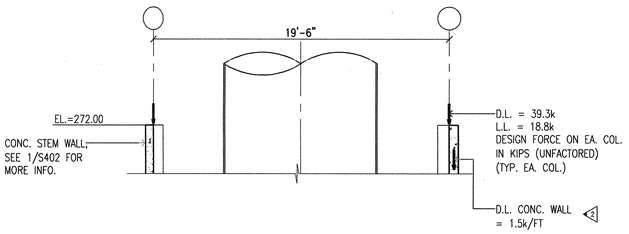
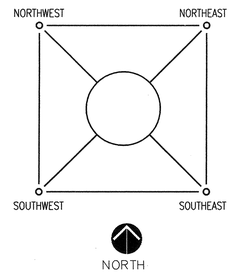


1 SECTION SHOWING LOADS FROM STAIR #3 ON FOOTING OF GRAY WATER VESSEL
NOT TO SCALE



2 QUADRANT DIAGRAM
NOT TO SCALE

		LOADS FOR CONN. DESIGN						LOADS FOR DESIGN OF GRAY WATER VESSEL AND FOUNDATION									
(FT) HEIGHT TO CENTERLINE FROM COLUMN BASE EL. 270.5'	QUADRANT SEE 2/S203	(K) VERT DN DL	(K) VERT DN LL	(K) Paxial DL	(K) Paxial LL	(K) Paxial (MAX.) WIND	(K) Paxial (MAX.) SEISMIC	(K) Paxial WIND N TO S	(K) Paxial WIND W TO E	(K) Paxial WIND NW TO SE	(K) Paxial WIND SW TO NE	(IN) MAX DRIFT DUE TO WIND		(K) Paxial SEISMIC N TO S	(K) Paxial SEISMIC W TO E	(K) Paxial SEISMIC NW TO SE	(K) Paxial SEISMIC SW TO NE	(IN) MAX DRIFT DUE TO SEISMIC
77.00'	NORTHWEST	-	-	-0.17	-0.03	+/-3.72	+/-1.52	-2.35	-2.91	-3.72	-0.40	0.52		-1.00	-1.15	-1.52	-0.10	0.83
77.00'	NORTHEAST	-	-	-0.18	-0.03	+/-3.84	+/-1.56	-2.45	+2.98	+0.37	+3.84	0.52		-1.04	+1.17	+0.09	+1.56	0.83
77.00'	SOUTHEAST	-	-	-0.22	-0.02	+/-3.22	+/-1.40	+2.22	+2.34	+3.22	+0.09	0.52		+0.97	+1.01	+1.40	+0.02	0.83
77.00'	SOUTHWEST	-	-	-0.19	-0.02	+/-3.82	+/-1.56	+2.74	-2.66	+0.05	-3.82	0.52		+1.11	-1.09	+0.01	-1.56	0.83
56.92'	SOUTHEAST	2.10	2.40	+0.19	-0.02	+/-6.94	+/-2.15	+6.83	+2.99	+6.94	-2.71	0.34		+2.02	+1.02	+2.15	-0.71	0.51
53.42'	SOUTHWEST	2.10	2.40	+0.48	-0.03	+/-8.74	+/-2.66	+7.74	-4.61	+2.21	-8.74			+2.26	-1.50	+0.54	-2.66	
49.92'	NORTHWEST	2.10	2.40	+0.52	-0.03	+/-5.53	+/-1.65	-1.82	-5.53	-5.19	-2.63			-0.56	-1.65	-1.56	-0.77	
46.42'	NORTHEAST	2.10	2.40	+0.51	-0.04	+/-5.96	+/-1.52	-2.23	+5.96	+2.64	+5.79			-0.64	+1.51	+0.61	+1.52	
42.92'	SOUTHEAST	2.10	2.40	+0.35	-0.03	+/-6.09	+/-1.59	+4.41	+4.21	+6.09	-0.14	0.22		+1.27	+0.99	+1.59	-0.20	0.32
39.42'	SOUTHWEST	2.10	2.40	+0.07	-0.01	+/-4.56	+/-1.38	+3.90	-2.54	+0.96	-4.56			+1.09	-0.86	+0.16	-1.38	
35.92'	NORTHWEST	2.10	2.40	-0.01	0	+/-2.31	+/-1.60	-1.69	-1.58	-2.31	+0.08			-0.41	-1.60	-0.72	-0.13	
32.42'	NORTHEAST	2.10	2.40	-0.07	+0.01	+/-3.43	+/-0.63	-1.72	+3.13	+1.00	3.43			-0.37	+0.52	+0.10	+0.63	
28.92'	SOUTHEAST	2.10	2.40	-0.05	0	+/-5.49	+/-0.97	+4.10	+3.67	+5.49	-0.31	0.12		+0.82	+0.55	+0.97	-0.19	0.16
25.42'	SOUTHWEST	2.10	2.40	-0.03	0	+/-4.35	+/-0.85	+4.26	-1.90	+1.67	-4.35			+0.73	-0.47	+0.19	-0.85	
21.92'	NORTHWEST	2.10	2.40	-0.02	0	+/-2.99	+/-0.56	-2.03	-2.19	-2.99	-0.11			-0.31	-0.48	-0.56	-0.12	
18.42'	NORTHEAST	2.10	2.40	0	0	+/-4.49	+/-0.52	-1.97	+4.38	+1.70	+4.49			-0.28	+0.46	+0.13	+0.52	
14.92'	SOUTHEAST	2.10	2.40	-0.13	0	+/-6.04	+/-0.73	+4.28	+4.26	+6.04	-0.02	0.04		+0.57	+0.46	+0.73	-0.08	0.05
11.42'	SOUTHWEST	2.10	2.40	-0.05	0	+/-3.81	+/-0.63	+3.56	-1.83	+1.23	-3.81			+0.48	-0.40	+0.06	-0.63	
7.92'	NORTHWEST	2.10	2.40	-0.12	0	+/-1.98	+/-0.45	-1.38	-1.41	-0.02	-1.98			-0.28	-0.35	-0.04	-0.45	
4.42'	NORTHEAST	2.10	2.40	-0.48	0	+/-2.12	+/-0.48	-1.16	+1.84	+2.12	+0.48			-0.34	+0.35	+0.48	+0.01	

NOTES:
1. ALL REACTIONS GIVEN ARE UNFACTORED +=TENSION, -=COMPRESSION
2. AXIAL LOAD REACTIONS GIVEN ARE FOR DIRECTIONS INDICATED. LOADING IN DIRECTION OPPOSITE TO THOSE GIVEN WILL RESULT IN OPP. SIGN AXIAL LOAD REACTION.

3 TABLE SHOWING FORCES ACTING ON THE GWV STRUCTURE FROM STAIR #3 DIAGONAL LANDING SUPPORT BEAMS
NOT TO SCALE

GENERAL NOTES ON GRAY WATER VESSEL (GWV) CONSTRUCTION:

1. GWV MFG. SHALL DESIGN THE FOOTING SIZE AND DETERMINE REINF. AND NUMBER AND LOCATION OF ANCHOR BOLTS REQUIRED FOR VESSEL ANCHORAGE.

2. CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO A/E WITHIN TIME PERIOD ESTABLISHED BY GENERAL CONTRACTOR (G.C.)

3. THE TIME PERIOD SHALL BE ESTABLISHED BY G.C. PRIOR TO AWARD OF G.W.V. CONTRACT.

4. DESIGN OF FOOTING SHALL CONSIDER ANALYSIS OF MAXIMUM OVERTURNING ABOUT DIAGONAL AXIS.

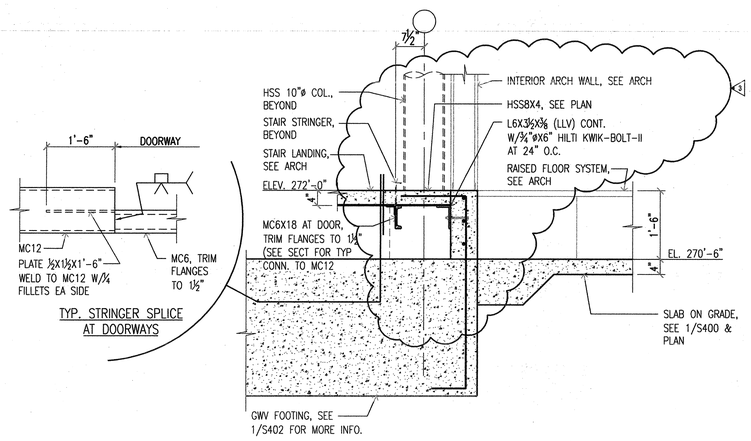
5. G.W.V. SHALL BE DESIGNED AND MANUFACTURED TO SUPPORT THE GRAVITY AND LATERAL LOADS FROM THE STAIR STRUCTURE AS GIVEN IN THE TABLE 3/S203.

6. ADDITIONAL DESIGN REQUIREMENTS AS SHOWN ON THESE DRAWINGS MUST BE ACCOUNTED FOR IN THE DESIGN USED FOR PRICING PURPOSES.

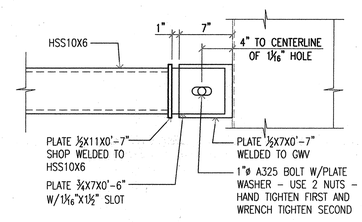
7. G.W.V. MANUFACTURER SHALL DESIGN AND PROVIDE CONNECTIONS AS DETAILED ON SHEET S202 FOR THE DIAGONAL LANDING SUPPORT BEAMS. CONNECTION FORCES USED IN THE DESIGN SHALL BE AS GIVEN AT TABLE 3/S203.

8. G.W.V. SHALL BE DESIGNED TO LIMIT THE MAXIMUM DRIFT FOR UNFACTORED LOADS TO VALUES GIVEN AT TABLE 3/S203.

9. G.W.V. STEEL ROOF (APPROX. ELEV. 349.00') SHALL BE STIFFENED AS REQUIRED TO SUPPORT ROOF LOADING WHILE SPANNING FROM G.W.V. WALL TO GIRT AS SHOWN ON ARCH DRAWINGS.



4 SECTION AT DOORWAY OF STAIR #3
SCALE: ¾"=1'-0"



5 DIAGONAL BEAM CONN. AT 2.92', 6.42', 9.92', AND 13.42'
SCALE: 1½"=1'-0"

FOR PRICING OF GRAY WATER VESSEL ONLY

CERTIFICATE OF AUTHORIZATION ARKANSAS ENGINEERING CROMWELL ENGINEERS #55

ARKANSAS REGISTERED PROFESSIONAL ENGINEER 12/15/03

POLK STANLEY YEARY ARCHITECTS, LTD.

700 SOUTH SCHILLER
LITTLE ROCK, AR 72201
501 375-6378
FAX 372-7629

21 W. MOUNTAIN, SUITE 227
FAYETTEVILLE, AR 72701
479-444-8473

CONSULTANTS:

OWNER'S PROJECT ADVISOR:
MOSES TUCKER REAL ESTATE, INC.

CIVIL ENGINEER:
McCLELLAND ENGINEERS

LANDSCAPE ARCHITECT:
LARSON BURNS SMITH

STRUCTURAL ENGINEER:
CROMWELL ENGINEERS INC.

MECH., ELEC., PLUMB. ENGINEER:
CROMWELL ENGINEERS INC.

SUSTAINABLE CONSULTANT:
BNIM / ELEMENTS

GLOBAL VILLAGE CONSULTANT
CAMBRIDGE SEVEN ASSOCIATES

INTERIOR DESIGNER:
POLK STANLEY YEARY

GENERAL CONTRACTOR:
CDI

GENERAL NOTES:

NOTES:

ISSUE DATE:
DECEMBER 15, 2003
CORE/SHELL
PACKAGE #5

REVISIONS:

#	DATE	DESCRIPTION
1	6/01/2004	ASI #2
2	7/01/2004	PACKAGE 7
3	7/12/2004	ASI #8

HEIFER INTERNATIONAL CENTER OFFICE BUILDING

LITTLE ROCK, ARKANSAS

PSY PROJECT NUMBER:
431C

CONTENTS:
STAIR #3

SHEET NUMBER:
S203

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@PLTDATELONG
@DWGFULLNAME