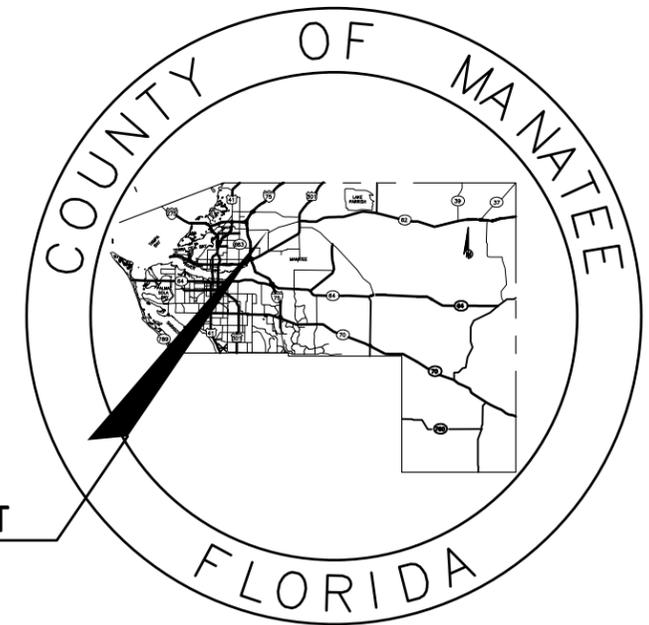


STATE OF FLORIDA

COUNTY OF MANATEE

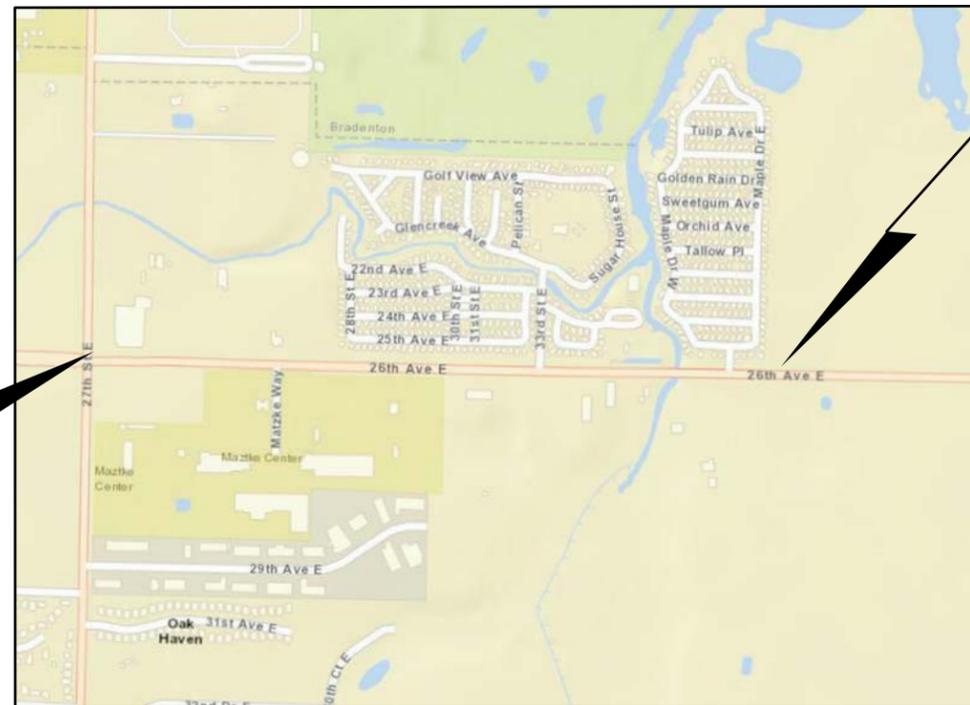
PLANS OF PROPOSED 26TH AVENUE EAST SIDEWALK BRADENTON, FLORIDA PROJECT No. 178-0019900



LOCATION OF PROJECT



JUNE 2021



END PROJECT
STA. 147+33.92

BEGIN PROJECT
STA. 107+00.00

INDEX OF PLANS

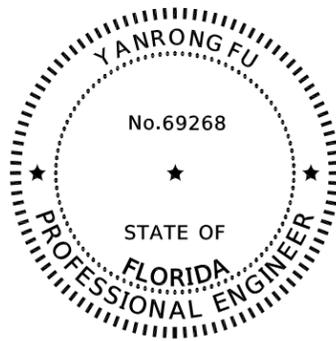
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	SIGNATURE SHEET
3	GENERAL NOTES UTILITIES
4	GENERAL NOTES AND LEGEND
5	GENERAL NOTES
6	TYPICAL SECTIONS
7	SURVEY CONTROL
8-15	PLAN AND PROFILE
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41	UTILITY PLAN AND PROFILE
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B-2 - B-4	GENERAL NOTES - PREFABRICATED BRIDGE NOTES
B-5	PLAN AND ELEVATION
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B-9	END BENT DETAILS (1 OF 2)
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B-15	BOARDWALK TYPICAL SECTIONS
B-16	BOARDWALK LAYOUT
B-17	BOARDWALK DETAILS (1 OF 4)
B-18	BOARDWALK DETAILS (2 OF 4)
B-19	BOARDWALK DETAILS (3 OF 4)
B-20	BOARDWALK DETAILS (4 OF 4)
B-21	FD0D SI 415-001 BAR BENDING DETAILS

BID PLANS

NAVD 88 DATUM

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ENLARGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

THE 2021-22 EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE 2021-22 EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION TRANSPORTATION DESIGN STANDARDS (ENGLISH UNITS) AND REVISIONS THERETO INCLUDED IN THIS CONTRACT PACKAGE SHALL GOVERN WORK PERFORMED UNDER THIS CONTRACT.
<http://www.fdot.gov/roadway/DS/18/STDs.shtm>



ROADWAY

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

YANRONG FU, P.E.

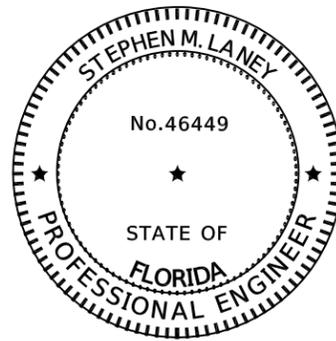
ON THE DATE ADJACENT TO THE SEAL

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MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208
YANRONG FU, P.E. NO. 69268

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.	DESCRIPTION
1	COVER SHEET
4	GENERAL NOTES
5	GENERAL NOTES LEGEND/QUANTITIES
6	TYPICAL SECTIONS
8-14	PLAN AND PROFILE
15-27	CROSS SECTIONS
33	EROSION CONTROL DETAIL
37-38	ROADWAY DETAILS



BRIDGE/BOARDWALK

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

STEVEN M. LANEY, P.E.

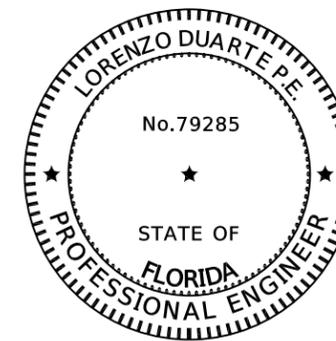
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MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208
STEVEN M. LANEY, P.E. NO. 46449

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.	DESCRIPTION
28-32	BRIDGE AND BOARDWALK CROSS SECTIONS
B-1	INDEX OF SHEETS AND QUANTITIES
B-2 - B-4	GENERAL NOTES - PREFABRICATED BRIDGE NOTES
B-5	PLAN AND ELEVATION
B-6	BRIDGE TYPICAL SECTION
B-7	FOUNDATION LAYOUT
B-8	AUGER CAST PILE DETAILS
B-9	END BENT DETAILS (1 OF 2)
B-10	END BENT DETAILS (2 OF 2)
B-11	REBAR LIST - SLOPE PROTECTION DETAILS
B-12 - B-13	GEOTECHNICAL BORING DATA
B-14	BOARDWALK GENERAL NOTES
B-15	BOARDWALK TYPICAL SECTIONS
B-16	BOARDWALK LAYOUT
B-17	BOARDWALK DETAILS (1 OF 4)
B-18	BOARDWALK DETAILS (2 OF 4)
B-19	BOARDWALK DETAILS (3 OF 4)
B-20	BOARDWALK DETAILS (4 OF 4)
B-21	FDOD SI 415-001 BAR BENDING DETAILS



UTILITIES

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

LORENZO DUARTE, P.E.

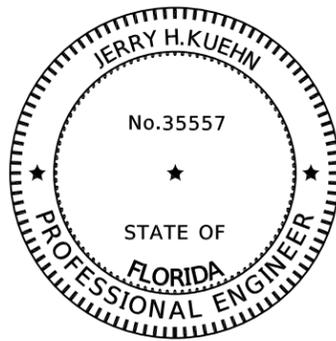
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MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208
LORENZO DUARTE, P.E. NO. 79285

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.	DESCRIPTION
3	GENERAL NOTES UTILITIES
39-40	UTILITY DETAIL
41	UTILITY PLAN AND PROFILE
42	UTILITY PROFILE



SOILS

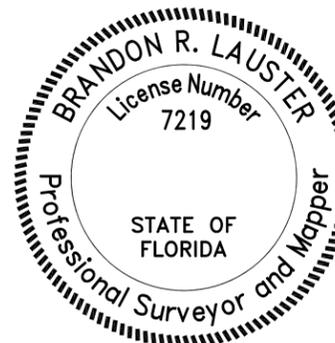
THIS DATA WAS ACQUIRED FROM: SUBSURFACE SOIL EXPLORATION AND RECOMMENDATIONS FOR SUGAR CREEK PEDESTRIAN BRIDGE, 26TH AVENUE EAST REPORT DATED NOV. 23, 2020

ELECTRONICALLY SIGNED AND SEALED BY: JERRY H. KUEHN, P.E. LICENSE # 35557 DATED 2020.11.23

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ARDAMAN & ASSOCIATES
1724 BARBER ROAD
SARASOTA, FL. 34240

SHEET NO.	DESCRIPTION
B9	BORING DATA
B10	BORING DATA



SURVEY

SURVEY DATA WAS ACQUIRED FROM: SPECIFIC PURPOSE SURVEY OF NORTH SIDE OF 26TH AVENUE FROM: 27TH STREET EAST TO: 2700 FEET EAST OF 27TH STREET EAST

SIGNED AND SEALED BY: BRANDON R. LAUSTER PSM LICENSE # 7219 DATED JULY 24, 2019

AND WETLAND DELINIATION FROM SPECIFIC PURPOSE SURVEY WETLAND DELINIATION 26TH STREET PEDESTRIAN BRIDGE

SIGNED AND SEALED BY: BRANDON R. LAUSTER PSM LICENSE # 7219

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ZNS/ENGINEERING
201 5TH AVENUE DRIVE EAST
BRADENTON, FL. 34208

H:\Highway Engineering\PROJ\SIDEWALK\26TH Ave. East Sugar Creek\DWG\SIGNATURE SHEET.dwg - Aug 2, 2021 7:43 AM

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED		
			SURVEY #		DESIGNED		
			SEC./TWN./RGE		DRAWN	JEA	09/2020
			SCALE		CHECKED		



26TH AVENUE EAST SIDEWALK
SIGNATURE SHEET

SHEET NO. 02

UTILITIES

1. LOCATIONS, 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. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED, MAY NOT BE IN THE EXACT LOCATION SHOWN OR RELOCATED SINCE THE PREPARATION OF THESE PLANS. 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) THAT MAY AFFECT HIS WORK. ALL EXISTING UTILITIES TO BE EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATION. ANY DISCREPANCIES OR CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.
2. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAIL BOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED ITEM DUE TO HIS CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
3. ANY TEMPORARY SHUTDOWNS FOR MODIFICATIONS OF EXISTING UTILITY SYSTEMS THAT MUST REMAIN IN SERVICE DURING CONSTRUCTIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE COORDINATED WITH AND APPROVED BY THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IT IS NOTED THAT TEMPORARY SHUTDOWNS MAY BE RESTRICTED TO CERTAIN HOURS AT ANY TIME OF THE DAY OR NIGHT AND WILL BE COMPLETED AT NO ADDITIONAL COST TO THE OWNER.
4. FOR WORK BEING DONE ON EXISTING SANITARY SEWER LINES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE FLOW OF ALL SEWAGE DURING CONSTRUCTION, WHICH MAY REQUIRE BY-PASS PUMPING AND/OR PUMPER TRUCKS. THE CONTRACTOR SHALL SUBMIT A DETAILED BY-PASS PUMPING PLAN PER SECTION 02720.
5. FOR DEFINITIONS OF EXISTING UTILITY LETTER DESIGNATIONS REFER TO THE FDOT UTILITY ACCOMMODATIONS MANUAL LATEST EDITION.
6. ALL EXISTING UTILITY VALVES ARE TO BE RESTORED TO THE FINISHED GRADE.
7. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES AND PUMP STATIONS ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS

RESTORATION

1. ALL CONCRETE THRUST BLOCKS INSTALLED FOR TESTING PURPOSES AND NOT REQUIRED FOR THE OPERATION OF THE PIPELINE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE, AT NO ADDITIONAL COST TO THE OWNER.
2. ALL SEWER VALVES SHOULD REMAIN VISIBLE AND ACCESSIBLE DURING ALL STAGES OF CONSTRUCTION. VALVE AND VALVE PADS SHOULD BE UP TO COUNTY STANDARDS AND ADJUSTED TO FINAL GRADE AT END OF CONSTRUCTION. ANY WASTEWATER ISSUES CAN BE SENT TO UTILITY SERVICE COORDINATOR BLAKE HEEKE; BLAKE.HEEKE@MYMANATEE.ORG, OR UTILITY SUPERVISOR JACOB EISMAN; JACOB.EISMAN@MYMANATEE.ORG.

CONSTRUCTION

1. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEEP DAILY AS PART OF DAILY CLEAN UP.
2. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
3. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
4. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.
5. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM.
6. ALL PIPING AND FITTINGS USED ON THIS PROJECT SHALL BE AS NOTED ON THE PLANS AND IN THE CONTRACT DOCUMENT AND SHALL BE INSTALLED TO THE LINES AND GRADES SHOWN ON THE PLANS AND PROFILES.
7. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.
8. ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.
9. ALL FITTINGS FOR PRESSURE CLASS-RATED PIPE SHALL BE RESTRAINED DUCTILE IRON. RESTRAINED LENGTHS OF PIPE SHALL ADHERE TO THE REQUIREMENTS AS SHOWN ON THE DETAIL SHEETS.
10. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S MAXIMUM ALLOWABLE RECOMMENDED DEFLECTION.
11. ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES OR FITTINGS.
12. ALL ROCKS OR STONES LARGER THAN SIX INCH DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO INCH DIAMETER.
13. ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.
14. ALL CONCRETE PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.
15. THE CONTRACTOR, PRIOR TO ANY TEMPORARY FORCE MAIN SHUT-OFFS DURING WATER MAIN TIE-IN, ETC., SHALL NOTIFY THE AFFECTED RESIDENTS BY POSTING INFORMATIONAL SIGNS IN THE NEIGHBORHOOD AT LEAST TWO DAYS (48 HRS) PRIOR TO THE WATER SHUT-OFF. REFERENCE SECTION 01500, PARAGRAPH 1.03 OF THE SPECIFICATIONS. WHEN FEASIBLE, "DOOR HANGERS" SHALL BE DELIVERED TO AFFECTED RESIDENCES AT LEAST TWO DAYS (48 HRS) PRIOR TO FORCE MAIN SHUT-OFF. FOR LARGE PROJECTS WITH HUNDREDS OF HOMES AFFECTED, THE CONTRACTOR SHALL ALSO MAKE EXTENSIVE USE OF THE MEDIA AND SHALL HAVE PRIOR CONTACT WITH HOMEOWNER'S ASSOCIATIONS. WRITTEN NOTIFICATIONS SHALL ALSO BE FAXED TO THE TAMPA TRIBUNE, BRADENTON HERALD, SARASOTA HERALD TRIBUNE, WBRD RADIO, EMERGENCY COMMUNITY CENTERS, INSPECTIONS, WATER TREATMENT PLANT, WATER MANAGER, HELPLINE, CUSTOMER SERVICE, AND THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT.
16. ALL NEW PIPE LINES SHALL BE PIG (CLEANED 1/4" AND LARGER), FLUSHED, PRESSURE TESTED, AND CERTIFIED PRIOR TO TIE-INS TO EXISTING FACILITIES. THE CONTRACTOR WILL BE ALLOWED TO USE TEMPORARY PLUGS FOR PIG CLEANING AND PRESSURE TESTING.
17. ALL TEST POINT PIPING SHALL BE CUT LOOSE FROM THE CORPORATION STOP AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. A CORPORATION STOP PLUG SHALL BE INSTALLED AND THE CORPORATION STOP SHALL REMAIN IN PLACE.
18. ALL EXISTING MAINS THAT ARE BEING REPLACED SHALL BE REMOVED.
19. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.
20. CONTRACTOR SHALL PROVIDE RECORD DRAWINGS IN ACCORDANCE WITH SECTION 1.15 IN THE CURRENT MANATEE COUNTY UTILITY STANDARDS AT NO COST TO THE OWNER. RECORD DRAWINGS SHALL BE SIGNED & SEALED BY A SURVEYOR CURRENTLY LICENSED BY THE STATE OF FLORIDA. ALL RECORD DRAWING INFORMATION REQUIREMENTS IN SECTION 1.15 SHALL BE STRICTLY ENFORCED. A COPY OF SECTION 1.15 WILL BE PROVIDED UPON REQUEST.

H:\Highway\Engineering\PROJ\1516\1516126TH Ave East Sugar Creek\DWG\GP - Sugar Creek Sidewalk.dwg - Auto 2-21-17 7:44 AM

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

DATE		DESCRIPTION		DATE		PROJECT #		178-0019900	SURVEYED	ZNS	07/2019	LORENZO DUARTE, P.E. FLORIDA P.E. LICENSE # 79285 MANATEE COUNTY PUBLIC WORKS 1022 26TH AVENUE EAST BRADENTON, FL. 34208	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	26TH AVENUE EAST SIDEWALK		SHEET NO. 03
						SURVEY #	N/A	DESIGNED	JEA	08/2020	GENERAL NOTES UTILITIES					
						SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020						
						SCALE		CHECKED	LD	06/2021						

GENERAL

1. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE PROJECT MANAGER. DAN GARNER P.E. (941) 708-7450 EXT. 7236
2. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.
3. VERTICAL CONTROL FOR THIS PROJECT WAS ESTABLISHED BY A MINIMUM OF TWO REFERENCE BENCHMARKS DESCRIBED ON THE "THE NORTH AMERICAN VERTICAL DATUM OF 1988", (NAVD '88).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER. ARMY CORPS OF ENGINEERS PERMIT NUMBER SAI-2019-03604. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) PERMIT NUMBER 800710/4304641.000.
5. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
6. 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 ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
7. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 OR THE NATIONAL 811 ONE CALL NUMBER WHEN APPLICABLE FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITIES FOR THE POSSIBLE RELOCATION OR THE TEMPORARY MOVEMENT OF ANY EXISTING UTILITIES WITHIN THE RIGHTS-OF-WAY.
8. ALL STATIONS AND OFFSETS REFER TO BASELINE OF CONSTRUCTION, UNLESS OTHERWISE NOTED.
9. THE CONSTRUCTION LENGTHS IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
10. SEPARATE PAYMENT SHALL BE MADE ONLY FOR THE ITEMS OF WORK LISTED AND IDENTIFIED BY APPROPRIATE PAY ITEM ON THE BID FORM. THE COST OF ANY RELATED WORK NOT SPECIFICALLY IDENTIFIED, BUT WHICH IS REQUIRED FOR SATISFACTORY COMPLETION OF THE WORK, SHALL BE CONSIDERED TO BE INCLUDED IN THE CONTRACT PRICE FOR THE APPROPRIATE BID ITEM.
11. THE CONTRACTOR SHALL HAVE A FOREMAN, OR RESPONSIBLE PARTY, ON SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. ALL WORKERS ON THE JOB SITE WILL BE COURTEOUS TO THE PUBLIC AT ALL TIMES, AND SHALL REFER ANY QUESTIONS OR CONCERNS TO THE CONTRACTOR'S FOREMAN OR THE COUNTY INSPECTOR. THE FOREMAN SHALL SPEAK AND UNDERSTAND ENGLISH AND SHALL BE AVAILABLE AT ALL TIMES FOR TIMELY RESOLUTION OF PROJECT-RELATED ISSUES.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE COORDINATION OF CONSTRUCTION SCHEDULING BETWEEN CONTRACTOR AND ALL UTILITY AGENCIES.
NOTE:
THIS INCLUDED MEETING WITH UTILITY AGENCIES PRIOR TO THE PRE-CONSTRUCTION CONFERENCE TO ADJUST THEIR SCHEDULES TO COINCIDE WITH THE CONTRACTORS CONSTRUCTION SCHEDULE. (REFERENCE CONTRACT DOCUMENTS)
13. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTORS HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTORY OF THE COUNTY PROJECT MANAGER. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
14. ALL CONSTRUCTION WITHIN FDOT RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH CURRENT FDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION AND THE DESIGN STANDARDS.
15. ALL SIGNING, STRIPING AND RPM PLACEMENT WITHIN THE FDOT RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH FDOT STANDARD INDEX 17346.

SAFETY

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90-96, LAWS OF FLORIDA EFFECTIVE OCTOBER 1, 1990 AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.650, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
2. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
3. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
4. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.
5. SIDEWALK TO BE ADJUSTED TO MINIMIZE THE TAKING OF TREES.
6. COUNTY INSPECTOR AND HOA REPRESENTATIVE TO BE ON SITE DURING FENCE PLACEMENT IN AREAS INVOLVING TREES.

ENVIRONMENTAL

1. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION ALL SEDIMENT AND EROSION CONTROL (SEC) DEVICES (E.G., BARRIERS, SEDIMENT TRAPS/BASINS, VEGETATIVE BUFFERS, ETC.) AS SPECIFIED IN THE FINAL APPROVED PLANS FOR THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SEC DEVICES UTILIZED DURING THE PROJECT, AS WELL AS INSTALLATION & MAINTENANCE OF ANY ADDITIONAL MEASURES DEEMED NECESSARY DURING PROJECT IMPLEMENTATION, TO PREVENT EROSION AND OFF-SITE SEDIMENT MIGRATION. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL SEC DEVICES UPON CONCLUSION OF THE PROJECT, AND UPON ADEQUATE STABILIZATION OF DISTURBED SOILS.
2. WHEN A BENTONITE SPILL OR FRACK-OUT OCCURS OR THERE IS A LOSS OF RETURN INDICATING EXCESSIVE SEEPAGE OR LOSS OF DRILLING FLUID, DRILLING MUST BE STOPPED UNTIL THE LOCATION OF THE SPILL IS IDENTIFIED. UNDER NO CIRCUMSTANCES WILL DRILLING CONTINUE WHEN A SPILL IS APPARENT.
3. ONCE LOCATED, THE BENTONITE SPILL MUST BE ISOLATED AND SEEPAGE INTO ANY NEARBY WATER BODIES WILL BE BLOCKED DEPENDING ON THE DEGREE OF THE SPILL, THE ISOLATED BENTONITE MUST BE REMOVED MANUALLY OR MECHANICALLY AND DISPOSED OF BY APPROPRIATE MEANS OR REUSED.
4. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDEP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.
5. STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.
6. STORM WATER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. THIS WILL BE MAINTAINED TO PREVENT DEGRADATION OF THE WATERS OF THE COUNTY AND STATE.
7. SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF WATER, MUST BE INSTALLED, CONSTRUCTED, OR IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.
8. ALL SWALES, DITCHES, AND CHANNELS LEADING FROM THE SITE SHALL BE PROTECTED FROM SILTATION AND EROSION DURING CONSTRUCTION AND BE SODDED WITHIN THREE (3) DAYS OF EXCAVATION.
9. SOIL DISPLACED BY CONSTRUCTION WILL BE REMOVED. EROSION CONTROL SHALL BE IMPLEMENTED IN AREAS WHICH ARE CONSIDERED

ENVIRONMENTALLY SENSITIVE. EROSION CONTROL SYSTEMS SHALL BE REQUIRED FOR ALL WORK WITHIN JURISDICTIONAL AREAS. THESE SYSTEMS MAY INCLUDE STAKED HAY BALES, SILT SCREENS, FILTER FABRIC, AND TURBIDITY SCREENS.

10. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
11. THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER WETLAND AREAS THAT MAY BE ON OR NEAR THE CONSTRUCTION SITE. ALL WORK IN THE VICINITY OF OPEN WATER AND/OR WETLANDS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL REGULATIONS AND/OR PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES RESULTING FROM HIS VIOLATION OF ANY REGULATIONS OR PERMIT CONDITIONS.
12. FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.
13. FOR FERN RELOCATION GUIDANCE CONTACT ALISSA POWERS, PARKS AND REC. DEPARTMENT (941) 742 5980 EXT. 1892
14. PILING WILL BE CONCRETE OR PRESSURE TREATED WOOD WRAPPED WITH HIGH DENSITY POLYETHYLENE TO MINIMIZE LEACHING OF CHEMICALS INTO THE SOIL AND SURFACE WATER.
15. THE STRUCTURE AND FOUNDATION OF THE BOARDWALK AND PEDESTRIAN BRIDGE ARE DESIGNED AS NOT TO IMPEDE, INTERRUPT, OR IMPOUND SURFACE WATER FLOWS AND WILDLIFE MOVEMENTS.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ENHANCED/ CREATED WETLANDS UNTIL PROJECT DRAINAGE AND GRADING IS COMPLETED AND ACCEPTED BY THE OWNER.
17. MAINTENANCE SHALL BE IN ACCORDANCE WITH PERMIT CONDITIONS. WETLAND BOUNDARY AND BUFFER AREAS SHALL BE CLEARLY DELINEATED ON SITE PRIOR TO INITIAL CLEARING AND GRUBBING ACTIVITIES. THE DELINEATION SHALL ENDURE THROUGHOUT THE CONSTRUCTION PERIOD, AND BE READILY DISCERNIBLE TO CONSTRUCTION PERSONNEL. THE WETLAND (JURISDICTIONAL) AND BUFFER AREAS ARE TO BE IDENTIFIED IN THE FIELD WITH STAKES AND FLAGGED STRING LINES (STRING LINE 5' ABOVE GRADE WITH FLAGGING AT 10' INTERVALS) PRIOR TO COMMENCEMENT OF CLEARING AND GRUBBING. THE STRING LINE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL STAY OUT OF THE EXISTING WETLAND AND BUFFER AREAS, EXCEPT WHERE PLANS CALL OUT SPECIFIC WORK TO BE PERFORMED.

RIGHT-OF-WAY

1. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
2. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR, PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHTS-OF-WAY USE PERMIT AND A TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM OTHER GOVERNMENTAL AGENCIES HAVING RELEVANT JURISDICTION. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD). A TRAFFIC CONTROL PLAN SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED STORM WATER STRUCTURES, PIPING, ENTRANCE PIPE AND HEADWALLS, THAT ARE TO REMAIN, WHETHER SHOWN ON THE PLANS OR NOT.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH IN THE FIELD THE RIGHT-OF-WAY LINES, BASE LINES, BENCH MARKS (ELEV.), CENTER LINES, AND STATIONING AS REQUIRED TO CONSTRUCT THIS PROJECT.
6. THE CONTRACTOR SHALL COORDINATE THE CUTTING OF DRIVEWAYS WITH THE PROPERTY OWNER PRIOR TO CUT. ALL DRIVEWAYS WILL BE IN PASSABLE CONDITION AT THE END OF THE WORK DAY AND FULLY RESTORED PER PLAN. THE CONTRACTOR SHALL COORDINATE WITH THE AFFECTED UTILITY COMPANY FOR THE ADJUSTMENT OF ANY EXISTING UTILITIES AND STRUCTURES IN ORDER TO MATCH THE PROPOSED ELEVATIONS AND ALIGNMENTS.
7. A RIGHT OF ENTRY AGREEMENT SHALL BE OBTAINED BY THE PROJECT MANAGER FROM THE PROPERTY OWNER BEFORE ANY DRIVEWAY CONSTRUCTION WORK IS DONE OUTSIDE OF THE RIGHT-OF-WAY OR EASEMENT.
8. COORDINATE WITH MATT MERUCCI MATT.MERUCCI@MYMANATEE.ORG FOR ROW PERMITS AND NOT APPROVAL.

DRAINAGE AND GRADING

1. ALL CONSTRUCTION IS TO BE STAKED IN THE FIELD BY OR UNDER THE SUPERVISION OF A FLORIDA REGISTERED LAND SURVEYOR.
2. THE CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD WITH REPRODUCIBLE RECORD DRAWINGS SHOWING ALL IMPROVEMENT LOCATIONS AND ELEVATIONS IN ACCORDANCE WITH LATEST MANATEE COUNTY TRANSPORTATION DEPARTMENT STANDARDS AND SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) STANDARDS. THE CONTRACTOR SHALL ALSO PROVIDE FIVE SETS OF PRINTS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR, OF THE RECORD DRAWINGS TO THE ENGINEER OF RECORD. THESE RECORD DRAWINGS SHALL BE CERTIFIED TO THE OWNER, APPROPRIATE GOVERNMENTAL AGENCIES. RECORD DRAWINGS SHALL SPECIFICALLY INCLUDE STORMWATER FACILITY LOCATIONS, INCLUDING TOP OF BANK, UNDERDRAIN AND CONTROL STRUCTURES. SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE AND PAYMENT. BENCH MARKS WITH THE ELEVATION CLEARLY AND PERMANENTLY MARKED ARE TO BE PLACED ON THE TOP OF ALL PROPOSED OUTFALL CONTROL STRUCTURES. RECORD DRAWINGS OF ALL MITIGATION AREAS INCLUDING ELEVATIONS, ZONES AND LIMITS SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE AND PAYMENT. THE RECORD DRAWINGS SHALL SPECIFICALLY INCLUDE THE SURFACE AREA OF STORMWATER FACILITY AREAS AT NORMAL WATER 1', TOP OF BANK AND ELEVATION (NWL25), AT HIGH WATER ELEVATION (HWL ALL MITIGATION AND/OR LITTORAL SHELF AREAS.
3. TO PREVENT SEDIMENTARY RUNOFF DURING CONSTRUCTION, STAKED HAY BALES, STAKED SILT SCREENS OR INLET DEBRIS CONTROL SCREENS ARE TO BE PLACED AT STORM INLETS, OUTFALL LOCATIONS AND ADJACENT PROPERTY LINES AS REQUIRED PRIOR TO ANY CONSTRUCTION ACTIVITIES. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSTALLED AND THEN VERIFIED/INSPECTED BY MANATEE COUNTY INFRASTRUCTURE INSPECTIONS RESOURCES DIVISION (708-7450) PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SEDIMENTATION BARRIERS IN A WORKING MANNER FOR THE DURATION OF CONSTRUCTION AND SHOULD BE CHECKED DAILY. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF OF THE DEPTH OF THE SEDIMENTATION BARRIER SHALL BE IMMEDIATELY REMOVED AND REPLACED IN UPLAND AREAS. IN ADDITION TO SPECIFIED EROSION CONTROL LOCATIONS, THE CONTRACTOR SHALL PERFORM DAILY SITE INSPECTIONS FOR POTENTIAL EROSION PROBLEMS. IF PROBLEMS OCCUR, THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING APPROPRIATE EROSION CONTROL IMMEDIATELY. AN INSPECTION LOG SHALL BE MAINTAINED AND AVAILABLE ONSITE AT ALL TIMES. STORMWATER TREATMENT FACILITIES INCLUDING OUTFALL PER DETAIL ARE TO BE CONSTRUCTED EARLY IN SITE DEVELOPMENT, WITH NO OFF-SITE UNTREATED RUN-OFF OCCURRING DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING TEMPORARY EROSION CONTROL DEVICES FOLLOWING COMPLETION OF ALL CONSTRUCTION AND FINAL STABILIZATION.
4. ALL PIPE LENGTHS SHOWN ON PLAN VIEW ARE TO THE END OF THE MITERED END SECTION. REFER TO MITERED END SECTION DETAIL FOR LENGTH OF PIPE TO BE INCLUDED IN PRICE FOR MITERED END SECTION.
5. TOPOGRAPHIC AND PROPERTY SURVEYS GIVING LOT SIZE, GROUND ELEVATIONS, OBSTRUCTIONS ON SITE, LOCATIONS AND DEPTHS OF SEWERS, CONDUITS, PIPES, EXISTING STRUCTURES, CURBS, PAVEMENTS, TRACTS, AND SOIL BORING DATA GIVING THE NATURE OF GROUND AND SUBSURFACE CONDITIONS HAVE BEEN OBTAINED FROM RELIABLE SOURCES. THE ACCURACY OF THIS DATA IS NOT GUARANTEED, AND IS FURNISHED SOLELY AS AN ACCOMMODATION TO THE CONTRACTOR. USE OF THIS DATA SHALL BE MADE AT THE CONTRACTOR'S DISCRETION. NO ADDITIONAL COMPENSATION WILL BE GRANTED DUE TO THE CONTRACTOR'S LACK OF KNOWLEDGE OF SITE CONDITIONS. PRIOR TO BID SUBMISSION, THE CONTRACTOR SHALL CONDUCT ANY ADDITIONAL SURVEYS AND SOILS TESTS HE MAY DEEM NECESSARY TO VERIFY THE ACCURACY OF THE INFORMATION PROVIDED.
6. THE CONTRACTOR SHALL VERIFY TOPOGRAPHY AND SATISFY HIMSELF AS TO THE EXTENT OF FILL NECESSARY TO ACHIEVE FINISHED GRADE PRIOR TO AWARD OF CONTRACT. THERE SHALL BE NO CLAIM FOR EXTRAS NOTWITHSTANDING SITE PLAN REVISIONS PROMULGATED SUBSEQUENT TO AWARD OF CONTRACT.
7. ROADSIDE UNDERDRAIN SHOWN ON PLAN IS MINIMUM AND EXTENSION SHALL BE REQUIRED AS DETERMINED NECESSARY BY THE ENGINEER OF RECORD AND/OR MCPWD INSPECTION DEPARTMENT DURING THE COURSE OF CONSTRUCTION.
8. SUITABLE FILL MATERIAL FROM EXCAVATION SHALL BE UTILIZED FOR PROJECT FILL PER GRADING SPECIFICATIONS. UNSUITABLE MATERIAL SHALL BE PLACED IN OPEN AREAS ONLY AS DIRECTED BY THE PROJECT ENGINEER AND SOILS ENGINEER IN ACCORDANCE WITH FDOT INDEX 505.
9. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURES PRIOR TO INSTALLATIONS.
10. REFER TO CONSTRUCTION TECHNICAL SPECIFICATIONS FOR COMPACTION REQUIREMENTS, GRASSING/SODDING REQUIREMENTS, AND PAVING CONSTRUCTION MATERIAL SPECIFICATIONS.
11. ALL FILL AREAS ARE TO BE CONSTRUCTED IN 12" MAXIMUM LIFTS.
12. THE CONTRACTOR SHALL REVIEW SOILS TESTS AS PERFORMED BY THE SOIL CONSULTANT AND IS ENCOURAGED TO CONDUCT ON-SITE TESTING TO SATISFY HIMSELF AS TO ACTUAL LIMITS OF REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIALS PRIOR TO BIDDING.

13. ON SLOPES GREATER THAN 3:1 PEGGING OR PINNING OF SOD MAY BE REQUIRED.
14. STATION LOCATIONS AND OFFSETS FOR STORM DRAIN INLETS AND MANHOLES REFERENCE THE CENTER OF THE SPECIFIED STRUCTURE BOTTOM. STATION LOCATION IS CENTER OF STRUCTURE BOTTOM FOR JUNCTION BOXES, CENTER OF RISER FOR CURB INLETS. FOR PIPES WITH MITERED END SECTIONS, THE PROPOSED LENGTHS SHOWN ON THE PLANS INCLUDE THE LENGTH OF THE MITERED END SECTION. PAYMENT FOR PIPE SHALL NOT INCLUDE THE LENGTH OF THE MITERED END SECTION. AS SPECIFIED BY DIMENSION "F" AS SHOWN IN FDOT INDEX 272 AND 273. PAYMENT SHALL BE FROM INSIDE STRUCTURE WALL TO INSIDE STRUCTURE WALL. ANY EXTRA PIPE LENGTH LISTED SHALL BE CONSIDERED CONTINGENT.
15. ALL CURB INLET AND JUNCTION BOX STORMWATER STRUCTURES SHALL HAVE HEAVY DUTY RING AND COVER MANHOLE ACCESS. ALL DRAINAGE BOX DETAIL SHALL FOLLOW MANATEE COUNTY CURRENT STANDARD 202 UNLESS IT IS DESIGNATED IN THE PLAN. ALL DRAINAGE BOXES SHALL HAVE A WALL THICKNESS OF 6" MINIMUM.
16. DURING DEWATERING OPERATIONS, THE CONTRACTOR SHALL NOT DISCHARGE DIRECTLY TO RECEIVING WATERS, EXISTING CONVEYANCES TO RECEIVING WATERS, OR WETLAND SYSTEMS. TEMPORARY SEDIMENT BASINS, TRAPS, OR SILTATION REDUCTION DEVICES SHALL BE UTILIZED TO COLLECT THE DISCHARGE FROM DEWATERING ACTIVITIES TO ELIMINATE THE POTENTIAL FOR OFFSITE SEDIMENT TRANSPORT AND TO ENSURE THAT DIRECT DISCHARGE DOES NOT OCCUR.
17. SLURRY WALL - CONSTRUCTION OF THE SLURRY WALL SHOULD BE UNDERTAKEN IN ACCORDANCE WITH THE SPECIAL PROVISIONS OF THE CONTRACTOR BY A GEOTECHNICAL SPECIALTY CONTRACTOR EXPERIENCED IN CONSTRUCTION OF CLAY SLURRY WALLS. CONTRACTOR SHOULD REVIEW GEOTECHNICAL REPORT, PLANS, AND RETAIN EXPERIENCED PERSONNEL TO CARRY OUT THE OPERATIONS, SAFETY, TESTING AND QUALITY CONTROL AS SPECIFIED. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL SUBMIT TECHNICAL SPECIFICATIONS, FOR ENGINEER'S APPROVED THAT COVER MATERIALS, EQUIPMENT, EXCAVATION OF THE WORK (I.E. SLURRY TRENCHING, KEY, CLEANING TRENCH BOTTOM, BACKFILL MIXING & BACKFILL PLACEMENT), CLEAN-UP, SPILL CONTINGENCY PLAN, QUALITY CONTROL, AND TESTING. IN ADDITION, THE FOLLOWING SHALL BE SUPPLIED PRIOR TO START OF CONSTRUCTION:
 - A. SOIL-BENTONITE SLURRY MIX DESIGN AND TRIAL MIX REPORTS, INCLUDING MIX PROPORTIONS, DENSITY, MOISTURE CONTENT, GRADATIONS, AND HYDRAULIC CONDUCTIVITY SHALL BE PERFORMED.
 - B. SPECIFICATIONS OF THE BATCH PLANT AND LAYOUTS SHOWING LOCATIONS OF EQUIPMENT, PONDS, TANKS, PUMPS, VALVES, HOSES AND SUPPLY LINES.
 - C. SOURCE OF ALL IMPORTED MATERIAL, INCLUDING BENTONITE. SHIPMENT OF MATERIALS TO THE SITE SHALL BE ACCOMPANIED BY THE SHIPPER'S WRITTEN VERIFICATION OF THE QUALITY OR SPECIFICATION OF THE MATERIAL, A COPY OF WHICH SHALL BE RETAINED BY THE CONTRACTOR.
 - D. CERTIFICATION OF BENTONITE QUALITY, SHOWING COMPLIANCE WITH API STANDARD 13A.
 - E. CERTIFICATION OF QUALITY OF ANY ADMIXTURE.
18. ALL OF THE SIGNING AND PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MUTCD, FDOT DESIGN STANDARDS AND THE MANATEE COUNTY PUBLIC WORKS DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS. TRAFFIC CONTROL DEVICES THAT DO NOT CONFORM TO THESE DOCUMENTS, AND THAT ARE WITHIN THE PUBLICLY MAINTAINED RIGHT-OF-WAY, IF ACCEPTABLE, WILL REQUIRE AN EXECUTED MAINTENANCE AGREEMENT PRIOR TO APPROVAL OF CONSTRUCTION PLANS.
19. ALL STREET NAME SIGN SHOP DRAWINGS ARE TO BE REVIEWED BY MANATEE COUNTY PRIOR TO INSTALLATION AND THE SIGNS SHALL BE DESIGNED WITH BLOCK NAMES, NUMBERS AND COLORS AS FOLLOWS:
 - A. PRIVATE STREETS INTERSECTING WITH PUBLIC ROADS: THE STREET NAME SIGNS SHALL BE 6" B SERIES UPPER/LOWER CASE WHITE TEXT ON BLUE BACKGROUND.
 - B. PUBLIC STREETS: THE STREET NAME SIGNS SHALL BE 6" B SERIES UPPER/LOWER CASE WHITE TEXT ON GREEN BACKGROUND.
 - C. EMERGENCY ACCESS MAINTENANCE STREETS: THE STREET NAME SIGNS SHALL BE 6" B SERIES UPPER/LOWER CASE WHITE TEXT ON BROWN BACKGROUND.

EXISTING		LEGEND	
	BENCH MARK		BUSH
	CONCRETE MONUMENT		TREE
	IRON PIPE		OAK TREE
	IRON ROD		PALM TREE
	HUB		PINE TREE
	NAIL & DISK		EDGE OF VEGETATION
	ELEVATION		CHAIN LINK FENCE
	PARCEL ID NO.		WOOD FENCE
	PARCEL ID NO.		BARBED WIRE FENCE
	LOT NO.		FORCE MAIN
	GUY WIRE		POTABLE WATER
	POWER POLE		RECLAIMED WATER
	LIGHT POLE		SANITARY SEWER
	MAIL BOX		STORM DRAIN
	SIGN		GAS LINE
	REFLECTOR		OVERHEAD_CHARTER_TV
	SPRINKLER		BURIED_CABLE_TV
	GAS MARKER		OVERHEAD ELECTRIC
	BACKFLOW PREVENTER		BURIED_FPL
	BLOW OFF VALVE		OVERHEAD_FRONTIER
	FIRE HYDRANT		BURIED_FRONTIER
	WATER VALVE		BURIED_FIBER_OPTIC
	AIR RELEASE VALVE		BURIED_UTILITY
	WATER METER		OVERHEAD_UTILITY
	SANITARY SEWER MANHOLE		RAIL ROAD TRACKS
	SANITARY SEWER CLEAN OUT		EDGE OF CONCRETE
	SOIL BORING LOCATION		EDGE OF ROAD
	TELEPHONE SERVICE BOX		TOE OF SLOPE
	FLOW DIRECTION		TOP OF BANK
	GRATE INLET		PROPERTY LINE
	MITERED END SECTION		RIGHT OF WAY

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THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019	YANRONG FU, P.E. FLORIDA P.E. LICENSE # 69268 MANATEE COUNTY PUBLIC WORKS 1022 26TH AVENUE EAST BRADENTON, FL. 34208	<p>PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208</p>	26TH AVENUE EAST SIDEWALK	SHEET NO. 04
			SURVEY #	N/A	DESIGNED			<p>GENERAL NOTES AND LEGEND</p>			
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020				
			SCALE		CHECKED	GB/SF	06/2021				

RESTORATION

- ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
- ALL DISTURBED GRASSED AREAS SHALL BE SODDED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER. ALL EXISTING SHRUBS, TREES, PLANTINGS AND OTHER VEGETATION, OUTSIDE OF RIGHT-OF-WAY DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH EQUIVALENT MATERIAL BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- CONCRETE DRIVEWAYS OR SIDEWALKS THAT ARE CUT SHALL BE RESTORED TO MATCH EXISTING ACCORDING TO THE CURRENT EDITIONS OF THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN, SECTION 522, AND SECTION 310 OF THE F.D.O.T. DESIGN STANDARDS LATEST REVISION.
- WHENEVER A PERMANENT ROADWAY SURFACE IS NOT PLACED IMMEDIATELY AFTER BACKFILLING AND COMPACTION OF THE NEWLY INSTALLED PIPE LINE IN AREAS WHERE TRAFFIC MUST PASS, THE CONTRACTOR SHALL INSTALL A TEMPORARY SURFACE CONSISTING OF NINE INCHES OF COMPACTED LIME ROCK BASE AND A COAT OF ASPHALT EMULSION. PERMANENT ROADWAY REPAIR SHALL BE PERFORMED A MAXIMUM OF TWENTY-ONE CALENDAR DAYS AFTER THE INITIAL OPEN CUTTING.
- RESTORATION OF CURBS, DRIVEWAYS, SIDEWALKS, AND PLACEMENT OF SOD SHALL BE COMPLETED WITHIN FORTY-FIVE CALENDAR DAYS OF INITIAL DISTURBANCE, OR TWENTY-ONE CALENDAR DAYS OF SUBSTANTIAL COMPLETION, WHICHEVER OCCURS FIRST.

CONSTRUCTION

- THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT BAFFELS POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.
- NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEEPED DAILY AS PART OF DAILY CLEAN UP.
- THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
- INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
- PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA, UNLESS OTHERWISE NOTED ON THE PLANS.
- THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM. THE CONTRACTOR SHALL SUBMIT DEWATERING PLAN TO DISTRICT FOR APPROVAL PRIOR TO CONSTRUCTION.
- ALL PIPING AND FITTINGS USED ON THIS PROJECT SHALL BE AS NOTED ON THE PLANS AND IN THE CONTRACT DOCUMENT AND SHALL BE INSTALLED TO THE LINES AND GRADES SHOWN ON THE PLANS AND PROFILES.
- ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS AND STATION OFFSETS ARE TO CENTER OF STRUCTURES OR FITTINGS. REFER TO DETAIL SHEET FOR ALL REFERENCE POINTS.
- ALL ROCKS OR STONES LARGER THAN SIX INCH DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO INCH DIAMETER.
- ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.
- ALL CONCRETE AND REBAR PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.
- CONTRACTOR IS RESPONSIBLE FOR ALL UNSUITABLE MATERIAL REMOVAL WITHIN PROJECT LIMITS. EXCAVATION, EMBANKMENT, INCLUDING UTILIZATION, AND UNSUITABLE MATERIAL REMOVAL SHALL BE IN ACCORDANCE WITH FDOT DESIGN STANDARDS, LATEST VERSION.
- WHERE EXCAVATION IS REQUIRED FOR CONSTRUCTION OF SIDEWALK, ALL STUMPS, ROOTS, ETC. SHALL BE REMOVED COMPLETELY FROM THE SIDEWALK AREA. ALL STUMPS WITHIN THE PROJECT LIMITS SHALL BE REMOVED COMPLETELY AND REPLACED WITH COMPACTED BACKFILL BEFORE THE AREA IS FILLED. TREE ROOTS IN AREA OF PROPOSED SIDEWALK, RAMP, OR DRIVEWAY REPLACEMENT SHALL BE GROUND OUT TO A DEPTH OF 6" BELOW BOTTOM OF NEW SIDEWALK OR DRIVEWAY. ALL PRUNED ROOT DEBRIS SHALL BE REMOVED FROM THE SUB-BASE MATERIAL PRIOR TO POURING CONCRETE, ASPHALT, OR APPLICATION OF OTHER SPECIFIED MATERIALS. THIS WORK SHALL BE INCLUDED IN AND PAID FOR UNDER THE PAY ITEM FOR CLEARING AND GRUBBING.
- ALL STUMPS, ROOTS, AND OTHER DEBRIS PROJECTING THROUGH OR APPEARING ON THE SURFACE OF THE GROUND SHALL BE REMOVED TO A DEPTH OF 1-FOOT BELOW THE COMPLETED SURFACE. THIS WORK SHALL BE INCLUDED IN AND PAID FOR UNDER THE PAY ITEM FOR CLEARING AND GRUBBING.
- ALL MATERIALS NOT CLAIMED BY THE COUNTY SHALL BECOME PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN AREAS PROVIDED BY THE CONTRACTOR. THIS WORK SHALL BE INCLUDED IN AND PAID UNDER THE PAY ITEM CLEARING AND GRUBBING.
- THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING, AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES OR TO MINIMIZE TRENCH WIDTH. WHERE A SEPARATE PAY ITEM IS NOT PROVIDED, THE COST OF ALL SHEETING, SHORING, AND BRACING REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE ITEM OF WORK FOR WHICH SHEETING, SHORING, AND BRACING IS REQUIRED.
- THE CONTRACTOR SHALL DISTURB NO MORE GROUND THAN WHAT IS NECESSARY FOR CONSTRUCTION. NO OPEN EXCAVATED TRENCH, OR OTHER UNSAFE CONDITION WILL BE LEFT OVERNIGHT. ALL WORK SITES WILL BE COMPLETELY RESTORED WITHIN SEVEN (7) CALENDAR DAYS OF THE CONCRETE POUR FOR SIDEWALK. THE INTENT OF THIS PROVISION IS TO "SAFE-UP" THE PROJECT SITE AS WORK PROGRESSES, AND SHALL INCLUDE REMOVING FORMS, FILLING HOLES, GRADING, AND REMOVAL OF DEBRIS.
- ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED IN THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- ANY EXISTING SIGN TO REMAIN THAT IS DISTURBED OR RELOCATED DURING CONSTRUCTION SHALL BE RESET TO CURRENT STANDARDS FOR HEIGHT, OFFSET, AND METHOD OF INSTALLATION AT NO ADDITIONAL COST TO THE COUNTY.
- ALL EXISTING SWALES NOT DESIGNATED FOR RECONSTRUCTION SHALL BE REGRADED TO PROMOTE POSITIVE DRAINAGE AND MATCH PROPOSED CENTERLINE SWALE ELEVATION AND ALIGNMENT.
- ALL STORM DRAINS AND STRUCTURES TO REMAIN SHALL BE CLEANED OF DEBRIS, DIRT, VEGETATION AND OTHER MATERIAL. STORM SEWER INLETS SHALL BE MODIFIED (RAISED/LOWERED) TO MATCH PROPOSED FINISHED GRADE.
- ALL EXISTING FENCES DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AND REINSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST. (EXISTING FENCES WITHIN R/W TAKING LIMITS SHALL BE RECONSTRUCTED TO THE NEW R/W LINE AND ARE TO BE REIMBURSED UNDER THE MISCELLANEOUS BID ITEM).
- ALL EXISTING STORM DRAINAGE STRUCTURES SHALL REMAIN UNLESS OTHERWISE NOTED.
- ALL EXISTING BUILDINGS SHALL REMAIN UNLESS OTHERWISE NOTED.
- REMOVE AND REPLACE BASE AND SUB-BASE ACCORDING TO FDOT STANDARDS.
- ALL TREES/BUSHES WITHIN CONSTRUCTION LIMITS SHALL BE REMOVED.

REGULATORY PERMITS OBTAINED

- SWFWMD-APP ID/PERMIT NUMBER: 800710 / 43044641.000 DATED JUNE 29, 2020
- U.S. ARMY CORPS OF ENGINEERS-PERMIT NUMBER: (NWP) 14-LINEAR TRANSPORTATION PROJECTS DATED AUGUST 20, 2020

CONTACTS:

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
INFRASTRUCTURE ENGINEERING
JIM RENNEBERG
1022 26TH AVENUE EAST
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ON-CALL CONSTRUCTION SUPERVISOR
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(813) 483-3223

CHARTER COMMUNICATIONS
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BRADENTON, FL 34208-5535
24/7 EMERGENCY HOTLINE
(844) 220-2369

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MADELINE STANLEY
5657 MCINTOSH ROAD
SARASOTA, FL.
(941) 927-4273
FAX: (941) 723-4430
EMERGENCY:
1-800-4-OUTAGE
MADELINE.STANLEY@FPL.COM

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SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
SARASOTA SERVICE OFFICE
6750 FRUITVILLE ROAD
SARASOTA, FL 34240
24/7 ENGINEER ON DUTY
(941) 377-3722
FAX: (941) 373-7660

DEPT OF ENVIRONMENTAL PROTECTION
STEPHANIE BARIOS
13051 N. TELECOM PKWY
TEMPLE TERRACE, FL 33637
(813) 632-7600, EXT. 408

SUNSHINE STATE ONE CALL OF FLORIDA
1 (800) 432-4770

TECO/PEOPLE GAS CO.
8261 VICO COURT
SARASOTA, FL 34240
24/7 EMERGENCY HOTLINE
1-877-832-6911

H:\Highway Engineering\Initial\PROJ\SIDEWALK\KS\26TH Ave East Sugar Creek\DWG\GP_Sugar_Creek_Sidewalk.dwg - Aug 2 21 7:52 AM

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019	YANRONG FU, P.E. FLORIDA P.E. LICENSE # 69268 MANATEE COUNTY PUBLIC WORKS 1022 26TH AVENUE EAST BRADENTON, FL. 34208	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	26TH AVENUE EAST SIDEWALK	GENERAL NOTES	SHEET NO. 05
			SURVEY #	N/A								
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020					
			SCALE		CHECKED	GB/SF	06/2021					

SURVEYOR'S REPORT

26th AVENUE EAST
 MANATEE COUNTY PROJECT NO. 001990
 ZNS File No. 00-44702

I hereby certify that:

1. I am a Professional Surveyor and Mapper, registered in the State of Florida, holding Certificate No. PSM 7219 and that I am acting on behalf of ZNS Engineering, L.C., a corporation authorized to offer services of registered Surveyors and Mappers in the State of Florida, holding L.B. No. 6982.
2. This certificate is made to Topographic Survey of 26th Avenue East from 27th Street East to the east line of Sugar Creek Estates. The survey was prepared for design of roadway improvements and was completed July 2019.
3. I hereby certify that the survey prepared under my direct supervision is to the best of my knowledge, information and belief, a true and correct representation of the existing improvements shown and meets the requirements of Chapter 5J-17, Florida Administrative Code, as it pertains to Topographic Surveys.
4. The bearings shown are based on the Florida State Plane Coordinate System, (West Zone) NAD 83/2011 and were derived using Real Time Kinematic Method and the Florida Department of Transportation Permanent Reference Network. The published values of "COB 1019" (PID# DO6903) and "A 700" (PID# DL1772), were used to validate the project coordinates.
5. Elevations shown are based on the National American Vertical Datum of 1988. The Benchmarks these elevations are derived from are:
 - Manatee County Benchmark #129-88-11, Elevation = 6.45'.
 - Manatee County Benchmark #129-88-09, Elevation = 9.47'.
 - The conversion to 1929 National Geodetic Vertical Datum is: +0.98' using the CORPSCON program.
6. Improvements such as, but not limited to, landscape features and subsurface improvements have not been located except as shown. The location of all subsurface improvements (utilities) should be verified in the field prior to any excavation.
7. No ownerships of record reflecting easements, rights of way, and/or ownership are known by, or were furnished to this surveyor, except as shown hereon.
8. Monuments at property corners depicted were not recovered or set, unless noted.
9. Parcel information shown hereon was gathered from the Manatee County Geographic Information System Property Information web site.
10. This survey does not warranty title, zoning easements or ownership.

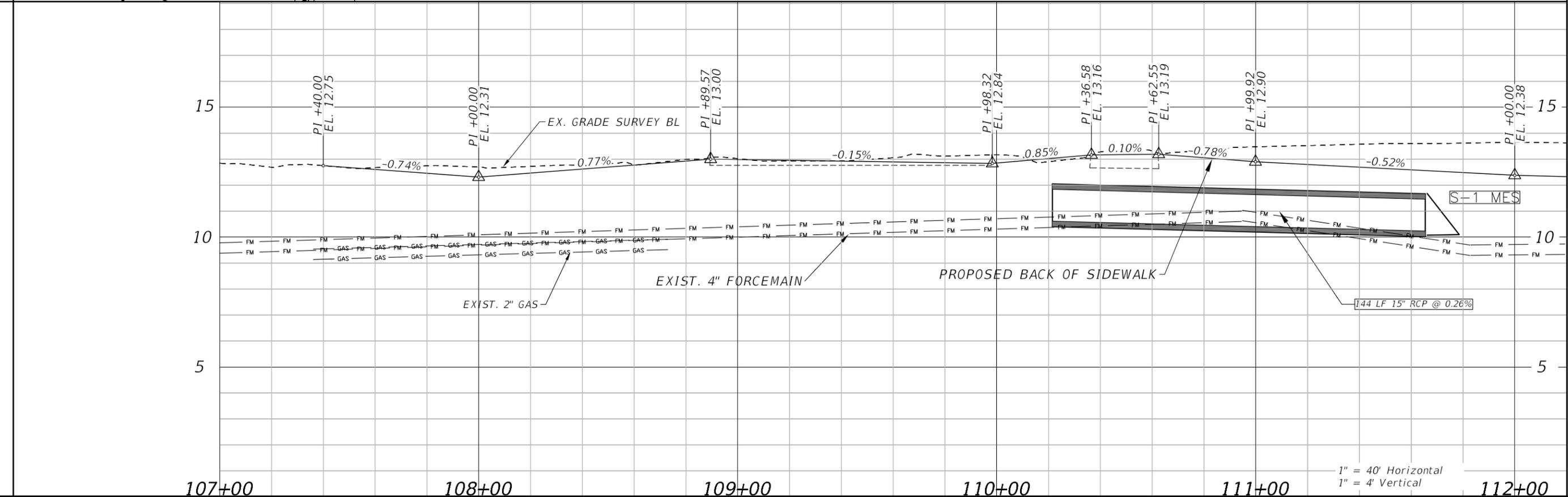
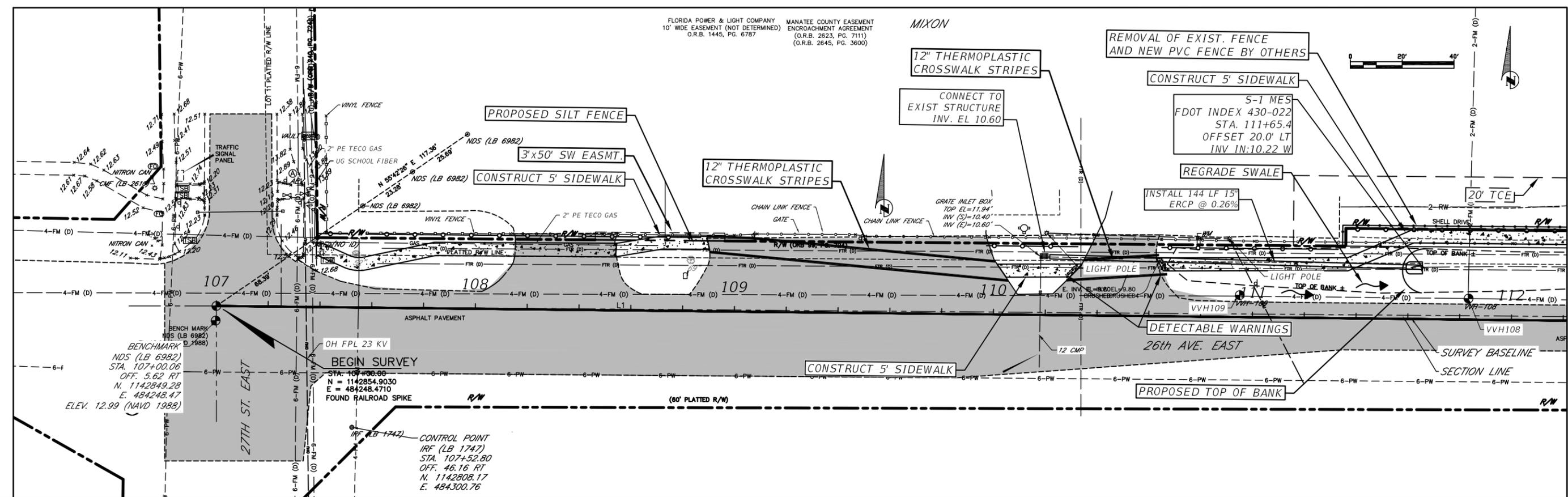
26TH Ave. East (SURVEY BASELINE)										
Number	Length	Radius	Line/Chord Direction	A Value	START STATION	END STATION	START NORTHING	END NORTHING	START EASTING	END EASTING
L1	2698.997		S89° 22' 34.14"E		107+00.00	133+99.00	1142854.9	1142825.5	484248.5	486947.3
C1	2.246	200.000	S89° 41' 52.30"E		133+99.00	134+01.24	1142825.5	1142825.5	486947.3	486949.6
L2	1398.757		N89° 58' 49.54"E		134+01.24	148+00.00	1142825.5	1142826.0	486949.6	488348.3

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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	26TH AVENUE EAST SIDEWALK SURVEY CONTROL	SHEET NO.
			SURVEY #	N/A	DESIGNED					
			SEC./TWN./RGE	32/34S/18E	DRAWN					
			SCALE		CHECKED					
										07

FLORIDA POWER & LIGHT COMPANY 10' WIDE EASEMENT (NOT DETERMINED) O.R.B. 1445, PG. 6787
 MANATEE COUNTY EASEMENT ENCROACHMENT AGREEMENT (O.R.B. 2623, PG. 7111) (O.R.B. 2645, PG. 3600)

MIXON



1" = 40' Horizontal
 1" = 4' Vertical

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DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED	ZNS	07/2019
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				DESIGNED	JEA	08/2020
			32/34S/18E	DRAWN	JEA	09/2020
				CHECKED	GB/SF	06/2021

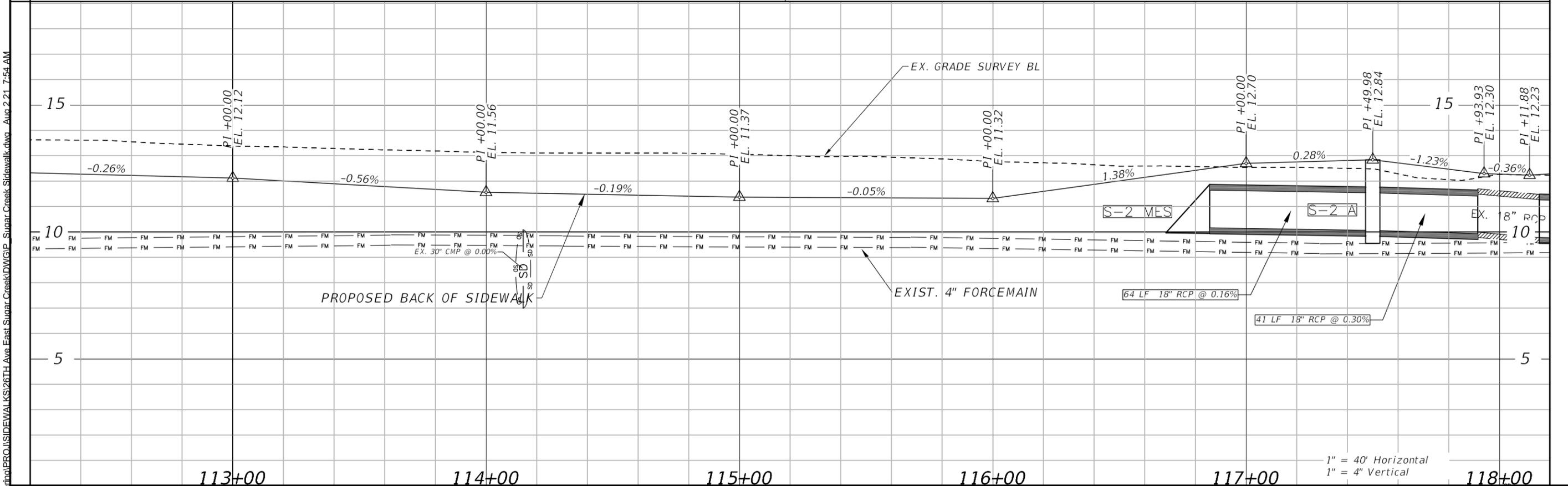
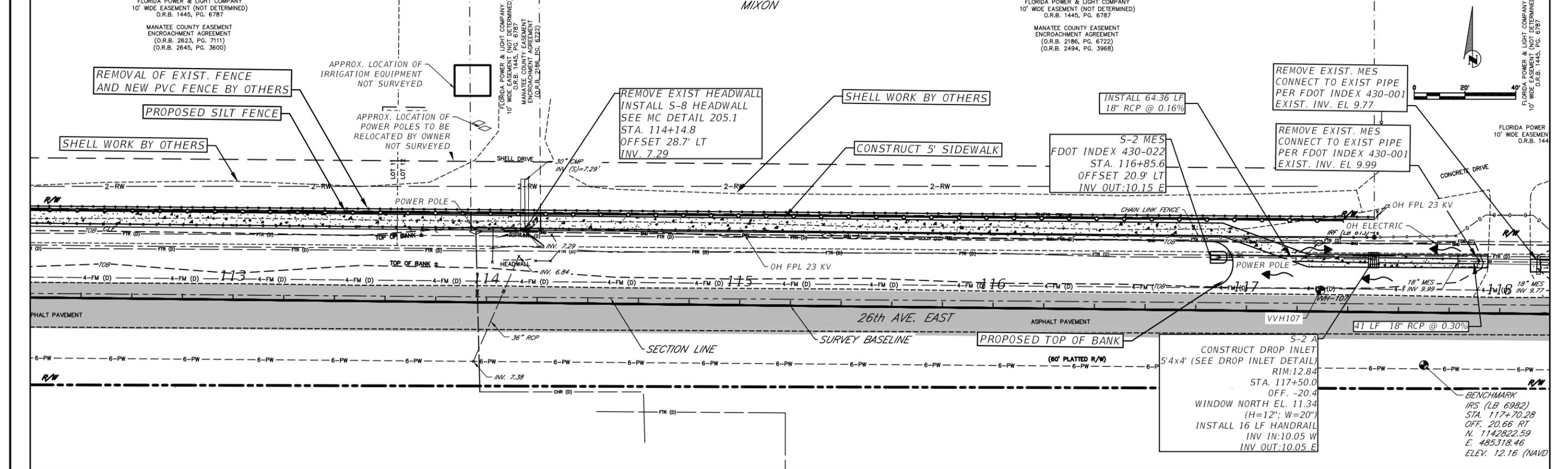
YANRONG FU, P.E.
 FLORIDA P.E. LICENSE # 69268
 MANATEE COUNTY PUBLIC WORKS
 1022 26TH AVENUE EAST
 BRADENTON, FL. 34208



**PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES**
 1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
 PLAN AND PROFILE
 STA. 107+00 TO 112+20

SHEET NO.
 08



DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

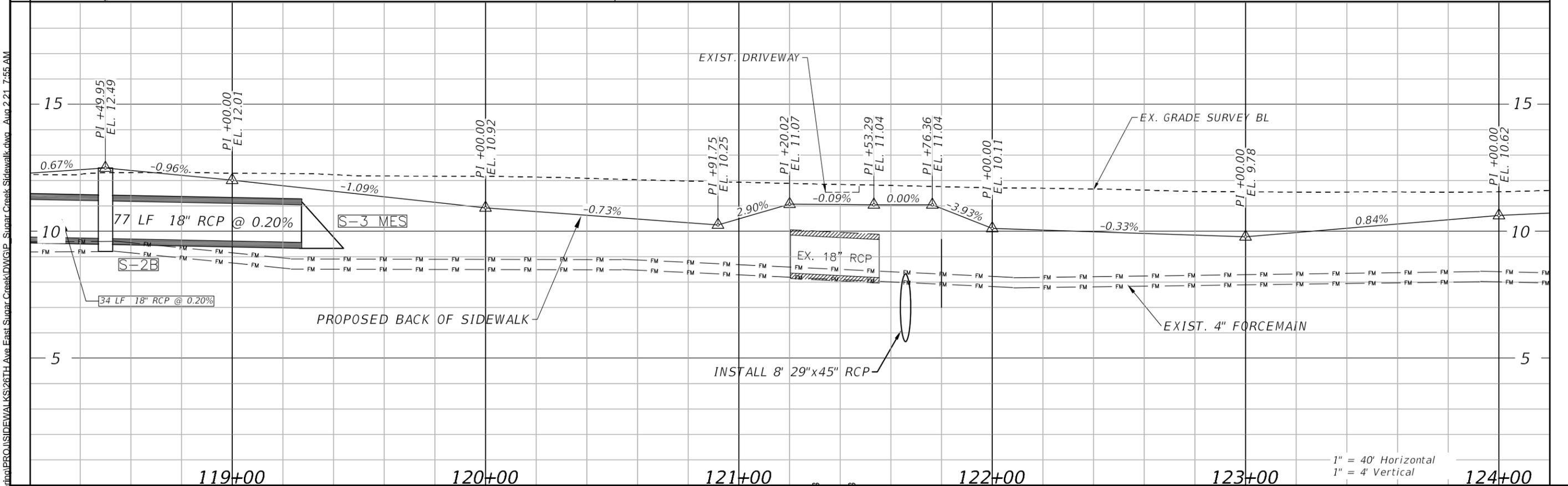
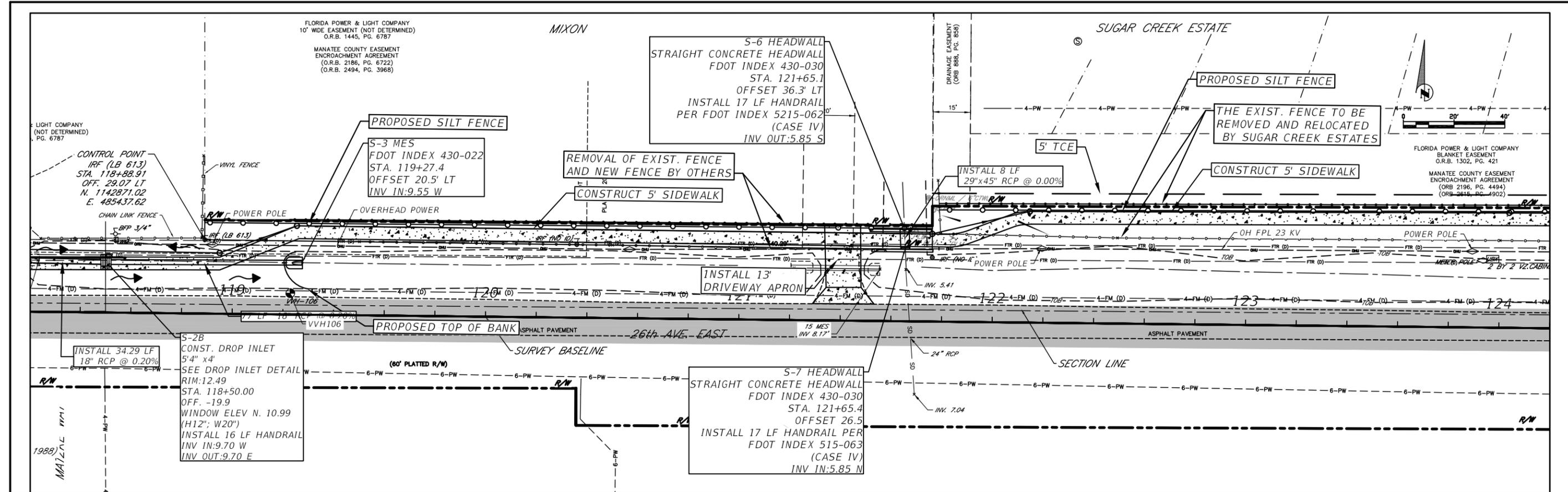
YANRONG FU, P.E.
 FLORIDA P.E. LICENSE # 69268
 MANATEE COUNTY PUBLIC WORKS
 1022 26TH AVENUE EAST
 BRADENTON, FL. 34208



26TH AVENUE EAST SIDEWALK
 PLAN AND PROFILE
 STA. 112+20 TO 118+20

SHEET NO.
 09

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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

MANATEE COUNTY
FLORIDA

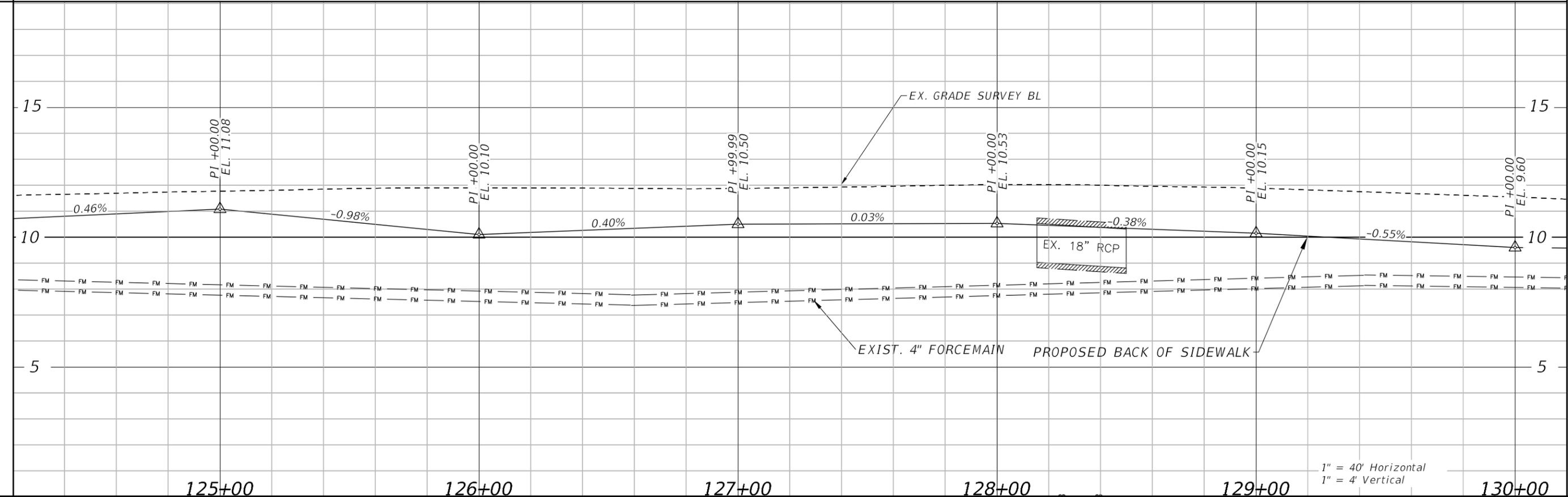
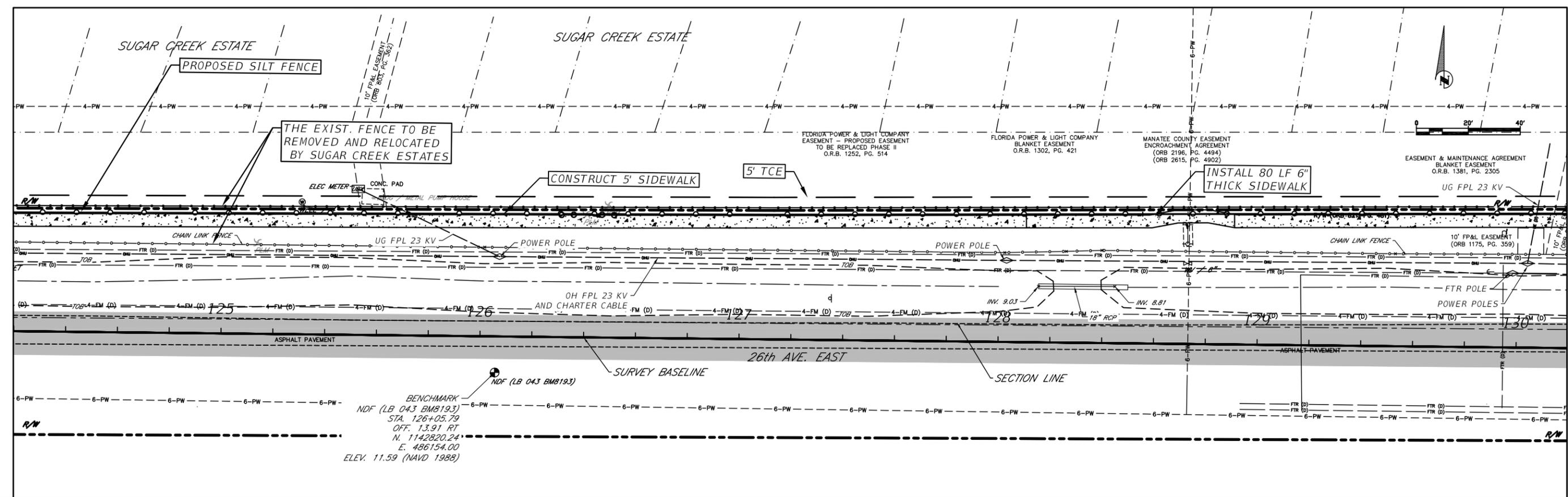
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
PLAN AND PROFILE
STA. 118+20 TO 124+20

SHEET NO.
10

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1" = 40' Horizontal
1" = 4' Vertical

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

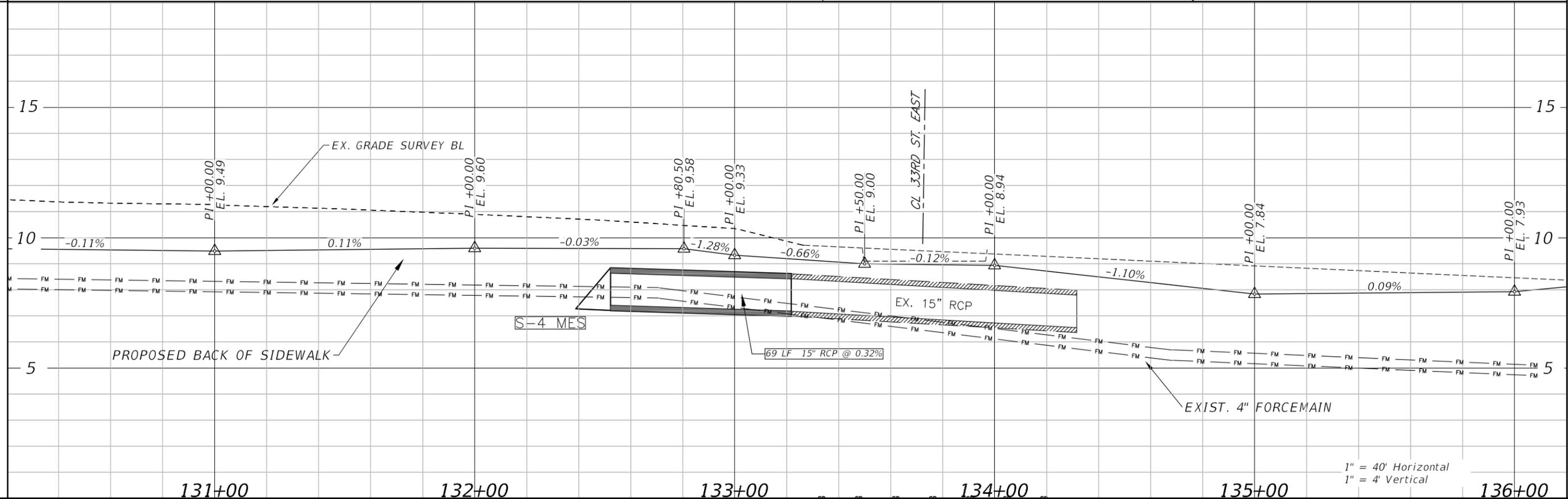
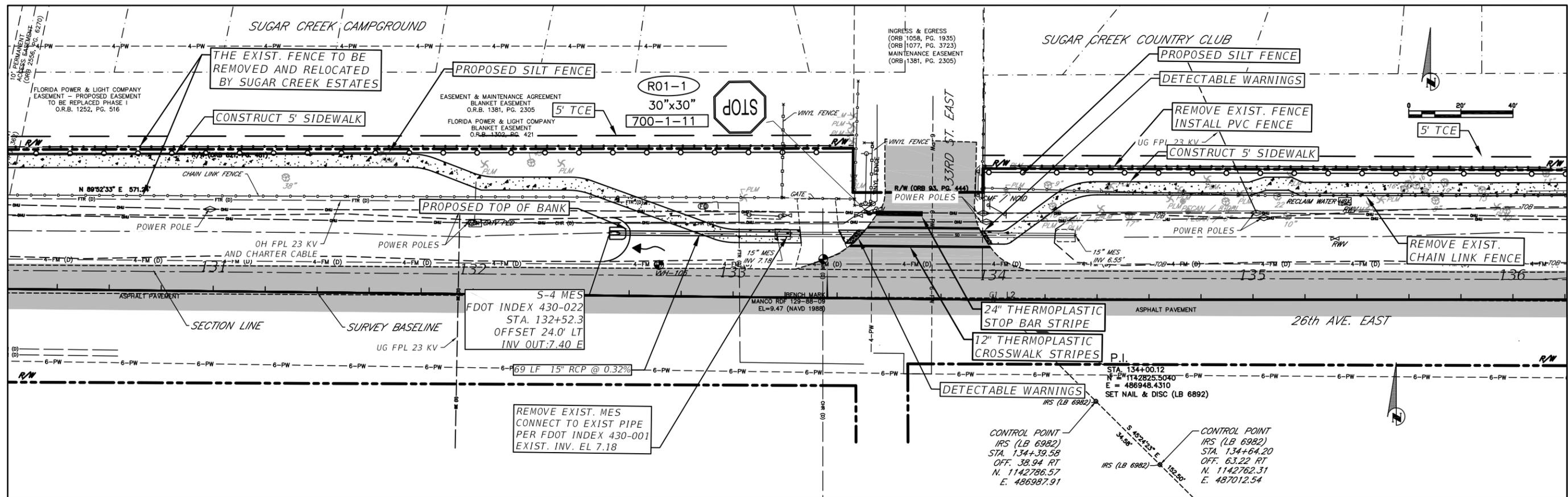
YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208



26TH AVENUE EAST SIDEWALK
PLAN AND PROFILE
STA. 124+20 TO 130+20

SHEET NO.
11

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1" = 40' Horizontal
1" = 4' Vertical

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

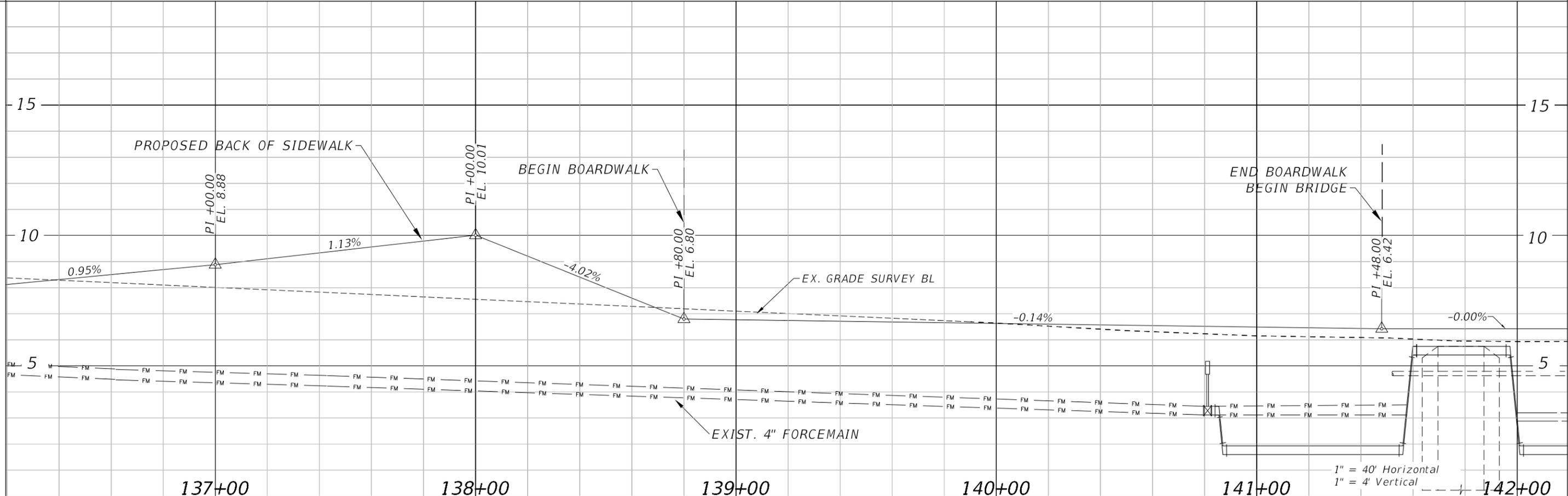
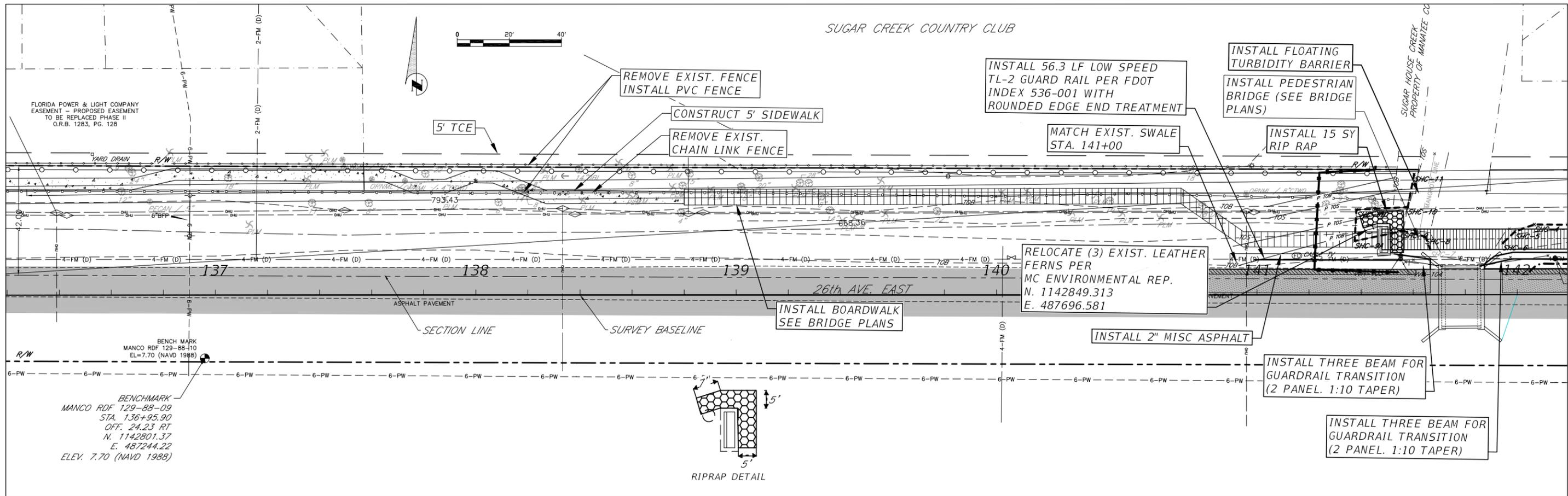
MANATEE COUNTY
FLORIDA

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ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
PLAN AND PROFILE
STA. 130+20 TO 136+20

SHEET NO.
12

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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

Manatee County
FLORIDA

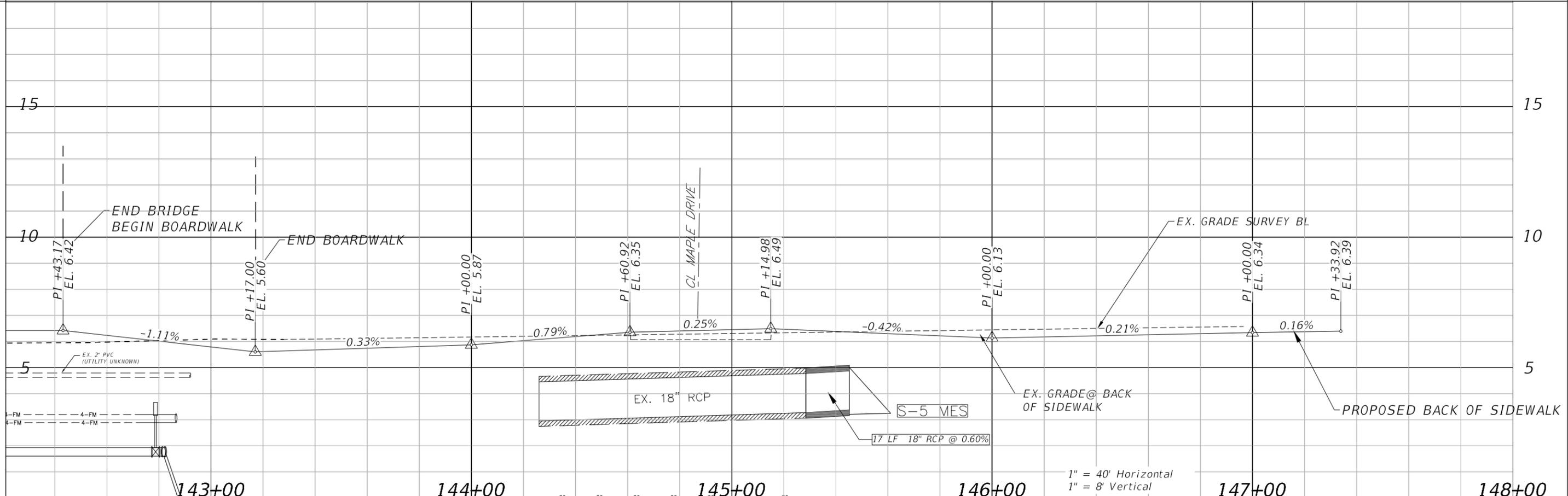
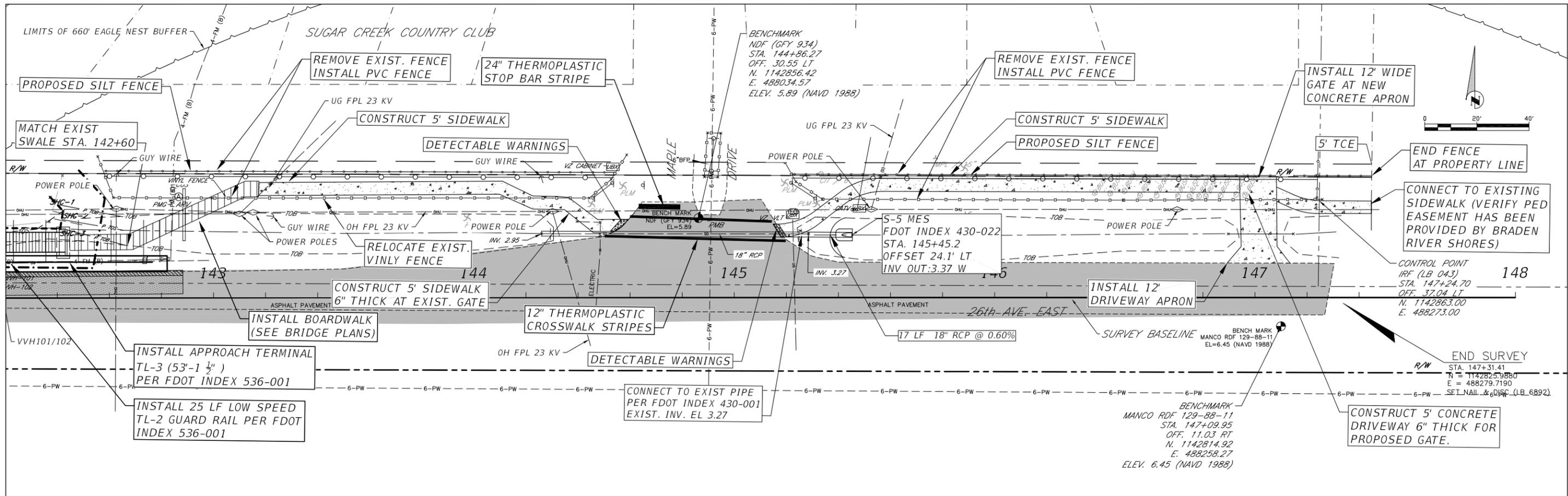
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
PLAN AND PROFILE
STA. 136+20 TO 142+20

SHEET NO.
13

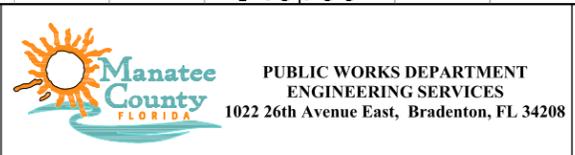
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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
 FLORIDA P.E. LICENSE # 69268
 MANATEE COUNTY PUBLIC WORKS
 1022 26TH AVENUE EAST
 BRADENTON, FL. 34208

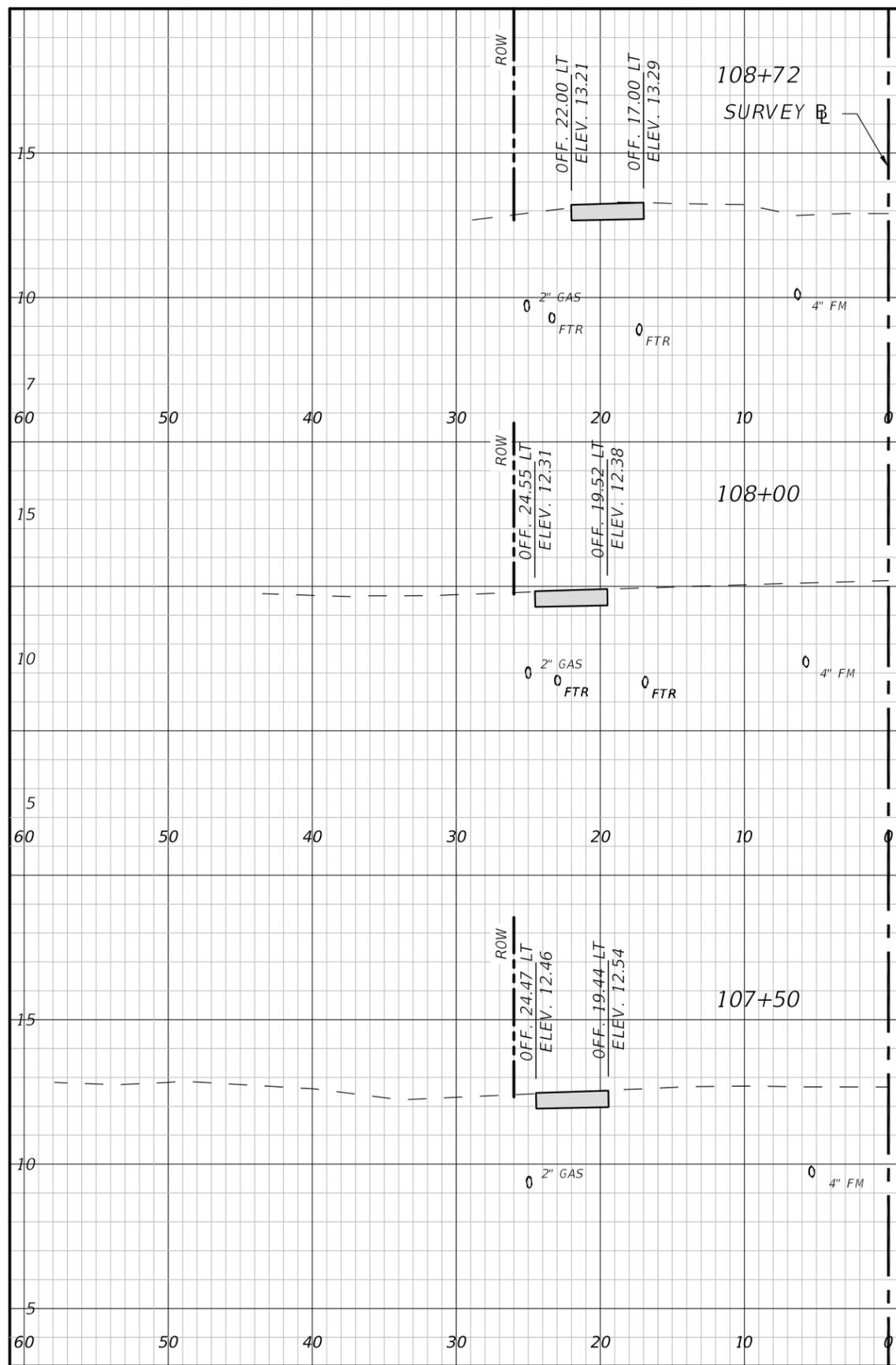


**26TH AVENUE EAST SIDEWALK
 PLAN AND PROFILE
 STA. 142+20 TO 147+20**

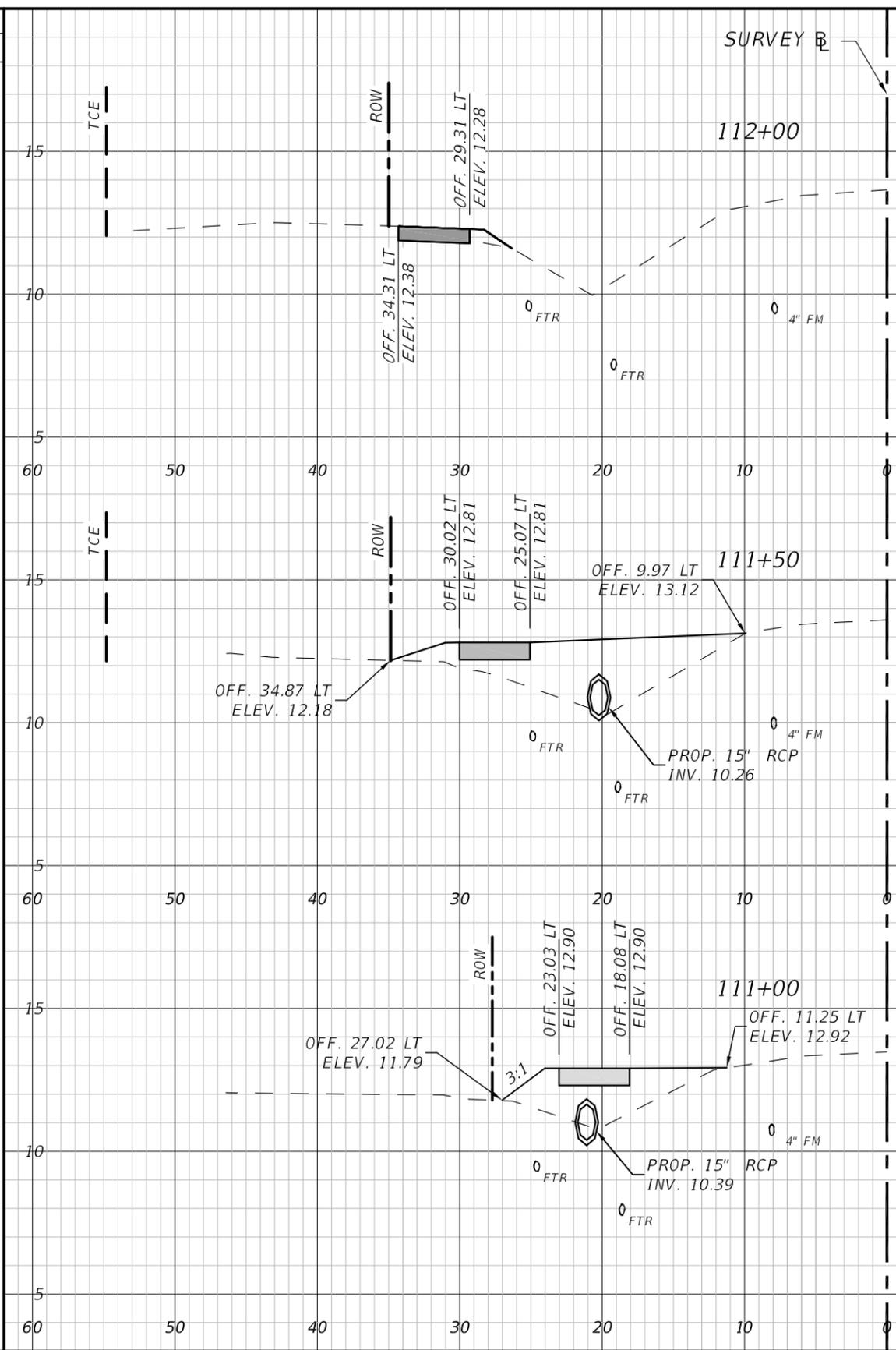
SHEET NO.
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Regular Exc.		Embankment	
A	V	A	V
ft ²	ft ³	ft ²	ft ³



Regular Exc.		Embankment	
A	V	A	V
ft ²	ft ³	ft ²	ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	000-000000	SURVEYED	ZNS	---
					DESIGNED	JEA	08/2020
			26/33/18		DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208



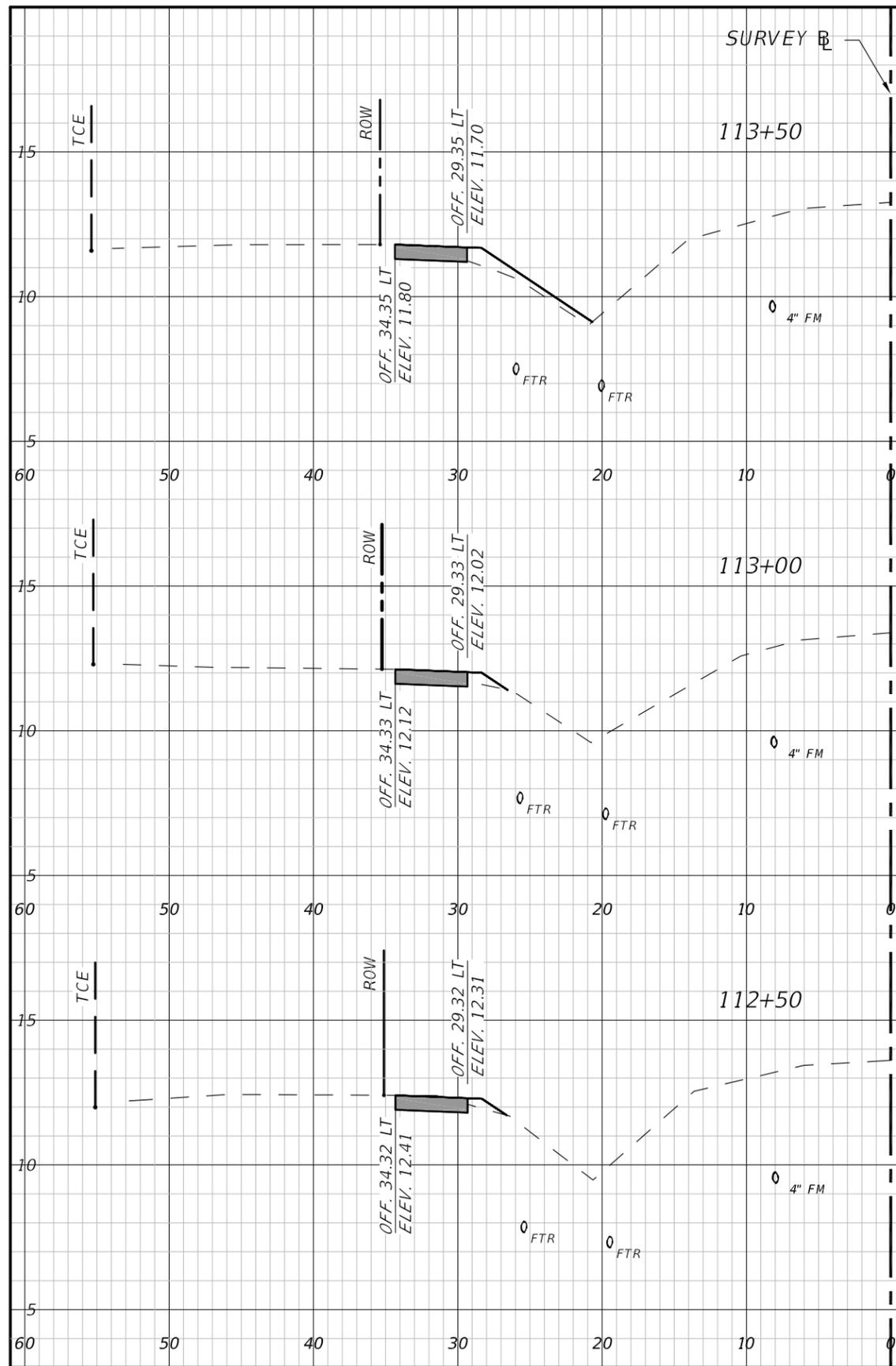
**PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES**
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 107+50 TO 112+00

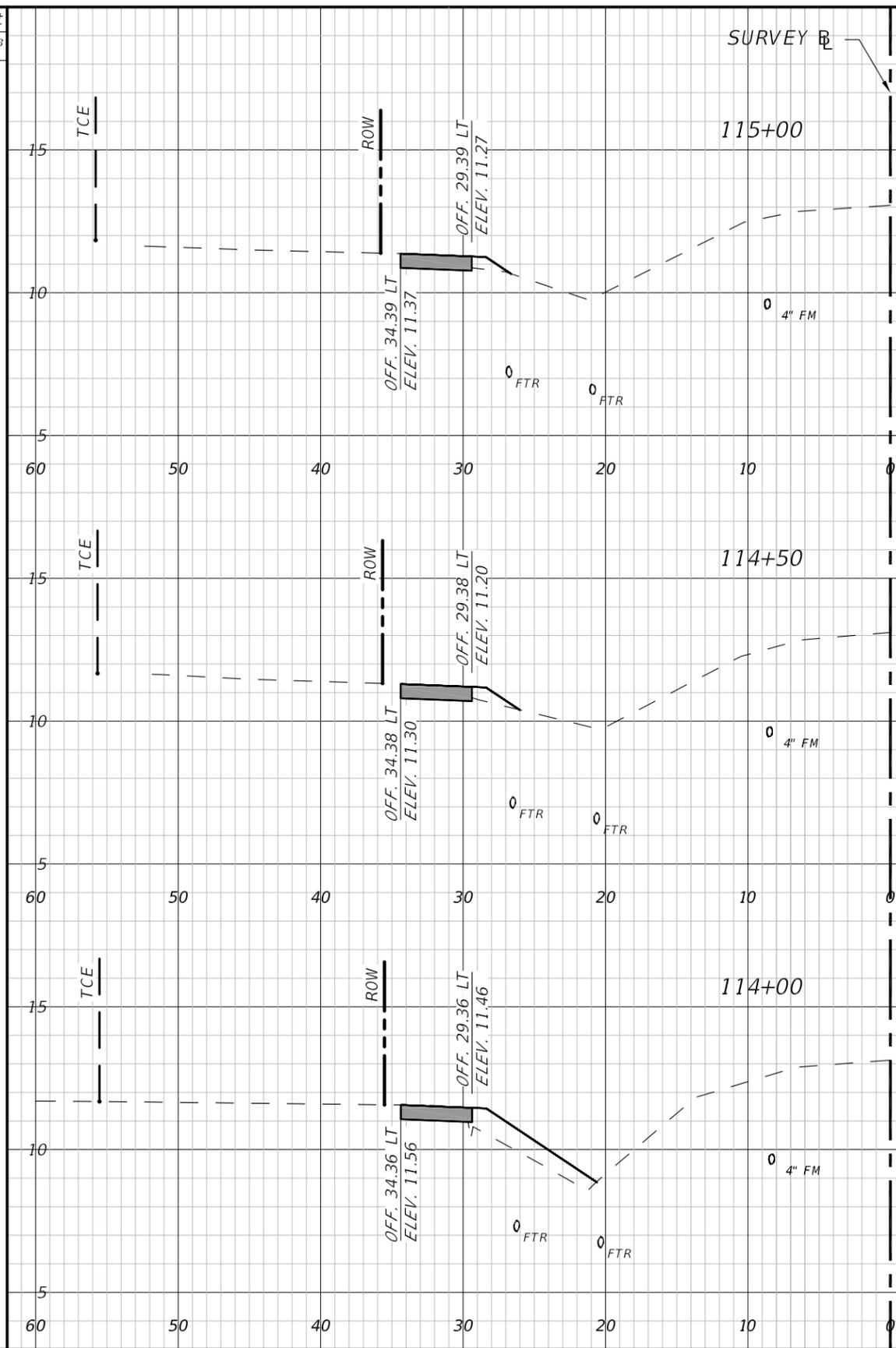
SHEET NO.
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Regular Exc.		Embankment	
A	V	A	V
ft ²	ft ³	ft ²	ft ³



Regular Exc.		Embankment	
A	V	A	V
ft ²	ft ³	ft ²	ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
					DESIGNED	JEA	08/2020
					DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

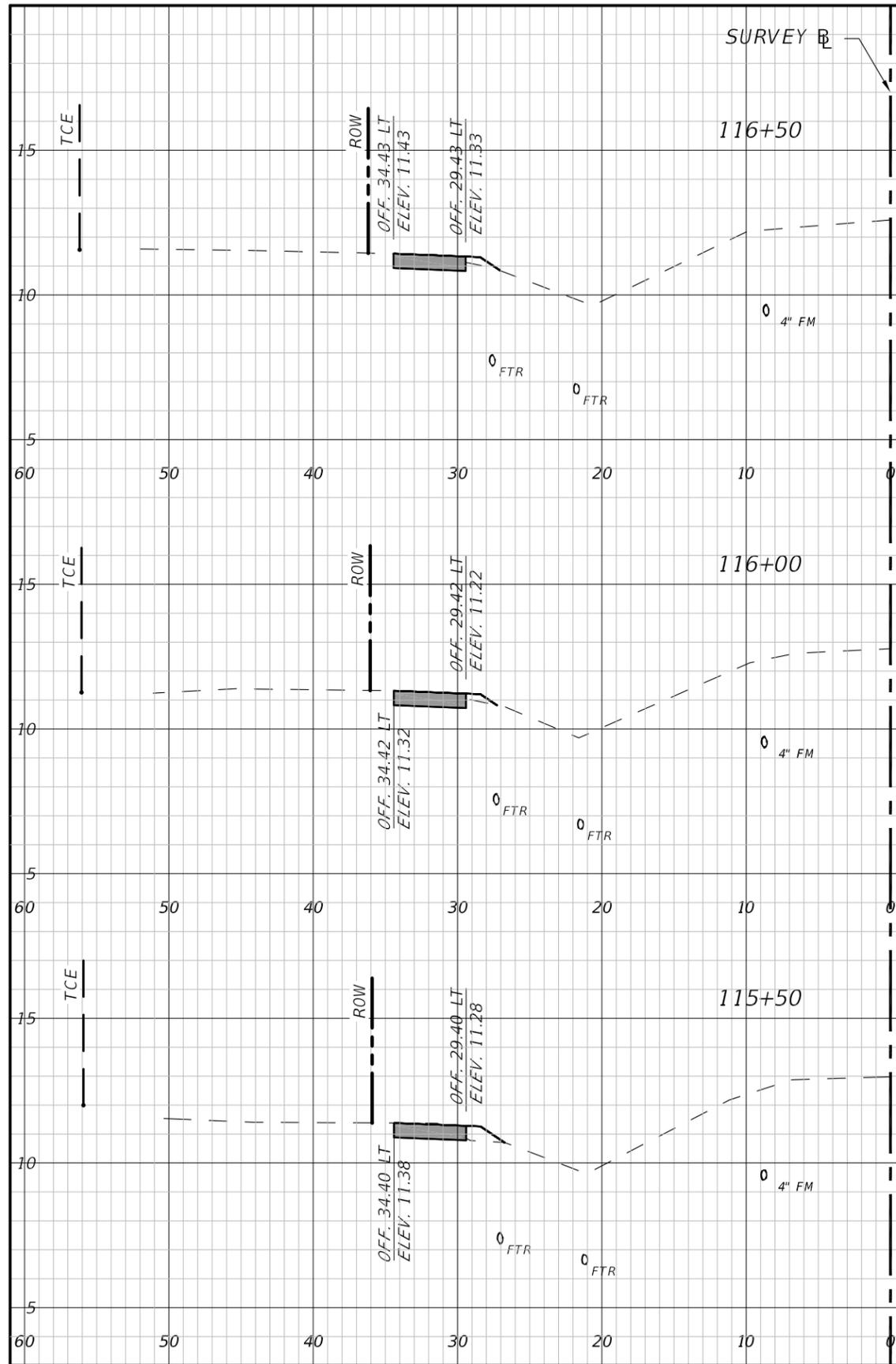


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ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

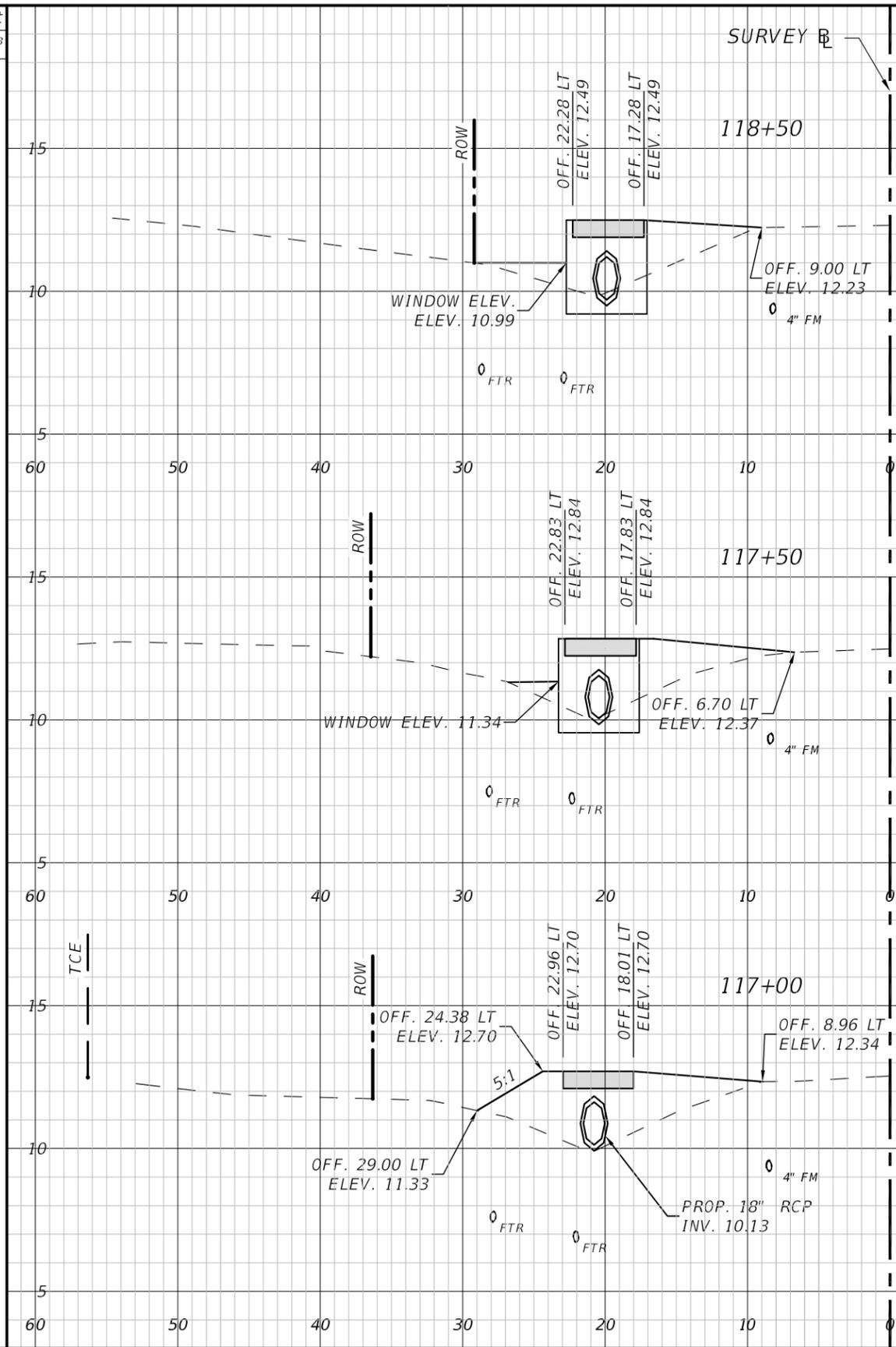
26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 112+50 TO 115+00

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Regular Exc.		Embankment	
A	V	A	V
ft ²	ft ³	ft ²	ft ³



Regular Exc.		Embankment	
A	V	A	V
ft ²	ft ³	ft ²	ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

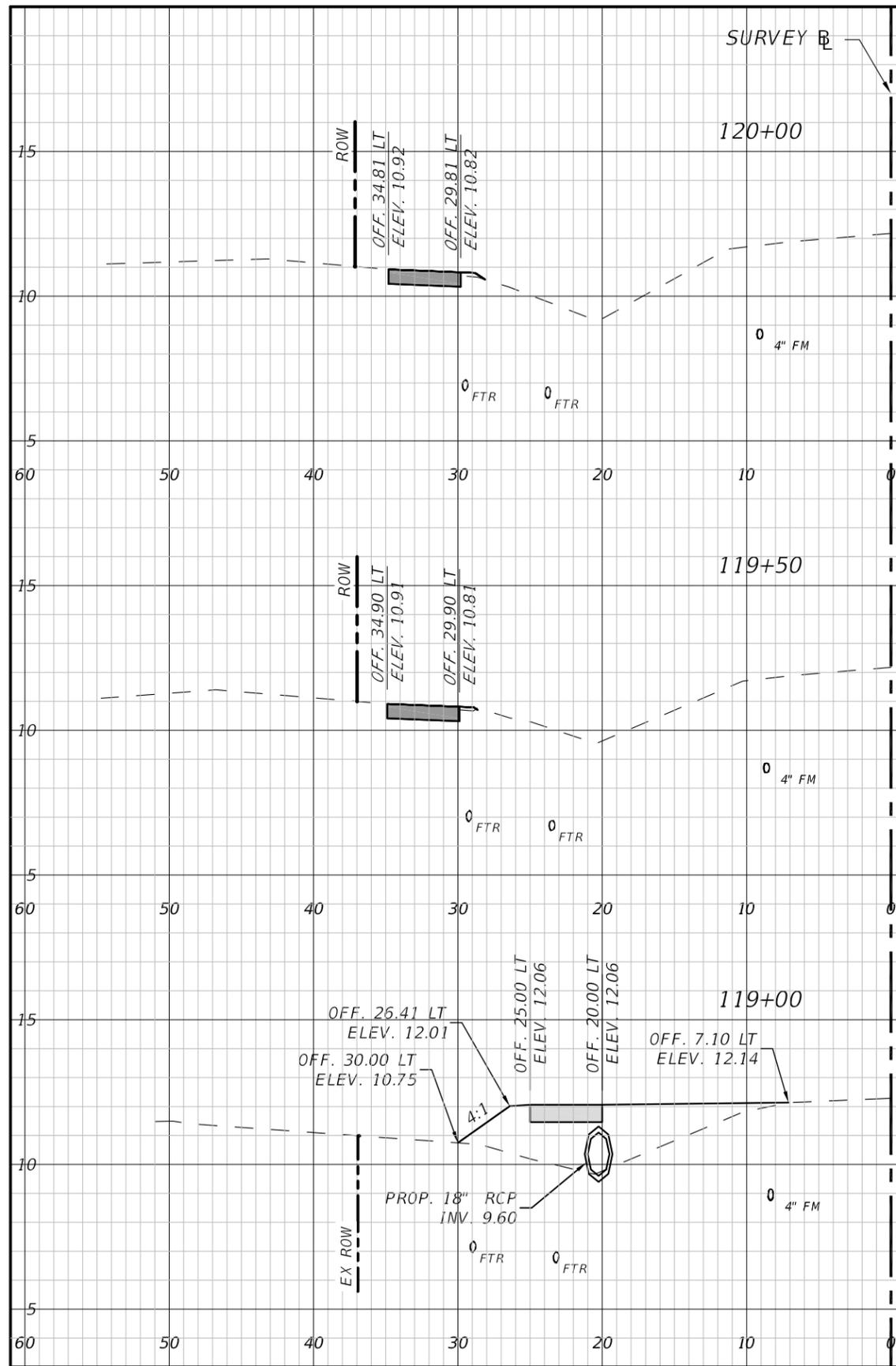


PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

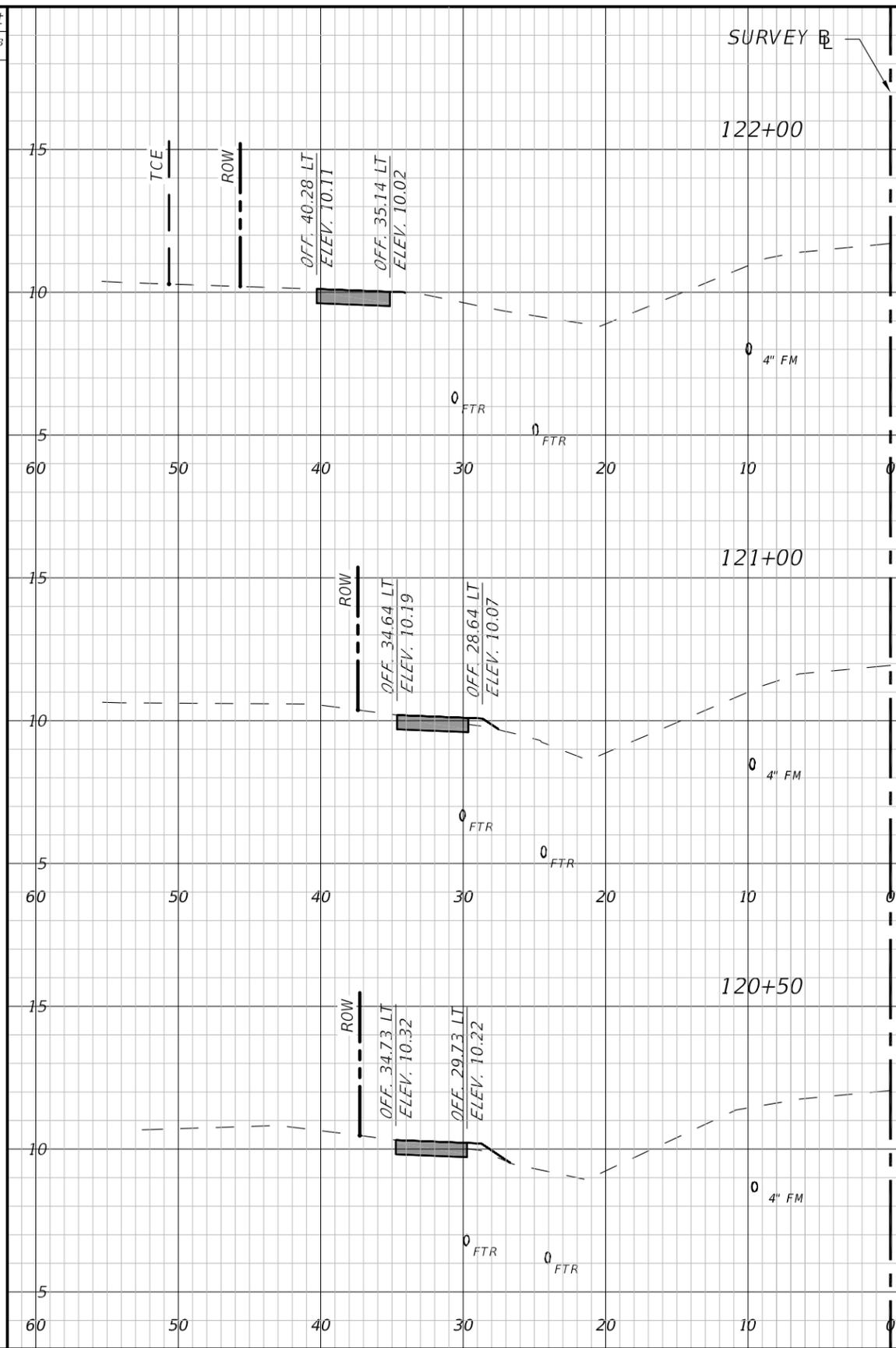
26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 115+50 TO 118+00

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Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³



Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				---	DESIGNED	JEA	08/2020
			26/33/18		DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

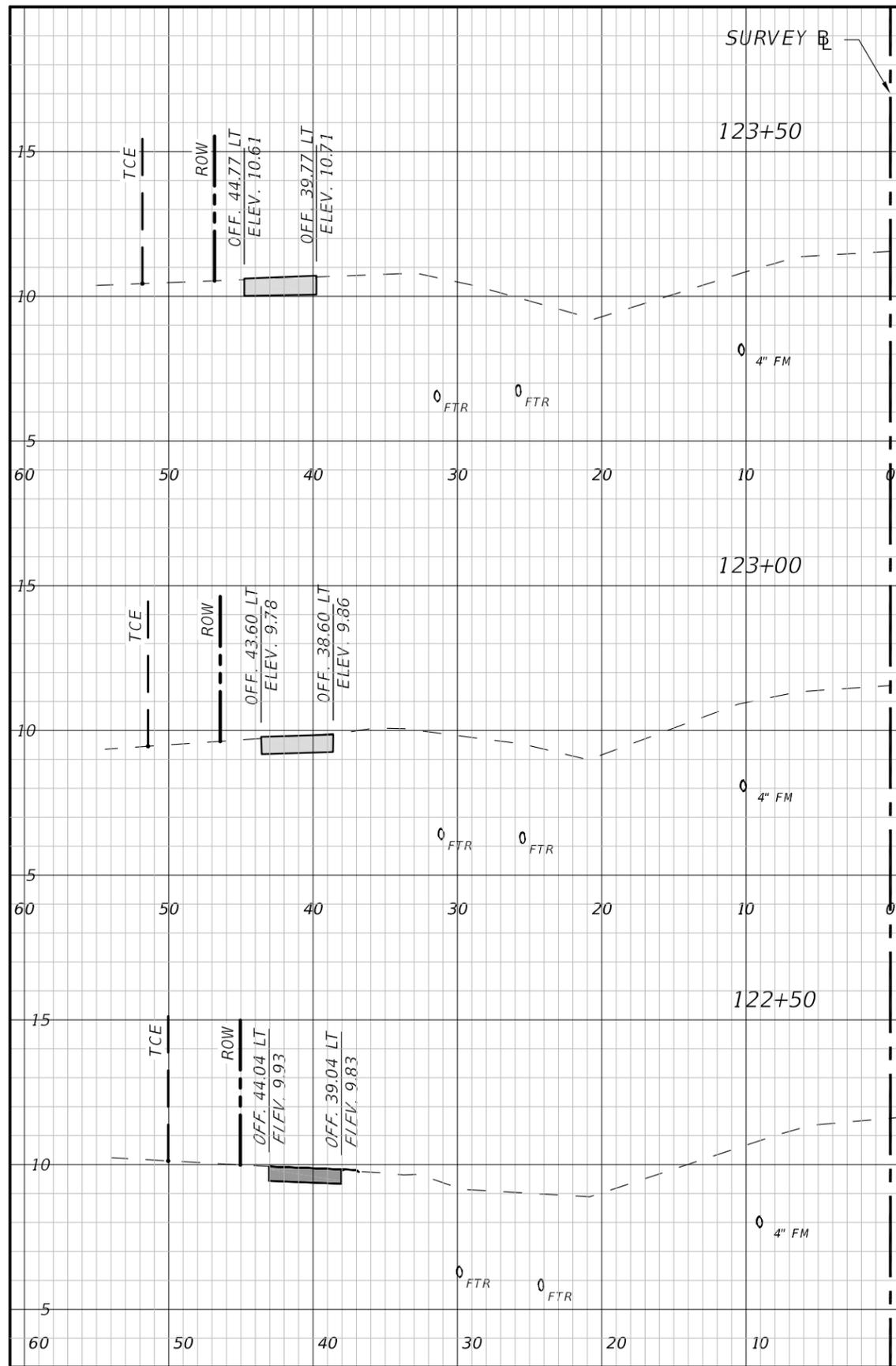


PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

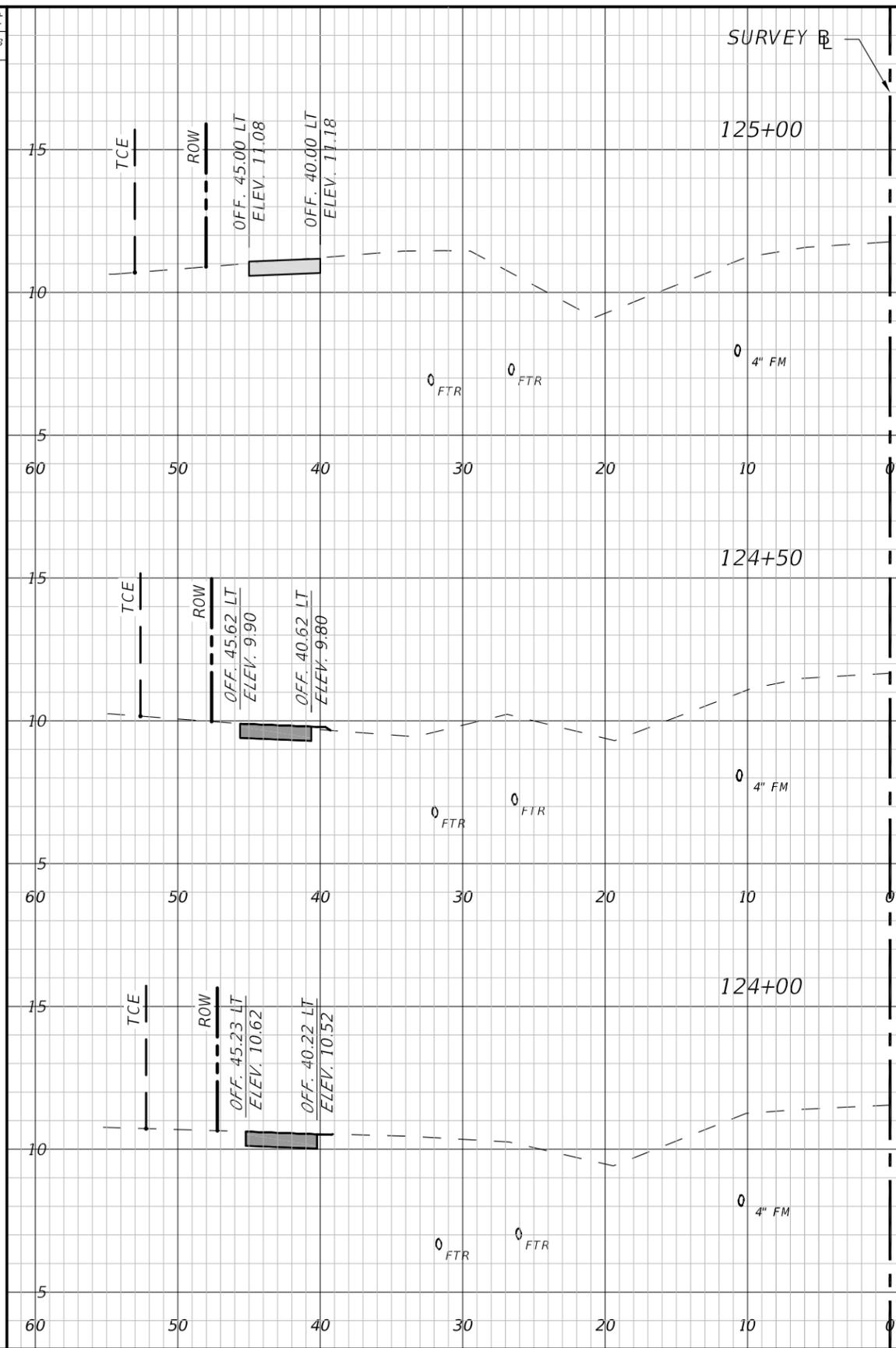
26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 119+00 TO 122+00

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Regular		Exc.		Embankment			
A	ft ²	V	ft ³	A	ft ²	V	ft ³



Regular		Exc.		Embankment			
A	ft ²	V	ft ³	A	ft ²	V	ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

YANRONG FU, P.E.
FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208



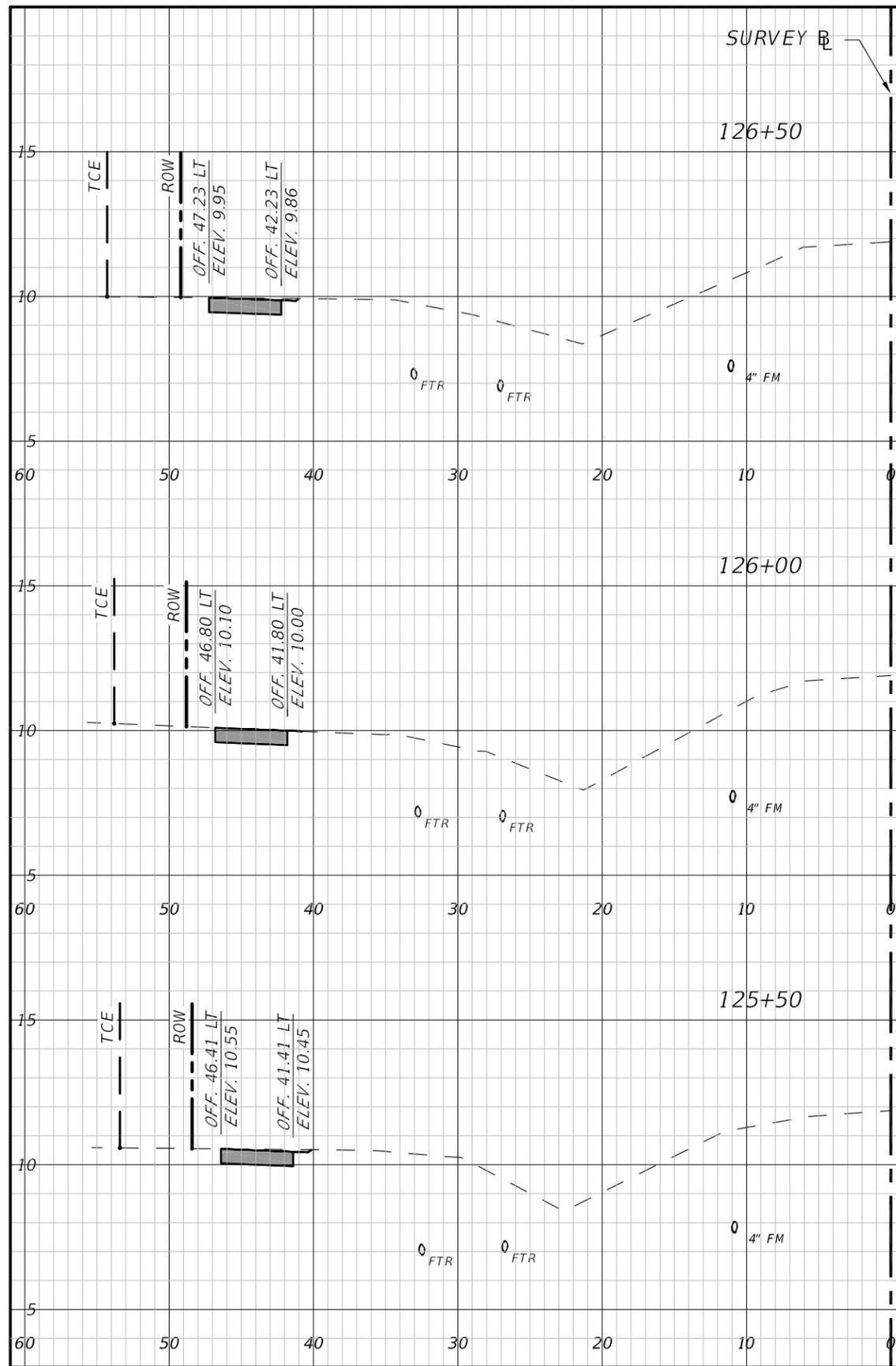
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 122+50 TO 125+00

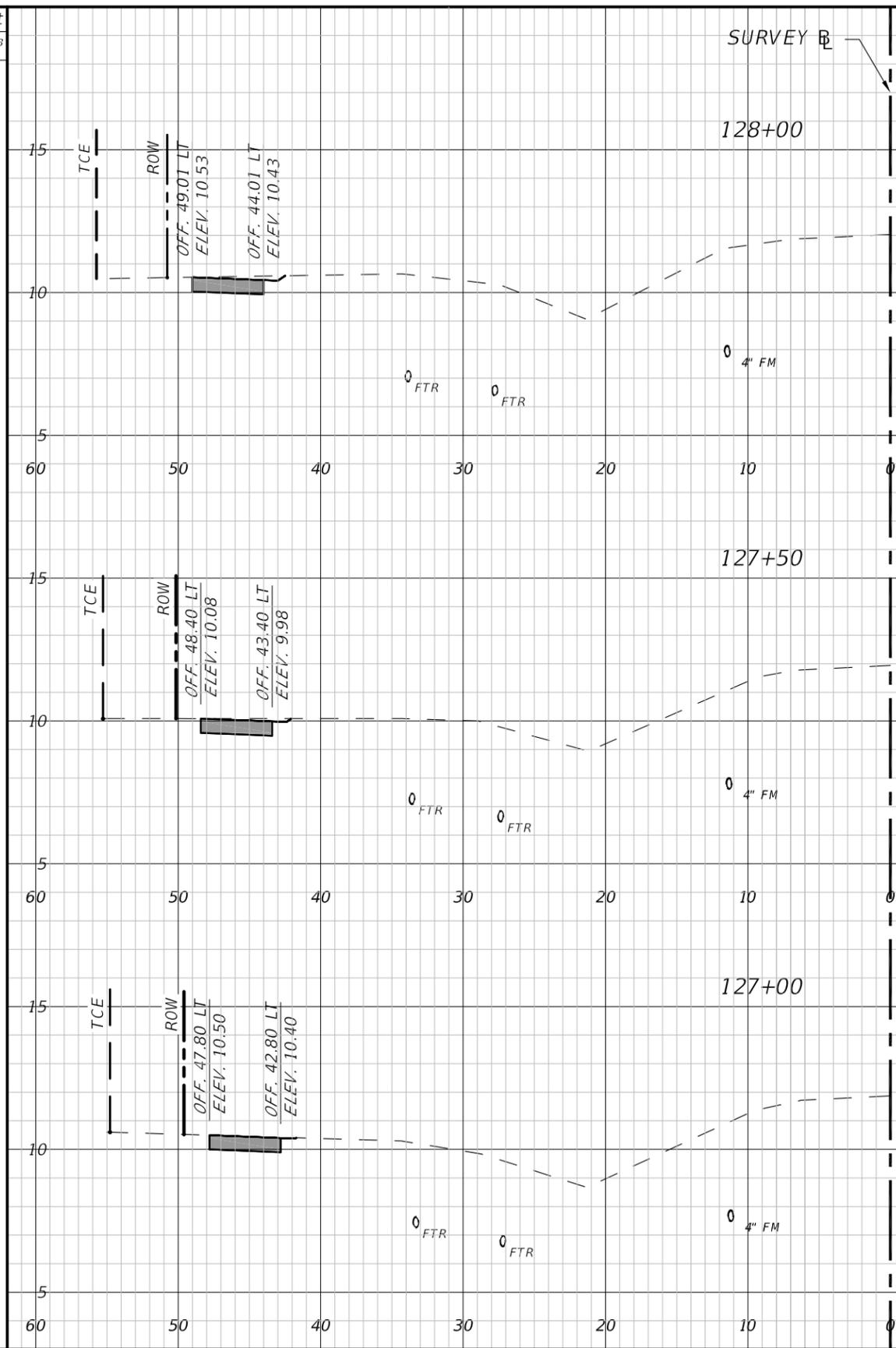
SHEET NO.
19

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H:\Highway Engineering\PROJ\SIDEWALKS\26TH Ave East Sugar Creek\DWG\Sugar Creek Cross Sections.dwg [8/2/2021 8:03 AM]



Regular		Exc.		Embankment	
A	V	A	V	A	V
ft ²	ft ³	ft ²	ft ³	ft ²	ft ³



Regular		Exc.		Embankment	
A	V	A	V	A	V
ft ²	ft ³	ft ²	ft ³	ft ²	ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				----	DESIGNED	JEA	08/2020
			26/33/18		DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

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FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

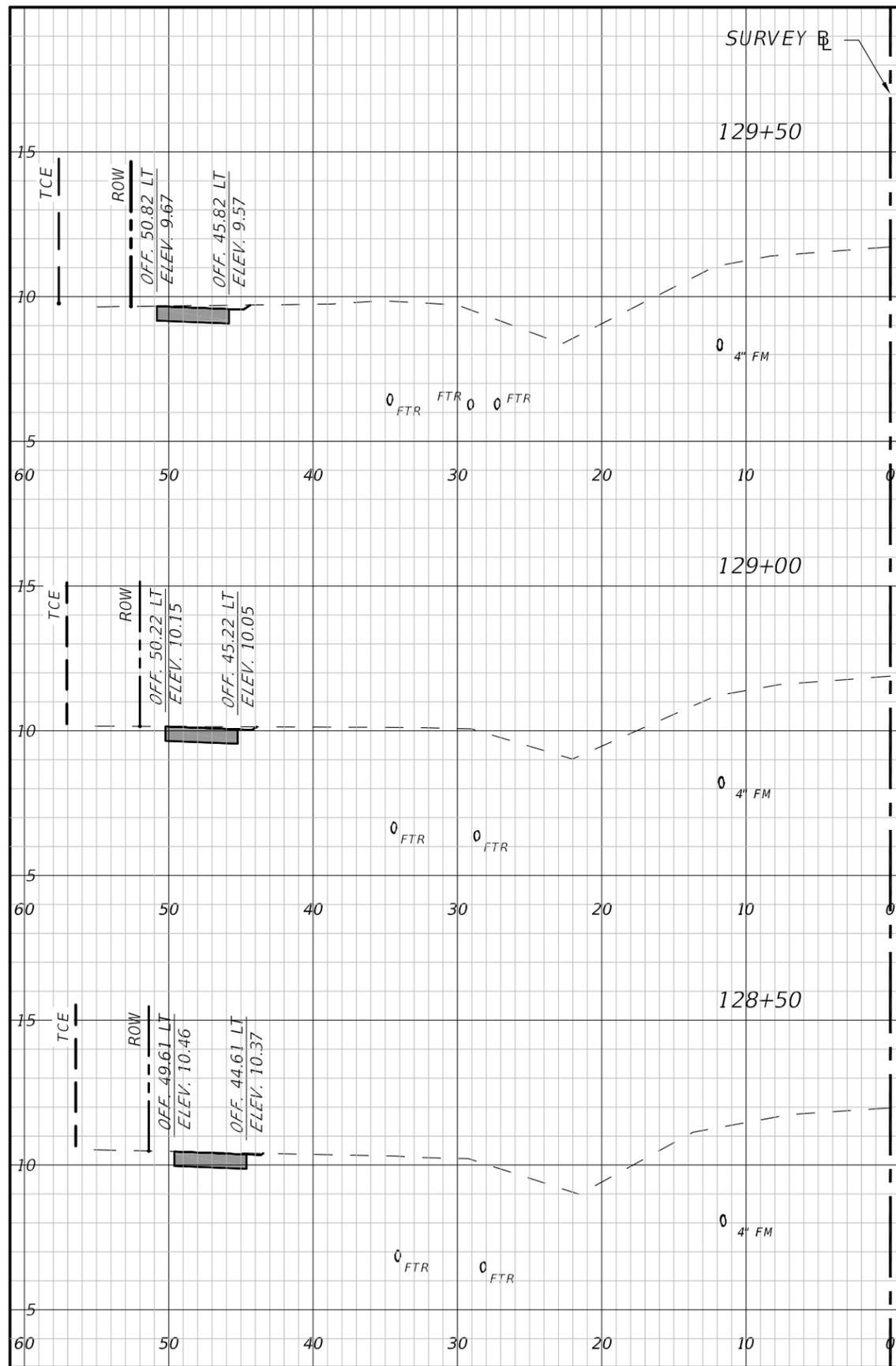


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ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

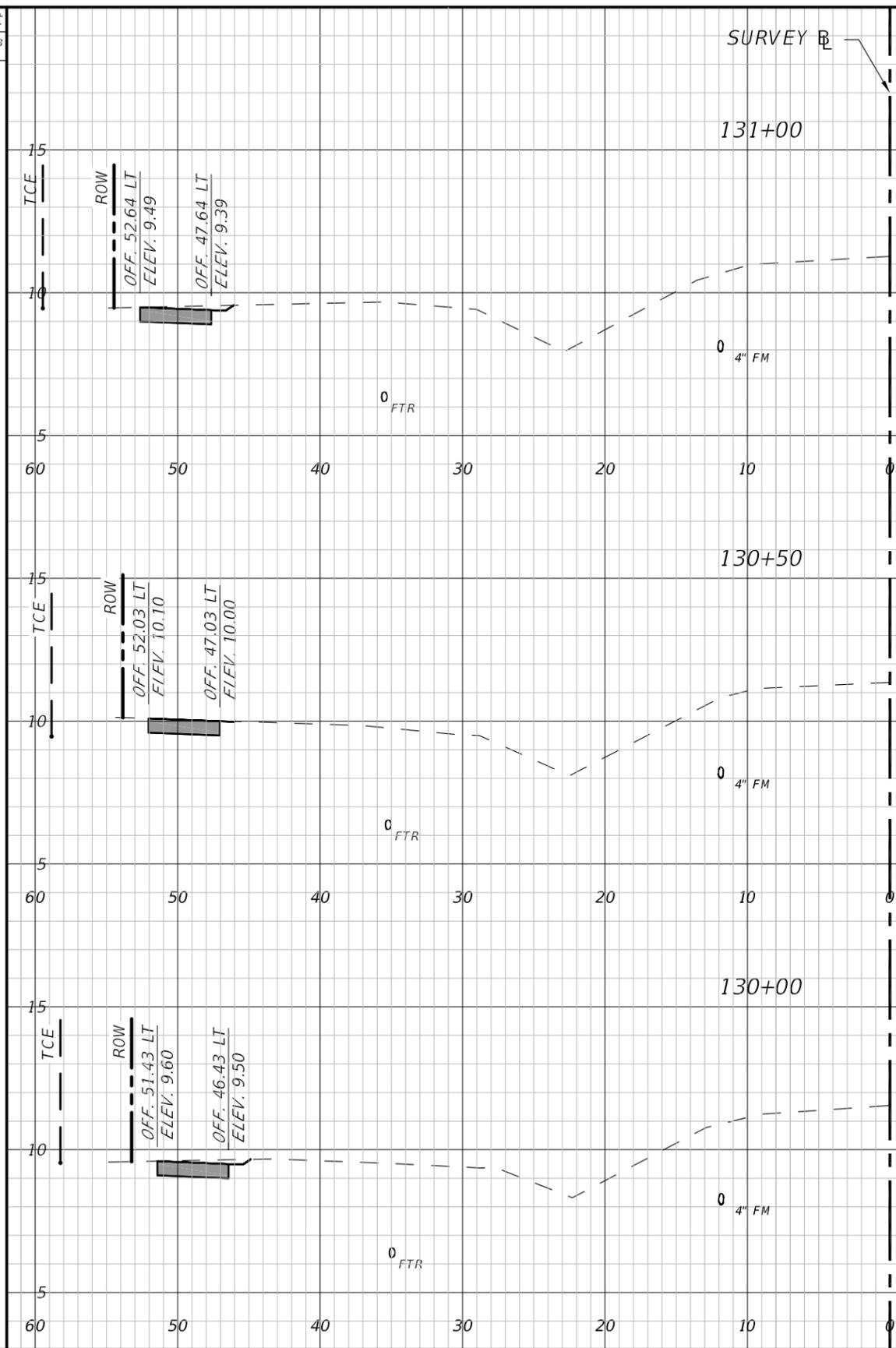
26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 125+50 TO 128+00

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Regular		Exc.		Embankment	
A	V	A	V	A	V
ft ²	ft ³	ft ²	ft ³	ft ²	ft ³



Regular		Exc.		Embankment	
A	V	A	V	A	V
ft ²	ft ³	ft ²	ft ³	ft ²	ft ³

1" = 10' Horizontal
 1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				---	DESIGNED	JEA	08/2020
			26/33/18		DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

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 BRADENTON, FL. 34208

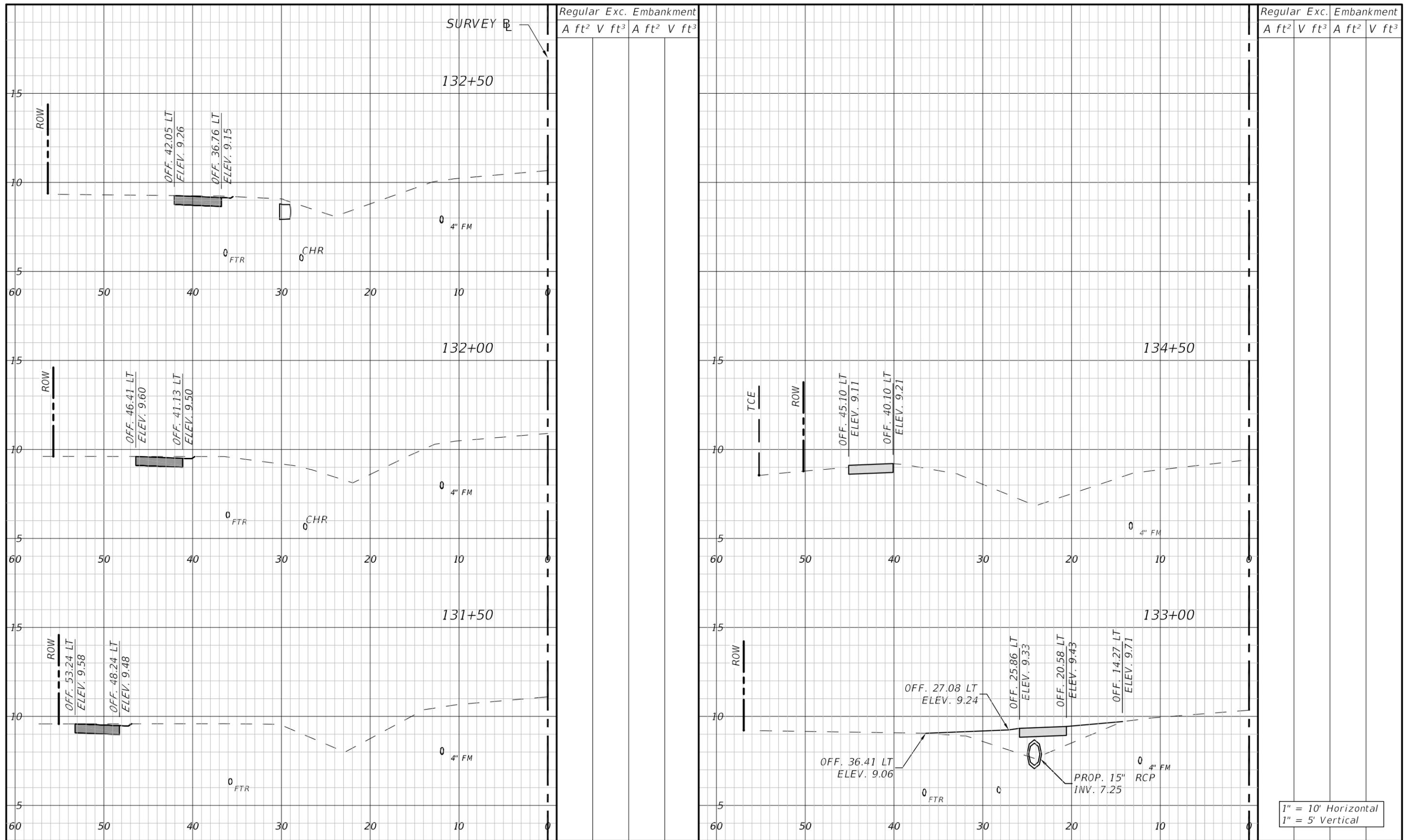


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26TH AVENUE EAST SIDEWALK
 CROSS SECTIONS
 STA. 128+50 TO 131+00

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Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³

Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				---	DESIGNED	JEA	08/2020
			26/33/18		DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

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1022 26TH AVENUE EAST
BRADENTON, FL. 34208

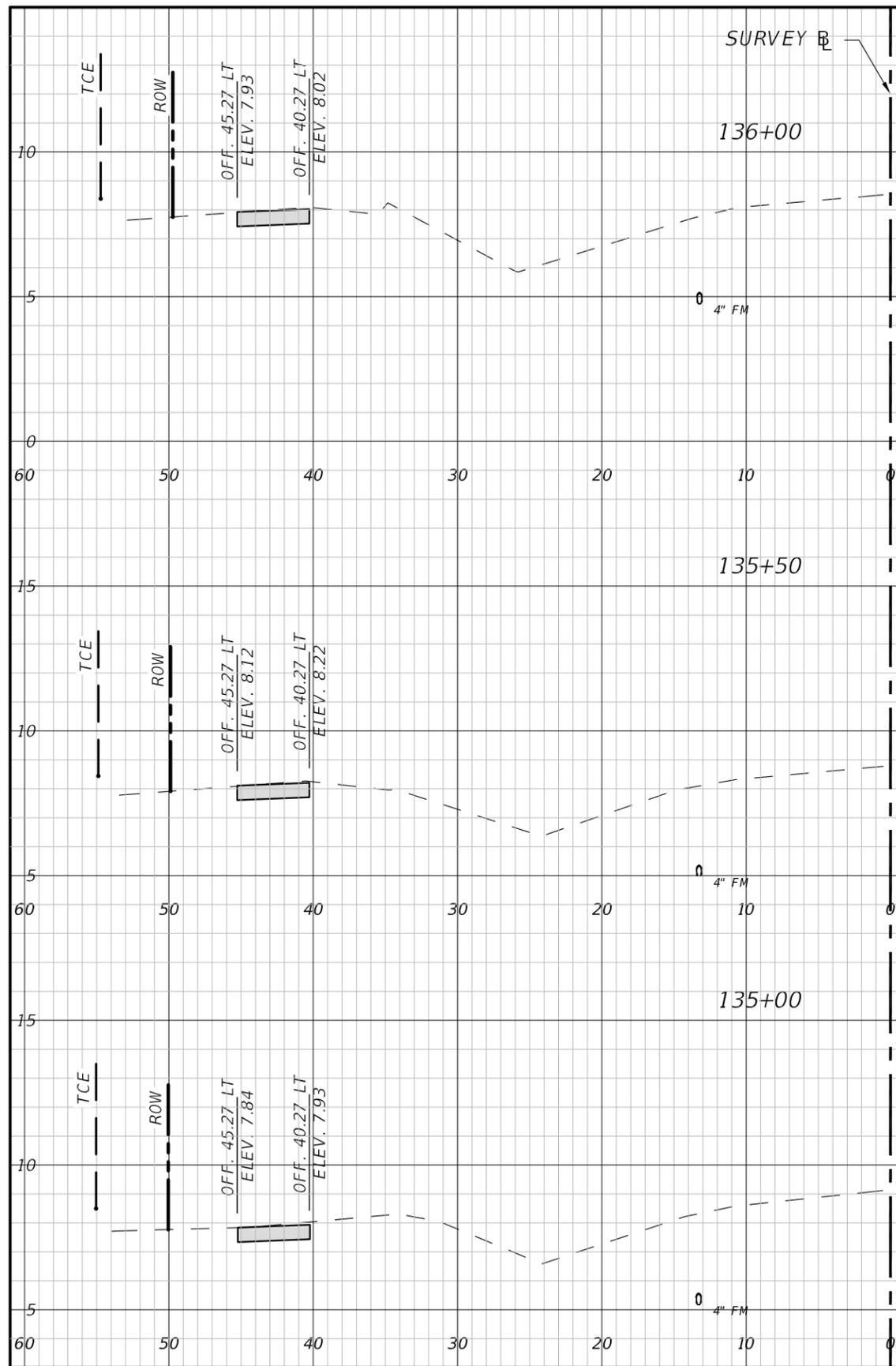


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1022 26th Avenue East, Bradenton, FL 34208

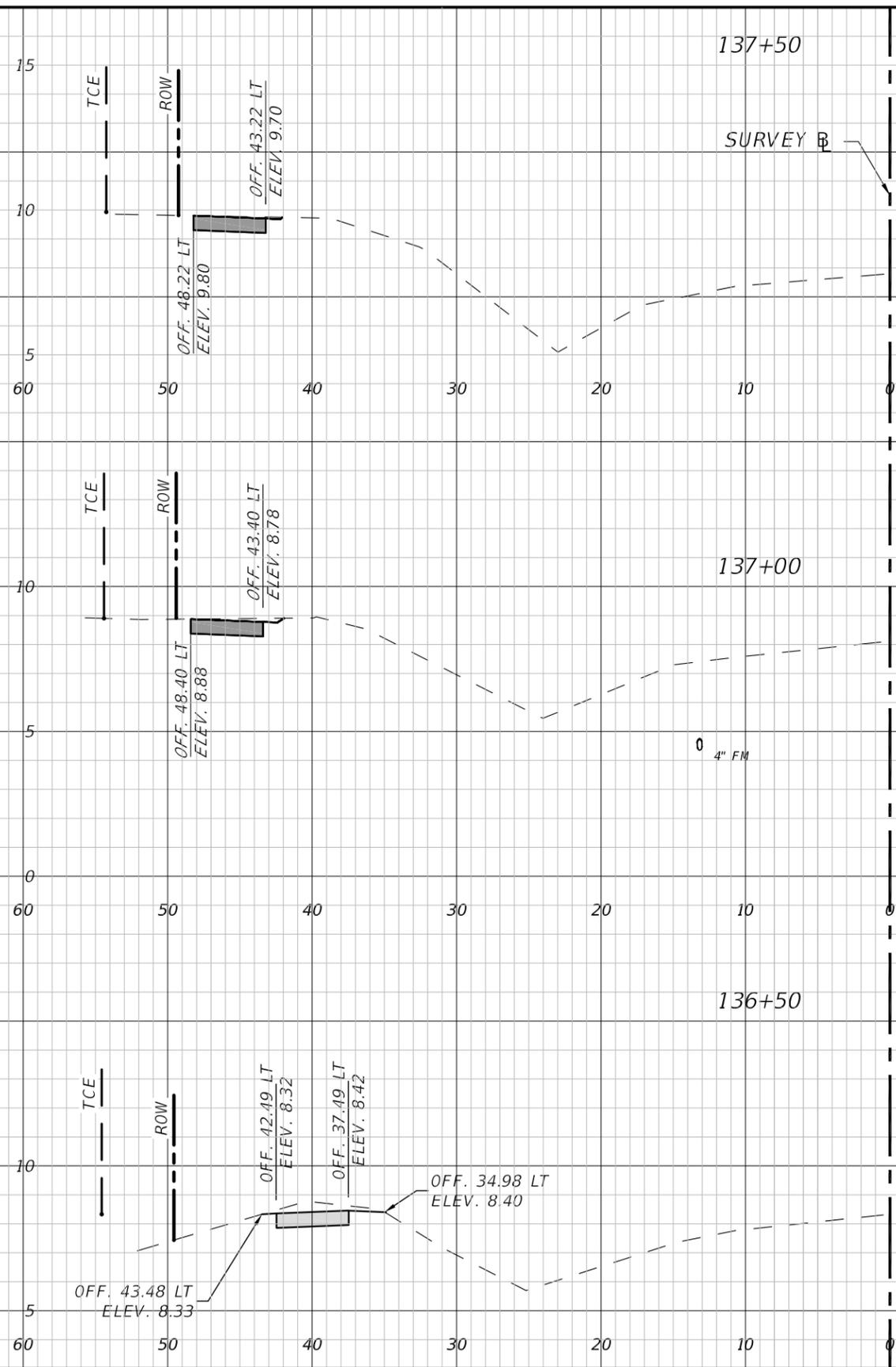
26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 131+50 TO 137+50

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Regular		Exc.		Embankment	
A	V	A	V	A	V
ft ²	ft ³	ft ²	ft ³	ft ²	ft ³



Regular		Exc.		Embankment	
A	V	A	V	A	V
ft ²	ft ³	ft ²	ft ³	ft ²	ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

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1022 26TH AVENUE EAST
BRADENTON, FL. 34208

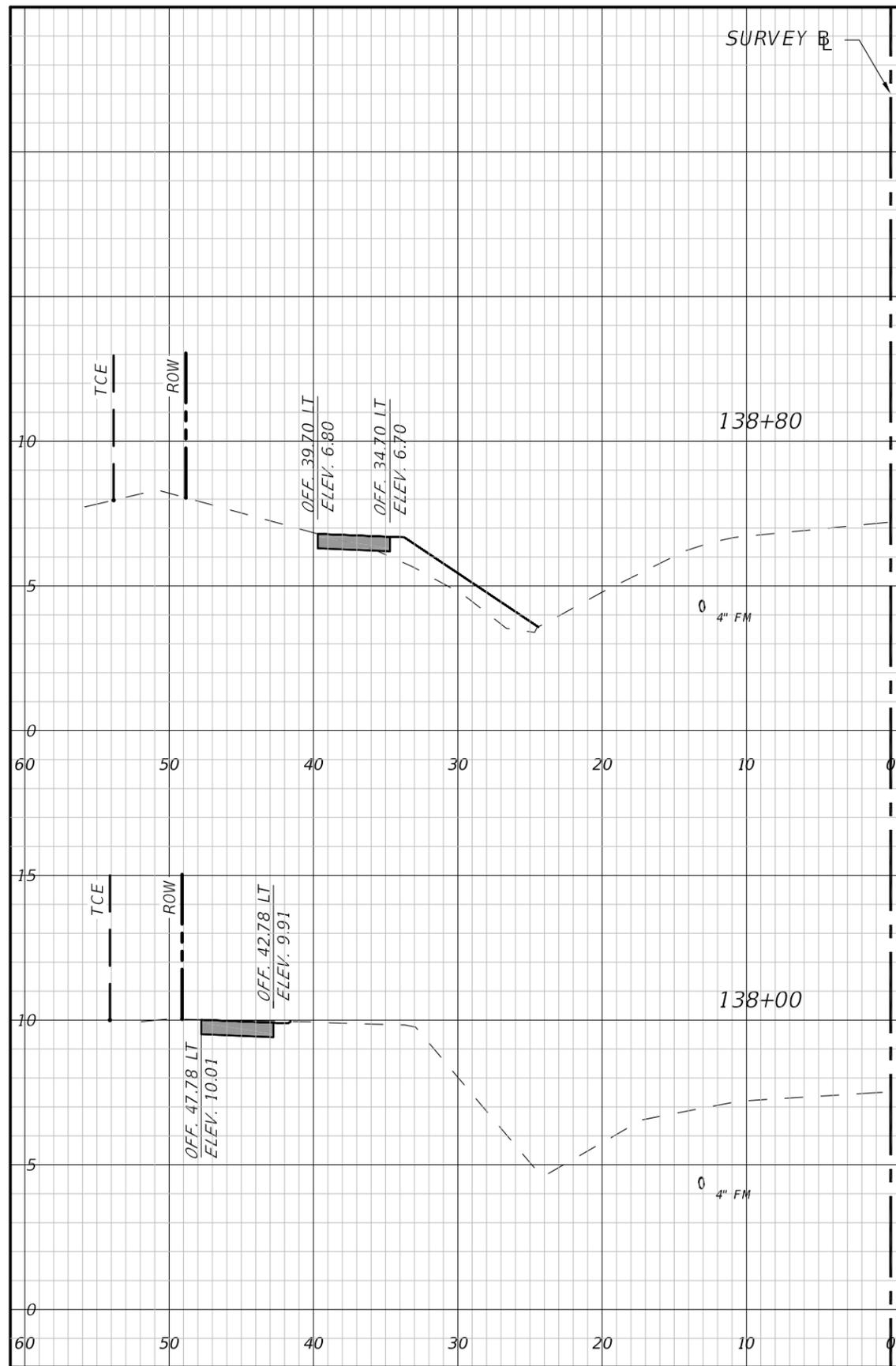


PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

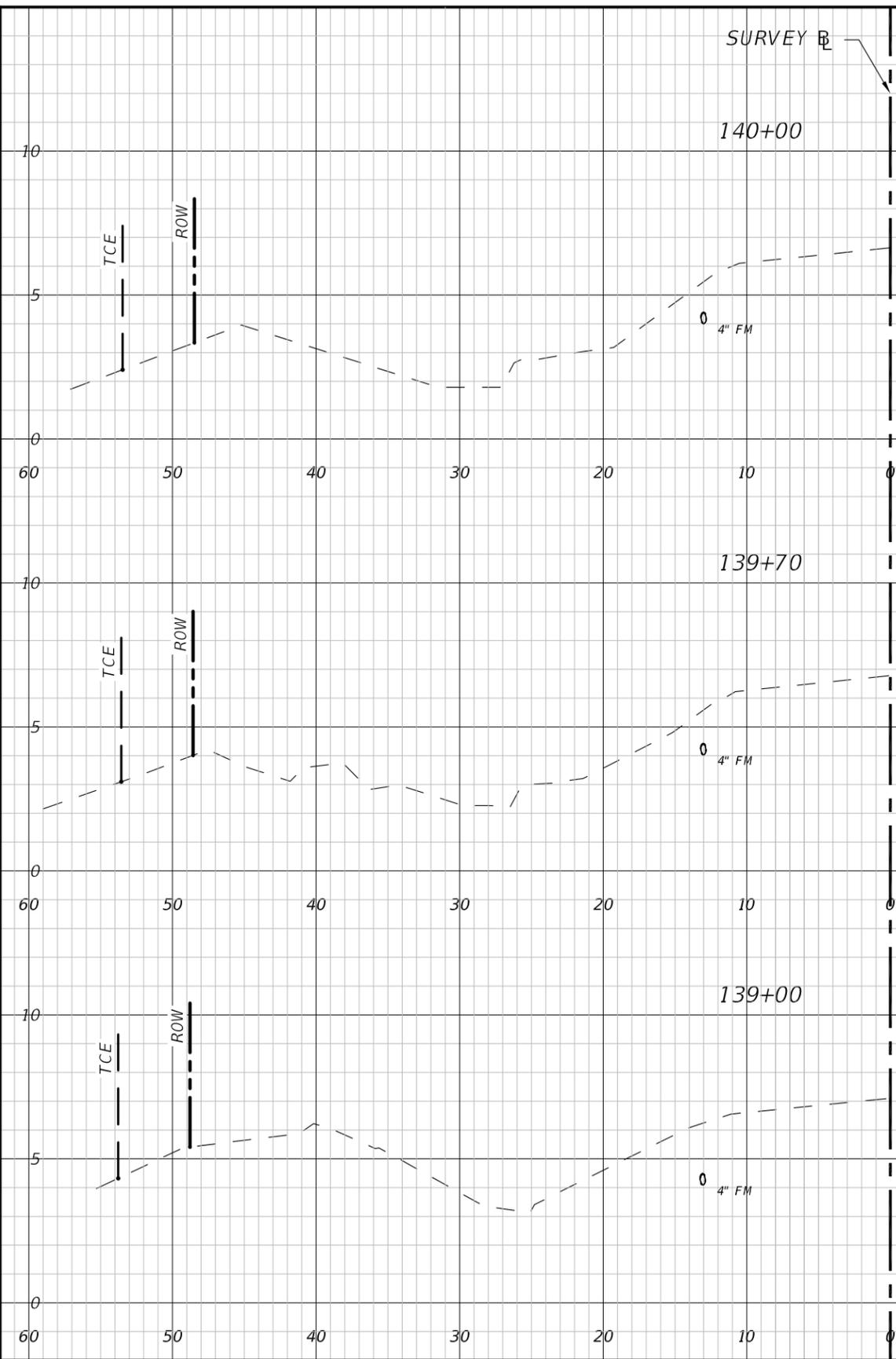
26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 135+00 TO 137+00

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Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³



Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				----	DESIGNED	JEA	08/2020
			26/33/18		DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

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1022 26TH AVENUE EAST
BRADENTON, FL. 34208

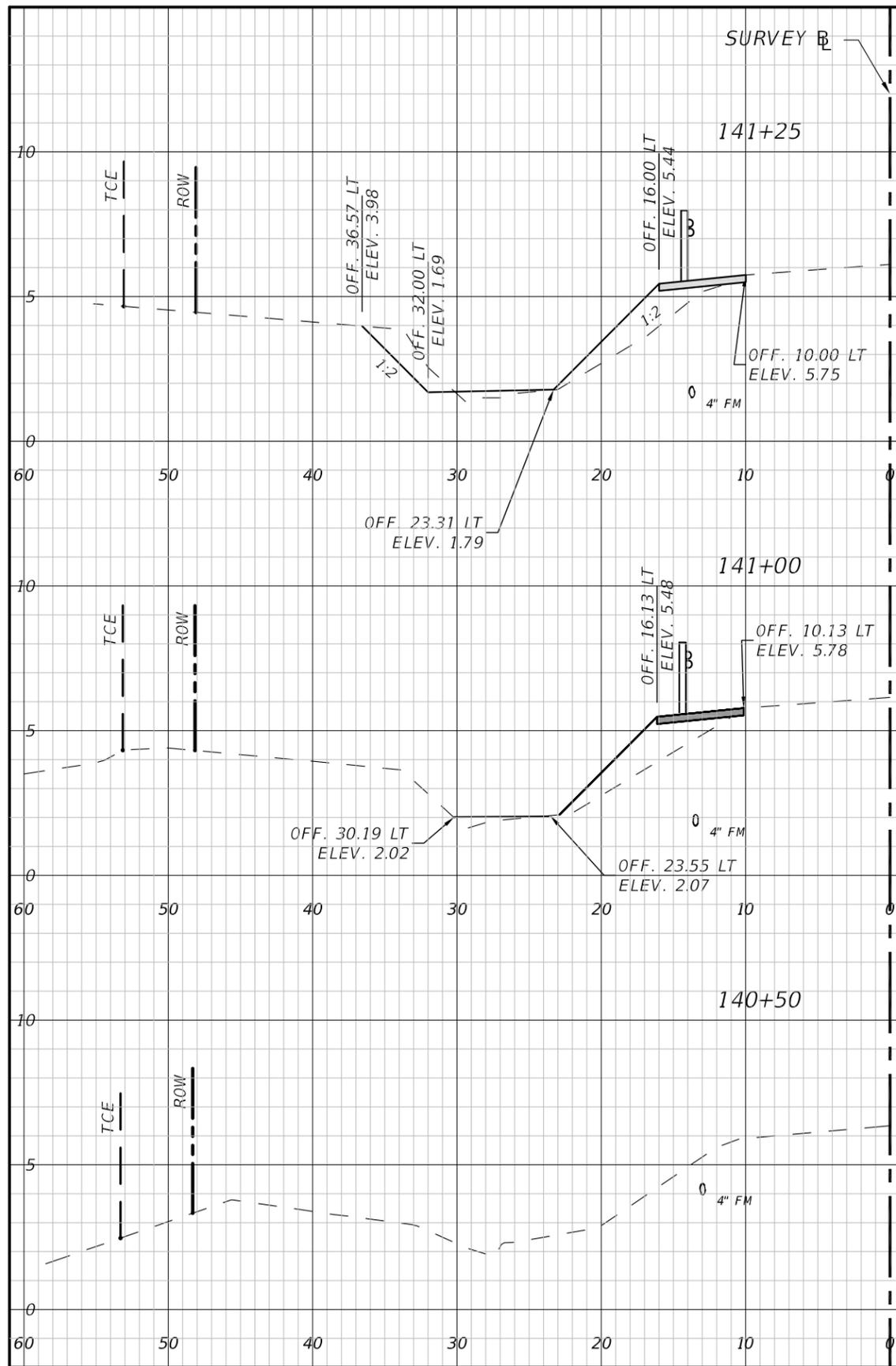


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ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

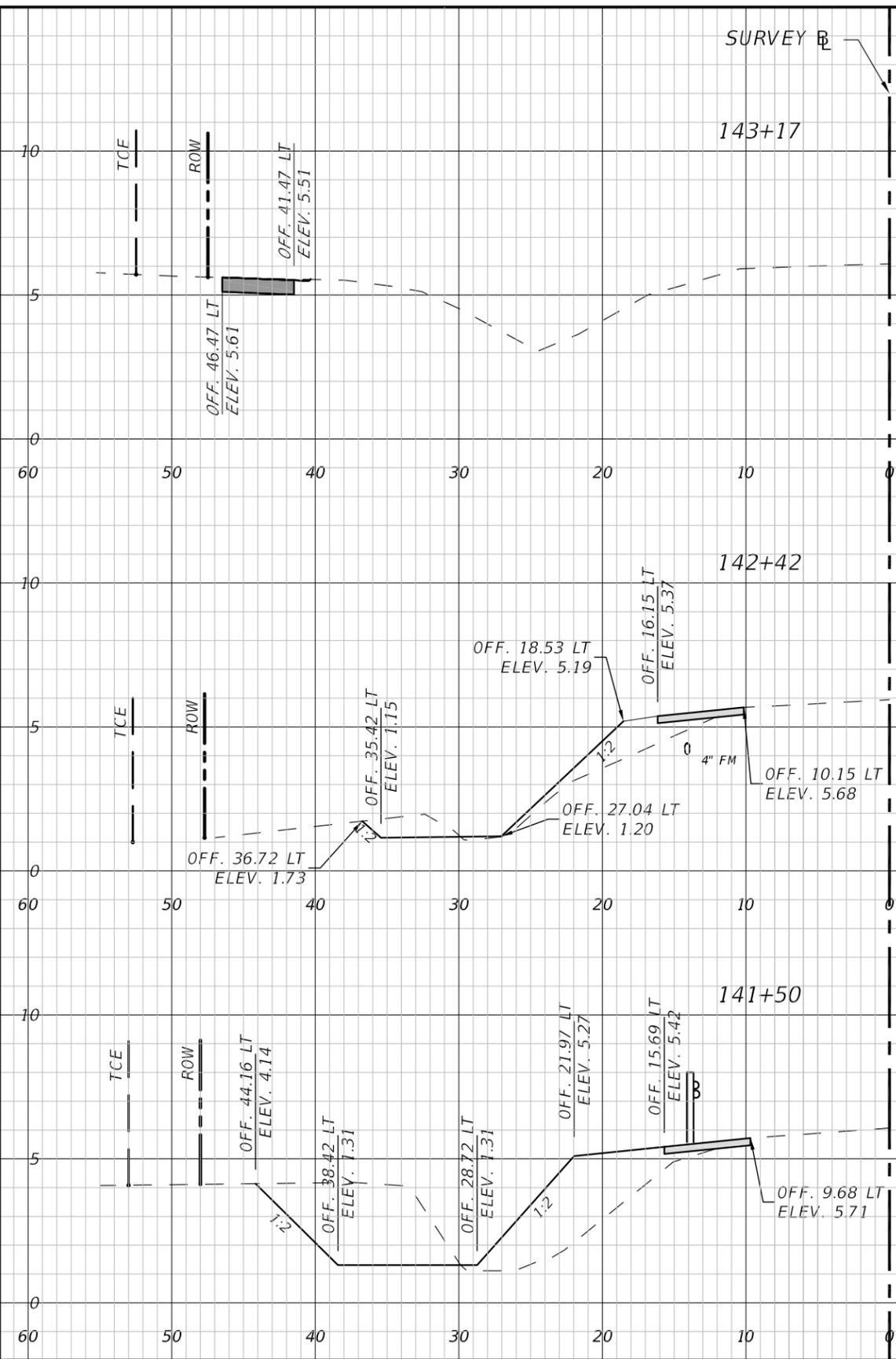
26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 138+00 TO 140+00

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Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³



Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	SURVEYED	ZNS	DATE
			178-0019900			07/2019
			---	DESIGNED	JEA	08/2020
			26/33/18	DRAWN	JEA	09/2020
				CHECKED	GB/SF	06/2021

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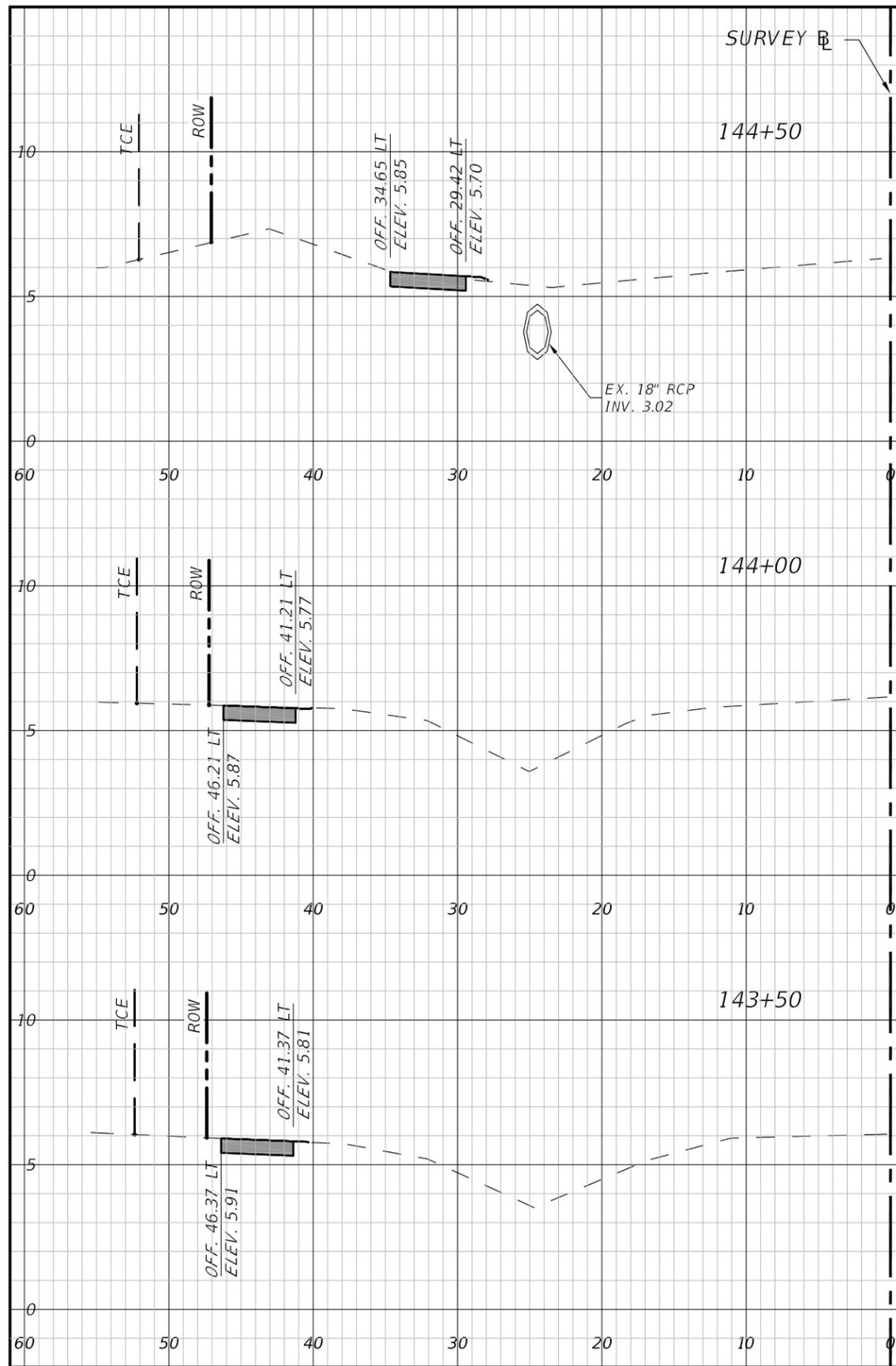
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ENGINEERING SERVICES
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26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 140+50 TO 143+17

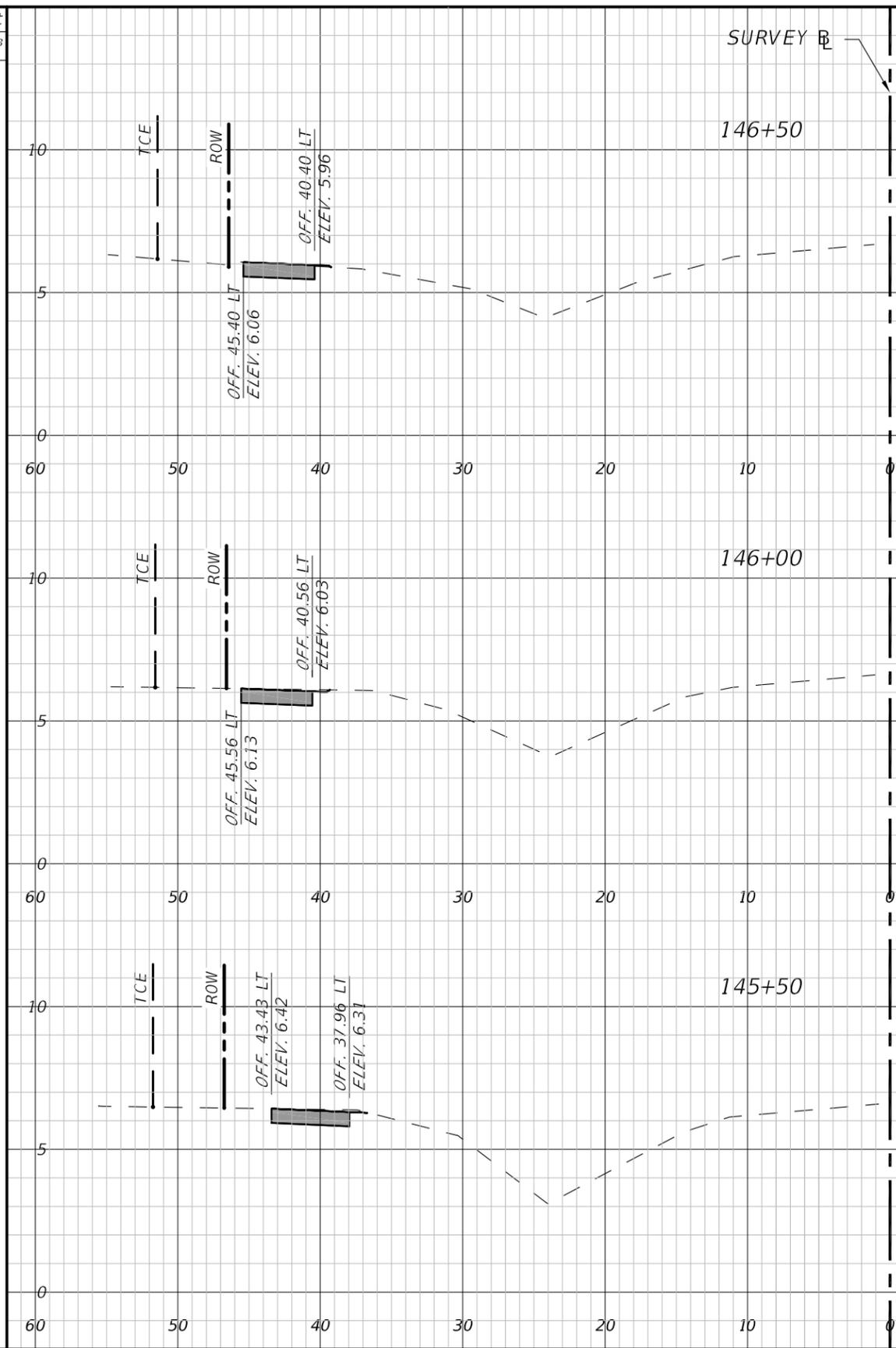
SHEET NO.
25

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Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³



Regular Exc.		Embankment	
A ft ²	V ft ³	A ft ²	V ft ³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				----	DESIGNED	JEA	08/2020
			26/33/18		DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

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1022 26TH AVENUE EAST
BRADENTON, FL. 34208

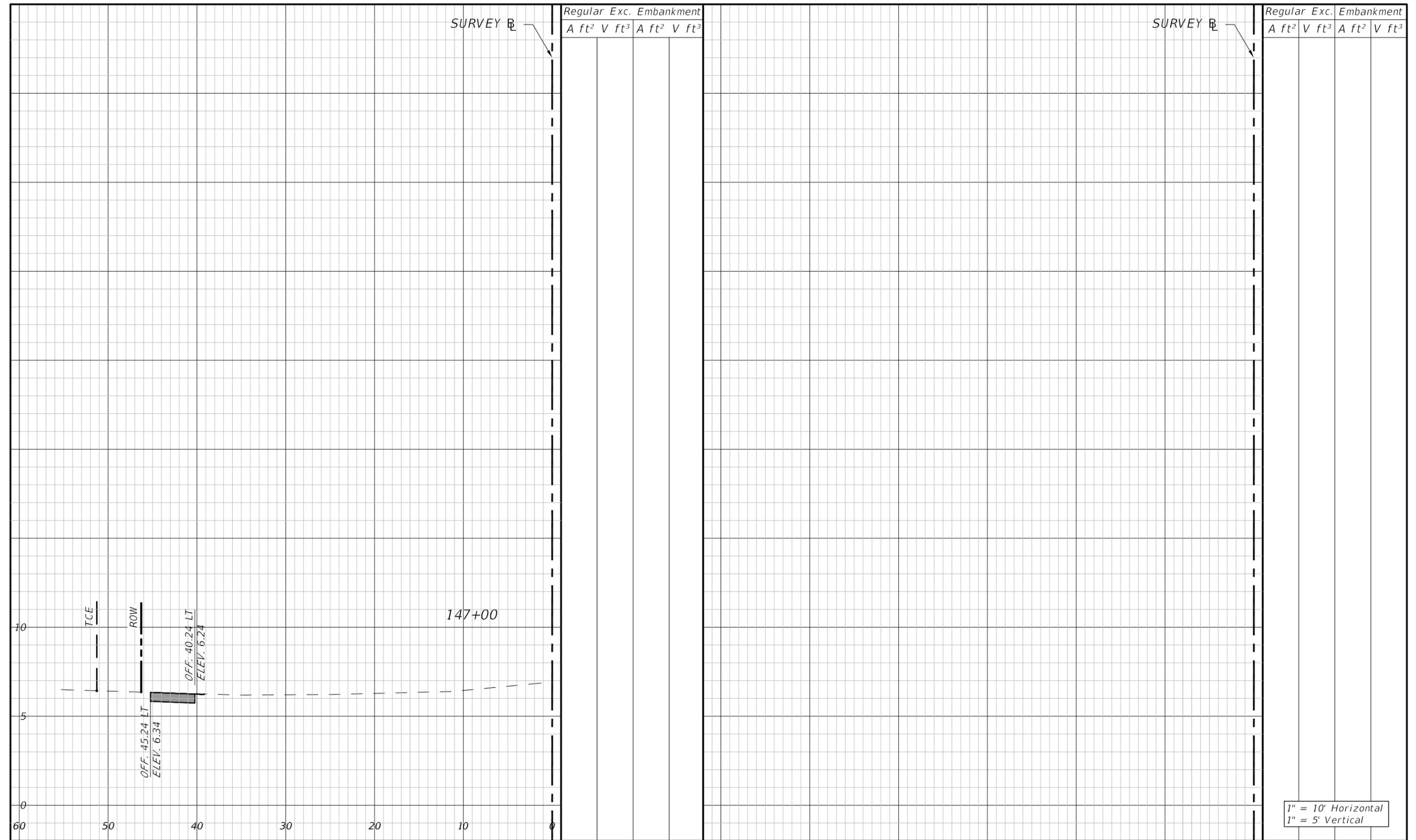


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26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 143+50 TO 146+50

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SURVEY #

SURVEY #

Regular Exc. Embankment
A ft² V ft³ A ft² V ft³

Regular Exc. Embankment
A ft² V ft³ A ft² V ft³

1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				----	DESIGNED	JEA	08/2020
			26/33/18		DRAWN	JEA	09/2020
					CHECKED	GB/SF	06/2021

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MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208



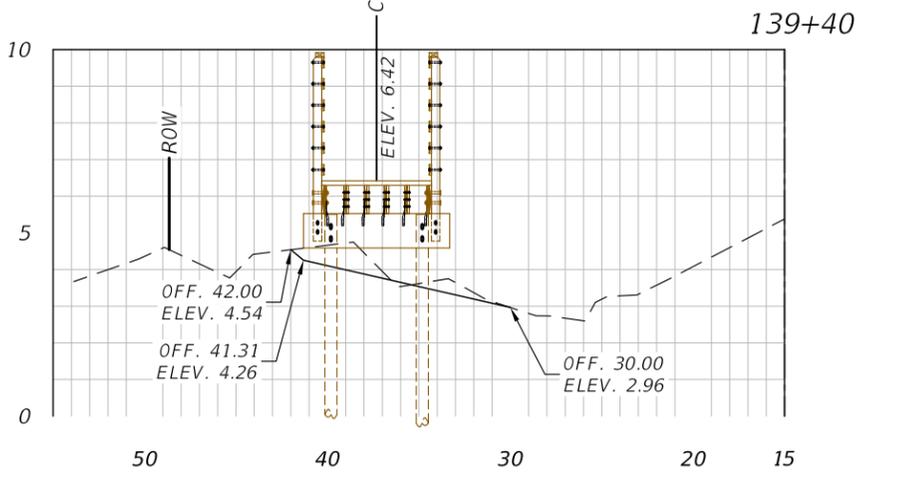
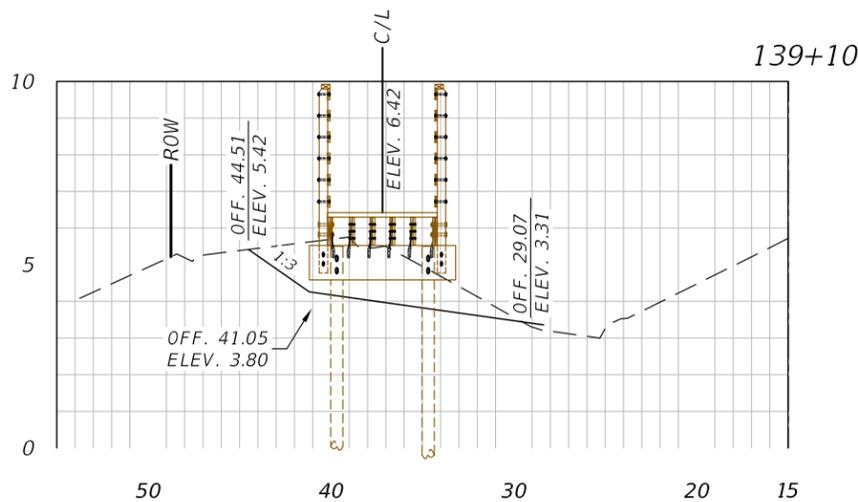
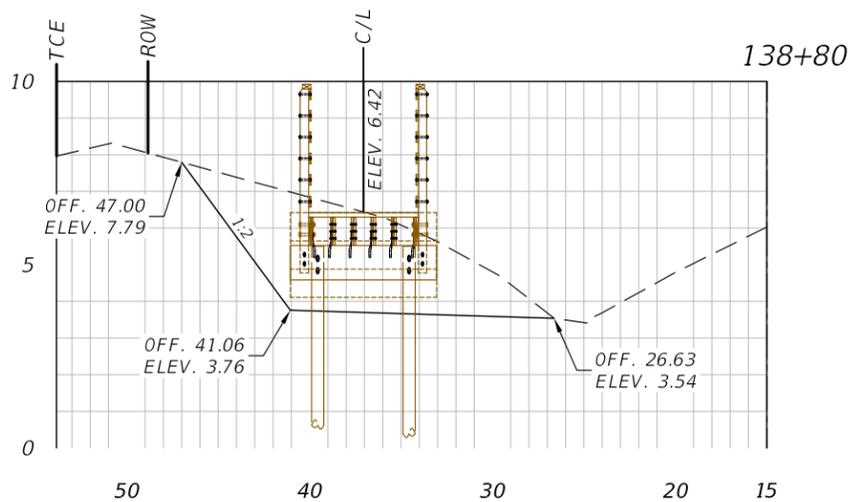
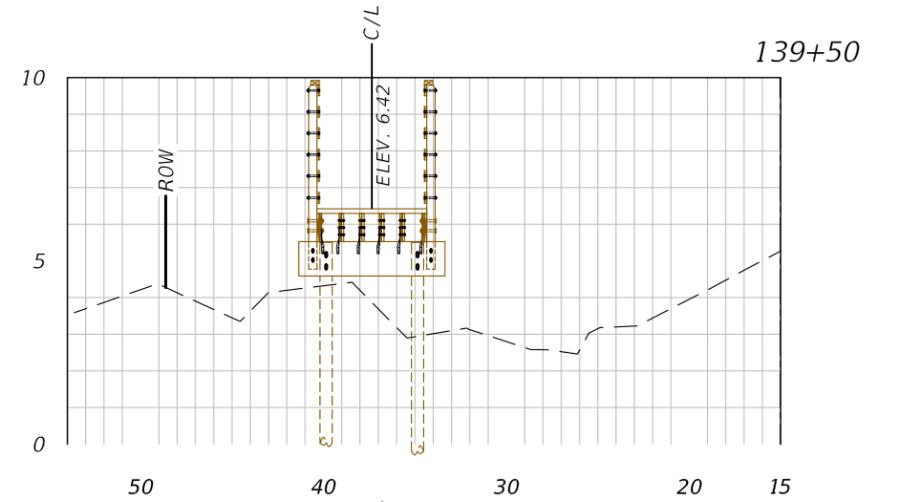
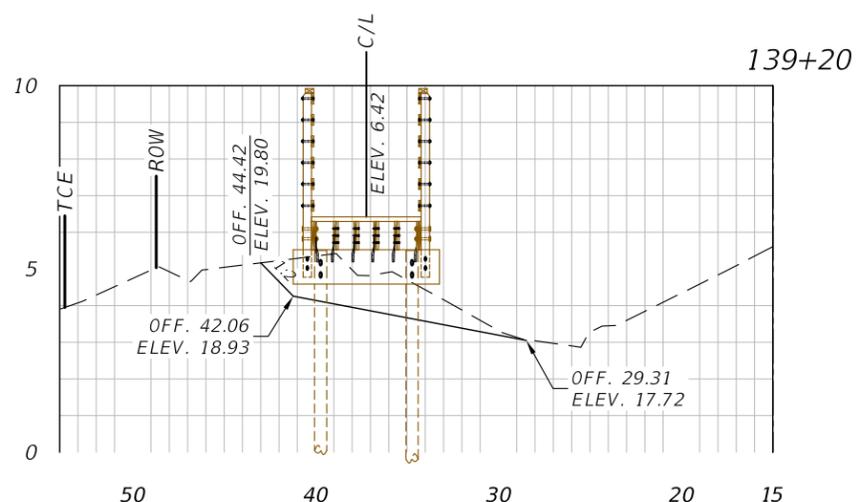
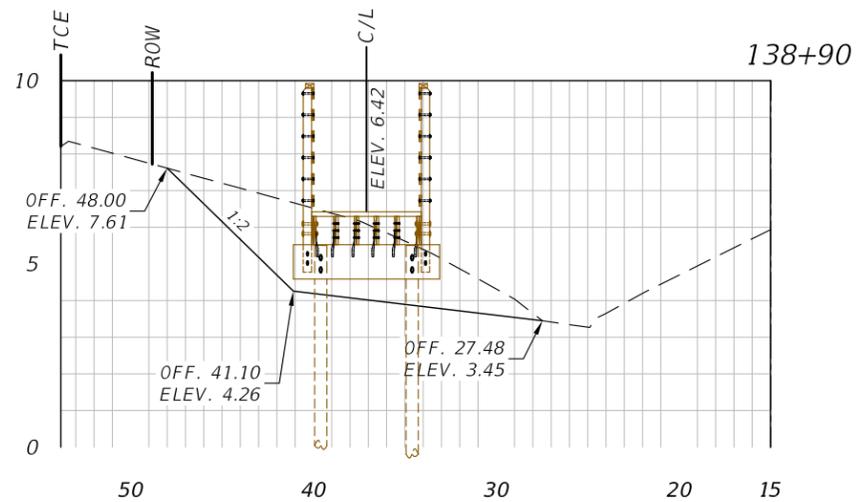
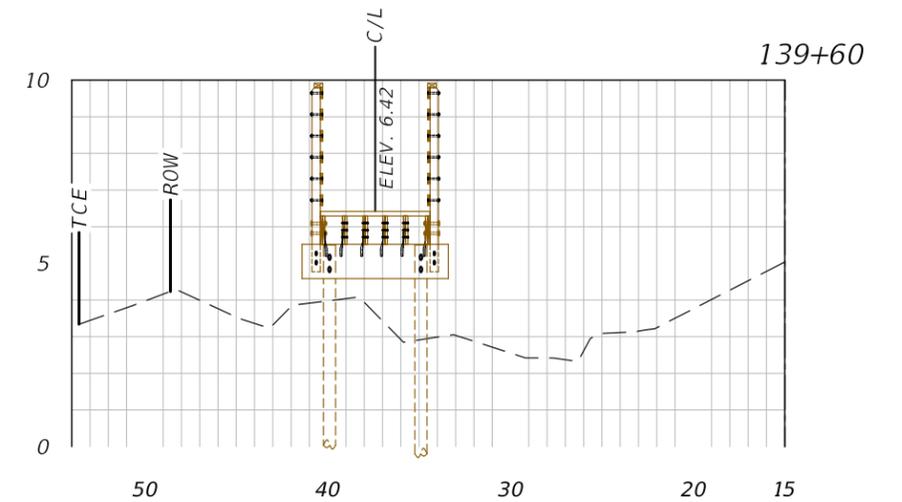
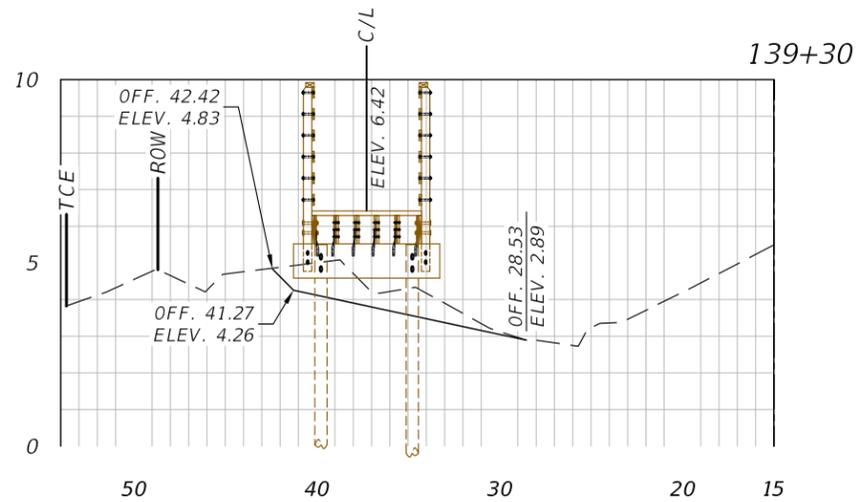
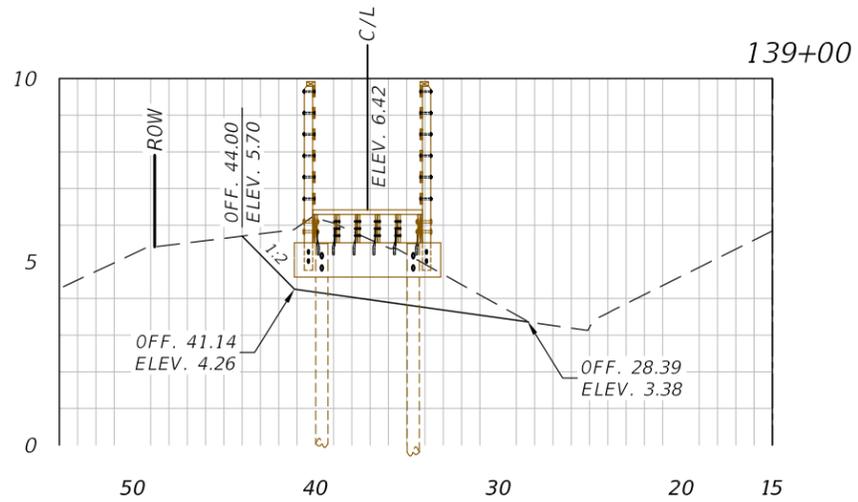
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1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
CROSS SECTIONS
STA. 147+00

SHEET NO.
27

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1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	000-0000000	SURVEYED	ZNS	08/2020
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

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FLORIDA P.E. LICENSE # 46449
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208



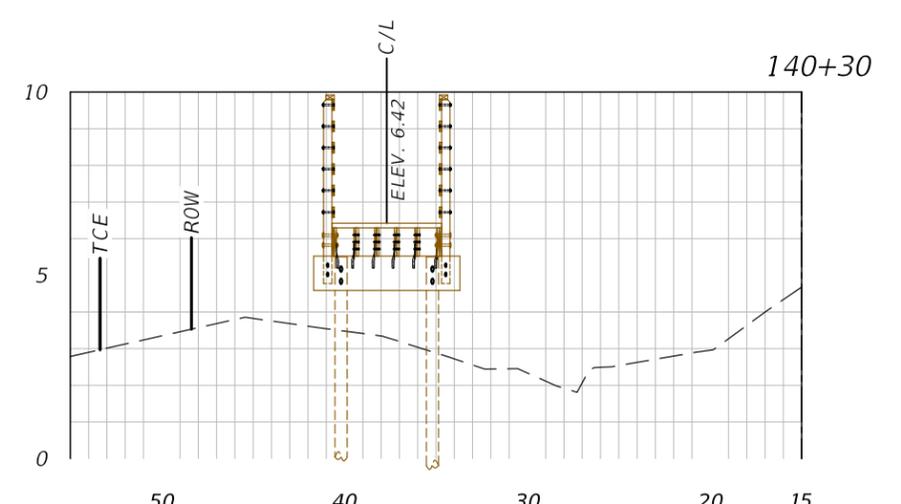
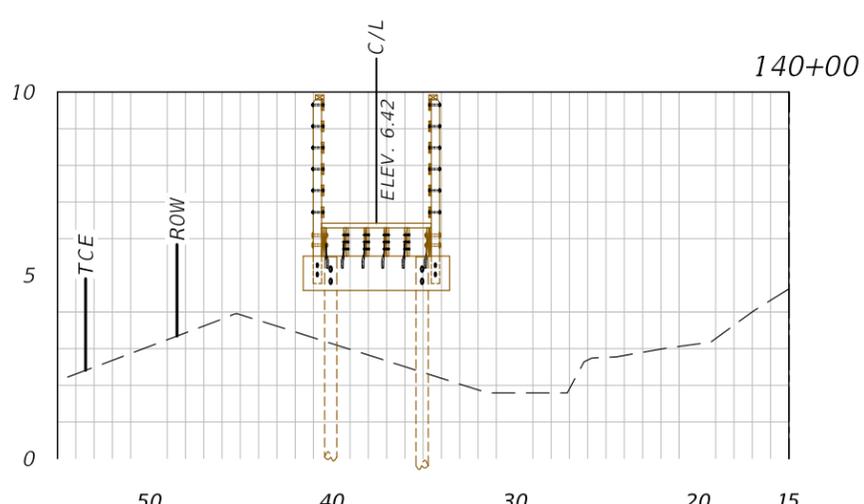
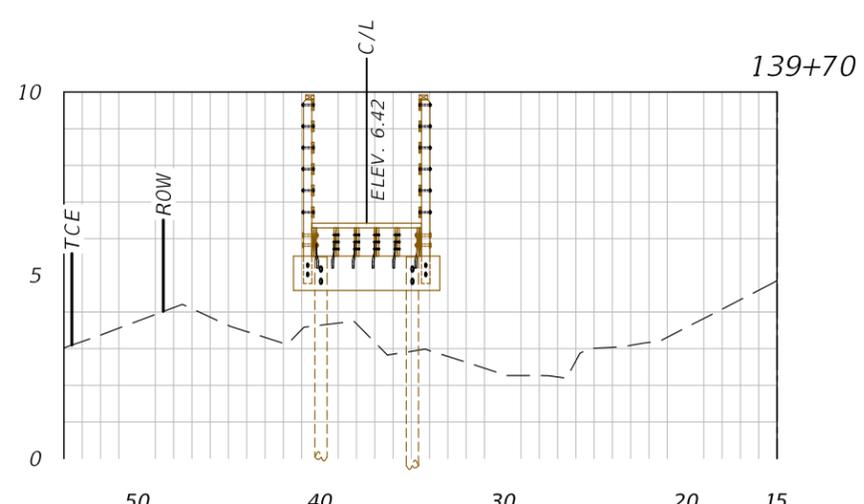
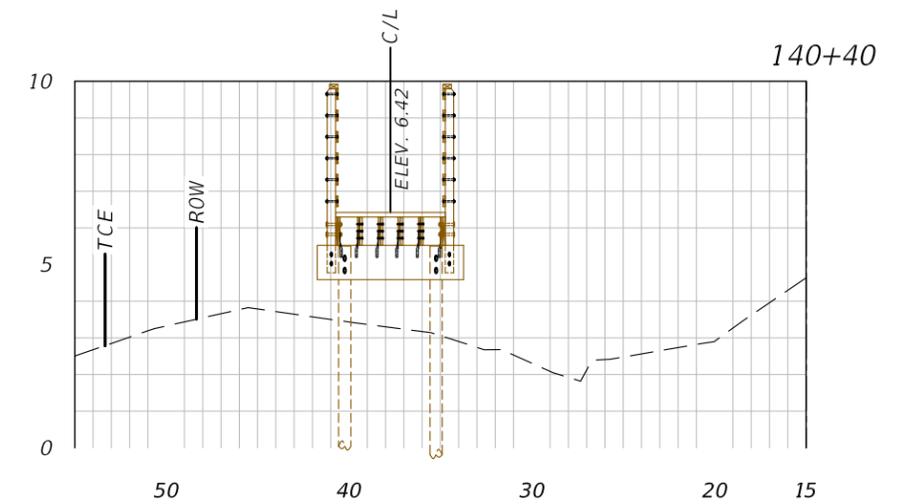
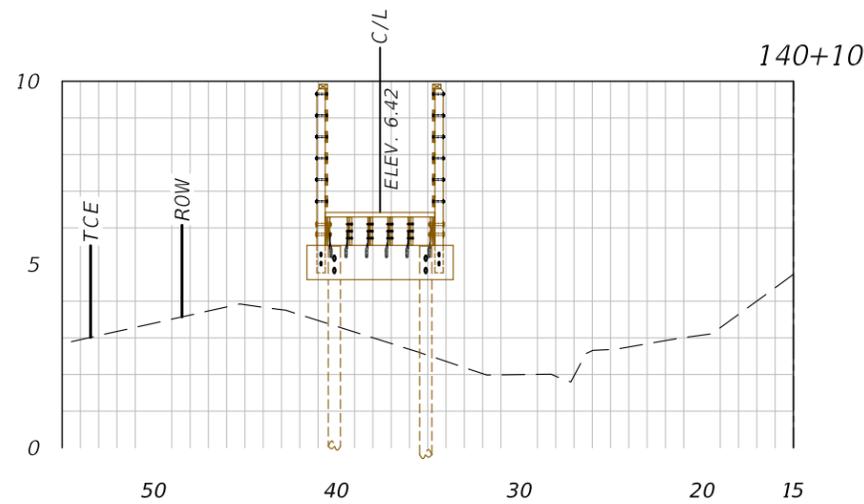
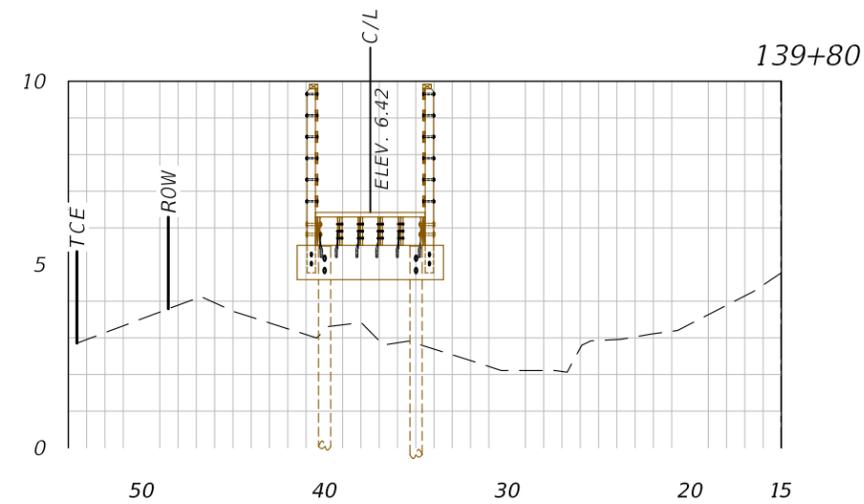
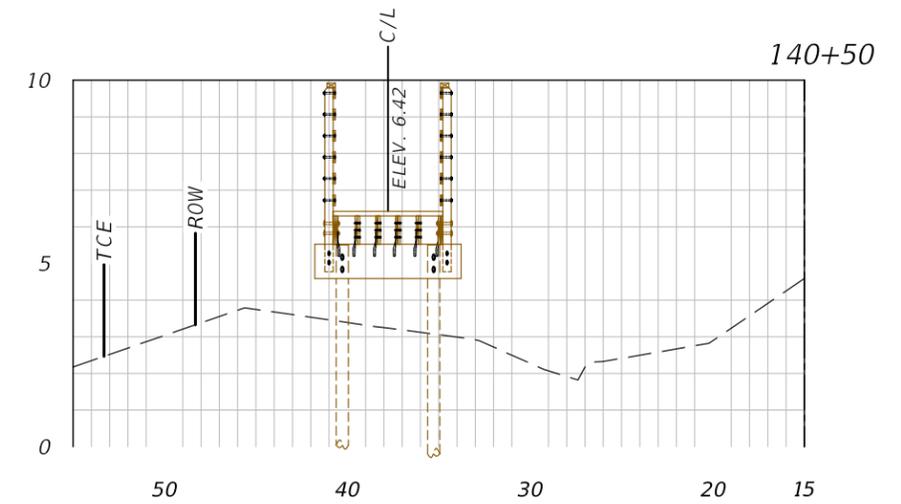
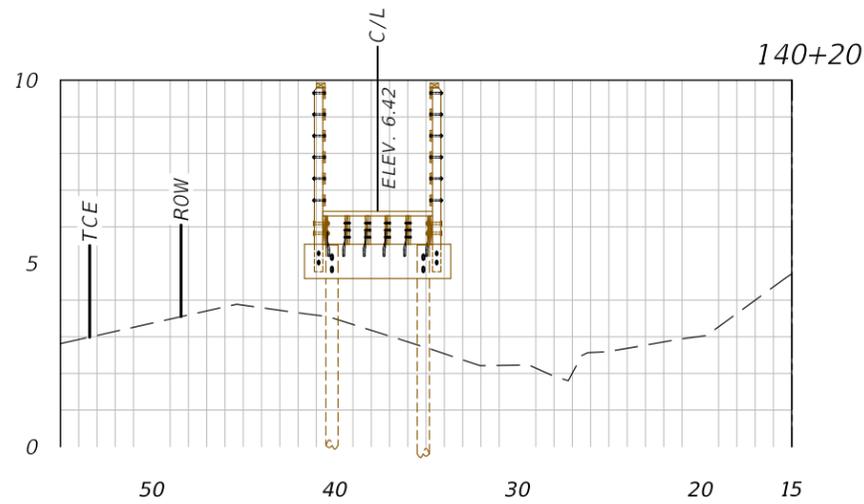
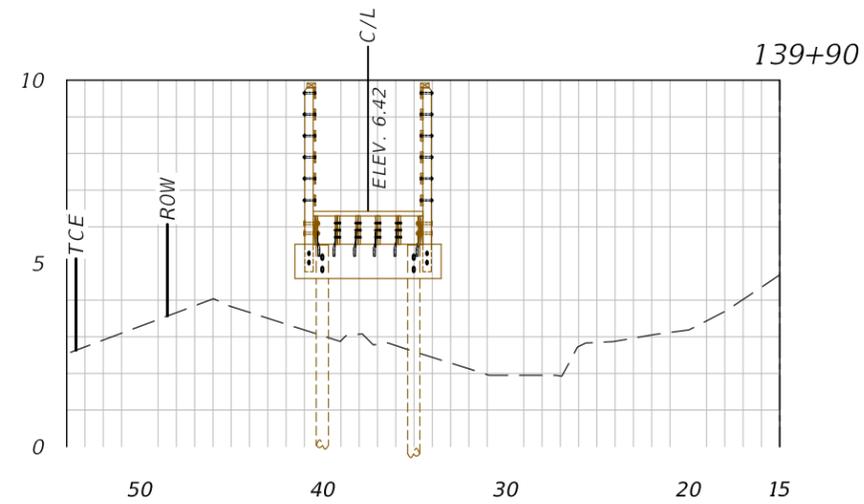
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26TH AVENUE EAST SIDEWALK
BRIDGE AND BOARDWALK
CROSS SECTIONS

SHEET NO.
28

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1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	000-0000000	SURVEYED	ZNS	08/2020
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

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1022 26TH AVENUE EAST
BRADENTON, FL. 34208



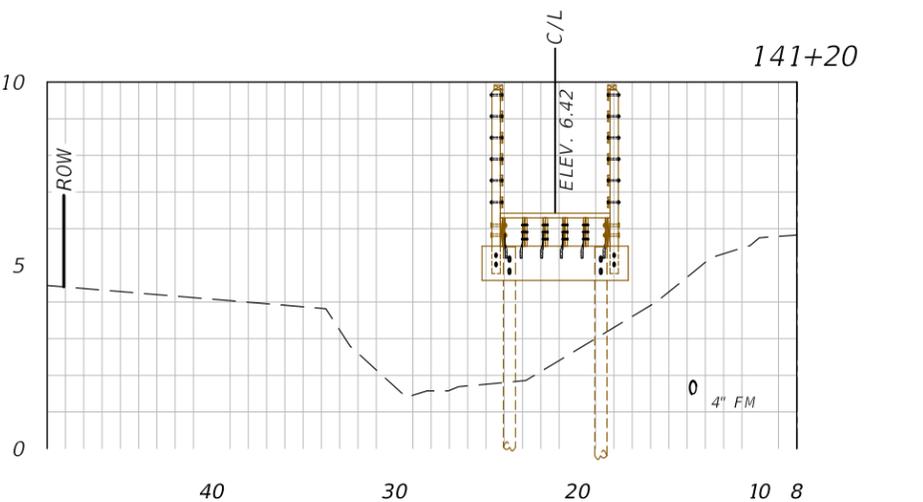
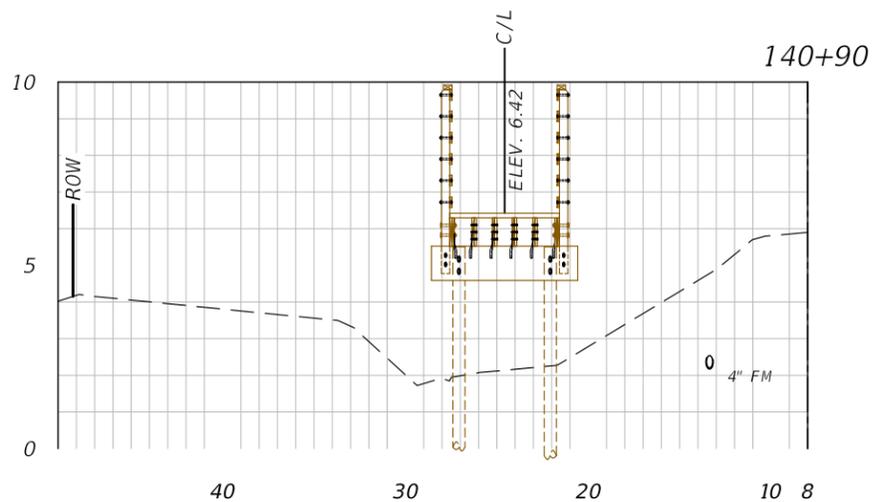
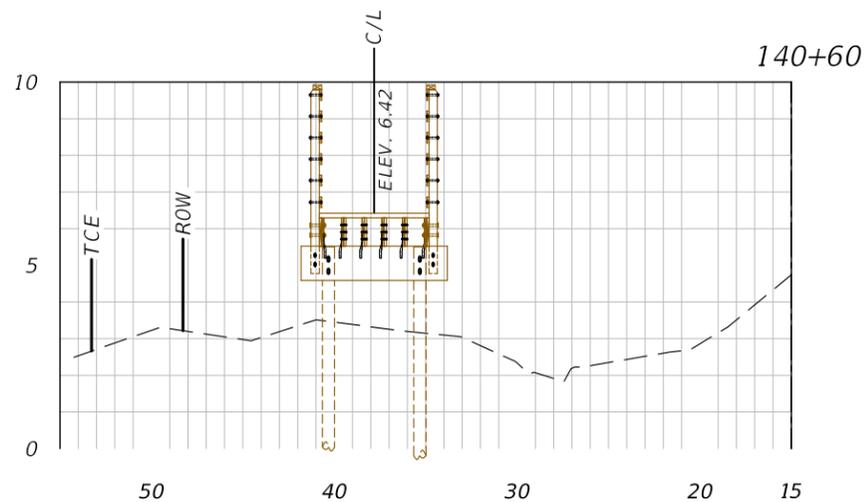
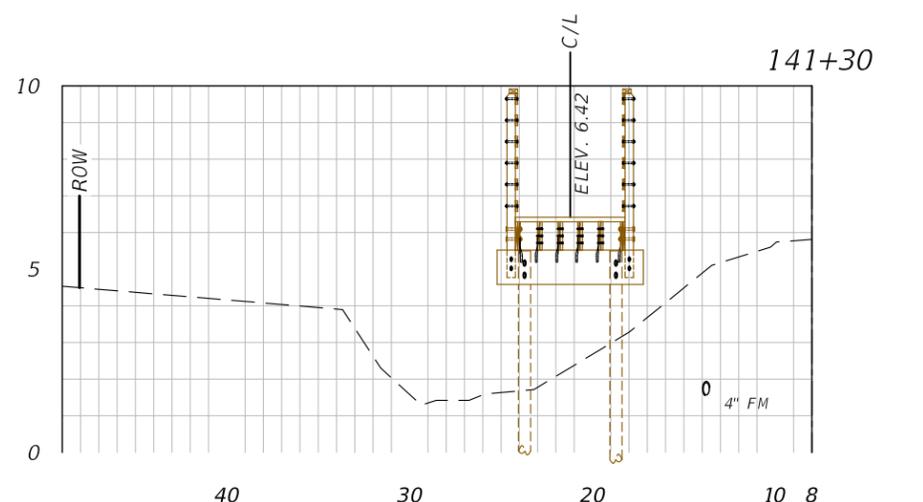
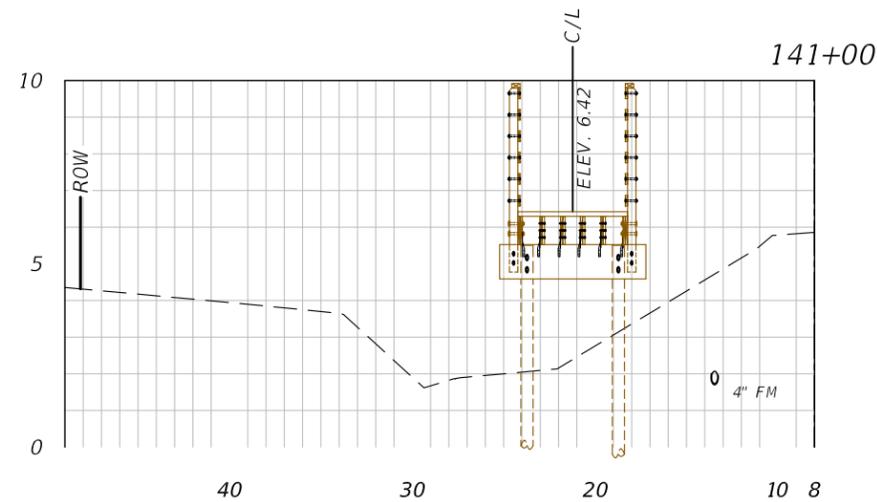
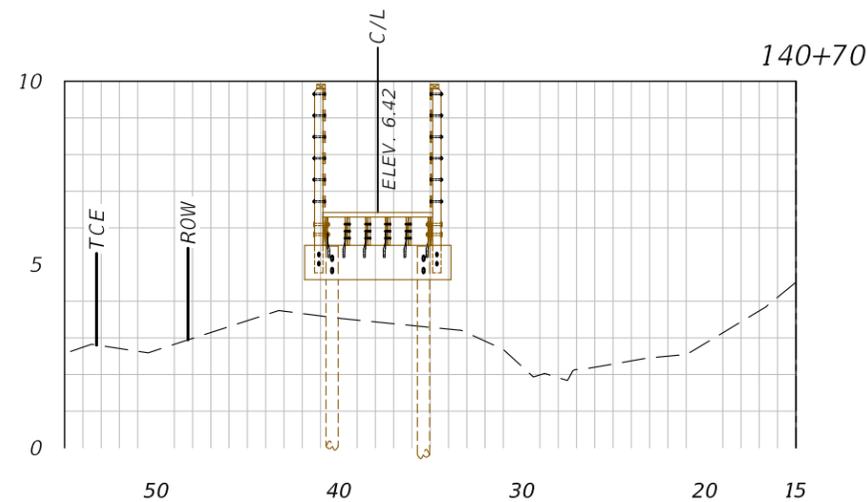
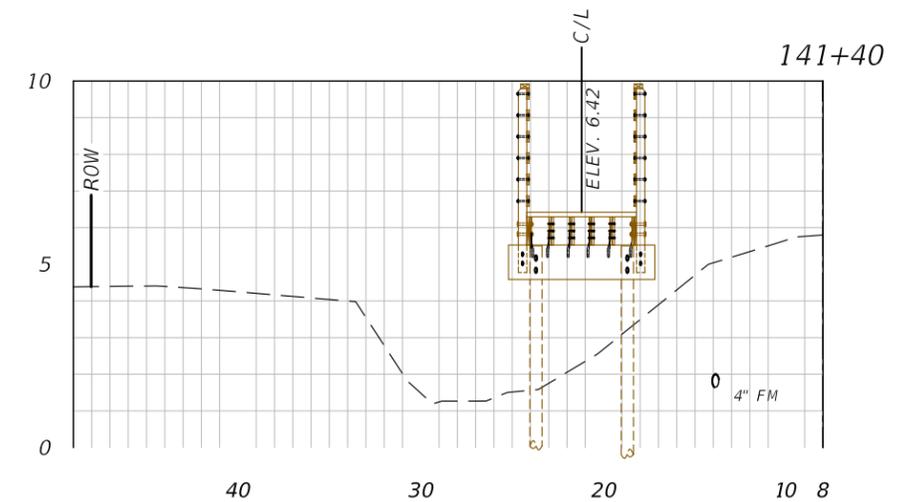
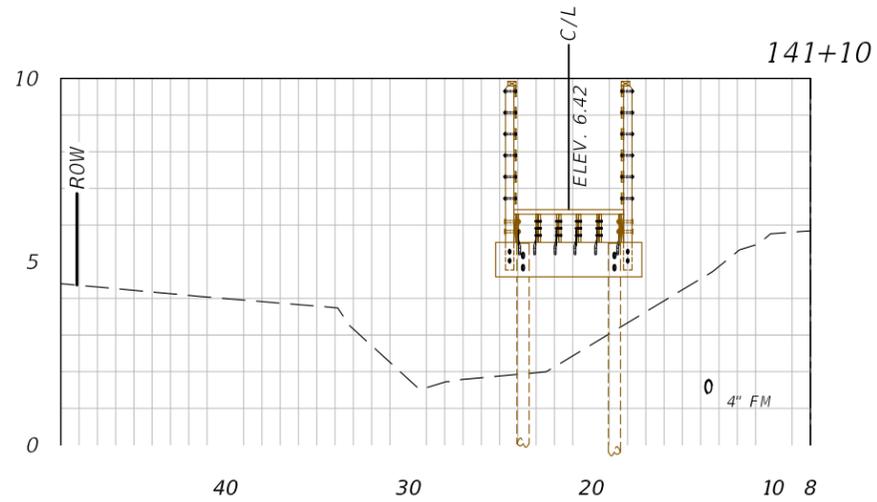
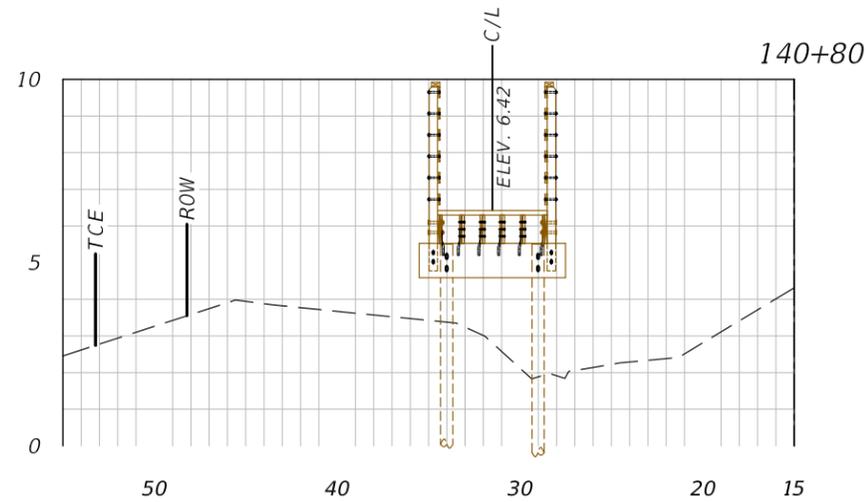
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26TH AVENUE EAST SIDEWALK
BRIDGE AND BOARDWALK
CROSS SECTIONS

SHEET NO.
29

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1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	000-0000000	SURVEYED	ZNS	---/---/---
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

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1022 26TH AVENUE EAST
BRADENTON, FL. 34208



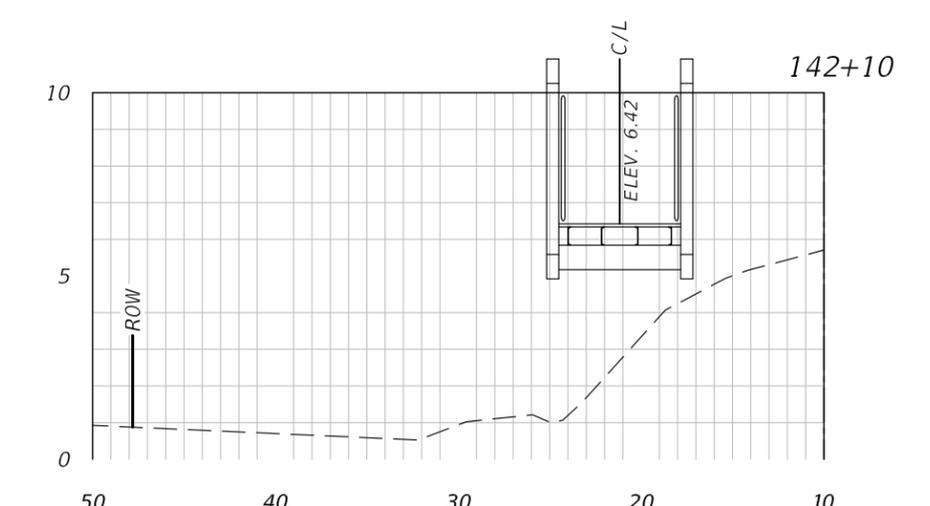
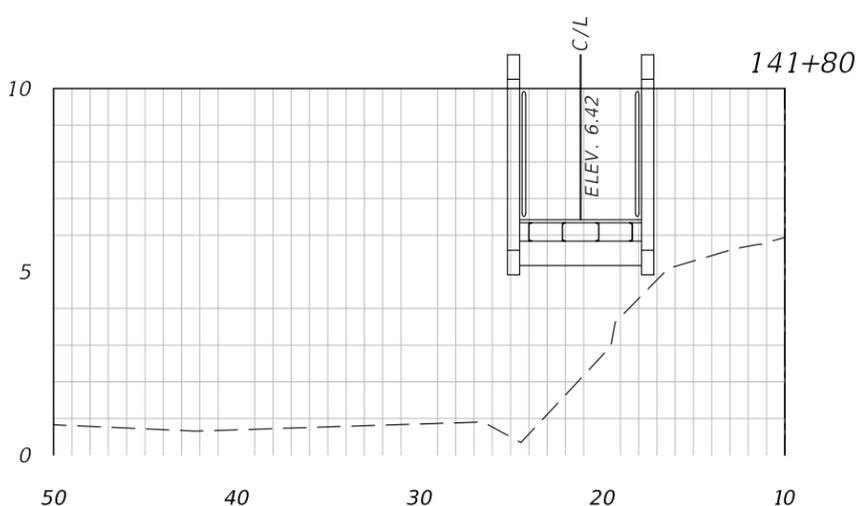
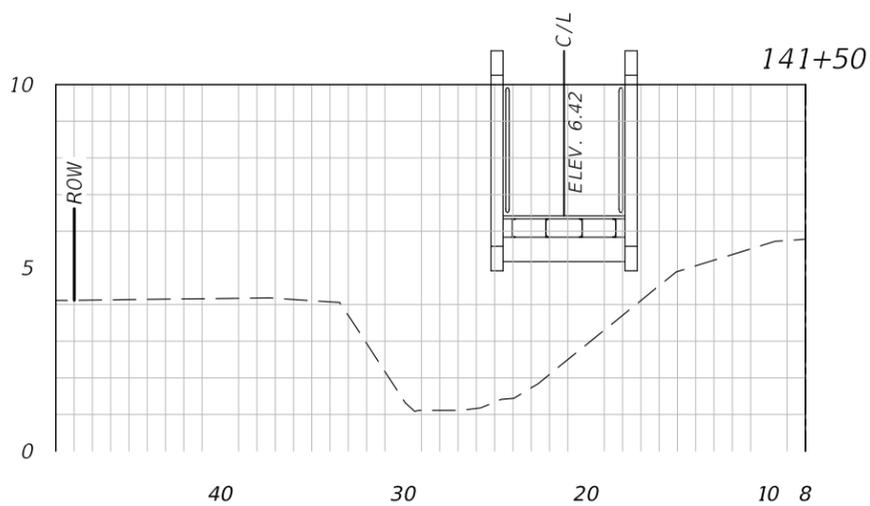
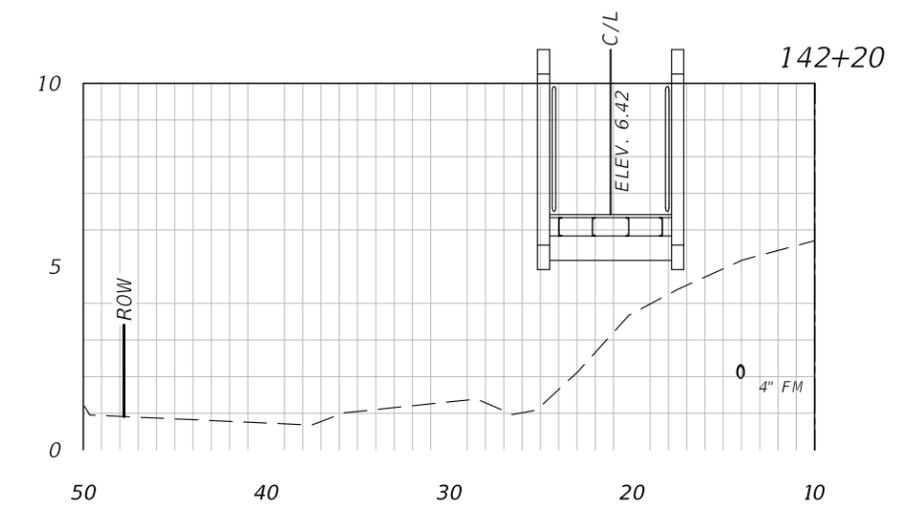
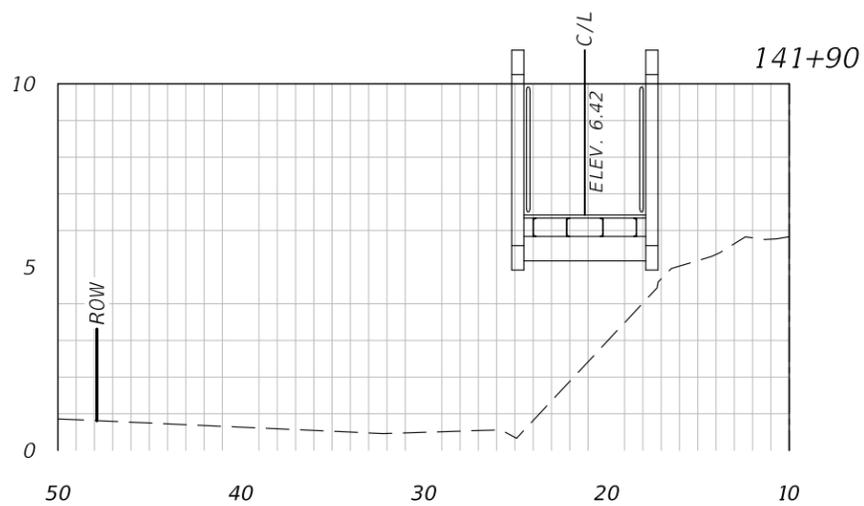
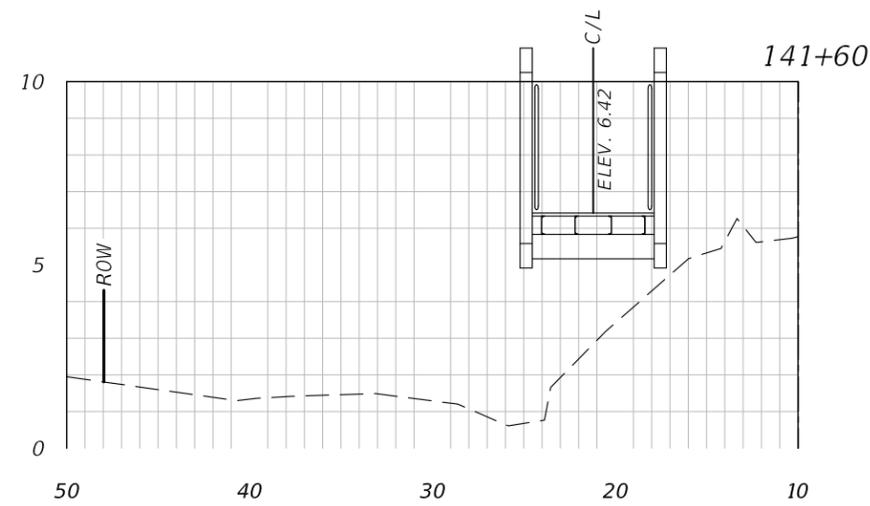
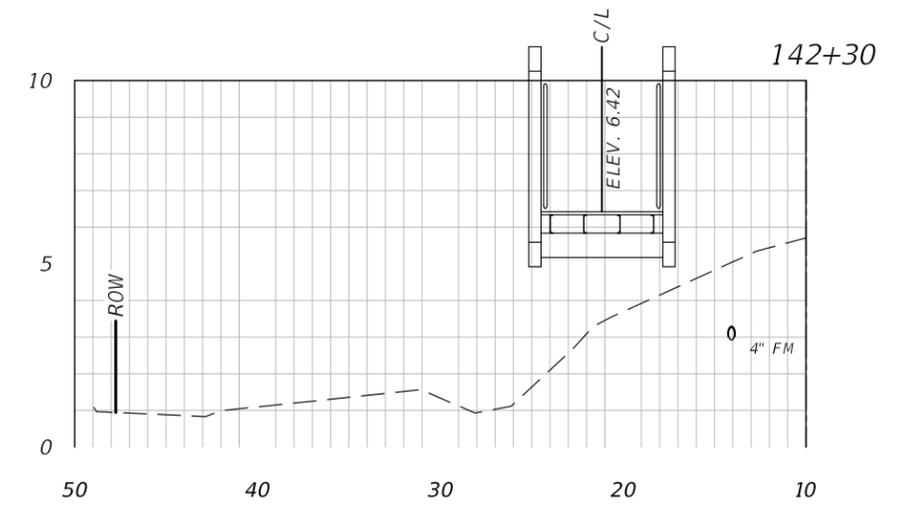
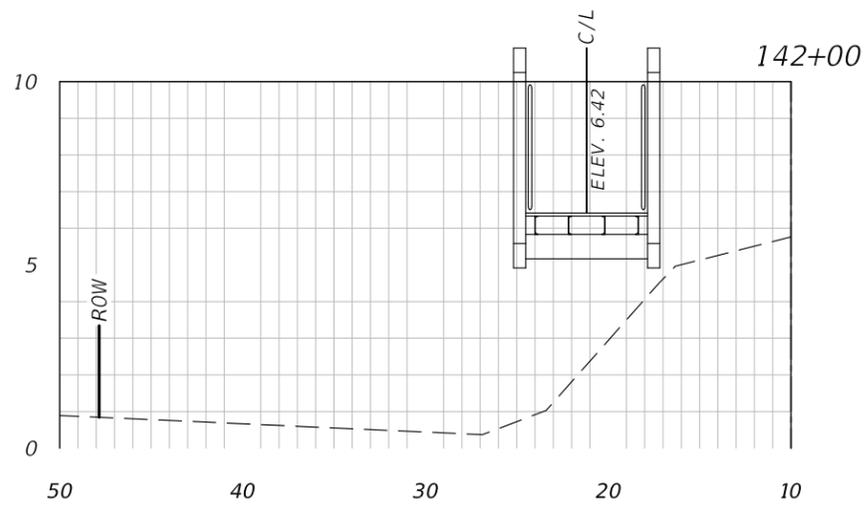
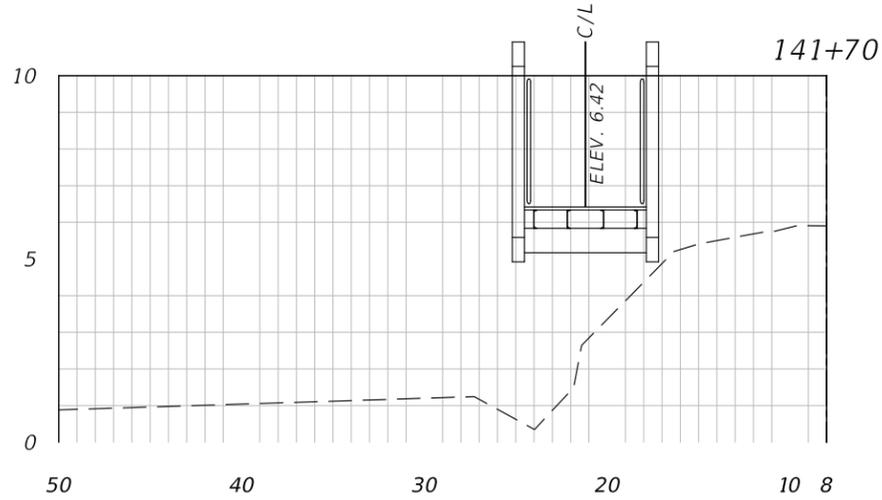
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
BRIDGE AND BOARDWALK
CROSS SECTIONS

SHEET NO.
30

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

H:\Highway Engineering\PROJ\SIDEWALKS\26TH Ave East Sugar Creek\DWG\Sugar Creek Cross Sections BRIDGE.dwg [8/2/2021 8:14 AM]



1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	000-0000000	SURVEYED	ZNS	---/---/---
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

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FLORIDA P.E. LICENSE # 46449
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208



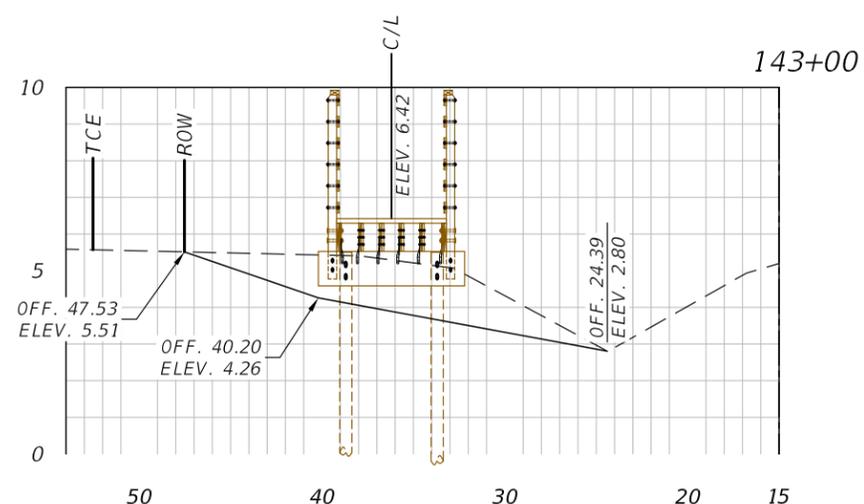
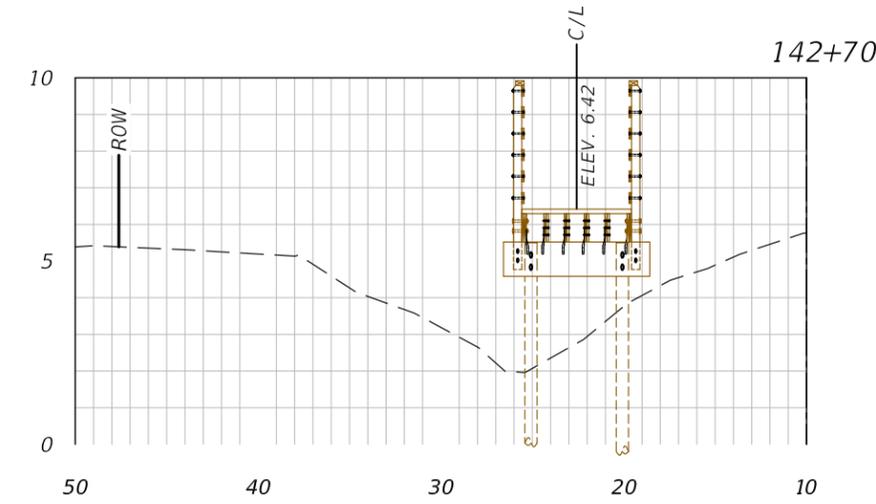
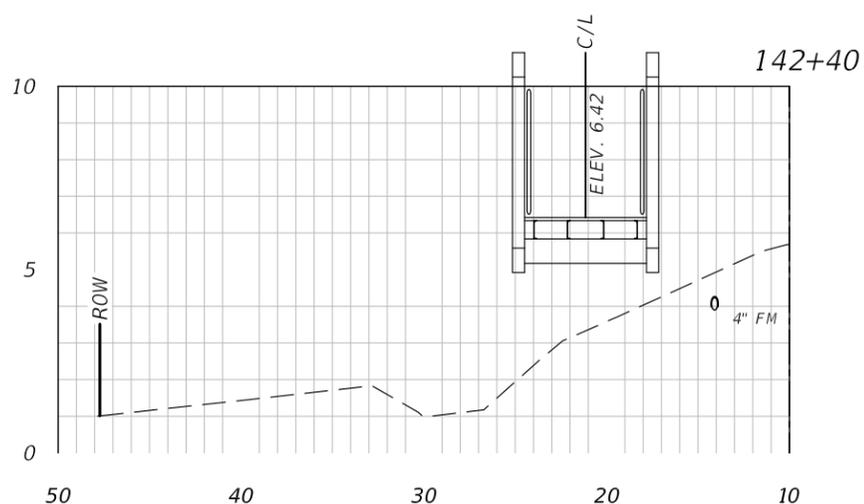
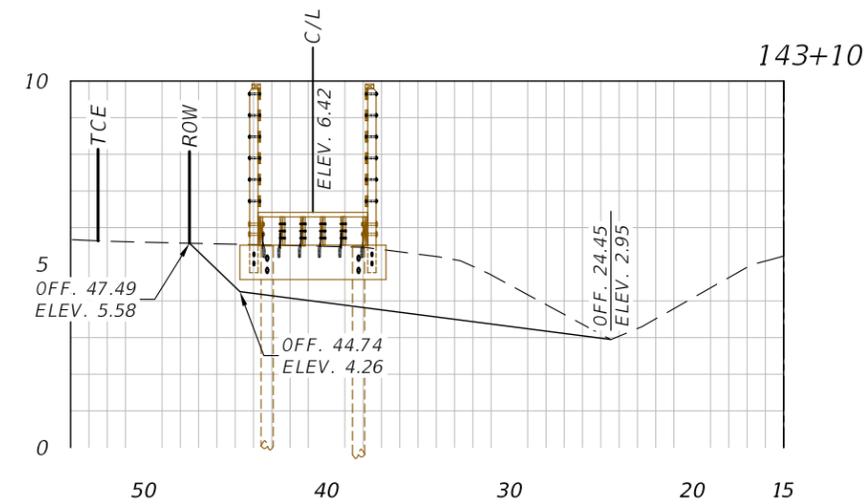
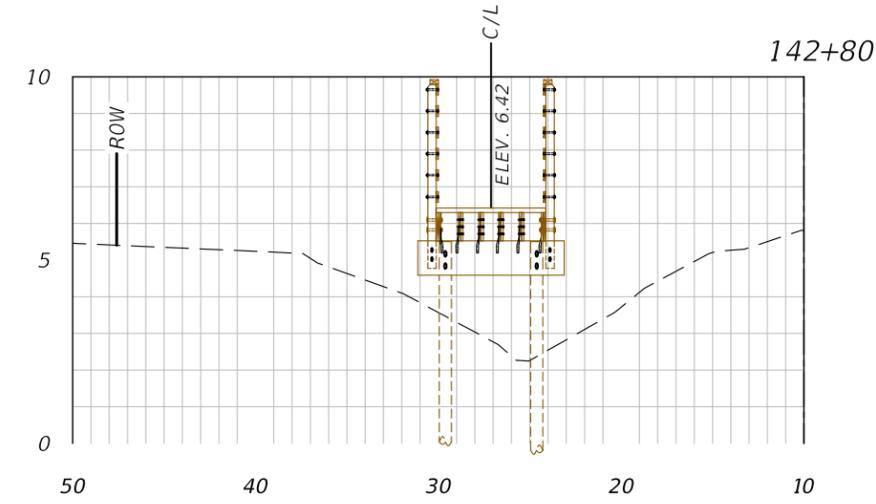
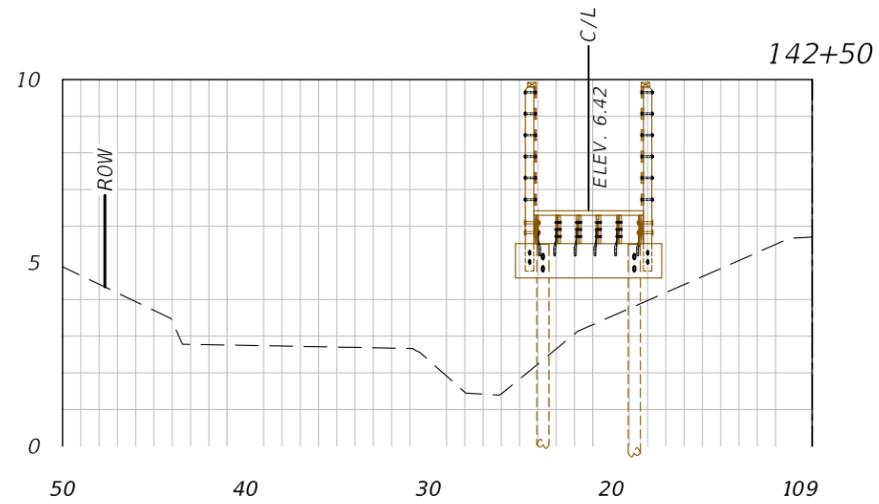
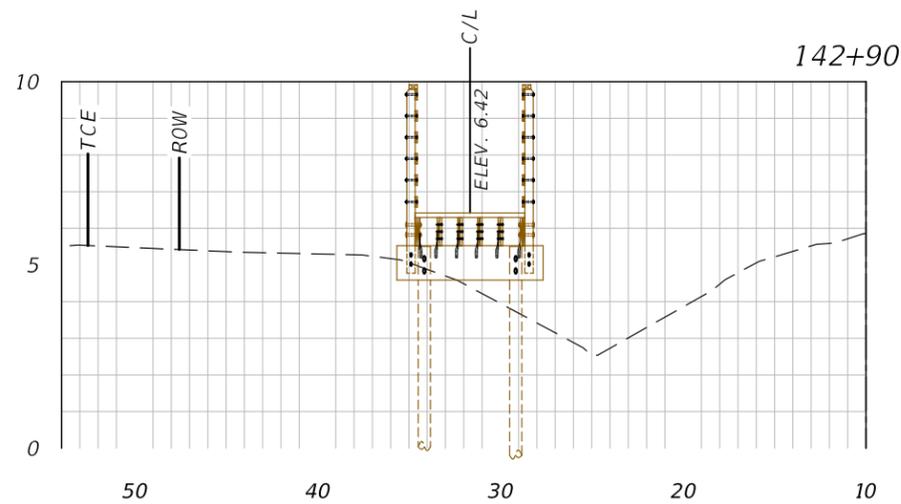
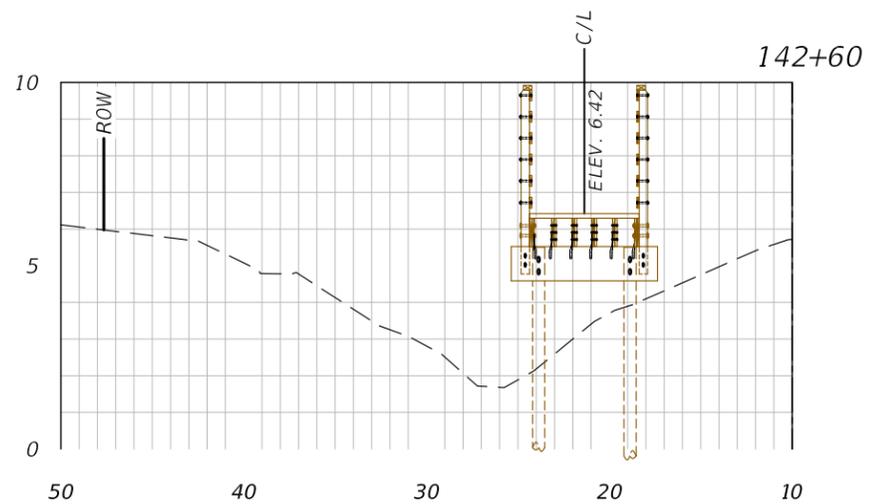
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26TH AVENUE EAST SIDEWALK
BRIDGE AND BOARDWALK
CROSS SECTIONS

SHEET NO.
31

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1" = 10' Horizontal
1" = 5' Vertical

NUMBER	DESCRIPTION	DATE	PROJECT #	000-000000	SURVEYED	ZNS	---/---/---
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

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FLORIDA P.E. LICENSE # 46449
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

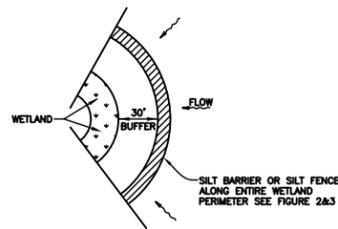


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1022 26th Avenue East, Bradenton, FL 34208

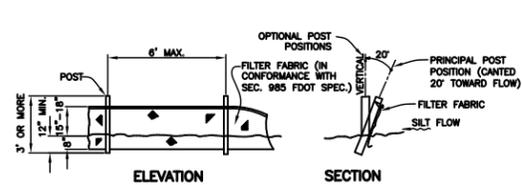
26TH AVENUE EAST SIDEWALK
BRIDGE AND BOARDWALK
CROSS SECTIONS

SHEET NO.
32

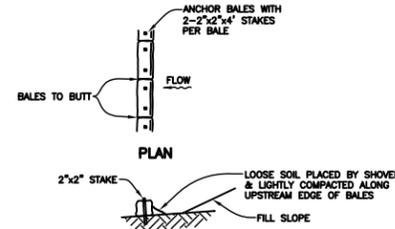
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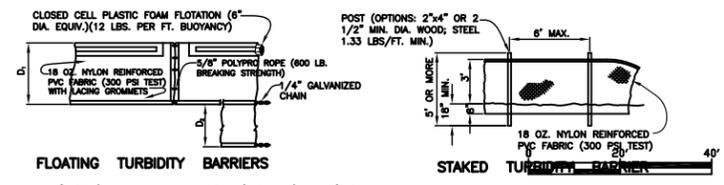
WETLAND BUFFER
FIGURE 1



TYPICAL SILT FENCE
FIGURE 2



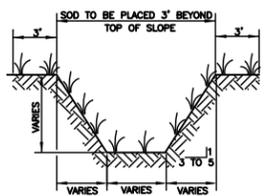
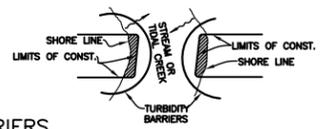
TYPICAL BALE SILT BARRIER
FIGURE 3



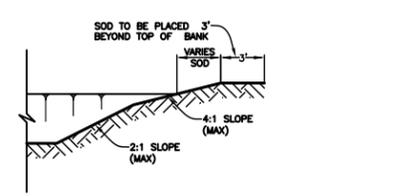
STAKED TURBIDITY BARRIERS

TURBIDITY BARRIERS
FIGURE 4

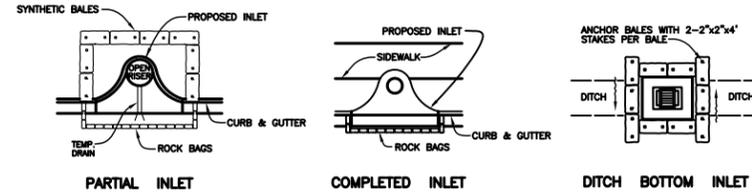
NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



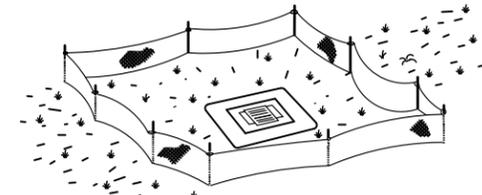
TYPICAL SWALE SECTION
FIGURE 5



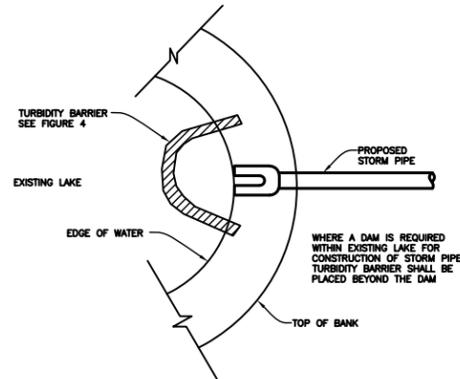
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



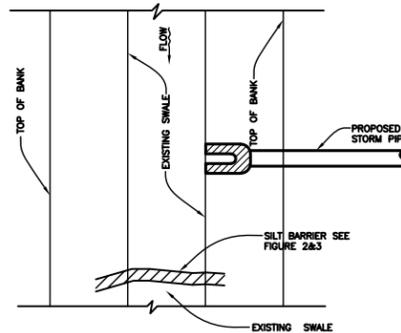
SYNTHETIC BALE PROTECTION AROUND
INLETS OR SIMILAR STRUCTURES
FIGURE 7



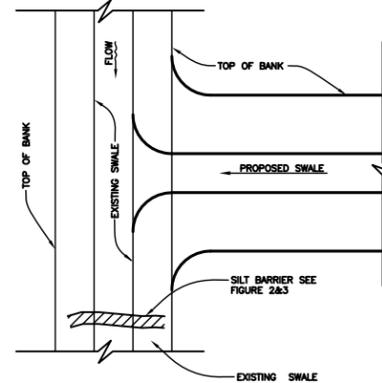
TYPE III SILT FENCE PROTECTION
AROUND DITCH BOTTOM INLETS
STAKED SILT BARRIER OR SILT FENCE
PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



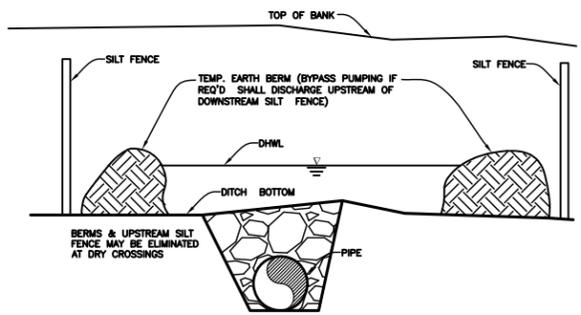
TURBIDITY BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING LAKE
FIGURE 9



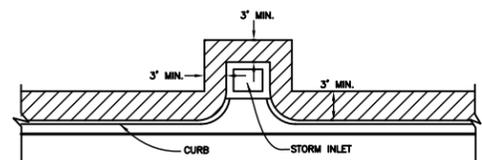
SILT BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING SWALE
FIGURE 10



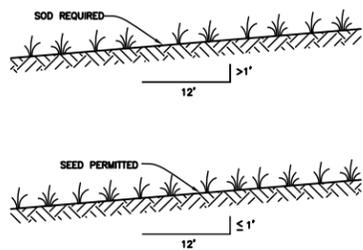
SILT BARRIER AT CONNECTION
OF SWALE TO EXISTING SWALE
FIGURE 11



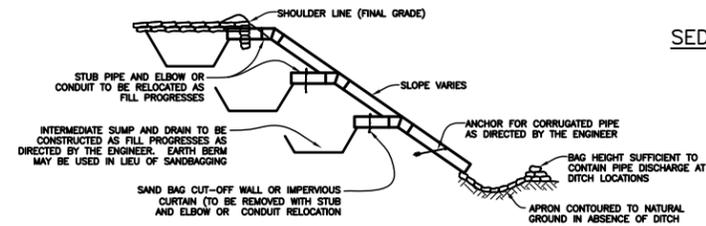
UNDERGROUND PIPE CROSSING
FIGURE 12



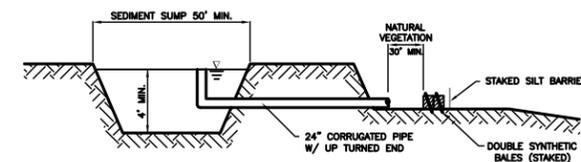
SOD ALONG CURB
AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



SECTION AA
TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS
LATEST EDITION FOR ALL TEMPORARY
EROSION CONTROL MEASURES.

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NUMBER	DESCRIPTION	DATE	PROJECT #	000-0000000	SURVEYED	ZNS	---
			SURVEY #	----	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	26/33/18	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

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FLORIDA P.E. LICENSE # 69268
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

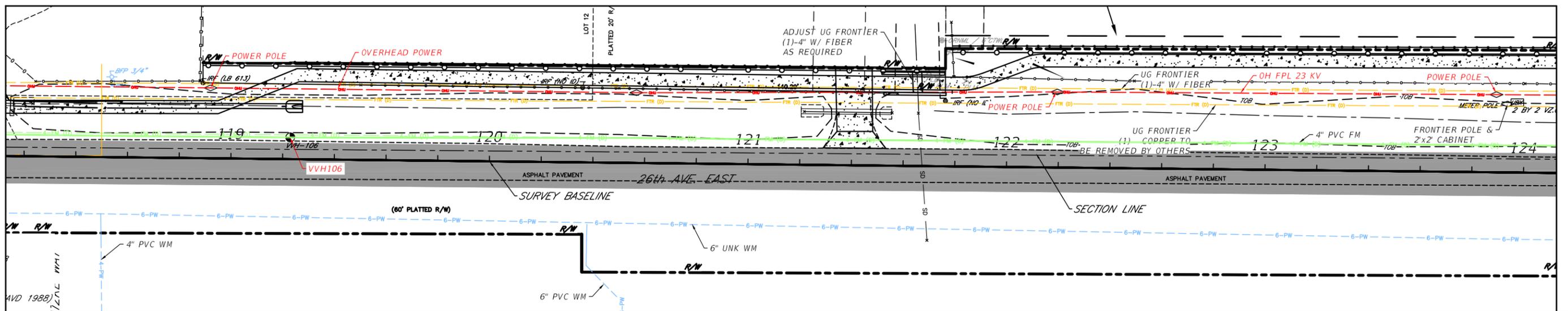
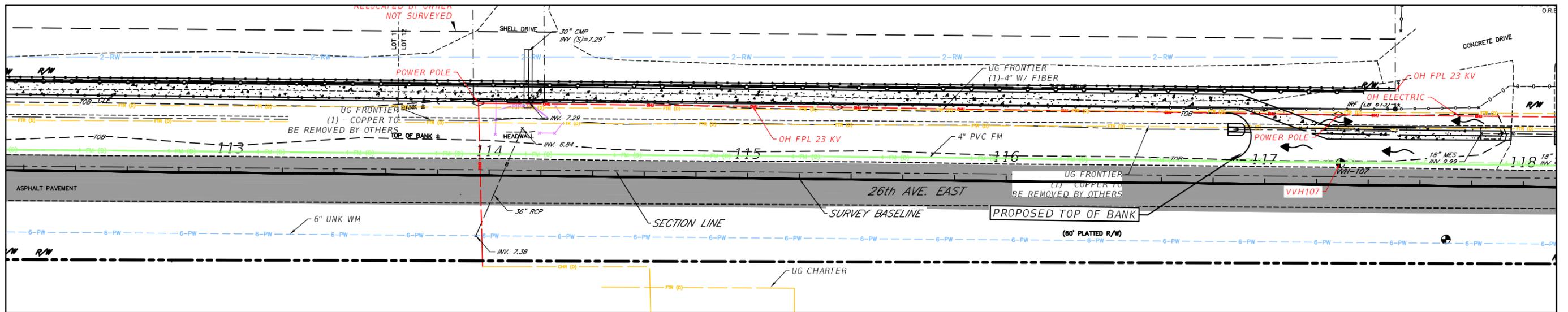
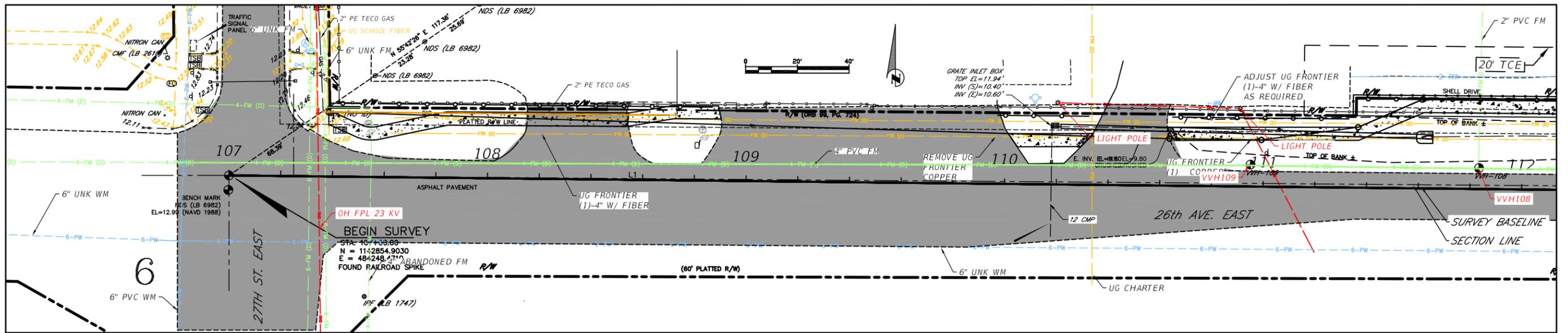


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26TH AVENUE EAST SIDEWALK
EROSION CONTROL DETAIL

SHEET NO.
33

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DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED	DESIGNED	DRAWN	SCALE
			178-0019900				
			N/A				
			32/34S/18E			JEA	09/2020

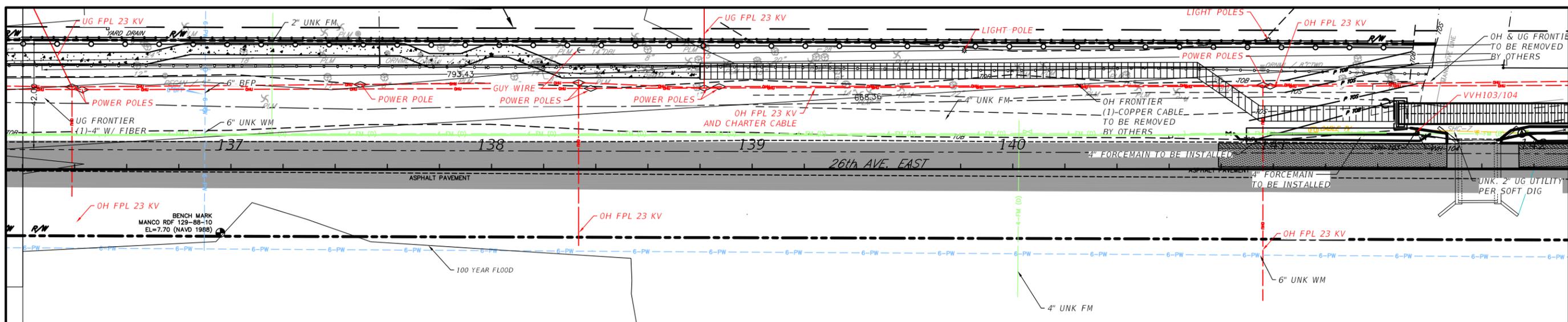
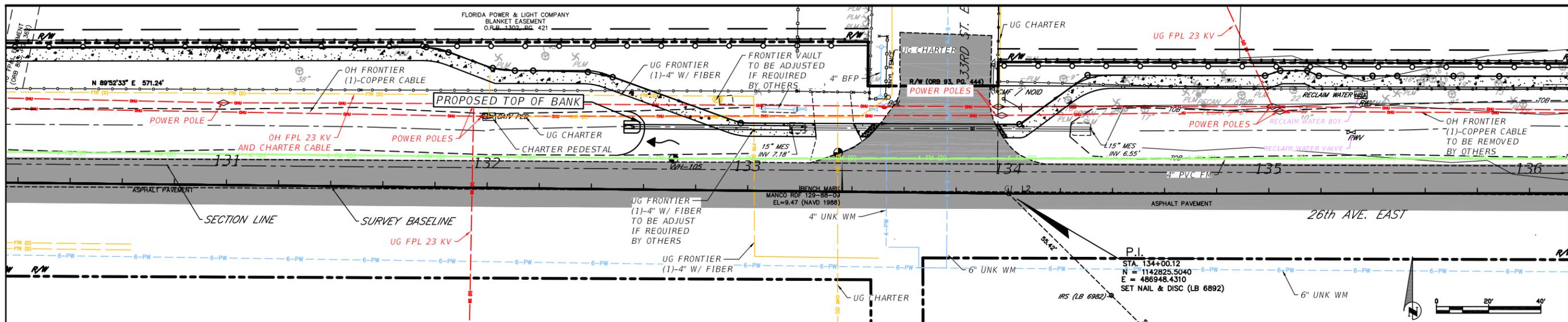
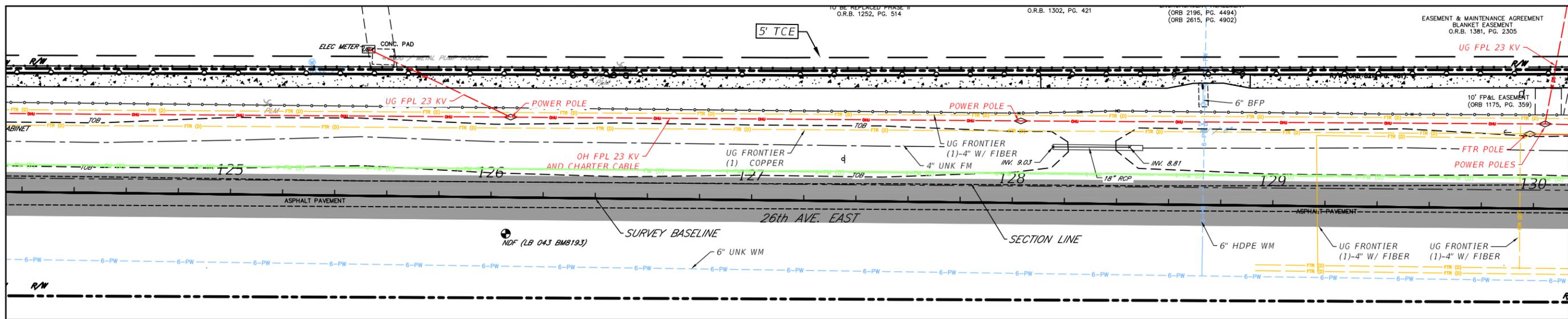
EXISTING UTILITY LOCATIONS PROVIDED BY PRIVATE UTILITY COMPANIES AND MANATEE COUNTY UTILITIES DEPARTMENT. THESE LOCATIONS ARE NOT EXACT. CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY ALL EXISTING UTILITIES.



**PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES**
1022 26th Avenue East, Bradenton, FL 34208

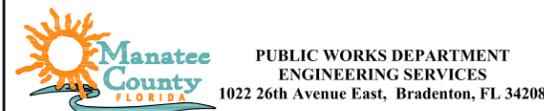
**26TH AVENUE EAST SIDEWALK
UTILITY ADJUSTMENT SHEETS**
STA. 107+00 TO 124+20

SHEET NO.
34



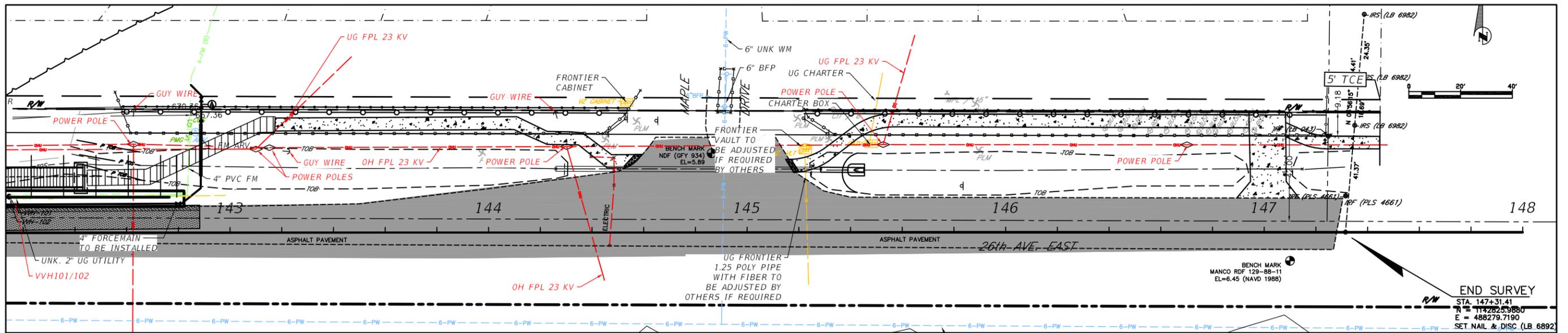
H:\Highway Engineering\PROJ\SIDWALK\26TH Ave East Sidewalk\DWG\IP Sidewalk Sidewalk.dwg - Auto 2-21 8:19 AM

DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED	ZNS	07/2019
			178-0019900			
			N/A	DESIGNED	JEA	08/2020
			32/34S/18E	DRAWN	JEA	09/2020
				CHECKED		



26TH AVENUE EAST SIDEWALK
UTILITY ADJUSTMENT SHEETS
STA. 124+20 TO 142+20

H:\Highway Engineering\PROJ\SIDEWALKS\26TH AVE EAST\Suwan Creek\DWG\IP_Suwan_Creek_Sidewalk.dwg - Aug 2 21 8:19 AM



DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020
			SCALE		CHECKED		



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ENGINEERING SERVICES**
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
UTILITY ADJUSTMENT SHEETS
STA. 142+20 TO 147+20

ROUND PIPE

DIMENSIONS AND QUANTITIES													
D	X	A	B	C	E	F	G	M					
								Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe		
18"	24"	30"	36"	42"	48"	54"	60"	1.50	3.00	4.50	6.00	7.50	9.00
24"	30"	36"	42"	48"	54"	60"	66"	1.50	3.00	4.50	6.00	7.50	9.00
30"	36"	42"	48"	54"	60"	66"	72"	1.50	3.00	4.50	6.00	7.50	9.00
36"	42"	48"	54"	60"	66"	72"	78"	1.50	3.00	4.50	6.00	7.50	9.00
42"	48"	54"	60"	66"	72"	78"	84"	1.50	3.00	4.50	6.00	7.50	9.00
48"	54"	60"	66"	72"	78"	84"	90"	1.50	3.00	4.50	6.00	7.50	9.00
54"	60"	66"	72"	78"	84"	90"	96"	1.50	3.00	4.50	6.00	7.50	9.00
60"	66"	72"	78"	84"	90"	96"	102"	1.50	3.00	4.50	6.00	7.50	9.00
66"	72"	78"	84"	90"	96"	102"	108"	1.50	3.00	4.50	6.00	7.50	9.00

TOP VIEW-SINGLE PIPE **TOP VIEW-MULTIPLE PIPE**

SECTION

MITERED END SECTION FOR ROUND, SINGLE & MULTIPLE PIPES 102.2

MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07 DATE OF B.O.C.C. APPROVAL

PLAN VIEW

SECTION A-A **END VIEW**

DRIVEWAY AND ROAD PIPE MITERED END SECTION 103.0

MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07 DATE OF B.O.C.C. APPROVAL

ISOMETRIC VIEW

BUTT JOINT **BELL JOINT**

FILTER FABRIC JACKET 104.0

MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07 DATE OF B.O.C.C. APPROVAL

GENERAL NOTES

- ALL REFERENCED STANDARDS SHALL BE LATEST REVISION.
- CONCRETE SHALL BE CLASS "1" AS SPECIFIED IN SECTION 345 OF F.D.O.T. SPECIFICATIONS.
- SEE SECTION 425-2.2 "MORTAR" OF FLORIDA D.O.T. SPECIFICATIONS.
- IRON CASTING SHALL BE AS SPECIFIED IN SECTION 962-8 OF F.D.O.T. SPECIFICATIONS. SEE SECTION 425-5.
- ALL REINFORCEMENT STEEL SHALL BE AS SPECIFIED IN SECTIONS 415 & 931.1 OF F.D.O.T. SPECIFICATIONS.
- SEE FLORIDA D.O.T. SPECIFICATIONS FOR GRATINGS.
- SEE FLORIDA D.O.T. SPECIFICATIONS FOR SECTION 125 "EXCAVATION FOR STRUCTURES."
- PRECAST TOP AND BOTTOM TO BE F.D.O.T. STANDARDS WITH MINIMUM TRAFFIC BEARING 8" THICKNESS.
- ALL STORMWATER PIPE SHALL BE INSTALLED BEHIND THE CURB OR EDGE OF PAVEMENT AND WITHIN THE RIGHT OF WAY AND WITHIN THE DRAINAGE EASEMENTS.
- THE FOLLOWING IS THE DRAINAGE STRUCTURE WALL MINIMUM THICKNESS:

		DIMENSION INDEX					
PIPE SIZE	TYPE	"C"	"D"	"E"	"F"	"G"	"H"
15"	RCP	2'8"	4'	5'	4'	5'4"	6'4"
12"x18"	RCP	"	"	"	"	"	"
18"	RCP	"	"	"	"	"	"
14"x23"	RCP	"	"	"	"	"	"
24"	RCP	3'4"	4'8"	5'8"	"	"	"
19"x30"	RCP	4'	5'4"	6'4"	"	"	"
30"	RCP	"	"	"	"	"	"
24"x38"	RCP	5'	6'4"	7'4"	"	"	"
36"	RCP	5'	6'4"	"	"	"	"
66"	RCP	8'5"	9'9"	10'9"	4'8"	6'0"	7'0"

MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07 DATE OF B.O.C.C. APPROVAL

DRAINAGE CONTROL SHEET 202.0

SECTION "A-A" **SECTION "B-B"**

PLAN VIEW

TYPICAL CONC. BLOCK BOX 202.1

MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07 DATE OF B.O.C.C. APPROVAL

GENERAL NOTES

- SIDEWALK SHALL BE CONSTRUCTED A MINIMUM OF 4" THICK, USING 3000 psi CONCRETE. WHERE SIDEWALK BISECTS A DRIVEWAY, THE MINIMUM SHALL BE 6" OF CLASS 1 CONCRETE REINFORCED WITH 6"x6" #10 WIRE MESH. * SEE SHEETS #101.2 & 101.3.
- ALL SIDEWALKS SHALL BE CONSTRUCTED TO THE SPECIFICATIONS OF THE MANATEE COUNTY LAND DEVELOPMENT CODE, SECTION 722. A MINIMUM (5) FOOT WIDE SIDEWALK SHALL BE INSTALLED ALONG THE NORTH AND WEST SIDES OF ALL NEW LOCAL STREETS WHICH ARE CONSTRUCTED IN CONJUNCTION WITH A NEW RESIDENTIAL DEVELOPMENT. A SIDEWALK A MINIMUM OF (5) FEET IN WIDTH SHALL BE INSTALLED ON BOTH SIDES OF ALL THROUGHFARES. REFER TO F.D.O.T. ROADWAY AND TRAFFIC STANDARDS, LATEST REVISION FOR CURB CUT RAMP SPECIFICATIONS.
- THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL NOT BE MORE THAN 1/4" UNDER A TEN FOOT STRAIGHTEDGE, NOR MORE THAN 1/8" ON A FIVE-FOOT TRAVERSE SECTION. THE EDGE OF THE SIDEWALK SHALL BE CAREFULLY FINISHED WITH AN EDGING TOOL HAVING A RADIUS OF 1/2".
- EXPANSION JOINT: EXPANSION JOINTS BETWEEN THE SIDEWALKS AND THE CURB OR DRIVEWAY OR AT FIXED OBJECTS AND SIDEWALK INTERSECTIONS SHALL BE 1/2" MATERIAL SHALL MEET THE REQUIREMENTS OF ASHTO M153 OR ASHTO M213. FOR LONG POORS, AN EXPANSION JOINT SHALL BE PLACED AT INTERVALS NOT TO EXCEED 120'.
- CONTRACTION JOINTS:
OPEN TYPE JOINTS
OPEN TYPE CONTRACTION JOINTS SHALL BE FORMED BY STAKING A METAL BULKHEAD IN PLACE AND DEPOSITING THE CONCRETE ON BOTH SIDES. AFTER THE CONCRETE HAS SET SUFFICIENTLY TO PRESERVE THE WIDTH AND THE SHAPE OF THE JOINT, THE BULKHEAD SHALL BE REMOVED. AFTER THE SIDEWALK HAS BEEN FINISHED OVER THE JOINT, THE SLOT SHALL BE FINISHED WITH A TOOL HAVING A 1/2" RADIUS.
SAWED JOINTS
A SLOT APPROXIMATELY 3/16" WIDE AND NOT LESS THAN 1" DEEP AT 10' CENTERS SHALL BE CUT WITH A CONCRETE SAW AFTER THE CONCRETE HAS SET.
- SIDEWALKS ALONG OTHER STREETS SHALL BE CONSTRUCTED AND DEDICATED AS REQUIRED BY THE APPROVING AUTHORITY WHEN NECESSARY TO CONTINUE AN EXISTING OR PROPOSED SIDEWALK.
- HANDICAP RAMPS SHALL MEET FLORIDA ACCESSIBILITIES STANDARDS, AND SECTIONS 301.0, 301.1 AND 301.2.
- ALL SIDEWALKS ON R/W WITHIN 10' OF AN EXISTING OR PROPOSED TREE THAT WILL EXCEED 6" IN DIAMETER AT MATURITY SHALL BE 5" THICK AND CONTAIN 2-#3 REBAR CENTERED VERTICALLY AND SPACED 3' ON CENTER. PALMS ARE NOT CONSIDERED TREES.

*NOTE: FOR COMPLETE SIDEWALK DETAILS SEE F.D.O.T. DESIGN STANDARDS, 2006 EDITION, INDEX 30A, SHEETS 1 THROUGH 6 AND INDEX 310, SHEETS 1 & 2.

MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07 DATE OF B.O.C.C. APPROVAL

SIDEWALKS GENERAL NOTES 301.0

PLAN VIEW

TRUNCATED DOME

CURB RAMP DETECTABLE WARNING DETAIL

NOTES:

DETECTABLE WARNINGS ON WALKING SURFACES

THE DETECTABLE WARNING SHALL EXTEND THE FULL WIDTH AND DEPTH OF THE CURB RAMP. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCH, A HEIGHT OF NOMINAL 0.2 INCH AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCH AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CONE CONTACT.

THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70%. CONTRAST IN PERCENT IS DETERMINED BY:
CONTRAST = [(B1-B2)/B1] x 100

WHERE B1 = LIGHT REFLECTANCE VALUE (LRV) OF THE LIGHTER AREA AND B2 = LIGHT REFLECTANCE VALUE (LRV) OF THE DARKER AREA.

NOTE THAT IN ANY APPLICATION BOTH WHITE AND BLACK ARE NEVER ABSOLUTE; THUS, B1 NEVER EQUALS 100 AND B2 IS ALWAYS GREATER THAN 0.

MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07 DATE OF B.O.C.C. APPROVAL

CURB RAMP DETECTABLE WARNINGS 302.3

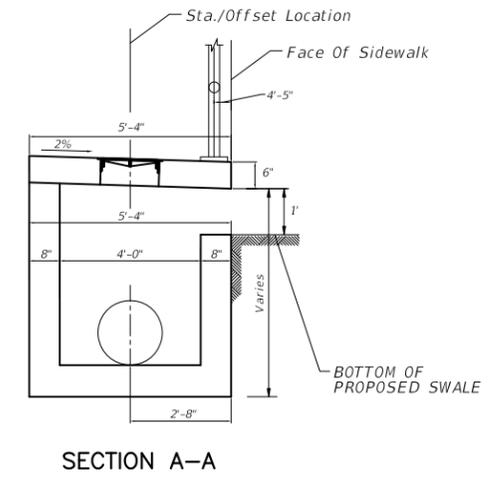
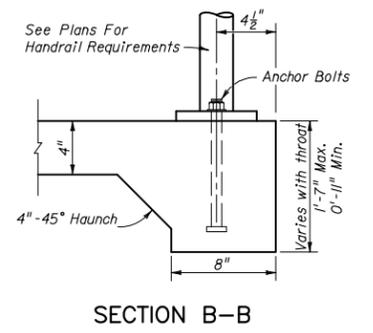
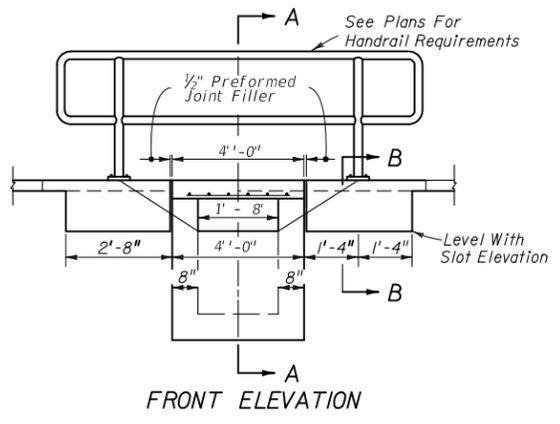
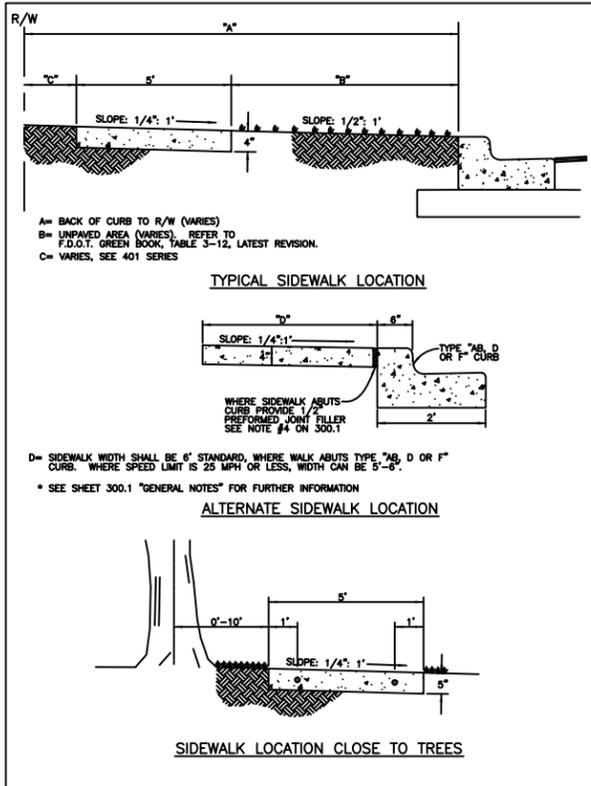
SECTION A-A

CONCRETE BLOCK HEADWALL 205.1

MANATEE COUNTY TRANSPORTATION DEPARTMENT 6/12/07 DATE OF B.O.C.C. APPROVAL

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- NOTES:**
- FOR ADDITIONAL DETAILS SEE INDEX 232.
 - INLET TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR INLETS (MC DROP INLET), EA. HANDRAIL TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR PIPE HANDRAIL, (MATERIAL), LF.
 - FOR STRUCTURE TOP SLAB, REFER TO SHEET 66 DETAIL MANATEE COUNTY STANDARDS #202.5. (DIMENSIONS "D" AND "G" TO MATCH TYPE "C" MODIFIED DIMENSIONS)
 - FOR ACCESS COVER, REFER TO SHEET 66 DETAIL MANATEE COUNTY STANDARDS #203.1.
 - REFER TO FDOT INDEX #201 FOR TOP SLAB TO WALL CONSTRUCTION JOINT.

INLET TYPE MC DROP INLET

MANATEE COUNTY TRANSPORTATION DEPARTMENT		SIDEWALK REQUIREMENTS	301.1
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	JEA	08/2020
			SEC./TWN./RGE	32/34S/18E	DRAWN	JEA	09/2020
			SCALE		CHECKED	GB/SF	06/2021

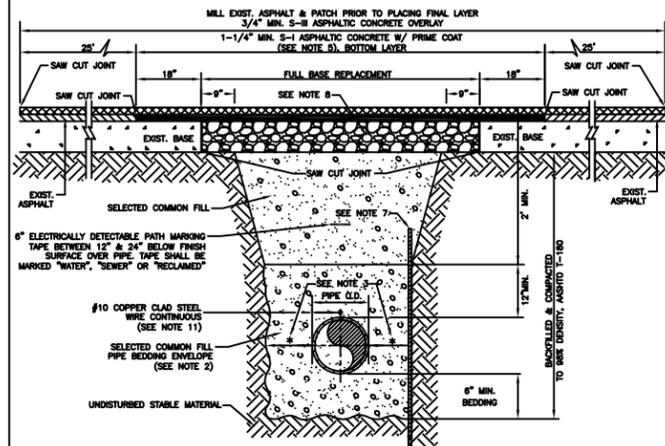
YANRONG FU, P.E.
 FLORIDA P.E. LICENSE # 69268
 MANATEE COUNTY PUBLIC WORKS
 1022 26TH AVENUE EAST
 BRADENTON, FL. 34208

Manatee County
FLORIDA

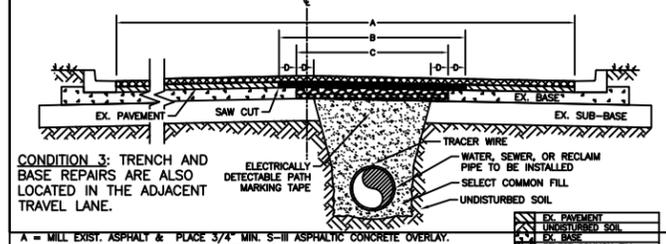
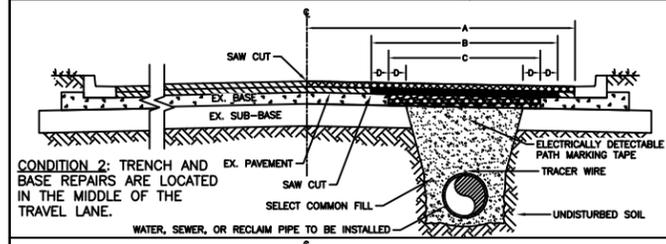
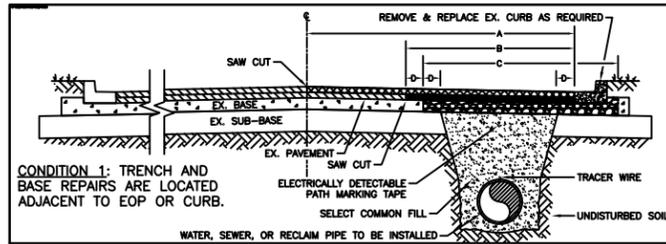
PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES
 1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
 ROADWAY DETAILS

- NOTES:**
1. BITUMINOUS PAVEMENT SHALL BE REMOVED IN CLEAN STRAIGHT LINES BY SAW CUTTING. WHERE BITUMINOUS PAVEMENT ADJOINS A TRENCH, THE EDGES ADJACENT TO THE TRENCH SHALL BE TRIMMED TO A NEAT STRAIGHT LINES BEFORE RESURFACING TO ENSURE THAT ALL AREAS TO BE RESURFACED ARE ACCESSIBLE TO ROLLERS OR TAMPERS USED TO COMPACT THE SUB-GRADE OR PAVING MATERIALS.
 2. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
 3. PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.
 4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
 5. ASPHALTIC CONCRETE STRUCTURE COURSE WITH PRIME COAT SHALL BE THE SAME DEPTH AND TYPE AS EXISTING OR A MINIMUM OF 1-1/4 INCH S-1, WHICHEVER IS GREATER.
 6. MILL 25' BACK FROM TRENCH CROSSING SAW CUTS. ADJUST MILLING PER INDIVIDUAL SITE TO NOT IMPACT BASE. BUTT JOINT TO EXIST ASPHALT. FINAL OVERLAY TO MATCH EXISTING WITH NO DISCERNABLE "BUMP" AT JOINT. MILLING LIMITS THAT IMPACT INTERSECTION SHALL BE ADDRESSED ON A CASE BY CASE BASIS AND APPROVED BY MANATEE COUNTY.
 7. SHEETING ORDERED LEFT IN PLACE TO BE CUT OFF 24" BELOW FINISHED GRADE OR 12" BELOW SUBGRADE.
 8. NEW BASE SHALL MATCH EXISTING; OR BE CRUSHED CONCRETE, 8" MIN. THICKNESS, LBR ≥150, WHICHEVER IS GREATER.
 9. TEMPORARY PATCHES WILL BE INSTALLED TO PROVIDE A SMOOTH ALL WEATHER SURFACE AT ALL TIMES. PERMANENT REPLACEMENT TO BE MADE AS SOON AS POSSIBLE.
 10. RESTORE SIGNAGE & MARKING WITH THERMOPLASTIC PER FDOT STANDARDS, LATEST EDITION.
 11. TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.
 12. NOTES 5. THRU 10. ARE MINIMUM REQUIREMENTS FOR A TRENCH IN A LOCAL ROAD. REFER TO LATEST EDITION OF MANATEE COUNTY HIGHWAY AND TRAFFIC STANDARDS FOR ADDITIONAL REQUIREMENTS.



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING (CROSSING)	UG-12
REV. BY	DATE	February 25, 2020 DATE OF APPROVAL	



- NOTES:**
1. THIS DETAIL IS BASED ON A TWO-LANE ROADWAY AND SHALL BE FOLLOWED WHEN A PIPE IS INSTALLED WITHIN THE LIMITS OF A ROADWAY AND RUNS PARALLEL WITH THE EDGE OF PAVEMENT. THIS DETAIL CAN ALSO BE UTILIZED FOR RESTORATION NEEDS OF ROADWAYS WITH ADDITIONAL LANES. CONDITION 3 ONLY EXTENDS TO NEXT ADJACENT LANE ON MULTI-LANE ROADS.
 2. THE MILL AND OVERLAY SHALL BE FIELD ADJUSTED TO MEET THE NEEDS FOR PAVEMENT RESTORATION DUE TO CONSTRUCTION ACTIVITIES AND SHALL BE COORDINATED WITH THE COUNTY.
 3. SEE TRENCH WITH ASPHALT PAVEMENT TYPE A-1 PIPE BEDDING (CROSSING) DETAIL FOR NOTES 1 TO 12 THAT ARE ALSO APPLICABLE TO ASPHALT PAVEMENT RESTORATION.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING (LONGITUDINAL)	UG-12B
REV. BY	DATE	February 25, 2020 DATE OF APPROVAL	

REQUIRED LENGTH OF RESTRAINED JOINT PIPE
FOR C900-16 PVC PIPE (DR-18)

MAIN PIPE SIZE	HORIZ. BENDS			TEES				REDUCERS				PLUGS & VALVES
	90°	45°	22.5°	SIZE		LENGTH		SIZE		LENGTH		
24	90	38	18	X24	X20	X16	X12	X10	X20	X16	X12	214
20	78	32	16	X20	X16	X12	X10	X8	X16	X12	184	
16	66	27	13	X16	X12	X10	X8	X6	X12	X10	151	
12	52	22	10	X12	X10	X8	X6	X4	X10	X8	118	
10	44	18	9	X10	X8	X6	X4	X3	X8	X6	100	
8	37	15	7	X8	X6	X4	X3	X2	X6	X4	83	
6	29	12	6	X6	X4	X3	X2	X1	X4	X3	63	
4	21	8	4	X4	X3	X2	X1	X0	X3	X2	45	

- NOTES:**
1. RESTRAIN 11.25' BENDS 50% OF LENGTH FOR 22.5° BENDS.
 2. ALL VALVES AND FITTINGS SHALL BE RESTRAINED TO THE CONNECTING SECTIONS OF PIPE.
 3. ALL ISOLATION VALVES MUST BE PROPERLY ANCHORED OR RESTRAINED TO RESIST A 180 PSI TEST PRESSURE IN EITHER DIRECTION.
 4. PIPE SIZES ARE GIVEN IN INCHES.
 5. RESTRAINED PIPE LENGTHS ARE GIVEN IN FEET.
 6. LENGTHS SHOWN ARE FOR A TEST PRESSURE OF 180 PSI.
 7. THE RESTRAINED LENGTHS SHOWN IN THESE TABLES ARE BASED ON SOIL CLASSIFICATION SP WITH AWWA TYPE 3 TRENCH CONDITIONS, 180 PSI TEST PRESSURE, 3 FEET OF COVER AND 1.5 FACTOR OF SAFETY. ACTUAL BURY CONDITIONS MUST BE DETERMINED BY THE ENGINEER OF RECORD AND THE RESTRAINED LENGTHS MODIFIED ACCORDINGLY.
 8. RESTRAINED LENGTHS TO BE APPLIED TO PIPELINES PER DETAIL UG-10 RESTRAINED LENGTHS FOR PIPE.
 9. ALL RESTRAINED JOINT HARDWARE SHALL CONFORM TO 1.11.17 OF THE PUBLIC WORKS UTILITIES STANDARDS MANUAL.
 10. ALL THREE "LEGS" OF TEES SHALL BE RESTRAINED PER THE STATED LENGTH IN THE TABLE.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		RESTRAINED LENGTHS FOR PVC PIPE	UG-8
REV. BY	DATE	February 25, 2020 DATE OF APPROVAL	

ID Name Location	Northing*	Easting*	Surface Elevation	Measured Depth	Top of Pipe	Pipe Size	Pipe Material	Type	Surface
VVH#101	1142839.90	487762.79	5.4	0.65	4.79	2"	PVC	UNKNOWN	GROUND
VVH#102	1142839.52	487762.83	5.3	2.05	3.23	4"	PVC	FORCE MAIN	GROUND
VVH#103	1142840.80	487703.52	5.7	0.50	5.17	2"	PVC	UNKNOWN	GROUND
VVH#104	1142839.49	487703.52	5.7	2.25	3.43	4"	PVC	FORCE MAIN	GROUND

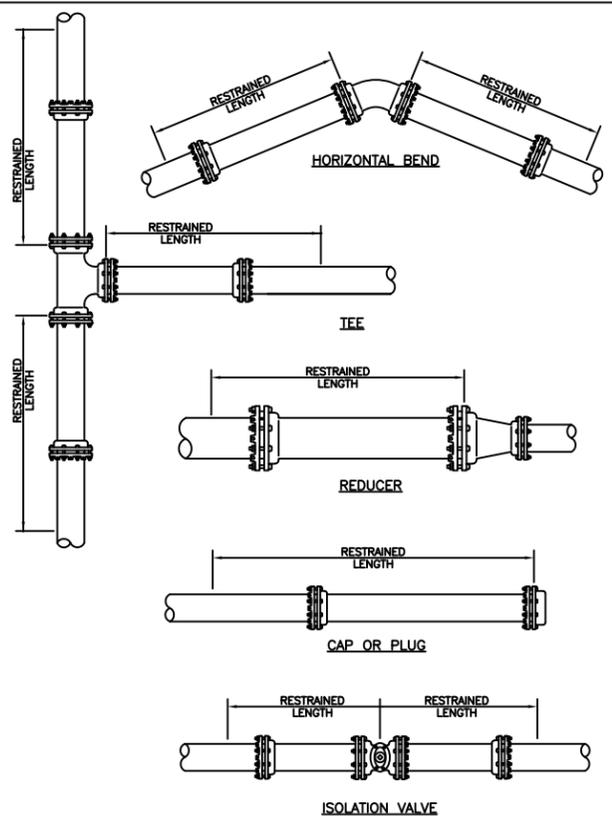
26th Avenue East SUBSURFACE UTILITY EXCAVATION (SUE) REPORT

ID Name Location	Northing*	Easting*	Surface Elevation	Measured Depth	Top of Pipe	Pipe Size	Pipe Material	Type	Surface
VVH#105	1142838.86	486819.91	10.3	1.72	8.58	4"	PVC	FORCE MAIN	GROUND
VVH#106	1142849.99	485471.35	12.4	2.85	9.55	4"	PVC	FORCE MAIN	GROUND
VVH#107	1142852.04	485277.68	12.7	2.35	10.65	4"	PVC	FORCE MAIN	GROUND
VVH#108	1142857.76	484716.35	13.5	2.35	11.15	4"	PVC	FORCE MAIN	GROUND
VVH#109	1142859.07	484643.54	13.4	2.35	11.05	4"	PVC	FORCE MAIN	GROUND

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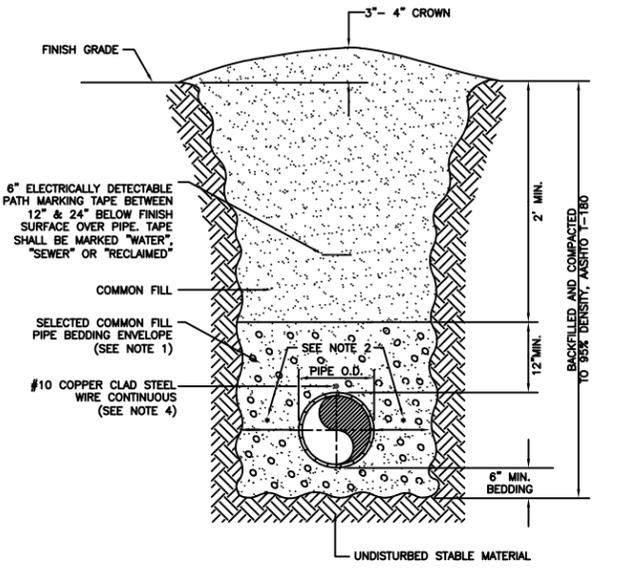
DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019	LORENZO DUARTE, P.E. FLORIDA P.E. LICENSE # 79285 MANATEE COUNTY PUBLIC WORKS 1022 26TH AVENUE EAST BRADENTON, FL. 34208	PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	26TH AVENUE EAST SIDEWALK	SHEET NO. 39
			SURVEY #	N/A	DESIGNED	JE	08/2020				
			SEC./TWN./RGE	32/34S/18E	DRAWN	JE	09/2020				
			SCALE		CHECKED	LD	06/2021				
UTILITY DETAILS											



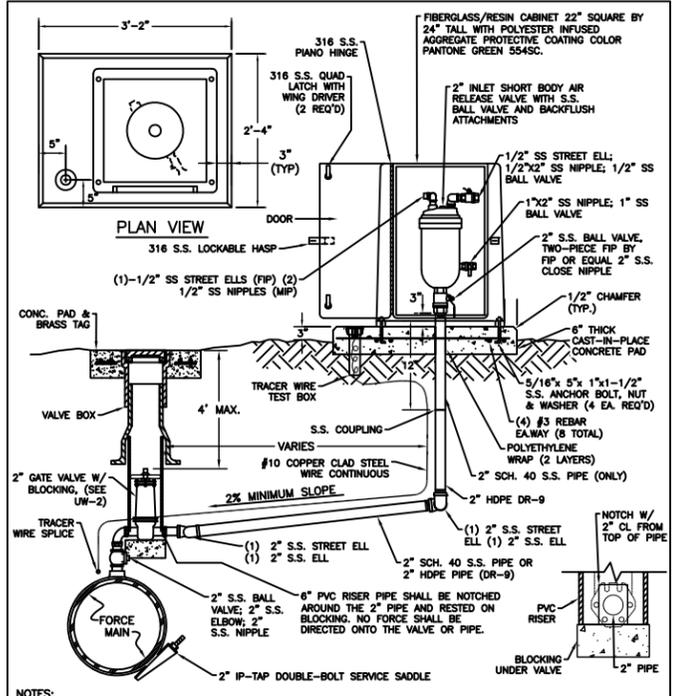
NOTE:
1. SEE DETAIL UG-8 RESTRAINED LENGTHS FOR PVC PIPE FOR NOTES 1 THROUGH 9 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR PIPE.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		RESTRAINED LENGTHS FOR PIPE	UG-10
REV. BY	DATE		
	February 25, 2020		
	DATE OF APPROVAL		

- NOTES:
- USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
 - PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.
 - PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.

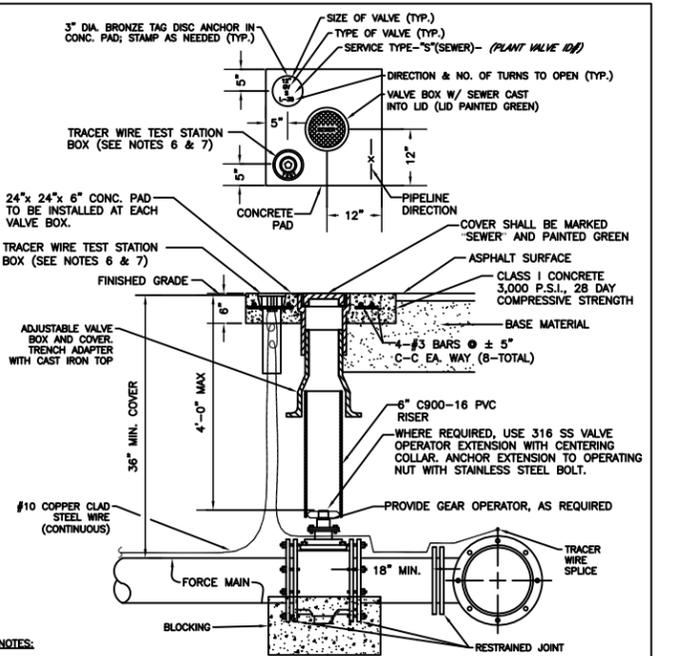


MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TRENCH WITH UNIMPROVED SURFACE TYPE A-1 PIPE BEDDING	UG-11
REV. BY	DATE		
	February 25, 2020		
	DATE OF APPROVAL		



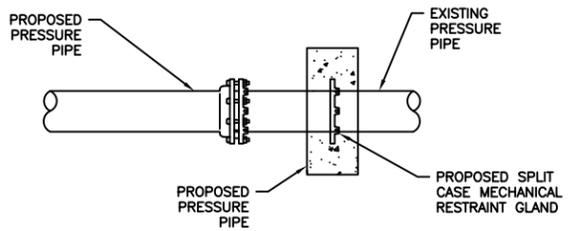
- NOTES:
- AIR RELEASE VALVES TO BE ABOVE-GROUND INSTALLATIONS, UNLESS IMPRACTICAL. INSTALLATIONS MAY BE BELOW-GROUND ONLY WHERE APPROVED AND SPECIFICALLY INDICATED ON THE PLAN.
 - AIR RELEASE VALVES TO BE INSTALLED AT HIGH POINTS, OR WHERE AIR WOULD BE ENTRAPPED, ALONG 4" AND LARGER FORCE MAINS.
 - FORCE MAIN VERTICAL ALIGNMENT TO BE DESIGNED SUCH THAT THE MINIMUM NUMBER OF REQUIRED AIR RELEASE VALVES ARE INSTALLED.
 - ALL INCIDENTAL FITTINGS AND HARDWARE TO BE 316 STAINLESS STEEL.
 - ALL PIPE THREADS TO BE SEALED AIR TIGHT.
 - VENT PIPE TO BE LAID ACCURATELY ON SLOPE, WITHOUT HIGH OR LOW POINTS.
 - CONCRETE PAD SHALL BE TYPE 1 CONCRETE W/ 3,000 P.S.I., 28 DAY COMPRESSIVE STRENGTH.
 - ARV SHALL BE INSTALLED MINIMUM 6 FT FROM EDGE OF PAVEMENT; 10 FT MAXIMUM FROM BACK OF CURB; 4 FT MIN. MAY BE APPROVED BY UTILITIES IN SOME EXISTING AREAS.
 - SEE UG-2 GATE VALVE, BOX, LID AND TAG STANDARD DETAIL. CENTERING COLLAR IS NOT REQUIRED ON 2" GATE VALVES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		ABOVE-GROUND AIR RELEASE VALVE ASSY. FOR FORCE MAINS	US-9
REV. BY	DATE		
	February 25, 2020		
	DATE OF APPROVAL		



- NOTES:
- "SV" TO BE IMPRESSED INTO THE NEWLY-POURED CONCRETE CURB, ALONG WITH DISTANCE IN FEET TO THE VALVE. IF NO CURB, INSTALL A GREEN DISC WITH "SV" AND A 1/8" x 1" GALVANIZED STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE DISC TO THE VALVE.
 - ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS DETERMINED IN THE FIELD.
 - VALVES SHALL NOT BE PLACED IN HANDICAPPED RAMPS, CURBS OR GUTTERS.
 - PRECAST CONCRETE PADS AND THRUST BLOCKS SHALL NOT BE USED.
 - ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".
 - USE NON-TRAFFIC RATED BOXES FOR NORMAL YARD SERVICE. WHERE VALVE WILL BE IN STREET OR PARKING UNDER VEHICLE TRAFFIC, USE TRAFFIC RATED BOXES. WHERE POSSIBLE, LOCATE TRACER WIRE TESTING STATION OUTSIDE OF TRAVEL LANE OR IN MEDIAN, CENTERED IN SEPARATE CONCRETE PAD SIMILAR TO STANDARD VALVE BOX PAD.
 - TRACER WIRE BOX SHALL BE LOCATED OUTSIDE THE ROADWAY ON THOROUGHFARES, LOCAL ARTERIAL AND STATE ROADWAYS.
 - THE BRASS TAG SHALL HAVE A "PLANT VALVE ID#" WHEN VALVES ARE INSTALLED WITHIN THE COUNTY TREATMENT PLANT LIMITS. THE PLANT VALVE ID# SHALL BE SHOWN ON THE CONSTRUCTION PLANS AND RECORD DRAWINGS.
 - REFER TO SECTION 1.11 IN THE PUBLIC WORKS UTILITY STANDARDS MANUAL FOR FURTHER DETAILS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		VALVE, BOX, COVER AND TAG	US-11
REV. BY	DATE		
	February 25, 2020		
	DATE OF APPROVAL		



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FLORIDA P.E. LICENSE # 79285
MANATEE COUNTY PUBLIC WORKS
1022 26TH AVENUE EAST
BRADENTON, FL. 34208

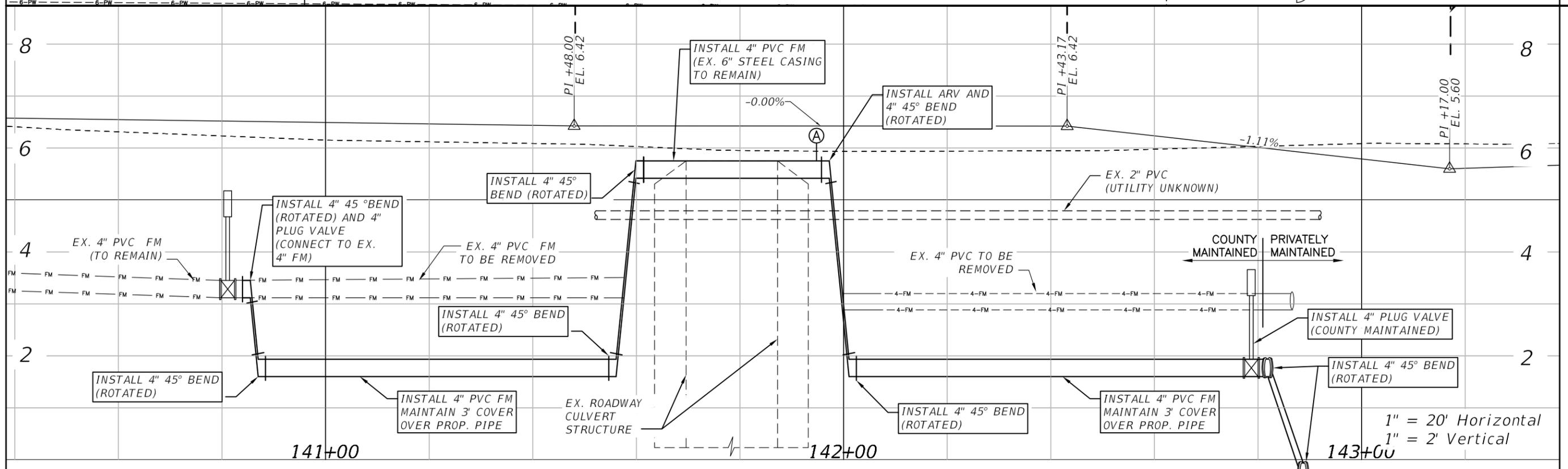
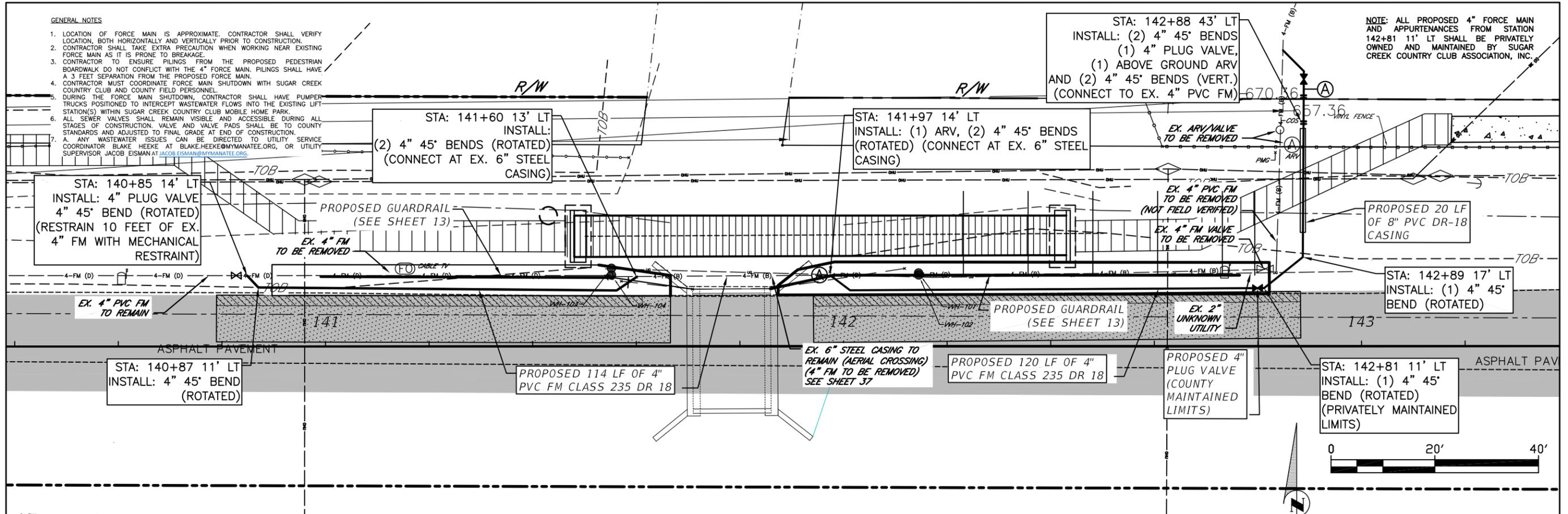
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ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
UTILITY DETAILS

GENERAL NOTES

1. LOCATION OF FORCE MAIN IS APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION, BOTH HORIZONTALLY AND VERTICALLY PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL TAKE EXTRA PRECAUTION WHEN WORKING NEAR EXISTING FORCE MAIN AS IT IS PRONE TO BREAKAGE.
3. CONTRACTOR TO ENSURE PILING FROM THE PROPOSED PEDESTRIAN BOARDWALK DO NOT CONFLICT WITH THE 4" FORCE MAIN. PILING SHALL HAVE A 3 FEET SEPARATION FROM THE PROPOSED FORCE MAIN.
4. CONTRACTOR MUST COORDINATE FORCE MAIN SHUTDOWN WITH SUGAR CREEK COUNTRY CLUB AND COUNTY FIELD PERSONNEL.
5. DURING THE FORCE MAIN SHUTDOWN, CONTRACTOR SHALL HAVE PUMPER TRUCKS POSITIONED TO INTERCEPT WASTEWATER FLOWS INTO THE EXISTING LIFT STATION(S) WITHIN SUGAR CREEK COUNTRY CLUB MOBILE HOME PARK.
6. ALL SEWER VALVES SHALL REMAIN VISIBLE AND ACCESSIBLE DURING ALL STAGES OF CONSTRUCTION. VALVE AND VALVE PADS SHALL BE TO COUNTY STANDARDS AND ADJUSTED TO FINAL GRADE AT END OF CONSTRUCTION.
7. ANY WASTEWATER ISSUES CAN BE DIRECTED TO UTILITY SERVICE COORDINATOR BLAKE HEEKE AT BLAKE.HEEKE@MYMANATEE.ORG, OR UTILITY SUPERVISOR JACOB EISMAN AT JACOB.EISMAN@MYMANATEE.ORG.

NOTE: ALL PROPOSED 4" FORCE MAIN AND APPURTENANCES FROM STATION 142+81 11' LT SHALL BE PRIVATELY OWNED AND MAINTAINED BY SUGAR CREEK COUNTRY CLUB ASSOCIATION, INC.



1" = 20' Horizontal
1" = 2' Vertical

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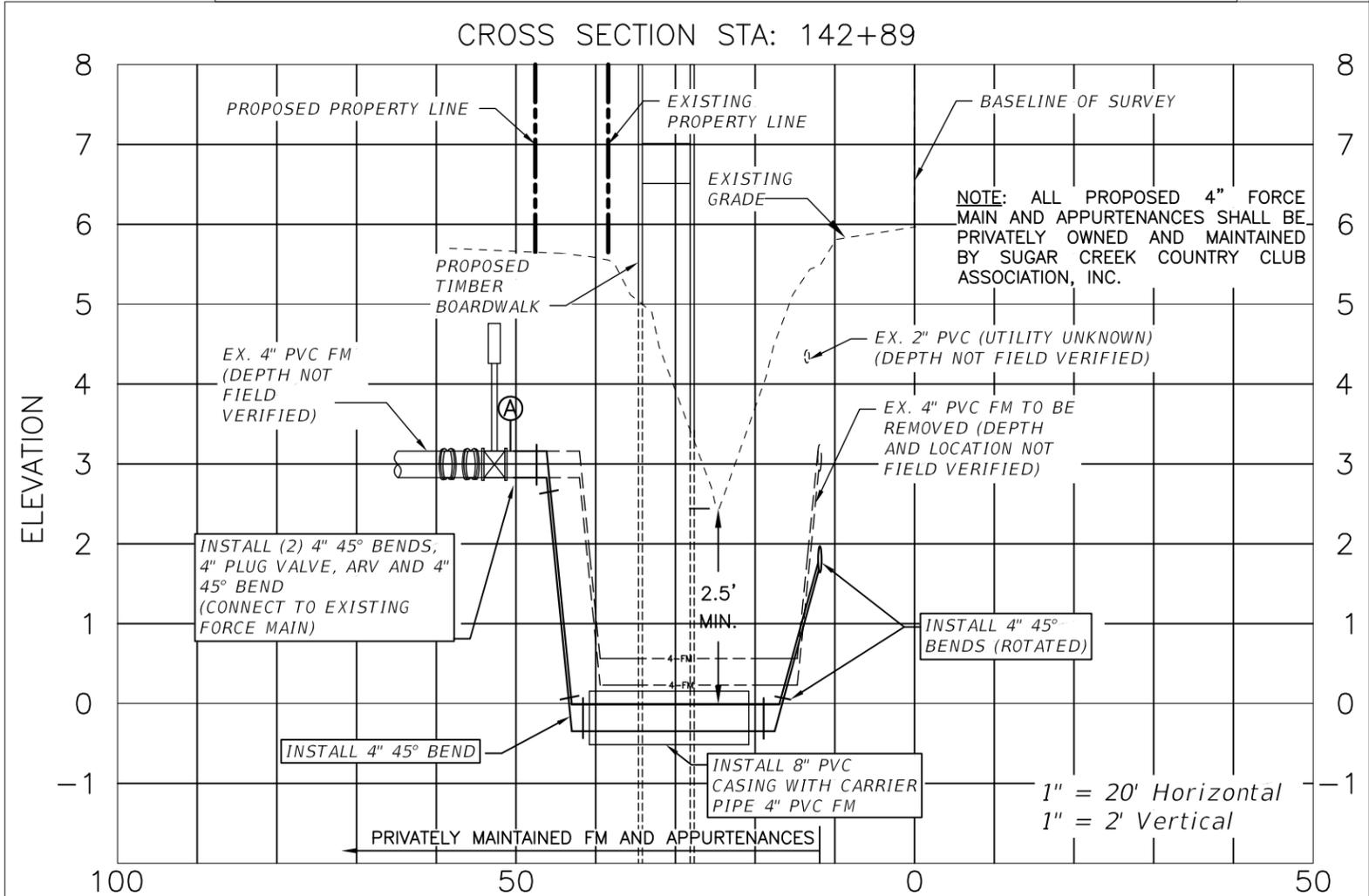
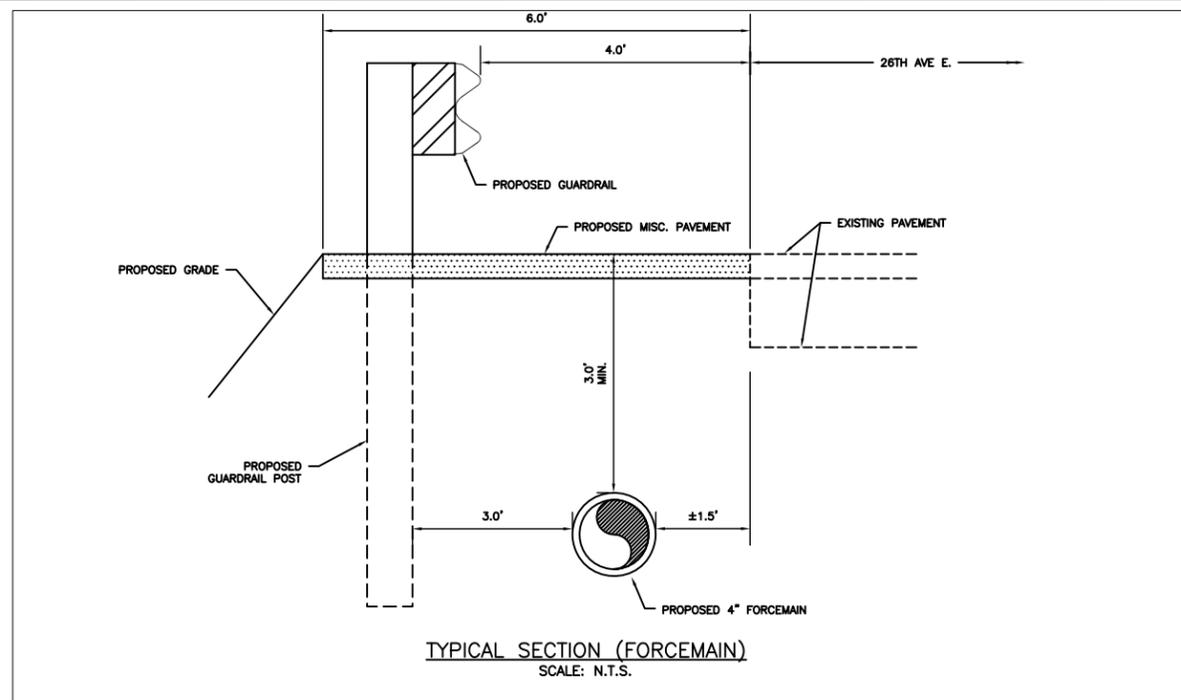
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BRADENTON, FL. 34208



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
UTILITY PLAN AND PROFILE

SHEET NO.
41

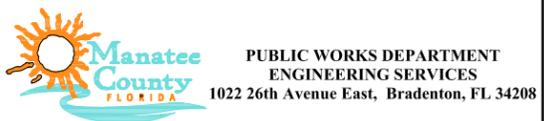


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			SURVEY #	N/A	DESIGNED	LD	08/2020
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 FLORIDA P.E. LICENSE # 79285
 MANATEE COUNTY PUBLIC WORKS
 1022 26TH AVENUE EAST
 BRADENTON, FL. 34208



26TH AVENUE EAST SIDEWALK
 UTILITY PROFILE

INDEX OF SHEETS

SHEET No.	TITLE
B-1	INDEX OF SHEETS AND QUANTITIES
B-2 TO B-4	GENERAL NOTES - PREFABRICATED BRIDGE NOTES
B-5	PLAN AND ELEVATION
B-6	BRIDGE TYPICAL SECTIONS
B-7	FOUNDATION LAYOUT
B-8	AUGER CAST PILE DETAILS
B-9	END BENT DETAILS (1 OF 2)
B-10	END BENT DETAILS (2 OF 2)
B-11	REBAR LIST - SLOPE PROTECTION DETAILS
B-12 TO B-13	GEOTECHNICAL BORING DATA
B-14	BOARDWALK GENERAL NOTES
B-15	BOARDWALK TYPICAL SECTION
B-16	BOARDWALK LAYOUT
B-17	BOARDWALK DETAILS (1 OF 4)
B-18	BOARDWALK DETAILS (2 OF 4)
B-19	BOARDWALK DETAILS (3 OF 4)
B-20	BOARDWALK DETAILS (4 OF 4)
B-21	FDOT SI 415-001 BAR BENDING DETAILS

SUMMARY OF QUANTITIES			
ITEM No.	ITEM	UNIT	QUANTITY
125-1	EXCAVATION FOR STRUCTURES	CY	35.0
125-3	SELECT BEDDING MATERIAL	CY	7.0
400-4-5	CONCRETE CLASS IV, SUBSTRUCTURE	CY	20.3
415-1-5	REINFORCING STEEL, SUBSTRUCTURE	LB	1336
455-112-14	AUGER GROUTED PILE, 14"	LF	120
455-119-101	STATIC LOAD TEST	EA	1
460-5	PREFABRICATED ALUMINUM PEDESTRIAN BRIDGE (95' L x 6' INSIDE CLEAR)	LS	1
470-1	TIMBER BOARDWALK (1)	SF	2121.0
530-3-4	RIPRAP, RUBBLE, F&I, DITCH LINING	TN	20.0
570-74	BEDDING STONE	TN	12.0

NOTES:
 (1) THE TIMBER PILES ARE INCLUDED IN THE COST OF THE BOARDWALK.

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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	SML	07/2021
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FLORIDA P.E. # 46449
 STEVEN M. LANEY, P.E.

Signature & Date



PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES
 1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
 PEDESTRIAN BRIDGE
 INDEX OF SHEETS & QUANTITIES

SHEET NO.
 B-1

GENERAL NOTES:

1. GENERAL DESIGN SPECIFICATIONS:

- 1.1. MANATEE COUNTY PUBLIC WORKS STANDARDS; PART 3 - HIGHWAY & TRAFFIC STANDARDS MANUAL, 2015, AMENDED 2016.
- 1.2. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2021.
- 1.3. FDOT DESIGN STANDARDS, 2021.

2. DESIGN SPECIFICATIONS:

- 2.1. AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2ND ED., 2009 WITH '15 INTERIMS.
- 2.2. AASHTO LOAD AND RESISTANCE FACTOR (LRFD) BRIDGE DESIGN SPECIFICATIONS, 7TH ED., WITH '15 AND '16 INTERIMS.
- 2.3. FLORIDA BUILDING CODE, BUILDING, 7TH ED., 2020.
- 2.4. FLORIDA GREENBOOK (MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS) 2016.
- 2.5. FDOT STRUCTURES DESIGN GUIDELINES (SDG), 2021.
- 2.6. FDOT DESIGN MANUAL, 2021.
- 2.7. ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318-14.
- 2.8. THE ALUMINUM ASSOCIATION, ALUMINUM DESIGN MANUAL, LATEST EDITION.

3. VERTICAL DATUM:

- 3.1. NAVD 1988.

4. ENVIRONMENT:

- 4.1. SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE
- 4.2. SUBSTRUCTURE: MODERATELY AGGRESSIVE ($SO_4 = 180\text{ppm}$)

5. DESIGN METHODOLOGY:

- 5.1. LOAD AND RESISTANCE FACTOR DESIGN METHOD (LRFD) USING STRENGTH, SERVICE AND FATIGUE LIMIT STATES.

6. DESIGN LOADINGS:

- 6.1. LIVE LOAD:
 - a. PEDESTRIAN = 90 psf
 - b. VEHICULAR = 4000 lb Utility Vehicle, 20% Front Axle, 80% Rear Axle
- 6.2. DEAD LOAD:
 - a. REINFORCED CONCRETE = 150 pcf
 - b. TIMBER = 50 pcf
- 6.3. WIND LOAD:
 - a. WIND SPEED $V_{ult} = 145$ mph for ULTIMATE DESIGN WIND SPEED
 $V_{asd} = 112$ mph for NOMINAL DESIGN WIND SPEED
 - b. RISK CATEGORY = II
 - c. WIND EXPOSURE = B

7. CONCRETE:

- 7.1. CONCRETE FOUNDATIONS SHALL BE FDOT CLASS IV AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH, $f'_c = 5500$ PSI
- 7.2. CONCRETE COVER:
CONCRETE COVER IS 4" UNLESS NOTED OTHERWISE IN THE PLAN SET AND DO NOT INCLUDE PLACEMENT AND FABRICATION TOLERANCES. SEE SECTION 415 OF THE SPECIFICATIONS FOR ALLOWABLE TOLERANCES.
- 7.3. JOINTS IN CONCRETE:
CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT THE LOCATIONS INDICATED IN THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE APPROVAL OF THE ENGINEER.
- 7.4. CHAMFERS:
PROVIDE $\frac{3}{4}$ " CHAMFER ON ALL EXPOSED SURFACES EXCEPT PROVIDE $\frac{1}{2}$ " CHAMFER AT TOP OF PEDESTAL ADJACENT TO TOP OF TIMBER BOARDWALK DECK.

8. REINFORCING STEEL:

- 8.1. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60 PER FDOT SPECIFICATIONS SECTION 931.
- 8.2. ALL DIMENSIONS PERTAINING TO THE LOCATION OF REINFORCING ARE TO THE CENTERLINE OF BAR, EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO THE FACE OF CONCRETE.

9. APPLIED FINISH COATING:

- 9.1. A CLASS 5 FINISH COATING SHALL BE APPLIED TO THE TOP AND SIDES OF THE RETAINING WALL CAP IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION 400 AND 975.
- 9.2. THE CLASS 5 COATING SHALL BE IN THE FDOT APPROVED PRODUCTS LIST.

10. PLAN DIMENSIONS:

- 10.1. ALL DIMENSIONS IN THE PLANS ARE MEASURED IN FEET AND INCHES.

11. UTILITIES:

- 11.1 LOCATION AND TYPE OF UTILITIES SHOWN IN THE BRIDGE PLANS ARE APPROXIMATE. SEE SIDEWALK AND UTILITY PLANS UTILITY ADJUSTMENTS AND ADDITIONAL INFORMATION.

12. MAINTENANCE OF TRAFFIC:

- 12.1 CONSTRUCTION WILL BE PERFORMED ADJACENT TO TRAFFIC THAT IS TO BE MAINTAINED. THE CONTRACTOR SHALL COMPLY WITH THE STATE AND FEDERAL REGULATIONS REGARDING THE PROTECTION OF THE PUBLIC AND SHALL PREPARE A PROTECTION PLAN DETAILING PROPOSED PROCEDURES AND DEVICES. THE PROTECTION PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
- 12.2. MAINTENANCE OF TRAFFIC PLANS SHALL CONFORM TO FDOT STANDARD INDEXES FOR TEMPORARY TRAFFIC CONTROL.

13. BID ITEM NOTES:

- 13.1 PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL PAY ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAY ITEMS.

14. EXCAVATION AND BACKFILL:

- 14.1 REFER TO SPECIFICATION 125 FOR STRUCTURE EXCAVATION AND BACKFILL.

15. AUGER CAST-IN-PLACE PILING (ACIP):

- 15.1 REFER TO SPECIAL PROVISIONS AND AUGER CAST-IN-PLACE PILE DETAILS FOR DESIGN LOADS AND INSTALLATION REQUIREMENTS.

16. ANCHOR BOLTS:

- 16.1 THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANCHOR BOLTS THAT MEET PREFABRICATED BRIDGE SUPPLIER REQUIREMENTS.

17.0 FOUNDATION:

- 17.1 THE FOUNDATION FOR THE CONCRETE PILE CAP FOOTING, PEDESTAL AND AUGER CAST-IN-PLACE (ACIP) PILES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 455 OF THE SPECIFICATIONS AND THE SPECIAL PROVISIONS FOR THE ACIP PILING.
- 17.2 THE FOUNDATIONS HAVE BEEN DESIGNED USING THE FOLLOWING ESTIMATED TOTAL LOADS FROM THE PEDESTRIAN BRIDGE WITH APPLICABLE STRENGTH AND SERVICE LIMITS APPLIED.

Estimated Dead Load reaction (unfactored) per bearing = 3.174 kips
 Pedestrian Live Load reaction (unfactored) per bearing = 12.825 kips (90 psf LL)
 Horizontal Wind (unfactored) per bearing = 10.892 kips (based on 137 mph wind)
 Horizontal Wind Vertical Component (unfactored) per bearing = ± 11.119 kips
 Overturning Wind Vertical Component (unfactored) per bearing = - 5.463 kips (near bearing)
 Overturning Wind Vertical Component (unfactored) per bearing = - 1.821 kips (far bearing)

Strength I Loading (Factored) R1 Vertical = 26.411 kips
 R2 Vertical = 26.411 kips

Strength III Loading (Factored) R1 Vertical = - 19.246 kips
 R1 Horizontal = 15.248 kips
 R2 Vertical = +16.984 kips
 R2 Horizontal = 15.248 kips

IF THE CONTRACTOR PROVIDES A PEDESTRIAN BRIDGE THAT EXCEEDS THESE LOADS, THEN THE CONTRACTOR MUST SUBMIT CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA TO THE COUNTY FOR REVIEW AND APPROVAL SHOWING THAT THE FOUNDATION DIMENSIONS, REINFORCING STEEL SIZE, AND SPACING ARE ADEQUATE.

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**PUBLIC WORKS DEPARTMENT
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**26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE**

GENERAL NOTES (1 OF 3)

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Signature & Date

SHEET NO.
B-2

GENERAL NOTES (CONT'D):

PREFABRICATED ALUMINUM BRIDGE SPECIFICATIONS

1.0 SCOPE:

1.1. ALL ENGINEERING DESIGN AND RELATED DETAILING OF THE BRIDGE SHALL BE PROVIDED BY THE SUPPLIER. THE DESIGN AND DETAILING SHALL CONFORM TO THE APPLICABLE CODES AND STANDARDS LISTED IN THE GENERAL NOTES AND SHALL COMPLY WITH STRUCTURAL DRAWINGS / PLANS PREPARED BY MANATEE COUNTY AND THIS DOCUMENT.

1.2. BRIDGE AND ITS ATTACHMENTS SHALL BE FULLY FABRICATED BY A QUALIFIED SUPPLIER. SUPPLIER SHALL BE RESPONSIBLE FOR THE DELIVERY OF ALL BRIDGE MATERIALS. THESE SPECIFICATIONS ARE FOR FULLY ENGINEERED CLEAR SPAN BRIDGE OF ALUMINUM CONSTRUCTION AND SHALL BE REGARDED AS MINIMUM STANDARDS FOR DESIGN AND CONSTRUCTION.

2.0 SUPPLIERS:

2.1. QUALIFIED SUPPLIERS

EACH BIDDER IS REQUIRED TO IDENTIFY THEIR INTENDED BRIDGE SUPPLIER AS PART OF THE BID SUBMITTAL. QUALIFIED SUPPLIERS MUST HAVE AT LEAST 5 YEARS OF EXPERIENCE FABRICATING THESE TYPE OF STRUCTURES.

2.2. THE BRIDGE SUPPLIER SHOULD HAVE IN-HOUSE CAPABILITY TO PROVIDE DESIGN, ENGINEERING AND FABRICATION THUS PROVIDING AN INTEGRATED APPROACH THAT DELIVERS DESIGN AND FABRICATION SERVICES WITH A SINGLE POINT OF RESPONSIBILITY.

3.0 PRE-APPROVED MANUFACTURERS:

1. MULLET'S ALUMINUM PRODUCTS, INC.
905 PONDER AVENUE
SARASOTA, FLORIDA 34232
1-941-371-3502

2. GATOR DOCK AND MARINE, LLC.
2880 MELLONVILLE AVENUE
SANFORD, FLORIDA 32773
1-866-709-0034

3. THE LIBERTY COMPANY
187 DUTTON ROAD
SECTION, ALABAMA 35771
1-256-996-2342

4. REDD TEAM BY SAPA
125 SUPERIOR DRIVE
DELHI, LA 71232
1-256-631-1078

3.1. SUPPLIERS OTHER THAN THOSE LISTED ABOVE MAY BE USED PROVIDED THE ENGINEER OR OWNER'S AGENT EVALUATES THE PROPOSED SUPPLIER AND APPROVES THE SUPPLIER PRIOR TO BID.

3.2. THE CONTRACTOR MUST PROVIDE THE FOLLOWING DOCUMENTATION, FOR ANY PROPOSED SUPPLIER WHO IS NOT PRE-APPROVED, AT LEAST 15 BUSINESS DAYS PRIOR TO BID:

3.3. PRODUCT LITERATURE - ALL DOCUMENTATION TO INSURE THE PROPOSED SUBSTITUTION WILL BE IN COMPLIANCE WITH THESE SPECIFICATIONS. THIS SHALL INCLUDE:

- DESIGN CALCULATIONS IN ACCORDANCE WITH THIS SPECIFICATION
- SHOP DRAWINGS IN ACCORDANCE WITH THIS SPECIFICATION
- SPLICING AND ERECTION PROCEDURES
- WARRANTY INFORMATION
- INSPECTION AND MAINTENANCE PROCEDURES
- WELDER QUALIFICATIONS

3.4. PROPOSED SUPPLIERS MUST HAVE AT LEAST FIVE (5) YEARS OF EXPERIENCE DESIGNING AND FABRICATING THESE TYPE STRUCTURES, AND A MINIMUM OF FIVE (5) SUCCESSFUL BRIDGE PROJECTS, OF SIMILAR DESIGN AND CONSTRUCTION SCOPE, EACH OF WHICH HAS BEEN IN SERVICE AT LEAST THREE (3) YEARS. LIST THE LOCATION, BRIDGE SIZE, OWNER, AND A CONTACT FOR REFERENCE FOR EACH PROJECT.

3.5. THE ENGINEER WILL EVALUATE AND VERIFY THE ACCURACY OF THE SUBMITTAL PRIOR TO BID. IF THE ENGINEER DETERMINES THAT THE QUALIFYING CRITERIA HAVE NOT BEEN MET, THE CONTRACTOR'S PROPOSED SUPPLIER SHALL BE REJECTED. THE ENGINEER'S RULING SHALL BE FINAL.

4.0 APPLICABLE AND GOVERNING CODES AND STANDARDS:

- 4.1. AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2ND ED., 2009 WITH '15 INTERIMS.
- 4.2. AASHTO LOAD AND RESISTANCE FACTOR (LRFD) BRIDGE DESIGN SPECIFICATIONS, 7TH ED., WITH '15 AND '16 INTERIMS.

5.0 REFERENCE CODES AND STANDARDS:

- 5.1. THE ALUMINUM ASSOCIATION, ALUMINUM DESIGN MANUAL, LATEST EDITION.
- 5.2. AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE, LATEST EDITION.

6.0 SYSTEM:

6.1. BRIDGE SHALL BE A CASCADE STYLE ALUMINUM TRUSS BRIDGE, OR SIMILAR IN LOOK AND FUNCTION.

6.2. BRIDGE SHALL BE FABRICATED AND DELIVERED AS CONTINUOUS AND PRE-ASSEMBLED STRUCTURE UNLESS MID-SPAN SPLICES ARE REQUIRED. BRIDGE SHALL INCORPORATE AN ENCLOSED FLOOR SYSTEM TO HIDE HORIZONTAL BRACING, FLOOR BEAMS AND STRINGERS FROM VIEW.

6.3. BRIDGE SHALL BE DESIGNED UTILIZING AN H-SECTION CONFIGURATION, WHERE THE FLOOR SUPPORT SYSTEM INTERSECTS THE TRUSS VERTICALS ABOVE THE BOTTOM CHORD TO INCREASE STABILITY. THE TOP OF THE TOP CHORD SHALL NOT BE LESS THAN 54" ABOVE THE FINISHED DECK FOR BICYCLE TRAFFIC.

7.0 CAMBER:

7.1. BRIDGE SHALL BE CAMBERED TO OFFSET THE DEAD LOAD.

8.0 SLOPE:

8.1. BRIDGE SHALL BE DESIGNED FOR ABUTMENTS CONSTRUCTED AT THE SAME ELEVATION AS INDICATED IN THE STRUCTURAL DRAWINGS/PLANS.

9.0 DECK:

9.1. BRIDGE SHALL HAVE AN ALUMINUM SKID-RESISTANT DECK.

10.0 BEARING PADS:

10.1. BRIDGE SHALL INCLUDE BEARING PADS, WHICH SHALL ALLOW THE BRIDGE TO EXPAND AND CONTRACT AS NEEDED WITHOUT BINDING. ALL BEARING PADS SHALL BE 1" THICK ADEQUATELY DIMENSIONED TO PROVIDE SUPPORT TO THE STRUCTURE OVER THE FULL TRAVEL RESULTING FROM EXPANSION AND CONTRACTION.

11.0 SAFETY & HAND RAILS:

11.1. BRIDGE SHALL INCORPORATE A COMBINATION RAIL SYSTEM CONSISTING OF VERTICAL PICKETS, A GRASPABLE TOP RAIL, AND CURB BOTTOM RAIL, WHICH SHALL MINIMIZE CLIMBING HAZARDS AND SERVE THE FUNCTION OF GUARD, HAND, AND TOE RAIL. THE COMBINATION RAIL SYSTEM SHALL MEET ALL THE DIMENSIONAL REQUIREMENTS OF FOOT ALUMINUM PEDESTRIAN/BICYCLE PICKET RAILING - INDEX NO. 860 OR PRE -APPROVED EQUAL.

12.0 ENGINEERING DESIGN LOADS:

12.1. DEAD LOAD

THE BRIDGE SHALL BE DESIGNED CONSIDERING ITS OWN DEAD LOAD INCLUDING STRUCTURE AND ORIGINALLY DESIGNED DECKING ONLY. NO ADDITIONAL LOADS SHALL BE CONSIDERED.

12.2. PEDESTRIAN LIVE LOAD

MAIN SUPPORTING MEMBERS, INCLUDING TRUSSES, PRIMARY BEAMS, AND ARCHES SHALL BE SECONDARY MEMBERS, INCLUDING DECK AND SUPPORTING FLOOR SYSTEM SHALL BE DESIGNED FOR A LIVE LOAD OF 90 POUNDS PER SQUARE FOOT.

12.3. VEHICLE LOAD

THE BRIDGE SHALL BE DESIGNED FOR AN OCCASIONAL 4000 LB VEHICLE LOADING, WHERE 80% OF THE LOAD IS CONSIDERED TO ACT ON THE REAR AXLE AND 20% ON THE FRONT. ALL FLOOR BEAMS AND MAIN SUPPORTING MEMBERS SHALL BE DESIGNED TO SUPPORT THE VEHICLE LOAD, UNIFORMLY DISTRIBUTED ACROSS THEIR WIDTH AT A MAXIMUM WHEEL BASE OF 6 FEET. THE LOADING OUTLINED IN THIS SECTION SHALL SUPERSEDE AASHTO SUGGESTED LOADING REQUIREMENTS. NO VEHICLE IMPACT OR DYNAMIC LOADING REQUIREMENTS ARE REQUIRED.

12.4. WIND LOADS

THE BRIDGE SHALL BE DESIGNED FOR THE HORIZONTAL WIND LOADS APPLIED TO THE FULL VERTICAL PROJECTED AREA OF THE BRIDGE AS IF ENCLOSED, AT RIGHT ANGLES TO THE LONGITUDINAL AXIS OF THE STRUCTURE. WIND LOADS SHALL BE PROPORTIONALLY AT RIGHT ANGLES TO THE LONGITUDINAL AXIS OF THE STRUCTURE DISTRIBUTED ACROSS ALL EXPOSED PRIMARY MEMBER SURFACES INCLUDING CHORDS, VERTICAL POSTS, AND TRUSS DIAGONALS ON THE WINDWARD SIDE.

12.5. FATIGUE EFFECTS

FATIGUE EFFECTS SHALL BE CONSIDERED FOR ALL LOAD COMBINATIONS INCORPORATING WIND LOADS, WHERE N=100,000 CYCLES.

12.6. OVERTURNING EFFECTS

THE EFFECT OF FORCES TENDING TO OVERTURN THE STRUCTURE SHALL BE CALCULATED ASSUMING THAT THE WIND DIRECTION IS AT RIGHT ANGLES TO THE LONGITUDINAL AXIS OF THE STRUCTURE. IN ADDITION, AN UPWARD FORCE SHALL BE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE SUPERSTRUCTURE WIDTH. THIS FORCE SHALL BE 20 POUNDS PER SQUARE FOOT OF DECK INFLUENCE AREA.

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GENERAL NOTES (CONT'D):

PREFABRICATED ALUMINUM BRIDGE SPECIFICATIONS (CONT'D):

12.7. TOP CHORD/RAIL LOAD

THE TOP CHORD, TOP RAIL, AND VERTICAL POSTS SHALL BE DESIGNED FOR A SIMULTANEOUS VERTICAL AND HORIZONTAL LOAD OF 50 POUNDS PER LINEAR FOOT OR A 200 POUND POINT LOAD, WHICHEVER IS GREATER, POSITIONED TO PRODUCE THE MAXIMUM LOAD EFFECT.

THE PICKET SYSTEM SHALL BE DESIGNED FOR A 200 POUND POINT LOAD, APPLIED TRANSVERSELY OVER AN AREA OF 1 SQUARE FEET.

13.0 DESIGN LIMITATIONS:

13.1. DEFLECTION

THE VERTICAL DEFLECTION OF THE MAIN TRUSS DUE TO ANY LOAD COMBINATION SHALL NOT EXCEED L/360, WHERE L IS THE LENGTH OF THE UNSUPPORTED SPAN. THE HORIZONTAL DEFLECTION OF THE STRUCTURE DUE TO ANY LOAD COMBINATION SHALL NOT EXCEED L/360, WHERE L IS THE LENGTH OF THE UNSUPPORTED SPAN.

13.2. STRESSES, LOAD FACTORS AND RESISTANCE FACTORS

ALL STRESSES, LOAD FACTORS AND RESISTANCE FACTORS SHALL BE DETERMINED IN ACCORDANCE WITH THE AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, OR THE ALUMINUM DESIGN MANUAL FOR THE LRFD STRENGTH AND SERVICE LOAD LIMIT STATES.

13.3. FRAME STABILITY

THE BUCKLING LOAD FACTOR FOR THE BRIDGE STRUCTURE SHALL BE NO LESS THAN 4 FOR ANY COMBINATION OF APPLIED LOADS, TO ENSURE ADEQUATE OVERALL STABILITY AND STIFFNESS.

13.4. VIBRATION

THE FUNDAMENTAL FREQUENCY OF THE UNLOADED PEDESTRIAN BRIDGE SHALL BE NO LESS THAN 3.0 HZ TO AVOID THE FIRST HARMONIC.

13.5. ANALYSIS

FULL STRUCTURAL ANALYSES FOR THE PRIMARY BRIDGE STRUCTURE SHALL BE COMPLETED USING A 3-D ANALYSIS. ALL MEMBER END CONDITIONS ARE TO BE CONSIDERED FIXED. OTHER ANALYSIS METHODS MAY BE USED FOR SECONDARY MEMBERS. ALL ANALYSIS AND RESULTS NECESSARY TO DETERMINE THE STRUCTURAL ADEQUACY OF THE BRIDGE SHALL BE REPORTED. THE FOLLOWING ANALYSES ARE REQUIRED:

13.5.1 STRESS AND DEFLECTION

ANALYSIS SHALL BE COMPLETED TO DETERMINE THAT ALL BRIDGE MEMBERS, CRITICAL CONNECTIONS, AND BRIDGE CONFIGURATIONS ARE SUFFICIENT TO ADEQUATELY RESIST THE FOLLOWING LOAD COMBINATIONS:

LOAD COMBINATION I	DEAD LOAD + PEDESTRIAN LIVE LOAD
LOAD COMBINATION II	DEAD LOAD + WIND LOADS
LOAD COMBINATION III	DEAD LOAD + VEHICLE LOADS
LOAD COMBINATION IV	TOP CHORD/RAIL LOAD

13.5.2 FRAME STABILITY

BUCKLING ANALYSIS SHALL BE COMPLETED TO DETERMINE THAT THE BRIDGE FRAME IS ADEQUATELY STABLE AND SUFFICIENT TO RESIST FORCES CAUSING IT TO BUCKLE FOR THE FOLLOWING LOAD COMBINATIONS:

LOAD COMBINATION I	DEAD LOAD + PEDESTRIAN LIVE LOAD
LOAD COMBINATION II	DEAD LOAD + WIND LOADS
LOAD COMBINATION III	DEAD LOAD + VEHICLE LOADS

13.5.3 FREQUENCY

FREQUENCY ANALYSIS SHALL BE COMPLETED TO SHOW THAT THE FUNDAMENTAL FREQUENCY IN THE VERTICAL DIRECTION OF THE UNLOADED PEDESTRIAN BRIDGE SHALL BE GREATER THAN 3.0 HERTZ (HZ) TO AVOID THE FIRST HARMONIC. IN THE LATERAL DIRECTION, THE FUNDAMENTAL FREQUENCY SHALL BE GREATER THAN 1.3 HZ

14.0. MATERIALS:

14.1. STRUCTURAL MEMBERS

ALL PRIMARY STRUCTURAL MEMBERS ARE TO BE 6061-T6 ALUMINUM FOR ITS HIGH STRENGTH AND CORROSION RESISTANCE. SECONDARY MEMBERS ARE TO BE 6000 SERIES ALUMINUM FOR CORROSION RESISTANCE.

14.2. FASTENERS

ALL FASTENERS REQUIRED FOR ASSEMBLY SHALL BE STAINLESS STEEL TYPE 304. INSULATING WASHERS SHALL BE PROVIDED WHERE STAINLESS STEEL AND ALUMINUM CONTACT IS ANTICIPATED TO MINIMIZE THE POTENTIAL FOR GALVANIC ACTION.

15.0. FABRICATION & ASSEMBLY WELDING

15.1 ALL ALUMINUM MEMBERS SHALL BE WELDED USING 5356 ALUMINUM FILLER WIRE IN ACCORDANCE WITH AWS D1.2.

16.0. EXPANSION SLOTS:

16.1 SLOTS SHALL BE CUT INTO BRIDGE BEARING AREA TO ALLOW FOR PROPER EXPANSION AND CONTRACTION OF THE BRIDGE.

17.0. MID-SPAN SPLICES:

17.1 WHEN REQUIRED TO ACCOMMODATE CONTRACTOR REQUIREMENTS OR THOSE OF THIS SPECIFICATION, MID-SPAN SPLICES SHALL BE INCORPORATED AND BE ADEQUATELY DESIGNED TO MEET ALL DESIGN LIMITATION CRITERIA SPECIFIED IN THE NOTES.

18.0. SUBMITTALS - FABRICATION DRAWINGS:

18.1 FABRICATION DRAWINGS AND CALCULATIONS SHALL BE PREPARED AND SUBMITTED FOR REVIEW AFTER RECEIPT OF THE ORDER. SUBMITTAL DRAWINGS SHALL BE UNIQUE DRAWINGS TO THIS PROJECT, PREPARED TO ILLUSTRATE THE SPECIFIC PORTION OF THE BRIDGE BEING FABRICATED. ALL RELATIVE DESIGN INFORMATION SUCH AS MEMBER SIZE, MATERIAL SPECIFICATION, DIMENSIONS, AND REQUIRED CRITICAL WELDS SHALL BE CLEARLY SHOWN ON THE DRAWINGS. DRAWINGS SHALL HAVE CROSS REFERENCED DETAILS AND SHEET NUMBERS.

18.2 ALL DRAWINGS SHALL BE STAMPED, AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA. 3 INDIVIDUALLY STAMPED SETS SHALL BE PROVIDED TO BE REVIEWED AND APPROVED EXCLUSIVELY BY MANATEE COUNTY.

AT MINIMUM THE FOLLOWING CRITERIA MUST BE INCLUDED FOR APPROVAL:

- ALL RELEVANT BRIDGE DIMENSIONS
- BRIDGE CROSS SECTIONS
- SUFFICIENT DETAILING
- MEMBER CROSS SECTIONS
- GENERAL NOTES INDICATING MATERIAL SPECIFICATIONS AND DESIGN LOADS
- WELD DETAILS
- DETAIL OF BOLTED SPLICES (IF APPLICABLE)
- SIGNATURE AND SEAL OF PE LICENSED IN ACCORDANCE WITH THIS SPECIFICATION
- CAMBER DETAILS

19.0. CALCULATIONS & RESULTS:

19.1 STRUCTURAL ANALYSIS RESULTS AND CALCULATIONS SHALL BE PREPARED AND SUBMITTED FOR REVIEW AFTER RECEIPT OF THE ORDER. ALL ANALYSIS AND RESULTS NECESSARY TO DETERMINE THE STRUCTURAL ADEQUACY OF THE BRIDGE SHALL BE SHOWN. 3 INDIVIDUALLY STAMPED SETS SHALL BE PROVIDED TO BE REVIEWED AND APPROVED EXCLUSIVELY BY MANATEE COUNTY.

19.2 AT MINIMUM THE FOLLOWING CRITERIA MUST BE INCLUDED FOR APPROVAL:

- BRIDGE REACTIONS FOR ALL LOAD COMBINATIONS;
- EXPANSION AND CONTRACTION REQUIREMENTS AND/OR INDUCED LOADS;
- CRITICAL WELD ANALYSIS RESULTS.
- DETAILED DESCRIPTION OF APPLIED LOADS AND CONDITIONS FOR ALL LOAD COMBINATIONS;
- MEMBER MAXIMUM ALLOWABLES FOR ALL LOAD AND DESIGN CONDITIONS;
- ANALYSIS BOUNDARY CONDITIONS, DATA INPUT, ANALYSIS RESULTS AND SUPPLEMENTARY CALCULATIONS FOR ALL STRESS & DEFLECTION ANALYSES;
- RESULTS FOR FRAME STABILITY ANALYSIS;
- RESULTS FOR FREQUENCY ANALYSIS;
- AND BOLTED SPLICE CALCULATIONS (IF APPLICABLE).

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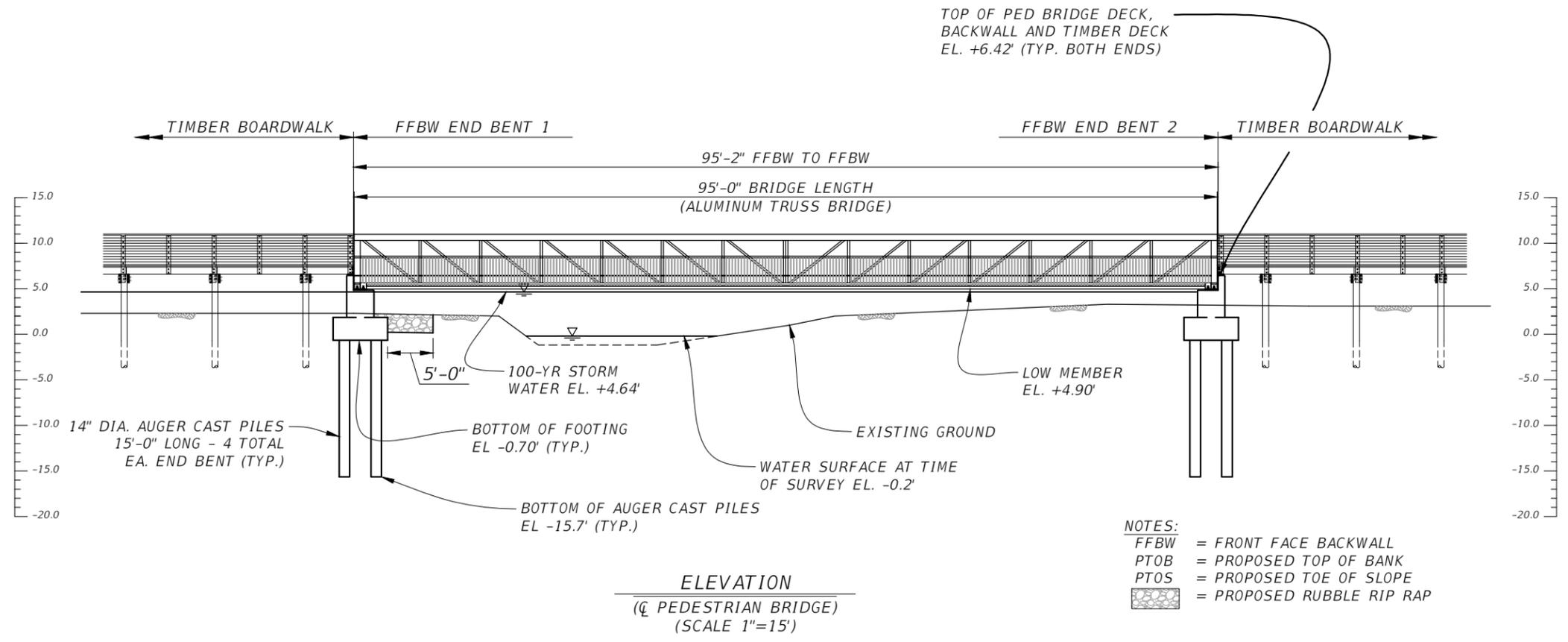
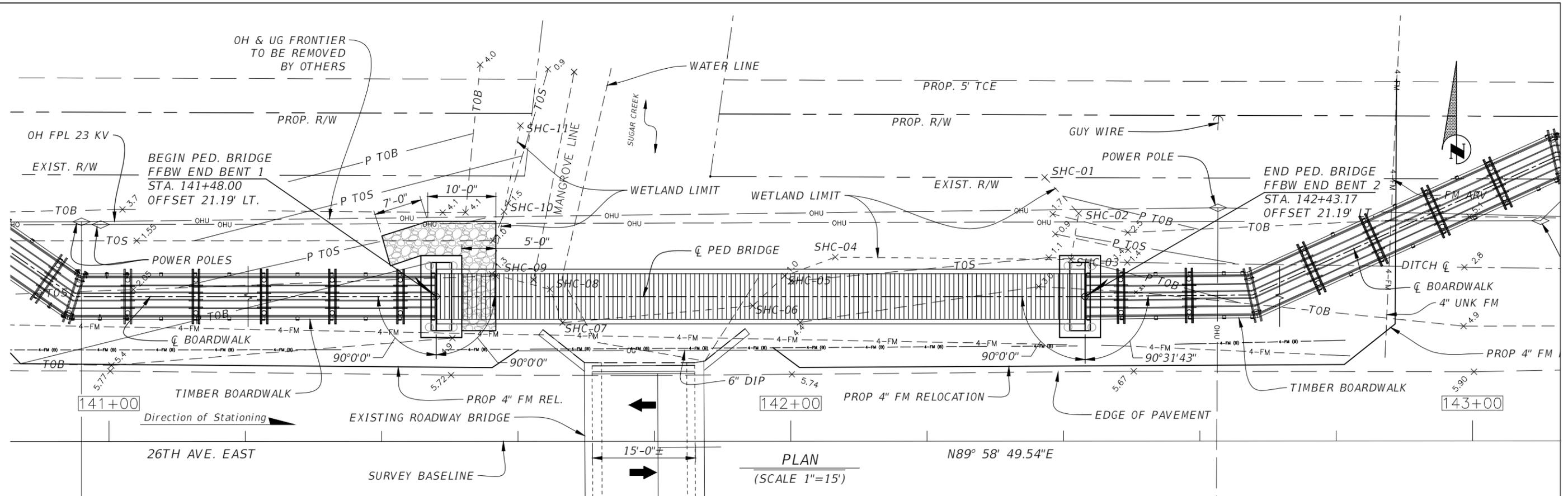
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SHEET NO.
B-4

F:\Projects\26th Ave E Sidewalk\26th Ave E Sidewalk Ped Bridge.dwg Aug 16 21 8:30 AM



- NOTES:**
- FFBW = FRONT FACE BACKWALL
 - PTOB = PROPOSED TOP OF BANK
 - PTOS = PROPOSED TOE OF SLOPE
 - = PROPOSED RUBBLE RIP RAP

FLORIDA P.E. # 46449
STEVEN M. LANEY, P.E.



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

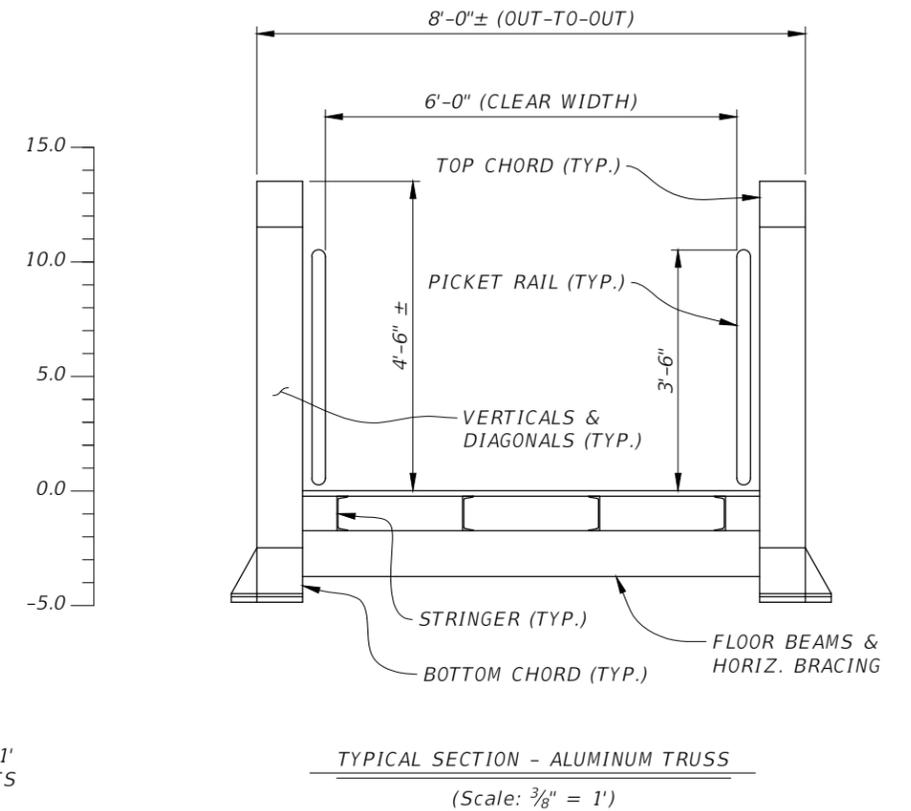
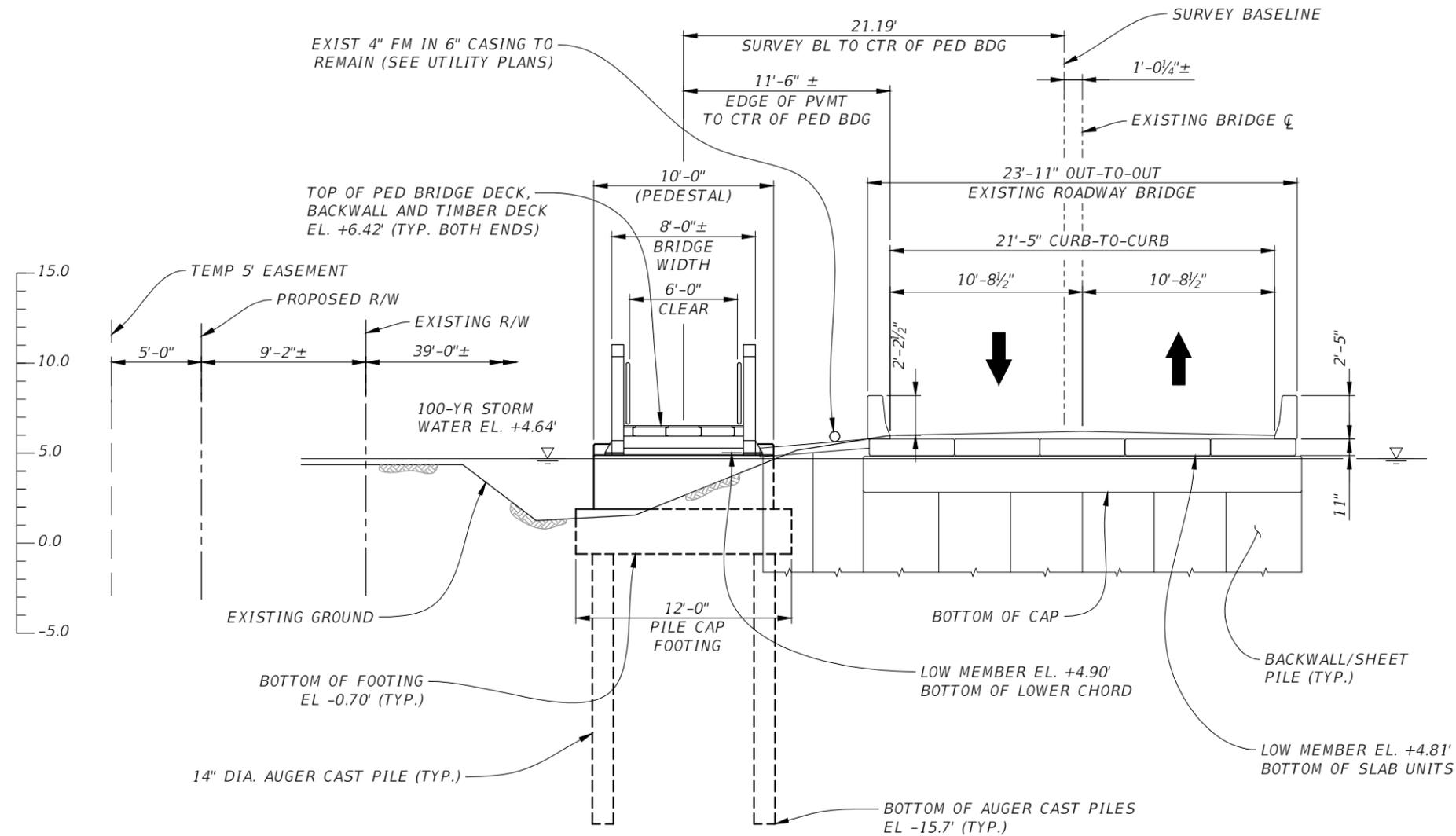
26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE
PLAN AND ELEVATION

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	SML	07/2021
			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	07/2021
			SCALE	1" = 15'	CHECKED	GLB	07/2021

Signature & Date

SHEET NO.
B-5

F:\Projects\26th Ave E Sidewalk\AI\NB1006 Ped Bridge\06 DWG\26th Ave E Sidewalk Bridge.dwg Aug 16 21 8:30 AM



TYPICAL SECTION AT END BENT 1 STA. 141+48.00
(Looking East - Scale: 1/8" = 1')

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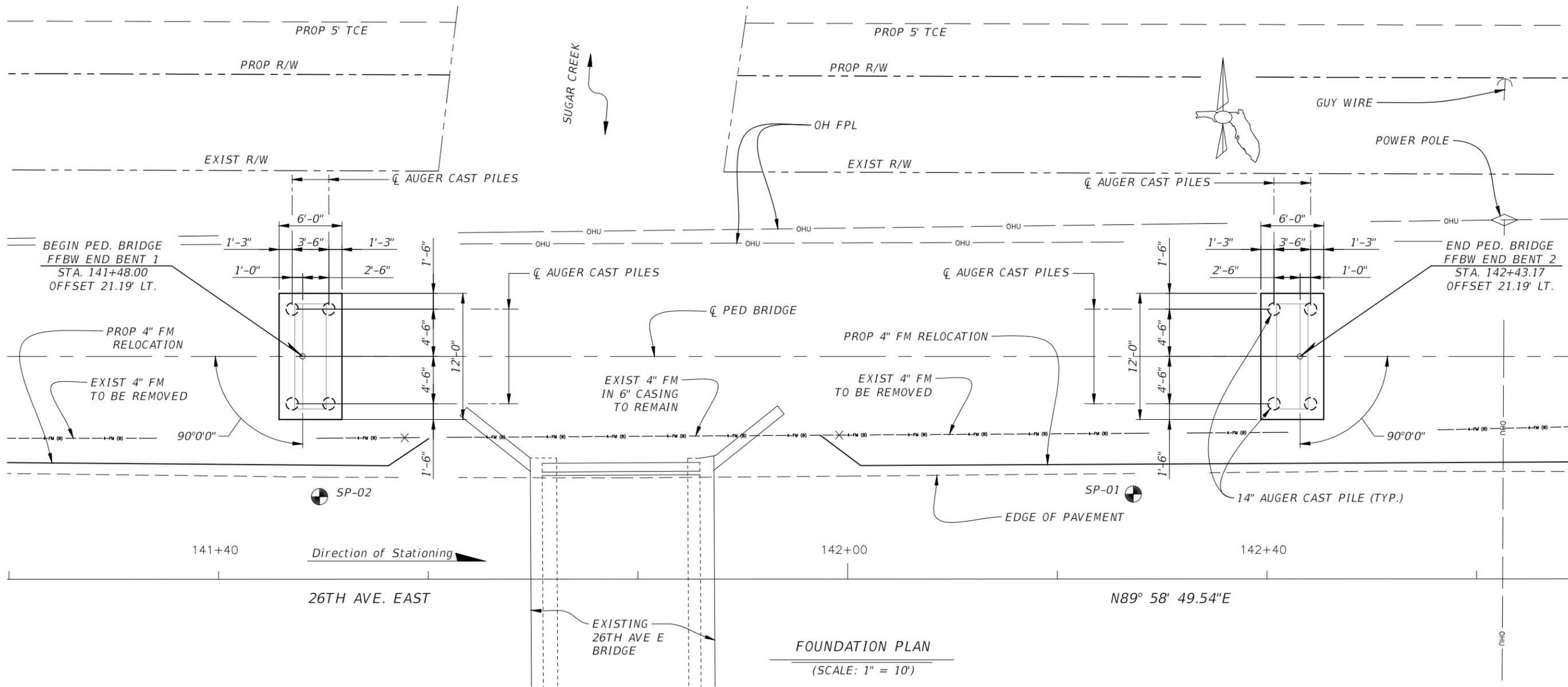
**26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE**
TYPICAL SECTIONS

Signature & Date

SHEET NO.
B-6

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				N/A	DESIGNED	SML	07/2021
			32/34S/18E		DRAWN	SML	07/2021
			1/8" = 1'		CHECKED	GLB	07/2021

F:\Projects\26th Ave E Sidewalk\AI\NB1006 Ped Bridge\06 DWG\26th Ave E Sidewalk Bridge.dwg Aug 16 21 8:31 AM



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ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

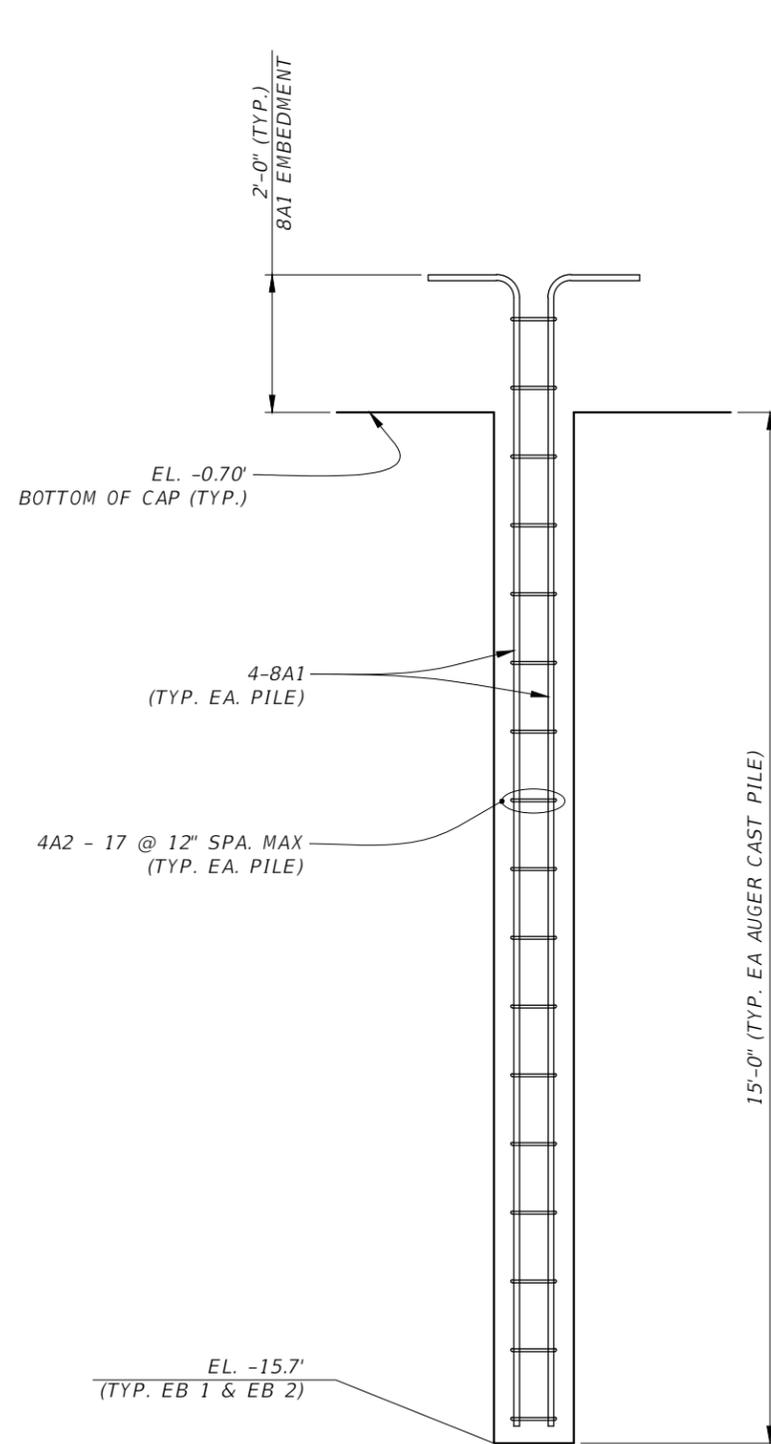
*26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE
FOUNDATION LAYOUT*

SHEET NO.
B-7

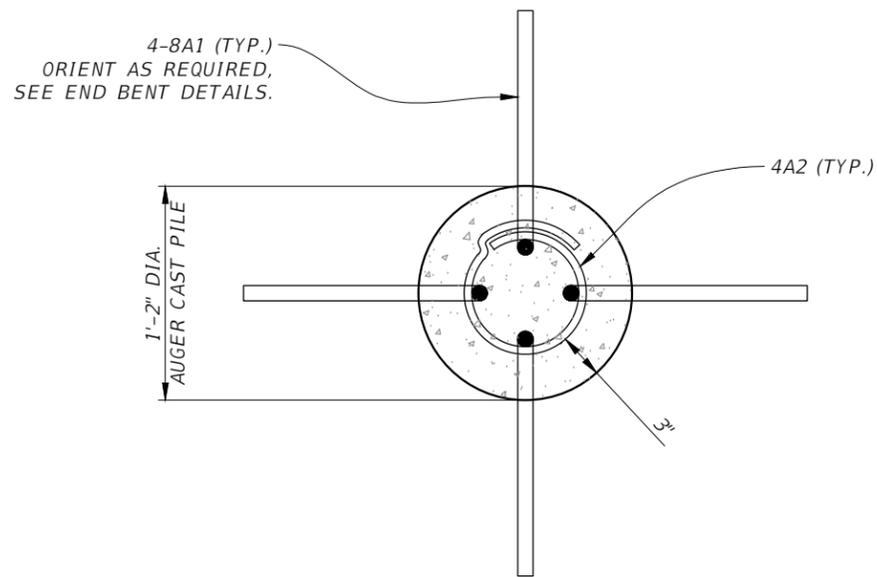
Signature & Date

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	SML	03/2021
			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	03/2021
			SCALE	AS NOTED	CHECKED	GLB	07/2021

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ELEVATION VIEW
(Scale: 3/8" = 1')



SECTION VIEW
(Scale: 1" = 1')

AUGER CAST-IN-PLACE PILE NOTES:

- 1.0. INSTALL AUGER CAST-IN-PLACE PILES IN ACCORDANCE TO FDOT STANDARD SPECIFICATION 455 AND WITH THE SPECIAL PROVISIONS.
- 2.0. THE INSTALLATION OF AUGER CAST-IN-PLACE PILES SHALL BE OBSERVED BY A GEOTECHNICAL ENGINEER TO BE PROVIDED BY THE COUNTY.
- 3.0. GROUT FOR THE AUGER CAST PILES:
 - 3.1 COMPLY WITH REQUIREMENTS OF STANDARD SPECIFICATION 455 AND SPECIAL PROVISIONS.
 - 3.1 MAXIMUM WORKING COMPRESSIVE STRENGTH = 2,000 PSI.
 - 3.2 MINIMUM 28 DAY STRENGTH = 5000 PSI.
- 4.0 FIELD VERIFY THE LOCATION OF ALL OVERHEAD AND UNDERGROUND SERVICES.
- 5.0 LOW HEADROOM PILE INSTALLATION IS ANTICIPATED FOR THIS PROJECT.
- 6.0 PRIOR TO THE START OF PRODUCTION PILING, PERFORM A COMPRESSION LOAD TEST ON 1 NON-PRODUCTION PILE IN ACCORDANCE WITH ASTM D1143 AT A LOCATION DETERMINED BY THE GEOTECHNICAL ENGINEER. THE LOAD TEST SHALL BE PERFORMED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER.
- 7.0 THE TEST LOAD SHALL BE 2 TIMES THE DESIGN LOAD.
- 8.0 PILES WITHIN 6' OF EACH OTHER SHALL NOT BE INSTALLED ON THE SAME DAY.
- 9.0 THE CONTRACTOR SHALL SUBMIT AN AUGER CAST PILE INSTALLATION PLAN IN ACCORDANCE TO STANDARD SPECIFICATION 455 AND THE SPECIAL PROVISIONS.
10. PRE-DRILLING MAY BE REQUIRED TO PENETRATE HARD LAYERS.
11. PILE DATA (FOR ALL PILES):

11.1 PILE CAPACITY	= 25.0 TONS (ALLOW. COMPRESSION)
11.2 DESIGN LOAD	= 17.0 TONS (UNFACTORED)
11.2 MINIMUM TIP ELEVATION	= -15.7' (NAVD 88)
11.3 CUTOFF ELEVATION	= - 0.7' (NAVD 88)

FLORIDA P.E. # 46449
STEVEN M. LANEY, P.E.

Signature & Date



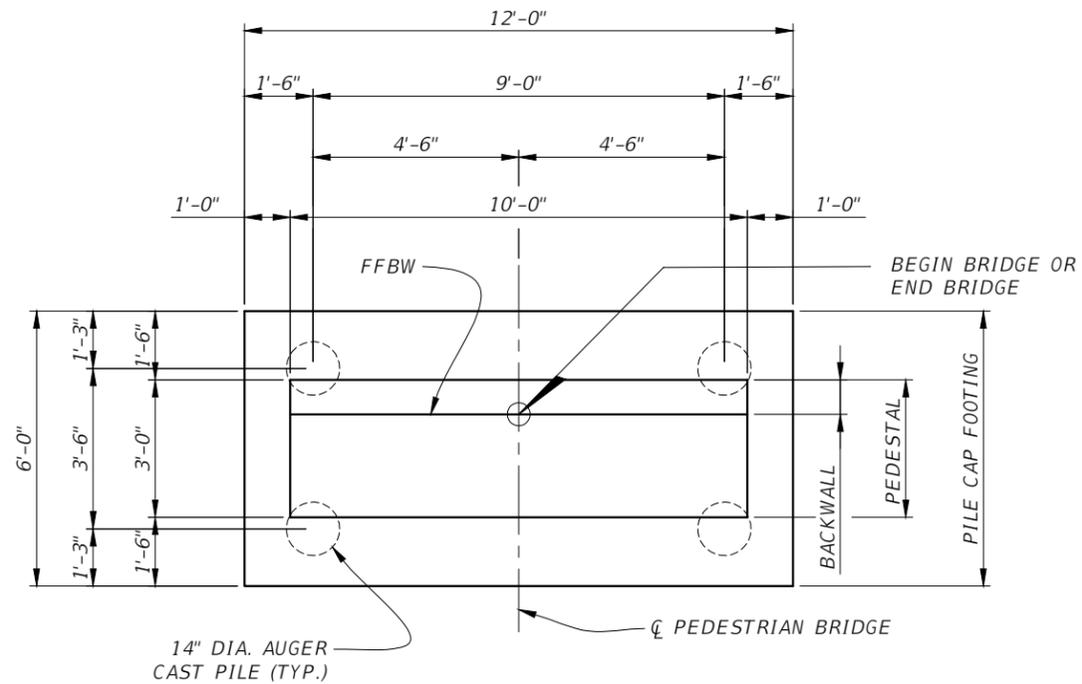
**PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES**
1022 26th Avenue East, Bradenton, FL 34208

**26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE**
AUGER CAST PILE DETAILS

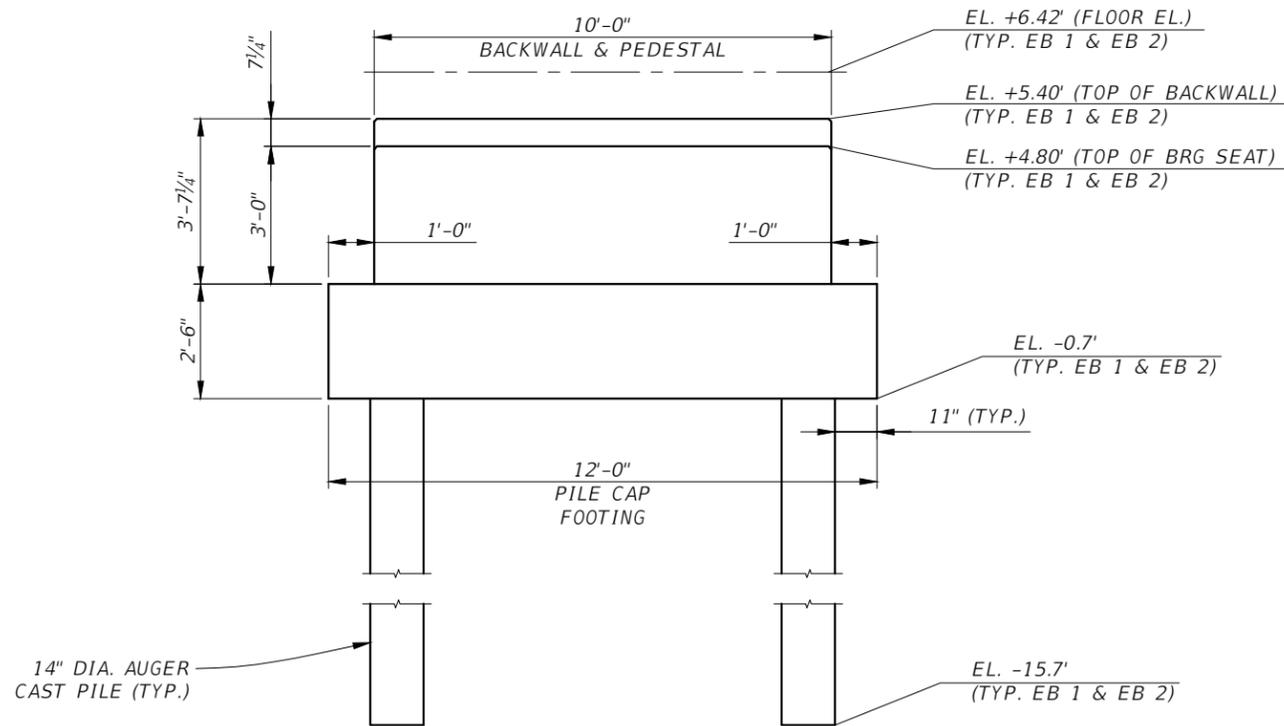
SHEET NO.
B-8

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	SML	03/2021
			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	03/2021
			SCALE		CHECKED	GLB	07/2021

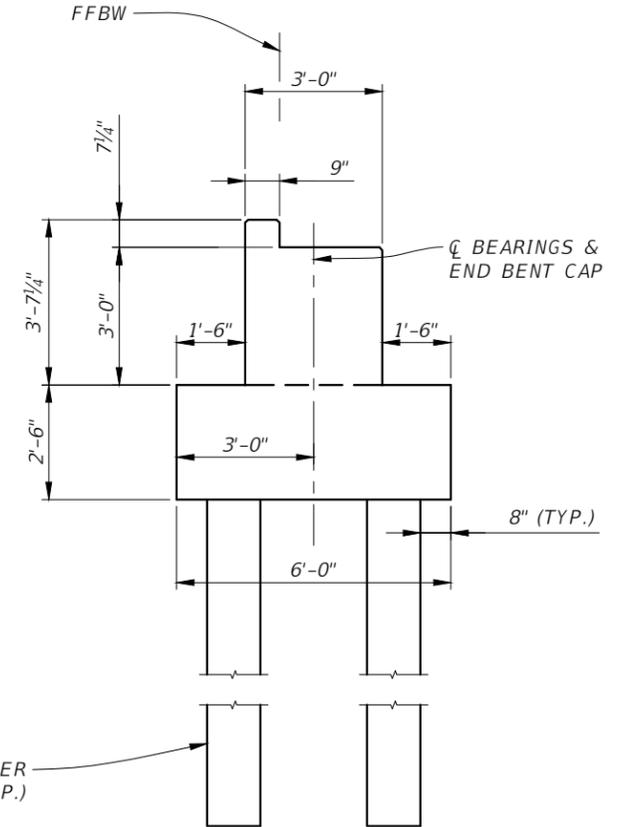
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PLAN VIEW
(Scale: 1/4" = 1')



ELEVATION VIEW
(Scale: 1/4" = 1')



SECTION VIEW
(Scale: 1/4" = 1')

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	SML	07/2021
			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	07/2021
			SCALE	AS NOTED	CHECKED	GLB	07/2021

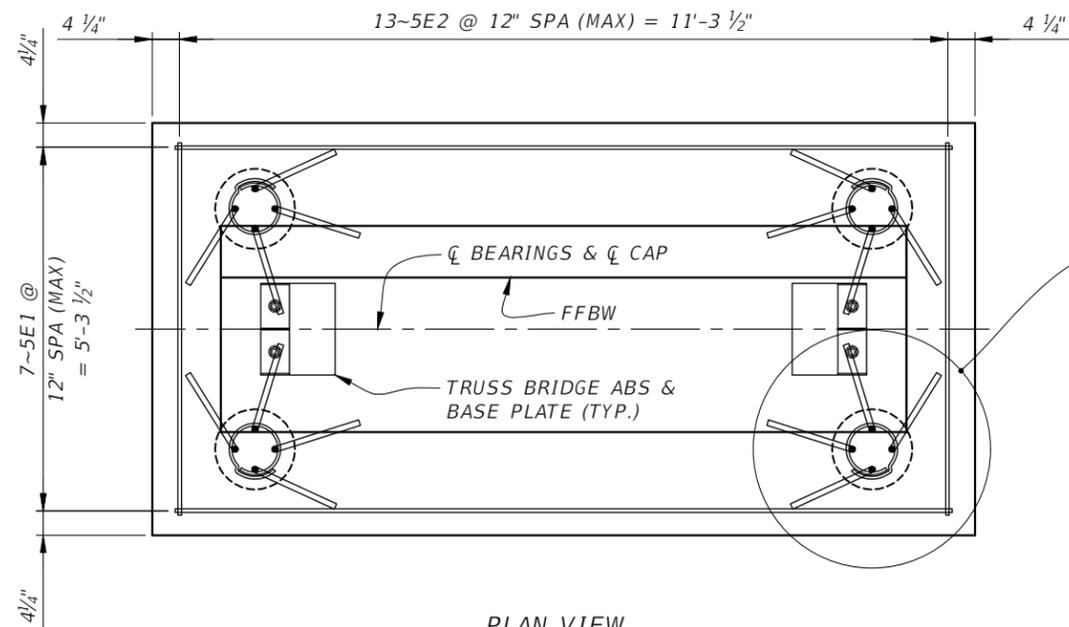
FLORIDA P.E. # 46449
STEVEN M. LANEY, P.E.

Signature & Date

PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE**
END BENT DETAILS (1 OF 2)

SHEET NO.
B-9

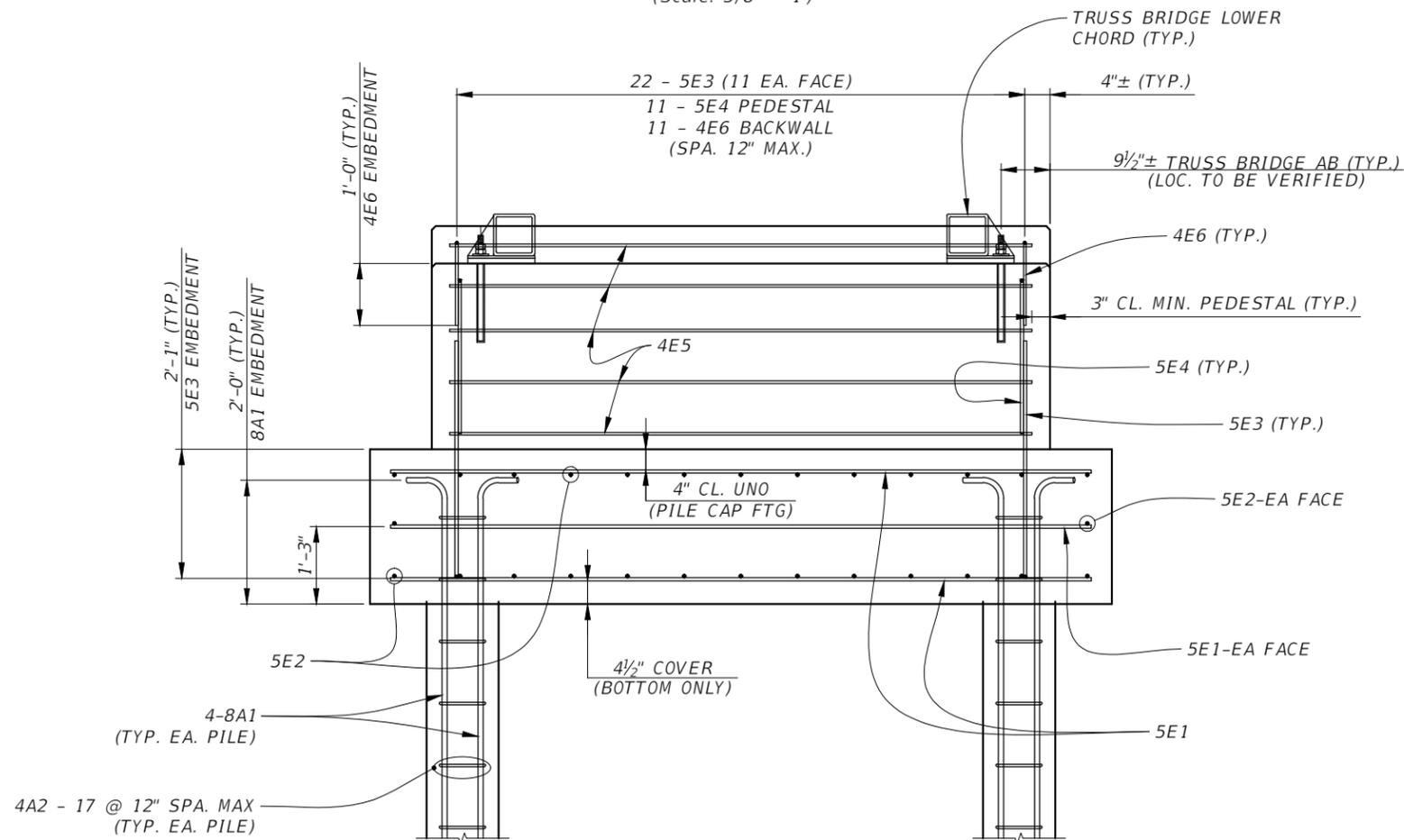


NOTES:
REINFORCING IN PEDESTAL AND BACKWALL NOT SHOWN FOR CLARITY.

AUGER CAST PILE REINFORCING ORIENTED INTO FOOTING AS REQUIRED (TYP.)

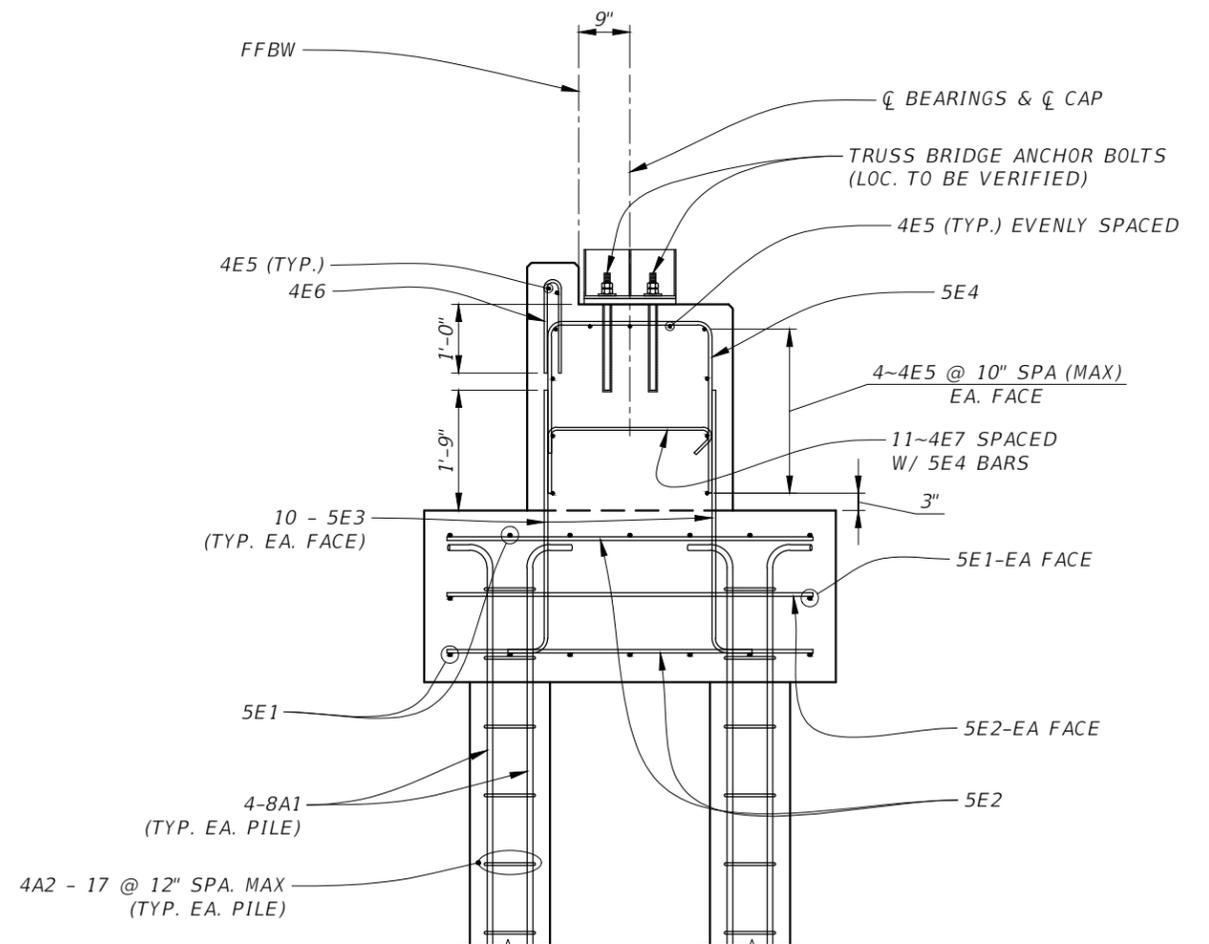
PLAN VIEW

(Scale: 3/8" = 1')



ELEVATION VIEW

(Scale: 3/8" = 1')



SECTION VIEW

(Scale: 3/8" = 1')

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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				N/A	DESIGNED	SML	07/2021
				32/345/18E	DRAWN	SML	07/2021
				AS NOTED	CHECKED	GLB	07/2021

FLORIDA P.E. # 46449
STEVEN M. LANEY, P.E.

Signature & Date

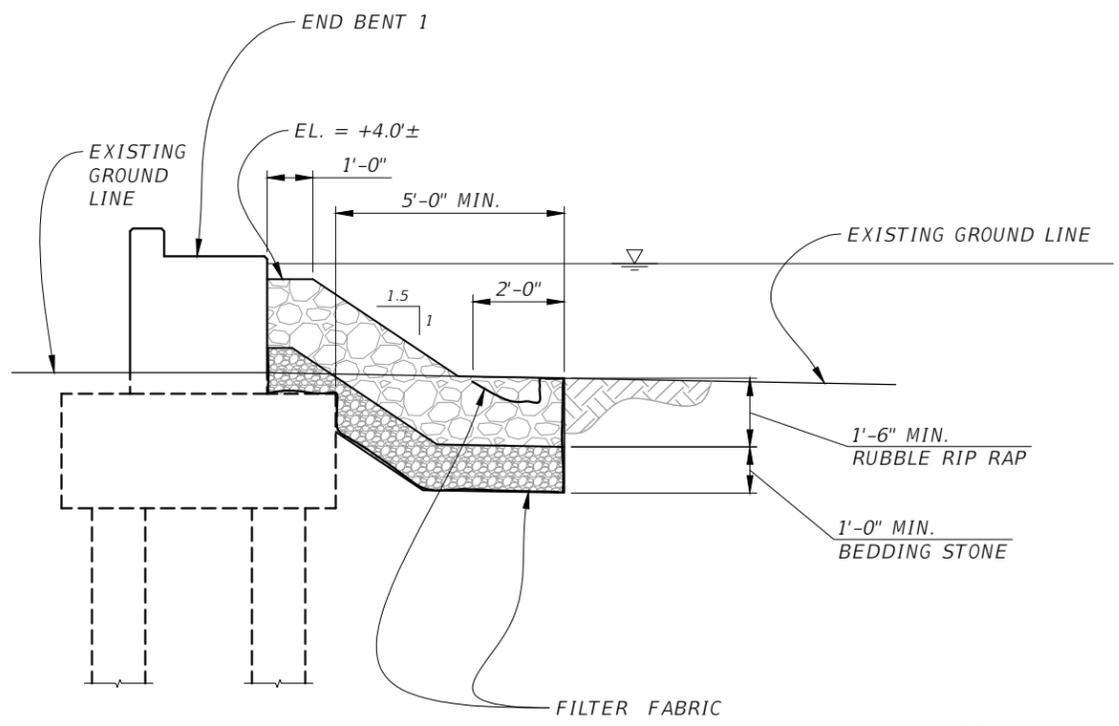


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ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

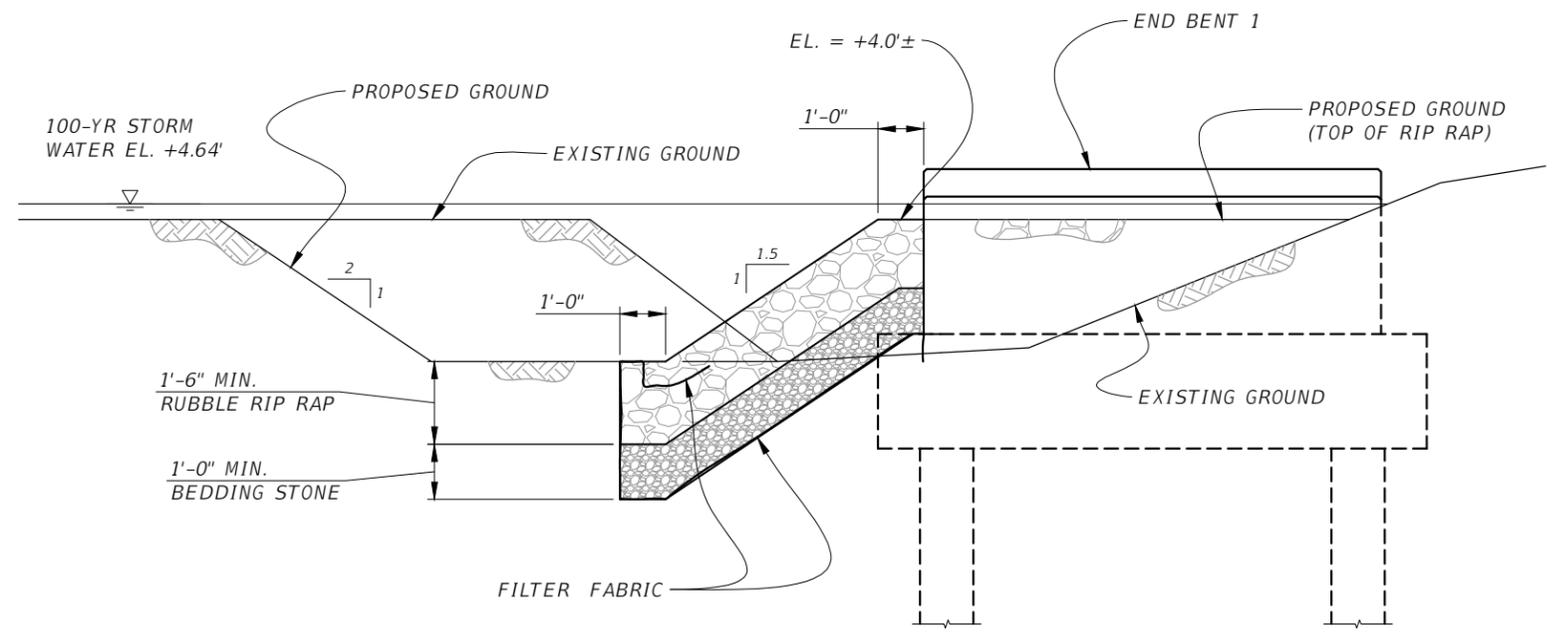
26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE
END BENT DETAILS (2 OF 2)

SHEET NO.
B-10

MARK	LENGTH	NO	TYP	STY	B	C	D	E	F	H	J	K	N	Ø								
SIZE	DES	FT	IN	BAR	BAR A G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
LOCATION					END BENTS					NO. REQUIRED = 2												
5	E1	11 - 4	16	1		11 - 4																
5	E2	5 - 4	28	1		5 - 4																
5	E3	4 - 8	22	10		3 - 10	0 - 10															
5	E4	7 - 6	11	11		2 - 6	2 - 6	2 - 6														
4	E5	9 - 6	13	1		9 - 6																
4	E6	3 - 0	11	23		1 - 3	0 - 01	1 - 3														
4	E7	3 - 6	11	15		2 - 6.5	0 - 6.5	0 - 5													90	135
LOCATION					AUGER CAST-IN PLACE PILES					NO. REQUIRED = 8												
8	A1	18 - 1	4	10		16 - 9	1 - 4															
4	A2	2 - 8	17	24		0 - 6	0 - 4															



SLOPE PROTECTION DETAIL A
(Scale: 1/4" = 1')



SLOPE PROTECTION DETAIL B
(Scale: 1/4" = 1')

NOTES:
 1. SLOPE PROTECTION FOR END BENT 1 ONLY.
 2. DITCH LINING RIP RAP, BEDDING STONE AND FILTER FABRIC IS TO BE IN ACCORDANCE TO STANDARD SPECIFICATION 530.

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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
				N/A	DESIGNED	SML	07/2021
			32/34S/18E		DRAWN	SML	07/2021
					CHECKED	GLB	07/2021

FLORIDA P.E. # 46449
 STEVEN M. LANEY, P.E.

Signature & Date



PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES
 1022 26th Avenue East, Bradenton, FL 34208

26TH AVENUE EAST SIDEWALK
 PEDESTRIAN BRIDGE
 REBAR LIST & SLOPE PROTECTION

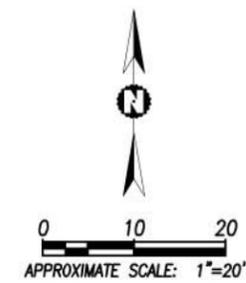
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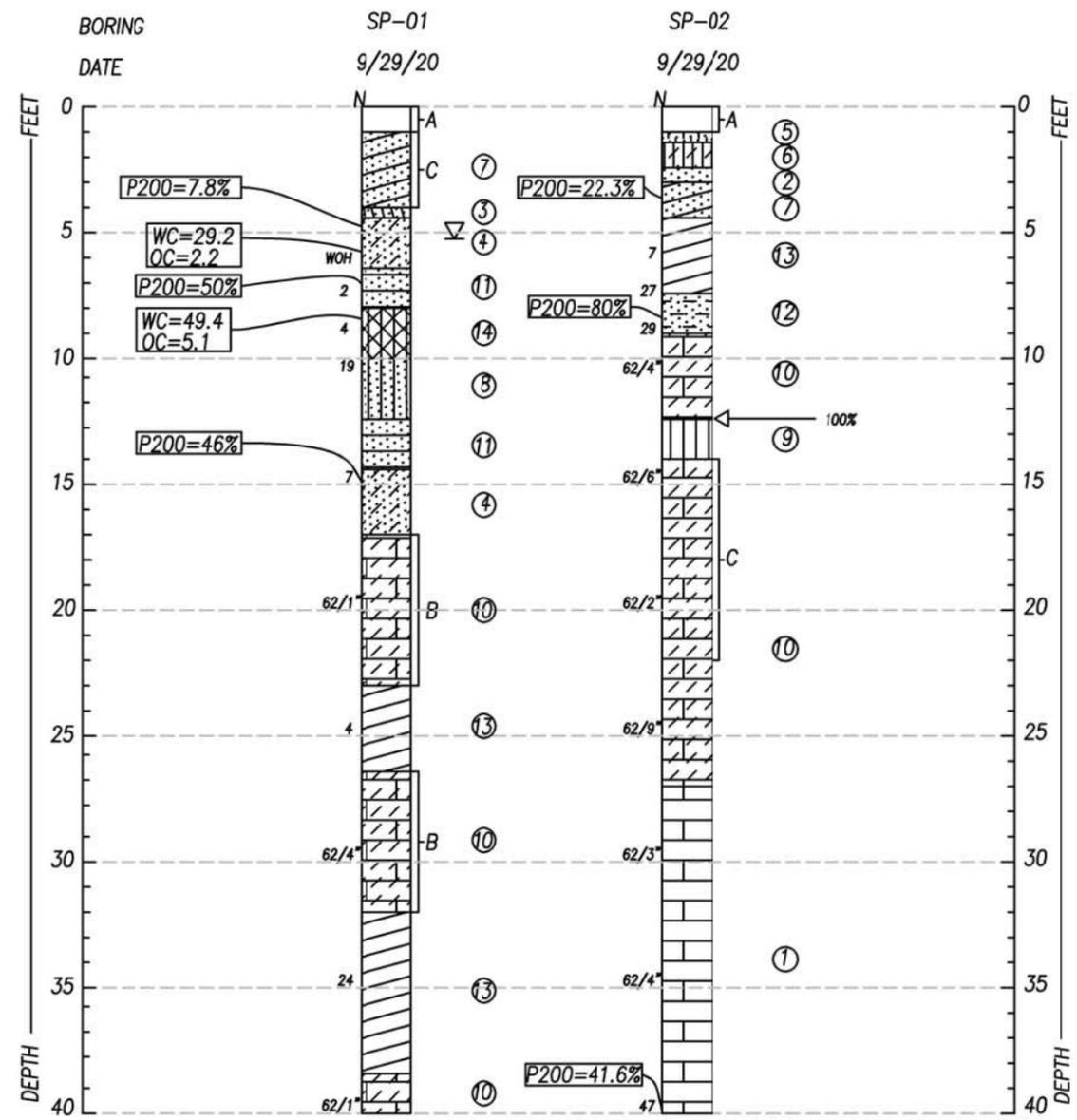
REFERENCE: GOOGLE EARTH PRO 2019, IMAGERY DATED 1/2019

LEGEND


 APPROXIMATE LOCATION OF 15 FEET SPT'S



TEST LOCATION PLAN			
 Ardaman & Associates, Inc. Geotechnical, Environmental and Materials Consultants			
SUGAR CREEK PEDESTRAIN BRIDGE 26th Ave. EAST, BRADENTON MANATEE COUNTY, FLORIDA			
DRAWN BY:	CHECKED BY:	DATE:	
AUR	MEM	10/26/20	
FILE NO.	APPROVED BY:	Sheet B-12	
20-36-7193	MEM		



- LEGEND**
- ① GRAY CEMENTED SILTY LIMESTONE (GM)
 - ② GRAY FINE SAND (SP)
 - ③ BROWN FINE SAND WITH CLAY (SP-SC)
 - ④ GRAY TO DARK GRAY SILTY FINE SAND (SM)
 - ⑤ BROWN SILTY FINE SAND (SM)
 - ⑥ GRAY SILTY CLAYEY FINE SAND (SC-SM)
 - ⑦ BROWN CLAYEY FINE SAND (SC)
 - ⑧ SANDY SILT (ML)
 - ⑨ SILT (ML)
 - ⑩ CEMENTED SILT (ML)
 - ⑪ SANDY CLAY (CL/CH)
 - ⑫ SILTY CLAY WITH SAND (CL-ML)
 - ⑬ CLAY (CL/CH)
 - ⑭ ORGANIC SANDY SILT (OL)

- A ASPHALT AND BASE
 - B WITH ROCK
 - C WITH GRAVEL
- (SP) UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) SYMBOL
- ∇ GROUNDWATER LEVEL MEASURED ON DATE DRILLED
- N SPT N-VALUE IN BLOWS PER FOOT
- WOH WEIGHT OF HAMMER
- WC WATER CONTENT (%)
- P200 % PASSING NO.200 SIEVE
- OC ORGANIC CONTENT
- ← LOST CIRCULATION (%%)
- NOTE**
- AUTO HAMMER VALUES CONVERTED TO EQUIVALENT
MANUAL HAMMER N-VALUES

SOIL BORING PROFILES

Ardaman & Associates, Inc.
Geotechnical, Environmental and
Materials Consultants

SUGAR CREEK PEDESTRAIN BRIDGE
26th Ave. EAST, BRADENTON
MANATEE COUNTY, FLORIDA

DRAWN BY: AUR	CHECKED BY: MEM	DATE: 10/27/20	
FILE NO. 20-36-7193	APPROVED BY: MEM	Sheet B-13	

DESIGN CRITERIA:

D01. DESIGN CODES:

- a. FLORIDA BUILDING CODE, BUILDING, 2020.
- b. ASCE 7-16, MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.
- c. AWC NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2018.
- d. AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2ND ED., 2009 WITH '15 INTERIMS.

D02. DESIGN LOADS:

- A. LIVE LOAD:
 - 1. PEDESTRIAN = 90 psf
 - 2. VEHICULAR = 4000 lb Utility Vehicle, 20% Front Axle, 80% Rear Axle
- B. HANDRAIL:
 - 1. 200 lb CONCENTRATED LOAD AT ANY POINT IN ANY DIRECTION. OR
 - 2. 50 plf LOAD IN ANY DIRECTION.
- C. WIND LOAD:
 - 1. WIND SPEED $V_{ult} = 145$ mph for ULTIMATE DESIGN WIND SPEED
 $V_{asd} = 112$ mph for NOMINAL DESIGN WIND SPEED
 - 2. RISK CATEGORY = II
 - 3. WIND EXPOSURE = B

D03. TIMBER PILE DESIGN:

- 1. PILE DESIGN BASED ON GEOTECHNICAL DATA AND BORINGS FROM THE NOVEMBER 23, 2020 SUBSURFACE SOIL EXPLORATION REPORT PROVIDED BY ARDAMAN AND ASSOCIATES.
- 2. SOIL PARAMETERS BASED ON BORING SP-01.
- 3. REQUIRED NOMINAL BEARING RESISTANCE = 10 TONS (UNFACTORED)
- 4. DESIGN COMPRESSIVE LOAD = 4.0 TONS (SERVICE-UNFACTORED)
- 5. DESIGN UPLIFT LOAD = 2.5 TONS (SERVICE-UNFACTORED)
- 6. MINIMUM EMBEDMENT = 15.0 FT.
EMBEDMENT MEASURED FROM THE BOTTOM OF ANY UNSUITABLE MATERIAL (MUCK, ETC.).

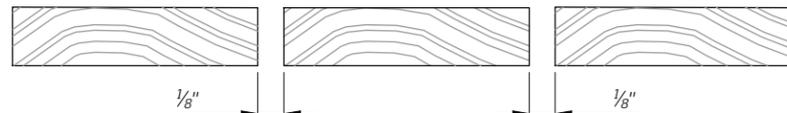
GENERAL NOTES:

- G01. CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS PRIOR TO FABRICATION AND START OF CONSTRUCTION. REPORT ANY DISCREPANCIES TO OWNER OR ENGINEER PRIOR TO PROCEEDING WITH WORK.
- G02. IT IS THE CONTRACTOR'S RESPONSIBILITY AT ALL TIMES TO MAINTAIN STRUCTURAL STABILITY OF THE STRUCTURE DURING CONSTRUCTION.
- G03. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITY LINES FROM ALL DAMAGES DURING CONSTRUCTION.
- G04. NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
- G05. COORDINATE STRUCTURAL DRAWINGS AND OTHER DRAWINGS OF THE CONTRACT DOCUMENTS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS.
- G06. ALL DETAILS AND SECTIONS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUCTED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT EXCEPT WHERE A SEPARATE DETAIL IS SHOWN.
- G07. THE OWNER'S ENGINEER/REPRESENTATIVE SHALL NOT BE RESPONSIBLE FOR LAYOUT, DIMENSIONAL ERRORS OR DISCREPANCIES RESULTING FROM THE REPRODUCTION AND USE OF DRAWINGS FOR ERECTION AND SHOP DRAWINGS. USE OF CONTRACT DRAWINGS REPRODUCED IN WHOLE OR ANY PART IN SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR NOR SUBCONTRACTORS FROM THEIR RESPONSIBILITY TO ACCURATELY LAYOUT, COORDINATE, DETAIL, FABRICATE AND INSTALL A COMPLETE STRUCTURE.
- G08. REVIEW ALL SHOP DRAWINGS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND FOR COMPLETENESS AND ANSWER ALL CONTRACT RELATED QUESTIONS. SIGN AND SEAL ALL SHEETS PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER FOR REVIEW. NONCOMPLIANCE WITH THIS REQUEST WILL RESULT IN REJECTION OF SUBMITTAL.

- G09. AFTER ALL WORK IS COMPLETED, REMOVE WOOD AND WASTE FROM BELOW AND WITHIN THE CONSTRUCTION ZONE OF THE BOARDWALK. THIS INCLUDES GRADE STAKES, FORMS, SHORING OR OTHER WASTE.
- G10. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED WITHIN THE CONSTRUCTION SITE.

WOOD:

- W01. ALL MEMBERS SHALL BE NO. 1 GRADE PRESSURE TREATED SOUTHERN PINE.
- W02. DECKING AND RAILING SHALL BE AIR DRIED TO LESS THAN 19% MOISTURE CONTENT, GRADED IN ACCORDANCE WITH THE SPIB GRADE RULES, SECTION 4, AND MAY HAVE ANY OR ALL OF THE CHARACTERISTICS OF THIS GRADE.
- W03. ALL DECKING SHALL BE CONTINUOUS UNLESS OTHERWISE NOTED IN THE PLANS.
- W04. EACH PIECE OF DECKING SHALL BE FACE SCREWED WITH THREE NO. 10 x 3" CERAMIC COATED DECK SCREWS AT EACH SUPPORT.
- W05. ALL BOLT HOLES THROUGH TIMBERS TO BE AN EXTRA 1/16" IN DIAMETER RELATIVE TO THE BOLT DIAMETER.
- W06. DECKING AND RAILING WITH WANE OF 3/8" OR MORE MAY BE GROUNDS FOR REJECTION, REMOVAL AND REPLACEMENT.
- W07. INSTALL DECKING FACING DOWN AS SHOWN BELOW AND WITH MAXIMUM 1/8 INCH SPACING FOR EXPANSION.



- W08. ALL DECKING, RAILING, AND ALL SURFACES EXPOSED TO VIEW SHALL BE TREATED WITH A FINISH & SEAL WATER REPELLENT.
- W09. BEAMS, STRINGERS, AND RAILS SHALL BE CONTINUOUS OVER SINGLE SPANS UNLESS OTHERWISE NOTED IN THE PLANS.
- W10. PILES SHALL BE TREATED ROUND TIMBER PILES CONFORMING TO ASTM D 25-12. THE PILES SHALL BE SOUTHERN PINE WITH A MINIMUM REFERENCE DESIGN VALUE OF 1250 PSI COMPRESSION PARALLEL TO GRAIN.
- W11. PILES SHALL BE PRESSURE TREATED IN ACCORDANCE WITH REQUIREMENTS OF AWWA STANDARD U1 WITH A MINIMUM OF 2.5 PCF CCA RETENTION FOR USE CATEGORY UC5C FOR BRACKISH OR SALT WATER CONDITIONS.
- W12. PILES AND POSTS SHALL RUN CONTINUOUSLY FULL HEIGHT. NO SPLICING SHALL BE PERMITTED.
- W13. ALL CUTS IN PILES OR POSTS ARE A MAXIMUM DEPTH. ANY CUT DEEPER THAN THE CUT DEPTH NOTED IN THE DRAWINGS IS GROUNDS FOR REJECTION, REMOVAL AND REPLACEMENT OF ITS FULL HEIGHT.
- W14. ALL FIELD CUTS IN PILES AND POSTS SHALL BE FIELD TREATED IN ACCORDANCE WITH AWWA STANDARD M4 PRIOR INSTALLATION OF MEMBERS.
- W15. FIELD PRESERVATIVE CHEMICALS SHALL BE APPLIED TO ALL FIELD CUTS AND DRILLED HOLES TO MAINTAIN TIMBER PRESSURE TREATMENT INTEGRITY.
- W16. PILES SHALL BE MINIMUM 8" DIAMETER AT THE TIP END AND HAVE A STANDARD LINEAR TAPER OF ROUGHLY 0.2 in/ft FROM THE TIP TO THE BUTT.
- W17. TIMBER PILES TO BE INSTALLED PER FDOT SECTION 455-6 OF THE STANDARD SPECIFICATIONS TO A 10.0 TON CAPACITY (UNFACTORED). PILES SHALL BE INSTALLED TO THE MINIMUM EMBEDMENT INDICATED IN THE PLANS, IT MAY BE NECESSARY TO PREDRILL PILE HOLES TO OBTAIN THE REQUIRED EMBEDMENT WITHOUT DAMAGING THE PILE DURING DRIVING. AUGERS USED FOR PREDRILLING SHALL BE NO LARGER THAN THE MINIMUM PILE DIAMETER. DRIVE

THE LAST 2' FOR FINAL PILE EMBEDMENT.

- W18. TIMBER PILES SHALL BE SET BY DRIVING, JETTING, OR EXCAVATING A 12" DIA. HOLE. IF SET BY DRIVING, THE POST TIP SHALL BE DRIVEN TO THE EMBEDMENT "D" DEPTH. IF SET BY EXCAVATION, THE POST SHALL BE SET CENTERED IN THE HOLE AND TO THE EMBEDMENT "D" DEPTH. THE HOLE SHALL BE BACKFILLED AND COMPACTED WITH FDOT SELECT MATERIAL AS APPROVED BY THE ENGINEER.

- W19. ALL PILES SHALL RECEIVE A COATING OF TAR ON TOP END TO PREVENT MOISTURE ENTERING THE TOP OF THE PILE AFTER INSTALLATION.

PRESERVATIVE TREATMENT:

WOOD PRESSURE TREATMENT TABLE		
COMPONENT	CCA RETENTION (PCF)	
PILES	2.5	
COMPONENT	ACQ RETENTION (PCF)	w/ WATER REPELLENT
STRINGERS, CAP BEAMS, BRACES	0.6 (UC4C)	0.25
DECK BOARDS, RAILS AND RAIL POSTS	0.4 (UC4A)	0.25

FASTENERS:

- F01. ALL BOLTS SHALL BE HOT DIPPED GALVANIZED. BOLTS AND LAG SCREWS SHALL BE HEX HEADED AND SHALL MEET COMPLY WITH THE REQUIREMENTS OF ANSI/ASME STANDARD 18.2.1.
- F02. BOLTS ARE TO CONFORM TO THE REQUIREMENTS OF ASTM A307 or ASTM A449. NUTS ARE TO CONFORM TO THE REQUIREMENTS OF ASTM A563 AND WASHERS ARE TO CONFORM TO ASTM F436
- F03. ALL HURRICANE TIES SHALL BE HOT DIPPED GALVANIZED AND SHALL BE TYPE H8 FASTENERS AS MANUFACTURED BY SIMPSON STRONG-TIE OR APPROVED EQUAL WITH AN UPLIFT CAPACITY OF 780 LB EACH MINIMUM. HURRICANE TIES SHALL BE INSTALLED WITH 0.148" x 1 1/2" HDG NAILS IN ACCORDANCE TO SIMPSON INSTALLATION GUIDELINES.
- F04. HOT DIPPED GALVANIZED ITEMS SHALL BE GALVANIZED AS FOLLOWS:
 - a. STRUCTURAL SHAPES AND PLATES - ASTM A123
 - b. ALL NUTS, BOLTS AND WASHERS - ASTM A153
 - c. CLASS C OR D DEPENDING ON SIZE, FIELD TOUCH UP ALL STEEL IMMEDIATELY WHERE GALVANIZING HAS BEEN DAMAGED DURING OR PRIOR TO CONSTRUCTION WITH COLD GALVANIZING COATING.
- F05. ALL THROUGH BOLTS WHICH ARE EXPOSED TO HUMAN CONTACT SHALL BE CUT BACK AND GROUND SMOOTH.
- F06. ALL THROUGH BOLTS SHALL EXTEND FULL LENGTH TO THE FACE OF THE NUT. FOR BOLTS NOT EXPOSED TO HUMAN CONTACT, EXTEND BOLT 1 1/2 TIMES THE BOLT DIAMETER PAST THE NUT.
- F07. ALL STEEL SHALL BE ASTM-A36 AND HOT DIPPED GALVANIZED
- F08. "0-GEE" WASHERS SHALL BE USED FOR ALL TIMBER SIDE CONNECTOR SIZES EQUAL TO OR GREATER THAN 1/2" O.
- F09. 2x8 SILL PLATES ON CONCRETE END BENTS FOR SPANS ADJACENT TO THE PEDESTRIAN BRIDGE SHALL BE ANCHORED WITH 4 - 1/2" DIA. HIT-RE 500 ADHESIVE ANCHORS WITH HAS AS MANUFACTURED BY HILTI OR APPROVED EQUAL. ANCHORS SHALL BE HOT DIPPED GALVANIZED.
- F10. ALL THROUGH NAILS SHALL BE BENT ON PROTRUDING SIDE.

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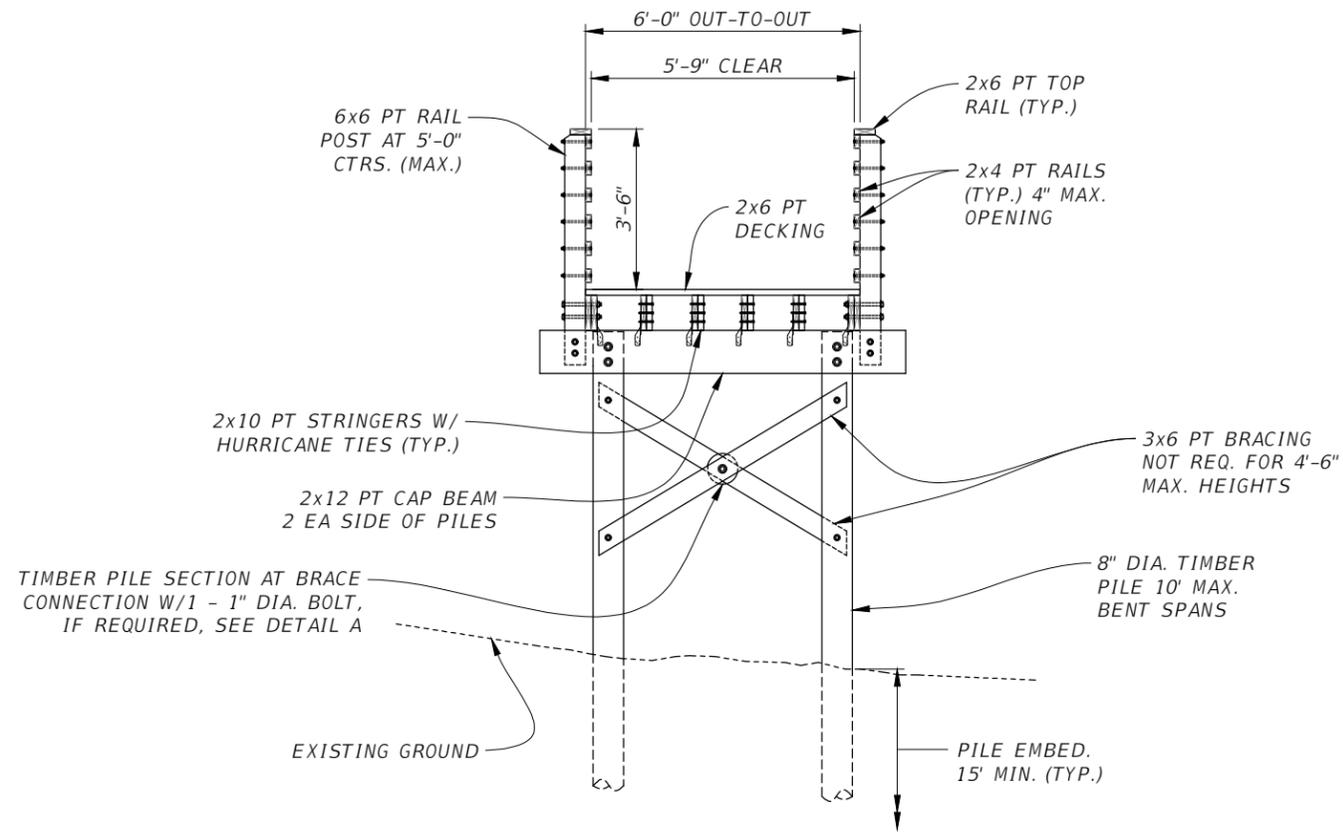
**26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE**
BOARDWALK GENERAL NOTES

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	SML	07/2021
			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	07/2021
			SCALE		CHECKED	GLB	07/2021

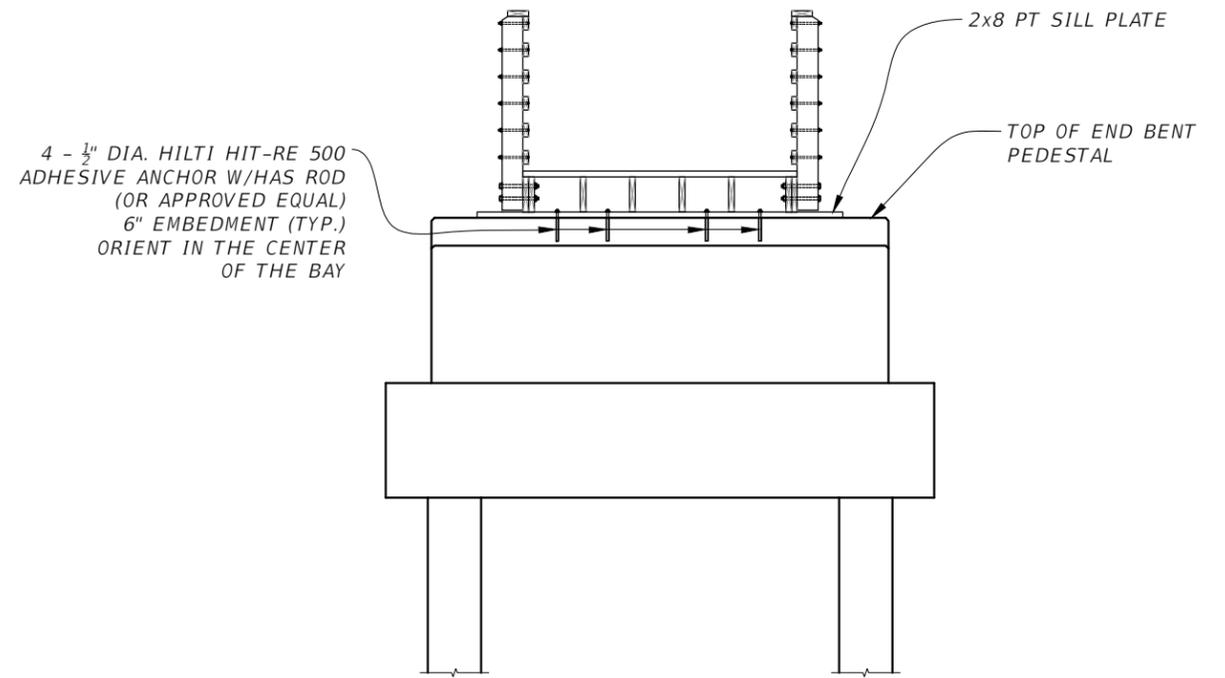
Signature & Date

SHEET NO.
B-14

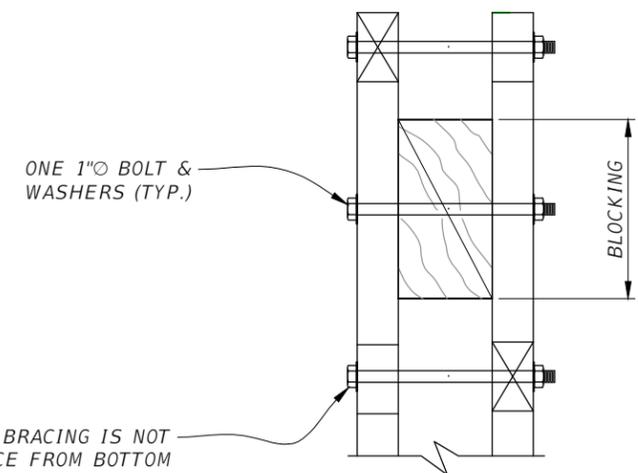
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TIMBER BOARDWALK TYPICAL SECTION
(SECTION A-A, Scale: 1/4" = 1')



BOARDWALK TYPICAL SECTION AT END BENTS
(SECTION A-A, Scale: 1/4" = 1')



DIAGONAL CROSS BRACING IS NOT REQUIRED IF DISTANCE FROM BOTTOM OF CAP BEAM TO EXISTING GRADE IS LESS THAN 4'-6". CONNECT TO TIMBER PILE WITH 1"Ø BOLTS (TYP.)

DETAIL A
(Scale: 3/4" = 1')

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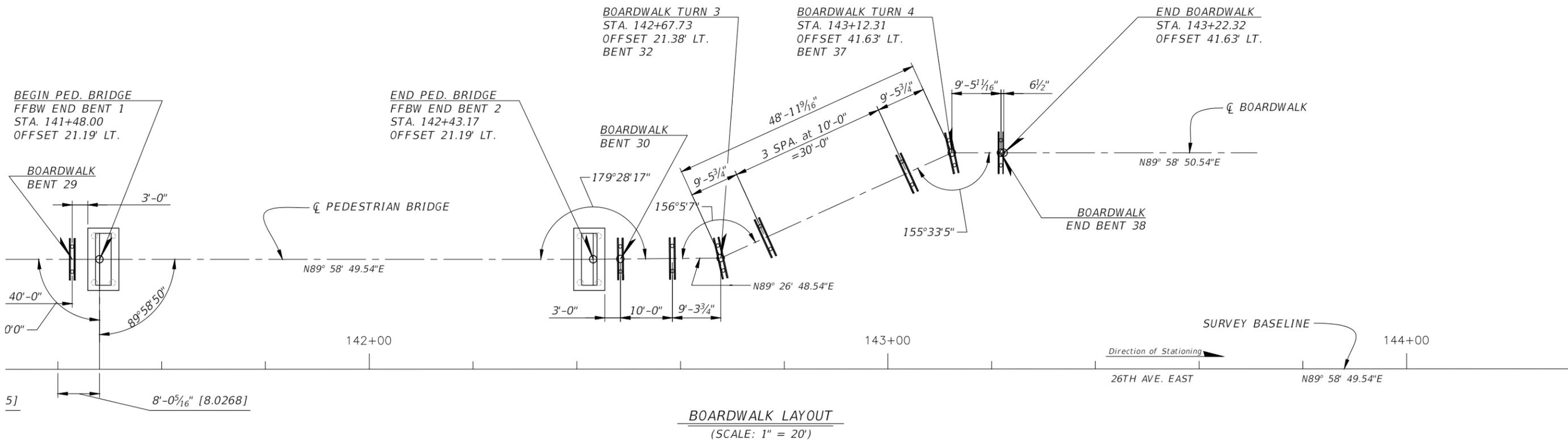
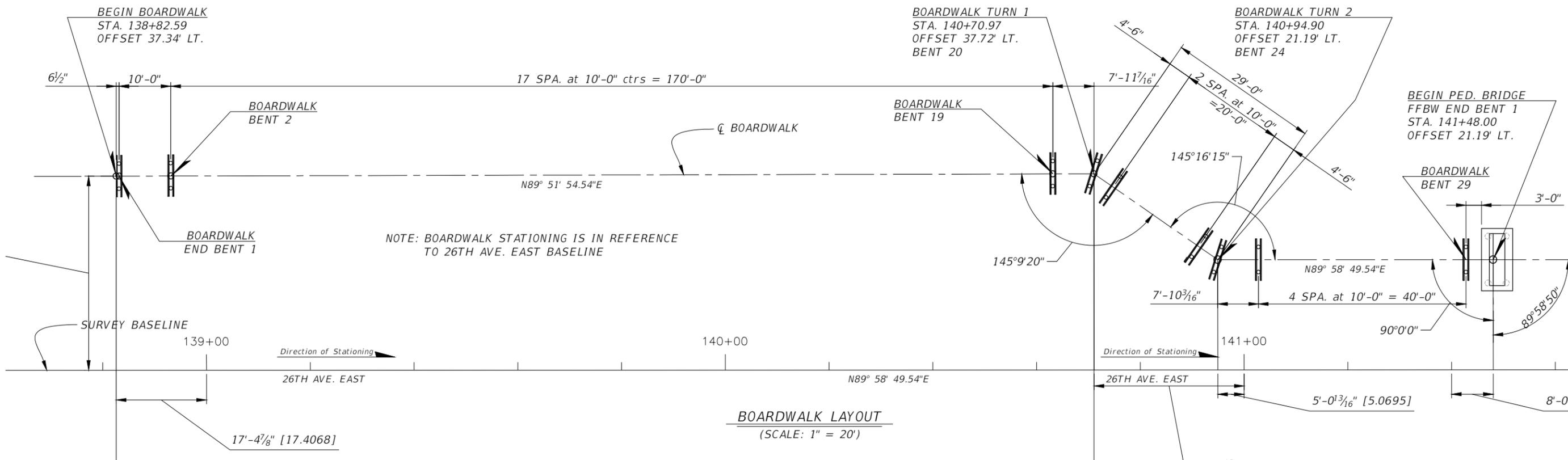
26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE
BOARDWALK TYPICAL SECTION

SHEET NO.
B-15

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
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			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	07/2021
			SCALE	AS NOTED	CHECKED	GLB	07/2021

Signature & Date

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DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	SML	07/2021
			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	07/2021
			SCALE	1" = 20'	CHECKED	GLB	07/2021

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Signature & Date

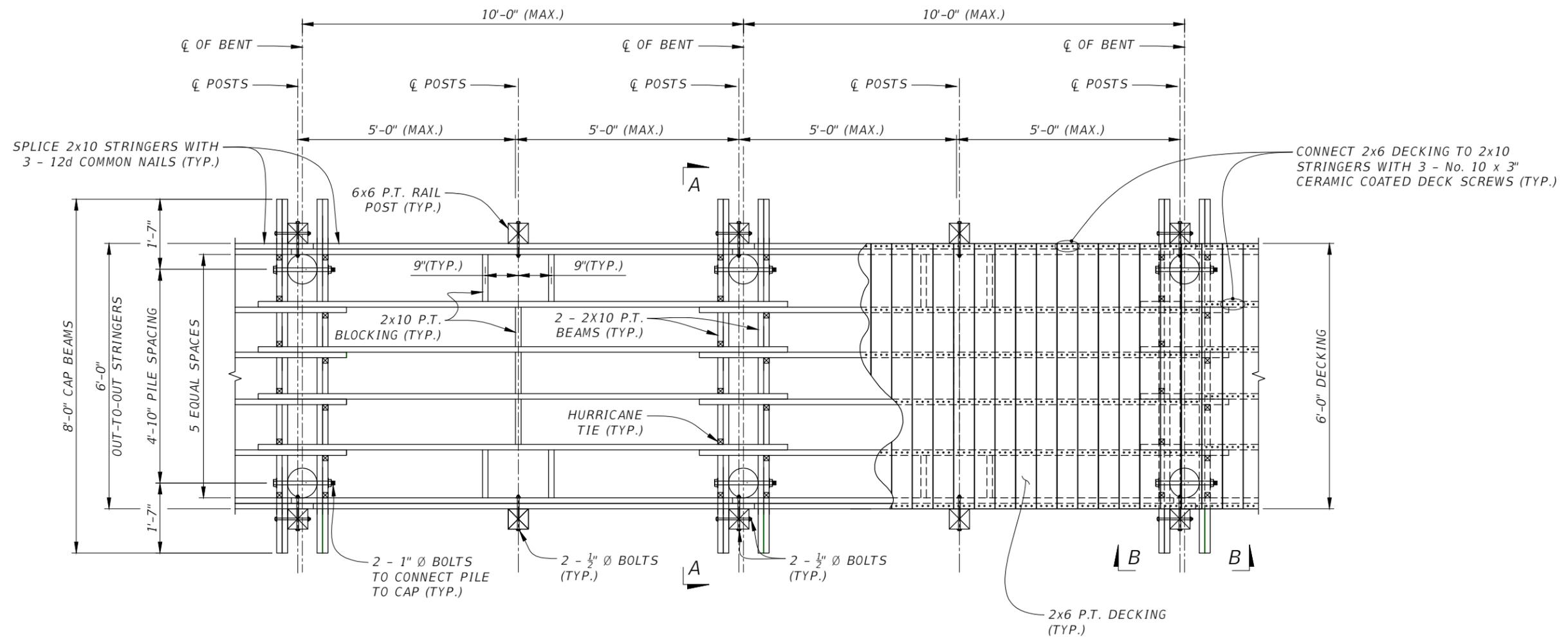


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26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE
BOARDWALK LAYOUT

SHEET NO.
B-16

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- NOTES: 1. HAND RAILS NOT SHOWN FOR CLARITY.
 2. FOR SECTION A-A, SEE BOARDWALK TYPICAL SECTION SHEET.
 3. FOR SECTION B-B, SEE BOARDWALK DETAILS 2 OF 4.

BOARDWALK TYPICAL FRAMING PLAN

(SCALE: 3/8" = 1')

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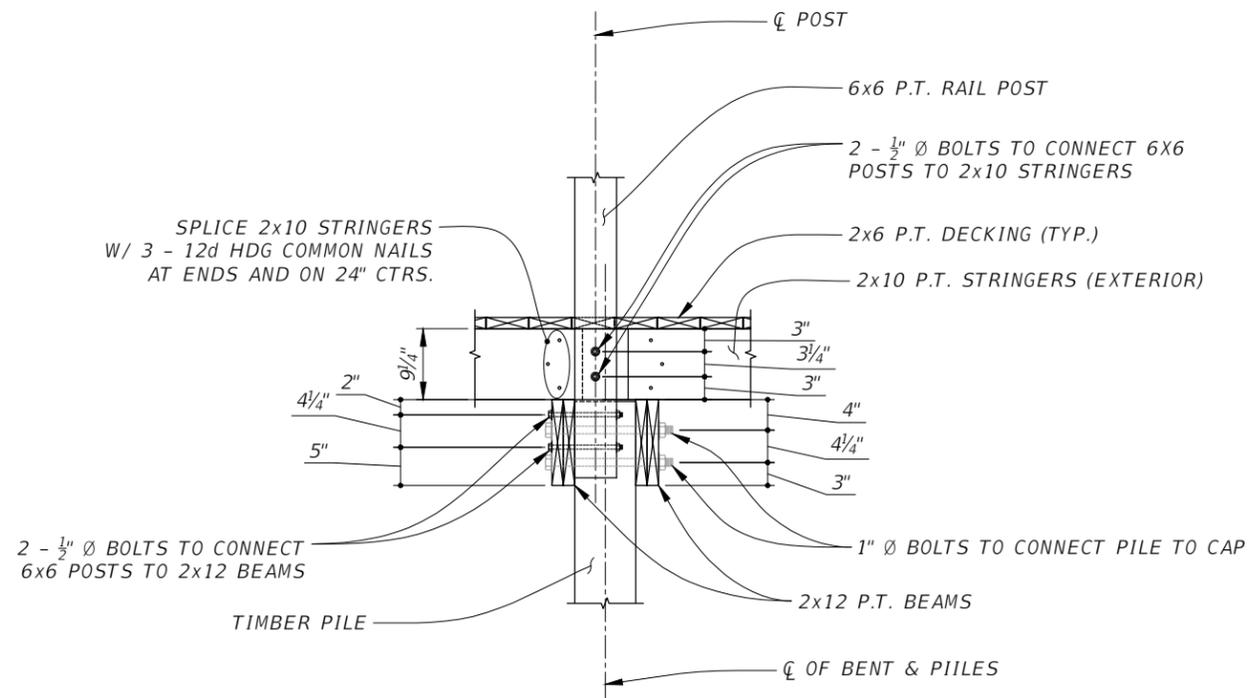
Signature & Date

26TH AVENUE EAST SIDEWALK
 PEDESTRIAN BRIDGE
 BOARDWALK DETAILS (1 OF 4)

SHEET NO.
 B-17

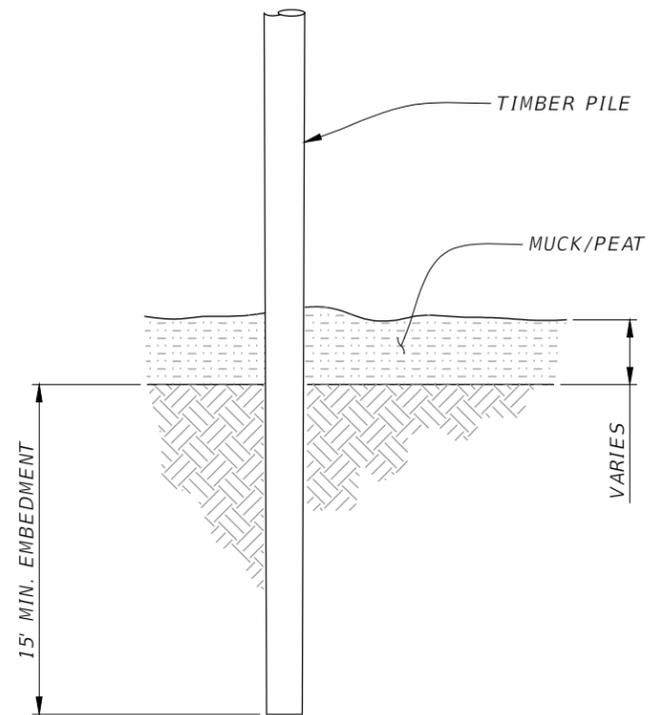
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			SURVEY #	N/A	DESIGNED	SML	07/2021
			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	07/2021
			SCALE	AS NOTED	CHECKED	GLB	07/2021

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VIEW B-B
(SCALE: 1/2" = 1')

- NOTES:**
1. REFER TO BOARDWALK DETAILS 1 OF 4 FOR VIEW B-B LOCATION.
 2. HAND RAILING NOT SHOWN FOR CLARITY.



PILE EMBEDMENT DETAIL
(SCALE: 1/2" = 1')

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
			SURVEY #	N/A	DESIGNED	SML	07/2021
			SEC./TWN./RGE	32/34S/18E	DRAWN	SML	07/2021
			SCALE	1/4" = 1'	CHECKED	GLB	07/2021

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STEVEN M. LANEY, P.E.

Signature & Date

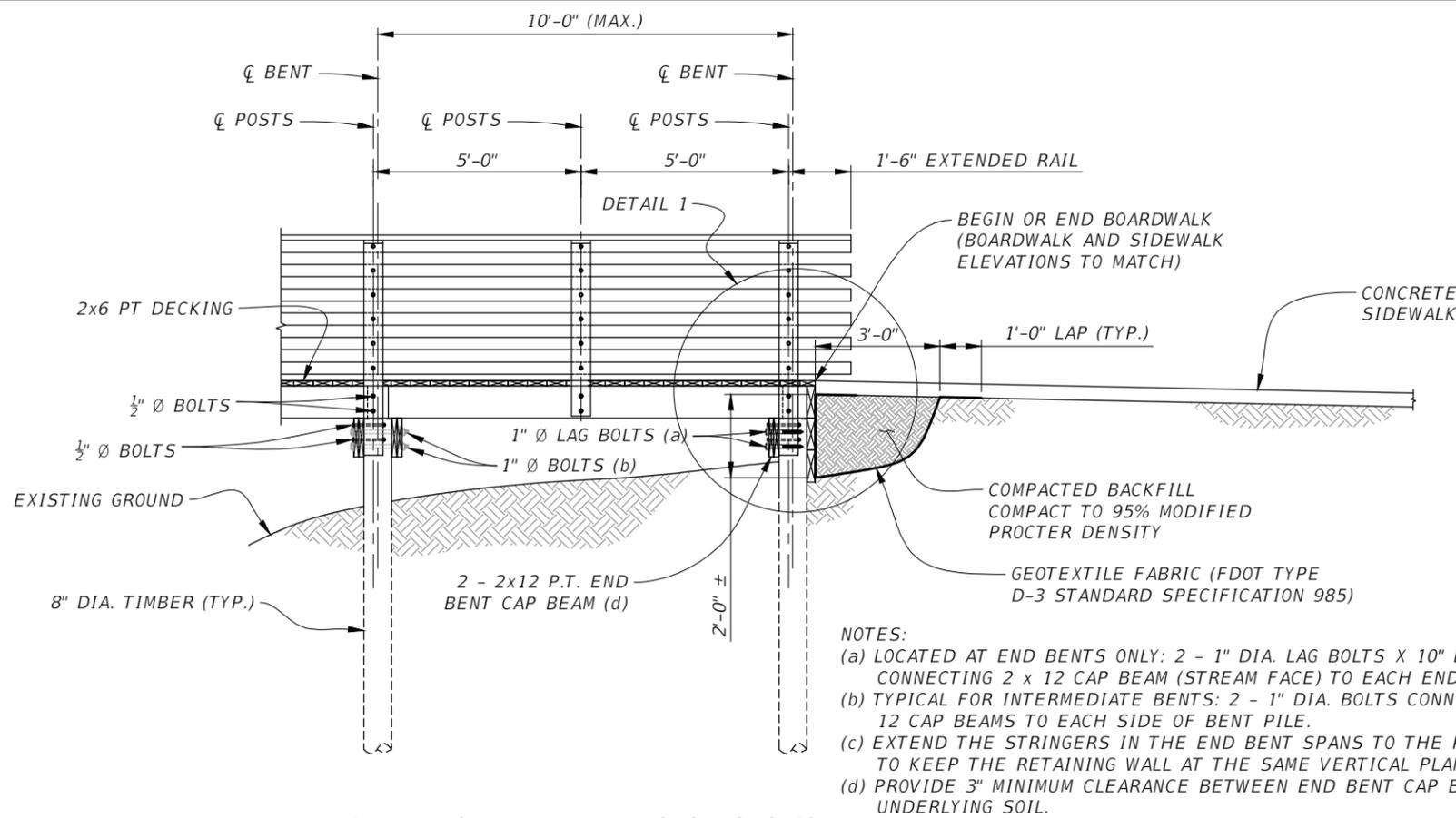


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1022 26th Avenue East, Bradenton, FL 34208

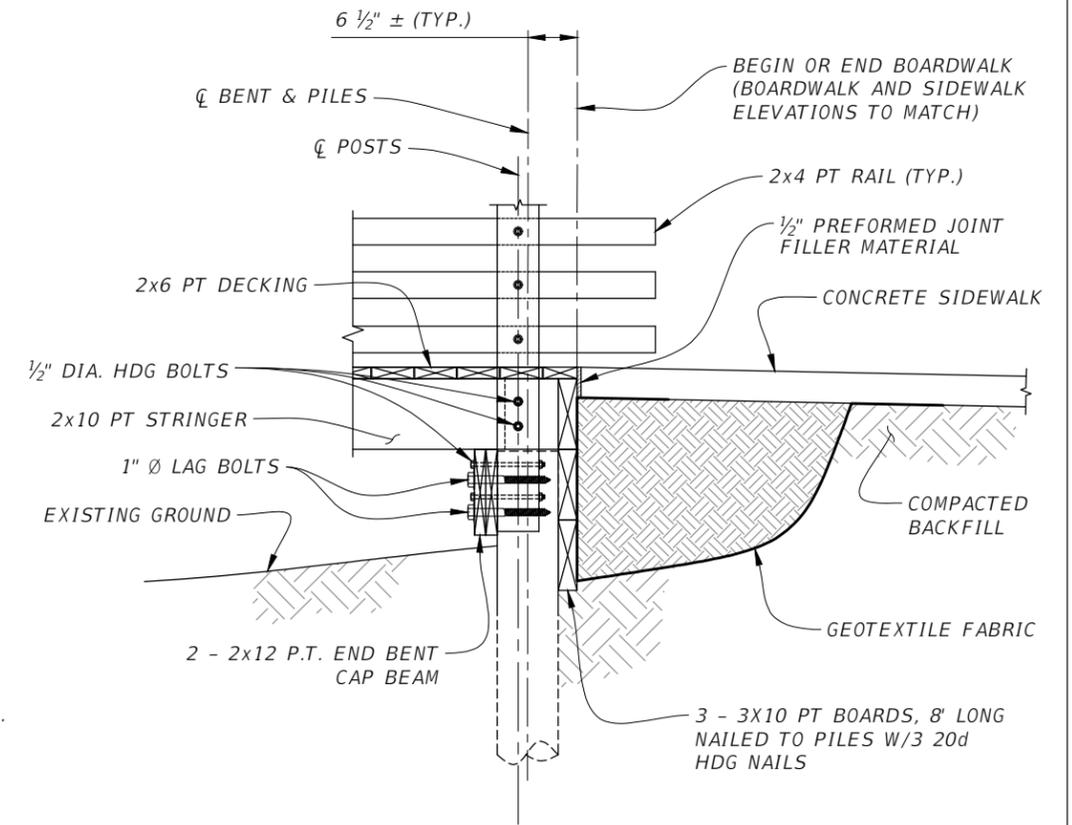
**26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE**

BOARDWALK DETAILS (2 OF 4)

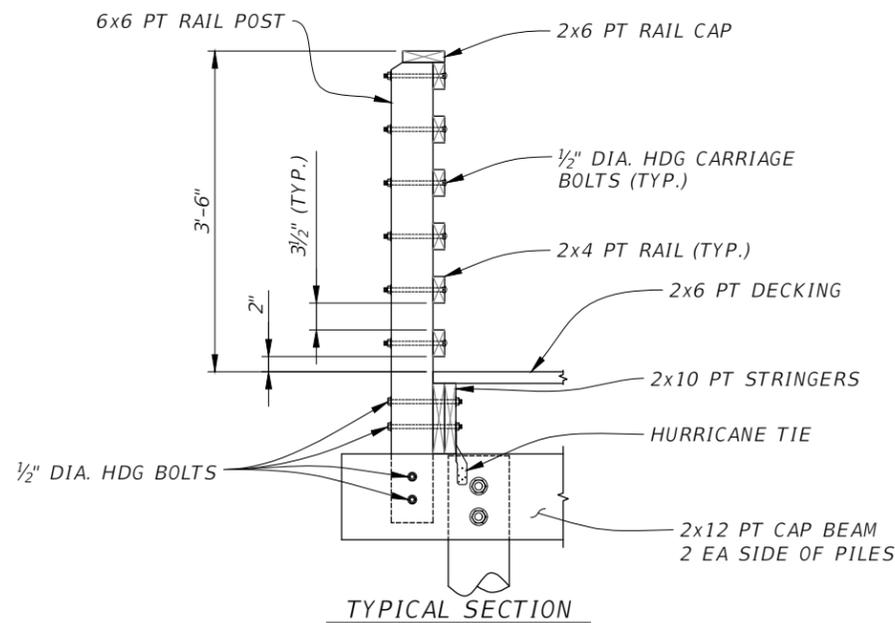
SHEET NO.
B-18



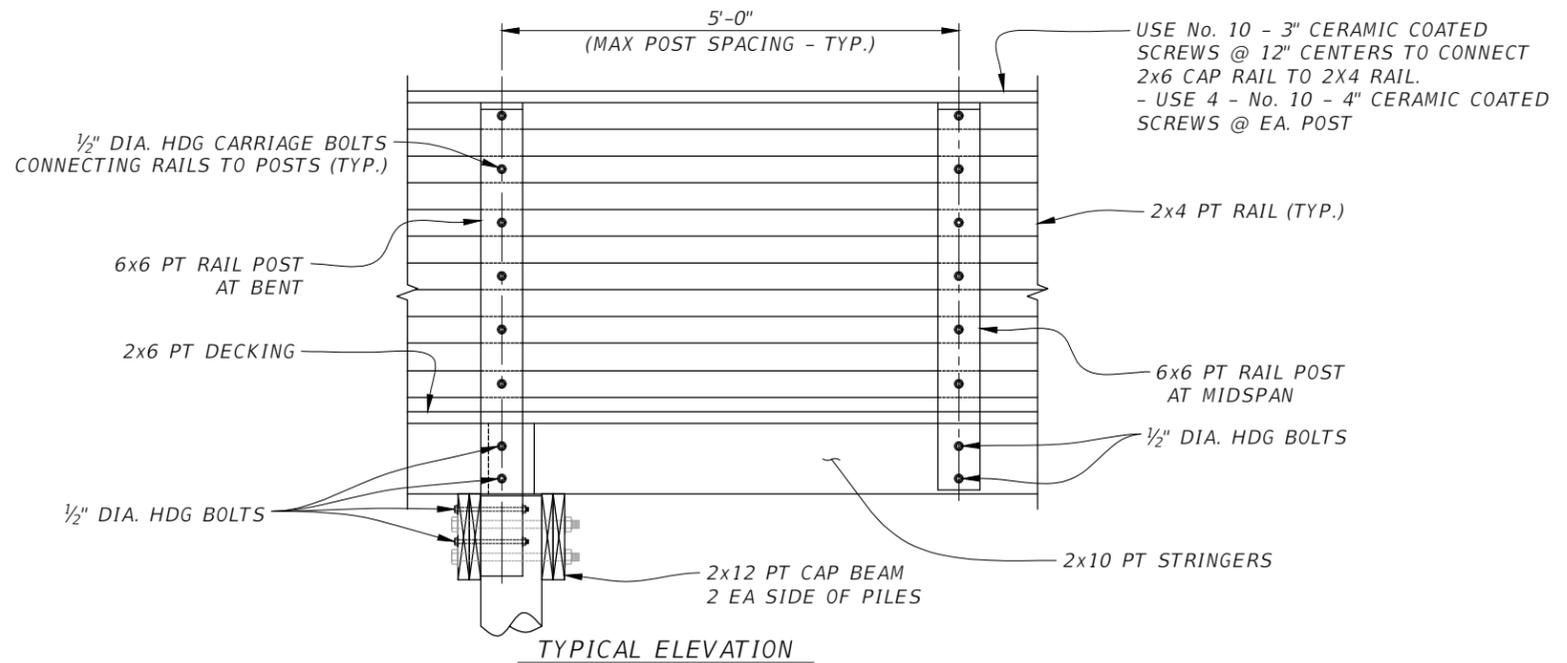
TIMBER BOARDWALK APPROACH SECTION
(Scale: 1/4" = 1')



DETAIL 1
(Scale: 1/2" = 1')



TYPICAL SECTION



TYPICAL ELEVATION

STANDARD RAILING DETAILS
(Scale: 1/2" = 1')

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DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED	ZNS	07/2019
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			N/A	DESIGNED	SML	07/2021
			32/345/18E	DRAWN	SML	07/2021
			1/4" = 1'	CHECKED	GLB	07/2021

FLORIDA P.E. # 46449
STEVEN M. LANEY, P.E.

Signature & Date

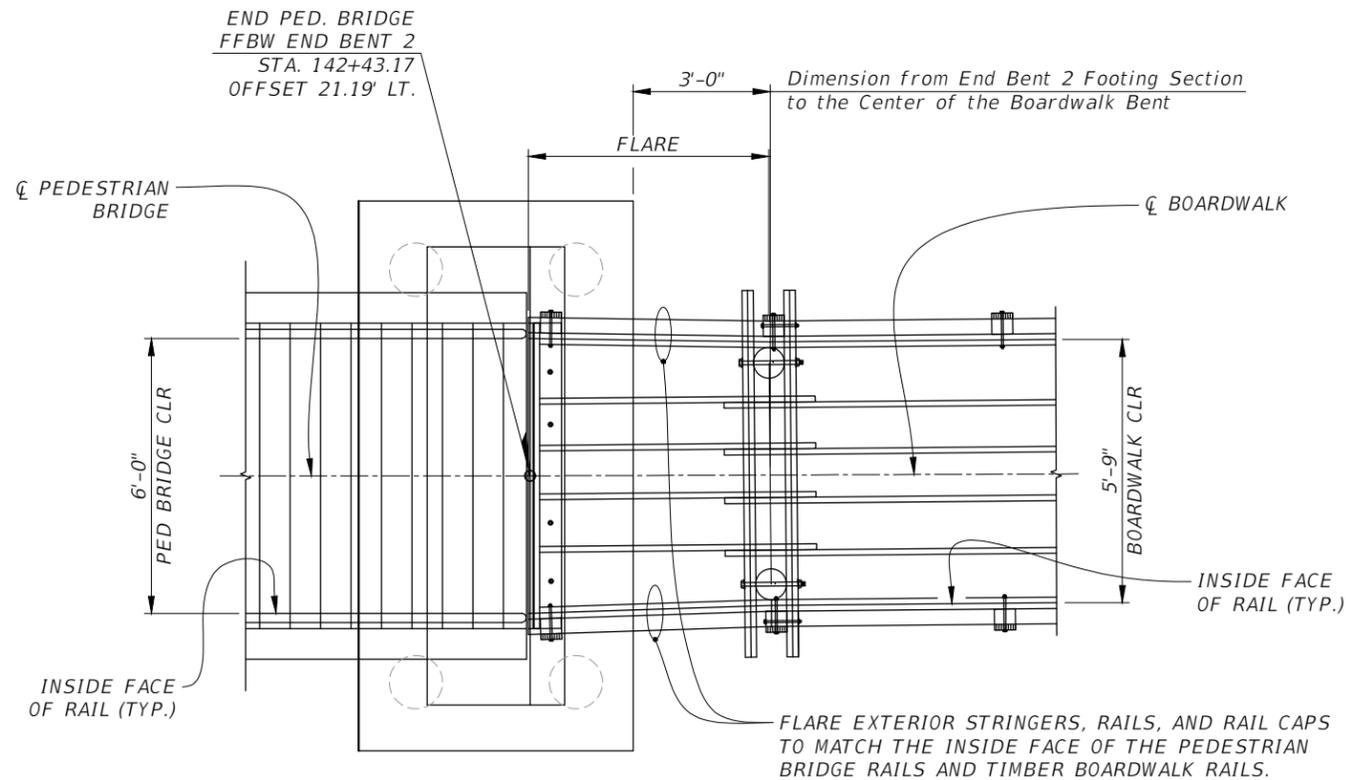


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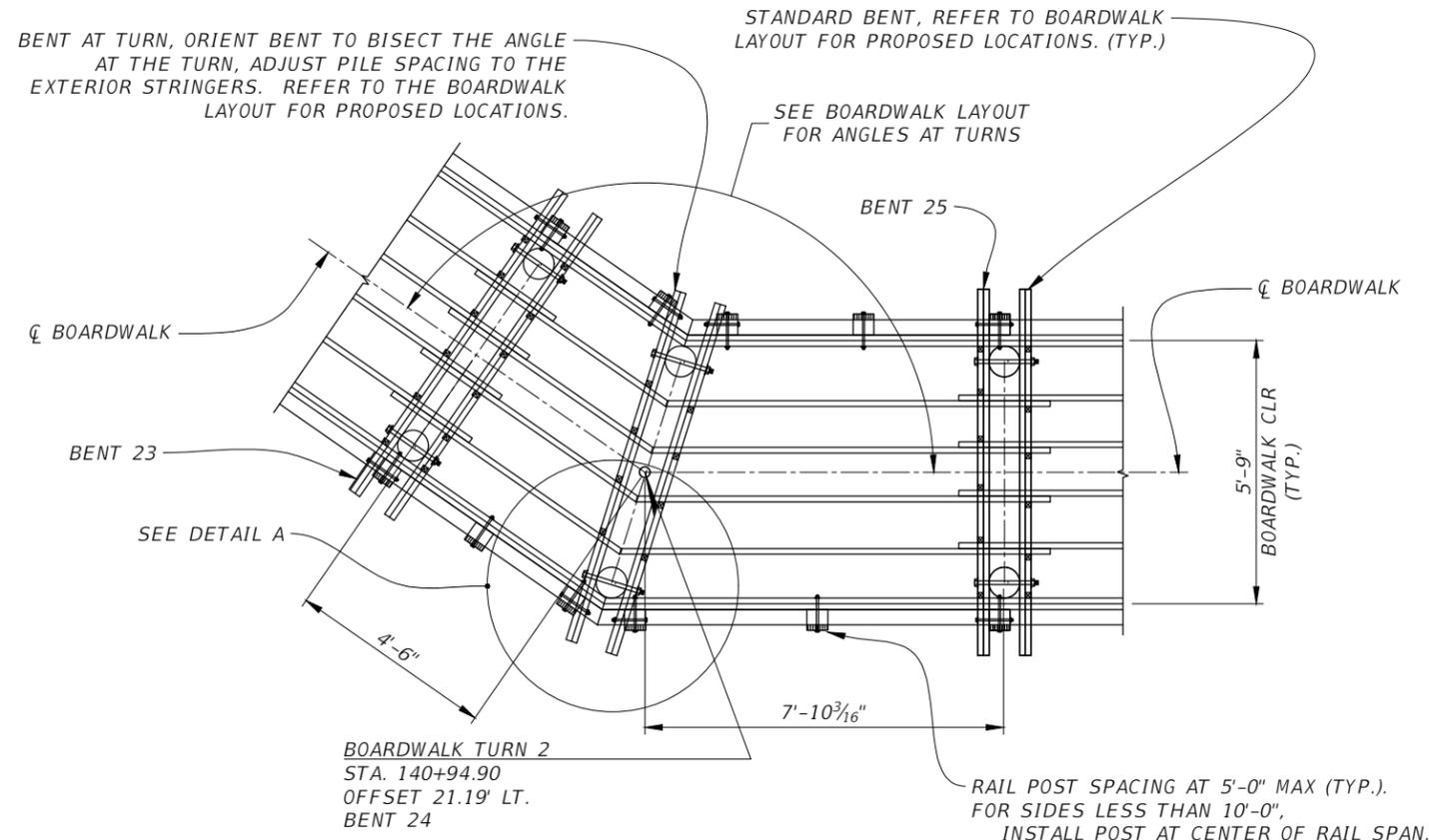
26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE
BOARDWALK DETAILS (3 OF 4)

SHEET NO.
B-19

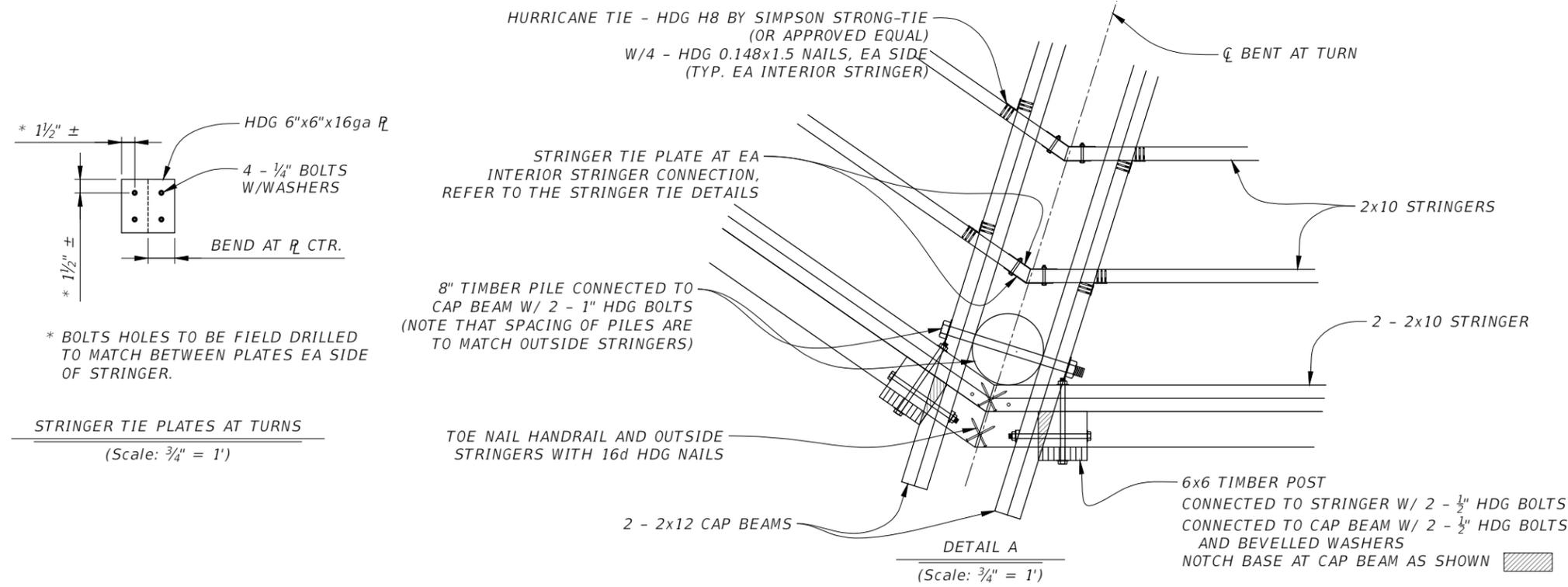
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TYPICAL BOARDWALK FLARE AT PEDESTRIAN BRIDGE
(End Bent 2 Shown, End Bent 1 Similar, Scale: 1/4" = 1')



TYPICAL BOARDWALK FRAMING AT TURN
(Turn 2 Shown, Others Similar, Scale: 1/4" = 1')



STRINGER TIE PLATES AT TURNS
(Scale: 3/4" = 1')

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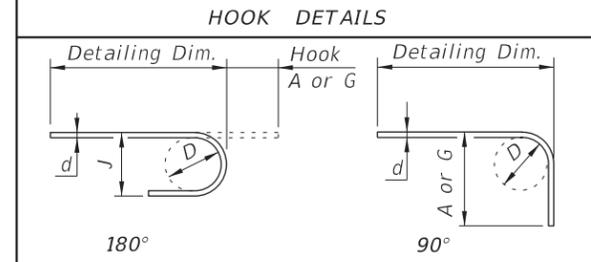
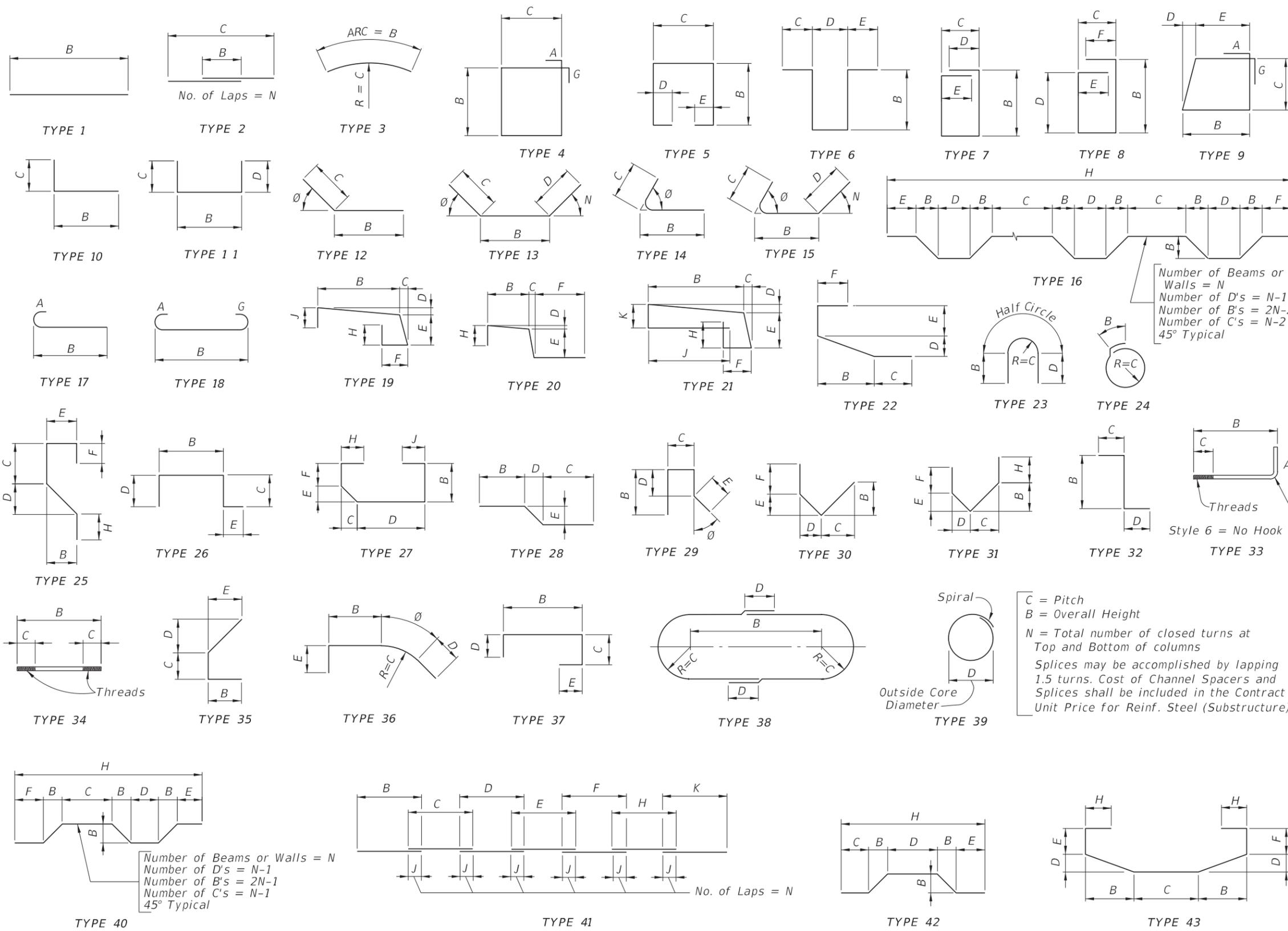
Manatee County
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1022 26th Avenue East, Bradenton, FL 34208

**26TH AVENUE EAST SIDEWALK
PEDESTRIAN BRIDGE**
BOARDWALK DETAILS (4 OF 4)

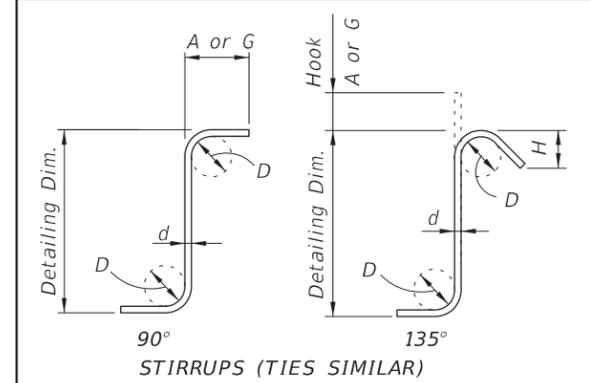
SHEET NO.
B-20

DATE	DESCRIPTION	DATE	PROJECT #	178-0019900	SURVEYED	ZNS	07/2019
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			32/345/18E		DRAWN	SML	07/2021
			AS NOTED	CHECKED	GLB		07/2021

Signature & Date



BAR SIZE	D	180° HOOKS		90° HOOKS
		A OR G	J	A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	1'-0"
#7	5 1/4"	10"	7"	1'-2"
#8	6"	11"	8"	1'-4"
#9	9 1/2"	1'-3"	11 3/4"	1'-7"
#10	10 3/4"	1'-5"	1'-1 1/4"	1'-10"
#11	12"	1'-7"	1'-2 3/4"	2'-0"
#14	18 1/4"	2'-3"	1'-9 3/4"	2'-7"
#18	24"	3'-0"	2'-4 1/2"	3'-5"
STYLE		1		3



BAR SIZE	D	90° HOOKS		135° HOOKS	
		A or G	A or G	A or G	H *
#3	1 1/2"	4"	4"	4"	2 1/2"
#4	2"	4 1/2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	5 1/2"	3 3/4"
#6	4 1/2"	1'-0"	8"	8"	4 1/2"
#7	5 1/4"	1'-2"	9"	9"	5 1/4"
#8	6"	1'-4"	10 1/2"	10 1/2"	6"
STYLE		4		5	

STYLE 6 = NO HOOK

* Dimension is approximate.
Hook Styles Detailed on this sheet are for Illustration Only.
Actual Hook Style for any particular bar will be shown under A or G Heading on REINFORCING BAR LIST sheet(s) in Structures Plans.
All Dimensions are out-to-out.

NOTE: For Bar Dimensions See REINFORCING BAR LIST Sheet(s) in Structures Plans.

26TH AVE E SIDEWALK - PEDESTRIAN BRIDGE

SHEET B-21

LAST REVISION 11/01/20	DESCRIPTION:
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FY 2021-22
STANDARD PLANS

BAR BENDING DETAILS (STEEL)

INDEX 415-001	SHEET 1 of 1
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