CONSTRUCTION PLANS

FOR

SEWRF RECLAIMED PUMP BACK STATION & SEWRF ARC FLASH MITIGATION

MANATEE COUNTY, FLORIDA

MARCH 2020

MANATEE COUNTY PROJECT #6088380/6097680



PROJECT TEAM:

MANATEE COUNTY 1022 26TH AVE. E. BRADENTON, FL 34208 CONTACT: ANTHONY BENITEZ, P.E. 941-708-7450 ext. 7333

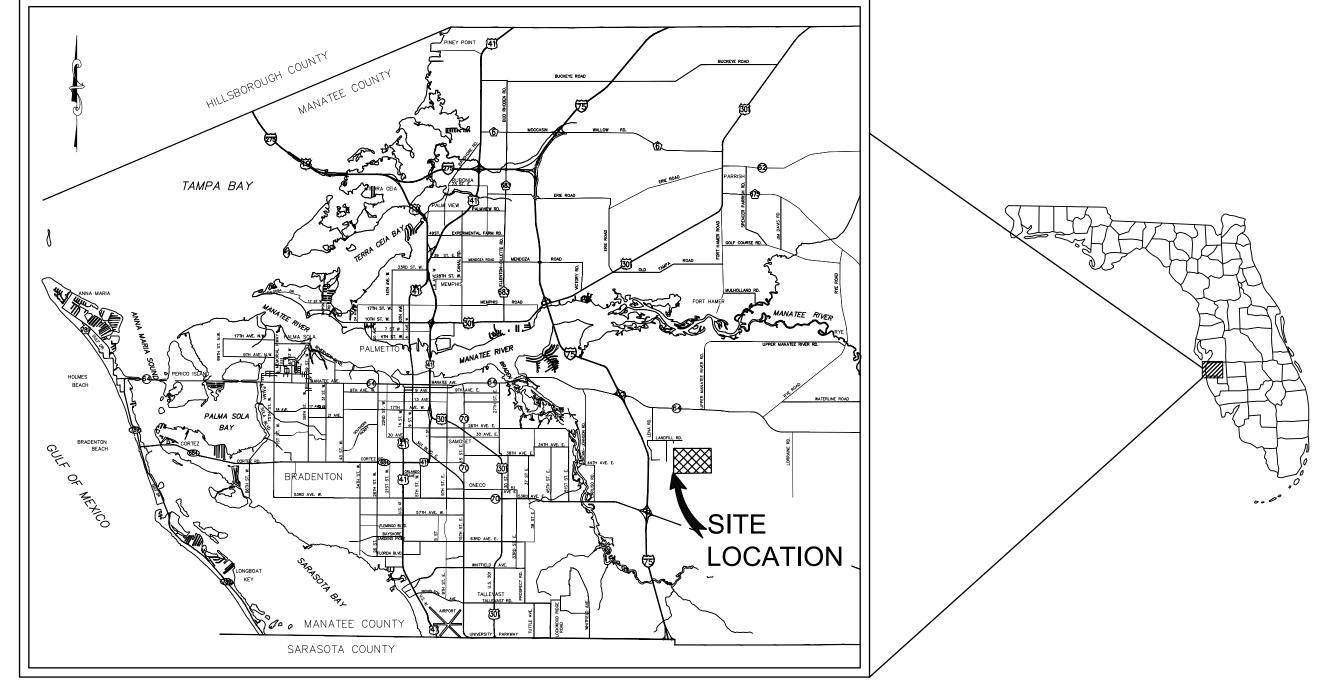
<u>ENGINEER:</u> KIMLEY—HORN AND ASSOCIATES, INC. 100 2ND AVENUE SOUTH, SUITE 105N ST. PETERSBURG, FL 33701 CONTACT: STEPHEN N. ROMANO, P.E. 727-547-3999

ELECTRICAL: TRICON ENGINEERING 777 S. HARBOUR ISLAND BLVD. SUITE 870 735 LAKEVIEW DRIVE TAMPA, FL 33602 CONTACT: TIMOTHY THOMAS, P.E. 813-227-9190

BRADENTON, FLORIDA 34212 CONTACT: JOHN MATTHEWS 941-748-4693

<u>GEOTECH:</u> ARDAMAN & ASSOCIATES 3925 COCONUT PALM DRIVE TAMPA, FLORIDA 33619 CONTACT: ROSS T. MCGILLIVRAY, P.E. 813-620-3389

ECOLOGY: QUEST ECOLOGY INC. WIMAUMA, FLORIDA 33598 CONTACT: LEE COOK 813-765-6209



REVISIONS

PROJECT VICINITY MAP

BID SET

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THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

100 2ND AVENUE SOUTH, SUITE 105N ST. PETERSBURG, FL 33701

PHONE (727) 547-3999

WWW.KIMLEY-HORN.COM CA 00000696

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I COMI LIMICE MITH I.S. CHALLER 113.

MARCH 2020 HA PROJECT NO 148400015 SHEET NUMBER STEPHEN N. ROMANO, F FLORIDA LICENSE NUMBER: 57579 G-1

GENERAL NOTES

1. THESE PLANS ARE SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE EXISTING CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION NECESSARY TO DETERMINE THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED.

2. LOCATION, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) AFFECTING HIS WORK.

3. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEERS CLARIFICATION BEFORE

THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, STORM DRAINS, SEWERS, UTILITIES, AND OTHER FACILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR ANY DAMAGES DUE TO HIS

WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE JOINT DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURERS' MAXIMUM RECOMMENDED DEFLECTION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING DRAINAGE SYSTEM WITHIN THE LIMITS OF THE PROJECT AREA FOR THE DURATION OF THE PROJECT.

7. THE CONTRACTOR SHALL PROVIDE CERTIFIED RECORD DRAWINGS AS OUTLINED IN THE SPECIFICATIONS. RED-LINE DRAWINGS SHALL BE CURRENT WITH EACH PAY APPLICATION SUBMITTED AND WILL BE CHECKED AS PART OF THE PAY APPLICATION REVIEW PROCESS. PAYMENT WILL NOT BE MADE TO CONTRACTOR WITHOUT APPROVED RED-LINE DRAWINGS. THE MOST CURRENT SET OF RED-LINE DRAWINGS SHALL ALSO BE BROUGHT TO EACH MONTHLY PROGRESS MEETING.

8. FIELD CONDITIONS MAY NECESSITATE ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED PIPELINES TO AVOID CONFLICTS. NO ADDITIONAL PAYMENT SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND THE OWNER'S ENGINEER.

9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY DISPOSE OF ALL WASTEWATER, SLUDGE, AND GRIT WITHIN ALL PIPES TO BE DEMOLISHED, REMOVED, OR CONNECTED TO.

10. ALL PROPOSED WORK SHALL BE COORDINATED WITH WASTEWATER TREATMENT PLANT PERSONNEL AND MANATEE COUNTY UTILITIES DEPARTMENT AT LEAST TWO WEEKS IN ADVANCE OF PROPOSED

11. THE CONTRACTOR SHALL FURNISH SHOP DRAWINGS PER SPECIFICATION SECTION 01340 TO THE ENGINEER FOR REVIEW OF ALL PIPE CONNECTIONS, TRANSITIONS, AND SPECIAL APPURTENANCES PRIOR TO FABRICATION OR DELIVERY TO THE JOB SITE.

12. CONNECTIONS TO EXISTING FACILITIES SHALL BE ACCOMPLISHED IN A NEAT WORKMANSHIP LIKE MANNER, WHEN FIELD CONDITIONS INDICATE ANY VARIANCE FROM DETAILED METHODS. THE CONTRACTOR SHALL PROVIDE COMPREHENSIVE AND DETAILED DRAWINGS FOR OWNER REVIEW AND APPROVAL PRIOR TO MAKING THE CONNECTIONS.

13. UNLESS OTHERWISE INDICATED OR APPROVED, ALL BELOW GROUND DUCTILE IRON PIPE SHALL HAVE PUSH-ON OR MECHANICAL JOINTS, AND ALL ABOVE GROUND DUCTILE IRON PIPE SHALL HAVE FLANGED JOINTS. ALL PIPE IN CONTACT WITH RECLAIMED WATER SHALL HAVE A CEMENT LINING PER AWWA C104. ALL BURIED PIPE SHALL HAVE AN EXTERNAL COAL TAR ENAMEL. ALL EXPOSED PIPE SHALL HAVE AN FACTORY APPLIED EXTERIOR EPOXY PRIMER ALL JOINTS SHALL BE RESTRAINED PER JOINT RESTRAINT TABLE UNLESS OTHERWISE SPECIFIED ON THE PLANS. CONTRACTOR TO FULLY RESTRAIN EXISTING PIPE AT TIE-IN LOCATIONS OF NEW PIPE IN ACCORDANCE WITH JOINT RESTRAINT TABLE

14. ALL PIPELINES SHALL HAVE A MINIMUM COVER OF 36" BELOW EXISTING GRADE UNLESS OTHERWISE NOTED OR DIRECTED.

15. SANITARY SEWERS AND FORCE MAINS CROSSING OVER OR UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER OR FORCE MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10' BETWEEN ANY TWO JOINTS. AS AN ALTERNATIVE, THE SEWER OR FORCE MAIN MAY BE PLACED IN A WATERTIGHT CASING PIPE.

16. WATER SHALL NOT BE PERMITTED IN BUILDING EXCAVATIONS OR TRENCHES DURING CONSTRUCTION. DEWATERING IS REQUIRED TO A MINIMUM OF 18" BELOW BOTTOM OF EXCAVATION.

17. THE CONTRACTOR SHALL NOT ALLOW ANY DISCHARGE OF WASTEWATER TO LANDS AND OR ADJACENT WATER BODIES OR STORM DRAINS. ANY LEAKAGE MUST BE CONTAINED AND REMOVED BY THE CONTRACTOR TO THE PLANT DRAIN PUMP STATION AT THE WASTEWATER TREATMENT PLANT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ANY SPILLS TO FDEP.

18. ALL BELOW-GRADE FITTINGS 4-INCHES AND GREATER IN DIAMETER SHALL BE MECHANICAL JOINT DUCTILE IRON AND COATED ON THE INSIDE WITH CEMENT LINING PER AWWA C104, AND SHALL HAVE A COAL TAR ENAMEL COATING ON THE OUTSIDE

19. ALL EXPOSED FITTINGS 4-INCHES AND GREATER IN DIAMETER SHALL BE FLANGED JOINT DUCTILE IRON AND COATED ON THE INSIDE WITH A CEMENT LINING PER AWWA C104, AND SHALL HAVE A FACTORY APPLIED EXTERIOR EPOXY PRIMER.

20. ALL EXPOSED PIPING AND FITTINGS SHALL BE PAINTED WITH DESIGNATED COLORS ASSOCIATED WITH THEIR USAGE AS PROVIDED IN THE

21. ALL NEW PIPELINES SHALL BE FLUSHED, PRESSURE TESTED, AND APPROVED PRIOR TO TIE-INS TO EXISTING FACILITIES. THE CONTRACTOR WILL BE ALLOWED TO USE TEMPORARY PLUGS FOR PRESSURE TESTING.

22. CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL BE REQUIRED TO INSTALL ALL EROSION, SEDIMENT, AND TURBIDITY CONTROL MEASURES PRIOR TO CONSTRUCTION OF ANY COMPONENTS ASSOCIATED WITH THE PROJECT. SEDIMENT CONTROL INCLUDES SILT DAMS, TRAPS, EROSION PROTECTION, AND ANY OTHER APPURTENANCES NEEDED BUT NOT NECESSARILY SHOWN ON

23. CONTRACTOR SHALL PROVIDE PROTECTIVE MATTING, FUEL CONTAINMENT AND ALL OTHER MATERIALS, EQUIPMENT AND LABOR TO PROTECT THE STAGING AREA DURING CONSTRUCTION.

24. CONTRACTOR SHALL, PRIOR TO BEGINNING CONSTRUCTION, SUBMIT A "FUELING SPILL PREVENTION PLAN" THAT SHALL CLEARLY INDICATE HOW FUEL SPILLS WILL BE PREVENTED WHEN FUELING BOTH WITHIN AND OUTSIDE

OF THE STAGING AREA.

25. THE CONTRACTOR SHALL COORDINATE THE STAGING AREA WITH THE OWNER. THERE MAY BE MULTIPLE PROJECTS UNDER CONSTRUCTION AT THE FACILITY AND IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A SECURE AREA FOR THE STORAGE AND STAGING OF EQUIPMENT, INCLUDING BUT NOT LIMITED TO FENCING, GATES, AND ANY ADDITIONAL ITEMS THAT MAY BE NECESSARY TO SECURE THE AREA.

<u>SURVEY NOTES</u>

THE FOLLOWING VERTICAL CONTROL MONUMENTS WERE RECOVERED AND UTILIZED FOR THE ELEVATIONS INDICATED HEREIN: 1.1. COORDINATES- N: 1138264.41 E: 513497.33 ELEV. (NGVD) 48.93'

THIS SURVEY IS REFERENCED TO A PROJECTION OF THE FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE NAD 1983/2011 ADJUSTMENT).

THIS IS NOT A BOUNDARY OR MEAN HIGH WATER SURVEY. TITLE WORK WAS NOT

THIS SURVEY IS SUBJECT TO PERTINENT EASEMENTS, RIGHTS-OF-WAY AND RESTRICTIONS OF RECORD, IF ANY.

THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN HYATT SURVEY SERVICES, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM HYATT SURVEY SERVICES, INC. IS STRICTLY PROHIBITED AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO HYATT SURVEY SERVICES, INC.

UTILITY NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE FOLLOWING 4. JURISDICTIONAL BODIES AND UTILITY COMPANIES:

MANATEE COUNTY PUBLIC WORKS ANTHONY BENITEZ, P.F. 1022 26TH AVENUE EAST BRADENTON, FL 34208-3916 (941) 708-7450 EXT. 7333

SOUTHEAST REGIONAL WASTEWATER TREATMENT PLANT VICTOR BOUCHER, CHIEF OPERATOR LENA ROAD BRADENTON, FL 34210 (941) 792-8811 EXT. 8028

ALL UTILITY CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST VERSION OF THE MANATEE COUNTY UTILITY STANDARDS, UNLESS OTHERWISE

3. ALL VALVE BOX COVERS SHALL BE PAINTED TO INDICATE THEIR TYPE OF

ALL TEST POINT TAPPING SHALL BE CUT LOOSE FROM THE CORPORATION STOP AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. THE CORPORATION STOP SHALL BE CAPPED AND REMAIN IN PLACE,

MAY 2017 SUE TEST HOLE DATA

NUMBER	UTILITY	SIZE/MATERIAL	GROUND ELEVATION	TOP OF PIPE
VVH-101	FM	30" DIP	36.55	31.69
VVH-102	FM	12" PVC	36.17	31.76
VVH-103	FM	36" DIP	35.99	31.69
VVH-104	FM	36" DIP	39.34	32.90
VVH-105	FM	12" PVC	40.48	33.27
VVH-106	RCW	30" DIP	40.50	37.32
VVH-107		2" PVC	40.78	37.77
VVH-108	FM	36" DIP	38.82	32.64
VVH-109	FM	12" PVC	37.95	31.70
VVH-110	RCW	30" DIP	37.86	35.06
VVH-111	UNKNOWN	DIP	37.45	31.00
VVH-112	RCW	36" DIP	34.61	31.61
VVH-113	UNKNOWN	DIP	34.54	27.08
VVH-114	FM	24" DIP	35.48	32.78
VVH-115	FM	12" PVC	35.50	32.67

<u>JANUARY 2017 SUE TEST HOLE DATA</u>

57579

FL DATE:

NUMBER	UTILITY	SIZE/MATERIAL	GROUND ELEVATION	TOP OF PIPE
VVH-101	UNKNOWN	DIP	35.33	32.82
VVH-102	CLE	36" DIP	35.99	29.39
VVH-103	2CL2S	2" PVC	36	33.95
VVH-104	REJ	12" PVC	37.06	32.94
VVH-105	SPW	16" DIP	36.92	33.12
VVH-106	UNKNOWN	12" DIP	36.34	33.18
VVH-107	RCW	DIP	34.96	29.96
VVH-108	BE	2" PVC	35.40	33.55
VVH-109	UNKNOW	12" PVC	35.62	31.34
VVH-110	UNKNOWN	8" PE	35.60	32.93
VVH-111	BE	2" PVC	35.87	34.27
VVH-112	UNKNOWN	DIP	35.05	29.75

NOTE: SUBSURFACE UTILITY ENGINEERING DATA PROVIDED BY HYATT SURVEY SERVICES, DATED JANUARY 18, 2017 AND MAY 24, 2017.

LICENSED PROFESSIONAL STEPHEN N. ROMANO, P.E FL LICENSE NUMBER

EARTHWORK NOTES

- 1. ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE IN ACCORDANCE WITH THE OWNER'S REQUIREMENTS EXCESS DIRT EXCAVATED IN CONSTRUCTING THE PROPOSED IMPROVEMENTS TO THE PROPOSED GRADES SHALL BE RETAINED BY THE CONTRACTOR
- THE CONTRACTOR SHALL INSTALL BARRICADES OF OTHER SYSTEMS APPROVED BY THE OWNER'S REPRESENTATIVE TO PROTECT TREES THAT ARE TO REMAIN. IF TREES NEED TO BE REMOVED, THE CONTRACTOR SHALL PREPARE AND SUBMIT THE REQUIRED TREE REMOVAL PERMITS. THAT ASSOCIATED PERMITTING FEES SHALL BE BORNE BY THE CONTRACTOR AND INCLUDED WITHIN THE SCOPE OF WORK. THE COST TO REMOVE AND REPLACE
- DAMAGES TO TREE ROOTS GREATER THAN 1-INCH IN DIAMETER THAT ARE AFFECTED BY THE CONTRACTOR'S ACTIVITIES WITHIN THE DRIP-LINE OF THE TREE SHALL BE SAWED WITH A CLEAN CUT.

(IF REQUIRED) THE TREES SHALL BE BORNE BY THE CONTRACTOR.

THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING, AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES OR TO MINIMIZE TRENCH WIDTHS. WHEN A SEPARATE PAY ITEM IS NOT PROVIDED. THE COST OF AL SHEETING, SHORING AND BRACING REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEM OF WORK FOR WHICH SHEETING. SHORING AND BRACING IS ANTICIPATED TO BE REQUIRED IN ACCORDANCE WITH THE TRENCH SAFETY ACT.

RESTORATION AND MISCELLANEOUS NOTES

PRE-CONSTRUCTION CONDITIONS.

- ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE AN ASPHALT PATCH FOR TRENCH AREAS CONSTRUCTED IN EXISTING ROADWAYS. ADJUST ALL CASTINGS TO MATCH NEW PAVEMENT SURFACE.
- THE CONTRACTOR SHALL REPLACE ALL EXISTING PAVING, STABILIZED EARTH CURBS. SIDEWALKS, FENCES, LANDSCAPING, AND OTHER IMPROVEMENTS WITH THE SAME OR BETTER TYPE AND QUANTITY OF MATERIAL THAT WAS
- REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER ALL EXISTING FENCES DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AND REINSTALLED BY THE CONTRACTOR AT NO ADDITIONAL
- COST TO THE OWNER UNLESS SHOWN TO BE REMOVED ON CONSTRUCTION

CONTRACTOR SHALL RESTORE ALL IRRIGATION SYSTEM COMPONENTS TO

- ALL DISTURBED GRASSED AREAS SHALL BE RESTORED WITH SOD IN LIKE KIND UNLESS OTHERWISE DIRECTED BY OWNER. CONTRACTOR SHALL ROLL ALL SODDED AREAS.
- CONCRETE SIDEWALKS ACROSS DRIVEWAYS SHALL BE RESTORED WITH 6 INCHES OF 3,000 PSI CONCRETE WITH W2.5 X W2.5, 6X6 WIRE MESH. PLACE 1/2 INCH EXPANSION JOINT BETWEEN BACK OF CURB AND NEW CONCRETE. AREA BENEATH RESTORATION SHALL BE MECHANICALLY TAMPED PRIOR TO PLACING CONCRETE.
- CONCRETE SIDEWALKS OUTSIDE OF DRIVEWAYS SHALL BE RESTORED WITH 4 INCHES OF 3,000 PSI CONCRETE PER FDOT DESIGN STANDARDS, SECTIONS
- RIP RAP SHALL BE INSTALLED PER FDOT STANDARD SPECIFICATION 530 AND SHALL BE PROCURED FROM A FDOT APPROVED YARD.

PIPE AND FITTING SYMBOLS

90° ELBOW	
90° ELBOW ROTATED UP	
90° ELBOW ROTATED DOWN	
TEE	
REDUCER	
ECCENTRIC REDUCER	
GATE VALVE	
PLUG VALVE	
MAGNETIC FLOW METER	
ARV	
CHECK VALVE	
FLANGED	

MECHANICAL JOINT

SIC			
5	ADDENDUM 5	5/26/2020	SNR
No.	REVISIONS	DATE	BY

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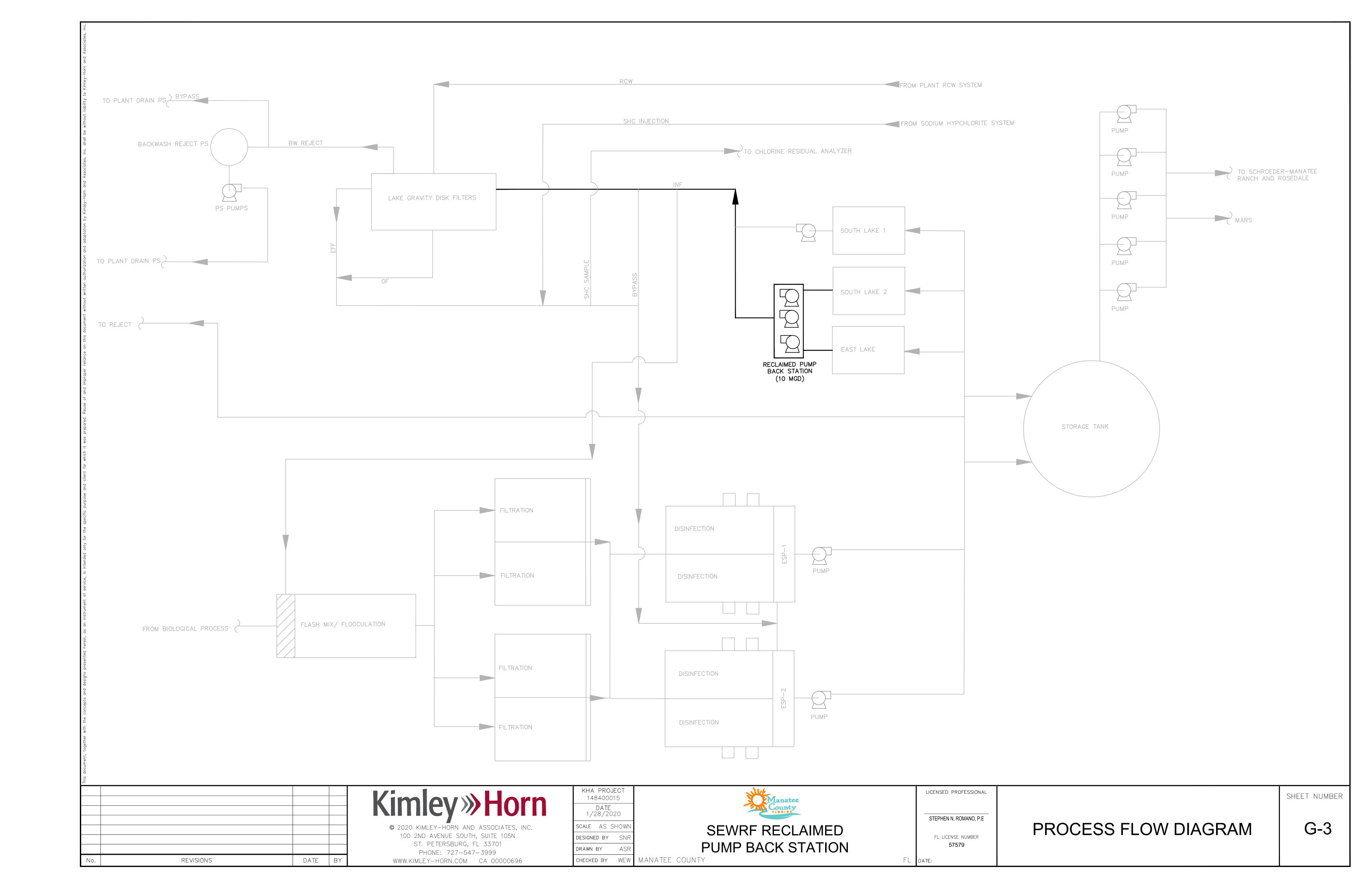
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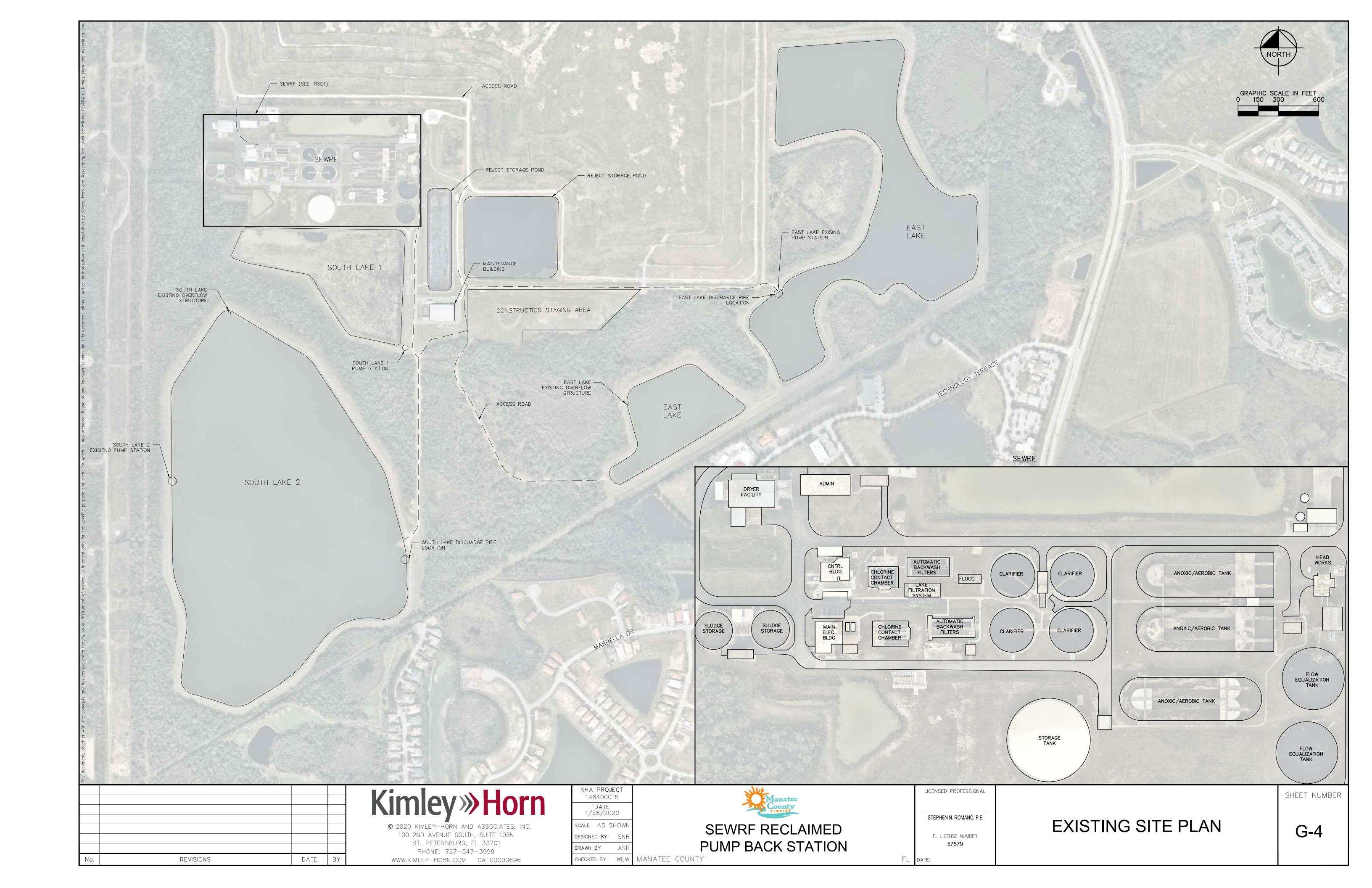
PUMP BACK STATION

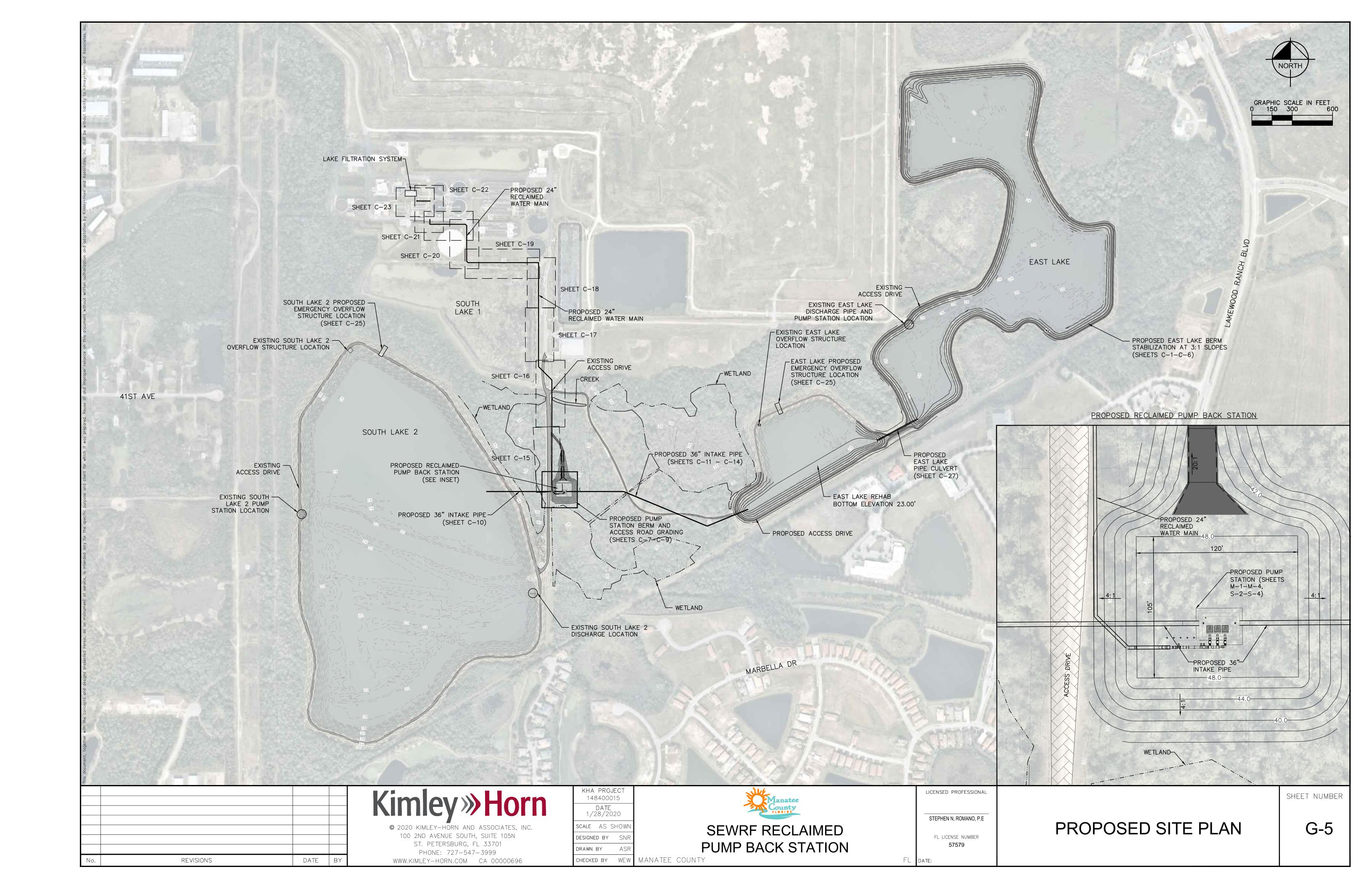
DRAWING INDEX AND GENERAL NOTES

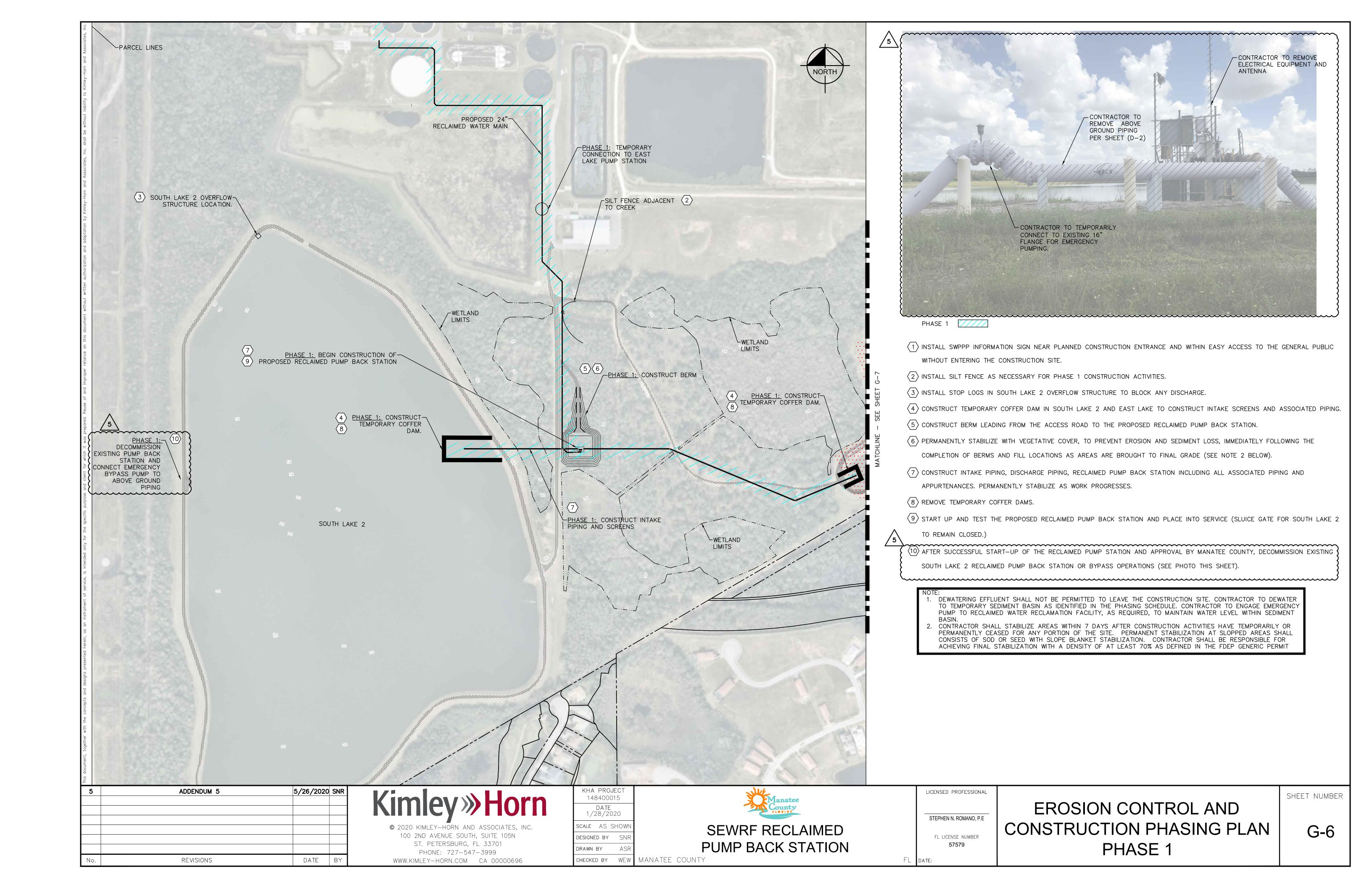
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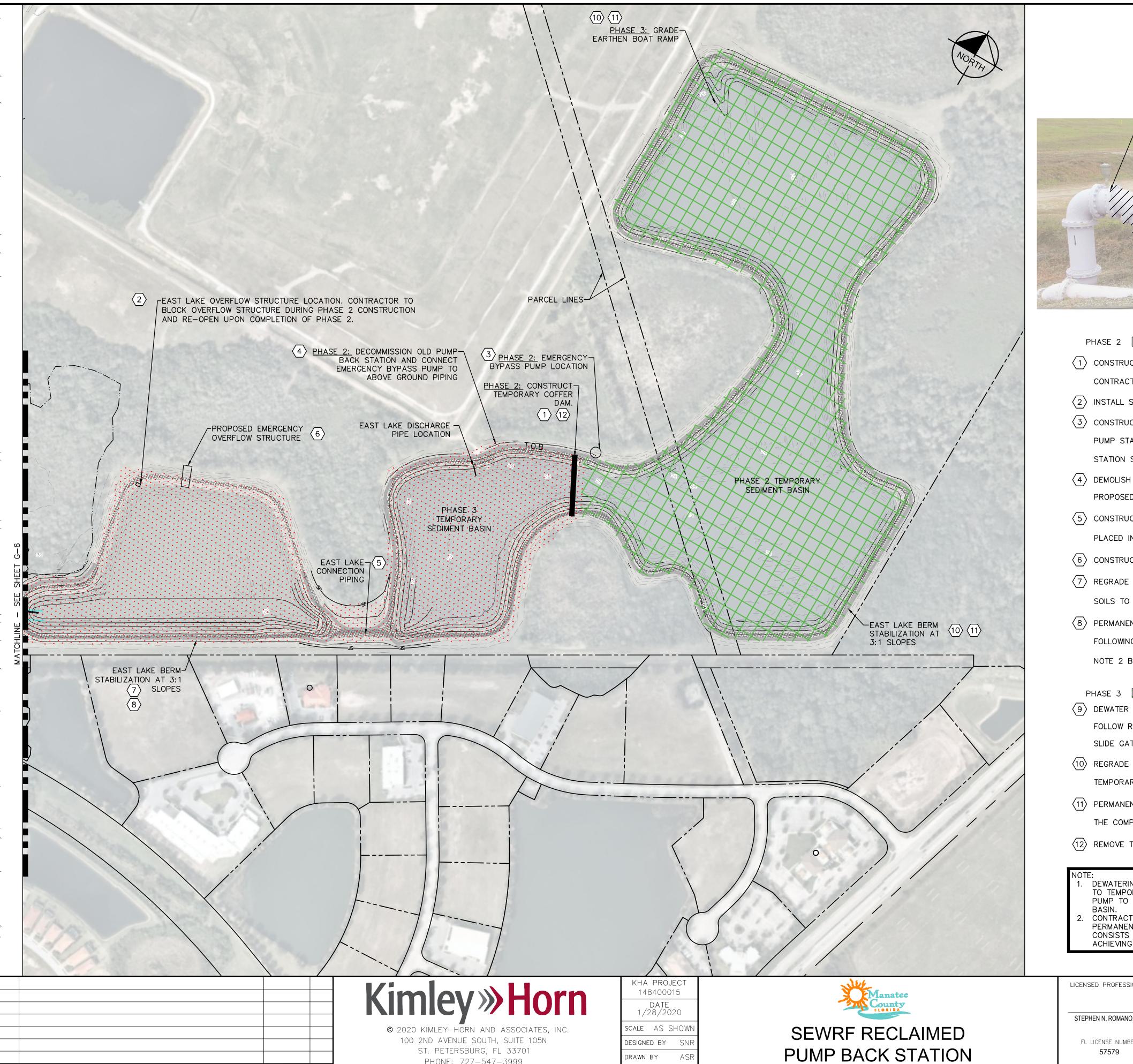
SHEET NUMBER











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MANATEE COUNT

REVISIONS

DATE

CONTRACTOR TO REMOVE - CONTRACTOR TO TEMPORARILY CONNECT ABOVE GROUND PIPING TO EXISTING 16" FLANGE FOR PER SHEET (D-2) EMERGENCY PUMPING (EXISTING PUMP DESIGN POINT 2,000 GPM AT 69' TDH)

EAST LAKE TEMPORARY EMERGENCY PUMPING CONNECTION

- (1) CONSTRUCT TEMPORARY COFFER DAM IN EAST LAKE (DEWATER INTO PHASE 2 TEMPORARY SEDIMENT BASIN). CONTRACTOR SHALL FOLLOW RECOMMENDATIONS OF GEOTECHNICAL REPORT NO. 17-7261 DATED SEPTEMBER 2018.
- $\langle 2 \rangle$ INSTALL STOP LOGS IN EAST LAKE OVERFLOW STRUCTURE TO BLOCK ANY DISCHARGE.
- 3 CONSTRUCT TEMPORARY EMERGENCY PUMP STATION ON NORTH EAST SIDE OF TEMPORARY COFFER DAM. CONNECT PUMP STATION TO EXISTING ABOVE GROUND PIPING (SEE PHOTO THIS SHEET). TEMPORARY/EMERGENCY PUMP STATION SHALL BE ABLE TO OPERATE TO PREVENT WATER FROM OVERFLOWING DISCHARGE STRUCTURE.
- $\langle 4 \rangle$ DEMOLISH EAST LAKE RECLAIMED PUMP STATION AND EXISTING DISCHARGE STRUCTURE. REBUILD BERM TO MATCH PROPOSED GRADES.
- $\langle 5 \rangle$ construct east lake connection piping and regrade the bottom of east lake (suitable soils to be PLACED IN PROPOSED EARTHEN BERM AREA).
- 6 CONSTRUCT EMERGENCY OVERFLOW STRUCTURE AND DISCHARGE STRUCTURE.
- $\langle 7 \rangle$ REGRADE BERMS IN THE SOUTHERN PORTION OF EAST LAKE, WEST OF THE TEMPORARY COFFER DAM (SUITABLE SOILS TO BE PLACE IN PROPOSED EARTHEN BERM AREA).
- (8) PERMANENTLY STABILIZE WITH VEGETATIVE COVER, TO PREVENT EROSION AND SEDIMENT LOSS, IMMEDIATELY FOLLOWING THE COMPLETION OF BERMS AND FILL LOCATIONS AS AREAS ARE BROUGHT TO FINAL GRADE (SEE NOTE 2 BELOW).

PHASE 3

- 9 DEWATER NORTHERN PORTION OF EAST LAKE INTO PHASE 3 TEMPORARY SEDIMENT BASIN. CONTRACTOR SHALL FOLLOW RECOMMENDATIONS OF GEOTECHNICAL REPORT NO. 17-7261 DATED SEPTEMBER 2018. OPEN EAST LAKE SLIDE GATE AT NEW RECLAIMED PUMP BACK STATION.
- $\overline{(10)}$ REGRADE BERMS AND GRADE THE EARTHEN BOAT RAMP IN THE NORTHERN PORTION OF EAST LAKE, EAST OF THE TEMPORARY COFFER DAM (SUITABLE SOILS TO BE PLACE IN PROPOSED EARTHEN BERM AREA).
- (11) PERMANENTLY STABILIZE VEGETATIVE COVER, TO PREVENT EROSION AND SEDIMENT LOSS, IMMEDIATELY FOLLOWING THE COMPLETION OF BERMS AND FILL LOCATIONS AS AREAS ARE BROUGHT TO FINAL GRADE (SEE NOTE 2 BELOW).
- $\langle 12 \rangle$ remove the temporary coffer dam, silt fence and re-open east lake overflow structure.

TO TEMPORARY SEDIMENT BASIN AS IDENTIFIED IN THE PHASING SCHEDULE. CONTRACTOR TO ENGAGE EMERGENCY PUMP TO RECLAIMED WATER RECLAMATION FACILITY, AS REQUIRED, TO MAINTAIN WATER LEVEL WITHIN SEDIMENT

PERMANENTLY CEASED FOR ANY PORTION OF THE SITE. PERMANENT STABILIZATION AT SLOPPED AREAS SHALL CONSISTS OF SOD OR SEED WITH SLOPE BLANKET STABILIZATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ACHIEVING FINAL STABILIZATION WITH A DENSITY OF AT LEAST 70% AS DEFINED IN THE FDEP GENERIC PERMIT

LICENSED PROFESSIONAL

FL DATE:

STEPHEN N. ROMANO, P.E

FL LICENSE NUMBER 57579

EROSION CONTROL AND CONSTRUCTION PHASING PLAN PHASE 2 AND 3

SHEET NUMBER

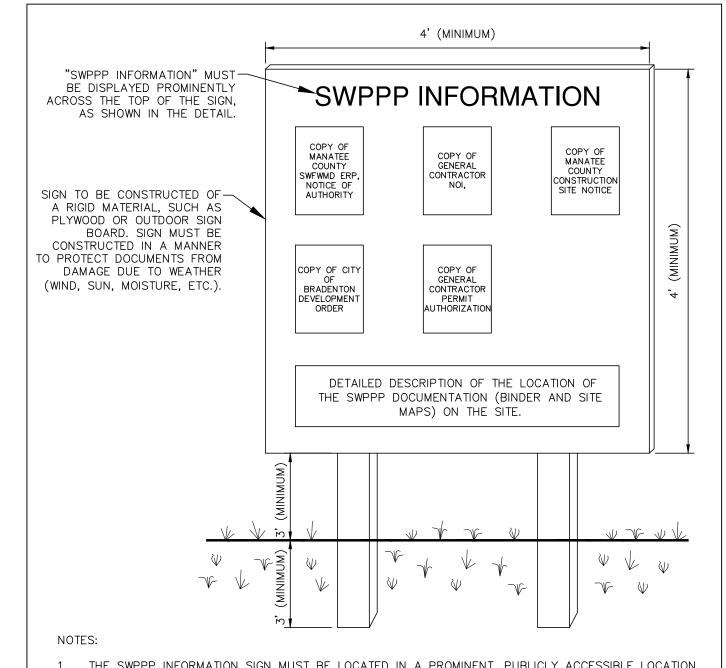
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EROSION AND SEDIMENT CONTROL NOTES

- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FILING NOTICE OF INTENT TO USED THE GENERIC PERMIT FOR STORMWATER
- DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THIS STORM WATER POLLUTION PREVENTION PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR
- SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH SWPPP IMPLEMENTATION SEQUENCE. OR AS REQUIRED BY THE APPLICABLE GENERIC PERMIT. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED. ALL DENUDED/BARE AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE, MUST BE STABILIZED IMMEDIATELY UPON COMPLETION OF MOST RECENT GRADING ACTIVITY, WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING AND/OR BLANKETS. COMPLETION MUST BE ACHIEVED WITHIN 7 DAYS.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED. THESE AREAS SHALL BE SEEDED, SODDED, AND/OR VEGETATED IMMEDIATELY, AND COMPLETED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- TEMPORARY AND/OR PERMANENT STABILIZATION SHALL BE APPLIED PER REQUIREMENTS IN THESE E&S CONTROL NOTES. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE
- OFF-SITE. ALL MEASURES STATED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE GENERIC PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE PLANS.
- STORM WATER POLLUTANT CONTROL MEASURES INSTALLED DURING CONSTRUCTION, THAT WILL ALSO PROVIDE STORM WATER
- MANAGEMENT AFTER CONSTRUCTION, ARE INCLUDED IN THE CONTRACT DOCUMENTS. ALL PERMANENT CONTROLS AND SYSTEMS MUST BE INSTALLED AND FUNCTIONING AS DESIGNED AND FREE OF ACCUMULATED SEDIMENT AND DEBRIS DURING FINAL PROJECT INSPECTION AND APPROVAL.

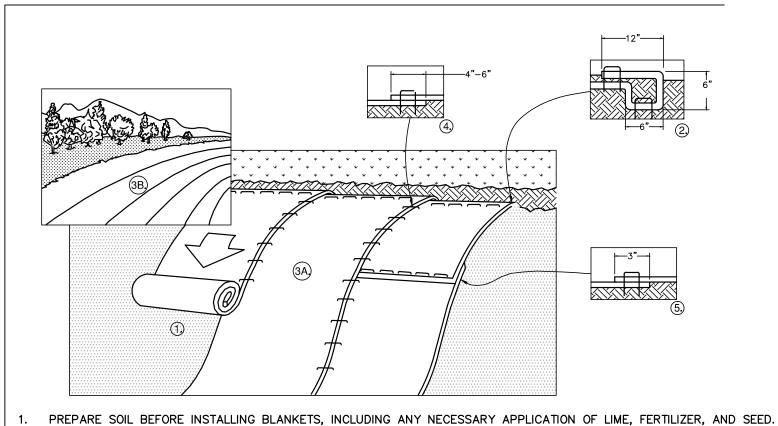
NOI	TABLE
PROJECT NAME	SEWRF RECLAIMED PUMP BACK STATION
PROJECT ADDRESS	3331 LENA ROAD
CITY	BRADENTON
STATE	FLORIDA
ZIP CODE	34211
COUNTY	MANATEE
LATITUDE	27° 28′ 08.20" N
LONGITUDE	82° 27' 05.8" W
INDIAN COUNTY LANDS	NO
WATER MANAGEMENT DISTRICT	SWFWMD
LARGE OR SMALL CONSTRUCTION	LARGE
LOD ACREAGE	290 ACRES
SWPPP LOCATION	ADDRESS IN PART IV
DEWATERING	YES
WITHIN 500' OF CONTAMINATED SITE	YES
REMEDIATED	NO
POLLUTANTS PRESENT	YES
RECEIVING WATER	MANATEE RIVER

NOTE: GENERAL CONTRACTOR TO	CO	MPL	ETE	TA	BLE	WITH	- TH	HEIR	EST	IMA ⁻	ΓED	PRO)JE(OT S	CHE	EDU	LE						
CONSTRUCTION SEQUENCE			_	_		JUN J				_	_	_						JUL	AUG	SEP	OCT	NOV	, D
TEMPORARY CONSTRUCTION EXITS																							Γ
TEMPORARY CONTROL MEASURES																							
SEDIMENT CONTROL BASIN(S)/TRAP(S)																							
STRIP & STOCKPILE TOPSOIL																							
ROUGH GRADING																							
STORM FACILITIES																							
SITE CONSTRUCTION																							
FINISH GRADING																							
PERMANENT CONTROL STRUCTURES																							
FOUNDATION / BUILDING CONSTRUCTION																							
LANDSCAPING/SEED/FINAL STABILIZATION																							



- 1. THE SWPPP INFORMATION SIGN MUST BE LOCATED IN A PROMINENT, PUBLICLY ACCESSIBLE LOCATION NEAR THE MAIN ENTRANCE OF THE SITE, SUCH THAT THE DOCUMENTATION CAN BE READ WITHOUT ACCESSING THE JOBSITE, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A TRAFFIC SAFETY HAZARD. 2. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE
- 3. ALL PAGES OF NOTICES OF INTENT AND PERMIT AUTHORIZATIONS MUST BE POSTED. THE CONTRACTOR MAY UTILIZE ACCESSIBLE WATERPROOF FOLDERS TO STORE THESE DOCUMENTS IF IT
- WILL BE DIFFICULT TO POST ALL PAGES INDIVIDUALLY. 4. CONTRACTOR SHALL POST OTHER STORMWATER AND/OR PERMITS AS SHOWN ON THE SWPPP
- INFORMATION SIGN DETAIL AND AS REQUIRED BY THE GOVERNING AGENCIES. 5. SUBSEQUENT PERMIT MODIFICATION REQUESTS OR RENEWAL APPLICATIONS AND THEIR ASSOCIATED AUTHORIZATIONS OR RESPONSES SHALL BE POSTED ON THE SWPPP SIGN.
- 6. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY
- 7. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

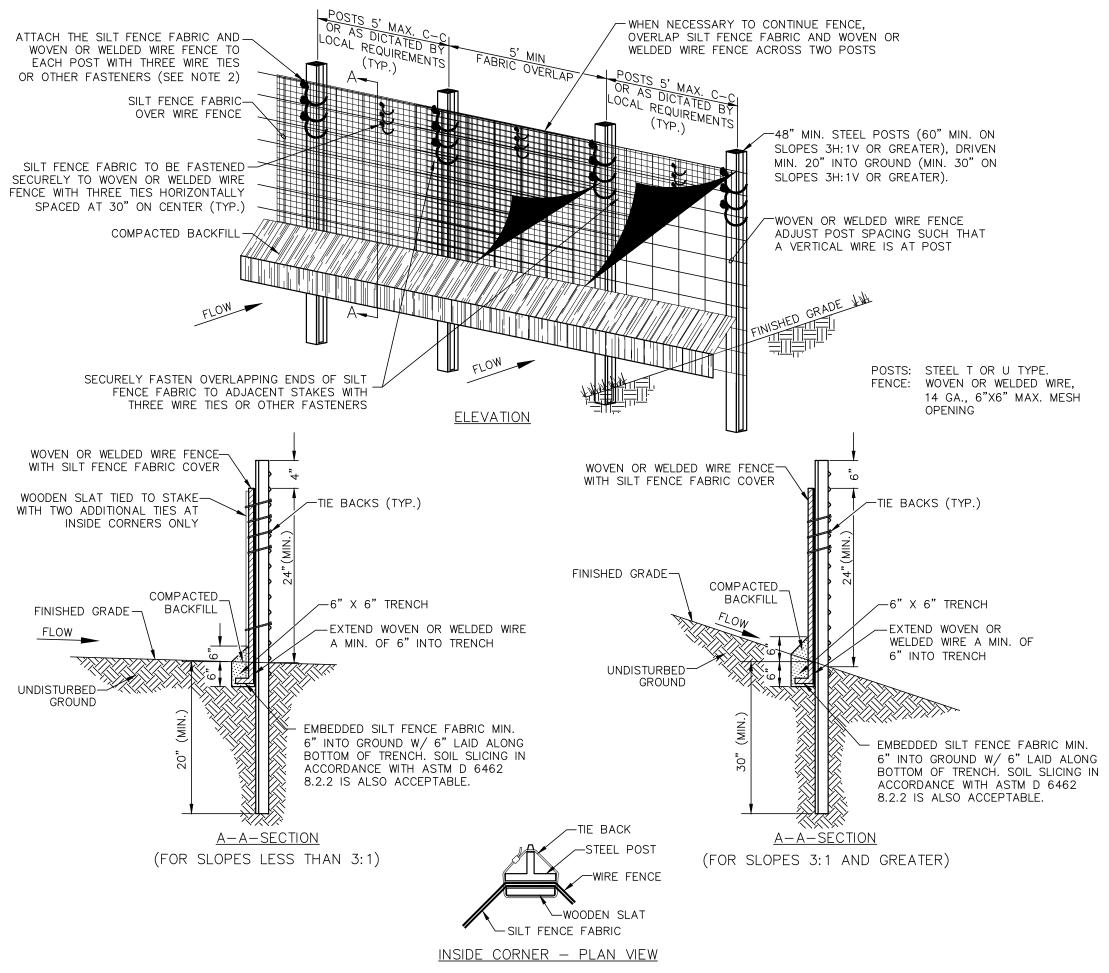




- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH AS SHOWN IN DETAIL 2. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH.BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET
- ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH 6. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.
- IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS. 2. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION.

YEROSION CONTROL BLANKET (SLOPE INSTALLATION)

CHECKED BY WEW MANATEE COUNTY



SPECIFICATIONS FOR SILT FENCE INSTALLATION

- MATERIALS AND INSTALLATION SHALL COMPLY WITH ASTM D 6462
- LATEST EDITION. INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR THE ANTICIPATED
- ATTACH THE GEOTEXTILE OR FABRIC TO THE WOVEN OR WELDED WIRE FENCE WITH THREE WIRE TIES OR OTHER FASTENERS (HORIZONTALLY SPACED EVERY 30"), ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. AT EACH POST, ATTACH THE GEOTEXTILE OR FABRIC AND THE WOVEN OR WELDED WIRE FENCE TO THE POST AS PREVIOUSLY STATED. IN ADDITION, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
- WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS
- TWO POSTS. AS SHOWN. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS THE STATIC SLICING EQUIPMENT IS UTILIZED TO INSTALL THE FENCE
- PER DETAIL, "SILT FENCE INSTALLATION (SLICING METHOD)". WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
- COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER. OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH.
- COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

SEDIMENTATION/SILT FENCE WITH WIRE BACKING

DATE REVISIONS

© 2020 KIMLEY-HORN AND ASSOCIATES, INC. 100 2ND AVENUE SOUTH, SUITE 105N ST. PETERSBURG, FL 33701 PHONE: 727-547-3999 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT 148400015 DATE 1/28/2020 CALE AS SHOW ESIGNED BY SN

DRAWN BY

SEWRF RECLAIMED PUMP BACK STATION LICENSED PROFESSIONAL STEPHEN N. ROMANO, P.E FL LICENSE NUMBER

FL DATE:

57579

EROSION CONTROL AND SEDIMENTATION **DETAILS**

MAINTENANCE NOTES

FOR REUSE.

SILT FENCE.

DAMAGED.

1. SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST

FROM REACHING ON-THIRD THE HEIGHT OF THE SILT FENCE. 2. ALL MATERIAL EXCAVATED FROM BEHIND SILT FENCE SHALL BI

3. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO

4. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHOULD IMPLEMENT ADDITIONAL

5. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS

BYPASS IS OCCURRING AT JOINING SECTIONS.

BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD

THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST

BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS

STOCKPILED ON AN UPLAND PORTION OF THE SITE IF SUITABLE

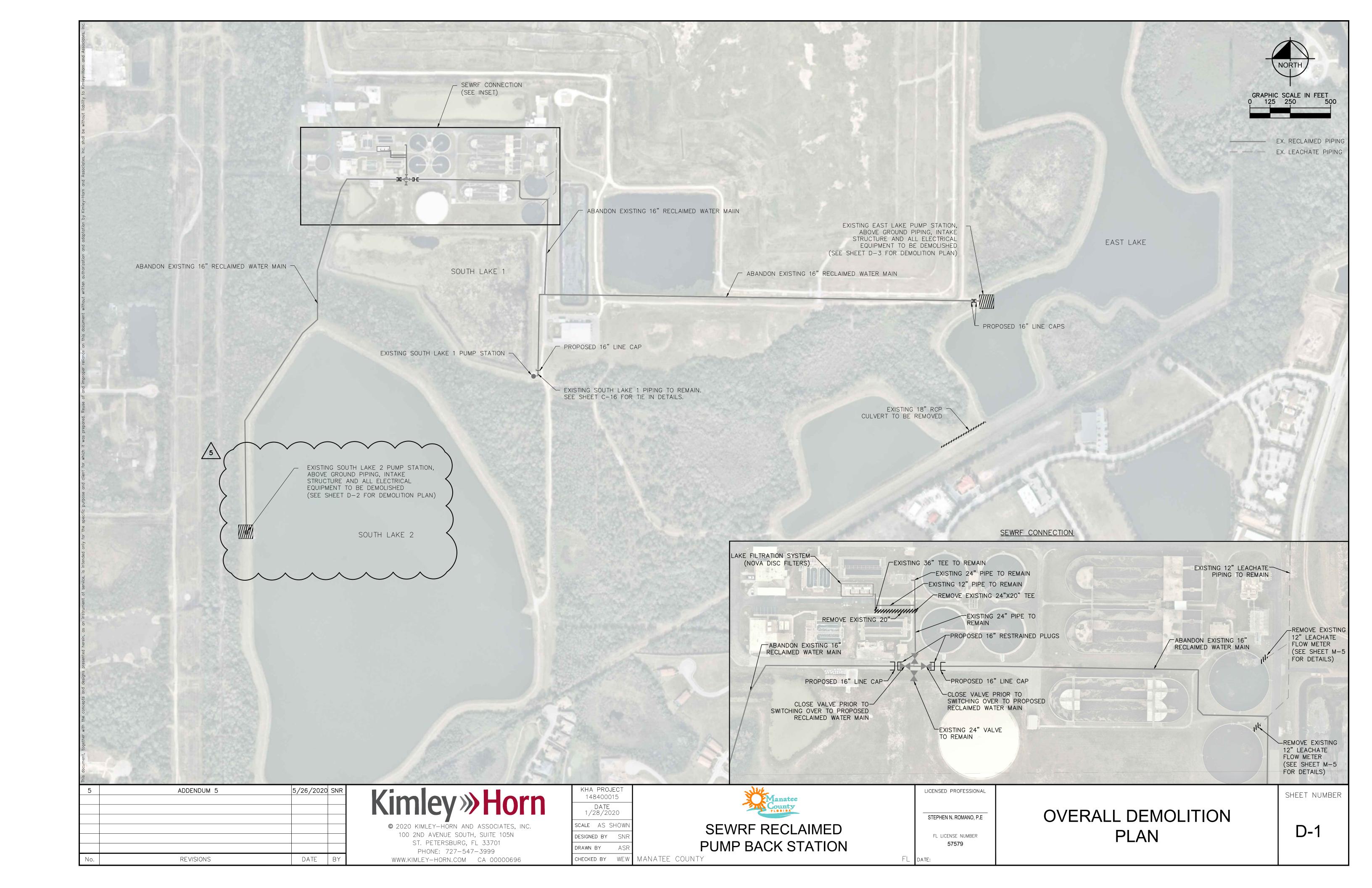
UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO

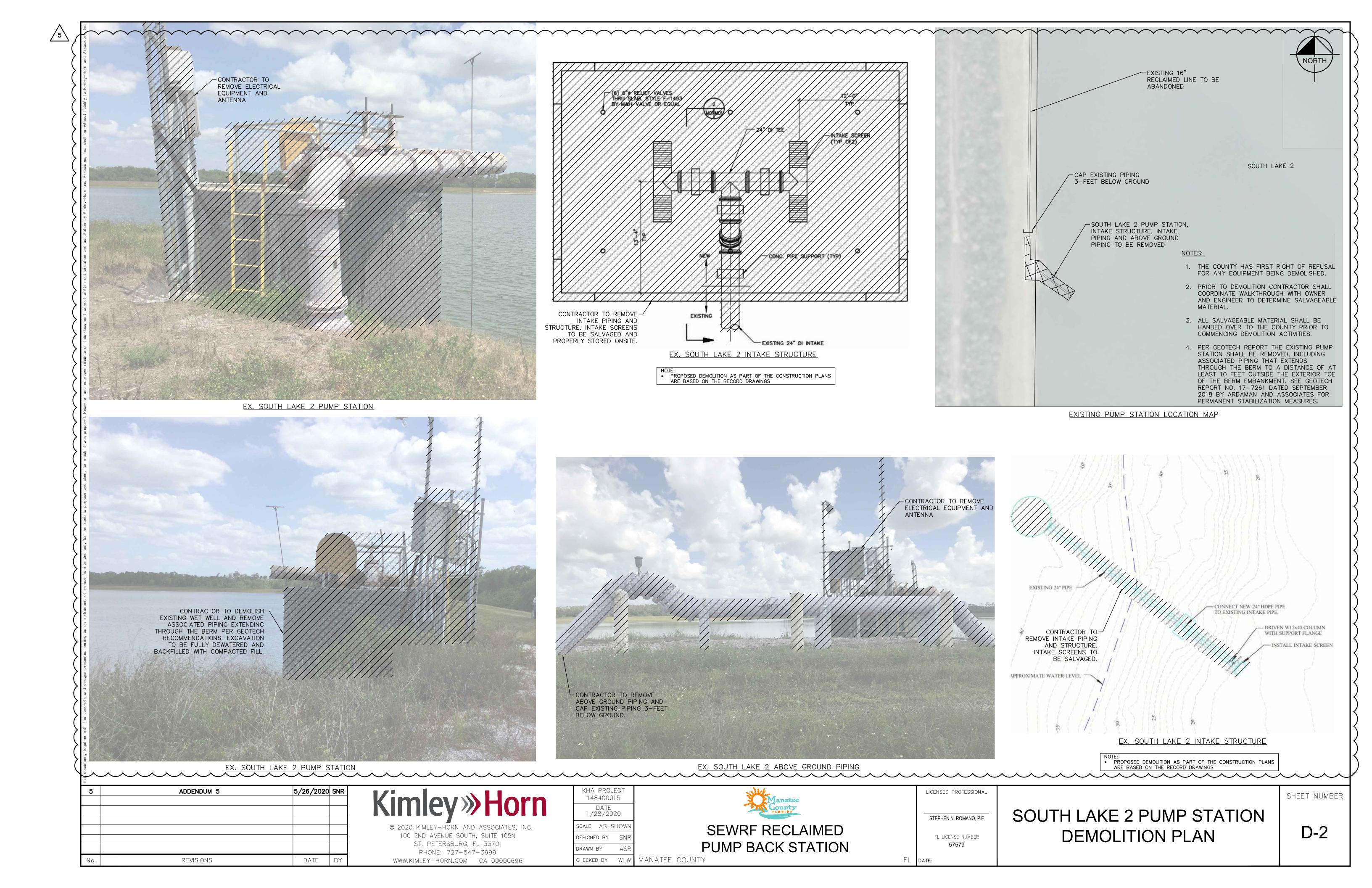
UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS

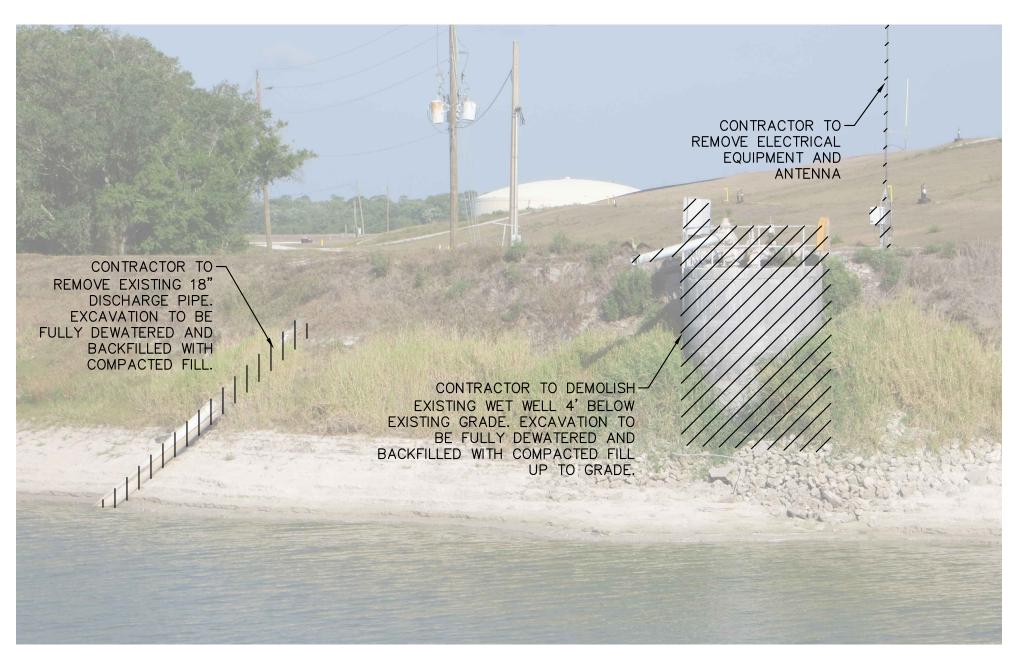
(PENDING CEC APPROVAL) TO PREVENT EXCESSIVE BUILDUP ON

SHEET NUMBER

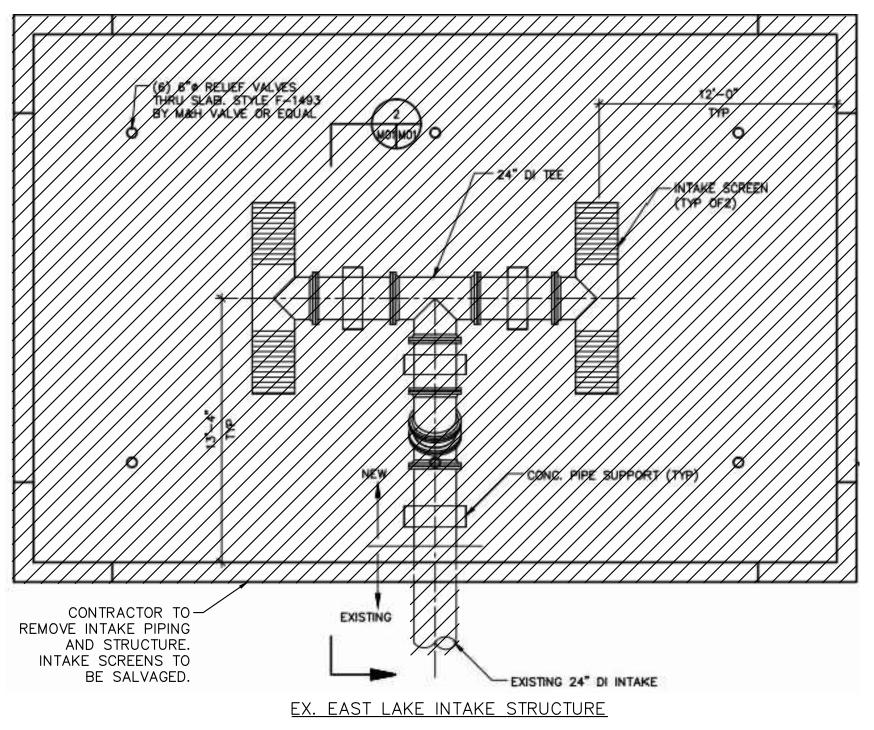
G-8





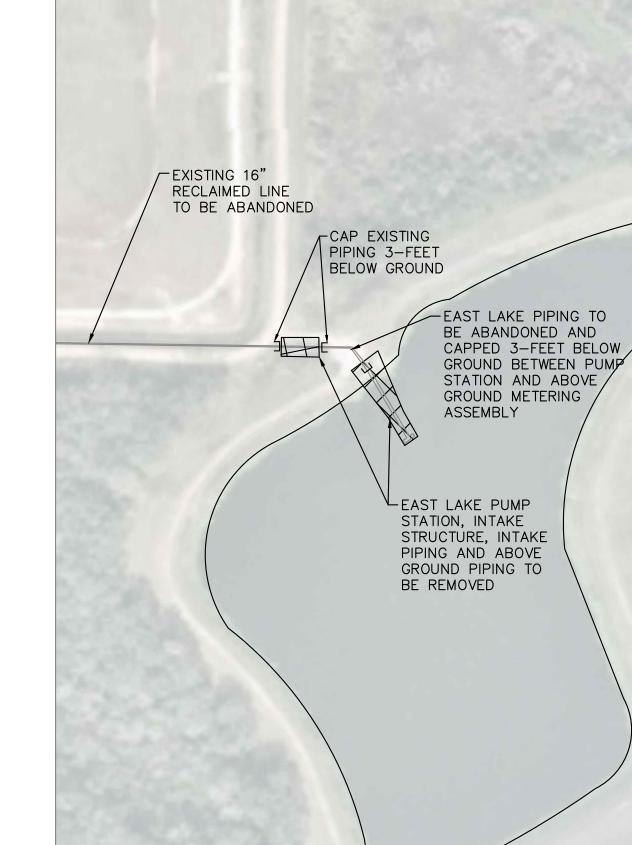


EX. EAST LAKE PUMP STATION



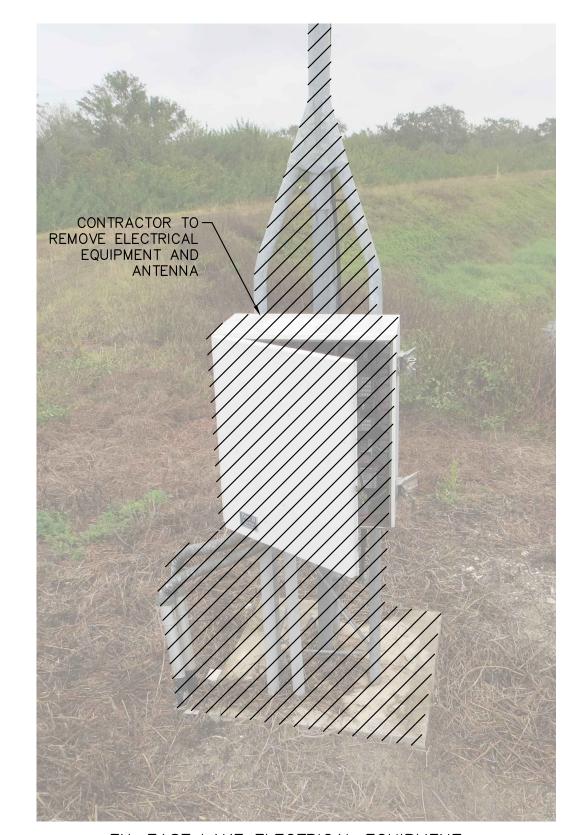
PROPOSED DEMOLITION AS PART OF THE CONSTRUCTION PLANS

ARE BASED ON THE RECORD DRAWINGS.



1. THE COUNTY HAS FIRST RIGHT OF REFUSAL FOR ANY EQUIPMENT BEING DEMOLISHED. 2. PRIOR TO DEMOLITION CONTRACTOR SHALL COORDINATE WALKTHROUGH WITH OWNER AND ENGINEER TO DETERMINE SALVAGEABLE MATERIAL. 3. ALL SALVAGEABLE MATERIAL SHALL BE HANDED OVER TO THE COUNTY PRIOR TO COMMENCING DEMOLITION ACTIVITIES. 4. PER GEOTECH REPORT THE EXISTING PUMP STATION SHALL BE REMOVED, INCLUDING ASSOCIATED PIPING THAT EXTENDS THROUGH THE BERM TO A DISTANCE OF AT LEAST 10 FEET OUTSIDE THE EXTERIOR TOE OF THE BERM EMBANKMENT. SEE GEOTECH REPORT NO. 17-7261 DATED SEPTEMBER 2018 BY ARDAMAN AND ASSOCIATES FOR PERMANENT STABILIZATION MEASURES.

EXISTING PUMP STATION LOCATION MAP



EX. EAST LAKE ELECTRICAL EQUIPMENT



EXISTING CONCRETE WET WELL APPROXIMATE WATER LEVEL CONTRACTOR TO REMOVE-INTAKE PIPING AND STRUCTURE INTAKE SCREENS TO BE SALVAGED.	9
EX. EAST LAKE INTAKE STRUCTURE	

PROPOSED DEMOLITION AS PART OF THE CONSTRUCTION PLANS ARE BASED ON THE RECORD DRAWINGS.

EX. EAST LAKE ABOVE GROUND PIPIN

5	ADDENDUM 5	5/26/2020 SNR
	·	
No.	REVISIONS	DATE BY

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PHONE: 727-547-3999

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KHA PROJECT 148400015 DATE 1/28/2020 SCALE AS SHOW ESIGNED BY SN

MANATEE COUNTY

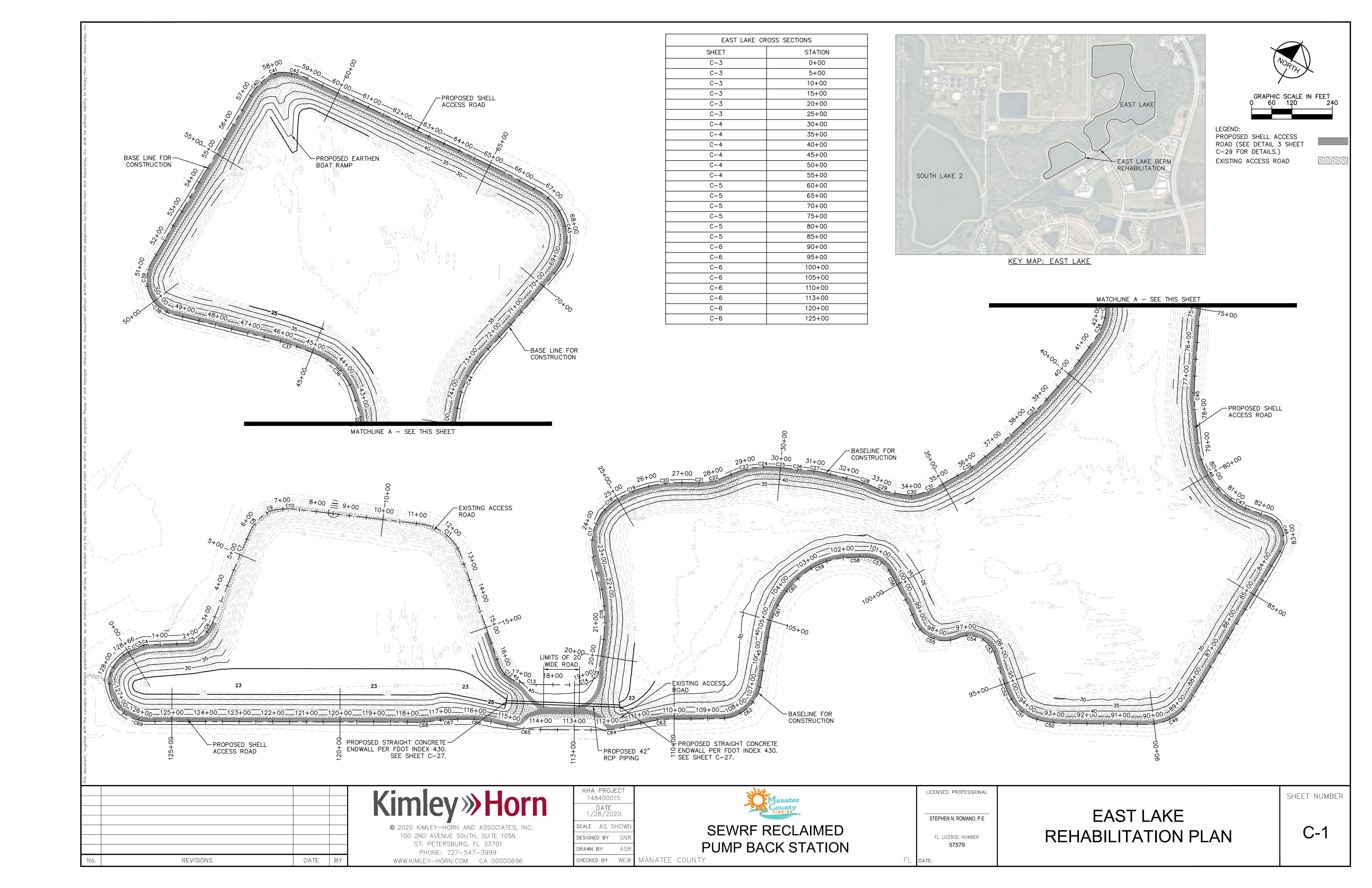
SEWRF RECLAIMED PUMP BACK STATION LICENSED PROFESSIONAL STEPHEN N. ROMANO, P.E

FL LICENSE NUMBER

EAST LAKE PUMP STATION **DEMOLITION PLAN**

SHEET NUMBER

D-3



				CURVE	TABLE			
CURVE	RADIUS	LENGTH	START NORTHING	START	END NORTHING	END	PI NORTHING	PI
CURVE	KADIUS		NOR THING EASTING N: 1137201.3589	STATION	NORTHING EASTING N:1137217.2139	STATION	NOR THING EASTING N: 1137210.3892	STATION
C1	56.10'	20.10'	E: 512475.9605	-0+00.00	E: 512488.1398	0+20.10	E: 512480.6145	0+10.16
C2	15.94'	10.11'	N: 1137217.2139 E: 512488.1398	0+20.10	N: 1137224.7157 E: 512494.6616	0+30.21	N: 1137219.8945 E: 512492.6318	0+25.33
C3	37.35'	16.67'	N: 1137224.7157 E: 512494.6616	0+30.21	N: 1137239.3719 E: 512502.3177	0+46.88	N: 1137232.9128 E: 512496.8262	0+38.69
C4	34.26'	17.93'	N: 1137239.3719 E: 512502.3177	0+46.88	N: 1137249.7436 E: 512516.6935	0+64.81	N: 1137246.4830 E: 512508.1166	0+56.06
C5	58.74'	37.50'	N: 1137310.2644 E: 512612.6066	1+78.22	N: 1137338.7309 E: 512636.0375	2+15.73	N: 1137320.6253 E: 512629.0266	1+97.64
C6	122.93'	42.79'	N: 1137363.4333 E: 512645.6030	2+42.22	N: 1137405.9412 E: 512648.0562	2+85.01	N: 1137384.4716 E: 512650.5669	2+63.83
C7	2830.91	126.83'	N: 1137572.5174 E: 512623.6667	4+53.36	N: 1137698.3764 E: 512608.1097	5+80.19	N: 1137635.2726 E: 512614.4783	5+16.79
C8	99.34'	47.58'	N: 1137698.3764 E: 512608.1097	5+80.19	N: 1137745.0491 E: 512614.6341	6+27.77	N: 1137722.5092 E: 512605.6741	6+04.45
C9	58.62'	34.41'	N: 1137762.3942 E: 512621.5290	6+46.44	N: 1137788.9420 E: 512642.6430	6+80.85	N: 1137778.8590 E: 512628.0739	6+64.15
C10	58.62'	11.38'	N: 1137808.6193 E: 512671.0749	7+15.43	N: 1137814.1497 E: 512681.0011	7+26.81	N: 1137811.8678 E: 512675.7687	7+21.13
C11	142.20'	159.03'	N: 1137969.5863 E: 513037.4109	11+15.64	N: 1137947.3477 E: 513186.6362	12+74.67	N: 1138005.1610 E: 513118.9822	12+04.63
C12	88.00'	90.74	N: 1137728.7259 E: 513442.4707	16+11.19	N: 1137711.7647 E: 513527.5738	17+01.94	N: 1137696.1303 E: 513480.2161	16+61.06
C13	148.00'	30.33'	N: 1137717.3874 E: 513544.6055	17+19.87	N: 1137729.7715 E: 513572.2372	17+50.20	N: 1137722.1587 E: 513559.0581	17+35.09
C14	78.81'	48.84'	N: 1137789.7186 E: 513676.0153	18+70.05	N: 1137824.2718 E: 513709.4275	19+18.90	N: 1137801.6458 E: 513698.2535	18+95.29
C15	17.92'	13.26'	N: 1137836.5548 E: 513714.9546	19+32.36	N: 1137849.4587 E: 513716.1894	19+45.63	N: 1137842.7673 E: 513718.0749	19+39.32
C16	480.26	191.04'	N: 1137929.1064 E: 513684.8906	20+31.20	N: 1138088.5417 E: 513581.9499	22+22.24	N: 1138019.1982 E: 513649.4878	21+28.00
C17	152.75'	141.93'	N: 1138145.9247 E: 513526.0612	23+02.34	N: 1138276.3816 E: 513484.6140	24+44.28	N: 1138200.7671 E: 513472.6469	23+78.90
C18	149.83	57.37'	N: 1138279.2656 E: 513485.0705	24+47.20	N: 1138332.8609 E: 513504.5383	25+04.57	N: 1138307.9500 E: 513489.6102	24+76.24
C19	268.73'	62.88'	N: 1138344.0220 E: 513511.2267	25+17.58	N: 1138393.7062 E: 513549.5391	25+80.46	N: 1138371.1157 E: 513527.4630	25+49.17
C20	375.15'	112.16'	N: 1138402.3130 E: 513557.9500	25+92.50	N: 1138469.7113 E: 513647.0846	27+04.66	N: 1138442.7247 E: 513597.4417	26+49.00
C21	311.13'	50.39'	N: 1138479.8590 E: 513665.7517	27+25.91	N: 1138507.3972 E: 513707.8843	27+76.30	N: 1138491.9185 E: 513687.9354	27+51.16
C22	138.43'	34.45'	N: 1138509.5220 E: 513710.6228	27+79.77	N: 1138533.7915 E: 513734.9454	28+14.21	N: 1138520.1358 E: 513724.3017	27+97.08
C23	275.48'	69.14	N: 1138568.5065 E: 513762.0030	28+58.23	N: 1138617.1631 E: 513810.8704	29+27.37	N: 1138595.9173 E: 513783.3675	28+92.98
C24	129.31'	21.29'	N: 1138623.4699 E: 513819.0347	29+37.69	N: 1138635.0425 E: 513836.8758	29+58.98	N: 1138629.9922 E: 513827.4779	29+48.36
C25	511.41'	54.58'	N: 1138641.4290 E: 513848.7606	29+72.47	N: 1138664.6543 E: 513898.1283	30+27.05	N: 1138654.3602 E: 513872.8242	29+99.79
C26	332.47'	33.83'	N: 1138667.1230 E: 513904.1968	30+33.60	N: 1138681.4406 E: 513934.8284	30+67.43	N: 1138673.5020 E: 513919.8771	30+50.53
C27	305.80'	61.12'	N: 1138683.1291 E: 513938.0085	30+71.03	N: 1138706.2258 E: 513994.4909	31+32.16	N: 1138697.5093 E: 513965.0917	31+01.70
C28	340.84	64.19'	N: 1138731.6997 E: 514080.4105	32+21.77	N: 1138744.0608 E: 514143.3071	32+85.97	N: 1138740.8505 E: 514111.2751	32+53.96
C29	194.00'	48.25	N: 1138744.0782 E: 514143.4805	32+86.14	N: 1138754.7782 E: 514190.3970	33+34.39	N: 1138746.4962 E: 514167.6075	33+10.39
C30	105.78'	50.26	N: 1138769.1083 E: 514229.8288	33+76.34	N: 1138796.6491 E: 514271.3074	34+26.60	N: 1138777.8570 E: 514253.9024	34+01.95
C31	211.52'	44.44	N: 1138803.4330 E: 514277.5905	34+35.85	N: 1138838.9604 E: 514304.1551	34+80.29	N: 1138819.7962 E: 514292.7458	34+58.15
C32	194.00'	27.80'	N: 1138920.0711 E: 514352.4437	35+74.69	N: 1138944.8967 E: 514364.9088	36+02.49	N: 1138932.0366 E: 514359.5672	35+88.61
C33	1669.16	481.25'	N: 1138944.8967 E: 514364.9088	36+02.49	N: 1139409.6294 E: 514483.3306	40+83.74	N: 1139168.6676 E: 514457.8513	38+44.80
C34	169.00'	59.52'	N: 1139459.4558 E: 514487.8415	41+33.77	N: 1139518.4491 E: 514482.7671	41+93.29	N: 1139489.4039 E: 514490.5527	41+63.84
C35	144.00'	82.99'	N: 1139518.4491 E: 514482.7671	41+93.29	N: 1139588.2249 E: 514439.9809	42+76.28	N: 1139559.6784 E: 514471.7156	42+35.97
			· ·	<u> </u>	<u> </u>	<u> </u>	· ·	

CURVE	RADIUS	LENGTH	START NORTHING	START	END NORTHING	END	PI NORTHING	PI
CURVE	KADIU3	LENGIA	EASTING	STATION	EASTING	STATION	EASTING	STATIO
C36	194.00'	171.76'	N: 1139616.1184 E: 514408.9723	43+17.99	N: 1139663.6253 E: 514249.6979	44+89.75	N: 1139677.6255 E: 514340.5959	44+09.9
C37	851.43'	112.80'	N: 1139658.8463 E: 514218.6704	45+21.15	N: 1139634.3500 E: 514108.6424	46+33.95	N: 1139650.2478 E: 514162.8438	45+77.6
C38	105.57'	98.01'	N: 1139551.7556 E: 513827.0489	49+27.41	N: 1139568.3051 E: 513733.9802	50+25.42	N: 1139536.7312 E: 513776.3715	49+80.2
C39	104.57'	98.08'	N: 1139568.3051 E: 513733.9802	50+25.42	N: 1139652.5633 E: 513691.1291	51+23.50	N: 1139599.5782 E: 513691.2087	50+78.4
C40	178.66'	87.43'	N: 1140219.3517 E: 513695.3888	56+90.31	N: 1140304.1817 E: 513712.6147	57+77.74	N: 1140263.9172 E: 513693.4113	57+34.9
C41	59.48'	37.80'	N: 1140304.1817 E: 513712.6147	57+77.74	N: 1140332.8509 E: 513736.2651	58+15.54	N: 1140322.4055 E: 513719.7254	57+97.3
C42	161.00'	83.14'	N: 1140332.8509 E: 513736.2651	58+15.54	N: 1140358.7953 E: 513814.2800	58+98.67	N: 1140356.1243 E: 513771.8469	58+58.0
C43	161.00'	282.70	N: 1140416.6587 E: 514580.4341	66+67.20	N: 1140229.1160 E: 514742.3285	69+49.90	N: 1140420.3959 E: 514774.3378	68+61.1
C44	309.00'	179.16'	N: 1139915.6712 E: 514682.1075	72+69.14	N: 1139739.5220 E: 514695.5978	74+48.30	N: 1139825.5844 E: 514662.5787	73+61.3
C45	710.56'	123.98'	N: 1139513.7725 E: 514798.3421	76+96.57	N: 1139407.9261 E: 514862.5907	78+20.55	N: 1139458.0397 E: 514825.8377	77+58.7
C46	224.00'	182.83'	N: 1139338.7451 E: 514913.3277	79+06.34	N: 1139248.8774 E: 515066.7401	80+89.17	N: 1139260.6454 E: 514970.6056	80+03.1
C47	194.00'	58.70'	N: 1139247.6731 E: 515076.5780	80+99.08	N: 1139249.3964 E: 515135.0266	81+57.78	N: 1139244.0796 E: 515105.9337	81+28.6
C48	72.00'	127.16	N: 1139260.9177 E: 515198.0690	82+21.86	N: 1139189.0399 E: 515283.0052	83+49.03	N: 1139276.6739 E: 515284.2845	83+09.5
C49	146.96'	152.68'	N: 1138670.8717 E: 515275.4414	88+67.25	N: 1138545.2737 E: 515201.1934	90+19.93	N: 1138586.8440 E: 515274.2278	89+51.2
C50	322.00'	87.42	N: 1138423.7699 E: 514987.8019	92+65.49	N: 1138391.2935 E: 514906.9315	93+52.90	N: 1138402.0091 E: 514949.5845	93+09.4
C51	122.00'	96.54'	N: 1138391.2935 E: 514906.9315	93+52.90	N: 1138405.3008 E: 514813.9427	94+49.44	N: 1138378.8780 E: 514857.5119	94+03.8
C52	322.00'	57.73'	N: 1138405.3008 E: 514813.9427	94+49.44	N: 1138439.4915 E: 514767.5189	95+07.17	N: 1138420.3097 E: 514789.1941	94+78.3
C53	69.00'	42.27	N: 1138497.2413 E: 514702.2624	95+94.31	N: 1138514.1381 E: 514664.2384	96+36.58	N: 1138511.7020 E: 514685.9221	96+16.1
C54	79.00'	79.94'	N: 1138514.8833 E: 514657.6055	96+43.25	N: 1138485.4850 E: 514586.9030	97+23.19	N: 1138519.7700 E: 514614.1104	96+87.0
C55	96.00'	149.10'	N: 1138478.5903 E: 514581.4316	97+31.99	N: 1138462.0227 E: 514447.8971	98+81.09	N: 1138404.7102 E: 514522.8029	98+26.3
C56	15911.82'	65.25	N: 1138518.9976 E: 514362.7342	99+83.67	N: 1138551.9969 E: 514306.4408	100+48.93	N: 1138535.5550 E: 514334.6213	100+16.
C57	79.00'	87.05	N: 1138551.9969 E: 514306.4408	100+48.93	N: 1138550.2817 E: 514223.7459	101+35.98	N: 1138576.5438 E: 514264.5664	100+97
C58	56767.94	57.39'	N: 1138550.2817 E: 514223.7459	101+35.98	N: 1138519.2305 E: 514175.4813	101+93.37	N: 1138534.7683 E: 514199.6058	101+64.
C59	225.97'	167.02'	N: 1138519.2305 E: 514175.4813	101+93.37	N: 1138384.5059 E: 514083.2893	103+60.39	N: 1138469.7243 E: 514103.2913	102+80
C60	290.48'	44.27	N: 1138384.5059 E: 514083.2893	103+60.39	N: 1138341.1402 E: 514074.6022	104+04.66	N: 1138363.1546 E: 514077.2902	103+82
C61	269.56'	131.62'	N: 1138341.1402 E: 514074.6022	104+04.66	N: 1138211.9615 E: 514091.8209	105+36.29	N: 1138274.4061 E: 514067.1211	104+71.
C62	122.37'	176.58'	N: 1138067.8036 E: 514148.1703	106+91.07	N: 1137916.3574 E: 514091.6329	108+67.65	N: 1137967.2128 E: 514186.5146	107+98
C63	318.00'	70.72	N: 1137846.3296 E: 513974.3394	110+04.26	N: 1137804.2388 E: 513917.6892	110+74.98	N: 1137828.4469 E: 513943.6644	110+39.
C64	282.00'	63.84	N: 1137748.0595 E: 513857.4089	111+57.38	N: 1137710.1697 E: 513806.2000	112+21.22	N: 1137726.2040 E: 513833.9580	111+89.
C65	282.00'	57.80'	N: 1137613.7390 E: 513639.2630	114+14.01	N: 1137590.1422 E: 513586.6134	114+71.80	N: 1137599.2335 E: 513614.1515	114+43.
C66	318.00'	69.32'	N: 1137563.0811 E: 513504.6433	115+58.13	N: 1137534.3762 E: 513441.6983	116+27.44	N: 1137552.1725 E: 513471.6003	115+92.
C67	5370.96'	67.01	N: 1137526.2087 E: 513427.9751	116+43.41	N: 1137488.8169 E: 513372.3639	117+10.43	N: 1137507.6863 E: 513400.0528	116+76.
C68	394.42'	82.59'	N: 1137488.8169 E: 513372.3639	117+10.43	N: 1137443.1701 E: 513303.7172	117+93.02	N: 1137462.3868 E: 513340.4389	117+51.
C69	80.12	10.80'	N: 1137043.3186 E: 512612.1435	125+91.95	N: 1137040.6152 E: 512601.6909	126+02.75	N: 1137041.6140 E: 512607.0085	125+97

This				
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KHA PROJECT 148400015 DATE 1/28/2020 SCALE AS SHOW DESIGNED BY SNF DRAWN BY



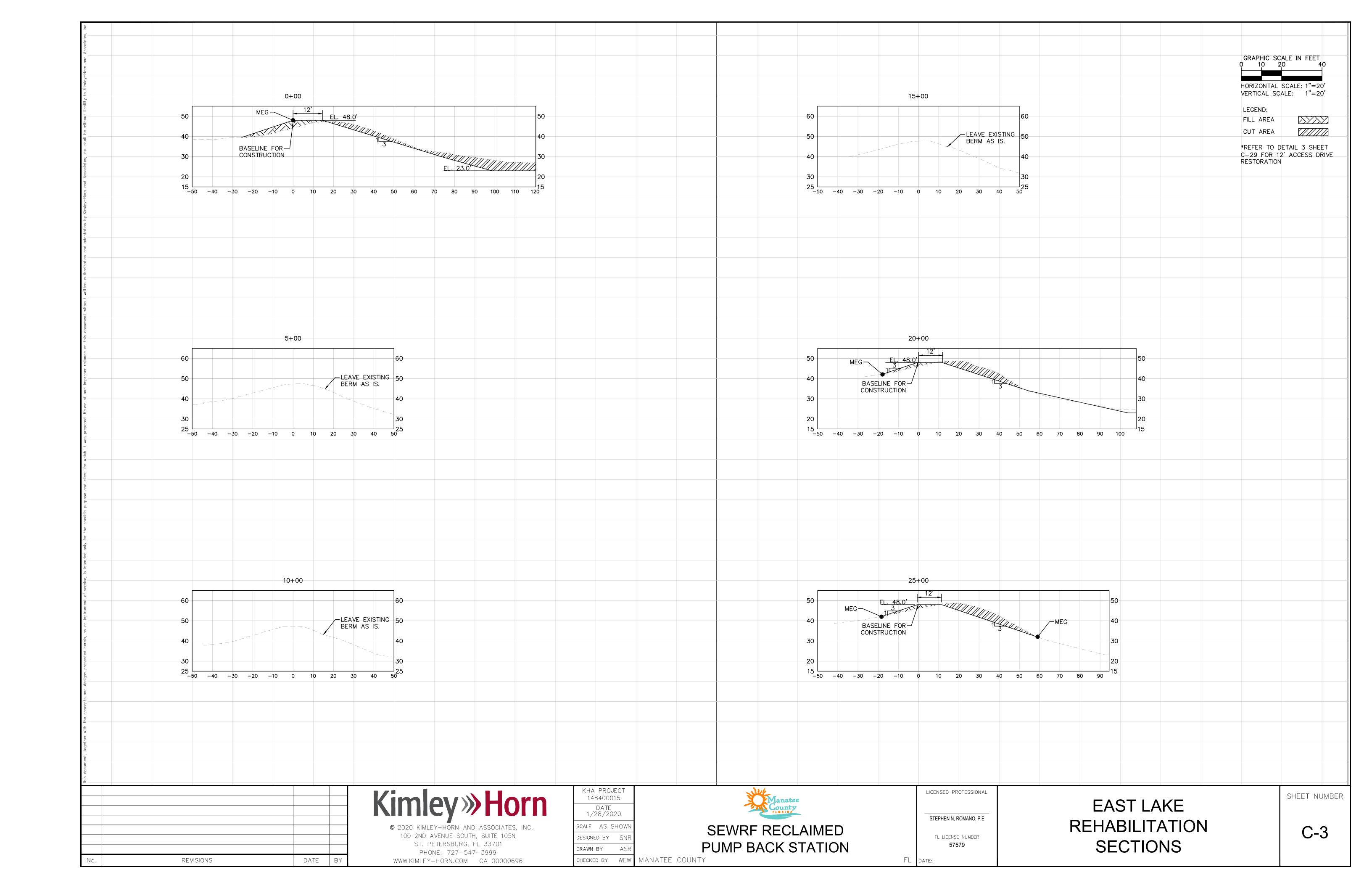
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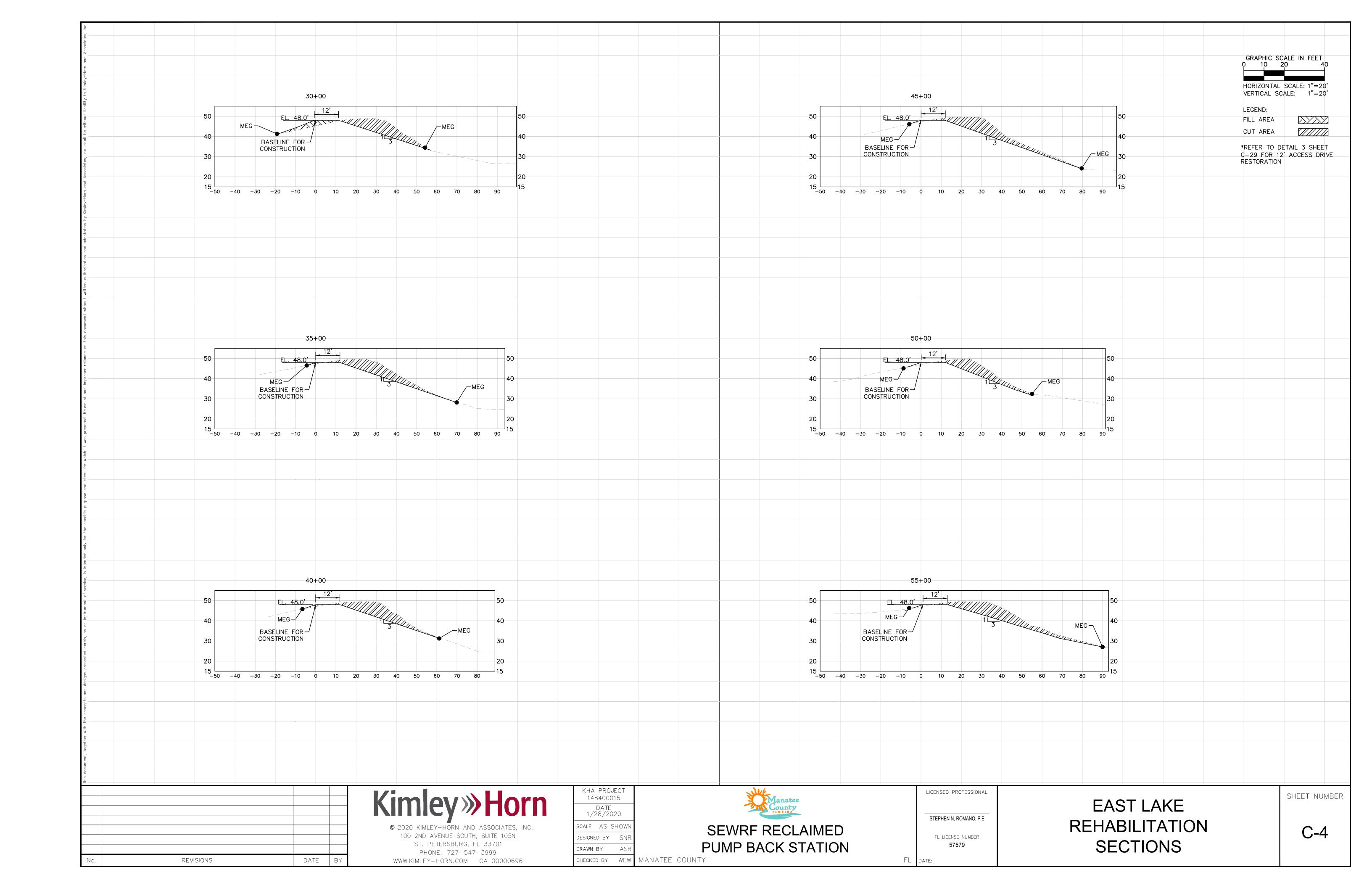
STEPHEN N. ROMANO, P.E

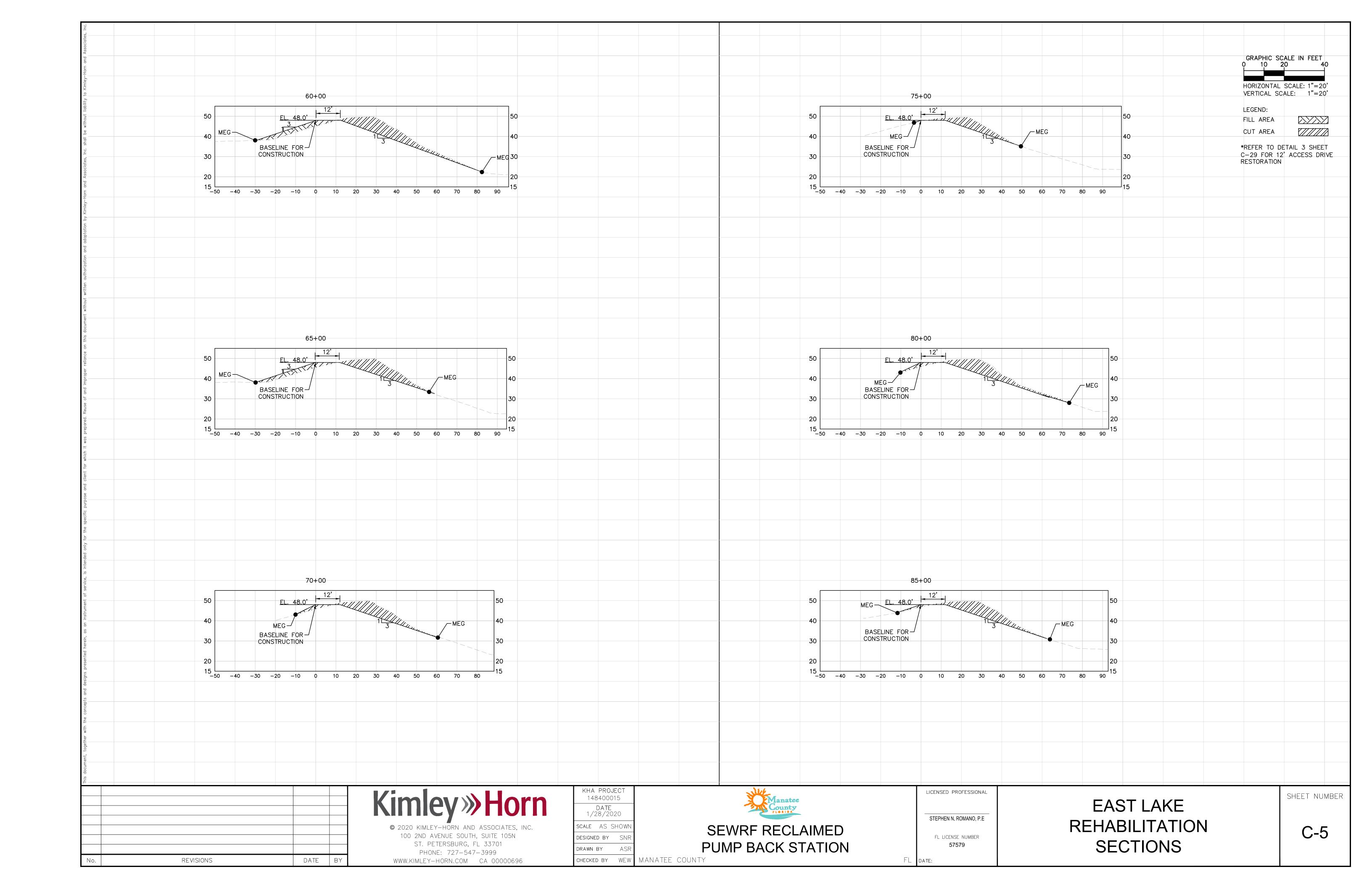
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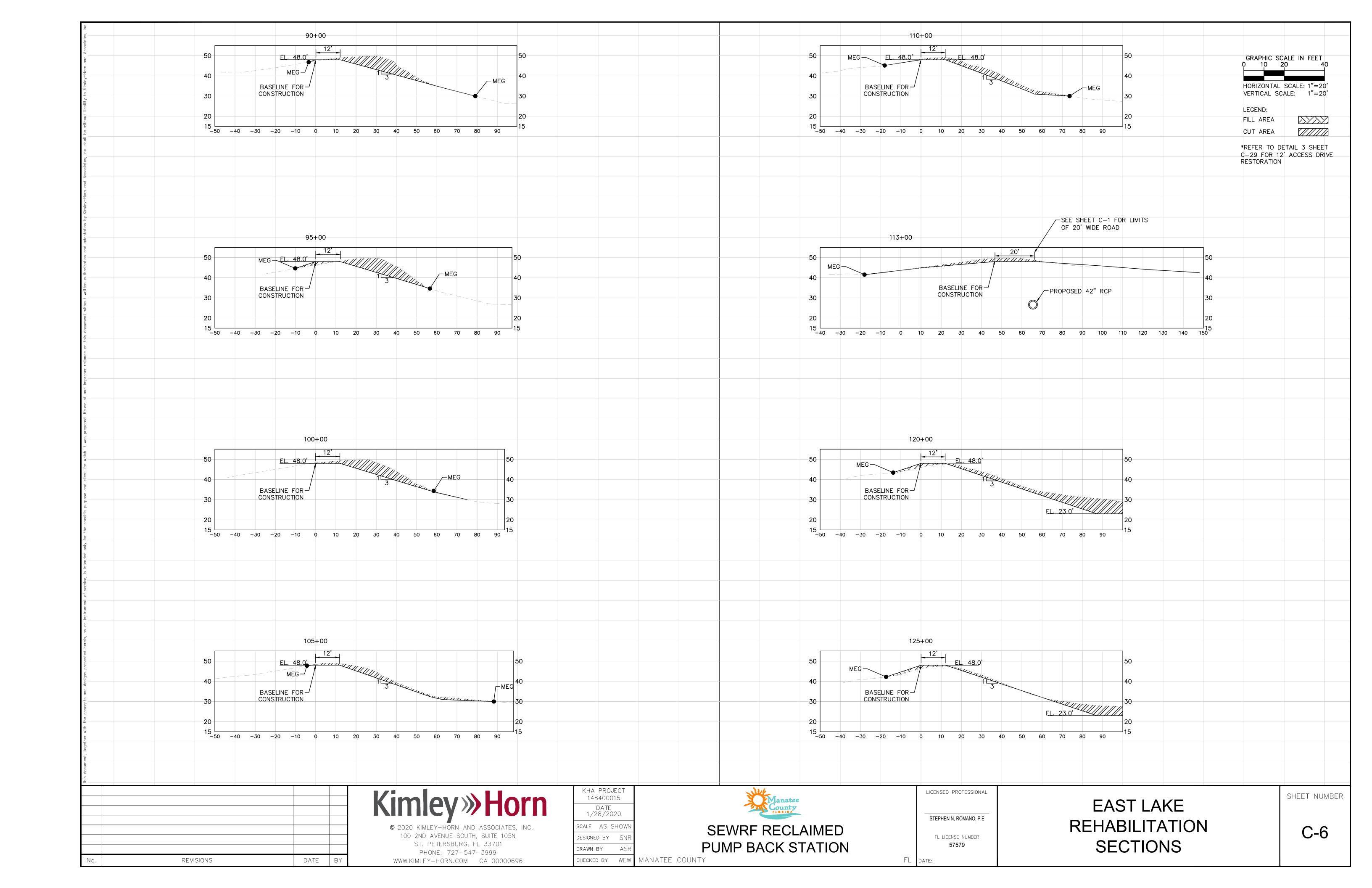
EAST LAKE REHABILITATION CURVE **TABLES**

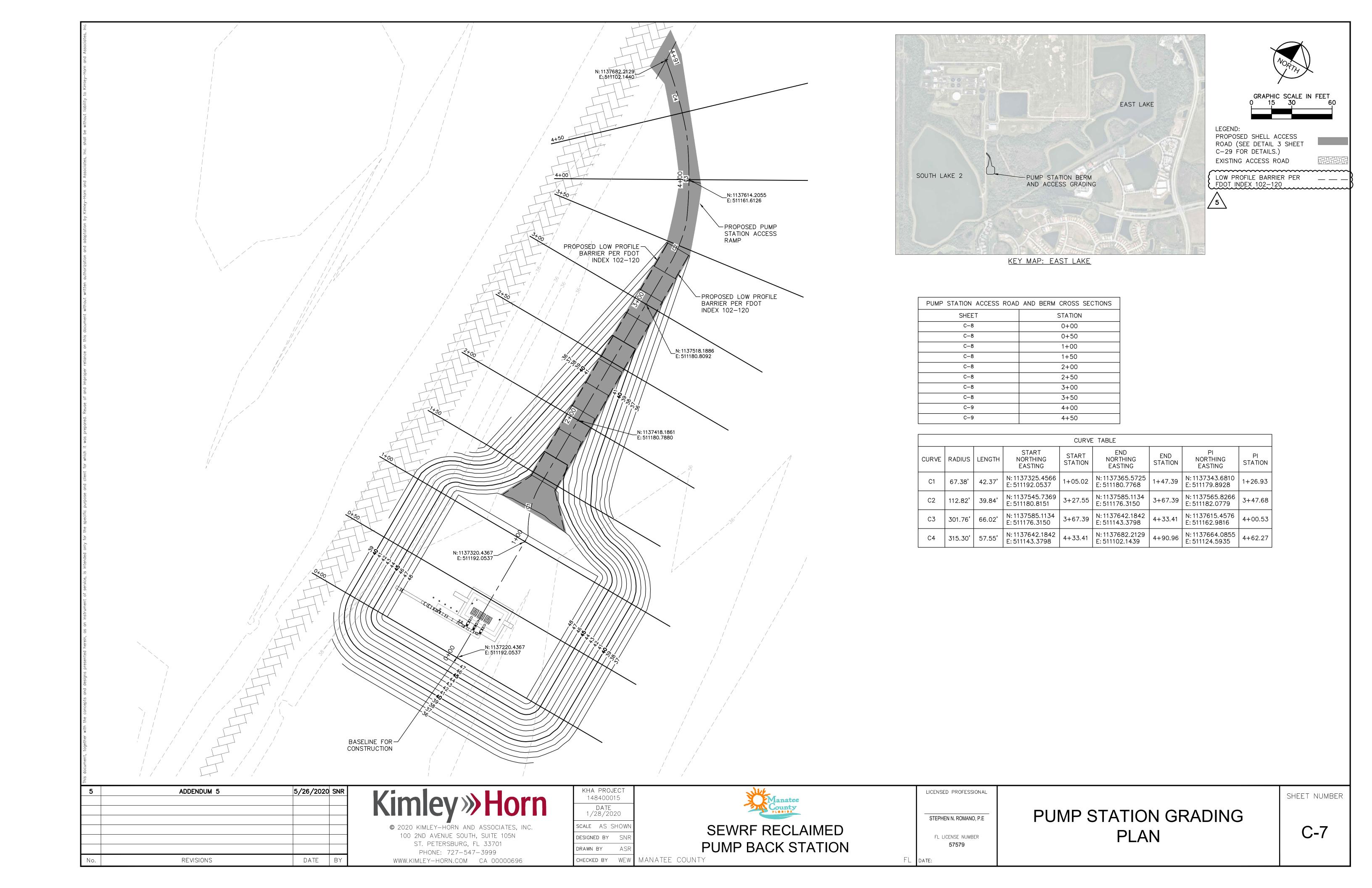
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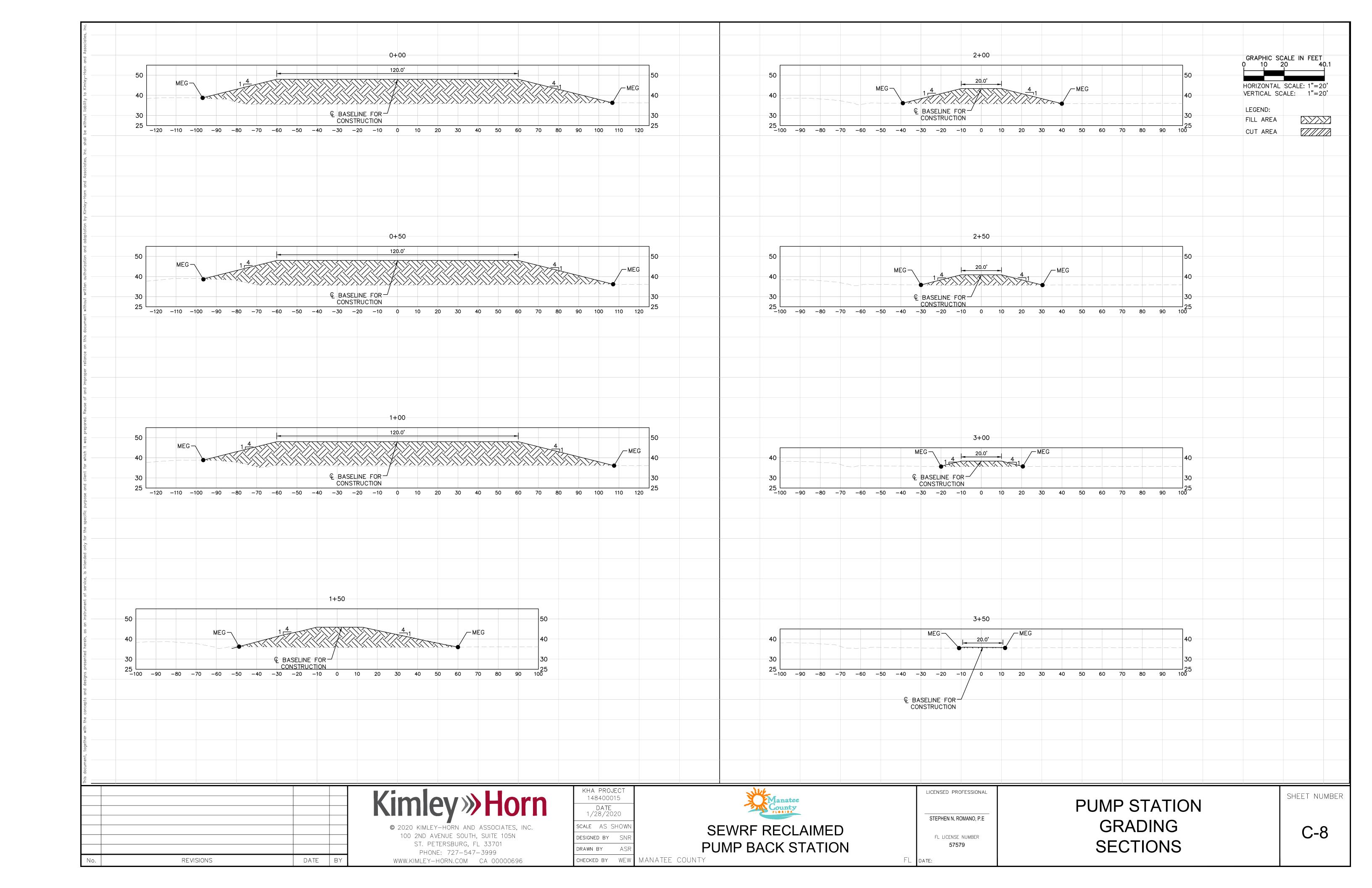


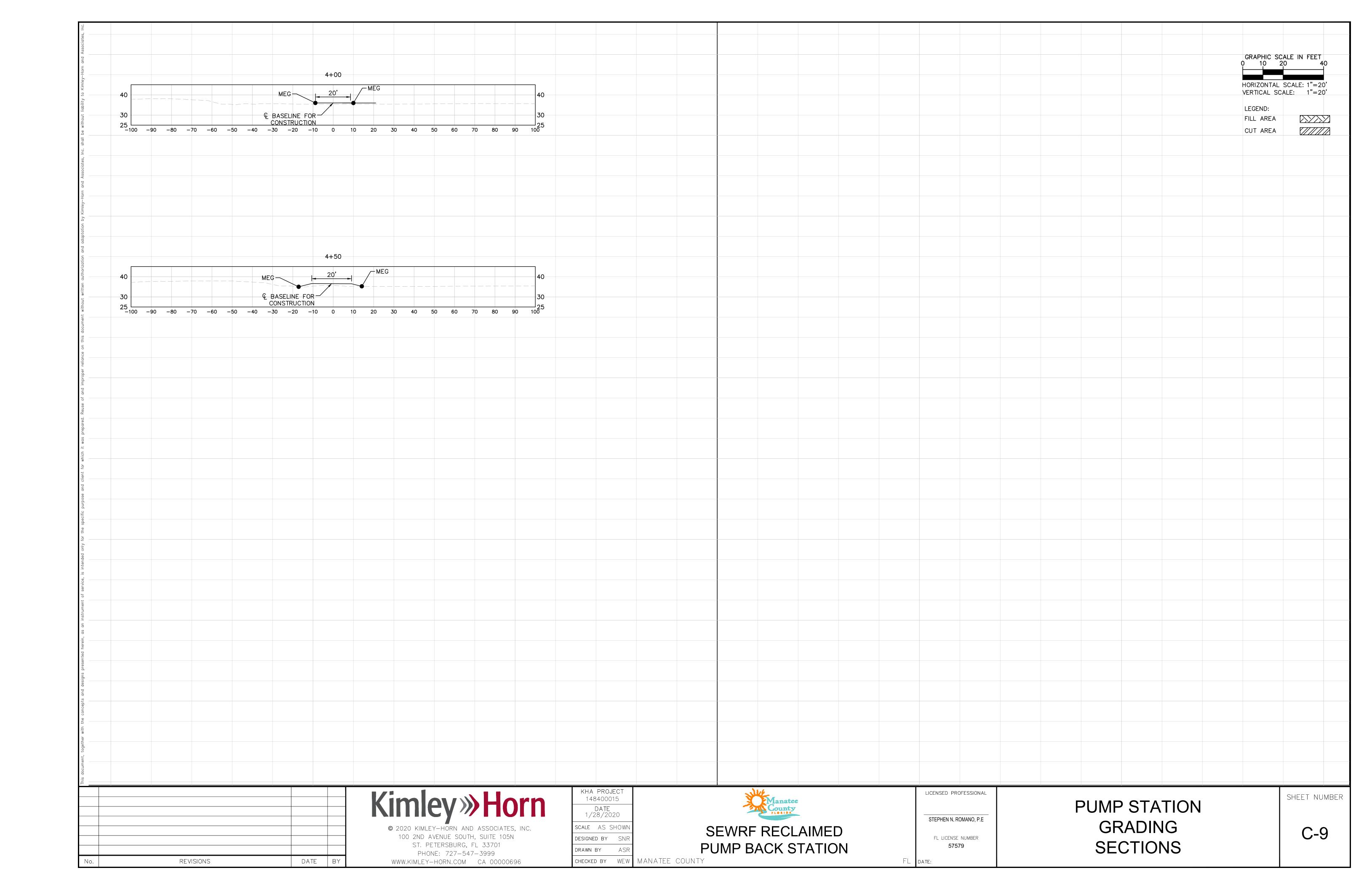


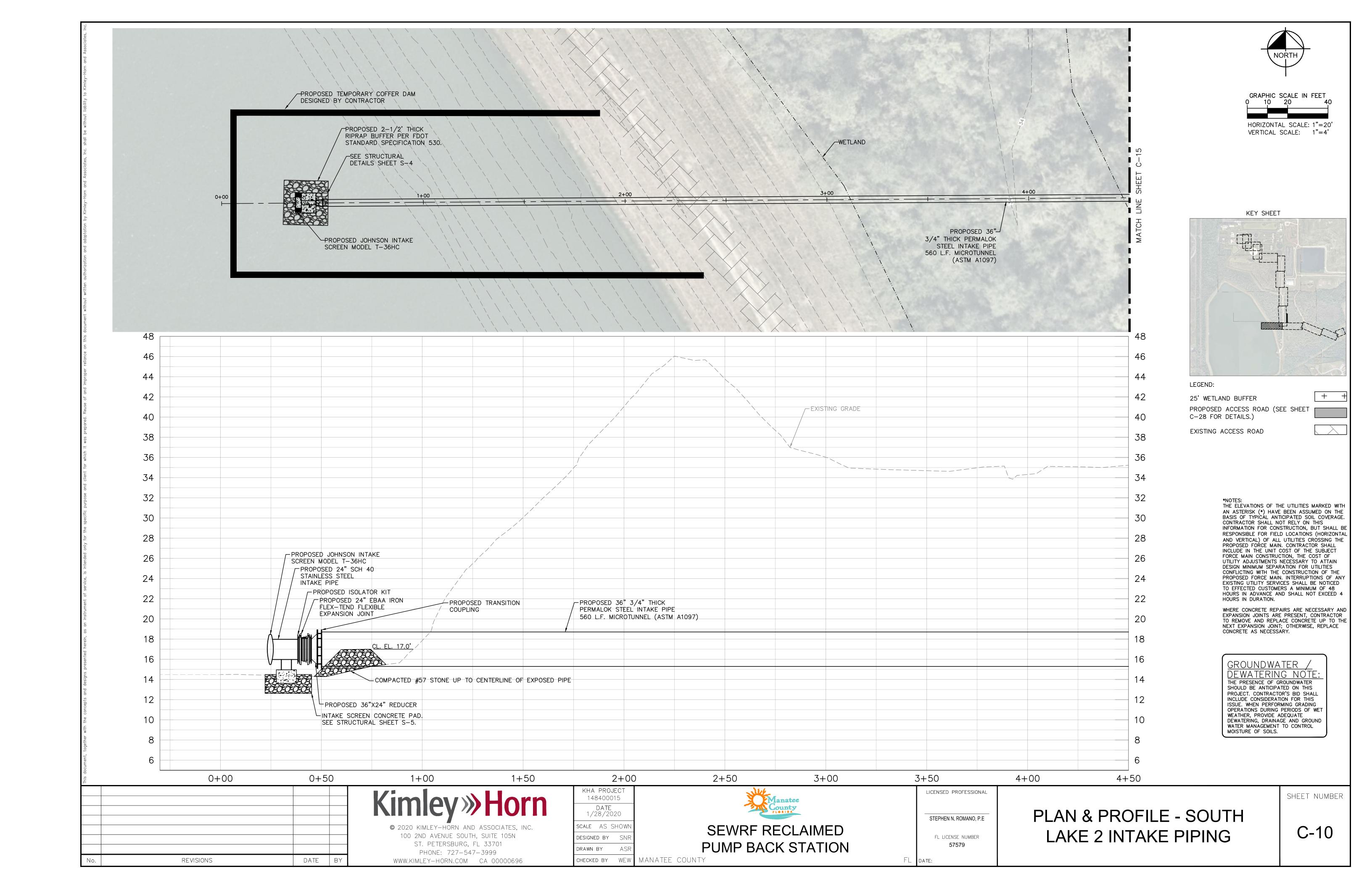


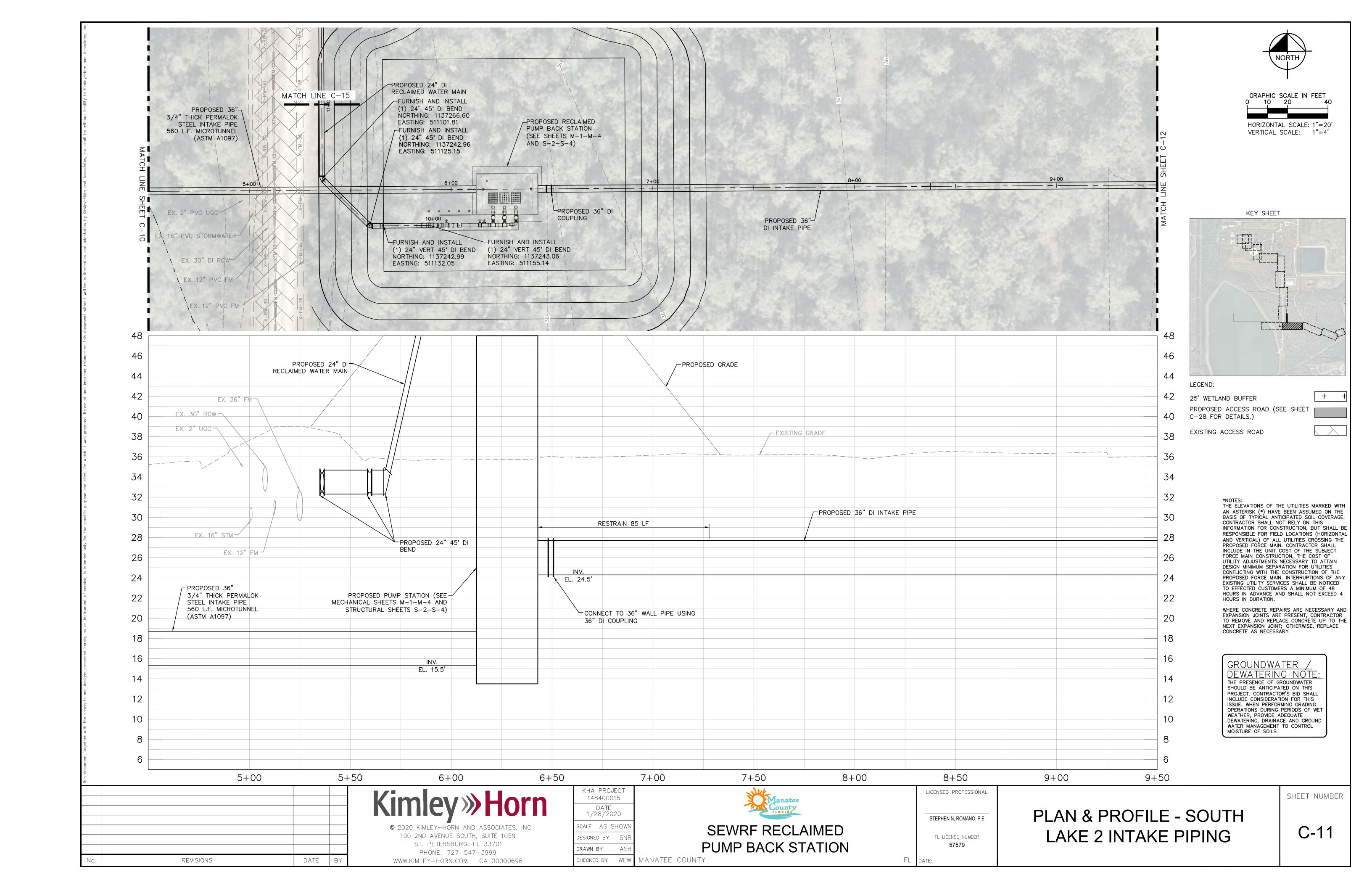


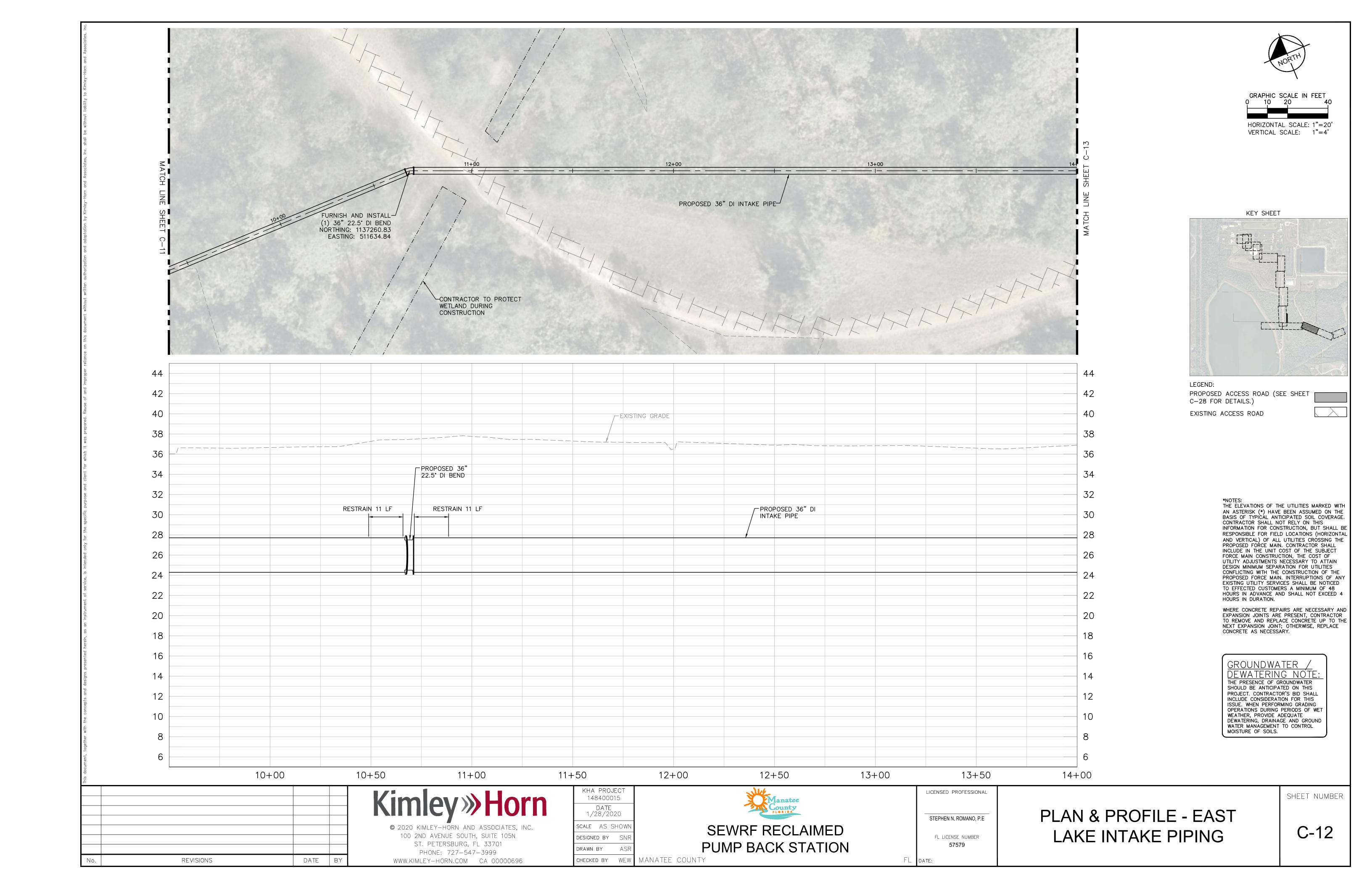


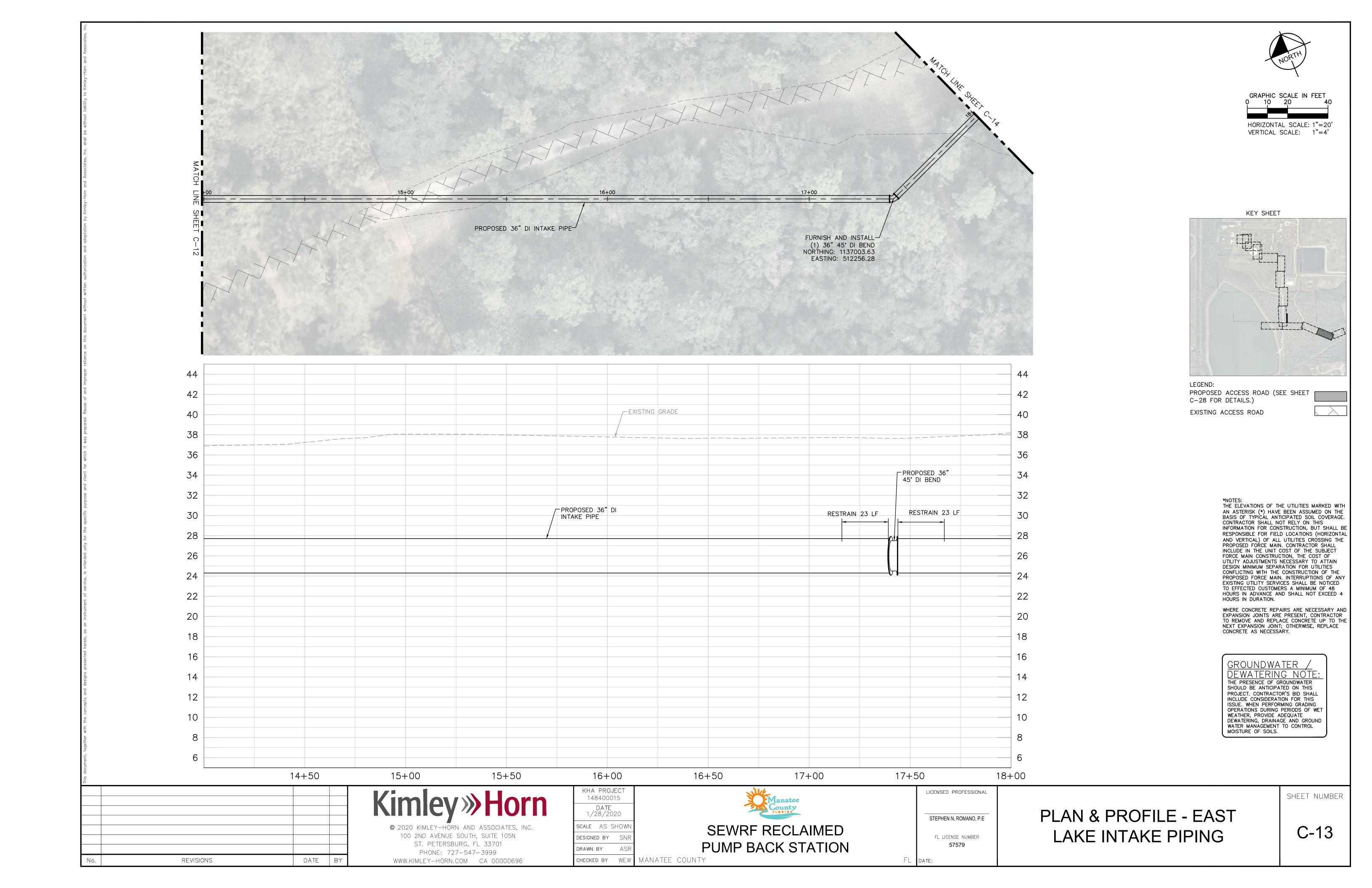


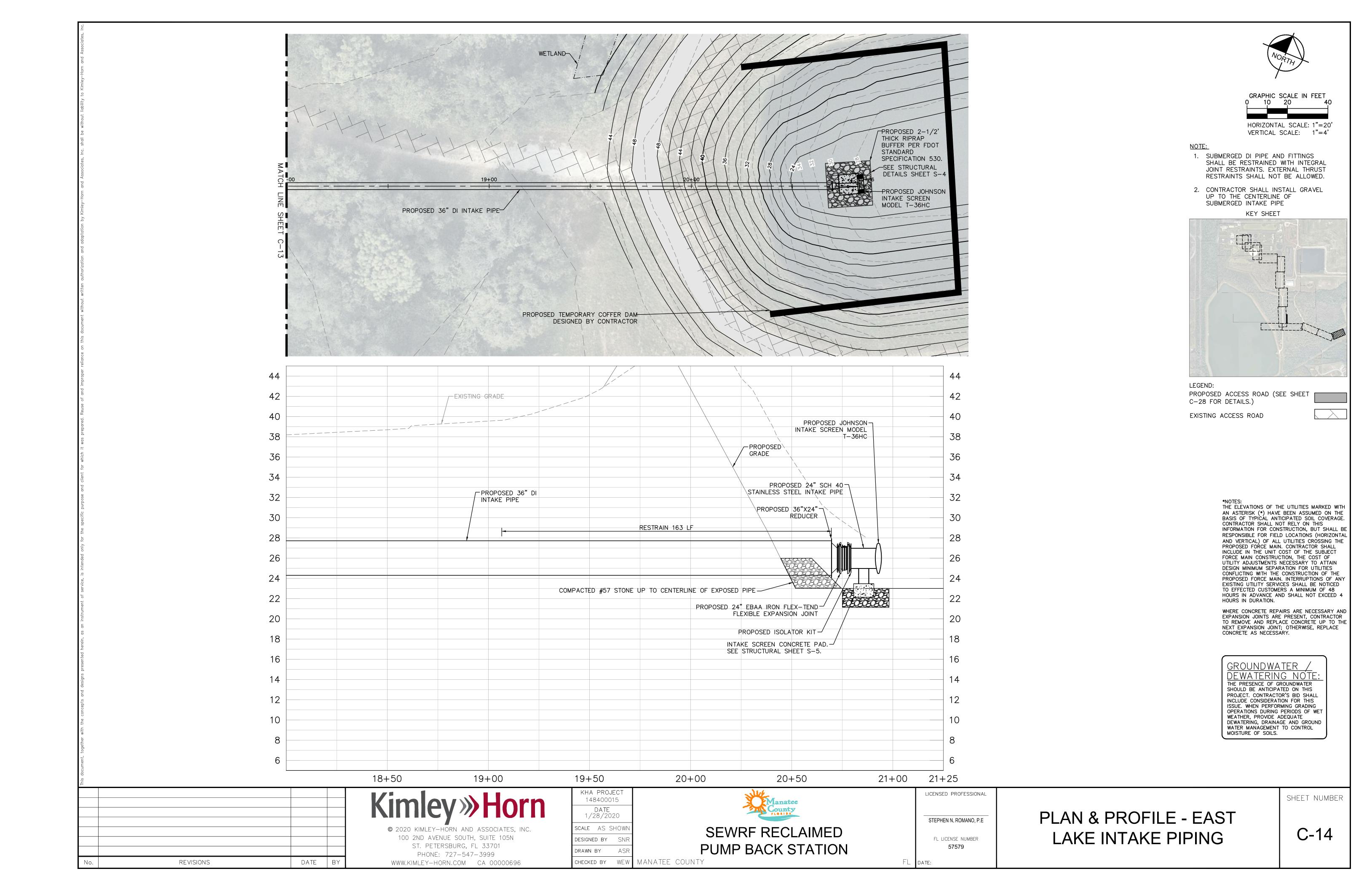


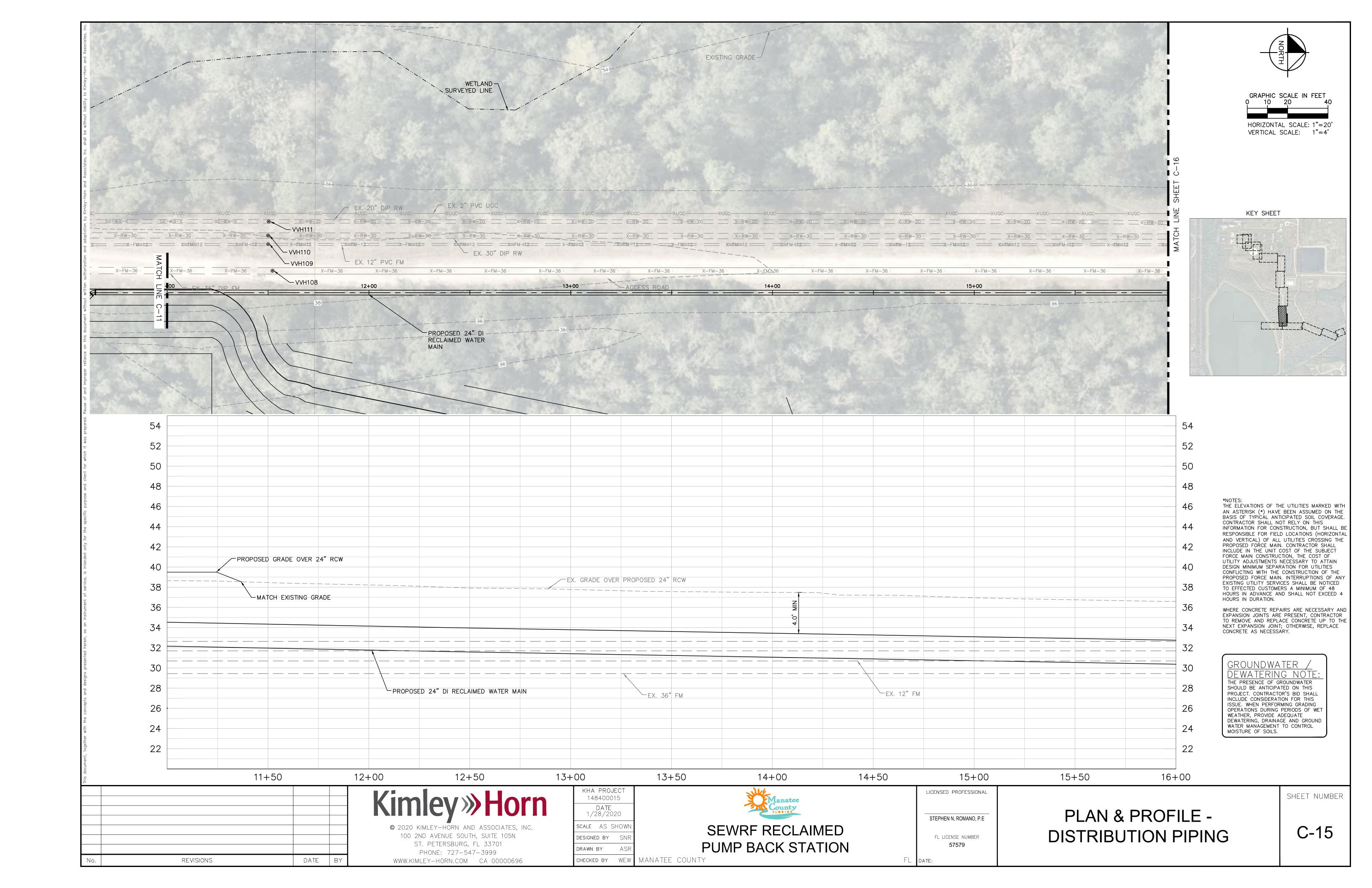


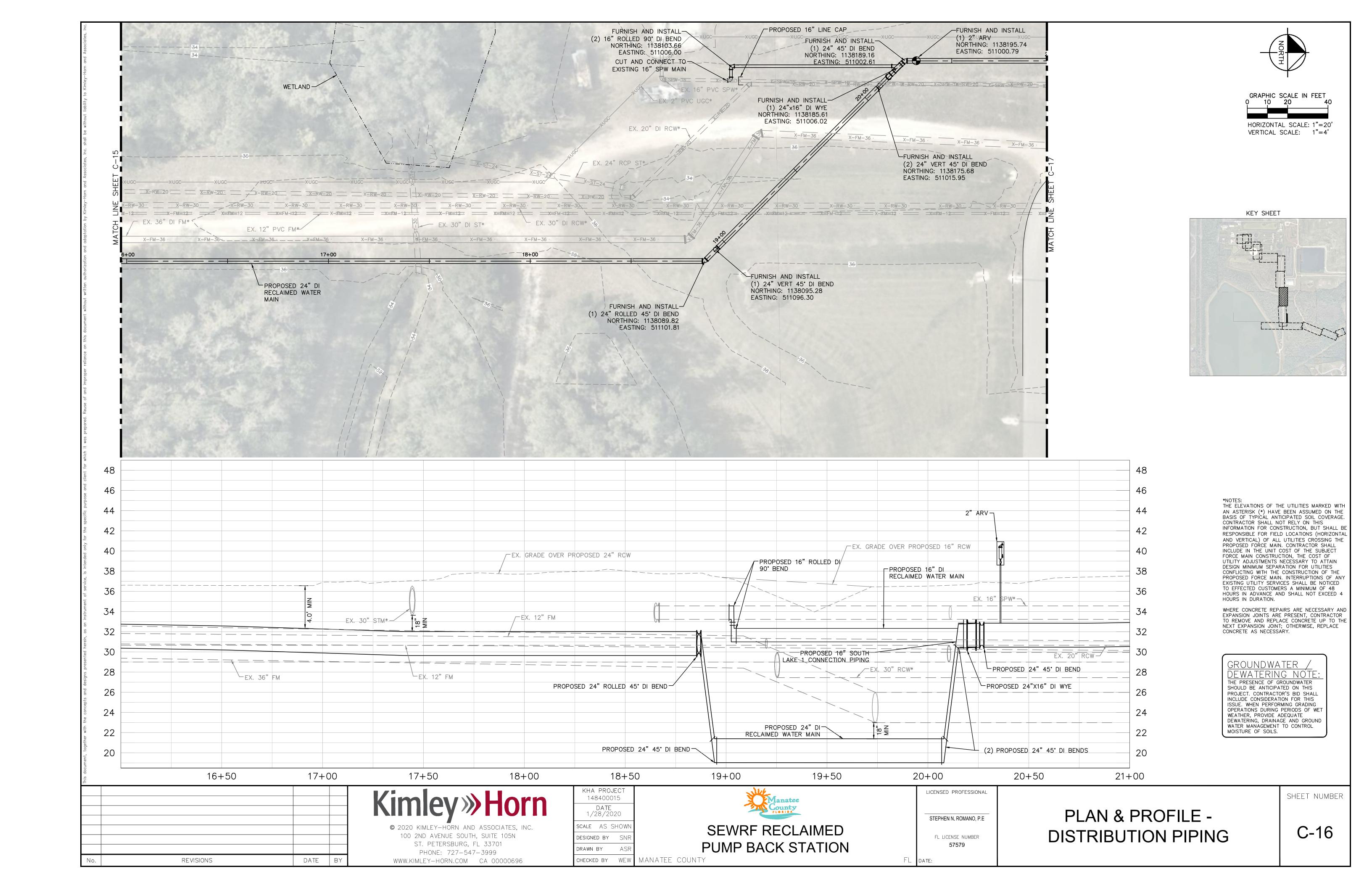


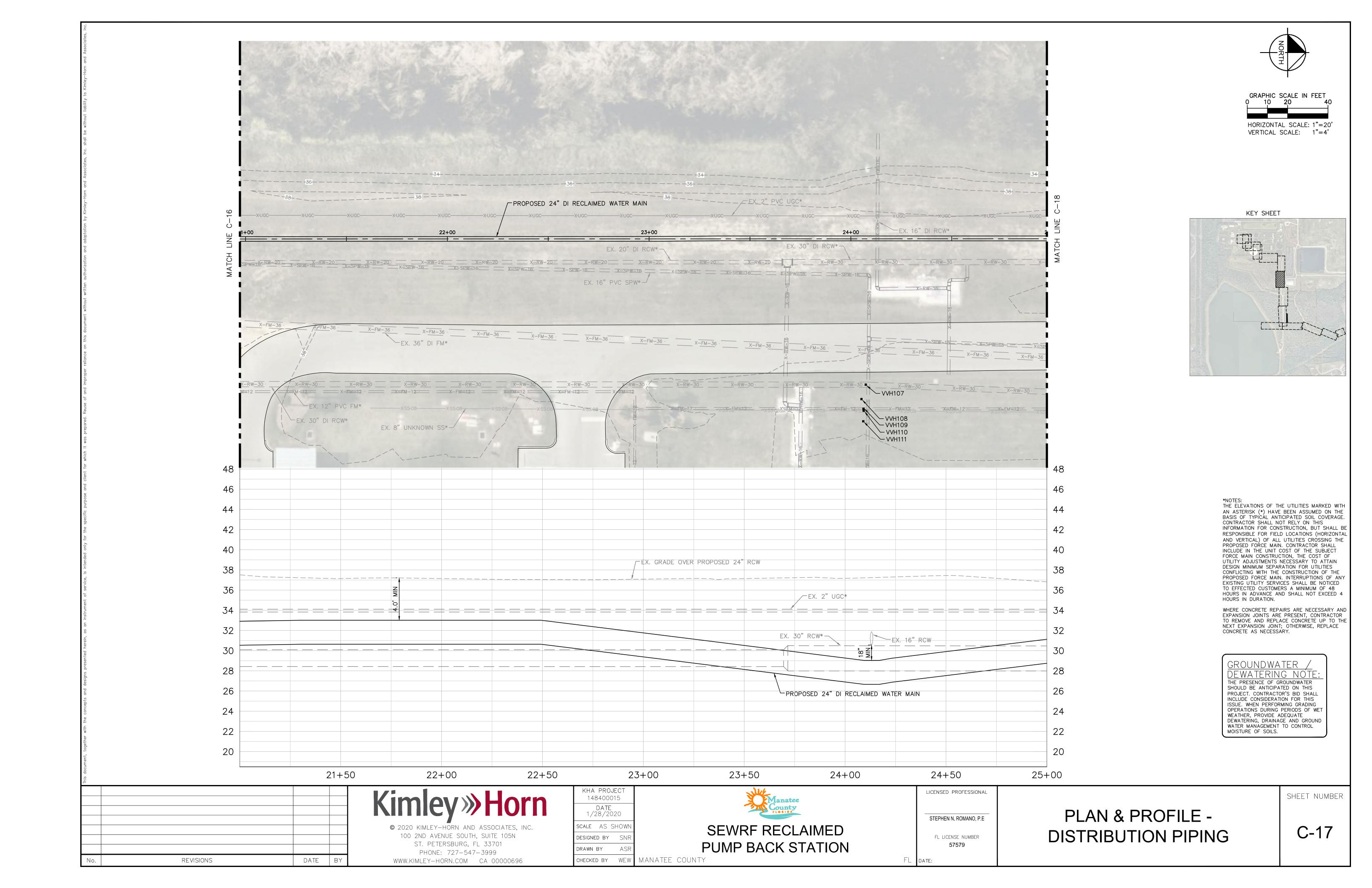


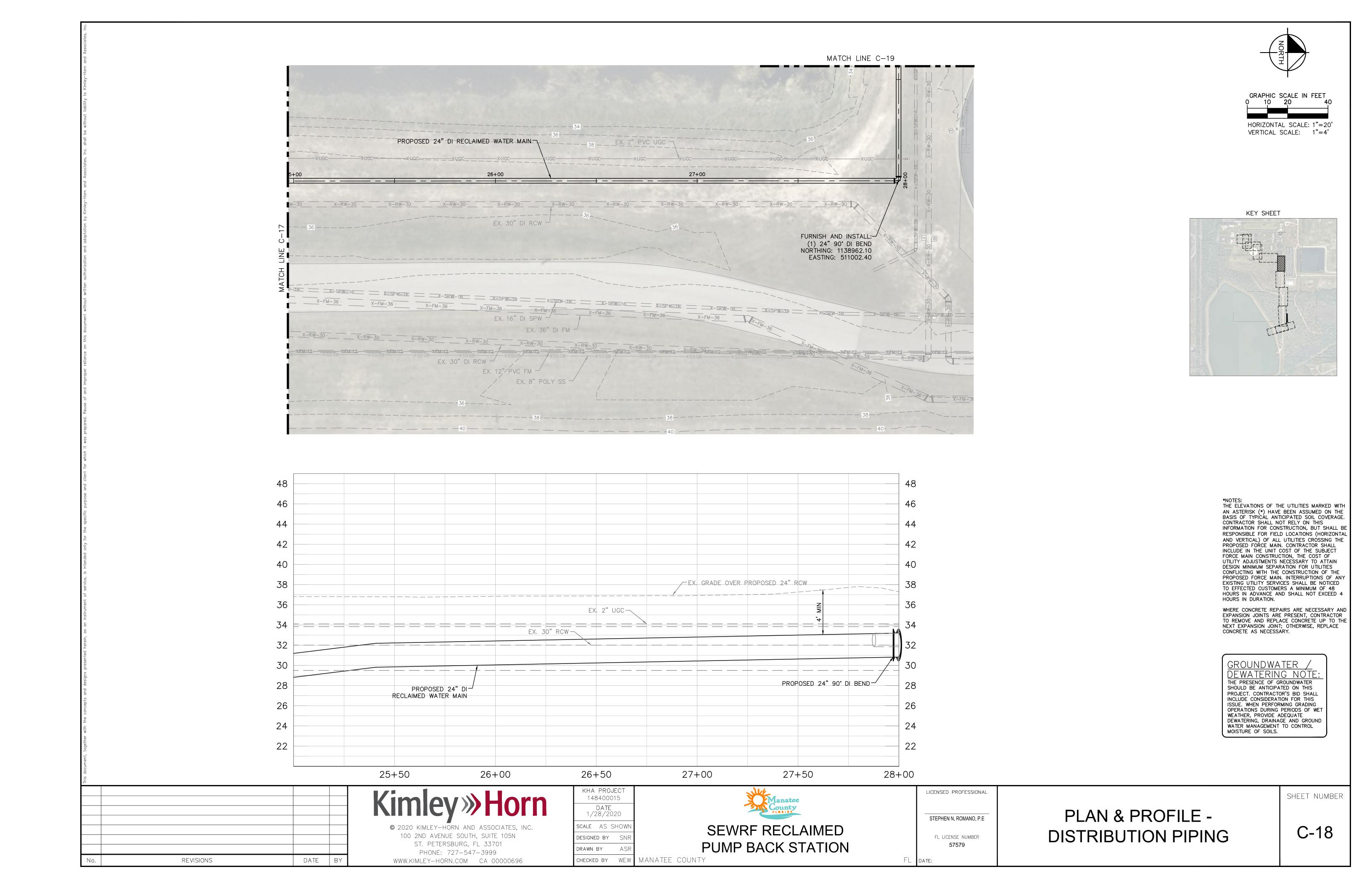


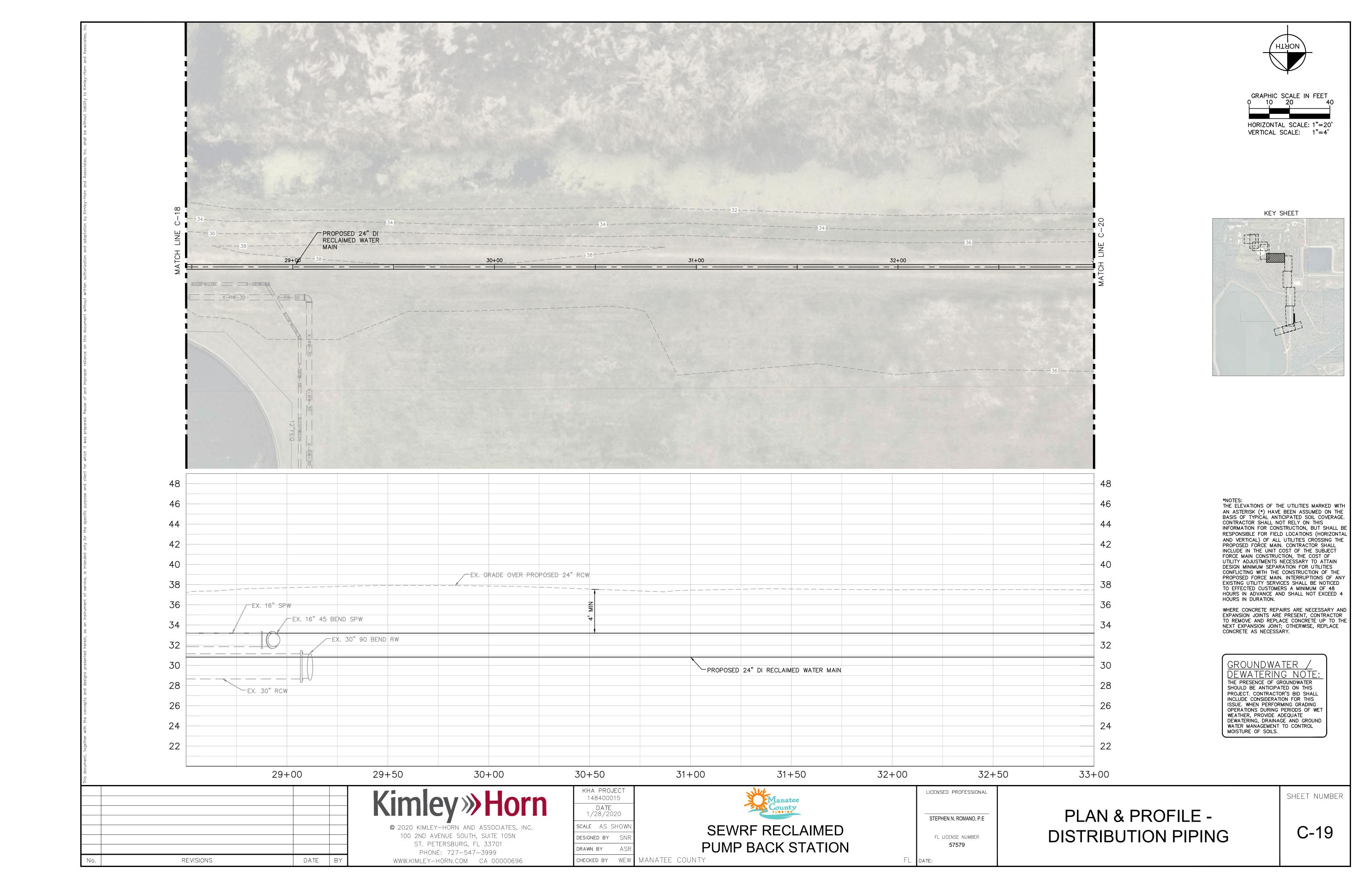


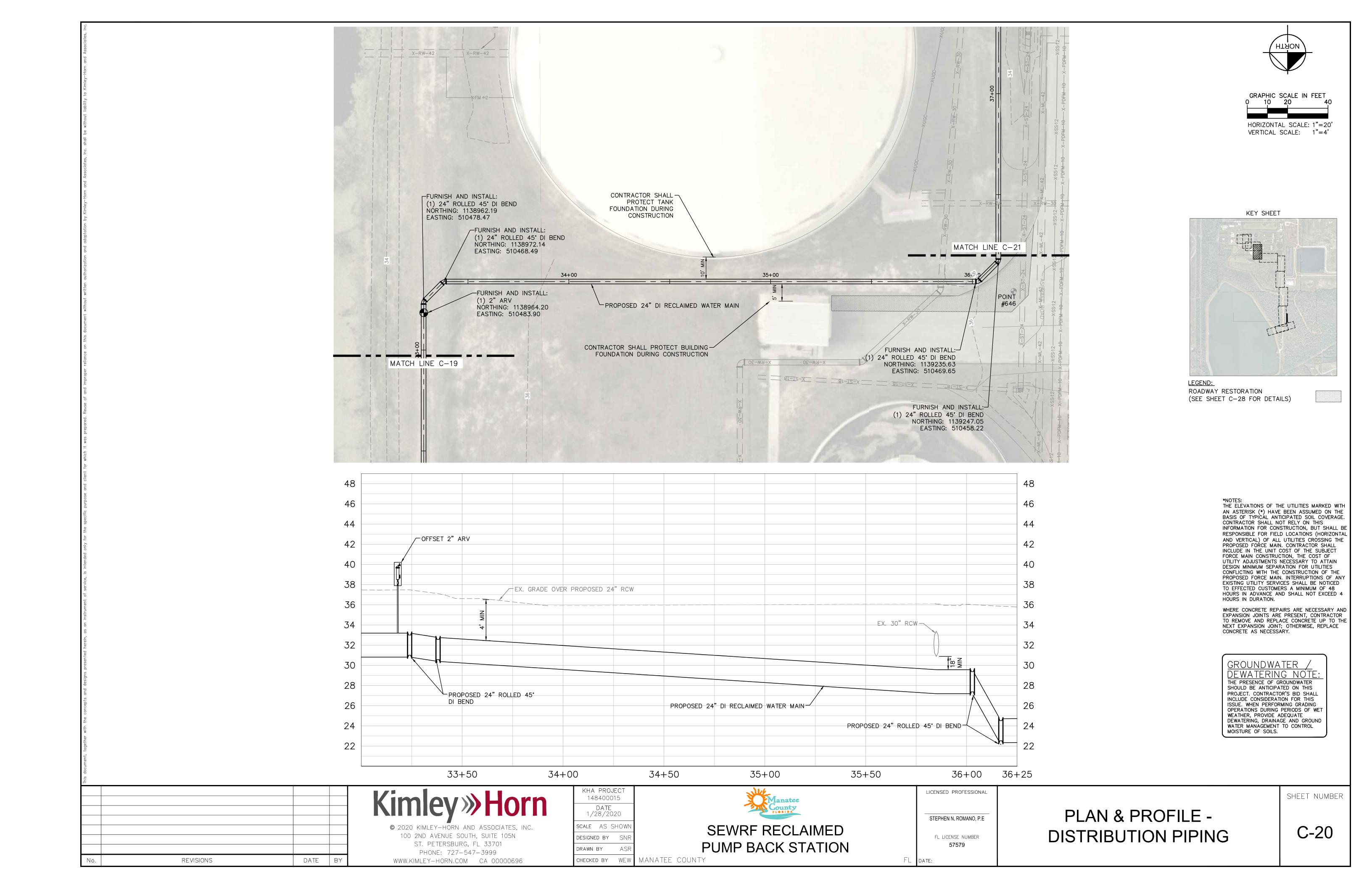


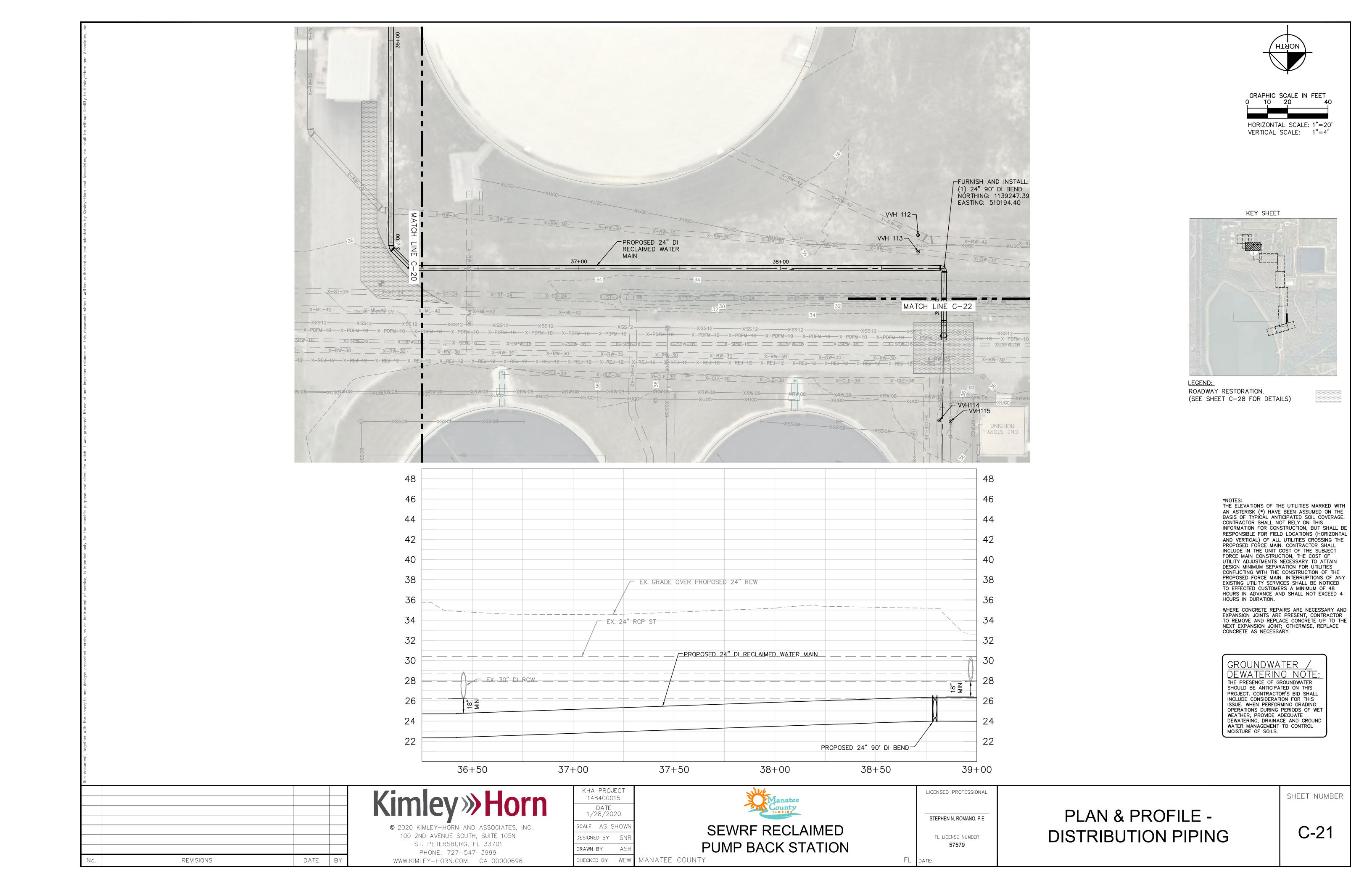


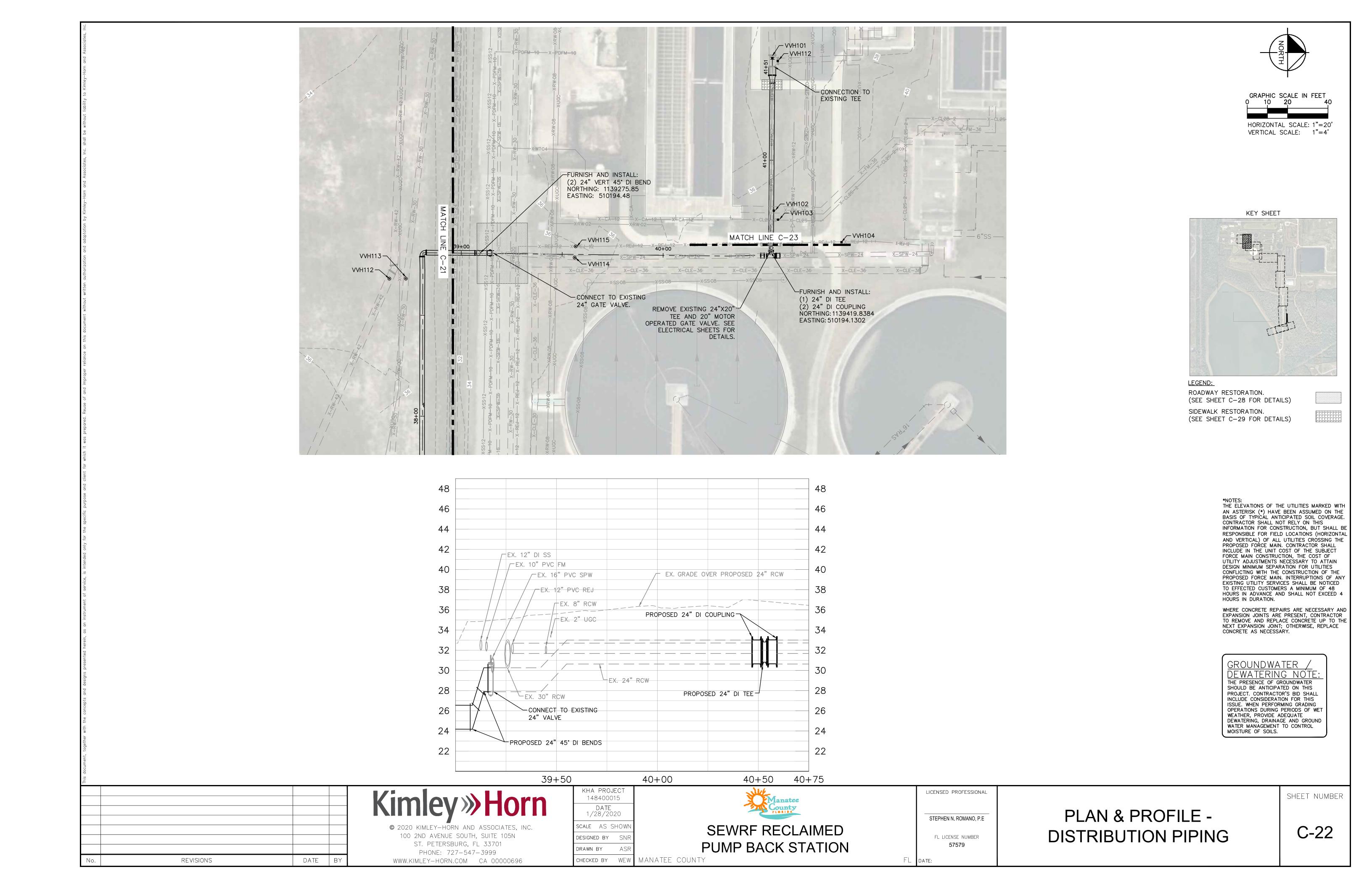


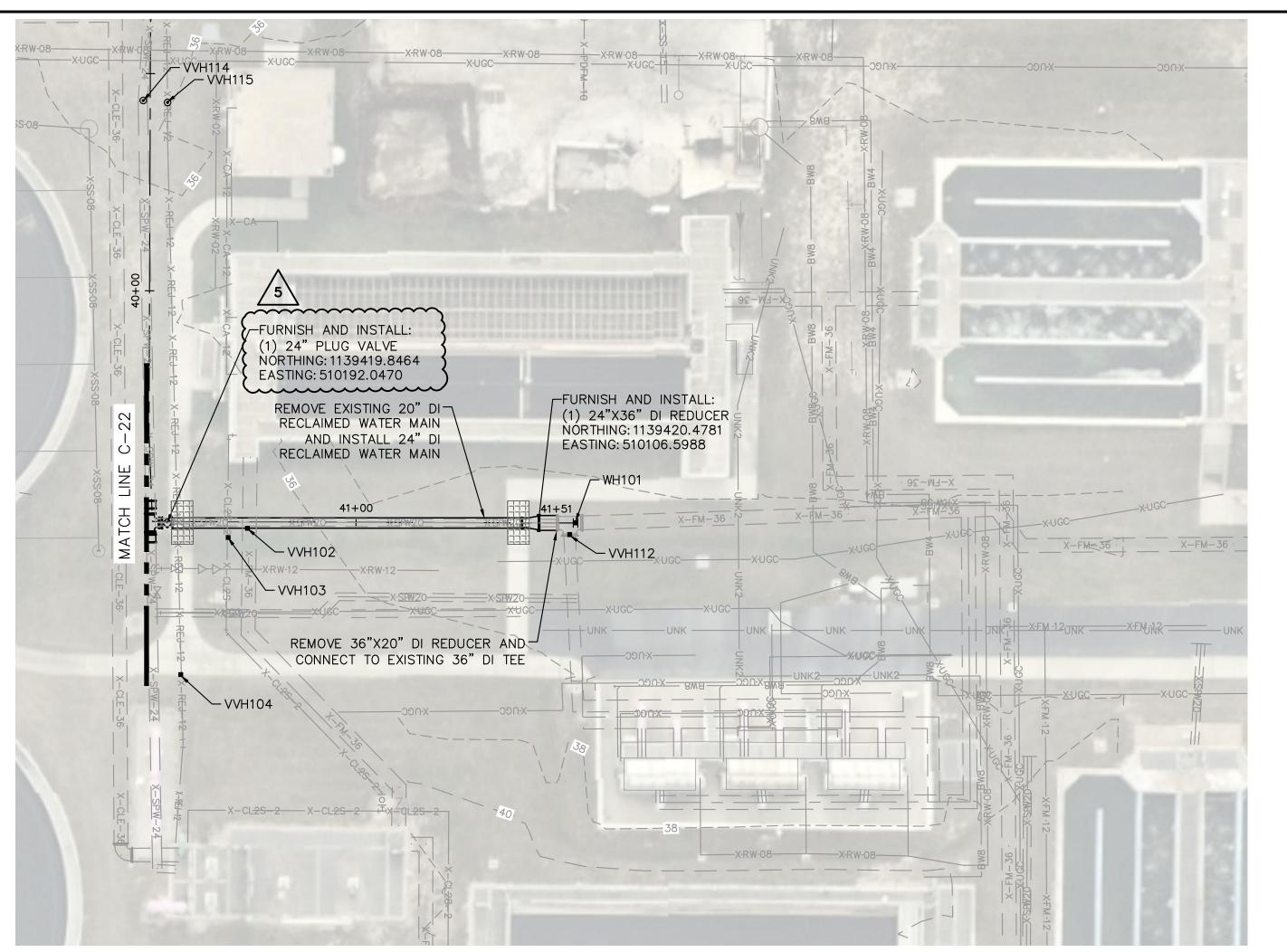


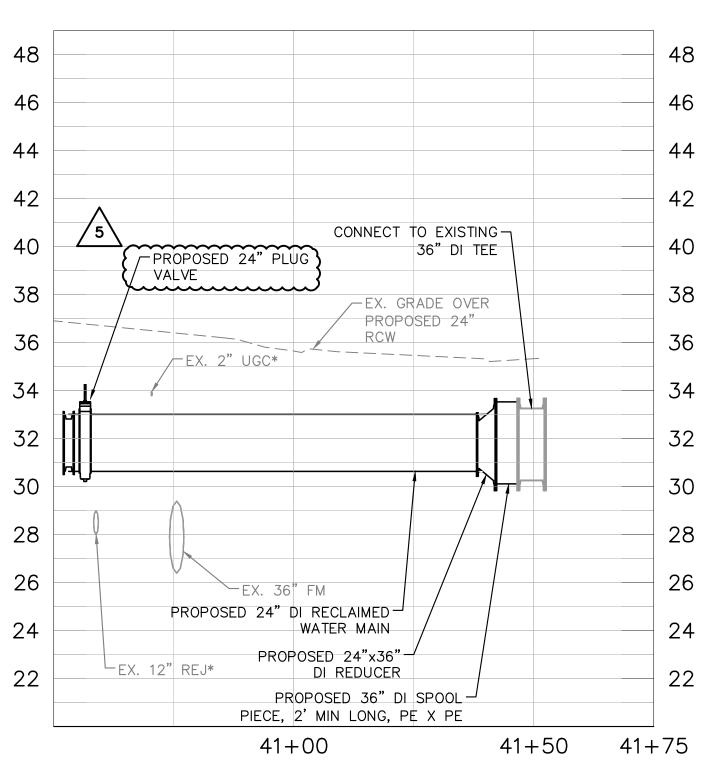








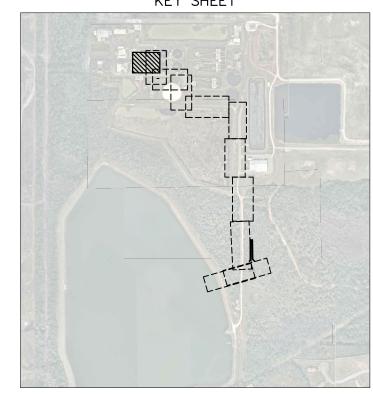




GRAPHIC SCALE IN FEET O 10 20 40

HORIZONTAL SCALE: 1"=20' VERTICAL SCALE: 1"=4"

KEY SHEET



SIDEWALK RESTORATION. (SEE SHEET C-29 FOR DETAILS)

THE ELEVATIONS OF THE UTILITIES MARKED WITH AN ASTERISK (*) HAVE BEEN ASSUMED ON THE BASIS OF TYPICAL ANTICIPATED SOIL COVERAGE. CONTRACTOR SHALL NOT RELY ON THIS INFORMATION FOR CONSTRUCTION, BUT SHALL B RESPONSIBLE FOR FIELD LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL UTILITIES CROSSING THE PROPOSED FORCE MAIN. CONTRACTOR SHALL INCLUDE IN THE UNIT COST OF THE SUBJECT FORCE MAIN CONSTRUCTION, THE COST OF UTILITY ADJUSTMENTS NECESSARY TO ATTAIN DESIGN MINIMUM SEPARATION FOR UTILITIES CONFLICTING WITH THE CONSTRUCTION OF THE PROPOSED FORCE MAIN. INTERRUPTIONS OF ANY EXISTING UTILITY SERVICES SHALL BE NOTICED TO EFFECTED CUSTOMERS A MINIMUM OF 48 HOURS IN ADVANCE AND SHALL NOT EXCEED 4 HOURS IN DURATION.

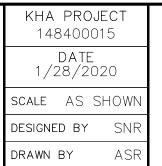
WHERE CONCRETE REPAIRS ARE NECESSARY AND EXPANSION JOINTS ARE PRESENT, CONTRACTOR TO REMOVE AND REPLACE CONCRETE UP TO THE NEXT EXPANSION JOINT; OTHERWISE, REPLACE CONCRETE AS NECESSARY.

GROUNDWATER DEWATERING NOTE
THE PRESENCE OF GROUNDWATER
SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR THIS ISSUE. WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS.

5	ADDENDUM 5	5/26/2020	SNR
·			
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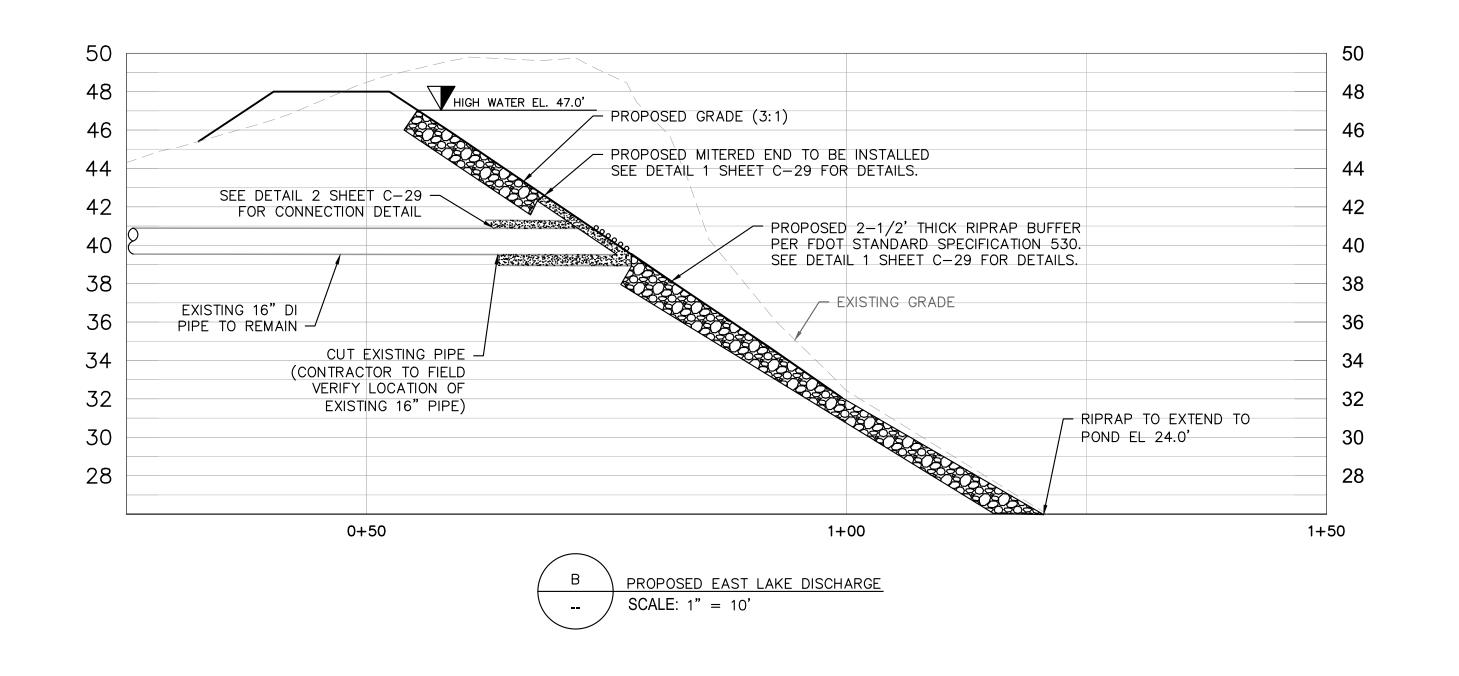
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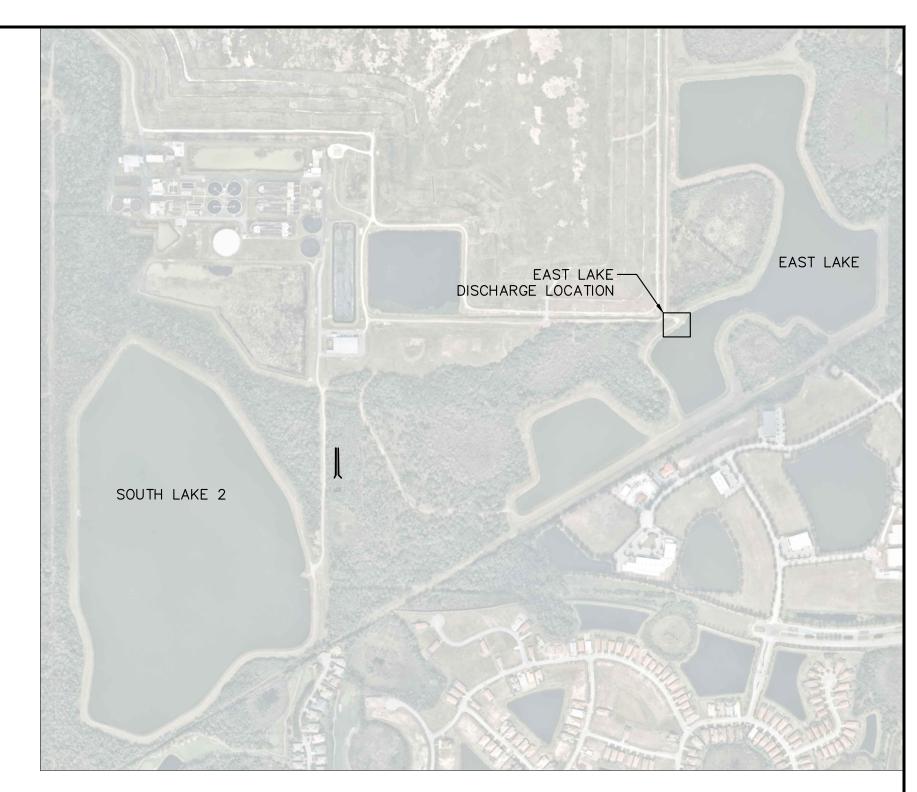


LICENSED PROFESSIONAL STEPHEN N. ROMANO, P.E FL LICENSE NUMBER 57579

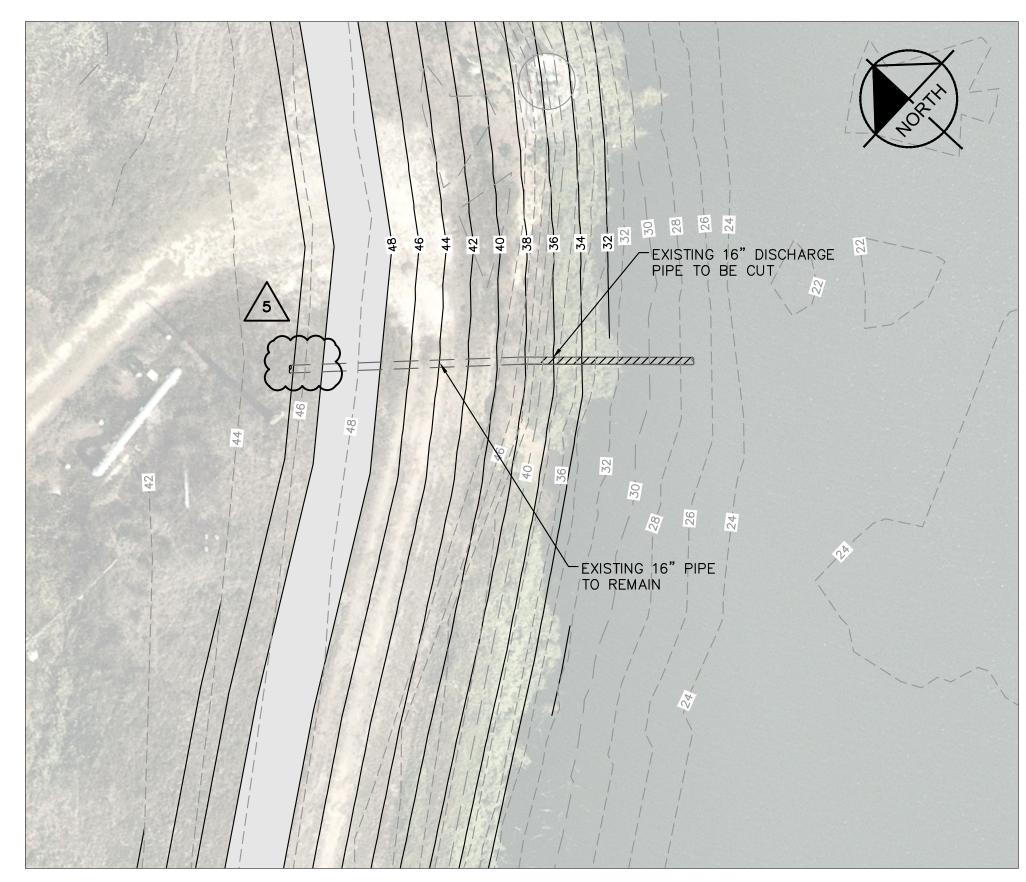
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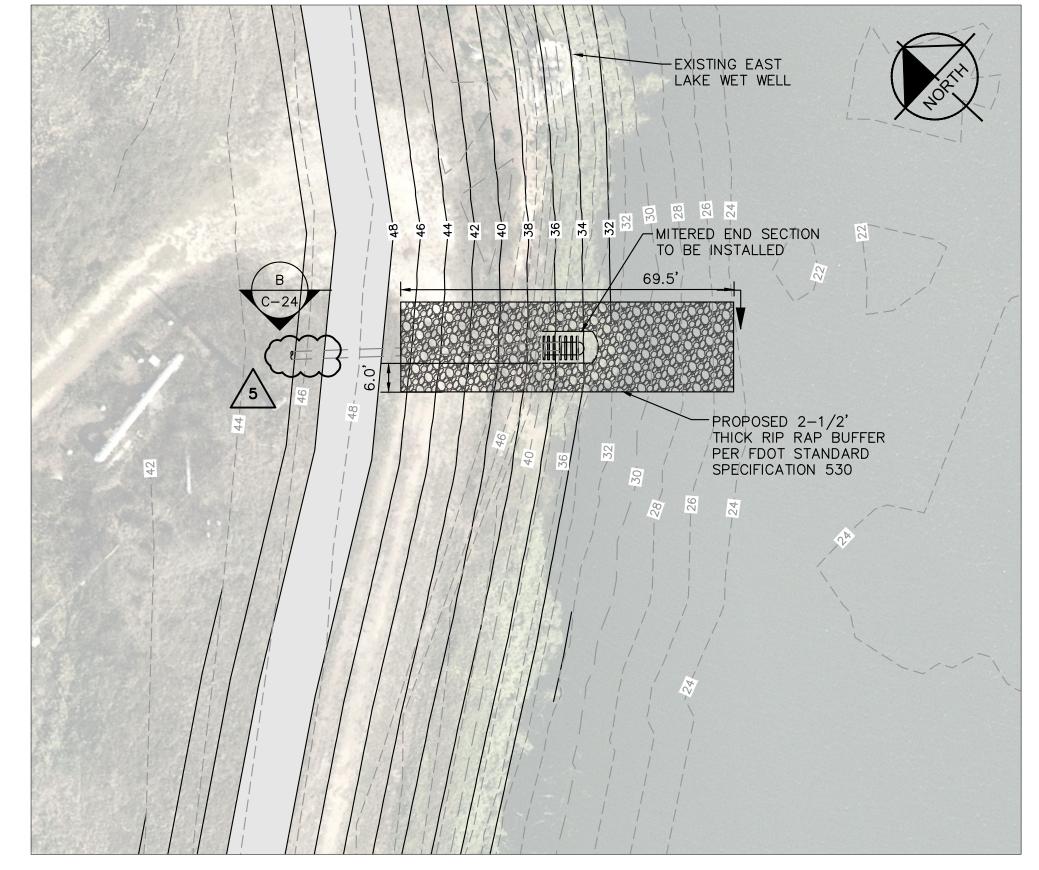
PLAN & PROFILE -DISTRIBUTION PIPING SHEET NUMBER





DISCHARGE LOCATION MAP OVERVIEW





EAST LAKE DISCHARGE DEMOLITION PLAN PROPOSED EAST LAKE DISCHARGE PLAN

5	ADDENDUM 5	5/26/2020 SNR
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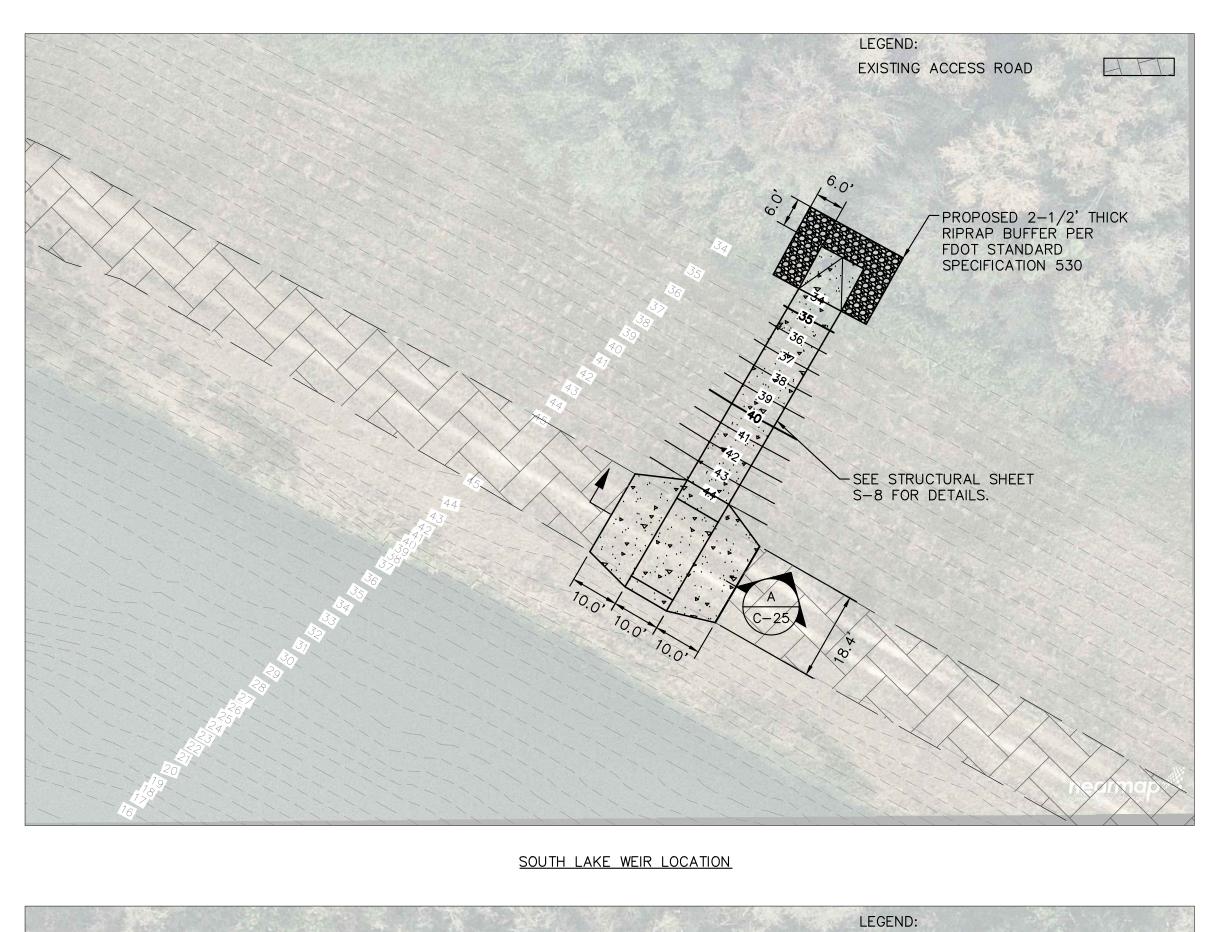
KHA PROJECT 148400015 DATE 1/28/2020 SCALE AS SHOW DESIGNED BY SNF

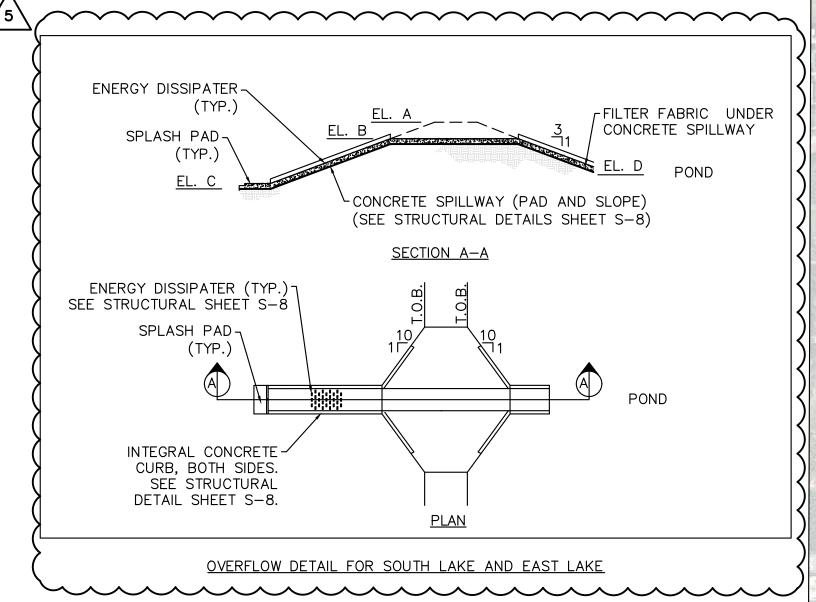
SEWRF RECLAIMED PUMP BACK STATION CHECKED BY WEW MANATEE COUNTY

LICENSED PROFESSIONAL STEPHEN N. ROMANO, P.E FL LICENSE NUMBER

EAST LAKE ENERGY DISSIPATION STRUCTURE

SHEET NUMBER

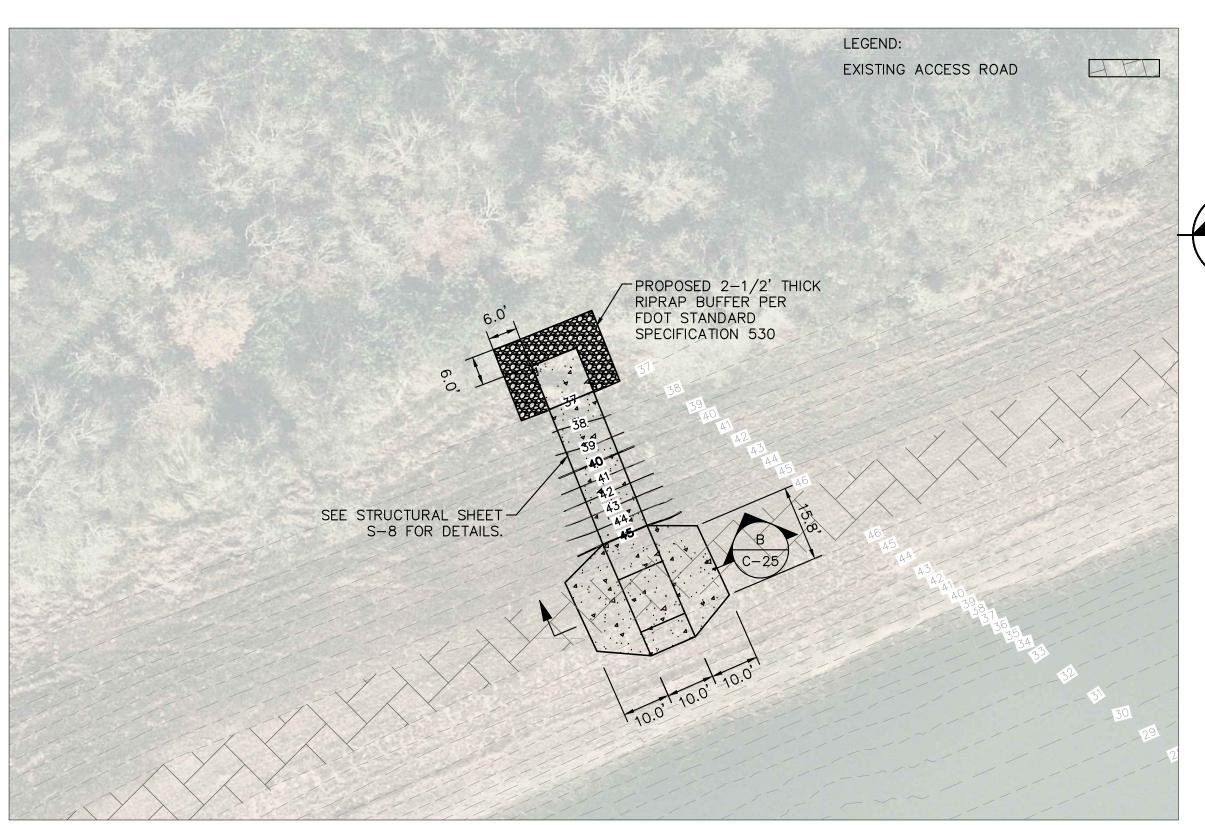




	ELEVATION TABLE	
DESCRIPTION	SOUTH LAKE	EAST LAKE
P OF BANK ELEVATION (A)	45.0'	46.0'
P OF WEIR ELEVATION (B)	44.0'	45.0'
LASH PAD ELEVATION (C)	34.0'	37.0'
ND SIDE ELEVATION (D)	42.0'	45.0'

EAST LAKE SOUTH LAKE OVERFLOW WEIR LOCATION FAST LAKE OVERFLOW WEIR LOCATION SOUTH LAKE 2

OVERFLOW STRUCTURE LOCATION MAP



EAST LAKE WEI	R LOCATION		

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KHA PROJE 148400015		Manatee
DATE 1/28/2020	0	County
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DESIGNED BY	SNR	
DRAWN BY	ASR	PUMP BACK STATION
CHECKED BY	WEW	MANATEE COUNTY

LICENSED PROFESSIONAL 1ED ION 57579

42

OVERFLOW STRUCTURES SHEET NUMBER

0+50

0+50

_EXISTING TOP OF BERM

5	ADDENDUM 5	5/26/2020	SNR	

DATE BY

REVISIONS

STEPHEN N. ROMANO, P.E FL LICENSE NUMBER FL DATE:

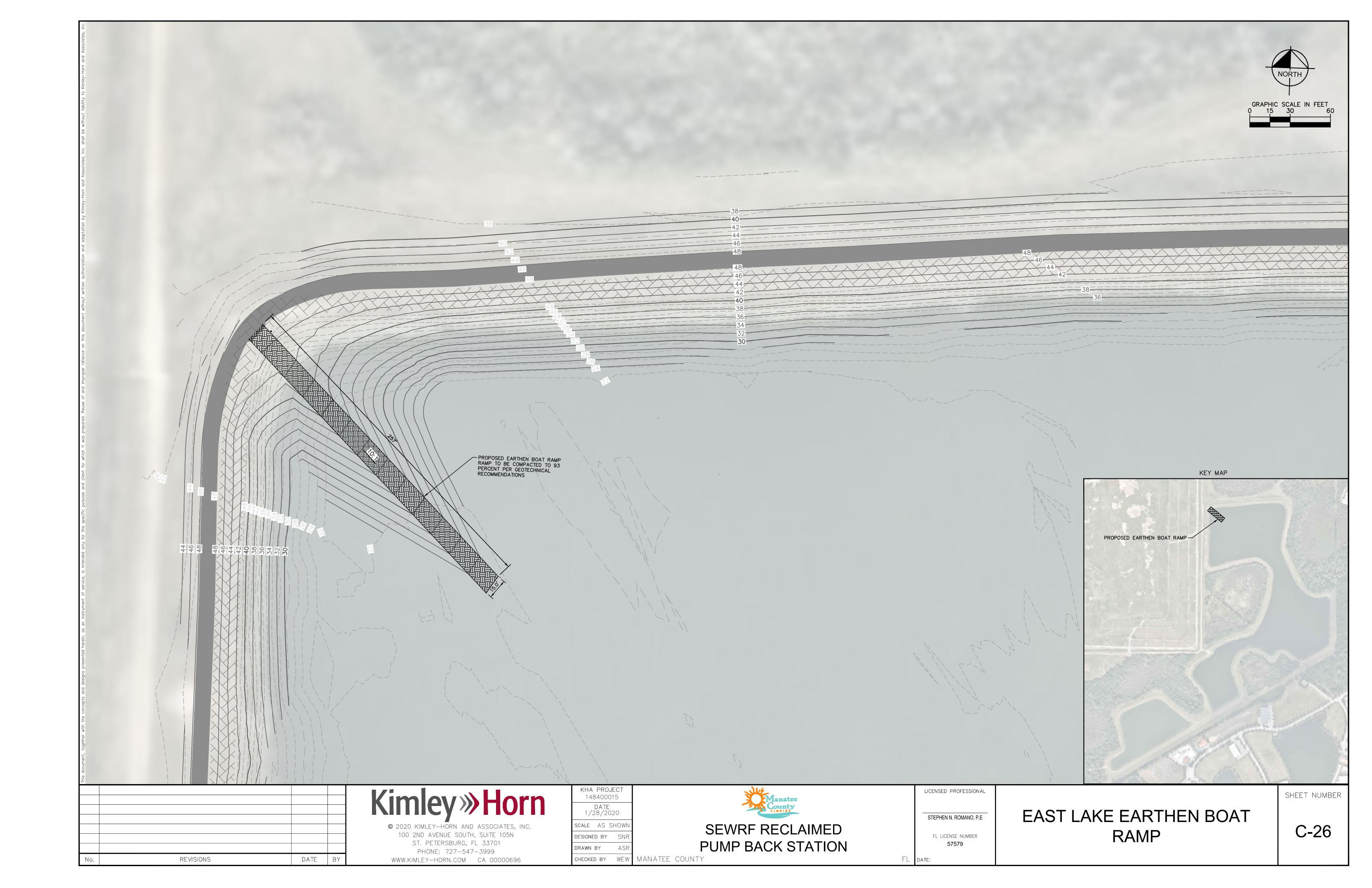
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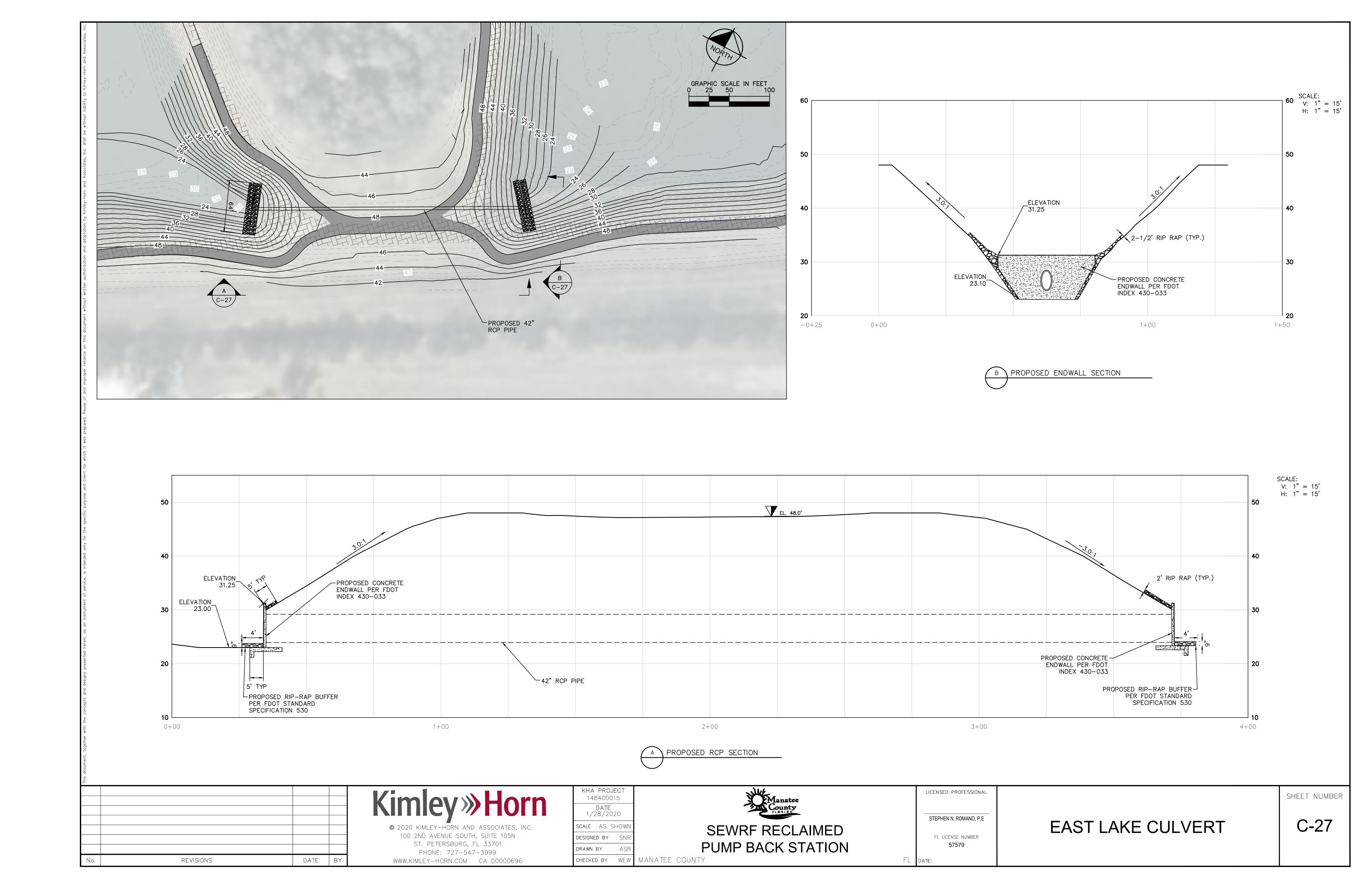
EXISTING TOP OF BERM

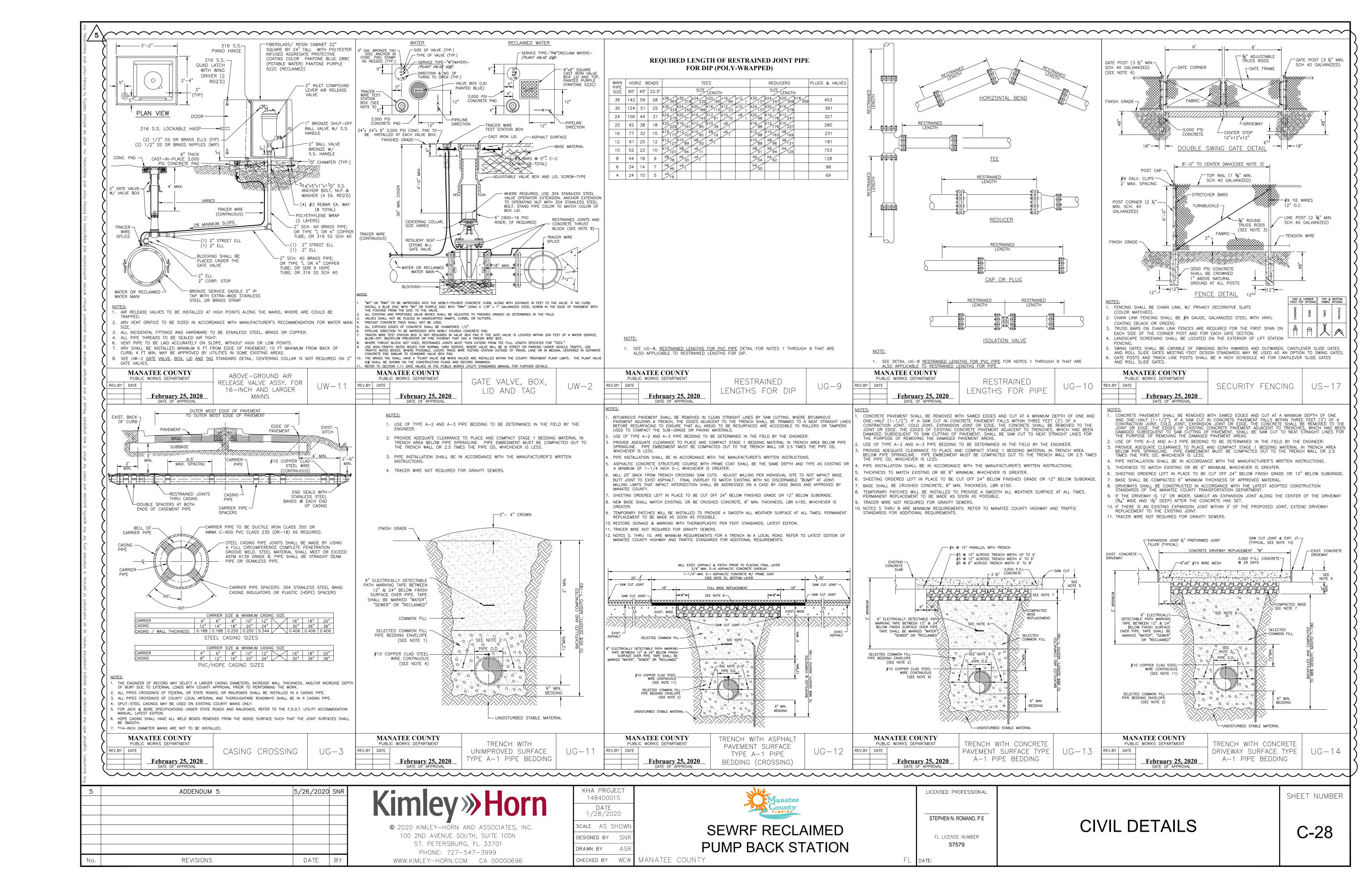
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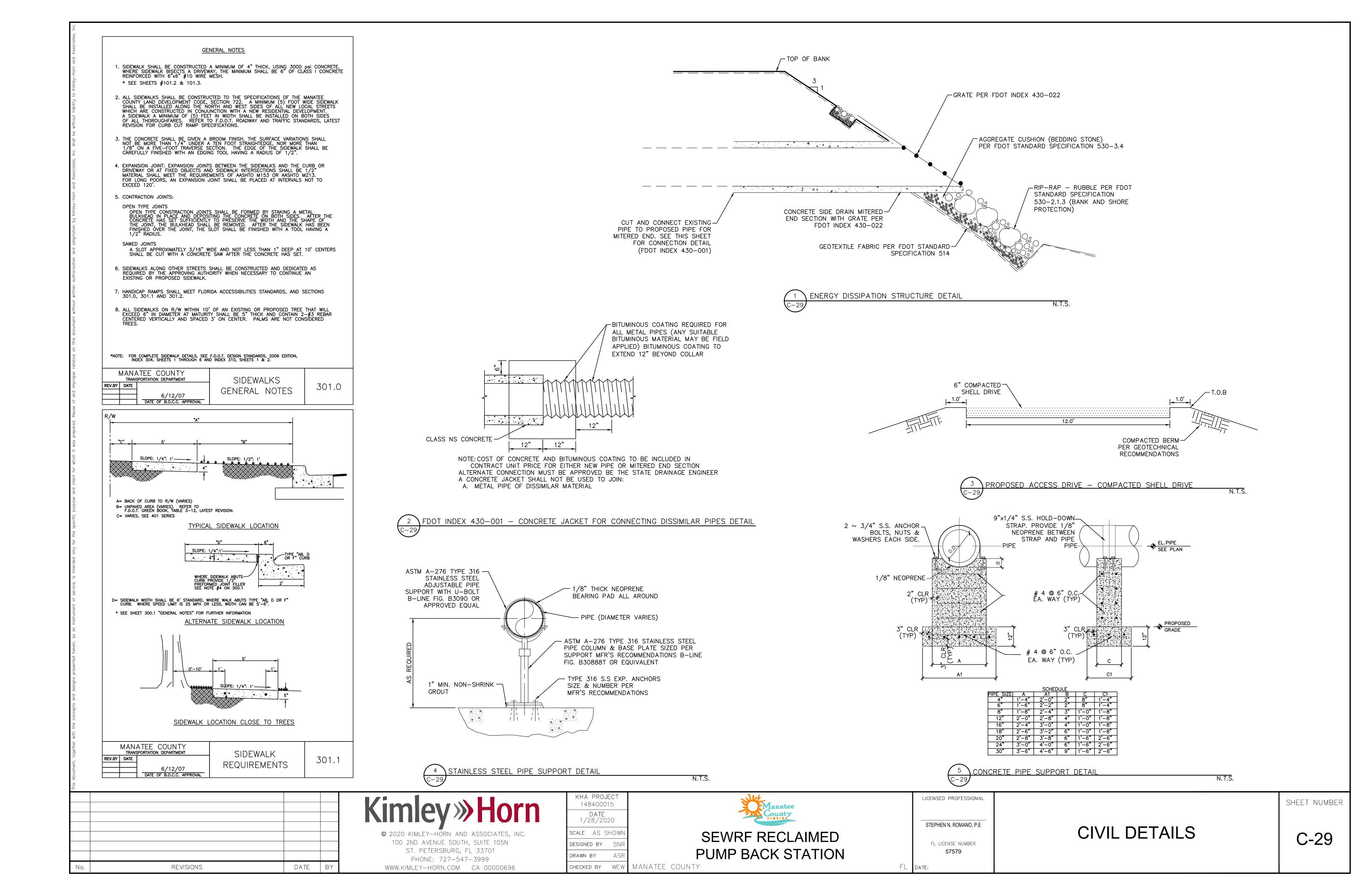
SOUTH LAKE - SECTION A

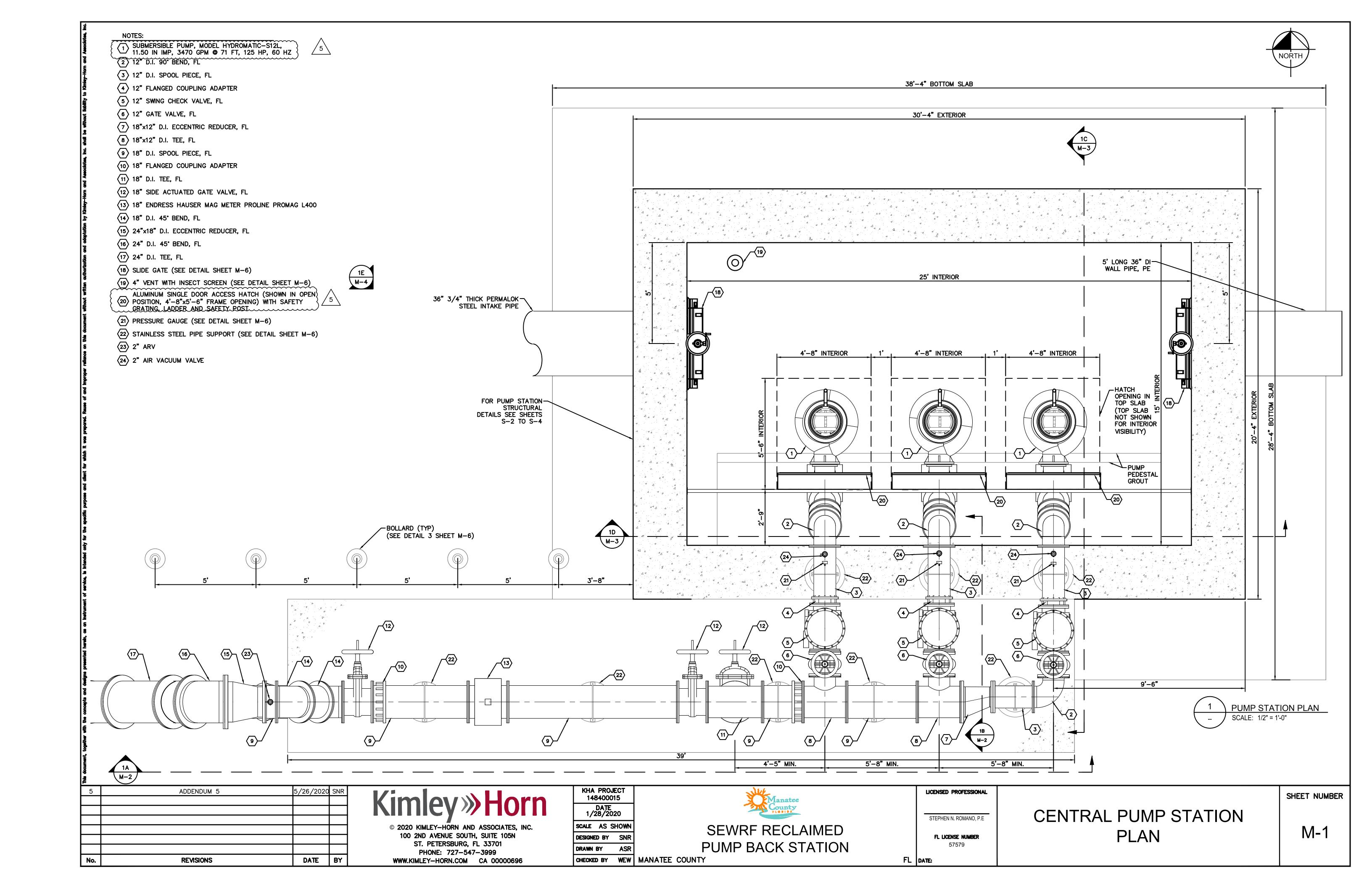
<u>EAST LAKE - SECTION B</u>

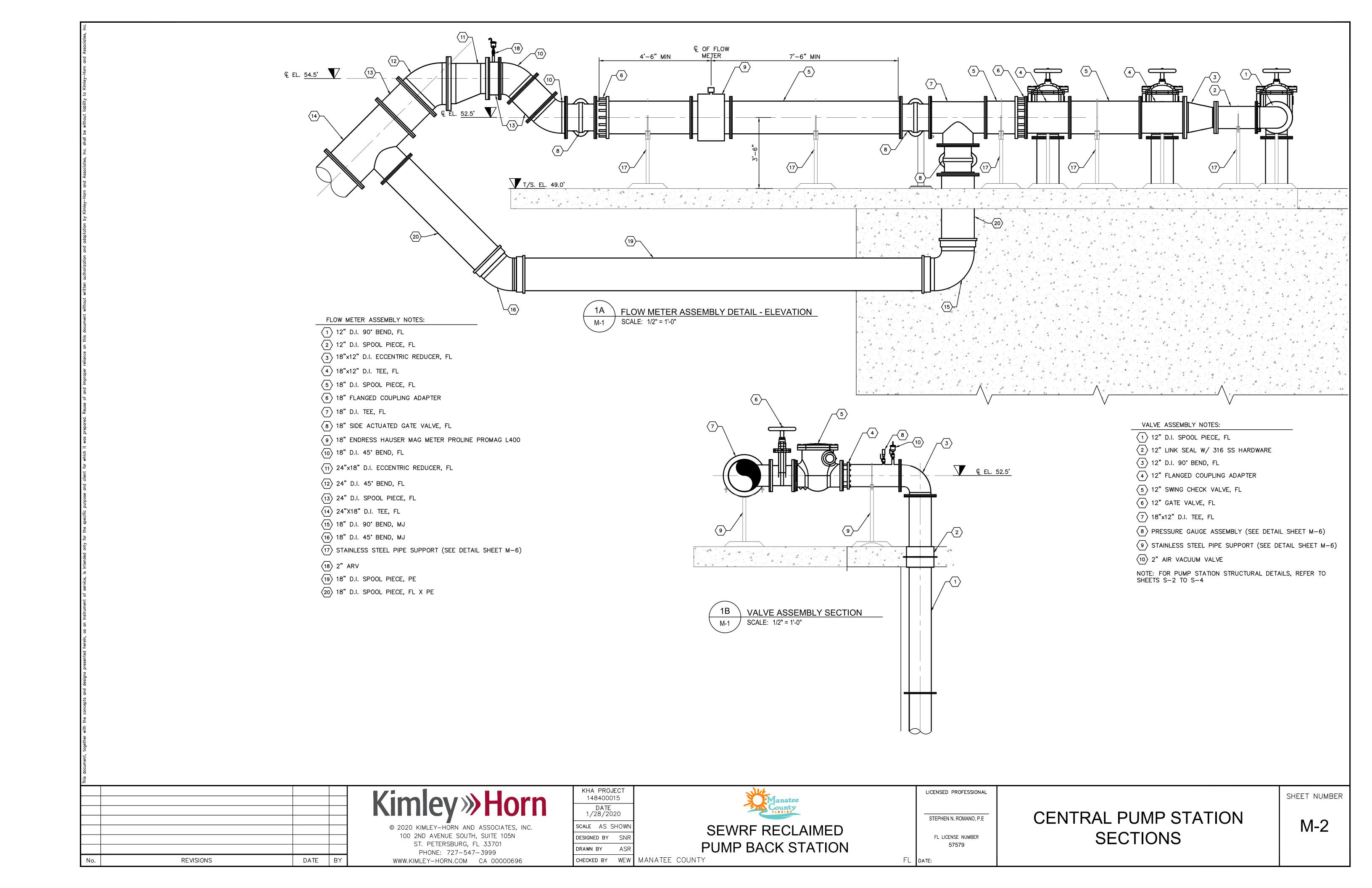


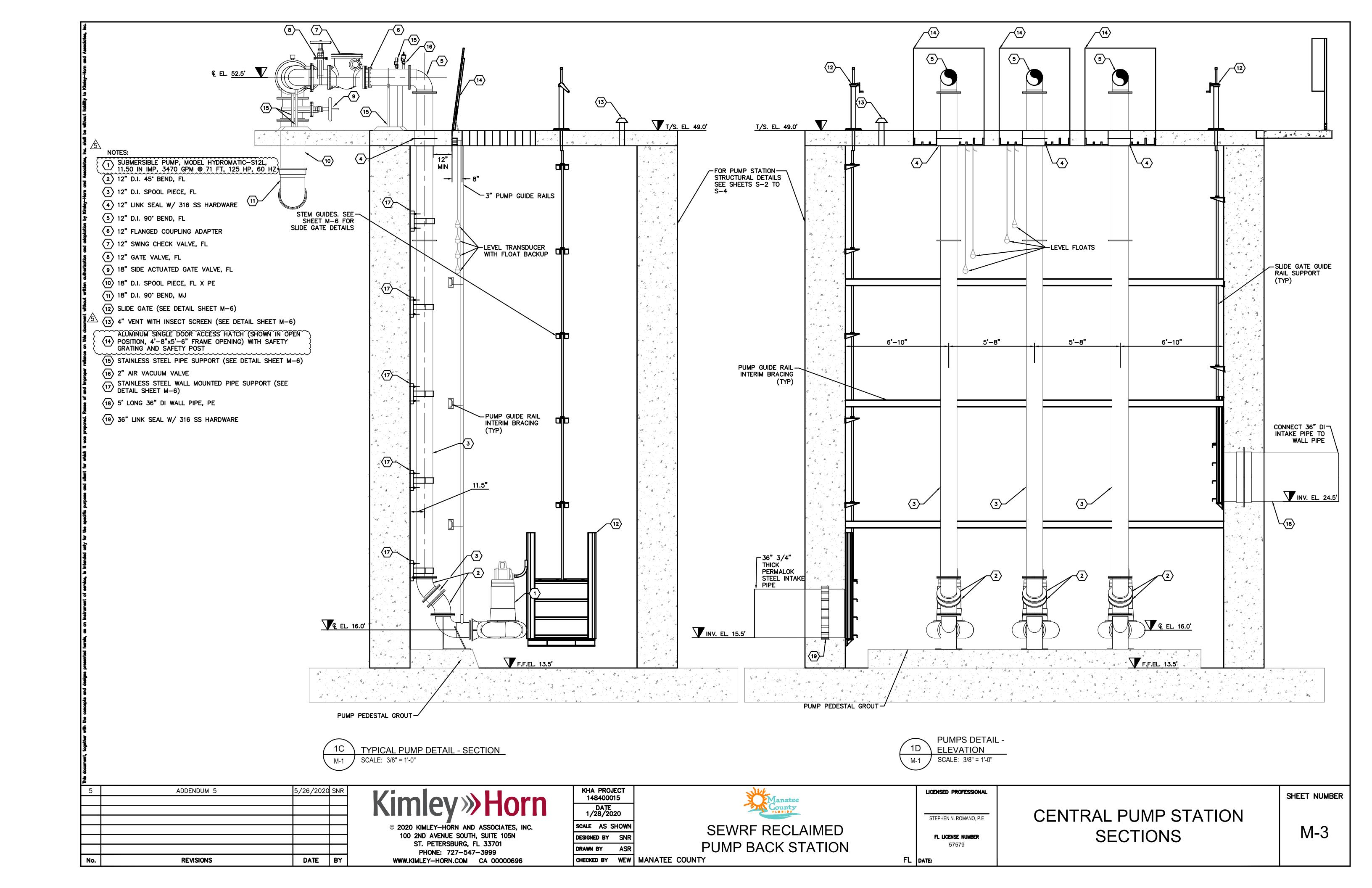


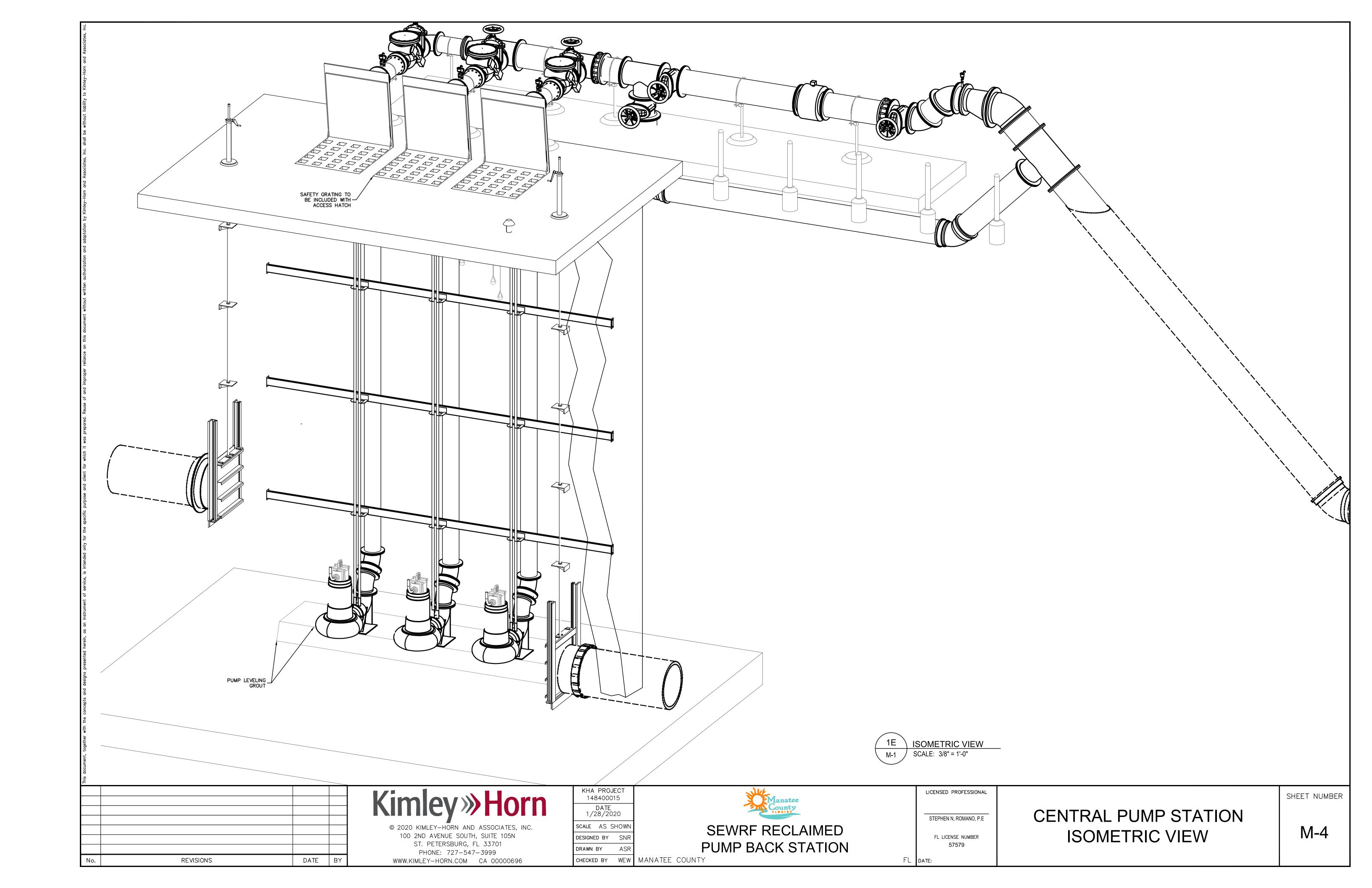


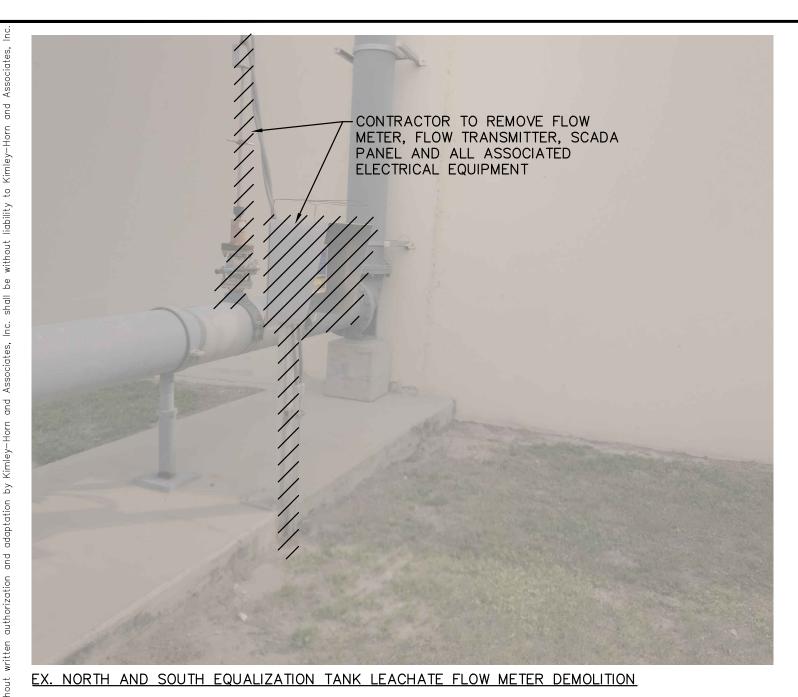


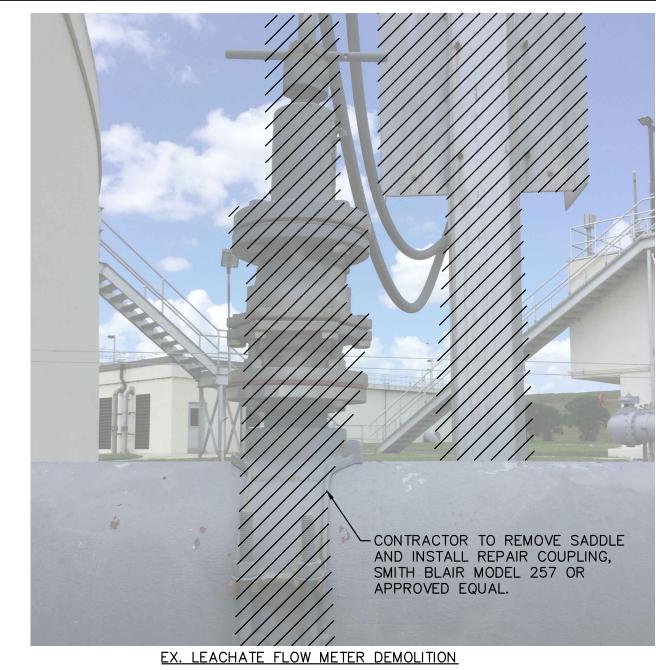


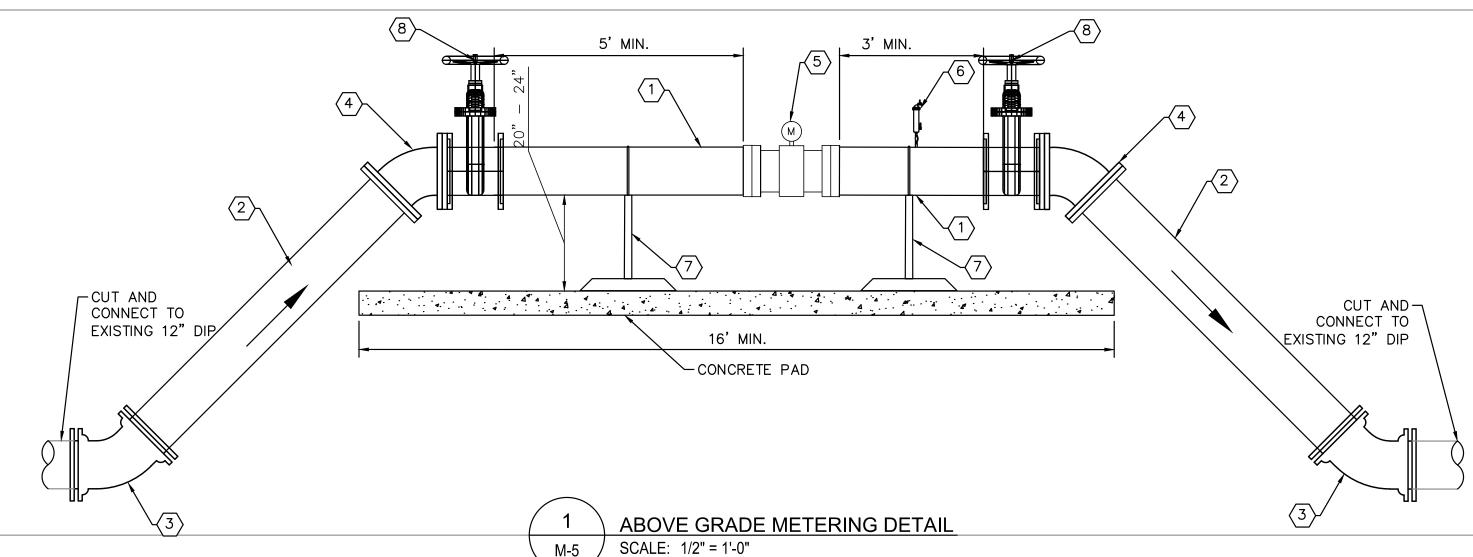










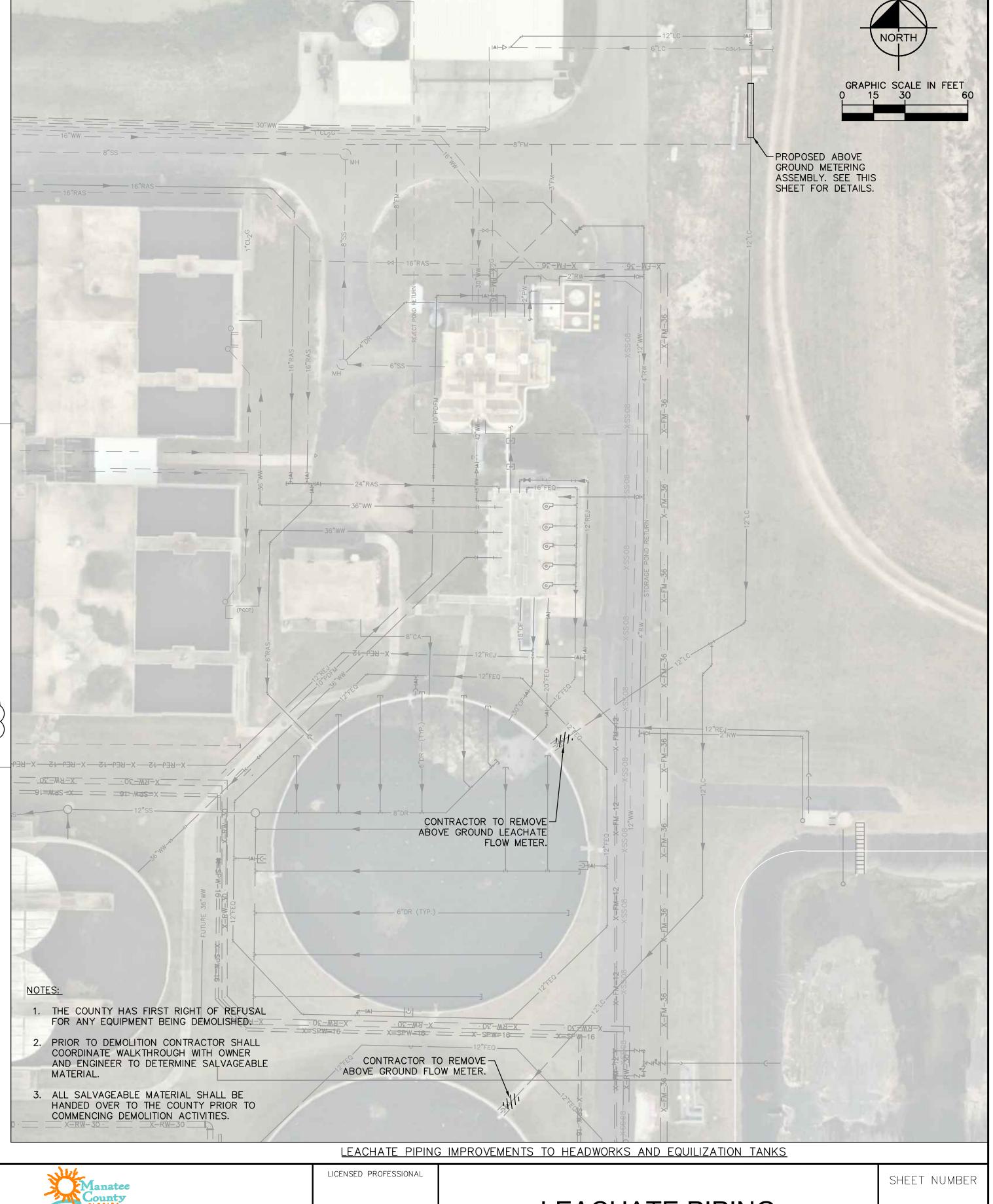


MAG METER PIPING NOTES:

- 1 12" D.I. SPOOL PIECE, FLG
- 2 12" D.I. SPOOL PIECE, FLG X PE
- $\overline{3}$ 12" D.I. 45' BEND (COMPACT), MJ
- $\overline{\langle 4 \rangle}$ 12" D.I. 45' BEND (COMPACT), FLG
- $\langle 5 \rangle$ 12" ENDRESS HAUSER MAG METER PROMAG W400
- (6) 2" ARV
- $\langle 7 \rangle$ S.STL PIPE SUPPORT (SEE SHEET C-29 FOR DETAILS)
- (8) 12" GATE VALVE, FLG

MAG METER DETAIL NOTES:

- 1. ABOVE GROUND PIPING SHALL BE D.I. BODY FLANGED FITTINGS.
- 2. ALL PIPING SHALL BE COLOR CODED IN ACCORDANCE W/ MANATEE COUNTY STANDARDS.
- 3. PIPE THROUGH SLAB AND ABOVE GROUND SHALL BE D.I. PIPE AND FITTINGS.
- 4. ALL METAL APPURTENANCES INCLUDING BOLTS, NUTS, AND WASHERS SHALL BE STAINLESS STEEL (TYPE 316) UNLESS OTHERWISE NOTED. ALL STAINLESS STEEL BOLTS SHALL BE TREATED WITH NEVER—SIEZE PRIOR TO ASSEMBLY.
- 5. CONTRACTOR TO PROVIDE REQUIRED LENGTH OF PIPE DOWNSTREAM AND UPSTREAM OF THE PROPOSED METER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 6. ALL BELOW GROUND PIPING SHALL BE RESTRAINED ACCORDINGLY.
- 7. CONTRACTOR TO REMOVE/ABANDON EXISTING VAULTS AND FORCE MAIN AS NECESSARY TO PROPERLY INSTALL PROPOSED METER ASSEMBLY. ALL VOIDED AREAS SHALL BE REFILLED WITH FLOWABLE FILL.
- 8. ALL BELOW GROUND D.I. PIPE AND FITTINGS SHALL BE POLYETHYLENE WRAPPED.
- 9. INSTALL 6" OF COMPACTED 1", WASHED, CRUSHED SHELL OVER ONE LAYER OF WEED BARRIER OVER ALL EXPOSED GROUND SURFACES. ONE LAYER OF WEED BARRIER IS TO BE LAID AND EXTEND TO A LINE 6 FEET OUTSIDE OF THE CONCRETE PAD. THE WEED BARRIER SHALL BE MIRASCAPE MANUFACTURED BY MIFAFI OR APPROVED EQUAL. ALL FINISHED GRADE SURFACES SHALL SLOPE AWAY FROM THE CONCRETE SLABS AT A MINIMUM SLOPE OF 2%, EXTENDING TO A LINE 6 FEET OUTSIDE OF THE CONCRETE PAD LINE. ALL DISTURBED GROUND SHALL BE COMPACTED TO 95% MAX DENSITY, AASHTO T—180, BEFORE INSTALLING THE WEED BARRIER.



No. REVISIONS DATE BY

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DESIGNED BY SNR

CHECKED BY WEW MANATEE COUNTY

DRAWN BY

SEWRF RECLAIMED
PUMP BACK STATION

STEPHEN N. ROMANO, P.E

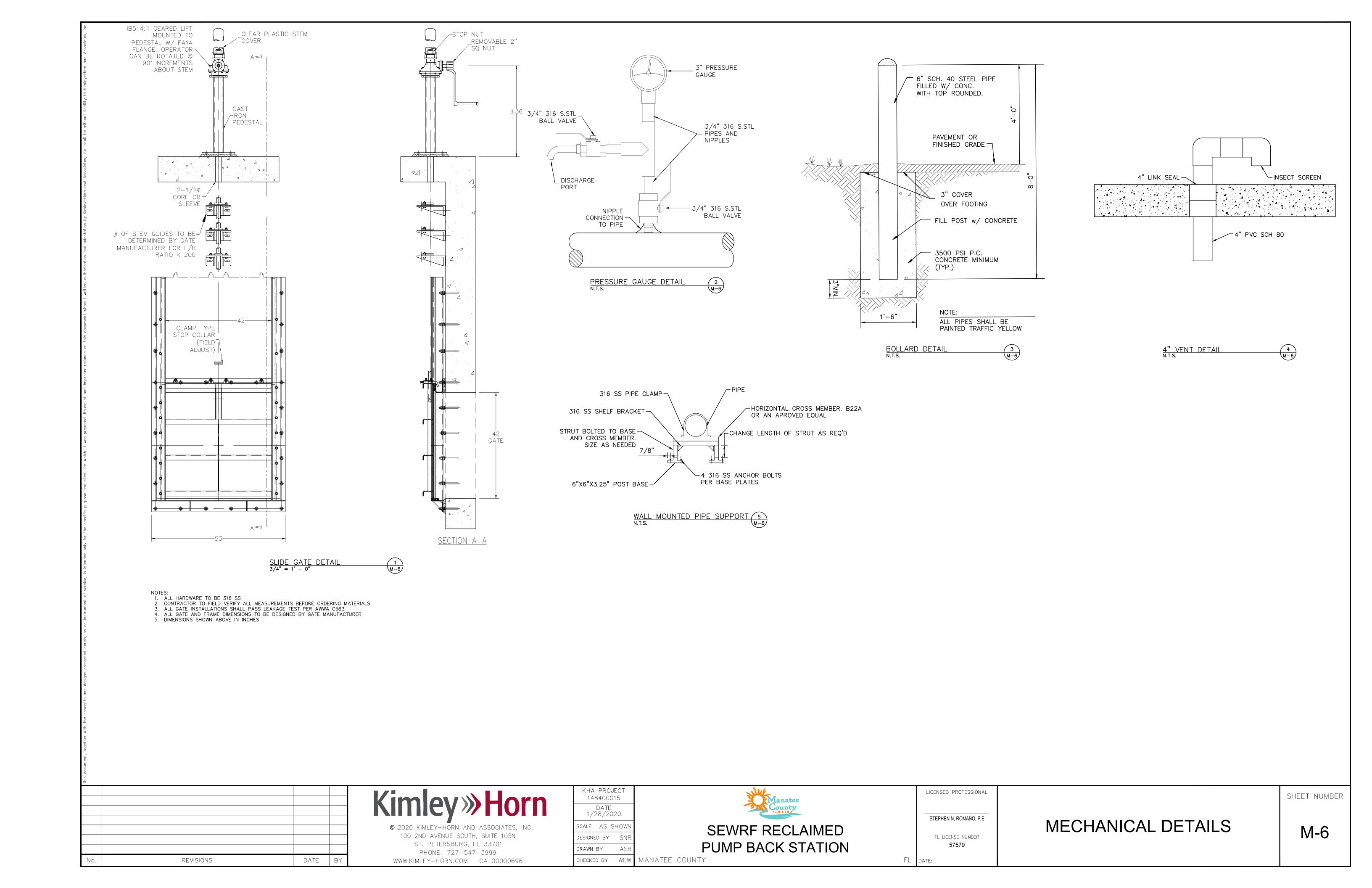
FL LICENSE NUMBER

57579

FL DATE:

LEACHATE PIPING IMPROVEMENTS

M-5



STRUCTURAL NOTES

- 1. GENERAL:
- (A) THESE NOTES ARE NOT INTENDED TO REPLACE THE PROJECT SPECIFICATIONS OR CONSTRUCTION DRAWING NOTES AND DETAILS. IN CASE OF CONFLICT BETWEEN THE REQUIREMENTS OF THE SPECIFICATIONS/CONSTRUCTION DRAWINGS AND THESE NOTES, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- (B) PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITY LINES FROM ALL DAMAGE. CONTRACTOR SHALL PROTECT THE WORK, ADJACENT PROPERTY, AND THE PUBLIC. CONTRACTOR IS SOLELY RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLECT
- (C) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SAFETY AND CONSTRUCTION PROCEDURES.
- (D) PRIOR TO CONSTRUCTION, FIELD VERIFY ALL DIMENSIONS IN THE DRAWINGS AND DETAILS AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
- (E) REFER TO THE ENGINEER FOR INSTRUCTION FOR ANY DIMENSION NOT GIVEN ON DRAWINGS. SCALING OF DRAWINGS SHALL NOT BE USED TO OBTAIN OR VERIFY ANY DIMENSION SHOWN ON THE DRAWINGS.
- 2. CONCRETE:
- (A) ALL CONCRETE MATERIALS, PLACING AND HANDLING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 301, ACI 318 AND ACI 350. CURING OF CONCRETE SHALL BE IN STRICT ACCORDANCE WITH ACI 301 PROVISIONS.
- (B) STRUCTURAL CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28-DAY COMPRESSIVE STRENGTH:

1. FOUNDATIONS 5000 PSI 2. TANK 5000 PSI 3. SLAB-ON-GRADE 4000 PSI

- (C) USE NORMAL WEIGHT CONCRETE (135 PCF MIN.) FOR ALL STRUCTURAL MEMBERS. DO NOT USE CALCIUM CHLORIDE IN ANY CONCRETE.
- (D) PROVIDE 3 INCH \pm 1 INCH SLUMP.
- (E) ALL CONCRETE TO HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.40. MINIMUM CEMENTITIOUS CONTENT SHALL BE 515 LBS/CY. FLY ASH SHALL BE TYPE F ONLY.
- (F) PROVIDE 3" CONCRETE COVER OVER REINFORCING BARS EXCEPT AS OTHERWISE NOTED.
- (G) FORM TIES AND REINFORCING BAR SUPPORTS SHALL BE OF NON-CORROSIVE MATERIAL INCLUDING, BUT NOT LIMITED TO, FIBERGLASS, PLASTIC, AND/OR PRECAST CONCRETE MEETING THESE SPECIFICATIONS.
- (H) CONCRETE FINISHES:
 - FORMED SURFACE—SMOOTH FORM FINISH PER ACI 301.
 BROOM FINISH FOR SLAB ON GRADE SUCH AS DISCHARGE PIPING CONCRETE PAD AND TOP SLAB OF CENTRAL PUMP STATION
- (I) ALL GROUT SHALL BE NON-SHRINK, NON-METALLIC.
- (J) ALL CONCRETE CONSTRUCTION SHALL BE DONE IN THE DRY.
- (K) PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES UNLESS OTHERWISE NOTED.
- (L) CONTRACTOR IS RESPONSIBLE FOR THE PROPER DESIGN AND CONSTRUCTION OF ALL FORMWORK AND SHORING. DESIGN SHALL BE PERFORMED BY A LICENSED FLORIDA PROFESSIONAL ENGINEER.
- (M) CONTRACTOR SHALL REFER TO MECHANICAL DRAWINGS FOR LOCATIONS AND SIZES OF SLEEVES, OPENINGS, EMBEDDED ITEMS, SLAB RECESSES, SLOPES, ETC. THESE ITEMS SHALL BE COORDINATED WITH OTHER TRADES AND INSTALLED PRIOR TO CONCRETE PLACEMENT.
- (M) A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING
 - CONCRETE TESTS:

 1. CYLINDER STRENGTH TESTS ASTM C39. ONE SET OF FIVE CYLINDERS FOR EACH 50 CUBIC YARDS OR FRACTION THEREOF PLACED. TEST ONE AT 3 DAYS, ONE AT 7 DAYS, TWO AT 28 DAYS, AND HOLD ONE.

 2. SLUMP TESTS ASTM C143
- (N) ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ENGINEER, AND CONTRACTOR.
- (O) SUBMITTALS:
 - 1. SUBMIT PROPOSED CONCRETE MIX DESIGN PRIOR TO CONSTRUCTION
 2. SUBMIT DETAILED SHOP DRAWINGS OF REINFORCING BARS SHOWING NUMBER,
 SIZE, AND LOCATION. INCLUDE BAR LISTS AND BEND DIAGRAMS.
- 3. REINFORCEMENT:
- (A) REINFORCING STEEL SHALL BE A.S.T.M. A-615 WITH SUPPLEMENT, GRADE 60: MINIMUM WORKING STRESS 24,000 PSI.
- (B) ALL REINFORCEMENT SHALL BE UNCOATED (BLACK).
- (C) ALL DIMENSIONS PERTAINING TO LOCATION OF REINFORCING BARS ARE TO CENTERLINE OF BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO FACE OF CONCRETE.
- (D) ACI STANDARD HOOKS SHALL BE USED UNLESS OTHERWISE NOTED.
- (E) ALL LAP AND SPLICE LENGTHS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318, ACI 350 AND CRSI STANDARD PRACTICES, EXCEPT AS OTHERWISE NOTED.

- 4. FOUNDATIONS:
- (A) A GEOTECHNICAL REPORT OF SUBSURFACE CONDITIONS HAS BEEN PREPARED BY ARDAMAN & ASSOCIATES (DATED SEPTEMBER 12, 2018, PROJECT # 17-7261). ANY ADDITIONAL GEOTECHNICAL WORK WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- (B) NOTIFY THE ENGINEER IMMEDIATELY OF ANY EXISTING FOUNDATION CONDITIONS OR DETAILS THAT ARE IN CONFLICT WITH THOSE INDICATED AND SHOWN IN THE DRAWINGS.
- (C) ADHERE TO THE RECOMMENDATIONS MADE IN THE SOIL PREPARATION SECTION OF THE GEOTECHNICAL REPORT.
- (D) ALL FILL AND COMPACTION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
- (E) IN ACCORDANCE WITH THE RECOMMENDATION OF THE FEBRUARY 28, 2020 EMAIL FROM JERRY KUEHN, P.E. OF ARDAMAN AND ASSOCIATES TO KEVIN GERSZUNY OF KIMLEY—HORN AND ASSOCIATES, EMBANKMENT FILL SHALL BE PLACED DURING THE CONSTRUCTION OF THE PUMP STATION.

200 PSF

DESIGN CRITERIA:

2017 FLORIDA BUILDING CODE WITH SUPPLEMENTS LIVE LOADS:

A. TANK ROOF SLAB
WIND LOAD:
BASIC WIND SPEED 150 MPH
EXPOSURE C
RISK CATEGORY II

No. REVISIONS DATE BY

Kimley Whorn

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PHONE: 727-547-3999
WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT
148400015

DATE
1/28/2020

SCALE AS SHOWN
DESIGNED BY SS

CHECKED BY WEW MANATEE COUNTY

DRAWN BY

SEWRF RECLAIMED
PUMP BACK STATION

LICENSED PROFESSIONAL

SETH SCHMID, P.E

FL LICENSE NUMBER

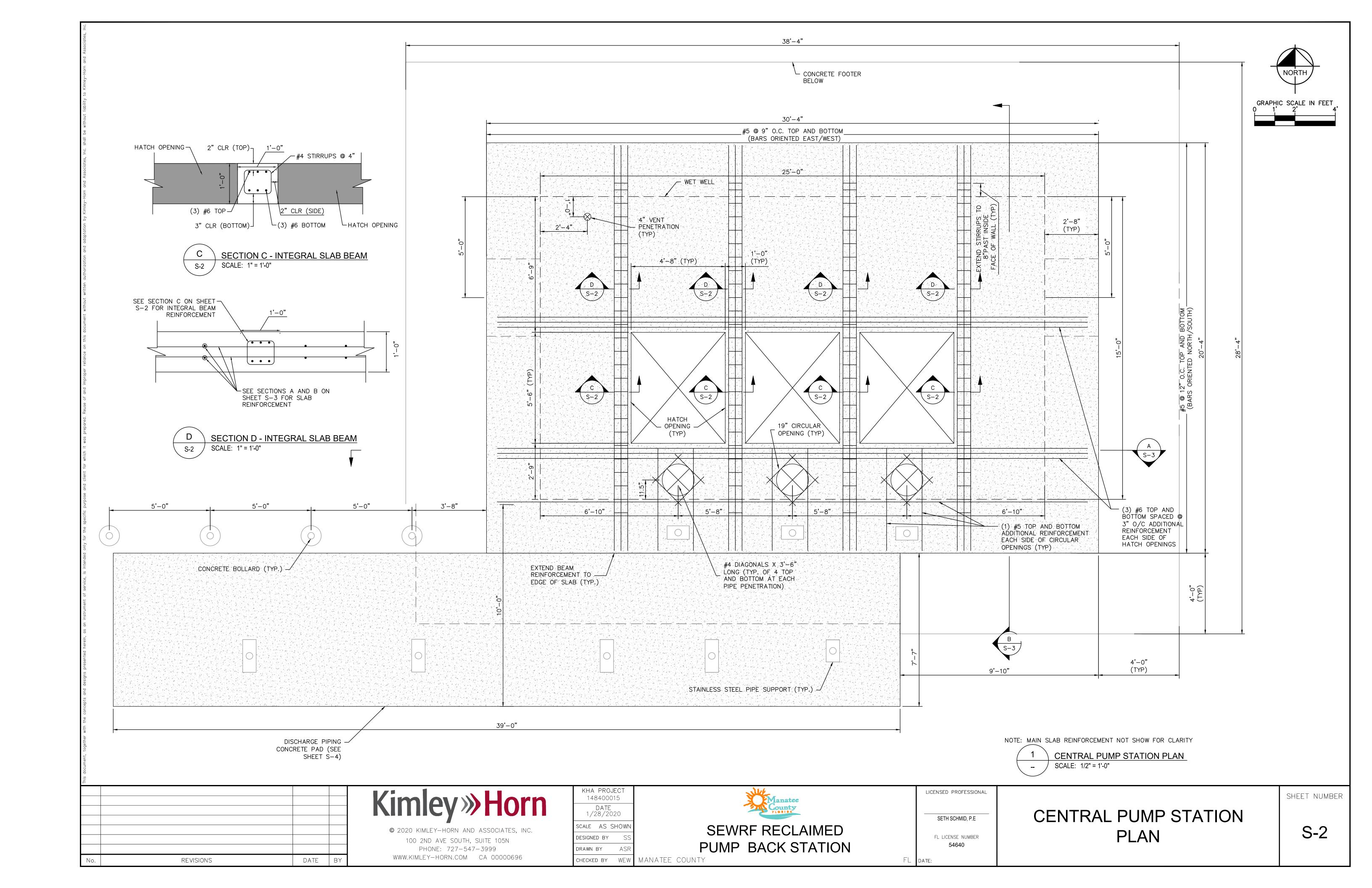
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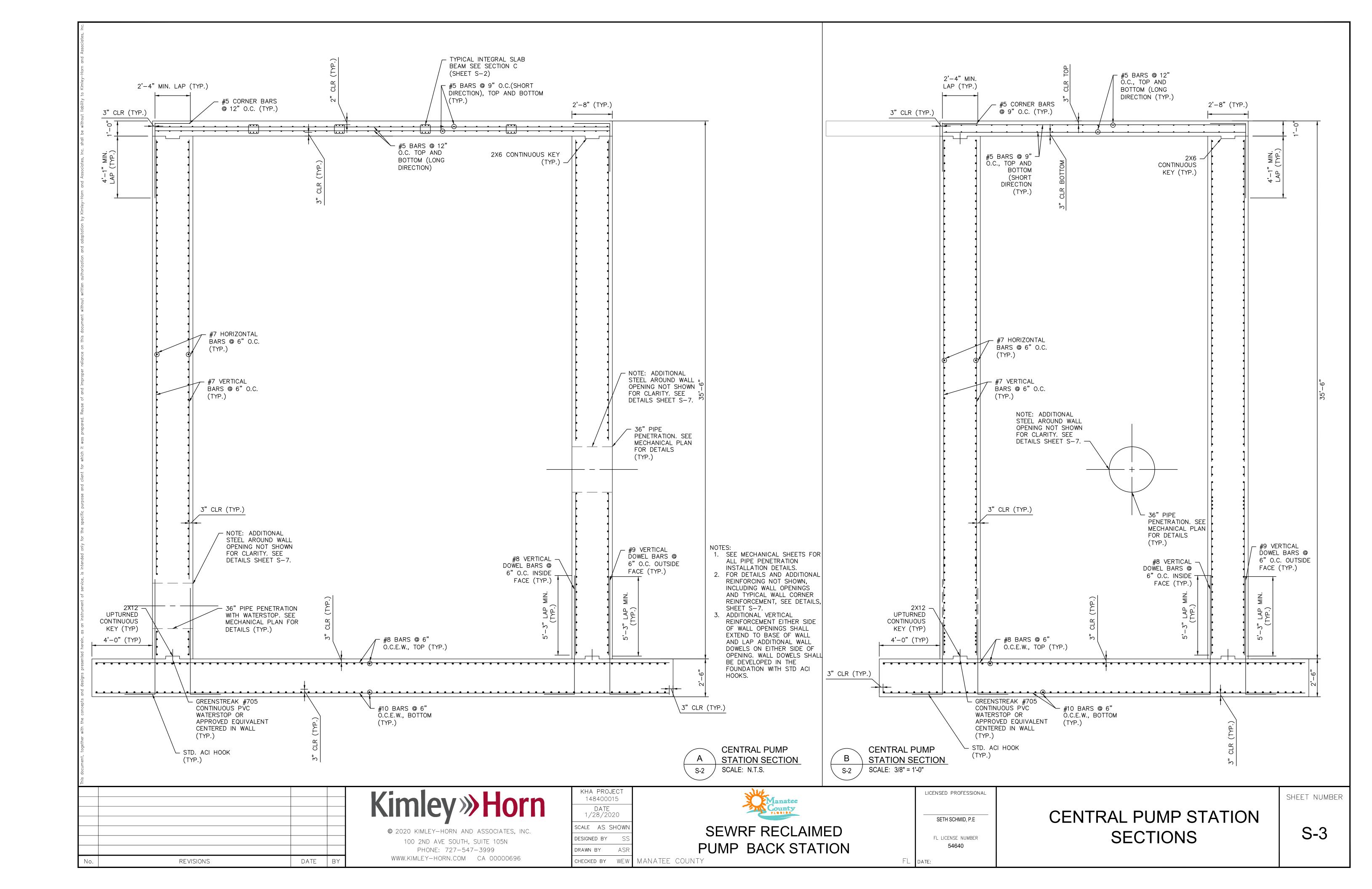
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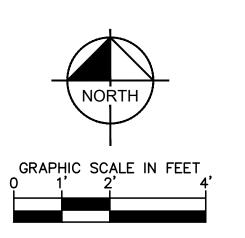
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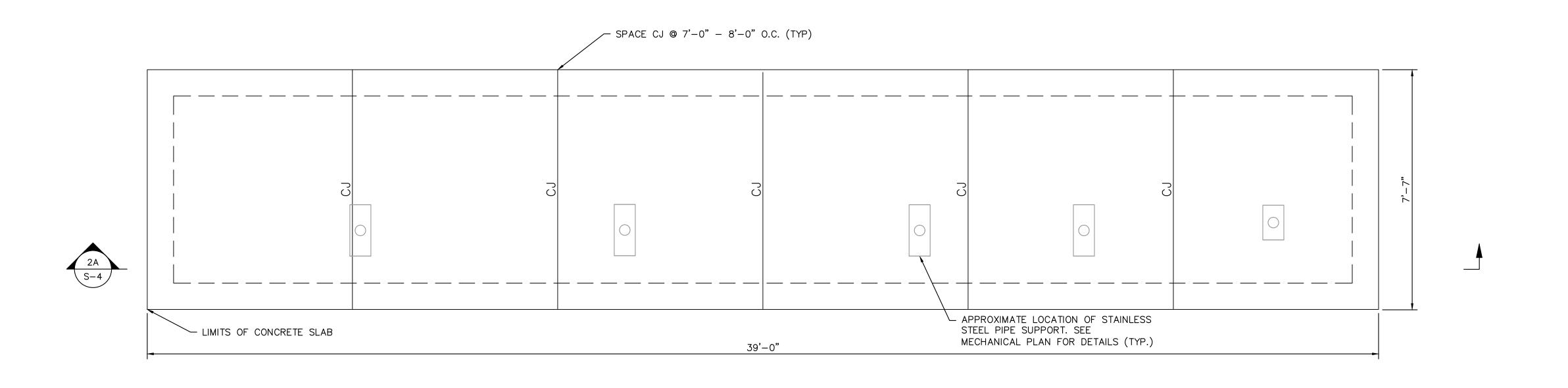
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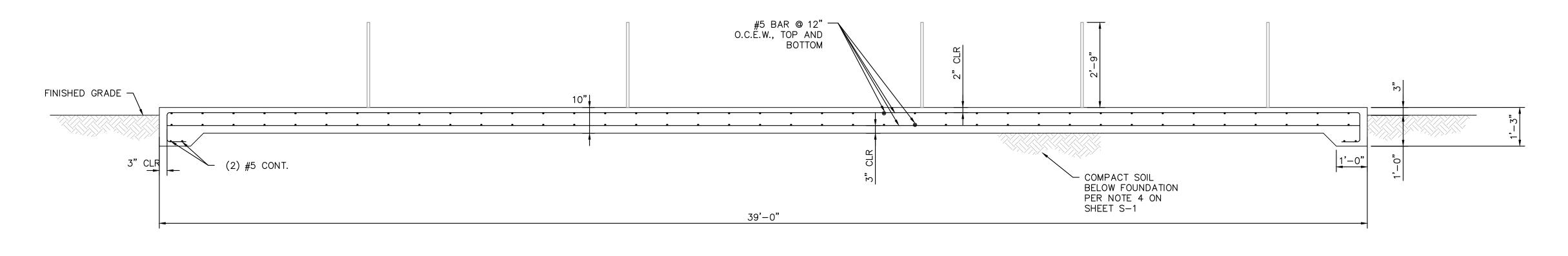














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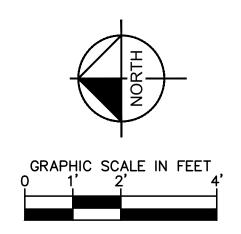
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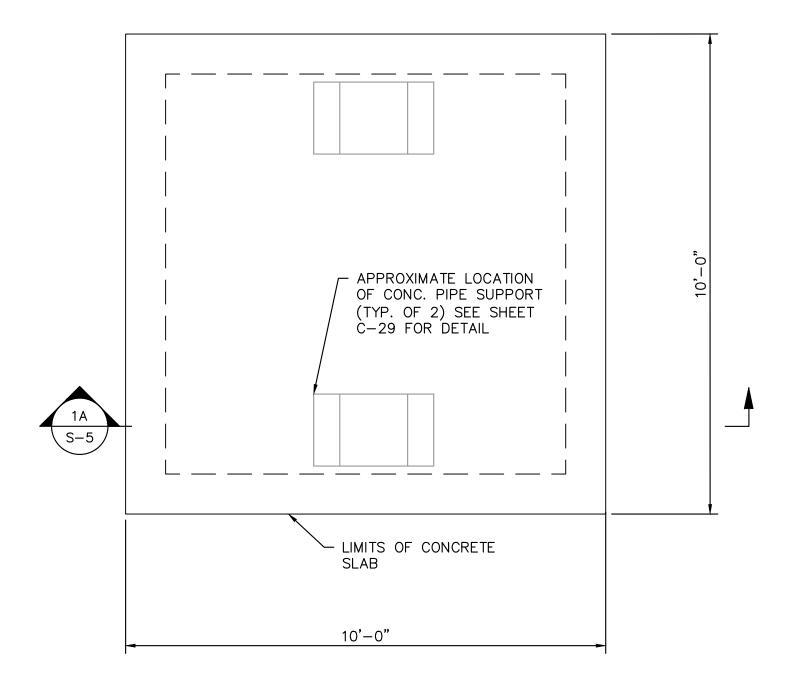
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54640

DISCHARGE PIPING FOUNDATION

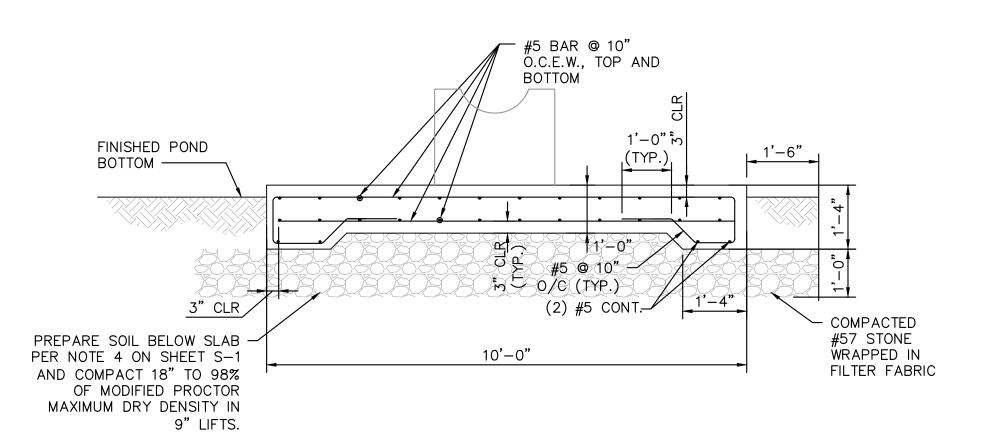
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1 INTAKE SCREEN PAD FOUNDATION PLAN

- SCALE: 1/2" = 1'-0"



1A INTAKE SCREEN PAD FOUNDATION SECTION
S-5 SCALE: 1/2" = 1'-0"

NOTES

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN GEOTECHNICAL INVESTIGATION AT THE INTAKE STRUCTURE
- PRIOR TO AND DURING CONSTRUCTION.

 2. THE INTAKE STRUCTURE SHALL BE CONSTRUCTED IN DRY CONDITIONS.

INTAKE SCREEN SLAB

CONDITIONS.

3. PREPARATION AND COMPACTION OF THE LAKE BOTTOM BELOW THE INTAKE STRUCTURE SHALL BE INSPECTED AND APPROVED BY THE CONTRACTOR'S GEOTECHINCAL ENGINEER PRIOR TO PLACEMENT OF THE #57 STONE

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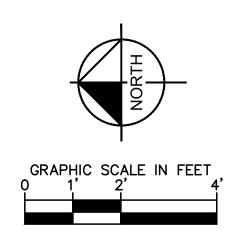
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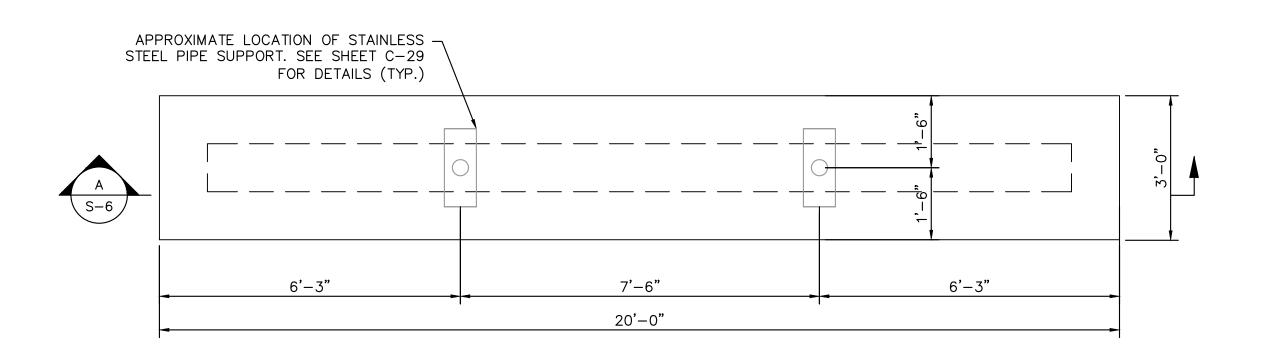
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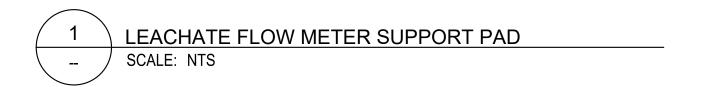
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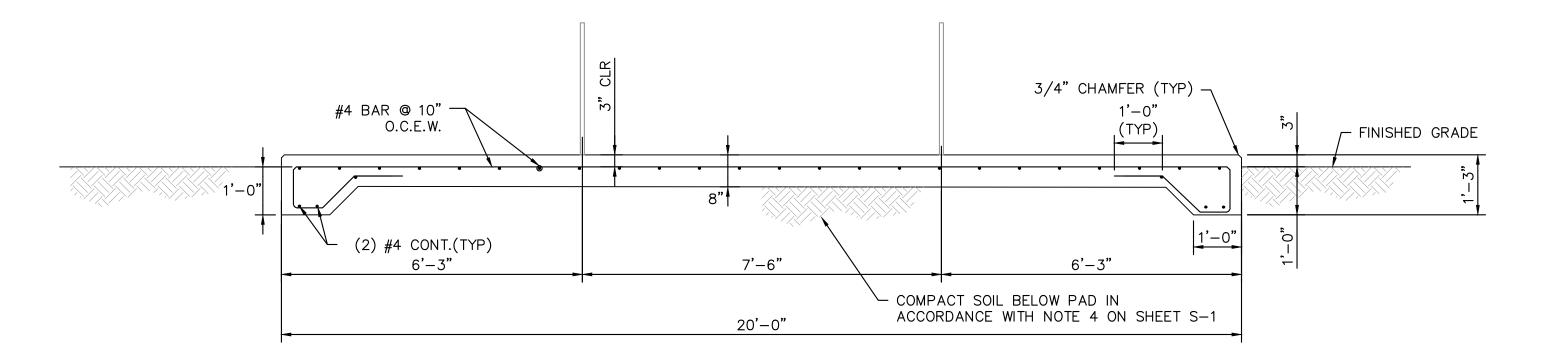
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A LEACHATE FLOW METER SUPPORT PAD SECTION SCALE: NTS

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14840	00015	
DATE 1/28/2020		
SCALE A	S SHOWN	
DESIGNED E	BY SS	

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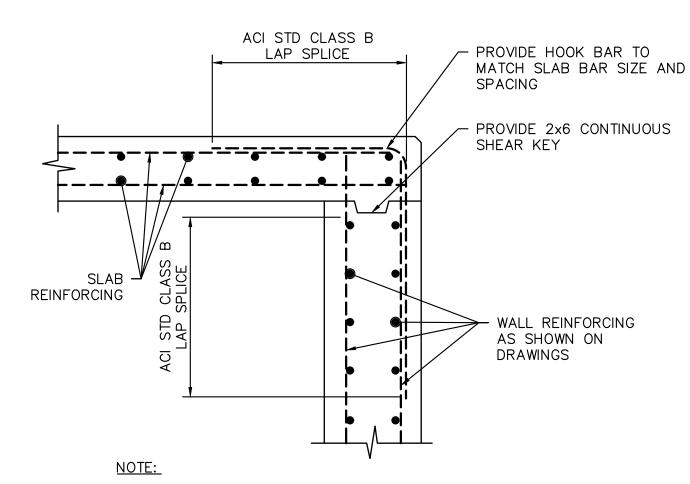
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LICENSED PROFESSIONAL	
SETH SCHMID, P.E	
FL LICENSE NUMBER	
54640	

FL DATE:

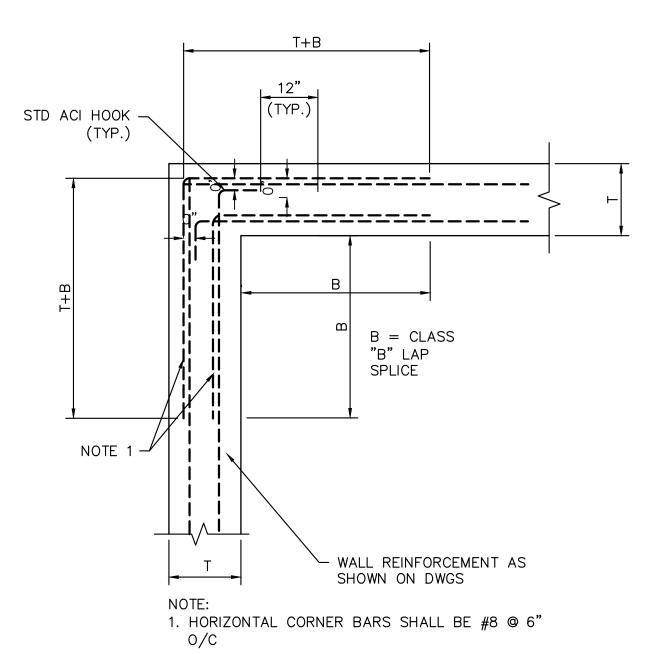
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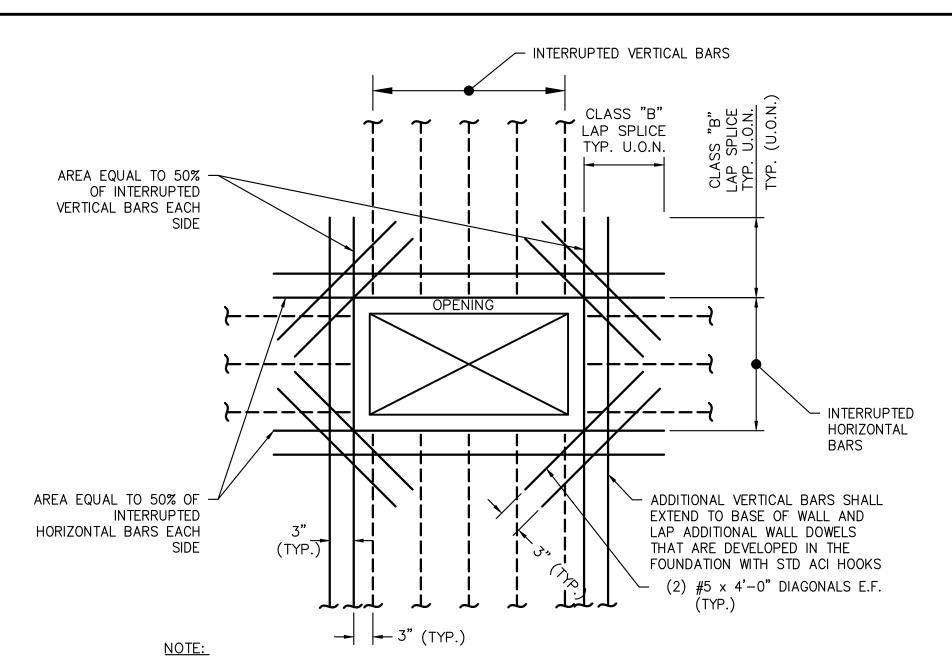


1. REFER TO INDIVIDUAL STRUCTURE PLANS FOR WALL AND SLAB THICKNESSES AND REINFORCING



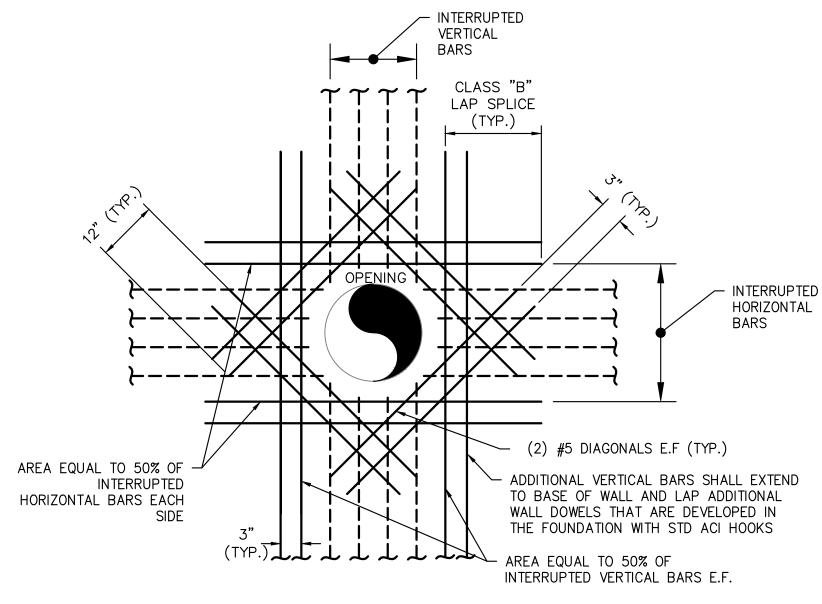






- 1. WHERE INTEGRAL BEAMS OR DROP DOWN BEAMS ARE ADJACENT TO OPENING, ADDITIONAL REINFORCING IS NOT REQUIRED.
- 2. PROVIDE 3" CLEAR AROUND OPENINGS, UNLESS NOTED OTHERWISE.
- 3. ADDITIONAL VERTICAL REINFORCING SHALL BE DEVELOPED IN FOOTING WITH STD ACI HOOKS





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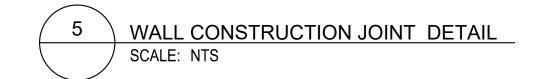
TYPICAL CIRCULAR OPENING REINFORCING DETAIL SCALE: NTS FOR WALL OPENINGS 12" OR GREATER IN DIAMETER

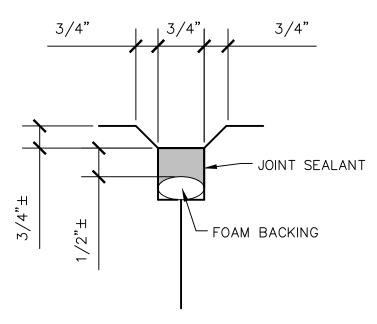
─/ INITIAL CAST ─── WALL SEE DETAIL "A" TYP. EA. FACE T/3 GREENSTREAK #679 CONT. PVC WATERSTOP OR APPROVED EQUAL

CLASS B SPLICE (TYP)

STOP WATERSTOP 6" BELOW TOP OF WALL.

- 1. CONTRACTOR SUBMIT LOCATION IF NOT SPECIFIED
- 2. DO NOT LOACTE VERTICAL CONTRUCTION JOINTS WITHIN 10' OF WET WELL CORNERS



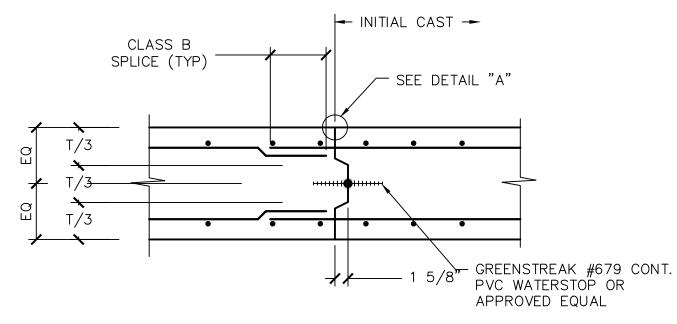


NOTE:

1. JOINT SEALANT SHALL BE SIKAFLEX - 2C NS EZ MIX OR APPROVED EQUIVALENT. INSTALL PER MANUFACTURERS REQUIREMENTS



DETAIL "A' CONTROL/CONSTRUCTION JOINT SCALE: NTS



CONTRACTOR SUBMIT LOCATION IF NOT SPECIFIED



BASE SLAB CONSTRUCTION JOINT DETAIL SCALE: NTS

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PUMP BACK STATION

LICENSED PROFESSIONAL SETH SCHMID, P.E FL LICENSE NUMBER 54640

FL DATE:

STRUCTURAL DETAILS

SHEET NUMBER

