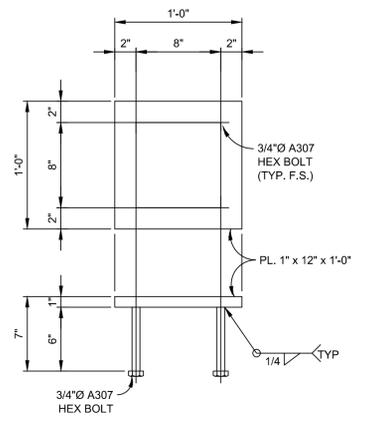
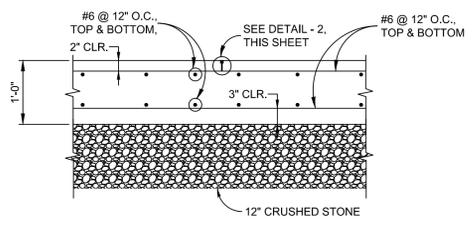


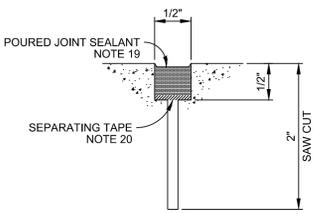
1 SECTION
D1101
TYPICAL GRADE BEAM SECTION
SCALE: 3/4" = 1'-0"



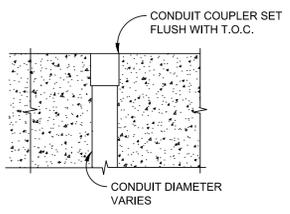
1 DETAIL
D1101
TYP. 4 PLACES
SCALE: 1-1/2" = 1'-0"



2 SECTION
D1101
TYPICAL CONCRETE CONTROL JOINT
SCALE: 3/4" = 1'-0"



2 DETAIL
D1103
NOT TO SCALE



3 DETAIL
D1102
NOT TO SCALE

APPROX. CONCRETE QUANTITIES			
FOUNDATION DESIGNATION	QUANTITY FOUNDATIONS	CUBIC YARDS OF CONCRETE	
		EACH	TOTAL
F1	1	55.56	55.56
F2	1	8.44	8.44

APPROXIMATE TOTAL CONCRETE QUANTITIES
64.00 C.Y.

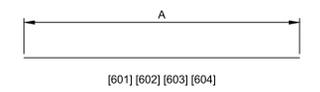
TOTAL EPOXY ANCHOR QUANTITIES

- (18) 3/8"Ø x T.B.D. LONG HILTI HAS-E ROD INSTALLED WITH HY-200 ADHESIVE.
- (12) 5/8"Ø x T.B.D. LONG HILTI HAS-E ROD INSTALLED WITH HY-200 ADHESIVE.
- (28) 7/8"Ø x T.B.D. LONG HILTI HAS-E ROD INSTALLED WITH HY-200 ADHESIVE.

REBAR QUANTITIES

REINFORCEMENT BAR BENDING SCHEDULE				
MARK NO.	QUANTITY EACH	BAR SIZE	FOUNDATION DESIGNATION	DIMENSIONS
[601]	102	#6	F1	29'-6"
[602]	62	#6	F1	49'-6"
[603]	40	#6	F2	11'-6"
[604]	26	#6	F2	18'-6"

BENDING SCHEDULE



NOTE:
- REINFORCEMENT BAR BENDING SCHEDULE IS FOR REFERENCE ONLY. CONTRACTOR IS TO VERIFY LENGTH & QUANTITY FOR EACH FOUNDATION BEFORE CONSTRUCTION.

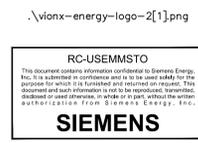
FOUNDATION NOTES:

1. FOUNDATION DESIGN BASED ON GEOTECHNICAL REPORT BY GEI CONSULTANTS, (PROJECT NO. 1610901) DATED DECEMBER 21, 2016.
2. THE CONTRACTOR SHALL CORRELATE ALL DIMENSIONS BETWEEN THE ELECTRICAL, STRUCTURAL AND FOUNDATION PLANS BEFORE CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES BEFORE PROCEEDING WITH THE WORK.
3. CONCRETE TESTING FOR QUALITY CONTROL IS THE RESPONSIBILITY OF THE OWNER AND THE FREQUENCY AND TYPES OF TESTING SHALL BE DETERMINED BY THE OWNER.
4. CONCRETE PLACEMENT WHEN AMBIENT AIR TEMPERATURES ARE EXPECTED BELOW 50°F SHALL MEET RECOMMENDATIONS OF ACI 306R-10 FOR COLD WEATHER AND WHEN AMBIENT TEMPERATURES ARE EXPECTED ABOVE 90°F SHALL MEET RECOMMENDATIONS OF ACI 305R-10 FOR HOT WEATHER CONCRETE PLACEMENT. CONTRACTOR SHALL SUBMIT PROPOSED PROCEDURES FOR COMPLYING WITH THESE DOCUMENTS TO THE STRUCTURAL ENGINEER 5 BUSINESS DAYS PRIOR TO CASTING CONCRETE DURING THESE CONDITIONS.
5. ALL EARTHWORK AND COMPACTION OF FILL MATERIAL SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION BY GEI CONSULTANTS, DATED DECEMBER 21, 2016.
6. ALL CONCRETE SHALL BE MADE FROM TYPE II CEMENT AND SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 P.S.I. AT 28 DAY TEST WITH 4% - 6% AIR ENTRAINMENT.
7. ALL EXTERIOR OR EXPOSED CONCRETE SHALL BE CONSOLIDATED BY INTERNAL VIBRATION IN ACCORDANCE WITH A.C.I. 309, "RECOMMENDED PRACTICE FOR CONSOLIDATION OF CONCRETE."
8. ALL REINFORCING STEEL SHALL BE NEW BILLET, 60 KSI DEFORMED BARS (ASTM A-615).
9. ALL DETAILING, FABRICATION, PLACING AND SUPPORTING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH A.C.I. 318 AND C.R.S.I. CURRENT EDITION.
10. ALL REINFORCING SHALL BE RIGIDLY SECURED IN POSITION PRIOR TO THE PLACING OF CONCRETE.
11. SLUMP SHALL BE LESS THAN 4" (UNLESS APPROVED ADMIXTURES ARE USED), FOR ALL POURS EXCEPT DRILLED PIERS, WHICH SHALL BE 6" (±1"). MOVING CONCRETE WITH A VIBRATOR IS PROHIBITED.
12. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

(A) CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	MIN. COVER (IN)
(B) CONCRETE EXPOSED TO EARTH AND WEATHER	3"
	2"
13. ALL REINFORCEMENT AND WELDED WIRE FABRIC SHALL BE FREE OF RUST, DIRT, OIL AND MILL SCALE PRIOR TO PLACEMENT OF CONCRETE.
14. DEBRIS IN THE BOTTOM OF THE EXCAVATION SHALL BE REMOVED PRIOR TO STEEL PLACEMENT. WATER SHALL NOT BE ALLOWED TO INFILTRATE THE FOUNDATION EXCAVATION.
15. TO REDUCE THE POTENTIAL FOR GROUNDWATER SEEPAGE INTO THE EXCAVATION AND TO MINIMIZE DISTURBANCE TO THE BEARING AREA, STEEL AND CONCRETE SHALL BE PLACED AS SOON AS POSSIBLE AFTER EXCAVATION IS COMPLETED AND PROPERLY CLEANED.
16. THE EXCAVATION SHALL NOT REMAIN OPEN OVERNIGHT UNLESS SPECIAL PROVISIONS ARE APPROVED BY THE ENGINEER.
17. THE BEARING SURFACE SHALL BE EVALUATED IMMEDIATELY PRIOR TO PLACING CONCRETE.
18. EACH FOUNDATION SHALL BEAR ON A MINIMUM 12" THICK LAYER OF CRUSHED STONE AS INDICATED IN THE GEI CONSULTANTS' GEOTECHNICAL REPORT UNDER THE SECTION "EQUIPMENT MAT PREPARATION."
19. FOR SEALANT, USE BASF MASTER SEAL SL1 OR APPROVED EQUIVALENT.
20. FOR SEPARATING TAPE, USE CRL 1/4" BOND BREAKER TAPE OR APPROVED EQUIVALENT.

REFERENCE DRAWINGS:

- MAN17077-D-0001 BATTERY STORAGE LOCATION PLAN
- MAN17077-D-1101 ELECTRICAL EQUIPMENT FOUNDATION PLAN
- MAN17077-D-1102 CHILLER EQUIPMENT FOUNDATION PLAN



VIONX ENERGY - 905-0522
BATTERY STORAGE SYSTEM
 SHIRLEY, MA

DRAFTER: MAG		ENGR: BDP		DATE: 14 JUL 17	
CHECKER: BDP		APPD: DRP		SCALE: 3/8" = 1'-0"	
REV	DATE	DESCRIPTION			
0	22 DEC 17	ISSUED FOR CONSTRUCTION			

1330 E. KINGSLEY, SUITE B
 SPRINGFIELD, MA 01104
 PHONE: (417) 898-4540
 FAX: (417) 898-4542

FOUNDATION DETAILS
 DRAWING NO. MAN17077-D-1103
 REV. 0