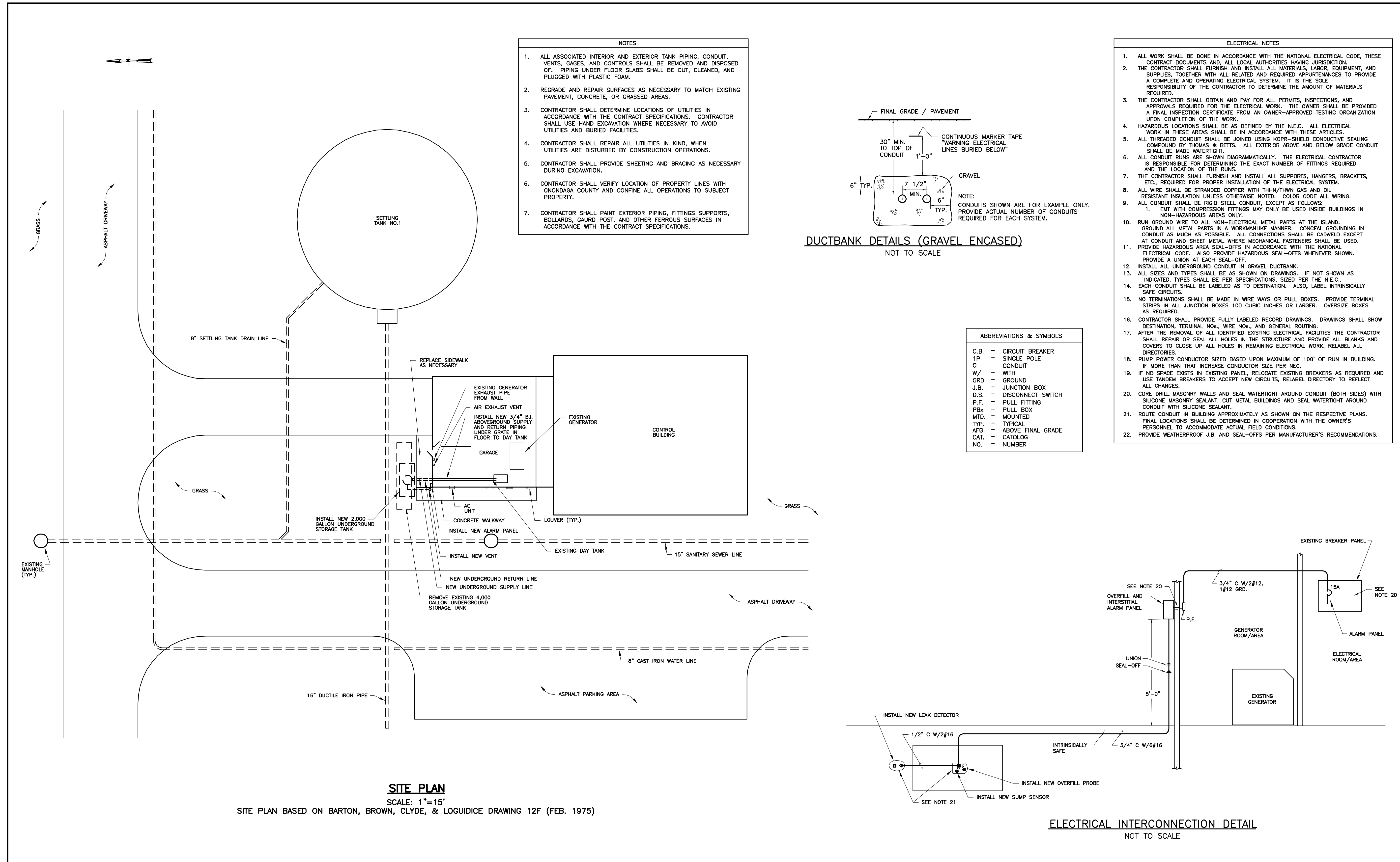
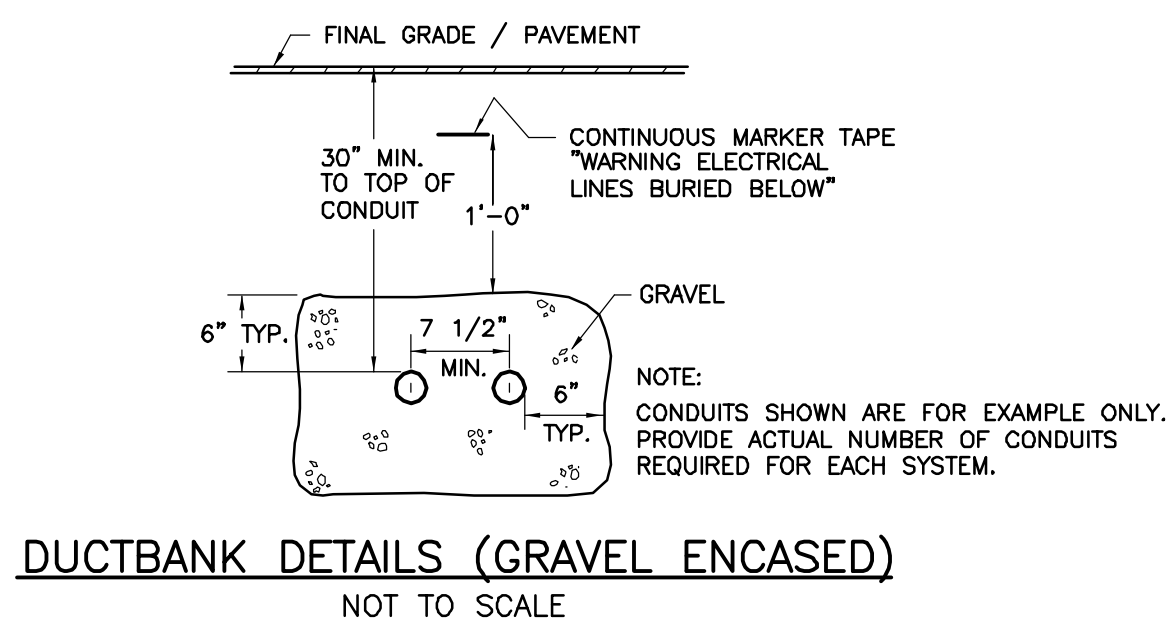


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- NOTES**
1. ALL ASSOCIATED INTERIOR AND EXTERIOR TANK PIPING, CONDUIT, VENTS, GAGES, AND CONTROLS SHALL BE REMOVED AND DISPOSED OF. PIPING UNDER FLOOR SLABS SHALL BE CUT, CLEANED, AND PLUGGED WITH PLASTIC FOAM.
 2. REGRADE AND REPAIR SURFACES AS NECESSARY TO MATCH EXISTING PAVEMENT, CONCRETE, OR GRASSED AREAS.
 3. CONTRACTOR SHALL DETERMINE LOCATIONS OF UTILITIES IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. CONTRACTOR SHALL USE HAND EXCAVATION WHERE NECESSARY TO AVOID UTILITIES AND BURIED FACILITIES.
 4. CONTRACTOR SHALL REPAIR ALL UTILITIES IN KIND, WHEN UTILITIES ARE DISTURBED BY CONSTRUCTION OPERATIONS.
 5. CONTRACTOR SHALL PROVIDE SHEETING AND BRACING AS NECESSARY DURING EXCAVATION.
 6. CONTRACTOR SHALL VERIFY LOCATION OF PROPERTY LINES WITH ONONDAGA COUNTY AND CONFINE ALL OPERATIONS TO SUBJECT PROPERTY.
 7. CONTRACTOR SHALL PAINT EXTERIOR PIPING, FITTINGS SUPPORTS, BOLLARDS, GAUGE POST, AND OTHER FERROUS SURFACES IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.



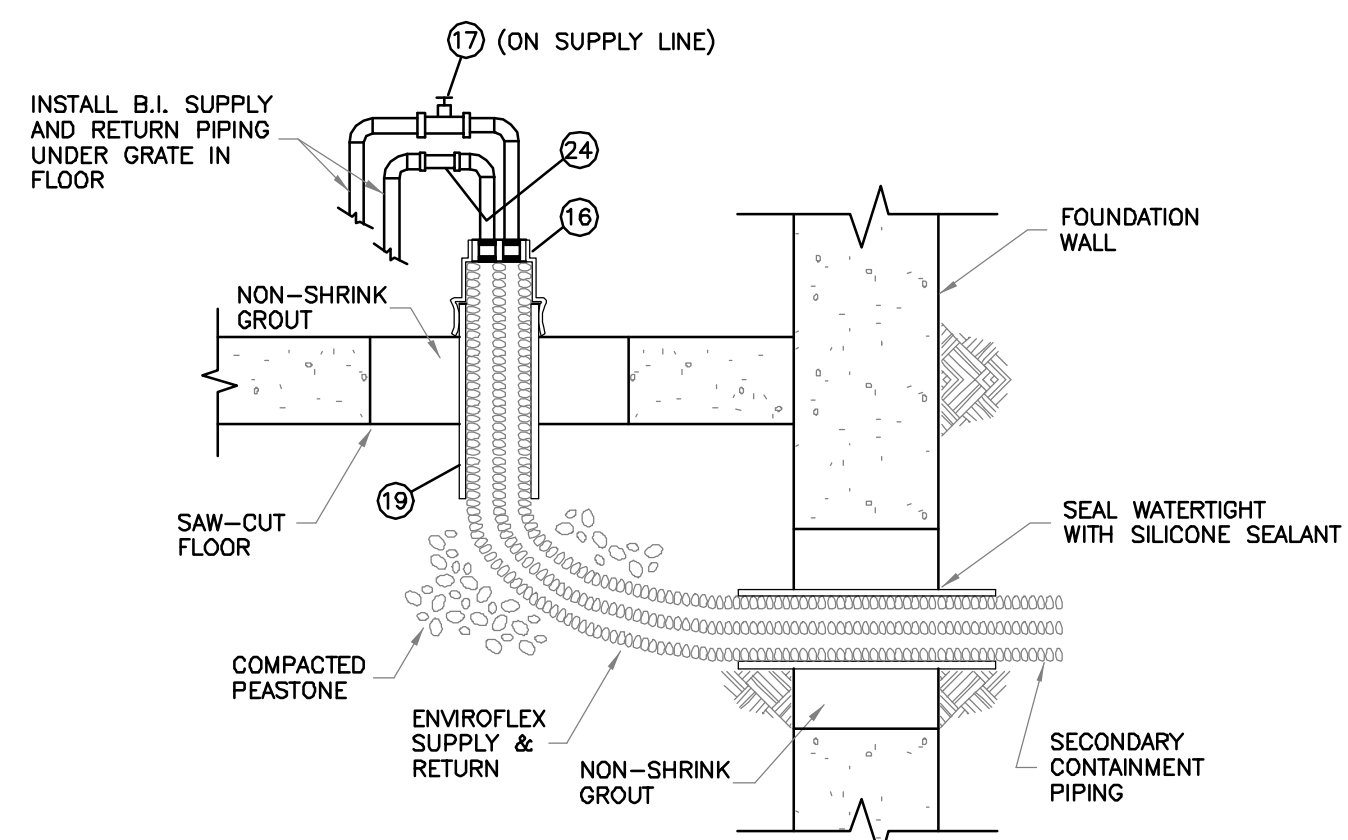
ABBREVIATIONS & SYMBOLS

C.B.	-	CIRCUIT BREAKER
1P	-	SINGLE POLE
C	-	CONDUIT
W/	-	WITH
GRD	-	GROUND
J.B.	-	JUNCTION BOX
D.S.	-	DISCONNECT SWITCH
P.F.	-	PULL FITTING
Pbx	-	PULL BOX
MTD.	-	MOUNTED
TYP.	-	TYPICAL
AFG.	-	ABOVE FINAL GRADE
CAT.	-	CATALOG
NO.	-	NUMBER

- ELECTRICAL NOTES**
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, THESE CONTRACT DOCUMENTS AND, ALL LOCAL AUTHORITIES HAVING JURISDICTION.
 2. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS, LABOR, EQUIPMENT, AND SUPPLIES, TOGETHER WITH ALL RELATED AND REQUIRED APPURTENANCES TO PROVIDE A COMPLETE AND OPERATING ELECTRICAL SYSTEM. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE AMOUNT OF MATERIALS REQUIRED.
 3. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, INSPECTIONS, AND APPROVALS REQUIRED FOR THE ELECTRICAL WORK. THE OWNER SHALL BE PROVIDED A FINAL INSPECTION CERTIFICATE FROM AN OWNER-APPROVED TESTING ORGANIZATION UPON COMPLETION OF THE WORK.
 4. HAZARDOUS LOCATIONS SHALL BE AS DEFINED BY THE N.E.C. ALL ELECTRICAL WORK IN THESE AREAS SHALL BE IN ACCORDANCE WITH THESE ARTICLES.
 5. ALL THREADED CONDUIT SHALL BE JOINED USING KOPR-SHIELD CONDUCTIVE SEALING COMPOUND BY THOMAS & BETTS. ALL EXTERIOR ABOVE AND BELOW GRADE CONDUIT SHALL BE MADE WATERTIGHT.
 6. ALL CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT NUMBER OF FITTINGS REQUIRED AND THE LOCATION OF THE RUNS.
 7. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORTS, HANGERS, BRACKETS, ETC., REQUIRED FOR PROPER INSTALLATION OF THE ELECTRICAL SYSTEM.
 8. ALL WIRE SHALL BE STRANDED COPPER WITH THHN/THWN GAS AND OIL RESISTANT INSULATION UNLESS OTHERWISE NOTED. COLOR CODE ALL WIRING.
 9. ALL CONDUIT SHALL BE RIGID STEEL CONDUIT, EXCEPT AS FOLLOWS:
 1. EMT WITH COMPRESSION FITTINGS MAY ONLY BE USED INSIDE BUILDINGS IN NON-HAZARDOUS AREAS ONLY.
 10. RUN GROUND WIRE TO ALL NON-ELECTRICAL METAL PARTS AT THE ISLAND. GROUND ALL METAL PARTS IN A WORKMANLIKE MANNER. CONICAL GROUNDING IN CONDUIT AS MUCH AS POSSIBLE. ALL CONNECTIONS SHALL BE CADWELD EXCEPT AT CONDUIT AND SHEET METAL WHERE MECHANICAL FASTENERS SHALL BE USED.
 11. PROVIDE HAZARDOUS AREA SEAL-OFFS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. ALSO PROVIDE HAZARDOUS SEAL-OFFS WHENEVER SHOWN. PROVIDE A UNION AT EACH SEAL-OFF.
 12. INSTALL ALL UNDERGROUND CONDUIT IN GRAVEL DUCTBANK.
 13. ALL SIZES AND TYPES SHALL BE AS SHOWN ON DRAWINGS. IF NOT SHOWN AS INDICATED, TYPES SHALL BE PER SPECIFICATIONS, SIZED PER THE N.E.C.
 14. EACH CONDUIT SHALL BE LABELED AS TO DESTINATION. ALSO, LABEL INTRINSICALLY SAFE CIRCUITS.
 15. NO TERMINATIONS SHALL BE MADE IN WIRE WAYS OR PULL BOXES. PROVIDE TERMINAL STRIPS IN ALL JUNCTION BOXES 100 CUBIC INCHES OR LARGER. OVERSIZE BOXES AS REQUIRED.
 16. CONTRACTOR SHALL PROVIDE FULLY LABELED RECORD DRAWINGS. DRAWINGS SHALL SHOW DESTINATION, TERMINAL NO., WIRE NO., AND GENERAL ROUTING.
 17. AFTER THE REMOVAL OF ALL IDENTIFIED EXISTING ELECTRICAL FACILITIES THE CONTRACTOR SHALL REPAIR OR SEAL ALL HOLES IN THE STRUCTURE AND PROVIDE ALL BLANKS AND COVERS TO CLOSE UP ALL HOLES IN REMAINING ELECTRICAL WORK. RELABEL ALL DIRECTORIES.
 18. PUMP POWER CONDUCTOR SIZED BASED UPON MAXIMUM OF 100' OF RUN IN BUILDING. IF MORE THAN THAT INCREASE CONDUCTOR SIZE PER NEC.
 19. IF NO SPACE EXISTS IN EXISTING PANEL, RELOCATE EXISTING BREAKERS AS REQUIRED AND USE TANDUM BREAKERS TO ACCEPT NEW CIRCUITS, RELABEL DIRECTORY TO REFLECT ALL CHANGES.
 20. CORE DRILL MASONRY WALLS AND SEAL WATERTIGHT AROUND CONDUIT (BOTH SIDES) WITH SILICONE MASONRY SEALANT. CUT METAL BUILDINGS AND SEAL WATERTIGHT AROUND CONDUIT WITH SILICONE SEALANT.
 21. ROUTE CONDUIT IN BUILDING APPROXIMATELY AS SHOWN ON THE RESPECTIVE PLANS. FINAL LOCATIONS SHALL BE DETERMINED IN COOPERATION WITH THE OWNER'S PERSONNEL TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
 22. PROVIDE WEATHERPROOF J.B. AND SEAL-OFFS PER MANUFACTURER'S RECOMMENDATIONS.

SITE PLAN
SCALE: 1"=15'
SITE PLAN BASED ON BARTON, BROWN, CLYDE, & LOGUIDICE DRAWING 12F (FEB. 1975)

ELECTRICAL INTERCONNECTION DETAIL
NOT TO SCALE

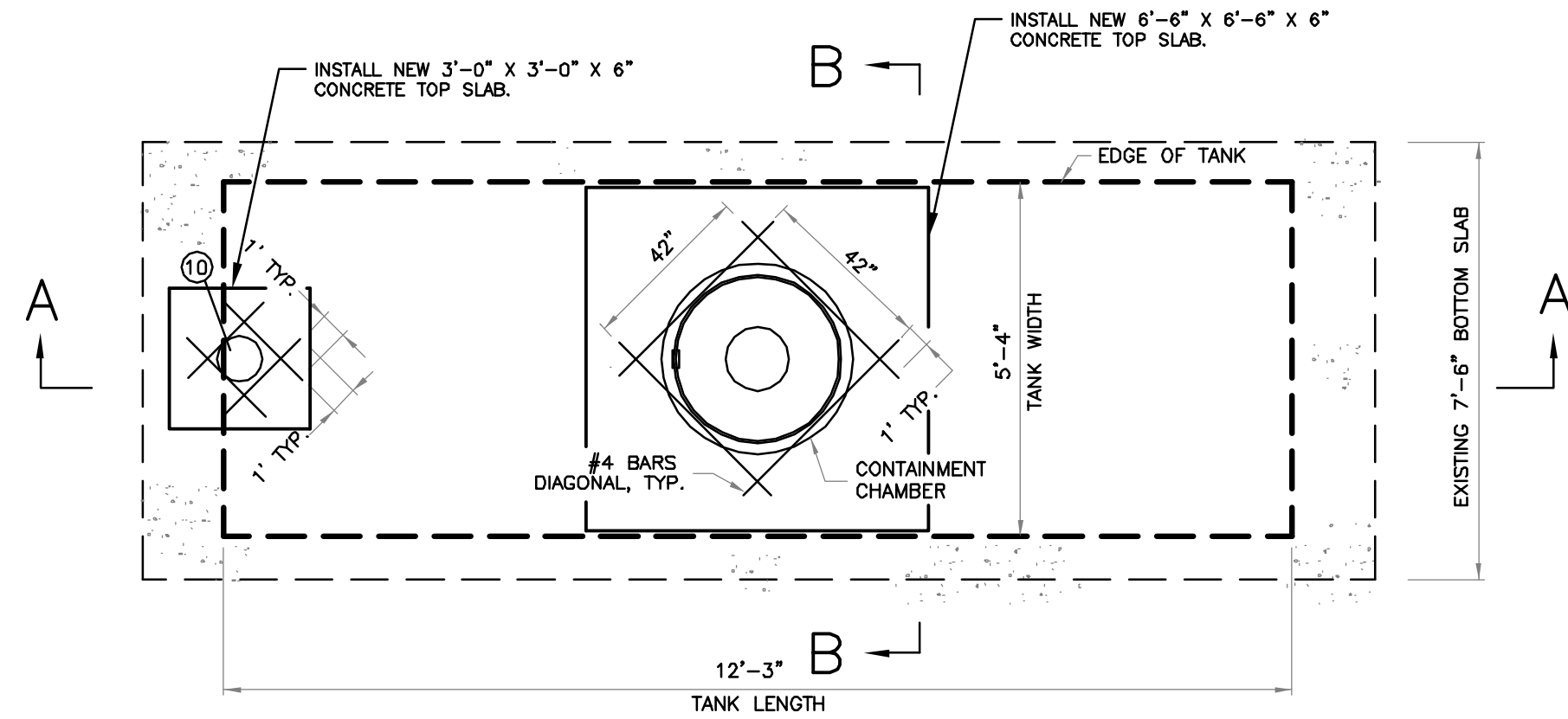


BUILDING ENTRANCE DETAIL
NOT TO SCALE

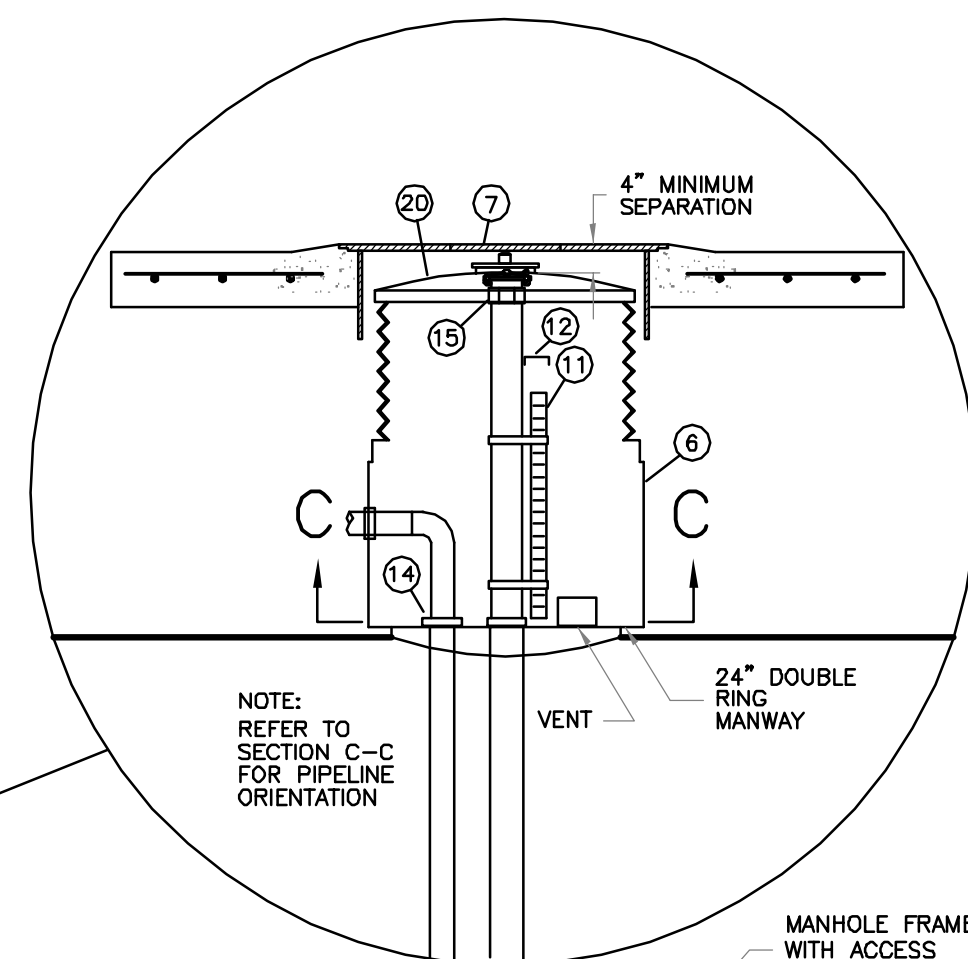
PIPING SCHEDULE				
DESCRIPTION	NO. REQ'D	SIZE	MATERIAL	REMARKS
BUILDING FUEL STORAGE				
SUCTION	1	3/4"	ENVIROFLEX	SECONDARY CONTAINMENT REQUIRED
VENT	1	2"	FRP/GALV. STEEL	SCHEDULE 40 SEE VENT PIPE DETAIL
FILLS	1	4"	STEEL	SCHEDULE 40
RETURN	1	3/4"	ENVIROFLEX	SECONDARY CONTAINMENT REQUIRED
INSIDE SUPPLY	1	3/4"	BLACK IRON	
INSIDE RETURN	1	3/4"	BLACK IRON	

BILL OF MATERIALS		
NUMBER	QUANTITY	DESCRIPTION (OR EQUAL)
①	1	SH-P3(CATHODICALLY PROTECTED), 360 DEGREE WRAP, 60 MIL FRP COATED DOUBLE WALL UNDERGROUND STORAGE TANK WITH UL APPROVAL, DOUBLE RING MANWAY, 7 GAUGE INNER WALL TANK, LIFTING LUGS, LABELING, AND ACCESSORIES AS SPECIFIED, AS SCHEDULED, AND SHOWN ON CONTRACT DRAWINGS.
②	1	FOOT VALVE (PREFERRED TYPE 932 3/4")
③	AS REQUIRED	2" DIAMETER VENT PIPING.
④	5	5" DIAMETER COUPLING W/ 5"x4" DIAMETER DIELECTRIC BUSHING INSERT.
⑤	1	GAUGE/ALARM PROBE - PNEUMERCATOR MODEL 2-412.
⑥	1	TOTAL CONTAINMENT SU42331 CONTAINMENT SUMP, WITH MANWAY MOUNTING KIT.
⑦	1	PEMCO 106-42-10DA - 42" DIAMETER MANHOLE FRAME WITH DOUBLE ACCESS COVER. UNIT SHALL BE SUITABLE FOR H-20 LOADING.
⑧	1	2" DIAMETER SCH. 80 PVC RISER FOR INTERSTITIAL LEAK SENSOR.
⑨	1	INTERSTITIAL SENSOR - PNEUMERCATOR LS 600LD BN.
⑩	1	14" MONITORING WELL CURB BOX W/BOLT DOWN LID, LABELED WITH BLACK TRIANGLE AND WHITE BACKGROUND. EBW 814
⑪	1	SUMP SENSOR (PNEUMERCATOR LS600LDBN) CLAMP TO FILL PIPE WITH STAINLESS STEEL CLAMPS AND WIRE TO CONTROL PANEL.
⑫	1	OPW 107 NAMEPLATE HOLDER FOR 4" PIPE. PROVIDE NAMEPLATE TO READ "FILL", AND TYPE OF FUEL, "DIESEL FUEL ONLY".
⑬	AS REQUIRED	HOLD-DOWN STRAPS, DIELECTRIC ISOLATION PADS, TURNBUCKLES AND ANCHOR BOLTS, NUMBER AND SIZE PER TANK MANUFACTURER'S RECOMMENDATIONS.
⑭	2	4" x 3/4" DOUBLE TAPPED STEEL BUSHING.
⑮	1	CAP & ADAPTOR (OPW MODELS 634TT & 633-T).
⑯	1	TERMINATION PLUG TP3000.
⑰	1	FIRE VALVE/MAIN SHUTOFF (PREFERRED FUSOMATIC)
⑱	1	OPW 523 VENT.
⑲	1	TOTAL CONTAINMENT TERMINATION ASSEMBLY TA4500.
⑳	1	TOTAL CONTAINMENT LSC033 - 33" ACCESS LID WITH OC000B OBSERVATION CAP.
㉑	1	3" DIAMETER COUPLING W/3"x2" DIAMETER DIELECTRIC BUSHING.
㉒	1	DROP TUBE WITH GASKET (EBW782).
㉓	1	OVERFILL ALARM PANEL - PNEUMERCATOR E700-1.
㉔	1	FULL PORT BALL VALVE- MORRISON 691

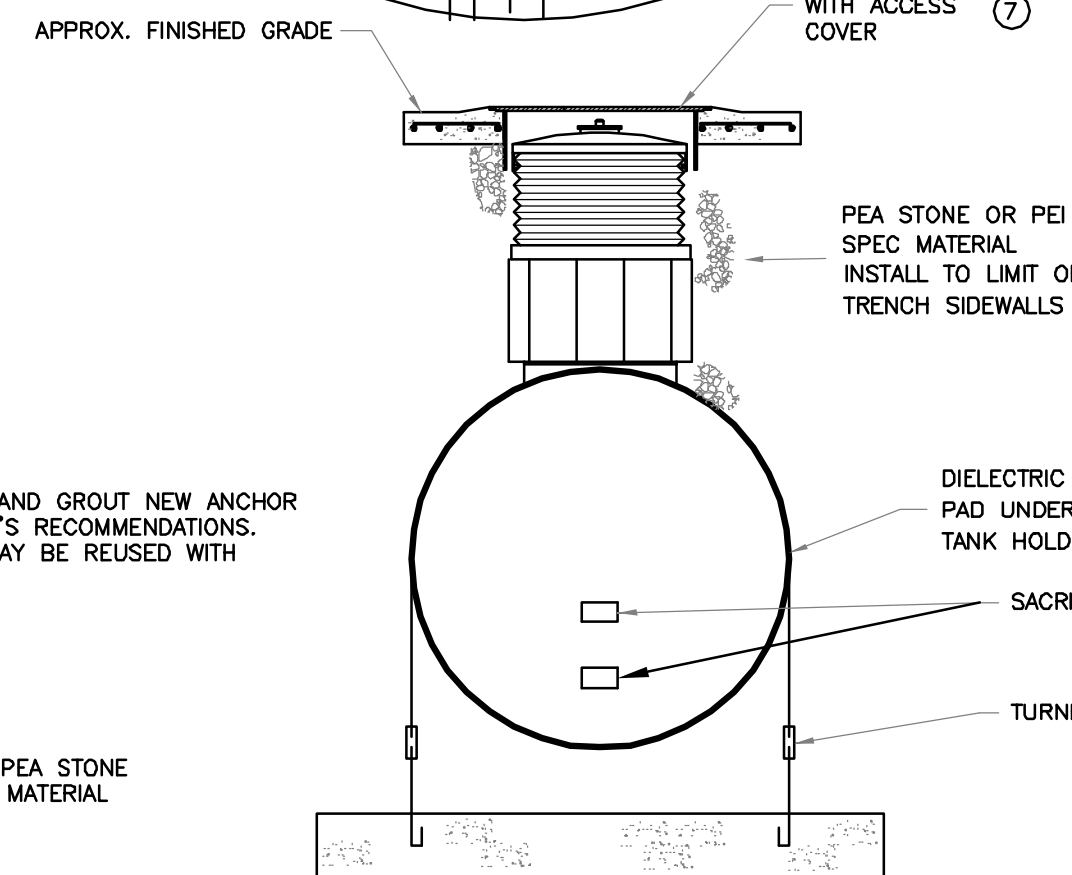
- TANK NOTES**
- FOLLOWING INSTALLATION OF THE TANK, BUT PRIOR TO BACKFILLING, PIPING CONTAINMENT CHAMBER SHALL BE TESTED BY SEALING OPENINGS AND FILLING CHAMBER WITH WATER. FOR A PERIOD OF 2-HOURS, THERE SHALL BE NO DROP IN WATER LEVEL AND NO EVIDENCE OF LEAKAGE FROM THE PIPING CONTAINMENT CHAMBER.
 - FURNISH AND INSTALL SUCTION DROP LINE WITH FOOT VALVE.
 - INSTALLATION SHALL CONFORM COMPLETELY WITH RECOMMENDED PRACTICES OF THE PETROLEUM EQUIPMENT INSTITUTE (PEI) AND THE AMERICAN PETROLEUM INSTITUTE (API). REFER TO PEI-RP-100 FOR RECOMMENDED PRACTICES.
 - ALL PRODUCT PIPING AND VENT PIPING SHALL BE INSTALLED IN SECONDARY CONTAINMENT PIPING. CONTAINMENT PIPING SHALL BE SLOPED TOWARDS CONTAINMENT CHAMBER.
 - SECONDARY CONTAINMENT PIPE SHALL TERMINATE AT CHAMBER WITH TEST BOOT. AFTER TESTING CONTAINMENT PIPING, IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, SLIDE BOOT BACK SO CONTAINMENT PIPING DRAINS TO CHAMBER. LEAVE BOOTS FOR FUTURE TESTING.
 - AFTER ALL PIPING CONNECTIONS ARE COMPLETED, TANK AND PIPING SHALL BE PRECISION TESTED BY PETROTITE SYSTEM TEST.
 - REFER TO PEI-RP-100 FOR DEFINITION OF "PEI SPEC. MATERIAL".
 - ALL CONCRETE SHALL BE 4,000 PSI. TOP SLAB SHALL HAVE 6% AIR ENTRAINMENT.
 - CONTRACTOR SHALL FURNISH AND INSTALL A COMBINATION INVENTORY MONITOR, INTERSTITIAL LEAK SENSOR, SUMP SENSOR, AND HIGH LEVEL ALARM. PROBE AND TRANSDUCER SHALL BE INSTALLED IN TANK AND ADJUSTED FOR THE FOLLOWING SET POINTS:
HIGH LEVEL ALARM - 90% OF TANK CAPACITY
GAUGE ASSEMBLY SHALL BE FURNISHED WITH SPECIFIC READOUT SCALE, LABELED IN "GALLONS" WHICH SHALL CORRESPOND TO THE ACTUAL VOLUME OF PRODUCT STORED IN THE TANK.
FURNISH AND INSTALL ALARM PANEL UNIT OUTSIDE IN LOCATION SELECTED BY OWNER.
FURNISH AND INSTALL ALL WIRING, CONDUIT, AND ACCESSORIES FOR COMPLETE WORKING GAUGE/ALARM SYSTEM. INSTALLATION SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF ALARM SYSTEM MANUFACTURER. PROVIDE CALIBRATION OF MECHANICAL TANK GAUGE AND ELECTRONIC GAUGE/ALARM SYSTEM.
 - FURNISH AND INSTALL THE FOLLOWING SIGNS IN LOCATION SELECTED BY OWNER. SIGNS TO BE OD ALUMINUM OR PLASTIC MATERIAL.
A) "CAUTION: WHEN ALARM BELL SOUNDS, FUEL TANK IS FILLED TO CAPACITY. DO NOT OVERFILL".
B) "CAUTION: MAXIMUM LIQUID CAPACITY IS 1,800 GALLONS".
 - PROVIDE WATER TIGHT SEAL-OFFS WHERE CONDUITS ENTER PIPING CONTAINMENT CHAMBER USING ENTRY BULKHEAD FITTINGS.
 - APPLICABLE EXISTING PIPING AND CONDUITS SHALL BE REMOVED (EXTERIOR & INTERIOR), HOLES PATCHED AND EQUIPMENT (MONITORING WELL PANELS, GAUGES, ETC.) SHALL BE TURNED OVER TO ONONDAGA COUNTY.
 - PROVIDE FITTINGS AND BUSHINGS AS NECESSARY.
 - TANK MUST BE LABELED PER SPECIFICATION SECTION 13117 2.04 OF THE CONTRACT DOCUMENTS.
 - SUMP AND MANWAY BOLTS SHALL BE INSTALLED, WELDED, AND HAVE THE HEADS FIBERGLASSED AT THE FACTORY.



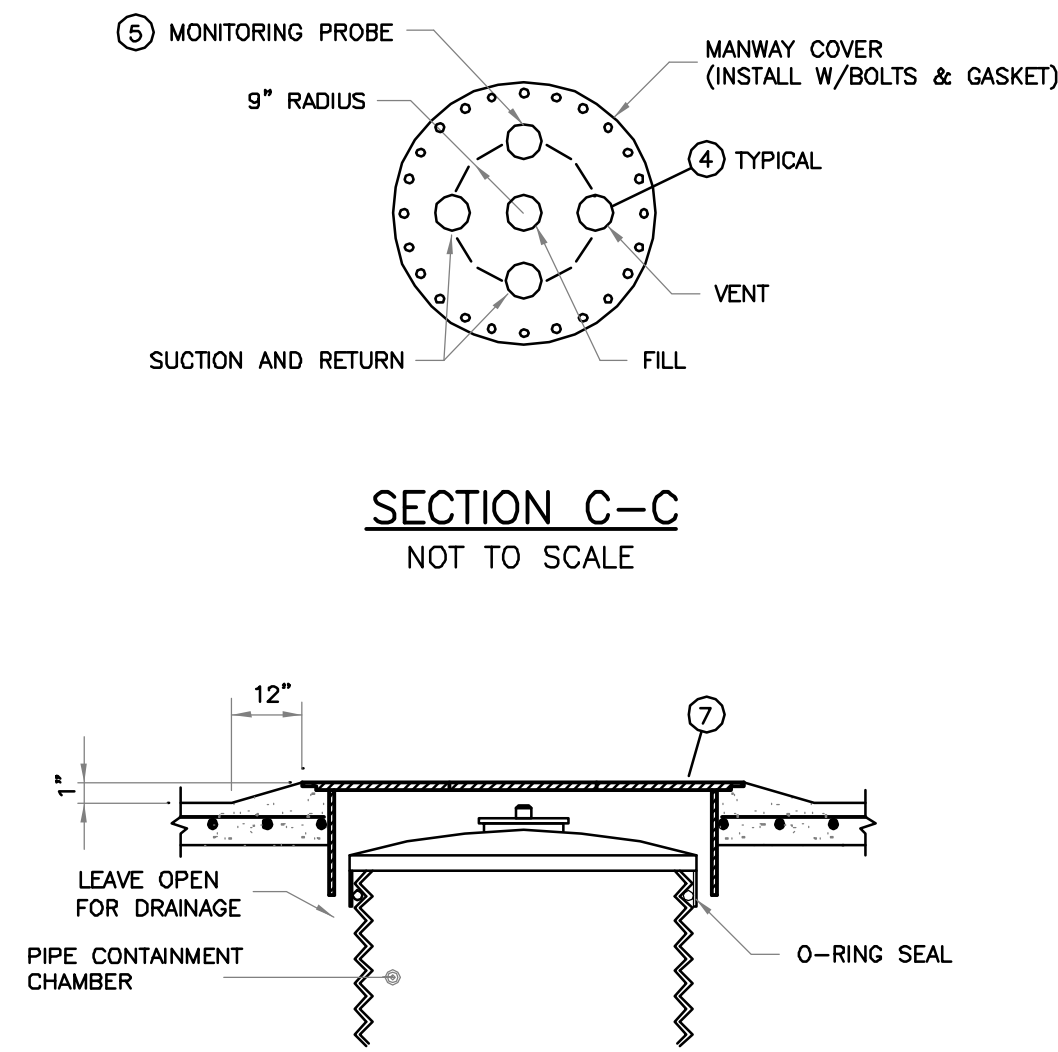
TANK PLAN
NOT TO SCALE



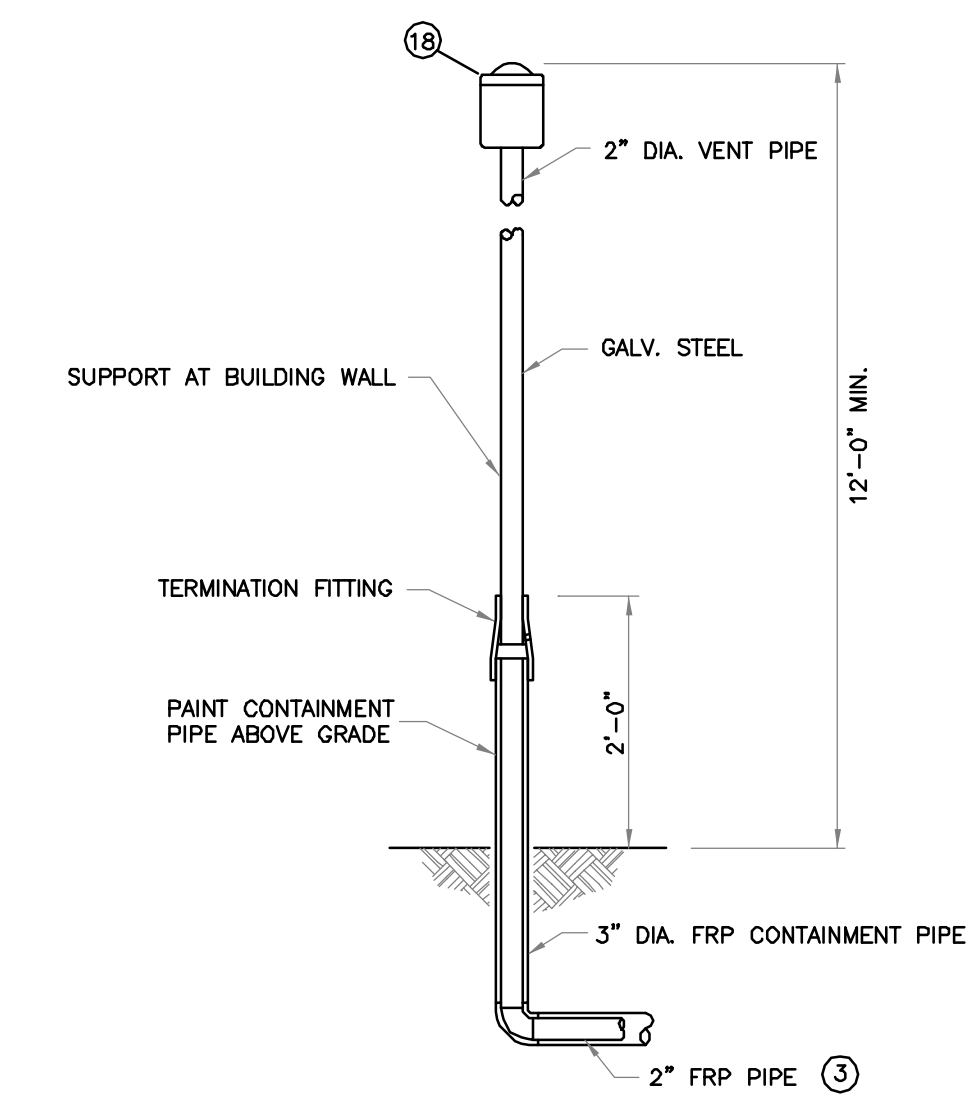
SECTION C-C
NOT TO SCALE



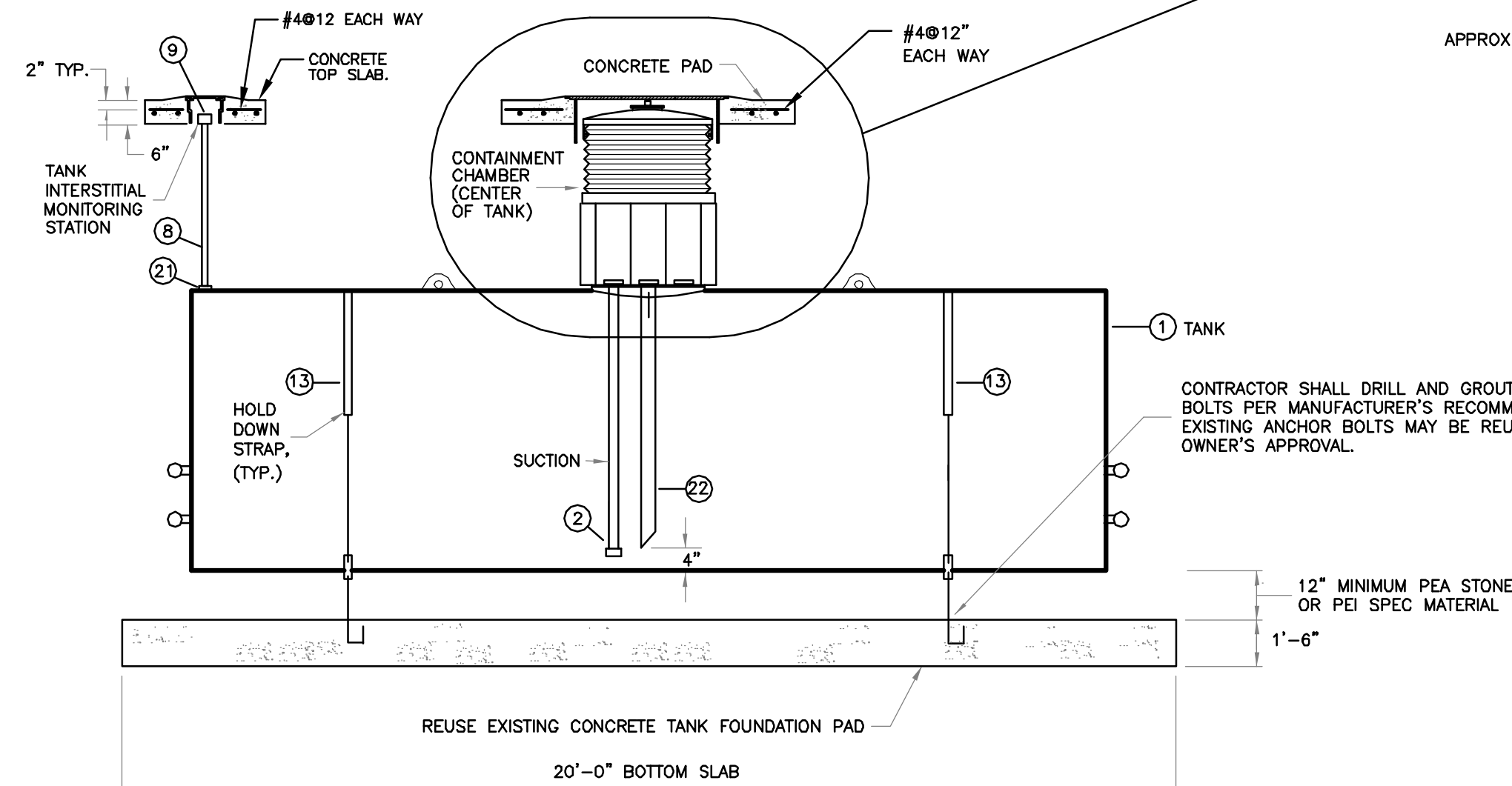
SECTION B-B
NOT TO SCALE



CONTAINMENT MANHOLE DETAIL
NOT TO SCALE



VENT PIPE DETAIL
NOT TO SCALE



SECTION A-A
NOT TO SCALE

NOTES:
Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.
It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way. If an item is altered, the altering engineer shall affix to the item his/her seal and the notation "altered by" followed by his/her signature and the date of such alteration, and a specific description of the alteration.

ISSUE NO.	DATE	CHECKED	DESIGNER	APPROVED	DATE
2	FOR CONSTRUCTION				
	M.J.L.	8/95		JEB	
1	FOR APPROVAL				
	DW	7/95		JEB	
	PROJECT SUPERVISOR		DEPARTMENT SUPERVISOR		

Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

ONONDAGA COUNTY DEPARTMENT OF DRAINAGE AND SANITATION			
BREWERTON WATER POLLUTION CONTROL PLANT - CICERO, NY			
UNDERGROUND 2,000 GALLON STEEL GENERATOR FUEL STORAGE TANK DETAILS			
JOB NO.	3044	CONTRACT	SHEET 2 OF 2