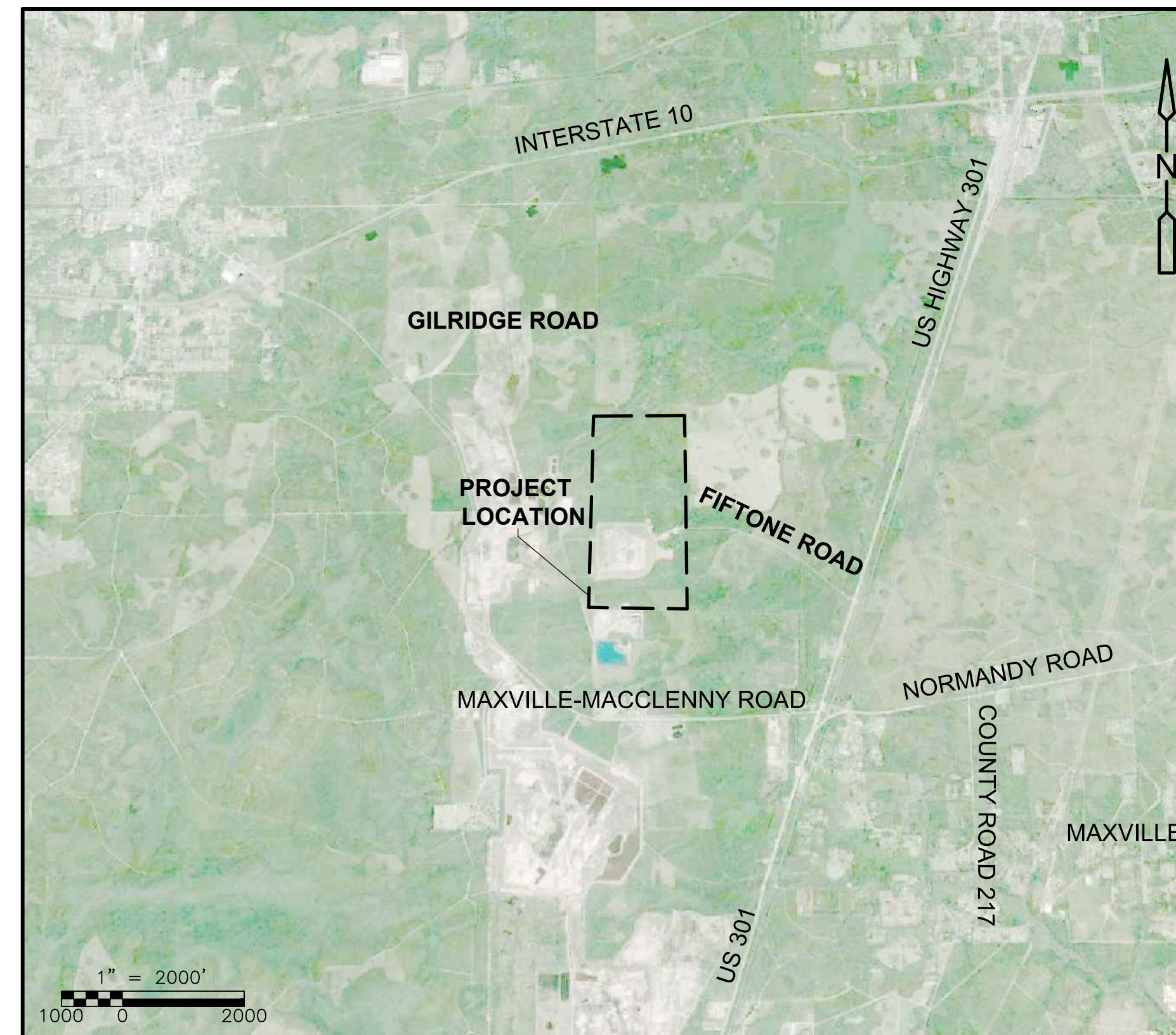
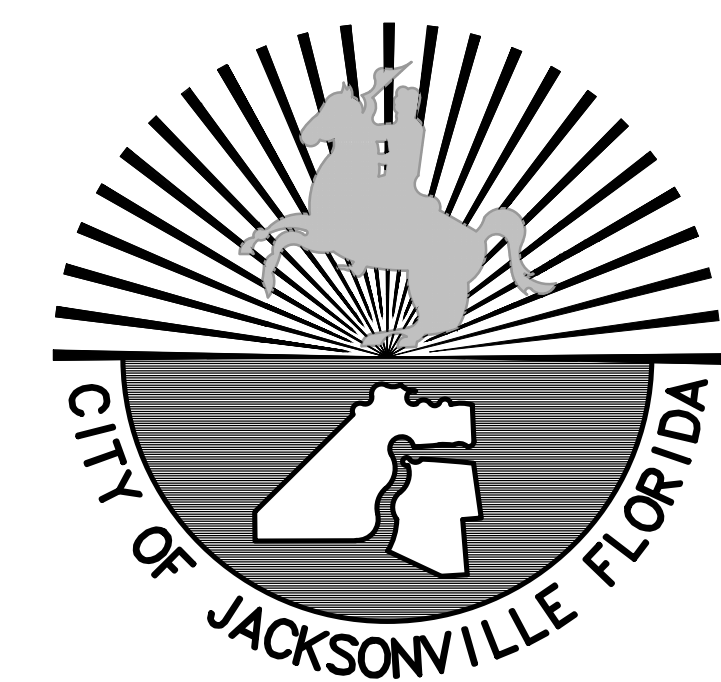


CITY OF JACKSONVILLE, FLORIDA
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II
5110 US HIGHWAY 301, BALDWIN, FL 32234



VICINITY MAP



NOTE:
THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION.
THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

PREPARED BY

**CDM
Smith**

4651 SALISBURY ROAD, SUITE 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FLA COA NO. EB-0000020
CITY CONTRACT NO. 6354-13

PROJECT No. 9012-228686

MAYOR
LENNY CURRY

DIRECTOR OF PUBLIC WORKS

JOHN P. PAPPAS, P.E.

PREPARED FOR

SOLID WASTE DIVISION
1031 SUPERIOR STREET
JACKSONVILLE, FL 32254

NOVEMBER 2020

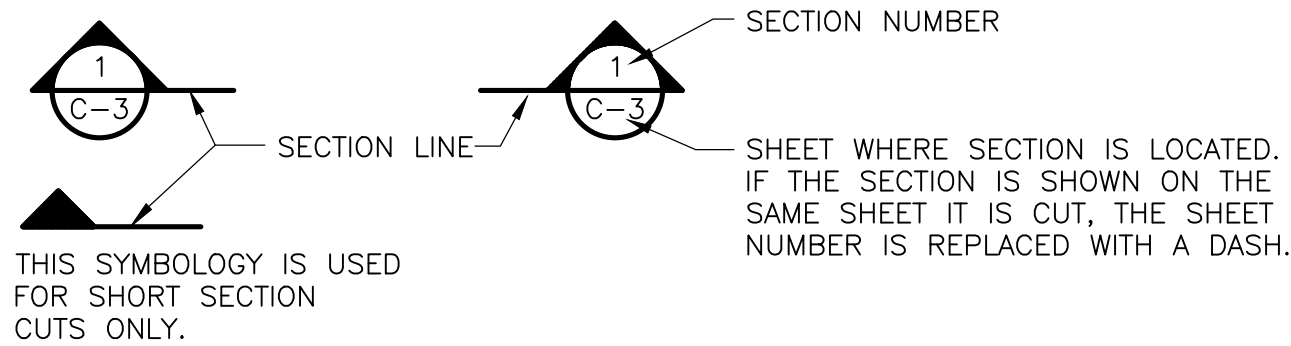
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pw\j\cdwsntrh-cd02-pw.bentley.com\PW_PL1\9012\228686_PHASE II\04 Design Services NM_509A\01 General\10 CADD\G001NFIK.dwg
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REUSE OF DOCUMENTS:

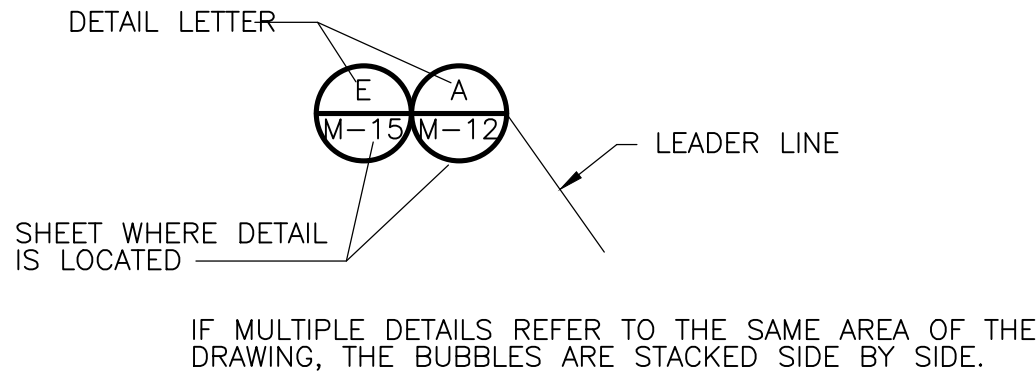
GENERAL NOTES

- HORIZONTAL COORDINATES ARE REFERENCED TO THE EAST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD'83), 2011 ADJUSTMENT, FEET.
- VERTICAL ELEVATIONS ARE TO NATIONAL GEODETIC VERTICAL DATUM OF 1929.
- LANDFILL TRAFFIC MUST BE MAINTAINED AT ALL TIMES. THIS SITE IS AN OPERATING LANDFILL. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE LANDFILL OPERATOR. NO IMPACT TO SOLID WASTE OPERATIONS OR PUBLIC TRAFFIC SHALL BE PERMITTED.
- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND AGREE TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING HIS WORK.
- CONTRACTOR SHALL VERIFY ALL UTILITIES AND NOTIFY THE LANDFILL DIRECTOR OR DESIGNEE, 72 HOURS PRIOR TO DIGGING IN ANY PORTION OF THE SITE.
- THE CONTRACTOR SHALL REPLACE ANY DRAINAGE CULVERTS, FENCES, ETC., PER FDOT STANDARDS WITH THE SAME TYPE OF MATERIAL THAT WAS DAMAGED OR REMOVED DURING CONSTRUCTION.
- TOPOGRAPHIC SURVEY WAS PROVIDED BY SOUTHERN RESOURCES MAPPING CORPORATION AND FLOWN ON JANUARY 17, 2019.
- NEW CONSTRUCTION OCCURRING AFTER THE SURVEY MAY NOT BE INCLUDED ON THE DRAWINGS. BIDDERS ARE RESPONSIBLE FOR MAKING ANY AND ALL INVESTIGATIONS PRIOR TO SUBMITTAL OF BIDS.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY UPON FINDING ANY CONFLICTS DURING CONSTRUCTION ON ANY IMPROVEMENTS SHOWN ON THE DRAWINGS.
- EROSION CONTROL AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING ANY DEMOLITION OR CONSTRUCTION. THEY SHALL BE INSTALLED, AS REQUIRED IN THE SPECIFICATIONS AND IN ACCORDANCE WITH ALL REGULATORY AGENCY REQUIREMENTS. EXTERIOR BERMS SHALL BE STABILIZED IF THEY ARE TO REMAIN UNDISTURBED FOR MORE THAN TWO WEEKS.
- THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS SHALL BE STRICTLY OBSERVED BY THE CONTRACTOR. ALL INGRESS, EGRESS AND TRAFFIC PATTERNS ON THE SITE SHALL BE WITHIN THE LIMITS OF CONSTRUCTION OR ON HAUL ROADS SHOWN ON THE DRAWINGS.
- NO REPRESENTATION IS MADE REGARDING BALANCED EARTHWORK. ANY EXCESS MATERIAL, OR MATERIAL NOT SUITABLE FOR USE AS BACKFILL, SHALL BE PLACED IN A PERMANENT STOCKPILE AREA THAT IS TO BE DESIGNATED BY THE OWNER AND STABILIZED IN ACCORDANCE WITH THE SPECIFICATION. NO MATERIAL SHALL BE REMOVED FROM SITE WITHOUT APPROVAL IN WRITING FROM THE OWNER.
- ANY DAMAGE TO HAUL ROADS CAUSED BY CONSTRUCTION OR CONSTRUCTION TRAFFIC MUST BE RESTORED.
- THE CONTRACTOR SHALL COORDINATE TIE-IN TO THE EXISTING LEACHATE TANK FARM WITH LANDFILL OPERATOR TO MINIMIZE DOWNTIME TO LEACHATE HAULING OPERATIONS. COORDINATION OF DOWNTIME IS NECESSARY DUE TO POTENTIALLY ELEVATED LEVELS IN LEACHATE STORAGE TANKS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY SEDIMENT ACCUMULATION IN THE STORMWATER DITCHES THAT RESULTS FROM CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING GROUNDWATER MONITORING WELLS WITHIN THE LIMITS OF CONSTRUCTION AND STAGING AREAS.
- DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER LEACHATE OR LANDFILL GAS. ALL NECESSARY SAFETY PRECAUTIONS SHALL BE TAKEN. PRIOR TO CONSTRUCTION, A HEALTH AND SAFETY PLAN SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR REVIEW IN ACCORDANCE WITH SECTION 013529.
- THE CONTRACTOR SHALL COMPLY WITH REGULATION REQUIREMENTS AND PERMIT CONDITIONS APPLICABLE FOR THE SITE.
- THE CONTRACTOR SHALL DETERMINE STAGING, STORING, AND WORK AREAS IN COORDINATION WITH THE OWNER AND SHALL BE RESPONSIBLE FOR ALL ACTIVITIES OR LACK THEREOF WITHIN WORK AREAS.
- INGRESS/EGRESS THROUGH MAIN ENTRANCE OF THE LANDFILL. NORMAL ACCESS DURING LANDFILL OPERATING HOURS OF 6:00 A.M TO 7:00 P.M (MONDAY – FRIDAY) OR 6:00 A.M. TO 1:00 P.M (SATURDAY). IF NEEDED, COORDINATE WITH LANDFILL OPERATOR FOR ACCESS BEFORE OR AFTER OPERATING HOURS FOR EQUIPMENT MAINTENANCE ONLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO ANY DAMAGED PIPES OR UTILITIES.

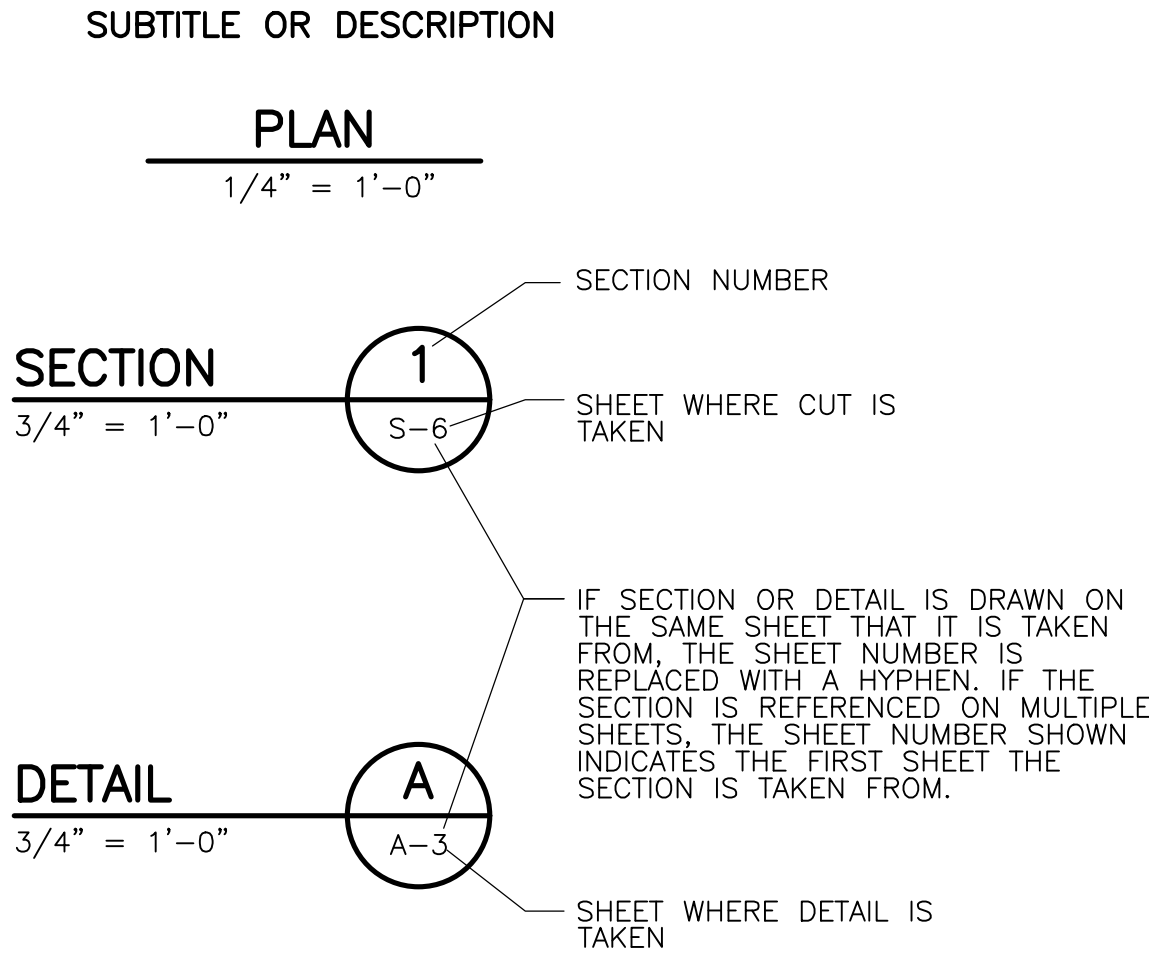
SECTION CUT SYMBOLS



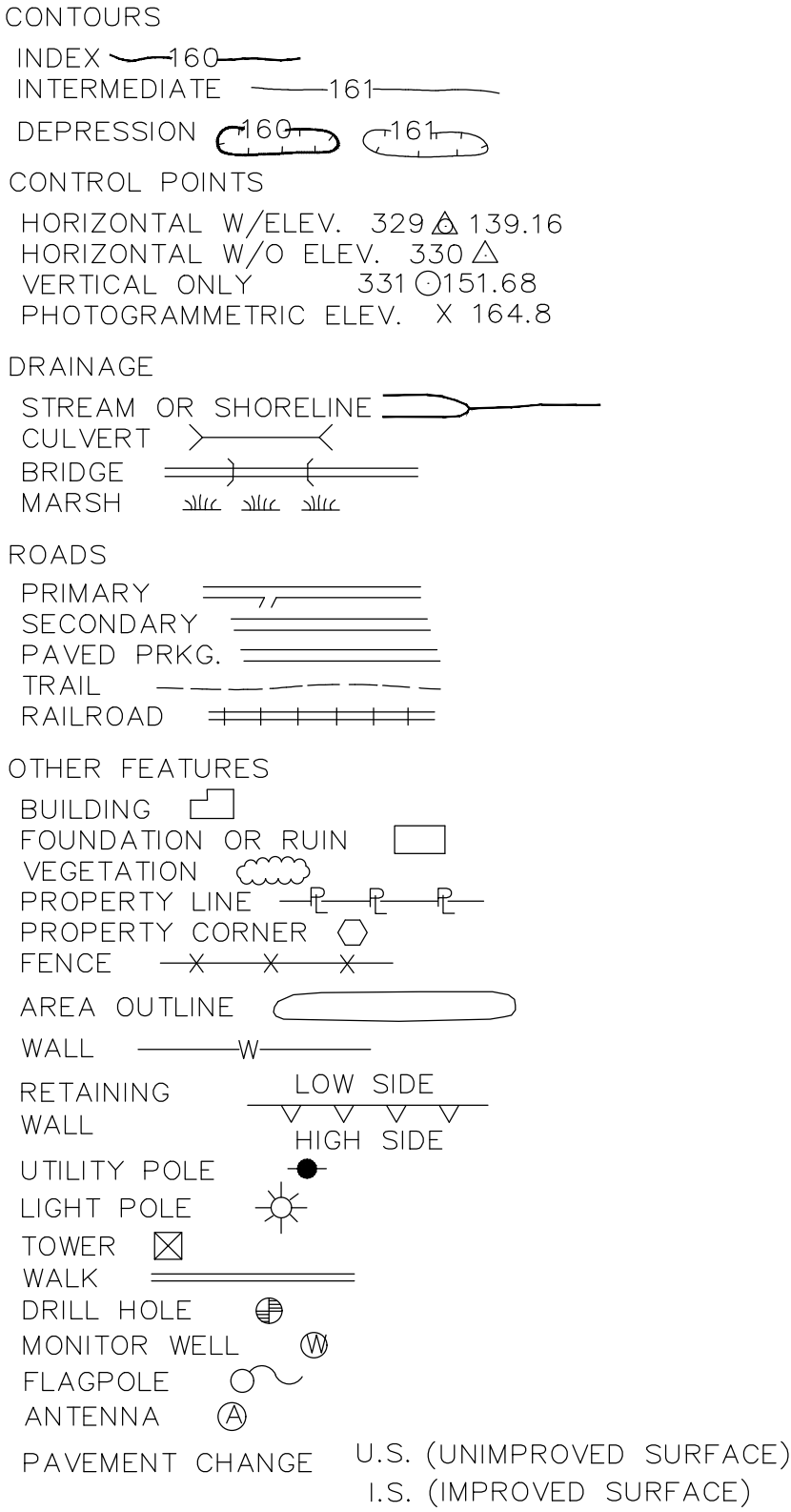
DETAIL CALL OUT SYMBOLS



DRAWING SECTION AND DETAIL TITLES



SURVEYORS SYMBOLS



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REV.	NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	K. WESTERLUND
DRAWN BY:	A. NUNES
SHEET CHK'D BY:	W. LIU
CROSS CHK'D BY:	L. STERLING
APPROVED BY:	J. CURRO
DATE:	NOVEMBER 2020

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FL CDA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

GENERAL NOTES, LEGEND, SYMBOLS
AND INDEX OF SHEETS

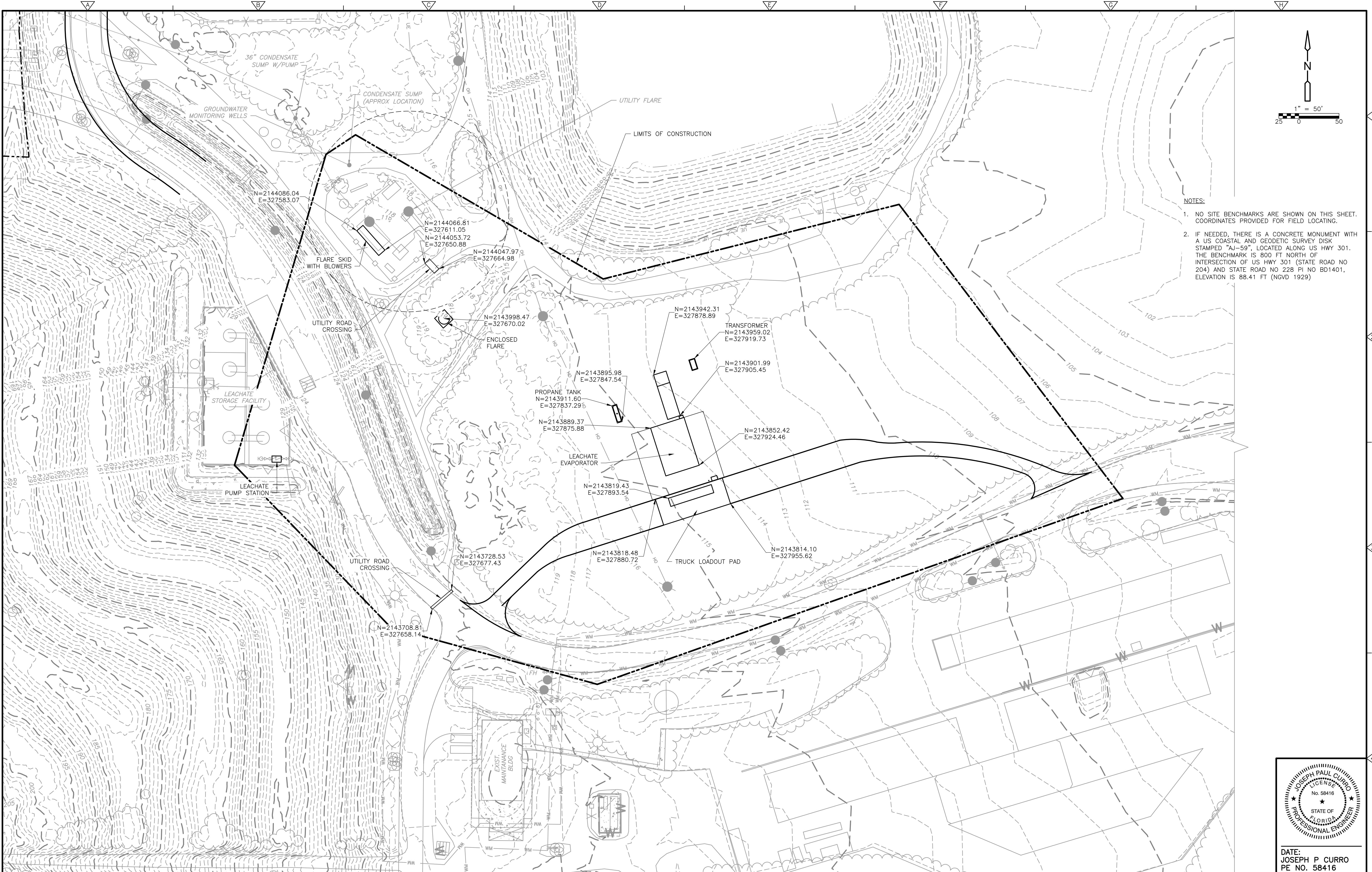
JOSEPH PAUL CURRO
LICENSE
No. 58416
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DATE:
JOSEPH P CURRO
PE NO. 58416

PROJECT NO. 9012-228686
FILE NAME: G001NFIK

SHEET NO.
G-1

XREFs: [aerial, CEP000ST, 11-008-Base, CEP00004B, CDMs_2436, CEP001YP, CWP000ST, EWP000GE] Images: []
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- NOTES:
1. NO SITE BENCHMARKS ARE SHOWN ON THIS SHEET. COORDINATES PROVIDED FOR FIELD LOCATING.
 2. IF NEEDED, THERE IS A CONCRETE MONUMENT WITH A US COASTAL AND GEODETIC SURVEY DISK STAMPED "AJ-59", LOCATED ALONG US HWY 301. THE BENCHMARK IS 800 FT NORTH OF INTERSECTION OF US HWY 301 (STATE ROAD NO 204) AND STATE ROAD NO 228 PI NO BD1401, ELEVATION IS 88.41 FT (NGVD 1929)

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. WESTERLUND
DRAWN BY: A. NUNES
SHEET CHK'D BY: W. LIU
CROSS CHK'D BY: L. STERLING
APPROVED BY: J. CURRO
DATE: NOVEMBER 2020

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FL CDA No. EB-0000020

CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

LIMITS OF CONSTRUCTION
EXISTING CONDITIONS
AND HORIZONTAL CONTROL PLAN

JOSEPH PAUL CURRO

LICENSE

No. 58416

STATE OF FLORIDA

PROFESSIONAL ENGINEER

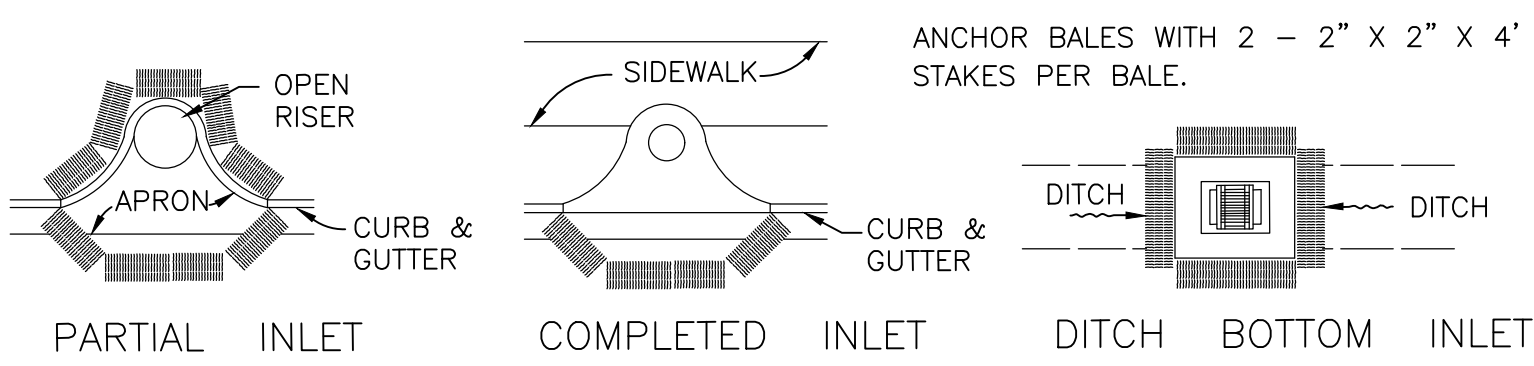
DATE:
JOSEPH P CURRO
PE NO. 58416

PROJECT NO. 9012-228686
FILE NAME: C001STPL.DWG

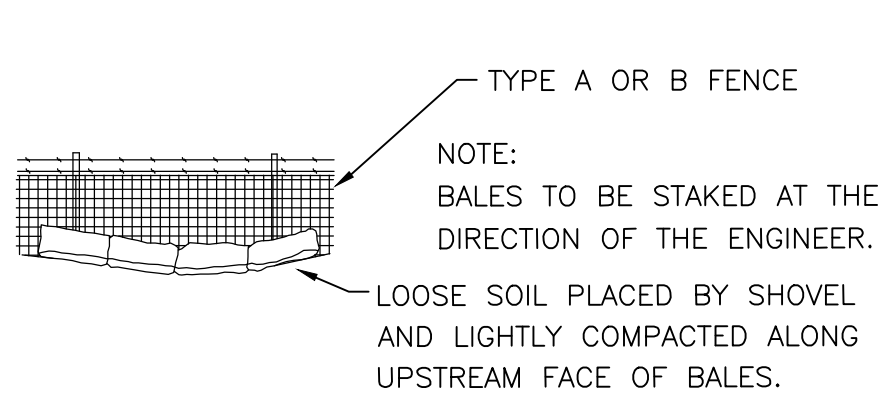
SHEET NO.
C-1

EROSION AND SEDIMENT CONTROL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION-ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORESEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
6. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED IN D-903. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
7. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
8. NATURAL STRAW BALES SHALL NOT BE USED. ONLY FDOT APPROVED SYNTHETIC BALES SHALL BE ALLOWED.
9. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 8 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
10. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
11. ALL SEDIMENT CONTROLS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
12. NECESSARY REPAIRS TO BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.
13. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SEDIMENT CONTROL BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
14. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
15. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
16. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT SPECIFICATIONS AND CRITERIA.
17. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL - A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) CHAPTER 6.
18. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION.
19. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
20. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
21. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
22. A DEWATERING PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ANY DEWATERING. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT (CUP) FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT. IF IT IS DETERMINED THAT A CUP IS REQUIRED IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE PERMIT.
23. ALL DISTURBED AREAS TO BE STABILIZED THROUGH COMPACTION, SILT CONTRACTOR TO OBTAIN THE PERMIT, SCREENS, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
24. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE STABILIZED AND FINAL APPROVAL IS GRANTED BY OWNER.
25. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
26. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SURWMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE BID ITEM FOR EROSION AND SEDIMENT CONTROL.



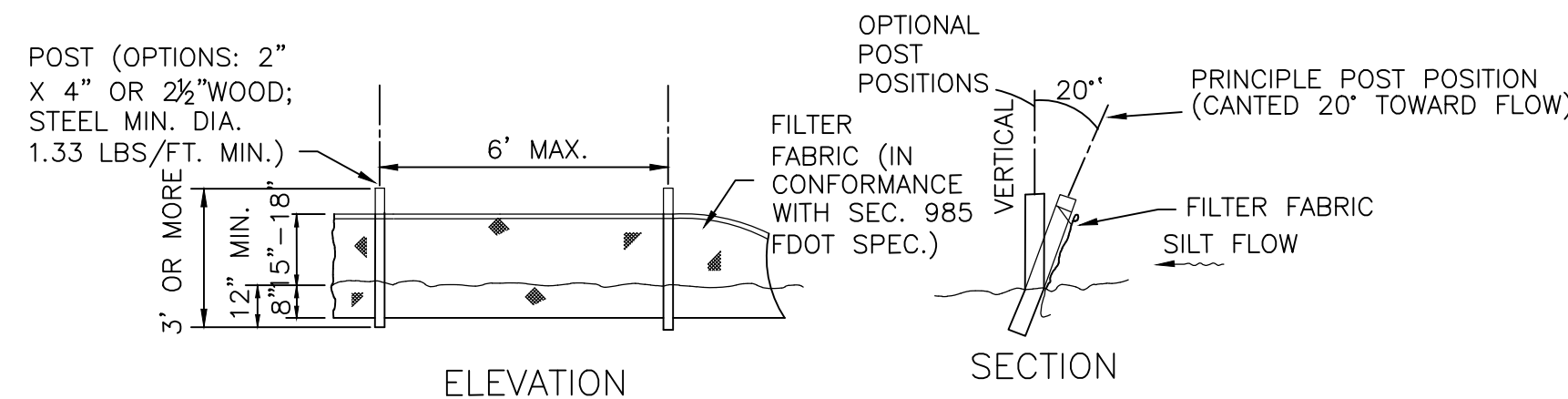
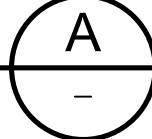
PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



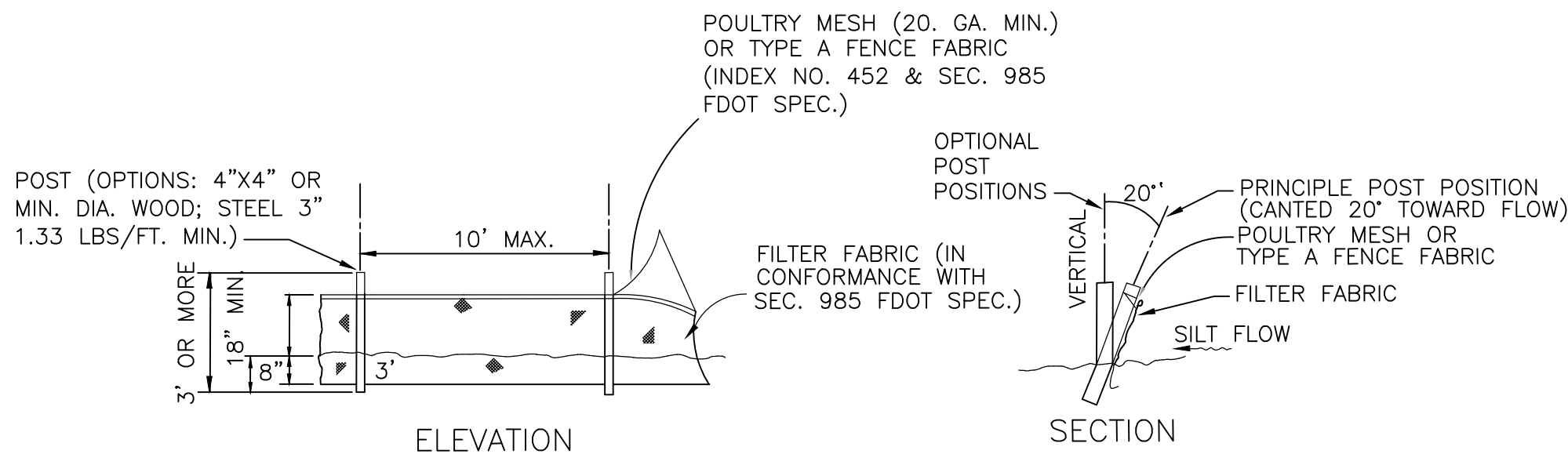
BALES BACKED BY FENCE

SYNTHETIC BALE LOCATION (D-901)

DETAIL
NTS

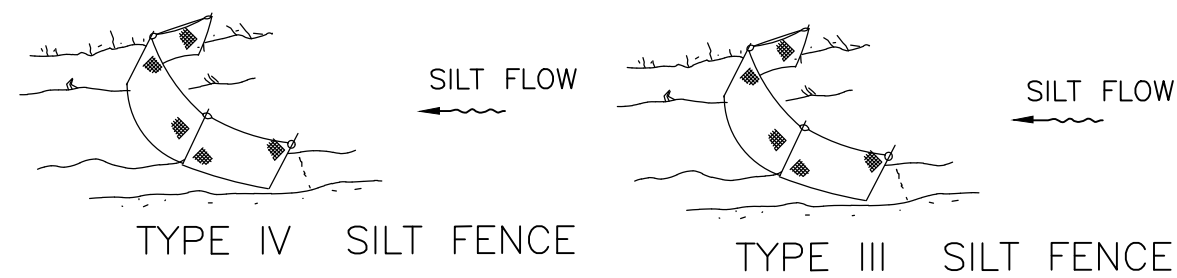


TYPE III SILT FENCE

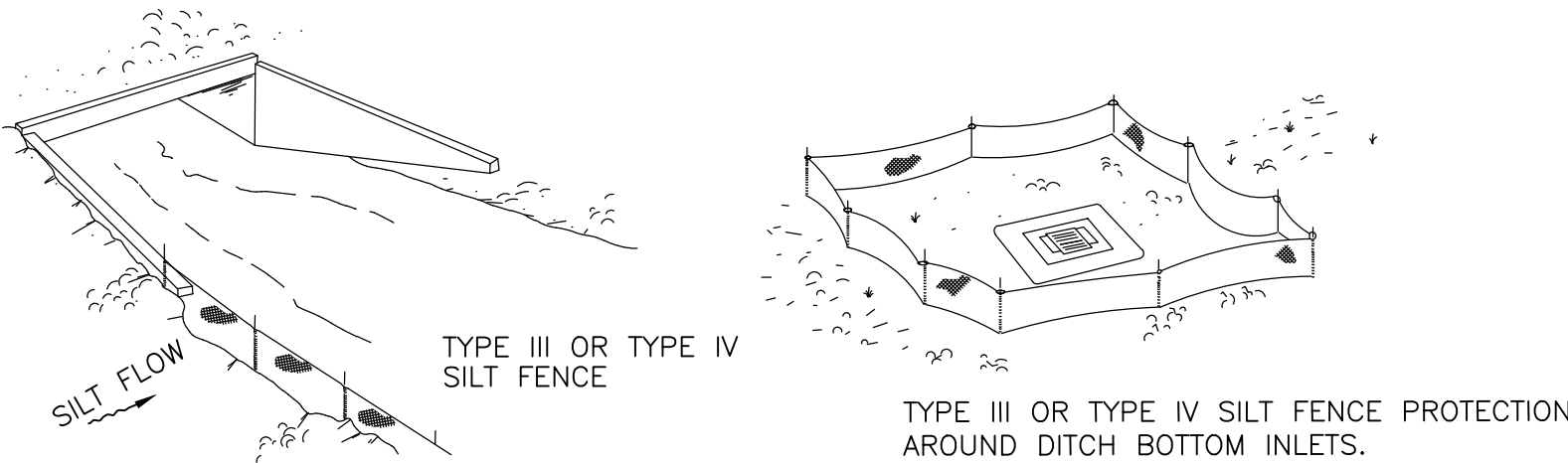


TYPE IV SILT FENCE

NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT LUMP SUM PRICE FOR EROSION AND SEDIMENT CONTROL.



NOTE:
SPACING FOR TYPE III & TYPE IV FENCE TO BE IN ACCORDANCE WITH CHART 1, SHEET 1 OF 3, FDOT INDEX

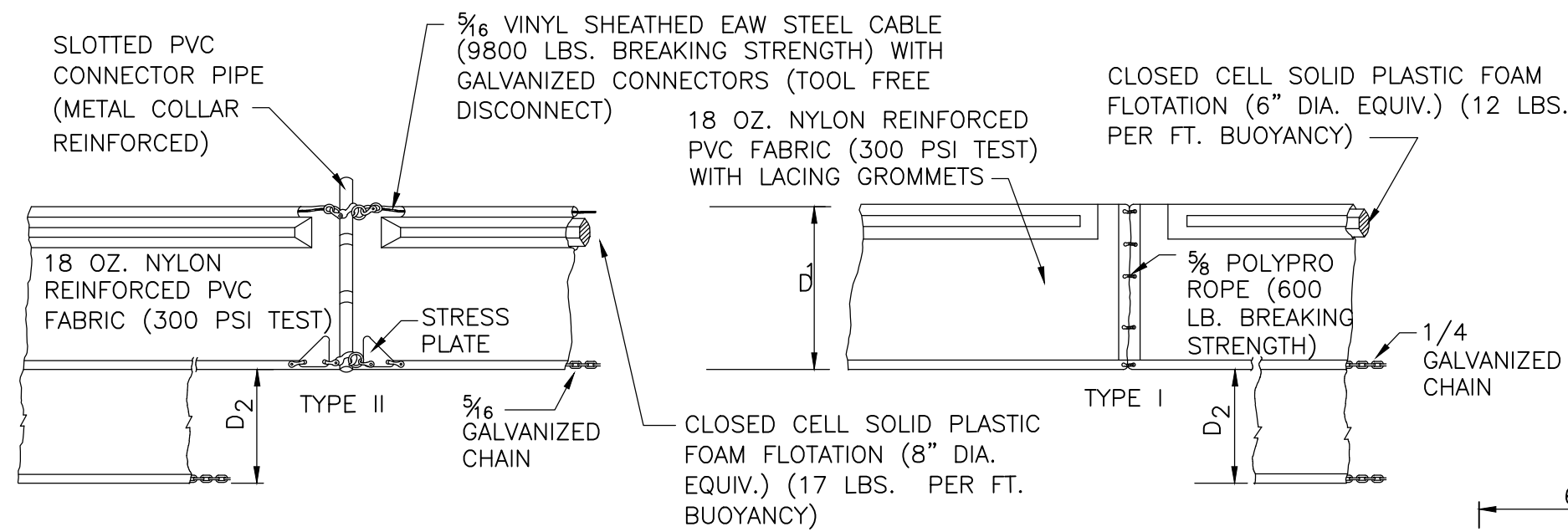
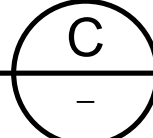


DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE APPLICATIONS

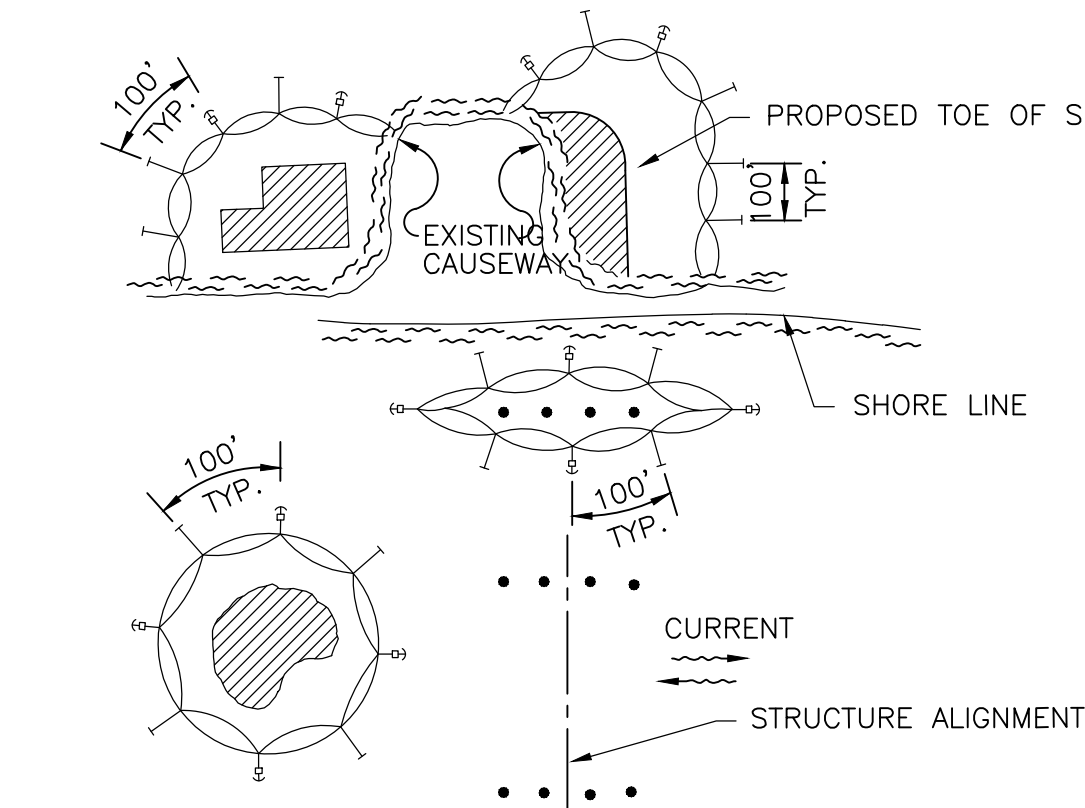
SILT FENCE TYPE III & IV (D-908)

DETAIL
NTS



FLOATING TURBIDITY BARRIERS

STAKED TURBIDITY BARRIER

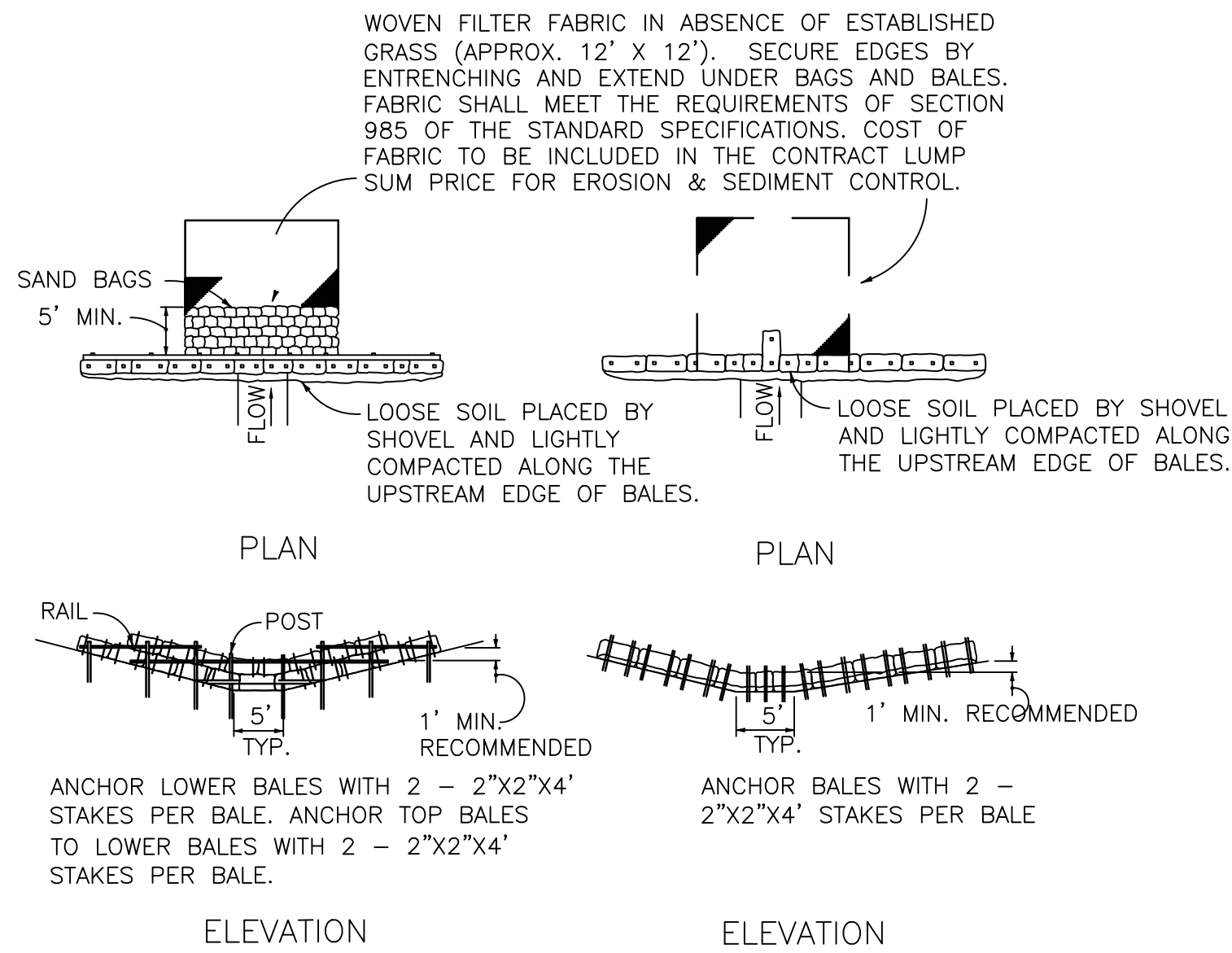
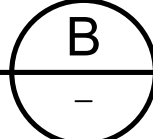


- NOTES:
1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
 2. NUMBER AND SPACING OF ANCHORS DEPENDENT ON CURRENT VELOCITIES.
 3. DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
 4. NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION OPERATIONS.
 5. FOR ADDITIONAL INFORMATION SEE SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.

TURBIDITY BARRIER APPLICATIONS

TURBIDITY BARRIERS (D-907)

DETAIL
NTS



APPLICATION AND SPACING: THE USE OF TYPES I & II BALE BARRIERS SHOULD BE LIMITED TO THE CONDITIONS OUTLINED IN CHART 1, SHEET 1 OF 3, INDEX NO. 102

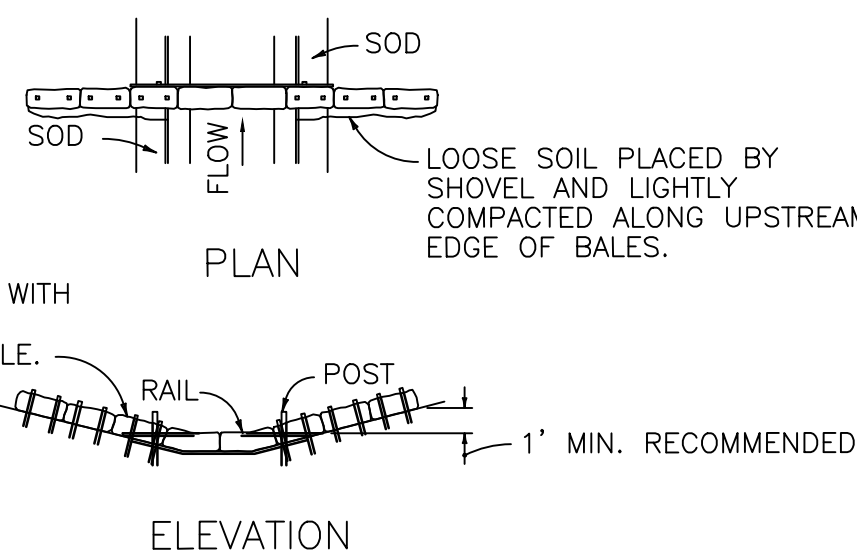
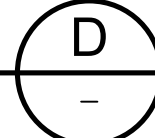
TYPE II

TYPE I

BARRIER FOR UNPAVED DITCHES

SYNTHETIC BALE BARRIERS TYPE I & II (D-912)

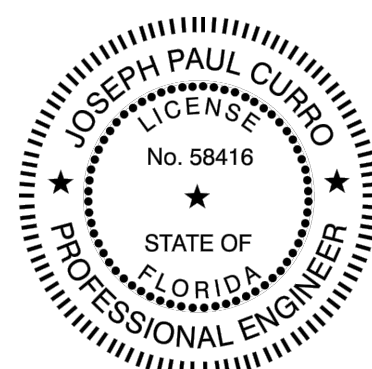
DETAIL
NTS



SPACING: BALE BARRIERS FOR PAVED DITCHES SHOULD BE SPACED IN ACCORDANCE WITH CHART 1, SHEET 1 OF 3, INDEX NO. 102

BARRIER FOR PAVED DITCH

NOTE:
WHERE FDOT SPECS AND INDEX ARE REFERENCED, PLEASE REFER TO FDOT ROADWAY & TRAFFIC DESIGN STANDARDS, AND FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.



DATE:
JOSEPH P CURRO
PE NO. 58416

PROJECT NO. 9012-228686
FILE NAME: C003SDDT.DWG

SHEET NO.

C-3

ISSUED FOR BID

DESIGNED BY:	K. WESTERLUND
DRAWN BY:	A. NUNES
SHEET CHK'D BY:	W. LIU
CROSS CHK'D BY:	L. STERLING
APPROVED BY:	J. CURRO
DATE:	NOVEMBER 2020

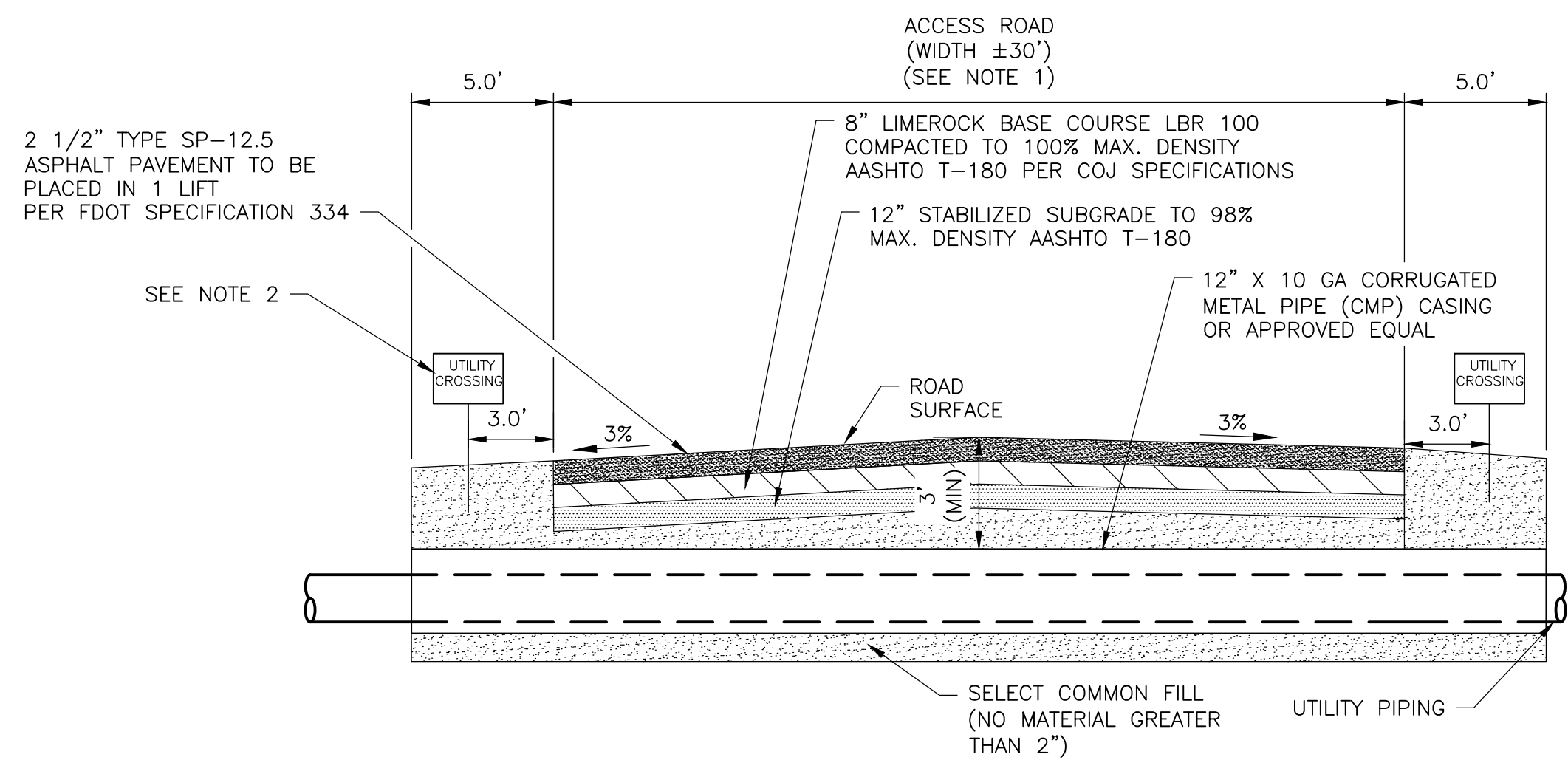


CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

EROSION AND SEDIMENTATION CONTROL
PLAN

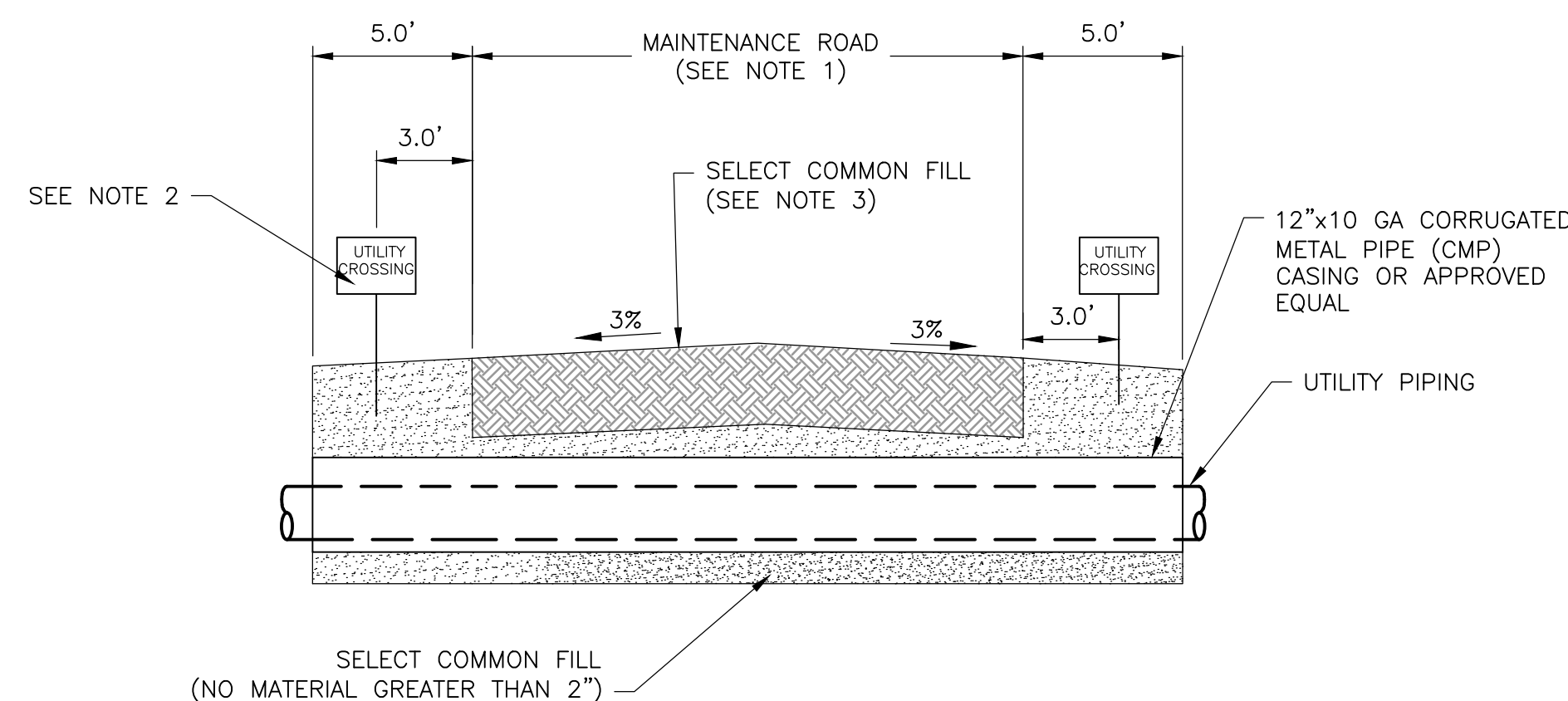
4. PIPE SUPPORTS ARE TO BE PLACED 6'-0" ON CENTER.
SEE DETAIL C ON THIS SHEET.





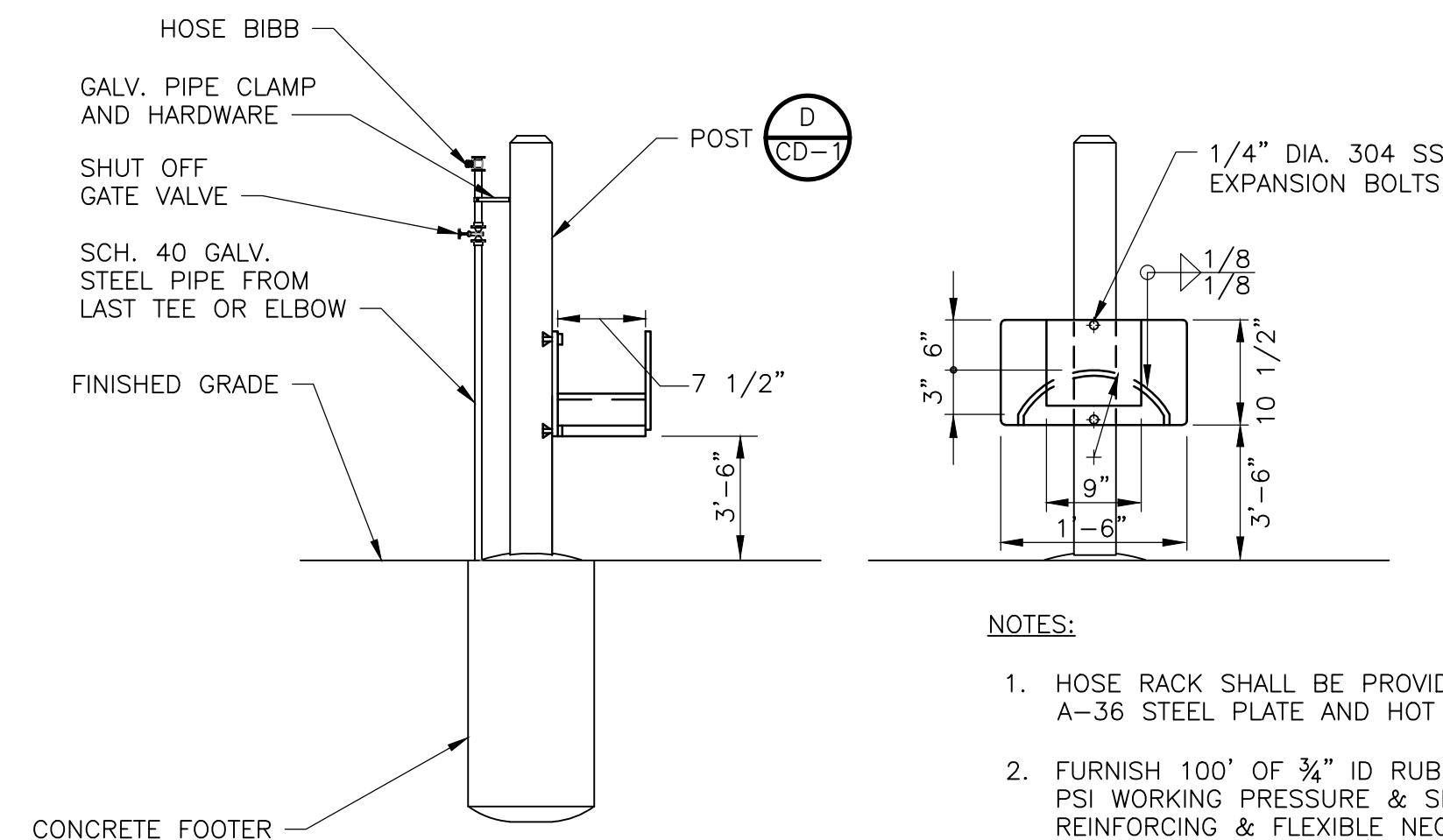
- NOTES:**
1. THE ASPHALT THAT IS SHOWN IS TYPICAL. IF CONDITIONS VARY IN THE FIELD, THE CONTRACTOR SHALL RESTORE THE ASPHALT ROAD TO MATCH ORIGINAL CONDITIONS. THE GOVERNING SPECIFICATIONS ARE THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
 2. PROVIDE 9"x12" ALUMINUM SIGNS W/ SS HARDWARE WHICH STATE "UTILITY CROSSING". THE BACKGROUND SHALL BE WHITE AND THE LETTERS BLACK. MOUNT SIGNS IN ACCORDANCE WITH FDOT INDEX 700-010, SLIP BASE AND FOUNDATION DETAIL.
 3. THE CONTRACTOR IS REQUIRED TO PROVIDE A FDOT CERTIFIED QUALITY CONTROL LABORATORY TO MONITOR AND TEST ASPHALT PLACEMENT IN ACCORDANCE WITH THE FDOT SPECIFICATIONS.

DETAIL B
NTS C-2

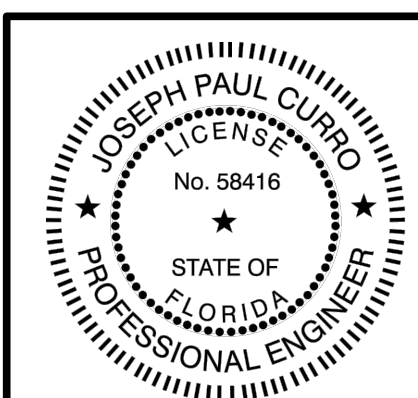


- NOTES:**
1. THE MAINTENANCE ROAD THAT IS SHOWN IS TYPICAL. IF CONDITIONS VARY IN THE FIELD, THE CONTRACTOR SHALL RESTORE THE ACCESS ROAD TO MATCH ORIGINAL CONDITIONS.
 2. PROVIDE 9"x12" ALUMINUM SIGNS W/ SS HARDWARE WHICH STATE "UTILITY CROSSING". THE BACKGROUND SHALL BE WHITE AND THE LETTERS BLACK. MOUNT SIGNS IN ACCORDANCE WITH FDOT INDEX 700-010, SLIP BASE AND FOUNDATION DETAIL.
 3. RESTORE MAINTENANCE ROAD TO MATCH ORIGINAL CONDITIONS USING SELECT COMMON FILL AND COMPACTING TO 95% MODIFIED PROCTOR DRY DENSITY.

DETAIL C
NTS C-2



- NOTES:
1. HOSE RACK SHALL BE PROVIDED. UNIT SHALL BE FABRICATED FROM 1/8" A-36 STEEL PLATE AND HOT DIPPED GALV AFTER FABRICATION.
 2. FURNISH 100' OF 3/4" ID RUBBER HOSE. HOSE SHALL BE DESIGNED FOR 150 PSI WORKING PRESSURE & SHALL HAVE TWO CORDS OF TIGHTLY BRAIDED REINFORCING & FLEXIBLE NEOPRENE EXTERIOR THAT RESISTS OIL, GREASE, ABRASION & SEVERE WEATHER CONDITIONS FOR INDUSTRIAL USE BOTH ENDS OF HOSE SHALL BE THREADED, ONE END MALE, ONE END FEMALE PROVIDE A TYPICAL RUBBER COVERED SPRAY NOZZLE WITH SWIVEL TYPE ADAPTORS, OR EQUAL, LEVER ACTION, RATED AT 150 PSI.
 3. INSIDE DIAMETER OF HOSE SHALL BE SAME AS HOSE VALVE.
 4. PROVIDE VACUUM BREAKER-BACKFLOW PREVENTER (NIDEL 34H) OR EQUAL.



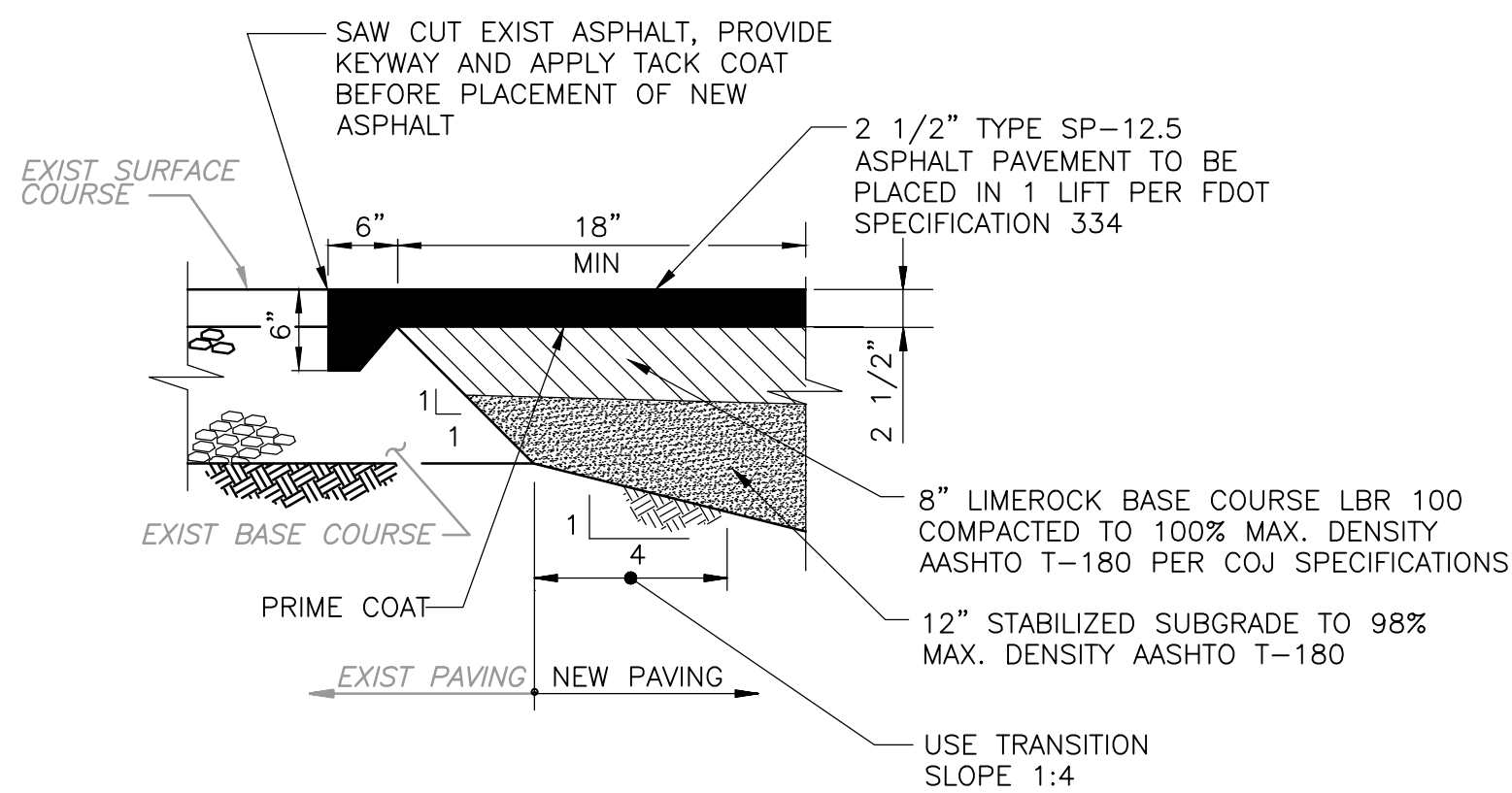
DATE:
JOSEPH P CURRO
PE NO. 58416

PROJECT NO. 9012-22868
FILE NAME: CD02GSDT.DWG

SHEET NO.

CD-2

ISSUED FOR BID

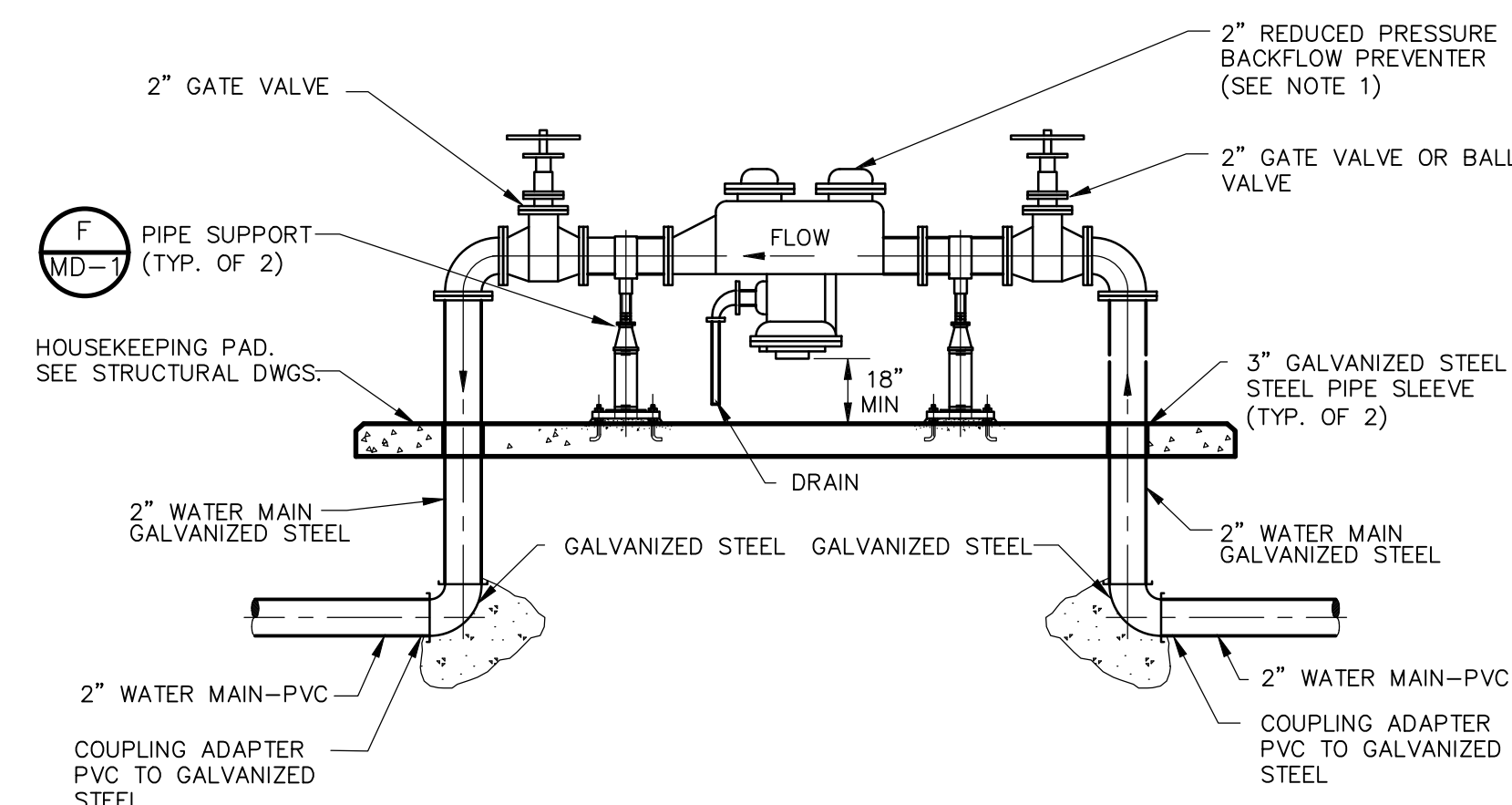


DETAIL

NTS

D

C-2



- NOTE:
1. THE BACKFLOW PREVENTER MUST BE SUPPLIED BY A JEA QUALIFIED GENERAL BACKFLOW PREVENTION ASSEMBLY VENDOR.

DETAIL E
NTS C-2



TRAIL RIDGE LANDFILL PHASE 6 LANDFILL GAS SYSTEM - PHASE II

DETAILS II

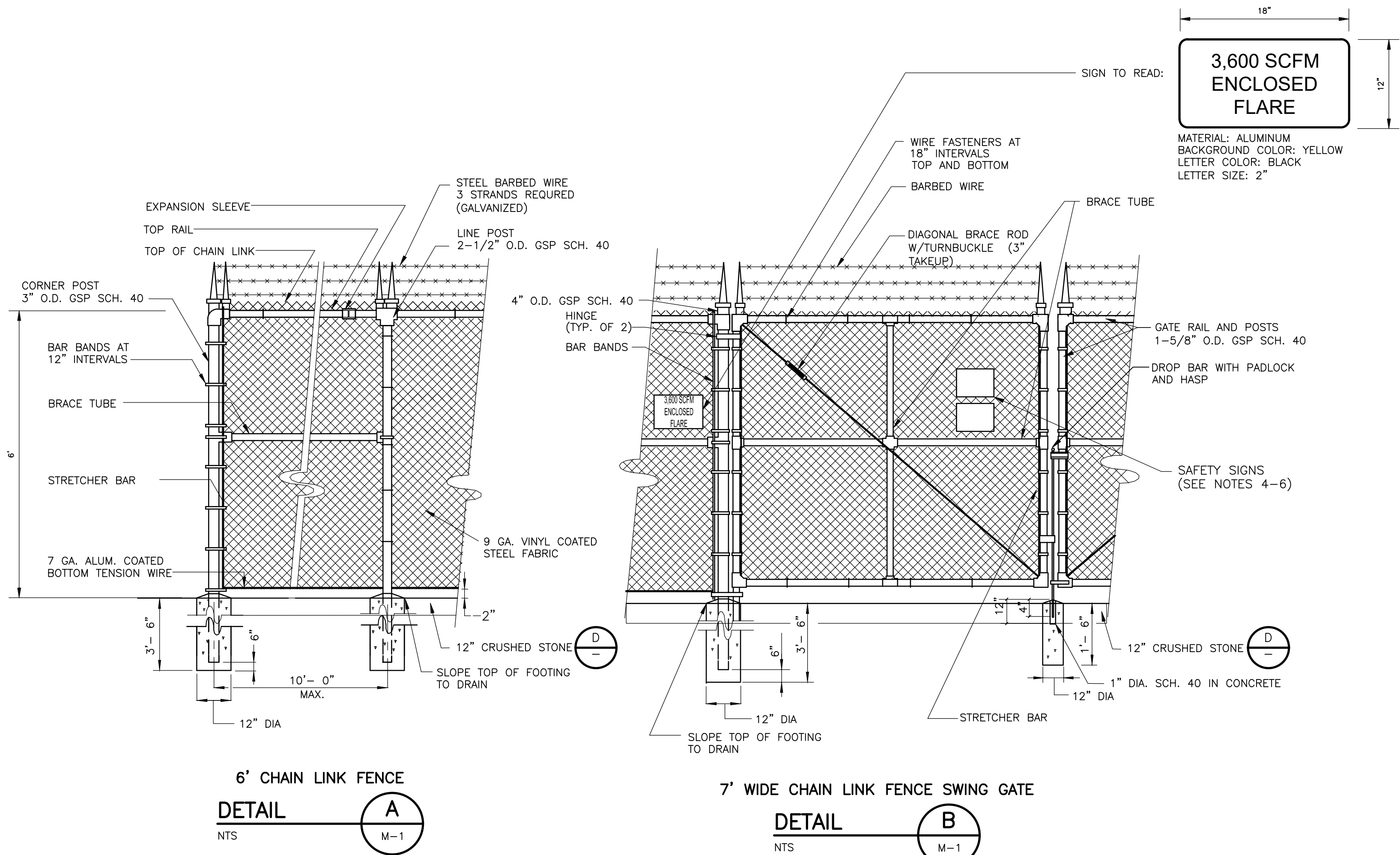
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. WESTERLUND
DRAWN BY: A. NUNES
SHEET CHK'D BY: W. LIU
CROSS CHK'D BY: L. STERLING
APPROVED BY: J. CURRO
DATE: NOVEMBER 2020

**CDM
Smith**
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL COA No. EB-0000020

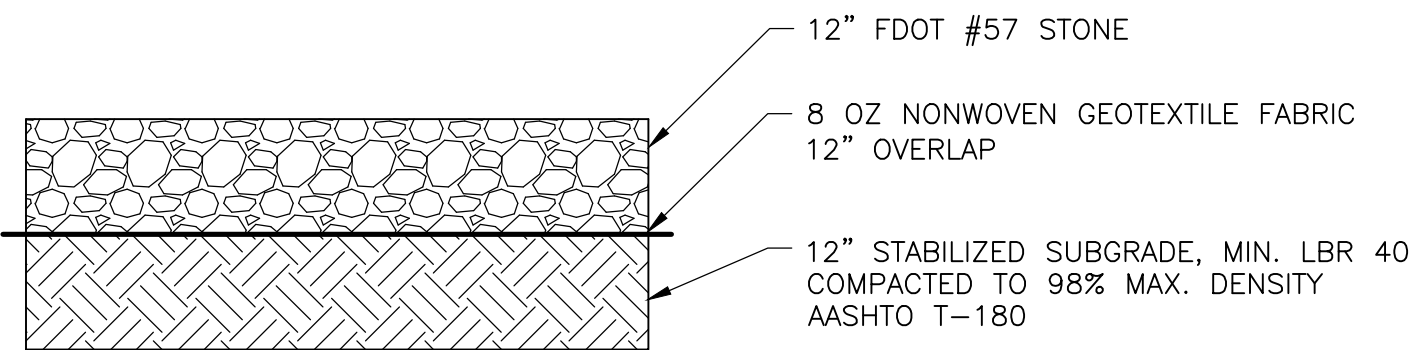
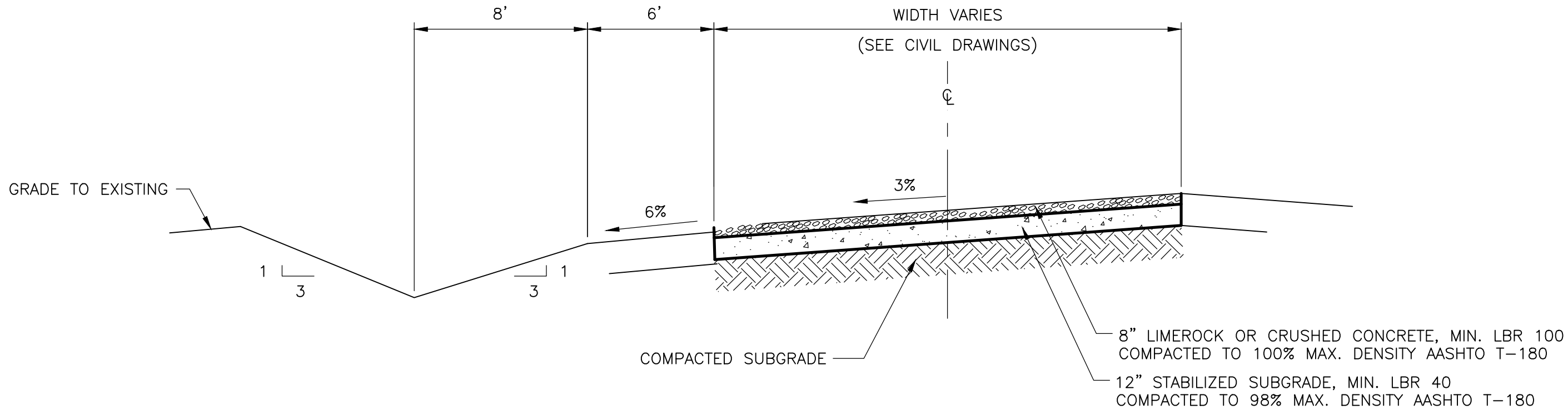
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NOTES (DETAILS A AND B):

- ALL RAILS, POSTS, HARDWARE, AND CHAIN LINK FENCING SHALL BE GALVANIZED, VINYL COATED BLACK.
- VINYL COATED STEEL WOVEN FABRIC TO BE STRETCHED TAUT WITH STRETCHER BARS AND STRAPS, AND FASTENED TOP AND BOTTOM AND AT LINE POSTS WITH GALV. HOG RING TIES WITH SLATS.
- GATE TO BE SECURED OPEN WITH GATE STOP SET IN CONCRETE.
- ALL SIGNS SHALL BE SECURED TO FENCE WITH SS HARDWARE.
- THE CONTRACTOR SHALL INSTALL BOTH NO SMOKING AND METHANE GAS HAZARD SIGNS. THESE 10"x14" SIGNS SHALL BE OSHA COMPLIANT AND MADE OF ALUMINUM.
- CONTRACTOR TO SUBMIT PROPOSED SIGNS FOR APPROVAL IN ACCORDANCE WITH SECTION 013300.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. WESTERLUND
DRAWN BY: A. NUNES
SHEET CHK'D BY: W. LIU
CROSS CHK'D BY: L. STERLING
APPROVED BY: J. CURRO
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CDA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

DETAILS III

JOSEPH PAUL CURRO

LICENSE

No. 58416

STATE OF FLORIDA

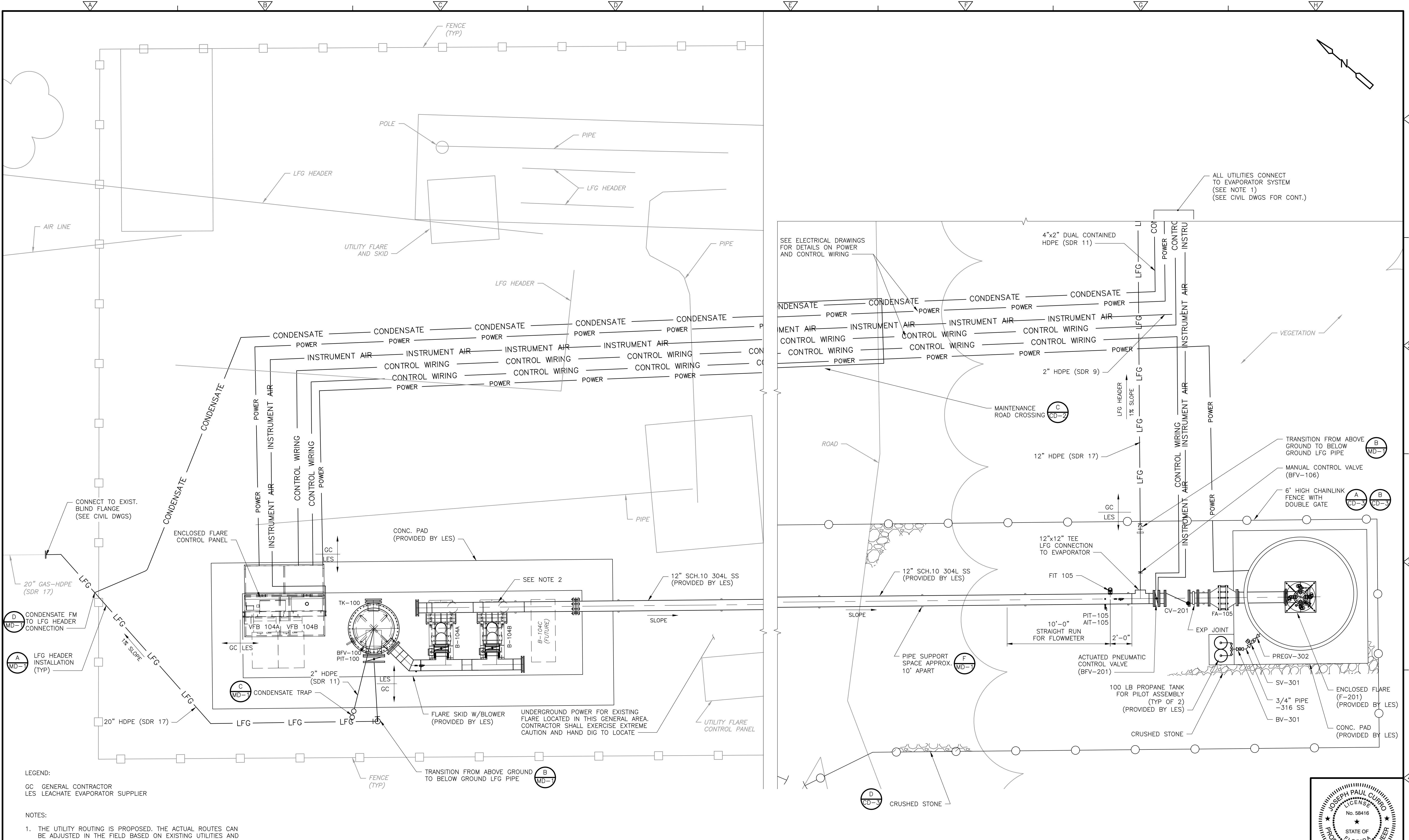
PROFESSIONAL ENGINEER

DATE:
JOSEPH P CURRO
PE NO. 58416

PROJECT NO. 9012-228686
FILE NAME: CD03GSDT.DWG

SHEET NO.
CD-3

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PLAN
1/4" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. WESTERLUND
DRAWN BY: A. NUNES
SHEET CHK'D BY: W. LIU
CROSS CHK'D BY: L. STERLING
APPROVED BY: J. CURRO
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CQA No. EB-0000020

CITY OF JACKSONVILLE
**TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II**

ENCLOSED FLARE AND BLOWERS

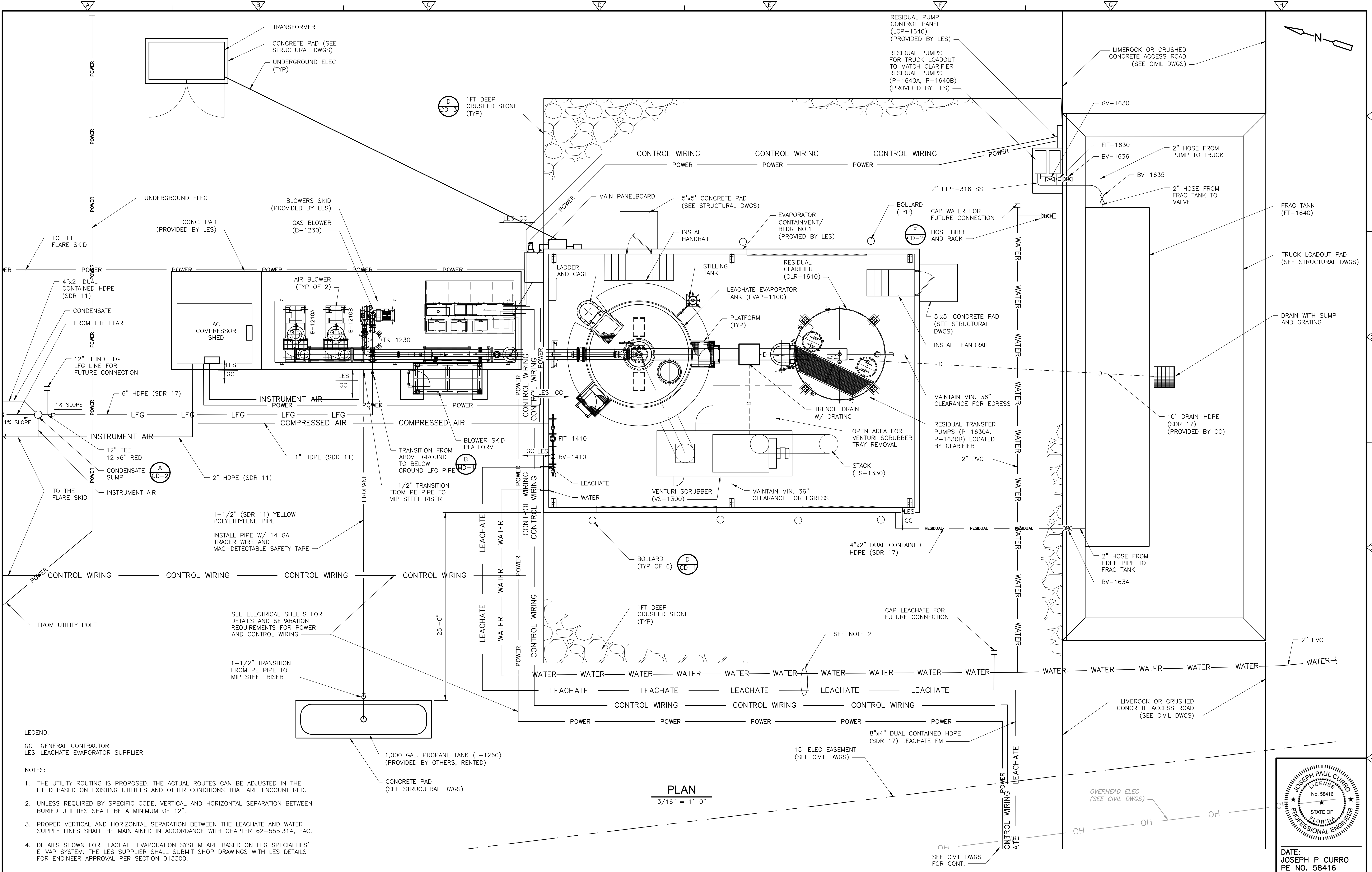
JOSEPH PAUL CURRO
LICENSE
No. 58416
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DATE:
JOSEPH P CURRO
PE NO. 58416

PROJECT NO. 9012-228686
FILE NAME: M001GEPL.DWG

SHEET NO.
M-1

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REUSE OF DOCUMENTS:



LEGEND:
GC GENERAL CONTRACTOR
LES LEACHATE EVAPORATOR SUPPLIER

NOTES:
1. THE UTILITY ROUTING IS PROPOSED. THE ACTUAL ROUTES CAN BE ADJUSTED IN THE FIELD BASED ON EXISTING UTILITIES AND OTHER CONDITIONS THAT ARE ENCOUNTERED.
2. UNLESS REQUIRED BY SPECIFIC CODE, VERTICAL AND HORIZONTAL SEPARATION BETWEEN BURIED UTILITIES SHALL BE A MINIMUM OF 12".
3. PROPER VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE LEACHATE AND WATER SUPPLY LINES SHALL BE MAINTAINED IN ACCORDANCE WITH CHAPTER 62-555.314, FAC.
4. DETAILS SHOWN FOR LEACHATE EVAPORATION SYSTEM ARE BASED ON LFG SPECIALTIES' E-VAP SYSTEM. THE LES SUPPLIER SHALL SUBMIT SHOP DRAWINGS WITH LES DETAILS FOR ENGINEER APPROVAL PER SECTION 013300.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. WESTERLUND
DRAWN BY: A. NUNES
SHEET CHK'D BY: W. LIU
CROSS CHK'D BY: L. STERLING
APPROVED BY: J. CURRO
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CDA No. EB-0000020

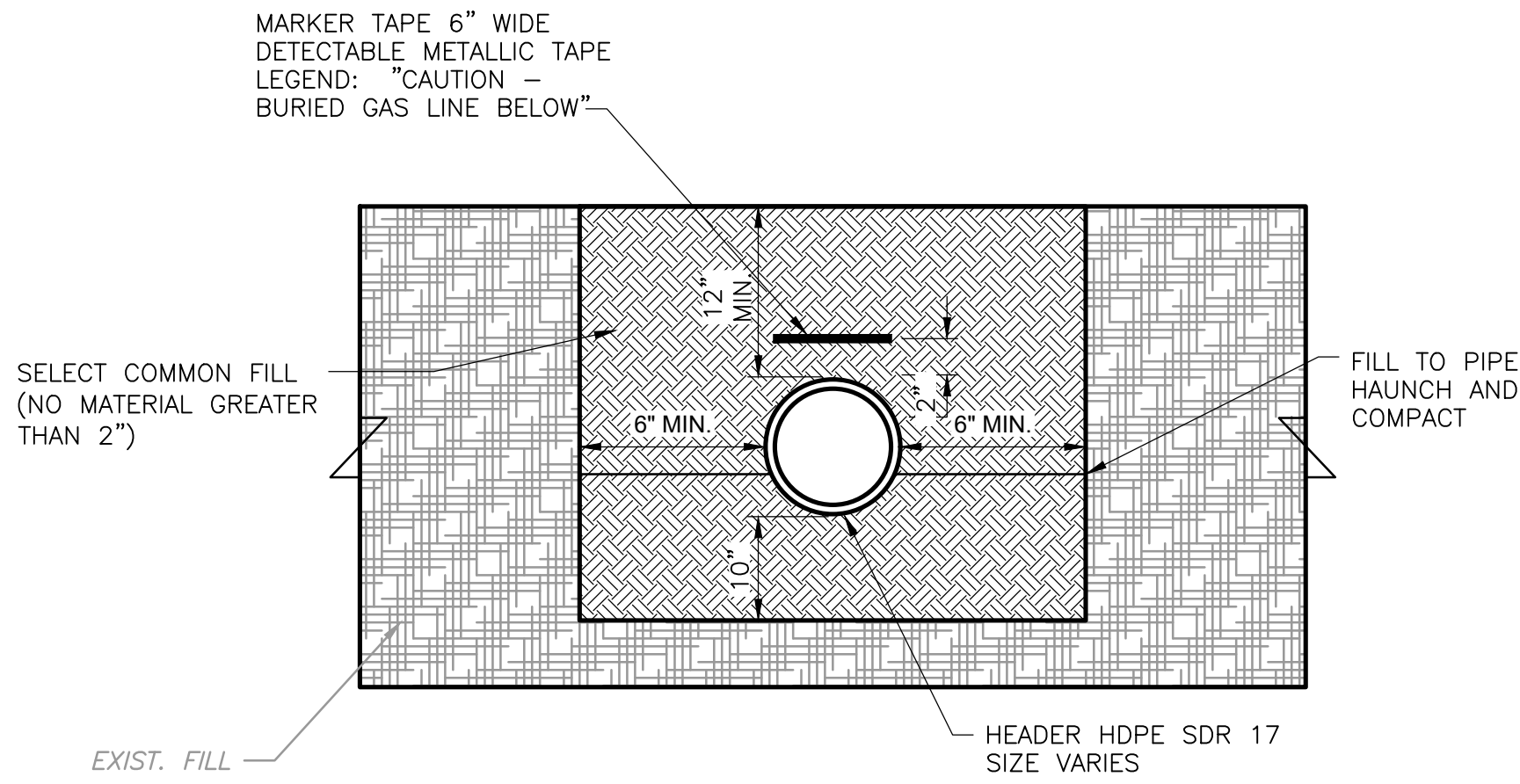
CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

LEACHATE EVAPORATOR
AND RESIDUAL LOADOUT

DATE: 9012-228686
PE NO. 58416
FILE NAME: M002GEPL.DWG
SHEET NO. M-2

ISSUED FOR BID

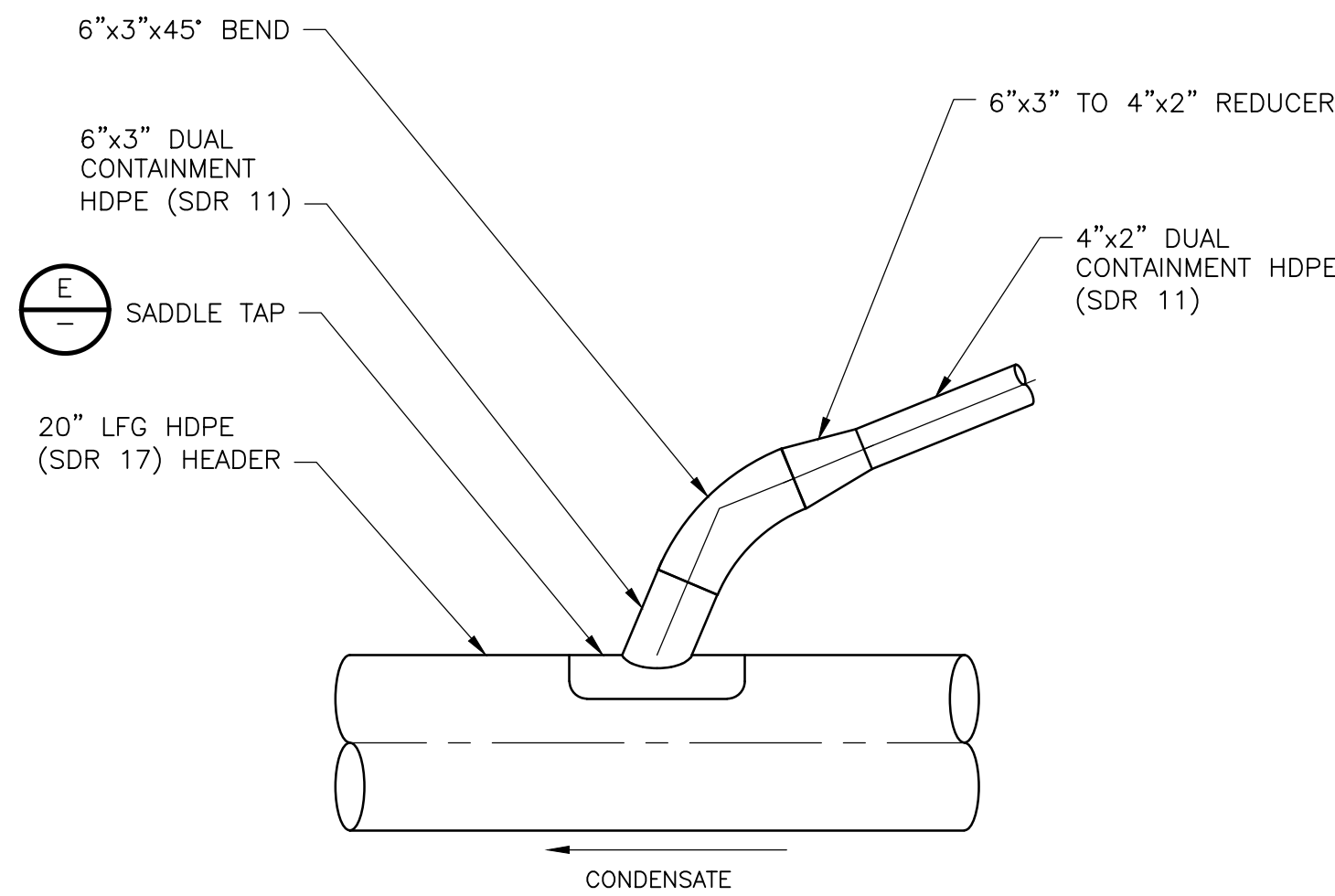
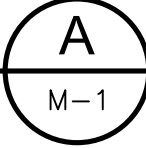
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LFG HEADER INSTALLATION

DETAIL

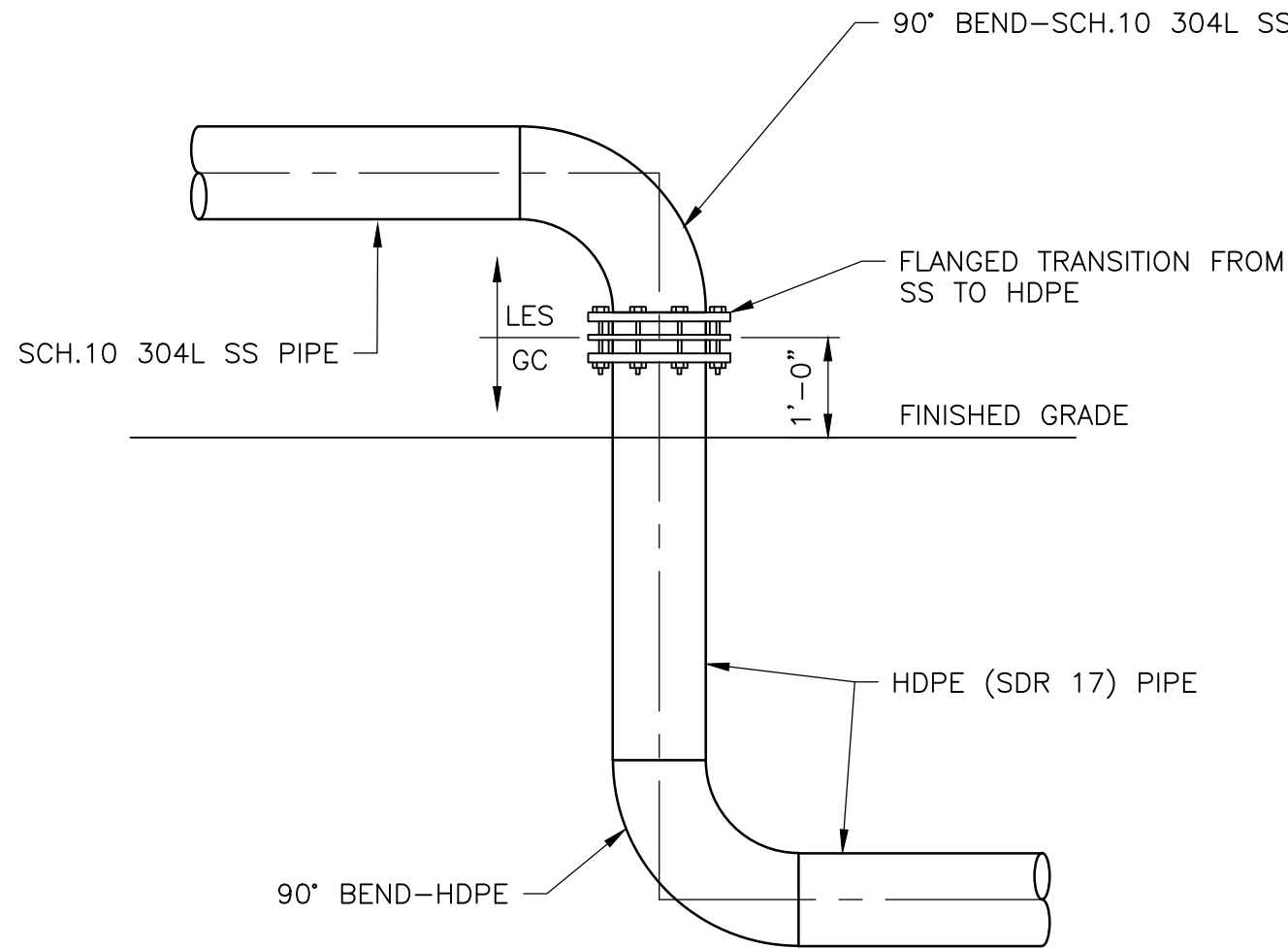
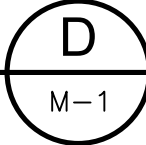
NTS



CONDENSATE FM TO LFG HEADER CONNECTION

DETAIL

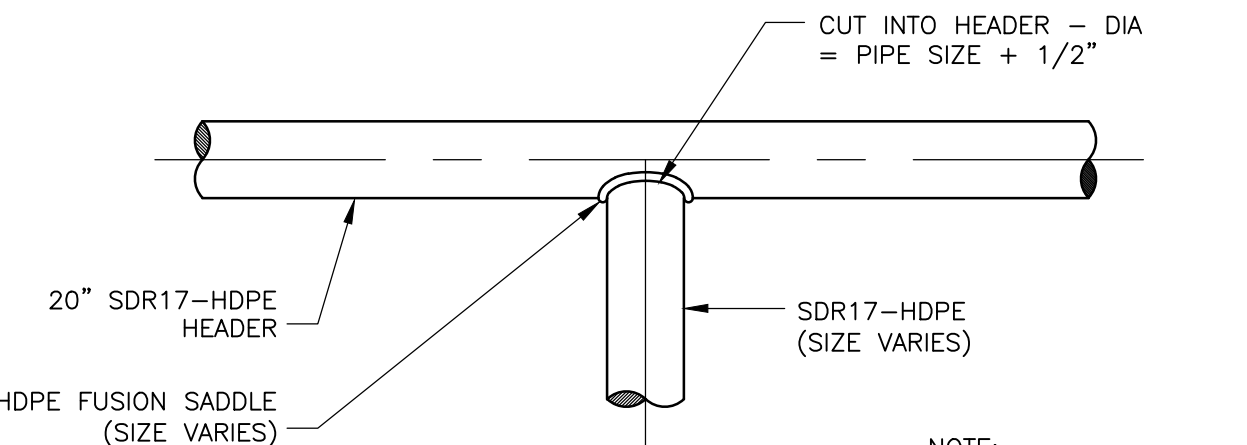
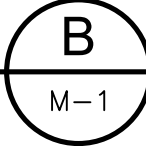
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LFG PIPE TRANSITION FROM
ABOVE TO BELOW GROUND

DETAIL

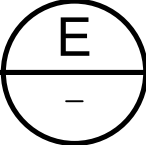
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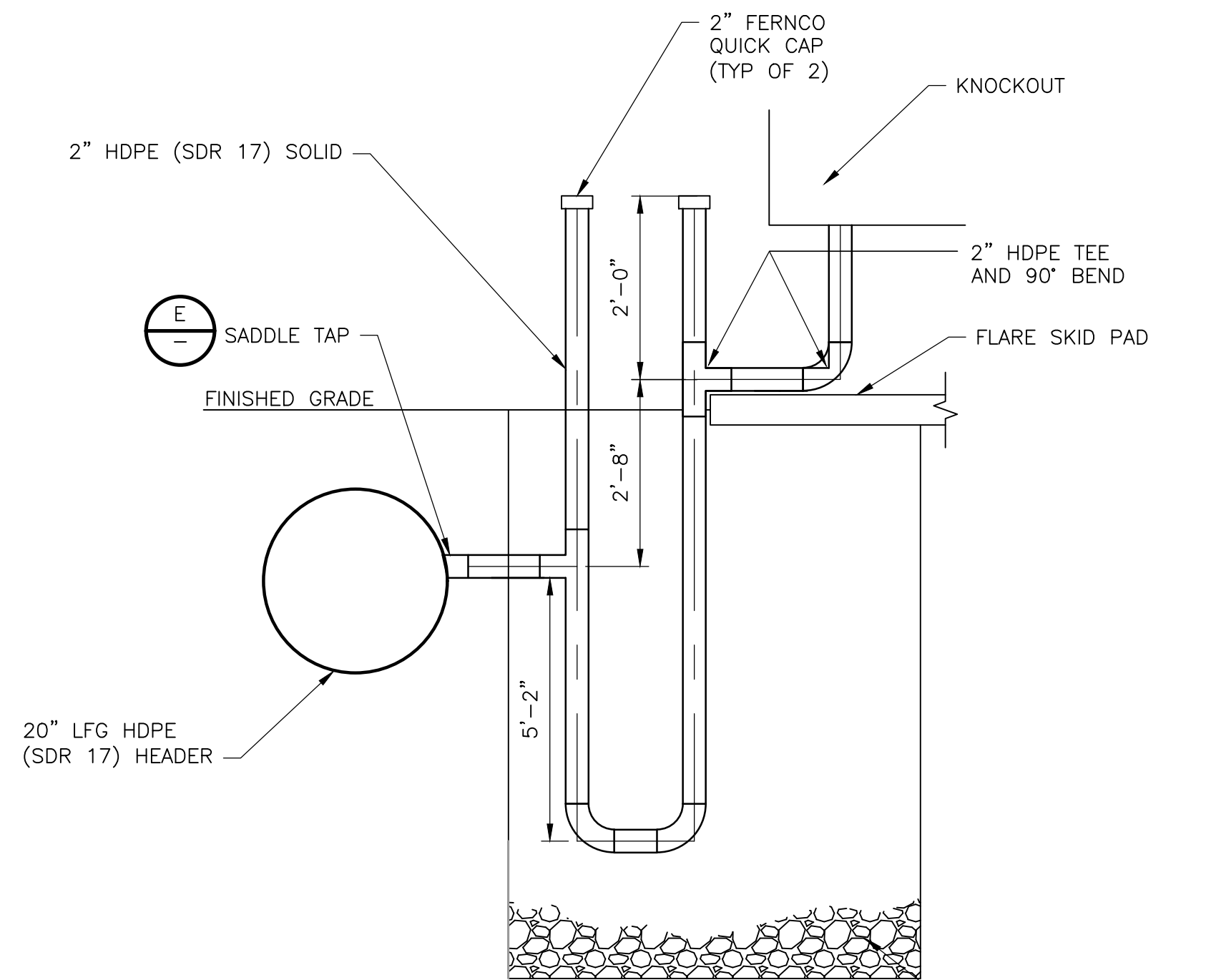
PIPE CUT-IN

DETAIL

NTS



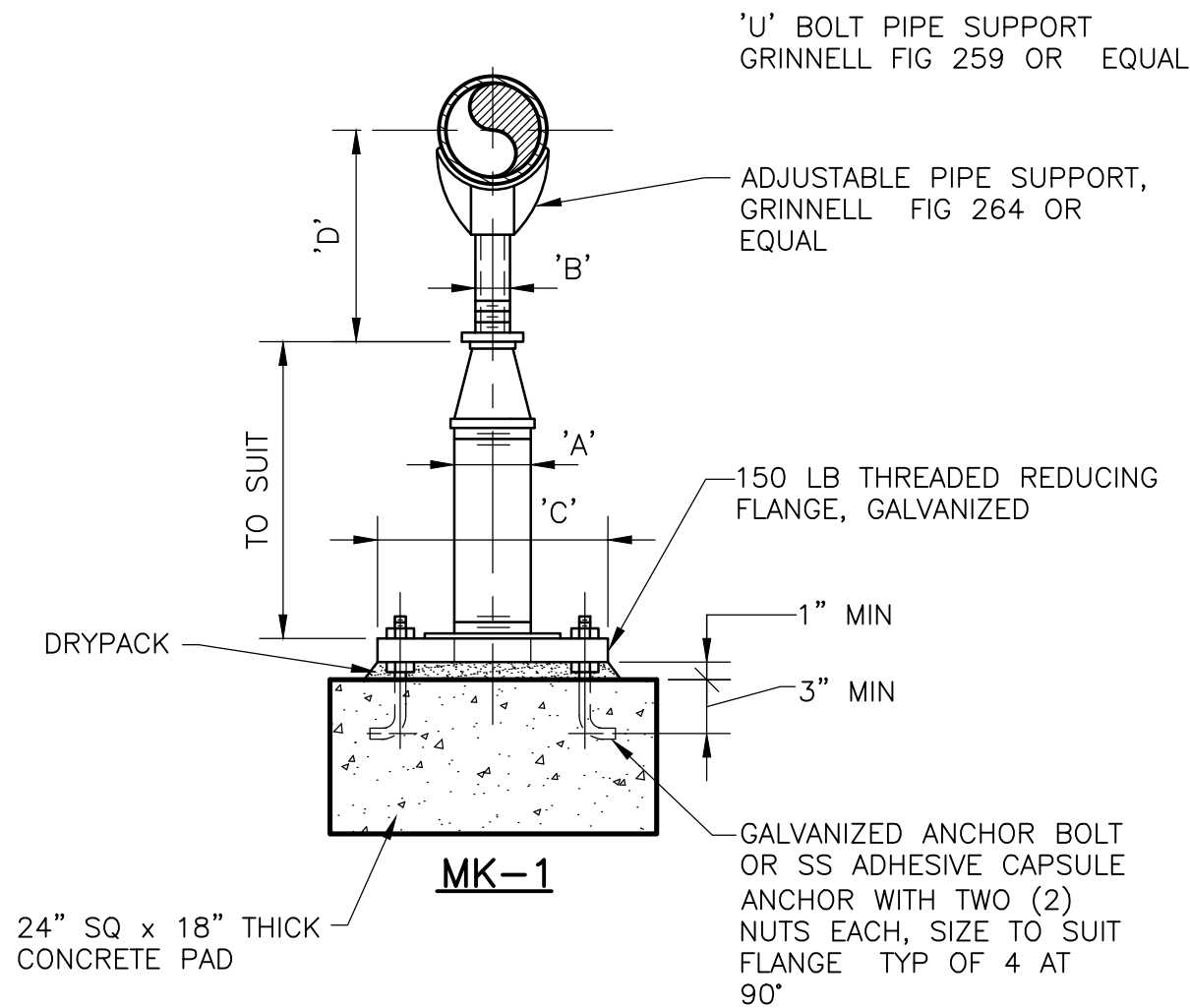
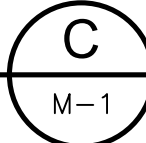
- NOTE:
1. REMOVE ALL CUTTING
FROM HEADER



CONDENSATE TRAP

DETAIL

NTS



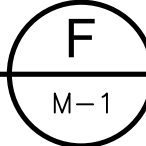
NOTES:

1. UNDER VALVES, METERS OR OTHER SPECIAL APPURTENANCES A FABRICATED
SUPPORT PIECE MAY BE UTILIZED AS ACCEPTABLE TO ENGINEER

ADJUSTABLE PIPE SUPPORT

DETAIL

NTS



ADJUSTABLE PIPE SUPPORT APPROX DIMENSIONS IN INCHES					
PIPE SIZE	A	B	C	D MIN	D MAX
2 ½	2 ½	1 ½	9	8	11 ½
3	2 ½	1 ½	9	8 ¼	11 ¾
3 ½	2 ½	1 ½	9	8 ½	12
4	3	2 ½	9	10 ¼	14
6	3	2 ½	9	11 ¾	15 ¼
8	3	2 ½	9	13 ¾	16 ½
10	3	2 ½	9	14 ¾	18 ¼
12	3	2 ½	9	15 ¾	19 ¾
14	4	3	11	18 ¾	20 ¾
16	4	3	11	19 7/8	22 ¼
18	6	3 ½	13 ½	21 ¼	24
20	6	3 ½	13 ½	23 ¼	25 ½
24	6	4	13 ½	26 ½	28 ¼
30	6	4	13 ½	29 ¾	31 ½
32	6	4	13 ½	30 ¾	32 ¾
36	6	4	13 ½	32 ¾	34 ¾

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. WESTERLUND
DRAWN BY: A. NUNES
SHEET CHK'D BY: W. LIU
CROSS CHK'D BY: L. STERLING
APPROVED BY: J. CURRO
DATE: NOVEMBER 2020

**CDM
Smith**
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CDA No. EB-0000020

CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

DETAILS I

JOSEPH PAUL CURRO
LICENSE
No. 58416
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

DATE:
JOSEPH P CURRO
PE NO. 58416

PROJECT NO. 9012-228686
FILE NAME: MD01GSDT.DWG

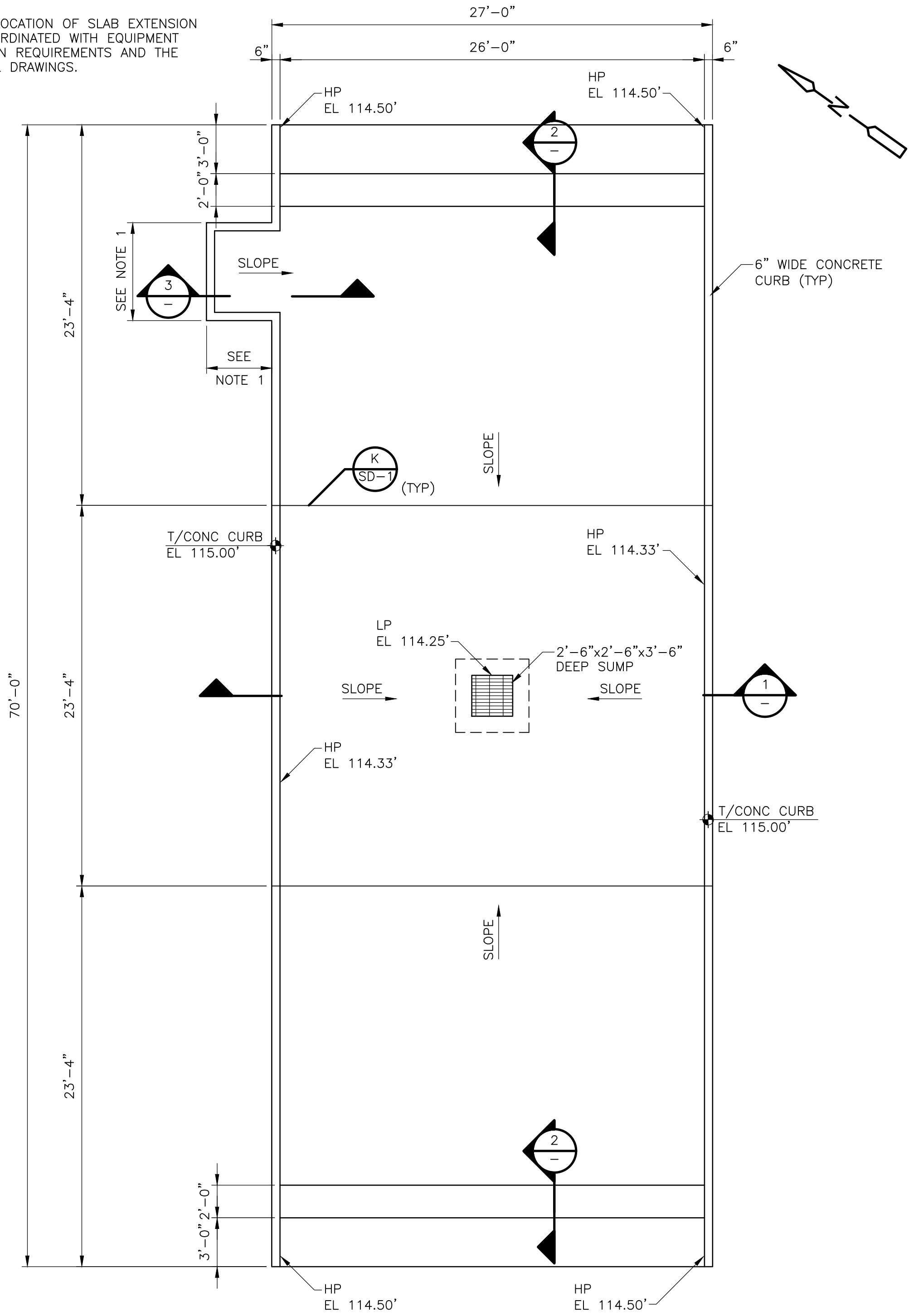
SHEET NO.
MD-1

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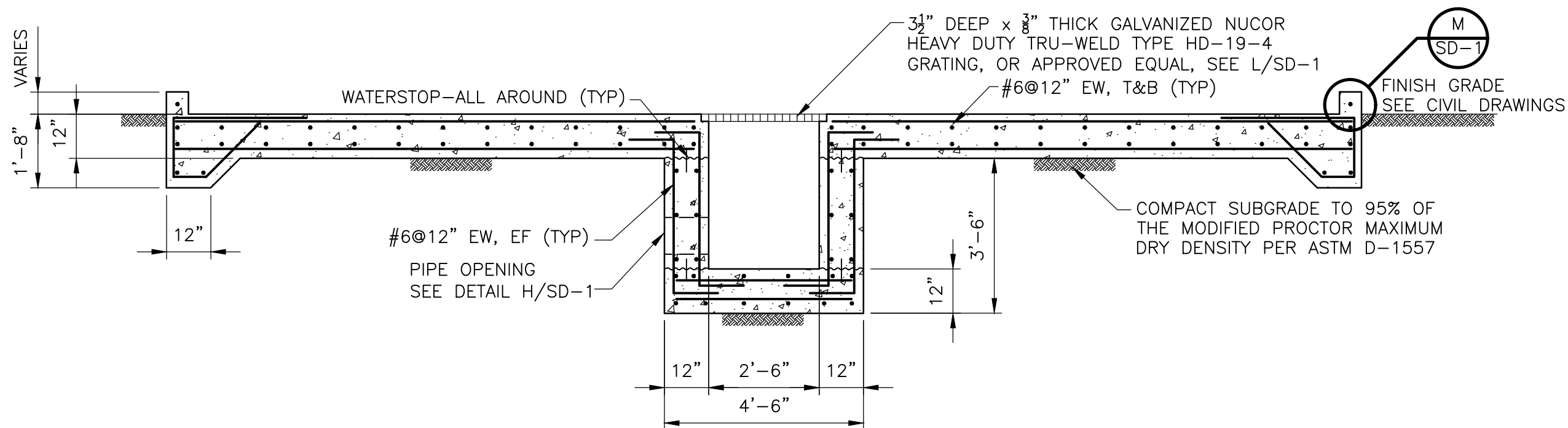
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NOTE:

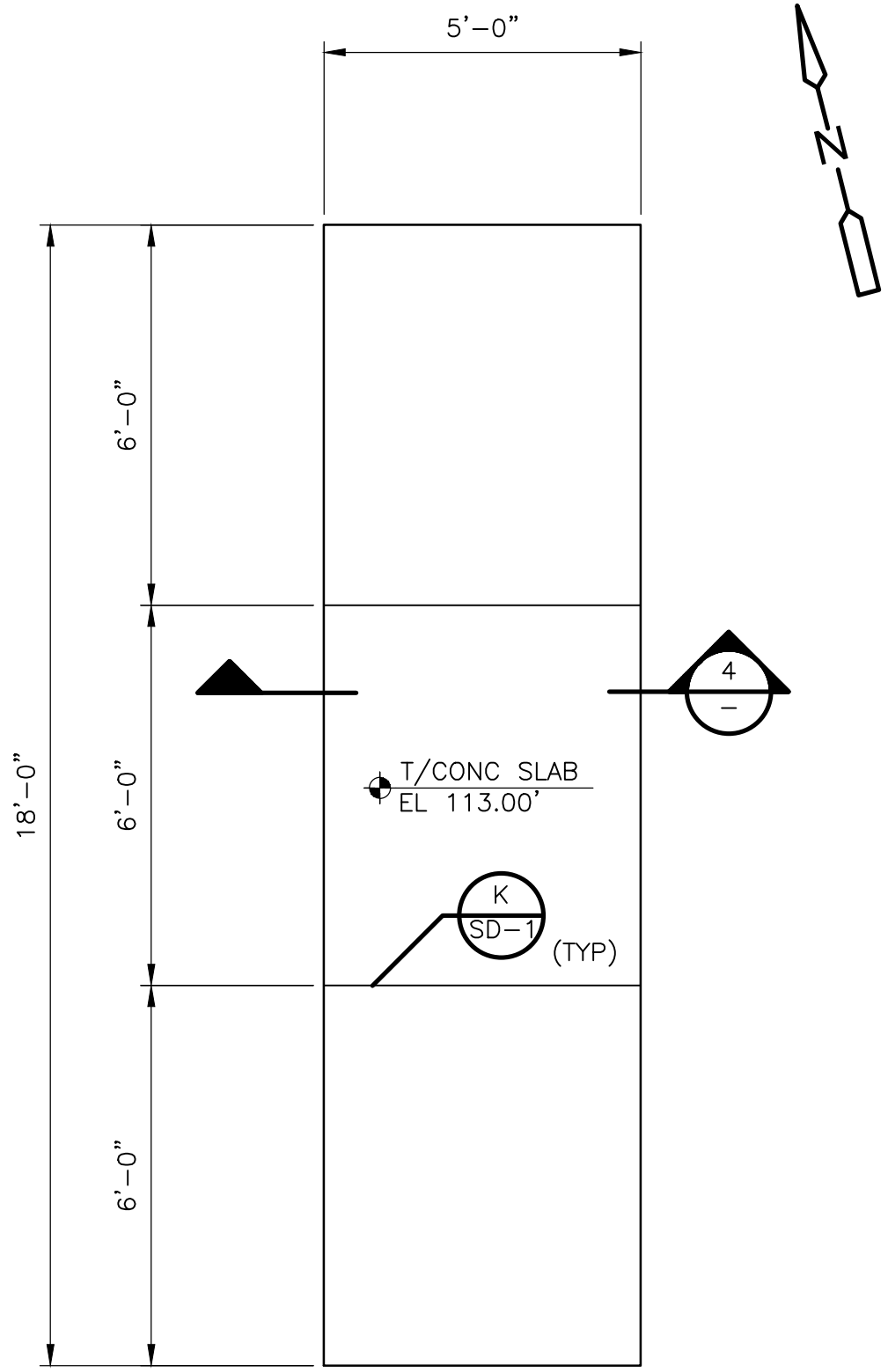
1. SIZE AND LOCATION OF SLAB EXTENSION TO BE COORDINATED WITH EQUIPMENT INSTALLATION REQUIREMENTS AND THE MECHANICAL DRAWINGS.



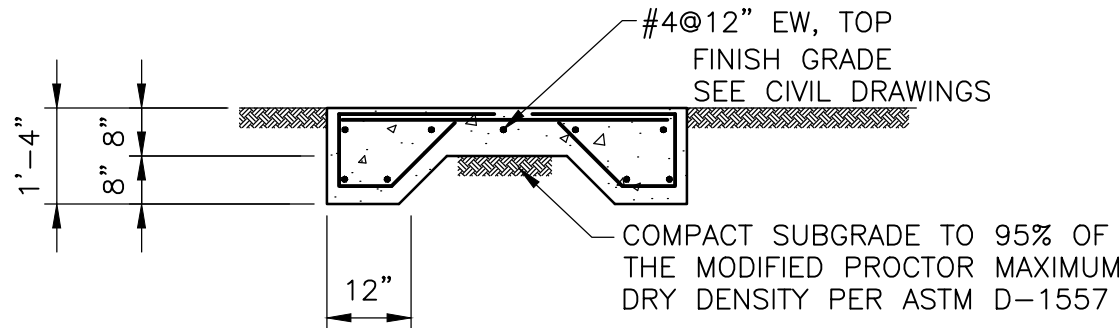
TRUCK LOADOUT SLAB
PLAN
3/16" = 1'-0"



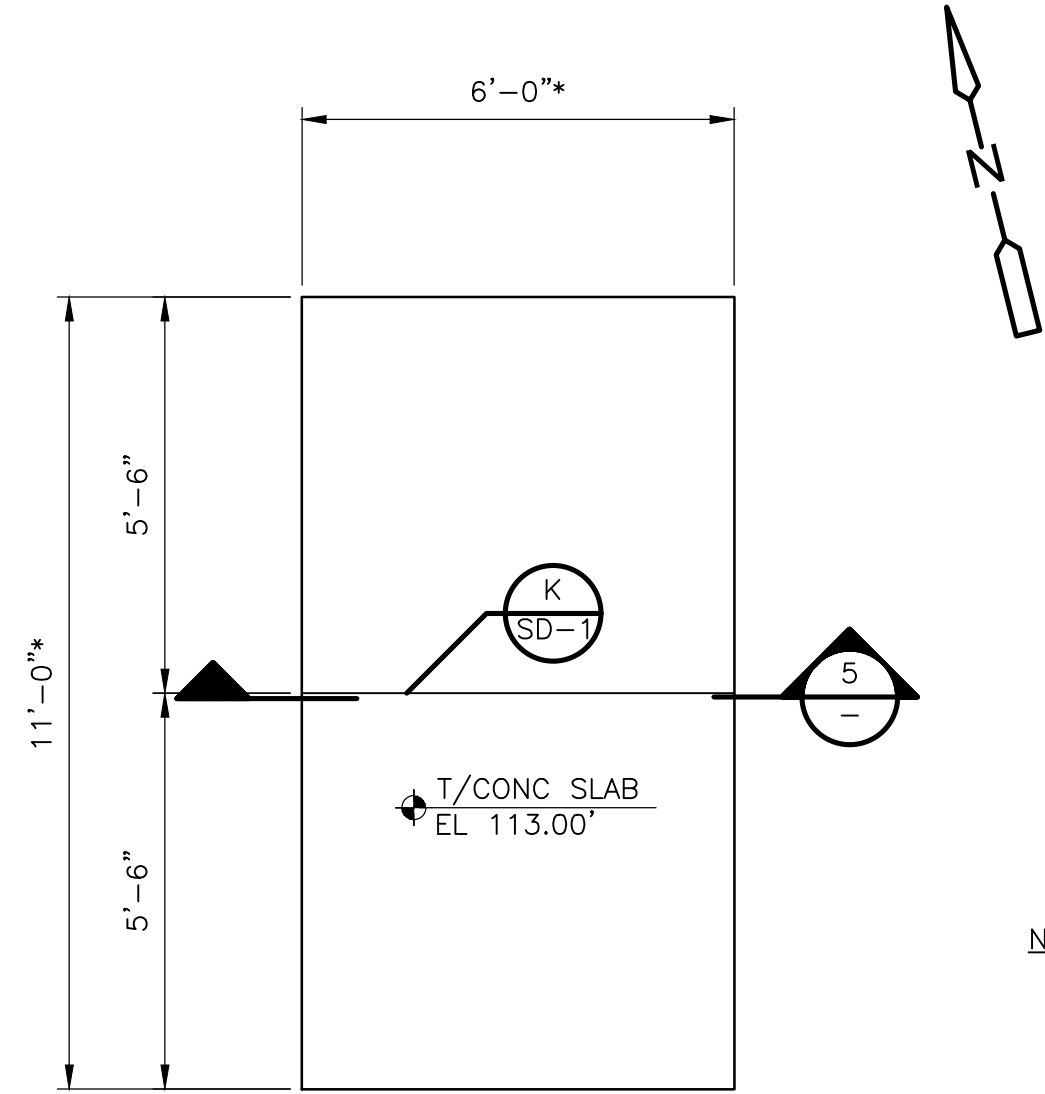
SECTION 1
3/8" = 1'-0"



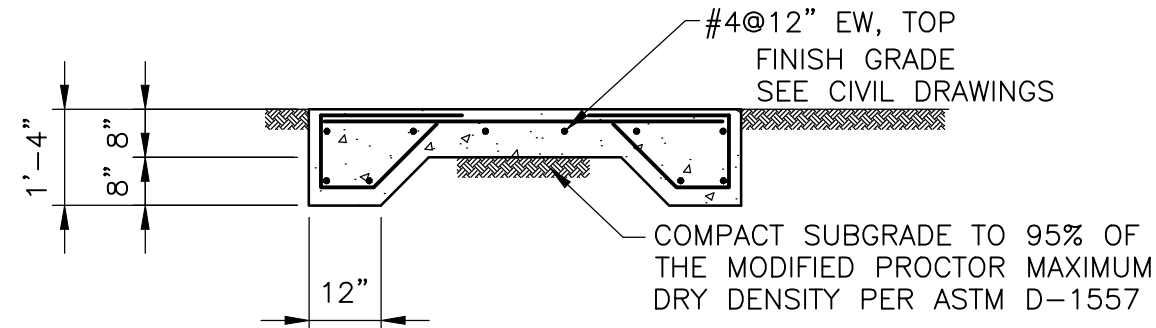
PROPANE TANK SLAB
PLAN
3/8" = 1'-0"



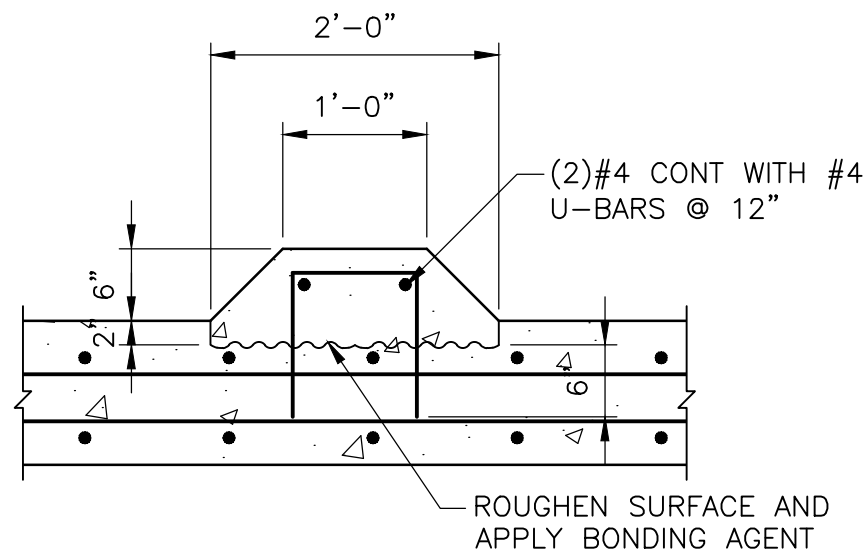
SECTION 4
3/8" = 1'-0"



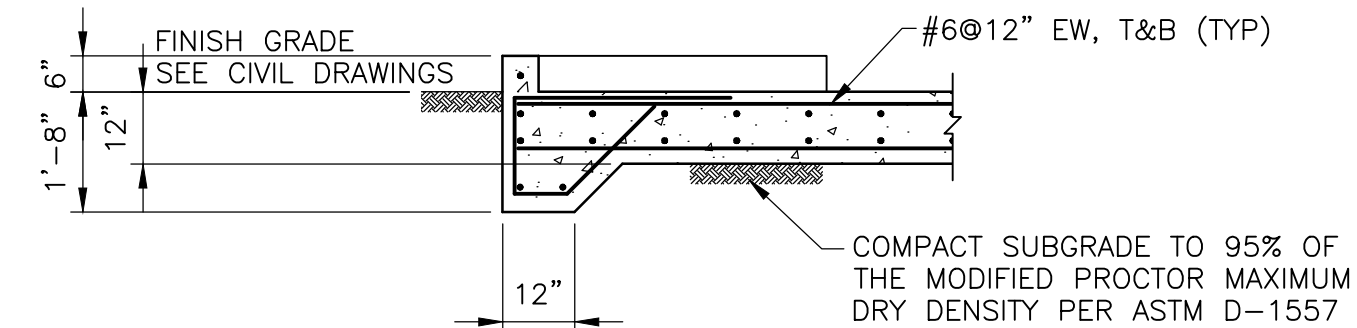
TRANSFORMER SLAB
PLAN
3/8" = 1'-0"



SECTION 5
3/8" = 1'-0"



SECTION 2
3/4" = 1'-0"



SECTION 3
3/8" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: H. MORATAYA
DRAWN BY: P. SCHIAVO
SHEET CHK'D BY: T. VERWEY
CROSS CHK'D BY: E. RIVERA
APPROVED BY: H. MORATAYA
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CCA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

MISCELLANEOUS EQUIPMENT SLABS

HECTOR G. MORATAYA
LICENSE
No. 76177
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DATE:
HECTOR G. MORATAYA
PE NO. 76177

PROJECT NO. 9012-228686
FILE NAME: S002SLPL.DWG


SHEET NO.

S-2

ISSUED FOR BID

REV. NO.	DATE	DRWN	CHKD		REMARKS

DESIGNED BY:	E. GACHARICH
DRAWN BY:	R. CARTER
SHEET CHK'D BY:	J. SANCHEZ
CROSS CHK'D BY:	S. PERRY
APPROVED BY:	S. PERRY
DATE:	NOVEMBER 2020



4651 Salisbury Road, Suite 420
 Jacksonville, FL 32256
 Tel: (904) 731-7109
 FL COA No. EB-000020

	<p>CITY OF JACKSONVILLE</p> <p>TRAIL RIDGE LANDFILL PHASE 6 LANDFILL GAS SYSTEM - PHASE II</p>
--	--

EXISTING
WORK

NEW
WORK

FUTURE
EXPANSION

EXISTING, NEW OR FUTURE CONDITION DESIGNATION

COMPARTMENT DESIGNATION (SEE MCC FRONT ELEVATION)

(2) 3" C., 3#3/0, 1#2G DENOTES A QUANTITY OF TWO (2) 3-INCH CONDUITS EACH CONTAINING THREE NO. 3/0 AWG CONDUCTORS AND 1 NO. 2 AWG GROUND CONDUCTOR, FROM NEMA SIZE 6 STARTER IN MCC-1 TO 250HP MOTOR LOAD.

3/4" C., 7#14, 1#14G DENOTES ONE 3/4-INCH CONDUIT CONTAINING SEVEN NO. 14 AWG CONTROL CONDUCTORS AND 1 NO. 14 AWG GROUND CONDUCTOR.

GEN

THIS IS A
SOME SY
APPEAR C

NOTES:

1. PROTECTIVE/CONTROL DEVICE AS SHOWN.
2. CONTROL/AUXILIARY DEVICES AT OR NEAR EQUIPMENT. EQUIPMENT SHALL BE INSTALLED AND WIRED AS REQUIRED BY EQUIPMENT FURNISHED AND/OR CONTROL DIAGRAM.

TYPICAL ONE LINE DIAGRAM SHOWING POWER AND CONTROL TO EQUIPMENT

D. SITE PLANS: FOR DETERMINING THE LENGTH OF CIRCUITS EXTERIOR TO STRUCTURES AND TO IDENTIFY THE SPECIFIC REQUIREMENTS OF THE UNDERGROUND CONDUITS OR DUCT BANKS, SITE PLANS SHOW THE GENERAL ROUTING OF UNDERGROUND CONDUITS AND DUCT BANKS WITH SECTIONS INDICATING THE CONDUIT SIZE, ARRANGEMENT AND CIRCUIT ROUTING.

E. NOTE THAT CONDUIT SIZE WITHIN THE STRUCTURE IS INDICATED ON ONE-LINE DIAGRAM AND UNDERGROUND SIZE IS INDICATED ON DUCT BANK SECTIONS.

A circular professional engineer seal for the State of Florida. The outer ring contains the text "SPENCER J. PERRY JR." at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the text "LICENSE" at the top, "NO. 62587" in the center, and "STATE OF FLORIDA" at the bottom, also separated by two stars.

DATE:
SPENCER J. PERRY JR
PE NO. 62587

SYMBOL	DESCRIPTION
	SINGLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	DOUBLE POLE SWITCH "a" INDICATES FIXTURES CONTROLLED.
	THREE WAY SWITCH "c" INDICATES FIXTURES CONTROLLED.
	FOUR WAY SWITCH "a" INDICATES FIXTURES CONTROLLED.
	DIMMER SWITCH "a" INDICATES FIXTURES CONTROLLED
	SINGLE POLE SWITCH "OS" INDICATES A PASSIVE INFRARED OCCUPANCY SENSOR
	DOUBLE POLE SWITCH "OS" INDICATES PROGRAMMABLE OCCUPANCY SENSOR CAPABLE OF INBOARD/OUTBOARD SWITCHING
	SINGLE POLE SWITCH "DT" INDICATES DUAL TECHNOLOGY PROGRAMMABLE OCCUPANCY SENSOR CAPABLE OF SENSING MOTION AND SOUND
	LIGHTING CONTACTOR WITH NUMBER OF POLES AS INDICATED
	TIME SWITCH
	PUSH BUTTON STATION
	INDICATES ALL LIGHTING FIXTURES WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE TYPE "A" UNLESS OTHERWISE NOTED. SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	LIGHTING PANELBOARD (LP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	POWER PANELBOARD (PP-#) OR DISTRIBUTION PANELBOARD (DP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	LIGHTING CONTACTOR PANELBOARD (LCP-#) SHOWN ON PLAN PER ACTUAL PANEL DIMENSIONS
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W * - GFCI - GROUND FAULT CIRCUIT INTERRUPTER TYPE WP - WEATHERPROOF XP - EXPLOSION PROOF T - TRANSIENT VOLTAGE SURGE SUPPRESSOR IC - ISOLATED GROUND 4 - CIRCUIT NUMBER
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W MOUNTED ABOVE COUNTER-TOP OR 42" AFF * - NOTATIONS SAME AS ABOVE
	SPECIAL PURPOSE RECEPTACLE * - VOLT RATING "3" - NUMBER OF POLES "60" - AMPERE RATING "4W" - 4 WIRES IN ADDITION TO GROUND
	MULTI-OUTLET ASSEMBLY, SYMBOL DENOTES RECEPTACLE TYPE
	FLUSH FLOOR OUTLET BOX WITH TYPE OUTLET INDICATED
	UNDER FLOOR DUCT SYSTEM WITH TYPE OUTLETS INDICATED
	THREE CELL UNDER FLOOR DUCT SYSTEM JUNCTION BOX
	JUNCTION BOX
	PULL BOX
	TERMINAL CABINET
	OCCUPANCY SENSOR
	PHOTOCELL
	EMERGENCY EYEWASH/SHOWER ALARM STATION WITH FLOW SWITCH(ES)
	INDICATED EQUIPMENT AND MATERIALS TO BE DEMOLISHED
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 12 CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR GASKETED AND SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION (OR CORROSION RESISTANT CONSTRUCTION SUITABLE FOR USE IN A WET LOCATION WHERE NEMA STANDARDS DO NOT APPLY) UNLESS OTHERWISE NOTED.
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL CONFORM TO N.E.C. REQUIREMENTS FOR THE HAZARDOUS AREA CLASSIFICATION SHOWN.

SYMBOL	DESCRIPTION
	FIRE ALARM MASTER BOX
	FIRE ALARM HORN, MOUNT UP 7'-6"
	FIRE ALARM STROBE, MOUNT UP 6'-8" 15 = CANDELA RATING
	FIRE ALARM HORN AND STROBE LIGHT COMBINATION, MOUNT UP 6'-8" 15 = CANDELA RATING
	FIRE ALARM MANUAL PULL STATION, MOUNT UP 4'-0"
	SPRINKLER VALVE SUPERVISORY SWITCH
	SPRINKLER FLOW ALARM SWITCH
	FIRE ALARM BELL
	WEATHERPROOF HI-INTENSITY FIRE ALARM STROBE LIGHT WITH HORN
	PASSIVE INFRARED DETECTOR
	SMOKE BEAM DETECTOR (RECEIVER)
	SMOKE BEAM DETECTOR (TRANSMITTER)
	FIRE ALARM SMOKE DETECTOR REMOTE INDICATOR AND TEST SWITCH

ABBREVIATIONS	
A	AMPS
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
AIC	AMPERE INTERRUPTING CAPACITY
AMP	AMPERE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CGD	COMBUSTIBLE GAS DETECTOR
CKT	CIRCUIT
CLB	CURRENT LIMITING BREAKER
CLF	CURRENT LIMITING FUSE
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH/CONTROL STATION
CT	CURRENT TRANSFORMER
CU	COPPER
CWS	CONDUIT WALL SEAL
DC	DIRECT CURRENT
DIA	DIAMETER
DMU	DIGITAL METERING UNIT
DN	DOWN
EC	EMPTY CONDUIT
ELEC	ELECTRICAL
ELEV	ELEVATION

SHEET NO. WHERE
DETAIL IS DRAWN

SYMBOL WHERE THERE IS A DETAIL

DETAIL
1/4" = 1'-0"

SHEET NO.
WHERE THERE
IS A DETAIL

SYMBOL WHERE DETAIL IS DRAWN

DETAIL SYMBOL

GENERAL NOTE

THIS IS A STANDARD LEGEND.
SOME SYMBOLS MAY NOT
APPEAR ON THE DRAWINGS.

SHEET NO.
WHERE SECTION
IS DRAWN

SYMBOL WHERE THERE IS A SECTION

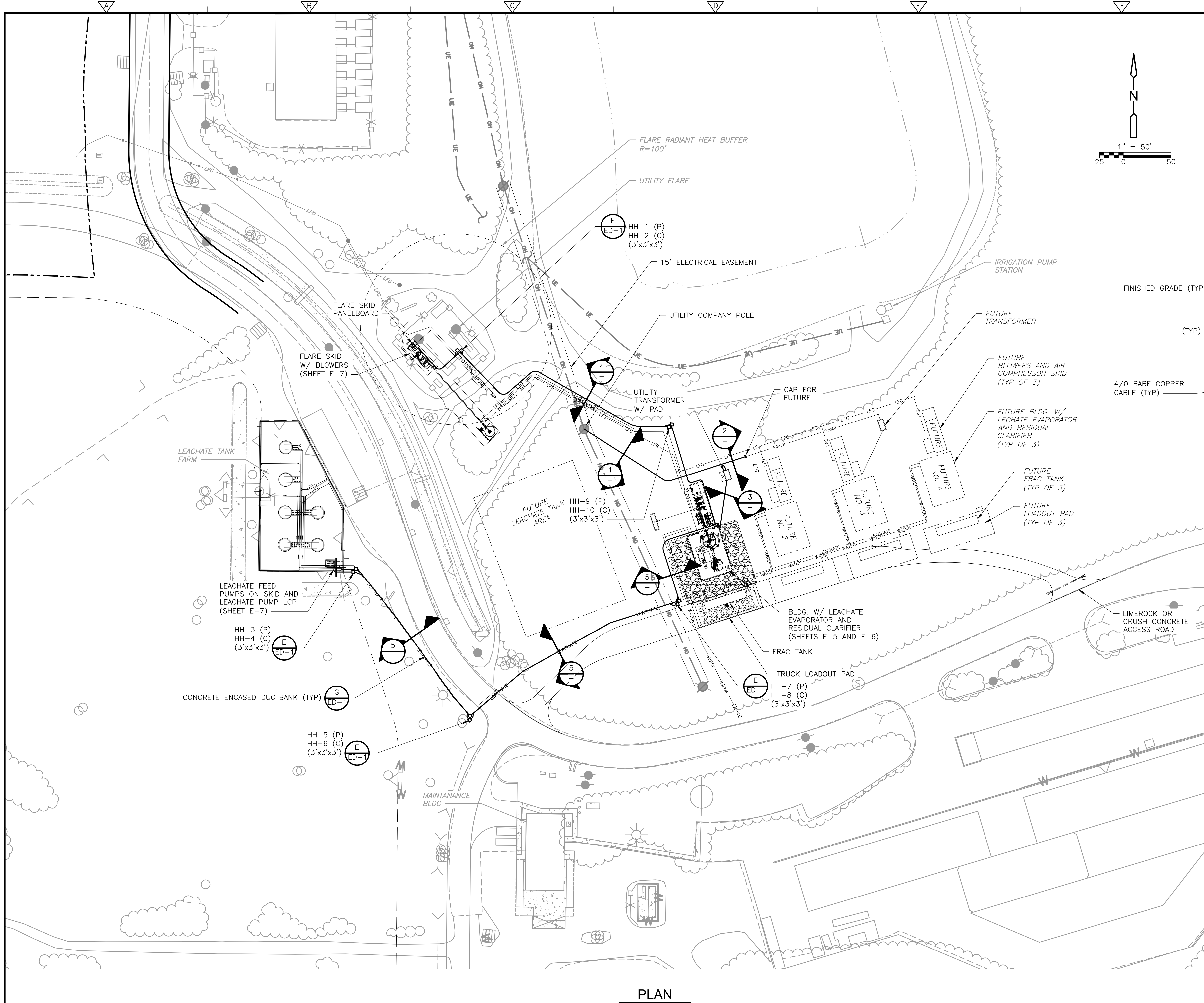
SECTION
1/4" = 1'-0"

SHEET NO.
WHERE SECTION
IS TAKEN

SYMBOL WHERE SECTION IS DRAWN

SECTION SYMBOL

ABBREVIATIONS (CONTINUED)	
EM	EMERGENCY
ENCL	ENCLOSURE OR ENCLOSED
EQUIP	EQUIPMENT
ES	EMERGENCY STOP
EWC	ELECTRIC WATER COOLER
EW H	ELECTRIC WATER HEATER
EX	EXISTING
FO	FIBER OPTIC
FU	FUSE
GCP	GENERATOR CONTROL PANEL
GEN	GENERATOR
G, GND	GROUND
GFI	GROUND FAULT INTERRUPTER
GRS	GALVANIZED RIGID STEEL
HACR	HEATING & AIR CONDITIONING RATED
HH	HANDHOLE
HT	HEIGHT
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HZ	HERTZ
ID	IDENTIFICATION
INSTR	INSTRUMENT
K	KILO (PREFIX)
kcmil	1000 CIRCULAR MILS
KVA	KILOVOLT AMPERES
KW	KILOWATTS
LA	LIGHTNING ARRESTER
LTG	LIGHTING
LP	LIGHTING PANEL
LV	LOW VOLTAGE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
N	NEUTRAL
NC	NORMALLY CLOSED
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
OL	OVERLOAD
PB	PULL BOX
PCP	PUMP CONTROL PANEL
PH	PHASE
PMH	POWER MANHOLE
PNL	PANEL OR PANELBOARD
PR	PAIR
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RECPT	RECEPTACLE
REQD	REQUIRED
QTY	QUANTITY
SA	SURGE ARRESTER
SEC	SECONDS OR SECONDARY
SH	SHIELDED OR SPACE HEATER
SHH	SIGNAL HANDHOLE
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
SV	SOLENOID VALVE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TIME TO CLOSE OR TRAY CABLE
TEL	TELEPHONE
TO	TIME TO OPEN
TS	TWISTED SHIELDED OR THERMAL SWITCH
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPS
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS, WIDTH, WITH, WIRE
WP	WEATHERPROOF
XP	EXPLOSION PROOF
XFMR	TRANSFORMER



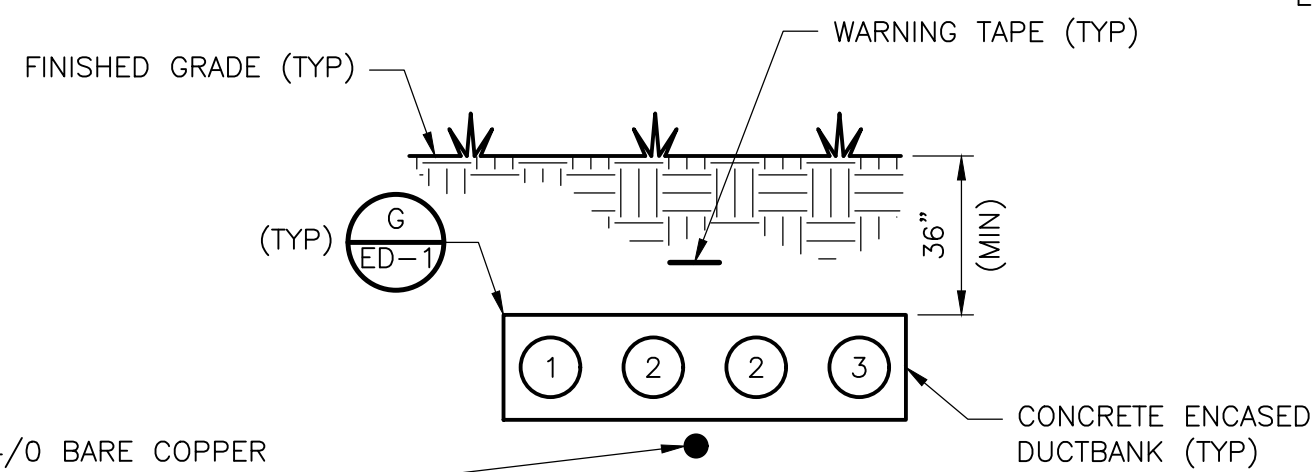
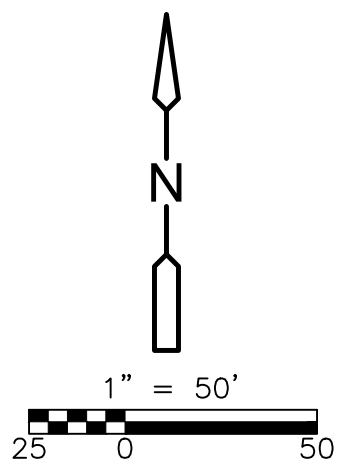
PLAN

GENERAL NOTES:

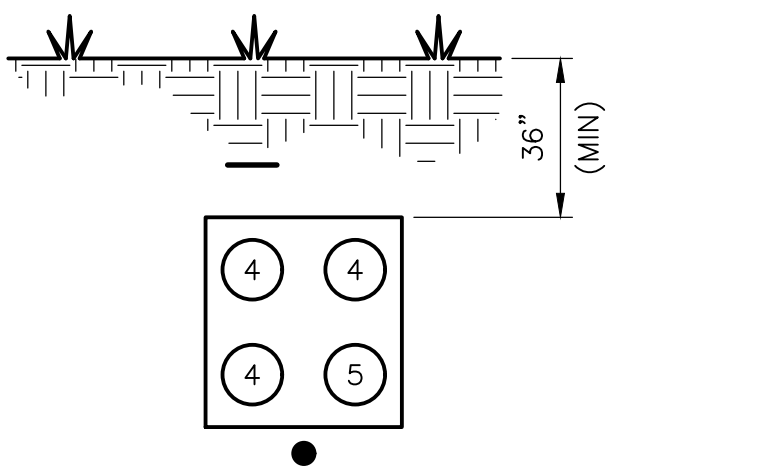
- A. DO NOT SCALE THE ELECTRICAL DRAWINGS REFER TO THE CIVIL, MECHANICAL, STRUCTURAL DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT.
- B. ALL WORK SHALL COMPLY WITH NEC AND LOCAL CODES.
- C. CONDUCTORS SHALL NOT BE SPLICED EXCEPT AS NOTED IN SPECS.
- D. ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250.122 OF THE NEC (UNLESS OTHERWISE NOTED).
- E. CONTRACTOR SHALL FIELD VERIFY EXISTING UNDERGROUND UTILITIES, PIPING, ETC. REROUTE NEW CONDUITS, DUCTBANK, MANHOLES, PULL BOXES, ETC., AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
- F. DO NOT INSTALL CONDUIT IN AREAS DESIGNATED AS FUTURE.

AREA CLASSIFICATION NOTES:

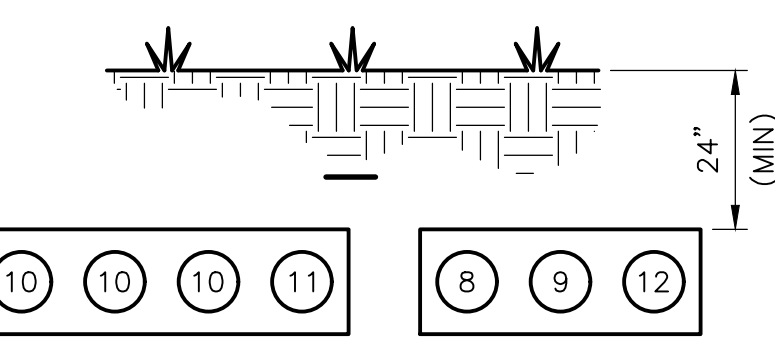
1. ENVELOPES 3 FEET AROUND GAS PROCESSING EQUIPMENT, SUCH AS GAS FLARES, GAS BLOWERS, VALVES, INSTRUMENTS, ETC. ARE CLASS 1, DIVISION 2 HAZARDOUS LOCATIONS.
2. ENVELOPES 3 FEET AROUND LEACHATE PROCESSING EQUIPMENT, SUCH AS TANKS, PUMPS, VALVES, INSTRUMENTS, ETC. ARE CLASS 1, DIVISION 2 HAZARDOUS LOCATIONS.
3. ELECTRICAL INSTALLATIONS IN HAZARDOUS LOCATIONS SHALL MEET THE REQUIREMENTS OF NEC ARTICLE 500, 501, 502, 503 AND 504.
4. ELECTRICAL RACEWAYS IN OUTDOOR AREAS AND PROCESS AREAS SHALL BE ALUMINUM RIGID METALLIC CONDUIT.
5. ENCLOSURES FOR ELECTRICAL EQUIPMENT IN OUTDOOR AREAS AND PROCESS AREAS, NOT WITHIN THE HAZARDOUS ENVELOPES, SHALL BE NEMA 4X, 316 STAINLESS STEEL.
6. ENCLOSURES FOR ELECTRICAL EQUIPMENT WITHIN THE HAZARDOUS ENVELOPES SHALL BE NEMA 7. IT WILL BE ACCEPTABLE TO LOCATE ELECTRICAL ENCLOSURES OUTSIDE OF THE HAZARDOUS ENVELOPES TO AVOID NEMA 7 ENCLOSURES.



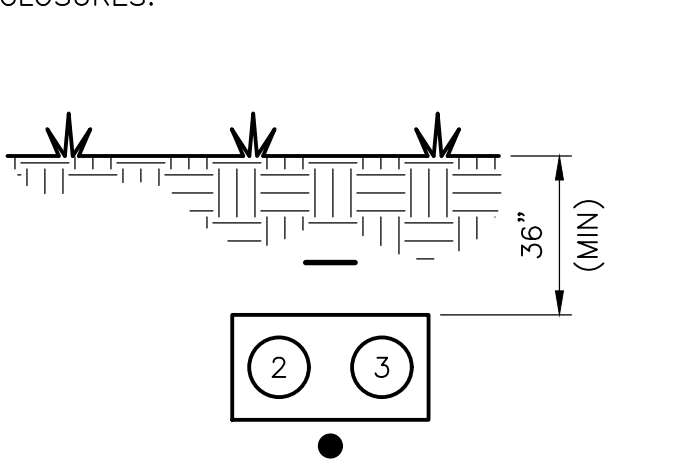
ELECTRICAL DUCTBANK
SECTION 1
NTS



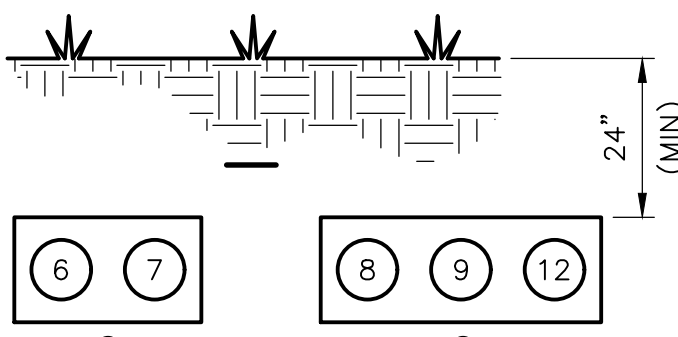
ELECTRICAL DUCTBANK
SECTION 3
NTS



ELECTRICAL DUCTBANK
SECTION 5
NTS

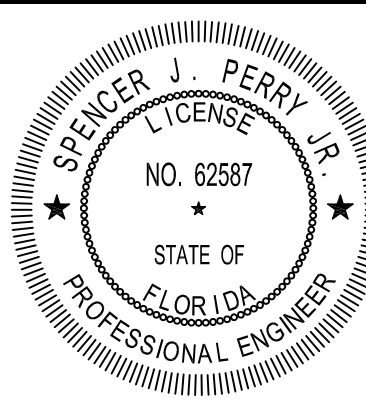


ELECTRICAL DUCTBANK
SECTION 2
NTS



ELECTRICAL DUCTBANK
SECTION 4
NTS

CONDUIT AND WIRE LEGEND (NUMBERS REFERENCE THIS SHEET ONLY)	
NO.	DESCRIPTION
①	5" C. UTILITY PRIMARY CABLES
②	5" C. SPARE
③	5" C. FUTURE UTILITY PRIMARY CABLES
④	4" C. 480V SERVICE CONDUCTORS
⑤	4" C. SPARE
⑥	3" C. 480V FEEDERS
⑦	3" C. SPARE
⑧	2" C. DISCRETE SIGNAL
⑨	2" C. ANALOG SIGNAL
⑩	2" C. 480V FEEDERS
⑪	2" C. SPARE
⑫	2" C. FIBER OPTIC CABLE



DATE:
SPENCER J. PERRY J
PE NO. 62587

PROJECT NO. 9012-2286
FILE NAME: E003STPL.DWG

SHEET NO
E-3

ISSUED FOR BID

					DESIGNED BY: <u>E. GACHARICH</u>
					DRAWN BY: <u>R. CARTER</u>
					SHEET CHK'D BY: <u>J. SANCHEZ</u>
					CROSS CHK'D BY: <u>S. PERRY</u>
					APPROVED BY: <u>S. PERRY</u>
REV. NO.	DATE	DRWN	CHKD	REMARKS	DATE: <u>NOVEMBER 2020</u>

DESIGNED BY: E. GACHARICH
DRAWN BY: R. CARTER
SHEET CHK'D BY: J. SANCHEZ
CROSS CHK'D BY: S. PERRY
APPROVED BY: S. PERRY
DATE: NOVEMBER 2020

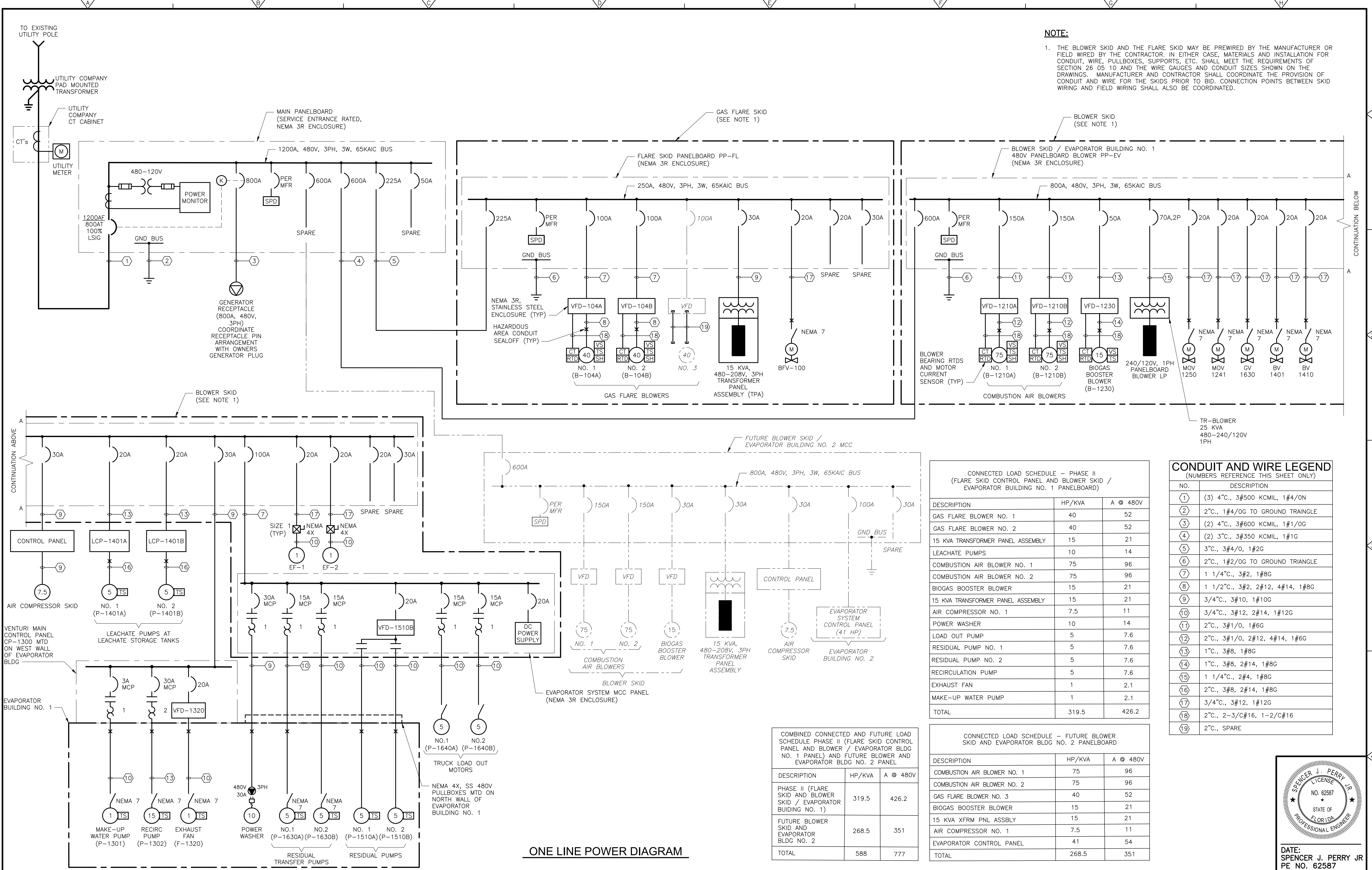


CITY OF JACKSONVILLE

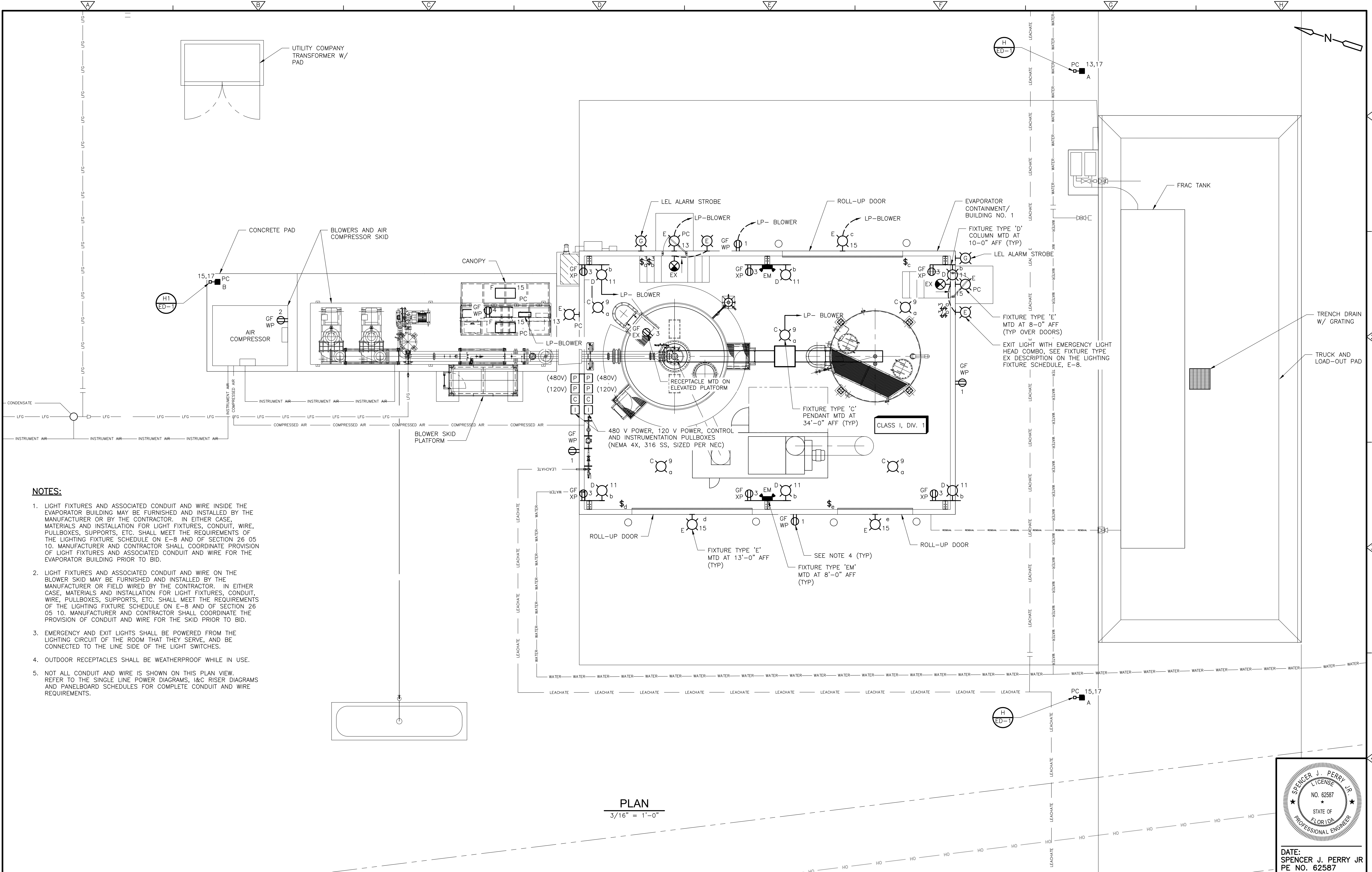
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

ELECTRICAL SITE PLAN

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pw\jensmith-cad2-pw.bentley.com\PL1\9012\228686_PHASE II\04 Design Services NM Bid\09 Electrical\10 CADD\E004NFOL.dwg
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PLAN

$3/16'' = 1'-0''$

REV. NO.	DATE	DRWN	CHKD	REMARKS

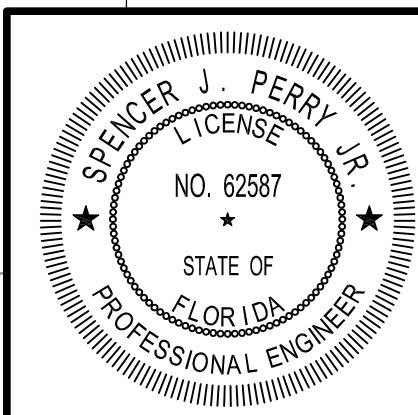
DESIGNED BY: E. GACHARICH
DRAWN BY: R. RUCK
SHEET CHK'D BY: J. SANCHEZ
CROSS CHK'D BY: S. PERRY
APPROVED BY: S. PERRY
DATE: NOVEMBER 2020



CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

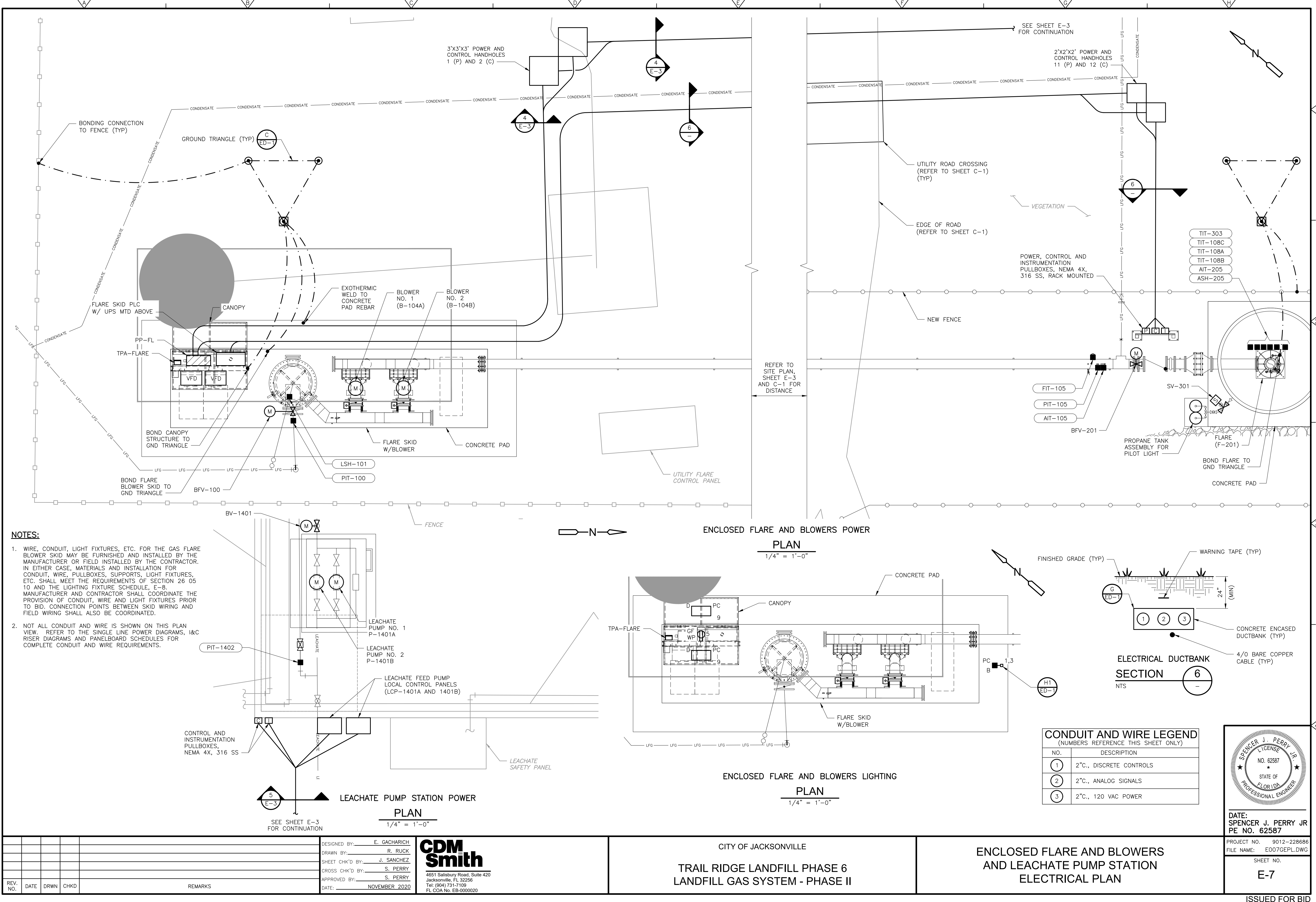
LEACHATE EVAPORATOR AND RESIDUAL LOADOUT LIGHTING PLAN



DATE:
SPENCER J. PERRY JR
PE NO. 62587

PROJECT NO.	9012-22868
FILE NAME:	E006GEPL.DWG
SHEET NO.	

XREFs: [CDMS-2436, MWPO000MU, CEP0000ST, EWP0010CE, CWP0000ST]
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REUSE OF DOCUMENTS:



- NOTES:**
1. WIRE, CONDUIT, LIGHT FIXTURES, ETC. FOR THE GAS FLARE BLOWER SKID MAY BE FURNISHED AND INSTALLED BY THE MANUFACTURER OR FIELD INSTALLED BY THE CONTRACTOR. IN EITHER CASE, MATERIALS AND INSTALLATION FOR CONDUIT, WIRE, PULLBOXES, SUPPORTS, LIGHT FIXTURES, ETC. SHALL MEET THE REQUIREMENTS OF SECTION 26 05 10 AND THE LIGHTING FIXTURE SCHEDULE, E-8. MANUFACTURER AND CONTRACTOR SHALL COORDINATE THE PROVISION OF CONDUIT, WIRE AND LIGHT FIXTURES PRIOR TO BID. CONNECTION POINTS BETWEEN SKID WIRING AND FIELD WIRING SHALL ALSO BE COORDINATED.
 2. NOT ALL CONDUIT AND WIRE IS SHOWN ON THIS PLAN VIEW. REFER TO THE SINGLE LINE POWER DIAGRAMS, I&C RISER DIAGRAMS AND PANELBOARD SCHEDULES FOR COMPLETE CONDUIT AND WIRE REQUIREMENTS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: E. GACHARICH
DRAWN BY: R. RUCK
SHEET CHK'D BY: J. SANCHEZ
CROSS CHK'D BY: S. PERRY
APPROVED BY: S. PERRY
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CCA No. EB-0000020

CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

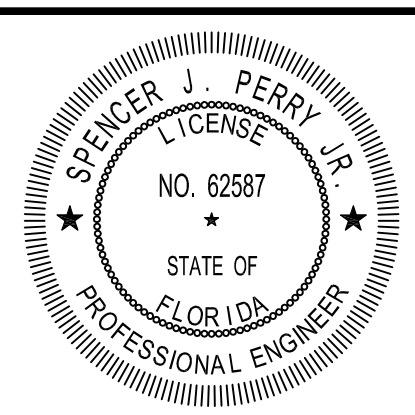
ENCLOSED FLARE AND BLOWERS
AND LEACHATE PUMP STATION
ELECTRICAL PLAN

DATE:
SPENCER J. PERRY JR
PE NO. 62587

PROJECT NO. 9012-228686
FILE NAME: E007GEPL.DWG

SHEET NO.
E-7

ISSUED FOR BID



XREFs: [CDWS-2436] Images: []
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LIGHTING FIXTURE SCHEDULE			
TYPE	WATT	DESCRIPTION	MFR (OR APPROVED EQUAL)
A	166	HEAVY-DUTY, LED AREA LIGHT; 16,013 NOMINAL LUMENS; 70 CRI, 4,000K; CAST ALUMINUM HOUSING AND DOOR WITH EXTRUDED ALUMINUM HEAT SINK; TOOL-LESS ENTRY; HINGED REMOVABLE POWER TRAY DOOR FOR EASY MAINTENANCE; 3G VIBRATION RATED; SL3 OPTICAL DISTRIBUTION (TYPE III WITH SPILL CONTROL); STANDARD 1A DRIVE CURRENT; LED DRIVERS ARE MOUNTED TO THE REMOVABLE DIE-CAST ALUMINUM DOOR; UNIVERSAL VOLTAGE (120-277V); 10KV COMMON AND DIFFERENTIAL-MODE SURGE PROTECTION; SUITABLE FOR AMBIENT TEMPERATURES FROM -40°C TO 40°C; STANDARD THREE-POSITION TUNNEL TYPE COMPRESSION TERMINAL BLOCK; GREATER THAN 90% LUMEN MAINTENANCE EXPECTED AT 60,000 HOURS; LIGHT SQUARES ARE IP66 ENCLOSURE RATED; 15" STRAIGHT ARM; FOUR-BOLT/TWO-BRACKET SLIP-FITTER WITH CAST-IN PIPE STOP AND BUILT-IN INCREMENTAL 2.5" LEVELING STEPS; HOUSING AND CAST PARTS FINISHED IN GRAY POLYESTER POWDER COAT FINISH; HEAT SINK IS ANODIZED ALUMINUM; MOTION SENSOR FOR DIMMING OPERATION, 21' - 40' MOUNTING HEIGHT; NEMA 7-PIN TWIST-LOCK PHOTOCONTROL - MULTI-TAP; UL WET LOCATION LISTED; 5 YEAR WARRANTY	COOPER LIGHTING: NAVION SERIES NVN-AF-03-D-UNV-SL3-10-MS/DIM-L40-A15-AP
B	59	HEAVY-DUTY, LED AREA LIGHT; 6,038 NOMINAL LUMENS; 70 CRI, 4,000K; CAST ALUMINUM HOUSING AND DOOR WITH EXTRUDED ALUMINUM HEAT SINK; TOOL-LESS ENTRY; HINGED REMOVABLE POWER TRAY DOOR FOR EASY MAINTENANCE; 3G VIBRATION RATED; T4W OPTICAL DISTRIBUTION (TYPE IV WDE); 1A DRIVE CURRENT; LED DRIVERS ARE MOUNTED TO THE REMOVABLE DIE-CAST ALUMINUM DOOR; UNIVERSAL VOLTAGE (120-277V); 10KV COMMON AND DIFFERENTIAL-MODE SURGE PROTECTION; SUITABLE FOR AMBIENT TEMPERATURES FROM -40°C TO 40°C; STANDARD THREE-POSITION TUNNEL TYPE COMPRESSION TERMINAL BLOCK; GREATER THAN 90% LUMEN MAINTENANCE EXPECTED AT 60,000 HOURS; LIGHT SQUARES ARE IP66 ENCLOSURE RATED; 15" STRAIGHT ARM; FOUR-BOLT/TWO-BRACKET SLIP-FITTER WITH CAST-IN PIPE STOP AND BUILT-IN INCREMENTAL 2.5" LEVELING STEPS; HOUSING AND CAST PARTS FINISHED IN GRAY POLYESTER POWDER COAT FINISH; HEAT SINK IS ANODIZED ALUMINUM; MOTION SENSOR FOR DIMMING OPERATION, 9' - 20' MOUNTING HEIGHT; NEMA 7-PIN TWIST-LOCK PHOTOCONTROL - MULTI-TAP; UL WET LOCATION LISTED; 5 YEAR WARRANTY	COOPER LIGHTING: NAVION SERIES NVN-AF-01-D-UNV-T4W-10K-MS/DIM-L20-A15-AP
C	125	HAZARDOUS AREA, PENDANT MOUNTED, HIGH BAY LUMINAIRE, 12720 LUMENS, 70 CRI, 5,000° K CRISP WHITE LIGHT, CORROSION RESISTANT, COPPER FREE ALUMINUM HOUSING AND SPLICE BOX, ELETROSTATICALLY APPLIED BAKED POWDER EPOXY FINISH, STAINLESS STEEL HARDWARE, ALUMINUM REFLECTOR WITH WHITE FINISH, CLEAR GLASS GLOBE REFRACTOR, CAST ALUMINUM GLOBE GUARD, FACTORY SEALED, VIBRATION RESISTANT, SOLDER-LESS LED BOARD CONNECTIONS, 100,000 HOUR LED ARRAY LIFE WITH 70% INITIAL LUMENS, 50,000 MAINTENANCE FREE HOURS, -40°C TO 55°C AMBIENT TEMPERATURE, UL 8750 AND UL 844 COMPLIANT, CSA CERTIFIED, CLASS 1, DIVISION 1, TYPE 4X, 120 - 277 V, INTEGRAL SURGE PROTECTION.	HUBBELL/KILLARK EZL SERIES HOSTILE LITE LED
D	50	HAZARDOUS AREA, WALL MOUNTED LUMINAIRE, 12720 LUMENS, 70 CRI, 5,000° K CRISP WHITE LIGHT, CORROSION RESISTANT, COPPER FREE ALUMINUM HOUSING, SPLICE BOX AND WALL BRACKET, ELETROSTATICALLY APPLIED BAKED POWDER EPOXY FINISH, STAINLESS STEEL HARDWARE, ALUMINUM REFLECTOR WITH WHITE FINISH, CLEAR GLASS GLOBE REFRACTOR, CAST ALUMINUM GLOBE GUARD, FACTORY SEALED, VIBRATION RESISTANT, SOLDER-LESS LED BOARD CONNECTIONS, 100,000 HOUR LED ARRAY LIFE WITH 70% INITIAL LUMENS, 50,000 MAINTENANCE FREE HOURS, -40°C TO 55°C AMBIENT TEMPERATURE, UL 8750 AND UL 844 COMPLIANT, CSA CERTIFIED, CLASS 1, DIVISION 1, TYPE 4X, 120 - 277 V	HUBBELL/KILLARK EML SERIES HOSTILE LITE LED
E	34	HAZARDOUS AREA, WALL MOUNTED LUMINAIRE, AESTHETIC APPEARANCE, 4,000 LUMENS, ALUMINUM CONSTRUCTION, ELETROSTATICALLY APPLIED BRONZE POWDER COATED FINISH, CORROSION RESISTANT HEX HEAD FASTENERS, DOOR GASKET, THERMAL SHOCK AND IMPACT RESISTANT PRISMATIC BOROSILICATED GLASS REFRACTOR, FULL CUTOFF GLARE SHIELD, WIRE GUARD, SURGE PROTECTION, 100,000 HOUR LED ARRAY LIFE WITH 70% INITIAL LUMENS, 50,000 MAINTENANCE FREE HOURS, SUITABLE FOR 55°C AMBIENT TEMPERATURE, UL 1589 AND UL 844 COMPLIANT, CSA CERTIFIED, CLASS 1, DIVISION 2, TYPE 4X, 120 - 277 V, INTEGRAL PHOTOCCELL	HUBBELL/KILLARK KWPL SERIES CERTI-LITE LED
F	18	1'x2' FULLY ENCLOSED, GASKETED INDUSTRIAL LED LUMINAIRE; 2,200 NOMINAL LUMENS; 82 CRI, 4,000K; 5VA (F1) FIBERGLASS HOUSING, RATED FOR FLAME AND WEATHER RESISTANCE; .050" ALUMINUM INTERNAL HOUSING; STAINLESS STEEL LATCHES; REFLECTIVE WHITE POLYESTER POWDER COAT FINISH; WATERTIGHT HUBS; FROSTED, RIBBED, UV STABILIZED POLYCARBONATE LENS; HIGH QUALITY MID-POWER LED'S AND LED BOARDS ARE REPLACEABLE ;SURFACE OR SUSPENDED MOUNTING; INTEGRAL PHOTOCCELL UNIVERSAL VOLTAGE (120-277V); ETL CONFORMS TO UL STD 1598 AND UL STD 8750; LISTED AS SUITABLE FOR WET LOCATIONS CERTIFIED, IP65, IP66, AND IP67 CERTIFIED, AND RATED FOR NEMA 4X; 5 YEAR WARRANTY	HE WILLIAMS: 96 SERIES LED 96--4--L21/840-PCFR-EM/10W-WET/2-SS LATCH-DRV-UNV
EM	20	HAZARDOUS AREA EMERGENCY LIGHT WITH 2 FULLY ADJUSTABLE, FACTORY SEALED LED HEADS, 900 INITIAL LUMENS PER HEAD, 5000° K CRISP CLEAR ILLUMINATION, COPPER FREE ALUMINUM ALLOY CONSTRUCTION FOR MAIN ENCLOSURE AND HEADS WITH ELECTROSTATICALLY APPLIED AND BAKED POWDER EPOXY/POLYESTER FINISH, COPPER-FREE ATTACHMENT FITTINGS, EXTERNAL 316 STAINLESS STEEL HARDWARE, NI-CAD BATTERIES SIZED FOR 90 MINUTES OF ILLUMINATION, POWER AVAILABLE INDICATING LED, INTEGRAL OR REMOTE PUSH-TO-TEST STATION, 100,000 HOUR LED HEAD LIFE, SUITABLE FOR 0°C TO 45°C AMBIENT TEMPERATURE, UL 844, 924, 1203, 1589 AND 8750 COMPLIANT, CLASS 1, DIVISION 1, TYPE 4X, 120 - 277 V.	HUBBELL/KILLARK EBS SERIES HOSTILE LITE EMERGENCY LED
EX	20	HAZARDOUS AREA EXIT AND EMERGENCY LIGHT COMBO, WITH 1 WHITE BODY, RED LETTER LED EXIT SIGN AND 1 REMOTE FACTORY SEALED LED EMERGENCY HEAD, COPPER FREE ALUMINUM ALLOY CONSTRUCTION FOR MAIN ENCLOSURE, EXIT SIGN AND EMERGENCY HEAD WITH ELECTROSTATICALLY APPLIED AND BAKED POWDER EPOXY/POLYESTER FINISH, COPPER-FREE ATTACHMENT FITTINGS, EXTERNAL 316 STAINLESS STEEL HARDWARE, NI-CAD BATTERIES SIZED FOR 90 MINUTES OF ILLUMINATION, POWER AVAILABLE INDICATING LED, INTEGRAL OR REMOTE PUSH-TO-TEST STATION, 100,000 HOUR LED HEAD LIFE, SUITABLE FOR 0°C TO 45°C AMBIENT TEMPERATURE, UL 844, 924, 1203, 1589 AND 8750 COMPLIANT, CSA CERTIFIED, CLASS 1, DIVISION 1, TYPE 4X, 120 - 277 V.	HUBBELL/KILLARK EBS SERIES HOSTILE LITE EXIT / EMERGENCY LED

CONDUIT AND WIRE LEGEND (NUMBERS REFERENCE THIS SHEET ONLY)

NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
①	3/4"C., 1-2/C#16SH	⑧	2"C., 6#12, 1#12G	⑮	1"C., 14#14, 1#14G
②	3/4"C., 2#14, 1#14G	⑨	2"C., 10-2/C#16SH	⑯	2"C., 2-2/C#16SH
③	3/4"C., 2#12, 1#12G	⑩	2"C., 2#12, 8#14, 1#12G	⑰	2"C., 50#14
④	1"C., 3-2/C#16SH	⑪	1"C., 10#14, 1#14G	⑱	2"C., FIBER OPTIC CABLE
⑤	1"C., 8#14, 1#14G	⑫	1"C., 10#12, 1#12G	⑲	1-1/2"C., 26#14, 1#14G
⑥	1"C., 2-2/C#16SH	⑬	2"C., 10-2/C#16SH	⑳	1"C., 3-2/C#16SH
⑦	3/4"C., 4#14, 1#14G	⑭	1"C., 4#12, 14#14, 1#12G	㉑	2"C., 1-12PR#16SH

125 AMP MAIN BREAKER 150 AMP BUS RATING 120/240 VOLTS						PANELBOARD LP-BLOWER 22 KA SHORT CIRCUIT RATING ELECTRONIC GRADE: NO						LOCATION: BLOWER SKID ENCLOSURE RATING: NEMA 3R MOUNTING: SURFACE			
42 POLES 1 PHASE 3 WIRE						60 Hz.									
CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/ POLES	WIRE SIZE	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/ POLES	WIRE SIZE				
		LINE 1	LINE 2					LINE 1	LINE 2						
1	RECEPTACLE BLDG EXTERIOR	0.18		20 /1	5.6	2	COMPRESSOR SKID RECEPTACLE	0.18		20 /1	5.6				
3	RECEPTABLES BLDG INTERIOR		0.18	20 /1	5.6	4	BLOWER SKID RECEPTACLE		0.18	20 /1	5.6				
5	INSTRUMENT	0.05		20 /1	5.6	6	MONORAIL DISCONNECT SWITCH	0.5		20 /1	5.6				
7	EVAPORATOR BUILDING PLC		0.3	20 /1	5.6	8	EVAPORATOR PLC	0.5	0.5	20 /1	5.6				
9	BUILDING INTERIOR LIGHTS	0.5		20 /1	5.6	10	SUMP PUMP CONTROLLER	0.5		20 /1	5.6				
11	BUILDING INTERIOR LIGHTS		0.5	20 /1	5.6	12	DEFOMER PUMP	0.2	0.5	20 /1	5.6				
13	OUTDOOR PC LIGHTS	0.3		20 /1	5.6	14	EVAPORATOR OPERATOR PANEL	0.2		20 /1	5.6				
15	OUTDOOR PC LIGHTS		0.3	20 /1	5.6	16	AIR DRYER UTILITIES		0.1	20 /1	5.6				
17	LIGHT POLE RECEPTABLES	0.1		20 /1	5.6	18	AIR COMPRESSOR UTILITIES	0.1		20 /1	5.6				
19	SPARE			20 /1	20	20	EVAPORATOR GRADE		0.1	20 /1	5.6				
21	SPARE			20 /1	22	22	240 V OUTLET COMPRESSOR SKID	0.3		20 /2	5.6				
23	SPARE			20 /1	24	24		0.3	0.3						
25	SPARE			20 /1	26	26	SPARE			20 /1					
27	SPARE			20 /1	28	28	SPARE			20 /1					
29	SPARE			20 /1	30	30	SPARE			20 /1					
31	SPARE			20 /1	32	32	SPARE			20 /1					
33	SPARE			20 /1	34	34	SPARE			20 /1					
35	SPARE			20 /1	36	36	SPARE			20 /1					
37	SPARE			20 /1	38	38	SPARE			20 /1					
39	SPARE			20 /1	40	40	SPARE			20 /1					
41	SPARE			20 /1	42	42	SPARE			20 /1					
TOTAL LINE KVA THIS SIDE		1.13	1.28			TOTAL LINE KVA THIS SIDE		1.48	1.68						
						TOTAL KVA PER LINE		2.61	2.96						
						TOTAL KVA		5.57							
NOTES:						NOTES CONT.:									
1. PROVIDE LOCKING HARDWARE						2. 15 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER									
3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)						4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)									
5. BRANCH CIRCUIT WIRING: 3/4" C. 2#12 & 1#12G						6. PROVIDE HAZARDOUS AREA SEAL-OFFS ON CONDUIT									

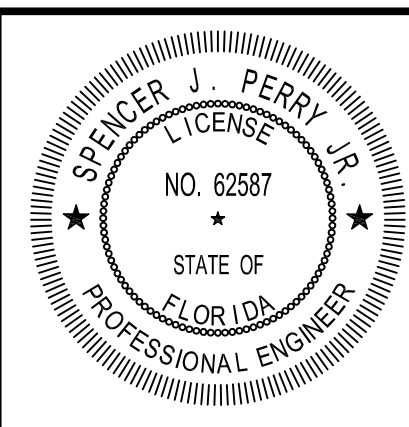
TRANSFORMER - PANELBOARD ASSEMBLY TPA-BLOWER																																																																					
15 KVA 3-PHASE TRANSFORMER										480 VOLT PRIMARY										40 AMP 3 POLE PRIMARY MAIN BREAKER										LOCATION: BLOWER SKID										65 KA																													
60 AMP 3 POLE SECONDARY MAIN BREAKER																														ENCLOSURE RATING: NEMA 3R										MOUNTING: SURFACE																													
60 AMP BUS RATING 24 POLES																				10 KA SHORT CIRCUIT RATING																				ELECTRONIC GRADE: NO																													
208/120 VOLTS										3 PHASE 4 WIRE										60 HZ																																																	
CIRCUIT NO.		DESCRIPTION		PHASE A		PHASE B		PHASE C		LOAD KVA		BREAKER AMPS/ POLES		WIRE SIZE		CIRCUIT NO.		DESCRIPTION		PHASE A		PHASE B		PHASE C		LOAD KVA		BREAKER AMPS/ POLES		WIRE SIZE																																							
1		LIGHT POLE		0.1						20 /1		7		2		SPARE										20 /1		7		4																																							
3		LIGHT POLE RECEPTACLE				0.18				20 /1		7		4		SPARE										20 /1		7		4																																							
5		RECEPTACLE						0.18		20 /1		7		6		SPARE										20 /1		7		6																																							
7		FLARE RTU		0.5						20 /1		7		8		SPARE										20 /1		7		8																																							
9		LIGHT				0.1				20 /1		7		10		SPARE										20 /1		7		10																																							
11		SPARE								20 /1		12		12		SPARE										20 /1		12		12																																							
13		SPARE								20 /1		14		14		SPARE										20 /1		14		14																																							
15		SPARE								20 /1		16		16		SPARE										20 /1		16		16																																							
17		SPARE								20 /1		18		18		SPACE										/1		20		18																																							
19		SPACE								/1		20		20		SPACE										/1		20		20																																							
21		SPACE								/1		22		22		SPACE										/1		22		22																																							
23		SPACE								/1				24		SPACE										/1																																											
TOTAL PHASE KVA THIS SIDE				0.6		0.28		0.18						TOTAL PHASE KVA THIS SIDE				0		0		0				TOTAL KVA PER PHASE				0.6		0.28		0.18																																			
																										TOTAL THREE PHASE KVA				1.06																																							
NOTES:																																																																					
1. PROVIDE LOCKING HARDWARE																																																																					
3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)																																																																					
5. BRANCH CIRCUIT WIRING: 3/4"C. 3#12 & 1#12G																																																																					
7. BRANCH CIRCUIT WIRING: 3/4"C. 2#12 & 1#12G																																																																					
9. PROVIDE STAINLESS STEEL ENCLOSURE																																																																					
NOTES CONT.:																																																																					
2. 15 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER																																																																					
4. PROVIDE LOOKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)																																																																					
6. BRANCH CIRCUIT WIRING: 3/4"C. 3#10 & 1#12G																																																																					
8. PROVIDE CONDUIT SEAL																																																																					

INSTRUMENTATION AND CONTROL RISER DIAGRAM

CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

LIGHT FIXTURE SCHEDULE,
PANELBOARD SCHEDULES
AND I&C RISER DIAGRAM



DATE: _____
SPENCER J. PERRY JR
PE NO. 62587

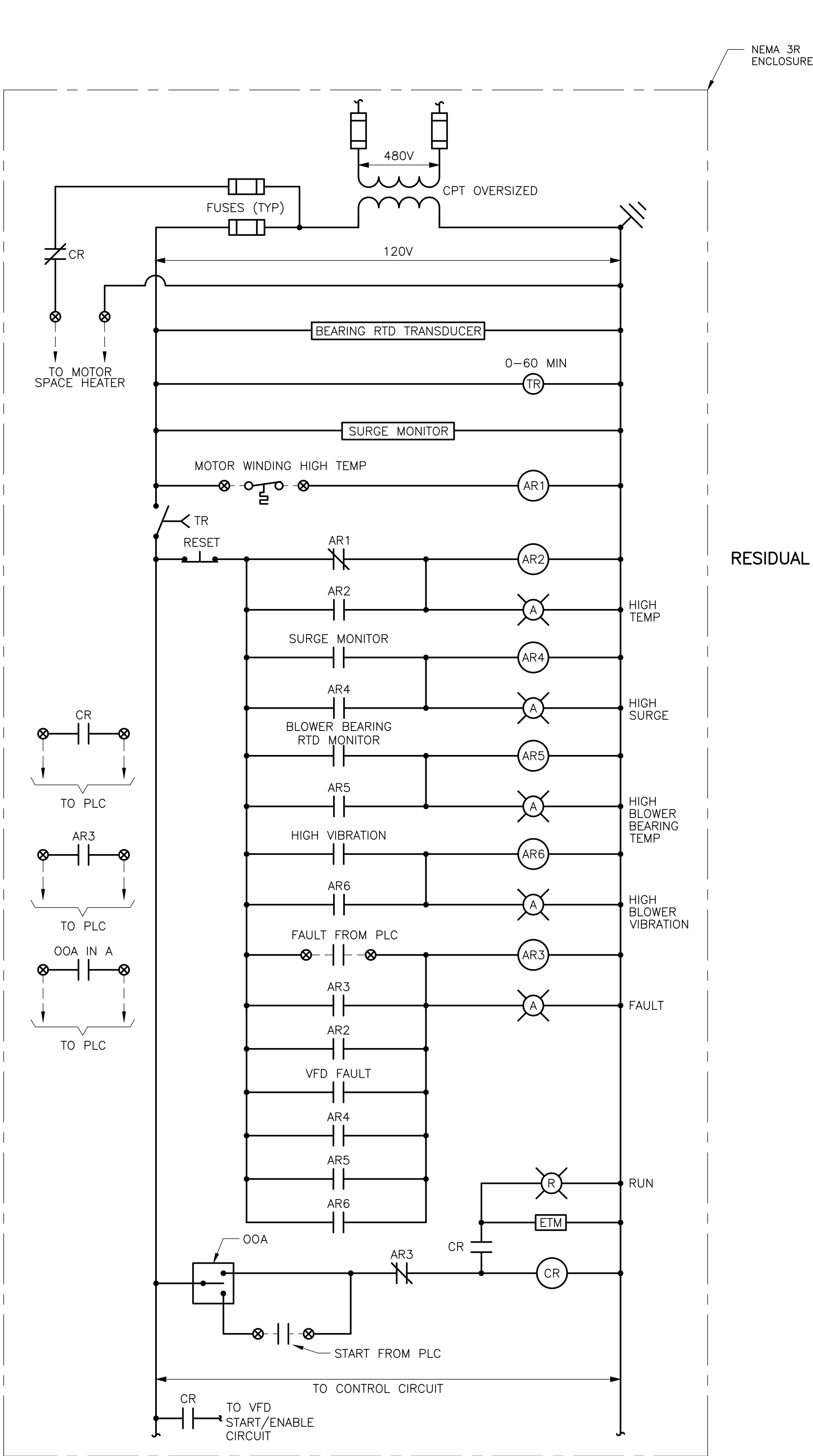
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SHEET NO.

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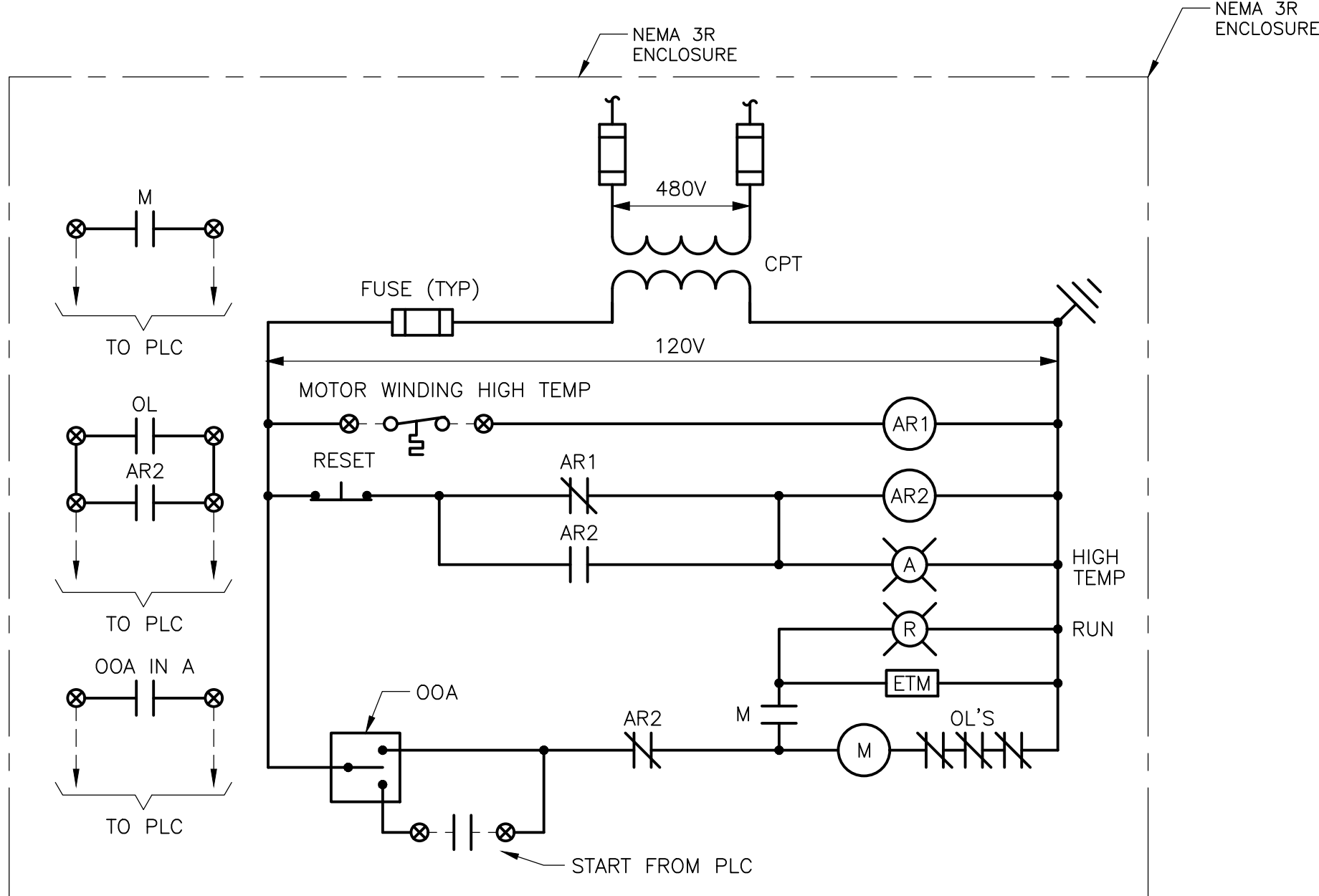
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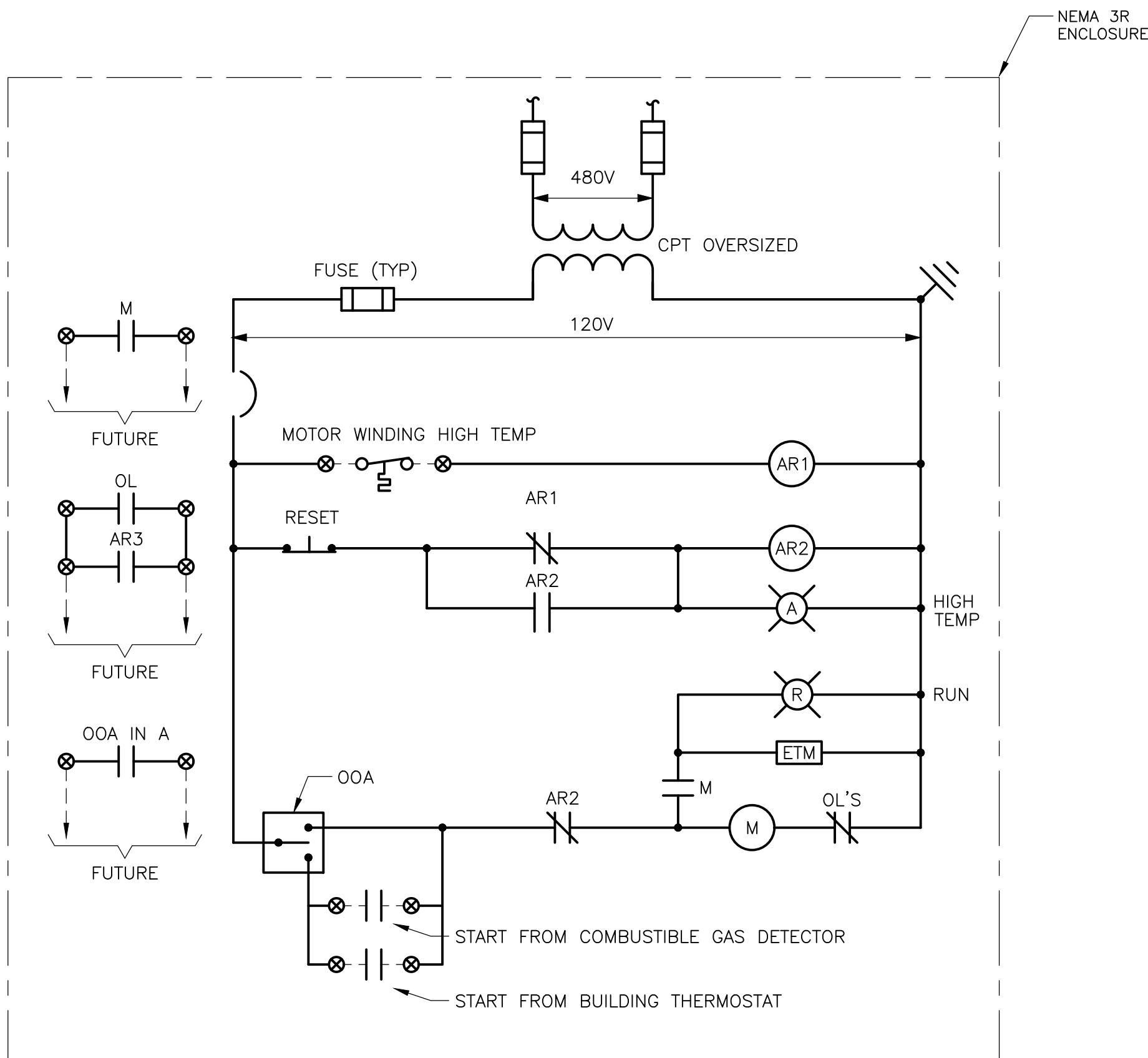
FLARE SKID, COMBUSTION AIR AND GAS BOOSTER BLOWER VFD
(B-104A, B-104B, B-1210A, B-1210B, B-1230)

SCHEMATIC 1
TYP FOR 5



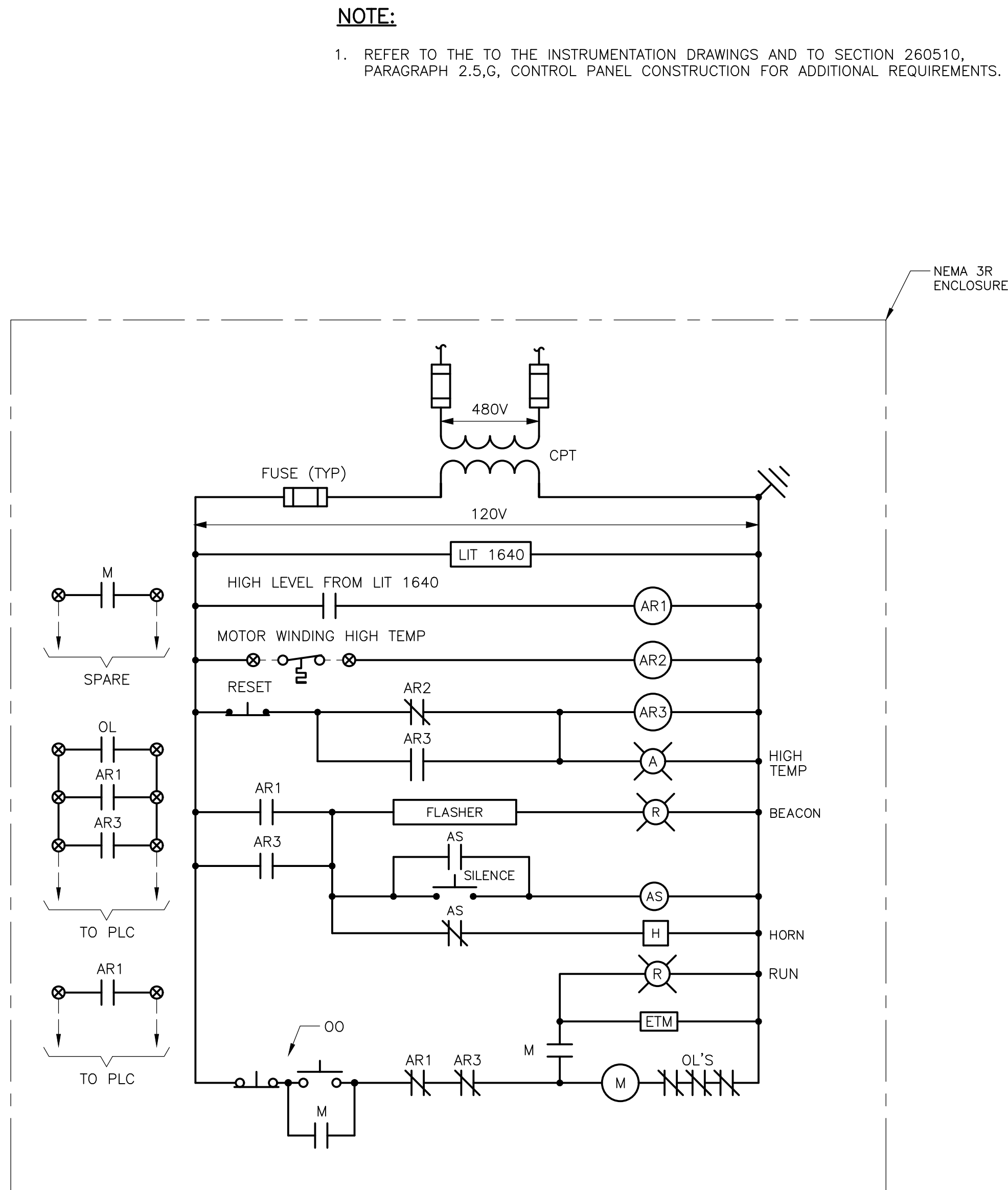
RESIDUAL TRANSFER PUMPS (P-1630A & P-1630B) AND LEACHATE FEED PUMP (P-104A & P-104B)

SCHEMATIC 2
TYP FOR 4



BUILDING EXHAUST FANS

SCHEMATIC 3
TYP FOR 2



RESIDUAL LOAD OUT PUMP (P-1640A & P-1640B)

SCHEMATIC 4
TYP FOR 2

NOTE:
1. REFER TO THE TO THE INSTRUMENTATION DRAWINGS AND TO SECTION 260510, PARAGRAPH 2.5,G, CONTROL PANEL CONSTRUCTION FOR ADDITIONAL REQUIREMENTS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	E. GACHARICH
DRAWN BY:	R. RUCK
SHEET CHK'D BY:	J. SANCHEZ
CROSS CHK'D BY:	S. PERRY
APPROVED BY:	S. PERRY
DATE:	NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL OOA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

ELEMENTARY CONTROL DIAGRAMS I

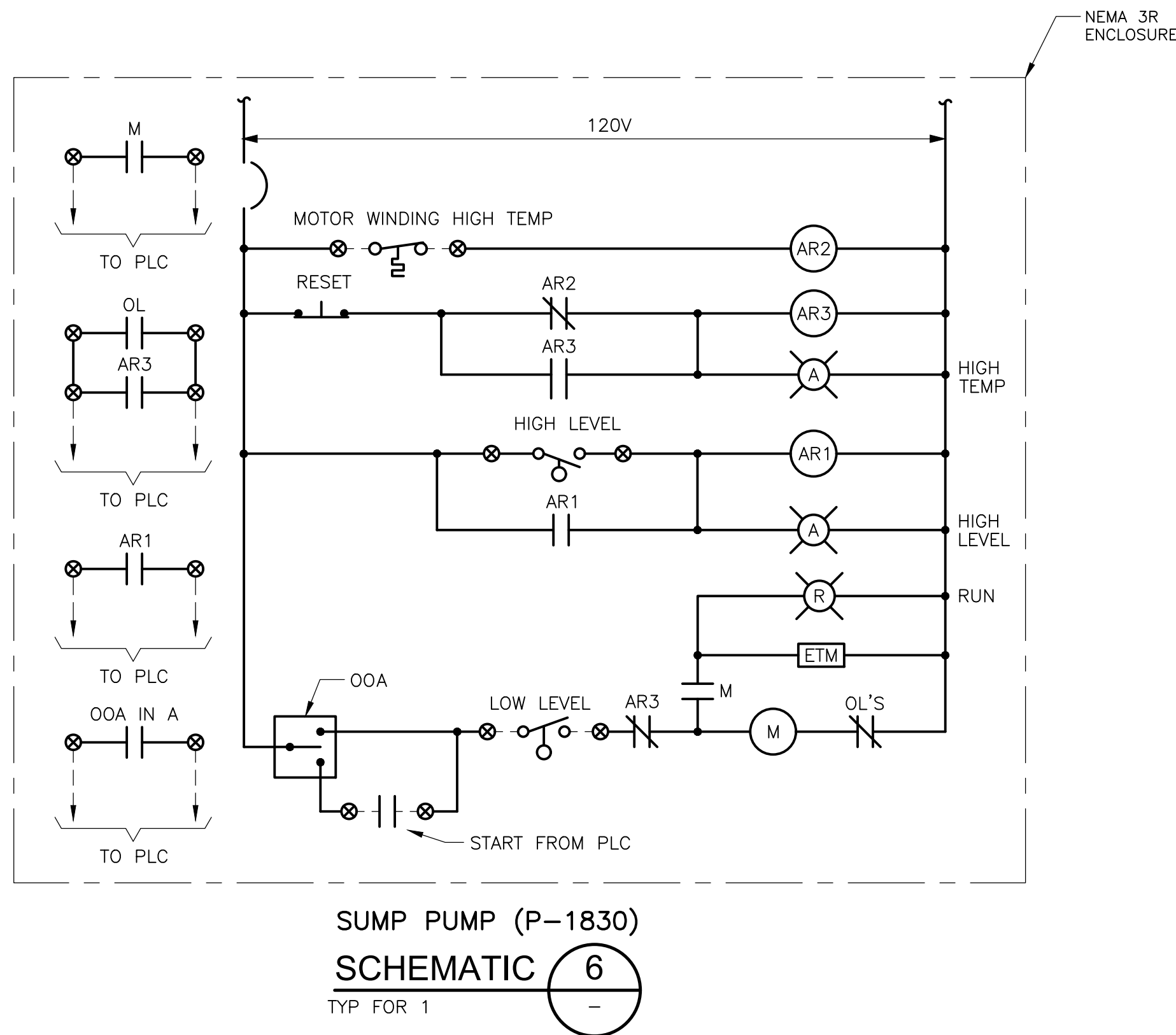
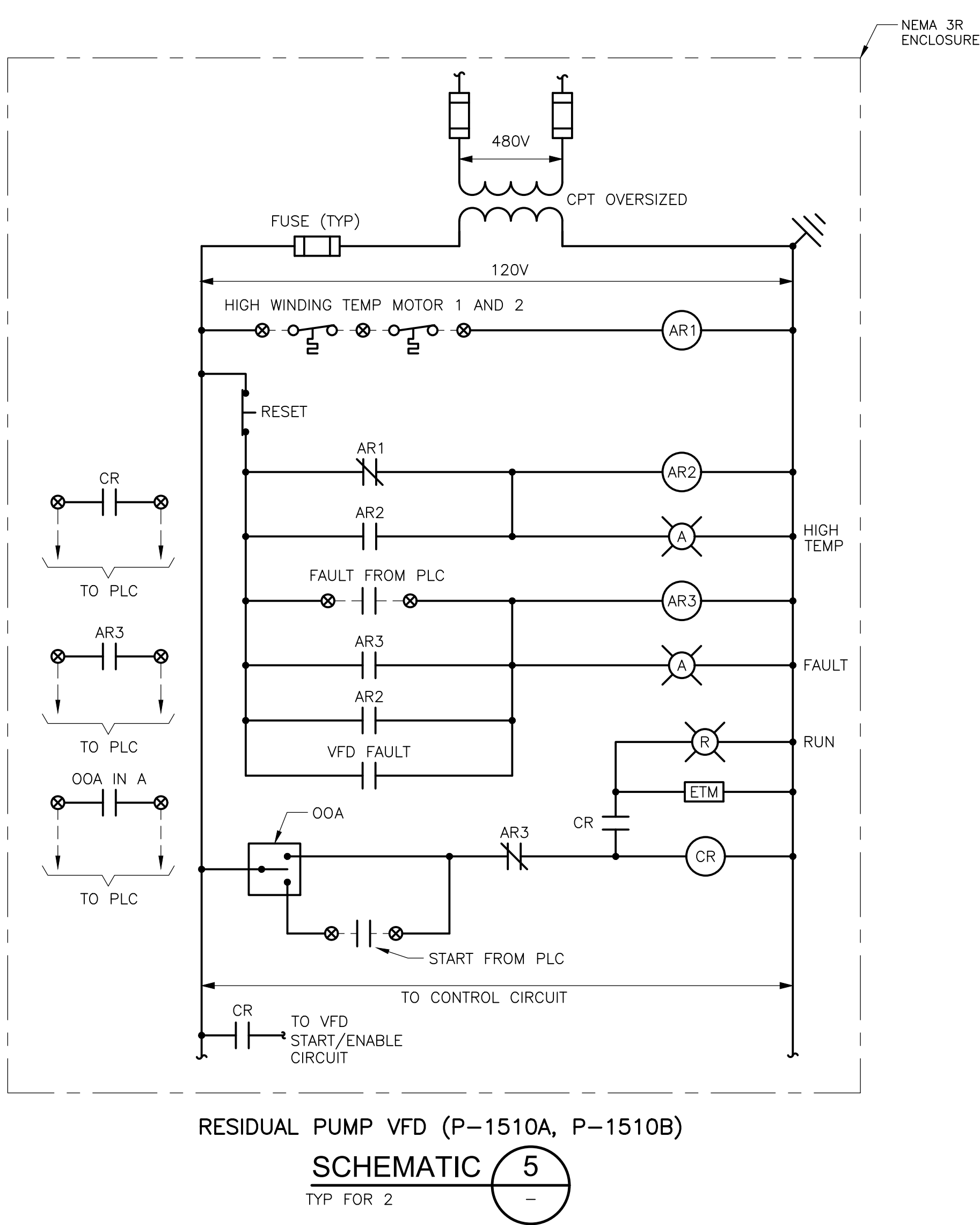
SPENCER J. PERRY JR.
LICENSE
NO. 62587
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

DATE:
SPENCER J. PERRY JR
PE NO. 62587

PROJECT NO. 9012-228686
FILE NAME: E009NFEL.DWG

SHEET NO.
E-9

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: E. GACHARICH
DRAWN BY: R. RUCK
SHEET CHK'D BY: J. SANCHEZ
CROSS CHK'D BY: S. PERRY
APPROVED BY: S. PERRY
DATE: NOVEMBER 2020

CDM Smith
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Tel: (904) 731-7109
FL OOA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

ELEMENTARY CONTROL DIAGRAMS II

SPENCER J. PERRY JR.
LICENSE
NO. 62587
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

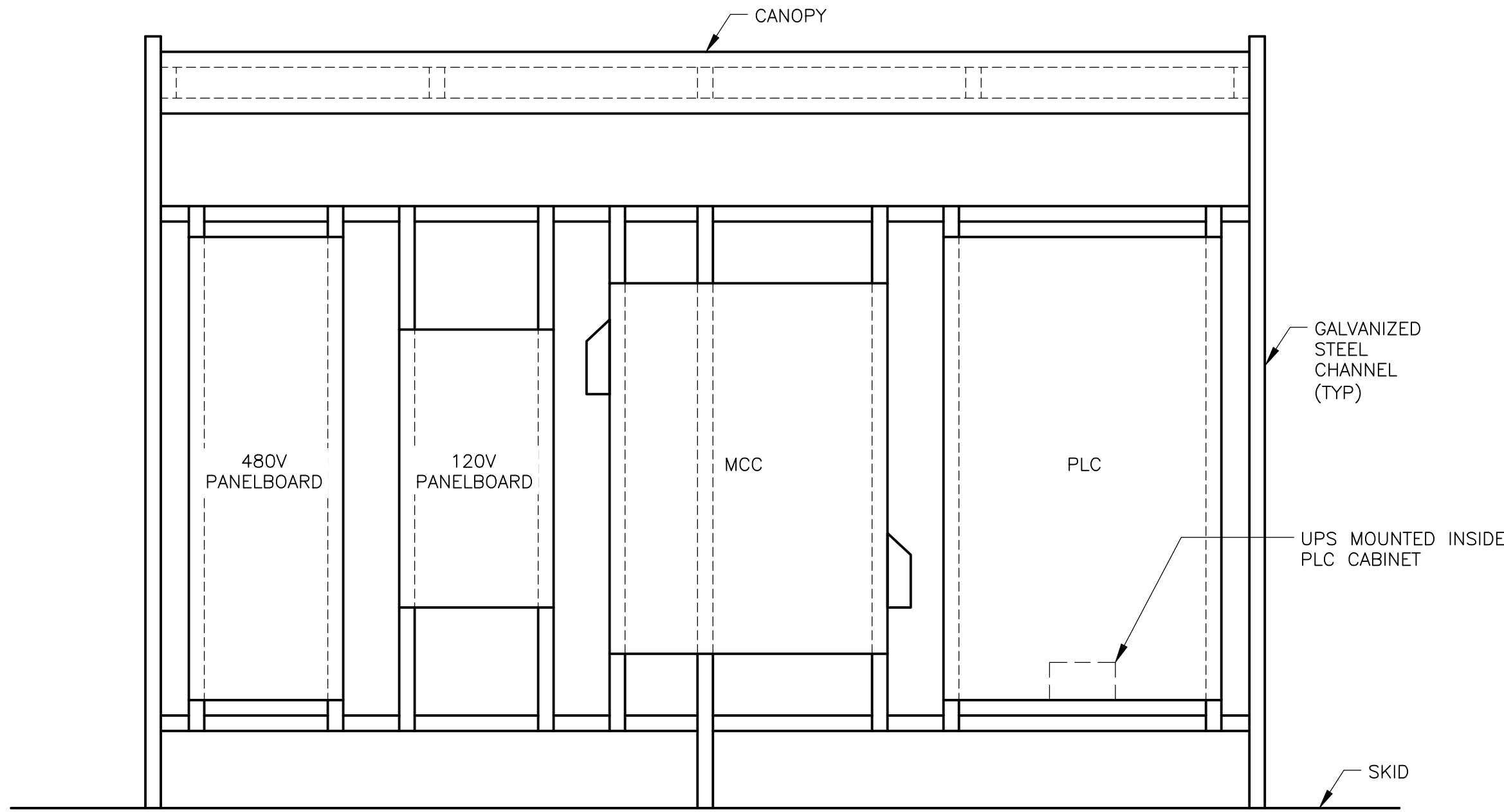
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PE NO. 62587

PROJECT NO. 9012-228686
FILE NAME: E010NFEL.DWG

SHEET NO.
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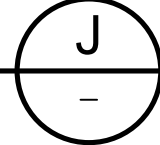
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REUSE OF DOCUMENTS:

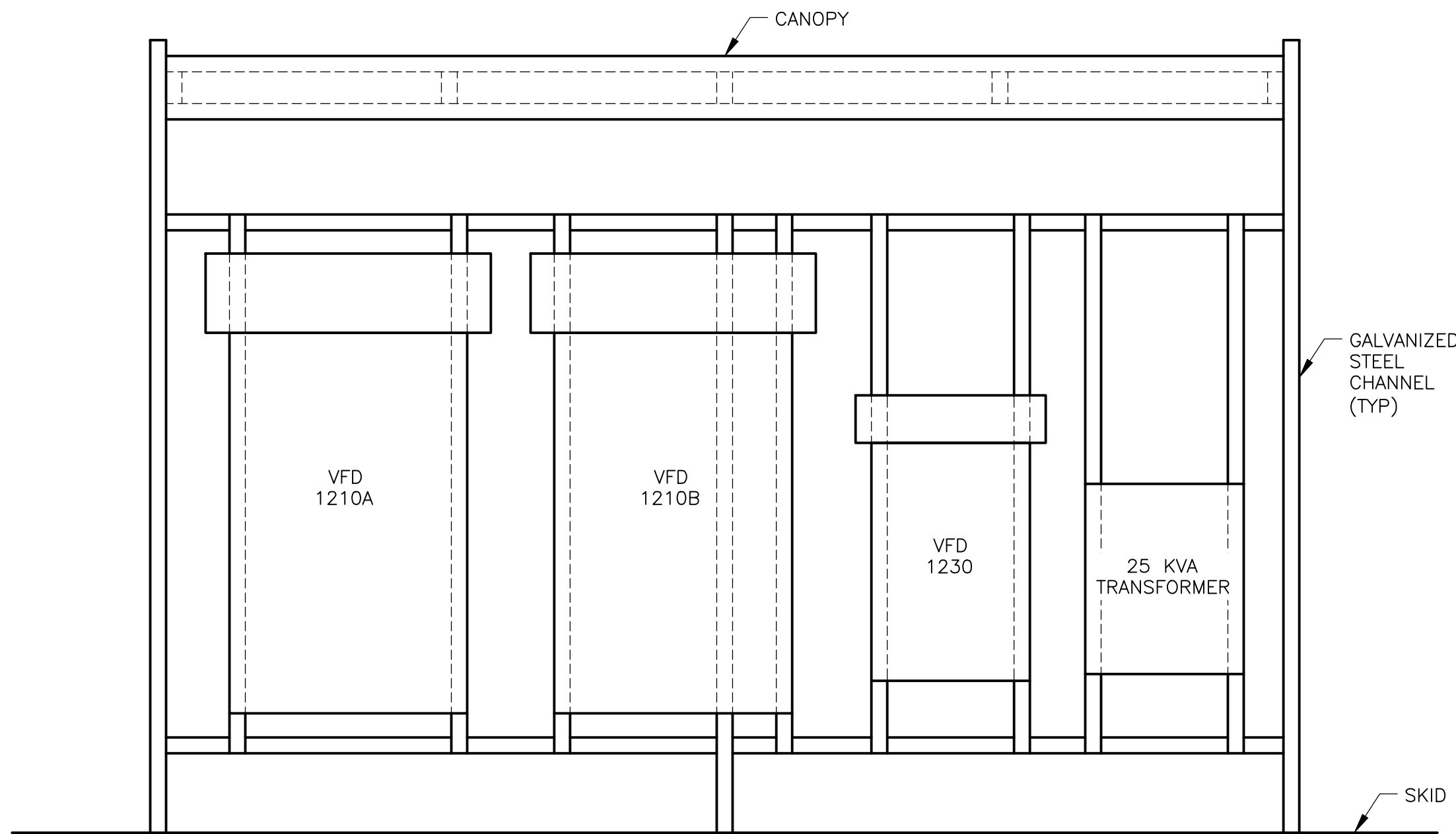


EVAPORATOR CANOPY RACK – EAST ELEVATION

DETAIL

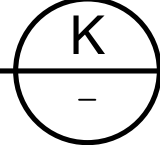


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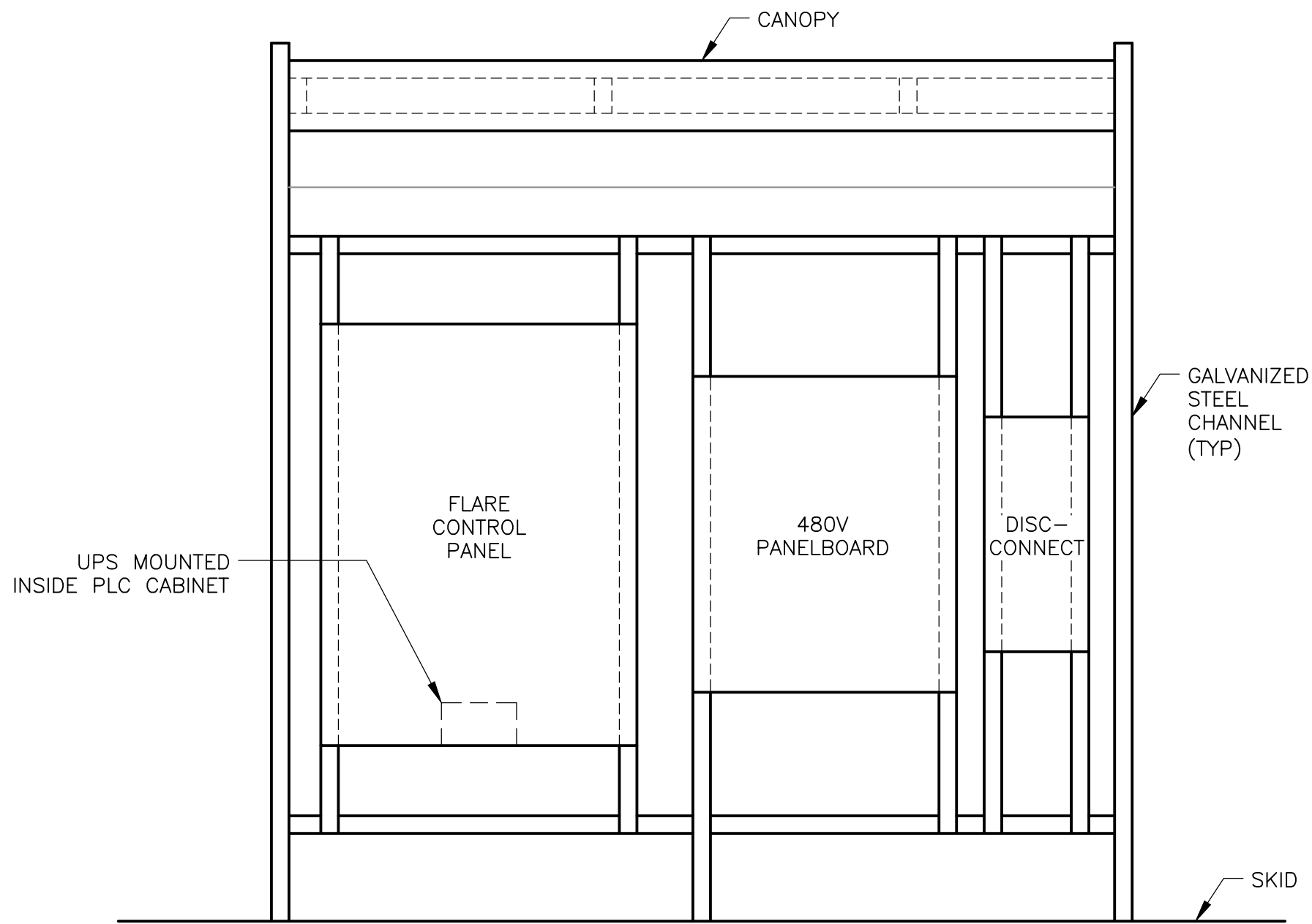


EVAPORATOR CANOPY RACK – WET ELEVATION

DETAIL

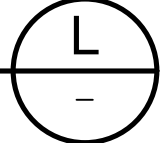


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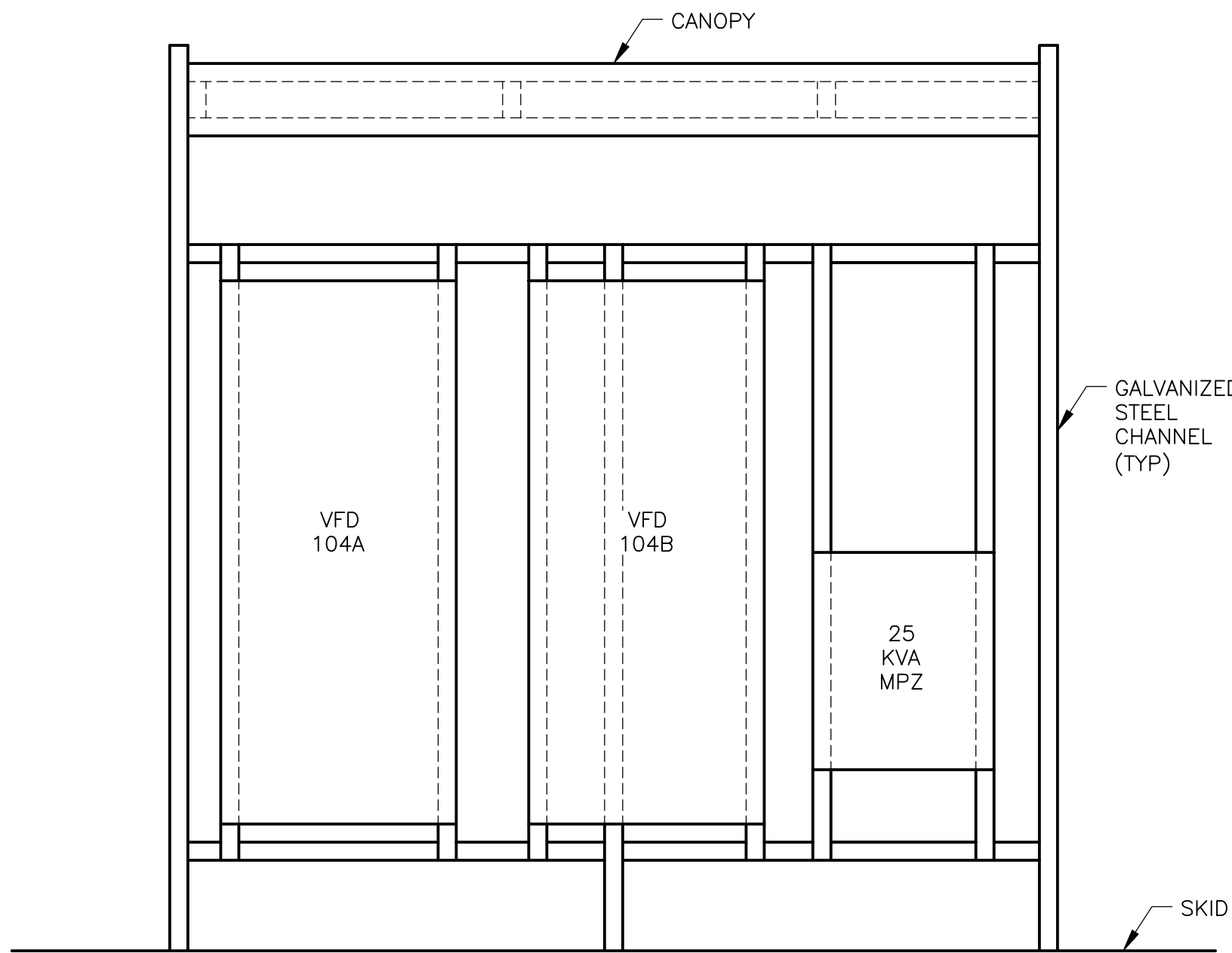


FLARE CANOPY RACK – EAST ELEVATION

DETAIL

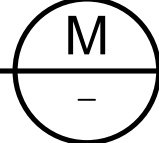


NTS



FLARE CANOPY RACK – WET ELEVATION

DETAIL



NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: E. GACHARICH
DRAWN BY: R. RUCK
SHEET CHK'D BY: J. SANCHEZ
CROSS CHK'D BY: S. PERRY
APPROVED BY: S. PERRY
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CDA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

ELECTRICAL DETAILS

DATE:
SPENCER J. PERRY JR
PE NO. 62587

PROJECT NO. 9012-228686
FILE NAME: ED02NFD1.DWG

SHEET NO.
ED-2

INSTRUMENTATION FUNCTION CODE

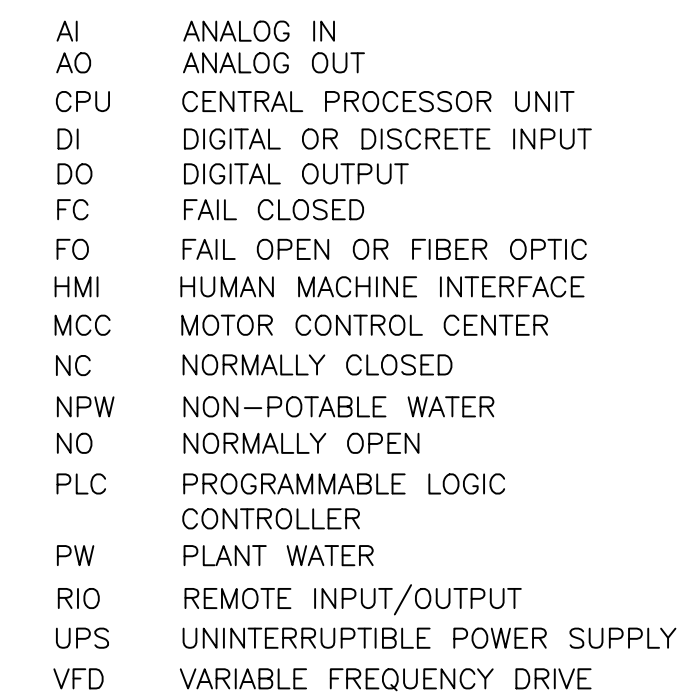
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	MEASURED/INITIATING VARIABLE	VARIABLE MODIFIER	READOUT/PASSIVE FUNCTION	OUTPUT/ACTIVE FUNCTION	FUNCTION MODIFIER
A	ANALYSIS		ALARM		
B	BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	USER'S CHOICE			CONTROL	CLOSED
D	USER'S CHOICE	DIFFERENCE, DIFFERENTIAL			DEVIATION
E	VOLTAGE		SENSOR, PRIMARY ELEMENT		
F	FLOW, FLOW RATE	RATIO			
G	USER'S CHOICE		GLASS, GAUGE, VIEWING DEVICE		
H	HAND				HIGH
I	CURRENT		INDICATE		
J	POWER		SCAN		
K	TIME, SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOISTURE				MIDDLE, INTERMEDIATE
N	USER'S CHOICE		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		ORIFICE, RESTRICTION		OPEN
P	PRESSURE		POINT (TEST CONNECTION)		
Q	QUANTITY	INTEGRATE, TOTALIZE	INTEGRATE, TOTALIZE		
R	RADIATION		RECORD		RUN
S	SPEED, FREQUENCY	SAFETY		SWITCH	STOP
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	
V	VIBRATION, MECHANICAL, ANALYSIS			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE		WELL, PROBE		
X	UNCLASSIFIED (1)	X-AXIS	ACCESSORY DEVICES, UNCLASSIFIED (1)	UNCLASSIFIED (1)	UNCLASSIFIED (1)
Y	EVENT, STATE, PRESENCE	Y-AXIS		AUXILIARY DEVICES	
Z	POSITION, DIMENSION	Z-AXIS, SAFETY INSTRUMENT SYSTEM		DRIVER, ACTUATOR, UNCLASSIFIED, FINAL CONTROL ELEMENT	

GENERAL NOTES

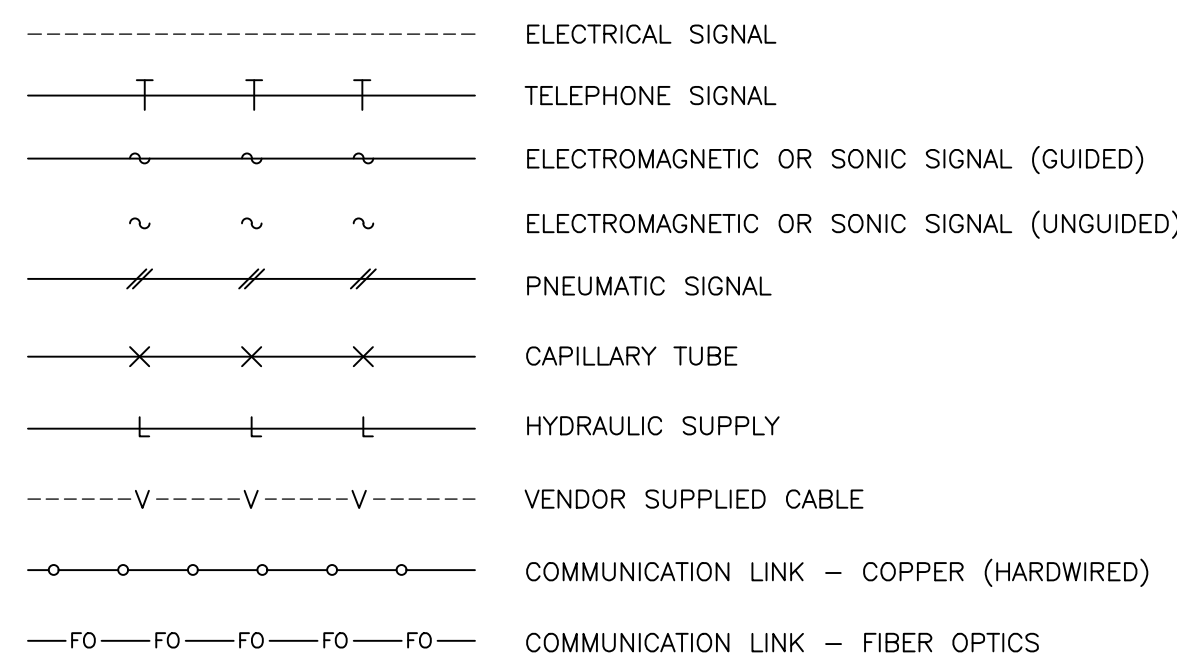
- ## GENERAL ABBREVIATIONS



GENERAL ABBREVIATIONS



INSTRUMENT LINE SYMBOLS



ELECTRICAL / AIR SOURCES



LOR = LOCAL/OFF/REMOTE
LOS = LOCKOUT/STOP
LA = LOCAL/AUTO
LR = LOCAL/REMOTE
OC = OPEN/CLOSE
OCA = OPEN/CLOSE/AUTO
OO = ON/OFF
OOA = ON/OFF/AUTO
OSC = OPEN/STOP/CLOSE
RSL = RAISE/STOP/LOWER
SS = START/STOP
SOR = START/OFF/RESET

DESIGNED BY: _____ T. WILEY
DRAWN BY: _____ J. LOWE
SHEET CHK'D BY: _____ T. WILEY
CROSS CHK'D BY: _____ T. WILEY
APPROVED BY: _____ T. WILEY
DATE: _____ NOVEMBER 2020

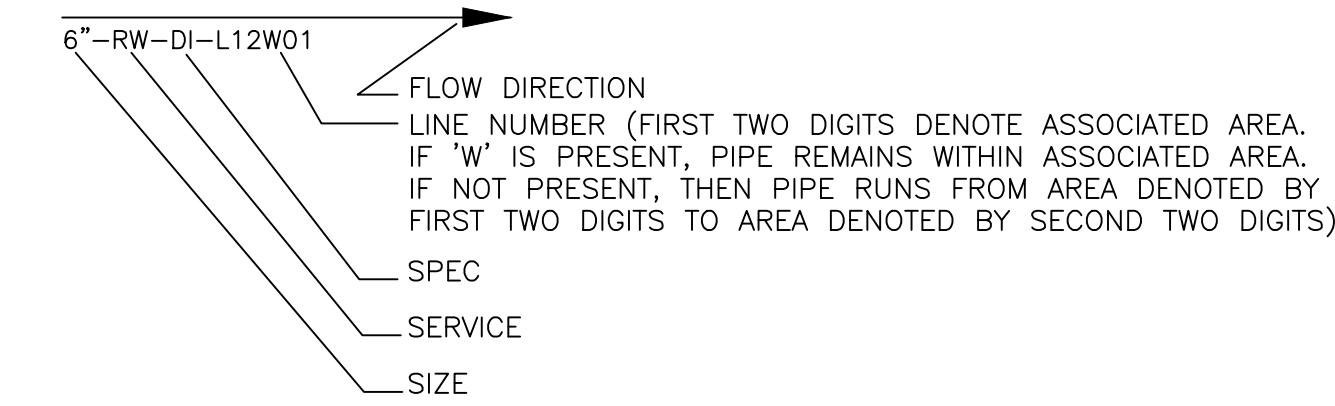
**CDM
Smith**
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL COA No. EB-0000020

INSTRUMENTATION LEGEND (1 OF 2)

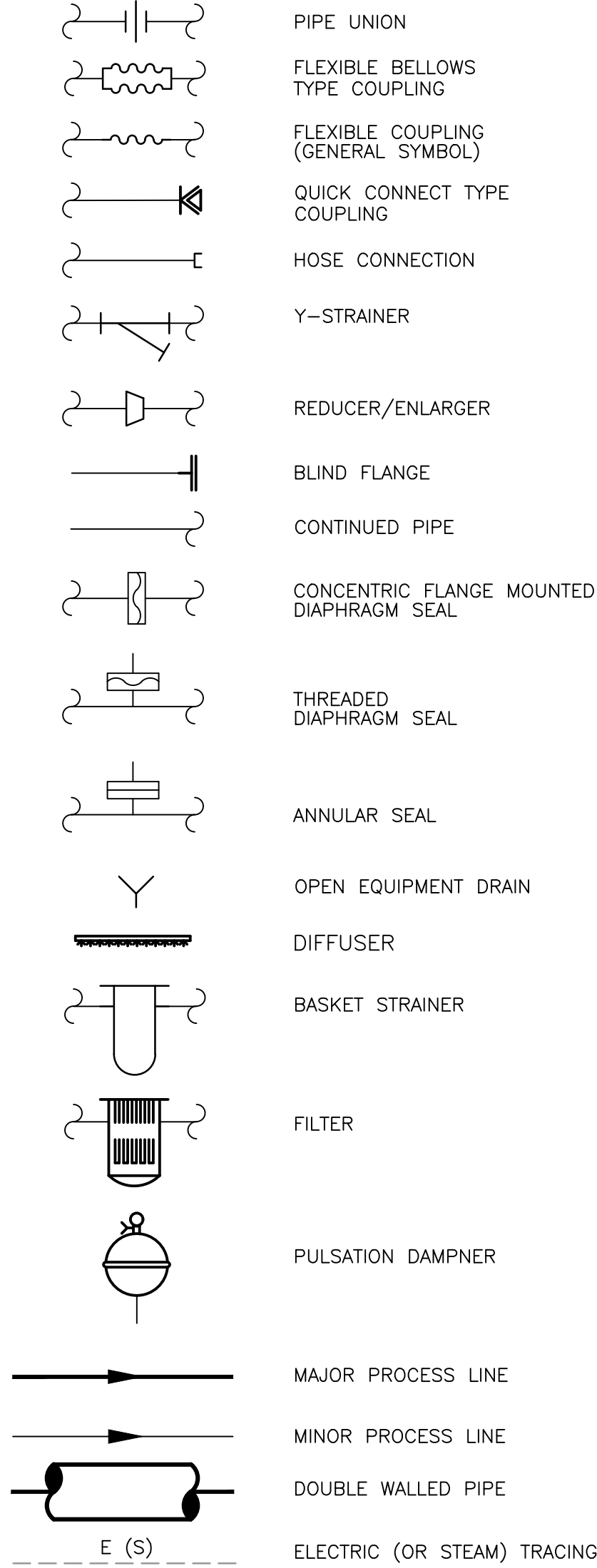
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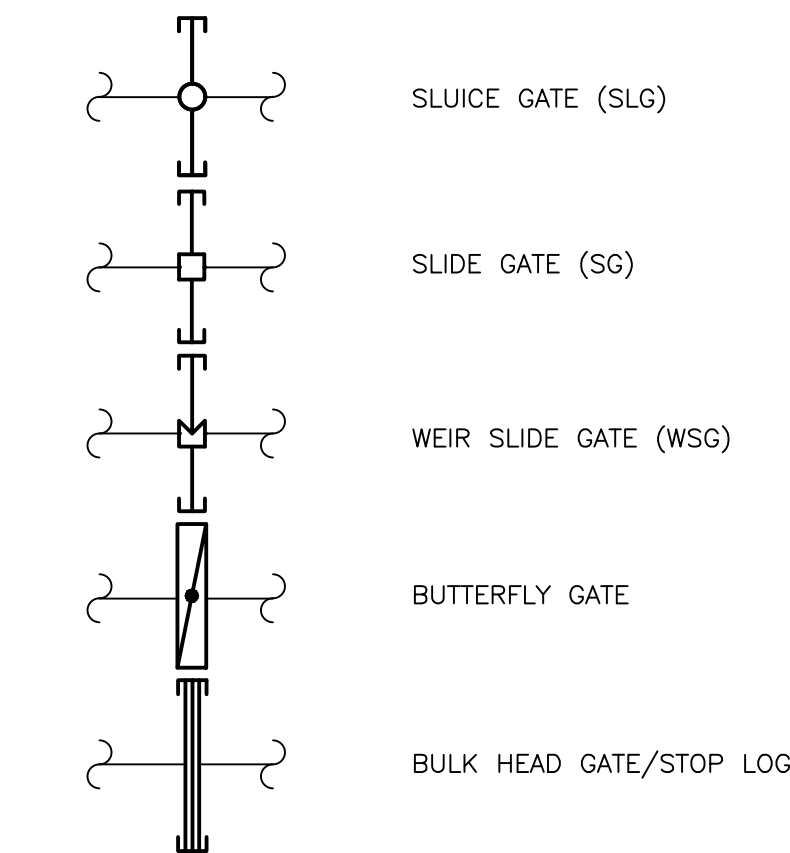
TYPICAL PIPE TAG NUMBERS & DESIGNATION



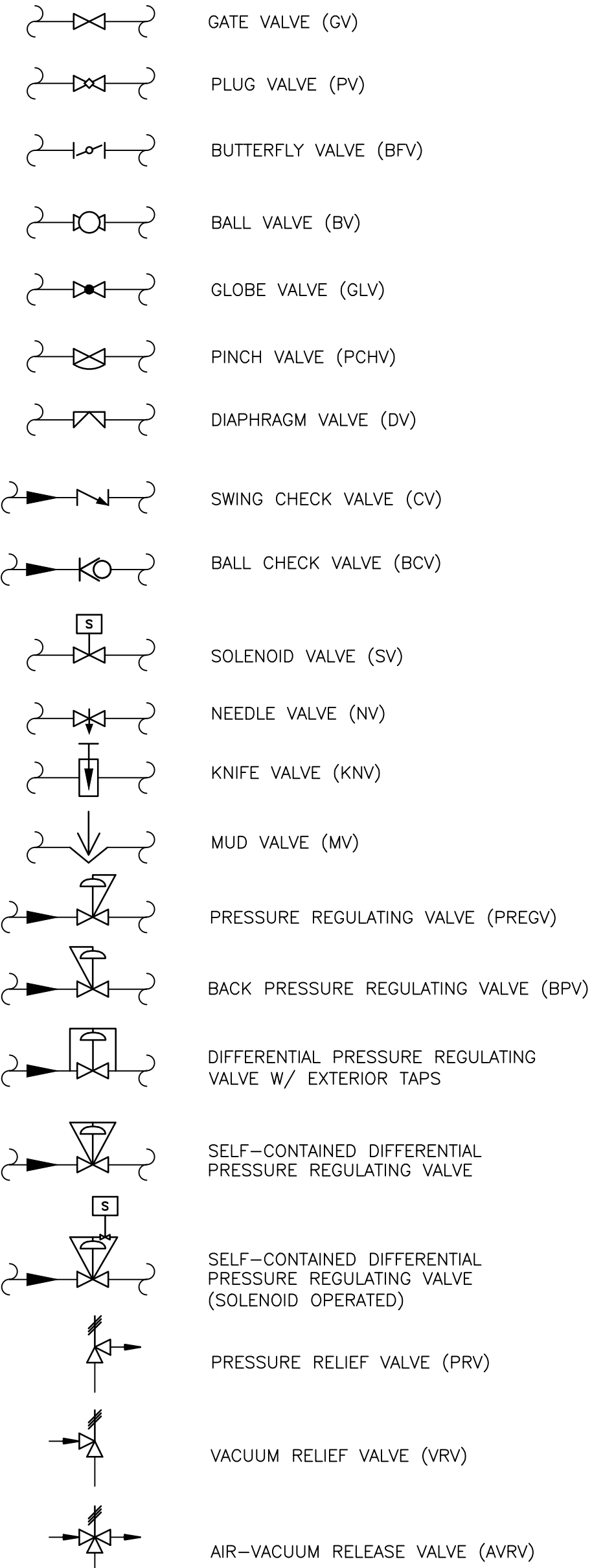
PIPE LINE SYMBOLS



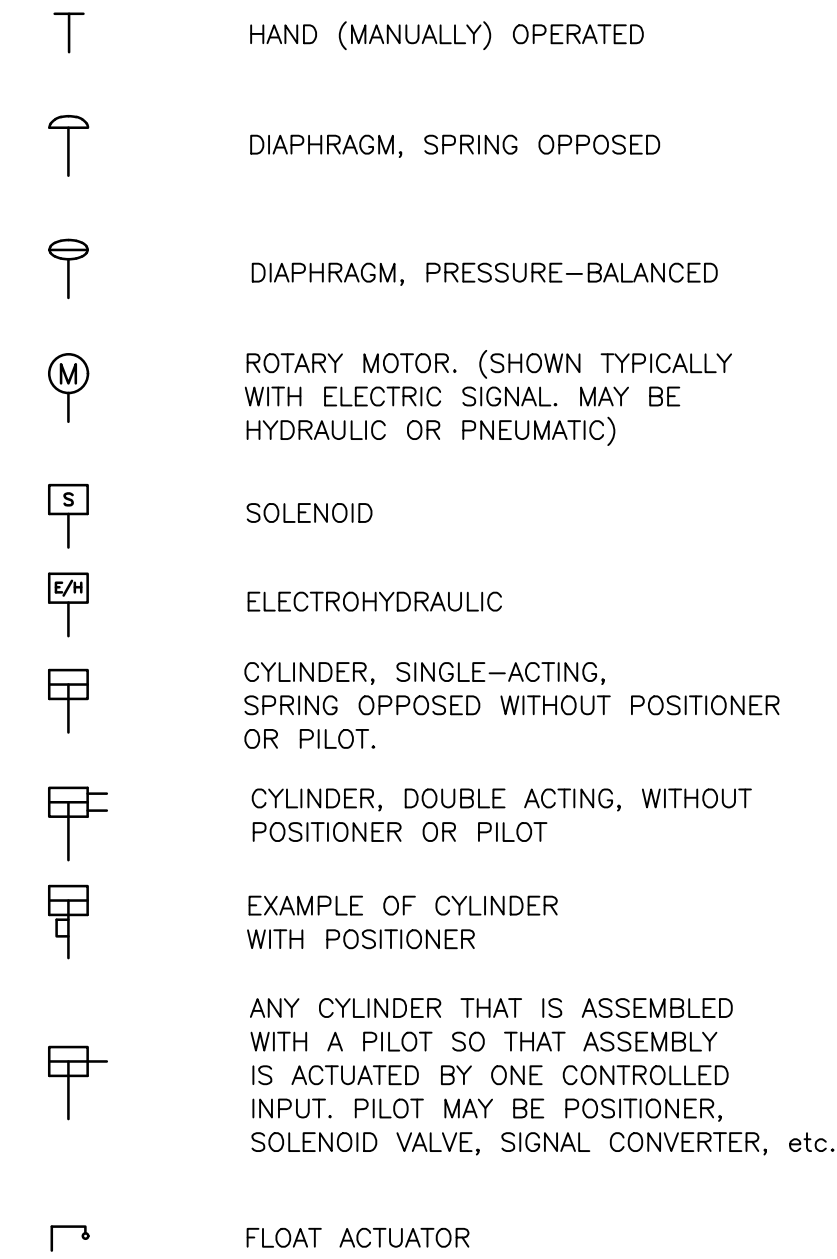
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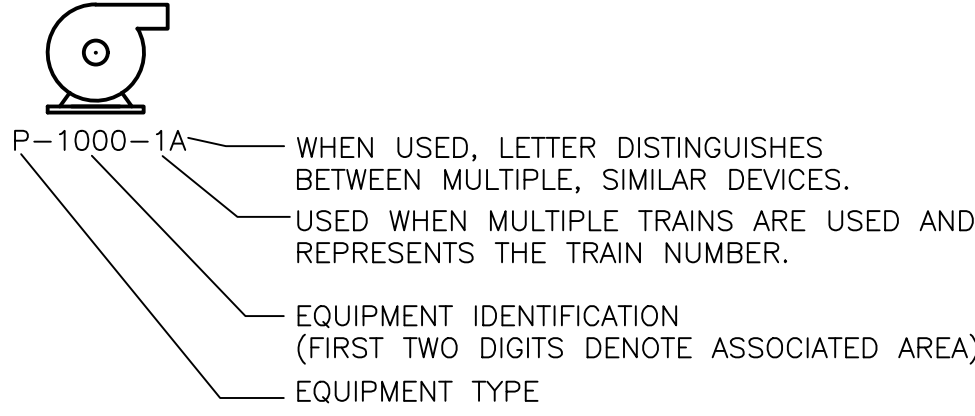
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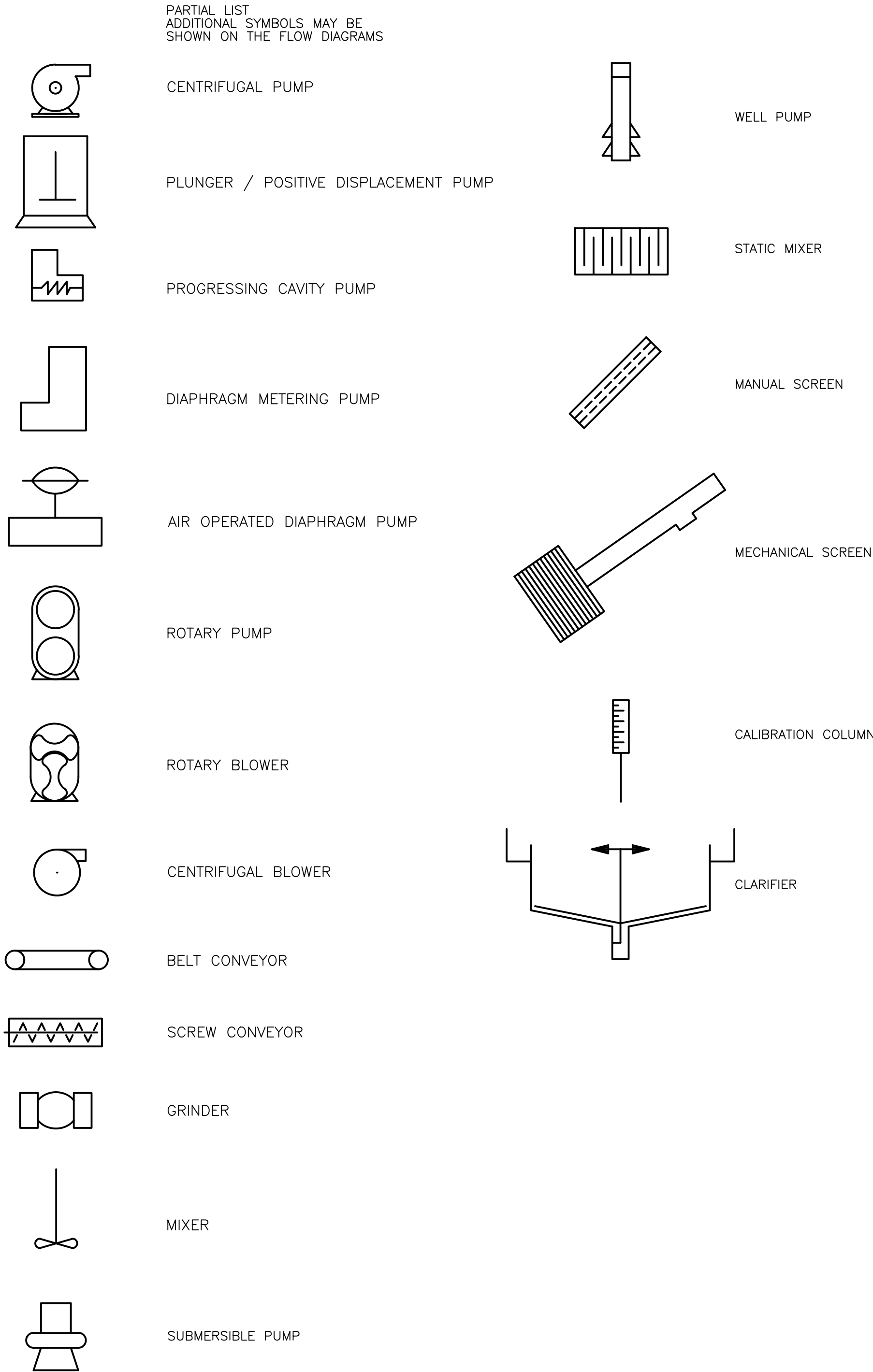
VALVE ACTUATORS



TYPICAL EQUIPMENT TAG NUMBERS & DESIGNATION



PROCESS EQUIPMENT



GENERAL NOTES

1. REFER TO SHEET I-1 FOR ADDITIONAL NOTES

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	T. WILEY
DRAWN BY:	J. LOWE
SHEET CHK'D BY:	T. WILEY
CROSS CHK'D BY:	T. WILEY
APPROVED BY:	T. WILEY
DATE:	NOVEMBER 2020



CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6 LANDFILL GAS SYSTEM - PHASE II

INSTRUMENTATION LEGEND (2 OF 2)

TIMOTHY GENE WILEY

LICENSE

NO. 78470

STATE OF FLORIDA

PROFESSIONAL ENGINEER

DATE:

TIMOTHY G. WILEY, PE

PE NO. 78470

PROJECT NO.

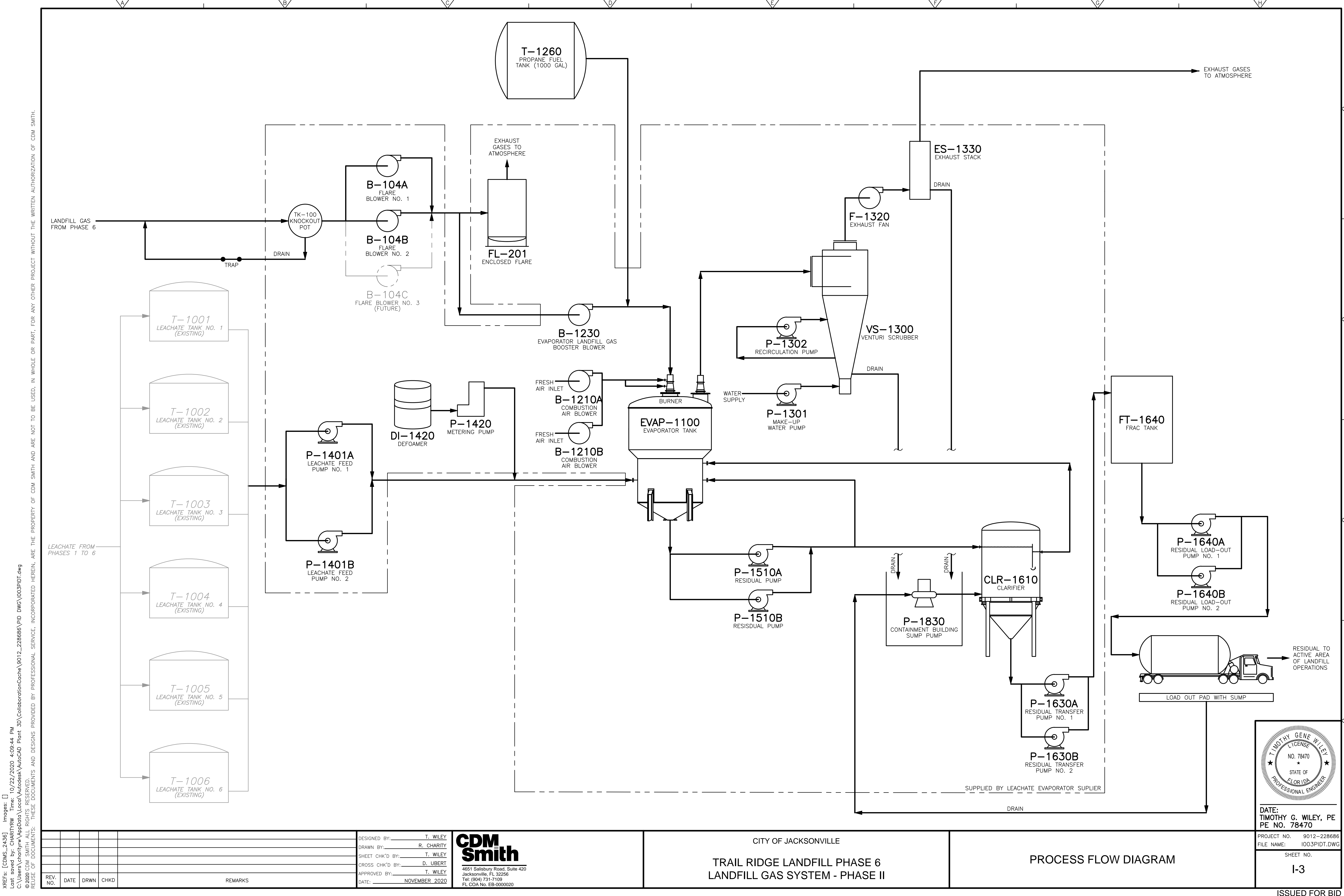
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FILE NAME:

1002SYMB.DWG

SHEET NO.

I-2



REV. NO. DATE DRWN CHKD REMARKS

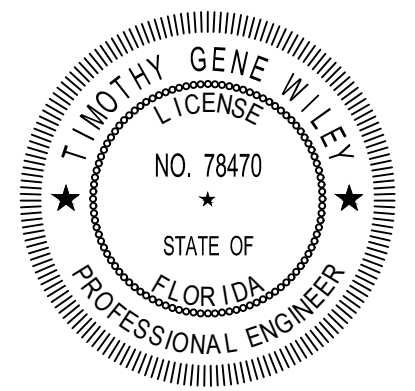
DESIGNED BY: T. WILEY
DRAWN BY: R. CHARITY
SHEET CHK'D BY: T. WILEY
CROSS CHK'D BY: D. UBERT
APPROVED BY: T. WILEY
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CDA No. EB-0000020

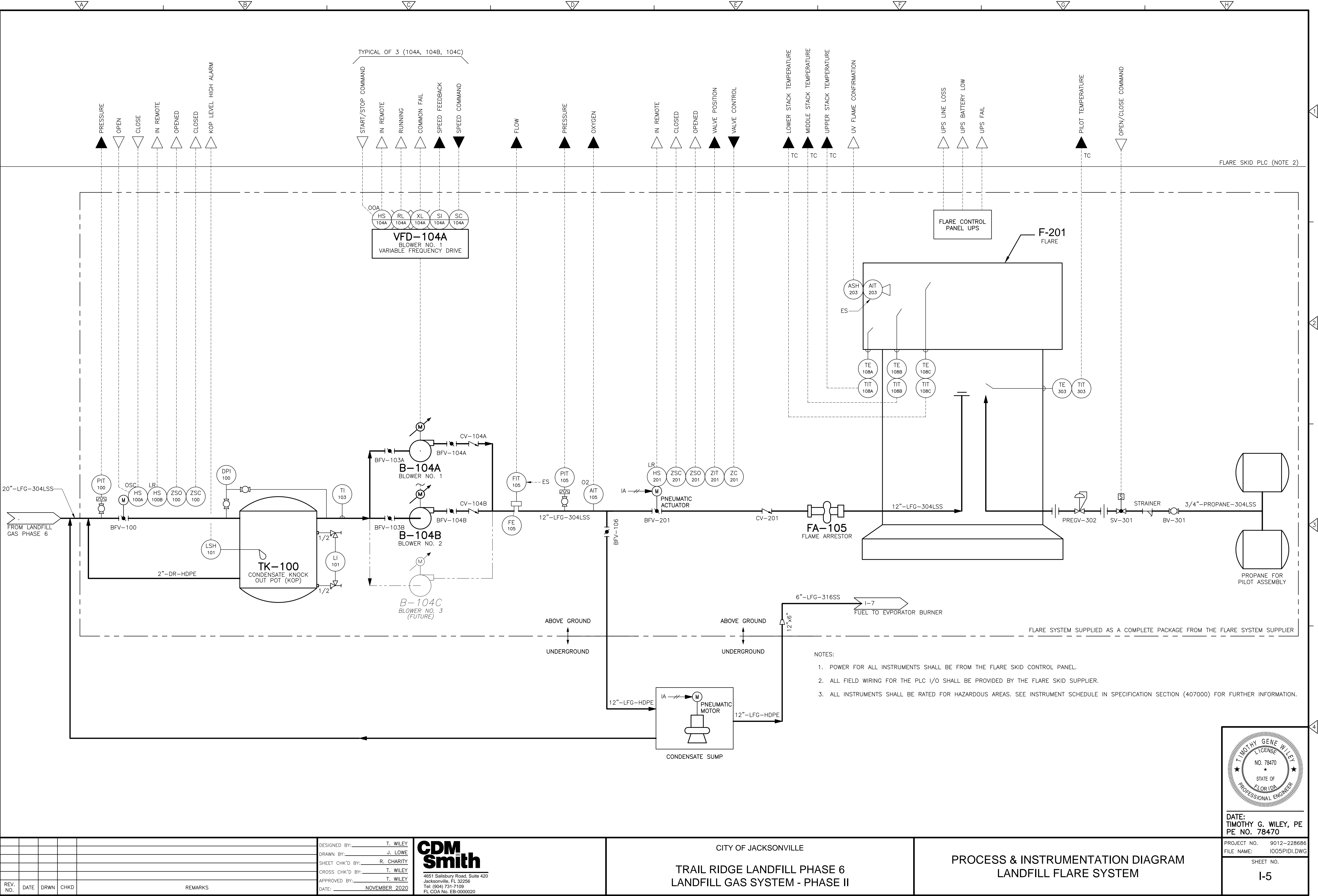
CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

PROCESS FLOW DIAGRAM

DATE: TIMOTHY G. WILEY, PE
PE NO. 78470
PROJECT NO. 9012-228686
FILE NAME: I003PIDT.DWG
SHEET NO. I-3



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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	T. WILEY
DRAWN BY:	J. LOWE
SHEET CHK'D BY:	R. CHARITY
CROSS CHK'D BY:	T. WILEY
APPROVED BY:	T. WILEY
DATE:	NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL QOA No. EB-0000020

CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

PROCESS & INSTRUMENTATION DIAGRAM
LANDFILL FLARE SYSTEM

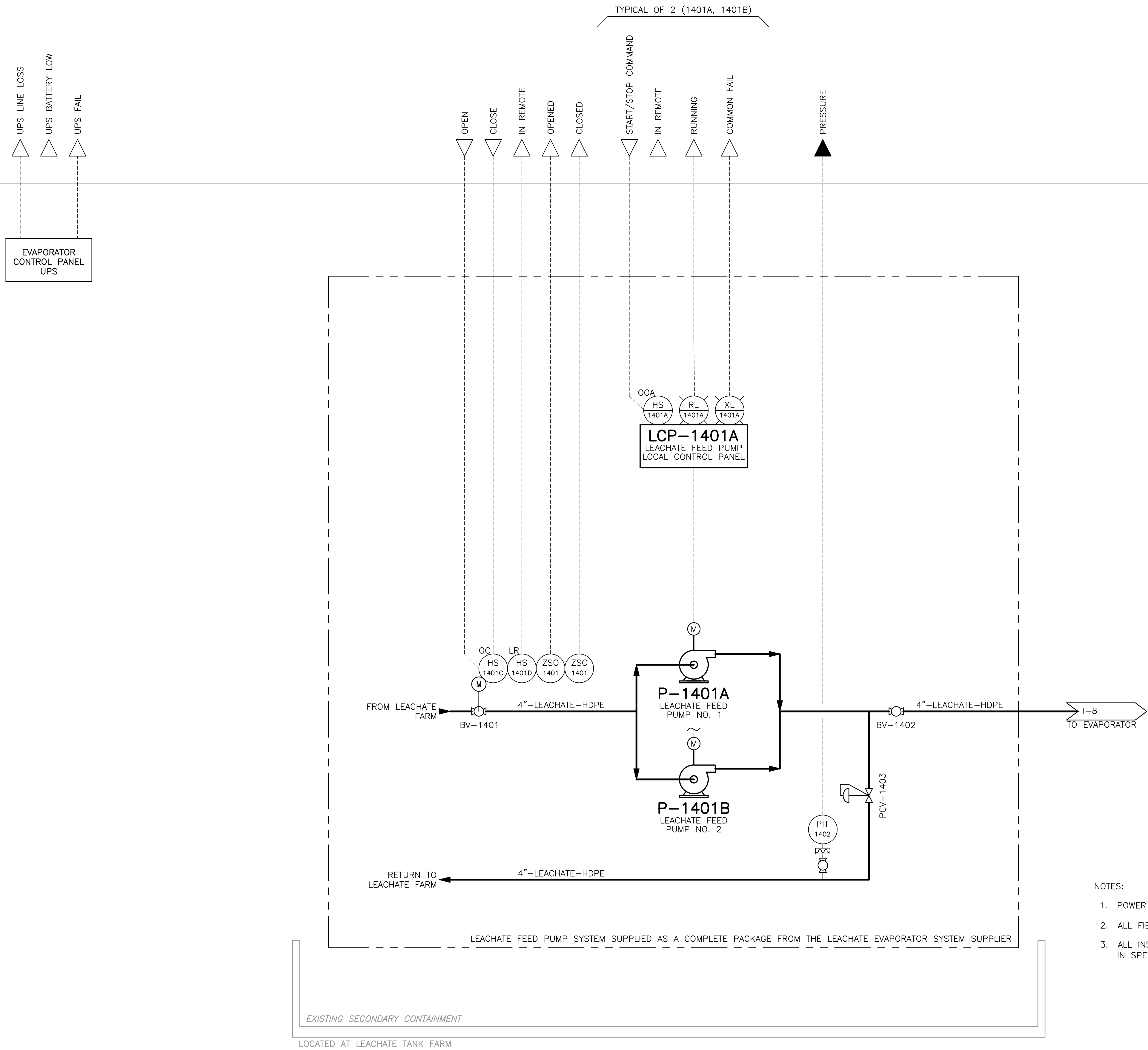
TIMOTHY GENE WILEY
LICENSE
NO. 78470
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470

PROJECT NO. 9012-228686
FILE NAME: 1005PID1.DWG

SHEET NO.
I-5

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- NOTES:
1. POWER FOR ALL INSTRUMENTS SHALL BE FROM THE EVAPORATOR CONTROL PANEL.
 2. ALL FIELD WIRING FOR THE PLC I/O SHALL BE PROVIDED BY THE EVAPORATOR SUPPLIER.
 3. ALL INSTRUMENTS SHALL BE RATED FOR HAZARDOUS AREAS. SEE INSTRUMENT SCHEDULE IN SPECIFICATION SECTION (407000) FOR FURTHER INFORMATION.

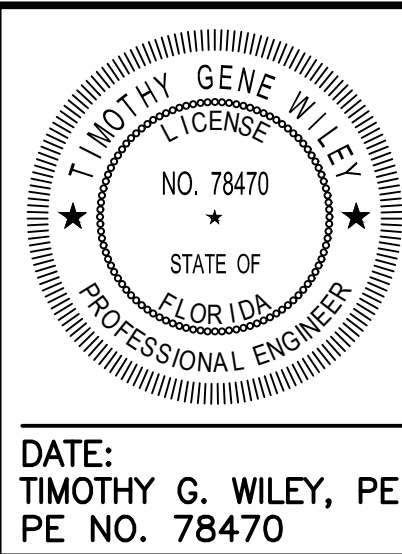
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. WILEY
DRAWN BY: J. LOWE
SHEET CHK'D BY: R. CHARITY
CROSS CHK'D BY: T. WILEY
APPROVED BY: T. WILEY
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL OOA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

PROCESS & INSTRUMENTATION DIAGRAM
LEACHATE FEED SYSTEM



DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470

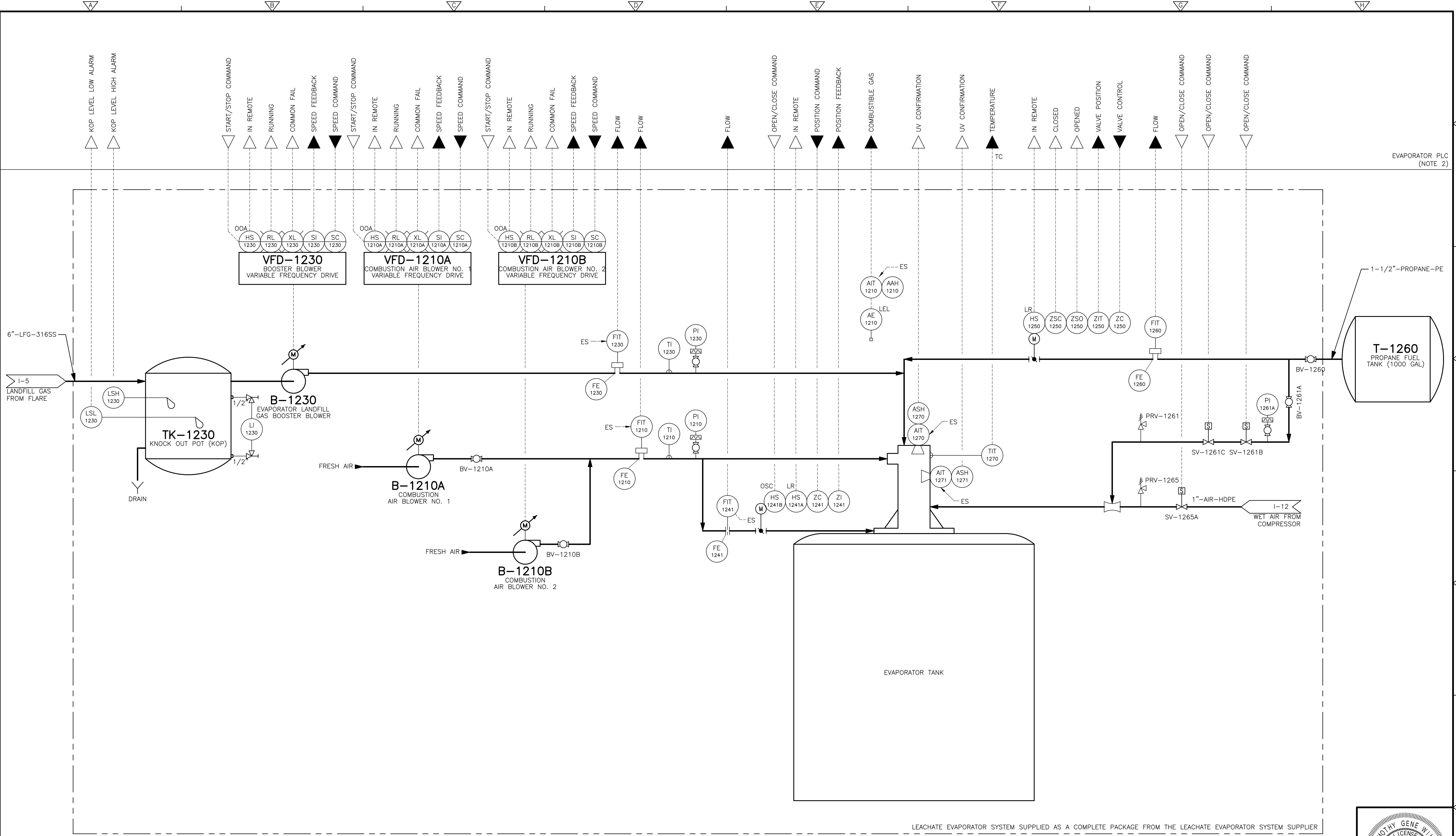
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SHEET NO.

I-6

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 3. ALL INSTRUMENTS SHALL BE RATED FOR HAZARDOUS AREAS. SEE INSTRUMENT SCHEDULE IN SPECIFICATION SECTION (407000) FOR FURTHER INFORMATION.

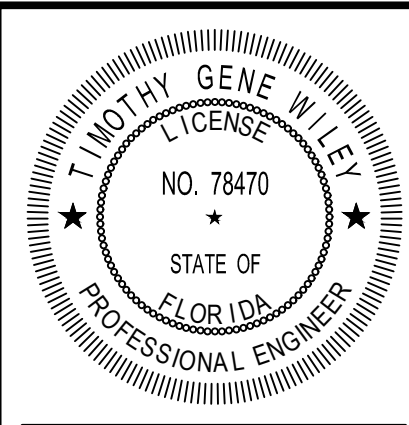
REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	T. WILEY
DRAWN BY:	J. LOWE
SHEET CHK'D BY:	R. CHARITY
CROSS CHK'D BY:	T. WILEY
APPROVED BY:	T. WILEY
DATE:	NOVEMBER 2020

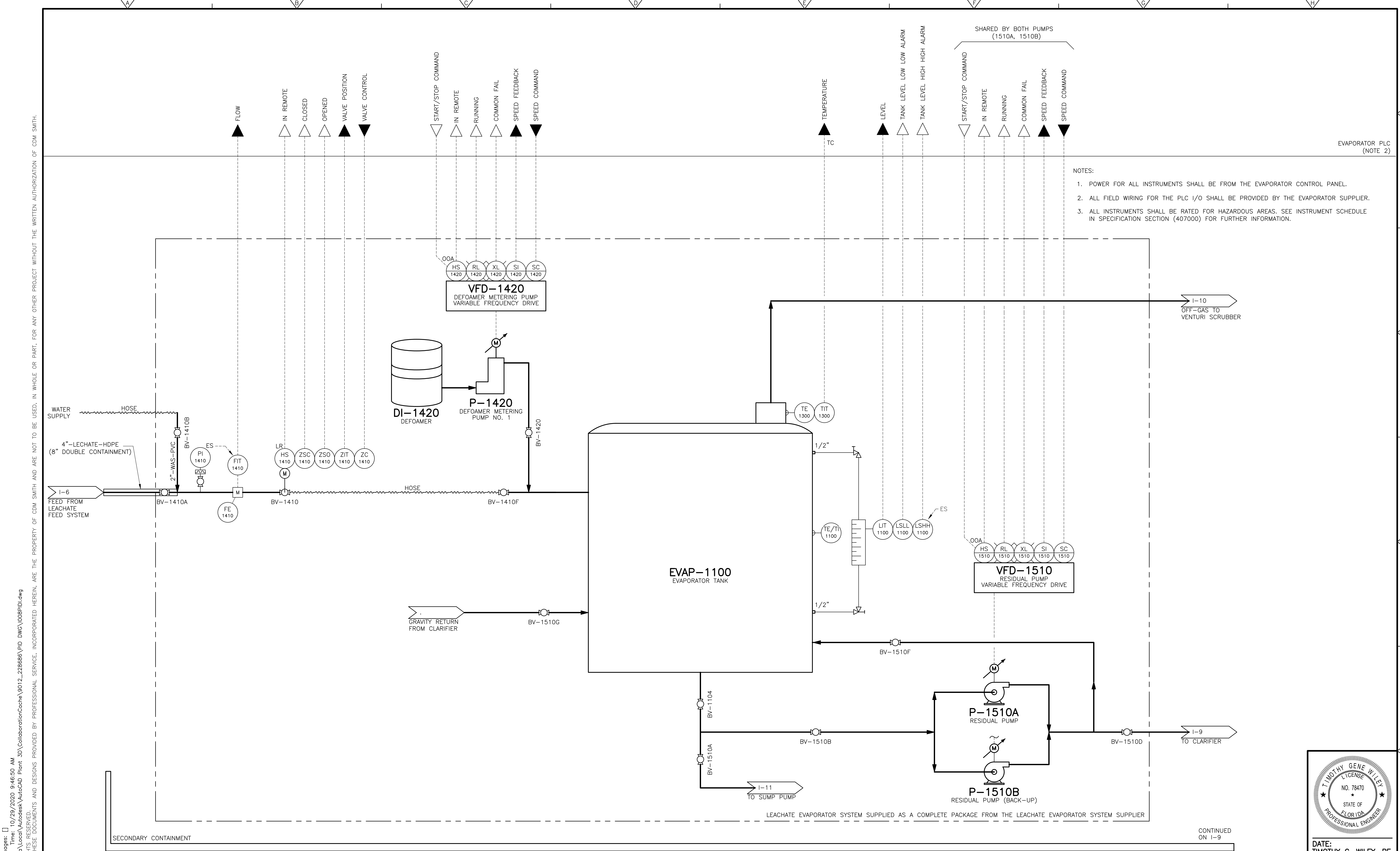
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Jacksonville, FL 32256
Tel: (904) 731-7109
FL OOA No. EB-0000020

CITY OF JACKSONVILLE
**TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II**

PROCESS & INSTRUMENTATION DIAGRAM LEACHATE EVAPORATOR TANK BURNER SYSTEM	
PROJECT NO. 9012-228688 FILE NAME: 1007PIDI.DWG	SHEET NO. I-7



DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470



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DRAWN BY: J. LOWE
SHEET CHK'D BY: R. CHARITY
CROSS CHK'D BY: T. WILEY
APPROVED BY: T. WILEY
DATE: NOVEMBER 2020

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4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL OOA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

PROCESS & INSTRUMENTATION DIAGRAM
LEACHATE EVAPORATOR TANK

TIMOTHY GENE WILEY

LICENSE

NO. 78470

STATE OF FLORIDA

PROFESSIONAL ENGINEER

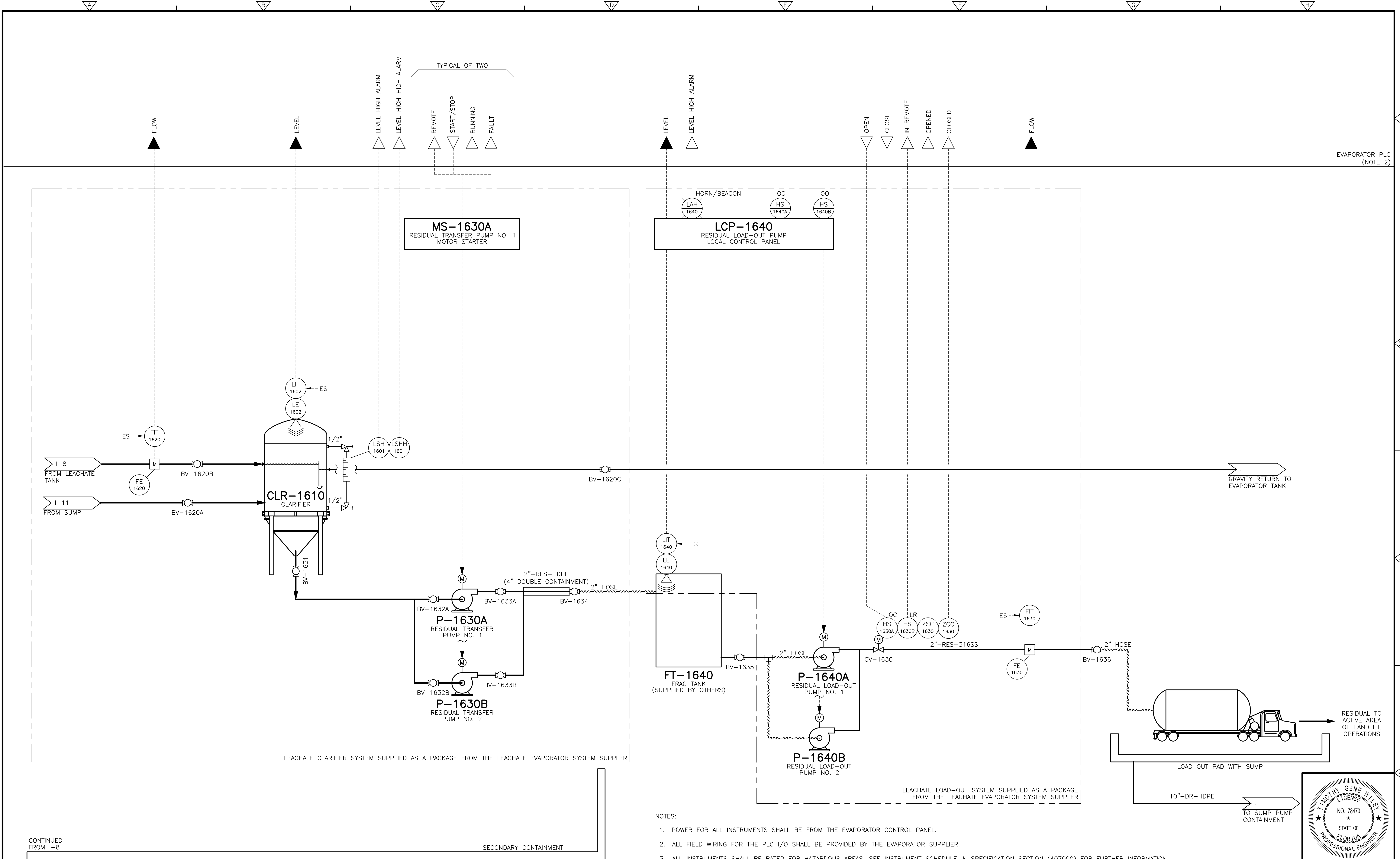
DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470

PROJECT NO. 9012-228686
FILE NAME: 1008PID.DWG

SHEET NO.
I-8

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- NOTES:
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. WILEY
DRAWN BY: B. VARLJEN
SHEET CHK'D BY: T. WILEY
CROSS CHK'D BY: D. UBERT
APPROVED BY: T. WILEY
DATE: NOVEMBER 2020

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4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL OCA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

PROCESS & INSTRUMENTATION DIAGRAM
LEACHATE CLARIFIER AND TRUCK LOAD-OUT

TIMOTHY GENE WILEY

LICENSE

NO. 78470

STATE OF FLORIDA

PROFESSIONAL ENGINEER

DATE:

TIMOTHY G. WILEY, PE

PE NO. 78470

PROJECT NO.

9012-228686

FILE NAME:

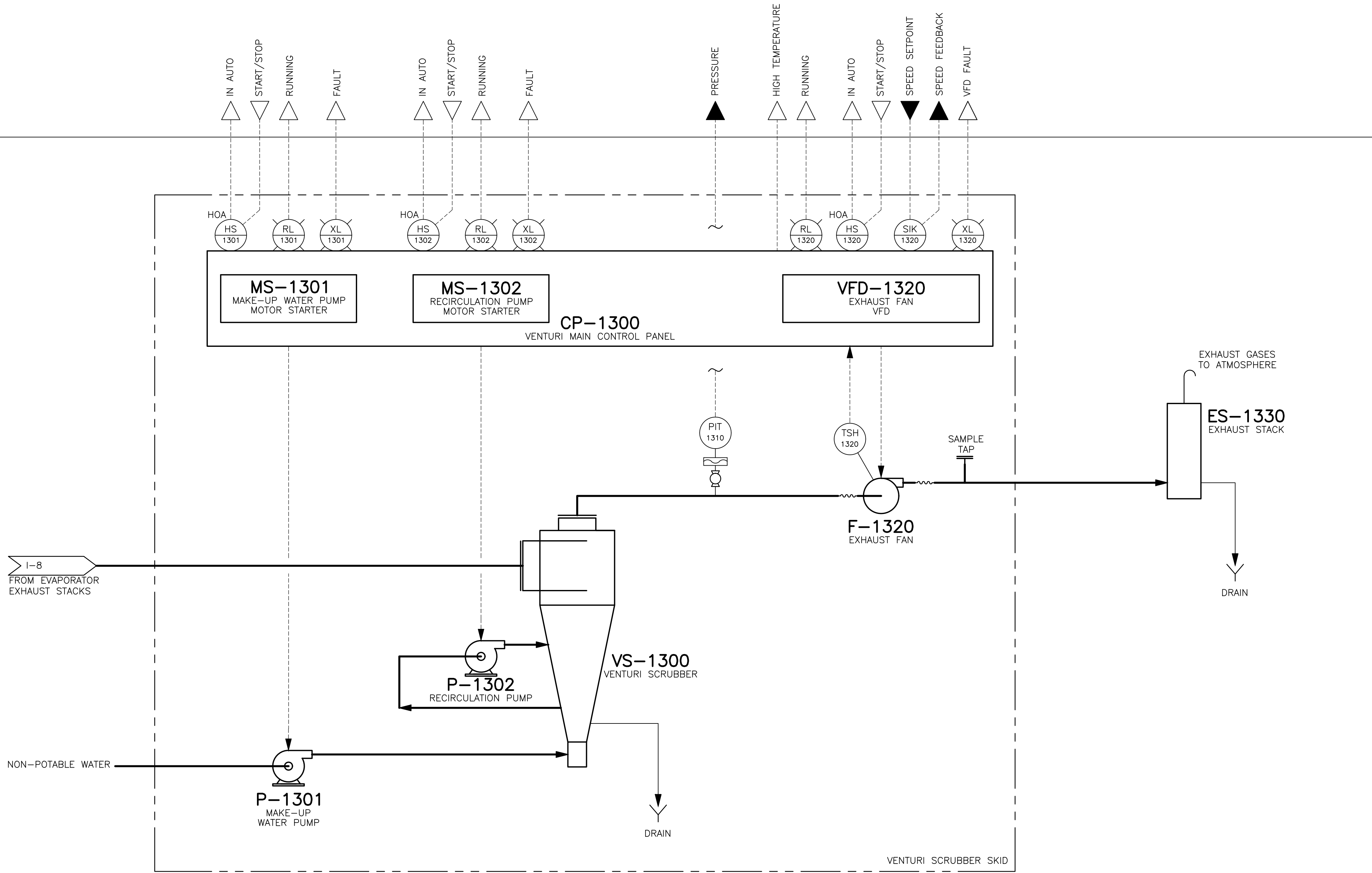
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SHEET NO.

I-9

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- NOTES:
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 - ALL INSTRUMENTS SHALL BE RATED FOR HAZARDOUS AREAS. SEE INSTRUMENT SCHEDULE IN SPECIFICATION SECTION (407000) FOR FURTHER INFORMATION.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. WILEY
DRAWN BY: B. VARLJEN
SHEET CHK'D BY: T. WILEY
CROSS CHK'D BY: D. UBERT
APPROVED BY: T. WILEY
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CDA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

PROCESS & INSTRUMENTATION DIAGRAM
LEACHATE EVAPORATOR VENTURI SCRUBBER

TIMOTHY GENE WILEY

LICENSE

NO. 78470

STATE OF FLORIDA

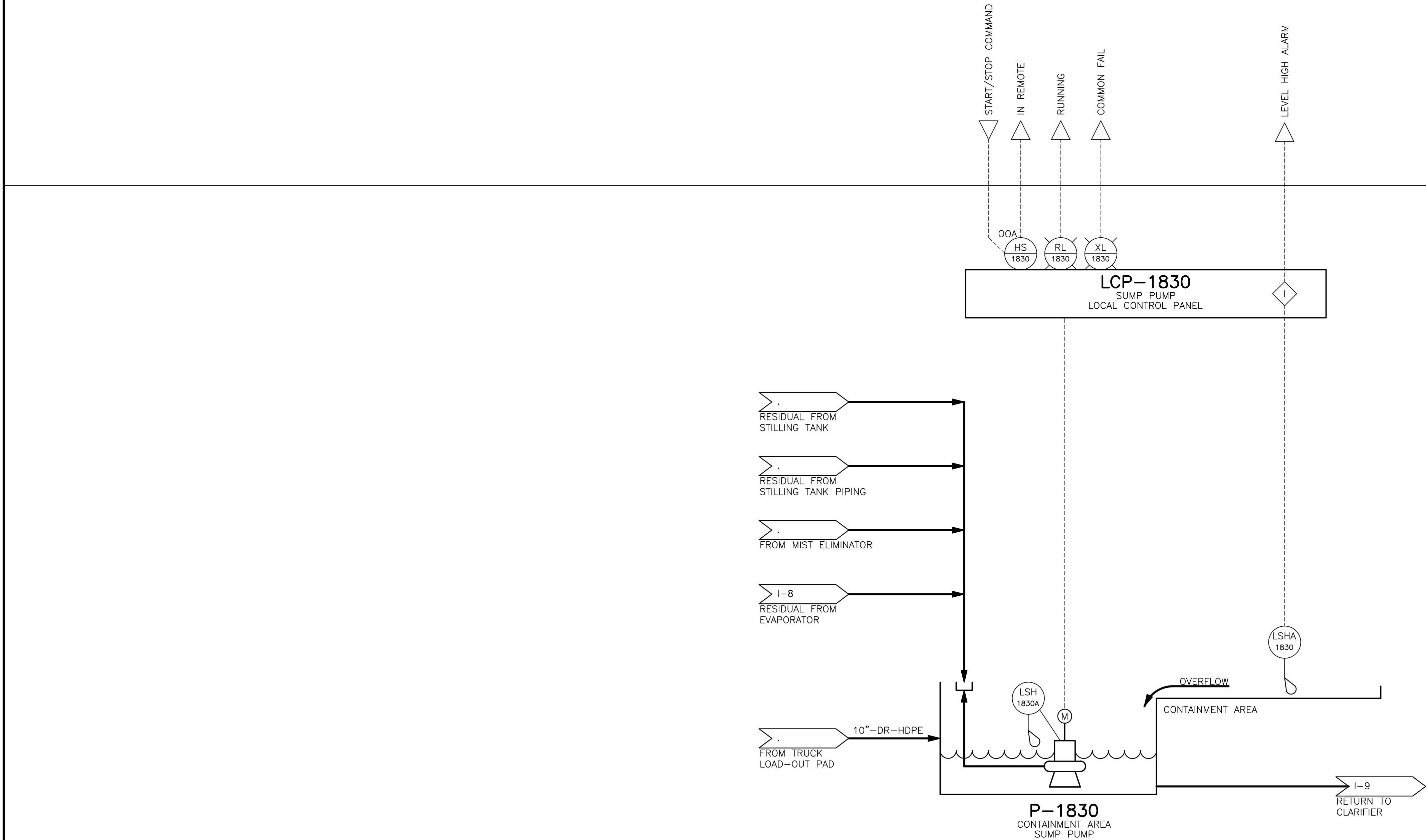
PROFESSIONAL ENGINEER

DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470

PROJECT NO. 9012-228686
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SHEET NO.
I-10

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EVAPORATOR PLC
(NOTE 2)

- NOTES:
- POWER FOR ALL INSTRUMENTS SHALL BE FROM THE EVAPORATOR CONTROL PANEL.
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 - ALL INSTRUMENTS SHALL BE RATED FOR HAZARDOUS AREAS. SEE INSTRUMENT SCHEDULE IN SPECIFICATION SECTION (407000) FOR FURTHER INFORMATION.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	T. WILEY
DRAWN BY:	J. LOWE
SHEET CHK'D BY:	R. CHARITY
CROSS CHK'D BY:	T. WILEY
APPROVED BY:	T. WILEY
DATE:	NOVEMBER 2020

**CDM
Smith**

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Jacksonville, FL 32256
Tel: (904) 731-7109
FL OOA No. EB-0000020

CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

PROCESS & INSTRUMENTATION DIAGRAM
LEACHATE EVAPORATOR CONTAINMENT AREA

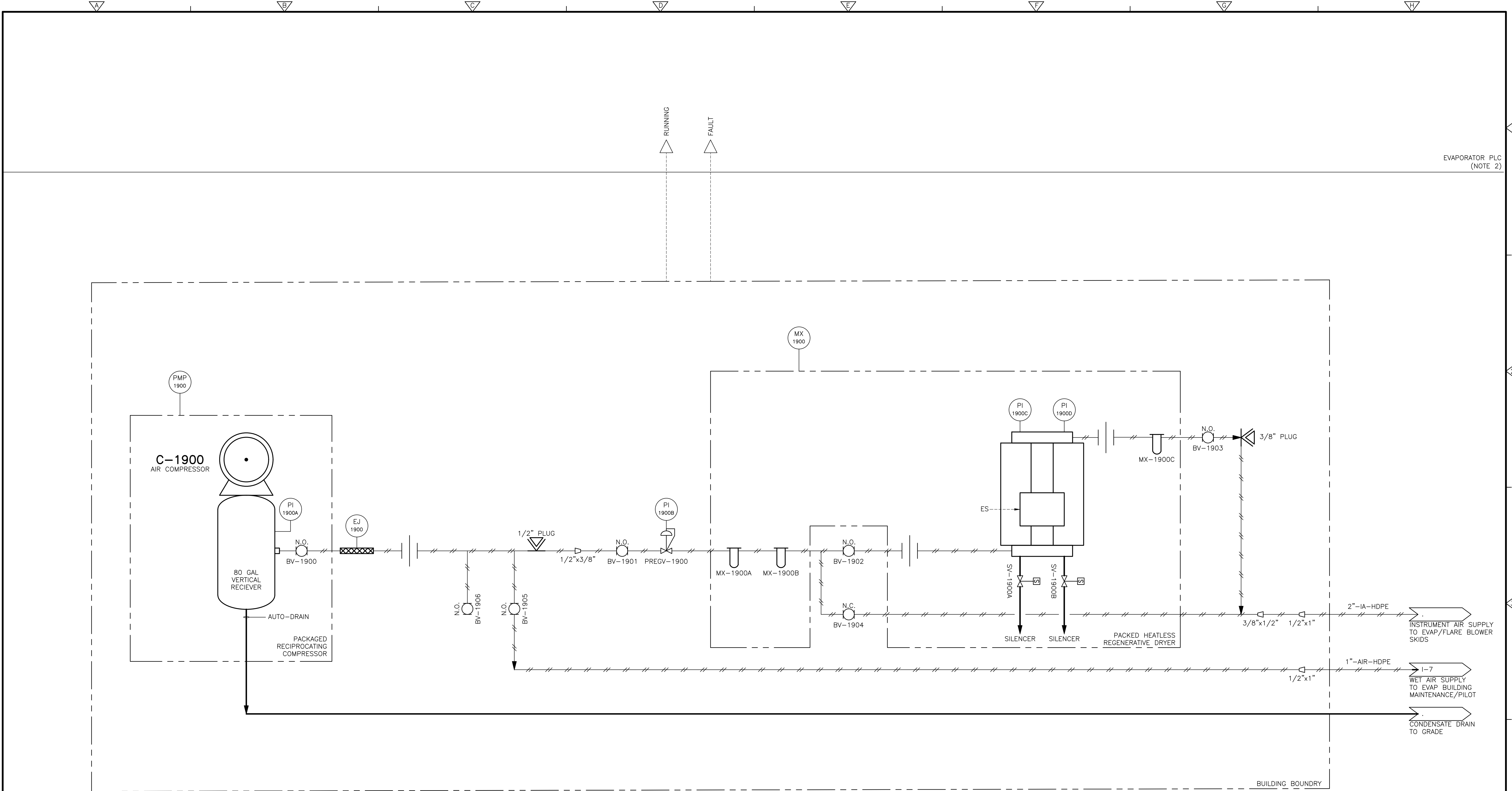
TIMOTHY GENE WILEY
LICENSE
NO. 78470
★
STATE OF
FLORIDA
★
PROFESSIONAL ENGINEER

DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470

PROJECT NO. 9012-228686
FILE NAME: 0111PIDL.DWG

SHEET NO.
I-11

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 3. ALL INSTRUMENTS SHALL BE RATED FOR HAZARDOUS AREAS. SEE INSTRUMENT SCHEDULE IN SPECIFICATION SECTION (407000) FOR FURTHER INFORMATION.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	T. WILEY
DRAWN BY:	J. LOWE
SHEET CHK'D BY:	R. CHARITY
CROSS CHK'D BY:	T. WILEY
APPROVED BY:	T. WILEY
DATE:	NOVEMBER 2020

**CDM
Smith**

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Jacksonville, FL 32256
Tel: (904) 731-7109
FL CCA No. EB-0000020

CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

PROCESS & INSTRUMENTATION DIAGRAM
COMPRESSED AIR SYSTEM

TIMOTHY GENE WILEY

LICENSE

NO. 78470

STATE OF FLORIDA

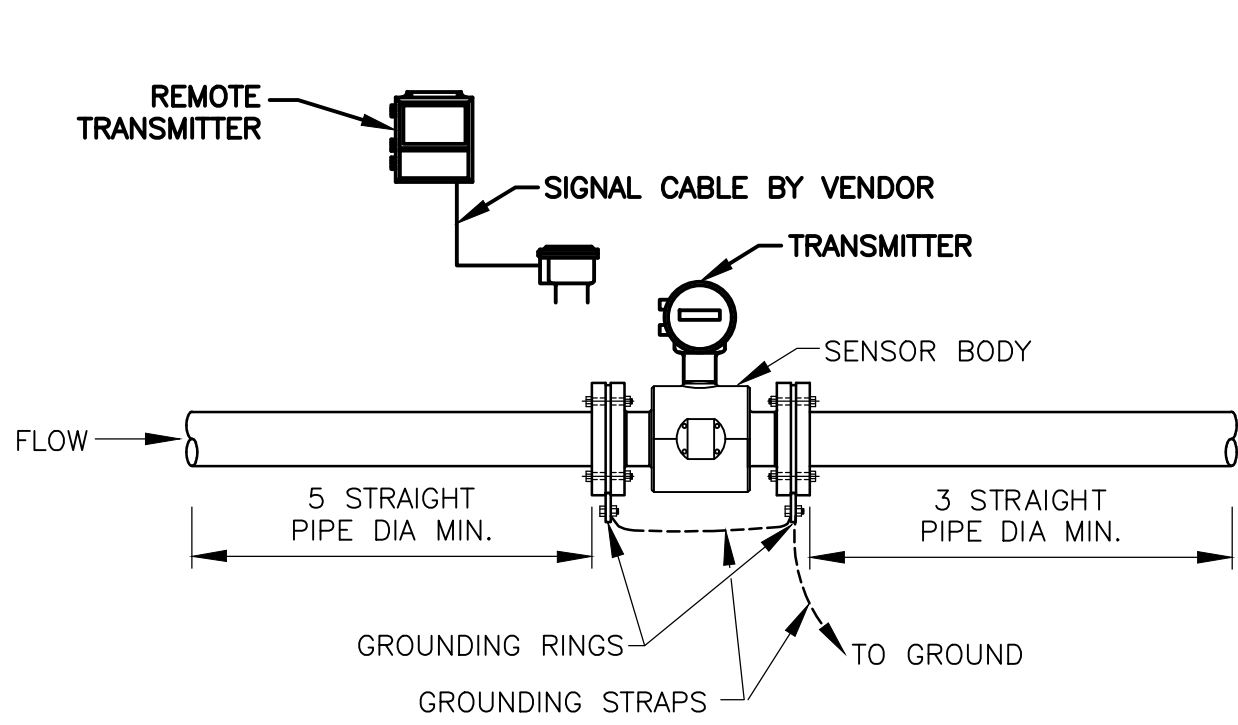
PROFESSIONAL ENGINEER

DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470

PROJECT NO. 9012-228688
FILE NAME: 012PIDI.DWG

SHEET NO.
I-12

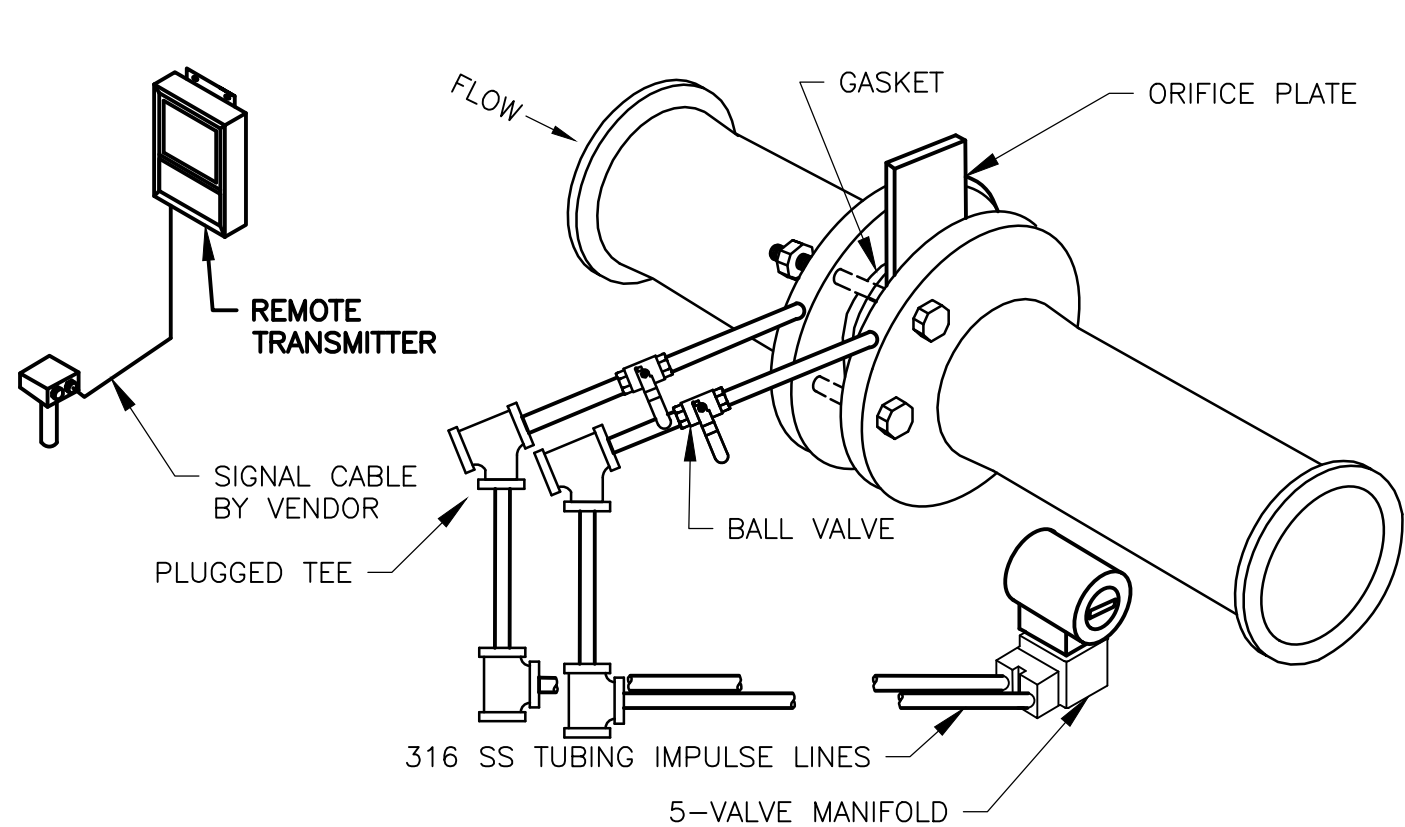
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NOTES:

1. PROVIDE GROUNDING RING(S) AS RECOMMENDED BY MANUFACTURER.
2. PROVIDE SENSOR LINING TO PREVENT BUILDUP ON METER.

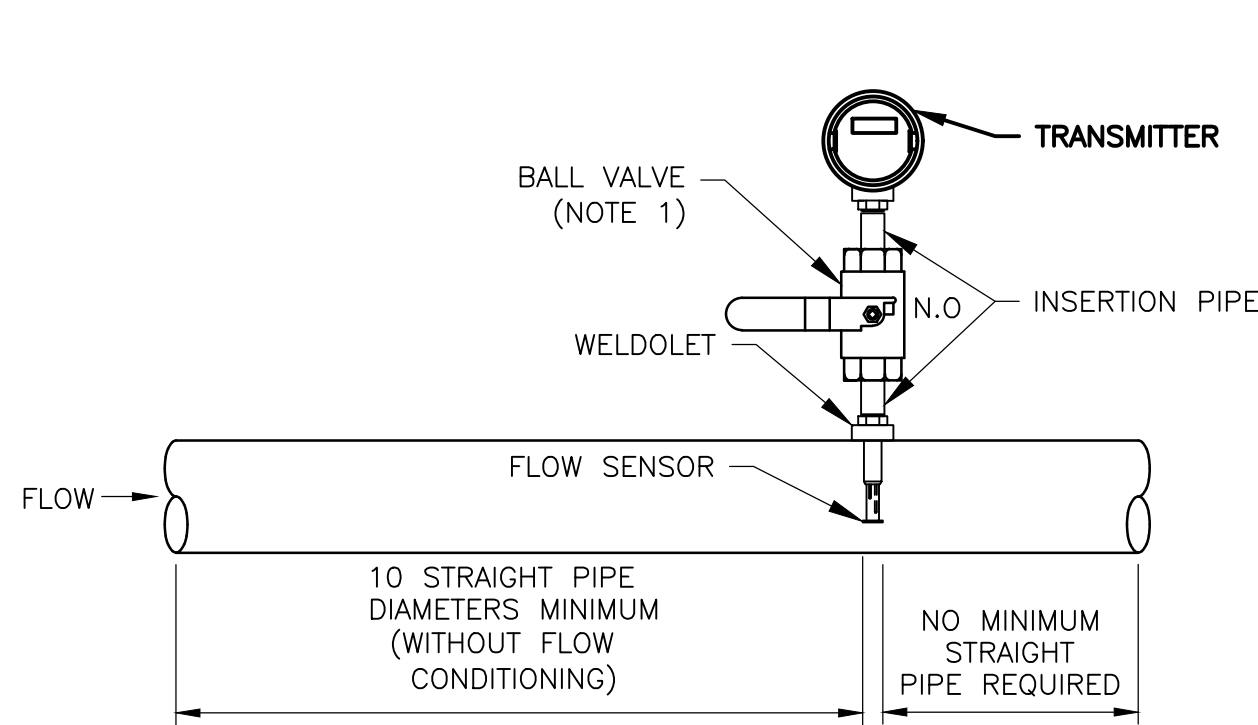
MAGNETIC FLOW METER
DETAIL A
NTS



NOTES:

1. PROVIDE A DIFFERENTIAL PRESSURE TRANSMITTER WITH INTEGRAL SQUARE ROOT EXTRACTOR.

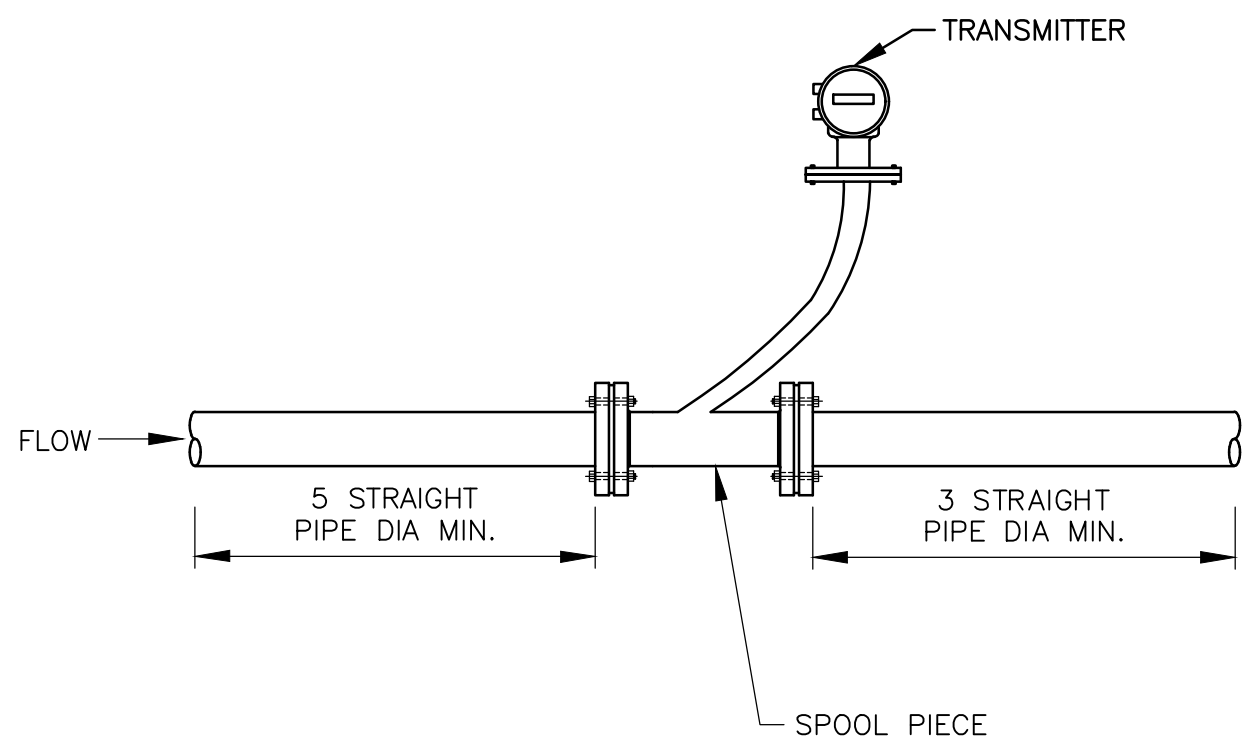
ORIFICE PLATE FLOW METER
DETAIL B
NTS



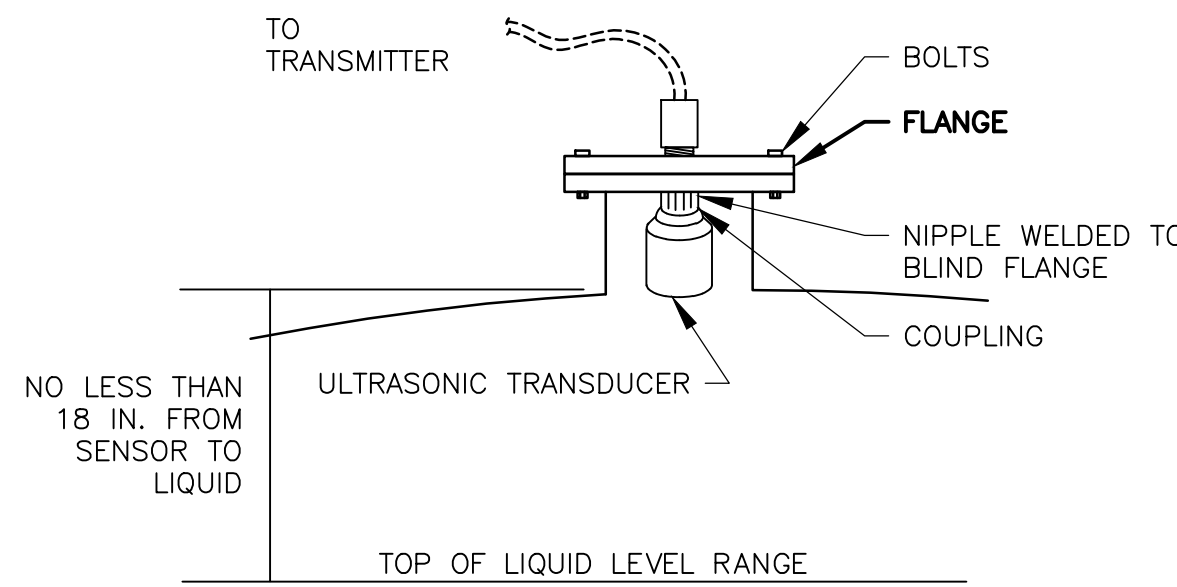
NOTES:

1. SIZE ISOLATION BALL VALVE TO ACCOMMODATE THE INSERTION OF THE FLOW METER.
2. PROVIDE CLEARANCE FOR REMOVAL OF PROBE.

THERMAL MASS FLOW METER
(WITH HOT TAP)
DETAIL C
NTS



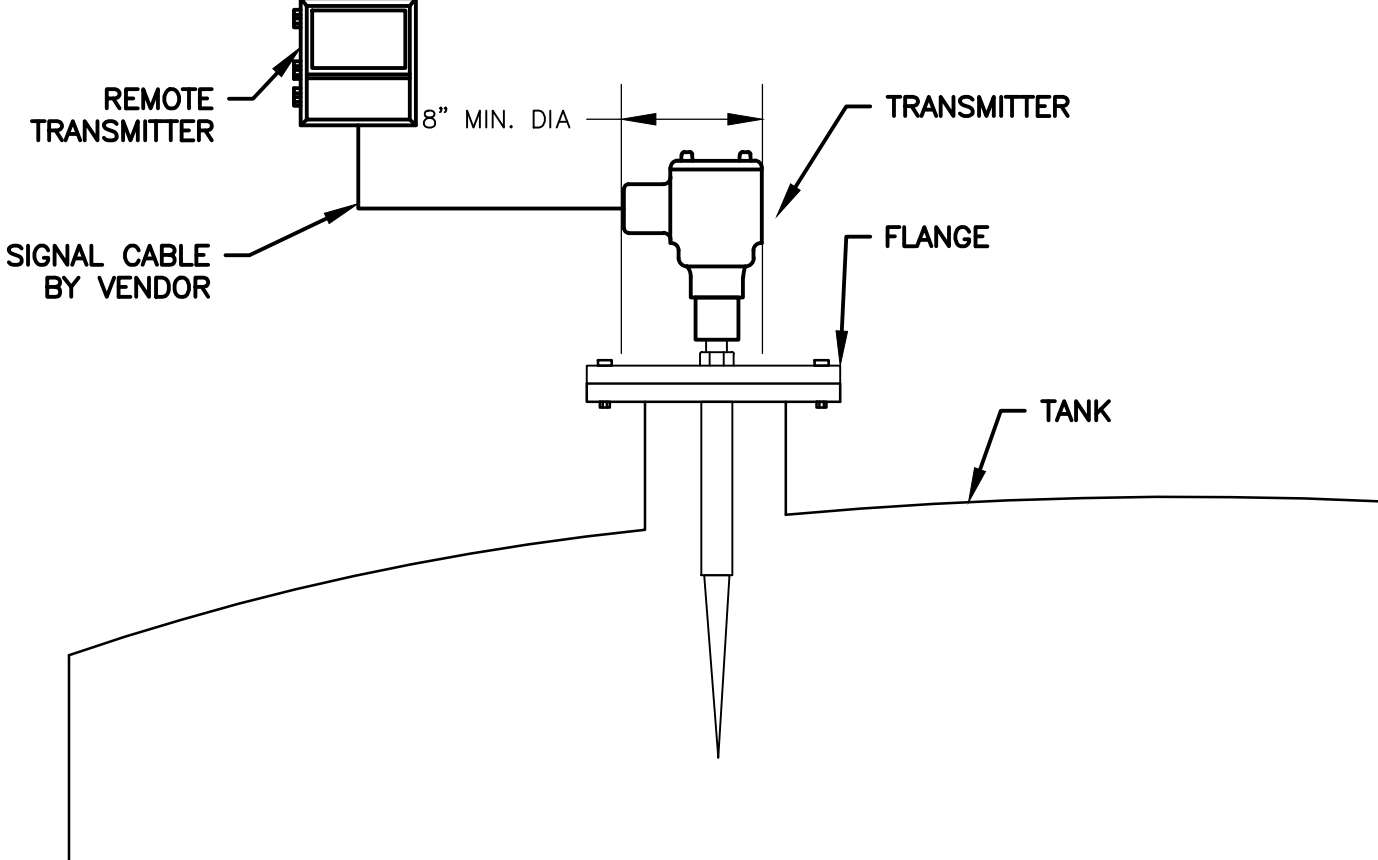
THERMAL MASS FLOW METER
(INLINE)
DETAIL D
NTS



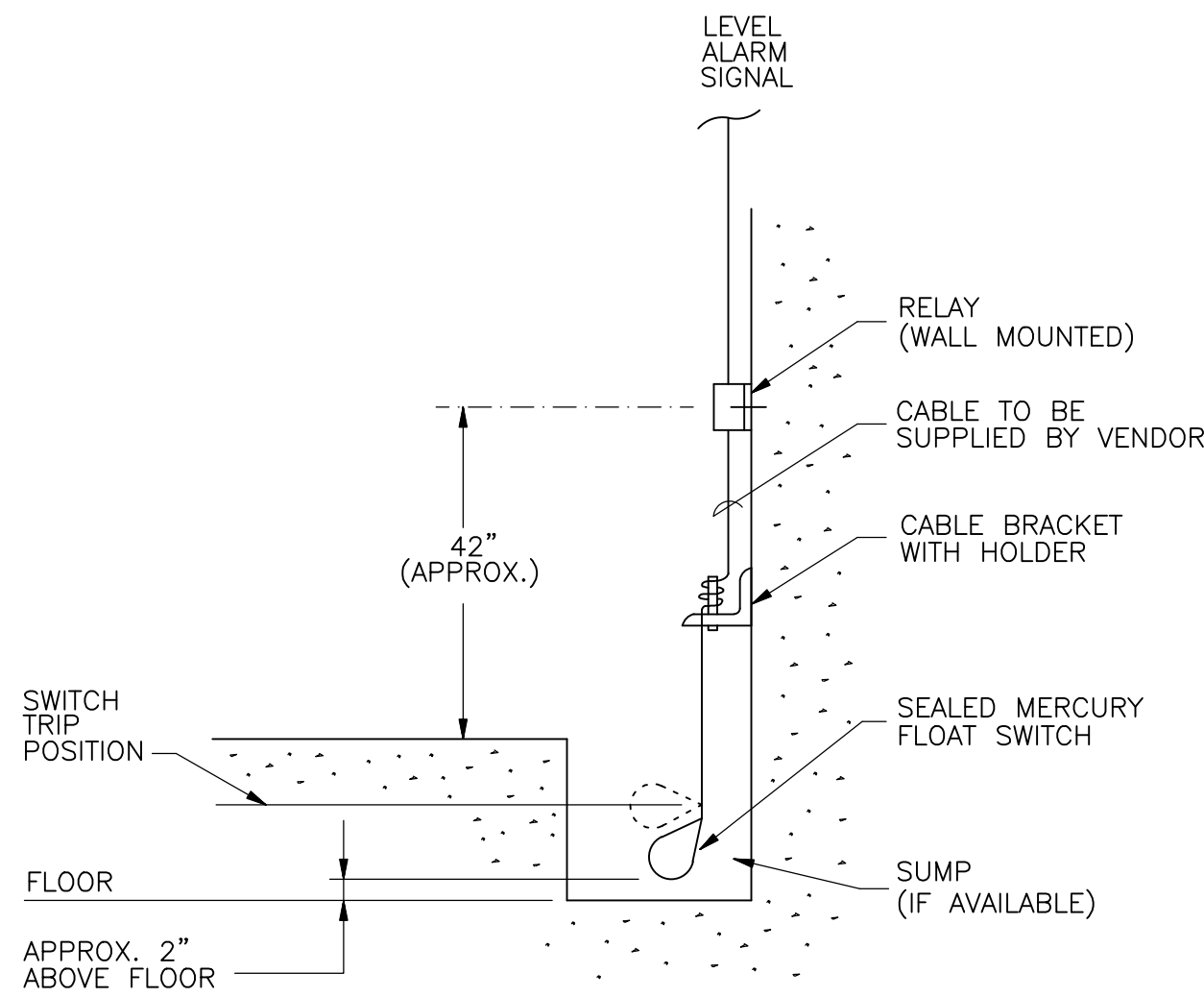
NOTES:

1. PROVIDE TEMPERATURE COMPENSATION FOR SENSOR PER MANUFACTURER RECOMMENDATIONS.
2. PROVIDE AN AIR PURGE OR HEATER TO PREVENT CONDENSATION.

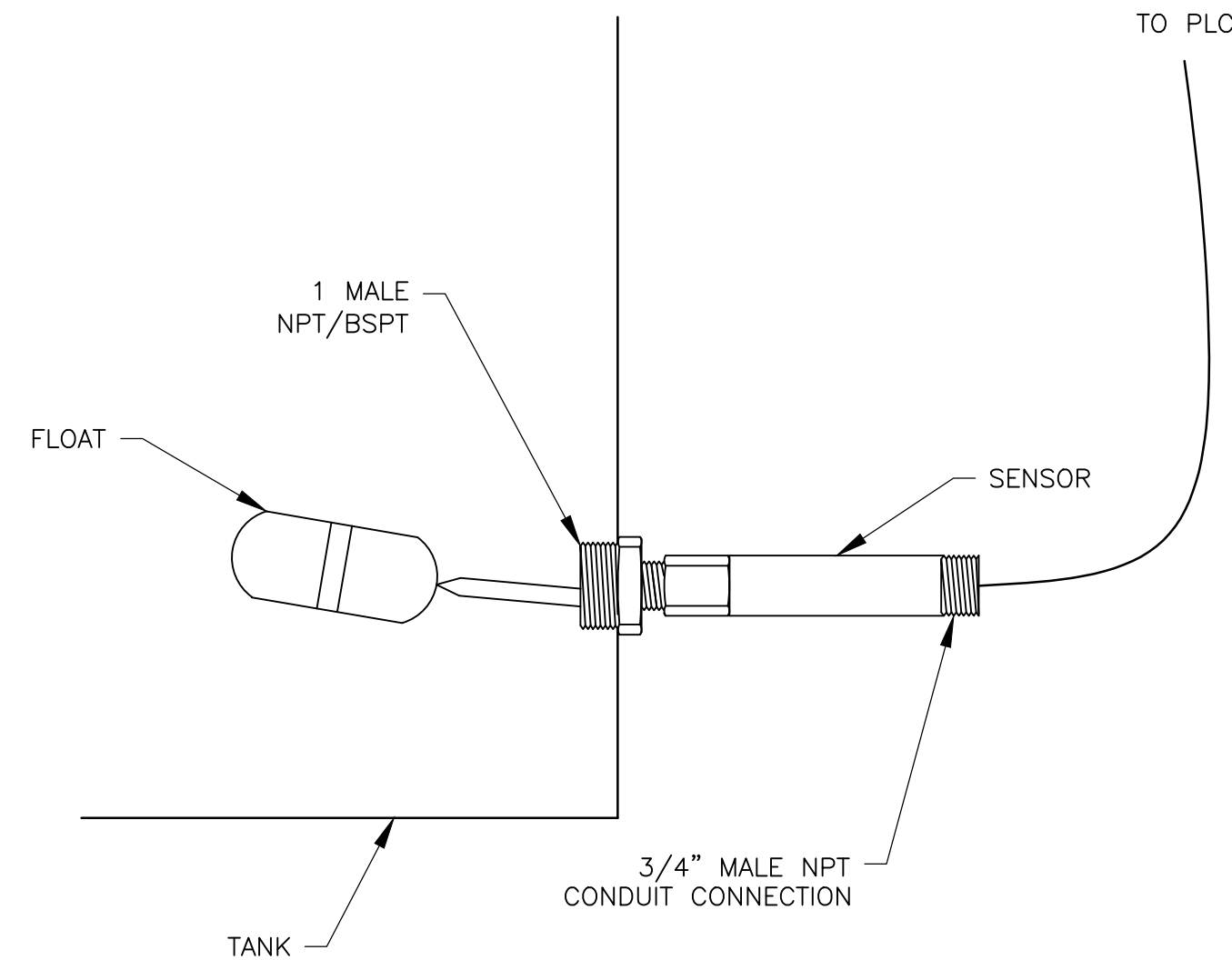
ULTRASONIC LEVEL
(ON TANK)
DETAIL E
NTS



ANTENNA RADAR LEVEL
TRANSMITTER
DETAIL F
NTS



FLOAT SWITCH
(SUMP PIT)
DETAIL G
NTS



FLOAT SWITCH
(SIDE OF TANK)
DETAIL H
NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. WILEY
DRAWN BY: J. LOWE
SHEET CHK'D BY: R. CHARITY
CROSS CHK'D BY: T. WILEY
APPROVED BY: T. WILEY
DATE: NOVEMBER 2020

CDM Smith
4651 Salisbury Road, Suite 420
Jacksonville, FL 32256
Tel: (904) 731-7109
FL CDA No. EB-0000020

CITY OF JACKSONVILLE
TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

INSTRUMENT INSTALLATION DETAILS

TIMOTHY GENE WILEY
LICENSE
NO. 78470
STATE OF FLORIDA
PROFESSIONAL ENGINEER

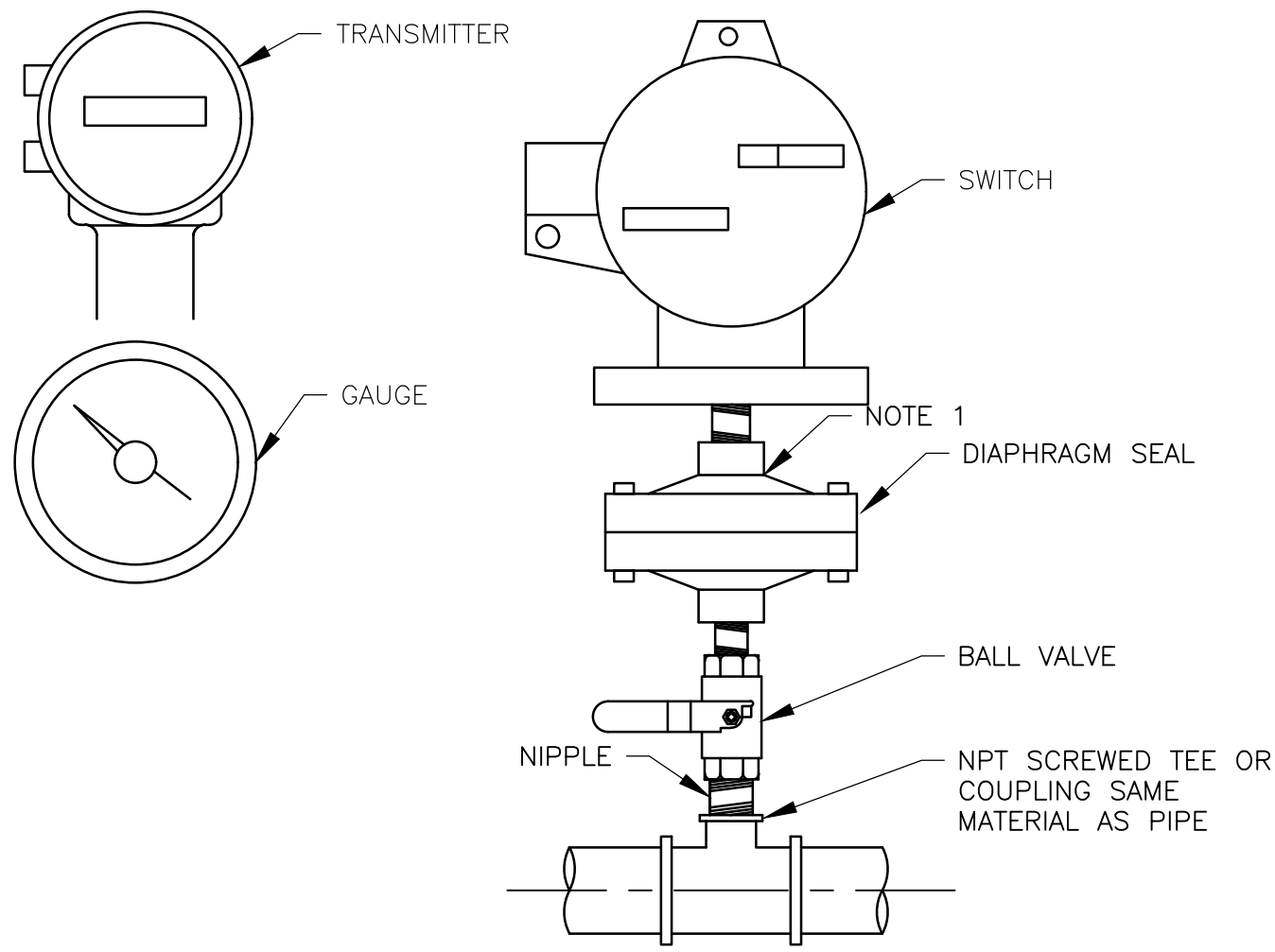
DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470

PROJECT NO. 9012-228686
FILE NAME: I013PIDT.DWG

SHEET NO.
I-13

ISSUED FOR BID

XREFs: [CDMS-2436] Images: []
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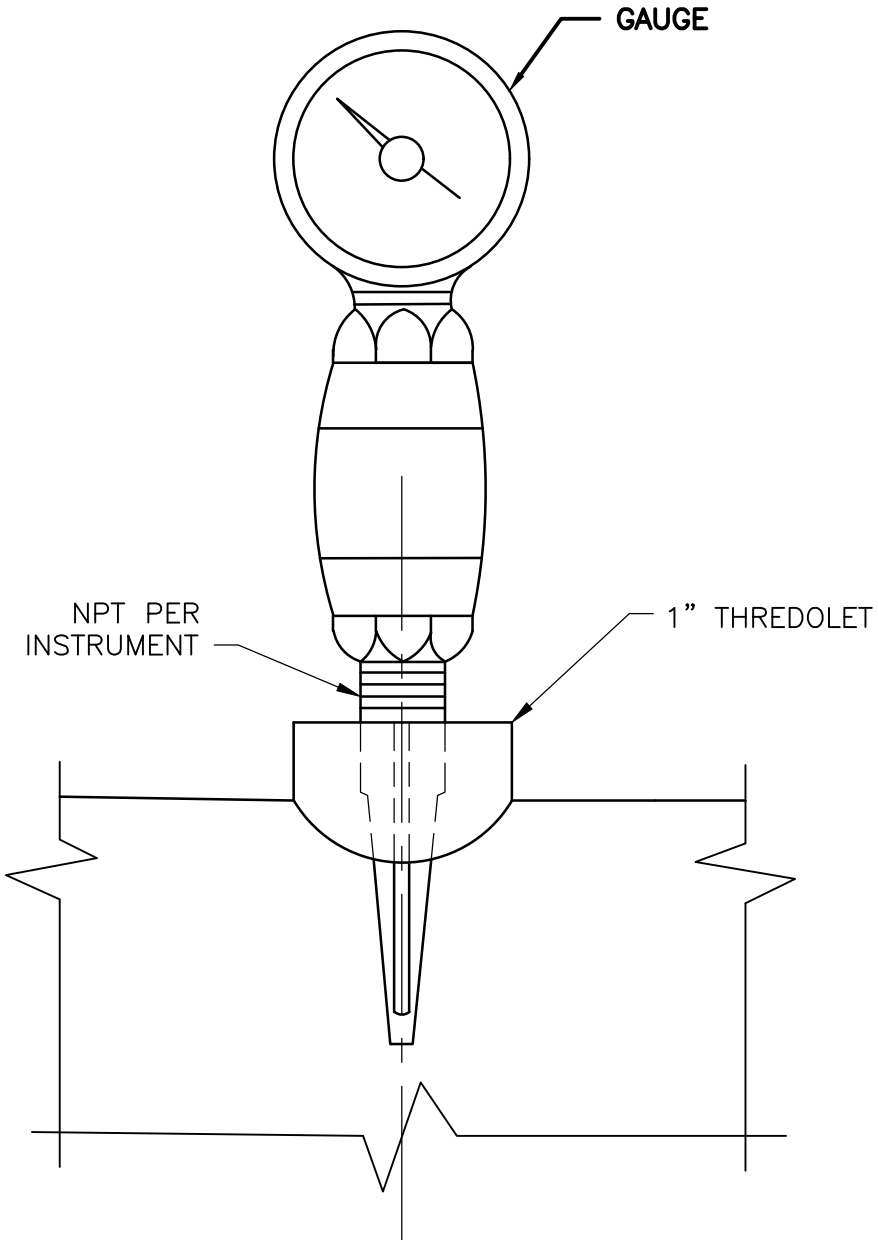


- NOTES:
- FOR PROPER OPERATION, EVACUATE SECTION BETWEEN DIAPHRAGM AND PRESSURE DEVICE OF AIR AND SEAL WITH OIL.

PRESSURE TRANSMITTER/SWITCH/GAUGE
(WITH DIAPHRAGM SEAL)

DETAIL I

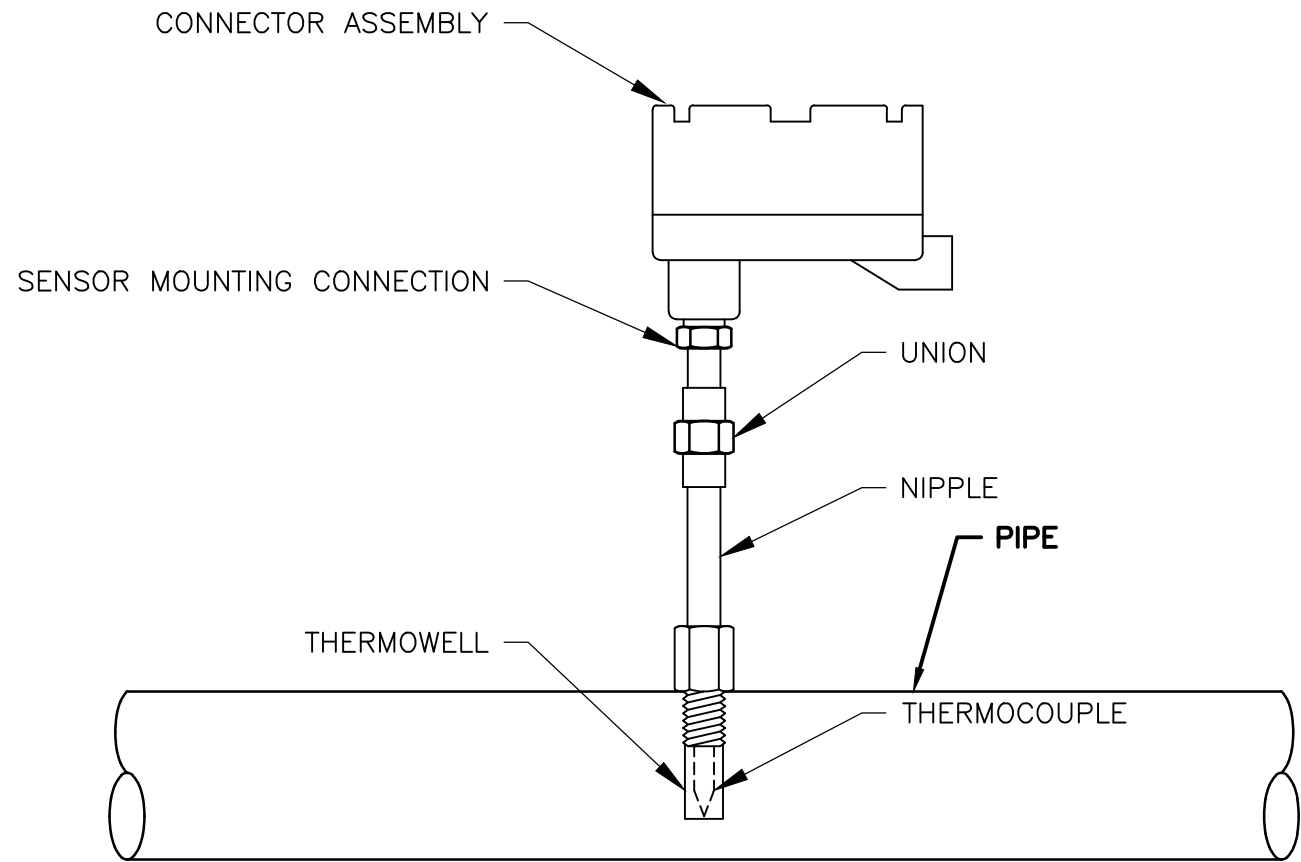
NTS



TEMPERATURE GAUGE

DETAIL J

NTS

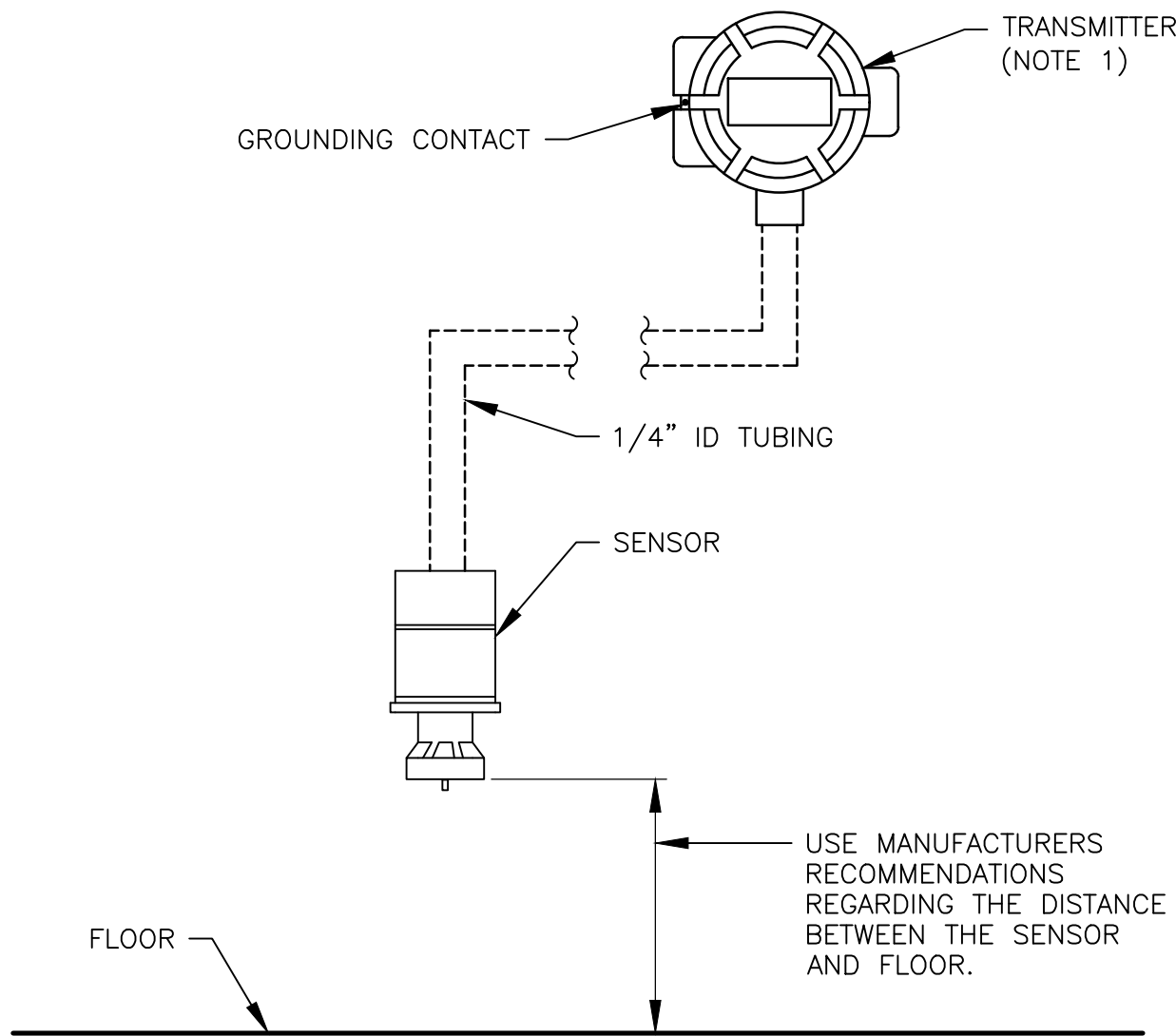


- NOTES:
- SEE DIVISION 40 SPECIFICATIONS, ELECTRICAL DRAWINGS, AND P&IDs FOR DETAILED INSTRUMENT INFORMATION.

TEMPERATURE SENSOR
(WITH THERMOWELL)

DETAIL K

NTS



- NOTES:
- TRANSMITTER SHALL BE MOUNTED AT EYE LEVEL.

GAS DETECTION
(REMOTE SENSOR)

DETAIL L

NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	T. WILEY
DRAWN BY:	J. LOWE
SHEET CHK'D BY:	R. CHARITY
CROSS CHK'D BY:	T. WILEY
APPROVED BY:	T. WILEY
DATE:	NOVEMBER 2020

CDM Smith

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CITY OF JACKSONVILLE

TRAIL RIDGE LANDFILL PHASE 6
LANDFILL GAS SYSTEM - PHASE II

INSTRUMENT INSTALLATION DETAILS

TIMOTHY GENE WILEY
LICENSE
NO. 78470
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DATE:
TIMOTHY G. WILEY, PE
PE NO. 78470

PROJECT NO. 9012-228688
FILE NAME: I014PIDT.DWG

SHEET NO.
I-14

ISSUED FOR BID