Project Clydesdale - Precon Front End Documents

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BEALE INFRASTRUCTURE GROUP LLC
300 N LASALLE ST, STE 1500
CHICAGO, IL 60654

Architect
HDR ARCHITECTURE INC
1917 S 67TH ST
OMAHA, NE

Contractor
J.E. DUNN CONSTRUCTION COMPANY
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KANSAS CITY, MO 64106

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SECTION 00 21 13
INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.1 SUMMARY

A. The Project is being constructed through a design-bid-build delivery method where the Work will be subcontracted and coordinated by the Contractor.

B. Selected Subcontractors and Suppliers have been invited to submit a lump sum Bid for the construction of the Work described in the Bidding Documents.

C. Bidders are required to study carefully and conform to these instructions in order that their Bid(s) be complete, responsive and acceptable.

D. The Project will be delivered on a fast-track basis with portions of the Project being constructed while other portions of the Project are being finally designed.

1.2 DEFINITIONS

A. *NOTE: Terms of art and other words not specifically defined in these Instructions to Bidders have the same meaning as those used and/or defined in the Bidding Documents.

B. Agreement: the form of agreement between Contractor and the Successful Bidder, as defined in the Form of Agreement section below.

C. Addenda: written or graphic instruments issued by the Architect before the execution of the Subcontract, which instruments modify or interpret the Bidding Documents by addition, deletion, clarification, or correction.

D. Alternate Bid or Alternate: an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents and the Specifications, is accepted by the Owner.

E. Architect: the entity identified in the Bidding Documents that has entered into an agreement with the Owner to provide certain design services for the Project. The term "Architect" shall also refer to its sub-consultants.

F. Base Bid: the amount stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or deleted for amounts stated in Alternate Bids and Unit Prices.

G. Bid Form: the form upon which a Bid shall be submitted in accordance with the Bidding Documents.

H. Bid: an offer of a Bidder submitted on a complete and properly executed Bid Form stating the sum(s) for performing the Scope(s) of Work set forth in the Bid Form submitted in accordance with the Bidding Documents.

I. Bidder: the entity that submits a Bid for the Scope(s) of Work set forth in the Bid Form.

J. Bidding Documents: consist of: (1) the Bidding Requirements; (2) the Drawings identified on the Invitation to Bid; (3) the Project Manual identified on the Invitation to Bid; (4) any other documents provided to Bidders for bidding purposes; and (5) all Addenda or amendments issued thereto.

K. Bidding Requirements: consist of: (1) the Front End Document (including the Instruction to Bidders, Bid Form, and sample Agreement); (2) the associated Bid Package(s) (including the Invitation to Bid and Scope(s) of Work); (3) the Architect's Project

Manual, to the extent it includes requirements related to bidding; and (4) all Addenda or amendments issued thereto.

L. Bid Package: a discrete set of Bidding Documents, consisting of one or more Scopes of Work, an Invitation to Bid, and any other documents included or referenced in the Bid Package. Relative to any prior Bid Package, a subsequent Bid Package may include additional or revised Bidding Documents specific to the Bid Package. Contractor may solicit Bids for various portions of the overall Work of the Project through multiple Bid Packages to procure portions of the Work over time rather than bidding the entire Work of the Project at one time.

M. Combination Bid: an offer of a Bidder submitted on a complete and properly executed Combination Bid Form stating the sum for performing the Scopes of Work set forth in the Combination Bid Form submitted in accordance with the Bidding Documents.

N. Contractor: the entity, identified as the General Contractor in the Invitation to Bid, that has entered into an agreement with Owner to provide construction services on the Project.

O. Scope of Work: the Work described and identified for a specific aspect of the Project.

P. Subcontract Documents: For bidding purposes, the Subcontract Documents with respect to the Work of a Subcontractor and the Contract Documents with respect to the Work of a Supplier consist of the form of Agreement (as identified in the Form of Agreement section below), the Prime Contract between Owner and Contractor (to the extent available at the time of Bid), Drawings, Specifications, all Addenda issued prior to the time for receiving Bids, and all other documents identified in the form of Agreement. Upon execution of the Subcontract or M&E Contract, the Subcontract or Contract Documents shall be those set forth in the executed Agreement.

Subcontract Documents: consist of (for bidding purposes): (1) the form of Agreement (as identified in the Form of Agreement section below); (2) the Prime Contract between Owner and Contractor (to the extent available at the time of Bid); (3) Drawings and Specifications as identified in the Bid Package; (4) all Addenda issued before the time for receiving Bids; and (5) all other documents identified in the form of Agreement. Upon execution of the Agreement, the Subcontract Documents shall be those set forth in the executed Agreement. For bidding purposes, the term "Contract Documents" in the form of Agreement between Vendor and Contractor shall have the same meaning as "Subcontract Documents."

Q. Subcontractor: the entity that will enter into an agreement with the Contractor to provide labor, with or without materials or equipment, for a particular Scope of Work.

R. Successful Bidder: the Bidder to which Contractor, on the basis of the Contractor’s evaluation, makes an award.

S. The entity that will enter into an agreement with the Contractor to supply material and/or equipment for the Project. For bidding purposes, the term "Vendor" shall be replaced with "Subcontractor," unless otherwise noted.

T. Unit Price: an amount stated in the Bid as a price per unit of measurement for material, equipment, or labor as described in the Bidding Documents.

U. Work: For bidding purposes, the construction and services required by the Bidding Documents, including all labor, material, equipment, and services provided or to be provided by the Subcontractor or Supplier to fulfill the Subcontractor's or Supplier's obligation under the Subcontract or Contract Documents as defined above. Upon execution of the Subcontract or Materials & Equipment ("M&E") Contract, the Work shall be as defined in the executed Agreement.

1. Furnish: means furnish completely, including all Work and associated costs for: materials, shop drawings, transportation, insurance, field measurements, expediting, shipping, handling, packaging, storage, touch up materials, Owner's manuals, training, and any other accessories required for a complete installation. Shipping methods and delivery dates for furnished items shall be coordinated with the receiver/installer and shall include all reasonable provisions required for unloading, including but not limited to a proper container and lift gate.
2. Install: means install completely, including all Work and associated costs for: receiving, unloading, unpacking, verification of quantity and condition, inventorying, hoisting, rigging, equipment, lifts, storage, hangers, supports, sleeves, coordination, layout, shop drawings, review of shop drawings by others, field measurements, excavation, backfill, dewatering, installation, cutting and patching, firestopping, daily clean up, inspections, documentation, protection of own Work and Work of others, rough-in, testing, as-built drawings, and all other accessories, services and facilities required for a complete installation. Repair or replace items damaged, misplaced, stolen, or otherwise deemed unfit for installation as determined by the Architect after proper inventorying of materials and/or equipment supplied by others.
3. Provide: means furnish and install completely, including all Work and associated costs for: furnishing, installing, materials, labor, equipment, layout, tools, and any other temporary or permanent facilities required to complete the Work.

1.3 THE BIDDING DOCUMENTS

A. Bidders shall use complete sets of Bidding Documents in preparing Bids. Neither the Owner, the Contractor, nor the Architect shall assume any responsibility for errors, mistakes, misrepresentations, or incomplete bids resulting from the use of incomplete sets of Bidding Documents.

B. In making copies of the Bidding Documents available, the Owner, Architect and Contractor do so only for the purpose of obtaining Bids on the Scopes of Work and do not confer a license or grant permission to use the Bidding Documents for any other purpose.

1.4 EXAMINATION OF BIDDING DOCUMENTS AND SITE

A. It is the responsibility of each Bidder, before submitting a Bid, to:

1. carefully study and compare the Bidding Documents with each other, and with other Work being bid concurrently or presently under construction to the extent that it relates to the Scope of Work for which the Bid is submitted,
2. visit and examine the Project site to become familiar with local conditions that may effect cost, progress, performance or furnishing of the services or Work;
3. consider federal, state and local laws and regulations that may affect cost, progress,

performance or furnishing of the services or Work; and

4. notify the Contractor immediately of all conflicts, errors, inconsistencies or ambiguities discovered by Bidder in the Bidding Documents.

B. Site Information

1. Within the Bidding Documents, there may be reports of explorations and tests of subsurface conditions at or contiguous to the site of the Project ("Geotechnical Reports"). If Geotechnical Reports are available and not included in the Bidding Documents, they will be made available to Bidders upon request. Those bidding on a Scope of Work that may be impacted by subsurface conditions shall obtain and/or review the Geotechnical Reports.

2. The Bidding Documents may identify reports and/or drawings relating to Asbestos, PCB, Petroleum, Hazardous Waste, Radioactive Material or other hazardous materials ("Hazardous Materials"). Copies of these reports and drawings will be made available to Bidders upon request. Provisions relating to responsibilities for such conditions are set forth in the Subcontract Documents (for Subcontractors) or Contract Documents (for Suppliers).

3. These reports, drawings and other documents referenced in this section are not part of the Subcontract Documents (for Subcontractors) or Contract Documents (for Suppliers). The Bidder is responsible for any interpretation, extrapolation or conclusion it draws from any technical data or any other data, interpretations, opinions or information contained in such reports or drawings or shown or indicated in other documents related to subsurface conditions or Hazardous Materials.

C. Upon reasonable notice, Contractor and/or Owner will provide each Bidder access to the site to conduct such examinations, inspections and studies as each Bidder deems necessary for submission of a Bid.

1.5 INTERPRETATIONS AND ADDENDA

A. All questions regarding the meaning or intent of the Bidding Documents are to be directed to the Contractor who will forward such questions to the Architect, if needed.

B. Bidders shall promptly notify the Contractor of any ambiguity, inconsistency or error which they discover upon examination of the Bidding Documents, the Project site and the local conditions.

C. Bidders requiring interpretation, clarification, correction or change of the Bidding Documents shall make a written request which must reach the Contractor within the time set forth in the Invitation to Bid.

D. Written requests received after the deadline set forth in the Invitation to Bid may not be answered.

E. Interpretations, clarifications, corrections and changes to the Bidding Documents considered necessary by the Contractor and/or Architect in response to such questions or otherwise will be made by Addenda.

F. No Addenda will be issued later than the time set forth in the Invitation to Bid except for an Addendum withdrawing the request for Bids or postponing the date for receipt of Bids.

G. Reasonable efforts will be made to deliver notifications of Addenda to all who are known

to have received a complete set of Bidding Documents.

H. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

I. It is the responsibility of each Bidder to ascertain and confirm, prior to submitting a Bid, that the Bidder has received all Addenda. Bidder shall also acknowledge its receipt of all Addenda in its Bid(s) on the Bid Form. Owner, Contractor, and Architect are not responsible for errors or omissions in Bids from Bidders who have not received all Addenda.

J. Only interpretations, clarifications, corrections, and changes made by formal written Addenda are binding. Interpretations, clarifications, corrections, and changes to the Bidding Documents made in any other manner are not binding, and Bidders shall not rely upon them.

K. In the case of an ambiguity, inconsistency or error in Bidding Documents not clarified by Addendum, the higher quality, more expensive option and/or greater quantity of Work shall be provided in accordance with the Contractor's interpretation.

L. Failure of the Bidder to notify the Contractor of a known ambiguity, inconsistency or error in the Bidding Documents will waive the Bidder's right to seek additional compensation for such ambiguity, inconsistency or error.

1.6 SUBSTITUTIONS

A. Unless otherwise specifically required, reference in the Specifications to any product, material, equipment, type or form of construction shall establish a minimum standard of quality and shall not be construed as limiting competition.

B. The products, materials and equipment described in the Bidding Documents establish a standard of required design, spare parts availability, strength, durability, usefulness, serviceability, operating cost, convenience, and for the purpose intended to be met by any proposed substitution.

C. Reference to standard specifications for basic materials shall not be modified for any substitutions proposed.

D. No request for substitution will be considered prior to receipt of Bids unless a written request for approval has been received by the Contractor within the time set forth in the Invitation to Bid. Requests for substitution will not be considered when proposed with a Bid.

E. Requests for substitutions will only be considered under the following procedures:

1. The request is made under the "or approved equal" or the "or approved substitute" provisions of the Bidding Documents.
2. The request is received within the time period set forth in the Invitation to Bid.
3. The request includes the name of the material, product, equipment or system for which it is to be substituted, correlated to Specification section and page, and all basic data and characteristics of the proposed substitute so that a direct comparison may readily be made.
4. The request complies completely with the other requirements for substitutions set forth in Division 01 of the Specifications.

F. It is the sole responsibility of the Bidder making the request to submit complete descriptive and technical information necessary for the Architect to evaluate the substitution.

G. The burden of proof of the merit of the proposed substitution is upon the Bidder making the request. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

H. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth by written Addendum. An approval of a request for substitution made in any other manner will not be binding, and Bidders shall not rely upon an approval made in any other manner.

I. No substitutions will be allowed subsequent to the notice of award to the Bidder unless specifically provided for in the Bidding Documents.

1.7 PRE-BID CONFERENCE

A. A pre-bid conference will be held at the date, time and location stated in the Invitation to Bid.

B. Representatives of Owner, Architect and Contractor will be present to discuss the Project and answer questions regarding the Bidding Documents and bidding procedure. Bidders are encouraged to attend and participate in the conference.

1.8 TIME AND PLACE TO RECEIVE BIDS

A. Bids will be received until the time on the date indicated in the Invitation to Bid or indicated by Addendum. Bids received after this time may not be accepted.

B. Bids shall be submitted at the place indicated in the Invitation to Bid or indicated by Addendum. Bidders shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

C. Bids can be submitted as identified in the Invitation to Bid, specifically via facsimile or e-mail OR via Building Connected.

1.9 THE BID

A. Bids will be received from Bidders for the Scopes of Work identified in the Bidding Documents. Bids shall include all Work defined within the Scope of Work, including but not limited to the relevant Specification Section(s) and Bidding Documents.

B. Bids are to include all overhead, profit, labor, applicable taxes, insurance, licenses, permits, tools, equipment, materials, services, labor, supervision and incidentals necessary or required for the completion of the Scopes of Work identified in the Bidding Documents, including costs of complying with the safety requirements included in the Bidding Documents.

C. No Bidder may submit more than one (1) Bid per Scope of Work. Multiple Bids for the same Scope of Work from an individual or entity under the same or different names will not be considered.

D. Bids shall include the following documents and attachments:

1. Bid on the Bid Forms provided in the Bidding Documents

2. Bidder's Scope of Work (copied from these Bidding Documents)

3. Client Cost Breakdown Form

1.10 BID SECURITY

A. There is not any Bid Security required for the Project.

1.11 PRE-QUALIFICATION OF BIDDERS

A. All Bidders must be qualified to perform the Work described in the Bidding Documents. All Bidders must demonstrate their ability, experience, technical expertise, efficiency, integrity, reputation, capacity of personnel, and financial resources to properly and timely perform the Work described in the Bidding Documents to be considered a responsible Bidder.

B. To be qualified to perform the Work described in the Bidding Documents, the Bidder must submit and/or update the necessary information on Contractor's online Subcontractor Management System located at http://sms.jedunn.com.

C. Only invited Bidders that are qualified may Bid the Project. The Contractor or Owner may reject proposals or Bids from non-invited and/or non-qualified firms. Contact Contractor for information regarding qualifying to Bid the Project.

1.12 BIDDER REPRESENTATIONS

A. Each Bidder, by submitting its Bid, represents that:

1. The Bidder has examined, carefully studied and understands the Bidding Documents, including all Addenda and other related information, and its Bid is made in accordance therewith.
2. The Bidder has read and understands the Subcontract Documents (for Subcontractors) or Contract Documents (for Suppliers) to the extent that such documentation relates to the Scope of Work for which its Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.
3. The Bidder has visited the site, familiarized itself with the local conditions under which the Work is to be performed and has correlated its observations with the requirements of the proposed Subcontract Documents (for Subcontractors) or Contract Documents (for Suppliers).
4. The Bidder is familiar with all federal, state and local Laws and Regulations that may affect cost, progress or performance of the Work.
5. The Bid is based upon materials, equipment and systems required by the Bidding Documents without exception unless otherwise approved.
6. The Bid(s) have been derived at independently without consultation, communication or agreement as to any matter relating to the Bid(s) with any other Bidder or with any competitor.
7. The Bidder will not later request, and will not later expect to receive, additional payment for Work related to conditions which could have been determined by examination of the site and the Bidding Documents.
8. The Bidder will agree to contract under the form of Agreement set forth in Section 00 52 00, including Project-specific modifications, if any, made at a later time, without clarification or modification.

B. By submitting a Bid, Bidder agrees that any protest, controversy, dispute or claim arising from the Invitation to Bidders, the Bidder's submission of the Bid, the Owner's or Contractor's rejection of any Bid and/or the award of a Subcontract or M&E Contract shall be subject to the same dispute resolution requirements as are set forth in the form of Agreement set forth in Section 00 52 00 applicable to the Scope of Work upon which the Bid is based, which are incorporated into these Instructions to Bidders by this reference.

1.13 MODIFICATION AND WITHDRAWAL OF BIDS

A. Prior to the time and date for the receipt of Bids, any Bid submitted may be modified or withdrawn by written notice to the party receiving Bids at the place designated for receipt of Bids.

B. Bids may not be withdrawn, modified or canceled for the period of time set forth in the Invitation to Bid following the time and date for the receipt of Bids.

1.14 REJECTION OF BIDS

A. The Contractor and/or Owner reserve the right to reject any or all Bids, including, without limitation, the right to reject Bids that are incomplete, irregular, nonconforming, non-responsive, unbalanced, or conditional. An award may be made to other than the low bidder.

1.15 ACCEPTANCE OF BID (AWARD)

A. It is the intent of the Contractor to award a Subcontract or M&E Contract to the lowest, responsible Bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents, subject to Contractor's right to reject bids as stated in these Instructions to Bidders.

B. In awarding the Subcontract or M&E Contract, the Contractor may take into consideration, among other items, the Bidder's skill, facilities, capacity, experience, responsibility, previous work record and financial standing, the necessity of prompt and efficient completion of Work, and the Bidder's other qualifications. The inability of any Bidder to meet the considerations mentioned above may be cause for rejection of the Bid.

C. The Contractor and/or Owner may interview any and all Bidders before the Subcontract or M&E Contract is awarded. The interview will enable the Contractor and/or Owner to ask the Bidder questions about materials, labor, duration, Scope of Work, the Subcontract Documents (for Subcontractors) or Contract Documents (for Suppliers) or the Bidder's qualifications and abilities.

D. The Contractor shall have the right to waive informality or irregularities in a Bid received and to accept the Bid which, in Contractor's judgment, is in the Contractor's best interest.

E. The Contractor shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternate(s) accepted.

F. The Successful Bidder will receive written notice of award of the Agreement.

G. Submittals

1. Successful Bidders shall, within seven (7) calendar days of the Notice of Award, submit the following information to the Contractor:

a. A designation of the Work to be performed by the Bidder with its own forces.

b. The proprietary names and suppliers of principal items or systems of materials and equipment proposed for the Work.

c. A list of names of the lower-tier contractors or other persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

2. Successful Bidders will be required to establish, to the satisfaction of the Contractor and Owner, the reliability and responsibility of the lower-tier contractors and suppliers proposed to furnish and perform the Work described in the Bidding Documents.

a. Prior to the Notice to Proceed, the Contractor will notify the Bidder in writing if the Contractor or Owner, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Contractor or Owner has reasonable objections to a proposed person or entity, the Bidder may submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution.

b. The Contractor may accept the adjusted bid price or disqualify the Bidder.

3. Persons and entities proposed by the Successful Bidder to whom the Contractor and Owner have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed, except with the written consent.

1.16 SCHEDULE

A. The Bidder agrees that if awarded the Subcontract or M&E Contract, the Bidder will complete the Work in accordance with the Project Schedule. The Project Schedule has been included in Section 00 31 13.

B. A detailed Project schedule is available upon request.

C. The Bidder hereby agrees to commence Work under the Subcontract or M&E Contract within seven (7) calendar days after the date of a “Notice to Proceed,” unless otherwise stipulated in that notice.

1.17 BOND REQUIREMENTS

A. Performance And Payment Bond

1. The Bidder shall indicate the actual cost to furnish bonds covering the faithful performance of the Subcontract or M&E Contract and payment of all obligations in connection with the same. Bonds shall be issued by a surety company that is rated “A-” or better by A.M. Best Company. The surety shall have a per bond underwriting limit set forth in the most current United States Treasury Circular 570 List that is greater than or equal to the face value of the bond.

2. Bonds (if required) shall be written on forms included in the Bidding Documents. Bonds shall be written in full amount of the Subcontract or Contract Sum and shall name the Contractor as obligee. The approved bond forms are included in Section 00 61 13.

B. Contractor will only pay for the actual cost of the bond based upon an invoice from the surety.

1.18 INSURANCE

A. This Project will have a Controlled Insurance Program ("CIP"), as set forth in Section 00 73 16.

B. Per the CIP Manual, Bidders that are required to enroll in the CIP shall include in their base Bid the cost of providing the insurance required by the Subcontract and the CIP Manual for enrolled trade partners and exclude costs of onsite General Liability coverage. Bidders that are not required to enroll in the CIP shall include in their base Bid the cost of providing the insurance required by the Subcontract and the CIP Manual for non-enrolled trade partners.

1.19 FORM OF AGREEMENT

A. The form of Agreement between the Contractor and a Subcontractor for the Work is the Subcontract included in the Bidding Documents. See Section 00 52 00.

B. The form of Agreement between Contractor and a Supplier to provide materials, goods, or equipment is the Modified Purchase Order (MPO) (described herein as the “M&E Contract”) included in the Bidding Documents. See Section 00 52 00.

C. The form of Agreement may be modified from the form included to reflect Project-specific provisions required by the Owner or by the final agreement between Owner and Contractor. Otherwise, the form of Agreement shall not be changed from the form that is included in the Bidding Documents. The Bidder shall include in its Bid all costs associated with executing the form of Agreement provided in Section 00 52 00.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00 30 00
SITE ACCESS PLAN

PART 1 - GENERAL

1.1 SUMMARY

A. Site access will be according to the plan included in this Section.

B. Bidders acknowledge that the site access plan will be revised during the course of construction to accommodate the Work as it progresses.

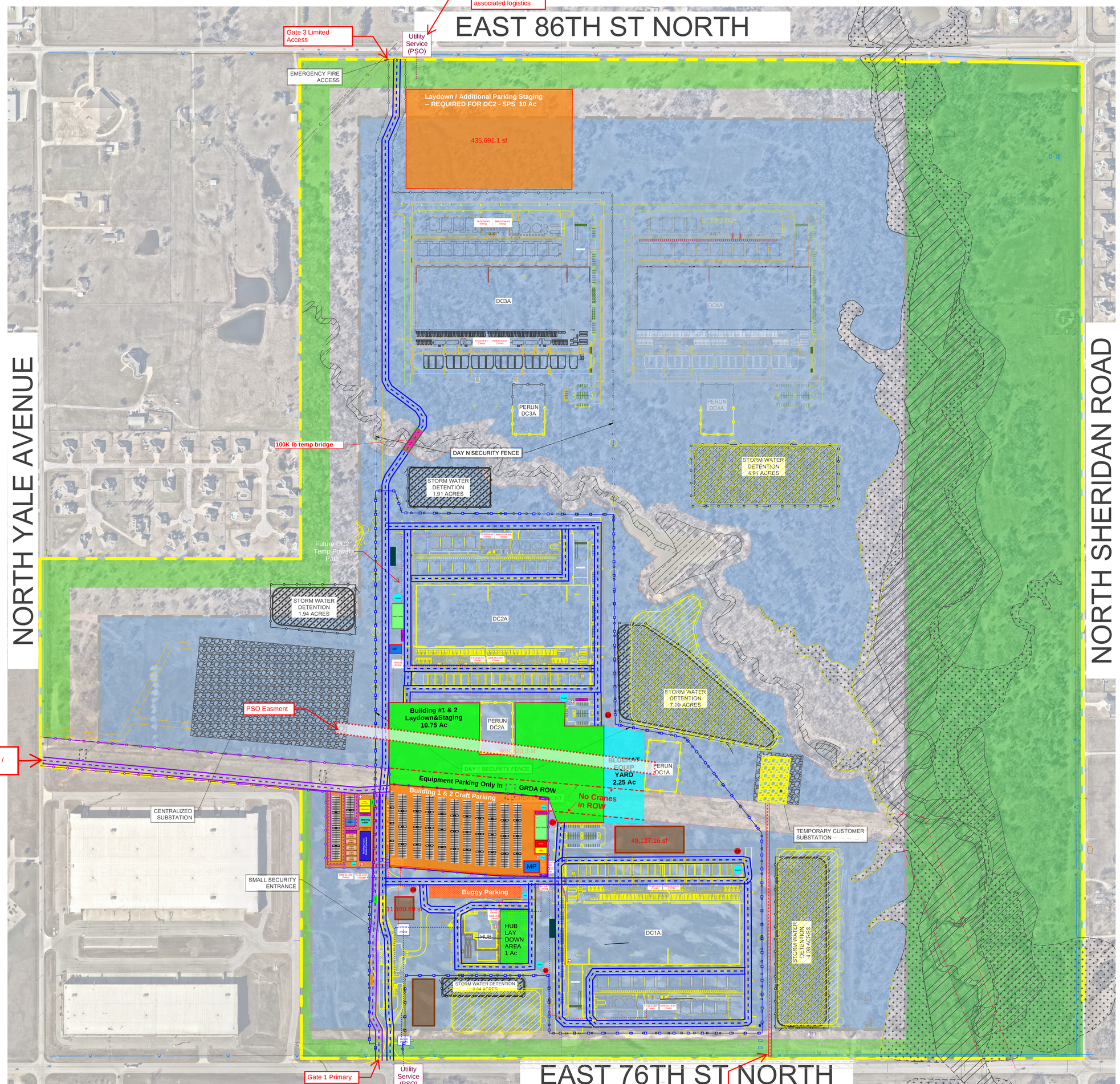
C. Reference Division 01 for other requirements.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

Phase 1 Logistics Plan 9/2/25



NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

LEGEND:

- SUBSTATION
- FEMA ZONE AE FLOOD ZONE
- FLOODWAY
- WETLANDS
- STORM WATER DETENTION
- DEVELOPABLE AREA
- LANDSCAPE BUFFER
- UNDISTURBED NATURAL AREA
- BREAK TRAILERS
- SECURITY FENCE
- TEMP FENCING
- TEMP ROAD (Type 1) ASPHALT 6" BASE + 4 "
- TEMP ROAD (Type 2) GRAVEL 12" X 30'
- JERSEY BARRIERS
- SIDEWALKS
- RESTROOM
- SHADE AREAS
- FIRST AID STATIONS
- ASPHALT PARKING AREAS
- BUGGY PARKING
- DUMPSTER AREA
- WHEEL WASH STATION
- SURVEY CONTROL POINTS
- GUARD SHACK (VAC)
- TURNSTILE (MAC)
- TOPSOIL STOCKPILE 2Ac.
- MUSTER POINT

100,000 lb Temp Bridge

Kimley»Horn

CLYDESDALE OVERALL CP
OPTION 1
2025-06-02

REVISIONS			DRAWN:
NO.	DATE	DESCRIPTION	APPRV'D:

CAMPUS PLAN
PROJ. NO. 060007903

FENCING
SCALE: 1" = 200'

SHEET NUMBER:
CP-01.4

PAPER SIZE:
PHASE:

Div 00 Procurement and Contracting Requirements
Section 00 3050 - SITE ACCESS PLAN

SECTION 00 31 13
MILESTONE SCHEDULE OF CONSTRUCTION

PART 1 - GENERAL

1.1 SUMMARY

A. Bidders recognize that revisions in the planned schedule are inherent in construction. This may result in revisions to the schedule of construction for the Project and the Bidders' Work during the progress of construction.

B. Bidders acknowledge that Contractor cannot guarantee Bidders, if selected, will be able to start the Work on any particular date or continue without interruption once started. Bidders shall include in their Bid all costs associated with this risk.

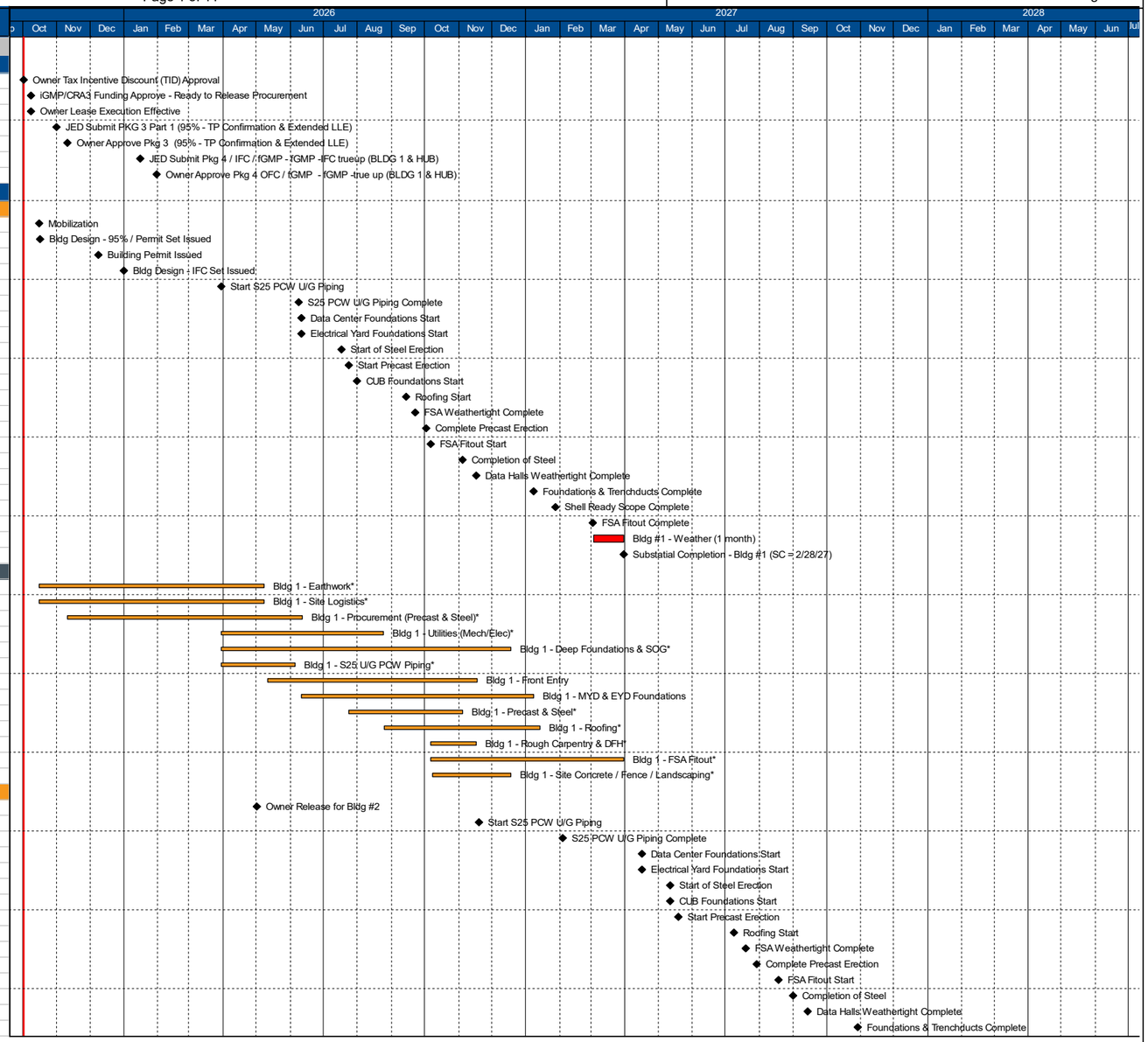
C. Bidders shall include multiple mobilizations as required to execute the Work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
Beale - Clydesdale - EPOCH 2.1 - Core & Shell - Evaporative, Dense Everywhere					
Precon Deliverables / Owner Financial Releases					
CON-39000	Owner Tax Incentive Discount (TID) Approval	0	0		02-Oct-25*
CON-38770	iGMP/CRA3 Funding Approve - Ready to Release Procurement	0	0		08-Oct-25*
CON-38800	Owner Lease Execution Effective	0	0		08-Oct-25*
CON-38780	JED Submit PKG 3 Part 1 (95% - TP Confirmation & Extended LLE)	0	0		31-Oct-25*
CON-38790	Owner Approve Pkg 3 (95% - TP Confirmation & Extended LLE)	0	0		10-Nov-25*
CON-38820	JED Submit Pkg 4 / IFC / fGMP - fGMP -IFC trueup (BLDG 1 & HUB)	0	0		15-Jan-26*
CON-38830	Owner Approve Pkg 4 OFC / fGMP - fGMP -true up (BLDG 1 & HUB)	0	0		30-Jan-26*
Milestones					
Building 1 Milestones					
BLDG1-MS-1000	Mobilization	0	0	16-Oct-25	
BLDG1-MS-1200	Bldg Design - 95% / Permit Set Issued	0	0		16-Oct-25
BLDG1-MS-1230	Building Permit Issued	0	0		08-Dec-25
BLDG1-MS-1210	Bldg Design - IFC Set Issued	0	0		31-Dec-25
BLDG1-MS-1010	Start S25 PCW U/G Piping	0	0	30-Mar-26	
BLDG1-MS-1020	S25 PCW U/G Piping Complete	0	0	08-Jun-26	
BLDG1-MS-1030	Data Center Foundations Start	0	0	11-Jun-26	
BLDG1-MS-1040	Electrical Yard Foundations Start	0	0	11-Jun-26	
BLDG1-MS-1050	Start of Steel Erection	0	0	17-Jul-26	
BLDG1-MS-1070	Start Precast Erection	0	0	24-Jul-26	
BLDG1-MS-1060	CUB Foundations Start	0	0	31-Jul-26	
BLDG1-MS-1090	Roofing Start	0	0	14-Sep-26	
BLDG1-MS-1100	FSA Weathertight Complete	0	0		22-Sep-26
BLDG1-MS-1080	Complete Precast Erection	0	0		02-Oct-26
BLDG1-MS-1120	FSA Fitout Start	0	0	06-Oct-26	
BLDG1-MS-1110	Completion of Steel	0	0		04-Nov-26
BLDG1-MS-1130	Data Halls Weathertight Complete	0	0		16-Nov-26
BLDG1-MS-1140	Foundations & Trenchducts Complete	0	0		07-Jan-27
BLDG1-MS-1150	Shell Ready Scope Complete	0	0		27-Jan-27
BLDG1-MS-1160	FSA Fitout Complete	0	0		02-Mar-27
BLDG1-MS-1170	Bldg #1 - Weather (1 month)	20	20	03-Mar-27	30-Mar-27
BLDG1-MS-1180	Substatial Completion - Bldg #1 (SC = 2/28/27)	0	0		30-Mar-27*
Bldg 1 Summary					
CON-36540	Bldg 1 - Earthwork*	139	139	16-Oct-25	08-May-26
CON-36570	Bldg 1 - Site Logistics*	139	139	16-Oct-25	08-May-26
CON-36750	Bldg 1 - Procurement (Precast & Steel)*	145	145	10-Nov-25	11-Jun-26
CON-36560	Bldg 1 - Utilities (Mech/Elec)*	104	104	30-Mar-26	24-Aug-26
CON-36600	Bldg 1 - Deep Foundations & SOG*	185	185	30-Mar-26	18-Dec-26
CON-38500	Bldg 1 - S25 U/G PCW Piping*	49	49	30-Mar-26	05-Jun-26
CON-36580	Bldg 1 - Front Entry	134	134	11-May-26	17-Nov-26
CON-36700	Bldg 1 - MYD & EYD Foundations	145	145	11-Jun-26	07-Jan-27
CON-36590	Bldg 1 - Precast & Steel*	73	73	24-Jul-26	04-Nov-26
CON-36610	Bldg 1 - Roofing*	97	97	25-Aug-26	13-Jan-27
CON-36620	Bldg 1 - Rough Carpentry & DFH*	30	30	06-Oct-26	16-Nov-26
CON-36690	Bldg 1 - FSA Fitout*	120	120	06-Oct-26	30-Mar-27
CON-36550	Bldg 1 - Site Concrete / Fence / Landscaping*	50	50	08-Oct-26	18-Dec-26
Building 2 Milestones					
BLDG2-MS-1180	Owner Release for Bldg #2	0	0	01-May-26*	
BLDG2-MS-1000	Start S25 PCW U/G Piping	0	0	19-Nov-26	
BLDG2-MS-1010	S25 PCW U/G Piping Complete	0	0	03-Feb-27	
BLDG2-MS-1020	Data Center Foundations Start	0	0	16-Apr-27	
BLDG2-MS-1030	Electrical Yard Foundations Start	0	0	16-Apr-27	
BLDG2-MS-1040	Start of Steel Erection	0	0	12-May-27	
BLDG2-MS-1050	CUB Foundations Start	0	0	12-May-27	
BLDG2-MS-1060	Start Precast Erection	0	0	19-May-27	
BLDG2-MS-1080	Roofing Start	0	0	09-Jul-27	
BLDG2-MS-1090	FSA Weathertight Complete	0	0		19-Jul-27
BLDG2-MS-1070	Complete Precast Erection	0	0		29-Jul-27
BLDG2-MS-1110	FSA Fitout Start	0	0	18-Aug-27	
BLDG2-MS-1100	Completion of Steel	0	0		31-Aug-27
BLDG2-MS-1120	Data Halls Weathertight Complete	0	0		13-Sep-27
BLDG2-MS-1130	Foundations & Trenchducts Complete	0	0		29-Oct-27



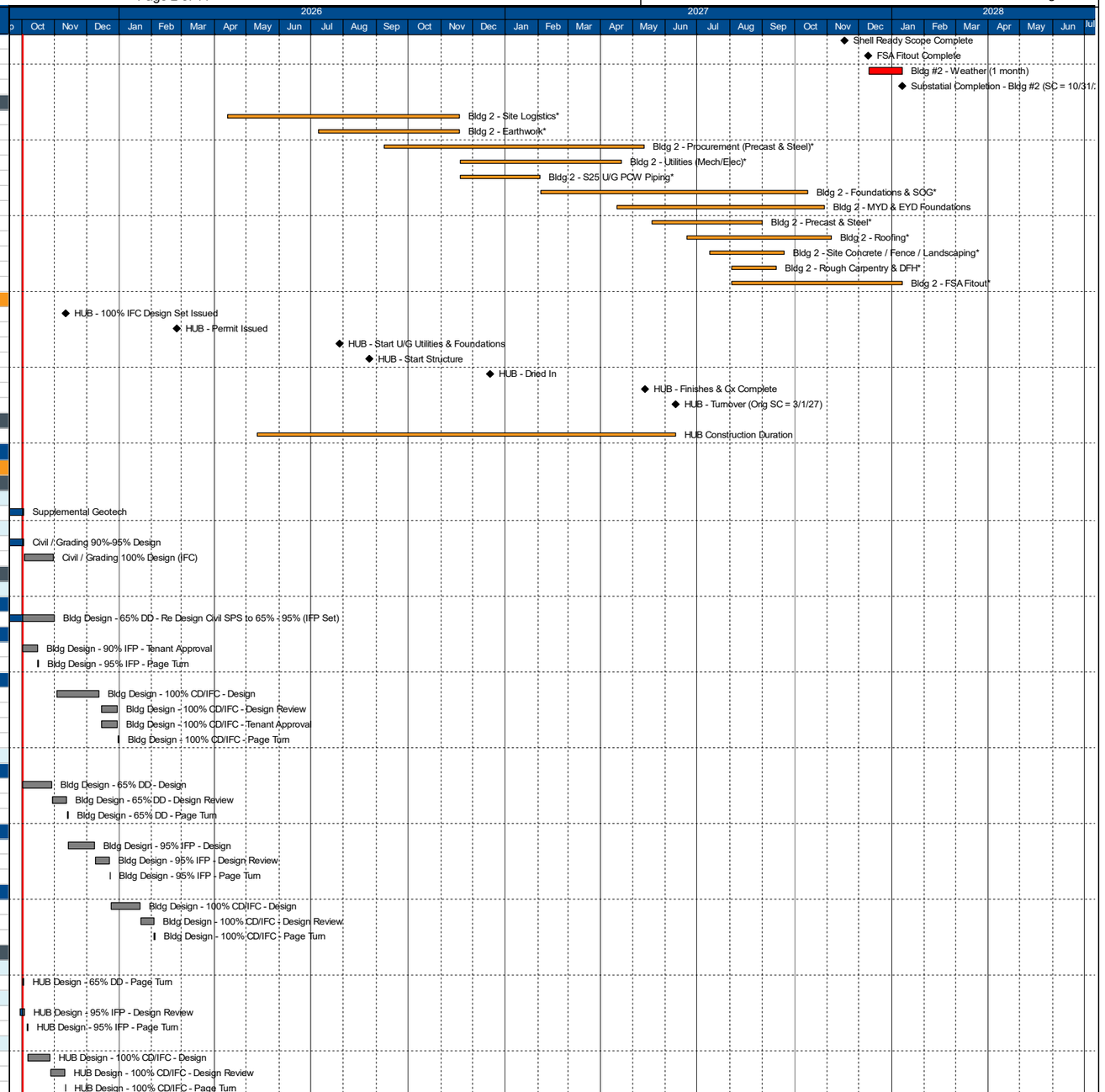
Remaining Level of Effort
Actual Level of Effort
Actual Work
Critical Remaining Work
Remaining Work
Milestone

Run Date: 03-Oct-25

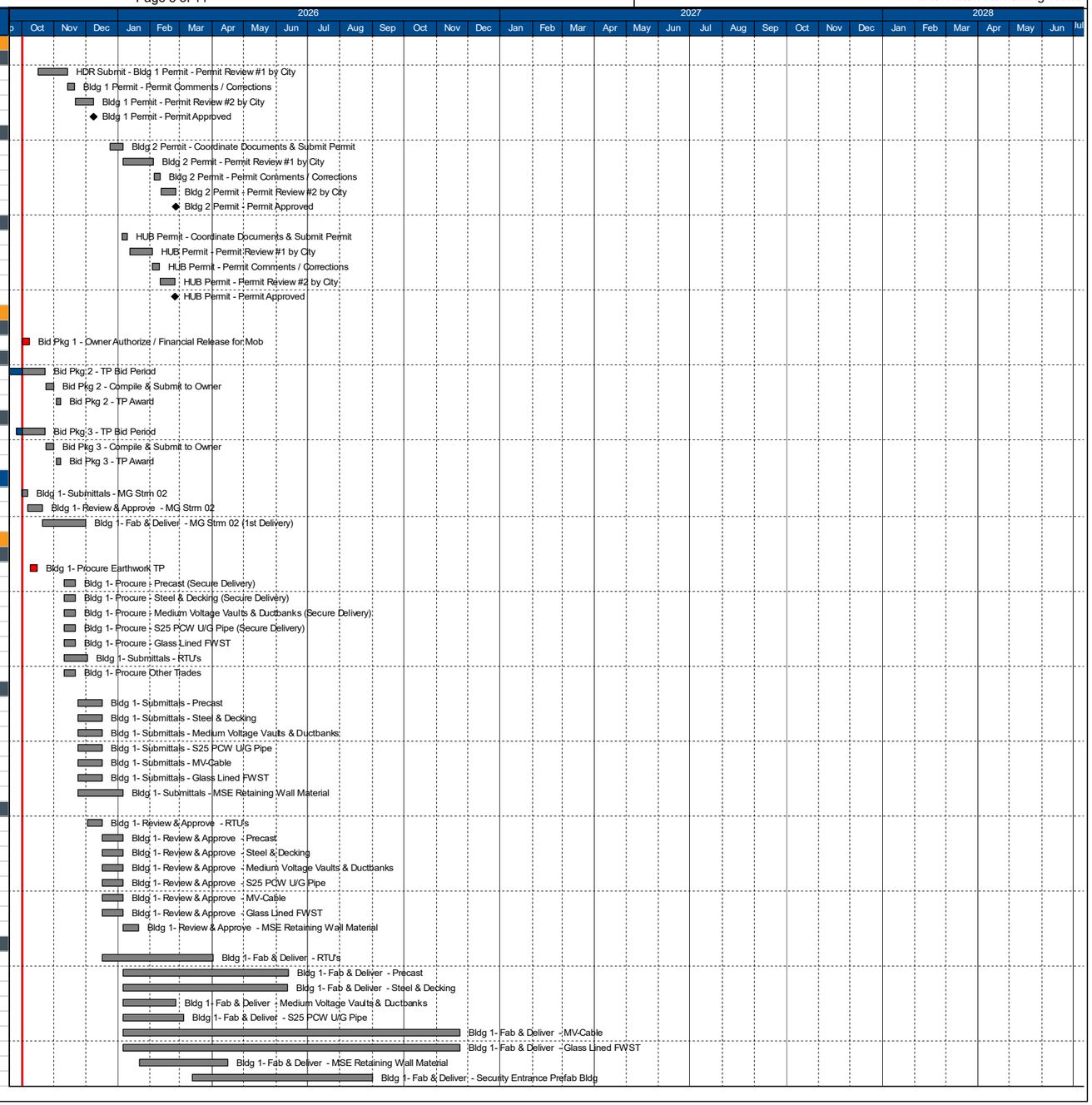
Beale - Clydesdale - EPOCH 2.1 - Core Shell - Evaporative, Dense Everywhere
JE Dunn Construction Company
02-Oct-25 Update Schedule

JE DUNN® CONSTRUCTION

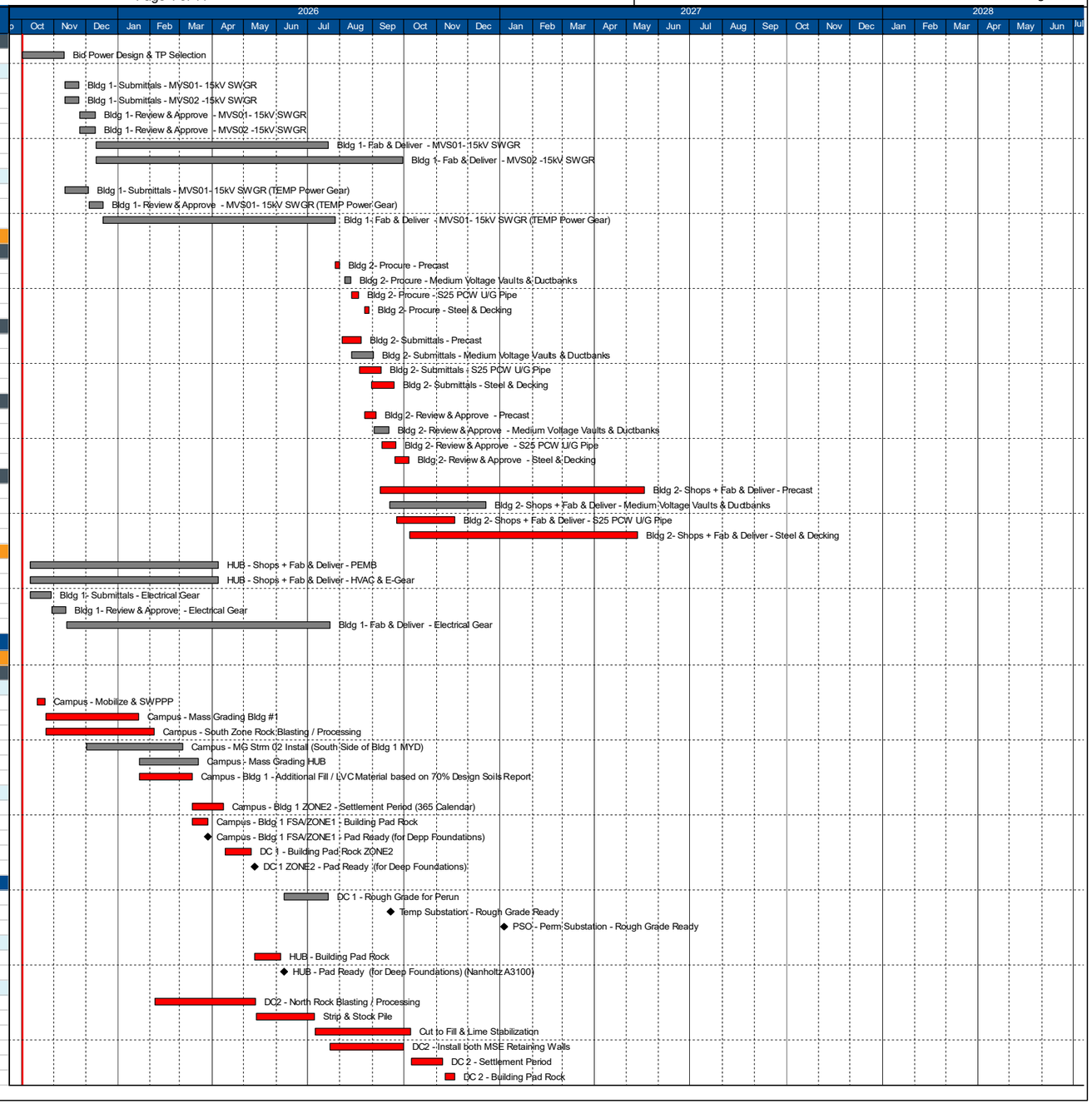
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
BLDG2-MS-1140	Shell Ready Scope Complete	0	0		17-Nov-27
BLDG2-MS-1150	FSA Fitout Complete	0	0		09-Dec-27
BLDG2-MS-1160	Bldg #2 - Weather (1 month)	20	20	10-Dec-27	10-Jan-28
BLDG2-MS-1170	Substatial Completion - Bldg #2 (SC = 10/31/27)	0	0		10-Jan-28*
Bldg 2 - Summary					
CON-38310	Bldg 2 - Site Logistics*	155	155	13-Apr-26	18-Nov-26
CON-38280	Bldg 2 - Earthwork*	95	95	08-Jul-26	18-Nov-26
CON-38490	Bldg 2 - Procurement (Precast & Steel)*	170	170	08-Sep-26	11-May-27
CON-38300	Bldg 2 - Utilities (Mech/Elec)*	103	103	19-Nov-26	20-Apr-27
CON-38510	Bldg 2 - S25 U/G PCW Piping*	49	49	19-Nov-26	02-Feb-27
CON-38340	Bldg 2 - Foundations & SOG*	177	177	03-Feb-27	13-Oct-27
CON-38440	Bldg 2 - MYD & EYD Foundations	138	138	16-Apr-27	29-Oct-27
CON-38330	Bldg 2 - Precast & Steel*	73	73	19-May-27	31-Aug-27
CON-38350	Bldg 2 - Roofing*	97	97	21-Jun-27	04-Nov-27
CON-38290	Bldg 2 - Site Concrete / Fence / Landscaping*	50	50	13-Jul-27	21-Sep-27
CON-38360	Bldg 2 - Rough Carpentry & DFH*	30	30	02-Aug-27	13-Sep-27
CON-38430	Bldg 2 - FSA Fitout*	111	111	02-Aug-27	10-Jan-28
HUB Milestones					
CON-38700	HUB - 100% IFC Design Set Issued	0	0		11-Nov-25
CON-38710	HUB - Permit Issued	0	0		24-Feb-26
CON-38570	HUB - Start U/G Utilities & Foundations	0	0	28-Jul-26	
CON-38600	HUB - Start Structure	0	0	25-Aug-26	
CON-38610	HUB - Dried In	0	0		17-Dec-26
CON-38620	HUB - Finishes & Cx Complete	0	0		12-May-27
CON-38630	HUB - Turnover (Orig SC = 3/1/27)	0	0		10-Jun-27*
HUB - Summary					
CON-38580	HUB Construction Duration	274	274	11-May-26	10-Jun-27
Preconstruction					
Design					
Master Planning & Grading Design					
Master Planning Design					
DES-1120	Supplemental Geotech	27	1	25-Jun-25 A	02-Oct-25
Grading Design					
DES-1170	Civil / Grading 90%-95% Design	20	1	11-Jul-25 A	02-Oct-25
DES-1220	Civil / Grading 100% Design (IFC)	20	20	03-Oct-25	30-Oct-25
Building Design					
Building 1 Design					
Bldg 1 Design - 65% Design Devlopment					
DES-1610	Bldg Design - 65% DD - Re Design Civil SPS to 65% - 95% (IFP Set)	39	22	09-Sep-25 A	31-Oct-25
Bldg 1 Design - 95% Issue for Permit					
DES-1310	Bldg Design - 90% IFP - Tenant Approval	10	10	02-Oct-25	15-Oct-25
DES-1350	Bldg Design - 95% IFP - Page Turn	1	1	16-Oct-25	16-Oct-25
Bldg 1 Design - 100% Issue for Construction					
DES-1360	Bldg Design - 100% CD/IFC - Design	28	28	03-Nov-25	12-Dec-25
DES-1380	Bldg Design - 100% CD/IFC - Design Review	10	10	15-Dec-25	30-Dec-25
DES-1390	Bldg Design - 100% CD/IFC - Tenant Approval	10	10	15-Dec-25	30-Dec-25
DES-1410	Bldg Design - 100% CD/IFC - Page Turn	1	1	31-Dec-25	31-Dec-25
Building 2 Design					
Bldg 2 Design - 65% Design Devlopment					
DES-1480	Bldg Design - 65% DD - Design	20	20	02-Oct-25	29-Oct-25
DES-1490	Bldg Design - 65% DD - Design Review	10	10	30-Oct-25	12-Nov-25
DES-1510	Bldg Design - 65% DD - Page Turn	1	1	13-Nov-25	13-Nov-25
Bldg 2 Design - 95% Issue for Permit					
DES-1520	Bldg Design - 95% IFP - Design	15	15	14-Nov-25	08-Dec-25
DES-1530	Bldg Design - 95% IFP - Design Review	10	10	09-Dec-25	22-Dec-25
DES-1550	Bldg Design - 95% IFP - Page Turn	1	1	23-Dec-25	23-Dec-25
Bldg 2 Design - 100% Issue for Construction					
DES-1560	Bldg Design - 100% CD/IFC - Design	15	15	24-Dec-25	20-Jan-26
DES-1570	Bldg Design - 100% CD/IFC - Design Review	9	9	21-Jan-26	02-Feb-26
DES-1590	Bldg Design - 100% CD/IFC - Page Turn	1	1	03-Feb-26	03-Feb-26
HUB Design					
HUB Design - 65% Design Devlopment					
DES-1280	HUB Design - 65% DD - Page Turn	1	1	02-Oct-25	02-Oct-25
HUB Design - 95% Issue for Permit					
DES-1320	HUB Design - 95% IFP - Design Review	5	2	29-Sep-25 A	03-Oct-25
DES-1330	HUB Design - 95% IFP - Page Turn	1	1	06-Oct-25	06-Oct-25
HUB Design - 100% Issue for Construction					
DES-1340	HUB Design - 100% CD/IFC - Design	15	15	07-Oct-25	27-Oct-25
DES-1370	HUB Design - 100% CD/IFC - Design Review	10	10	28-Oct-25	10-Nov-25
DES-1400	HUB Design - 100% CD/IFC - Page Turn	1	1	11-Nov-25	11-Nov-25



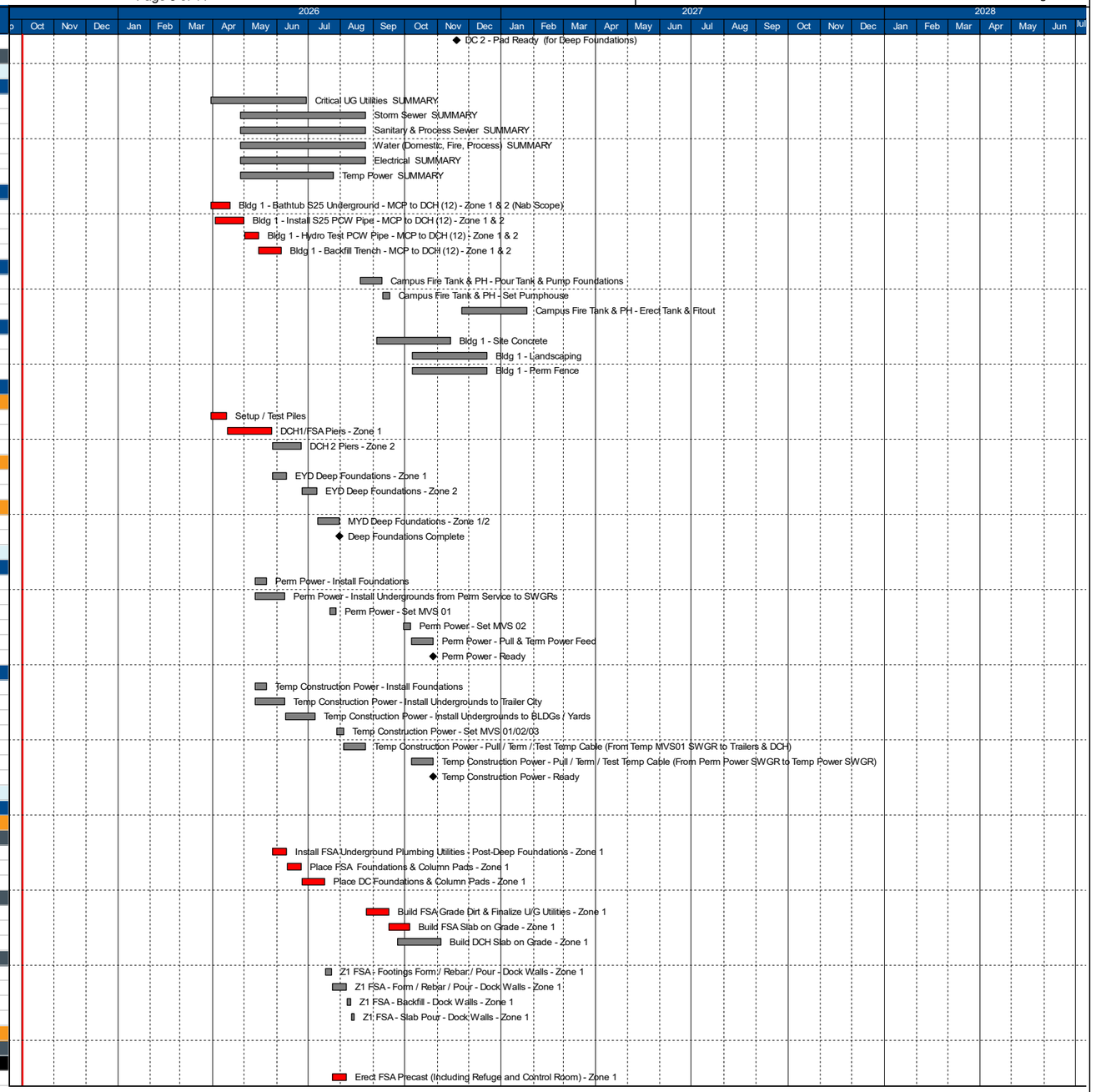
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
Permitting					
Building 1 Permit					
PERM-1060	HDR Submit - Bldg 1 Permit - Permit Review #1 by City	20	20	17-Oct-25	13-Nov-25
PERM-1070	Bldg 1 Permit - Permit Comments / Corrections	5	5	14-Nov-25	20-Nov-25
PERM-1090	Bldg 1 Permit - Permit Review #2 by City	10	10	21-Nov-25	08-Dec-25
PERM-1110	Bldg 1 Permit - Permit Approved	0	0		08-Dec-25
Building 2 Permit					
PERM-1150	Bldg 2 Permit - Coordinate Documents & Submit Permit	5	5	24-Dec-25	05-Jan-26
PERM-1160	Bldg 2 Permit - Permit Review #1 by City	20	20	06-Jan-26	03-Feb-26
PERM-1170	Bldg 2 Permit - Permit Comments / Corrections	5	5	04-Feb-26	10-Feb-26
PERM-1180	Bldg 2 Permit - Permit Review #2 by City	10	10	11-Feb-26	25-Feb-26
PERM-1190	Bldg 2 Permit - Permit Approved	0	0		25-Feb-26
HUB Permit					
PERM-1080	HUB Permit - Coordinate Documents & Submit Permit	5	5	05-Jan-26	09-Jan-26
PERM-1100	HUB Permit - Permit Review #1 by City	15	15	12-Jan-26	02-Feb-26
PERM-1120	HUB Permit - Permit Comments / Corrections	5	5	03-Feb-26	09-Feb-26
PERM-1130	HUB Permit - Permit Review #2 by City	10	10	10-Feb-26	24-Feb-26
PERM-1140	HUB Permit - Permit Approved	0	0		24-Feb-26
Bid Packages					
Bid Pkg 1 - Earthwork					
CON-39200	Bid Pkg 1 - Owner Authorize / Financial Release for Mob	5	5	02-Oct-25	08-Oct-25
Bid Pkg 2 - Concrete / Precast / Steel					
CON-38930	Bid Pkg 2 - TP Bid Period	10	16	15-Sep-25 A	23-Oct-25
CON-38940	Bid Pkg 2 - Compile & Submit to Owner	6	6	24-Oct-25	31-Oct-25
CON-38950	Bid Pkg 2 - TP Award	5	5	03-Nov-25	07-Nov-25
Bid Pkg 3 - Hoisting / Carpentry / Finishes					
CON-38970	Bid Pkg 3 - TP Bid Period	20	16	26-Sep-25 A	23-Oct-25
CON-38980	Bid Pkg 3 - Compile & Submit to Owner	6	6	24-Oct-25	31-Oct-25
CON-38990	Bid Pkg 3 - TP Award	5	5	03-Nov-25	07-Nov-25
Procurement					
BLDG1-PROC-1440	Bldg 1- Submittals - MG Strm 02	28	3	01-Oct-25 A	06-Oct-25
BLDG1-PROC-1450	Bldg 1- Review & Approve - MG Strm 02	10	10	07-Oct-25	20-Oct-25
BLDG1-PROC-1460	Bldg 1- Fab & Deliver - MG Strm 02 (1st Delivery)	28	28	21-Oct-25	01-Dec-25
Bldg 1 - Procurement					
Procure Materials					
BLDG1-PROC-1200	Bldg 1- Procure Earthwork TP	5	5	09-Oct-25	15-Oct-25
BLDG1-PROC-1120	Bldg 1- Procure - Precast (Secure Delivery)	10	10	10-Nov-25	21-Nov-25
BLDG1-PROC-1140	Bldg 1- Procure - Steel & Decking (Secure Delivery)	10	10	10-Nov-25	21-Nov-25
BLDG1-PROC-1130	Bldg 1- Procure - Medium Voltage Vaults & Ductbanks (Secure Delivery)	10	10	10-Nov-25	21-Nov-25
BLDG1-PROC-1150	Bldg 1- Procure - S25 PCW U/G Pipe (Secure Delivery)	10	10	10-Nov-25	21-Nov-25
BLDG1-PROC-1300	Bldg 1- Procure - Glass Lined FWST	10	10	10-Nov-25	21-Nov-25
BLDG1-PROC-1340	Bldg 1- Submittals - RTU's	15	15	10-Nov-25	02-Dec-25
BLDG1-PROC-1430	Bldg 1- Procure Other Trades	10	10	10-Nov-25	21-Nov-25
Submittals					
BLDG1-PROC-1080	Bldg 1- Submittals - Precast	15	15	24-Nov-25	16-Dec-25
BLDG1-PROC-1100	Bldg 1- Submittals - Steel & Decking	15	15	24-Nov-25	16-Dec-25
BLDG1-PROC-1090	Bldg 1- Submittals - Medium Voltage Vaults & Ductbanks	15	15	24-Nov-25	16-Dec-25
BLDG1-PROC-1110	Bldg 1- Submittals - S25 PCW U/G Pipe	15	15	24-Nov-25	16-Dec-25
BLDG1-PROC-1170	Bldg 1- Submittals - MV-Cable	15	15	24-Nov-25*	16-Dec-25
BLDG1-PROC-1310	Bldg 1- Submittals - Glass Lined FWST	15	15	24-Nov-25*	16-Dec-25
BLDG1-PROC-1400	Bldg 1- Submittals - MSE Retaining Wall Material	25	25	24-Nov-25	05-Jan-26
Review & Approve					
BLDG1-PROC-1350	Bldg 1- Review & Approve - RTU's	10	10	03-Dec-25	16-Dec-25
BLDG1-PROC-1040	Bldg 1- Review & Approve - Precast	10	10	17-Dec-25	05-Jan-26
BLDG1-PROC-1060	Bldg 1- Review & Approve - Steel & Decking	10	10	17-Dec-25	05-Jan-26
BLDG1-PROC-1050	Bldg 1- Review & Approve - Medium Voltage Vaults & Ductbanks	10	10	17-Dec-25	05-Jan-26
BLDG1-PROC-1070	Bldg 1- Review & Approve - S25 PCW U/G Pipe	10	10	17-Dec-25	05-Jan-26
BLDG1-PROC-1180	Bldg 1- Review & Approve - MV-Cable	10	10	17-Dec-25	05-Jan-26
BLDG1-PROC-1320	Bldg 1- Review & Approve - Glass Lined FWST	10	10	17-Dec-25	05-Jan-26
BLDG1-PROC-1410	Bldg 1- Review & Approve - MSE Retaining Wall Material	10	10	06-Jan-26	20-Jan-26
Fab & Deliver					
BLDG1-PROC-1360	Bldg 1- Fab & Deliver - RTU's	70	70	17-Dec-25	01-Apr-26
BLDG1-PROC-1000	Bldg 1- Fab & Deliver - Precast	111	111	06-Jan-26	12-Jun-26
BLDG1-PROC-1020	Bldg 1- Fab & Deliver - Steel & Decking	110	110	06-Jan-26	11-Jun-26
BLDG1-PROC-1010	Bldg 1- Fab & Deliver - Medium Voltage Vaults & Ductbanks	35	35	06-Jan-26	25-Feb-26
BLDG1-PROC-1030	Bldg 1- Fab & Deliver - S25 PCW U/G Pipe	40	40	06-Jan-26	04-Mar-26
BLDG1-PROC-1190	Bldg 1- Fab & Deliver - MV-Cable	225	225	06-Jan-26	23-Nov-26
BLDG1-PROC-1330	Bldg 1- Fab & Deliver - Glass Lined FWST	225	225	06-Jan-26	23-Nov-26
BLDG1-PROC-1420	Bldg 1- Fab & Deliver - MSE Retaining Wall Material	60	60	21-Jan-26	15-Apr-26
BLDG1-PROC-1160	Bldg 1- Fab & Deliver - Security Entrance Prefab Bldg	120	120	13-Mar-26	31-Aug-26



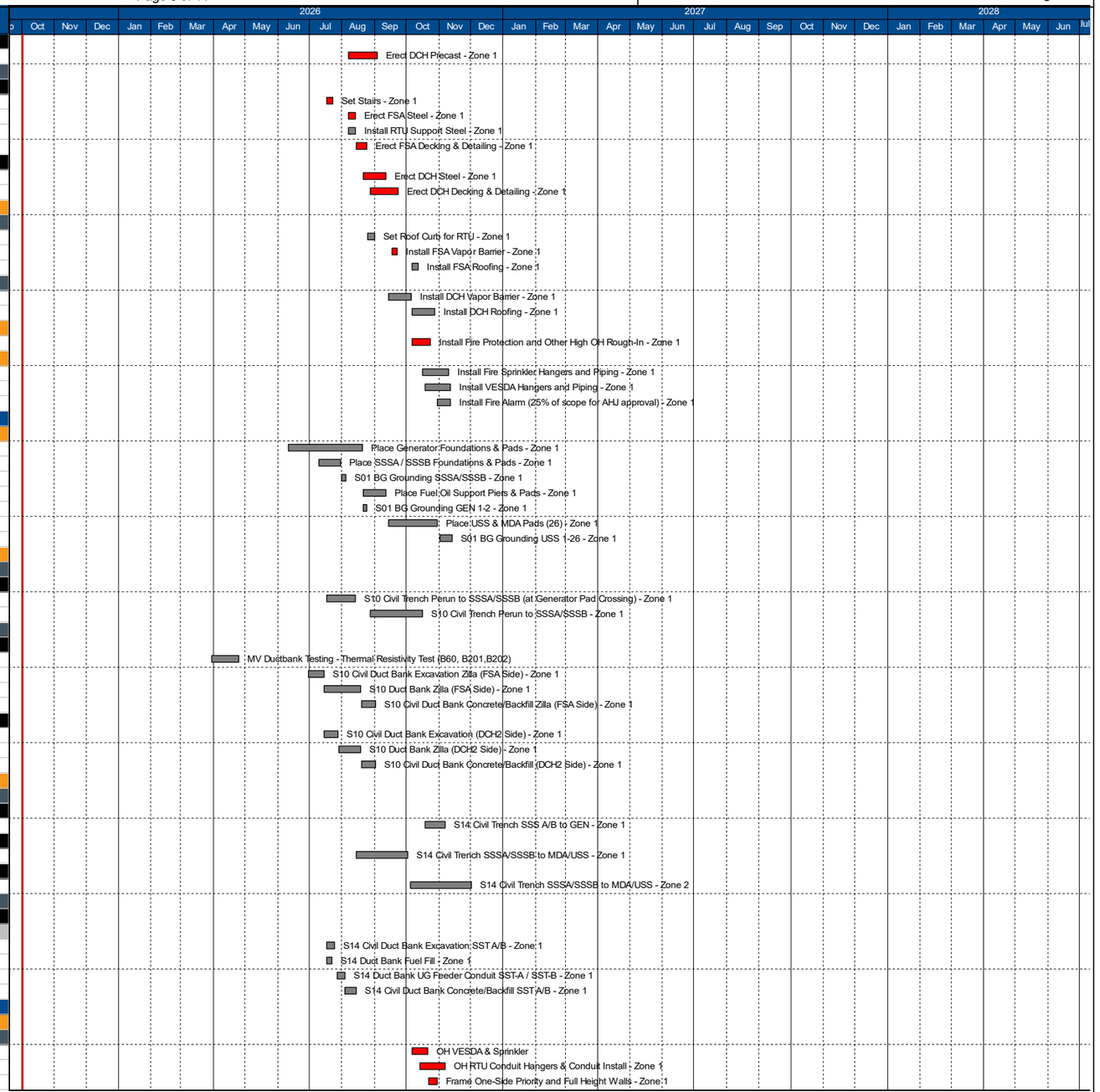
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
Power / Temp Power Gear					
CON-39270	Bid Power Design & TP Selection	28	28	02-Oct-25	10-Nov-25
Perm Power Gear					
BLDG1-PROC-1210	Bldg 1- Submittals - MVS01- 15kV SWGR	10	10	11-Nov-25*	24-Nov-25
BLDG1-PROC-1240	Bldg 1- Submittals - MVS02 -15kV SWGR	10	10	11-Nov-25*	24-Nov-25
BLDG1-PROC-1220	Bldg 1- Review & Approve - MVS01- 15kV SWGR	10	10	25-Nov-25	10-Dec-25
BLDG1-PROC-1250	Bldg 1- Review & Approve - MVS02 -15kV SWGR	10	10	25-Nov-25	10-Dec-25
BLDG1-PROC-1230	Bldg 1- Fab & Deliver - MVS01- 15kV SWGR	150	150	11-Dec-25	20-Jul-26
BLDG1-PROC-1260	Bldg 1- Fab & Deliver - MVS02 -15kV SWGR	200	200	11-Dec-25	29-Sep-26
Temp Power Gear					
BLDG1-PROC-1270	Bldg 1- Submittals - MVS01- 15kV SWGR (TEMP Power Gear)	15	15	11-Nov-25*	03-Dec-25
BLDG1-PROC-1280	Bldg 1- Review & Approve - MVS01- 15kV SWGR (TEMP Power Gear)	10	10	04-Dec-25	17-Dec-25
BLDG1-PROC-1290	Bldg 1- Fab & Deliver - MVS01- 15kV SWGR (TEMP Power Gear)	150	150	18-Dec-25	27-Jul-26
Bldg 2 - Procurement					
Procure Materials					
BLDG2-6000	Bldg 2- Procure - Precast	5	5	27-Jul-26	31-Jul-26
BLDG2-6020	Bldg 2- Procure - Medium Voltage Vaults & Ductbanks	5	5	05-Aug-26	11-Aug-26
BLDG2-6030	Bldg 2- Procure - S25 PCW U/G Pipe	5	5	12-Aug-26	18-Aug-26
BLDG2-6010	Bldg 2- Procure - Steel & Decking	5	5	24-Aug-26	28-Aug-26
Submittals					
BLDG2-6040	Bldg 2- Submittals - Precast	15	15	03-Aug-26	21-Aug-26
BLDG2-6060	Bldg 2- Submittals - Medium Voltage Vaults & Ductbanks	15	15	12-Aug-26	01-Sep-26
BLDG2-6070	Bldg 2- Submittals - S25 PCW U/G Pipe	15	15	19-Aug-26	09-Sep-26
BLDG2-6050	Bldg 2- Submittals - Steel & Decking	15	15	31-Aug-26	21-Sep-26
Review & Approve					
BLDG2-6080	Bldg 2- Review & Approve - Precast	10	10	24-Aug-26	04-Sep-26
BLDG2-6100	Bldg 2- Review & Approve - Medium Voltage Vaults & Ductbanks	10	10	02-Sep-26	16-Sep-26
BLDG2-6110	Bldg 2- Review & Approve - S25 PCW U/G Pipe	10	10	10-Sep-26	23-Sep-26
BLDG2-6090	Bldg 2- Review & Approve - Steel & Decking	10	10	22-Sep-26	05-Oct-26
Fab & Deliver					
BLDG2-PROC-1000	Bldg 2- Shops + Fab & Deliver - Precast	175	175	08-Sep-26	18-May-27
BLDG2-PROC-1020	Bldg 2- Shops + Fab & Deliver - Medium Voltage Vaults & Ductbanks	65	65	17-Sep-26	18-Dec-26
BLDG2-PROC-1030	Bldg 2- Shops + Fab & Deliver - S25 PCW U/G Pipe	40	40	24-Sep-26	18-Nov-26
BLDG2-PROC-1010	Bldg 2- Shops + Fab & Deliver - Steel & Decking	150	150	06-Oct-26	11-May-27
HUB - Procurement					
CON-38640	HUB - Shops + Fab & Deliver - PEMB	120	120	09-Oct-25	06-Apr-26
CON-38650	HUB - Shops + Fab & Deliver - HVAC & E-Gear	120	120	09-Oct-25	06-Apr-26
BLDG1-PROC-1370	Bldg 1- Submittals - Electrical Gear	15	15	09-Oct-25	29-Oct-25
BLDG1-PROC-1380	Bldg 1- Review & Approve - Electrical Gear	10	10	30-Oct-25	12-Nov-25
BLDG1-PROC-1390	Bldg 1- Fab & Deliver - Electrical Gear	170	170	13-Nov-25	22-Jul-26
Construction					
Campus SDT - Site Development (NEW)					
Campus Site Prep / Heavy Civil					
Campus Earthwork					
CAMP-1000	Campus - Mobilize & SWPPP	6	6	16-Oct-25*	23-Oct-25
CAMP-1010	Campus - Mass Grading Bldg #1	56	56	24-Oct-25	20-Jan-26
CAMP-1100	Campus - South Zone Rock Blasting / Processing	67	67	24-Oct-25*	04-Feb-26
CAMP-1190	Campus - MG Strm 02 Install (South Side of Bldg 1 MYD)	60	60	02-Dec-25	03-Mar-26
CAMP-1050	Campus - Mass Grading HUB	40	40	21-Jan-26	18-Mar-26
CAMP-1120	Campus - Bldg 1 - Additional Fill / LVC Material based on 70% Design Soils Report	36	36	21-Jan-26	12-Mar-26
DC 1					
CAMP-1130	Campus - Bldg 1 ZONE2 - Settlement Period (365 Calendar)	30	30	13-Mar-26	11-Apr-26
CAMP-1160	Campus - Bldg 1 FSA/ZONE1 - Building Pad Rock	15	15	13-Mar-26	27-Mar-26
CAMP-1170	Campus - Bldg 1 FSA/ZONE1 - Pad Ready (for Depp Foundations)	0	0	28-Mar-26	
CAMP-1030	DC 1 - Building Pad Rock ZONE2	20	20	13-Apr-26	08-May-26
CAMP-1040	DC 1 ZONE2 - Pad Ready (for Deep Foundations)	0	0	11-May-26	
Substations Pad Ready Dates					
BLDG1-2430	DC 1 - Rough Grade for Perun	30	30	08-Jun-26*	20-Jul-26
CON-38900	Temp Substation - Rough Grade Ready	0	0		18-Sep-26*
CON-38910	PSO - Perm Substation - Rough Grade Ready	0	0		04-Jan-27*
HUB					
CAMP-1080	HUB - Building Pad Rock	19	19	11-May-26	05-Jun-26
CAMP-1090	HUB - Pad Ready (for Deep Foundations) (Nanholtz A3100)	0	0	08-Jun-26	
DC 2					
CAMP-1150	DC2 - North Rock Blasting / Processing	68	68	05-Feb-26	12-May-26
CAMP-1110	Strip & Stock Pile	38	38	13-May-26	07-Jul-26
CAMP-1020	Cut to Fill & Lime Stabilization	65	65	08-Jul-26	07-Oct-26
CAMP-1180	DC2 - Install both MSE Retaining Walls	50	50	22-Jul-26	30-Sep-26
CAMP-1140	DC 2 - Settlement Period	30	30	08-Oct-26	06-Nov-26
CAMP-1060	DC 2 - Building Pad Rock	8	8	09-Nov-26	18-Nov-26



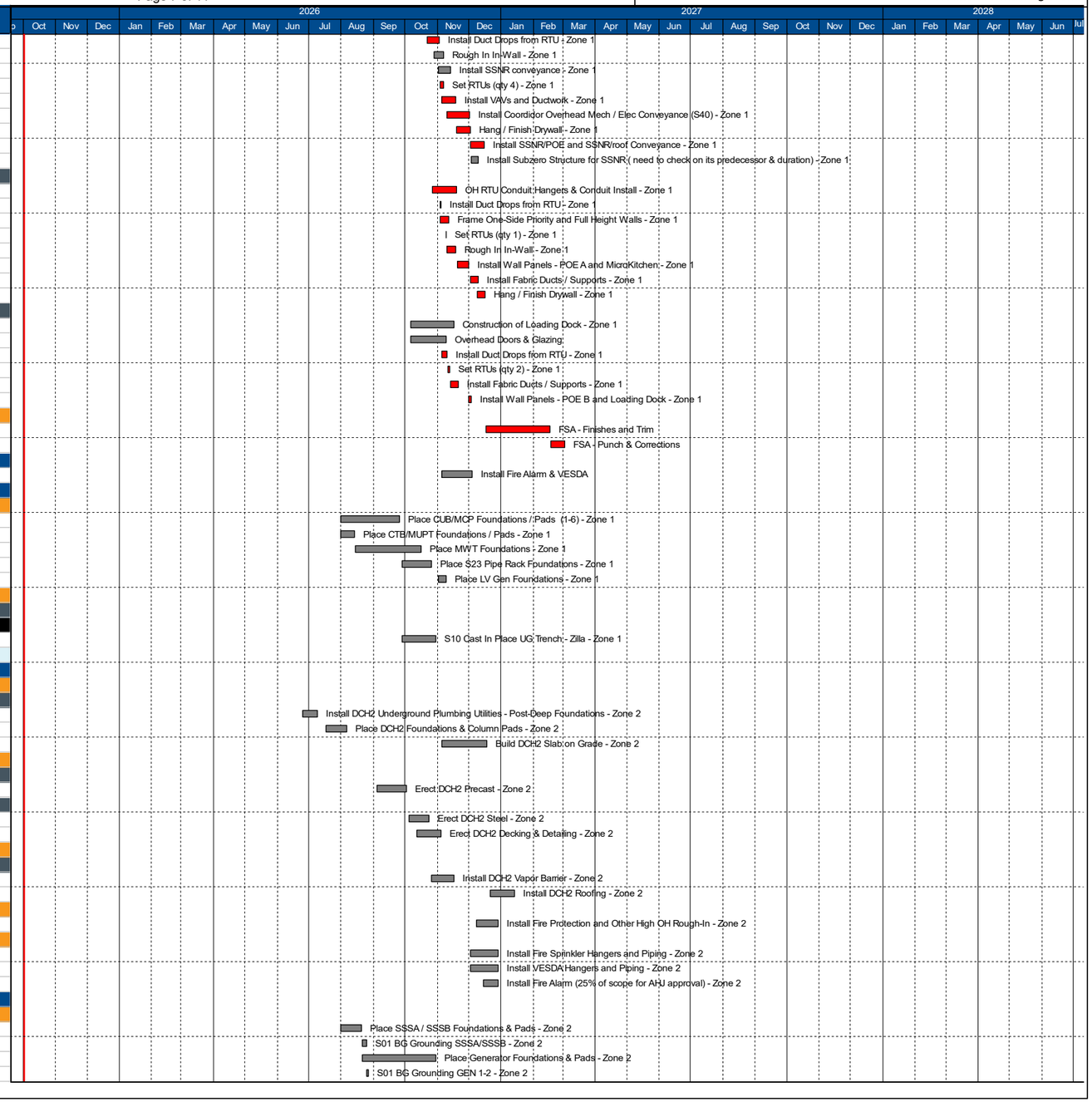
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
CAMP-1070	DC 2 - Pad Ready (for Deep Foundations)	0	0	19-Nov-26	
Building 1 Construction					
Bldg 1 - SDT					
Site Utilities & Temp Power					
BLDG1-1010	Critical UG Utilities SUMMARY	65	65	30-Mar-26	29-Jun-26
BLDG1-1030	Storm Sewer SUMMARY	84	84	27-Apr-26	24-Aug-26
BLDG1-1040	Sanitary & Process Sewer SUMMARY	84	84	27-Apr-26	24-Aug-26
BLDG1-1050	Water (Domestic, Fire, Process) SUMMARY	84	84	27-Apr-26	24-Aug-26
BLDG1-1060	Electrical SUMMARY	84	84	27-Apr-26	24-Aug-26
BLDG1-1070	Temp Power SUMMARY	63	63	27-Apr-26	24-Jul-26
Bldg 1 - S25 - PCW Underground Pipe					
BLDG1-1000	Bldg 1 - Bathtub S25 Underground - MCP to DCH (12) - Zone 1 & 2 (Nab Scope)	15	15	30-Mar-26	17-Apr-26
BLDG1-1020	Bldg 1 - Install S25 PCW Pipe - MCP to DCH (12) - Zone 1 & 2	20	20	03-Apr-26	30-Apr-26
BLDG1-1080	Bldg 1 - Hydro Test PCW Pipe - MCP to DCH (12) - Zone 1 & 2	10	10	01-May-26	14-May-26
BLDG1-1090	Bldg 1 - Backfill Trench - MCP to DCH (12) - Zone 1 & 2	15	15	15-May-26	05-Jun-26
Campus Fire Tank & Pumphouse					
CON-39240	Campus Fire Tank & PH - Pour Tank & Pump Foundations	15	15	19-Aug-26	09-Sep-26
CON-39260	Campus Fire Tank & PH - Set Pumphouse	5	5	10-Sep-26	16-Sep-26
CON-39250	Campus Fire Tank & PH - Erect Tank & Fitout	40	40	24-Nov-26	25-Jan-27
Site Concrete & Landscaping					
BLDG1-1770	Bldg 1 - Site Concrete	50	50	04-Sep-26	13-Nov-26
BLDG1-1890	Bldg 1 - Landscaping	50	50	08-Oct-26	18-Dec-26
BLDG1-1500	Bldg 1 - Perm Fence	50	50	08-Oct-26	18-Dec-26
Deep Foundations					
DCH / FSA					
BLDG1-1100	Setup / Test Piles	12	12	30-Mar-26	14-Apr-26
BLDG1-1110	DCH1/FSA Piers - Zone 1	30	30	15-Apr-26	27-May-26
BLDG1-1130	DCH 2 Piers - Zone 2	20	20	28-May-26	24-Jun-26
EYD					
BLDG1-1140	EYD Deep Foundations - Zone 1	10	10	28-May-26	10-Jun-26
BLDG1-1210	EYD Deep Foundations - Zone 2	10	10	25-Jun-26	09-Jul-26
CUB / Perun					
BLDG1-1280	MYD Deep Foundations - Zone 1/2	15	15	10-Jul-26	30-Jul-26
BLDG1-1320	Deep Foundations Complete	0	0		30-Jul-26
Substations					
Perm Power					
CON-39100	Perm Power - Install Foundations	10	10	11-May-26	22-May-26
CON-39110	Perm Power - Install Undergrounds from Perm Service to SWGRs	20	20	11-May-26	08-Jun-26
CON-39130	Perm Power - Set MVS 01	5	5	21-Jul-26	27-Jul-26
CON-39150	Perm Power - Set MVS 02	5	5	30-Sep-26	06-Oct-26
CON-39140	Perm Power - Pull & Term Power Feed	15	15	07-Oct-26	27-Oct-26
CON-39180	Perm Power - Ready	0	0		27-Oct-26
Temp Substation					
CON-39010	Temp Construction Power - Install Foundations	10	10	11-May-26	22-May-26
CON-39020	Temp Construction Power - Install Undergrounds to Trailer City	20	20	11-May-26	08-Jun-26
CON-39030	Temp Construction Power - Install Undergrounds to BLDGs / Yards	20	20	09-Jun-26	07-Jul-26
CON-39040	Temp Construction Power - Set MVS 01/02/03	5	5	28-Jul-26	03-Aug-26
CON-39160	Temp Construction Power - Pull / Term / Test Temp Cable (From Temp MVS01 SWGR to Trailers & DC	15	15	04-Aug-26	24-Aug-26
CON-39090	Temp Construction Power - Pull / Term / Test Temp Cable (From Perm Power SWGR to Temp Power S	15	15	07-Oct-26	27-Oct-26
CON-39170	Temp Construction Power - Ready	0	0		27-Oct-26
Bldg 1 - Zone 1					
SHL - Core and Shell - Zone 1					
S02 - Slab on Grade - Zone 1					
S02 - Shallow Foundations & SOG - Zone 1					
BLDG1-1120	Install FSA Underground Plumbing Utilities - Post-Deep Foundations - Zone 1	10	10	28-May-26	10-Jun-26
BLDG1-1170	Place FSA Foundations & Column Pads - Zone 1	10	10	11-Jun-26	24-Jun-26
BLDG1-1270	Place DC Foundations & Column Pads - Zone 1	15	15	25-Jun-26	16-Jul-26
S02 - SOG - Zone 1					
BLDG1-1730	Build FSA Grade Dirt & Finalize U/G Utilities - Zone 1	15	15	25-Aug-26	15-Sep-26
BLDG1-1860	Build FSA Slab on Grade - Zone 1	14	14	16-Sep-26	05-Oct-26
BLDG1-1880	Build DCH Slab on Grade - Zone 1	30	30	24-Sep-26	04-Nov-26
Dock - Zone 1					
BLDG1-1350	Z1 FSA - Footings Form / Rebar / Pour - Dock Walls - Zone 1	5	5	17-Jul-26	23-Jul-26
BLDG1-1420	Z1 FSA - Form / Rebar / Pour - Dock Walls - Zone 1	10	10	24-Jul-26	06-Aug-26
BLDG1-1560	Z1 FSA - Backfill - Dock Walls - Zone 1	2	2	07-Aug-26	10-Aug-26
BLDG1-1590	Z1 FSA - Slab Pour - Dock Walls - Zone 1	3	3	11-Aug-26	13-Aug-26
S03 - Superstructure - Zone 1					
S03 - Precast - Zone 1					
FSA - Zone 1					
BLDG1-1410	Erect FSA Precast (Including Refuge and Control Room) - Zone 1	10	10	24-Jul-26	06-Aug-26



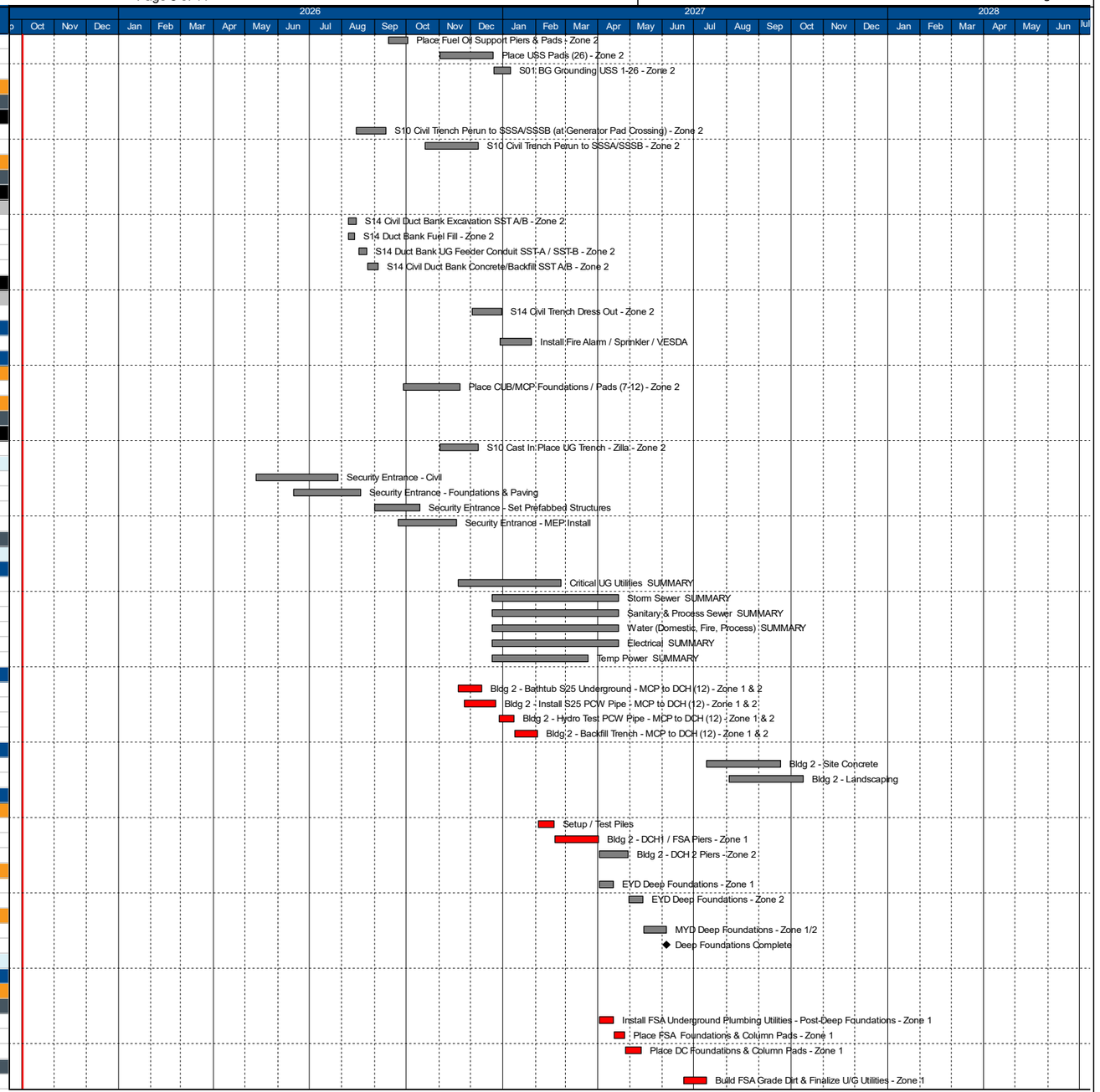
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
	DCH - Zone 1				
BLDG1-1550	Erect DCH Precast - Zone 1	20	20	07-Aug-26	03-Sep-26
	S03 - Steel - Zone 1				
	FSA - Zone 1				
BLDG1-1340	Set Stairs - Zone 1	5	5	17-Jul-26	23-Jul-26
BLDG1-1530	Erect FSA Steel - Zone 1	5	5	07-Aug-26	13-Aug-26
BLDG1-1540	Install RTU Support Steel - Zone 1	5	5	07-Aug-26	13-Aug-26
BLDG1-1600	Erect FSA Decking & Detailing - Zone 1	7	7	14-Aug-26	24-Aug-26
	DCH - Zone 1				
BLDG1-1650	Erect DCH Steel - Zone 1	15	15	21-Aug-26	11-Sep-26
BLDG1-1740	Erect DCH Decking & Detailing - Zone 1	18	18	28-Aug-26	23-Sep-26
	S05 - Roof - Zone 1				
	FSA - Zone 1				
BLDG1-1700	Set Roof Curb for RTU - Zone 1	5	5	25-Aug-26	31-Aug-26
BLDG1-1870	Install FSA Vapor Barrier - Zone 1	4	4	17-Sep-26	22-Sep-26
BLDG1-1930	Install FSA Roofing - Zone 1	5	5	06-Oct-26	12-Oct-26
	DCH - Zone 1				
BLDG1-1790	Install DCH Vapor Barrier - Zone 1	16	16	14-Sep-26	05-Oct-26
BLDG1-1950	Install DCH Roofing - Zone 1	16	16	06-Oct-26	27-Oct-26
	S07 - Fire Alarm - Zone 1				
BLDG1-1940	Install Fire Protection and Other High OH Rough-In - Zone 1	14	14	06-Oct-26	23-Oct-26
	S08 - Fire Suppression - Zone 1				
BLDG1-2000	Install Fire Sprinkler Hangers and Piping - Zone 1	18	18	16-Oct-26	10-Nov-26
BLDG1-2050	Install VESDA Hangers and Piping - Zone 1	18	18	19-Oct-26	11-Nov-26
BLDG1-2100	Install Fire Alarm (25% of scope for AHJ approval) - Zone 1	9	9	30-Oct-26	11-Nov-26
	EYD - Electrical Yard - Zone 1				
	S02 - EYD Piers / Gen / Eqpt Pads & Foundations - Zone 1				
BLDG1-1190	Place Generator Foundations & Pads - Zone 1	50	50	11-Jun-26	20-Aug-26
BLDG1-1300	Place SSSA / SSSB Foundations & Pads - Zone 1	15	15	10-Jul-26	30-Jul-26
BLDG1-1460	S01 BG Grounding SSSA/SSSB - Zone 1	3	3	31-Jul-26	04-Aug-26
BLDG1-1660	Place Fuel Oil Support Piers & Pads - Zone 1	15	15	21-Aug-26	11-Sep-26
BLDG1-1670	S01 BG Grounding GEN 1-2 - Zone 1	2	2	21-Aug-26	24-Aug-26
BLDG1-1800	Place USS & MDA Pads (26) - Zone 1	35	35	14-Sep-26	30-Oct-26
BLDG1-2120	S01 BG Grounding USS 1-26 - Zone 1	10	10	02-Nov-26	13-Nov-26
	S10 - EYD SST Conveyance - Zone 1				
	S10 - SST to SSS A/B Trenchduct - Zone 1				
	S10 - Trench Duct - Zone 1				
BLDG1-1380	S10 Civil Trench Perun to SSSA/SSSB (at Generator Pad Crossing) - Zone 1	20	20	17-Jul-26	13-Aug-26
BLDG1-1750	S10 Civil Trench Perun to SSSA/SSSB - Zone 1	35	35	28-Aug-26	16-Oct-26
	S10 - Ductbank - Zone 1				
	S10 - EYD Ductbank				
CON-39230	MV Ductbank Testing - Thermal Resistivity Test (B60, B201,B202)	20	20	30-Mar-26	24-Apr-26
BLDG1-1180	S10 Civil Duct Bank Excavation Zilla (FSA Side) - Zone 1	10	10	30-Jun-26	14-Jul-26
BLDG1-1250	S10 Duct Bank Zilla (FSA Side) - Zone 1	25	25	15-Jul-26	18-Aug-26
BLDG1-1470	S10 Civil Duct Bank Concrete/Backfill Zilla (FSA Side) - Zone 1	10	10	19-Aug-26	01-Sep-26
	S10 - MYD Ductbank				
BLDG1-1260	S10 Civil Duct Bank Excavation (DCH2 Side) - Zone 1	10	10	15-Jul-26	28-Jul-26
BLDG1-1310	S10 Duct Bank Zilla (DCH2 Side) - Zone 1	15	15	29-Jul-26	18-Aug-26
BLDG1-1480	S10 Civil Duct Bank Concrete/Backfill (DCH2 Side) - Zone 1	10	10	19-Aug-26	01-Sep-26
	S14 - EYD Conveyance - Zone 1				
	S14 Trenchduct Placement				
	S14 - Gens to GPS - Trench Duct - Zone 1				
BLDG1-2010	S14 Civil Trench SSS A/B to GEN - Zone 1	15	15	19-Oct-26	06-Nov-26
	S14 - SSS A/B to USS - Trench Duct - Zone 1				
BLDG1-1610	S14 Civil Trench SSSA/SSSB to MDA/USS - Zone 1	35	35	14-Aug-26	02-Oct-26
	S14 - SSS A/B to USS - Trench Duct - Zone 2				
BLDG1-1900	S14 Civil Trench SSSA/SSSB to MDA/USS - Zone 2	40	40	05-Oct-26	01-Dec-26
	S14 Assembly				
	S14 - E-House Ductbank - Zone 1				
	S14 - E-House - SST-A / B UG				
BLDG1-1360	S14 Civil Duct Bank Excavation SST A/B - Zone 1	6	6	17-Jul-26	24-Jul-26
BLDG1-1370	S14 Duct Bank Fuel Fill - Zone 1	4	4	17-Jul-26	22-Jul-26
BLDG1-1440	S14 Duct Bank UG Feeder Conduit SST-A / SST-B - Zone 1	6	6	27-Jul-26	03-Aug-26
BLDG1-1510	S14 Civil Duct Bank Concrete/Backfill SST A/B - Zone 1	9	9	04-Aug-26	14-Aug-26
	FSA - Facility Support Area				
	FSA Installation				
	Zone 1 (MDA Batt/Elec + FMC) & Zone 2 (HWOPS / Disck Erase) & Zone 3 (SSNR / DAS / IDF)				
BLDG1-1970	OH VESDA & Sprinkler	12	12	06-Oct-26	21-Oct-26
BLDG1-1990	OH RTU Conduit Hangers & Conduit Install - Zone 1	18	18	14-Oct-26	06-Nov-26
BLDG1-2060	Frame One-Side Priority and Full Height Walls - Zone 1	7	7	22-Oct-26	30-Oct-26



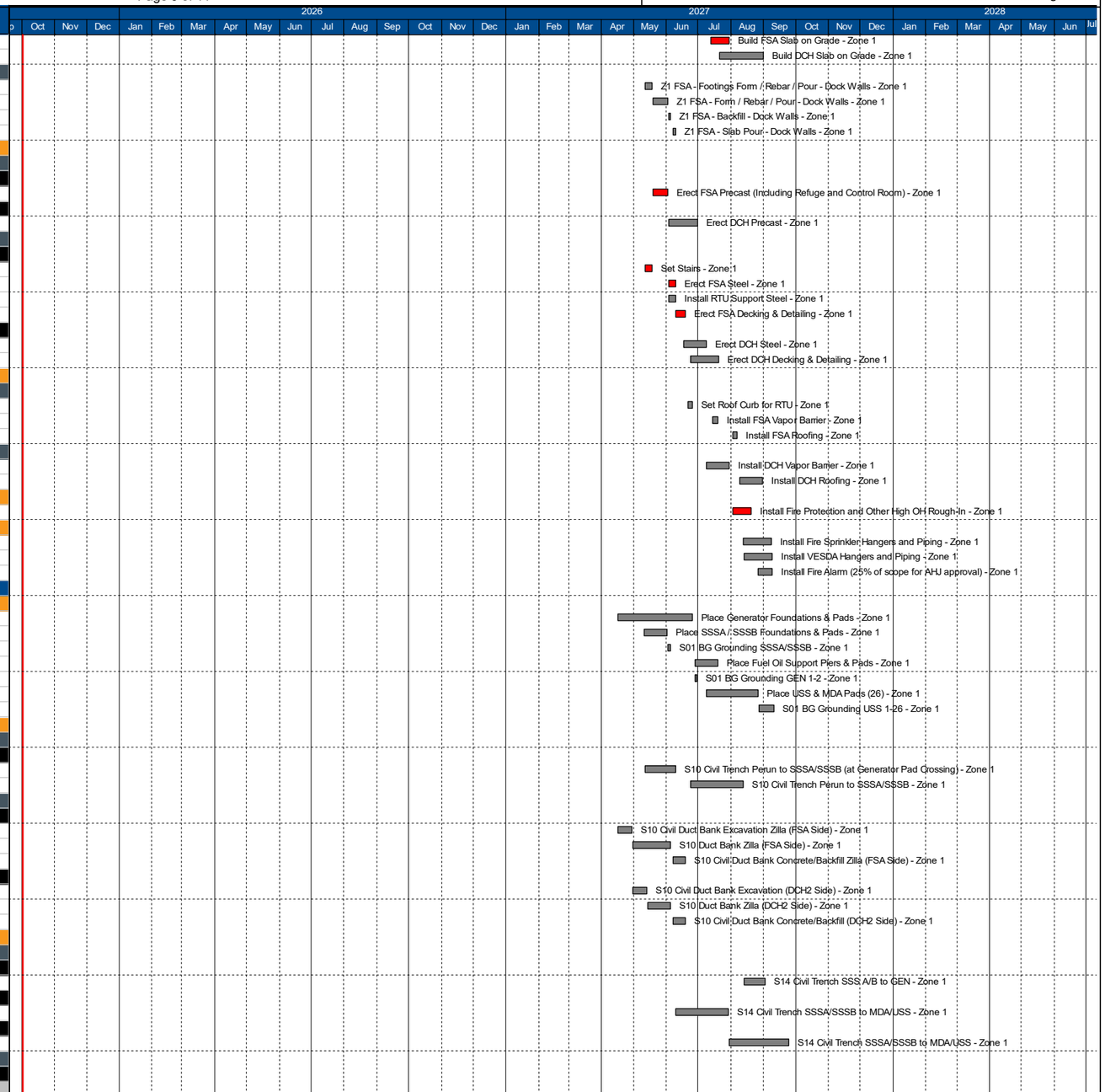
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
BLDG1-2070	Install Duct Drops from RTU - Zone 1	8	8	22-Oct-26	02-Nov-26
BLDG1-2080	Rough In In-Wall - Zone 1	7	7	29-Oct-26	06-Nov-26
BLDG1-2110	Install SSNR conveyance - Zone 1	10	10	02-Nov-26	13-Nov-26
BLDG1-2140	Set RTUs (qty 4) - Zone 1	4	4	03-Nov-26	06-Nov-26
BLDG1-2170	Install VAVs and Ductwork - Zone 1	10	10	05-Nov-26	18-Nov-26
BLDG1-2230	Install Coordidor Overhead Mech / Elec Conveyance (S40) - Zone 1	14	14	10-Nov-26	01-Dec-26
BLDG1-2260	Hang / Finish Drywall - Zone 1	8	8	19-Nov-26	02-Dec-26
BLDG1-2330	Install SSNR/POE and SSNR/roof Conveyance - Zone 1	10	10	02-Dec-26	15-Dec-26
BLDG1-2310	Install Subzero Structure for SSNR (need to check on its predecessor & duration) - Zone 1	5	5	03-Dec-26	09-Dec-26
Zone 4 (FSA General)					
BLDG1-2090	OH RTU Conduit Hangers & Conduit Install - Zone 1	18	18	27-Oct-26	19-Nov-26
BLDG1-2150	Install Duct Drops from RTU - Zone 1	2	2	03-Nov-26	04-Nov-26
BLDG1-2200	Frame One-Side Priority and Full Height Walls - Zone 1	7	7	03-Nov-26	11-Nov-26
BLDG1-2210	Set RTUs (qty 1) - Zone 1	1	1	09-Nov-26	09-Nov-26
BLDG1-2240	Rough In In-Wall - Zone 1	7	7	10-Nov-26	18-Nov-26
BLDG1-2270	Install Wall Panels - POE A and MicroKitchen - Zone 1	5	5	20-Nov-26	30-Nov-26
BLDG1-2340	Install Fabric Ducts / Supports - Zone 1	6	6	02-Dec-26	09-Dec-26
BLDG1-2370	Hang / Finish Drywall - Zone 1	6	6	09-Dec-26	16-Dec-26
Zone 5 (DC General)					
BLDG1-1920	Construction of Loading Dock - Zone 1	30	30	06-Oct-26	16-Nov-26
BLDG1-1980	Overhead Doors & Glazing	25	25	06-Oct-26	09-Nov-26
BLDG1-2180	Install Duct Drops from RTU - Zone 1	4	4	05-Nov-26	10-Nov-26
BLDG1-2220	Set RTUs (qty 2) - Zone 1	2	2	11-Nov-26	12-Nov-26
BLDG1-2250	Install Fabric Ducts / Supports - Zone 1	6	6	13-Nov-26	20-Nov-26
BLDG1-2320	Install Wall Panels - POE B and Loading Dock - Zone 1	3	3	01-Dec-26	03-Dec-26
FSA Finishes & Punch					
BLDG1-2360	FSA - Finishes and Trim	40	40	17-Dec-26	16-Feb-27
BLDG1-2420	FSA - Punch & Corrections	10	10	17-Feb-27	02-Mar-27
DCH - Data Center Hall - Zone 1					
BLDG1-2160	Install Fire Alarm & VESDA	20	20	05-Nov-26	04-Dec-26
CFG - Central Utility Building - Zone 1					
S02 - MYD Piers / Gen / Eqpt Pads & Foundations - Zone 1					
BLDG1-1330	Place CUB/MCP Foundations / Pads (1-6) - Zone 1	40	40	31-Jul-26*	25-Sep-26
BLDG1-1400	Place CTB/MUPT Foundations / Pads - Zone 1	10	10	31-Jul-26*	13-Aug-26
BLDG1-1450	Place MWT Foundations - Zone 1	45	45	14-Aug-26	16-Oct-26
BLDG1-1780	Place S23 Pipe Rack Foundations - Zone 1	21	21	28-Sep-26	26-Oct-26
BLDG1-2020	Place LV Gen Foundations - Zone 1	6	6	02-Nov-26	09-Nov-26
S10 Conveyance & Ductbank					
S10 - Conveyance (SSS to Zilla Ring)					
S10 - Trench Duct - Zone 1					
BLDG1-1810	S10 Cast In Place UG Trench - Zilla - Zone 1	25	25	28-Sep-26	30-Oct-26
Bldg 1 - Zone 2					
SHL - Core and Shell - Zone 2					
S02 - Slab on Grade - Zone 2					
S02 - Shallow Foundations & SOG - Zone 2					
BLDG1-1200	Install DCH2 Underground Plumbing Utilities - Post-Deep Foundations - Zone 2	10	10	25-Jun-26	09-Jul-26
BLDG1-1390	Place DCH2 Foundations & Column Pads - Zone 2	15	15	17-Jul-26	06-Aug-26
BLDG1-2190	Build DCH2 Slab on Grade - Zone 2	30	30	05-Nov-26	18-Dec-26
S03 - Superstructure - Zone 2					
S03 - Precast - Zone 2					
BLDG1-1620	Erect DCH2 Precast - Zone 2	20	20	04-Sep-26	02-Oct-26
S03 - Steel - Zone 2					
BLDG1-1760	Erect DCH2 Steel - Zone 2	15	15	05-Oct-26	23-Oct-26
BLDG1-1830	Erect DCH2 Decking & Detailing - Zone 2	18	18	12-Oct-26	04-Nov-26
S05 - Roof - Zone 2					
DCH - Zone 2					
BLDG1-1960	Install DCH2 Vapor Barrier - Zone 2	16	16	26-Oct-26	16-Nov-26
BLDG1-2390	Install DCH2 Roofing - Zone 2	16	16	21-Dec-26	13-Jan-27
S07 - Fire Alarm - Zone 2					
BLDG1-2350	Install Fire Protection and Other High OH Rough-In - Zone 2	14	14	08-Dec-26	28-Dec-26
S08 - Fire Suppression - Zone 2					
BLDG1-2280	Install Fire Sprinkler Hangers and Piping - Zone 2	18	18	02-Dec-26	28-Dec-26
BLDG1-2300	Install VESDA Hangers and Piping - Zone 2	18	18	02-Dec-26	28-Dec-26
BLDG1-2380	Install Fire Alarm (25% of scope for AHJ approval) - Zone 2	9	9	15-Dec-26	28-Dec-26
EYD - Electrical Yard - Zone 2					
S02 - Piers / Gen / Eqpt Pads & Foundations - Zone 2					
BLDG1-1490	Place SSSA / SSSB Foundations & Pads - Zone 2	15	15	31-Jul-26	20-Aug-26
BLDG1-1680	S01 BG Grounding SSSA/SSSB - Zone 2	3	3	21-Aug-26	25-Aug-26
BLDG1-1690	Place Generator Foundations & Pads - Zone 2	50	50	21-Aug-26	30-Oct-26
BLDG1-1710	S01 BG Grounding GEN 1-2 - Zone 2	2	2	25-Aug-26	26-Aug-26



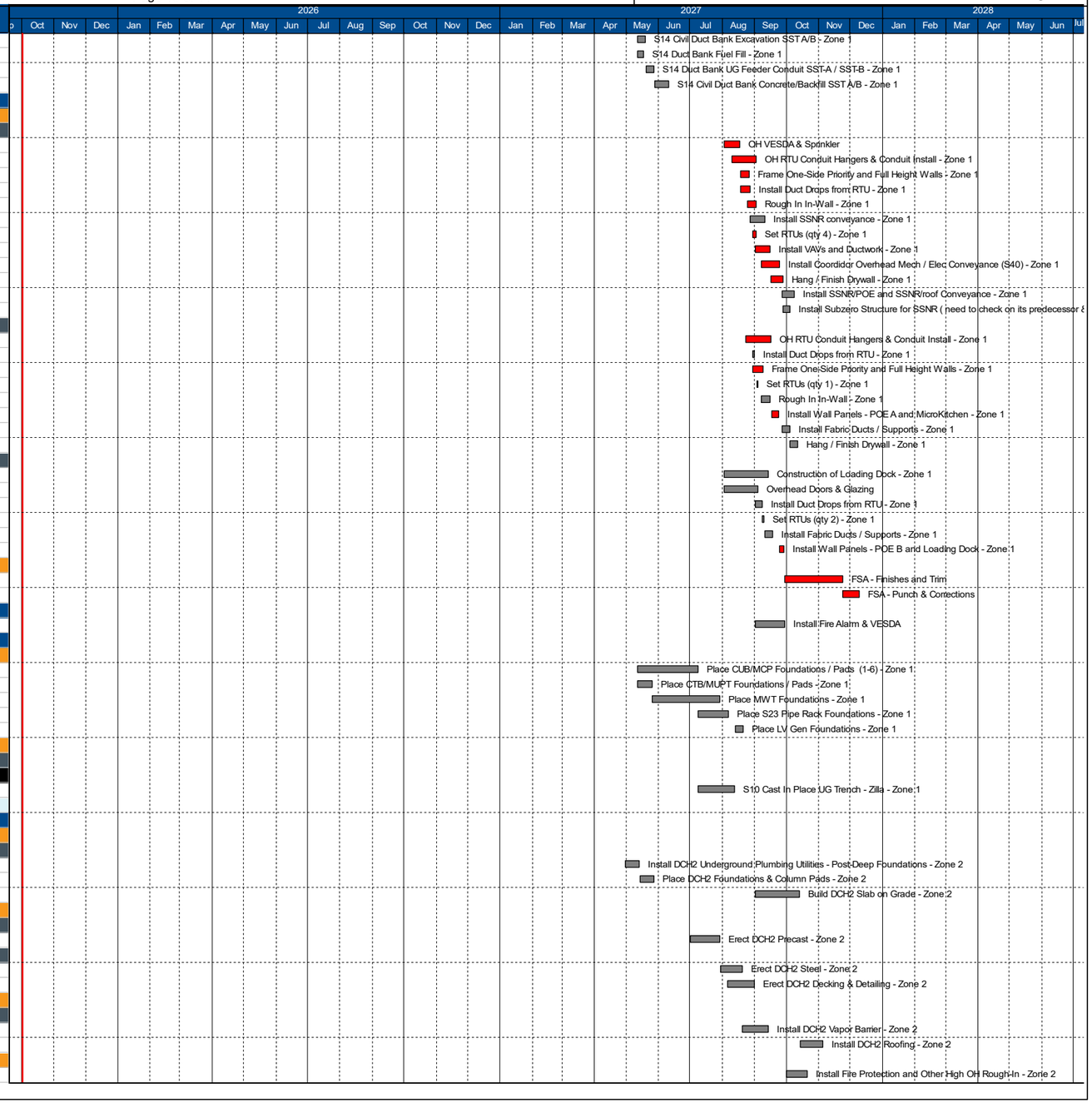
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
BLDG1-1840	Place Fuel Oil Support Piers & Pads - Zone 2	15	15	14-Sep-26	02-Oct-26
BLDG1-2130	Place USS Pads (26) - Zone 2	35	35	02-Nov-26	22-Dec-26
BLDG1-2400	S01 BG Grounding USS 1-26 - Zone 2	10	10	23-Dec-26	07-Jan-27
S10 - EYD SST Trench Conveyance - Zone 2					
S10 - SST to SSS A/B - Zone 2					
S10 - Trench Duct - Zone 2					
BLDG1-1630	S10 Civil Trench Perun to SSSA/SSSB (at Generator Pad Crossing) - Zone 2	20	20	14-Aug-26	11-Sep-26
BLDG1-2040	S10 Civil Trench Perun to SSSA/SSSB - Zone 2	35	35	19-Oct-26	08-Dec-26
S14 - EYD Conveyance - Zone 2					
S14 Assembly					
S14 - E-House - Zone 2					
S14 - E-House - SST-A / B UG					
BLDG1-1570	S14 Civil Duct Bank Excavation SST A/B - Zone 2	6	6	07-Aug-26	14-Aug-26
BLDG1-1580	S14 Duct Bank Fuel Fill - Zone 2	4	4	07-Aug-26	12-Aug-26
BLDG1-1640	S14 Duct Bank UG Feeder Conduit SST-A / SST-B - Zone 2	6	6	17-Aug-26	24-Aug-26
BLDG1-1720	S14 Civil Duct Bank Concrete/Backfill SST A/B - Zone 2	9	9	25-Aug-26	04-Sep-26
S14 - SSS A/B to USS - Zone 2					
S14 - SSS A/B to USS - Trestle Assembly & Cable Tray - Zone 2					
BLDG1-2290	S14 Civil Trench Dress Out - Zone 2	20	20	02-Dec-26	30-Dec-26
DCH - Data Center Hall - Zone 2					
BLDG1-2410	Install Fire Alarm / Sprinkler / VESDA	20	20	29-Dec-26	27-Jan-27
CFG - Central Utility Building - Zone 2					
S02 - MYD Piers / Eqpt Pads & Foundations - Zone 2					
BLDG1-1820	Place CUB/MCP Foundations / Pads (7-12) - Zone 2	40	40	28-Sep-26	20-Nov-26
S10 Conveyance and Ductbanks					
S10 - Conveyance (SSS to Zilla Ring)					
S10 - Trench Duct - Zone 2					
BLDG1-2030	S10 Cast In Place UG Trench - Zilla - Zone 2	25	25	02-Nov-26	08-Dec-26
Bldg 1 - Security Entrance					
BLDG1-1150	Security Entrance - Civil	55	55	11-May-26	28-Jul-26
BLDG1-1430	Security Entrance - Foundations & Paving	45	45	16-Jun-26	18-Aug-26
BLDG1-1850	Security Entrance - Set Prefabbed Structures	30	30	01-Sep-26*	13-Oct-26
BLDG1-1910	Security Entrance - MEP Install	40	40	23-Sep-26	17-Nov-26
Building 2 Construction					
Bldg 2 - SDT					
Site Utilities					
BLDG2-1010	Critical UG Utilities SUMMARY	65	65	19-Nov-26*	24-Feb-27
BLDG2-1030	Storm Sewer SUMMARY	84	84	21-Dec-26	20-Apr-27
BLDG2-1040	Sanitary & Process Sewer SUMMARY	84	84	21-Dec-26	20-Apr-27
BLDG2-1050	Water (Domestic, Fire, Process) SUMMARY	84	84	21-Dec-26	20-Apr-27
BLDG2-1060	Electrical SUMMARY	84	84	21-Dec-26	20-Apr-27
BLDG2-1070	Temp Power SUMMARY	63	63	21-Dec-26	22-Mar-27
Bldg 2 - S25 - PCW Underground Pipe					
BLDG2-1000	Bldg 2 - Bathtub S25 Underground - MCP to DCH (12) - Zone 1 & 2	15	15	19-Nov-26*	11-Dec-26
BLDG2-1020	Bldg 2 - Install S25 PCW Pipe - MCP to DCH (12) - Zone 1 & 2	20	20	25-Nov-26	24-Dec-26
BLDG2-1080	Bldg 2 - Hydro Test PCW Pipe - MCP to DCH (12) - Zone 1 & 2	10	10	28-Dec-26	11-Jan-27
BLDG2-1090	Bldg 2 - Backfill Trench - MCP to DCH (12) - Zone 1 & 2	15	15	12-Jan-27	02-Feb-27
Site Concrete & Landscaping					
BLDG2-1810	Bldg 2 - Site Concrete	50	50	13-Jul-27	21-Sep-27
BLDG2-1930	Bldg 2 - Landscaping	50	50	03-Aug-27	12-Oct-27
Deep Foundations					
DCH / FSA					
BLDG2-1100	Setup / Test Piles	12	12	03-Feb-27	18-Feb-27
BLDG2-1110	Bldg 2 - DCH1 / FSA Piers - Zone 1	30	30	19-Feb-27	01-Apr-27
BLDG2-1130	Bldg 2 - DCH 2 Piers - Zone 2	20	20	02-Apr-27	29-Apr-27
EYD					
BLDG2-1140	EYD Deep Foundations - Zone 1	10	10	02-Apr-27	15-Apr-27
BLDG2-1200	EYD Deep Foundations - Zone 2	10	10	30-Apr-27	13-May-27
CUB / Perun					
BLDG2-1270	MYD Deep Foundations - Zone 1/2	15	15	14-May-27	04-Jun-27
BLDG2-1420	Deep Foundations Complete	0	0		04-Jun-27
Bldg 2 - Zone 1					
SHL - Core and Shell - Zone 1					
S02 - Slab on Grade - Zone 1					
S02 - Shallow Foundations & SOG - Zone 1					
BLDG2-1120	Install FSA Underground Plumbing Utilities - Post-Deep Foundations - Zone 1	10	10	02-Apr-27	15-Apr-27
BLDG2-1160	Place FSA Foundations & Column Pads - Zone 1	7	7	16-Apr-27	26-Apr-27
BLDG2-1230	Place DC Foundations & Column Pads - Zone 1	11	11	27-Apr-27	11-May-27
S02 - SOG - Zone 1					
BLDG2-1650	Build FSA Grade Dirt & Finalize U/G Utilities - Zone 1	15	15	21-Jun-27	12-Jul-27



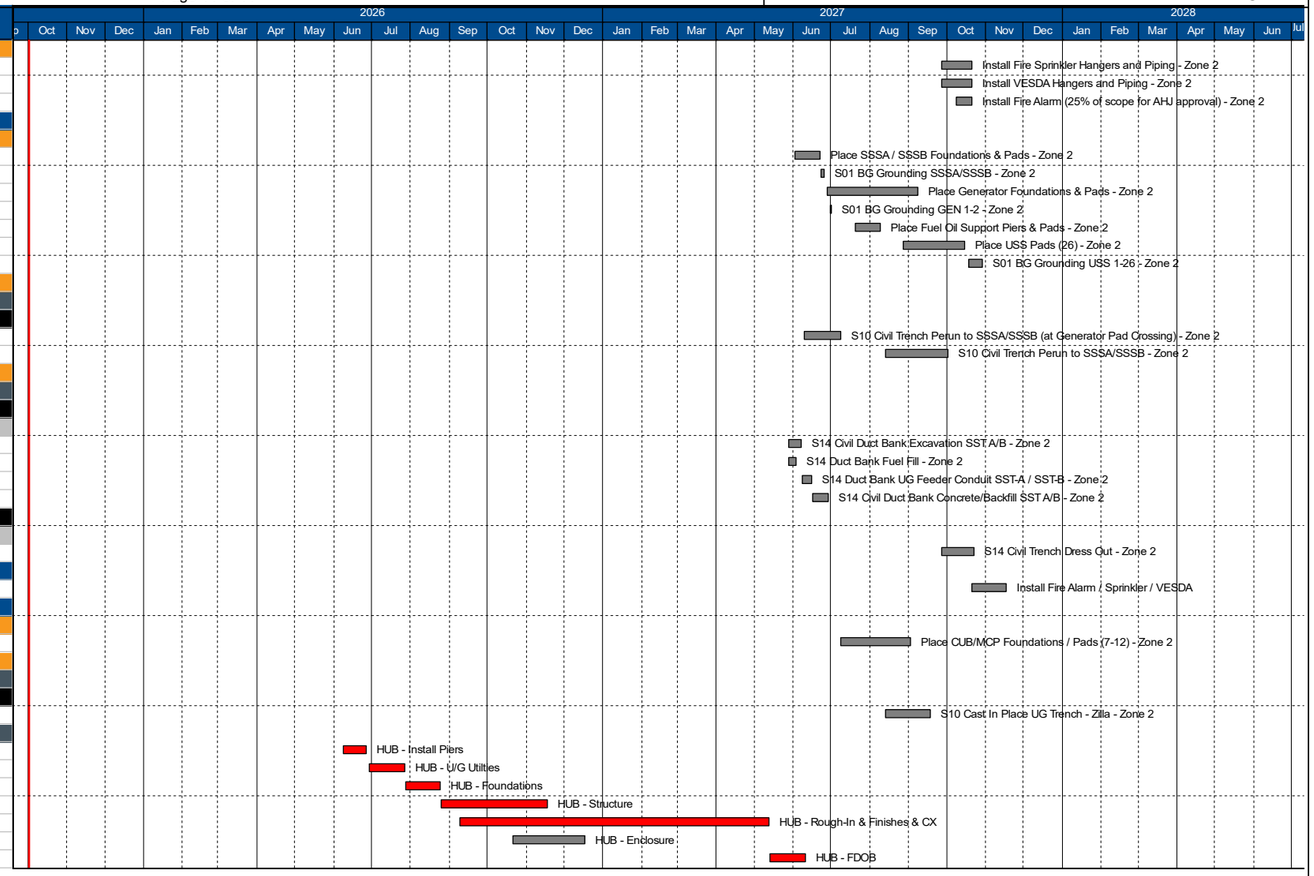
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
BLDG2-1800	Build FSA Slab on Grade - Zone 1	14	14	13-Jul-27	30-Jul-27
BLDG2-1840	Build DCH Slab on Grade - Zone 1	30	30	21-Jul-27	31-Aug-27
Dock - Zone 1					
BLDG2-1310	Z1 FSA - Footings Form / Rebar / Pour - Dock Walls - Zone 1	5	5	12-May-27	18-May-27
BLDG2-1400	Z1 FSA - Form / Rebar / Pour - Dock Walls - Zone 1	10	10	19-May-27	02-Jun-27
BLDG2-1520	Z1 FSA - Backfill - Dock Walls - Zone 1	2	2	03-Jun-27	04-Jun-27
BLDG2-1540	Z1 FSA - Slab Pour - Dock Walls - Zone 1	3	3	07-Jun-27	09-Jun-27
S03 - Superstructure - Zone 1					
S03 - Precast - Zone 1					
FSA - Zone 1					
BLDG2-1390	Erect FSA Precast (Including Refuge and Control Room) - Zone 1	10	10	19-May-27	02-Jun-27
DCH - Zone 1					
BLDG2-1510	Erect DCH Precast - Zone 1	20	20	03-Jun-27	30-Jun-27
S03 - Steel - Zone 1					
FSA - Zone 1					
BLDG2-1300	Set Stairs - Zone 1	5	5	12-May-27	18-May-27
BLDG2-1490	Erect FSA Steel - Zone 1	5	5	03-Jun-27	09-Jun-27
BLDG2-1500	Install RTU Support Steel - Zone 1	5	5	03-Jun-27	09-Jun-27
BLDG2-1580	Erect FSA Decking & Detailing - Zone 1	7	7	10-Jun-27	18-Jun-27
DCH - Zone 1					
BLDG2-1630	Erect DCH Steel - Zone 1	15	15	17-Jun-27	08-Jul-27
BLDG2-1670	Erect DCH Decking & Detailing - Zone 1	18	18	24-Jun-27	20-Jul-27
S05 - Roof - Zone 1					
FSA - Zone 1					
BLDG2-1640	Set Roof Curb for RTU - Zone 1	5	5	21-Jun-27	25-Jun-27
BLDG2-1820	Install FSA Vapor Barrier - Zone 1	4	4	14-Jul-27	19-Jul-27
BLDG2-1870	Install FSA Roofing - Zone 1	5	5	02-Aug-27	06-Aug-27
DCH - Zone 1					
BLDG2-1750	Install DCH Vapor Barrier - Zone 1	16	16	09-Jul-27	30-Jul-27
BLDG2-1890	Install DCH Roofing - Zone 1	16	16	09-Aug-27	30-Aug-27
S07 - Fire Alarm - Zone 1					
BLDG2-1880	Install Fire Protection and Other High OH Rough-In - Zone 1	14	14	02-Aug-27	19-Aug-27
S08 - Fire Suppression - Zone 1					
BLDG2-1950	Install Fire Sprinkler Hangers and Piping - Zone 1	18	18	12-Aug-27	07-Sep-27
BLDG2-2000	Install VESDA Hangers and Piping - Zone 1	18	18	13-Aug-27	08-Sep-27
BLDG2-2050	Install Fire Alarm (25% of scope for AHJ approval) - Zone 1	9	9	26-Aug-27	08-Sep-27
EYD - Electrical Yard - Zone 1					
S02 - EYD Piers / Gen / Eqpt Pads & Foundations - Zone 1					
BLDG2-1180	Place Generator Foundations & Pads - Zone 1	50	50	16-Apr-27	25-Jun-27
BLDG2-1280	Place SSSA / SSSB Foundations & Pads - Zone 1	15	15	11-May-27*	01-Jun-27
BLDG2-1470	S01 BG Grounding SSSA/SSSB - Zone 1	3	3	02-Jun-27	04-Jun-27
BLDG2-1690	Place Fuel Oil Support Piers & Pads - Zone 1	15	15	28-Jun-27	19-Jul-27
BLDG2-1700	S01 BG Grounding GEN 1-2 - Zone 1	2	2	28-Jun-27	29-Jun-27
BLDG2-1760	Place USS & MDA Pads (26) - Zone 1	35	35	09-Jul-27	26-Aug-27
BLDG2-2070	S01 BG Grounding USS 1-26 - Zone 1	10	10	27-Aug-27	10-Sep-27
S10 - EYD SST Conveyance - Zone 1					
S10 - SST to SSS A/B Trenchduct - Zone 1					
S10 - Trench Duct - Zone 1					
BLDG2-1340	S10 Civil Trench Perun to SSSA/SSSB (at Generator Pad Crossing) - Zone 1	20	20	12-May-27	09-Jun-27
BLDG2-1680	S10 Civil Trench Perun to SSSA/SSSB - Zone 1	35	35	24-Jun-27	12-Aug-27
S10 - Ductbank - Zone 1					
S10 - EYD Ductbank					
BLDG2-1170	S10 Civil Duct Bank Excavation Zilla (FSA Side) - Zone 1	10	10	16-Apr-27	29-Apr-27
BLDG2-1250	S10 Duct Bank Zilla (FSA Side) - Zone 1	25	25	30-Apr-27	04-Jun-27
BLDG2-1550	S10 Civil Duct Bank Concrete/Backfill Zilla (FSA Side) - Zone 1	10	10	07-Jun-27	18-Jun-27
S10 - MYD Ductbank					
BLDG2-1260	S10 Civil Duct Bank Excavation (DCH2 Side) - Zone 1	10	10	30-Apr-27	13-May-27
BLDG2-1380	S10 Duct Bank Zilla (DCH2 Side) - Zone 1	15	15	14-May-27	04-Jun-27
BLDG2-1560	S10 Civil Duct Bank Concrete/Backfill (DCH2 Side) - Zone 1	10	10	07-Jun-27	18-Jun-27
S14 - EYD Conveyance - Zone 1					
S14 Trenchduct Placement					
S14 - Gens to GPS - Trench Duct - Zone 1					
BLDG2-1960	S14 Civil Trench SSS A/B to GEN - Zone 1	15	15	13-Aug-27	02-Sep-27
S14 - SSS A/B to USS - Trench Duct - Zone 1					
BLDG2-1590	S14 Civil Trench SSSA/SSSB to MDA/USS - Zone 1	35	35	10-Jun-27	29-Jul-27
S14 - SSS A/B to USS - Trench Duct - Zone 2					
BLDG2-1850	S14 Civil Trench SSSA/SSSB to MDA/USS - Zone 1	40	40	30-Jul-27	24-Sep-27
S14 Assembly					
S14 - E-House Ductbank - Zone 1					
S14 - E-House - SST-A / B UG					



Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
BLDG2-1320	S14 Civil Duct Bank Excavation SST A/B - Zone 1	6	6	12-May-27	19-May-27
BLDG2-1330	S14 Duct Bank Fuel Fill - Zone 1	4	4	12-May-27	17-May-27
BLDG2-1410	S14 Duct Bank UG Feeder Conduit SST-A / SST-B - Zone 1	6	6	20-May-27	27-May-27
BLDG2-1460	S14 Civil Duct Bank Concrete/Backfill SST A/B - Zone 1	9	9	28-May-27	10-Jun-27
FSA - Facility Support Area					
FSA Installation					
Zone 1 (MDA Batt/Elec + FMC) & Zone 2 (HWOPS / Disck Erase) & Zone 3 (SSNR / DAS / IDF)					
BLDG2-1910	OH VESDA & Sprinkler	12	12	02-Aug-27	17-Aug-27
BLDG2-1940	OH RTU Conduit Hangers & Conduit Install - Zone 1	18	18	10-Aug-27	02-Sep-27
BLDG2-2010	Frame One-Side Priority and Full Height Walls - Zone 1	7	7	18-Aug-27	26-Aug-27
BLDG2-2020	Install Duct Drops from RTU - Zone 1	8	8	18-Aug-27	27-Aug-27
BLDG2-2030	Rough In In-Wall - Zone 1	7	7	25-Aug-27	02-Sep-27
BLDG2-2060	Install SSNR conveyance - Zone 1	10	10	27-Aug-27	10-Sep-27
BLDG2-2090	Set RTUs (qty 4) - Zone 1	4	4	30-Aug-27	02-Sep-27
BLDG2-2120	Install VAVs and Ductwork - Zone 1	10	10	01-Sep-27	15-Sep-27
BLDG2-2180	Install Coordidor Overhead Mech / Elec Conveyance (S40) - Zone 1	14	14	07-Sep-27	24-Sep-27
BLDG2-2210	Hang / Finish Drywall - Zone 1	8	8	16-Sep-27	27-Sep-27
BLDG2-2280	Install SSNR/POE and SSNR/roof Conveyance - Zone 1	10	10	27-Sep-27	08-Oct-27
BLDG2-2260	Install Subzero Structure for SSNR (need to check on its predecessor & duration) - Zone 1	5	5	28-Sep-27	04-Oct-27
Zone 4 (FSA General)					
BLDG2-2040	OH RTU Conduit Hangers & Conduit Install - Zone 1	18	18	23-Aug-27	16-Sep-27
BLDG2-2100	Install Duct Drops from RTU - Zone 1	2	2	30-Aug-27	31-Aug-27
BLDG2-2150	Frame One-Side Priority and Full Height Walls - Zone 1	7	7	30-Aug-27	08-Sep-27
BLDG2-2160	Set RTUs (qty 1) - Zone 1	1	1	03-Sep-27	03-Sep-27
BLDG2-2190	Rough In In-Wall - Zone 1	7	7	07-Sep-27	15-Sep-27
BLDG2-2220	Install Wall Panels - POE A and MicroKitchen - Zone 1	5	5	17-Sep-27	23-Sep-27
BLDG2-2290	Install Fabric Ducts / Supports - Zone 1	6	6	27-Sep-27	04-Oct-27
BLDG2-2320	Hang / Finish Drywall - Zone 1	6	6	04-Oct-27	11-Oct-27
Zone 5 (DC General)					
BLDG2-1860	Construction of Loading Dock - Zone 1	30	30	02-Aug-27	13-Sep-27
BLDG2-1920	Overhead Doors & Glazing	25	25	02-Aug-27	03-Sep-27
BLDG2-2130	Install Duct Drops from RTU - Zone 1	4	4	01-Sep-27	07-Sep-27
BLDG2-2170	Set RTUs (qty 2) - Zone 1	2	2	08-Sep-27	09-Sep-27
BLDG2-2200	Install Fabric Ducts / Supports - Zone 1	6	6	10-Sep-27	17-Sep-27
BLDG2-2270	Install Wall Panels - POE B and Loading Dock - Zone 1	3	3	24-Sep-27	28-Sep-27
FSA Finishes & Punch					
BLDG2-2310	FSA - Finishes and Trim	40	40	29-Sep-27	23-Nov-27
BLDG2-2370	FSA - Punch & Corrections	10	10	24-Nov-27	09-Dec-27
DCH - Data Center Hall - Zone 1					
BLDG2-2110	Install Fire Alarm & VESDA	20	20	01-Sep-27	29-Sep-27
CFG - Central Utility Building - Zone 1					
S02 - MYD Piers / Gen / Eqpt Pads & Foundations - Zone 1					
BLDG2-1290	Place CUB/MCP Foundations / Pads (1-6) - Zone 1	40	40	12-May-27*	08-Jul-27
BLDG2-1360	Place CTB/MUPT Foundations / Pads - Zone 1	10	10	12-May-27*	25-May-27
BLDG2-1430	Place MWT Foundations - Zone 1	45	45	26-May-27	29-Jul-27
BLDG2-1740	Place S23 Pipe Rack Foundations - Zone 1	21	21	09-Jul-27	06-Aug-27
BLDG2-1970	Place LV Gen Foundations - Zone 1	6	6	13-Aug-27	20-Aug-27
S10 Conveyance & Ductbank					
S10 - Conveyance (SSS to Zilla Ring)					
S10 - Trench Duct - Zone 1					
BLDG2-1770	S10 Cast In Place UG Trench - Zilla - Zone 1	25	25	09-Jul-27	12-Aug-27
Bldg 2 - Zone 2					
SHL - Core and Shell - Zone 2					
S02 - Slab on Grade - Zone 2					
S02 - Shallow Foundations & SOG - Zone 2					
BLDG2-1190	Install DCH2 Underground Plumbing Utilities - Post-Deep Foundations - Zone 2	10	10	30-Apr-27	13-May-27
BLDG2-1350	Place DCH2 Foundations & Column Pads - Zone 2	10	10	14-May-27	27-May-27
BLDG2-2140	Build DCH2 Slab on Grade - Zone 2	30	30	01-Sep-27	13-Oct-27
S03 - Superstructure - Zone 2					
S03 - Precast - Zone 2					
BLDG2-1600	Erect DCH2 Precast - Zone 2	20	20	01-Jul-27	29-Jul-27
S03 - Steel - Zone 2					
BLDG2-1730	Erect DCH2 Steel - Zone 2	15	15	30-Jul-27	19-Aug-27
BLDG2-1790	Erect DCH2 Decking & Detailing - Zone 2	18	18	06-Aug-27	31-Aug-27
S05 - Roof - Zone 2					
DCH - Zone 2					
BLDG2-1900	Install DCH2 Vapor Barrier - Zone 2	16	16	20-Aug-27	13-Sep-27
BLDG2-2340	Install DCH2 Roofing - Zone 2	16	16	14-Oct-27	04-Nov-27
S07 - Fire Alarm - Zone 2					
BLDG2-2300	Install Fire Protection and Other High OH Rough-In - Zone 2	14	14	01-Oct-27	20-Oct-27



Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
	S08 - Fire Suppression - Zone 2				
BLDG2-2230	Install Fire Sprinkler Hangers and Piping - Zone 2	18	18	27-Sep-27	20-Oct-27
BLDG2-2250	Install VESDA Hangers and Piping - Zone 2	18	18	27-Sep-27	20-Oct-27
BLDG2-2330	Install Fire Alarm (25% of scope for AHJ approval) - Zone 2	9	9	08-Oct-27	20-Oct-27
	EYD - Electrical Yard - Zone 2				
	S02 - Piers / Gen / Eqpt Pads & Foundations - Zone 2				
BLDG2-1480	Place SSSA / SSSB Foundations & Pads - Zone 2	15	15	02-Jun-27	22-Jun-27
BLDG2-1660	S01 BG Grounding SSSA/SSSB - Zone 2	3	3	23-Jun-27	25-Jun-27
BLDG2-1710	Place Generator Foundations & Pads - Zone 2	50	50	28-Jun-27	07-Sep-27
BLDG2-1720	S01 BG Grounding GEN 1-2 - Zone 2	2	2	30-Jun-27	01-Jul-27
BLDG2-1830	Place Fuel Oil Support Piers & Pads - Zone 2	15	15	20-Jul-27	09-Aug-27
BLDG2-2080	Place USS Pads (26) - Zone 2	35	35	27-Aug-27	15-Oct-27
BLDG2-2350	S01 BG Grounding USS 1-26 - Zone 2	10	10	18-Oct-27	29-Oct-27
	S10 - EYD SST Trench Conveyance - Zone 2				
	S10 - SST to SSS A/B - Zone 2				
	S10 - Trench Duct - Zone 2				
BLDG2-1610	S10 Civil Trench Perun to SSSA/SSSB (at Generator Pad Crossing) - Zone 2	20	20	10-Jun-27	08-Jul-27
BLDG2-1990	S10 Civil Trench Perun to SSSA/SSSB - Zone 2	35	35	13-Aug-27	01-Oct-27
	S14 - EYD Conveyance - Zone 2				
	S14 Assembly				
	S14 - E-House - Zone 2				
	S14 - E-House - SST-A / B UG				
BLDG2-1440	S14 Civil Duct Bank Excavation SST A/B - Zone 2	6	6	28-May-27	07-Jun-27
BLDG2-1450	S14 Duct Bank Fuel Fill - Zone 2	4	4	28-May-27	03-Jun-27
BLDG2-1530	S14 Duct Bank UG Feeder Conduit SST-A / SST-B - Zone 2	6	6	08-Jun-27	15-Jun-27
BLDG2-1620	S14 Civil Duct Bank Concrete/Backfill SST A/B - Zone 2	9	9	16-Jun-27	28-Jun-27
	S14 - SSS A/B to USS - Zone 2				
	S14 - SSS A/B to USS - Trestle Assembly & Cable Tray - Zone 2				
BLDG2-2240	S14 Civil Trench Dress Out - Zone 2	20	20	27-Sep-27	22-Oct-27
	DCH - Data Center Hall - Zone 2				
BLDG2-2360	Install Fire Alarm / Sprinkler / VESDA	20	20	21-Oct-27	17-Nov-27
	CFG - Central Utility Building - Zone 2				
	S02 - MYD Piers / Eqpt Pads & Foundations - Zone 2				
BLDG2-1780	Place CUB/MCP Foundations / Pads (7-12) - Zone 2	40	40	09-Jul-27	02-Sep-27
	S10 Conveyance and Ductbanks				
	S10 - Conveyance (SSS to Zilla Ring)				
	S10 - Trench Duct - Zone 2				
BLDG2-1980	S10 Cast In Place UG Trench - Zilla - Zone 2	25	25	13-Aug-27	17-Sep-27
	HUB				
CON-39190	HUB - Install Piers	15	15	08-Jun-26	26-Jun-26
HUB-1050	HUB - U/G Utilties	20	20	29-Jun-26	27-Jul-26
HUB-1000	HUB - Foundations	20	20	28-Jul-26	24-Aug-26
HUB-1010	HUB - Structure	60	60	25-Aug-26	17-Nov-26
HUB-1020	HUB - Rough-In & Finishes & CX	170	170	09-Sep-26	12-May-27
HUB-1030	HUB - Enclosure	40	40	21-Oct-26	17-Dec-26
HUB-1040	HUB - FDOB	20	20	13-May-27	10-Jun-27



SECTION 00 41 00.10
INDIVIDUAL SCOPE(S) BID FORM

Owner: BEALE INFRASTRUCTURE GROUP LLC

Project: Project Clydesdale - Precon

J.E. Dunn Project No.: 25024800

Contractor: J.E. Dunn Construction Company

Attn: [Bid Taker]

Name of Bidder: _____

Address of Bidder: _____ Phone: _____

Contact Name: _____ Email: _____

BASE BID INDIVIDUAL SCOPES OF WORK

Directions: For individual Scopes of Work, list the Scope of Work number, the Scope of Work description and the Base Bid amount both in words and in figures for each Scope. These Base Bids are considered stand-alone Bids and could be awarded individually or in any combination.

Scope of Work #:	Description:	$

Scope of Work #:	Description:	$
Base Bid (words):		

Scope of Work #:	Description:	$
Base Bid (words):		

Scope of Work #:	Description:	$
Base Bid (words):		

Scope of Work #:	Description:	$
Base Bid (words):		

Scope of work #:	Description:	$
Base Bid (words):		

Bid Proposal Amounts:

Bid Proposal Amounts:
The undersigned, having examined the Bidding Documents and the site of the proposed Work and being familiar with all the conditions affecting the construction of the Project, including the availability of labor, equipment, and materials, hereby proposes and agrees to provide and furnish all labor, material, equipment, supervision, and other items necessary to perform and complete, in a workmanlike manner, all Work required by the Bidding Documents, at the prices stated below. Stated sums include fees, insurance, payroll taxes, materials, labor, and all charges that may be levied. This Bid also includes all applicable taxes, including sales tax, unless otherwise stated.

With respect to the Bid amount, the amount shall be shown in both words and figures. In the case of discrepancy between the words and the figures, the words shall govern.

Alternates:

Bidder shall identify the (1) Scope of Work #/Name, (2) Alternate #/Description, (3) Bid Amount and if the Alternate value is an (4) ADD or a DEDUCT to the Base Bid for the applicable Scope of Work.

Scope # & Description	Alternate # & Description	Amount (figures)	ADD or DEDUCT

Unit Prices:

Bidder shall identify the Scope of Work No/Name, Unit Price Description, Amount for the ADD and DEDUCT to the Base Bid for the applicable Scope of Work.

Scope # & Description	Unit Price Description	Amount / Unit ADD	Amount / Unit DEDUCT

Addenda:

The Bidder hereby acknowledges receipt and inclusion in the Bid Proposal the following addendum (number and date):

Addendum No. ___ Dated: _____ Addendum No. ___ Dated: _____

Addendum No. ___ Dated: _____ Addendum No. ___ Dated: _____

Addendum No. ___ Dated: _____ Addendum No. ___ Dated: _____

Changes in the Work:

Changes in the Work shall be administered per the executed agreement between the Bidder and the Contractor. The fee limits stated in the Bidding Documents shall be used for pricing of additions and deletions to the Work.

Performance and Payment Bond Cost (not to be included in Base Bid amount):
$_____.

If required to provide performance and payment bonds, Contractor will pay only Bidder's actual costs without markup. Therefore, provide the Performance and Payment Bond Cost based upon actual cost from the Bidder's surety with no markup. Bonds shall be written on the forms included in the Bidding Documents.

Time of Commencement, Completion and Damages:

The Bidder agrees that if awarded a contract, Bidder will have Bidder's Work ready for either the follow-on contractor's work or the completion of Contractor's Work in accordance with the Project schedule. The Bidder agrees to commence work under the contract awarded to Bidder within seven (7) calendar days after the date of a "Notice to Proceed," unless otherwise stipulated in that notice.

Time is expressly declared to be of the essence in completion of the Work covered by this Bid, and the Bidder shall be liable for damages for delay in completion of Work.

General Agreements:

The Bidder agrees that Bidder has had an opportunity to examine the site of the Work and has examined the Bidding Documents, and that Bidder has carefully prepared Bidder's Bid upon the basis thereof and that Bidder has carefully examined and checked this Bid and the materials,

equipment, and labor required thereunder, the cost thereof, and its figures therefore, and hereby states that the amount or amounts set forth in this Bid Proposal Form

The Bidder acknowledges that the Contractor reserves the right to waive informalities and to reject any or all bids.

The Bidder agrees that this Bid shall not be withdrawn or altered for a period of Sixty (60) calendar days after the last date scheduled for the submission of bids.

By signing this Bid, Bidder certifies that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

The Bidder acknowledges that this Bid Proposal Form is required to be executed by an authorized officer of Bidder's company. Bidder further acknowledges that it is expressly reasonable for Contractor to rely on representations set forth in this Bid Proposal Form and the apparent authority of the individual executing it on behalf of the Bidder to bind the Bidder to the obligations herein.

By signing below, Bidder agrees to contract under the Subcontract Documents (for Subcontractors) or Contract Documents (for Suppliers as provided (including Project-specific modifications, if any, made at a later time) without clarification or modification.

The undersigned Bidder agrees that, when these requirements have been completed, it will execute an agreement with the Contractor on the Subcontract or the M&E Contract exhibited in the Project Manual without modification.

DATED THIS _____ DAY OF _____ , 20 _____

Signature of Authorized Officer: _____

Printed Name of Authorized Officer: _____

State of: _____ County of: _____

Attachments:

Beale Breakdown Form
Contractor's Scope(s) of Work
Long Lead Item List

END OF SECTION

SECTION 00 52 00.10
CONTRACT BETWEEN CONTRACTOR AND SUBCONTRACTOR

PART 1 - GENERAL

1.1 SUMMARY

A. The form of Agreement between the Contractor and a Subcontractor for the Work is the Subcontract to be included in this Section 00 52 00.10 by addendum at a later date.

B. The form of Agreement may be modified from the form included to reflect Project-specific provisions required by the Owner or by the final agreement between Owner and Contractor. Otherwise, the form of Agreement shall not be changed from the form that is included in this Section. The Bidder shall include in its Bid all costs associated with executing the form of Agreement provided herein.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00 52 00.20
MATERIAL AND EQUIPMENT (M&E) CONTRACT

PART 1 - GENERAL

1.1 SUMMARY

A. The form of Agreement between Contractor and a Supplier (referred to as "Vendor" in the M&E Contract) to provide materials, goods, or equipment is the Material & Equipment Contract OR Materials and Equipment Purchase Order (“M&E Contract”) to be included in this Section 00 52 00.20 by addendum at a later date.

B. The form of Agreement may be modified from the form included to reflect Project-specific provisions required by the Owner or by the final agreement between Owner and Contractor. Otherwise, the form of Agreement shall not be changed from the form that is included in this Section. The Bidder shall include in its Bid all costs associated with executing the form of Agreement provided herein.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00 52 00.30
MATERIAL AND EQUIPMENT PURCHASE ORDER (MPO)

PART 1 - GENERAL

1.1 SUMMARY

A. The form of Agreement between Contractor and a Supplier (referred to as "Vendor" in the MPO Contract) to provide materials, goods, or equipment is the Materials and Equipment Purchase Order (“MPO”) to be included in this Section 00 52 00.30 by addendum at a later date.

B. The form of Agreement may be modified from the form included to reflect Project-specific provisions required by the Owner or by the final agreement between Owner and Contractor. Otherwise, the form of Agreement shall not be changed from the form that is included in this Section. The Bidder shall include in its Bid all costs associated with executing the form of Agreement provided herein.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00 61 13
PERFORMANCE AND PAYMENT BOND

PART 1 - GENERAL

1.1 SUMMARY

A. The Performance and Payment Bond, if required, shall be written on the form attached to this Section.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

Surety Company MUST provide the following:

Bond No. _____

Phone No: _____

Fax No: _____

SUBCONTRACTOR PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, That _____
(Include Subcontractor's Legal Business Name and Address)

(hereinafter called "Principal"), as Principal and _____
(Include Surety's Legal Business Name and Address) organized and existing under the laws of the state of _____ (hereinafter called the "Surety"), as Surety, are held and firmly bound unto J.E. Dunn Construction Company, (hereinafter called the "Obligee") in the sum of

_____ ($_____)

("Penal Sum"), for the payment of which sum well and truly to be made, the said Principal and Surety bind themselves, and their respective heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Obligee has been awarded a contract (hereinafter called the "Prime Contract").

by _____
(Include Name and Address of Project Owner)

for _____

_____ and;
(Include Name and Address of Project – **NOT SCOPE**)

WHEREAS, the Principal has entered into a written subcontract with the Obligee, dated _____, 20____
(Date of Subcontract)
to perform as Subcontractor, which Subcontract is hereby referred to and made apart hereof.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall promptly make payment to all persons (a) supplying labor, services, utilities, equipment or any other goods or services, in the prosecution of the work provided for in said Subcontract and any and all modifications of said Subcontract that may hereafter be made; (b) pensions, welfare, vacation and/or supplemental employee benefit contributions payable under collective bargaining agreements with respect to a person employed upon such Work; (c) federal, state and local taxes and contributions required by law to be withheld or paid with respect to the employment of persons upon said Work; and (d) otherwise fully indemnify and save Obligee from and against any claims or liens asserted by any party as a result of payment claimed due or concerning the Subcontract, including attorney's fees and expenses, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The said Surety agrees that no change, increase in the Subcontract Sum, extension of time, alteration, addition, omission, or other modification of the terms of either the said Subcontract or the said Prime Contract, or both, or in the said Work to be performed, or in the specifications, or in the plans, shall in anywise change its obligation on this Bond, and it does hereby waive notice of any such changes, increases, extensions of time, alterations, additions, omissions, and other Modifications. The Penal Sum shall automatically increase by the amount of any Change Order, Modification, or other supplemental agreement or amendment that increases the Subcontract Sum in accordance with the Subcontract. Decreases in the Subcontract Sum shall not, however, reduce the Penal Sum.

The said Principal and the said Surety agree that this Bond shall inure to the benefit of all persons supplying labor and material in the prosecution of the work provided for in said Subcontract, as well as to the Obligee, and that such persons may maintain independent actions upon this Bond In their own names.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this _____ day of _____ 20____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to the authority of its governing body.

_____ (Seal)
(Legal Name of Principal)

Witness: By _____
(Name & Title of Authorized Signor)

_____ _____
Or Secretary's Attest (Form Must Be Witnessed) **(Signature)**

_____ (Seal)
(Legal Name of Surety)

Witness: By _____
(Name & Title)

_____ * _____
Or Secretary's Attest (Form Must Be Witnessed) **(Signature)**

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*Attach Power-of-Attorney

Surety Company MUST provide the following:

Bond No. _____

Phone No: _____

Fax No: _____

SUBCONTRACTOR PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, _____

(Include Subcontractor's Legal Business Name and Address)

(hereinafter called the "Principal") as Principal and _____

(Include Surety's Business Name and Address)

organized and existing under the laws of the state of _____ (hereinafter called the "Surety"), as Surety, are held and firmly bound unto J.E. Dunn Construction Company, (hereinafter called the "Obligee") in the sum of

_____ ($_____)

(the "Penal Sum"), for the payment of which sum well and truly to be made, the said Principal and Surety bind themselves and their respective heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Obligee has been awarded a contract (hereinafter called the "Prime Contract").

by _____

(Include Name and Address of Project Owner)

for _____

_____ and;

(Include Name and Address of Project – **NOT SCOPE**)

WHEREAS, the Principal has entered into a written Subcontract with the Obligee, dated _____, 20 ____

(Date of Subcontract)

to perform, as Subcontractor, which Subcontract is hereby referred to and made a part hereof.

The Surety, for value received, agrees, if requested to do so by the Obligee, to perform fully all of the terms, conditions, obligations, undertakings, covenants, and agreements of the aforesaid Subcontract, as well as any duly authorized Modification thereof (collectively, the "Subcontract Obligations"), if the Principal fails, neglects, or refuses to perform fully and complete the Subcontract Obligations. The Surety further agrees to commence the performance and completion of said Subcontract Obligations within ten (10) days after delivery of notice from the Obligee of the failure, neglect, or refusal of the Principal to perform and complete or cause to be performed and completed the Subcontract Obligations, and to perform and complete the same within the time required under said Subcontract (as well as any duly authorized modification thereof), as extended by the period of time elapsing between the date of such failure, neglect, or refusal of the Principal and the date of the delivery of such notice by the Obligee to the Surety. In the event the Surety does not undertake the performance or completion of the Subcontract Obligations, or cause them to be performed and completed within the time stated above, then the Obligee shall have the remaining Subcontract Obligations performed and completed, Surety to remain liable hereunder for all costs and expenses, including attorney fees, at performance and completion.

It is expressly understood and acknowledged by the Surety that the term "Subcontract Obligations" in this Bond includes, but is not limited to: (i) any express or implied warranty obligations owed by the Subcontractor to the Obligee and (ii) any obligation contained in the Subcontract by which Subcontractor is to defend and/or indemnify Obligee against any losses, claims, demands or causes of action.

The said Surety agrees that no change, increase in the Subcontract Sum, extension of time, alteration, addition, omission, or other modification of the terms of either the said Subcontract or the said Prime Contract, or both, or in the said Work to be performed, or in the specifications, or in the plans, shall in anywise change its obligation on this Bond, and it does hereby waive notice of any such changes, increases, extensions of time, alterations, additions, omissions, and other Modifications. The Penal Sum shall automatically increase by the amount of any Change Order, Modification, or other supplemental agreement or amendment that increases the Subcontract Sum in accordance with the Subcontract. Decreases in the Subcontract Sum shall not, however, reduce the Penal Sum.

The Principal and the Surety agree that this Bond shall inure to the benefit of Obligee, its successors, and assigns and that such persons may maintain independent actions upon the Bond in their own names.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this _____ day of _____ 20____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

_____ (Seal)

(Legal Name of Principal)

Witness: By _____

(Name & Title of Authorized Signor)

_____ _____

Or Secretary's Attest (Form must be Witnessed) (Signature)

_____ (Seal)

(Legal Name of Surety)

Witness: By _____

(Name & Title)

_____ *

Or Secretary's Attest (Form must be Witnessed) (Signature)

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*Attach Power of Attorney

SECTION 00 62 76.10
PAY APPLICATION FORM

PART 1 - GENERAL

1.1 SUMMARY

A. The Payment Application shall be written on the form attached to this Section.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

AIA® Document G702™ – 1992

Application and Certificate for Payment

TO OWNER:

PROJECT: -

APPLICATION NO: 002
PERIOD TO:
CONTRACT FOR:
CONTRACT DATE:
PROJECT NOS: / /

Distribution to:
OWNER:
ARCHITECT:
CONTRACTOR:
FIELD:
OTHER:

FROM CONTRACTOR:

VIA ARCHITECT:

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM		$ 0.00
2. NET CHANGE BY CHANGE ORDERS		$ 0.00
3. CONTRACT SUM TO DATE (Line 1 ± 2)		$ 0.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)		$ 0.00
5. RETAINAGE:		
a. 0 % of Completed Work (Column D + E on G703)	$ 0.00	
b. 0 % of Stored Material (Column F on G703)	$ 0.00	
Total Retainage (Lines 5a + 5b or Total in Column I of G703)		$ 0.00
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)		$ 0.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)		$ 0.00
8. CURRENT PAYMENT DUE		$ 0.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6)	$ 0.00	

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	$ 0.00	$ 0.00
Total approved this Month	$ 0.00	$ 0.00
TOTALS	$ 0.00	$ 0.00
NET CHANGES by Change Order	$ 0.00	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of:

County of:

Subscribed and sworn to before me this day of

Notary Public:

My Commission expires:

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED $ 0.00

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

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AIA® Document G703™ – 1992

Continuation Sheet

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.
In tabulations below, amounts are in US dollars.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 001
APPLICATION DATE:
PERIOD TO:
ARCHITECT'S PROJECT NO:

A	B	C	D	E	F	G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)	BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD					
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00 %	0.00	0.00
	GRAND TOTAL	$0.00	$0.00	$0.00	$0.00	$0.00	0.00 %	$0.00	$0.00

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User Notes: (892030576)

SECTION 00 62 76.20
PARTIAL WAIVER AND AFFIDAVIT (PRE-PAYMENT): SUBCONTRACTOR AND SUPPLIER

Subcontractor/Supplier:	_____
Project Number and Name:	25024800 Project Clydesdale - Precon
Project Address:	76th and Sheridan Owasso, OK 74055
Payment Application No:	_____
Payment Amount:	_____
Total Amount Paid:	_____
Subcontract Amount:	_____
Last date of work covered by the Payment Application:	_____
Contractor:	J.E. Dunn Construction Company

Beneficiaries: Contractor, Owner, and other parties, if any, having any interest in the Property.

1. In consideration of the payment to be made by Contractor to the undersigned Subcontractor/Supplier in the Payment Amount set forth above for work, labor, services, and/or materials furnished for the construction of the Project, and for any and all work, labor, material, or equipment furnished by or through said Subcontractor/Supplier, its sub-subcontractors, suppliers, equipment providers, and laborers and anything else in connection with the agreement between Contractor and Subcontractor/Supplier ("Subcontract"), through the last date of work covered by the Payment Application except as it pertains to unpaid retainage, if any, the undersigned Subcontractor/Supplier, effective upon remittance of the Payment Amount and contingent upon final clearance and payment of valuable consideration of the Payment Amount and being familiar with the penalties for false certification, represents and certifies to the Beneficiaries that:

   A. Subcontractor/Supplier a) irrevocably and unconditionally waives and releases the Property, Project, and Beneficiaries from; and b) shall defend, indemnify, and hold harmless the Property, Project, Beneficiaries, their sureties, guarantors, and respective successors and assigns against:

      i. Any and all liens, statutory or otherwise, or rights thereof;

      ii. Any and all obligations under any bond or guaranty for payment furnished to or by the Beneficiaries, whether pursuant to an agreement or required by law; and

      iii. Any other claims of any kind whatsoever, statutory or otherwise, except as specifically claimed in accordance with the Subcontract Documents.

2. The following listed persons or entities are the Subcontractor/Supplier's only sub-subcontractors, equipment providers, materialmen or suppliers for the Project. This partial waiver, or one similar, will be required for all sub-subcontractors, equipment providers, materialmen and suppliers for each payment application. Future payments may be delayed if all documents are not submitted properly.

A. _____ Write "none" here if no sub-subcontractors, equipment providers, materialmen, or suppliers were used on this Project.

B. Sub-subcontractors, equipment providers, materialmen, or suppliers:

COMPANY NAME (of your material suppliers and/or subcontractors)	CONTRACT AMOUNT (if unknown, list N/A)	AMOUNT PAID TO DATE (cumulative amount)	AMOUNT PAID THIS PERIOD (thru date listed above)	REMAING BALANCE LEFT ON CONTRACT

3. Payment in full, less retainage, if any, has been made by the Subcontractor/Supplier through the period covered by all prior payments (a) to all of the Subcontractor/Supplier's sub-subcontractors, equipment providers, materialmen, suppliers, and laborers, and (b) for all materials and labor used or furnished by the Subcontractor/Supplier in connection with the performance of the Subcontract, except as noted below:

COMPANY NAME (of your material suppliers and/or subcontractors not paid)	AMOUNT NOT PAID	REASON WHY AMOUNT WAS NOT PAID

4. Subcontractor/Supplier has complied with Federal, State, and Local tax laws, including, without limitation, Income Tax Withholding, Sales Tax, Social Security, Unemployment Compensation, and Worker's Compensation laws, insofar as applicable to the performance of the Subcontract. Subcontractor/Supplier has paid, or out of the proceeds of this payment will promptly pay, all sales or use tax due and owing.

5. The undersigned is fully authorized and empowered to execute this instrument for and on behalf of said Subcontractor/Supplier and to bind it hereto and does in fact so execute this

Partial Waiver and Affidavit. The undersigned acknowledges and agrees that the Beneficiaries or anyone on their behalf may and will act and rely upon this instrument in releasing any funds due or owing.

6. The remittance of the Payment Amount negotiated and/or endorsed by Subcontractor/Supplier and marked "paid" or otherwise accepted by the bank against which said remittance was drawn shall constitute conclusive proof that said Payment Application was paid and that the Payment Amount thereof was received by Subcontractor/Supplier, and this Partial Waiver and Affidavit shall become effective automatically and without requirement of any further act, acknowledgment, or receipt on the part of the Subcontractor/Supplier.

Subcontractor/Supplier

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

State of: _____ County of: _____

On this _____ day of _____, 20_____, before me personally appeared _____, _____ of _____, known to me to be the person who executed this document and acknowledged to me that he/she executed the same for the purposes therein stated.

_____ Notary Public in and for said County and State

_____ Commission Expires

END OF SECTION

SECTION 00 62 76.30
PARTIAL WAIVER AND AFFIDAVIT (POST-PAYMENT): SUBCONTRACTOR AND SUPPLIER

Subcontractor/Supplier:	_____
Project Number and Name:	25024800 Project Clydesdale - Precon
Project Address:	76th and Sheridan Owasso, OK 74055
Payment Application No:	_____
Payment Amount:	_____
Total Amount Paid:	_____
Subcontract Amount:	_____
Last date of work covered by the Payment Application:	_____
Contractor:	J.E. Dunn Construction Company

Beneficiaries: Contractor, Owner, and other parties, if any, having any interest in the Property.

1. In consideration of the payment made by Contractor to the undersigned Subcontractor/Supplier in the Payment Amount set forth above for work, labor and services and/or materials furnished for the construction of the Project, the undersigned Subcontractor/Supplier, effective upon remittance of the Payment Amount and contingent upon final clearance and payment of valuable consideration of the Payment Amount and being familiar with the penalties for false certification, represents and certifies to the Beneficiaries that:

   A. Subcontractor/Supplier a) irrevocably and unconditionally waives and releases the Property, Project and Beneficiaries from; and b) shall defend, indemnify and hold harmless the Property, Project, Beneficiaries, their sureties, guarantors and respective successors and assigns against

      i. any and all liens, statutory or otherwise, or rights thereof;

      ii. any and all obligations under any bond or guaranty for payment furnished to or by the Beneficiaries, whether pursuant to an agreement or required by law; and

      iii. any other claims of any kind whatsoever, statutory or otherwise, except as specifically claimed in accordance with the subcontract documents; and

for any and all work, labor, material or equipment furnished by or through said Subcontractor/Supplier, its sub-subcontractors, suppliers, equipment providers and laborers and anything else in connection with the agreement between Contractor and Subcontractor/Supplier ("Subcontract"), through the last date of work covered by the Payment Application except as it pertains to unpaid retainage, if any.

2. The following listed persons or entities are the Subcontractor/Supplier's only sub-subcontractors, equipment providers, materialmen or suppliers for the Project. This partial waiver, or one similar, will be required for all sub-subcontractors, equipment providers, materialmen and suppliers for each payment application. Future payments may be delayed if all documents are not submitted properly.

A. Sub-subcontractors, equipment providers, materialmen or suppliers

B. _____ Write "none" here if no sub-subcontractors, equipment providers, materialmen or suppliers were used on this Project.

COMPANY NAME (of your material suppliers and/or subcontractors)	CONTRACT AMOUNT (if unknown, list N/A)	AMOUNT PAID TO DATE (cumulative amount)	AMOUNT PAID THIS PERIOD (thru date listed above)	REMAING BALANCE LEFT ON CONTRACT

3. Payment in full, less retainage, if any, has been made by the Subcontractor/Supplier through the period covered by all prior payments (a) to all of the Subcontractor/Supplier's sub-subcontractors, equipment providers, materialmen, suppliers and laborers, and (b) for all materials and labor used or furnished by the Subcontractor/Supplier in connection with the performance of the Subcontract, except as noted below:

COMPANY NAME (of your material suppliers and/or subcontractors not paid)	AMOUNT NOT PAID	REASON WHY AMOUNT WAS NOT PAID

4. Subcontractor/Supplier has complied with Federal, State and Local tax laws, including, without limitation, Income Tax Withholding, Sales Tax, Social Security, Unemployment

Compensation and Worker's Compensation laws, insofar as applicable to the performance of the Subcontract. Subcontractor/Supplier has paid, or out of the proceeds of this payment will promptly pay, all sales or use tax due and owing.

5. The undersigned is fully authorized and empowered to execute this instrument for and on behalf of said Subcontractor/Supplier and to bind it hereto and does in fact so execute this Partial Waiver and Affidavit. The undersigned acknowledges and agrees that the Beneficiaries or anyone on their behalf may and will act and rely upon this instrument in releasing any funds due or owing.

Subcontractor/Supplier

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

State of: _____ County of: _____

On this _____ day of _____, 20_____, before me personally appeared _____, _____ of _____, known to me to be the person who executed this document and acknowledged to me that he/she executed the same for the purposes therein stated.

_____ Notary Public in and for said County and State

_____ Commission Expires

END OF SECTION

SECTION 00 62 79.10
STORED MATERIALS FORMS: BILL OF SALE

Buyer: J.E. Dunn Construction Company

1001 Locust St.
Kansas City, MO 64106

Seller: _____

_____

Project: Project Clydesdale - Precon

76th and Sheridan
Owasso, OK 74055

In consideration of payments made by J.E. Dunn Construction Company ("Buyer") referenced in the agreement dated _____, 20_____ receipt of which is hereby acknowledged, Seller declares and certifies that it now possesses, and does hereby grant, sell, transfer, and deliver to Buyer, all right, title and interest in the following goods, material, chattel or equipment ("Goods"):

Description of Material	Estimated Material Quantity and Cost Required for Project	In Storage Beginning of Period Quant./Dollars	Added to Storage this Billing Quant./Dollars	Removed from Storage & Shipped to Site this Period Quant./Dollars	In storage at end of Period Quant./Dollars

As an alternative to completing the list above, include a copy or copies of invoices or other documentation providing the information requested above.

Buyer has all rights and title to the Goods in itself and its executors, administrators and assigns forever. Seller, on behalf of itself, its successors and assigns, will warrant and defend the title to said Goods hereby sold unto Buyer, its successors and assigns, forever, against the lawful claims and demands of all persons.

Buyer shall have free access to enter Seller's premises and to take possession of and utilize, sell, lease or otherwise dispose of the Goods in such a manner as Buyer, in its sole discretion, may elect.

Seller shall mark and identify the described Goods and shall segregate from and shall not commingle

such Goods with other goods held by Seller. Seller shall protect and bear the risk of loss or damage to such Goods until final completion and acceptance by Owner in accordance with the terms of the Subcontract/M&E Agreement. Seller, on behalf of its insurance companies insuring the property against loss, waives all rights of subrogation against

It is expressly understood and agreed that the acceptance of the Goods described herein is not a waiver of any right of action that the Buyer may have for breach of warranty or any other cause under the Subcontract or M&E Agreement with Seller or at law.

In WITNESS WHEREOF, Seller has executed this Agreement the _____ day of _____, 20_____ .

Subcontractor/Supplier:

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

State of: _____ County of: _____

On this _____ day of _____, 20_____, before me personally appeared _____, _____ of _____, known to me to be the person who executed this document and acknowledged to me that he/she executed the same for the purposes therein stated.

_____ Notary Public in and for said County and State

_____ Commission Expires

END OF SECTION

SECTION 00 62 79.20
STORED MATERIALS FORMS: NON-NEGOTIABLE BAILMENT RECEIPT

Bailor: BEALE INFRASTRUCTURE GROUP LLC

300 N LASALLE ST, STE 1500
CHICAGO, IL 60654

Bailee Subcontractor/Supplier) : _____

_____

Location of Storage: _____

The goods, equipment and materials described below are held and stored at the above referenced location pursuant to the Contract by and between Bailee, as Subcontractor/Supplier, and J.E. Dunn Construction Company, as Contractor, for Work to be performed at the Project Clydesdale - Precon located at 76th and Sheridan
Owasso, OK 74055. In consideration of payment made to the undersigned Bailee, the receipt and sufficiency of which are admitted, the Bailee agrees:

1. to keep said goods and materials at the above mentioned address, separate and apart from all other goods and identified as subject to this bailment,
2. to keep said goods and materials fully insured against all risk of physical loss or damage,
3. to keep said goods protected from the weather, commingling, vandalism, and/or diversion from said Project, and
4. to deliver said goods and materials to the Project site in conjunction with the performance of Bailee's Contract referenced above or upon the direction of Bailor or its Contractor and no other.

Quantity	Description of Item

As an alternative to completing the list above, include a separate list or other documentation providing the information requested above.

The Bailee acknowledges that it has no ownership rights or title in, nor shall claim any lien upon, said goods and materials.

Agreed and Acknowledged:
Subcontractor/Supplier:

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

END OF SECTION

SECTION 00 65 00.10
FINAL WAIVER AND AFFIDAVIT (PRE-PAYMENT): SUBCONTRACTOR AND SUPPLIER

Subcontractor/Supplier:	_____
Project Number and Name:	25024800 Project Clydesdale - Precon
Project Address:	76th and Sheridan Owasso, OK 74055
Payment Application No:	_____
Payment Amount:	_____
Total Amount Paid:	_____
Subcontract Amount:	_____
Last date of work covered by the Payment Application:	_____
Contractor:	J.E. Dunn Construction Company

Beneficiaries: Contractor, Owner, and other parties, if any, having any interest in the Property.

1. In consideration of the previous payments made and the final payment to be made by Contractor to the undersigned Subcontractor/Supplier in the Final Payment Amount set forth above for work, labor and services and/or materials furnished for the construction of the Project, the undersigned Subcontractor/Supplier, effective upon remittance of the Payment Amount and contingent upon final clearance and payment of valuable consideration of the Payment Amount and being familiar with the penalties for false certification, represents and certifies to the Beneficiaries that:

A. Subcontractor/Supplier a) irrevocably and unconditionally waives and releases the Property, Project, and Beneficiaries from; and b) shall defend, indemnify, and hold harmless the Property, Project, Beneficiaries, their sureties, guarantors, and respective successors and assigns against

i. any and all liens, statutory or otherwise, or rights thereof;

ii. any and all obligations under any bond or guaranty for payment furnished to or by the Beneficiaries, whether pursuant to an agreement or required by law; and

iii. any other claims of any kind whatsoever, statutory or otherwise; and

for any and all work, labor, material or equipment furnished by or through said

Subcontractor/Supplier, its sub-subcontractors, suppliers, equipment providers and laborers and anything else in connection with the agreement between Contractor and Subcontractor/Supplier ("Subcontract"), through the last date of work covered by the Payment Application except as it pertains to unpaid retainage, if any.

2. The following listed persons or entities are the Subcontractor/Supplier's only sub-subcontractors, equipment providers, materialmen or suppliers for the Project. This final waiver, or one similar, will be required for all sub-subcontractors, equipment providers, materialmen and suppliers for each payment application. Final payments may be delayed if all documents are not submitted properly.

A. Sub-subcontractors, equipment providers, materialmen or suppliers

B. _____ Write "none" here if no sub-subcontractors, equipment providers, materialmen or suppliers were used on this Project.

COMPANY NAME (of your material suppliers and/or subcontractors)	CONTRACT AMOUNT (if unknown, list N/A)	AMOUNT PAID TO DATE (cumulative amount)	AMOUNT PAID THIS PERIOD (thru date listed above)	REMAING BALANCE LEFT ON CONTRACT

3. The previous amounts paid and the Final Payment Amount requested for the work and labor performed and material and equipment supplied on the Project represents the actual value of work and material provided under the terms of the Subcontract and all authorized changes thereto concerning work to be performed on the Property.

4. Payment in full has been made by the Subcontractor/Supplier through the periods covered by all prior payment applications (a) to all of the Subcontractor's or Supplier's sub-subcontractors, equipment providers, materialmen, suppliers and laborers, and (b) for all materials and labor used or furnished by the Subcontractor/Supplier in connection with the performance of the Subcontract, except as noted below:

COMPANY NAME (of your material suppliers and/or subcontractors not paid)	AMOUNT NOT PAID	REASON WHY AMOUNT WAS NOT PAID

5. Subcontractor/Supplier has complied with Federal, State and Local tax laws, including, without limitation, Income Tax Withholding, Sales Tax, Social Security, Unemployment Compensation and Worker's Compensation laws, insofar as applicable to the performance of the Subcontract. Subcontractor/Supplier has paid, or out of the proceeds of this payment will promptly pay, all sales or use tax due and owing.

6. The undersigned is fully authorized and empowered to execute this instrument for and on behalf of said Subcontractor/Supplier and to bind it hereto and does in fact so execute this Final Waiver and Affidavit. The undersigned acknowledges and agrees that the Beneficiaries or anyone on their behalf may and will act and rely upon this instrument in releasing any funds due or owing.

7. The remittance of the Final Payment Amount negotiated and/or endorsed by Subcontractor/Supplier and marked "paid" or otherwise accepted by the bank against which said remittance was drawn shall constitute conclusive proof that said Final Payment Application was paid and that the Final Payment Amount thereof was received by Subcontractor/Supplier and this Final Waiver and Affidavit shall become effective automatically and without requirement of any further act, acknowledgment or receipt on the part of the Subcontractor/Supplier.

Subcontractor/Supplier

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

State of: _____ County of: _____

On this _____ day of _____, 20_____, before me personally

appeared _____, _____

of _____, known to me to be the person who executed

this document and acknowledged to me that he/she executed the same for the purposes therein stated.

_____ _____

Notary Public in and for said County and State

Commission Expires

END OF SECTION

SECTION 00 65 00.20
FINAL WAIVER AND AFFIDAVIT (POST-PAYMENT): SUBCONTRACTOR AND SUPPLIER

Subcontractor/Supplier:	_____
Project Number and Name:	25024800 Project Clydesdale - Precon
Project Address:	76th and Sheridan Owasso, OK 74055
Payment Application No:	_____
Payment Amount:	_____
Total Amount Paid:	_____
Subcontract Amount:	_____
Last date of work covered by the Payment Application:	_____
Contractor:	J.E. Dunn Construction Company

Beneficiaries: Contractor, Owner, and other parties, if any, having any interest in the Property.

1. In consideration of the payments made of the Final Payment Amount and all previous payment amounts by Contractor to the undersigned Subcontractor/Supplier for work, labor and services and/or materials furnished for the construction of the Project, the undersigned Subcontractor/Supplier, being familiar with the penalties for false certification, represents and certifies to the Beneficiaries that:

   A. Subcontractor/Supplier a) irrevocably and unconditionally waives and releases the Property, Project and Beneficiaries from; and b) shall defend, indemnify and hold harmless the Property, Project, Beneficiaries, their sureties, guarantors and respective successors and assigns against

      i. any and all liens, statutory or otherwise, or rights thereof;

      ii. any and all obligations under any bond or guaranty for payment furnished to or by the Beneficiaries, whether pursuant to an agreement or required by law; and

      iii. any other claims of any kind whatsoever, statutory or otherwise,

      for any and all work, labor, material or equipment furnished by or through said Subcontractor/Supplier, its sub-subcontractors, suppliers, equipment providers and

laborers and anything else in connection with the agreement between Contractor and Subcontractor/Supplier ("Subcontract"), Property, and Project.

2. The following listed persons or entities are the Subcontractor/Supplier's only sub-subcontractors, equipment providers, materialmen or suppliers for the Project. This final waiver, or one similar, will be required for all sub-subcontractors, equipment providers, materialmen and suppliers.

A. Sub-subcontractors, equipment providers, materialmen or suppliers

B. _____ Write "none" here if no sub-subcontractors, equipment providers, materialmen or suppliers were used on this Project.

COMPANY NAME (of your material suppliers and/or subcontractors)	CONTRACT AMOUNT (if unknown, list N/A)	AMOUNT PAID TO DATE (cumulative amount)	AMOUNT PAID THIS PERIOD (thru date listed above)	REMAING BALANCE LEFT ON CONTRACT

3. The Final Payment Amount and all previous payment amounts for the work and labor performed and material and equipment supplied on the Project represents the actual value of work and material provided under the terms of the Subcontract and all authorized changes thereto concerning work to be performed on the Property.

4. Payment in full has been made by the Subcontractor/Supplier through the period covered by all prior payments (a) to all of the Subcontractor/Supplier's sub-subcontractors, equipment providers, materialmen, suppliers and laborers, and (b) for all materials and labor used or furnished by the Subcontractor/Supplier in connection with the performance of the Subcontract, except as noted below:

COMPANY NAME (of your material suppliers and/or subcontractors not paid)	AMOUNT NOT PAID	REASON WHY AMOUNT WAS NOT PAID

5. Subcontractor/Supplier has complied with Federal, State and Local tax laws, including,

without limitation, Income Tax Withholding, Sales Tax, Social Security, Unemployment Compensation and Worker's Compensation laws, insofar as applicable to the performance of the Subcontract. Subcontractor/Supplier has paid, or out of the proceeds of this payment will promptly pay, all sales or use tax due and owing.

6. The undersigned is fully authorized and empowered to execute this instrument for and on behalf of said Subcontractor/Supplier and to bind it hereto and does in fact so execute this Final Waiver and Affidavit. The undersigned acknowledges and agrees that the Beneficiaries or anyone on their behalf may and will act and rely upon this instrument in releasing any funds due or owing.

Subcontractor/Supplier

Authorized Signature: _____

Name: _____

Title: _____

Date: _____

State of: _____ County of: _____

On this _____ day of _____, 20_____, before me personally appeared _____, _____ of _____, known to me to be the person who executed this document and acknowledged to me that he/she executed the same for the purposes therein stated.

_____ Notary Public in and for said County and State

_____ Commission Expires

END OF SECTION

SECTION 00 72 00
PRIME CONTRACT BETWEEN OWNER AND CONTRACTOR

PART 1 - GENERAL

1.1 SUMMARY

A. The redacted Prime Contract between Owner and Contractor is to be added by addendum at a later date.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00 73 00
SPECIFIC PROJECT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

B. All Work required by these Specific Project Requirements is included in the Subcontract Documents. In case of conflicts between the Specific Project Requirements and other Subcontract Documents, the more stringent requirements shall govern as determined and directed by the Contractor.

1.2 SUMMARY

A. This Section includes the following:

1. Project Information
2. Allowances
3. Unit Prices
4. Alternates
5. Contract Modification Procedures
6. Payment Procedures
7. Project Management and Coordination
8. Construction Progress Documentation
9. Submittal Procedures
10. Quality Requirements
11. General Requirements for Workmanship
12. General Requirements for Products and Materials
13. Contract Closeout
14. Record Documents
15. Special Project Procedures for Alterations of Existing Facilities and/or Grounds

B. The attachments to this Section include the following:

1. Attachment A: Electronic Data Release
2. Attachment B: 3D BIM Models Coordination Program

1.3 PROJECT INFORMATION

A. Work Hours

1. Normal working hours on the Project are Monday through Friday, 6:30 a.m. to 5:00 p.m., local Project time. Contractor may amend work hours as required or necessary to maintain Project schedule or as seasonal and/or site work conditions warrant.

B. Project Start Up

1. All parties must execute the Agreement before the Subcontractor can move on site to

begin Work.

2. Provide evidence of insurance meeting the requirements of the Subcontract Documents to Contractor at least seven (7) calendar days before the Subcontractor is scheduled to begin Work and within seven (7) calendar days from the Notice of Award.
3. If required, submit Performance and Payment Bonds within seven (7) calendar days from the Notice of Award.
4. Furnish early Project submittals to the Contractor within fifteen (15) business days of the Notice of Award. No payment application will be accepted until Contractor receives all required information. Early submittal items include:
    a. A listing of all subcontractors, suppliers, and any tiered subcontractors. If a particular item of work has not been determined, indicate on the listing "TBD" (to be determined) and provide such information to the Contractor immediately after determination.
    b. A fabrication schedule detailing the fabrication sequence and time required for fabrication and delivery of major materials and equipment.
    c. A submittal schedule of shop drawings and product submissions showing time for approval, fabrication, and transport.
    d. An installation schedule, which combines both manpower and time requirements including:
        1) Total workdays required to perform the major items of Work broken down into meaningful details as required for scheduling by the Contractor.
        2) Estimated weeks required to complete the Work in each of the Subcontractor’s major areas of work. Include crew sizes.

C. Electronic Project Correspondence and Communication

1. Project correspondence, communications and information will be provided electronically. Subcontractors and Suppliers shall have necessary knowledge, technology, hardware, software and internet connectivity to exchange information electronically.
2. Subcontractors and Suppliers shall provide email addresses for office and field leadership personnel assigned to Project for the purpose of communication and exchanging documents. At minimum, email addresses shall be capable of receiving a 10-megabyte file attachment.
3. A Project Website will be used for purposes of managing communication and documents during the construction stage.
4. Subcontractors and Suppliers shall utilize provided online systems to collaborate and input, respond and/or update information as required for jobsite observations and issue tracking and resolution such as safety audits, quality documentation, punch lists and coordination of Cx activities. Use of this software may require administration through field tablet or mobile devices provided by the Subcontractor for associated activities.

D. Code of Conduct

1. Because this Project may involve working in and around occupied facilities and/or public areas, Subcontractor and all its employees are required to comply with the following:
    a. Perform their work in a professional manner.
    b. Do not converse or talk with employees of Owner. All construction related questions are to be directed to Contractor.
    c. Inappropriate language or gestures, profanity, or lewd conduct are strictly prohibited.
    d. Tobacco use on the Project site must comply with the Owner's restrictions. If there are no restrictions, tobacco must be kept to a minimum so as to not damage the Project or litter the site. Smoking is restricted to designated areas, if any. Violations of this policy may result in tobacco use being prohibited on the Project site.
    e. Parking is only allowed in areas designated by Contractor.
2. Violations of this policy could result in immediate dismissal from the site.

1.4 ALLOWANCES

A. Refer to Division 01, Section "Allowances" for specific requirements regarding allowances.

B. Refer to Division 02 through Division 48 for items of work covered by allowances.

C. Refer to Scope of Work document for any additional Contractor requested allowances.

1.5 UNIT PRICES

A. Refer to Division 01, Section "Unit Prices" for specific requirements regarding unit prices. Record unit pricing on the Bid Form.

B. Refer to Division 02 through Division 48 for work requiring the use of unit pricing. Record unit pricing on the Bid Form.

C. Refer to Scope of Work document for any Contractor requested unit prices. Record this unit pricing on the Scope of Work document and attach it to the Bid Form.

1.6 ALTERNATES

A. Refer to Division 01, Section "Alternates" for specific requirements regarding alternates. Record alternates on the Bid Form.

B. Refer to Scope of Work document for any Contractor requested alternates. Record these alternates on the Scope of Work document and attach it to the Bid Form.

1.7 CONTRACT MODIFICATION PROCEDURES

A. Request for Information (RFI)

1. Refer to Division 01, Section "Project Management and Coordination" for specific requirements regarding RFIs.
2. If during the construction of the Project, clarification of the documents is required, it shall be brought to the attention of the Contractor.
3. The Contractor will either provide clarification or forward a Request for Information

(RFI) to the Architect. These RFI's shall be dated and sequentially numbered on a form determined by the Contractor. The Contractor will submit RFI's to the Architect for response and will distribute such responses to affected Subcontractors or Suppliers.

4. A response to an RFI is not an authorization to proceed with work. If a Subcontractor or Supplier believes that the response changes its Scope of Work, it shall immediately advise the Contractor who will review the response with the Architect and Owner to determine whether a change in the Scope of Work exists.

B. Minor Changes in the Work

1. Refer to Division 01, Section "Contract Modification Procedures" for specific requirements regarding minor changes in the Work.
2. Prior to proceeding with any work described in an Architect's Supplemental Instructions (ASI), Subcontractors and Suppliers shall confirm that these will not impact their cost or schedule. Proceeding with such work without confirmation will be deemed a waiver of Subcontractor's or Supplier's right to claim additional cost or time associated with the Minor Change in Work.

C. Proposal Request (PR)

1. Refer to Division 01, Section "Contract Modification Procedures" for specific requirements regarding proposal requests.
2. Should the Owner contemplate making a change in the work, the Architect will issue a Proposal Request (PR) to the Contractor.

D. Change Orders (CO)

1. Refer to Division 01, Section "Contract Modification Procedures" for specific requirements regarding change orders.
2. All PR's will be reviewed and forwarded to the affected Subcontractors and Suppliers for review. Each Subcontractor and Supplier will determine if the PR affects its Scope of Work. If the described change impacts cost and/or time, the Subcontractor and Supplier shall immediately prepare a proposal for submission to the Contractor. The Subcontractor's or Supplier's proposal shall be broken down completely identifying all labor and material quantities. The Contractor will review the pricing with the Owner and Architect to determine if a change order will be issued. Subcontractors and Suppliers are not to proceed with additional work until written authorization has been received.
3. If the Owner determines that a Proposal Request will be accepted, the Architect or Contractor will prepare a Change Order (CO) which will be dated and numbered sequentially.
4. The Change Order will describe the change or changes, will refer to the Proposal Request and proposal number, and will be signed by the Owner, the Architect and the Contractor.

E. Construction Change Directives (CCD)

1. Refer to Division 01, Section "Contract Modification Procedures" and other Subcontract Documents for specific requirements regarding Construction Change Directives (CCD).

2. Construction Change Directives instruct the Contractor to proceed with a change in the work prior to concluding Contract adjustment negotiations.

F. Submission Of Proposals For Change Order - Follow other Subcontract Document requirements if more stringent than the requirements listed in this section.

1. Labor Rate Breakdown

a. Base Rate Calculation: All Subcontractors will be required to substantiate all labor rates (for all skill levels and tradesmen) as actual cost-plus allowable overhead and profit, prior to submitting change order pricing. Breakdowns shall include base labor rate, fringes, union dues, payroll taxes and insurance. Any item not falling into one of these categories will be considered overhead and shall be included in the fee limits listed below.

b. Premium on Overtime Rate Calculation: In the event overtime work is requested by the Contractor (not required by the Subcontract Documents or due to the fault of the Subcontractor), the premium on the overtime rate will be required to be substantiated as actual cost-plus allowable overhead and profit. Breakdowns shall include half of base labor rate, only the overtime premium portion of any applicable union fringes, and payroll taxes and insurance (excluding workers compensation insurance which is not paid on the premium portion of overtime). Any item not falling into one of these categories will be considered overhead and shall be included in the fee limits listed below.

2. Method of Proposal

a. Comply with the requirements of this section and all other requirements.

b. Include a direct reference to the initiating change document in the proposal description. If the request is not linked to a change document, a full and thorough description of the work and the reason for the change order request is required. Change requests not in this format will not be reviewed and/or will be returned as rejected.

c. Include detail quantities of materials added or eliminated including unit costs, with extend total amounts. If requested, furnish additional information to substantiate quantities.

d. Itemize applicable taxes, delivery charges, equipment rental (rates and hours), and amounts of trade discounts.

e. Include costs of labor and supervision (as allowed by contract provisions) directly attributable to the change. Provide crew information including, approved labor rate for each skill level and trade, number of man-hours including estimating program back-up substantiating those hours.

f. Provide proposal detail and estimate which defines the type or area of work (e.g., Concrete: concrete walls, grade beams, piers, sidewalks, etc.; Drywall: metal studs, rock, finishing, etc.).

g. Include substantiating back-up from tiered subcontractors and Material Suppliers equal to the requirements of the Subcontractor proposal as described in this section.

h. Itemize fee separate from the material and labor detail described herein and within limits described in this section.

i. Include an updated Subcontractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

j. Review and acceptance of a Subcontractor's price proposal does not constitute a limitation of labor or materials necessary for Subcontractor to complete its Work.

3. Fee Limits

a. Fee includes all general requirements, all supervision (including project management and general on-site supervision), overhead, and profit.

b. The following fee percentages shall be used for lump sum pricing and actual cost pricing of additions and deletions to the Work:

1) To Subcontractor for work performed by own forces: not to exceed 10%

2) To Subcontractor for work performed by other than own forces: not to exceed 5%

3) To second-tier Subcontractor and/or material Supplier for work performed by its own forces: not to exceed 10%

4) To second-tier Subcontractor and/or material Supplier for work performed by other than its own forces: not to exceed 5%

1.8 PAYMENT PROCEDURES

A. Refer to Division 01, Section "Payment Procedures" for specific requirements regarding payment procedures.

B. Schedule of Values

1. Submit for approval by the Contractor a Schedule of Values following the format of AIA G703 – Application and Certificate of Payment Continuation Sheet within fifteen (15) calendar days following Notice of Award. The Schedule of Values shall list the installed value of the component parts of the Work, broken down in sufficient detail to serve as a basis for computing values for progress payments during construction with total equaling the Subcontract Sum. The Schedule of Values should be broken down by area, building, floor, etc. in sufficient detail to evaluate progress payments. If a Project specific accounting breakdown has been provided, the Schedule of Values shall be broken down appropriately. No payments will be made prior to Contractor's receipt of an approved Schedule of Values. The approved Schedule of Values shall be used by the Subcontractor on all Applications for Payment.

C. Application for Progress Payments

1. At a time consistent with the requirements of this section and the Subcontract Documents, and for each calendar month during the progress of the Work, the Subcontractor shall submit a properly notarized Application for Payment prepared in a manner consistent with the Schedule of Values.

2. The amount shown on the Application for Payment shall be the value of work completed through the last day of the application period and the value of the material/equipment suitably stored in accordance with the Subcontract Documents,

less the aggregate of previous payments, and less the retainage as specified in the Subcontract.

3. The form of application for payment shall as provided in Division 00.
4. Application and Certificate for Payment
    a. Fill in all required information, including that for change orders executed prior to the date of the application.
    b. Fill in the summary of dollar values to agree with the respective totals indicated on the continuation sheet.
    c. Execute certificate with the signature of an authorized signer of the firm.
5. Continuation Sheets
    a. Based on the approved Schedule of Values, fill in dollar values for Previous Application and Complete this Period.
    b. Based on the Approved Schedule of Values and Work covered by this application for payment, fill in the dollar values for each column of each scheduled line item of work. Round values to nearest dollar, unless directed otherwise.
    c. List each change order item executed prior to the date of application following Approved Schedule of Values. Include change order number, description and agreed cost breakdown level sufficient for evaluating progress of work. If requested by the Contractor, breakdown change order totals in the same details as the original Schedule of Values.

D. Substantiating Data for Progress Payments

1. Include substantiating data required to verify a payment request.
    a. In order to bill for stored materials, provide documentation and adhere to specific procedures as follows:
        1) Physically mark and identify the stored materials and/or equipment and segregate from and not commingle such goods with other goods held by the Subcontractor or Supplier. Provide photographic evidence to Contractor of said stored materials.
        2) Submit evidence of insurance coverage on the material and/or equipment while stored at its warehouse or other approved facilities, naming Contractor and theOwner as Additional Insureds.
        3) Complete and submit a Bill of Sale form endorsed by a corporate officer or owner. The validity of the Bill of Sale is subject to Subcontractor's receipt of payment as referred to therein. A copy of the Bill of Sale is included in Section 00 62 79.10.
        4) Complete and submit a Non-negotiable Bailment Receipt. A copy of the Non-negotiable Bailment Receipt is included in Section 00 62 79.20.
        5) Submit supporting documentation for stored material that verifies the amount requested, such as paid invoices. Match the amount requested with amounts indicated on the documentation. Do not include overhead and profit on stored materials.

6) Other requirements as may be deemed necessary to protect the interests of the Contractor and Owner.

b. Applications for Payment shall be accompanied with supporting cost back-up from the Sub-subcontractors and Material Suppliers and Lien Waivers from sub-subcontractors and Material Suppliers associated prior month's application for payment.

c. When the Contractor finds the Subcontractor's application in proper form and properly progressed, it will be included for payment by Owner within the established payment cycle.

d. Payment Application Documents:

1) G702 and G703

2) Subcontractor And Supplier Partial Waiver And Affidavit

3) Non-negotiable Bailment Receipt (if stored material is being billed)

4) Bill of Sale (if stored material is being billed)

5) Evidence of Insurance covering the stored material

6) Photographic documentation of stored materials

7) Other supporting documentation for stored materials such as invoices.

E. Application for Final Payment

1. Submit final Application for Payment following the procedures specified above for progress payments as set forth in the Subcontract Documents.
2. Before submitting a final Application for Payment, the Subcontractor shall submit to the Contractor for review by the Architect, all warranties and guarantees, Record and Information Manuals, As-Built Drawings and Specifications, and other documents required by the Subcontract Documents, and properly turn-over and store specified extra stock and spare parts. Subcontractor shall obtain the signature of the Contractor verifying receipt of the extra stock and spare parts.
3. Properly executed "Subcontractor And Supplier Final Waiver And Affidavit" shall be submitted to the Contractor prior to final payment.

1.9 PROJECT MANAGEMENT AND COORDINATION

A. General Coordination

1. Subcontractor shall coordinate its construction operations with those of other Subcontractors and entities to ensure efficient and orderly installation of each part of the Work. Subcontractor shall coordinate its operations with operations, included in different Sections that depend on each other for proper installation, connection, and operation.
2. Coordinate inspections and ensure items are complete and ready for inspection in advance. Provide notification to appropriate person(s) and agencies for all testing and inspections associated with the Work. Provide "confidence" tests of systems as required prior to formal inspections to ensure adequacy of installed work.

B. Building Information Modeling (BIM) and other Electronic Data

1. The Architect and Contractor may utilize and provide the Subcontractor Building Information Modeling or other electronic data ("Electronic Data") for use in the Subcontractor's work during the Project.
2. The Electronic Data will be provided for informational purposes only. The Electronic Data cannot be used for any other project or purpose other than in connection with this Project.
3. The Electronic Data shall not replace or supersede the record set of the drawings and other Subcontract Documents ("Paper Documents"). In the event of a conflict between the Record Documents and the Electronic Data, the Record Documents shall govern.
4. Prior to receiving any Electronic Data, complete and execute the Electronic Data Release included as Attachment A to this section and/or the Release(s) required by the Design Team.
5. See the attached 3D BIM Models Coordination Program included as Attachment B to this section for requirements.
6. Subcontractor shall pay any fees for electronic files as defined in other Sections.

C. Project Meetings

1. Refer to Division 01, Section "Project Management and Coordination" for additional requirements regarding meetings.
2. Preconstruction Conference
   a. Contractor will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect.
      1) The conference will be conducted to review responsibilities and personnel assignments.
      2) Authorized representatives of Owner, Contractor, Architect, and their consultants; Subcontractor(s) and their superintendent; major sub-subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
      3) Contractor will discuss items of significance such as administrative items, procedural issues, site usage and requirements, schedule, jobsite rules and regulations, etc.
3. Progress Meetings
   a. Progress Meetings, chaired by the Contractor, will be held regularly, on a weekly or bi-weekly basis as required to support the schedule. Attendance by the Subcontractor's personnel intimately knowledgeable of its work and authorized to make decisions on its behalf is mandatory. At the direction of the Contractor, key Subcontractors, Suppliers, sub-subcontractors and supervisors will be required to provide reports of their activities and participate in coordination and discussions.
   b. The progress meeting provides the Subcontractor an opportunity to discuss any problems or potential problems arising from the Project. Each Subcontractor shall

attend progress meetings as requested by the Contractor and shall come prepared to discuss its work status and how it relates to the Project schedule.

c. The Project schedule will be reviewed at progress meetings. Each Subcontractor is expected to provide the status of shop drawings, material and equipment delivery, job progress and quality control.

4. Pre-Installation Conference

a. Contractor will conduct pre-installation conferences per Specifications or at its discretion prior to starting new construction activities or those that require coordination with other work.

b. Installer and representatives of manufacturers and fabricators involved in or affected by the work or its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. All Subcontractors (including field superintendents and/or foremen) performing or directly affected by the work will be required to attend.

c. Contractor will prepare the meeting agenda. Items for discussion will include progress review of other construction activities and preparations for the work specific to the pre-installation conference. Other subjects that may be discussed include:

1) Clear understanding of material installation means, methods and procedures,

2) Clear understanding of contract document requirements,

3) Coordination and sequencing of installation among applicable trades,

4) Identify instances of detailing which require modification to meet applicable manufacturers or industry standards for installation,

5) Confirmation of material compatibility, and

6) Confirmation of quality control checklist and agreed-upon frequency for their use.

5. Coordination Meetings

a. Contractor may conduct additional Project coordination meetings as needed to resolve specific issues or coordinate upcoming work.

6. BIM Coordination Meetings

a. Contractor shall host BIM coordination meetings as required by this Section. All affected Subcontractor(s) shall perform in accordance with the BIM Execution Plan and BIM Requirements. All Subcontractors whose work impacts or is impacted by such work must attend applicable meetings.

b. Subcontractors shall comply with the coordination program identified in Attachment B to this Section.

D. Lean Construction

1. This Project will be built using a lean approach. Contractor will implement a number of tools that promote and support a lean philosophy and approach which may include, but are not limited to, the Last Planner® System, 5S, continuous improvement

programs, lessons learned (Do Again/Do Better), BIM, prefabrication, 5-Why Root Cause Analysis, and other such tools. Subcontractors will be required to participate in one or more Lean Training Sessions that will introduce and train on Contractor's lean approach and these tools. Subcontractors may be required to implement any and all lean tools on the Project. All field foremen/supervisors actively supervising the Work on this Project will be required to attend the lean meetings on site. The cost and time associated with attending lean training and meetings and implementing lean tools are to be included in Subcontractor's Bid. Lean construction practices are only effective with complete participation by all subcontractors. Subcontractor's full participation is required for the mutual benefit of all Project participants.

2. Last Planner System

   a. This Project practices the Last Planner® System. For each schedule milestone, Contractor will conduct a collaborative, phase pull plan session to build the plan to reach that schedule milestone. All field foremen/supervisors and Project managers for Subcontractors and Suppliers must attend every such session where that Subcontractor or Supplier's Work is implicated.

   b. At least three (3) weeks prior to starting Subcontractor's Scope of Work on the Project, it is mandatory that the Subcontractor's key office and field staff attend weekly planning sessions. Once Subcontractor's Work has commenced, Subcontractor will be required to have its field foreman/supervisor attend the weekly planning meeting to proactively coordinate schedules with the other subcontractors and suppliers. Planning meetings will be conducted by Contractor's Project superintendent at the jobsite.

   c. Fifteen (15) minute daily stand-up coordination meetings are held on-site. All foremen working on site are required to attend.

   d. Use of the Last Planner system may result in adjustment or advancement of the Project schedule resulting from subcontractor coordination and planning. Subcontractors are to support any adjustments and advancements in the Project schedule as a result of Last Planner with compensatory shifting of manpower and material resources.

1.10 CONSTRUCTION PROGRESS DOCUMENTATION

A. Progress Schedule

1. Refer to Division 01, Section “Project Management and Coordination” for specific requirements regarding scheduling.

2. Contractor will prepare a critical path method (CPM) Project Schedule for the construction work including construction activities, submittals for major components, procurement of materials and equipment, and testing of major building systems and periodically update the progress schedule throughout the Project. A construction milestone schedule has been included in Section 00 31 00. A detailed Project schedule is available at Contractor’s office and is available for review.

3. Within (7) calendar days after receipt of Notice to Proceed, each Subcontractor shall submit for approval by Contractor a schedule indicating durations and dates for submittals, procurement and installation of the components included in its Scope of

Work. No schedule activity shall exceed 2 weeks in duration (except for procurement related activities).

4. If changes occur in the approved Subcontractor's schedule, the Subcontractor shall provide the Contractor updated schedule information as soon as practical, but no later than (3) calendar days following occurrence of schedule change. If the Contractor determines that schedule changes negatively affect the CPM Project Schedule, the Subcontractor shall prepare schedule recovery plan detailing activities, sequences and timing for bringing its work into alignment with the CPM Project Schedule.
5. The Subcontractor shall substantially complete the work in accordance with the schedule developed by the Contractor.
6. The Subcontractor hereby agrees to commence work under the Contract within seven (7) days after the date of a Notice to Proceed, unless otherwise stipulated in that notice.
7. Completion of the Work: The Subcontractor shall complete its work according to and within time limits included in the CPM Project Schedule and in a manner to not delay work of other Subcontractors.

1.11 SUBMITTAL PROCEDURES

A. Refer to Division 01, Section "Submittal Procedures" for specific requirements regarding submittals.

B. Subcontractors shall submit all Shop Drawings, Product Data and Samples ("Submittals") to the Contractor bearing the Subcontractor's stamp indicating conformance to the Subcontract Documents and shall be signed by the Subcontractor's representative.

C. Subcontractor is to submit the following to the Contractor (unless more are required by Division 01):

1. Shop Drawings - in PDF format (with proper bookmarks) via electronic files or collaborative software (as determined by the Project Team).
2. Product Data - in PDF format (with proper bookmarks) via electronic files or collaborative software (as determined by the Project Team).
3. Samples – Minimum of 3 each of each differing type unless specifically noted as additional required.
4. Coordination Drawings - in PDF format via electronic files or collaborative software (as determined by the Project Team).

D. Contractor will return to the Subcontractor:

1. Shop Drawings - in PDF format via electronic files or collaborative software.
2. Product Data - in PDF format via electronic files or collaborative software.
3. Samples - 1 each of each differing type.

E. Forward Submittals to Contractor in a timely fashion for Contractor and Architect's review to maintain the Project Schedule. If a Submittal requires expediting to maintain the Project Schedule, conspicuously note and communicate a required return date in the

Submittal. If other review cycles are identified in the Subcontract Documents, account for those times as well.

F. If design ASIs, RFIs, bulletins, or any other change in the Work (collectively, "changes") require modifications to Shop Drawings, Subcontractor shall update its Shop Drawings. Such updated Shop Drawings shall become the basis of Subcontractor's as-built drawings, per the requirements identified below.

1.12 QUALITY REQUIREMENTS

A. Refer to the Division 01 Section "Quality Requirements" and individual Specification Sections for specific requirements regarding quality control and assurance.

B. Refer to the Division 01 Section “Testing & Inspection Services” and individual Specification Sections for specific requirements regarding testing and inspections.

C. Advise the Contractor's on-site field superintendent of all scheduled tests with a minimum of two (2) business days advanced notice.

D. The Subcontractor’s quality control representative shall review Drawings, procurement documents, and contracts to ensure that the technical information provided and all work performed is in accordance with the latest revision of the Subcontract Documents. These documents shall be updated to reflect all changes made through Addenda, Change Orders, and Requests for Information.

E. The Subcontractor’s quality control representative shall perform an on-site inspection upon receipt of all materials, equipment, and supplies. Items that are damaged or not in conformance with the respective Submittals, quality standards, and Subcontract Documents will be identified and segregated from accepted items. Items thus identified will not be incorporated into the Work until corrective action, acceptable to the Contractor and Architect is completed.

F. The Subcontractor is responsible for the quality of the work performed by its work force and sub-subcontractors, as well as the quality of the material, equipment, and supplies furnished by the Subcontractor to be incorporated into the Work. Subcontractor shall designate a quality control representative, who will be on site at all times when Work is in progress.

G. As determined by the Contractor, the Subcontractor shall submit a quality control plan for review and approval before Subcontractor can commence its Work. The plan shall describe measurements, inspections, and test required to ensure conformance with Project quality requirements. The plan shall include quality control inspection checklist with the anticipated frequency of field verification. Subcontractor shall upload such checklist to the Project's on-line collaboration software.

1.13 GENERAL REQUIREMENTS FOR WORKMANSHIP

A. Manufacturer’s requirements shall be strictly followed for storage, preparation, installation, cleaning, protecting, and testing of all products and materials except where specific requirements included in appropriate Sections in Division 01 through Division 49 exceed those requirements. Subcontractor shall submit such requirements to the Architect for review and approval before beginning the Work. Where conflicts between manufacturer’s requirements and Subcontract Documents occur, Subcontractor shall notify Contractor and request resolution prior to proceeding.

B. The Subcontractor shall inspect the jobsite, coordinate with others, and field verify dimensions where applicable before fabricating products or material. Pay special attention to field verifications necessary where new Work meets existing conditions to ensure accurate fabrication.

C. Follow manufacturer’s requirements and industry standards in regard to the effect of temperature, UV exposure, moisture, and humidity on products and materials. The approved submittal for manufacturer's installation instructions shall be available and on-site during construction.

D. Install materials and equipment plumb, level, and true, with uniform joints and edge conditions, tight seams, and neatly fitting adjoining materials, unless specifically shown otherwise.

E. Install materials and equipment as indicated in the Drawings and Specifications. If field verification is not required and dimensional information is not indicated, Subcontractor shall submit an RFI to the Contractor, requesting missing dimensional information.

F. Clean materials and equipment in a manner so as to not damage the finish of installed materials.

G. Protect installed equipment and material from damage by Subcontractor or others, with labels left intact until final cleaning.

1.14 GENERAL REQUIREMENTS FOR PRODUCTS AND MATERIALS

A. Refer to the Division 01 Section “Submittal Procedures” for specific requirements regarding product selection.

B. Refer to the Division 01 Section “Substitution Procedures” for specific requirements regarding substitutions.

1.15 CONTRACT CLOSEOUT

A. Refer to the Division 01 Section “Closeout Procedures” for specific requirements regarding Project closeout.

B. Refer to the Division 01 Section “Closeout Procedures” for specific requirements regarding warranties.

C. Refer to the Division 01 Section "Operation and Maintenance Data" for specific requirements regarding Operation and Maintenance Manuals.

D. Refer to the Division 01 Section "Demonstration and Training" for specific requirements regarding required Owner training.

1.16 RECORD DOCUMENTS

A. Refer to the Division 01 Section “Submittal Procedures” for specific requirements regarding submittals.

B. Refer to the Division 01 Section "Project Record Documents" for specific requirements for record documents including as-built drawings.

C. Subcontractor shall maintain at the Project site for the Contractor’s review, current versions of the following:

1. Drawings

2. Specifications
3. Addenda
4. Change Orders
5. Other Change Directives
6. Approved Submittals, including but not limited to: Shop Drawings, Product Data, and Samples
7. Field Test Reports
8. Meeting Notes

D. Subcontractor shall provide electronic redline Drawings, Specifications, submittals, etc. with "As-Built" information and submit to the Contractor in PDF format via electronic files when the Subcontractor is substantially complete with its Work. This is in addition to any paper copies required by the Subcontract Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00 73 00.A
ATTACHMENT A - ELECTRONIC DATA RELEASE

Project:	Project Clydesdale - Precon
Owner:	BEALE INFRASTRUCTURE GROUP LLC
Architect/Engineer:	HDR ARCHITECTURE INC
Contractor:	J.E. Dunn Construction Company
Subcontractor:	_____

1. Subcontractor has requested and Contractor has agreed to provide copies of electronic data files, which may include building information modeling (BIM) data and Drawings (collectively, "Electronic Files") for the Project.

2. In consideration of Contractor providing a copy of the Electronic Files to Subcontractor, Subcontractor agrees to the following:

2.1 Subcontractor acknowledges the Electronic Files shall not replace or supersede the record hardcopy set of the Drawings and other Contract Documents ("Paper Documents"). If a conflict between the Paper Documents and the Electronic Files occurs, the Paper Documents shall govern. Subcontractor shall be deemed to have used the Paper Documents in performing its Work.

2.2 Subcontractor may use the Electronic Files for informational purposes only, agrees to make no modifications to the Electronic Files, and shall return all copies of the Electronic Files, if requested. Subcontractor shall not use or attempt to use the Electronic Files for any other project or any purpose other than in connection with the Project.

2.3 Subcontractor agrees to defend, indemnify, and hold the Owner, Architect/Engineer, and Contractor harmless in connection with any defects contained in the Electronic Files and any claims arising out of the use of the Electronic Files.

2.4 If Contractor has executed a release agreement with a design professional (the "Design Professional Release") affecting the documents that will be provided under this Release, Subcontractor shall be bound to Contractor by the terms of this Release and those of the Design Professional Release, which shall be attached as an exhibit to this Release or otherwise made available to Subcontractor, and shall assume toward Contractor all the obligations and responsibilities which Contractor, by the Design Professional Release, assumes toward the design professional, insofar as applicable to this Subcontractor.

Accepted and agreed:

Authorized Signature:	_____
Name:	_____
Title:	_____
Date:	_____

END OF SECTION

SECTION 00 73 00.B
ATTACHMENT B - COORDINATION PROGRAM (BIM)

PART 1 - GENERAL

1.1 SUMMARY

A. In general, the scope of work under this coordination program is to create a technically accurate and detailed BIM/3D computer model of the architectural, structural, mechanical, plumbing, physical security, fire protection, civil, electrical, equipment suppliers, and other pertinent scopes of the Project identified herein.

B. Subcontractor will participate in the creation of BIM content for use in construction coordination activities. Models will be used to improve prefabrication opportunities, construction coordination, fabrication, and installation of systems.

C. Development of a Project-specific BIM Execution Plan, Level of Development ("LOD") Specification, and Responsibility Matrix will occur within thirty (30) days of Notice to Proceed from Owner OR align with Owner requirements. Subcontractor must participate in routine meetings to develop and agree upon the Plan. Once finalized, the BIM Execution Plan will become a part of the Subcontract or Contract Documents. The BIM Execution Plan may be modified during the Project to ensure Project goals and objectives are met. Unless otherwise directed by Contractor in writing, no modifications to the Plan will be allowed without approval from all parties impacted by proposed changes to the Plan.

D. To the extent Architect has developed its own BIM Execution Plan, Subcontractor shall abide by the requirements therein. In the event of a conflict between Architect's BIM Execution Plan and Contractor's BIM Execution Plan, Subcontractor shall notify Contractor regarding same.

1.2 COORDINATION PROGRAM REQUIREMENTS

A. Subcontractor must attend routine coordination meetings throughout construction and provide input and subject matter expertise related to its Scope of Work.

B. Subcontractor must maintain progress in the creation of its model so that Subcontractor does not impact the construction schedule and milestones.

C. Subcontractor must utilize software that is compatible with Autodesk Construction Cloud (ACC).

D. The Project will utilize ACC to host design Revit model development and coordination. Subcontractor must have the appropriate software license(s) to work collaboratively with the Project team.

E. Subcontractor must have designated “in house” BIM technical resources. Such BIM resources must have the authority to make routing and coordination decisions for systems related to Subcontractor's Scope of Work. If Subcontractor's BIM resources do not have authority to make such decisions, a project manager or field supervision must attend scheduled coordination meetings.

F. Subcontractor models shall be developed in such a way that streamlines the prefabrication modeling process, shop drawing creation, construction coordination, fabrication, and installation of systems.

1.3 FILE SHARING

A. Requirements for electronic Project communication and correspondence is further

defined in 00 73 00 Specific Project Requirements.

B. Construction coordination will occur using ACC for clash detection. Subcontractor will be granted access to the Contractor's ACC site.

C. The Contractor's Information Manager will define the file structure within ACC, and Subcontractor shall ensure each file is uploaded in the correct location. If a BIM Execution Plan is required, the folder structure will be defined in the Plan. If a BIM Execution Plan is not required, the folder structure will be defined in the Project's BIM kick-off meeting.

1.4 MODEL SET UP

A. Project file naming conventions will be defined upon development of the BIM Execution Plan. If a BIM Execution Plan is not required, file naming conventions will be defined in the Project's BIM kick-off meeting.

B. Subcontractor's model coordinate systems will align with design models coordinate system.

C. Subcontractor must align its models to the site control coordinates for field layout.

D. Subcontractor must model all components in its contracted Scope of Work. Further development of model objects will be defined in the creation of the Project's BIM Execution Plan, Roles and Responsibility matrix, and LOD Specification. If there is a discrepancy in LOD requirements between documents, whichever document is of greater detail will govern.

E. Subcontractor shall purge all non-essential 2D information from its models used during construction coordination.

1.5 MODEL LEVEL OF DEVELOPMENT (LOD)

A. Subcontractor must model all components of its contracted Scope of Work. Subcontractor is fully responsible for field coordinating all items not included in the Subcontractor's model. Subcontractor will field coordinate in such a way that it does not impact systems that are coordinated and included in the coordination model.

B. LOD Definitions. LOD definitions are derived from AGC BIM Forum Level of Development Specification. If current definitions differ from what is stated in this document, current definitions supersede the definitions in this document.

1. LOD 100 – The Model Element may be graphically represented in the Model with a symbol or other generic representation but does not satisfy the requirements for LOD 200. Information related to the Model element (i.e., cost per square foot, tonnage of HVAC, etc.) can be derived from other Model Elements. LOD 100 elements are not geometric representations. Examples are information attached to other Model elements or symbols showing the existence of a component but not its shape, size, or precise location. Any information derived from LOD 100 elements must be considered approximate.

2. LOD 200 – The Model Element is graphically represented within the Model as a generic system, object, or assembly with approximate quantities, size, location, and orientation. Non-graphic information may also be attached to the Model Element. At this LOD, elements are generic placeholders. They may be recognizable as the

components they represent, or they may be volumes for space reservation. Any information derived from LOD 200 elements must be considered approximate.

3. LOD 300 – The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of quantity, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the Model without referring to non-modeled information such as notes or dimension callouts. The project origin is defined, and the element is located accurately with respect to the Project origin.
4. LOD 350 – The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of size, shape, location, orientation, and interferences with other building systems. Non-graphic information may also be attached to the Model. Parts necessary for coordination of the element with nearby or attached elements are modeled. These parts will include such items as supports and connections. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the Model without referring to the non-modeled information such as notes or dimension callouts.
5. LOD 400 – The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of size, shape, location, quantity, and orientation with detailing, fabrication, assembly, and installation information. Non-graphic information may also be attached to the Model Element. An LOD 400 element is modeled at sufficient detail and accuracy for fabrication of the represented component. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the Model without referring to non-modeled information such as notes and dimension callouts.

C. Design Model elements (Architectural and Structural) will be modeled at LOD 300 or 350.

D. Construction Model elements will be modeled at LOD 400.

E. If a Project BIM Execution Plan is required, Model LOD will be further defined in development of the BIM Execution Plan and LOD Specification.

1.6 CONSTRUCTION COORDINATION PROCESS

A. The construction coordination process helps to identify conflicts between system models to ensure accurate spatial coordination, reduce field re-work, increase offsite fabrication, and facilitate post-construction assess for maintenance. The construction coordination process never transfers responsibilities stated in the contract. Subcontractor must maintain design intent and performance of the systems as specified in the Subcontract Documents and take no liberties in modifying design.

B. Contractor uses ACC software to identify clash items between design and Subcontractor models.

C. Subcontractor must upload models to the Contractor’s ACC site at least twenty-four (24) hours before scheduled coordination meetings.

D. The sequence of coordination may not coincide with overall construction sequence. In areas of high priority, or for long lead items, the Subcontractor must provide model

content prior to approved submittals.

E. Subcontractor must provide Submittals for items that will be involved in the BIM coordination process before the start of coordination in each area.

F. Each clash item identified in the coordination meetings will be “assigned” to the Subcontractor responsible for modifying its model to resolve the conflict. All “assigned” clashes are to be resolved prior to the next coordination meeting.

G. At the completion of coordination in each area, and when all clashes are resolved, each Subcontractor will ensure all metadata required by the LOD and related to its model (if any) is included and “sign-off” on the completed area, per the attached 00 73 00.B, Attachment B-1. Model sign-off will be at the discretion of the Contractor’s model manager. By signing off on the model, Subcontractor agrees to abide by the means and methods/routing associated with the model and comply with Subcontract Documents and applicable law, including code.

H. On the date of Model sign-off, Contractor will create a published Navisworks file based on the signed-off Model of the same date. The signed-off model may include content for other areas outside of the current sign-off area. Those other areas will be signed off separately.

I. If design ASIs, RFIs, bulletins, or any other change in the Work (collectively, "changes") require modifications to the signed-off Model, affected subcontractors shall first participate in additional coordination meetings with Contractor to determine whether any conflicts or clashes will result. If conflicts or clashes will result, the affected subcontractors shall work together to resolve such conflicts or clashes. If no conflicts or clashes will result or once any conflicts or clashes are resolved in coordination meetings, then each affected subcontractor shall update, as necessary, their respective Shop Drawings (See Front End Section 00 73 00, at 1.11) and models. After such updates occur, all subcontractors associated with the original signed-off Model shall sign off on such updated Model, and such updated Model shall become the new signed-off Model, upon which all Work is performed.

1.7 CONSTRUCTION COORDINATION SCHEDULE

A. A coordination schedule will be produced that includes agreed upon “Sign-Off” dates for each area of coordination. The coordination schedule will have a direct correlation with the Contractor’s construction schedule.

1.8 MODEL AUTHORS

A. Architectural – by Architect

B. Structure – by Structural Engineer and Steel Subcontractor

C. Mechanical – by Mechanical Engineer and Mechanical Subcontractor

D. Plumbing – by Plumbing Engineer and Plumbing Subcontractor

E. Electrical – by Electrical Engineer and Electrical Subcontractor

F. Low Voltage – by Low voltage Designer and Low Voltage Subcontractor

G. Fire Protection – by Fire Protection Subcontractor

H. Specialty Subcontractor/Equipment – by Specialty Subcontractor/Equipment Supplier

1.9 FINAL COORDINATION MODEL

A. The BIM shall extend to five feet beyond the exterior walls of the building plan. Vertically, the model shall extend from the lowest extent of the foundation or lowest underground utility, whichever is greater, and up through roof including roof-top mounted equipment. Civil and Construction Site Utilities models will begin from five foot beyond the exterior walls of the building and extend to the furthest extent site modifications and tie-in locations included in the Subcontract Documents.

B. All model content and routing shall align with design criteria and Specifications and shall consider means and methods, constructability, prefabrication strategy, code requirements, and design performance criteria.

1.10 DESIGN MODEL ELEMENTS

A. At a minimum, model objects listed will be included in the development of models.

1. Architectural

   a. Interior and exterior walls systems

   b. Interior and exterior doors, including door swings

   c. Interior and exterior window and window systems

   d. Louvers

   e. Casework

   f. Roof and roof slopes

   g. Floors

   h. Ramps, stairs, and railings

   i. Ceilings and soffits, including overall thickness, elevation changes, and termination points

   j. Fixed furnishings and equipment

   k. Architectural specialties

   l. Elevators and escalators

   m. Plumbing fixtures/toilet partitions

   n. Coverings and finishes

2. Structural – Concrete and Steel

   a. Footings and foundations (caissons, piles, pile caps, footings, grade beams)

   b. Cast-in-place concrete walls (foundation, shear, bearing, pit walls, elevator core, stair towers)

   c. Concrete beams (include slope where required)

   d. Concrete columns

   e. Structural precast concrete

   f. Slab edges

g. Elevated structural decks, including openings (include slope where required)

h. Pits (elevator, dock leveler, sump, etc.)

i. Primary and secondary structural steel members

j. Metal and concrete decks as the overall thickness of the slab

1.11 CONSTRUCTION MODEL ELEMENTS

A. Subcontractor must verify local code requirements related to its Scope of Work.

B. Note: Structural steel design model elements will be replaced with fabrication steel models provided by the structural steel Subcontractor. Steel fabrication models will be LOD 400. If the Project is designed using a concrete structure sleeves, openings and penetrations, at a minimum, will be added to the design model for purposes of construction coordination.

1. Structural Steel (Division 5)

   a. Primary and secondary structural steel members (columns, beams, trusses, joists, braces, x-bracing, gusset plates, braces, equipment supports, kickers, steel stairs)

   b. Other structural elements including, but not limited to:

      1) Member slope

      2) Embeds

      3) Miscellaneous steel

      4) Anchor bolts

      5) Openings and penetrations

   c. Metal and concrete decks as the overall thickness of the slab

2. HVAC (Division 23)

   a. Duct runs, fittings, transitions, terminations, and connections

   b. All hanger and support systems

   c. Mechanical and air handling equipment

   d. HVAC equipment to overall height, width, and depth as specified in accordance with design specified equipment

   e. Housekeeping pads (overall size, thickness, and location)

   f. HVAC piping, fittings, transitions, terminations, and connection points

   g. Grilles, registers, and diffusers

   h. Fire and smoke dampers, including indicating service access requirements (e.g. access panel) if not readily accessible

   i. Duct balance dampers and model service access zone requirements

   j. Multi-trade overhead MEP rack structure (if applicable)

3. High and Low Voltage Electrical (Divisions 26, 27, 28)

   a. Conduit routing and raceways

b. Light fixtures (location, size, and coordination with reflected ceiling plans)

c. Power feeds to equipment and switch gear to overall height, width, and depth in accordance with design specified equipment

d. Cable tray

e. All hanger and support systems

f. Electrical required for HVAC and plumbing equipment

g. Modeling switches, outlets, data ports, and similar items where coordination with architectural furniture, fixtures, and equipment or interior elevations is required

h. Duct banks to actual size, location, and elevation

i. “No-fly Zones” above panels

4. Plumbing/Piping (Division 22)

a. Pipe routing, fittings, terminations, and connection points

b. All hanger and support systems

c. Pipe slope

d. Plumbing equipment to overall height, width, and depth in accordance with design specified equipment

e. Valves and service access, including chain guides

f. Drip legs, drainpipes, blow down valves, and cleanouts

g. Underground piping (if applicable)

5. Fire Protection Sprinkler and Alarm (Division 21)

a. All components of fire protection system, including but not limited to piping, valves, fire pump, and sprinkler heads

b. All hanger and support systems

c. Any access zone requirements (shown as solids)

d. “No-fly Zones” above control panels

6. Civil & Site Utilities (Division 33)

a. Utilities one and a half inches (1-1/2”) in diameter or greater up to within five feet (5’-0”) of building perimeter

b. Vaults, manholes, catch basins, tanks, underground storage containers, and other underground structures

c. Electrical duct banks

d. Bundled conduit and piping

e. Light poles and bases

f. Bollards with foundations

g. Backflow preventers and control valves

h. Site structures

i. Fire hydrants

j. Storm water management structures, pump stations, manholes and piping

k. Fuel systems and piping

l. Topography

m. Asphalt and concrete paving (roads, parking lots, drives, sidewalks, curbs, gutters)

7. Special Construction (Division 13) (e.g., Swimming Pools or other specialty systems)

a. Plumbing, piping, and equipment to the correct size

b. Pipe slope

c. Plumbing equipment to its overall height, width, and depth in accordance with design specified equipment

d. Valves and service access, including chain guides

e. Drip legs, drainpipes, blow down valves, and cleanouts

f. Underground piping (if applicable)

8. Pneumatic Tubing (if applicable)

a. Piping, including accurate radius or pipe bends, and equipment

C. Equipment Provided by Others (including Owner furnished/Owner installed (OFOI) and/or Owner furnished/Contractor installed (OFCI))

1. If Subcontractor's Scope of Work connects to equipment provided by others, Subcontractor must coordinate layout and access to this equipment as noted on the submittals and shop drawings. Where equipment submittals are not available, or equipment is unknown at the time of coordination, Subcontractor will work with the Contractor to establish access and installation zones that will be included in the coordination model.

2. Equipment locations will be coordinated with architectural layout.

1.12 SHOP DRAWINGS & SUBMITTALS (IF APPLICABLE)

A. Coordination Models will be submitted for information only. Subcontractor must submit a separate set of Shop Drawings derived directly from its construction model and its Scope of Work.

B. Subcontractor shall use its model to support layout of systems in the field. Field install tolerances are to be within one inch (1”) of the final coordinated, signed-off Model. If Subcontractor fails to install its Work within such tolerance, Contractor reserves the right to require Subcontractor to relocate any of Subcontractor's components not installed per the signed-off Model and tolerances at Subcontractor's own expense, and/or reimburse Contractor for any resultant damages caused thereby.

C. If there is a Project prefabrication strategy, Subcontractor must submit Shop Drawings that align with prefabrication strategy and components.

D. Subcontractor's Shop Drawings shall include prefabrication component unique identifier, plans, sections, axonometric views, dimensions, and annotations.

1.13 AS-BUILT MODEL REQUIREMENTS

A. Subcontractor must update its coordination models with as-built conditions throughout the construction phases. Subcontractor shall not wait until the end of the Project to make final updates.

B. Subcontractor As-Built model tolerances shall be within one inch (1”) of the final installed condition.

C. Models updated with as-built conditions shall be posted to ACC within forty-eight (48) hours of changes to the final coordination model.

1.14 DIGITAL ASSET MANAGEMENT

A. This section outlines the requirements for tracking digital asset data within the Revit model elements. Refer to the Owner's BIM Requirements attached for clarification on which model objects require data assets embedded within the Revit model elements.

B. Asset data will be generated throughout the Project life cycle by more than one author. When an entity adds a new model element, that entity is also responsible for including the required asset parameters and data within the model element prior to execution of the Work.

C. The original model author will be responsible for updating the asset data through the Project to ensure the model reflects the correct data asset information. Waiting until the end of the Project is prohibited. Refer to the Owner's BIM Requirements and/or BIM Execution Plan for clarification on what data assets, parameters, and model objects are required for this Project.

1.15 DIGITAL ASSET QUALITY ASSURANCE

A. The goal of digital asset quality assurance review is to provide clarification on correct or incorrect information within the model and the final deliverables.

B. A model review will be performed. Such review will follow Owner's BIM Requirements and/or BIM Execution Plan.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

[Beale Clydesdale]

SECTION 00 73 00
SPECIAL PROJECT RQUIREMENTS
Attachment B – 3D COORDINATION PROGRAM (BIM)

PART 1 - GENERAL

1.1 BUILDING INFORMATION MODELING (BIM) COORDINATION PROCESS

A. In general, the scope of work under this coordination program is to create a technically accurate and detailed BIM/3D computer model of the architectural, structural, mechanical, plumbing, physical security, fire protection, civil, electrical, equipment suppliers and other pertinent scopes of the Project identified herein.

B. Owner requires the implementation of Building Information Modeling in the delivery of the Project. This document details the minimum BIM standards and modeling requirements required for the Project. This document is not intended to define the BIM process in detail. The BIM execution plan will further detail BIM processes and responsibilities.

C. Trade Partners will participate in the creation of construction BIM content and coordination to assist in the development of shop drawings and as-built documentation. In addition to using the BIM process to improve design model coordination and documentation, models will be used to support prefabrication opportunities, construction coordination, fabrication, and installation of systems.

D. Trade Partners will be required to participate in routine meetings to develop and agree upon the plan. The BIM Execution Plan may be modified during the Project to ensure Project goals and objectives are met. Unless otherwise directed by Contractor in writing, no modifications to the Plan will be allowed without approval from all parties impacted by proposed changes to the Plan.

1.2 COORDINATION PROGRAM REQUIREMENTS

A. Trade Partners will be required to attend routine coordination meetings throughout construction and provide input and subject matter expertise related to each of their Scopes of Work.

B. Trade Partners will be required to maintain progress in the creation of their model so that a Trade Partner does not impact the construction schedule and milestones.

C. Trade Partners will be required to utilized software that is compatible with Autodesk BIM 360 platform.

D. The Project will utilize the Autodesk Construction Cloud (ACC) to host design Revit model development and coordination. Each Trade Partner will be required to have the appropriate software license(s) of ACC and Design Collaboration to work collaboratively with the Project team.

E. Trade Partners will be required to have designated “in house” BIM technical resources. BIM resources must have the authority to make routing and coordination decisions for systems related to their Scopes of Work. If Trade Partners BIM resources does not have authority to make such decisions, a project manager or field supervision must attend scheduled coordination meetings.

F. Trade Partner models shall be developed in such a way that streamlines the prefabrication modeling process, shop drawing creation, construction coordination, fabrication, and installation of systems.

1.3 FILE SHARING

A. Requirements for electronic project communication and correspondence is further defined in 00 73 00 Specific Project Requirements.

B. Construction coordination will occur using the Contractor will use Navisworks for clash detection. Trade Partners will be granted access to the Owners ACC site.

C. The Design Team's Information Manager will define the file structure within the ACC site, and it will be the responsibility of Trade Partner to ensure each file is uploaded in the correct location. If a BIM execution plan is required, the folder structure will be defined in the plan. If a BIM execution plan is not required, the folder structure will be defined in the project BIM Kick-off meeting.

1.4 MODEL SET UP

A. Project file naming conventions will be defined upon development of BIM execution plan. If a BIM execution plan is not required, file naming conventions will be defined in the project BIM coordination kick-off meeting.

B. Trade Partner model coordinate systems will align with design models coordinate system.

C. Trade Partners will be responsible with aligning their models to the site control coordinates for field layout.

D. Trade Partners are required to model all components in their contracted Scope of Work. Further development of model objects will be defined in the creation of the project BIM execution plan, Roles and Responsibility matrix, and LOD specification. If there is a discrepancy in LOD requirements between documents, whichever document is of greater detail will govern.

E. Trade Partner models used during construction coordination are to be purged of all non-essential 2D information.

1.5 MODEL LEVEL OF DEVELOPMENT (LOD)

A. Trade Partners are required to model all components in their contracted scope of work. Items not included in the Trade Partner's model will be the sole responsibility of the Trade Partner to field coordinate items not included in the model. Field coordination will be done in such a way that it does not impact systems that are coordinated and included in the coordination model.

B. LOD Definitions. LOD definitions are derived from AGC BIM Forum Level of Development Specification. If current definitions differ from what is stated in this document, current definitions supersede the definitions in this document.

1. LOD 100– The Model Element may be graphically represented in the Model with a symbol or other generic representation but does not satisfy the requirements for LOD 200. Information related to the Model element (i.e., cost per square foot, tonnage of HVAC, etc.) can be derived from other Model Elements. LOD 100 elements are not geometric representations. Examples are information attached to other model elements or symbols showing the existence of a

component but not its shape, size, or precise location. Any information derived from LOD 100 elements must be considered approximate.

2. LOD 200 – The Model Element is graphically represented within the model as a generic system, object, or assembly with approximate quantities, size, location, and orientation. Non-graphic information may also be attached to the Model Element. At this LOD, elements are generic placeholders. They may be recognizable as the components they represent, or they may be volumes for space reservation. Any information derived from LOD 200 elements must be considered approximate.

3. LOD 300 – The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of quantity, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the model without referring to non-modeled information such as notes or dimension callouts. The project origin is defined, and the element is located accurately with respect to the project origin.

4. LOD 350 – The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of size, shape, location, orientation, and interferences with other building systems. Non-graphic information may also be attached to the model. Parts necessary for coordination of the element with nearby or attached elements are modeled. These parts will include such items as supports and connections. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the model without referring to the non-modeled information such as notes or dimension callouts.

5. LOD 400 – The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of size, shape, location, quantity, and orientation with detailing, fabrication, assembly, and installation information. Non-graphic information may also be attached to the Model Element. An LOD 400 element is modeled at sufficient detail and accuracy for fabrication of the represented component. The quantity, size, shape, location, and orientation of the element as designed can be measured directly from the model without referring to non-modeled information such as notes and dimension callouts.

C. Design Model elements (Architectural and Structural) will be modeled at LOD 300-350.

D. Construction Model elements will be modeled at LOD 400.

E. If a project BIM execution plan is required, model LOD will be further defined in development of BIM execution plan and LOD Specification.

1.6 CONSTRUCTION COORDINATION PROCESS

A. The construction coordination process helps to identify conflicts between system models to ensure accurate spatial coordination, reduce field re-work, increase offsite fabrication, and facilitate post-construction assess for maintenance. The construction coordination process, at no time, transfer responsibility of the parties stated in the contract. Trade Partners are responsible for maintaining design intent and performance of the systems as specified in the contract documents and take no liberties in modifying design.

B. Autodesk Construction Cloud and Autodesk Navisworks Manage software will be used to identify clash items between design and Trade Partner models.

C. Trade Partners will be required to upload models to the Contractor's BIM 360 Glue site 24 hours in advance of scheduled coordination meetings.

D. The sequence of coordination may not coincide with overall construction sequence. In areas of high priority, or for long lead items, the Trade Partner will need to provide model content prior to approved submittals.

E. Submittals for items that will be involved in the BIM coordination process shall be submitted and approved prior to the start of coordination in each area.

F. Each clash item identified in the coordination meetings will be "assigned" to the Trade Partner responsible for modifying their model to resolve the conflict. All "assigned" clashes are to be resolved prior to the next coordination meeting.

G. At the completion of coordination in each area, and all clashes are resolved, each the Trade Partner will "sign-off" on the completed area. Model sign-off will be at the discretion of the Contractor's model manager. If design ASI's, RFI's, or bulletins require additional coordination, affected Trade Partners will be required to participate in additional coordination meetings.

1.7 CONSTRUCTION COORDINATION SCHEDULE

A. A coordination schedule will be produced that includes agreed upon "Sign-Off" dates for each area of coordination. The coordination schedule will have a direct correlation with the Contractor's construction schedule.

1.8 MODEL AUTHORS

A. Architectural – by Architect

B. Structure – by Structural Engineer and Steel Trade Partner

C. Mechanical – by Mechanical Engineer and Mechanical Trade Partner

D. Plumbing – by Plumbing Engineer and Plumbing Trade Partner

E. Electrical – by Electrical Engineer and Electrical Trade Partner

F. Low Voltage - by Low voltage Designer and Low Voltage Trade Partner

G. Fire Protection – By Fire Protection Trade Partner

H. Specialty Contractor/Equipment – By specialty contractor

1.9 FINAL COORDINATION MODEL

A. The BIM shall extend to five feet beyond the exterior walls of the building plan. Vertically the model shall extend from the lowest extent of the foundation or lowest underground utility, whichever is greater, and up through roof including roof-top mounted equipment. Construction Site Utilities models will begin from five foot beyond the exterior walls of the building and extend to the furthest underground utility included in the contract documents.

B. All model content and routing shall align with design criteria and specification and shall consider means and methods, constructability, prefabrication strategy, code requirements, and design performance criteria.

1.10 DESIGN MODEL ELEMENTS

A. At a minimum, model objects listed will be included in the development of models.

1. Architectural

a. Interior and exterior walls systems

b. Interior and exterior doors, including door swings

c. Interior and exterior window and window systems

d. Louvers

e. Casework

f. Roof and roof slopes

g. Floors

h. Ramps, stairs, and railings

i. Ceilings and soffits, including overall thickness, elevation changes, and termination points

j. Fixed furnishings and equipment

k. Architectural Specialties

l. Elevators and escalators

m. Plumbing fixtures/Toilet Partitions

n. Coverings and finishes

B. Structural – Concrete and Steel

a. Footings and Foundations (caissons, piles, pile caps, footings, grade beams)

b. Cast-in-place concrete walls (Foundation, shear, bearing, pit walls, elevator core, stair towers)

c. Concrete beams (include slope where required)

d. Concrete columns

e. Structural Precast

f. Slab edges

g. Elevated structural decks, including openings (include slope where required)

h. Pits (elevator, dock leveler, sump, etc.)

i. Primary and secondary structural steel members.

j. Metal and concrete decks as the overall thickness of the slab

1.11 CONSTRUCTION MODEL ELEMENTS

A. Each Trade Partner is responsible for verifying local code requirements related to their respective scopes of work.

B. Note: Structural steel design model elements will be replaced with fabrication steel models provided by the structural steel Trade Partner. Steel fabrication models will be LOD 400. If project is designed using a concrete structure sleeves, openings, and penetrations, at a minimum, will be added to the design model for purposes of construction coordination.

1. Structural – Steel – Division 5

a. Primary and secondary structural steel members including Pre-Engineered Metal Building elements (Columns, beams, trusses, joists, braces, x-bracing, gusset plates, braces, equipment supports, kickers, steel stairs)

b. Other structural elements including, but not limited to:

1) Member slope

2) Embeds

3) Miscellaneous steel

4) Anchor bolts

5) Openings and Penetrations

c. Metal and concrete decks as the overall thickness of the slab

2. HVAC – Division 23

   a. Duct runs, fittings, transitions, terminations, and connections

   b. Duct joints and flanges

   c. Hanger and support systems

   d. Mechanical and air handling equipment.

   e. HVAC equipment modeled to the equipment overall height, width, and depth as specified in accordance with design specified equipment

   f. Housekeeping Pads: overall size, thickness, and location

   g. HVAC piping, fittings, transitions, terminations, and connection points

   h. Grilles, registers, and diffusers

   i. Fire and smoke dampers, including indicating service access requirements (e.g. access panel) if not readily accessible

   j. Identify duct balance dampers and model service access zone requirements.

   k. Multi-trade overhead MEP rack structure (if applicable)

   l. Insulation and Acoustic/Gypsum Lagging

3. High and Low Voltage Electrical – Division 26, 27, & 28

   a. Conduit routing and raceways

   b. Light fixtures location, sized and coordinated with reflected ceiling plans

   c. Power feeds to equipment and switch gear to overall height, width, and depth in accordance with design specified equipment

   d. Cable tray and required access zones

   e. Electrical required for HVAC and Plumbing equipment

   f. Modeling switches, outlets, data ports, and similar items where coordination with architectural furniture, fixtures, and equipment or interior elevations is required.

   g. Duct banks to actual size, location, and elevation

   h. “No-fly Zones” and NEC Code clearances above panels shall be modeled.

i. Hangers and support systems

4. Plumbing/Piping – Division 22

a. Pipe routing, fittings, terminations, and connection points

b. Pipe slope shall be modeled accurately

c. Plumbing equipment to overall height, width, and depth in accordance with design specified equipment.

d. Valves and service access, including chain guides

e. Drip legs, drainpipes, blow down valves, and cleanouts

f. Hanger and support systems

g. Insulation and Acoustic/Gypsum Lagging

h. Underground piping (if applicable)

5. Fire Protection Sprinkler and Alarm – Division 21

a. All components of fire protection system. This includes all piping, valves, fire pump, and sprinkler heads.

b. Any access zone requirements will be shown as solids.

c. "No-fly Zones" above control panels shall be modeled.

d. Hanger and support systems

6. Civil & Site Utilities – Division 33

Note: Civil and Site Utility models will extend to the furthest extent of site modifications and tie-in locations for the Project.

a. Utilities 1-1/2" in diameter or greater up to within 5'-0" of building perimeter.

b. Vaults, manholes, catch basins, tanks, underground storage containers and other underground structures.

c. Electrical duct banks

d. Bundled conduit and piping

e. Light poles and bases

f. Bollards with foundations

g. Backflow preventers and control valves

h. Site structures

i. Fire hydrants

j. Storm water management structures, pump stations, manholes and piping

k. Fuel systems and piping

l. Topography

m. Asphalt and concrete paving (roads, parking lots, drives, sidewalks, curbs, gutters)

7. Special Construction – Division 13

a. Plumbing, piping, and equipment to the correct size

b. Pipe slope shall be modeled accurately.

c. Plumbing equipment to its overall height, width, and depth in accordance with design specified equipment.

d. Valves and service access, including chain guides.

e. Drip legs, drainpipes, blow down valves, and cleanouts.

f. Underground piping (if applicable)

8. Pneumatic Tubing (if applicable)

a. Piping, including accurate radius or pipe bends, and equipment.

b. Access, code clearance, and “No-fly Zones” for all panels, equipment, and future maintenance and facilities access

C. Equipment Provided by Others

1. Trade Partners with Scopes of Work that connect to equipment provided by others are required to coordinate layout and access to this equipment as noted on the submittals and shop drawings.

2. Where equipment submittals are not available, or equipment is unknown at the time of coordination, Trade Partners will work with the Contractor to establish access and installation zones that will be included in the coordination model.

3. Equipment locations will be coordinated with architectural layout.

1.12 SHOP DRAWINGS & SUBMITTALS (IF APPLICABLE)

A. Coordination Models will be submitted for information only. Each Trade Partner must submit a separate set of shop drawings that derived directly from their construction model and their respective Scope of Work.

B. Trade Partners shall use their models to support layout of systems in the field. Field install tolerances are to be within 1" of the final coordination, signed-off, model.

C. If there is a project prefabrication strategy, Trade Partners will be required to submit shop drawings that align with prefabrication strategy and components.

D. Shop drawings shall include prefabrication component unique identifier, plans, sections, axonometric views, dimensions, and annotations.

1.13 **AS-BUILT MODEL REQUIREMENTS**

A. The Trade Partners will be responsible for updating their coordination models with as-built conditions throughout the construction phases. Updating models for as-built conditions shall occur throughout construction and not wait until the end of the project to make final updates.

B. Trade Partner As-Built model tolerances to be within 1" of the final installed condition.

C. Models updated with as-built conditions shall be posted to the project BIM 360 Glue site within 48 hours of changes to the final coordination model.

SECTION 00 73 00.C
ATTACHMENT C - SITE SPECIFIC LEAN PLAN

PART 1 - GENERAL

1.1 SUMMARY

A. Reference Attachment C for the Site Specific Lean Plan.

PART 2 - PRODUCTS

PART 3 - EXECUTION

Attachment C

CYL Site Specific Lean Plan

Rev. 0

28 Aug 2025

Purpose: This document is a tool to enable clear direction regarding LEAN standards at the CYL site to facilitate a productive and successful project for all team members involved.

Project Meetings:

1. Pre-Installation Conference
   1.1. Attendees: Invite per specifications, mandatory regardless of specifications are Trade Parter Foreman for the specific scope or work package, project manager, safety manager, quality manager.
   1.2. Cadence: Required to start the installation of a new scope, work package or substantial change in material / system. example: mechanical small bore vs. large bore piping or low voltage electrical vs. medium voltage.
2. Coordination Meetings
   2.1. Recurring coordination meetings will generally be weekly apart from Cx and on a as needed basis for other critical activities. These meetings will occur specifically to certain areas of the project or related to specific sub-projects / work packages.
   2.2. Attendees: Foreman and project managers related to meeting topic.
   2.3. Cadence: Weekly
3. Weekly Work Plans
   3.1. Attendees: All onsite field supervision / foreman. Will occur in the onsite conference room.
   3.2. Cadence: Weekly
4. Daily Standup's
   4.1. Attendees: All onsite field supervision, Foreman & Crew Lead. Meetings will take place broken down by areas of the project at the work area.
   4.2. Cadence: Daily.
   4.3. Laminated drawing sheets on rolling boards will be provided at the work areas for each daily standup group.
5. Pull Plans
   5.1. Attendees: Foreman / Trade Partner representation that can commit to dates work will be performed.
   5.2. Cadence: As needed for specific areas / portion of work that need additional level of detail.

Project initiatives:

1. Elimination of Rework
   1.1. Mockups – specifically for products or systems identified in previous projects as being problematic.
   1.2. First work in place (FWIP) reviews will be used for all instances of installed systems to ensure that the project requirements are being met.
   1.3. Review specifications to ensure the correct material is being used / installed and not a higher quality material that requires additional time / money / people power than it should. This will be a part of the pre-installation conference.
   1.4. Remove extra layers of signoff for work in place and ensure that the inspecting party clearly understands the requirements of the project and is not rejecting work that meets specifications.

Div 00 Procurement and Contracting Requirements
Section 00 73 00.C - ATTACHMENT C - SITE SPECIFIC LEAN PLAN Page 2

example: specifications require level 4 drywall finish and inspector is rejecting work not meeting level 5.

2. Site Congestion / Trade Stacking
   2.1. Through daily stand-up meetings to coordinate and deconflict work areas, where each trade is on that day and where they will be the next day will be identified.
   2.2. Each Foreman is to use 3 week look ahead planning (3WLA), that will identify what materials are needed for upcoming work and prevent the delivery of excess materials to the site that clog up staging and work areas.
3. Extra Motion & Material Handling
   3.1. Material staging - Do not bring in more materials to the building in a day, than can be installed in a day. Utilize "JIT", Just In Time delivery.
   3.2. Material Storage – Only materials that will be installed within five (5) working days shall be stored onsite unless circumstances require the material to be delivered earlier. Early coordination with J.E. Dunn is needed to allocate additional space as needed both onsite and at available warehouse space adjacent to project site.
   3.3. Staging / Storage areas inside and outside the building will be assigned for each Trade Partner. All materials but be clearly labeled for whom they belong to.
   3.4. No tools or equipment are to be stored in the building that are not actively being utilized for the installation of permanent materials and equipment.
   3.5. All materials, tools and equipment brought into the building will be on wheels and be capable of being moved by hand. No pallets requiring the use of a forklift for movement permitted.
   3.6. Each day, Foreman are to review the work plan for the next day and ensure the right material in the right quantity has been identified in the staging area and moved to the work location.
4. General
   4.1. Wheeled trash carts shall be used near designated staging areas, cut stations, and for trash/excess material removal.
   4.2. Trade Partners shall clean and sweep (broom clean) their designated staging area and work areas daily. Failure to clean designated areas after two days will result in J.E. Dunn providing the necessary labor and resources to perform this work at subcontractors' cost.
   4.3. All work and/or cut stations must be elevated, properly supported, and must have adequate substrate for proper footing. Cut stations shall not be staged over finished flooring or finished work product areas.

Div 00 Procurement and Contracting Requirements
Section 00 73 00.C - ATTACHMENT C - SITE SPECIFIC LEAN PLAN Page 3

EVM (Earned Value Management) Section

1. Earned Value Management is a systematic project management process used to highlight variances in projects based on the comparison of work performed (labor hours earned) vs work planned (labor hours budgeted across the schedule).

2. EVM will be utilized on the Project for the purpose of evaluating work complete to-date, schedule health, and forecasting.

3. The EVM process will be based on budgeted labor hours furnished by Subcontractors at the time of bid for each Work Package/P6 Schedule Activity. These budgeted labor hours will include direct labor hours only. Direct labor hours are those utilized for installation of work (foreman level or below). All indirect labor hours for management above the foreman level (GC/GRs), will not be tracked.

4. Subcontractors will also be required to provide quantity takeoff for each Work Package/P6 Schedule Activity as it pertains to their Scope. Please note that the list below is not complete but rather a sampling of those quantities required:

   i) Earthwork; Unit of Measure (UOM) = CY
   ii) Site Utilities; Unit of Measure (UOM) = LF
   iii) Piling; Unit of Measure (UOM) = LF
   iv) Steel Erection; Unit of Measure (UOM) = TN
   v) Concrete; Unit of Measure (UOM) = CY
   vi) Precast; Unit of Measure (UOM) = SF
   vii) Shiraz; Unit of Measure (UOM) = EA
   viii) PCW Piping; Unit of Measure (UOM) = LF
   ix) Cable Tray; Unit of Measure (UOM) = LF
   x) MV Cable Pull; Unit of Measure (UOM) = LF
   xi) MV Cable Termination; Unit of Measure (UOM) = EA
   xii) BMS and PMS Cable Pull; Unit of Measure (UOM) = LF
   xiii) BMS and PMS Cable Terminations; Unit of Measure (UOM) = EA
   xiv) Busduct; Unit of Measure (UOM) = LF
   xv) Busplug; Unit of Measure (UOM) = EA
   xvi) MTS; Unit of Measure (UOM) = EA

5. Subcontractors will be required to submit labor hours and quantities within 60 days of contract award.

Div 00 Procurement and Contracting Requirements
Section 00 73 00.C - ATTACHMENT C - SITE SPECIFIC LEAN PLAN Page 4

SECTION 00 73 00.D
ATTACHMENT D - DIG PERMIT PROCESS

PART 1 - GENERAL

1.1 SUMMARY

A. Reference Attachment D for Dig Permitting Process.

PART 2 - PRODUCTS

PART 3 - EXECUTION

CYL Dig Permit Procedure

Excavations, digging, boring into soil, drilling or cutting blind penetrations into floors or walls, demolition, and any operation penetrating the ground shall require a Dig Permit. The steps below outline the process.

****AN EXCAVATON PERMIT IS VALID FOR 7 DAYS****

STEP 1 – Request Excavation Permit:

Request Dig permit from tab below.

STEP 2 – Complete Permit Form:

Complete google form and submit. Once submitted and email will be sent to requester with access to the document. Two drawings are needed to be upload to the permit form, One drawing (included in the form) needs to highlight the general area of work on the campus. The permit requestor needs to also include a second drawing highlighting the specific excavation area on a civil utility background.

STEP 3 – Submit Completed Permit Form:

Once the permit is complete, an email will be sent to the underground team notifying the team of a "Walk and Talk" taking place within approximately 3 days of the email notification.

STEP 4 – Prior to Walk and Talk:

During the 3 days leading up to the Walk and Talk, the requesting contractor needs to lay out the proposed excavation area. Layout of the excavation area must be completed prior to the Walk and Talk, but, if work is taking place in the area, completing the layout of the proposed excavation is obviously beneficial.

Also, during the 3 days leading up to the Walk & Talk, all notified contractors are to evaluate the request. If the request involves a contractor's installed work within 10' of the proposed excavation, the contractor needs to attend the Walk and Talk. When attending a Walk and Talk, the contractor needs to come prepared to locate and mark the buried utilities within 10' of the proposed excavation.

If a contractor determines that they have no installed work within 10' of the proposed excavation and there is no risk to the contractor's work, the contractor indicates "ALL

Clear" by initialing and dating in the "All Clear" column of the dig request form. There is no need for an unaffected, "All Clear" contractor to attend the Walk & Talk if verified by JE Dunn.

Unmarked or improperly marked utilities damaged during an excavation, and within 10' of the boundaries of the planned excavation, will be the responsibility of the contractor assigned with locating and identifying the utility.

STEP 5 – Day of Walk & Talk:

All parties will meet at the location of the excavation at the time of the Walk and Talk. Notification of the Walk and Talk will have been sent via calendar invite. It's important to be on time to the Walk and Talk. The Walk and Talk will be cancelled if the contractor requesting the dig permit has not arrived within 10 minutes of the scheduled time. All people that will be digging, the spotter, and the requesting contractor's supervisor need to attend the Walk & Talk.

During the Walk and Talk, the permit requestor describes the proposed excavation, timing, means and methods, location, etc. The dig team will identify and mark all utilities within 10' of the excavation. The requesting contractor's team will explain the non-destructive (i.e., hydro-excavation, hand digging, etc.) means they intend to use to daylight the utilities in the proposed area prior to starting work.

A Walk and Talk will generally take 15 minutes or so. Layout of utilities may continue after the Walk and Talk, so long as they are discussed during the Walk and Talk.

STEP 6 – Signoffs:

After all utilities have been marked and the Walk and Talk is finished, the dig team will initial and date the dig request form in the "Marked" column and note the utility type. JE Dunn safety will take a photo of the dig permit area. A signature from a JE Dunn Superintendent and JE Dunn Safety are required at the bottom of page 2 of the permit form prior starting the excavation. All signoffs are to be complete by the end of the day, the same day as the Walk and Talk.

Sign off in the "Excavation Supervisor" block is the last step of the permit and completes the permit form. The Excavation Supervisor is the competent person overseeing the work.

STEP 7 – Excavation:

The first step of the excavation is to safely daylight all identified utilities prior to using any methods that could damage underground utilities. Once the utilities are visible to the extents appropriate, the primary excavation may proceed.

A daily excavation permit needs to be completed each day the work takes place. This permit is in duplicate, and a copy is placed on the excavation permit board in the JE Dunn field office trailer and the other copy is to be kept accessible at the location of the excavation.

Open excavation permits are reviewed weekly and closed if the work has been completed.

****AN EXCAVATON PERMIT IS VALID FOR 1 WEEK****

PERMIT REFRESH:

An excavation permit is only valid for 1 week. This is due to the ever-changing conditions on site and the size of some excavations. It is important to review the excavation regularly to ensure changes are identified and discussed. If the excavation needs to continue beyond the 1-week permit period, the contractor needs to start again at step 3, a minimum of 3 days prior to the anticipated expiration. The process needs to be completed again.

A LACK OF PLANNING DOES NOT CONSTITUTE AN EMERGENCY. PLEASE ALLOW ENOUGH TIME FOR THE PERMIT PROCESS.

AS-BUILTS

After installation is complete, and prior to backfill, as-built shots are to be taken every 50' and change in direction, whether vertical or horizontal.

Label as-built points with a description of the points including system designation, fitting, size, etc. Include details so identification is clear and obvious later.

As-builts need to be turned in weekly to Ryan Thomas <Ryan.Thomas@jedunn.com>, Mandera Gatwech <Mandera.Gatwech@jedunn.com>, & Justin Hough <Justin.Hough@jedunn.com>

SAFETY
EVERYONE.
EVERYWHERE.
ALL THE TIME.

Clydesdale Excavation Permit Request

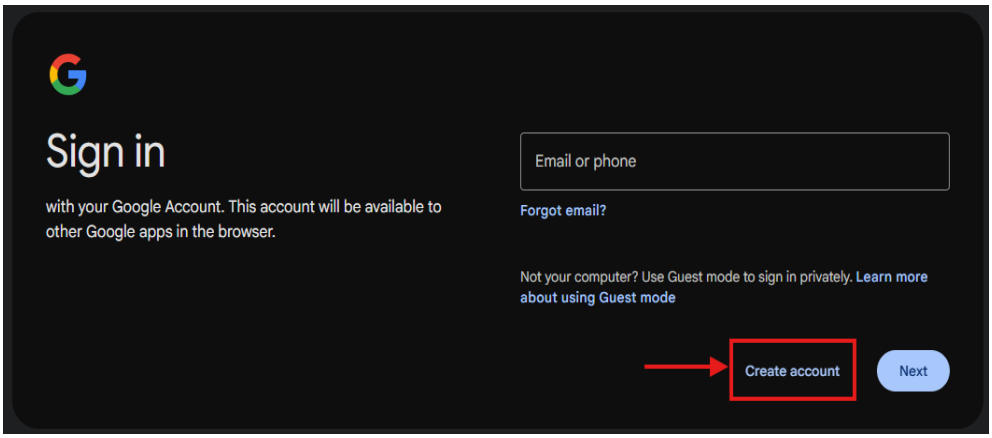
To request an excavation permit, a Google Account is required. All permit requests, reviews, and approvals are managed through Google's online platform. The system utilizes Google Forms and Google Sheets to track, submit, and document excavation activities in real time.

Having a Google Account ensures that each user can:

- Access and complete permit forms electronically.
- Upload required documentation (such as as-builts, maps, or utility verifications).
- Receive automated notifications when walk and talks are scheduled.
- Maintain accountability and recordkeeping tied to their business email address.

If you do not currently have a Google Account associated with your company email, one will need to be created before submitting or managing excavation permits.

- Create a new Google Account with a non-Gmail business email for access to Google tools Drive, Docs, etc., without changing email hosting.
    a. Type your business email address (e.g., travis.smith@jedunn.com)
    b. Create a **strong password** that meets Google's security requirements.
    c. Click Next



DIG PERMIT

TO BE COMPLETED PRIOR TO ANY DIG

The following items must be completed and reviewed with JE Dunn Construction prior to any excavation, trenching or boring. Please attach drawing excerpts, enlarged drawings, or additional information to supplement this permit. This permit must be posted with JE Dunn Construction prior to start of work.

1. Trade Partner: _____
2. Scope of Work: _____
3. Date of Dig: _____
4. Call-Before-You Dig
    a. Reference Number: _____
5. Private Locate Required: Y N Date Completed: _____
6. As-Built Review / Dig Board Review
    a. Attach drawing of work area and highlight work to be completed
    b. Review for all utilities (storm, sanitary, water, fire, med gas, electrical, fiber) JE Dunn Construction representative must be in attendance during this review.
7. Photos of area, attach to permit.
8. Walk area with JE Dunn Construction Superintendent
    a. Items discovered during walk _____
    _____
    b. Risk identified during walk_____
    _____
9. Hand digging must be done at locations where utilities are shown on as-builts and locates during all excavations. The is no exception to this requirement.

_____	_____
Trade Partner Signature	JE Dunn Signature
_____	_____
Title	Title
_____	_____
Date	Date

SECTION 00 73 00.E
ATTACHMENT E - FUEL

PART 1 - GENERAL

1.1 SUMMARY

A. A fuel depot will be available on site for subcontractor purchase through Agriland FS. See attached application for account set up.

PART 2 - PRODUCTS

PART 3 - EXECUTION

421 N. 10TH STREET | WINTERSET, IA 50273
(515) 462-5353

Submit completed application to credit department:
email: credit@agrilandfs.com
website: www.agrilandfs.com

CREDIT APPLICATION

INDIVIDUAL ACCOUNT INFORMATION

Name _____ Soc. Sec. # _____
Last First M.I.

Address _____ City _____ State _____ Zip _____ DOB _____
[month/day/year]

Primary Phone (_____) _____-_____ Email _____ ☐ *Check to receive statements via e-mail*

Years at This Address _____ ☐ Own ☐ Rent: Landlord's name & phone number_____

Present Employer Name _____ Phone (_____) _____-_____

Position _____ Years of Employment _____ Annual Income $ _____

Nearest Relative Name _____ Relationship _____ Phone (_____) _____-_____

BUSINESS ACCOUNT INFORMATION (Corporation, LLC)

Company _____ Federal/Tax ID _____

Billing Address _____ City _____ ST _____ Zip _____

Business Phone (_____) _____-_____ Cell Phone (_____) _____-_____ Number of Years in Business _____

A/P Contact Person _____ Email _____ ☐ *Check to receive statements via e-mail*

Primary Bank _____ Trade Reference Name _____

City _____ State _____ Zip _____ City _____ State _____ Zip _____

Phone _____ Fax _____ Phone _____ Fax _____

Email _____ Email _____

Contact Name_____

CREDIT TERMS

The Individual and/or Company listed above (hereinafter individually and collectively "I", "me" or "my") agree to abide by the terms and conditions set forth in this Application and in AGRILAND FS, Inc.'s Credit Policy, receipt of which is hereby acknowledged. I/we understand and agree that interest at the rate of 24% per annum, or the maximum amount allowed by law, will be assessed on any outstanding balance owed, if not paid according to the terms as stated.

CREDIT REFERENCE AUTHORIZATION

I understand that the above information is for the purpose of obtaining credit terms and is warranted, to the best of my knowledge, to be true. I agree that AGRILAND FS, Inc. can and will rely on the information set forth by me in this application and that AGRILAND FS, Inc. is reasonable in doing so. I understand that AGRILAND FS, Inc. will retain this application whether or not it is approved. I authorize AGRILAND FS, Inc. to investigate the references listed pertaining to my creditworthiness and financial responsibility and that of the above referenced Company. I further authorize AGRILAND FS, Inc. to request consumer reports from consumer reporting agencies to consider this Application and to review or collect any balance due on the account.

LEGAL

Any legal proceedings arising out of any contract made or dealing between the parties is to be processed and submitted to a court in the state of Iowa and be governed by the laws of Iowa. I hereby agree to venue in Polk County, Iowa for any action arising out of this agreement. I agree that, in the event of legal action against me or the Company by AGRILAND FS, Inc. as a result of the failure to fulfill any duty and/or obligation to AGRILAND FS, Inc., I will pay any costs, including attorney's fees, incurred by AGRILAND FS, Inc. in connection with said legal action..

KEEP CREDIT POLICIES FOR YOUR INFORMATION

ELECTRONIC SIGNATURE AND RECORDS

By electronically signing below you agree that you have read, understand, and agree to the federal Electronic Signatures in Global and International Commerce Act (E-Sign Act) and the Iowa Uniform Electronic Transactions Act (IUETA) (Iowa Code §554D.101 et seq).

You hereby understand and acknowledge that (i) your electronic signature to this agreement and Application is the legal equivalent of a manual signature, (ii) you represent that the information you have provided to AGRILAND FS, Inc. is complete, true and accurate to the best of your knowledge, (iii) you have read, understand and agree to the terms and conditions of this agreement and the Application, (iv) no certification authority or other third-party verification is necessary to validate your electronic signature, and the lack of such certification or third-party verification will not in any way affect the enforceability of your electronic signature, (iv) your electronic signature shall have the same legal validity and enforceability as a manually executed signature or use of a paper-based recordkeeping system to the fullest extent permitted by applicable law, and (v) you waive any defense to the validity or enforceability of the this agreement or any challenge to the admissibility of the Application or terms herein based upon its being electronically signed.

AUTHORIZED SIGNATURE OF INDIVIDUAL OR BUSINESS

For Business Accounts, I certify that the above listed company (the "Company") is duly organized, validly existing and in good standing as a corporation or other entity under the laws of the jurisdiction of its incorporation or other organization; the Company has the full right, power and authority to enter into and perform its obligations and grant the rights, licenses, consents and authorizations it grants or is required to grant under this Application; and I have been duly authorized by all necessary corporate or organizational action to sign this Application.

Signature _____ Date _____

Print Name _____

Title (If Business Account) _____

New credit accounts will be automatically enrolled to access myFS Solution Center, online portal for your account information, please provide email address for login information:

Email _____

PERSONAL GUARANTEE
Required for Business Account

To induce AGRILAND FS, Inc. to extend credit to the above listed company (the "Company"), knowing that AGRILAND FS, Inc. is relying on this personal guarantee as a precondition to extend such credit. I authorize AGRILAND FS, Inc. to complete normal credit investigations, including but not limited to requesting my consumer reports from consumer reporting agencies, and understand that my individual credit history may be a factor in the evaluation of this application.

I individually (or if more than one, then all of us jointly and severally), absolutely and unconditionally guarantee to AGRILAND FS, Inc. all payments and obligations owed by Company to AGRILAND FS, Inc. AND AGREE TO PERSONALLY MEET ANY AND ALL DEBTS, LIABILITIES AND OBLIGATIONS OF EVERY NATURE OR FORM, NOW EXISTING OR HEREAFTER ARISING OR ACQUIRED, including but not limited to AGRILAND FS, Inc.'s attorney's fees and legal costs incurred in collecting all payments and obligations owed by Company to AGRILAND FS, Inc. and in enforcing this guarantee. Accounts extended, modified, renewed or settled between Company and AGRILAND FS, Inc. will bind me. I waive notice of demand and default, and waive all defenses, set-offs and counterclaims. I agree that AGRILAND FS, Inc. may proceed directly against me without first proceeding against Company. This guarantee will bind my heirs, representatives, and successors.

I freely consent to personal jurisdiction in the Courts of Iowa and agree that any legal proceedings arising out of any contract made or dealing between the parties is to be processed and submitted to a court in the state of Iowa and be governed by the laws of Iowa. I further hereby agree to venue in Polk County, Iowa for any such action.

I have read all the terms of this Commercial Credit Application, and specifically agree to same.

Signature _____ Date _____

Print Name _____

AGRILAND FS, Inc. CREDIT ACCOUNT POLICIES

Annual Percentage Rate for Purchases (APR)	24%
Periodic Rate	APR divided by 365 (Daily Periodic Rate) multiplied by the number of days in the billing period
Grace Period and Finance Charges	You can avoid Finance Charges on purchases by paying the entire balance owed each month no later than the payment due date specified on your monthly statement. If you do not pay the entire balance owed each month by the due date, a Finance Charge will be applied to your account.
Method of Computing the Finance Charge	Finance Charges are calculated by multiplying the Periodic Rate by the total of two amounts: (1) the average daily balance of your account during the month (excluding current purchases and finance charges) and (2) the average daily balance of the purchases during the preceding month.
Order of Application of Payments	Payments will be applied first to reduce any finance charges on the account, then to reduce the oldest unpaid balance.
Other Fees	Non-Sufficient Funds and/or returned checks will result in a $35 fee.

1. **Purchases on credit.** You may buy goods and services from us on credit. We may, in our sole discretion, restrict the items that can be purchased on credit. We may stop further credit purchases if you are delinquent in paying your credit balance.

2. **Minimum payment**. We will send you a statement showing the balance that you owe at the end of each month. You are required to pay the entire balance due by the due date specified on your monthly statement.

3. **Finance charges.** The above chart shows our current method of calculating finance charges. We will notify you in advance of any changes to how we will calculate future finance charges.

4. **In case of errors or questions about your statement.** If you think your statement is wrong, or if you need more information about a transaction on your statement, write to us at the address listed on your statement as soon as possible. We must receive your letter no later than 60 days after the date of the first statement on which the error or problem appeared. You can telephone us, but doing so will not preserve your rights. In your letter, give us the following information:

    - Your name and account number.
    - The dollar amount of the suspected error.
    - Describe the error and explain, if you can, why you believe there is an error. If you need more information, describe the item you are unsure about.

You do not have to pay any amount in question while we are investigating the suspected error, but you are still obligated to pay the parts of your statement that are not in question. While we investigate your question, we cannot report you as delinquent or take any action to collect the amount you question.

KEEP CREDIT POLICIES FOR YOUR INFORMATION

SECTION 00 73 10
SPECIFIC PROJECT REQUIREMENTS: TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

B. All work required by these Specific Project Requirements are included in the Subcontract Documents. In case of conflicts between the Specific Project Requirements and other Subcontract Documents, the more stringent requirements shall govern as determined and directed by the Contractor.

1.2 SUMMARY

A. This Section includes the following:

1. Personnel and Materials Hoisting
2. Disposal and Trash Removal
3. Temporary Toilets
4. Temporary Water
5. Temporary HVAC
6. Temporary Electrical
7. Temporary Communication Systems
8. Temporary Fire Protection
9. Existing Utility Services
10. Construction Indoor Air Quality
11. Construction Fence
12. Temporary Onsite Structures
13. Deliveries and Storage
14. Temporary Enclosures
15. Surveying
16. Site and Area Restrictions and Requirements
17. Water and Snow Removal
18. Security and Protection Facilities Installation
19. Site Specific Requirements

1.3 TEMPORARY FACILITIES AND CONTROLS

A. Personnel and Materials Hoisting

1. Crane: The Contractor will provide a crane for materials hoisting.
2. Vertical material and personnel management: The Contractor will provide scaffold stairs for roof access.
3. Horizontal material management: Contractor will provide a forklift to move material

around the site. Use of the forklift needs to be scheduled with the Contractor.

4. Scaffolding: The Subcontractor shall provide all scaffolding (unless noted otherwise) required to complete its work.
5. Lifts: The Subcontractor shall provide all lifts and other necessary equipment (unless noted otherwise) required to complete its work. Subcontractor shall be responsible to determine capacity limits of structure for proposed equipment.
6. Temporary Stairs: Until permanent stairs are available, Contractor will provide scaffold stairs for roof access.
7. Construction Sequencing: Please refer to the project schedule.

B. Disposal and Trash Removal

1. The Contractor will provide dumpsters for Subcontractors use (unless noted otherwise). Dumpsters may be allocated by material type. Subcontractor is responsible to sort debris to appropriate dumpster. Subcontractor shall not place any hazardous materials into dumpsters.
2. On a daily basis, Subcontractor shall clean-up its work area(s) to the satisfaction of the Contractor removing all its rubbish and debris to designated locations directed by the Contractor.
3. Subcontractor shall maintain a minimum of one (1) laborer for clean-up purposes for every ten (10) workers on site (including tiered subcontractors), or ratio thereof. In the event the Subcontractor fails to clean up in accordance with these requirements, the Contractor, after twenty-four (24) hours written notice to the Subcontractor, reserves the right to arrange for the clean up to be performed by others and deduct the cost from the Subcontract Sum.
4. Subcontractor shall ensure that all boxes, cartons, etc. are crushed to the minimum volume prior to placing in the trash containers or trash collection areas.
5. No paint cloths will be allowed in trash containers.
6. The disposal of any material, waste, effluents, trash, garbage or oil, grease, chemicals, etc. resulting from either demolition or new work, shall be disposed of in accordance with all applicable laws and shall be subject to the approval of the Contractor and/or Owner.
7. Contractor will coordinate progress cleaning for joint-use areas where more than one installer has worked.
8. An area will be designated for lunch and breaks. All food or drink, other than water, consumed on site must be in designated area. All waste shall be disposed of in trash receptacles furnished by the Contractor.
9. Project Specific Construction Waste Management and Disposal Plan – This Section includes administrative and procedural requirements for recycling and disposing of non-hazardous demolition, construction, and land clearing debris. Also reference other Division 01 through 49 Sections for other disposal requirements for other materials.
    a. Definitions:
        1) Construction Waste: Building and site improvement materials and other solid

waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.

2) Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.

3) Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.

4) Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

5) Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.

6) Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

b. Objectives: Whenever possible, reduce construction waste by diverting construction, demolition and land clearing debris from landfill disposal. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

c. Recycling of construction materials will be completed on this project. Listed below are the basic recycling materials that will be required. Prior to mobilization on site the Contractor reserves the right to investigate additional recycling options based on specific materials to be installed. Following is a list of general items to be recycled: Cardboard, plastic, paper, aluminum, wood, drywall, concrete, and metals.

d. Each Subcontractor is responsible for sorting their waste. Each item must be separated into a specific container. A Subcontractor's inability to follow the recycling requirements may result in rejected containers due to mixed containers. The Contractor reserves the right to backcharge any subcontractor due to these rejected containers based on the additional charges incurred by non-recycled material. Multiple trips may be required during construction in order for materials to be separated correctly. On-site dumpsters will be provided and labeled for efficient distribution of trash as required. Asphalt, Concrete, & Roofing Subcontractors shall provide haul-off of their waste and materials in lieu of utilizing Contractor provided site dumpsters (unless directed otherwise).

C. Temporary Toilets

1. Temporary toilet facilities shall be furnished and maintained as required by Contractor. The toilets shall be in sufficient number and at various locations to accommodate the workforce. The use of these toilet facilities by all members of the workforce is mandatory.

D. Temporary Water

1. Contractor will pay all temporary service and the Owner shall pay all permanent service water utility bills on the project.

2. Temporary water for use throughout the building and project site, at locations determined by the Contractor, shall be provided the Plumbing Subcontractor.

3. Each Subcontractor shall provide drinking water for their own forces.
4. Subcontractors requiring additional special temporary water service shall coordinate this work through the Plumbing Subcontractor and obtain approval of the Contractor. Associated cost of additional water service will be paid by the Subcontractor requesting the service. Special temporary requirements include, but are not limited to, trailer connections, sitework water and bulk water.
5. It will be the responsibility of the Subcontractor utilizing temporary water to protect the Project against water damage. When using water, the Subcontractor is required to use new materials and replace worn or broken parts. Hoses, fittings, etc. that are leaking shall be removed. Subcontractor will be responsible for the cost of damages arising from violation of this responsibility.
6. Temporary water service shall be drained down and reactivated as required to prevent freezing by the Plumbing Subcontractor.

E. Temporary HVAC

1. Temporary HVAC work includes, but is not limited to, caps for ductwork, temporary filters and filter media, equipment warranty extensions, interim controls, fire watch, temporary stand-alone smoke detectors for fan shut-down, ventilation and humidity control, monitoring of temperature and humidity, manual control of dampers (if required) and final clean-up of mechanical systems upon completion of construction work.
2. Ventilation and humidity control includes, but is not limited to, temporary ventilation required by construction activities for curing or drying of completed installations and protecting installed construction from adverse effects of high humidity. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption. Relative humidity shall be controlled as required to allow acclimation, installation, and application of finish materials.
3. Temporary Heat required for Subcontractor's Work is to be provided by Subcontractor (i.e. concrete, masonry, EIFS, etc.). General heating for creature comfort will not be provided by the Contractor.
4. Reference project specific temporary HVAC plan for the timeline of temporary conditioning inside the building.
5. Project Specific Temporary HVAC plan - The following is a basic guide for temporary conditioning during construction specifically addressing the use of existing or new HVAC equipment. Each job is unique as to the type of equipment on site, construction schedule, and construction type. Following a pre-coordination meeting with the Owner, Contractor, and Design Team, the Mechanical Subcontractor in conjunction with the Contractor shall submit their plan for coordination, review, and approval.
    a. Mechanical Subcontractor shall provide temporary heat and cooling (including ventilation and humidity control) during construction maintaining temperatures and humidity conducive to installation of the specified finishes as outlined in Division 00 Section “Milestone Schedule of Construction.”
    b. New HVAC systems: The Owner will allow the use of new systems for temporary heating and cooling.

c. Permanent equipment and systems (for temporary conditioning when permanent systems CAN be used for temporary HVAC):

1) Subcontractors shall include warranty extensions for all equipment utilized during temporary HVAC.

2) Equipment safeties: Mechanical Subcontractor shall provide stand-alone fire alarm devices for AHU shut down as required for temporary heating and cooling. Coordinate any other fire alarm requirements with the Electrical Subcontractor. Other safeties may be required if circumstances dictate, such as: a high static safety on the leaving side of the fan ahead of first fire smoke damper to protect the duct work, a low-pressure static safety on return duct applications with a return fan, freeze protection along with control sequences to protect water coils. The leaving air temperature must be below dew point (approximately fifty-five (55) degrees Fahrenheit) to provide adequate moisture removal. Discharge air temperature must remain constant due to the use of 100% outside air.

3) Filtration: Mechanical Subcontractor shall provide and maintain equal to or greater filtration than specified for the final intended use of the system during temporary conditioning. Utilize rolled media on all filter banks to facilitate increasing the life of the filters during temporary conditioning. Filtration of duct openings, such as return air diffuser and supply diffuser will be required (when directed by the Contractor) to protect duct work. Prior to starting any duct system, all duct insulation shall be installed. Ensure all fire smoke dampers are open (manually, if required).

4) Return air: If the use of return air duct systems is required prior to the completion of final finishes (in an area served by an AHU) filtration is required at each return grille. Any use of return air duct systems during temporary conditioning must be approved by the Contractor in advance.

5) Unit cleaning: At the completion of temporary conditioning, all internal components of the AHUs must be cleaned by the Mechanical Subcontractor (i.e. coils, fans, damper, condensate pans, flow stations, humidifiers, etc.). Use 10% Isopropyl Alcohol-Water solution to wipe down the inside surfaces of the air handlers. Use proper ventilation whenever cleaning with an Isopropyl Alcohol solution.

6) Start-up and testing: Prior to start-up, testing, balancing and commissioning of any supply air/return air system and its respective air handling equipment, the Mechanical Subcontractor and Contractor shall review the status of areas served by the system. Upon approval, the Subcontractor will commence preparations for system testing. Temporary filter media (installed over the pre-filter banks), pre-filters and final filters shall be installed in the air handling units. The extra filtration should remain in place until the TAB subcontractor is ready to perform performance checks on AHUs. Should any dust making activities occur after this point, the air handling equipment shall be shut down and protected.

d. Utility Charges for permanent equipment: Contractor will pay for utility charges incurred as a result of operating permanent equipment for temporary HVAC.

e. Utility Charges for rental equipment: Contractor will pay for utility charges

incurred as a result of operating rental equipment for temporary HVAC. Fuel charges will be the responsibility of the subcontractor providing the equipment.

f. Monitoring: During temporary conditioning site conditions shall be monitored. The Contractor will provide data loggers to perform this function.

g. Humidity control: A heating load may be required to control relative humidity during summer conditions. In humid climates it may be necessary to provide additional moisture removal using dehumidification systems.

h. Mechanical Subcontractor shall coordinate electrical requirements for temporary HVAC with the Electrical Subcontractor and other affected Subcontractors.

i. When temporary heat must be maintained during non-working hours, a competent person, agreed upon by Contractor, must be present to monitor heating equipment and take all necessary actions to prevent fire or respond to an emergency per the Contractor's Temporary Heat policy (available upon request). Each Subcontractor is responsible for cost associated with this requirement as it applies to their Work. Temporary heat is defined as any heating source that is powered by electricity (all types), LP gas, kerosene, fuel oil, and natural gas.

j. Reference "Construction Indoor Air Quality" (IAQ) in this Section for cleanup guidelines, ductwork cleanliness guidelines for maintaining proper indoor air quality.

k. Reference other Division 00 and 01 Sections "Temporary Facilities and Controls" for additional requirements.

l. Proper execution of the temporary HVAC and IAQ program should result in clean ductwork systems at project substantial completion. Should ductwork become contaminated, Subcontractor will be held accountable for measures to test and clean ductwork.

F. Temporary Electrical (Power, lighting, fire alarm)

1. Contractor will pay temporary service and owner shall pay permanent service usage costs for electrical power.
2. Electrical Subcontractor shall furnish, install, relocate, maintain and remove all necessary temporary wiring, lighting fixtures, protective devices, distribution panels, and transformers, etc. required for construction purposes conforming to rules and regulations of OSHA as well as other agencies having local jurisdiction. Work includes electrical power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
3. Site Temporary Power Electrical Subcontractor shall provide temporary power requirements for trailers, equipment, and other special needs as required to execute the work. Reference paragraph titled "Personnel and Material Hoisting" of this section for specific equipment requiring power.
4. Site Temporary Power Electrical Subcontractor shall make all necessary arrangements with the utility company to provide temporary service, as required. All electrical connections must meet local code requirements.
5. All Subcontractors will be responsible for their power extension cords from the temporary panels to their work areas. These cords shall be three wire (including

ground wire) of sufficient capacity for service intended and fully approved by all governing bodies.

6. Each Subcontractor shall coordinate and pay for any further special temporary electrical requirements with the Electrical Subcontractor. Approval shall be provided by the Contractor.
7. Electrical Subcontractor shall provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, security, and traffic conditions without the need to operate the entire system. Lighting shall be as required by OSHA and not less than one lamp per room. Minimum illuminance levels as defined by OSHA shall be maintained at all times.
8. Additional temporary task lighting requirements shall be the responsibility of individual Subcontractors.
9. When required by code or AHJ, Electrical Subcontractor shall provide temporary fire alarm system tied into existing fire alarm control panel. This temporary system shall be complete and functional at all times. No part of the temporary system shall be used for the permanent system. Work includes removal and maintenance of the temporary system.

G. Temporary Communication Systems

1. Subcontractor shall provide radios and/or cellular phones for all supervisory personal. Radios shall be as defined by Contractor to allow for common frequency and open communication.
2. Subcontractors requiring land line telephone or data service must coordinate and receive approval of the Contractor, prior to making their own arrangements for installation of these services.

H. Temporary Fire Protection

1. Contractor will provide fire extinguishers of proper type and quantity as required for general fire protection.
2. Subcontractor shall provide firewatch as required to perform its work.
3. Subcontractor shall notify Contractor in advance of performing Hot Work or any activity that could create a fire hazard. If required, Obtain Hot Work permit in advance of performing work and provide necessary fire extinguishers and/or firewatch.

I. Existing Utility Services

1. Where existing services and/or systems are required to be removed, relocated, or abandoned, the affecting Subcontractor shall bypass such services and/or systems before cutting in to minimize OR prevent interruption to occupied areas.

J. Construction Indoor Air Quality (IAQ)

1. Summary: This Section defines the Indoor Air Quality Plan which focuses on providing a clean construction environment in order to produce not only an improved final product but also an improved working environment during construction. Each project will require a tailored IAQ Plan in order to account for any unique construction activities that may necessitate additional IAQ directives.

2. The IAQ guidelines outline the basic information necessary to accomplish the required environmental conditions.
3. Submittals: Indoor Air Quality (IAQ) Plan – After attending a pre-coordination meeting with the Contractor, the Mechanical Subcontractor with guidance from the Contractor shall submit a project specific construction indoor air quality plan describing proposed usage for existing or new temporary HVAC systems and electrical requirements. Coordinate with Electrical Subcontractor.
4. Clean-Up Methods: In order for a Subcontractor to maintain the basic required conditions for an acceptable IAQ environment daily clean-up methods must be performed. These include the following steps:
    a. Daily clean-up of all waste products.
    b. Walk-off mats – Often times the most dust and debris comes from outside of the building during poor weather conditions. Temporary walk-off mats should be used at all entrances. Walk off mats shall be provided by the Contractor.
    c. Vacuums should be readily available to each crew for immediate use. (See "vacuums" below for further information).
    d. Additional clean-up during finishing will be required in order to mitigate dust and debris that may affect the end product.
    e. Access points into the building will be restricted to a limited number. Similarly, the trash routes and toilet facilities route may be restricted to these specific access points and therefore must be taken into consideration during planning.
    f. Drywall Subcontractor shall vacuum out all stud tracks and chases before installing sheetrock.
    g. Use water based sweeping compounds (only if allowed by finish flooring manufacturer) to minimize dust.
    h. Equipment rooms shall be cleaned regularly.
5. Vacuums: Although vacuums are only a tool for achieving a successful IAQ Plan the availability of these items becomes an important aspect during construction. The guidelines below provide information that must be followed.
    a. Saws, sanders, and other construction tools that create dust must be fitted with vacuums during use.
    b. Shop Vacuums must have a working filter system. Any vacuums that do not appear to vacuum or filter the dust as expected may be required to be replaced per the direction of the Contractor.
6. Cutting: Once the building becomes enclosed, the cutting methods require specific changes that will influence the flow of construction. Cutting within an enclosed space, especially during finishes, may be done only if necessary. The majority of cutting must be completed outside of the building enclosure and would not require any additional safeguards. Cutting within the structure without the following precautions will not be prohibited.
    a. Wet cutting will be required during the cutting of most products within the building enclosure. This mostly pertains to the cutting of concrete and masonry although

some finish products such as solid surfacing and tile work may also require wet cutting.

b. Cutting of some products such as gypsum board or millwork may need to be performed inside due to weather constraints. These products must utilize saws that can be fitted with vacuums.

c. Cutting stations may be built to provide an efficient process for a large amount of cutting. These stations may be designated rooms sealed off to contain the dust and debris. A designated cutting room must be accompanied by a permanent vacuum and daily clean-up of this room will be required. A mobile cutting station could be a secondary option for interior cutting. The mobile station concept will allow for a crew to maintain a close proximity to the current work area while still restricting dust and debris.

7. Ductwork Cleanliness Guidelines: Guidelines for ductwork cleanliness shall be as follows (follow other Subcontract Document requirements if more stringent than requirements listed in this section):

   a. Ductwork Fabrication

      1) Shop or factory fabricated ductwork shall be manufactured in a shop environment with the mill oil film removed. When shop fabricated ductwork and fittings are shipped to the site completely assembled, both ends shall be sealed with an adhered protective covering.

      2) Ductwork may be shipped unassembled. This duct shall be kept covered and cleaned at the site as it is erected.

      3) Ductwork and fittings purchased from other fabricators, i.e. spiral, oval, etc., and delivered directly to the jobsite, shall be cleaned and capped and mill oil removed.

      4) Duct fabrication labels shall be placed on duct exterior only. No paper identification labels shall be inside the duct.

   b. Shipping: All ductwork and accessories shipped from fabrication shop(s) shall be shipped in an enclosed trailer or enclosed truck to protect the ductwork from damage, dirt, and moisture during transit to the jobsite.

   c. Storage: Ductwork that is delivered to the site shall be installed as soon as possible. Care shall be taken to schedule only enough material on site for the immediate work. If ductwork is to be stored on the site, it must be in enclosed vans or inside the building at least 4” above the floor to avoid damage from weather or spills. Openings shall remain sealed until installed.

8. Installation

   a. Duct cleanliness for installed ductwork systems shall be maintained to meet the requirements for fabricated ductwork (see above). The ductwork shall be cleaned as necessary to maintain these conditions.

   b. Cover all ends of installed ductwork at the end of each workday, or when work is suspended for any length of time, i.e. breaks, lunch, etc. Hair nets are not an acceptable form of covering ductwork.

c. If installed prior to roofing, protect ductwork from water infiltration.

9. Special Systems (Surgery, Pharmacy, Labs etc.): Any special systems, as outlined in the specifications or noted on the drawings, shall be internally cleaned with sterilizing alcohol. All openings shall be kept sealed and not opened for air outlet installation until all room finishes and dust related work is completed. Ductwork and equipment for these systems shall not be utilized for temporary heating and cooling. If conditioning of these spaces is required, temporary units may be necessary. These systems shall not be brought on-line until dust generating activities are complete (as directed by the Contractor).

10. Air Outlets Diffusers and Grilles:

    a. Air outlets shall be installed with filter media or blanked off (as directed by theContractor).

    b. Return air shall not be activated until all dust generating activities are complete. If return air must be activated prior to completion, upon approval by the Contractor, install filter media on return duct openings.

    c. Equipment

        1) Air Handling Units, including their respective mechanical equipment rooms, and rooftop units are to be inspected for dirt/debris prior to any filter installation/start-up and shall be cleaned as necessary. Use 10% Isopropyl Alcohol-Water solution to wipe down the inside surfaces of the air handlers. Use proper ventilation whenever cleaning with an Isopropyl Alcohol solution.

        2) All VAV terminal units shall be shipped from the factory and completely sealed and shall not be opened until they are installed, and ductwork connected. Also, terminal units are to be protected even if installed.

11. Protection of absorptive materials from moisture damage: HVAC Pipe or Ductwork insulation shall be stored 4” off the floor and covered to protect it from moisture and dirt, if necessary. Once installed this is the responsibility of the Subcontractor until the owner has accepted the work.

12. Existing Facility Guidelines

    a. Follow SMACNA IAQ Guidelines for Occupied Buildings under Construction.

    b. Reference Division 00 Section “Special Project Procedures for Existing Facilities” for other requirements for working in existing facilities or sites.

K. Construction Fence

1. Contractor will erect and maintain a construction fence around the perimeter of the site and staging area as indicated on the site access plan. Fence gates will be located to provide access/egress as determined by Contractor. Subcontractor shall not remove sections of the fence without approval from Contractor. Subcontractors granted approval to remove a portion of the construction fence will be responsible to replace and restore those sections to the satisfaction of Contractor. Reference Section titled “Site Access Plan” 00 30 00 for further detail.

L. Temporary Onsite Structures

1. Each Subcontractor shall coordinate and obtain the approval of the Contractor for on-

site temporary office and storage facilities. Subcontractor shall provide, maintain and remove its own temporary office and storage facilities.

2. Temporary power, telephone and water service requirements to its on-site temporary facilities shall be the responsibility the Subcontractor requiring temporary facilities
3. Reference the Site Access Plan for centralized temporary facilities, if any.

M. Deliveries and Storage

1. Each Subcontractor shall familiarize themselves with available existing and planned site access road conditions including associated requirements such as overhead power lines, other overhead clearances, available vehicle turning radius at corners and/or intersections, or maximum load capacity of access roads. If equipment or materials cannot be delivered to the project site based on available access constraints, Subcontractor shall be responsible for temporary and/or permanent access infrastructure modifications as required to perform delivery and any repairs made necessary because of modifications and/or damage caused by delivery of materials and equipment to or from the Project site.
2. Coordinate and schedule all material deliveries and storage in advance of the scheduled work. Subcontractor's on-site personnel shall receive, unload and store all material to be installed as part of the Work.
3. Onsite storage shall not be allowed except as specifically approved by the Contractor. Contractor will not assume any responsibility for Subcontractor’s stored materials.
4. If it becomes necessary at any time during construction to move Subcontractor’s stored materials, temporary protection, equipment or barricades which impede or interfere with construction, the Subcontractor, when directed by the Contractor, shall move them to location acceptable to Contractor within 24 hours of request and without additional charge to the Contractor.

N. Temporary Enclosures

1. Any work requiring protection from weather or other detrimental conditions shall be protected by the Subcontractor performing that work.

O. Surveying

1. Benchmarks will be established and maintained by the Contractor. Any inconsistencies found in dimensions or elevations shall be reported to the Contractor before proceeding with work.
2. All other layout required for the Work shall be by the Subcontractor, unless specifically noted otherwise.

P. Site and Area Restrictions and Requirements

1. Reference Section titled “Site Access Plan” Section 00 30 00.
2. Access to and from the site is under the control and direction of Contractor. All Subcontractors are responsible coordinating and obtaining the approval of their delivery schedule with the Contractor.
3. Limited Parking will be provided at the site per the site access plan.
4. Contractor shall construct and maintain temporary roads, crane roads and pads, and

paved areas adequate for construction operations as described in the Site Access Plan. Contractor shall remove temporary roads and paved areas not intended for integration into permanent construction. Each Subcontractor requiring temporary roads or pads beyond that indicated on Site Access Plan shall coordinate and obtain the approval of the Contractor. If approved by Contractor, Subcontractor shall provide and maintain temporary roads and pads for its use and remove them at the direction of the Contractor. Subcontractor shall also restore, to a similar or like condition, any areas damaged by Subcontractor's work.

5. Traffic Controls: Each Subcontractor shall provide traffic controls including, but not limited to, barricades, flagmen and street closure permits for their Work. Comply with requirements of authorities having jurisdiction. Protect existing site improvements to remain including curbs, pavement, and utilities. Maintain access for fire-fighting equipment and access to fire hydrants. Traffic controls provided by Contractor (if any) will be specifically defined on the Site Access Plan.
6. Each Subcontractor is responsible for daily cleaning of streets from mud track-out as a result of their Work.

Q. Water and Snow Removal

1. Dewatering Facilities and Drains: Contractor / Subcontractor shall install and maintain Storm Drainage System, Storm Water Detention, Retention, etc. for the project site in compliance with requirements of storm water management policies including but not limited to NPDES (National Pollutant Discharge Elimination System) SWPPP (Storm Water Pollution Prevention Plan) and authorities having jurisdiction.
2. Each Subcontractor shall remove water as required to maintain progress of the Work according to the schedule.
3. Snow and Ice Removal: Contractor will clear parking areas and pathways for access. Subcontractors shall remove snow and ice as required to maintain progress of the work according to schedule. The use of calcium chloride as an aid or means to remove snow or ice will not be permitted.

R. Security and Protection Facilities Installation

1. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to authorities having jurisdiction and Subcontract Documents. Primary responsibility for the stormwater and erosion control will be the Mass Excavation/Earthwork Subcontractor. To the extent other Subcontractor's work will result in additional land disturbance or affect erosion control measures in place, the subcontractor shall comply with the requirements of the Subcontract Documents and the authorities having jurisdiction.
2. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains. Primary responsibility for this Work will be the Mass Excavation/Earthwork Subcontractor. To the extent other Subcontractor's work will result in additional land disturbance or affect erosion control measures in place, the subcontractor shall comply with the requirements of the Subcontract Documents and the authorities having jurisdiction.

3. Tree and Plant Protection: Mass Excavation/Earthwork Subcontractor shall comply with requirements specified in Division 01 Section “Temporary Tree and Plant Protection.” Subcontractor shall install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion. Contractor will assume this responsibility upon acceptance of Mass Excavation/Earthwork Subcontractor's completion of work.
4. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction (and as required for adequate pedestrian and traffic safety) for erecting structurally adequate barricades, including warning signs and lighting.
5. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
6. Temporary Partitions: Contractor shall provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
7. Site Security: Site security will be provided on the project.

S. Site Specific Requirements: Comply with all Owner requirements for Contractor policies, rules, and regulations.

1. Smoking and other tobacco use on the jobsite is permitted in designated areas only.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00 73 10.F
JE DUNN ON-SITE EQUIPMENT PROGRAM

PART 1 - GENERAL

1.1 SUMMARY

A. JE Dunn Construction will be utilizing the On-Site Equipment Program (OEP) in an effort to increase equipment safety, utilization, and on-site accessibility while decreasing unnecessary traffic and congestion on the jobsite through vendor consolidation. The OEP is required and applies to all trade partners using non-owned rental equipment on this project.

B. The OEP provides the project with a comprehensive equipment offering that includes a standardized rate sheet for all available rental equipment. This equipment will be located at an on-site rental yard for the project. Every trade partner is required to utilize the OEP for their respective scopes of work. Please see additional details regarding this program attached.

PART 2 - PRODUCTS

PART 3 - EXECUTION

JE Dunn On-Site Equipment Program (OEP)

Instructions to Bidders and Program Requirements

Introduction

I. JE Dunn Construction will be utilizing the OEP in an effort to increase equipment safety, utilization, and on-site accessibility while decreasing unnecessary traffic and congestion on the jobsite through vendor consolidation. The OEP is required and applies to all trade partners using non-owned rental equipment on this project.

Program Details

II. The OEP provides the project with a comprehensive equipment offering that includes a standardized rate sheet for all available rental equipment. This equipment will be located at an on-site rental yard for the project. Every trade partner is required to utilize the OES for their respective scopes of work. The use of OEP equipment better facilitates the satisfaction of project safety requirements and overall quality expectations. The OEP participation requirement only applies to items listed on the rate sheet. All other equipment outside of the program may be requested by a vendor of choice, but JE Dunn/Blue Hat has first right of refusal for supplying those items. For all rental equipment that falls outside of the program (as outlined on the project rate sheet), written approval must be obtained prior to such equipment arriving on-site.

The equipment procured through the OES will be provided by Blue Hat or their on-site channel partner, United Rentals. The on-site rental location will have equipment storage, repair/maintenance capabilities, and customer service personnel to meet your needs. All requests for new rentals, service activities, call offs, etc. will be coordinated through the on-site personnel.

The provided client/JE Dunn approved rate sheet will cover the base rental rate for the respective equipment based on standard usage of 160 hours per four-week billing cycle (overtime shift usages are not included in base rates). Additional charges for any OEP refueling, cleaning, ancillary charges such as supplies/consumables or other applicable materials and services will be billed with the rental activity as individual line items on a consolidated monthly billing statement.

Utilizing the OEP

III. All OEP participants are required to provide an equipment forecast list during the weekly planning covering equipment order volume expected over the following four weeks. This planning and communication will allow for identified equipment to be made available at the on-site location when needed. Providing an order at least seven days in advance is critical

for equipment availability. Failure to order in advance may result in equipment delays or additional freight charges that will be the trade partner's responsibility. On-site program personnel will attend the weekly planning meetings as frequently as possible. Equipment availability is contingent upon clear and proactive communication, otherwise availability cannot be guaranteed. Failure to properly communicate equipment needs in advance will not justify use of outside rental providers. Each request must contain the following information to enable accurate and timely billing: customer name, item description, date required, requestor name, phase or purchase order, anticipated duration, and the on-site contact/responsible party for requested equipment.

Upon confirmation of a requested piece of equipment, the OEP team will endeavor to make the equipment available and ready. Again, proactive communication is needed to aid in equipment readiness. Once an order is confirmed, the trade partner will be required to pick up the requested equipment from the OEP equipment yard (unless other arrangements have been made for chargeable delivery services) and the rental period will commence at that time. Once the trade partner is finished utilizing the equipment, they are required to return it to the OEP equipment yard and obtain proper off-rent documentation. The rental period ends once the equipment has been returned AND checked in by the OEP coordinator (unless other arrangements have been made for chargeable pick-up services). It is the trade partner's responsibility to ensure that the equipment is checked in, clean, and full of fuel upon return.

The trade partner is responsible for providing qualified operators and safety devices for the equipment. Additionally, the operator is required to perform a daily inspection of the equipment prior to usage and report any deficiencies to the OEP coordinator. All damage resulting from an unqualified operator or misuse of the equipment will be the responsibility of the trade partner and invoiced separately.

Maintenance and Repairs

IV. The trade partner will be responsible for all daily maintenance, such as proper greasing and maintaining all fluid levels, including DEF, when applicable. Unless noted otherwise, the rental equipment vendor shall be responsible and pay for all other maintenance and repair costs, including, but not limited to, replacement of cable and other parts, engine maintenance, overhauls, brake relining and "normal wear and tear" resulting from the use of equipment under normal circumstances.

All equipment rented through the OEP will be covered by the trade partner's provided insurance identifying JE Dunn and/or United Rentals as the loss payee. The trade partner is responsible for equipment loss, theft, damage or destruction of the equipment due to accidental or intentional misuse, including equipment damaged while being operated by an unqualified operator.

Rates

V. OEP rental rates do not include sales or use taxes. All applicable taxes will be stated separately and provided on the monthly invoice.

Monthly rates are based on a 28-day rental period, single shift usage or 160 hours per billing period. Weekly rates may apply where the rental period is three days or more, but less than 28 days. Daily rates may apply to any rental of three days or less.

On-Site Coordination and Communication

VI. JE Dunn/Blue Hat and United Rentals will staff the on-site equipment facility with full-time rental coordinators to manage and administer all aspects of rental activity. These individuals will field requests for new items, returns, schedule deliveries and service, coordinate repairs and capture relevant billing information. The dedicated on-site staff will also provide equipment on-rent reports to all trade partners. These reports will be scheduled and routine, and any additional information requested will be taken under consideration and provided if practical. Weekly review by trade partners of on-rent equipment is critical to ensure the accuracy of invoices.

In addition, the OEP will employ a dedicated payment coordinator for compiling monthly billings, managing questions/discrepancies, and facilitating payment. JE Dunn project leadership will also provide support as needed.

Payment

VII. The OEP payment coordinator will prepare and send a consolidated monthly invoice for all activity for the previous calendar month on or before the third business day of that month. The invoice will be a summarized statement standardized for all trade partners within the OEP. The payment coordinator will also provide an itemized list that includes equipment level information and corresponds directly with the summarized invoice. In order to ensure timely receipt of the invoice and itemized list, each program participant must provide a designated email address upon program entry where the payment coordinator will send all appropriate information.

A sample of the consolidated billing invoice and statement will be provided when setting up trade partners into the program. Each trade partner is allowed only one purchase order to reference for their 28-day monthly consolidated billing invoice.

VIII. All trade partners will have seven days from receipt of invoice to raise disputes or potential modifications that must be communicated via email to the payment coordinator and/or United Rentals on-site representative. Any invoice details or charges that are NOT disputed during the one-week window will be considered accepted as accurate and will be the responsibility of the trade partner. Any agreed upon credits or corrections will be reflected on the following month's invoice.

Billing terms for the OEP will be NET 30. After completing a formal review of any invoice discrepancies, unpaid balances over 60 days may be subject to a deduction from the trade partner's next project pay application. Should the balance from a 2nd tier trade partner

become delinquent, JE Dunn may deduct the balance from the trade partner that the 2nd tier trade partner is working for.

On-site Facility Hours and Expectations

IX. Business Hours: Monday – Friday 7:30am-4:30pm
After Business Hours On Call – Nights, Weekends & Holidays – potential charges may apply
$189.00/hr. standard service rate
   a. Saturday at 1.5x standard rate, 4hr. minimum
   b. Sunday/Holiday 2x standard labor rate, 4hr. minimum

X. Ordering and Response Time
   a. Normal Office Hours – Within 1 Hour
   b. After-hours, Weekends, and Holidays – Within 4 Hours

XI. On Rent/Off Rent and Service Calls
   a. All emails are sent to the follow email addresses: BLGSITE@ur.com & bluehatblg@jedunn.com

On-site Facility Address

XII. Physical Address TBD, but will be on site at the Clydesdale Project Site.

Key Contacts

- TBD pending site mobilization.

JE Dunn On-Site Equipment Program Rental Agreement

Between Blue Hat Crane & Equipment Rental ("Lessor")
and
_____("Lessee")

Lessor, Blue Hat Crane & Equipment Rental, and Lessee, _____, desire to enter into this Equipment Program Rental Agreement to set forth the terms and pricing governing the lease of certain equipment (the "Equipment") for the project located at _____ (the "Project") and, if needed, the furnishing of certain operational personnel as further described and identified in future purchase orders or transfer tickets entered into between the parties on an as needed basis. Therefore, Lessee and Lessor ("the "Parties") agree as follows:

1. Term

The term of this Agreement shall be for the duration of Project Clydesdale.

2. Equipment

Subject to all other terms of this Agreement, Lessor agrees to lease to Lessee such type and quantities of Equipment that may be ordered from time to time by Lessee. Blue Hat shall have a right of first offer to provide all Equipment for the Project.

3. Equipment Ordering

To order Equipment hereunder, Lessee shall issue purchase orders or other agreed upon method order quantity, Equipment type, scheduled ship dates, places of delivery and any other specifications particular to the ordered Equipment. Lessee will provide Lessor with a forecast of Lessee's requirements for Equipment for each 4-week period. It is expected that Lessee will provide orders seven days in advance. All orders are subject to the Blue Hat's standard terms and conditions attached as Exhibit B to this Agreement. These terms and conditions apply to all Equipment orders notwithstanding anything to the contrary contained in or incorporated into any document from or oral statement made by you, the Lessee. No variation or amendment to the terms and conditions shall be of any effect unless expressly agreed, in writing, by a person authorized to sign on behalf of Blue Hat.

4. Pricing

Lessor will supply Equipment to Lessee in accordance with the terms and other conditions relating to pricing as set out in the Pricing Exhibit A attached to this Agreement and incorporated herein by reference. Such pricing may be adjusted by Lessor from time to time and will be reflected in an updated Exhibit A. Pricing changes will be effective on the next billing cycle following the effective date of such change. Monthly pricing rates are based on a 28-day rental period, single shift usage or 160 hours per billing period. Weekly pricing rates may apply where the rental period is three days or more, but less than 28 days. Daily pricing rates may apply to any rental of three days or less.

5. Payment

The Lessee shall pay rent during the term of this Lease in the amounts and at the times specified in each Equipment order. The Lessor agrees to invoice the Lessee for each rental payment due hereunder at least thirty (30) days prior to the respective due date thereof. Payment terms are Net 30 days from Lessee's receipt of an invoice. No interest on overdue payments will begin to accrue until thirty- (30) days following Lessee's receipt of an invoice for such amount. If Lessee receives an invoice from Lessor and Lessee, in good faith, disputes the amount stated on the invoice as due and

owing, Lessee shall provide Lessor with written notice of such dispute and the reason therefor within seven (7) days of receipt of such invoice. Invoices not disputed within seven (7) days of receipt of such invoice are deemed accepted. Amounts unpaid for over sixty (60) days may be recovered from Lessee's next project pay application.

6. Notice

All notices, requests, approvals, and consents and other communications required or permitted under this Agreement will be in writing and will be sent by e-mail of a PDF document to bluehatblg@jedunn.com

7. Assignment

This Agreement shall be binding upon and shall inure to the benefit of the permitted successors and assigns of each party hereto. Lessor may not assign, subcontract, delegate or otherwise convey this Agreement, or any of its rights and obligations hereunder to any entity without the prior written consent of Lessee, and any such attempted assignment or subcontracting without consent shall be void. Consent by Lessee to any subcontract or other delegation of Lessor's obligations under this Agreement shall not be deemed to relieve Lessor of its responsibility for such obligations. Lessee may assign this Agreement to any entity that is an affiliate or any successor in interest to all or any part of Lessee's operations, so long as the assignee agrees in writing to be bound by the terms and conditions of this Agreement.

8. Amendments

If Lessee and Lessor desire at any time to amend, modify, supplement or otherwise change the terms of this Agreement, they may do so only by means of a written amendment signed by both parties. No amendment to, or change, waiver or discharge of, any provision of this Agreement will be valid or enforceable unless in writing and signed by an authorized representative of the party against which such amendment, change, waiver, or discharge is sought to be enforced.

9. Severability

If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, the remaining provisions of this Agreement will remain in full force and effect unless substantial performance of this Agreement would be frustrated by such unenforceability, or unless such unenforceability would result in such a material change as to cause further performance of this Agreement to be unreasonable. The parties further agree that in the event such provision is an essential part of this Agreement, they will immediately begin negotiations for a suitable replacement provision.

10. Entire Agreement

This Agreement and each of the Exhibits, which are hereby incorporated by reference into this Agreement, is the entire Agreement between the parties with respect to its subject matter, and there are no other representations, understandings, or Agreements between the parties relative to such subject matter. All prior communications, whether oral or written, are hereby abrogated and withdrawn. Any purchase order or transfer ticket issued by Lessor shall be deemed to include the terms of this Agreement unless it specifical1y varies the terms of this Agreement by a typed (not pre-printed) provision of such purchase order.

The Exhibits, which are incorporated into this Agreement, are:

- Exhibit A – Pricing

- Exhibit B – Terms and Conditions

This is not an exclusive Agreement between Lessee and Lessor.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

Blue Hat Crane & Equipment Rental	_____
By: _____	By: _____
Name: _____ (print)	Name: _____ (print)
Title: _____	Title: _____

Exhibit A - Pricing

EXHIBIT B
BLUE HAT STANDARD TERMS AND CONDITIONS

Terms and Conditions

1. All equipment herein named and identified under the subdivision designated as "Equipment" in the Equipment Rental Agreement ("Agreement") and any additions thereto are included within the definition of "Equipment" in this lease. Unless otherwise specified, Lessee will erect and dismantle the Equipment and provide the operator for the Equipment. Lessor expressly DISCLAIMS ANY WARRANTY, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE with respect to the Equipment. Lessor shall in no case be liable for any cost, claims, or actions arising out of the use of Equipment, including, but not limited to, the costs of any down time or for any failure in the operation of the Equipment or for any loss of profits or for any direct, indirect or consequential damages arising from bodily injury or property damage or economic loss.

2. The Equipment shall remain personal property and title to and ownership of the Equipment at all times shall be and remain in Lessor, notwithstanding possession and use by Lessee. Title to all parts, materials and supplies furnished to the Equipment shall vest in Lessor. At the request of Lessor, Lessee will execute any and all financing statement or other documents Lessor may desire executed by Lessee to protect or demonstrate Lessor's title to the Equipment. Nothing which the parties may do, including, but not limited to the delivery of purchase invoices for the Equipment, shall be deemed to pass title to the Lessee until and unless title is formally passed by the execution and delivery of a bill of sale by Lessor to Lessee after full payment of any agreed purchase price. No option to purchase or other agreement shall be construed as a conditional sales contract, and Lessee shall give Lessor immediate notice in the event any Equipment is levied upon or becomes liable to seizure from any cause.

3. Equipment shall be delivered in good operating order. Lessor agrees to replace all parts which may be found to be defective if notified of such defect within three (3) days from the date of delivery; said warranty being limited to replacement of actual part or piece of equipment only, FOB location, not including cost of labor for removal or replacement or any other costs occasioned thereby, and only if in Lessor's sole opinion such defect is found to be in manufacture or design and not caused by misuse, improper handling or lack of maintenance. The acceptance of the Equipment by Lessee, receiving delivery without objection to the Equipment, exercising any dominion over same, or making any use of the Equipment constitutes acknowledgment by Lessee that this lease is a valid and binding contract and the Equipment is good, safe, serviceable, and fit. Lessee agrees that the provisions of this paragraph shall not limit the effect and extent of Lessor's warranty disclaimers in Paragraph 1 of these terms and conditions.

4. Lessee agrees to pay the rentals on the Equipment for the minimum period set forth in the Agreement or until this lease is terminated, whichever period is longer. Upon the conclusion of said minimum rental period, this lease and all of its provisions may be extended by mutual consent of the parties, provided, however, that Lessor may terminate for Lessor's convenience any such mutual extension of this lease upon fourteen (14) days written notice to Lessee.

5. Subject to Lessee's liability to Lessor for rent for the Equipment for the minimum rental period, as set forth in the Agreement, the rental period for the Equipment shall begin upon the Rental Commencement Date specified or when the Equipment is in possession at the designated location by Lessee or its agents, whichever is first to occur, and shall end when the Equipment is received by Lessor at its yard in Kansas City, Kansas or at a point designated by

Lessor in accordance with Paragraph 8(f) of these terms and conditions. The Lessee shall pay rental for each article of Equipment named in the subdivision designated "Equipment" in the Agreement at the rates indicated for each piece of equipment, and payment shall be made in advance in the office of Lessor at 240 South 65th Street, Kansas City, KS 66111. If the rental period is weekly, then payments shall be due on the first day of each week, and if the rental period is monthly, then payments shall be due on the first day of each month. Should Lessee delay taking delivery after the stated delivery date, Lessor may terminate this Agreement without liability.

6. The Lessee hereby agrees to report to Lessor any overtime operation for the Equipment and to pay Lessor for such overtime operation at the same time Lessee's next rental payment for straight time operation is due. Lessor may use the equipment hour meter to establish the amount of overtime operation to the extent Lessee fails to accurately report the amount of overtime operation.

7. The Lessee hereby agrees that:

(a) The rental rates set forth herein shall not be subject to any deduction by, or credit to, Lessee on account of any downtime or non-working time of the Equipment during the rental term. The amount of rent payable for any fraction of a month or week after the end of the minimum rental period shall be in accordance with Lessor's schedule for pro-rated payments, which is available from Lessor upon request;

(b) Daily rental rates shall not be subject to deduction for any non-working time in the day and shall be paid for each calendar day in the month in advance. The amount of rent payable for any fraction of a day after the end of the minimum rental period shall not be prorated if a daily rental rate is paid for Equipment, but instead, rental payment shall be made for the entire day upon which the Equipment is returned; and

(c) Any sums due Lessor, which are not paid as and when due, shall bear interest at the rate of one- and one-half percent (1.5%) per month.

8. Lessee covenants and agrees to:

(a) Assume responsibility for all risk of loss or damage to the Equipment from the time Lessee or its agents take possession until it is returned to the care, custody and control of Lessor or its freight carrier for return delivery. Indemnify Lessor against loss resulting from damage to the Equipment. Lessee shall, at its cost, provide all-risk and Inland Marine/Equipment Floater insurance with Boom and Overload coverage for the value of the rented equipment and such insurance shall name Lessor as the loss payee. Lessee shall furnish Lessor a certificate of such insurance;

(b) Display on the Equipment at all times a plate or stencil in the following words: "Blue Hat Crane and Equipment Rental";

(c) Permit the Equipment to be operated and serviced safely, carefully and only by persons specially qualified to do so, grease, oil, keep in proper adjustment and otherwise maintain and service the same and keep the Equipment in efficient operating condition at Lessee's expense, and if replacement parts should be necessary or desired Lessee agrees to purchase them from Lessor or from any person, firm, or corporation designated by Lessor. Lessee shall coordinate with Lessor prior to any repair on the Equipment. If the Equipment goes down for unscheduled or non-routine servicing or repairs while in Lessee's service, then Lessee shall notify Lessor and Lessor shall repair it or will provide Equipment to replace it. If Lessor determines in good faith that the required servicing or repairs is Lessor's responsibility, then the transportation costs, travel time, mileage, labor, and parts for the repair or replacement and other associated costs required for repair ("Repair Costs") will be provided at no charge to Lessee. However, if Lessor determines in good faith that any servicing or repairs are due to any reason other than Lessor's negligence, and thus, is Lessee's responsibility, then Lessee agrees to pay, within thirty (30)

days from receipt of Lessor's invoice, all applicable Repair Costs, even if service is performed by Lessor upon return of the Equipment. If the Equipment is returned with a major component unusable, rent continues until repair or replacement can be completed;

(d) Pay all taxes and assessments which may be levied or assessed against or in respect of the Equipment, the transfer, possession, or use of the Equipment by Lessee or against Lessor, including any ad valorem, sales, use, consumer's or transportation tax to which Lessor, Lessee, or the Equipment may be subjected by reason of this lease;

(e) Defend, indemnify, and hold Lessor harmless from and against any and all claims, loss, cost, liability, personal injury, damage or expense, including attorney's fees, in any manner connected with or arising out of the maintenance, use, transportation, repair, erection, or operation of the Equipment, however arising, including personal injury to the operator of Equipment;

(f) Return the Equipment at the termination of this lease in the same condition as when received (with a usable hoist line for cranes), ordinary wear and tear excepted, without concrete splatter and if necessary perform any service work to put the Equipment in the condition required by this lease, and if Lessee fails to perform such work, Lessee shall pay to Lessor the cost of the repairs immediately on receipt of a statement from Lessor identifying the same;

(g) Pay rental to Lessor at the specified rate after return of the Equipment by Lessee for that period of time required to make repairs and perform service work to put the Equipment in the condition required by Subparagraph (f);

(h) Keep and maintain accurate lubrication records, repair records, and records of actual hours and rates of operation in the form prescribed by Lessor;

(i) Pay all costs, expenses and reasonable attorney's fees that may be incurred or paid by Lessor in enforcing the covenants and agreements in this lease; and

(j) Maintain, at its sole cost and expense, during the entire term of this Agreement, the following insurance coverage: Lessee General Liability Insurance must be provided with limits of at least $1,000,000 per occurrence and $2,000,000 aggregate. Auto Liability Insurance must be provided with a combined single limit of at least $1,000,000. Workers Compensation Insurance must be provided with statutory coverage and Employers Liability with limits of at least $500,000. Umbrella/Excess Insurance must be provided with limits of at least $2,000,000 each occurrence and in the aggregate; provided, however, such coverage limits must be at least $5,000,000 each occurrence and in the aggregate for cranes and Magni equipment with capacity greater than RTH 6.30 SH or an HTH 16.10. Coverage shall be excess of General Liability, Automobile Liability and Employers Liability.

Additional Insurance Requirements:

- Blue Hat Crane & Equipment Rental shall be included as an Additional Insured on General Liability, Auto Liability and Umbrella/Excess policies. Additional Insured status shall be on a primary and noncontributory basis. For General Liability, Additional Insured status shall be per form CG 2028 04/13 or an equivalent form approved by Blue Hat Crane & Equipment Rental.
- To the extent allowed by law, A Waiver of Subrogation shall be included under all policies in favor of Blue Hat Crane & Equipment Rental.
- Policies shall provide 30 days' notice of cancellation to Blue Hat Crane & Equipment Rental.
- Certificate(s) of Insurance must evidence Additional Insured status, primary & non-contributory wording, waiver of subrogation, and notice of cancellation to Blue Hat Crane & Equipment Rental.

Contractor's Leased/Rented Equipment Coverage:

- Coverage limit shall be equal to, or greater to, the value of the equipment as identified on lease agreement.
- Blue Hat Crane & Equipment Rental shall be included as Loss Payee. Policy shall include no overload exclusion or boom restriction.
- Policy shall provide 30 days' notice of cancellation to Blue Hat Crane & Equipment Rental.

The insurance certificate must show a description of the equipment, the value of the equipment, confirmation of no overload exclusion or boom restriction and 30 days' notice of cancellation to Blue Hat Crane & Equipment Rental. If Lessor furnishes the operator for the Equipment, Lessor will furnish evidence of workers compensation insurance covering the operator.

9. Lessee further covenants and agrees that it will not:

(a) Assign rights granted herein, further sublet the Equipment or suffer or permit it to be used by others, or remove the same or any part of the Equipment from the location of the "Job Address" designated in the Agreement without the prior written permission of Lessor;

(b) Remove numbering, lettering or insignia from the Equipment, alter the same, or affix attachments to the Equipment, without first having obtained Lessor's written consent;

(c) Suffer or permit the Equipment to be seized or affected by attachment, mortgage, lien or legal process or do or permit anything else which may encumber, impair or cloud Lessor's title to the Equipment; and

(d) Use the Equipment beyond its capacity, or in any other manner abuse or improperly use the same.

10. Lessee shall pay all transportation, freight, loading and unloading charges from the present location of the Equipment to the work site of the Lessee and for the return of the Equipment as provided in Paragraph 5 of these terms and conditions. Lessee shall furnish, in writing, to Lessor, shipping instructions, provided, however, if such instructions are not furnished to Lessor, Lessor shall ship the Equipment in the manner Lessor believes to be the most reasonable under the circumstances. In the event Lessor desires the Equipment forwarded to any point other than Lessor's yard in Kansas City, Kansas, then the Lessee shall pay the freight and loading charges to such point designated by Lessor together with any unloading charges incurred at such point, but in no event shall the amount exceed the normal freight rate and loading and unloading charges on shipment from the Lessee's jobsite to Lessor's yard in Kansas City, Kansas.

11. If Lessee shall fail to punctually pay rent due hereunder or otherwise breaches this Agreement and such failure shall continue for five (5) days after notice thereof from Lessor, Lessor may terminate this lease without any other or further notice to Lessee, and, in addition to any other remedies allowed by applicable law, Lessor shall have the right to (a) take possession of the Equipment, (b) recover from the Lessee all rental payments and other sums due and to become due Lessor from Lessee and the amount of any damages, injuries, and expenses, including attorney fees, incurred in repossessing and returning the Equipment to Lessor's yard and satisfying Lessee's obligations under this lease, and (c) enter upon the premises where the Equipment is located at the time and take possession of the Equipment, with or without legal process, and remove the Equipment. Lessee agrees to protect, defined, indemnity and hold Lessor harmless with respect to any and all damages or claims of damages occasioned by any such entry, repossession, or removal and to pay Lessor all costs, expenses and damages, including court costs and attorney fees, incurred by Lessor by reason of any (a) refusal to permit Lessor, or (b) inability of Lessor to enter upon such premises and take possession of and remove the Equipment. If and at any time after a legal proceeding shall have been commenced involving or affecting the Equipment or title to the Equipment, or if Lessee

shall become bankrupt or insolvent or seek or suffer appointment of a receiver to take charge of Lessee's property or affairs, then and upon the occurrence of such an event, Lessor may terminate this lease instantly and without notice and Lessor shall have all the rights following a default accorded to Lessor under the first two sentences of this Paragraph 11. Nothing done by Lessor under this paragraph shall terminate or discharge Lessee's obligations under this lease.

12. Lessor shall have the right at all reasonable times to enter the premises where the Equipment is located, and Lessee hereby guarantees Lessor free access to this location, for the purpose of inspection. If any inspection, whether during the continuation of this lease or after the Equipment has been returned to Lessor, shall disclose any loss or damage to the Equipment, Lessee shall pay the amount of such loss or damage to Lessor immediately on notification by Lessor of the amount of the loss or damage.

13. Any notice required or permitted to be given hereunder shall be in writing and shall be served if sent by United States Certified Mail, Federal Express, or UPS with confirmation of delivery. If to Lessor, such notice shall be addressed to Lessor at its office, 240 South 65th Street, Kansas City, KS 64111, or at such other place as may be designated from time to time in writing by Lessor. If to Lessee, such notice shall be so mailed and addressed to Lessee at its office at the address in the Agreement.

14. If at any time required by Lessor, the Lessee at its own expense shall furnish a bond in the amount of the value of the Equipment, with sureties satisfactory to Lessor to insure compliance by Lessee of all its obligations under this lease. Additionally, Lessee will provide such information as requested so that Lessor can file a pre-lien notice.

15. This agreement, although not assignable by Lessee, shall be binding on the parties and their respective successors, heirs, administrators, executors and assigns. No modification of this agreement shall be valid or binding unless in writing and signed by both parties.

16. Upon receipt of the Equipment from Lessor, the Lessee assumes responsibility for the following service items:

a. Completion of all preventive maintenance checks and services that come due during the operation of the Equipment. This includes service of all fluids and filters at the proper intervals and in accordance with manufacturer's guidelines. For Lessor to service the equipment, the cost will be $2.00 per hour up to 250 hours of operation, and anything past 250 hours of operation will be charged at $2.50 per hour.

b. Completion of all periodic inspections and adjustments in accordance with the manufacturer's guidelines and as dictated by condition of equipment operation.

c. Completion of all repairs deemed minor by Lessor, for example hose replacement, belt replacement and minor electrical component repair/replacement. Lessor will supply the parts for these repairs.

d. Lessee shall provide documentation of all such servicing and repairs to Lessor upon completion of such service or repairs.

17. Lessor assumes no responsibility for labor back charges or other costs or damages due to equipment downtime.

18. Lessee waives any claim against Lessor for consequential damages arising out of or relating to this Agreement.

19. Lessee waives all rights against Lessor and its employees for damages caused by fire or other causes of loss to the extent covered by property insurance carried by Lessee. Lessee waives any claim against Lessor for damage to Lessee's work arising out of this Agreement.

20. Lessee agrees that in the event of any strike, picket, sympathy strike, work stoppage or other form of labor dispute or picket in connection with the location on which the Equipment is to be used the Lessee will provide a picket free entrance for Lessor.

21. All disputes arising from this Agreement shall be determined in accordance with the laws of the State of Missouri. Lessee hereby agrees the courts of Jackson County, Missouri shall be the forum for resolution of disputes arising out of this Agreement.

22. Except as otherwise mutually agreed in writing, this Agreement is the complete agreement of the parties and supersedes all other agreements or understandings, written or oral.

SECTION 00 73 16
INSURANCE PROGRAM – DCIP (GL and Workers' Comp)

PART 1 - GENERAL

1.1 SUMMARY

A. This Project will have a Controlled Insurance Program ("CIP"), as set forth in this Section.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

Controlled Insurance Program Requirements & Forms for General Liability and Workers' Compensation

**NOTE: TRADE PARTNER SHALL EXCLUDE COST OF ON-SITE GL AND WORKERS' COMPENSATION INSURANCE FROM BID.

Sponsored by JE Dunn Construction Group, Inc., or one of its subsidiaries or affiliates.

THIS MANUAL IS PART OF YOUR CONTRACT.

Dunn VII Version $125M

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Workers' Compensation Report of Injury
Claim Reporting Form

This manual has been prepared to provide general information about the Dunn Controlled Insurance Program and the procedures to be followed by a Trade Partner. **This manual is not** a substitute for policies issued, nor is it to be interpreted as altering or changing any of the general or special conditions or other terms of the insurance contract as it pertains to insurance coverage or any other duties or responsibilities of any party enrolled in this program. If any conflict exists between this manual and the insurance policies, the policies govern. Policies are available upon request. This manual is subject to change and any such changes will be communicated to all affected parties.

I. Introduction

What is a Controlled Insurance Program?

The Dunn Controlled Insurance Program (DCIP) is a coordinated master insurance, safety and claims management program for the Contractor and all Enrolled Trade Partners working on the Project.

What coverage will the DCIP provide?

The following coverage is provided by the DCIP for the Contractor and **Enrolled** Trade Partners: onsite General Liability, onsite Workers' Compensation, onsite Employer's Liability, and onsite Excess Liability.

Who is eligible to be enrolled?

Any Trade Partner that is not defined herein as excluded is eligible.

What are ENROLLED Trade Partner obligations as a participant in the DCIP?

- ✓ **Exclude** onsite General Liability **and** Workers' Compensation coverage costs from pricing; include all other insurance costs as required by this manual and Contract in the price.
- ✓ Complete and submit all enrollment documentation prior to starting work. (Section XIII)
- ✓ Provide Certificate(s) of Insurance evidencing all coverage required in this manual to be furnished by Enrolled Trade Partners and not provided under the DCIP. (Section VI and Section XIII)
- ✓ Report all jobsite payrolls to Lockton Companies, LLC as required. (Section X)
- ✓ Inform Lockton Companies, LLC of all Lower Tier Trade Partners prior to their starting work.
- ✓ Comply with all on-site safety requirements including, but not limited to, the DCIP Project Safety Program. (Section XII and http://sms.jedunn.com/safety_program)
- ✓ Immediately report accidents or occurrences as required in the Claims Procedures. (Section XI)
- ✓ Participate in the Return-to-Work/Modified Work Program. (Reference Section XII *DCIP Project Safety Program* at Section 6.0 Return-to-Work/Modified Work Program)

What are EXCLUDED (Non-enrolled) Trade Partner obligations?

- ✓ Contracts are to be bid with **all** costs of providing insurance required in this manual and Contract **included** in its overall price for the Work. (Section VII)
- ✓ Provide certificate(s) of insurance evidencing all coverage required in this manual to be furnished by Non-enrolled Trade Partners. (Sections VIII and XIII)
- ✓ Comply with all on-site safety requirements including, but not limited to, the DCIP Project Safety Program. (Section XII and http://sms.jedunn.com/safety_program)

- ✓ Immediately report accidents or occurrences as required in the Claims Procedures. (Section XI)

Who is excluded from the DCIP?

Unless allowed by Contractor, the following parties, including their lower tier trade partners, are excluded from the DCIP:

- ✓ Trade Partners performing hazardous material remediation;
- ✓ Trade Partners performing structural demolition (dismantling will be included into the DCIP if no wrecking balls, explosive or demolition that is structural in nature is performed);
- ✓ Trade Partners performing blasting operations;
- ✓ Elevator Trade Partners;
- ✓ Architects, engineers, surveyors, testing laboratories, and their consultants; and
- ✓ Vendors, suppliers, material dealers, haulers and/or independent haulers, and firms whose sole function is to transport, pick up, deliver, or carry materials, supplies, tools, equipment, parts, or other items or persons to or from the Project Site.

Contractor reserves its right to exclude any and all Trade Partners and/or lower tier Trade Partners from the DCIP.

Important Facts

- ✓ **Enrollment:** Enrollment in the DCIP by all eligible Trade Partners is mandatory (unless specifically excluded by the Contractor) but not automatic. **Satisfactory completion and submission of enrollment documentation is required PRIOR TO STARTING WORK AT THE PROJECT SITE.**
- ✓ **Enrolled Trade Partner insurance credit calculation:** JE Dunn reserves the right to verify the insurance amount excluded from bid packages. At JE Dunn and/or DCIP administrator request, each trade partner and each of its lower tier trade partners shall submit all documentation in connection therewith, including, but not limited to:
    - Copies of declaration and rate pages for the state where the project is located.
    - Deductible or retention pages
    - If applicable, loss pick rate information on insurance carrier letterhead

The DCIP administrator will review the data submitted by the trade partner for accuracy. In the event of discrepancy, the DCIP administrator will notify the JE Dunn and trade partner.

The trade partner represents that all insurance credit information submitted to DCIP administrator to verify insurance credit is accurate and complete. The trade partner agrees that

JE Dunn is entitled to and may identify additional insurance credits resulting from inaccurate assumptions in the initial credit.

- ✓ **Enrolled Trade Partners:** The DCIP shall apply to the Contractor and eligible Trade Partners who have complied with the insurance requirements and completed the enrollment process. Contractor reserves the right to exclude any Trade Partner from the DCIP.

- ✓ **Excluded Trade Partners/Activities:** See above and Section II *Definitions* to review the parties and activities excluded from DCIP coverage. The Contractor, at its sole discretion, will determine which Trade Partner(s) of any tier will participate in the DCIP.

- ✓ **Scope of Insurance:** Unless otherwise specifically indicated, the coverage set forth in Section IX *DCIP Insurance provided for Enrolled Trade Partners* will cover only those operations of the enrolled parties performed in connection with the Work on the Project Site and employees of the enrolled parties while performing the Work on the Project Site. The DCIP shall not apply to the operations or the employees of any Trade Partner at their offices, factories, warehouses or otherwise not on the Project Site.

- ✓ **Safety:** Strict compliance with Section XII – *DCIP Project Safety Program*, the Dunn national safety program (at http://sms.jedunn.com/safety_program), and any other safety requirements in the Contract Documents, will always be required. Failure to comply is a default of the Subcontract and could result in being denied coverage under the DCIP, being denied access to the Project Site, or termination of the Subcontract.

- ✓ **Trade Partner Enrollment Process:** Trade Partners are required to submit a Trade Partner Enrollment Application, Estimated Exposure Worksheet, and a certificate of insurance complying with the requirements herein.

- ✓ **Payroll Reporting:** The Payroll Reporting Form must be completed each month by Enrolled Trade Partners and any lower tiers of Trade Partner(s) on the Jobsite for **each** Contract awarded, including zero payroll if applicable, until completion of the Work under each Contract. Enrolled Trade Partners should not report the payroll from this Project to its individual insurance carrier.

- ✓ **Experience Modification:** Trade Partners' payroll and losses will be reported to NCCI. This experience will be used to calculate the Trade Partner's future experience modifications.

- ✓ **If an Enrolled Trade Partner contracts with a lower tier Trade Partner, including contract employee(s) and temporary employment agencies, the Trade Partner is responsible for the following:**

    1. Including this manual and all requirements within it as a part of the Enrolled Trade Partner's lower tier subcontract agreement(s); and ensuring that such lower tier Trade Partners fulfill all obligations as required of you as a Trade Partner under the DCIP.

    2. Notifying the Contractor of **all** subcontract awards utilizing the Trade Partner Enrollment Application-WC/GL Program form. (Section XIII *Enrollment Forms*).

3. Ensuring lower tier Trade Partner(s) bids **exclude onsite General Liability and Workers' Compensation coverage cost** but include all other insurance required by this manual.

All Enrolled Trade Partners will be required to meet the DCIP requirements as outlined in Section V. Miscellaneous DCIP Requirements. The Contractor has the authority to deny access to the Jobsite for noncompliance with insurance or safety requirements. **TRADE PARTNERS SHALL VERIFY THEIR LOWER TIER TRADE PARTNER(S) HAVE MET THESE REQUIREMENTS PRIOR TO AWARDING WORK.**

The DCIP provides some, but not all, insurance coverages typical to construction projects. Refer to Section IX to review what is provided. Contact the Contractor if you have questions regarding other coverages.

Who needs a copy of this manual?

- ✓ Trade Partner's administrative personnel who manage its insurance and/or its insurance agent/broker.
- ✓ Trade Partner's estimators, prior to bidding work on the Project.
- ✓ Trade Partner's payroll personnel, who will be responsible for turning in the payroll reports.
- ✓ Trade Partner's safety personnel, who will need to educate its on-site workers with respect to the Project Safety Program requirements.
- ✓ Trade Partner's claims personnel, who will be responsible for turning in claims.
- ✓ Lower-tier Trade Partners (of any tier).

✓ It is recommended you discuss with your insurance agent(s) / broker(s) endorsing your coverage to be excess and contingent over the DCIP coverage for on-site activities. Many traditional insurance programs contain "CIP exclusions" which should be removed.

II. Definitions

The following definitions shall apply only for the purpose of this Project Insurance Manual.

Architect/Engineer
The firm or team of firms that provide design services, including preparation of the construction documents under a contract with an owner and/or a general contractor, depending on the circumstances.

Contractor
J.E. Dunn Construction Company or any subsidiary or affiliate, which has the primary Project contract with the Owner or other entity and which subcontracts some or all work under a Contract between the Contractor and Trade Partners.

Contract/ Contract Document(s)
A written agreement between the Contractor or its designee and a Trade Partner.

DCIP
The Dunn Controlled Insurance Program under which certain insurance coverage is provided and paid for by the Contractor.

DCIP Administrator
Lockton Companies, LLC
444 West 47th Street, Suite 900
Kansas City, Missouri 64112-1906
Phone: 816-960-9000
E-mail: WrapUpCIPCoordinators@lockton.com

Designated Representative
A representative approved by the Contractor and its Trade Partner(s) who is always readily accessible during working hours for the purpose of reporting claims and completing claim reports.

Enrolled Trade Partner
A Trade Partner that has a Contract with the Contractor or one of its Trade Partners for the Project and has been approved by the Contractor and accepted by the DCIP Administrator for participation in the DCIP. Approval requires the Trade Partner to have previously:

1. complied with all insurance requirements,
2. completed the enrollment process, and
3. received notification of enrollment.

Excess Liability
Any number of insurance policies that provide additional limits of coverage in excess of the limits provided by the primary policy.

Excluded Parties / Activities

Project participants that fall into the following categories:

1. Trade Partners performing hazardous material remediation and their lower tier Trade Partners.
2. Trade Partners performing structural demolition and their lower tier Trade Partners. Dismantling will be included into the DCIP if no wrecking balls, explosive or demolition that is structural in nature is performed)
3. Trade Partners performing blasting operations and their lower tier Trade Partners.
4. Elevator Trade Partners and their lower tier Trade Partners.
5. Architect, engineer, surveyor, or testing laboratory and their sub-consultants of any tier.
6. Vendors, suppliers, material dealers, haulers and/or independent haulers, and firms whose sole function is to transport, pick up, deliver, or carry materials, supplies, tools, equipment, parts, or other items or persons to or from the Project Site.

Insurer(s)

Workers' Compensation and Employer's Liability: Liberty Insurance Corp.
Commercial General Liability: Liberty Mutual Fire Insurance Co.
Excess Liability: National Fire & Marine Insurance Co.
Excess Liability: Ohio Casualty Insurance Co.
Excess Liability: ACE Property and Casualty Insurance Co.
Excess Liability: Endurance American Insurance Co.
Excess Liability: TBD
Excess Liability: TBD
Excess Liability: TBD
Excess Liability: TBD

Jobsite / Project Site

The location of work or operations performed by the Contractor or Trade Partner at the designated jobsite. Jobsite work also includes areas adjacent to Project Site or nearby described tracts of land where incidental operations are performed as specifically indicated in the Contract Documents.

This insurance does not apply to the operations of any Trade Partner(s) of any tier at their offices, factory, warehouse, or yards or otherwise not on the Project Site. The DCIP insurance coverage apply only to work performed at the Project Site.

Non-enrolled Trade Partner

A Trade Partner providing typical labor and material services but excluded from the DCIP (non-enrolled) and their Trade Partners of any tier.

Owner

Owner as defined in the Contract Documents

Payroll
Total earnings of the Trade Partner employees while working at the Jobsite in accordance with NCCI rules for Workers' Compensation payroll reporting.

Project
The construction project for which the Contractor has a written agreement with the Owner for the Work.

Project Insurance Manual
This document, also sometimes referred to as simply "manual."

Trade Partner
Persons or companies providing construction services and/or materials and equipment for the Project under written Contract with Contractor or under contract with a Trade Partner of any tier.

Trade Partner Supervisor
A Trade Partner's superintendent or primary supervisor for the Work on the Project who has the overall responsibility to see that the Work or Project is satisfactorily completed in accordance with the Contract.

Work
The construction and services, including all labor, material, equipment, and services to be provided, to complete the Trade Partner's obligations under the Contract Documents. Work may include areas adjacent to the Project Site or nearby described tracts of land where incidental operations are performed as specifically indicated in the Contract Documents.

III. Checklist for Enrollment

Forms required for enrollment prior to arrival on site. (Section XIII Forms)

- ❑ Trade Partner Enrollment Application.
- ❑ Estimated Exposure Worksheet.
- ❑ Certificate(s) of insurance.

Failure to complete the enrollment forms may result in one or more of the following:

- No admittance to jobsite.
- Progress payments withheld.
- No insurance coverage provided by the DCIP policies.
- Future Work opportunities on the Project could be jeopardized.

Each Trade Partner is responsible for assisting the DCIP Administrator in obtaining all completed enrollment forms from their lower tier Trade Partners.

Note: Online enrollment is available. A link, along with enrollment instructions will be provided by the DCIP Administrator.

Prior to starting work.

- ❑ Employees must complete project orientation and drug testing. (Section XII *DCIP Project Safety Program*).

Additional Form Completion Notes and Deadlines.

- ❑ **Payroll Reports due on the 10th day of the month following end of reporting period.**
  - Online reporting is encouraged. A link, along with reporting instructions, will be provided by the DCIP administrator.
  - Form (should online reporting be impractical): Payroll Reporting Form
- ❑ **An end of contract completion report due within 15 days of completion of Contract.**
  - Form: Notice of Completion.
- ❑ ***Updated*** **Trade Partner Enrollment Application(s) – specifically noting any new lower tier Trade Partners added after original enrollment.**
  - Form: Trade Partner Enrollment Application

EMAIL Enrollment Forms:

Attn: DCIP Coordinator
Lockton Companies, LLC
E-Mail: WrapUpCIPCoordinators@lockton.com

NOTE: Submission of an application for enrollment does NOT constitute acceptance into the DCIP. Enrollment is not complete until the DCIP Administrator has provided notice of enrollment in writing.

IV. Administrative Contacts

DCIP Administrator (Broker)	Chris Severe, Wrap-Up Administration Manager Lockton Companies, LLC 444 West 47th Street, Suite 900 Kansas City, Missouri 64112-1906 Phone: (816) 960-9786 **csevere@lockton.com**
Loss Control	James Robles, National Safety Director JE Dunn Construction Company 1601 South Mopac Expressway, Barton Skyway Tower, Suite 450 Austin, TX 78746 (512) 687-6146 **james.robles@jedunn.com**
Claims Consultant (Work Comp)	Travis Trautman, Claims Consultant Lockton Companies, LLC 444 West 47th Street, Suite 900 Kansas City, Missouri 64112-1906 (816) 960-9132 **ttrautman@lockton.com**
Claims Consultant (GL)	Holly Wright, Claims Consultant Lockton Companies, LLC 444 West 47th Street, Suite 900 Kansas City, Missouri 64112-1906 (816) 960-9429 **hwright@lockton.com**
Workers Compensation Claims	Makenzie Tetlow J. E. Dunn Construction Company 1001 Locust Street Kansas City, MO 64106 (816) 292-8787 **makenzie.tetlow@jedunn.com**
DCIP Director and Program Administrator	Beth Brown, Insurance Program Manager J. E. Dunn Construction Company 1001 Locust Street Kansas City, MO 64106 (816) 292-8732 **beth.brown@jedunn.com**

IV. Administrative Contacts

Contact for Filing Claims	Beth Brown J. E. Dunn Construction Company 1001 Locust Street Kansas City, MO 64106 (816) 292-8732 **claims@jedunn.com**

Audits
All payroll records and bidding records regarding insurance pricing related to this DCIP are subject to physical audit by the Contractor, DCIP Administrator or Insurer. Audits may be conducted after the anniversary date of Project commencement to verify the reported payroll. The Insurer reserves the right to audit Enrolled Trade Partners' payroll records and bid records related to insurance pricing at any time, subject to one week's written notice of such audit.

If an audit reveals costs which relate to onsite General Liability or Workers Compensation coverage, such costs shall be disallowed.

Returning to the Jobsite after Substantial Completion
The DCIP will provide General Liability and Excess Liability coverage for up to one year following substantial completion if the Trade Partner is required to return to the site. Such insurance only applies to issues with work performed under the original Contract. All other insurance of Trade Partner, including Workers Compensation, necessary when returning to the site shall be provided by Trade Partner.

If Trade Partner returns to the site for any other reason, including maintenance of installed equipment, the DCIP will not be applicable, and Trade Partner's own insurance coverage must respond to any occurrence or event. Please confirm with Contractor the appropriate insurance approach prior to returning to the Project.

Assignment and Transfer to Return of Premiums
Enrolled Trade Partners of any tier assign and transfer any and all rights, title, and all interest in any dividends, retrospective adjustments, participation payment and/or return of premiums, which may be payable to the Contractor under the DCIP. This "Assignment and Transfer to Return of Premiums" is in no way related to the Trade Partner's usual or traditional insurance programs.

Return to Work/Modified Work Program (RTW/MWP)
An Enrolled Trade Partner's failure to participate in the RTW/MWP as described in Section XII *DCIP Project Safety Program* will result in a liquidated damage assessment to the Trade Partner of $1,500 weekly as allowed by jurisdiction until such time as the injured worker is returned to work in either a modified duty position or full duty. The Enrolled Trade Partner agrees that such damage assessment will be issued through a unilateral deductive change order or other means approved by the Contractor.

Employee Safety Orientation
All project personnel shall complete the DCIP employee safety orientation as described in Section XII *DCIP Project Safety Program*. Failure to ensure that all personnel complete orientation may result in a liquidated damage assessment to the Enrolled Trade Partner of $1,500 per injured employee. The Enrolled Trade Partner agrees that such damage assessment will be issued through a unilateral deductive change order or other means approved by the Contractor.

Medical Managed Care
When a DCIP project is in a state with an optional medical management program, the Contractor will utilize such programs. Trade Partners will be required to utilize such programs, including, but not limited to, the Texas Healthcare Network.

VI. Insurance to be Furnished by Enrolled Trade Partners

Prior to enrollment and commencement of any Work on the Project, Enrolled Trade Partners, at their own expense, will furnish to the Contractor certificates of insurance evidencing insurance coverage as follows:

1. **Minimum Coverage and Limits.** Unless higher limits are required in the Contract Documents, Enrolled Trade Partners must procure, carry, and maintain policies of insurance meeting the requirements and minimum limits listed below. Where appropriate, the required insurance limits may be provided through a combination of primary and excess/umbrella policies.

   A. **OFFSITE Workers' Compensation and Employer's Liability Insurance.** Enrolled Trade Partners must obtain and maintain Workers' Compensation insurance for activities **not on the Jobsite** to cover the statutory limits and requirements of the Workers' Compensation laws of the state or states in which the Enrolled Trade Partner's Work is performed. Trade Partner Workers' Compensation insurance shall include coverage for all proprietors, partners, members, and executives. **Enrolled Trade Partners must carry this insurance regardless of eligibility for waiver or exemption of coverage under a state law.** Trade Partner's Workers' Compensation insurance shall provide coverage for every tier with whom Trade Partner has a contract to perform Trade Partner's Work on the project, including, but not limited to, lower tier Trade Partners, Professional Employee Organizations, staffing companies, or labor vendors where such entities are performing any labor or services on the project. Enrolled Trade Partners must also obtain and maintain Employer's Liability insurance, including Occupational Disease coverage, meeting the requirements, and written for the following policy limits:

      $500,000 Bodily Injury Each Accident
      $500,000 Each Employee
      $500,000 Aggregate – Policy Limit

      Coverage for Workers' Compensation and Employers Liability shall be written on an NCCI WC 00 00 00 coverage form or its equivalent.

      Such insurance must include "other states" insurance, to include all states not named on the declarations page of the insurance policy, except for the monopolistic states.

      Enrolled Trade Partners shall either provide Workers' Compensation coverage or require proof of Workers' Compensation coverage, from every person with whom it has a direct contract to perform construction work on the Project. The substance of this clause shall be included in all contracts the Enrolled Trade Partner enters with lower tier Trade Partners.

      NOTICE: Any out-of-state project participants of any tier are advised to contact the Workers' Compensation department in the state where the project is located regarding requirements and compliance with the local Workers' Compensation laws and regulations.

B. **OFFSITE Commercial General Liability Insurance.** Enrolled Trade Partners must obtain and maintain Commercial General Liability insurance for activities **not on the Jobsite** for the hazards of (i) construction operation, (ii) independent contractors, (iii) products/completed operations, (iv) explosion, collapse and underground (XCU), (v) broad form property damage, (vi) personal injury, (vii) premises operations, and (viii) broad form contractual liability. Such insurance must be written for the following policy limits:

$1,000,000 Per Occurrence, Combined Single Limit for Bodily Injury and Property Damage
$1,000,000 Personal & Advertising Injury
$2,000,000 General Aggregate (Per Project)
$2,000,000 Products/Completed Operations Aggregate

Enrolled Trade Partners must continue to maintain or renew annually Commercial General Liability, including products/completed operations, for a minimum of **the statute of repose for the state in which the project is located** from completion of the Enrolled Trade Partners' Work on-site, or as required by the Contract Documents, whichever is longer.

C. **Commercial Automobile Liability Insurance.** Enrolled Trade Partners must obtain and maintain automobile liability insurance covering all owned, non-owned and hired automobiles used in connection with the Enrolled Trade Partner's Work written for the following policy limits:

$1,000,000 Combined Single Limit for Bodily Injury and Property Damage per Accident

D. **Excess/Umbrella Liability.** Enrolled Trade Partners must obtain and maintain Excess/Umbrella Liability coverage on a form following primary policy form (for General Liability (**offsite**), Automobile Liability and Employers Liability) written for the following policy limits:

$2,000,000 Per Occurrence
$2,000,000 Aggregate Limit

Enrolled Trade Partners must continue to maintain or renew annually Excess/Umbrella Liability for a minimum of the statute of repose for the state in which the project is located from completion of Enrolled Trade Partners' Work on-site, or as required by the Contract Documents, whichever is longer.

E. **Design/Professional Liability.** If any design responsibility is included in the scope of Work of an Enrolled Trade Partner's Contract, the Enrolled Trade Partners, or its designer, must purchase and maintain or renew annually, for a period of **the statute of repose for the state in which the project is located** after the date of Final Completion, insurance covering claims arising out of the performance or furnishing of design professional services and for claims arising out of allegations of errors, omissions

or negligent acts in connection with the Work. The policy must be written for the following policy limits:

$1,000,000 Each Claim / $1,000,000 Annual Aggregate Limit

If the Trade Partner's Contract amount exceeds $25 million, Trade Partner shall evidence higher limits; Trade Partner shall confirm with Contractor the higher limits required.

F. **Commercial Watercraft and/or Aircraft Liability (if applicable).** If watercraft or aircraft are used in connection with the Enrolled Trade Partner's Work, Enrolled Trade Partners must obtain and maintain Commercial Watercraft and/or Aircraft Liability insurance covering the use of all owned, non-owned, and hired watercraft and/or aircraft written with a combined bodily injury or property damage limit of **$50,000,000**.

G. **Pollution Liability (if applicable to Trade Partner as defined in their Contract's scope of work).** The Contractor reserves the right to determine, on an individual Contract basis, whether pollution coverage must be carried by a Trade Partner and what limits will be required. If required, a Trade Partner must furnish insurance providing coverage for Pollution Liability in an amount not less than **$2,000,000 per occurrence / $2,000,000 Annual Aggregate** and complying with any other requirements of the Contract Documents. Such coverage shall be maintained or renewed annually for a minimum of the statute of repose for the state in which the project is located.

H. **Equipment Policy.** Trade Partners must provide property coverage for their equipment and tools brought onto the Project site. Trade Partners waive all rights and claims against Owner, Contractor, Architect and other trade partners of any tier for damages or losses to their personal property, including, without limitation, their tools, equipment, machinery, mobile construction equipment, vessels, scaffolding and temporary structures, whether owned, used, leased or rented by Trade Partner, however caused. Trade Partner's insurance policies shall provide for such waiver by endorsement or otherwise. Trade Partner shall be solely responsible for any loss or damage to their personal property, however caused, and shall have no right of recovery against Owner, Contractor, Architect and other trade partners for such loss or damage.

I. **Manned and Unmanned Aerial Services.** Before contracting for aerial services (such as manned or unmanned aerial photography), Enrolled Trade Partners must show that providers have aviation liability insurance coverage. A compliant certificate of insurance must be provided prior to executing an agreement or commencing services as follows:
   - Specifically states that JE Dunn Construction Company and the Owner of the Project are Additional Insureds with respect to Aviation / Aircraft Liability coverage.
   - Lists "JE Dunn Construction Company" as the certificate holder. JE Dunn will not accept a "generic," or blank, certificate.
   - Shows liability limits maintained on the specific and identified aircraft/drone meeting or exceeding the following:
     - **$1,000,000** per occurrence (with no per passenger or per person sublimit).

- Includes a statement indicating the policy has been endorsed to waive the insurer's rights to subrogate against JE Dunn and the Owner with respect to claims arising from the use of the aircraft/drone in performing work on behalf of JE Dunn.
- Includes a thirty (30) day written notice of cancellation in favor of JE Dunn.
- States the following on the certificate: "Coverage is primary and without right of contribution of any insurance maintained by JE Dunn Construction Company or [the Owner of the Project]."

Only FAA Part 107 certified and qualified pilots may fly drones on JE Dunn projects, and all required FAA and government waivers must be obtained prior to flight.

2. **Conditions**

A. **Insurance Primary.** Enrolled Trade Partners agree that all its policies of insurance are primary, non-contributory with and not in excess of the coverage of the insurance provided hereunder (whether primary, excess, or umbrella) or any other insurance available to Additional Insureds required by Contract.

B. **Severability of Interest.** Offsite General Liability, Offsite Excess/Umbrella Liability, and Pollution Liability, if any, must be written to provide that, inasmuch as this policy is written to cover more than one insured, all terms, conditions, insuring agreements and endorsements, with the exception of limits of liability, must operate in the same manner as if there were a separate policy covering each insured.

C. **Waiver of Subrogation.** All policies of insurance, where allowed by law and excluding Design/Professional Liability insurance, that are in any way related to the Work or services of the Project, including those that are secured and maintained by consultants and lower-tier Trade Partners, must include a provision providing that each party and its insurance carrier waive all rights of recovery under subrogation or otherwise against the Owner, Contractor, Architect (if required in the Contract Documents), Enrolled Trade Partners of any tier, and any other person or entity required by the Contract Documents, and all their assigns, subsidiaries and affiliates.

D. **Additional Insureds.** Trade Partner-furnished insurance (except Workers' Compensation Insurance and Design/Professional Liability, if applicable) must include Owner, Contractor, Architect (if required in the Contract Documents), and any other person or entity required by the Contract Documents, and all their assigns, subsidiaries and affiliates as additional insureds as their respective interest may appear ("Additional Insureds"). Additional Insured status must be provided for ongoing operations and completed operations. Additional Insured endorsements are subject to Contractor's review and approval if provided with certificates of insurance. Additional Insured endorsements may not contain time limitations shorter than required by Contract, nor may it alter/limit coverage provided to the Additional Insured. All limits of liability available to the Trade Partner shall inure to the benefit of the Additional Insureds.

E. **Cancellation Notice.** Policies shall not be canceled, non-renewed or materially changed without the Trade Partner providing sixty (60) days prior written notice to Contractor.

3. **Lower-Tier Trade Partners' Insurance.** A Trade Partner must require all lower-tier Trade Partners providing labor, equipment, materials, or services directly to Trade Partner in connection with the Trade Partner's Work to obtain, maintain and keep in force coverage in accordance with these insurance requirements. Trade Partner will not be excused from its obligations to cause such lower-tier Trade Partners to meet the insurance coverage requirements set forth under this section unless Trade Partner obtains in writing from Contractor a waiver, which must be effective only as to such requirements and for such lower-tier Trade Partners specifically identified therein.

4. **General Requirements**

A. Certificates of insurance complying with these requirements must be received by Contractor's DCIP Administrator prior to commencement of a Trade Partner's Work on the Project and will be a condition to any payment.

B. All insurance is to be issued by companies acceptable to Contractor but must be provided by companies having at least an A.M. Best rating of A-VI or better and authorized in the state in which the project is located.

C. Contractor reserves the right to require that Trade Partner provide certified copies of any and all insurance policies and endorsements.

D. Certificates of insurance are subject to the approval of Contractor. However, any acceptance of a certificate by Contractor does not limit or relieve Trade Partner of its obligations under the Contract or waive Trade Partner's obligation to maintain such insurance.

E. Contractor may take such steps as necessary to ensure Trade Partner compliance with the insurance requirements. In the event Trade Partner fails to obtain and maintain the policies of insurance meeting the requirements and minimum limits identified above, Contractor may obtain and maintain such coverage and recover the cost from Trade Partner.

F. The policies of insurance required above must contain no exclusion for work expressly within Trade Partner's scope of work (e.g., EIFS, asbestos, etc.) unless Trade Partner has a separate policy providing such coverage and provides evidence of such coverage with limits of liability comparable with above stated limits.

G. The required coverage and limits referred to and set forth herein do not affect or limit Trade Partner's liability with respect to its Contract and its performance or the coverage afforded to an Additional Insured.

VII. Insurance to be Furnished by Non-Enrolled Trade Partners

Non-enrolled Trade Partners and other Excluded Parties shall not be covered by insurance provided through the DCIP. Non-enrolled Trade Partners shall obtain and maintain all insurance coverage specified below until all their obligations have been discharged, including any warranty periods under their Contract. Other categories of Excluded Parties should refer to their specific Contract to ascertain their insurance obligations.

1. **Minimum Coverage and Limits.** Unless higher limits are required in the Contract Documents, Non-enrolled Trade Partners must procure, carry, and maintain policies of insurance meeting the requirements and minimum limits listed below. Where appropriate, the required insurance limits may be provided through a combination of primary and excess/umbrella policies.

   A. **Workers' Compensation and Employer's Liability Insurance.** Non-enrolled Trade Partners must obtain and maintain Workers' Compensation insurance to cover the statutory limits and requirements of the Workers' Compensation laws of the state or states in which the Non-enrolled Trade Partner's Work is performed. Trade Partner's Workers' Compensation insurance shall include coverage for all proprietors, partners, members, and executives. **Non-Enrolled Trade Partners must carry this insurance regardless of eligibility for waiver or exemption of coverage under a state law**. Trade Partner Workers' Compensation insurance shall provide coverage for every tier with whom Trade Partner has a contract to perform Trade Partner's Work on the project, including, but not limited to, lower tier Trade Partners, Professional Employee Organizations, staffing companies, or labor vendors where such entities are performing any labor or services on the project. Non-enrolled Trade Partners must also obtain and maintain Employer's Liability insurance, including Occupational Disease coverage, meeting the requirements, and written for the following policy limits:

      $500,000 Bodily Injury Each Accident
      $500,000 Each Employee
      $500,000 Aggregate – Policy Limit

      Coverage for Workers' Compensation and Employers Liability shall be written on an NCCI WC 00 00 00 coverage form or its equivalent.

      Such insurance must include "other states" insurance, to include all states not named on the declarations page of the insurance policy, except for the monopolistic states.

      Non-enrolled Trade Partners shall either provide Workers' Compensation coverage or require proof of Workers' Compensation coverage from every person with whom it has a direct contract to perform construction Work on the Project. The substance of this clause shall be included in all contracts Non-enrolled Trade Partners enter with lower tier Trade Partners.

      NOTICE: All out-of-state Trade Partners of any tier are advised to contact the Workers' Compensation department in the state where the project is located regarding requirements and compliance with the local Workers' Compensation Law and Regulations.

B. **Commercial General Liability Insurance.** Non-enrolled Trade Partners must obtain and maintain Commercial General Liability insurance for the hazards of (i) construction operation, (ii) independent contractors, (iii) products/completed operations, (iv) explosion, collapse and underground (XCU), (v) broad form property damage, (vi) personal injury, (vii) premises operations, and (viii) broad form contractual liability. Such insurance must be written for the following policy limits:

$1,000,000 Per Occurrence, Combined Single Limit for Bodily Injury and Property Damage
$1,000,000 Personal & Advertising Injury
$2,000,000 General Aggregate (Per Project)
$2,000,000 Products/Completed Operations Aggregate

Non-enrolled Trade Partners must continue to maintain or renew annually Commercial General Liability, including products/completed operations, for a minimum of the **statute of repose for the state in which the project is located** from completion of Non-enrolled Trade Partners' Work on-site, or as required by the Contract Documents, whichever is longer.

C. **Commercial Automobile Liability Insurance.** Non-enrolled Trade Partners must obtain and maintain automobile liability insurance covering all owned, non-owned and hired automobiles used in connection with the Non-enrolled Trade Partner's Work written for the following policy limits:

$1,000,000 Combined Single Limit for Bodily Injury and Property Damage per Accident

D. **Excess/Umbrella Liability.** Non-enrolled Trade Partners must obtain and maintain Excess/Umbrella Liability coverage on a form following primary policy form (General Liability, Automobile Liability and Employers Liability) written for the following policy limits:

$2,000,000 Per Occurrence
$2,000,000 Aggregate Limit

Non-enrolled Trade Partners must continue to maintain or renew annually Excess/Umbrella Liability for a minimum of the **statute of repose for the state in which the project is located** from completion of Non-enrolled Trade Partners' Work on-site, or as required by the Contract Documents, whichever is longer.

E. **Design/ Professional Liability.** If any design responsibility is included in the scope of Work of a Non-enrolled Trade Partner's Contract, Non-enrolled Trade Partners, or their designers, must purchase and maintain or renew annually, for a period of the **statute of repose for the state in which the project is located** after the date of Final Completion, insurance covering claims arising out of the performance or furnishing of design professional services and for claims arising out of allegations of errors, omissions or negligent acts in connection with the Work. The policy must be written for the following policy limits:

$1,000,000 Each Claim,
$1,000,000 Annual Aggregate Limit

If the Trade Partner's Contract amount exceeds $25 million, Trade Partner shall evidence higher limits; Trade Partner shall confirm with Contractor the higher limits required.

F. **Commercial Watercraft and/or Aircraft Liability (if applicable).** If watercraft or aircraft are used in connection with the Non-enrolled Trade Partners' Work, Non-enrolled Trade Partners must obtain and maintain Commercial Watercraft and/or Aircraft Liability insurance covering the use of all owned, non-owned, and hired watercraft and/or aircraft written with a combined bodily injury or property damage limit of **$50,000,000**.

G. **Pollution Liability (if applicable to Trade Partner as defined in their Contract's scope of work).** The Contractor reserves the right to determine, on an individual Contract basis, whether pollution coverage must be carried by a Trade Partner and what limits will be required. If required, a Trade Partners must furnish insurance providing coverage for Pollution Liability in an amount not less than **$2,000,000 per occurrence / $2,000,000 Annual Aggregate** and complying with any other requirements of the Contract Documents. Such coverage shall be maintained or renewed annually for a minimum of the statute of repose for the state in which the project is located.

H. **Equipment Policy.** Trade Partners must provide property coverage for their equipment and tools brought onto the Project site. Trade Partners waive all rights and claims against Owner, Contractor, Architect and other trade partners of any tier for damages or losses to their personal property, including, without limitation, their tools, equipment, machinery, mobile construction equipment, vessels, scaffolding and temporary structures, whether owned, used, leased or rented by Trade Partner, however caused. Trade Partner's insurance policies shall provide for such waiver by endorsement or otherwise. Trade Partner shall be solely responsible for any loss or damage to their personal property, however caused, and shall have no right of recovery against Owner, Contractor, Architect and other trade partners for such loss or damage.

I. **Manned and Unmanned Aerial Services.** Before contracting for aerial services (such as manned or unmanned aerial photography), Enrolled Trade Partners must show that providers have aviation liability insurance coverage. A compliant certificate of insurance must be provided prior to executing an agreement or commencing services as follows:
   - Specifically states that JE Dunn Construction Company and the Owner of the Project are Additional Insureds with respect to Aviation / Aircraft Liability coverage.
   - Lists "JE Dunn Construction Company" as the certificate holder. JE Dunn will not accept a "generic," or blank, certificate.
   - Shows liability limits maintained on the specific and identified aircraft/drone meeting or exceeding the following:
     - **$1,000,000** per occurrence (with no per passenger or per person sublimit).

- Includes a statement indicating the policy has been endorsed to waive the insurer's rights to subrogate against JE Dunn and the Owner with respect to claims arising from the use of the aircraft/drone in performing work on behalf of JE Dunn.
- Includes a thirty (30) day written notice of cancellation in favor of JE Dunn.
- States the following on the certificate: "Coverage is primary and without right of contribution of any insurance maintained by JE Dunn Construction Company or [the Owner of the Project]."

Only FAA Part 107 certified and qualified pilots may fly drones on JE Dunn projects, and all required FAA and government waivers must be obtained prior to flight.

2. **Conditions**

A. **Insurance Primary.** Non-enrolled Trade Partners agree that all its policies of insurance are primary, non-contributory with and not in excess of Contractor's primary, excess or umbrella insurance or any other insurance available to the Contractor, Enrolled Trade Partners, or Additional Insureds required by Contract.

B. **Severability of Interest.** General Liability, Excess/Umbrella Liability and Pollution Liability, if any, must be written to provide that, inasmuch as this policy is written to cover more than one insured, all terms, conditions, insuring agreements and endorsements, with the exception of limits of liability, must operate in the same manner as if there were a separate policy covering each insured.

C. **Waiver of Subrogation.** All policies of insurance, where allowed by law and excluding Design/Professional Liability insurance, that are in any way related to the Work or services of the Project, including those that are secured and maintained by consultants and lower-tier Trade Partners, must include a provision providing that each party and its insurance carrier waive all rights of recovery under subrogation or otherwise against the Owner, Contractor, Architect (if required in the Contract Documents), any Trade Partners of any tier, and any other person or entity required by the Contract Documents, and all their assigns, subsidiaries and affiliates.

D. **Additional Insureds.** Trade Partner-furnished insurance (except Workers' Compensation Insurance and Design/Professional Liability, if applicable) must include, Owner, Contractor, Architect (if required in the Contract Documents), and any other person or entity required by the Contract Documents, and all their assigns, subsidiaries and affiliates as additional insureds as their respective interest may appear ("Additional Insureds"). Additional Insured status must be provided for ongoing operations and completed operations. Additional Insured endorsements are subject to Contractors review and approval if provided with certificates of insurance. Additional Insured endorsements may not contain time limitation shorter than required by Contract, nor may it alter/limit coverage provided to the Additional Insured. All Limits of Liability available to the Trade Partner will inure to the benefit of the Additional Insureds.

E. **Cancellation Notice.** Policies shall not be canceled, non-renewed or materially changed without the Trade Partner providing sixty (60) days prior written notice to Contractor.

3. **Lower-Tier Trade Partners' Insurance.** A Trade Partner must require all lower-tier Trade Partners providing labor, equipment, materials, or services directly to Trade Partner in connection with the Trade Partner's Work to obtain, maintain and keep in force coverage in accordance with these insurance requirements. Trade Partner will not be excused from its obligations to cause such lower-tier Trade Partners to meet the insurance coverage requirements set forth under this section unless Trade Partner obtains in writing from Contractor a waiver, which must be effective only as to such requirements and for such lower-tier Trade Partners specifically identified therein.

   Trade Partner shall verify that their lower tier Trade Partners have met the Workers' Compensation insurance requirements, as required by law, including but not limited to collecting all required certificates of insurance.

4. **General Requirements**

   A. Certificates of insurance and endorsements complying with these requirements must be received by Contractor or Trade Partner prior to commencement of a Trade Partner's Work on the Project and will be a condition to any payment.

   B. All insurance is to be issued by companies acceptable to Contractor but must be provided by companies having at least an A.M. Best rating of A-VI or better and authorized in the state in which the project is located.

   C. Contractor reserves the right to require that Trade Partner provide certified copies of any and all insurance policies and endorsements.

   D. Certificates of insurance are subject to the approval of Contractor. However, any acceptance of a certificate by Contractor does not limit or relieve Trade Partner of its obligations under the Contract or waive Trade Partner's obligation to maintain such insurance.

   E. Contractor may take such steps as necessary to ensure Trade Partner compliance with the insurance requirements. In the event Trade Partner fails to obtain and maintain the policies of insurance meeting the requirements and minimum limits identified above, Contractor may obtain and maintain such coverage and recover the cost from Trade Partner.

   F. The policies of insurance required above must contain no exclusion for work expressly within Trade Partner's scope of work (e.g., EIFS, asbestos, etc.) unless Trade Partner has a separate policy providing such coverage and provides evidence of such coverage with limits of liability comparable with above stated limits.

   G. The required coverage and limits referred to and set forth herein do not affect or limit Trade Partner's liability with respect to its Contract and its performance or the coverage afforded to an Additional Insured.

VIII. Termination of DCIP and Alternate Insurance

In the event Contractor, for any reason, is unable to provide or, after commencement of Work, elects not to provide or to continue to provide the insurance as specified in Section IX of this Manual then, upon sixty (60) days written notice from Contractor or its designee, the following shall be required of each Enrolled Trade Partner:

The parties previously enrolled or to be enrolled in the DCIP shall obtain replacement insurance with the minimum coverage and limits set forth in Section VII or as otherwise required by Contractor, with insurers acceptable to Contractor. Such insurance shall be obtained before the DCIP coverage terminates, and Trade Partners shall provide Contractor with certificates of insurance or certified copies of policies prior to that date. Trade Partners shall also require all lower tier Trade Partners to obtain such insurance. Contractor shall issue the Trade Partner a change order which reflects the cost of the additional premiums realized by Trade Partner and its lower tier Trade Partners for such replacement insurance.

IX. DCIP Insurance Provided for Enrolled Trade Partners

Contractor will, at its sole expense, maintain the following types of insurance under the DCIP:

1. Workers' Compensation and Employer's Liability Insurance

Workers' compensation insurance will be provided through a National Council on Compensation Insurance (NCCI) standard policy coverage form of insurance in accordance with applicable laws of each state. In addition, Employer's Liability insurance, including Occupational Disease coverage, shall be provided with the following policy limits:

$1,000,000 Each Accident
$1,000,000 Each Employee
$1,000,000 Aggregate - Policy Limit

- ✓ No coverage is provided for any work at a location not included in the Jobsite.
- ✓ Workers' Compensation will be primary and non-contributory with respect to persons directly engaged in performance of Work included in the Jobsite.

Payrolls and losses will be filed with the appropriate Workers' Compensation rating bureau and will affect the experience modification of Enrolled Trade Partners.

The Enrolled Trade Partner shall advise its current carrier(s) to exclude payroll for the Work at this Jobsite.

2. Commercial General Liability

Coverage is written on an "occurrence" basis. The policy includes:

- ✓ Premises and Operations coverage.
- ✓ Completed Operations coverage based on the relevant state statute of repose, in effect as of the date of project completion.
- ✓ Personal Injury Liability.
- ✓ Contractual coverage for liability assumed under an insured contract as defined by the insurance policy.
- ✓ Broad form property damage.
- ✓ Independent contractors.
- ✓ Explosion, Collapse, Underground (XCU).
- ✓ Employees are insureds under the policy.
- ✓ Separation of insureds, as defined by the standard Insurance Service Office (ISO) policy form.
- ✓ Stop Gap coverage, where applicable.

Policy limits:

$5,000,000 Each Occurrence
$10,000,000 Products/Completed Operations Aggregate
$10,000,000 General Aggregate

The limits of liability are shared by Contractor and all Enrolled Trade Partners. Aggregates are per project. General Aggregate limits shall be reinstated annually.

The policy will be primary for claims arising from Work under Contract at the Jobsite and noncontributory with any other insurance carried by the Trade Partner for Work performed at the Jobsite.

Specific exclusions:

1. Engineers and Architects Professional Liability exclusion (CG2280)
2. Absolute Pollution exclusion
3. Asbestos exclusion
4. Fungus/mold exclusion

Deductible

Trade Partners will be responsible for payment of a deductible up to $2,500.00 per occurrence for general liability property damage claims. Such deductibles may be collected through the issuance of a unilateral deductive change order.

Refer to policy for additional terms, exclusions, and conditions. Policy is available from the Contractor or DCIP Administrator upon request.

3. Excess Liability

Coverage is provided with combined limits of $125,000,000 per occurrence, $125,000,000 General Aggregate, and $125,000,000 Completed Operations. The limits of liability are shared by Contractor and all Enrolled Trade Partners. Aggregates are per project. General Aggregate limits shall be reinstated annually. Limits may be revised for different phases of the Project.

Refer to policy for additional terms, exclusions, and conditions. Policy available from the DCIP Administrator upon request.

DCIP Insurance Carriers

Workers' Compensation and Employer's Liability: Liberty Insurance Corp.
Commercial General Liability: Liberty Mutual Fire Insurance Co.
Excess Liability: National Fire & Marine Insurance Co.
Excess Liability: Ohio Casualty Insurance Co.
Excess Liability: ACE Property and Casualty Insurance Co.
Excess Liability: Endurance American Insurance Co.
Excess Liability: TBD
Excess Liability: TBD

Excess Liability: TBD
Excess Liability: TBD

Providing the insurance described in this Section IX shall in no way relieve, limit, or be construed to relieve or limit the Trade Partners of any responsibility or obligation whatsoever otherwise imposed by their Contract or by law.

Any type of insurance or increase of limits not described above which the Trade Partner requires for its own protection or on account of statute shall be its own responsibility and at its own expense.

X. Payroll Reporting

A payroll reporting form must be completed each month by Enrolled Trade Partners and any lower tiers of Trade Partner(s) on the Jobsite for each Contract awarded, including zero payroll if applicable, until completion of the Work under each Contract. The completed form shall be sent to the DCIP Administrator by the 10th day of each month, or payments to Trade Partners may be withheld. The Trade Partner is responsible for enforcing the submission of all forms by its lower tier Trade Partner(s).

Online payroll reporting is encouraged. A link, along with reporting instructions, will be provided by the DCIP Administrator. If online reporting is impractical, a payroll reporting form must be submitted. Computer-generated payroll reports are acceptable if similar information is provided.

Payroll Reporting Form Instructions

1. **Reporting Period:** Enter the reporting period for which this report is supplying payroll information.
2. **Company Name:** Enter Trade Partner's name.
3. **Workers' Compensation Class Code:** List Trade Partner's Workers' Compensation class code(s). This information can be obtained from Trade Partner's Workers' Compensation policy, its insurance agent, or the information supplied on the Estimated Exposure Worksheet. The form will need to be revised if there are additional class codes listed on the monthly reporting form that were not listed on the Estimated Exposure Worksheet.
4. **Man-hours and Payroll:** List man-hours and payroll for each class code. List straight time **and** overtime. List one cumulative total for all employees who fall under each class code. There is no need to break out figures on a per employee basis.
5. **Sign and Date Form.**

Other Instruction and Requirements

Audit

All payroll records related to this DCIP are subject to physical audit by an auditor representing the Contractor, DCIP Administrator or Insurer. Audits will also be scheduled shortly after the anniversary of Project commencement to verify the prior years reported payroll. The Insurer reserves the right to audit Enrolled Trade Partners' payroll records at any time, subject to one week's written notice of such audit.

Employer Verified Payroll

DCIP payroll reports must reflect accurate payroll certified by the Trade Partner. Signature verification by your controller or another company officer is adequate to certify your payroll report.

Class Codes

Trade Partner shall utilize the NCCI classification for assigning Workers' Compensation codes for each of its employees. Any questions regarding classification should be directed to the DCIP Administrator.

Multiple Contracts

If a Trade Partner has multiple Contracts for work on a Jobsite, that Trade Partner shall complete a separate Payroll Reporting Form for each Contract.

DCIP Payroll

Reported payroll shall include the total payroll and hours split out by Workers' Compensation Class Code for all employees working on the Jobsite based on the NCCI rules for payroll inclusion.

Overtime Payroll

Earnings for any overtime work should be reported at the straight-time rate: overtime hours multiplied by straight-time hourly wage. Do not include the premium portion of the wage paid to the employee. Overtime means those hours exceeding 8 hours worked each day, 40 hours in any week, or work on Saturdays, Sundays, or holidays, but only when there is an increase in the hourly rate to work such hours.

SAMPLE CALCULATION

	Hours	Wage Rate	Payroll	DCIP Payroll
Straight Time	40.00	$10/hr.	$400	$400
Overtime	20.00	$15/hr.	$300	$200
TOTAL	**60.00**		**$700**	**$600**

Records Retention

Payroll records (related to Jobsite Work) for employees covered by the DCIP should be maintained separately from all other Enrolled Trade Partner payroll records. These records shall be retained for three years following completion of your Work under each Contract with the Contractor, or for a period specified in your Contract, whichever is longer.

Report Due Date

Regardless of your accounting period, payroll reports (DCIP Payroll Report or equivalent) are due by the 10th day of each month.

If online reporting is impractical, payroll reporting forms must be submitted to:

Lockton Companies, LLC
444 West 47th Street, Suite 900
Kansas City, Missouri 64112-1906
Attn: J.E. Dunn DCIP Administrator
Phone: (816) 960-9000
E-mail: WrapUpCIPCoordinators@Lockton.com

Failure to provide reports by the due date will cause your payments to be delayed.

Please Note: All Enrolled Trade Partners must report man-hours and payroll. This includes time and materials, GMP, and lump sum type contracts.

1. **Workers' Compensation Claims:** Enrolled Trade Partner personnel **must** follow these procedures whenever an employee is involved in **any** accident or occurrence resulting in an injury, or whenever complaints of illness or discomfort arise while working on the Project Site.

   A. Immediately contact the Trade Partner's supervisor to report **all** incidents. The Trade Partner's supervisor shall contact the Project safety office to arrange for care. If emergency transportation is required, call the designated emergency number **first**, and then immediately call the Project safety office to report the injury.
   B. Once serious incidents are under control, the Workers' Compensation Report of Injury form must be completed, and a copy sent to the Project safety office for all incidents. (Section XIII *Forms*)
   C. All incidents shall be reported immediately to the Project safety office of the Contractor and any required accident report forms completed. The Project safety office shall review the report for accuracy within 24 hours. The report shall be forwarded by the Project safety office to the DCIP Claim Resource Specialist for transmittal to the Insurer.
   D. OSHA 300 Log - OSHA requires employers to maintain a log of workplace injuries based on their guidelines defining a reportable incident/injury. It is the responsibility of the Trade Partners to maintain this log and comply with all other applicable regulations. The Project safety office will maintain a cumulative log of all injuries on the Project site.
   E. A supply of pre-printed accident/incident forms shall be maintained at the Project safety office, at the Contractor's designated site, or on the Project intranet/website.
   F. Injured employees must be returned to work or services when released by the medical provider for modified duty, except as otherwise authorized by the Contractor. Such modified duty shall be at pre-injury wage rate, except as authorized by the Contractor or as otherwise controlled by state statute. (Reference Section XII *DCIP Project Safety Program*, at Section 6 *Return to Work/Modified Work Program*.)
   G. Non-enrolled Trade Partners must notify the Contractor of any incident on the Project Site. Claims should be reported to the respective Trade Partner's workers compensation insurance carrier.

2. **General Liability Claims – Enrolled Trade Partners:** It is the responsibility of all Enrolled Trade Partners to notify the Contractor of all claims **within 24 hours** of the occurrence by following the procedures below. **Failure to timely notify Contractor of any and all claims could be grounds for denial of coverage.**

   A. Immediately notify the Contractor's superintendent or project manager of any property damage or injury involving a third party.
   B. An Enrolled Trade Partner shall complete a Claim Reporting Form (Section XIII *Forms*) and email to claims@jedunn.com **within 24 hours** of the occurrence.
   C. In the event the Trade Partner is served with a summons or other legal notice involving a claim of personal injury or property damage to a third party related to the Project, a copy of the summons, complaint, or other legal notice shall be forwarded **within 24 hours** of its receipt to the Contractor's project manager with a PDF copy

to claims@jedunn.com. If not previously submitted, a Claim Reporting Form should also be completed, as described above. **Delay in reporting a summons or other legal notice could result in a default judgement against the Trade Partner.**

D. Trade Partners shall assist in completing any paperwork (including the Claim Reporting Form), undertaking any investigation of the injury or property damage, and cooperating in any and all activities to bring a claim to resolution. Trade Partner should be prepared to provide:
   - Date, time, and location of the occurrence
   - Name, address and phone number of the injured person(s) and/or owner(s) of the damaged property
   - Description of the damaged property, if any
   - Name, address and phone number of witness(es).

3. **General Liability Claims – Non-enrolled Trade Partners:** Non-enrolled Trade Partners shall report any property damage or injury involving a third party directly to their own insurance carrier/broker by following its usual procedures. Non-enrolled Trade Partners shall likewise notify Contractor's superintendent or project manager of any such occurrence and shall, on request, confirm to Contractor that satisfactory reporting to the insurance carrier has occurred.

4. Enrolled Trade Partners, on a quarterly basis, may request a reporting of the participant's respective claims details and loss information. An Enrolled Trade Partner may submit their request by email to claims@jedunn.com.

5. Joint Representation. When legal representation is required by two or more parties insured under the DCIP, absent an actual conflict of interest between such insureds, the Insurer shall have the right to retain one attorney to represent all such insureds in any action or proceeding in which more than one insured is named. An insured has an actual conflict, and is entitled to separate counsel, only in the following circumstances:

   - The DCIP Insurer has issued a reservation of rights to one, but not all, insureds joined in such action or proceeding;
   - A DCIP Insurer's reservation of rights issued to one insured contains reservations different than a reservation issued to another insured(s) joined in such action or proceeding; or
   - Adequate limits of DCIP insurance are not available for the damages sought in such action or proceeding; or
   - As addressed by statute.

   An insured with an actual conflict of interest may waive such conflict and agree to joint representation. By enrolling in the DCIP, an insured shall be deemed to waive any conflict which does not meet the above definition of an actual conflict, and all insureds agree to perform any additional steps necessary to ensure the waiver of any conflict which does not meet the above definition of an actual conflict.

6. Waiver of Insured Cross-Claims. By enrolling in the DCIP, an insured agrees they are not entitled to make a cross-claim (or any similar legal claim) against another insured if that cross-claim arises from "bodily injury," "property damage," or "personal injury" to which the DCIP applies and for which there is adequate limits of insurance to pay damages in any such proceeding. The insureds agree to perform any additional acts required to initiate the waiver of any such claim. This paragraph does not apply to any suit or claim necessary to trigger DCIP coverage.

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6.0 RETURN-TO-WORK/MODIFIED WORK PROGRAM (RTW/MWP)

Note: In addition to the safety information referenced herein, other Project-specific safety requirements have been or may be developed by the Owner and Contractor – such requirements shall also be applicable to all Trade Partners, suppliers, and other related parties at the Project Site.

1.0 INTRODUCTION & POLICY STATEMENT

The Project team is committed to providing each worker a safe and healthful workplace. To accomplish this objective, it is necessary that an effective and understandable safety and health policy be defined and enforced consistent with nationally recognized standards.

Successful safety performance requires the combined efforts of the Contractor, Trade Partners, all Project participants, and all employees. It is very important that the team addresses this objective in order to maintain the safest and most successful Project in the construction industry.

The Contractor's national Safety and Health Manual can be found at http://sms.jedunn.com/safety_program. Adherence to the Safety and Health Manual **is a requirement** for all partners on all of Contractor's projects.

Additionally, the Contractor and the DCIP Administrator have prepared the DCIP-specific Project Safety Requirements. The Safety and Health Manual, as well as the DCIP-specific Project Safety Requirements and any Site-Specific Safety Plan, are binding terms for all Enrolled and Non-enrolled Trade Partners. The Contractor's agreement with the owner may also include specific safety requirements. **Together, these items comprise the core of the total "Project Safety Program" for the DCIP Project.**

It is a requirement of all Trade Partners that all components of the Project Safety Program be included in all Project contracts of any tier.

It is not the intention of the Project Safety Program to be all-inclusive. It is, however, an attempt to provide the Trade Partners and their employees with basic safety and health requirements as well as to provide requirements that may be in addition to Occupational Safety and Health Act (OSHA) regulations. It is incumbent on all parties to follow the best and highest safety practices in all aspects of their activities.

In the event of a conflict and/or ambiguity between various statutes, law, regulations or standards and this Project Safety Program, interpretation by the Project Safety Manager will be final.

1.1 Definitions

The definitions set forth in Section II of this manual shall apply to the Project Safety Program. The following definitions also apply:

Project Safety Program: shall be comprised of the Contractor's national Safety and Health Manual, the DCIP-specific Project Safety Requirements, any Site-Specific Safety Plan, and any aspects of the owner agreement. It also includes OSHA regulations, other applicable regulations (federal, state or local), and any other provisions necessary to operate and enforce the program.

Contractor's Representative: the person(s) designated by the Contractor as having the responsibility to monitor the Project Safety Program.

Project Safety Manager: A specific safety specialist assigned to the Project; may be one and the same as Contractor's Representative.

Trade Partner Safety Representative: the individual on the payroll for each Trade Partner responsible for monitoring compliance with the Project Safety Program and the respective Trade Partner's own safety plan.

Note: Capitalized terms used in this Section XII but not defined herein may refer to terms used in Contractor's national Safety and Health Manual or may refer to standard terms recognized in the industry. Any questions regarding such terminology shall be directed to Contractor's Representative.

2.0 RESPONSIBILITIES

Trade Partners shall comply with the Project Safety Program. Each Trade Partner shall retain primary responsibility for its Work and its employees. Each Trade Partner shall also be responsible for its compliance with the Project Safety Program by its lower tiers.

The Trade Partner shall communicate the contents of this Project Safety Program to their workers and provide regular updates. Trade Partner personnel, suppliers, consultants, agents, and visitors shall, at the Project Site, observe and comply with the strictest provisions of all federal, state, or local safety, fire, and environmental laws, rules, and regulations and as otherwise prescribed by the Project Safety Program or any other legal requirements.

Failure to comply with any part of the Project Safety Program will be considered noncompliance with the Contract and may result in remedial action, including withholding of payment of any sums due and/or removal of the Trade Partner from the Project Site.

Trade Partners shall take all necessary precautions to protect the public from any hazards involving safety and health arising from their Work. All construction activities shall be isolated from the public to the greatest extent possible.

Trade Partners will be responsible for the payment of all fines and/or claims for damages levied against them for safety or environmental violations or deficiencies related to the conduct of their employees or Work.

The Contractor shall have full authority to stop work in progress, when necessary, to enforce mandatory safety requirements. The Contractor shall not be liable for any damages experienced by Trade Partner due to stoppage. No part of the time lost due to any such stop work order shall be made the subject of a claim for extension of time or increased costs owed to any Trade Partner.

If at any time the Trade Partner is performing Work under more than one contract at the Project Site or intends to or does have fifty (50) or more employees on site ("High employment"), such Trade Partner will have a full-time safety representative with no other craft or supervisory duties assigned. This requirement is to ensure the safety of its operations and to protect all of the stakeholders during the period of such High employment. If the Trade Partner does not comply with this requirement, Contractor may elect to supplement this personnel resource at Trade Partner's expense and without authorization from Trade Partner.

Each Trade Partner Safety Representative shall have the experience, ability, and authority to act on behalf of the respective Trade Partner and its lower tiers regarding matters of safety on the Project. Costs of Trade Partner's participation are the responsibility of the Trade Partner. Selection of the Representatives is subject to approval by Contractor, and candidate resumes must be submitted in a timely manner for review. Each Trade Partner Safety Representative will become a member of the Project safety committee(s) and will be expected to attend all committee meetings called by the Contractor. The Trade Partner agree to make their designated Trade Partner Safety Representative available for additional specialized safety training over and above the normal duties stated above, as deemed appropriate by the Contractor. If the Trade Partner does not comply with the safety requirements, Contractor may elect to supplement safety personnel resources at Trade Partner's expense and without authorization from the Trade Partner.

Trade Partners shall provide the following items before commencement of Work and/or throughout the life of the Project:

- A copy of its corporate safety and health program/manual;
- A copy of its project-specific safety plan;
- A list of "competent personnel" designated by the Trade Partner (on company letterhead);
- Job hazard analyses (JHA) that define the scope of work, activities and risks involved with the scope of work, and the methods Trade Partner will use to mitigate and eliminate such risks (the JHA should be available prior to preinstallation meeting);
- Confirmation of compliance with daily job safety analyses (JSA);
- Written Hazard Communication Program;
- Written Housekeeping Plan;
- Written Cord Management Plan;
- Written Exposure Control Plan for Silica, when applicable;
- Acknowledgement and implementation plan for a "Ladders Last Policy";
- Heat Illness Prevention Plan;
- A list of chemicals used on the Jobsite in the performance of the Work;
- Copies of Material Safety Data Sheets (MSDS) for each chemical used on the Jobsite;
- Documentation of required training for Project employees as it applies to their Work;
- Inspection process and periodic inspections of the Work area;
- Copies of accident investigations (within 24 hours of occurrence) for any incident or near miss occurring at the Project Site;
- Incident log of occupational injuries and illnesses that occur on the Jobsite, including a 300 log, when requested;
- Records of the disposal of chemicals/materials or any other hazardous wastes used on the Jobsite in the performance of the Contract;

- Proof of compliance with storm water discharge environmental regulations (the Contractor, at its option, may choose to create and maintain this documentation for the Trade Partners); and
- Leading and Lagging Safety Indicators reported electronically through the Contractor's Project intranet or website (weekly requirement).

Employees are prohibited from carrying weapons or ammunition to the Project Site or carrying weapons while performing Work on the Project or attending Project-sponsored activities.

Trade Partner further agrees to comply with any postings or notices placed on site by the Contractor's representative regarding safety, security, or weapons.

The Contractor has adopted a policy of a drug free work site on the Project. This may include, but is not limited to, pre-work, just cause, random, general or shift, and post-accident drug screening as required by the Contractor. Employees are prohibited from use and possession of alcoholic beverages or drugs (other than prescription) while performing Work on the Project Site or attending Project-sponsored activities.

All Trade Partner employees must provide the Contractor's Representative satisfactory evidence of a negative drug screen at the designated clinic before being allowed to work on the Project. If the Trade Partner utilizes a clinic or service other than the one designated by the Contractor, the testing methods, procedures, protocols, and reporting procedures utilized will be subject to approval by the Contractor. The negative drug screen shall be provided no later than at the time of safety orientation of the employee and prior to commencing work. Employee drug screening shall have been performed within the 45 days prior to the employee's start date on the Project. Worker participation in a bona fide substance abuse program may, subject to approval by the Contractor and Insurer, meet the requirement for pre-work drug testing. Whenever an employee sustains a work-related injury, a drug and alcohol test is necessary. Such tests will be administrated at the time an injured worker receives medical treatment resulting from the incident. Testing is not limited to the injured employee but may be required of any person(s) involved in the incident as required by the Project Safety Manager. The cost of the testing is the responsibility of the Trade Partner.

All unauthorized personnel (individuals on site without an identification badge/sticker/beacon) wishing to enter the Project Site must have the permission of the Contractor or its designee. Permission will only be given upon verification that the unauthorized personnel will always be accompanied by an authorized employee.

The Trade Partner shall provide each worker on the Jobsite the proper tools and equipment to safely perform his/her job. Additionally, all personal protective equipment (PPE) shall meet all Owner and Contractor requirements. Such PPE shall be supplied, inspected, and maintained by the Trade Partner at Trade Partner's expense. Contractor has adopted a glove policy and culture on this Project. Trade Partners must provide adequate and appropriate hand protection (i.e., gloves) for each employee based on task specific risks. At a minimum, gloves must meet a cut level protection equivalent to an ANSI 2/EN 3 as it pertains to a scale of 1-5. An appropriate inventory of gloves shall always be provided and maintained by each Trade Partner.

Trade Partners must implement a Ladders Last Policy approach in accordance with Contractor's national Safety and Health Manual. Ladders Last seeks to mitigate and eliminate the use of ladders,

including step ladders, where practicable. The intent is to eliminate work at heights, substitute (using ladder alternative options) with lifts/scaffolding equipment and choose a platform ladder with defined safety precautions as a last option(must include risk assessment).

In addition to task-specific safety training, each Trade Partner shall conduct weekly toolbox talks. Safety meetings shall be documented by subject, date and time, and attendee names. A copy of the toolbox talk must be transmitted weekly to the Contractor's Representative. If a limited number of onsite employees for the Trade Partner makes a talk impractical, any onsite employees shall attend the weekly toolbox talk scheduled by the Contractor. Contractor reserves the right to call additional safety meetings, to include safety stand-downs or re-focus meetings, when conditions warrant. These safety meetings will be at the expense of Trade Partner. Training materials are available through trade associations, insurance companies, and the Project Safety Manager.

Trade Partners shall comply with all floor hole and opening requirements set-forth in Contractor's Safety and Health Manual. All protective covers shall be mechanically fastened to floor or structure, and floor hole cover removal permits are required when removing any protective covers.

Any Trade Partner that is involved in "high hazard" work will be required to provide notification of the start of such activity to the Project Safety Manager prior to the commencement of such activity. Such scopes and activities include but are not limited to critical lifts with cranes, hot work, trenching and excavations, work at heights, steel erection, precast erection, work near overhead power lines, utility tie-ins, pneumatic tests, and confined space entry work.

The Contractor may request the removal from the Project of Trade Partner or lower tier Trade Partner personnel, management, supervision, or craft for noncompliance with the Project Safety Program or non-correction of hazards. This request for removal may also apply to any individual who, in the opinion of the Contractor and the Contractor's Representative, exhibits an unsafe attitude. The Contractor and/or the Contractor's Representative shall not be liable for any damages experienced by any Trade Partner due to removal of Trade Partner's personnel, management, supervision, or craft from the Project Site.

Trade Partners are required to discipline employees who violate established rules and regulations of the Project. The Trade Partner's disciplinary procedures will meet or exceed those provided for in the Project Safety Program.

Trade Partners, without exception, must comply with Contractor's safety and health policies as outlined in the Safety and Health Manual, with special emphasis and actions placed on fall protection, falling object/overhead protection, floor holes and openings, mobile elevated work platforms, precast erection and steel erection.

3.0 HAZARD NOTIFICATION

Imminent danger situations brought to the attention of the Contractor shall be corrected immediately. Other unsafe conditions will be conveyed via a written hazard alert. The Trade Partner, within one (1) working day (24 hours) of notification of the unsafe condition or hazard alert, must correct the hazard(s) and/or unsafe act(s) or remove defective equipment from the Project Site. Upon expiration of the period, the Contractor may stop work until the hazard is abated. Lost time, lost productivity, or other expenses as a result of this hazard and/or safety violation will be at the sole cost of the Trade

Partner.

Trade Partners encountering safety hazards beyond their control or expertise to correct must notify the Contractor of their concerns. Failure on the part of the Contractor to observe or deter unsafe work practices shall in no way relieve any Trade Partner of its safety responsibilities. Lack of cooperation in complying with these requirements will be considered non-compliance with the Contract and may result in a remedial action including, but not limited to, withholding of payments due the Trade Partner or correction of the hazard by the Contractor with the cost deducted from the Trade Partner's Contract.

4.0 EMPLOYEE SAFETY ORIENTATION

All Trade Partners shall require their employees to complete a project safety orientation prior to being able to enter the Project Site. The Contractor will provide general safety orientation to all workers before the start of their first day. Safety orientation for employees will be approximately two hours in length or as deemed appropriate by the Contractor's Representative. Each Trade Partner will be responsible for contacting the Contractor's Project safety office to schedule each worker for this training. Training shall include: introduction to the project safety plan, JSA requirements (daily), proper use of personal protective equipment requirements (such as hard hats, safety glasses with rigid side shields (z87.1), hand protection (100% gloves), hearing protection, foot protection, and other clothing requirements), fall protection, falling object protection, floor hole/openings, emergency preparedness, and applicable hazard communication awareness. It is the Trade Partners' responsibility to provide task specific safety training for their workers. An identification badge/sticker or beacon will be issued to all individuals who have completed safety orientation and have provided evidence of a negative drug screen. All personnel who have access to the Project Site are required to wear the identification. The Contractor will monitor employees for proper identification.

Failure to ensure all personnel complete orientation will result in a liquidated damage assessment of $1,500 per untrained employee. Such assessment will be issued through a unilateral deductive change order or other means approved by the Contractor.

5.0 ENFORCEMENT PROGRAM

To ensure compliance, the Contractor will place all workers on site under a three-step enforcement program consisting of the following: verbal warning for the first violation; written warning for a second violation; and revocation of eligibility to work on the Project Site for a third violation. However, episodes of gross misconduct by an employee for any reason may result in immediate disciplinary action up to and including permanent removal from the Project Site.

6.0 RETURN-TO-WORK/MODIFIED WORK PROGRAM

Enrolled Trade Partners and their lower tier Trade Partner(s) shall implement a "Return-to-Work/Modified Work Program" (RTW/MWP) for any employees injured at the Project. Enrolled Trade Partners shall initiate the RTW/MWP when the injured employee is released by the medical provider for modified duty whether or not a job is immediately available and whether or not such work is available on this Project, except as otherwise authorized by the Contractor. The RTW/MWP process includes, but shall not be limited to, the following:

- The Enrolled Trade Partner shall communicate to the injured employee and treating physician the RTW/MWP program and facilitate the RTW/MWP process with the treating physician and the injured employee.
- The RTW/MWP assignments must comply with all medical limitations defined by the treating physician so that new, additional, or aggravation injuries do not occur.

- The Enrolled Trade Partner must provide the Contractor copies of the injured employee's return to work notes, including description of the duty assignment, length of the modified duty, and restrictions.
- Such modified duty shall be at the employee's pre-injury wage rate, except as authorized by the Contractor or as otherwise controlled by statute.

Failure to participate in the RTW/MWP will result in a liquidated damage assessment to the Enrolled Trade Partner of $1,500 weekly until such time as the injured worker is returned to work in either a modified duty position or full duty. The Enrolled Trade Partner agrees that such assessment will be issued through a unilateral deductive change order or other means approved by the Contractor.

XIII. Forms

A. Trade Partner Enrollment Application

B. Estimated Exposure Worksheet

C. Assignment and Transfer Form

D. Certificate of Insurance – Enrolled

E. Certificate of Insurance – Non-enrolled

F. Payroll Reporting Form

G. Notice of Completion

H. Workers' Compensation Report of Injury

I. Claim Reporting Form

NOTE: Online enrollment is available. A link, along with enrollment instructions, will be provided by the DCIP Administrator. If online enrollment is impractical, a Trade Partner Enrollment Application, Estimated Exposure Worksheet, and Assignment & Transfer Form must be emailed to the DCIP Administrator.

Dunn Controlled Insurance Program
Trade Partner Enrollment Application – WC/GL Program

Prime Trade Partner
Project Name: _____

Company Name: _____

Enrollment Contact: _____ _____ _____
Name *Phone* *Fax*
E-mail Address: _____

Company Address: _____
Street Address
_____ _____ _____
City *State* *Zip*
Federal Employer's Identification Number (FEIN): _____ Contract Value: _____

Scope of Work: _____ Estimated Start Date: _____

Who holds your Contract (J.E. Dunn or other)? Specify: _____

If you are subcontracting any of your work, please fill out the following. Please keep in mind YOU will be held responsible per contract for notification of any and all additional subcontracts issued under YOU. This means at any tiers.

LOWER TIER TRADE PARTNER ONE:
Company Name: _____

Enrollment Contact: _____ _____ _____
Name *Phone* *Fax*
E-mail Address: _____

Company Address: _____
Street Address
_____ _____ _____
City *State* *Zip*
Federal Employer's Identification Number (FEIN): _____ Contract Value: _____

Scope of Work: _____ Estimated Start Date: _____

LOWER TIER TRADE PARTNER TWO:
Company Name: _____

Enrollment Contact: _____ _____ _____
Name *Phone* *Fax*
E-mail Address: _____

Company Address: _____
Street Address
_____ _____ _____
City *State* *Zip*
Federal Employer's Identification Number (FEIN): _____ Contract Value: _____

Scope of Work: _____ Estimated Start Date: _____

If you have additional lower tier trade partners, please submit them on an attached sheet with this application.

Signature of Company Officer: _____ Date: _____

This form must be e-mailed to:

LOCKTON COMPANIES, LLC
Attn: Dunn DCIP Administrator
444 West 47th Street, Suite 900
Kansas City, MO 64112-1906
Phone: 816-960-9000
E-mail: WrapUpCIPCoordinators@Lockton.com

Estimated Exposure Worksheet

Company Name: _____

Who holds your Contract (JE Dunn or other)? Specify: _____

Bid Package: _____

Trade Partner EMR: _____

Project/Phase Name: _____ Contract Value: $ _____

Payroll Information

Labor Classification	WC Class Code	Estimated Man-Hours	Estimated Payroll

Assignment and Transfer

Agreement

The undersigned hereby warrants the accuracy of payroll/contract information provided and agree that the Contractor, its insurance representative, and/or the DCIP Insurer may audit the Trade Partner's records to confirm the accuracy of payrolls/contract amount.

Contract price and assignment of return premium: The Contractor, at its sole expense, will furnish the DCIP coverages listed for the benefit of all enrolled Trade Partners. In consideration of the Contractor providing DCIP coverages, the Trade Partner and its lower tier Trade Partners will:

- Bid contracts without General Liability and Workers' Compensation insurance costs included.
- Assign to the Contractor all return premiums, dividends, refunds, discounts, and/or other deducts due under the DCIP policies.

Signed by: _____ Date Prepared: _____

Printed: _____

Trade Partner Name: _____

Complete the form using estimated payroll/Contract amount and man-hours for the Contract you have been awarded. **If you have been awarded more than one Contract, a separate worksheet is required for each Contract.**

If you have any questions concerning the completion of this form, please contact your insurance representative or the assigned Lockton DCIP coordinator.

SAMPLE DCIP WC/GL ENROLLED TRADE PARTNERS
CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND, OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Broker's Name	PHONE (A/C, No. Ext):	FAX (A/C, No):
	EMAIL ADDRESS:	
(Name, Address)	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: Insurance Company	
INSURED	INSURER B:	
Trade Partner	INSURER C:	
	INSURER D:	
(Name, Address)	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM, OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR For Offsite Coverage Outside the DCIP GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC						EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
A	**AUTOMOBILE LIABILITY** X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
A	**UMBRELLA LIAB** X OCCUR **EXCESS LIAB** CLAIMS-MADE DED RETENTION $						EACH OCCURRENCE	$ 2,000,000
							AGGREGATE	$ 2,000,000
								$
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N N/A **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below						X WC STATU-TORY LIMITS OTH-ER	
							E.L. EACH ACCIDENT	$ 500,000
							E.L. DISEASE - EA EMPLOYEE	$ 500,000
							E.L. DISEASE - POLICY LIMIT	$ 500,000
	Workers Comp for Offsite Coverage							

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Dunn Project Number _____ - Dunn Project Name
Workers' Compensation, General Liability, Automobile Liability & Excess Liability contain a waiver of subrogation where allowed by law.
Option I-For General Liability & Excess Liability on-going and completed operations and Auto Liability policies, blanket Additional Insured endorsement provides additional insured status as required by contract.
Option II-For General Liability & Excess Liability on-going and completed operations and Auto Liability policies, additional insured status is provided for [insert list of Additional Insureds]

CERTIFICATE HOLDER

JE Dunn Construction Company
1001 Locust Street
Kansas City, MO 64106

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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SAMPLE DCIP WC/GL NON-ENROLLED TRADE PARTNERS
CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND, OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Broker's Name	PHONE (A/C, No. Ext):	FAX (A/C, No):
	EMAIL ADDRESS:	
(Name, Address)	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: Insurance Company	
INSURED	INSURER B:	
Trade Partner	INSURER C:	
	INSURER D:	
(Name, Address)	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM, OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ $ $ 1,000,000 $ 2,000,000 $ 2,000,000
A	**AUTOMOBILE LIABILITY** X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	**UMBRELLA LIAB** X OCCUR **EXCESS LIAB** CLAIMS-MADE DED RETENTION $						EACH OCCURRENCE AGGREGATE	$ 2,000,000 $ 2,000,000
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N N/A **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below						X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 500,000 $ 500,000 $ 500,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Dunn Project Number _____ - Dunn Project Name
Workers' Compensation, General Liability, Automobile Liability & Excess Liability contain a waiver of subrogation where allowed by law.
Option I-For General Liability & Excess Liability on-going and completed operations and Auto Liability policies, blanket Additional Insured endorsement provides additional insured status as required by contract.
Option II-For General Liability & Excess Liability on-going and completed operations and Auto Liability policies, additional insured status is provided for [insert list of Additional Insureds]

CERTIFICATE HOLDER

JE Dunn Construction Company
1001 Locust Street
Kansas City, MO 64106

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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Payroll Reporting Form
Dunn Controlled Insurance Program

I. General Information

Company Name: _____

Project/Phase Name: _____

Who holds your Contract (J.E. Dunn or other)? Specify: _____

Period That You Are Reporting Payroll For: **(Example: 06/01/08 – 06/30/08)**	Month	Day	Year	–	Month	Day	Year

☐ **NO PAYROLL TO REPORT FOR THIS PERIOD**

II. Payroll Information

WC Description	WC Code	Hours	Payroll	Number of Employees
	TOTALS:			
***NOTE: Overtime should be included at the normal hourly rate. DO NOT INCLUDE EXTRA WAGES PAID FOR O.T.**				

Payroll Verified by: _____ Date: _____
Controller or Company Officer

Does payroll include leased employees? ☐ Yes ☐ No

Is this your FINAL payroll report? ☐ Yes** ☐ No

****NOTE: If answered yes, a NOTICE OF COMPLETION FORM must be sent immediately to:**

LOCKTON COMPANIES, LLC
Attn: Dunn DCIP Administrator
444 West 47th Street, Suite 900
Kansas City, MO 64112-1906
Phone: 816-960-9000
E-mail: WrapUpCIPCoordinators@Lockton.com

Please list any Lower Tier Trade Partners performing work on the contact listed above:

_____

_____

J.E. Dunn DCIP Administrator and/or the insurance company may audit payroll.

Notice of Completion
Dunn Controlled Insurance Program

I. Completed Work

Company Name: _____

Project/Phase Name: _____

Who holds your Contract (J.E. Dunn or other)? Specify: _____

II. Trade Partners

Please Provide Names of Lower Tier Trade Partners That May Also Be Completing Work (attach additional pages if necessary):

_____ _____ _____ _____

III. Contract Information

Final Contract Value: $_____ Other Contracts at This Jobsite: ☐ Yes ☐ No

Completion Date: ___/___/_____ Final Onsite Total: $_____ Payroll _____ Man-hours

Cumulative Payroll Summary (attach additional pages if necessary)

Class Code: _____	Payroll: $_____	Class Code: _____	Payroll: $_____
Class Code: _____	Payroll: $_____	Class Code: _____	Payroll: $_____
Class Code: _____	Payroll: $_____	Class Code: _____	Payroll: $_____
			TOTAL: $_____

Each Contract awarded on this jobsite will require a separate Notice of Completion form.

Final Audit Lockton Companies, LLC, or a designated "insurer" representative will contact your audit personnel identified in your Contractor Application to arrange for a final payroll audit.

Record Retention All payroll records related to the DCIP must be retained for a period not less than three years from completion of your Work.

Note—: Any Trade Partner whose insurance as provided by the DCIP has been terminated and who intends to return to the Project Site to perform warranty or additional work must confirm with the Contractor the appropriate insurance approach before entering the Project Site.

Print Name: _____

Signature: _____ **Title:** _____ **Date:** _____
Controller or Company Officer

This form must be e-mailed to:

LOCKTON COMPANIES, LLC
Attn: Dunn DCIP Administrator
444 West 47th Street, Suite 900
Kansas City, MO 64112-1906
Phone: 816-960-9000
E-mail: WrapUpCIPCoordinators@Lockton.com

WORKERS' COMPENSATION REPORT OF INJURY

Company/branch office reporting injury: _____

Project Name: _____ Project Number: _____

Project Address: _____ City/State/Zip: _____

Injured Employee: _____ Social Security #: _____

Address: _____ City: _____ State: _____ Zip: _____

Phone: _____ Sex: _____ Marital Status: _____ DOB: _____

Occupation: _____ Date of Hire: _____ Wage: _____

Employer: _____ Employer Address: _____

Employer Phone: _____ Employer Contact: _____

Date of Injury: _____ Time of Injury: _____ ☐ a.m./☐ p.m.

Type of Injury: _____ Body Part: _____

Accident Reported to: _____ Date and Time Reported: _____

☐ Yes ☐ No Was Employee Drug Tested & Orientated? Date of Drug Test _____ Date of Orientation: _____

☐ Yes ☐ No Did employee leave site for treatment? Date _____ Time: _____

☐ Yes ☐ No Did employee return to work after treatment? Date _____ Time: _____

Treatment *(check one)*: ☐ Report Only/First Aid *(on-site)* ☐ Clinic ☐ Hospital ☐ Other: _____

Location of Accident: _____

What was employee doing when injured? _____

Describe *(in detail)* how accident occurred: _____

_____

List Superintendents/Foreman at time of injury: _____

What steps have been taken to prevent accident in the future? _____

☐ Yes ☐ No Was the employee using any equipment/materials at time of injury?
If so, list items: _____

☐ Yes ☐ No Was there a defect in equipment?
If so, what? _____

☐ Yes ☐ No Was employee utilizing safety equipment?
If so, list items *(or check):* _____
☐ Hard hat ☐ Eye protection ☐ Gloves ☐ Safety harness ☐ Respirator

☐ Yes ☐ No Were there any witnesses to the accident?
If so, list: _____
Name Phone #

Additional Comments: _____

Date: _____ Supervisor's Signature: _____

CLAIM REPORTING FORM

(Use for all claims <u>except</u> workers' comp. and auto)

Project name: _____ JE Dunn project no.: _____ Project start date: _____

Project address: _____ City: _____ State/ZIP: _____

Claim contact: (JE Dunn or trade partner (name, company, email and phone no.)) _____

_____

Date of incident: _____ Time of incident: _____

Brief description of incident: (Describe events, conditions, or action taken. Give **facts** only.)

_____

_____

_____

_____

_____

List of person(s) involved or witness to the incident:

Name	Company	Phone no.	Claimant (C), Employee (E), Witness (W) or Other (O)

Person completing the form:

Name (print)	Signature	Company/employer	Phone no.	Date of report

For internal use only: ☐ "Notice only"

Coverage ☐ GL ☐ BR ☐ Other: ____

GL program	☐ Traditional	☐ DCIP	1-15 | Over 15					
			Dunn I	Dunn II	Dunn III	Dunn IV	Dunn V	Dunn VI

Excess $_____ If left blank, Lockton will notify all excess carriers. ☐ Notice only ☐ Discussion needed

Office code: ____ Project code: ____ Contractor code: ____

Please email this completed form **within 24 hours** of the incident to claims@jedunn.com

SECTION 00 73 19
SAFETY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Reference the Contractor's Safety Program at the following location: https://sms.jedunn.com/safety_program. The latest version must be followed.

B. Refer to the attachment for the Project Site Specific Safety Plan. The most stringent requirement shall govern if there are any discrepancies between the requirements of the Site Specific Safety Plan and those outlined herein.

C. Safety on the Project site is a primary concern to the Owner and Contractor. Each Subcontractor is responsible for the safety and security of its personnel.

D. All Subcontractors and lower-tier subcontractors are required to follow all of Contractor's safety requirements, as well as OSHA, state, and local safety regulations.

E. Provide the proper training and equipment necessary to ensure that Contractor's personnel follow all of Contractor's safety requirements, and OSHA, state, and local safety requirements.

F. Inspect Contractor's own work areas periodically throughout the day for recognizable safety hazards and for taking immediate corrective actions to provide a safe work environment at the site.

G. Safety Representative: Assign a competent individual to act as the Subcontractor's safety representative. This individual must be on site and have the authority to immediately correct hazardous conditions. Submit the name of the on-site representative to the Contractor before the Subcontractor begins Work on site.

1.2 DISCIPLINARY POLICY

A. Failure to follow safety requirements may result in disciplinary action up to and including the removal and replacement of personnel and site foreman per Contractor's safety policy.

B. Replace foreman and personnel who are unable or unwilling to follow the Project safety requirements.

C. Subcontractor must enforce its safety program and OSHA requirements as it relates to its work at the Project.

D. Failure to correct safety issues in a timely manner may result in Contractor directing a correcting subcontractor to take action and a back charge may be issued to the creating Subcontractor.

1.3 TRAINING REQUIREMENTS

A. Copies of all training must be forwarded to the Contractor's site office. This documentation must include a detailed description of the items covered in the training and the signatures of the attendees.

1.4 ORIENTATION

A. All tradespeople will be required to complete the Contractor's safety orientation prior to starting their Work on site.

1.5 TASK-SPECIFIC TRAINING

A. Subcontractor must provide task-specific training to ensure that each of its personnel knows how to perform his or her work in a safe manner.

B. If Owner, Contractor, and/or Subcontractor identify a safety issue concerning a particular crew, Subcontractor must provide task-specific training for that crew, on a minimum of a weekly basis.

1.6 SAFETY SUBMITTALS

A. Safety and Health Program/Hazard Communication: Prior to the start of Work, Subcontractor shall provide copies (including a physical, hard copy) to the Contractor of its safety and health program, its Hazard Communication program, an inventory list of all products to be used on site, and all corresponding Safety Data Sheets for these products.

B. Scope-Specific Hazard Plans and associated Training Records: Prior to the start of Work, Subcontractor shall submit to the Contractor scope-specific hazard plans, which plans shall include but not be limited to: Hazard-Specific Employee Training, Designated competent/qualified persons, engineered plans, hoisting plans, fall protection plans, erection plans, bracing and shoring plans, lock out/tag out plans, confined space plans, or other plans the Contractor deems necessary to provide a safe work environment.

C. Silica: Subcontractor shall comply with OSHA Silica Standard (1926.1153). Subcontractor shall submit a written exposure control plan, provide a trained competent person, and provide Silica Awareness training to all onsite personnel for any potential exposure to respirable crystalline silica.

D. JHA: Subcontractor shall submit a scope specific Job Hazard Analysis (JHA) to the Contractor prior to the start of Work.

E. JSA: Subcontractor shall submit a scope specific Job Safety Analysis (JSA) to the Contractor daily while on site.

F. Reoccurring safety documentation submittals: Submit JSAs, Toolbox Talks, Safety Observation, Inspections, Checklist, Permits, and any other required documentation to Contractor electronically via Autodesk Construction Cloud for the Project.

1.7 PERSONAL PROTECTIVE EQUIPMENT (PPE)

A. An OSHA-approved hard hat or helmet style head protection shall be worn by all personnel and visitors on the jobsite at all times.

B. American National Standards Institute (ANSI) Class 2 high visibility upper body garments and proper clothing shall be worn, suitable for construction work. Shirts and long pants shall be worn at all times.

C. Sturdy, heavy-duty, hard-soled work boots with over-the-ankle support are required; canvas or leather type athletic shoes and shoes without heel or toe coverings are not permitted.

D. Gloves with a minimum ANSI Level A4 at a minimum or gloves appropriate to the task are required, along with safety glasses and side shields.

E. Subcontractor shall furnish all other PPE to its personnel as required.

1.8 FIRST AID

A. The Contractor will maintain a first aid center at the Project office. The Contractor will have phone numbers of the local clinics and hospitals posted at all times.

1.9 INCIDENTS

A. All incidents including, but not limited to, injuries, fires, property damage, spills and near misses, must be immediately reported to Contractor.

1.10 HOUSEKEEPING

A. Maintain good housekeeping at all times. All stripped lumber shall be safely stacked after nails have been removed or bent down. All stairways, scaffolds, ramps, walkways, and work areas shall be kept clear and clean of trash and material. Maintain Work areas free from accumulation of combustible trash.

B. Clean Subcontractor's Work areas each day. Failure to clean work areas each day may result in Contractor directing a correcting subcontractor to take action and a back charge may be issued to the creating Subcontractor.

1.11 GFCI

A. Provide ground-fault circuit interrupter (GFCI) protection for Subcontractor's Work when using generators or permanent electrical installations.

1.12 STRETCH AND FLEX

A. Required daily by each Subcontractor.

1.13 JOB SAFETY ANALYSIS (JSA)

A. All trade partners are highly encouraged to use the SmartTagIt system (at no cost to the trade partner) for JSA submittals and improvement auditing. Trade partners shall submit a scope specific Job Safety Analysis (JSA) to the Contractor daily while on site and shall update the submitted JSA every time that work scope or conditions change enough to merit a reconsideration of known or potential hazards.

1.14 OKLAHOMA OSHA CONSULTATION

A. JE Dunn Construction intends to engage the Oklahoma OSHA office for Site Consultation services as part of Project Clydesdale. Participation in site consultations by trade partners and site vendors is highly encouraged, but not required.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

CYL Tulsa Campus

Site Specific Environmental, Health and Safety Plan

Revision	Date of Issuance	Scope of Revision
01	*06/16/2025*	*SRP Rollout*
02	*07/18/2025*	*Pre-Mob Tulsa*
03	*08/25/2025*	*Finalization and Adoption*

JE DUNN CONSTRUCTION

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Leadership Org Chart



Mission Statement

Foster a "one team, one goal" culture committed to delivering projects safely, collaboratively + innovatively while supporting a dynamic building environment for a worldwide data leader.

Section 1: Project Information

Project Name	CYL
Job	Datacenter
Project Address	E 76th St N and N Yale Owasso, OK
Project Description	SPS Phase 1A
Project Executive	Jason Bishop
Superintendent	Les Payne
EHS Responsible	Zack Cooper

Section 2: Commitment

2.1. Corporate Value

1. JE Dunn Construction Company believes that all employees working on the project deserve a work environment that is free of any recognized hazards. Safety is fundamental to the success of this project and responsibility of **Everyone, Everywhere, All the Time**.

2.2. Stop Work Authority

1. The purpose of Stop Work Authority is to ensure that all employees, trade partners and visitors are given the responsibility and authority to stop work when employees believe that a situation exists that places them, their coworker or the public at risk or in danger.

2. JE Dunn Management is committed to maintaining and encouraging the Stop Work Authority of all employees. No employee will ever be reprimanded or retaliated against for using his or her Stop Work Authority. All employees are required to stop work if asked to do so. JE Dunn Management will evaluate each stop work occurrence and work will not resume until all issues have been resolved. Management will explain the manner in which they resolved the stop work occurrence to all employees involved.

Jason Bishop, Project Executive Date

Les Payne, General Superintendent Date

Zack Cooper, EHS Responsible Date

Section 3: Scope

1. This plan applies to all JE Dunn and Trade Partner personnel performing work at a JE Dunn construction site or within any subsidiary facilities.

2. All Trade Partners are required to flow all requirements in this plan to all sub-tier Trade Partners.

Beale Infrastructure Environmental Health and Safety

Section 4: Purpose

1. This "Plan" has been developed by JE Dunn Construction Company to establish the required programs for the prevention of injury and job-related illness to personnel who will perform activities within the specified scope of this Project.

2. This Site EHS / Accident Prevention Plan is intended to be a tool to help establish guidelines to aid JE Dunn and our trade partners of this Project in maintaining a zero-incident jobsite.

3. Outline the safety duties and responsibilities of all parties on this Project.

4. Establish and implement a plan for safety education, training, and monitoring to promote identification and elimination of hazards and unsafe acts.

4.1. Referenced Requirements

1. In addition to following the JE Dunn Site Safety & Health Plan, it is required that the subsequent programs shall be incorporated by reference in their entirety in addition to any governing codes and standards found within the contract.
    a. JE Dunn Construction Company Safety and Health Manual
    b. 29 CFR 1926, OSHA Construction Requirements
    c. Global Minimum Performance Requirements
    d. Contractor EHS Requirements
    e. Excavation Guidelines

2. If there is a conflict between one or more of these requirements, the more stringent shall apply. Primary trade partners are required to ensure all sub-tiers follow procedures and policies.

3. Specific requirements of this document could change based on any agreements made with JE Dunn and Trade Partner. Any changes to this plan will be made as an addendum to this document.

Section 5: Responsibilities

The safety, health and environmental protection is the responsibility of each person assigned to this project. All personnel all required to conduct work in a safe manner, follow all EHS requirements.

5.1. JE Dunn Leadership

1. Implement JE Dunn Injury Free Workplace Requirements.

2. Demonstrate JE Dunn's core value of safety.

3. JE Dunn senior project leadership has the overall responsibility to develop and effectively implement the requirements of the EHS / Accident Prevention Plan.

4. Perform a kick-off meeting to establish goals and responsibilities, in addition to re-emphasizing JE Dunn's mission to be the leader in construction safety.

5. Conduct pre-install meetings with trade partners for all elements of work.

6. Ensure that all personnel receive a Project Orientation prior to performing any work on the project.

7. Enforce all applicable safety, health and environmental rules and regulations.

8. Lead all incident (injury, damage, near miss) investigations and ensure that causal factors have been evaluated to eliminate recurrence.

9. Lead the Safety Leadership Team and complete actions required.

10. Provide leadership during the Mass Safety Meeting with all Trade Partners.

11. Lead team(s) to undertake Safety Management audits and drive corrective actions, as needed.

12. Perform daily jobsite observations (e.g. daily inspections) and input data into BIM 360 Field.

13. Implement a safety recognition plan for the project. Ensure employees are recognized for performing safety actions on this Project.

14. Consistently apply JE Dunn's enforcement policy for project safety violations.

15. Will ensure all JE Dunn and Trade Partner scopes of work, activities / tasks, implement a process for hazard identification and risk assessment. The tools include Job Hazard Analysis (JHA) and Job Safety Analysis (JSA's). These are risk planning processes to mitigate and eliminate risk potential.
Note: ***A full list of JE Dunn project safety responsibilities can be found in the JE Dunn Safety & Health Manual.*** ***JED Safety & Health Manual***

5.2 Trade Partner Leadership

1. Shall ensure that their employees comply with their Company's Safety Program and all Federal, State, and Local Codes and Regulations, including JE Dunn Safety & Health Manual and this Plan.

2. Shall ensure compliance with the site-specific Safety and Health Orientation process for all personnel assigned to the Project.

3. Attend a safety kick off meeting.

4. Conduct safety related training applicable/required for the work being performed by company supervisors and employees, sub-tier Trade Partner personnel, and visitors.

5. Maintain complete records of all associated safety training given to all project personnel and submit training matrix to JE Dunn.

6. Ensure that all personnel receive a Project Orientation prior to performing work on this project.

7. Shall train employees (including sub-tier trade partners) to perform work in a safe manner and to recognize and correct potential and actual hazards and unsafe acts. When a person lacks proficiency in the subject matter, retraining is done promptly.

8. Provide OSHA / ANSI compliant PPE to employees. Assure employees use/ wear PPE that is appropriate for the work and exposure per approved JHA/JSA.

9. Attend Safety Leadership Team meetings, Safety Management by Walking Around field audits, Refocus Meetings (when requested).

10. Coordinate, document and chair weekly job site toolbox talks and safety meetings with company and site personnel.

11. Participate in all projects IFW related activities.

12. Ensure Safety Score Cards are populated with accuracy and on a weekly basis.

13. Shall report all safety-related matters to JE Dunn Safety, Supervision and Project Superintendent promptly.

14. Shall investigate any accident to their employee and submit accident investigation reports to JE Dunn Project Leadership.

15. Shall participate in post incident review meetings upon request.

16. Shall ensure that JSA's are in place and exercised for all work activities.

5.3 Craft Personnel

1. Perform work in a manner which prevents incidents and accidents to themselves, fellow workers, the public and property.

2. Notify supervisors of dangerous or potentially dangerous conditions, including unsafe tools and equipment.

3. Properly wear and inspect all personal protective equipment

4. Actively participate in Job Safety Analysis and all Safety Prevention Activities

5. Cooperate with and participate in accident and incident investigations as requested

6. Never walk past or leave an unsafe condition. Take prompt actions to make the condition or area safe and inform your supervisor to have it corrected and properly communicated

7. Always have tasks covered under a JSA

8. Be respectful of your co-workers, management and all personnel on site

9. Never use a tool or piece of equipment that you have not been trained to use

10. Plan and prepare yourself for the work environment.

5.4. Project Codes of Conduct

1. Below are general rules of conduct that all personnel are expected to follow while performing work on this project.
    a. Be respectful.
    b. Never walk in unsafe conditions.
    c. Multiple drink containers are not allowed.
    d. All containers must be labeled as to their substance.
    e. Comply with federal/state regulations and requirements and site-specific safety and health standards.
    f. Report all workplace safety and health hazards to your supervisor, the company safety representative or JE Dunn Management.
    g. Report all injuries or illnesses, no matter how minor, to the supervisor.
    h. Employees taking any prescription medications that may induce drowsiness or impair their abilities must report their use and provide a copy of the prescription to their supervisor prior to beginning the work shift.
    i. Clothing shall be in good taste – no offensive pictures or sayings.
    j. Obey security rules.
    k. Lock up your tools and materials.
    l. Use jobsite toilets only.
    m. Follow construction management and area coordinator direction.
    n. Pick up all trash after lunch and breaks.
    o. Protect the work of others.
    p. Take care of your property.
    q. Smoking and tobacco products including electronic/smokeless cigarettes are only permitted outdoors in designated smoking areas.
    r. Dispose of cigarettes in appropriate receptacles, not in trash containers or on the ground.

2. The following items are considered violations of JE Dunn policy and could result in removal from site.
    a. Wander around the site/building into non-construction areas or areas where you are not authorized to go. Personnel shall stay in their work areas.
    b. Harassment is defined as “behavior that offends other individuals on the basis of sex, race, religion, national origin, sexual orientation, or other protected basis”. All Trade Partners, sub-

Trade Partners, visitors and vendors are expected to observe this code of conduct. Any form of harassment is strictly prohibited. All reports of harassment must be taken to JE Dunn site leadership.

c. Display or exchange sexually explicit materials.
d. Eat or drink in any areas of the site other than in areas designated for such use.
e. Bring or use alcoholic beverages or illegal drugs on site.
f. Bring firearms, weapons or explosives on site.
g. Use radios, tape players, or headsets (ear buds).
h. Disturb client employees
i. Gamble while on the project site.
j. Sleeping while on the project site. (Note: This does not include personal break/lunch times.)
k. Any theft of JE Dunn, Trade Property, or Client property. This includes any intellectual property.
l. Being involved in horseplay or fighting.
m. Taking photos or recording audio on the job without approval.
n. Allowing unauthorized site access by way of badge lending of tailgating at badged doorways.

Section 6: Injury Free Workplace

6.1. Objective

JE Dunn Construction promotes and adheres to the Environmental, Health and Safety policies and procedures created by its Trade Partners. JE Dunn Constructions' objective is to provide the best service while maintaining a safe and healthy work environment.

6.2. Purpose

The Purpose of the Injury Free Workplace (IFW) program is to develop a project workforce (both management and craft personnel) dedicated and personally committed to eliminating all occupational injuries and incidents.

6.3. Scope

The IFW program implementation is required for all JE Dunn construction projects. It is an integral element in JE Dunn's philosophy and execution. Monthly Safety Leadership Team (SLT) Meetings consisting of JE Dunn, Trade Partner (craft personnel) and Trade Partner Management will be established and carried out.

6.4. Roles & Responsibilities

JE Dunn and Trade partner personnel are responsible for assuring an incident free workplace.

Specific Roles and Responsibilities defined in JE Dunn's "Responsibility and Accountability Matrix (Exhibit 2)" – JE Dunn Safety and Health Manual R&A Matrix

1. JE Dunn Project Executive/Manager/Superintendent - Leads Injury Free execution effort. Works to define injury free execution strategy for the scope of work defined. Ensures adequate resources dedicated to the project (manpower, dollars, etc.). Remains committed and are visible in driving project safety to achieve the Injury Free goal.

2. JE Dunn EHS Manager– Works with Project Management to define Injury Free scope of work and works to ensure appropriate funds are placed in project budgets to accommodate all aspects of the Environmental, Health and Safety Plan. Works with Project Management to develop Injury Free Workshop, monitors perception survey participation when conducted and provides feedback for the project, schedule for project staff, including Trade Partners as necessary. The EHS Manager shall assist project management in the lead, coordination of the IFW program.

3. JE Dunn Superintendents - Works with JE Dunn EHS Manager, JE Dunn employees and trade partner personnel to ensure compliance with all aspects of the Injury Free Workplace concept.

4. Trade Partner (s) Sub Tier(s) – Work in conjunction with JE Dunn Construction to implement IFW programs.

5. All companies are to ensure compliance with all aspects of the Injury Free Workplace concept. Shall attend and participate in scheduled Injury Free Workshops and exercises. Trade partner management shall ensure employees participate in IFW efforts including but not limited to EHS Perception Surveys, Site Wide All Hands meetings/announcements, etc. Trade Partner EHS Representatives shall attend monthly safety committee meetings.

6. All Employers (Trade Partners) must complete the electronic Scorecard weekly and make improvements to those areas that may be lacking in safety prevention. The Scorecard is a list of leading activities (i.e. safety prevention) which must be well communicated to employees and promoted continuously throughout the life of the project. If a trade partner fails to submit the scorecard weekly, JE Dunn may withhold payment of invoices until each week is reconciled and accurate.

6.5. Training

The following trainings shall be implemented on the project to support JE Dunn's IFW Program, as needed. This training could be offered in the project with the intent of management & supervision attend the START/SCEW combo or equivalent training. SULU training is for trade personnel and can be offered as a supplemental workshop or series of workshops.

1. **Supervisor Training in Accountability and Recognition Techniques (START/SCEW Combination) 4 hours** - This is a three-part training consisting of the following topics:
    a. Why Improve your Safety Culture.
    b. What Makes an Effective Safety Culture.
    c. How to Engage and Involve Employees.

2. **Speak Up! Listen Up! (SULU) 2 hours**- SULU is a training program that is intended to empower all personnel to speak up if they see something they believe is unsafe and listen if someone brings up a safety issue.

3. **Injury Free Workshop Training 1 hour** – Employers / employees may be asked to attend a IFW workshop to discuss the intent of safety prevention and our leading activities.

Administrative Programs

Section 7: Required Elements of EHS Plan

The intent of this section is to allow trade partners and sub-tier Trade Partners to demonstrate EHS Programs, Policies, and Procedures, and show their visible commitment to an injury free work environment.

CYL Welcome Letter

7.1. Trade Partner Documentation

1. Each trade partner is required to furnish the following documents to JE Dunn prior to bidding any work. This must be done through our SMS – Subcontractor Management System for approval and validation.
    a. Corporate Injury, Illness and Prevention Program.
    b. OSHA and other regulatory agency citations history for the past 3 years
    c. Most recent Corporate OSHA 300 and 300A Logs
    d. Letter from their workers compensation insurance carrier or broker for experience modification rates (EMR) for the past three years.
    e. Project Manager and designated Safety Responsible Resume

7.2. EHS Performance Assessment Statistics

1. Each proposed trade partner and all sub-tier trade partners are required to submit and meet the following EHS performance statistics prior to performing any work onsite.
    a. EMR ratings of 1.0 or lower for last three years.

b. Lagging Indicators.
    i. Recordable Rate <= 4.0
    ii. Days Away Case Rate <= 0.8
    iii. Zero (0) Fatalities in the last 12 months

Note: Trade partners are not allowed to start work on site until their EHS performance statistics and their competency and that of their multiple sub-tier Trade Partners have been verified and approved by JE Dunn Construction Company.

7.3. Safety Management Plan

1. Trade partners that fail to meet these performance requirements are required to submit a Safety Management Plan (SMP). The SMP will describe in detail how the trade partner will correct the issues that caused their EHS performance statistics to become elevated.

2. The JE Dunn Project Team (Project Manager, Superintendent and Safety Professional) will decide if the corrective actions stated in the SMP will reduce the overall risk to an adequate level. If the Project Team decides that the SMP does not reduce risk to an adequate level, then the trade partner must resubmit a new SMP or their bid will be rejected.

3. Additionally, trade partners can be placed on a SMP due to poor project EHS performance. SMP compliance will be evaluated by JE Dunn Operations and Safety on a regular basis. If a trade partner fails to meet SMP requirements, JE Dunn has the right to remove the trade partner from the project.

7.4. Pre-Bid Meeting

1. All Trade Partners must attend a Pre-Bid Meeting prior to bid approval. This meeting will go over JE Dunn's EHS / Site Specific Safety Plan and Trade Partner requirements to ensure that each scope of work is clearly understood. The focus is to: review project specific EHS requirements; discuss work scope challenges; discuss possible hazards presented by the work; and review constructability challenges that may require specific controls to reduce the potential for injury.

2. Trade Partners bids shall address the EHS Plan requirements and identify constructability issues and job hazards that could increase the potential for injury or loss. Trade Partners are required to assess their sub-tiers and confirm to JE Dunn that their sub-tier Trade Partners meet all project requirements. Trade Partners and sub-tier Trade Partners must be approved by JE Dunn management before work can proceed. JE Dunn can refuse to allow a sub-tier Trade Partner to work on the project when justified.

7.5. Kick-Off/ Pre-Install Meeting

1. Post contract award, JE Dunn will hold a kick-off meeting to finalize acceptance of the JE Dunn Site Specific Safety Plan (and all associated procedures and hazard analyses). JE Dunn will assure that trade partners have effective EHS systems in place, and that all possible hazards have been identified and addressed.

   Submittal of Trade Partner Site Specific EHS Plan and related information:
   a. Site Specific Environmental, Health, and Safety Plan and Sub-tier's EHS Plans.
   b. Completed pre-qualification assessments for sub-tier Trade Partners .
   c. Job Hazard Analysis for each scope of work.
   d. List of Chemicals and associated SDS's that are used on site with a documented chemical hazard analysis for each chemical.
   e. Resume of EHS personnel (if applicable).
   f. Company list of Competent personnel.
   g. Employee Training, relative to job tasks.
   h. Emergency information and response plan.
   i. Case management program.

2. Preplanning meetings, also known as pre-installs. These meetings are an integral part of the safety planning process where we discuss the forthcoming work scope. The attendees typically include representatives from JE Dunn, the project owner, trade partners, project management, site supervision, and the safety lead. The primary goal of these pre-installs is to ensure everyone is on the same page regarding the upcoming work, potential hazards, and safety measures to be implemented. These discussions are held typically no less than two weeks following the initial safety kickoff. This gives ample time to address any emerging concerns or adjustments in the work plan, thereby ensuring the safety and efficiency of all operations on the site.

7.6. JE Dunn EHS Staffing

1. The JE Dunn Project Manager is required to ensure minimum staffing requirements are met.
   a. The JE Dunn management team shall perform an evaluation to determine project EHS staffing requirements based on the risk and complexity of the project.
   b. JE Dunn will have on staff (1) full-time Safety Professional that meets client requirements. A minimum personnel resource ratio / requirement of 300:1 (craft: safety professional) will be maintained by JE Dunn.

7.7. Trade Partner EHS Staffing

1. Trade Partner Management review, approval and:
   a. Trade Partners are required to submit experience / resumes for all EHS personnel to JE Dunn Management for review and approval.

b. All Trade Partner supervision, electrical trade personnel, and safety shall have obtained OSHA 30 and will be trained on how to administer cardiopulmonary resuscitation (CPR), first aid, and an AED.
c. JE Dunn reserves the right to request replacement of unacceptable managers, supervisors or safety personnel.
d. When competency deficiencies are noted, JE Dunn may request the Trade Partner to provide specific training for management, an individual, or group of employees at no cost to JE Dunn or client.

2. All Trade Partners are required to ensure the minimum EHS Staffing requirements are met.

Electrical Contractors must have a full-time Safety and Health Professional/Manager who will be on site full-time for the duration of the project. This is starting with mobilization and ends with demobilization and will follow the ratios given below for additional safety staffing.

a. Trade partners must include sub-tier trade partners in their head count.
b. Trade partners shall provide 1 full-time Safety Manager to oversee activities when the total headcount exceeds 25 craft workers on-site. Less than 30 = Safety Manager shall be present on site with 2 full shifts per week with one of those shifts to be present for the safety managers' meeting.
c. When Trade Partners employee staff exceed 60 employees, they must add a second full-time safety professional known as a Safety and Health Supervisor (SHS) and maintain a 60 to 1 ratio thereafter of safety professionals.
d. Additional staffing may be needed and added to conform with local requirements. Additional staffing may also be needed as determined by the General Contractor, and/or Client Project Team to supplement EHS performance.
e. Trade partner safety professionals shall be trained in incident investigation and root cause analysis.

Safety Manager must meet one of the following:

a. Safety Manager with a Health & Safety degree (Associates minimum) and a minimum of Five (5) year's total of construction safety experience.
b. The Safety Manager is a "Certified Safety Professional" as recognized by the Board of Certified Safety Professionals with at least three (3) total years of relevant construction safety experience.
c. The Safety Manager has completed the OSHA 500 Basic Instructor Course in Occupational Safety and Health Standards for the Construction Industry and must have performed full-time safety responsibilities for at least ten (10) years in the relevant construction safety industry.

Safety Managers shall also have the following training or local equivalent:

a. Management Training
b. Incident Investigation Training

Field SHS (Safety and Health Supervisor) must meet the following:

a. The field SHS must, at a minimum, have 3 years of relevant construction safety experience and knowledge of all safety and health rules/ regulations. Knowledge is to be specifically in the hazards of the work to be performed. The SHS shall also have completed the basic "30-hour Occupational Safety and Health Training Course in Construction Safety and Health and hold a current CPR/FA/AED certification."

Field SHS shall also have the following training or local equivalent:

a. JHA/Risk Assessment Training
b. Incident Investigation Training

Additionally, must attend site specific safety training as designated by JE Dunn within 30 days of assignment.

Night Shift Safety Coverage

1. For the night shift, a medic will be on-site throughout the entire shift to ensure immediate medical assistance if needed. If a trade partner's workforce comprises fewer than 30 individuals, it is required that their safety professionals shall remain on-site for at least two full night shifts each week that they work or for the duration of that trade partners work as deemed necessary by JE Dunn supervision. For workforces exceeding 30, or otherwise determined by JE Dunn, a full-time safety professional must be present.

2. JE Dunn Construction takes pride in its Bluehats, who are rigorously trained in handling incidents and serve as safety professionals across the company's operations. Should both the workforce size and associated risks be deemed manageable by the JE Dunn General Superintendent and EHS (Environmental, Health, and Safety) Lead, JE Dunn Bluehat shall fulfill the role of a full-time EHS professional during the night shift. This approach ensures that safety and health management is maintained effectively, aligning with our commitment to providing a secure working environment.

7.8. Trade Partner Site Specific Environmental, Health & Safety Plan

1. Trade Partners must submit a Site Specific EHS Plan prior to beginning work. Each trade partner plan shall address the following topics.
    a. Job Hazard Analysis and Job Safety Analysis Planning Program
    b. Hazard Communication Program
    c. PPE Program
    d. Housekeeping Policy
    e. Incident Analysis Program
    f. Incident Emergency Procedures/Response Plan
    g. Waste Management Program
    h. Drug and Alcohol Abuse Prevention Program
    i. Mentorship Program
    j. Soft Tissue Injury Prevention Program

k. Audit and Inspection Program
l. Schedule of safety meetings to be held with employees
m. EHS Communication Board and OSHA poster location
n. Disciplinary Action policy
o. Respiratory Protection Program
p. Fall Protection Program
q. Confined Space Program
r. Energized Electrical Work
s. Lock-out/Tag-out Program
t. Chemical / Flammable Material Approval and Storage Plan
u. Sub-tier Trade Partner's orientation and Site Specific Requirements.

7.9. Quality of Life and General Rules of Conduct

1. Quality of Life:

    a. JE Dunn is responsible for ensuring that restrooms and hand washing facilities are provided on site consistent with 29CFR1926.51.
    b. Adequate eating /break areas will be designated for all Trade Partner personnel. JE DUNN will ensure that site lunch and break quarters provide shelter from the heat/cold and are sufficiently isolated from construction areas so that PPE need not be worn during lunch and other breaks and that adequate seating is available.
    c. Personnel are expected to maintain these facilities in a clean and healthy manner.
    d. Each Trade Partner is responsible for the conditions that their employees, and their lower sub-tier employees, create. Trade Partners must ensure that their employees eat in the designated areas and away from construction areas.
    e. Trade Partners are required to ensure that drinking water is available at all times for their employees. Food and water must not be eaten or taken into the building unless an area has been identified by JE DUNN and the Client.

Section 8: Trade Partner Orientation

8.1. Orientation Requirements

1. Must present a negative Drug screen (10 panel required) within the last 30 days.

2. Must present a minimum Osha 10-hour in Construction for field staff and OSHA 30-hour in Construction for all supervision.

3. Attendees must be alert and responsive during orientation.

4. Must be able to show they are enrolled in the OneSource program or pending results of a level 2+.

8.2. JE Dunn Project Orientation

1. All JE Dunn and Trade Partner personnel must attend JE Dunn Project Orientation prior to being allowed to perform work on-site. (duration: 3-hours) This is in addition to any employer training.

2. Each Trade Partner must complete the JE Dunn Orientation Request Form prior to being allowed to attend orientation. (the day prior to orientation required*)

3. JE Dunn Orientation will consist of the following areas of insrtution:
    a. Principles of an Injury Free Workplace environment.
    b. General EHS Requirements.
    c. Project Specific Requirements (incident notification, emergency evacuation/ response, eating/ smoking/cell phone use, vehicle rules/ parking.
    d. Understanding SULU (Speak-up/Listen-Up).

Sections 9: Site Security & Access

Logistics/Traffic Plan

9.1. General Security rules

1. This project and client reserve the right to conduct random searches of personal or other property carried on or off of premises including vehicles, handbags, lunch boxes, backpacks, briefcases, etc.

2. All personnel shall prominently display their identification badges at all times.

3. Employees are responsible for maintaining badges. (lost badges will cost $25)

4. “Piggybacking” through card reader-controlled entries or lending badges for site access is not allowed. (when applicable).

5. Taking pictures or video is strictly prohibited unless a Photo Badge has been issued.

6. All forms of social media to discuss project site specifics are not allowed.

7. Only authorized vehicles will be allowed on site.

8. All craft parking will be off North Yale Avenue.

9. Guns are not allowed on project sites.

10. All plans, specs, and details must be controlled. These items are not to leave project site. These items are not to be placed in any trash receptacles. When completed with project, turn in these items to JE Dunn for proper disposal.

11. Any suspicious activity must be immediately reported to JE Dunn management.

9.2. Controlling Access.

1. All personnel can help in controlling access by:
    a. Not admitting people who don't have valid identification badges and being respectful to the security requirements.
    b. Directing persons without badges or authorization to enter the site to contact Security to gain access.
    c. Do not attempt to lend a badge to another person.
    d. No tailgating through card reader-controlled entries
    e. Entering and exiting through designated doors and entry points only.
    f. Not defeating locks or latches, or propping doors open unless they are attended.
    g. Securing temporary openings in walls, roofs or floors to prevent unauthorized access.

Section 10: Training Requirements

Training Calendar

Purpose: To ensure that any person(s) under the control of JE Dunn Construction Company or its respective trade partners who is performing tasks that can impact the health, safety or environment is (are) competent on the basis of appropriate education, training or experience, is applied throughout the project and at relevant levels.

Scope: JE Dunn and its respective trade partners shall apply all necessary resources to ensure each employee has been adequately educated and trained.

10.1. Training

1. Specific Requirements
   a. JE Dunn Site Orientation
   b. 10-hour OSHA Construction
   c. LOTO/Arc Flash Training (as applicable)
   d. Training is required for all equipment operators and prior to exposure to hazards
   e. All trade partners and Tier trade partners must present to JE Dunn EHS a complete training matrix that covers on-site employees. The matrix must be maintained as new workers onboard.

10.2. JE Dunn Responsibilities

1. Shall identify, implement and document relevant company training needs associated with the risks and the safety management system.
2. Request and monitor trade partner education and training programs to ensure conformance with applicable employee tasks and exposures.

3. Shall train its employees to make personnel working under their control aware of: appropriate hazards and controls, emergency preparedness and roles and responsibilities of both personal and management performance.

4. All personnel must attend JE Dunn Orientation.

5. Training personnel on JE Dunn's Speak Up! Listen Up! (IFW) Training Workshop as required.

6. Provide necessary training for personnel per contractual requirements.

10.3. Trade Partners Responsibilities

1. All employees must attend JE Dunn Orientation prior to working. The only exception would be visitors who must be escorted.

2. Employees shall attend JE Dunn's Speak Up! Listen Up! (IFW) Training as required.

3. Develop training programs suitable to the work environment and exposures as it relates to "creating" employer responsibilities.

4. Trade partners shall use individuals who are competent and qualified to instruct on each subject matter. Each trade partner must submit a competent person list for all relevant scopes of work.

5. Each trade partner shall instruct each employee in the recognition and correction of unsafe acts, behaviors and workplace conditions to which the employee may be exposed.

6. It's the responsibility of each trade partner of any tier to comply with any/all JE Dunn and applicable site policies, procedures and plans. In addition, each employee must receive training prior to exposure to risk.

7. Trade Partner shall provide to JE Dunn all training documents. Including outlining criteria, date, employee, instructor, etc. Each employee is required to receive all necessary training prior to being exposed to the workplace hazards.

8. Training shall be updated as appropriate to ensure compliance with all applicable policies, procedures and regulations.

9. If JE Dunn requests additional training of Supervisors or Employees, Employer must provide timely training appropriate to the subject matter and at the sole cost of Employer (Trade Partner)

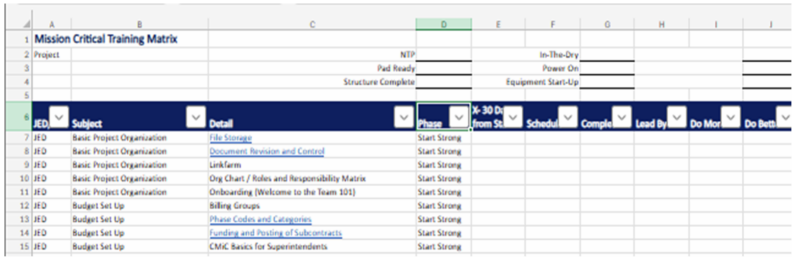
10. All Trade Partners must submit a training matrix that shows what training each employee has received.

11. Training Matrix's should at a minimum contain the following information following the training matrix example in 10.4.

10.4. Training Matrix

MC Project Training Tracker

Example:



	A	B	C	D	E	F	G	H	I	J
1	Mission Critical Training Matrix									
2	Project		NTP			In-The-Dry				
3			Pad Ready			Power On				
4			Structure Complete			Equipment Start-Up				
5										
6	JED	Subject	Detail	Phase	X- 30 D from St	Schedul	Comple	Lead By	Do Mor	Do Bett
7	JED	Basic Project Organization	File Storage	Start Strong						
8	JED	Basic Project Organization	Document Revision and Control	Start Strong						
9	JED	Basic Project Organization	Linkfarm	Start Strong						
10	JED	Basic Project Organization	Org Chart / Roles and Responsibility Matrix	Start Strong						
11	JED	Basic Project Organization	Onboarding (Welcome to the Team 101)	Start Strong						
12	JED	Budget Set Up	Billing Groups	Start Strong						
13	JED	Budget Set Up	Phase Codes and Categories	Start Strong						
14	JED	Budget Set Up	Funding and Posting of Subcontracts	Start Strong						
15	JED	Budget Set Up	CMiC Basics for Superintendents	Start Strong						

10.5. Mentor Program

Safety Mentor Program

All employees that are unfamiliar with the project will be required to be assigned a mentor. Mentors will be through each employer and shall be designated based on experience and ability to lead. All Trade Partners are required to submit their own buddy program which aligns to JE Dunn's requirements.

Section 11: Communications

11.1. Risk Mitigation & Safety Information Distribution

JE Dunn and Trade Partner personnel shall follow all applicable requirements.

1. **Job Hazard Analysis (JHA):**
   Note: *Will be performed monthly and/or after incidents involving injuries. Must be reviewed at the beginning of each month with the entire crew.*
   a. A new JHA is required by each trade partner.
   b. The JHA must describe each task being performed, the hazards associated with the task, and the methods used to mitigate each hazard.
   c. JHA's must contain a method of ranking safety risks.
   d. JHA's reviewed and signed off, at regular intervals, by employees performing work. Intervals shall be determined by JE Dunn.

2. **Pre-Task Plan (PTP's):**
   Note: *Will be performed daily and/or during a task change. Must be reviewed at the beginning of each shift with entire crew.*
   a. Pre-Task Plan (PTP's) must be completed and posted in the general vicinity of the work.
   b. Pre-Task Plan must be reviewed after lunch by the entire crew to address any changes in tasks, equipment, etc. and PTP must be updated.
   c. Each employee is required to read and sign the PTP denoting that they fully understand steps required to complete the task and will adhere to any safety procedure(s) outlined in the PTP.
   d. Certain activities may also require additional operational controls through the use of permits and/or forms (i.e., hot-work permit, confined space permit, etc.).
      i. All operational control requirements shall be completed and submitted in a timely manner per the contract requirements.
   e. PTP's must comply with the following minimum requirements:
      i. May be conducted by the foreman or craft lead designated by the foreman, provided however, that the foreman reviews all pre-task plans to ensure that they are appropriate, complete, and accurate for the subject task(s).
      ii. Must be documented in writing.
      iii. All crew members must participate at the job location in pre-task planning and shall sign the completed plan.
      iv. Must include hazards and precautions identified in applicable Pre-Task Plan.
      v. Must be readily available at the work site (posted and/or placed where crew members have knowledge of its location at the work area).
      vi. PTP's must be reviewed and revised whenever work conditions or crew membership experience change that may affect the ability to safely complete the work.

3. **Daily Huddle**: Operations will establish time & location
    a. Daily trade foreman meeting to identify potential safety and health hazards and coordination work efforts.

4. **Pre-installation Meetings:** Shall be performed before each major scope of work. Trade partners must submit their JHA prior to this meeting and come prepared to discuss the safe execution of their work.
    a. Superintendents and the Safety Department shall work together to populate the safety section of the pre-install form in addition to reviewing the safety and risk planning for the work.
    b. Pre-installations meeting shall include trade partners (including sub-tier employers / fabricators (as applicable), and individuals who are familiar with the scope of supply and execution.

5. **Stand-downs:** Will be used to communicate import safety information and discuss project trends.
    a. Safety stand downs should occur randomly in regular intervals or directly after incidents in order to maintain a high level of focus and distribute pertinent information.

6. **Safety Leadership Walks**
    a. These walks shall be comprised of Trade Partner, JE Dunn and Trade Partner Management.
    b. These walks are intended to promote engagement with the craft, addressing issues and recognizing safe behaviors.

7. **Safety Leadership Team (SLT)**
    a. This meeting shall occur at least monthly and include Client, JE Dunn and Trade Partner senior leadership as needed.
    b. The objective of the SLT is to establish strategic planning for the project that will maintain the established culture. Each SLT Team member is recognized as the key decision maker for their respective company and acts as a key partner with JE Dunn to ensure that the project is an injury free work environment. The SLT provides the required project leadership to help ensure that the employees leave the work site in the same condition they arrive, each and every day.
    c. One function of the SLT is to evaluate project safety on a regular basis, reviewing and assessing field conditions, EHS performance indicators, adverse events (accident and incident) and environmental issues. The SLT is responsible for managing proactive safety initiatives and safety incentive schemes, as well as sharing lessons learned per Trade Partner's incident analyses.

8. **All Hands Safety Meeting**
    a. All JE Dunn and Trade Partner employees shall attend a weekly All Hands Safety Meeting as defined by JE Dunn.
    b. The All-Hands Meeting is developed and presented in conjunction with all project personnel.
    c. The All-Hands Meeting is intended to distribute pertinent safety information, recognize personnel and address current conditions.
    d. The All-Hands Meeting may be held in separate locations to accommodate employees in different work areas, but will cover similar topics.

9. **EHS Leads Meeting**
    a. All JE Dunn and Trade Partner EHS professionals are required to attend a weekly EHS Leads Meeting to review indicators, trends and issues.

10. **Refocus Meeting**
    a. All trade partners shall participate in re-focus meetings as defined inside of the JE Dunn Safety and Health Manual.
    b. JE Dunn must hold refocus meetings with trade partners, to ensure a high level of focus around safety is present. These include, but are not limited to, a meeting to align crews, review / adjust safe work practices, or modify safety due to trending of unsafe observations. Refocus meetings shall be planned and unplanned. Trade partners of all levels must consider these types of meetings into all scopes of work, project deliverables and project pricing. Refocus meetings are 5-to-10-minute meetings held in the field.

11.2. Employee Feedback

1. **5-Worker Lunch Meetings**: will occur at the start of the project. This meeting will include a combination of trade workers and JE Dunn management to discuss any issues that the trade workers might have.

2. **Safety Perception Survey**
    a. The Employee Perception Survey captures JE Dunn's management and trade employee's perception of the EHS program each quarter.
    b. It also gives JE Dunn the ability to analyze any perception gaps between management and craft employees.
    c. All JE Dunn employees and Trade Partners are strongly encouraged to participate in all Safety Perception Surveys.

11.3. Postings

1. Federal, State and Municipal Occupational Safety and Labor Law postings must be displayed in a conspicuous place where employees can view them. JE Dunn safety bulletins and other safety information should also be posted in a similar location.
    a. Subcontractor job Trailers.
    b. Lunch/break Trailers.

11.4. Visitors

1. All visitors must follow site access security access control process and must be escorted at all times. Visitors will not be allowed to perform work in the field, unless:
    a. Must present a negative Drug screen (10 panel required) within the last 30 days.
    b. Must present a minimum Osha 10-hour in Construction.
    c. Attendees must be alert and responsive during orientation.
    d. Visitors on-site for short duration may be escorted by a JE Dunn Blue Hat during their visit and not expected to follow drug screen, etc. requirements.

Section 12: Employee Recognition

12.1. Spot Awards

1. JE Dunn believes in recognition of safe work behaviors. JE Dunn management will continually evaluate the project site for personnel that perform work in a safe manner, and reward personnel with Spot Awards.

12.2. Safety Recognition

1. JE Dunn and Trade Partner(s) will jointly plan site wide safety recognition events.
2. These events will be tied to milestones or other safety activities that promote and recognize safety excellence.
3. These events will not be directly tied to injury rates.
4. JE Dunn Management shall continually recognize employees (verbally) that demonstrate safety behaviors and identify/correct unsafe conditions.

Section 13: Indicators/Inspections/Audits

All trade partners are responsible for logging EHS documentation on a weekly basis on their site folder, located on the project dashboard. Below are the requested leading/ lagging indicators that are required to be recorded.

13.1. Lagging/ Leading Indicators

1. Monthly data submissions are due on the 7th of the following month
    a. Monthly hours and all incidents.

2. Incident form submissions shall be entered by trade partners within 24 hours of the incident and GC shall submit to the owner within 24 hours of receiving report from trade partners. A submission must be made for all incidents.
    a. Trade partners shall ensure that all Significant Potential Event (SPE) or Significant Event (SE) alerts received are communicated to relevant parties involved in the project and incorporate relevant lessons learned into programs and procedures.

b. Trade partners shall document all follow-up actions related to all events, especially SPE and SE alerts according to the owner's tracking process.

3. Forms will be provided by GC.

13.2 Site Specific Observation Program/ Check In (Inspections) Responsibility Matrix

1. It is the expectation of JE Dunn that all supervisory / competent employees involved in field operations are performing field observations and inspections in line with JE Dunn's Responsibility Matrix. These observations & inspections will be entered into the project "Check In" form in order to track and trend observations.
2. Trade Partners are required to close out issues brought to their attention by the due date.
3. Each Trade Partner will have a representative entered into the form. Trade Partners are expected to close out open issues in the check-in form by the assigned due date.
4. For inspections carried out outside of the check-in form, such as ACC, trade partners are required to submit these weekly. Inspections are required to be performed 3 times a week by each trade partner's supervision. These observations shall be accompanied by appropriate corrective measures. The inclusion of photos with each corrective action is encouraged. (Photos to be taken by properly badged personnel).

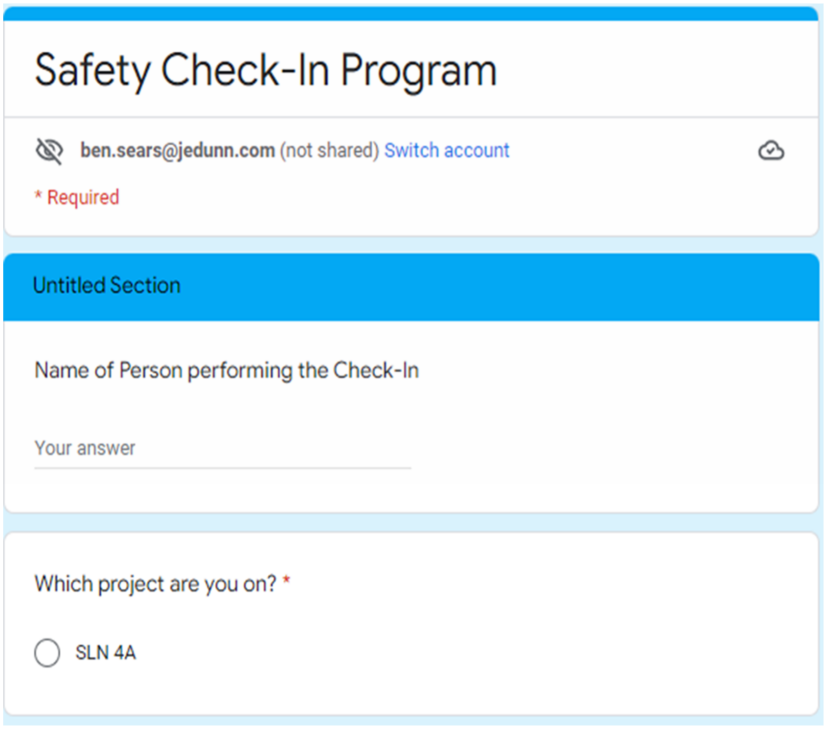
13.3. Program Auditing

On a periodic basis, an audit will be performed, by a competent and independent resource, from outside of the project team who will provide a written report to indicate the effectiveness of the EHS Plan / Accident Prevention Plan being carried out. The report will be in the form of a written dialog and may come from a variety of sources, such as:

1. JE Dunn Corporate and Regional resources.
2. insurance carrier(s), insurance brokers.
3. safety consultants.

Programmatic auditing will be performed by JE Dunn EHS on a regularly scheduled basis. These audits will be used to evaluate the implementation and effectiveness of JE Dunn EHS processes, programs and procedures.

JE Dunn regional and national safety management will perform scheduled program audits.



13.4. Training Auditing

1. Purpose: To ensure that JE Dunn and trade partner employees performing specific tasks have received effective required training.
    a. Below is a list of specific training subjects that are required before performing specific activities.
        i. Site Orientation
        ii. OSHA 10
        iii. Hazard Communications (Chemicals)
        iv. Ladders
        v. Hand & Power Tool
        vi. Fall Protection Awareness
        vii. Personal Fall Protection User
        viii. CPR/First Aid/ AED
        ix. Scaffold User
        x. Scaffold Competent Person
        xi. Crane Operator
        xii. Qualified Rigger
        xiii. Signal Person (Crane)

xiv. Scissor Lift
xv. Boom Lift
xvi. Forklift
xvii. Competent Person Heavy Equipment
xviii. Competent Person Excavation & Trenching
xix. Hot Work/ Fire Watch
xx. Respirator User
xxi. Lock Out Tag Out
xxii. Electrical Safety
xxiii. Energized Electrical Work
xxiv. Confined Space
xxv. Asbestos Work
xxvi. Blood Borne Pathogen
xxvii. Flagging
xxviii. Welding/Cutting

2. Project specific training shall also be added.

3. Training Matrix

Prior to performing work onsite all trade partners and sub-tiers must submit a matrix that shows what training each employee has received. Training matrixes should be updated on a monthly basis.

Training Audit Process

The following process shall be used to audit the training of those personnel performing work in the field.

1. Audit Frequency
    a. Training audits shall be performed on a monthly frequency.
    b. Following the format below each trade partner will be audited and scored.

2. Risk and Scope
    a. JE Dunn Safety and/or Management shall review the scope of work and determine which tasks require specific training and pose the greatest risk.
    b. Based on this review JE Dunn Safety and/or Management shall determine which personnel to audit.

3. Audit Process

    a. JE Dunn shall locate the personnel performing work in the field that requires specific training.
    b. Names of those employees performing specific task shall be recorded.

c. A test shall be administered to those employees performing specific tasks to determine training effectiveness.
d. JE Dunn shall cross reference the employees name to the training matrix provided by their employer.
e. If the training matrix does not show that the employee has received the specific training, it shall be logged as a non-conformance.
f. Non-conformities may be changed to conforming if the trade partner submits an updated training matrix showing that the employee(s) had received the required training prior to the audit.
g. Tests scores shall be logged and used to determine overall effectiveness of the trade partners training program.
h. If test scores are consistently low, JE Dunn shall review the trade partner's specific training program criteria.
i. All results of the audit shall be logged and save to the project dashboard.

Section 14: Drug and Alcohol Policy

14.1. Drug and Alcohol Policy

1. The Company strictly prohibits the manufacture, use, sale, purchase, transfer, possession, or use of illegal drugs, controlled substances or alcohol, or being under the influence thereof at work or while on Company business. There may be circumstances in which alcohol is served at Company events or business-related gatherings. If that is the case, then employees may consume alcohol only to the extent it does not lead to impairment of performance, result in inappropriate behavior, endanger the safety of the employee or any other person or otherwise violate the law. Employees are expected to consume alcohol responsibly. Employees are also expected to conform their behavior to this standard to represent the Company in a positive light in their community and have the ability to report to work in a timely manner and perform all job duties safely and effectively. The use or abuse of alcohol off the job prohibited from reporting to work with alcohol in their system. The Company also prohibits the improper use and/or abuse of therapeutic drugs, as defined below.

2. When circumstances warrant, the Company reserves the right under this Policy to require an employee, his foreman and his superintendent to undergo a blood test and/or urinalysis to determine the presence of alcohol or drugs in the system. This screening will be on Company time and Company expense and will be mandatory.

3. Circumstances which could warrant testing are as follows:
    a. Whenever, in the sole judgement of the Company, there is reasonable cause to believe that an employee is under the influence of drugs and alcohol. "Reasonable Cause" is defined as facts

and circumstances which would lead a reasonable person to suspect that an employee is under the influence of drugs or alcohol.

i. Observable phenomena while at work, such as direct observation of substance abuse or of the physical symptoms or manifestations of being impaired due to substance abuse;
ii. Abnormal conduct or erratic behavior while at work or a significant deterioration in work performance; or
iii. Evidence that an employee has used, possessed, sold, solicited, or transferred illegal drugs while working or while on the Company's premises or while operating the Company's vehicle, machinery, or equipment.

b. Whenever the employee sustains a job-related injury, the company concludes that drugs or alcohol, if used, may have contributed to the incident causing the injury requiring professional medical treatment.
c. Whenever in the sole judgment of the Company, the employee's conduct is a contributing factor to an accident which results in injury to another or damage to property.
d. To remain in compliance with Federal D.O.T. standards and the regulations of any other governing Federal or State agency.
e. To meet lawful contractual requirements of a project owner, project insurance requirements, or the lawful provisions of a collective bargaining agreement.

4. Employees who test positive for drugs or alcohol, those who refuse to consent to a drug test, or who are otherwise found in violation of this policy, will be subject to disciplinary actions, up to and including discharge.

5. Definitions:
    a. ***Alcohol*** - the intoxicating agent in beverage alcohol, ethyl alcohol, or other low molecular weight alcohols including methyl and isopropyl alcohol to would include any beverage, mixture, or preparation, including any medication, containing alcohol
    b. ***Therapeutic drug*** - any substance, including any prescription drug, prescribed for the individual consuming it by a licensed medical practitioner, or any over-the-counter drug used by the employee
    c. ***Illegal drug*** - any drug or controlled substance that is unlawful or controlled by federal, state or local laws, regulations, or judicial decisions, including amphetamines, marijuana, cocaine, opiates, and phencyclidine. For purposes of this Policy, use of an illegal drug shall have the same meaning as use of "controlled substances," and the terms may be used interchangeably.

6. Pre-Employment Testing:
    a. The Company requires all employees or potential employees, unless covered by a collective bargaining agreement that contradicts this Policy or provides more stringent requirements, to undergo post-offer pre-employment testing for illegal drugs and alcohol.

7. Conditions for Testing:

a. Consistent with applicable laws and subject to any applicable collective bargaining agreement, the Company reserves the right under this Policy to require employees to undergo testing for alcohol and/or illegal drugs as described below. This mandatory testing will be on Company time and at Company's expense.

8. Illegal drug and/or alcohol drug testing procedures, methods, and cut-off levels shall conform to this policy. Employees who test positive for illegal drugs or alcohol, refuse to consent to a drug test, or are otherwise found in violation of this Policy may be subject to disciplinary action, up to and including discharge.

9. Employees who test positive for illegal drugs or alcohol, or are otherwise found in violation of this policy, may, at the sole discretion of the Company, be referred to the Employee Assistance Program (EAP). Where available, an employee referred to the EAP following a positive test will not be permitted to return to work until he/she successfully completes a medically supervised rehabilitation program approved by the Company or a medical professional determines that the employee may safely return to work and has negative results on a return-to-duty illegal drug and/or alcohol test. Follow-up tests may occur for the period Management determines is necessary, will be unannounced, and may occur at any time for a time-period management considers reasonable. If the employee fails the follow-up test, he/she may be terminated.

10. Employees discharged for violation of this policy will not be eligible for rehire for a period of time determined by the Company. Eligibility for rehire will only be considered after the employee satisfies the following criteria:

    a. The employee can show proof that he/she has received formal professional counseling concerning drugs and/or alcohol;
    b. The worker successfully passes a return to work illegal drug and/or alcohol screen;
    c. The worker agrees to alcohol and/or illegal drug testing for a period of one year;
    d. Availability of a position for which the employee is qualified; and
    e. A determination by the appropriate company representative that re-employment is appropriate under the circumstances.

11. An employee who adulterates, attempts to adulterate, substitutes a testing specimen, or otherwise manipulates or attempts to manipulate the testing process, will be subject to discipline, up to and including termination to the extent permitted by applicable law or collective bargaining agreement.

14.2. Therapeutic Drugs

1. This policy does not prohibit the use of a therapeutic drug unless such therapeutic drug affects the employee's capacity to properly perform job duties or creates a danger to him/her or to others in the

workplace. "Therapeutic drugs" include legally obtained prescription drugs, controlled substances, and over-the-counter drugs used in accordance with the employee's related prescription and/or directions.

2. Any employee whose use of any therapeutic drug(s) may affect his/her capacity to properly and safely perform job duties or may create a danger to himself/herself or to others in the workplace should report the therapeutic drug use to his/her supervisor. The Company will handle the matter as confidentially as practical under the circumstances. An employee may be allowed to continue to work, even though under the influence of a therapeutic drug, if the Company has determined, after consultation, that the employee does not pose a threat to his/her own safety or health or the safety or health of other employees, and the employee's job performance is not significantly, detrimentally affected by the therapeutic drug. Otherwise, the employee may be required to take a leave of absence in accordance with company policy or comply with other appropriate action determined by the Company.

14.3. Company Policy Concerning a Drug-Free Workplace (as required by the Drug-Free Workplace Act of 1988)

1. Employees are prohibited from manufacturing, using, selling, purchasing, transferring, possessing, or being under the influence of illegal drugs, controlled substances, or alcohol during working hours or on any work location of the Company. The legal use of therapeutic drugs is permitted on the job only if it does not impair an employee's ability to perform the essential functions of the job effectively and in a safe manner.

2. Under the Drug-Free Workplace Act, any employee convicted of violating a criminal drug statute based on conduct occurring on Company paid time or on Company premises or work locations is required to notify the Company of such conviction. The notification must be made to the employee's supervisor within five (5) days of the conviction.

3. Employees must consent to abide by this statement as a condition of employment.

4. Any violation of the Drug-Free Workplace policy will result in discipline, up to and including discharge, in accordance with Company policy.

14.4. The Role of the Supervisor

1. Company supervisors should be able to recognize signs of illegal drug or alcohol use and be able to respond to them accordingly. Supervisors should be prepared to handle employees at the very moment they appear impaired and know where to send an employee for help.

2. Supervisors know employees' job skills, abilities, and performance history. Supervisors are in positions to note changes in job performance that are indicative of problems that could be related to illegal drug or alcohol use.

3. To assist with the recognition of signs of illegal drug or alcohol use, the Company will provide supervisors and management personnel with training to assist their recognition of behavior and other

observable facts that indicate possible illegal drug and/or alcohol use and training in how to respond to suspected illegal drug and/or alcohol use.

14.5. Employee Assistance Program (EAP)

1. The Company has contracted with a confidential Employee Assistance Program ("EAP") to counsel employees (and/or their immediate family members) regarding drug and/or alcohol related issues. The Company has selected Lyra as its Employee Assistance Program (EAP) provider. Lyra's EAP offers confidential assessment, short term counseling, referral, and follow up to help employees deal with a wide range of personal issues including alcohol or drug dependence, before they negatively affect job performance. The EAP offers services across the United States and has more than 1,400 locations.

2. The Company encourages employees who suspect they have a problem – even an early-stage problem – to seek voluntary assistance on a confidential basis before his or her safety, health, or position with the Company is jeopardized. Employees may contact Lyra by calling their office at 877-273-3776 to arrange a confidential consultation. When an employee contacts the EAP on their own, the only feedback provided to the Company is aggregate, statistical information; names are never mentioned. Employees may also request assistance from their supervisors, human resources or safety department.

14.6. Drug and Alcohol Sampling and Test Procedures

1. Alcohol testing will be conducted consistent with the requirements of the medical clinic conducting the testing, and with the requirements of this section, except where the requirements conflict with the requirements of applicable law. Where conflicts exist, applicable law will control.

2. Breath alcohol testing will be conducted by a medical clinic that uses only certified equipment. Breath alcohol concentrations exceeding .04 percent will be considered a verified positive result. A second confirmatory breath test will be conducted to confirm any initial positive test result. Breath alcohol testing may also be performed consistent with any alternative testing procedures approved and recognized by the U.S.D.O.T.

3. Controlled Substances (Illegal Drug) Testing: All specimens collected for purposes of a drug screen under this policy will be handled using strict chain of custody procedures which are outlined below. They are designed to insure the integrity of the specimen from the time of collection through the performance of all requested tests, until the specimen is ultimately discarded. They are also designed to document the details of the specimen collection, identification, transportation, receipt of, and custody of that specimen.

4. Specimens submitted under the chain of custody protocol will be collected and processed as follows:
    a. The employee who submits to a drug screen must produce some type of valid photo identification, (i.e., driver's license).
    b. Normally, a non-observed collection procedure will be used. The sample will be checked for temperature and PH content to ensure its validity.

c. Precautions will be taken using a double seal, tamper proof container and chain of custody documentation that accompany the sample through collection, transportation, testing, and storage. These precautions will help ensure the test results are accurate and are returned on the correct individual.

5. Positive samples will be frozen and retained for a minimum of one year.

6. A urine sample will be taken for the purposes of drug testing. However, a blood sample may be taken, where consistent with applicable law, if an employee is injured and a urine sample is not available.

7. The drug screen includes qualitative analysis using the latest technologies to test for the presence of the groups of drugs listed in the table below. Positive screens are confirmed for all drugs present by Gas Chromatography/Mass Spectrometry (GCMS). GCMS will be the only method of confirmatory testing where required by state or local law. Drug testing may also be performed consistent with any procedures approved and recognized by the U.S.D.O.T.

8. Where the results of a test indicate a "dilute" or is otherwise inconclusive, the Company reserves the right under this Policy to require the employee to undergo a follow up test or be re-tested for alcohol and/or drugs as described herein. All rights, remedies and procedures under this Policy also apply to any follow-up test or retest required by the Company. This mandatory testing will be on Company time and at the Company's expense.

9. Random annual drug testing of up to 10% of the work force unless higher test levels are specified by applicable Law or Owner. Alcohol testing may be included at the direction of the owner or contractor.

10. Periodic testing may be required when an employee returns to work after a long illness, disabling injury, or following a serious accident. Contractor direct employees on probationary status may also be included in periodic testing according to the contractor program. Subcontractor employees who test positive under any of the above tests are prohibited from access to the Project site for one year after the date of the failed test and must re-apply for access as a new applicant.

14.7. Substance Testing and Cutoff Levels

The cutoff levels established by the Department of Health and Human Services ("DHHS") will be used in both initial and confirmatory testing (see table below).

Substance Name and Cutoff Levels

Drug Name	Type of Drug	Initial Test	Confirmatory Test
Amphetamine		1000 NG/ML	500 NG/ML
Methamphetamine	Amphetamine	1000 NG/ML	500 NG/ML
Ecstasy, X or XTC	Amphetamine	1000 NG/ML	500 NG/ML
Barbiturates		300 NG/ML	300 NG/ML
Benzodiazephene		300 NG/ML	300 NG/ML
Cocaine		300 NG/ML	150 NG/ML

Morphine	Opiate	2000 NG/ML	2000 NG/ML
Codeine	Opiate	2000 NG/ML	2000 NG/ML
Heroine	Opiate	2000 NG/ML	2000 NG/ML
PCP	Phencyclidine	25 NG/ML	25 NG/ML
Darvon	Propoxyphene	300 NG/ML	300 NG/ML
Methadone		300 NG/ML	300 NG/ML
Marijuana	THC	50 NG/ML	15 NG/ML

Authorization for Substance Abuse Testing

1. If a supervisor determines that a reasonable suspicion drug screen is warranted, he or she must first contact the local or National Safety Director. The local or National Safety Director with the Human Resources Director will review the circumstances and decide whether testing is warranted and/or necessary.

2. In the case of a union employee, the terms of the applicable collective bargaining agreement should be reviewed before rendering a decision to test.

14.8. What Supervisors Should Not Do

1. A supervisor should never, under any circumstances, do the following, as these actions could create legal liabilities, safety hazards, or costly errors:
    a. Supervisors should never attempt to diagnose a drug or alcohol problem.
    b. Supervisors should not discuss suspicions with unauthorized persons. If supervisors suspect a drug or alcohol problem, they should only discuss it with their immediate supervisor or other persons authorized in the Company.
    c. Supervisors should never put suspicions regarding drug or alcohol use in writing. Supervisors should document facts on worker performance, not suspicion.
    d. Supervisors should not attempt to obtain a confession. A discussion with an employee regarding poor performance is one of the most difficult tasks a supervisor will ever have. It is even more difficult when supervisors suspect a drug or alcohol problem is a contributing factor.
    e. Supervisors should not ask the employee if he/she has a drug problem. Instead, supervisors should base any discussion on poor work performance. Hold the meeting in private and ask the employee if there is anything that can be done to help him/her solve the problem. If the problem is severe enough to warrant further action, the supervisor may want to refer him/her to the Employee Assistance Program or contact the Safety or Field Operation departments for authorization for a possible drug and alcohol test.
    f. Supervisors should not play favorites or make a subjective evaluation of an employee. Supervisors must treat all workers on the project the same. For example, a supervisor may have a close friend or longtime co-worker that shows signs of poor work performance that warrants action, but choose to ignore the symptoms due to the long-term relationship with this employee. If a supervisor initiates action on another employee because of age, color, or dislike for him/her, the supervisor runs the risk of subjecting the Company and/or themselves to a lawsuit for discrimination for failure to treat all workers equally.

2. To summarize, in trying to control drug or alcohol abuse in the Company a supervisor must never:

a. Try to diagnose any employee's problem as that of drug/alcohol abuse
b. Discuss their suspicions with unauthorized employees
c. Put suspicions of drug or alcohol use in writing
d. Confront employees or try to get a confession of drug/alcohol abuse
e. Play favorites.

14.9. What Supervisors Should Do

1. Whenever an employee's work, attendance, or behavior falls below the acceptable standard, the supervisor needs to act. There are positive steps a supervisor can take in the face of suspected employee problems.
    a. **Keep good records.** To deal with a drug or alcohol problem, the supervisor must have accurate, objective, written records. Symptoms and job performance should be listed. No subjective remarks should be listed. Document facts, not suspicions.
    b. **Act on poor performance.** Document poor performance and meet with that employee to discuss his/her performance. Require improvement and make it clear that other measures will be taken if necessary. Provide the employee with an Employee Assistance Program brochure and explain that he/she may use this service confidentially if needed.
    c. **Follow through.** If the employee performance does not improve, document this fact. Contact the Director of Field Operations or safety departments for further assistance.

2. All these actions may sound easy, but they are not. It is very difficult to confront chemical abuse problems. Front line supervisors are in a good position to help control drug abuse in the Company. It is imperative to know what can or cannot be done. A successful program could reduce losses caused by low productivity, accidents, high workers' compensation costs, poor morale, and theft. The success of this program is directly dependent on supervisors who understand the program and are prepared to enforce it when required.

14.10. Additional Legal Considerations

1. Disgruntled employees sometimes raise claims against a manager in his or her individual capacity, as well as against a company in its corporate capacity as employer. Defamation and privacy claims are the most likely ones to be raised. Defamation, for these purposes, means falsely labeling or characterizing an employee in a way that reflects adversely on the employee's character. Simply confine comments to objective, observable behavior.

2. An individual's right to privacy may be violated if: (1) an employer publicly discloses private facts about the employee (e.g., positive test results); (2) an employer has intruded, uninvited, into the employee's private activities (e.g., off duty activity); or (3) an employer discloses inaccurate information that places the employee in a false light in the public eye.

3. Supervisors are free to communicate objective observations to those in management with a need to know. Be discreet in terms of all communications, whether oral or written, concerning such matters. Any discussions or correspondence with employees experiencing drug or alcohol problems should be kept in the strictest confidence. Discussions with employees should take place only in a private setting.

Section 15: Disciplinary Enforcement Policy

15.1 Purpose

1. The purpose of this policy is to outline specific enforcement procedures when personnel are found in violation of a safety policy outlined in this manual.

2. This policy is also utilized to track and trend safety issues by employee and company. This will assist the Safety Department in identifying issues that may need to be addressed or individuals that lack the safety training or culture required. By identifying these issues, we can improve our overall safety by focusing our efforts on these issues.

3. We should not expect that each and every minor safety issue be documented and the full write-up policy implemented for each instance. Issues that are considered minor in nature should be handled as a teaching/coaching moment to improve the overall safety culture of the organization. It is expected that ALL safety issues likely to result in serious injury or death be addressed immediately and that this procedure is fully adhered to.

15.2. Responsibility

1. It is the field supervisor's responsibility to ensure all workers are performing their work safely in accordance with the rules and procedures outlined in this manual. When that fails, the supervisor shall utilize the enforcement procedures in section 15.3. The supervisor shall also retrain the worker to ensure that the employee understands the safety requirements of the task.

15.3. Enforcement Procedures

1. Each worker will be placed under a three-step enforcement program consisting of a verbal warning, written warning, and termination and/or suspension for failure to comply with company safety policies. Workers under the supervision of field supervisors that continue to violate safety and health procedures may result in both employee and supervisor write-ups.

2. Verbal Warning:
    a. When an employee is found violating a safety rule, it is important that the supervisor states the issue to the employee, shows the employee what steps need to be taken to correct the issue and get assurances from the employee that this issue will not happen again. The supervisor should make it clear to the individual that this is a verbal warning, and the employee will be written up if it happens again. New Hire orientation is each person's verbal warning in regard to all zero tolerance safety requirements shown below.

3. Written Warning:

a. If an employee is in violation of any policy of this manual for the second time, the employee will receive a written reprimand. The reprimand should show the nature of the violation and what the resulting actions would be if the employee violates the program the third time.
b. The employee shall be required to re-attend project safety orientation training, and/or safety training specific to the unsafe act.

4. Third Warning:
    a. Upon the third reprimand of an employee, the supervisor should suspend or terminate the employee for violation of the safety policies. The severity of the penalty shall be adequate for the violation.

5. Zero Tolerance Policy
    a. Persons committing the following acts, and persons instructing others to commit the following acts, will be removed and banned from the site (and possibly future sites) per defined period determined by JE DUNN project management.
    b. Examples include but are not limited to:
        I. Crossing red danger tape barricaded area without authorization
        II. Intentionally putting oneself or another at risk of injury.
        III. Fall Protection: Working at height > 6' without 100% tie-off or edge protection.
        IV. Confined Space Entry: Failure to comply with confined space procedures.
        V. COHE: Unauthorized removal or interference with a safety Lockout or Tag-Out device (Lockout/ Tag-out/ or Block-out violation).
        VI. EEW: Unauthorized work on, or access to, energized electrical equipment (Life threatening electrical violations).
        VII. Trenching/ Excavation: Excavation Procedure violations,
        VIII. Cranes, rigging, hoisting violations,
        IX. Fire Prevention/ Protection violations,
        X. Special Equipment violations, and
        XI. Any Life-Threatening violation.
        XII. Worker's failure to report a 'zero tolerance' incident
        XIII. Company's (foreman through upper management) failure to report a 'zero tolerance' incident
        XIV. Horseplay / Fighting / Hostile Behavior / Bullying.
        XV. Failure to follow safety related directions or instruction given by JE DUNN.
        XVI. Attempting to use, consume, possess, purchase, sell, manufacture, distribute, or dispense, illegal drugs while on site.
        XVII. Being under the influence of non-prescribed drugs or alcohol.
        XVIII. Theft of, intentional damage to, misuse of, or interference with tools, equipment, scaffold, or safety equipment.
        XIX. Urinating or defecating anywhere other than site restroom facilities.
    c. Zero Tolerance reprimands will result in the immediate dismissal of the individual(s) involved and permanent barring from the construction site. If the violation occurred with the knowledge of the foreman or supervisor of those involved, said foreman or supervisor will also

be removed from the site. If Zero Tolerance reprimands continue to occur by the same Trade Partner, the Trade Partner will be barred from the site.

d. Incident Late Reporting can result in immediate disciplinary action up to removal from the project.

15.4. Gross Misconduct

1. Episodes of gross misconduct by an employee for any reason may result in immediate disciplinary action up to and including discharge. Any worker who is terminated for not following safety policy will not be eligible to work for the company for a minimum of 1 year.

2.Gross misconduct includes but is not limited to:

a. Fighting
b. Working at unprotected heights
c. Safety violations where the resulting injury could cause death or serious injury
d. Actions that could jeopardize the safety of another
e. Any other action that would jeopardize the safety or security of the project

15.5 Documentation of Enforcement

1. Regardless of the level of warning given, the supervisor shall complete the Safety Violation Form. A copy shall be provided to the worker that violated the policy. The completed form shall be sent to the regional safety department to be entered into the safety violation database.

15.6. Enforcement Guidelines

1. How you address the issues that arise is a critical part of the safety culture and performance expectations at the job site. If you choose to ignore or minimize the severity of a safety violation at the jobsite, that sets precedent for future safety performance not only for the individual but also the Foreman responsible. The safety issue that is not properly addressed today is a missed opportunity to prevent an accident tomorrow.

2. Enforcement should never be viewed as a disciplinary measure but rather an opportunity to identify a part of a safety program or process that can be improved to prevent accidents. Most safety violations can be attributed to failure in a company's safety program or procedure. For instance, a worker using a ladder improperly may:
    a. Not have been properly trained in the use of that ladder
    b. Not have been provided with the proper equipment to perform his/her work in a safe manner
    c. Not believing that working safely is a condition of employment for JE Dunn
    d. Have the wrong attitude towards following safety rules

3. Regardless of the reasons for safety issues, steps need to be taken to not only correct the issue but find the cause and address it to prevent recurrence again. This method of continuous process improvement looks at safety issues as opportunities to make a project safer and more productive. All disciplinary actions must be executed in a fair and consistent manner throughout the ranks of the organization.

4. The following steps should be taken when a safety issue is encountered:
    a. **STOP the violation immediately**. Allowing someone to continue to work unsafe is not acceptable. Furthermore, stopping the violation sets the precedence for others to be aware of the expectation to perform work in a safe manner. The worker should be instructed to get his/her foreman to develop and implement corrective measures.

    b. **SECURE the situation for safety.** The area must be made safe, or the hazard has been abated.

    c. **DISCUSS the issue with the worker**. Determine why it occurred. Usually, the root causes will include one or more of the following:
        i. A lack of knowledge or training
        ii. Using improper equipment

15.7. Employee misconduct

1. **ADDRESS the violation**. Not only the incident, but in many cases the root causes should be addressed to improve safety at the project. Some corrective action may include the following:
    a. Tool box safety training given by the foreman with the crew or workers who may also be exposed. Documentation of training should be given to the JE Dunn Superintendent and forwarded to the safety department.
    b. Significant issues or issues which continue to repeat without resolution should be escalated to upper management for action.
    c. The safety violation form should be completed per this policy to document the violation and corresponding corrective measures.
    d. Foreman should be held accountable. Where a Foreman has failed to ensure that the worker in violation was properly trained or was provided the proper equipment the Foreman should also be held accountable with the worker as conditions warrant.
    e. **FOLLOW-UP with the corrective action** to ensure that the actions taken were effective. All safety issues should be reviewed at the group huddle/plan of the day meetings and in the weekly progress meetings to again reinforce the safety expectation on the project and to give others the opportunity to learn from the issues.

Emergency Management and Investigation

Section 16: Incident Reporting and Investigation

16.1. Purpose

This procedure summarizes the process for reporting, investigating, and managing any occurrence that caused, or could have likely caused any occupational injury/illness cases, property damage, service interruptions or environmental & health impacts.

16.2. Scope

This procedure is applicable to all JE Dunn Employees, Trade Partner Personnel and Visitors while on this JE Dunn project site. This procedure also applies to any motor vehicle collision that involves JE Dunn Company vehicles. This procedure does not apply to any support work that occurs outside the physical boundaries of JE Dunn projects.

16.3. Responsibilities

All responsibilities associated with this procedure are identified in the process steps.

Process *(Note: This process should be amended to align with owner and facility requirements when required)*

All the following classified incidents will require the completion of the Incident Report Form.

16.4. Occupational Injuries and Illness Incidents

1. Medical Emergency
    a. Note: A medical emergency is defined as an acute injury or illness that poses an immediate risk to a person's life or long-term health. Medical emergency incidents include, but are not limited to, breathing difficulty, loss of consciousness, severe bleeding, electrical shock, chest pain, or pressure and broken bones.
    b. Trade partners shall call the emergency phone number to report emergencies (if communicated)

For emergencies call 911 until Guardia Security is onsite (update Guardia number.

i. fire,
ii. medical,
iii. accident
iv. major hazardous materials spill,
v. workplace violence,
vi. bomb threat,
vii. any other emergency

1. Injury or Illness (*Medical Emergency*)

Responding Employee	Step	Action

Responding Employee	1.	Call 911
	2.	PROVIDE assistance to injured/ill employee, which may include rendering first aid treatment.
	a.	The injured employee should not be moved unless the employee's life is in danger.
	3.	Notify JE Management or designate someone to notify JE Dunn management as soon as possible.
	4.	REMAIN with the injured/ill employee until Emergency Medical Services arrives
JE Dunn Management	1.	As soon as being notified of a Medical Emergency, the Construction Emergency Response Team will be activated.
	a.	The Emergency Response Team shall stop all activities that could interfere with Emergency Medical Services.
	b.	Security and or Construction Emergency Response Team (if necessary) shall direct Emergency Medical Service to the injury employee's location.
	c.	Assist in rendering first aid treatment to the injury employee.
	2.	Make notifications following the **Project Incident/Injury Notification Tree**
	a.	Notifications should be made as soon as reasonably possible.
	b.	Follow owner notification time limits when required.
	3.	Ensure that administrative activities described in Section 4.1 (b) are followed.

2. Injury or Illness (*Non-Medical Emergency*)

Responding Employee	Step	Action
Injured/ill Employee	1.	Self-treat injury with First Aid if possible.
	2.	NOTIFY the immediate supervisor/manager as soon as possible after the occurrence of an Injury or Illness.
	a.	When injury/illness worsens or is not initially recognized after work hours, the employee should call their supervisor immediately.
	3.	Fill out all required paperwork associated with the injury.
	4.	Assist in all incident investigations and After-Action Review if necessary.
	5.	Notify supervisors of all visits to private practitioners, chiropractors, physical therapists, etc.
	a.	Provided documentation associated with all medical visits.
	6.	Follow all medical recommendations.
Employee Supervisor	1.	NOTIFY JE Dunn Management and Safety of the injury soon as possible.
	2.	Assist in completion of all incident paperwork.
	3.	Assist in all incident investigations and After-Action Review (AAR) if necessary.

	4.	Ensure that the employee is present at scheduled medical appointments.
JE Dunn Management	1.	Make notifications following the **Project Incident/Injury Notification Tree**.
	2.	Ensure that all required incident paperwork has been filled out.
	3.	Shall be charged with coordinating and running all AAR's.
	4.	Responsible for ensuring that assigned Actions Required (AR) are completed.
	5.	Responsible for dispersing information to Top Management
Safety Manager	1.	Make notifications following the **Project Incident/Injury Notification Tree**. (Perform RISK 360)
	2.	Work with the injured employee and employee supervisor to ensure that proper medical attention is received.
	3.	Shall be responsible for conducting all incident investigations.
	4.	Responsible for notifying Workers Compensation Carrier of Injury or illness and completion of required paperwork.
	5.	Assist Workers Comp Carrier in injury and claim management activities. (If applicable)
	6.	Assist JE Dunn project management in coordinating and running AAR's.

3. Interruption to the Facility or Service- Service Interruptions are defined as losses that resulted from an interruption in business operations. The interruption typically arise from damage caused to a business's property or failure in sequencing construction activities. Each owner will have different requirements for managing Service Interruptions. JE Dunn Management will be required develop a project specific Service Interruption procedure if required by the Owner.

Responding Employee	Step	Action
Employee(s)	1.	Ensure the area is safe and don't let others enter the area if there is a hazard present.
	2.	NOTIFY immediate supervisor.
	3.	Assist in the incident investigation.
Employee Supervisor	1.	NOTIFY JE Dunn Management and Safety of the incident as soon as possible.
	2.	Assist in the incident investigation and AAR if required.
JE Dunn Management	1.	Make notifications following the **Project Incident/Injury Notification Tree**. Ensure that proper facility personnel are contacted.
	2.	Shall be charged with coordinating and running all AAR's.
	3.	Responsible for ensuring that assigned Actions Required (AR) are completed.
Safety Manager	1.	Make notifications following the **Project Incident/Injury Notification Tree**. (Perform RISK 360)
	2.	Shall be responsible for conducting all incident investigations.

	3.	Assist JE Dunn project management in coordinating and running AAR's.

4. Property Damage

In the event an incident that involved the damage of property the same procedural steps required in section 3 shall be followed. Additional paperwork will be required.

5. Environmental Emergencies

Responding Employee	Step	Action
Employees	1.	If any spills, leaks or releases are noticed that could cause harm to the environment or human health, all activities should be stopped.
	2.	NOTIFY supervisor immediately.
		In you know what chemical(s) has been released, understand the hazard and have to proper PPE you may attempt clean the spill.
Employee Supervisor	1.	NOTIFY JE Dunn Management immediately
	2.	Direct clean activities if charged too so.
	a.	If the crew has not been trained to handle the released chemical, remove all personnel from the area.
	3.	Assist in the incident investigation and AAR if required.
JE Dunn Management	1.	Make notifications following the **Project Incident/Injury Notification Tree**.
	2.	Coordinate all clean-up activities and ensure proper environmental remediation is achieved.
	3.	Shall be charged with coordinating and running all AAR's.
	4.	Responsible for ensuring that assigned Actions Required (AR) are completed.
Safety Manager	1.	Make notifications following the **Project Incident/Injury Notification Tree**. (Perform RISK 360)
	2.	Shall be responsible for conducting all incident investigations.
	3.	Assist JE Dunn project management in coordinating and running AAR's.

16.5. Incident Investigation

The extent an incident will be investigated and reviewed will be based on severity or potential risk.

1. Investigation Drivers: The following incidents will be required to be investigated and have an After-Action Review performed.
    a. Recordable Injuries
    b. Minor Injuries with High Potential Severity
    c. Near Miss Incidents
    d. Incidents involving property or environmental
    e. Incidents involving Service Interruptions

2. Incident Scene Securement

a. Prevent additional accidents from occurring by ensuring there are no hazards in the scene.
b. Secure the accident scene to prevent evidence contamination or the scene from being altered.

3. Evidence Collection
    a. Photo Evidence (follow site requirements)
        i. Take photographs of all angles of the scene.
        viii. Take closes up of any physical evidence.
    b. Paper Evidence
        i. Pre-Task Plans
        ii. Job Hazard Analysis
        iii. Inspection and Maintenance Records
        iv. Safety Data Sheets
        v. Training Records

4. People Evidence
    a. Interview and record witness statements from everyone who saw and were involved with the incident. In addition, interview everyone who was in the vicinity of the accident before, during, and after the incident. Furthermore, project superintendent, crew foreman, etc., should also be interviewed. Witnesses should be separated prior to starting the interview process, and interviews should be conducted with one witness at a time.

5. Physical Evidence
    a. Collect all equipment, tools, materials, and PPE, which were being used at the time of the incident. All evidence collected should be labeled accurately.

16.6. After Action Review (AAR)

The After Action Review process is used to determine the causal factors involved in an incident, in order to prevent future occurrences. The AAR process should not be used to place blame or find fault on the individual involved.

16.7. AAR Meeting Structure

1. The AAR meeting will require a meeting that includes, but is not limited to, JE Dunn Management, JE Dunn Safety, Trade Partner Supervision, Individual(s) involved and Owner Representation if required.

2. JE Dunn Management will be charged with organizing and running the AAR meeting.

3. Based on the incident investigation JE Dunn and Trade Partner Supervision will pre-populate the AAR Form prior to the meeting.

4. During the AAR meeting each section of the AAR Form will be reviewed for accuracy.

5. During this meeting the group will come to a consensus on contributing factors and root cause.

6. Based on the contributing factors and root cause Action Required (AR) will be assigned to prevent future occurrences.

16.8. Reporting

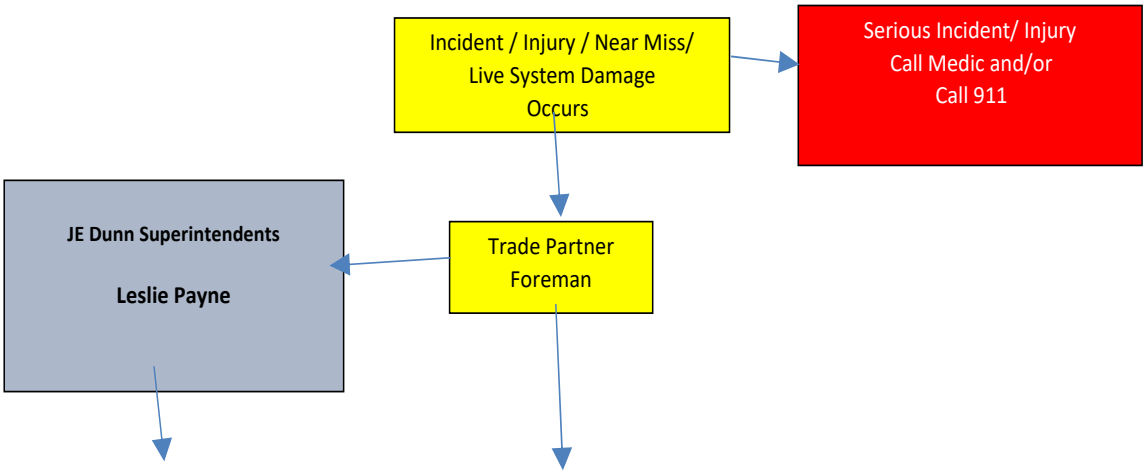
Some Occupational Injuries and Illnesses are required to be reported to the Occupational Safety & Health Administration (OSHA) or State Plans if the following criteria are met.

Note: Trade Partner shall notify JE Dunn prior to notifying OSHA.

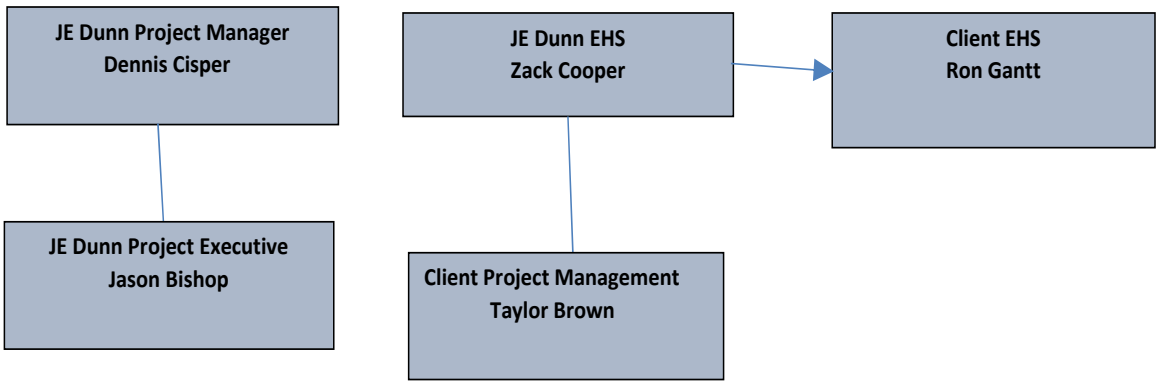
a) Within eight (8) hours after the death of any employee as a result of a work-related incident.
b) Within twenty-four (24) hours after the in-patient hospitalization of one or more employees or an employee's amputation or an employee's loss of an eye, as a result of a work-related incident.
c) You must report the fatality, inpatient hospitalization, amputation, or loss of an eye using one of the following methods:
    i. By telephone or in person to the OSHA Area Office that is nearest to the site of the incident.

Immediate Incident Notification Process

Verbal communications



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JE Dunn Project Manager
Dennis Cisper
JE Dunn EHS
Zack Cooper
Client EHS
Ron Gantt
JE Dunn Project Executive
Jason Bishop
Client Project Management
Taylor Brown

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AFTER ACTION REPORT
(AAR)

SAFETY
EVERYONE.
EVERYWHERE.
ALL THE TIME.

Project:	Project Number:	
Event Date:	Event Start Time:	Event End Time:
Meeting Date:	Meeting Time:	
Contractor:	Trade Partner:	Third Tier:
Specific Location:		

INJURY UPDATE SECTION

Note: If any injury occurred the following section must be completed.

Description of Injury:

Status of Injured Employee:

ROOT CAUSE ANALYSIS (RCA) SECTION

What did we want to happen?

Type answer here

What actually happened? (Problem Statement)

Type answer here

Chronology:

Type answer here

AFTER ACTION REPORT
(AAR)

SAFETY
EVERYONE.
EVERYWHERE.
ALL THE TIME.

Current Situation:

Type answer here

Contributing Factors:

- *Type answer here*

Root Cause:

- *Type answer here*

What did we learn?

- *Type answer here*

What will we do different next time?

- *Type answer here*

AFTER ACTION REPORT
(AAR)

SAFETY
EVERYONE.
EVERYWHERE.
ALL THE TIME.

AR SECTION					
AR#	Description of A/R	Status	Notes	AR Owner	Due Date
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

EVENT CLASSIFICATION									
First Aid	Yes		No		Near Miss	Yes		No	
Recordable	Yes		No		Service Interruption	Yes		No	
DART Case	Yes		No		Environmental	Yes		No	

ATTENDEES		
Name	Company	Email

AFTER ACTION REPORT
(AAR)

SAFETY
EVERYONE.
EVERYWHERE.
ALL THE TIME.

PHOTOS | ATTACHMENTS

Section 17: First Aid and Medical Attention

17.1. First Aid/ AED

1. A list of locations on the project where first aid kits are/ or will be located as the project progresses.

Note: a map of FA/AED/Emergency Routes will be made available for easy reference.

2. A list of locations on the project where eye wash stations are/ or will be located as the project progresses.

3. A list of locations on the project where AED are/ or will be located as the project progresses.

4. A minimum of one EHS incident drill will be conducted every quarter and at least one medical emergency incident drill every six months. (drills may include, but are not limited to natural disasters, fire etc.) a debrief report on the findings, along with status of action items, will be made available to Beale's project management team.

17.2. Medical Response (Non- Emergency)

1. Reporting and Investigating injuries shall follow the requirements in Section 16 of this plan.

2. Medical treatment that is not classified as a medical emergency, shall be treated by a licensed medical provider.

3. All personnel seeking medical treatment are required ***to report*** to the JE Dunn Safety Manager before seeking off-site medical treatment.

Note: JE Dunn does not allow personnel seeking medical treatment for an occupational injury to self-transport. Transportation should be provided by JE Dunn or Trade Partner Management or contracted medical service provider (as applicable).

4. Ensure that the proper insurance paperwork (Injury Kit) is sent with the employee.

5. JE Dunn's Preferred Medical Provider will be On-Site Medic. WorkPartners will be utilized if an injury needs off-site care.

6. Preferred Medical Provider Map and Directions will be communicated during orientation.

17.3. Medical Emergency

1. A medical emergency is defined as an acute injury or illness that poses an immediate risk to a person's life or long-term health. Medical emergency incidents include, but are not limited to, breathing difficulty, loss of consciousness, severe bleeding, electrical shock, chest pain, or pressure and broken bones.

2. Reporting and investigating of injuries shall follow the requirements in Section 16 of this plan.

3. Preferred Hospital/ Emergency Department Address

17.4. Evacuation & Staging

1. Method of evacuating the project site in case of an emergency. Will be communicated during orientation and other applicable means and methods on-site.

Section 18: Bloodborne Pathogens Program

18.1. Purpose

1. This program's purpose is to eliminate and/or minimize employee occupational exposure to blood, other body fluids, and other potentially infectious materials. It is the policy of the company to protect employees who could be exposed, as part of their assigned duties, to human blood or other potentially infectious materials (OPIM) that may contain bloodborne pathogens, infectious microorganisms that are present in human blood and can cause disease in humans. These pathogens include but are not limited to Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV) commonly known as AIDS. Since no person is risk free, any employee who has occupational exposure to blood or other potentially infectious material shall be included within the scope of this policy.

2. The safety department is responsible for annually reviewing this program and its effectiveness, and for updating this program as needed.

18.2. Definitions

Blood: human blood, human blood components, and products made from human blood.

***Blood borne Pathogens*:** infectious microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV) commonly known as AIDS.

***Contaminated*:** the presence of blood or other potentially infectious materials on an item or surface.

***Exposure Incident*:** a specific incident in which an eye, mouth, other mucous membrane, skin, comes in contact with blood or other potentially infectious materials resulting from the performance of an employee's duties.

***Hand Washing Facilities*:** a facility providing an adequate supply of running potable water, soap, and single use towelettes or hot air-drying machines.

***Occupational Exposure*:** reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of employees' duties.

***Other Potentially Infectious Materials*(OPIM):** means human bodily fluids contaminated with blood and all bodily fluids where it is difficult or impossible to differentiate between body fluids. Includes, but is not limited to, blood cultures, organs, and other tissues.

***Personal Protective Equipment*:** specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes not intended to function as protection against a hazard are not considered to be personal protective equipment.

***Source Individual*:** any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to an employee.

***Universal Precautions*:** an approach to infection control. According to the concepts of Universal Precautions, all human blood and certain body fluids are treated as if known to be infectious for HIV, HBV, and other blood borne pathogens.

***Work Practice Controls*:** controls that reduce the likelihood of exposure by altering the manner in which a task is performed (i.e. wearing protective equipment).

***Engineering Controls*:** controls (e.g. sharp disposal containers, self-sheathing needles, or other equipment) that may isolate or remove blood borne pathogens from the workplace.

18.3. Exposure Determination

Employees covered by this policy include:

1. Designated first-aid personnel.

2. Designated emergency response individuals.

3. Exposure determinations shall be made without regard to the use of personal protective equipment. All personnel exposed to bloodborne pathogens must be tested after an incident.

4. Exposure in the construction industry is expected to be limited to emergency situations involving job related injuries. Employees should review the bloodborne pathogen program.

18.4. Work Practice Controls

1. Employees who may be exposed to bloodborne pathogens are required to implement “universal precautions” or “body substance isolation”. Control measures will be implemented in accordance with the requirements set forth during employee training in “work practice controls”, whereby steps are taken by the employee and the company that shall reduce the likelihood of exposure to potentially infectious materials by altering the manner in which tests are performed. All exposure cases without regard to the use of PPE must be tested.

2. All employees assigned as designated first-aid person, infirmary personnel, and other emergency response personnel will be provided training in how to recognize and control blood borne exposure. Work practice controls, as outlined in this section, will be furnished to all affected employees and each employee will be trained in their use with updated implementation training to be given annually. The Safety Director will maintain all training records.

3. Hepatitis B vaccinations are available to all employees who have occupational exposure as defined in this control program. The employee may elect to have the vaccine administered any time after initial assignment. Employees who decline the vaccine will be asked to sign a statement to that effect; however, he or she may decide to accept the vaccination at a later date. In addition, all employees who have an exposure incident are entitled to a post-exposure evaluation and follow-up with a licensed healthcare professional (i.e. doctor or nurse). Vaccines, post exposure evaluations, and follow-ups will be provided at the company’s expense. All medical records will remain confidential.

4. Immediately following the removal of PPE, the employee is required to wash their hands and other potentially exposed skin with antiseptic hand wash or towelettes. The employee shall then wash their hands with soap and water as soon as possible thereafter.

5. Work surfaces and equipment that are contaminated with blood or OPIM shall be disinfected with an appropriate cleaner.

18.5 Control Procedures

Assess the Workplace Environment:

1. Employees shall be trained to look for signs or labels that indicate the presence of infectious materials that are or may become present during the course of work operations. If the worker suspects there may be infectious materials present, they should contact their supervisor who will in turn call the Safety Director for guidance.

2. In cases where we are performing work within a business or industry where there is a possibility of encountering this issue, a meeting shall be held with the building occupant's internal infection control person to discuss the possible exposure.

18.6 Use of Personal Protective Equipment (PPE):

1. All employees involved in a situation where it is reasonably anticipated that exposure to infectious materials is likely, are required to wear PPE. PPE items are located in the first-aid kit.

2. PPE will be considered appropriate only if it does not permit blood or OPIM to contact the employee or the employee's clothing.

3. Contaminated PPE shall be placed in a bag or container marked with the universal biohazard label and disposed of at the proper biohazard disposal facility.

4. Immediately following the removal of PPE all employees are required to wash their hands and any other potentially exposed skin with antiseptic hand cleaner or towelettes. As soon as possible thereafter the employees shall wash the same areas with soap and water.

5. Work surfaces or equipment that is contaminated with blood or other OPIM shall be disinfected with an appropriate cleaner.

6. Hand Washing Facilities
    a. Employees shall be furnished with readily accessible hand washing facilities when feasible.

b. When hand washing facilities are not readily accessible to the employee, antiseptic towelettes provided in the first-aid kit should be utilized. Should the use of antiseptic towelettes be necessary, employees shall wash hands with soap and running water as soon as feasible.
c. All employees must, without exception, wash hands and any other infected skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or OPIM's.

18.7. Post Exposure and Follow-Up

1. All exposure incidents shall be reported, investigated, and documented. When an employee incurs an exposure incident, it shall be reported immediately to the company's safety department.

2. Following a report of an exposure incident, the exposed employee shall immediately receive a confidential medical evaluation and follow-up, including at least the following elements:

3. Documentation of the route of exposure, and the circumstances under which the exposure incident occurred.

4. Identification and documentation of the source individual.
    a. The source individual's blood shall be tested as soon as feasible, after consent is obtained in order to determine HBV and HIV infectivity. When the law does not require the source individual's consent, the source individual's blood, if available, shall be tested and the results documented.
    b. Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

5. Collection and testing of blood for HBV and HIV serological status will comply with the following:
    a. The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained. The employee will be offered the option of having his/her blood collected for testing the employee's HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status.
    b. All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. All post exposure follow-ups will be performed by a local designated medical center.

18.8. Training

1. All employees with occupational exposure are required to be trained in requirements set forth in CFR 1910.1030 Bloodborne pathogens. The training program will consist of the following elements:

a. An accessible copy of the regulatory text of OSHA 1910.1030 and explanation of its contents.
b. A copy of the bloodborne pathogen program and hazard control plan.
c. A general explanation of the epidemiology and symptoms of blood borne disease.
d. An explanation of the modes of transmission of blood borne disease.
e. A description of the hazard control plan.
f. Information on how to recognize a potential hazard.
g. An explanation of the use and limitations of the methods required to control exposure including engineering controls, work practices and personal protective equipment.
h. Information on the types, proper uses, location, removal, handling, decontamination, and disposal of personal protective equipment.
i. Information on the benefits, use and availability of the Hepatitis B vaccine.
j. Appropriate action to take and persons to contact in the event of an emergency involving medical follow-up.
k. Information on post-exposure evaluation and follow-up that is required to be provided following an exposure incident.
l. An opportunity for interactive questions and answers with the person conducting the training session.
m. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.

18.9. Record Keeping

The company shall maintain records of all exposure incidents, including the names of the source individual(s).

18.10. Vaccinations

Vaccinations shall be provided at no cost to the exposed employee. Employees that decline treatment shall sign and date the Declination Statement.

Occupational Health, and Safety Practices and Procedures

Section 19: Personal Protective Equipment (PPE)

This document is written to provide clear and concise policy on the wearing of various types of required personal protective equipment. Everyone, regardless of the reason for being on site will be required to follow these guidelines. Trade Partners are required to ensure their employees, visitors and tiered Trade Partners follow these requirements. Failure to follow these guidelines will result in being removed from the project.



19.1. Responsibility

1. **Supervisors and Project Managers** are responsible for ensuring that this policy is strictly enforced.

2. **Field supervisors** are required to conduct a hazard assessment of their workplace and select the proper PPE to protect the employee from the assessed hazards

19.2. General Requirements

1. At a minimum, all personnel entering a construction area shall wear at all times the following PPE.
    a. Hardhat
    b. High Viz Vest
    c. Safety Glasses
    d. Gloves
    e. Work Boots
    f. Trousers and a shirt with 4" sleeves.
2. All personal protective equipment (PPE) used on site must be kept in good working condition.
3. Equipment, either personal or company owned, shall be checked periodically and be removed from service if found defective.
4. To avoid entanglement in rotating equipment, workers with long hair shall have it tucked under their hard hat or within their shirt.
5. Apparel that may get hung up in moving parts of tools or machinery is prohibited.
6. Wearing rings or loose jewelry is discouraged.
7. All workers shall be trained in the proper selection, use and care of all PPE.
8. Only PPE that meets the standards published by the American National Standards Institute (ANSI), National Institute of Occupational Safety & Health (NIOSH) or the Occupational Safety and Health Administration (OSHA) shall be used.
9. PPE is required at all times unless in a designated "General Purpose" area or "Safe Zone".

19.3. Fall Protection

Fall protection requirements are covered in Section 24.

19.4. Hard Hats

1. All hard hats must conform to ANSI standard Z 89.1.
2. Hard hats must be worn in conformance with the manufacturer's instructions.
3. The outside shell shall be free of paint, holes, cracks or cuts, and the inside suspension shall be in good working order.

4. Only hard hats with a four-point integrated chinstrap and impact liner shall be approved for wear.

5. Ball caps, stocking caps, and hoodies shall not be worn under hardhats.

6. Bump caps shall be used when working in a tight location that does not allow the use of a hardhat.

7. Ensure name tags for the wearers are visible on the front of the hardhats.

8. Welder's "soft caps" will not be allowed. A hard hat that accepts the welding hood must be worn by those needing such protection.

19.5. Eye and Face Protection

1. Eye protection must be worn at all times. Safety glasses with side shields meeting ANSI Z87 will be required:

2. All eye protection must meet ANSI Z87.1

3. If prescription glasses do not meet the ANSI Z87.1 standard, then glasses that do meet the standard must be worn over prescription glasses.

4. During certain activities that create potential eye and/or face injuries, a combination of safety glasses and a face shield will be required. (i.e. chipping, grinding, overhead work, power washing)

5. Tinted eye protection shall not be used in low light conditions.

19.6. Hand Protection

1. Gloves appropriate for the task and exposure are required to be worn at all times. A minimum of a cut resistant ANSI level 4 glove shall be readily available to employees for general purpose reasons.

2. The only exceptions will be:
    a. Specialty gloves used for certain applications and exposures such as protection against chemicals
    b. Job tasks that require a higher amount of dexterity and serious hazards are not present, then the task may be carried out without the use of ANSI Level A4 gloves, but in each of these instances, a hazard assessment and JSA shall clearly identify the risks that the employee will be exposed to without the use of ANSI Level A4 gloves.
    c. If an employee needs to remove his/her glove(s) in the work area and this does not present any type of risk or exposure, the task must be documented on the PTP (JSA) and approved by their foreman/superintendent prior to performing the task.

d. When operating equipment such as cranes, heavy earth-moving, dump trucks or other similar equipment where exposure to abrasions or cuts/lacerations are low. However, prior to exiting the seat, appropriate gloves will be expected to be worn.

3. Style/type of gloves shall be selected based on the exposure or hazard. If you have any questions about the type of hand protection required, please contact your local Safety Specialist.

4. Forearm protection - Required for the use of cut resistant sleeves where there's potential cut hazard to a worker's forearm.

19.7 Proper Clothing

1. Clothing, bearing wording and/or illustrations that could be considered offensive to the general public is prohibited.

2. Shirts:
    a. Shirts with sleeves shall be worn at all times.
    b. Short sleeve shirts having a minimum of a 4" sleeve are acceptable.
    c. The shirts shall also cover the trunk of the body, starting at the base of the neck to the beltline.
    d. Tank tops, midriffs, sleeveless shirts or shirts with deep cut necklines or armpits are not allowed.

3. Trousers:
    a. Heavy-duty trousers which cover the length of the leg to the boot top must be worn while on site.
    b. Shorts, cutoffs, wind pants or exercise type pants are not allowed – this apparel does not protect the leg from the elements or hazards that may be encountered onsite.

4. Foot Protection:
    a. All personnel shall wear safety shoes that meet the requirements of ANSI Z41.1.
    b. Sturdy, heavy-duty, hard-soled leather work boots are required to be worn over the ankle at a minimum.
    c. Canvas or soft leather-type athletic shoes or toeless shoes are not permitted.
    d. Rubber boots are required when working in concrete or water. Note, placing tape (or equivalent protection measure) over the boot is required to prevent wet concrete from entering the boot.
    e. The use of safety toe or safety boot covering (i.e. metatarsal cover) may be required where injury to the foot may occur. (i.e. steel erection, soil compaction, etc.)

5. High-Visibility Clothing:
    a. Class 2 reflective/high-visibility vests shall be worn by all workers on site for the duration of the project or as deemed necessary by the Safety Director. Shirts or coats that are a Class 2 high

visibility in color may be worn in lieu of the vests. Shirts and vests that are dirty and faded that have lost their visibility characteristics are prohibited.

b. When flagging or exposed to vehicle traffic, DOT approved vests are required.

6. Specialty Clothing:
    a. Kevlar sleeves or equivalent shall be worn when the conditions warrant additional protection beyond normal clothing. An example would be workers performing hand demolition.

19.8. Hearing Protection

1. When it's not possible to reduce noise levels below the permissible exposure limit levels, hearing protection will be worn. When proper hearing protection is in use, noise reduction levels should be maintained below 85 dba per 8-hour work shift.

2. During certain activities that could affect hearing, protection will be required. Tasks include, but are not limited to:
    a. Grinding
    b. Chipping
    c. Scaling
    d. Cutting metal studs or track
    e. Cutting masonry/block saw
    f. Using air blowers
    g. Powder actuated tools
    h. Working near noise and other noise producing operations.

3. For most construction related noise hazards, simple foam ear plugs are adequate for most tasks and will be made readily available onsite. If additional protection is needed, earmuffs worn with ear plugs can provide additional protection.

4. Personal radios, iPods, headphones, air pods or similar devices that limit your ability to hear are prohibited.

Hearing Tip: As a rule of thumb, if you must raise your voice above normal speaking level to be heard, the sound around you is too loud and hearing protection is required.

19.9. Respirators

For detailed information on Respirators, See Section 20

Section 20: Respiratory Protection

The respirator program specifies standard operating procedures to protect all construction site employees from respiratory hazards.

All respiratory protection programs will meet the requirements of ANSI Z88.2, National Standard for Respiratory Protection.

20.1. Responsibilities

1. The safety department is the Respiratory Protection Program Administrator. The Program Administrator will develop written detailed instructions covering each of the basic elements in this program and is solely authorized to amend these instructions.

2. Superintendents are responsible for ensuring all employees follow the guidelines outlined in this program.

3. The safety department shall review this program periodically to ensure its effectiveness. Only the safety department may amend the written program.

4. Employees may review a copy of our Respiratory Protection Program.

20.2. Respirator Selection

1. Respirators are to be used only where engineering control of respiratory hazards are not feasible, while engineering controls are being installed, or in emergencies.

2. All respiratory equipment will be provided by the company at no cost to the employee.

3. Respirators shall be selected on the exposure of the worker. They shall also be based on workplace and user factors that affect respirator performance and reliability. All selections must be approved by the safety department.

4. Before selecting the respirator, the company must first assemble the necessary toxicological, safety, and other relevant information for each containment, including the following:
    a. General use conditions, including determination of contaminants
    b. Physical, chemical, and toxicological properties of the contaminant(s)
    c. Odor threshold data, if applicable
    d. Exposure limits (exposure limits are usually Time Weighted Averages (TWA) unless a ceiling limit exists for the compound)
    e. Eye irritation potential
    f. Any service life information available (for cartridges and canisters).

5. Under no circumstance shall an employee be allowed to enter a space that is considered to be IDLH (immediately dangerous to life or health). If you encounter a condition that has the potential of becoming IDLH, the safety department should be contacted immediately.

20.3. Medical Evaluations

1. A medical evaluation to determine whether an employee can use a given respirator is an important element of an effective Respiratory Protection Program and is necessary to prevent injuries, illnesses, and even, in rare cases, death from the physiological burden imposed by respirator use.

2. Workers will not be assigned to tasks requiring the use of respirators nor fit tested unless it has been determined that they are physically able to perform the work and use the respirator.

3. A Physician or Other Licensed Health Care Professional () will perform medical evaluations using a medical questionnaire found in Sections 1 and 2, Part A of Appendix C of OSHA 29 CFR 1910.134.

4. All medical questionnaires and examinations shall remain confidential and completed during the employee's normal working hours or at a time and place convenient for the employee. The medical questionnaire is administered so that the employee understands its content. All employees are provided with an opportunity to discuss the questionnaire and examination results with their physician or another licensed health care professional.

5. Before any initial examination or questionnaire is given, the medical provider should be provided with the following information so that he/she can make the best recommendation concerning an employee's
    a. Type and weight of the respirator to be used by the employee
    b. Duration and frequency of respirator use (including use for rescue and escape)
    c. Expected physical work effort
    d. Additional protective clothing and equipment to be worn
    e. Temperature and humidity extremes that may be encountered.

6. Once the examiner determines the eligibility of the employee to wear a respirator, the examiner will provide the company with a written recommendation containing only the following information:
    a. Limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator.
    b. The need, if any, for follow-up medical evaluations.
    c. A statement that the employer has provided the employee with a copy of these written recommendations. All candidates for respiratory equipment must undergo a medical examination before use. The evaluation must be confidential and provided during normal work hours. Candidates must be provided with the opportunity to discuss the results of medical exams with the program licensed health care provider (PHHCP).

20.4. Fit Test Procedures

1. To provide proper protection, respirators must fit properly. If a tight seal is not maintained between the respirator and employee's face, contaminated air will be drawn into the breathing zone of the worker rendering the respirator ineffective. Fit testing seeks to protect the employee against breathing contaminated ambient air and is one of the core provisions of our respirator program.

2. In general, fit testing may be either qualitative or quantitative. Qualitative Fit Testing (QLFT) involves the introduction of a gas, vapor, or aerosol test agent into an area around the head of the respirator user. If that user can detect the presence of the test agent through subjective means, such as odor, taste, or irritation, the respirator fit is inadequate.

3. In a Quantitative Respirator Fit Test (QNFT), the adequacy of respirator fit is assessed by measuring the amount of leakage into the respirator, either by generating a test aerosol as a test atmosphere, using ambient aerosol as a test agent, or using controlled negative pressure to measure the volumetric leak rate. Appropriate instrumentation is required to quantify respirator fit in QNFT.

4. Fit tested shall be conducted with the same make, model, style, and size of respirator that will be used whenever any of the following are encountered:
    a. Employees are required to use any respirator with a negative or positive pressure tight-fitting facepiece.
    b. Whenever a different respirator face piece (size, style, model, or make) is used.
    c. At least annually.
    d. Whenever the employee's physical conditions change, that could affect respirator fit.
    e. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery or an obvious change in body weight.
    f. When the employee notifies the company that the fit of the respirator is unacceptable. The employee will be retested with a different respirator face piece.

5. Employees must pass one of the following fit test types that follow the protocols and procedures contained in OSHA 29 CFR 1910.134 Appendix A:

6. QLFT (Only used to fit test negative pressure air-purifying respirators that must achieve a fit factor of 100 or less. May be used to test tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators if tested in the negative pressure mode).

7. QNFT (May be used to fit test a tight-fitting half face piece respirator that must achieve a fit factor of 100 or greater OR a tight-fitting full face piece respirator that must achieve a fit factor of 500 or greater OR tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators if tested in the negative pressure mode).

20.5. Proper Use of Respirators

1. Once the respirator has been properly selected and fitted, its protection efficiency must be maintained by proper use in accordance with OSHA 29 CFR 1910.134(g).

2. The following checklist shall be used to ensure that proper use procedures include coverage of OSHA requirements:
    a. Facepiece Seal Protection: Do not permit respirators with tight-fitting face pieces to be worn by employees who have any of the following:
        i. Facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function
        ii. Any condition that interferes with the face-to-face piece seal or valve function
        iii. If an employee wears corrective glasses or goggles or other personal protective equipment, ensure that such equipment is worn in a manner that does not interfere with the seal of the facepiece to the face of the user
        iv. For all tight-fitting respirators, ensure that employees perform a user seal check each time they put on the respirator using the procedures recommended by the respirator manufacturer.
    b. Continuing Respirator Effectiveness:
        i. Maintain surveillance of the work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, reevaluate the continued effectiveness of the respirator.
        ii. Ensure that employees leave the respirator use area
        iii. To wash their faces and respirator face pieces as necessary to prevent eye or skin irritation associated with respirator use
        iv. If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece
        v. To replace the respirator or the filter, cartridge, or canister elements.
        vi. If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece, replace or repair the respirator before allowing the employee to return to the work area.

20.6. Voluntary Use of a Respirator

Under certain circumstances OSHA allows voluntary use of filtering facepieces commonly referred to as a particulate respirator (N95). Voluntary users of filtering face pieces are not required to undergo fit testing.

Voluntarily users must ensure that they are not jeopardizing their health by wearing the respirator, it is clean, and it is not shared. Supervisors should provide the employee information concerning voluntary respirator usage.

20.7. Maintenance and Care Procedures

1. In order to ensure continuing protection from respiratory protective devices, it is necessary to establish and implement proper maintenance and care procedures and schedules. A lax attitude toward maintenance and care will negate successful selection and fitness because the devices will not deliver the assumed protection unless they are kept in good working order.

2. Respirators shall be provided that are clean, sanitary, and in good working order.

3. Disposal respirators should be used whenever possible.

4. If reusable respirators are used, the following requirements must be met:
    a. Respirators shall be cleaned and sanitized whenever:
        i. More than one employee uses the respirator
        ii. After each use.

20.8. Storage

Proper respirator storage must be done to ensure that the equipment is not subject to contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.

20.9. Inspection

1. To assure the continued reliability of respirator equipment, it must be inspected on a regular basis. The frequency of inspection is related to the frequency of use.

2. Respirators shall be inspected:
    a. Before first use

3. After cleaning and disinfecting
    a. In accordance with manufacturer's recommendations.
    b. Inspection criteria include but is not limited to, elastomeric parts for pliability and signs of deterioration, the face piece, head straps, valves, connections, cartridges, canisters or filters.

4. Respirators that fail an inspection must be discarded.

20.10. Training

1. The safety department shall ensure workers that utilize respirators are trained. The training shall include:
    a. Pre-use inspections
    b. Use of equipment
    c. Limitations of the respirators
    d. Periodic Inspections of respirators.

20.11. Record Keeping

1. The safety department shall maintain all records required in this policy. Those records include:
    a. Medical reports will be kept on all employees using respirators

b. Voluntary Use
c. Records of inspections
d. Maintenance of personnel records.

Section 21. Lockout/Tagout

21.1. Policy Statement

The intent of this policy is to establish the minimum policy requirements for the control of energy sources when installing, adjusting, commissioning, and servicing machinery, equipment or services.

21.2. Definitions

Affected Employees: one whose job requires him/her to operate or use a machine or equipment on which servicing, commissioning, or maintenance is being performed under LOTO, or whose job requires him/her to work in an area in which such servicing, commissioning, or maintenance is being performed. Affected employees must always be under the visual supervision of an authorized employee.

Authorized Employee: an employee that has been properly trained in the lockout/tagout policy and by training has been authorized to apply/remove their assigned lock during the performance of their work. They will be familiar with the equipment and/or electrical systems that are being put under LOTO. These employees may also be allowed to conduct energy verification activities, or other tasks that involve energized electrical work.

Barricade*:* an erected barrier used to limit or control access to a designated area

Capable of Being Locked Out*:* an energy isolating device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy isolating devices are capable of being locked out if LOTO can be achieved without the need to dismantle, rebuild, or replace the energy-isolating device or permanently alter its energy control capability.

De-Energized: When all energy sources are disconnected or in a released state

Designated (Qualified) Person: A trained person, competent to safely perform specific duties as determined by responsible employer

Energized: Connected to an energy source or containing residual or stored energy

Energy Isolating Device: A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following:

a. a manually operated electrical circuit breaker

b. a disconnect switch.
c. a manually operated switch in which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently.
d. a line valve.
e. a block of any similar device used to block or isolate energy.
f. (NOTE: Push buttons, selector switches and other control circuit type devices are not energy isolating devices.)

Energy *Source*: Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy

Group Lockout/Tagout Program: This procedure can be used when there are projects that require a group of authorized employees to perform work on the machine or piece of equipment locked out by an authorized employee in charge

Live-Dead-Live: Verification of de-energization using a calibrated digital voltmeter, when applicable and High/Medium voltage proximity testers when digital volt meters cannot be used. Procedure consists of testing proper meter operation at a known live source (Live), the moving leads to de-energized source for verification (Dead) and transfer back to known live source verifying proper meter operation (Live).

Lockout: The placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed

LOTO: Lockout/Tagout

Lockout/Tagout Supervisor: An authorized employee who has been designated as having the primary responsibility for a set number of employees working under the protection of a LOTO procedure to ensure coordination of the work group and ensure continuity of protection for employees

Multiple Energy Sources: When more than one energy source is present and poses a potential hazard

Multiple Locking Hasp: A manufactured device designed to accommodate a number of locks (usually 6) to allow more than one person, craft, etc., to secure an Energy Isolation Device

One-Line Drawing: A document that illustrates all the energy sources that feed into a specific piece of equipment or electrical device

Other Employee: Employees whose work operations are or may be in an area where energy controls procedures may be utilized

Safe Position: The position or state of an energy isolating device after the equipment has been isolated from the energy source

Tagout: A temporary or removable tag (label) used in conjunction with a lockout device

Zero Energy State: A machine condition where every power source that can produce movement of the machine, or its parts, has been isolated; and where all stored energy has been released

Complex LOTO/Energy isolation: LOTO/Energy isolation becomes complex when you have any of the following:

a. Multiple energy sources
b. Risk of back feeds
c. Multiple crews
d. Multiple locations
e. Multiple employers
f. Multiple disconnecting means
g. Job or task that continues for more than one work period, or crosses shifts
h. Multi-colored tags are approved in complex LOTO/Energy Isolation scenarios

21.3. General Requirements

1. **Digital Lockout/Tagout (LOTO) management platform**
    a. All Subcontractors are required to utilize AutoLOTO for Lockout/Tagout (LOTO) management. AutoLOTO provides a centralized, efficient, and OSHA-compliant platform for managing all LOTO procedures and documentation. To ensure consistency and safety across the site, the use of this system is mandatory. The cost of AutoLOTO will be covered by JE Dunn.

2. **Employer Responsibilities**:
    a. Ensure that all authorized and affected employees, as well as the designated LOTO supervisor(s), are properly trained and instructed in the LOTO policy and procedure.
    b. Enforces compliance with LOTO policy and procedures by all personnel, which includes the use of disciplinary action where warranted.
    c. Ensure that all authorized employees are knowledgeable and able to demonstrate the necessary skills and techniques to safely work on or near equipment or machinery.
    d. Ensures that only authorized employees perform the LOTO procedure. Maintains a roster of all authorized employees.

3. **Plans for Access Controls:**

    a. Establish controlled access zones during the transition from a de-energized to energized (or reverse) state of power, which includes specific electrical training and requiring an approval list for accessing the area (energizing equipment, installing permanent power, and so on).
    b. The appropriate barriers and signage are still required within the controlled access zone, based on the type of hazardous activity taking place (for example, electrical testing) to protect other workers who are not involved with the activities.

c. The Controlling Entity is responsible for providing an attendant at each entrance of the controlled area to confirm whether each individual meets the training and site requirements to access the area.
d. Provide a visual indicator for authorized individuals (such as a hard hat sticker) and those requiring escort (such as an "Escort Required" badge).
e. Maintain an access log to document personnel entry or exit.
    i. Develop a plan for providing site and equipment access to utility vendor, or other contractors' personnel, including:
        1. Communication of known hazards
        2. State of the equipment
        3. Review of documentation (Single-line diagrams, LOTO/Energy Isolation procedures, etc.)

4. LOTO Supervisor Responsibilities:

a. Ensures compliance with the policy and procedures by observing LOTO on an ongoing basis.
b. Ensures that all personnel have been properly trained and instructed in LOTO policy and procedures prior to starting any work.
c. Ensures that the proper safety equipment and tools are available and are inspected, tested, and maintained in safe and reliable condition and utilized by all authorized employees.
d. Enforces the LOTO safety program and issues disciplinary action if the LOTO procedures are not strictly followed.
e. Ensures the procedure for transfer of LOTO status at shift changes is strictly followed.
f. Before starting each job, the LOTO Supervisor and Foreman shall conduct a job briefing, with employees involved. The briefing shall cover:
    i. Hazards associated with the job
    ii. Work procedures involved
    iii. Special precautions
    iv. Energy source controls
    v. Personal Protective Equipment requirements
    vi. Information on the energized electrical work permit
    vii. Additional job briefings will be held if changes which may affect safety occur
    viii. Roles will be clearly defined for all authorized/affected employees at this meeting.

5. Authorized Employee Responsibilities:
a. Must have successfully completed LOTO training.
b. Designated by their employer as qualified based on training, experience, and knowledge of electrical hazards and systems.
c. Must obtain and care for safety equipment required to comply with the LOTO policy and procedure.
d. Must implement--without exception--the LOTO procedure established when working on equipment.
e. Must consult with their Foreman whenever there are questions concerning the LOTO policy and procedure.

f. Must immediately report any violation of the LOTO policy and procedure to their Foreman.
g. Follow the daily work plan and do not deviate from the plan without first consulting with their Foreman/Supervisor.
h. Restrict access to areas that are under the custody and control of their LOTO devices.
i. Performs Live-Dead-Live verifications and any other verifications needed to verify zero energy state, prior to commencing any activities involving LOTO.
j. A LOTO/Energy Isolation device shall not be applied by anyone other than the owner of the lock. If a lock is to be removed, and the owner is not found, there must be a documented process to remove the lock.

6. Affected and Other Areas:

a. Does not attempt to start or energize a piece of equipment that is or has been locked and/or tagged out.
b. Does not attempt to remove a lock or a tag from any machine or energy control source.
c. Does not place any part of their body into an area on a machine where work is performed on the material being processed or where an associated danger zone exists during a machine operating cycle.
d. Does not enter any area that has been barricaded off from the hazards associated with LOTO without properly receiving training and applying their own LOTO devices under the direction of an Authorized Employee.
e. No person, authorized or not, shall cross any barricaded area without first having their own LOTO device installed on equipment that is under active lockout/tag-out.

21.4 Locks and Tags

1. Standardized Locks:

a. After successfully completing an authorized employee LOTO training course, each qualified person will be assigned an individually keyed lock (one key) as needed for a LOTO procedure. The LOTO Supervisor will maintain a roster or log of lock assignments. The roster shall include at a minimum the employee's name, the numerical number of the lock assigned, the date, equipment to be put under LOTO, location of such equipment in the facility, and their supervisors' name and contact information.
    i. All locks must be sturdy and effective for purpose, including isolation
    ii. Isolation locks shall be red and single keyed.
b. After completion of the LOTO procedure, or the need for a LOTO procedure is no longer necessary, the employee shall return the assigned lock to the Foreman or LOTO Supervisor. The Foreman/LOTO Supervisor will then document the return of the lock and the completion of the LOTO procedure on the LOTO roster or log.

2. Standardized Identification Tags

a. Each authorized/affected employee will receive one tag for each lock they have been issued.
b. This tag will have printed on it, the individual's name, the company name, and the date and location in which the tag was applied, as well as a contact phone number.

c. This tag will also have a statement prohibiting unauthorized operation and removal of the tag. A statement, such as “DANGER – DO NOT OPERATE” will be required on the tag.
d. This tag will have either a reinforced hole large enough for the shank of the lock to pass through or shall have a tag attachment device which is non-reusable that is attached by hand which is self-locking and non-releasable with a minimum of 50 lbs. opening strength. An all-environment nylon cable tie is acceptable.

21.5. Training

1. **Frequency of Training**, Individual employee training/retraining is required when:
    a. The employee is introduced to the LOTO policy and procedures
    b. There is a change in the LOTO policy and procedure
    c. It is determined by the safety department, LOTO Supervisor or any other authority, there are deviations or inadequacies in the employee’s knowledge or use of the LOTO program
    d. Any employee who is found to have violated this policy, is involved in an electrical incident, or that cannot demonstrate competency/knowledge of this program, will require re-training.

2. **Documentation of Training**: Training and re-training is documented to certify that the employee has completed the required training. Documentation will include:
    a. Employee’s name
    b. Employee’s employee number or other unique identification number
    c. Date of training
    d. Reason for training (regular training/re-training as required)
    e. Trainer’s name
    f. Documentation will be maintained in compliance with company procedures.

3. **Training Elements**: Training of authorized employees must include:
    a. The purpose and use of the LOTO procedures
    b. The type and magnitude of energy available in the workplace
    c. The recognition of applicable hazardous energy sources
    d. Responsibilities of the individual and group as it relates to the LOTO program
    e. The method of notification that must be used when the LOTO procedures are being applied and removed
    f. Prohibitions relating to attempting to restart or re-energize equipment or machines
    g. The basic steps of the LOTO program
    h. The disciplinary action associated with violations of the LOTO program
    i. PPE requirements while performing energy verification status
    j. Barricading requirements and distances based on the most current NFPA 70E standards or a site-specific arc flash analysis of the onsite electrical equipment
    k. Emergency procedures to follow in the event of an electrical incident.
    l. Training of other affected employees shall include:
        i. The purpose and use of the LOTO program and when it must be used

ii. The method of notification that will be used when the LOTO program is being applied and removed

iii. Employee responsibilities during a LOTO procedure and the prohibitions relating to attempting to restart or re-energize equipment or machines
iv. A visual observation of the locks and tags used in the LOTO procedure
v. The disciplinary action associated with violation of the LOTO program
vi. Barricading requirements and distances based on the most current NFPA 70E standards or a site-specific arc flash analysis of the onsite electrical equipment
vii. Emergency procedures to follow in the event of an electrical incident.

4. Personal Protection Safeguards

a. Authorized employees working in areas where there are potential hazards must be provided with the appropriate personal protective equipment, isolation devices, and equipment.
    i. Energy Isolation Devices (Locks, hasps, lock boxes, tags, breaker lockout devices, valve lockout devices, etc.)
    ii. Automated External Defibrillator (AED)
    iii. Personal Protective Equipment (PPE)
    iv. Electrical rescue equipment
    v. Proper testing equipment with calibration documentation
    vi. Proper Fire Extinguishers for energized areas/switch rooms

21.6. Lockout/Tagout Procedures LOTO Permit LOTO Permit Tracking Log

1. Preparation:

a. LOTO procedures should only be carried out by authorized employees.
b. Before implementing the LOTO procedure, you must fully understand:
c. Who is responsible for identifying and determining the de-energization procedure
d. The number, type and magnitude of the energy to be controlled
e. The necessary PPE to be used
f. All points of energy isolation
g. The methods and means of controlling the hazardous energy sources.
h. Complete the LOTO Permit and LOTO Authorization and Checklist that document the exact location of LOTO, who is performing, types of energy, sources of energy, and other relevant details about the individual LOTO program.
i. Whenever complex LOTO/Energy Isolation is to be used, a LOTO/Energy Isolation coordinator or lead shall be designated to be accountable for the safe planning, execution, and restoration of that specific LOTO/Energy Isolation.
    i. MOP (Method of Procedure) required

2. Notification:

a. Before the application of the LOTO devices, notify all affected personnel of the energy control procedure that is being used and the reasons why.
    i. Procedures submitted by both JE Dunn and trade partner
    ii. Must make available to client

3. Shutdown:

a. Shut down equipment in an orderly manner. This may mean simply turning off the equipment. When the equipment is part of a production or manufacturing process, all parts of the operation must be considered. An orderly shutdown will avoid increased hazards when the equipment is de-energized.

4. Isolation:

a. Locate all energy isolating devices. Often there are multiple energy sources. When the LOTO Supervisor determines that a piece of equipment needs to be locked out, that supervisor is responsible to ensure that all energy sources are identified and locked out. Reference available posted one-line drawings and electrical diagrams to understand all the sources of energy for a complete shutdown. If the LOTO Supervisor has any doubt whether all sources have been identified, no LOTO procedure shall be implemented until the safety department is notified and all parties have been assured that all potential energy sources have been identified.
b. Operate the energy isolating devices so that the equipment is completely isolated from the energy source. When complete, all devices will be in the “safe” or “off” position.

5. Application of Locks and Tags:

a. Securely attach locks and/or tags to the energy isolating device so the device is held in the “safe” or “off” position. Separate locks or tags must be used for each authorized employee.
b. If using group lockbox, hasps, etc. all authorized and affected workers must lock out.

6. Controlling of Stored and Residual Energy:

a. Relieve, disconnect and restrain all stored or residual energy. Remember, hazardous energy can also be found in springs, elevated machine members, capacitors, rotating flywheels, hydraulic systems, air, gas, steam, and water pressure.
b. This energy must be dissipated or restrained. Operator’s and service manuals can assist you in safely controlling the specific energy hazards. Common methods to restrain or dissipate stored energy are repositioning, blocking, and bleeding down systems.
c. Install equipment grounding devices (i.e. grounding clusters) to dissipate stored energy or when the potential exists for unexpected re-energization.
d. Know in advance the tools and equipment needed to control each hazard. Be sure they are in proper working order and able to perform the tasks expected of them.

7. Shutdown verification:

a. Check to be sure that all personnel are in a safe location, and any needed barricades are in place. Verify that the equipment is properly isolated and all hazardous energy is safely controlled. Operate push buttons and other controls to verify isolation. Check circuits with proper electrical meters. Inspect springs, pressure gauges and the location of moving parts and other sources of stored energy. Be sure to return operating controls to the neutral or off position after the test. Each machine and piece of equipment is different. Follow the instructions found in the operator's and service manual. Once you are absolutely sure that the energy is isolated and safely controlled, proceed with the maintenance and service activities.
b. Live-Dead-Live Test - Treat all systems as "live" until the initial verification is complete and shows a zero-energy state at the point of work. This means wearing necessary PPE while performing verification tests/checks.
c. Use properly rated PPE before testing electrical meters on a known energy source to verify tester is functioning properly.
d. Test the equipment that is being placed under LOTO to verify it is at a zero-voltage state.
e. Re-test the same known energy source as before to ensure the tester is still functioning properly.
f. All authorized and affected employees that will be working in the area of the arc flash boundary or hazard zone of the energy source must witness the energy verification checks.
g. WARNING: Some machinery and equipment can re-accumulate stored energy even after the system has been de-energized. If there is a possibility of stored energy building to a hazardous level, continue verification until maintenance or service is completed or until the possibility of accumulation no longer exists.

8. Tagout Procedures

a. Tagout must be documented on the LOTO permit and PRIOR APPROVAL IS REQUIRED by the safety department.
b. The tagout procedure follows the same steps and has the same requirements for ensuring de-energization as the lockout procedure. However, because tagout does not provide the same level of security that is present with lockout, the conditions listed below must be met:
c. Tagout procedures cannot be used in lieu of lockout.
d. Tagout shall only be implemented when there is no physical engineered accommodation for lockout and the employee(s) performing the work can maintain continuous line of sight monitoring of the tag locations(s).
e. Tagout requires the use of completed "DANGER-DO NOT OPERATE" tag(s).

9. Group Lockout/Tagout

a. This procedure can be used when there are projects that require a group of authorized employees to perform work on the same machine or piece of equipment that is locked out by the LOTO supervisor in charge.
b. There are two types of group LOTO:
c. With the use of a lockbox (Complex Lockout)
d. Without the use of a lockbox (Simple Lockout)

10. With the use of a lockbox:

a. The LOTO Supervisor oversees the group LOTO procedure
b. The LOTO Supervisor must complete each step of the appropriate LOTO procedure and secure locks and tags on all energy isolating devices
c. The keys for the locks of the equipment are then placed in a lockbox
d. Each employee then secures their lock and properly completes the tag on the lockbox
e. After an employee is finished with his/her service or maintenance work, the employee removes his/her lock and tag from the lockbox
f. After all employees' locks are removed from the lockbox, the LOTO supervisor removes the key(s) from inside and follows the re-energizing procedure.

11. Without the use of a lockbox:

a. The LOTO Supervisor oversees the group LOTO procedure
b. The LOTO Supervisor must complete each step of the appropriate LOTO procedure and secure locks and tags on all energy isolating devices using a multiple locking hasp when necessary
c. Service or maintenance work can now be performed, but only by the employees who have affixed their locks to the lockout device "hasp" and verified zero energy
d. After the employee is finished with his/her service or maintenance work, the employee removes his/her lock from the device
e. After all employees' locks are removed from the LOTO device, the LOTO Supervisor removes his/her lock and follows the re-energizing procedure.
f. Shift or Personnel Change

12. If the work is incomplete at the end of the shift, the authorized person(s) at the end of shift will:

a. Contact the LOTO Supervisor for permission to maintain LOTO status for shift rotation at the shift change
b. The shift-end LOTO Supervisor will notify the on-coming LOTO Supervisor that an authorized employee has a piece of equipment locked and tagged out on which the work is incomplete
c. The on-coming LOTO Supervisor will ensure that an on-coming authorized employee(s) accompanies the initial authorized employee who has locked the equipment out to the location of the lockout/tagout
d. The shift-end authorized employee will remove his/her lock and tag from the isolating device in the presence of the on-coming authorized employee
e. The on-coming authorized employee will place his/her lock and tag on the isolating device, and complete all steps of the LOTO procedure, including energy verification.
f. Restoring Equipment to Services (Releasing Energy Controls)
g. When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken:
    i. Inspect the work area.
    ii. Ensure all non-essential items such as tools, parts and cleaning supplies have been removed.
    iii. Check to be sure that all machine and equipment components and safety guards are ready for operation.

iv. Be certain all employees have been safely positioned or removed.
v. Verify all controls are in neutral, off or stop position.
vi. Notify all affected employees that the LOTO devices are being removed.

13. Remove Locks and Tags:

a. After a thorough inspection of the equipment is conducted and the authorized employee is confident that the equipment can be safely returned to service, the lock and tag can be removed by the authorized employee that installed it. Removal of a safety lock or tag not belonging to you is strictly prohibited without the LOTO Supervisor's implementation of the emergency lock removal procedures.
b. Sign the lock back into the logbook for tracking purposes by the LOTO Supervisor before leaving the facility.

14. Emergency Lock Removal

1. When an authorized employee who applies a lock and tag to a machine or piece of equipment and is not available to remove them, they may be removed at the direction of the LOTO Supervisor under the following circumstances:
    a. Verification that the authorized employee who applied the LOTO devices is not at the facility.
    b. After all reasonable efforts are made to contact the authorized employee to inform him/her that their LOTO devices are being removed. If contact is made, mark time of contact and location of worker during contact.
    c. And that the authorized employee who applied the LOTO devices is informed before resuming work that the LOTO devices were removed.
    d. The safety department must be contacted in the event a lock must be removed, and a separate form documenting this must be completed by the LOTO Supervisor and submitted to the safety department for approval.

21.7. Exceptions

1. LOTO program does not apply to the following:

a. Servicing or maintenance of a machine or equipment in which the electrical wiring and/or electrical components are not a factor in the job to be performed and safety measures provided by the mechanical lockout/tagout policy and procedure ensure full employee protection.
b. Work on plug connected electrical equipment where the controlling of energy is accomplished by unplugging the equipment and the plug is under the exclusive control of the employee performing the work.
    i. Plug is visible and at a distance that the person performing work and exposed to the potential hazards maintains control
    ii. The equipment has a single source of energy and does not have any stored or residual hazardous energy
    iii. The work is completed in one shift and/or the authorized worker(s) performing the work does not leave the equipment unattended during work.

21.8. Compliance/Enforcement of this Program

1. Employees are responsible for adhering to the requirements of this program. The employee must understand the importance of this program and that ignoring these requirements could result in an accident that could inflict serious bodily harm to themselves or their fellow workers.

2. Employees must also understand that failure to follow these requirements or knowingly bypassing or ignoring any of these written procedures could result in discipline up to and including removal from the project.

3. Trade Partners shall be allowed to utilize their company specific LOTO program for their employees, so long as it adheres to the minimum requirements set forth in this policy, the clients project manual (section 6.3.1) and any governing regulations.

21.9. Site Specific Requirements

1. All electrical system Lockout/Tagout shall comply with the processes outlined in this manual and the project LOTO program for the control of electrical energy on site.

2. Each LOTO shall follow the LOTO process and must be submitted 48 hours in advance per the site-specific method via the LOTO request form. Other documents required may include Scope of Work or MOP, JSA or similar job risk assessment.
    a. MOP
        i. Equipment to be worked on.
        ii. Detail step by step of work to be performed.
        iii. Location of equipment.
    b. JHA/AHA
        i. LOTO Hazards (Minimum approach boundaries and verification absence of voltage)
        ii. Hazards associated with electrocution and the accidental energization of wrong equipment or system
        iii. Hazards associated with ARC Flash
        iv. Use of wrong tool or PPE.

3. Daily coordination meetings are required with all affected parties. This meeting shall include all affected parties to review the status, or state, of the electrical and mechanical systems prior to any additional manipulations taking place.

4. Electrical contractor shall ensure that subcontractors and all relevant stakeholders understand and are aware of the relevant requirements of the client project EHS manual section 6.3.1

Section 22: Electrical Safety

Electrical hazards are a leading cause of injury and death in the construction industry. The purpose of this program is to establish the minimum requirements for the installation and use of temporary electrical panels, lighting and electrical hand and power tools.

22.1. Responsibilities

1. This policy applies to all Trade Partners and vendors who perform work on JE Dunn Projects.

2. **Each worker** is responsible for a daily visual check of their tools and cords before first use. Damaged or defective tools or cords shall be tagged **"Danger do not use"** and removed from service immediately.

3. **Each Foreman** is responsible for ensuring that all electrical tools and equipment are suitable for their intended use.

4. The **Electrical Trade Partner** who installs and provides any temporary electrical installation is responsible for ensuring that each installation is in accordance with applicable state, local and federal regulations as well as the requirements in this program.

22.2. General Requirements

1. All temporary 120 volt, 15- or 20-amp receptacles used during the course of construction shall have a Ground Fault Circuit Interrupter (GFCI) installed for personnel protection.

2. During construction activities, if an extension cord is plugged into the existing buildings outlet; a portable ground fault circuit interrupter is required.

3. Ground fault circuit interrupters must be tested before each use. Testing can be achieved by pushing the "push to test" button available on the outlet. The electrician should be notified of any outlets that fail to trip during this test.

4. All electrical tools and equipment must be grounded or double insulated and inspected prior to each use.

5. Temporary electrical cords must be covered or elevated in locations where they present a tripping hazard or may be subject to damage.

6. Energized wiring in outlets, switches, junction boxes, circuit breaker panels, etc., must be covered at all times to prevent unauthorized access to live parts.

7. Extension cords shall be three wire grounded type "***designed for hard or extra hard usage***" with an S, SO, SJ, ST or SJO rating.

8. Flat extension cords are prohibited.

9. Power strips, also known as surge protectors shall not be used unless they are approved for hard service.

10. All cords must be protected from damage throughout the course of construction.

11. Sawzall shall not be used to cut conduit containing installed wiring.

22.3. Temporary Panels and Outlets

1. All electrical devices and components must be tested, approved and listed for use in the conditions in which they are being installed.

2. All electrical installations, whether temporary or permanent, must be installed according to the NEC (NFPA 70), NFPA 70E, OSHA 1926 and all requirements of this program.
    a. Electric power installed for the office trailers must be secured prior to the trailers being put in place.

3. All temporary branch circuit panels and related electrical installations must be inspected by a qualified electrician monthly. These inspections shall be documented and posted on each panel.

4. All circuit breakers must be labeled to properly identify what each breaker feeds.

5. The installation and alteration of all electrical systems shall be accomplished under the direct supervision of a qualified electrician.

6. Holes in electrical boxes or panels must be covered with approved devices.

7. Gaps between breakers in branch circuit panels must be covered with approved blanks.

8. All splices shall be contained within an electrical junction box.

9. Weather resistant boxes, cords, fittings and raceways are required in all applications where not protected from the weather by a complete building envelope.

10. All conductors that feed branch circuit boxes or temporary panels must be approved for that use and rated for hard or extra hard usage or must be completely encased in conduit. The use of exposed single conductor wires and triplex, Romex or similar conductors are not allowed.

22.4. Electrical Rooms

1. Electrical installations in rooms, closets or vaults with live circuits shall be guarded from accidental contact by cabinets or other forms of enclosure. These enclosures should be accessible only by authorized employees.

2. Entrances to rooms and other guarded locations containing exposed live parts shall be marked with conspicuous warning signs prohibiting unauthorized access.

3. Doors with locks shall be installed to prevent unauthorized access.

JE Dunn Controlled
Room Access Permit

22.5. Temporary Lighting

1. Temporary lights shall consist of molded light strands or be protected by conduit and electrical boxes as appropriate for site conditions. The use of exposed single conductor wires or Romex type light strings is not allowed.

2. Temporary lights are to be installed per manufacturer's installation instructions.

3. Tools and attachments shall not be plugged into temporary light strings. Light strings with open end caps shall have the caps covered to prevent use.

4. Light stands are allowed for task or emergency lighting only and may not be used for temporary lighting.

5. All lights shall be provided with protective covers to prevent accidental contact.

6. The installing Trade Partner is responsible for maintaining the temporary lighting.

Table D: Minimum Illumination Intensities in Foot-Candles

Foot-Candles	Area of Operation
Temporary lighting shall meet the following minimum illumination intensities:	
5	General Construction area lighting
3	General construction areas, concrete placement, excavation and waste areas, access ways, active storage areas, loading platforms, refueling and field maintenance areas.
5	Indoors: warehouses, corridors, hallways and exit ways.
5	Tunnels, shafts and general underground work areas. (Exception: minimum of 10 foot-candles is required at tunnel and shaft heading during drilling, mucking and scaling. Bureau of Mines approved cap lights shall be acceptable for use in the tunnel heading.)
10	General Construction plants and shops (e.g. batch plants, screening plants, mechanical and electrical equipment rooms, carpenter shops, rigging lofts and active storerooms, barracks or living quarters, locker or dressing rooms, mess halls and indoor toilets and workrooms).
30	First aid stations, infirmaries and offices

22.6. Live Electrical Circuits (Energized Work)

Energized Electrical Work Permit

1. All electrical equipment greater than 50 volts should be de-energized and Locked-out/Tagged-out before work is performed. Workers performing work on these circuits or equipment must be trained, qualified and authorized for such work. All work must be in conformance with OSHA and NFPA 70E requirements. If work must be performed on an energized electrical circuit(s), the following must take place:
    a. A pre-task planning meeting must be conducted with JE Dunn, Trade Partner, superintendent and safety director to explain why this work must be performed live.
    b. The Trade Partner must provide a written energized electrical hazard assessment and/or energized electrical work permit. Included in this electrical hazard assessment and/or energized work permit shall include:
        i. Proof that there is no feasible means to de-energized the system.
        ii. Identification of shock risk boundary, limited approach boundary, arc flash boundary, electrical exposure, incident energy,
        iii. Required protective equipment including Personal Protective Equipment.
        iv. Proof of energized work training for all persons associated with the task.
        v. Arc rated clothing that is appropriate for the potential arc flash per NFPA 70 E must be worn at all times when live panels are open.

vi. The area that energized work is taking place must be barricaded to prevent access by unauthorized workers not directly involved with the task.
vii. If the location or nature of the task that is being performed changes, the pre-task planning meeting must be revisited.

Note: All Energized Electrical work shall be approved and performed following Trade Partner OPERATIONAL CONTROL requirements.

22.7. Assured Equipment Grounding Conductor Program

1. A GFCI shall be used for all 120-volt, single-phase, 15- and 20-ampere receptacles, or requirements of the assured grounding program shall be used.

2. This procedure describes the requirements to assure the installation and maintenance of equipment grounding conductors for temporary wiring on construction sites in accordance with Paragraph (b)(1)(iii) of Part 1926.404 of Safety and Health Regulations for Construction.

3. All receptacles, extension cords, and cord and plug connected equipment on site shall be tested on a regular basis for proper grounding and overall condition. The superintendent shall be responsible for complying with the requirements of this procedure.

4. Equipment grounding conductors shall be installed and maintained in accordance with this procedure.

5. Installations – equipment grounding conductors shall be installed as follows:
    a. All 120-volt, single-phase, 15- and 20-ampere receptacles shall be of the grounding type. Their contacts shall be grounded by connection to the equipment grounding conductor of the circuit supplying the receptacles in accordance with the applicable requirements of the National Electric Code (ASTM F855).
    b. All 120-volt cord sets (extension cords) shall have an equipment grounding conductor which shall be connected to the grounding contacts of the connector(s) on each end of the cord.
    c. The exposed non-current-carrying metal parts of 120-volt cord and plug connected tools and equipment that are likely to become energized shall be grounded in accordance with the applicable requirements of the National Electric Code.

6. Visual Inspection - Employees shall be instructed to visually inspect receptacles, flexible cord sets extension cords (except those that are fixed and not exposed to damage), and equipment connected by cord and plug before each day's use for external defects such as deformed or missing grounding prongs or insulation damage and for indications of possible internal damage. Where there is evidence of damage, the damaged item shall be taken out of service until proper repairs have been made, and the equipment has been retested.

7. Only trained and qualified workers shall select, apply, and remove temporary personal protective grounding.

8. All grounding procedures and applications shall meet or exceed the client's standards in the EHS project manual section 6.3.1

22.8. Testing:

1. All 120-volt, single-phase, 15- and 20-ampere receptacles which are not a part of the permanent wiring of the building or structure, 120-volt flexible cord sets, and 120-volt cord and plug connected equipment required to be grounded shall be tested as follows:
    a. All equipment grounding conductors shall be tested for continuity and shall be electrically continuous.
    b. Each receptacle and attachment cap or plug shall be tested for the correct attachment of the equipment grounding conductor. The equipment grounding conductor shall be connected to its proper terminal.
    c. Testing schedule - All required tests shall be performed:
        i. Before first use
        ii. Before equipment is returned to service following any repairs.
        iii. Before equipment is used after any incident which can be reasonably suspected to have caused damage (i.e., when a cord set is run over).
        iv. Inspection and testing of temporary protective grounding sets should be carried out every two years, or whenever any major component (such as a clamp, ferrule, or cable) of the assembly is repaired, replaced, or suspected. Identify and track the history and status of each individual set following the applicable standard.

22.9. Overhead Power Lines

1. Whenever feasible, overhead lines at or near the jobsite should be removed or de-energized and visibly grounded. Working within the allotted distance of overhead power lines poses significant safety risks and therefore requires a permit to ensure that all necessary precautions and safety measures are in place. The approval of the permit must be granted by either the Safety Manager or the General Superintendent from JE Dunn per an Overhead Powerline Permit.

2. All overhead power lines at the jobsite or in close proximity to the jobsite must be identified as to the voltage by the owner of the lines before cranes, lifts, earth moving equipment, scaffolds or similar equipment is allowed to mobilize at the jobsite.
    a. Height of lines should be identified and marked
    b. Flag overhead lines that are low enough to come into contact with moving equipment.

3. Safe distances from live power lines must be maintained at all times per Logistics Hoisting Policy Manual and OSHA 29CFR1928. If safe distances cannot be maintained, operations must be coordinated with the owner of the power line to have the line removed, de-energized and grounded, insulated or otherwise protected as appropriate for the hazard and the operation being performed.

22.10. Equipment Installation

1. A formal energy isolation plan must be developed before the installation of electrical equipment begins.

2. Formal energy isolation plan must include all potential sources of energy for a piece of equipment to include, but not limited to, a primary source of energy (utility power), secondary sources of energy (generators, batteries, control power), and any other sources of energy that could be introduced.

3. Employees shall wear additional FR clothing wherever there is possible exposure to an electric arc flash above the threshold-energy level for a second-degree burn 5 J/cm2 (1.2 cal/cm2).

4. Equipment installation shall meet or exceed the client's requirements in the EHS project manual section 6.3.1

22.11. Training

1. **Training**, Individual employee training/retraining is required when:
    a. The employee is introduced to electrical procedures
    b. There is a change in the electrical policy and procedure
    c. It is determined by the safety department, or any other authority, there are deviations or inadequacies in the employee's knowledge of the electrical procedure and guidelines
    d. Any employee who is found to have violated this policy, is involved in an electrical incident, or that cannot demonstrate competency/knowledge of this program, will require re-training.

2. Training shall meet or exceed the requirements in the Training Section of the Electrical Playbook.

3. Vendor training: The electrical contractor should be included in the vendor-specific training for equipment if they are requested to operate or switch the equipment during the construction or commissioning phase of the project, to energize and de-energize downstream equipment.

22.12. Audit Process

1. An annual review of written MOPs shall be performed and documented, with records kept for review upon request.

22.13. Commissioning

1. Prior to the start of the commissioning activities the Controlling Entity, General Contractor, Electrical Contractor, or Contractor is required to establish dedicated times for daily commissioning meetings.

2. Define pre-job planning documentation requirements and Method of Procedures (MOP) development requirements.
3. The Controlling Entity is required to assign or appoint a dedicated and qualified Energization Marshall/Commissioning Lead as well as a commissioning committee or team to support all commissioning efforts
4. Schedule and commissioning process should meet or exceed the requirements set in the clients EHS manual section 6.3.1

Section 23: Steel Erection

The steel erection Trade Partner(s) is responsible for following the guidelines of this program, including all applicable federal, state, and local regulations.

23.1. Prior to Start of Erection

Prior to the start of work, a pre-erection meeting shall be conducted with the project superintendent and representatives of the erection Trade Partner including the erection supervisor. The Steel Erection Checklist shall be completed and reviewed.

The Controlling Trade Partner shall provide written notification to the steel erector that:

1. The concrete in the footings, piers, and walls and/or the mortar in the masonry piers and walls have attained, on the basis of an appropriate ASTM standard test method of field-cured samples, either 75 percent of the intended minimum compressive design strength or sufficient strength to support the loads imposed during steel erection.
2. Anchor bolt repairs, replacements, and modifications were completed under the direction and approval of the project Structural Engineer of Record.

23.2. Site Layout

In order for the steel erector to perform necessary operations in a safe manner, the Controlling Trade Partner shall ensure that:

1. Access roads into and through the site are adequate for safe delivery and movement of derricks, cranes, trucks, other necessary equipment and the material to be erected.

2. Adequate space is available for safe storage of materials and safe operation of the erector's equipment.

23.3. Site Specific Erection Plan

1. All hoisting and erection operations must be pre-planned by a qualified person. The plan shall be written and submitted to the project superintendent for approval before any work is performed.

2. Full-time safety professional on-site during all erection activities.

3. Plans must include the following:
    a. The sequence of erection activity, developed in coordination with the controlling Trade Partner.
        i. Material deliveries
        ii. Material staging and storage
        iii. Coordination with other trades and construction activities (controlled access)
        iv. A description of the crane and derrick selection and placement procedures, including site preparation, certified crane operator, path for overhead loads, critical lifts (including rigging supplies and equipment), and inspection documentation (annual and daily).

4. A description of steel erection activities and procedures, including the following:
    i. Stability considerations requiring temporary bracing and guying
    ii. Erection bridging terminus point
    iii. Notifications regarding repair, replacement and modifications of anchor bolts
    iv. Columns and beams (including joists and purlins)
    v. Connections
    vi. Decking, ornamental, and miscellaneous iron.
    vii. A description of the fall protection procedures that will be used (*no walking steel without the use of a horizontal lifeline shall be permitted)
    viii. A description of the falling object protection procedures that will be utilized
    ix. A description of the special procedures required for hazardous non-routine tasks.
    x. A certification and/or designation for each employee who has received training for performing steel erection operations as required by OSHA.
    xi. A list of qualified and competent persons.
    xii. A description of the procedures that will be utilized in the event of rescue or emergency response.

5. In addition, the plan should include identification of the site and project and be signed and dated by the qualified person responsible for its preparation and modification.

23.4. Loading and Unloading Steel

Unloading steel from flatbed trailers can be hazardous with shifting loads after a long haul, and additional height for the rigger who must rig the steel. There is no tie off point to get to the top of the steel to apply slings to offload trucks pose a hazard of moving steel, caught between and losing balance.

1. Delivery truck parked with engine off and brake set; chocks are required to be used and must have one set before and one set after rear tires of flatbed trailer to prevent movement during loading/unloading activities.

2. A manufactured trailer access ladder should be used where feasible. Where a step ladder must be used for access, the ground must be improved to allow safe access and secured to prevent displacement.

3. A properly installed and signed barricade shall be installed around the entire operation prior to releasing any load tiedown equipment and no one shall be allowed to walk within 10ft of the barricaded area during operation.

4. A boom lift or other safe methods shall be used when above 6’ to attach rigging to steel on flatbed.

23.5. Structural Steel Assembly

1. Guying or bracing When deemed necessary by a competent person, guying or bracing must be installed during the steel erection process to ensure the stability of the structure
    a. Bracing shall be in place and properly installed before the structure is loaded with construction material such as loads of joists, bundles of decking, or bundles of bridging to avoid movement
    b. Bracing equipment may be removed only with the approval of a competent person.

2. Metal Decking

3. Hoisting, landing, and placing of metal decking bundles shall be under the direction of a qualified rigger.

4. Bundle packaging and strapping may not be used for hoisting unless specifically designed for that purpose.

5. If loose items such as dunnage, flashing, or other materials are placed on top of metal decking bundles intended to be hoisted, they must be secured to the bundles.

6. When bundles of metal decking are landed on joists, all bridging must be installed and anchored, and all joist-bearing ends attached.
7. Metal decking bundles must be landed on framing members so that enough support is provided to allow the bundles to be unbanned without dislodging the bundles from the supports.

8. At the end of the shift or when environmental or jobsite conditions require, metal decking must be secured against displacement.

9. Metal decking at roof and floor holes and openings must be installed as follows:
    a. Framed metal deck openings must have structural members turned down to allow continuous deck installation, except where prevented by structural design constraints or constructability
    b. Openings such as roof and floor holes must be decked over. When metal decking holes and openings are cut, they must be protected by standard guardrails or adequate floor hole covers.
    c. Where large size, configuration, or other structural constraints do not allow openings to be decked over (e.g. elevator shafts, stairwells, etc.), employees must be protected in accordance with the fall protection provisions of this policy.

10. Covers for roof and floor openings shall be capable of supporting, without failure, twice the weight of the employees, equipment, and materials that may be imposed on them at any one time. All covers must be:
    a. Secured when installed to prevent accidental displacement by the wind, equipment or employees
    b. Marked with the word "HOLE" or "COVER" to provide warning of the hazard ○ Installed smoke dome or skylight fixtures are not considered covers, unless they meet the appropriate strength requirements.
    c. Where planks or metal decking around columns do not fit tightly, wire mesh, exterior plywood, or equivalent material must be installed, and must be of sufficient strength to provide fall protection for personnel and prevent objects from falling through.

11. To prevent accidental movement or displacement, metal decking must be laid tightly and be immediately secured.

12. During initial placement, metal decking panels must be fully supported by structural members.

23.6. Structural Assembly

1. All columns must be anchored by a minimum of four (4) anchor bolts.

2. Columns must be set on level finished floors, pre-grouted leveling plates, leveling nuts, or shim packs that adequately transfer the construction loads.

3. All columns must be evaluated by a competent person to determine whether guying or bracing is needed; if guying or bracing is needed, it must be installed.

4. Anchor rods or bolts will not be repaired, replaced, or field-modified without approval by the project structural engineer of record in writing.

23.7. Beams and Columns

1. During the final placing of solid web structural members, the load must not be released from the hoisting line until the members are secured with at least two bolts per connection, of the same size and strength as shown in the erection drawings and bolts are drawn up wrench tight.

2. A competent person must determine if more than two bolts are necessary to ensure the stability of cantilevered members if additional bolts are needed, they must be installed.

3. Perimeter columns shall not be erected unless:
    a. The perimeter columns extend a minimum of 48 inches (1.2 m) above the finished floor to permit installation of perimeter safety cables prior to erection of the next tier, except where constructability does not allow
    b. The perimeter columns have holes or other devices in or attached to perimeter columns at 42-45 inches (107-114 cm) above the finished floor and the midpoint between the finished floor and the top cable to permit installation of perimeter safety cables required for fall protection

23.8. Open Web Steel Joists

1. Hoisting cables will not be released until the seat of the joist on each end has been stabilized.

2. No modification that affects the strength of the joist can be made without the approval of Structural Engineer of record.

3. Steel joists and steel joist girders shall not be used as anchorage points for a fall arrest system unless written approval to do so is obtained from a qualified person.

4. Each steel joist will be secured to the structure, at least on one end immediately upon placement in the final erection position and before additional joists are placed or hoisting cables released. For joists over 60 feet, both ends will be secured prior to release of hoisting cables.

5. No more than one employee is allowed on a joist until bridging is installed and secured.

6. When landing decking materials on joists, ensure that the load is distributed properly and does not exceed carrying capacity of the joists.

7. No bundle of decking can be placed on joists until all bridging has been installed and anchored, and all joist ends are secured.

8. Bundles of decking should be placed on a minimum of three joists to properly distribute the weight and should be within 1 foot of the bearing surface of the joist end.

23.9. Falling Object Protection (See JE Dunn Safety and Health Manual)

1. All materials, equipment and tools which are not in use shall be secured against accidental displacement. Tool tethers or other securing devices are required even if areas below the erection area are barricaded off. Only the erection crew should be allowed in the work area to reduce the amount of personnel exposure.

2. No other construction activities will occur during the erection process unless overhead protection is provided for the workers, or a restricted area is in place to prevent exposure to workers below.

23.10. Fall Protection

1. During all erection processes, all workers shall utilize and follow 100% fall protection above 6 feet.

2. The use of an **elevated** horizontal lifeline attached to a horizontal solid web structural member that is being installed shall be utilized where its use does not create a greater hazard for the assembly of members or the worker installing them. Employees will not be allowed to walk steel unless an approved horizontal lifeline is erected. Crawling (on all-fours) steel beams with beamers will be permitted, but no walking on steel beams with rolling beamers.

3. These systems must be designed by an engineer and installed under the direction of a qualified person.

4. Controlled decking zones cannot be used as a substitute for the 100% fall protection rule.

5. Fall protection provided by the steel erector shall remain in place and under his/her control until the controlling Trade Partner has inspected and accepted control and responsibility of the fall protection.

6. When utilizing retractable lifelines in a leading-edge condition, the retractable must be designed and approved for this use.

23.11. Training

1. Personnel performing steel erection shall receive training from their employer that focuses on the specific hazards associated with steel erection such as fall hazards, use, and operation of guardrails, personal fall arrest systems, and any other special training as required.

2. Trade partners will supply documentation of this training prior to starting erection.

Section 24: Fall Protection

24.1. General Requirements

1. A Fall Protection and Prevention Work Plan is required of all Trade Partners working at heights. This site-specific plan shall be submitted prior to commencement of work on site and be accepted by JE Dunn as part of the APP.

2. Fall protection is required when on a walking or working surface (vertical or horizontal surface) 6 feet or more above a lower level, regardless of the trade at work or the task being performed.

3. Fall protection systems, equipment and design must allow for 100% fall protection.

4. The use of a Safety Monitor System and a Controlled Decking Zone as a primary means of fall protection is prohibited.

5. All elevated floors, platforms, decks or formwork must be capable of supporting at least 2 times the maximum intended load.

6. A structural engineer must verify the safe capacity of the floor for any and all equipment that will be used on the floor.

7. When determining a tie off point, each company's competent person shall review the anchor point.

8. Not allowed to tie off to wire cable guardrails unless we have an engineered drawing.

24.2 Responsibilities

The Superintendent is responsible for developing and implementation of the project fall protection work plan for the craft working at heights 6 feet or higher.

Fall Protection Work Plan

The fall protection plan must be kept on file and updated as conditions and tasks change.

1. Trade Partners are to provide the appropriate equipment, training and supervision needed to accomplish fall protection at the jobsite.

2. Each Trade Partner's Foreman is responsible for:
    a. Providing and ensuring that the fall protection being used is appropriate for the particular application.
    b. Training each of his workers on the proper installation, use, maintenance, inspection and limitations of their fall protection equipment.
    c. Retraining immediately following an unsafe fall protection observation for his crew.

24.3. Guardrails

1. All guardrails must be constructed to meet or exceed 29 CFR 1926 Subpart M requirements:
    a. Guardrail Construction Specifications:
        i. All guardrails must consist of a top rail, mid-rail, and a toe board.
        ii. Top rails must be 42 inches from the working surface.
        iii. Top rails must be capable of supporting 200lbs. of force in a downward and outward direction.
        iv. Mid-rails must support 150 lbs.
        v. Toe boards must be capable of resisting, without failure, 50 lbs. of force without failure. (NOTE: See Falling Object Protection)
        vi. Wire rope guardrails should not be installed around interior floor openings and on stairs.
        vii. Ladder-ways with offset rails must be provided at all access/egress points.

24.4. Wire Rope Guardrail Requirements:

1. Wire rope must have a minimum breaking strength of 5000lbs.

2. Wire rope rails must not deflect more than 3 inches in any direction when a 200 lbs. force is applied.

3. Wire rope rails should be terminated by wrapping around columns or other structural supports at each inside and outside corner.

4. Runs should not exceed 90 feet.

5. Terminations should consist of three nonmalleable cable clamps or fist grips, installed per manufacturer's requirements.

6. Cables must be flagged with visible material every 6 feet. (Bright colored duct tape may be used to help maintain 6ft. distances.)

7. Turnbuckles should be installed at each section to provide easy maintenance.

24.5. Wood Guardrails:

1. Structural support stanchions must be installed every 8 feet.

2. Sixteen-penny nails should be used to build wood rails. Duplex or form nails should not be used as they may pose a snagging hazard or may damage the lumber.

24.6. Barricades

1. Barricading tape can be used for a short-term identification of restricted areas. A sign explaining the hazard shall be attached and signs must be placed on the barricade to identify ownership at a minimum of every 50 feet. When using barricade tape to identify a hazard, the following should apply:
    a) Yellow Caution Tape –This tape shall be used to designate an area where persons recognize the hazard and have taken the appropriate measures to protect themselves from the hazard. The person can then enter the area. Yellow caution tape shall not be used to designate areas with hazards that could result in serious injuries.
        i. Caution tape shall not be used to restrict access to an area where a fall hazard of six feet or more exists.
    b) Red Danger Tape – This tape shall be used to designate an area where a significant hazard is present. Only workers involved in the operation may enter if the owner of the barricade allows them.
    c) Orange tape or rigid type barricade – For safe operation and maintenance of temporary electrical equipment, sufficient access and working space are available and maintained for all temporary electrical equipment. Barricades shall create a clear working space of no less than 4’ on all sides of such equipment. These are to be maintained regularly by their owner or other JE Dunn Superintendent designee. NOTE: OSHA 1926.403 table K-1 or NEC table 110.26(A)(1), is to be used to determine working clearance requirements in lieu of the 4’ minimum clearance. No clear working spaces are used for storage.

2. Signage should identify the name of the company, hazard, contact information, and start/date times.

3. If left open for more than 24hrs, snow fencing shall be installed to help identify.

4. The Trade Partner that installed the tape shall place their company name and the person responsible in legible ink on the back of the tape.

5. The barricading tape shall be removed when no longer needed and hazards have been mitigated.

6. The installer shall be responsible for the installation/maintenance and removal/disposal of the barricading tape.

7. Rope off or barricade stored materials in laydown areas.
    a. Contact sign shall be posted on all sides and every 50 feet in distance along sides.

24.7. Personal Fall Arrest System (PFAS)

1. Any employee exposed to fall hazards of greater than 6 feet that are not protected by other means, must utilize a personal fall arrest system.

2. All employees using fall protection PPE shall be trained on the proper use, fit and wear before donning the equipment.

3. Personal fall arrest equipment shall be inspected prior to each use for wear, damage and other deterioration. Defective equipment shall be tagged and removed from service.

4. Personal fall arrest equipment shall be equipped with suspension trauma straps.

5. Equipment must be used according to manufacturers' recommendations.

6. Anchor points for PFAS must be capable of supporting 5,000 lbs. per worker and be designed to limit free fall distance to 6 feet.

7. No shop made devices such as hooks, brackets or attachments are allowed.

8. Personal fall arrest systems shall not be attached to guardrail systems.

9. Any component subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.

10. Lifelines and lanyards shall be used only for employee safeguarding.

11. A rescue plan is required whenever a worker is using PFAS at heights.

Lanyards

1. All fall arrest systems will include the use of a self-retracting device (SRD). Shock absorbing lanyards shall not be used without prior authorization for the GC safety department. Class 2 shall be used at leading edges or areas where lanyards may be exposed to cuts.

2. Shock absorbing lanyards, when authorized, will be a minimum of 1/2-inch nylon, or equivalent, with a maximum length to provide for a free fall of no greater than 6 feet.

3. The lanyard shall have a nominal breaking strength of 5,400 pounds.

4. Lanyards shall not be extended in any way.

5. Lanyards shall not be hooked back to themselves.

6. Lanyards shall not be attached to retractable lifelines (yo-yos) to extend reach.

24.8. Fall Restraint Systems (FRS)

1. A fall restraint system is different from a fall arrest system. A fall restraint system may allow a worker to approach the edge or fall hazard, but at no time will it allow a worker to reach the edge or fall hazard.
    a. Fall Restraint System (FRS) shall be installed per applicable ANSI standards.
    b. A FRS must consist of a, full body harness, a lifeline (capable of fall arrest) and anchorage point.
    c. Anchor points for FRS must be capable of supporting 1,000 lbs. per worker attached.

2. Specialized training must be provided to use Fall Restraint Systems. This training shall be documented and shall consist of the following:
    a. The installation, maintenance and limitation of the FRS and its components.
    b. The proper use of the FRS.
    c. Training must be documented and a copy provided to JE Dunn's Safety Department before use of this system.
    d. Retraining must be provided whenever the system, its components or the environment in which the system is being used changes.
    e. All workers using a FRS must be retrained if one worker is observed using the system in an unsafe manner.
    f.

24.9. Warning Lines

1. Warning lines may be used for roofing operations or any other situation where temporary fall protection must be provided for an unprotected side or edge.

2. Warning lines may not be utilized as a primary means of fall protection. They are used to keep unauthorized workers out of an area that is not protected by other means. Additional means of fall protection must be used when workers are located between the warning line and the unprotected roof edge or open sided floor. These systems may include:
    a. Personal Fall Arrest
    b. Guardrails
    c. Safety Nets
    d. Or combination of the above

3. Warning lines must encompass the entire work area on all sides.

4. Warning lines must be installed a minimum of 15 feet away from the roof edge or unprotected side or edge.

5. Points of access, materials handling areas, storage areas, and hoisting areas shall be connected to the work area by an access path formed by two warning lines.

6. The warning line location must have gate entry with signage detailing “Gate”. The entry can be a physical gate, red rope gate, flagging, and or red high strength heavy duty danger tape.

7. Design and installation criteria for Warning Lines must meet OSHA requirements. 29 CFR 1926.502 (f).

24.10. Controlled Access Zones (CAZ)

Controlled Access Zones (CAZ) primarily used for precast and decking operations may be used for leading edge work but shall not be utilized as a primary means of fall protection. Other means of fall protection must be utilized when workers are located between the control line and the leading edge or other fall hazard. These systems may include:

1. Personal Fall Arrest
2. Guardrails
3. Safety Nets
4. Or combination of the above

Controlled Access Zone lines shall consist of:

1. Control lines shall be erected not less than 6 feet or more than 25 feet from unprotected or leading edge
2. Precast Only: Control lines shall be erected not less than 6 feet or more than 60 feet from unprotected or leading edge
3. Must extend along the entire length of unprotected or leading edge
4. Control lines shall be connected on each side to guardrail system or wall
5. Be flagged with high visibility material every 6 feet

6. Be maintained at a height of 39-45”
7. Warning line material must have a minimum tensile strength of 500 pounds

24.11. Falling Object Protection

1. Debris netting shall be installed on all multi-story buildings. The determination of whether the debris netting is installed floor to ceiling or top rail to the floor shall be made by the Superintendent and Safety Director.

2. Debris netting (floor to ceiling) or (horizontal exterior) is required on all high-rise structures in urban or heavily populated areas.

3. Falling object protection barricades should completely encompass the potential fall zone. (Additional distance should be added to the height of the fall and the type of material that could fall.)
4. Falling object protection barricade may consist of:
    a. Standard barricading fence and appropriate signage to warn of overhead work or potential falling objects.
    b. High strength fiber tape with appropriate signage.
    c. Either of the above barricades and a “ground man” to warn other workers of the overhead hazard and keep people out of the potential fall area.
    d. Temporary (less than 8 hours) falling object protection barricade may consist of red danger tape assuming that it is not erected in a high traffic area.

5. Workers who enter barricaded areas without authorization are subject to disciplinary action.

6. Overhead protection must be provided at all building entry points when overhead work is taking place or construction traffic must be rerouted with barricades to other entry points where there is no overhead work.

7. Overhead protection must be provided at the base of all exterior personnel hoists.

8. Overhead protection that is designed (including those used to protect the public) must be designed by a competent person. These designs must take into account:
    a. The heights of the overhead work
    b. The materials that are being installed over the potential fall area.
    c. The tools and equipment being used in the area.

9. During all overhead work that exceeds the intended level of protection provided by the design, all traffic, construction, public or other must be rerouted and “Ground Person” provided.

10. Materials may not be stacked within 10 feet of the exterior edge of a building or within 6 feet of an interior opening where the material is higher than the toe board or debris netting.

24.12. Training

1. Trade Partners must provide training and retraining to employees:
    a. Immediately prior to using a fall protection system.
    b. Each time a new crew member is added to the crew.
    c. Each time a worker is observed using fall protection improperly or in an unsafe manner.
    d. Anytime that the equipment or methods of fall protection change.

2. Training shall include:
    a. The nature of fall hazards in the work area.
    b. The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems that are to be used.
    c. The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, and other protection to be used.
    d. The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection.
    e. The roles and responsibilities of each worker in fall protection plans.
    f. All applicable state federal and local fall protection standards.

3. Training must be documented and include:
    a. The date of the training and the name of the project being inspected.
    b. A description of the topics discussed and details including the fall protection methods, proper use, inspection, installation, maintenance, and any project specific requirements as applicable.
    c. A sign-in sheet with all attendees.
    d. The name of the person giving the training and the responsible foreman (if different).

4. Copies of the training shall be available upon request.

24.13. Vertical Lifelines

1. A minimum of ¾ inch manila or equivalent, with a minimum breaking strength of 5,400 pounds shall be used.

2. Lifelines shall be secured above the point of operation to an anchorage point capable of supporting a minimum dead weight of 5,400 pounds.

3. When vertical lifelines are used, each employee shall be attached to a separate lifeline.

4. Lifelines shall be protected against being cut or abraded.

24.14. Horizontal Lifelines

1. Horizontal lifelines shall be designed, installed, and used, under the supervision of a competent person, as part of a complete personal fall arrest system and shall be designed to a safety factor of twice the designed load.

2. OSHA prohibits tying off to perimeter guardrails as a form of fall protection. However properly installed horizontal lifelines around the building perimeter can serve as guardrails. This allows workers to use the lifelines as a tie-off point when work outside the guardrails is required. The requirements for the installation of horizontal lifelines are more stringent than guardrails. The following provides direction in meeting those guidelines.

3. Procedure:
    a. The horizontal lifeline systems must be designed by a qualified person. OSHA defines "Qualified" as one that, by possession of a recognized degree, certificate, professional standing, or by extensive knowledge, training, and experience, has demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project.

    b. All materials used in the horizontal lifeline system design must be capable of sustaining a minimum breaking strength of 5,000 lbs. The materials listed below are capable of sustaining a minimum load of 5,000 lbs., if installed properly.

    c. No more than two workers shall be tied off to the same run of lifeline.

4. Training:
    a. Workers shall receive the appropriate training before installing, maintaining or using the system. Training shall include:
        i. Wire rope cable installation procedures.
        ii. Proper wire rope cable inspection procedures.
        iii. Proper use of the horizontal lifeline system and all personal fall arrest equipment used with the system.
5. Testing:
    a. Drop tests shall be conducted on the system if no current test data is available or the system design has changed. Contact the safety department for assistance/direction in performing these tests.

24.15. Full Body Harness

1. Full body harnesses are required for all personal fall protection applications.

2. Leg and chest straps must be properly buckled when utilizing the harness for fall protection.

24.16. Ladders

1. The use of Ladders should be considered as a secondary piece of equipment versus a primary means if / when elevated work is necessary. A ladder permit must be completed and approved by JE Dunn Safety if using a ladder above a 6' working height. Through the risk assessment tool, i.e. job hazard analysis, the identification of primary systems (e.g. equipment) to perform elevated work shall be identified. Elevated work platforms, scaffolds and elimination of the hazard should be considered in all major scopes of work prior to requesting a ladder permit.
    a) Mobile Elevated Work Platform (MEWP) or scaffold devices shall be the preferred tool or device of choice on our projects.
    b) If the situation arises where ladder usage can't be avoided, contractors direct to Beale Infrastructure shall have language in their manuals to ensure a usage permit (permit valid for one work shift), and pre-use inspection of the ladder shall be performed.
    c) Permits and inspections shall be kept on file for the duration of the project and made available upon request to audit.
    d) Contactors shall ensure that the workers understand the risk of using the ladder and implement all associated mitigation through a documented process like Pre-task plan, Job hazard analysis, etc.
    e) Ladders not in use must be secured to prevent unauthorized use (i.e. secured area or padlocked together).

2. Anytime a worker is working and is exposed to a fall hazard over 6 vertical feet, as measured from the sole of their shoe, personal fall protection will be used.
    a. Exception:
        i) Always maintain at least three points of contact with the ladder.
        ii) Maintains center of body between the ladder's vertical supports.
        iii) Co-workers support the ladder, or it is secured from movement; and
        iv) Faces the front of the ladder.

Ladders Last Ladder Permit

- Plan to reduce or eliminate the need for ladders. Planning should occur well before the work begins. Can we engineer or design out the need to use ladders or even work at elevated heights?
- Identifying other means of access and or elevated work platforms that better protect workers and support safe production.
- When given the choice, use stairs or elevators to access a work area, rather than climbing a ladder.
- Consider safer alternatives to do work at elevated heights. Can an aerial, boom, or personal lift be used? Are temporary stairs available?
- Ladders will be used on SRP Projects only after it has been determined that there is no other feasible method to perform the elevated work.
- All ladder work requiring a ladder greater than 6 feet will require a permit prior to start.
  - Sign off by the SRP Safety Manager.

Permit to perform work from a ladder greater than 6 feet | Fill out form below & attach proper documentatio

PERMIT NUMBER:_____ DATE:

SITE: _____ LOCATION:_____

EMPLOYEE:_____ PHONE:_____

This permit is valid from _____ ☐ AM ☐ PM Date: _____

This permit is expires _____ ☐ AM ☐ PM Date: _____

DESCRIPTION OF WORK:

Job Hazard Analysis (JHA) for work to be done ☐ YES ☐ NO

Please list the reason(s) alternative means of equipment such as Scissor lift, Boom lift, etc. cannot be utilized:

SRP
Safety MGR:_____ APPROVAL: _____

Note: The above section of this permit must be completed and signed by the SRP Safety Manager before work is to proceed

Section 25: Mobile Elevated Work Platform (MEWP)

25.1. General Requirements

1. Equipment under the control and custody of JE Dunn will not be permitted to be used by anyone other than JE Dunn personnel, unless granted approval from the project Superintendent or designated supervisor and a release of liability for use of equipment waiver is signed by the person(s) or company requesting its use.

2. All lifts operated on finished concrete must be equipped with a leak prevention method (i.e. diapers)

3. All lifts operated on finished flooring must be equipped in such a way as to not damage the finished product.

4. The operator's manual must be maintained and stored on the lift.

5. Daily inspections of the lift shall be conducted and documented before each shift and verified prior to each use.

6. Daily inspections shall be maintained on the lift equipment during use.

7. Ground conditions must be adequate to support the equipment.

8. Allowable slope and grade conditions must not be exceeded.

9. All lifts operated on soil shall have a spill prevention plan in place with the GC.

10. "Dog Walking" of lifts or out of basket lateral travel is prohibited:
    a. "Dog walking" or lateral travel outside the scissor lift basket is strictly prohibited, except for rescue purposes.
    b. Any non-rescue instances necessitating this action require a comprehensive risk analysis, detailed Job Hazard Analysis (JHA) planning, and documented approval from JE Dunn Safety.

25.2. Training

1. Operators must have general training regarding inspection, operation, and applications, including the recognition of general hazards associated with the operation of the lift.

2. Operators must have specific model training on the purpose and function of all controls and safety devices and operating characteristics of that particular model lift.

3. Make sure there is another person available on-site who is not working on the machine qualified to use emergency controls and know who that person is.

4. Retraining shall take place every three years, whenever an incident occurs with the lift and/or when an employee lacks understanding or proficiency in the subject matter.

25.3. Work Area Inspection

1. An inspection of the workplace must be conducted to identify overhead hazards or surface hazards (holes, bumps, drop-offs, obstructions, mud, debris, and inadequate ground/floor support).

2. Floor holes and drop-offs shall be adequately covered or stop blocks installed along the drop-offs to prevent the operator from driving into the hazards.

3. A structural engineer shall verify the loading capacity of an elevated deck/floor or roof before a lift is placed. This document should be made readily available for review on site.

25.4. Machine Inspection

1. Prior to use, all lifts must be inspected per the manufacturer's recommendations. Any deficiencies must be corrected before the machine is put into service. If a machine is taken out of service due to deficiencies, the Superintendent must ensure that it has been locked out/tagged until repaired or removed from site. This pre-use equipment inspection form will be kept with the machine at all times during operation.

2. All Inspection Sheets must be turned into JE Dunn at the end of each shift.

3. Scissor lifts must be equipped with functional pothole protectors to help prevent lifts from tipping when driven over holes, depressions or changes in elevations.

25.5. Spotters

1. Spotters are required for horizontal or vertical use of MEWP/equipment when vision is obstructed, confined areas, or as hazards may require. It is the responsibility of the operator and the spotter to communicate any movement and observe the movement.

2. For Vertical (up/down) movement or when vision is obstructed, confined areas, or hazards may require: The spotter shall work in conjunction with the operator to ensure the MEWP is utilized in a safe manner. All spotters are to perform their duties from ground level exclusively and are expressly prohibited from spotting for other equipment.

3. The spotter is required to conduct a thorough walk-around of the lift and the operational path before and during its operation to ensure clearance and prevent collisions with surrounding objects.

4. A spotter is not a full-time job. The spotter is allowed to work or retrieve equipment or parts when the lift comes to a complete stop and is not in operation.

5. A spotter may spot for 2 lifts within 25 feet of one another, but only one lift at a time may move.

6. Establish communication prior to a lift moving, two examples are: verbal (example – call out, going up, coming down) and eye contact/hand gestures.

7. While a lift is in motion, the spotter must maintain complete and undivided attention to the task at hand. Distractions are strictly prohibited. These include, but are not limited to:

    a. Cellular telephones, laptop computers, tablet devices, and audio earbuds.
    b. Conversations unrelated to the ongoing task.

8. For overhead work that may produce falling object hazards, the spotter is responsible for managing the access zone below in the absence of barricades.

    a. 360-degree barricades shall be used when a spotter is not available.

9. All equipment operating on an operational data floor or owner-controlled areas must have a spotter for any vertical or horizontal movement or anytime when view is obstructed.

10. Barricades in owner-controlled areas should not be temporary tape. Consider using retractable belt or plastic chain barricade systems or other similar systems to provide a continuous barricade around the work area.

25.6. Machine Operation

1. The operator must be familiar with equipment capabilities and limitations. Refer to manufacturer's instructions for proper operation.

2. Malfunctioning equipment must be taken out of service until repairs are made.

3. Maximum working and/or occupancy loads must not be exceeded.

4. No equipment attachments/modifications are allowed without the manufacturer's approval.

5. An aerial lift must never be used as a crane or for material handling unless approved for that use by the manufacturer.

6. Safety devices and interlocks shall not be bypassed.

7. Emergency stop must be engaged when equipment is not in motion.

8. Trash, excess material, and tools shall be removed from the lift frequently to not create a trip hazard.

9. Aerial lift operations must be shut down when wind conditions exceed the manufacturer's operating limits.

10. When working outside the confines of the guardrail, the lift shall not be used as an attachment point for fall protection, unless the lift is equipped with a manufacture approved accessory specifically designed to be an anchor point for fall protection while working outside of the basket.

11. Cords and hoses shall never be secured to the rails of a lift, unless they incorporate a break-away method to disconnect the cord or hose should it become snagged on equipment or structures.

12. No working from the rails of any lift.

13. Secondary Guarding shall be installed on all boom lifts before use on-site to prevent the operator from being crushed during operation.

14. 100% tie off required in all MEWPs using type 2 retractable lanyards.

15. All MEWPs shall be labeled with the operating company's name and contact information in an easily visible location.

25.7. Fall Hazards

1. JE Dunn's policy requires 100% tie off in all aerial lifts (i.e., articulating platforms, scissor lifts, etc).

2. Only Type 2 retractable fall restraint shall be used.

3. Having a written rescue plan in place that provides detailed instruction and procedures for safe and prompt retrieval.
    a. Personnel left suspended following a fall-arrest situation.
    b. Personnel stranded on the work platform of a snagged and/or malfunctioning aerial lift.

4. All gates and rails must be secured in the proper position.

5. Using steps, planks, or standing on guardrails to increase reach is prohibited. Employees shall always stand firmly on the floor of the basket and shall not sit or climb on the edge of the basket.

25.8. Electrocution Hazard

Safe clearance must be maintained from all electrical lines.

Table B: Minimum Safe Approach Distances

Voltage Range (phase to phase)	Minimum Safe Approach Distance (Feet/Meters)
0 to 50 KV	10 (3)
Over 50 KV to 200 KV	15 (5)
Over 200 KV to 350KV	20 (6)
Over 350KV to 500KV	25 (8)
Over 500 KV to 750KV	35 (11)
Over 750KV to 1000KV	45 (14)

Section 26: Compressed Air/Gas Cylinders/Welding and Cutting

26.1. General Requirements

1. All ANSI Z49.1, Safety in Welding, Cutting and Allied Processes requirements will be followed.

2. Fuel/Gas Cylinder content must be identified by visible readable labels. Cylinder colors shall not be used to identify the cylinder content.

3. Users of compressed gas cylinders must be trained in the proper use, storage and hazards associated with these cylinders.

4. Cylinders not in use shall be fitted with valve protection cap and secured in an upright position.

5. Do not tamper with or alter cylinders, valves or safety relief devices. Do not tighten connection or leaking fittings or attempt other repairs while the cylinder is under pressure.

6. Before connecting a regulator to a cylinder valve, the valve shall be opened momentarily and closed immediately. Note: This action is generally termed "cracking" and is intended to clear the valve of dust or dirt that might otherwise enter the regulator.

7. Signage must be posted in all locations where containers are stored. Signage shall include, but not limited to:
    a. no smoking
    b. flammable or combustible
    c. empty/full (need separate)

8. Fire extinguisher(s) shall be placed at proper distances.

26.2. Safe Handling

1. All fuel/gas cylinders shall be secured in an upright position at all times.

2. When cylinders are hoisted, always use proper carriers. Cylinders should never be choked or lifted by their valve protection cap.

3. Cylinders shall not be dropped, struck or permitted to strike objects in a manner that may damage the cylinder, valve or safety device.

4. Empty cylinders shall not be treated any differently than full cylinders.

5. Do not place cylinders next to a heat source or direct an open flame at any part of cylinder.

6. Oxygen shall not be used as a substitute for compressed air.

7. Oxygen shall not be used to dust clothing, to create pressure or to ventilate areas.

8. Jets of oxygen shall not be permitted to strike an oily surface or greasy clothes or to enter fuel oil or other storage tanks.

9. Never use oily or greasy hands, gloves or rags to handle oxygen cylinders.

10. Acetylene cylinder valves shall not be opened more than 1-1/2 of a turn.

26.3. Storage

1. All flammable compressed gas cylinder storage areas shall be located outside of the building or structure.

2. Valve protection caps shall be placed on all cylinders when not in use.

3. Gauges shall be removed and cylinders capped at the end of the day.

4. Oxygen or fuel/ gas cylinder shall be used and stored in an upright position and secured from tipping by chain or other equivalent method.

5. Different gasses shall be stored at least 20 feet apart or separated by a 5-foot noncombustible firewall with a fire-resistance rating of at least one-half hour.

6. Storage areas shall be posted with No smoking or open flame signage. ladders

26.4. Liquid Propane Gas (LPG) Tanks

1. All Liquid Propane Gas (LPG) supply hoses and connections must be installed per local codes and statutes.

2. All hoses and tanks must be protected from damage.

3. No more than three (3), 100lb. propane tanks shall be connected together via manifold.

4. Portable tanks shall be fitted with a Hackney collar.

5. Large bulk tanks shall be located a minimum of 20 feet away from any buildings or structures and be protected by barricading. Hard barriers (Jersey Barriers, K-Rail) or equivalent should be used when the bulk tanks are exposed to vehicle or equipment traffic.

26.5. Welding and Cutting

Torches:

a. Boxes used for the storage of gas hoses shall be ventilated.
b. Hoses, cables, and other equipment shall be kept clear of passageways, ladders and stairs.
c. Clogged torch tip openings shall be cleaned with suitable cleaning wires, drills, or other devices designed for such purposes.
d. Flashback arrestors must be provided on all torches and regulators.
e. Torches in use shall be inspected at the beginning of each working shift for leaking shutoff valves, hose couplings, and tip connections. Defective torches shall not be used.
f. Torches shall be lit by friction lighters or other approved devices, and not by matches or from hot work.
g. Oxygen and fuel gas pressure regulators, including their related gauges, shall be in proper working order while in use.
h. Oxygen cylinders and fittings shall be kept away from oil or grease. Cylinders, cylinder caps and valves, couplings, regulators, hose, and apparatus shall be kept free from oil or greasy substances and shall not be handled with oily hands or gloves. Oxygen shall not be directed at oily surfaces, greasy clothes, or within a fuel oil or other storage tank or vessel.
i. Never allow acetylene gas pressure to exceed 15 lbs.

Arc Welding and Cutting:

a. Only manual electrode holders which are specifically designed for arc welding, and cutting, and are of a capacity capable of safely handling the maximum rated current required by the electrodes, shall be used.
b. Any current-carrying parts passing through the portion of the holder which the arc welder or cutter grips in his hand, and the outer surfaces of the jaws of the holder, shall be fully insulated against the maximum voltage encountered to ground.
c. All arc welding and cutting cables shall be of the completely insulated, flexible type, capable of handling the maximum current requirements of the work in progress, taking into account the duty cycle under which the arc welder or cutter is working.

d. Only cables free from repair or splices for a minimum distance of 10 feet from the cable end to which the electrode holder is connected shall be used, except that cables with standard insulated connectors or with splices whose insulating quality is equal to that of the cable are permitted.
e. When it becomes necessary to connect or splice lengths of cable one to another, substantial insulated connectors of a capacity at least equivalent to that of the cable shall be used. If connections are affected by means of cable lugs, they shall be securely fastened together to give good electrical contact, and the exposed metal parts of the lugs shall be completely insulated.
f. Cables in need of repair shall not be used. When a cable, other than the cable lead referred to in paragraph (B)(4) of this section, becomes worn to the extent of exposing bare conductors, the portion thus exposed shall be protected by means of rubber and friction tape or other equivalent insulation.
g. A ground return cable shall have a safe current carrying capacity equal to or exceeding the specified maximum output capacity of the arc welding or cutting unit which it services. When a single ground return cable services more than one unit, its safe current-carrying capacity shall equal or exceed the total specified maximum output capacities of all the units which it services.
h. Ventilation for welding and cutting operations shall comply with OSHA requirements.

Section 27: Fire Prevention and Hot work

27.1 General Fire Prevention

1. Smoke only in designated areas. Extinguish matches and tobacco products and place them in approved containers.

2. Minimize the amount of flammable liquids/gasses in the work area. When possible, limit the amount to a single work shift supply.

3. Close containers of flammable liquids when not in use. Report spills and any indication of excessive flammable vapor/gas concentrations immediately.

4. Obtain the necessary permits daily when performing hot work or disabling fire protection systems. Close out obtained permits at the end of each day.

5. Make sure materials and equipment do not block access to extinguishers and fire protection hoses, hydrants, and standpipes.

6. Ensure materials are kept at least 18 inches (0.5 meter) from sprinkler heads.

7. In case of Fire:
    a. Go to the nearest phone and contact **911 or** emergency service. (TBD)
    b. If available, activate the nearest fire alarm pull station and alert JE Dunn personnel.
    c. Assist anyone in immediate danger to safety.
    d. For developing stage fires and having been trained to properly use a fire extinguisher, a fire extinguisher may be used after steps 1-3. To do this:
        i. Locate the closest fire extinguisher
        ii. Do not get too close to the fire
        iii. Pull the locking pin from the handle of the fire extinguisher
        iv. Aim the extinguisher hose at the base of the fire and squeeze the activating lever on the handle.
        v. Use a sweeping motion to spread the extinguisher medium at the base of the fire.
    e. For a larger fire, or a fire involving chemicals do not attempt to fight the fire.
    f. If the fire results in an evacuation, follow site specific plan and stay out of the way of firefighters or emergency responders.

8. Attempt to extinguish small fires (trash can size) only if trained to do so. If trained to extinguish fires, familiarize yourself with the location of fire extinguishers in the area.

27.2. Fire Extinguisher Requirements for Active Construction Sites

1. Active construction projects shall have portable fire extinguishers provided until the permanent building's fire extinguishers are installed.

2. Extinguishers shall be provided in buildings under construction once one of the following conditions exists:
    a. a second story or roof has been installed – though not necessarily completed - over the foundation.
    b. The exterior walls have been erected and closed in.

3. The portable fire extinguishers shall be dry or wet chemical, and shall be rated for Ordinary Hazard Occupancy

4. Each portable fire extinguisher shall have a minimum 10A:120B:C rating and shall be spaced on an interval not to exceed 3,000 square feet (280 square meters) per extinguisher.

5. Maximum travel distance to any fire extinguisher shall not exceed 100 feet (30.5 meters).

6. Transition to providing fire extinguishers at permanent locations and spacing is not necessary until the building/rooms are completed and meet room readiness requirements. All cabinets and mounting hardware for the permanent fire extinguishers shall be marked as 'not in operation' or equivalent, until the permanent extinguishers have been installed.

27.3 Hot Work Permit

1. A Hot Work Permit is required any time work involves the use of open flame or spark producing equipment. This includes welding, cutting burning, grinding, soldering operations, and use of a circular skill saw when cutting metal.

2. Any hot work performed in construction only areas, a Hot Work Permit shall be obtained from JE Dunn (or designee) and coordinated prior to commencement of work. Prior to commencing work, all work specific/area hazards must be understood and communicated and all appropriate permits will be obtained.

3. Each hot work is to be reviewed and approved by JE Dunn Safety and/or JE Dunn Superintendent. After signing off, the carbon copy of the permit is to be posted to the Hot Work Board, and the other copy is to be in your work area. After hot work is complete, return the hot work board, and staple copies together and place them in the completed folder daily.

4. All appropriate permits will be posted in the area of the work.

5. All personnel in the surrounding work area must be properly warned of the hazardous work area by the use of barricades or other communication means.

6. Prior to work, within 35 feet (~ 11 meters) of work area:
    a. Flammable liquids, dust lint and oily deposits are to be removed
    b. Explosive atmosphere is eliminated or if not possible, monitored
    c. Floors are swept clean
    d. Combustible floors wet down, combustibles in the area removed or covered with fire resistive protection
    e. Floor and wall openings covered
    f. Fire resistive tarpaulins suspended beneath work
    g. Fire extinguisher shall be 20lbs and or 10A:120B:C rating

7. A fire watch will be employed while Hot Work is ongoing and for 60 minutes after with fire extinguishing equipment immediately available in the work area.

8. All fire watch personnel will be trained in the use of the fire protection equipment and fire watch duties.

9. Non-Electrical Hot Work will not be conducted in any area classified as a Class I, Division I or II area according to the current Uniform Fire Code. Contact your local safety representative or project manager regarding questions.

10. Any Hot Work requiring the deactivation of an active fire alert or suppression system will require the approval of the General Superintendent or designee.

27.4 Fire System Work

Note, work that involves disabling or impairment on a “live system” associated with any life safety system, requires special planning and coordination with client / owner. This may include ITP planning, Work Notification/JHA, etc.

27.5 Wet Work

1. A Wet Work permit is a crucial part of our Site-Specific Safety Plan. This permit is required for any operation involving work where there is a potential for liquids to be released and the risk of injury or finished materials being damaged exists. Wet work includes but is not limited to operations such as:
    a. The use of liquids for testing piping systems
    b. Flushing
    c. Hot taps into existing piping systems

2. The purpose of the Wet Work permit is to ensure that all necessary precautions are taken before beginning any wet work. This includes assessing and documenting the risk factors, implementing control measures, and ensuring that all workers involved are aware of the hazards and safety procedures.

3. Before any wet work begins, the relevant GC supervisor/safety must ensure that the Wet Work permit has been obtained and that all procedures outlined in the permit are strictly followed. This is to ensure the safety of all personnel and to prevent any potential damage to finished materials.

Section 28: Underground Utilities and Blind Penetrations into Walls & Floors - Refer to

Excavation Breakout Plan

28.1. Definitions

Blind penetration: Drilling, cutting, nailing, and installing fasteners, etc. into a wall or floor when the interior is concealed from view.

Boring: Commonly called horizontal directional drilling or HDD, is a steerable trenchless method of installing underground pipes, conduits and cables.

Drilling: Creates holes in the earth subsurface for piles.

Non-Destructive Means: Excavating with tools or equipment that do not pose a hazard to utilizes (i.e. vacuum excavation, roto hammers, and shovels).

Utility Locate: Term in general use in the utility industry for the process of locating and marking buried or concealed utilities.

Detectable Underground Tape: Red underground marking tape shall be placed by each digging trade partner to run along ALL buried electric power lines, lighting cables, and conduit. Red foil tape may also be used to assist in locating electrical lines after they've been buried in the ground, permanent or temporary.

Mandatory Utility Committee: made of 1 person from all companies that have underground installations, these are the people that locate their utilities prior to dig permit being approved.

Walk and Talk Attendees: Foremen, Operator, spotter for company doing excavating. Utility committee member that has buried lines in the dig area, JE Dunn Superintendent, and Safety.

28.2. Purpose

Excavation, digging, boring into soil, drilling or cutting blind penetrations into floors and walls, and demolition on JE Dunn projects shall be performed only after utilities have been located and marked by a competent person.

28.3 Utility Evaluation

Prior to performing any excavation or blind penetration activities, the performing trade partner shall determine if existing utilities pose a hazard to the operation. These activities are required to ensure that utilities are located prior to starting operations. All excavating, digging, boring, drilling or cutting blind penetrations within 15ft of known utilities must submit a WN/JHA. No operations will be conducted prior to obtaining clearance from JE Dunn and Client.

Note: Wood stakes driven into soil under 12" are excluded from these requirements. JE Dunn underground team shall still be notified prior to starting.

28.4. Known Utilities Locations

1. Shall review any existing construction/as-built drawings to determine the presence of utilities in the work area.

Note: If existing construction/as-built drawings do not show the presence of existing utilities skip to Section 28.5 Unknown Utility Section.

2. If drawings show existing utilities in the work area the performing contractor must have the area scanned/utility locating to confirm utility location.

3. If scanning/utility locating shows existing utilities the location must be marked.

4. If scanning/utility locating does not confirm the location of utilities shown on construction/as-built drawings, then the following is required.
    a. If possible, the utility shall be physically located using the non-destructive means (i.e. hydro vac). potholing should occur every 10ft along the length of the utility.
        i. Any area where the excavation change in depth or size will require additional spot checks if not captured in the 10' interval.

28.5. Unknown Utilities Locations

1. If either construction/as-built drawings show no existing utilities or drawings do not exist, then the area must be scanned/utility located to ensure no utilities are present.

2. If scanning or utility locating do not show the presence of existing utilities then no further action is required.

3. If scanning or utility locating shows existing utilities the location must be marked.

28.6. Utility Markings

1. If a utility has been marked, no excavation or blind penetration can be performed within 5' on either side of the marking until the utility has been physically located using the non-destructive means. For soils potholing should occur every 10ft along the length of the utility.
    a. If it is not possible to physically locate the utility, then the utility should be de-energized to ensure that it does not pose a hazard.

2. Once a utility has been located, no excavation or blind penetration can be performed within 5' on either side of the utility unless by the use of the non-destructive means.
    a. Upon utility location, non-destructive means shall be used for all underground trench/excavation or penetration work, where utility is within 5ft on either side of utility. Use of vacuum trucks, hand-digging or other means of non-destructive work would be accepted.

3. If possible, markings should be recorded (as-built) or photographed.

4. If markings have become faded or are no longer visible, then the area should be re-marked prior to proceeding with excavation or blind penetration activities.

5. When utilities are encased in concrete or guarding methods, it is at the discretion of the DCOPs to review and approve any deviation (<5 feet) from the rule. This process should be documented, and all parties (DCOPs, DCPMG, DCEHS, Contractor/Vendor) involved in work will sign off on the agreed-upon procedure.

28.7. Locate Color Coding

Most Utilities will use a standardized color-coding system to identify the location of underground lines.

1. Underground lines will be marked with the standard color codes as follows:
    a. White: Proposed Excavation Line
    b. Fluorescent Pink: Temporary Survey Markings
    c. Red: Electric
    d. Yellow: Gas/Oil/Steam/Petroleum
    e. Orange: Communications CATV
    f. Blue: Water
    g. Green: Sewer and Drain Lines
    h. Purple: Reclaimed Water

28.8. Excavation Permit

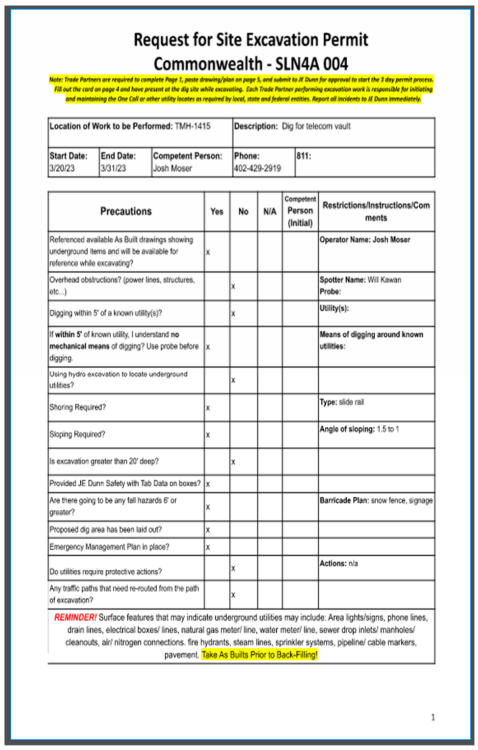
The request for an excavation permit is a process that shall consist of 3 days of due diligence. First, the digging contractor is to notify JE Dunn Superintendent of location to be excavated. Next, the underground utility team (this team consists of one person from every trade that has buried utilities) walks the proposed excavation area with the digging contractor. Locates are confirmed the day prior to excavation taking place and permit is signed off on by the digging contractor and underground locate team members (every signature must be on the dig permit prior to any excavation) All signatures will also be required to have the dig permit closed out. Deviations from the excavation permit must be approved by JE Dunn. Weekends do not count as a part of the 3 day process.

Day 1: *Notification of excavation sent to JE Dunn and underground locate team. Proposed excavation flagged with white flags.*

Day 2: *All locates are marked by* ***ALL*** *parties.*

Day 3: *Walk and talk with excavating contractor and utility locate team. Dig Permit Request signed by all parties.*

Dig Day: *Dig Permit is posted on the map. All signatures are also needed to close the permit.*



Request for Site Excavation Permit
Commonwealth - SLN4A 004

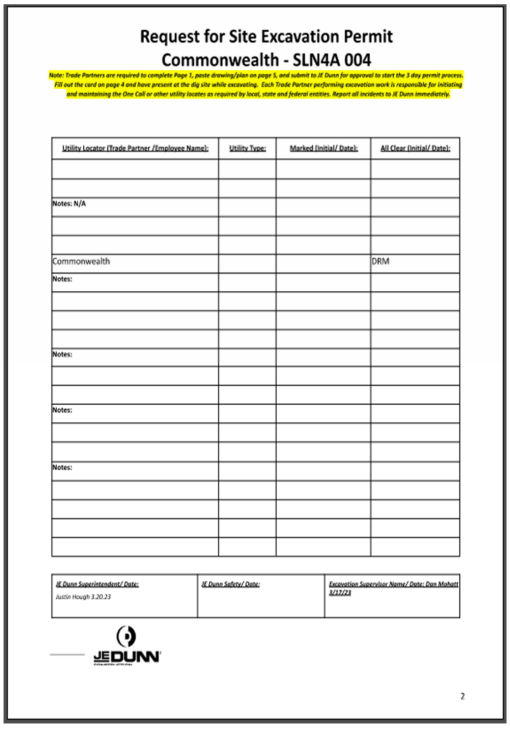
Note: Trade Partners are required to complete Page 1, paste drawing/plan on page 5, and submit to JE Dunn for approval to start the 3 day permit process. Fill out the card on page 4 and have present at the dig site while excavating. Each Trade Partner performing excavation work is responsible for initiating and maintaining the One Call or other utility locates as required by local, state and federal entities. Report all incidents to JE Dunn immediately.

Location of Work to be Performed: TMH-1415			**Description:** Dig for telecom vault	
Start Date: 3/20/23	**End Date:** 3/31/23	**Competent Person:** Josh Moser	**Phone:** 402-429-2919	**811:**

Precautions	Yes	No	N/A	Competent Person (Initial)	Restrictions/Instructions/Comments
Referenced available As Built drawings showing underground items and will be available for reference while excavating?	x				**Operator Name:** Josh Moser
Overhead obstructions? (power lines, structures, etc...)		x			**Spotter Name:** Will Kawan **Probe:**
Digging within 5' of a known utility(s)?		x			**Utility(s):**
If **within 5'** of known utility, I understand **no mechanical means** of digging? Use probe before digging.	x				**Means of digging around known utilities:**
Using hydro excavation to locate underground utilities?		x			
Shoring Required?	x				**Type:** slide rail
Sloping Required?	x				**Angle of sloping:** 1.5 to 1
Is excavation greater than 20' deep?		x			
Provided JE Dunn Safety with Tab Data on boxes?	x				
Are there going to be any fall hazards 6' or greater?	x				**Barricade Plan:** snow fence, signage
Proposed dig area has been laid out?	x				
Emergency Management Plan in place?	x				
Do utilities require protective actions?		x			**Actions:** n/a
Any traffic paths that need re-routed from the path of excavation?		x			

REMINDER! Surface features that may indicate underground utilities may include: Area lights/signs, phone lines, drain lines, electrical boxes/ lines, natural gas meter/ line, water meter/ line, sewer drop inlets/ manholes/ cleanouts, air/ nitrogen connections, fire hydrants, steam lines, sprinkler systems, pipeline/ cable markers, pavement. Take As Builts Prior to Back-Filling!

1



Request for Site Excavation Permit
Commonwealth - SLN4A 004

Note: Trade Partners are required to complete Page 1, paste drawing/plan on page 5, and submit to JE Dunn for approval to start the 3 day permit process. Fill out the card on page 4 and have present at the dig site while excavating. Each Trade Partner performing excavation work is responsible for initiating and maintaining the One Call or other utility locates as required by local, state and federal entities. Report all incidents to JE Dunn immediately.

Utility Locator (Trade Partner /Employee Name):	Utility Type:	Marked (Initial/ Date):	All Clear (Initial/ Date):
Notes: N/A			
Commonwealth			DRM
Notes:			
Notes:			
Notes:			
Notes:			

JE Dunn Superintendent/ Date:	JE Dunn Safety/ Date:	Excavation Supervisor Name/ Date: Dan Mahett 3/13/23
Justin Hough 3.20.23		

2

Section 29: Excavation and Trenching - Refer to:

Excavation Breakout Plan

29.1. Responsibility

1. It is the responsibility of each Trade Partner performing excavation and trenching work to adhere to the requirements in this program as well as OSHA, federal, state and local rules and regulations.

2. Each Trade Partner is responsible for providing a “competent person” at the jobsite during all excavation work. The competent person is responsible for the safety of workers in the excavation and the safety of other trades affected by his/her excavation activities.

3. Each Trade Partner performing excavation work is responsible for initiating and maintaining the One Call or other utility locates as required by local, state and federal entities.
4. Each trade partner is responsible for their own As Builts:

    a. After installation is complete, and prior to backfill, as-built shots are to be taken every 50’ and change in direction, whether vertical or horizontal.

b. Label as-built points with a description of the points including system designation, fitting, size, etc. Include details so identification is clear and obvious later.
c. As-builts need to be turned in weekly to the identified JE Dunn underground representative.

29.2. General Requirements

1. Excavation work shall be approved by and coordinated with the Trade Partner "Competent Person" and JE Dunn EHS and Client.

2. An excavation permit is required for excavation work within or outside of buildings.

3. All excavations must have a competent person regardless of type or depth. The competent person is responsible for determining what safety measures are required to ensure the safety of workers in the excavation. The competent person will be responsible for inspecting the excavation daily.

4. Additional mandatory guidelines:
    a. All excavations 5 feet or more in depth must have an OSHA approved protective system installed. These may include:
        i. Trench Boxes
        ii. Shoring
        iii. Sloping
        iv. Benching
        v. Any combinations of the above
    b. If none of the above is feasible, excavations must be designed by a registered Professional Engineer with expertise in soils and protective systems.

5. ***Note: Protective assistance may be required for excavations of less than 5 feet when soil conditions are warranted.***

6. Excavations greater than 20 feet in depth must be designed by a registered Professional Engineer with expertise in soils and protective systems.

7. The use of these systems must be accomplished in accordance with OSHA regulations CFR 1926 Subpart P and the manufacturers tabulated data for manufactured systems. (Note: Tabulated data must be available at the jobsite while manufactured systems are being used.)

8. Ladders or ramps must be provided when the excavation is 4 feet or more in depth. Ladders or ramps must be within 25 feet of all workers in the excavation. Ladders must be located inside the trench box, shoring or other protective device when used.

9. Spoil piles must be kept at least 2 feet from the top edge of the excavation. Equipment and materials must be kept at least 2 feet from the edge of the excavation. Additional distance may be required to prevent surcharge at the top edge of the excavation.

10. All loose rock or soil must be removed from the sides or top of excavations before workers are allowed to enter an excavation.

11. All excavations must be barricaded with appropriate barricade protection for both pedestrian and vehicular traffic, as applicable. Barricades that are designed and used for fall protection shall be placed at an appropriate distance from the fall hazard. Additional distance may be required depending on the depth and other site conditions at the discretion of the competent person, JE Dunn supervisor and EHS.

12. If an excavation is left open overnight, orange snow fencing shall enclose the excavation.

13. Fall protection must be installed when workers are exposed to a fall hazard greater than six feet.

14. Work in excavations with standing water or in excavations where water is accumulating is prohibited. Dewatering systems must be used as needed.

15. Workers are not allowed to work under suspended loads.

16. When mobile equipment is operated adjacent to an excavation, or when such equipment is required to approach the edge of an excavation, and the operator does not have a clear and direct view of the edge of the excavation, a warning system shall be utilized such as barricades, hand or mechanical signals, or stop logs. If possible, the grade should be away from the excavation.

17. When excavation work can affect footings, piers, utility lines, or other adjacent structures the competent person must ensure that steps are taken to ensure the stability of the structures. The Superintendent shall determine if a structural engineer should be hired to evaluate the stability of existing buildings or adjacent structures as needed. Required to notify Trade Partner prior to proceeding with excavation activities.

29.3. Soil Testing and Classification

1. At least one manual and one visual test must be performed by the competent person to determine soil type. Based on these tests and site conditions the competent person shall classify the soil type as either B or C. The classification of type 'A' or "Stable Rock" must be documented by a soils engineer.

2. The competent person must test and classify excavations:
    a. Each Day or work shift before workers are allowed to enter the excavation.
    b. Following rain or other weather conditions which may change the classification of the excavation.
    c. Following any other event that could change the safe working conditions of the excavation.

29.4. Public Protection

1. The Superintendent must notify the safety department when an excavation could expose the public to hazards associated with that work.

2. Excavations that may expose the public must be protected by fencing/street plates/barricades and traffic barriers appropriate for the conditions and exposure.

3. All excavations that are not completely protected by a site fence must have sufficient protection installed around the excavation at the end of each workday or when the public is exposed to excavation work.

4. Pedestrian Protection:
    a. Excavations with limited exposure or no pedestrian traffic may be protected with 42-inch orange barrier fence placed at least 6 feet away from the edges of the excavation.
    b. Excavations in areas with significant pedestrian traffic must be enclosed with 6-foot-tall chain link fence.
    c. Appropriate signage must be placed to warn the public of the hazards and to reroute pedestrian traffic as needed.
    d. Pedestrian bridges shall be able to withstand the maximum intended load of a 300-pound weight, which when placed at the center of the bridge, shall not cause a bending greater than ½ inch.
    e. Bridges and walkways shall be:
        i. Free of splinters, protruding nails or other protrusions that might cause injury.
        ii. Slanted to ground level on both ends.
        iii. Have a rise no greater than 1 foot over a 12-foot run. Have a non-slip surface, which is even, secured, and does not create a tripping hazard.
        iv. Guardrail systems shall be present on all sides of bridges and walkways and:
        v. Have a top rail that is 42 inches above the platform and capable of withstanding a 300-pound push against the center of the rail.
        vi. Have a mid-rail that is 21 inches above the platform.
        vii. Have a toe board that is 4 inches nominal in vertical height from its top edge to the level of the floor, platform, runway, or ramp if work will be performed, or pedestrians will pass below the bridge or walkway.

5. Vehicular Traffic:
    a. All signage and barricades installed to warn and re-route traffic away from the work area must be installed per the Manual of Uniform Traffic Control Devices.
    b. Small excavations that are exposed to minimal traffic may be protected by traffic delineators such as cones and barrels with appropriate traffic control signs.

Section 30: Floor Holes and Openings

The purpose of this section is to establish minimum requirements for protecting the risk from one or both of the following types of falls in regard to **c**overs for Hole and Openings in floors, roofs, and other walking/working surfaces:

1. Workers falling through openings

2. Materials and objects falling through openings onto workers below

30.1. Definitions

Floor Hole: Any gap or void measuring 12" or less at its largest dimension, but more than 1" at its smallest dimension, in any floor, roof or platform (walking working surface) through which materials, but not persons may fall. Examples include, pipe opening, slot type opening, etc.

Floor Opening: Any gap or void measuring 12" or more at its smallest dimension in any roof, floor, or platform (+walking working surface) which a person could fall.

Floor Hole/Opening Covers: Floor hole/opening covers are used to protect holes and openings in floors, platforms and walking/working surfaces. These covers must be capable of supporting two times the potential load of which they may be subjected. The cover must completely overlay the hole/opening and be secured against accidental displacement. **Covers must be marked in hi-vis color (i.e. Fluorescent Orange).**

HOLE COVER – DO NOT REMOVE (CUBIERTA DE HOYA – NO REMOVER)

30.2. Standards for Floor Holes and Openings

1. Cover or protect floor holes and openings immediately and / or as soon as they are created.

2. All floor holes greater than 1" must be covered or protected to prevent falling objects.

3. At a minimum, floor covers shall be constructed out of ¾ inch exterior grade plywood or the equivalent. Manufactured floor covers meeting the strength requirements of intended loads may be used.

4. Covers must completely cover the opening and be constructed so they will effectively support two times the weight of employees, equipment and materials that may be imposed on cover at any one time. Where floor covers cannot be constructed to accommodate such equipment or materials, curbs or bumpers of sufficient strength with a minimum of 3-1/2 inches in height shall be installed around the opening to prevent access.

5. All types of floor covers in excess of 1'x1' will extend a minimum of 4 inches over the edge of the floor opening being covered.

6. Covers not supported on all sides or intended for other than foot traffic shall be designed by a qualified person.

7. When equipment such as an aerial lift is operating near an opening or drop in floor elevation, a rail or bumper block of sufficient size and strength must be installed to prevent the equipment from accidentally driving off the edge. Example: Minimum of a 2-2x4's stacked and secured on all open sides. Increase size of bumper protection when larger vehicles (+ tires) are in vicinity.

8. Covers must be marked in hi-vis color (i.e. Fluorescent Orange).
   HOLE COVER – DO NOT REMOVE (CUBIERTA DE HOYA – NO REMOVER)

30.3. 1'x1' Floor Hole or Less

1. Must meet the General requirements, e.g. covered / protected and secured from accidental displacement by wind, equipment or employee.

2. Floor cover must meet 2x intended load requirements.

3. Floor hole covers smaller than 1'x1' or 144" can be secured by cleating the underside.

4. Floor holes narrower than 6" in one direction may exceed the 144" rule.

30.4. Greater than 1'x1' / 144" and less than 40" Opening at narrowest dimension

1. Floor openings greater than 1'x1' (144") must include a cover which is mechanically secured, anchored or fastened to avoid accidental displacement by use of sufficient bracing nails or screws. (Do not use double headed nails.)

2. In cases where the floor opening is greater than 12", but equal to or less than 24" at its narrowest dimension, only one support brace will be required to extend the entire length of the floor opening cover.

3. All floor openings 40" or less at their narrowest dimensions are to be covered and secured using 3/4" exterior grade plywood or the equivalent. *Note, for normal foot traffic, a 4x8 sheet of 3/4" exterior grade plywood is sufficient to cover a 3'x7' floor opening.*

30.5. 40" Opening or Greater

1. When a floor opening exceeds 40" at its narrowest dimension, it will require temporary flooring of sufficient strength for the anticipated loads. Temporary flooring can be solid 2-inch lumber positively secured to prevent displacement from personnel. Temporary flooring can be 3/4" exterior-grade plywood as long as it is properly supported. In any case, the cover shall be designed by a qualified person.

2. Stairwells, elevator shafts, chases and similar large type openings must be decked solid on every other floor unless alternate protection is approved by the Regional Safety Director.

30.6. Floor Cover Removal

1. Whenever any type of floor cover in this procedure must be removed, the employee(s) removing it must have authorization from their supervisor in addition to the following:

2. Any Floor Cover over 1'x1' in size shall require a "Floor Cover Removal Permit". This permit must be obtained through the JE Dunn Superintendent (or competent JED designee) who must inspect, authorize and approve the removal and protections required.

   Floor Cover Protection Removal Permit

3. If a Floor Cover must be removed for an extended period of time, a substantial guardrail system with adequate debris netting must be erected and anchored to afford adequate fall protection.

4. Permits shall be issued and returned to JE Dunn Superintendent (or competent JED designee) and kept as a project record.

30.7. Floor Cover Modifications

1. If floor covers must be modified, or cut, to accept piping, conduit, etc., the Supervisor responsible for the work must contact a JE Dunn Superintendent. If size exceeds 1'x1' floor cover, a "Floor Cover Removal Permit" shall be initiated.

30.8. Inspection / Verification Process

1. An assessment and / or survey shall be made (+keep current) using available resources, such as: BIM modeling, drawings, etc.

2. Regular inspections shall be made by the project team to ensure all existing and potential floor hole and openings + covers are positively identified, marked and meet the intent of this procedure. The expectation of "regular" inspections is 1x per week and anytime conditions change.

FLOOR COVER / PROTECTION REMOVAL PERMIT

Check which applies: ☐ **Floor Cover Removal** ☐ **Floor Cover Modification**

Describe specific location, floor level, size of opening and preventive measures:

Company Performing work:

Supervisor / Foreman: Cell phone #

Start Date: _____ Finish Date: _____

Time work started:_____ AM / PM Time work completed:_____ AM / PM

Note: Alternate fall protection must be implemented to protect the workers during the removal process. The potential fall hazard created by the removal of the cover or protection must not be left unattended. Guardrails shall be put in place, or the floor cover properly reinstalled before leaving the area.

- Describe the fall protection that will be utilized by workers while removing the cover/protection.
- Define how the area will be guarded, or protected, to prevent any employee(s) to inadvertently get in close proximity to the hazard.

- Job Safety Analysis (JSA) is required before beginning this activity. The JSA & Permit must be shared with all supervisors and workers who may be affected.
- Each employee shall receive instructions on the task and how to safely protect themselves and the surrounding area. Employees must sign below.

JE Dunn Construction

Superintentent (or Competent JE Dunn Designee)_____
Date: _____ Time Issued: _____ AM / PM Time Returned: _____ AM / PM

Note: This Permit is a project record and must be returned to the JE Dunn Superintedent once the area is returned to a safe state.

Section 31: Forklifts and Powered Industrial Trucks

This policy applies to all Trade Partners, Vendors, or Owners who perform work on JE Dunn projects.

31.1. Responsibilities

1. Superintendent:
    a. Ensure that employees assigned to operate powered industrial vehicles are trained and qualified as outlined in this program.
    b. Ensure powered industrial vehicles are inspected prior to each use as outlined in this Program.

2. Trade Partners:
    a. To provide JE Dunn the training and inspection certifications for each operator and machine that is outlined in this program prior to the operation of a powered industrial vehicle on a JE Dunn project.

3. Operator:
    a. Adheres to all of the operating requirements that have been identified in this program.
    b. Operators are responsible for the daily inspection of equipment prior to use.
    c. Ensure that his/her certification is current prior to any operation of a powered industrial vehicle on a JE Dunn project. (Recertification is required at a minimum of every three years).

31.2. Definitions

Qualified Person: Individual that possesses the knowledge, skill and ability either through training or experience to operate equipment included in this policy. They must also successfully demonstrate their practical skills to operate the equipment smoothly and safely.

Powered Industrial Vehicle: A powered industrial vehicle includes but is not limited to fork vehicles, tractors with forks, platform lift vehicles, motorized hand vehicles, and any other specialized industrial vehicle powered by electric motors or internal combustion engines.

31.3. Operator Training

1. Only trained and authorized operators are permitted to operate powered industrial vehicles on JE Dunn projects. Operators must show proof of training. Powered industrial vehicle operators must be trained in accordance with the manufacturer's recommendations and OSHA Standards.

2. Operator training and operator certifications are required at a minimum of every three years. Operators will be required to retrain under the following conditions:
    a. The operator has been observed operating a powered industrial vehicle in an unsafe manner.
    b. The operator has been involved in an accident or near-miss incident.
    c. The operator is assigned to operate a different vehicle type.
    d. Conditions in the workplace change in a manner that could affect the safe operation of the vehicle.

31.4. Operating Procedures

1. Only trained and authorized operators are permitted to operate powered industrial vehicles. Operators are required to:
    a. Inspect the forklift daily and prior to each use. (Documented Inspection Required)
    b. Inspection shall include, but not be limited to:
        i. Manufacturers Inspection Requirements
        ii. Work area
        iii. Special attachments
        iv. Conditions related to tasks.
    c. The operator must have current certification or license on their person at all times.
    d. Wear safety belts when operating the machine.
    e. The operator must keep arms and legs inside the cab or ROPS at all times.
    f. Not allowing workers to ride on the forklift or load.
    g. Operate the machine at a safe speed that is suitable to the conditions.
    h. Follow the manufacturer’s recommendations on the vehicle's capacity.
    i. Not allow workers to stand or pass under the elevated portion of the forklift, whether loaded or empty.
    j. Ensure the stability of their load.
    k. Drive a loaded forklift with the load on the uphill side whenever possible.
    l. Travel with the load trailing if the load obstructs the forward view.
    m. Drive with the load tilted back and the forks raised only enough for clearance of the surface.
    n. Never turn a vehicle sideways on a ramp or steep incline.
    o. Never transport compressed gas cylinders without the proper cage that secure and support the cylinders.
    p. Maintain a safe distance from all overhead obstructions.
    q. Avoid sudden starts and stops to prevent the load from shifting or coming displaced.
    r. Never raise or lower the load while traveling.
    s. Reduce speeds when negotiating turns.
    t. Always shut the engine off while refueling.
    u. Maintain a safe operating distance from other powered industrial vehicles.
    v. Sound the horn when approaching intersections, blind spots or dangerous locations.
    w. Compensate for shifts in the center of gravity of the machine and always maintain machine stability.
    x. Be cautious of pedestrians, they have the right-of-way.

y. Horseplay is strictly prohibited.
z. Never leave a loaded forklift / powered industrial truck running or unattended.
aa. When the vehicle is in a parked or unattended position, ensure that the forks are on the ground, the parking brake is set, and the key is in the off position.
bb. A spotter is required if operating a forklift inside of the building, operating in tight or congested areas or hoisting any material. Spotter is not required for normal driving operations on the exterior.
cc. Spotters are required when backing up or in areas with pedestrians present and at all times at the loading dock area.
dd. Travel speed with loaded PIT shall not exceed 5 MPH max.
ee. When traveling with material at distances greater than 50 ft, all material loads must be secured to prevent unintentional shifting or loss of load.

Maintain proper distance from overhead power lines in accordance with the table below.

Table H: Minimum Safety Approach Distance

Voltage Range (phase to phase)	Minimum Safe Approach Distance (feet/meters)
0 to 50KV	10 (3)
Over 50KV to 200KV	15 (5)
Over 200KV to 250KV	20 (6)
Over 350KV to 500KV	25 (8)
Over 500KV to 750KV	35 (11)
Over 750KV to 1000KV	45 (14)

31.5. Special Conditions

1. Lifting Hooks:
    a. A "Lift Hook" device is required when conducting lifting operations under the forks. Rigging (slings, chains, chokers and the like) shall not be directly attached to the forks or tines; also known as "Free Rigging".

2. Fork/Jib Attachments:
    a. Attachments on forklifts may only be used after a meeting has been conducted with the Superintendent, Forklift Operator, and the Safety Specialist to approve the use of the attachment.
    b. The use of attachments greatly affects the dynamics of a forklift. When an attachment is utilized, the following guidelines apply:
        i. Pre-Task Plan and JHA must be completed.
        ii. The attachment safety instructions must be reviewed with the crew and operator.
        iii. The attachment load chart must be strictly adhered to.

3. Personnel Platforms:
    a. It is strictly prohibited that a powered industrial vehicle is used as a personnel lift.

4. Moving Fuel containers: Link to Fuel Depot Logistics
    a. 25 gal cans – must be secured in trucks, gators, trailer, no loose or bouncing cans.
    b. 50-to-100-gal transfer tanks – Can be moved with a forklift / skid steer as long as it is secured to a containment, and the whole thing is secured to the forks so it cannot slide off the forks forward or side to side – no exceptions
    c. Fuel depot tank movements must have a detailed plan approved by site safety manager or general superintendent.
    d. Must use a spotter for congested/tight areas, when backing up or in areas with pedestrians. Plan on having someone nearby to assist when at loading docks. Speed – Maintain speed limit at 5 mph max!
    e. Secondary containment (i.e. diapers) required for MEWPS/ PITs on finished concrete or inside of buildings.

31.6 Vehicles on site: Trucks, Cars, Golf Carts

1. Trade Partners, Vendors and Owners shall comply with vehicular postings and local regulations, to include posted speed limits, stop signs, pedestrian crossings, and haul road intersections while operating a motor vehicle.

2. Trade Partner is responsible to prevent oil spills/ leaks from exiting the equipment onto the ground /concrete surface. Equipment shall exhibit an effective collection system (drip trays/ or oil diapers, etc.) to retain any leakage. Trade partners shall constantly monitor the equipment in operation to ensure the absence of oil drips to the ground or concrete. Spills, leaks and releases are the responsibility of the Trade Partner to immediately report, clean and properly remediate the surface.

3. Trade Partners who need to bring company vehicles into the fenced construction zone must possess an authorized access/parking tag in a visible manner.

4. *Note: JE DUNN will manage the number of vehicles per Trade Partner, based on limited space and phase of the construction project.*
    a. Speed limit on site: not to exceed posted mph!
    b. Park in authorized, designated parking areas only.
    c. Pickup trucks and cars requirements.
        i. Company name on vehicle
        ii. Proof of company insurance for that vehicle
    d. Vendors and Delivery Vehicles
    e. Trade Partners will be responsible for their vendors and delivery personnel to ensure compliance with the site safety policies; (site speed limit and PPE to include hardhat, safety glasses, etc.)
    f. At no time shall personnel ride in the back of an open pick-up.

g. Wheels on vehicles must be chocked when being unloaded, parked on an incline or in a dock area.
h. All vehicles shall have reverse light and alarm (when reversing); yellow blinking light and seat belt and audible horn. Drivers shall show evidence of vehicle insurance.
i. Turn off vehicle engines when parked to reduce the probability that engine exhaust will be drawn into building ventilation systems.
j. Do not block exits, walkways, roads, loading bays, fire hydrants or emergency equipment.

5. Refueling
   a. Turn off the ignition system before refueling.
   b. Do not refuel gasoline- and diesel-powered vehicles or equipment inside building facilities unless JE Dunn EHS has specifically approved an individual request to use any other type of lift.
   c. Refueling must be attended at all times.
   d. When any refueling, grounding and bonding must be established to prevent static build-up or release during refueling operation. Personnel performing refueling must be trained to do so.
   e. In case of a spill, cease operation and be sure the area is made safe; then report the spill by calling JE Dunn area Superintendent. Follow the SWPPP or Environmental Control program procedures.
   f. Mobile refueler drivers will be trained in the proper use of general containment equipment and measures to be followed during refueling activities at the site. All mobile refueling equipment will be equipped with spill response materials. This equipment may include a combination of temporary curbing, contouring, barriers, sock mats, drain systems which catch fuel and deployable containment equipment such as drip pans, duck ponds, and spill kits.
   g. Fuel storage tanks must comply with all local regulations, including signage and secondary containment. Each employer must provide a written plan to control fuel tank leaks, releases or discharges. Plan shall be submitted to EHS prior to mobilization on site.
6. ATV Powered Carts – Golf Carts requirements.
   a) Vehicles will be limited based on need and must be approved by JE Dunn EHS.
   b) All powered carts that operate before or after dusk are to have lights and a flashing beacon.
   c) All powered carts are to have a sign (sticker) with the company abbreviation and a cart number. Sign (sticker) must have 2” lettering (or greater) and be visible.
   d) All indoor carts must be powered by a non-combustion source.
   e) All golf carts must stay within areas approved by JE Dunn and Client.

Section 32: Housekeeping/ Material Handling

CYL - Housekeeping / Material Management Plan

32.1. General

Operations will develop a cord management plan that addresses electrical cords, hoses, and welding leads to prevent slips, trips, and falls. Strictly adhere to the policy of impeccable and continuous housekeeping.

1. Materials shall not be stored outdoors without approval.

2. Walking surfaces shall be free of slip, trip and fall hazards by keeping the area clean and free of obstructions.

3. "Clean as you go" means work areas must be kept clean at all times. At the end of the work shift, the area shall be left clean and organized.

4. Construction materials and debris shall be removed from the area at the end of the task.

5. All stripped lumber shall be safely stacked after nails and/or other fasteners have been removed or bent over.

6. All stairways, scaffolds, ramps, platforms, walkways, aisles, and work areas shall be kept clear and clean of trash and material.

7. Trade Partners shall provide trash receptacles in their immediate work areas.

8. Round or rolling-stock such as pipe, rebar, conduit, and all-thread scraps and equivalent, must be immediately disposed of properly and not allowed to lie on the floor.

9. Trade Partners are responsible for providing trash receptacles in lunch and break areas. They are also responsible for maintaining these areas in a clean and orderly manner.

10. Material, scrap, empty pallets, and other items shall not be left leaning against walls, columns, railings, equipment, or other items unless the item is secured to prevent it from falling.

11. Trade partners shall ensure that material is stored in a safe manner:
    a. Material on carts is secured so it will not fall off.
    b. Contents of pallets are secure so that they will not fall or tip over.
    c. Stacked materials/pallets are stacked in such a way to prevent crushing, tipping, and falling.
    d. Pipe, tubing, conduit, and other round material shall be stored in such a way that it will stay in place and not roll.

12. When threaded rod, tubing, and other material of small cross section is stored, it shall be stored in such a way to avoid creating bump and impalement hazards. Workers shall be protected from the material by crates, guards, barriers, caps, or other effective means.

13. All combustible scrap and debris shall be removed from the project daily. Safe means shall be provided to facilitate such removal. This may include, but is not limited to:
    a. Trash chutes
    b. Trash gondolas
    c. Rolling containers
    d. Cranes

e. Material hoists

14. Separate closed containers shall be provided by the Trade Partner generating waste containing paint soak combustibles, oily or solvent soaked rags. This material shall be removed from the project daily.

15. Trash gondolas used to fly debris off the building shall not have the debris stacked any higher than the sides. Fly zones must be clear prior to flying gondolas or other containers. The use of material securing may be necessary.

16. Dumpsters shall have the end door open for employees to dump trash, or a platform shall be built for safe access.

32.2. Material Movement/Handling

1. Trade Partner supervisors shall monitor and manage the movement of materials.

2. Trade Partner may be requested to produce a material transcript when transporting materials on or off the site. (JE Dunn will define processes, if and when required.)

3. Trade Partner using docks to load or unload materials shall comply with the following:
    a. Vehicle engine shall be turned off
    b. Rear wheels on both sides of the vehicle shall be chocked when on incline
    c. Vehicles shall not be left unattended at the dock
    d. Care shall be taken when moving materials to ensure that people are not injured and that the walls, ceilings and doors are not damaged. Damage will be back charged to the Trade Partner.
    e. There are many aisles that must be shared by pedestrians and powered vehicles. Trade Partners traveling in aisles shall stay to the right, stay alert, and yield the right-of-way to power vehicles.
    f. To maintain emergency egress requirements, carts, tools, materials and equipment shall not be left in aisles or near doorways.

4. Trade Partner shall use the following preventive measures when moving materials:
    a. Piping, conduit, ladders, etc. shall be transported with the forward end of the material raised above head height to reduce the possibility of striking oncoming personnel.
    b. Piping, conduit, ladders, etc. more than 10 feet long shall be carried by at least two people, each supporting one end of the material to be transported.
    c. Caution signs or signal people may be required at corridor intersections to alert personnel

5. Exclusion Zone (Truck Loading and Unloading) The intent of this policy is to ensure safe operations for all activities involving the receiving, loading, and unloading of trucks and trailers.
    a. An exclusion zone is required to be set up at a minimum of 10 feet on the opposite side of the forklift with danger tape or red rope and signage. **Controlled Access Zone MUST BE RED.**

i. Note: When using a forklift to hoist equipment/materials exclusion zones are required. A certified hoisting attachment/hook must be used.
ii. Free rigging (attaching rigging over the forks) is never allowed on JE Dunn projects.

b. A spotter can be used on the opposite side of the forklift if "Danger" tape or rope is unfeasible.
c. Prior to the loading or unloading of any truck or trailer the Truck Loading/Unloading Checklist must be completed in addition to a JSA.
d. A JE Dunn Superintendent/Safety must be contacted if during the completion of the checklist it is deemed that the load is unsafe to load or unload.
e. A secured ladder, ramp, lift gate or other safe means must be used to access the bed of a truck or trailer.
f. Jumping from the bed of a truck or trailer is not allowed.
g. Walking surfaces on truck beds or trailers should be stable and free of trip hazards.
h. When working off a truck bed or trailer 6 feet or greater in height, fall protection feasibility must be evaluated by JE Dunn Safety.

32.3. Safe Lifting Requirements

1. Personnel should first know their own capacity for lifting materials, tools, or equipment prior to starting any tasks.

2. Determine the weight of the load before applying force to move it. This can be obtained from shipping labels or material calculations for common construction products. If you are unsure of the load weight, always seek assistance from a co-worker or supervisor.

3. Inspect the materials/equipment prior to attempting to lift or move them. Damaged containers, sharp edges, etc. can pose additional hazards that could interfere with safe lifting and transportation.

4. Mechanical material handling equipment or aids should always be used when possible, to lessen the amount of manual lifting required for a job. The amount of weight in a single lift should be limited to approximately 50 pounds for all materials/equipment. If a lift will exceed this limit, seek assistance from a co-worker or mechanical means to transport the materials.

5. Objects or materials that are awkward to lift or carry should use the "2-person rule"; 2 people should carry long items (ex. 8' or longer) such as tall extension ladder, sheet of plywood, formwork, etc. During windy conditions, any large sheet materials (plywood, formwork, or drywall) must use the 2-person rule to prevent the material from being pushed or pulled from the workers' hands.

6. Use the following rules for picking up, carrying, or placing materials:
    a. Place feet as close to the load as possible

b. Bend at the knees and not at the waist. Never lift any materials by bending at the waist to pick them up
c. Get a good handhold on the load - keep hands out of pinch points and use handles where available
d. Lift straight up on the load using the leg muscles
e. Keep the load close to the body - keep the load below head height
f. Maintain a straight back while carrying the load
g. Never twist or turn at the waist; make changes in direction with the feet only
h. To place the load down, bend with the waist. Bend the knees and place the load down on cribbing/dunnage to avoid pinch points. Where possible, keep the load at least one foot off the ground to minimize stress on the body from lifting.

Section 33: Scaffolds

33.1. Scaffold Erection

1. All scaffolds shall be erected or dismantled under the direct supervision of a designated competent person. That person must be familiar with and follow the manufacturer's recommendations concerning the installation and use of the scaffolding.

2. All scaffolding shall be capable of supporting, without failure, its own weight and at least four times the maximum intended load.

3. Scaffolds will be designed by a qualified person. The scaffold shall be constructed and loaded in accordance with that design. The designer must address non-typical loading due to wind and winter protection and netting.

4. Scaffolding greater than 125 feet high must be designed by a registered Professional Engineer.

5. Scaffold installers/dismantlers shall utilize fall protection when exposed to a fall of greater than six feet.

33.2. Scaffold Inspection

1. A daily inspection of the scaffold is to be performed by the designated competent person.

2. The designated competent person shall determine whether the scaffold is safe to use by others. A scaffold tagging system shall be used to identify the stage of scaffold readiness.

3. Tags:
    a. The scaffold tagging system shall consist of three separate tags:
        i. **Green tag**- No hazards associated with accessing scaffolding
        ii. **Yellow tag**- Scaffolding may be accessed but with special conditions

iii. **Red tag**- Scaffolding may not be accessed except by the erector

4. Scaffold tags shall be placed at access points or other highly visible locations and shall bear the date of the last inspection and the initials of the inspector.

5. A green tag is attached by the competent person to scaffolds that are considered complete. This would include the installation of all structural components, tiebacks, decking and a guardrail system. A green tag would tell the user that the scaffold is safe to use.

6. A yellow tag placed on a scaffold indicates the scaffold was constructed in a manner outside the norm in order to meet specific work conditions or requirements. All attempts should be made to restore a yellow tag to a green tag as soon as is practical. A yellow tag also informs the user that a fall protection device may be required.

7. A red tag indicates the scaffold is being dismantled, not yet completely erected, or for some reason not safe and shall not be used, except by authorized persons.

8. Scaffolds that are not tagged shall not be used.

9. If there are any changes or alterations to the scaffold, the competent person shall re-inspect the scaffold.

10. All Trade Partners are to provide their own inspections, regardless of the responsible erecting party.

11. All Trade Partners are to sign an indemnity release form and present for acceptance to the responsible scaffold contactor.

12. All workers are to be properly trained in scaffolds and fall protection prior to accessing scaffolds.

13. All stair towers will be inspected by a JE Dunn employee and not by trade partner personnel.

14. A competent person from each trade partner will inspect each multi-user scaffold.

33.3. General Work Requirements

1. Fall protection must be used when exposed to a fall greater than six feet.

2. No scaffold shall be constructed within 10’ of an electrical hazard without prior approval from the safety department.

3. Employees are prohibited from working on scaffolds covered with snow, ice, or other slippery materials.

4. Work on or from scaffolds is prohibited during storms or high winds unless a competent person has determined that it is safe for all employees.

5. Debris, material, and tools shall not be allowed to accumulate on platforms.

6. No type of makeshift devices, material, or equipment will be used to increase the working height of employees on scaffolds, including but not limited to ladders.

7. Apparatuses such as hoists, lifts or piping shall not be added to a scaffold without the scaffold manufacturer's approval.

33.4. Guardrails

1. Standard guardrails consisting of a top rail (39-45 inches), mid-rail (21 inches) and toe boards (4 inches) shall be installed on all open sides of the scaffolding.

2. Cross bracing is not acceptable in place of a top rail or mid-rail.

3. Guardrails must meet the 200 lbs. force requirement.

33.5. Work Platform

1. Scaffolds will be fully planked or decked between the front uprights, and the guardrail supports with spacing no greater than 1 inch around the uprights and between planks.

2. The front edge of all platforms will not be more than 14 inches from the face of the work, unless guardrail systems are erected along the front edge and/or personal fall arrest systems are used.

3. The maximum distance from the face for plastering and lathing operations will be 18 inches.

4. Each end of the plank or platform, unless cleated or otherwise restrained by hooks, shall extend over the centerline of the support at least 6 inches but not more than 12 inches.

5. Planking overlap shall not be less than 12 inches unless planks are nailed together or restrained to prevent movement.

33.6. Bracing and Tiebacks

1. All scaffolds that meet the 4:1 ratio (height to base) are required to be tied off, braced, or supported by other means.

2. Tie-backs and braces must be installed at the closest horizontal member to the 4:1 height, and then repeated:
    a. Vertically:
        i. Every 20 feet or less for scaffolds less than three feet wide

ii. Every 26 feet or less for scaffolds more than three feet wide.

b. Horizontally:

i. At each end at intervals not to exceed 30 feet from one end.

33.7. Foundation

1. Supported scaffold poles, legs, posts, frames, and uprights shall bear on base plates. Mud sills boards capable of supporting the load must be used unless there are other adequate firm foundations. Footings shall be level, sound, rigid, and capable of supporting scaffold without settling or displacement.

33.8. Scaffold Access

1. When scaffold platforms (of any type of scaffold) are more than 2 feet above or below a point of access, safe means of access will be provided.

2. Cross braces will not be used as a means of access.

3. 35ft access ladder limit – higher than 35ft you need a stair tower

4. Hook-on and attachable ladders shall be specifically designed for use with the type of scaffold used.

5. When hook-on or attachable ladders are used, the maximum free climbing height shall be limited to 35 feet measured from the base of the scaffold. Alternate means such as a stair scaffold shall be utilized when exceeding that height.

6. Hook-on ladders will be positioned no more than 24 inches from the ground.

7. Direct access to or from another surface shall be used only when the scaffold is not more than 14 inches horizontally and not more than 24 inches vertically from the other surface. Other means may be allowed when approved by the safety department.

8. With the exception of Mobile Elevated Work Platforms (MEWP), mobile scaffolds shall not be moved while occupied.

33.9. Suspension Scaffold

1. Suspension scaffold shall be installed per manufacturer's recommendations.

2. Workers on a two-point suspended scaffold must utilize a personal fall arrest system.

3. Anchorage points used for attachment of personal fall arrest equipment shall be independent of any anchorage point being used to support or suspend platforms and capable of supporting at least 5,000 pounds.

4. Two-point and multi-point suspension scaffolds shall be tied or otherwise secured to prevent movement.

5. All suspension scaffold support devices, such as outrigger beams, cornice hooks, parapet clamps, and similar devices, shall rest on surfaces capable of supporting at least four times the load imposed on them.

6. Suspension scaffold outrigger beams, when used, will be made of structural metal or equivalent strength material and will be restrained to prevent movement.

7. Outrigger beams shall have stop bolts installed at each end of the beam.

8. Outrigger beams which are not stabilized by bolts or other direct connections to the floor or roof will be secured by tiebacks.

9. Outrigger tiebacks shall be installed perpendicular to the face of the building or at opposing angles to a structurally sound anchorage. Tiebacks shall be secured with a minimum of 3 non-malleable clamps.

10. Suspension scaffolds require a rescue/retrieval plan developed prior to use.

11. Occupants must be fitted with fall trauma straps while on the scaffold.

12. Counterweights will be made of a solid material.

13. Sand, gravel, and similar material will not be allowed as counterweights.

14. Counterweights, if used, will be secured by mechanical means to the outrigger beams to prevent accidental movement.

15. Direct access to or from another surface shall be used only when the scaffold is not more than 14 inches horizontally and not more than 24 inches vertically from the other surface. Other means may be allowed when approved by the safety department.

33.10. Overhead Falling Object Protection

1. When employees are working on scaffolding and are exposed to work above, they shall be protected with one or more of the following means:
    a. Approved overhead protection installed on the scaffold
    b. Toe boards, vertical netting, on every open-sided floor above the scaffold
    c. Catch platforms or horizontal nets between the work above and the scaffold work platform

d. Housekeeping efforts on the upper floors
e. Securing of material and/or equipment on the upper floors
f. Staggering of work schedule to eliminate the exposure.

2. When employees are working on a scaffold and there is a potential of exposure below due to falling objects, one or more of the following means shall be implemented:
    a. Barricades and signage shall be set up to keep workers out of the area
    b. Extended toe boards and/or vertical netting shall be installed on the back of the scaffold
    c. A ground person shall be in place to direct traffic and/or personnel movement
    d. Scaffold deck cleaned regularly throughout the shift
    e. Tool tethers/lanyards.
        i. Tool Lanyards are required during any overhead work activities where access at ground level cannot be restricted. Examples include working near an open-sided floor, edge of the structure, or any work in a personnel lift.
        ii. Tools over 5lbs are not allowed to be tethered directly to a person.
        iii. Tool attachments, anchor points, and tool lanyards all must have a maximum weight capacity which is greater than or equal to the weight of the tool.
        iv. All tool tethers must have a legible label with manufacturer name, product identification number, published capacity, tether length, and maximum tether length.
        v. All tethers must meet the requirements of the ANSI/ISEA 121-2018 standard.

33.11. Special Considerations

1. During wintertime operations where scaffolds are tarped and heated the following hazards shall be addressed:
    a. Scaffold tiebacks should be engineered to address additional loading due to wind.

2. Carbon monoxide must be monitored.

3. Additional housekeeping should be conducted to ensure that combustible debris is not allowed to accumulate around the heat source.

4. Tarps are flame Retardant.

SCAFFOLD
SAFETY GREEN TAG

This scaffold has been erected to meet site requirements and is safe for its intended use.

Check appropriate scaffold system in use:

Frame Scaffold ☐ Tube & Coupler ☐ Rolling Scaffold ☐ Baker Scaffold ☐

System Scaffold ☐ Other ☐

Duty Rating: Light=25 lb/sqft ☐ Med=50 lb/sqft ☐ Heavy=75 lb/sqft ☐

LOCATION: _____

NAME OF COMPANY WHO ERECTED SCAFFOLD:_____

OWNING CONTRACTOR:_____

OWNING CONTRACTOR'S COMPETENT PERSON:_____

PHONE #:_____ ALTERNATE PHONE #: _____

JOB START DATE:_____ JOB END DATE:_____

IDENTIFY AND LIST IMPACT HAZARDS ASSOCIATED WITH USE OF THIS SCAFFOLD

SCAFFOLD
SAFETY YELLOW TAG

THIS SCAFFOLD DOES NOT FULLY MEET SITE OR OSHA REQUIREMENTS DUE TO SPECIAL CONDITIONS AND/OR POSSIBLE IMPACT HAZARDS. THESE CONDITIONS AND THEIR CONTROLS ARE LISTED ON THIS TAG. IN ORDER TO SAFELY ACCESS THIS SCAFFOLD, ALL LISTED CONTROLS MUST BE FOLLOWED.

Check appropriate Scaffold System in use:

Frame Scaffold ☐ Tube & Coupler ☐ Rolling Scaffold ☐ Baker Scaffold ☐

System Scaffold ☐ Other ☐

Duty Rating Light=25 lb/sqft ☐ Med=50 lb/sqft ☐ Heavy=75 lb/sqft ☐

LOCATION:_____

NAME OF COMPANY WHO ERECTED SCAFFOLD:_____

OWNING CONTRACTOR:_____

OWNING CONTRACTOR'S COMPETENT PERSON:_____

PHONE #:_____ ALTERNATE PHONE #:_____

JOB START DATE:_____ JOB END DATE:_____

SPECIAL CONDITIONS AND CONTROLS

IS FALL PROTECTION REQUIRED ON THIS SCAFFOLD? YES ☐ NO ☐

IDENTIFY AND LIST IMPACT HAZARDS ASSOCIATED WITH USE OF THIS SCAFFOLD

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JE DUNN CONSTRUCTION

Section 34: Stairways and Ladders

34.1. Stairway General Requirements

A stairway or ladder must be provided for all personnel access points with a vertical break in elevation of 19 inches or more.

34.2. Stairs, Pans and Landings

1. Employees are not allowed to walk on pan stairs or platforms which have not been poured unless wood fillers or other solid material is fitted to the top edge of each pan and platform.

2. Incomplete stairs (including stairs without pans filled) shall be barricaded at the top and bottom of the landings to prevent use.

34.3. Stairway Handrails and Guardrails

1. Handrails must be provided on all open sides of stairs with 4 or more risers or rising more than 30 inches, whichever is less.

2. Guardrails (42" top rail 21" mid rail) must be installed to protect landings.

34.4. Ladder Inspection and Maintenance

Ladders' Last Selection and Usage Process

Ladders will only be considered as a last option, when selecting equipment for task(s). The intent of this policy is to eliminate and/or mitigate the use of ladders through proper planning and risk assessment. This selection process must be implemented prior to any ladder selection and use. When selecting access equipment, a clear and comprehensive planning process must be followed. The safest suitable means of access and "platform for work" must be identified, during the equipment selection. The primary means of access to equipment that shall be considered are as follows: aerial work platforms (scissor/boom lifts), scaffolds, and lastly platform ladders. All efforts to select the best equipment must be done through the employer's risk assessment and plan to mitigate risk of exposure. Proper planning and procurement of equipment is essential. The use of ladders should be viewed as a means of access only. Ladders are considered to be a last selection for a proper working platform on this project site.

If a ladder is selected for use, a thorough risk assessment documented in a JSA must be completed containing the following items:

1. Risk assessment describing hazardous exposure and frequency.
2. How and why ladder selection was determined.
3. Identifying the area ladder is to be used.
4. Properly inspect the ladder and verify proper ladder footer conditions.
5. Verify workers have been trained in proper ladder usage.
6. If working on a ladder, identify how materials/tools are to be elevated to the working area. Tools and materials shall not be hoisted in an open top container. Tool buckets/bags shall be fully enclosed to prevent spills during the hoisting operation.
7. While a worker is on a ladder a coworker must be present and act as a holder/spotter.
8. Field supervisor must approve and sign the JSA.
9. JSA is to remain in the direct location where the ladder is to be used.
10. Trade partner leadership/EHS must follow up and verify proper risk assessment planning has been performed for the task at hand.
11. All trade partners are to oversee tier trade partners and verify all the items above have been completed.
12. If a trade partner or tier trade partner is not sure how to properly mitigate the exposure hazards, risk assessment should be elevated to include JE Dunn EHS.
13. Trade Partners and Tier Trade Partners must control complacency.

Ladder Inspections

1. Ladders should be inspected by a competent person prior to use. Damaged ladders shall be removed from service, tagged “Danger. Do Not Use” and removed from the jobsite as soon as possible.
2. Rungs should be kept clean to prevent slips.
3. Manufactured ladders must conform to the following:

Table L: Manufactured Ladder Specification Requirements

Ladder Type	Duty Rating	Description

Type 1AA	375 lbs.	Extra Heavy-Duty Industrial Ladder
Type 1A	300 lbs.	Heavy-Duty Industrial Ladder

34.5. General Ladder Safety

1. Side rails must extend at least 36 inches above the landing surface and the ladder must be secured.
2. Ladders must be placed on a substantial base with clear access at the top and bottom.
3. Ladders should be pitched at 1 foot out from the support structure for every 4 feet of ladder height.
4. Workers must face the ladder and maintain three points of contact when climbing.
5. A hand line must be available at each access ladder to hoist tools or materials.
6. Ladders should not be placed in front of doors unless the door is locked or blocked.
7. When utilizing a ladder near an interior or exterior opening, personal fall protection must be utilized when the distance is less than or equal to 1.5 times the height of the ladder.
8. Guardrails protecting ladder landings shall be provided with a gate or offset so that a person cannot walk directly into the ladder way opening.
9. Aluminum ladders are prohibited
10. Ladder permits are required when using a ladder in the following situations:
    a. Use of a step ladder that is 6 feet or greater (Fall Protection tie off required above 6 feet)
    b. Use of a scaffold straight ladder
    c. Use of an extension ladder at any height
    d. Use of any ladder within 6 feet of a guardrail or leading edge
11. When determining a tie off point, each company's competent person shall review anchor point.

34.6. Step Ladders

1. Center your body on the ladder and keep the belt buckle between the rails while maintaining a firm grip.
2. Don't overreach, lean to one side or try to move the ladder while you are on it.
3. Don't exceed the maximum load capacity of a ladder.

4. Do not stand on the top step or brace of a step ladder.

5. Do not straddle a ladder and sit on the top or pail shelf.

6. Do not use a stepladder unless the ladder is completely open with the spreaders locked.

7. Don't climb on the back of a ladder.

8. Don't permit more than one person on a single sided step ladder.

34.7. Extension Ladders

1. Extension ladders shall not be used as the primary point of access or egress.

2. Get help with handling heavy ladders.

3. Secure the ladder or have another person hold the ladder while you are working on it.

4. Center your body on the ladder and keep the belt buckle between the rails while maintaining a firm grip.

5. Don't overreach, lean to one side or try to move the ladder while you are on it.

6. Don't exceed the maximum load capacity of a ladder.

7. Extension ladder sections are not to be separated and used individually.
8. Extension ladders will not exceed 24' extended length.

34.8. Job Built Ladders

1. Single-cleat and Double-cleat ladders must not exceed 24 feet in working length.

2. The width of a single cleat should be between 16 and 20 inches. The width of a double cleat should be between 18 and 22 inches.

3. Cleats should be continuous and extend the full width of double cleat ladders. Cleats must be parallel and evenly spaced from the ladder's base to the top bearing point. Spacing must measure 12 inches between the top edges of each cleat. There should be no cleats on side rails that extend above the landing surface.

4. Extra cleats should be cut and nailed to the side rail of the ladder as a quick replacement for cleats that become worn or broken.

5. Cleat board should be free of knots, holes, checks or splits.

6. When job-built ladders are installed where there is an exposure to an interior or exterior unprotected shaft or opening, a side rail shall be installed along the exposed side of the ladder.

7. Single-headed nails as specified in note 4 of drawing A shall be used to construct ladders.

Section 35: Hoisting & Rigging

Hoisting Policy Manual

35.1 Third party inspection

1. Any Crane that will be onsite for a period of 5 days or more must have a third-party site inspection when crane comes to site, and the operator daily/ monthly continued inspections.
2. Day Crane/ Truck crane must have 3rd party annual inspection and operators daily/ monthly inspection reports.

FOR SAFETY REQUIREMENTS FOR CRANES, PERSONNEL HOISTS AND RELATED EQUIPMENT, PLEASE REFER TO THE HOISTING POLICY MANUAL.

Note: *During material picking operations, crane swing radius and flight paths are not accessible to any personnel, outside that scope of work. If someone needs to access the area of crane operations, clear communication must be given to the spotter/rigger. The spotter/rigger must verify flight path is clear and approach authorization can be given. At no time will workers be allowed to work, walk, or stand under a "live load".*

35.1.1 Rigging

1. General: JE Dunn reserves the right to limit what personnel will be allowed to signal and/or rig cranes. Crane operators are required to refuse to pick up any load from an unapproved Signal Persons, individuals lacking the apparel designating approved Signal and Rigging Persons, or a person that has demonstrated they are unable to signal/communicate properly.
    a. All rigging or hoisting activities on site require a documented daily lift plan, which must include pre-lift planning, communication of roles and safety measures, and adherence to approved procedures. The plan must be reviewed and signed before operations begin, with any deviations documented and re-authorized to ensure compliance and safety.
    b. Riggers must be designated and qualified in accordance with current ASME and regulations in the type and scope of their work. Trade Partners must submit written documentation to the appropriate Dunn project supervisor identifying those individuals that meet all Signal Persons and Qualified Rigging outlined in 29 CFR 1926.1428 and 29CFR 1926.1401. After JE Dunn has received the appropriate certification documentation, those individuals must view JE Dunn's

Supplemental Rigging & Signaling Expectation video and Q&A session. Crane operators will be provided with a list of approved Signal Persons.

c. Riggers will be identified using a Green colored vest. All loads to be rigged and flown must either be rigged by a qualified rigger in a Green-vest, or rigged by a qualified rigger and a helper, with only the qualified rigger ensuring the load is ready to fly and giving signals to the operator. No helper or any person who is not a qualified rigger may rig and fly any load by themselves at any time.
d. Riggers/Spotters will be responsible for verifying material does not fly over workers. If work activity is in the area of crane activities the rigger/spotter must remove workers from hazard areas prior to flying material. The rigger/spotter will communicate all clear, to the crane operator, only when the flight path is clear. If workers travel through active crane paths, rigger/spotter must halt crane activity until the area is clear.
e. Rigging equipment shall:
    i. Have permanently affixed and legible identification markings as prescribed by the manufacturer that indicates the recommended safe working load for types of hitches and number of sling legs
    ii. Not to be loaded in excess of its recommended safe working load as prescribed on the identification markings by the manufacturer
    iii. Never be overloaded in excess of the manufacturer's safe working load
    iv. Must not be shortened with knots or bolts or other makeshift devices
    v. Be padded or protected from the sharp edges of their loads
    vi. Must not be shock-loaded
    vii. Not be pulled from under a load when the load is resting on the sling.
f. Special designed hooks, clamps or other special rigging devices shall be marked with the maximum safe working load and be proof loaded to 125% of rated load.
g. Hands or fingers shall not be placed between the sling and its load while the sling is being tightened around the load.
h. Sling legs shall not be kinked.
i. Slings used in a basket hitch shall have the loads balanced to prevent slippage.
j. Rigging equipment, when not in use, shall be removed from the immediate work area so as not to present a hazard to employees.
k. When utilizing four individual single legged slings to rig a load, the total capacity of rigging shall be figured by only using three legs.
l. Rigging at angles greater than 30 degrees is prohibited unless approved by the qualified rigger.

2. Inspections:

a. Rigging equipment, including fastenings devices and attachments shall be inspected before first use for damage or defects by a competent person.
b. Any rigging that does not meet the minimum requirements of this manual shall be tagged and removed from service. If the rigging device is rendered not usable or not repairable, the equipment shall be cut in half before discarding in the trash.

c. Additional inspection criteria for chain slings are required.

3. Synthetic slings:
    a. Synthetic web slings shall be immediately removed from service if any of the following conditions are present:
        i. Snags, punctures, tears or cuts
        ii. Broken or worn stitches
        iii. Melting or charring of any part of the sling surface
        iv. Acid or caustic burns
        v. When synthetic web slings are used, the following precautions shall be taken:
            1. Nylon, polyester, and polypropylene web slings shall not be used where fumes, vapors, sprays, mists or liquids of acids or phenolic are present
            2. Synthetic web slings of polyester and nylon shall not be used at temperatures in excess of 180 deg. F (82.2 deg. C). Polypropylene web slings shall not be used at temperatures in excess of 200 deg. F (93.33 deg. C).

4. Wire rope slings:
    a. Wire rope shall not be used if:
        i. In any length of eight diameters, the total number of visible broken wires exceeds 10 percent of the total number of wires
        ii. If there are more than 5 visible broken wires in one strand of a lay length or 10 broken wires in any part of the rope in one lay length
        iii. If the rope shows other signs of excessive wear, corrosion, or defect.
    b. Protruding ends of strands in splices on slings and bridles shall be covered or blunted.
    c. Wire ropes shall not be secured by knots.
    d. Except for eye splices in the ends of wires and for endless rope slings, each wire rope used in hoisting or lowering, or in pulling loads, shall consist of one continuous piece without knot or splice.
    e. Eyes in wire rope bridles, slings, or bull wires shall not be formed by wire rope clips or knots.

5. Chain slings:
    a. Only alloy type chain slings shall be used for hoisting a load. Load or log chains or any chain without a tag identifying its capacity as a hoisting chain shall not be used.
    b. Employers must not use alloy steel-chain slings with loads in excess of the rated capacities (i.e., working load limits) indicated on the sling by permanently affixed and legible identification markings prescribed by the manufacturer.
    c. In addition to the inspection required by paragraph B-1 of this section, a thorough periodic inspection of alloy steel chain slings shall be made on a regular basis, based on frequency of sling use, severity of service conditions, and nature of lifts being made. Such inspections shall in no event be at intervals greater than once every 12 months. A record of the most recent month in which each alloy steel chain sling was thoroughly inspected shall be maintained and made available for examination.
    d. Conditions to look for are:
        i. Bent or twisted or deformed links
        ii. Cracked links

iii. Gouges, chips, or cuts
iv. Small dents, peen marks, and bright polished surfaces which usually indicate fatigue
v. Severe corrosion, pitting resulting in material loss
vi. Links wear at the point of link contact.

e. Whenever wear at any point of any chain link exceeds that shown in Table H (refer to Hoisting Policy and Manual), the assembly shall be removed from service.
f. Chains not meeting the inspection requirements of this section shall be tagged and removed from service.
g. Never weld on chain slings.

Section 36: Confined Space Entry Program

Strict Adherence Confined Space Entry Guidance

All confined spaces on the CYL site will be considered permit-required confined spaces and permitted accordingly.

Whenever possible, work should be performed in ways that do not require entry to confined spaces.

For all confined space entries, you must either have suitable rescue capability onsite for confined space rescues or to have coordinated with local emergency response to ensure timely and effective rescue from any confined space onsite. Coordination with local response agencies must be in writing where applicable.

36.1. Scope

1. This written program sets forth the OSHA requirements, as addressed in Confined Spaces Construction (29 CFR Part 1200, Subpart AA), for practices and procedures to protect JE Dunn Construction Company employees engaged in construction activities at a worksite with one or more confined spaces.

2. Examples of locations where confined spaces may occur include, but are not limited to the following:

    a. Bins, boilers
    b. Pits (such as elevator, escalator, pump, valve or other equipment)
    c. Manholes (such as sewer, storm drain, electrical, communication, or other utility)
    d. Tanks (such as fuel, chemical, water or other liquid, solid or gas)
    e. Incinerators
    f. Scrubbers
    g. Concrete pier columns, sewers
    h. Transformer vaults
    i. Heating, ventilation and air-conditioning (HVAC) ducts

j. Storm drains
k. Water mains,
l. Precast concrete and other pre-formed manhole units
m. Drilled shafts
n. Enclosed beams
o. Vessels
p. Digesters
q. Lift stations
r. Cesspools, silos
s. Air receivers
t. Sludge gates
u. Air preheaters
v. Step up transformers
w. Turbines
x. Chillers
y. Bag houses and/or
z. Mixers/reactors

3. Exceptions: This written program does not apply to:
    a. Construction work regulated by §1926 subpart P – Excavations.
    b. Construction work regulated by §1926 subpart S – Underground Construction, Caissons, Cofferdams and Compressed Air.
    c. Construction work regulated by §1926 subpart Y – Diving.

4. Where this written program applies and there is a provision that addresses a confined space hazard in another applicable OSHA standard, JE Dunn Construction Company must comply with both that requirement and the applicable provisions of this standard.

5. Policy statement: It is the policy of JE Dunn Construction Company to provide a safe workplace for its employees based on guidelines established by OSHA and industry best practices.

6. Program objective: JE Dunn Construction Company has developed this written program to assure that their employees receive the information and training they need so they may work safely in confined spaces. This written program is the primary tool for providing that information to our employees for determining how every aspect of our confined space entry program is achieved.

36.2. Program Definitions

Acceptable entry conditions: the conditions that must exist in a permit space before an employee may enter that space, to ensure that employees can safely enter into; and safely work within the space.

Attendant: an individual stationed outside one or more permit spaces who monitors and assesses the authorized entrants and who must perform those duties.

Authorized entrant: an employee who is authorized by the entry supervisor to enter a permit space.

Blanking or blinding: the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

Competent person: one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.

Confined space: a space that (a) Is large enough and so configured that an employee can bodily enter it; (b) Has limited or restricted means for entry or exit; and (c) Is not designed for continuous employee occupancy.

Control: the action taken to reduce the level of any hazard inside a confined space using engineering methods (for example, by ventilation), and then using these methods to maintain the reduced hazard level. Control also refers to the engineering methods used for this purpose. Personal protective equipment is not a control.

Controlling Trade Partner: the employer that has overall responsibility for construction at the worksite.

Note: If the controlling Trade Partner owns or manages the property, then it is both a controlling employer and a host employer.

Double block and bleed: the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Early-warning system: the method used to alert authorized entrants and attendants that an engulfment hazard may be developing. Examples of early-warning systems include but are not limited to: alarms activated by remote sensors; and lookouts with equipment for immediately communicating with the authorized entrants and attendants.

Emergency*:* any occurrence (including any failure of power, hazard control or monitoring equipment) or event, internal or external, to the permit space that could endanger entrants.

Engulfment: the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing, or suffocation.

Entry: the action by which a person passes through an opening into a permit-required confined space. Entry includes work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space, whether or not such action is intentional or any work activities are actually performed in the space.

***Entry Employer*:** any employer who decides that an employee it directs will enter a permit space.

Note: An employer cannot avoid the duties of the standard merely by refusing to decide whether its employees will enter a permit space, and OSHA will consider the failure to so decide to be an implicit decision to allow employees to enter those spaces if they are working in the proximity of the space.

Entry permit: the written or printed document that is provided by the employer who designated the space a permit space to allow and control entry into a permit space and that contains the information specified in Section 6 of this written program.

Entry rescue: occurs when a rescue service enters a permit space to rescue one or more employees.

Entry supervisor: the qualified person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this standard.

Note: An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this standard for each role he or she fills. Also, the duties of entry supervisor may be passed from one individual to another during the course of an entry operation.

Hazard: a physical hazard or hazardous atmosphere. See definitions below.

Hazardous atmosphere: an atmosphere that may expose employees to the risk of death, incapacitation, and impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

a. Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL).
b. Airborne combustible dust at a concentration that meets or exceeds its LFL.

Note: This concentration may be approximated as a condition in which dust obscures vision at a distance of 5 feet (1.5 m) or less.

c. Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent.
d. Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published, and which could result in employee exposure in excess of its dose or permissible exposure limit.

Note: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.

e. Any other atmospheric condition that is Immediately Dangerous to Life or Health (IDLH).
Note: For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Safety Data Sheets (SDS) that comply with the Hazard

Communication Standard, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Host employer: the employer that owns or manages the property where the construction work is taking place.

Note: If the owner of the property on which the construction activity occurs has contracted with an entity for the general management of that property, and has transferred to that entity the information specified in Section 3, Paragraph H. 1, of this written program, OSHA will treat the contracted management entity as the host employer for as long as that entity manages the property. Otherwise, OSHA will treat the owner of the property as the host employer. In no case will there be more than one host employer.

Hot work: operations capable of providing a source of ignition (for example, riveting, welding, cutting, burning, and heating).

Immediately Dangerous to Life or Health (IDLH): any condition that would interfere with an individual's ability to escape unaided from a permit space and that poses a threat to life or that would cause irreversible adverse health effects.

Note: Some materials, hydrogen fluoride gas and cadmium vapor, for example—may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" after recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

Inerting: displacing the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

Note: This procedure produces an IDLH oxygen-deficient atmosphere.

Isolate or isolation: the process by which employees in a confined space are completely protected against the release of energy and material into the space, and contact with a physical hazard, by such means as: blanking or blinding; misaligning or removing Sections of lines, pipes, or ducts; a double block and bleed system; lockout or tag-out of all sources of energy; blocking or disconnecting all mechanical linkages; or placement of barriers to eliminate the potential for employee contact with a physical hazard.

Limited or restricted: for entry or exit means a condition that has a potential to impede an employee's movement into or out of a confined space. Such conditions include, but are not limited to, trip hazards, poor illumination, slippery floors, inclining surfaces and ladders.

Line breaking: the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

Lockout*:* the placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

flammable limit or lower explosive limit: the minimum concentration of a substance in air needed for an ignition source to cause a flame or explosion.

Monitor or monitoring: the process used to identify and evaluate the hazards after an authorized entrant enters the space. This is a process of checking for changes that is performed in a periodic or continuous manner after the completion of the initial testing or evaluation of that space.

Non-entry rescue: occurs when a rescue service, usually the attendant, retrieves employees in a permit space without entering the permit space.

Non-permit confined space: a confined space that meets the definition of a confined space but does not meet the requirements for a permit-required confined space, as defined in this subpart. **Non-Permit required confines spaces do not exist on the CYL jobsite.**

Oxygen deficient atmosphere: an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere: an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-required confined space: a confined space that has one or more of the following characteristics:

1. Contains or has potential to contain a hazardous atmosphere
2. Contains a material that has the potential for engulfing an entrant
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-Section; or
4. Contains any other recognized serious safety or health hazard.

Permit-required confined space program: the employer's overall program for controlling, and, where appropriate, for protecting employees from permit space hazards and for regulating employee entry into permit spaces.

Prohibited condition: any condition in a permit space that is not allowed by the permit during the period when entry is authorized. A hazardous atmosphere is a prohibited condition unless the employer can demonstrate that personal protective equipment (PPE) will provide effective protection for each employee in the permit space and provides the appropriate PPE to each employee.

Qualified person: one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.

Representative permit space: a mock-up of a confined space that has entrance openings that are similar to, and is of similar size, configuration, and accessibility to, the permit space that authorized entrants enter.

Rescue: retrieving, and providing medical assistance to, one or more employees who are in a permit space.

Rescue service: the personnel designated to rescue employees from permit spaces.

Retrieval system: the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

Serious physical damage: an impairment or illness in which a body part is made functionally useless or is substantially reduced in efficiency. Such impairment or illness may be permanent or temporary and includes, but is not limited to; loss of consciousness, disorientation, or other immediate and substantial reduction in mental efficiency. Injuries involving such impairment would usually require treatment by a physician or other licensed health-care professional.

Tag-out: (a) Placement of a tag-out device on a circuit or equipment that has been de-energized, in accordance with an established procedure, to indicate that the circuit or equipment being controlled may not be operated until the tag-out device is removed; and (b) The employer ensures that (i) tag-out provides equivalent protection to lockout, or (ii) that lockout is infeasible and the employer has relieved, disconnected, restrained and otherwise rendered safe stored (residual) energy.

Test or testing: the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

Note: Testing enables employers both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to, and during, entry.

Ventilate or ventilation: controlling a hazardous atmosphere using continuous forced-air mechanical systems that meet the requirements of OSHA standard §1926.57—Ventilation.

36.3. Program Explanations

Atmospheric testing: *Before* a permit space is first entered, the internal atmosphere must be tested with a calibrated direct-reading instrument for oxygen content, flammable gases and vapors, and potential toxic air contaminants.

Before work begins: A competent person identifies all confined spaces where employees may work, and identifies each space that is a permit space by considering and evaluating the elements of that space, including testing as needed.

Construction work*:* You must comply with the construction confined space rule if you are doing construction work, such as building a new structure or upgrading an old one.

Continuous monitoring: Permit space atmospheres must be continuously monitored unless equipment for continuous monitoring is not commercially available or periodic monitoring is sufficient. All monitoring must ensure continuous forced air ventilation prevents accumulation of a hazardous atmosphere.

Employees designated to rescue*:* Each employee must be provided with PPE needed to conduct rescues safely and trained in the use of the PPE; each employee must be trained to proficiently perform assigned rescue duties as authorized entrants; train each employee in basic first aid and CPR; employee team must practice rescues before attempting an actual rescue, and at least once every 12 months, in simulated rescues removing dummies, manikins or actual persons; practice rescue is not required when employees have properly performed a rescue during the past 12 months in the same permit space.

Entry employers: Entry employers must give the controlling Trade Partner info about their entry program and hazards encountered in the space.

Hazard detected: Employees must leave the space immediately; space must be evaluated to determine how the hazard developed; employer must implement measures to protect employees from the hazard before any reentry takes place.

Hazardous atmosphere: May expose employees to death, injury, acute illness, incapacitation, inability to self-rescue due to flammable gas, vapor or mist in excess of 10% of its lower flammable limit (LFL); airborne combustible dust at a concentration meeting or exceeding its LFL; atmospheric oxygen concentration below 19.5% or above 23.5%; employee exposure in excess of an airborne concentration dose or permissible exposure limit published in Osha or any other atmospheric condition immediately dangerous to life or health.

Host employers: Host employers must provide info about permit spaces to the controlling Trade Partner, who passes it on to employers whose employees will enter the spaces.

Information loop: Trade Partners must give the controlling Trade Partner info about their entry program and hazards encountered in the space; the controlling Trade Partner passes this info to other Trade Partners and back to the host.

Monitoring alert: Continuous monitoring equipment must have an alarm to notify all entrants if a specified atmospheric threshold is achieved, or an employee must check the monitor frequently enough to ensure entrants have time to escape.

Multiple roles: An entry supervisor may serve as an attendant or authorized entrant if that person is trained and equipped for each role he or she assumes.

Non-entry rescue: Is required unless the retrieval equipment would increase the risk of entry or would not contribute to the rescue of an entrant; retrieval systems must include use of a chest or full body harness,

retrieval line, and mechanical device that must be able to retrieve personnel from a vertical permit space more than 5 feet deep.

Permit space: A confined space that may have a hazardous atmosphere, engulfment hazard, or other serious hazard (exposed wiring for example) interfering with a worker's ability to exit the space without assistance.

Primary point of contact: The controlling Trade Partner – *not the host employer* – is the primary point of contact for information about confined spaces at the work site.

Required equipment: Testing and monitoring equipment; ventilating equipment; communications equipment; personal protective equipment when feasible engineering and work practice controls don't adequately protect employees; lighting equipment; barriers and shields; ladders or other means of safe entry and exit; rescue and emergency equipment.

Rescue service: Must be selected on the basis of 1) being able to reach victim(s) within a time frame appropriate for the hazard identified; 2) possessing equipment and proficiency in using equipment for the needed rescue; and 3) agreeing to notify the employer immediately if the rescue service becomes unavailable.

Training: Must result in an understanding of the hazards in the permit space; methods to isolate, control or in other ways protect entrants from hazards; and for employees not authorized to perform rescues, the dangers of attempting such rescues.

Write a permit: You must write a permit specifying what safety measures must be taken and who is allowed to go in a permit space before workers assigned and trained to work in a permit space can enter it.

36.4. General Requirements

1. Before a trade partner begins work at a worksite controlled by JE Dunn Construction Company, the Regional Safety Manager must be notified to ensure that a competent person identifies all confined spaces in which one or more of their employees it directs may work, and identifies each space that is a permit space, through consideration and evaluation of the elements of that space, including testing as necessary.[1]

2. Confined Space work shall be approved by and coordinated with the Trade Partner "Competent Person", JE Dunn EHS, and Client prior to entry.

3. If the workplace contains one or more permit spaces, the employer who identifies, or who receives notice of, a permit space must:

    a. Inform exposed employees by posting danger signs or by any other equally effective means, of the existence and location of, and the danger posed by, each permit space.

Note: A sign reading "DANGER -- PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER" or using other similar language would satisfy the requirement for a sign.

4. Inform, in a timely manner, and in a manner other than posting, its employees' authorized representatives and the controlling Trade Partner of the existence and location of, and the danger posed by, each permit space.

5. If JE Dunn Construction Company identifies, or receives notice of, a permit space and has not authorized employees it directs to work in that space, it must take effective measures to prevent those employees from entering that permit space, in addition to complying with all other applicable requirements of this standard.

6. If JE Dunn Construction Company decides that employees it directs will enter a permit space, it must have a written permit space program that complies with §1910.146 or §1926.1204 (Permit-required Confined Spaces) implemented at the worksite. The written program must be made available prior to and during entry operations for inspection by JE Dunn Construction Company employees and their authorized representatives.

Note: Proper application of the decision flow chart facilitates compliance with this requirement.
Note 2: Since JE Dunn Construction Company works inside of operating facilities and in general construction, both CFR's may apply depending on scope and condition of work defined by contract. Regardless, this Confined Space Entry Program covers each type of work environment being.

7. JE Dunn Construction Company may use the alternate procedures, specified in Paragraph 10, for entering a permit space only under the conditions set forth in Paragraph 9 below:

8. JE Dunn Construction Company employees whose employees enter a permit space need not comply with Paragraphs 4 through 6 of this written program, provided that all of the following conditions are met:

9. JE Dunn Construction Company can demonstrate that all physical hazards in the space are eliminated or isolated through engineering controls so that the only hazard posed by the permit space is an actual or potential hazardous atmosphere.

10. JE Dunn Construction Company can demonstrate that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry, and that, in the event the ventilation system stops working, entrants can exit the space.

11. JE Dunn Construction Company develops monitoring and inspection data that supports the demonstrations required by the applicable OSHA industry standard.

12. If an initial entry of the permit space is necessary to obtain the data required by applicable OSHA industry confined space standard, the entry is performed in compliance with that applicable OSHA industry confined space standard.

13. The determinations and supporting data required by applicable OSHA industry confined space standard are documented by JE Dunn Construction Company, and are made available to each employee who enters the permit space under the terms of the applicable OSHA industry confined space standard; and

14. Entry into the permit space under the terms of the applicable OSHA industry confined space standard is performed in accordance with the requirements of that applicable OSHA industry confined space standard.

Note: See Paragraph 26 of this section for reclassification of a permit space after all hazards within the space have been eliminated.

15. The following requirements **do apply** for entry into permit spaces that meet the conditions set forth in Paragraph 9:
    a. Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed.
    b. When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.

16. Before an employee enters the space, the internal atmosphere must be tested, with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. Any employee, who enters the space, or that employee's authorized representative, must be provided with an opportunity to observe the pre-entry testing required by this paragraph.

17. No hazardous atmosphere is permitted within the space whenever any employee is inside the space.

18. Continuous forced air ventilation must be used, as follows:
    a. An employee must not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.

b. The forced air ventilation must be so directed as to ventilate the immediate areas where an employee is or will be present within the space and must continue until all employees have left the space.
c. The air supply for the forced air ventilation must be from a clean source and must not increase the hazards in the space.

19. The atmosphere within the space must be continuously monitored unless the entry employer can demonstrate that equipment for continuous monitoring is not commercially available or periodic monitoring is sufficient. If continuous monitoring is used, the employer must ensure that the monitoring equipment has an alarm that will notify all entrants if a specified atmospheric threshold is achieved, or that an employee will check the monitor with sufficient frequency to ensure that entrants have adequate time to escape. If continuous monitoring is not used, periodic monitoring is required. All monitoring must ensure that continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any employee who enters the space, or that employee's authorized representative, must be provided with an opportunity to observe the testing required by this paragraph.

20. If a hazard is detected during entry:
    a. Each employee must leave the space immediately.
    b. The space must be evaluated to determine how the hazard developed; and
    c. JE Dunn Construction Company must implement measures to protect employees from the hazard before any subsequent entry takes place.

21. JE Dunn Construction Company must ensure a safe method of entering and exiting the space. If a hoisting system is used, it must be designed and manufactured for personnel hoisting; however, a job-made hoisting system is permissible if it is approved for personnel hoisting by a registered professional engineer, in writing, prior to use.

22. JE Dunn Construction Company must verify that the space is safe for entry and that the pre-entry measures required by Paragraphs 16-23 of this Section have been taken, through a written certification that contains the date, the location of the space, and the signature of the person providing the certification. The certification must be made before entry and must be made available to each employee entering the space or to that employee's authorized representative.

23. When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, or some indication that the initial evaluation of the space may not have been adequate, each entry employer must have a competent person reevaluate that space and, if necessary, reclassify it as a permit-required confined space.

24. A space classified by an employer as a permit-required confined space may only be reclassified as a non-permit confined space when a competent person determines that all the applicable requirements in Paragraphs 27 through 31 have been met. Under no condition will any confined space be reclassified to a “non-permit required confined space” on the CYL project.

25. If the permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated or isolated without entry into the space (unless the employer can demonstrate that doing so without entry is infeasible), the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated or isolated. Under no condition will any confined space be reclassified to a “non-permit required confined space” on the CYL project.

26. The entry employer must eliminate or isolate the hazards without entering the space, unless it can demonstrate that this is infeasible. If it is necessary to enter the permit space to eliminate or isolate hazards, such entry must be performed under the guidelines of this written program. If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated or isolated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated or isolated. Under no condition will any confined space be reclassified to a “non-permit required confined space” on the CYL project.
    a. Note: Control of atmospheric hazards through forced air ventilation does not constitute elimination or isolation of the hazards. Section 36.6 of this written program covers permit space entry where the employer can demonstrate that forced air ventilation alone will control all hazards in the space.

27. The entry employer must document the basis for determining that all hazards in a permit space have been eliminated or isolated, through a certification that contains the date, the location of the space, and the signature of the person making the determination. The certification must be made available to each JE Dunn Construction Company employee entering the space or to that employee’s authorized representative; and

28. If hazards arise within a permit space that has been reclassified as a non-permit space, all employees in the space must exit the space. The entry employer must then reevaluate the space and reclassify it as a permit space as appropriate in accordance with all other applicable provisions of this standard.

29. Permit Space Entry Communication and Coordination:
    a. Before entry operations begin, the host employer must provide the following information, if it has it, to the controlling Trade Partner:
        i. The location of each known permit space.
        ii. The hazards or potential hazards in each space or the reason it is a permit space; and
        iii. Any precautions that the host employer or any previous controlling Trade Partner or entry employer implemented for the protection of employees in the permit space.
    b. Before entry operations begin, the controlling Trade Partner must:

i. Obtain the host employer's information about the permit space hazards and previous entry operations; and

c. Provide the following information to each entity entering a permit space and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space:
   i. The information received from the host employer.
   ii. Any additional information the controlling Trade Partner has about the subjects; and
   iii. The precautions that the host employer, controlling Trade Partner, or other entry employers implemented for the protection of employees in the permit spaces.

d. Before entry operations begin, each participating employer must:
   i. Obtain all the controlling Trade Partner's information regarding permit space hazards and entry operations; and
   ii. Inform the controlling Trade Partner of the permit space program that the entry employer will follow, including any hazards likely to be confronted or created in each permit space.

e. The controlling Trade Partner and entry employer(s) must coordinate entry operations when:
   i. More than one entity performs permit space entry at the same time: or
   ii. Confined Space Entry is performed at the same time and activities could foreseeably result in a hazard in the permit space.

30. Post entry operations:
   a. The controlling Trade Partner must debrief each entity that entered a permit space regarding the permit space program followed, and any hazards confronted or created in the permit space(s) during entry operations.
   b. The entry employer must inform the controlling Trade Partner in a timely manner of the permit space program followed and of any hazards confronted or created in the permit space(s) during entry operations; and

   c. The controlling Trade Partner must apprise the host employer of the information exchanged with the entry entities pursuant to this subparagraph.

   d. Note: Unless a host employer or controlling Trade Partner has or will have employees in a confined space, it is not required to enter any confined space to collect the information specified.
   e. If there is no controlling Trade Partner present at the worksite, the requirements for, and role of, controlling contactors, identified in Section 3 of this written program, must be fulfilled by the host employer or other employer who arranges to have employees of another employer perform work that involves permit space entry.

36.5. Permit-Required Confined Space Program

Reference 29 CFR 1926.1204. Under the permit-required confined space program JE Dunn Construction Company must:

1. Implement the necessary measures to prevent unauthorized entry.

2. Identify and evaluate the hazards of permit spaces before employees enter them.

3. Develop and implement the means, procedures, and practices necessary for safe permit space entry operations, including, but not limited to, the following:
    a. Specific acceptable entry conditions.
    b. Providing each authorized entrant or that employee's authorized representative with the opportunity to observe any monitoring or testing of permit spaces.
    c. Isolating the permit space and physical hazard(s) within the space.
    d. Purging, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards.

    Note: When an employer is unable to reduce the atmosphere below 10 percent LFL, the employer may only enter if the employer purges the space so as to render the entire atmosphere in the space noncombustible, and the employees use PPE to address any other atmospheric hazards (such as oxygen deficiency), and the employer eliminates or isolates all physical hazards in the space.

    e. In the event the ventilation system stops working, the monitoring procedures will detect an increase in atmospheric hazard levels in sufficient time for the entrants to safely exit the permit space.

    f. Providing pedestrian or vehicle barriers as necessary to protect entrants from external hazards.

    g. Verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry, and ensuring that employees are not allowed to enter into, or remain in, a permit space with a hazardous atmosphere unless the employer can demonstrate that personal protective equipment (PPE) will provide effective protection for each employee in the permit space and provides the appropriate PPE to each employee; and

    h. Eliminating any conditions (for example, high pressure) that could make it unsafe to remove an entrance cover.

    i. Provide the following equipment specified in Paragraphs 14 through 20 at no cost to each employee, maintain that equipment according to the manufacturer's instructions, and ensure that each employee uses that equipment properly.

    j. Testing and monitoring equipment.

k. Ventilating equipment as needed to obtain acceptable entry conditions.

l. Communications equipment necessary for compliance, including any necessary electronic communication equipment for attendants assessing entrants' status in multiple spaces.

m. Personal protective equipment insofar as feasible engineering and work-practice controls do not adequately protect employees.

Note: The PPE requirements continue to apply to the use of PPE in a permit space. For example, if employees use respirators, then the respirator requirements in §1926.103 (Respiratory protection) must be met.

n. Lighting equipment that meets the minimum illumination requirements in §1926.56, that is approved for the ignitable or combustible properties of the specific gas, vapor, dust, or fiber that will be present, and that is sufficient to enable employees to see well enough to work safely and to exit the space quickly in an emergency.

o. Barriers and shields as required by Paragraph 10.

p. Equipment, such as ladders, needed for safe ingress and egress by authorized entrants.

q. Rescue and emergency equipment needed to comply with Section 36.6, Paragraph 35, except to the extent that the equipment is provided by rescue services; and

r. Any other equipment necessary for safe entry into safe exit from, and rescue from, permit spaces.

s. Evaluate permit space conditions in accordance with the following Paragraphs 23 through 28 of this section when entry operations are conducted:

16. Test conditions in the permit space to determine if acceptable entry conditions exist before changes to the space's natural ventilation are made, and before entry is authorized to begin, except that, if an employer demonstrates that isolation of the space is infeasible because the space is large or is part of a continuous system (such as a sewer), the employer must:
    a. Perform pre-entry testing to the extent feasible before entry is authorized; and,

    b. If entry is authorized, continuously monitor entry conditions in the areas where authorized entrants are working, except that employers may use periodic monitoring in accordance with Paragraph 3 for monitoring an atmospheric hazard if they can demonstrate that equipment for continuously monitoring that hazard is not commercially available.

17. Provide an early-warning system that continuously monitors for non-isolated engulfment hazards. The system must alert authorized entrants and attendants in sufficient time for the authorized entrants to safely exit the space.

18. Continuously monitor atmospheric hazards unless the employer can demonstrate that the equipment for continuously monitoring a hazard is not commercially available or that periodic monitoring is of sufficient frequency to ensure that the atmospheric hazard is being controlled at safe levels. If continuous monitoring is not used, periodic monitoring is required with sufficient frequency to ensure that acceptable entry conditions are being maintained during the course of entry operations.

19. When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors.

20. Provide each authorized entrant or that employee's authorized representative an opportunity to observe the pre-entry and any subsequent testing or monitoring of permit spaces.

21. Reevaluate the permit space in the presence of any authorized entrant or that employee's authorized representative who requests that the employer conduct such reevaluation because there is some indication that the evaluation of that space may not have been adequate; and

22. Immediately provide each authorized entrant or that employee's authorized representative with the results of any testing conducted in accordance with Section 36.6 of this written program.

23. Provide at least one attendant outside the permit space into which entry is authorized for the duration of entry operations.

24. Attendants may be assigned to more than one permit space provided the duties can be effectively performed for each permit space.

25. Attendants may be stationed at any location outside the permit space as long as the duties described in Section 36.10 of this written program can be effectively performed for each permit space to which the attendant is assigned.

26. If multiple spaces are to be assigned to a single attendant, include in the permit program the means and procedures to enable the attendant to respond to an emergency affecting one or more of those permit spaces without distraction from the attendant's responsibilities.

27. Designate each person who is to have an active role (as, for example, authorized entrants, attendants, entry supervisors, or persons who test or monitor the atmosphere in a permit space) in entry operations, identify the duties of each such employee, and provide each such employee with the training required by this written program.

28. Develop and implement procedures for summoning rescue and emergency services (including procedures for summoning emergency assistance in the event of a failed on-entry rescue), for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue.

29. Develop and implement a system for the preparation, issuance, use, and cancellation of entry permits as required by this standard, including the safe termination of entry operations under both planned and emergency conditions.

30. Develop and implement procedures to coordinate entry operations, in consultation with the controlling Trade Partner, when employees of more than one employer are working simultaneously in a permit space or elsewhere on the worksite where their activities could, either alone or in conjunction with the activities within a permit space, foreseeably result in a hazard within the confined space, so that employees of one employer do not endanger the employees of any other employer.

31. Develop and implement procedures (such as closing off a permit space and canceling the permit) necessary for concluding the entry after operations have been completed.

32. Review entry operations when the measures taken under the permit space program may not protect employees and revise the program to correct deficiencies found to exist before subsequent entries are authorized; and

Note: Examples of circumstances requiring the review of the permit space program include, but are not limited to: any unauthorized entry of a permit space, the detection of a permit space hazard not covered by the permit, the detection of a condition prohibited by the permit, the occurrence of an injury or near miss during entry, a change in the use or configuration of a permit space, and employee complaints about the effectiveness of the program.

33. Review the permit space program, using the canceled permits retained under Section F, Paragraph 6 of this written program, within 1 year after each entry and revises the program as necessary to ensure that employees participating in entry operations are protected from permit space hazards.

Note: Employers may perform a single annual review covering all entries performed during a 12-month period. If no entry is performed during a 12-month period, no review is necessary.

36.6. Permitting Process

1. Reference 29 CFR 1926.1205.

2. Before entry is authorized, if JE Dunn Construction Company is the entry employer, it shall document the completion of measures required by Paragraph 3 of this section by preparing an entry permit.

3. Before entry begins, the JE Dunn Construction Company entry supervisor identified on the permit must sign the entry permit to authorize entry.

4. The completed permit must be made available at the time of entry to all authorized entrants or their authorized representatives, by posting it at the entry portal or by any other equally effective means so that the entrants can confirm that pre-entry preparations have been completed.

5. The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit in accordance with Section 36.8, Paragraph 1.b. of this written program.

6. The JE Dunn Construction Company entry supervisor must terminate entry and take the following action when any of the following apply:
    a. Cancel the entry permit when the entry operations covered by the entry permit have been completed; or
    b. Suspend or cancel the entry permit and fully reassess the space before allowing reentry when a condition that is not allowed under the entry permit arises in or near the permit space and that condition is temporary in nature and does not change the configuration of the space or create any new hazards within it; and
    c. Cancel the entry permit when a condition that is not allowed under the entry permit arises in or near the permit space and that condition is not covered and reassess.

7. The entry employer must retain each canceled entry permit for at least 1 year to facilitate the review of the permit-required confined space program. Any problems encountered during an entry operation must be noted on the pertinent permit so that appropriate revisions to the permit space program can be made.

36.7. Entry Permit

Reference 29 CFR 1926.1206. The entry permit that documents compliance with this Section and authorizes entry to a permit space must identify the following:

1. The permit space that is to be entered.

2. The purpose of the entry.

3. The date and the authorized duration of the entry permit.

4. The authorized entrants within the permit space, by name or by such other means (for example, using rosters or tracking systems) will enable the attendant to determine quickly and accurately, for the duration of the permit, which authorized entrants are inside the permit space).

Note: This requirement may be met by inserting a reference on the entry permit as to the means used, such as a roster or tracking system, to keep track of the authorized entrants within the permit space.

5. Means of detecting an increase in atmospheric hazard levels in the event the ventilation system stops working.

6. Each person, by name, serving as an attendant.

7. The individual, by name, currently serving as entry supervisor, and the signature or initials of each entry supervisor who authorizes entry.

8. The hazards of the permit space are to be entered.

9. The measures are used to isolate the permit space and to eliminate or control permit space hazards before entry.

Note: Those measures can include, but are not limited to, the lockout or tagging of equipment and procedures for purging, ventilating, and flushing permit spaces.

10. The acceptable entry conditions.

11. The results of tests and monitoring performed under Section 36.4, Paragraph s 7-23 of this written program, accompanied by the names or initials of the testers and by an indication of when the tests were performed.

12. The rescue and emergency services that can be summoned and the means (such as the equipment to use and the numbers to call) for summoning those services.

13. The communication procedures are used by authorized entrants and attendants to maintain contact during the entry.

14. Equipment, such as personal protective equipment, testing equipment, communications equipment, alarm systems, and rescue equipment, to be provided for compliance with this standard.

15. Any other information necessary, given the circumstances of the confined space, to ensure employee safety; and

16. Any additional permits, such as for hot work, that have been issued to authorize work in the permit space.

36.8. Training

Reference 29 CFR 1926.1207.

1. JE Dunn Construction Company must provide training to each employee whose work is regulated by this standard, at no cost to the employee, and ensure that the employee possesses the understanding, knowledge, and skills necessary for the safe performance of the duties assigned under this standard. This training must result in an understanding of the hazards in the permit space and the methods used to isolate, control or in other ways protect employees from these hazards, and for those employees not authorized to perform entry rescues, in the dangers of attempting such rescues.

2. Training required by this Section must be provided to each affected employee:

    a. In both a language and vocabulary that the employee can understand.

3. Before, the employee is first assigned duties under this standard.

4. Before there is a change in assigned duties.

5. Whenever there is a change in permit space entry operations that presents a hazard about which an employee has not previously been trained; and

6. Whenever there is any evidence of a deviation from the permit space entry procedures or there are inadequacies in the employee's knowledge or use of these procedures.

7. The training must establish employee proficiency in the duties required by this standard and must introduce new or revised procedures, as necessary, for compliance with this standard.

8. JE Dunn Construction Company must maintain training records to show that the training required has been completed prior to performing any confined space entry work.

9. The training records must contain each employee's name, the name of the trainers, and the dates of training. The documentation must be available for inspection by employees and their authorized representatives, for the period the employee is employed by JE Dunn Construction Company.

36.9. Duties of Authorized Entrants

Reference 29 CFR 1926.1208.

JE Dunn Construction Company must ensure that all authorized entrants:

1. Are familiar with and understand the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.

2. Properly use equipment as required by this written program.

3. Communicate with the attendant as necessary to enable the attendant to assess entrant status and to enable the attendant to alert entrants of the need to evacuate the space as required by this written program.

4. Alert the attendant whenever:
    a. There is any warning sign or symptom of exposure to a dangerous situation; or
    b. The entrant detects a prohibited condition; and

5. Exit from the permit space as quickly as possible whenever:
    a. An order to evacuate is given by the attendant or the entry supervisor
    b. There is any warning sign or symptom of exposure to a dangerous situation
    c. The entrant detects a prohibited condition; or
    d. An evacuation alarm is activated.

36.10. Duties of Attendants

Reference 29 CFR 1926.1209.
JE Dunn Construction Company must ensure that each attendant:

1. Is familiar with and understands the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.

2. Is aware of possible behavioral effects of hazard exposure in authorized entrants.

3. Continuously maintains an accurate count of authorized entrants in the permit space and ensures that the means used to identify authorized entrants under this written program accurately identifies who is in the permit space.

4. Remains outside the permit space during entry operations until relieved by another attendant.

    a. Note: Once an attendant has been relieved by another attendant, the relieved attendant may enter a permit space to attempt a rescue when the employer's permit space program allows attendant entry for rescue and the attendant has been trained and equipped for rescue operations as required by this written program.

5. Communicates with authorized entrants as necessary to assess entrant status and to alert entrants of the need to evacuate the space under this written program.

6. Assesses activities and conditions inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:
    a. If there is a prohibited condition.
    b. If the behavioral effects of hazard exposure are apparent in an authorized entrant.
    c. If there is a situation outside the space that could endanger the authorized entrants; or
    d. If the attendant cannot effectively and safely perform all the duties required under this written program.

10. Summons rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.

11. Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:

    a. Warns the unauthorized persons that they must stay away from the permit space.

b. Advises the unauthorized persons that they must exit immediately if they have entered the permit space; and

c. Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.

d. Performs non-entry rescues as specified by the employer's rescue procedure; and

e. Performs no duties that might interfere with the attendant's primary duty to assess and protect the authorized entrants

36.11. Duties of Entry Supervisors

Reference 29 CFR 1926.1210.

The JE Dunn Construction Company must ensure that each entry supervisor:

1. Is familiar with and understands the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.

2. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.

3. Terminates the entry and cancels or suspends the permit as required by Section 36.7, Paragraphs 6-9 of this written program.

4. Verifies that rescue services are available and that the means for summoning them are operable, and that the employer will be notified as soon as the services become unavailable.

5. Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations; and

6. Determines, whenever responsibility for a permit space entry operation is transferred, and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.

36.12. Rescue and Emergency Services

Reference 29 CFR 1926.1211.

Pursuant to this written program, JE Dunn Construction Company must:

1. Evaluate a prospective rescuer's ability to respond to a rescue summons in a timely manner, considering the hazard(s) identified.

Note: What will be considered timely will vary according to the specific hazards involved in each entry. For example, §1926.103—Respiratory Protection requires employers provide a standby person or persons capable of immediate action to rescue employee(s) wearing respiratory protection while in work areas defined as IDLH atmospheres.

2. Evaluate a prospective rescue service's ability, in terms of proficiency with rescue-related tasks and equipment, to function appropriately while rescuing entrants from the particular permit space or types of permit spaces identified.

3. Select a rescue team or service from those evaluated that:
    a. Has the capability to reach the victim(s) within a time frame that is appropriate for the permit space hazard(s) identified.

    b. Is equipped for, and proficient in, performing the needed rescue services.

    c. Agrees to notify the employer immediately in the event that the rescue service becomes unavailable.
    d. Inform each rescue team or service of the hazards they may confront when called on to perform rescue at the site; and
    e. Provide the rescue team or service selected with access to all permit spaces from which rescue may be necessary so that the rescue team or service can develop appropriate rescue plans and practice rescue operations.

4. Should JE Dunn Construction Company designate employees to provide permit space rescue and/or emergency services, it must take the following measures and provide all equipment and training at no cost to those employees:
    a. Provide each affected employee with the personal protective equipment (PPE) needed to conduct permit space rescues safely and train each affected employee so the employee is proficient in the use of that PPE.
    b. Train each affected employee to perform assigned rescue duties. JE Dunn Construction Company must ensure that such employees successfully complete the training required and establish proficiency as authorized entrants, as provided by this written program.

c. Train each affected employee in basic first aid and cardiopulmonary resuscitation (CPR). The employer must ensure that at least one member of the rescue team or service holding a current certification in basic first aid and CPR is available; and
d. Ensure that affected employees practice making permit space rescues before attempting an actual rescue, and at least once every 12 months, by means of simulated rescue operations in which they remove dummies, manikins, or actual persons from the actual permit spaces or from representative permit spaces, except practice rescue is not required where the affected employees properly performed a rescue operation during the last 12 months in the same permit space the authorized entrant will enter, or in a similar permit space. Representative permit spaces must, with respect to opening size, configuration, and accessibility, simulate the types of permit spaces from which rescue is to be performed.

5. Non-entry rescue is required unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. JE Dunn Construction Company must designate an entry rescue service whenever non-entry rescue is not selected. Whenever non-entry rescue is selected, the entry employer must ensure that retrieval systems or methods are used whenever an authorized entrant enters a permit space, and must confirm, prior to entry, that emergency assistance would be available in the event that non-entry rescue fails. Retrieval systems must meet the following requirements:

6. Each authorized entrant must use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point which the employer can establish presents a profile small enough for the successful removal of the entrant. Wristlets or anklets may be used in lieu of the chest or full body harness if the employer can demonstrate that the use of a chest or full body harness is infeasible or creates greater hazard and that the use of wristlets or anklets is the safest and most effective alternative.

7. The other end of the retrieval line must be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device must be available to retrieve personnel from vertical type permit spaces more than 5 feet (1.52 meters) deep.

8. Equipment that is unsuitable for retrieval must not be used, including, but not limited to, retrieval lines that have a reasonable probability of becoming entangled with the retrieval lines used by other authorized entrants, or retrieval lines that will not work due to the internal configuration of the permit space.

9. If an injured entrant is exposed to a substance for which a Safety Data Sheet (SDS) or other similar written information is required to be kept at the worksite, that SDS or written information must be made available to the medical facility treating the exposed entrant.

3. Employee Participation

4. Reference 29 CFR 1926.1213.

5. JE Dunn Construction Company shall consult with affected employees and their authorized representatives, if so represented, on the development and implementation of all aspects of the company's written permit space program required by this written program.

6. JE Dunn Construction Company shall make available to all affected employees and his/her authorized representatives, if so represented, all information required and developed by this written program.

36.13. Document Retention

Reference 29 CFR 1926.1213.

1. For each document required to be retained by the OSHA Confined Spaces in Construction standard and this written program, JE Dunn Construction Company shall make those program documents readily available on request to the Secretary of Labor or the Secretary's designee.

2. Retention period. JE Dunn Construction Company, Confined Spaces in Construction recordkeeping documents shall be retained for a minimum period of three (3) years after completion of the entry work performed. Those documents required to be retained include:
    a. Confined Space Entry Permit
    b. List of Authorized Entrants
    c. Permit Required Confined Space Inventory Log

4. Retention location. JE Dunn Construction Company Confined Spaces in Construction recordkeeping documents shall be managed and stored in accordance to the Project Records and its record management.

Section 37: Blasting

The intent of this policy is to provide guidelines when removing rock by drilling and blasting techniques. All blasting shall be performed in accordance with all Federal, State, and local regulations.

1. Definitions

Approved storage facility: a facility for the storage of explosive materials conforming to the requirements of the OSHA regulation and covered by a license or permit issued under authority of the Bureau of Alcohol, Tobacco, and Firearms.

Blast area: the area in which explosives loading and blasting operations are being conducted.

Blasting agent: a blasting agent is any material or mixture consisting of a fuel and oxidizer used for blasting, but not classified an explosive and in which none of the ingredients is classified as an explosive provided the furnished (mixed) product cannot be detonated with a No. 8 test blasting cap when confined. A common blasting agent presently in use is a mixture of ammonium nitrate (NH(4) NO(3)) and carbonaceous combustibles, such as fuel oil or coal, and may either be procured, premixed and packaged from explosives companies or mixed in the field.

Blasting cap: a metallic tube closed at one end, containing a charge of one or more detonating compounds, and designed for and capable of detonation from the sparks or flame from a safety fuse inserted and crimped into the open end.

Detonating cord: a flexible cord containing a center core of high explosives which when detonated, will have sufficient strength to detonate other cap - sensitive explosives with which it is in contact.

Stemming: a suitable inert incombustible material or device used to confine or separate explosives in a drill hole, or to cover explosives in mud-capping. Typically, this a rock gravel material

2. General Requirements
    a. Project Managers are responsible for:
        i. Ensuring that the requirements of this policy are placed in the bid documents
        ii. Contacting the Risk Management Department to determine the amount of general liability coverage the blasting Trade Partner must provide. That amount will vary depending on the scope of work, location, and exposure.
        iii. Submitting all required documentation, blasting plan, and insurance documents to the Regional Safety Department and Risk Management Department for approval prior to commencement of work.
    b. Risk Management Department is responsible for:
        i. Ensuring that the blasting Trade Partner's insurance limits and policy meet or exceed the requirements of the company's insurance and policies.
    c. Safety Department is responsible for:
        i. Reviewing the blasting plan with the superintendent and ensuring that all requirements are met.
    d. Superintendents are responsible for:
        i. Ensuring all requirements of this section are strictly followed.
        ii. Verifying that safe work practices are followed and ensure that prompt corrective action of unsafe acts or conditions are made.
        iii. Performing a Pre-Installation Meeting with the blasting Trade Partner to ensure they understand the company's safety expectations in the execution of their work.
        iv. Ensuring that the blasting Trade Partner maintains adequate documentation of when blasting agents arrive onsite, when they are removed, detonation times, seismic monitoring activities, and required notifications to authorities and adjacent property owners.

v. Attend the blasting safety meeting held each day prior to blasting operations commencing.

e. The Blasting Trade Partner is responsible for:
   i. Providing a blasting plan detailing the proposed blasting operations.
   ii. Maintaining and making the plan available to workers on site.
   iii. Obtaining and maintaining all special permits and licensing for their scope.
   iv. Performing work in accordance with the submitted plan and in compliance with all federal, state, and local laws and codes.
   v. Maintaining a general liability insurance policy with limits to be determined by the JE Dunn Risk Manager.
   vi. The blaster-in-charge for the Blasting Trade Partner shall be in-charge of the blast site. The blaster-in-charge shall assume all responsibilities and perform all duties as required under OSHA regulations.

3. Blasting Trade Partner Personnel Qualifications
   a. Blaster-in-Charge
      i. Employees who transport, store, handle, or use explosives or blasting agents must be at least 21 years of age.
      ii. They must be able to give and understand written and verbal instructions.
      iii. They must be qualified through training, knowledge, and experience in transporting, storing, handling, and using explosives, and have a working knowledge of State and local laws and regulations that pertain to explosives.
      iv. Blasters must hold a Federal, State, or local license or certificate, have proof of formal training attended within the last 5 years, or three recommendations from past employers or explosives manufacturers testifying to the blaster's knowledge and ability to perform in a safe manner the type of blasting that will be required.

4. Blasting Plan
   a. The blasting plan shall contain the following minimum components:
      i. General Objectives
      ii. Proposed dates, times, and all locations of blasting
      iii. A copy of the blasting permit obtained to conduct blasting on site from the required local and state governing bodies
      iv. Rock Type and Characteristics as described from boring tests or other engineering data based on the site conditions
      v. Blaster-in-Charge must be identified and include written evidence of licensing, experience, and qualifications
      vi. List of other personnel involved with blasting operations including their qualifications and responsibilities
      vii. Copies of Permits, Licenses, Insurance Certificates
      viii. Blast Procedures detailed in a sequence of events from drilling of blast holes to detonation of blasting agents
      ix. Map or drawing of the project site with blasting zones shown
      x. JHA or Risk Evaluation of their scope(s) of work including drilling operations
      xi. Calculations for scaled distance factor (SD) for their blasting operations to determine "safe" distances in relation to air blast and ground vibration
      xii. List of equipment used for drilling and blasting operations

xiii. Blasting Trade Partner safety & health manual.

a. The blasting Trade Partner shall provide site-specific details of the proposed blasting operations including the following for each separate blasting area:

i. Method and equipment for transporting explosives and detonators
ii. Type and location of storage facilities
iii. Explosive type, quantities and safety data sheets
iv. Detonator type utilized
v. Delay type, interval, and pattern
vi. Maximum drill hole depth and diameter
vii. Maximum charge per hole
viii. Maximum charge per delay
ix. Drill hole spacing, burden, and orientation
x. Weather considerations (rain, lightning, cold temps, high winds, etc.) for discontinuing operations
xi. Coordination details of evacuating personnel to safe zone
xii. Blast area security
xiii. Procedures for handling misfires and removing of blasting agents already loaded into holes
xiv. Distance to nearest below-ground structures including existing buried utilities
xv. Methods of matting or covering of blast area to prevent fly rock
xvi. A list of instrumentation which the Trade Partner proposes to use to monitor vibrations and air-blast overpressure levels along with documentation of most recent calibration
xvii. Blast warning system procedures
xviii. Emergency Action Plan
xix. Post-Blast documentation including seismic results and description of expected vs. actual blasting results
xx. Prohibition of sources of ignition near all blasting agents (smoking, welding, temporary heat, etc.)
xxi. Dust control procedures for blasting and drilling operations.

5. Pre-Blast Notifications
    a. The blasting Trade Partner shall be responsible for all required notifications. This includes, at a minimum:
        i. Regulatory agencies
        ii. Law enforcement agencies
        iii. Emergency services
        iv. Onsite Trade Partner personnel
    b. At least 30 days before the initiation of blasting, the blasting Trade Partner or their agent shall notify, in writing, all residents, or owners of dwellings or other structures located within proximity of the permit area of upcoming ongoing blasting operations. Resident/owner notifications shall include the following information:
        i. The blasting Trade Partner's name, address and telephone number
        ii. That a pre-blast survey is available at no charge.
        iii. The purpose of the pre-blast survey
        iv. The requests for a pre-blast survey must be made in writing and sent directly to the

blasting Trade Partner A 24-hour notification of the actual date and approximate time of the blast is available before a blasting event.

6. Survey
    a. Prior to the blasting Trade Partner mobilizing to the project site, the blasting Trade Partner shall complete a pre-blast survey of all structures and improvements of adjoining properties subject to effects from the blasting operations. This survey should be reviewed at the Pre-Installation Meeting held with the blasting Trade Partner and the owner/client, where applicable.
    b. The survey shall include visual inspection of structures and improvements in addition to recording of existing interior and exterior conditions by means of photographs and/or video containing a date stamp after completion of blasting.
    c. A post-blast survey shall be conducted to identify any changes to the adjacent properties. A descriptive narrative should accompany the pre-blast survey, explaining each image and how it relates to the permit area.
    c. An updated survey of any additions, modifications, or renovations shall be conducted by the Trade Partner if requested by the resident or owner.

7. Daily Blast Safety Meeting
    a. Before loading operations begin, the blaster-in-charge shall ensure that a safety meeting be held for all blasting Trade Partner's employees on site and attended by at least one Trade Partner Superintendent. Information regarding the hazards observed during the pre-blast inspection as well as pertinent safety instructions shall be given to the workers. The blaster-in-charge shall issue directives and supervision to all blasting Trade Partner's employees as to their responsibility and duties for the day.
    b. This employee safety meeting shall be documented, and all attendees must sign a roster that they understand the blasting operations for the day.
    c. The meeting will discuss the blasting signals/warnings used that day, security procedures, review of the site EAP, and other relevant information.

8. Blast Site Security Procedures
    a. The blast site shall be barricaded and/or designated as off-limits to personnel during loading operations. All access entry points onto the blast site shall be barricaded and monitored. Markers, barricades, signs, and/or barrier tape shall be used to designate the blast site. Entry into the blast site by unauthorized personnel shall be prohibited. Only the blaster-in-charge or his agent shall have the authority to grant permission for entry onto the blast site. Personnel monitoring access entry points must be in constant communication with the Blaster-In-Charge during blasting operations.
    b. Barricades and signage that prohibit access shall be placed at the maximum distance listed in the blasting plan that safely allows other personnel to be present on the site.
    c. Barricades and devices should be of sufficient strength, height, and type to restrict access to other workers, owner's personnel, or members of the public and pedestrians.

9. Explosive Handling
    a. Explosives should not be dropped, thrown, or slid at any time.
    b. Detonators, primers, and other explosives shall be carried in separate containers when being transported.
    c. Remove explosives from their original containers only as needed for immediate use.
    d. Use only non-sparking tools or devices to open such containers.

e. Dispose of empty containers and packing in accordance with the manufacturer's recommendations.

10. Explosive Loading and Wiring
    a. At no time, should excavation and drilling activities be within 50ft of any loading operations.
    b. Do not drill in an area already blasted until examining remaining "bootlegs" (holes that do not detonate full depth) for unexploded charges.
    c. Make boreholes ready for loading, and remove equipment and tools not used for loading from the area before delivering the explosives to the site.
    d. While the holes are being loaded with explosives, exclude all personnel, other than those involved in the loading of boreholes, from the blast site.
    e. Make boreholes large enough to permit loading of cartridges and explosives without forcing. Prime, load, tamp, and fire as promptly as possible with a minimum of exposure to personnel.
    f. Tamp only with wooden or plastic tamping poles without exposed metal parts. Non-sparking metal connectors on jointed poles are permissible. Seat cartridges by even, steady pressure, and do not tamp primers.
    g. Follow the manufacturer's recommendations in priming cartridges.
    h. Make primers up only at the loading area and in quantities limited to the number required for a single round of blasting.
    i. Stem all blast holes in open work with noncombustible material to the collar or to a point that will confine the charge.
    j. Use an electric blasting machine to fire blasts using electronic detonators.
    k. Fire blasts using nonelectric detonators with a blasting machine or starting device prescribed by the detonator manufacturer.
    l. Do not remove the manufacturer's shunt from the cap leg wires until the cap has been connected to the lead lines or to another cap in preparation for the assembly of two or more caps into a single series.
11. Firing

    a. Preparation. Before connecting the firing line to the power source, notify all personnel in the danger area of the blast and remove them to a safe area. Make satisfactory arrangements for evacuating the danger area and ensuring that no one enters the area before the blast.
    b. Responsibility. The blaster must oversee the blasting machine or firing switch, and must connect the firing line to the firing device. The blaster must make all connections from the cap circuit back to the firing device, and the firing line must remain shorted until connected to the firing device immediately before firing.
    c. Blasting Signal. Sound the following blasting signal on a clearly audible whistle, horn, or siren before each surface or underground blast:

       Blasting warning: A 1-minute series of long blasts 5 minutes before the blast signal
       Blast signal: A series of short blasts 1-minute before the shot
       All clear: A prolonged blast following inspection of the blast area

    d. Posting Blasting Signals. Post blasting signals at all access points, and before each shot, post competent flag persons at all access points to the danger area.
    e. Disconnecting. Immediately following the blast, disconnect the firing line from the firing power source or blasting machine and shunt it. Lock firing switches open.

12. Post Blast Inspections

    a. Before the all-clear signal, the blaster must thoroughly inspect to determine if all charges have fired. The blaster must carefully check wires and search for unexploded charges.
    b. The geology of the rock to identify:
        i. Mud seams
        ii. Potential slide areas
        iii. Voids
        iv. Loose rocks
        v. Any rock mass defects
        vi.

13. Methods for Monitoring/Measuring Seismic Readings

    a. The use of seismographs at the nearest structures shall be used and monitored to ensure compliance with Federal, State, and local regulations.
    b. If a blast round results in ground vibrations or air-blasts overpressures which exceed the blasting limit criteria, the Trade Partner shall, prior to detonating and subsequent rounds, revise the round design appropriately to reduce the vibrations and submit the revised round design to the engineer for approval prior to the continuation of blasting.

14. Blasting Containment Techniques
    a. The blasting Trade Partner shall take all necessary steps and use all available blasting techniques to limit the adverse effects of fly rock, misfires, ground vibration, and air blast.
    b. Blast mats, blast cans, overburden, and the like will be required for all blasting operations, unless the blasting Trade Partner can demonstrate that their use will not be required due to the lack of fly rock from the blasting operation. The blasting plan shall explain in detail how this will be achieved, either through the orientation of blasting holes, patterns, depth of charges, remoteness of site, and/or other factors.

15. Special Conditions
    a. Weather – If severe weather approaches, the handling or use of explosives shall be discontinued and all persons shall be moved to a place of safety until danger has passed. Determination of safe distance from the blasting area to the severe weather shall be made by the blasting Trade Partner with knowledge of their blasting agents, after referencing the project Emergency Action Plan for severe weather.
        i. A positive system to detect and measure the probability of lightning or massive static electrical discharges shall be used.
    b. Static - All parts of an electrical blasting circuit shall be effectively insulated or protected from grounds or short circuits and adequately separated from power source so as to prevent any possibility of electrical contact or entrance of stray current into the blast circuit.
    c. Stray Radio Frequency – mobile transmitters shall not be energized near electrical caps or delays being handled or used. 2-way radios, cell phones, and the like communicating devices may only be used if deemed safe by the blaster in charge.
    d. All explosive storage requirements shall be in accordance with all Federal, State, and local regulations. All permits and licenses must be formally issued before storage shall be permitted. All unused explosives materials shall be removed from the project site at the end of shift unless

authorization is given from the regional safety director.

16. Emergency Action Plan
    a. The blasting Trade Partner shall develop an emergency action plan. The plan shall be communicated to all affected Trade Partners and maintained on site during all blasting operations.
    b. At a minimum, the plan should include:
        i. Blasting Trade Partner contacts
        ii. Local emergency contacts
        iii. Ambulance
        iv. Fire
        v. Police
        vi. Address and phone number to the nearest medical facility
        vii. Address and phone number to the nearest hospital

Section 38: Hand and Power Tools

38.1. General

1. All tools whether personal or company owned must be kept in good condition, inspected before use and maintained.

2. Worn or damaged equipment must be tagged “Out of Service” and replaced immediately or immediately removed from the jobsite.

3. Where conditions warrant, tethers/tool lanyards shall be used to prevent hand or power tools from falling to work areas below.

38.2. Electric Tools

1. Electrical tools must be grounded or double insulated.

2. Power cords must be free of cuts, nicks, or damage.

3. Ground Fault Circuit Interrupting devices must be provided. If the tool is connected to temporary power, the installed GFCI must be tested prior to each use. When cords and tools are plugged into permanent building power that does not have a GFCI installed, a portable GFCI device shall be used, and it shall be tested prior to each use.

4. Tools must be disconnected from power source before changing attachments or making repairs.

38.3. Gasoline Powered Tools

1. Fuel powered tools must be shut down before refueling.

2. Smoking is prohibited during refueling operations.

3. Adequate ventilation must be provided when operating in closed areas.

4. It is not recommended to use gasoline powered tools indoors or in any area where ventilation is restricted. If gas powered tools must be used indoors, carbon monoxide levels must be monitored.

5. When gasoline powered tools are in use, a fire extinguisher must be provided in the immediate area and must be easily accessible.

6. Gasoline containers used for refueling must be an approved type safety can in good condition with a spark arrestor and is properly labeled with its contents.

38.4. Portable Circular Saws

1. Portable circular saws must be equipped with guards above and below the base plate or shoe. The lower blade guard must operate smoothly and retract when the blade is in use and automatically return to the guarding position when the tool is withdrawn from the material being cut.

2. Blocking of the lower guard is prohibited.

3. The base or shoe of the saw shall be adjusted for the thickness of the material being cut.

4. Sawzall, portable bandsaws, and chainsaws are tools of last resort. Must submit a specialized JSA, to JE Dunn safety for approval, covering specific control methods if the tool is needed. (**Only Portable Bandsaws with dual triggers will be allowed on site.)**

38.5. Table or Bench Saws

1. Upper blade guards and non-kickback attachments must be provided and used.

2. A push stick is required when ripping.

3. Blade height shall be properly adjusted when cutting and retracted when not in use.

4. Belt/pulley guards shall be installed and maintained.

38.6. Right-Angle Grinders

1. 180 degree guards must be installed and utilized.

2. Wheels must be inspected regularly and defective wheels replaced immediately.

3. Wheels must match the rated RPM of the tool.

38.7. Pneumatic Tools

1. Air supply lines must be protected and all connections secured to prevent accidental separation.ie whip-checks.

2. Hoses may not be used to raise or lower tools.

3. Air hoses with an inside diameter of ½ inch or greater must be equipped with a flow control safety device attached at the source to reduce pressure if a hose fails.

38.8. Powder-Actuated Tools

1. Each Trade Partner shall provide a site-specific safety plan describing the safe use, storage and disposal of used materials.

2. Only trained employees are allowed to operate powder-actuated tools. Proof of training is required.

3. Hearing and eye protection are mandatory.

4. Loaded tools shall not be left unattended.

5. Unfired/Misfired cartridges must be disposed of per the manufacturer's recommendations.

   Signs will be posted to notify personnel that powder-actuated tools are in use.

38.9. Hand Tools

1. Hand tools must be kept in good condition. Worn or broken tools such as hammers with loose handles, chisels with mushroomed heads, saws with teeth not set, shovels with splintered or split handles, etc. must be repaired or replaced.

2. No tools shall be modified unless approved by the manufacturer.

3. All tools should be produced by a reputable manufacturer or approved by JE Dunn's Safety representative prior to use.

4. No hammers of any type will be used while driving fence posts, curb pins, or sign posts. Powered driving tools or attachments are required for these tasks. Hammers are utilized with prior approval from JE Dunn supervision where attachments are not feasible.

5. The use of fixed open blade utility knives, foldable fixed blade utility knives, or pocket knives as a work tool shall not be allowed. Usage of a safety knife designed with a self-retracting blade is acceptable, only when the user has been properly trained in its use.

38.10. Other Machine Guards and Protections

1. Rotating belts, pulleys, shafts, etc. on all equipment shall be guarded to prevent contact either by the worker or by objects carried or worn by the worker.

2. All Air Compressors shall be equipped with whip checks and pressure release valves.

Section 39: Laser Safety

1. At a minimum the use and inspection of lasers, both rotating and stationary, shall comply with: OSHA, ANSI and the manufacturer's recommendations and requirement.

2. Laser beam or reflected beam can cause injuries to the eyes and skin during use. No laser beam will be directed at any worker. Associated hazards such as electrical, noise, fire, and health should be considered. Lasers must not be left unattended during operation.

3. The owner’s manual shall be kept with the equipment at all times, and shall be produced upon request.

4. Laser users shall be trained and certified for the class of laser he or she is using. Proof of qualification shall be maintained on the user, and shall be produced upon request.

5. Where Class II or more powerful lasers are used, appropriate laser warning placards shall be conspicuously posted on the equipment, and laser warning signs shall be posted in the area where the beam reaches/affects.

6. Where a certain model or class laser requires the use of a specific eye protection for protection against direct or reflected laser light, this operation shall be conducted only in an area where access is restricted to only the user(s), or shall be done off-hours.

7. Lasers must not be left unattended during operation. Beam shutters or caps will be utilized, or the laser turned off when laser transmission is not actually required.

8. A warning sign must be attached to equipment and in conspicuous locations indicating the potential eye hazard associated with the laser and warning against looking into the primary beam or reflections.

9. All potential electrical hazards must be safeguarded.

Section 40: Raised Metal Floor Entry (if applicable)

1. Raised Metal Floor Permit should be completed prior to entry.

2. Work Permit given from protocol shall be completed prior to entry.

3. Rigid barricades are required for all openings in the RMF, including single tile openings.

4. Rigid barricades must be capable of withstanding a 200 lb. of downward and upward force.

5. Top Rail must be 42'' plus/minus 3 inches in height.

6. Mid-rail must be half-way between the RMF and the top rail.

7. Barricade must be bolted down or secured with approved ratchet straps around the open holes.

8. Barricading materials must meet cleanroom material requirements and specifications.

9. Single tile rigid barricades must be secured to the floor structure.

10. If there are multiple companies working within a larger rigid barricaded area each floor opening within the barricaded area must be individually barricaded or covered.

11. Spotters are required for all single tile openings and all work below the RMF.

12. No barricade is required for lifting a single view tile provided the tile is kept within the floor structure and hinged up.

13. A spotter is required anytime someone makes entry below the RMF. The Spotter must remain in contact with the individual below the floor, notify them immediately if any conditions change, and ensure the other work area does not affect the person working below the raised floor.

14. A spotter is NOT required while working around or under a tool pedestal during installation, provided the area is properly barricaded. However, if work extends under the RMF surface, or if there are any other safety or health hazards in the vicinity, a spotter or confined space permit may be required.

15. NEVER move another person's barricade from around open floor areas.

16. Once under the floor, a spotter must be in place. The furthest a person can travel from the opening under the floor is 6 tiles.

17. The location and orientation of each tile is unique. Carefully note the position and orientation prior to removing a tile (mark with cleanroom tape). Replace the tile in the same position when the work is complete.

18. When covers (of sufficient integrity) are used to cover holes, JE Dunn Floor Hole and Opening Policy must be followed.

19. Entry into a space beneath a raised floor, which can be performed with the floor tile(s) removed, is not considered entry into a confined space; the Raised Floor Pre-Entry Checklist requirement is not required unless otherwise determined by JE Dunn. Entry to a space beneath a raised floor that must be conducted with the floor tiles in place above the employees is considered a confined space entry and must be performed in compliance with the confined space guidelines.

20. Tools, associated utilities and operational conditions shall be assessed in order to determine potential hazards to the space beneath a raised floor and possible classification as a PRCS. Examples of potential hazards that may cause the space beneath the raised floor to be classified as PRCS include, but not limited to: welding, exposed energized electrical, HPM line breaking, demolition of chemical/gas lines, energized robotics. Confined space hazard assessments shall be performed for the existing areas beneath the raised floor per OSHA standards. If conditions change from original assessment, or major construction occurs, the spaces must be re-evaluated per this standard.

Section 41: Line Breaking (if applicable)

Each Trade Partner shall establish line breaking procedures that are consistent with the work processes at the site.

1. Purpose and Scope
    a. This procedure defines the process for breaking/cutting/disconnecting any installed gas, chemical, or water line.
    b. Its purpose is to ensure that all lines are clearly identified and verified prior to any cuts being made.
    c. To ensure that all hazardous energies have been removed prior to any cuts being made.

2. Responsibilities
    a. System owners will walk the system and verify task details with Trade Partner or other party to perform the line break. After all parties are satisfied, the system owner will issue a line break permit.
    b. Trade Partner and JE Dunn start the process for permit approval.
    c.
3. Procedure
    a. Notification
        i. The system owner will coordinate a meeting for system walk through with JE Dunn & Trade Partner.
        ii. Trade Partner will initiate contact with system owner (when applicable) and start the process for permit approvals (including ITP).
    b. Verification

i. The system owner will coordinate meeting for system walk through.
ii. Submit Permit for approval
iii. Trade Partner will verify where the LOTO will be placed.

c. Execution
i. Trade Partner applies LOTO lock and tag to the system after the system owner lock has been placed on the system and verifies isolation.
ii. Obtain line break permit.
iii. Appropriately display OPERATIONAL CONTROL Permit, line break permit and other applicable forms in work area.
iv. Verify utility ID Tag is tie wrapped on the utility line at lateral POC.
v. The crew doing the work apply their individual locks and verify isolation
vi. Second person/buddy responsibilities will be:
    1. To verify the utility line to be cut is correct prior to being cut.
    2. To support utility line in place to avoid shifting.
    3. To support the utility line to prevent it from falling after cut is made.
vii. The person performing the de-installation/cut work must verify the POC valve has been closed and tagged out and attach his/her individual lock to the isolation valves until line is cut and capped.
viii. Barricade the work area and post appropriate signs.
ix. Put on proper PPE in accordance with the approved work plan
    1. Anyone within the barricaded area will be required to wear proper PPE
x. Relieve system pressure and begin draining piping (or liquid systems).
xi. Upon completion of draining procedure, immediately disconnect piping from lateral POC and cap the lateral connection point using appropriate means.
xii. Place the ring and tag back along the line to the position of the next cut, this will verify correct identification of the line.
    1. Every effort should be made not to remove this ring/tag from the utility line being removed until the de-installation process is complete.
    2. This tag will always be within 1” of the cut location. No obstructions (i.e. Unistrut) will exist between the cut location and the ring/tag
    3. As each pipe is cut, open ends are to be temporarily bagged and taped.
    4. Repeat the above steps for all cuts.
xiii. Remove all hangers, supports, and other miscellaneous specialties associated with the system being removed.
xiv. When de-installed materials are ready for removal from the work area, assure that the ends of the lines are sealed appropriately to avoid leaks.
xv. Transport all de-installed materials to a pre-determined disposal location on-site.
    1. De-installed materials are not permitted to accumulate in the work area, if necessary, the Trade Partner must make multiple trips to the disposal area during the course of the demolition.
    2. As a minimum, all de-installed materials must be removed at the end of each workday.
xvi. Clean up any tools or debris in the area and remove the barricades.
xvii. Close out permits.

d. Completion
    i. Trade Partner shall notify system the owner that de-installation on this line is complete.
    ii. Trade Partner system owners shall verify that de-installed work is complete per work plans and specifications including removal of all tools, and the specific labeling and tagging.

Section 42: Occupational Health Hazards

Industrial Hygiene

42.1. Purpose

This document outlines responsibilities and practices to protect Trade Partners and others from the release of toxic substances such as airborne asbestos fibers, lead containing materials, PCB's, contaminated soils, and others during demolition, renovation, and/or new construction-related activities and comply with all applicable rules and regulations set forth by the local, state and federal government authorities.

42.2. General Requirements

1. JE Dunn does not and will not perform asbestos, lead, or hazardous contamination abatement related activities unless special contractual provisions are put in place.

2. Under normal circumstances, JE Dunn will not contract directly with a licensed abatement or hazardous waste company, transporter or dumping facility. This policy will not be deviated from without written permission from the Risk Management Officer.

42.3. Responsibilities

1. Building Owners:
    a. Prior to any demolition or renovation activities, the building owner is responsible for conducting an inspection for asbestos, lead, and other hazardous substances in the affected portion of the building.
    b. The owner must notify JE Dunn of the presence, location, and quantity of hazardous substances in the building.
    c. Notification shall be in writing and must be accompanied by an environmental survey from a 3rd party.
    d. If hazardous substance abatement is conducted under the direction of the owner, JE Dunn will not allow work to commence until the owner provides JE Dunn notice that the hazardous materials have been abated and the building no longer poses a threat to our workers. In the

case of asbestos or other hazardous materials found in the air, a clean air report should be included.

e. The owner must also notify the local governing bodies, as well as state agencies, if hazardous materials are found and the local or state regulations require reporting.

2. Project Managers:
    a. Prior to any demolition or renovation activities, the project manager shall obtain from the building or facility owner a copy of the environmental survey identifying the presence, location, and quantity of hazardous substances in the affected area of the building.
    b. The project manager shall provide a copy of the environmental survey to the superintendent and Trade Partners prior to the start of any demolition or renovation activities.
    c. The project manager shall also review local codes and ensure that we are in compliance with any permitting or notification requirements of that locale. The Regional Safety Department may provide assistance in contacting area agencies that are Authority Having Jurisdiction (AHJ).

3. Superintendents:
    a. Prior to any demolition or renovation activities, the superintendents shall review the environmental survey and become familiar with the location, type, and quantity of hazardous substances in all work areas.
    b. The environmental survey shall be posted and made available to all workers on site.
    c. The results of the survey must be communicated to all JE Dunn field labor, Trade Partner personnel, and any other affected party prior to the start of work
    d. The superintendent shall ensure that all employees working on site have sufficient hazardous substance awareness training. The Regional Safety Department shall be contacted to determine the length and scope of the training required. Documentation of such training shall be kept on file and made available for review upon request.

4. Abatement Trade Partners:
    a. The Trade Partner shall submit a written hazardous material removal plan that shall include, at a minimum: a description of the enclosure system, the equipment used, procedures to be used for abatement, physical description of work area, approximate amount of ACM to be abated, protection of existing HVAC, personnel hygiene procedures, PPE types, air monitoring plan (when required), transportation and disposal of hazardous wastes.

42.4. Building Inspection/Surveys

1. All buildings (regardless of age) shall be inspected for asbestos, lead, and other hazardous substances prior to any demolition or renovation activities.

2. No building shall be considered exempt from the required environmental inspection based on age or date of the last renovation. Hazardous materials may not have been removed during previous renovations and some products used during the construction of new buildings could contain hazardous materials.

3. If during construction activities a suspect material is discovered that was not part of the original inspection, work must be stopped immediately. The area will be cordoned off until an inspection of the material can be completed by a qualified 3rd party inspector.

4. Individuals engaged in the sampling of suspected asbestos containing material must meet minimum federal and state training requirements including (but not limited to) the possession of a valid Asbestos Inspector License. The same requirements apply to those performing lead containing material inspections.

5. If the inspection of the building indicates the presence of hazardous materials and these materials will be disturbed due to the demolition or renovation activities, then they shall be removed by a licensed hazardous materials abatement Trade Partner specifically trained to remove those hazardous materials.

42.5. Emergency Procedures

1. Every effort will be made to identify the presence and location of all hazardous materials prior to demolition or renovation activities minimizing the chance of accidental disturbance. Upon identification or accidental release of hazardous materials or the accidental release should occur, the following steps should be followed immediately:
    a. Stop work immediately and vacate the area.
    b. Notify supervision of the disturbance.
    c. The supervisor shall notify the regional Safety Director
    d. Isolate the area to prevent entry by others.
    e. Post danger signs to inform other personnel of hazard.
    f. Shut off or temporarily modify the air handling system to prevent the distribution of airborne hazardous materials to other areas.
    g. Do not attempt to clean up debris.
    h. Suspect material must be evaluated/tested immediately.
    i. Do not re-enter the area until tests are confirmed and show air contaminants are completely removed or limited to acceptable levels as outlined in the applicable OSHA regulation (1926.1101 for Asbestos, 1926.62 for lead).

42.6. Training

1. All workers shall be trained in the hazards associated with asbestos, lead, or other hazardous materials and the procedures for safely working around those hazardous materials without endangering themselves, their coworkers, or other building occupants.

2. This is regardless of the fact that the hazardous material has already been removed and we are in receipt of a clean building report.

3. The training will include:

a. Adverse health effects of asbestos, lead, or other hazardous materials
b. The types, properties and uses of asbestos, lead, or other hazardous materials
c. The hazards of asbestos fibers, lead, or other hazardous materials inhalation and ingestion
d. Locations, signs of damage and deterioration of asbestos-containing materials, lead, or other hazardous materials
e. Types of activities which could release asbestos fibers, lead, or other hazardous materials
f. The proper response to a hazardous materials release episode

4. The superintendent shall receive proof of training from all workers prior to the start of work. Documentation of such training shall be kept on file and made available for review upon request.

5. Training records for abatement Trade Partner employees shall be provided to the site superintendent and/or project manager prior to the work commencing. The level of training will be determined by the activities being performed onsite and types of protective methods the abatement Trade Partner will be instituting.

Section 43: Crystalline Silica

43.1. Intent Statement

JE Dunn will take reasonable steps and precautions to eliminate potential hazards of airborne silica in the workplace. The purpose and intent of this section is to minimize exposure and risks associated with respirable crystalline silica through training and awareness, use of engineering and work practice controls and following the silica standard as outlined in 29 CFR 1926.

43.2. Definitions

Action Level (AL): a concentration of airborne respirable crystalline silica of 25 ug/m3, calculated as an 8-hour Time Weighted Average

Air Monitoring Data: the measurements taken to assess employee exposure to respirable crystalline silica

Competent Person: a designated individual who is capable of identifying existing and foreseeable respirable crystalline silica hazards in the workplace and who has authorization to take prompt corrective measures to eliminate or minimize them. The competent person must have the knowledge and ability necessary to fulfill the responsibilities set forth in the Written Exposure Control Plan.

Employee Exposure: the exposure to airborne respirable silica that would occur if the employee were not using a respirator

High-Efficiency Particulate Air (HEPA) Filter: a filter that is at least 99.97% efficient in removing mono-dispersed particles of 0.3 micrometers in diameter

Objective data: information, such as air monitoring data from industry-wide surveys or calculations based on the composition of a substance, demonstration employee exposure to respirable crystalline silica associated with a particular product or material or a specific process, task or activity. The data must reflect workplace conditions closely resembling or with a higher exposure potential than the processes, types of materials, control methods, work practices, and environmental conditions in the employer's current operation.

Permissible Exposure Limit (PEL): a concentration of airborne respirable crystalline silica of 50 ug/m3, calculated as an 8-hour Time Weighted Average

Physician or other licensed health care professional: an individual whose legally permitted scope of practice (i.e. license, registration, or certification) allows him or her to independently provide or be delegated the responsibility to provide some or all of the particular health care services required by this paragraph (h) of this section

Regulated Area: an area, demarcated by the employer, where an employee's exposure to airborne concentrations of respirable crystalline silica exceeds, or can reasonably be expected to exceed, the Permissible Exposure Limit

Respirable Crystalline Silica (Silica): quartz, cristobalite, and/or tridymite contained in airborne particles that are determined to be respirable by a sampling device designed to meet the characteristics for respirable-particle-size-selective samplers

Respiratory Protection: when the use of respirators is required by this rule, a respiratory program shall be instituted in accordance with governing standards. Respirators protect the user by the removal of contaminants from the breathing air. Respirators of this type include particulate respirators, which filter out airborne particles, and air-purifying respirators with cartridges/canisters which filter out chemicals and gases. Other respirators protect by supplying clean respirable air from another source. Respirators of this type include self-contained breathing apparatus, which include their own air supply.

43.3. General Requirements

Controlling Employer Responsibilities:

1. Ensure all common areas at the worksite (e.g. roadways, walkways, etc.) are maintained to minimize exposure to silica dust.

2. Ensure employers, including trade partners (when required) have a written exposure control plan to manage the work.

3. Discuss means for mitigation and elimination to include operation of water integrated systems and source of water, dustless equipment, ventilation, and other engineering / administrative controls.

4. Ensure proper coordination between trade partners to minimize exposure to dust at the site.

Trade Partner Employer Responsibilities:

1. Ensure that the Trade Partner Exposure Control Plan is fully and properly implemented.

2. Ensure that the worksite has a competent person present at all times of the work. The trade partner's written plan shall define who the competent person is for employer.

3. Provisions for water are defined and communicated in advance, in writing, with the controlling employer. Note, if the trade partner is not the controlling employer.

4. Ensure that materials and equipment selected for the project are optimal for work conditions and employee training is fully and properly implemented.

5. A copy of the Exposure Control Plan shall be present on this project site and made readily available for examination and copying, upon request.

6. Ensure that supervisors and employees are trained in the proper use of engineering controls, administration controls, and work practices as defined in their plan and/or table 1, if applicable.

7. Review and evaluate the effectiveness of the Exposure Control Plan at least annually and update it as necessary.

Supervisor Responsibilities:

1. Provide adequate training and instruction to employees on the implementation of the Exposure Control Plan.

2. Ensure all employees know who the designated competent person is for their related scope of work.

3. Plan, select and implement the appropriate control measures to mitigate dust exposure.

4. Ensure that employees using respirators have been properly trained and fit-tested, and that the results of all related tests are recorded and provided in a timely manner, when requested.

5. Ensure that control methods, including engineering controls and respirators are properly maintained. Provide regular inspections of the work area.

6. Ensure work is conducted in a manner that minimizes and adequately controls the risk to employees and others. This includes ensuring employees use the available engineering controls and implement good work practices.

7. Ensure the exposure control plan has been effectively communicated to employees, controlling employers and any other relevant parties working near the work location.

8. Enforce the Exposure Control Plan and ensure it is fully and properly implemented.

9. Inspect the work area regularly.

Employee Responsibilities:

1. Read, understand, and comply with the control methods set out in the Exposure Control Plan.

2. Complete training provided by employer.

3. Perform work tasks / activities in accordance to the plan and safe work practices defined by the employer.

4. Stop working if the plan is not fully and properly implemented.

5. Use the appropriate equipment (including attachments), PPE – respiratory protection and management techniques for housekeeping.

6. Report to the Supervisor any unsafe condition / act or changes in the work.

7. Report to the supervisor any equipment or tool defect.

What is Silica and where does it come from?

1. Crystalline silica is an important industrial material used in the construction industry.

2. Quartz, the most common form of silica, is a component of: sand, rock, concrete, brick, block and mortar. Refer to SDS information for percentage of content.

3. Silica dust is hazardous when very small ("respirable") particles are inhaled. These respirable dust particles can penetrate deep into the lungs and bring about disabling and sometimes fatal conditions including cancer, lung effects, immune effects and kidney effects.

4. Employees may be exposed to silica at the worksite when cutting, sawing, drilling, chipping, operating crushing machines, mixing concrete and mortar, sweeping, and during demo etc.

43.4. Six Requirements for implementing an effective Silica Exposure Control Plan

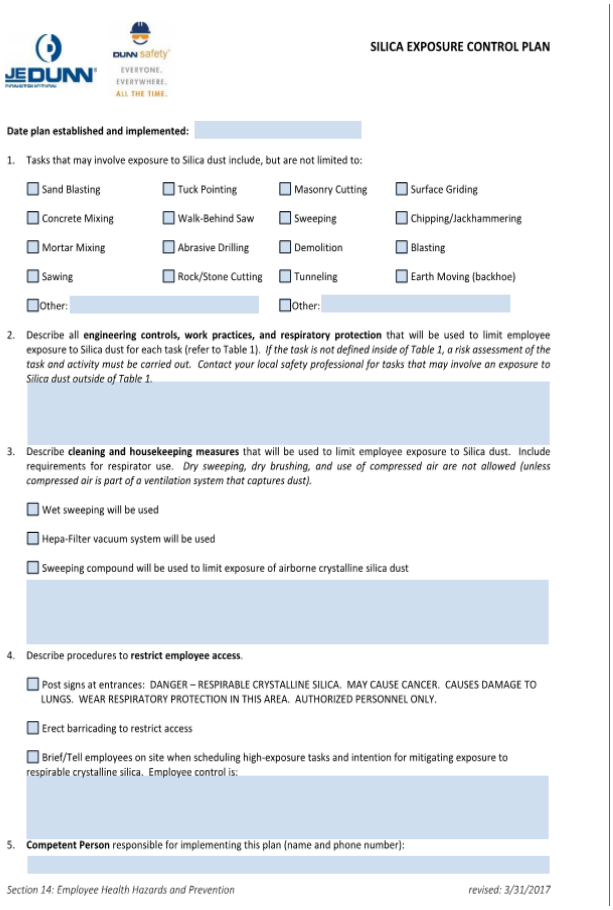
REQUIREMENT ONE: Each employer shall provide a written exposure control plan that, at a minimum, contains the following elements:

1. A description of the workplace tasks that involve exposure to silica.

2. The protective steps used to limit employee exposure for each task. JE Dunn will follow Table 1 outlined in the annex below or perform a risk assessment for tasks not defined in the table.

3. The housekeeping measures being taken.

4. Procedures used to restrict access to work areas, when necessary, to minimize the number of employees exposed and the level of exposure.



SILICA EXPOSURE CONTROL PLAN

Date plan established and implemented:

1. Tasks that may involve exposure to Silica dust include, but are not limited to:

☐ Sand Blasting	☐ Tuck Pointing	☐ Masonry Cutting	☐ Surface Griding
☐ Concrete Mixing	☐ Walk-Behind Saw	☐ Sweeping	☐ Chipping/Jackhammering
☐ Mortar Mixing	☐ Abrasive Drilling	☐ Demolition	☐ Blasting
☐ Sawing	☐ Rock/Stone Cutting	☐ Tunneling	☐ Earth Moving (backhoe)
☐ Other:		☐ Other:	

2. Describe all **engineering controls, work practices, and respiratory protection** that will be used to limit employee exposure to Silica dust for each task (refer to Table 1). *If the task is not defined inside of Table 1, a risk assessment of the task and activity must be carried out. Contact your local safety professional for tasks that may involve an exposure to Silica dust outside of Table 1.*

3. Describe **cleaning and housekeeping measures** that will be used to limit employee exposure to Silica dust. Include requirements for respirator use. *Dry sweeping, dry brushing, and use of compressed air are not allowed (unless compressed air is part of a ventilation system that captures dust).*

☐ Wet sweeping will be used

☐ Hepa-Filter vacuum system will be used

☐ Sweeping compound will be used to limit exposure of airborne crystalline silica dust

4. Describe procedures to **restrict employee access**.

☐ Post signs at entrances: DANGER – RESPIRABLE CRYSTALLINE SILICA. MAY CAUSE CANCER. CAUSES DAMAGE TO LUNGS. WEAR RESPIRATORY PROTECTION IN THIS AREA. AUTHORIZED PERSONNEL ONLY.

☐ Erect barricading to restrict access

☐ Brief/Tell employees on site when scheduling high-exposure tasks and intention for mitigating exposure to respirable crystalline silica. Employee control is:

5. **Competent Person** responsible for implementing this plan (name and phone number):

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*Employees should have access to plan at any time.

**Employer will review and evaluate the plan for effectiveness at least annually and update it as necessary.

REQUIREMENT TWO: Must designate a competent person to fully and properly implement the written exposure control plan.

REQUIREMENT THREE: Restrict housekeeping practices that increase silica exposure.

1. No dry brushing or sweeping, unless methods such as wet sweeping and HEPA-filtered vacuuming are not feasible. Use of sweeping compound is a way to keep respirable dust down to reasonable levels.

2. Prohibit the use of compressed air to clean surfaces or clothing, unless compressed air is used with a ventilation system that can effectively capture the dust cloud or no other cleaning method is feasible.

REQUIREMENT FOUR: Medical surveillance and exams

1. A physician or (PLHCP) at no cost to employee will be offered to employees who will need to wear a respirator for 30 or more days per year.
    a. Medical exams will include Initial (Baseline), Periodic, and Specialist referrals:
    b. Initial (Baseline) Within 30 days after initial assignment or when it becomes known that a person will need to wear a respirator for more than 30 days in a year.
    c. Exam includes but is not limited to: Medical work history focused on silica exposure, physical, chest X-ray, pulmonary function test, latent tuberculosis test and other tests deemed appropriate by PLHCP.
    d. Periodic means every 3 years (or more if PLHCP requires) - Exam includes, same as initial exam (minus tuberculosis test)
    e. Referral to Specialist must be done within 30 days after receiving the (PLHCP's written opinion) - If the PLHCP's written medical opinion indicates an employee should be examined by a specialist, the employer must make available a medical examination by a specialist.

REQUIREMENT FIVE: Training

1. Training is required of each worker who will be exposed to hazards of respirable crystalline silica. This is part of the hazard communication standard and we consider this training **Silica Awareness Training**

Competent person training to those designated by employer and who meet the criteria outlined.

Respiratory protection training: Respiratory evaluations, fit testing, and respiratory protection training must be done prior to exposures requiring the use of a respirator.

REQUIREMENT SIX: Maintain proper recordkeeping of Air monitoring data, Objective data and Medical Surveillance records.

*All equipment, materials and labor defined in the exposure control plan is required of JE Dunn and trade partners.

Section 44: Hazard Communication

To protect workers from hazards presented by hazardous chemicals in the workplace, JE Dunn has developed a comprehensive hazard communication program which aligns with the Globally Harmonized System of

Classification and Labeling of Chemicals (GHS). This program includes a written hazard communication program for the workplace, a list of all hazardous chemicals present at the workplace, proper labeling of all containers of chemicals in the workplace, a file of all Safety Data Sheets (SDS) maintained at the workplace and provide all employees with information and training on all hazardous chemicals at their workplace.

44.1. Hazard Determination

The Company will not make a determination if a chemical is hazardous. They will rely on the evaluation performed by the manufacturer or material supplier and follow the recommendations from the Safety Data Sheets (SDS). All chemicals shall be segregated appropriately, labeled, stored in the proper manner, and inspected as required.

44.2. Chemical Lists

1. Safety Data Sheets (SDS) shall be submitted to JE Dunn prior to mobilization.

2. Copies of the SDS for materials or chemicals used on the project are available online and in the safety trailer. SDS can also be obtained by calling 1-888-362-7416 24hrs/day-7 days/week to request a copy be faxed or emailed to the project.

3. SDS's will be made available to all employees, their representatives or Trade Partners for review.

4. If a SDS cannot be found for a chemical or product, call the Safety Department for assistance.

5. Purchasing shall make requests for SDS's on all purchases. SDS's shall be forwarded to the safety department. If SDS's are not sent with the shipment, a letter shall be sent to the manufacturer requesting the SDS. A file shall be maintained for follow-up that SDSs request letters.

44.3. Labels and Other Forms of Warning

1. Each container, regardless of size, shall be labeled, tagged or otherwise marked to show the identity of the hazardous chemicals and the appropriate warnings.

2. Field supervisors shall be responsible for seeing that all portable containers used in their work areas are labeled with identity and hazard warnings. If the chemical is transferred to another container, that container must be properly labeled with its contents and appropriate hazards. For help with labeling, please contact the safety department.

3. All incoming materials shall be checked for the following:

a. Name of the chemical/product identifier
b. Signal word
c. Pictograms
d. Appropriate hazard warnings
e. Precautionary statement
f. Name and address of the responsible party.

44.4. Employee Training and Other Information

1. The Superintendent shall be responsible for ensuring that every employee is trained in the following subjects:
    a. Explanation of the Hazard Communication Standard.
    b. Introduction to the written Hazard Communication Program.
    c. Availability and interpretation of SDS.
    d. Labeling procedures and how to interpret them.
    e. Physical and health hazards of chemicals in the workplace.
    f. Proper protective measures to undertake when exposed to hazard.
    g. Where and how to obtain additional information.
    h. The safety department, upon request, will assist the Superintendent in the training of employees.
    i. Posters shall be placed on site informing workers of the location of the written program and the SDS's.

44.5. Multi-Employer Worksites

1. Each Trade Partner working on site must have a Hazard Communication Program and corresponding Safety Data Sheets available on site. A copy of their program must be placed in our project office along with all programs. The program must remain on site as long as they have material on site.

2. All Trade Partners shall submit all SDS sheets to the JE Dunn Safety Manager for review prior to bringing the chemical on site.

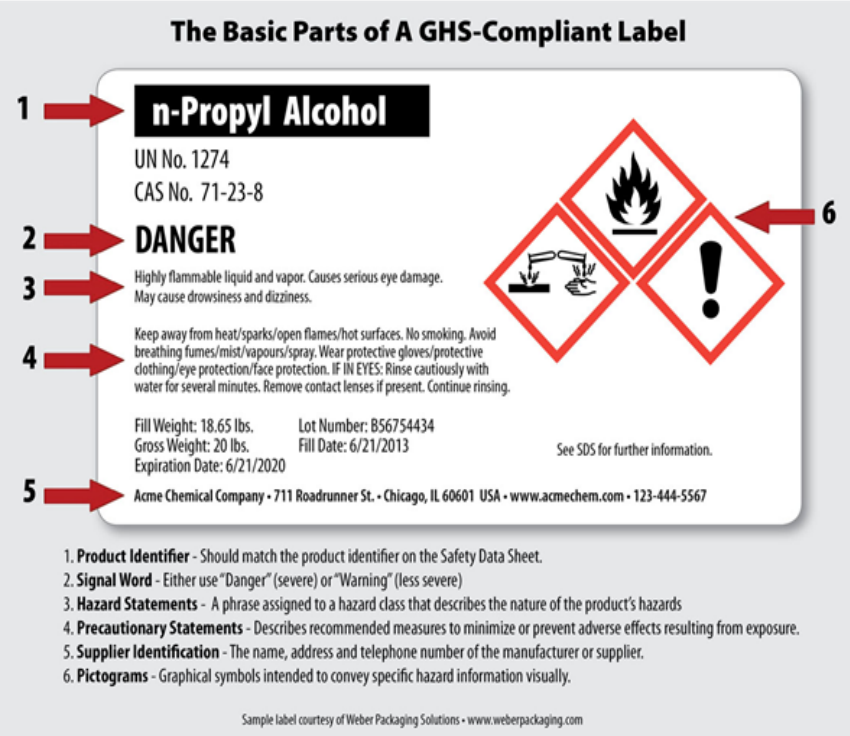
44.6. Work Performed in Other Facilities

1. If work is performed in an active facility owned by someone else, that owner has a responsibility to provide JE Dunn the following:
    a. The facilities Hazard Communication Program.
    b. A list of hazardous materials we may encounter along with the proper SDS's.
    c. The system they use for identifying chemicals, pipes, tanks, etc.
    d. During the course of work, if we encounter materials, tanks, pipes, vessels, etc. that JE Dunn is unaware of their contents, the owner and/or his representative will be notified immediately to provide the needed information before work is allowed to resume.

44.7. Non-Routine Tasks

1. Occasionally, workers are required to perform tasks that would be considered non-routine. An example would be requiring a laborer to spray a special concrete sealer on the inside of a vault (enclosed space). The task of sealing concrete in itself would not be considered non-routine but the fact that he would be in an enclosed space would qualify this as a non-routine task. Another example would be requiring a laborer to remove existing plant piping that at one time may have contained hazardous chemicals that he would normally not be required to handle. If a worker is required to perform a task that would be considered non-routine, the Superintendent shall ensure that:
    a. The worker is trained in the hazards associated with this task.
    b. The personal protective equipment available is sufficient for the potential hazards encountered.
    c. All SDS's associated with the work are available and precautions followed.





Section 45: Hot/Cold Weather Injury Prevention

HIIP

Cold Weather Work/Rest Plan

45.1 Purpose and Scope

JE Dunn Construction Company wants to ensure the health and safety of all employees, and particularly those employees working outdoors. This plan applies to the control of risk of occurrence with respect to heat and cold illnesses and is applicable to all employees and employers. Consequently, we require our employees and Trade Partners to comply with the plans & procedures.

45.2 Weather Monitoring

1. The safety department will monitor the weather and communicate extended weather forecast. Weather forecasts can be checked with the aid of the internet (http://www.nws.noaa.gov/), via cell phone application or contacting the safety department.

2. A thermometer will be used at the jobsite to monitor sudden increases in temperature.
    a. Once the temperature exceeds 80 degrees Fahrenheit, shade structures will be opened and made available to the workers.
    b. Once the temperatures reach 95 degrees F, additional preventive measures such as the high heat procedures will be implemented.
    c. While there isn't a single universal "trigger" temperature, employers should begin monitoring and planning for cold weather safety when temperatures are cold enough to cause a risk of cold stress.
    d. If the outside temperature drops to -10 degrees Fahrenheit or less, all outside work activities at the project site can be canceled at the discretion of JE Dunn leadership.

3. Other devices, such as handheld smart phones with OSHA heat app, handheld anemometers with temperature capabilities, or other typical types of thermometers, including WBGT devices utilized to follow weather conditions.

4. Supervisors will communicate weather conditions, including any changes that may affect the worker.

45.3 Hot Weather Injury Definitions

Acclimatization: temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for at least two hours per day in the heat.

Heat illness: a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

Environmental risk factors for heat illness: working conditions that create the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as ground, air movement, workload severity and duration, protective clothing and personal protective equipment worn by employees.

Personal risk factors for heat illness: factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.

Shade: The blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless that car is running with air conditioning. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use.

Temperature: the dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer to measure the outdoor temperature in an area where there is no shade. While the temperature measurement must be taken in the area with full sunlight, the bulb or sensor of the thermometer should be shielded while taking the measurement, e.g., with the hand or some other object, from direct contact by sunlight.

45.4 High-Heat Procedures

1. The employer shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit. These procedures shall include the following to the extent practicable:
   a. Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.
   b. Observing employees for alertness and signs or symptoms of heat illness.
      i. Supervisor or designee observation of 20 or fewer employees, or
      ii. Mandatory buddy system, or
      iii. Regular communication with sole employees such as by radio or cellular phone, or
      iv. Other effective means of observation.
   c. Designating one or more employees on each worksite as authorized to call for emergency medical services and allowing other employees to call for emergency services when no designated employee is available.
   d. Reminding employees throughout the work shift to drink plenty of water.
   e. Pre-shift meetings before the commencement of work to review the high-heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest, when necessary.

2. Safety action plan:
   a. Safety and Supervisors will monitor the weather forecast for when outdoor temperature is projected to reach or exceed 95 F.
   b. Crew leaders will be provided with 2-way radios for communication with other crew leaders, onsite supervision and the project office trailer staff.
   c. Cellphone communication can be used in lieu of 2-way radios to communicate effectively in the project. (verify coverage and reliability)
   d. Crew leaders and onsite supervision will frequently communicate with crews in addition to monitoring employees for signs/symptoms of heat illness. Immediate action shall be taken if an employee presents signs/symptoms of heat stress.
   e. All new employees will be assigned to an experienced work partner to monitor their condition for the first 14 days of employment. Most employees on the site will be working in crews of 2 to 6 employees.
   f. Employees that show signs of heat illness will be taken to the first aid office for additional monitoring, recovery, and retraining. Emergency Services will be notified if the employee does not show immediate signs of recovery.

g. Morning tailgate meetings (JSA's) identifying possible risks shall be done during times of high heat or heat waves. Preventive measures will be discussed in these meetings and actions noted.

h. The Supervisor will encourage frequent drinking of water.

i. The supervisor will ensure the appropriate amount of shade is available and can accommodate the crew.

45.5 Provisioning of Water

1. Employees shall have access to potable drinking water, including but not limited to the requirements that it be fresh, pure, suitably cool, and provided to employees free of charge. In addition, water shall be located as close as practicable to the areas where employees are working. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. Employees should be instructed on the importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.

2. Safety action plan:
    a. Employees will be assigned to multi-person crews. Trade Partners are expected to provide each crew with an 80-quart portable ice chest filled with ice and bottled water at the start of each shift.
    b. During the morning huddle and stretch and flex activity, employees will be encouraged to drink a bottle of water prior to starting work and will be reminded to hydrate on a regular basis to prevent heat illness. This will be done through each Supervisor.
    c. Employees will also be provided with single serve electrolytes replacement liquids/powders (Sqwincher or Qwik Serv) as needed in addition to the bottled water.
    d. A crew of 2 workers will deliver additional bottled water and ice to the work crews, as needed, and throughout the shift. They will also pick up empty water bottles and dispose them in recycling containers.
    e. Crew leader, in addition to the general foreman and safety personnel will monitor the water consumption of the employees to ensure that they are hydrating on a continuous basis throughout the shift.
    f. Effective and regular communication will be used to remind employees to drink water.
    g. Employees that show signs of heat illness will be taken to the first aid station for additional monitoring, recovery, and retraining. Emergency Services will be notified if the employee does not show immediate signs of recovery.

45.6 Access to Shade

1. Shade shall be present when the temperature exceeds 80 degrees Fahrenheit. When the outdoor temperature in the work area exceeds 80 degrees Fahrenheit, the employer shall always have and maintain one or more areas of shade while workers are present that are either open to the air or

provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate employees on recovery or rest periods, so that they can sit in a normal posture fully in the shade while maintaining a social distance of at least 6'. The shade shall be located as close as practicable to the areas where employees are working. Subject to the same specifications, the amount of shade present during meal periods shall be at least enough to accommodate the number of employees on the meal period who remain on site.

2. Employees shall be allowed and encouraged to take preventative cool-down rests in the shade when they feel the need to do so to protect themselves from overheating. Such access to shade shall be always permitted. An individual employee who takes a preventative cool-down rest (A) shall be monitored and asked if he or she is experiencing symptoms of heat illness; (B) shall be encouraged to remain in the shade; and (C) shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than 5 minutes in addition to the time needed to access the shade.

3. If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, the employer shall provide appropriate first aid or emergency response according to subsection 45.7.2(f) of this section.

4. Safety action plan:
    a. Trade Partners will be provided with a foldable/portable shade canopy (e.g. 12'x12', 10'x10', 8'x8' or other) for each crew, that they can move along with them as the work location changes throughout the shift. The type of structure may vary in size/type/style, but all must meet the intent of the standard, i.e. code requirements.
    b. Folding chairs, or equivalent, must be provided.
    c. Crews must have enough shade to accommodate those on a break period. In addition, shade for all employees who select to remain in the general area of work or in areas designated for break, i.e. recovery and rest, shade must be available and present to accommodate personnel. Supervisors will monitor both location and accommodation to ensure a safe environment is in place. Moreover, crews shall be encouraged to take cool-down rest breaks in the shade. Individuals taking a preventative cool-down rest period shall be monitored and asked if they are experiencing symptoms of heat illness.
    d. Employees that show signs or report symptoms of heat illness will be taken to the cool down location or first aid office for additional monitoring, recovery, retraining. Emergency Services will be notified if the employee does not show immediate signs of recovery.

45.7 Emergency Response Procedures

1. The employer shall implement effective emergency response procedures including:
    a. Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor or emergency medical services when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable. If an electronic device will not furnish reliable communication in the work area, the employer will ensure a means of summoning emergency medical services.

b. Responding to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.
    i. If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor shall take immediate action commensurate with the severity of the illness.
    ii. If the signs or symptoms are indicators of severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), the employer must implement emergency response procedures.
    iii. An employee exhibiting signs or symptoms of heat illness shall be monitored and shall not be left alone or sent home without being offered on-site, first aid and/or being provided with emergency medical services in accordance with the employer's procedures.
c. Contacting emergency medical services and, if necessary, transporting employees to a place where they can be reached by an emergency medical provider.
d. Ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

2. Safety Action Plan:
    a. Reference the Crisis Emergency Action Plan for reference.
    b. Prior to assigning workers to a particular area of the project, an assessment should be made taking into consideration all relevant aspects for emergency preparedness and response.
    c. All Supervisors will have phone communication devices for this purpose. If phone devices are not reliable, then radio devices and communication must be put in place.
    d. All Supervisors shall know how to communicate with the on-site first aid personnel i.e. trained EMT, Medic, First-aid person. Each employer shall have personnel trained in first aid, CPR and AED on site and in close proximity to the workers.
    e. If an emergency response is necessary, anyone on site may contact 911 emergency services.
    f. When an employee is showing symptoms of possible heat illness, steps will be taken immediately to keep stricken employees cool and comfortable once emergency service responders have been called (to reduce progression to more serious illness). Under no circumstance will affect employee be left unattended.
    g. During a heat wave or hot temperatures, workers will be reminded to promptly report to their supervisor any signs or symptoms they are experiencing.
    h. Employee and supervisor training will include every detail of the written procedures.

45.8 Handling of a Sick Employee

1. When an employee displays possible signs or symptoms of heat illness, a trained first aid worker or supervisor will check the sick employee and determine whether resting in the shade and drinking cool water will suffice. Or, if emergency service providers will need to be called. If possible, the employee should be seen by the site EMT / Medic for assistance.

2. Emergency service providers will be called immediately if the employee displays any symptoms of heat illness (decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, red and hot face) or does not look okay after drinking cool water and resting in shade. While ambulances are in route, first aid will be initiated. Do not let sick workers leave the site. And, if in doubt, contact local ambulatory and have medic observe employees with symptoms.

45.9 Acclimatization

1. All employees shall be closely observed by a supervisor or designee during a heat wave. For purposes of this section only, "heat wave" means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.
    a. An employee who has been newly assigned to a high-heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.
    b. At the time of orientation, the employer will identify those employees who have not been acclimated to the work environment.
    c. Foreman shall monitor the employee(s) in their crew and discuss using a buddy system to be on the lookout for possible signs and symptoms.
    d. Weather will be monitored, daily, by safety and site supervisors. Safety will communicate to supervisors the day's temperatures and weather forecast. In addition, safety and supervisors will be on the lookout for any sudden heat waves or spikes in temperatures.
    e. During a heat wave, or periods where temperatures may spike, the workday may be shortened.
    f. During a heat wave, employees will be observed closely to be on the lookout for possible symptoms of heat illness.
    g. Employees and supervisors will be trained on the importance of acclimatization.

45.10 Employee and Supervisor Training

1. Employees will be provided the following training prior to being assigned to Supervise other workers. Supervisory and non-supervisory personnel will be trained in the heat illness prevention procedures, including their responsibilities as a supervisor. In addition, topics will include but not be limited to:
    a. Provisioning for water
    b. Shade
    c. Cool-down rest periods
    d. First aid
    e. Employees' rights under the standard without retaliation.
    f. When temperature is expected to exceed 80 degrees F, short tailgate meetings will be held to reinforce the importance of heat illness prevention.
    g. Environmental and personal risk factors for heat illness as well as the added effects of physical labor, clothing and PPE.
    h. Importance of continuing to hydrate before and after the work shift.
    i. Employer procedures for complying with the requirements of this standard.

j. Importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot.
k. Importance of acclimatization.
l. Different types of heat illness and common signs and symptoms.
m. Importance of immediately reporting, through the proper chain of command, any signs of heat illness in themselves or co-workers.
n. Employer's procedures for responding to signs and symptoms of heat illness, including how emergency medical services will be provided should they become necessary.
o. Employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider.
p. Employer's procedures for ensuring that, in the event of emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.
q. Employee responsibilities, such as preparing for the work environment, causes of heat illness, and prompt notification process.

2. Supervisor Training:
    a. Prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness effective training on the following topics shall be provided to the supervisor.

3. Employee training requirement:
    a. Procedures to follow when implementing applicable provisions HIPP.
    b. Procedures to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.
    c. How to monitor weather reports and how to respond to hot weather advisories.

45.11 Cold Weather Injury Definitions

Chilblains: Small, red, itchy or tender skin lesions caused by prolonged exposure to damp, non-freezing old. They are an inflammatory response to repeated cold exposure and poor circulation.

Cold Stress: trench foot, frostbite, and hypothermia.

Frostbite: is caused by the freezing of the skin and tissues. Frostbite can cause permanent damage to the body, and in severe cases can lead to amputation. The risk of frostbite is increased in people with reduced blood circulation and among people who are not dressed properly for extremely cold temperatures.

Frostnip: A mild, superficial form of frostbite where the skin is cold, red, and numb but does not freeze or cause long-term damage.

Hypothermia: occurs when the normal body temperature (98.6°F) drops to less than 95°F. Exposure to cold temperatures causes the body to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up the body's stored energy. The result is hypothermia, or abnormally low body temperature. Hypothermia is most likely at very cold temperatures, but it can occur even at cool temperatures (above 40°F) if a person becomes chilled from rain, sweat, or immersion in cold water.

Immersion/Trench Foot: Trench foot is a non-freezing injury of the feet caused by prolonged exposure to wet and cold conditions. It can occur in temperatures as high as 60°F if feet are constantly wet. Injury occurs because wet feet lose heat 25 times faster than dry feet.

45.12 Cold weather Procedures

1. The employer shall implement cold weather procedures when the temperature equals or less than 35 degrees Fahrenheit. These procedures shall include the following to the extent practicable:
    a. Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.
    b. Observing employees for alertness and signs or symptoms of cold weather injuries.
        i. Supervisor or designee observation of 20 or fewer employees, or
        ii. Mandatory buddy system, or
        iii. Regular communication with sole employees such as by radio or cellular phone, or
        iv. Other effective means of observation.
    c. Designating one or more employees on each worksite as authorized to call for emergency medical services and allowing other employees to call for emergency services when no designated employee is available.
    d. Reminding employees throughout the work shift to take frequent breaks to warm up and check circulation of the extremities.
    e. Pre-shift meetings before the commencement of work to review the cold weather work procedures, encourage employees to drink plenty of water, and remind employees of their right to take a warm-up rest, when necessary.

45.13 Cold Weather Emergency Response Procedures

1. **Frostbite** *First Aid*
    a. Call for the on-site medic.
    b. Follow the recommendations described below for hypothermia.
    c. Protect the frostbitten area, e.g., by wrapping loosely in dry cloth and protect the area from contact until medical help arrives.
    d. DO NOT rub the affected area, because rubbing causes damage to the skin and tissue.
    e. Do not apply snow or water. Do not break blisters.
    f. DO NOT try to re-warm the frostbit area before getting medical help, for example, do not use heating pads or place in warm water. If a frostbitten area is rewarmed and gets frozen again, more tissue damage will occur. It is safer for the frostbitten area to be re-warmed by medical professionals.

g. Give warm sweetened drinks if alert (no alcohol).

2. **Immersion/Trench Foot** First Aid
   a. Remove affected workers from the work zone to the wellness trailer.
   b. Remove wet shoes/boots and wet socks.
   c. Dry the feet and avoid working on them.
   d. Keep affected feet elevated and avoid walking. Get medical attention.

3. ***Hypothermia*** First Aid
   a. Call for on-site medical aid.
   b. Move the worker to a warm, dry area.
   c. Remove any wet clothing and replace it with dry clothing. Wrap the entire body (including the head and neck) in layers of blankets; and with a vapor barrier (e.g. tarp, garbage bag) Do not cover the face.
   d. If medical help is more than 30 minutes away:
   e. Give warm sweetened drinks if alert (no alcohol), to help increase the body temperature. Never try to give a drink to an unconscious person.
   f. Place warm bottles or hot packs in armpits, sides of chest, and groin. Call 911 for additional rewarming instructions.

45.14 Employee and Supervisor Cold Weather Training

1. Employees will be provided with the following training prior to being assigned to supervise other workers. Supervisor and non-supervisory personnel will be trained in cold weather injury symptom recognition and the responsibilities of supervisors, in addition to:
   a. Proper clothing selection for wet and windy conditions.
   b. The "General Rule" of staying warm is "***COLD***".

C- Keep it clean.
O- Avoid overheating
L- Wear it loose in layers
D- Stay Dry

Section 46: Soft Tissue Injury Prevention

46.1. Stretch and Flex

1. Warming up and stretching the eyes, neck and head, shoulders, back, arms, wrists, hands, fingers, and feet can prevent repetitive stress injury, or even relieve sore muscles and tendons.

2. All Trade Partners, (including additional tier subs), are required to participate in a daily stretch and flex program to minimize occupational-related sprains and/or strains at the beginning of each day's work.

Mid-day stretch and flex based upon work environment and specific activities may be deemed necessary.

46.2. MSD & CTD Awareness Policy

1. Trade Partner shall provide a Musculoskeletal Disorder (MSD) and Cumulative Trauma Disorder (CTD) Injury Prevention Programs. In an effort to prevent MSD and CTD injuries, all Trade Partners shall have a process in place that, at a minimum, includes the following items:
    a. Awareness/Education: All employees assigned to the project, including field, management, and office support shall be provided training, that is designed to increase awareness and understanding of risk factors that may lead to MSD/CTD injuries, and of how proper ergonomics can prevent such injuries.
    b. Risk Factor Assessment and Mitigation: An MSD/CTD risk factor assessment and mitigation plan shall be completed for all major scopes of work. The assessment shall take into consideration relevant job tasks, tools used, work procedures, workstations, and equipment operation where exposure may exist. Since the number one cause of MSD/CTD injuries are related to manual material handling, special emphasis shall be placed on their reduction of manual handling of material, equipment, and tools.
    c. JE Dunn's Nothing Hits the Ground initiative shall be considered to MSD/CTD prevention. Nothing Hits the Ground limits multiple handling of materials and advocates innovative methods for employees to work in neutral positions. All efforts shall be made to bring materials and equipment on pallets and adequate carts for storage as well as movement and workstations set up in elevated position with debris bins present for excess scrap disposal.

Fatigue Management

Section 47: Overtime Policy

1. Trade Partner shall assure that no craft or field management exceed the following requirements:
    a. Normal work hours should not exceed 60 hours per week and workers that work 12 consecutive days must receive 2 consecutive days off
    b. Project Management is exempt
    c. Work in excess of 60 hours per week must be pre-approved by a JE Dunn Safety representative and may not include any high hazard operations (rigging, confined space, etc.)
    d. If projects require work in excess of 60 hours per week, a formal fatigue risk assessment plan must be in place that is Trade Partner specific and must address the risk of fatigue and how worker monitoring will occur.
    e. Other variables that must be taken into consideration in limiting work hours and overtime are: health and physical condition of the individual worker, excessive heat, work area, type of work, etc.

2. The site Fatigue Management Plan requires that a form be completed for a given crew that plans to work in excess of the 60-hr site requirement. The following conditions must be met for approval:
    a. All members on the crew must complete a documented tool box talk on fatigue awareness and recognize prior to the start of work.
    b. The work plan must be attached to the submission, and submitted 48 hours prior to shift
    c. No high-risk work is permitted when any of the crew has worked in excess of 60 hours
    d. The JSA must be reviewed and signed off by the General Foreman, Foreman, and Company Safety Representative.
    e. A Company Safety Representative must be on-site during times of increased work hours
    f. Approval will be given for up to one month but is contingent on the completion of a formal audit of the crew on a weekly basis by a Company Safety Representative.
    g. Weekend work must be submitted at least two days in advance for review and approval from the Safety and General Superintendent.

Fatigue Risk Assessment and Approval Form

Date:	Job #:	Project Name:

This assessment must be performed for each Activity/Trade that exceeds JE Dunn Constructions Acceptable work hour criteria.

Elevated

-If any work activity falls into the Yellow Zone of the Fatigue Risk Matrix, your senior project superintendent must approve the Fatigue Risk Assessment.

Restricted

-If any work activity falls into the Red Zone of the Fatigue Risk Matrix, your senior project superintendent, and a JE Dunn PX/ Vice President or JE Dunn General Superintendent must approve the Fatigue Risk Assessment.

-Work exceeding 12hrs in a day, 60 hrs in a week, or working 12 consecutive days, will be considered Red Zone work and will require to then have two consecutive days off.

-Work scheduled where workers have less then 8hrs in-between shifts will be considered Red Zone Work.

Date Start	Date End	Activity/Trade	Risk Zone	Mitigation
			Yellow Red	
			Yellow Red	
			Yellow Red	
			Yellow Red	
			Yellow Red	
			Yellow Red	
			Yellow Red	
			Yellow Red	

Project Gen. Superintendent (All Yellow & Red Zone Work)	Print Name	Signature
PX/ Vice President Approval (All Red Zone Work)	Print Name	Signature

Please mark-up the matrix accordingly and submit for approval.		Weekly Hours								
Risk Ranking	**Activity/Trade**	40	45	50	55	60	65	70	75	80
High Risk	Steel Erection									
	Rebar									
	Concrete Placement									
	Formwork									
	Formwork Stripping									
High Risk	Scaffolding									
Medium Risk	Crane Operator									
	Personnel Fall Protection									
	Confined Space Entry									
	Energized Electrical									
	General Laborer									
	Heavy Equipment Op.									
	Concrete Finishing									
	Finish Carpentry									
	Dry Wall/Metal Stud									
Medium Risk	Wet/Dry Mechanical									
Low Risk	General Electrical									
	Brick/Block Work									
	Roofing									
	Waterproofing									
	Fireproofing									
	Non-Working Supervisor									
Low Risk	Office Support									

Environmental

Section 48: Environmental Control Plan

Dust Control Plan

Dust Control Log

48.1. Environmental Policy and Commitment

JE Dunn Construction Company and sub-contractors are expected to consider and comply with environmental requirements when performing any work. Environmental awareness promotion is designed to improve efficiency and effectiveness of the preventive management system. JE Dunn Construction Company bases the environmental plan on the fundamental principles that are in preventive measures, and applies internal procedures and good management practices to reduce and mitigate environmental impacts. We are also committed to the continuous improvement principle. Procedures are established and implemented to:

1. Identify, respect and comply with the current laws and legal regulations applicable to the environment.

2. Identify and evaluate potential impacts to the environment that result from construction activities and operations.

3. Implement preventive and corrective measures derived from aspects and impacts evaluation that help to avoid impacts to the environment.

4. Provide Environmental planning and resources sufficient for scope of work and apply best management practices for monitoring and controlling risks.

5. Reduce, Reuse and Recycle non-hazardous waste where possible and continually improve upon this initiative.

48.2. Roles and Responsibilities

1. The Environmental Control Plan Administrator is the EHS assigned responsible for the project. (refer to organizational chart)

2. The Plan Administrator, referred to as “Plan”, has the authority and responsibility for implementing the provisions of this “Plan” for JE Dunn Construction Company.
    a. Implement and enforce the plan requirements.
    b. Conduct and oversee training.
    c. Resolve environmental issues in a timely manner.
    d. Review subcontractor plans and ensure adherence to client requirements.

e. Perform regular inspections.
f. Report on environmental issues, incidents and changes to customer.

3. All managers and supervisors are responsible for implementing and maintaining the Environmental Control Plan in their work areas and for answering worker questions about the Plan. A copy of this Plan is available for each manager and supervisor.

4. Management is also responsible for ensuring that all applicable Environmental plan requirements are clearly communicated and understood by all employees. Managers and supervisors are expected to enforce the plan requirements to ensure compliance with requirements.

5. All employees are responsible for using best work practices and assisting in maintaining a work environment free of impact against the environment.

6. Our responsibility to ensure workers comply with the Environmental Control Plan requirements, include:
    a. Informing workers of the provisions of this plan.
    b. Acknowledging and acting upon the aspects and impacts related to activities.
    c. Recognizing work practices that may improve the aspects / impacts on the project.
    d. Provide training for new workers and whose performance is deficient.
    e. Discipline worker(s) for failure to comply with Environmental Plan and best work practices.
    f. Provide frequent inspections in accordance with plan requirement

48.3. Communication

1. We recognize that open two-way communication between management and staff on Environmental issues is essential for a successful control plan. The following system of communication is designed to facilitate a continuous flow of information between management and staff in a form that is readily understandable and consists of the following items:
    a. New worker orientation including a discussion of Environmental requirements, policies and procedures.
    b. Review of our Environmental Control Plan, including Project overall Plan.
    c. Workplace Environmental training.
    d. Regularly scheduled EHS meetings, such as weekly tool box talks, daily huddles, pre-task plan meetings, and joint EHS committee meetings.
    e. Effective communication between workers and supervisors, including translation where appropriate.
    f. Posted or distributed environmental information.
    g. A system for workers to anonymously inform management about workplace hazards through the JE Dunn call in line and suggestion boxes located on site.
    h. A labor/management EHS committee that meets regularly, prepares written records of the EHS committee meetings, reviews result of the periodic scheduled inspections, reviews investigations of incidents, exposures and non-conformities. In addition, the committee shall make suggestions to management for the prevention of future incidents, review investigations

of possible hazardous conditions and materials, and submit recommendations to assist in the recognition, planning and evaluation of aspects and impacts.

i. Communication of environmental issues shall be channeled through the JE Dunn Construction Company Supervision and Plan Administrator respectively. The Plan Administrator will then promptly communicate to client, as described in contract requirements.

2. For Incidents, immediate notification shall be made to JE Dunn EHS and General Superintendent and then directly to the Environmental (POC) as defined in the overall site Environmental Control Plan.
3. **Storm Water Pollution Prevention Plan (SWPPP) is managed by Olsson, If more follow-up is needed, please request from JE Dunn Management Team.**

48.4. Guidelines to Prevent Environmental Impact

Chemical Management

1. Safety Data Sheets (SDS) supplied by the manufacturers, suppliers, contractors, subcontractors, and/or property owner will be the principal source of health and environmental hazard information. All hazardous material containers must be appropriately labeled, identifying the material(s), their potential hazard(s), and any personal protective equipment requirements per Occupational Safety and Health Administration (OSHA) laws & regulations. All chemicals anticipated and scheduled to be brought on site must be submitted, reviewed and approved by Contractor of Project. JE Dunn must review and approve all materials (SDS – information) prior to arrival on site. When personnel are working with chemicals, they shall know the following:
    a. Methods and observations that may be used to detect and identify chemicals, such as odor, visual appearance, etc.
    b. The potential health hazards associated with the chemicals they use.
    c. The location of the applicable SDS information and the format by which they are maintained.
    d. Methods for protection against chemical exposure to self and against the environment. (e.g. land, air, water)
    e. Workers should always review the SDS before working with a new or unknown product.
    f. Workers should never handle harmful or work near harmful or toxic materials, or flammable liquids or gases until they have been instructed in the safe handling and use of said materials.
2. Hazardous materials (or any other materials) shall not be discharged into sewer or surface water systems. For additional information regarding this matter, contact the EHS representative for the proper storage and disposal. Water discharge guidelines and regulations must be followed per applicable water discharge permissions or permit. In the event of a spill follow the appropriate protocol for spill response and the site environmental requirements. After an incident, the site EHS representatives shall document it on the Environmental Spill or Release Report form with the details regarding spill, level of spill response and appropriate reporting criteria to appropriately define the event. **(Reference site specific**

SPCC plan (when applicable) or Environmental Control Plan procedures to engage appropriate services and personnel.) Note, this will be done through the controlling employer.

3. All containers/tanks shall be labeled with the contractor's/subcontractor's name, its contents, and the appropriate hazardous materials information system code and/or National Fire Protection Association (NFPA) codes.

4. Outside storage cabinets built as a separate building set apart from the main facility per NFPA and local fire code standards and OSHA signage are acceptable. Ex: "FLAMMABLE – Keep Fire Away".

5. No Asbestos containing material (ACM), lead, Polychlorinated biphenyl (PCB) compounds shall be used or installed.

48.5. Outdoor Air Quality

To define and mitigate potential outdoor air pollutants and implement proper controls.

1. Regulatory Requirements
    a. 40 CFR part 63, Subpart C- List of Hazardous Air Pollutants
    b. Clean Air Act
    c. Local law regulations
    d. National Ambient Air Quality Standards (NAAQS)
    e. National Emission Standards for Hazardous Air Pollutants (NESHAP)
2. Procedure
    a. Protect teams prior to starting work, must determine if work will generate any regulated air pollutants.
    b. Common air pollutants include but are not limited to.
    c. Dust
    d. Soil
    e. Building Demolition.
    f. Crushing/Screening Operations.
    g. Asbestos .
    h. Large emission generating stationary equipment.
    i. Proper air permitting must be obtained prior to beginning work.
    j. Permitting is typically obtained from either the State or regional agency.
    k. Adequate controls must be use and all permit requirements must be implemented.

Section 49: Impacts to Production Prevention Plan

ITP Mitigation

49.1. Purpose

To ensure that JE Dunn and all Trade Partners will execute work in a manner that results in zero impact/interruptions to production in operating facilities.

49.2. Scope

The requirements outlined in this document apply to JE Dunn, Trade Partners, as well as any 3rd tier Trade Partners performing work activities on this project. No deviations from this procedure will be allowed unless written approval is received from JE Dunn.

Impacts to Production Prevention Plan Development Process:

49.3. Scope of Work Description

All JE Dunn personnel and Trade Partners are required to provide a description of the scope of work that will be performed within their Impacts to Production Prevention Plan.

49.4. Mitigation Walk

1. Before any scope of work is performed, a mitigation field walk must take place and be documented within the Impacts to Production Prevention Plan.

2. All mitigation walks must include JE Dunn Superintendent and a Trade Partner Foreman responsible for the assigned scope at a minimum. Additional personnel may be needed based on the scope of work.

3. During the mitigation walk, the assembled team will evaluate the areas where their work will be performed. The team will identify vulnerable systems/system components (i.e. dampers, sprinkler heads, EMO's, valves, plastic pipe, etc.....) that could potentially be impacted by their work activity, which could cause an interruption in production, or an impact to the factory/facility.

4. All vulnerable items identified during the mitigation walk that pose an Impact to Production (ITP) hazard, will be documented on the Impacts to Production Prevention Plan during the mitigation walk. The Impacts to Production Prevention Plan can be found in Appendix A of this document.

49.5. Meeting to Discuss/Decide Proper Mitigation

1. All appropriate personnel associated with the scope of work will be present for the mitigation meeting to discuss/decide what types of mitigation will used to protect the vulnerable systems/system components that were identified during the mitigation walk. This meeting will

consist of PM, JE Dunn Superintendent and Trade Partner Representative responsible for the particular scope of work. The Owners may be contacted to help determine appropriate mitigation.

2. After the core group of project personnel have reached a consensus on the types of mitigation that will be installed, the selected forms of mitigation to be used will be documented on the Impacts to Production Prevention Plan.

3. The appropriate Trade Partners will be assigned to install the mitigation based on the items noted in the plan.

49.6. Documentation of Systems That Can't be protected with Mitigation

5. If it is determined that the vulnerable system/system components cannot have mitigation applied, or that the application of mitigation will be ineffective in protecting that system and its components, these systems/system components will be documented on the Impacts to Production Prevention Plan.

6. The system/system components that were documented on the Impacts to Production Prevention Plan that couldn't be effectively safeguarded by standard mitigation strategies, will be reported to Owner and a shutdown will be coordinated/scheduled through the Owner.

49.7. Documentation of Emergency Protocols

1. All necessary emergency protocols associated with the work being performed will be documented on the Pre-Task Plan (PTP)

49.8. Final Plan Execution

2. The finalized Impacts to Production Prevention Plan will be generated by JE Dunn and issued to the Trade Partner, so the plan implementation process can be initiated.

49.9. Plan Implementation

1. All Trade Partner crew members associated with the scope of work will be required to review the plan. All crew members must sign off on the plan, acknowledging that they have read, understood and agreed with the contents of the plan.

2. All Trade Partner crew members will verify that appropriate bullet-proofing items have been successfully installed per the plan.

3. If it is determined by the Trade Partner that the mitigation/bulletproofing hasn't been installed per the plan, the Trade Partner crew will not proceed, and JE Dunn will be contacted. JE Dunn will determine how to address any items that need to be protected. Once the items have been addressed, the crew will proceed with the work.

4. If any additional hazards are identified while the trade partners are engaging with the work will stop work and reevaluate. The crew will not reengage in the work activity until the additional hazards that were recognized are protected by some means of mitigation.

5. The Impacts to Production Prevention Plan shall be modified to reflect the additional hazards that were discovered and mitigated accordingly.

6. The Impacts to Production Prevention Plan must be located at work area and made readily available for any stake holders that wish to review the plan at any given time.

49.10. Impact to Production Prevention Training

1. Principles of ITP Mitigation: The basic principles and concepts of ITP Mitigation will be covered during the first portion of training for the Impacts to Production Prevention Program

2. Step by Step ITPPP Review: The second portion of the training will consist of a step by step review of the elements housed within JE Dunn's Impacts to Production Prevention Program

3. Re-training/Refresher Training.
    a. Training will be valid for 1 year. Retraining will occur on an annual basis for all JE Dunn and Trade Partner Employees
    b. Training content will be reviewed by JE Dunn annually, and changes will be made if it decided that there is a need to so.

49.11. Impacts to Production Prevention Program Auditing

1. BIM 360 Field: Our BIM 360 Field Program will be used as an auditing tool on a continual basis. JE Dunn will utilize the Impacts to Production Prevention Program audit checklist in appendix C of this document to expedite audit activities.

49.12 ITP Incident Review Process

JE Dunn will use the After Action Review process.

49.13 Continuous Program Improvement

1. JE Dunn and all Trade Partners working for JE Dunn will meet on an annual basis to evaluate the program and make changes if needed.

2. BIM 360 audit findings will be analyzed during this process to identify any trends that have developed. JE Dunn will create actions items to address concerns that may arise while reviewing the data that is captured in BIM 360.

SECTION 00 73 36
EQUAL OPPORTUNITY

PART 1 - GENERAL

1.1 SUMMARY

A. Contractor is an Equal Employment Opportunity employer. As such, the requirements of 41 CFR 60-1.4(b) are incorporated by this reference, if applicable. Contractor and Subcontractor shall abide by the requirements of 41 CFR 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, national origin, or for inquiring about, discussing, or disclosing compensation. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or veteran status. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Subcontractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

1.2 PARTICIPATION

A. Subcontractor or Supplier and its sub-subcontractors and suppliers are strongly encouraged to contract with disadvantaged business enterprises (“DBE”) (e.g., minority-owned, women-owned, veteran-owned, veteran disability owned, etc.) to construct the Project. Subcontractor or Supplier may be required to report to Contractor the DBE participation and outreach efforts in connection with Subcontractor’s or Supplier’s Work on the Project as part of Contractor’s efforts to monitor DBE utilization on Contractor’s projects.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00 99 00
REVISIONS TO FRONT END DOCUMENTS

The following constitutes a summary of the revisions that have been made to these Front End Documents from the previously published version. The following items have been incorporated into these Front End Documents.

FRONT END DOCUMENTS - Rev 0

1. SECTION NO 1 - Front End Amendments

A. An updated project schedule has been added.

B. An updated site logistics plan has been added.

C. JE Dunn On-Site Equipment Program notification and details have been added.

D. Oklahoma OSHA Consultation Services notification has been added.

E. SmartTagIt notificaiton has been added for JSA's.