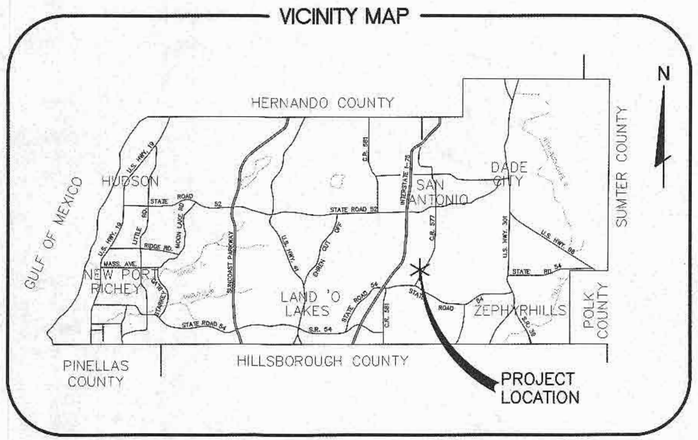
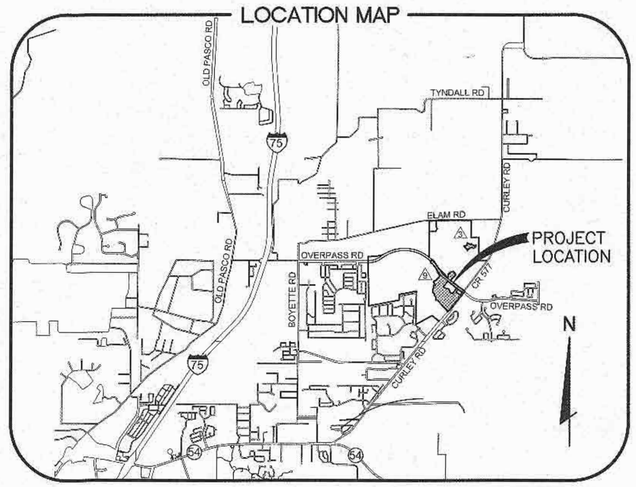
EPPERSON RANCH
OVERPASS ROAD - PHASE 1
SIMULTANEOUS SUBMITTAL △

LOCATED IN PART OF SECTIONS 26, 27, 34 AND 35 TOWNSHIP 25 SOUTH, RANGE 20 EAST
PASCO COUNTY, FLORIDA

VICINITY MAP



LOCATION MAP



LEGAL DESCRIPTION:
(OVERPASS RIGHT-OF-WAY ONLY)

A PARCEL OF LAND BEING A PORTION OF THOSE CERTAIN PROPERTIES AS DESCRIBED IN OFFICIAL RECORDS BOOK 7697, PAGE 1396 AND OFFICIAL RECORDS BOOK 8274, PAGE 1702, BOTH OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA, LYING WITHIN SECTIONS 27, 34 AND 35, TOWNSHIP 25 SOUTH, RANGE 20 EAST, PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SECTION 26, TOWNSHIP 25 SOUTH, RANGE 20 EAST, PASCO COUNTY, FLORIDA; THENCE S89°50'27"E, ALONG THE SOUTH LINE OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION 26 (BEING THE BASIS OF BEARINGS FOR THIS LEGAL DESCRIPTION), FOR 1,310.64 FEET TO THE SOUTHEAST CORNER OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 26; THENCE S89°40'12"E, ALONG THE SOUTH LINE OF THE EAST 1/2 OF SAID SOUTHWEST 1/4 OF SECTION 26, FOR 526.47 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF CURLEY ROAD (COUNTY ROAD 577); THENCE LEAVING SAID SOUTH LINE OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 26, S37°33'31"W, ALONG SAID WESTERLY RIGHT-OF-WAY LINE OF CURLEY ROAD (COUNTY ROAD 577), FOR 2,472.17 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S37°33'31"W, ALONG SAID WESTERLY RIGHT-OF-WAY LINE OF CURLEY ROAD (COUNTY ROAD 577), FOR 128.00 FEET; THENCE LEAVING SAID WESTERLY RIGHT-OF-WAY LINE OF CURLEY ROAD (COUNTY ROAD 577), N52°26'10"W, FOR 1,385.85 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 2,564.00 FEET, A CENTRAL ANGLE OF 21°28'20", AN ARC LENGTH OF 960.88 FEET, AND A CHORD BEARING N41°42'00"W FOR 955.27 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 2,436.00 FEET, A CENTRAL ANGLE OF 13°33'45", AN ARC LENGTH OF 576.63 FEET, AND A CHORD BEARING N37°44'43"W FOR 575.28 FEET TO THE POINT OF INTERSECTION WITH A RADIAL LINE; THENCE N45°28'25"E, FOR 128.00 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENT CURVE, CONCAVE SOUTHWESTERLY; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, FROM A RADIAL BEARING OF S45°28'25"W, HAVING A RADIUS OF 2,564.00 FEET, A CENTRAL ANGLE OF 13°33'45", AN ARC LENGTH OF 606.93 FEET, AND A CHORD BEARING S37°44'43"E FOR 605.51 FEET, TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 2,436.00 FEET, A CENTRAL ANGLE OF 21°28'20", AN ARC LENGTH OF 912.91 FEET, AND A CHORD BEARING S41°42'00"E FOR 907.58 FEET, TO THE POINT OF TANGENT; THENCE S52°26'10"E, FOR 1,385.84 FEET TO THE POINT OF BEGINNING.

CONTAINING 373,058 SQUARE FEET OR 8.564 ACRES, MORE OR LESS.

ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 1988 DATUM. TO CONVERT TO NGVD 1929 DATUM, ADD 0.83'. △

SITE DATA

△ EPPERSON RANCH OVERPASS ROAD PHASE I

PROJECT TYPE:	ROADWAY EXTENSION
PASCO COUNTY PARCEL I.D. #'S:	34-25-20-0000-00100-0010 34-25-20-0000-00100-0020 34-25-20-0000-00100-00B0 35-25-20-0000-00300-0020 35-25-20-0000-00300-0010 35-25-20-0000-00300-00B0 27-25-20-0000-00200-0010 26-25-20-0000-00200-0040
EXISTING ZONING:	EPPERSON RANCH DRI # 258, APPROVED 11/5/2008 MPUD PETITION # 6859, PRESENTLY UNDER REVIEW BY THE COUNTY
FUTURE LAND USE:	△ RES-3
CURRENT USE:	VACANT
PROJECT AREA:	△△△ 73.63 ACRES
CLASS III WETLAND AREA:	30.18 ACRES (WITHIN PROJECT AREA)
PROPOSED WETLAND IMPACTS:	1.54 ACRES (WITHIN PROJECT AREA)
NET WETLAND AREA:	28.64 ACRES (WITHIN PROJECT AREA)
PROPOSED MITIGATION AREA:	7.35 ACRES (WITHIN PROJECT AREA)

△△ THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE CURRENT VERSION OF "FLORIDA DEPARTMENT OF TRANSPORTATION PLAN PREPARATIONS MANUAL 2014 EDITION", AND ARE IN COMPLIANCE WITH THE STANDARDS THEREIN.

811 Know what's **below.** **Call** before you dig.

FLA. STATUTE 553.851 (1979) REQUIRES A MIN. OF 2 DAYS AND A MAX. OF 5 DAYS NOTICE BEFORE YOU EXCAVATE.

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* △ **DENOTES SHEETS INCLUDED FOR CURLEY RIGHT-OF-WAY USE PERMIT SUBMITTAL. SHEETS INCLUDED: 1-4, 24-25, 31-38, 40-41, 43-44, 47-49**

△ 06-17-2015 REVISED DRAWING INDEX FOR RIGHT-OF-WAY USE PERMIT SUBMITTAL PS
△ 05-15-2015 REVISED PROJECT AREA / BNDY PER ACOE REVISIONS; ADDED SHEETS 7A & 42A PS
△ 04-07-2015 ADDED SHEET 4A; REVISED PROJECT AREA AB
△ 02-19-2015 REVISED PER PASCO COUNTY COMMENTS PS
△ 02-06-2015 REVISED PER PASCO COUNTY COMMENTS PS
△ 01-05-2015 DRAWING INDEX REVISED - ADDED OVERPASS ROADWAY X-SECTIONS; RE-NUMBERED SHEETS PS
△ 12-17-2014 ADDED MITIGATION DETAIL SHEET AND DISCHARGE STRUCTURE PLAN; DATUM NOTE PS
△ 12-08-2014 REVISED PER SWFWMD COMM. PS
△ 09-21-2014 REVISED PER PASCO CO & SWFWMD COMM. PS
△ 08-01-2014 AERIAL & MITIGATION PLAN ADDED PS
NO. DATE REVISIONS PSPE'D BY

PROJECT NO. 0597-0025
DRAWN PS
CHECKED AVS
D.E.C. PS
SHEET NO. 137
DATE 06-04-2014

PAUL S. SKIPWORTH LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 289-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: COVER SHEET

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3630 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 322-1047 FAX: (727) 846-3648 WWW.FLDESIGN.COM C.A. NO. 7421

SHEET 1 OF 51

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GENERAL NOTES

1. ALL ELEVATIONS ARE BASED ON NAVD-1988 DATUM.
2. ALL OPEN/DISTURBED AREAS TO BE SODDED. AREAS WHERE SOD IS REQUIRED SHALL BE SAND GROWN AND STAKED AS NECESSARY TO PREVENT DISPLACEMENT. SODDED SLOPES GREATER THAN A 4:1 SLOPE SHALL BE PEGGED.
3. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER OF THE FOLLOWING KEY ACTIVITY STARTUPS A MINIMUM OF FIVE (5) DAYS IN ADVANCE:
   - A. CLEARING, GRUBBING, AND TREE PROTECTION AND NATIONAL POLLUTANT DISCHARGE ELIMINATION REQUIREMENTS.
   - B. SUBGRADE STABILIZATION.
   - C. BASE PLACEMENT.
   - D. PAVING.
   - E. FINAL INSPECTION.
4. ELECTRICAL SERVICE WILL BE PROVIDED BY WITHLACOOCHEE RIVER ELECTRIC COOPERATIVE (WREC).
5. STREET LIGHTING WILL BE PROVIDED BY STREET LIGHTING TAXING DISTRICT OR OTHER APPROVED ENTITY.
6. PROPOSED DRAINAGE EASEMENTS AND UTILITY EASEMENTS SHALL BE GRANTED ON THE PLAT WHEN RECORDED. PONDS SHALL BE WITHIN DRAINAGE EASEMENTS. THE WETLANDS SHALL BE WITHIN WETLAND CONSERVATION EASEMENTS.
7. THE SITE IS LOCATED WITHIN FLOOD ZONES "A" AND "X". (REFERENCE: FLOOD INSURANCE RATE MAP PANEL NO. 12101C0268F, DATED SEPTEMBER 26, 2014.
8. CONSERVATION AREAS, DETENTION PONDS AND BUFFER EASEMENTS SHALL BE OWNED AND MAINTAINED BY A HOME OWNERS ASSOCIATION, COMMUNITY DEVELOPMENT DISTRICT OR SOME OTHER APPROVED ENTITY OTHER THAN PASCO COUNTY.
9. THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER ANY WETLAND AREAS, EXCEPT AS AUTHORIZED BY THE APPROPRIATE ENVIRONMENTAL PERMIT. ALL WORK IN THE VICINITY OF OPEN WATER OR WETLANDS SHALL BE PERFORMED IN COMPLIANCE WITH ANY AND ALL PERMITS.
10. ALL TREES WITHIN PROPOSED INGRESS/EGRESS EASEMENT, RIGHT OF WAYS AND DRAINAGE EASEMENTS MAY BE REMOVED.
11. ALL WORK WITHIN THE ROW WILL REQUIRE A ROW USE PERMIT. (LDC 406.5)
12. AS APPLICABLE, THE OWNER/DEVELOPER WILL PROVIDE COPIES OF THE REQUIRED PERMITS FROM THE RESPECTIVE GOVERNING AGENCIES, PRIOR TO ISSUANCE OF THE SDP. (LDC 902.2.C)
13. PRIOR TO CONSTRUCTION, A BUILDING PERMIT SHALL BE OBTAINED FOR ALL STRUCTURES THAT HAVE A FOOTER, REGARDLESS OF SIZE, THROUGH PASCO COUNTY CENTRAL PERMITTING.
14. ANY OFF SITE DISTURBANCE SHALL BE RESTORED TO THE PRE OR BETTER CONDITION. (LDC 902.2)
15. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE VICINITY OF TREES TO REMAIN AND IS RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS WORK.
16. BURN AREAS, IF PERMITTABLE, SHALL BE LIMITED TO PROPOSED PONDS AS DIRECTED BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING AND BEING IN COMPLIANCE WITH THE APPROPRIATE BURN PERMIT(S).
17. EXCESS FILL MATERIAL IS NOT ANTICIPATED ON THIS PROJECT.
18. NO BUFFER SHALL ENCROACH INTO THE CLEAR SITE TRIANGLE, AS DEFINED IN SECTION 200 OF THE PASCO COUNTY LAND DEVELOPMENT CODE, SO AS TO BLOCK CLEAR SITE VISIBILITY. ALL CLEAR-SITE AREAS SHALL BE KEPT FREE OF ANY SIGNAGE, PLANTINGS, TREES, ETC. IN EXCESS OF THREE-AND-A-HALF (3 1/2) FEET IN HEIGHT.
19. THE LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AS SHOWN AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF THE UTILITIES PRIOR TO CONSTRUCTION IN THEIR VICINITY. THE CONTRACTOR SHALL NOTIFY ALL CONCERNED PUBLIC AGENCIES AND UTILITY COMPANIES IN THE AREA BEFORE BEGINNING CONSTRUCTION, INCLUDING "SUNSHINE" AT 811.
20. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES TO BE EXTENDED, CONNECTED TO, OR CROSSED FOR VERIFICATION OF THEIR LOCATION AND ELEVATION. ANY CONFLICTS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION AND BE SATISFACTORILY RESOLVED BY THE CONTRACTOR.
21. IN ACCORDANCE WITH SECTION 603.2.C.8 OF THE PASCO COUNTY LAND DEVELOPMENT CODE, DRAINAGE AREAS THAT ABUT ROAD RIGHT-OF-WAYS SHALL BE PLANTED WITH TREES SELECTED FROM THE TREE LIST AT A RATE OF(1) ONE TREE PER (50) FIFTY LINEAR FEET OF POND BANK. TREES MAY BE PLANTED IN GROUPS IN ACCORDANCE WITH THE APPROVED TREE PLAN.
22. IF DURING CONSTRUCTION ACTIVITIES, ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING, BUT NOT LIMITED TO, ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC BUILDING FOUNDATIONS ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES BEING FOUND ON THE SITE.
23. ALL ROADWAY WILL BE MAINTAINED BY PASCO COUNTY. THE ROADWAY DESIGN SPEED OF THIS PROJECT IS 30 MPH UNLESS OTHERWISE NOTED.
24. IF, DURING CONSTRUCTION ACTIVITIES, ANY EVIDENCE OF STATE AND FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES, OTHER THAN THOSE SUBJECT TO ALREADY ISSUED PERMITS, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP, AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES BEING FOUND.
25. ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS APART FROM ANY ULTIMATELY-APPROVED SITE PLAN. APPROVAL OF THIS SITE PLAN DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE.
26. THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.
27. NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY COUNTY OR STATE RIGHT-OF-WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT-OF-WAY USE PERMIT.
28. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD CONDITIONS.
29. ALL STRUCTURES, INCLUDING BUFFER WALLS, RETAINING WALLS, SIGNAGE, ETC. REQUIRE SEPARATE BUILDING PERMITS.
30. THE CONTRACTOR SHALL CHECK PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICT BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
31. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN CONTRACT.
32. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION.
33. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
34. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE OWNER'S ENGINEER SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS. FAILURE TO OBTAIN ENGINEERS COMMENTS BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE.
35. REPAIR AND REPLACEMENT OF ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS UNLESS SPECIFICALLY EXEMPTED BY THE PLANS.
36. CONTRACTOR SHALL VERIFY THE LENGTHS OF ALL PIPE PRIOR TO BIDDING AND INSTALLATION. NO EXTRAS WILL BE APPROVED FOR ADDITIONAL PIPE LUMP SUM CONTRACTS EXCEPT AS A RESULT FROM PLAN CHANGES.
37. ADJUSTMENTS OF INLETS, JUNCTION BOXES, MANHOLE TOPS, WATER VALVES, WATER METERS, ECT. SHALL BE INCLUDED IN THE CONTRACTOR'S BID AND NO CLAIM SHALL BE MADE AGAINST THE OWNER OR ENGINEER FOR THESE ADJUSTMENTS, IF REQUIRED.
38. IT WILL BE NECESSARY TO EXAMINE, COORDINATE AND ADJUST ACCORDINGLY THE PROPOSED LOCATIONS OF THE VARIOUS COMPONENTS OF THE SITE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT COORDINATION DRAWINGS SHOWING PIPE SIZES, STRUCTURES, AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING AND COORDINATION OF THE ALL UNDERGROUND WORK ASSOCIATED WITH THIS PROJECT.

SAFETY

39. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
40. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.
41. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
42. CONTRACTOR SHALL PROVIDE AND MAINTAIN ITS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH ITS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTOR'S EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
43. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.
44. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
45. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
46. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
47. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE ONE AT 811.
48. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED TO AND APPROVED BY, THE APPROPRIATE GOVERNMENTAL AGENCIES PRIOR TO BEGINNING ANY CONSTRUCTION.
49. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.

EROSION/TURBIDITY CONTROL

50. ALL COSTS ASSOCIATED WITH ADDITIONAL TURBIDITY EROSION CONTROL ARE INCIDENTAL TO THE DEWATERING COSTS OR THE ITEM THAT REQUIRES THE DEWATERING.
51. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REQUIREMENTS CONTAINED IN NPDES EROSION AND SEDIMENTATION CONTROLS INCLUDING ALL REPORTING AND MAINTENANCE REQUIREMENTS UNTIL SUCH TIME AS THE PROJECT INFRASTRUCTURE IS ACCEPTED BY PASCO COUNTY.
52. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.
53. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHALL BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORMWATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.
54. CONSTRUCTION OPERATIONS IN OR ADJACENT TO WETLANDS SHALL BE RESTRICTED TO THOSE AREAS IDENTIFIED IN THE PLANS AND IN THE SPECIFICATIONS.
55. EXCEPT AS NECESSARY FOR CONSTRUCTION, EXCAVATED MATERIAL SHALL NOT BE DEPOSITED IN THE WETLANDS OR IN A POSITION CLOSE ENOUGH THERETO TO BE WASHED AWAY BY HIGH WATER OR RUNOFF.
56. WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATERS FROM CONSTRUCTION AREAS, THE WATER SHALL BE TREATED PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE AND ARE NOT LIMITED TO, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS, SEDIMENT BASINS, OR CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.
57. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSED, UNCOMPLETED CONSTRUCTION TO THE ELEMENTS SHALL BE AS SHORT AS PRACTICABLE. CLEARING AND GRUBBING SHALL BE SO SCHEDULED AND PERFORMED THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.
58. THE CONTRACTOR AND/OR OWNER'S REPRESENTATIVE SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOILS ARE STABILIZED.
59. THE CONTRACTOR SHALL CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS APPROVED BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE.
60. ALL PRACTICABLE AND NECESSARY EFFORT, INCLUDING BUT NOT LIMITED TO THE USE OF STAKED HAY BALES OR STAKED SILT SCREEN BARRIERS, SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIALS TO INLETS, SURFACE DRAINS, WETLANDS AND POND AREAS. STAKED HAY BALES AND STAKED SILT SCREEN BARRIERS SHALL BE INSTALLED PRIOR TO AND MAINTAINED THROUGH CONSTRUCTION COMPLETENESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.
61. THE CONTRACTOR SHALL RETAIN ALL EFFLUENT FROM DEWATERING ACTIVITIES ON-SITE WITHIN ISOLATED PONDS OR WETLANDS. NO WATER FROM DEWATERING ACTIVITIES SHALL BE PERMITTED TO LEAVE THE SITE WITHOUT PRIOR WRITTEN APPROVAL FROM SWFWMD. ALL WATER FROM DEWATERING ACTIVITIES SHALL PASS THROUGH DEWATERING BAGS (EQUIVALENT TO ULTRA DEWATERING BAGS AS PRODUCED BY ULTRA TECH INTERNATIONAL, INC.) OR APPROVED ALTERNATE.
62. THE SOIL EROSION AND SEDIMENT CONTROL DEVISES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS PERMANENTLY STABILIZED. (LDC 902.2)

CLEARING AND SITE PREPARATION NOTES

63. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY'S TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION
64. CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
65. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
66. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR/SUBCONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY. IT SHALL BE THE CONTRACTOR'S/SUBCONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONSTRACTOR/SUBCONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES AND THE CONTRACTOR/SUBCONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR/SUBCONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
67. ALL TREE ROOTS EXISTING WITHIN APPROVED AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA AS SHOWN ON THE TREE REMOVAL PLAN.
68. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE PRUNED IN ACCORDANCE WITH THE NATIONAL ARBORIST ASSOCIATION (NAA) PRUNING STANDARDS.
69. NO GRADE CHANGES SHOULD OCCUR WITHIN THE DRIP LINE OF TREES TO REMAIN.
70. ALL TREES TO REMAIN MUST BE PROTECTED BY TREE PROTECTION BARRICADES MEETING THE MINIMUM CODE STANDARDS. PROTECTIVE BARRICADES SHALL REMAIN IN PLACE UNTIL LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED.
71. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOT REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIP LINE OF A TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE COUNTY.
72. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND EXISTING WETLANDS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW MULCH, OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND / OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.

SANITARY SEWER, RECLAIMED AND POTABLE WATER DISTRIBUTION NOTES

73. ALL SEWER, RECLAIMED AND WATER PIPE MATERIAL AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE PASCO COUNTY "STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER, AND RECLAIMED WATER FACILITIES", LATEST EDITION. SANITARY SEWER PIPE SHALL BE PVC (SDR-35) UP TO DEPTHS OF 12 FEET, DEPTHS BETWEEN 12 FEET AND 18 FEET SHALL BE PVC (SDR-26) AND DEPTHS EXCEEDING 18 FEET SHALL BE PVC (C-900). ALL SANITARY SEWER SHALL BE COLORED GREEN. WATER PIPE 2" THROUGH 3" SHALL BE PVC (SDR-21) AND 4" THROUGH 12" SHALL BE PVC AWWA C-900, DR-18. ALL WATER PIPE SHALL BE COLORED BLUE.
74. ALL SANITARY SEWER AND POTABLE WATER SERVICE LATERALS SHALL BE MARKED WITH PAINT ON THE EDGE OF PAVEMENT AND WITH WOOD STAKES AT THE END OF SERVICE LATERALS (BLUE PAINT FOR WATER AND GREEN PAINT FOR SEWER) OR SOME OTHER APPROVED METHOD.
75. CONFLICTS OF WATER LINES WITH SANITARY SEWER AND STORM SEWER SYSTEMS SHALL BE RESOLVED BY ADJUSTING WATER LINES AS NECESSARY.
76. POTABLE WATER LINE, RECLAIMED LINE AND SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 36-INCHES OF COVER FROM PROPOSED GRADE. (UNLESS APPROVED IN WRITING BY THE PROJECT ENGINEER).
77. APPROXIMATE POTABLE WATER LINE DISTANCES ARE SHOWN BETWEEN CENTERS OF MAIN FITTINGS. THE CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED FOR COMPLETE SYSTEMS IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICES.
78. ALL WATER MAINS SHALL MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM ALL SANITARY SEWER, STORM SEWER AND FORCEMAINS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE.
79. ALL WATER LINE PIPE JOINTS SHALL BE A MINIMUM OF 10 FEET FROM THE CENTERLINE OF ANY STORM SEWER STRUCTURE (MANHOLES, INLETS OR CATCH BASINS).
80. SEWAGE DISPOSAL SHALL BE PROVIDED BY PASCO COUNTY UTILITIES VIA AN EXISTING SANITARY SEWER SYSTEM.
81. POTABLE WATER SHALL BE PROVIDED BY PASCO COUNTY FROM AN EXISTING WATER MAIN SYSTEM.
82. FIRE PROTECTION WILL BE PROVIDED FROM HYDRANTS AND BY THE PASCO COUNTY FIRE DEPARTMENT.
83. AT THE TERMINATION OF EACH WATER MAIN, A GATE VALVE THE SAME SIZE AS THE WATER MAIN AND 2" TEMPORARY BLOW-OFF SHALL BE INSTALLED. VALVES AND BLOW-OFFS SHALL BE RESTRAINED AND CONSTRUCTED IN ACCORDANCE WITH THE CURRENT PASCO COUNTY STANDARDS.
84. TYPICAL-ALL WATER LINES AND FORCEMAINS DEFLECTING AROUND INLETS, TREES OR OTHER OBSTRUCTIONS SHALL USE THE PIPE DEFLECTION METHOD AS REQUIRED BY P.C.U.D.
85. CONTRACTOR SHALL PREVENT FLOATATION OF STRUCTURES DURING ALL PHASES OF CONSTRUCTION.
86. RAISED PAVEMENT MARKINGS INDICATING THE FIRE HYDRANT LOCATIONS SHALL BE PROVIDED IN ACCORDANCE WITH PASCO COUNTY CODE.
87. HYDRANTS SHALL BE FLOW TESTED BY THE CONTRACTOR. THIS COULD BE PART OF A UTILITY INSPECTION OR A SEPARATE TEST, BUT NOT PART OF THE PRESSURE TEST. THE ENGINEER OF RECORD OR THEIR APPOINTED REPRESENTATIVE MUST BE PRESENT AT THIS FLOW TEST.
88. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
89. FIRE HYDRANTS MUST BE FLOW TESTED AND COLOR-CODED. BASED ON FLOW RESULTS, THE CAPS (TOP AND 3 SIDES) ARE TO BE COLOR CODED: 0-500 GPM RED CLASS A, 500-1000 GPM ORANGE CLASS B, 1000-1500 GPM GREEN CLASS A, AND 1500+ GPM BLUE CLASS AA. ALL HYDRANT BODIES ARE TO BE BASE COLORED YELLOW.
90. THE SANITARY SEWER PLUGS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL CERTIFICATION HAS BEEN COMPLETED FOR FACILITIES TO BE PLACED INTO SERVICE.
91. ALL COMPONENTS OF WATER SYSTEM, INCLUDING FITTINGS, THRUST BLOCKING, HYDRANTS, CONNECTIONS AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER;S ENGINEER, PRESSURE TESTS TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE REQUIREMENTS OF THE APPROPRIATE MUNICPALITY. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND COUNTY INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.
92. CONTRACTOR TO PERFORM CHLORINATING AND BACTERIOLOGICAL SAMPLING AND OBTAIN CLEARANCE OF DOMESTIC WATER SYSTEM. COPIES OF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO OWNER'S ENGINEER.
93. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.
94. WHERE SANITARY SEWERS, FORCE MAINS, RECLAIMED WATER MAINS AND STORM SEWERS MUST CROSS A POTABLE WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE: (1) BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED/ALSO, A SANITARY SEWER OR FORCE MAIN MAY BE C900 PVC AT THE (CROSSING) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS (2) ALTERNATIVELY, ONE OF THE CROSSING MAINS SHALL BE ENCLOSED WITHIN A 20 FOOT LONG STEEL OR PVC CASING CENTERED ON THE CROSSING. WHERE WATER MAIN CROSSES BELOW SEWER MAIN, ENCASEMENT OF BOTH MAINS IS MANDATORY.
95. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING.
96. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).
97. WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS ABOVE.
98. A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
99. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
100. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM THE JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
101. ALL ON-SITE PVC WATER MAINS 4-12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-900 STANDARDS. ALL ON-SITE PVC WATER MAINS 2-3 INCHES SHALL BE CLASS 1120 OR 1220 (SDR 21) AND MEET REQUIREMENTS OF ASTM D-2241. WATER MAINS SMALLER THAN 2 INCHES SHALL BE CLASS 1120 OR 1220 SCHEDULE 80 AND MEET REQUIREMENTS OF ASTM D-1785.
102. PE PIPE 2 INCHES OR SMALLER SHALL MEET THE REQUIREMENTS OF ASTM D-1248.
103. ALL DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI STANDARDS A21.51, MINIMUM CLASS 50. IN AREAS WHERE THE SOIL IS DETERMINED TO BE CORROSIVE OR HIGH GROUND WATER IS EXPECTED, THE PIPE SHALL BE INSTALLED IN LOOSE POLYETHYLENE ENCASEMENT NOT LESS THAN 8 MILS THICK AND INSTALLED IN ACCORDANCE WITH ANSI SPECIFICATION A21.51.
104. ALL UTILITY SYSTEM-DESIGN MATERIALS AND WORKMANSHIP SHALL COMPLY WITH STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER, AND RECLAIMED WATER FACILITIES SPECIFICATIONS, "LATEST EDITION".
105. ALL NON-METALIC PIPE WILL BE INSTALLED WITH 2 PAIR, 10 GAUGE, COPPER TRACER WIRE.
106. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.
107. ALL SANITARY SEWER WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
108. ALL SANITARY SEWER MANHOLE COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING.
109. SANITARY SEWER MAINS AND LATERALS SHALL HAVE A MINIMUM COVER OF THREE (3) FEET.
110. JOINTING OF PVC PIPE USING SOLVENT CEMENTING IS NOT PERMITTED.
111. NON-METALIC FORCEMAIN PIPE WILL BE INSTALLED WITH TWO PAIR, 10 GAUGE COPPER TRACER WIRE.
112. THE CONTRACTOR SHALL PERFORM AT HIS OWN EXPENSE AN INFILTRATION OR EXFILTRATION TEST, A TELEVISION INSPECTION WITH VIDEO-TAPE RECORDS, AND A MANDREL (GO, NO GO) TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE REQUIREMENTS OF THE REGULATORY AGENCY HAVING JURISDICTION. SAID TEST ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION OF TESTING AND NOTIFICATION OF ALL PARITIES IS THE CONTRACTOR'S RESPONSIBILITY. THE MUNICIPALITY WILL PERFORM THE T.V. INSPECTION OF THE GRAVITY SEWER. A TESTING AGENCY APPROVED BY THE ENGINEER SHALL PERFORM THE MANDREL TESTING.
113. ALL COMPONENTS OF THE POTABLE AND RECLAIMED WATER SYSTEM (IF ANY), INCLUDING FITTINGS, HYDRANTS, CONNECTIONS AND VALVES SHALL REMAIN UNCOVERED UNTIL REVIEWED BY OWNER'S ENGINEER AND PROPERLY INSPECTED AND ACCEPTED BY THE MUNICIPALITY. PRESSURE TESTS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITIES. UTILITY DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND MUNICIPALITIES INSPECTOR FROM MUNICIPALITY 72 HOURS IN ADVANCE OF PERFORMING TEST.
114. CONTRACTOR TO CLEAN AND FLUSH WATER SERVICE CONNECTION PRIOR TO PLACING INTO SERVICE.
115. ALL OF THE ABOVE NOTES APPLY TO ALL SANITARY SEWER AND WATER DISTRIBUTION PLAN SHEETS.

PAVING, GRADING, AND DRAINAGE NOTES

116. ALL UNDERGROUND UTILITIES INCLUDING CONDUIT FOR ELECTRICAL, CABLE, IRRIGATION AND TELEPHONE CROSSINGS SHALL BE INSTALLED PRIOR TO PAVEMENT CONSTRUCTION.
117. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PASCO COUNTY STANDARDS AND/OR FDOT STANDARDS AS REQUIRED.
118. ALL ROADWAY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE CURRENT VERSION OF THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS", STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION.
119. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES FOR INLETS AND STORM MANHOLES. MITERED END SECTIONS AND FLARED END SECTIONS ARE PART OF PIPE LENGTHS. INLET STATIONS AND OFFSETS ARE CALCULATED FROM BASELINE OF CONSTRUCTION, CENTER OF BOX. ALL PIPE LENGTHS ARE APPROXIMATE.
120. DRAINAGE RUNOFF (POST DEVELOPMENT) SHALL BE COLLECTED AND DIRECTED TO PONDS VIA PIPES AND SWALES AS INDICATED ON THE DRAINAGE PLAN.
121. STAKED SILT FENCE SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS PRIOR TO ANY CONSTRUCTION ACTIVITIES IN THE VICINITY OF ADJACENT WETLAND AREAS AND SHALL BE MAINTAINED THROUGH THE PROJECT COMPLETION.
122. FOR CONTROL STRUCTURE DATA, SEE POND & DRAINAGE STRUCTURE DETAIL SHEETS AND PAVING, GRADING AND DRAINAGE PLANS.
123. AFTER CONSTRUCTION OF EACH POND CONTROL STRUCTURE IS COMPLETED, A PERMANENT BENCHMARK SHALL BE ESTABLISHED ADJACENT TO OR ON THE OUTFALL STRUCTURE.
124. CONTRACTOR SHALL PREVENT FLOATATION OF STRUCTURES DURING ALL PHASES OF CONSTRUCTION.
125. IT SHALL BE EPPERSON RANCH CDD WHO WILL BE RESPONSIBLE TO INSPECT AND MAINTAIN THE WATER RETENTION SYSTEM ON A REGULAR BASIS. (LDC 902.2.M)
126. A GEOTECHNICAL TESTING COMPANY SHALL BE PRESENT DURING POND EXCAVATION TO OBSERVE POND EXCAVATION ACTIVITIES. IF LIMEROCK IS ENCOUNTERED DURING EXCAVATION, EXCAVATION IN THIS AREA WILL STOP AND A MINIMUM OF 2 FEET OF CLAY SHALL BE BACKFILLED AND COMPACTED TO THE GEOTECH'S SATISFACTION.
127. ALL OF THE ABOVE NOTES APPLY TO ALL PAVING, GRADING AND DRAINAGE PLAN SHEETS.
128. CONTRACTOR TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
129. ALL PAVEMENT MARKINGS SHALL CONFORM TO FDOT STANDARD INDEX NO. 17346, SHEETS 1-7.
130. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
131. STANDARD INDEXES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
132. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) WITH RUBBER GASKET JOINTS UNLESS OTHERWISE NOTED ON PLANS. ALL INLETS, MANHOLES AND JUNCTION BOXES SHALL CONFORM TO THE FLORIDA DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION. ALL INLETS ARE TO HAVE MANHOLE LIDS FOR MAINTENANCE ACCESS. ALL PIPE ARE TO BE CUT FLUSH WITH THE INSIDE WALLS OF MANHOLES AND JUNCTION BOXES.
133. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO THE CENTER OF DRAINAGE STRUCTURES WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS WHICH ARE INCLUDED IN LENGTHS.
134. ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS.
135. CONTRACTOR TO SOD ANY SUMPS AS INDICATED ON PLANS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE SUMPS.
136. ALL STORM DRAINAGE STRUCTURES DEEPER THAN TEN (10) FEET TO HAVE LADDER BARS.
137. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY DEWATERING PERMITS FROM THE LOCAL WATER MANAGEMENT DISTRICT OR OTHER REGULATORY AGENCY.
138. PROTECTION OF EXISTING STORM SEWERS SYSTEMS: DURING CONSTRUCTION, ALL STORM SEWER 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 BE CONSTRUCTION PROGRESS.
139. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1996, OR LATEST REVISION THEREOF AND SUPPLEMENTAL SPECIFICATIONS THERETO.
140. ALL RELOCATION OR MODIFICATION OF PROPOSED STORM SEWER SYSTEM SHALL NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD AND PASCO COUNTY.
141. ALL BACKFILL OVER STORM SEWER PIPE THAT IS TO BE INSTALLED UNDER ROADWAYS OR WITHIN THE EMBANKMENT, ETC. OF THE ROADWAY IS TO BE COMPACTED TO 98% DENSITY AS DETERMINED BY AASHTO T-180 PER FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, SECTION 125.8.3 1986 EDITION (OR LATEST EDITION)
142. IF LIMESTONE BEDROCK IS ENCOUNTERED DURING CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM. THE DISTRICT MUST BE NOTIFIED AND CONSTRUCTION IN THE AFFECTED AREA SHALL CEASE.
143. NO EXCAVATIONS SHALL EXTEND BELOW THE PERMITTED DEPTHS/ELEVATIONS SHOWN ON THE PLANS. NO CONFINING LAYER OF CLAYEY MATERIAL SHALL BE BREACHED AND/OR LIMEROCK MATERIAL SHALL BE EXCAVATED, REGARDLESS IF THESE MATERIALS ARE ENCOUNTERED ABOVE THE PERMITTED DEPTHS/ELEVATIONS. IF SUCH ARE DISCOVERED DURING EXCAVATION, THEN THE GEOTECHNICAL ENGINEER SHALL BE NOTIFIED AND EXCAVATION CEASE IN THAT AREA. IF IT IS DETERMINED THAT SUCH MATERIAL IS NON-CONFINING AND IS WITHIN THE LIMITS OF THE PERMITTED PLANS THEN EXCAVATION MAY CONTINUE. NO CLAY MATERIAL SHALL BE LEFT EXPOSED IN ANY POND. WHERE CLAY OR SANDY-CLAYS ARE EXPOSED AT THE PERMITTED BOTTOM OR SIDE LIMITS OF THE EXCAVATION, THE CONTRACTOR SHALL OVER-EXCAVATE BY A MINIMUM OF TWELVE (12) INCHES AND BACKFILL WITH CLEAN SANDS TO PREVENT SUSPENSION OF FINE PARTICLES IN THE WATER COLUMN. IN NO INSTANCE SHALL THE CONTRACTOR OVER-EXCAVATE THE BOTTOM OF THE POND IN A WAY TO COMPROMISE A CONFINING LAYER OF CLAY.
144. THE STORM DRAINAGE PIPING AND FILTRATION SYSTEM SHALL BE SUBJECT TO A VISUAL OBSERVATION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE.
145. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE REVIEWED BY THE OWNER'S ENGINEER PRIOR TO FINAL ACCEPTANCE.
146. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE GEOTECHNICAL ENGINEER. TEST WILL BE REQUIRED FOR EMBANKMENT, SUBGRADE, SOIL CEMENT BASE COURSE AND ASPHALT SURFACE COURSE. ALL TESTING SHALL BE IN ACCORDANCE WITH THE PASCO COUNTY SPECIFICATIONS.
147. GEOTECHNICAL ENGINEER TO SUPPLY THE ENGINEER WITH A PHOTOCOPY OF ALL RESULTS. THE GEOTECHNICAL ENGINEER IS TO VERIFY TO THE ENGINEER OF RECORD IN WRITING THAT ALL TESTING REQUIREMENTS REQUIRED BY LOCAL REGULATORY AGENCY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION(FDOT) FOR THE IMPROVEMENTS AS REQUIRED BY THE CONSTRUCTION DRAWINGS HAVE BEEN SATISFIED.
148. CONTRACTOR TO REVIEW SOILS REPORTS AND BORINGS PRIOR TO BIDDING THE PROJECT AND COMMENCING CONSTRUCTION.

STANDARD FIRE PROTECTION NOTES:

149. ALL PROJECTS MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.
150. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
151. PER THE NATIONAL FIRE ASSOCIATION, NFPA-1, 16.4.3.1.3: WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
152. PER NFPA-1, 18.3.4.1: CLEARANCES OF 7.5 FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A 4 FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.
153. GATED ENTRIES REQUIRE A SIREN OPERATING SYSTEM OR A 3M OPTICOM SYSTEM FOR EMERGENCY ACCESS.

GEOTECHNICAL NOTES:

154. SHOULD ANY NOTICEABLE SOIL SLUMPING OR SINKHOLE FORMATION BECOME EVIDENT, THE APPLICANT/DEVELOPER SHALL IMMEDIATELY NOTIFY THE COUNTY, TAMPA BAY WATER (TBW), AND SWFWMD, AND ADOPT ONE OR MORE OF THE FOLLOWING PROCEDURES AS DETERMINED TO BE APPROPRIATE BY THE COUNTY AND SWFWMD:
155. IF THE SLUMPING OR SINKHOLE FORMATION BECOMES EVIDENT BEFORE OR DURING CONSTRUCTION ACTIVITIES, STOP ALL WORK (EXCEPT FOR MITIGATION ACTIVITIES) IN THE AFFECTED AREA AND REMAIN STOPPED UNTIL THE COUNTY AND SWFWMD APPROVE RESUMING CONSTRUCTION ACTIVITIES.
156. TAKE IMMEDIATE MEASURES TO ENSURE NO SURFACE WATER DRAINS INTO THE AFFECTED AREAS.
157. VISUALLY INSPECT THE AFFECTED AREA.
158. EXCAVATE AND BACKFILL OR GROUT AS REQUIRED TO FILL THE AFFECTED AREA AND PREVENT FURTHER SUBSIDENCE.
159. USE SOIL REINFORCEMENT MATERIALS IN THE BACKFILLING OPERATION, WHEN APPROPRIATE.
160. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA, MAINTAIN A MINIMUM DISTANCE OF TWO FEET FROM THE BOTTOM OF THE RETENTION POND TO THE SURFACE OF THE LIME-ROCK OR KARST CONNECTION.
161. IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA AND THE ABOVE METHODS DO NOT STABILIZE THE COLLAPSE, RELOCATE THE RETENTION AREA.
162. DISCHARGE OF STORM-WATER INTO DEPRESSIONS WITH DIRECT OR DEMONSTRATED HYDROLOGIC CONNECTION TO THE FLORIDAN AQUIFER SHALL BE PROHIBITED.
163. CONTRACTOR SHALL REVIEW THE REPORT OF STORMWATER POND AND ROADWAY SOIL STUDY FOR EPPERSON RANCH PREPARED BY FAULKNER ENGINEERING SERVICES, INC., DATED NOVEMBER 2006 FOR GEOTECHNICAL RECOMMENDATION.

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	EPN	DATE	DESIGNED	DRAWN	CHECKED	Q.C.
0597-0025	137	06-04-2014	PS	AVS	PS	

NO.	DATE	REVISIONS	APP'D BY
4	06-22-2015	ELECTRIC COMPANY REVISED	PS
3	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
2	01-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
		RAISED ROADWAY TO MEET FDOT CRITERIA	
1	09-11-2014	REVISED PER PASCO COUNTY COMMENTS	PS

DESIGNED FOR: EPPERSON RANCH, LLC
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PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: GENERAL NOTES

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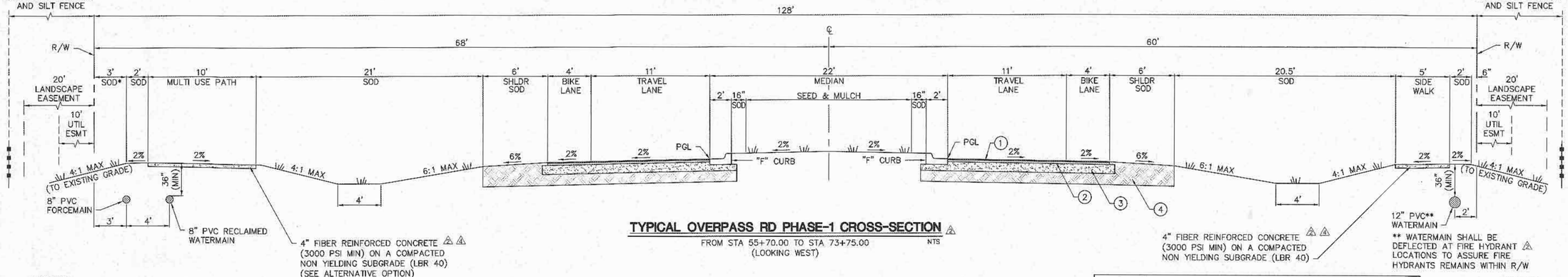
⚠ * – SOD IF 4:1 OR GREATER, SEED & MULCH OTHERWISE

MULTI PATH ALTERNATIVE OPTION ⚠
1" THICK SP 9.5 ASPHALTIC CONCRETE SURFACE PLACED ON A 4" LIMEROCK BASE (LBR 100) ON A COMPACTED TO 98% MODIFIED PROCTOR SUBGRADE

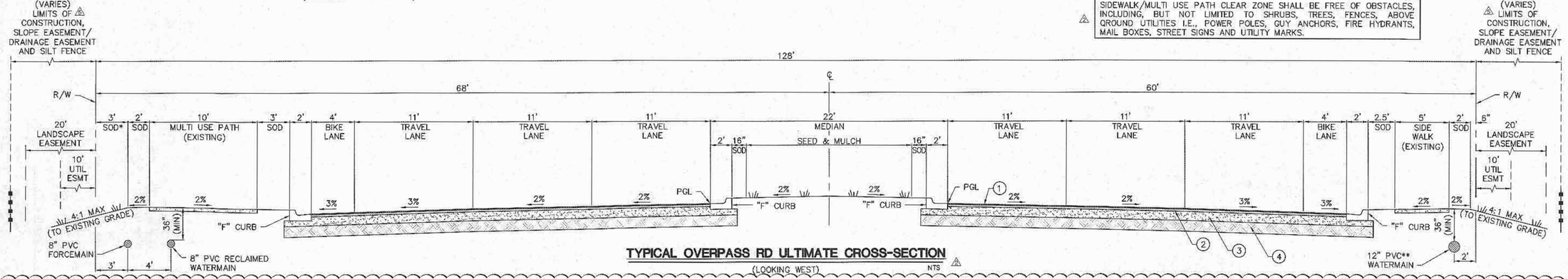
⚠ ROAD SIDE CLEAR ZONE SHALL BE FREE OF ANY OBSTRUCTIONS. CLEAR ZONE SHALL BE FOUR (4) FEET FROM THE FACE OF F CURB AND 18' FROM THE EDGE OF THROUGH TRAVEL LANE FOR THE RURAL SECTION.



TYPICAL OVERPASS RD PHASE-1 CROSS-SECTION ⚠

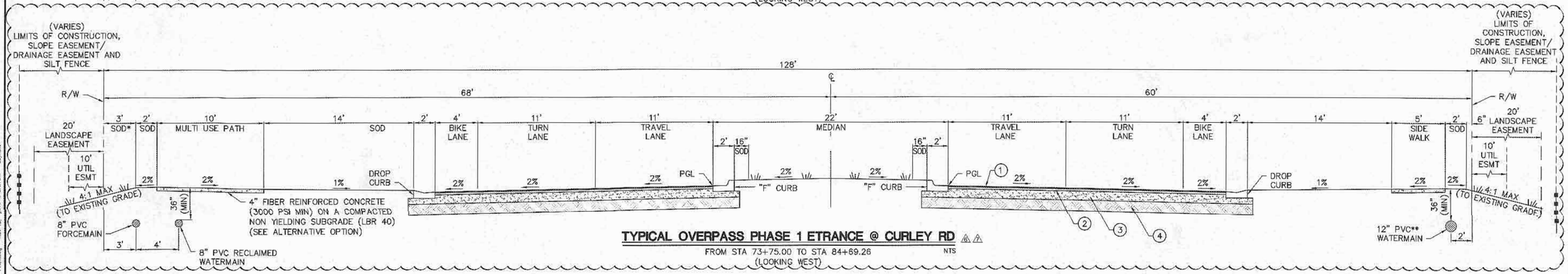
FROM STA 55+70.00 TO STA 73+75.00 NTS
(LOOKING WEST)

⚠ SIDEWALK/MULTI USE PATH CLEAR ZONE SHALL BE FREE OF OBSTACLES, INCLUDING, BUT NOT LIMITED TO SHRUBS, TREES, FENCES, ABOVE GROUND UTILITIES I.E., POWER POLES, GUY ANCHORS, FIRE HYDRANTS, MAIL BOXES, STREET SIGNS AND UTILITY MARKS.



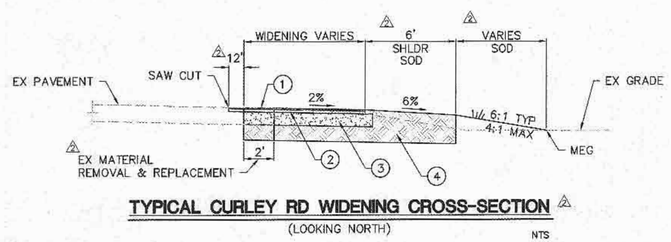
TYPICAL OVERPASS RD ULTIMATE CROSS-SECTION ⚠

(LOOKING WEST) NTS



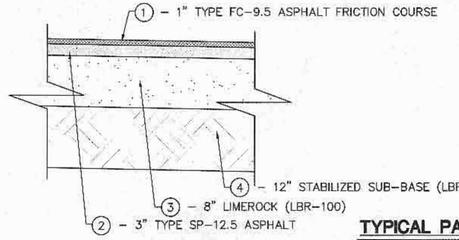
TYPICAL OVERPASS PHASE 1 ETRANCE @ CURLEY RD ⚠⚠

FROM STA 73+75.00 TO STA 84+69.26 NTS
(LOOKING WEST)



TYPICAL CURLEY RD WIDENING CROSS-SECTION ⚠

(LOOKING NORTH) NTS



TYPICAL PAVEMENT DETAIL ⚠

NTS

⚠⚠ STRUCTURAL NUMBER CALCULATION

① – 1" TYPE FC-9.5 ASPHALT FRICTION COURSE	1 X 0.44	= 0.44
② – 3" TYPE SP-12.5 ASPHALT	3 X 0.44	= 1.32
③ – 8" LIMEROCK (LBR-100)	8 X 0.18	= 1.44
④ – 12" STABILIZED SUB-BASE (LBR-40)	12 X 0.08	= 0.96
TOTAL PROVIDED		= 4.16 > 4.00 (MIN)

⚠ NOTE:

1. MINIMUM ROADWAY STRUCTURAL COEFFICIENTS AND DESIGN STANDARDS WERE BASED ON CHAPTER 900, SECTION 901.6, STREET DESIGN AND DEDICATION REQUIREMENTS, OF THE PASCO COUNTY LAND DEVELOPMENT CODE.
2. SEE SHEET 44 FOR ADDITIONAL NOTES AND DETAILS.

PAUL E. SKIDMORE LICENSE No. 70031 STATE OF FLORIDA PROFESSIONAL ENGINEER
11-16-15

JOB NO.	0567-0025					
ENV.	137					
DATE	05-04-2014					
DESIGNED/ DRAWN	PS	AVS				
CHECKED	PS					
APP'D BY	PS					

	DATE	BY	DESCRIPTION
⚠	11/16/2015	PS	ADDED TYPICAL SECTION - OVERPASS PHASE 1 ADDED LANE - WIDENED RD FROM STA 73+75
⚠	02-19-2015	PS	TURN LANE TYPICAL ADDED PER PASCO CO.
⚠	02-09-2015	PS	REVISED PER PASCO COUNTY COMMENTS
⚠	01-09-2015	PS	REVISED PER PASCO COUNTY COMMENTS
⚠	10-23-2014	PS	ELIMINATED 4 LANE TYPICAL CROSS SECTION
⚠	08-11-2014	PS	REVISED PER PASCO COUNTY COMMENTS
⚠	06-01-2014	PS	ADDED LINEBERGRAIN-FRESHREMENTS
NO.	DATE	BY	REVISIONS

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
TYPICAL CROSS SECTIONS & DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

SHEET 3 OF 51

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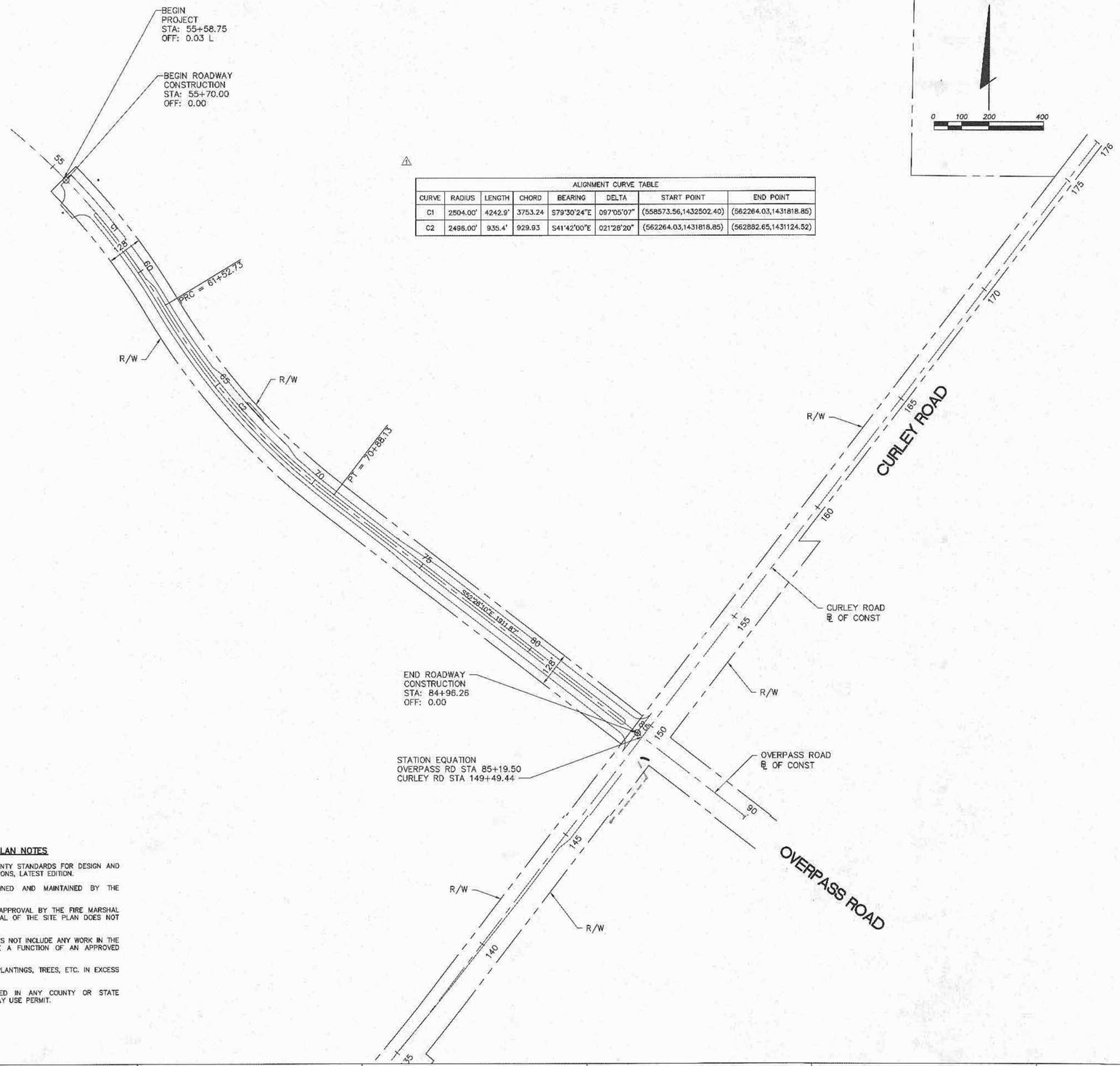
K:\137\ROADWAY\Dsn\Dwg\PLANS\OVERPASS ROAD\137_TYP_OVERPASS_PH01.dwg – Nov 16, 2015 @ 8:27am – apyrtko



ALIGNMENT CURVE TABLE							
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA	START POINT	END POINT
C1	2504.00'	4242.9'	3753.24	S79°30'24"E	097°05'07"	(558573.56,1432502.40)	(562264.03,1431818.85)
C2	2496.00'	935.4'	929.93	S41°42'00"E	021°28'20"	(562264.03,1431818.85)	(562882.65,1431124.52)

PASCO COUNTY DEVELOPMENT REVIEW–STANDARD SITE PLAN NOTES

1. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE PASCO COUNTY STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES SPECIFICATIONS, LATEST EDITION.
2. ALL ON–SITE WATER AND SEWER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER–DEVELOPER.
3. INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE FIRE MARSHAL AND THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS.
4. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THIS APPROVAL DOES NOT INCLUDE ANY WORK IN THE COUNTY RIGHT–OF–WAY. ALL RIGHT–OF–WAY WORK SHALL BE A FUNCTION OF AN APPROVED PASCO RIGHT–OF–WAY USE PERMIT.
5. ALL CLEAR–SITE AREAS SHALL BE KEPT FREE OF ANY SIGNAGE PLANTINGS, TREES, ETC. IN EXCESS OF THREE–AND–A–HALF (3–1/2) FEET IN HEIGHT.
6. NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY COUNTY OR STATE RIGHT–OF–WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT–OF–WAY USE PERMIT.

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	APVD BY
1	10-01-2014	REVISED PER PASCO COUNTY COMMENTS	PS

JOB NO. 0597-0025
LPH 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS
Q.E.

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: HORIZONTAL CONTROL PLAN

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT, ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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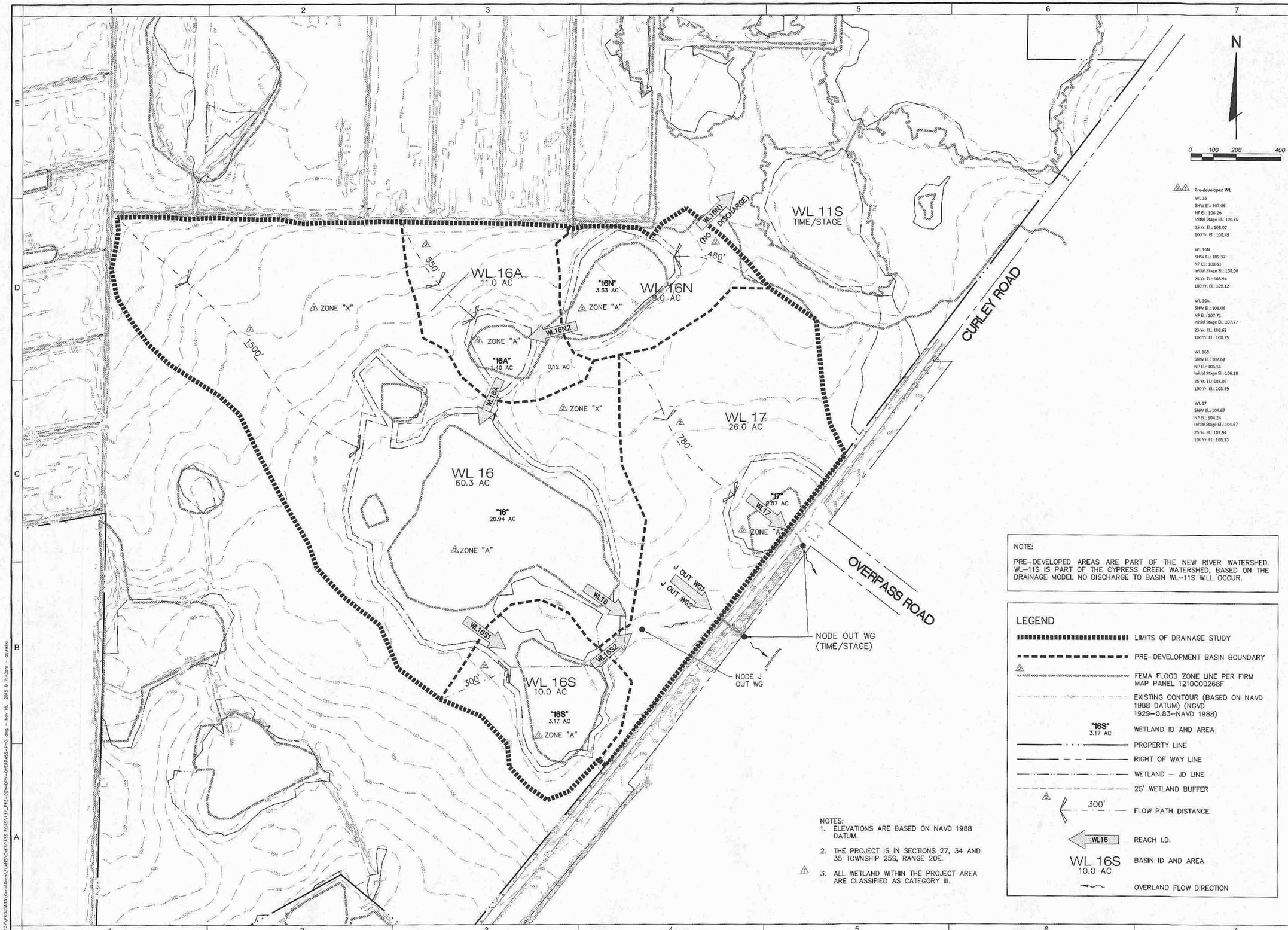

Pre-developed WL

WL 16
SHW El.: 107.06
NP El.: 106.26
Initial Stage El.: 106.26
25 Yr. El.: 108.07
100 Yr. El.: 108.49

WL 16N
SHW El.: 109.37
NP El.: 108.61
Initial Stage El.: 108.06
25 Yr. El.: 108.94
100 Yr. El.: 109.12

WL 16A
SHW El.: 108.06
NP El.: 107.71
Initial Stage El.: 107.77
25 Yr. El.: 108.62
100 Yr. El.: 108.75

WL 16S
SHW El.: 107.62
NP El.: 106.54
Initial Stage El.: 106.18
25 Yr. El.: 108.07
100 Yr. El.: 108.49

WL 17
SHW El.: 104.67
NP El.: 104.24
Initial Stage El.: 104.67
25 Yr. El.: 107.94
100 Yr. El.: 108.33

NOTE:

PRE-DEVELOPED AREAS ARE PART OF THE NEW RIVER WATERSHED. WL-11S IS PART OF THE CYPRESS CREEK WATERSHED, BASED ON THE DRAINAGE MODEL NO DISCHARGE TO BASIN WL-11S WILL OCCUR.

LEGEND

- LIMITS OF DRAINAGE STUDY
- PRE-DEVELOPMENT BASIN BOUNDARY
- FEMA FLOOD ZONE LINE PER FIRM MAP PANEL 1210C00268F
- EXISTING CONTOUR (BASED ON NAVD 1988 DATUM) (NGVD 1929-0.83=NAVD 1988)
- "16S" 3.17 AC — WETLAND ID AND AREA
- PROPERTY LINE
- RIGHT OF WAY LINE
- WETLAND - JD LINE
- 25' WETLAND BUFFER
- 300' — FLOW PATH DISTANCE
- WL16 — REACH I.D.
- WL 16S 10.0 AC — BASIN ID AND AREA
- OVERLAND FLOW DIRECTION

NOTES:
1. ELEVATIONS ARE BASED ON NAVD 1988 DATUM.
2. THE PROJECT IS IN SECTIONS 27, 34 AND 35 TOWNSHIP 25S, RANGE 20E.
3. ALL WETLAND WITHIN THE PROJECT AREA ARE CLASSIFIED AS CATEGORY III.

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	DESIGNED	DRAWN	CHECKED	APP'D BY
3	02-09-2016	REVISED PER PASCO COUNTY COMMENTS	PS	AVS	PS	PS
2	01-09-2016	REVISED PER PASCO COUNTY COMMENTS	PS		PS	
1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS		PS	

JOB NO. 0597-0025
ENV 137
DATE 06-04-2014

DESIGNED FOR: EPPERSON RANCH, LLC
2202 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 286-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: PRE-DEVELOPMENT DRAINAGE MAP

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

SHEET 6 OF 51

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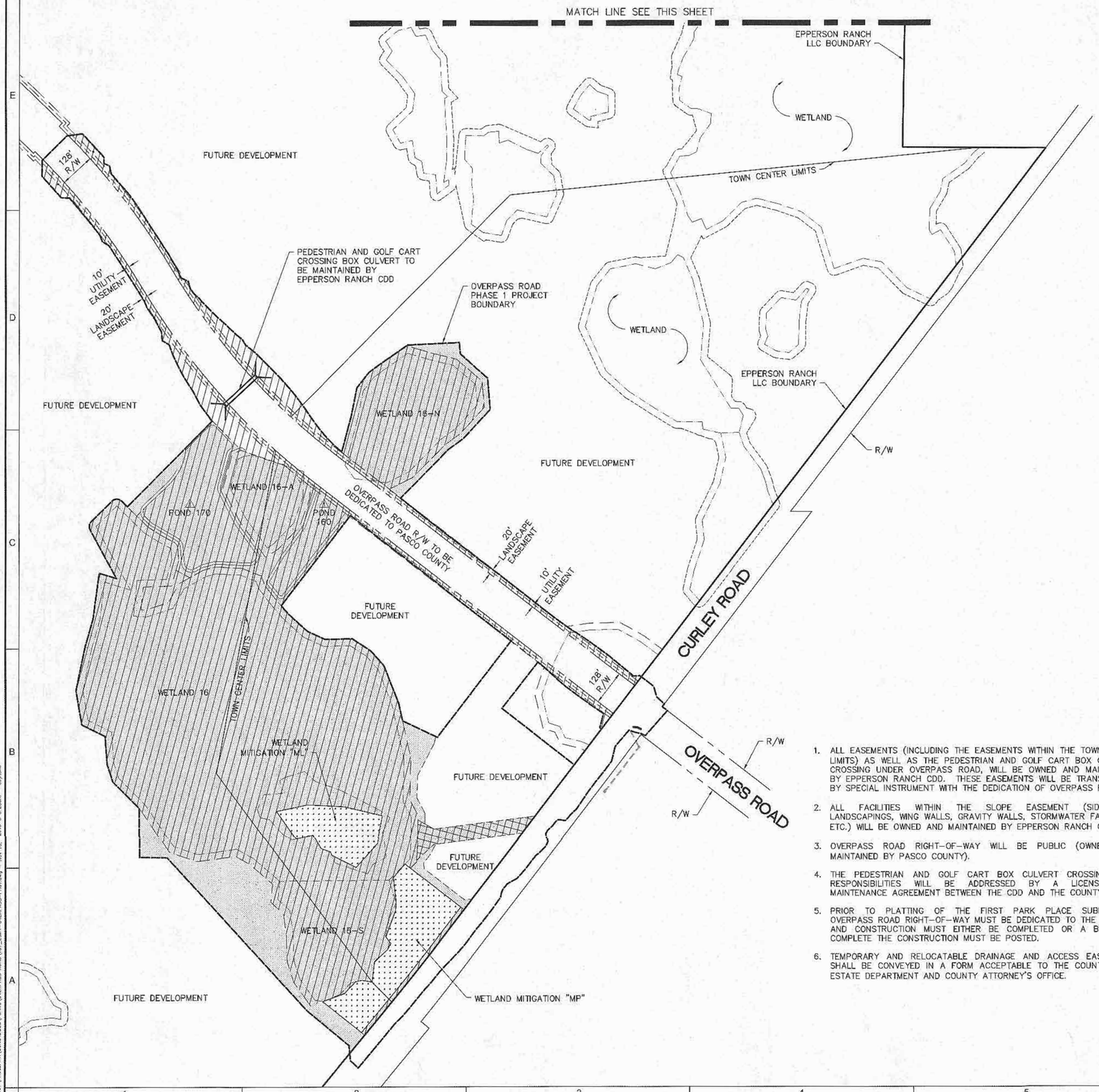

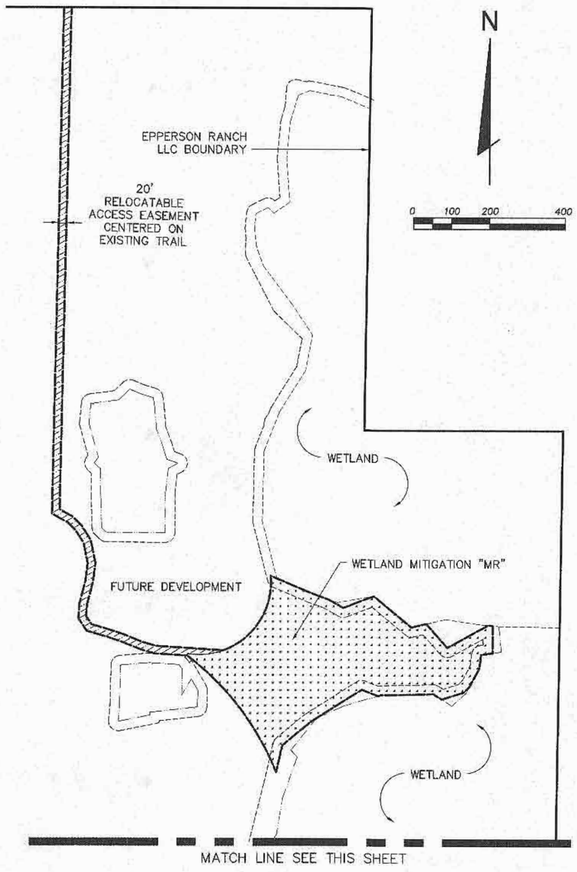

1. ALL EASEMENTS (INCLUDING THE EASEMENTS WITHIN THE TOWNCENTER LIMITS) AS WELL AS THE PEDESTRIAN AND GOLF CART BOX CULVERT CROSSING UNDER OVERPASS ROAD, WILL BE OWNED AND MAINTAINED BY EPPERSON RANCH CDD. THESE EASEMENTS WILL BE TRANSFERRED BY SPECIAL INSTRUMENT WITH THE DEDICATION OF OVERPASS ROAD.
2. ALL FACILITIES WITHIN THE SLOPE EASEMENT (SIDEWALKS, LANDSCAPINGS, WING WALLS, GRAVITY WALLS, STORMWATER FACILITIES, ETC.) WILL BE OWNED AND MAINTAINED BY EPPERSON RANCH CDD.
3. OVERPASS ROAD RIGHT-OF-WAY WILL BE PUBLIC (OWNED AND MAINTAINED BY PASCO COUNTY).
4. THE PEDESTRIAN AND GOLF CART BOX CULVERT CROSSING O&M RESPONSIBILITIES WILL BE ADDRESSED BY A LICENSE AND MAINTENANCE AGREEMENT BETWEEN THE CDD AND THE COUNTY.
5. PRIOR TO PLATTING OF THE FIRST PARK PLACE SUBDIVISION, OVERPASS ROAD RIGHT-OF-WAY MUST BE DEDICATED TO THE COUNTY AND CONSTRUCTION MUST EITHER BE COMPLETED OR A BOND TO COMPLETE THE CONSTRUCTION MUST BE POSTED.
6. TEMPORARY AND RELOCATABLE DRAINAGE AND ACCESS EASEMENTS SHALL BE CONVEYED IN A FORM ACCEPTABLE TO THE COUNTY REAL ESTATE DEPARTMENT AND COUNTY ATTORNEY'S OFFICE.

LEGEND

(1)	OVERPASS ROAD PHASE 1 PROJECT BOUNDARY
(2)	TEMPORARY DRAINAGE EASEMENT TO PASCO COUNTY (MAINTAINED BY EPPERSON RANCH CDD)
(3)	DRAINAGE EASEMENT TO BE DEDICATED TO PASCO COUNTY (MAINTAINED BY EPPERSON RANCH CDD)
	MITIGATION EASEMENT/DRAINAGE EASEMENT TO BE DEDICATED TO PASCO COUNTY (MAINTAINED BY EPPERSON RANCH CDD)
	SLOPE EASEMENT/DRAINAGE EASEMENT DEDICATED TO PASCO COUNTY (MAINTAINED BY EPPERSON RANCH CDD)
	RELOCATABLE ACCESS EASEMENT TO MITIGATION AREA MR (MAINTAINED BY EPPERSON RANCH CDD)
(4)	RELOCATABLE DRAINAGE AND ACCESS EASEMENT TO PASCO COUNTY (MAINTAINED BY EPPERSON RANCH CDD)

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	APP'D BY
1	05-12-2015	REMOVED SUMPS WL 16A-W & WL 16A-E, ADDED PONDS 170 & 160, REVISED PER ACOE COMM.	PS

JOB NO.	0597-0025
EPN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
Q.C.	

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: EASEMENT PLAN

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
3030 STARKEY BOULEVARD, NEW PORT R CHEY, FLORIDA 34655
PHONE: (800) 532 - 1047 FAX: (727) 848 - 3648 WWW.FLDESIGN.COM C.A. NO. 7421

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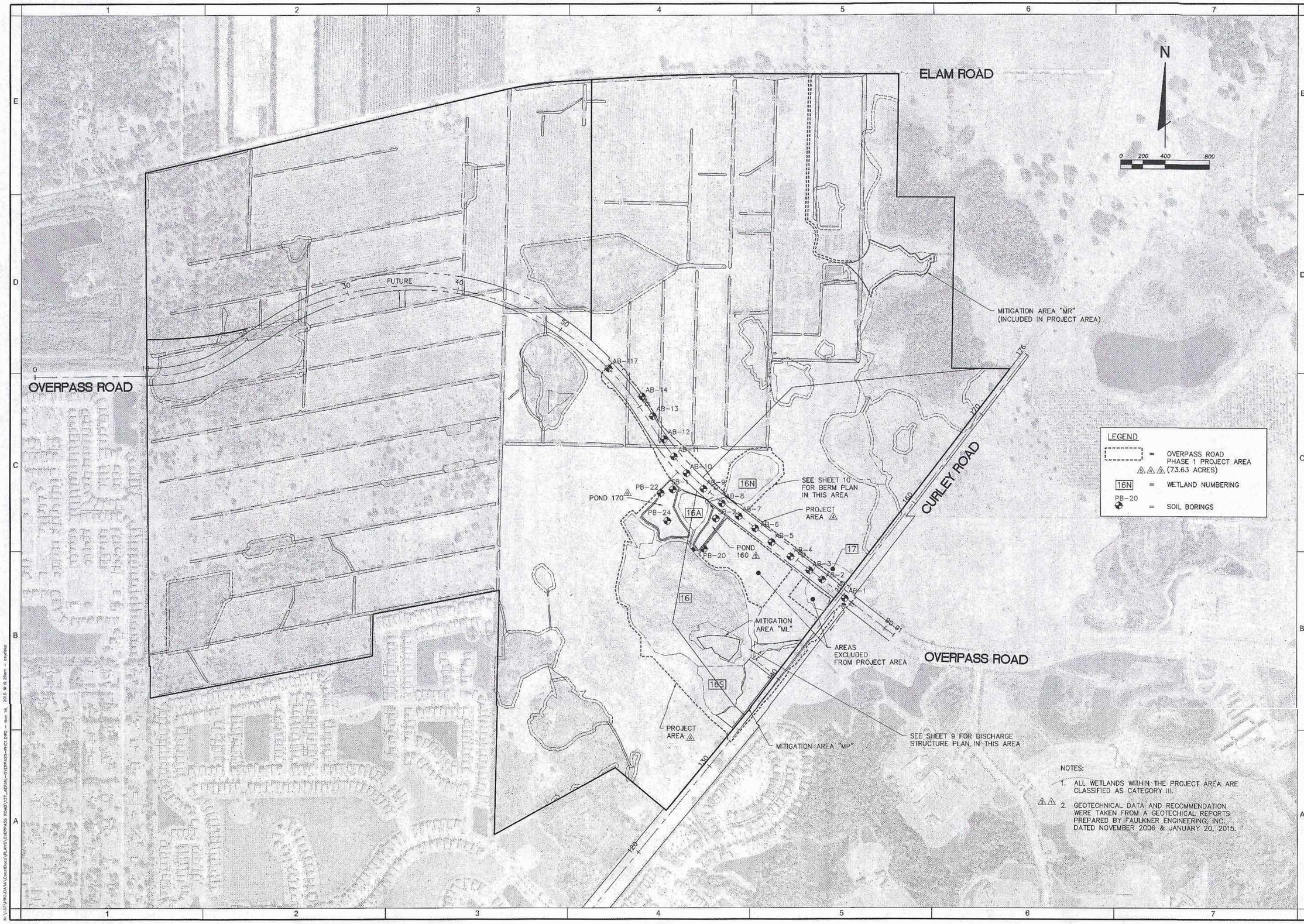

NOTES:

1. ALL WETLANDS WITHIN THE PROJECT AREA ARE CLASSIFIED AS CATEGORY III.
2. GEOTECHNICAL DATA AND RECOMMENDATION WERE TAKEN FROM A GEOTECHICAL REPORTS PREPARED BY FAULKNER ENGINEERING, INC. DATED NOVEMBER 2006 & JANUARY 20, 2015.

PAUL E. SKIDMORE LICENSE NO. 39531 STATE OF FLORIDA PROFESSIONAL ENGINEER 10-20-15

NO.	DATE	REVISIONS		
5	05-12-2015	REVISED PROJECT AREA / BNDY PER ACOE	PS	JOB NO. 0597-0025
4	04-07-2015	ADDED POND 170 & POND 160	AB	SHT. 137
3	02-09-2015	REVISED PROJECT AREA	PS	DATE 06-04-2014
2	01-21-2015	REVISED PER PASCO COUNTY COMMENTS	PS	DESIGNED PS DRAWN AVS
1	01-09-2015	ADDED SOIL BORINGS "SB-1" & "SB-2"	PS	CHECKED PS D.C.
		REVISED PER PASCO COUNTY COMMENTS	PS	APPD BY
		ADDED BORING LOCATIONS		

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1030
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: AERIAL, BORING & PROJECT AREA

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 846-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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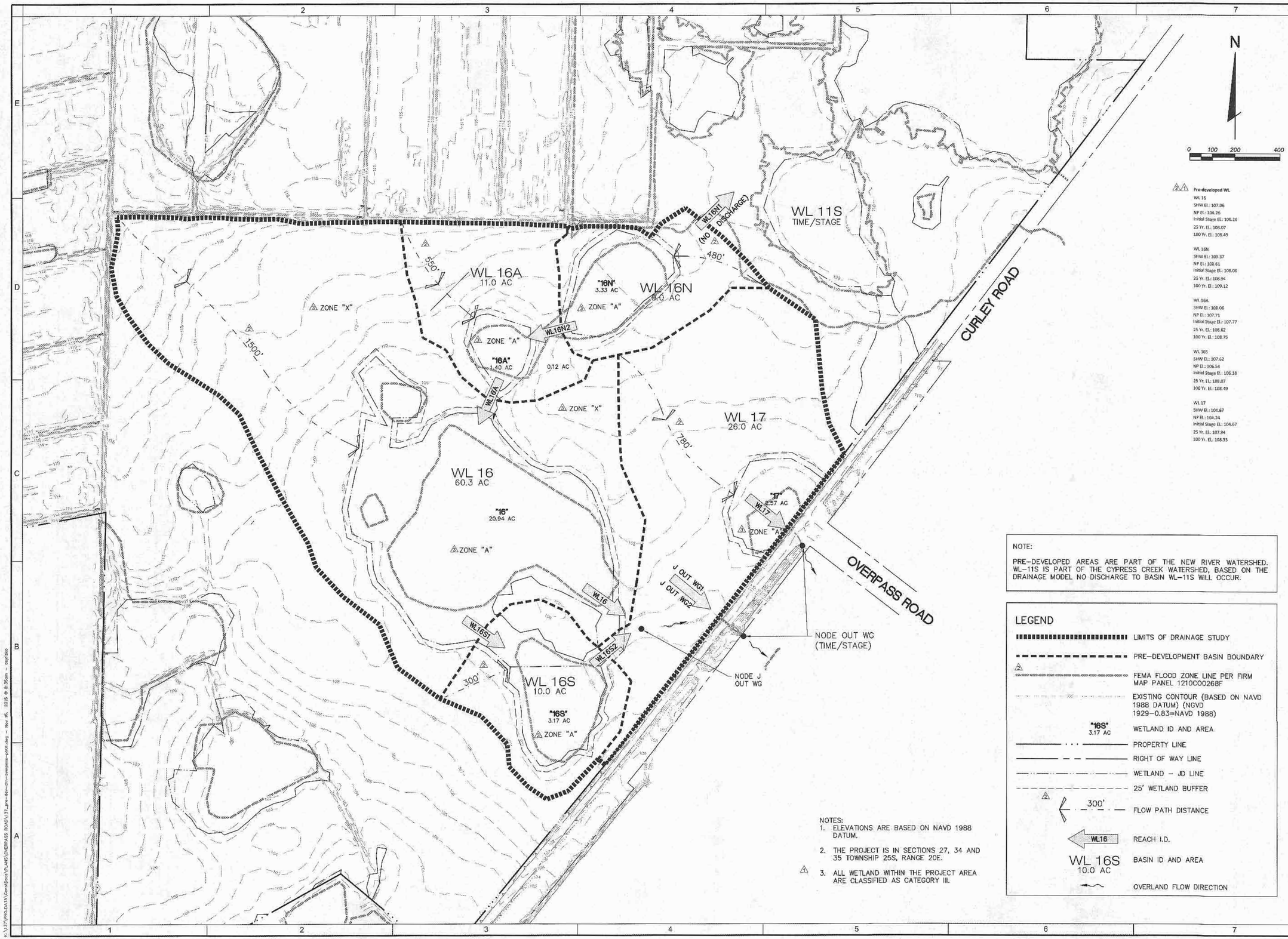

Pre-developed WL

WL 16
SHW El.: 107.06
NP El.: 106.26
Initial Stage El.: 106.26
25 Yr. El.: 108.07
100 Yr. El.: 108.49

WL 16N
SHW El.: 109.37
NP El.: 108.61
Initial Stage El.: 108.06
25 Yr. El.: 108.94
100 Yr. El.: 109.12

WL 16A
SHW El.: 108.06
NP El.: 107.71
Initial Stage El.: 107.77
25 Yr. El.: 108.62
100 Yr. El.: 108.75

WL 16S
SHW El.: 107.62
NP El.: 106.54
Initial Stage El.: 106.18
25 Yr. El.: 108.07
100 Yr. El.: 108.49

WL 17
SHW El.: 104.67
NP El.: 104.24
Initial Stage El.: 104.67
25 Yr. El.: 107.94
100 Yr. El.: 108.33

NOTE:

PRE-DEVELOPED AREAS ARE PART OF THE NEW RIVER WATERSHED. WL-11S IS PART OF THE CYPRESS CREEK WATERSHED, BASED ON THE DRAINAGE MODEL NO DISCHARGE TO BASIN WL-11S WILL OCCUR.

LEGEND

- LIMITS OF DRAINAGE STUDY
- PRE-DEVELOPMENT BASIN BOUNDARY
- FEMA FLOOD ZONE LINE PER FIRM MAP PANEL 1210C00268F
- EXISTING CONTOUR (BASED ON NAVD 1988 DATUM) (NGVD 1929-0.83=NAVD 1988)
- "16S" 3.17 AC — WETLAND ID AND AREA
- PROPERTY LINE
- RIGHT OF WAY LINE
- WETLAND - JD LINE
- 25' WETLAND BUFFER
- 300' — FLOW PATH DISTANCE
- WL16 — REACH I.D.
- WL 16S 10.0 AC — BASIN ID AND AREA
- OVERLAND FLOW DIRECTION

NOTES:
1. ELEVATIONS ARE BASED ON NAVD 1988 DATUM.
2. THE PROJECT IS IN SECTIONS 27, 34 AND 35 TOWNSHIP 25S, RANGE 20E.
3. ALL WETLAND WITHIN THE PROJECT AREA ARE CLASSIFIED AS CATEGORY III.

PAUL E. SKIDMORE LICENSED NO. 37631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO	DATE	REVISION	REVISIONS	DESIGNED	DRAWN	CHECKED	Q.C.
3	02-09-2016	REVISED PER PASCO COUNTY COMMENTS	PS	PS	AVS	PS	
2	01-09-2016	REVISED PER PASCO COUNTY COMMENTS	PS				
1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS				

JOB NO. 0597-0025
SHT. 137
DATE 06-04-2014

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
PRE-DEVELOPMENT DRAINAGE MAP

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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STORM SEWER STRUCTURE SCHEDULE

Structure #1
Type E DBI
Station & O/S: 57+41.25; 45.75' LT
Top El.: 117.33
Slot El.: 115.56
18" Inv. El: 112.61
98' - 18" RCP @ 0.30%

Structure #2
Type E DBI
Station & O/S: 57+41.25; 45.75' RT
Top El.: 117.33
Slot El.: 115.56
18" Inv. El: 112.32 (NE & SE)
214' - 18" RCP @ 0.30%

Structure #3
Type E DBI
Station & O/S: 59+60.00; 48.75' LT
Top El.: 116.62
Slot El.: 115.56
18" Inv. El: 111.97
98' - 18" RCP @ 0.30%

Structure #4
Type E DBI
Station & O/S: 59+60.00; 48.75' RT
Top El.: 116.62
Slot El.: 115.56
18" Inv. El: 111.68 (NW, SE & NE)
215' - 18" RCP @ 0.30%

Structure #5
Type E DBI
Station & O/S: 61+78.11; 48.75' LT
Top El.: 115.93
Slot El.: 114.16
18" Inv. El: 111.33
98' - 18" RCP @ 0.30%

Structure #6
Type E DBI
Station & O/S: 61+78.11; 48.75' RT
Top El.: 115.93
Slot El.: 114.16
18" Inv. El: 111.04 (NW, SE & NE)
165' - 18" RCP @ 0.30%

Structure #7
Type E DBI
Station & O/S: 63+40; 48.75' LT
Top El.: 119.18
Slot El.: 117.41
18" Inv. El: 113.22
98' - 18" RCP @ 0.30%

Structure #8
Type E DBI
Station & O/S: 65+00; 48.75' LT
Top El.: 126.83
Slot El.: 126.08
18" Inv. El: 121.04
10' - 18" RCP @ 0.30%

Structure #9
Type P-S Curb Inlet
Station & O/S: 65+00; 39.25' LT
EOP El.: 126.75
18" Inv. El: 121.01 (NE & SW)
98' - 18" RCP @ 0.30%

Structure #10
Type E DBI
Station & O/S: 65+00; 48.75' RT
Top El.: 126.83
Slot El.: 125.06
18" Inv. El: 120.75 (NE)
18" Inv. El: 119.06 (NW)
163' - 18" RCP @2.00%

Structure #11
Type E DBI
Station & O/S: 63+40; 48.75' RT
Top El.: 119.18
Slot El.: 117.41
18" Inv. El: 112.93 (NE)
18" Inv. El: 110.54 (NW)
18" Inv. El: 115.80 (SE)
24" Inv. El: 110.04 (SW)
34' - 24" RCP @ 0.30%

Structure #12
Type B MH w/ P Bottom, 4' Dia.
Station & O/S: 63+40; 83' RT
Top El.: 115.50
24" Inv. El: 109.93
282' - 24" RCP @ 0.30%

Structure #13
Type B MH w/ P Bottom, 4' Dia.
Station & O/S: 66+10; 135' RT
Top El.: 115.40
24" Inv. El: 109.07
58' - 24" RCP @ 0.30%

Structure #14
Type E DBI
Station & O/S: 66+65; 136.98' RT
Top El.: 115.26
24" Inv. El: 108.90
79' - 24" RCP @ 0.30%

Structure #15
Type E DBI
Station & O/S: 68+40; 48.75' LT
Top El.: 125.99
Slot El.: 125.23
18" Inv. El: 120.70
10' - 18" RCP @ 0.30%

Structure #16
Type P-S Curb Inlet
Station & O/S: 68+40; 39.25' LT
EOP El.: 125.92
18" Inv. El: 120.67 (NE & SW)
88' - 18" RCP @ 0.30%

Structure #17
Type E DBI
Station & O/S: 68+40; 48.75' RT
Top El.: 125.99
Slot El.: 124.24
18" Inv. El: 120.41
71' - 18" RCP @ 0.30%

Structure #18
Type E DBI
Station & O/S: 69+90; 48.75' LT
Top El.: 117.26
Slot El.: 115.49
18" Inv. El: 112.42
98' - 18" RCP @ 0.30%

Structure #19
Type E DBI
Station & O/S: 69+90; 48.75' RT
Top El.: 117.26
Slot El.: 115.49
18" Inv. El: 112.13
82' - 18" RCP @ 0.30%

Structure #20
Type B MH w/ P Bottom, 4' Dia.
Station & O/S: 69+10; 51.50' RT
Top El.: 122.07
18" Inv. El: 111.89 (SW & SE)
18" Inv. El: 118.98 (NW)
32' - 18" RCP @ 0.30%

Structure #21
Type B MH w/ P Bottom, 4' Dia.
Station & O/S: 69+10; 83.00' RT
Top El.: 119.00
18" Inv. El: 111.80 (NW & NE)
32' - 18" RCP @ 0.30%

Structure #22
Type B MH w/ P Bottom, 4' Dia.
Station & O/S: 67+40; 135' RT
Top El.: 115.76
18" Inv. El: 111.75 (SE)
24" Inv. El: 108.66 (NW)
24" Inv. El: 105.11 (SW)
35' - 24" RCP @ 0.30%

Structure #23
FES
Station & O/S: 67+40; 170.17' RT
24" Inv. El: 105.00

Structure #24
Type E DBI
Station & O/S: 83+90; 48.75' LT
Top El.: 111.26
Slot El.: 109.49
18" Inv. El: 106.21
280' - 18" RCP @ 0.30%

Structure #25
Type E DBI
Station & O/S: 83+90; 48.75' RT
Top El.: 111.26
Slot El.: 109.49
18" Inv. El: 106.21
98' - 18" RCP @ 0.30%

Structure #26
Type E DBI
Station & O/S: 81+00; 48.75' LT
Top El.: 111.21
Slot El.: 109.44
18" Inv. El: 106.63
98' - 18" RCP @ 0.30%

Structure #27
Type E DBI
Station & O/S: 81+00; 48.75' RT
Top El.: 111.21
Slot El.: 109.44
18" Inv. El: 106.34 (NE)
18" Inv. El: 105.34 (SE)
24" Inv. El: 104.84 (NW)
265' - 24" RCP @ 0.30%

Structure #28
Type E DBI
Station & O/S: 78+35; 48.75' LT
Top El.: 112.19
Slot El.: 110.43
18" Inv. El: 106.33
98' - 18" RCP @ 0.30%

Structure #29
Type E DBI
Station & O/S: 78+35; 48.75' RT
Top El.: 112.19
Slot El.: 110.43
18" Inv. El: 106.04 (NE)
24" Inv. El: 104.05 (SE)
30" Inv. El: 103.55 (NW)
265' - 30" RCP @ 0.20%

Structure: #30
Type E DBI
Station & O/S: 75+70; 48.75' LT
Top El.: 113.18
Slot El.: 111.41
18" Inv. El: 107.90
98' - 18" RCP @ 0.30%

Structure #31
Type E DBI
Station & O/S: 75+40; 40.08' RT
Top El.: 113.18
Slot El.: 111.41
18" Inv. El: 107.61 (NE)
30" Inv. El: 103.01 (NW & SE)
400' - 30" RCP @ 0.10%

Structure #32
Type E DBI
Station & O/S: 71+70; 48.75' LT
Top El.: 112.81
Slot El.: 111.04
18" Inv. El: 108.00
98' - 18" RCP @ 0.30%

Structure #33
Type E DBI
Station & O/S: 71+70; 48.75' RT
Top El.: 112.81
Slot El.: 111.04
18" Inv. El: 107.71 (NE)
30" Inv. El: 102.21 (SE)
30" Inv. El: 101.21 (SW)
61' - 30" RCP @ 0.20%

Structure #34
FES
Station & O/S: 71+70; 109.54' RT
30" Inv. El: 101.09

Structure #35
FES
Station & O/S: 84+67.53; 77.61' LT' RT
36" Inv. El: 104.67
145' - 36" RCP @ 0.30%

Structure #36 (Remove Existing Endwall)
Type E DBI w/ J Bottom, 5'x5' Square
Station & O/S: 84+86.93; 64.04' RT
Top El.: 109.59
36" Inv. El: 104.24 (SE) Existing
36" Inv. El: 104.24 (W)
36" Inv. El: 104.24 (NE)
31' - 36" RCP @ 1.40%

Structure #37
FES
Station & O/S: 84+66.84; 87.31' RT
36" Inv. El: 104.67

Structure # CW-16N
Type H DBI w/ Slot & Alt. A Bottom, 6' Dia
Station & O/S: 71+34.04; 76.32' LT
Top El.: 111.75
Weir El.: 109.37
Weir Length: 12'
2.75" Dia Orifice, Inv. El: 108.61
36" Inv. El: 106.72
172' - 36" RCP @ 0.25%

Structure # CW-16N1
FES
Station & O/S: 70+45.43; 73.54' RT
36" Inv. El: 106.29

Structure # CW-16
Type H DBI w/ slots and Skimmer Blade
See Sheet 9 for Location
Top El.: 108.34
Weir El.: 107.06
Weir Length: 12'
5.5" Dia. Orifice Inv. 106.26
29"X45" Inv. El: 103.93
170' - 29"X45" RCP @ 0.10%

Structure # CW-16A
FES
See Sheet 9 for Location
29"X45" Inv. El: 103.76

Structure # CW-16S
Type H DBI with slots and Skimmer Blade
See Sheet 9 for Location
Top El.: 108.34
Weir El.: 107.62
Weir Length: 9'
29"X45" Inv. El.: 103.93
170' - 29"X45" RCP @ 0.10%

Structure # CW-16S1
FES
See Sheet 9 for Location
29"X45" Inv. El: 103.78

Structure # CW-17D
Type H DBI (4 Grate) with slots & Skimmer Blades
Top El.:110.60
Weir #1 El.: 108.00
Weir #2 El.: 107.56
34"X53" Inv. El.: 106.20

Structure #17I
FES
See sheet 7A for location
34"X53" Inv. El.: 106.00

Post-developed WL

WL 16
SHW EL: 107.06
NP El.: 106.26

Initial Stage El.: 106.70
25 Yr. El.: 108.34
100 Yr. El.: 108.71

WL 16N
SHW El.: 109.37
NP El.: 108.61

Initial Stage El.: 109.18
25 Yr. El.: 109.92
100 Yr. El.: 110.13

WL 16A
SHW El.: 108.06
NP El.: 107.71

Initial Stage El.: 107.77
25 Yr. El.: 108.06
100 Yr. El.: 108.72

WL 16S
SHW El.: 107.62
NP El.: 106.34

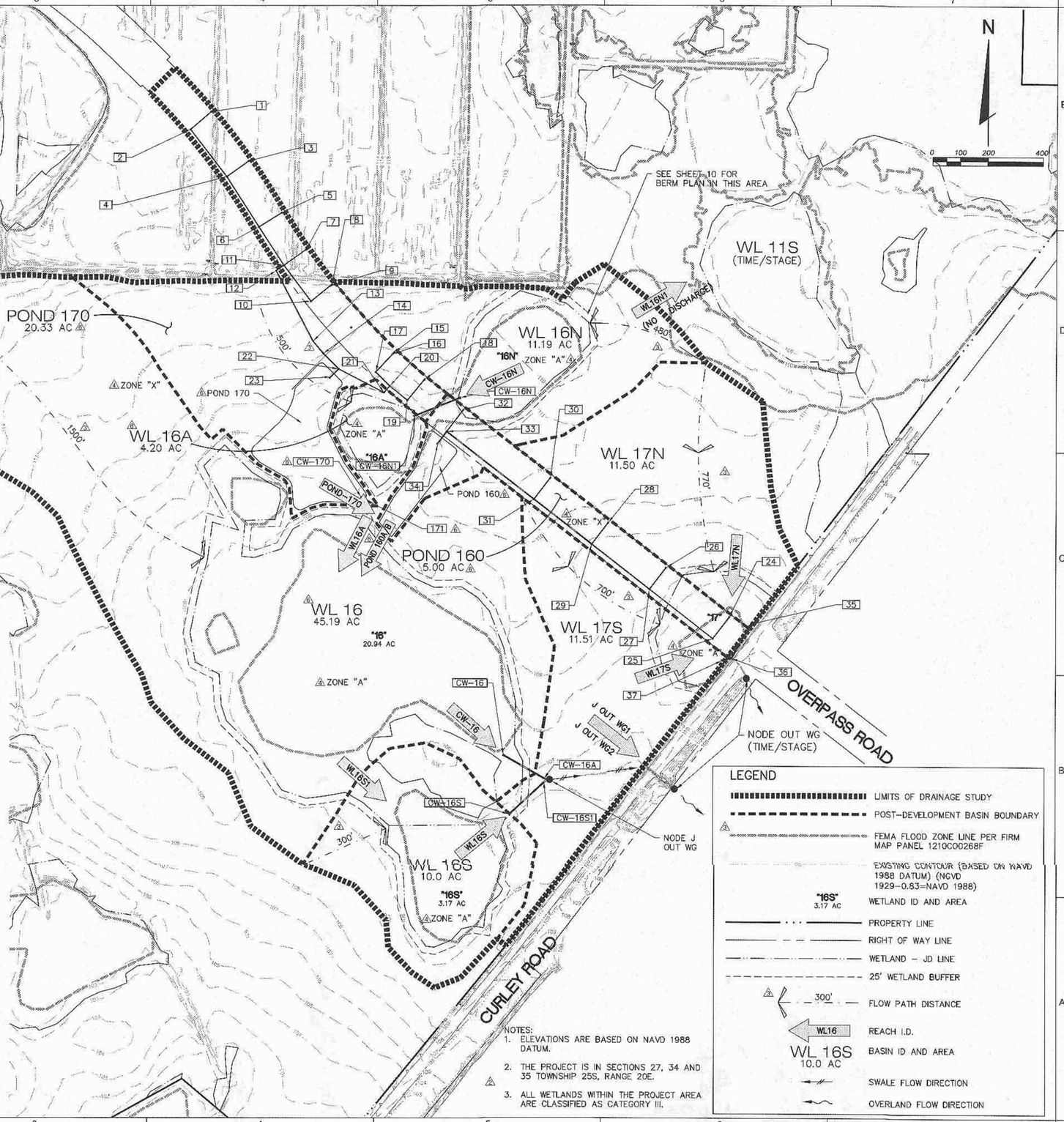
Initial Stage El.: 106.78
25 Yr. El.: 108.34
100 Yr. El.: 108.71

WL 17N
SHW El.: 104.67
NP El.: 104.24

Initial Stage El.: 104.67
25 Yr. El.: 108.12
100 Yr. El.: 108.73

WL 17S
SHW El.: 104.67
NP El.: 104.24

Initial Stage El.: 104.67
25 Yr. El.: 108.09
100 Yr. El.: 108.68



NOTES:
1. ELEVATIONS ARE BASED ON NAVD 1988 DATUM.
2. THE PROJECT IS IN SECTIONS 27, 34 AND 35 TOWNSHIP 25S, RANGE 20E.
3. ALL WETLANDS WITHIN THE PROJECT AREA ARE CLASSIFIED AS CATEGORY III.

LEGEND

- LIMITS OF DRAINAGE STUDY
- POST-DEVELOPMENT BASIN BOUNDARY
- FEMA FLOOD ZONE LINE PER FIRM MAP PANEL 1210C00268F
- EXISTING CONTOUR (BASED ON NAVD 1988 DATUM) (NGVD 1929-0.83=NAVD 1988)
- "16S" 3.17 AC — WETLAND ID AND AREA
- PROPERTY LINE
- RIGHT OF WAY LINE
- WETLAND – JD LINE
- 25' WETLAND BUFFER
- 300' — FLOW PATH DISTANCE
- WL16 — REACH I.D.
- WL 16S 10.0 AC — BASIN ID AND AREA
- SWALE FLOW DIRECTION
- OVERLAND FLOW DIRECTION

PAUL E. SKIDMORE — LICENSE NO. 39834 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

JOB NO.	APPV.	DATE	DESIGNED	DRAWN	CHECKED	Q.C.
0597-0025	PS	06-04-2014	PS	AVS	PS	

NO.	DATE	REVISION	BY
6	05-12-2015	REMOVED SUMPS WL 16A-W & WL 16A-E, ADDED PONDS 170 & 160, REVISED PER ACOE COMM.	PS
5	02-19-2015	REVISED PER PASCO COUNTY COMMENTS	PS
4	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
3	01-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
2	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS
1	08-01-2014	REVISED STRUCTURE SCHEDULE	PS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: POST-DEVELOPMENT DRAINAGE MAP

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
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PHONE: (800) 532-1047 FAX: (727) 846-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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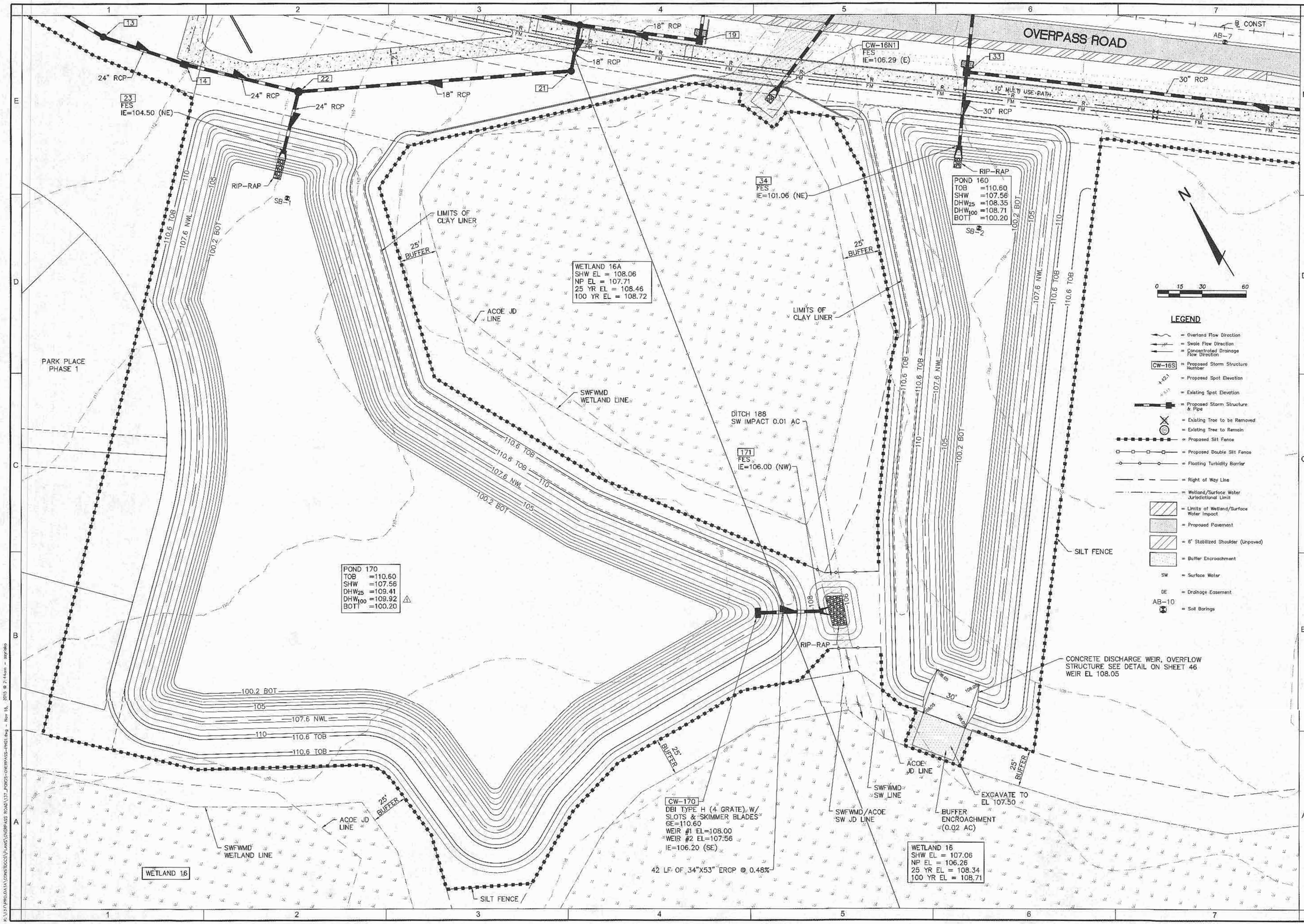
K:\537\PRODUCTION\Overpass Road\PLANS\OVERPASS ROAD\07_POST-DEV-DRN-OVERPASS-Post.dwg — Nov 16, 2015 @ 7:13am — mgrisko



PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	APPD BY
1	06-02-2015	REVISED PER SWFWMD COMMENTS	PS

JOB NO.	DESIGNED	DRAWN	CHECKED	Q.C.
0597-0025	137	06-04-2014	PS	AVS

DESIGNED FOR: EPPERSON RANCH, LLC
2302 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: PONDS PLAN & DETAILS

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PHONE: (800) 532 - 1047 FAX: (727) 848 - 3648 WWW.FLDESIGN.COM C.A. NO. 7421

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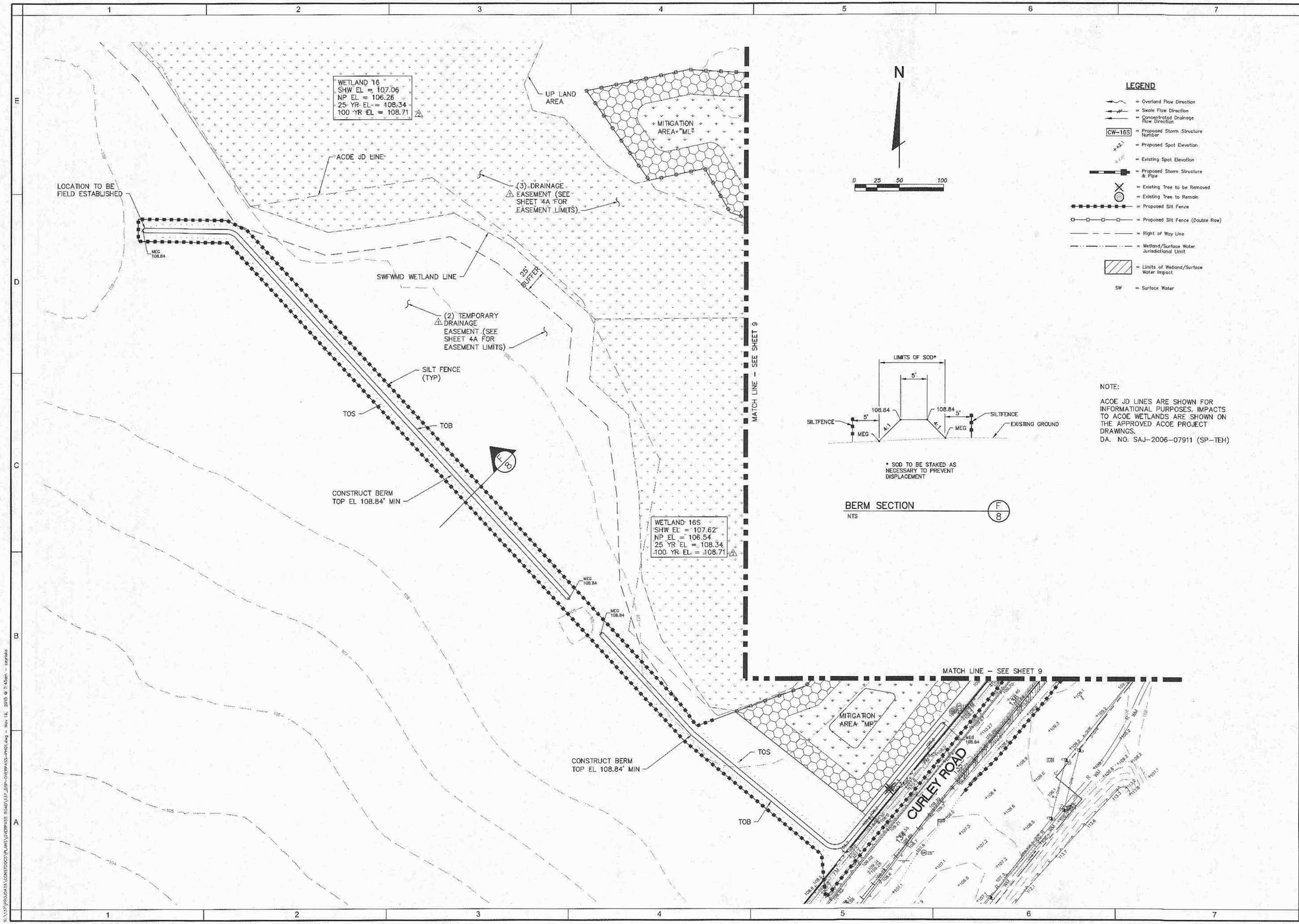

NOTE:

ACOE JD LINES ARE SHOWN FOR INFORMATIONAL PURPOSES. IMPACTS TO ACOE WETLANDS ARE SHOWN ON THE APPROVED ACOE PROJECT DRAWINGS.
DA. NO. SAJ-2006-07911 (SP-TEH)

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO	DATE	REVISIONS	BY
2	05-12-2015	REVISED DESIGN WATER LEVELS DUE TO ACOE DRAINAGE COMMENTS	PS
1	04-07-2015	ADDED EASEMENT LIMITS	AB

JOB NO. 0597-0025
FPN 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS
Q.C.

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 286-8078

PROJECT NAME
EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME
DISCHARGE STRUCTURE PLAN (ONE)

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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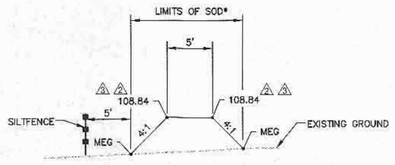
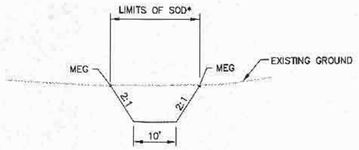
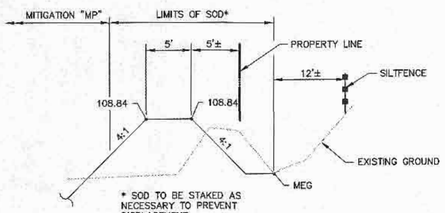


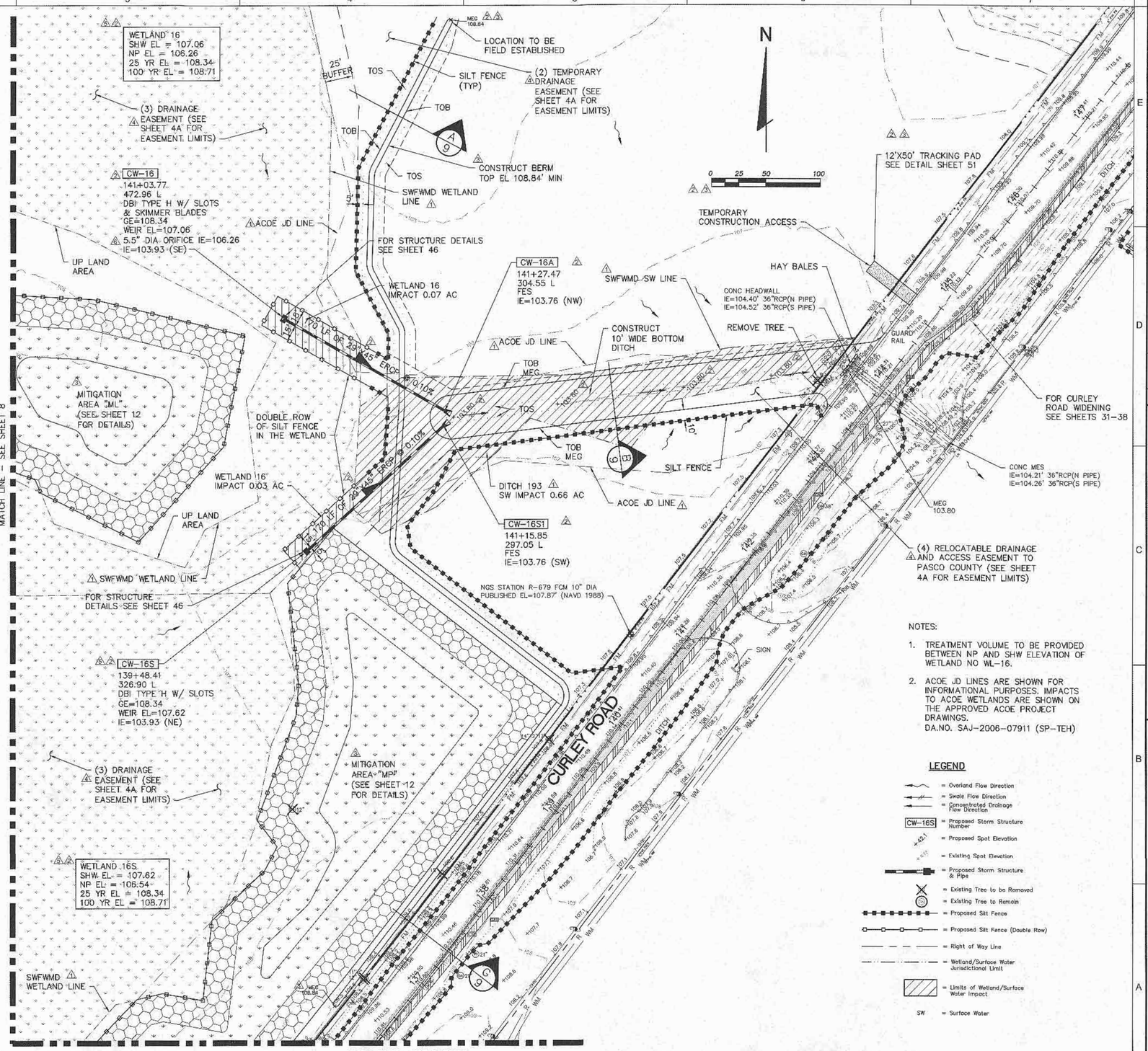
BERM SECTION (A/9)
NTS



SWALE SECTION (B/9)
NTS



BERM SECTION (G/9)
NTS



NOTES:

1. TREATMENT VOLUME TO BE PROVIDED BETWEEN NP AND SHW ELEVATION OF WETLAND NO WL-16.
2. ACOE JD LINES ARE SHOWN FOR INFORMATIONAL PURPOSES. IMPACTS TO ACOE WETLANDS ARE SHOWN ON THE APPROVED ACOE PROJECT DRAWINGS. DA.NO. SAJ-2006-07911 (SP-TEH)

LEGEND

- = Overland Flow Direction
- = Swale Flow Direction
- = Concentrated Drainage Flow Direction
- CW-16S = Proposed Storm Structure Number
- +42.1 = Proposed Spot Elevation
- +42.1 = Existing Spot Elevation
- = Proposed Storm Structure & Pipe
- = Existing Tree to be Removed
- = Existing Tree to Remain
- = Proposed Silt Fence
- = Proposed Silt Fence (Double Row)
- = Right of Way Line
- = Wetland/Surface Water Jurisdictional Limit
- = Limits of Wetland/Surface Water Impact
- SW = Surface Water

PAUL E. SKOGRE LICENSE NO. 56631 STATE OF FLORIDA PROFESSIONAL ENGINEER

DATE	BY	DESCRIPTION
06-02-2015	PS	REVISED PER SWFWMD COMMENTS
06-12-2015	PS	REVISED DESIGN WATER LEVELS DUE TO ACOE DRAINAGE COMMENTS
04-07-2015	AB	ADDED EASEMENT LIMITS
12-17-2014	PS	ADDED MITIGATION AREAS "MP" & "ML", BERM LOCATION, REVISED PER SWFWMD COMMENTS
06-16-2014	PS	REVISED PER PASCO COUNTY COMMENTS
07-18-2014	PS	SWFWMD JD IMPACTS ADDED/REVISED

PROJECT 0597-0025 | DRAWN PS | APP'D PS | DATE 06-04-2014 | SCALE AS NOTED | SHEET NO. 137

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 286-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: DISCHARGE STRUCTURE PLAN (TWO)

FLORIDA DESIGN CONSULTANTS, INC.
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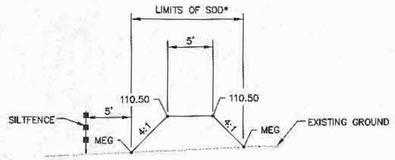
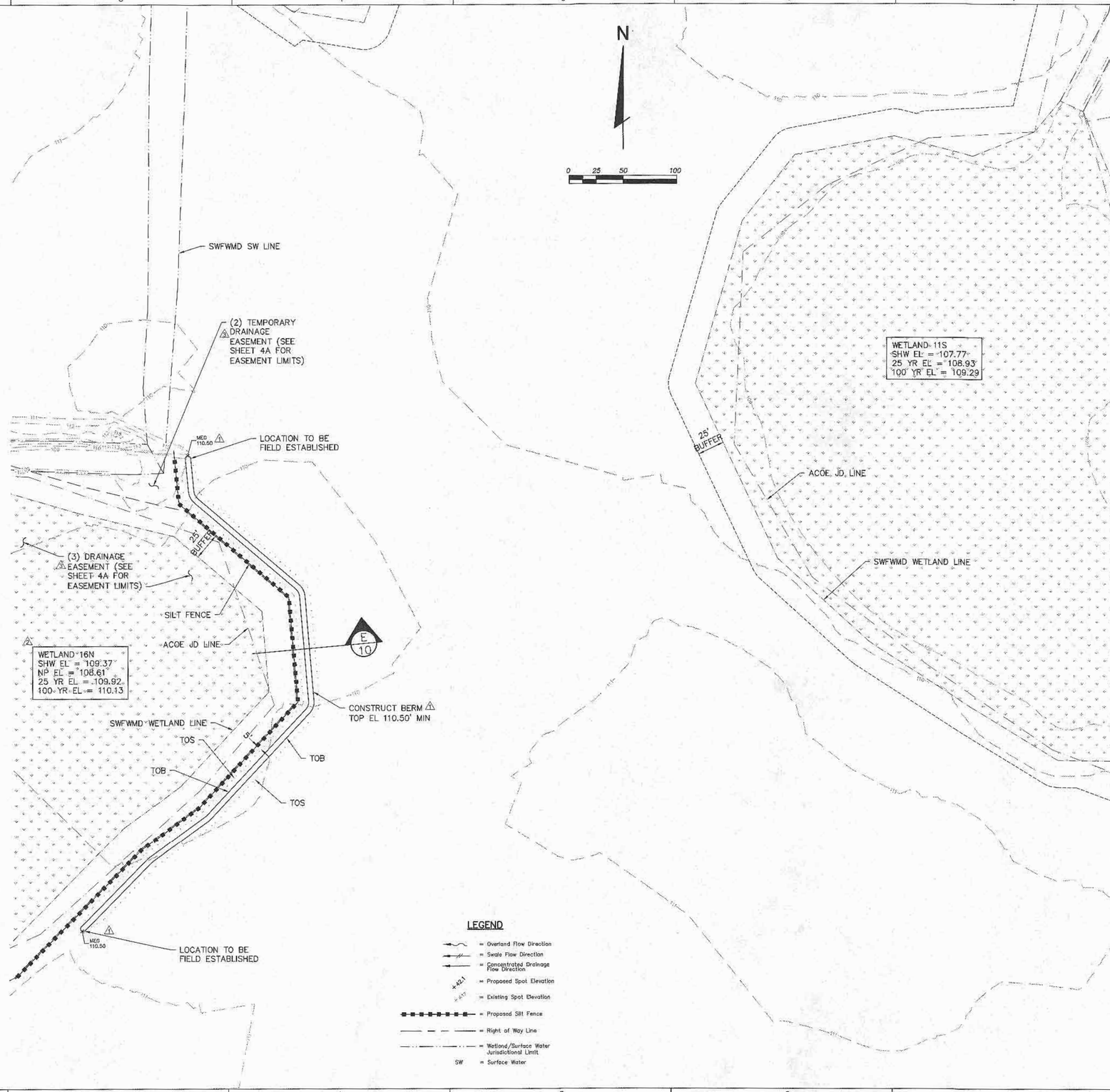


* SOD TO BE STAKED AS NECESSARY TO PREVENT DISPLACEMENT

BERM SECTION (E/10)

NTS



LEGEND

- = Overland Flow Direction
- = Swale Flow Direction
- = Concentrated Drainage Flow Direction
- +42.1 = Proposed Spot Elevation
- 42.1 = Existing Spot Elevation
- = Proposed Silt Fence
- = Right of Way Line
- = Wetland/Surface Water Jurisdictional Limit
- SW = Surface Water

PAUL E. SKIDMORE LICENSE NO. 49634 STATE OF FLORIDA PROFESSIONAL ENGINEER 11-20-15

JOB NO	0597-0025			
DWN	137			
DATE	06-04-2014			
DESIGNED	TDS/AM			
CHECKED	PS	AB	PS	PS
DRAWN BY	AVS	PS	PS	PS
CHECKED BY	PS	PS	PS	PS
APPR BY				
DATE	12-17-2014	01-09-2015	04-07-2015	
REVISIONS	SWFWMD COMMENTS	BERM LOCATION & ELEVATION REVISED PER	REVISED PER PASCO COUNTY COMMENTS	ADDED EASEMENT LIMITS
NO.	1	2	3	4

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-3078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: BERM PLAN

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
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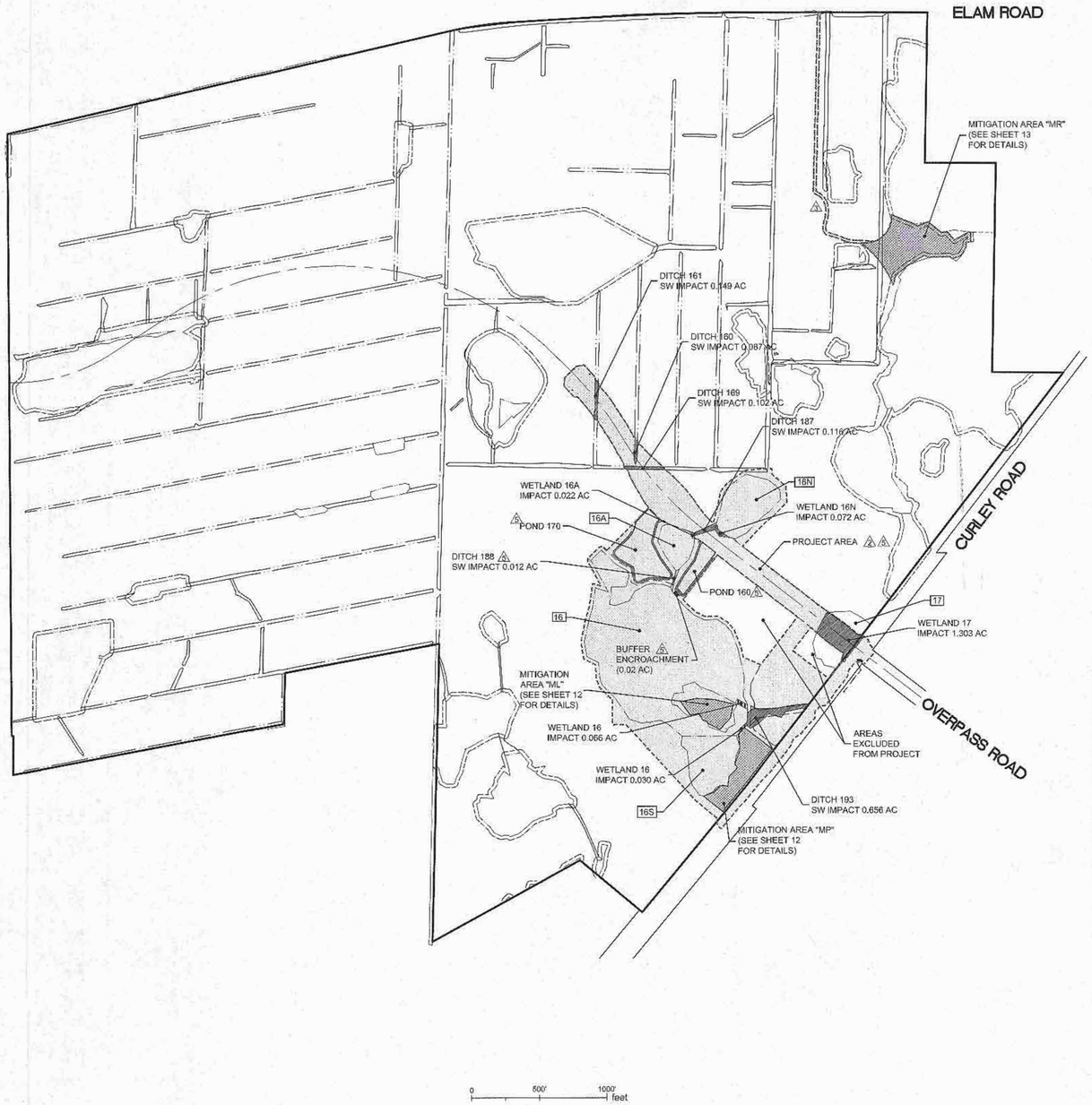


Mitigation Location Map

WETLAND MITIGATION MONITORING & MAINTENANCE NOTES

All the following items will be included in the mitigation monitoring and maintenance program:

A. Monitoring and maintenance will be performed for a minimum of 3 years for herbaceous areas and 5 years for the forested areas. Maintenance will occur eight times per year for years one and two, six times per year for years three and four and four times per year thereafter as needed.
Monitoring will be done semi-annually and reported annually; Events should occur between March 1 and November 30;
Monitoring reports will be submitted to SWFWMD and to COE within 30 days following the monitoring event at the annual anniversary. At a minimum, monitoring reports will address:

1. Percent survival of planted species.
2. Number of plants replanted if necessary to meet 85 they were planted.
3. Water quality
   a) Visual observations
   b) Lab data if necessary, i.e., salinity, conductivity, pH, etc.
4. Total plant cover
5. Plant diversification and natural recruitment (list species present)
6. Depth of water at monitoring event
7. Soil stabilization measures used
8. Permanently marked photo stations
9. Wildlife usage
10. Overall ecological evaluation
11. Problems encountered and corrective actions taken or needed
12. Date planted and number of planted materials used

B. Maintenance shall mean the removal of nuisance or exotic species. Nuisance species coverage must not exceed 10 %. (cattails, willow, primrose willow, water hyacinths, Sesbania spp. dogfennel, Brazilian pepper, etc.) Contactor should avoid use of herbicides if possible. All weed control should cease one year prior to release by SWFWMD.

C. Survival must be guaranteed for each planted species. The area will be replanted annually if species survivorship falls below 85%. 50% plant cover will be achieved at the end of year one, 70% by the end of year two and 85% plant cover of non-nuisance wetland species will be achieved by the end of the third year. Replanting may be needed to achieve these values. No more than 10% of the total area coverage shall be upland or nuisance species.

D. Monitoring and maintenance will continue until SWFWMD permitted success criteria are achieved and the areas are released by SWFWMD. Reconstruction of the site design may be necessary to achieve functioning wetlands.

E. Prior to any wetland impact, SWFWMD must receive appropriate financial surety for the mitigation completion.

MISCELLANEOUS MITIGATION NOTES:

Plants will be installed in random patterns at the contractor's discretion unless otherwise directed by the plans or by the mitigation designer.

The Mitigation areas will be considered as conservation areas. Plants will be installed at elevations most conductive for their development. Planting ranges are depicted on the attached list.

Grades and slopes shown on the mitigation areas may be field altered to insure that water levels will be achieved which result in optimal plant survival and habitat value. However, grade changes must be approved by appropriate agencies.

Minimum plant sizes:
Herbs: 4" potted material or bare root equivalent.
Shrubs: one gallon pots
Trees: one gallon pots in herbaceous areas, 3 gallon pots in forested areas

Potted, nursery grown material will be used, unless otherwise approved in advance.
Plants will be as shown on the attached list.

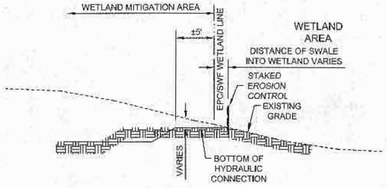
All mitigation areas will receive plants on 3 foot centers. In herbaceous areas, three percent of this total will be shrubs and trees to increase vegetative diversity. The forested areas will receive herbs on 3' centers, trees on 9' centers and shrubs on 12' centers.

Wetland topsoil from approved impacts 11S,11SE,and 17 will be used in the mitigation areas L,M,N,P,R, and U for all areas, The contractor will provide at least 24" of sandy, non-clay material above any present clay layer.

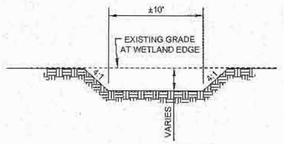
MITIGATION CONSTRUCTION PROCESS NOTES

These pasture uplands will be scraped to elevations depicted. This should be completed within 90 days following initiation of construction at the first wetland impact of that phase. Suitable soils should be provided (see notes on this sheet).

Planting of the mitigation and woody buffers should occur within 60 days followlng completion of the mitigation grading, assuming suitable hydrology is present. Notification of planting completion should be provided to SWFWMD. A monitoring schedule will be arranged with SWFWMD.



GENERIC 10' HYDRAULIC CONNECTION BETWEEN MITIGATION AREA AND WETLAND



NOTES:

1. DEPTH OF CONNECTIONS WILL VARY (±12") DEPENDING ON EXISTING GRADES, WETLAND HYDROPERIODS AND PROPOSED MITIGATION GRADES.
2. DETERMINATION AS TO WHETHER HYDRAULIC CONNECTIONS ARE NEEDED AND WHERE THEY WILL BE LOCATED WILL BE BASED ON A CASE-BY-CASE ASSESSMENT OF EACH MITIGATION AREA AT THE TIME OF CONSTRUCTION PLANS PREPARATION. THEY WILL BE INSTALLED AT LOCATIONS TO MINIMIZE WETLAND AND TREE DISTURBANCE. ANY DISTURBED AREAS WILL BE PLANTED WITH WETLAND VEGETATION CONCURRENTLY WITH MITIGATION PLANTINGS AND MAINTAINED ACCORDINGLY.
3. EPPERSON RANCH CDD WILL BE RESPONSIBLE FOR OPERATION & MAINTENANCE OF MITIGATION AREAS.

WOODY BUFFER PLANTING LIST

TREES		Approximate Relative %
Slash Pine*	(Pinus elliottii)	60
~~Sweetgum~~	~~(Liquidambar styraciflua)~~	~~30~~
Elm	(Ulmus americana)	10
SHRUBS		
Wax Myrtle*	(Myrica cerifera)	60
Small Viburnum	(Viburnum obovatum)	10
Beauty Bush	(Callicarpa americana)	30

*DOMINANT SPECIES

TREES (3 GALLON) TO BE PLANTED ON 10' CENTERS, SHRUBS (1 GALLON) TO BE INTERSPERSED, 2 PER TREE. BUFFER PLANTING TO OCCUR WHERE MITIGATION AREA IS ADJACENT TO DEVELOPMENT (e.g., LOTS, ROADS, COMMERCIAL PARCELS), SEE LOCATION PLAN VIEWS.

ENGINEER OF RECORD DOES NOT CERTIFY TO THE ACCURACY OR COMPLETENESS OF THIS MITIGATION PLAN

		CSB NO	0597.0025
		SHEET	137
05-12-2015	REVISED PROJECT AREA AND WETLAND	DESIGNED	PS
04-07-2015	IMPACTS DUE TO ACOE DRAINAGE COMMENTS	DATE	06-04-2014
02-09-2015	REVISED PROJECT AREA	DRAWN	AB
01-09-2015	REVISED PER PASCO COUNTY COMMENTS	CHECKED	PS
NO.	REVISED PER PASCO COUNTY COMMENTS	APPROVED	PS
	DATE		

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: IMPACT AREA - MITIGATION PLAN

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
3030 STARKEY BOULEVARD, NEW PORT R CHEY, FLORIDA 34655
PHONE: (800) 532 - 1047 FAX: (727) 848 - 3648 WWW.FLDESIGN.COM C.A. NO. 7421

SHEET 11 OF 51

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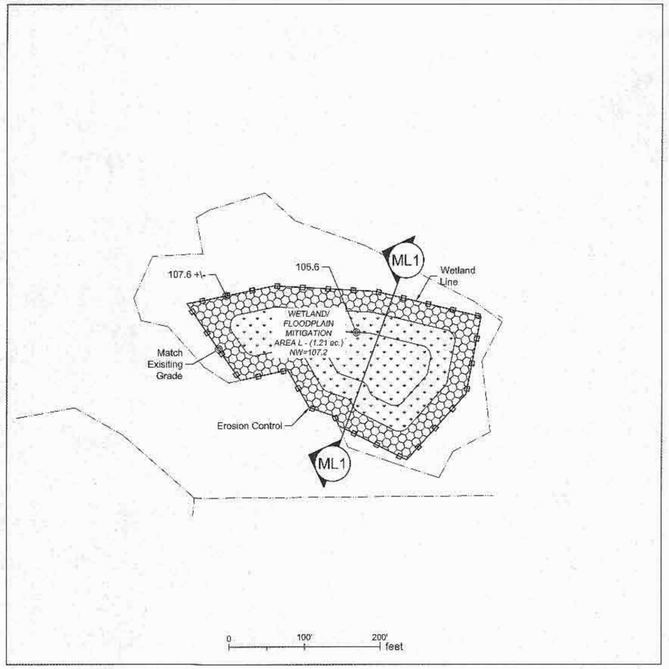
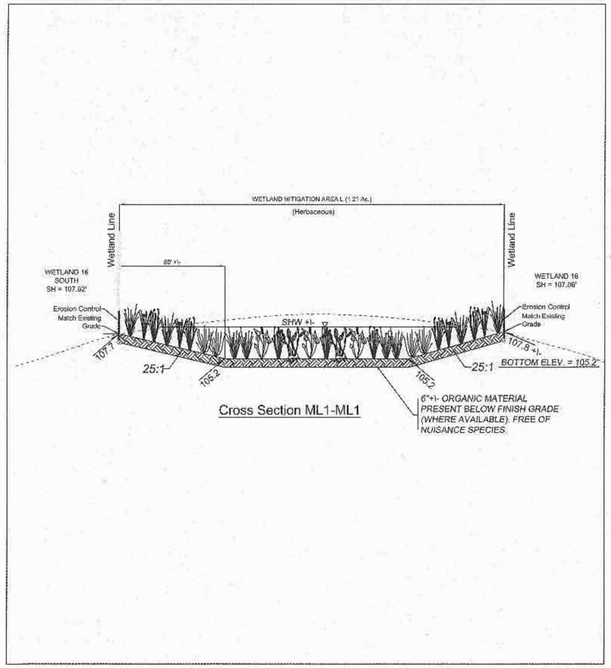


Mitigation Area ML Grading Plan



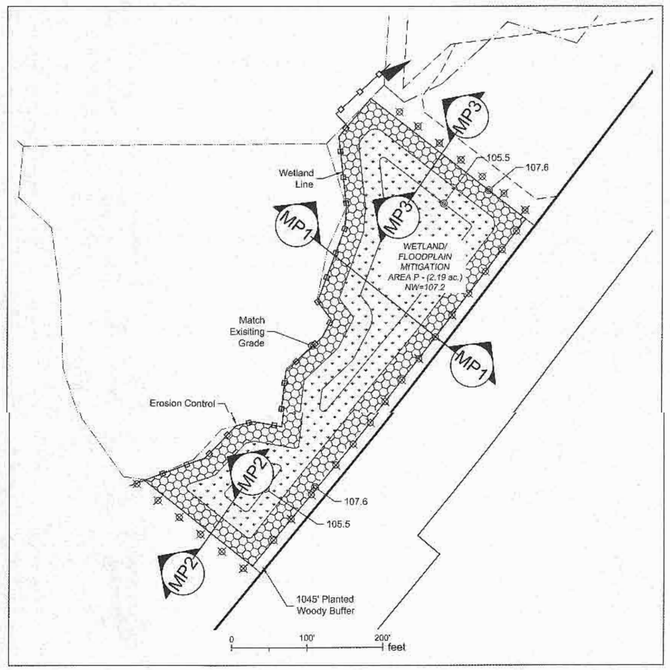
Cross Section ML1-ML1

Mitigation Area ML Cross Section

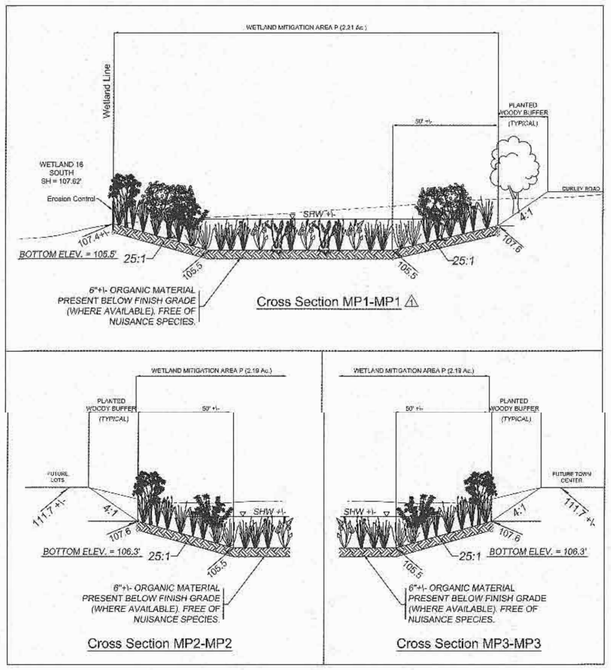
Epperson Project, Mitigation Area - ML (1.21 ac.) (Herbaceous)

Zone	Elevation	Scientific Name	Common Name	Acres	Quantity	Size	Spacing
UPPER RANGE	107.6 to 105.6	*Pontederia cordata*	pickerelweed	0.57	268	4" container/reed stock or bare root equivalent	3' o.c.
		Sagittaria lancifolia	lance-leaved arrowhead		268		
		Eleocharis interstincta	knotted spikerush		268		
		Panicum hemitomon	maidencane		643		
		Iris hexagona	prairie iris		80		
		Canna flaccida	golden canna		80		
		Spartina bakeri	sand cordgrass		1073		
		Viburnum obovatum	small viburnum		17	1 gal	
		Hypericum fasciculatum	sandweed		8		
		Itea virginica	Virginia-willow		8		
		Acer rubrum	red maple		17		
		Quercus laurifolia	laurel oak		8		
		Ilex cassine	dahoon holly		8		
		Ulmus americana	American elm		17		
			Upper Range Plant Totals:		2,763		
LOWER RANGE	106.6 to 105.6	*Pontederia cordata*	pickerelweed	0.84	1121	4" container/reed stock or bare root equivalent	3' o.c.
		Sagittaria lancifolia	lance-leaved arrowhead		1067		
		Eleocharis interstincta	knotted spikerush		300		
		Panicum hemitomon	maidencane		465		
		Nymphaea odorata	white water-lily		31	1 gal	
		Cephalanthus occidentalis	buttonbush		9		
		Nyssa sylvatica var. biflora	swamp black gum		9		
		Taxodium distichum	bald cypress		65		
		Fraxinus caroliniana	water ash		9		
			Lower Range Plant Totals:		3,096		
			Total Plant Numbers:		5,859		

Mitigation Area ML Plant Legend



Mitigation Area MP Grading Plan



Mitigation Area MP Cross Section

Epperson Project, Mitigation Area - MP (2.19 ac.)

Zone	Elevation	Scientific Name	Common Name	Acres	Quantity	Size	Spacing
UPPER RANGE	107.6 to 105.5	*Pontederia cordata*	pickerelweed	0.93	450	4" container/reed stock or bare root equivalent	3' o.c.
		Sagittaria lancifolia	lance-leaved arrowhead		450		
		Eleocharis interstincta	knotted spikerush		450		
		Panicum hemitomon	maidencane		1080		
		Iris hexagona	prairie iris		14		
		Canna flaccida	golden canna		14		
		Spartina bakeri	sand cordgrass		1800		
		Viburnum obovatum	small viburnum		113	1 gal	12' o.c.
		Lyonia lucida	fetterbush, shiny lyonia		56		
		Cephalanthus occidentalis	buttonbush		42		
		Hypericum fasciculatum	sandweed		28		
		Itea virginica	Virginia-willow		42		
		Nyssa sylvatica var. biflora	swamp black gum		59	3 gal	8' o.c.
		Acer rubrum	red maple		123		
		Quercus laurifolia	laurel oak		100		
		Ilex cassine	dahoon holly		100		
		Ulmus americana	American elm		125		
			Upper Range Plant Totals:		5,281		
LOWER RANGE	106.6 to 105.5	*Pontederia cordata*	pickerelweed	1.26	1134	4" container/reed stock or bare root equivalent	3' o.c.
		Sagittaria lancifolia	lance-leaved arrowhead		2134		
		Eleocharis interstincta	knotted spikerush		610		
		Panicum hemitomon	maidencane		1220		
		Cephalanthus occidentalis	buttonbush		324	1 gal	12' o.c.
		Hypericum fasciculatum	sandweed		38		
		Iris virginica	Virginia iris, southern blue-flag		191		
			Lower Range Plant Totals:		6,651		
			Total Plant Numbers:		11,932		

Mitigation Area MP Plant Legend

ENGINEER OF RECORD DOES NOT CERTIFY TO THE ACCURACY OR COMPLETENESS OF THIS MITIGATION PLAN

JOB NO	0597-0025					
ERA	137					
DATE	06-04-2014					
DESIGNED	PS	AVS				
DRAWN	AVS					
CHECKED	PS					
QC	PS					
APP'D						
NO	1	2	3	4	5	6
DATE	02-09-2015					
REVISIONS	REVISED PER PASCO COUNTY COMMENTS					

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 289-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
MITIGATION PLAN & DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
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3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 932 - 1047 FAX: (727) 848 - 3648 WWW.FLDESIGN.COM C.A. NO: 7421

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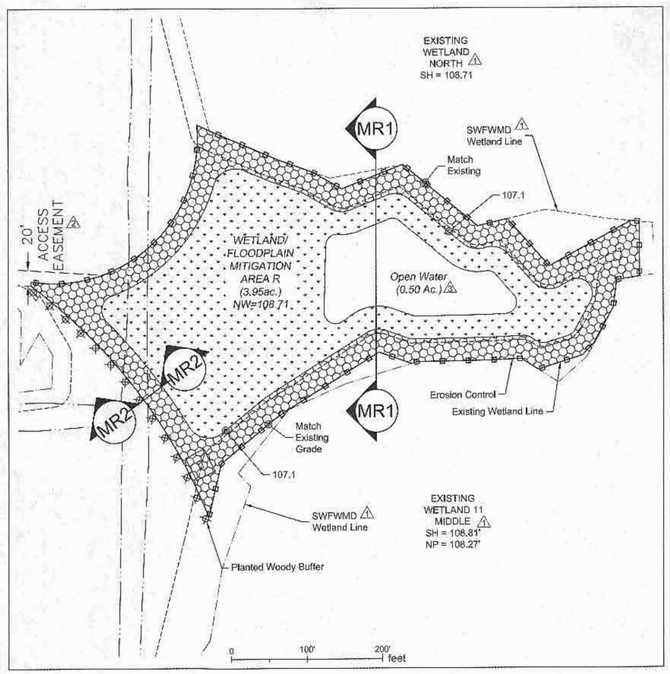
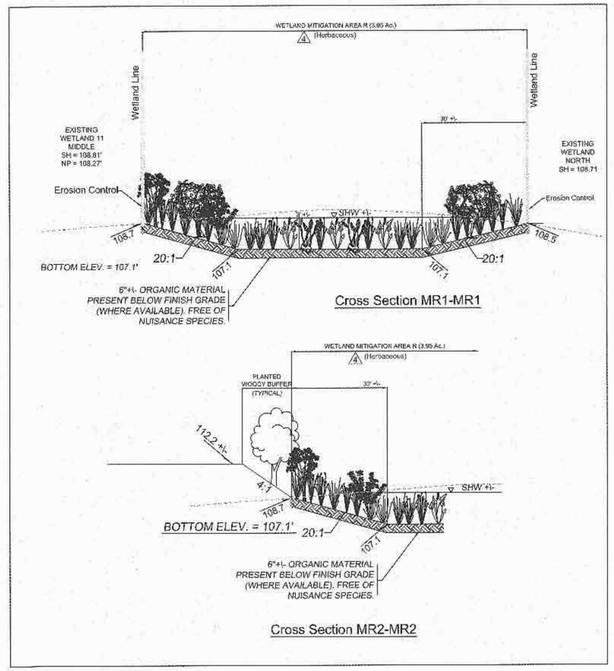


Mitigation Area MR Grading Plan



Mitigation Area MR Cross Section

△3

Epperson Project, Mitigation Area - MR (3.95 ac.) (Herbaceous)

Zone	Elevation	Scientific Name	Common Name	Acres	Quantity	Size	Spacing
UPPER RANGE	108.7 to 107.1	*Pontederia cordata*	pickerelweed	1.42	667	4" cont/c/entired stock or bare root equivalent	3' o.c.
		Sagittaria lancifolia	lance-leaved arrowhead		667		
		Eleocharis interstincta	knotted spikerush		667		
		Panicum hemitomon	maidencane		1601		
		Iris hexagona	prairie iris		199		
		Canna flaccida	golden canna		199		
		Spartina bakeri	sand cordgrass		2674		
		Viburnum obovatum	small viburnum		41	1 gal	
		Hypericum fasciculatum	sandweed		21		
		Itea virginica	Virginia-willow		21		
		Acer rubrum	red maple		41		
		Quercus laurifolia	laurel oak		21		
		Ilex cassine	dahoon holly		21		
		Ulmus americana	American elm		41		
			Upper Range Plant Totals:		6,881		
LOWER RANGE	107.1	*Pontederia cordata*	pickerelweed	2.03	3557	4" containerized stock or bare root equivalent	3' o.c.
		Sagittaria lancifolia	lance-leaved arrowhead		3547		
		Eleocharis interstincta	knotted spikerush		953		
		Panicum hemitomon	maidencane		1474		
		Cephalanthus occidentalis	buttonbush		29	1 gal	
		Nyssa sylvatica var. biflora	swamp black gum		29		
		Taxodium distichum	bald cypress		286		
		Fraxinus caroliniana	water ash		29		
			Lower Range Plant Totals:		9,924		
			Total Plant Numbers:		16,705		

Mitigation Area MR Plant Legend

ENGINEER OF RECORD DOES NOT CERTIFY TO THE ACCURACY OR COMPLETENESS OF THIS MITIGATION PLAN

NO.	DATE	APPROVED
1	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS	PS
2	04-07-2015	ADDED ACCESS EASEMENT	AB	PS
3	05-12-2015	REVISED MITIGATION AREA "MR" DETAILS	PS	AVS
4	06-14-2015	REVISED FORESTED TO HERBACEOUS	PS	PS

JOB NO. 0597-0025 | SCALE: AS NOTED | DRAWN BY: CHECKED BY: | DATE: 06-04-2014 | SHEET NO. 137

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
MITIGATION PLAN & DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532 - 1047 FAX: (727) 848 - 3648 WWW.FLDESIGN.COM C.A. NO. 7421

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NOTE: TURN-OUTS SHALL BE CONSTRUCTED PER FDOT INDEX 515.

LEGEND

- = Overland Flow Direction
- = Swale Flow Direction
- = Concentrated Drainage Flow Direction
- CW-16S = Proposed Storm Structure Number
- +42.1 = Proposed Spot Elevation
- +42.1 = Existing Spot Elevation
- = Proposed Storm Structure & Pipe
- = Existing Tree to be Removed
- = Existing Tree to Remain
- = Proposed Silt Fence
- = Right of Way Line
- = Wetland/Surface Water Jurisdictional Limit
- = Limits of Wetland/Surface Water Impact
- = Proposed Pavement
- = 6' Stabilized Shoulder (Unpaved)
- SW = Surface Water
- AB-10 = Soil Borings

0 10 20 40

PROTECT EXISTING TREE (TYP)

SWFWMD/ACOE SW JD LINE

12" PLUG & BO

12" GV

12"X12" CROSS

WM SHALL BE DEFLECTED AT FIRE HYDRANT LOCATIONS TO ASSURE FIRE HYDRANTS REMAINS WITHIN R/W

FIRE HYDRANT ASSEMBLY

8" PLUG & BO

8" GV

32 LF 12" PVC WM

STUB & PLUG

1 DBI TYPE E GE=119.50 SLOT EL=117.73 IE=112.61 (SW)

LIMITS OF CONSTRUCTION, SLOPE EASEMENT / DRAINAGE EASEMENT & SILT FENCE (TYP)

3 DBI TYPE E GE=118.85 SLOT EL=117.08 IE=111.97 (SW)

12" GV

12" PLUG & BO

135 LF 12" PVC WM

STATION EQUATION
OVERPASS RD
STA 56+49.44
EPPERSON RANCH
BLVD STA 48+00.00

44 LF 12" PVC WM

757 LF 12" PVC WM

AB-14

R/W

5' SIDEWALK

DITCH 161 SW IMPACT 0.15 AC

TOS

TOB

20' LANDSCAPE EASEMENT

10' UTIL ESMT

6' SHLDR

PROP EOP

+70.00 32.00 L

+60.13 32.00 L

160 LF 12" DIP WM IN 140 LF 24" STEEL CASING

98 LF OF 18" RCP @ 0.30%

PGL LEFT

OVERPASS ROAD

"F" CURB

℄ CONST

BEGIN ROADWAY CONSTRUCTION STA: 55+70.00 OFF: 0.00

AB-11

+36.44 0.00

+36.44 11.00 R

PGL RIGHT

+41.25 26.00 R

MATCH LINE STA 60+20 SEE SHEET 16

BEGIN PROJECT STA: 55+60.00 OFF: 0.00

151 LF 8" DIP RECLAIMED WM IN 130 LF 16" STEEL CASING

+59.87 31.98 R

+70.00 32.00 R

175 LF OF 8" PVC @ 0.42%

DETECTABLE WARNING PER FDOT INDEX 304 (TYP)

214 LF OF 18" RCP @ 0.30%

10' MULTI-USE PATH

33 LF 8" PVC RECLAIMED WM

1066 LF 8" PVC RECLAIMED WM

1055 LF 8" PVC FORCEMAIN

REMOVE TREE (TYP)

+95.88 77.29 R

+96.07 87.19 R

+15.40 76.73 R

+15.17 86.73 R

2 DB TYPE E GE=119.50 SLOT EL=117.73 IE=112.32 (NE) IE=112.32 (SE)

4 DB TYPE E GE=118.85 SLOT EL=117.08 IE=111.68 (NW) IE=111.68 (SE) IE=111.68 (NE)

38 LF 8" FORCEMAIN

8" CROSS

8" MJ TEE

40 LF 8" PVC RECLAIMED WM

36 LF 8" PVC FORCEMAIN

IMPROVEMENTS PROPOSED UNDER PARK PLACE ENTRANCE ROAD PLANS

EPPERSON RANCH BLVD ℄ OF CONSTRUCTION

PARK PLACE

SWFWMD/ACOE SW JD LINE

NOTE:
ACOE JD LINES ARE SHOWN FOR INFORMATIONAL PURPOSES. IMPACTS TO ACOE WETLANDS ARE SHOWN ON THE APPROVED ACOE PROJECT DRAWINGS.
DA.NO. SAJ-2006-07911 (SP-TEH)

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NO	DATE	REVISIONS	BY
7	07-13-2015	UPSIZED WM TO 12" AT STA 57+00 FOR FUTURE PARK PLACE CONNECTION	PS
6	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.	AB
5	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
4	01-16-2015	REVISED PARK PLACE CURB RETURN ELEV.	
3	01-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
2		RAISED ROADWAY TO MEET FDOT CRITERIA.	
1	09-11-2014	REVISED PER PASCO COUNTY COMMENTS	PS
0	07-16-2014	SWFWMD JD IMPACTS ADDED/REVISED	JH

JOB NO 0597-0025
DSN 137
DATE 06-04-2014
DRAWN PS
CHECKED PS
APP'D

DESIGNED FOR EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME OVERPASS ROAD
PLAN (1)

FLORIDA DESIGN CONSULTANTS, INC.
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NO.	DATE	REVISIONS	APP'D BY
3	07-13-2015	UPSIZED WM TO 12" AT STA 57+00 FOR FUTURE PARK PLACE CONNECTION	
2	01-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
		RAISED ROADWAY TO MEET FDOT CRITERIA	
1	08-03-2014	REVISED STORM & UTILITIES	

JOB NO. 0597-0025
EPN 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME
OVERPASS ROAD PROFILE (1)

FLORIDA DESIGN CONSULTANTS, INC.
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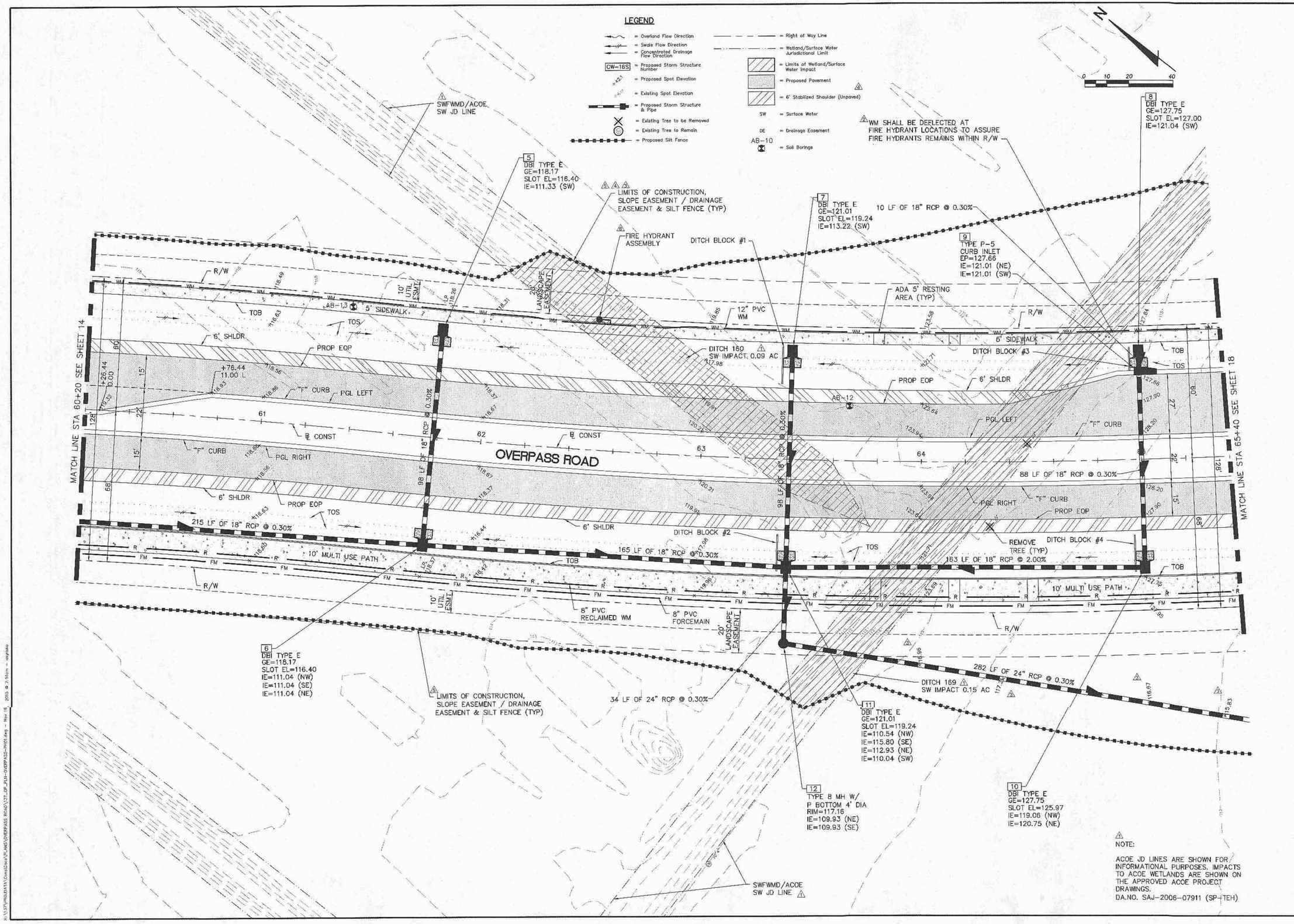

NO.	DATE	REVISIONS
6	07-06-2015	REVISED FIRE HYDRANT LOCATION PER PASCO
5	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.
4	02-09-2015	REVISED PER PASCO COUNTY COMMENTS
3	01-09-2015	REVISED PER PASCO COUNTY COMMENTS
2	09-11-2014	RAISED ROADWAY TO MEET FDOT CRITERIA
1	07-18-2014	SWFWMD JD IMPACTS ADDED/REVISED

JOB NO.	0597-0025
FTN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
Q.C.	

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD PLAN (2)

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PAUL E. SKIDMORE
LICENSE
NO. 49631
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

JOB NO.	0597-0025
EPN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
Q.C.	

NO.	DATE	REVISIONS	APP'D BY
2	01-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
		RAISED ROADWAY TO MEET FDOT CRITERIA	
1	08-03-2014	REVISED STORM & UTILITIES	

DESIGNED FOR

EPPERSON RANCH, LLC

2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME

EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME

OVERPASS ROAD
PROFILE (2)

FLORIDA DESIGN CONSULTANTS, INC.

— THINK IT. ACHIEVE IT. —

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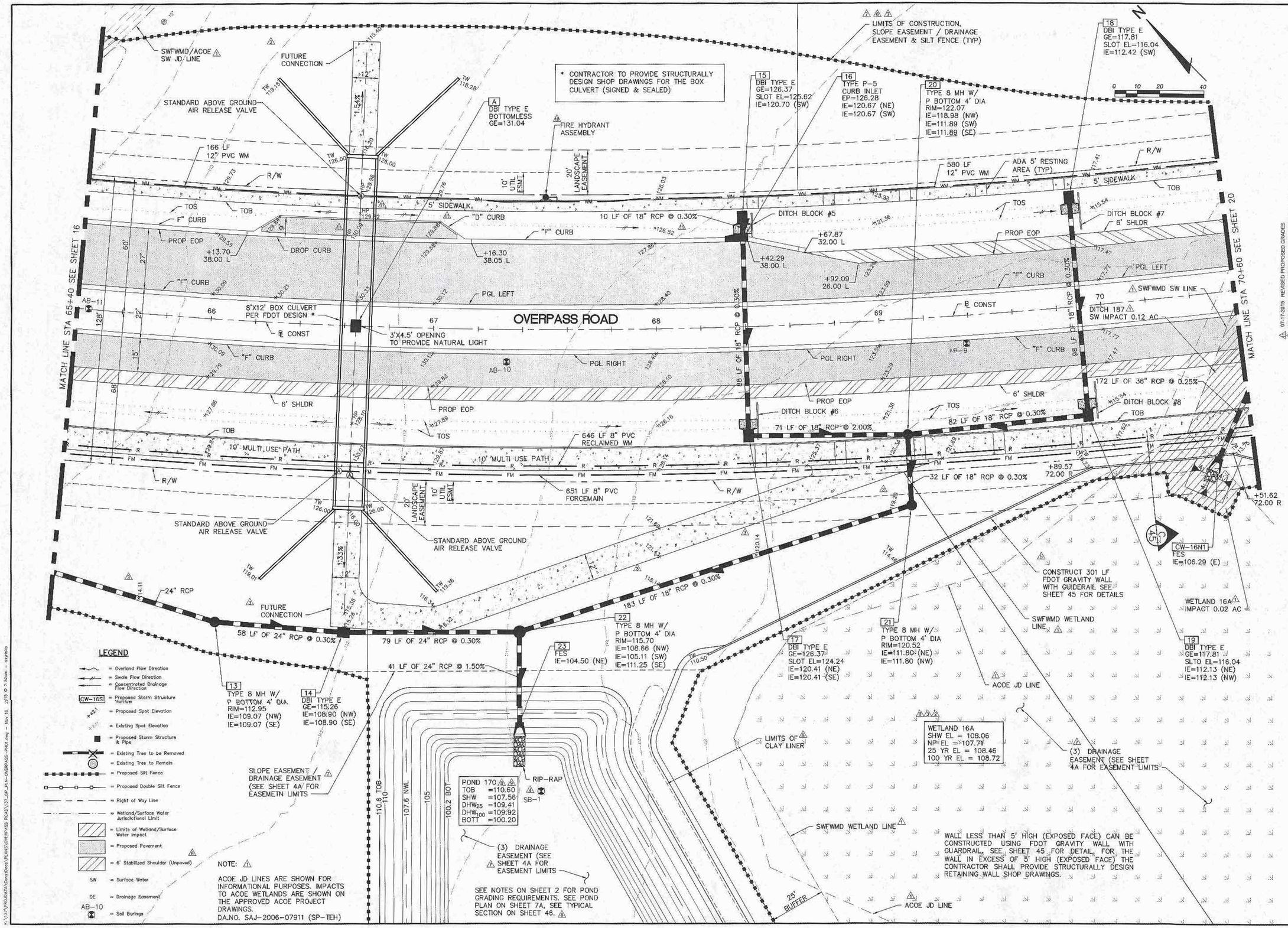

07-17-2015 REVISED PROPOSED GRADES
07-08-2015 ADDED FIRE HYDRANT PER PASCO COUNTY
05-26-2015 ADDED FES, REMOVED SUMP INL 163-W
05-12-2015 REMOVED SUMP INL 163-W, ADDED POND 170
REVISIONS MADE PER ACOE COMMENTS

NO.	DATE	REVISIONS	BY
1	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.	AB
		ADDED EASEMENTS LIMITS	
2	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
3	01-21-2015	REVISED GRAVITY WALL LENGTH	PS
4	01-12-2015	ADDED SOIL BORINGS "SB-1" & "SB-2"	PS
5	01-06-2015	REVISED PER PASCO COUNTY COMMENTS	PS
		RAISED ROADWAY TO MEET FDOT CRITERIA	
6	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS
7	07-18-2014	SWFWMD JD IMPACTS ADDED/REVISED	JH

PAUL E. SKIDMORE LICENSE NO. 49631 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT NO.	0597-0025
DRAWN	AB
DESIGNED	PS
CHECKED	PS
QUALITY CONTROL	PS
DATE	06-04-2014
SCALE	1" = 40'
DRAWING NO.	137
SHEET NO.	18
TOTAL SHEETS	51

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 286-8079

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD
PLAN (3)

FLORIDA DESIGN CONSULTANTS, INC.
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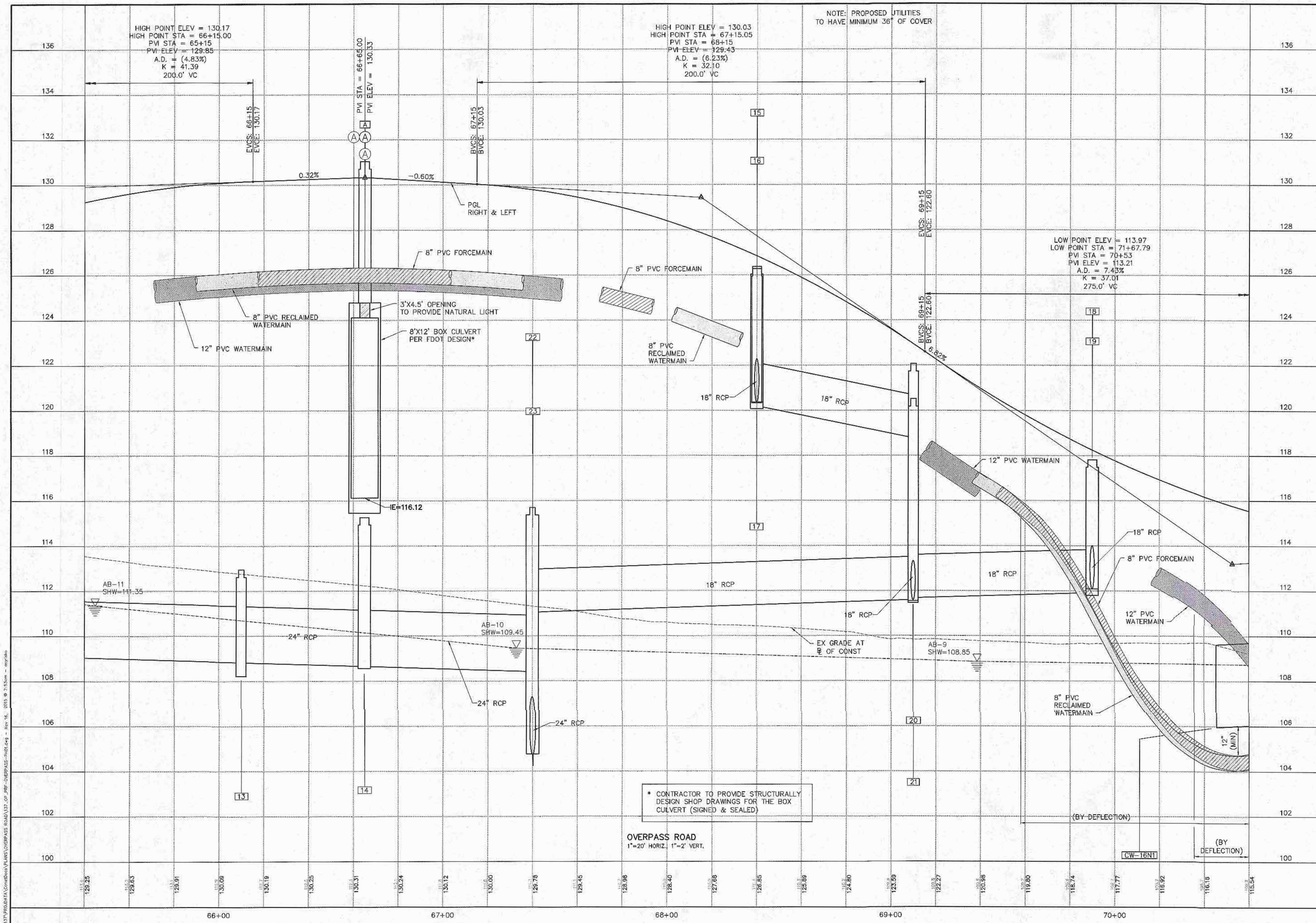

PAUL E. SKIDMORE LICENSE NO. 34631 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	0597-0025
CFR	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
Q.C.	
APPD BY	

NO.	DATE	REVISIONS
2	01-09-2015	REVISED PER PASCO COUNTY COMMENTS
		RAISED ROADWAY TO MEET FDOT CRITERIA
1	08-03-2014	REVISED STORM & UTILITIES

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD PROFILE (3)

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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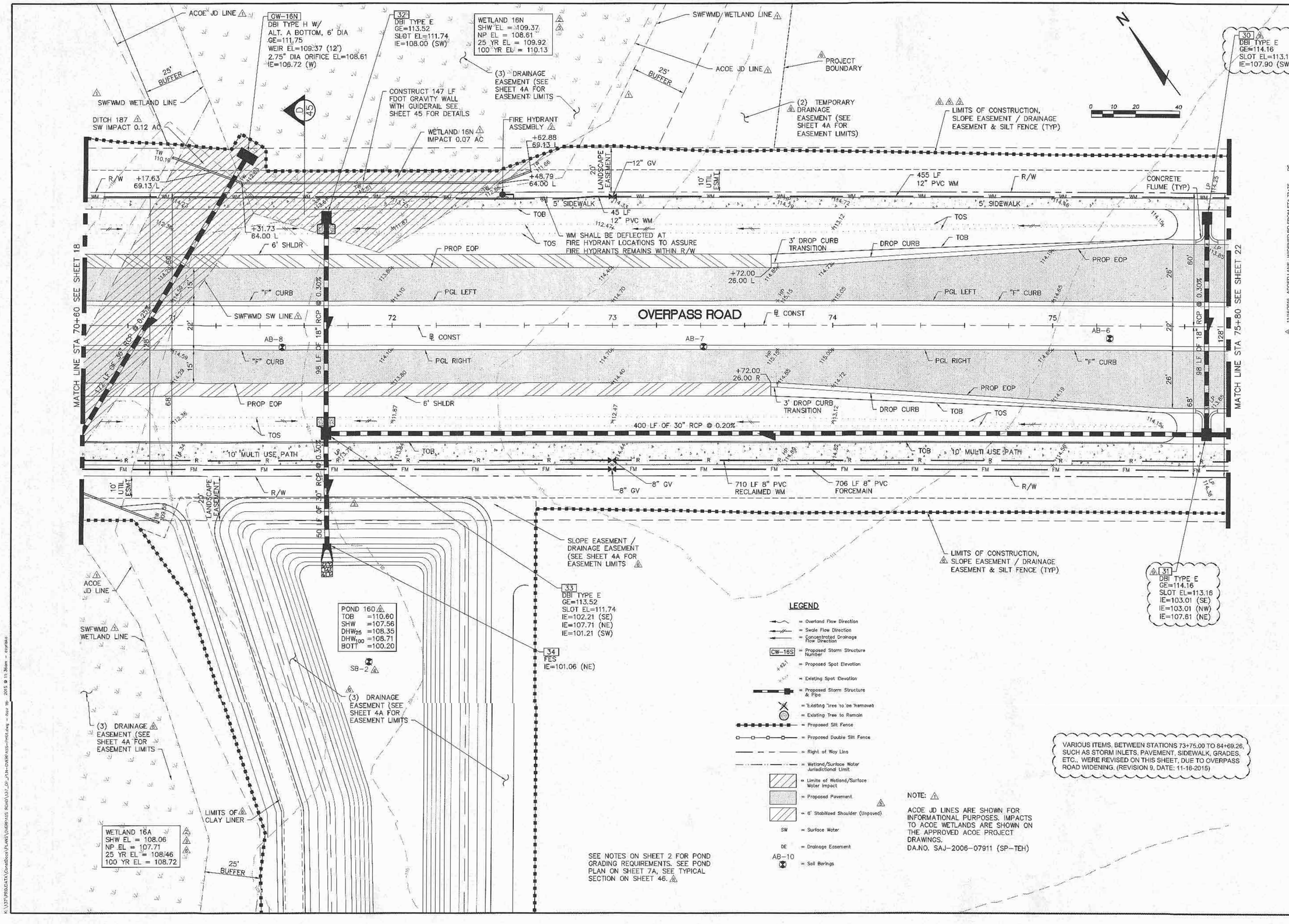

11/16/2015 ADDED LANE - WIDENED RD FROM STA 73+75 PS
05-12-2015 REMOVED SUMP WL 16A-W, ADDED POND 170 PS

NO.	DATE	REVISIONS
7	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.
		ADDED EASEMENTS LIMITS
8	02-09-2015	REVISED PER PASCO COUNTY COMMENTS
9	01-21-2015	ADDED SOIL BORINGS "SB-1" & "SB-2"
10	01-09-2015	REVISED PER PASCO COUNTY COMMENTS
		RAISED ROADWAY TO MEET FDOT CRITERIA
11	09-11-2014	REVISED PER PASCO COUNTY COMMENTS
12	07-18-2014	SWFWMD JD IMPACTS ADDED/REVISED

		DESIGNED	DRAWN	CHECKED
AB	0597-0025	PS	PS	JH
PM	137	DATE	ISSUE/DESCRIPTION	APPD.
DATE	06-04-2014	PS	AVS	PS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD PLAN (4)

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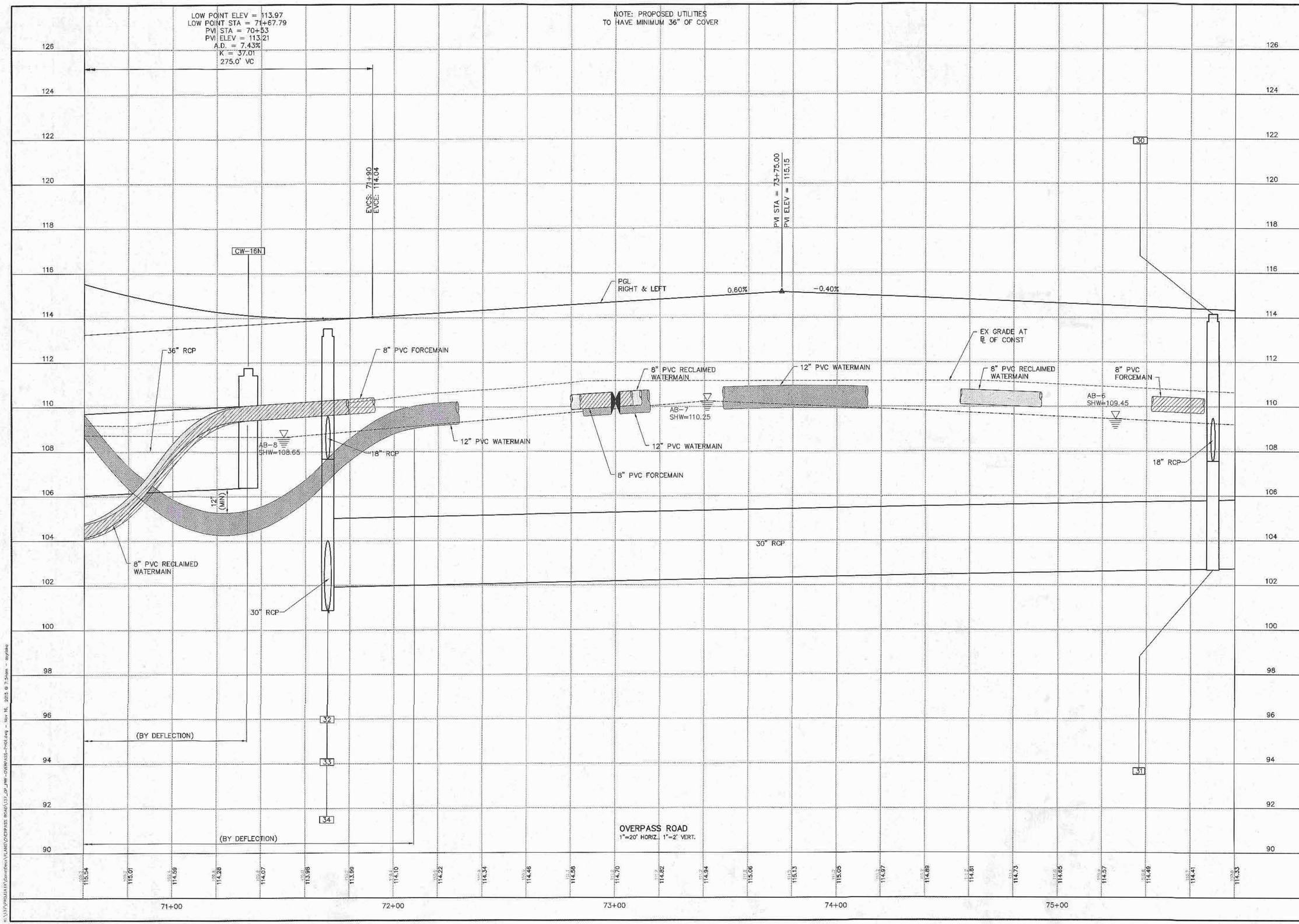

PAUL E. SKIDMORE
LICENSE NO. 39631
STATE OF FLORIDA
PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	APPD BY
2	01-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
1	08-03-2014	RAISED ROADWAY TO MEET FDOT CRITERIA	
		REVISED STORM & UTILITIES	

JOB NO. 0597-0025
DPR 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS
Q.C.

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
OVERPASS ROAD
PROFILE (4)

FLORIDA DESIGN CONSULTANTS, INC.
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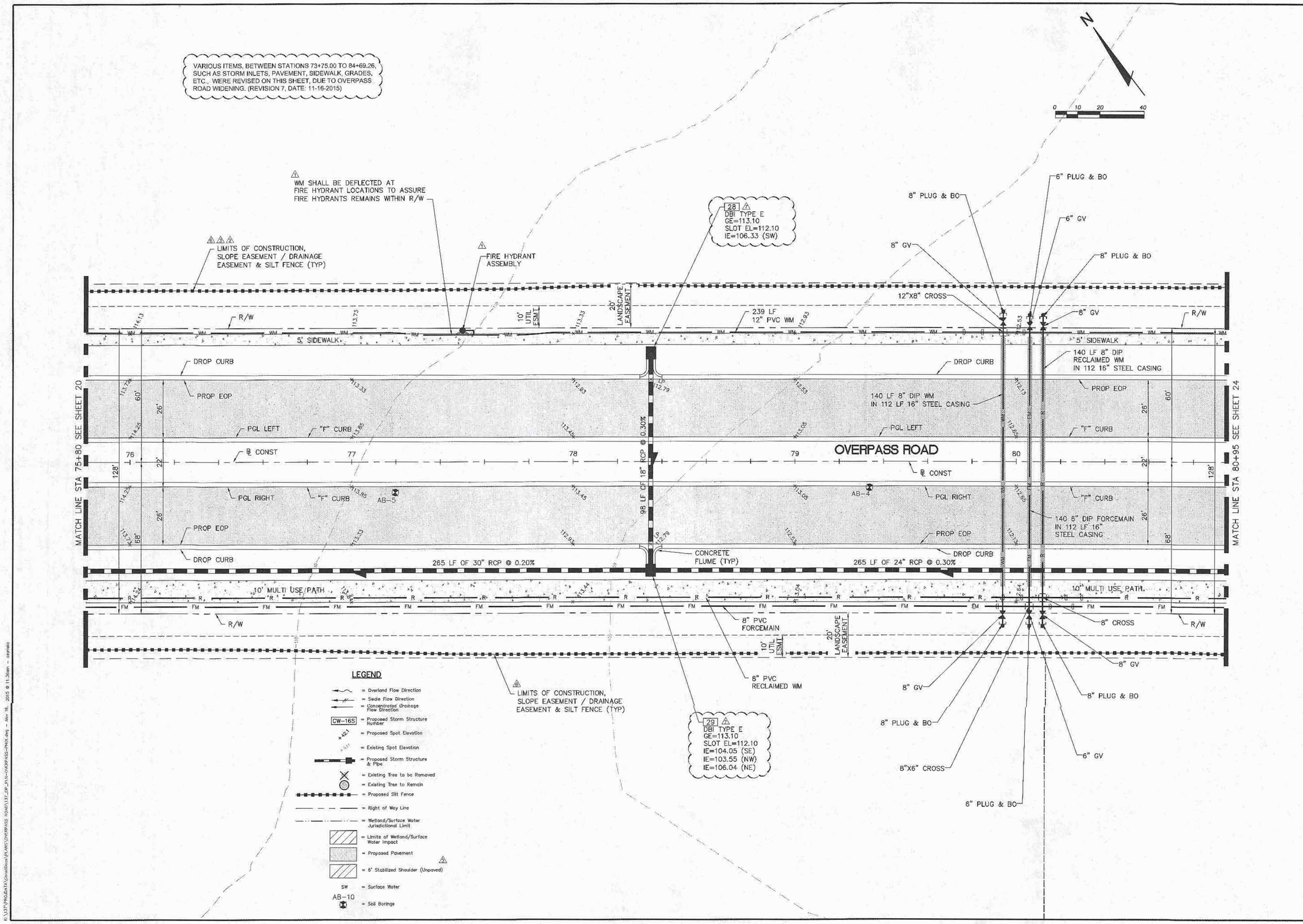

NO.	DATE	REVISIONS	APP'D BY
7	11-16-2015	ADDED LANE - WIDENED RD FROM STA 73+75	PS
6	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.	AB
5	03-06-2015	REVISED INTERSECTION, WIDENED MEDIAN	PS
4	02-19-2015	TURN-LANE ADDED PER PASCO COUNTY	PS
3	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
2	01-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
1	09-11-2014	RAISED ROADWAY TO MEET FDOT CRITERIA	PS

JOB NO. 0597-0025
DR. 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS
Q.C.

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
OVERPASS ROAD
PLAN (5)

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
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PAUL E. SKIDMORE
LICENSE
NO. 59631
STATE OF FLORIDA
PROFESSIONAL ENGINEER

JOB NO	0597-0025
EPN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
Q.C.	

NO.	DATE	REVISIONS	APP'D BY
2	01-09-2015	REVISED PER PASCO COUNTY COMMENTS RAISED ROADWAY TO MEET FDOT CRITERIA	PS
1	08-03-2014	REVISED STORM & UTILITIES	

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
OVERPASS ROAD
PROFILE (5)

FLORIDA DESIGN CONSULTANTS, INC.
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LEGEND

- = Overland Flow Direction
- = Swale Flow Direction
- = Concentrated Drainage Flow Direction
- CW-16S = Proposed Storm Structure Number
- +43.1 = Proposed Spot Elevation
- +43.1 = Existing Spot Elevation
- = Proposed Storm Structure & Pipe
- = Existing Tree to be Removed
- = Existing Tree to Remain
- = Proposed Silt Fence
- = Right of Way Line
- = Wetland/Surface Water Jurisdictional Limit
- = Limits of Wetland/Surface Water Impact
- = Proposed Pavement 2" Saw Cut Line
- = 6' Stabilized Shoulder (Unpaved)
- SW = Surface Water
- AB-10 = Soil Borings

NOTE: ⚠

ACOE JD LINES ARE SHOWN FOR INFORMATIONAL PURPOSES. IMPACTS TO ACOE WETLANDS ARE SHOWN ON THE APPROVED ACOE PROJECT DRAWINGS. DA.NO. SAJ-2006-07911 (SP-TEH)

NOTE: TURN-OUTS SHALL BE CONSTRUCTED PER FDOT INDEX 515.

ACOE JD LINE

SWFWMD WETLAND LINE

25' BUFFER

WETLAND 17N
SHW EL = 104.67
NP EL = 104.24
25 YR EL = 108.12
100 YR EL = 108.73

24 ⚠ DBI TYPE E GE=111.56 SLOT EL=110.56 IE=106.50 (SW)

WM SHALL BE DEFLECTED AT FIRE HYDRANT LOCATIONS TO ASSURE FIRE HYDRANTS REMAINS WITHIN R/W

FIRE HYDRANT ASSEMBLY

LIMITS OF CONSTRUCTION, SLOPE EASEMENT / DRAINAGE EASEMENT & SILT FENCE (TYP)

WETLAND 17 IMPACT 1.34 AC

SIGHT DIST. TRIANGLE PER FDOT INDEX 546

20'X20' SIGHT TRIANGLE

12" GV

35 FES E=104.67 (SW)

CURLEY ROAD

+94.31 87.20 L

MEG 109.95

4" PVC (TYP)

TEMPORARY CONSTRUCTION WATER SERVICE

REMOVE EX 16" CAP CONNECT TO EX 16" DIP WM

16"X12" REDUCER

REMOVE 130 LF OF CHAIN LINK FENCE

2' REMOVAL

R/W

261 LF 12" PVC WM

206 LF 12" PVC WM

10' UTIL ESMT

20' LANDSCAPE EASEMENT

5' SIDEWALK

DROP CURB

PROP EOP

+44.30 37.00 L

R50'

+96.73 43.51 L

EX CONC SIDEWALK

DETECTABLE WARNING PER FDOT INDEX 304

128 LF 12" DIP WM IN 93 LF 24" STEEL CASING (BY JACK & BORE)

REMOVE TREE (TYP)

END ROADWAY CONSTRUCTION STA: 84+96.26 OFF: 0.00

OVERPASS ROAD

STATION EQUATION
OVERPASS RD STA 85+19.50
CURLEY RD STA 149+49.44

MATCH LINE STA 80+95 SEE SHEET 22

98 LF OF 18" RCP @ 0.30%

PGL LEFT

"F" CURB

PGL RIGHT

82 83 84 85 86

+26.80 11.00 L

+26.80 11.00 R

R11'

AB-3 AB-2 AB-1

SAW CUT

REMOVE 104 LF OF GUARDRAIL

114 LF 8" DIP RECLAIMED WM IN 106 LF 16" STEEL CASING (BY JACK & BORE)

29 LF OF SHEET PILE TO PROTECT ROADWAY (SEE NOTES ON SHEET 25)

16"X8" REDUCER

DMH N RIM EL=109.87' IE-W=103.89' 36"RCP IE S=104.02' 36"RCP

REMOVE EX 16" PLUG CONNECT TO EX 16" DIP RECLAIMED WATER MAIN

CONCRETE FLUME ⚠

290 LF OF 18" RCP @ 0.30%

10' MULTI USE PATH

16 LF 8" PVC RECLAIMED WM

8" 45° MJ BEND

R50'

REMOVE EX HEADWALL

CONC HEADWALL IE=104.24' 36"RCP

469 LF 8" PVC FORCEMAIN

429 LF 8" PVC RECLAIMED WM

8" 45° MJ BEND

8" GV

14 LF 8" PVC RECLAIMED WM

MEG 109.84 +94.29 87.07 R

C/S W/ AIR RELEASE VALVE

4" PVC (TYP)

27 ⚠ DBI TYPE E GE=112.04 SLOT EL=111.04 IE=105.34 (SE) IE=104.84 (NW) IE=106.34 (NE)

25' (BUFFER)

LIMITS OF CONSTRUCTION, SLOPE EASEMENT / DRAINAGE EASEMENT & SILT FENCE (TYP)

25 ⚠ DBI TYPE E GE=111.56 SLOT EL=110.56 IE=106.21 (NE) IE=106.21 (NW)

8" 45° MJ BEND

5 LF 8" PVC FORCEMAIN

8" 45° MJ BEND

20'X20' SIGHT TRIANGLE

36 DBI TYPE E BOTTOM 5'X5' SQUARE GE=109.59 IE=104.24 (W) IE=104.24 (NE) IE=104.24 (SE)

31 LF OF 36" RCP @ 1.40%

37 FES IE=104.67 (E)

5 LF 8" FORCEMAIN

28 LF 8" PVC FORCEMAIN

8" 22.5° MJ BEND (ROTATED)

17 LF 8" PVC FORCEMAIN

STANDARD ABOVE GROUND AIR RELEASE VALVE

8" 22.5° MJ BEND (ROTATED)

WETLAND 17S
SHW EL = 104.67
NP EL = 104.24
25 YR EL = 108.09
100 YR EL = 108.68

VARIOUS ITEMS, BETWEEN STATIONS 73+75.00 TO 84+69.26, SUCH AS STORM INLETS, PAVEMENT, SIDEWALK, GRADES, ETC., WERE REVISED ON THIS SHEET, DUE TO OVERPASS ROAD WIDENING. (REVISION 11, DATE: 11-16-2015)

REMOVE EX 8" CAP CONNECT TO EX 8" PVC FORCEMAIN

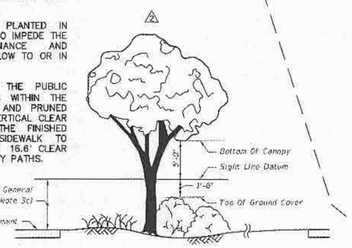
SIGHT DIST. TRIANGLE PER FDOT INDEX 546

FOR CURLEY ROAD WIDENING SEE SHEETS 31-38

EXISTING STORM (APPROXIMATE LOCATION)

NOTES:

1. SITE TRIANGLE SHALL BE UNOBSTRUCTED AND SHALL BE INSPECTED AND MAINTAINED IN CONFORMANCE WITH FDOT INDEX 546.
2. LANDSCAPING SHALL BE PLANTED IN SUCH A MANNER AS NOT TO IMPEDE THE ACCESS FOR MAINTENANCE AND STORM-WATER RUN-OFF FLOW TO OR IN A DITCH, SWALE, OR POND.
3. TREES OVERHANGING TO THE PUBLIC RIGHT OF WAY/OR TREES WITHIN THE ROW SHALL BE TRIMMED AND PRUNED TO MAINTAIN A MINIMUM VERTICAL CLEAR HEIGHT OF 8' FROM THE FINISHED GROUND SURFACE OF THE SIDEWALK TO THE BOTTOM OF CANOPY 16.6' CLEAR HEIGHT ABOVE THE ROADWAY PATHS.



The Intent Of This Standard Is To Provide A Window With Vertical Limits Of Not Less Than 5' Above And 1'-6" Below The Sight Line Datum, And Horizontal Limits Defined By The Limits Of Clear Sight.

PICTORIAL WINDOW DETAIL

PAUL E. SKIDMORE LICENSE NO. 59631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	BY	DESCRIPTION
1	03-06-2015	PS	REVISED INTERSECTION, WIDENED MEDIAN
2	02-18-2015	PS	TURN LANE ADDED PER PASCO COUNTY
3	02-09-2015	PS	REVISED PER PASCO COUNTY COMMENTS
4	01-28-2015	PS	REVISED 24" JAB STEEL CASING LENGTH
5	01-09-2015	PS	REVISED PER PASCO COUNTY COMMENTS
			RAISED ROADWAY TO MEET FDOT CRITERIA
6	09-19-2014	JC	UNDERGROUND ARV REVISED TO ABOVE
			GROUND OFFSET ARV PER PDU
7	09-11-2014	PS	REVISED PER PASCO COUNTY COMMENTS
8	07-18-2014	PS	SWFWMD JD IMPACTS ADDED/REVISED
9			
10	11-16-2015	PS	ADDED LANE - WIDENED RD FROM STA 73+75
11	07-16-2015	PS	REMOVED PAVEMENT RESTORATION & ADDED SHEET PILE PER PC R/W USE COMMENTS
12	04-07-2015	AB	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.
13		PS	

PROJECT NO. 0597-0025
DRAWN PS
CHECKED PS
GUIDANCE JC
DESIGNED PS
APPR. AVS
DATE 06-04-2014
SHEET NO. 137

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
SHEET NAME: OVERPASS ROAD - PHASE 1
OVERPASS ROAD PLAN (6)

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SHEET 24 OF 51

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NOTE: PROPOSED UTILITIES TO HAVE MINIMUM 36" OF COVER

NOTE:
LOCATION OF EXISTING UTILITIES IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY PRIOR TO INSTALLATION OF PROPOSED FACILITIES.

PVI STA = 82+45.00
PVI ELEV = 112.83

HIGH POINT ELEV = 112.45
HIGH POINT STA = 83+15.00
PVI STA = 83+90
PVI ELEV = 112.05
A.D. = (1.47%)
K = 102.31
150.0' VC

BVCS: 83+15
BVCE: 112.45

EVCS: 84+65
EVCE: 110.55

END ROADWAY CONSTRUCTION
PVI STA = 84+94.26
PVI ELEV = 109.96

CURLY ROAD

0.40%

PCL RIGHT & LEFT

-0.54%

-2.00%

END ROADWAY CONSTRUCTION

LIMITS OF STEEL SHEET PILING

EX DMH

8" PVC RECLAIMED WATERMAIN

12" PVC WATERMAIN

8" PVC FORCEMAIN

EX GRADE AT P. OF CONST

AB-3
SHW=106.65

18" RCP

AB-2
SHW=104.45

36" RCP

36" RCP

8" PVC FORCEMAIN

18" RCP

EX 36" RCP

AB-1
SHW=106.05

12" 45° MJ BEND

EX 16" DIP WM

EX 36" RCP

12" (MIN)

8" DIP RECLAIMED WATERMAIN

12" DIP WATERMAIN

EX 16" RCLM WM

IE=101.95

24" STEEL CASING (BY JACK & BORE)

16" STEEL CASING (BY JACK & BORE)

12" 45° MJ BEND

IE=101.28

26 27 24 25 36 37 35

OVERPASS ROAD
1"=20' HORIZ., 1"=2' VERT.

112.25 112.33 112.41 112.49 112.57 112.65 112.73 112.81 112.75 112.64 112.53 112.43 112.28 112.11 111.90 111.64 111.35 111.02 110.65 110.25

81+00 82+00 83+00 84+00 85+00 86+00

Δ STEEL SHEET PILING NOTES:

1. EXISTING UTILITIES ARE IN THE VICINITY OF THE SHEET PILING. DEPTH SHOWN IN PROFILE IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY PRIOR TO WORK. ENGINEER SHALL BE NOTIFIED PRIOR TO ANY WORK IF CONDITIONS VARY FROM THE PLANS. CAUTION SHALL BE TAKEN WHEN INSTALLING SHEET PILING. CONTRACTOR TO PROVIDE DESIGN OF SHEET PILING, SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.
2. FOR INSTALLATION AND REMOVAL OF TEMPORARY STEEL SHEET PILING, CONTRACTOR SHALL REFER TO THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 455 – STRUCTURES FOUNDATIONS AND SECTION 125 –EXCAVATION AND BACKFILLING.
3. BACKFILL AND COMPACTION OF THE LOWEST ZONE, BEDDING ZONE AND COVER ZONE OF THE 16" RECLAIMED WATERMIAN SHALL BE IN 6-INCH LIFTS (COMPACTED THICKNESS). COMPACTION IN THE TOP ZONE, FROM 12 INCHES ABOVE THE TOP OF PIPES TO FINAL GRADE, SHALL NOT EXCEED 12 INCHES COMPACTED THICKNESS. COMPACTION SHALL BE TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T99, METHOD C, FOR ALL PIPE ZONES AND THROUGHOUT THE EXCAVATED AREA.
4. A TOTAL OF FOUR (4) DENSITY TESTS SHALL BE TAKEN FOR EACH LIFT WITH TWO (2) TESTS OVER PIPE ZONE AREAS AND TWO (2) TESTS NEAR SHEET PILING TO ASSURE SPECIFIED COMPACTION IS MAINTAINED THROUGHOUT THE EXCAVATED AREA. SHEET PILING SHALL REMAIN IN PLACE UNTIL ALL BACKFILL AND COMPACTION HAS BEEN COMPLETED TO FINAL GRADE AND ACCEPTED BY THE PASCO COUNTY REPRESENTATIVE AND ENGINEER OF RECORD. CONTRACTOR SHALL THEN REMOVE SHEET PILING WITH CAUTION.
5. EXCAVATABLE FLOWABLE FILL MEETING THE REQUIREMENTS OF THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 121, MAY BE USED AS AN ALTERNATIVE TO COMPACTED BACKFILL AT THE CONTRACTOR'S OPTION. EXPOSED BOLTS, MECHANICAL JOINTS AND TAPPING SLEEVE AND VALVE SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE MATERIAL PRIOR TO PLACEMENT OF FLOWABLE FILL. NO ADDITIONAL MEASUREMENT AND PAYMENT WILL BE MADE FOR THIS OPTION.

PAUL E. SKIDMORE LICENSE NO. 42631 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	0597-0025			
DSN.	137			
DATE	06-04-2014	PS	07-16-2015	ADDED SHEET PILING LIMITS AND NOTES
REVISED	PS			
DRAWN	PS		01-09-2015	PER PC R/W USE PERMIT COMMENTS
CHECKED	AVS			
ENG.	PS		06-03-2014	REVISED PER PASCO COUNTY COMMENTS
				RAISED ROADWAY TO MEET FDOT CRITERIA
				REVISED STORM & UTILITIES

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD
PROFILE (6)

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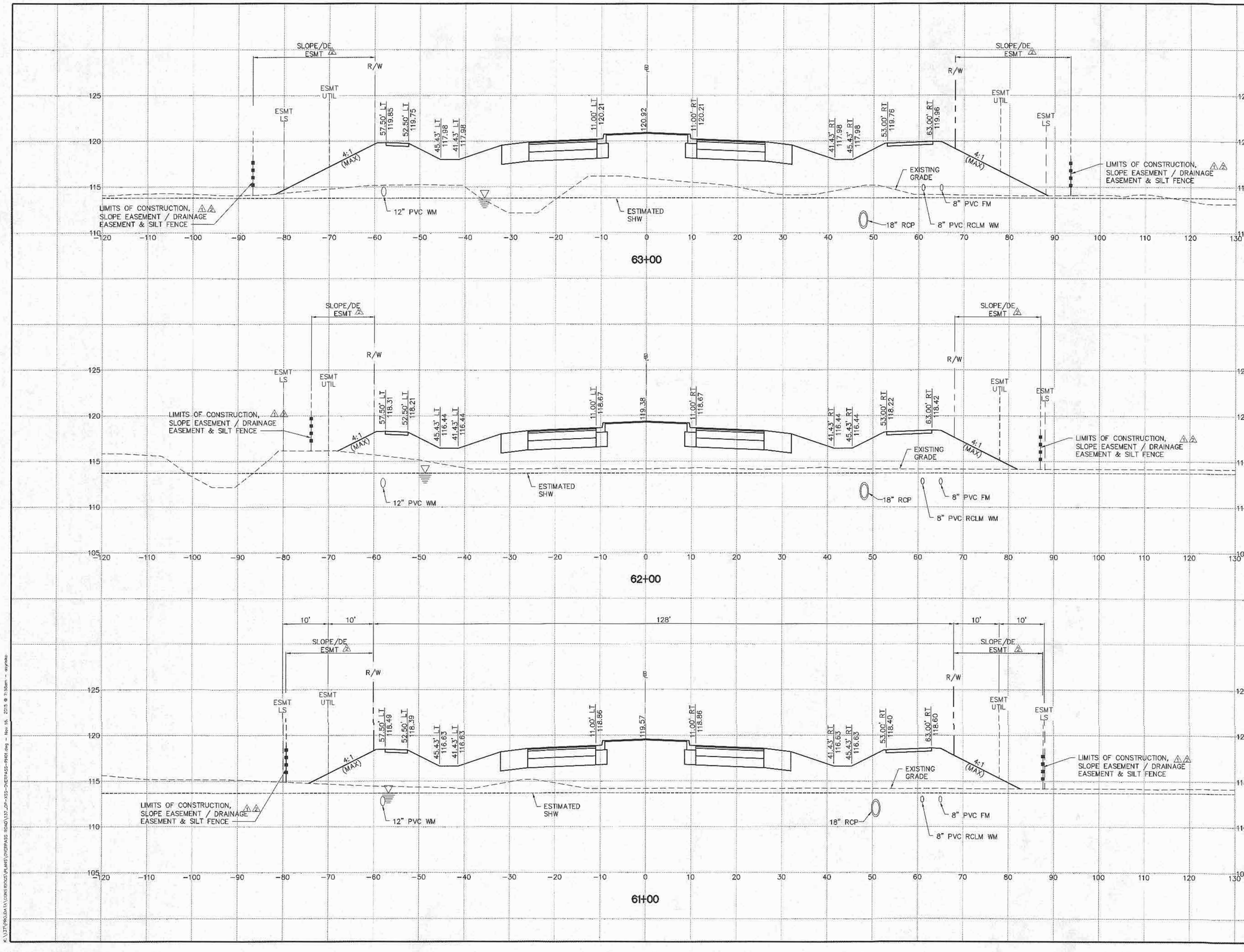

PAUL E. SKIDMORE LICENSED NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	BY
2	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT. ADDED EASEMENTS LIMITS	AB
1	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS

JOB NO. 0597-0025
SHT. 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS
Q.C.

DESIGNED FOR
EPPERSON RANCH, LLC
2302 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME
OVERPASS ROAD CROSS SECTIONS

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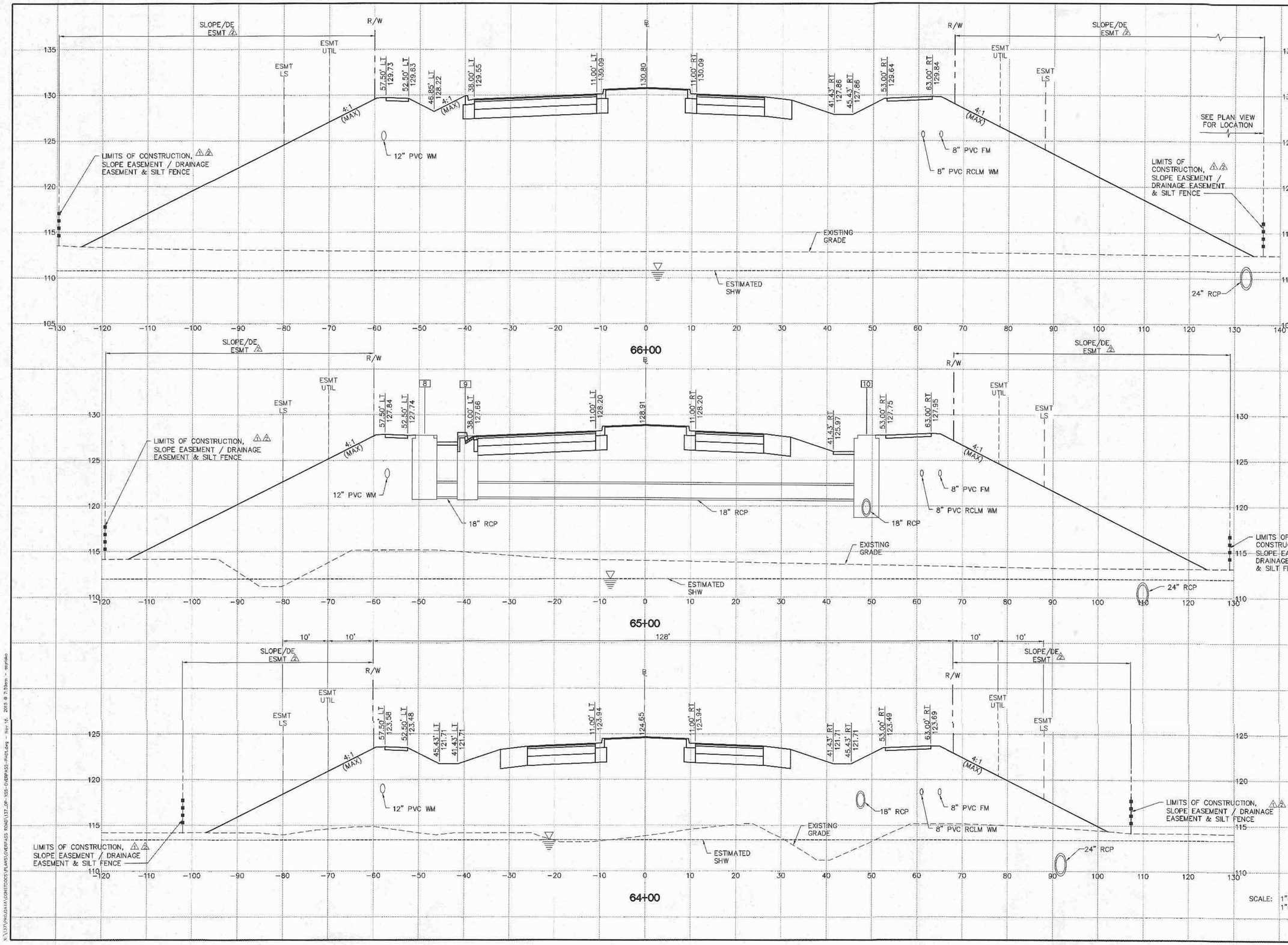

SCALE: 1"=10' HORIZ., 1"=5' VERT.

PAUL E. SKIDMORE LICENSE NO. 34631 STATE OF FLORIDA PROFESSIONAL ENGINEER 11-20-15

NO.	DATE	REVISIONS	DESIGNED	DRAWN
2	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT. ADDED EASEMENTS LIMITS	AB	PS
1	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS	PS

JOB NO. 0597-0025
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DESIGNED PS
DRAWN AVS
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PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD CROSS SECTIONS

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3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3646 WWW.FLDESIGN.COM C.A. NO. 7421

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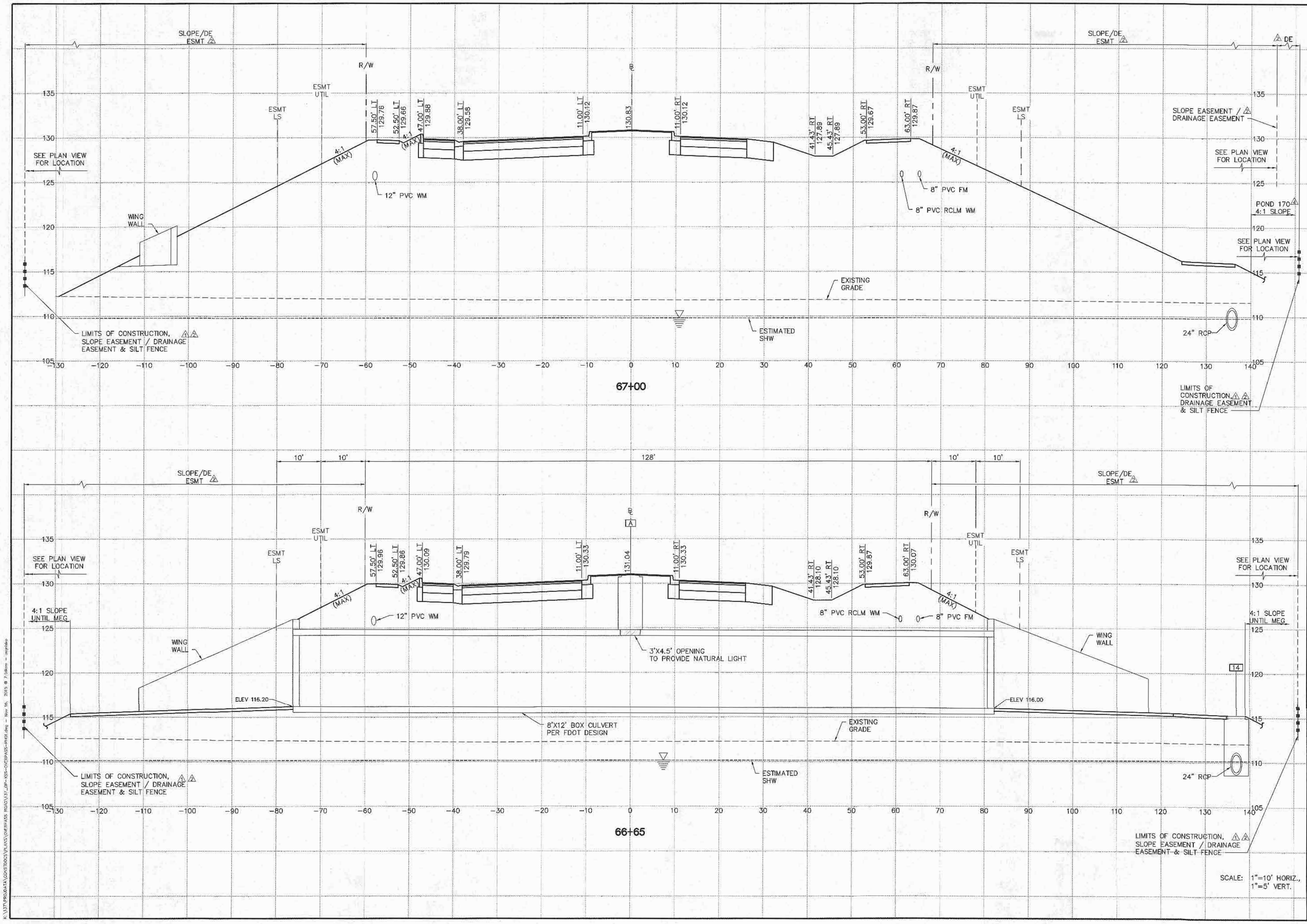

NO.	DATE	REVISIONS
4	05-12-2015	REMOVED SUMP WL 16A-W, ADDED POND 170
		REVISIONS MADE PER ACOE COMMENTS
3	05-12-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.
2	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.
		ADDED EASEMENTS LIMITS
1	02-09-2015	REVISED PER PASCO COUNTY COMMENTS

JOB NO.	0597-0025
SPN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
Q.C.	
APPD BY	

DESIGNED FOR: EPPERSON RANCH, LLC
2902 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD CROSS SECTIONS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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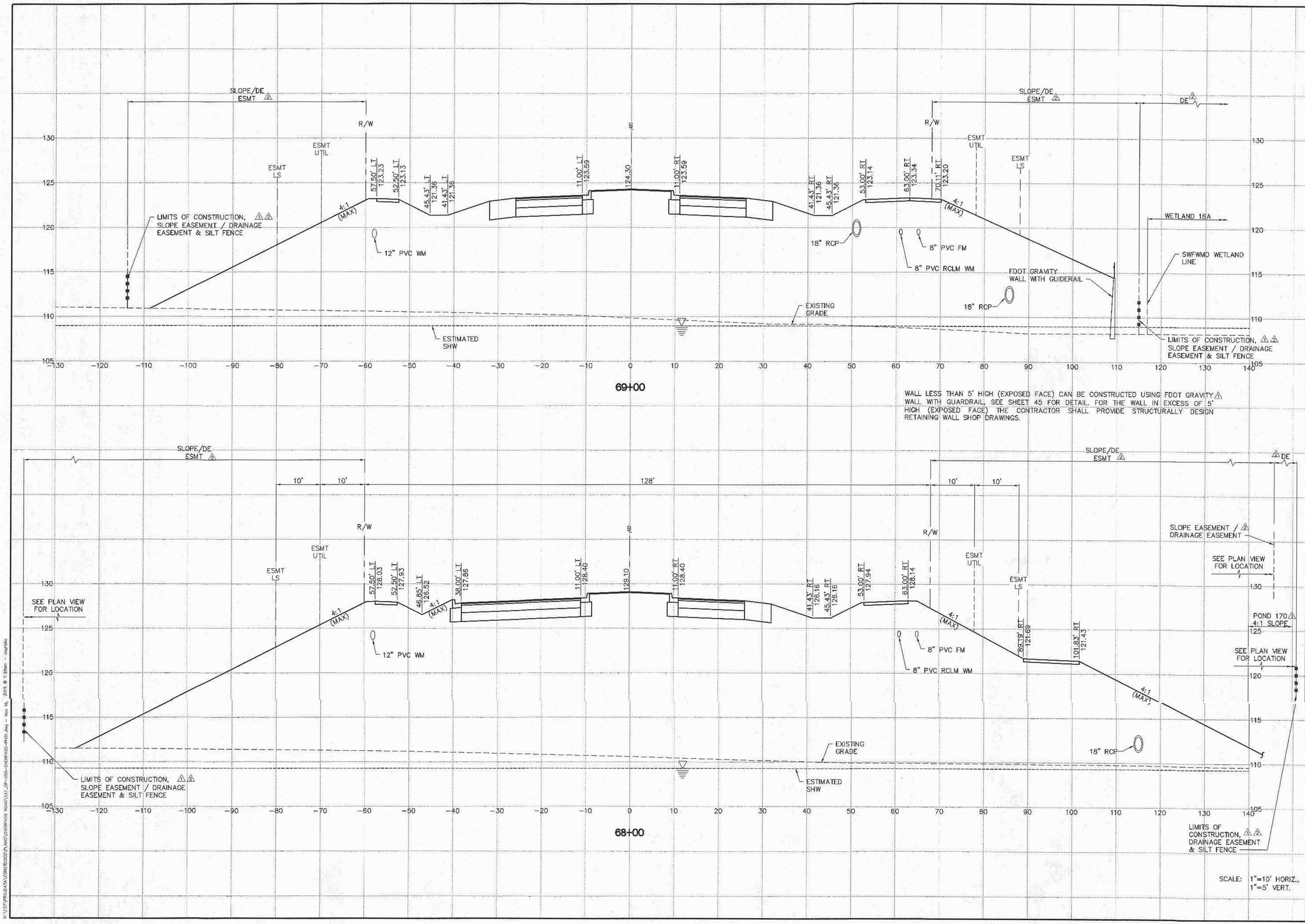

NO.	DATE	REVISIONS
3	05-12-2015	REMOVED SUMP WL 16A-W, ADDED POND 170
		REVISIONS MADE PER ACOE COMMENTS
2	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT.
		ADDED EASEMENTS LIMITS
1	02-09-2015	REVISED PER PASCO COUNTY COMMENTS

JOB NO.	0597-0025
SPN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
CLC	

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD
CROSS SECTIONS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.F DESIGN.COM C.A. NO. 7421

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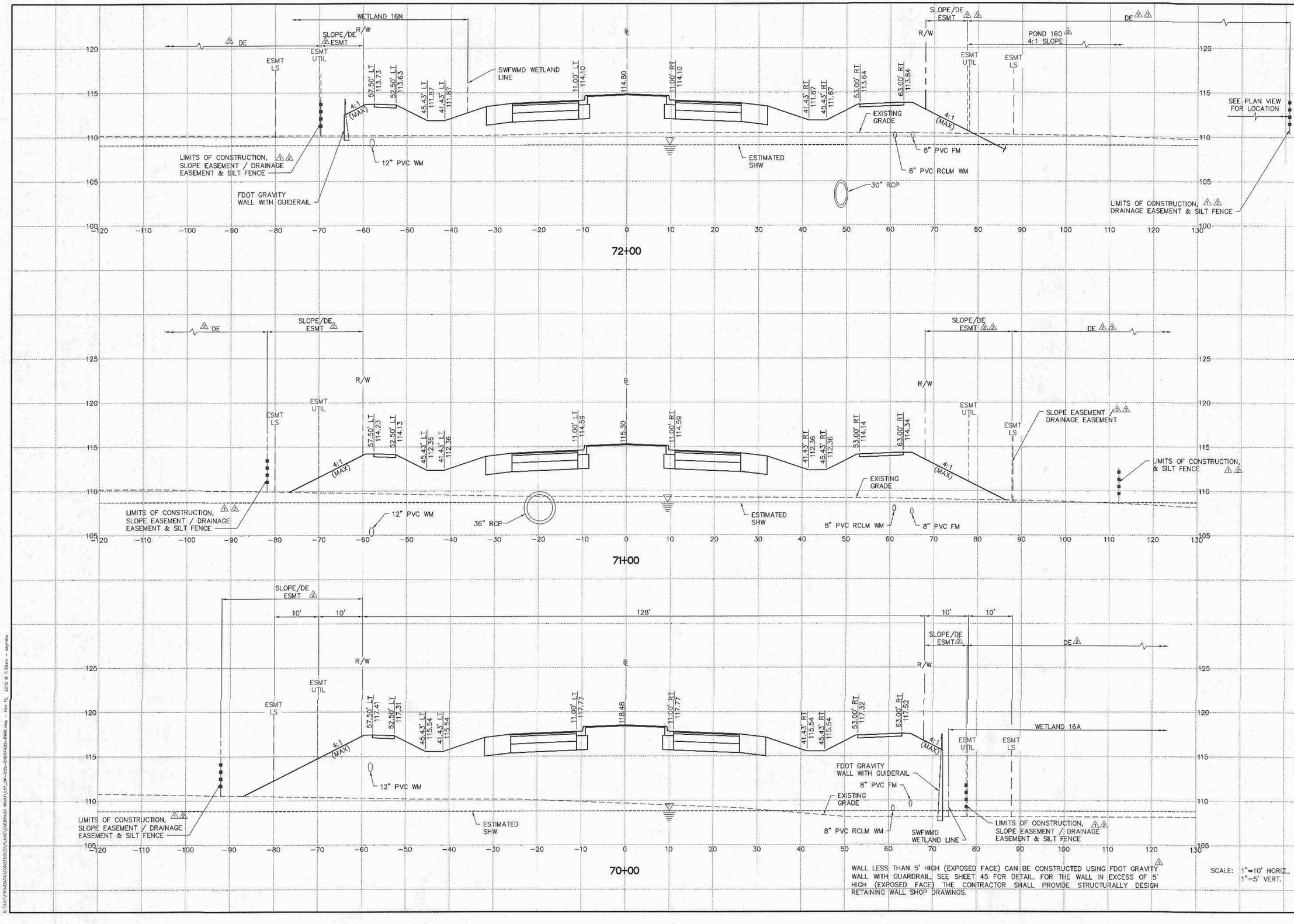

WALL LESS THAN 5' HIGH (EXPOSED FACE) CAN BE CONSTRUCTED USING FDOT GRAVITY WALL WITH GUARDRAIL. SEE SHEET 45 FOR DETAIL. FOR THE WALL IN EXCESS OF 5' HIGH (EXPOSED FACE) THE CONTRACTOR SHALL PROVIDE STRUCTURALLY DESIGN RETAINING WALL SHOP DRAWINGS.

SCALE: 1"=10' HORIZ., 1"=5' VERT.

PAUL E. SKIDMORE LICENSED NO. 59631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	BY
3	05-12-2015	REMOVED SUMP WL 16A-E, ADDED POND 160	
		REVISIONS MADE PER ACOE COMMENTS	
2	04-07-2015	REVISED LABEL FOR SLOPE / DRAINAGE ESMT	AB
		ADDED EASEMENTS LIMITS	
1	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS

JOB NO. 0597-0025
DWN 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS
DIV.

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 388-8070

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: OVERPASS ROAD CROSS SECTIONS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 846-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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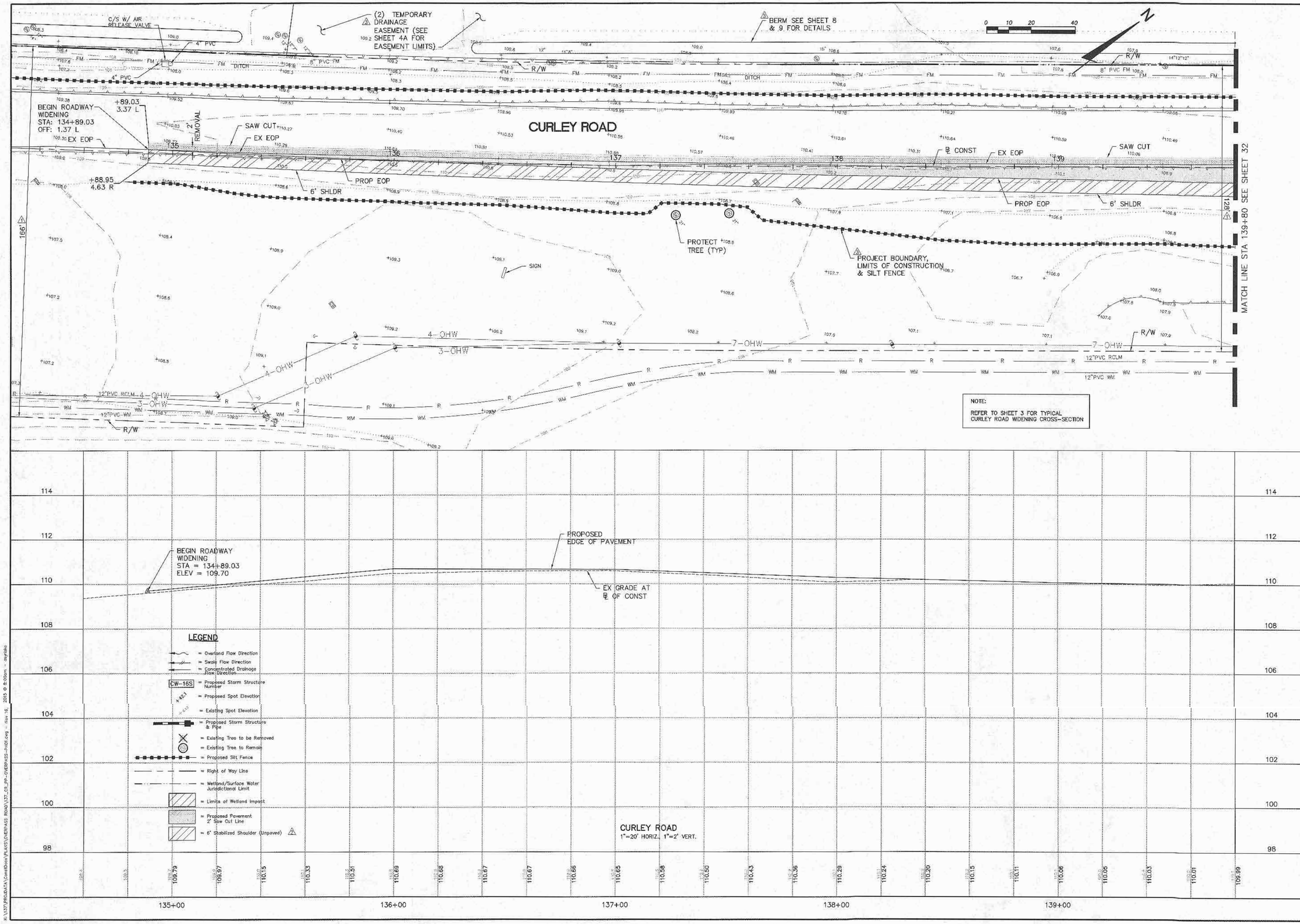

PAUL E. SKIDMORE LICENSED NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	APPR. BY
3	04-07-2015	ADDED PROJECT BNDY AND ESMT LIMITS	AB
2	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS

JOB NO. 0597-0025
SPN 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS
Q.C.

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1030
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: CURLEY ROAD WIDENING PLAN & PROFILE

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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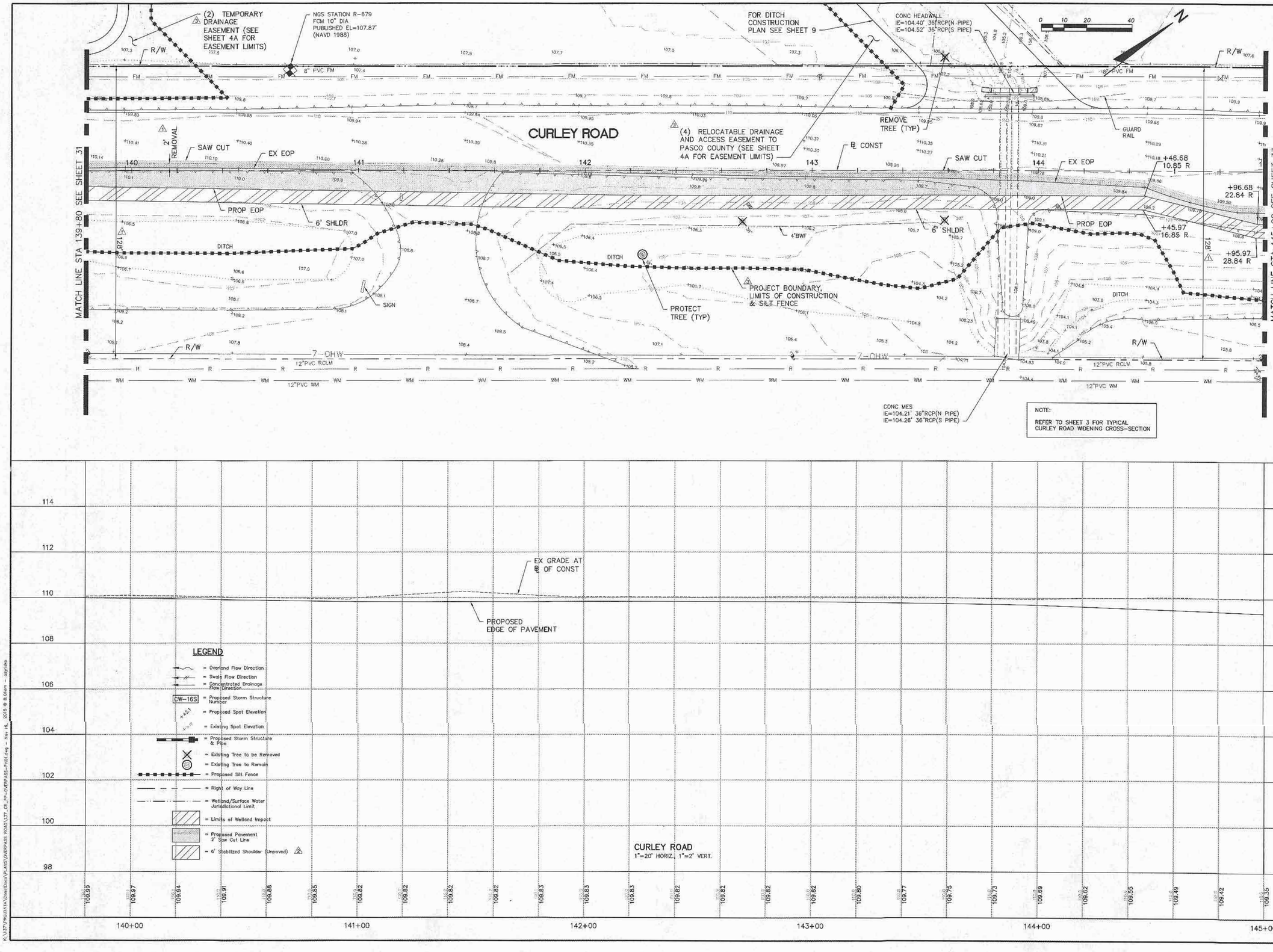

NO.	DATE	REVISIONS		
1	04-07-2015	ADDED PROJECT BNDY AND ESMT LIMITS	AB	
2	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS	
3	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS	

JOB NO. 0597-0025
SPR 137
DATE 06-04-2014
COURSE PS
DRAWN AVS
CHECKED PS
APP'D BY PS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: CURLEY ROAD WIDENING PLAN & PROFILE

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
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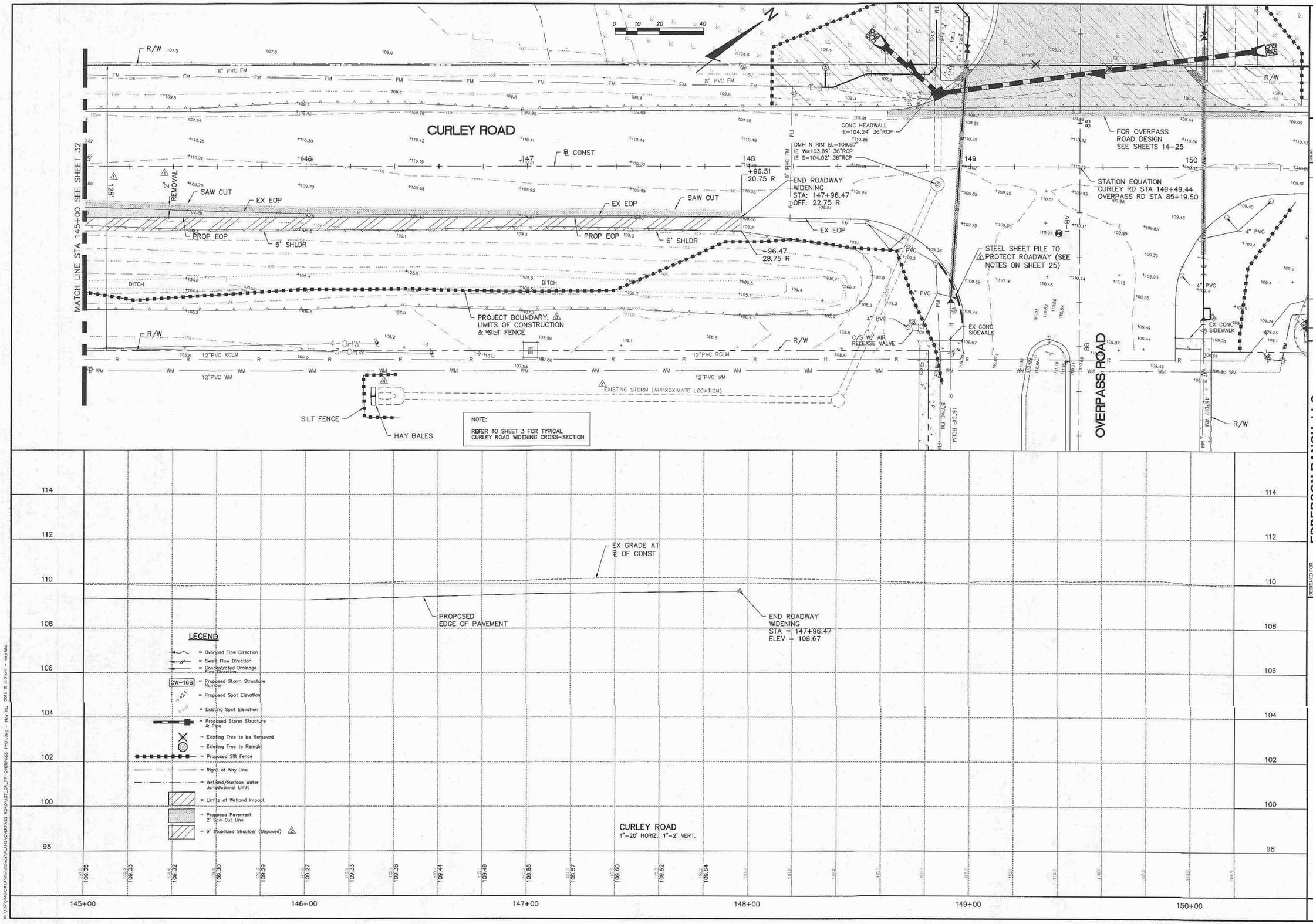

NO.	DATE	REVISIONS	APPD BY
4	07-16-2015	ADDED EXISTING STORM & BMP AT DISCHARGE	PS
		ADDED SHEET PILE PER R/W USE COMMENTS	PS
3	04-07-2015	ADDED PROJECT BOUNDARY	AB
2	02-09-2015	REVISED PER PASCO COUNTY COMMENTS	PS
1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: CURLEY ROAD WIDENING PLAN & PROFILE

JOB NO. 0597-0025
EPN 137
DATE 06-04-2014
DESIGNED PS
DRAWN AVS
CHECKED PS
D.C.

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
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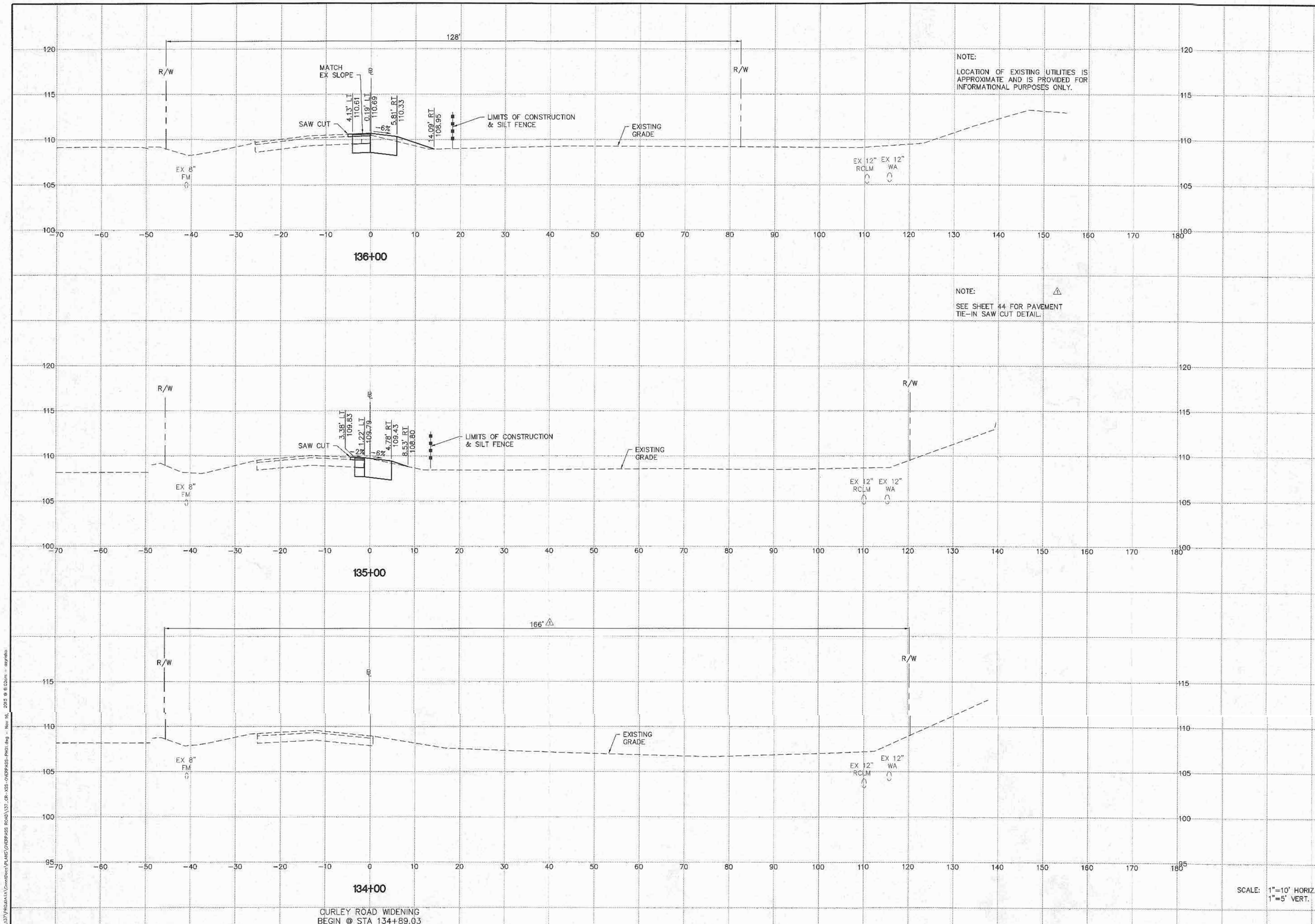

PAUL E. SKIDMORE LICENSED NO. 49631 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	DWG.	DATE	DESIGNED	DRAWN	CHECKED	Q.C.
0597-0025	137	06-04-2014	PS	AVS	PS	

NO.	DATE	REVISIONS
1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 258-8878

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: CURLEY ROAD WIDENING CROSS SECTIONS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
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PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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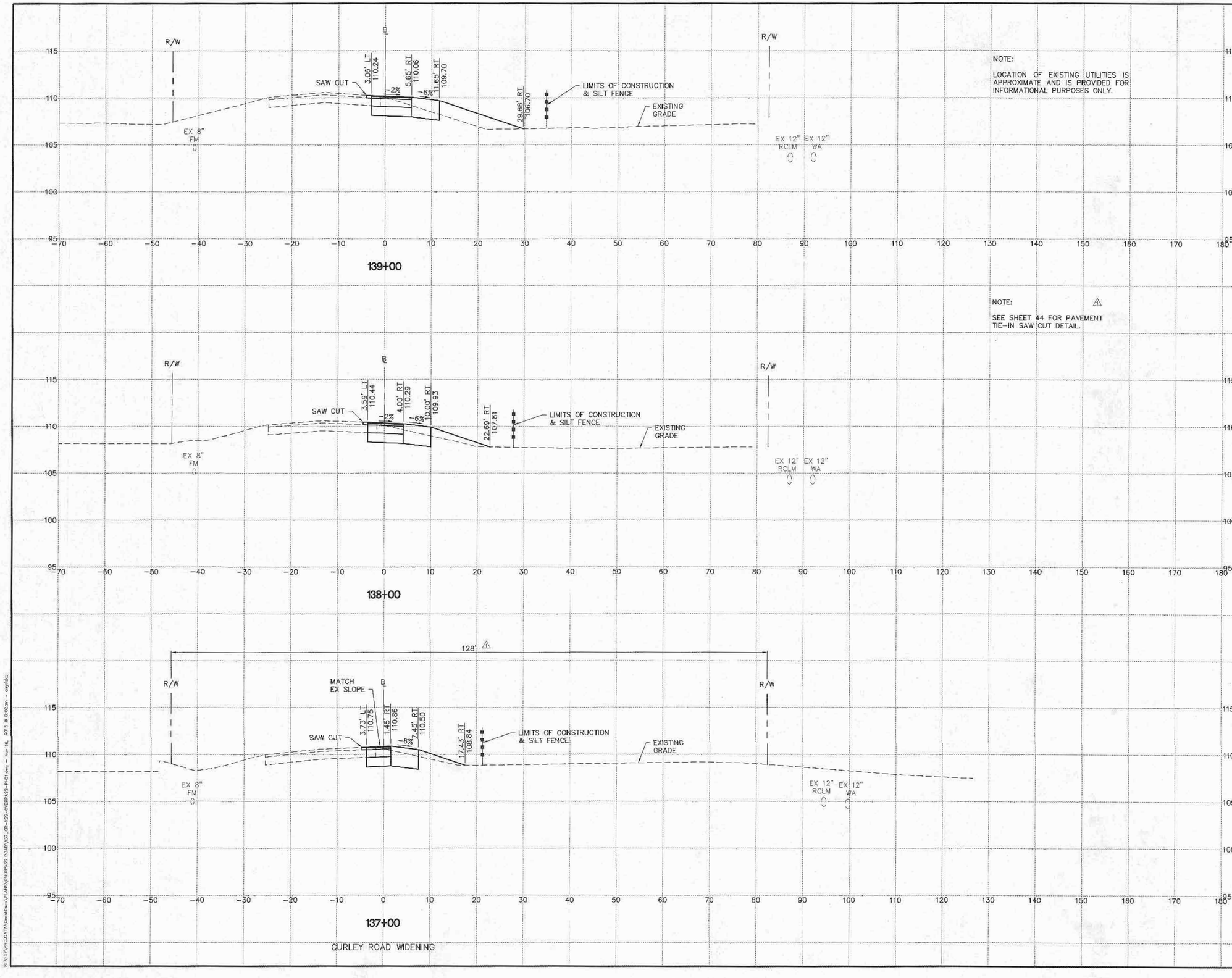

NOTE:

LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOTE: ⚠

SEE SHEET 44 FOR PAVEMENT TIE-IN SAW CUT DETAIL.

SCALE: 1"=10' HORIZ., 1"=5' VERT.

PAUL E. SKIDMORE LICENSE NO. 65351 STATE OF FLORIDA PROFESSIONAL ENGINEER 9-15-15

JOB NO.	0597-0025		
DES.	137		
DATE	06-04-2014		
DESIGNED	PS	DRAWN	AVS
CHECKED	PS	QC	PS

NO.	DATE	REVISIONS	BY
1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: CURLEY ROAD WIDENING
CROSS SECTIONS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT R CHEY., FLORIDA 34655
PHONE: (800) 532 - 1047 FAX: (727) 848 - 3648 WWW.FLDESIGN.COM C.A. NO. 7421

SHEET 35 OF 51

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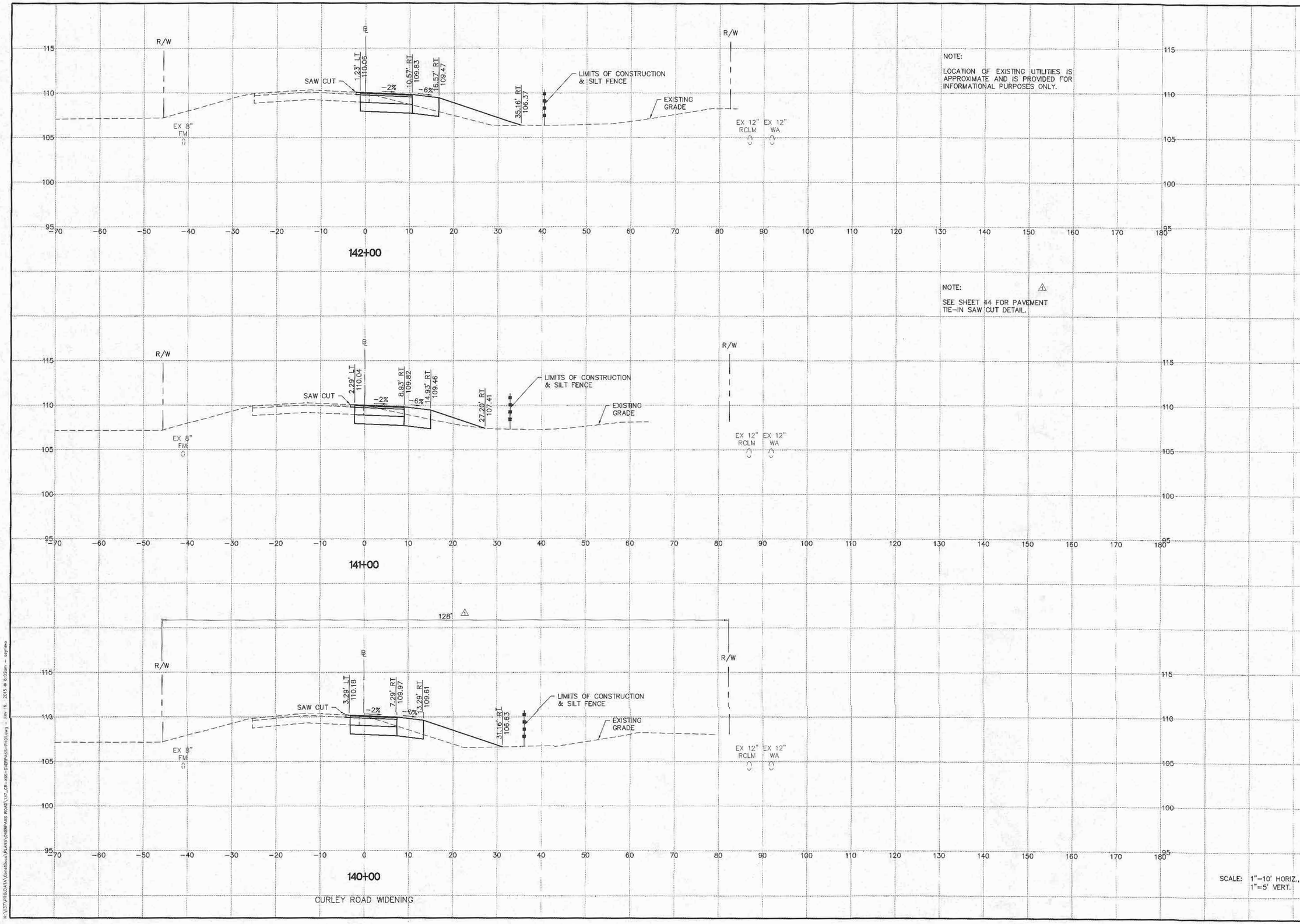

NOTE:

LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOTE: △1

SEE SHEET 44 FOR PAVEMENT TIE-IN SAW CUT DETAIL.

SCALE: 1"=10' HORIZ., 1"=5' VERT.

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	BY
△1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS

JOB NO.	0597-0025
DWG.	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
QUIC.	

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: CURLEY ROAD WIDENING CROSS SECTIONS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
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PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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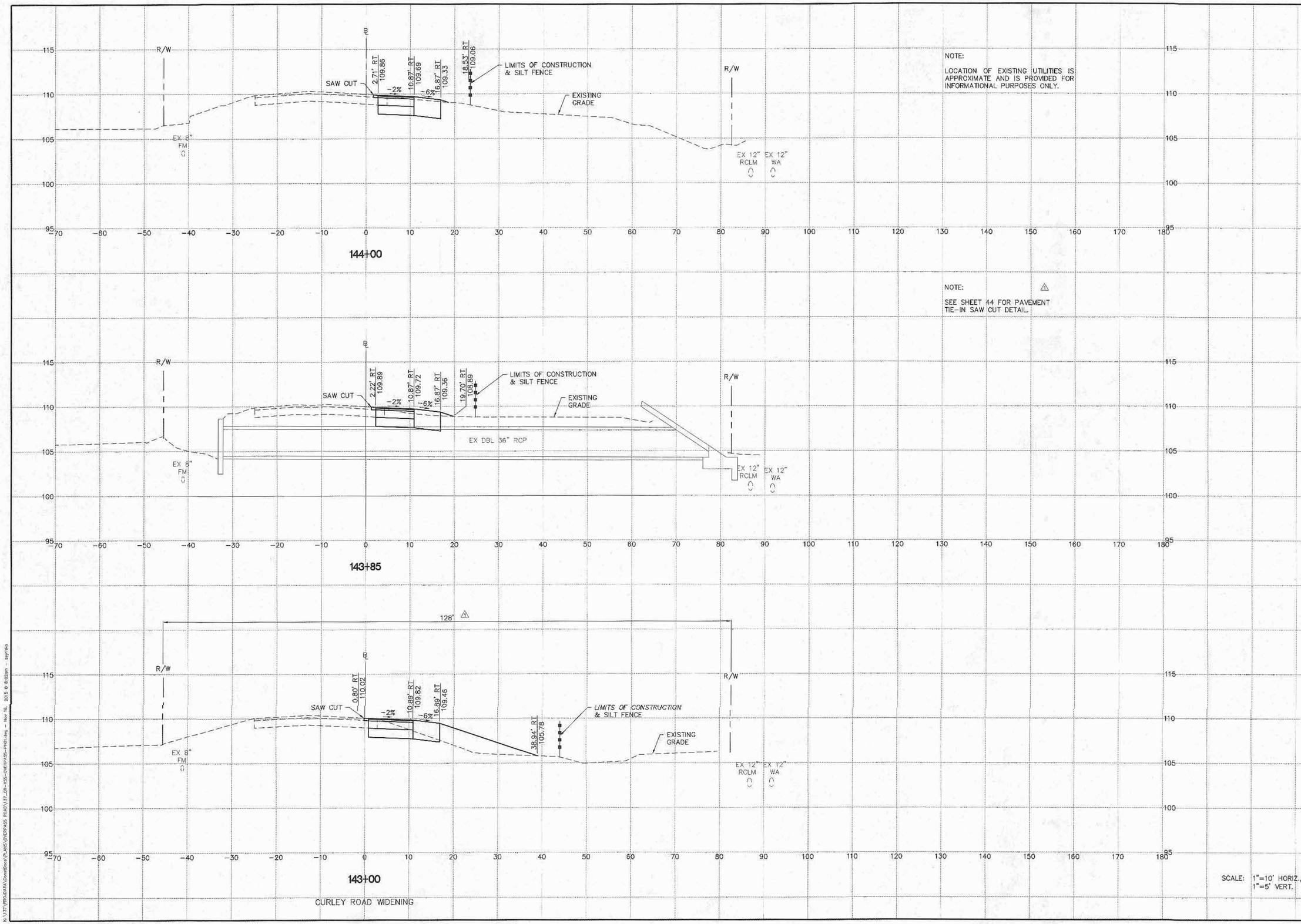

NOTE:

LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOTE: △1

SEE SHEET 44 FOR PAVEMENT TIE-IN SAW CUT DETAIL.

SCALE: 1"=10' HORIZ., 1"=5' VERT.

PAUL E. SKIDMORE LICENSED NO. 30831 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	DWN	DATE	DESIGNED	DRAWN	CHECKED	CKD
0597-0025	137	06-04-2014	PS	AVS	PS	

NO.	DATE	REVISIONS	APPD BY
1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 286-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: CURLEY ROAD WIDENING CROSS SECTIONS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT, ACHIEVE IT. —
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PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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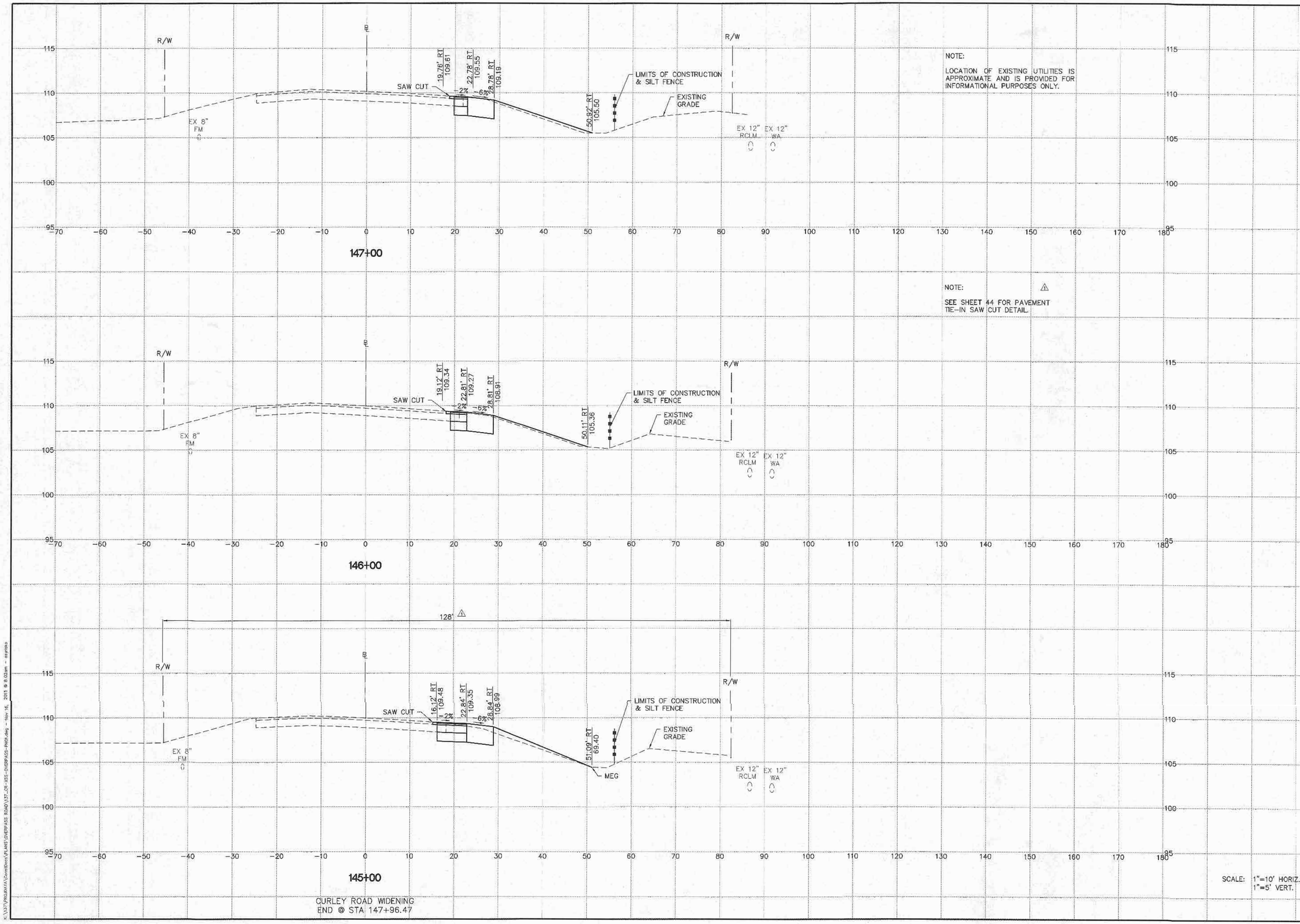

NOTE:

LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

NOTE: △1

SEE SHEET 44 FOR PAVEMENT TIE-IN SAW CUT DETAIL.

SCALE: 1"=10' HORIZ., 1"=5' VERT.

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	0597-0025
ETN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
O.C.	

NO.	DATE	REVISIONS	APP'D BY
△1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1000
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: CURLEY ROAD WIDENING CROSS SECTIONS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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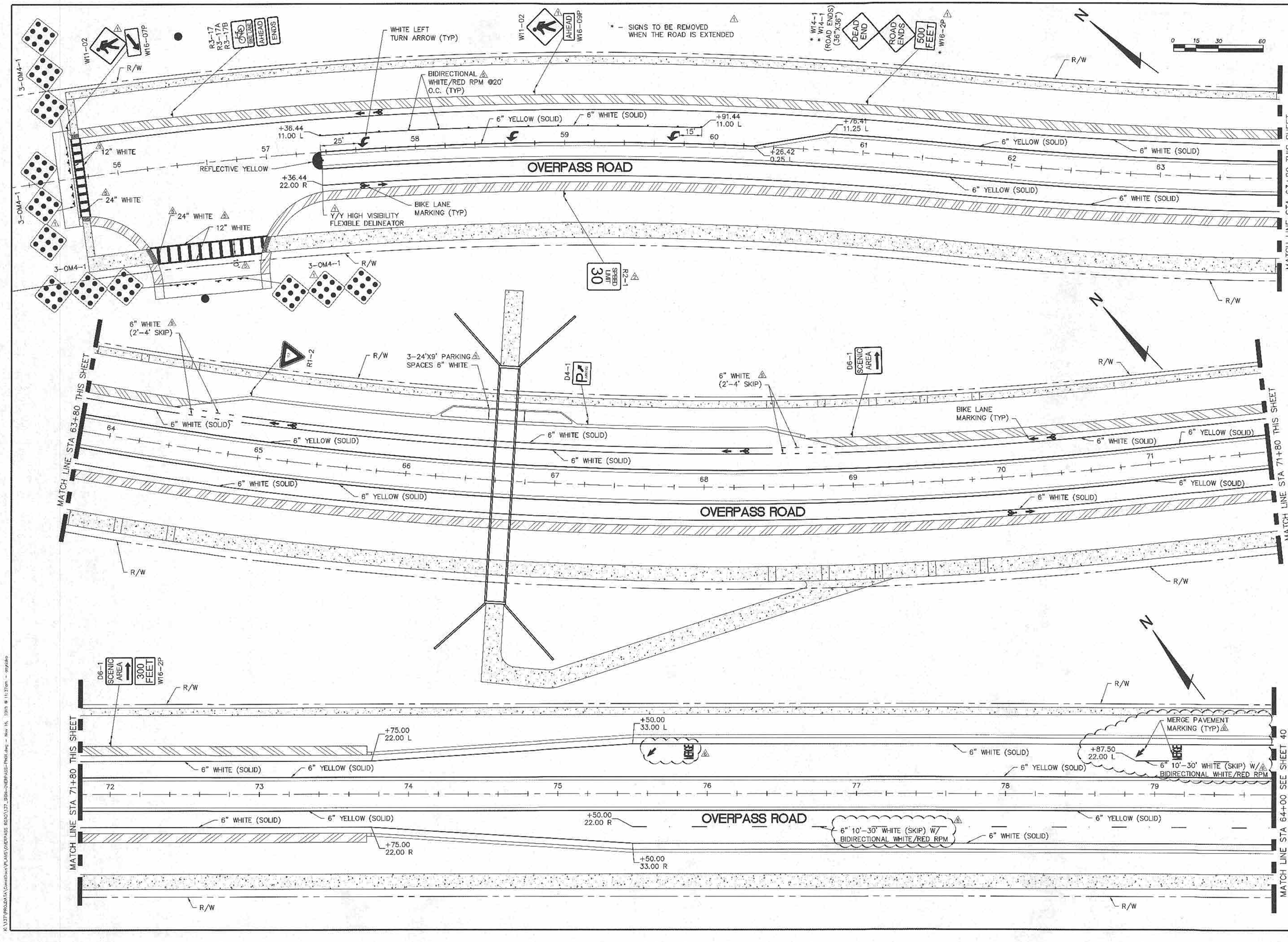

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PAUL E. SKIDMORE LICENSED NO. 39031 STATE OF FLORIDA PROFESSIONAL ENGINEER

			PROJECT	0597-0025
			EPIN	137
		PS	DATE	06-04-2014
		AB	DESIGNED	PS
11-16-2015	ADDED LANE - WIDENED RD FROM STA 73+75	PS	DRAWN	AVS
04-07-2015	ADDED STRIPING LABELS	PS	CHECKED	PS
03-06-2015	STRIPING REVISED PER PASCO COUNTY	PS	QC	
02-18-2015	TURN LANE ADDED PER PASCO COUNTY	PS		
01-09-2015	REVISED SPEED LIMIT FROM 35 TO 30	PS		
08-11-2014	REVISED PER PASCO COUNTY COMMENTS	PS		
NO.	DATE	APPVD BY		

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: SIGNING & PAVEMENT MARKING PLAN & DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 632-1047 FAX: (727) 846-3846 WWW.FLDESIGN.COM C.A. NO. 7421

SHEET 39 OF 51

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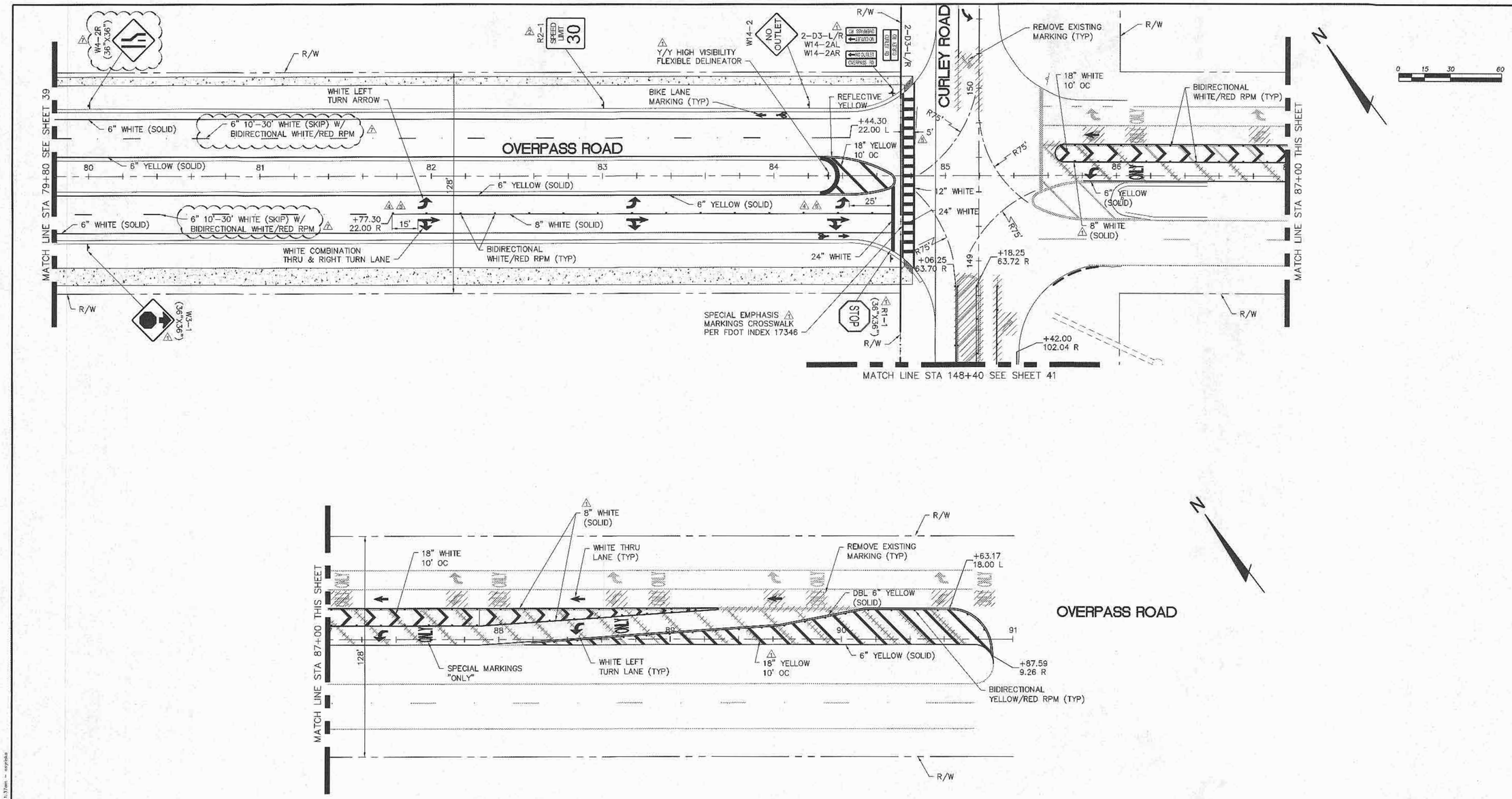

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	APPD. BY	CHK'D BY	DWN BY
7	11-16-2015	ADDED LANE - WIDENED RD FROM STA 73+75	PS	PS	0597-0025
6	07-06-2015	REMOVED "ONLY" PAVEMENT MARKING	PS	PS	
5	04-07-2015	ADDED STRIPING LABELS	AB	AB	137
4	03-06-2015	REVISED INTERSECTION & STRIPING PER PASCO COUNTY	PS	PS	
3	02-19-2015	TURN LANE ADDED INTERSECTION STRIPING	PS	PS	06-04-2014
2	01-09-2015	REVISED PER PASCO COUNTY	PS	PS	AVS
1	09-11-2014	REVISED SPEED LIMIT FROM 35 TO 30	PS	PS	
		REVISED PER PASCO COUNTY COMMENTS	PS	PS	

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: SIGNING & PAVEMENT MARKING PLAN & DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532 - 1047 FAX: (727) 848 - 3648 WWW.FLDESIGN.COM C.A. NO. 7421

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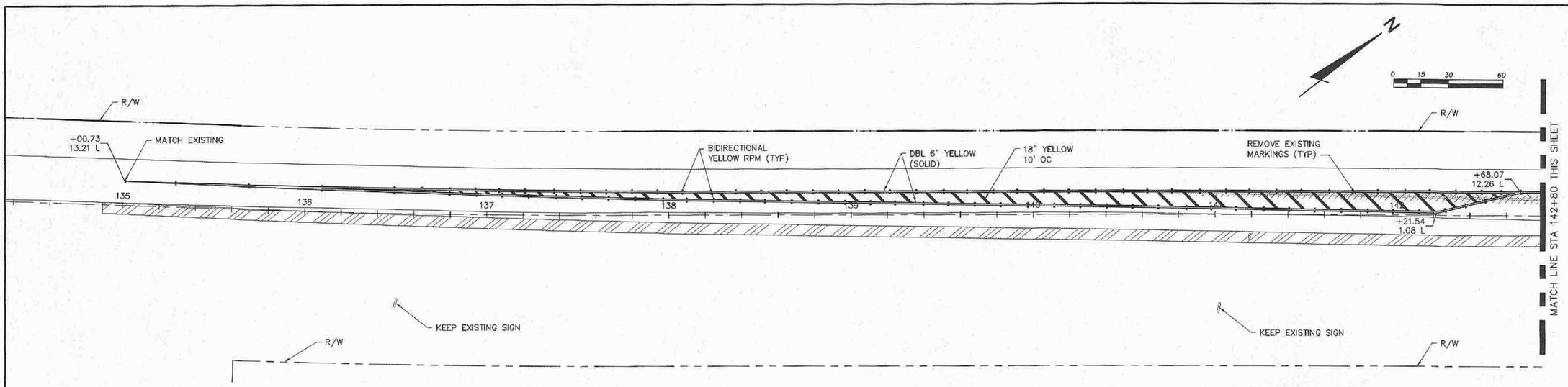

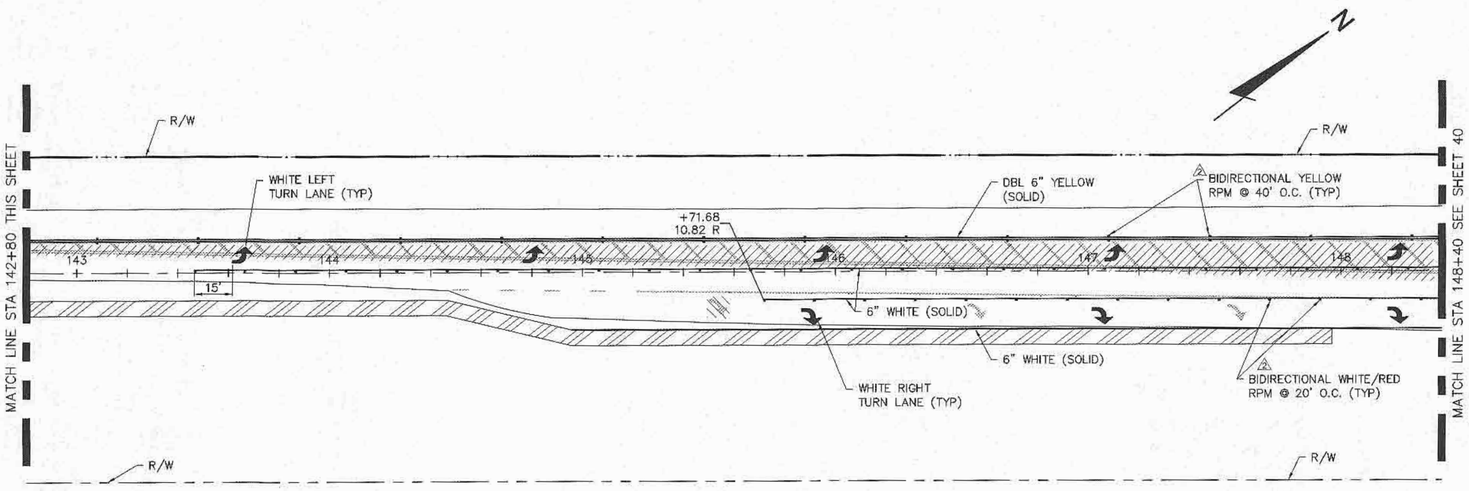

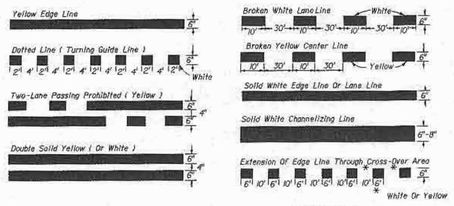

TYPES OF PERMANENT LONGITUDINAL LINES

BASIC COLOR RULE

White lines separate flows in the same direction.
Yellow lines separate flows in the opposite direction.
Yellow dotted lines may be used in special cases.

PASCO COUNTY FLORIDA
TRAFFIC OPERATIONS DIVISION
ENGINEERING SERVICES DEPARTMENT
DEVELOPMENT SERVICES BRANCH

SPECIFICATIONS FOR DESIGN AND INSTALLATION OF TRAFFIC CONTROL DEVICES ON COUNTY ROADS

1. Purpose:
These specifications have been developed to provide developers with a uniform system for installation of traffic control devices on the County road system. A uniform system provides for reduced maintenance costs and a high standard of visibility for drivers. All required traffic control devices shall be installed by the developer of the project.

2. Florida State Statute 316.0745:
2.1) Any and all traffic control devices installed on the County road system shall conform to Florida State Statute 316.0745, Uniform signals and devices.
2.2) This statute requires that all devices conform to Florida Department of Transportation (FDOT) Specifications. The FDOT has adopted the Federal Manual on Uniform Traffic Control Devices as the standards to be used in the State of Florida.

3. Pavement Markings
3.1) All pavement markings shall be thermoplastic; raised pavement makers shall be class "B".
3.2) Pavement markings and raised pavement markers shall be installed on all roads classified other than residential with an ADT greater than 500 vehicles or if other conditions exist that require pavement markings, (see MUTCD section 3B-1).

4. Traffic Control Signs:
4.1) All sign blanks shall be of a type currently certified by the FDOT for use in the State of Florida.
4.2) All sign faces shall be High Intensity grade and of a type currently certified by the FDOT for use in the State of Florida.
4.3) All signs shall be no less than the standard size as specified by the Federal Manual on Uniform Traffic Control Devices. No minimum size signing shall be accepted. Larger signsshall be used when required by design speed etc.
4.4) Street name signs shall be 9" on collector and arterial roads and all signs shall have 6" series B letters. All street name signs on private roads shall be standard D3 street name signs with the colors reversed. White background with green letters and border. At intersections with county maintained roads, the county maintained road shall be green background with white letters and border.Street name sign brackets for 6" signs 30" long or less, or 9" signs 24" long or less, shall have a Sinchbladeor cross. All other street name signs shall be mounted with brackets with a 12 inch blade or8 inchcross. All street name sign brackets shall be supplied with bolts, set screws will not be accepted.
4.5) On roads to be maintained by Pasco County, all signs other than street names shall be datecoded with a yellow reflective label affixed to the back of the sign. It will be punched to show month, day, and year of installation (See Sample Label). Alternate label designs providing the date code information may be used if a sample is submitted and approved by Pasco County prior to installation.

WARNING
REMOVAL OF, OR DEFACING ANY TRAFFIC CONTROL DEVICE IS PUNISHABLE BY FINE AND/OR IMPRISONMENT REPORT DAMAGE BY CALLING (813) 847-2411
INSTALLED
J F M A M J J A S O N D
10's 20's 30's – 1 2 3 4 5 6 7 8 9
12 13 14 15 16 17 18 19

4.6) All post systems, mounting brackets and hardware shall be of a type currently in use by the Pasco County Public Works Department and currently certified by the Florida Department of Transportation for use in the state of Florida. Alternative systems etc. shall only be used if approved by the County Engineer.

5. Certification of Materials:
5.1) All traffic control devices and materials shall be on the current FDOT APPROVED PRODUCTS LIST. Proof of certification is required for all traffic control devices
5.2) A Traffic Control Devices Submittal Data Form shall be submitted for approval prior to installation of any traffic control devices. No traffic control device shall be installed until the certification submittal has been approved by the Traffic Operations Division. These forms are available from the Traffic Operations Division. Copies of the approved Traffic Control Devices Submittal Data Form shall be sent to the contractor and the Engineering Inspections Division.

6. Traffic Control Devices Plan:
6.1) All pavement markings shall be thermoplastic; raised pavement makers shall be class "B".
6.2) Pavement markings and raised pavement markers shall be installed on all roads classified other than residential with an ADT greater than 500 vehicles or if other conditions exist that require pavement markings, (see MUTCD section 3B-1).

7. Cost Estimate: An engineer's cost estimate shall be required for all proposed traffic control devices. The estimates shall be provided in conjunction with the Traffic Control Devices Submittal Data Form. (See Section 5.2)

8. Inspection and acceptance:
8.1) Upon completion of the installation of the traffic control devices, the contractor shall call the Engineering Inspections Division for an inspection at (813) 847-8154.
8.2) The inspection shall be made by the Engineering Inspections Division within 48 hours (two working days) of the request.
8.3) An inspection report shall be made by the Engineering Inspections Division. Copies of the report shall be sent to the Engineer and the Developer.
8.4) No roadway shall be open to the Public until all traffic control devices have been inspected and accepted by Pasco County.

PAUL E. SKIDMORE
LICENSE
NO. 46531
STATE OF FLORIDA
PROFESSIONAL ENGINEER
11-20-15

CONTRACT	0597-0025
ENTITY	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
QUALITY CTL	PS
APPR. BY	

DATE	REVISIONS	BY
04-07-2015	ADDED STRIPING LABELS	AB
09-11-2014	REVISED PER PASCO COUNTY COMMENTS	PS

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 396-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
SIGNING & PAVEMENT MARKING
PLAN & DETAILS - CURLEY ROAD

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
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SHEET 41 OF 51

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PASCO COUNTY LANDSCAPING STANDARD NOTES (PASCO LDC 905.2)

1. MAINTENANCE RESPONSIBILITY. THE COUNTY IS NOT RESPONSIBLE FOR MAINTENANCE OF ANY LANDSCAPING UNLESS APPROVED THROUGH A COUNTY MAINTENANCE AGREEMENT. (LDC 905.2–C.1.A)

2. CLEAR–SIGHT TRIANGLE. WHERE A DRIVEWAY/ACCESSWAY INTERSECTS A ROAD RIGHT–OF–WAY OR WHERE TWO (2) ROAD RIGHTS–OF–WAY INTERSECT, VEGETATION, STRUCTURES, AND NON–VEGETATIVE VISUAL SCREENS SHALL NOT BE LOCATED SO AS TO INTERFERE WITH THE CLEARSIGHT TRIANGLE AS DEFINED IN THIS CODE OR THE FLORIDA DEPARTMENT OF TRANSPORTATION, MANUAL OF UNIFORM MINIMUM STANDARDS, MOST RECENT EDITION (GREEN BOOK), WHICHEVER IS MORE RESTRICTIVE. (LDC 905.2–C.1.B)

3. SUSTAINABLE PRACTICES. LANDSCAPING SHALL BE INSTALLED SO THAT LANDSCAPING MATERIALS MEET THE CONCEPT OF RIGHT MATERIAL/RIGHT PLACE. INSTALLED TREES AND PLANTS SHALL BE GROUPED INTO ZONES ACCORDING TO WATER, SOIL, CLIMATE, AND LIGHT REQUIREMENTS. PLANT GROUPINGS BASED ON WATER REQUIREMENTS ARE DROUGHT TOLERANT, NATURAL, AND OASIS. (LDC 905.2–C.1.C)

4. DIVERSITY. A MAXIMUM OF 50 PERCENT OF THE PLANT MATERIALS USED, OTHER THAN TREES, MAY BE NON–DROUGHT TOLERANT. A MINIMUM OF 30 PERCENT OF THE PLANT MATERIALS, OTHER THAN TREES AND TURFGRASS, USED TO FULFILL THE REQUIREMENTS OF THIS SUBSECTION SHALL BE NATIVE FLORIDIAN SPECIES, SUITABLE FOR GROWTH IN THE COUNTY. (LDC 905.2–C.1.D)

5. DIVERSITY. NO ONE PLANT SPECIES OF SHRUBS OR GROUND COVER PLANTS, EXCLUDING TURFGRASS, SHALL CONSTITUTE MORE THAN 25 PERCENT COVERAGE OF THE OVERALL LANDSCAPE AREA. (LDC 905.2–C.1.D.5)

6. QUALITY. ALL PLANT MATERIALS SHALL BE FLORIDA NO. 1 GRADE PER "GRADES AND STANDARDS FOR NURSERY PLANTS," FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES (FDACS), WHICH IS INCORPORATED HEREIN BY REFERENCE. (LDC 905.2–C.2.A)

7. AVOID EASEMENTS. TREES SHALL NOT BE PLANTED WITHIN ANY EASEMENT SO AS TO INTERFERE WITH THE USE OF THAT EASEMENT, NOR UNDER ANY PRESENT OR PLANNED OVERHEAD UTILITY, NOR IN ANY RIGHTS–OF–WAY WITHOUT COUNTY APPROVAL THROUGH THE ASSOCIATED REVIEW PROCESS. (LDC 905.2–C.3.C)

8. MULCH SHALL BE USED IN CONJUNCTION WITH LIVING PLANT MATERIALS SO AS TO COVER EXPOSED SOIL. MULCH SHALL BE INSTALLED TO A MINIMUM DEPTH OF THREE (3) INCHES. THE MULCH SHOULD NOT BE PLACED DIRECTLY AGAINST THE PLANT STEM OR TREE TRUNK. MULCH SHALL NOT BE REQUIRED FOR ANNUAL BEDS. STONE OR GRAVEL MAY BE USED TO COVER A MAXIMUM OF 20 PERCENT OF THE LANDSCAPED AREA. (LDC 905.2–C.3.D)

9. QUALITY PRACTICES. ALL LANDSCAPING SHALL BE INSTALLED IN ACCORDANCE WITH STANDARDS AND PRACTICES OF THE FLORIDA NURSERY, GROWERS, AND LANDSCAPE ASSOCIATION AND THE FLORIDA CHAPTER OF THE INTERNATIONAL SOCIETY OF ARBORICULTURE. (LDC 905.2–C.3.E)

10. ALL PORTIONS OF A LOT UPON WHICH DEVELOPMENT HAS COMMENCED, BUT NOT CONTINUED FOR A PERIOD OF 30 DAYS, SHALL BE PLANTED WITH A GRASS SPECIES OR GROUND COVER TO PREVENT EROSION AND ENCOURAGE SOIL STABILIZATION. ADEQUATE COVERAGE, SO AS TO SUPPRESS FUGITIVE DUST, SHALL BE ACHIEVED WITHIN 45 DAYS. (LDC 905.2–C.3.G) (2)

11. ALL REQUIRED LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY CONDITION IN PERPETUITY IN ACCORDANCE WITH THIS CODE. (LDC 905.2–E.2)

12. ONGOING MAINTENANCE TO PREVENT THE ESTABLISHMENT OF PROHIBITED EXOTIC SPECIES IS REQUIRED. (LDC 905.2–E.4)

13. LANDSCAPE PLANTINGS SHALL BE PLACED TO AVOID CONFLICT WITH THE EXISTING AND/OR PROPOSED UTILITIES. (1)

14. LANDSCAPING SHALL BE IRRIGATED BY WATER TRUCKS UNTIL SUCH TIME THE LANDSCAPING HAS ESTABLISHED A SUPPORTING ROOT SYSTEM.

15. TREE STAKING TO COMPLY WITH FDOT INDEX 544. (2)

(2)

OVERALL EPPERSON RANCH SOUTH TREE REMOVAL DEFICIT (in inches)	13,462
Per 10/08/14 Tree Removal Permit	
Credits for Tree Replacment: (in inches)	
Overpass Road	93
Crystal Lagoon	104
Park Place Blvd., Phase 1	2778
Total Credits for Overpass Road, Crystal Lagoon and Park Place Blvd.	2975
Remaining Tree Removal Deficit (in inches)	10,487

PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	NATIVE	DROUGHT TOL.
	15	ACER RUBRUM / RED MAPLE	30 GAL	3"CAL	10' HT	Y	Y
	3	FRAXINUS PENNSYLVANICA / GREEN ASH	30 GAL	3"CAL	MIN. 8' HT	Y	Y
	6	TAXODIUM DISTICHUM / BALD CYPRESS	45 GAL	3"CAL	MIN. 8' HT	Y	Y
	3	ULMUS ALATA / WINGED ELM	45 GAL	3"CAL	MIN. 8' HT	Y	Y
EVERGREEN TREES	QTY	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	NATIVE	DROUGHT TOL.
	6	QUERCUS VIRGINIANA 'HIGH RISE' / HIGH RISE LIVE OAK	30 GAL	3"CAL	12' HT	Y	Y

TREE REMOVAL - REPLACEMENT TABLE

Type	Size (Inches)	No.	Total Inches On Site	To Be Saved		To Be Removed		Required Replacements	
				No.	Inches	No.	Inches	1:1	1:3
Oak	10	143	1,430	30	300	113	1,130	1,130	
	11	99	1,089	19	209	80	880	880	
	12	109	1,308	27	324	82	984	984	
	13	85	1,105	18	234	67	871	871	
	14	68	952	12	168	56	784	784	
	15	72	1,080	14	210	58	870	870	
	16	47	752	7	112	40	640	640	
	17	39	663	8	136	31	527	527	
	18	55	990	15	270	40	720	720	
	19	50	950	8	152	42	798	798	
	20	39	780	6	120	33	660	660	
	21	32	672	4	84	28	588	588	
	22	31	682	3	66	28	616	616	
	23	19	437	2	46	17	391	391	
	24	23	552	5	120	18	432	432	
	25	17	425	1	25	16	400	400	
	26	18	468	1	26	17	442	442	
	27	5	135	2	54	3	81	81	
	28	10	280	1	28	9	252	252	
	29	3	87	0	0	3	87	87	
	30	4	120	0	0	4	120	120	
	31	3	93	0	0	3	93	93	
	32	5	160	0	0	5	160	160	
	33	6	198	1	33	5	165	165	
	34	2	68	2	68	0	0	0	
	35	3	105	0	0	3	105	105	
	36	2	72	1	36	1	36	36	
	37	4	148	1	37	3	111	111	
	38	2	76	1	38	1	38	38	
	39	1	39	1	39	0	0	0	
	42	2	84	0	0	2	84	84	
	43	1	43	1	43	0	0	0	
	Total	999	16,043	191	2,978	808	13,065	13,065	0
Maple	10	6	60	2	20	4	40		13 1/3
	11	3	33	1	11	2	22		7 1/3
	12	2	24	1	12	1	12		4
	13	4	52	3	39	1	13		4 1/3
	14	3	42	2	28	1	14		4 2/3
	15	2	30	1	15	1	15		5
	18	2	36	1	18	1	18		6
	20	1	20	1	20	0	0		0
	21	1	21	0	0	1	21		7
	23	1	23	1	23	0	0		0
	Total	25	341	13	186	12	155	0	51 2/3
Cedar	11	2	22	0	0	2	22		7 1/3
	14	1	14	0	0	1	14		4 2/3
	18	1	18	0	0	1	18		6
	Total	4	54	0	0	4	54	0	18
China Berry	10	12	120	0	0	12	120		40
	11	5	55	0	0	5	55		18 1/3
	12	4	48	0	0	4	48		16
	13	1	13	0	0	1	13		4 1/3
	14	4	56	0	0	4	56		18 2/3
	15	3	45	0	0	3	45		15
	16	2	32	0	0	2	32		10 2/3
	Total	31	369	0	0	31	369	0	123
Camphor	10	4	40	0	0	4	40		
	11	1	11	0	0	1	11		
	12	5	60	1	12	4	48		
	13	1	13	0	0	1	13		
	14	2	28	0	0	2	28		
	17	2	34	0	0	2	34		
	19	1	19	0	0	1	19		
	21	1	21	1	21	0	0		
	32	1	32	0	0	1	32		
	Total	18	258	2	33	16	225	0	0
Bay	10	3	30	1	10	2	20		6 2/3
	11	2	22	1	11	1	11		3 2/3
	12	3	36	2	24	1	12		4
	15	1	15	0	0	1	15		5
	Total	9	103	4	45	5	58	0	19 1/3
Black Cherry	10	15	150	1	10	14	140		46 2/3
	11	5	55	1	11	4	44		14 2/3
	12	7	84	0	0	7	84		28
	13	3	39	0	0	3	39		13
	14	2	28	0	0	2	28		9 1/3
	15	1	15	0	0	1	15		5
	16	1	16	0	0	1	16		5 1/3
	17	1	17	0	0	1	17		5 2/3
	30	1	30	0	0	1	30		10
	Total	36	434	2	21	34	413	0	137 2/3
Palm	10	1	10	0	0	1	10		
	12	1	12	0	0	1	12		
	13	2	26	0	0	2	26		
	14	8	112	0	0	8	112		
	15	6	90	0	0	6	90		
	16	4	64	0	0	4	64		
	17	5	85	0	0	5	85		
	18	7	126	0	0	7	126		
	19	3	57	0	0	3	57		
	20	1	20	0	0	1	20		
	21	1	21	0	0	1	21		
	23	1	23	0	0	1	23		
	24	2	48	0	0	2	48		
	Total	42	694	0	0	42	694	0	0
Pine	19	1	19	0	0	1	19		6 1/3
	21	1	21	1	21	0	0		0
	22	1	22	0	0	1	22		7 1/3
	Total	3	62	1	21	2	41	0	13 2/3
Sweet Gum	10	5	50	1	10	4	40		13 1/3
	11	2	22	1	11	1	11		3 2/3
	12	1	12	1	12	0	0		0
	15	1	15	0	0	1	15		5
	21	1	21	0	0	1	21		7
	25	1	25	1	25	0	0		0
	Total	11	145	4	58	7	87	0	29
Unknown	15	1	15	0	0	1	15		5
	Total	1	15	0	0	1	15	0	5
Total Required Replacement (Inches)								13,462	

ROBERT HAUGHT
LANDSCAPE ARCHITECT
LA-6666815

JOB NO	0597-0025
EPN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
Q.C.	
APP'D BY	PS

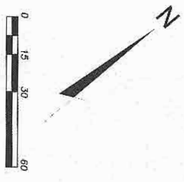
NO	DATE	REVISIONS
2	05-12-2015	REVISED POND PLANTINGS
1	09-18-2014	REVISED PER PASCO COUNTY COMMENTS

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
LANDSCAPING PLAN & DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421



SHEET 42A OF 51

FLORIDA DESIGN CONSULTANTS, INC.
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PHONE: (800) 532 - 1047 FAX: (727) 848 - 3648 WWW.FLDESIGN.COM C.A. NO. 7421

DESIGNED FOR: **EPPERSON RANCH, LLC**
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: **EPPERSON RANCH**
OVERPASS ROAD - PHASE 1

SHEET NAME: **LANDSCAPING PLAN & DETAILS**

NO.	DATE	REVISIONS	APP'D BY
1	09-16-2014	REVISED PER PASCO COUNTY COMMENTS	PS

JOB NO. 0597-0025
EPT 137
DATE 06-04-2014
DESIGNED PS DRAWN AVS
CHECKED PS QC

ROBERT HAUGHT
LANDSCAPE ARCHITECT
LA-6666815

ROUND STRUCTURE BOTTOMS (ALTERNATE A) & ROUND RISERS- TABLE 1
Wall Thickness (t_1 & t_2) and Vertical & Horizontal Areas of Reinforcement (A_s)

Type	Structure/Riser Diameter (ft)	Cast-In-Place Items Class II Concrete			Precast Items Class II Concrete			Precast Items ASTM C478	
		t_1 Riser (in.)	t_2 Bottom (in.)	A_s (in.²/ft.)	t_1 Riser (in.)	t_2 Bottom (in.)	A_s (in.²/ft.)	t_1 or t_2 (in.)	A_s *** (in.²/ft.)
P	3'-6"	6	8	0.20	6	8	0.20	4**	0.105
P	4'-0"	6	8	0.20	6	8	0.20	5**	0.120
J	5'-0"	-	8	0.20	-	8	0.20	6**	0.150
J	6'-0"	-	8	0.20	-	8	0.20	6	0.180
J	7'-0"	-	8	0.20	-	8	0.20	7	0.210
J	8'-0"	-	8	0.20	-	8	0.20	8	0.240
J	10'-0"	-	10	0.40##	-	10	0.40##	10	0.300
J	12'-0"	-	10	0.40##	-	12	0.40##	12	0.360

TABLE 1 NOTES:
##Provide 0.20 sq. in./ft. at each face, 12" max. bar spacing.
**Modified minimum wall thickness.
***Min. total circumferential reinforcement for continuous steel hoops:
A_s = 0.50 sq. in. for riser section height equal or less than 2'-0" (2 hoop min.)
A_s = 0.75 sq. in. for riser section height more than 2'-0" up to 4'-0" (3 hoop min.)
Areas of reinforcing for precast items are based on Grade 60 reinforcing.
No reduction in the area of reinforcement is allowed for welded wire fabric in Table 1;
Area of vertical reinforcing may be reduced in accordance with ASTM C478.

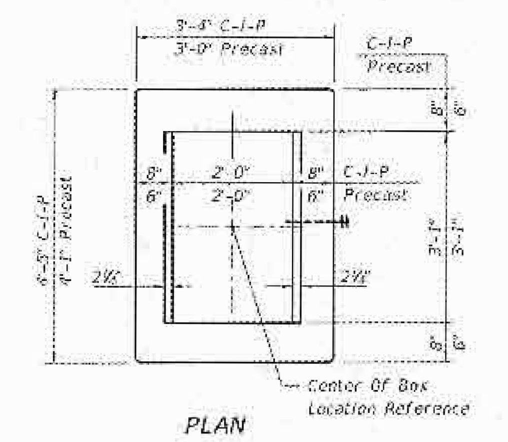
SQUARE & RECTANGULAR STRUCTURES (ALTERNATE B) – TABLE 2

Type	Wall Length (ft)	Max. Depth (ft)	Wall Thickness (t_3) CIP (in.)	Wall Thickness (t_3) Precast (in.)
P	≤ 3'-6"	40	6 Riser 8 Bottom	6
J	4'-0"	40	8	6
J	5'-0"	22	-	6
J	6'-0"	15	-	6
J	5'-0" to 9'-0"	40	8	8
J	10'-0"	26	8	8
J	10'-0" to 12'-0"	40	10	9
J	16'-0"	35	-	9
J	16'-0"	40	10	10
J	20'-0"	25	-	9
J	20'-0"	30	10	10

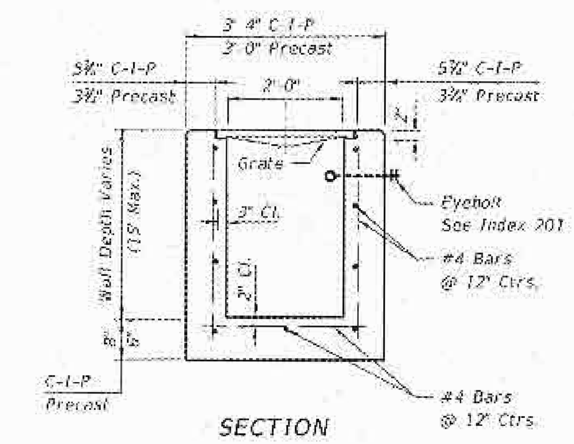
TABLE 2 NOTES:
See Table 8 for Reinforcing Schedule.

GENERAL NOTES

1. Standard structure bottoms 4'-0" diameter and smaller (Alt. A) and 3'-6" square (Alt. B) are designated Type P. Larger standard structure bottoms are designated Type J. Risers are permitted for all structures. Round risers are designated Type A, square risers are designated Type B.
2. Walls of circular structures (Alt. A) constructed in place may be of brick or reinforced concrete. Precast and rectangular structures (Alt. B) shall be constructed of reinforced concrete only.
3. Wall thickness and reinforcement are for either reinforced cast-in-place or precast concrete units except that precast circular units may be furnished with walls in accordance with ASTM C478 (see modified wall thicknesses in Table 1).
4. Top and bottom slab thickness and reinforcement are for precast and cast-in-place construction. All concrete shall be of Class II concrete, except use Class IV concrete when shown in the Plans, for special applications of structures located in extremely aggressive environments. Concrete as specified in ASTM C478 (4000 psi) may be used in lieu of Class II concrete for precast items manufactured in accordance with Specifications Section 449.
5. All reinforcement shown is Grade 60 steel, deformed bar. Equivalent area Grade 40 steel or equivalent area smooth or deformed welded wire reinforcement in accordance with Specification Section 931 may be substituted according to Index No. 201, unless otherwise noted.
6. Alt. A or Alt. B structure bottoms may be used in conjunction with curb inlet tops Types 1, 2, 3, 4, 5, 6, 9, and 10, and any manhole or junction box unless otherwise shown in the plans or other standard drawings. Alt. B structure bottoms may be used in conjunction with curb inlet Types 7 & 8, or any ditch bottom inlet unless otherwise shown in the plans or other standard drawings.
7. Rectangular structures may be rotated as directed by the Engineer in order to facilitate connections between the structure walls and storm sewer pipes.
8. Except when ACI hooks are specifically required, reinforcement in top and bottom slab shall be straight embedment.
9. All reinforcement must have 2" minimum cover except for 3'-6" diameter precast circular units manufactured under ASTM C478, keyed construction otherwise shown. Additional bars used to restrain hole formers for precast structures with grouted pipe connections,may be left flush with the hole surface. Cut or bend reinforcement at pipe openings to maintain cover. Exposed ends of reinforcing at precast pipe openings and grouted joints must be removed to 1" below the concrete surface and sealed with a Type F epoxy in accordance with Specification Section 926. Horizontal steel in rectangular structures shall be lapped a minimum of 30 bar diameters or by standard hooks at corners.
10. The corner fillets shown are necessary for rectangular structures used with circular risers and inlet throats and when used on skew with rectangular risers, inlets and inlet throats. Fillets will be required in the top slab of the Alt. A structure bottoms when used with the Alt. B risers. Each fillet shall be reinforced with two #5 bars.
11. Inlet walls, throats, risers or manhole tops shall be secured to structures as shown on Index No. 201 (Sheet 3 of 5) Optional Construction Joints.
12. Structures with depths over 14' below the mean high water table are to be checked for flotation by the designer of the drainage project.
13. Units larger than specified standards may be substituted at the contractor's option when these units will not cause or increase the severity of utility conflicts. Such larger units shall be furnished at no additional cost to the Department. Larger Alt. A units cannot replace Alt. B units without approval of the Engineer. This note applies to this Index only.
14. For manhole and junction box tops, for frames and covers, and, for supplementary details and notes see Index No. 201.
15. Type J structure bottoms must have a minimum 6'-0" wall height when possible, for maintenance access.



PLAN



SECTION

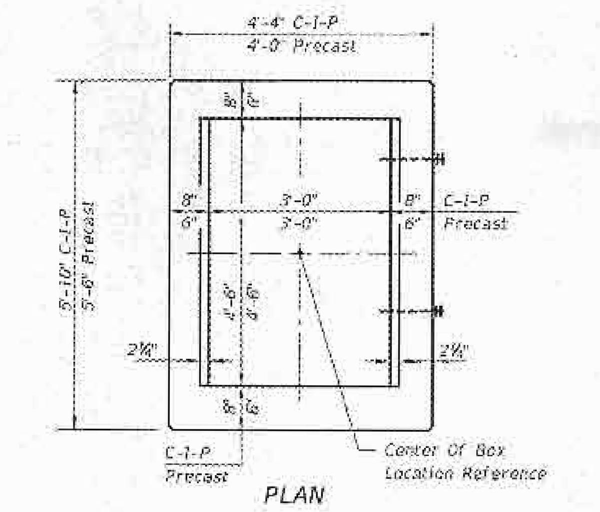
HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0'-15'	A12	0.20	12"	8"

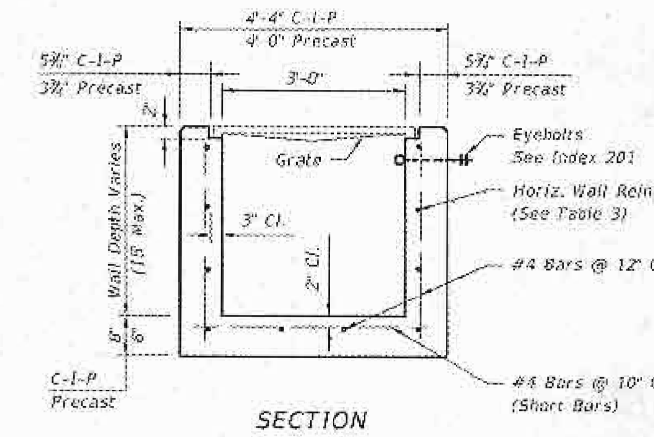
TYPE C

Recommended Maximum Pipe Size:

2'-0" Wall - 18" Pipe
3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)



PLAN



SECTION

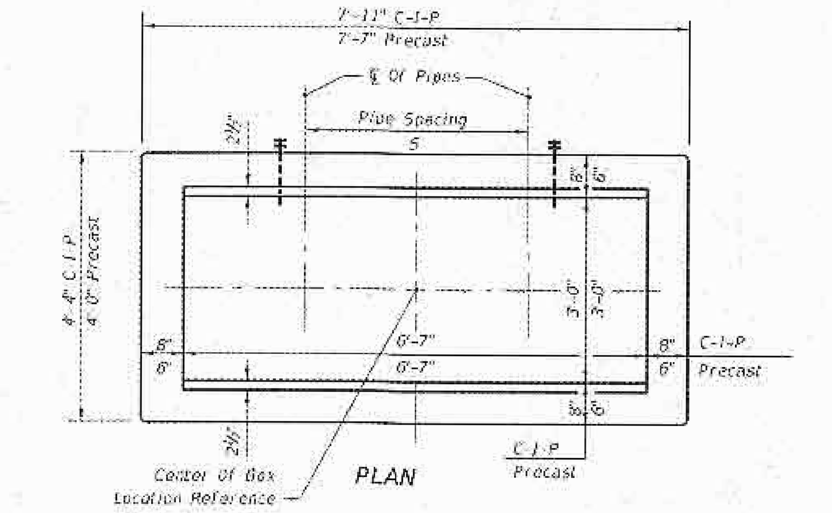
HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 3)

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0'-5'	A12	0.20	12"	8"
5'-7.5'	A6	0.20	6"	5"
7.5'-10'	B5.5	0.24	5½"	5"
10'-15'	C6.5	0.37	6½"	6"

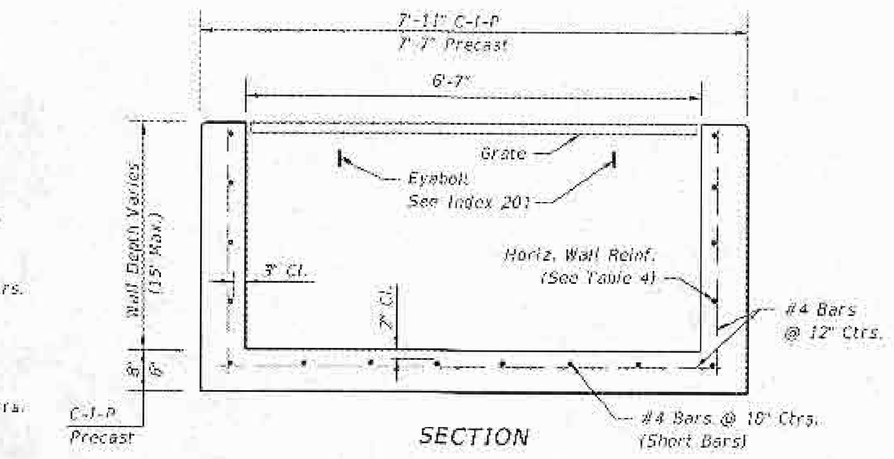
TYPE E

Recommended Maximum Pipe Size:

3'-0" Wall 24" Pipe
4'-6" Wall 36" Pipe



PLAN



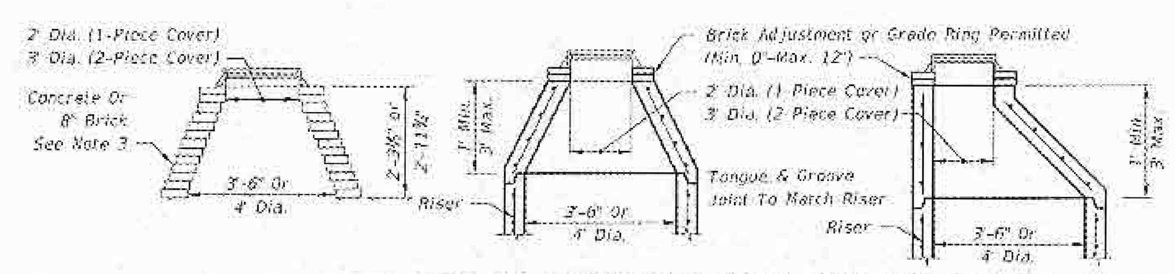
SECTION

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 4)

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0'-5'	B5.5	0.24	5½"	5"
5'-7'	C6.5	0.37	6½"	6"
7'-15'	D4.5	0.53	4½"	4"

TYPE H (2 & 3-GRATE INLET)

Recommended Maximum Pipe Size:
3'-0" Wall - 24" Pipe
6'-7" Wall - 1-60" Pipe
Or 2-24" Pipe (S=3'-5')



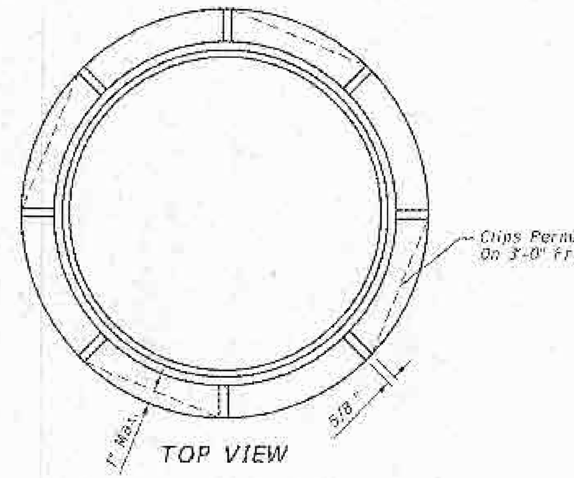
BRICK OR CONCRETE PRECAST CONCENTRIC CONE   PRECAST ECCENTRIC CONE

TYPE 8

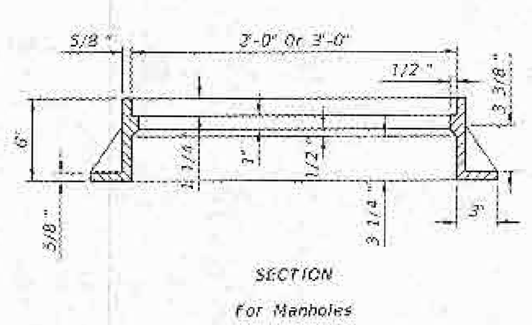
MANHOLE TOPS

NOTES (TOPS)
1. Manhole top Type 7 slabs shall be of Class II concrete. Concrete as specified in ASTM C478 may be used for precast units; see General Note No. 3.
2. Manhole top Type 7 slabs may be of cast-in-place or precast construction. The optional key is for precast tops and in lieu of dowels. Frame and slab openings are to be omitted when top is used over a junction box.
3. Manhole top Type 8 may be of cast-in-place or precast concrete construction or brick construction. For concrete construction, the concrete and steel reinforcement shall be the same as the supporting wall unit. An eccentric cone may be used.
4. Manhole tops shall be secured to structures by optional construction joints as shown on Sheet 3.
5. Frames can be adjusted a maximum 12" height with brick or precast ASTM C478 grade rings.
6. Substitution of manhole top Type 8 for manhole top Type 7 is allowed provided that minimum dimensions shown above are not reduced.
7. Substitution of Manhole top Type 7 for Type 8 is allowed if the minimum thickness (6) above pipe opening cannot be maintained with manhole top Type 8.

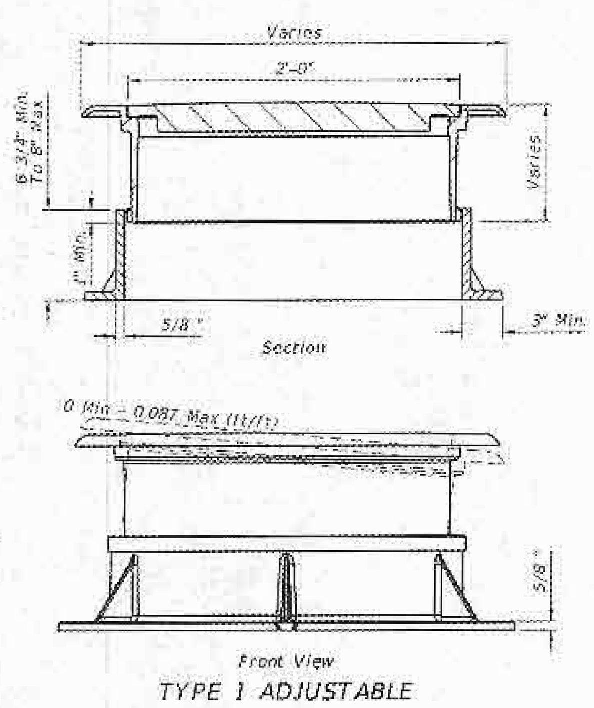
DESIGN NOTES
1. Manhole top Type 8 should be specified in the plans when depths shown above can be maintained.



TOP VIEW



SECTION
For Manholes
TYPE I



TYPE 1 ADJUSTABLE

WEIGHT OF CASTINGS (lb)

Frame Type	2' OPENING Frame	2' OPENING Cover (Std.)	3' OPENING Frame	3' OPENING 2-Piece Cover Inside	3' OPENING 2-Piece Cover Outside	3' OPENING 2-Piece Cover Total
I *	155	190	220	190	220	410
II	145	190	255	190	220	410
III	90	190	180	190	220	410

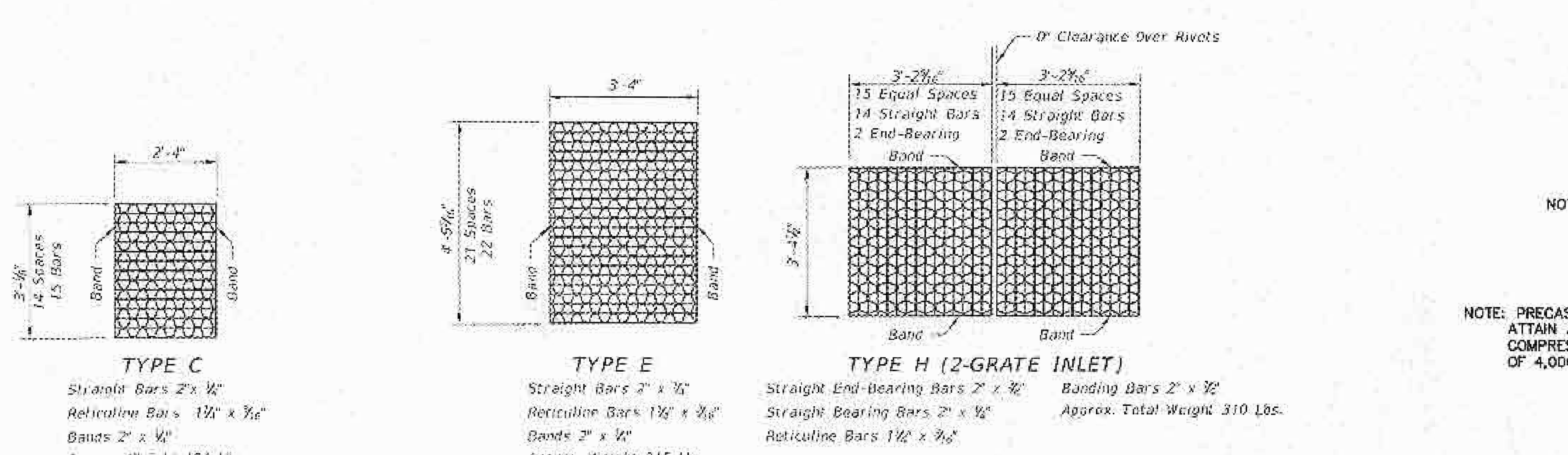
* Includes Type I Adjustable

NOTES (FRAMES, AND COVER)

1. The standard cover is to be used for all frames Types I, II, III and the 2-piece cover, and is the replacement cover for all previous frames with 1½" deep seats (traffic type). The 185 lb. cover (nontraffic type), 1984 Roadway and Traffic Design Standards Index No. 201, is the replacement cover for existing frames with ½" deep seats. Installation of frame with ½" deep seats is not permitted.
2. Use the 2'-0" cover, unless the 2-piece cover is called for in the plans, except at inlets and manholes with sump bottoms use the 2-piece cover when the sump depth exceeds 2', unless otherwise noted.

DESIGNER NOTE:

Consider using the 2-piece cover where depths exceed 5' and manual entry may be required for cleaning. Clearly note the requirement for a 2-piece cover, on the Drainage Structure sheets in the plans.



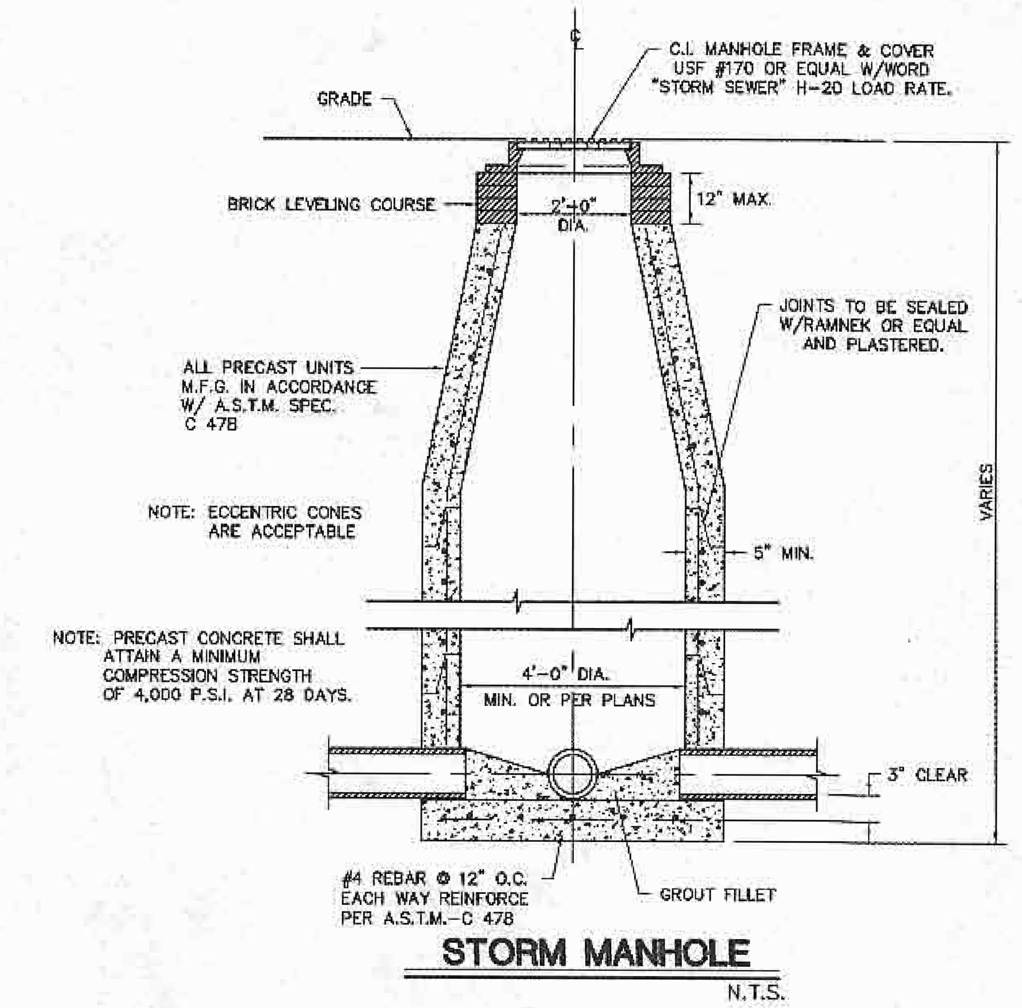
TYPE C
Straight Bars 2"x ¼"
Reticuline Bars 1¼" x ³⁄₁₆"
Bands 2" x ¼"
Approx. Weight 104 Lbs.

TYPE E
Straight Bars 2" x ¼"
Reticuline Bars 1¼" x ³⁄₁₆"
Bands 2" x ¼"
Approx. Weight 215 Lbs.

TYPE H (2-GRATE INLET)
Straight End-Bearing Bars 2" x ½"
Straight Bearing Bars 2" x ¼"
Reticuline Bars 1¼" x ³⁄₁₆"
Banding Bars 2" x ½"
Approx. Total Weight 310 Lbs.

STEEL GRATES

NOTE; Steel Grates Are Required On Inlets With Traversable Slots And On Inlets where Bicycle Traffic Is Anticipated.



STORM MANHOLE
N.T.S.

GENERAL NOTES

1. These inlets are suitable for bicycle traffic and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads. These inlets may be placed in areas subject to occasional pedestrian traffic such as landscaped areas and pavement areas where pedestrians can walk around the inlet.
2. Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and areas subject to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans. Traversable slots shall not be used in areas subject to occasional bicycle traffic.
3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dip galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
4. Recommended maximum pipe sizes shown are for concrete pipe. Size for other types of pipe must be checked for fit.
5. All exposed edges and corners shall be ¾" chamfer or tooled to ¼" radius.
6. Concrete inlet pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
7. Traversable slots constructed in existing inlets shall be paid for as inlets partial. For conversion work and method of payment see 'TRAVERSABLE SLOT INLETS (PARTIAL) FOR EXISTING INLETS'.
8. Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Performance Turf, SY.
9. For supplementary details see Index No. 201.
10. All reinforcing is Grade 60 bars with 2" min. cover unless otherwise noted. Bars to be cut or bent for 1½" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.

⚠1

NOTE:

PLEASE REFER TO FDOT INDEXES 200, 201, 232, 270, 273, 300, 500, 870 AND 6011 FOR MORE DETAILS.

PAUL E. SKIDMORE
LICENSE NO. 39631
STATE OF FLORIDA
PROFESSIONAL ENGINEER

JOB NO.	EPN	DATE	DESIGNED	DRAWN	CHECKED	Q.C.
0597-0025	137	06-04-2014	PS	AVS	PS	PS

NO	DATE	REVISIONS	APP'D BY
1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS

DESIGNED FOR
EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME
EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME
ROADWAY & DRAINAGE DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
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TOP VIEW

TOP SLAB OPENINGS		
DIAMETER	OPENING SIZE	
	MIN.	MAX.
4'-0"	2'-0" x 3'-1"	2'-0" x 3'-1"
5'-0"	2'-0" x 3'-1"	3'-1" x 4'-1"
6'-0"	2'-0" x 3'-1"	3'-0" x 4'-6"
8'-0"	2'-0" x 3'-1"	3'-0" x 4'-6"

TOP SLAB REINFORCING DIAGRAM

TOP SLAB REINFORCING SCHEDULE	
SCHEDULE	GRADE 60 (BAR) OR 65 KSI & 70 KSI (WIRE FABRIC) In.²/ft.
A	0.20
B	0.24
C	0.37
D	0.53
E	0.73
F	1.06
G	1.45

TOP SLAB WITH CENTERED OPENING		
SLAB DEPTH	SLAB THICKNESS	REINFORCING (2 WAYS) SCHEDULE
SIZE: 4'-0"		
≥0.5'-40'	9½"	C
SIZE: 5'-0"		
≥0.5' < 30'	9½"	C
30'-40'	9½"	D
SIZE: 6'-0"		
0.5' < 8'	9½"	B
8' < 18'	9½"	C
18' < 30'	9½"	D
30' < 37'	9½"	E
37'-40'	9½"	G
SIZE: 8'-0"		
≥0.5' < 9'	11½"	C
9' < 15'	11½"	D
15' < 23'	11½"	E
23' < 33'	11½"	E
33'-40'	11½"	G

SECTION AA

SECTION BB

ALT. A STRUCTURE BOTTOM FOR INLETS TYPE C, D AND E

PLAN

SECTION AA

OPTIONAL SHAPE

STRAIGHT FLARE SECTION BB

FLARED END SECTION

SECTION CC

END VIEW

REINFORCED CONCRETE JACKET DETAIL

DIA.	T	REINF. (in²/ft)	BELL Or Spigot	A	B	C	D	E	P	R 1	R 2	FLAT	WEIGHT (lb)	h	TOE WALL CLASS I CONC (CY)
12"	2"	0.07	1½"	4"	2'-0"	4'-0⅞"	6'-0⅞"	2'-0"	19 13/16"	10½"	9"	3½"	530	12"	.06
15"	2¼"	0.07	2"	6"	2'-3"	3'-10"	6'-1"	2'-6"	24 7/16"	12½"	11"	3½"	740	12"	.07
18"	2½"	0.07	2¼"	9"	2'-3"	3'-10"	6'-1"	3'-0"	29"	15½"	12"	4"	990	15"	.11
21"	2¾"	0.07	2¼"	9"	2'-11"	3'-2"	6'-1"	3'-6"	31⅝"	16⅛"	13"	4"	1280	15"	.12
24"	3"	0.07	2½"	9½"	3'-7½"	2'-6"	6'-1½"	4'-0"	33 7/16"	16 13/16"	14"	4½"	1520	18"	.17
27"	3¼"	0.148	2½"	10½"	4'-0"	2'-1½"	6'-1½"	4'-6"	36"	18 5/16"	14½"	4½"	1930	18"	.19
30"	3½"	0.148	3"	1'-0"	4'-6"	1'-7½"	6'-1¾"	5'-0"	37"	18½"	15"	5"	2190	21"	.24
36"	4"	0.148	3½"	1'-3"	5'-3"	2'-10½"	8'-1½"	6'-0"	47 13/16"	24 7/16"	20"	5½"	4100	21"	.29
42"	4½"	0.148	3¾"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	53⅝"	27½"	22"	5½"	5380	24"	.36
48"	5"	0.148	4½"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	56½"	28⅝"	22"	5⅞"	6550	24"	.39
54"	5½"	0.174	4¾"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"	65½"	33⅛"	24"	6¼"	8040	24"	.47
60"	6"	0.174	5"	2'-6"	5'-0"	3'-3"	8'-3"	8'-0"	72½"	36 1/16"	24"	6⅞"	8750	24"	.44
66"	6½"	0.174	5½"	2'-0"	6'-6"	1'-9"	8'-3"	8'-6"	72"	36⅛"	24"	7¼"	10630	24"	.47
72"	7"	0.174	6"	2'-0"	6'-6"	1'-9"	8'-3"	9'-0"	77 13/16"	38 7/16"	24"	7⅞"	12520	24"	.50

GENERAL NOTES

1. Flared end sections shall conform to the requirements of ASTM C76 with the exception that dimensions and reinforcement shall be as prescribed in the table above. Circumferential reinforcement may consist of either one cage or two cages of steel. Compressive strength of concrete shall be 4000 psi. Shop drawings for flared end sections having dimensions other than above must be submitted for approval to the State Drainage Engineer.
2. Connections between the flared end section and the pipe culvert may be any of the following types unless otherwise shown on the plans.
   a. Joints meeting the requirements of Section 449 of the Standard Specifications (O-Ring Gasket). Flared end section joint dimensions and tolerances shall be identical or compatible to those used in the pipe culvert joint. When pipe culvert and flared end section manufacturers are different, the compatibility of joint designs shall be certified to by the manufacturer of the flared end sections.
   b. Joints sealed with preformed plastic gaskets. The gaskets shall meet the requirements of Section 942-2 of the Standard Specifications and the minimum sizes for gaskets shall be as that specified for equivalent sizes of elliptical pipe.
   c. Reinforced concrete jackets, as detailed on this drawing. Cost of the reinforced concrete jacket to be included in the contract unit price for the flared end section. When non-coated corrugated metal pipe is called for in the plans, the pipe shall be bituminous coated in the jacketed area as specified on Index No. 280. Bituminous coating to be included in the contract unit price for the pipe culvert. Concrete jacket shall be as specified on Index No. 280. Cost of concrete and reinforcement shall be included in the contract unit price for the pipe culvert.
3. Toe walls shall be constructed when shown on the plans or at locations designated by the Engineer. Toe walls are to be cast-in-place with Class I Concrete and paid for under the contract unit price for Flared End Section (Concrete), EA. Reinforcing steel shall also be included in the cost of the Flared End Section (Concrete), EA.
4. On skewed pipe culverts the flared end sections shall be placed in line with the pipe culvert. Side slopes shall be warped as required to fit the flared end sections.
5. Flared End Section to be paid for under the contract unit price for Flared End Section (Concrete), EA. Seeding shall be in accordance with Index No. 281, and paid for under the contract unit price for Performance Turf, SY.

DESIGN NOTES

1. Flared end sections are intended for use outside the clear zone on median drain and cross drain installation, except that flared end sections for pipe sizes 12" and 15" are permitted within the clear zone. When the slope intersection permits, 12" and 15" flared end sections may be located with the culvert opening as close as 8' beyond the outside edge of the shoulder. Flared end sections are not intended for side drain installations.
2. Reinforced concrete jackets shall be used at all locations where high velocities and/or highly erosive soils may cause disjointing. These locations are to be shown on the plans.
3. Toe walls shall be used whenever the anticipated velocity of discharge and soil type are such that erosive action would occur. Toe walls are not required where ditch pavement is provided, except when disjointing would occur if the ditch pavement should fail.

FLARED END SECTION

DOT INDEX #270 N.T.S.

△1

SECTIONAL VIEW
NTS

NOTES:

1. THE DEVELOPER'S ENGINEER SHALL INVESTIGATE THE EXISTING PAVEMENT LAYER TYPES AND DEPTHS BY RESEARCHING "RECORD/AS-BUILT DRAWINGS" AND/OR PERFORM GEOTECHNICAL BORINGS.
2. THE NEW PAVEMENT SHALL PROVIDE THE MINIMUM STRUCTURAL NUMBER AS FOLLOWS: TYPE 2 - 2.38, TYPE 1 - 3.50, COLLECTOR 3.70, ARTERIAL 4.00.

NOTE:
NO DEVIATIONS TO THIS DETAIL WILL BE PERMITTED UNLESS APPROVED BY THE COUNTY ENGINEER. ANY PROPOSED ALTERATIONS SHALL BE CLEARLY IDENTIFIED AND HIGHLIGHTED ON DETAIL.

PASCO COUNTY ENGINEERING SERVICES — DESIGN STANDARDS — **PAVEMENT TIE-IN SAW CUT DETAIL** — APPROVED BY — BCC APPROVAL — REVISED — DWG. NO.

PASCO COUNTY CRUSHED CONCRETE BASE SPECIFICATIONS

THE WORK SPECIFIED UNDER THIS SECTION CONSISTS OF THE CONSTRUCTION OF ROADWAY BASE UTILIZING CRUSHED CONCRETE (RECLAIMED CONCRETE AGGREGATE BASE MATERIAL) ON A PREPARED STABILIZED SUBGRADE OF LBR 40 WITH A DENSITY OF 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY AS DETERMINED BY FM 1-T 180, METHOD D, IN CONFORMITY WITH THE LINES, GRADES NOTES AND TYPICAL CROSS SECTIONS SHOWN IN THE PLANS, AND AS DIRECTED BY THE COUNTY ENGINEER.

THE CONSTRUCTION OF CRUSHED CONCRETE BASE SHALL CONFORM TO THE REQUIREMENTS OF THIS SECTION, OR, IN LIEU THEREOF, SUCH REQUIREMENTS AS MAY BE ESTABLISHED BY THE COUNTY ENGINEER DURING CONSTRUCTION. THE COUNTY ENGINEER SHALL HAVE FULL AUTHORITY TO MODIFY THE PROVISIONS OF THIS SECTION AS DEEMED NECESSARY, IN HIS OPINION, TO MEET FIELD CONDITIONS AND REQUIREMENTS.

MATERIALS

CRUSHED CONCRETE MUST BE PRODUCED FROM A SOURCE APPROVED BY FLORIDA DEPARTMENT OF TRANSPORTATION OR THE COUNTY ENGINEER. THE SUPPLIER SHALL HAVE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERMIT REQUIREMENTS SECTION 62-701.730 OR BE QUALIFIED AS A CLEAN DEBRIS SOURCE UNDER DEP RULES. THE RECLAIMED CONCRETE AGGREGATE BASE SHALL CONSIST OF CRUSHED CONCRETE MATERIAL DERIVED FROM THE CRUSHING OF HARD PORTLAND CEMENT CONCRETE.

COMPOSITION

BASE MATERIAL SHALL CONFORM TO THE FOLLOWING **GRADATION REQUIREMENTS**:

SIEVE SIZE	PERCENT BY WEIGHT PASSING
2 INCH	100
3/4 INCH	65 to 95
3/8 INCH	40 to 85
No. 4	25 to 65
No. 10	20 to 50
No. 50	5 to 25
No. 200	0 to 10

BASE MATERIAL SHALL CONFORM TO THE FOLLOWING **PLASTICITY REQUIREMENTS**:

CRUSHED CONCRETE BASE SHALL NOT CONTAIN PLASTIC SOILS SUCH THAT THE No. 40 SIEVE MATERIAL SHALL BE NON-PLASTIC.

LIQUID LIMIT (AS DETERMINED BY AASHTO T89) (LESS THAN 25) PER MATERIAL TYPE

THE FINISHED IN-PLACE CRUSHED CONCRETE BASE **LIMEROCK BEARING RATIO** SHALL HAVE A MINIMUM (LBR) OF 150.

CRUSHED CONCRETE BASE SHALL BE FREE OF ALL MATERIALS THAT FALL UNDER THE CATEGORY OF SOLID WASTE OR HAZARD MATERIALS AS DEFINED BY THE STATE OR LOCAL JURISDICTION AND SHALL MEET ALL DEP PERMIT REQUIREMENTS WHICH PERTAIN TO CONSTRUCTION, DEMOLITION AND RECYCLING OF THESE MATERIALS. CRUSHED CONCRETE BASE SHALL BE ASBESTOS FREE. THE FOLLOWING LIMITS SHALL NOT BE EXCEEDED:

BITUMINOUS CONCRETE....1% BY WEIGHT
BRICKS....1% BY WEIGHT
WOOD AND OTHER ORGANIC SUBSTANCES....0.5% BY WEIGHT
HEAVY METALS (EXCEPT LEAD)....0.1% BY WEIGHT
LEAD....5 PARTS PER MILLION
REINFORCED STEEL AND WELDED WIRE FABRIC....0.1% BY WEIGHT
PLASTER AND GYPSUM BOARD....0.1% BY WEIGHT

THE MATERIAL FOR CRUSHED CONCRETE BASE SHALL CONSIST ONLY OF CRUSHED CONCRETE PAVEMENT AND SUCH ADDITIVE MATERIAL AS MAY BE APPROVED BY THE COUNTY ENGINEER FOR THE PURPOSE OF FACILITATING CONSTRUCTION AND ACHIEVING THE DESIRED CHARACTERISTICS OF THE FINISHED IN-PLACED PRODUCT. APPROVAL FROM THE COUNTY ENGINEER IS REQUIRED BEFORE PLACING MATERIAL FROM MORE THAN ONE SOURCE. ONCE APPROVED, A CHANGE IN THE SOURCE OF BASE MATERIAL SHALL REQUIRE ADDITIONAL ACCEPTANCE TESTING. THE MATERIAL SHALL NOT CONTAIN LUMPS, BALLS OR POCKETS OF SAND OR CLAY MATERIAL IN SIZE OR QUANTITY SUFFICIENT TO BE DETRIMENTAL TO THE PROPER BONDING, FINISHING, STRENGTH OF THE CONCRETE BASE. EXISTING BASE IS TO BE REMOVED TO CONSTRUCT THE NEW BASE.

NOTE:
NO DEVIATIONS TO THIS DETAIL WILL BE PERMITTED UNLESS APPROVED BY THE COUNTY ENGINEER. ANY PROPOSED ALTERATIONS SHALL BE CLEARLY IDENTIFIED AND HIGHLIGHTED ON DETAIL.

PASCO COUNTY ENGINEERING SERVICES — DESIGN STANDARDS — **CRUSHED - CONCRETE BASE SPECIFICATIONS** — Sheet No. 1 of 2 — APPROVED BY JCW — BCC APPROVAL — REVISED — Index No. 104

EQUIPMENT, PLACEMENT AND SPREADING OF MATERIAL

USE MECHANICAL ROCK SPREADERS, EQUIPPED WITH A DEVICE THAT STRIKES OFF THE ROCK UNIFORMLY TO LAYING THICKNESS AND CAPABLE OF PRODUCING EVEN DISTRIBUTION. FOR ROADWAY WIDTHS OF 20 FEET OR LESS, CROSSOVERS, INTERSECTIONS, RAMP AREAS OR WHERE THE USE OF A MECHANICAL SPREADER IS NOT PRACTICABLE; THE CONTRACTOR MAY SPREAD THE CRUSHED CONCRETE BASE USING BULLDOZERS OR BLADE GRADERS.

TRANSPORT CRUSHED CONCRETE TO THE POINT OF USE, OVER THE BASE PREVIOUSLY PLACED, AND DUMP IT ON THE END OF THE PRECEDING SPREAD. HAULING ON SUBGRADE TO DUMP CRUSHED CONCRETE BASE WILL BE PERMITTED ONLY WHEN, IN THE ENGINEER'S OPINION, THESE OPERATIONS WILL NOT BE DETRIMENTAL TO THE BASE AND SUBGRADE.

CRUSHED CONCRETE SHALL BE SPREAD UNIFORMLY WITHOUT SEGREGATION OF FINE OR COURSE MATERIALS. SEGREGATED AREAS SHALL BE REPLACED WITH PROPERLY GRADED CRUSHED CONCRETE AFTER REMOVAL.

THE MINIMUM THICKNESS OF THE CRUSHED CONCRETE BASE SHALL BE INDICATED ON THE PLANS. WHEN THE SPECIFIED COMPACTED THICKNESS OF THE CRUSHED CONCRETE BASE IS **GREATER THAN SIX INCHES, CONSTRUCT THE BASE IN MULTIPLE COURSES OF EQUAL THICKNESS. INDIVIDUAL COURSES SHALL NOT BE LESS THAN THREE INCHES.** PLACE CRUSHED CONCRETE MATERIAL TO ENSURE THE TOTAL THICKNESS SINGLE SOURCE INTEGRITY AT ANY STATION LOCATION OF THE BASE.

COMPACTING, FINISHING AND TESTING REQUIREMENTS

AFTER SPREADING IS COMPLETED THE CRUSHED CONCRETE SHALL BE UNIFORMLY COMPACTED, WITH WATER BEING ADDED AS REQUIRED TO A **DENSITY OF NOT LESS THAN ONE HUNDRED PERCENT (100%) OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.** DURING FINAL COMPACTION OPERATIONS, IF THE BLADING OF ANY AREAS IS NECESSARY TO OBTAIN THE TRUE GRADE AND CROSS SECTION, FREE OF SCABS AND LAMINATIONS, THE COMPACTING OPERATIONS FOR SUCH AREAS SHALL BE COMPLETED PRIOR TO THE PERFORMANCE OF DENSITY TESTS ON THE FINISHED BASE.

MULTIPLE COURSE BASE: CLEAN THE FIRST COURSE OF FOREIGN MATERIAL, THEN BLADE AND BRING IT TO A SURFACE CROSS-SECTION APPROXIMATELY PARALLEL TO THE FINISHED BASE. BEFORE SPREADING ANY MATERIAL FOR THE UPPER COURSES, **OBTAIN DENSITY TESTS FOR THE LOWER COURSES** TO DETERMINE THAT THE REQUIRED COMPACTION [NOT LESS THAN ONE HUNDRED PERCENT (100%) OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180] HAS BEEN OBTAINED. AFTER SPREADING THE CRUSHED CONCRETE FOR THE TOP COURSE, FINISH AND SHAPE IT'S SURFACE TO PRODUCE THE REQUIRED GRADE AND CROSS-SECTION, FREE OF SCABS AND LAMINATIONS, AFTER COMPACTION.

THE MINIMUM DENSITY THAT WILL BE ACCEPTED AT ANY LOCATION OUTSIDE THE TRAVELED ROADWAY (SUCH AS INTERSECTIONS, CROSSOVERS, TURNOUTS, ETC.) SHALL BE 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

TESTING OF BASE COURSE

THE MINIMUM **FREQUENCY** OF SAMPLING AND TESTING OF CRUSHED CONCRETE MATERIAL, LAB DENSITY, FIELD DENSITY AND THICKNESS SHALL ADHERE TO THE FREQUENCY OF TESTING FOR LIMEROCK BASE IN THE MOST CURRENT EDITION OF "**PASCO COUNTY ENGINEERING SERVICES DEPARTMENT TESTING SPECIFICATIONS FOR CONSTRUCTION OF ROADS, STORM DRAINAGE AND UTILITIES**". ONE PLANT MIX DESIGN, ONE PLANT GRADATION TEST FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES (AASHTO T-27) (FM1-T027) INCLUDING A PLASTICITY INDEX (FM-T090) (AASHTO T-90) FROM THE APPROVED SOURCE SHALL BE SUBMITTED AT ONE PER DAY OR CHANGE OF MATERIAL. ONE ROADWAY FIELD TEST FOR SIEVE ANALYSIS OF FINE AND *COARSE AGGREGATES (ASTM C-136) SHALL BE SUBMITTED PER 500 FEET OF ROAD PER DAY PER MIX DESIGN*; MINIMUM ONE PER ROAD.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING PERFORMED IN CONNECTION WITH CONSTRUCTION OF THE BASE.

CORRECTION OF DEFECTS

ALL SEGREGATED AREAS OF FINE OR COURSE CRUSHED CONCRETE SHALL BE REMOVED AND REPLACED WITH PROPERLY GRADED RECLAIMED CONCRETE AGGREGATE BASE MATERIAL. ALL DEFECTS IN MATERIALS AND CONSTRUCTION SHALL BE CORRECTED BY THE CONTRACTOR, AT HIS EXPENSE, AND TO THE SATISFACTION OF THE COUNTY ENGINEER.

PRIMING AND MAINTENANCE

APPLY THE PRIME COAT ONLY WHEN THE BASE MEETS THE SPECIFIED DENSITY REQUIREMENTS AND WHEN THE MOISTURE CONTENT. AT THE TIME OF PRIMING, ENSURE THAT THE BASE IS FIRM, UNYIELDING AND IN SUCH CONDITION THAT NO UNDUE DISTORTION WILL OCCUR. MAINTAIN THE TRUE CROWN AND TEMPLATE, WITH NO RUTTING OR DISTORTION, WHILE APPLYING THE SURFACE COURSE.

PASCO COUNTY TESTING SPECIFICATIONS ON CRUSHED CONCRETE BASE

TESTS FOR BASE THICKNESS, AND DENSITY SHALL BE LOCATED NO MORE THAN THREE HUNDRED (300) FEET APART AND SHALL BE STAGGERED TO THE LEFT, RIGHT, AND ON THE CENTERLINE OF ROADWAY. THERE SHALL BE NO LESS THAN ONE (1) TEST PER STREET. BEARING VALUE, GRADATION AND FIELD TEST FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES (ASTM C-136) SHALL BE NO MORE THAN FIVE HUNDRED (500) FEET.

EXAMPLE: A SEVEN HUNDRED FEET ROAD WOULD REQUIRE TWO FIELD LBR AND GRADATION TESTS, THREE FIELD DENSITY AND THICKNESS TESTS ALONG WITH THE APPROPRIATE LAB TESTING.

NOTE:
NO DEVIATIONS TO THIS DETAIL WILL BE PERMITTED UNLESS APPROVED BY THE COUNTY ENGINEER. ANY PROPOSED ALTERATIONS SHALL BE CLEARLY IDENTIFIED AND HIGHLIGHTED ON DETAIL.

PASCO COUNTY ENGINEERING SERVICES — DESIGN STANDARDS — **CRUSHED - CONCRETE BASE SPECIFICATIONS** — Sheet No. 2 of 2 — APPROVED BY JCW — BCC APPROVAL — REVISED — Index No. 104

△1

NOTES:

1. THE REMOVAL OF ORGANIC MATERIAL SHALL BE BASED ON FDOT INDEX 500.
2. FOR ROADWAYS, BELOW THE STABILIZED SUBGRADE A MINIMUM OF TWO FEET OF SELECT MATERIAL, CONSISTING OF A-3 (SP) SOIL AND/OR A-2-4 WITH A MAXIMUM 15 PERCENT PASSING NUMBER 200 SIEVE, SHALL BE PROVIDED.
3. THE ENGINEER RESPONSIBLE FOR THE PROJECT SHALL CERTIFY TO THE COUNTY ENGINEERING SERVICES DIRECTOR (THRU PC ENGINEERING INSPECTIONS) THAT THE SELECT MATERIAL MEETS THESE STANDARDS PRIOR TO INSTALLATION OF THE BASE. CERTIFICATION SHALL STRICTLY COMPLY WITH THE SUBGRADE CERTIFICATION FORM AVAILABLE IN "ENGINEERING SERVICES DEPARTMENT: A PROCEDURAL GUIDE FOR THE PREPARATION OF ASSURANCES OF COMPLETION AND MAINTENANCE."
4. THE CRUSHED CONCRETE BASE MATERIAL GRADATION SHALL CONFORM TO FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION SECTIONS 204 AND 901. THE CRUSHED CONCRETE SHALL ALSO CONFORM TO THE CRUSHED CONCRETE SPECIFICATIONS PER THE PASCO COUNTY STANDARDS

△1

NOTE:

PLEASE REFER TO FDOT INDEXES 200, 201, 232, 270, 273, 300, 500, 870 AND 6011 FOR MORE DETAILS.

PAUL E. SKIDMORE — LICENSE NO. 39631 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

JOB NO.	0597-0025
CPN	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
Q.C.	PS

NO.	DATE	REVISIONS	APP'D BY
△1	09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS

DESIGNED FOR: **EPPERSON RANCH, LLC**
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: **EPPERSON RANCH OVERPASS ROAD - PHASE 1**

SHEET NAME: **ROADWAY & DRAINAGE DETAILS**

FLORIDA DESIGN CONSULTANTS, INC.
— THINK IT. ACHIEVE IT. —
3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
PHONE: (800) 532-1047 FAX: (727) 848-3648 WWW.FLDESIGN.COM C.A. NO. 7421

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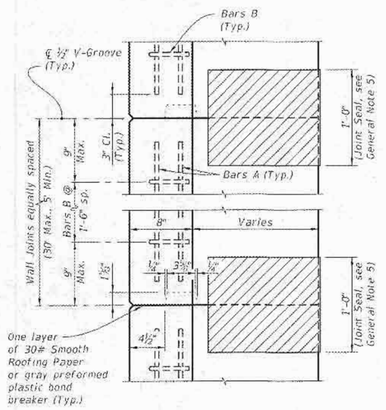
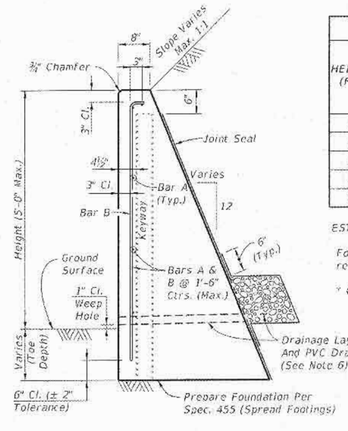


KEYWAY & WALL JOINT DETAIL
(TOP VIEW)



TYPICAL SECTION

ESTIMATED QUANTITIES FOR WALL					
HEIGHT (FT.)	PER LINEAR FOOT OF WALL				WEEP HOLES & DRAIN REQD.
	CLASS NS CONCRETE (CY)			REINF. STEEL (LB.)	
	SCHEME 1	SCHEME 2	SCHEME 3		
1'	0.08	0.11 (0.20*)	0.03	3 (4*)	No
2'	0.14	0.20 (0.32*)	0.09	4 (5*)	No
3'	0.22	0.32 (0.47*)	0.29	5 (6*)	Yes
4'	0.32	0.47 (0.65*)	0.43	6 (7*)	Yes
5'	0.43	0.65 (0.85*)	0.60	7 (8*)	Yes

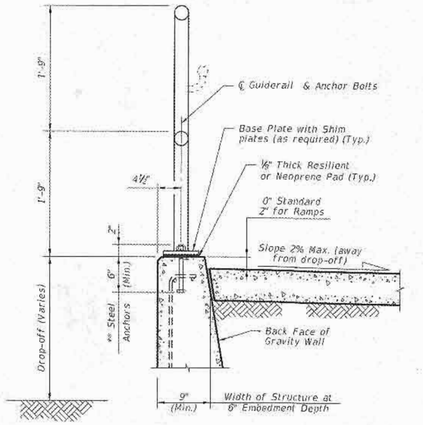
ESTIMATED QUANTITIES NOTES:

For Scheme 3 Junction Slab and Traffic Railing see the referenced Design Standards for estimated quantities.

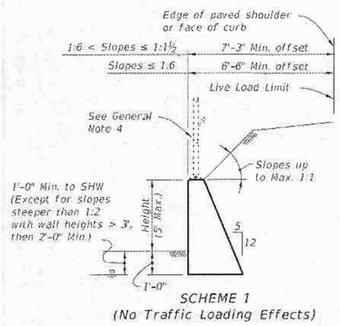
* Quantity for 2'-0" Toe Depth in Scheme 2.

GENERAL NOTES

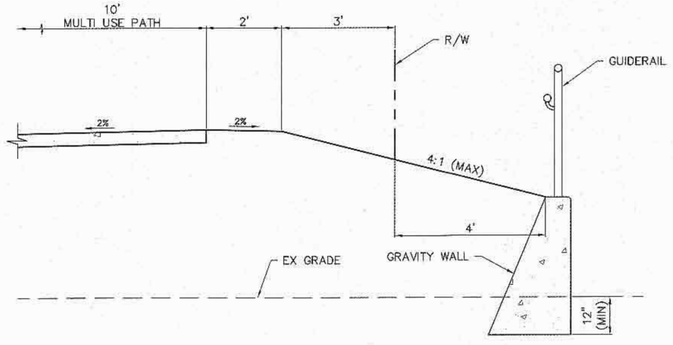
1. Gravity walls constructed as extensions of reinforced concrete retaining walls, except walls of proprietary designs, shall have the same face texture and finish as the reinforced concrete retaining wall.
2. Concrete for Gravity Wall shall be Class NS per Section 347. Concrete for Scheme 3 Junction Slab and Traffic Railing shall be Class II per Section 346, unless otherwise specified in the plans.
3. Reinforcing steel shall meet the requirements of Specification Section 931 (Grade 40 or 60) and be provided at the max. spacings shown. Smooth or Deformed Welded Wire Reinforcement (WWR) may be substituted on an equal area basis. Do not increas bar/wire spacing for Grade 60 reinforcing steel or WWR.
4. When required, for adjunct guiderail see the plans, Index No. 870 or 880 as appropriate. For adjunct Type B fence see Index No. 802.
5. Joint seal to be two layers of 30# smooth roofing paper or Type D-5 geotextile fabric in accordance with Index No. 199. Mop all contact surfaces of concrete and roofing paper or geotextile fabric with cut-back asphalt. Stop roofing paper or geotextile fabric 6" below top of wall.
6. Provide a continuous 1'x1' clean gravel or crushed rock drain for wall heights 3 ft. and higher. Wrap drainage layer as shown, with Type D-3 geotextile fabric in accordance with Index No. 199. Provide 8"x8" galvanized mesh with ½" openings, at the inside end of the PVC Drain Pipe. Provide 2" Ø PVC Drain Pipe (Sch. 40) at 10 ft. max. spacing (When Drainage Layer required). Locate minimum 2'-0" clear of wall joints.
7. Cost of reinforcing steel, face texture, finish, joint seal, drain pipes, drainage layer, galvanized mesh and geotextile fabric to be included in the Contract Unit Price for Concrete Class NS, Gravity Wall. Cost of concrete for Junction Slab in Scheme 3, to be included in Contract Unit Price for Concrete Traffic Railing Barrier With Junction Slab. Adjunct railings or fences to be paid for separately.



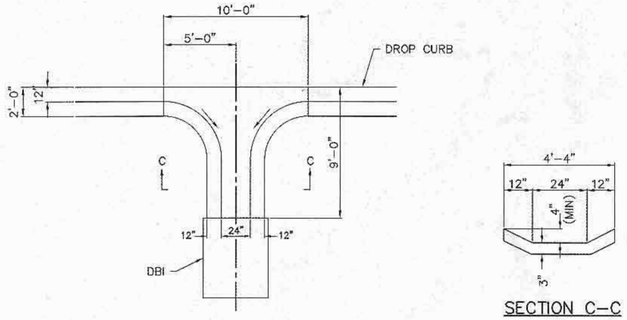
TYPICAL SECTION ON GRAVITY WALL
(Other Retaining Walls Similar)



SCHEME 1
(No Traffic Loading Effects)



GRAVITY WALL SECTION (C/18)
NTS

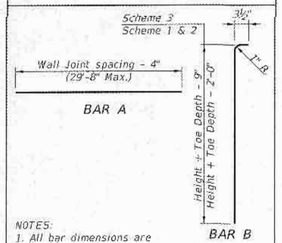


SECTION C–C

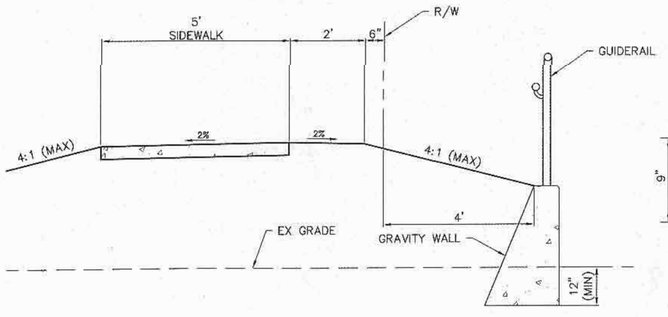
CONCRETE FLUME DETAIL △△
N.T.S.

BILL OF REINFORCING STEEL		
MARK	SIZE	LENGTH
A	4	As Reqd.
B	4	As Reqd.

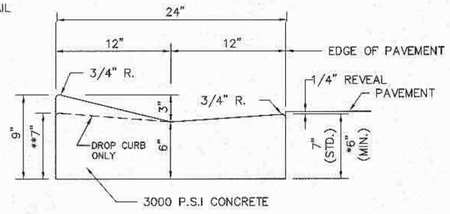
BAR BENDING DIAGRAM



NOTES:
1. All bar dimensions are out to out.
2. Lap splices for Bars A must be a minimum of 1'-6".



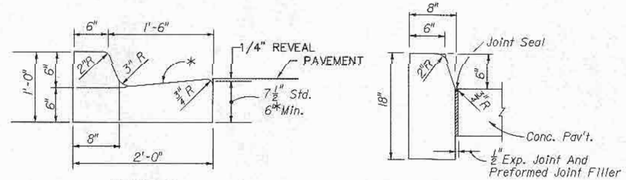
GRAVITY WALL SECTION (D/20)
NTS



* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN SHOWN ON PLANS.

** DROP CURB AT SIDEWALK LOCATIONS AS INDICATED ON PAVING, GRADING & DRAINAGE PLAN SHEETS.

24" CONCRETE DROP CURB
N.T.S.



Note: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see diagram right.

CONCRETE CURB
N.T.S. △

NOTE:

PLEASE REFER TO FDOT INDEXES 200, 201, 232, 270, 273, 300, 500, 870 AND 6011 FOR MORE DETAILS.

PAUL E. SHIDLOWSKE
LICENSE
NO. 75631
STATE OF FLORIDA
PROFESSIONAL ENGINEER

ISSUED	DATE	REVISED	CHKD'N	CALCULATED	CHKD
0597-0025	06-04-2014	PS	AVS	PS	
DWN 137		03-06-2015	REVISED FLUME DETAIL	PS	
		02-19-2015	REVISED PER PASCO COUNTY COMMENTS	PS	
		09-15-2014	REVISED PER PASCO COUNTY COMMENTS	PS	
		NO.	REVISIONS	BY	

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: ROADWAY & DRAINAGE DETAILS

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SHEET 45 OF 51

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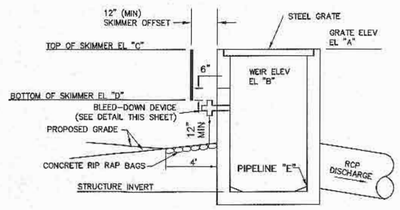
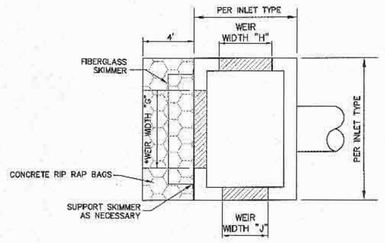
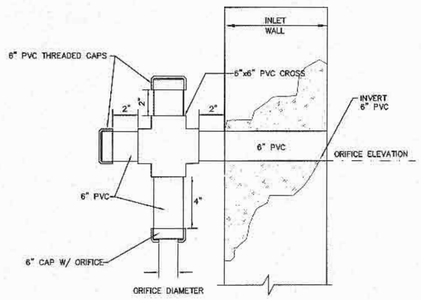


SECTION



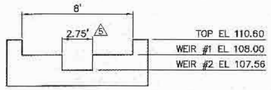
PLAN

TYPICAL DROP STRUCTURE FDOT TYPE (SEE PLANS)
N.T.S.



NOTE: PIPE & FITTINGS TO BE SCH. 40 PVC

BLEED-DOWN ORIFICE DETAIL
N.T.S.



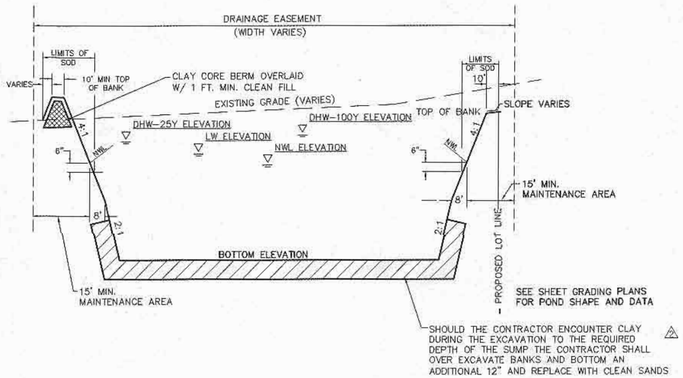
CW-170 WEIR DETAIL ⚠4
N.T.S.

⚠2 ⚠3 ⚠4

Control Structure Data												
Structure #	Top El. "A"	Weir El. "B"	Top of Skimmer, El. "C"	Bot. of Skimmer, El. "D"	Pipe Inv. El. "E"	Pipe Dia.	Orifice Inv.	Orifice Dia.	Weir Width "G"	Weir Width "H"	Weir Width "J"	Structure Type
CW-16N	111.75	109.37	N/A	N/A	106.72	36"	108.61	2.75"	6'	3'	3'	H
CW-16	108.34	107.06	108.34	106.55	103.93	29"X45"	106.26	5.5"	6'	3'	3'	H
CW-165	108.34	107.62	N/A	N/A	103.93	29"X45"	N/A	N/A	5'	2'	2'	H
CW-170	110.60	*	110.60	107.06	106.20	34"X53"	N/A	N/A	8'	N/A	N/A	H (4 GRATE)

* - SEE DETAIL FOR WEIR DATA

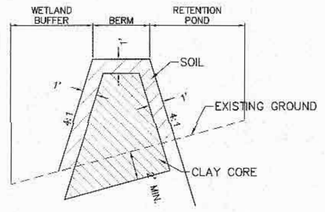
DROP STRUCTURE WITH BLEED-DOWN ORIFICE DETAIL
N.T.S. *NOTE: THE USE OF LONG WEIRS MAY REQUIRE THE USE OF THE BOX SIDES FOR THE WEIR CONSTRUCTION



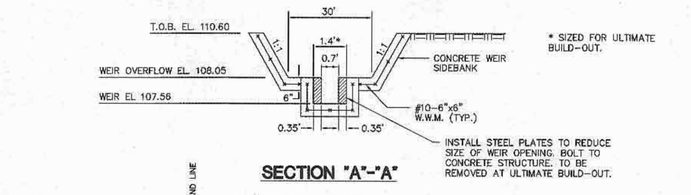
⚠2 ⚠3 NOTE:

NO EXCAVATION SHALL EXTEND BELOW THE PERMITTED DESIGN DEPTHS/ELEVATIONS SHOWN ON THE DRAWINGS, UNLESS ADDITIONAL TESTING SUPPORTS OTHERWISE; NO LOWER SEMI-CONFINING UNIT CLAYEY SOIL MATERIAL AND/OR NO LIMESTONE MATERIALS SHALL BE EXCAVATED REGARDLESS IF THEY ARE ENCOUNTERED WITHIN THE PERMITTED DEPTHS/ELEVATIONS. IF ANY LOWER SEMI-CONFINING UNIT CLAYEY SOIL MATERIALS OR LIMESTONE MATERIALS ARE ENCOUNTERED ABOVE THE PERMITTED DEPTHS/ELEVATIONS, THEN EXCAVATION OPERATIONS SHALL CEASE IN THE GENERAL LOCATION AND THE ENGINEER OF RECORD AND THE GEOTECHNICAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY TO ADDRESS AND PROVIDE RECOMMENDATIONS FOR FURTHER ACTION(S).'

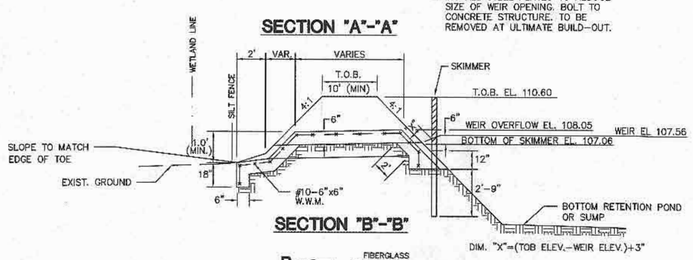
TYPICAL POND SECTION (TYP ANY)
N.T.S.



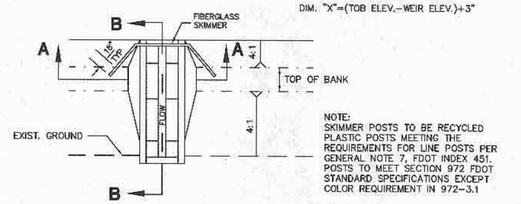
CLAY CORE BERM DETAIL ⚠3
N.T.S.



SECTION "A"-"A"



SECTION "B"-"B"

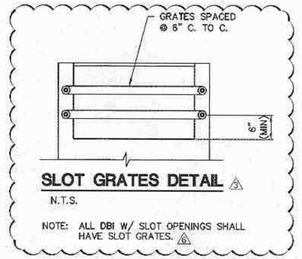


PLAN VIEW

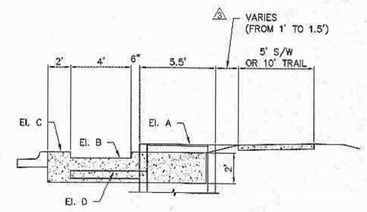
CONCRETE DISCHARGE WEIR DETAIL
FOR POND 160 ⚠2 ⚠3
N.T.S.

⚠2

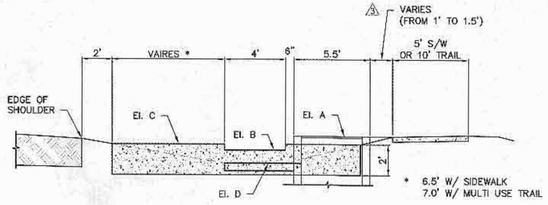
Ditch Block Data Table					
No.	El. A	El. B	El. C	El. D	Length
1	121.01	119.74	120.74	119.24	16.5'
2	121.01	119.74	120.74	119.24	17.0'
3	127.75	127.50	127.75	127.00	11'
4	127.75	127.50	127.75	127.00	17.0'
5	126.37	126.12	126.37	125.62	11'
6	126.37	126.12	126.37	125.62	17.0'
7	117.81	116.54	117.57	116.04	16.5'
8	117.81	116.54	117.54	116.04	17.0'



SLOT GRATES DETAIL ⚠3
N.T.S.
NOTE: ALL DBI W/ SLOT OPENINGS SHALL HAVE SLOT GRATES. ⚠3



NOTE: DITCH BLOCK #3 SHOWN, #5 MIRROR IMAGE



NOTE: DITCH BLOCK #1 & #7 SHOWN, #2, #4, #6 & #8 MIRROR IMAGE

DITCH BLOCK DETAIL
N.T.S.

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	BY
1	11-16-2015	REVISED SLOT GRATES DETAIL	PS
2	06-02-2015	REVISED PER SWFWMD COMMENTS	PS
3	05-12-2015	REVISED STRUCTURE DETAILS PER ACOE	PS
4	01-08-2015	ADDED SLOT GRATES DETAIL, REVISED DITCH BLOCK DETAIL	PS
5	09-11-2014	REVISED PER PASCO COUNTY COMMENTS	PS
6	08-01-2014	REVISED CONTROL STRUCTURE DATA	PS

JOB NO. 0597-0025 | DSN. PS | CHK. 137 | DATE 06-04-2014 | DESIGNED PS | DRAWN AVS | CHECKED PS | QC'D

DESIGNED FOR: EPPERSON RANCH, LLC
2502A NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 282-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: ROADWAY & DRAINAGE DETAILS

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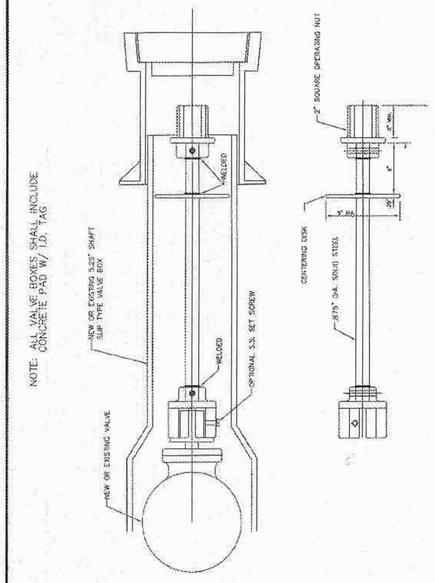
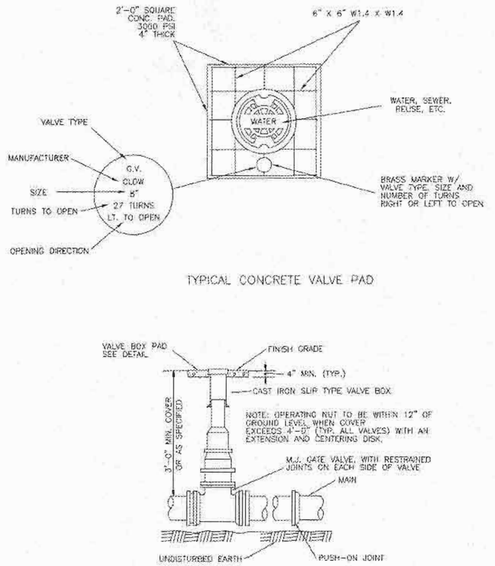
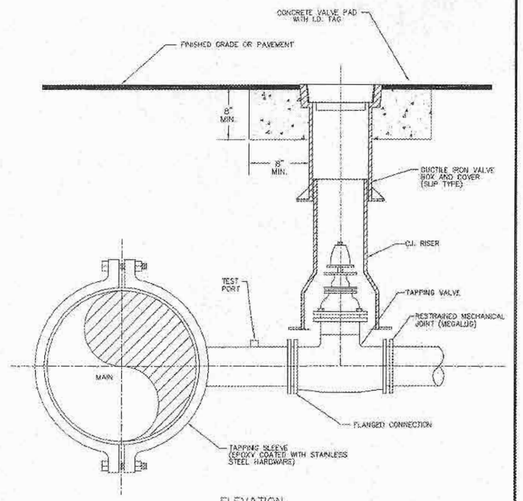


CREATED 02/24/03 REVISED	VALVE EXTENSION RODS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 29



TYPICAL CONCRETE VALVE PAD

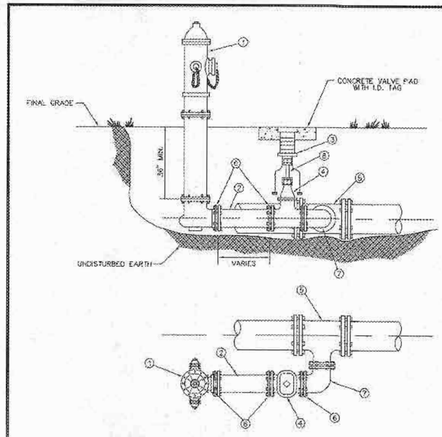
CREATED 02/24/03 REVISED	VALVE BOX DETAIL SLIP TYPE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 30



ELEVATION

NOTES:
- SADDLE CONNECTION WILL BE TESTED TO 150 PSI PRIOR TO TAPPING MAIN.
- MECHANICAL JOINTS/UNDERGROUND PIPING SHALL BE RESTRAINED AS SPECIFIED BY COUNTY/ENGINEER.
- VALVE EXTENSION ROD SHALL BE UTILIZED, AS NECESSARY, SO THAT VALVE OPERATING NUT IS A MAXIMUM OF 3' BELOW GRADE.

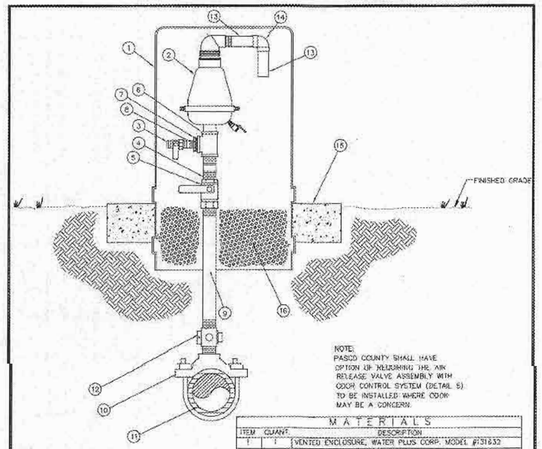
CREATED 02/24/03 REVISED	WATER, REUSE, AND FORCE MAIN TAPPING DETAIL W/ VALVE LOCATION	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 37



MATERIALS

ITEM	QUANT.	DESCRIPTION
1	1	HYDRANT, FIRE (5 1/4" VALVE MIN.), PAINTED YELLOW
2	※	6" PIPE, P.V.C. (DR-18)
3	1	BOX, VALVE SLIP TYPE
4	1	6" VALVE, GATE, M.J. RESILIENT WEDGE
5	1	TEE, ANCHORING, M.J.
6	※	6" RESTRAINER GLAND (MEGALUG)
7	1	BEND, ANCHORING, D.I.
8	※	VALVE EXTENSION ROD, AS NECESSARY (3' MAX. BELOW GRADE)

CREATED 02/24/03 REVISED	FIRE HYDRANT PARALLEL TO THE MAIN	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 26



MATERIALS

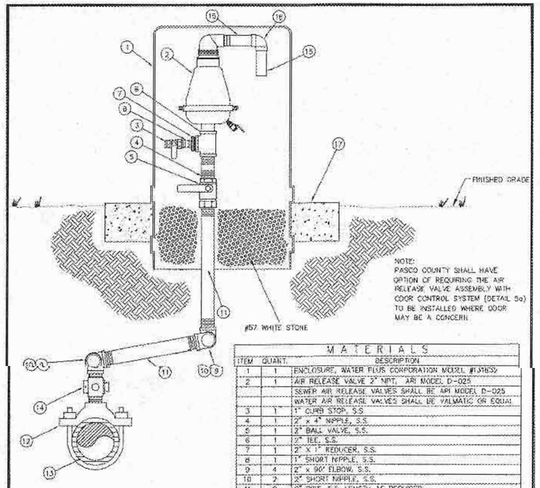
ITEM	QUANT.	DESCRIPTION
1	1	VENTED ENCLOSURE, WATER PLUS CORP. MODEL #1316-32
2	1	AIR RELEASE VALVE 2" NPT (SIDE BELOW)
		SEWER AIR RELEASE VALVES SHALL BE ARI MODEL D-025
		WATER AIR RELEASE VALVES SHALL BE VALMATIC OR EQUAL
3	1	1" CURB STOP, S.S.
4	1	2" x 4" NIPPLE, S.S.
5	1	2" BALL VALVE, S.S.
6	1	2" TEE, S.S.
7	1	2" X 1" REDUCER, S.S.
8	1	1" SHORT NIPPLE, S.S.
9	1	2" PIPE, S.S. LENGTH AS REQUIRED
10	1	2" DOUBLE STRAP TAPPING SADDLE, S.S.
11	1	4" & LARGER PIPE, D.I. OR PVC (DR-18)
12	1	2" CORPORATION BRASS
13	2	1-1/2" PIPE, PVC, LENGTH AS REQUIRED
14	1	1-1/2" x 90° ELBOW, PVC
15	1	CONCRETE SLAB AROUND ENCLOSURE
16	1	#57 WHITE ROCK

NOTE:

VENTED ENCLOSURE TO BE COLOR CODED AS FOLLOWS:

WATER MAIN – BLUE
FORCE MAIN – GREEN
REUSE MAIN – PURPLE

CREATED 02/24/03 REVISED	STANDARD AIR RELEASE VALVE ASSEMBLY (VERTICAL PIPE LAYOUT)	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 4



MATERIALS

ITEM	QUANT.	DESCRIPTION
1	1	ENCLOSURE, WATER PLUS CORPORATION MODEL #1316-32
2	1	AIR RELEASE VALVE 2" NPT, ARI MODEL D-025
		SEWER AIR RELEASE VALVES SHALL BE ARI MODEL D-025
		WATER AIR RELEASE VALVES SHALL BE VALMATIC OR EQUAL
3	1	1" CURB STOP, S.S.
4	1	2" x 4" NIPPLE, S.S.
5	1	2" BALL VALVE, S.S.
6	1	2" TEE, S.S.
7	1	2" X 1" REDUCER, S.S.
8	1	1" SHORT NIPPLE, S.S.
9	4	2" x 90° ELBOW, S.S.
10	2	2" SHORT NIPPLE, S.S.
11	2	2" PIPE, S.S. LENGTH AS REQUIRED
12	1	2" DOUBLE STRAP TAPPING SADDLE, S.S.
13	1	4" & LARGER PIPE, D.I. OR PVC (DR-18)
14	1	2" CORPORATION BRASS
15	2	1-1/2" PIPE, PVC, LENGTH AS REQUIRED
16	1	1-1/2" x 90° ELBOW, PVC
17	1	CONCRETE SLAB AROUND ENCLOSURE

NOTE:

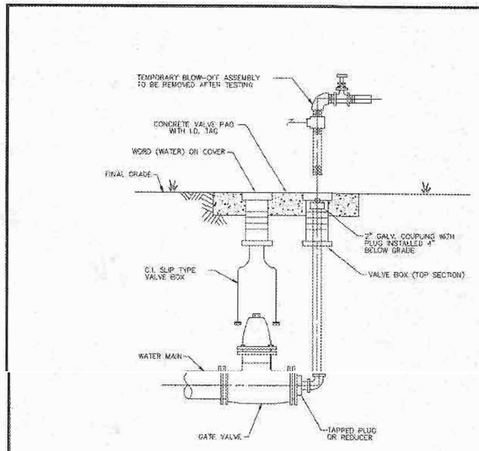
VENTED ENCLOSURE TO BE COLOR CODED AS FOLLOWS:

WATER MAIN – BLUE
FORCE MAIN – GREEN
REUSE MAIN – PURPLE

CREATED 02/24/03 REVISED	STANDARD AIR RELEASE VALVE ASSEMBLY ABOVE GROUND VERTICAL PIPE LAYOUT	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 07

⚠

DETAIL 09 – UNDERGROUND TRAFFIC STYLE ARV DETAIL DELETED.



NOTES:
- MECHANICAL JOINTS/UNDERGROUND PIPING SHALL BE RESTRAINED AS SPECIFIED IN JOINT RESTRAINT TABLE (DETAIL 45)
- VALVE EXTENSION ROD SHALL BE UTILIZED, AS NECESSARY, SO THAT VALVE OPERATING NUT IS A MAXIMUM OF 3' BELOW GRADE.

CREATED 02/24/03 REVISED	PERMANENT BLOW-OFF DETAIL	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 28

PAUL E. SKALITZKY LICENSE NO. 49631 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO. 0597-0025 | DSN. PS | DWN. PS | CHECKED PS | QA/C. PS | APP'D

NO.	DATE	REVISIONS	BY	APP'D
1	11-19-2014	UNDERGROUND ARV DETAIL DELETED PER PCU	PS	
2	08-17-2014	REVISED PER PASCO COUNTY COMMENTS	PS	

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 289-8678

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: UTILITY DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
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3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
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SHEET 47 OF 51

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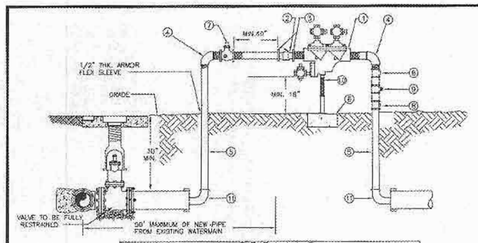
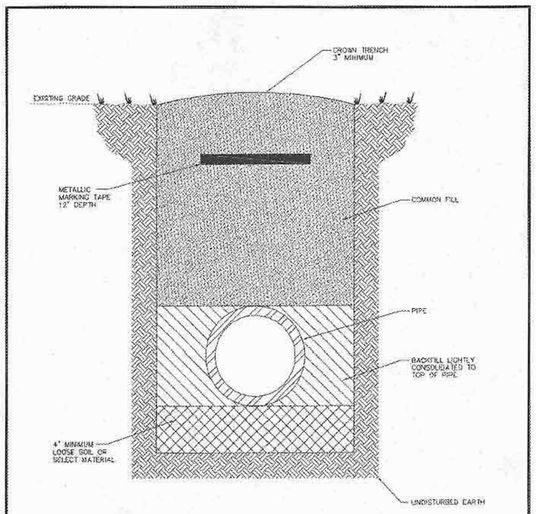


ITEM	QUANT.	MATERIALS DESCRIPTION
1	1	2" BACKFLOW PREVENTER ASSEMBLY, REDUCED PRESSURE ZONE
2	1	2" METER FURNISHED BY PASCO COUNTY UTILITIES
3	2	BRASS-METER FLANGES OR ADAPTORS
4	2	2" ELBOWS – GALV. 90°
5	2	2" RISER – GALV.
6	*	CONCRETE 'S' 48
7	1	2" VALVE – BRASS OR S.S.
8	2	TEE / VALVES – BRASS OR S.S.
9	1	2" GATE VALVE – BRASS OR S.S.
10	1	PIPE STAND (SUPPORT)
11	2	M.J. CAP WITH 2" TAP

NOTE: – CONTRACTOR/CUSTOMER SHALL APPLY AT PASCO COUNTY UTILITIES CUSTOMER SERVICE FOR TEMPORARY WATER SERVICE AT LEAST THREE DAYS PRIOR TO REQUIRED SERVICE DATE.
– THE METER WILL BE FURNISHED, INSTALLED AND INITIAL READING TAKEN BY PASCO COUNTY UTILITIES. ALL FITTINGS, PIPING, VALVES AND MATERIALS INCLUDING THE PASCO COUNTY APPROVED REDUCED PRESSURE BACKFLOW PREVENTION DEVICE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR/CUSTOMER.
– CONTRACTOR/CUSTOMER FURNISHED REDUCED PRESSURE BACKFLOW PREVENTION DEVICE MUST BE INSTALLED BEFORE THE METER IS INSTALLED BY PASCO COUNTY UTILITIES. THE APPROVED BACKFLOW PREVENTION DEVICE SHALL BE TESTED AND CERTIFIED BY PASCO COUNTY UTILITIES CERTIFIED BACKFLOW PREVENTION TECHNICIAN AT TIME OF METER INSTALLATION.
– CONTRACTOR/CUSTOMER SHALL PROTECT THE JUMPER/METER ASSEMBLY FROM DAMAGE.
– CONTRACTOR/CUSTOMER IS RESPONSIBLE FOR BACTERIOLOGICAL TESTING AFTER CONNECTION OF TEMPORARY WATER SERVICE.
– TEMPORARY CONSTRUCTION JUMPER/METER ASSEMBLY SHALL NOT BE REMOVED UNTIL SYSTEM IS ACCEPTED AND DEPARTMENT OF HEALTH CERTIFICATION AND CLEARANCE FOR SERVICE FORM HAS BEEN RECEIVED BY PASCO COUNTY UTILITIES.
– WHEN THE NEW SYSTEM IS ACCEPTED AND THE FINAL METER READING TAKEN BY PASCO COUNTY, THE TEMPORARY CONSTRUCTION JUMPER/METER ASSEMBLY MUST BE COMPLETELY REMOVED FROM M.J CAP TO M.J CAP AND A NEW WATER MAIN IS TO BE CHLORINATED AND INSTALLED COMPLETING THE FINAL CONNECTION.
– BY APPLYING FOR SERVICE, CONTRACTOR/CUSTOMER AGREES TO TAKE WATER SERVICE FROM PASCO COUNTY UTILITIES IN ACCORDANCE WITH THE APPROPRIATE RATE SCHEDULE AND IN ACCORDANCE WITH PASCO COUNTY UTILITIES RULES AND REGULATION.

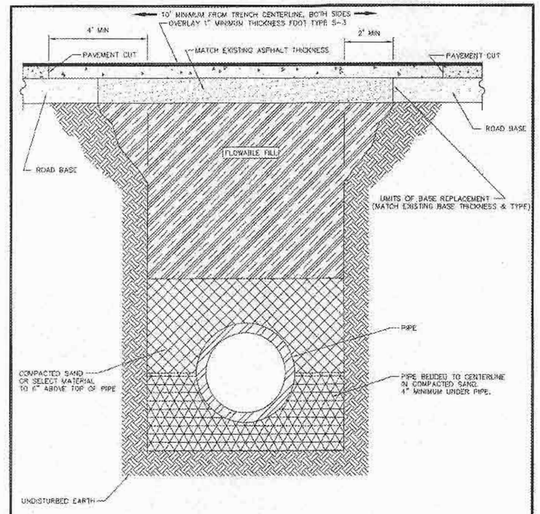
CREATED 11/19/09	TEMPORARY CONSTRUCTION WATER SERVICE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISED	PASCO COUNTY UTILITIES	DETAIL 01



NOTES: –LOOSE SOIL OR SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS AND FOREIGN MATERIAL.
–COMMON FILL TO BE PLACED AND COMPACTED IN 12" LAYERS. ROLLING EQUIPMENT SHALL NOT BE USED FOR COMPACTION UNTIL A MINIMUM OF 18" OF COMMON FILL HAS BEEN PLACED AND COMPACTED OVER THE PIPE. THREE FEET OF FILL SHALL BE PLACED BEFORE A HYDROHAMMER MAY BE USED FOR COMPACTION.

NTS

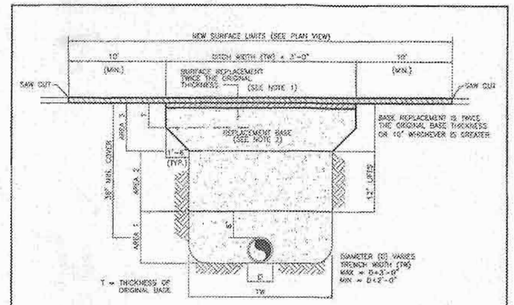
CREATED 08/24/09	PIPE LAYING CONDITIONS STANDARD UNPAVED AREAS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISED	PASCO COUNTY UTILITIES	DETAIL 35



NOTE: –SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS AND FOREIGN MATERIAL.
–COMPACTION TO TOP OF PIPE IS TO BE APPROXIMATELY 90% STANDARD PROCTOR, AASHTO T-99.
–EXISTING CONCRETE/ASPHALT PAVEMENT SURFACE AND BASE TO BE CUT SQUARE WITH CONCRETE SAW.

NTS

CREATED 03/06/03	PIPE LAYING CONDITIONS FLOWABLE FILL BACKFILL STANDARD EXISTING PAVED AREAS & ROADWAYS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISED	PASCO COUNTY UTILITIES	DETAIL 36



NOTES
1. REPLACEMENT ASPHALT SHALL BE TWICE THE ORIGINAL PAVEMENT THICKNESS WITH A MINIMUM OF 2 INCHES AND SHALL BE TYPE S-1 OR S-3 ASPHALT.
2. REPLACEMENT BASE SHALL BE NEW MATERIAL NOT REUSED FROM EXCAVATION. ACCEPTABLE BASE ALTERNATIVE SHALL BE TYPE ABC OR BETTER ASPHALT PLACED AT A TOTAL THICKNESS OF 6 INCHES.
3. AREA 1 – BACKFILL SHALL BE PLACED IN 6" LIFTS WITH EACH LIFT COMPACTED TO 100% OF ASTM T-180, USING MECHANICAL TAMPERS.
4. AREA 2 – BACKFILL SHALL BE PLACED IN 12" LIFTS WITH EACH LIFT COMPACTED TO 100% OF ASTM T-180, USING APPROPRIATE COMPACTING EQUIPMENT.
5. AREA 3 – UNDERCUT (LBR 100) BASE SHALL BE CONSTRUCTED IN LIFTS NOT GREATER THAN 6" COMPACTED THICKNESS, AND HAVE A DENSITY EQUAL TO 100% OF ASTM T-180 METHOD A.
6. FLOWABLE FILL MAY BE PLACED ABOVE AREA 1 UP TO THE BOTTOM OF THE RESTORED BASE. MIX DESIGN SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS SECTION 121.

CUT & PATCH DETAIL
NTS

NOTE:
NO EXCAVATIONS TO THIS DETAIL WILL BE PERMITTED UNLESS APPROVED BY THE COUNTY ENGINEER. ANY PROPOSED ALTERATIONS SHALL BE CLEARLY IDENTIFIED AND HIGHLIGHTED ON DETAIL.

PASCO COUNTY ENGINEERING SERVICES DESIGN STANDARDS	CUT & PATCH DETAIL	
	APPROVED BY	SCE APPROVAL REVISED / DWG. NO.

1. CONNECTIONS INTO A COUNTY-OWNED SYSTEM SHALL BE VIA WET TAP. WET TAPS SHALL BE PERFORMED EXCLUSIVELY BY THE UTILITIES SERVICES BRANCH AT THE DEVELOPERS EXPENSE. EXCAVATION, BACKFILL, AND SURFACE RESTORATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. MATERIAL FOR WET TAPS LARGER THAN TWO INCHES SHALL BE PROVIDED AND INSTALLED BY THE PROJECT CONTRACTOR.

2. THE CONTRACTOR'S RESPONSIBILITIES REGARDING WET TAPS TWO INCHES AND LARGER SHALL BE AS FOLLOWS:

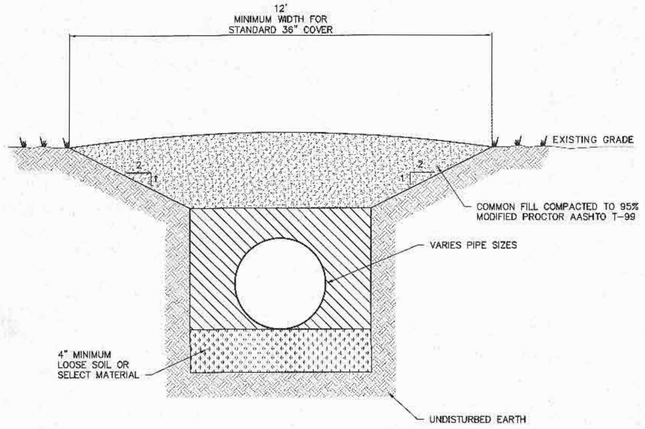
   2" ONLY – THE EXCAVATED TRENCH MUST BE DRY OR THE TRENCH WILL REQUIRE ROCK AND A PUMP TO BE IN PLACE. THE MINIMUM DISTANCE FROM THE FACE OF THE VALVE TO THE WALL OF THE TRENCH SHALL BE SIX FEET.

   3" AND LARGER – THE CONTRACTOR WILL SUPPLY A TAPPING SADDLE BEING EPOXY COATED, A TAPPING VALVE WITH MECHANICAL JOINT AND THE EQUIPMENT TO PROVIDE AND CONDUCT A PRESSURE TEST. COUNTY PERSONNEL WILL WITNESS THE PRESSURE TEST WHICH MUST BE AT 150 PSI FOR A DURATION OF THIRTY MINUTES.

   THE CONTRACTOR IS RESPONSIBLE FOR THE EXCAVATION BEFORE ANY COUNTY PERSONNEL WILL ENTER THE EXCAVATED AREA. IF THE TRENCH IS FOUR FEET IN DEPTH OR DEEPER, IT WILL REQUIRE A TRENCH BOX OR SLOPING AN A LADDER ACCORDING TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.

   THE TAPPING VALVE WILL REQUIRE A BLOCKING DEVICE MADE OF SUITABLE MATERIAL OR DEVICE. THIS BLOCKING DEVICE OR MATERIAL WILL BE PLACED UNDER THE VALVE AND REMAIN IN PLACE UNTIL THE TAP MACHINE IS REMOVED AND THE TAP IS COMPLETED.

   NOTE: IF THE CONTRACTOR HAS NOT FULFILLED HIS RESPONSIBILITIES, AS STATED ABOVE, PRIOR TO THE ARRIVAL OF PASCO COUNTY UTILITIES OPERATIONS AND MAINTENANCE TAPPING CREW, THERE WILL BE AN ADDITIONAL CHARGE OF $95.00.



NOTES:

– LOOSE SOIL OR SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS AND FOREIGN MATERIAL.
– COMMON FILL TO BE PLACED AND COMPACTED IN 12" LAYERS. ROLLING EQUIPMENT SHALL NOT BE USED FOR COMPACTION UNTIL A MINIMUM OF 18" OF COMMON FILL HAS BEEN PLACED AND COMPACTED OVER THE PIPE. THREE FEET OF FILL SHALL BE PLACED BEFORE A HYDROHAMMER MAY BE USED FOR COMPACTION.

TYPICAL TRENCH DETAIL
N.T.S.

PAUL E. SMITH — LICENSE NO. 39671 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

JOB NO	0697-0025
SHEET	137
DATE	06-04-2014
DESIGNED	PS
DRAWN	AVS
CHECKED	PS
D.C.	

NO.	DATE	REVISIONS
1	09-11-2014	REVISED PER PASCO COUNTY COMMENTS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1090
TAMPA, FLORIDA 33607
PHONE: (813) 289-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: UTILITY DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
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3030 STARKEY BOULEVARD, NEW PORT RICHEY, FLORIDA 34655
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SHEET 48 OF 51

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RESTRAINED JOINT NOTES:

1. THE PROGRAM, "THRUST RESTRAINT" DISTRIBUTED BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) WAS USED TO CALCULATE THE LENGTH OF RESTRAINED JOINTS BASED ON TYPE 3 STANDARD ANSI/AWWA C150/A21.50 LAYING CONDITIONS FOR DUCTILE IRON PIPE, SANDY/SILTY SOIL, 3.0 FT. MINIMUM COVERAGE AND 150 PSI OPERATING PRESSURE. APPROPRIATE ADJUSTMENT MUST BE MADE FOR DEVIATIONS FROM THESE ASSUMPTIONS.
2. SELECTED COMMON FILL FROM ORIGINAL EXCAVATION, SEE SPECIFICATIONS.
3. USE OF ALTERNATE TYPES OF PIPE BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE ENGINEER.
4. FOR COMBINED BENDS FORMING OFFSETS, THE LENGTHS QUOTED SHALL BE DOUBLED AND PROVIDED EACH SIDE OF THE CENTROID OF THE OFFSET.
5. VALVES LOCATED NEAR BENDS OR TEES SHALL TAKE ACCOUNT OF ADDITIONAL PASSIVE SOIL RESISTANCE.
6. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION, DEWATER AS NECESSARY.
7. EXISTING CONCRETE/ASPHALT PAVEMENT SURFACE AND BASE SHALL BE CUT SQUARE WITH CONCRETE SAW.
8. ALL FITTINGS AND VALVES SHALL BE MECHANICALLY RESTRAINED. IN ADDITION TO THE FITTING BEING RESTRAINED, THE MINIMUM LINEAR FEET TO BE RESTRAINED ON BOTH SIDES OF THE FITTING SHALL BE AS SHOWN IN THE TABLE UNLESS OTHERWISE NOTED. THE RESTRAINED JOINT LENGTHS FOR DUCTILE IRON PIPE ARE AS SHOWN. APPROPRIATE ADJUSTMENTS MUST BE MADE FOR PIPE MATERIALS OTHER THAN DUCTILE IRON. ANY DEVIATIONS FROM THIS CRITERIA SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
9. IF THE PIPE IS DEFLECTED IN LIEU OF FITTINGS, THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE 75% OF THE MANUFACTURER'S RECOMMENDED DEFLECTION, FOR THE JOINT TYPE USED.

* NUMBERS IN PARENTHESES REPRESENT LINEAL FEET OF RESTRAINT FOR POLY WRAPPED DIP AND FOR PVC PIPE

REDUCERS

LARGE END	4"	6"	8"	12"	16"	18"	20"	24"	30"
6"	31(44)								
8"	55(79)	32(46)							
12"	94(134)	79(113)	57(82)						
16"		117(166)	101(144)	59(84)					
18"			120(171)	83(118)	31(44)				
20"				104(149)	58(83)	31(44)	58(83)		
24"				143(204)	106(151)	83(119)	58(83)		
30"					163(232)	145(207)	126(180)	81(115)	
36"							181(258)	145(207)	80(114)
48"							266(381)	241(345)	196(280)

REDUCER RESTRAINED JOINTS (150 psi)

MINIMUM LINEAR FEET OF BRANCH PIPE TO BE RESTRAINED FROM JOINT AT TEE.

(WITH POLYETHYLENE WRAP OR PVC PIPE)

PIPE SIZE	4"	6"	8"	12"	16"	18"	20"	24"	30"	36"	48"
CAPPED ENDS	-	-	-	-	-	-	-	-	-	-	-
90° BENDS	42(60)	59(85)	77(110)	108(155)	138(198)	153(218)	166(238)	194(277)	231(330)	265(379)	3251(465)
45° BENDS	17(25)	25(35)	32(45)	45(64)	57(82)	63(90)	69(98)	80(115)	96(137)	110(157)	135(192)
22 1/2° BENDS	8(12)	12(17)	15(22)	22(31)	28(39)	30(43)	33(47)	39(55)	46(66)	53(75)	65(92)
11 1/4° BENDS	4(6)	6(8)	8(11)	11(15)	14(19)	15(21)	16(23)	19(27)	23(32)	26(37)	32(46
VALVES	-	-	-	-	-	-	-	-	-	-	-

DUCTILE IRON RESTRAINED JOINTS FOR VERTICALLY ORIENTED FITTINGS (150 psi)

MINIMUM LINEAR FEET OF PIPE TO BE RESTRAINED FROM JOINTS AT BENDS OR END CAPS.

(WITH POLYETHYLENE WRAP OR PVC PIPE)

PIPE SIZE	4"	6"	8"	12"	16"	18"	20"	24"	30"	36"	48"
CAPPED ENDS	42(60)	59(85)	77(110)	108(155)	138(198)	153(218)	166(238)	194(277)	231(330)	265(379)	325(465)
90° BENDS	20(24)	29(33)	37(43)	51(60)	65(76)	72(83)	78(90)	89(104)	104(122)	120(138)	144(167)
45° BENDS	8(10)	12(14)	15(18)	21(25)	27(31)	30(35)	32(37)	37(43)	44(52)	50(57)	60(69)
22 1/2° BENDS	4(5)	6(7)	7(9)	10(12)	13(15)	15(17)	16(18)	18(21)	21(24)	24(28)	29(33)
11 1/4° BENDS	2(2)	3(3)	4(4)	5(6)	7(8)	8(9)	8(9)	9(11)	11(12)	12(14)	14(16)
VALVE	35(50)	49(71)	64(92)	90(130)	115(165)	128(182)	139(198)	160(230)	193(275)	220(320)	325(465)

DUCTILE IRON RESTRAINED JOINTS FOR HORIZONTAL FITTINGS (150 psi)

MINIMUM LINEAR FEET OF PIPE TO BE RESTRAINED FROM JOINTS AT BENDS VALVE OR END CAPS.

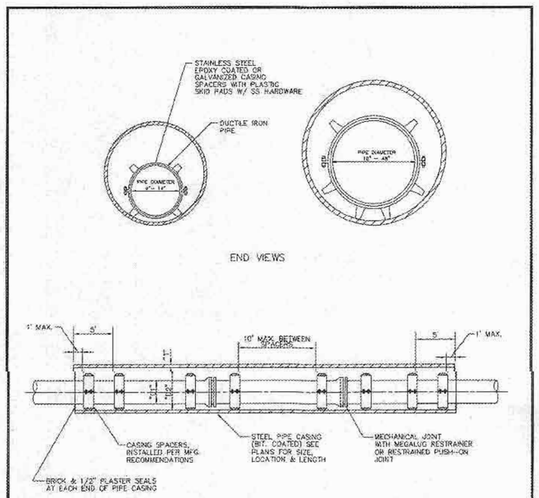
TEE

RUN \ BRANCH	4"	6"	8"	12"	16"	18"	20"	24"	30"	36"	48"
4"	21(29)										
6"	10(15)	38(54)									
8"	0(0)	30(43)	55(78)								
12"	0(0)	15(21)	43(62)	86(123)							
16"		0(0)	30(43)	78(111)	116(185)						
18"		0(0)	24(34)	73(104)	112(161)	130(186)					
20"		0(0)	16(23)	68(98)	109(156)	127(181)	143(205)				
24"		0(0)	1(2)	58(83)	102(145)	120(172)	128(197)	170(243)			
30"		0(0)	0(0)	42(61)	90(128)	110(157)	129(184)	163(233)	207(296)		
36"			0(0)	25(35)	77(110)	99(141)	118(169)	155(221)	201(287)	241(344)	
48"				0(0)	48(68)	73(104)	96(136)	136(194)	186(266)	229(328)	300(429)

TEE RESTRAINED JOINTS (150 psi)

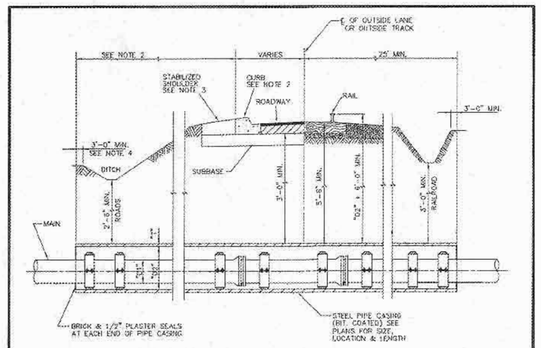
MINIMUM LINEAR FEET OF BRANCH PIPE TO BE RESTRAINED FROM JOINT AT TEE.

RESTRAINED JOINT TABLE AND ASSOCIATED NOTES



NOTE:
- CARRIER PIPE FOR WATER & REUSE MAINS SHALL BE CEMENT MORTAR LINED D.I.P.
- CARRIER PIPE FOR SEWER/FORCE MAINS SHALL BE GLASS FLAKE EPOXY (PROTECTO 401) OR POLYETHYLENE LINED D.I.P.
- CARRIER PIPE TO BE COLOR CODED WITH PAINT STRIPES:
  WATER - BLUE
  REUSE - PURPLE
  SEWER - GREEN
- CASING SHALL EXTEND 8' MINIMUM BEYOND EDGE OF PAVEMENT.

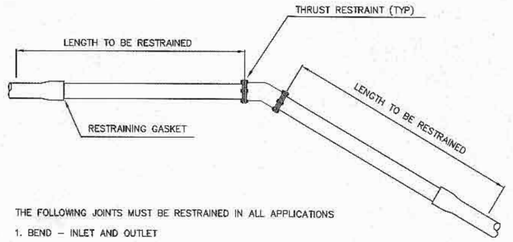
CREATED 02/24/03	JACK & BORE CARRIER DETAIL	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISED	PASCO COUNTY UTILITIES	DETAIL 33



NOTE:
1. VERTICAL DIMENSIONS ARE TYPICAL FOR MAINS.
2. CASINGS SHALL TERMINATE 8' MINIMUM BEYOND EDGE OF PAVEMENT.
3. CASINGS SHALL HAVE 30" MINIMUM COVER UNDER DITCH BOTTOMS AND 36" ELSEWHERE.
4. GRAVITY SEWERS SHALL BE PROPERLY ANCHORED TO PREVENT FLOATATION WITH SPACERS ADJUSTED TO PROVIDE THE SLOPE REQUIRED.
5. SEE SECTION B.2 FOR CASING SIZE.

CARRIER PIPE (INCHES)	CASING PIPE (INCHES)	CASING WALL THICKNESS (INCHES)
4	12	1/4
6	16	1/4
8	16	1/4
10	24	5/16
12	24	5/16
16	30	3/8
20	36	3/8
24	42	3/8
30	48	3/8
36	54	1/2
42	60	1/2
48	66	1/2

CREATED 02/24/03	JACK & BORE DETAIL	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISED	PASCO COUNTY UTILITIES	DETAIL 38



THE FOLLOWING JOINTS MUST BE RESTRAINED IN ALL APPLICATIONS

1. BEND – INLET AND OUTLET
2. TEE – OUTLET BRANCH
3. OFFSETS – INLET AND OUTLET
4. CAPS
5. PLUGS
6. DEAD END RUN
7. HYDRANT RUNOUT

THRUST RESTRAINT ON SUPJOINT DUCTILE IRON PIPE SHALL BE U.S. PIPE FIELD LOCK GASKETS FOR TYTON JOINT PIPE OR AMERICAN FAST-GRIP GASKETS FOR AMERICAN FASTITE PIPE. THRUST RESTRAINT ON DUCTILE IRON FITTINGS SHALL BE PROVIDED BY THE USE OF MEGALUG RETAINERS AND MECHANICAL JOINT FITTINGS.

PIPE RESTRAINT

NTS

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	DRN.	DATE	DESIGNED	DRAWN	CHECKED	ENG.
0597-0025		06-04-2014	PS	AVS	PS	

NO.	DATE	REVISIONS

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH
OVERPASS ROAD - PHASE 1

SHEET NAME: UTILITY DETAILS

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SHEET 49 OF 51

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THE CONTRACTOR SHALL CONFIRM THE REMOVAL OF ANY TREE LARGER THAN 6 INCHES IN DIAMETER WITH THE OWNER OR ENGINEER PRIOR TO ACTIVITY IN THE VICINITY, UNLESS SPECIFICALLY INDICATED IN THE PLANS TO BE REMOVED.

TREE PROTECTION DURING CONSTRUCTION

A. FOR THE PURPOSES OF TYPE I AND II PERMITS, PRIOR TO THE CLEARING OR GRUBBING OF LAND, OR THE REMOVAL OF ANY TREE, THE SITE CONTRACTOR SHALL CLEARLY MARK ALL TREE(S) FOR WHICH TREE(S) REMOVAL PERMIT(S) ARE GRANTED AND SHALL ERECT BARRIERS AROUND THE TREE(S) TO BE RETAINED ON SITE SO AS TO CREATE A PROTECTED ZONE.

(1) THE PROTECTED ZONE SHALL EXTEND FROM THE TREE TRUNK IN ALL DIRECTIONS A MINIMUM OF TWO-THIRDS (2/3) OF THAT TREE'S DRIP LINE.

(2) BARRIERS A MINIMUM OF THREE (3) FEET IN HEIGHT SHALL BE ERECTED OUTSIDE THE PROTECTED ZONE TO PREVENT ENCROACHMENT. BARRIERS SHALL REMAIN IN PLACE AND BE IN GOOD CONDITION THROUGHOUT CONSTRUCTION ACTIVITY.

(3) THE CONTRACTOR SHALL NOT CAUSE OR PERMIT THE MOVEMENT OF EQUIPMENT OR THE STORAGE OF EQUIPMENT, MATERIAL, AND DEBRIS OR FILL TO BE PLACED WITHIN THE PROTECTED ZONE. NO EXCAVATION SHALL OCCUR WITHIN THE PROTECTED ZONE AND THERE SHALL BE NO CLEANING OF EQUIPMENT OR MATERIAL OR THE STORAGE OR DISPOSAL OF WASTE MATERIALS SUCH AS PAINTS, PETROLEUM PRODUCTS, OILS, SOLVENTS, ASPHALTS, CONCRETE, MORTAR OR ANY OTHER MATERIAL WITHIN THE PROTECTED ZONE.

(4) PROTECTIVE BARRIERS MAY BE REMOVED FOR THE FINAL GRADING. REMOVAL OF VEGETATION OR ANY LANDSCAPING ACTIVITIES WITHIN THE BARRIER AREA SHALL BE ACCOMPLISHED BY MOWING OR HAND CLEARING. IF LANDSCAPING IS TO BE LOCATED WITHIN THE PROTECTED ZONE, CLEARING BY LIGHT RUBBER-WHEELED MACHINERY ONLY IN THE AREA AND TO THE EXTENT NECESSARY SHALL BE ALLOWED.

B. SILT BARRIER, HAY BALES OR SIMILARLY EFFECTIVE EROSION CONTROL BARRIERS SHALL BE REQUIRED IN ANY AREA WHERE EROSION OR SILTATION MAY CAUSE DAMAGE TO RETAINED TREES. ROOT PROTECTION MEASURES SHALL BE IN PLACE PRIOR TO THE DISPOSAL OF FILL IN THE PROTECTED ZONE. WHERE ELEVATION CHANGES ARE PROPOSED WITHIN THE PROTECTED ZONE RETAINING WALLS, DRAINAGE TILE OR OTHER APPROVED METHODS SHALL BE REQUIRED UNLESS SUCH PROTECTION IS DEMONSTRATED TO BE IMPRACTICAL. REFER TO THE GRADING AND DRAINAGE PLANS.

TREE BARRICADE PROTECTION DETAIL

N.T.S.

TEMPORARY STRAW BALE SEDIMENT BARRIER

N.T.S.

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

NOTES:

1. FOR ADDITIONAL INFORMATION AND DETAILS, SEE F.D.O.T. INDEX No. 102
2. ADDITIONAL POSTS AND RAILS MAY BE NECESSARY TO SECURE AND SUPPORT BARRIERS.
3. ADDITIONAL FENCE LENGTHS MAY BE REQUIRED BY THE COUNTY ENGINEER OR BY REGULATORY AGENCIES.

TYPE III SILT FENCE

N.T.S.

MAINTENANCE OF SILT SCREENS:
SILT SCREENS SHALL BE INSPECTED AFTER EACH RAINFALL EVENT FOR SIGNS OF DETERIORATION OR FAILURE. DETERIORATION OF A SILT SCREEN SHALL BE CONSTRUED TO MEAN THAT THE SILT SCREEN HAS LIMITED EFFECTIVENESS OR CAPACITY FOR THE FUNCTION OF TRAPPING SEDIMENT, DUE TO PROBLEMS SUCH AS, BUT NOT LIMITED TO, EXCESSIVE BUILDUP OF SEDIMENT OR CONSTRUCTION ACCIDENT. WHEN A SILT SCREEN BECOMES DETERIORATED, IT SHALL BE IMMEDIATELY REMEDIED AT THE DIRECTION OF THE ENGINEER BY SUCH MEANS AS REMOVAL OF THE EXCESSIVE BUILDUP OF SILT, STRAIGHTENING AND TIGHTENING OF THE SCREEN, OR ANY OTHER SUCH MEASURE DEEMED NECESSARY. FAILURE OF A SILT SCREEN SHALL BE CONSTRUED TO MEAN THAT THE SILT SCREEN IS NO LONGER CAPABLE OF FUNCTIONING TO TRAP SEDIMENT DUE TO A RIP, TEAR, OVERTOPPING BY SEDIMENT, BIODEGRADATION, CONSTRUCTION ACCIDENT, OR ANY OTHER SUCH MEANS. WHEN A SILT SCREEN IS DEEMED BY THE ENGINEER TO HAVE FAILED, IT SHALL BE IMMEDIATELY REPLACED WITH NEW SILT SCREEN WITHIN THE LIMITS DIRECTED BY THE ENGINEER. PREVENTATIVE MAINTENANCE OF THE SLIT SCREEN SHALL BE ACCOMPLISHED BY WEEKLY INSPECTION FOR SIGNS OF DETERIORATION OR FAILURE DURING PERIODS OF NO RAINFALL EVENT.

MAINTENANCE OF HAY BALES:
HAY BALES SHALL BE INSPECTED AFTER EACH RAINFALL EVENT FOR SIGNS OF DETERIORATION OR FAILURE. DETERIORATION OF A HAY BALE SCREEN SHALL BE CONSTRUED TO MEAN THAT THE HAY BALE SCREEN HAS LIMITED EFFECTIVENESS OR CAPACITY FOR THE FUNCTION OF TRAPPING SEDIMENT, DUE TO PROBLEMS SUCH AS, BUT NOT LIMITED TO, EXCESSIVE BUILDUP OF SEDIMENT OR CONSTRUCTION ACCIDENT. WHEN A HAY BALE SCREEN BECOMES DETERIORATED, IT SHALL BE IMMEDIATELY REMEDIED AT THE DIRECTION OF THE ENGINEER BY SUCH MEANS AS REMOVAL OF THE EXCESSIVE BUILDUP OF SILT, STRAIGHTENING AND REALIGNING OF THE SCREEN, OR ANY OTHER SUCH MEASURE DEEMED NECESSARY. FAILURE OF A HAY BALE SCREEN SHALL BE CONSTRUED TO MEAN THAT THE HAY BALE SCREEN IS NO LONGER CAPABLE OF FUNCTIONING TO TRAP SEDIMENT DUE TO OVERTOPPING BY SEDIMENT, BIODEGRADATION, CONSTRUCTION ACCIDENT, OR ANY OTHER SUCH MEANS. WHEN A HAY BALE SCREEN IS DEEMED BY THE ENGINEER TO HAVE FAILED, IT SHALL BY IMMEDIATELY REPLACED WITH A NEW HAY BALE SCREEN WITHIN THE LIMITS DIRECTED BY THE ENGINEER. PREVENTATIVE MAINTENANCE OF THE HAY BALE SCREEN SHALL BE ACCOMPLISHED BY WEEKLY INSPECTION FOR SIGNS OF DETERIORATION OR FAILURE DURING PERIODS OF NO RAINFALL EVENT.

D_1 = 5' Std. (Single Panel For Depths 5' or Less).
D_2 = 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.

FLOATING TURBIDITY BARRIERS

D.O.T. INDEX #103 N.T.S.

INSTALLATION:
TYPE III SILT FENCE SUPPORTED BY STEEL POST SHALL BE USED. THE STAKES SHALL BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART, AND SECURELY DRIVEN INTO THE GROUND, APPROXIMATELY 18 INCHES DEEP. THE FABRIC SHALL BE ENTRENCHED 12 INCHES AND BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL. FABRIC AND WIRE SHALL BE SECURELY FASTENED TO THE POST, AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18 INCHES OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.

MAINTENANCE:
THE BARRIER SHALL BE INSPECTED DAILY AND AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE BARRIER. SEDIMENT SHALL NOT BE WASHED INTO THE INLET. IT SHALL BE REMOVED FROM THE SEDIMENT BARRIER AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLET, AGAIN.

INLET SEDIMENT BARRIER FILTER FABRIC WITH SUPPORTING FRAME

PAUL E. SKIDMORE LICENSE NO. 59631 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO	0597-0025
EPN	137
DATE	06-04-2014
DESIGNED / DRAWN	PS / AVS
CHECKED / Q.C.	PS

NO. | DATE | REVISIONS | APP'D BY

DESIGNED FOR: EPPERSON RANCH, LLC
2502 NORTH ROCKY POINT DRIVE, SUITE 1050
TAMPA, FLORIDA 33607
PHONE: (813) 288-8078

PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: EROSION & SEDIMENT CONTROL DETAILS

FLORIDA DESIGN CONSULTANTS, INC.
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TEMPORARY CONSTRUCTION ACCESS

N.T.S.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT CERTIFICATION

CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (CSWMP)
EPPERSON RANCH OVERPASS ROAD PHASE 1.

1. THE CSWMP CONSISTS OF PLAN SHEETS 9 – 10, 14 – 25 AND 31 – 33 SHOWING EROSION PROTECTION DEVICES TO BE UTILIZED ON THE PROJECT.

2. THE APPLICANT/OWNER OR AUTHORIZED AGENT HAS REVIEWED THE CSWMP AND HAS SIGNED THE CSWMP WHERE REQUIRED BELOW.

3. THE CSWMP SHALL BE PART OF THE FINAL CONSTRUCTION PLANS FOR THE PERMITTED SURFACE WATER MANAGEMENT SYSTEM.

SIGNATURE: ______________________

NAME: ______________________ DATE: ____________

APPLICANT ☐ OWNER ☐ AUTHORIZED AGENT ☐

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

______________________ ____________
NAME (OPERATOR AND/OR RESPONSIBLE AUTHORITY) DATE

NAME	TITLE	COMPANY NAME, ADDRESS AND PHONE NUMBER	DATE
*			

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

* NPDES CONTRACTOR AND SUBCONTRACTOR CERTIFICATION TO BE COMPLETED AFTER CONTRACTORS HAVE BEEN SELECTED.

1. SITE DESCRIPTION

A. PROJECT DESCRIPTION:

THE DEVELOPER / APPLICANT PROPOSES TO CONSTRUCT A NEW ROADWAY LOCATED IN PASCO COUNTY, FLORIDA. CONSTRUCTION WILL CONSIST OF CLEARING, GRUBBING, EARTHWORK, INSTALLATION OF THE INFRASTRUCTURE, BACK FILLING, PAVING AND GRADING.

B. MAJOR SOIL DISTURBING ACTIVITIES:

SOIL DISTURBING ACTIVITIES FOR THIS PROJECT WILL INCLUDE CLEARING, GRUBBING, EARTHWORK, INSTALLATION OF PAVING, DRAINAGE AND SANITARY STRUCTURES, WATER MAIN INSTALLATION BACK FILLING AND GRADING.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING TEMPORARY OR PERMANENT STABILIZATION AS SOON AS POSSIBLE FOR AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE CEASED, BUT IN NO CASE SHALL THE TIME BE GREATER THAN FOURTEEN (14) CALENDAR DAYS.

C. TOTAL PROJECT AREA: 52.72± ACRES

THE PROJECT CONSISTS OF THE CONSTRUCTION OF APPROXIMATELY 0.55 MILES OF ROADWAY CONSISTING OF ASPHALT PAVEMENT, CURB AND GUTTER, DRIVEWAY CONNECTIONS AND ACCESS ROADS, A FORCEMAIN, RECLAIMED WATER MAIN, POTABLE WATER MAIN, AND FIRE PROTECTION AND A STORMWATER COLLECTION SYSTEM, AND CONVEYANCE PIPES TO THE SURFACE WATER MANAGEMENT SYSTEM LOCATED ONSITE.

D. TOTAL AREA TO BE DISTURBED: 24.08± ACRES

IT SHALL BE THE INTENT OF THE CONTRACTOR TO MINIMIZE THE ACREAGES OF DISTURBED SOIL IN THE PROJECT AREA AT ALL TIMES.

E. (1) RUNOFF COEFFICIENTS BEFORE CW(B), DURING CW(D) AND AFTER CW(A) CONSTRUCTION:

RUNOFF COEFFICIENT FOR:
OPEN SPACE: C = 0.20
IMPERVIOUS SURFACES: C = 0.95
DISTURBED AREAS, EXPOSED SOIL ETC. DURING CONST.: C = 0.40

WEIGHTED RUNOFF COEFFICIENT:
CW(B): 0.20
CW(D): 0.40
CW(A): 0.60

THE SITE CONSISTS OF NATURAL TREED AREAS AND PASTURE.

2. CONTROLS
NARRATIVE – SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS:

CONSTRUCTION ACTIVITIES – GENERAL

CONSTRUCTION ACTIVITIES ON THIS PROJECT CONSIST OF CLEARING, GRUBBING, EARTHWORK, INSTALLATION OF THE INFRASTRUCTURE, BACK FILLING AND GRADING. ALL ITEMS REPRESENTED IN THE FOLLOWING DISCUSSION ARE TREATED IN DETAIL IN THE CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, "FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", OR WILL BE IMPLEMENTED BY THE CONTRACTOR'S REPRESENTATIVE IN A MANNER APPROPRIATE TO ENVIRONMENTALLY SENSITIVE CONSTRUCTION PRACTICES AND AS APPROVED BY THE OWNER.

THE CONTRACTOR WILL BE REQUIRED TO PREPARE A SITE SPECIFIC EROSION CONTROL PLAN. THE CONTRACTOR WILL ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS DURING CONSTRUCTION TO ADAPT TO SEASONAL VARIATIONS.

OFF–SITE RUNOFF SHOULD BE DIVERTED AWAY OR THROUGH THE CONSTRUCTION AREA. THIS ADDITIONAL FLOW IF NOT DIVERTED, CAN ADD VOLUME AND SIZE TO STRUCTURAL PRACTICES, REQUIRING MORE FREQUENT MAINTENANCE AND LIMITING EFFECTIVENESS OF EROSION AND SEDIMENT CONTROLS.

COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN IS A REQUIREMENT OF THE PROJECT CONTRACT DOCUMENTS. CONSTRUCTION–RELATED INFORMATION REQUIRED BY THE NPDES PERMIT BUT NOT SPECIFICALLY INDICATED IN THE STORMWATER POLLUTION PREVENTION PLAN CAN BE FOUND IN THE CONTRACT DOCUMENTS.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A STABILIZED CONSTRUCTION ENTRANCE FOR VEHICLES ENTERING OR EXITING ONTO PUBLIC ROADS. THE CONTRACTOR'S REPRESENTATIVE SHALL BE RESPONSIBLE FOR MONITORING THE SYSTEM AND MODIFYING THE SYSTEM OR PROCEDURES AS NEEDED.

CONSTRUCTION ACTIVITIES

PRIOR TO COMMENCEMENT, THE CONTRACTOR SHALL PROVIDE A DETAILED CONSTRUCTION SCHEDULE TO INDICATE DATES OF MAJOR GRADING ACTIVITIES AND DETERMINE SEQUENCING OF TEMPORARY AND PERMANENT SOIL DISTURBING ACTIVITIES ON ALL PORTIONS OF THE SITE.

PRIOR TO THE BEGINNING OF ANY PHASE, THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL ITEMS AS DESCRIBED IN THE CONSTRUCTION DRAWINGS.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SEEDING, MULCHING AND WATER AS SOON AS POSSIBLE FOR AREAS OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY CEASED BUT IN NO CASE SHALL THE TIME BE GREATER THAN FOURTEEN (14) DAYS.

INSTALLATION OF THE INFRASTRUCTURE AND EARTHWORK, AS SHOWN ON THE PLANS MAY REQUIRE DEWATERING PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCHARGING THE DEWATERING FLOW TO A TEMPORARY SETTLINGS BASIN SUCH AS AREAS CREATED BY STAKED HAY BALES IN DRY GRASSED SWALES OR OTHER SIMILAR SETTLING AREAS, HOWEVER, AT NO TIME SHALL THE CONTRACTOR DISCHARGE DEWATERING FLOW DIRECTLY TO WETLAND AREAS.

EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND MAY BE REMOVED ONLY WHEN PERMANENT STABILIZATION IS ESTABLISHED AND THE OWNER APPROVES THE REMOVAL.

A. EROSION AND SEDIMENT CONTROLS:

(1) STABILIZATION PRACTICES TO BE IMPLEMENTED:

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE SHALL THE TIME BE GREATER THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. ALL DISTURBED AREAS WILL BE SEEDED AND MULCHED OR SODDED FOLLOWING CONSTRUCTION.

(2) STRUCTURAL PRACTICES WILL INCLUDE:

ROCK BEDDING AT CONSTRUCTION EXIT
STAKED SILT FENCES

B. OTHER CONTROLS:

(1) WASTE DISPOSAL:

THE CONTRACTOR WILL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ALL FERTILIZER, HYDROCARBON, OR OTHER CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER. NO SOLID MATERIALS INCLUDING BUILDING AND CONSTRUCTION MATERIALS SHALL BE DISCHARGED TO WETLANDS OR BURIED ON–SITE.

(2) OFF–SITE VEHICLE TRACKING:

OFF–SITE VEHICLE TRACKING WILL BE CONTROLLED BY THE FOLLOWING METHODS:

LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN.
EXCESS DIRT ON ROAD REMOVED DAILY.
STABILIZED CONSTRUCTION ENTRANCE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING AND MAINTAINING STABILIZED CONSTRUCTION ENTRANCES WHEN ENTERING OR EXITING ONTO PUBLIC ROAD. THE CONTRACTOR'S REPRESENTATIVE SHALL BE RESPONSIBLE FOR MODIFYING THE SYSTEM OR PROCEDURES AS NEEDED AND AS APPROVED BY THE OWNER.

(3) SANITARY WASTE:

ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR AS REQUIRED BY STATE REGULATION.

(4) FERTILIZERS AND PESTICIDES:

FERTILIZERS AND SOIL STERILIZERS WILL BE USED ON THIS PROJECT IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AT THE DISCRETION OF THE CONTRACTOR WITH COORDINATION OF THE OWNER.

(5) NON–STORMWATER DISCHARGE (INCLUDING SPILL REPORTING):

A. THE CONTRACTOR WILL PROVIDE THE DEVELOPER / APPLICANT WITH AN EROSION CONTROL PLAN THAT WILL INCLUDE SPILL REPORTING AND RESPONSE.

B. APPROVED STATE, LOCAL PLANS, OR STORMWATER PERMITS:
SEE ATTACHED PERMITS.

(6) STORAGE, APPLICATION, GENERATION, AND MITIGATION OF TOXIC SUBSTANCES:

(A) ALL TOXIC SUBSTANCES ARE TO BE STORED, APPLIED, GENERATED, OR MITIGATED IN ACCORDANCE WITH THE CRITERIA OF THE APPROPRIATE REGULATORY AGENCIES.

3. MAINTENANCE:

GENERAL

THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIRS OF EROSION AND SEDIMENT CONTROL DEVICES AND REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES AFTER THE NOTICE OF TERMINATION.

MAINTENANCE AND REPAIR REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION SHALL BE INCLUDED IN THE COST OF PAY ITEMS FOR THIS PROJECT.

THE CONTRACTOR SHALL MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD WEEKLY RAINFALL. ALL CONTROL MEASURES WILL BE MAINTAINED DAILY BY THE CONTRACTOR.

ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

STRUCTURAL PRACTICES AND CONTROLS:

THE FOLLOWING PRACTICES WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS:

BUILT–UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE–THIRD THE HEIGHT OF THE FENCE.

TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED TO PREVENT CLOGGING OF ROCK BEDDING WHICH MAY IMPEDE THE USEFULNESS OF THE STRUCTURE.

4. INSPECTION:

THE CONTRACTOR'S DAILY INSPECTIONS REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION SHALL BE INCLUDED IN THE COST OF THE PAY ITEMS FOR THIS PROJECT.

ALL EROSION AND WATER POLLUTION ABATEMENT AND CONTROL MEASURES WILL BE INSPECTED DAILY BY THE CONTRACTOR.

THE CONTRACTOR SHALL USE THE CONSTRUCTION INSPECTION REPORT FORM (SEE ATTACHED) FOR DAILY INSPECTIONS.

5. TRACKING AND REPORTING:

REQUIRED INSPECTIONS MUST OCCUR AT LEAST ONCE PER WEEK AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT IS 0.50 INCHES OR GREATER. AN INSPECTION REPORTING FORM HAS BEEN PROVIDED TO THE OWNER/DEVELOPER.

THE CONTRACTOR SHALL SUBMIT A WEEKLY REPORT TO THE DEVELOPER / APPLICANT DOCUMENTING THE DAILY INSPECTIONS AND MAINTENANCE OR REPAIRS TO THE EROSION AND SEDIMENT CONTROL DEVICES.

THE DEVELOPER / APPLICANT OR ITS REPRESENTATIVES SHALL MAINTAIN ALL REQUIRED RECORDS SUBMITTED BY THE CONTRACTOR AND COMPLETE ALL SWPPP INSPECTION REPORT FORMS REQUIRED FOR THE NPDES PERMIT.

PREPARATION OF THE CONTRACTOR'S WEEKLY REPORTS OF INSPECTIONS, MAINTENANCE AND REPAIRS, REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION, SHALL BE INCLUDED IN THE COST OF THE PAY ITEMS FOR THIS PROJECT.

PAUL E. SKIDMORE LICENSE NO. 39631 STATE OF FLORIDA PROFESSIONAL ENGINEER 11-20-15

JOB NO. 0597-0025 | LPN 137 | DATE 06-04-2014 | DESIGNED PS | DRAWN AVS | CHECKED PS | Q.C.

REVISIONS | NO. | DATE | APP'D BY

DESIGNED FOR: EPPERSON RANCH, LLC
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PROJECT NAME: EPPERSON RANCH OVERPASS ROAD - PHASE 1

SHEET NAME: EROSION & SEDIMENT CONTROL DETAILS

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