

380-6048460

PROJECT SITE



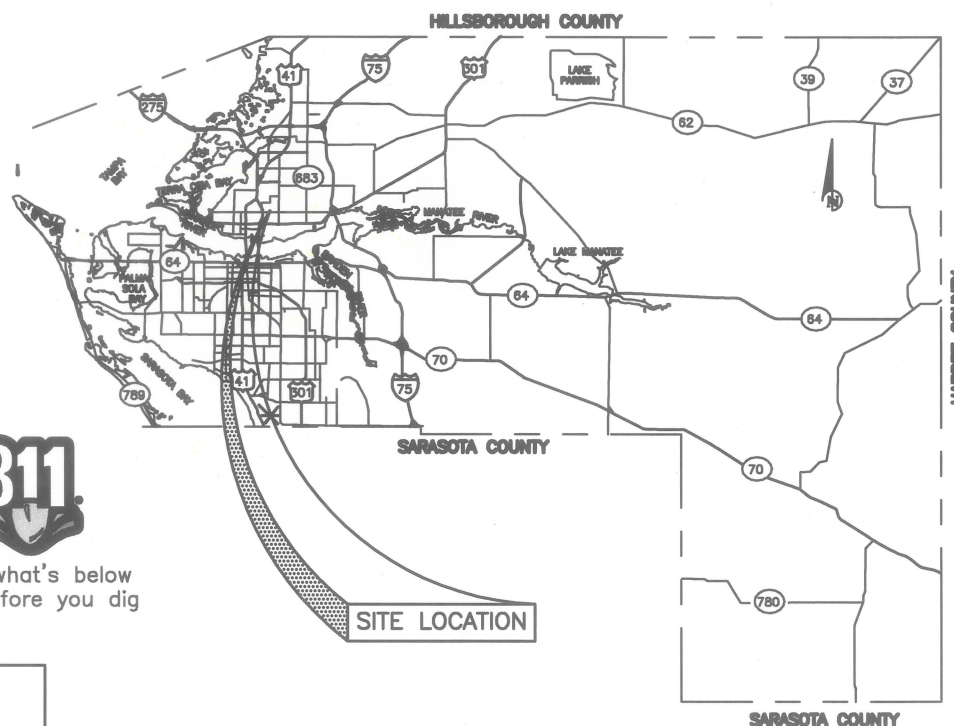
VICINITY MAP
N.T.S.

WORK CONSISTS OF RELOCATION OF EXISTING INTERSECTION TO THE EAST WITH ADDITION OF TURN LANES AND ELIMINATION OF SHARP CURVES.

1. INGRESS AND EGRESS ACCESS TO THE MANATEE COUNTY WASTE WATER FACILITY IS TO BE MAINTAINED DURING THE ENTIRE PROJECT. CONTRACTOR TO CONTACT CHRIS WEST, CHIEF OPERATOR NWRP, BEFORE CONSTRUCTION ACTIVITIES BEGIN. (941) 792-8811 EXT. 8057
2. THE CONTRACTOR SHALL PROVIDE ACCESS TO BUSINESSES AND LOCAL RESIDENTS AT ALL TIMES
3. NO LANE CLOSURE WILL BE ALLOWED BETWEEN THE HOURS OF 6AM AND 7PM
4. THE CONTRACTOR SHALL NOTIFY FDOT RAIL ADMINISTRATOR , ARLENE G. BARNES @ 1-(863) 519-2349 OR EMAIL ARLENE.BARNES@DOT.STATE.FL.US 48 HOURS PRIOR TO ANY WORK CONCERNING THE REMOVAL AND/OR INSTALLATION OF THE NEW OR OLD RAILROAD CROSSING.



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THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY:

1. THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2010, AND FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, DATED 2010 AND ALL SUPPLEMENTS.
2. MANATEE COUNTY TRANSPORTATION DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS, 2007, OR LATEST REVISION (ONLY WHERE NOTED)
3. MANATEE COUNTY PUBLIC WORKS UTILITY STANDARDS, MARCH 2009 OR LATEST REVISION AT TIME OF BID

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73.	UTILITY DETAIL SHEET
74.	EROSION CONTROL DETAIL SHEET
75.	EROSION CONTROL DETAIL SHEET

REVISION DESCRIPTION		BY	DATE
NO.			
PROJECT #		380-604846	
SURVEY #		1029, 1235	
SEC./TWN./RGE		26&35/33S/1	
DATE		DATE	
DESIGNED		DATE	
CHECKED		DATE	
CHRISTOPHER LEE MOWBRAY, P. ST. ALBINO FL. # 49718 FLORIDA PROFESSIONAL ENGINEER Signature & Date			
SHEET 1 OF 70			

12:29 PM Jim Anderson, 13, 11x17
COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT (S:\PMD_Engineering_Short\Highway Projects\CS\Erica_Baez_Approved_Agreement\Graphic Area 10-15-09\DWG\ERIE ROAD REALIGNMENT COVER.dwg) - GENERAL

GENERAL

1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: VINCE CANNA AND CAN BE REACHED AT (941) 708-7450; EXT. 7338.
2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE PROJECT MANAGER.
3. THE STANDARD SPECIFICATIONS TO BE USED FOR THIS WORK SHALL BE DIVISION II AND III OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010 EDITION AND ALL SUPPLEMENTAL SPECIFICATIONS THERETO, HEREINAFTER REFERRED TO AS THE STANDARD SPECIFICATIONS, FOR ROADWAY CONSTRUCTION, EXCEPT AS NOTED UNDER THIS CONTRACT, OR AS NOTED ON THE CONSTRUCTION PLANS. MEETING THE MANATEE COUNTY HIGHWAY, TRAFFIC AND STORM WATER STANDARDS (DATED 2007)
4. THE CONTRACTOR'S UTILITY WORK SHALL FOLLOW THE MANATEE COUNTY PUBLIC WORKS UTILITY STANDARDS AND SPECIFICATIONS (DATED MARCH 2009) FOR WATER, RECLAIM, AND FORCE MAIN WORK.
5. 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).
6. 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.
7. 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.
8. 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.
9. 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.
10. NO LANE CLOSURE WILL BE ALLOWED BETWEEN THE HOURS OF 8AM AND 7PM
11. ALL STATIONS AND OFFSETS REFER TO BASELINE OF CONSTRUCTION, UNLESS OTHERWISE NOTED.
12. 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.
13. 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.
14. 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 CONTRACTOR'S CONSTRUCTION SCHEDULE. (REFERENCE CONTRACT DOCUMENTS)
15. 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 SATISFACTORY OF THE COUNTY PROJECT MANAGER. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
16. ALL CONSTRUCTION WITHIN FDOT RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH CURRENT FDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION AND THE DESIGN STANDARDS.
17. ALL SIGNING, STRIPING AND RPM PLACEMENT IS TO BE IN ACCORDANCE WITH FDOT STANDARD INDEX 17346.

SAFETY

18. 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 1926.850, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
19. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
20. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC. AND CONFORM TO ALL OSHA REQUIREMENTS.
21. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

22. 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 COMPLETION OF THE PROJECT, AND UPON ADEQUATE STABILIZATION OF DISTURBED SOILS.
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.
28. 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.

29. 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.
30. 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.
31. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
32. 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.
33. FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.
- RIGHT-OF-WAY**
34. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY, FDOT, FPL RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
35. 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.
36. THE CONTRACTOR, PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHT-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.
37. 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.
38. 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 COUNTY PROJECT MANAGEMENT AND ZOLLAR HAJJAR & SHROYER UNDER COUNTY PROJECT NO'S 334-6001080 AND 319-6045661. REFER TO THE ORIGINAL SIGNED AND SEALED SURVEY CONTROL SHEETS IN THE PROJECT FILE.
39. 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.

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 VWH 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. EXTREME CAUTION SHALL BE EXERCISED WHEN WORKING NEAR THE 24" WATERLINE.
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, 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, TOP OF BANK AND ELEVATION (NNL₂), AT HIGH WATER ELEVATION (HWL ALL MITIGATION AND/OR LITTORAL SHELF AREAS).
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 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 ON-SITE 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 INVERT TO INVERT.
50. 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.
51. 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.
52. 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.
53. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURES PRIOR TO INSTALLATIONS.
54. 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.
55. ON SLOPES GREATER THAN 3:1 PEGGING OR PINNING OF SOD MAY BE REQUIRED.
56. 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 DO NOT 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.
57. ALL CURB INLET AND JUNCTION BOX STORMWATER STRUCTURES SHALL HAVE HEAVY DUTY RING AND COVER MANHOLE ACCESS
58. 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.

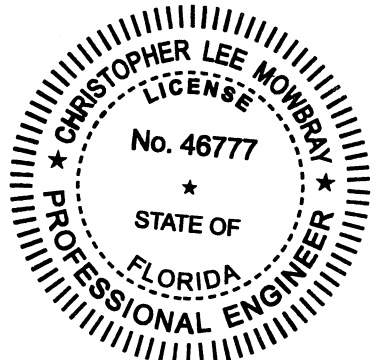


ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
GENERAL NOTES ROADWAY

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	380-6048460
SURVEY #	1029, 1235
SEC./TWN./RGE	26&35/33S/18E
SCALE	
SURVEYED	K&S 12/29/10
DESIGNED	CM 02/05/10
DRAWN	J & G 04/23/10
CHECKED	JP,SF 03/20/12

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
Christopher Lee Mowbray
4/25/12
Signature & Date
SHEET 2 OF 75



RESTORATION

59. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.

60. 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.

61. 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.

62. 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 MATCH EXISTING PAVEMENT.

63. 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

64. 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 BARRIERS POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.

65. 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.

66. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.

67. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.

68. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA, UNLESS OTHERWISE NOTED ON THE PLANS.

69. 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.

70. 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.

71. 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.

72. 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.

73. ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.

74. ALL CONCRETE AND REBAR PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.

75. 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.

76. 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.

77. 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.

78. 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.

79. 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.

80. 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.

81. ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED IN THE PLANS, OR AS DIRECTED BY THE ENGINEER.

82. 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.

83. ALL EXISTING SWALES NOT DESIGNATED FOR RECONSTRUCTION SHALL BE REGRADED TO PROMOTE POSITIVE DRAINAGE AND MATCH PROPOSED CENTERLINE SWALE ELEVATION AND ALIGNMENT.

84. 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.

85. 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).

86. ALL EXISTING TREES LOCATED WITHIN R/W LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.

87. ALL EXISTING STORM DRAINAGE STRUCTURES SHALL BE REMOVED UNLESS OTHERWISE NOTED.

88. ALL EXISTING BUILDINGS SHALL REMAIN UNLESS OTHERWISE NOTED.

89. REMOVE AND REPLACE BASE AND SUB-BASE ACCORDING TO FDOT STANDARDS

RAILROAD NOTES

90. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO INSTALL ROAD SURFACE (ASPHALT) UP TO THE INSTALLED CROSSING.

91. CROSSING MUST BE INSTALLED PRIOR TO ASPHALT INSTALLATION.

92. CONTRACTOR SHALL AT A MINIMUM GRADE APPROACHES TO THE PROPOSED CROSSING TO ALLOW MACHINERY ACCESS TO THE PROPOSED CROSSING LOCATION.

93. FINAL GRADING AND BASE WORK SHALL BE COMPLETED AFTER INSTALLATION OF THE CROSSING SYSTEM.

94. CONTRACTOR IS RESPONSIBLE FOR ALL STRIPING, SIGNAGE, AND ASPHALT MARKING TO COMPLY TO CURRENT FDOT STANDARDS.

95. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF TEMPORARY AND PERMANENT BARRICADES NECESSARY FOR THE EXISTING CROSSING.

96. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL SIGNAGE AND ROADWAY MARKINGS ASSOCIATED WITH THE REMOVAL OF THE EXISTING CROSSING.

ERIE ROAD SUPER ELEVATION DATA

CURVE	STATION		LEFT SHLD	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
1	101+12.79'	END NORMAL CROWN	-3.00%	-2.00%	-2.00%	-3.00%
1	101+54.29'	LEVEL CROWN	-3.00%	0.00%	-2.00%	-3.00%
1	101+95.79'	REVERSE CROWN	-3.00%	2.00%	-2.00%	-3.00%
1	102+37.29	BEGIN FULL SUPER	-3.00%	4.00%	-4.00%	-3.00%
1	108+34.82'	END FULL SUPER	-3.00%	4.00%	-4.00%	-3.00%
1	108+76.32'	REVERSE CROWN	-3.00%	2.00%	-2.00%	-3.00%
1	109+17.82'	LEVEL CROWN	-3.00%	0.00%	-2.00%	-3.00%
1	109+59.32'	BEGIN NORMAL CROWN	-3.00%	-2.00%	-2.00%	-3.00%
1	110+21.57'	BEGIN NORMAL SHOULDER	-3.00%	-2.00%	-2.00%	-3.00%
2	110+82.09'	END NORMAL SHOULDER	-3.00%	-2.00%	-2.00%	-3.00%
2	111+44.39'	END NORMAL CROWN	-3.00%	-2.00%	-2.00%	-3.00%
2	111+85.93'	LEVEL CROWN		-2.00%	0.00%	-3.00%
2	112+27.47'	REVERSE CROWN		-2.00%	2.00%	-3.00%
2	112+66.93'	BEGIN FULL SUPER	-3.00%	-3.90%	3.90%	-3.00%
2	114+46.32'	END FULL SUPER	-3.00%	-3.90%	3.90%	-3.00%
2	114+85.78'	REVERSE CROWN	-3.00%	-2.00%	2.00%	-3.00%
2	115+27.32'	LEVEL CROWN	-3.00%	-2.00%	0.00%	-3.00%
3	116+12.88'	LEVEL CROWN	-3.00%	0.00%	-2.00%	-3.00%
3	116+54.02'	REVERSE CROWN	-3.00%	2.00%	-2.00%	-3.00%
3	116+84.88'	BEGIN FULL SUPER	-3.00%	3.50%	-3.50%	-3.00%
3	119+69.20'	END FULL SUPER	-3.00%	3.50%	-3.50%	-3.00%
3	120+00.06'	REVERSE CROWN	-3.00%	2.00%	-2.00%	-3.00%
3	120+41.20'	LEVEL CROWN	-3.00%	0.00%	-2.00%	-3.00%
3	120+82.34'	BEGIN NORMAL CROWN	-3.00%	-2.00%	-2.00%	-3.00%

CONTACTS

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EMERGENCY: 1-877-832-6911
dshanahan@tecoenergy.com

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1-(800) 432-4770

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(883) 767-4680
kendell.coker@preco.coop

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PUBLIC WORK DEPT.
TRAFFIC ENGINEERING
MICHAEL O'REILLY, P.E.
(941) 749-3500 EXT. 7859
FAX: (941) 749-3571

BM • BENCH MARK
CM • CONCRETE MONUMENT
IP • IRON PIPE
IR • IRON ROD
HUB • HUB
N&D • NAIL & DISK
ELEVATION
1304
1305
777
GW ← GUY WIRE
PP → POWER POLE
LP • LIGHT POLE
MB □ MAIL BOX
SN □ SIGN
REF □ REFLECTOR
SPRK • SPRINKLER
GM • GAS MARKER
BFP → BACKFLOW PREVENTER
BO □ BLOW OFF VALVE
FH □ FIRE HYDRANT
WV □ WATER VALVE
ARV □ AIR RELEASE VALVE
WM □ WATER METER
SMH □ SANITARY SEWER MANHOLE
CO □ SANITARY SEWER CLEAN OUT
SB/SPB • SOIL BORING LOCATION
TEL □ TELEPHONE SERVICE BOX
GI □ GRATE INLET
MITERED END SECTION

EXISTING

BUSH
TREE
OAK TREE
PALM TREE
PINE TREE
EDGE OF VEGETATION
CHAIN LINK FENCE
WOOD FENCE
BARBED WIRE FENCE
FM FORCE MAIN
PW POTABLE WATER
RW RECLAIMED WATER
SS SANITARY SEWER
SD STORM DRAIN
GS GAS LINE
OHTV OVERHEAD TV
OHTV UNDERGROUND TV
OE OVERHEAD ELECTRIC
UE UNDERGROUND ELECTRIC
OH VER OVERHEAD VERIZON
UV VER UNDERGROUND VERIZON
VER VERIZON
UG UNDERGROUND UTILITY
OH OVERHEAD UTILITY
RT RAIL ROAD TRACKS
EC EDGE OF CONCRETE
ER EDGE OF ROAD
TS TOE OF SLOPE
TB TOP OF BANK
PL PROPERTY LINE
RL RIGHT OF WAY

LEGEND

ABBREVIATIONS

R/W RIGHT OF WAY
CONC CONCRETE
ASPH ASPHALT
DRWY DRIVEWAY
SWK SIDEWALK
EP EDGE OF PAVEMENT
BOC BACK OF CURB

PROPOSED

MAIN
SERVICE LINE
PROPOSED EASEMENT
FIRE HYDRANT
VALVE
SANITARY SEWER MANHOLE
BLOW OFF ASSEMBLY
REDUCER
TEE
HORIZONTAL BEND
VERTICAL BEND
PLUG
MASTER METER ASSEMBLY
SERVICE LINE & METER
DOUBLE SERVICE

MANATEE COUNTY GOVERNMENT
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES



1022 26th Avenue East
Bradenton, FL 34208

ERIE ROAD @ 69TH ST. EAST-

INTERSECTION

GENERAL NOTES ROADWAY

DATE							
BY							
REVISION DESCRIPTION							
NO.							

PROJECT # 380-6048460

SURVEY # 1029, 1235

SEC./TWN./RGE 26&35/33S/18E

SCALE

SURVEYED 11/29/10

DESIGNED CM 10/26/10

DRAWN 11/15/10

CHECKED 11/15/10

NO. 46777

FLORIDA P.E. # 46777

STATE OF FLORIDA

ENGINEER

SHEET 11 OF 15

MANATEE COUNTY GOVERNMENT
S:\PWD Engineering Shore\Highway Engineering\PROJECTS\Erie Bocc Approved Alignment\Chris' Areg 10-15-09\DWG\ERIE ROAD REALIGNMENT COVER.dwg, 4_GN UTIL 4/25/2012 12:08 PM Jim Anderson, 1:1, 11x17

- ## **SAFETY**

-
- ENVIRONMENTAL

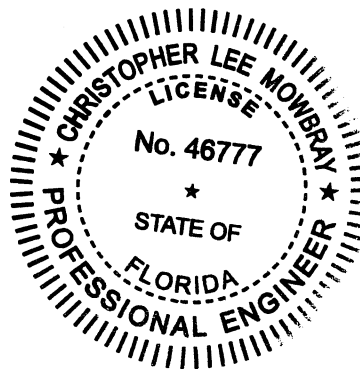
- RIGHT-OF-WAY**

- ## 16. UTILITIES

- ## RESTORATION

- ## CONSTRUCTION

47. CONTRACTOR SHALL PROVIDE RECORD DRAWINGS IN ACCORDANCE WITH SECTION 14 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 14 SHALL BE STRICTLY ENFORCED. A COPY OF SECTION 14 WILL BE PROVIDED UPON REQUEST.



1022 26th Avenue East
Bradenton, FL 34208

**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
GENERAL NOTES UTILITIES**

[illegible]

NO					
PROJECT #		380-6048460			
SURVEY #		1029, 1235			
SEC./TWN./RGE		26&35/33S/1E			
SCALE					
SURVEYED		K&S	12/29/11		
DESIGNED		CM	02/05/12		
DRAWN		AG	04/23/12		
CHECKED		WRT	03/20/12		

FLORIDA P.E. # 45777

4/25/16

Signature & Date

SHEET 4 OF 75

C:\P\0100\2010 MANATEE COUNTY GOVERNMENT\13-PWD-Engineering-Shore\Highway Engineering\PROJECTS\13-Boc Approved Alignment\Chris Area 10-13-09 DWG\ERIE ROAD REALIGNMENT COVER.dwg, 5-QTY SHEET, 6/22/2012 1:19 PM Jim Anderson, 1:1, ANSI full bleed B (17.00 x 11.00 inches)

LINE NO.	ITEM NO.	DESCRIPTION	EST. QTY	U/M
1.	0101-1	Mobilization	1	LS
2.	0102-1	Maintenance of Traffic	1	LS
		SUBTOTAL MOBILIZATION AND MOT		
3.	0102-74-MC	Barricade, Permanent, Type III	3	EA
4.	0104-10-3	Sediment Barrier	8,599	LF
5.	0104-11	Floating Turbidity Barrier	50	LF
6.	0104-15	Soil Tracking Prevention Device	1	EA
7.	0110-1-1	Clearing & Grubbing, Including Asphalt Removal	11	AC
8.	0110-4	Removal of Existing Concrete Pavement	100	SY
9.	0110-7-1	Mailbox (F & I) Single	4	EA
10.	0110-MC	Mailbox, Relocate	1	EA
11.	0120-1-MC	Special Excavation Includes Base Removal of Existing Road, Scarify Existing Sub-base, Recountour and Hydroseed all Disturbed Areas, Include Fill	1	LS
12.	0120-1	Regular Excavation	13,034	CY
13.	0120-4	Subsoil Excavation	100	CY
14.	0120-6	Embankment (Regular)	3,327	CY
15.	0160-4	12" Stabilized Sub-base (Type B)	14,052	SY
16.	0285-709	Optional Base Group 9	13,264	SY
17.	0334-MC	2" Type S-I Asphalt Concrete	1,409	TN
18.	0337-MC	1" Type S-II Asphalt Concrete	702	TN
19.	0350-2-1	Cement Concrete Pavement Reinforced, 6"	725	SY
20.	0400-2-12	Concrete Class II, Trench Slab	10	CY
21.	0425-2-41	Manholes (P-7) (<10')	2	EA
22.	0425-11	Drainage Structure - Modify Existing	1	EA
23.	0425-1-529	Inlets (Ditch Bottom Type C) (Modify)	2	EA
24.	0425-1-549	Inlets (Ditch Bottom Type D) (Modify)	1	EA
25.	0425-1-559	Inlets (Ditch Bottom Type E) (Modify)	2	EA
26.	0430-174-112	Pipe Culvert A2000 12" SD	88	LF
27.	0430-175-118	Pipe Culvert A2000 18" CD	285	LF
28.	0430-175-124	Pipe Culvert A2000 24" CD	662	LF
29.	0430-175-215	Pipe Culvert 12" x 18" CD RCP	718	LF
30.	0430-982-125	MES (Round) (18") (CD)	2	EA
31.	0430-982-623	MES (Elliptical) (12"x18") (CD)	14	EA
32.	0430-984-121	MES (Round) (12") (SD)	6	EA
33.	0430-984-129	MES (Round) (24") (SD)	1	EA
34.	0522-1	Sidewalk Concrete 4" Thick	310	SY
35.	0530-1	Rip-Rap, Sand-Cement	11	CY
36.	0530-MC	1-2"Ø River Stone w/ Mirafi 140N Filter Fabric	10	CY
37.	0550-MC	Fence Removal and Relocation	1	LS
38.	0556-1-6	Jack and Bore, Casing Diameter 36"	110	LF
39.	0570-1-2	Sodding (Performance Turf)	12,000	SY
		SUBTOTAL ROADWAY		
40.	MC-U-1	Water Service	1	EA
41.	MC-U-2	Reuse Service	1	EA
42.	MC-U-3	Forcemain Service	1	EA
43.	MC-U-4	Hydrant Assembly Including 24" x 6" Tapping Sleeve	1	EA
43a	MC-U-5	Adjust Valve	1	EA
		SUBTOTAL UTILITY		
44.	0700-20-11	Single Post Sign, F&I, Less than 12 SF	17	EA
45.	0700-20-40	Single Post Sign, Relocate	1	EA
46.	0700-20-60	Single Post Sign, Remove	19	EA
47.	0700-MC	Existing Utility Sign, relocate	1	AS
48.	0706-3	Retro-Reflective Pavement Markers, All Colors	284	EA
49.	0711-11-111	Thermoplastic, Standard, White, Solid, 6"	7,634.00	LF
50.	0711-11-123	Thermoplastic, Standard, White, Solid, 12"(Crosswalk)	180	LF
51.	0711-11-125	Thermoplastic, Standard, White, Solid, 24"(Stop Bar)	144	LF
52.	0711-11-160	Thermoplastic, Standard, White, Message (R/R Crossing)	3	EA
53.	0711-11-170	Thermoplastic, Standard, White, Directional Arrow	14	EA
54.	0711-11-211	Thermoplastic, Standard, Yellow, Solid, 6"	7,657.00	LF
55.	0711-11-224	Thermoplastic, Standard, Yellow, Solid, 18"	308	LF
		SUBTOTAL SIGNING AND STRIPING		

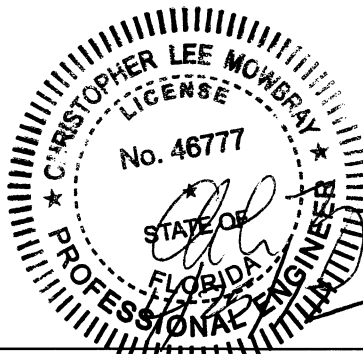
* SP. PROVISION CLARIFICATION OF LINE ITEMS
LINE # 16
FOR CRUSHED CONCRETE UNDER GRADED
AGGREGATE BASE OPTION, FDOT 2007 SPEC/
REV '08 SHALL BE USED.
TYPE B 12.5 EXCLUDED



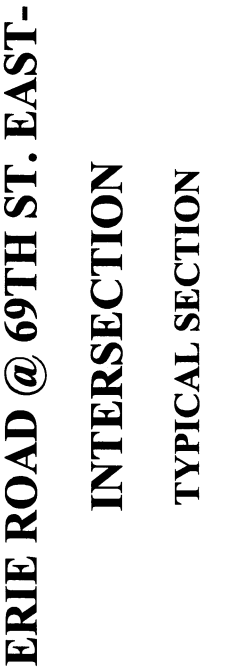
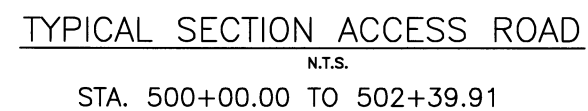
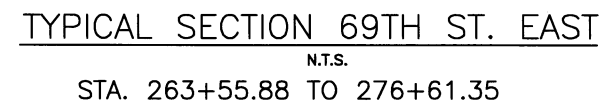
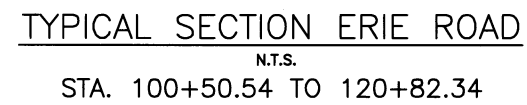
ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
SUMMARY OF PAY ITEMS/QUANTITY SHEET

REVISION	DESCRIPTION	BY	DATE
NO.			
PROJECT #	380-6048460		
SURVEY #	1029, 1235		
SEC./TWN./RGE	26&35/33S/18E		
SCALE			
SURVEYED	K&S	12/29/10	
DESIGNED	CM	02/05/10	
DRAWN		04/23/10	
CHECKED	JP,SF,PB	03/20/12	

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777



Signature & Date
SHEET 5 OF 75



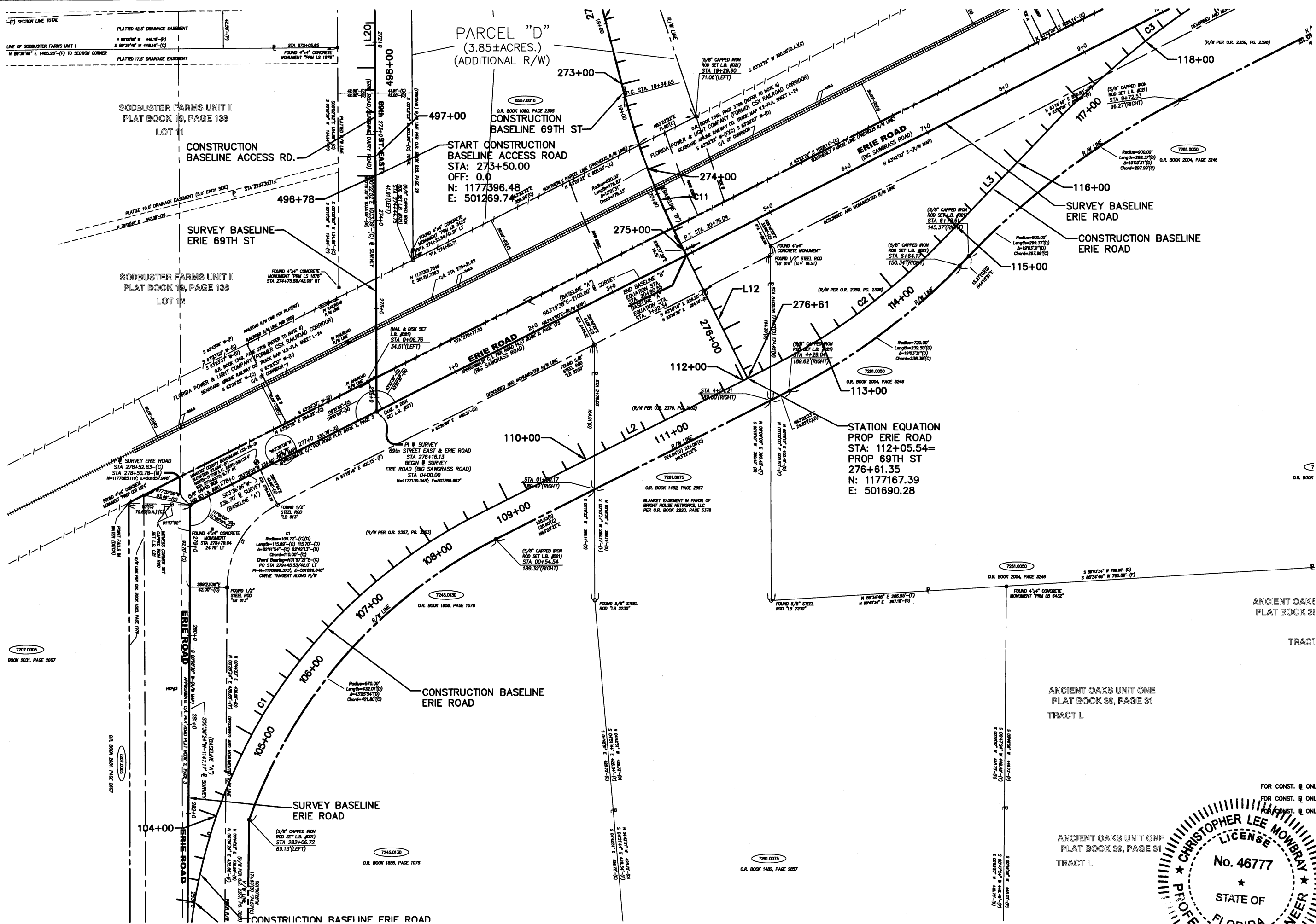
CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 48777
4/25/12
Signature & Date

[illegible]

CHRISTOPHER LEE MOWBRAY, P.
FLORIDA P.E. # 46777
FOR CONST. E ONLY
Ch Lee
4/25/12
Signature & Date

—START CONSTRUCTION
BASELINE ERIE ROAD
STA: 286+00.00
OFF: 1.63 R
N: 1176278.61
E: 501048.42

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT 15:PM Engineering, Shore Highway Engineering Projects, Eria Book Approved Alignment Chris Area 10-15-09 UNW/ERE ROAD REALIGNMENT SURV CONT. SHEET 8 OF 75 12:15 PM Jim Anderson, L.S., 11x17

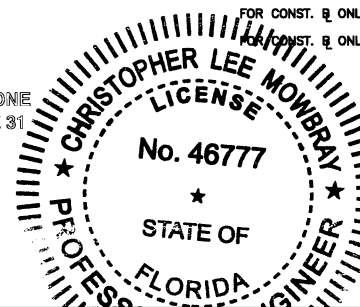


ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
SURVEY CONTROL SHEET

DATE	
BY	
REVISION DESCRIPTION	
NO.	

PROJECT #	380-6048460
SURVEY #	1029, 1235
SEC./TWN./RGE	26&35/33S/18E
SCALE	1"=30'
SURVEY	GFY 12/22/11
DESIGNED	CM 02/05/10
DRAWN	889 04/23/10
CHECKED	JP, SF 03/20/12

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
FOR CONST. B ONLY
Signature & Date
4/29/12
SHEET 8 OF 75

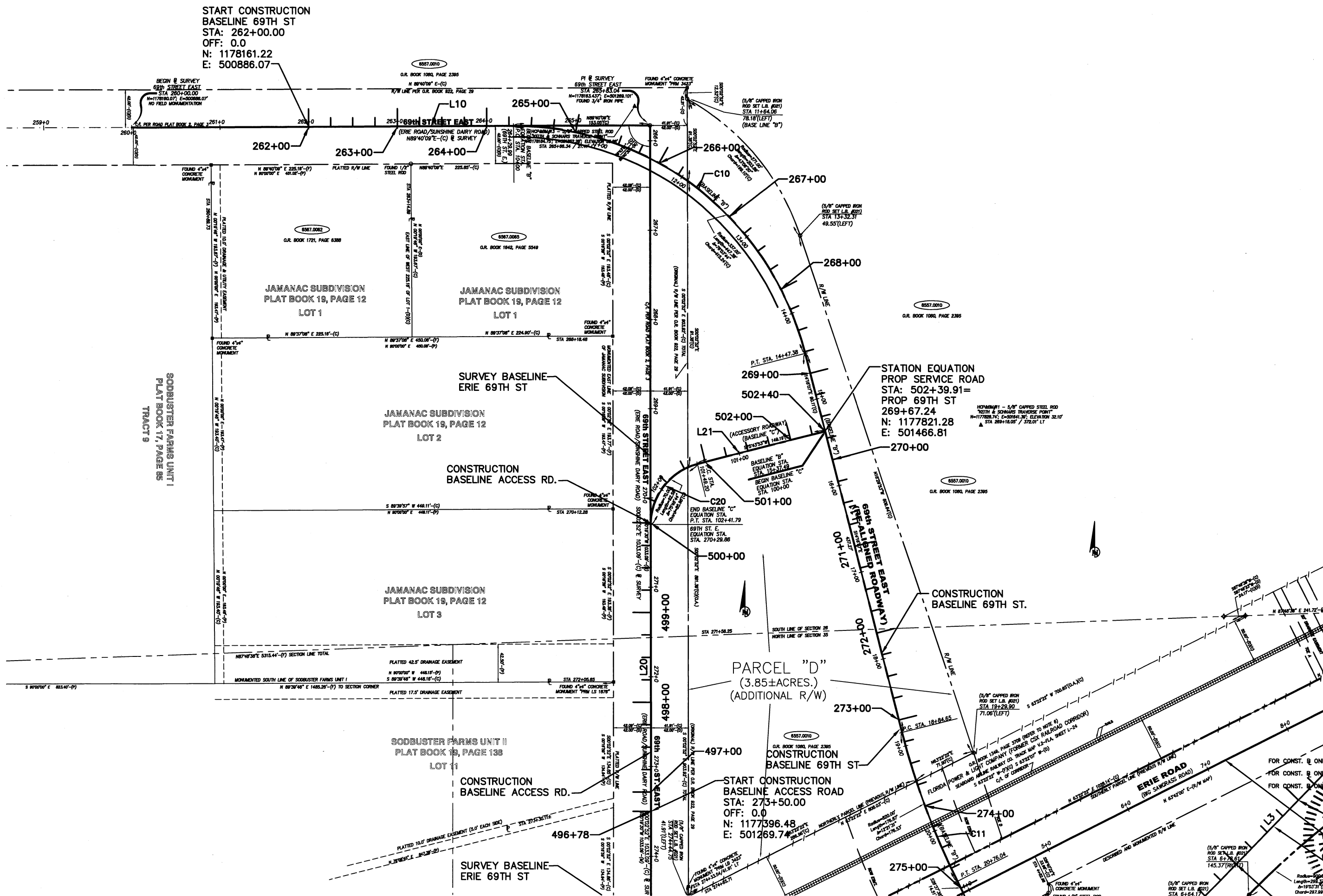


[illegible]

PROJECT #	380-604846
SURVEY #	1029, 1235
SEC./TWN./RGE	26&35/335/1
SCALE	1"=30'
SURVEY	GFY 12/22/
DESIGNED BY	IN 02/05/
DRAWN BY	04/11/
CHECKED BY	03/01/

CHRISTOPHER BAE
LICENSED PROFESSIONAL ENGINEER

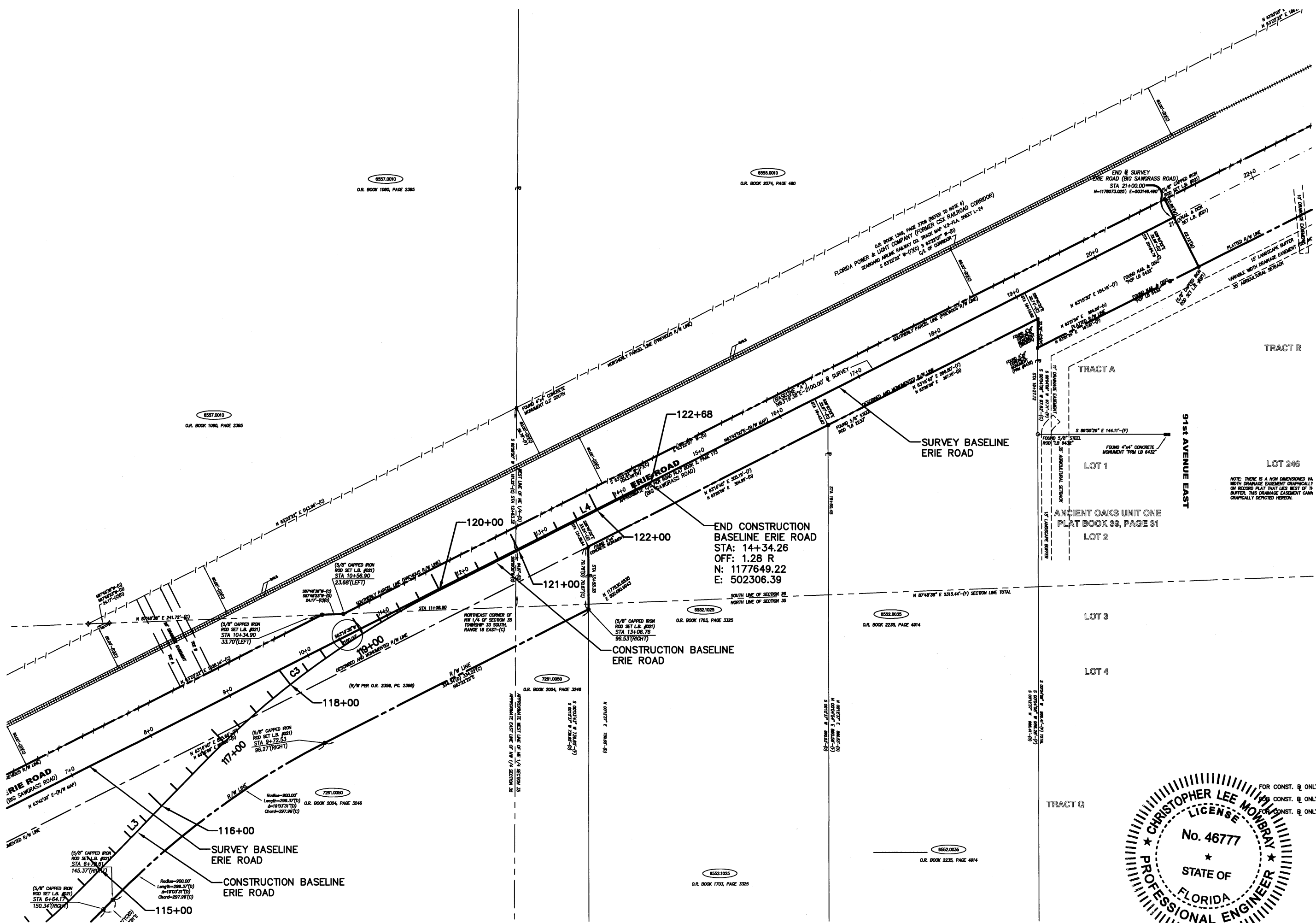
CHRISTOPHER BAE
LEWIS MONROE, P.E.
FLORIDA P.E. # 6771
FOR CONST & ONLY
STATE OF FLORIDA
Signature & Date
SWEET'S



[illegible]

Signature & Date

FOR CONST.
FOR CONST.
FOR CONST.



COPYRIGHT 2010 - MANATEE COUNTY GOVERNMENT | S:\PWD_Engineering_Shore Highway Engineering\PROJECTS\Erie Bocc Approved Alignment\Chris' Area 10--15--09\DWG\Erie Road REALIGNMENT SURV CONT.dwg,SCOTD 11, 4/25/2012 4:15 PM Jim Anderson, 11, 11x17

P_Erie Road											
Number	Length	Radius	Line/Chord Direction	Start North	Start East	Start Northing	Start Easting	Start Station	End Station	Start Station	End Station
L1	209.90		N1° 04' 54.02"E	1176278.61	501048.42			100+00.00	102+09.90		
C1	652.31	600.00	N32° 13' 37.86"E			1176488.47	1177013.51			102+09.90	108+62.21
L2	377.99		N63° 22' 21.71"E	1177013.51	501383.36			108+62.21	112+40.20		
C2	232.85	700.00	N53° 50' 36.14"E			1177182.92	1177319.67			112+40.20	114+73.05
L3	188.07		N44° 18' 50.56"E	1177319.67	501908.40			114+73.05	116+61.12		
C3	331.82	1000.00	N53° 49' 11.66"E			1177454.23	1177649.22			116+61.12	119+92.93
L4	275.21		N63° 15' 45.39"E	1177649.22	502306.39			119+92.93	122+68.14		

P_69th Ave											
Number	Length	Radius	Line/Chord Direction	Start North	Start East	Start Northing	Start Easting	Start Station	End Station	Start Station	End Station
L10	228.86		N89° 44' 52.29"E	1178161.22	500886.07			262+00.00	264+28.86		
C10	448.59	337.00	S52° 24' 08.98"E			1178162.23	1177908.30			264+28.86	268+77.45
L11	436.94		S14° 16' 07.01"E	1177908.30	501444.68			268+77.45	273+14.39		
C11	176.87	820.00	S20° 26' 52.65"E			1177484.84	1177319.43			273+14.39	274+91.26
L12	170.09		S26° 37' 38.29"E	1177319.43	501614.05			274+91.26	276+61.35		

north service road											
Number	Length	Radius	Line/Chord Direction	Start North	Start East	Start Northing	Start Easting	Start Station	End Station	Start Station	End Station
L20	321.56		N0° 00' 22.21"E	1177396.48	501269.74			496+78.44	500+00.00		
C20	91.46	71.01	N38° 34' 30.60"E			1177718.04	1177784.70			500+00.00	500+91.46
L21	148.45		N75° 43' 52.99"E	1177784.70	501322.94			500+91.46	502+39.91		

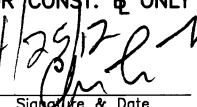
MANATEE COUNTY GOVERNMENT
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES

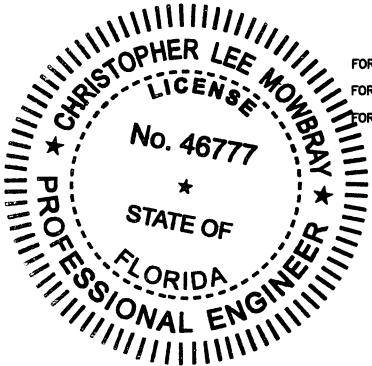

FLORIDA
1022 26th Avenue East
Bradenton, FL 34208

ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
SURVEY CONTROL SHEET

DATE							
BY							
REVISION DESCRIPTION							
NO.							

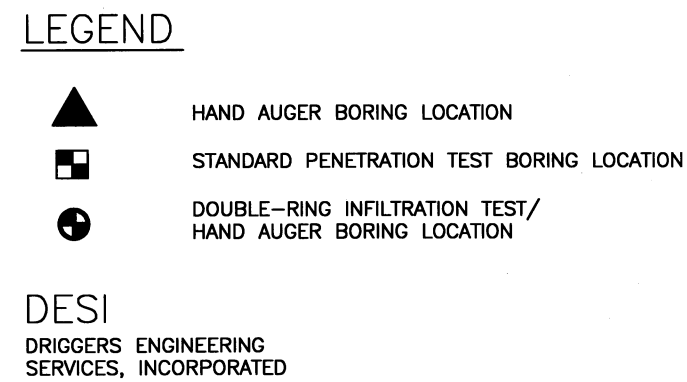
PROJECT #	380-6048460	
SURVEY #	1029, 1235	
SEC./TWN./RGE	26&35/33S/18E	
SCALE		
SURVEY	GFY	12/22/11
DESIGNED	CM	02/05/10
DRAWN	PLG	04/23/10
CHECKED	JP,SF	03/20/12

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
FOR CONST. & ONLY

Signature & Date



FOR CONST. & ONLY
FOR CONST. & ONLY
FOR CONST. & ONLY

DATE							
BY							
REVISION DESCRIPTION							
NO.							
PROJECT #	380-6048460						
SURVEY #	1029, 1235						
SEC./TWN./RGE	26&35/33S/18E						
SCALE	NTS						
SURVEYED							
DESIGNED							
DRAWN							
CHECKED							



**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ROADWAY SOIL SURVEY**

NO.	REVISION DESCRIPTION	DT	DATE

PROJECT #	380-604848	
SURVEY #	1029, 1235	
SEC./TWN./RGE	26&35/33S/1	
SCALE	NTS	
SURVEYED		
DESIGNED		
DRAWN		
CHECKED		



HAND AUGER BORING LOG				
PROJECT: Pavement & Drainage Area Investigation Erie Road & 69th Street East Manatee County, Florida Project No.: DES 106525		CLIENT: Manatee County		
TECHNICIAN: M.J.		WATER TABLE: 1.3'		DATE: 4/7/10
LOCATION: See Plate I		DATE: 4/7/10		COMPLETION DEPTH: 4.2'
		TEST NUMBER: HA-1		
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL	REMARKS
	Dark gray and brownish-gray Fine SAND with roots (SP) (A-3)	0		
	Gray Fine SAND (SP) (A-3)	1		
	Dark brown slightly organic, slightly silty Fine SAND with roots (SP-SM) (A-3)	2		
	Orangish-brown Fine SAND (SP) (A-3)	3		
	Light brown silty Fine SAND with trace of cemented sand (SM) (A-2-4)	4		
	Gray cemented, sandy CLAY (CL) (A-7-6)			
		5		
		6		
		7		

* Could not penetrate below depth 4.2' due to cementation.



HAND AUGER BORING LOG			
PROJECT: Pavement & Drainage Area Investigation Erie Road & 69th Street East Manatee County, Florida Project No.: DES 106525		CLIENT: Manatee County	
TECHNICIAN: M.J.		WATER TABLE: 1.4'	DATE: 4/7/10
LOCATION: See Plate I		DATE: 4/7/10	COMPLETION DEPTH: 5.0' *
		TEST NUMBER: HA-2	
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL
	Dark gray slightly organic Fine SAND with roots (SP) (A-3)	0	
		1	
	Gray Fine SAND (SP) (A-3)	2	
		3	
	Dark brown Fine SAND with finely divided organic material (SP) (A-3)	4	
		5	
	Brown and light brown Fine SAND with trace of roots (SP) (A-3)	6	
		7	
	Light brown sandy CLAY (CL) (A-7-6)		

* Could not penetrate below depth 5.0' due to cementation.



PROJECT: Pavement & Drainage Area Investigation Erie Road & 69th Street East Manatee County, Florida Project No.: DES 106525				CLIENT: Manatee County	
TECHNICIAN: M.J.				DATE: 4/7/10	
LOCATION: See Plate I				COMPLETION DEPTH: 6.0'	
ELEV. (FT)				SYMBOL	
DESCRIPTION				REMARKS	
	Dark gray slightly organic Fine SAND with roots (SP) (A-3)	0			
	Gray Fine SAND (SP) (A-3)	1			
	Dark brown slightly organic Fine SAND (SP) (A-3)	2			
	Dark reddish-brown Fine SAND (SP) (A-3)	3			
	Light brown Fine SAND with trace of cemented sand (SP) (A-3)	4			
	Greenish-gray and light brown sandy CLAY (CL) (A-7-6)	5			
		6			
		7			

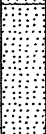
HAND AUGER BORING LOG				
PROJECT: Pavement & Drainage Area Investigation Erie Road & 69th Street East Manatee County, Florida Project No.: DES 106525		CLIENT: Manatee County		
TECHNICIAN: C.O.		WATER TABLE: 2.4'	DATE: 4/5/10	
LOCATION: See Plate I		DATE: 4/5/10	COMPLETION DEPTH: 6.0'	
		TEST NUMBER: HA-4		
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL	REMARKS
	Dark brown Fine SAND with roots (SP) (A-3)	0		
	Brownish-gray and light brown Fine SAND with trace of roots (SP) (A-3)			
	Dark gray slightly organic, slightly silty Fine SAND with trace of roots (SP-SM) (A-3)	1		
	Dark gray Fine SAND (SP) (A-3)			
		2		
		3		
	Dark brown Fine SAND with finely divided organic material (SP) (A-3)			
		4		
	Dark brown Fine SAND (SP) (A-3)			
	Orangish-brown Fine SAND (SP) (A-3)			
		5		
		6		
		7		

desi
DRIGGERS ENGINEERING SERVICES INCORPORATED

HAND AUGER BORING				
PROJECT: Pavement & Drainage Area Investigation Erie Road & 69th Street East Manatee County, Florida Project No.: DES 106525		CLIENT: Manatee County		
TECHNICIAN: C.O.		WATER TABLE: 2.4'	DATE: 4/5/10	
LOCATION: See Plate I		DATE: 4/5/10	COMPLETION DEPTH: 8.0'	
		TEST NUMBER: HA-5		
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL	REMARKS
	Dark gray slightly organic Fine SAND with roots (SP) (A-3)	0		
	Brownish-gray Fine SAND (SP) (A-3)	1		
		2		
	Dark brown Fine SAND with finely divided organic material and trace of roots (SP) (A-3)	3		
	Dark reddish-brown Fine SAND with trace of roots (SP) (A-3)	4		
	Light brown and brown Fine SAND with cemented sand (SP) (A-3)	5		
	Brownish-gray and light brown clayey Fine SAND (SC) (A-2-6)	6		
		7		

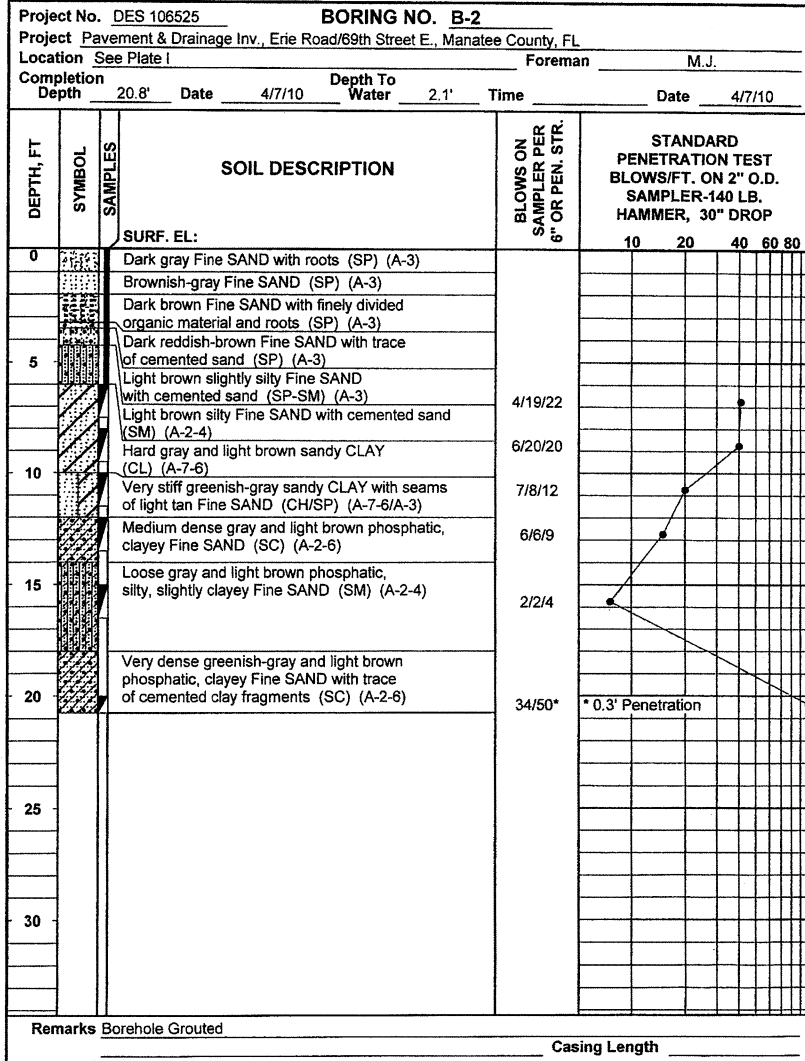
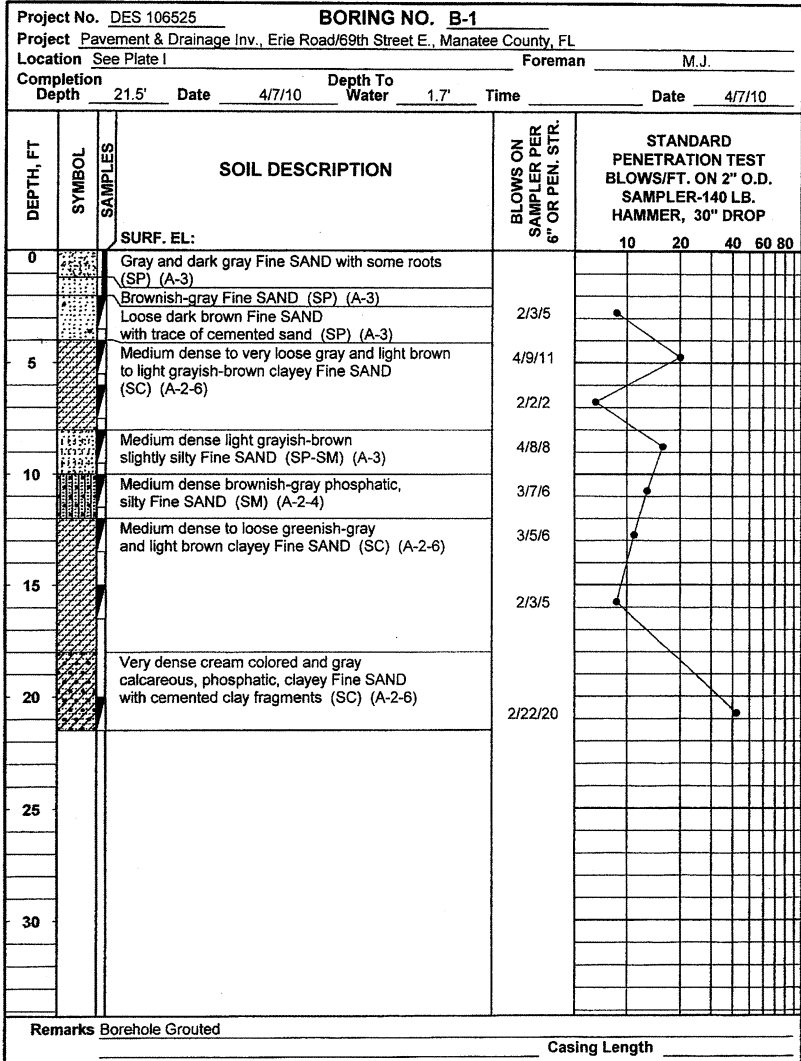
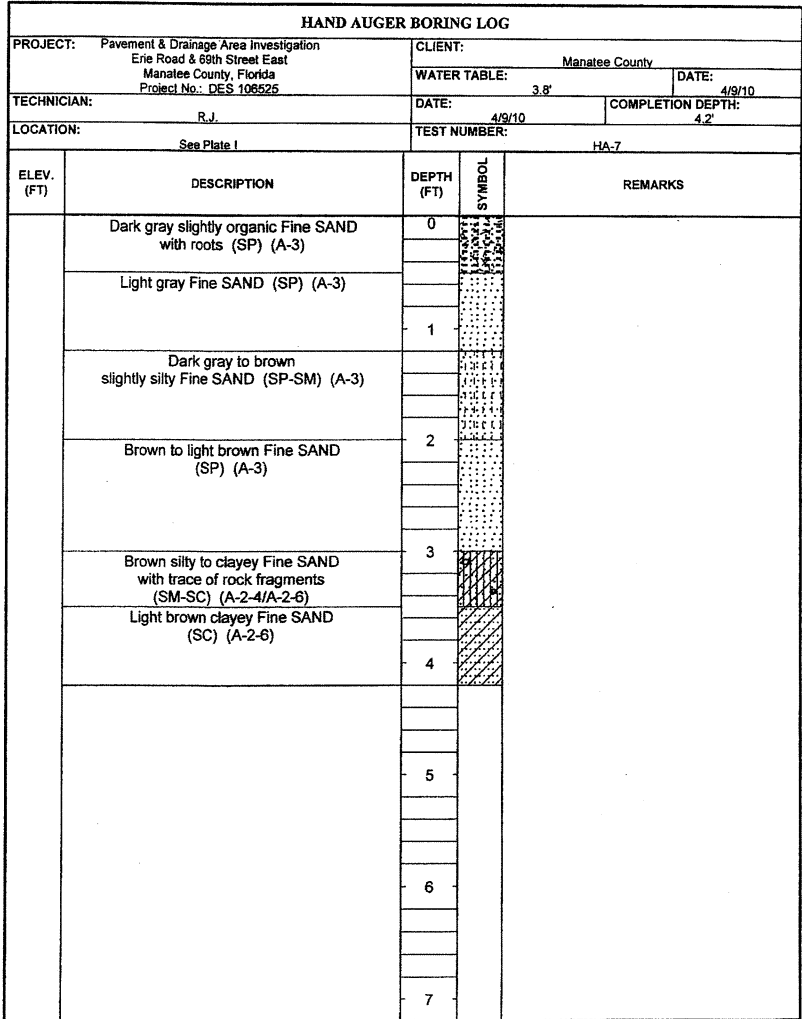


DRIGGERS ENGINEERING SERVICES INCORPORATED

HAND AUGER BORING LOG					
PROJECT: Pavement & Drainage Area Investigation Erie Road & 69th Street East Manatee County, Florida Project No.: DES 106525			CLIENT: Manatee County		
TECHNICIAN: S.F.			WATER TABLE: 5.0'		DATE: 4/7/10
LOCATION: See Plate I			DATE: 4/7/10		COMPLETION DEPTH: 6.0'
			TEST NUMBER: HA-6		
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL	REMARKS	
	Dark brownish-gray Fine SAND with roots (SP) (A-3)	0			
		1			
	Brownish-gray slightly silty Fine SAND (SP-SM) (A-3)				
		2			
		3			
	Dark gray slightly silty Fine SAND with shell fragments (SP-SM) (A-3)	4			
	Brown and light brown Fine SAND (SP) (A-3)				
		5			
	Dark brown and gray slightly silty Fine SAND (SP-SM) (A-3)	6			
		7			

DATE							
BY							
REVISION DESCRIPTION							
NO.							
PROJECT #				380-6048460			
SURVEY #				1029, 1235			
SEC./TWN./RGE				26&35/33S/18E			
SCALE				NTS			
SURVEYED							
DESIGNED							
DRAWN							
CHECKED							

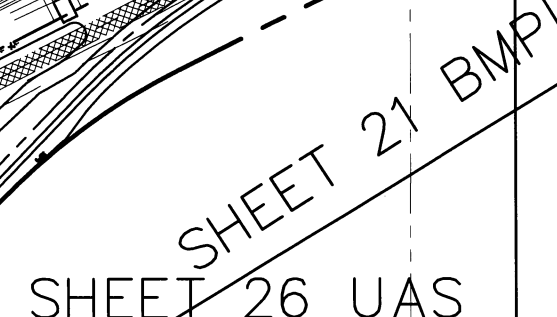
NO.	REVISION DESCRIPTION	BY	DATE
	PROJECT #	380-6048460	
	SURVEY #	1029, 1235	
	SEC./TWN./RGE	26&35/33S/18E	
	SCALE	NTS	
	SURVEYED		
	DESIGNED		
	DRAWN		
	CHECKED		



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CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 45777
Ch Lee
4/25/12
Signature & Date

SHEET 16 OF 75

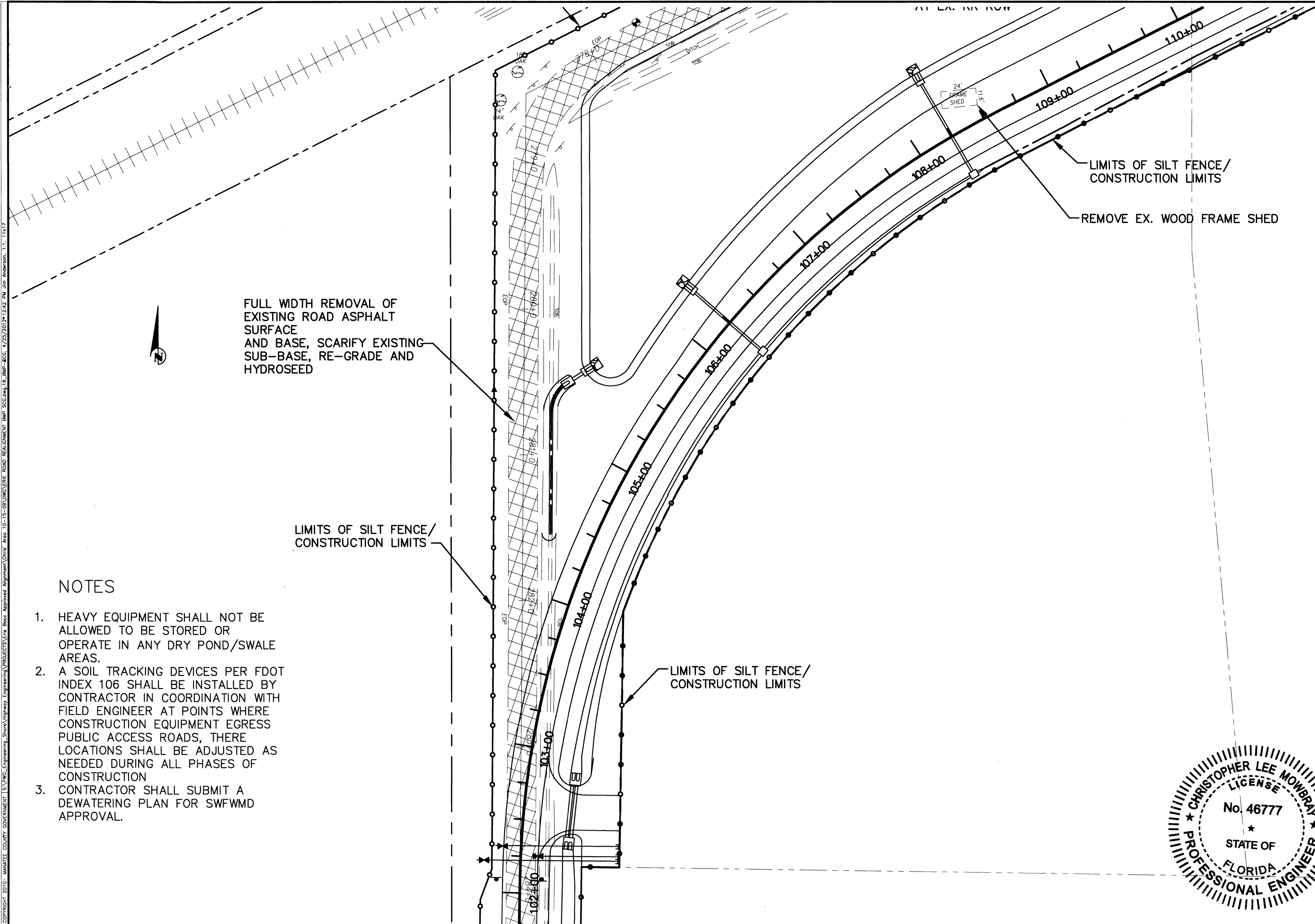


BEST MANAGEMENT PRACTICES/ SELECTIVE CLEARING AND GRUBBING SHEET

-
- A circular professional engineer seal for Christopher Lee Mowbray. The outer ring contains the text "CHRISTOPHER LEE MOWBRAY" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring is a dashed circle containing the word "LICENSE" at the top, "No. 46777" in the center, a single star below the number, and "STATE OF FLORIDA" at the bottom. The entire seal is surrounded by a border of short, parallel black lines.

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
Ch. ly
4/25/12
Signature & Date

Copyright 2010 - Manatee County Government, S:\PWO_Engineering_Shore_Highway_Engineering\PROJECTS\Erie_Bloc Approved Alignment\Chris Area 10-15-09 UMG\ERIE ROAD REALIGNMENT BHP SCG.dwg, 18 BHP-SCG, 4/25/2012 12:42 PM Jim Anderson, 1:1, 11x17



NOTES

- 1. HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO BE STORED OR OPERATE IN ANY DRY POND/SWALE AREAS.
- 2. A SOIL TRACKING DEVICES PER FDOT INDEX 106 SHALL BE INSTALLED BY CONTRACTOR IN COORDINATION WITH FIELD ENGINEER AT POINTS WHERE CONSTRUCTION EQUIPMENT EGRESS PUBLIC ACCESS ROADS, THERE LOCATIONS SHALL BE ADJUSTED AS NEEDED DURING ALL PHASES OF CONSTRUCTION
- 3. CONTRACTOR SHALL SUBMIT A DEWATERING PLAN FOR SWFWMD APPROVAL.

MANATEE COUNTY GOVERNMENT
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES

1022 26th Avenue East
Bradenton, FL 34208

ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
BEST MANAGEMENT PRACTICES/
SLECTIVE CLEARING AND GRUBBING SHEET

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	380-8048480	
SURVEY #	1029, 1235	
SEC./TWN./RGE	26&35/33S/18E	
SCALE	1"=60'	
SURVEYED	K&S	12/29/10
DESIGNED	CM	02/05/10
DRAWN	259	04/23/10
CHECKED	JP,SF	03/20/12

CHRISTOPHER LEE MOWBRAY
LICENSE
No. 46777
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

4/25/12
Signature & Date

SHEET 18 OF 75

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PLATTED 42.5' DRAINAGE EASEMENT

NOTES PLATTED 17.5' DRAINAGE EASEMENT

1. HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO BE STORED OR OPERATE IN ANY DRY POND/SWALE AREAS.
2. A SOIL TRACKING DEVICES PER FDOT INDEX 106 SHALL BE INSTALLED BY CONTRACTOR IN COORDINATION WITH FIELD ENGINEER AT POINTS WHERE CONSTRUCTION EQUIPMENT EGRESS PUBLIC ACCESS ROADS, THERE LOCATIONS SHALL BE ADJUSTED AS NEEDED DURING ALL PHASES OF CONSTRUCTION
3. CONTRACTOR SHALL SUBMIT A DEWATERING PLAN FOR SWFMD APPROVAL.

STA: 273+52
OFF: 349.0 R
FULL WIDTH REMOVAL
OF EXISTING ROAD ASPHALT
SURFACE AND BASE, SCARIFY
EXISTING SUB-BASE, RE-GRADE
AND HYDROSEED

LIMITS OF SILT FENCE/
CONSTRUCTION LIMITS

LIMITS OF REMOVAL
AT EX. RR ROW

STA: 273+98 SOUTH TO EX.
RAILROAD RIGHT OF WAY
OFF: 327.0 R
FULL WIDTH REMOVAL OF EXISTING ROAD
ASPHALT SURFACE AND BASE, SCARIFY
EXISTING SUB-BASE, RE-GRADE AND
HYDROSEED

CLEARING AND GRUBBING, REMOVAL OF EXISTING
CROSSING AND REGRADING IN EXISTING RAILROAD
ROW TO BE PERFORMED BY OTHERS

TEMPORARY CONSTRUCTION
EASEMENT "D"
FULL WIDTH REMOVAL
OF EXISTING ROAD ASPHALT
SURFACE AND BASE, SCARIFY
EXISTING SUB-BASE,
RE-GRADE AND HYDROSEED

LIMITS OF SILT FENCE/
CONSTRUCTION LIMITS

PI @ SURVEY ERIE ROAD
STA 278+52.83-(C)
STA 278+50.78-(M)
N=1177025.110; E=501057.948
NO FIELD MONUMENTATION

PI @ SURVEY
69th STREET EAST & ERIE ROAD
STA 276+16.13
BEGIN @ SURVEY
ERIE ROAD (BIG SAWGRASS ROAD)
STA 0+00.00
N=1177130.348; E=501269.952
NO FIELD MONUMENTATION

STAGING / SOIL STOCKPILE
AREA

CONTRACTOR TO
REMOVE AND RELOCATE
EXISTING FENCE AND
SIGN, COORDINATE WITH
UTILITY DEPARTMENT.

FULL WIDTH REMOVAL
OF EXISTING ROAD ASPHALT
SURFACE AND BASE, SCARIFY
EXISTING SUB-BASE,
RE-GRADE AND HYDROSEED

COORDINATE WITH
PROPERTY OWNER
FOR RELOCATION
OF MAIL BOX

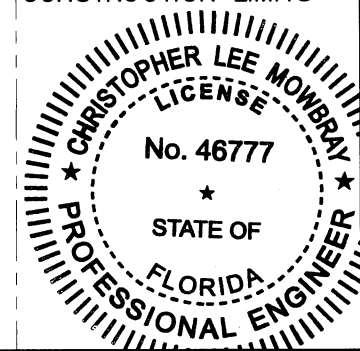
LIMITS OF REMOVAL
AT EX. RR ROW

STA: 273+05
OFF: 68.0 L
LIMITS FULL WIDTH
REMOVAL OF EXISTING ROAD

TEMPORARY CONSTRUCTION
EASEMENT "D"

LIMITS OF SILT FENCE/
CONSTRUCTION LIMITS

LIMITS OF
CLEARING BY OTHERS



ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
BEST MANAGEMENT PRACTICES/
SELECTIVE CLEARING AND GRUBBING SHEET

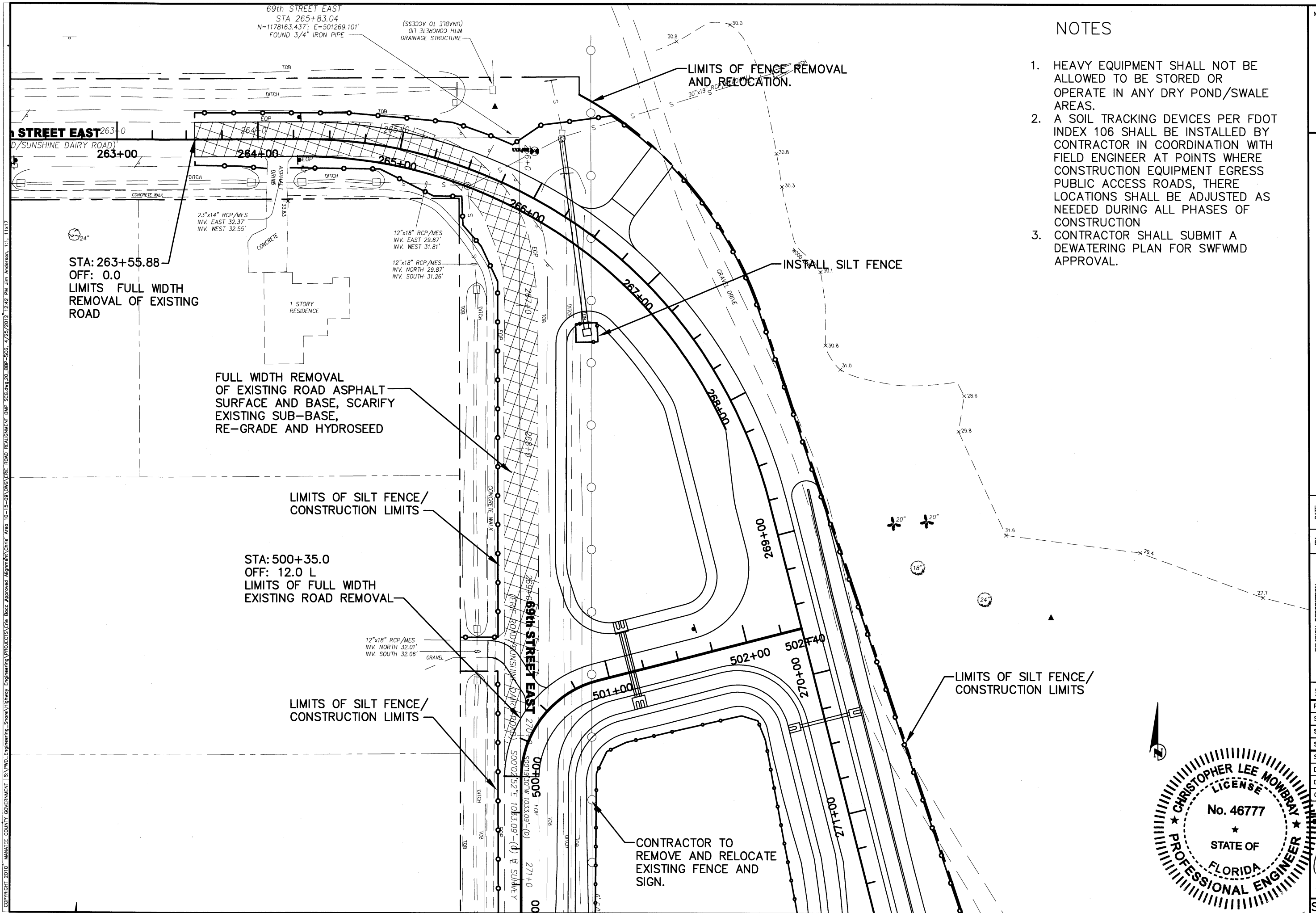
NO.	DATE	BY	REVISION DESCRIPTION
PROJECT #	380-6048460		
SURVEY #	1029, 1235		
SEC./TWN./RGE	26&35/33S/18E		
SCALE	1"=60'		
SURVEYED	K&S	12/29/10	
DESIGNED	CM	02/05/10	
DRAWN	CLS	04/23/10	
CHECKED	JP,SF	03/20/12	
CHRISTOPHER LEE MOWBRAY, P.E.			
FLORIDA P.E. # 46777			
Signature & Date			
SHEET 19 OF 75			

[illegible]

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 16777
Chh
4/25/12
Signature & Date

SHEET 20 OF 75

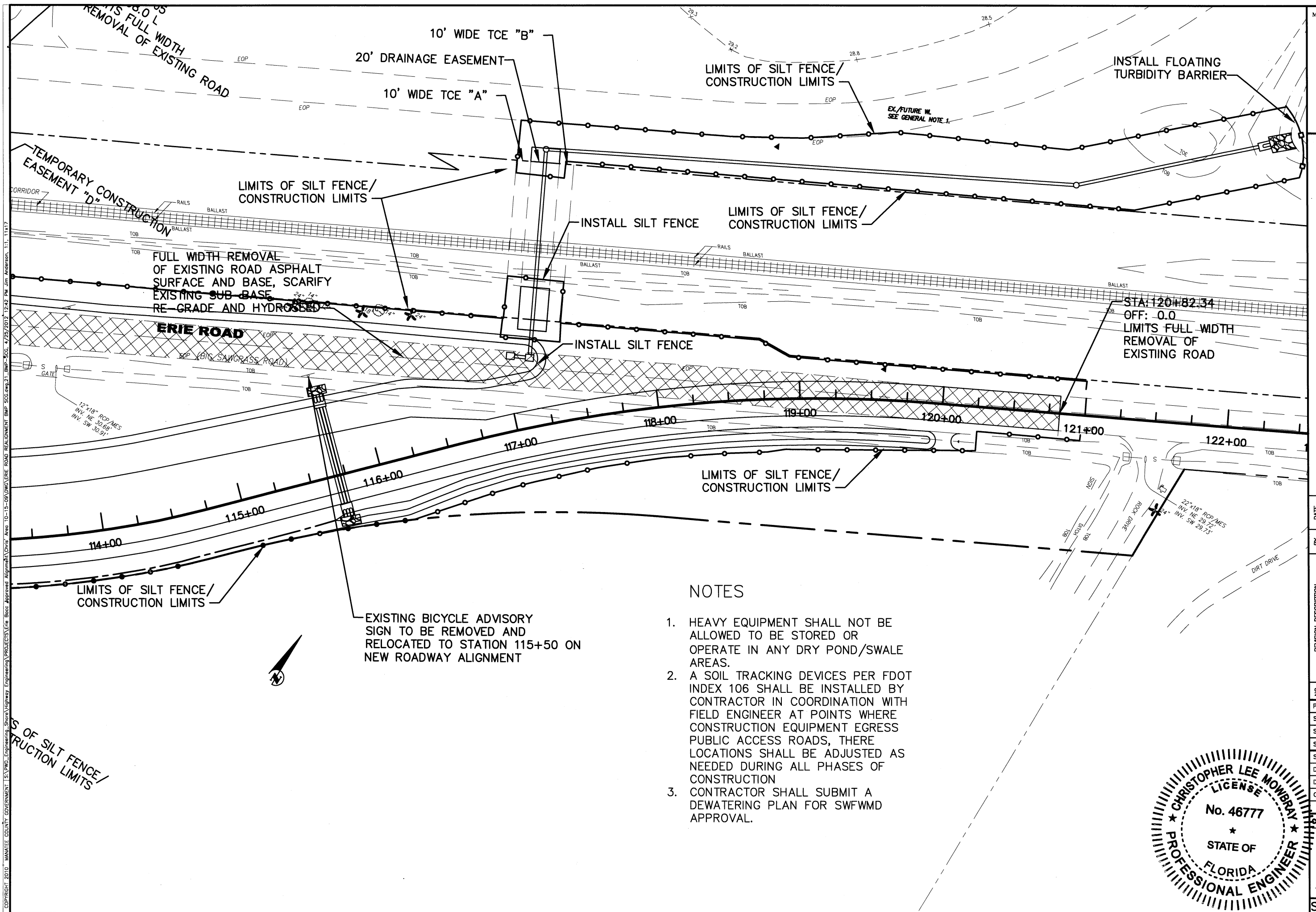
1. HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO BE STORED OR OPERATE IN ANY DRY POND/SWALE AREAS.
2. A SOIL TRACKING DEVICES PER FDOT INDEX 106 SHALL BE INSTALLED BY CONTRACTOR IN COORDINATION WITH FIELD ENGINEER AT POINTS WHERE CONSTRUCTION EQUIPMENT EGRESS PUBLIC ACCESS ROADS, THERE LOCATIONS SHALL BE ADJUSTED AS NEEDED DURING ALL PHASES OF CONSTRUCTION
3. CONTRACTOR SHALL SUBMIT A DEWATERING PLAN FOR SWFWMD APPROVAL.



INTERSECTION

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 48777
4/25/12
Signature & Date

SHEET 21 OF 75



EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.

12"x18" RCP/MES
INV. NORTH 31.70'
INV. SOUTH 31.75'

BACKFLOW
PREVENTOR —
(RECLAIMED WATER)

HYDRANT &
VALVES —
(RECLAIMED WATER)

—VER
COPPER PEDESTAL
TO REMAIN

12"x18" RCP/MES
INV. NORTH 31.46'
INV. SOUTH 31.46'

**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
UTILITY ADJUSTMENT SHEET**

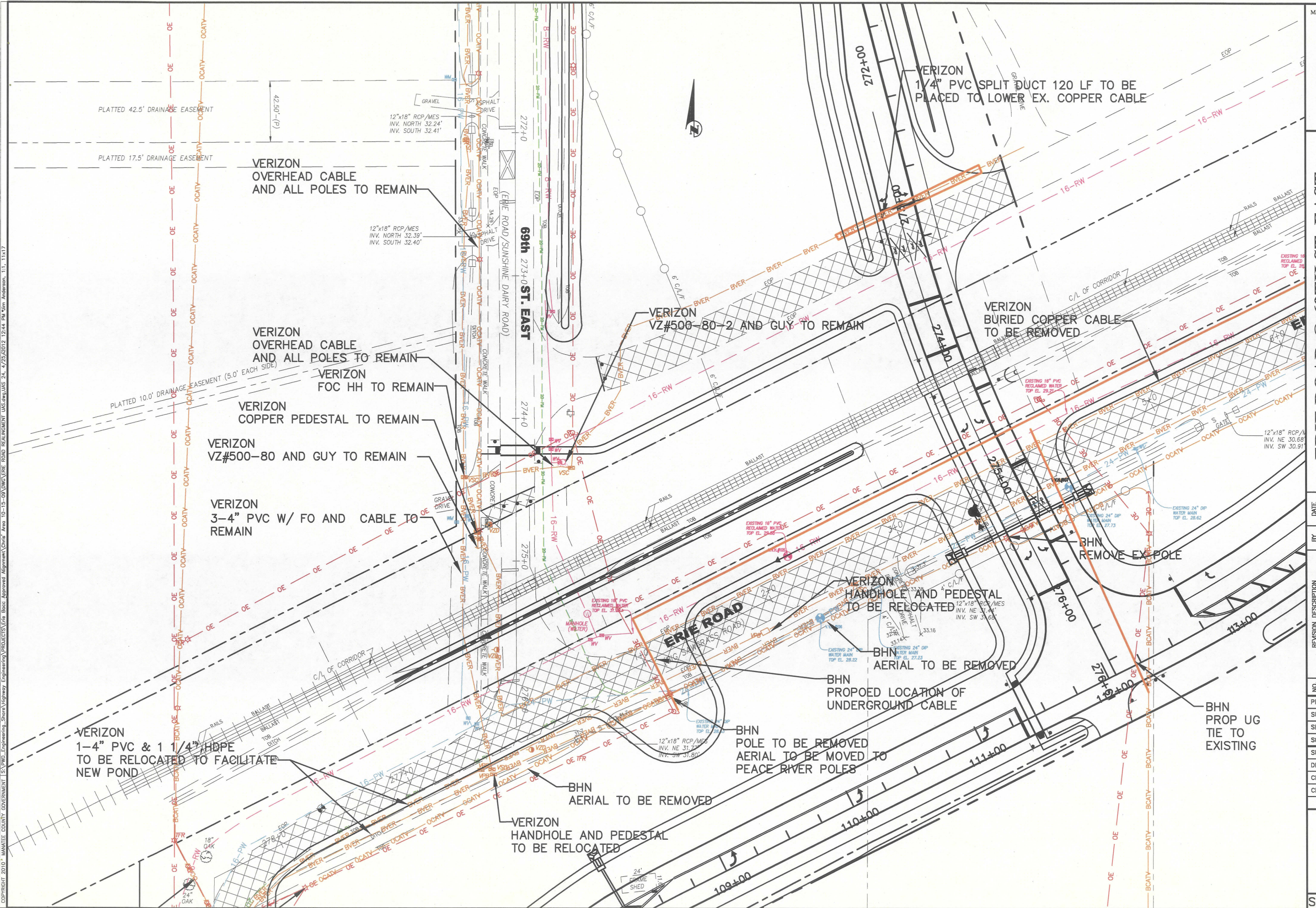
SHEET 22 OF 75

UTILITY ADJUSTMENT SHEET

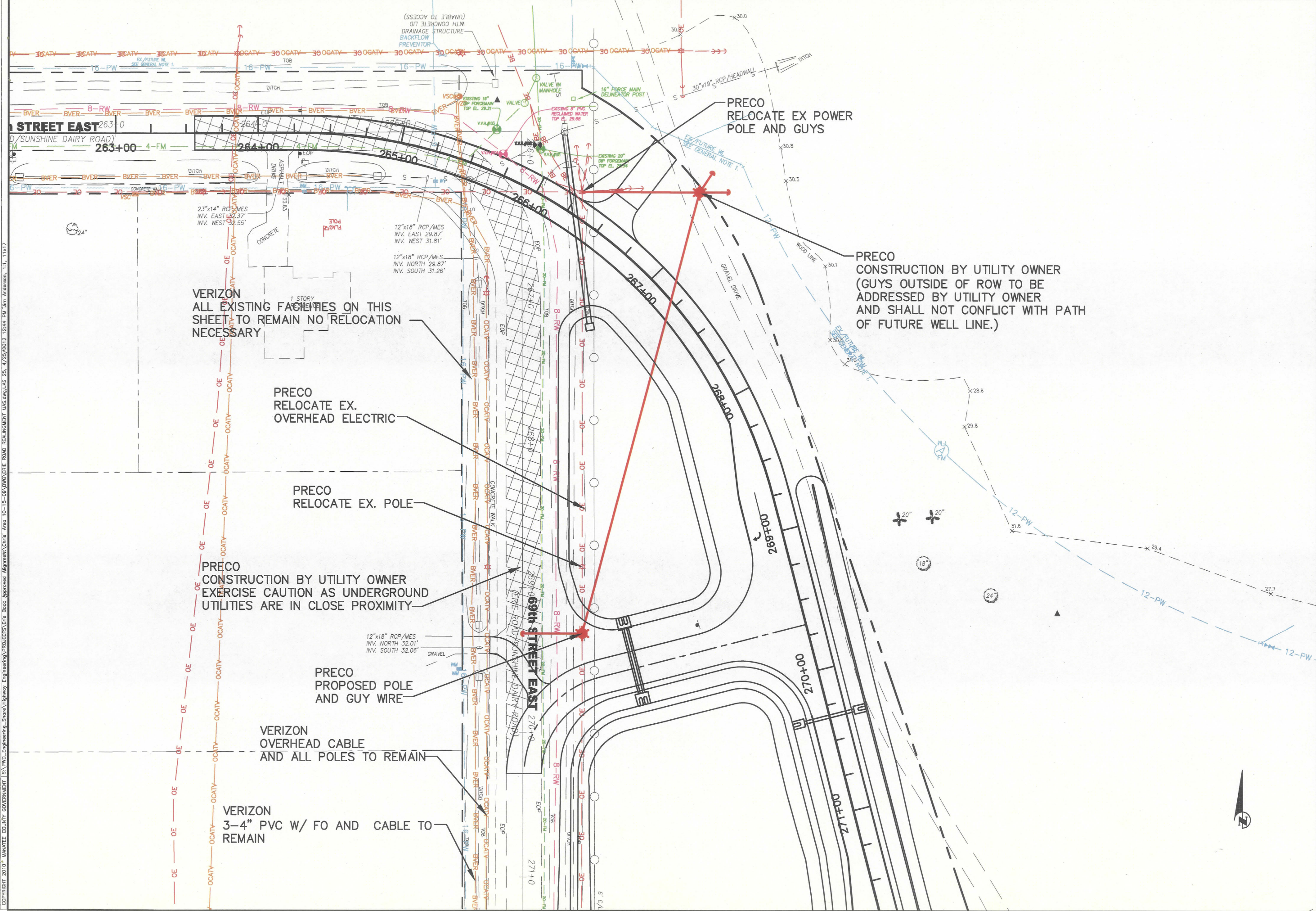
SHEET 23 OF 75

UTILITY ADJUSTMENT SHEET

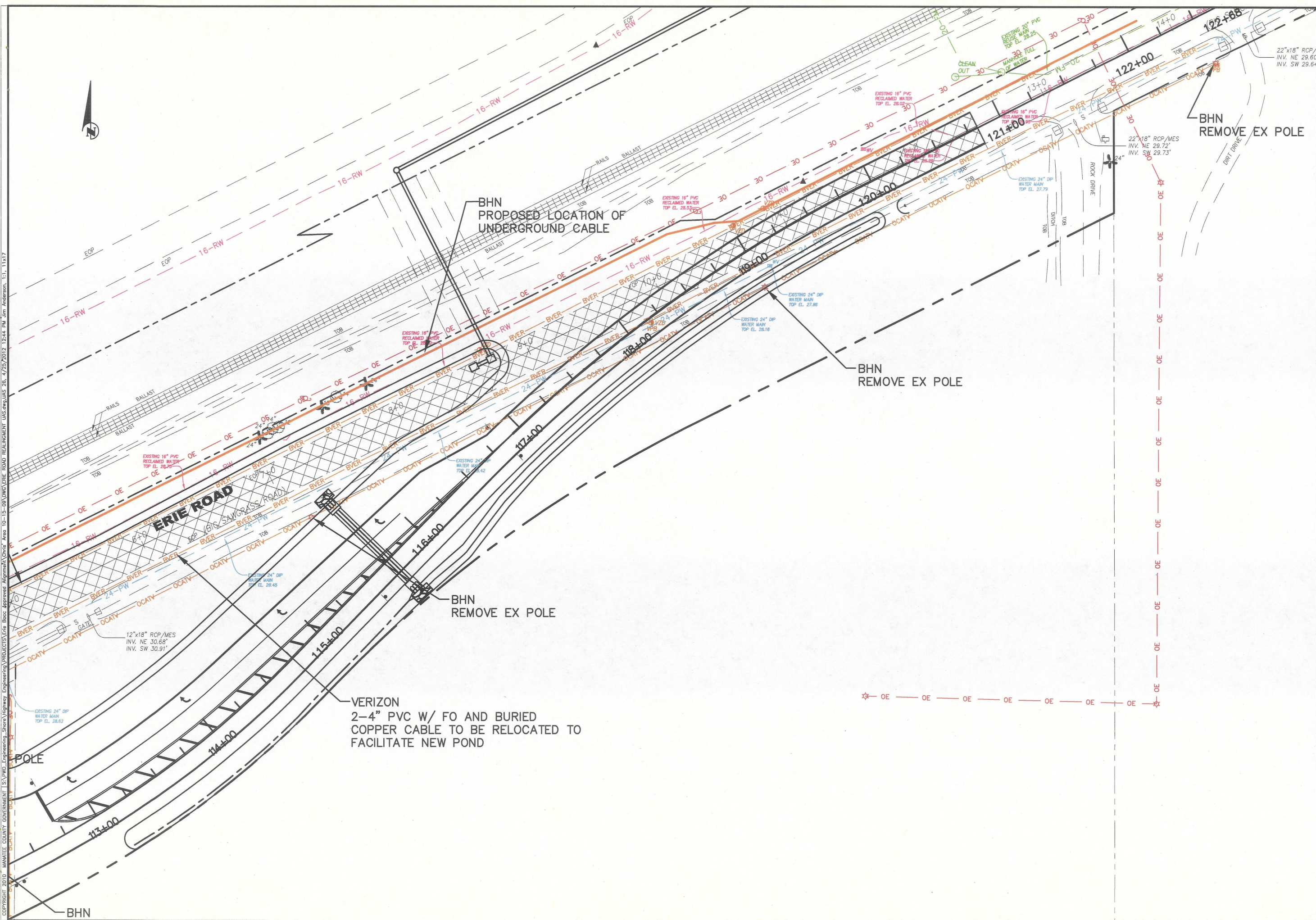
PROJECT #	380-6048460	
SURVEY #	1029, 1235	
SEC./TWN./RGE	26&35/33S/18E	
SCALE	1"=60'	
SURVEYED	K&S	12/29/10
DRAWN	<i>JCS</i>	04/23/10
CHECKED	JA,JP,SF	03/20/12
CHECKED	TECO,VER,FPL FGT,BHN,PFE	VARIES



[illegible]



COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT S:\PMD Engineering-Shore Highway Engineering\PROJECTS\Boca Approved Alignment\Draw Area 10-15-09\DWG\ERIE ROAD REALIGNMENT\ASDWG\JAS 26 4/29/2012 12:44 PM Jim Anderson, 1:1, 11x17



MANATEE COUNTY GOVERNMENT
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES

1022 26th Avenue East
Bradenton, FL 34208

ERIE ROAD @ 69TH ST. EAST-

INTERSECTION

UTILITY ADJUSTMENT SHEET

REVISION	DESCRIPTION	BY	DATE

PROJECT #	380-6048460
SURVEY #	1028, 1235
SEC./TWN./RGE	26&35/33S/18E
SCALE	1"=60'
SURVEYED	K&S 12/29/10
DRAWN	JAS 04/23/10
CHECKED	JA,JP,SF 03/20/12
CHECKED	TECO,VER,FPL FGT,BHN,PRE VARIES

[illegible]

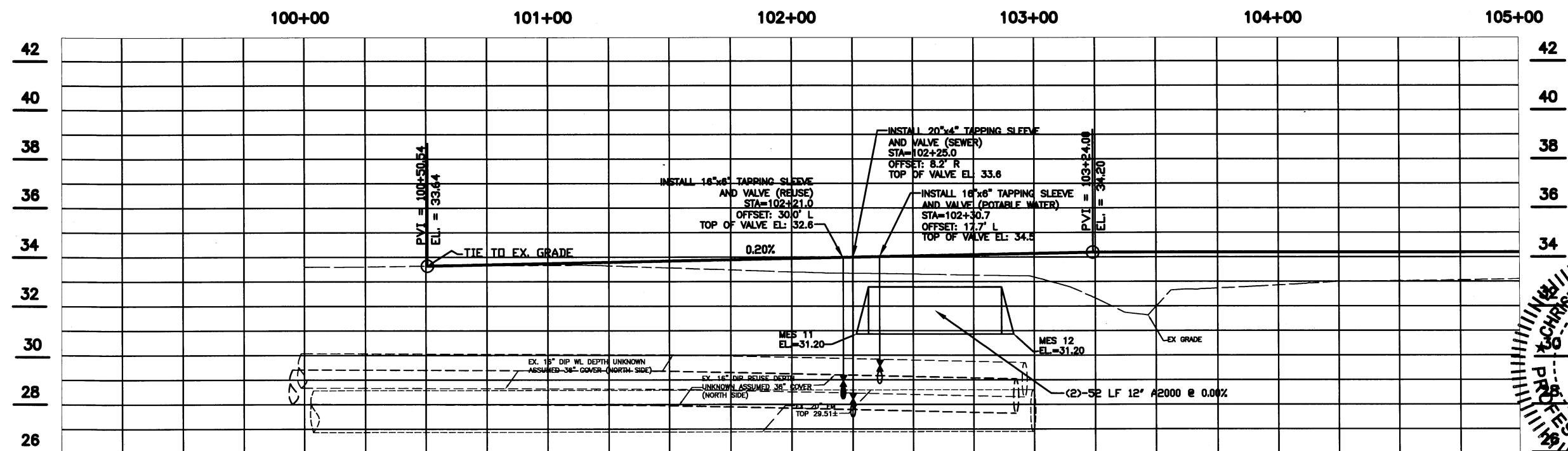
CHRISTOPHER LEE MOWBRAY, P.
FLORIDA P.E. # 46777
4/25/12
Signature & Date

A circular professional engineer seal for Christopher Lee Mowbray. The outer ring contains the text "CHRISTOPHER LEE MOWBRAY" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the text "LICENSE" at the top, "No. 46777" in the center, "STATE OF" at the bottom, and "FLORIDA" at the very bottom, also separated by two stars. The seal has a serrated outer edge.

ERIE ROAD / PLAN AND PROFILE

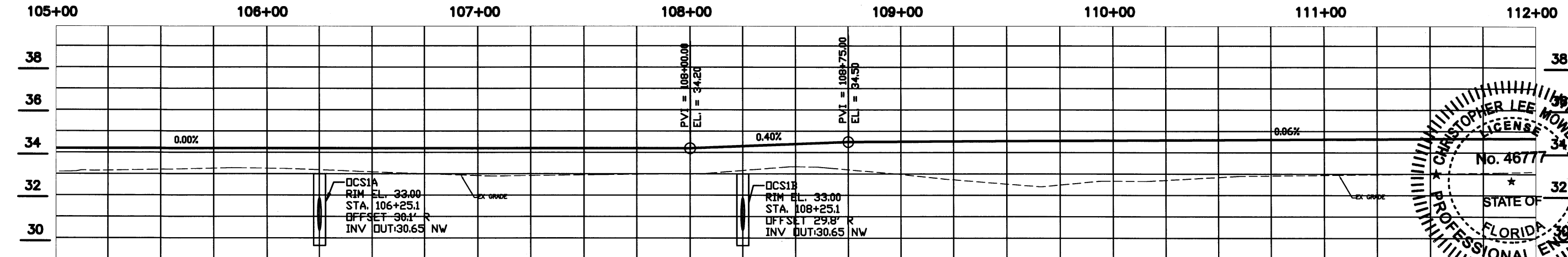
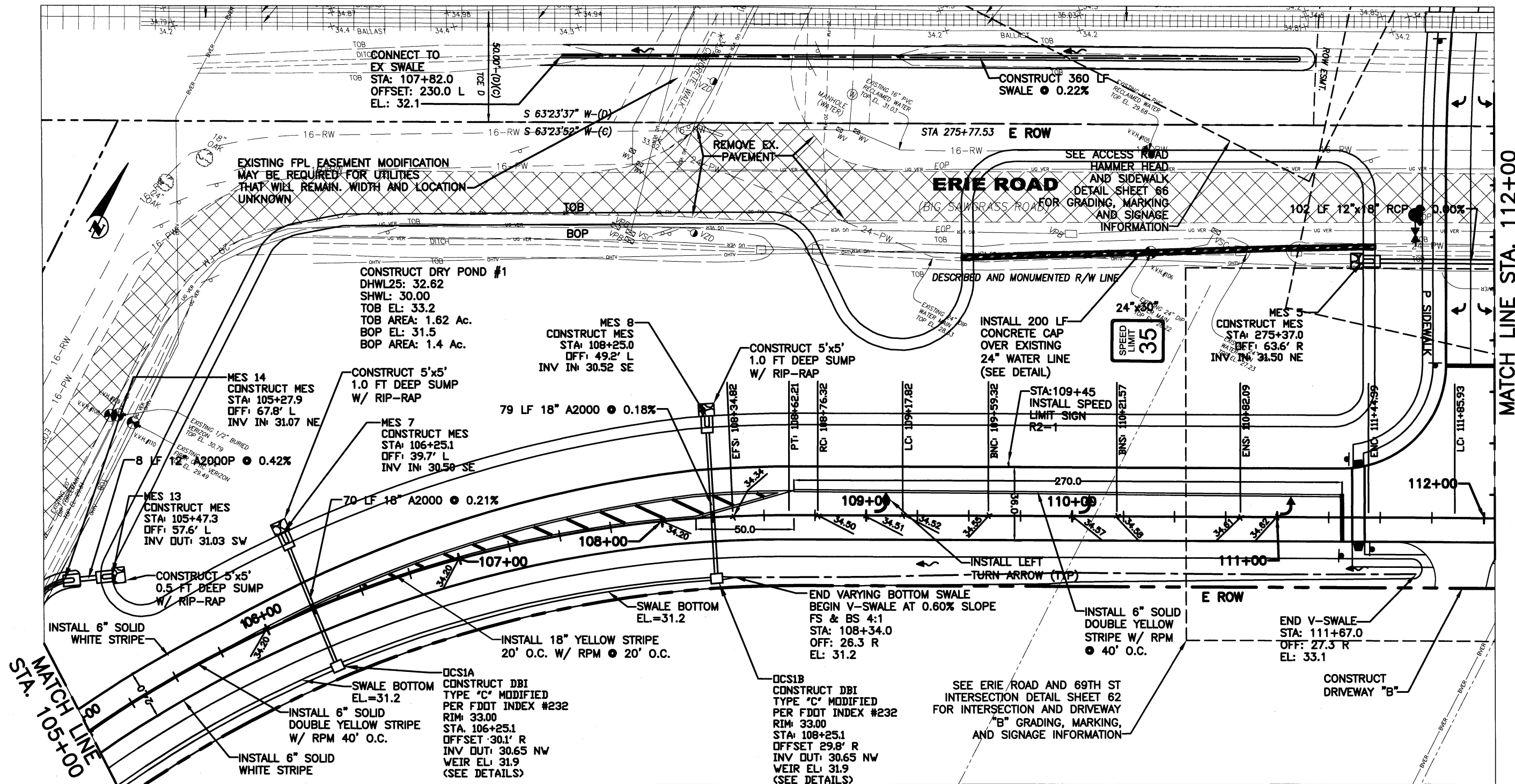
CHRISTOPHER LEE MOWERAY, P.E.
FLORIDA P.E. # 48777

4/25/12
Signature & Date

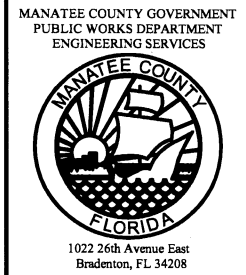


Vertical Scale: 1"=5'

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\P\RD_Engineering_Share\Highway_Engineering\PROJECTS\69th St East\Approved\69th St East.dwg, 29.00, 11/11/17



Horizontal Scale: 1"=50' Vertical Scale: 1"=5'

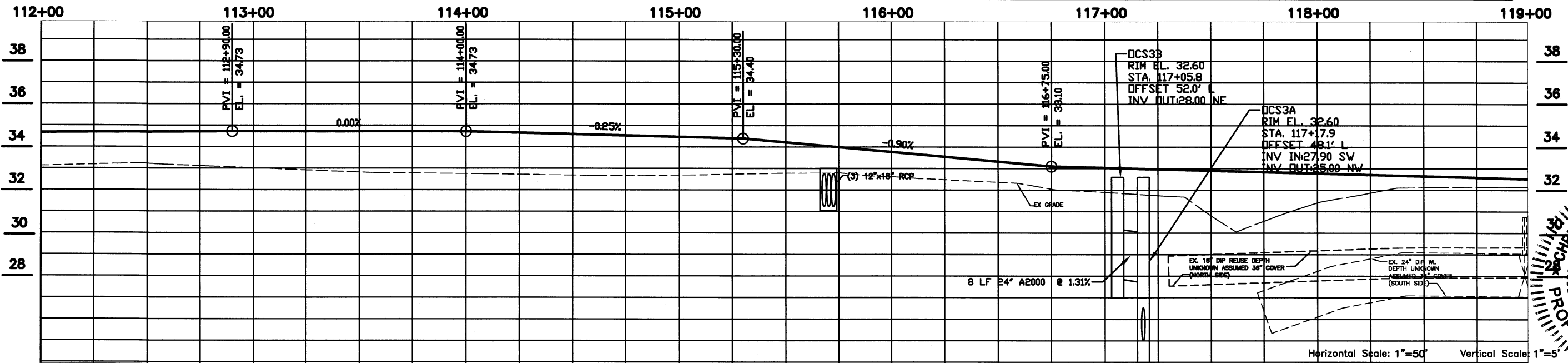
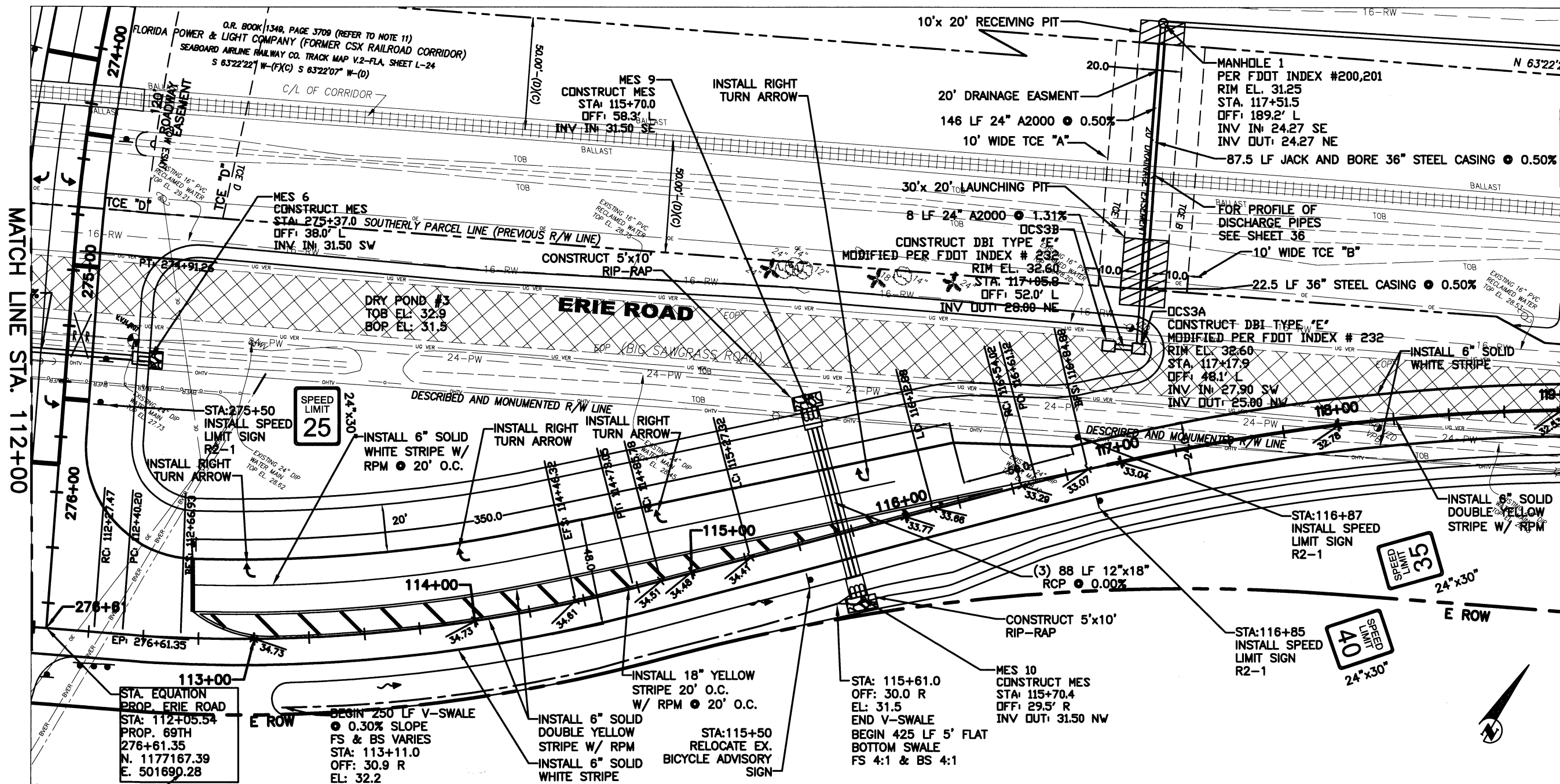


ERIE ROAD @ 69TH ST. EAST- INTERSECTION ERIE ROAD / PLAN AND PROFILE

NO.	DATE	BY	REVISION DESCRIPTION

PROJECT #	380-6048480
SURVEY #	1029, 1235
SEC./TWN./RGE	28&35/33S/18E
SCALE	1"=50'
SURVEYED	K&S 12/29/10
DESIGNED	CM 02/05/10
DRAWN	24 04/23/10
CHECKED	MO,JP,SF 03/20/12
PROFESSOR	CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. #	46777
Signature & Date	4/25/12

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT I:\PMD Engineering\Shore Highway Engineering\PROJECTS\ERI Road\Approved\Algermah\Chrs Area 10-15-09\DWG\ERI ROAD REALIGNMENT P&P.dwg,30. ERIE PP. 4/25/2012 12:48 PM Jim Anderson, L1, 11x17



Horizontal Scale: 1"=50' Vertical Scale: 1"=5'

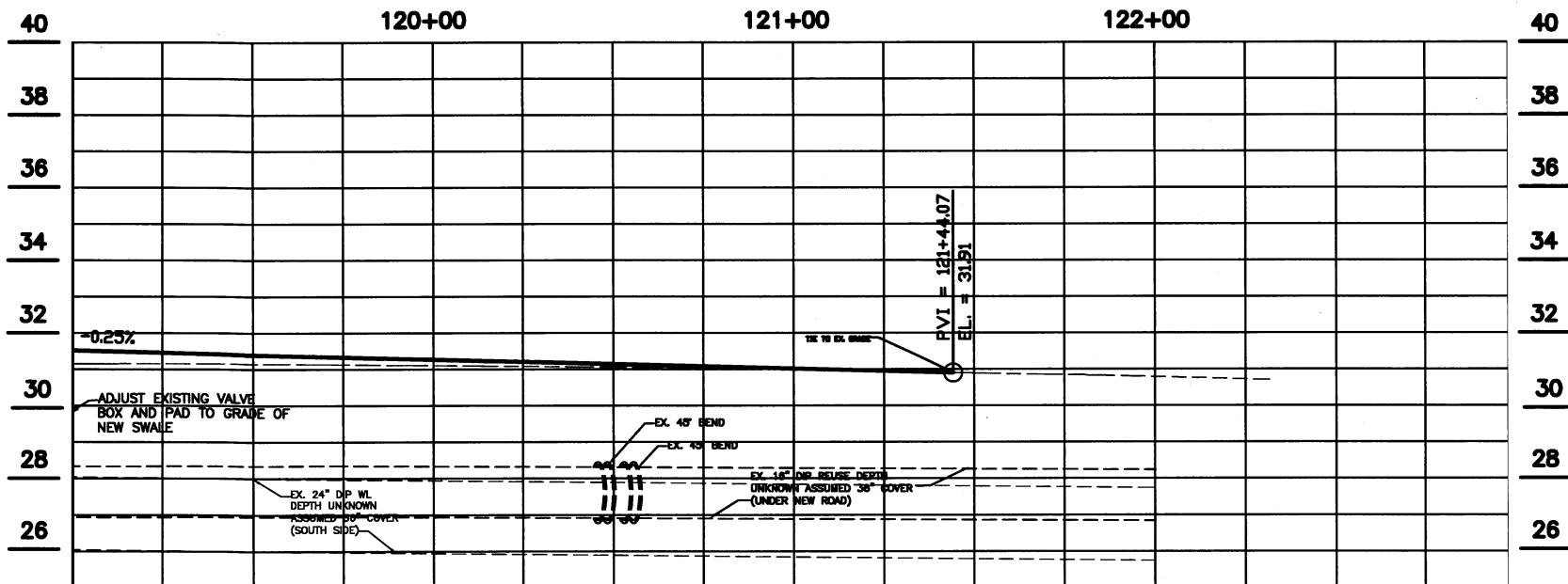


ERIE ROAD @ 69TH ST. EAST- INTERSECTION ERIE ROAD / PLAN AND PROFILE

REVISION	DESCRIPTION	DATE	BY
NO.			
PROJECT #	380-8048480		
SURVEY #	1028, 1235		
SEC./TWN./RGE	26&35/33S/18E		
SCALE	1"=50'		
SURVEYED	K&S	12/29/10	
DESIGNED	11/10/11	02/05/10	
DRAWN	AR5	04/29/10	
CHECKED	AR5	05/10/10	
APPROVED	AR5	05/10/10	
PROFESSOR	AR5	05/10/10	
STATE OF FLORIDA			
REGISTERED PROFESSIONAL ENGINEER			
NO. 46777			
DATE 10/25/11			
SHEET 30 OF 75			

[illegible]

SHEET 31 OF 75



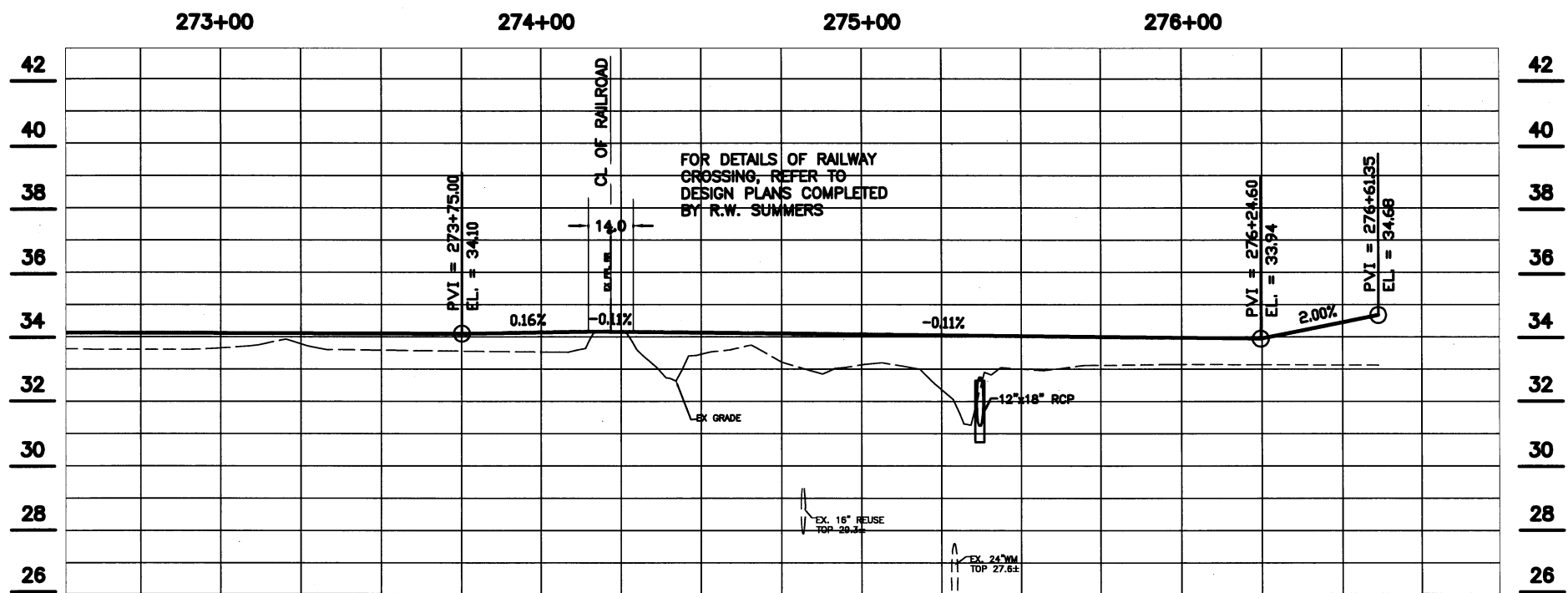
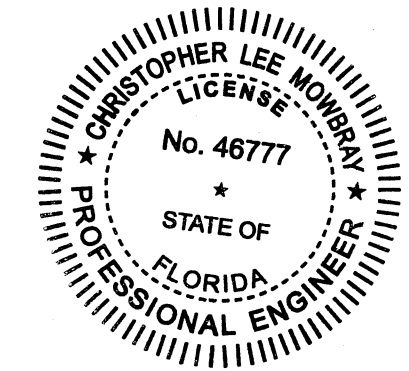
Vertical Scale: 1"=5'



**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
69TH ST. EAST / PLAN AND PROFILE**

NO.		REVISION DESCRIPTION		BY	DATE
PROJECT #		380-6048460			
SURVEY #		1029, 1235			
SEC./TWN./RGE		26&35/33S/18E			
SCALE		1"=50'			
SURVEYED	K&S	12/29/10			
DESIGNED	CM	02/05/10			
DRAWN	JKS	04/23/10			
CHECKED	MO,JP,SF	03/20/12			
CHRISTOPHER LEE MOWBRAY, P.E. FLORIDA P.E. # 46777  4/25/12 Signature & Date					

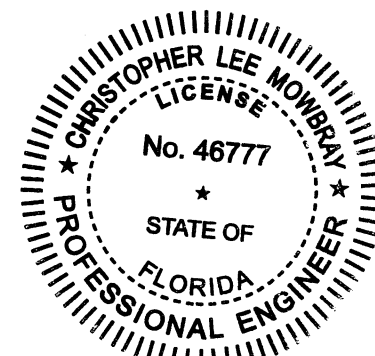
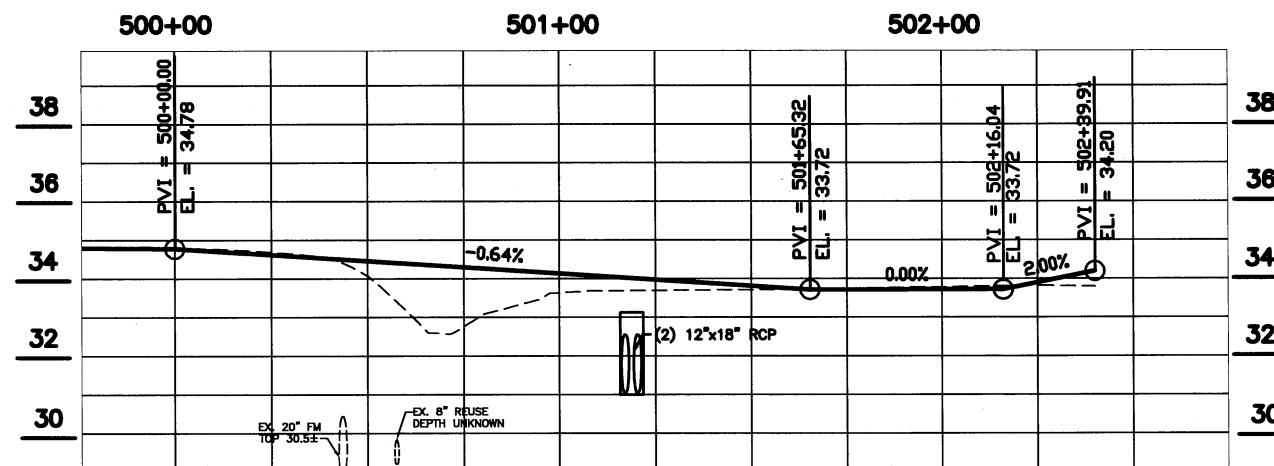
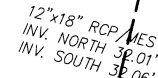
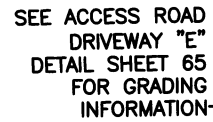
SHEET 32 OF 75

[illegible]

Horizontal Scale: 1"=50' Vertical Scale: 1"=5'

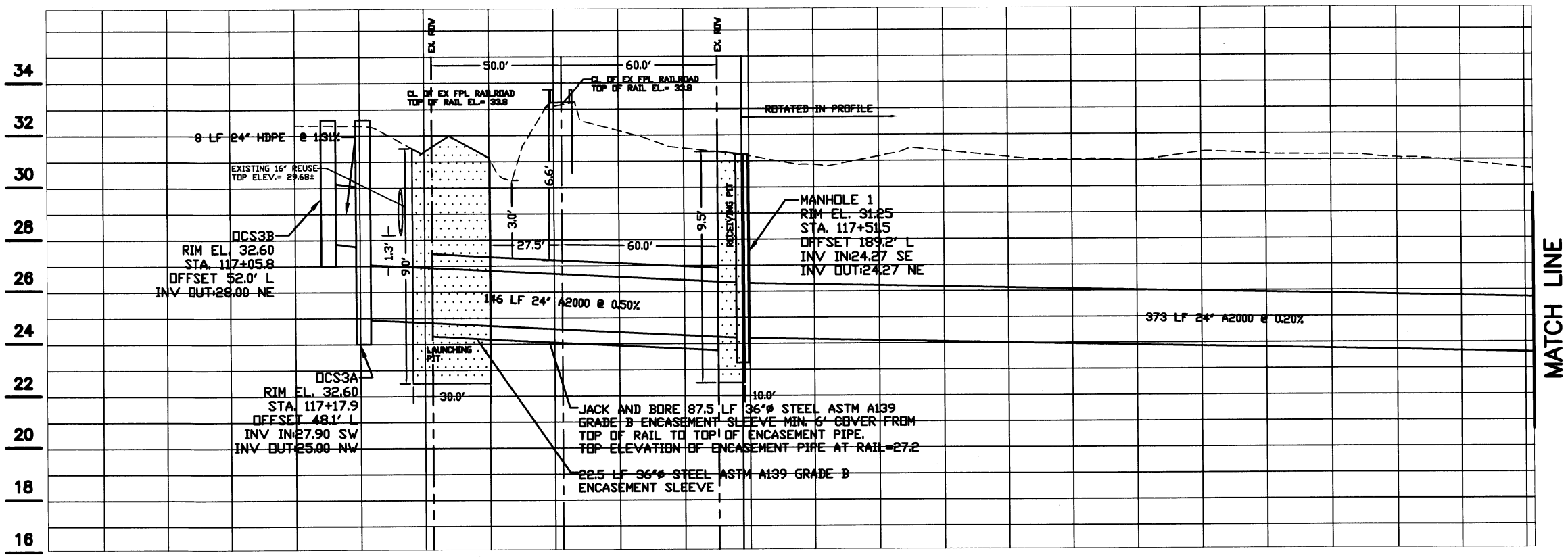
PROJECT #	380-8048460	
SURVEY #	1028, 1235	
SEC./TWN./RGE	28&35/33S/18E	
SCALE	1"=50'	
SURVEYED	K&S	12/29/10
DESIGNED	CM	02/05/10
DRAWN	gcz	04/23/10
CHECKED	MO,JP,SF	03/20/12

SHEET 35 OF 75

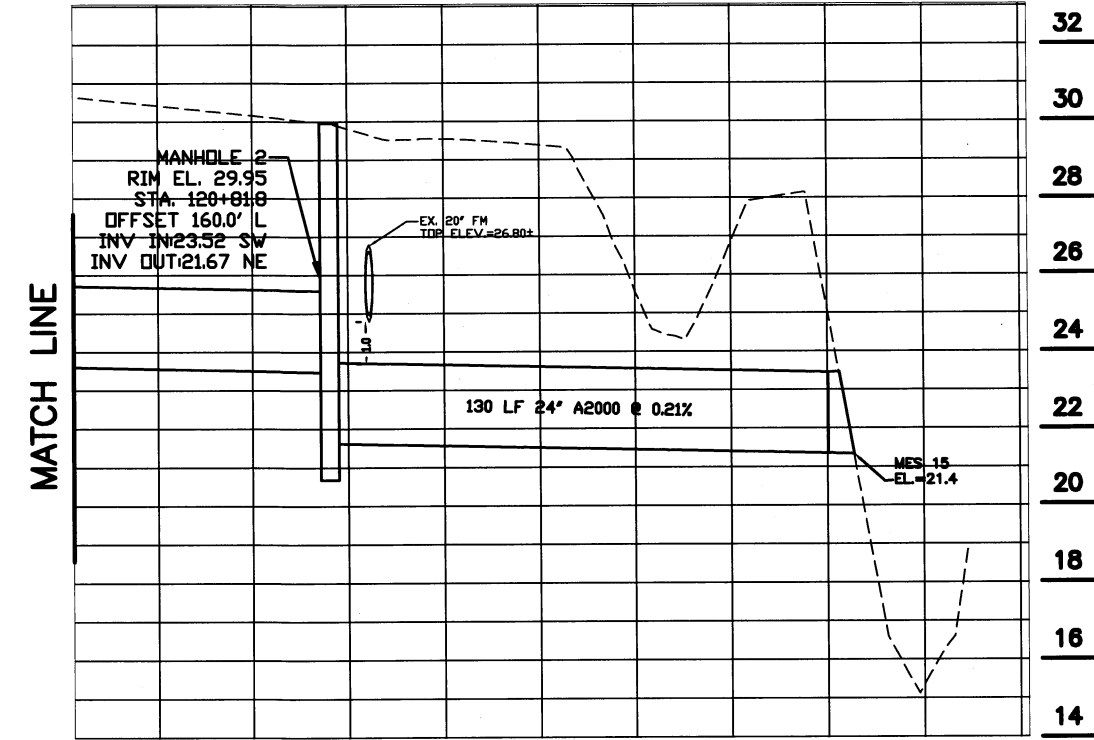


Vertical Scale: 1"=5'

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\PMD_Engineering_Short Highway Engineering\PROJECTS\ERIE Road\Approved Alignment\Chris Area 10-15-08\DWG\ERIE ROAD REALIGNMENT P&E.dwg, 36 OUTFALL MAJOR ROAD, 4/25/2012 12:50 PM Jim Anderson, 11.1, 11x17



MATCH LINE



MATCH LINE

32
30
28
26
24
22
20
18
16
14

LEGEND	
Value	Description
60'N/50'S	Distance from centerline of track to FPL R/W
6.6'	Distance from TOP of rail to top of casing
N/A	Distance from base of ditch to top of casing
110'	Total length of pipe on FPL R/W
23'N/23'S	Distance from centerline of nearest track to face of pits at a 90 degree angle to the track(s)
N/A	Distance from top of vent pipe to ground surface (4' minimum required)
N/A	Distance from centerline of track to the vent pipe at a 90 degree angle to the track
24"	Carrier pipe diameter
36"	Casing pipe diameter
9.5'N/9.0'S	Depth of launching/ receiving pit

PIPELINE CONTENT DETAILS	
CSXT Pipeline Spec. reference	
Commodity Description:	STORMWATER
Maximum operating Pressure:	N/A
Is Commodity Flammable:	☐ Yes ☒ No
CARRIER/CASING PIPE DETAILS	
24" Carrier Pipe	36" Casing Pipe
Pipe Material:	PVC-A2000
Material Specifications & Grade:	ASTM F949
Specified Minimum Yield Strength:	46 psi STIFFNESS
Nominal Size Outside Dia. (Inches):	25.6"
Wall Thickness (Inches):	1.1"
Type of Seam:	OVERLAP
Type of Joints:	GASKETED BELL & SPIGOT
Tunnel Liner Plates Required:	☐ Yes ☒ No
Cathodic Protection:	☐ Yes ☒ No
Protective Coating:	☐ Yes ☒ No
Temp. Track Support or Rip-Rap Req.:	☐ Yes ☒ No
COPYRIGHTED MATERIAL 2007.	

Location: 125 LF N. OF PROPOSED ERIE ROAD ALIGNMENT

Latitude: N 27° : 34' : 21 . 14"

Longitude: W 82° : 28' : 33 . 04"

Drawing No.: _____ Sheet: 1 of 1

Drawing Date: ____/____/____ Revised: ____/____/____

Drawing Scale: V 1 Inches= 5 Feet

Drawing Scale: H 1 Inches= 50 Feet

MANATEE COUNTY GOVERNMENT
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES

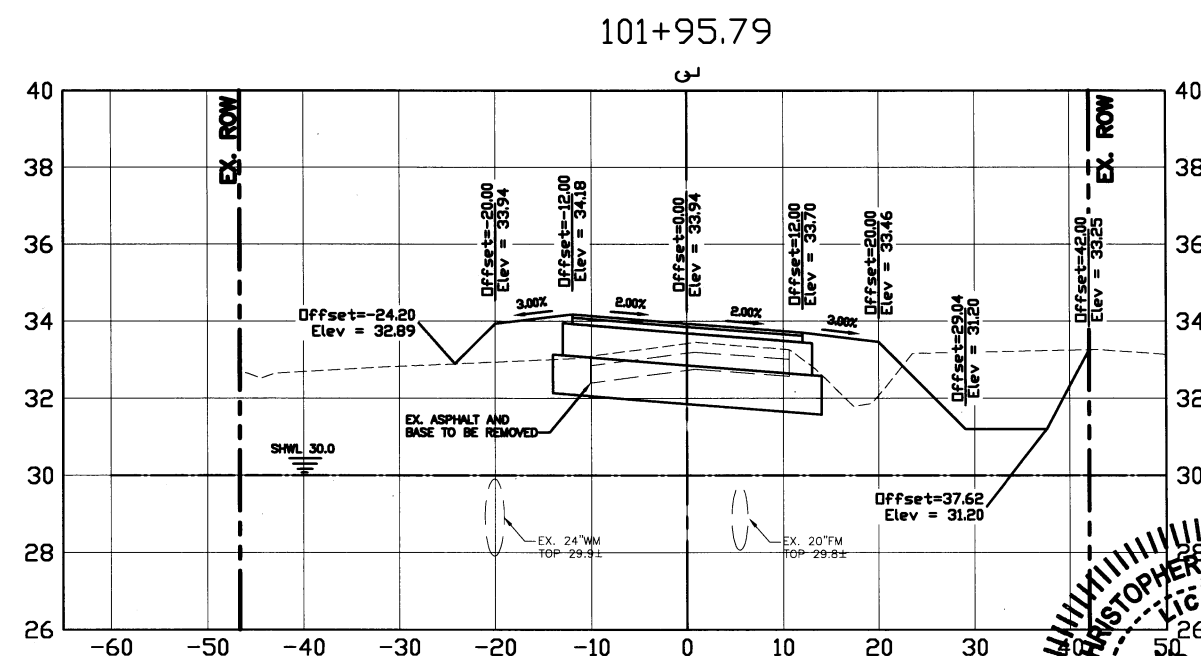
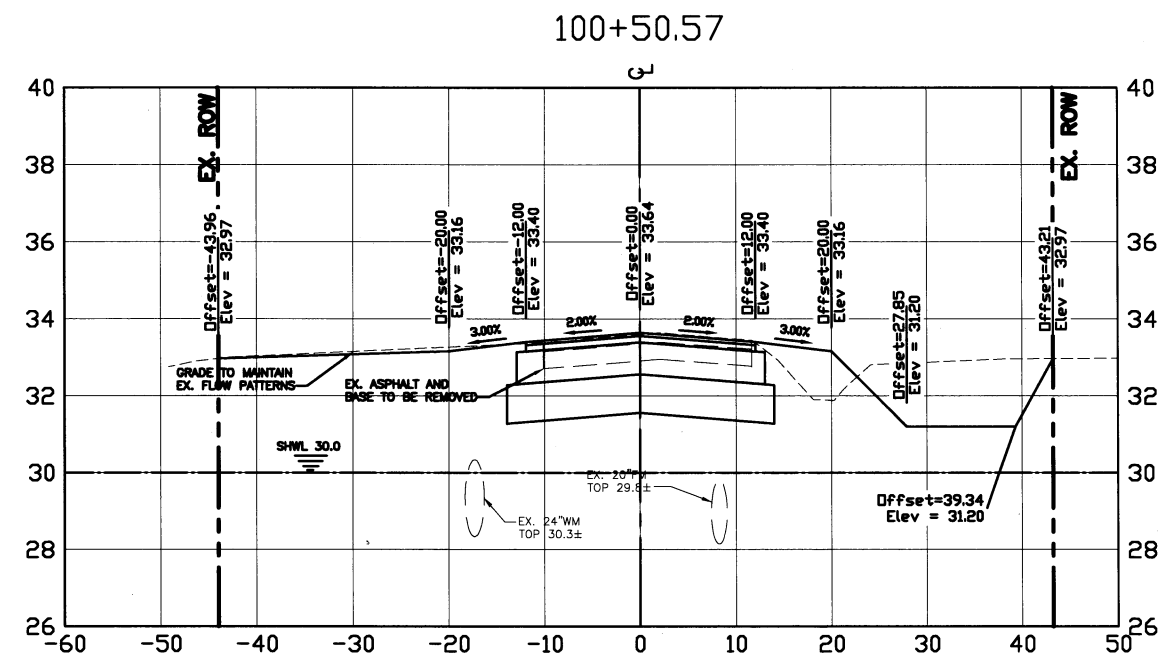
FLORIDA
1022 26th Avenue East
Bradenton, FL 34208

ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
PROFILE ACCESS PIPE / RAIL CROSSING

DATE					
BY					
REVISION DESCRIPTION					
NO.					

PROJECT #	380-8048480
SURVEY #	1029, 1235
SEC./TWN./RGE	26&35/33S/18E
SCALE	1"=50'
SURVEYED	12/29/10
DESIGNED	02/05/10
CHECKED	04/23/10
APPROVED	05/14/10
NO. 48777	
CHRISTOPHER LEE BOWMAN, P.E.	
FLORIDA REG. # 48777	
STATE OF FLORIDA	
PROFESSIONAL ENGINEER	
SHEET 136 OF 75	

Horizontal Scale: 1"=50' Vertical Scale: 1"=5'



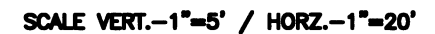
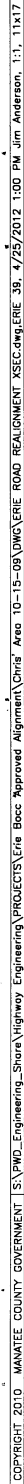
FLORIDA P.E. # 48777
Chen
4/25/12
Signature & Date

[illegible]

CHRISTOPHER LEE MOWERAY, P.
FLORIDA P.E. # 45777
Ch Lee
4/25/12
Signature & Date

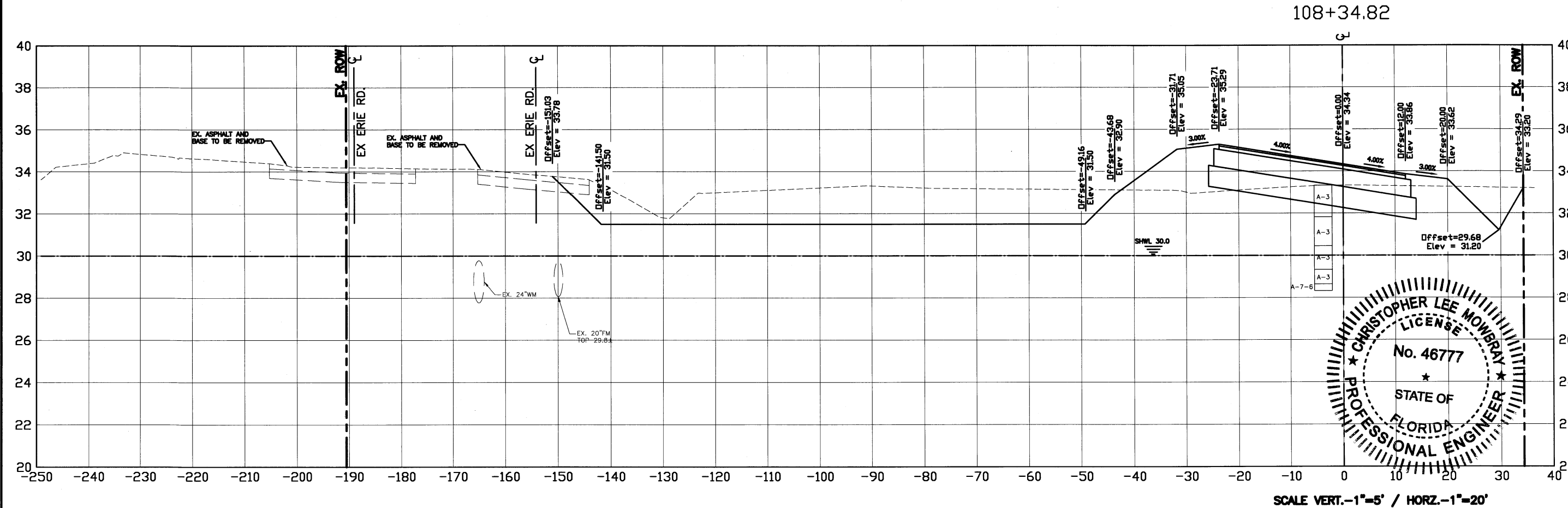
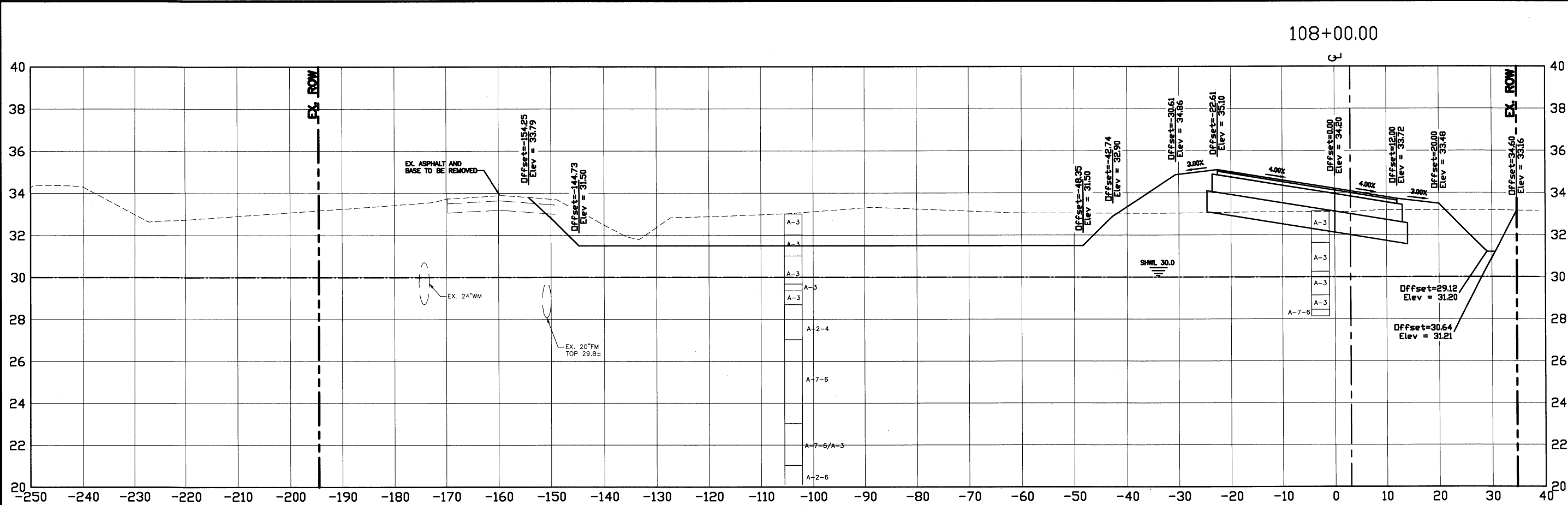
A circular professional engineer seal for Christopher Lee Mowbray. The outer ring contains the text "CHRISTOPHER LEE MOWBRAY" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring is a dashed circle containing the word "LICENSE" at the top, "No. 46777" in the center, a single star below the number, and "STATE OF FLORIDA" at the bottom. The entire seal is surrounded by a thick border of short, parallel lines.

ERIE ROAD CROSS SECTIONS



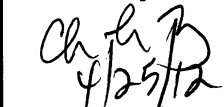
FLORIDA P.E. # 4877
Chen
4/25/12

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT, S:\PMD, Engineering, State Highway Engineering, PROJECTS\Tria Bocc Approved Alignment\Chgs Area 10-15-08\DWG\ERIE ROAD REALIGNMENT\XSEC.dwg, ERIE 40, 4/25/2012 1:00 PM Jim Anderson, 1:11x17

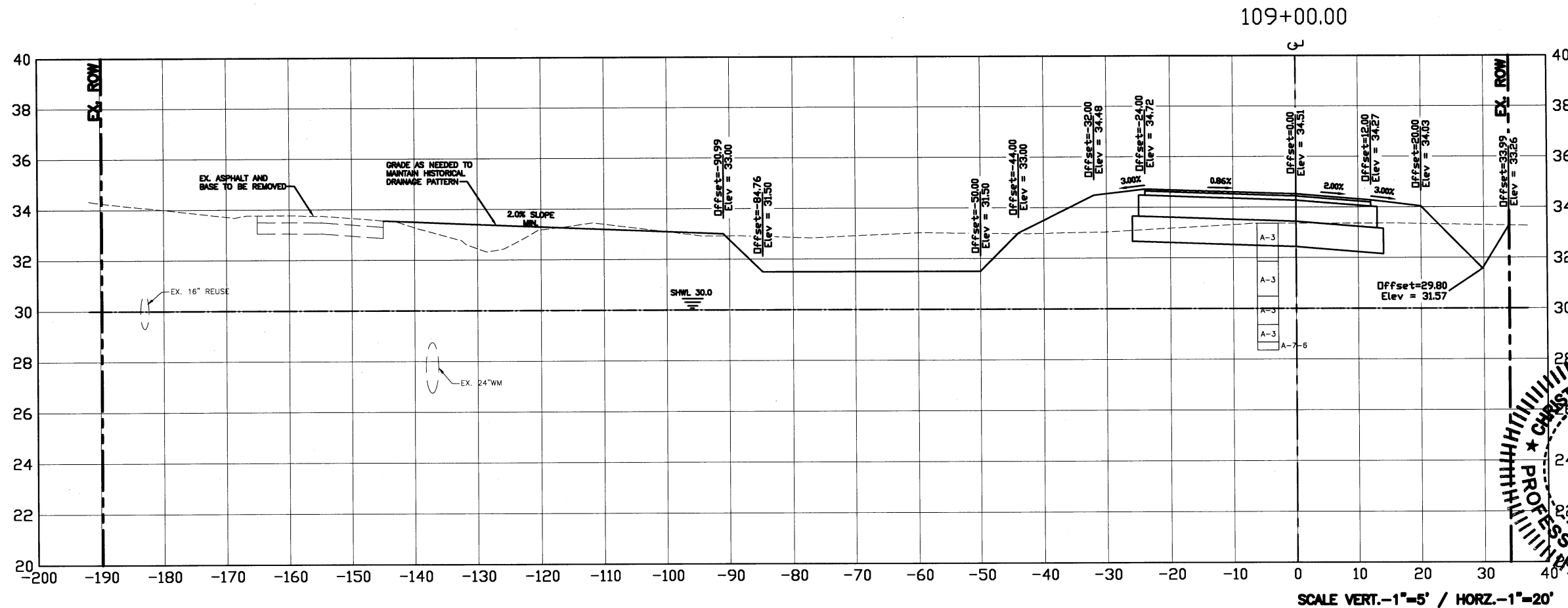
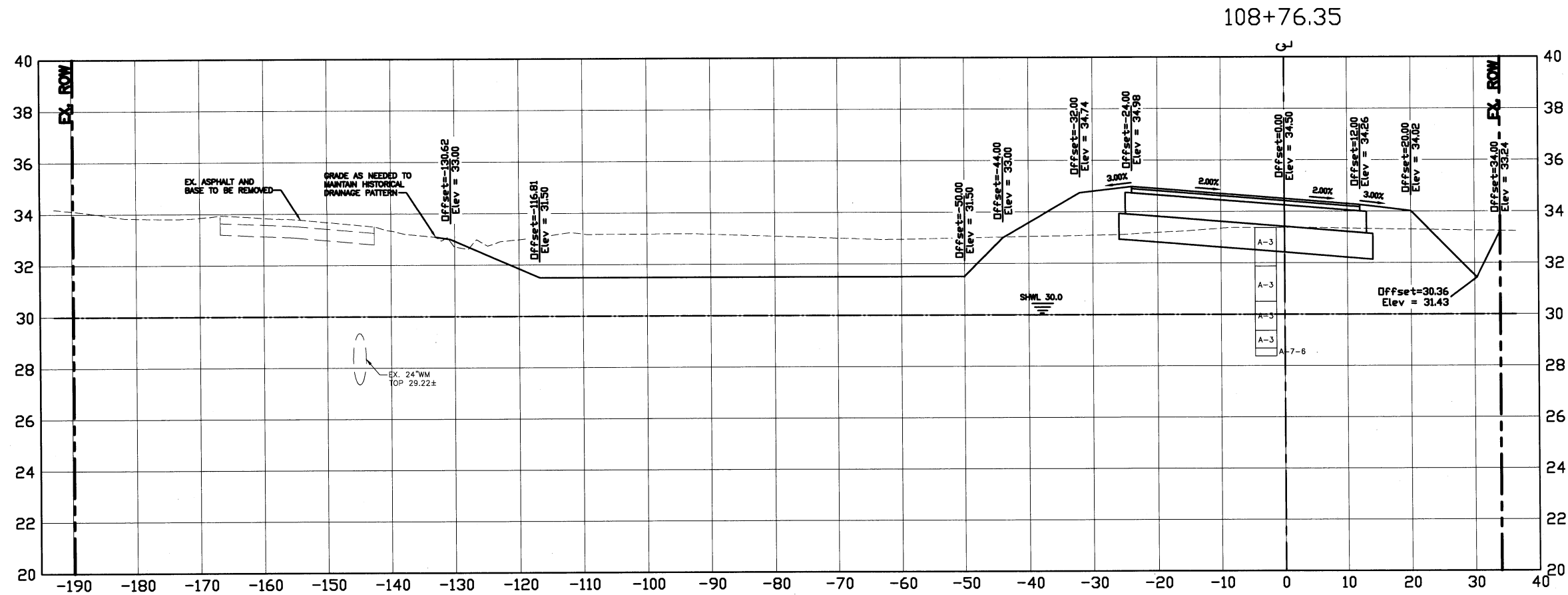


SCALE VERT.-1"=5' / HORZ.-1"=20'

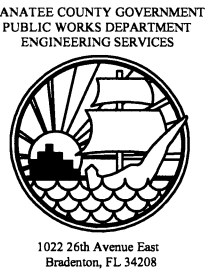
**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ERIE ROAD CROSS SECTIONS**

NO.	DATE	BY	REVISION DESCRIPTION
PROJECT #	380-8048480		
SURVEY #	N/A		
SEC./TWN./RGE	28&35/33S/18E		
SCALE	AS SHOWN		
SURVEYED	K&S	12/29/09	
DESIGNED	CM	02/05/10	
DRAWN	JES	02/05/10	
CHECKED	AM,JP,SF	03/20/12	
CHRISTOPHER LEE MOWBRAY, P.E.			
FLORIDA P.E. # 46777			
			
Signature & Date			

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\PMD_Engineering_Short\Highway_Engineering\PROJECTS\15-08\DMG\ERIE ROAD REALIGNMENT\XSEC.dwg | ERIE Area 10-15-08\DMG\ERIE ROAD REALIGNMENT\XSEC.dwg | ERIE 41, 4/25/2012 1:00 PM Jim Anderson, 1:1, 11x17



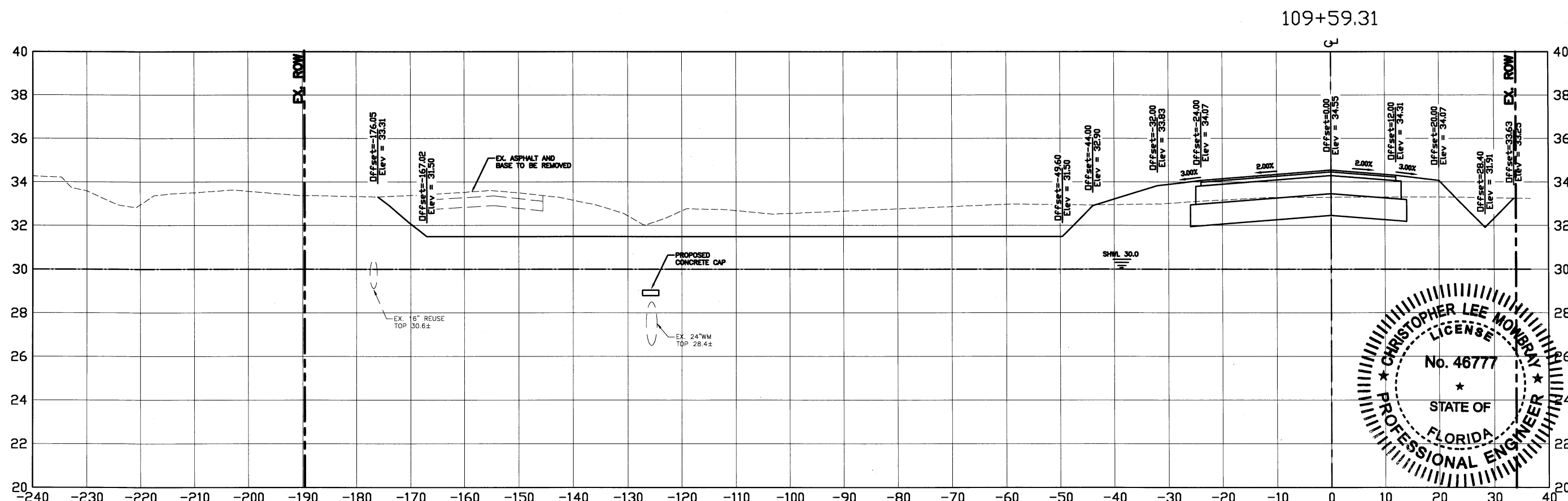
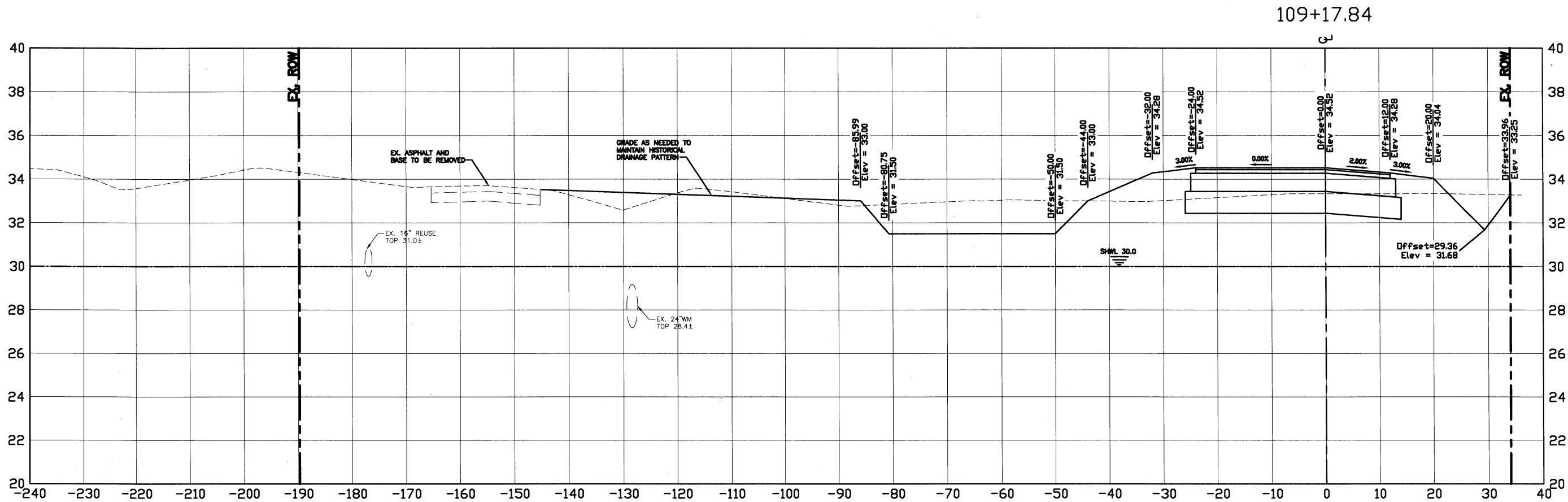
SCALE VERT.-1"=5' / HORZ.-1"=20'



ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ERIE ROAD CROSS SECTIONS

DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</
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Copyright 2010 MANATEE COUNTY GOVERNMENT S:\PMD_Engineering_Shore\Highway_Engineering\PROJECTS\9th Ave 10-19-09\DWG\9th Ave Road Realignment_XSEC.dwg, ERIE 42, 1/25/2012 1:00 PM Jim Anderson, 1:1, 11x17



SCALE VERT.-1"=5' / HORIZ.-1"=20'



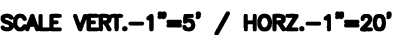
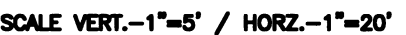
ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ERIE ROAD CROSS SECTIONS

NO.	REVISION	DESCRIPTION	BY	DATE
PROJECT #	380-8048480			
SURVEY #	N/A			
SEC./TWN./RGE	26&35/33S/18E			
SCALE	AS SHOWN			
SURVEYED	K&S	12/29/09		
DESIGNED	CM	02/05/10		
DRAWN	JCS	02/05/10		
CHECKED	AM,JP,SF	03/20/12		
CHRISTOPHER LEE MOWBRAY, P.E.				
FLORIDA P.E. # 46777				
Signature & Date				

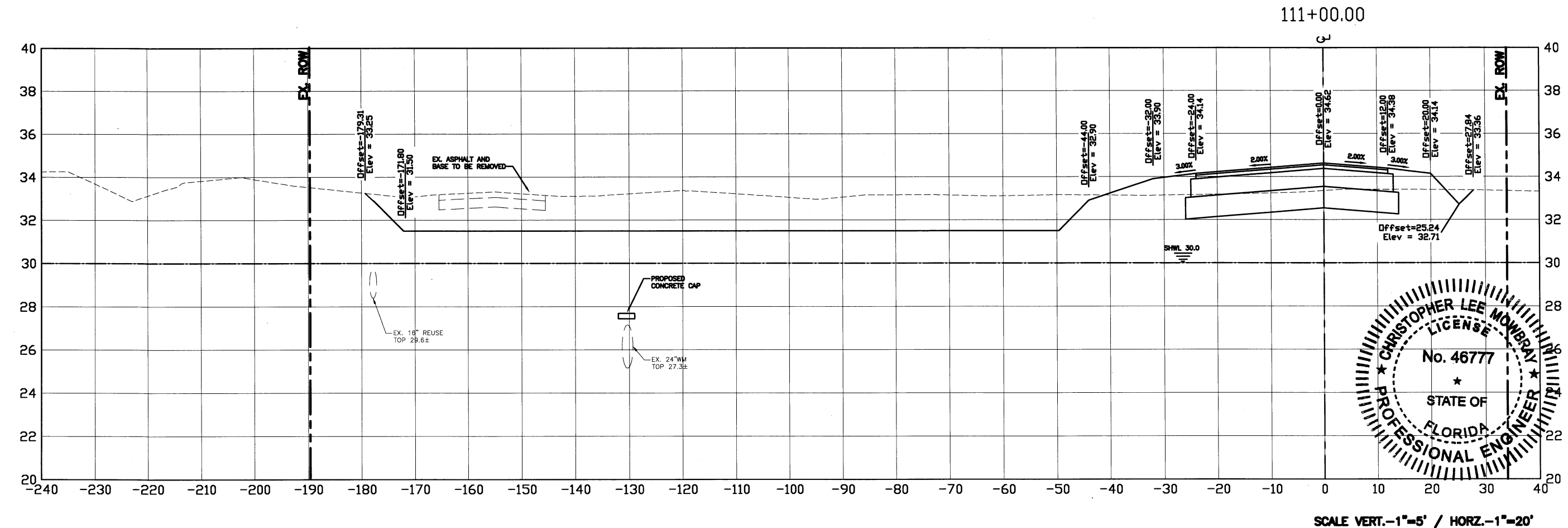
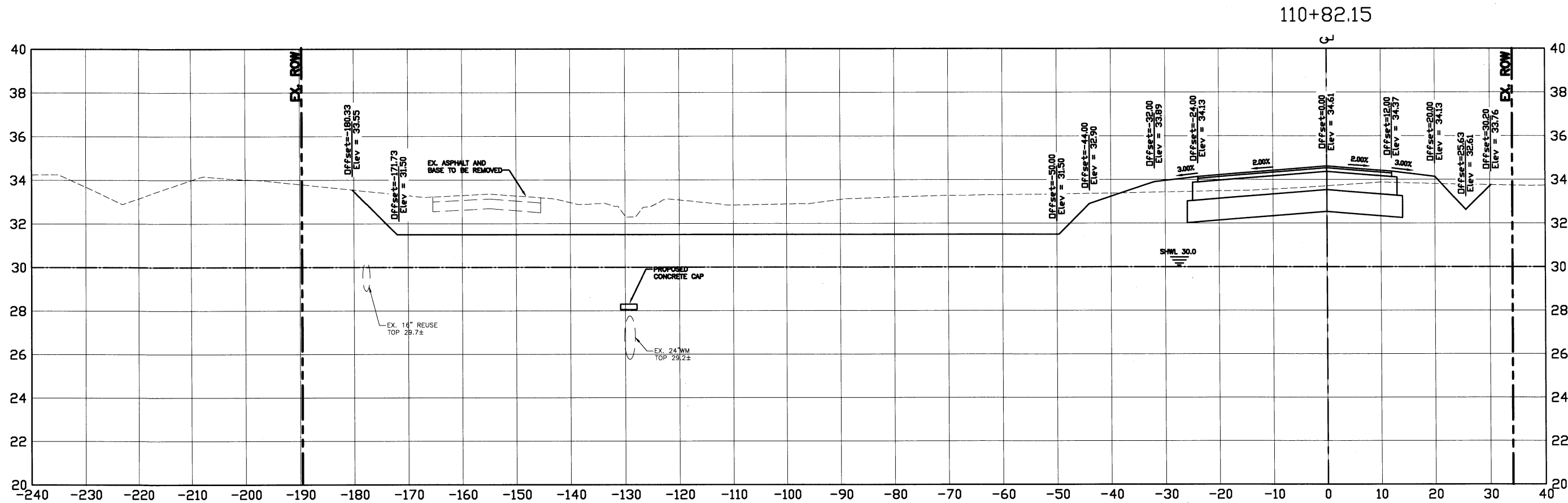
ERIE ROAD CROSS SECTIONS

PROJECT #	380-8048480	
SURVEY #	N/A	
SEC./TWN./RGE	26&35/33S/18E	
SCALE	AS SHOWN	
	BY	DATE
SURVEYED	K&S	12/28/08
DESIGNED	CM	02/05/10
DRAWN	<i>gcy</i>	02/05/10
CHECKED	AM,JP,SF	03/20/12

Signature & Date



COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\P\W\Engineering\Shore\Highway Engineering\PROJECTS\Erie Bocc Approved Alignment\Chris Area 10-15-09\DWG\ERIE ROAD REALIGNMENT\SEC44.dwg, ERE 44, 4/25/2012 1:01 PM Jim Anderson, 1:1, 11x17



SCALE VERT. -1"=5' / HORZ. -1"=20'



**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ERIE ROAD CROSS SECTIONS**

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	380-6048480		
SURVEY #	N/A		
SEC./TWN./RGE	28&35/33S/18E		
SCALE	AS SHOWN		
SURVEYED	K&S	DATE	12/28/09
DESIGNED	CM	DATE	02/05/10
DRAWN	JEG	DATE	02/05/10
CHECKED	AM,JP,SF	DATE	03/20/12
CHRISTOPHER LEE MOWBRAY, P.E.			
FLORIDA P.E. # 46777			
Signature & Date			
SHEET 44 OF 75			

ERIE ROAD @ 69TH ST. EAST-

INTERSECTION

ERIE ROAD CROSS SECTIONS

[illegible]

PROJECT #	380-6048460
SURVEY #	N/A
SEC./TWN./RGE	26&35/33S/18E
SCALE	AS SHOWN

	BY	DATE
SURVEYED	K&S	12/29/08
DESIGNED	CM	02/05/10
DRAWN	JG	02/05/10
CHECKED	AM,JP,SF	03/20/12

CHRISTOPHER LEE MOWBRAY, P.E.

FLORIDA P.S. # 48777

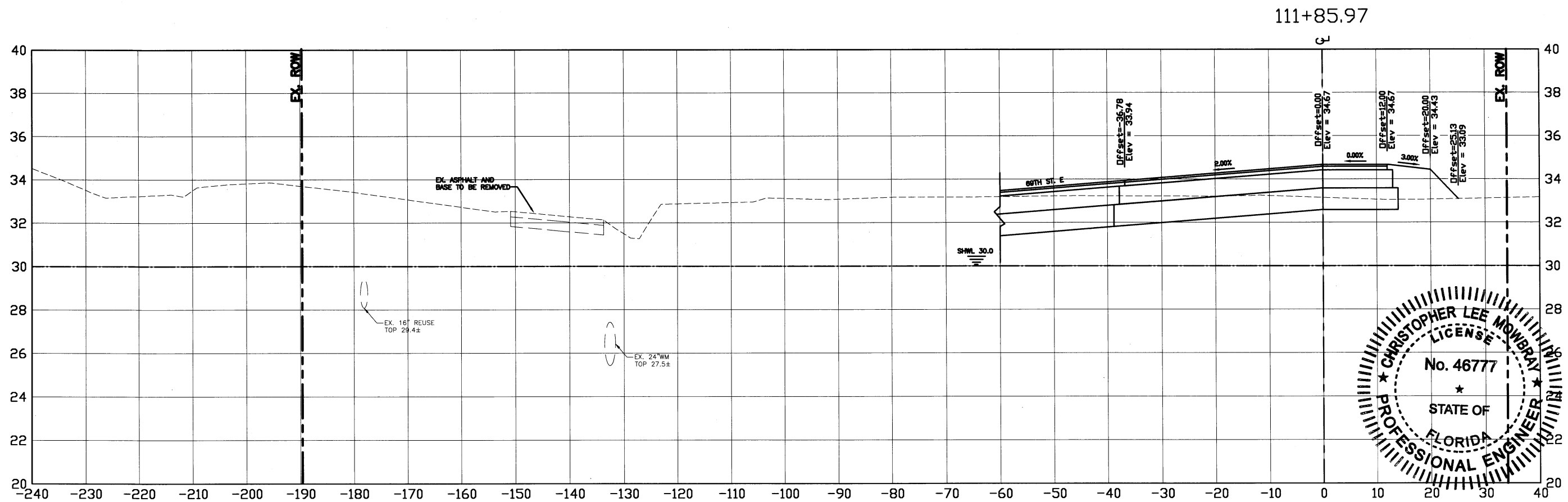
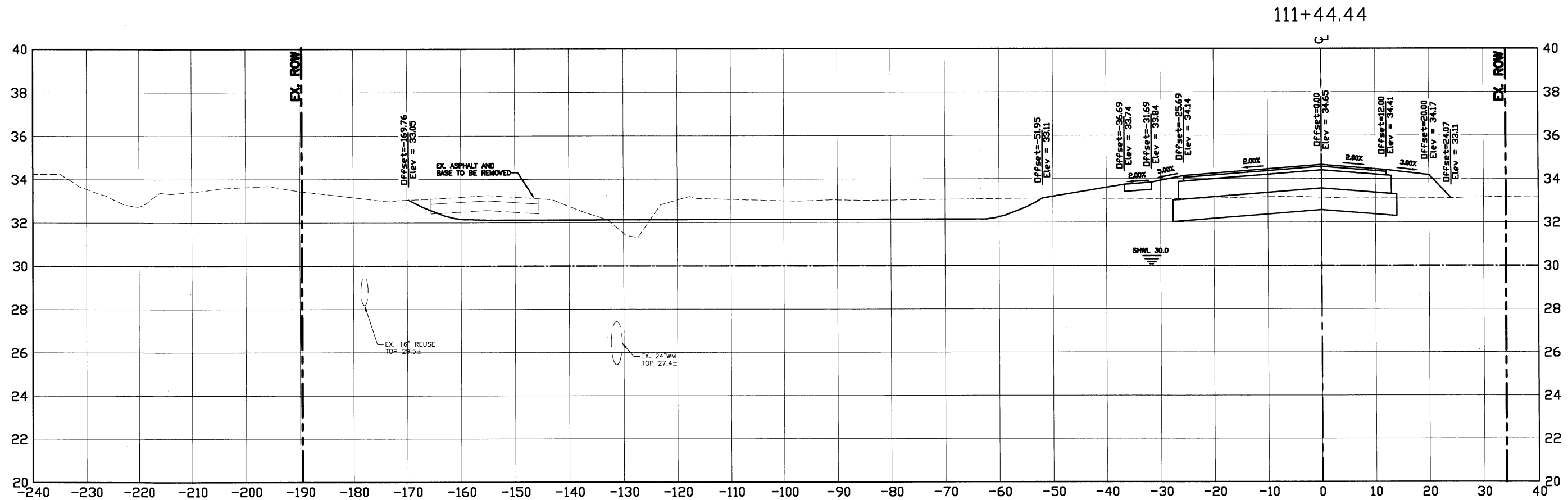
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4/29/12

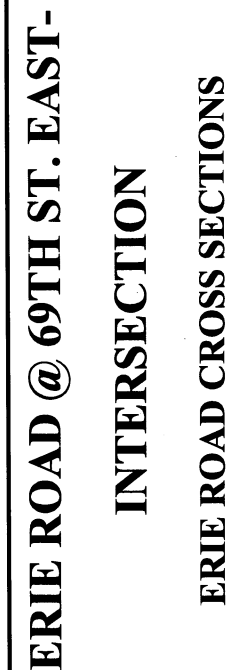
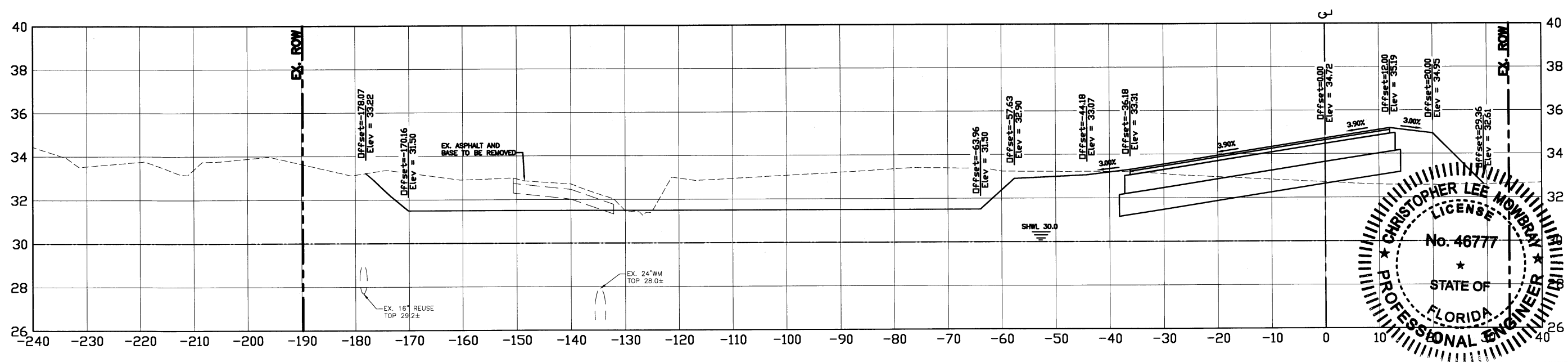
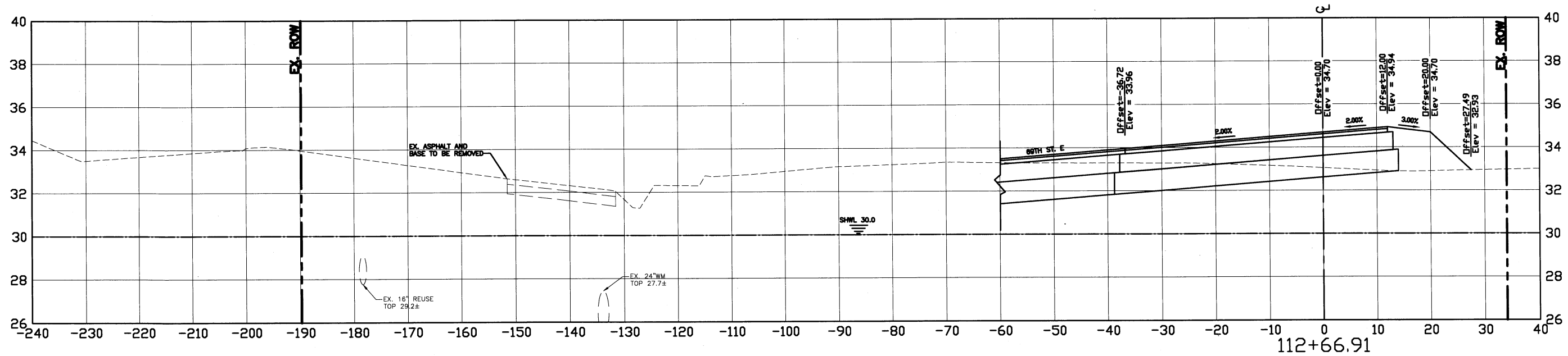
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Signature & Date



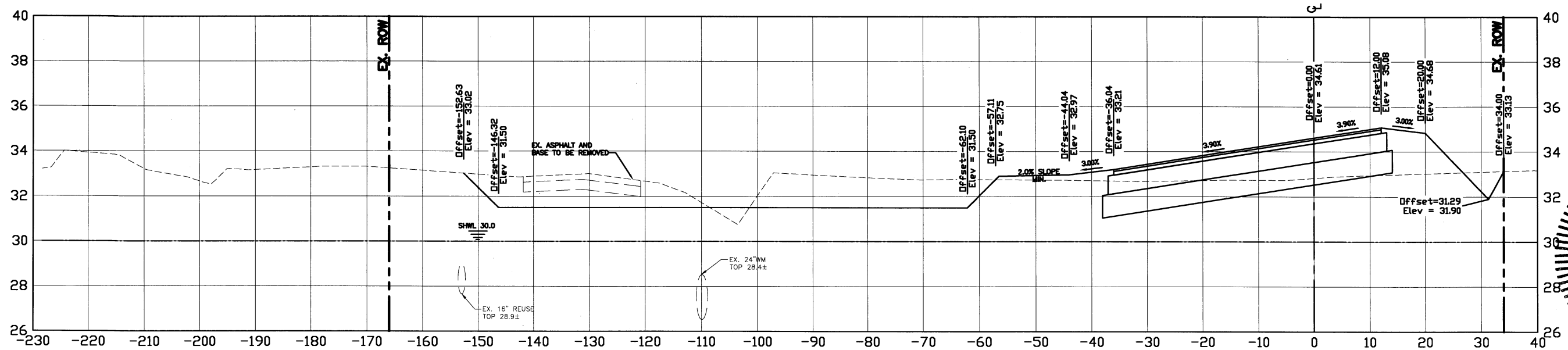
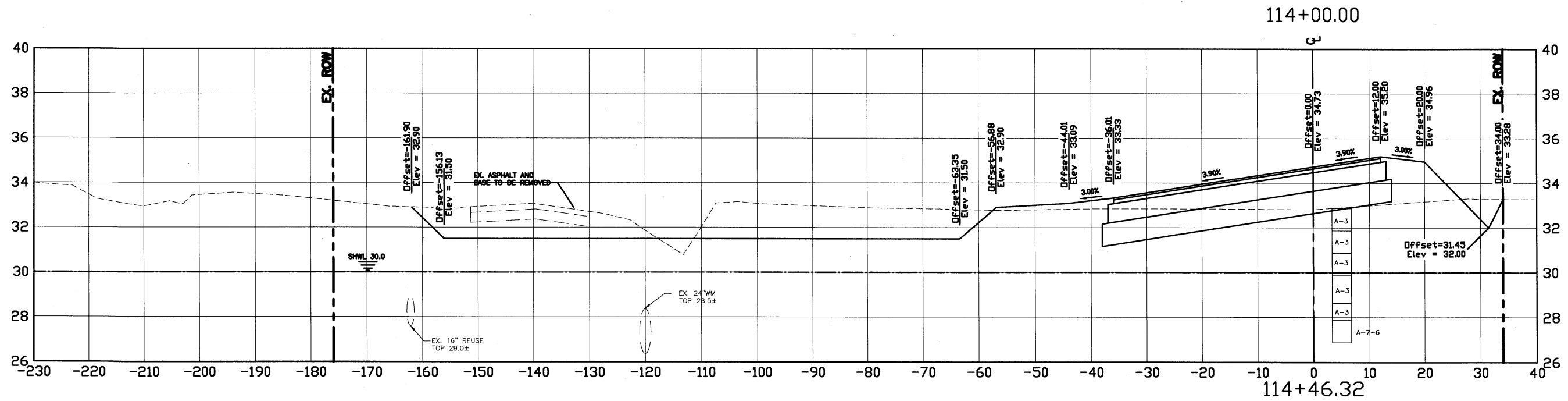
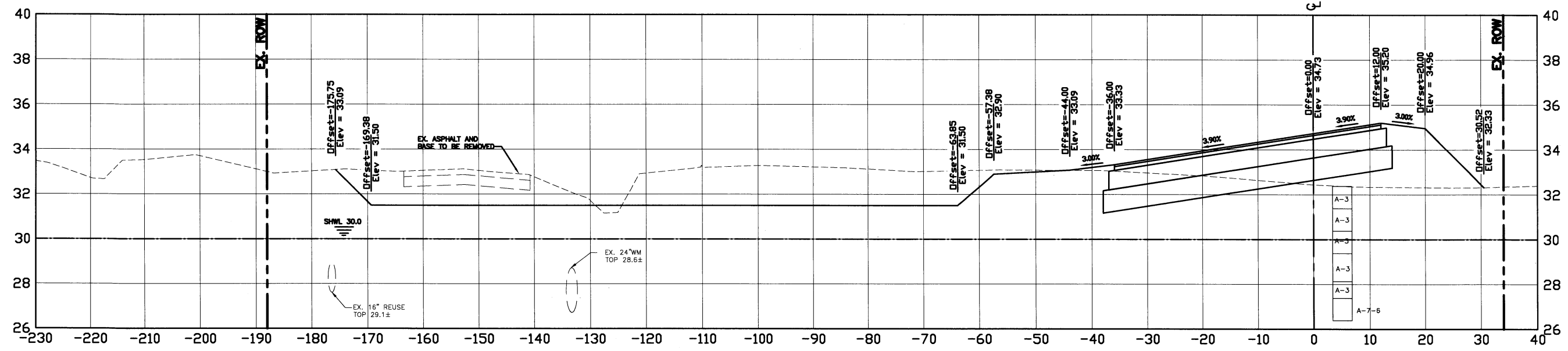
SCALE VERT.-1"=5' / HORZ.-1"=20'

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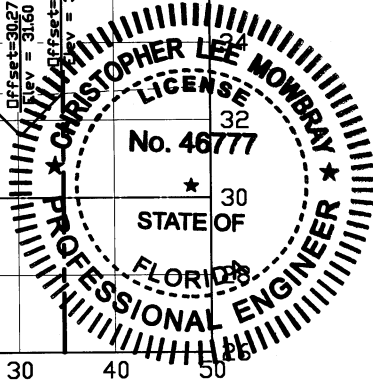
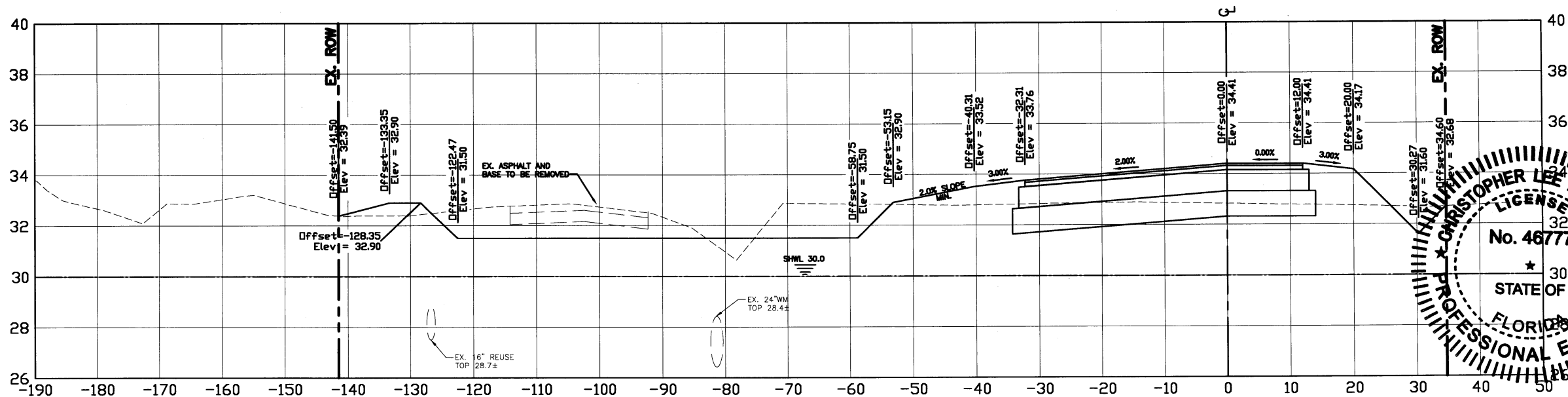
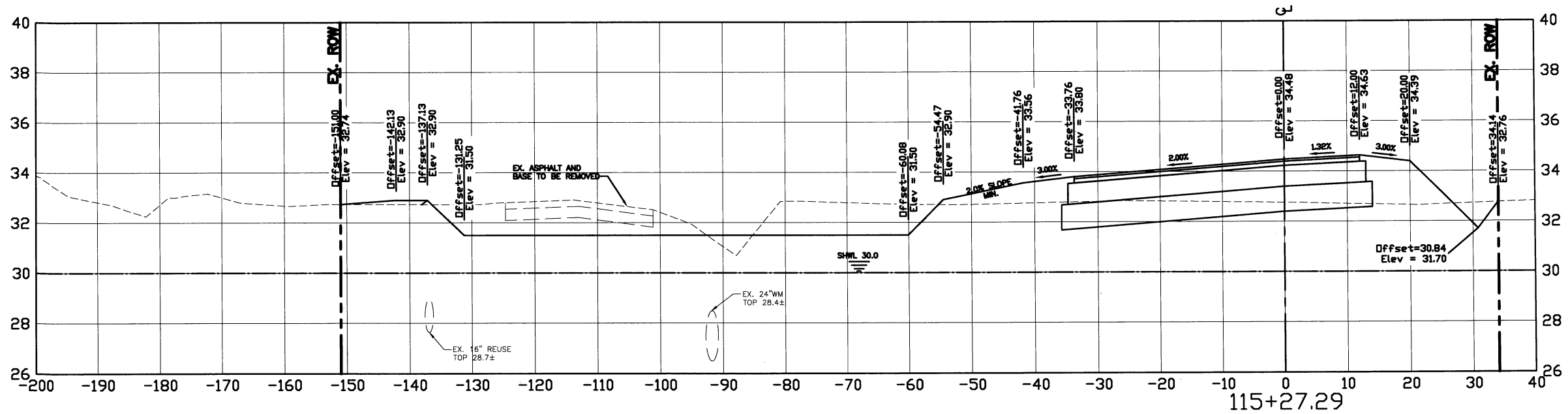
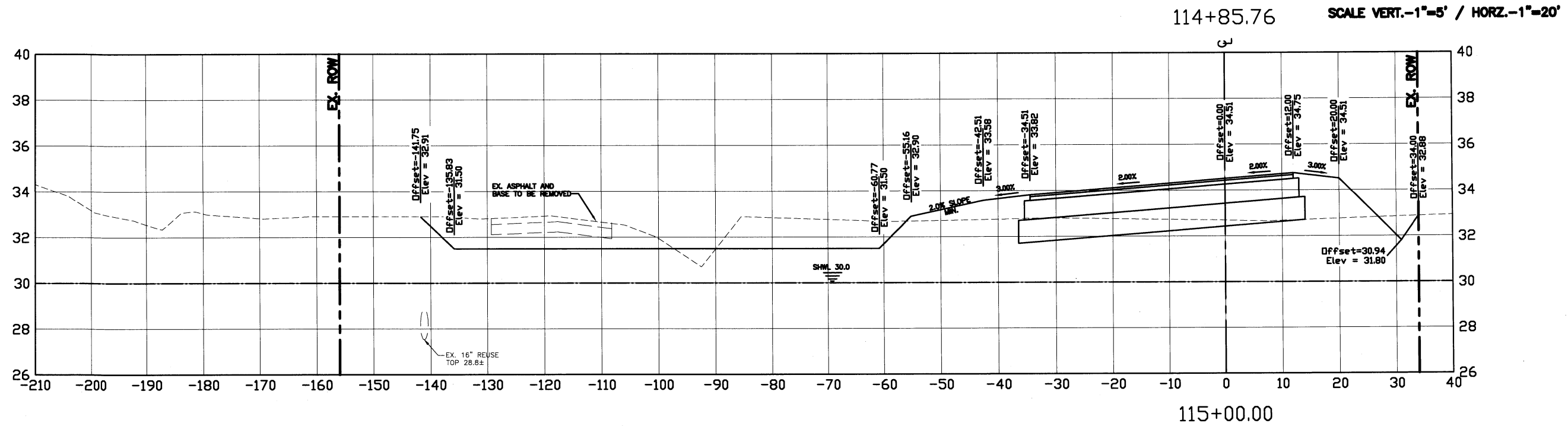


DATE									
BY									
REVISION DESCRIPTION									
NO.									
PROJECT #		380-80484							
SURVEY #		N/A							
SEC./TWN./RGE		28&35/33S/							
SCALE		AS SHOWN							
	BY	DATE							
SURVEYED	K&S	12/29							
DESIGNED	CM	02/05							
DRAWN	gtr	02/05							
CHECKED	AMJ,SF	03/20							
CHRISTOPHER LEE MOWERAY,									
FLORIDA D.E. # 46777									
 4/25/12 Signature & Date									
SHEET 46 OF 7									

DATE	12/29/08
PROJECT	LPS
DESIGNED BY	ON 02/05/10
DRAWN BY	02/05/10
CHECKED BY	02/05/10
NO. 4677	
CHRISTOPHER LEE MOWERY, P.E.	
FLORIDA P.E. # 4677	
STATE OF	
FLORIDA	
PROFESSIONAL ENGINEER	
Signature & Title	
SHEET 47 OF 75	



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ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ERIE ROAD CROSS SECTIONS

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	380-8048480		
SURVEY #	N/A		
SEC./TWN./RGE	28&35/33S/18E		
SCALE	AS SHOWN		
SURVEYED	K&S	12/28/09	
DESIGNED	CM	02/05/10	
DRAWN	gta	02/05/10	
CHECKED	AM,JP,SF	03/20/12	
CHRISTOPHER LEE MOWBRAY, P.E.			
FLORIDA P.E. # 46777			
Signature & Date			
SHEET 48 OF 75			

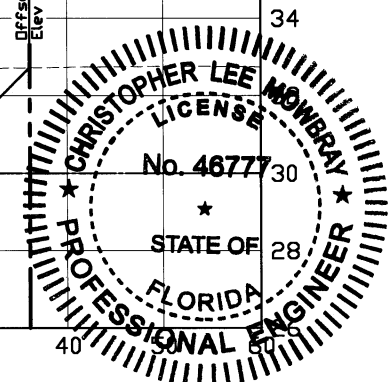
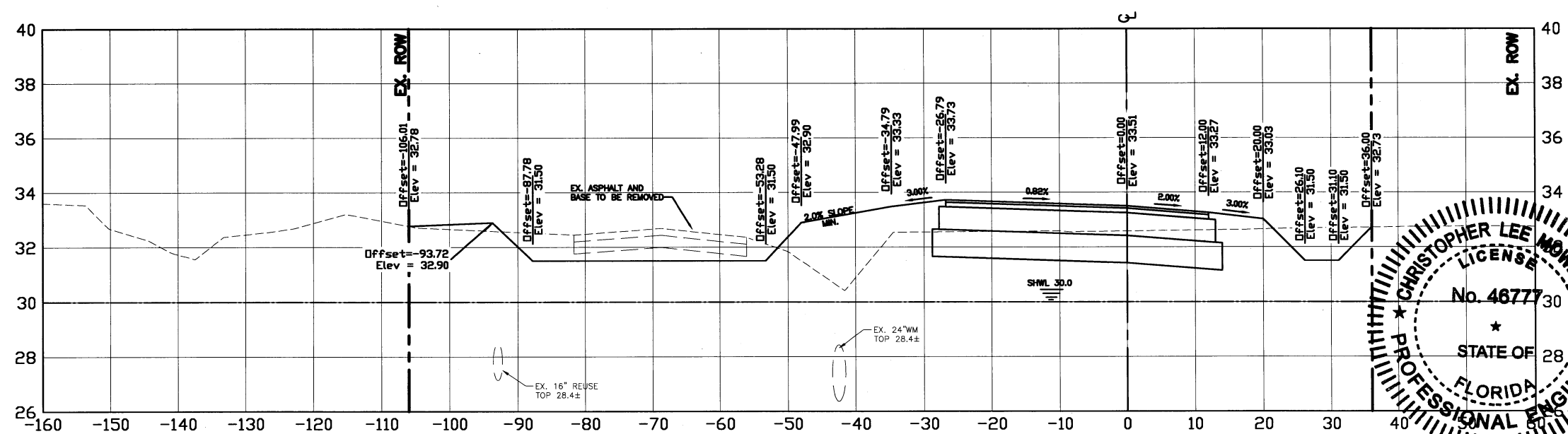
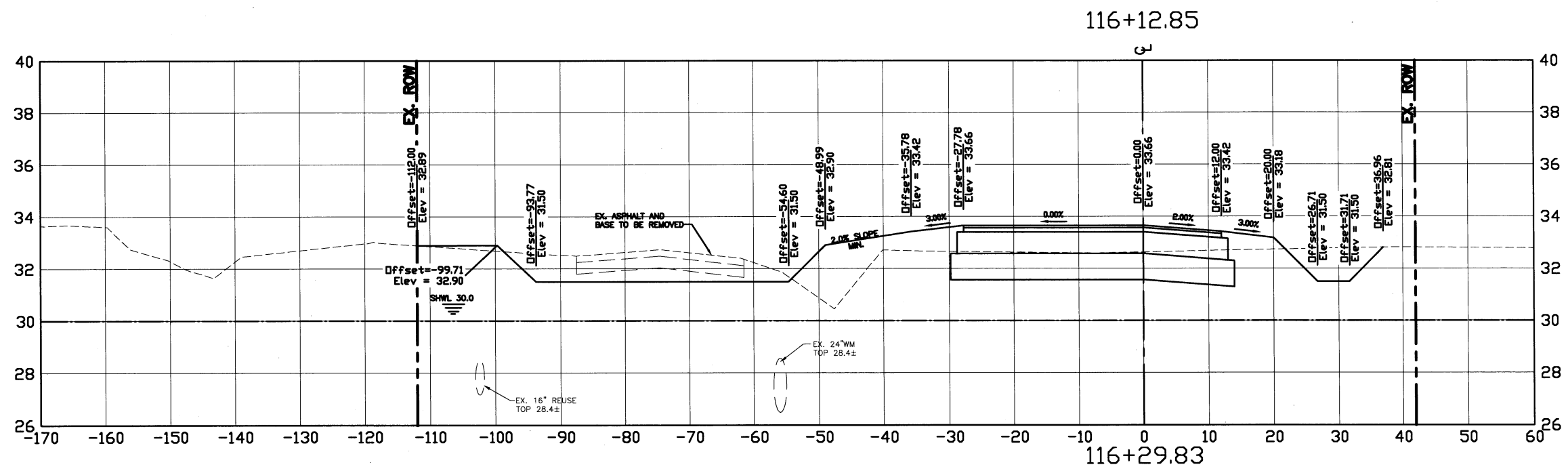
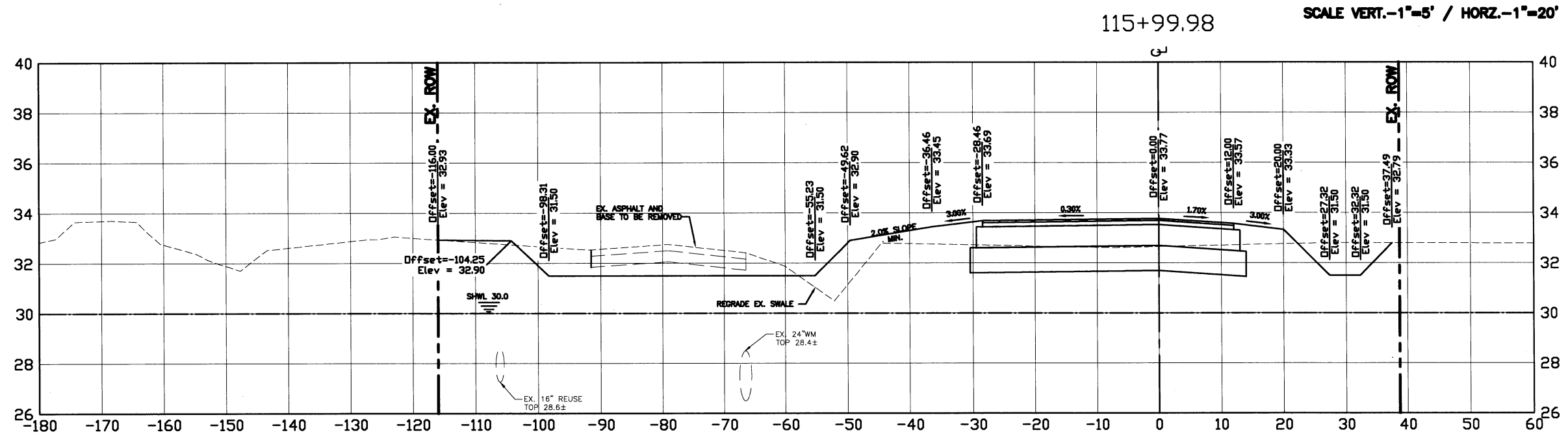
**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ERIE ROAD CROSS SECTIONS**

[illegible]

PROJECT #	380-8048480	
SURVEY #	N/A	
SEC./TWN./RGE	26&35/33S/18E	
SCALE	AS SHOWN	
	BY	DATE
SURVEYED	K&S	12/28/06
DESIGNED	CM	02/05/10
DRAWN	JEG	02/05/10
CHECKED	AM,JP,SF	03/20/12

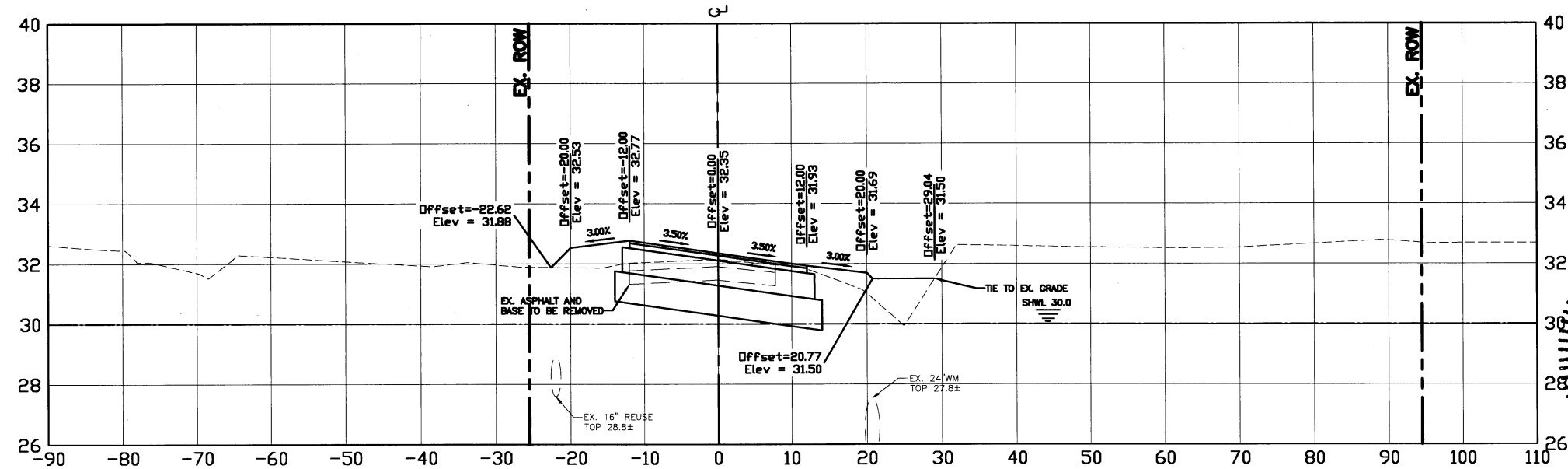
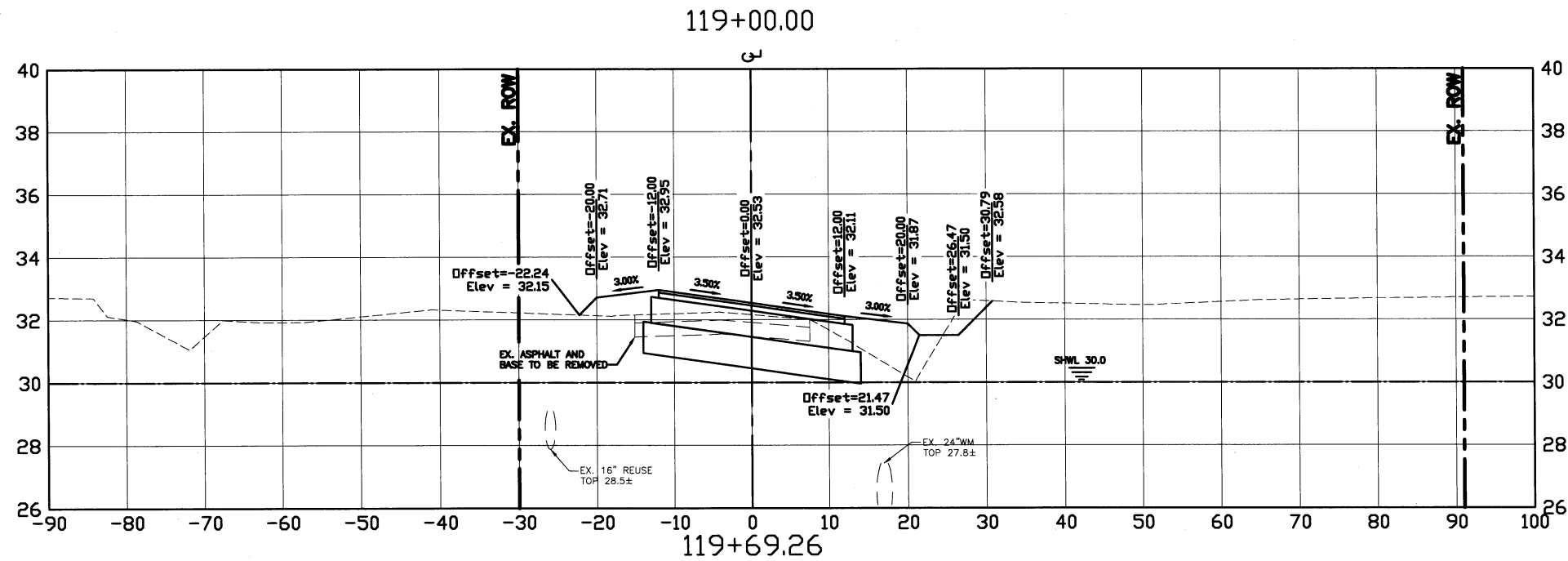
CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
Ch Lee
4/25/12

Signature & Date



INTERSECTION

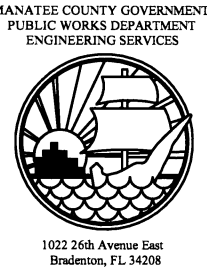
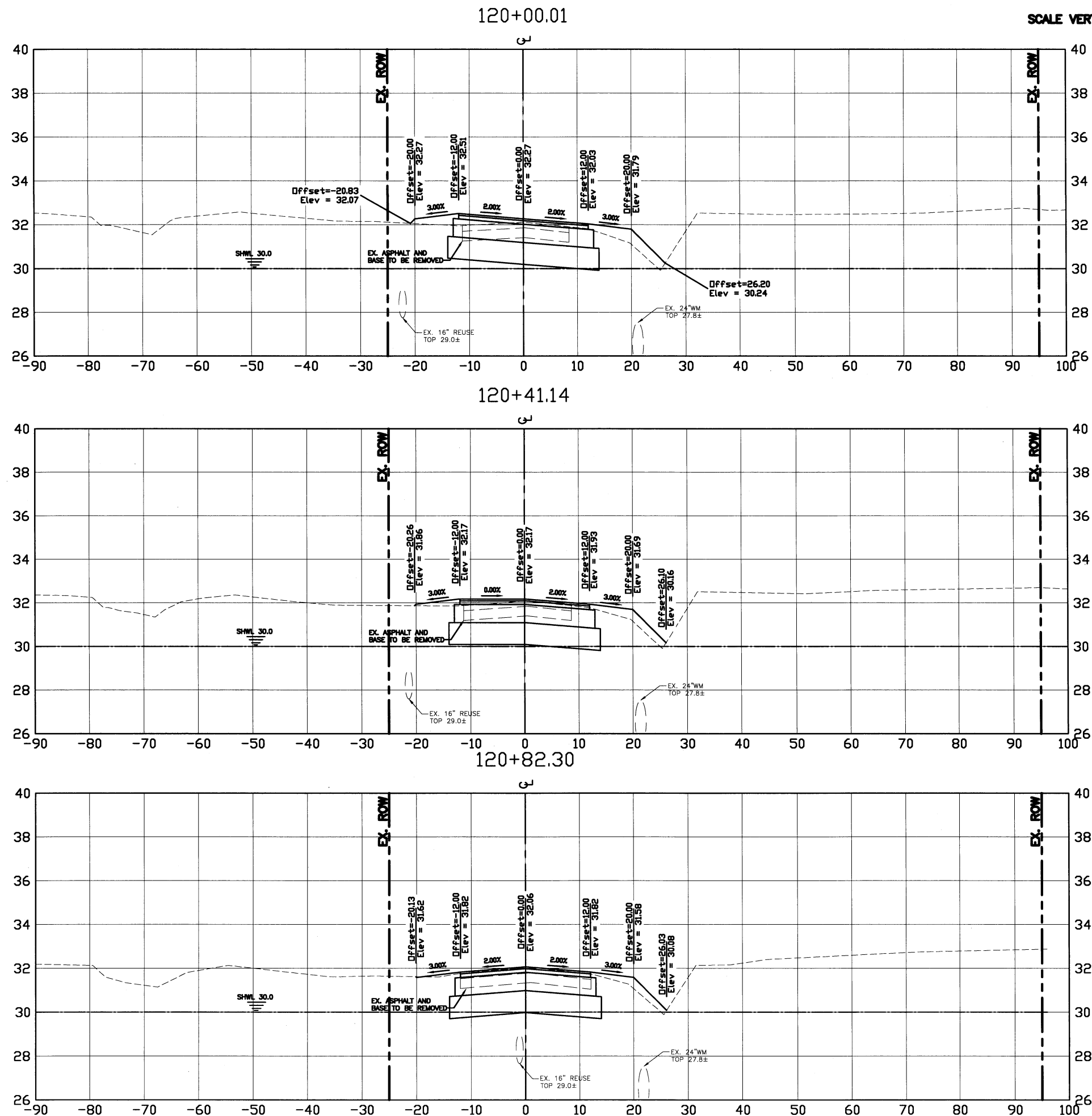
ERIE ROAD CROSS SECTIONS



A circular professional engineer seal for Christopher Lee Mowbray. The outer ring contains the text "CHRISTOPHER LEE MOWBRAY" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring is a dashed circle containing the word "LICENSE" at the top, "No. 46777" in the center, a single star below the number, and "STATE OF FLORIDA" at the bottom.

[illegible]

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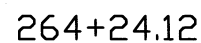
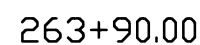
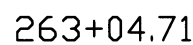
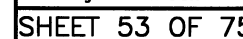
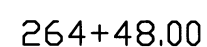
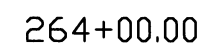


ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ERIE ROAD CROSS SECTIONS

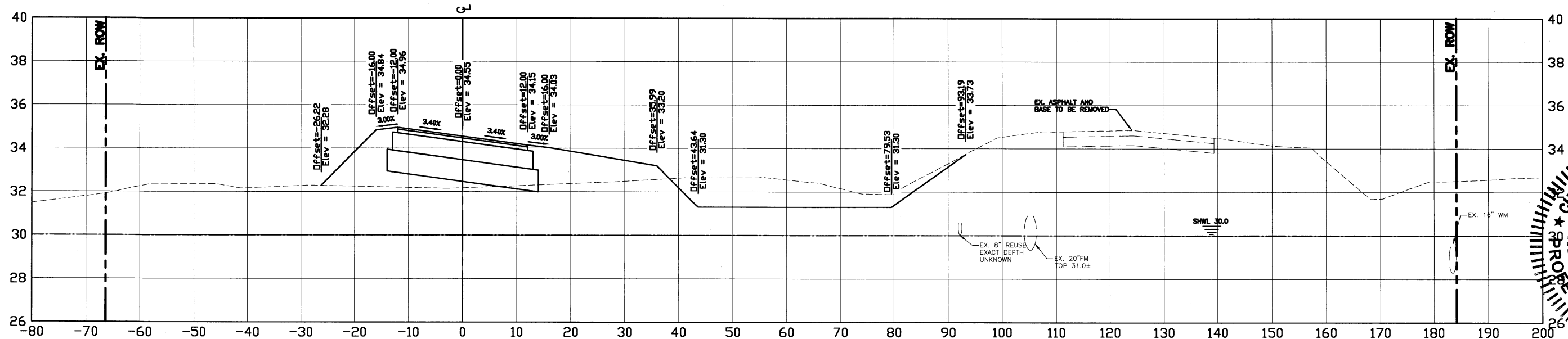
NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	380-8048480		
SURVEY #	N/A		
SEC./TWN./RGE	26&35/33S/18E		
SCALE	AS SHOWN		
SURVEYED	K&S	12/28/08	
DESIGNED	CM	02/05/10	
DRAWN	JLG	02/05/10	
CHECKED	AM,JP,SF	03/20/12	
CHRISTOPHER LEE MOWBRAY, P.E.			
FLORIDA P.E. # 45777			
No. 46777			
STATE OF FLORIDA			
PROFESSIONAL ENGINEER			
Signature & Date			
4/25/12			

69TH ST. CROSS SECTIONS

CHRISTOPHER LEE MOWERAY, P.J.
FLORIDA P.E. # 45777
Ch Lee
4/25/12
Signature & Date

 $263+55.88$ 

DATE					
BT					
REVISION DESCRIPTION					
NO.					
PROJECT #		380-8048460			
SURVEY #		N/A			
SEC./TWN./RGE		28&35/33S/18E			
SCALE		AS SHOWN			
DATE		02/29/09			
DESIGNED BY		CHRISTOPHER LEE MOWBRAY, P.E.			
DRAWN BY		CHRISTOPHER LEE MOWBRAY, P.E.			
CHECKED BY		CHRISTOPHER LEE MOWBRAY, P.E.			
IN CHARGE		CHRISTOPHER LEE MOWBRAY, P.E.			
STATE OF		FLORIDA			
COUNTY OF		FLORIDA			
CITY OF		FLORIDA			
SHEET 54 OF 75		SHEET 54 OF 75			



CHRISTOPHER LEE MOWERAY, P.J.
FLORIDA P.E. # 45777
Ch Lz
4/25/12
Signature & Date

Profile view of a proposed road section. The horizontal axis represents stationing from -50 to 220, and the vertical axis represents elevation from 26 to 40 feet. The proposed road profile is shown as a solid line, and the existing ground profile is shown as a dashed line. The road is proposed with a 3.40% grade from station -10 to 10, and a 3.00% grade from station 10 to 130. The road is proposed to be 20 feet wide, with a 10-foot shoulder on each side. The existing ground is shown with a 3.00% grade from station -10 to 10, and a 3.40% grade from station 10 to 130. The road is proposed to be 20 feet wide, with a 10-foot shoulder on each side. The existing ground is shown with a 3.00% grade from station -10 to 10, and a 3.40% grade from station 10 to 130. The road is proposed to be 20 feet wide, with a 10-foot shoulder on each side. The existing ground is shown with a 3.00% grade from station -10 to 10, and a 3.40% grade from station 10 to 130.

Station	Offset	Elevation
-24.01	Offset = 24.01	Elev = 32.68
-16.00	Offset = 16.00	Elev = 34.89
-12.00	Offset = 12.00	Elev = 34.81
0.00	Offset = 0.00	Elev = 34.40
12.00	Offset = 12.00	Elev = 35.99
16.00	Offset = 16.00	Elev = 33.87
40.19	Offset = 40.19	Elev = 33.20
48.00	Offset = 48.00	Elev = 31.30
130.19	Offset = 130.19	Elev = 31.30
138.76	Offset = 138.76	Elev = 33.20

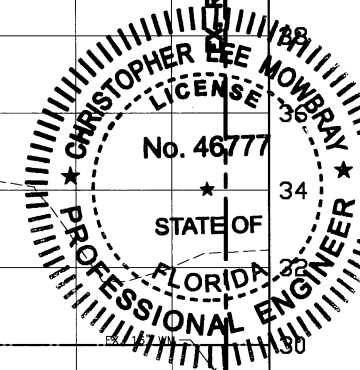
Key features and notes:

- EX. ROW (Existing Right of Way) is indicated at station -40 and 215.
- PROPOSED ROW (Proposed Right of Way) is indicated at station -40 and 215.
- EX. ASPHALT AND BASE TO BE REMOVED (Existing Asphalt and Base to be Removed) is indicated between stations 150 and 180.
- EX. 8" REUSE EXACT DEPTH UNKNOWN (Existing 8" Reuse Exact Depth Unknown) is indicated at station 150.
- EX. 20" FM TOP 31.02 (Existing 20" FM Top 31.02) is indicated at station 150.
- EX. 16" WM EXACT DEPTH UNKNOWN (Existing 16" WM Exact Depth Unknown) is indicated at station 215.
- SHWL 30.0 (Shoulder Width 30.0) is indicated at station 90.

This cross-section profile illustrates the proposed road grade and existing conditions. The horizontal axis represents stationing from 268+58.31 to 268+82.19. The vertical axis shows elevations from 26 to 40 feet. The profile includes several key features:

- Proposed Grade (Solid Line):** Shows the planned road surface with various slopes (3.00%, 3.40%, 2.0% SLOPE).
- Existing Conditions (Dashed Line):** Represents the current ground surface.
- Offsets and Elevations:** Specific points are marked with their offsets from the centerline and elevations.

Station (approx.)	Offset	Elevation
268+58.31	-23.16	32.82
268+58.31	-16.00	34.60
268+58.31	-12.00	34.72
268+58.31	0.00	34.31
268+58.31	22.10	33.56
268+58.31	26.10	33.44
268+58.31	47.53	33.20
268+58.31	55.14	31.30
268+58.31	144.59	31.30
268+58.31	152.10	33.09
- Other Features:**
 - SHW 30.0:** A horizontal line at elevation 30.0 feet.
 - EX. ASPHALT AND BASE TO BE REMOVED:** A note indicating the removal of existing pavement.
 - EX. 8" REUSE EXACT DEPTH UNKNOWN:** A note indicating the reuse of existing material.
 - EX. 20" FM TOP 31.0±:** A note indicating the existing 20-inch flexible mix top layer at elevation 31.0±.
 - EX. 16" WM:** A note indicating the existing 16-inch wide material.



Copyright 2010 MANATEE COUNTY GOVERNMENT 15:\PWS_Engineering\Shore\Highway_Engineering\PROJECTS\Erie Bocc Approved Alignment\Chris' Area 10-15-09\DWG\ERIE ROAD ALIGNMENT \SEC.dwg, 6/18/12 1:03 PM Jim Anderson, 11, 11x17

ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
69TH ST. CROSS SECTIONS

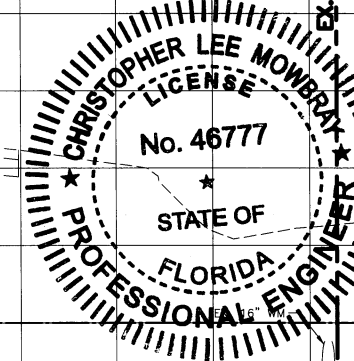
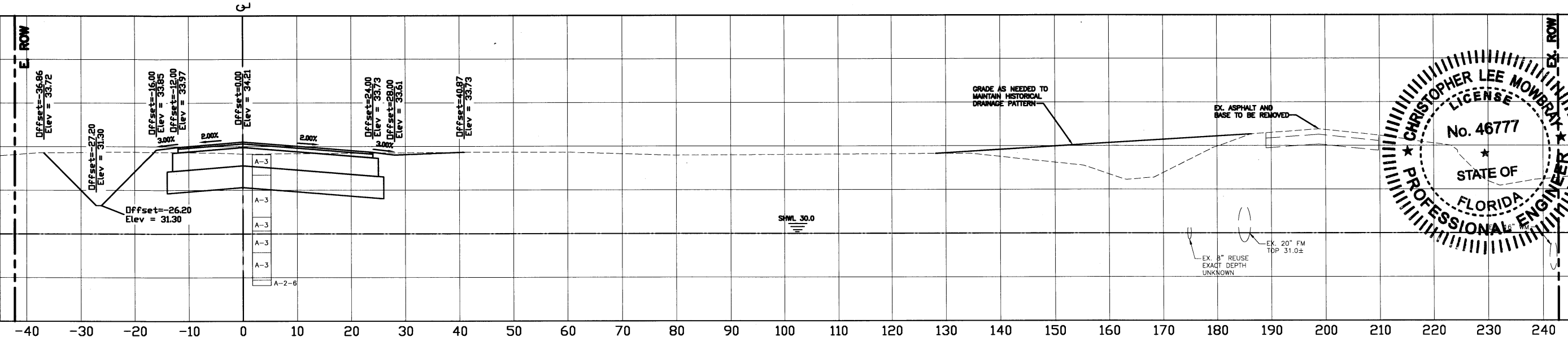
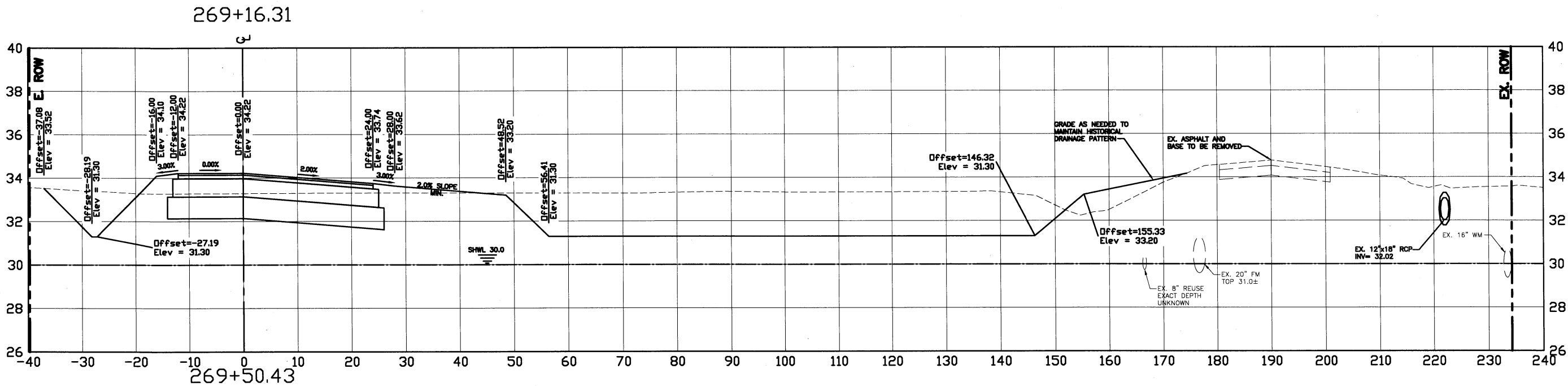
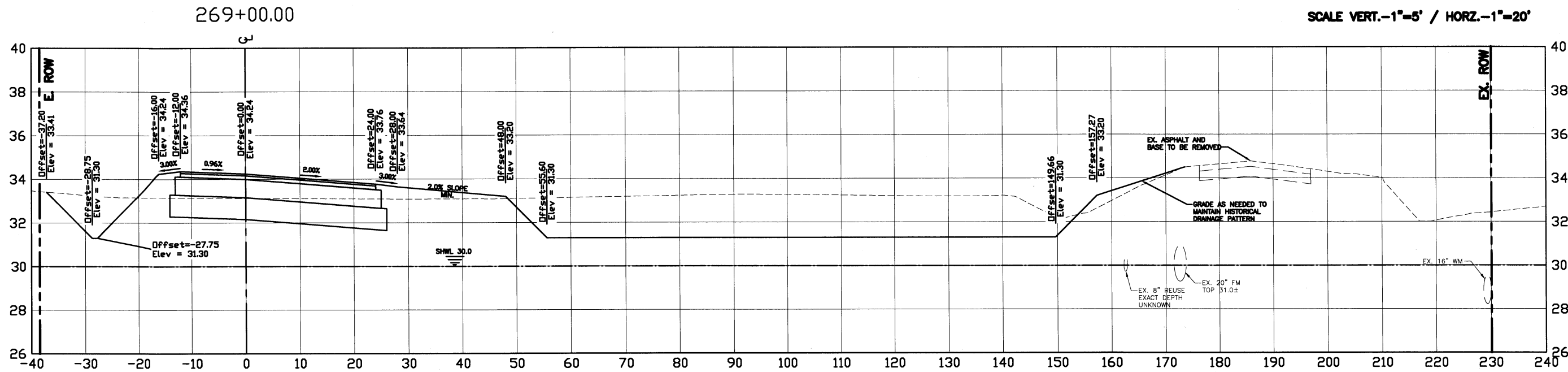
REVISION	DESCRIPTION	BY	DATE
NO.			

PROJECT #	380-6048480
SURVEY #	N/A
SEC./TWN./RGE	28&35/33S/18E
SCALE	AS SHOWN

	BY	DATE
SURVEYED	K&S	12/28/08
DESIGNED	CM	02/05/10
DRAWN	gls	02/05/10
CHECKED	AM,JP,SF	03/20/12

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
Signature
4/25/12
Signature & Date

SCALE VERT.-1"=5' / HORZ.-1"=20'



ERIE ROAD @ 69TH ST. EAST-

INTERSECTION

69TH ST. CROSS SECTIONS

[illegible]

PROJECT #	380-6048460
SURVEY #	N/A
SEC./TWN./RGE	28&35/33S/18E
SCALE	AS SHOWN

DATE	12/29/09
DRAWN	02/03/10
CHECKED	03/20/12

CHRISTOPHER LEE MOWBRAY, P.E.

FLORIDA P.E. # 46777

STATE OF FL.

KNIFE

4.1.4.

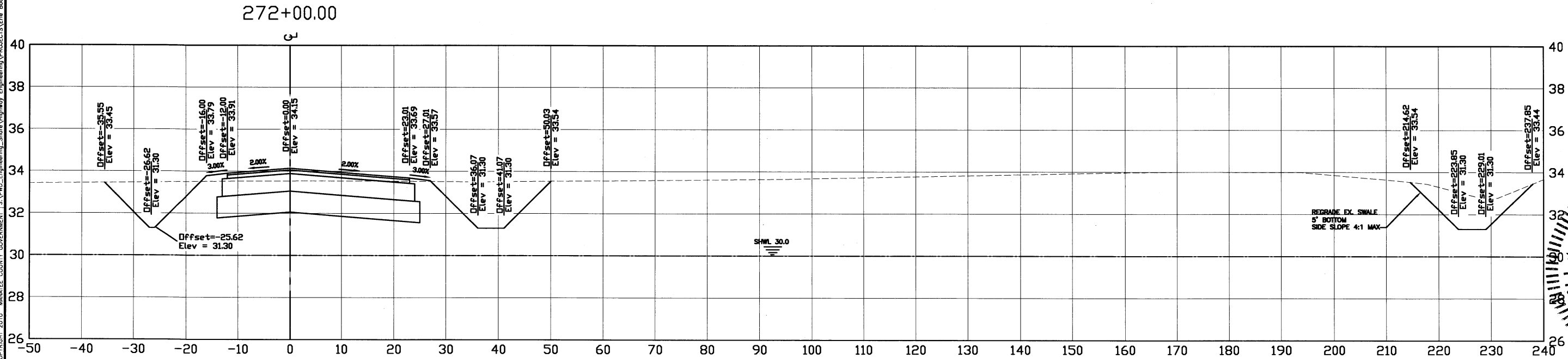
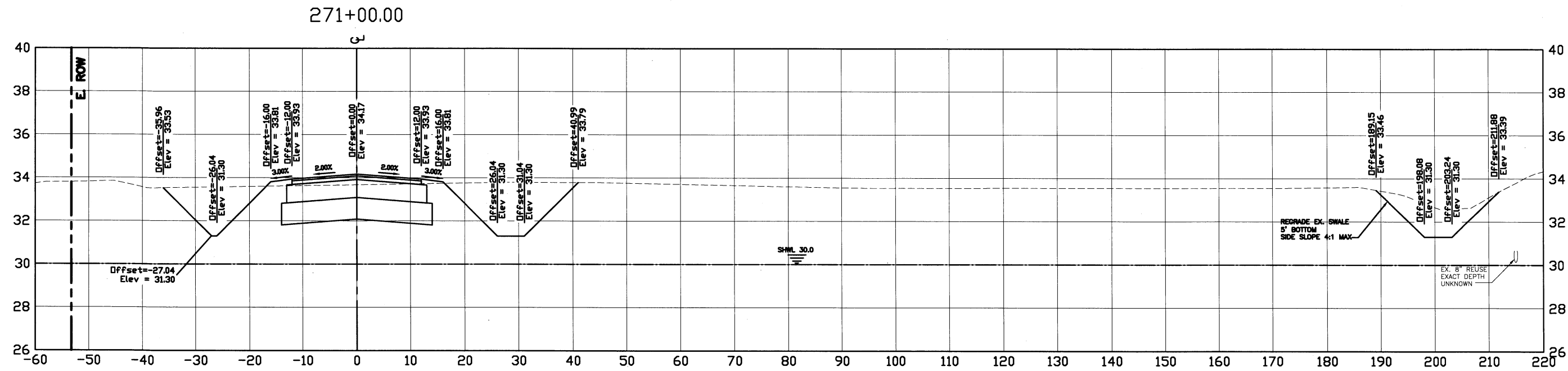
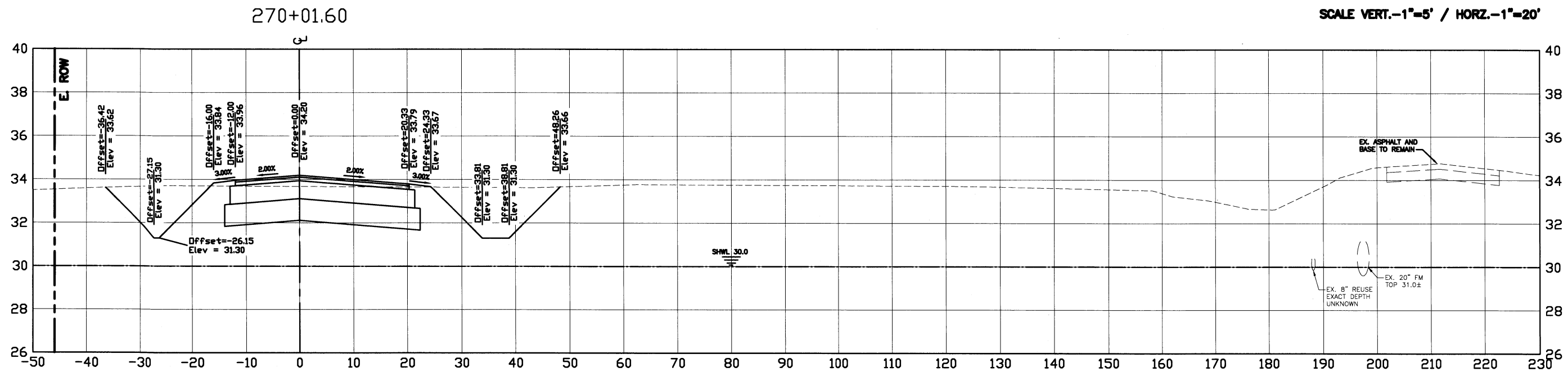
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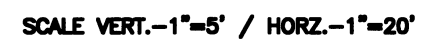
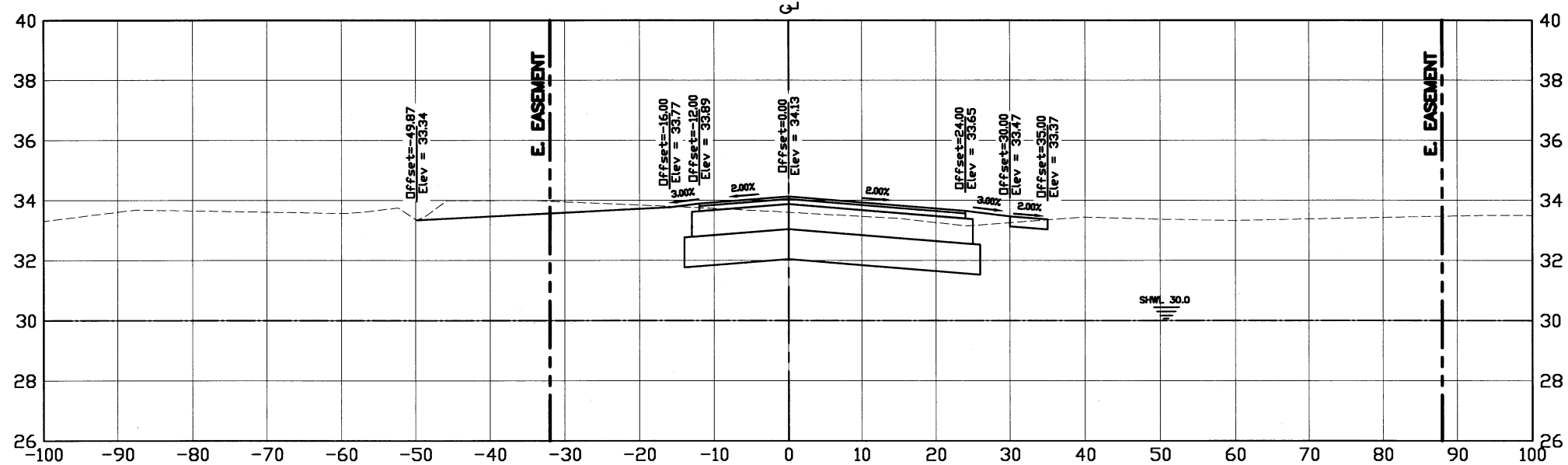
Signature & Date

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EEA 157 OF



69TH ST. CROSS SECTIONS

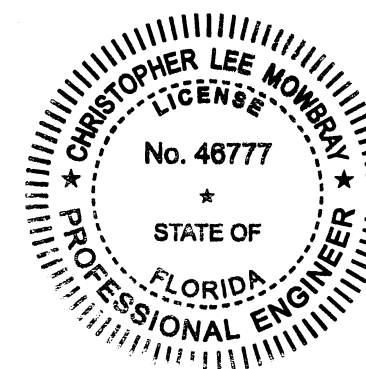
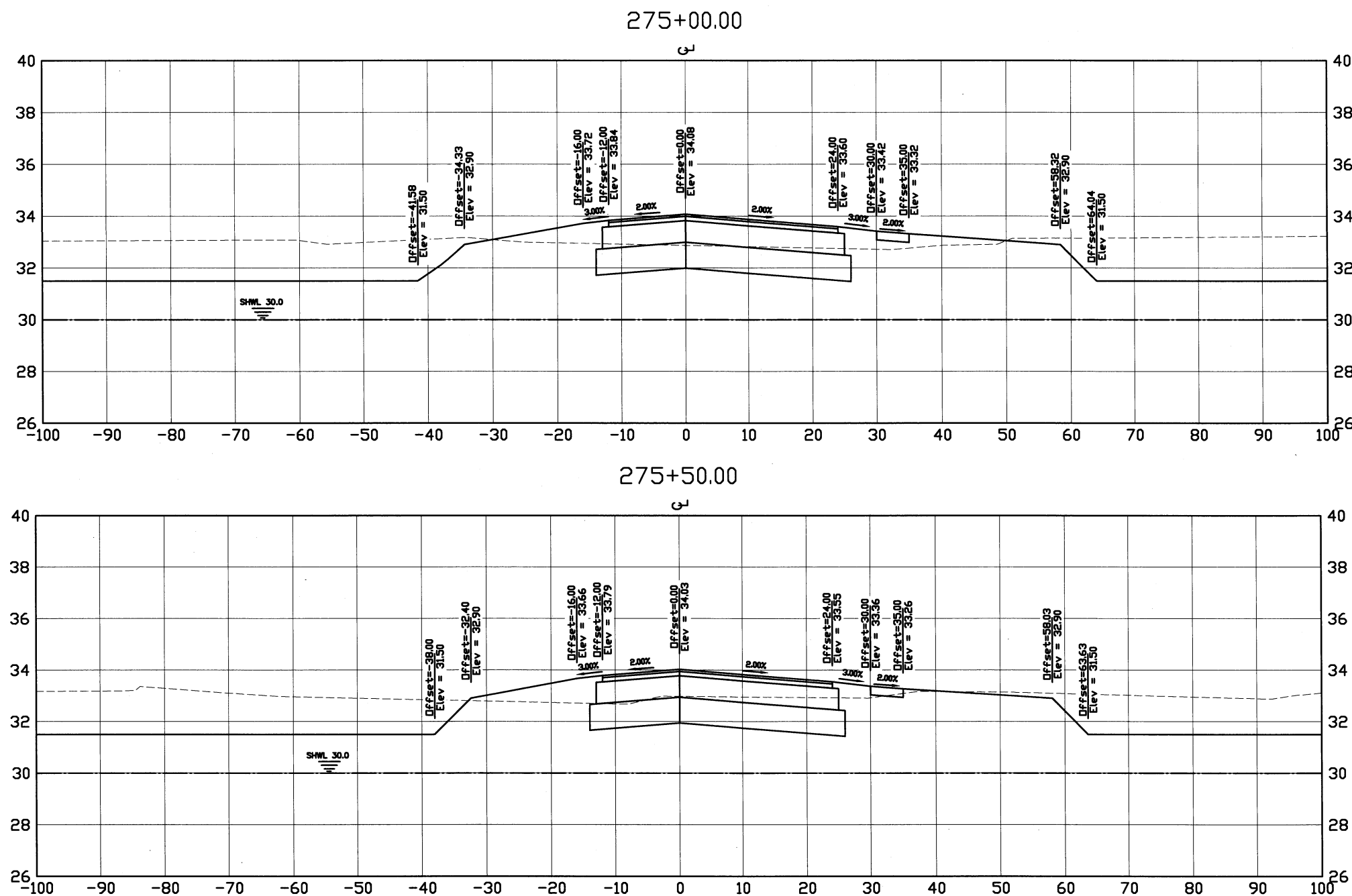


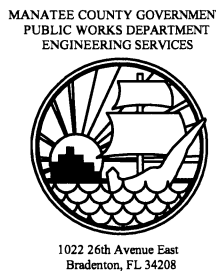
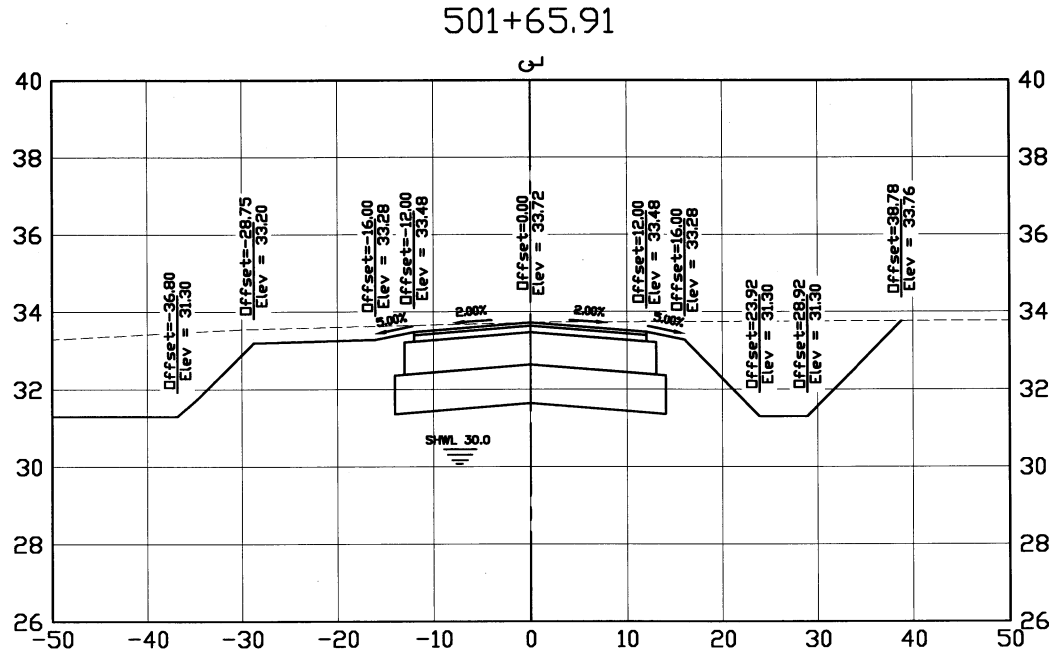
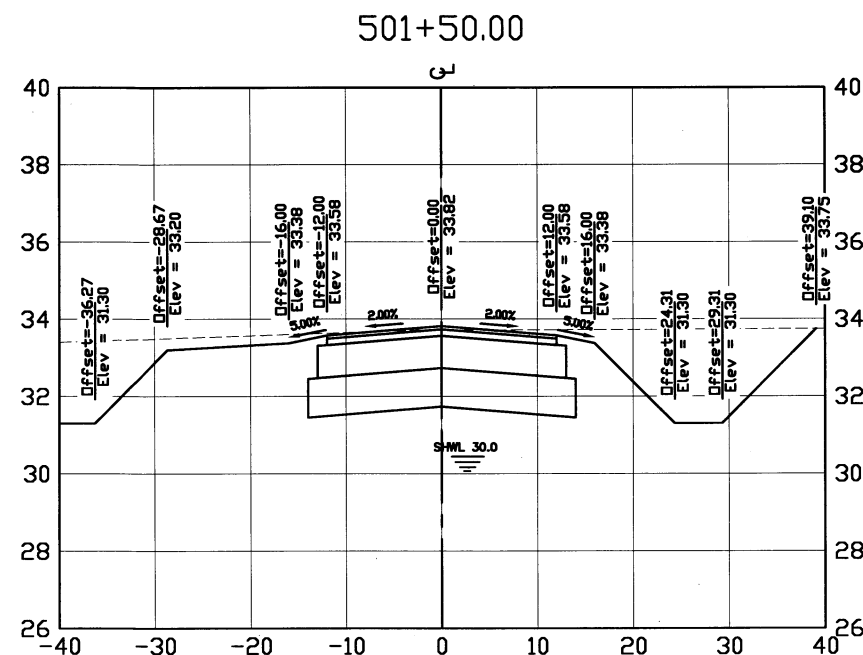
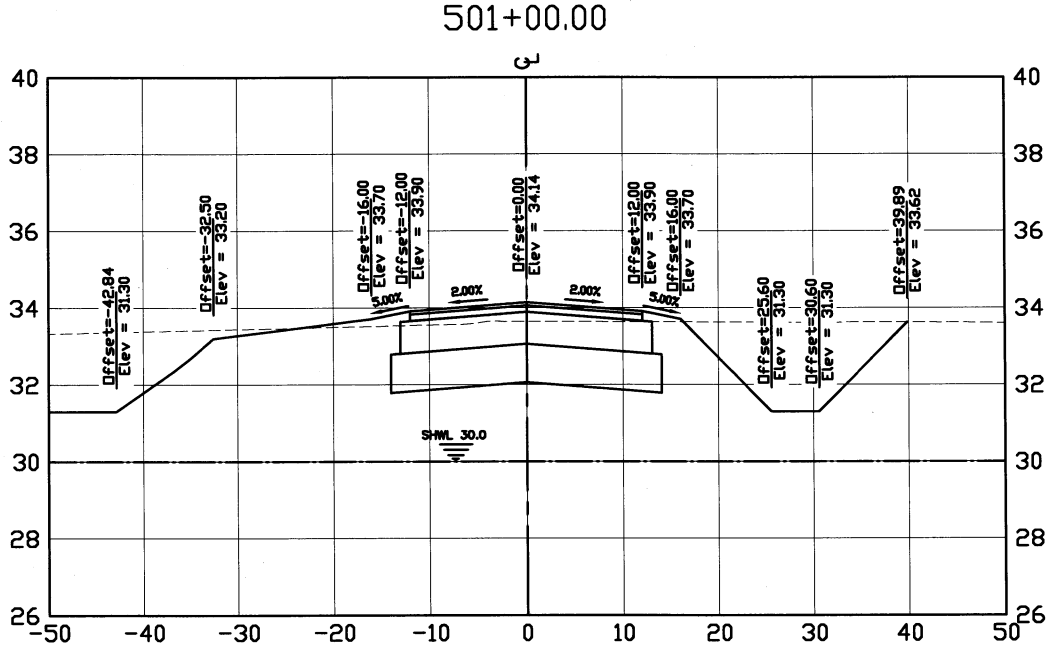
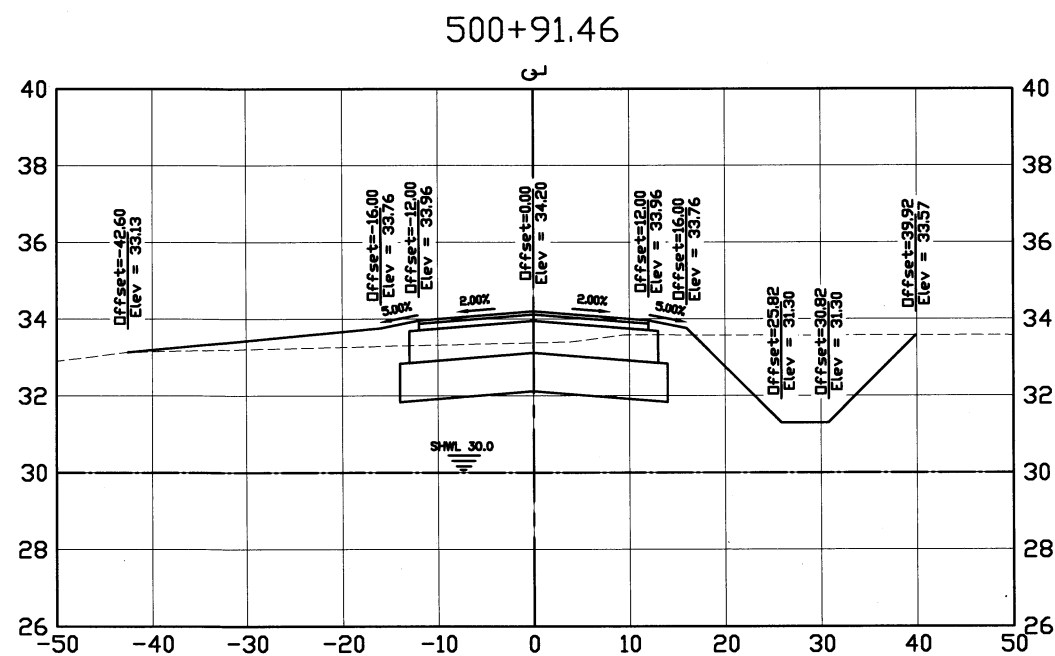
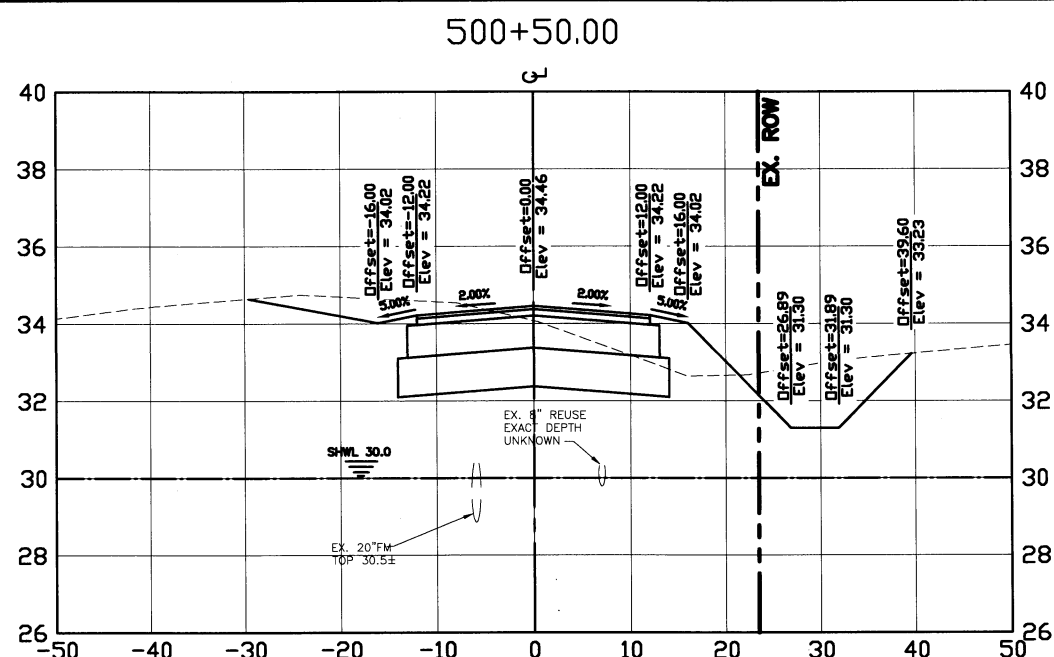
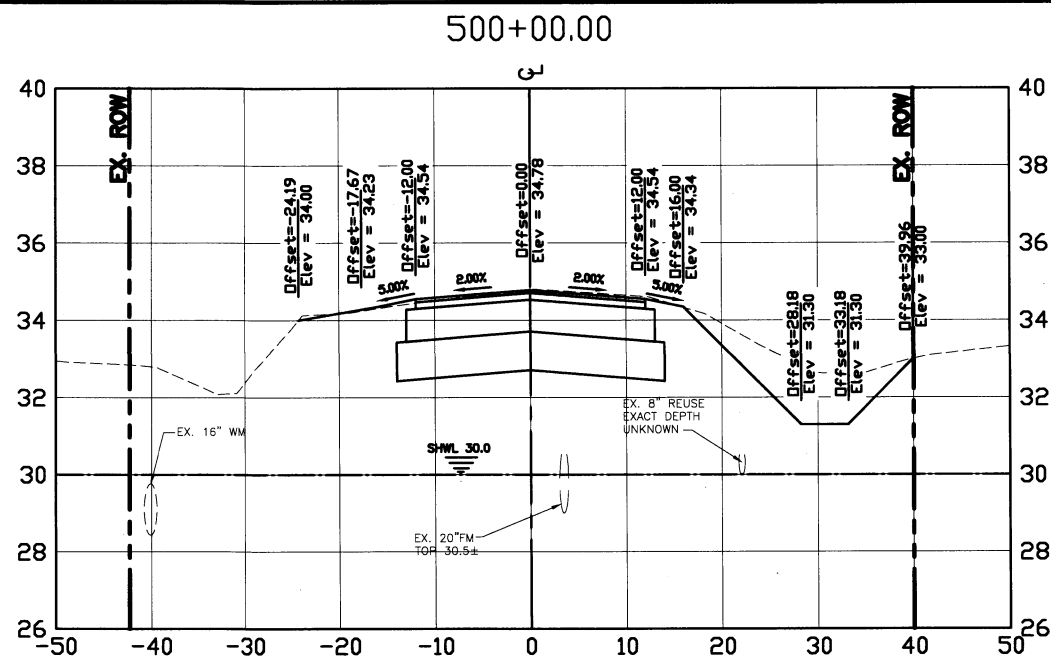
DATE					
BY					
REVISION					
DESCRIPTION					
NO.					
PROJECT #		380-8048460			
SURVEY #		N/A			
SEC./TWN./RGE		26&35/33S/18E			
SCALE		AS SHOWN			
	BY	DATE			
SURVEYED	K&S	12/29/08			
DESIGNED	CM	02/05/10			
DRAWN	JLC	02/05/10			
CHECKED	AM,JP,SF	03/20/12			
CHRISTOPHER LEE MOWBRAY, P.E.					
FLORIDA P.E. # 46777					
 4/25/12 Signature & Date					
SHEET 58 OF 75					

CHRISTOPHER LEE MOWBRAY, F

Signature & Date

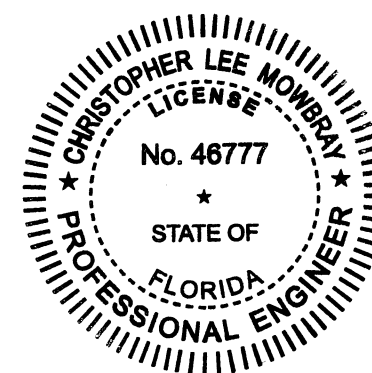
SCALE VERT.-1"=5' / HORZ.-1"=20'



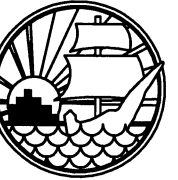


**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
ACCESS ROAD CROSS SECTIONS**

REVISION DESCRIPTION		BY	DATE
NO.			
PROJECT #		380-6048460	
SURVEY #		N/A	
SEC./TWN./RGE		26&35/33S/18E	
SCALE		AS SHOWN	
	BY	DATE	
SURVEYED	K&S	12/28/09	
DESIGNED	CM	02/05/10	
DRAWN	g & b	02/05/10	
CHECKED	MJP,SF	03/20/12	



SCALE VERT.-1"=5' / HORZ.-1"=20'



222 26th Avenue East
Bradenton, FL 34208

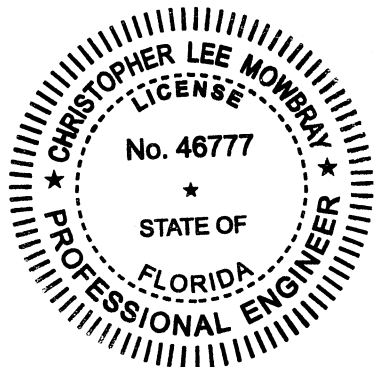
**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
SUMMARY OF EARTHWORK**

CUT-FILL VOLUME TABULATION					
ERIE ROAD					
STATION	AREA (SF) REG. EXCAV.	AREA (SF) EMBANKMENT	DISTANCE (FT)	VOL (CY) REG EXCAV.	VOL (CY) EMBANKMENT
100+50	71.1	7.9			
101+12	73.3	7.9	62.0	165.8	24.2
101+95	53.0	21.6	83.0	194.1	60.3
102+37	49.2	26.5	42.0	79.4	49.7
103+00	32.1	21.4	63.0	94.8	74.3
104+00	41.6	24.9	100.0	136.4	114.1
105+00	59.1	27.9	100.0	186.5	130.2
106+00	178.0	29.1	100.0	439.1	140.5
107+00	197.3	27.6	100.0	695.0	139.7
108+00	196.4	51.2	100.0	729.2	194.2
108+34	195.1	28.8	34.0	246.5	67.0
108+76	161.3	28.2	42.0	277.2	58.9
109+00	103.0	39.8	24.0	117.5	40.2
109+17	100.5	35.6	17.0	64.1	31.6
109+59	210.0	18.7	42.0	241.5	56.1
110+00	191.4	19.6	41.0	304.8	38.6
110+21	186.4	19.9	21.0	146.9	20.4
110+82	255.7	8.9	61.0	499.4	43.2
111+00	242.1	16.9	18.0	166.0	11.4
111+44	107.7	21.8	44.0	285.0	41.9
111+86	45.9	13.6	22.0	62.5	19.2
112+00	45.9	14.7	14.0	23.8	9.8
112+27	40.8	19.4	27.0	43.4	22.7
112+67	194.8	31.0	40.0	174.5	49.6
113+00	177.9	41.3	33.0	227.7	58.7
114+00	148.1	26.1	100.0	603.7	165.9
114+46	129.5	27.0	46.0	236.5	60.1
114+86	102.3	34.7	40.0	171.7	60.7
115+00	97.7	34.0	14.0	51.9	23.7
115+27	94.7	28.8	27.0	96.2	41.8
116+00	84.5	29.2	73.0	242.3	104.3
116+13	83.9	33.8	13.0	40.5	20.2
116+30	79.9	39.9	17.0	51.6	30.9
116+54	57.6	51.9	24.0	61.1	54.3
116+85	45.6	56.9	31.0	59.3	83.0
117+00	41.7	63.8	15.0	24.3	44.6
118+00	18.0	9.6	100.0	110.7	180.7
119+00	31.8	18.9	100.0	92.4	70.0
119+69	33.9	17.6	69.0	84.0	62.0
120+00	34.8	9.9	31.0	39.5	21.0
120+41	38.1	6.8	41.0	55.4	16.9
120+82	37.8	4.8	41.0	57.6	11.7
SUBTOTAL VOLUMES (CY)				7679.3	2548.4

CUT-FILL VOLUME TABULATION 69TH AVE.					
STATION	AREA (SF) REG. EXCAV.	AREA (SF) EMBANKMENT	DISTANCE (FT)	VOL (CY) REG EXCAV.	VOL (CY) EMBANKMENT
263+55	37.7	2.8			
263+90	39.8	3.9	35.0	50.2	5.7
264+00	41.4	4.1	10.0	15.0	2.0
264+24	46.0	2.7	24.1	39.0	4.0
264+48	50.8	1.0	24.0	43.0	2.2
265+00	69.2	0.8	52.0	115.6	2.2
266+00	141.7	6.4	100.0	390.5	17.7
267+00	47.7	57.2	100.0	350.8	156.6
268+00	155.5	33.9	100.0	376.4	224.4
268+58	190.4	20.3	58.0	371.6	77.5
268+82	224.9	17.6	24.0	184.6	22.4
269+00	244.9	20.4	18.0	156.6	16.9
269+16	265.9	20.1	16.0	151.3	16.0
269+50	95.8	45.6	34.0	227.7	55.0
270+01	120.2	1.1	51.0	204.0	58.6
271+00	125.1	1.5	99.0	449.7	6.4
272+00	138.8	1.6	100.0	488.7	7.7
273+00	110.1	0.0	100.0	461.0	4.0
274+00	114.3	0.0	100.0	415.4	0.0
274+50	78.0	2.1	50.0	178.0	2.6
275+00	44.3	17.8	50.0	113.2	24.6
275+50	46.3	14.9	50.0	83.9	40.3
SUBTOTAL VOLUMES (CY)				4866.2	746.7

CUT-FILL VOLUME TABULATION					
ACCESS ROAD					
STATION	AREA (SF) REG. EXCAV.	AREA (SF) EMBANKMENT	DISTANCE (FT)	VOL (CY) REG EXCAV.	VOL (CY) EMBANKMENT
500+00	76.6	0.5			
500+50	71.8	7.7	50.0	137.4	10.0
500+91	71.2	8.1	41.5	109.7	16.1
501+00	79.0	2.4	8.5	23.7	2.2
501+50	96.4	0.0	50.0	162.4	2.9
501+65	101.1	0.0	15.0	54.8	0.0
SUBTOTAL VOLUMES (CY)				488.1	31.3

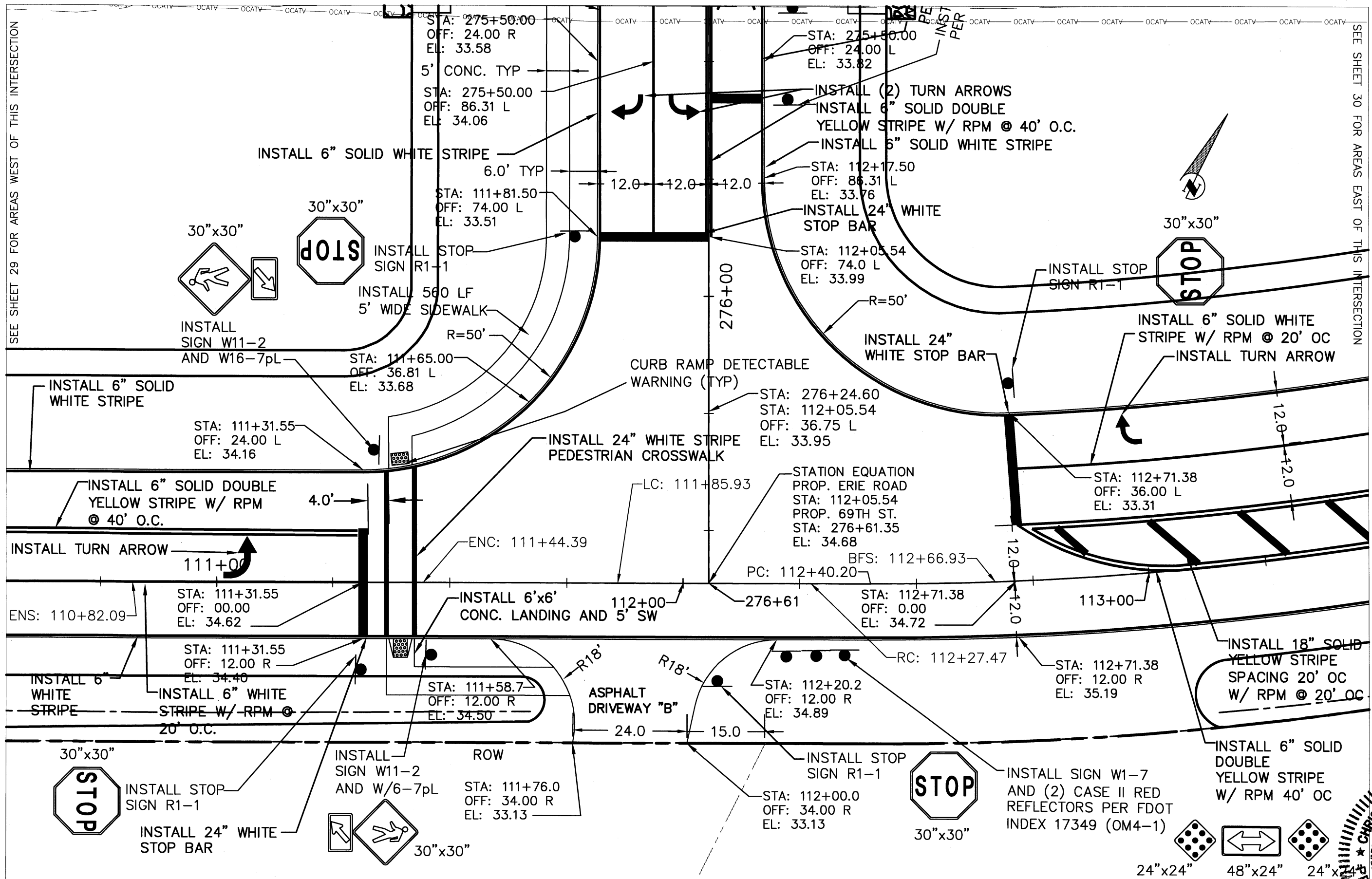
TOTAL CUT AND FILL TABULATION		
	VOL (CY) Regular Excavation	VOL (CY) Embankment
ERIE ROAD (INCLUDING PONDS AND SWALES)	7679.3	2548.4
69TH AVE (INCLUDING PONDS AND SWALES)	4866.2	746.7
ACCESS ROAD (INCLUDING PONDS AND SWALES)	488.1	31.3
TOTAL VOLUMES (CY)	13033.6	3326.4



NO.	REVISION	DESCRIPTION	BY	DATE
		PROJECT #	380-6048480	
		SURVEY #	N/A	
		SEC./TWN./RGE	26&35/33S/1BE	
		SCALE	----	
		SURVEYED	K&S	12/29/10
		DESIGNED	CM	02/05/10
		DRAWN	JEN	04/23/10
		CHECKED	JP	03/20/12

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 45777
Ch Lee
4/25/12
Signature & Date

SEE SHEET 67 FOR CONTINUATION



ERIE ROAD AND 69TH ST INTERSECTION

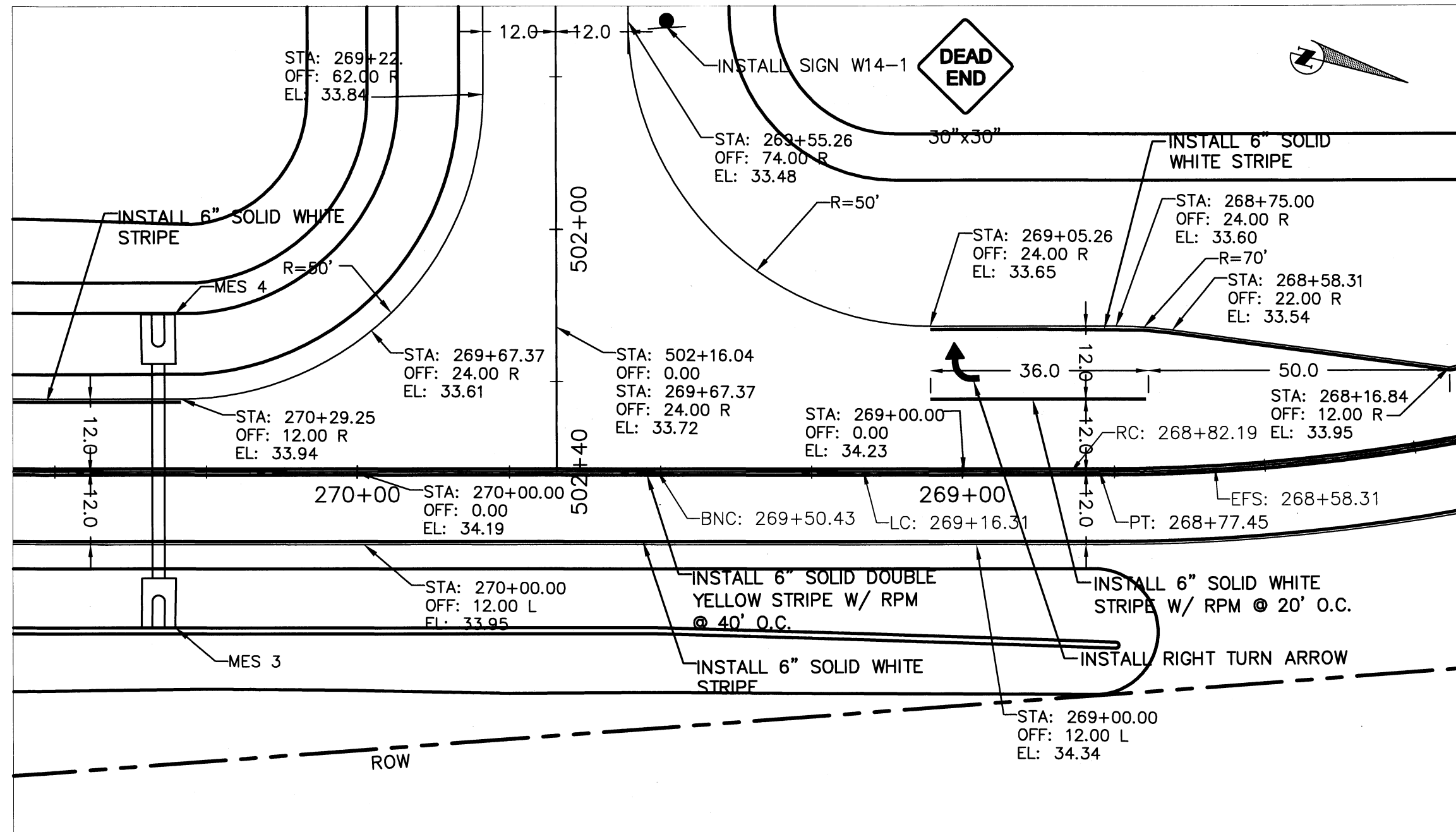
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ERIE ROAD @ 69TH ST. EAST-

INTERSECTION
INTERSECTION/DRIVEWAY DETAIL SHEET

DATE	
BY	
REVISION DESCRIPTION	
NO.	
PROJECT #	380-8048480
SURVEY #	1029, 1235
SEC./TWN./RGE	28&35/33S/18E
SCALE	AS NOTED
DESIGNED	10/29/10
DRAWN	01/11/10
CHECKED	02/23/12
NO. 46777	
CHRISTOPHER LEE MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
STATE OF FLORIDA	
PROFESSIONAL ENGINEER	
SHEET 62 OF 75	



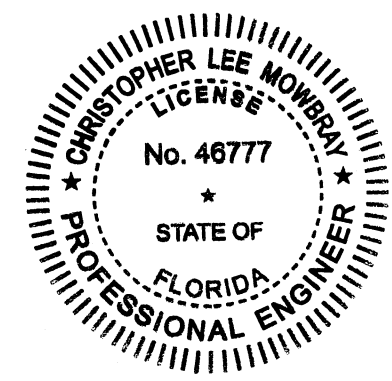
ACCESS ROAD AND 69TH ST INTERSECTION
1"=20'

ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
INTERSECTION/DRIVEWAY DETAIL SHEET

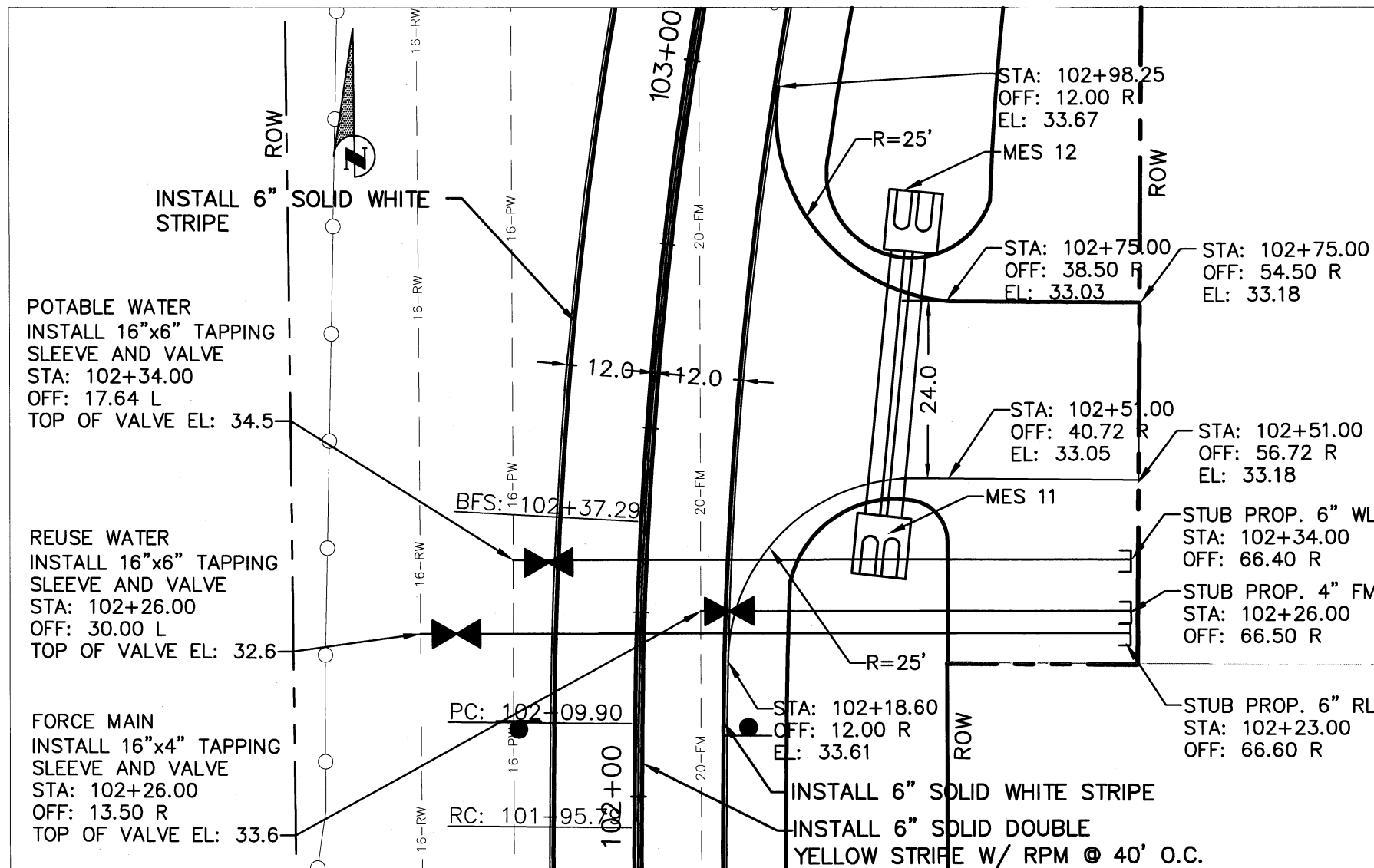
NO.	DATE	BY	REVISION DESCRIPTION

PROJECT #	380-8048480
SURVEY #	1029, 1235
SEC./TWN./RGE	28&35/33S/18E
SCALE	
SURVEYED	K&S 12/29/10
DESIGNED	CM 02/05/10
DRAWN	J&J 04/23/10
CHECKED	MO,JP,SF 03/20/12

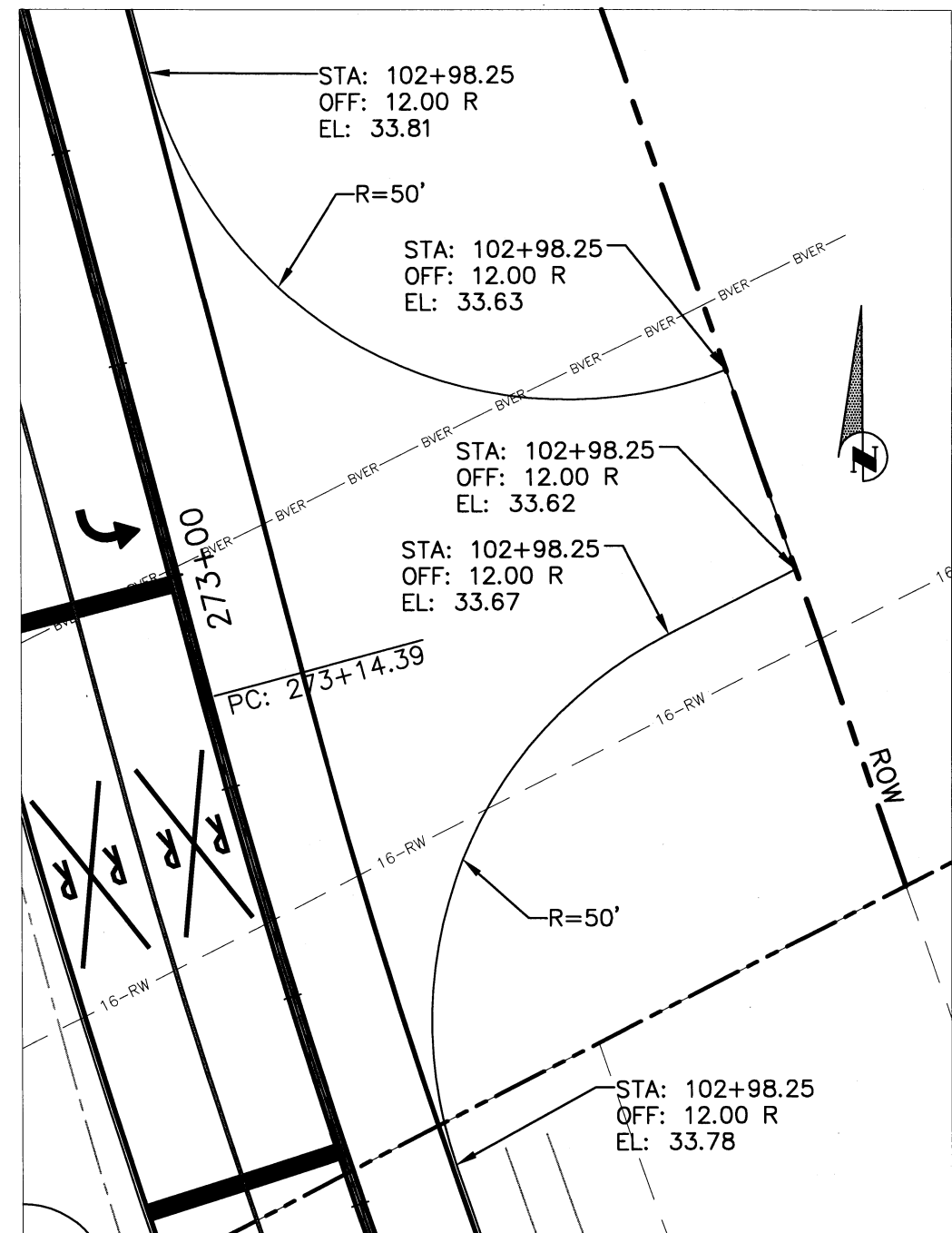
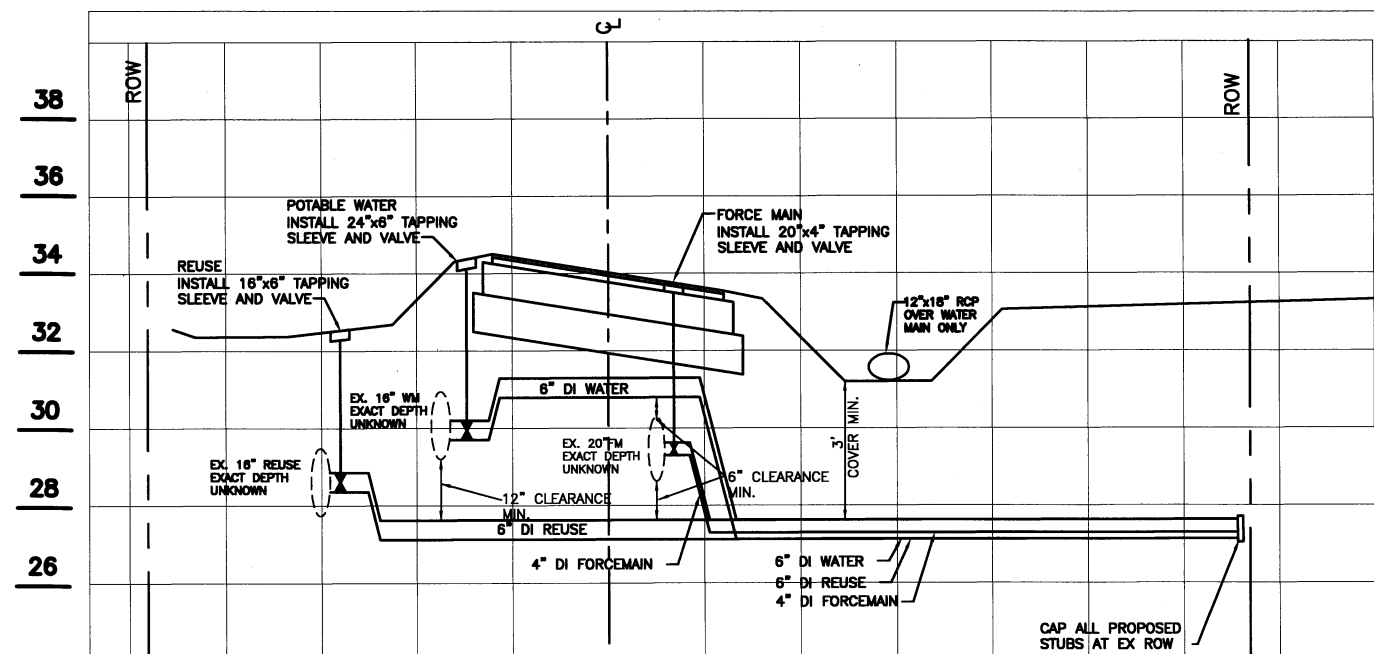
CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
Christopher Lee Mowbray
Signature & Date



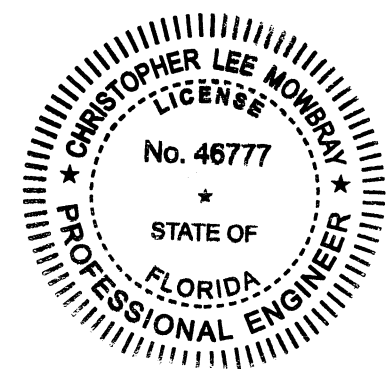
SS: PWD, Engineering, State Highway Engineering, PROJECTS, Erie Road, Approved Alignment, Chris' Area 10-15-09, DWS, Erie Road, Alignment, INT DET, DET, DET, 64, 4/25/2012 1:39 PM Jim Anderson, 11x17



ERIE ROAD CONCRETE DRIVEWAY "A"



69TH ST CONCRETE ACCESS DRIVE "D"

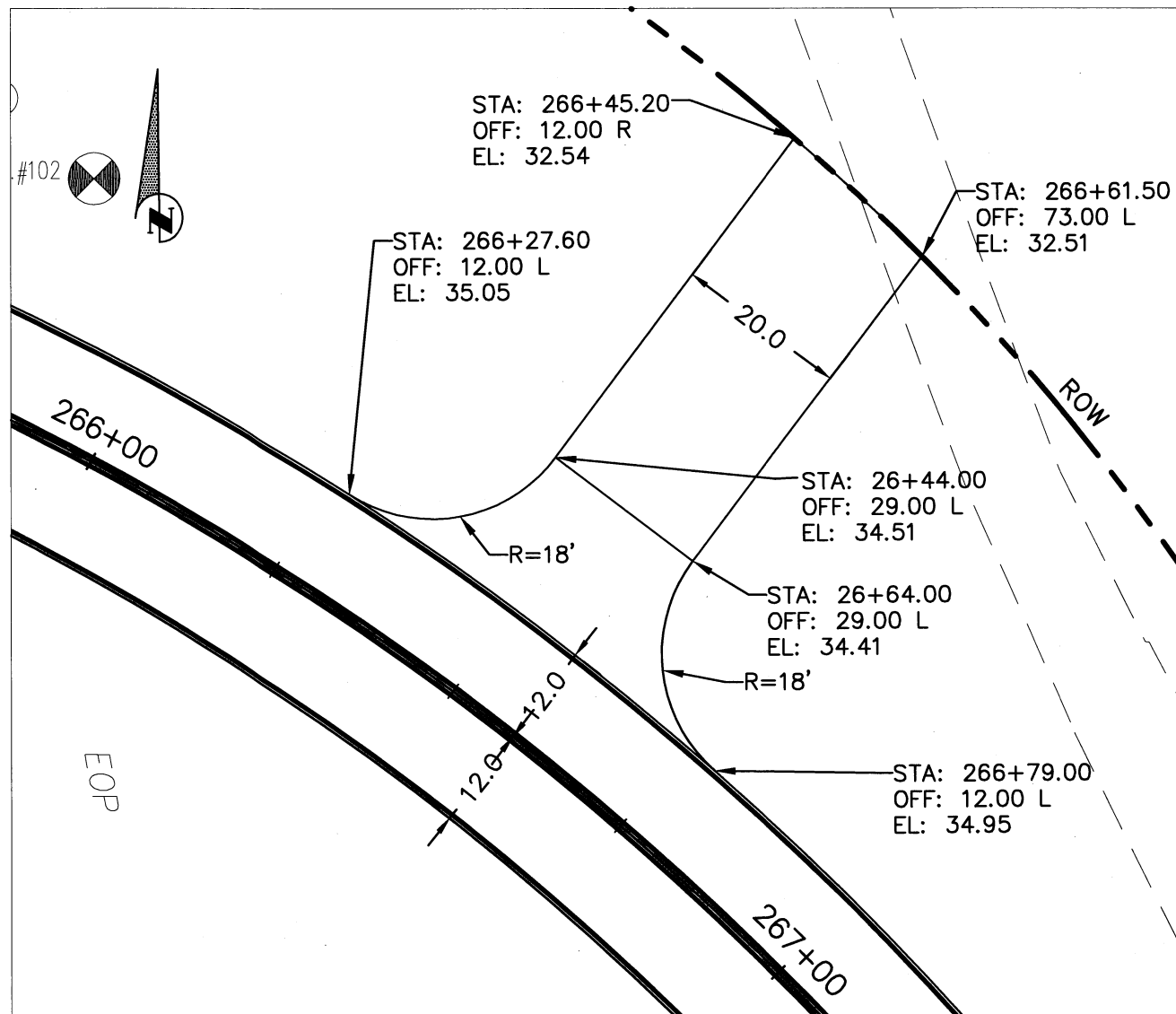


ERIE ROAD @ 69TH ST. EAST-
INTERSECTION
INTERSECTION/DRIVEWAY DETAIL SHEET

REVISION	DATE	BY	DESCRIPTION
NO.			
PROJECT #	380-8048480		
SURVEY #	1029, 1235		
SEC./TWN./RGE	28&35/33S/18E		
SCALE			
SURVEYED	K&S	12/29/10	
DESIGNED	CM	02/05/10	
DRAWN	gkg	04/23/10	
CHECKED	MOJP SFWT	03/20/12	

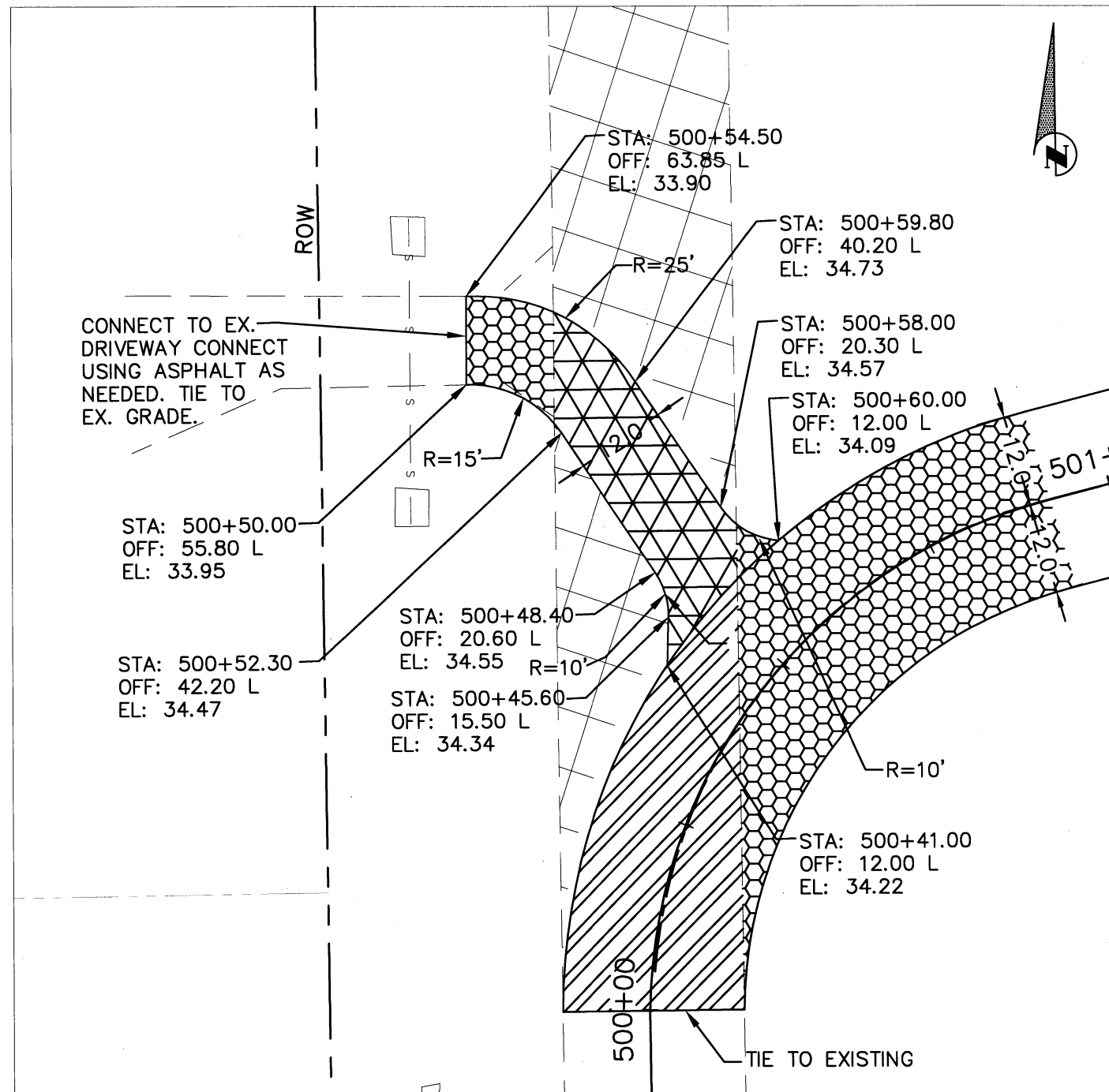
WAYNE R. TROXLER, P.E.
FLORIDA P.E. # 62204
Signature & Date
4/25/12

S:\P\01 Engineering - Shore Highway Engineering\PROJECTS\Erie Bocc Approved Alignment\Chris' Area 10-15-09\DWG\ERIE ROAD REALIGNMENT INT DETAIL.DWG (DET 65) 4/25/2012 1:09 PM Jim Anderson, 11x17



69TH ST CONCRETE DRIVEWAY "C"

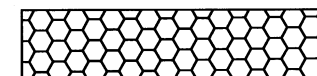
1"=20'



ACCESS ROAD DRIVEWAY "E"

1"=20'

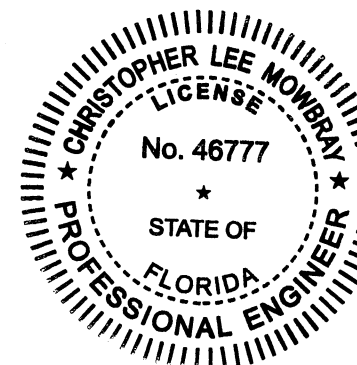
FULL DEPTH ACCESS ROAD
AND DRIVEWAY CONSTRUCTION



TOP COURSE ONLY



DRIVEWAY TO BE SALVAGED
FROM EXISTING ROADWAY.



ERIE ROAD @ 69TH ST. EAST- INTERSECTION INTERSECTION/DRIVEWAY DETAIL SHEET

NO.	DATE	BY	REVISION DESCRIPTION

PROJECT #	380-8048480
SURVEY #	1029, 1235
SEC./TWN./RGE	28&35/33S/18E
SCALE	
SURVEYED	K&S 12/29/10
DESIGNED	CM 02/05/10
DRAWN	JL 04/23/10
CHECKED	MO,JP,SF 03/20/12

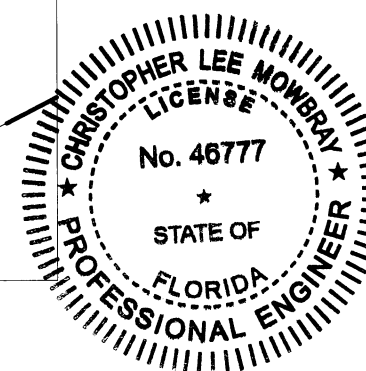
CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
Signature & Date
4/25/12

INTERSECTION/DRIVEWAY DETAIL SHEET

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777

4/25/12

SHEET 66 OF 75


$$1'' = 20'$$

INTERSECTION

RAIL ROAD INTERSECTION DETAIL

CHRISTOPHER LEE MOWBRAY, P.E.
FLORIDA P.E. # 46777
Chl 3
4/24/12

A circular seal for a Professional Engineer License. The outer ring contains the text "CHRISTOPHER LEE MOWBRAY" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "LICENSE" is at the top and "FLORIDA" is at the bottom. The center of the seal features the license number "No. 46777" above the words "STATE OF". A single star is positioned between "No. 46777" and "STATE OF". The entire seal is surrounded by a series of short, parallel lines.

$$1'' = 20'$$



POND BOTTOM EL. = 31.50
T.O.B. = 33.2
S.H.W.L. = 30.00 (PER MEETING 05/05/10)
D.H.W.L. = 32.62



POND BOTTOM EL. = 31.30
T.O.B. = 33.2
S.H.W.L. = 30.00 (PER MEETING 05/05/10)
D.H.W.L. = 32.62



POND BOTTOM EL. = 31.50
T.O.B. = 32.9
S.H.W.L. = 30.00 (PER MEETING 05/05/10)
D.H.W.L. = 31.98

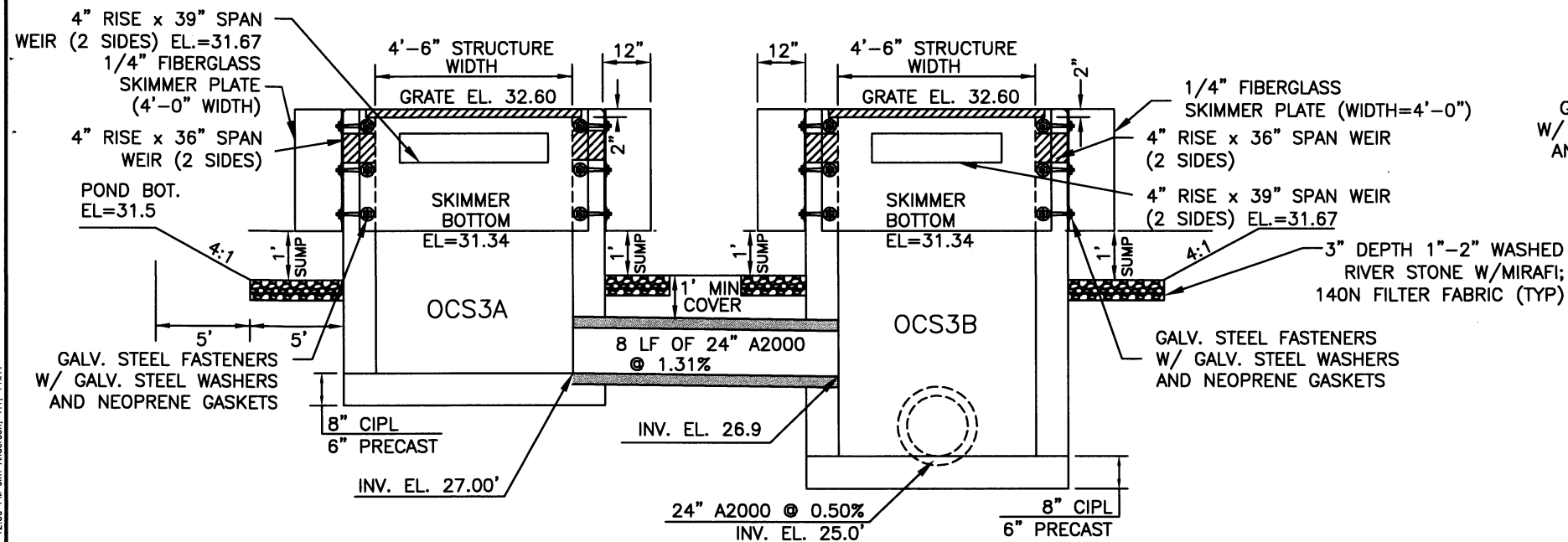


INTERSECTION

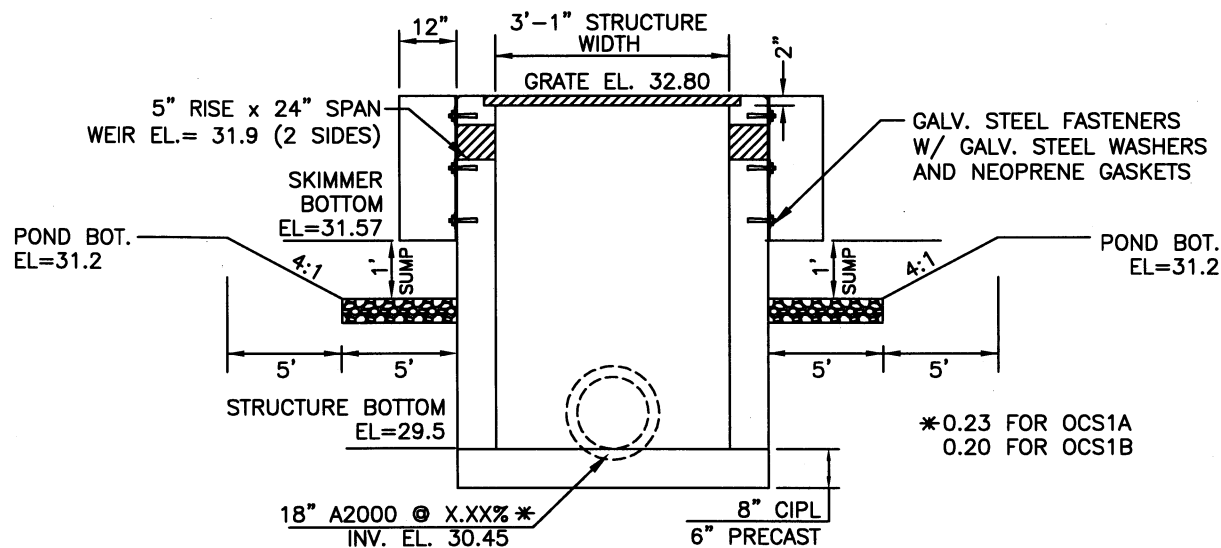
POND TYPICAL SECTIONS SHEET

DATE									
BY									
REVISION DESCRIPTION									
NO.									
PROJECT #		380-6048460							
SURVEY #		1029, 1235							
SEC./TWN./RGE		26&35/33S/18E							
SCALE									
SURVEYED		K&S		12/29/10					
DESIGNED		CM		02/05/10					
DRAWN		JEG		04/23/10					
CHECKED		JP,SF		03/20/12					
CHRISTOPHER LEE MOWBRAY, P.E.									
FLORIDA P.E. # 46777									
									
Signature & Date									

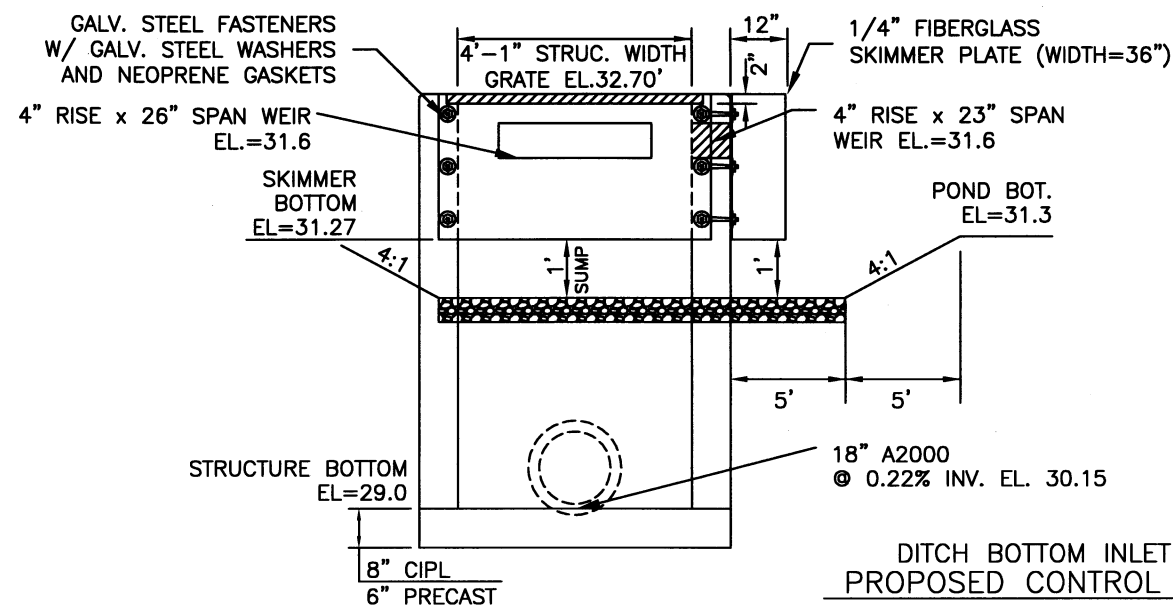
COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\P\W\Engineering\Shore\Highway Engineering\PROJECTS\Site Bocs\Approved Alignment\Chris Area 10-19-09\DWG\ERIE ROAD\REMAINING COVER.dwg,69 POND STR SHEET, 4/25/2012 12:09 PM Jim Anderson, 1:1, 11x17



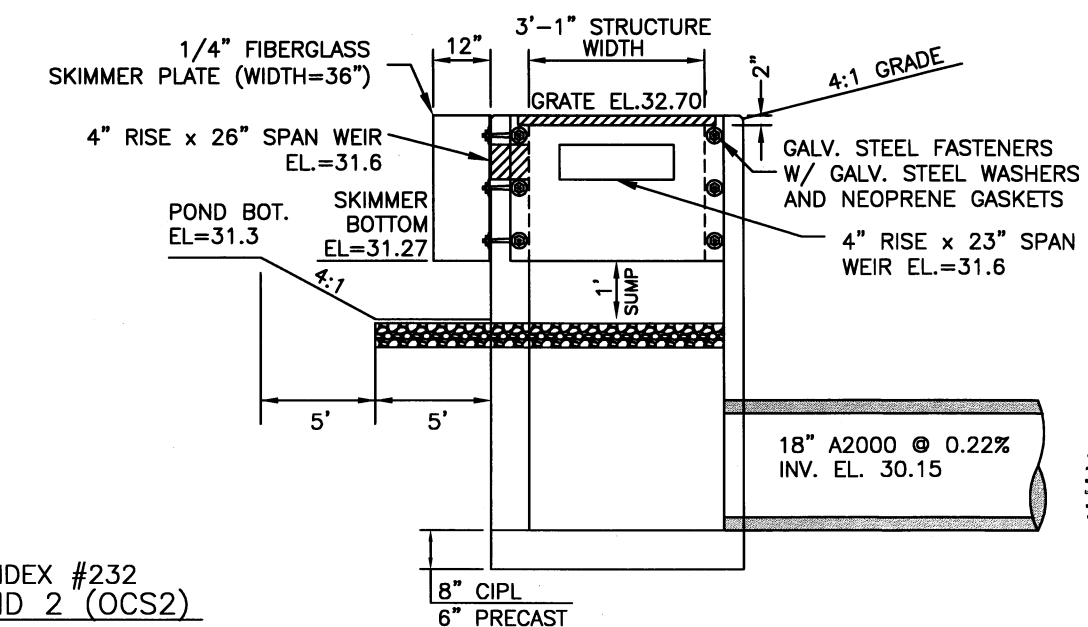
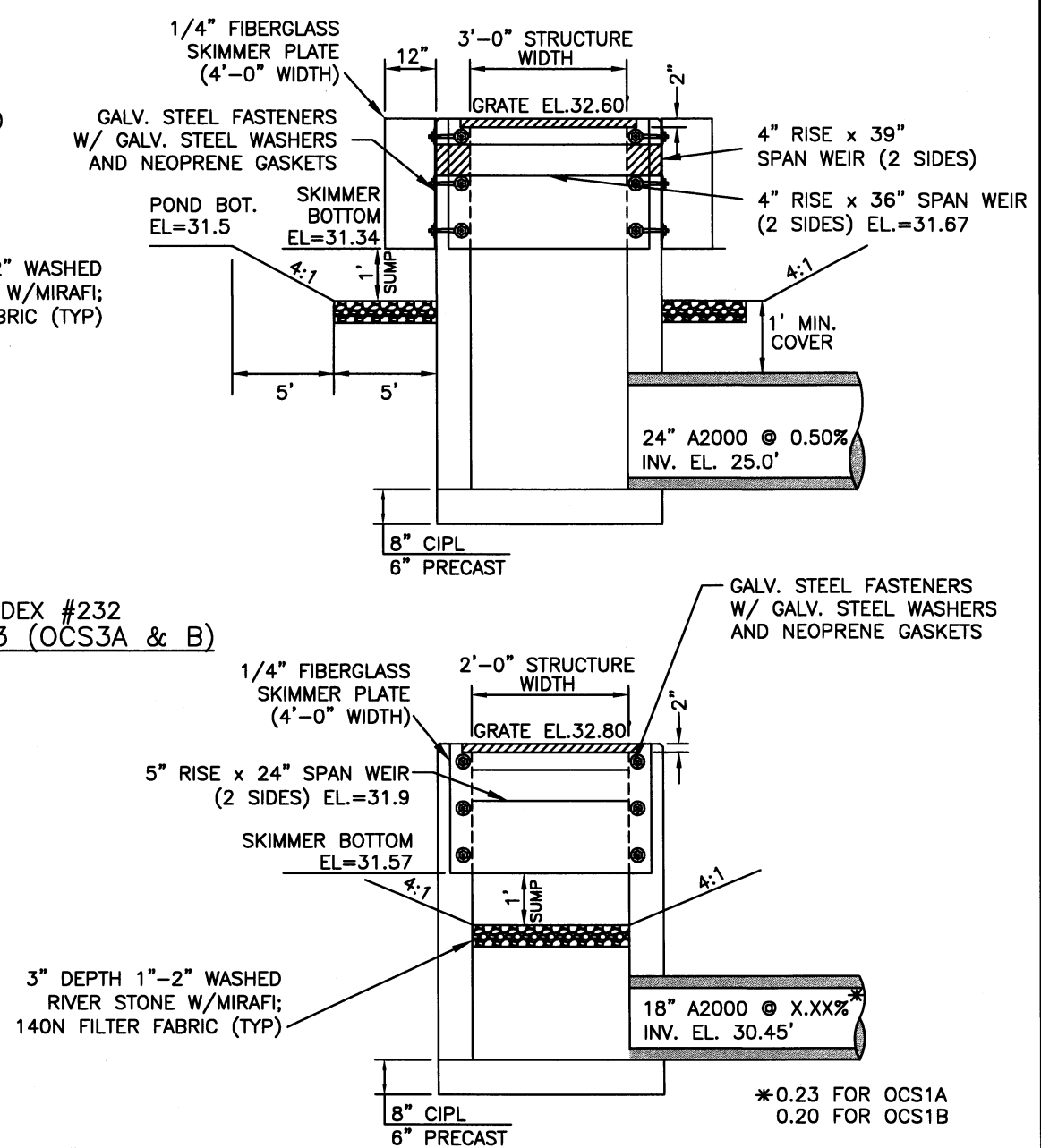
DITCH BOTTOM INLET TYPE 'E', MODIFIED. FDOT INDEX #232
PROPOSED CONTROL STRUCTURE FOR DRY POND 3 (OCS3A & B)
N.T.S.



DITCH BOTTOM INLET TYPE 'C', MODIFIED. FDOT INDEX #232
PROPOSED CONTROL STRUCTURE FOR SWALE 1 OCS1A & OCS1B
N.T.S.



DITCH BOTTOM INLET TYPE 'D', MODIFIED. FDOT INDEX #232
PROPOSED CONTROL STRUCTURE FOR DRY POND 2 (OCS2)
N.T.S.



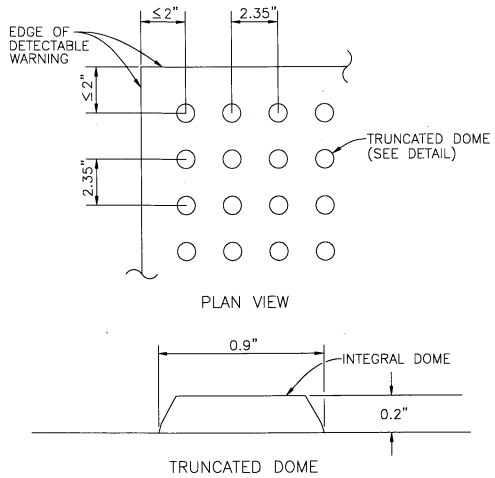
DATE	
BY	
REVISION DESCRIPTION	
NO.	
PROJECT #	380-6048460
SURVEY #	1029, 1235
SEC./TWN./RGE	28&35/33S/18E
SCALE	
SURVEYED	K&S 12/29/10
DRAWN	01/07/10
CHECKED	01/07/10
APPROVED	01/07/10
FLORIDA P.E. #	14777
STATE OF	FLORIDA
SIGNATURE	
SHEET	69 OF 75

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 THOROUGHFARES. 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 AASHTO M153 OR AASHTO 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 304, SHEETS 1 THROUGH 6 AND INDEX 310, SHEETS 1 & 2.

MANATEE COUNTY TRANSPORTATION DEPARTMENT		SIDEWALKS GENERAL NOTES	301.0
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



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-CANE CONTACT.

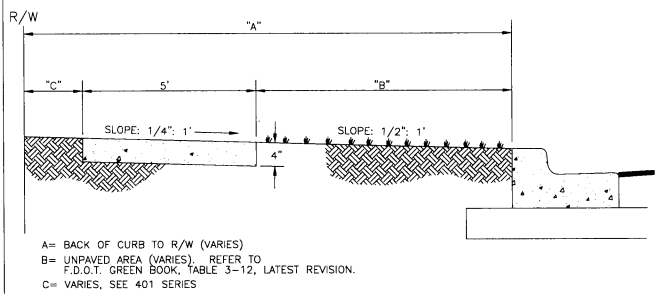
THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70% CONTRAST IN PERCENT IS DETERMINED BY:

$$\text{CONTRAST} = \frac{[B1 - B2] / B1}{100}$$

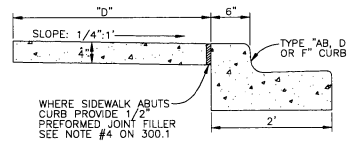
WHERE B1 = LIGHT REFLECTANCE VALUE (LRV) OF THE LIGHTER AREA AND B2 = LIGHT REFLECTANCE VALUE (LRV) OF THE DARKER AREA.

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

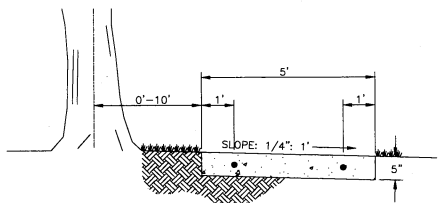
MANATEE COUNTY TRANSPORTATION DEPARTMENT		CURB RAMP DETECTABLE WARNINGS	302.3
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



TYPICAL SIDEWALK LOCATION



ALTERNATE SIDEWALK LOCATION



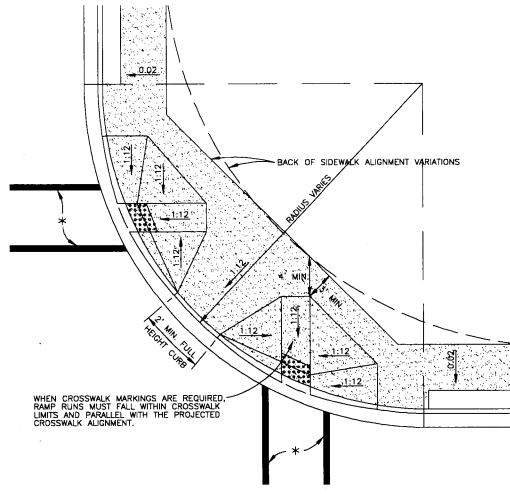
SIDEWALK LOCATION CLOSE TO TREES

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

GENERAL NOTES

- All county road construction shall conform to these Manatee County Department Of Transportation Standards.
- Asphaltic Concrete Type S: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 331.
Asphaltic Concrete Type III: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 333.
(A) Superpave mixes equivalent to F.D.O.T. Type S mixes are an accepted alternative upon directors approval.
(B) Surface material will be consistent with existing surface, or better.
- Limerock Base Course: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 200.
- Crushed concrete base course is acceptable unless otherwise noted.
- Stabilized Sub-Grade: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Sections 160, and 914.
- Drainage: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 941.
Soft, yielding or super-saturated material that will not readily compact shall be considered unacceptable for backfill. This is at the discretion of the field engineer. This type of existing material must be excavated from the road footprint to a depth as set by an approved testing lab.
- Soil Cement: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 270, excluding Sub-Section 270-4.3.1 ("Mix in place").
- Concrete Gutters: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 520.
- Topsoil: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 987.
Sodding: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 575.
Grassing: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 570.
(A) Entire R/W between road and property line, including median, shall be fertilized (1000 lbs. of slow-release 8-12-6 per acre), and seeded (30 lbs. Bahia and 30 lbs. of Rye per acre) and mulched, or sodded, as directed by the engineer.
(B) Hydromulch: Shall be per Florida Department Of Transportation Specifications Section 571.
- Visibility Triangles: Shall be in accordance with the Manatee County Land Development Code 1994; Section 713, latest revision, and Section 600.7-600.9.
- Handicap Ramps shall meet Florida Accessibilities Standards, and Section 302 series.
- Prime coat shall be applied @ a rate of 0.2 gal/sy. Tack coat of 0.08 gal/sy rate to be applied for overlay of existing roads.

MANATEE COUNTY TRANSPORTATION DEPARTMENT		GENERAL NOTES	400.1
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



* CROSSWALK WIDTHS AND CONFIGURATION VARY, MUST CONFORM TO FDOT INDEX NO. 17344 AND 17346.

- CURB CUT RAMPS ARE TO BE LOCATED AS SHOWN ON PLANS.
- SEE SHEETS # 300.1 "GENERAL NOTES" & # 301.2 "HANDICAPPED RAMP" SHT 2 FOR FURTHER REQUIREMENTS.
- RADIUS OF CURB VARIES AS FOLLOWS:
A) 25' RAD. LOCAL STREET WITH ALLEY.
B) 25' RAD. LOCAL STREET WITH LOCAL STREET.
C) 35' RAD. LOCAL STREET WITH THOROUGHFARE OR COLLECTOR.
D) 50' RAD. THOROUGHFARE WITH THOROUGHFARE.
- CURB RADIUS SHOULD BE A MINIMUM OF 50' WHERE INDUSTRIAL AND BUS TRAFFIC (5% OR MORE) IS ANTICIPATED ON LOWER CLASSIFICATION ROADWAYS.
- BOTH LOCATION OPTIONS FOR HANDICAPPED RAMP ARE SHOWN. ENGINEER MAY SELECT EITHER, WHICHEVER FITS THE SITUATION.

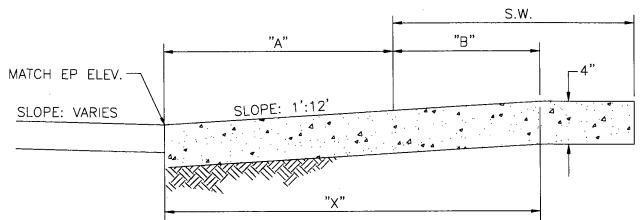
NOTE: FOR COMPLETE HANDICAP, PUBLIC SIDEWALK AND CURB RAMP DETAILS, SEE F.D.O.T. DESIGN STANDARDS, 2006 EDITION, INDEX 304, SHEETS 1 THROUGH 6.

MANATEE COUNTY TRANSPORTATION DEPARTMENT		HANDICAPPED RAMP SHEET 1	302.1
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

GENERAL NOTES (CONT.)

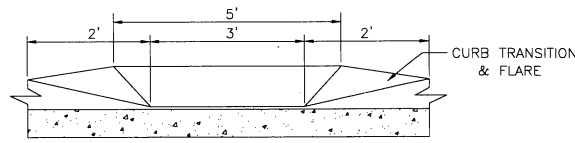
- All the signage, striping and signals (FDOT) shall conform to the latest revision of the Florida Department Of Transportation Standard Specifications For Road And Bridge Construction, the Manual On Uniform Traffic Control Devices, F.D.O.T. Design Standards and the Manatee County Transportation And Drainage Standards, Traffic Supplemental Specifications.
- Prime coat shall be applied @ a rate of 0.2 gal/sy. Tack coat of 0.08 gal/sy rate to be applied for overlay of existing roads.
- In general, all signing, marking, and traffic control devices shall conform to the Florida Department Of Transportation Roadway And Traffic Standard Specifications For Road And Bridge Construction (latest revision) and the Manual On Uniform Traffic Control Devices For Streets And Highways (latest revision), as well as the Manatee County Traffic Supplemental Specifications.
- Street radii requirement shall be in accordance with page 402.0, however radius should be a minimum of 50' where industrial or bus traffic (of 5% AADT or greater) is anticipated.
- Cement treated aggregate base, see section 403.3.
- Two lifts of asphalt is the preferred method of construction in area where extensive construction equipment will utilize the roads. A performance bond may be required for second lift. The first lift shall be 1-1/4", the second lift shall be 3/4" for residential. The second lift for industrial shall be 1-1/4". Lift thickness shall be specified for each road type.
- Any road widening (including divided roads) will require full width milling.
- All stormwater pipe shall be installed behind the curb or edge of pavement and within the right of way.
- The base, sub-base and asphalt thickness shown for 6-lane, 4-lane, Minor Collector, Rural Industrial and Urban Industrial are minimums. If the engineer can demonstrate a reduction based upon an analysis of equal single axle load, then it may be considered.
- Minimum of two pvc schedule 40 conduits (2.0" min. dia.) shall be installed for all directions at the intersections of all thoroughfare roadways per the direction of the Manatee County's Traffic Engineer. Additional signal inter-connect conduit may be required between intersections at the direction of Manatee County.

MANATEE COUNTY TRANSPORTATION DEPARTMENT		GENERAL NOTES	400.2
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



SECTION A-A
(SEE SHEET 301.0)

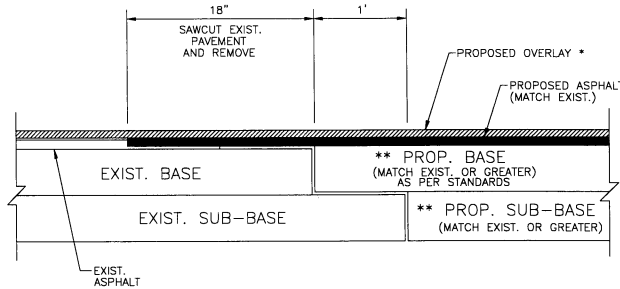
S.W. = SIDEWALK	"A"	S.W. + A + 10"	"X"	"B"
5'	0	5.8'	5.8'	5'
6'	0	6.8'	6.8'	6'
7'	0	7.8'	7.3'	6.5'
8'	0	8.8'	7.3'	6.5'
5'	2.5'	8.3'	8.1'	4.8'
5'	3'	8.8'	8.2'	4.4'
5'	3.5'	9.3'	8.4'	4.1'
5'	4'	9.8'	8.6'	3.8'
5'	4.5'	10.3'	8.7'	3.4'
5'	5'	10.8'	9.1'	3.1'



SECTION B-B
(SEE SHEET 301.0)

NOTE: FOR COMPLETE HANDICAP, PUBLIC SIDEWALK AND CURB RAMP DETAILS, SEE F.D.O.T. DESIGN STANDARDS, 2006 EDITION, INDEX 304, SHEETS 1 THROUGH 6.

MANATEE COUNTY TRANSPORTATION DEPARTMENT		HANDICAPPED RAMP SHEET 2	302.2
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



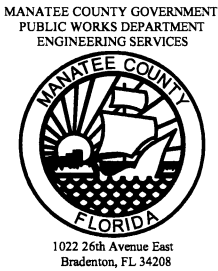
* NOTE: LIMITS OF OVERLAY - EDGE OF PAVEMENT TO EDGE OF PAVEMENT AND 25' BEYOND LIMITS OF CONSTRUCTION.

** NOTE: CONNECTION TO OLDER (SUBSTANDARD THICKNESS) ROADS MAY REQUIRE THICKER PROPOSED BASE AND SUB-BASE TO MEET CURRENT STANDARDS.

SIGNAGE AND MARKING PLAN SHALL ACCOMPANY CONSTRUCTION PLAN.

ROAD CONNECTION DETAIL
N.T.S.

MANATEE COUNTY TRANSPORTATION DEPARTMENT		ROAD CONNECTION DETAIL	403.3
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



ERIE ROAD @ 69TH ST. EAST-

INTERSECTION

DETAIL SHEET

DATE	BY	REVISION DESCRIPTION	NO.	PROJECT #	380-6048460
				SURVEY #	1029, 1235
				SEC./TWN./RGE	26&35/33S/18E
				SCALE	
				SURVEYED	K&S 12/29/10
				DESIGNED	CO 02/05/10
				DRAWN	LEA 04/24/10
				CHECKED	GENS 05/04/12
				APPROVED	06/12/12
				FLORIDA P.E. # 48777	
				STATE OF FLORIDA	
				REGISTERED PROFESSIONAL ENGINEER	
				SHEET 111 OF 111	

DRAINAGE, PAVING AND GRADING RECORD DRAWINGS

When construction is complete, record drawings, indicating the locations and elevations of the improvements that have been built, shall be provided to Manatee County. The record drawings shall be a special revision of the construction drawings, and shall depict design information crossed out (or screen shaded) and replaced by accurate record information.

- A. All stormwater drainage systems underdrain, cleanouts, catch basins, junction boxes and any other structures located in the right-of-way or an easement, shall be located by elevation and by station and offset based on Intersection P1's and centerline of right-of-way. For facilities located on private roads, the dimensioning shall be from centerline of paving or another readily visible baseline.
- B. Elevations shall be provided for all catch basin rim and inverts; junction box rim and inverts; control structure top of grate, baffle, weir, orifice, oil skimmer and inverts. Elevations shall also be provided at the PVI's and at every other lot line or 200 feet, whichever is less, of drainage swales and ditches. Bench marks and elevation datum shall be indicated.
- C. Slopes for pipes and ditches shall be recalculated, based on actual field measured distances, elevations, pipe size and type shown. Cross section of drainage ditches and swales shall be verified.
- D. Centerline of roads shall be tied to right-of-way lines. Elevation of roadway centerline shall be given at PVI's and at all intersections.
- E. Record drawings shall show bearings and distances for all right-of-way and easement lines and property corners.
- F. Locations and elevations of drainage ditches and swales shall be shown every 200 feet (measured along the centerline) or alternate lot lines, whichever is closer. Dimensions at these locations shall indicate distance from the centerline of right-of-way to the facility.
- G. Sidewalks, fences and walls, if installed at the time of initial record drawing submittal, shall be located every 200 feet or alternate lot lines, whichever is closer. Dimensions shall indicate distance from the right-of-way line and the back of curb and lot line or easement line.
- H. Retention ponds elevations shall be shown for high water level, normal water level, top of bank, bank side slopes and bottom of dry ponds verified.

PAVING, GRADING & DRAINAGE AS-BUILT REQUIREMENTS

AS-BUILT DRAWINGS AND INFORMATION CHECKLIST

Following is a list of information that is to be verified and submitted by the Engineer of Record in support of the Statement of Completion.

- a. On behalf of the permittee, the Engineer shall certify that:
 - a. At the time of final inspection, the surface water management system was completed substantially in accordance with the permitted construction plans and information. Any minor deviations from the permitting plans and specification will not prevent the system from functioning in compliance with the requirements of Chapters 400-D and 400-D-01, or 400-D-4, or 400-D-6, F.A.C. (The as-built drawings and information submitted to the District shall conform to this certification; or
 - b. At the time of final inspection, the system was NOT completed in substantial accordance with the permitted plans and information. (The registered professional engineer shall describe the deviation(s) in writing, provide confirming inspection on the as-built drawings and information.)
 2. The Engineer's certification shall be based upon on-site observation of construction (scheduled and conducted by the professional engineer or/and by a project representative under direct supervision) and review of as-built drawings, with field measurements and verification as needed, for the purpose of determining if the work was completed in accordance with original permitted construction plans, information and specifications.
- The as-built drawings are to be based on the District permitted construction drawings revised to reflect all changes made during construction. Both the original design and construction condition must clearly be shown. The drawings shall be clearly labeled as "as-built" and "record" drawings. As required by law, all surveyed dimensions and elevations required shall be verified and signed, dated and sealed by a Florida registered professional surveyor and signed by the professional engineer in charge of construction, at a minimum, shall be verified on the as-built drawings, and supplemental documents if needed:

- Discharge structures – Locations, dimensions and elevations of all, including weirs, orifices, gates, pumps, pipes, and oil and grease skimmers;
- Side bank and underdrain filters, or exfiltration trenches – locations, dimensions and elevations of all including clean-outs, pipes, connections to control structures and points of discharge to receiving waters;
- Storage areas for treatment and attenuation – dimensions, elevations, contours or cross-sections of all, sufficient to determine stage-storage relationships of the storage area and the permanent pool depth and volume below the control elevation for normally wet systems;

AS-BUILT
REQUIREMENTS
FOR S.W.F.W.M.D.

- I. Underdrain cleanouts for retention systems outside the right-of-way shall be located by station and offset from an appropriate baseline.
- J. On record drawings, at locations where the horizontal positions of constructed pipelines or other stormwater structures deviate by more than 5 feet (as scaled on the drawing) from the horizontal positions that were shown on the construction drawings, the actual positions of the pipelines or structures shall be measured and they shall be depicted in their actual positions on the record drawings and their original design positions shall be cross-hatched out on screen shaded.

- A. Every set of record drawings shall have a cover sheet with a vicinity map, which shows where the project is located, and a key map, which shows where each sheet in the record drawing set is located inside the project boundaries.
- B. Each sheet of the record drawings shall have the title "DRAINAGE, PAVING AND GRADING RECORD DRAWING" printed on it in large, bold lettering near the title block.
- C. Record drawing information submitted in tabular form shall not be accepted. Record information notes shall be positioned individually on the drawings near the depictions of structures to which each note corresponds.
- D. Record information notes shall be bold, italics, boxed or clouded to identify them as record information.
- E. Record drawings shall have a revision note such as "Record drawing" in the revision block and a date corresponding to the date the record drawing was issued.
- F. Record information shall be presented in a clear and comprehensible form.
- G. The drawing scales used in the record drawings shall be the same as were used in the construction drawings, and the sheet number of each record drawing sheet shall be the same as the sheet numbers that were used on the construction drawings from which the record drawings originate.
- H. All structures that were used to depict locations and elevations of drainage structures in the construction drawings shall be included in the record drawing set.
- I. Record drawings shall accurately depict all existing improvements lying within the immediate vicinity of the constructed stormwater system. Existing improvements shall include, but not be limited to: sidewalks, walls, fences, road surfaces, buildings, and other utilities. Rights of way, easements, and property corners shall be shown and shall be of sufficient detail as to

PAVING, GRADING & DRAINAGE AS-BUILT REQUIREMENTS

- a. System grading – dimensions, elevations, contours, final grades or cross-sections to determine contributing drainage areas, flow directions and conveyance of runoff to the system discharge point(s).
- b. Conveyance dimensions, elevations, contours, final grades or cross-sections of systems utilized to divert off-site runoff around or through the new system.
- c. Water levels – existing water elevation(s) and the date determined;
- d. Benchmark(s) – location and description (minimum of one per major water control structure); and
- e. Wetland mitigation or restoration areas – Show the plan of areas by acres, depicting a spatial distribution of plantings conducted by zone (if plantings are required by permit), with a list showing all species planted in each zone, numbers of each species, sizes, dates planted and identities of the owner of the material; provide the dimensions, elevations, contours and cross-sections of the wetland mitigation or restoration.

2. Submit the final subdivision plat or other legal documents, as recorded in the county public records, showing dedicated rights-of-way, easement locations and special use areas that are reserved for water management purposes and continuing operation and maintenance.
3. Additional information will be shown on the as-built drawings or otherwise provided as needed to verify and support the Statement of Completion (example: home owners association legal documents, and other items required by permitting conditions).

AS-BUILT
REQUIREMENTS
FOR S.W.F.W.M.D.

constructed stormwater systems are within the easements or rights of way. A reference to the recording document (O.R. Book or Plat Book and Page) shall be included with any depiction of a right-of-way or easement.

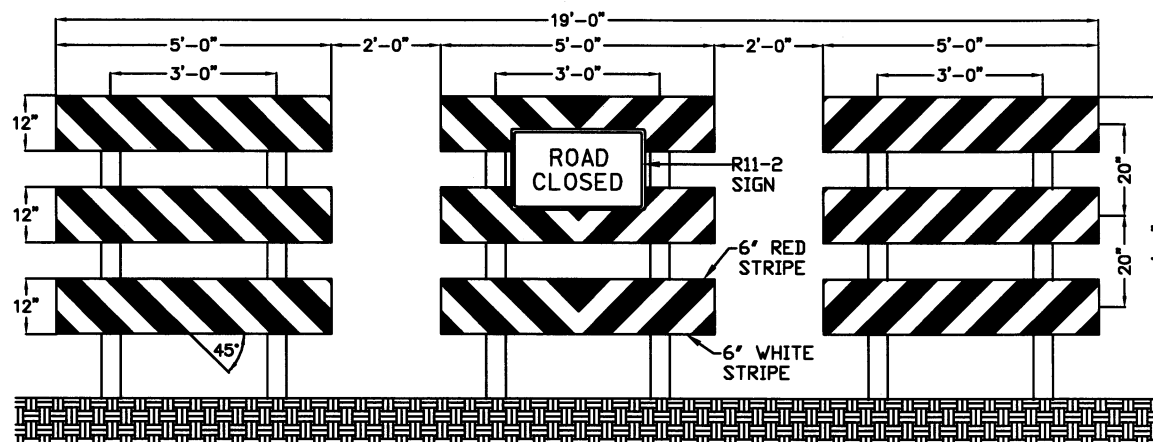
- J. Each roadway depicted on the drawings shall have the correct roadway name noted on it. Provisional roadway names, such as "Street A", shall not be allowed on the record drawings. Each new lot of a new subdivision shall have its street address number noted on the record drawings.
- K. Horizontal locations required for stormwater structures shall be to the center of each installation. Top of ground or pavement elevations required along pipelines shall be reported to the nearest 0.1 feet. Top of pipe elevations shall be to the nearest 0.1 feet. Elevations of catch basin rims and junction box pipe inverts shall be reported to the nearest 0.01 feet. Horizontal locations of all features shall be reported to the nearest 0.1 feet.
- L. Computer drawing files submitted shall be AutoCad⁷ Release 14 or later release date versions. All reference files required to recreate the signed and sealed record drawings shall be included in the submitted digital files. Computer drawing files format shall be DWG only and shall be Windows NT or Windows 2000 or Windows XP compatible.

A. Record information shall be referenced by station and offset to a monumented baseline. The monumentation for the baseline shall be shown or described on the record drawing (i.e. iron rod & cap, nail & disk or other durable and identifiable monument). For each baseline, there shall be at least two monuments described and referenced. State Plane Coordinates for the monuments shall be shown in NAD 83 (99 adjustment) in feet. Developments not within existing or proposed subdivisions and not within 1.5 miles from existing Manatee County Primary Control Points or platted State Plane Coordinates may be exempted from the requirement for monuments to be based on State Plane Coordinates.

B. The alignment of the baseline shall be along the centerline or edge of one of the following: an existing paved road, recorded right-of-way, recorded easement, face of an existing building, existing sidewalk or other existing, identifiable reference line. Offsets from the baseline shall not exceed 150 feet. All elevations shown on record drawings shall be referenced to a minimum of two described bench marks. A minimum of one on-site bench mark shall be described including datum. All bench marks shall be based upon NGVD29 or NAVD88 (NAVD 88 preferred).

C. All locations and elevations shall be field located by or under the direct supervision of a Florida Licensed Surveyor and Mapper.

PAVING, GRADING & DRAINAGE AS-BUILT REQUIREMENTS



1. SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.

2B.67 BARRICADES
6F.68 TYPE 1, 2, OR 3 BARRICADES

2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH FDOT DESIGN STANDARDS LATEST EDITION.
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS.

N.T.S.

A. Record Drawings shall be certified by a Florida Licensed Surveyor and Mapper. The certification shall state that the Record Locations and Elevations depicted on the Record Drawing are true and correct and were collected in the field by the Surveyor and Mapper or by a representative under the direct supervision of the Surveyor and Mapper. Certifier shall be fully responsible for the accuracy of the Record Locations and Elevations.

- B. Record Drawings shall be certified by the Engineer-of-Record. The certification must state that the improvements have been constructed in substantial conformance with the approved plans.

- C. Record drawings may not include any statement that the information was obtained from another party other than the Surveyor and Mapper or Engineer of Record. Statements such as "as-built information provided by contractor" shall not be permitted.

A. Record drawing submittal materials shall be attached to a transmittal letter, which shall list the following information:

Submittal date.
Project Title.
Planning Department Final Site Plan number.
Title and sheet number of each record drawing.

- B. Initially, the following materials shall be submitted for review and approval:**
- Transmittal letter,
 - One checkpoint copy of the record drawings,
 - Final plats and/or easements when applicable,
 - Final breakdown of construction quantities and final costs when applicable,
 - Performance bonds and warranties when applicable,
 - A copy of all of the infrastructure insurance reports, and
 - Up to four copies each of the water and wastewater Completion of Construction forms, fully signed, sealed and dated by the owner and engineer, of which one of each will be retained for the County's records.

- C. Once the checkprint copy of the record drawings has been reviewed and all corrections have been made, notification will be given to the engineer to make the final submittal, which shall consist of the following materials:

- Transmittal letter,
- One set original mylar record drawings,
- Three copies of the record drawings plan set, each signed, dated and sealed by the engineer of record,
- One 3 1/2-inch floppy or CD ROM copy of the record drawings plan set.

PAVING, GRADING & DRAINAGE AS-BUILT REQUIREMENTS

MANATEE COUNTY GOVERNMENT
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES



1022 26th Avenue East
Bradenton, FL 34208

ERIE ROAD @ 69TH ST. EAST-

INTERSECTION

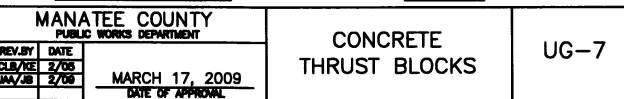
DETAIL SHEET

DATE									
BY									
REVISION DESCRIPTION									
NO.									
PROJECT #	380-6048460								
SURVEY #	1029, 1235								
SEC./TWN./RGE	26&35/33S/18E								
SCALE									
SURVEYED BY	K4S			12/29/11					
DESIGNED BY	CM			02/05/12					
CHECKED BY	K4S			01/23/12					
LICENSE NO. 4511 CHRISTOPHER LEE LOWERY, P.E. FLORIDA P.E. # 46774 STATE OF FLORIDA PROFESSIONAL ENGINEER Signature _____ Date _____ SHEET 72 OF 79									

ASSIGNED	CM	P2/05/1
CHRISTOPHER LEE LOWREY		
CHECKED	G	06/27/05
E		06/28/05

No. 45
CHRISTOPHER LEE LOWREY, P.E.
FLORIDA P.E. # 45777
STATE OF FLORIDA
Signature _____ Date _____

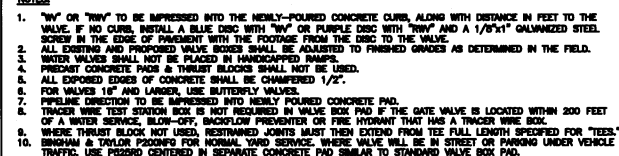
NOTES	PS
1. ALL THRUST BLOCKS SHALL BE CAST IN PLACE, FITTING ADJACENT TO THRUST BLOCKS SHALL BE WRAPPED IN POLYETHYLENE.	
2. THIS TABLE IS BASED ON WATER PRESSURE=180 PSI WITH AN ALLOWABLE SOIL BEARING PRESSURE=2000 PSF. CONCRETE STRENGTH=3000 PSI, REINFORCEMENT $f_y=60.0$ KSI. THRUST BLOCK SHALL BE CAST AGAINST FIRM UNDISTURBED SOIL.	
3. FOR LARGER THAN DIMENSIONS IT IS NECESSARY TO CHECK THAT PIPE SHALL BE SUFFICIENTLY DEEP TO ALLOW 15" MIN. SOIL COVER OVER TOP EDGE OF THRUST BLOCK.	
4. RESTRAINED JOINTS SHALL 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.	



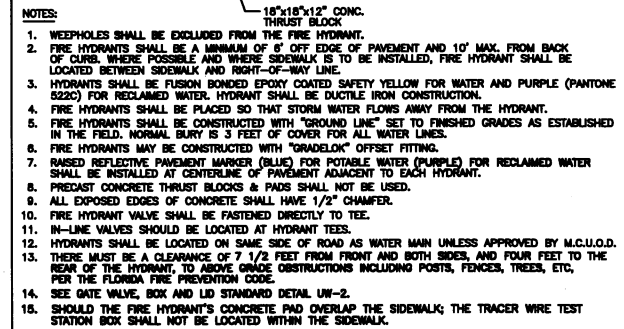
MAIN PIPE SIZE	HORIZ. BENDS			TEES								REDUCERS								PLUGS	VALVES
	90°	45°	22.5°	SIZE				LENGTH				SIZE				LENGTH					
				X20	X16	X12	X10	X20	X16	X12	X10	X20	X16	X12	X10	X20	X16	X12	X10		
24	90	36	18	X24	X20	X16	X12	X10	X8	X6	X4	X20	X16	X12	X10	214	107				
20	78	32	16	X20	X16	X12	X10	X8	X6	X4	X20	X16	X12	X10	158	184	92				
16	68	27	13 1/2	X16	X12	X10	X8	X6	X4	X24	X20	X16	X12	X10	149	151	76				
12	52	22	10 1/2	X12	X10	X8	X6	X4	X24	X20	X16	X12	X10	X8	X6	111	118	59			
10	44	18	9	X10	X8	X6	X4	X24	X20	X16	X12	X10	X8	X6	X4	86	100	50			
8	37	15	7 1/2	X8	X6	X4	X24	X20	X16	X12	X10	X8	X6	X4	X2	81	83	42			
6	28	12	6	X6	X4	X24	X20	X16	X12	X10	X8	X6	X4	X2	X1	90	63	32			
4	21	8	4	X4	X24	X20	X16	X12	X10	X8	X6	X4	X2	X1	X3/4	45	23				

- 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.) SEE RESTRAINED LENGTHS FOR PIPE STD. DETAIL UG-10.

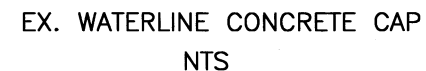
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		RESTRAINED LENGTHS FOR PVC PIPE	UG-8
REV. BY CUB/KE JAA/HB	DATE 2/08 10/08		
MARCH 17, 2009 DATE OF APPROVAL			



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		GATE VALVE, BOX, LID AND TAG	UW-2 PAGE 120
REV. BY	DATE		
CLB/KE	11/10		
MAY 10, 2011 DATE OF APPROVAL			



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		FIRE HYDRANT ASSEMBLY	UW-5
REV. BY	DATE		
CLB/KCE	03/08		
JAY/JS	10/08		
MARCH 17, 2009 DATE OF APPROVAL			

[illegible]

REGISTERED	12/29/10
DESIGNED	02/05/10
SEAL	02/22/10
RENEWED	12/20/12

NO. 05177

CHRISTOPHER LEE MOWBRAY, P.E.

FLORIDA P.E. # 45777

STATE OF FLORIDA

PROFESSIONAL ENGINEER

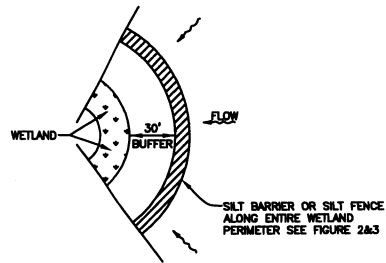
SIGNATURE

SHEET 19 OF 75

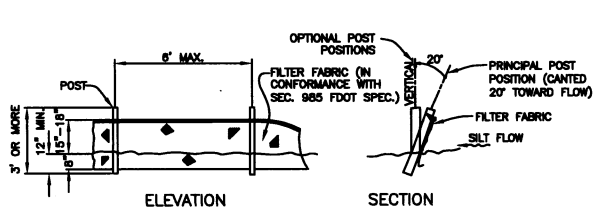
**ERIE ROAD @ 69TH ST. EAST-
INTERSECTION**

EROSION CONTROL DETAIL SHEET

DATE	
BY	
REVISION DESCRIPTION	
NO.	
PROJECT #	380-6048480
SURVEY #	1029, 1235
SEC./TWN./RGE	26&35/33S/18E
SCALE	
DESIGNED	12/29/10
DRAWN	02/05/10
CHECKED	06/23/10
APPROVED	03/29/12
No 46777	
CHRISTOPHER LEE MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
STATE OF FLORIDA	
PROFESSIONAL ENGINEER	
SHEET 14 OF 75	

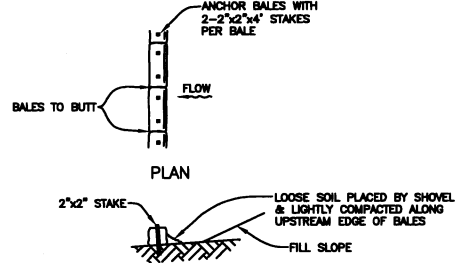


WETLAND BUFFER
FIGURE 1

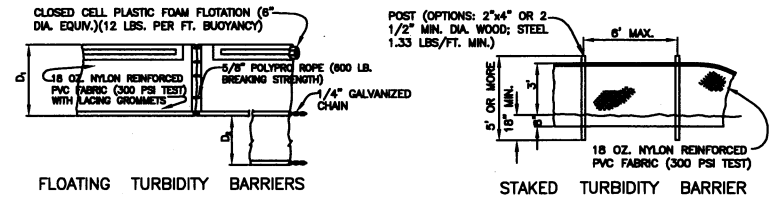


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

TYPICAL SILT FENCE
FIGURE 2



TYPICAL BALE SILT BARRIER
FIGURE 3



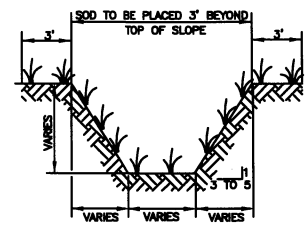
FLOATING TURBIDITY BARRIERS

STAKED TURBIDITY BARRIER

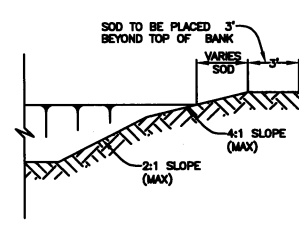
D₁ = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS). D₂ = 5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5'). CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO(2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

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.

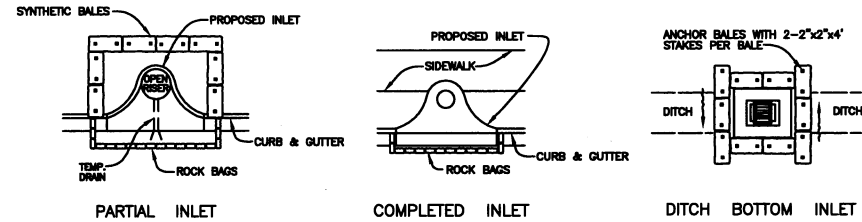
TURBIDITY BARRIERS
FIGURE 4



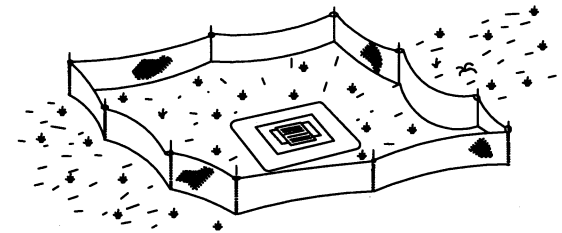
TYPICAL SWALE SECTION
FIGURE 5



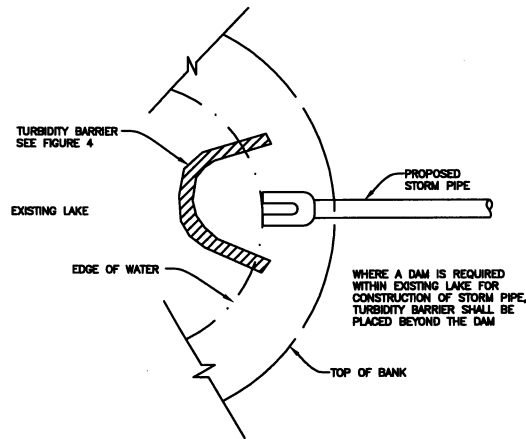
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



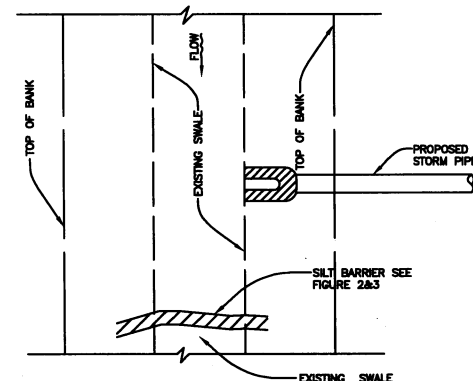
**SYNTHETIC BALE PROTECTION AROUND
INLETS OR SIMILAR STRUCTURES**
FIGURE 7



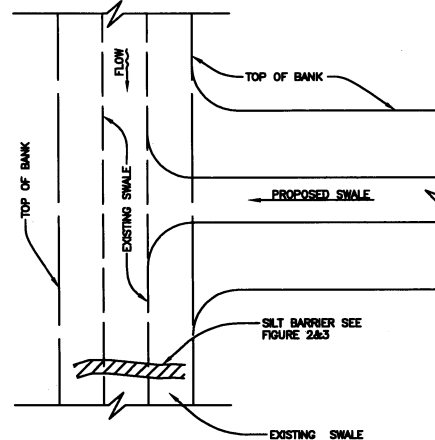
**TYPE III SILT FENCE PROTECTION
AROUND DITCH BOTTOM INLETS**
**STAKED SILT BARRIER OR SILT FENCE
PROTECTION AROUND DITCH BOTTOM INLETS**
FIGURE 8



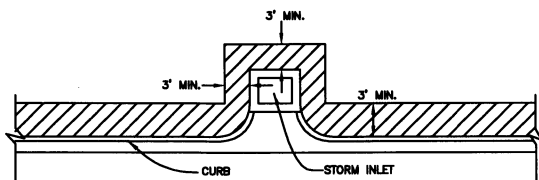
**TURBIDITY BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING LAKE**
FIGURE 9



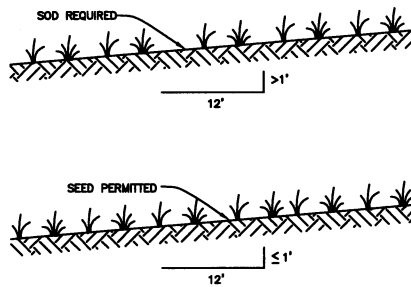
**SILT BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING SWALE**
FIGURE 10



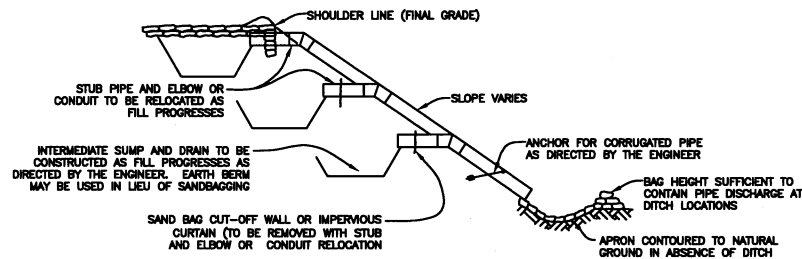
**SILT BARRIER AT CONNECTION
OF SWALE TO EXISTING SWALE**
FIGURE 11



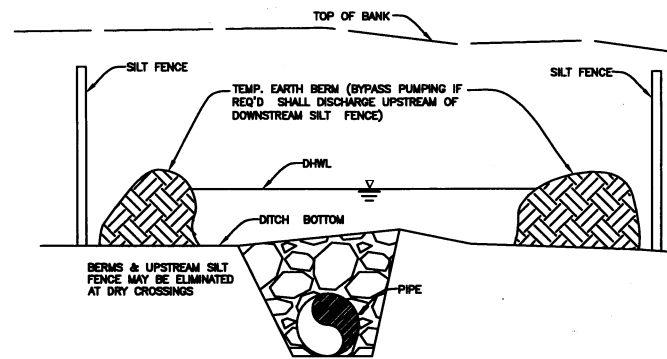
**SOD ALONG CURB
AND AROUND INLET**
FIGURE 14



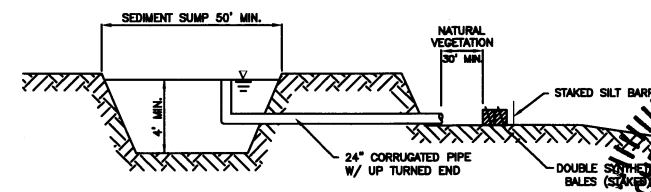
GRASS SLOPES
FIGURE 13



**SECTION AA
TEMPORARY SLOPE DRAIN**
FIGURE 15



UNDERGROUND PIPE CROSSING
FIGURE 12



SEDIMENT SUMP SECTION
FIGURE 16

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



- S:\PWD_Engineering_Shore\Highway_Engineering\PROJECTS\Erie Bocc Approved Alignment\Chris' Area 10-15-09\DWG\ERIE ROAD REALIGNMENT COVER.dwg, 7.5 EROSION CON, 4/25/2012 12:10 PM Jim Anderson, 1:1, 11x17

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S:\PWD_Engineering_Shore\Highway_Engineering\PROJECTS\Erie Bocc Approved Alignment\Chris' Area 10-15-09\DWG\ERIE ROAD REALIGNMENT COVER.dwg, 7.5 EROSION CON, 4/25/2012 12:10 PM Jim Anderson, 1:1, 11x17