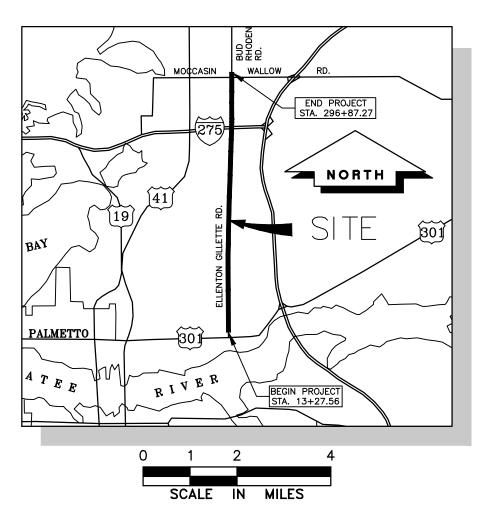
MANATEE COUNTY, FLORIDA

CONSTRUCTION PLANS

OR

ELLENTON GILLETTE ROAD

COUNTY PROJECT NO. 6084560



100% PLANS

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LOCATION MAP

Sections 5, 8, 17, Twp. 34 S., Rge. 18 E. Sections 17, 20, 29, 32, Twp. 33 S., Rge. 18 E.

DATE: APRIL, 2015

LOMBARDO, FOLEY & KOLARIK, INC.
Consulting Engineers, Surveyors and Planners

Consulting Engineers, Surveyors and Planners O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-45



GENERAL

- ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION.
 THE PROJECT MANAGER IS: MICHAEL STURM P.E.
 AND CAN BE REACHED AT (941) 708-7450 EXT. 7332.
- 2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE
- 3. 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.
- VERTICAL CONTROL FOR THIS PROJECT WAS ESTABLISHED BY A MINIMUM OF TWO REFERENCE BENCHMARKS DESCRIBED ON THE "THE NATIONAL GEODETIC VERTICAL DATUM OF 1929", (NGVD '29).
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. ALL STATIONS AND OFFSETS REFER TO BASELINE OF CONSTRUCTION, UNLESS OTHERWISE NOTED
- 10. THE CONSTRUCTION LENGTHS IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
- 11. 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 CONTENCT PRICE FOR THE APPROPRIATE BID ITEM.
- 12. 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.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE COORDINATION OF CONSTRUCTION SCHEDULING BETWEEN CONTRACTOR AND ALL UTILITY AGENCIES. NOTE: THIS INCLUDES MEETING WITH UTILITY AGENCIES PRIOR TO THE PRE—CONSTRUCTION CONFERENCE TO ADJUST THEIR SCHEDULES TO COINCIDE WITH THE CONTRACTORS CONSTRUCTION SCHEDULE. (REFERENCE CONTRACT DOCUMENTS)
- 14. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE COUNTY PROJECT MANAGER. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
- 15. ALL CONSTRUCTION WITHIN FDOT RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH CURRENT FDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION AND THE DESIGN STANDARDS.
- 16. ALL SIGNING, STRIPING AND RPM PLACEMENT WITHIN THE COUNTY RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH FDOT STANDARD INDEX 17344, 17346 AND 17347.

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- 17. 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.
- 18. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
- 19. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
- 20. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FROM PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

- 21. THE 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.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. 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.
- 26. 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.

- 27. 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.
- 28. 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.
- 29. 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.
- 30. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
- 31. 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.
- 32. FOR MORE INFORMATION, SEE THE BEST MANAGEMENT PRACTICES DETAIL SHEET INCLUDED IN THE PLANS.

RIGHT-OF-WAY

- 33. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR FASEMENTS SHOWN ON THE DRAWINGS.
- 34. 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.
- 35. 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 OF TRAFFIC CONTROL AND SAFE PRACTICES". A TRAFFIC CONTROL PLAN SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.
- 36. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED STORM WATER STRUCTURES, PIPING, ENTRANCE PIPE AND EX. HWS, THAT ARE TO REMAIN, WHETHER SHOWN ON THE PLANS OR NOT.
- 37. 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. ROADWAY PLANS AND PROPOSED DESIGN ARE BASED ON TOPOGRAPHIC SURVEYS PROVIDED BY MANATEE COLUMN
- 38. 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.
- 39. 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.

UTILITIES

- 40. 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. UTILITIES DESIGNATED VV, VH, AND VVH ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.
- 41. 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.
- 42. THE CONTRACTOR SHALL USE APPROPRIATE TECHNIQUES, AS APPROVED, RECOMMENDED OR OFFERED BY FLORIDA POWER AND LIGHT TO PREVENT UNDERMINING OF POWER POLES DURING CONSTRUCTION. IF HOLDING OF POWER POLES IS RECOMMENDED OR REQUIRED BY THE UTILITY, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH THE UTILITY AND BEAR ALL RELATED COSTS.
- 43. EXCEPT WHERE THE PLANS AND SPECIFICATIONS PROVIDE THAT SUCH WORK SHALL BE PERFORMED UNDER THE CONTRACT FOR THIS PROJECT. ALL UTILITIES INTERFERING WITH CONSTRUCTION SHALL BE REMOVED, RELOCATED OR ADJUSTED BY THEIR OWNERS, AT THEIR EXPENSE. THE CONTRACTOR SHALL ARRANGE HIS SCHEDULE TO ALLOW UTILITY OWNERS TIME FOR THE NECESSARY RELOCATION AND ADJUSTMENT OF UTILITIES AND RELATED STRUCTURES.

- 44. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITY COMPANIES FOR THE RELOCATION AND ADJUSTMENT OF ALL UTILITIES, INCLUDING, ANY EXISTING POWER POLES AND/OR UTILITY CONDUITS WITHIN RIGHT-OF-WAY.
- 45. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE APPROPRIATE PARTIES TO DETERMINE THE COUNTY'S FIBER COMMUNICATION NETWORK, KNOWN AS ATMS (COUNTY ISD, SCHOOL BOARD, AND TRAFFIC MANAGEMENT CENTER) IN THE AREA TO ACCOMMODATE ANY POTENTIAL CONFLICTS. AS—BUILT INFORMATION FOR EXISTING COMMUNICATION CONDUIT AND FIBER IS AVAILABLE FROM OLGA ROSIER, WITH UTILITY RECORDS (941—792—8811 EXT. 5059). CONSTRUCTION PLAN INFORMATION FOR PROJECTS UNDER CONSTRUCTION WITH THE COUNTY'S TRAFFIC MANAGEMENT CENTER ARE AVAILABLE AT WWW.MANATEEATMS.COM AND WWW.MANATEEATMS2.COM.

DRAINAGE AND GRADING

- 46. ALL CONSTRUCTION IS TO BE STAKED IN THE FIELD BY OR UNDER THE SUPERVISION OF A FLORIDA REGISTERED LAND SURVEYOR.
- 47. 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, SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE AND PAYMENT
- 48. 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 BARRIERS 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.
- 49. 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.
- 50. REFER TO CONSTRUCTION TECHNICAL SPECIFICATIONS FOR COMPACTION REQUIREMENTS, GRASSING/SODDING REQUIREMENTS, AND PAVING CONSTRUCTION MATERIAL SPECIFICATIONS.
- 51. ALL FILL AREAS ARE TO BE CONSTRUCTED IN 12" MAXIMUM LIFTS
- 52. ON SLOPES GREATER THAN 3:1 PEGGING OR PINNING OF SOD MAY BE REQUIRED.
- 53. 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.
- 54. ALL CURB INLET AND JUNCTION BOX STORMWATER STRUCTURES SHALL HAVE HEAVY DUTY RING AND COVER MANHOLE ACCESS
- 55. 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.

DESIGN SURVEY

- 56. TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY DATA OBTAINED BY LF&K (OCT. 2013 JAN. 2014)
- 57. RIGHTS-OF-WAY SHOWN HEREON ARE BASED ON FIELD LOCATIONS OF MONUMENTATION, PLATS, DEEDS OF RECORD AND MAINTAINED RIGHTS-OF-WAY AS IDENTIFIED BY MANATEE COUNTY PERSONNEL AND ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY.
- 58. BEARINGS ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM WEST ZONE NAD 83 (2011) AS DERIVED FROM OPUS CONTROL POINTS BBCG09 "COLUMBIA" AND BBCG30 "CONNECTICUT".
- 59. ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM (N.G.V.D. 1929). ORIGIN BENCHMARK IS MANATEE COUNTY BM. "COLUMBIA" WITH AN ELEVATION OF 11.61 N.A.V.D. 1988. CONVERSION TO ELEVATION 12.58 N.G.V.D. 1929 WAS DONE UTILIZING THE NATIONAL GEODETIC SURVEYS "VERTCOM" CONVERSION PROGRAM.

GENERAL NOTES ELLENTON GILLETTE ROAD

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EXISTING BENCH MARK	
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GUY WIRE SANITARY SEWER	
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Ø LIGHT POLE ====================================	
Ø LIGHT POLE ====================================	
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-O- BACKFLOW PREVENTER -> -> FLOW	
FIRE HYDRANT — — — TOP OF BANK	
₩ATER VALVE — — PROPERTY LINE	
BURIED WATER VALVE - RIGHT OF WAY	
WM WATER METER	
AIR RELEASE VALVE ABBREVIATIONS	
S SANITARY SEWER MANHOLE	
T TELEPHONE BOX R/W RIGHT OF WAY	
C CABLE BOX S/W SIDEWALK	
EB ELECTRIC BOX CONC. CONCRETE	
EM ELECTRIC METER ASPH ASPHALT	
V VERIZON EX. EXISTING	
TRANSFORMER EP EDGE OF PAVEMENT	
WELL BC BACK OF CURB	
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PINE TREE	
PROPOSED	
SIGN STAKED SILT SCREEN	
GRATE INLET ->	
MITERED END SECTION STORM DRAIN	

GENERAL NOTES

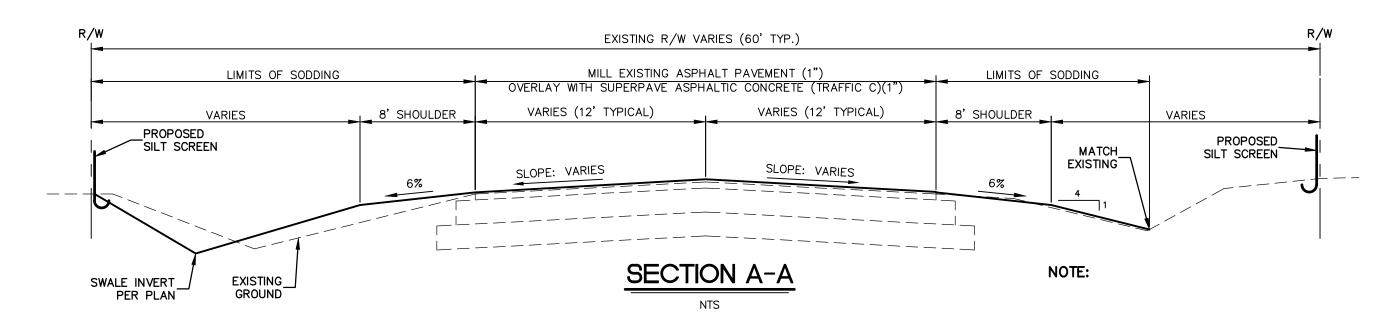
EVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561				
	PROJECT ENGINEER	DESIGN J.R.F.	DATE 01/06/14	SHEET NO.	
	JOHN R. FOLEY	DRAWN P.G.	SCALE AS SHOWN 7865	174	
	P.E. REG. NO.	APPR	JOB NO.	/	

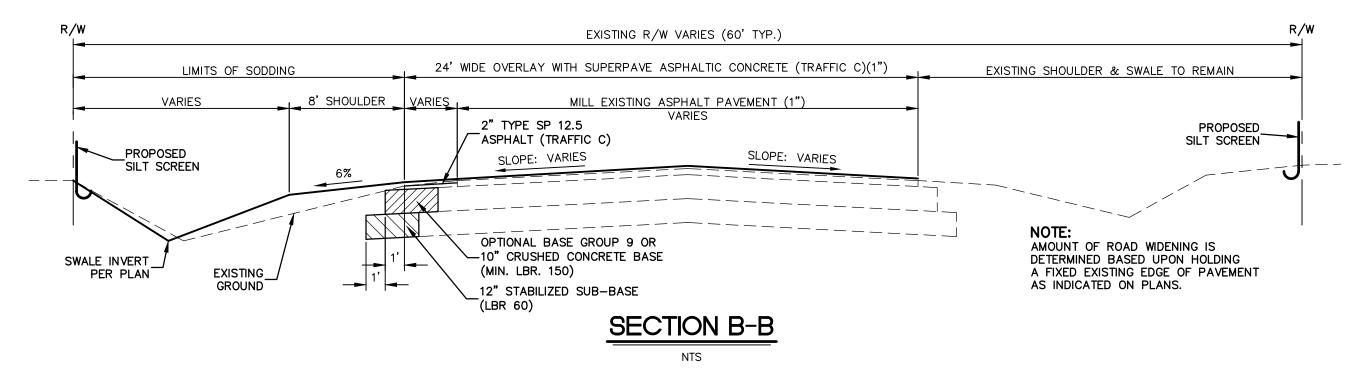
		SUMMARY OF PAY ITEMS		
LINE	PAY ITEMS	DESCRIPTION	QTY	U/M
1.	101-1	MOBILIZATION	1	ĹS
2.	102-1-1	MAINTENANCE OF TRAFFIC (MOT)	1	LS
		SUBTOTAL MOBILIZATION AND MOT	•	
3.	104-10-3	STAKED SILT FENCE (TYPE III)	25,500	LF
4.	104-11	FLOATING TURBIDITY BARRIER	200	LF
5.	104-15	SOIL TRACKING PREVENTION DEVICE	4	EA
6.	110-1-1	CLEARING AND GRUBBING	22.65	AC
7.	120-1	REGULAR EXCAVATION	9,625	CY
8.	120-6	EMBANKMENT (REGULAR)	6,250	CY
9.	160-4	12" STABILIZED SUB-BASE	9,187	SY
10.	285-709	OPTIONAL BASE GROUP 9	8,798	SY
11.	327-70-1	MILLING EXISTING ASPHALT PAVEMENT (1" AVG. DEPTH)	80,000	SY
12.	334-1-13	SUPERPAVE ASPHALTIC CONCRETE (TRAFFIC C)(12.5)(2")	1,960	TN
13.	337-7-42	ASPHALTIC CONCRETE FRICTION COURSE	4,450	TN
		(TRAFFIC C)(FC 9.5 RUBBER)(1")		
14.	400-1-2	CLASS 1 CONCRETE (ENDWALLS), INCL. REINFORCING STEEL	33.2	CY
15.	425-1-MC	GRATE INLET	25	EA
16.	425-2-MC	GRATE INLET / THROAT INLET	12	EA
17.	425-3-MC	JUNCTION BOX	3	EA
18.	425-11-MC	GRATE INLET CONVERTED TO JUNCTION BOX	8	EA
19.	430-175-115	PIPE STORM SEWER CULVERT (RCP)(15")	1,656	LF
20.	430-175-118	PIPE STORM SEWER CULVERT (RCP)(18")	4,056	LF
21.	430-175-124	PIPE STORM SEWER CULVERT (RCP)(24")	941	LF
22.	430-175-130	PIPE STORM SEWER CULVERT (RCP)(30")	56	LF
23.	430-175-136	PIPE STORM SEWER CULVERT (RCP)(36")	50	LF
24.	430-175-218	PIPE STORM SEWER CULVERT (ERCP)(14"x23")	220	LF
25.	430-984-123	MES (ROUND)(15" SD)	36	EA
26.	430-984-125	MES (ROUND)(18" SD)	69	EA
27.	430-984-129	MES (ROUND)(24" SD)	15	EA
28.	430-984-625	MES (ELLIP/ARCH)(18" SD)	6	EA
29.	520-1-10	TYPE F CURB & GUTTER	665	LF
30.	522-1	4" CONCRETE SIDEWALK	27	SY
31.	522-2	6" CONCRETE SIDEWALK, REINFORCED DRIVEWAY	3,685	SY
32.	527-2	DETECTABLE WARNINGS ON WALKING SURFACES	6	EA
33.	530-3-4	RIP-RAP (RUBBLE)(DITCH LINING)	25	TN
34.	908-104-1	CONTRACTOR'S SEDIMENT AND EROSION CONTROL	1	LS
		SUBTOTAL ROADWAY		
35.	700-20-11	SINGLE POST SIGN, (F&I)(LESS THAN 12)	4	AS
36.	700-20-40	SINGLE POST SIGN (RELOCATE)	11	EA
37.	706-3	RETRO REFLECTIVE PAVEMENT MARKERS	736	EA
38.	710-30	PAINTED PAVEMENT MARKINGS, STD, YELLOW, ISLAND NOSE	60	SF
39.	710-11-180	THERMOPLASTIC, PAVEMENT MARKINGS	15	LF
40.	711–11–121	THERMOPLASTIC, STD, WHITE, SOLID, 6"	9.95	GM
41.	711–11–123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	315	LF
42.	711–11–125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	280	LF
43.	711–11–151	THERMOPLASTIC, STD, WHITE, SKIP, 6", 2-4	211	LF
44.	711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	980	LF
45.	711-11-231	THERMOPLASTIC, STD, YELLOW, SKIP, 6", 10-30	2.152	GM
46.	711-11-251	THERMOPLASTIC, STD, YELLOW, SKIP, 6", 6-10	495	LF

SUMMARY OF PAY ITEMS					
LINE	PAY ITEMS	DESCRIPTION	QTY	U/M	
47.	711-11-160	THERMOPLASTIC, STD, WHITE, MESSAGE	3	ĒΑ	
48.	711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	43	EA	
49.	711-11-211	THERMOPLASTIC, STD, YELLOW, SOLID, 6"	7.421	GM	
		SUBTOTAL SIGNING AND STRIPING			
50.	570-1-2	SODDING (PERFORMANCE TURF, BAHIA)(INCLUDES MOWING)	110,000	SY	
		SUBTOTAL LANDSCAPING			
51.	U-1	ADJUST VALVE BOXES	20	EA	
52.	U-2	12" PVC WATER MAIN	1,291	LF	
53.	U-3	12" PVC WATER MAIN RESTRAINED JOINT	924	LF	
54.	U-4	8" PVC WATER MAIN RESTRAINED JOINT	20	LF	
55.	U-5	6" PVC WATER MAIN RESTRAINED JOINT	20	LF	
56.	U-6	12" DIP WATER MAIN	255	LF	
57.	U-7	12" DIP WATER MAIN RESTRAINED JOINT	111	LF	
58.	U-8	12" GATE VALVE	4	EA	
59.	U-9	8" GATE VALVE	2	EA	
60.	U-10	6" GATE VALVE	1	EA	
61.	U-11	12" 45° BENDS	4	EA	
62.	U-12	6" 45° BENDS	2	EA	
63.	U-13	12"x12"x6" TEE	4	EA	
64.	U-14	8"x12" CROSS	1	EA	
65.	U-15	FIRE HYDRANT ASS. (INCL. 6" GATE VALVE)	3	EA	
66.	U-16	RESET WATER METER	8	EA	
67.	U-17	1" WATER SERVICES	11	EA	
68.	U-18	TIE TO EXISTING MAIN	4	EA	
69.	U-19	RESET FIRE HYDRANTS	20	EA	
70.	U-20	GROUT 12" WATERLINE	2,300	LF	
		SUBTOTAL WATER DISTRIBUTION			
SUBTOTAL BID PRICE					
CONTINGENCY 15%					
BID PRICE INCLUDING CONTINGENCY					
		ND MARKING DURING CONSTRUCTION TO BE PAID FOR Y ITEM 102-1 MAINTENANCE OF TRAFFIC.			

SUMMARY OF PAY ITEMS **ELLENTON GILLETTE ROAD**

EVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561				
	PROJECT ENGINEER	DESIGN_	JRF.	DATE 03/03/14	SHEET NO.
	JOHN R. FOLEY 38630 PE BEG NO	DRAWN _	<i>P.G.</i> JR.F.	9CALE NONE JOB NO. 7865	4 / <u>174</u>





GENERAL NOTES:

- 1. SEE CROSS SECTIONS FOR DETERMINATION OF WHERE SHOULDER AND DITCH CONSTRUCTION IS REQUIRED.
- 2. EVERY CONSTRUCTION CONDITION IS NOT SHOWN IN THESE SECTIONS. SEE SPECIFIC CROSS SECTION AT EACH STATION FOR WORK REQUIRED.

TYPICAL SECTIONS **ELLENTON GILLETTE ROAD**

REVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561				
	PROJECT ENGINEER	DESIGN J.R.F.	DATE 01/06/14	SHEET NO.	
	JOHN R. FOLEY 38630 P.E. REG. NO.	DRAWN P.G. APPR. JRF.	SCALE AS SHOWN JOB NO. 7865	174	

R/W

R/W

JRF.

P.E. REG. NO.

JOB NO. **7865**

ELLENTON GILLETTE ROAD

JRF.

P.E. REG. NO.

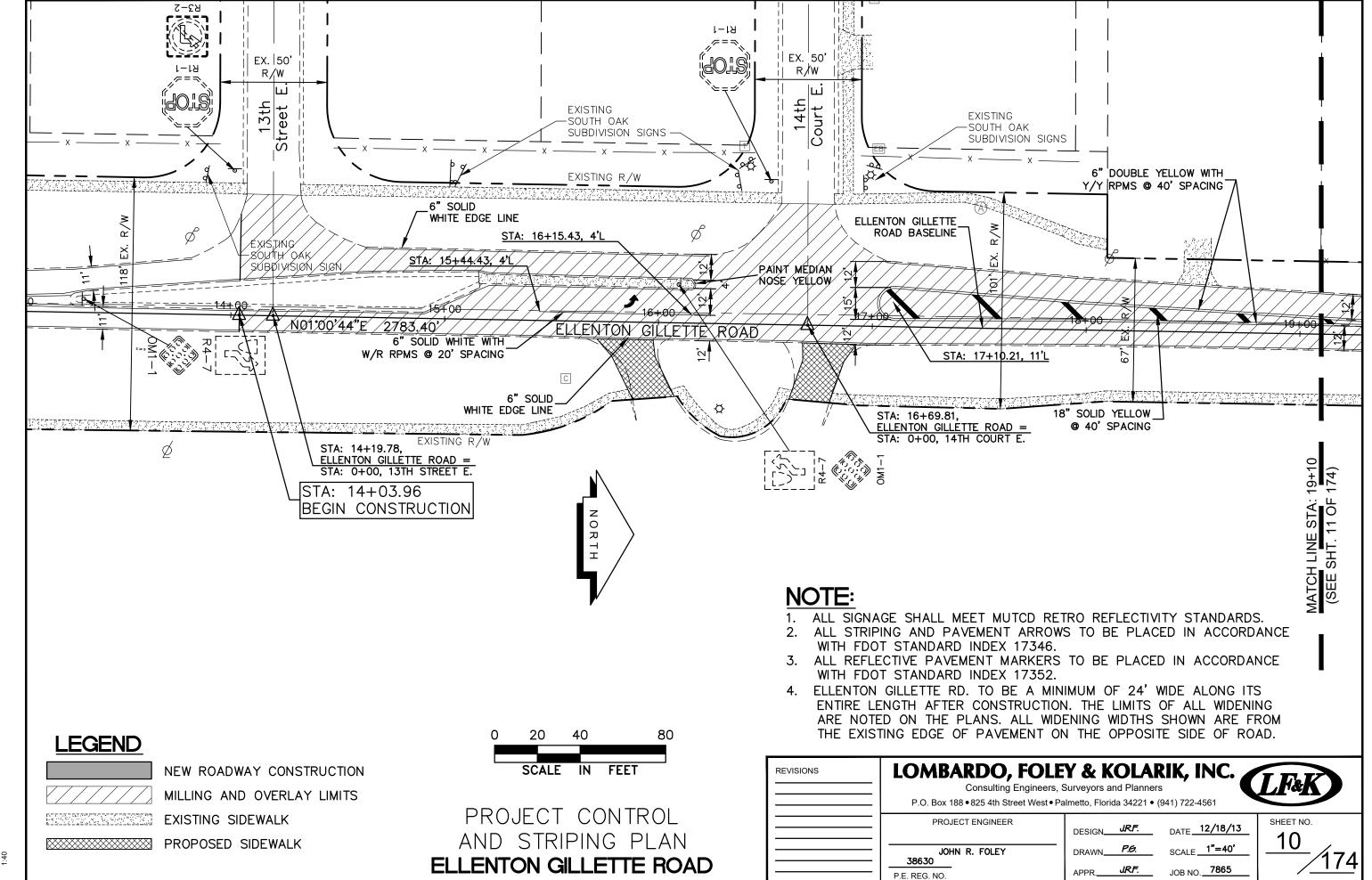
JOB NO. **7865**

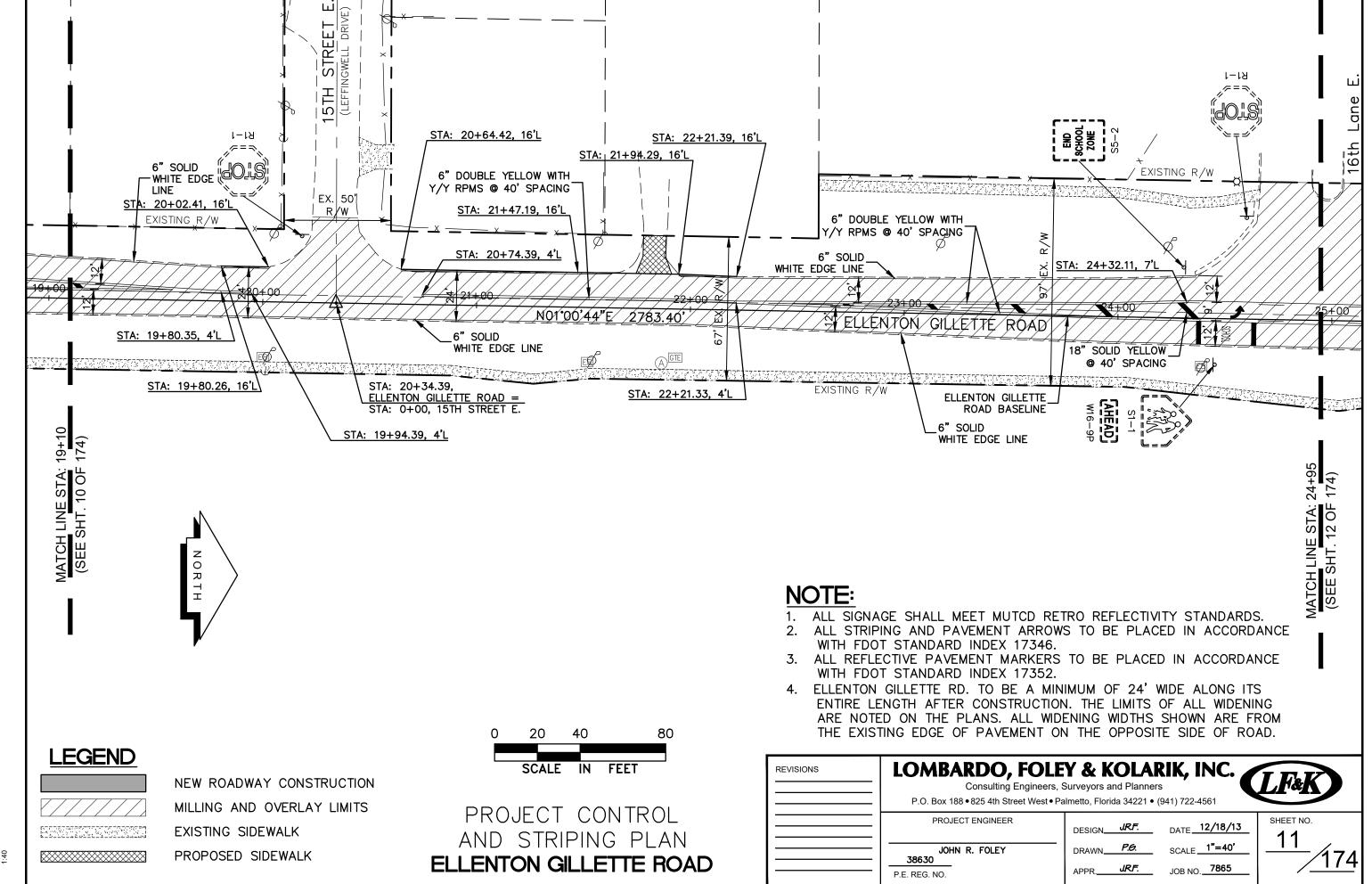
ELLENTON GILLETTE ROAD

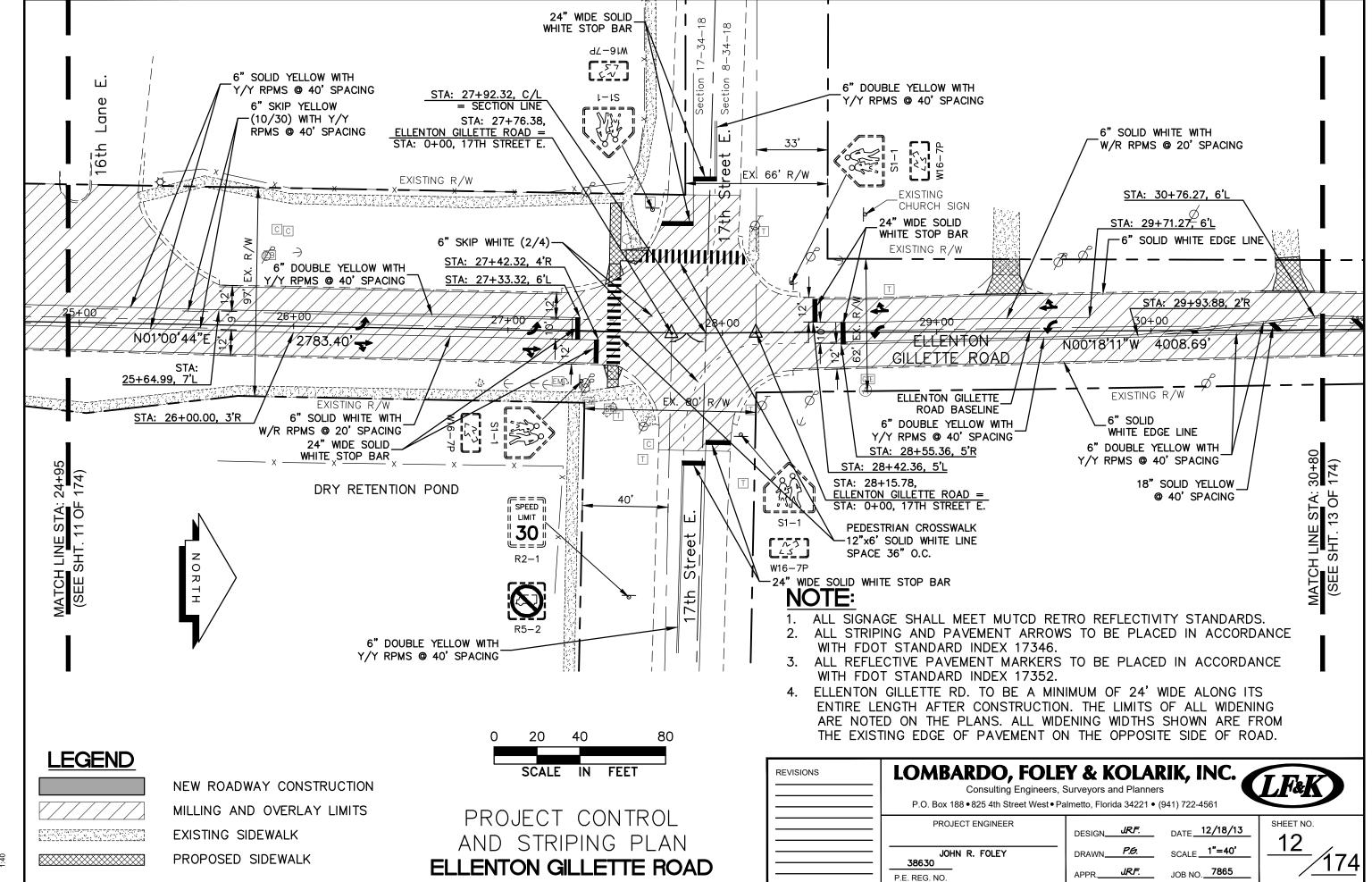
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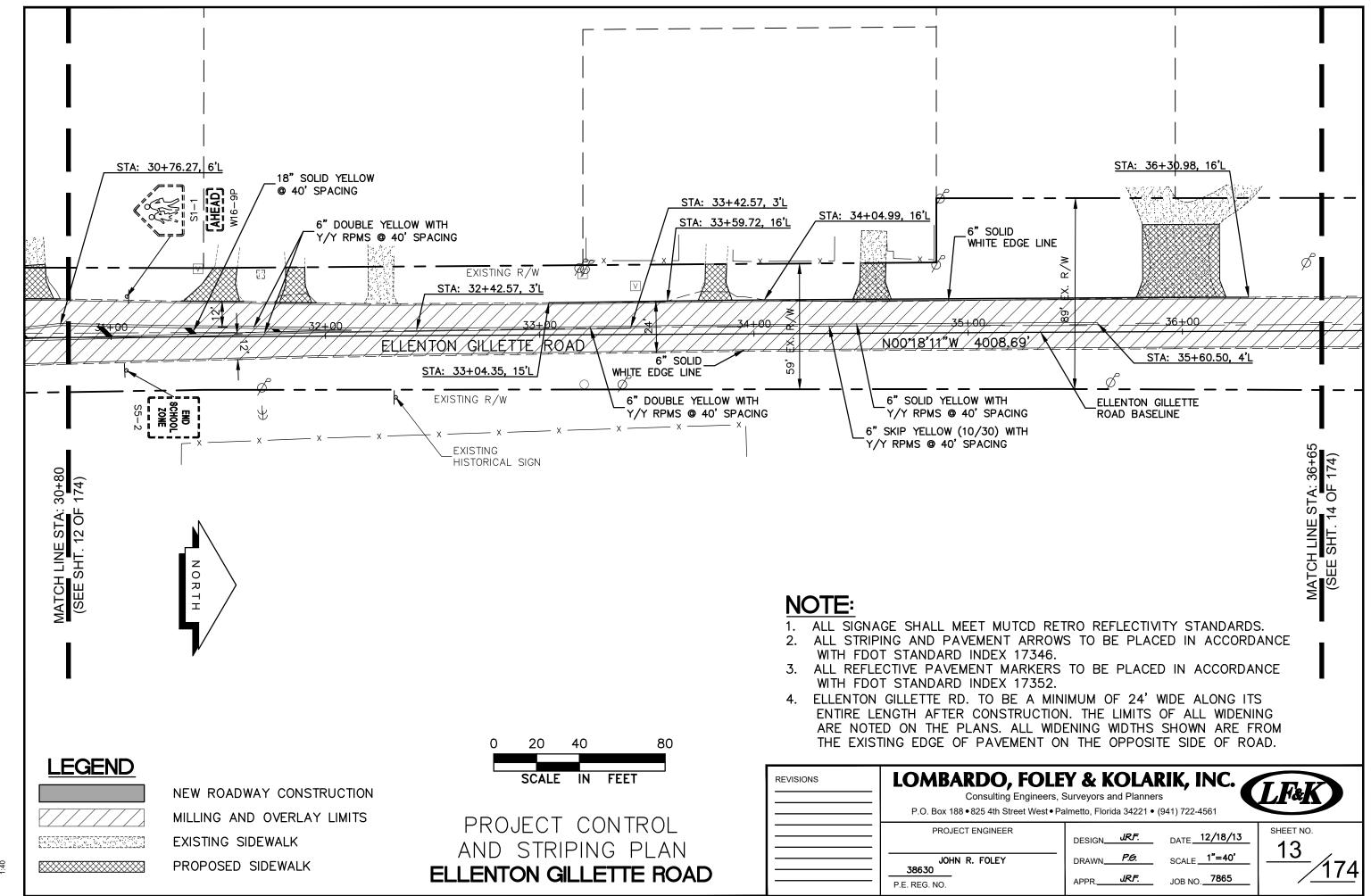
JOB NO. **7865**

P.E. REG. NO.

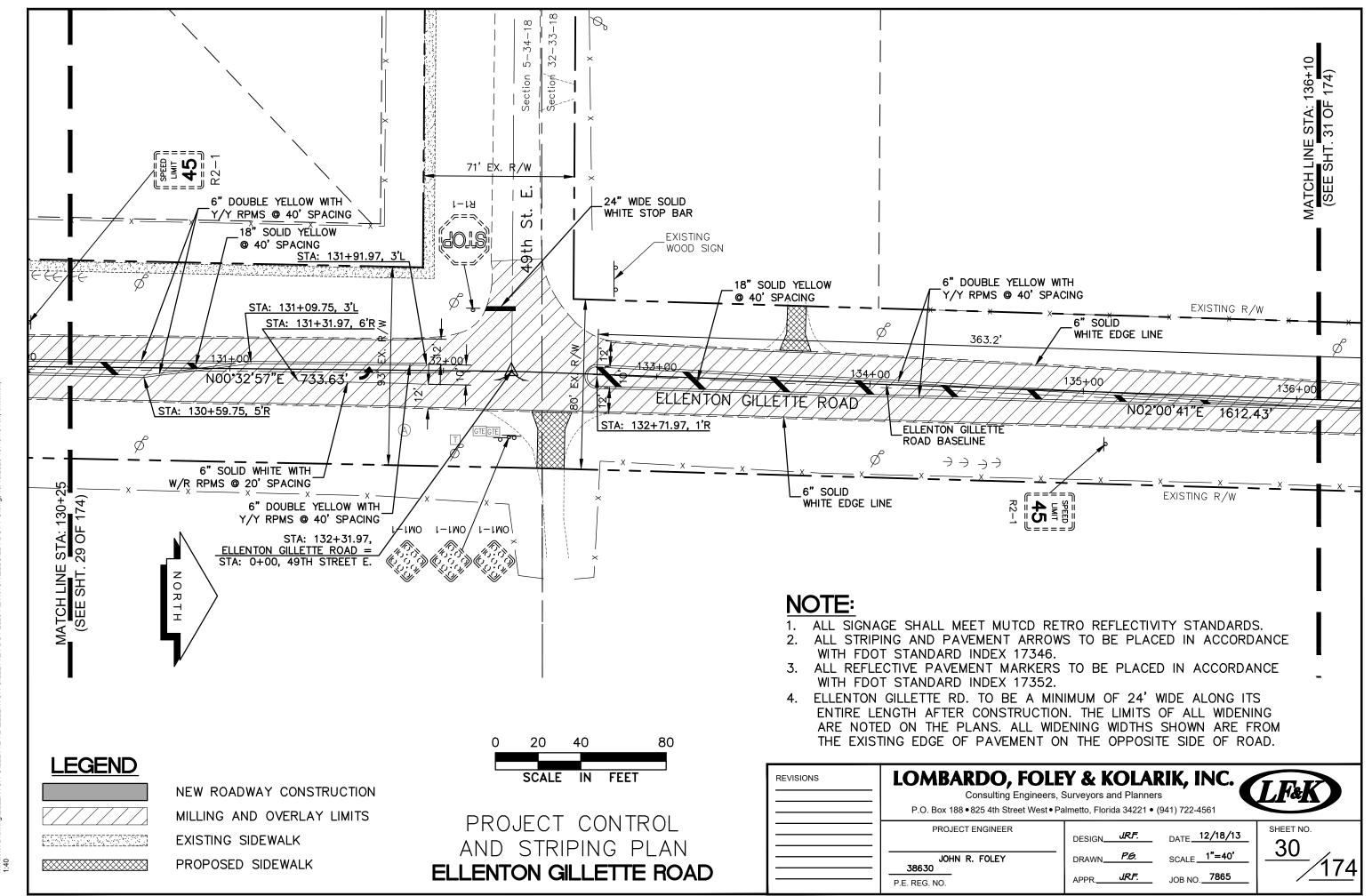


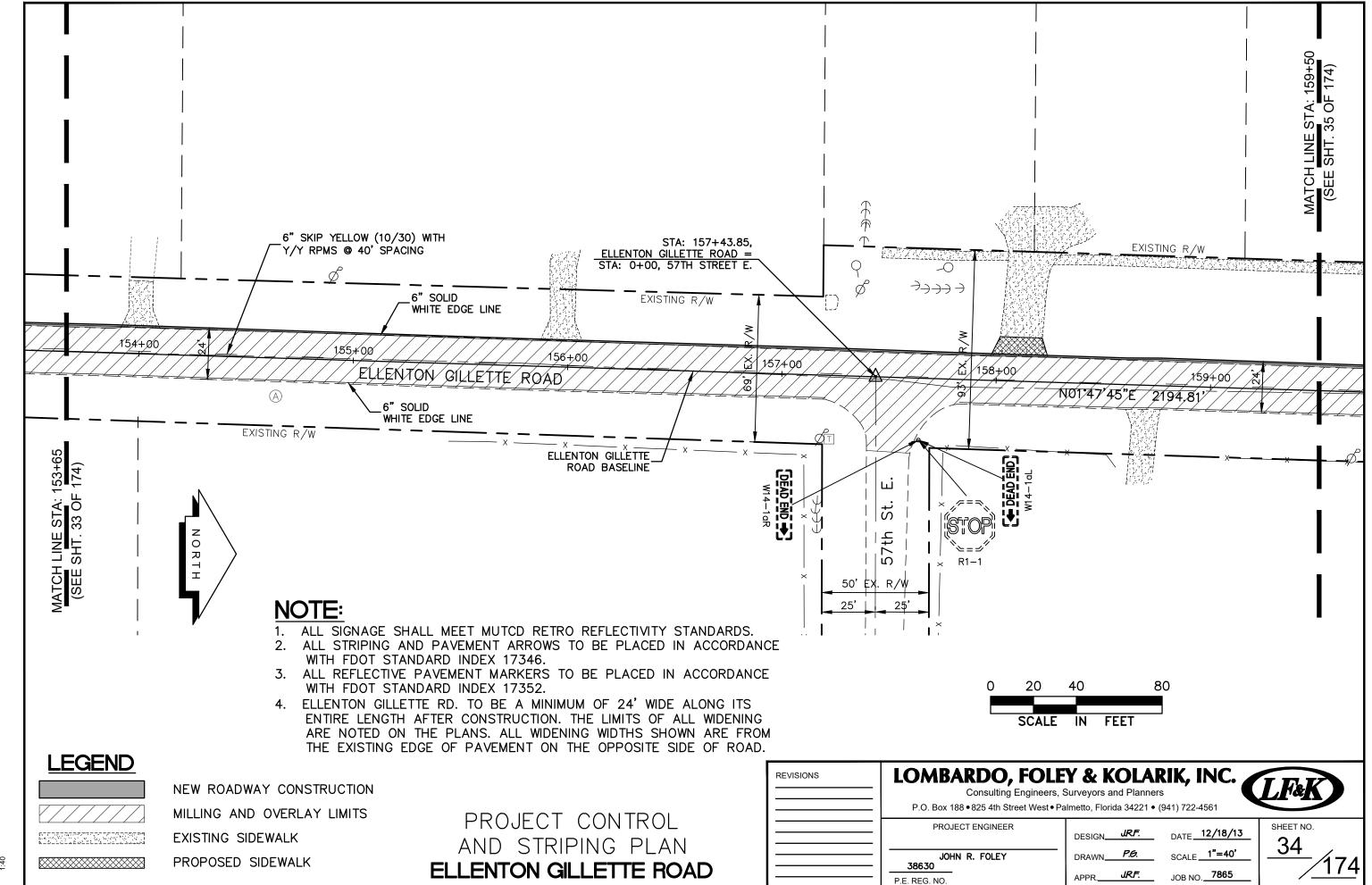


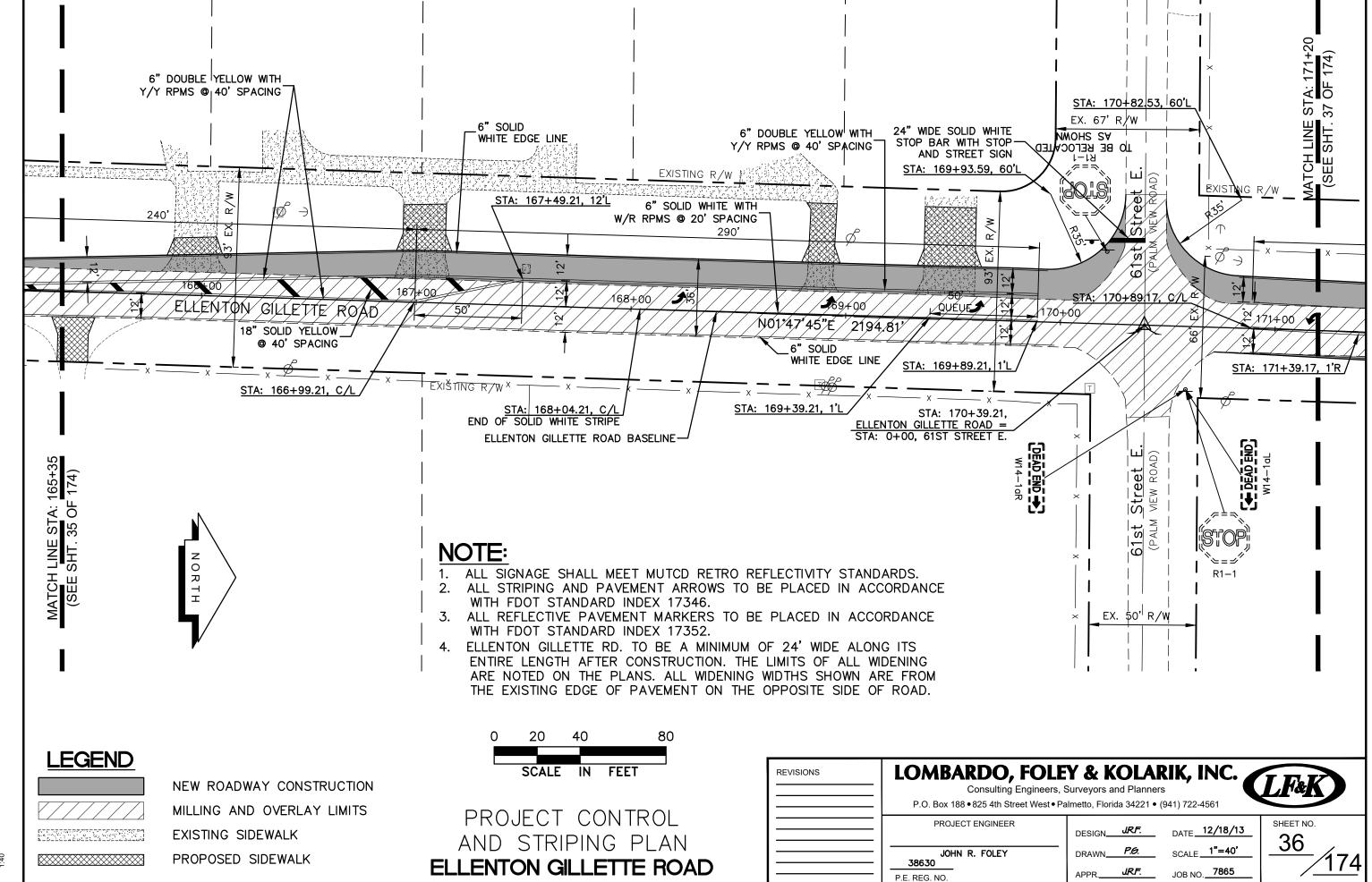




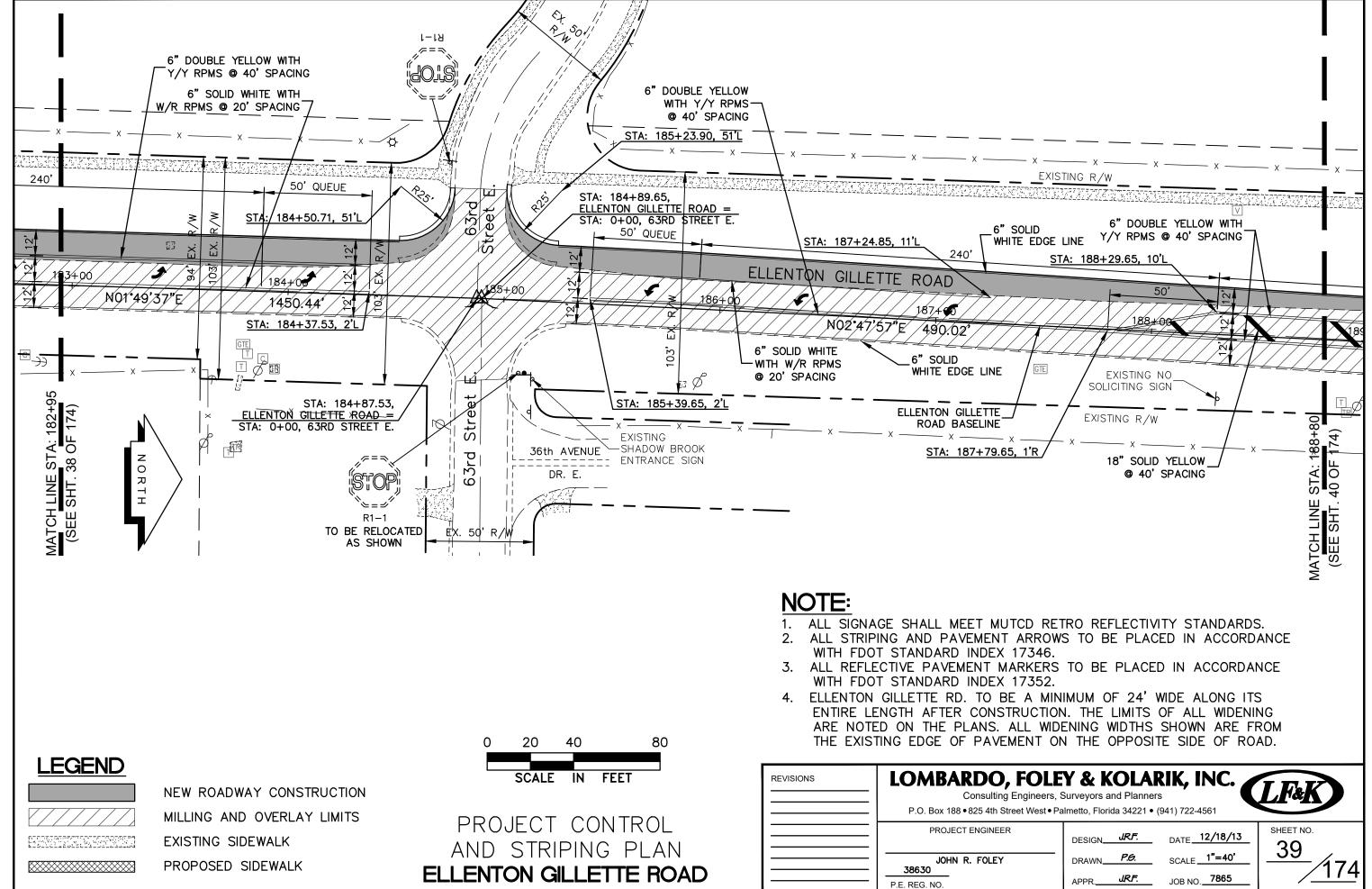
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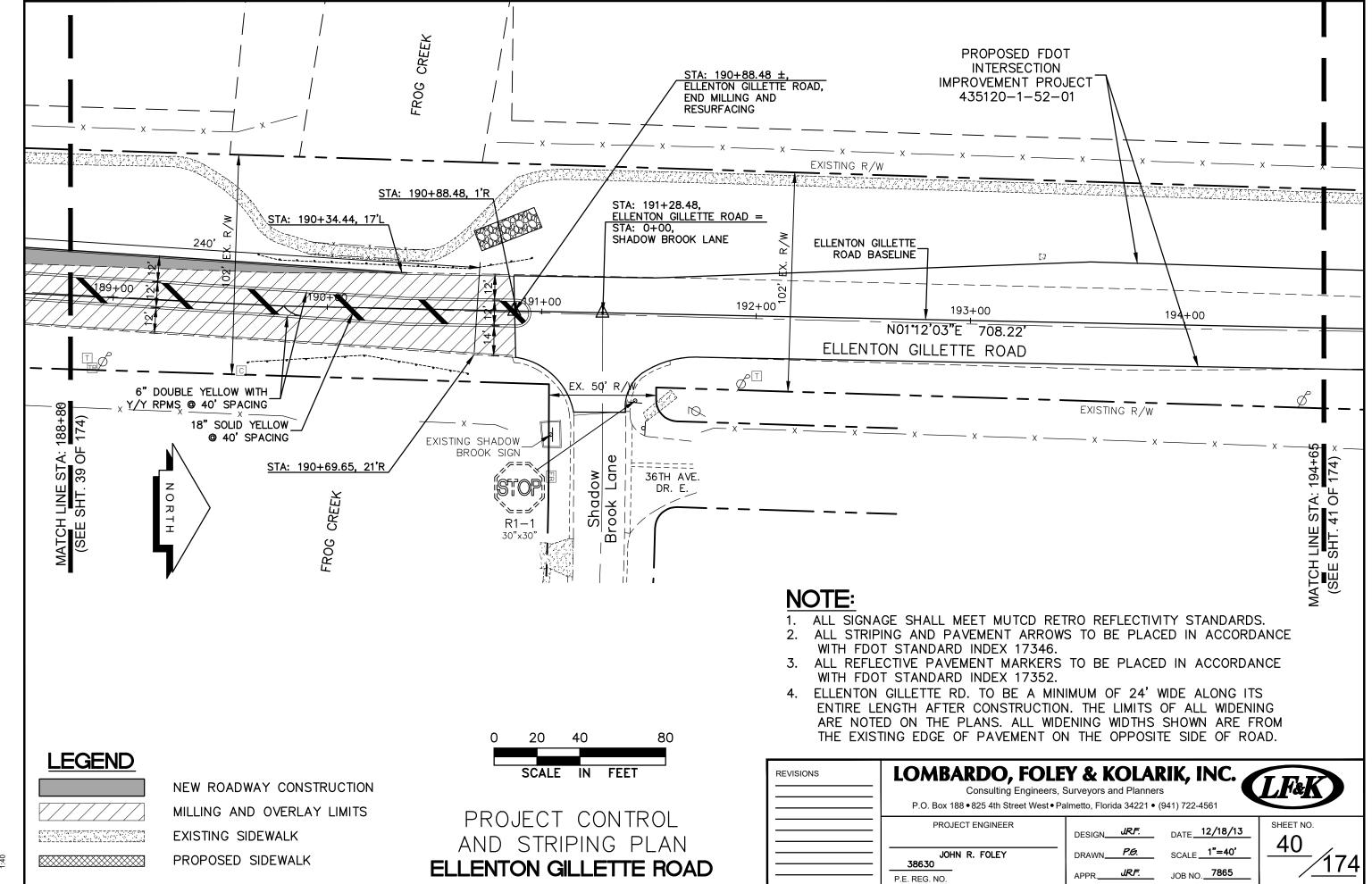




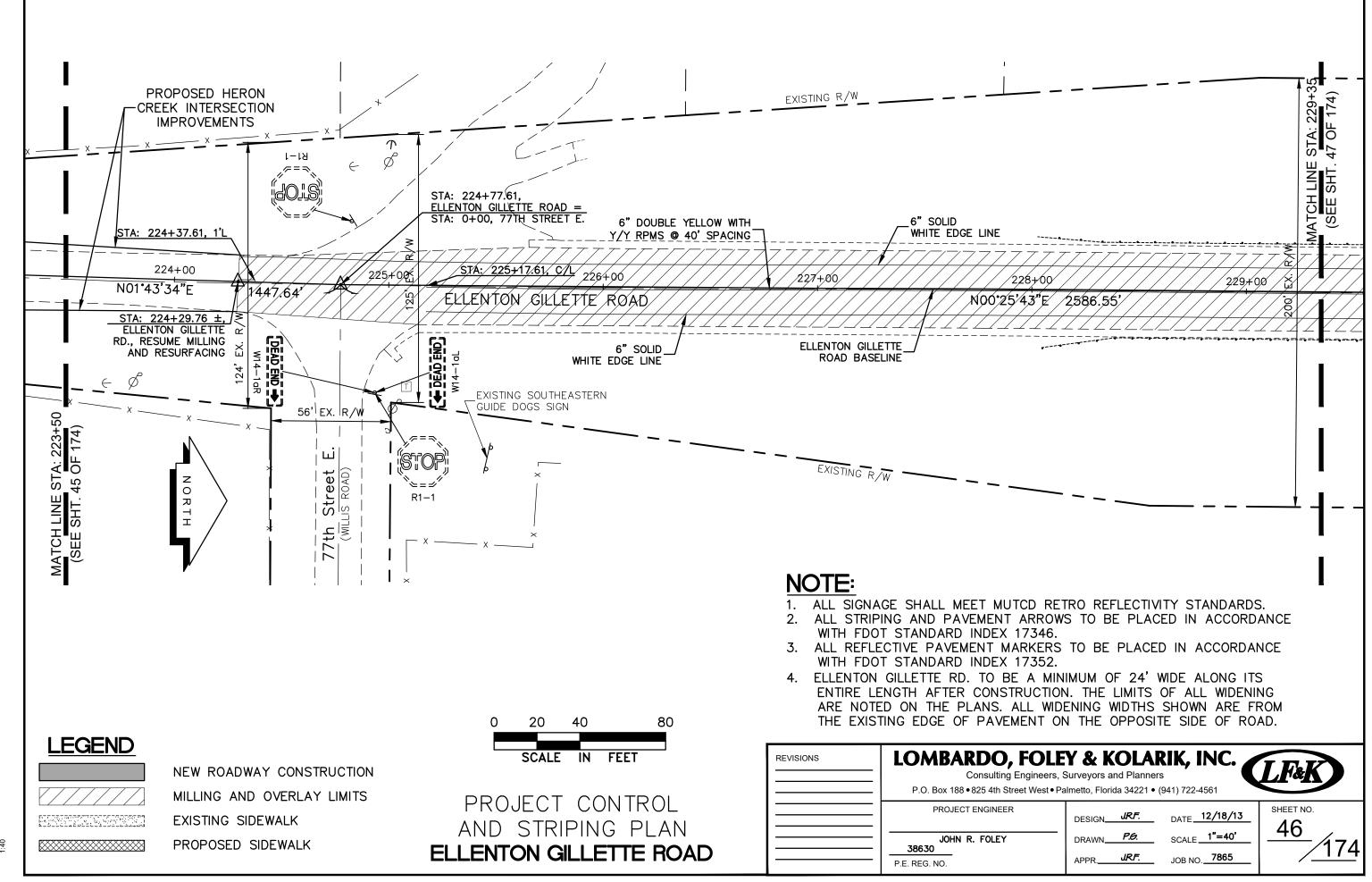




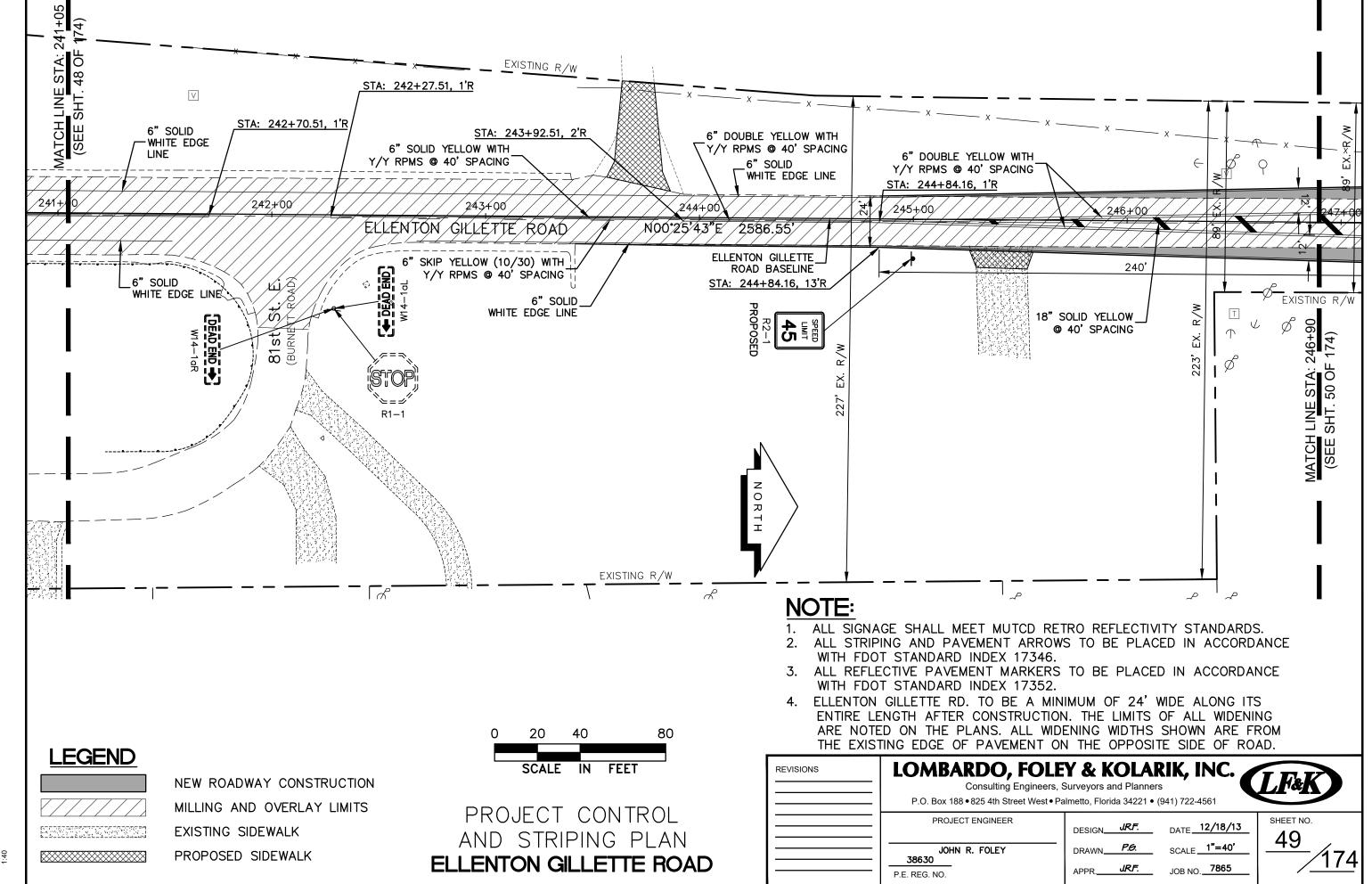


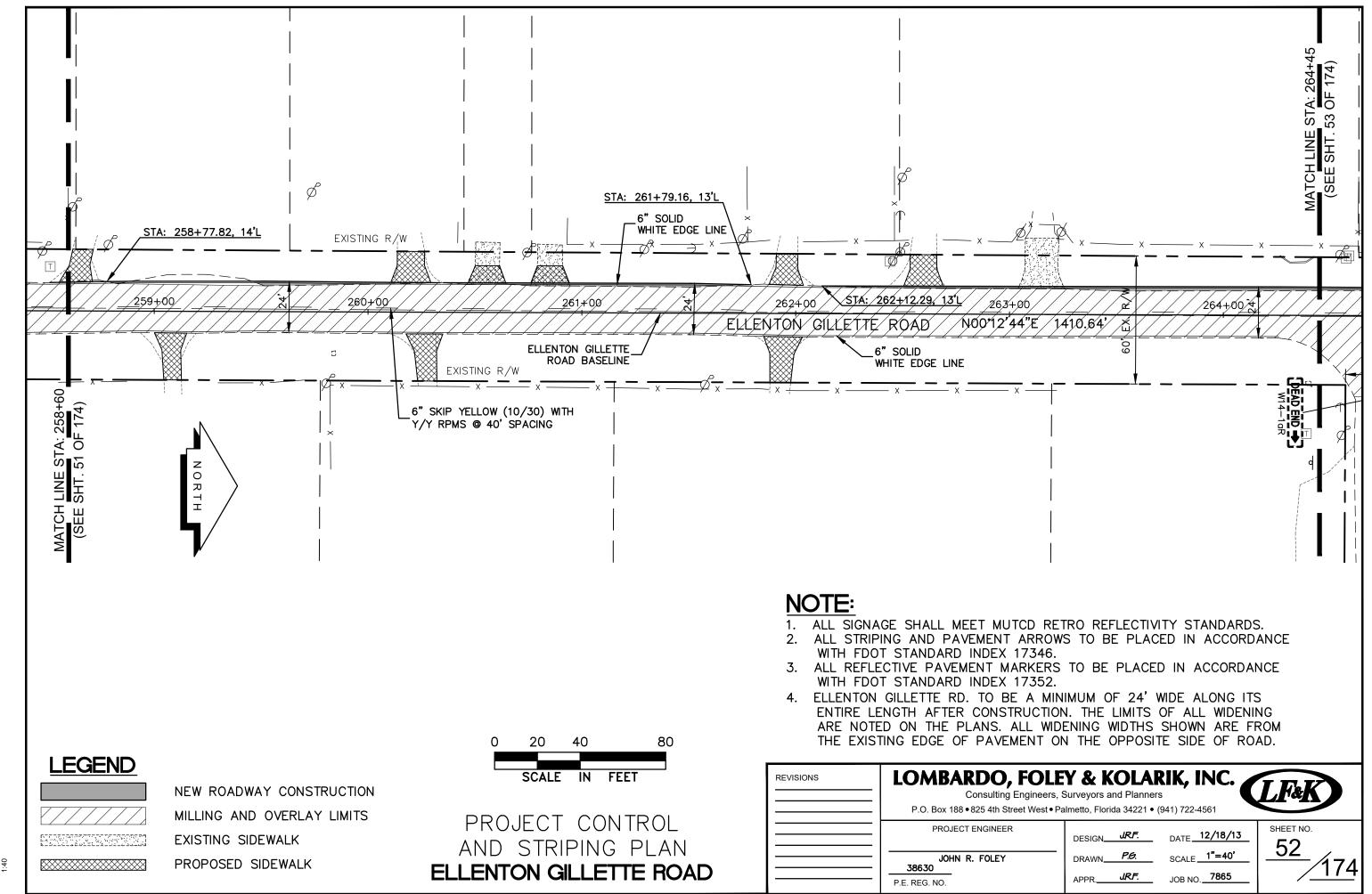


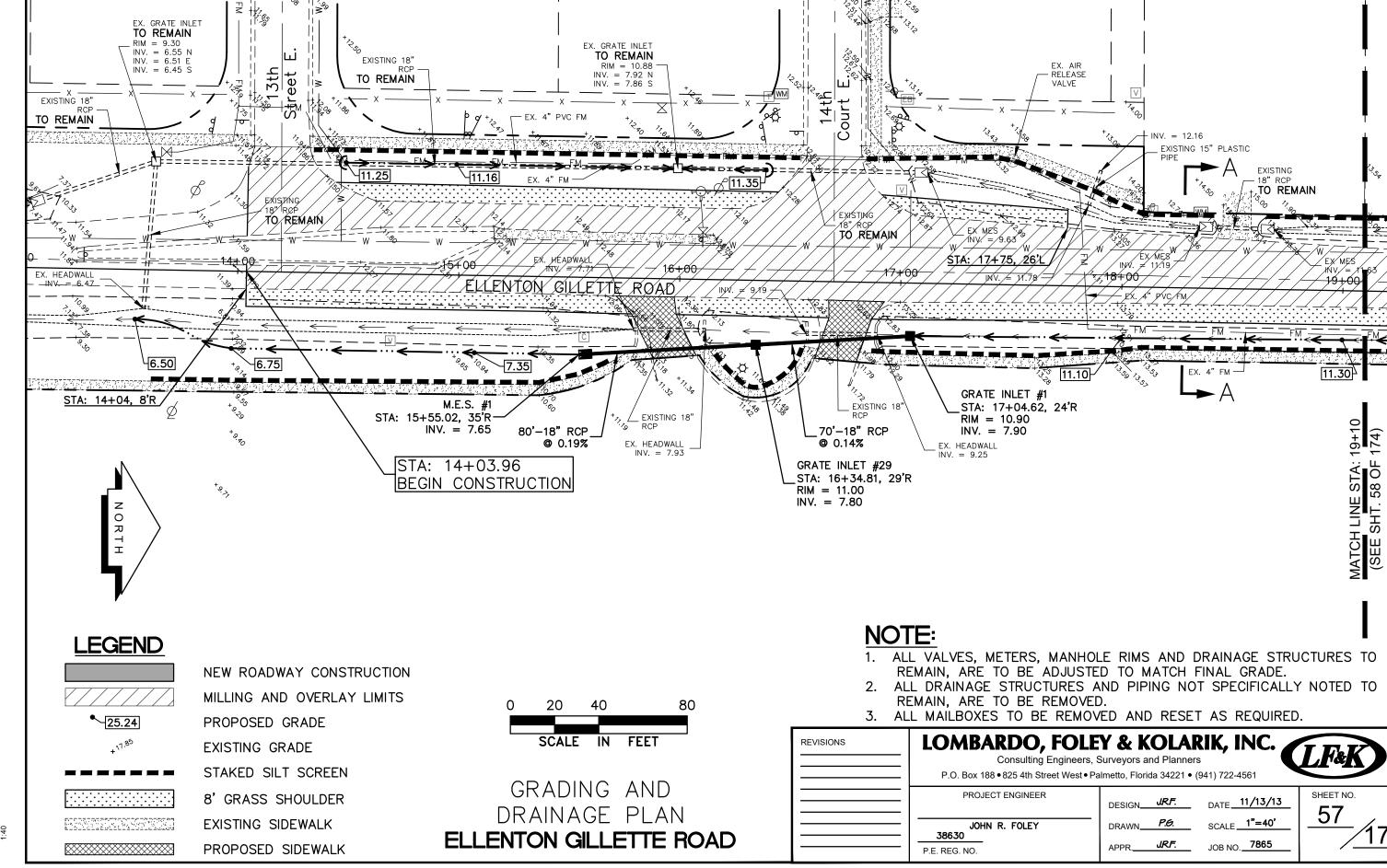
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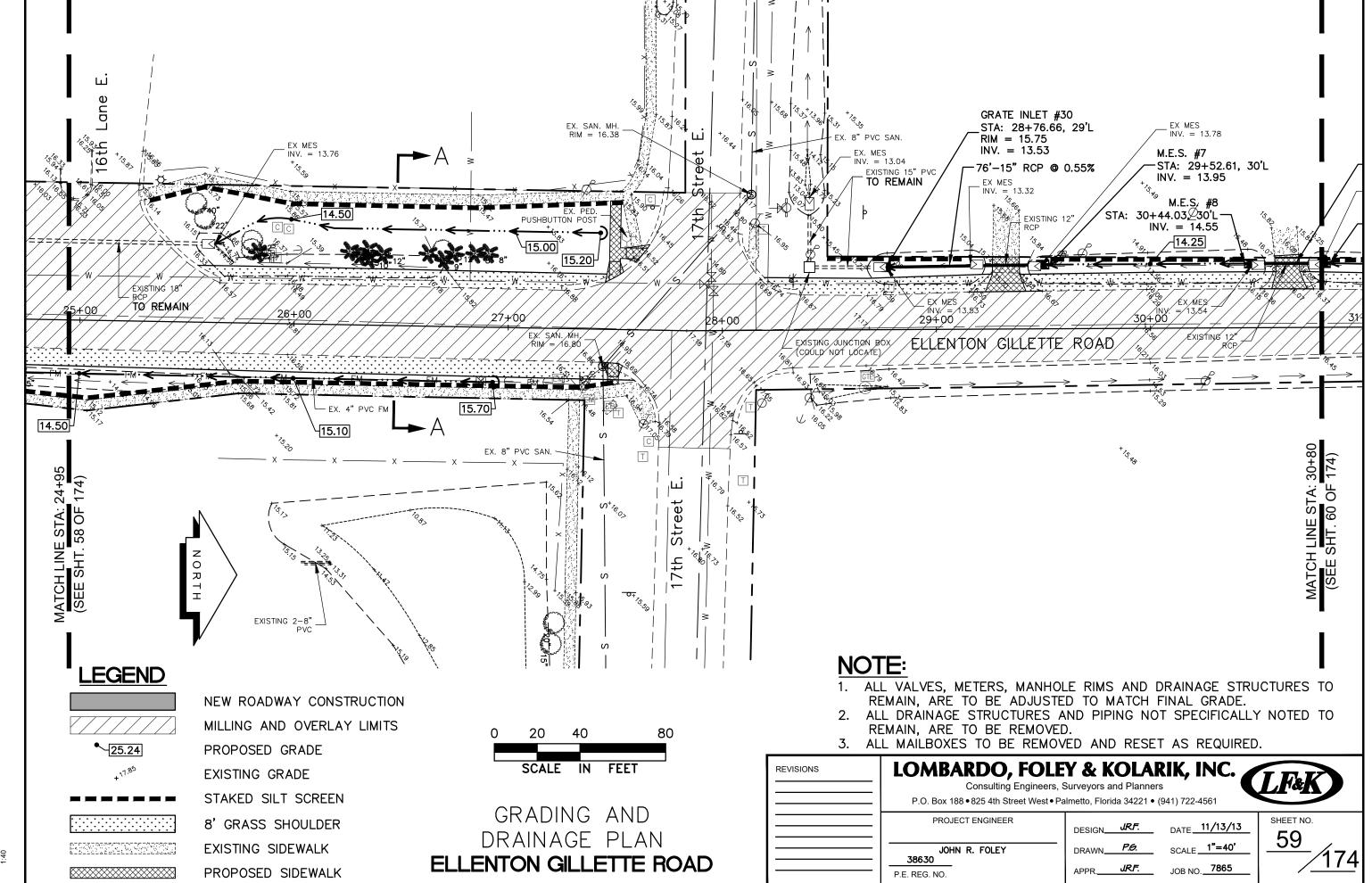


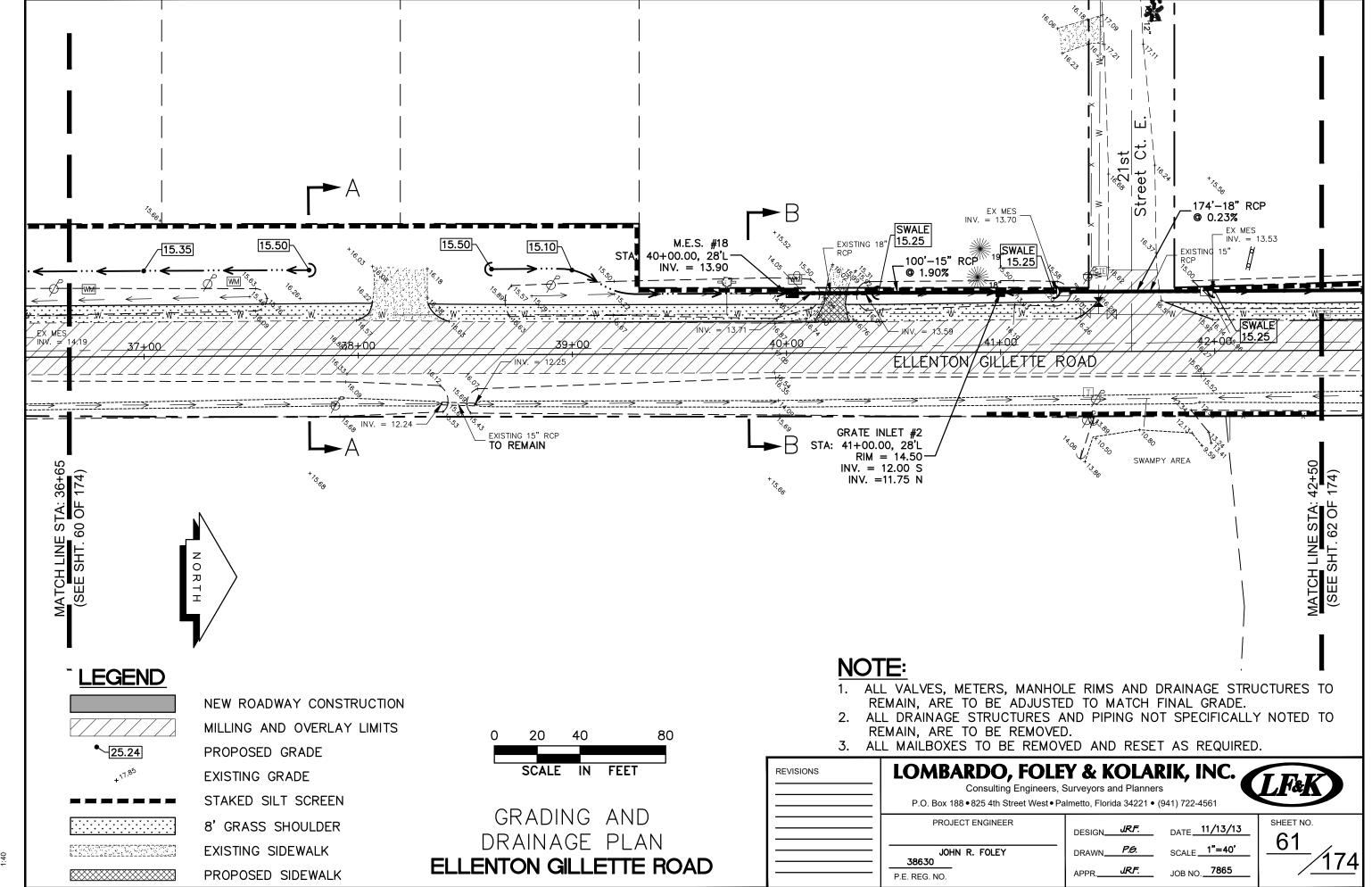
P.E. REG. NO.



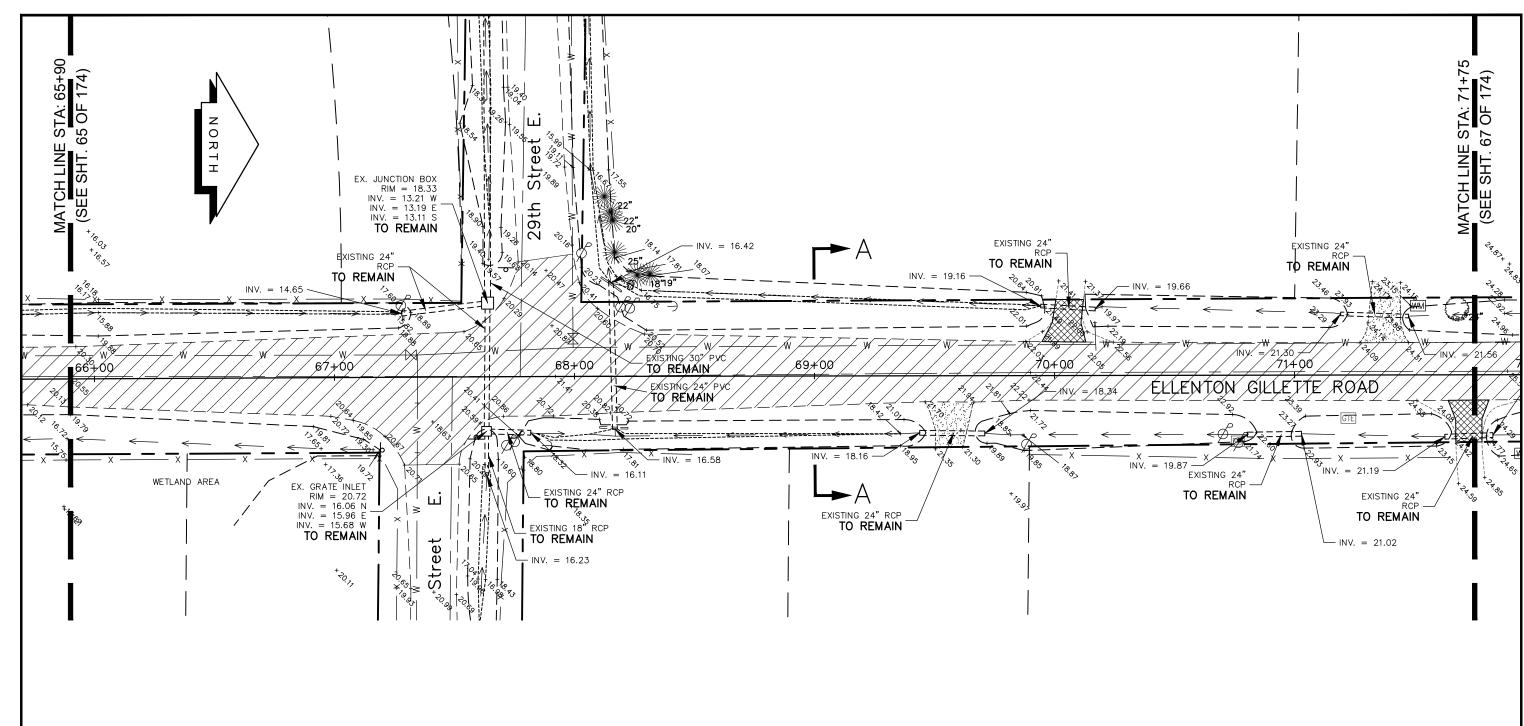




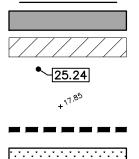








<u>LEGEND</u>



NEW ROADWAY CONSTRUCTION
MILLING AND OVERLAY LIMITS
PROPOSED GRADE
EXISTING GRADE
STAKED SILT SCREEN

8' GRASS SHOULDER EXISTING SIDEWALK PROPOSED SIDEWALK

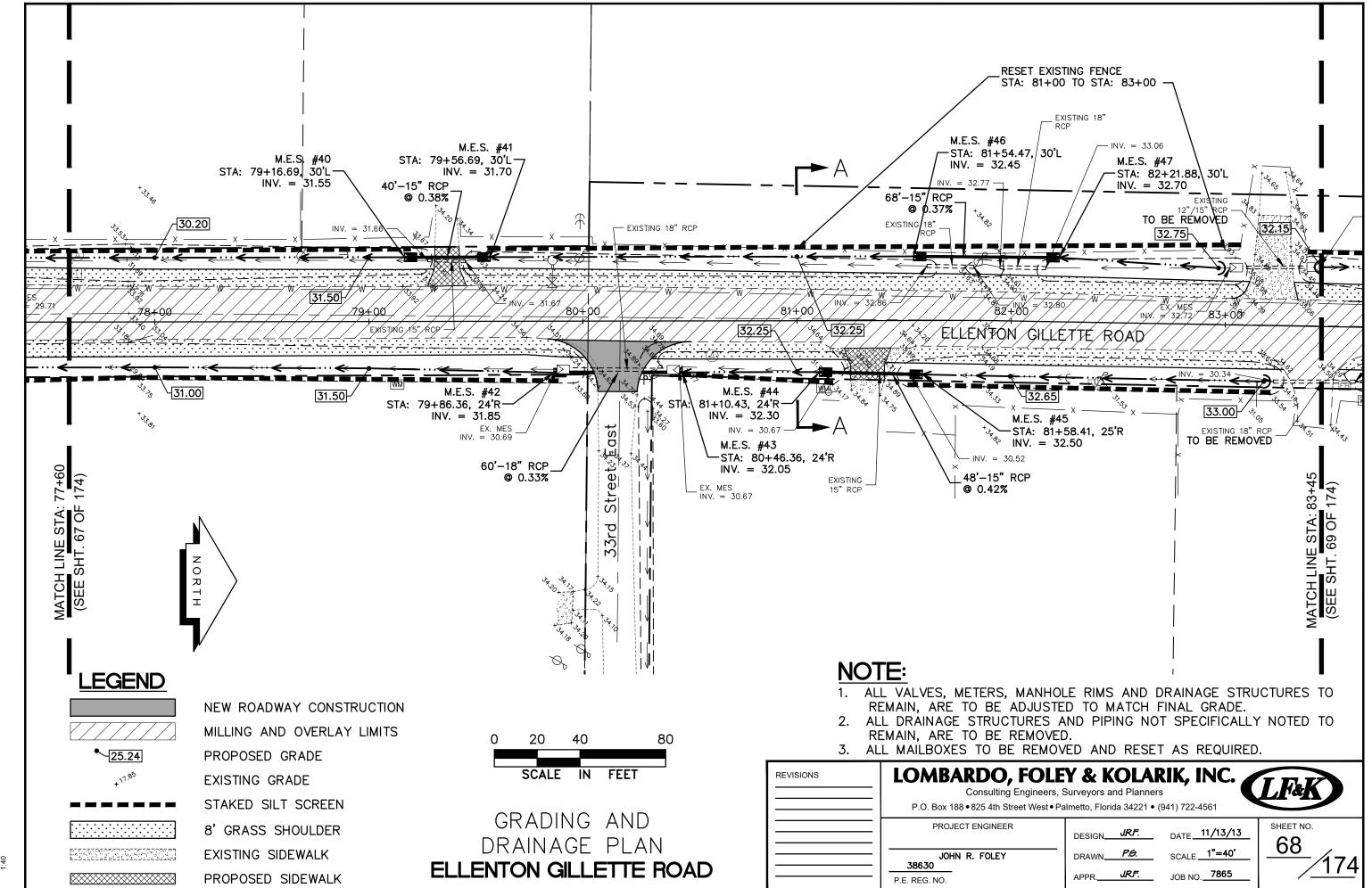


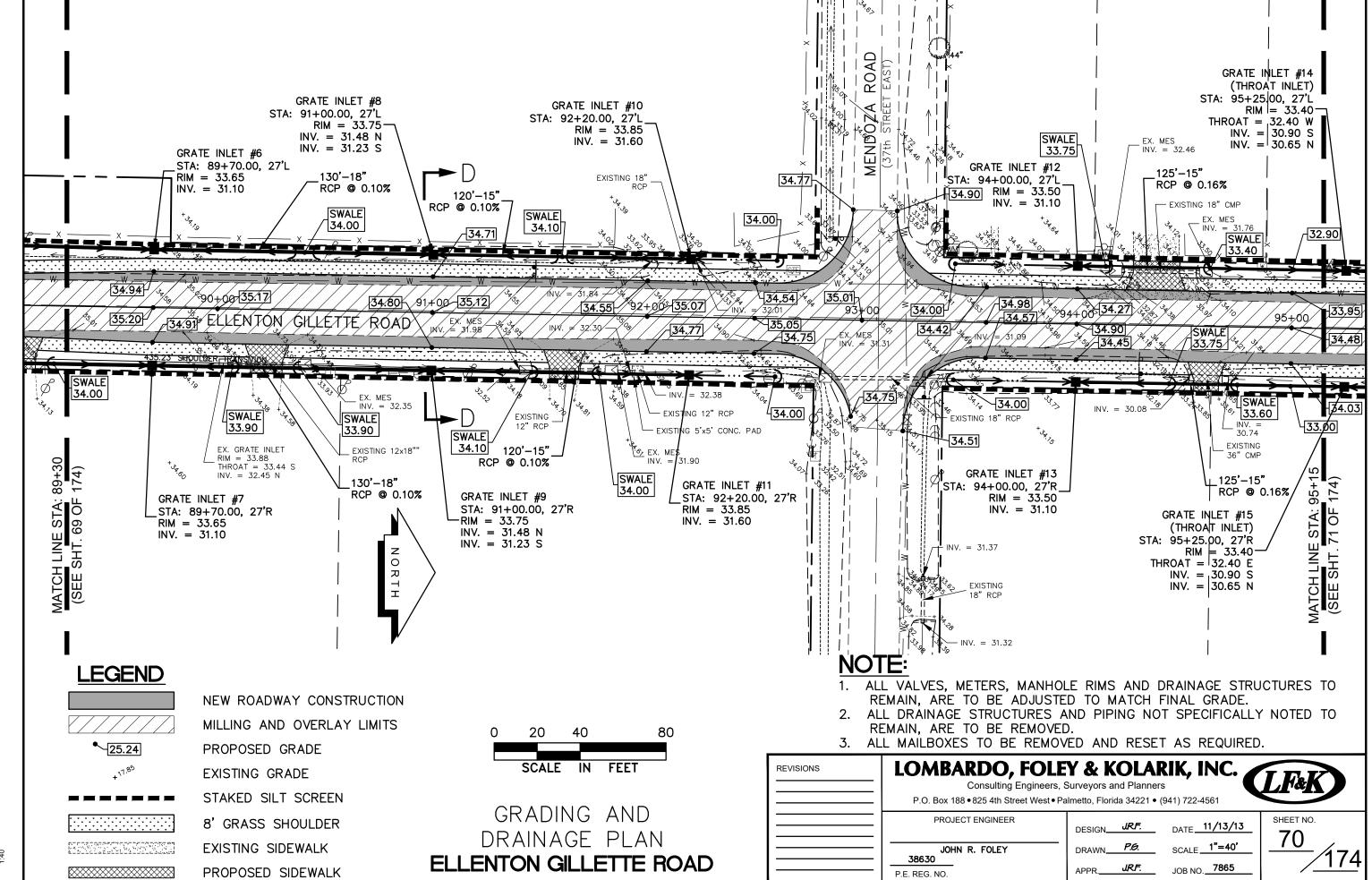
GRADING AND
DRAINAGE PLAN
ELLENTON GILLETTE ROAD

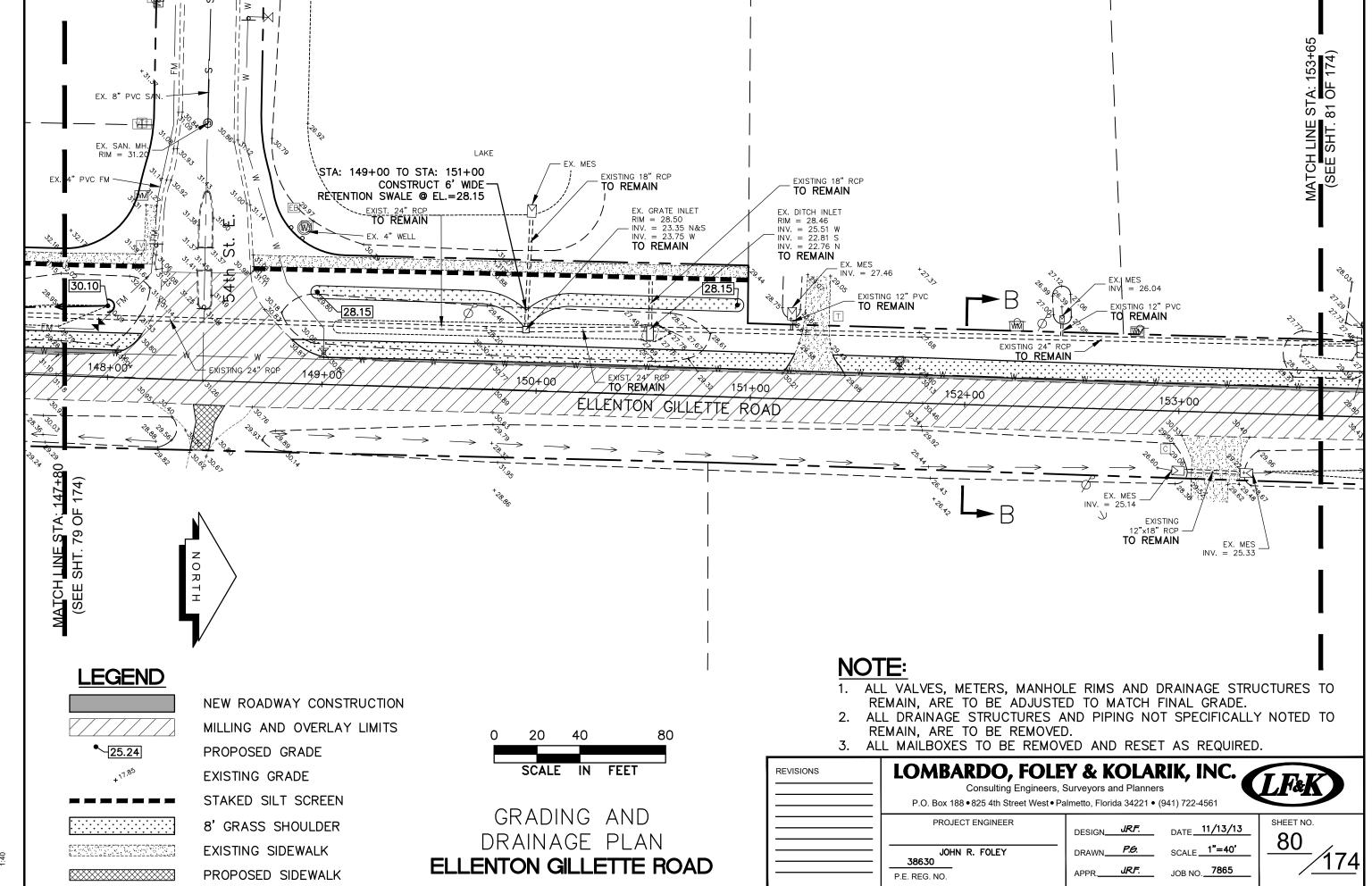
NOTE:

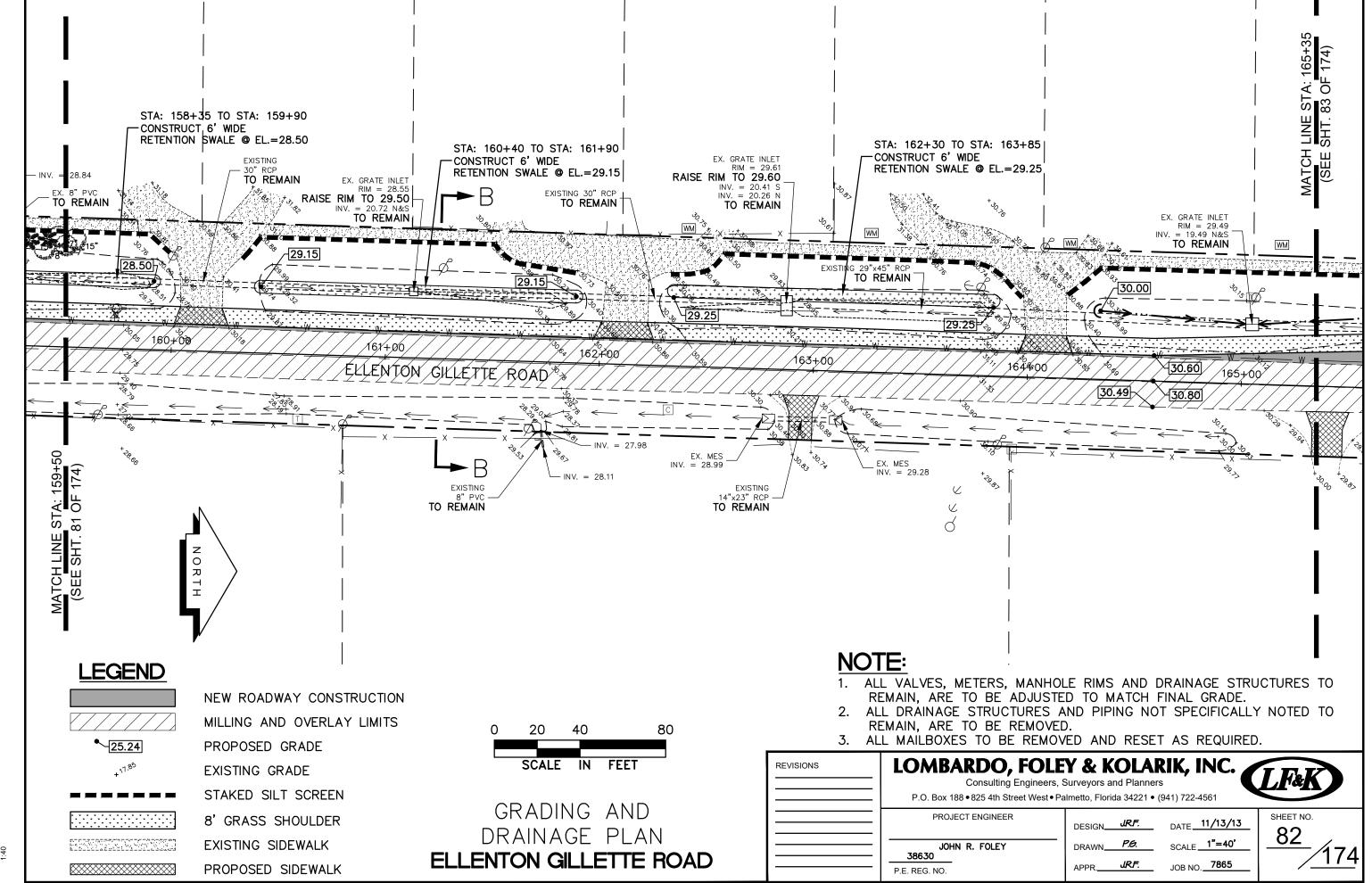
- 1. ALL VALVES, METERS, MANHOLE RIMS AND DRAINAGE STRUCTURES TO REMAIN, ARE TO BE ADJUSTED TO MATCH FINAL GRADE.
- 2. ALL DRAINAGE STRUCTURES AND PIPING NOT SPECIFICALLY NOTED TO REMAIN, ARE TO BE REMOVED.
- 3. ALL MAILBOXES TO BE REMOVED AND RESET AS REQUIRED.

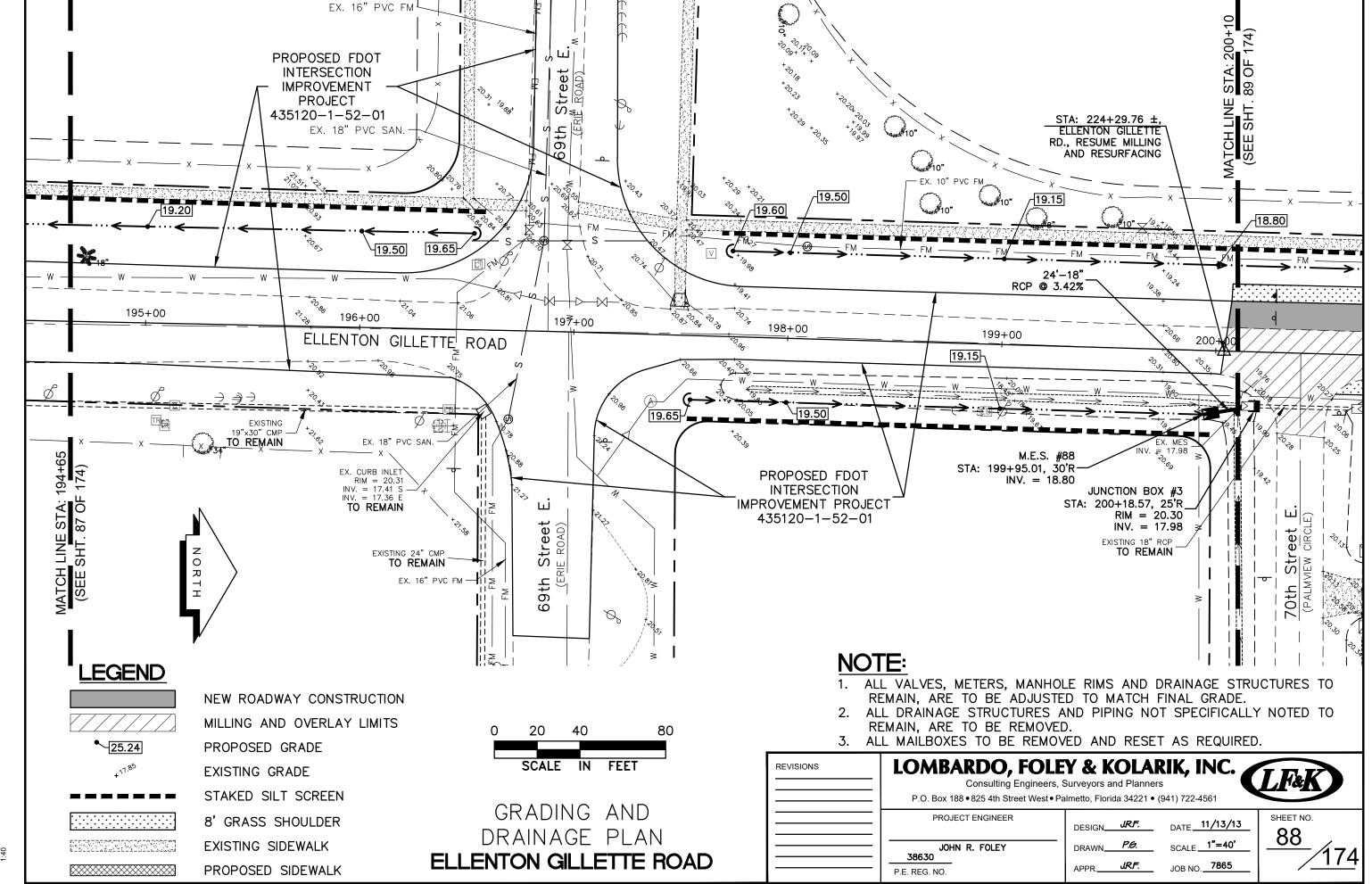
REVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561		
	PROJECT ENGINEER	DESIGN	SHEET NO.
	JOHN R. FOLEY 38630 P.E. REG. NO.	DRAWN <i>P.6.</i> SCALE 1"=40' APPR. <i>JRF</i> . JOB NO. 7865	174

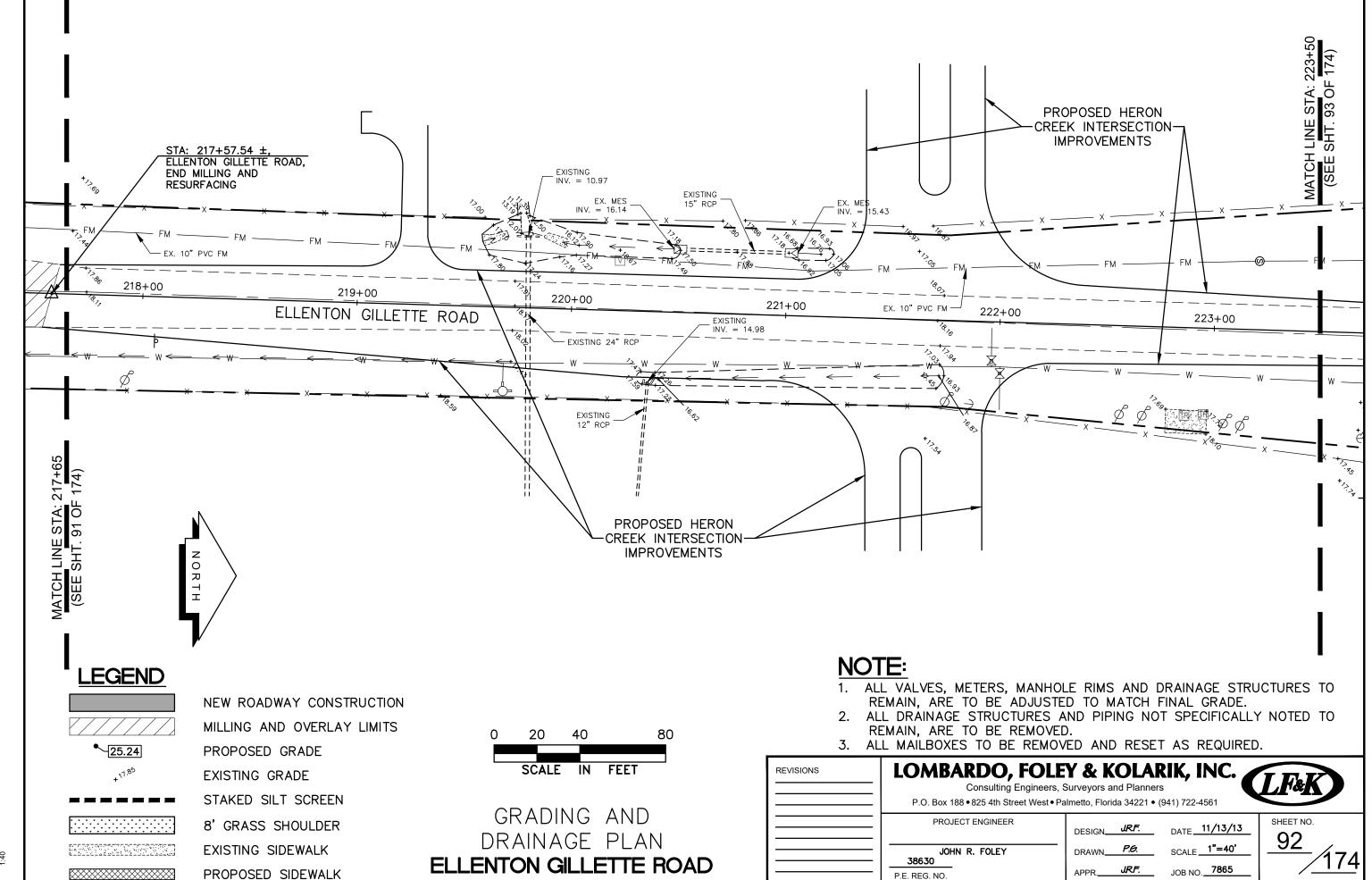


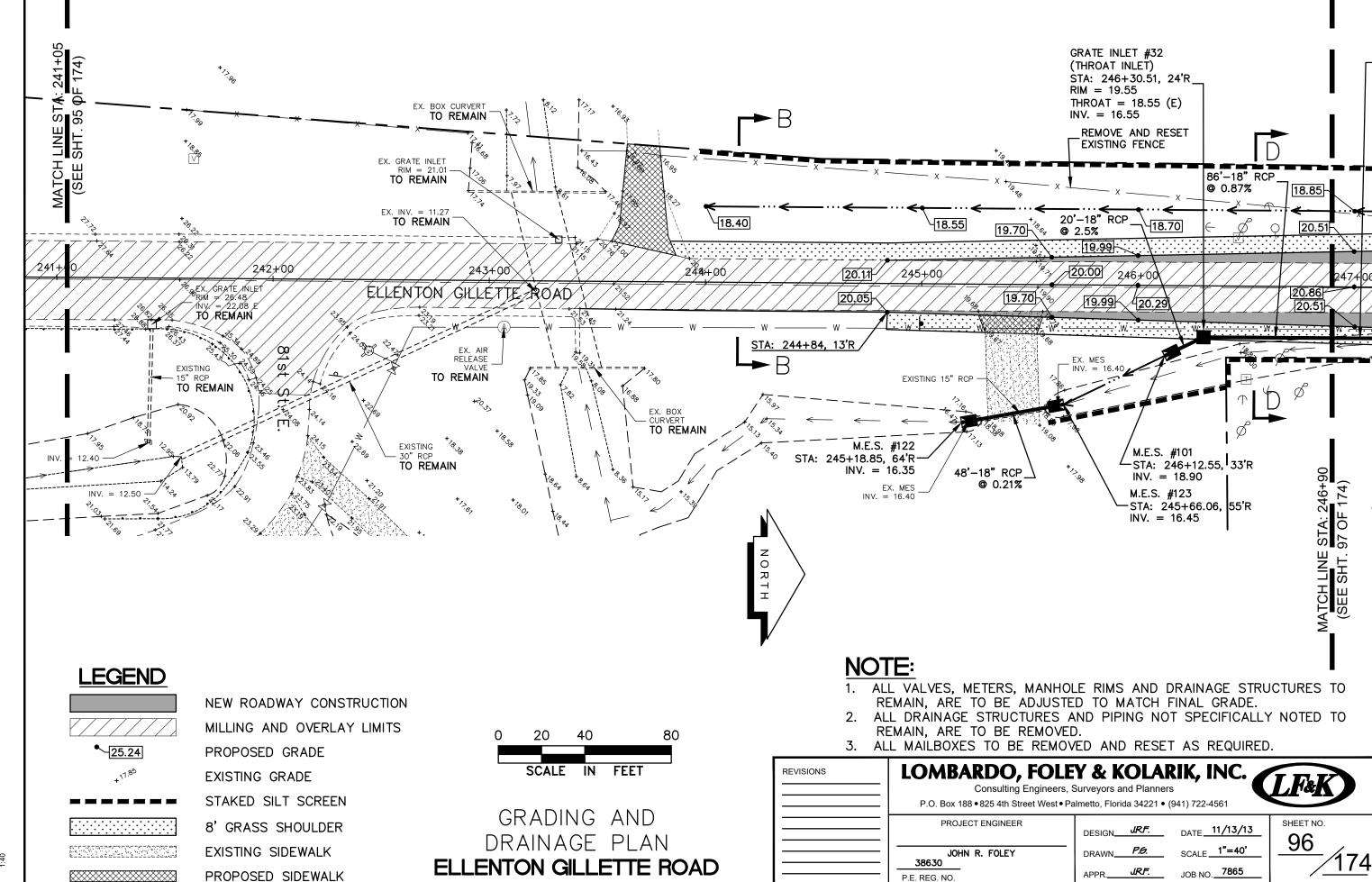


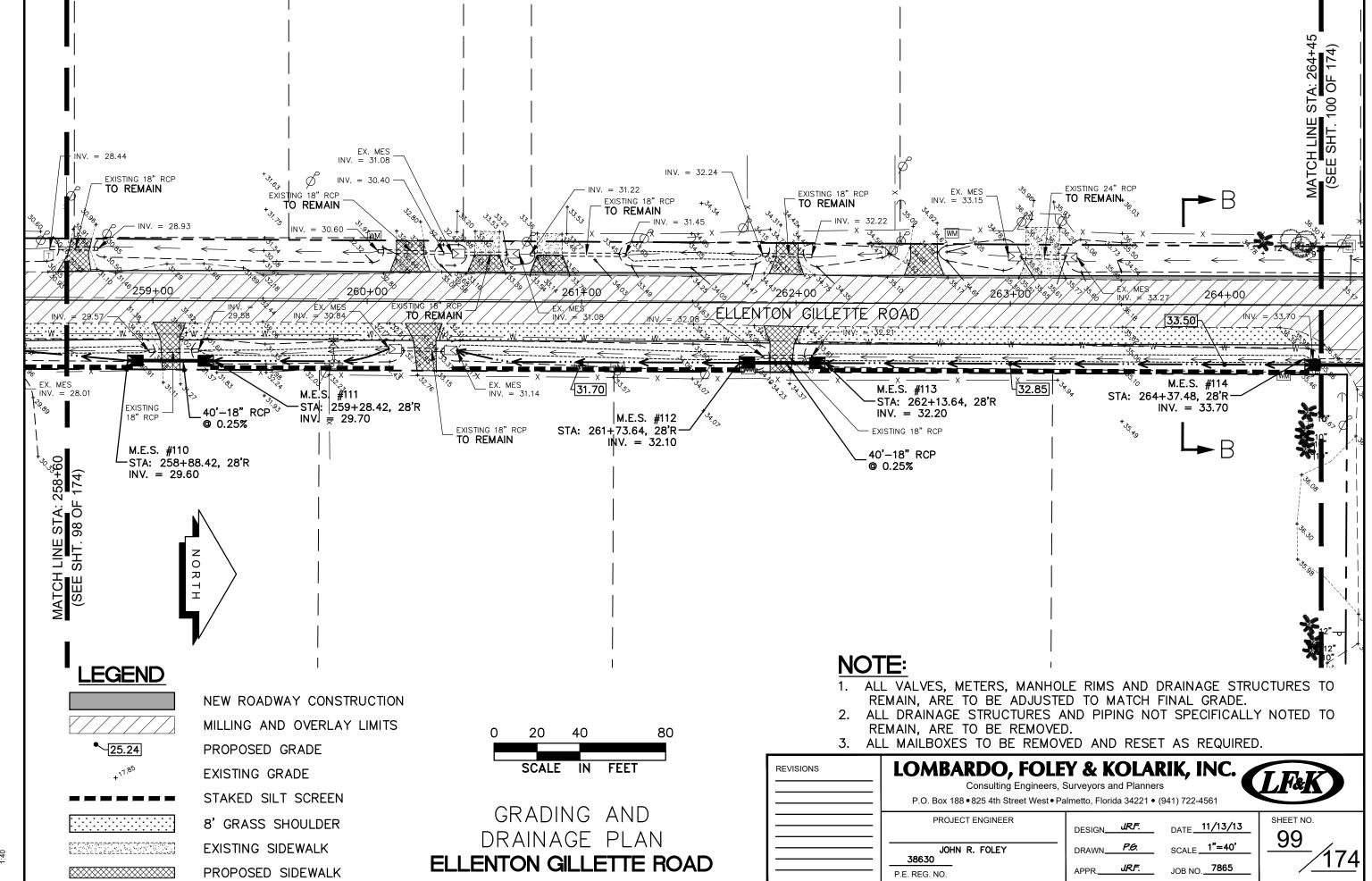


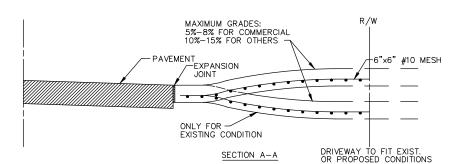


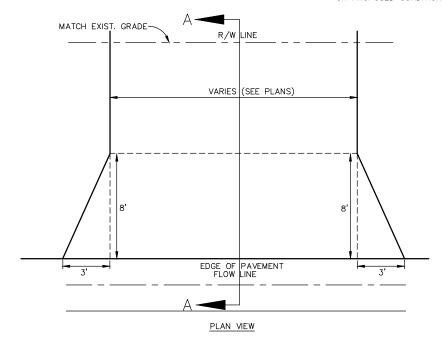






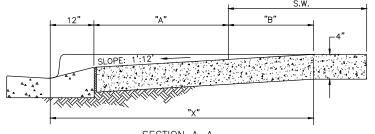






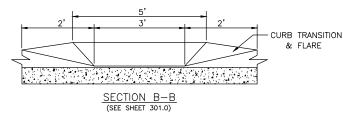
- (A) CONSTRUCT WITH 6" REINFORCED CONCRETE, $6"x6"\ \#10$ WIRE MESH FROM EDGE OF PAVEMENT TO R/W LINE.
- (B) EXPANSION JOINT 0.50" PREFORMED JOINT FILLER OR APPROVED ALTERNATE, DRIVES WIDER THAN 12" (BEYOND FLARE) PLACE JOINT ON 10' CENTER.

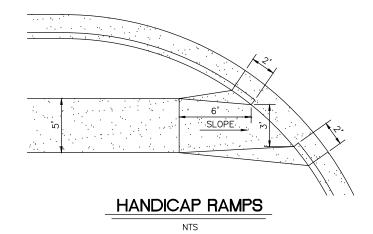
DRIVEWAYS

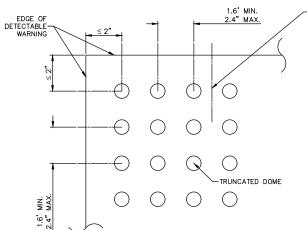


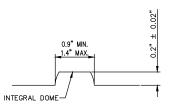
SEC	TION	A-A
(SEE	SHEET	301.0)

S.W.= SIDEWALK	"A"	S.W.+ A + 10"	"X"	"B"
5'——	<u> </u>	5.8'	— 5.8 ' —	——5'
6'	0	6.8'	6.8'	6'
7'——	<u> </u>	7.8 '	— 7.3 ' —	——6.5 '
8'	0	8.8'	7.3'	6.5
5'	— 2 ' —	7.8 '	— 7.8' <u> </u>	5'
5'	2.5'	8.3'	8.1'	4.8'
5'——	— 3 ' —	8.8'	— 8.2 ' —	—— 4.4'
5'	3.5'	9.3'	8.4	4.1'
5'——	— 4'—	9.8'	— 8.6 ' —	—— 3.8'
5'	4.5'	10.3'	8.7'	3.4'
5'	— 5 ' —	10.8 '	——9.1'——	—— 3.1'









THE TOP WIDTH OF THE DOME SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER.

TRUNCATED DOME

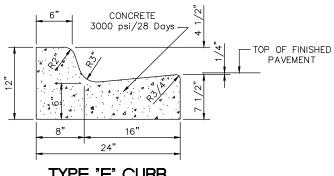
BASE-TO-BASE SPACING SHALL BE 0.65" MINIMUM BETWEEN DOMES.

PLAN VIEW

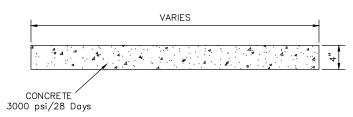
ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" (610mm) FROM THE BACK OF CURB.

CURB RAMP DETECTABLE WARNING DETAIL

NTS (REFERENCE FDOT INDEX 304)



TYPE "F" CURB



TYPE "A" SIDEWALK DETAIL

GRADING AND DRAINAGE DETAILS **ELLENTON GILLETTE ROAD**

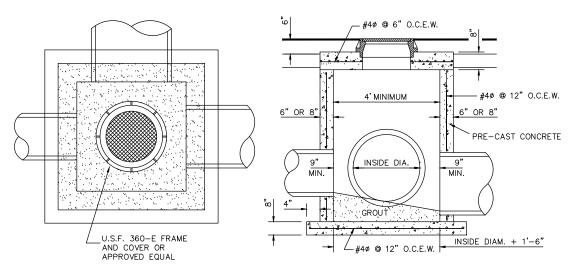
REVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561					
	PROJECT ENGINEER	DESIGN JRF.	DATE 03/03/1			
	JOHN R. FOLEY 38630	DRAWN	SCALE NONE			

P.E. REQ. NO.

4221 • (941) 722-4561 SHEET NO. DATE 03/03/14 SCALE_NONE

JOB NO. 7865

104



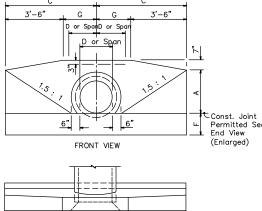
JUNCTION BOX (TRAFFIC BEARING)

ROUND CONCRETE PIPE

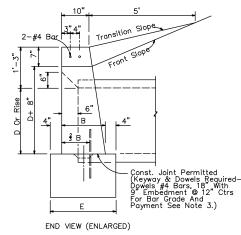
	О	Dimensions							
		Α	В	С	Е	F	G	S	
Ī	15"	1'-11"	1'-2"	4'-0"	1'-10"	1'-2"	0'-6"	2'-7"	
[18"	2'-2"	1'-3"	4'-6"	1'-11"	1'-3"	1'-0"	2'-10"	
	21"	21" 2'-5" 1'-4"		5'-0"	2'-0"	1'-4" 1'-6"		3'-2"	
	24"	2'-8"	1'-4"	5'-6"	2'-0"	1'-4"	2'-0"	3'-5"	
	27"	2'-11"	1'-5"	6'-0"	2'-1"	1'-5"	2'-6"	3'-10"	
	30"	3'-2"	1'-6"	6'-6"	2'-2"	1'-6"	3'-0"	4'-3"	
	36"	3'-8"	1'-8"	7'-6"	2'-4"	1'-8"	4'-0"	5'-1"	
	42"	4'-2"	1'-10"	8'-6"	2'-6"	2'-0"	5'-0"	6'-0"	
	48"	4'-8"	2'-1"	9'-6"	2'-9"	2'-0"	6'-0"	6'-9"	
Ī	54"	5'-2"	2'-6"	10'-6"	3'-2"	2'-3"	7'-0"	7'-8"	
[

CONCRETE ELLIPTICAL PIPE

		Dimensions							
Rise	Span	А	В	С	Е	F	G	S	
12"	18"	1'-8"	1'-2"	3'-9"	1'-10"	1'-2"	0'-3"	2'-10"	
14"	23"	1'-10"	1'-3"	4'-21/2"	1'-11"	1'-3"	8½"	3'-5"	
19"	30"	2'-3"	1'-4"	5'-1½"	2'-0"	1'-4"	1'-7½"	4'-2"	
24"	38"	2'-8"	1'-5"	6'-3"	2'-1"	1'-5"	2'-9"	5'-2"	
29"	45"	3'-1"	1'-6"	7'-0"	2'-2"	1'-6"	3'-6"	6'-0"	
34"	53"	3'-6"	1'-7"	7'-11½"	2'-3"	1'-7"	4'-5½"	7'-1"	
38"	60"	3'-10"	1'-8"	8'-9"	2'-4"	1'-8"	5'-3"	7'-11"	
43"	68"	4'-3"	1'-10"	9'-8½"	2'-6"	1'-10"	6'-21/2"	8'-10"	
48"	76"	4'-8"	2'-1"	10'-8"	2'-9"	2'-0"	7'-2"	9'-9"	
53"	83"	5'-1"	2'-6"	11'-7"	3'-2"	2'-6"	8'-1"	10'-7"	
58"	91"	5'-6"	2'-10"	12'-6½"	3'-6"	2'-10"	9'-0½"	11'-4"	

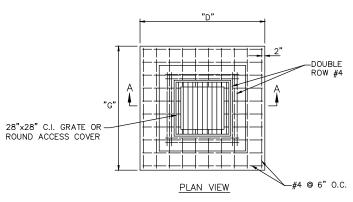


TOP VIEW



TYPICAL HEADWALL DETAIL

GRADING AND DRAINAGE DETAILS **ELLENTON GILLETTE ROAD**



- NOTE: DIMENSIONS "D" & "G" PER SECTION 202.0

 A) ALTERNATE C.I. GRATES, 18"X 24", 24"X 24", 28"X 36" OR ACCESS COVER (202.6).

 B) 8" TRAFFIC BEARING LID W/ REINFORCING C.I. RING & DOUBLE ROW OF #4 REBAR.

 C) FOLLOWING MATERIALS ARE SPECIFIED IN FLORIDA D.O.T. SPEC'S., 2000. SEC 346 CONCRETE, SEC 962-8 IRON CASTING, SEC 931-1 REINFORCED STEEL.
- D) FILL BLOCKS WITH 3,000 P.S.I. CONCRETE (EACH CELL), USE #4 ROD IN EACH BLOCK, 16" O/C. E) USE #4 ROD ON 6" CENTERS BOTH WAYS ON LID. (SEE 202.3 E)
- F) SEE SHEET # 202.0 GENERAL NOTES AND DIMENSIONS INDEX, ALSO SHEET 202.1 TYP. CONC. BOX. G) INVERT TO BE GROUTED (SEE 202.1).
- H) PRECAST BOXES AS SPECIFIED IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS ARE AN ACCEPTABLE ALTERNATIVE AS APPROVED BY THE TRANSPORTATION DIRECTOR OR HIS DESIGNEE.

 I) ANGLE BRACKETS SHOWN ON 202.1 NOT REQUIRED.

GRATE INLET

6" OR 8"

6" OR 8"

8" 2"1

-#4 @ 6" O.C.

4' MINIMUM

1/2"-||-

8" :: 2"1 OPEN THROAT

1 ±4 @ 6" 0.C.

INSIDE DIA.

JRF.

JOB NO. 7865

#4ø @ 12" O.C.E.W.

PRE-CAST CONCRETE

INSIDE DIAM. + 1'-6"

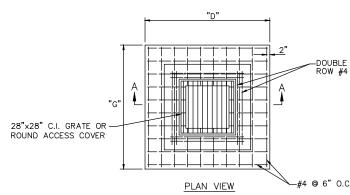
- #4ø @ 12" O.C.E.W.

PRE-CAST CONCRETE

INSIDE DIAM. + 1'-6"

_6" OR 8"

6" <u>OR 8"</u>



- NOTE: DIMENSIONS "D" & "G" PER SECTION 202.0

 A) ALTERNATE C.I. GRATES, 18"X 24", 24"X 24", 28"X 36" OR ACCESS COVER (202.6).

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 E) USE #4 ROD ON 6" CENTERS BOTH WAYS ON LID. (SEE 202.3 E)
- F) SEE SHEET # 202.0 GENERAL NOTES AND DIMENSIONS INDEX, ALSO SHEET 202.1 TYP. CONC. BOX G) INVERT TO BE GROUTED (SEE 202.1).

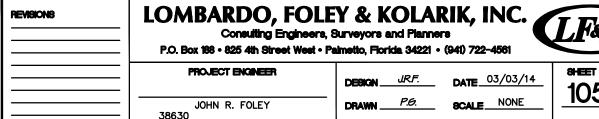
P.E. REG. NO.

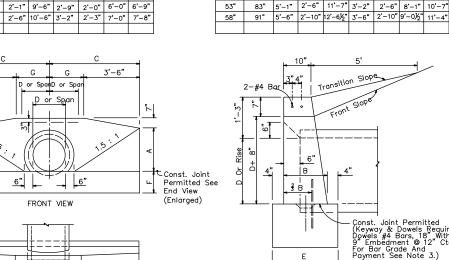
- H) PRECAST BOXES AS SPECIFIED IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS ARE AN ACCEPTABLE ALTERNATIVE AS APPROVED BY THE TRANSPORTATION DIRECTOR OR HIS DESIGNEE.

 I) ANGLE BRACKETS SHOWN ON 202.1 NOT REQUIRED.

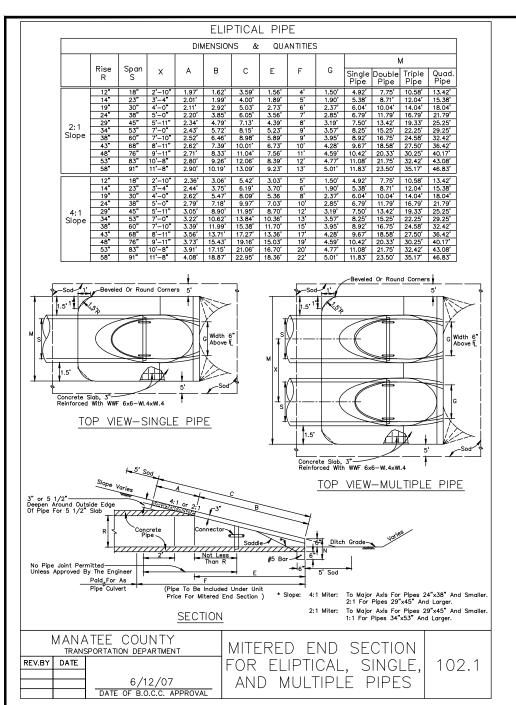
GRATE INLET/THROAT INLET

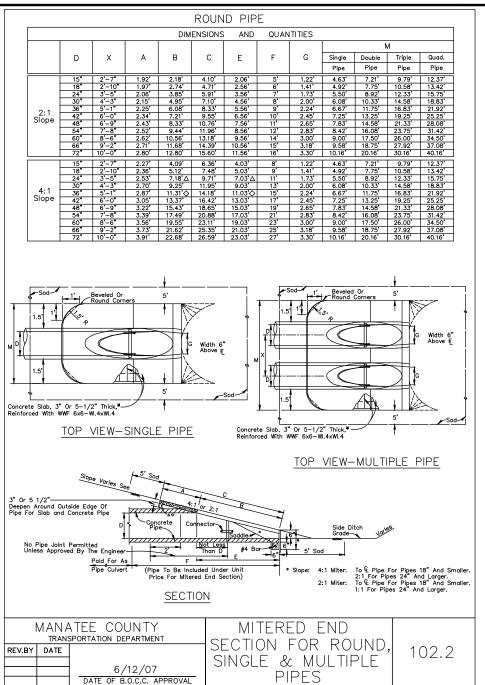
LOMBARDO, FOLEY & KOLARIK, INC. **REVISIONS** Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561 SHEET NO. PROJECT ENGINEER DATE 03/03/14 105

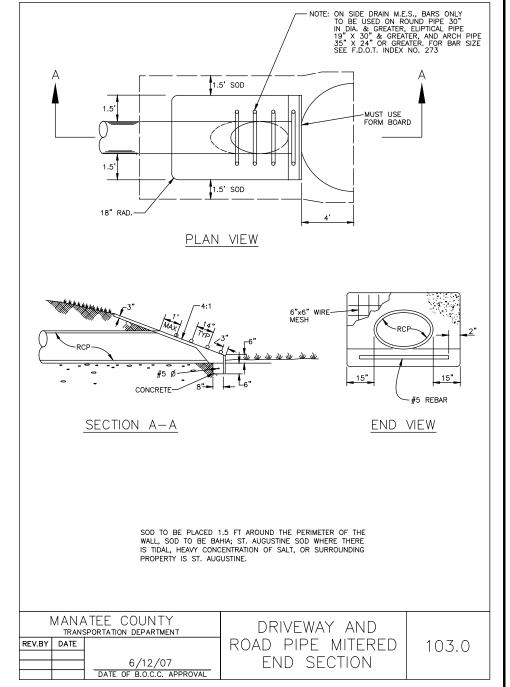




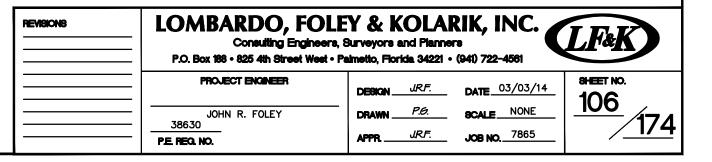






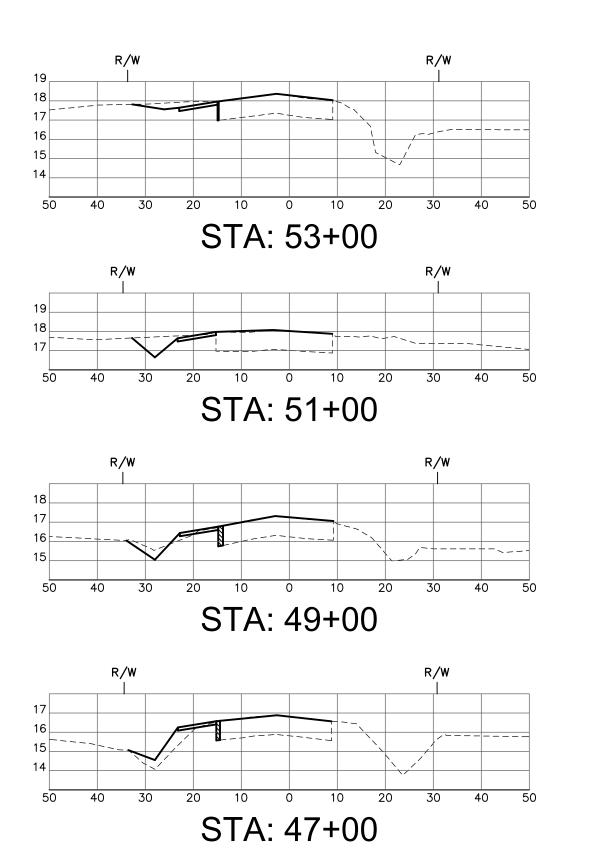






R/W

R/W



30

R/W

30

R/W

30

R/W

20

STA: 61+00

STA: 59+00

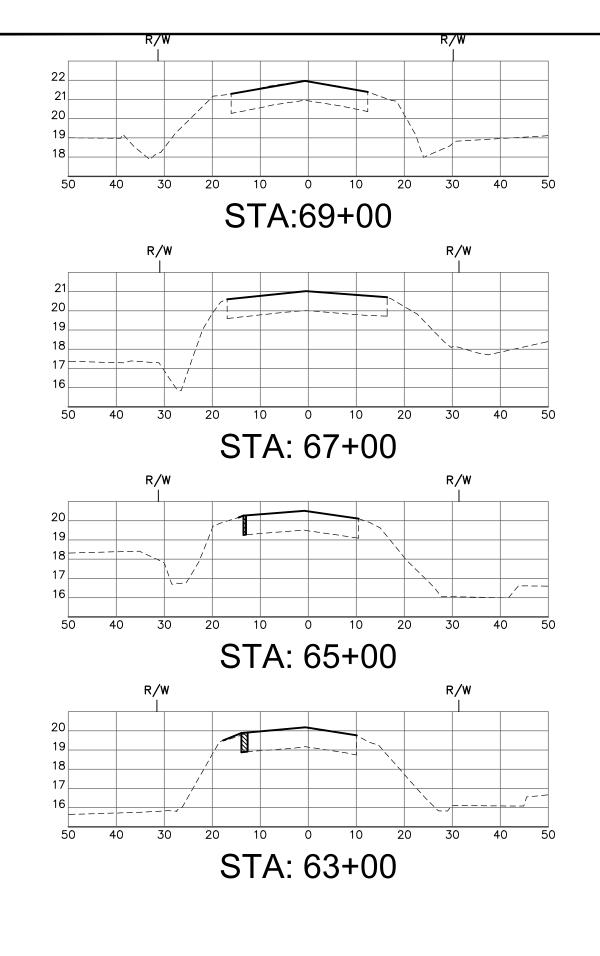
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R/W

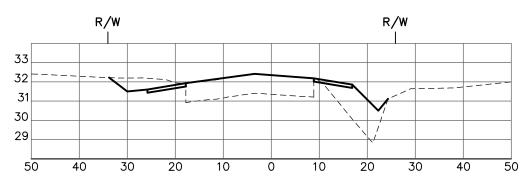
R/W

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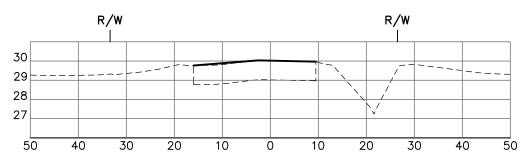
R/W



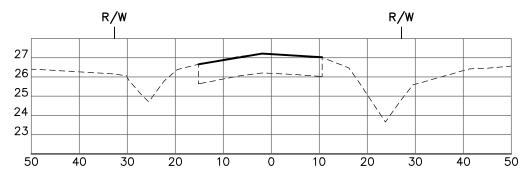
CROSS SECTIONS **ELLENTON/GILLETTE ROAD**



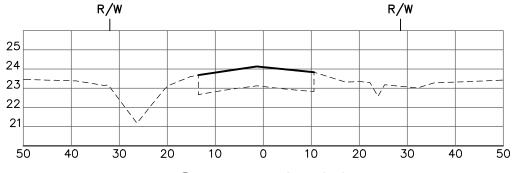
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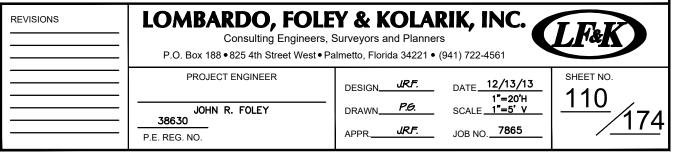
STA: 75+00



STA: 73+00

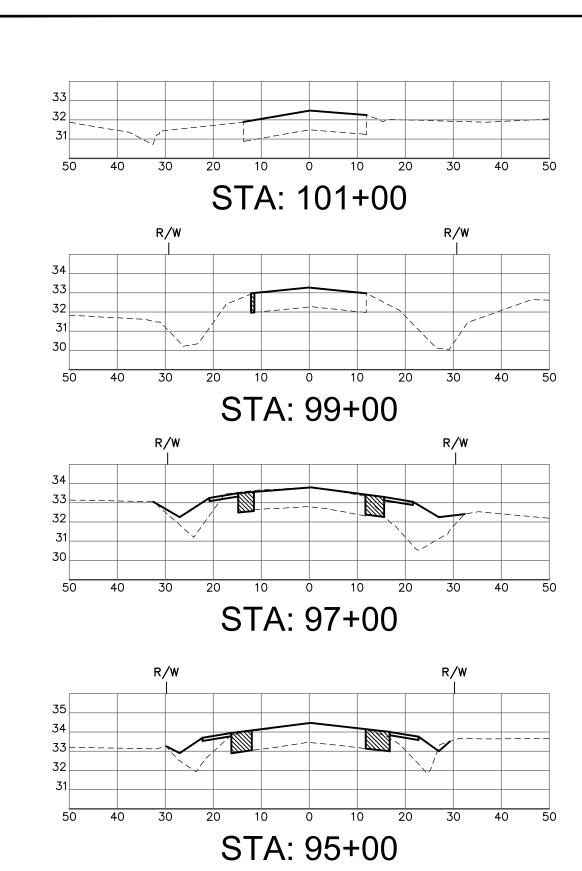


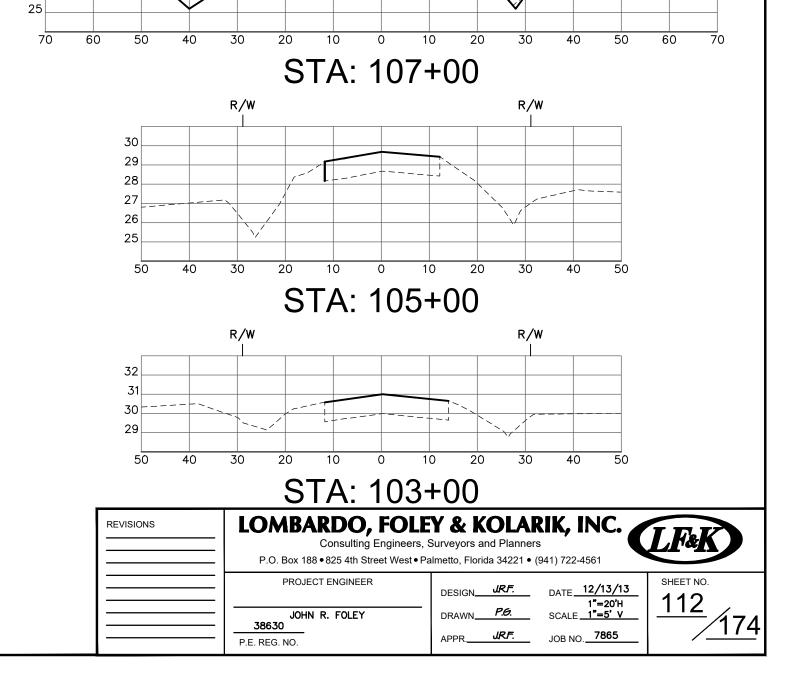
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R/W

R/W





STA: 109+00

R/W

CROSS SECTIONS **ELLENTON/GILLETTE ROAD**

R/W

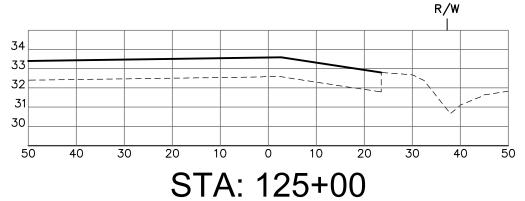
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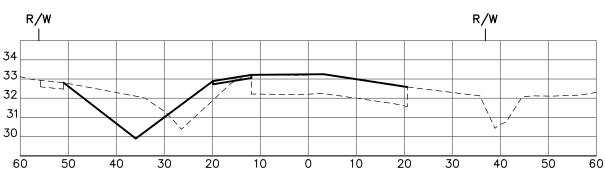
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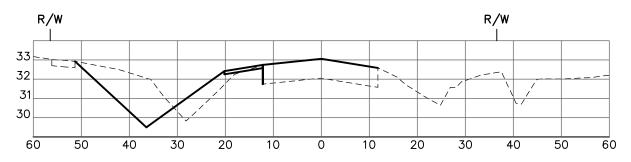
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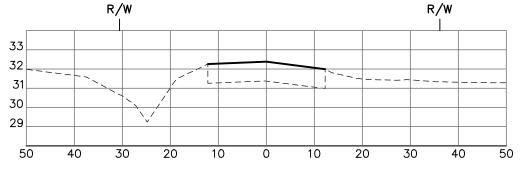




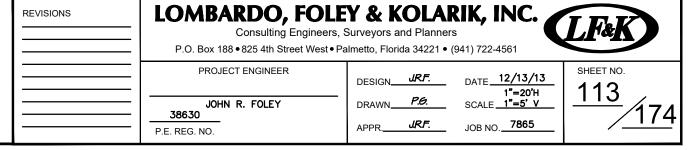
STA: 123+00



STA: 121+00



STA: 119+00



CROSS SECTIONS **ELLENTON/GILLETTE ROAD**

R/W

R/W

30

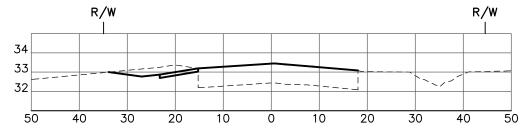
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R/W

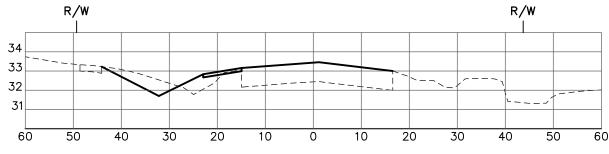
R/W

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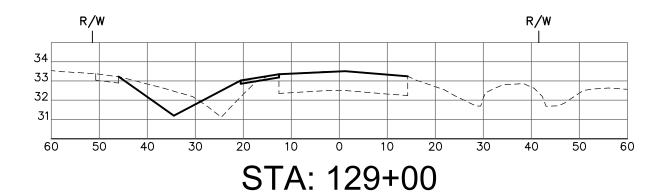
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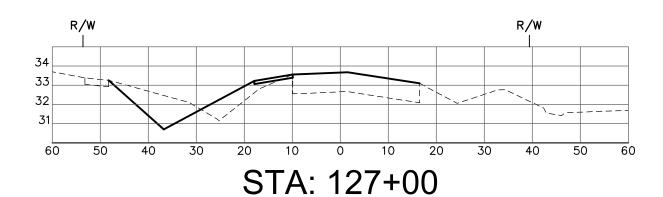


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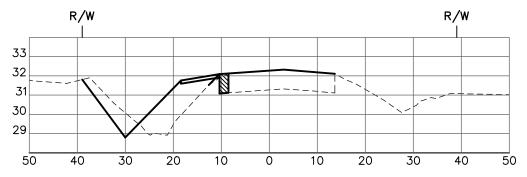


STA: 131+00

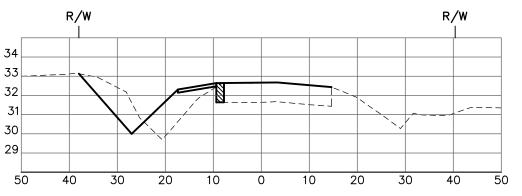




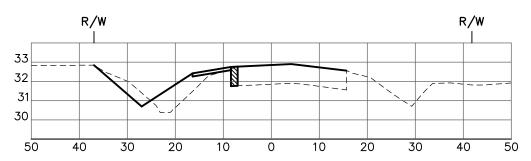
CROSS SECTIONS **ELLENTON/GILLETTE ROAD**



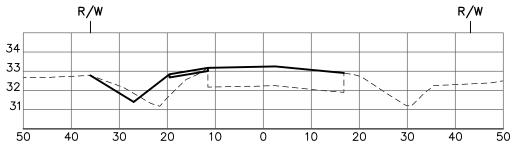
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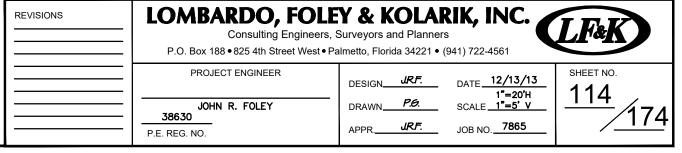
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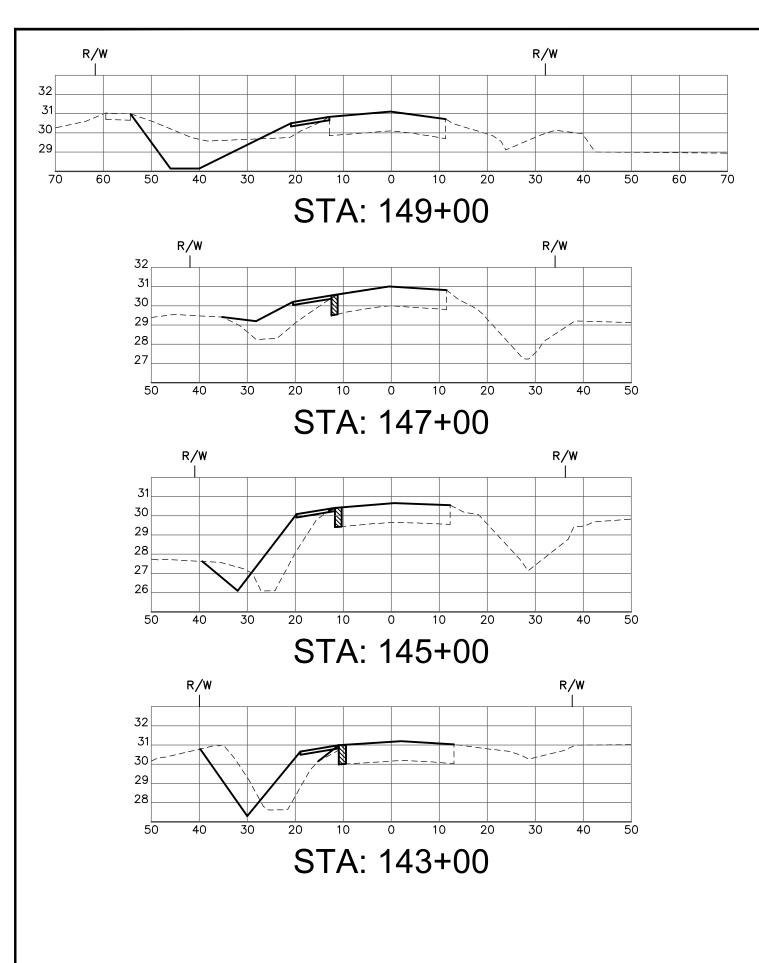


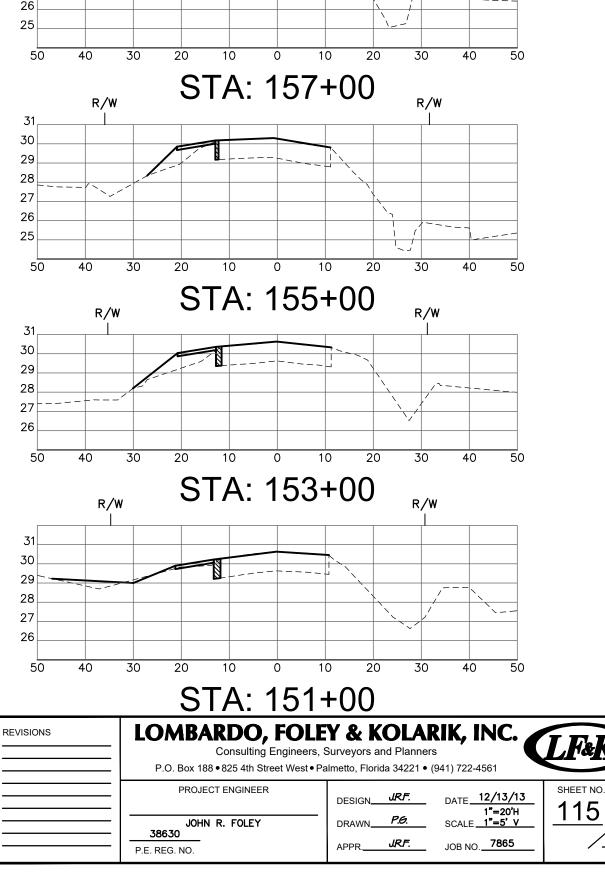
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STA: 135+00







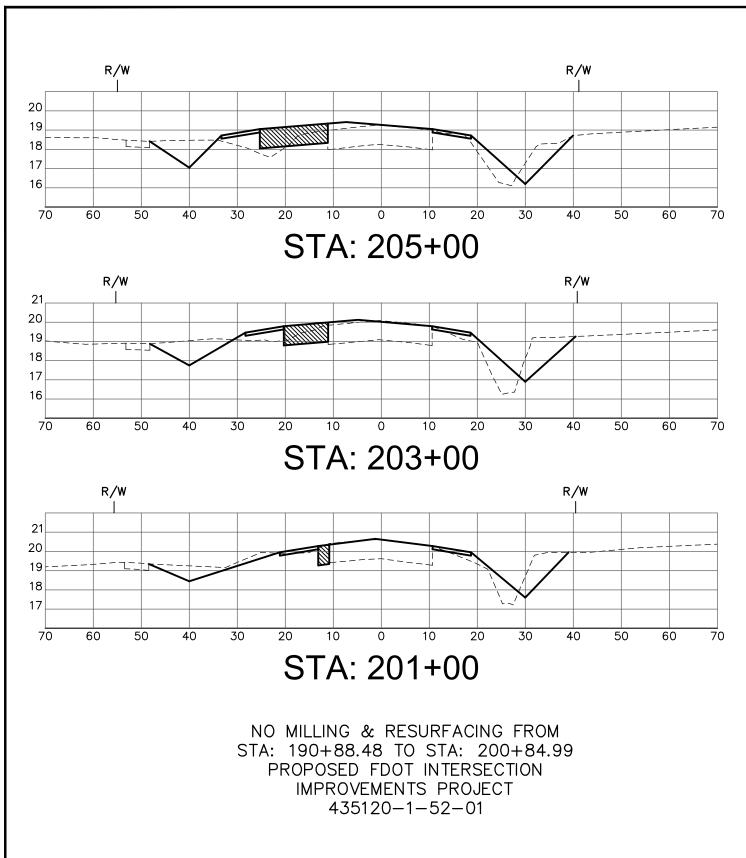
R/W

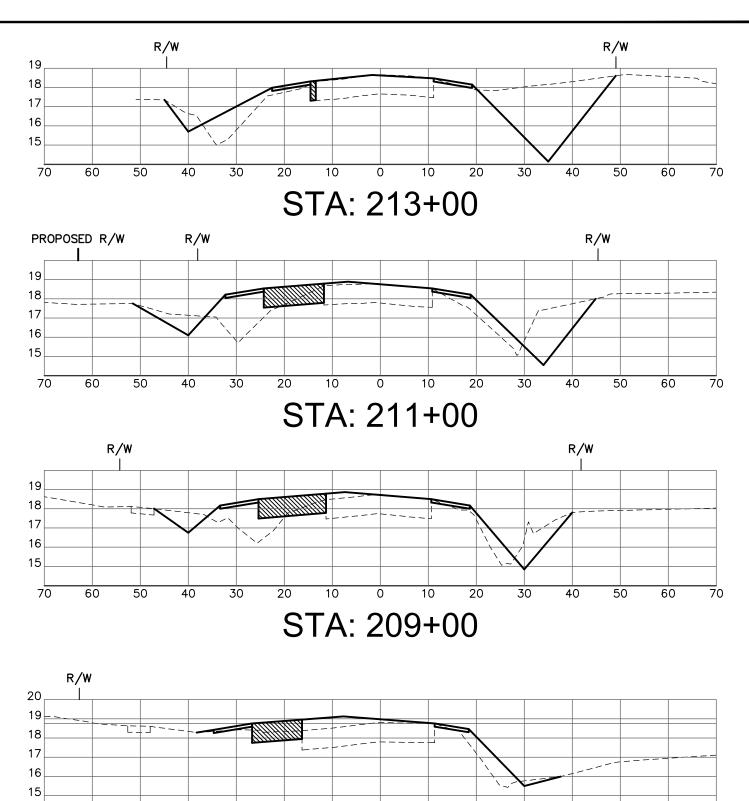
R/W

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27

CROSS SECTIONS **ELLENTON/GILLETTE ROAD**





70

REVISIONS

30

50

LOMBARDO, FOLEY & KOLARIK, INC.

STA: 207+00

Consulting Engineers, Surveyors and Planners
P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561

PROJECT ENGINEER

JOHN R. FOLEY

P.E. REG. NO.

ESIGN JRF. DATE 12/13/13

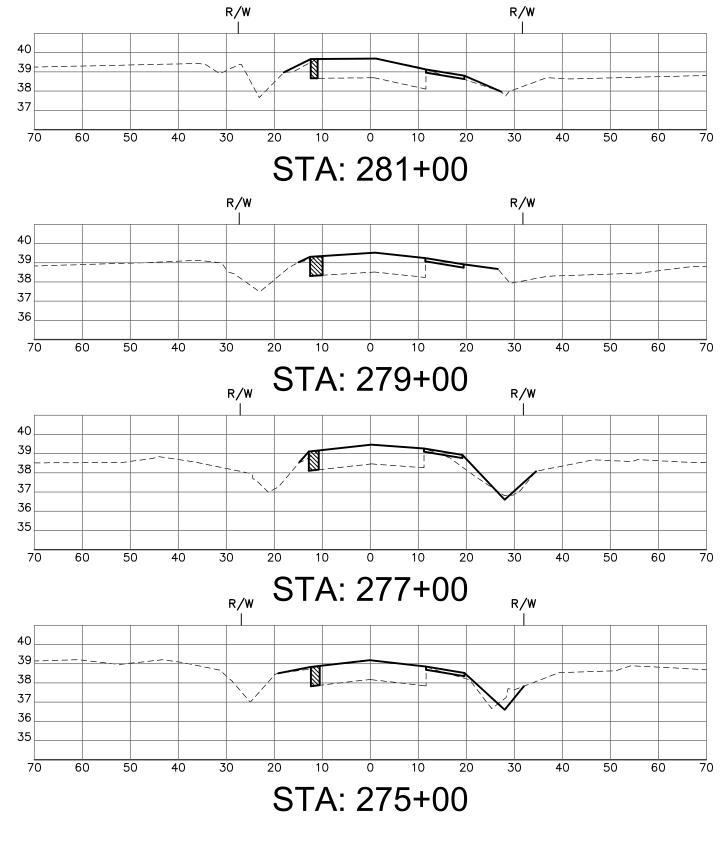
1"=20'H

SCALE 1"=5' V

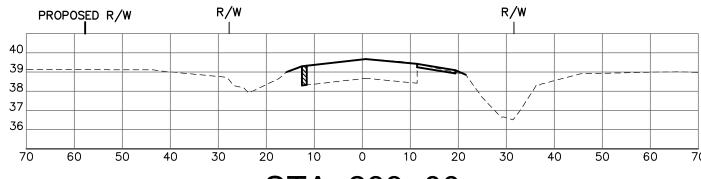
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CROSS SECTIONS **ELLENTON/GILLETTE ROAD**

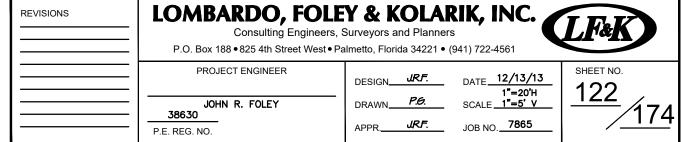
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STA: 283+94.55 END CONSTRUCTION

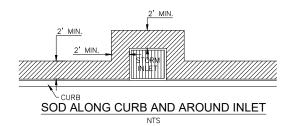


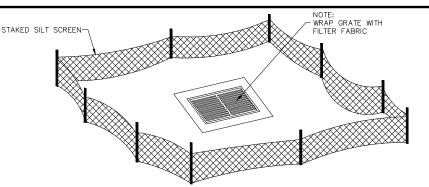
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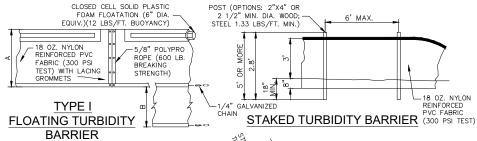
CROSS SECTIONS ELLENTON/GILLETTE ROAD

- 2. AT SITES WHERE EXPOSURE TO SUCH SENSITIVE AREAS IS PREVALENT. COMPLETE THE INSTALLATION OF ANY SEDIMENT CONTROL DEVICE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK.
- 3. AFTER INSTALLATION OF SEDIMENT CONTROL DEVICES, REPAIR PORTIONS OF ANY DEVICES DAMAGED AT NO EXPENSE TO THE OWNER.
- SCHEDULE OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODABLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAT THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSURE OF UNCOMPLETED CONSTRUCTION TO THE ELEMENTS IS AS SHORT AS PRACTICABLE.
- SCHEDULE AND PERFORM CLEARING AND GRUBBING SO THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER. SCHEDULE AND PERFORM GRADING OPERATIONS SO THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE
- 6 PROVIDE ROLLTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES, AT NO EXPENSE TO THE DEPARTMENT, UNTIL THE PROJECT IS COMPLETE AND ACCEPTED. IF RECONSTRUCTION OF SUCH EROSION AND SEDIMENT CONTROL FEATURES IS NECESSARY DUE TO THE CONTRACTOR'S NEGLIGENCE OR CARELESSNESS OR, IN THE CASE OF TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES, FAILURE BY THE CONTRACTOR TO INSTALL PERMANENT EROSION CONTROL FEATURES AS SCHEDULED, THE CONTRACTOR SHALL REPLACE SUCH EROSION CONTROL FEATURES AT NO EXPENSE TO THE OWNER.
- 7. INSPECT ALL EROSION AND SEDIMENT CONTROL FEATURES AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM OF 0.50 INCHES OR GREATER. MAINTAIN ALL EROSION CONTROL FEATURES AS REQUIRED IN THE STORMWATER POLLUTION PREVENTION PLAN, CONTRACTOR'S EROSION CONTROL PLAN AND AS SPECIFIED IN THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES.





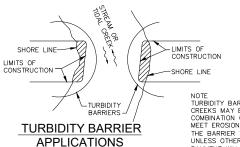
STAKED SILT SCREEN PROTECTION AROUND DITCH BOTTOM INLETS



A = 5' STD, (SINGLE PANEL FOR DEPTH 5' OR LESS). B = 5' STD. (ADDITIONAL PANEL FOR DEPTHS >5'). CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH OR AS DETERMINED BY THE

NOTICE
COMPONENTS OF TYPE I 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 TYPE I SHALL BE AS APPROVED BY

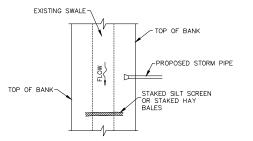
- NOTES
 1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER RECARDLESS OF WATER DEPTH.
 2. NUMBER AND SPACING OF ANCHORS DEPENDENT ON WATER VELOCITIES.
 3. DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMODATE CONSTRUCTION OPERATIONS.
 4. NAVICATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION OPERATIONS.



TURBIDITY BARRIERS FOR FLOWING STREAMS AND TIDAL CREEKS MAY BE EITHER FLOATING, OR STAKED TYPES OR ANY COMBINATION OF TYPES THAT WILL SUIT SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS. THE BARRIER TYPE(S) WILL BE AT THE CONTRACTORS OPTION UNLESS OTHERWISE SPECIFIED IN THE PLANS, HOWEVER PAYMENT WILL BE UNDER THE PAY ITEM(S) ESTABLISHED IN THE PLANS FOR FLOATING TURBIDITY BARRIER AND/OR STAKED TURBIDITY BARRIER. POSTS IN STAKED TURBIDITY BARRIERS TO BE INSTALLED IN VERTICAL POSITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

TURBIDITY BARRIERS

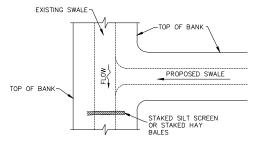
N.T.S.



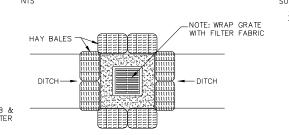


RISER

PARTIAL INLET

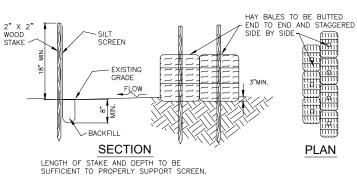


STAKED SILT SCREEN AT CONNECTION OF SWALE TO EXISTING SWALE

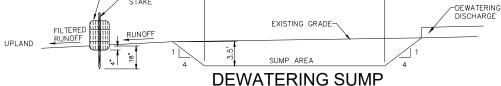


DITCH BOTTOM INLET

PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



STAKED SILT SCREEN AND HAY BALE DETAIL



STAKED AND ENTRENCHED HAY BALES, CONTINUOUS

ALONG DISCHARGE AREA

~2"X2"X36'

CONTRACTOR TO INSURE THAT DEWATERING ACTIVITIES DO NOT CAUSE EROSION AND THAT SUMP IS UTILIZED TO ALLOW FOR PARTICLE SEDIMENTATION.
 SEDIMENT SUMPS AND EROSION CONTROL ARE TO BE IMPLEMENTED BEFORE ANY DEWATERING

PROPOSED SEDIMENT SUMP (WDTH = 10') (LENGTH = 25')

3. SUMP SIZE BASED UPON AN ASSUMED DEWATERING DISCHARGE OF 5 cfs. CONTRACTOR IS TO

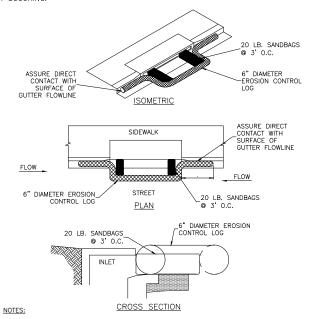
S. SUMP SIZE BASED UPON AN ASSUMED DE WAIRKING DISCHARGE OF 5 CTS. CONTRACTOR IS TO NOTIFY ENGINEER IF GREATER DISCHARGE IS PROPOSED SO SUMP SIZE CAN BE RECALCULATED.

4. DEWATERING WITHDRAWLS ARE TO BE FROM THE TOP OF THE WATER AREAS TO ALLOW FOR THE ADEQUATE SETTLING OF PARTICLES.

5. CONTRACTOR IS TO NOTIFY S.W.F.W.M.D. OF ANY MODIFICATIONS PROPOSED BY THE CONTRACTOR TO THE DEWATERING PLAN. CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF ANY REQUIRED PLANS AND PROCESSING OF SAME.

6. DISCHARGE FOR CHARGE WITHDRAWLTST ON THE AND FLOW PRIOR TO ENTERING.

6. DISCHARGE FROM SUMPS SHOULD MAXIMIZE OVERLAND FLOW PRIOR TO ENTERING
JURISDICTIONAL AREA. STAKED HAY BALES WILL BE USED TO MINIMIZE SILTATION RUNOFF.
CONTRACTOR IS RESPONSIBLE FOR UTILIZING ADEQUATE HAY BALES AT DISCHARGE LOCATIONS



- EROSION CONTROL LOG CONTAINMENT MESH SHALL BE 100% BIODEGRADABLE, PHOTODEGRADABLE OR RECYCLABLE; AND FILL MATERIAL SHALL CONSIST OF MULCH, ASPEN EXCELSIOR FIBERS, CHIPPED SITE VEGETATION, COCONUT FIBERS, 100% RECYCLABLE FIBERS, OR ANY OTHER ACCEPTABLE MATERIAL EXCLUDING STRAW AND
- HAY.

 2. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".

 3. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM WATER BEGINS TO OVERTOP THE CURB.

 4. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

CURB INLET PROTECTION WITH EROSION CONTROL LOG DETAIL EC-13

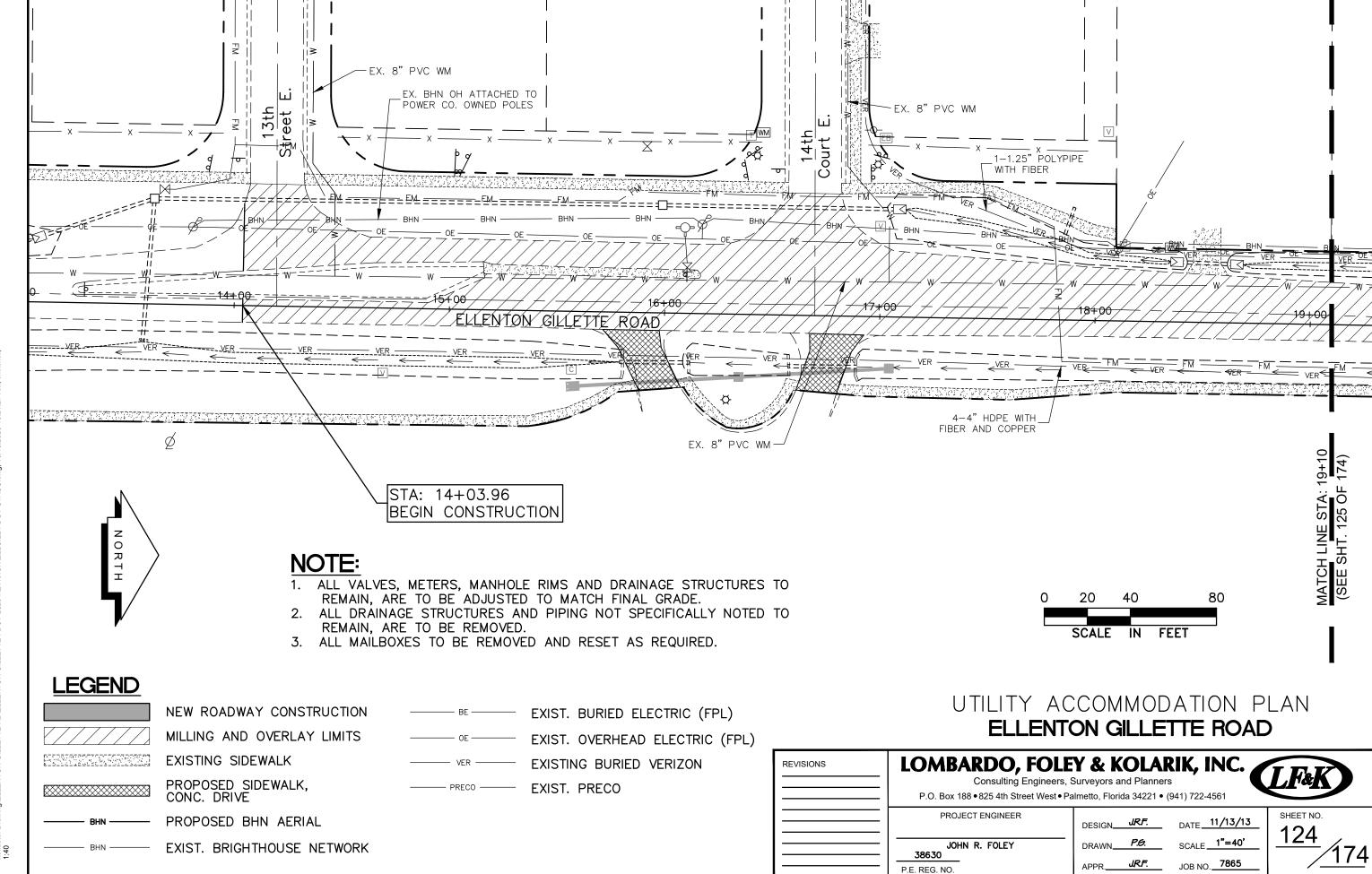
BEST MANAGEMENT PRACTICES DETAILS

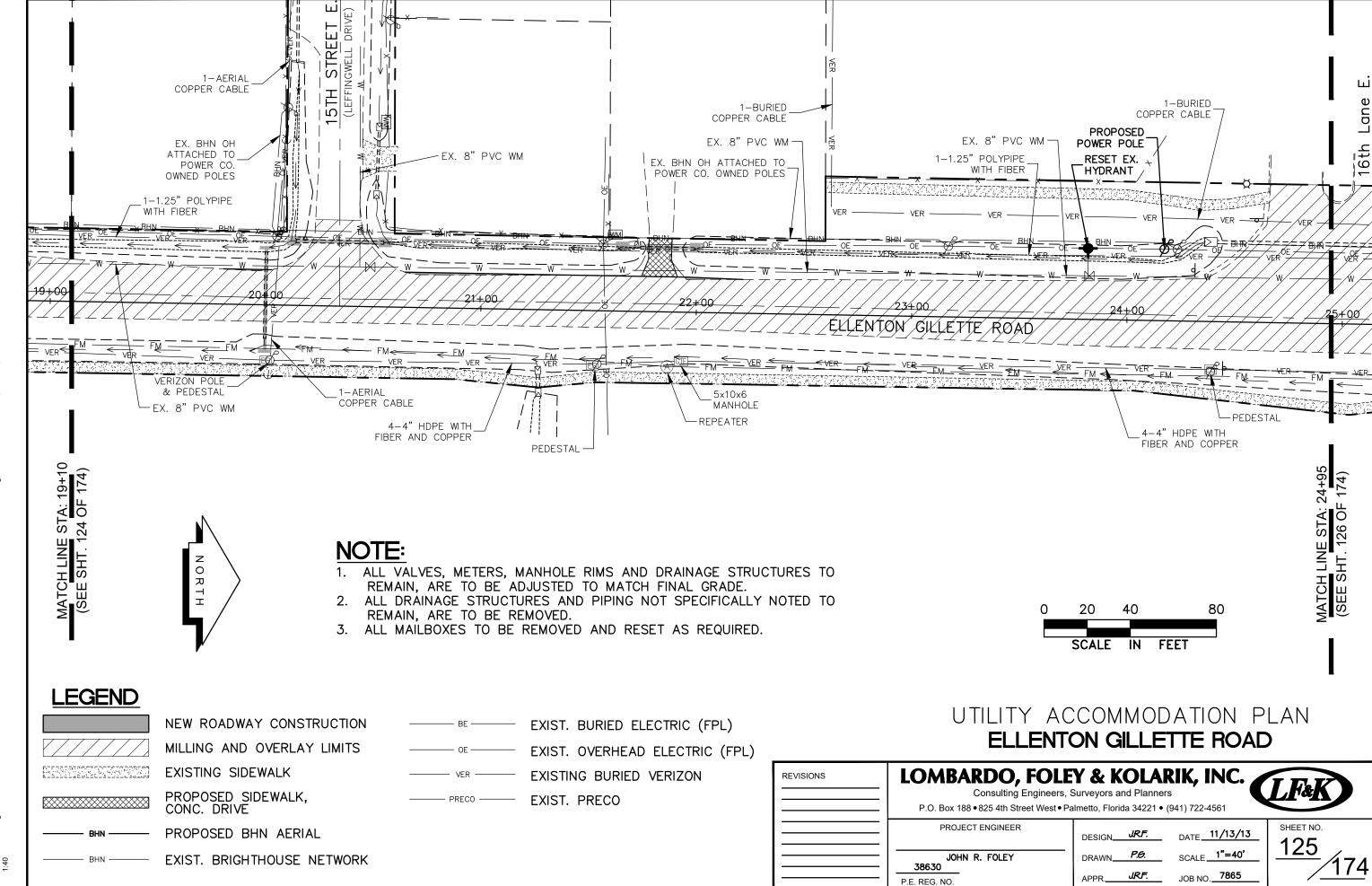
ELLENTON/GILLETTE ROAD

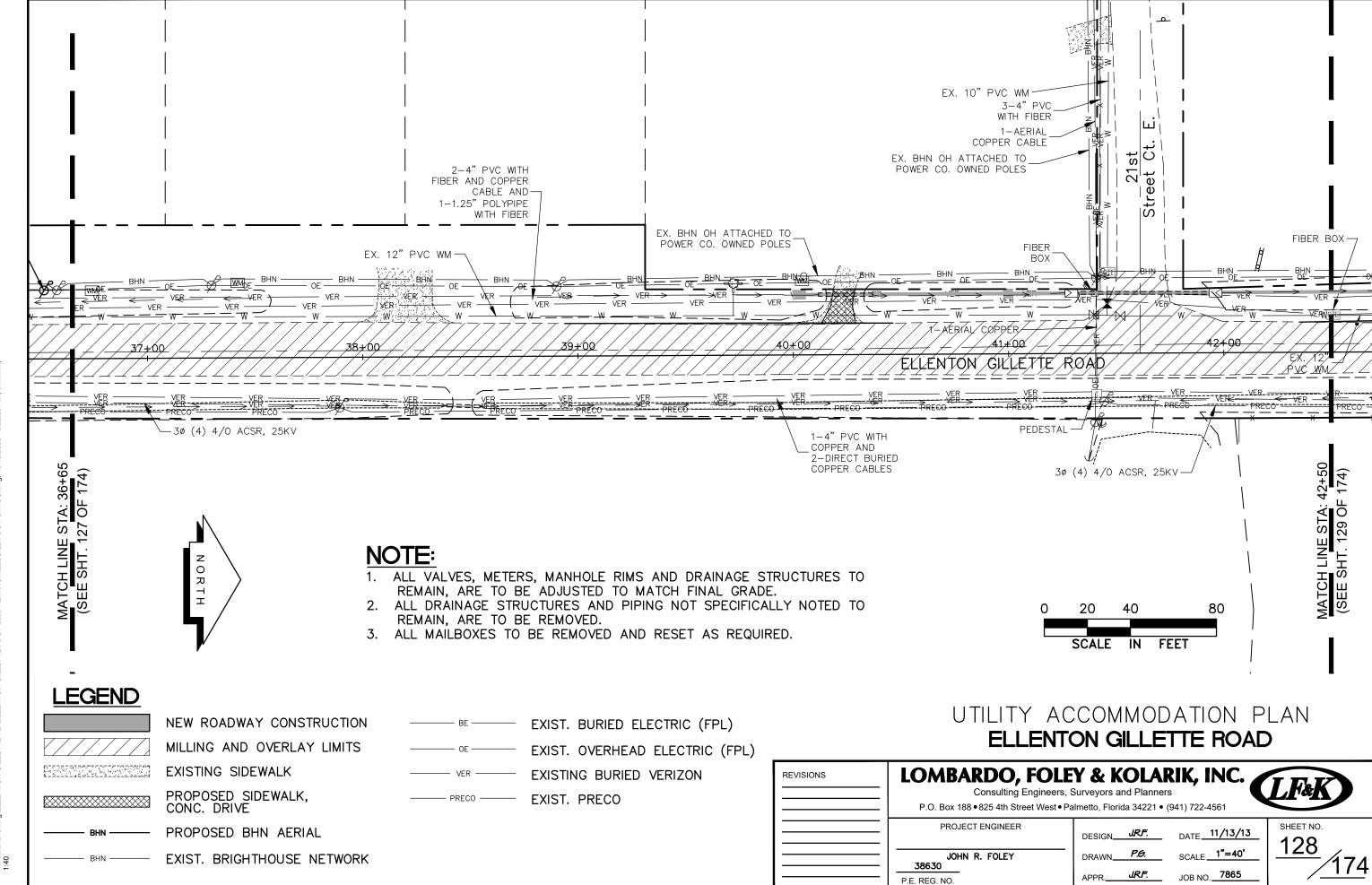
REVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561			
	PROJECT ENGINEER	DESIGN	DATE03/10/14	SHEET NO. 122
	JOHN R. FOLEY 38630 P.E. REG. NO.	DRAWN	SCALE NONE JOB NO. 7865	$\frac{123}{174}$

HAY BALES

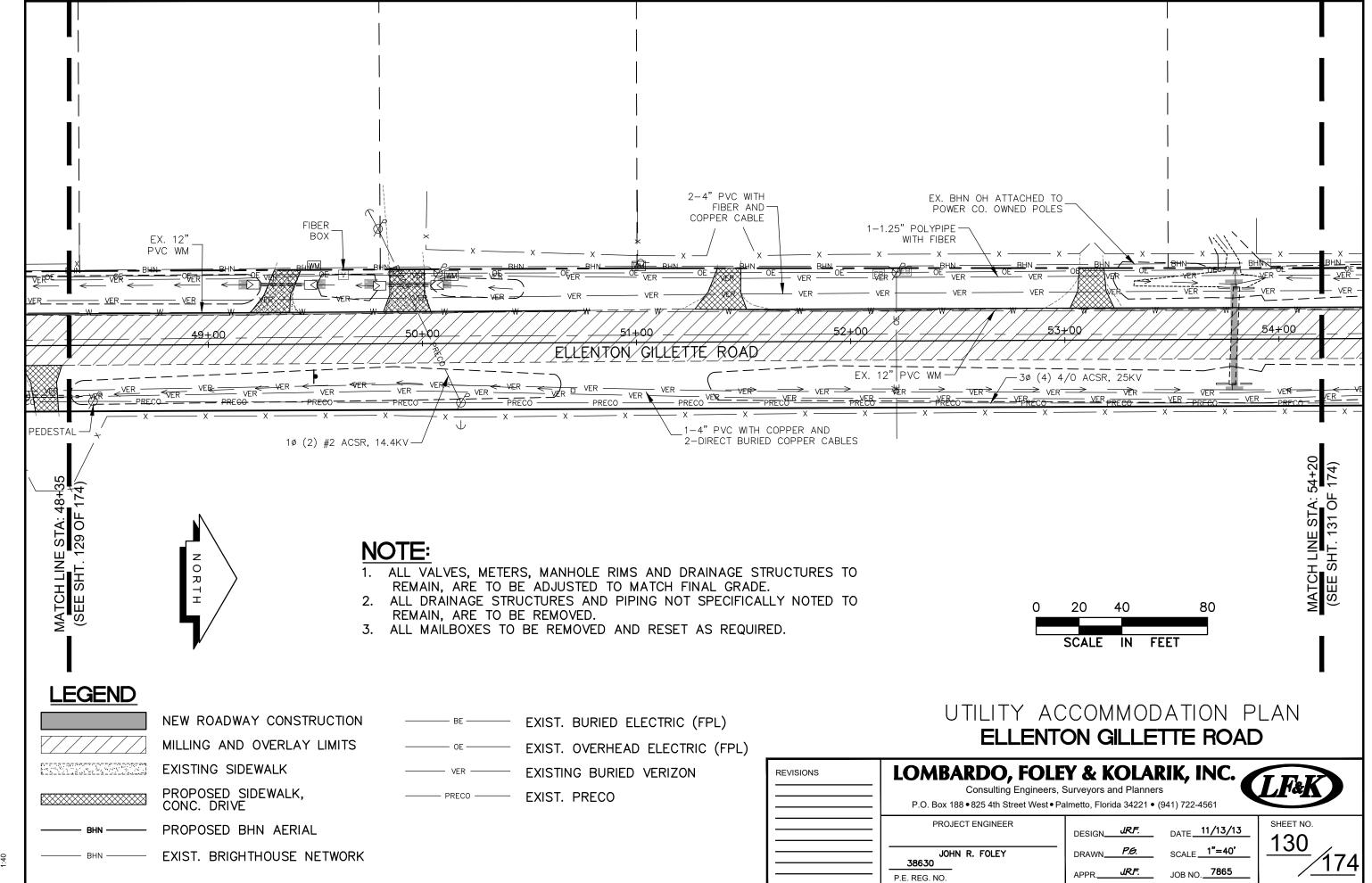
COMPLETED INLET



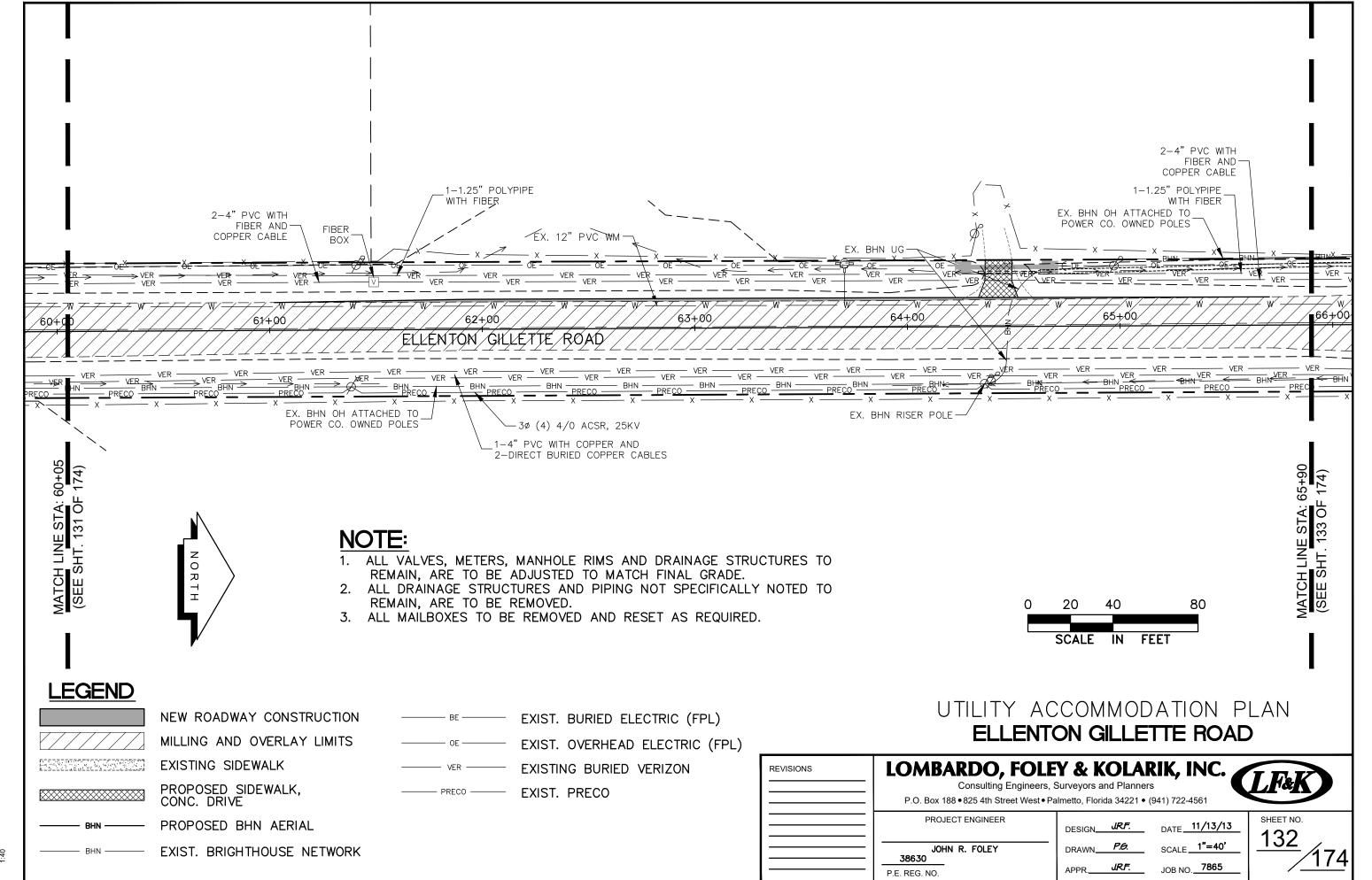




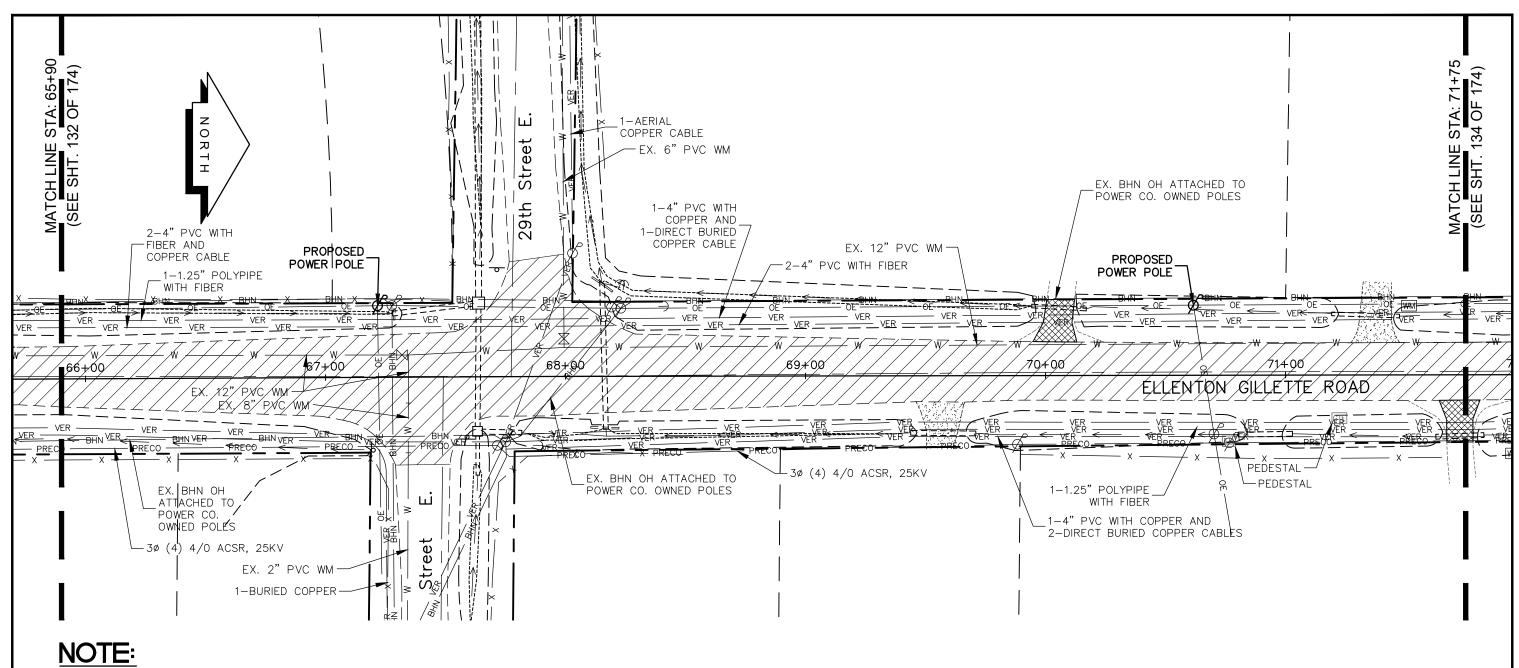
I:\Master Drawing\ELLEN | ON-GILLE | | E KD\ELLEN | ON GILL 1:40



P.E. REG. NO.







- 1. ALL VALVES, METERS, MANHOLE RIMS AND DRAINAGE STRUCTURES TO REMAIN, ARE TO BE ADJUSTED TO MATCH FINAL GRADE.
- 2. ALL DRAINAGE STRUCTURES AND PIPING NOT SPECIFICALLY NOTED TO REMAIN, ARE TO BE REMOVED.
- 3. ALL MAILBOXES TO BE REMOVED AND RESET AS REQUIRED.

EXIST. BRIGHTHOUSE NETWORK

0 20 40 80 SCALE IN FEET

LEGEND

NEW ROADWAY CONSTRUCTION

BE EXIST. BURIED ELECTRIC (FPL)

MILLING AND OVERLAY LIMITS

EXIST. OVERHEAD ELECTRIC (FPL)

EXIST. PRECO

EXIST. PRECO

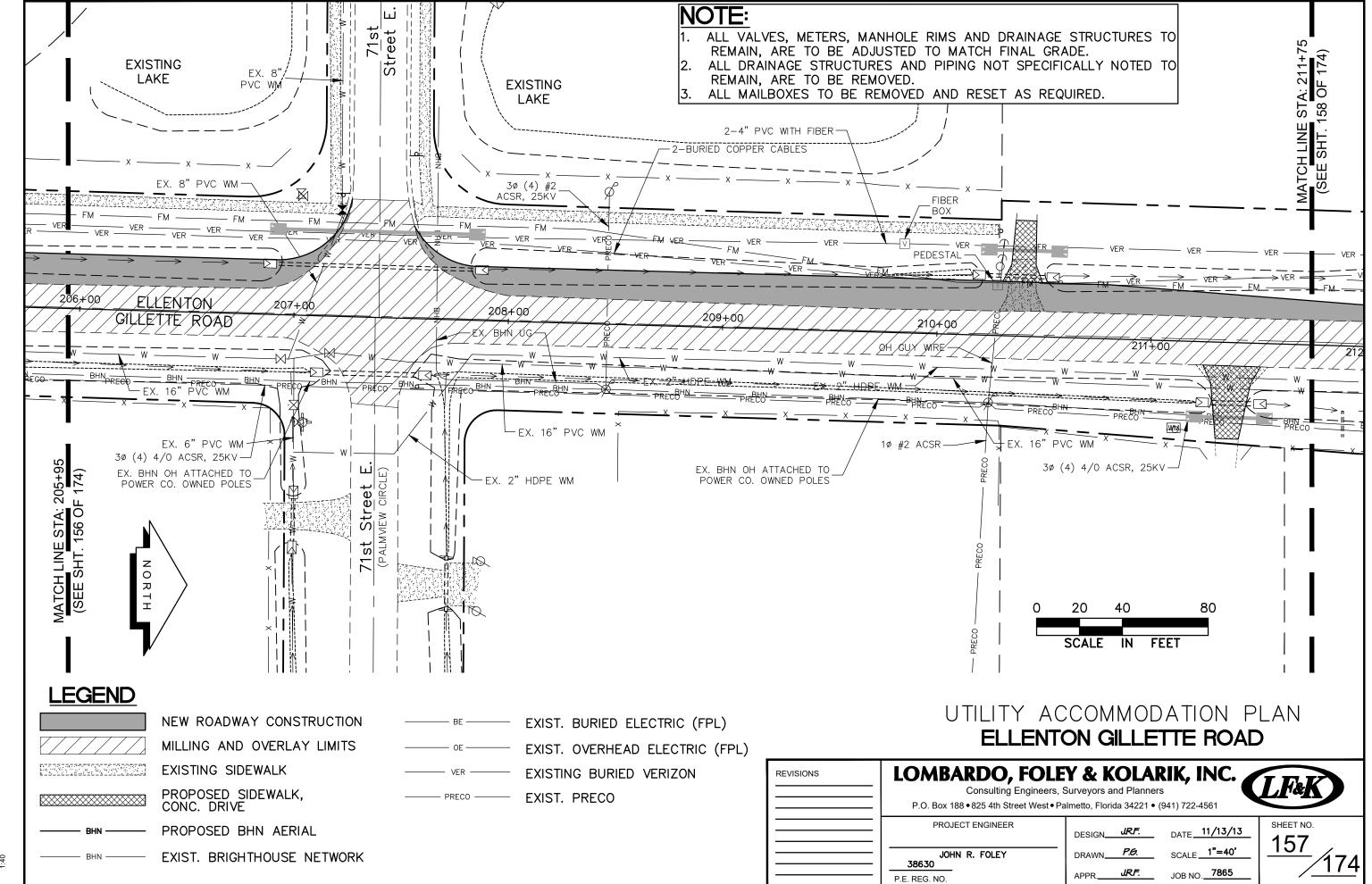
EXIST. PRECO

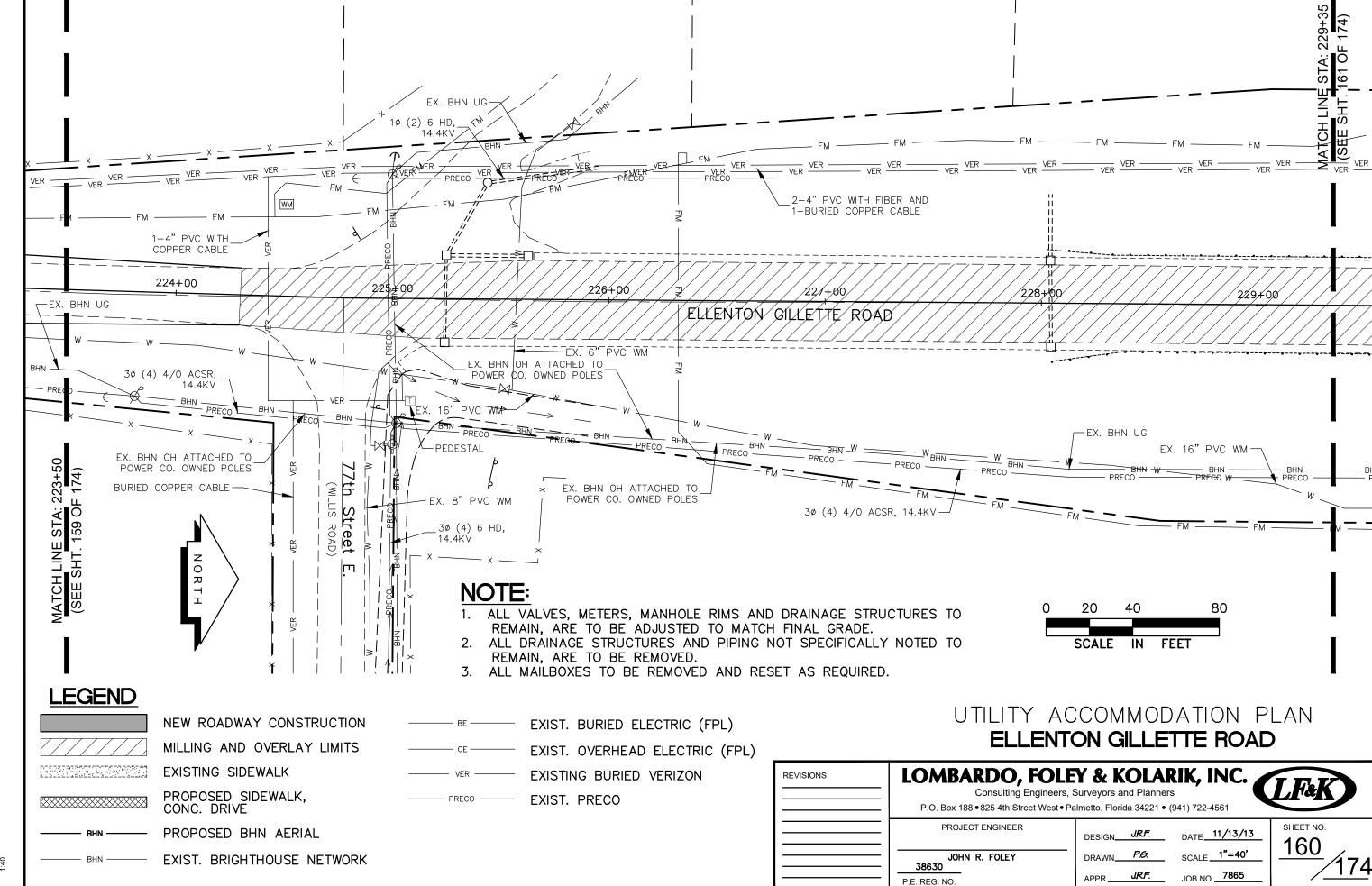
EXIST. PRECO

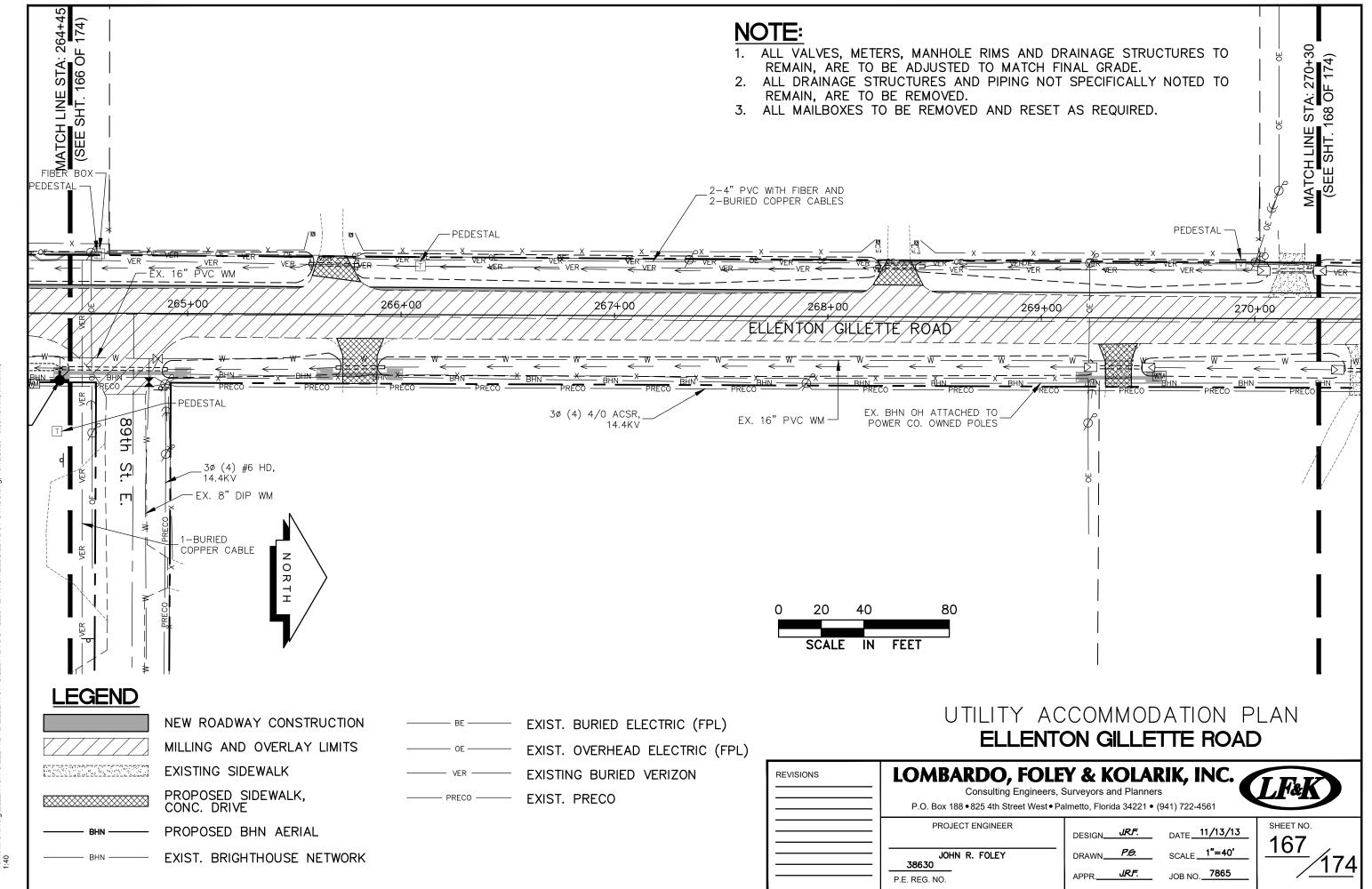
UTILITY ACCOMMODATION PLAN **ELLENTON GILLETTE ROAD**

REVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561				
	PROJECT ENGINEER	DESIGN	SHEET NO. 133		
	JOHN R. FOLEY 38630 P.E. REG. NO.	DRAWN <i>P.G.</i> SCALE 1"=40' APPR. <i>JRF</i> . JOB NO. 7865	174		

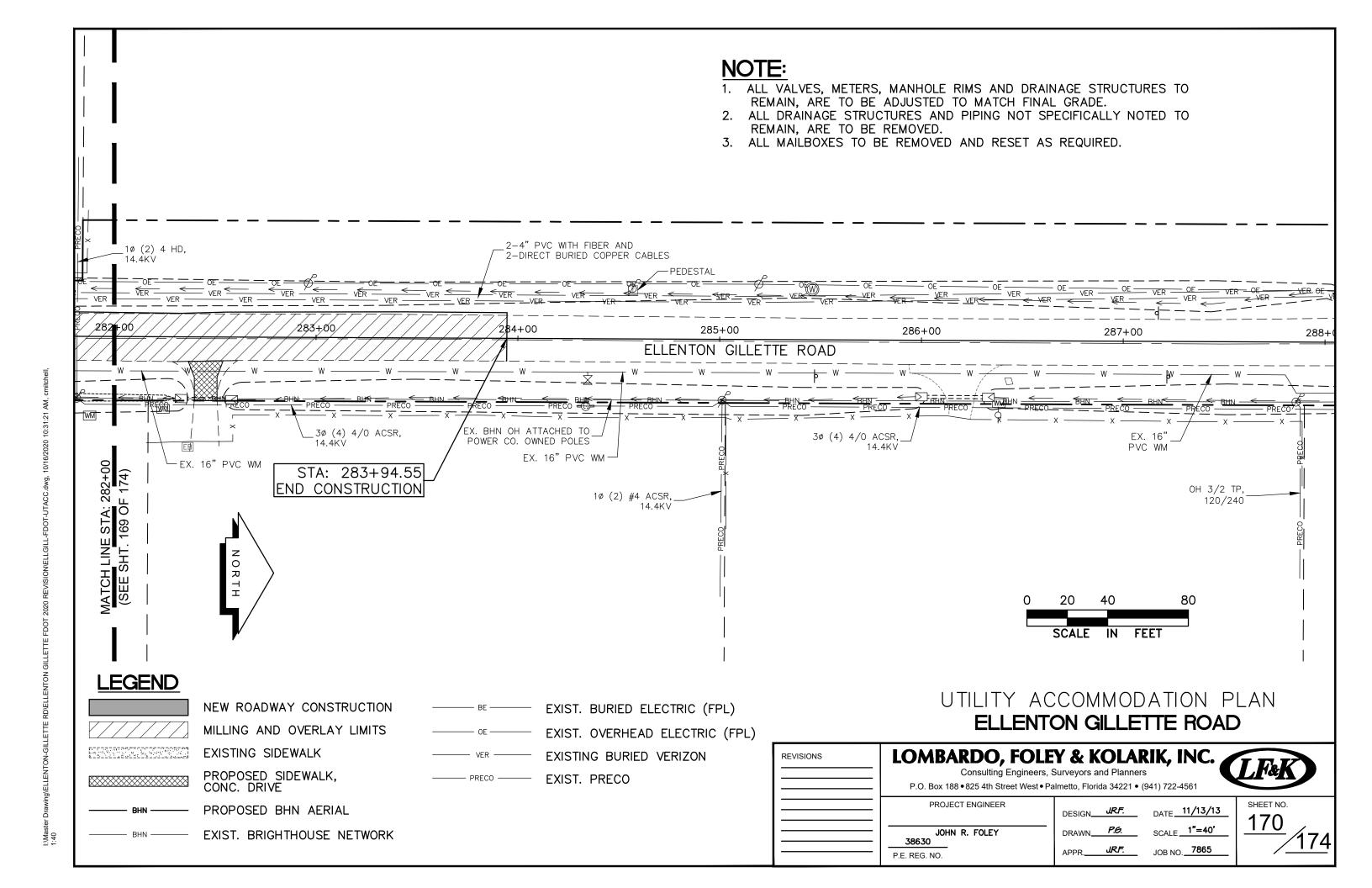
P.E. REG. NO.







Limastel Diawing/ELLEIN LON-GILLE | 1E R 1:40

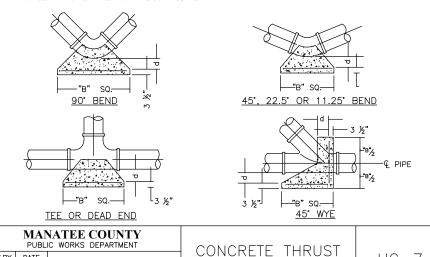


THRUST BLOCK DIMENSIONS B ft. x d inches												
PIPE SIZE	90°B	END	45°B	END	22.5°E	BEND	11.25°E	BEND	DEAD & TF		45°	WYE
(IN.)	В	d	В	d	В	d	В	d	В	d	В	d
4	1.5	3 ½	1.1	3 ½	0.8	3 ½	0.6	3 ½	1.3	3 ½	1.1	3 ½
6	2.2	5 1/4	1.6	3 3/4	1.2	3 ½	0.8	3 ½	1.9	4 ½	1.6	3 3/4
8	2.9	7	2.1	5	1.5	3 ½	1.1	3 ½	2.4	5 ¾	2.0	4 ¾
10	3.5	8 ½	2.6	6 1/4	1.9	4 ½	1.3	3 ½	3.0	7 1/4	2.5	6
12	4.2	10	3.1	7 ½	2.2	5 1/4	1.6	3 3/4	3.5	8 1/4	3.0	7 1/4
14	4.9	11 ¾	3.6	8 3/4	2.6	6 1/4	1.8	4 1/4	4.1	9 ¾	3.4	8 1/4
16	5.5	13 1/4	4.1	9 ¾	2.9	7	2.1	5	4.7	11 1/4	3.9	9 1/4
18	6.2	15	4.6	11	3.3	8	2.3	5 ½	5.2	12 ½	4.4	10 ½
20	6.9	16 ½	5.0	12	3.6	8 ¾	2.6	6 1/4	5.8	14	4.9	11 ¾
24	8.2	19 ¾	6.0	14 ½	4.3	10 1/4	3.1	7 ½	6.9	16 ½	5.8	14
30	10.1	24 1/4	7.5	18	5.3	12 3/4	3.8	9	8.5	20 ½	7.2	17 1/4
36	12.1	29	8.9	21 1/4	6.4	15 1/4	4.5	10 ¾	10.2	24 ½	8.6	20 ¾
REINFORCEMENT MAT SCHEDULE FOR DIM. "B" BETWEEN 5.75' & 12.5' USE #4 @ 8" EACH WAY FOR DIM. "B" LESS THAN 5.75' USE #3 @ 8" EACH WAY												

REV.BY DATE CLB/BR 11/10

MAY 10, 2011 DATE OF APPROVAL

- 1. ALL THRUST BLOCKS SHALL BE CAST IN PLACE. FITTINGS ADJACENT TO THRUST BLOCKS SHALL BE WRAPPED IN POLYETHYLENE
- 2. THIS TABLE IS BASED ON WATER PRESSURE=180 PSI WITH AN ALLOWABLE SOIL BEARING PRESSURE=2000 PSF, CONCRETE STRENGTH f_0 =3000 PSI, REINFORCEMENT f_y =60.0 KSI. THRUST BLOCK SHALL BE CAST AGAINST FIRM UNDISTURBED SOIL.
- 3. FOR LARGER "B" DIMENSIONS IT IS NECESSARY TO CHECK THAT PIPE IS SUFFICIENTLY DEEP TO ALLOW 15" MIN. SOIL COVER OVER TOP EDGE OF THRUST BLOCK.
- 4. RESTRAINED JOINTS MAY BE USED IN LIEU OF THRUST BLOCKS TO SAVE SPACE. THRUST BLOCKS SHALL BE USED IN SITUATIONS WHERE THRUST BLOCKS AND RESTRAINED JOINTS ARE BOTH REQUIRED.



BLOCKS

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DR-18 PVC PIPE

MAIN PIPE				TEES				R	EDUCER	!S	PLUGS & VALVES	
SIZE	90°	45°	22.5°		5	IZE LEN	IGTH		5	SIZE LEN	IGTH	
24	90	38	18	X24 169	X20 132	X16 90	X12 38	X10 ₆	X20 64	X16 117	X12 158	214
20	78	32	16	X20 141	X16 101	X12 53	X10 24	X8 ₁	X16 65	X12 115	X10 149	184
16	66	27	13	X16 111	X12 67	X10 41	X8 12		X12 64	X10 107	X8 111	151
12	52	22	10	X12 80	X10 56	X8 31	X6 ₁		X10 58	X8 62	X6 86	118
10	44	18	9	X10 63	X8 40	X6 7			X8 33	X6 61	X4 81	100
8	37	15	7	X8 49	X6 18	X4 ₁			X6 35	X4 60		83
6	29	12	6	X6 29	X4 ₁				X4 33			63
4	21	8	4	X4 12								45

NOTES:

UG-7

- 1. RESTRAIN 11.25° BENDS 50% OF LENGTH FOR 22.5° BENDS.
- 2. ALL VALVES AND FITTINGS SHALL BE RESTRAINED TO THE CONNECTING SECTIONS
- 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 RESTRAINED

		NATEE COUNTY IC WORKS DEPARTMENT	RESTRAINED	
REV.BY	DATE		LENGTHS FOR PVC	UG-8
CLB/BR	11/10	MAY 10. 2011	DIDE	
		DATE OF APPROVAL		PAGE 108

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (POLY-WRAPPED)

MAIN PIPE	HOR	IZ. B	ENDS			TE	ES				REDU	CERS		PLUGS	& VALVES
SIZE	90°	45°	22.5°			SIZE	LENGTI	-			SIZE	LENGTH	4		
36	142	59	28	x36 393	x30 318	×24 232	x20 165	x16 84	x12 1	X30 137	X24 247	X20 309	X16 359		453
30	124	51	25	X30 333	X24 252	X20 189	X16 115	X12 23	x10 1	X24 137	X20 213	X16 276			391
24	106	44	21	X24 270	X20 211	X16 143	X12 61	X10 10	x8 1	X20 98	X16 178	X12 241			327
20	92	38	18	X20 225	X16 161	X12 85	X10 39	x8 ₁		X16 98	X12 176	X10 227			280
16	77	32	15	X16 177	X12 107	X10 65	X8 19	x61		X12 98	X10 163	X8 169			231
12	61	25	12	X12 127	X10 89	X8 50	x6 ₁			X10 88	X8 96	X6 131			181
10	52	22	10	X10 101	X8 64	x6 11				X8 51	X6 94	X4 125			153
8	44	18	9	X8 78	X6 30	×4_1				X6 54	X4 92				128
6	34	14	7	X6 46	×4 ₁					X4 50					98
4	24	10	5	×4 19											69

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (NON-WRAPPED)

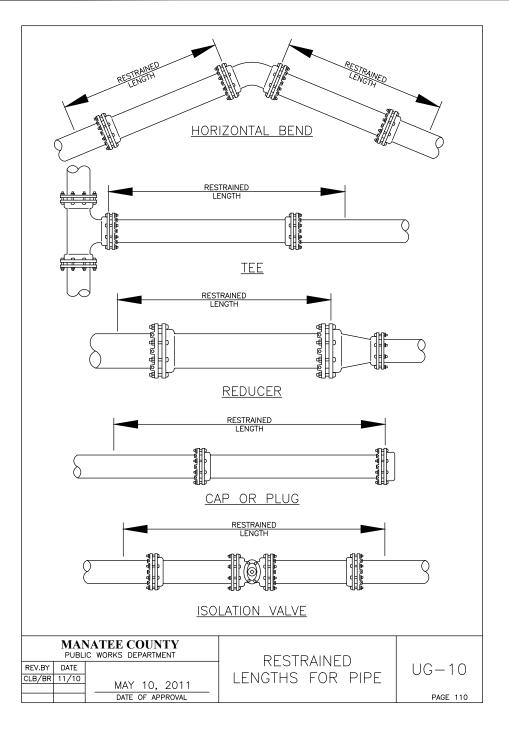
MAIN PIPE	HOF	RIZ. B	ENDS			TE	ES				REDU	CERS		PLUGS & VALVES
SIZE	90°	45°	22.5°			SIZE	LENGTI	+			SIZE	LENGTH	1	
36	100	42	20	x36 163	x30 132	×24 96	x20 68	x16 35	x12	X30 57	X24 103	X20 128	X16 149	188
30	88	37	18	X30 138	X24 104	X20 78	X16 48	X12 10	x10	X24 57	X20 88	X16 114		162
24	75	31	15	X24 112	X20 87	X16 59	X12 25	×104	x8 ₁	X20 40	X16 74	X12 100		135
20	65	27	13	X20 93	X16 67	X12 35	X10 16	x8 ₁		X16 41	X12 73	X10 94		116
16	54	22	11	X16 73	X12 44	X10 27	x8 ₈	x6 ₁		X12 41	X10 68	X8 70		96
12	43	18	8	X12 53	X10 37	X8 21	x6 ₁			X10 37	X8 40	X6 54		75
10	37	15	7	X10 42	X8 26	x6 ₅				X8 21	X6 39	X4 52		63
8	30	13	6	X8 32	X6 12	×4_1				X6/22	X4 38			53
6	24	10	5	X6 19	×4_1					X4 21				41
4	17	7	3	x4 ₈										29

SEE <u>RESTRAINED LENGTHS FOR PVC PIPE</u> DETAIL FOR NOTES 1 THROUGH 8 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR DIP.

		NATEE COUNTY IC WORKS DEPARTMENT	RESTRAINED	
REV.BY	DATE		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	UG-9
LB/BR	11/10	MAY 10, 2011	LENGTHS FOR DIP	
		MAT_TO, 2011		
		DATE OF APPROVAL		PAGE 109

UTILITY ACCOMMODATION DETAILS

REVISIONS	Consulting Enginee	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4581							
	PROJECT ENGINEER	DESIGN DATE11/10/14	SHEET NO. 171						
	JOHN R. FOLEY 38630	DRAWN P.G. SCALE NONE	171 /17A						
	P.E. REQ. NO.	APPR. JRF. JOB NO. 7865	/ <u>I/</u> 4						

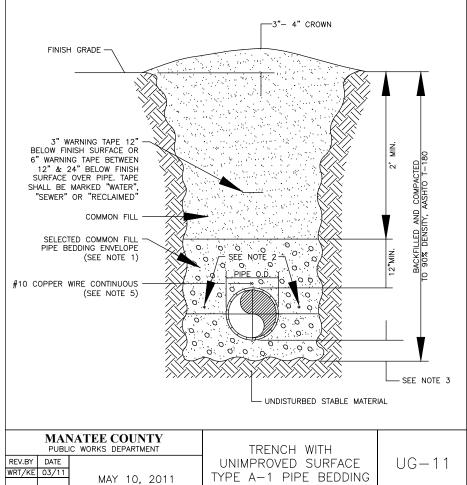


NOTES:

- 1. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 2. 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.
- 3. TYPICALLY 4" TO 6".

DATE OF APPROVAL

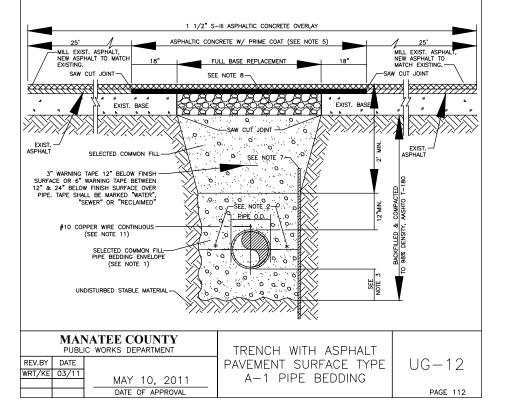
- 4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 5. TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.



NOTES:

PAGE 111

- 1. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 2. 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 ON WHICHEVER IS LESS
- 3 TYPICALLY 4" TO 6"
- 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, WHICHEVER IS GREATER.
- 6. MILL 25' BACK FROM TRENCH SAW CUT. ADJUST MILLING PER INDIVIDUAL SITE TO NOT IMPACT BASE. BUTT JOINT TO EXIST ASPHALT. FINAL OVERLAY LIMITS ARE FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT. 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.
- SHEETING ORDERED LEFT IN PLACE TO BE CUT OFF 24" BELOW FINISHED GRADE OR 12" BELOW SUBGRADE.
- 8. BASE SHALL BE 8" MINIMUM THICKNESS CRUSHED CONCRETE.
- 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 ROAD. REFER TO LATEST EDITION OF MANATEE COUNTY HIGHWAY AND TRAFFIC STANDARDS FOR ADDITIONAL REQUIREMENTS.

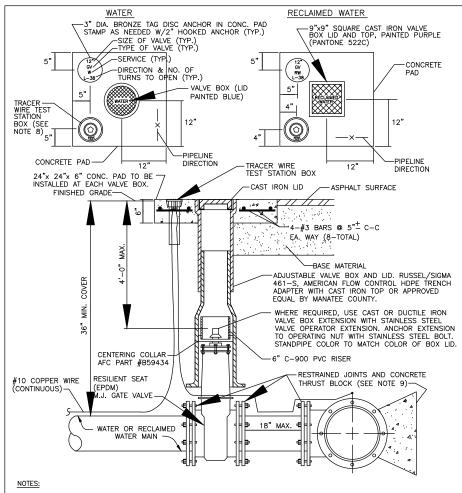


UTILITY ACCOMMODATION DETAILS

REVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561								
	PROJECT ENGINEER	DESIGN JR.F.	DATE 11/10/14	8HEET NO. 170					
	JOHN R. FOLEY 38630 P.E. REQ. NO.	DRAWN P.G. APPR JRF.	9CALE NONE JOB NO. 7865	<u>172</u> /174					



CLB/KE 11/10



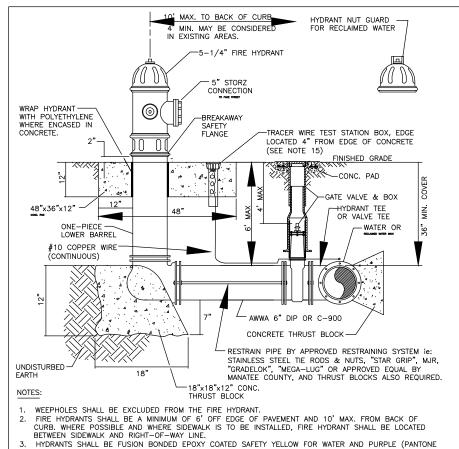
- "WV" OR "RWV" TO BE IMPRESSED INTO THE NEWLY—POURED CONCRETE CURB, ALONG WITH DISTANCE IN FEET TO THE VALVE. IF NO CURB, INSTALL A BLUE DISC WITH "WV" OR PURPLE DISC WITH "RWV" AND A 1/8"x1" GALVANIZED STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE DISC TO THE VALVE. ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS DETERMINED IN THE FIELD. WATER VALVES SHALL NOT BE PLACED IN HANDICAPPED RAMPS. PRECAST CONCRETE PADDS & THRUST BLOCKS SHALL NOT BE USED. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".

MAY 10, 2011

DATE OF APPROVAL

- ALL EXPOSED DEEDS OF COUNCEIE SHALL BE CHAMPERD 1/2.
 FOR VALVES 16" AND LARGER, USE BUTTERFLY VALVES.
 PIPELINE DIRECTION TO BE IMPRESSED INTO NEWLY POURED CONCRETE PAD.
 TRACER WIRE TEST STATION BOX IS NOT REQUIRED IN VALVE BOX PAD IF THE GATE VALVE IS LOCATED WITHIN 200 FEET
 OF A WAITER SERVICE, BLOW-OFF, BACKFLOW PREVENTER OR FIRE HYDRANT THAT HAS A TRACER WIRE BOX.
 WHERE THRUST BLOCK NOT USED, RESTRAINED JOINTS MUST THEN EXTEND FROM TEE FULL LENGTH SPECIFIED FOR "TEES."
 BINGHAM & TAYLOR P200NFG FOR NORMAL YARD SERVICE. WHERE VALVE WILL BE IN STREET OR PARKING UNDER VEHICLE
 TRAFFIC, USE P525RD CENTERED IN SEPARATE CONCRETE PAD SIMILAR TO STANDARD VALVE BOX PAD.
- MANATEE COUNTY GATE VALVE, BOX, UW-2REV.BY DATE

LID AND TAG



- 522C) FOR RECLAIMED WATER HYDRANT SHALL BE DUCTILE IRON CONSTRUCTION.

 4. FIRE HYDRANTS SHALL BE PLACED SO THAT STORM WATER FLOWS AWAY FROM THE HYDRANT.
- FIRE HYDRANTS SHALL BE PLOCED SO HAIR STORM WATER FLOWS AWAT FROM THE HIDRANT.
 FIRE HYDRANTS SHALL BE CONSTRUCTED WITH "GROUND LINE" SET TO FINISHED GRADES AS ESTABLISHED IN THE FIELD. NORMAL BURY IS 3 FEET OF COVER FOR ALL WATER LINES.
 FIRE HYDRANTS MAY BE CONSTRUCTED WITH "GRADELOK" OFFSET FITTING.
 RAISED REFLECTIVE PAVEMENT MARKER (BLUE) FOR POTABLE WATER (PURPLE) FOR RECLAIMED WATER.
- SHALL BE INSTALLED AT CENTERLINE OF PAYEMENT ADJACENT TO EACH HYDRANT 8. PRECAST CONCRETE THRUST BLOCKS & PADS SHALL NOT BE USED.

- ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 1/2" CHAMFER.

 I. FIRE HYDRANT VALVE SHALL BE FASTENED DIRECTLY TO TEE.

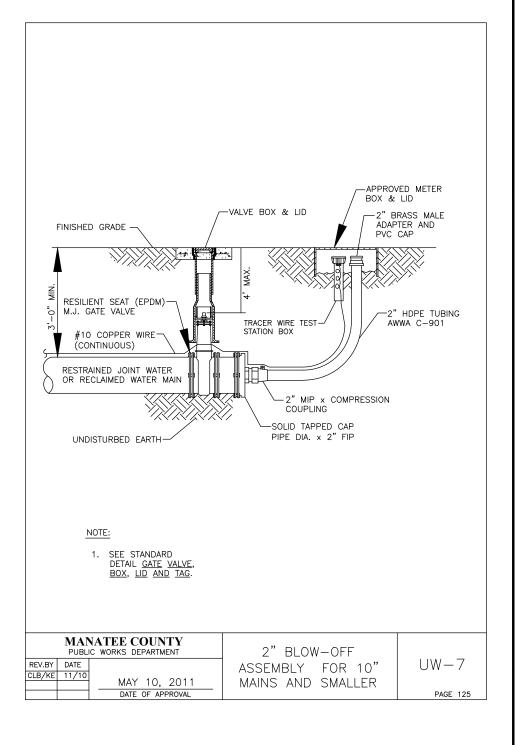
 I. FIRE HYDRANT VALVE SHOULD BE LOCATED AT HYDRANT TEES.

 HYDRANTS SHALL BE LOCATED ON SAME SIDE OF ROAD AS WATER MAIN UNLESS OTHERWISE APPROVED.

 THERE MUST BE A CLEARANCE OF 7 1/2 FEET FROM FRONT AND BOTH SIDES, AND FOUR FEET TO THE
- REAR OF THE HYDRANT, TO ABOVE GRADE OBSTRUCTIONS INCLUDING POSTS, FÉNCES, TREES, ETC, PER THE FLORIDA FIRE PREVENTION CODE.

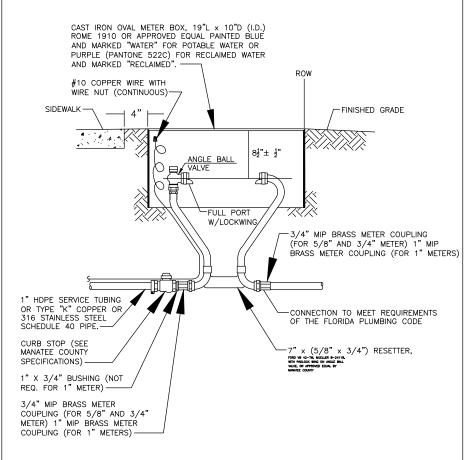
 SEE STANDARD DETAIL GATE VALVE, BOX, LID AND TAG.
- SHOULD THE FIRE HYDRANT'S CONCRETE PAD OVERLAP THE SIDEWALK, THE TRACER WIRE TEST STATION BOX SHALL NOT BE LOCATED WITHIN THE SIDEWALK.

		NATEE COUNTY IC WORKS DEPARTMENT	FIRF HYDRANT	
REV.BY	DATE		11112 111 210 1111	l UW-5
CLB/KE	11/10	MAY 10, 2011	ASSEMBLY	
		DATE OF APPROVAL		PAGE 123



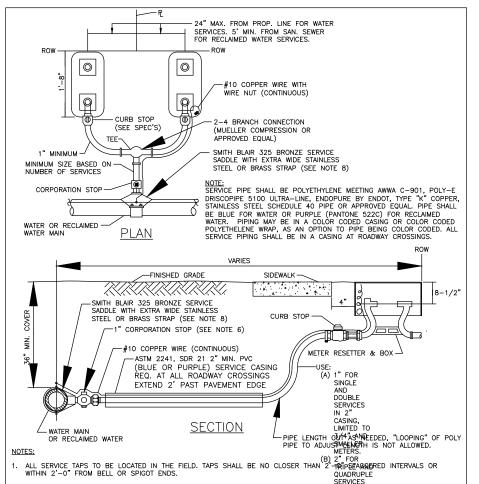
UTILITY ACCOMMODATION DETAILS

REVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4561								
	PROJECT ENGINEER	DESIGN JRF.	DATE 11/10/14	SHEET NO.					
	JOHN R. FOLEY 38630 P.E. REQ. NO.	DRAWN P.G. APPR JRF.	SCALE NONE JOB NO. 7865	173 174					



- 1. FORD 40 SERIES RESETTERS VB43 AND VB44 OR EQUAL FOR 3/4" OR 1" METERS ALSO ALLOWED.
- 2. METER BOX AND RESETTER ARE TO BE INSTALLED BY THE INFRASTRUCTURE CONTRACTOR AND SHALL NOT BE SET IN DRAINAGE SWALES, SIDEWALKS OR DRIVEWAYS.
- 3. FOR COMPLETE SERVICE CONNECTION ASSEMBLY, SEE DETAIL TYPICAL SERVICE CONNECTION.
- 4. WHEN THE DISTANCE BETWEEN THE EDGE OF THE SIDEWALK AND THE R/W IS ONE FOOT (CUL-DE-SAC W/ MEDIAN) A 10-FOOT-WIDE PUBLIC UTILITY EASEMENT SHALL BE LOCATED IN THE FRONT OF THE LOTS, ADJACENT TO THE ROW.
- 5. 3' MINIMUM CLEARANCE FROM LANDSCAPING PLANTS TO EDGE OF METER, CLEAR ACCESS OPENING TO STREET.

	NATEE COUNTY IC WORKS DEPARTMENT	METER BOX ASSEMBLY	
REV.BY DATE		FOR 5/8" X 3/4",	UW - 17
	MAY 10, 2011 DATE OF APPROVAL	3/4" & 1" METERS	PAGE 135



METER BOXES & RESETTERS ARE TO BE INSTALLED BY THE INFRASTRUCTURE CONTRACTOR SHALL NOT BE SET IN DRAINAGE SWALES, SIDEWALKS OR DRIVEWAYS. CASING.

"WM" OR "RWM" TO BE IMPRESSED INTO THE NEWLY POURED CONCRETE CURB ALONG WITH DISPANCE IN FEET TO THE METER. IF NO CURB, INSTALL A BLUE DISC WITH "WM" OR A PURPLE DISC WITH "RWM" A 1/8"x 1" GALVANIZED STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE DISTANCE (IN FEET) FROM THE DISC TO THE DISCEPT.

#10 COPPER WIRE SHALL BE INSTALLED WITH WATER AND RECLAIMED MAIN AND ALL SERWIDES! "SERVICE WIRE SHALL BE CONNECTED TO THE TRACER WIRE ALONG THE MAIN.

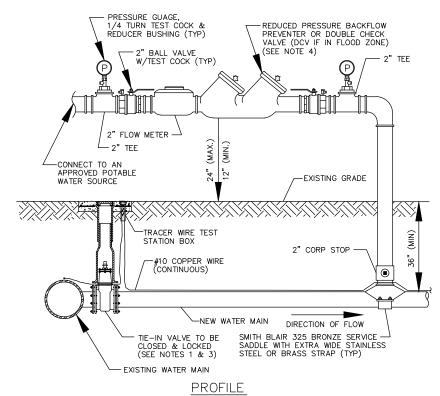
5. WATER AND RECLAIMED WATER SERVICE LINES TO BE 5' MINIMUM FROM SEWER SERVICE WHEPERS

6. FOR 2" SERVICES REPLACE CORPORATION STOP WITH 2" RESILIENT WEDGE FIP GATE VALVE W/BOX, LID & TAG.

WHEN THE DISTANCE BETWEEN THE EDGE OF THE SIDEWALK AND THE ROW IS ONE FOOT (CUL-DE-SAC W/MEDIAN) A 10-FOOT-WIDE PUBLIC UTILITY EASEMENT SHALL BE LOCATED IN THE FRONT OF THE LOTS, ADJACENT TO THE ROW.

8. FOR HDPE MAINS, USE ROMAC 306H SS OR CENTRAL PLASTICS ELECTRO FUSION CORP SADDLE.

		NATEE COUNTY IC WORKS DEPARTMENT	TYPICAL SERVICE	
REV.BY	DATE		THIOME SERVICE	UW-19
CLB/BR	11/10	1411/ 40 0044	CONNECTION	
		MAY 10, 2011		
		DATE OF APPROVAL		PAGE 137



- FOR TIE-IN VALVE, SEE DETAIL UW-4 FOR TAPPING SLEEVE VALVE, DETAIL UW-2 FOR GATE VALVE AND DETAIL UW-3 FOR BUTTERFLY VALVE.
- 2. CORPORATION STOP CONNECTIONS TO WATER MAINS SHALL BE AT A SUFFICIENT DISTANCE FROM NEW TAPPING SLEEVE & VALVE (TIE-IN VALVE). ALL CORPORATION STOP TAPS SHALL BE PLACED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO (1) MAIN PIPE DIAMETER PLUS (2) TAP DIAMETERS (WHICHEVER IS LARGER) FROM THE NEW TIE-IN VALVE (TAPPING VALVE & SLEEVE). A CROSS MAY BE INSTALLED IF THE EXISTING WATER MAIN IS NOT LARGER THAN THE NEW WATER MAIN.
- 3. IF THE EXISTING WATER MAIN IS LOCATED UNDER PAVEMENT OR CLOSE TO THE ROADWAY, BOTH JUMPER CORPORATION STOPS MAY CONNECT TO THE NEW WATER MAIN LOCATED OUTSIDE OF THE PAVEMENT. AN ADDITIONAL GATE VALVE OR BUTTERFLY VALVE SHALL BE INSTALLED AND THE VALVE MAY BE LOCATED AT THE ROW LINE. PIPING AND APPURTENANCES BETWEEN THE EXISTING MAIN AND ISOLATION VALVE AND JUMPER SHALL BE DISINFECTED
- 4. BACKFLOW PREVENTER SHALL BE STRUCTURALLY SUPPORTED.
- 5. SEE DETAIL UW-22 FOR ADDITIONAL JUMPER CONNECTION NOTES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT			TEMPORARY	
REV.BY WT/KE	DATE 01/11		JUMPER CONNECTION	UW-21
	,	MAY 10, 2011 DATE OF APPROVAL	OOMI LIV COMMECTION	PAGE 139

UTILITY ACCOMMODATION DETAILS

EVISIONS	LOMBARDO, FOLEY & KOLARIK, INC. Consulting Engineers, Surveyors and Planners P.O. Box 188 • 825 4th Street West • Palmetto, Florida 34221 • (941) 722-4581				
	PROJECT ENGINEER	DESIGN JRF.	DATE 11/10/14	8HEET NO.	
	JOHN R. FOLEY 38630 P.E. REQ. NO.	DRAWN P.G. APPR JRF.	9CALE NONE JOB NO. 7865	174/174	