



## GENERAL NOTES

A. LIGHTNING PROTECTION SYSTEM SHOWN FOR GENERAL INFORMATION ONLY. STRUCTURE TO BE PROVIDED WITH LIGHTNING PROTECTION SYSTEM DESIGNED AND INSTALLED IN ACCORDANCE WITH SPECIFICATION SECTION 13100. NFPA 780 AND UL STANDARD 96A.

## KEYED NOTES

- GROUND RING: COPPER, #4/0 STRANDED. INSTALL AT BOTTOM OF GRADE BEAM FOUNDATION WALLS. AT THE DEEP WALLS OF THE PUMP AND NPW ROOMS, THE GROUND RING SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30 INCHES BELOW FINISHED GROUND SURFACE PER NEC PARAGRAPH 250.53(F). IT IS THE INTENT THAT THE GROUND RING BE PLACED ALL AT ONE TIME DURING BACKFILLING PROCEDURES AND THE INSPECTION OF THE GROUND RING CAN BE ACCOMPLISHED DURING ONE SITE VISIT. THE GROUND RING SHOULD BE PLACED A MINIMUM OF 2 FEET HORIZONTALLY AWAY FROM THE FOUNDATION WALL.
- LOCATIONS FOR 3/4" X 8'-0" GROUND ROD, COPPER OR COPPER CLAD, AT EACH LIGHTNING PROTECTION DOWN CONDUCTOR LOCATION. FINAL DOWN CONDUCTOR LOCATIONS TO BE DETERMINED IN ACCEPTED SHOP SUBMITTAL FOR LIGHTNING PROTECTION SYSTEM.
- LOCATIONS FOR DOWN CONDUCTORS. EXPOSED DOWN CONDUCTORS SHALL HAVE RIGID (GRC OR ACCEPTABLE EQUIVALENT) PROTECTIVE COVERS UP TO 6'-0" ABOVE GRADE WHERE INSTALLED IN CLOSE PROXIMITY TO ROADWAYS.
- LOCATION FOR "UFER" BOND FOR STRUCTURE GROUNDING. RUN INTO DRILLED PIER, TIE TO STEEL REBAR AND PROVIDE MINIMUM 20'-0" LENGTH OF CONDUCTOR WITHIN DRILLED PIER CONCRETE IN ACCORDANCE WITH NEC AND LOCAL CODES. ROUTE STUB UP TO GROUND BAR LOCATED ON THE EAST WALL OF THE HYPOCHLORITE ROOM.
- APPROXIMATE LOCATION FOR BUILDING GROUNDING ELECTRODE CONDUCTOR CONNECTION TO GROUND RING.
- APPROXIMATE LOCATION OF LIGHTNING PROTECTION AIR TERMINALS ON ROOF. FINAL LOCATION TO BE AS SPECIFIED ON THE SHOP DRAWINGS.
- DRILLED PIER PER STRUCTURAL DRAWINGS. SEE SHEET PD-3 FOR EXACT LOCATION.
- #2/0 GROUNDING ELECTRODE CONDUCTOR FOR GENERATOR #2. SEE SHEET EPD4. STUB-UP AT GROUND BAR.
- ROUTE LIGHTNING PROTECTION ROOF CONDUCTORS BETWEEN AIR TERMINALS AND TO DOWN CONDUCTOR LOCATIONS.

## CONSTRUCTION NOTE:

- ALL ELECTRICAL CONDUIT(S) SHALL BE RUN BELOW FOUNDATION WALLS AND SHALL NOT PENETRATE ANY FOUNDATION WALL. ONCE PAST THE FACE OF FOUNDATION WALL, THE CONDUIT(S) MAY BE DEFLECTED VERTICALLY TO ACHIEVE THE DEPTH OF COVER INDICATED ON THE TYPICAL TRENCH DETAILS LOCATED ON SHEET ESP-2.

**1 PUMPING AND DISINFECTION BUILDING ELECTRICAL GROUNDING PLAN**  
SCALE: SCALE: 1/4" = 1'-0"

REVISIONS		
NO.	DATE	DESCRIPTION
1	09/16/2011	ISSUED FOR CMO PREPARATION (PUMPING AND DISINFECTION BUILDING FOUNDATION)
2	09/22/2011	ISSUED FOR FOUNDATION PERMIT SUBMITTAL TO PPRBD (PUMPING AND DISINFECTION BLDG)
3	10/17/2011	ISSUED FOR CONSTRUCTION PER PPRBD FOUNDATION PERMIT #8993 (PUMP AND DISINFECTION BLDG)
4	01/25/2012	ISSUED FOR PID BUILDING VALUE ENGINEERING REVIEW AND COMMENTS
5	04/19/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (PUMPING AND DISINFECTION BLDG)
6	05/21/2012	ISSUED FOR CONSTRUCTION PER PPRBD BLDG PERMIT #8993 (PUMP AND DISINFECTION BLDG)

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ELECTRICAL GROUNDING PLAN PUMPING AND DISINFECTION BUILDING HAROLD D. THOMPSON REGIONAL WATER RECLAMATION FACILITY LOWER FOUNTAIN METROPOLITAN SEWAGE DISPOSAL DISTRICT		
DRAWN DESIGNED CHECKED DATE PROJECT NO. GMS FILE NO.	XXX XXX XXX 2011 20166.330 2599	GMS, INC. CONSULTING ENGINEERS 611 N. WEBER, SUITE 300 COLORADO SPRINGS, COLORADO 80903
		SHEET EPD-3 OF 1