CONCORD STATION

PHASE 5, UNITS A1 AND A2,

SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD

CONSTRUCTION PLANS

SECTIONS 15 & 22 TOWNSHIP 26 S, RANGE 18 E

PASCO COUNTY, FLORIDA

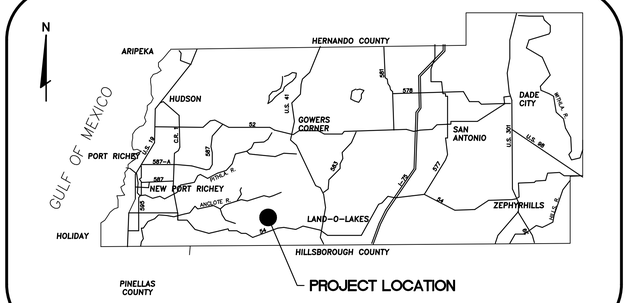
LEGAL DESCRIPTION

A PARCEL OF LAND BEING A PORTION OF SECTIONS 15 AND 22, TOWNSHIP 26 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 15, TOWNSHIP 26 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA; THENCE S00°17'39"W, ALONG THE WEST LINE OF SAID SECTION 15, TOWNSHIP 26 SOUTH, RANGE 18 EAST (BEING THE BASIS OF BEARINGS FOR THIS LEGAL DESCRIPTION), FOR 174.37 FEET; THENCE LEAVING SAID WEST LINE OF SECTION 15, TOWNSHIP 26 SOUTH, RANGE 18 EAST, S89°42'21"E, FOR 200.00 FEET TO THE POINT OF INTERSECTION WITH WITH THE SOUTH LINE OF THE 160.00 FOOT WIDE FORMER SEABOARD COAST LINE RAILROAD (NOW ABANDONED), SAME BEING THE SOUTH LINE A WATERMAIN TRANSMISSION LINE EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 732, PAGE 338 OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA SAME BEING THE POINT OF BEGINNING; THENCE N70°24'52"E,ALONG SAID SOUTH LINE OF THE 160.00 FOOT WIDE FORMER SEABOARD COAST LINE RAILROAD (NOW ABANDONED), SAME BEING SAID SOUTH LINE OF A WATERMAIN TRANSMISSION LINE EASEMENT FOR 1,211.10 FEET TO THE NORTHWEST CORNER OF OAKSTEAD PARCEL 5 AS RECORDED IN PLAT BOOK 47, PAGES 46–50 OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA; THENCE LEAVING SAID SOUTH LINE OF THE 160.00 FOOT WIDE FORMER SEABOARD COAST LINE RAILROAD (NOW ABANDONED), SAME BEING SAID SOUTH LINE OF A WATERMAIN TRANSMISSION LINE EASEMENT, S00°20'55"W, ALONG THE WEST LINE OF SAID OAKSTED PARCEL 5, FOR 2,900.60 FEET; THENCE CONTINUE ALONG SAID WEST LINE OAKSTEAD PARCEL 5, S00°16'01"W, FOR 353.25 FEET TO THE SOUTHWEST CORNER OF SAID OAKSTEAD PARCEL 5, SAME BEING THE NORTTHWEST CORNER OF OF THAT CERTAIN WARRANTY DEED AS RECORDED IN OFFICIAL RECORD BOOK 6776, PAGE 1615 OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA; THENCE LEAVING SAID WEST LINE OF SAID OAKSTED PARCEL 5, S89°59'55"W, FOR 0.47 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 300.00 FEET, A CENTRAL ANGLE OF 56°29'14", AN ARC LENGTH OF 295.77 FEET, AND A CHORD BEARING N61°45'28"W FOR 283.93 FEET TO THE POINT OF TANGENT; THENCE N33°30'50"W, FOR 188.46 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 400.00 FEET, A CENTRAL ANGLE OF 20°35'10", AN ARC LENGTH OF 143.72 FEET, AND A CHORD BEARING N43°48'25"W FOR 142.95 FEET TO THE POINT OF TANGENT TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE SOUTHERLY; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 750.00 FEET, A CENTRAL ANGLE OF 35°36'21", AN ARC LENGTH OF 466.08 FEET, AND A CHORD BEARING N71°54'11"W FOR 458.62 FEET, TO THE POINT OF TANGENT; THENCE N89°42'21"W, FOR 194.05 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 50.00 FEET, A CENTRAL ANGLE OF 90°00'00", AN ARC LENGTH OF 78.54 FEET, AND A CHORD BEARING N44°42'21"W FOR 70.71 FEET TO THE POINT OF TANGENT SAME BEING THE POINT OF INTERSECTION WITH A LINE 200.00 FEET EAST OF AND PARALLEL WITH SAID WEST LINE OF SECTION 15; THENCE N00°17'39"E, ALONG SAID LINE 200.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SECTION 15, FOR 1,306.37 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY; THENCE LEAVING SAID LINE 200.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SECTION 15, NORTHEASTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 90°00'00", AN ARC LENGTH OF 39.27 FEET, AND A CHORD BEARING N45°17'39"E FOR 35.36 FEET TO THE POINT OF TANGENT; THENCE N00°17'39"E, FOR 50.00 FEET TO A POINT OF INTERSECTION WITH A NON–TANGENT CURVE, CONCAVE NORTHEASTERLY; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, FROM A RADIAL BEARING OF S00°17'39"W, HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 90°00'00", AN ARC LENGTH OF 39.27 FEET, AND A CHORD BEARING N44°42'21"W FOR 35.36 FEET, TO THE POINT OF TANGENT SAME BEING THE POINT OF INTERSECTION WITH SAID LINE 200.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SECTION 15; THENCE N00°17'39"E, ALONG SAID LINE 200.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SECTION 15; FOR 853.11 FEET TO THE POINT OF BEGINNING.

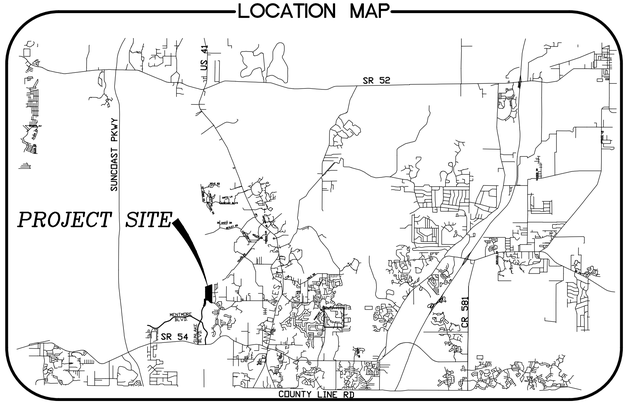
CONTAINING 3,054,912 SQUARE FEET OR 70.131 ACRES, MORE OR LESS.

VICINITY MAP



MAP OF PASCO COUNTY, FLORIDA

LOCATION MAP



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* NOT INCLUDED IN SWFWMD SUBMITTAL

PREVIOUS SUBMITTALS / APPROVALS

Revised Master Roadway Phasing Plan, approved by Pasco County 2/15/13 (File: PDD13-655)

Revised Preliminary Plan, approved by Pasco County 2/15/13 (File: PDD13-654)

Most current Concord Station MPUD Amendment, approved by Pasco County 12/28/10 (File: ZN11-127)

PREPARED FOR:

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THINK IT. ACHIEVE IT.

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THE PLAN HAS BEEN CERTIFIED BY THE DESIGN ENGINEER TO BE IN SUBSTANTIAL CONFORMANCE WITH THE UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE OF STREETS AND HIGHWAYS AS REQUIRED BY SECTION 336.045 FLORIDA STATUES.

JOB NO. 595-220
DATE: 8-10-06
REVISED: 2-20-14

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GENERAL NOTES

1. ALL ELEVATIONS ARE BASED ON NGVD-1929 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. ELECTRICAL SERVICE WILL BE PROVIDED BY DUKE ENERGY.
4. TELEPHONE SERVICE WILL BE PROVIDED BY VERIZON.
5. STREET LIGHTING WILL BE PROVIDED BY DUKE ENERGY.
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 PRIMARILY LOCATED WITHIN FLOOD ZONE "X" WITH LIMITED AREAS IN FLOOD ZONE "A". FIRST FLOOR ELEVATIONS SHALL BE AT OR ABOVE THE 100-YEAR FLOOD ELEVATION (REFERENCE: FLOOD INSURANCE RATE MAP PANEL NOS. 1202300400D AND 1202300425E, REVISED SEPTEMBER 30, 1992.
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. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE VICINITY OF TREES TO REMAIN AND IS RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS WORK.
12. 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).
13. EXCESS FILL MATERIAL IS NOT ANTICIPATED ON THIS PROJECT.
14. 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.
15. 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.
16. 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.
17. BUILDING SETBACKS ARE PER THE CONCORD STATION PRODUCT TYPE SCHEDULE APPROVED IN THE MPUD, AND AS FOLLOWS.

SINGLE FAMILY DETACHED

FRONT	20 FEET MIN.
REAR	15' FEET MIN.
SIDE	7.5' FEET MIN.*

18. ALLOWABLE PAVEMENT WIDTHS:

TYPE	PAVEMENT WIDTH
TYPE 1B	24'
TYPE 2	24'
TYPE 3	22'
TYPE 4	20'

19. IN ACCORDANCE WITH SECTION 905.2.6.B.3 OF THE PASCO COUNTY LAND DEVELOPMENT CODE, DRAINAGE AREAS THAT ABUT ROAD RIGHT-OF-WAYS SHALL BE PLANTED WITH TREES SELECTED FROM THE TAMPA BAY AREA 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.
20. 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.
21. ALL ROADS WITHIN THIS SUBDIVISION WILL BE MAINTAINED BY PASCO COUNTY. THE ROADWAY DESIGN SPEED OF THIS PROJECT IS 25 MPH UNLESS OTHERWISE NOTED.
22. 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.
23. 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.
24. THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.
25. 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.
26. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD CONDITIONS.
27. ALL STRUCTURES, INCLUDING BUFFER WALLS, RETAINING WALLS, SIGNAGE, ETC. REQUIRE SEPARATE BUILDING PERMITS.
28. 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.
29. 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.
30. 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.
31. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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.

36A. UPON COMPLETION OF THE LAND DEVELOPMENT CONSTRUCTION, A PROFESSIONAL ENGINEER SHALL PROVIDE A CERTIFICATION TO PASCO COUNTY THAT THE PROJECT, INCLUDING EACH PAD AREA, COMPLIES WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL/GEOLOGICAL ENGINEERING REPORT.

SAFETY

37. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
38. 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.
39. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
40. 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.
41. 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.
42. 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.
43. 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.
44. 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.
45. 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.
46. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED TO AND APPROVED BY, THE APPROPRIATE GOVERNMENTAL AGENCIES PRIOR TO BEGINNING ANY CONSTRUCTION.

EROSION/TURBIDITY CONTROL

47. ALL COSTS ASSOCIATED WITH ADDITIONAL TURBIDITY EROSION CONTROL ARE INCIDENTAL TO THE DEWATERING COSTS OR THE ITEM THAT REQUIRES THE DEWATERING.
48. 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 THE COUNTY.
49. 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.
50. 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.
51. CONSTRUCTION OPERATIONS IN OR ADJACENT TO WETLANDS SHALL BE RESTRICTED TO THOSE AREAS IDENTIFIED IN THE PLANS AND IN THE SPECIFICATIONS.
52. 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.
53. 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.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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.

CLEARING AND SITE PREPARATION NOTES

59. 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
60. 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.
61. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
62. 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.
63. 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.
64. 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.
65. NO GRADE CHANGES SHOULD OCCUR WITHIN THE DRIP LINE OF TREES TO REMAIN.
66. 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.
67. 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.
68. 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 AND WATER DISTRIBUTION NOTES

69. ALL SEWER 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.
70. 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.
71. CONFLICTS OF WATER LINES WITH SANITARY SEWER AND STORM SEWER SYSTEMS SHALL BE RESOLVED BY ADJUSTING WATER LINES AS NECESSARY.
72. POTABLE WATER 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).
73. 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.
74. 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.
75. 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).
76. SEWAGE DISPOSAL SHALL BE PROVIDED BY PASCO COUNTY UTILITIES VIA AN EXISTING SANITARY SEWER SYSTEM.
77. POTABLE WATER SHALL BE PROVIDED BY PASCO COUNTY FROM AN EXISTING WATER MAIN SYSTEM.
78. FIRE PROTECTION WILL BE PROVIDED FROM HYDRANTS BY THE EXISTING PASCO COUNTY FIRE STATION NO 26.
79. 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.
80. 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.
81. CONTRACTOR SHALL PREVENT FLOATATION OF STRUCTURES DURING ALL PHASES OF CONSTRUCTION.
82. RAISED PAVEMENT MARKINGS INDICATING THE FIRE HYDRANT LOCATIONS SHALL BE PROVIDED IN ACCORDANCE WITH PASCO COUNTY CODE.
83. 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.

83A. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.

84. 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.
85. 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.
86. ALL WATER METERS ARE TO BE LOCATED OUTSIDE OF DRIVEWAYS.
87. 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 MUNICIPALITY. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND COUNTY INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.
88. 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.
89. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAIN SHALL BE INSTALLED 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.
90. 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.
91. 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.
92. 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).
93. 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.
94. A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
95. 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.
96. 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).
97. 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.
98. PE PIPE 2 INCHES OR SMALLER SHALL MEET THE REQUIREMENTS OF ASTM D-1248.
99. 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.
100. ALL WATER SYSTEM WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
101. ALL NON-METALIC PIPE WILL BE INSTALLED WITH 2 PAIR, 10 GAUGE, COPPER TRACER WIRE.
102. CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING AND OBTAIN CLEARANCE OF DOMESTIC WATER SYSTEM. COPIES OFF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO OWNER'S ENGINEER.
103. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.
104. ALL SANITARY SEWER WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
105. ALL SANITARY SEWER MANHOLE COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING.
106. SANITARY SEWER MAINS AND LATERALS SHALL HAVE A MINIMUM COVER OF THREE (3) FEET.
107. JOINTING OF PVC PIPE USING SOLVENT CEMENTING IS NOT PERMITTED.
108. NON-METALIC FORCEMAIN PIPE WILL BE INSTALLED WITH TWO PAIR, 10 GAUGE COPPER TRACER WIRE.
109. 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.
110. 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.
111. CONTRACTOR TO CLEAN AND FLUSH WATER SERVICE CONNECTION PRIOR TO PLACING INTO SERVICE.
112. ALL OF THE ABOVE NOTES APPLY TO ALL SANITARY SEWER AND WATER DISTRIBUTION PLAN SHEETS.

PAVING, GRADING, AND DRAINAGE NOTES

113. ALL UNDERGROUND UTILITIES INCLUDING CONDUIT FOR ELECTRICAL, CABLE, IRRIGATION AND TELEPHONE CROSSINGS SHALL BE INSTALLED PRIOR TO PAVEMENT CONSTRUCTION.
114. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PASCO COUNTY STANDARDS AND/OR FDOT STANDARDS AS REQUIRED.
115. 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.
116. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES FOR INLETS AND STORM MANHOLES. MITERED END SECTIONS AND FLARED END SECTIONS ARE PART OF PIPE LENGTHS. CURB INLET STATIONS AND OFFSETS ARE CALCULATED TO EDGE OF PAVEMENT, CENTER OF BOX. ALL PIPE LENGTHS ARE APPROXIMATE.
117. DRAINAGE RUNOFF (POST DEVELOPMENT) SHALL BE COLLECTED AND DIRECTED TO PONDS VIA PIPES AND SWALES AS INDICATED ON THE MASTER DRAINAGE PLAN.
118. 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.
119. FOR CONTROL STRUCTURE DATA, SEE POND & DRAINAGE STRUCTURE DETAIL SHEETS AND PAVING, GRADING AND DRAINAGE PLANS.
120. AFTER CONSTRUCTION OF EACH POND CONTROL STRUCTURE IS COMPLETED, A PERMANENT BENCHMARK SHALL BE ESTABLISHED ADJACENT TO OR ON THE OUTFALL STRUCTURE.
121. CONTRACTOR SHALL PREVENT FLOATATION OF STRUCTURES DURING ALL PHASES OF CONSTRUCTION.
122. 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.
123. ALL OF THE ABOVE NOTES APPLY TO ALL PAVING, GRADING AND DRAINAGE PLAN SHEETS.
124. CONTRACTOR TO PROVIDE A $\frac{1}{2}$" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
125. ALL PAVEMENT MARKINGS SHALL CONFORM TO FDOT STANDARD INDEX NO. 17346, SHEETS 1-7.
126. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
127. PAD ELEVATION IS FINISHED FLOOR ELEVATION MINUS 6".
128. STANDARD INDEXES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
129. 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.
130. 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.
131. ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS.
132. CONTRACTOR TO SOD ANY SUMPS AS INDICATED ON PLANS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE SUMPS.
133. ALL STORM DRAINAGE STRUCTURES DEEPER THAN TEN (10) FEET TO HAVE LADDER BARS.
134. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY DEWATERING PERMITS FROM THE LOCAL WATER MANAGEMENT DISTRICT OR OTHER REGULATORY AGENCY.
135. 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.
136. 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.
137. ALL RELOCATION OR MODIFICATION OF PROPOSED STORM SEWER SYSTEM SHALL NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
138. 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 PASCO COUNTY ENGINEERING SERVICES DEPARTMENT TESTING SPECIFICATIONS FOR CONSTRUCTION OF ROADS, STORM DRAINAGE, AND UTILITIES, OCTOBER 2006.
139. 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.
140. 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.
141. 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.
142. 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.
143. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS 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.
144. SOIL ENGINEER TO SUPPLY THE ENGINEER WITH A PHOTOCOPY OF ALL RESULTS. THE SOILS 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.
145. CONTRACTOR TO REVIEW SOILS REPORTS AND BORINGS PRIOR TO BIDDING THE PROJECT AND COMMENCING CONSTRUCTION.
146. THE DEVELOPER MAY PROVIDE SIDEWALKS IN EXCESS OF THE MINIMUM COUNTY REQUIREMENTS. THE SIDEWALKS, AS DEPICTED IN THESE DOCUMENTS, MAY BE CONSTRUCTED SIMILAR TO WHAT IS DEPICTED, BUT IN NO CASE SHALL THE CONSTRUCTED SIDEWALKS BE LESS THAN WHAT IS REQUIRED BY CODE.

STANDARD FIRE PROTECTION NOTES:

147. ALL PROJECTS MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.
148. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
149. 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.
150. PER NFPA-1, 18.3.4.1: CLEARANCES OF 1.5 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.
151. GATED ENTRIES REQUIRE A SIREN OPERATING SYSTEM OR A 3M OPTICOM SYSTEM FOR EMERGENCY ACCESS.

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. 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.
5. HANDICAP PARKING SPACES WILL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR OTHER APPLICABLE STANDARDS.
6. THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.
7. ALL ON-SITE PARKING SPACES WILL BE STRIPED AND SIGNED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PARKING SPACES, DIRECTIONAL ARROWS, AND STOP BARS SHALL BE STRIPED IN WHITE. IT SHALL BE THE OWNER/DEVELOPER'S RESPONSIBILITY TO PROPERLY SIGN AND STRIPE IN ACCORDANCE WITH APPLICABLE STANDARDS.
8. 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.
9. 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.
10. 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.
11. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD/PUD CONDITIONS.
12. ALL STRUCTURES, INCLUDING BUFFER WALLS, RETAINING WALLS, SIGNAGE, ETC. REQUIRE BUILDING PERMITS.

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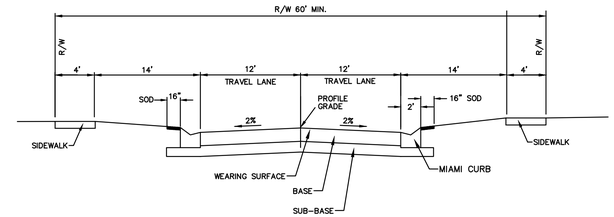

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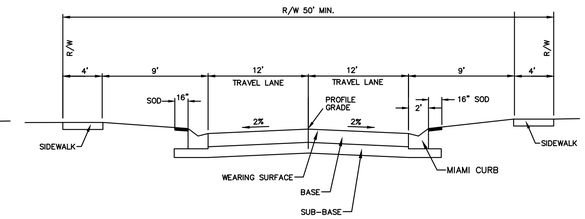
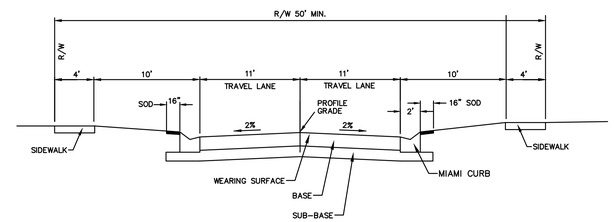


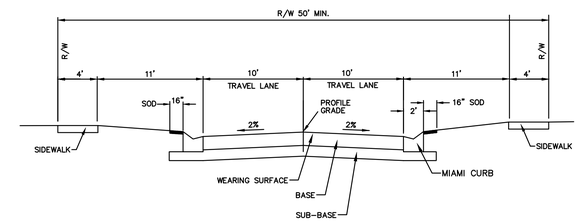
TYPE 2 CROSS SECTION

NTS



TYPE 3 CROSS SECTION

NTS



TYPE 4 CROSS SECTION

NTS

NOTE:
ALL STREETS ARE PUBLIC ROADWAYS.
SIDEWALKS/BIKE PATH LOCATIONS ARE
SHOWN ON THE SIDEWALK LOCATION
AND BUFFER PLAN.

TYPE 2, 3,& 4 PAVEMENT SECTION

OPTION 1

1.5" ASPHALT @ 0.44	= 0.66
6" SOIL CEMENT @ 0.15 (300 PSI)	= 0.90
12" STABILIZED SUBGRADE LBR 40 @ 0.08	= 0.96
TOTAL PROVIDED	= 2.52

OPTION 2

1.5" ASPHALT @ 0.44	= 0.66
6" CRUSHED CONCRETE @ 0.15 (MIN. LBR 150)	= 0.90
12" STABILIZED SUBGRADE LBR 40 @ 0.08	= 0.96
TOTAL PROVIDED	= 2.52

CONTRACTOR TO SUPPLY SAMPLES OF CRUSHED CONCRETE PRIOR TO PLACEMENT

TYPE 1B PAVEMENT SECTION

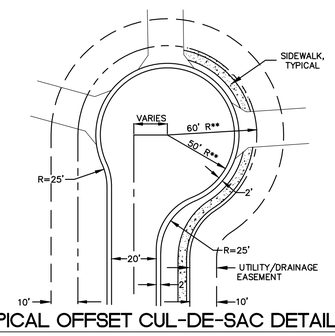
OPTION 1

2" ASPHALT @ 0.44	= 0.88
8" SOIL CEMENT @ 0.15 (300 PSI)	= 1.20
12" STABILIZED SUBGRADE LBR 40 @ 0.08	= 0.96
TOTAL PROVIDED	= 3.04

OPTION 2

2" ASPHALT @ 0.44	= 0.88
8" CRUSHED CONCRETE @ 0.15 (MIN. LBR 150)	= 1.20
12" STABILIZED SUBGRADE LBR 40 @ 0.08	= 0.96
TOTAL PROVIDED	= 3.04

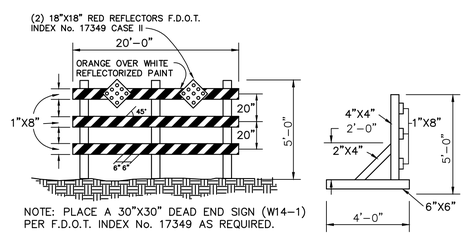
CONTRACTOR TO SUPPLY SAMPLES OF CRUSHED CONCRETE PRIOR TO PLACEMENT



TYPICAL OFFSET CUL-DE-SAC DETAIL

NTS

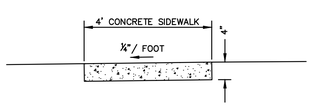
** LENGTHS/RADII FOR CUL-DE-SACS IN EXCESS OF 150' LENGTH. CUL-DE-SACS THAT ARE LESS THAN 150' IN LENGTH WILL CONFORM WITH EXISTING LAND DEVELOPMENT CODE.



NOTE: PLACE A 30"X30" DEAD END SIGN (W14-1) PER F.D.O.T. INDEX No. 17349 AS REQUIRED.

TYPE III BARRICADE DETAIL

N.T.S.



SIDEWALK PATH

* SIDEYARD NOTES:

SIDE-YARD SETBACKS MAY BE REDUCED TO FIVE FEET BASED UPON THE FOLLOWING CONDITIONS BEING MET PRIOR TO CONSTRUCTION PLAN APPROVAL FOR EACH PHASE OR UNIT. SHOULD THE CONDITIONS NOT BE MET, THE MINIMUM SIDE SETBACK SHALL BE 7.5 FEET.

1. THE ENGINEER OF RECORD SHALL PROVIDE TO PASCO COUNTY SIGNED AND SEALED DESIGN CALCULATIONS FOR EACH TYPICAL LOT DEMONSTRATING COMPLIANCE WITH PASCO COUNTY'S DRAINAGE CRITERIA. THESE CALCULATIONS SHALL ALSO INCLUDE A REPRESENTATION THAT THE UNDERLYING "SOILS" ON THE SUBJECT LOTS ARE ADEQUATE TO ACCOMMODATE FLOWS THROUGH THE SIDE-YARD SWALES WITHOUT MATERIAL EROSION.

2. PASCO COUNTY'S TYPICAL LOTS A, B, AND C WILL HAVE SIDE-YARD SWALES WITH SIDE SLOPES NO GREATER THAN 4:1 AND A DEPTH NO GREATER THAN 15 INCHES.

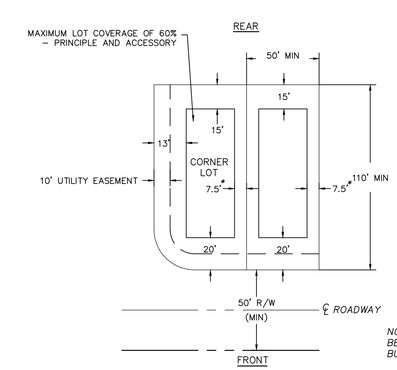
3. SIDE-YARD SWALES SHALL BE SLOPED TO CREATE POSITIVE OUTFALL TO THE FRONT OR REAR OF EACH LOT WITH VELOCITIES NO GREATER THAN ALLOWABLE FOR GRASSES STABILIZATION, AS IN THE FDOT DRAINAGE MANUAL. THE LOT SHALL BE DESIGNED SO THAT NO ADDITIONAL DRAINAGE FOR NONLOT AREAS LOCATED TO THE REAR OF THE LOTS WILL USE THE SIDE-YARD SWALES.

4. SWALES SHALL BE SODDED IN PLACE, AND MAINTENANCE RESPONSIBILITY WILL BE THAT OF THE HOMEOWNER. THE HOMEOWNER'S ASSOCIATION DOCUMENTS SHALL INCLUDE SPECIFIC LANGUAGE TO PROTECT THE INTEGRITY OF THE SIDE SWALE, PROHIBIT OBSTRUCTIONS WITHIN THE SWALE, AND ENSURE PROPER MAINTENANCE.

5. NO OBSTRUCTIONS SHALL BE PERMITTED IN THE SWALE AREA BETWEEN HOUSES THAT IMPAIRS THE INTENDED FUNCTION OF THE SWALE.

6. GUTTERS AND ROOF STRUCTURES SHALL BE DESIGNED AND INSTALLED SO AS TO REDUCE DIRECT DISCHARGE TO THE SIDE-YARD SWALES.

7. WHERE A FIVE-FOOT SETBACK IS ALLOWED, THE POST CONSTRUCTION CERTIFICATION SHALL BE REVIEWED, SIGNED, AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA AND SHALL INDICATE THE LOT HAS BEEN GRADED IN ACCORDANCE WITH THE APPROVED DESIGN. THE SIDE SWALES CONSTRUCTION COMPLIES WITH THE DESIGN REQUIREMENTS, AND THAT NO ADVERSE IMPACT TO SURROUNDING PROPERTIES EXISTS OR IS CREATED DUE TO THIS CONSTRUCTION.



NOTE: MINIMUM LOT WIDTHS SHALL BE PROVIDED AT THE PROPOSED BUILDING PAD.

TYPICAL SINGLE FAMILY DETACHED LOT DETAIL

MIN LOT AREA - 5,500 SF

NTS

DESIGNED	JD
DRAWN	TR
CHECKED	AB
Q.C.	

THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
707 NORTH FRANKLIN STREET, 6TH FLOOR, TAMPA, FLORIDA 33602
PHONE: (800) 532-1047 WWW.FLDESIGN.COM L.B. NO.6707

PREPARED FOR:

CONCORD STATION, LLP
4600 W. CYPRESS STREET, SUITE 200
TAMPA, FLORIDA 33607
PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:

CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
TYPICAL SECTIONS AND DETAILS

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 3 OF 34

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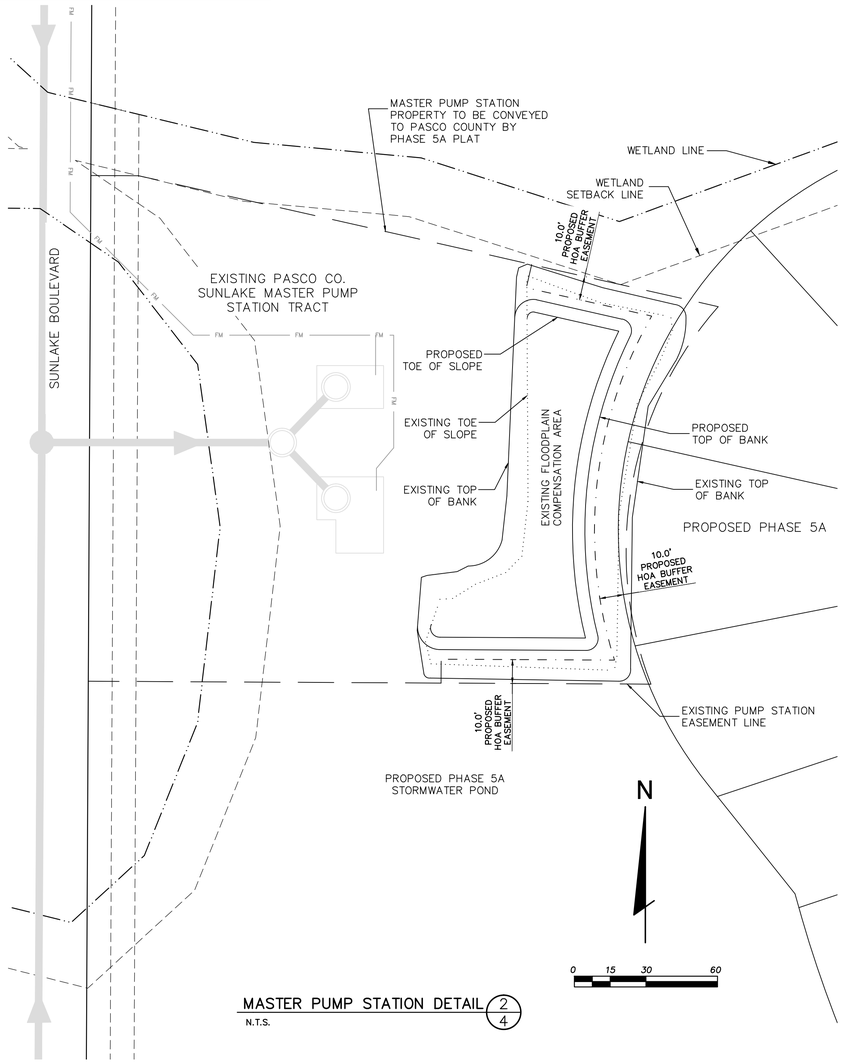
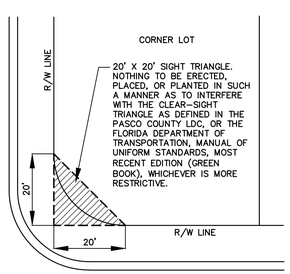
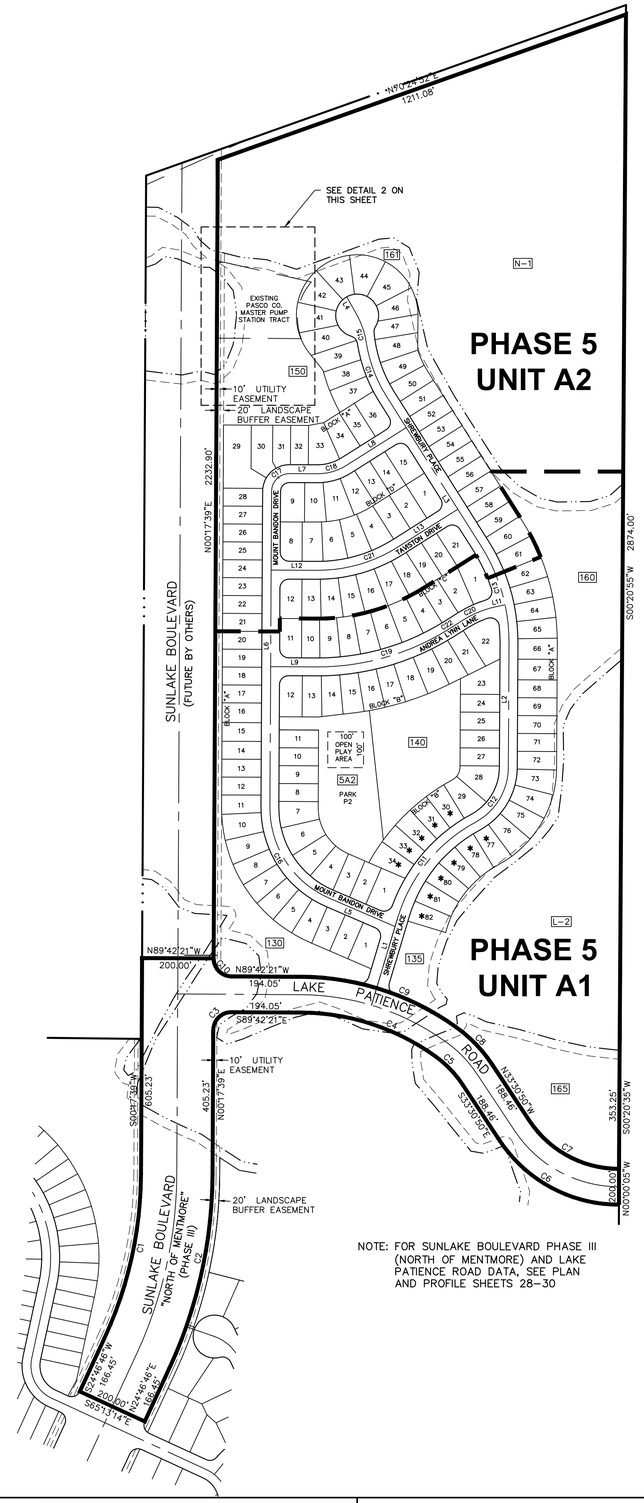


MASTER PUMP STATION DETAIL 2/4
N.T.S.



CLEAR SIGHT TRIANGLE DETAIL 1/4
N.T.S.



NOTE: FOR SUNLAKE BOULEVARD PHASE III (NORTH OF MENTMORE) AND LAKE PATIENCE ROAD DATA, SEE PLAN AND PROFILE SHEETS 28-30

N

0 100 200 400

LINE TABLE		
LINE	BEARING	LENGTH
L1	N16°42'08"E	255.73'
L2	N00°17'39"E	348.07'
L3	N32°16'41"W	495.65'
L4	N28°59'40"W	60.00'
L5	N66°40'55"W	200.11'
L6	N00°17'39"E	883.36'
L7	S89°42'21"E	77.63'
L8	N57°43'19"E	198.33'
L9	S89°42'21"E	127.63'
L11	N77°57'46"E	25.66'
L12	S89°42'21"E	127.63'
L13	N57°43'19"E	198.33'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	1100.0'	470.09'	466.52'	S12°32'12"W	024°29'07"
C2	1300.0'	555.56'	551.34'	N12°32'12"E	024°29'07"
C3	50.0'	78.54'	70.71'	N45°17'39"E	090°00'00"
C4	650.0'	403.94'	397.47'	S71°54'11"E	035°36'21"
C5	300.0'	107.79'	107.21'	S43°48'25"E	020°35'10"
C6	400.0'	394.36'	378.58'	S61°45'27"E	056°29'15"
C7	300.0'	295.77'	283.93'	S61°45'27"E	056°29'15"
C8	400.0'	143.72'	142.95'	S43°48'25"E	020°35'10"
C9	750.0'	466.08'	458.62'	S71°54'11"E	035°36'21"
C10	50.0'	78.54'	70.71'	S44°42'21"E	090°00'00"
C11	450.0'	352.84'	343.87'	N39°09'53"E	044°55'31"
C12	175.0'	187.33'	178.51'	N30°57'39"E	061°20'00"
C13	500.0'	284.25'	280.43'	N15°59'31"W	032°34'20"
C14	400.0'	164.20'	163.05'	N20°31'04"W	023°31'13"
C15	222.2'	78.49'	78.08'	N18°52'34"W	020°14'12"
C16	275.0'	321.46'	303.47'	N33°11'38"W	066°58'34"
C17	50.0'	78.54'	70.71'	N45°17'39"E	090°00'00"
C18	150.0'	85.27'	84.13'	N74°00'29"E	032°34'20"
C19	690.0'	392.26'	387.00'	N74°00'29"E	032°34'20"
C20	281.2'	99.34'	98.82'	N67°50'33"E	020°14'27"
C21	420.0'	238.77'	235.56'	N74°00'29"E	032°34'20"
C22	690.0'	392.26'	387.00'	N74°00'29"E	032°34'20"

LEGEND:

- BOUNDARY LINE
- PHASE LINE
- * MODEL CENTER LOTS
- 165 TRACT NUMBERS

TRACT INFORMATION

TRACT	DESIGNATION
5A2	NEIGHBORHOOD PARK
130,135,140,150,160,165	DRAINAGE/ACCESS/WETLAND BUFFER
161	WETLAND BUFFER
L-2,N-1	WETLAND CONSERVATION AREA

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DESIGNED JD
DRAWN TR
CHECKED AB
Q.C.

THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.

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CONCORD STATION, LLP
4600 W. CYPRESS STREET, SUITE 200
TAMPA, FLORIDA 33607
PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
HORIZONTAL CONTROL PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
CPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 4 OF 34

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SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT CERTIFICATION

CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (CSWMP)
CONCORD STATION – PHASE 5, UNITS A1 AND A2, SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD

1. THE CSWMP CONSISTS OF PLAN SHEETS 5 AND 6 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: _____

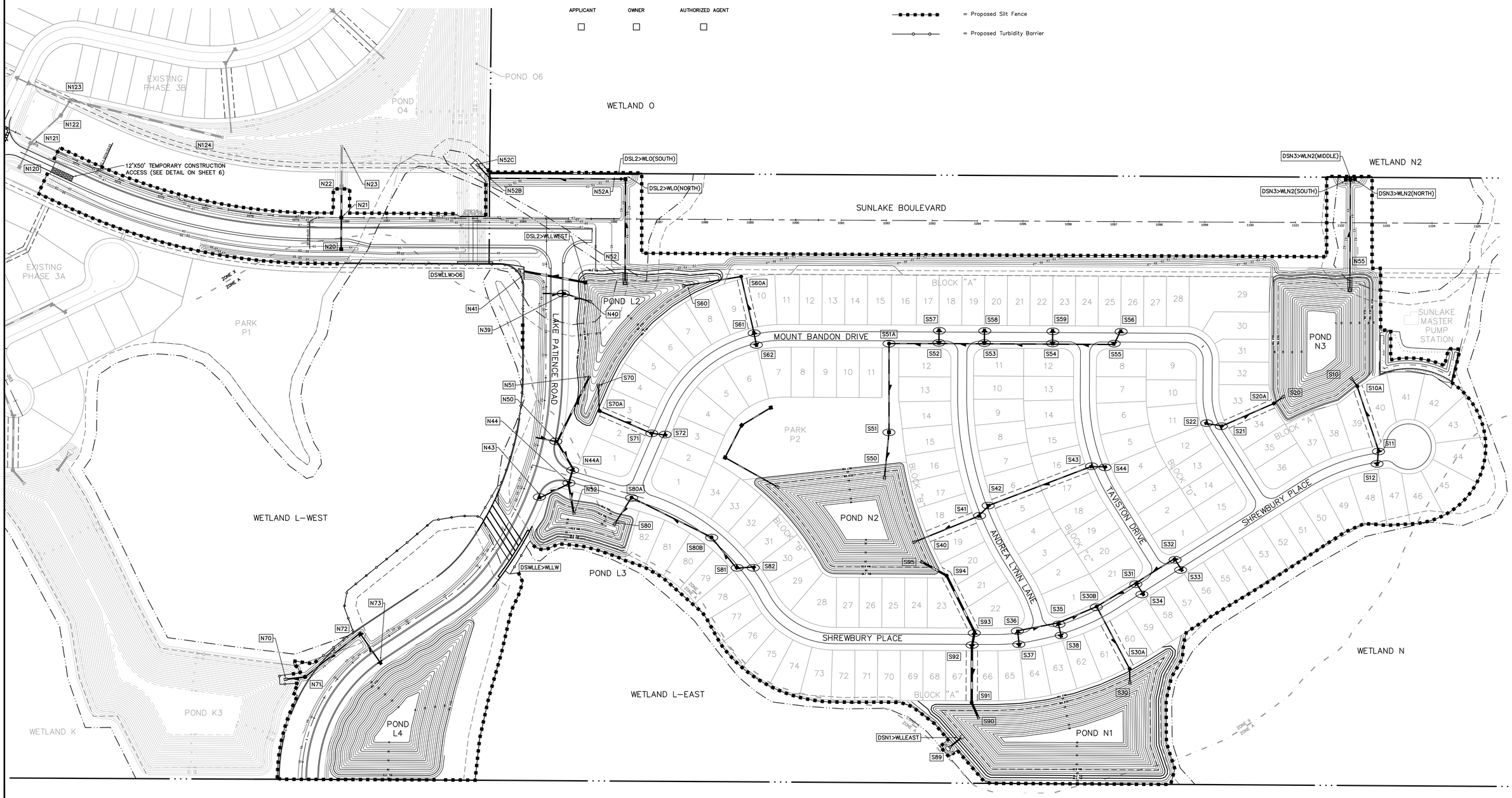
APPLICANT ☐ OWNER ☐ AUTHORIZED AGENT ☐

LEGEND

- = Proposed Storm Sewer
- = Proposed Flared End Section
- = Proposed Mitered End Section
- = Proposed Curb Inlet type 2 or 3
- S60 = Proposed Storm Structure Number
- = Proposed Inlet Sediment Barrier
- = Proposed Silt Fence
- = Proposed Turbidity Barrier

N

0 50 100 200



DESIGNED JD	THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.	FLORIDA DESIGN CONSULTANTS, INC. THINK IT. ACHIEVE IT. 707 NORTH FRANKLIN STREET, 6TH FLOOR, TAMPA, FLORIDA 33602 PHONE: (800) 532-1047 WWW.FLDESIGN.COM L.B. NO.6707	PREPARED FOR: CONCORD STATION, LLP 4600 W. CYPRESS STREET, SUITE 200 TAMPA, FLORIDA 33607 PHONE: (813) 574-5700 FAX: (813) 574-5701
DRAWN TR			
CHECKED AB			
Q.C.			

SHEET DESCRIPTION: CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
OVERALL STORMWATER PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 5 OF 34

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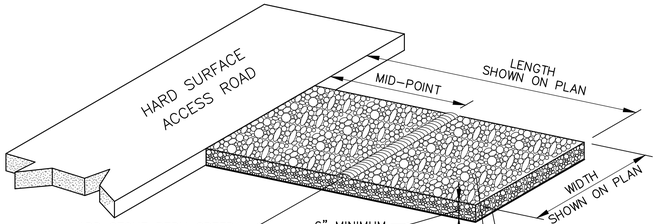

TEMPORARY CONSTRUCTION ACCESS

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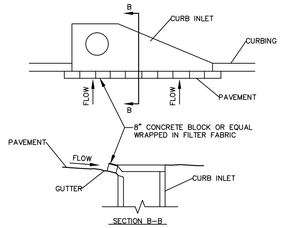
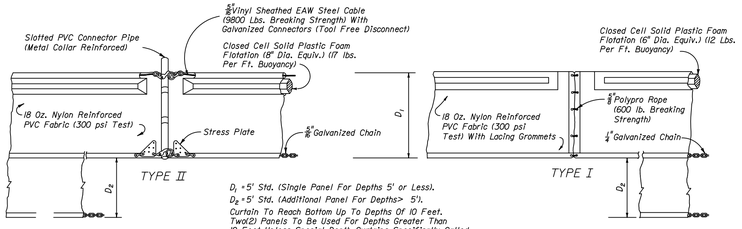


INSTALLATION:
INSTALL CURB INLET SEDIMENT BARRIER IMMEDIATELY AFTER PAVING. USE 8" CONCRETE BLOCK OR EQUAL WRAPPED IN FILTER FABRIC. PROVIDE A 4" GAP BETWEEN BARRIER AND INLET TO ALLOW OVERFLOW.
MAINTENANCE:
THE BARRIER SHALL BE INSPECTED DAILY AND AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT 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.

CURB INLET SEDIMENT BARRIER

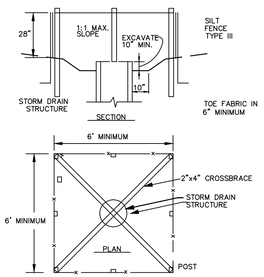


D_1 = 5' Std. (Single Panel For Depths 5' or Less).
D_2 = 5' Std. (Additional Panel For Depths> 5').
Curtain To Reach Bottom Up To Depths Of 10 Feet. Two(2) Panels To Be Used For Depths Greater Than 10 Feet Unless Special Depth Curtains Specifically Called For In The Plans Or As Determined By The Engineer.

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.

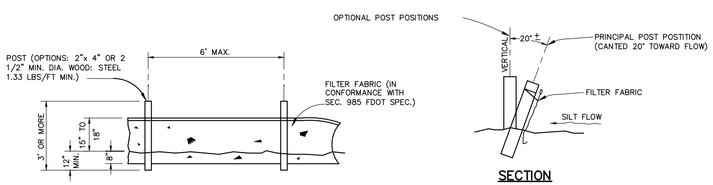


INSTALLATION:
TYPE III SILT FENCE SUPPORTED BY STEEL POST SHALL BE USED. THE STAKES SHALL BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART, AND SECURELY DRIVEN INTO THE GROUND, APPROXIMATELY 18 INCHES DEEP. THE FABRIC SHALL BE ENTRENCHED 12 INCHES AND BACKFILLED WITH CRUSHED 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

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 SILT 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.



TYPE III SILT FENCE

D.O.T. INDEX #102 N.T.S.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT CERTIFICATION

CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (CSWMP)
CONCORD STATION - PHASE 5, UNITS A1 AND A2, SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD

1. THE CSWMP CONSISTS OF PLAN SHEETS 5 AND 6 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 ☐

1. SITE DESCRIPTION

A. PROJECT DESCRIPTION:

THE DEVELOPER / APPLICANT PROPOSES TO CONSTRUCT A NEW SUBDIVISION 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: 78.46± ACRES

THE PROJECT CONSISTS OF THE CONSTRUCTION OF 152 RESIDENTIAL LOTS, ASPHALT PAVEMENT, CURB AND GUTTER, DRIVEWAY CONNECTIONS AND ACCESS ROADS, A CLOSED SANITARY SEWER SYSTEM, WATER MAINS FOR POTABLE WATER, 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: 49.89± 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): 0.25
CW(D): 0.40
CW(A): 0.50

DESCRIPTION OF SOIL OR QUALITY OF DISCHARGE

THE SITE CONSISTS OF NATURAL TREED AREAS, PLANTED PINE AREAS AND MAINTAINED PASTURE AREAS.

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.

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:

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.

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DESIGNED JD	THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.	FLORIDA DESIGN CONSULTANTS, INC. — THINK IT. ACHIEVE IT. — 707 NORTH FRANKLIN STREET, 6TH FLOOR, TAMPA, FLORIDA 33602 PHONE: (800) 532-1047 WWW.FLDESIGN.COM L.B. NO.6707	PREPARED FOR: CONCORD STATION, LLP 4600 W. CYPRESS STREET, SUITE 200 TAMPA, FLORIDA 33607 PHONE: (813) 574-5700 FAX: (813) 574-5701
DRAWN TR			
CHECKED AB			
Q.C.			

SHEET DESCRIPTION: CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
STORMWATER POLLUTION PREVENTION PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
SHT. 6 OF 34
DATE: 2/20/14

WETLAND BUFFER AND ENCROACHMENT COMPUTATIONS

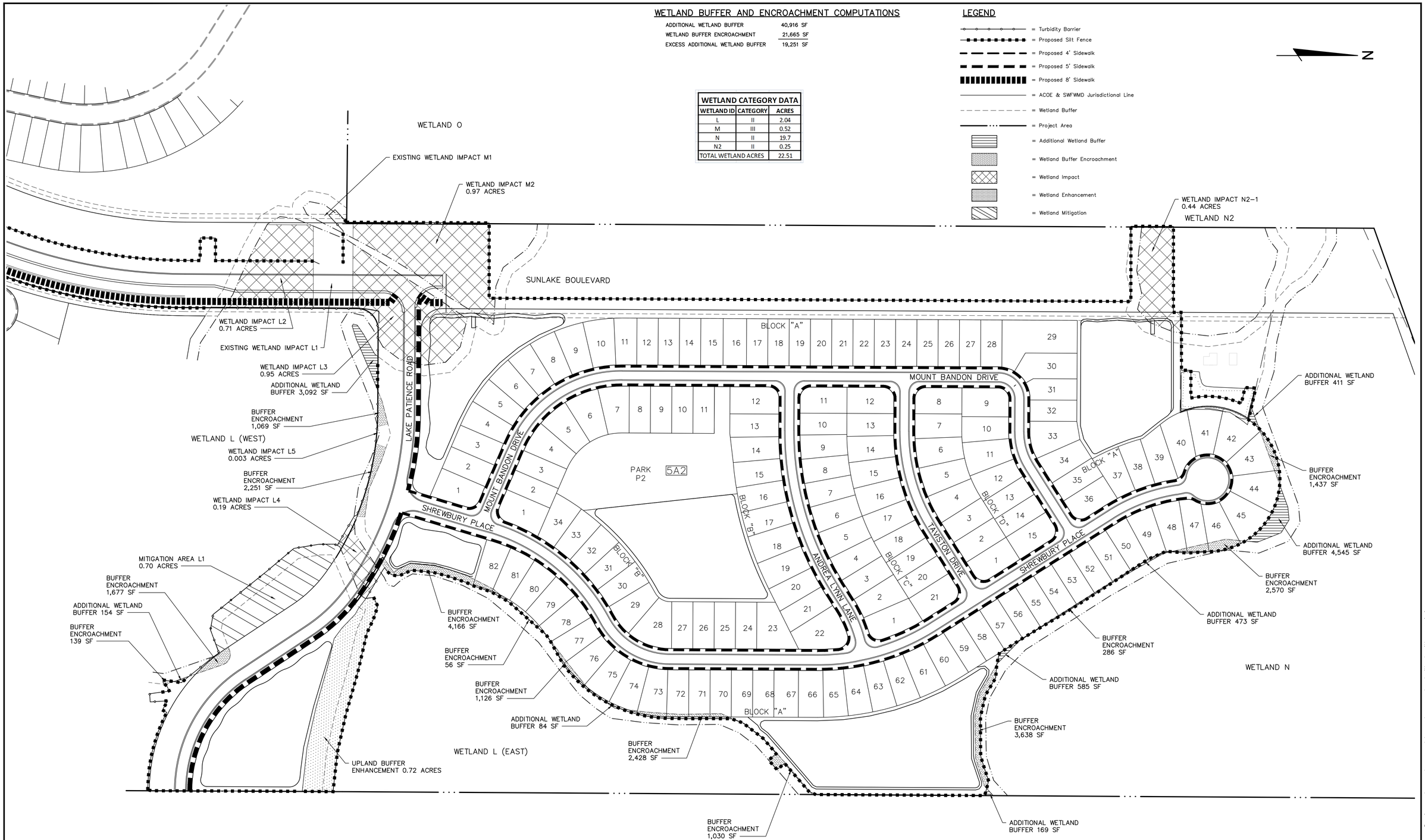
ADDITIONAL WETLAND BUFFER	40,916 SF
WETLAND BUFFER ENCROACHMENT	21,665 SF
EXCESS ADDITIONAL WETLAND BUFFER	19,251 SF

LEGEND

- = Turbidity Barrier
- = Proposed Silt Fence
- = Proposed 4' Sidewalk
- = Proposed 5' Sidewalk
- = Proposed 8' Sidewalk
- = ACOE & SWFWMD Jurisdictional Line
- = Wetland Buffer
- = Project Area
- = Additional Wetland Buffer
- = Wetland Buffer Encroachment
- = Wetland Impact
- = Wetland Enhancement
- = Wetland Mitigation

N

WETLAND CATEGORY DATA		
WETLAND ID	CATEGORY	ACRES
L	II	2.04
M	III	0.52
N	II	19.7
N2	II	0.25
TOTAL WETLAND ACRES		22.51



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PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:

CONCORD STATION
PHASE 5, UNITS A1 AND A2, SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
SIDEWALK LOCATION, PARK AND WETLAND BUFFER PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 7 OF 34

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NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FACILITIES PRIOR TO THE START OF CONSTRUCTION.

2. ALL WATER AND SEWER TO CONFORM TO PASCO COUNTY SPECIFICATIONS.

3. ALL SANITARY SEWER TO BE 8" PVC (SDR-35), UNLESS OTHERWISE NOTED.

4. ALL WATER TO BE PVC (C-900), UNLESS OTHERWISE NOTED.

5. ALL BACKFILL OVER ANY PIPE INSTALLED UNDER ROADWAYS OR WITHIN THE EMBANKMENT OF THE ROADWAYS SHALL BE COMPACTED PER FDOT SPECIFICATIONS, SECTION SECTION 125-8.3 (100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99).

6. THE LOCATION OF EXISTING UTILITIES ARE BASED UPON FIELD LOCATION OF VISIBLE, ABOVE-GROUND FACILITIES AND INFORMATION OBTAINED FROM PASCO COUNTY AND IT IS THE CONTRACTORS 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 STATE ONE CALL AT 1-800-432-4770.

7. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES TO BE EXTENDED OR CROSSED AND CONTACT THE ENGINEER AT 727-849-7588 FOR VERIFICATION OF THEIR LOCATION AND ELEVATION. ANY CONFLICTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.

8. ALL NON-METALLIC PIPE WILL BE INSTALLED WITH 2 PAIR, 10 GAUGE, COPPER TRACER WIRE.

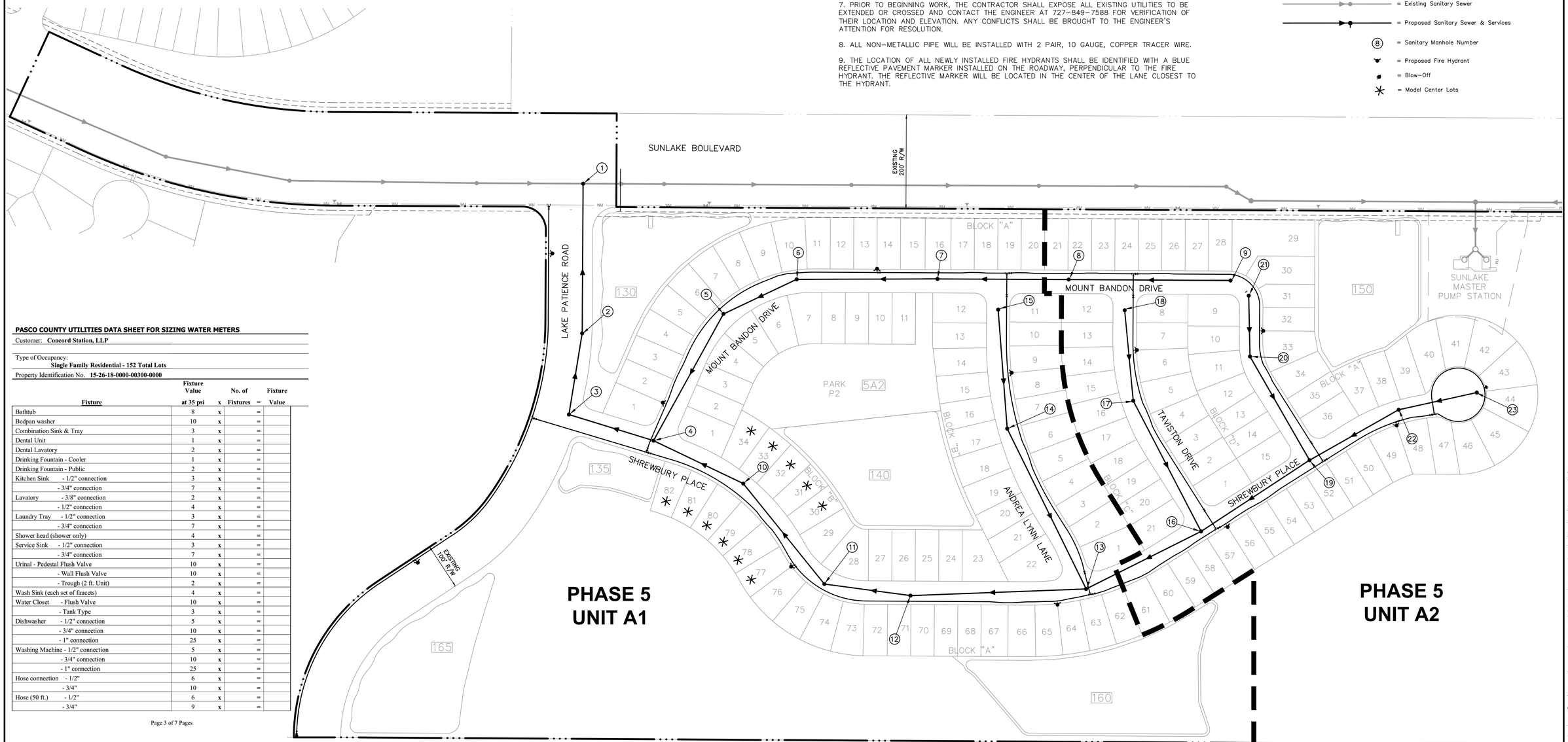
9. THE LOCATION OF ALL NEWLY INSTALLED FIRE HYDRANTS SHALL BE IDENTIFIED WITH A BLUE REFLECTIVE PAVEMENT MARKER INSTALLED ON THE ROADWAY, PERPENDICULAR TO THE FIRE HYDRANT. THE REFLECTIVE MARKER WILL BE LOCATED IN THE CENTER OF THE LANE CLOSEST TO THE HYDRANT.

N

0 50 100 200

LEGEND

- WM — = Existing Water Line, Valve, & Services
- FM — = Existing Force Main
- = Proposed Water Line, Valve, & Services
- = Proposed Phase Boundary
- = Existing Sanitary Sewer
- = Proposed Sanitary Sewer & Services
- (8) = Sanitary Manhole Number
- = Proposed Fire Hydrant
- = Blow-Off
- = Model Center Lots



PASCO COUNTY UTILITIES DATA SHEET FOR SIZING WATER METERS

Customer: **Concord Station, LLP**

Type of Occupancy:
Single Family Residential - 152 Total Lots

Property Identification No. **15-26-18-0000-00300-0000**

Fixture	Fixture Value at 35 psi	x	No. of Fixtures	=	Fixture Value
Bathtub	8	x		=	
Bedpan washer	10	x		=	
Combination Sink & Tray	3	x		=	
Dental Unit	1	x		=	
Dental Lavatory	2	x		=	
Drinking Fountain - Cooler	1	x		=	
Drinking Fountain - Public	2	x		=	
Kitchen Sink - 1/2" connection	3	x		=	
- 3/4" connection	7	x		=	
Lavatory - 3/8" connection	2	x		=	
- 1/2" connection	4	x		=	
Laundry Tray - 1/2" connection	3	x		=	
- 3/4" connection	7	x		=	
Shower head (shower only)	4	x		=	
Service Sink - 1/2" connection	3	x		=	
- 3/4" connection	7	x		=	
Urinal - Pedestal Flush Valve	10	x		=	
- Wall Flush Valve	10	x		=	
- Trough (2 ft. Unit)	2	x		=	
Wash Sink (each set of faucets)	4	x		=	
Water Closet - Flush Valve	10	x		=	
- Tank Type	3	x		=	
Dishwasher - 1/2" connection	5	x		=	
- 3/4" connection	10	x		=	
- 1" connection	25	x		=	
Washing Machine - 1/2" connection	5	x		=	
- 3/4" connection	10	x		=	
- 1" connection	25	x		=	
Hose connection - 1/2"	6	x		=	
- 3/4"	10	x		=	
Hose (50 ft.) - 1/2"	6	x		=	
- 3/4"	9	x		=	

Page 3 of 7 Pages

PHASE 5, UNIT A1 = 86 LOTS
PHASE 5, UNIT A2 = 66 LOTS
TOTAL = 152 LOTS

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SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
OVERALL UTILITY PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 8 OF 34

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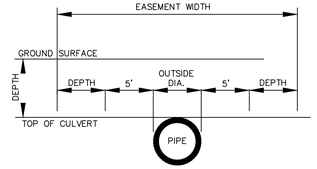


STRUCTURE #		HIGHEST	LOWEST	DEPTH	PIPE SIZE	REQUIRED	PROVIDED
FROM	TO	GROUND EL.	INV. EL.		(INCHES)	EASEMENT (FT)	EASEMENT (FT)
S-71	S-70A	67	61.55	5.45	18	20	20
S-61	S-60A	67.5	61.5	6	18	21	21

EASEMENT WIDTH TABLE

DSL2 > WLO

INLET TYPE	FDOT BACK OF SIDEWALK INLET (MOD)
GRATE ELEV.	N/A
WEIR WIDTH	22" WIDE 12" INLET (WEST WALL)
WEIR ELEV.	64.10
WATER QUALITY ORIFICE	2.30" DIA
WATER QUALITY ORIFICE ELEV.	62.60 (SEE NOTE)
PIPE INVERT	59.50

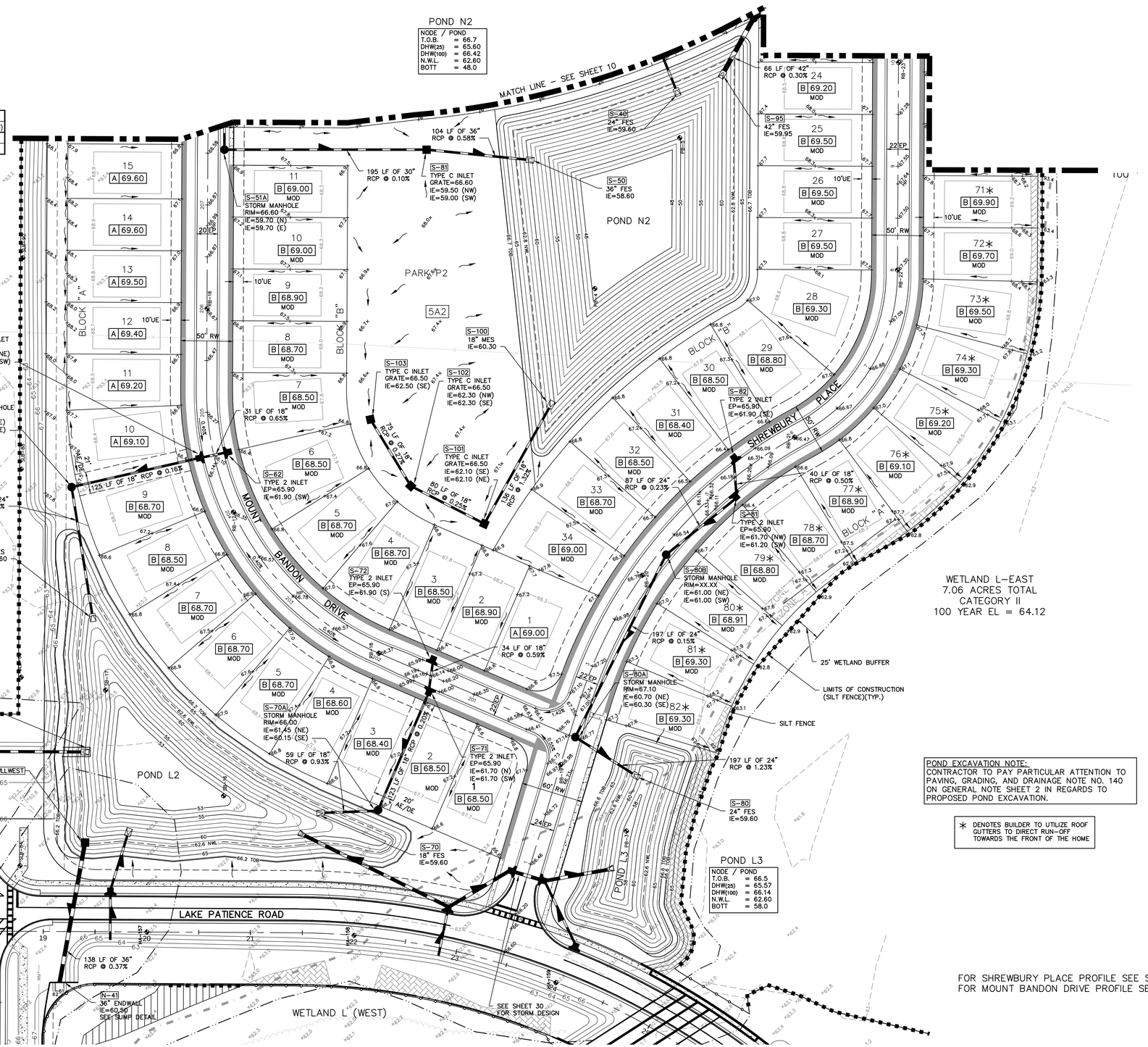
NOTES: ORIFICE IN SOUTH WALL.
ORIFICE DRAINS TO SOUTH.
SKIMMER AT MES IN POND L2.
STRUCTURE IS TYPE C MOD BACK OF SW ON J BOTTOM.

DSL2 > WLLWEST

INLET TYPE	TYPE D
GRATE ELEV.	65.65
WEIR 1 ELEV.	64.10
WEIR 1 WIDTH	30 IN.
WEIR 1 HEIGHT	18.6 IN.
WEIR 2 ELEV.	64.10
WEIR 2 WIDTH	22 IN.
WEIR 2 HEIGHT	12.0 IN.
WATER QUALITY ORIFICE	N/A
WATER QUALITY ORIFICE ELEV.	N/A
PIPE INVERT	61.00

POND L2

NODE / POND	
T.O.B.	= 66.2
DHW(25)	= 65.28
DHW(100)	= 65.62
N.W.L.	= 62.60
BOTT	= 53.0



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SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
PAVING, GRADING AND DRAINAGE PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
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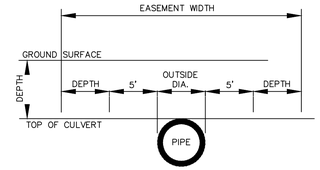
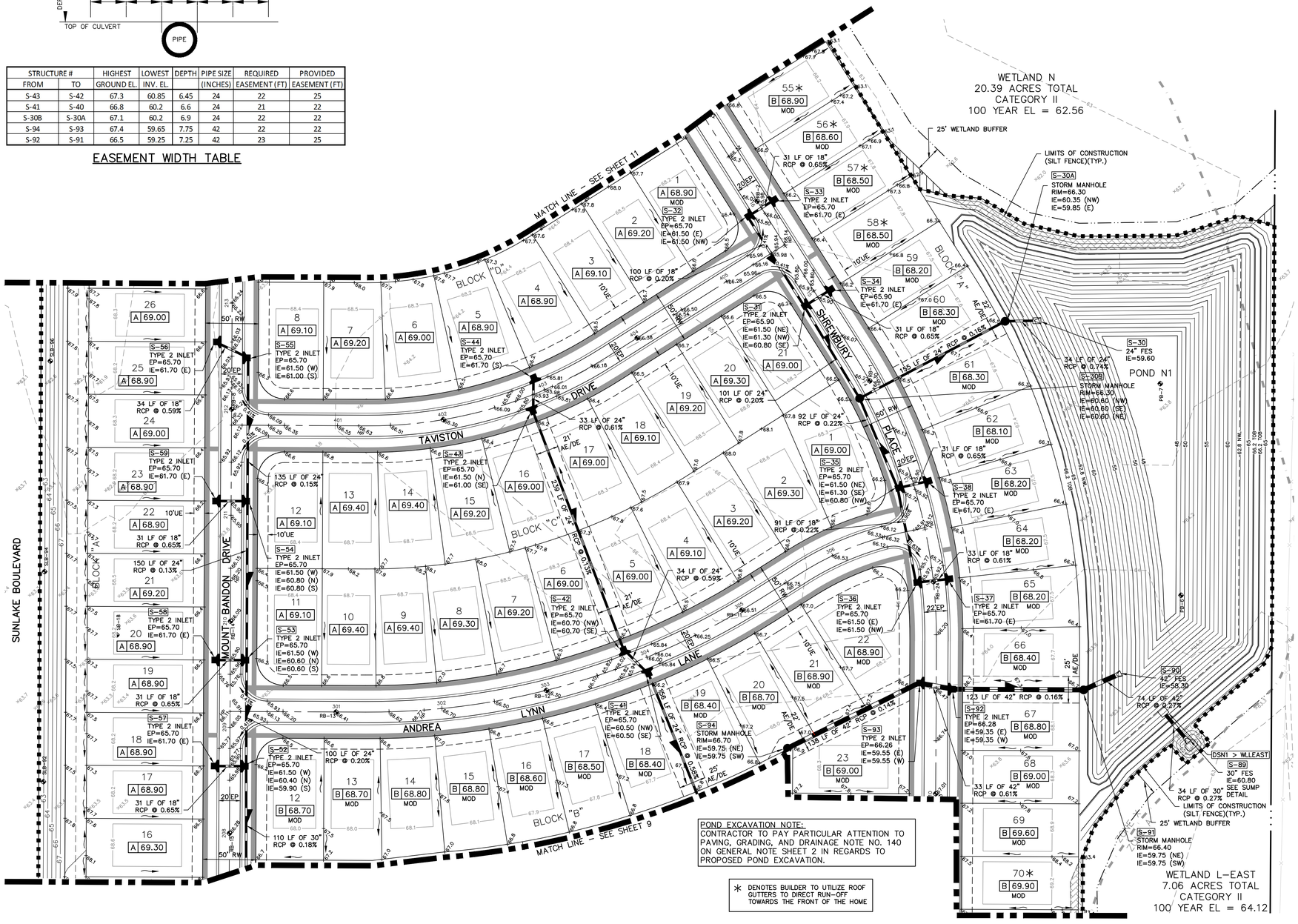


STRUCTURE #		HIGHEST	LOWEST	DEPTH	PIPE SIZE	REQUIRED	PROVIDED
FROM	TO	GROUND EL.	INV. EL.		(INCHES)	EASEMENT (FT)	EASEMENT (FT)
S-43	S-42	67.3	60.85	6.45	24	22	25
S-41	S-40	66.8	60.2	6.6	24	21	22
S-30B	S-30A	67.1	60.2	6.9	24	22	22
S-94	S-93	67.4	59.65	7.75	42	22	22
S-92	S-91	66.5	59.25	7.25	42	23	25

EASEMENT WIDTH TABLE



FOR SHREWBURY PLACE PROFILE SEE SHEET 16
FOR MOUNT BANDON DRIVE PROFILE SEE SHEET 17
FOR TAVISTON LANE PROFILE SEE SHEET 16
FOR ANDREA LYNN LANE PROFILE SEE SHEET 17

N

0 25 50 100

LEGEND

- = Overland Flow Direction
- = Concentrated Flow Direction
- = Hard Surface Drainage Flow Direction
- A 52.68 = Lot Grading Type & Min. Finish Floor Elev.
- = Proposed Grading Pad Contour
- 17 = Proposed Storm Structure Number
- +42.1 = Proposed Spot Elevation
- + 6.17 = Existing Spot Elevation
- = Existing Storm Structure & Pipe
- = Proposed Storm Structure & Pipe
- = Existing Tree to be Removed
- = Existing Tree to Remain
- = Future Sidewalk by Home Builder
- = Sidewalk/Path Constructed by Developer
- = Proposed Silt Fence
- = Additional Wetland Buffer
- = Buffer Encroachment
- = Outfall Rip Rap
- = Wetland/Surface Water Jurisdictional Limit
- = Turbidity Barrier
- = FEMA
- SLB-63 = Soil Boring Location & Designation
- 105 = Tract Designation (See Sheet 4)

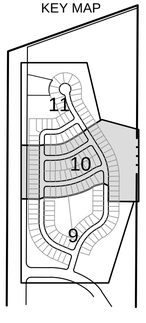
POND N1

NODE / POND	
T.O.B.	= 66.2
DHW(25)	= 65.53
DHW(100)	= 66.08
N.W.L.	= 62.60
BOTT	= 48.0

DSN1 > WLLEAST

INLET TYPE	TYPE D
GRATE ELEV.	64.73
WEIR WIDTH	20 IN.
WEIR ELEV.	63.60
WATER QUALITY ORIFICE	2.80" DIA
WATER QUALITY ORIFICE ELEV.	62.80
PIPE INVERT	61.00

KEY MAP



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PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
PAVING, GRADING AND DRAINAGE PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 10 OF 34

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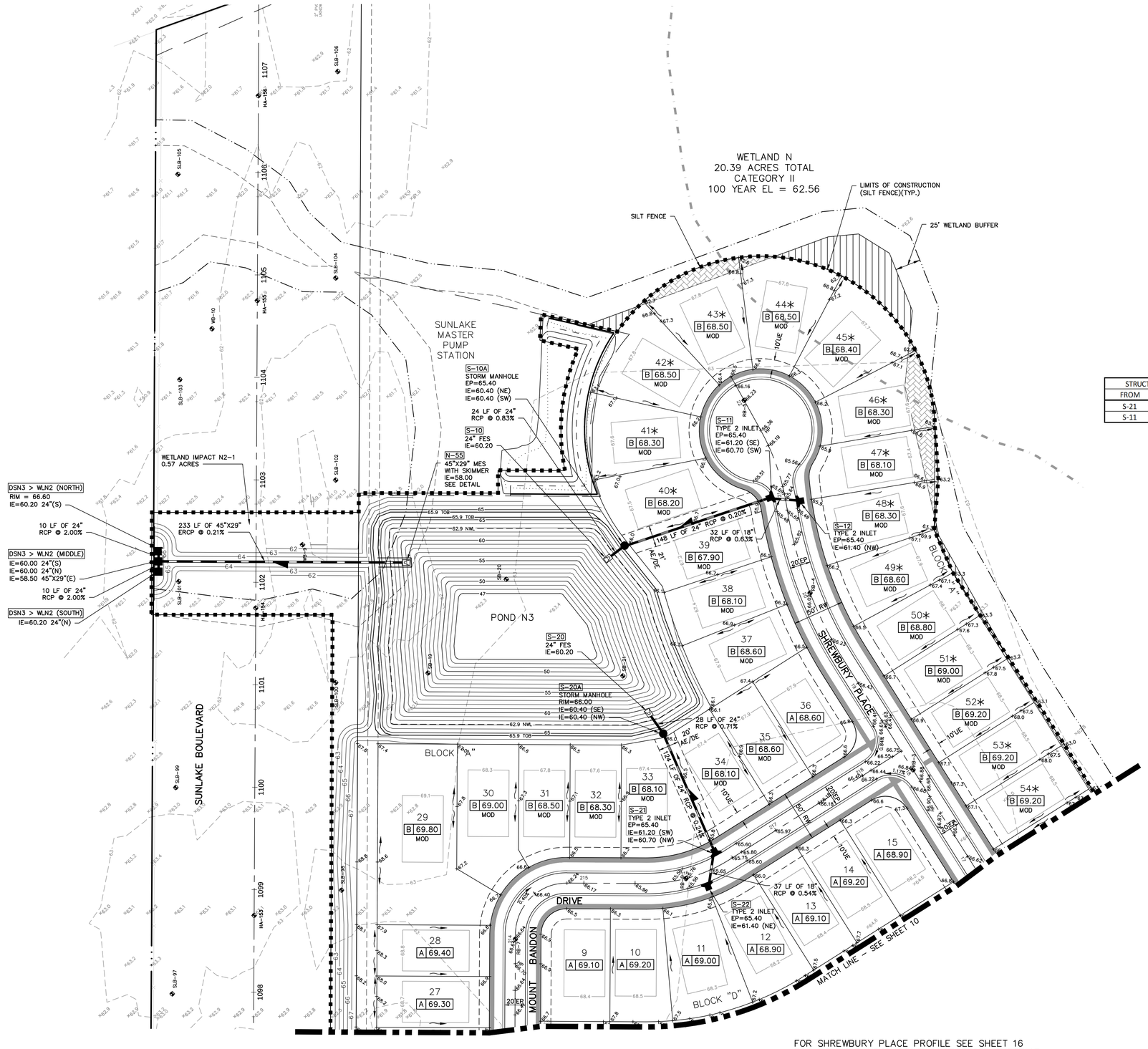

FOR SHREWBURY PLACE PROFILE SEE SHEET 16
FOR MOUNT BANDON DRIVE PROFILE SEE SHEET 17

N

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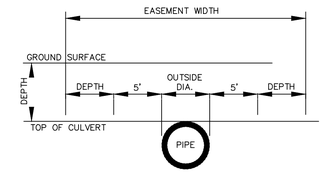


STRUCTURE #		HIGHEST	LOWEST	DEPTH	PIPE SIZE	REQUIRED	PROVIDED
FROM	TO	GROUND EL.	INV. EL.		(INCHES)	EASEMENT (FT)	EASEMENT (FT)
S-21	S-20A	66.5	60.55	5.95	24	20	20
S-11	S-10A	66.7	60.55	6.15	18	21	21

EASEMENT WIDTH TABLE

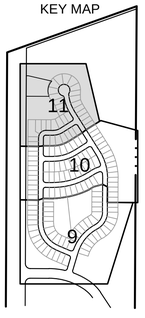
LEGEND

- = Overland Flow Direction
- = Concentrated Flow Direction
- = Hard Surface Drainage Flow Direction
- A 52.68 = Lot Grading Type & Min. Finish Floor Elev.
- = Proposed Grading Pad Contour
- 17 = Proposed Storm Structure Number
- + 42.1 = Proposed Spot Elevation
- + 6.17 = Existing Spot Elevation
- = Existing Storm Structure & Pipe
- = Proposed Storm Structure & Pipe
- = Existing Tree to be Removed
- = Existing Tree to Remain
- = Future Sidewalk by Home Builder
- = Sidewalk/Path Constructed by Developer
- = Proposed Silt Fence
- = Additional Wetland Buffer
- = Buffer Encroachment
- = Outfall Rip Rap
- = Wetland/Surface Water Jurisdictional Limit
- = Turbidity Barrier
- = FEMA
- SLB-63 = Soil Boring Location & Designation
- 105 = Tract Designation (See Sheet 4)

POND EXCAVATION NOTE:
CONTRACTOR TO PAY PARTICULAR ATTENTION TO PAVING, GRADING, AND DRAINAGE NOTE NO. 140 ON GENERAL NOTE SHEET 2 IN REGARDS TO PROPOSED POND EXCAVATION.

* DENOTES BUILDER TO UTILIZE ROOF GUTTERS TO DIRECT RUN-OFF TOWARDS THE FRONT OF THE HOME

KEY MAP



DSN3 > WLN2 (SOUTH, MIDDLE, NORTH)

INLET TYPE	3 FDOT BACK OF SIDEWALK INLETS (MOD)
GRATE ELEV.	N/A
WEIR WIDTH	36" WIDE 12" HIGH EACH INLET (WEST WALL)
WEIR ELEV.	64.10
WATER QUALITY ORIFICE	2.05" DIA
WATER QUALITY ORIFICE ELEV.	63.20
PIPE INVERT	59.50

NOTES: SKIMMER AT MES IN POND N3.
ORIFICE IN SOUTH INLET CENTER WEST WALL.
ORIFICE DRAINS TO WEST.
STRUCTURES ARE TYPE C MOD BACK OF SW ON J BOTTOM.

POND N3

NODE / POND	
T.O.B.	= 65.9
DHW(25)	= 65.08
DHW(100)	= 65.45
N.W.L.	= 63.20
BOTT	= 47.0

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PHASE 5, UNITS AI AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
PAVING, GRADING AND DRAINAGE PLAN

NO.	DATE	REVISIONS	APP'D BY

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CPN 241
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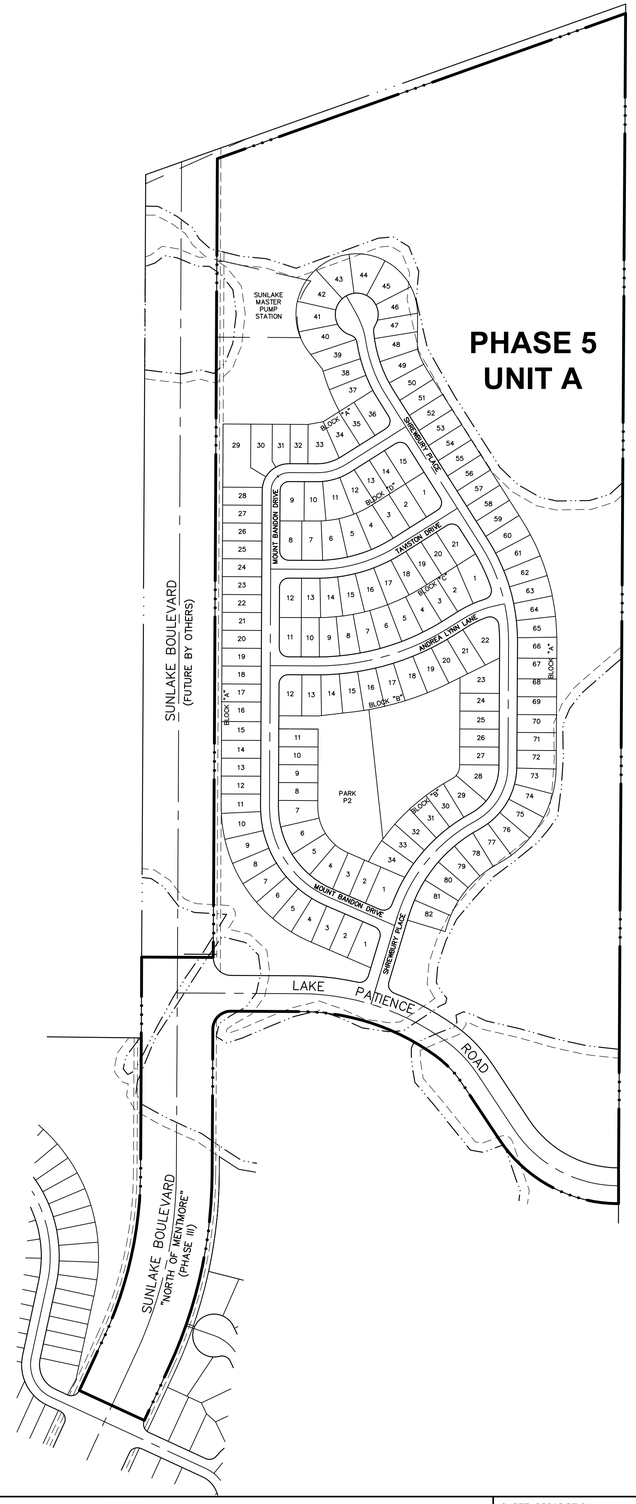

N

0 100 200 400

LEGEND:

PROJECT AREA 78.46 ACRES

NOTE: FOR SUNLAKE BOULEVARD PHASE III (NORTH OF MENTMORE) AND LAKE PATIENCE ROAD DATA, SEE PLAN AND PROFILE SHEETS 28–30

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PROJECT AREA

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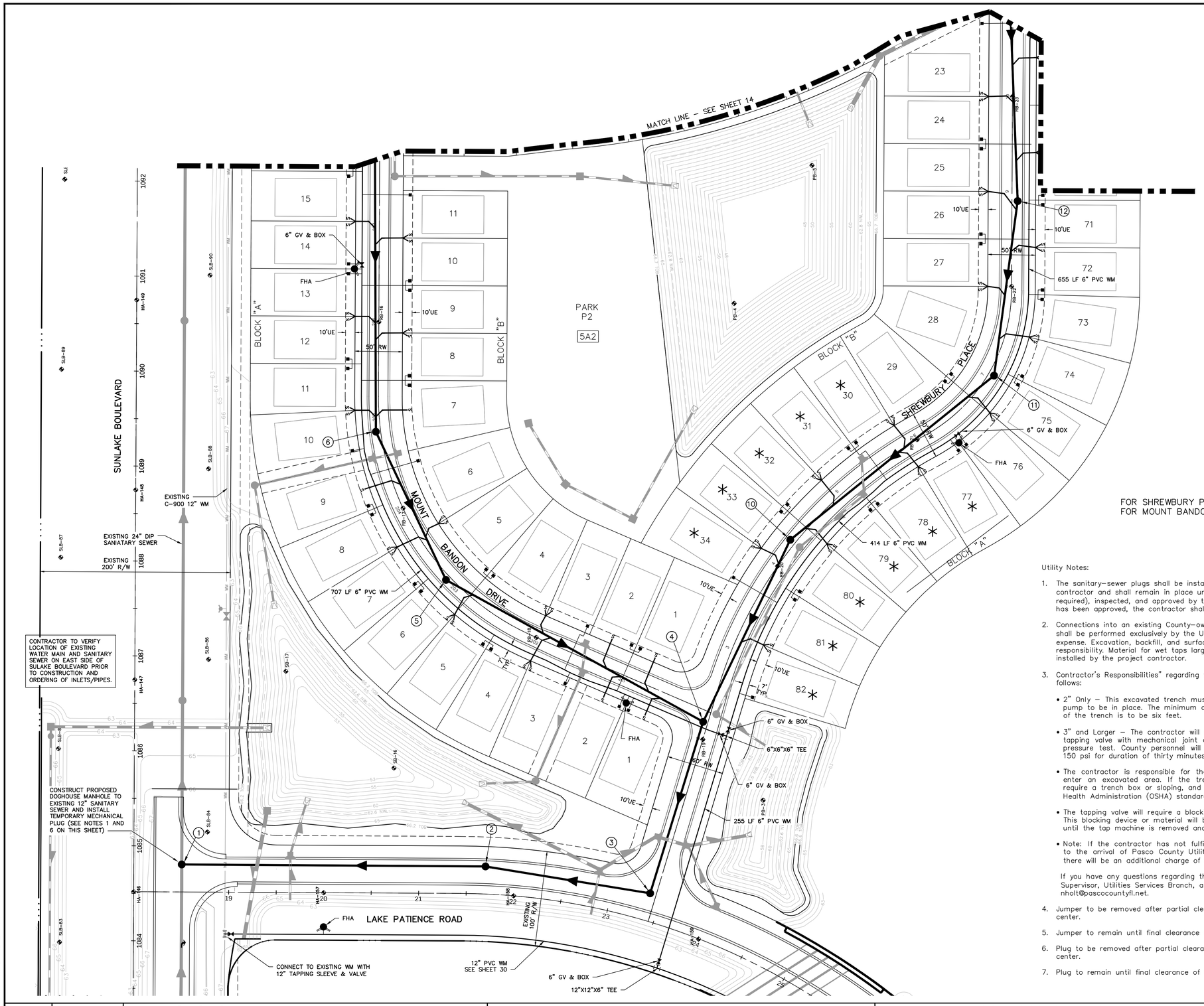


N

0 25 50 100

LEGEND

- = Proposed Water Line, Valve, & Services
- = Existing Water Line & Valve
- = Proposed Storm Sewer
- = Existing Force Main
- = Existing Sanitary Sewer &
- = Proposed Sanitary Sewer & Services
- (20) = Proposed Sanitary Sewer Manhole Number
- = Proposed Fire Hydrant (See Paving, Grading, And Drainage Plans For Finished Grade Elevation)
- = Existing Fire Hydrant
- = Proposed Blowoff
- 105 = Tract Designation (See Sheet 4)
- = Model Center Lots

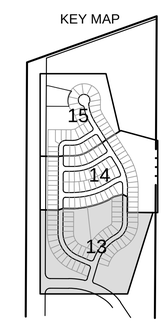
FOR SHREWBURY PLACE PROFILE SEE SHEET 16
FOR MOUNT BANDON DRIVE PROFILE SEE SHEET 17

Utility Notes:

1. The sanitary-sewer plugs shall be installed at the beginning of construction by the contractor and shall remain in place until the system has been cleaned, TV (if required), inspected, and approved by the Utilities Services Branch. When the system has been approved, the contractor shall be responsible for removal of the plugs.
2. Connections into an existing County-owned system shall be via wet tap. Wet taps shall be performed exclusively by the Utilities Services Branch at the developer's 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.
3. Contractor's Responsibilities" regarding wet taps two inches and larger shall be as follows:
   - 2" Only – This 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 is to 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 duration of thirty minutes.
   - The contractor is responsible for the excavation before any County personnel will enter an excavated area. If the trench is four feet in depth or deeper, it will require a trench box or sloping, and 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.

   If you have any questions regarding this information, contact Nelson D. Holt, Field Supervisor, Utilities Services Branch, at (727) 847-8145, or e-mail nholt@pascocountyfl.net.
4. Jumper to be removed after partial clearance of the water main for the model center.
5. Jumper to remain until final clearance of the water main.
6. Plug to be removed after partial clearance of the sanitary sewer main for the model center.
7. Plug to remain until final clearance of the sanitary sewer main.

KEY MAP



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SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
UTILITY PLAN

NO.	DATE	REVISIONS	APP'D BY

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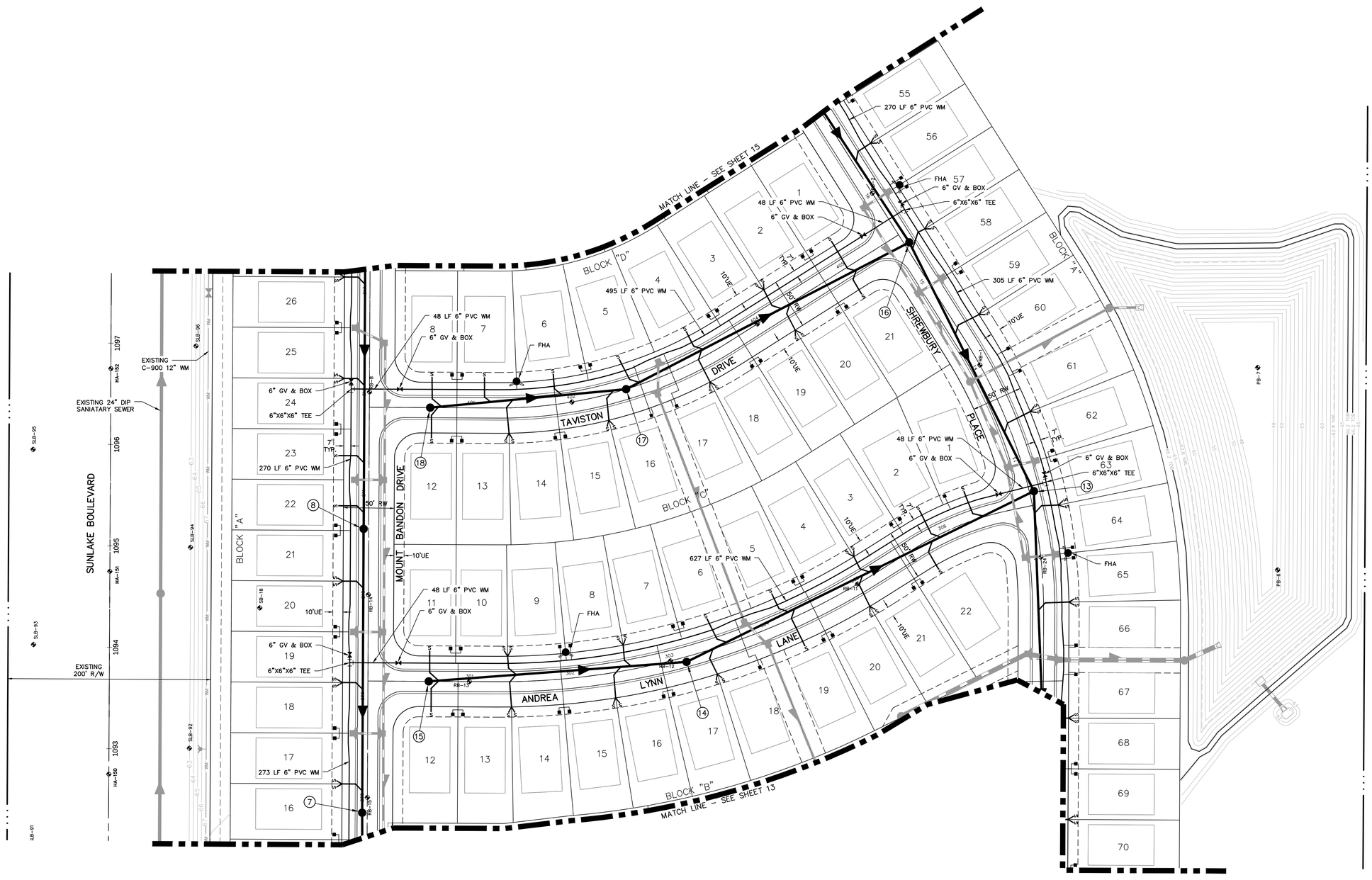


FOR SHREWBURY PLACE PROFILE SEE SHEET 16
FOR MOUNT BANDON DRIVE PROFILE SEE SHEET 17
FOR TAVISTON DRIVE PROFILE SEE SHEET 16
FOR ANDREA LYNN LANE PROFILE SEE SHEET 17

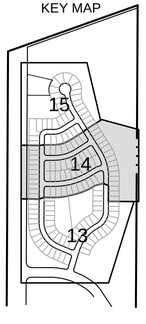
N

0 25 50 100

LEGEND

- = Proposed Water Line, Valve, & Services
- = Existing Water Line & Valve
- = Proposed Storm Sewer
- = Existing Force Main
- = Existing Sanitary Sewer &
- = Proposed Sanitary Sewer & Services
- (20) = Proposed Sanitary Sewer Manhole Number
- = Proposed Fire Hydrant (See Paving, Grading, And Drainage Plans For Finished Grade Elevation)
- = Existing Fire Hydrant
- = Proposed Blowoff
- [105] = Tract Designation (See Sheet 4)
- = Model Center Lots

KEY MAP



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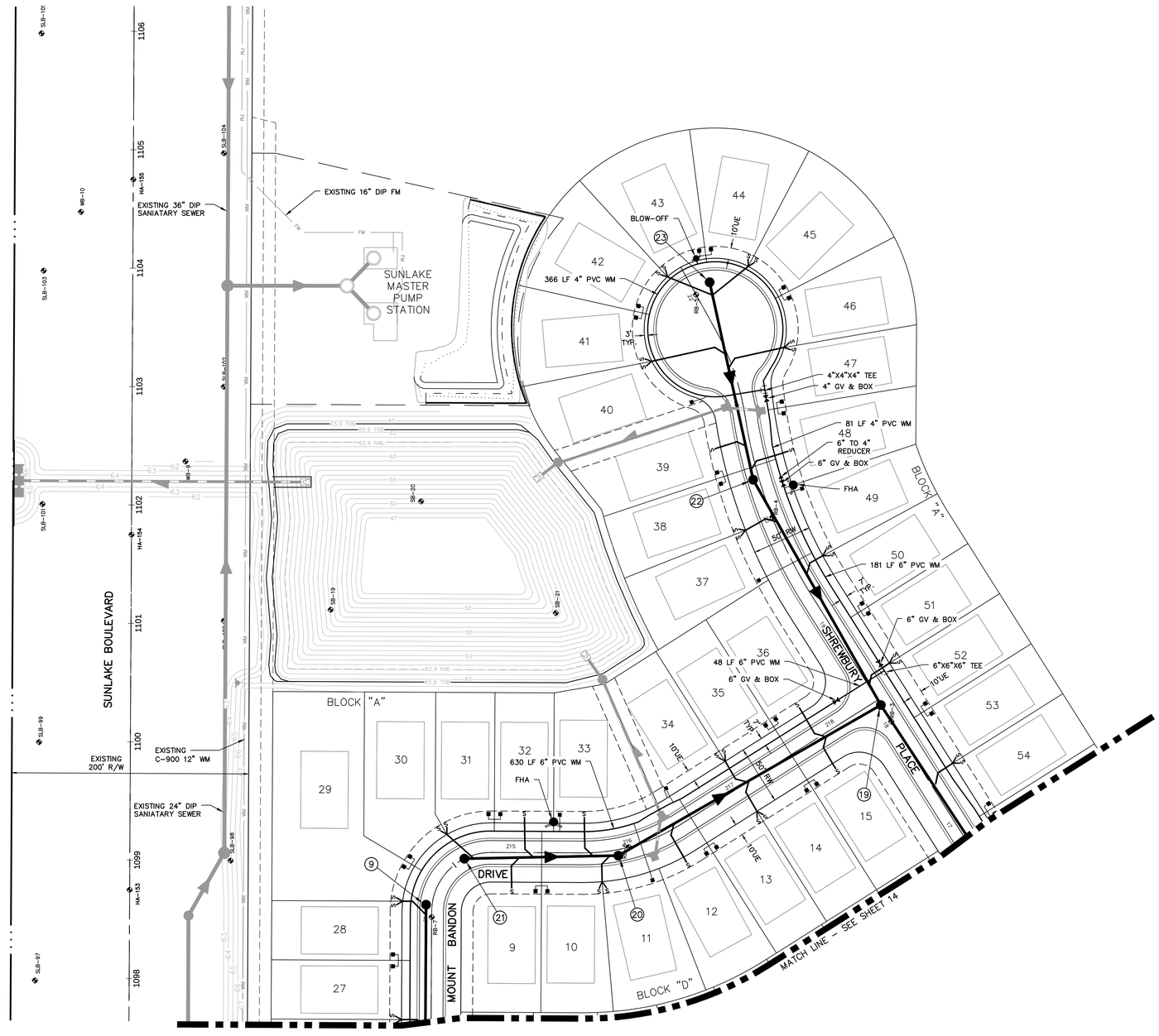

FOR SHREWBURY PLACE PROFILE SEE SHEET 16
FOR MOUNT BANDON DRIVE PROFILE SEE SHEET 17

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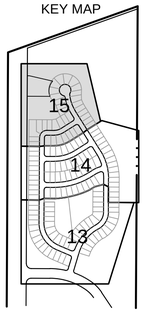

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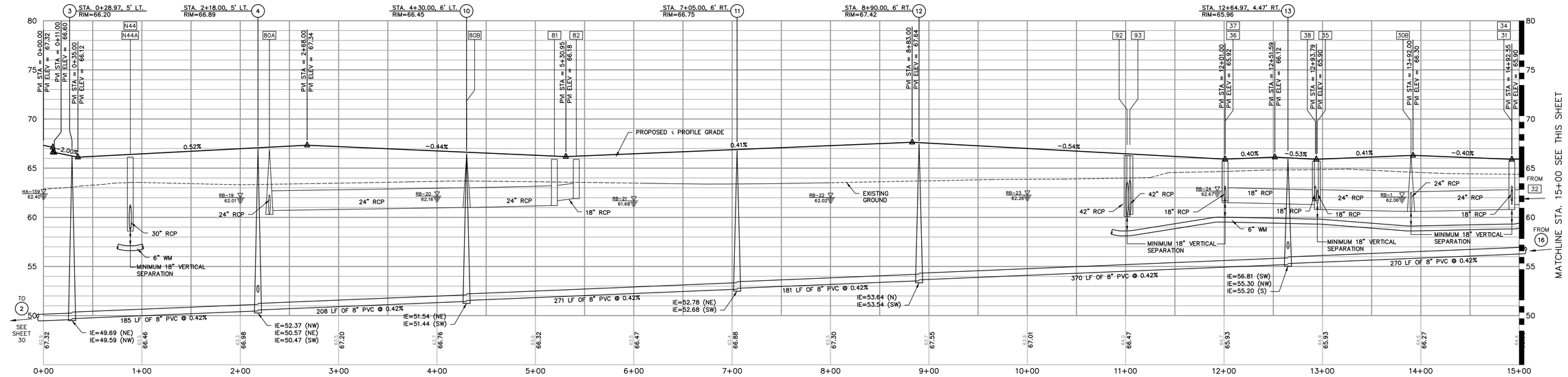
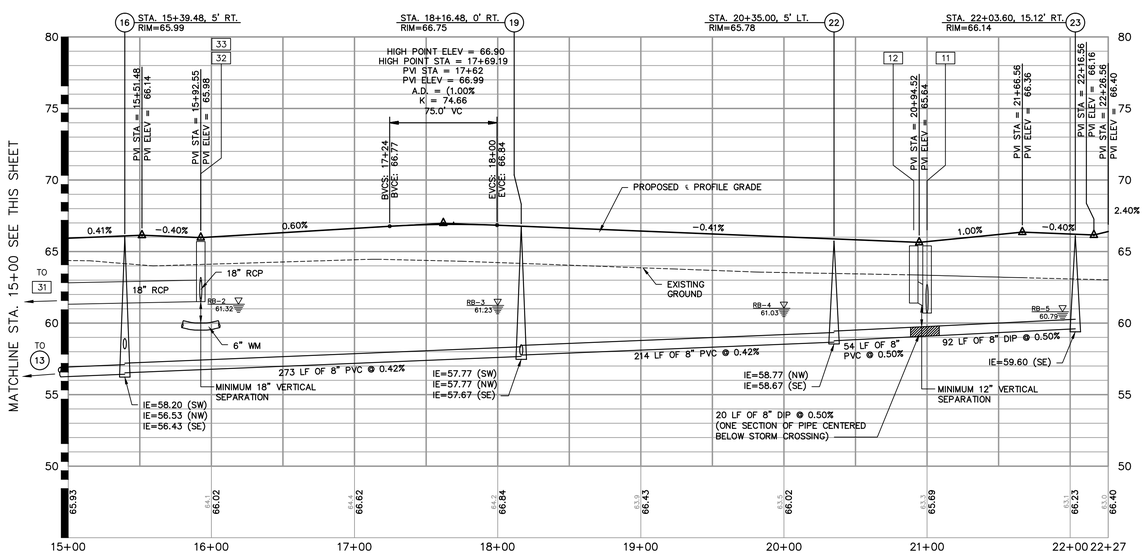
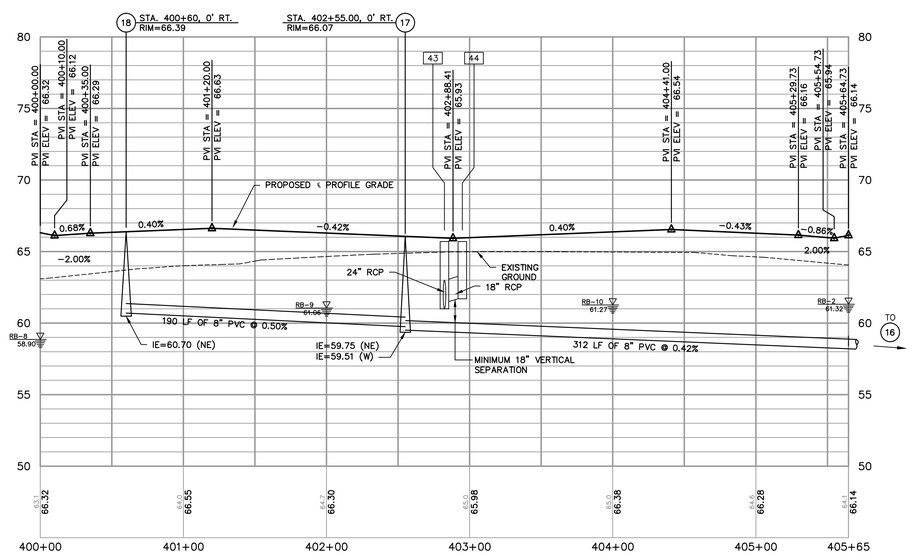


SHREWBURY PLACE
1"=50' HORIZ., 1"=5' VERT.



SHREWBURY PLACE
1"=50' HORIZ., 1"=5' VERT.



TAVISTON DRIVE
1"=50' HORIZ., 1"=5' VERT.

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ROADWAY PROFILES

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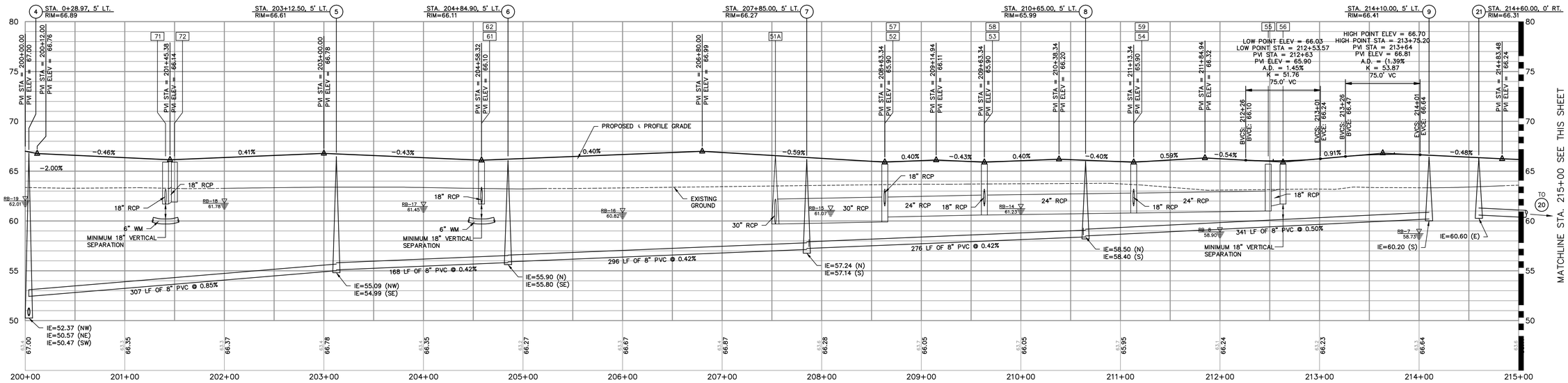
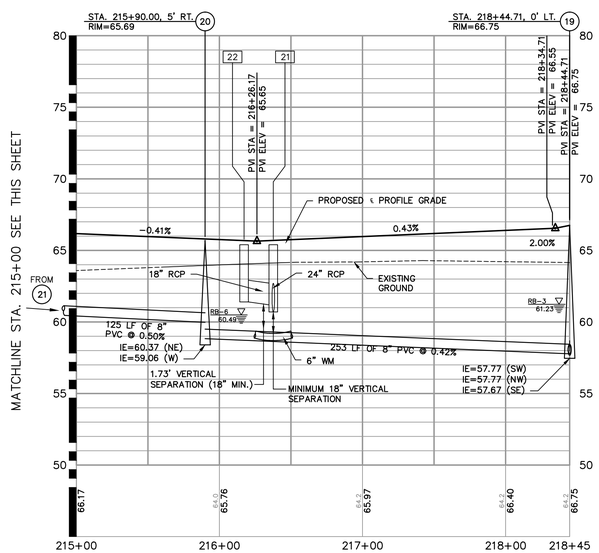


MOUNT BANDON DRIVE
1"=50' HORIZ., 1"=5' VERT.



MOUNT BANDON DRIVE
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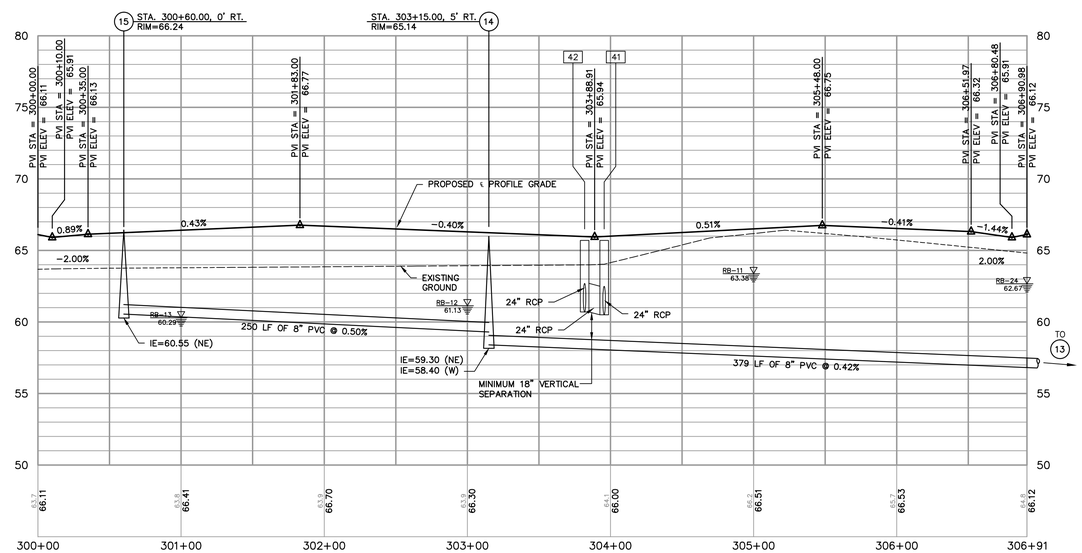

ANDREA LYNN LANE
1"=50' HORIZ., 1"=5' VERT.

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Q.C.					SHT. 17
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TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS 18 PLAN	18 FINAL	19 PLAN	19 FINAL	20 PLAN	20 FINAL	TOTAL PLAN	TOTAL FINAL	REF. SHEET
700-40-1	SIGN SINGLE POST (LESS THAN 12 SQ. FT.)	AS	4		4		3		11		
706-3	RPM, AMBER/AMBER	EA									
711-11-111	TRAFFIC STRIPE SOLID (THERMOPLASTIC) (WHITE) (6")	LF									
711-11-125	TRAFFIC STRIPE SOLID (THERMOPLASTIC) (WHITE) (24")	LF									
711-11-170	DIRECTIONAL ARROWS (THERMOPLASTIC)	EA									
711-11-211	TRAFFIC STRIPE SOLID (THERMOPLASTIC) (YELLOW) (6")	LF									
711-11-224	TRAFFIC STRIPE SOLID (THERMOPLASTIC) (YELLOW) (18")	LF									

SIGNAGE AND PAVEMENT MARKING NOTES:

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

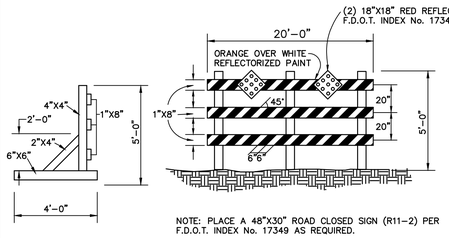
4.6) All post systems, mounting brackets and hardware shall be of a type currently in use by the Pasco County Public Works Department and currently certified by the Florida Department of Transportation for use in the state of Florida. Alternative systems etc. shall only be used if approved by the County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

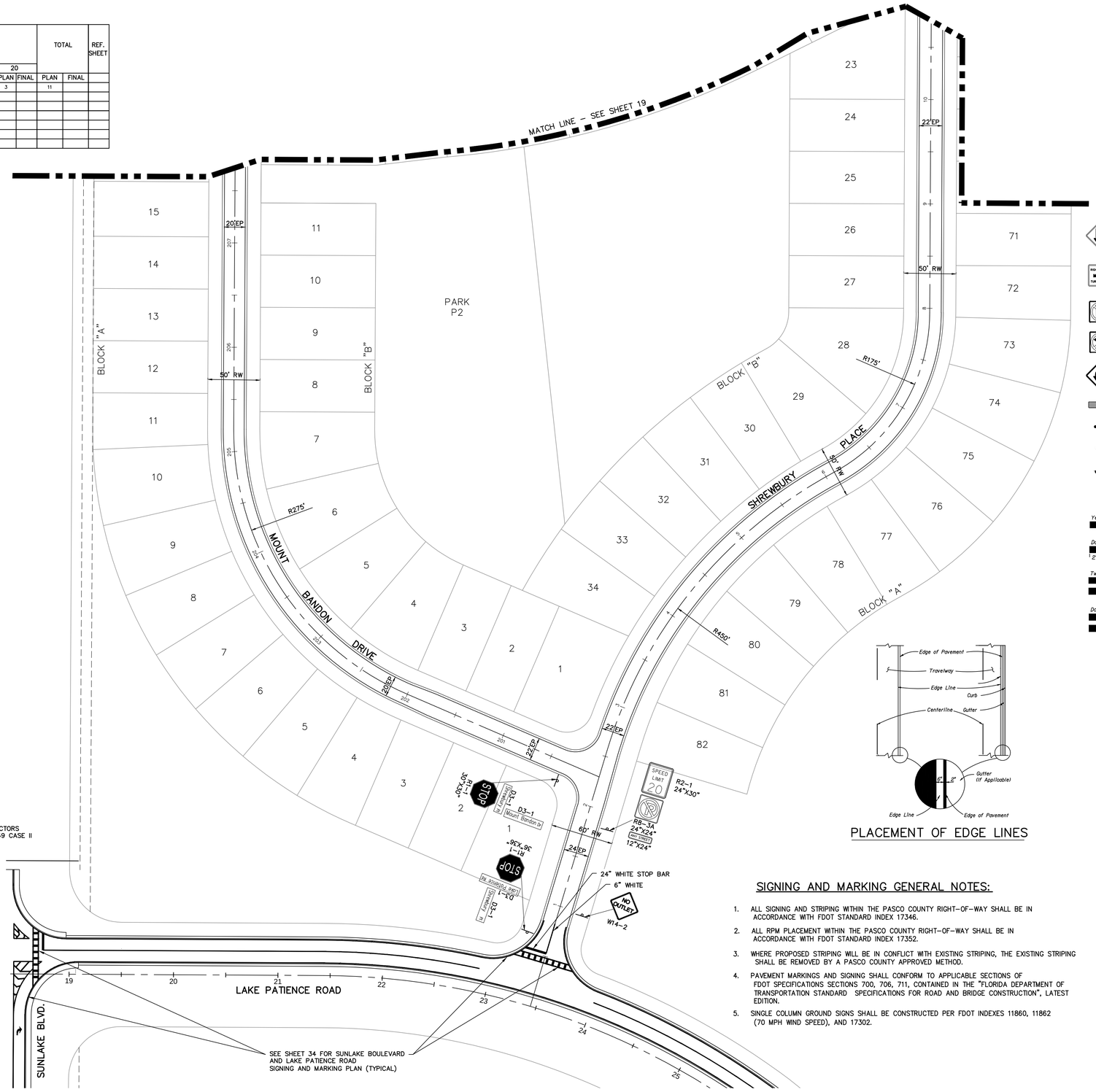
8. Inspection and acceptance:
8.1) Upon completion of the installation of the traffic control devices, the contractor shall call the Engineering Inspections Division for an inspection at (813) 847-8154.
8.2) The inspection shall be made by the Engineering Inspections Division within 48 hours (two working 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.



NOTE: PLACE A 48"X30" ROAD CLOSED SIGN (R11-2) PER F.D.O.T. INDEX No. 17349 AS REQUIRED.

TYPE III BARRICADE DETAIL

N.T.S.



N

0 25 50 100

SIGNING LEGEND

- = Two Way Traffic (W6-3)
- = Right Lane Must Turn Right (R3-7R)
- = No Right Turn (R3-1)
- = No Left Turn (R3-2)
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- = Wildlife Crossing Sign
- = Type III Barricade
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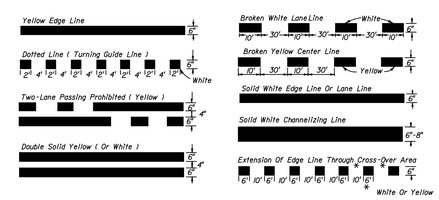
- = Stop Sign (R1-1)
- = Warning Sign (W1-1 R or L)
- = Advisory Speed Sign (W13-1 15 MPH)
- = Regulatory Speed Sign (R2-1 25 MPH) with No Parking Sign (R8-3A) and supplemental plate
- = One Way (R6-1)
- = Dead End Sign (W14-1)
- = No Outlet (W14-2)
- = Do Not Enter (R5-1)
- = Keep Right Sign (R4-7) with OM1
- = Reflective Marker Sign (OM1)
- = Reflective Marker Sign (OM4)

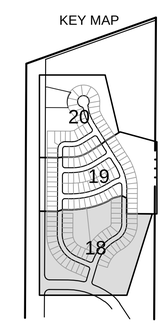


TYPES OF PERMANENT LONGITUDINAL LINES

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.

PLACEMENT OF EDGE LINES

KEY MAP



SIGNING AND MARKING GENERAL NOTES:

1. ALL SIGNING AND STRIPING WITHIN THE PASCO COUNTY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH FDOT STANDARD INDEX 17346.
2. ALL RPM PLACEMENT WITHIN THE PASCO COUNTY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH FDOT STANDARD INDEX 17352.
3. WHERE PROPOSED STRIPING WILL BE IN CONFLICT WITH EXISTING STRIPING, THE EXISTING STRIPING SHALL BE REMOVED BY A PASCO COUNTY APPROVED METHOD.
4. PAVEMENT MARKINGS AND SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF FDOT SPECIFICATIONS SECTIONS 700, 706, 711, CONTAINED IN THE "FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
5. SINGLE COLUMN GROUND SIGNS SHALL BE CONSTRUCTED PER FDOT INDEXES 11860, 11862 (70 MPH WIND SPEED), AND 17302.

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DESIGNED JD
DRAWN TR
CHECKED AB
Q.C.

THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.

FLORIDA DESIGN CONSULTANTS, INC.
THINK IT. ACHIEVE IT.
707 NORTH FRANKLIN STREET, 6TH FLOOR, TAMPA, FLORIDA 33602
PHONE: (800) 532-1047 WWW.FLDESIGN.COM L.B. NO.6707

PREPARED FOR:

CONCORD STATION, LLP
4600 W. CYPRESS STREET, SUITE 200
TAMPA, FLORIDA 33607
PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
PAVEMENT MARKING AND SIGNAGE PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 18 OF 34

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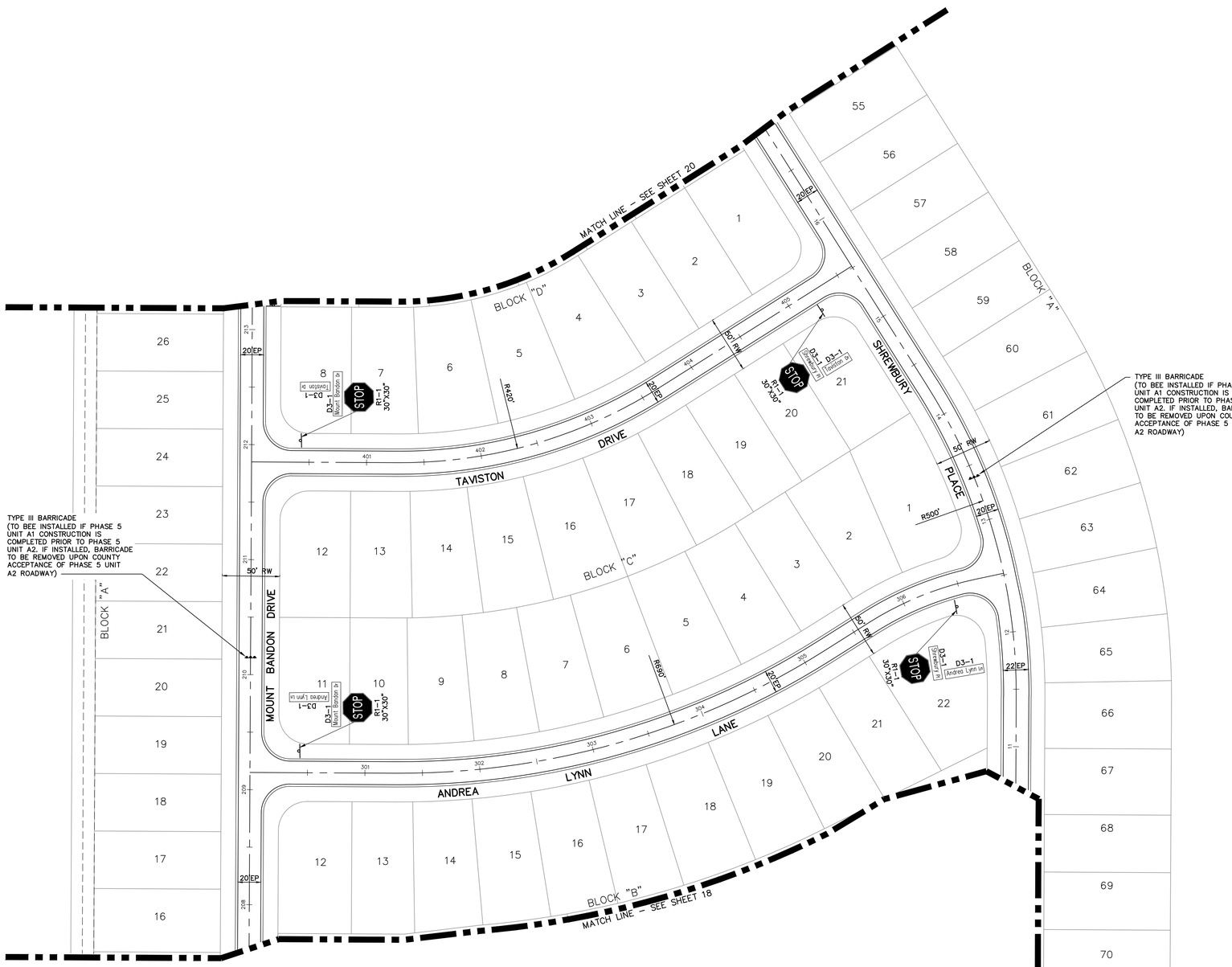

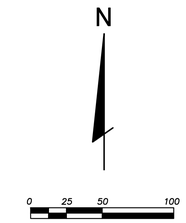

SIGNING LEGEND

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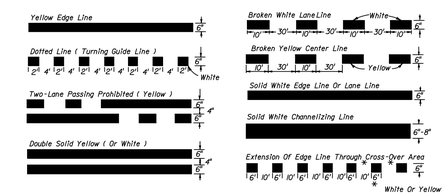

TYPES OF PERMANENT LONGITUDINAL LINES

BASIC COLOR RULE

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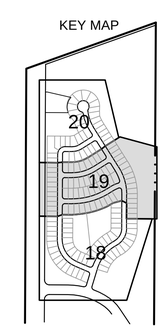
KEY MAP



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PHASE 5, UNITS A1 AND A2,
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PAVEMENT MARKING AND SIGNAGE PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
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DATE: 2/20/14
SHT. 19 OF 34

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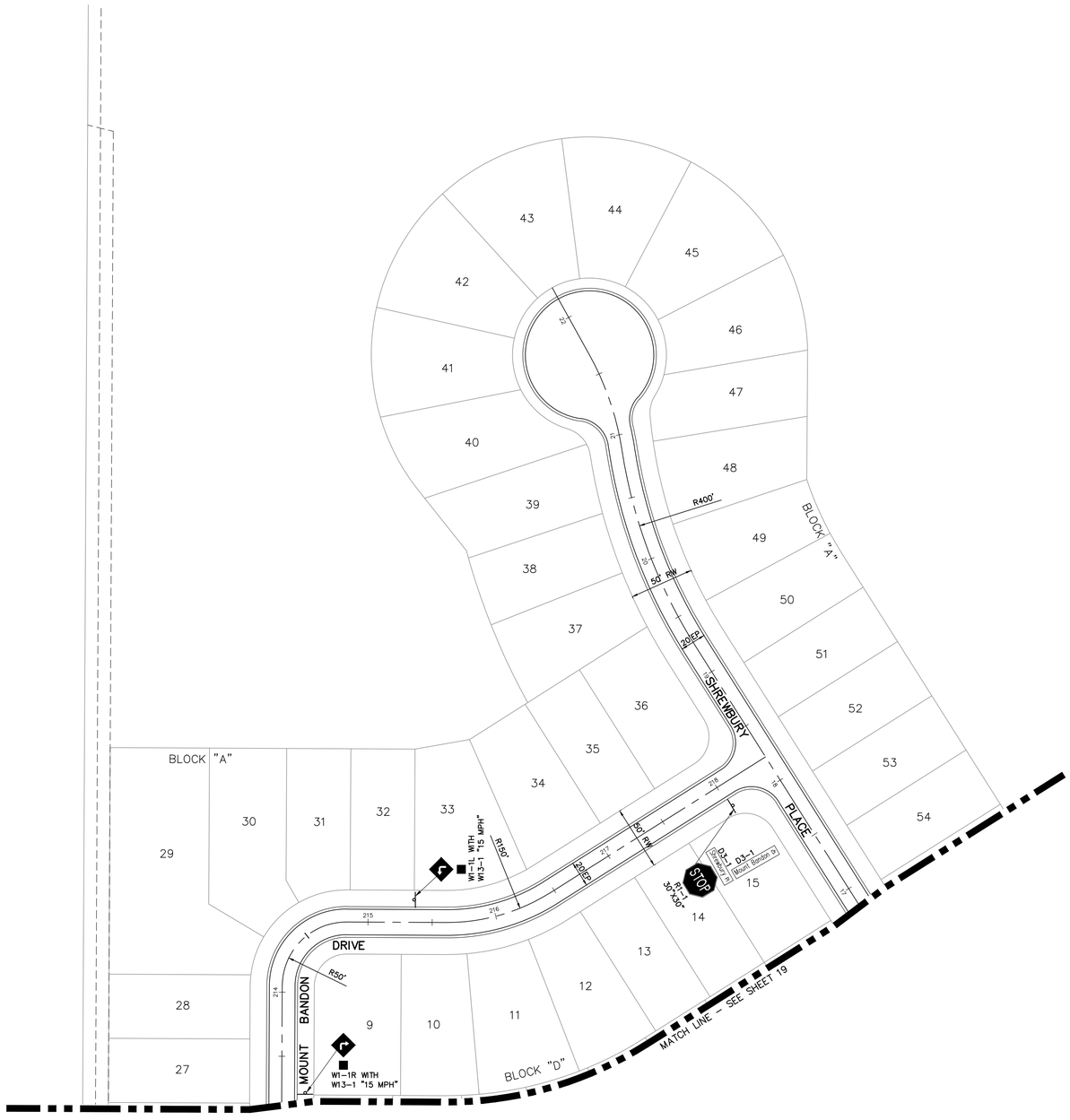

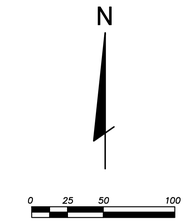

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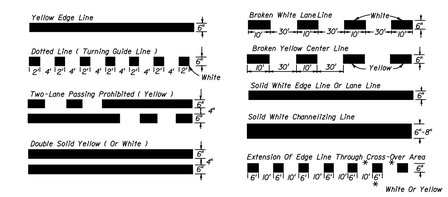

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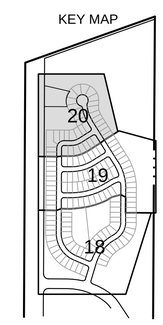

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DRAWN TR					EPN 241
CHECKED AB					F.B. & PG.
D.C.					DATE: 2/20/14
				NO. / DATE / REVISIONS / APP'D BY	SHT. 20 OF 34

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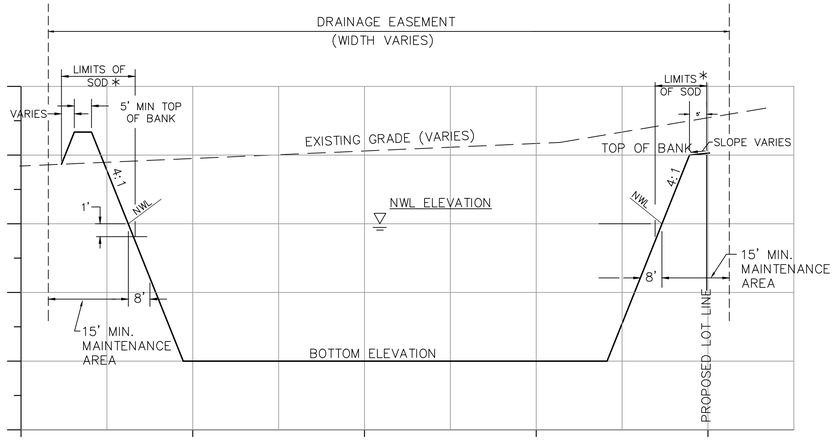
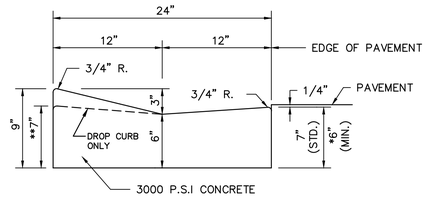


* NOTE: STAKE SOD AS NECESSARY TO PREVENT DISPLACEMENT

TYPICAL POND SECTION (TYP ANY)

N.T.S.

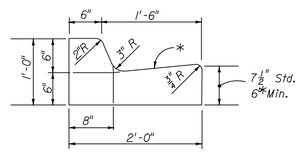


* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN SHOWN ON PLANS.

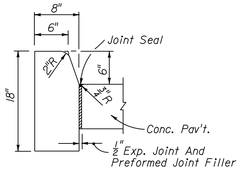
** DROP CURB AT SIDEWALK LOCATIONS AS INDICATED ON PAVING, GRADING & DRAINAGE PLAN SHEETS.

24" CONCRETE VALLEY CURB

N.T.S.



TYPE F

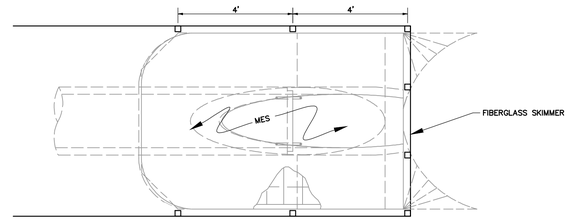


TYPE D

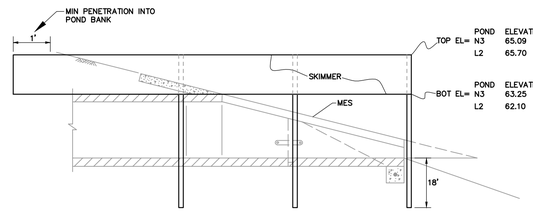
Note: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see diagram right.

CONCRETE CURB

N.T.S.



TOP VIEW



	POND	ELEVATION
TOP EL=	N3	65.09
	L2	65.70

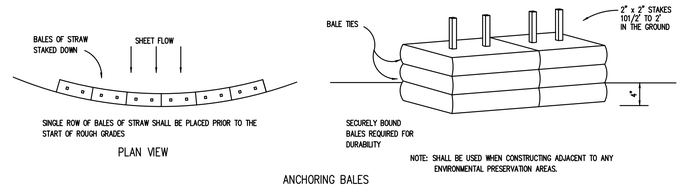
	POND	ELEVATION
BOT EL=	N3	63.25
	L2	62.10

SIDE VIEW

PONDS N3 AND L2 SKIMMER DETAIL

NOTES:
1. SKIMMER POSTS TO BE RECYCLED PLASTIC POSTS MEETING THE REQUIREMENTS FOR LINE POSTS PER GENERAL NOTE 7, FDOT INDEX 451. POSTS TO MEET SECTION 972 FDOT STANDARD SPECIFICATIONS EXCEPT COLOR REQUIREMENT IN 972-3.1

2. USE SAME CONFIGURATION FOR ELLIPTICAL PIPE



SINGLE ROW OF BALES OF STRAW SHALL BE PLACED PRIOR TO THE START OF ROUGH GRADES

PLAN VIEW

SECURELY BOUND BALES REQUIRED FOR DURABILITY

NOTE: SHALL BE USED WHEN CONSTRUCTING ADJACENT TO ANY ENVIRONMENTAL PRESERVATION AREAS.

ANCHORING BALES

TEMPORARY STRAW SEDIMENT BARRIER

N.T.S.

* NOTES:

SIDE-YARD SETBACKS MAY BE REDUCED TO FIVE FEET BASED UPON THE FOLLOWING CONDITIONS BEING MET PRIOR TO CONSTRUCTION PLAN APPROVAL FOR EACH PHASE OR UNIT. SHOULD THE CONDITIONS NOT BE MET, THE MINIMUM SIDE SETBACK SHALL BE 7.5 FEET.

1. THE ENGINEER OF RECORD SHALL PROVIDE TO PASCO COUNTY SIGNED AND SEALED DESIGN CALCULATIONS FOR EACH TYPICAL LOT DEMONSTRATING COMPLIANCE WITH PASCO COUNTY'S DRAINAGE CRITERIA. THESE CALCULATIONS SHALL ALSO INCLUDE A REPRESENTATION THAT THE UNDERLYING "SOILS" ON THE SUBJECT LOTS ARE ADEQUATE TO ACCOMMODATE FLOWS THROUGH THE SIDE-YARD SWALES WITHOUT MATERIAL EROSION.

2. PASCO COUNTY'S TYPICAL LOTS A, B, AND C WILL HAVE SIDE-YARD SWALES WITH SIDE SLOPES NO GREATER THAN 4:1 AND A DEPTH NO GREATER THAN 15 INCHES.

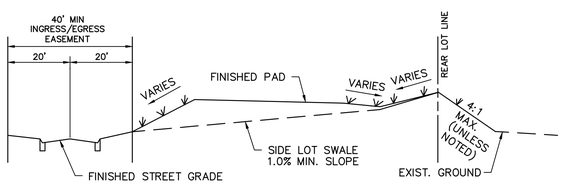
3. SIDE-YARD SWALES SHALL BE SLOPED TO CREATE POSITIVE OUTFALL TO THE FRONT OR REAR OF EACH LOT WITH VELOCITIES NO GREATER THAN ALLOWABLE FOR GRASSES STABILIZATION, AS IN THE FDOT DRAINAGE MANUAL. THE LOT SHALL BE DESIGNED SO THAT NO ADDITIONAL DRAINAGE FOR NONLOT AREAS LOCATED TO THE REAR OF THE LOTS WILL USE THE SIDE-YARD SWALES.

4. SWALES SHALL BE SODDED IN PLACE, AND MAINTENANCE RESPONSIBILITY WILL BE THAT OF THE HOMEOWNER. THE HOMEOWNER'S ASSOCIATION DOCUMENTS SHALL INCLUDE SPECIFIC LANGUAGE TO PROTECT THE INTEGRITY OF THE SIDE SWALE, PROHIBIT OBSTRUCTIONS WITHIN THE SWALE, AND ENSURE PROPER MAINTENANCE.

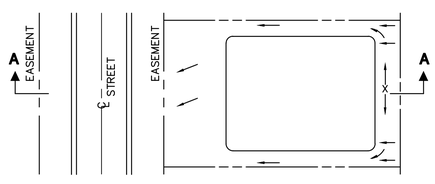
5. NO OBSTRUCTIONS SHALL BE PERMITTED IN THE SWALE AREA BETWEEN HOUSES THAT IMPAIRS THE INTENDED FUNCTION OF THE SWALE.

6. GUTTERS AND ROOF STRUCTURES SHALL BE DESIGNED AND INSTALLED SO AS TO REDUCE DIRECT DISCHARGE TO THE SIDE-YARD SWALES.

7. WHERE A FIVE-FOOT SETBACK IS ALLOWED, THE POST CONSTRUCTION CERTIFICATION SHALL BE REVIEWED, SIGNED, AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA AND SHALL INDICATE THE LOT HAS BEEN GRADED IN ACCORDANCE WITH THE APPROVED DESIGN, THE SIDE SWALES CONSTRUCTION COMPLIES WITH THE DESIGN REQUIREMENTS, AND THAT NO ADVERSE IMPACT TO SURROUNDING PROPERTIES EXISTS OR IS CREATED DUE TO THIS CONSTRUCTION.



TYPICAL SECTION "A-A"



PLAN

TYPE "A" LOT GRADING

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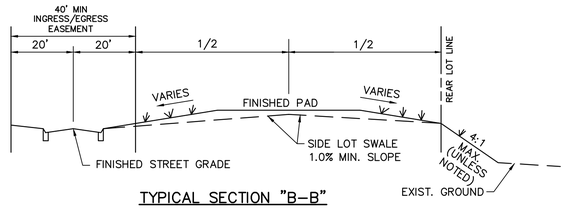
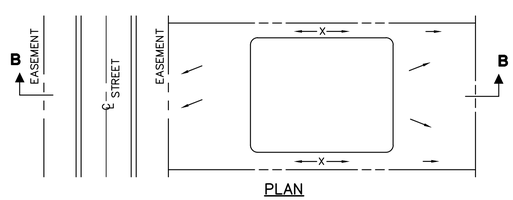


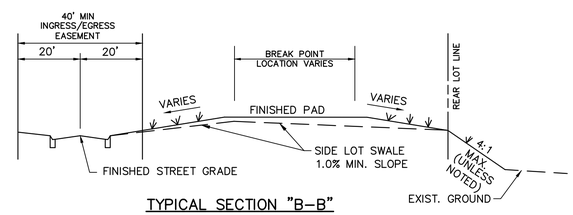
TYPICAL SECTION "B-B"



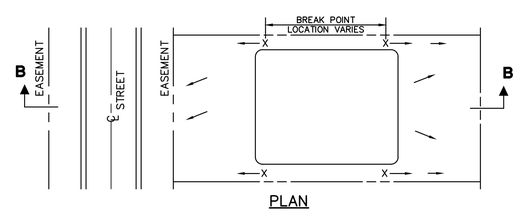
PLAN

TYPE "B" LOT GRADING

N.T.S.



TYPICAL SECTION "B-B"



PLAN

TYPE "B" MODIFIED LOT GRADING

N.T.S.

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DESIGNED	JD
DRAWN	TR
CHECKED	AB
Q.C.	

THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.

FLORIDA DESIGN CONSULTANTS, INC.
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707 NORTH FRANKLIN STREET, 6TH FLOOR, TAMPA, FLORIDA 33602
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PREPARED FOR:

CONCORD STATION, LLP
4600 W. CYPRESS STREET, SUITE 200
TAMPA, FLORIDA 33607
PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
PAVING, GRADING, AND DRAINAGE DETAILS

NO.	DATE	REVISIONS	APP'D BY

JOB NO.	595-220
EPN	241
F.B. & PG.	
DATE:	2/20/14
SHT.	21
OF	34

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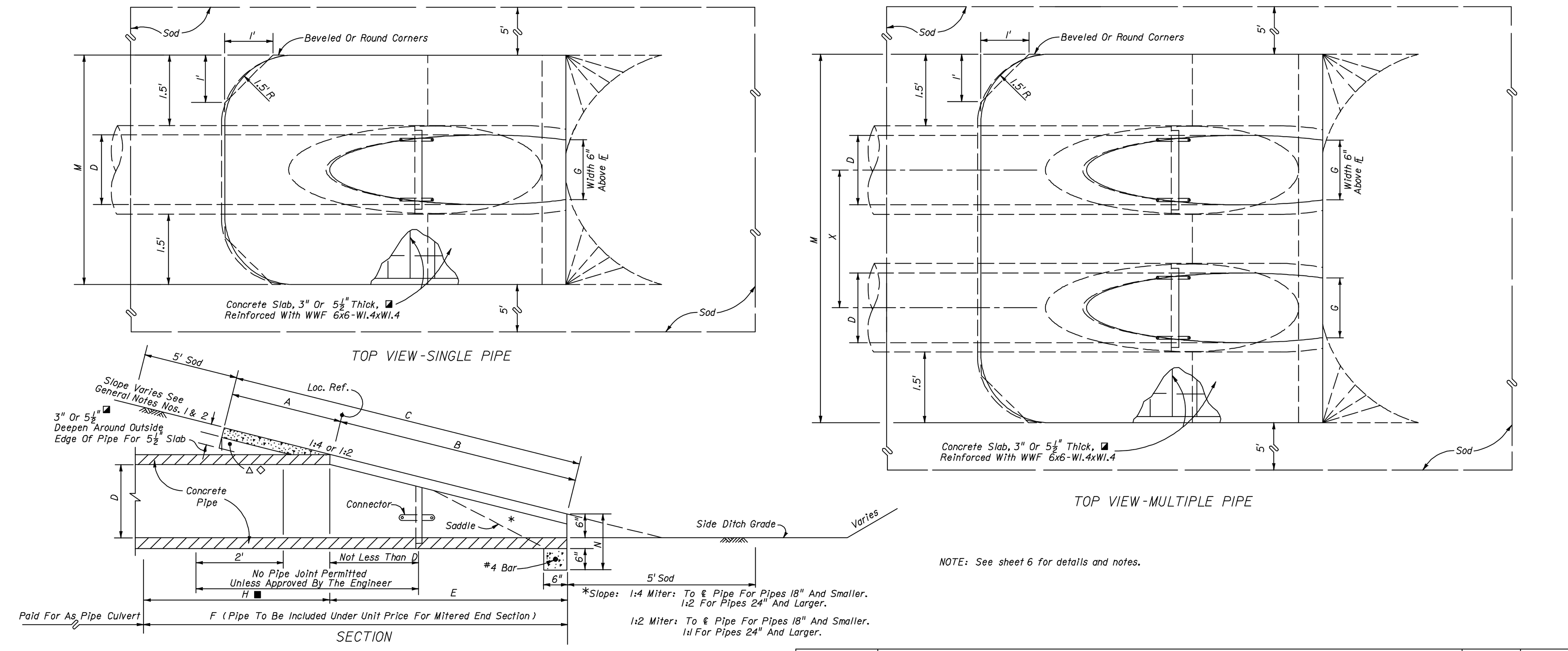
	D	X	A	B	C	E	F	G	H ■	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe	N	5½" Concrete Slab (CY) ◪ Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	Sodding (SQ. YDS.) Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe
1:2 Slope	15"	2'-7"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	2.9'	4.63'	7.21'	9.79'	12.37'	1.19'	0.38	0.58	0.77	0.96	21	24	27	30
	18"	2'-10"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	3.4'	4.92'	7.75'	10.58'	13.42'	1.21'	0.44	0.65	0.87	1.09	22	25	28	31
	24"	3'-5"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	3.4'	5.50'	8.92'	12.33'	15.75'	1.25'	0.54	0.83	1.12	1.42	24	28	32	35
	30"	4'-3"	2.15'	4.95'	7.10'	4.56'	8'	2.00'	3.4'	6.08'	10.33'	14.58'	18.83'	1.29'	0.66	1.09	1.50	1.91	26	31	35	40
	36"	5'-1"	2.25'	6.08'	8.33'	5.56'	9'	2.24'	3.4'	6.67'	11.75'	16.83'	21.92'	1.33'	0.81	1.38	1.95	2.51	28	34	39	45
	42"	6'-0"	2.34'	7.21'	9.55'	6.56'	10'	2.45'	3.4'	7.25'	13.25'	19.25'	25.25'	1.38'	0.97	1.70	2.45	3.19	30	37	43	50
	48"	6'-9"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	3.4'	7.83'	14.58'	21.33'	28.08'	1.42'	1.13	2.04	2.93	3.84	32	39	47	54
	54"	7'-8"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	3.4'	8.42'	16.08'	23.75'	31.42'	1.46'	1.31	2.44	3.58	4.72	34	42	51	59
	60"	8'-6"	2.62'	10.56'	13.18'	9.56'	14'	3.00'	4.4'	9.00'	17.50'	26.00'	34.50'	1.50'	1.51	2.89	4.28	5.68	36	45	55	64
	66"	9'-2"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	4.4'	9.58'	18.75'	27.92'	37.08'	1.54'	1.68	3.25	4.84	6.43	38	48	58	68
	72"	10'-0"	2.80'	12.80'	15.60'	11.56'	16'	3.30'	4.4'	10.16'	20.16'	30.16'	40.16'	1.58'	1.89	3.74	5.59	7.45	40	51	62	73
1:4 Slope	15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.0'	4.63'	7.21'	9.79'	12.37'	1.19'	0.57	0.87	1.15	1.44	23	26	29	32
	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.0'	4.92'	7.75'	10.58'	13.42'	1.21'	0.66	0.99	1.31	1.65	25	28	31	35
	24"	3'-5"	2.53'	7.18' △	9.71'	7.03' △	11'	1.73'	4.0'	5.50'	8.92'	12.33'	15.75'	1.25'	0.85	1.30	1.75	2.20	28	32	36	40
	30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	4.0'	6.08'	10.33'	14.58'	18.83'	1.29'	1.10	1.74	2.39	3.05	31	36	41	46
	36"	5'-1"	2.87'	11.31' ◇	14.18'	11.03' ◇	15'	2.24'	4.0'	6.67'	11.75'	16.83'	21.92'	1.33'	1.32	2.21	3.08	3.96	34	40	46	52
	42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	4.0'	7.25'	13.25'	19.25'	25.25'	1.38'	1.58	2.76	3.91	5.09	38	44	51	58
	48"	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	4.0'	7.83'	14.58'	21.33'	28.08'	1.42'	1.85	3.30	4.73	6.17	41	48	56	63
	54"	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	4.0'	8.42'	16.08'	23.75'	31.42'	1.46'	2.14	3.95	5.77	7.58	44	52	61	69
	60"	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	4.0'	9.00'	17.50'	26.00'	34.50'	1.50'	2.45	4.66	6.87	9.07	47	56	66	75
	66"	9'-2"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	4.0'	9.58'	18.75'	27.92'	37.08'	1.54'	2.88	5.54	8.18	10.84	49	59	69	80
	72"	10'-0"	3.91'	23.68'	27.59'	23.03'	27'	3.30'	4.0'	10.16'	20.16'	30.16'	40.16'	1.58'	3.54	6.61	9.87	13.13	52	63	74	85

◪ See General Note No. 3. See Sheet 5 Of 6 For 3" Slab Quantities

■ Values shown for estimating pipe quantities and are for information only.

B	E	
△ 6.42'	△ 6.25'	Dimensions permitted to allow use of 8' standard pipe lengths.
◇ 10.40'	◇ 10.10'	Dimensions permitted to allow use of 12' standard pipe lengths.

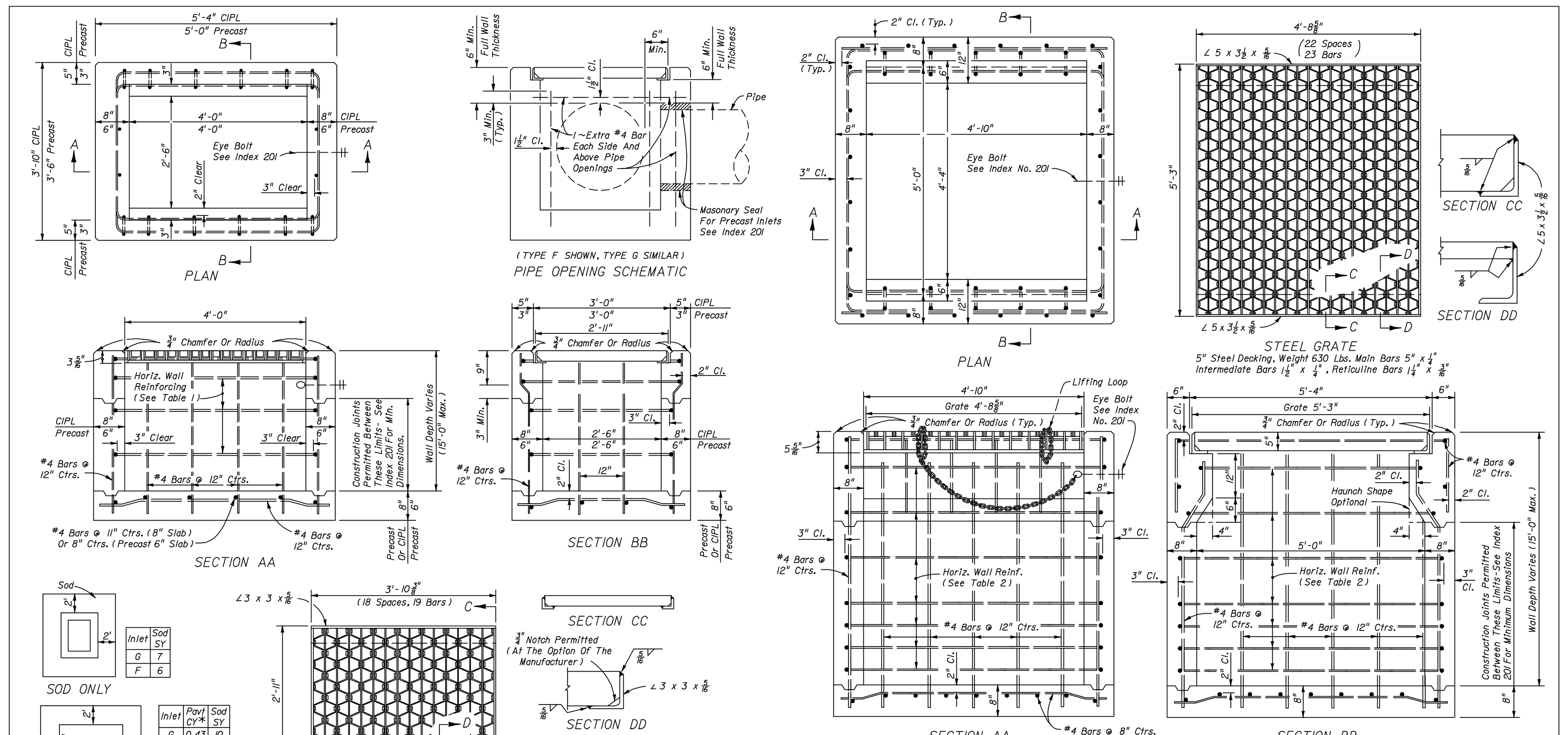
△◇ Concrete slab shall be deepened to form bridge across crown of pipe. See section below.



2006 FDOT Design Standards

CROSS DRAIN MITERED END SECTION SINGLE AND MULTIPLE ROUND CONCRETE PIPE

Last Revision 02 | Sheet No. 1 of 6 | Index No. 272



Inlet	Pavt CY*	Sod SY
G	0.43	10
F	0.34	9

*For Estimating Purposes Only

PAVT. AND SOD

Notes:

1. Pavement and/or sod to be used only where called for in the plans.
2. Cost of paving to be included in cost of inlet.

PAVEMENT AND SODDING

STEEL GRATE

Steel Grating, Straight Bars 3" x ¼"
Reticuline Bars 2" x 3/16"

TYPE F

RECOMMENDED MAXIMUM PIPE SIZES	
INLET INSIDE WIDTH	PIPE SIZE
2'-6" (Type F)	18"
4'-0" (Type F)	30"
4'-10" / 5'-0" (Type G)	42"

Note: Recommended sizes are for concrete pipe. Sizes for other types of pipe must be verified for fit in accordance with Index No. 201. For larger pipe sizes see Note 3.

HORIZONTAL WALL REINF. SCHEDULES
TYPE F INLET (TABLE 1)

WALL DEPTH	SCHEDULE	AREA (in^2/ft)	MAX. SPACING BARS	MAX. SPACING WWF
0' - 4'	A12	0.20	12"	8"
4' - 7'	A6	0.20	6"	5"
7' - 12'	B5.5	0.24	5½"	5"
12' - 15'	Special I	0.267	5"	4"

TYPE G INLET (TABLE 2)

WALL DEPTH	SCHEDULE	AREA (in^2/ft)	MAX. SPACING BARS	MAX. SPACING WWF
0' - 3'	A12	0.20	12"	8"
3' - 7'	A6	0.20	6"	5"
7' - 10'	B5.5	0.24	5½"	5"
10' - 15'	C6.5	0.37	6½"	6"

TYPE G

GENERAL NOTES

1. These inlets are designed for use in ditches, medians, pavement areas, or other areas subject to heavy wheel loads, minimal debris, and bicycle traffic. This inlet may be placed in areas subject to occasional pedestrian traffic such as landscaped areas and pavement areas where pedestrians can walk around the inlet. When inlet is placed in areas subject to bicyle traffic, install filler bar when clearance or gap is greater than 1" as shown in Index 218 Inset B.
2. When alternate G grate is specified in plans, the grate is to be hot dipped galvanized after fabrication.
3. These inlets may be used with Alt. B structure bottoms, Index 200. The inlet and bottom combinations are to be paid for under the contract unit price for inlets (DT Bot) (Type F (or G)) (J Bot, Depth), Ea.
4. For supplemental details, see Index 201.
5. All reinforcing 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, as shown.
6. All dimensions are for both precast and cast-in-place inlets unless otherwise noted.

2006 FDOT Design Standards

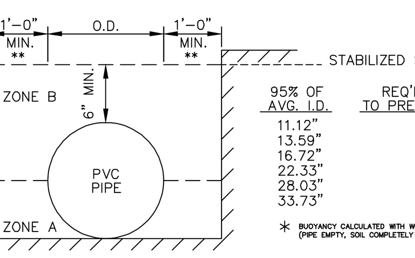
DITCH BOTTOM INLET TYPES F & G

Last Revision 07/01/05 | Sheet No. 1 of 1 | Index No. 233

**TRENCH WIDTH WILL BE 1'–0" MIN. TO 1'–6" MAX. ON EITHER SIDE OF THE PIPE

NOMINAL DIAMETER	AVERAGE O.D.	AVERAGE I.D.	95% OF AVG. I.D.	REQ'D BACKFILL * TO PREVENT UPLIFT
12"	12.8"	11.7"	11.12"	5.5"
15"	15.7"	14.3"	13.59"	7.25"
18"	19.2"	17.6"	16.72"	8.50"
24"	25.6"	23.5"	22.33"	11.25"
30"	32.2"	29.5"	28.03"	14.0"
36"	38.7"	35.5"	33.73"	17.0"

* BUOYANCY CALCULATED WITH WORSE CASE SITUATION. (PIPE EMPTY, SOIL COMPLETELY SATURATED)



PIPE
- SHALL BE MANUFACTURED TO ASTM F–949, WITH A MINIMUM 46 PSI PIPE STIFFNESS

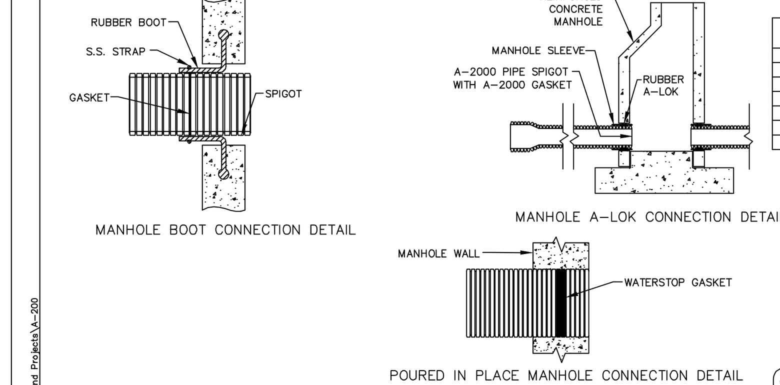
BACKFILL MATERIAL
- SAND (A1, A3), SILTY SAND (A–2–4, A–2–5) COMPACTED TO 95% MODIFIED PROCTOR T–180; 98% T–180 ROADWAYS/SHOULDER
  - ZONE A → BACKFILL TO BE SHOVEL SLICED AND WALKED INTO PLACE
  - ZONE B → BACKFILL TO BE COMPACTED WITH VIBRATORY EQUIPMENT

MANDREL TESTING
- MANDREL SHALL BE PULLED THROUGH PIPE NOT LESS THAN 30 DAYS AFTER INSTALLATION MANDREL SHALL BE SIZED AT 95% OF AVERAGE I.D.

MINIMUM HEIGHT OF COVER
- 6" BELOW STABILIZED SUBGRADE
- FOR HEAVY CONSTRUCTION LOADS, INCREASE MINIMUM HEIGHT OF COVER UP TO 30"

MITERED END SECTIONS
- CONCRETE COLLAR/APRON TO BE PLACED AROUND MITERED ENDS

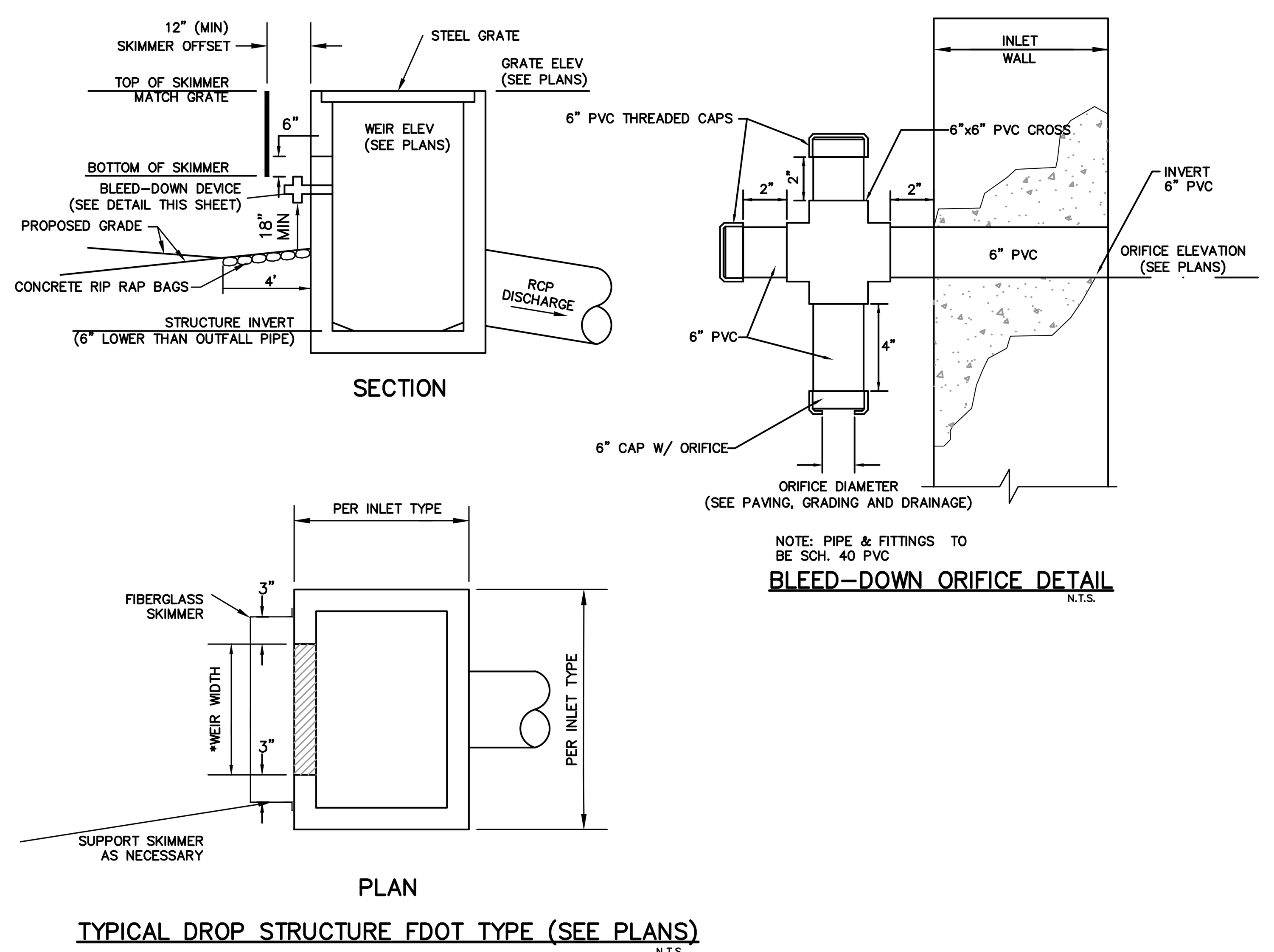
MANHOLE CONNECTION
ALL OF THESE CONNECTIONS APPROVED BY COUNTY



CONTECH CONSTRUCTION PRODUCTS INC.

A-2000 (ASTM F-949)

PASCO COUNTY PVC SPECIFICATION



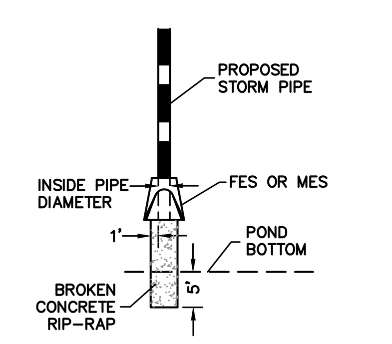
NOTE: PIPE & FITTINGS TO BE SCH. 40 PVC

BLEED-DOWN ORIFICE DETAIL
N.T.S.

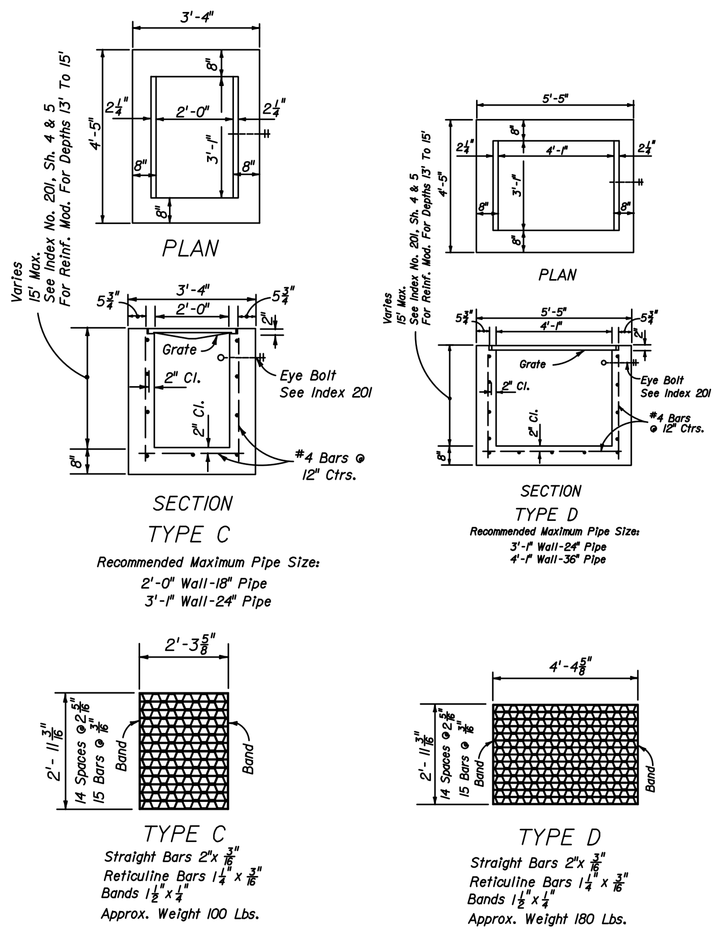
TYPICAL DROP STRUCTURE FDOT TYPE (SEE PLANS)
N.T.S.

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



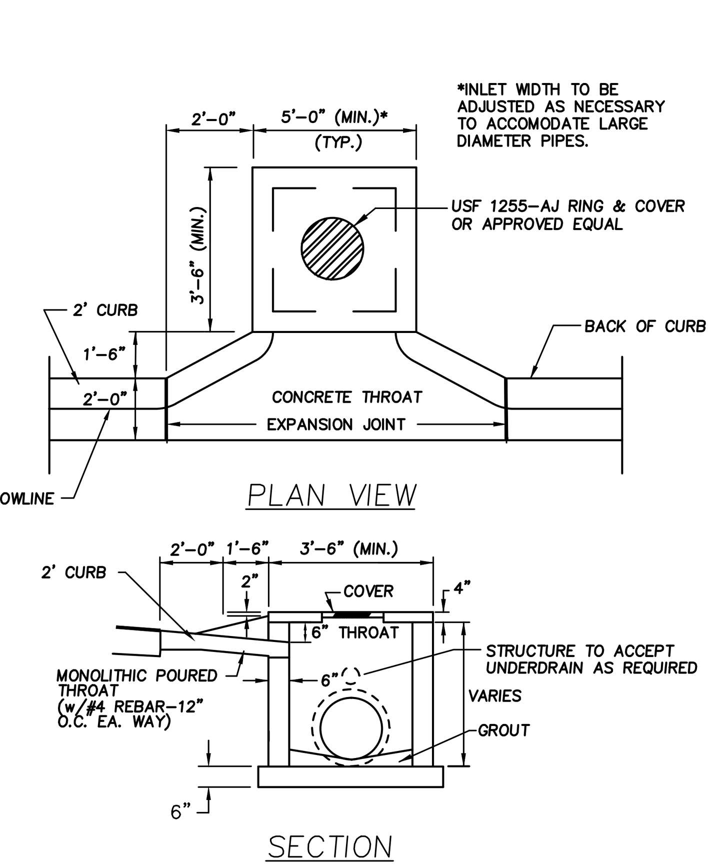
OUTFALL RIP RAP DETAIL
N.T.S.



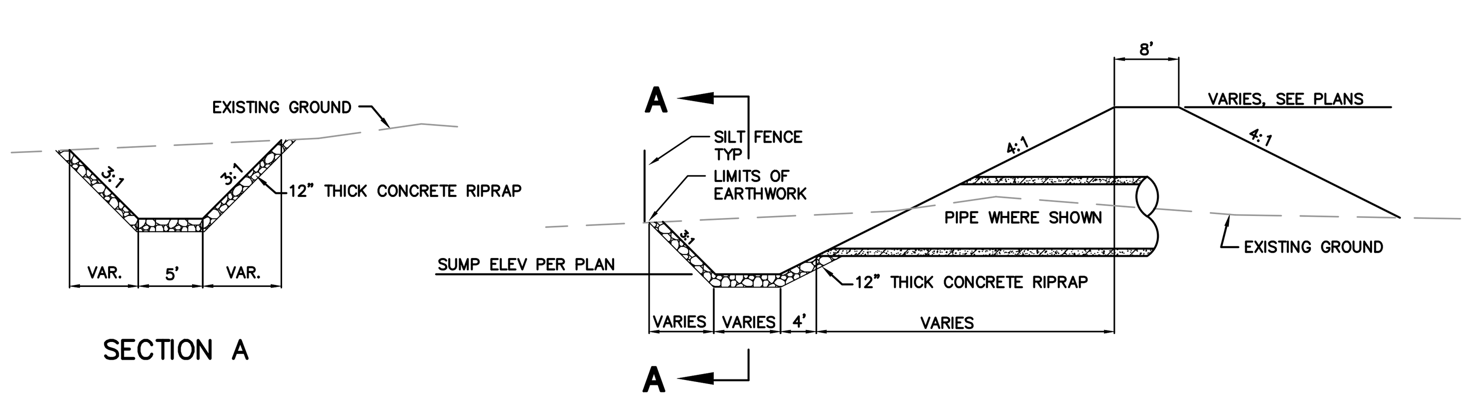
TYPE "C" INLET
F.D.O.T. INDEX #232 N.T.S.

TYPE "D" INLET
F.D.O.T. INDEX #232 N.T.S.

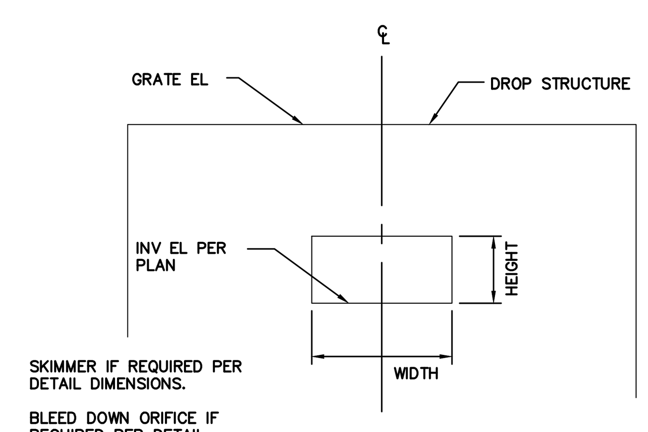
NOTICE: Steel Grates Are Required On Inlets With Traversable Slots And On Inlets where Bicycle Traffic Is Anticipated.



STANDARD TYPE 2 PRECAST CURB INLET
N.T.S.



TYPICAL OUTFALL SUMP DETAIL
N.T.S.

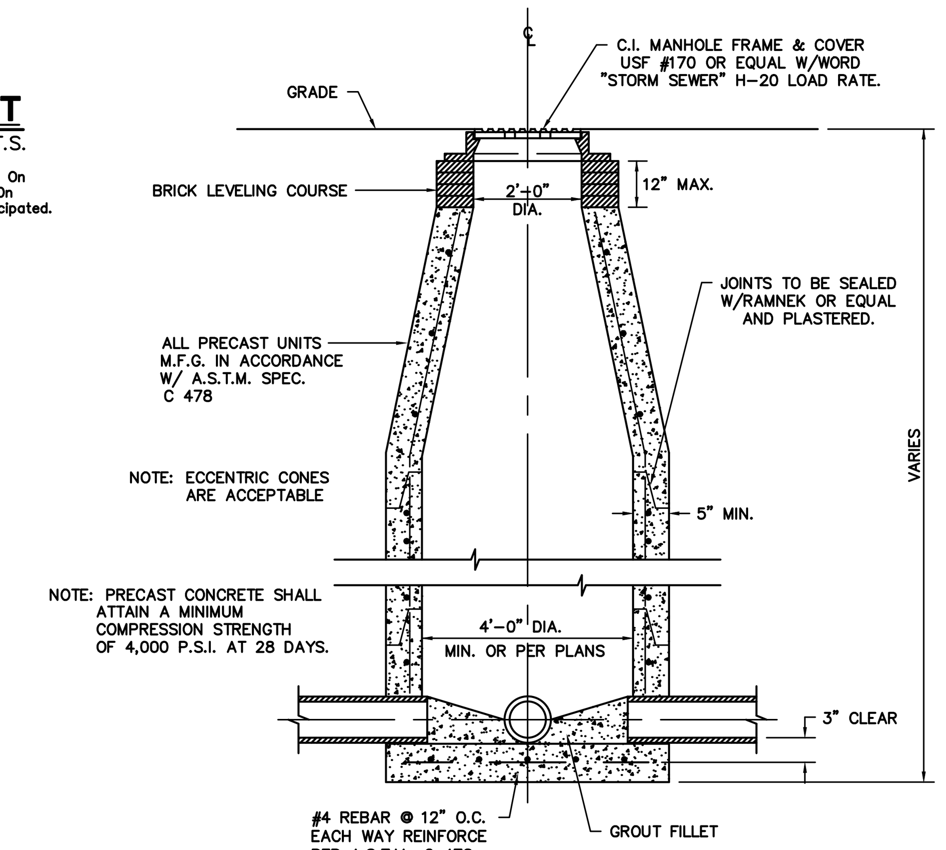


SKIMMER IF REQUIRED PER DETAIL DIMENSIONS.

BLEED DOWN ORIFICE IF REQUIRED PER DETAIL.

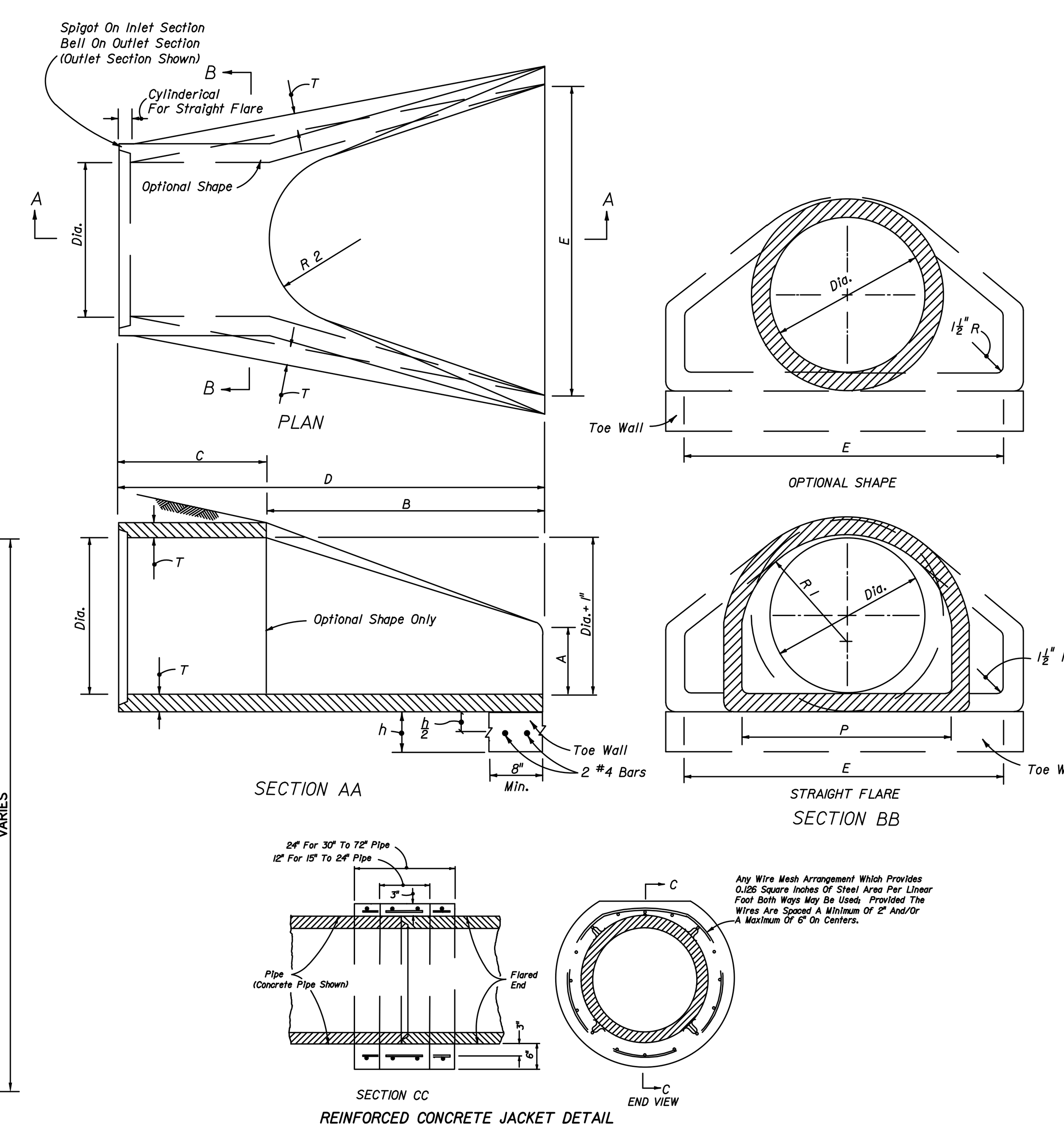
FRONT ELEVATION

RECTANGULAR ORIFICE DETAIL
N.T.S.



STORM MANHOLE
N.T.S.

DIA.	T	REINF REINF. SQ IN/LF	BELL Or SPIGOT	A	B	C	D	E	P	R 1	R 2	FLAT	WEIGHT (LBS.)	h	TOE WALL CLASS I CONC (Misc.) CY
18"	2½"	0.07	2½"	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 3/16"	16 13/16"	14"	4½"	1520	18"	.17
27"	3¼"	0.148	2½"	10½"	4'-0"	2'-1½"	6'-1½"	4'-6"	36"	18 9/16"	14½"	4½"	1930	18"	.19
30"	3½"	0.148	3"	1'-0"	4'-6"	1'-7¾"	6'-1¾"	5'-0"	37"	18½"	15"	5"	2190	21"	.24
36"	4"	0.148	3½"	1'-3"	5'-3"	2'-10¾"	8'-1¾"	6'-0"	47 13/16"	24 5/16"	20"	5½"	4100	21"	.29
42"	4½"	0.148	3¾"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	53⅞"	27½"	22"	5½"	5380	24"	.36
48"	5"	0.148	4¼"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	56½"	28½"	22"	5¾"	6550	24"	.39



FLARED END SECTION
DOT INDEX #270 N.T.S.

DESIGNED	JD
DRAWN	TR
CHECKED	AB
Q.C.	

THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.

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PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:

CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
PAVING, GRADING, AND DRAINAGE DETAILS

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
DATE: 2/20/14

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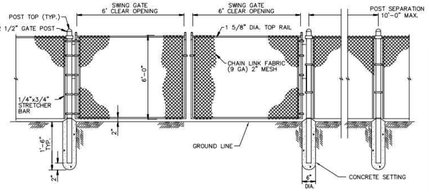
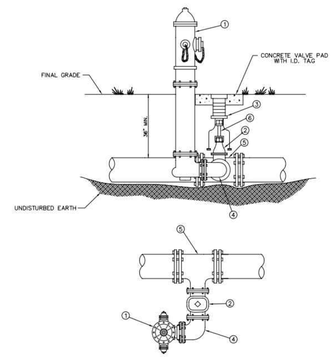


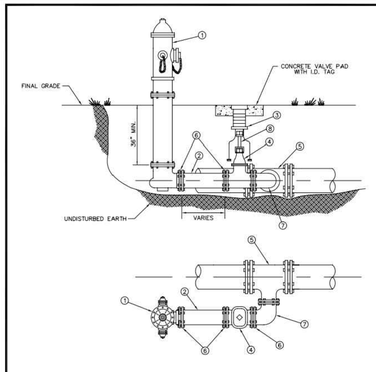
MATERIALS	
ITEM	DESCRIPTION
TYPE	CHAIN LINK
HEIGHT	4', 6', 8' – AS SPECIFIED BY COUNTY
FABRIC	9 GAUGE
POST	2–1/2" DIA. – .085 WALL THICKNESS (MINIMUM)
TOP RAILS	1–5/8" DIA. – .080 WALL THICKNESS (MINIMUM)
GATE	4' x 6' SWING TYPE W/ 2" DIA. – .085 WALL
	THICKNESS (MINIMUM)
	FRAMEWORK (LOCATED AS INDICATED ON METER
	SPEC. SHEET)
LATCH	FORK TYPE – PADLOCK COMPATIBLE

CREATED 02/24/03 REVISED	FENCE SPECIFICATIONS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 04



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	HYDRANT, FIRE (5 1/4" VALVE MIN.), PAINTED YELLOW
2	1	6" VALVE, GATE, MJ RESILIENT WEDGE
3	1	BOX, VALVE SLIP TYPE
4	1	6" BEND, ANCHORING, D.I.
5	1	TEE, ANCHORING, MJ
6	*	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 25



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

PIPE RESTRAINT LENGTHS IN FEET COMMON FITTINGS

WATER MAINS - TEST PRESSURE 150 PSI						
		FITTING TYPE				
		11-1/4°	22-1/2°	45°	90°	DEAD END
PIPE SIZE	4"	2'	4'	8'	20'	45'
	6"	3'	6'	12'	28'	63'
	8"	4'	7'	15'	36'	82'
	10"	4'	9'	18'	43'	98'
	12"	5'	10'	21'	50'	116'
	16"	6'	13'	26'	63'	148'
	20"	7'	15'	31'	76'	179'
	24"	9'	17'	36'	87'	208'

FORCE MAINS - TEST PRESSURE 100 PSI						
		FITTING TYPE				
		11-1/4°	22-1/2°	45°	90°	DEAD END
PIPE SIZE	4"	1'	3'	6'	13'	30'
	6"	2'	4'	8'	19'	42'
	8"	2'	5'	10'	24'	55'
	10"	3'	6'	12'	29'	66'
	12"	3'	7'	14'	34'	77'
	16"	4'	8'	18'	42'	99'
	20"	5'	10'	21'	50'	119'
	24"	6'	11'	24'	58'	139'

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE FITTING ALONG THE PIPE IN BOTH DIRECTIONS (EXCEPT DEAD ENDS).

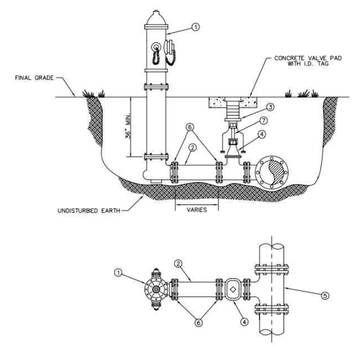
CREATED 02/24/03 REVISED	RESTRAINED JOINT TABLE COMMON FITTINGS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 31

PIPE RESTRAINT LENGTHS IN FEET TEES (BRANCH SIDE)

WATER MAINS - TEST PRESSURE 150 PSI										
		BRANCH SIZE								
		3"	4"	6"	8"	10"	12"	16"	20"	24"
RUN SIZE	3"	6'	14'	30'	—	—	—	—	—	—
	4"	2'	11'	28'	44'	—	—	—	—	—
	6"	1'	2'	22'	40'	52'	—	—	—	—
	8"	1'	1'	16'	35'	48'	62'	—	—	—
	10"	1'	1'	10'	30'	44'	58'	83'	—	—
	12"	1'	1'	3'	25'	40'	55'	80'	103'	—
	16"	1'	1'	1'	14'	31'	48'	75'	98'	119'
	20"	1'	1'	1'	2'	22'	40'	69'	94'	116'
	24"	1'	1'	1'	1'	11'	31'	63'	89'	111'

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE TEE ALONG THE BRANCH FOR THE DISTANCE INDICATED. A MINIMUM OF 5 FEET OF RESTRAINED PIPE MUST BE INSTALLED ON BOTH RUNS OF THE TEE. MEGALUG TYPE RESTRAINERS ARE REQUIRED ON ALL JOINTS.

CREATED 02/24/03 REVISED	RESTRAINED JOINT TABLE TEES (BRANCH SIDE)	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 32



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	*	VALVE EXTENSION ROD, AS NECESSARY (3' MAX. BELOW GRADE)

CREATED 02/24/03 REVISED	FIRE HYDRANT PERPENDICULAR TO THE MAIN	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
	PASCO COUNTY UTILITIES	DETAIL 27

POTABLE WATER/SANITARY SEWER CLEARANCE REQUIREMENTS

Vertical Clearance at Crossings:

Gravity sewers or force mains crossing under water mains 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. The crossing shall be arranged so that the sewer joints and water joints will be equidistant from the point of crossing with no less than 10 feet between any two joints. Where the minimum 18–in. separation cannot be maintained, one of the following methods of protection shall be utilized:

a. the sewer shall be encased in concrete for 20 feet centered on the crossing (10–ft. linear separation between joints);
b. the sewer shall be installed as D.I.P. for 20 feet centered on the crossing (10–ft. linear separation between joints);
c. the sewer shall be designed and constructed to the same specifications as water pipe, and shall be pressure tested at 150 psi to assure water tightness prior to backfilling; or
d. either the water main or the sewer line may be encased in a watertight carrier pipe which extends 10 feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the Department for use in water main construction.

One of the above descibed methods shall also be utilized when there is no alternative to sewers crossing over water mains. In such instances, adequate structural support shall be provided for the sewer to maintain line and grade.

Horizontal Separation Between Parallel Lines:

Gravity sewers or force mains shall be installed at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10–ft. separation, the water main shall be installed in a separate trench or on an undisturbed earth shelf located on one side of the sewer and at an elevation so that the bottom of the water main is at least 18 inches above the top of the sewer, and the water and sewer joints shall be staggered.

If it is impossible to obtain proper horizontal and vertical separation as described above, both the water main and sewer must be constructed of slip–on or mechanical joint pipe complying with public water supply design standards of the Florida Department of Environmental Protection and be pressure tested to 150 psi to assure watertightness before backfilling.

POTABLE WATER/STORM SEWER CLEARANCE REQUIREMENTS

PARALLEL INSTALLATION

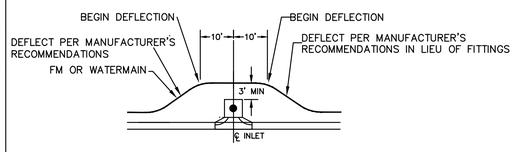
Water mains shall be laid at least 10 feet horizontally from any existing or proposed storm sewer. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10–ft. separation the water main shall be installed in a separate trench or on an undisturbed earth shelf located on one side of the storm sewer and at an elevation so that the bottom of the water main is at least 18 inches above the top of the storm sewer.

CROSSINGS

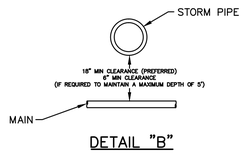
Water mains crossing storm sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the storm sewer. This shall be the case where the water main is either above or below the storm sewer. At crossings, one full length of water pipe shall be located so both joints will be as far from the storm as possible. Special structural support for the water and storm sewer pipes may be required.

STORM SEWER MANHOLES

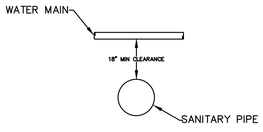
No water pipe shall pass through or come in contact with any part of a storm sewer manhole.



DETAIL "A"



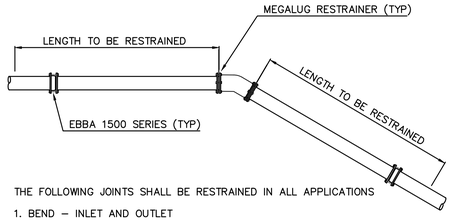
DETAIL "B"



DETAIL "C"

P.V.C. PIPE RESTRAINT

NOTE: THRUST RESTRAINT AT FITTINGS AND VALVES SHALL BE BY USE OF EBBA IRON MEGALUG RESTRAINERS. THRUST RESTRAINT BETWEEN PIPE JOINTS SHALL BE BY EBBA IRON SERIES 1500 RESTRAINERS.

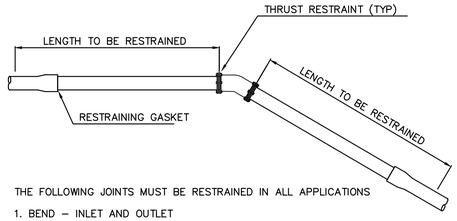


THE FOLLOWING JOINTS SHALL BE RESTRAINED IN ALL APPLICATIONS

1. BEND – INLET AND OUTLET
2. TEE – OUTLET BRANCH
3. OFFSETS – INLET AND OUTLET
4. CAPS
5. PLUGS
6. LAST TWO (2) JOINTS ON A DEAD END RUN (MIN 36')
7. LAST TWO (2) JOINTS ON A HYDRANT RUNOUT (MIN 36')

DUCTILE IRON PIPE RESTRAINT

THRUST RESTRAINT ON SLIPJOINT 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.



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

ANGULAR DEFLECTION:

NOTE: NO DEFLECTION SHALL BE ALLOWED AT THE JOINT. PIPE CURVATURE SHOULD BE ACCOMPLISHED BY BENDING THE PIPE RATHER THAN DEFLECTING THE JOINTS. THE BENT PIPE IS ASSUMED TO FORM A TRUE ARC, I.E. THE PIPE IS CURVED UNIFORMLY THROUGHOUT ITS LENGTH AS FOLLOWS:

PIPE SIZE (INCHES)	MINIMUM ALLOWABLE RADIUS (FEET)
4	100*
6	150*
8	200*
10	250*
12	300*

*VERIFY WITH PIPE MANUFACTURER

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DESIGNED JD
DRAWN TR
CHECKED AB
Q.C.

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SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
UTILITY DETAILS

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 23 OF 34

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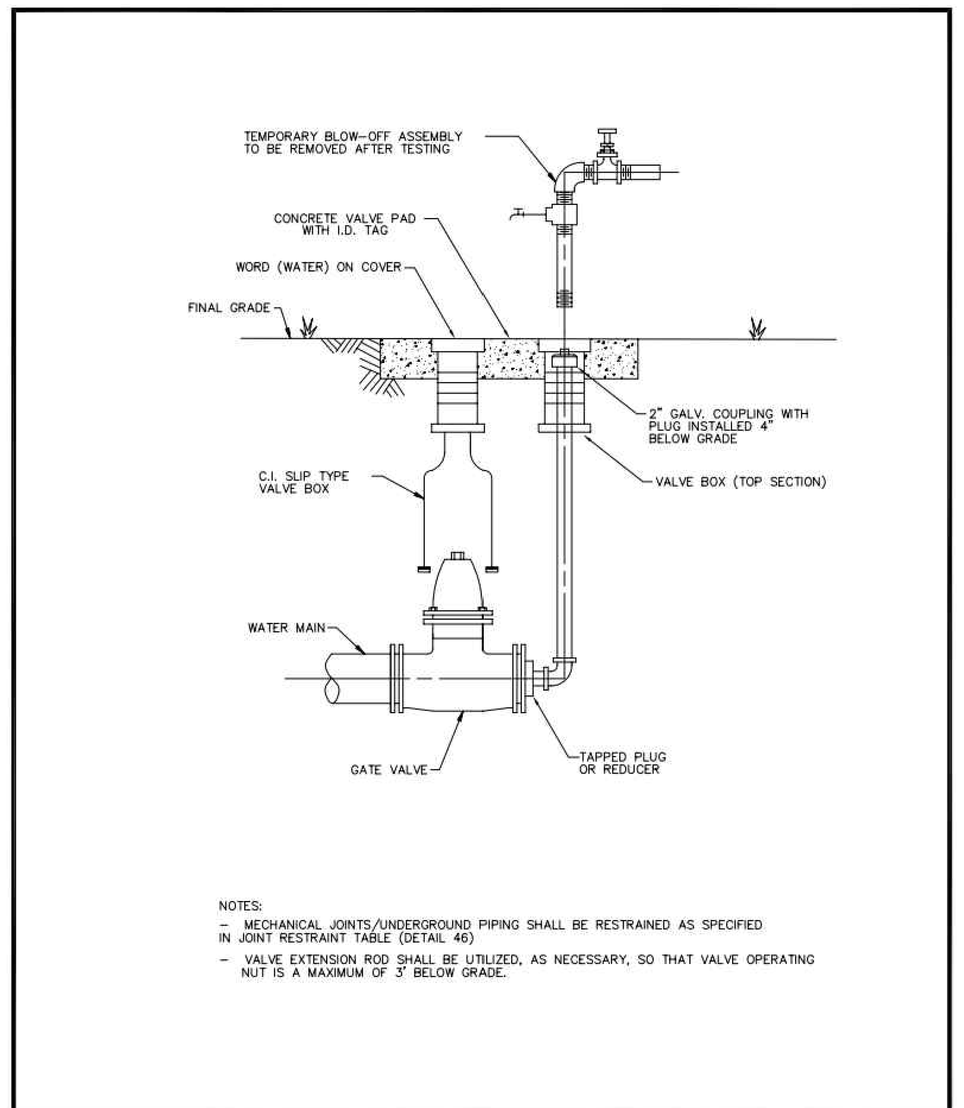
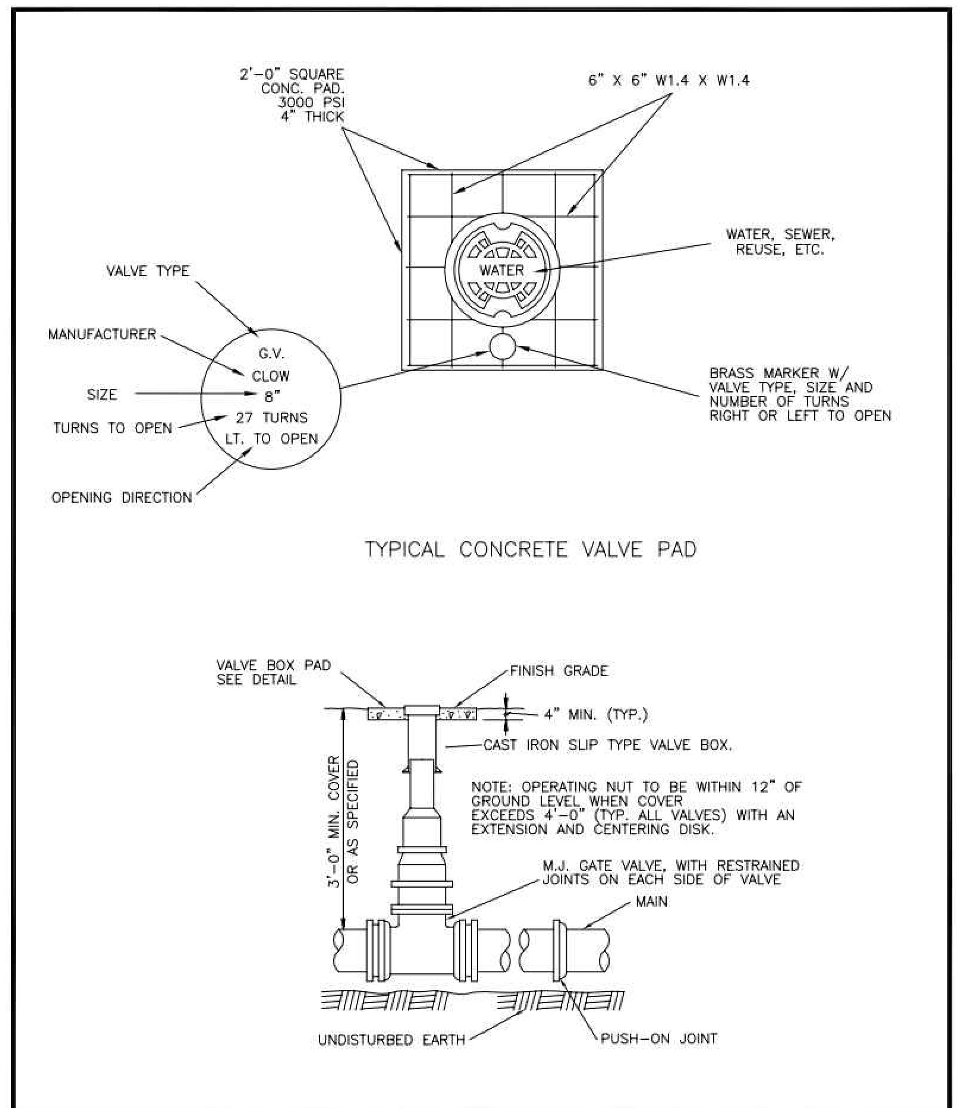
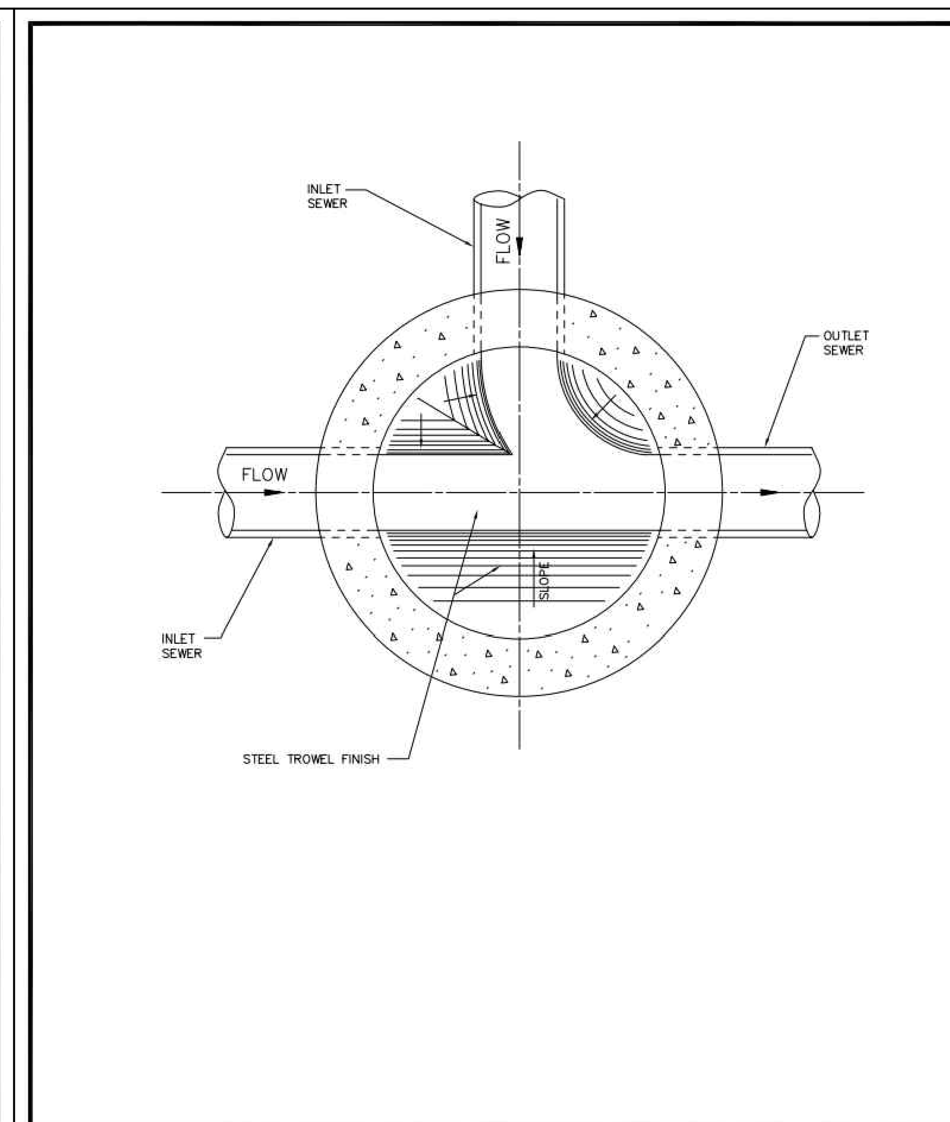


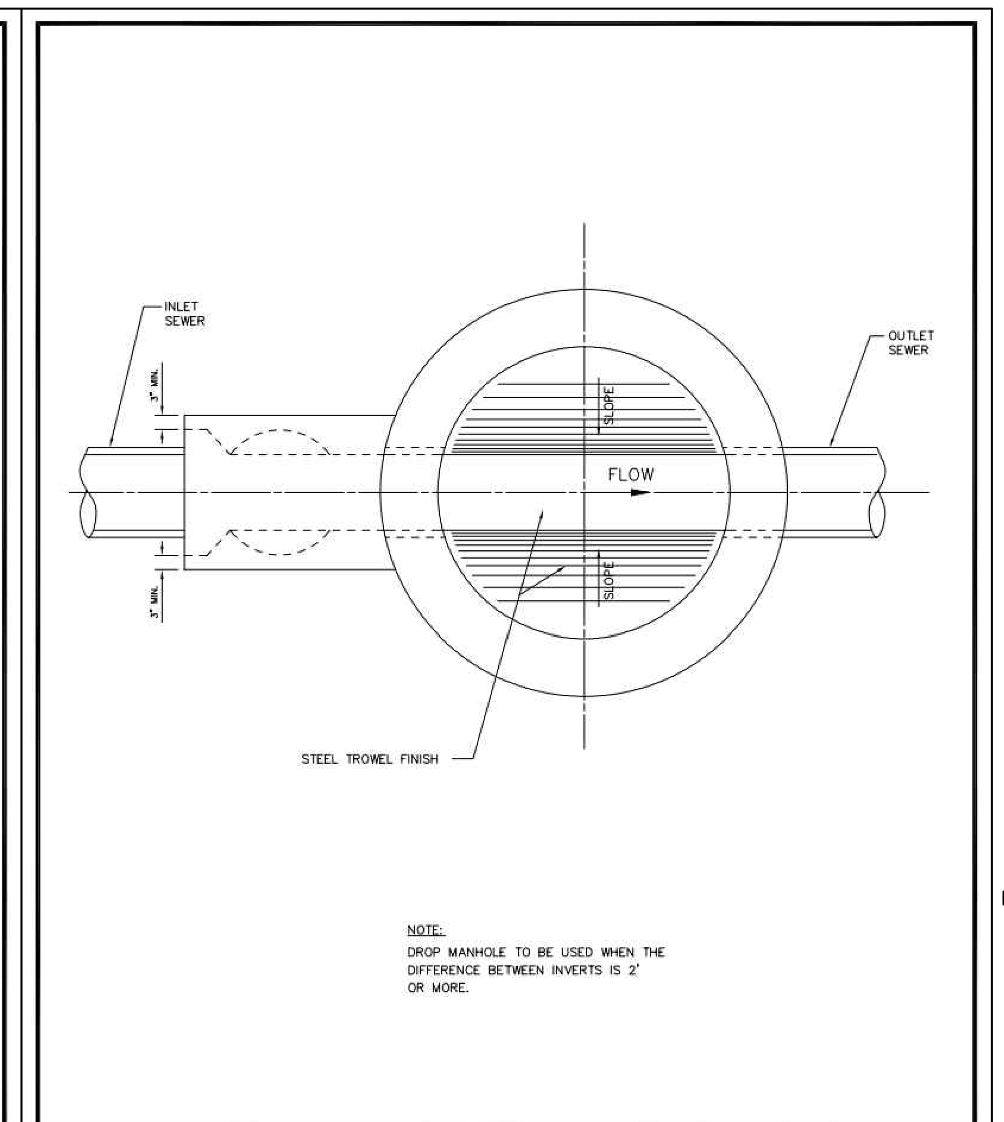
CREATED 02/24/03 REVISED — PERMANENT BLOW-OFF DETAIL — PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL — PASCO COUNTY UTILITIES — DETAIL 28



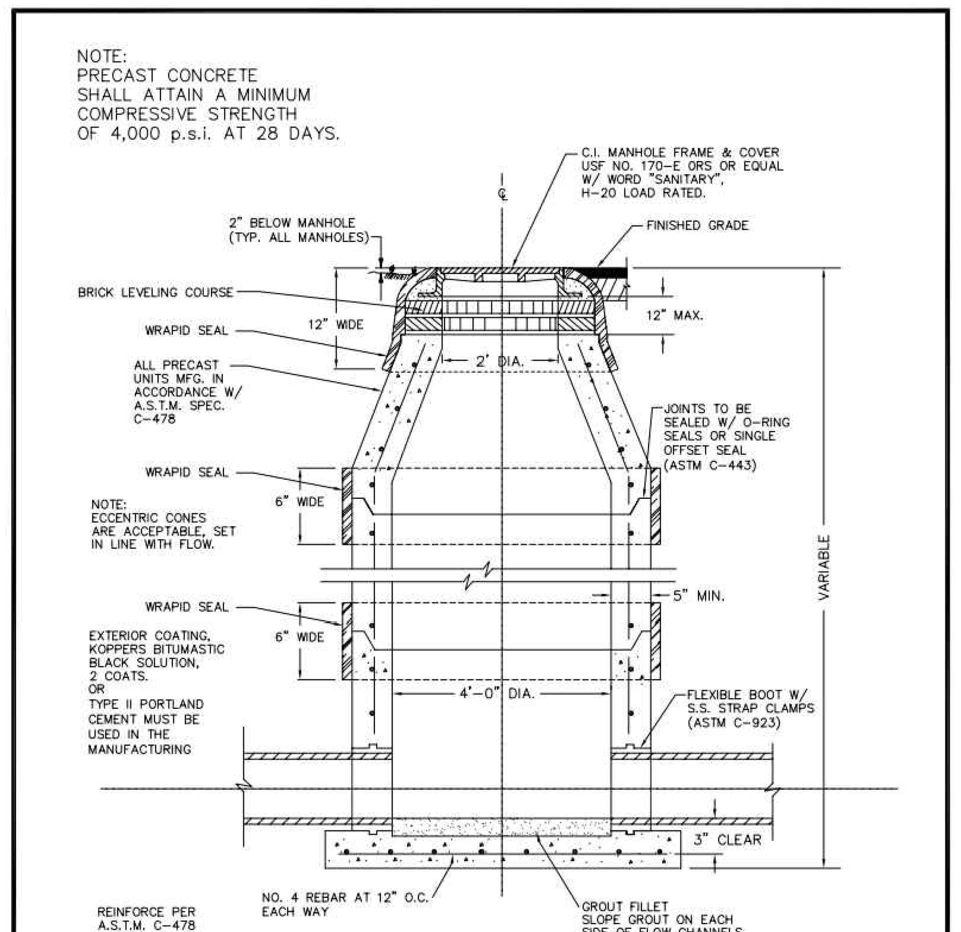
CREATED 02/24/03 REVISED — VALVE BOX DETAIL SLIP TYPE — PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL — PASCO COUNTY UTILITIES — DETAIL 30



CREATED 02/24/03 REVISED — STANDARD MANHOLE (BENCH AND INVERTS) — PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL — PASCO COUNTY UTILITIES — DETAIL 39

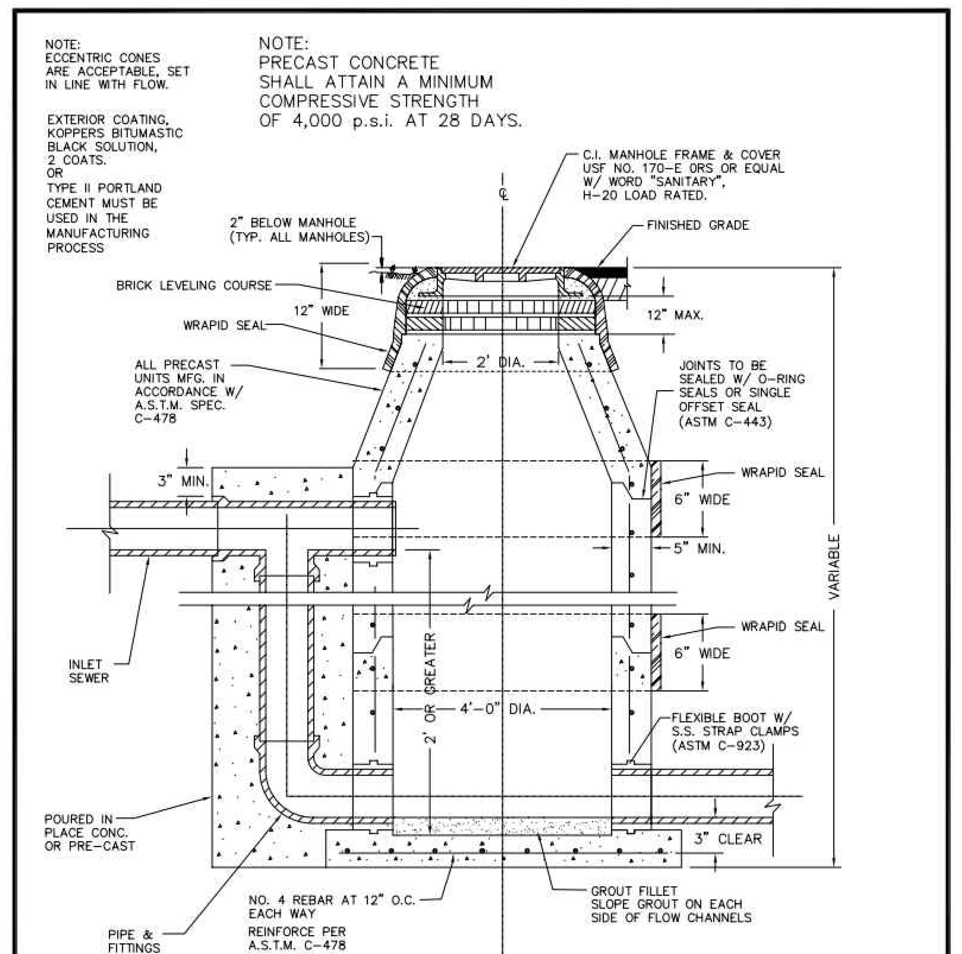


CREATED 02/24/03 REVISED — DROP MANHOLE (BENCH AND INVERTS) — PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL — PASCO COUNTY UTILITIES — DETAIL 40



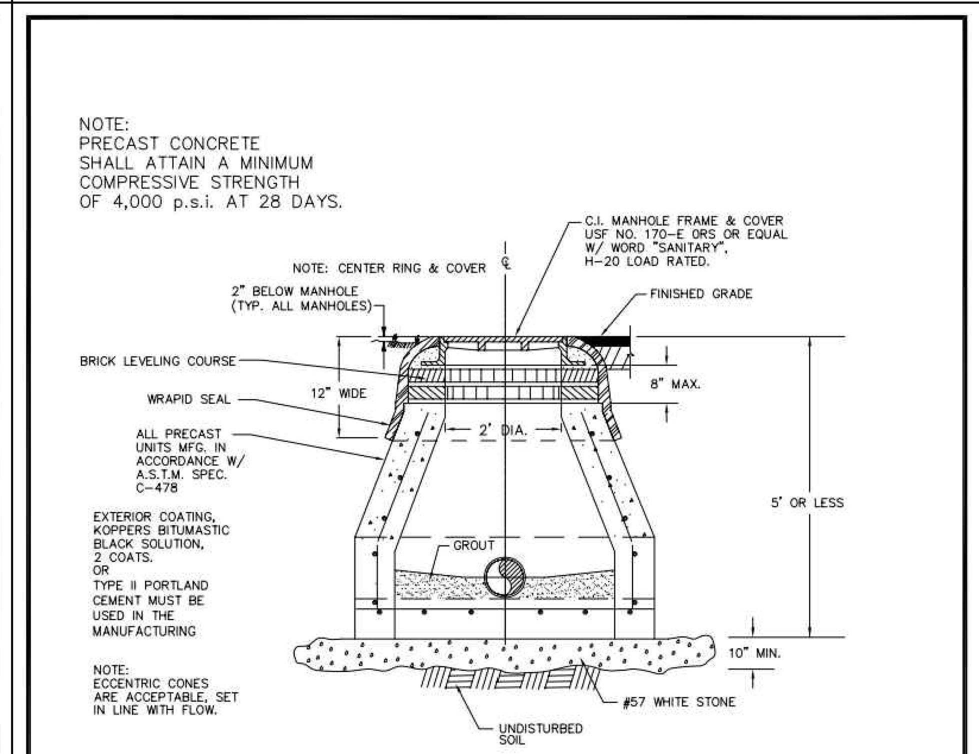
NOTE:
1. WRAPID SEAL MUST BE USED ON ALL JOINTS, CASTINGS AND RISER RINGS: ON ALL JOINTS ON AIR RELEASES, MANHOLES, GREASE/WATER, OIL/WATER SEPARATORS, AND WETWELLS.
2. WRAPID SEAL MUST BE USED IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.
3. PASCO COUNTY SHALL HAVE THE OPTION OF SPECIFYING THE TYPE OF INTERIOR LINING TO BE INSTALLED FOR EACH INDIVIDUAL MANHOLE.
4. PASCO COUNTY SHALL HAVE THE OPTION OF REQUIRING A NEGATIVE PRESSURE TEST PER ASTM C-1244
5. LIFT HOLES MUST NOT PENETRATE THE WALLS

CREATED 02/24/03 REVISED — STANDARD MANHOLE — PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL — PASCO COUNTY UTILITIES — DETAIL 41



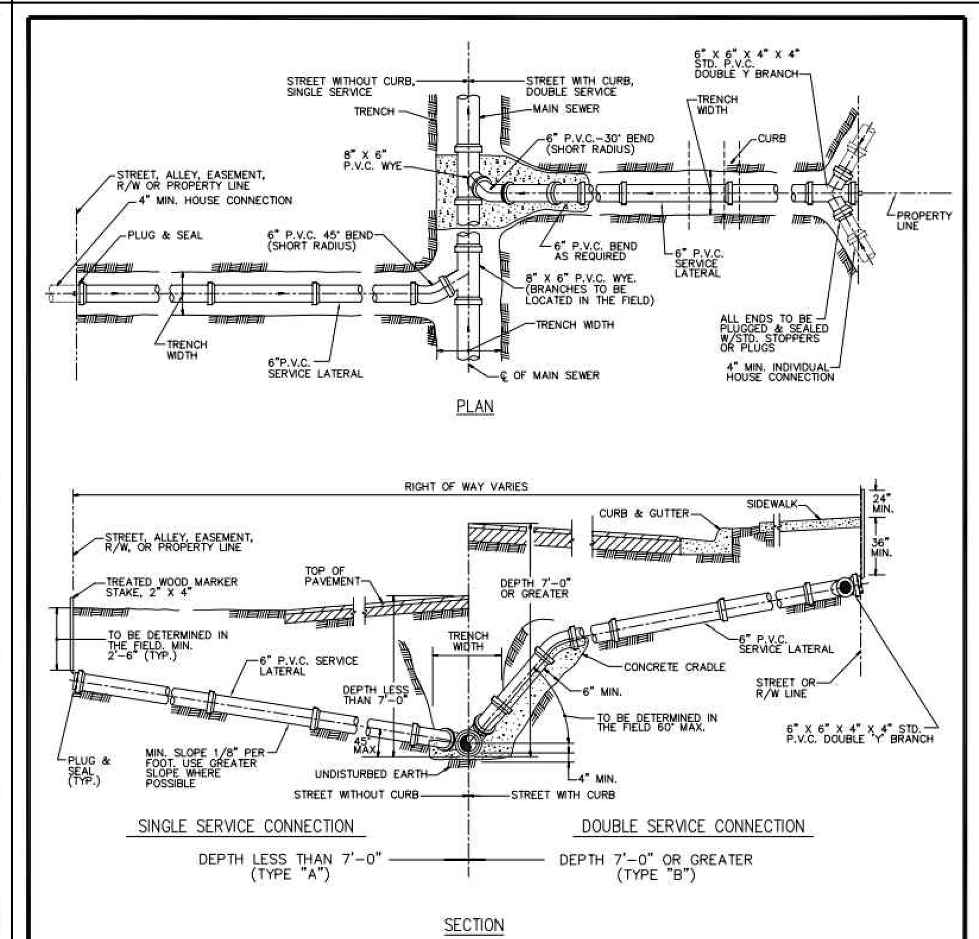
NOTE:
1. WRAPID SEAL MUST BE USED ON ALL JOINTS, CASTINGS AND RISER RINGS: ON ALL JOINTS ON AIR RELEASES, MANHOLES, GREASE/WATER, OIL/WATER SEPARATORS, AND WETWELLS.
2. WRAPID SEAL MUST BE USED IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.
3. PASCO COUNTY SHALL HAVE THE OPTION OF SPECIFYING THE TYPE OF INTERIOR LINING TO BE INSTALLED FOR EACH INDIVIDUAL MANHOLE.
4. PASCO COUNTY SHALL HAVE THE OPTION OF REQUIRING A NEGATIVE PRESSURE TEST PER ASTM C-1244
5. LIFT HOLES MUST NOT PENETRATE THE WALLS

CREATED 02/24/03 REVISED — DROP MANHOLE — PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL — PASCO COUNTY UTILITIES — DETAIL 42



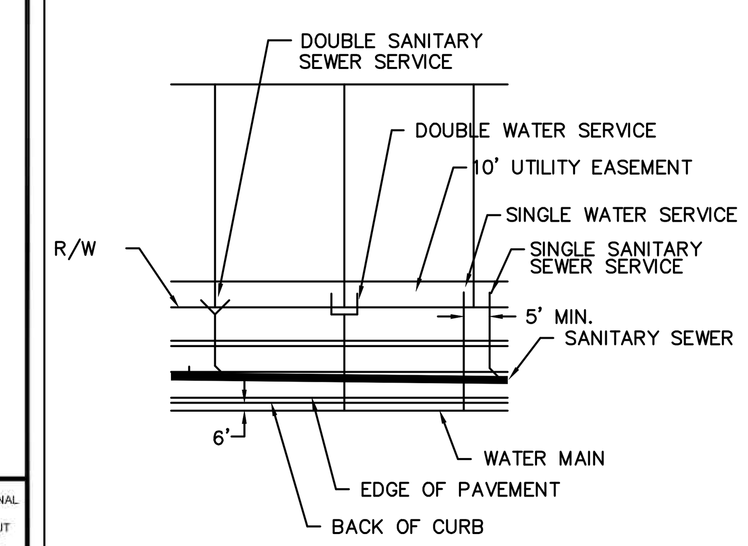
NOTE:
– A BEDDING OF CLASS I, CLASS II, OR CLASS III MATERIAL SHALL BE REQUIRED WHEN THE MANHOLE BOTTOM CANNOT BE INSTALLED ON UNDISTURBED SOIL OR IF THE NATIVE SOIL IS CLASS IV OR CLASS V MATERIAL.
– THIS TYPE OF CONSTRUCTION SHALL BE LIMITED TO DEPTHS OF (0-5) FEET.
– EXTERIOR COATING SHALL BE KOPPERS BITUMASTIC BLACK SOLUTION, 2 COATS.
– WRAPID SEAL MUST BE USED ON ALL JOINTS, CASTINGS AND RISER RINGS. WRAPID SEAL MUST BE USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
– PASCO COUNTY SHALL HAVE THE OPTION OF SPECIFYING THE TYPE OF INTERIOR LINING TO BE INSTALLED FOR EACH INDIVIDUAL MANHOLE.
– PASCO COUNTY SHALL HAVE THE OPTION OF REQUIRING A NEGATIVE PRESSURE TEST PER ASTM C-1244
– LIFT HOLES MUST NOT PENETRATE THE WALLS

CREATED 02/24/03 REVISED — MANHOLE SHALLOW CONSTRUCTION (CLOSED BOTTOM) — PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL — PASCO COUNTY UTILITIES — DETAIL 43



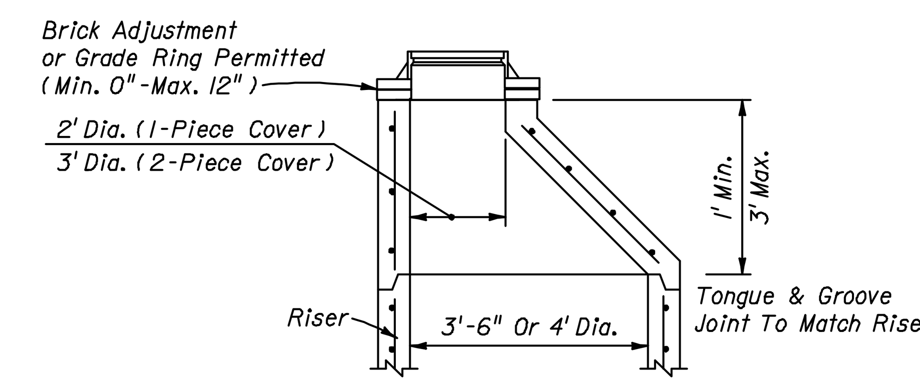
NOTE:
– CONTRACTOR SHALL MAKE, ON A CLEAN SET OF PLANS, THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE OF EACH SERVICE LATERAL AND THEN GIVE TO ENGINEER FOR RECORD PURPOSES.
– PROVIDE 2" x 4" PRESSURE TREATED WOOD MARKER STAKE AT ALL SANITARY SERVICES (INCLUDE IN PIPE PRICE), TOP OF STAKE TO BE PAINTED WITH GREEN PAINT.
– THE MINIMUM DIAMETER OF ALL SERVICE LATERALS SHALL BE 6 INCHES.

CREATED 02/24/03 REVISED — SEWER LATERAL CONNECTION — PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL — PASCO COUNTY UTILITIES — DETAIL 44



TYPICAL UTILITY SERVICES

N.T.S.



FDOT TYPE 8 PRECAST ECCENTRIC CONE

N.T.S.

DESIGNED	JD
DRAWN	TR
CHECKED	AB
Q.C.	

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SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
UTILITY DETAILS

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EPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 24 OF 34

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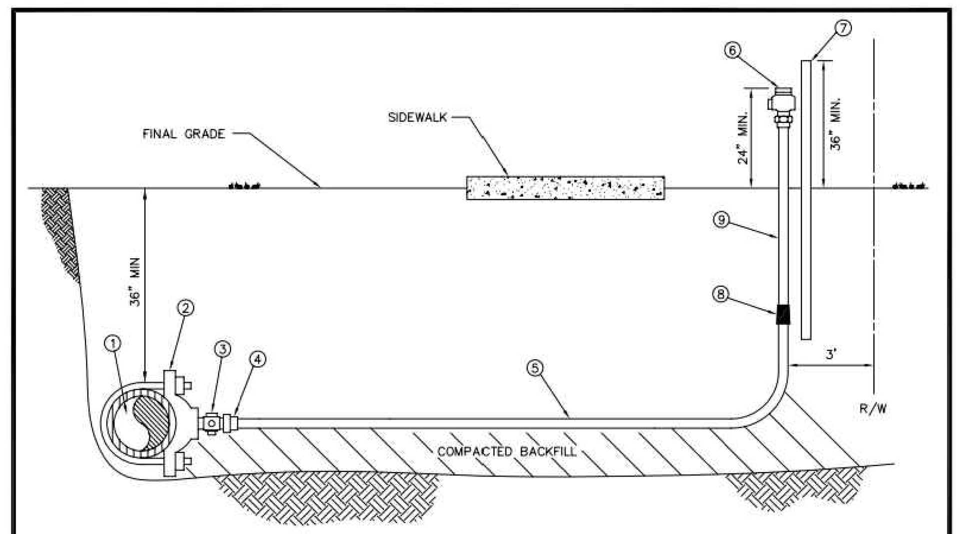

MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	*	PIPE, PVC (DR-18) OR D.I.P.
2	1	SADDLE, SERVICE W/ 1" F.I.P. THREAD
3	1	1" CORPORATION (M.I.P. x COMP.)
4	1	1" INSERT (STAINLESS STEEL)
5	*	1" TUBING, POLYETHYLENE
6	1	3/4" WATER OR 1" REUSE CURB STOP BALL
		VALVE W/ LOCK WINGS (F.I.P. x COMP.)
7	1	2" x 4" P.T. MARKER STAKE
8	1	1" x 3/4" COUPLING (COMP. x COMP.) WATER ONLY
9	1	3/4" WATER OR 1" REUSE TUBING, POLYETHYLENE 4'

NOTES:
- ALL FITTINGS FOR POLYETHYLENE TUBING ARE BRASS COMPRESSION TYPE.
- A VALVE BOX MAY BE REQUIRED AS SPECIFIED BY THE ENGINEER.
- CURB STOP TO TERMINATE 24" ABOVE GROUND AT R/W LINE.
- REUSE CURB STOPS = 1" / WATER CURB STOPS = 3/4"
- TUBING TO BE YARDLEY 3406 OR EQUAL.
- SADDLES 2" – 3" TO BE BRASS FULL CIRCLE TYPE.
- SADDLES 4" AND LARGER TO BE D.I. DUAL STRAP TYPE.
- CURB STOPS TO BE TIED TO MARKER STAKE.
- SADDLE MAY BE INSTALLED AT ANGLE (WITHIN 45° OF HORIZONTAL).
- MARKER STAKES PAINTED SAFETY BLUE FOR WATER, PURPLE FOR REUSE.

CREATED 02/24/03
REVISED

SINGLE NEAR SIDE WATER SERVICE – 3/4"
SINGLE NEAR SIDE REUSE SERVICE – 1"
POLYETHYLENE TUBING

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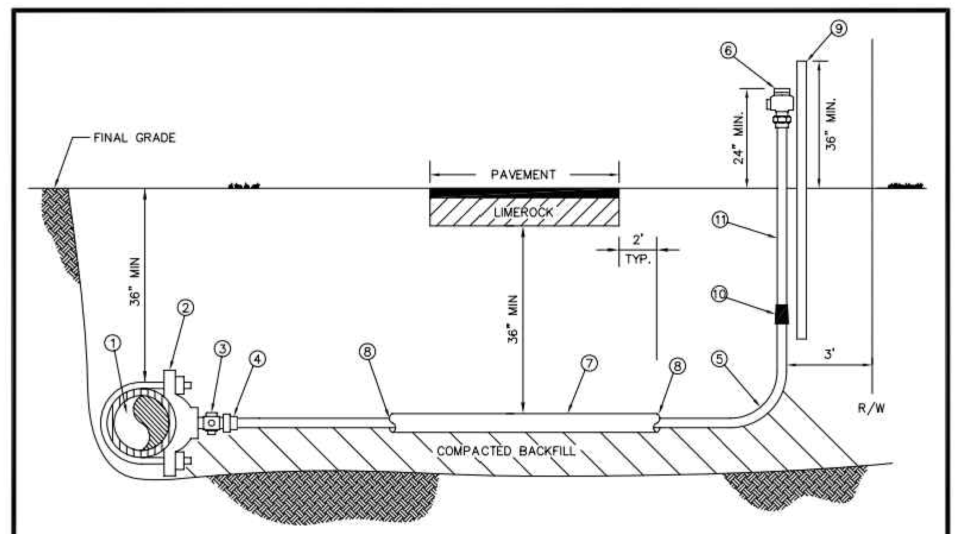
PASCO COUNTY UTILITIES — DETAIL 17



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	*	PIPE, PVC (DR-18) OR D.I.P.
2	1	SADDLE, SERVICE W/ 1" F.I.P. THREAD
3	1	1" CORPORATION (M.I.P. x COMP.)
4	1	1" INSERT (STAINLESS STEEL)
5	*	1" TUBING, POLYETHYLENE
6	1	3/4" WATER OR 1" REUSE CURB STOP BALL
		VALVE W/ LOCK WINGS (F.I.P. x COMP.)
7	*	2" CASING, PVC OR HDPE – 2' BEYOND EDGE PAVEMENT
8	*	SEALER, RAM-NEK
9	1	2" x 4" P.T. MARKER STAKE
10	1	1" x 3/4" COUPLING (COMP. x COMP.) WATER ONLY
11	1	3/4" WATER OR 1" REUSE TUBING, POLYETHYLENE 4'

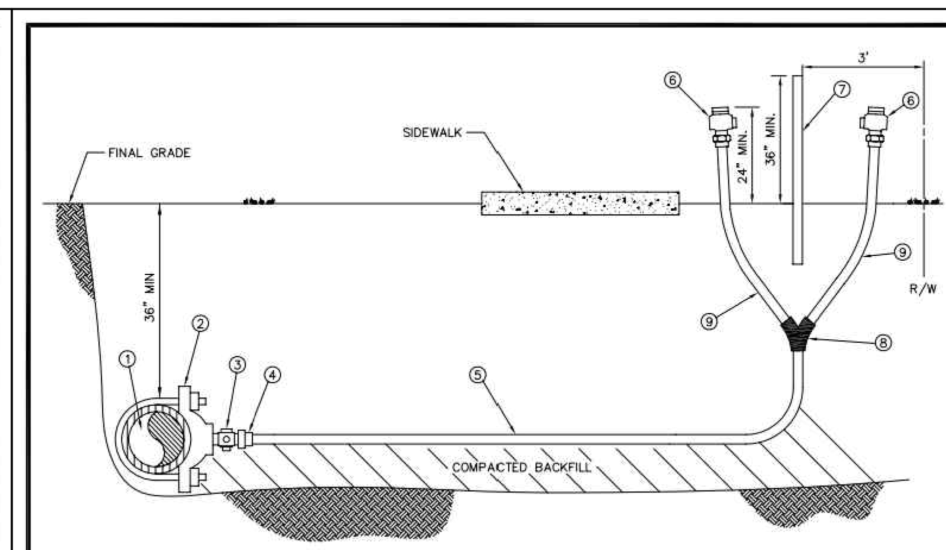
NOTES:
- ALL FITTINGS FOR POLYETHYLENE TUBING ARE BRASS COMPRESSION TYPE.
- A VALVE BOX MAY BE REQUIRED AS SPECIFIED BY THE ENGINEER.
- CURB STOP TO TERMINATE 24" ABOVE GROUND AT R/W LINE.
- REUSE CURB STOPS = 1" / WATER CURB STOPS = 3/4"
- TUBING TO BE YARDLEY 3406 OR EQUAL.
- SADDLES 2" – 3" TO BE BRASS FULL CIRCLE TYPE.
- SADDLES 4" AND LARGER TO BE D.I. DUAL STRAP TYPE.
- CURB STOPS TO BE TIED TO MARKER STAKE.
- SADDLE MAY BE INSTALLED AT ANGLE (WITHIN 45° OF HORIZONTAL).
- MARKER STAKES PAINTED SAFETY BLUE FOR WATER, PURPLE FOR REUSE.

CREATED 02/24/03
REVISED

SINGLE FAR SIDE WATER SERVICE – 3/4"
SINGLE FAR SIDE REUSE SERVICE – 1"
POLYETHYLENE TUBING

PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL

PASCO COUNTY UTILITIES — DETAIL 18



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	*	PIPE, PVC (DR-18) OR D.I.P.
2	1	SADDLE, SERVICE W/ 1" F.I.P. THREAD
3	1	1" CORPORATION (M.I.P. x COMP.)
4	1	1" INSERT (STAINLESS STEEL)
5	*	1" TUBING, POLYETHYLENE
6	1	3/4" WATER OR 1" REUSE CURB STOP BALL
		VALVE W/ LOCK WINGS (F.I.P. x COMP.)
7	1	2" x 4" P.T. MARKER STAKE
8	1	1" x 3/4" WYE BRANCH (COMP. x COMP.) WATER ONLY
		1" x 1" WYE BRANCH (COMP. x COMP.) REUSE ONLY
9	1	3/4" WATER OR 1" REUSE TUBING, POLYETHYLENE 4'

NOTES:
- ALL FITTINGS FOR POLYETHYLENE TUBING ARE BRASS COMPRESSION TYPE.
- A VALVE BOX MAY BE REQUIRED AS SPECIFIED BY THE ENGINEER.
- CURB STOP TO TERMINATE 24" ABOVE GROUND AT R/W LINE.
- REUSE CURB STOPS = 1" / WATER CURB STOPS = 3/4"
- TUBING TO BE YARDLEY 3406 OR EQUAL.
- SADDLES 2" – 3" TO BE BRASS FULL CIRCLE TYPE.
- SADDLES 4" AND LARGER TO BE D.I. DUAL STRAP TYPE.
- CURB STOPS TO BE TIED TO MARKER STAKE.
- SADDLE MAY BE INSTALLED AT ANGLE (WITHIN 45° OF HORIZONTAL).
- MARKER STAKES PAINTED SAFETY BLUE FOR WATER, PURPLE FOR REUSE.

CREATED 02/24/03
REVISED

DOUBLE NEAR SIDE WATER SERVICE – 3/4"
DOUBLE NEAR SIDE REUSE SERVICE – 1"
POLYETHYLENE TUBING

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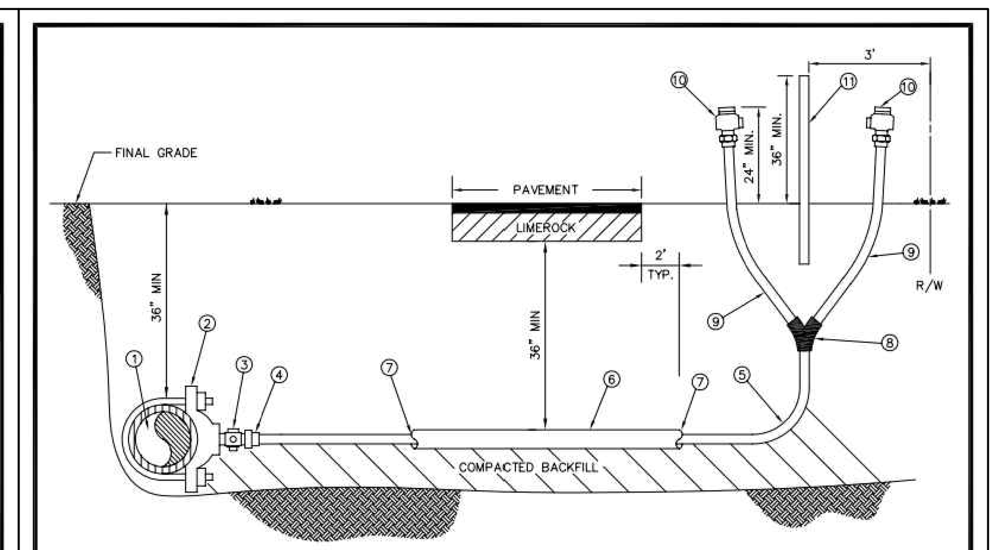
PASCO COUNTY UTILITIES — DETAIL 19



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	*	PIPE, PVC (DR-18) OR D.I.P.
2	1	SADDLE, SERVICE W/ 1" F.I.P. THREAD
3	1	1" CORPORATION (M.I.P. x COMP.)
4	1	1" INSERT (STAINLESS STEEL)
5	*	1" TUBING, POLYETHYLENE
6	*	2" CASING, PVC OR HDPE – 2' BEYOND EDGE PAVEMENT
7	*	SEALER, RAM-NEK
8	1	WYE BRANCH FOR POLY TUBING
9	2	3/4" WATER OR 1" REUSE TUBING, POLYETHYLENE 4'
10	2	3/4" WATER OR 1" REUSE CURB STOP BALL
		VALVE W/ LOCK WINGS (F.I.P. x COMP.)
11	1	2" x 4" P.T. MARKER STAKE

NOTES:
- ALL FITTINGS FOR POLYETHYLENE TUBING ARE BRASS COMPRESSION TYPE.
- A VALVE BOX MAY BE REQUIRED AS SPECIFIED BY THE ENGINEER.
- CURB STOP TO TERMINATE 24" ABOVE GROUND AT R/W LINE.
- REUSE CURB STOPS = 1" / WATER CURB STOPS = 3/4"
- TUBING TO BE YARDLEY 3406 OR EQUAL.
- SADDLES 2" – 3" TO BE BRASS FULL CIRCLE TYPE.
- SADDLES 4" AND LARGER TO BE D.I. DUAL STRAP TYPE.
- CURB STOPS TO BE TIED TO MARKER STAKE.
- SADDLE MAY BE INSTALLED AT ANGLE (WITHIN 45° OF HORIZONTAL).
- MARKER STAKES PAINTED SAFETY BLUE FOR WATER, PURPLE FOR REUSE.

CREATED 02/24/03
REVISED

WATER AND REUSE LATERAL SERVICE 3/4"
(DOUBLE – FAR SIDE)
POLYETHYLENE TUBING

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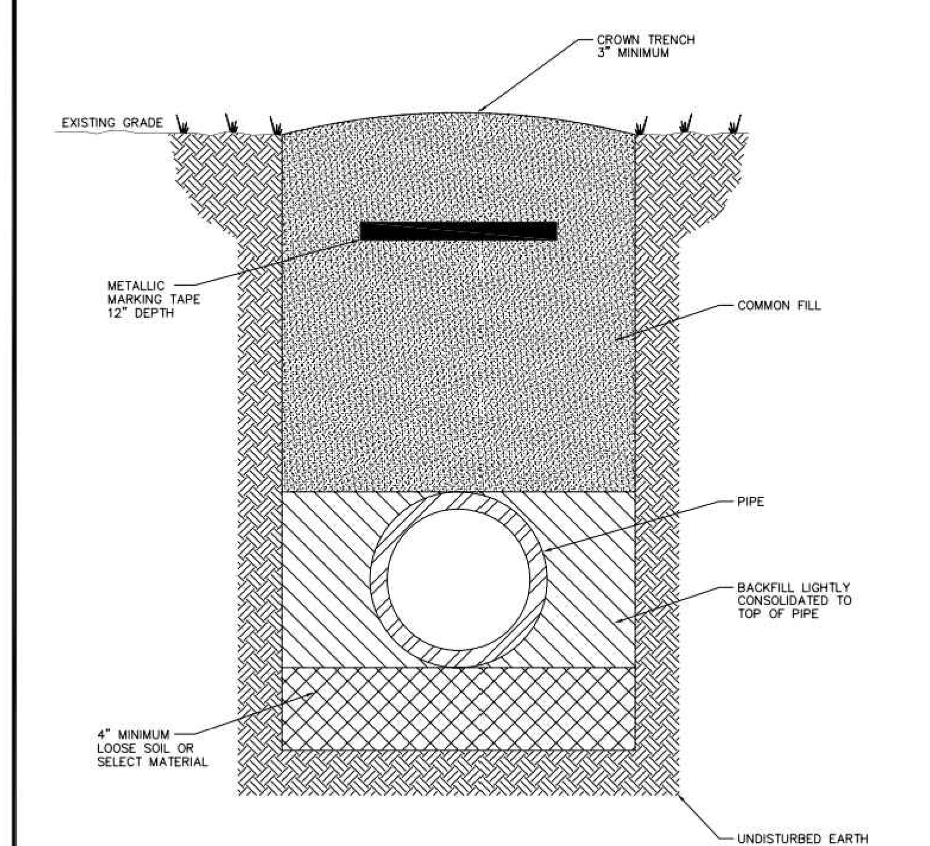
PASCO COUNTY UTILITIES — DETAIL 20



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 02/24/03
REVISED

PIPE LAYING CONDITIONS
STANDARD UNPAVED AREAS

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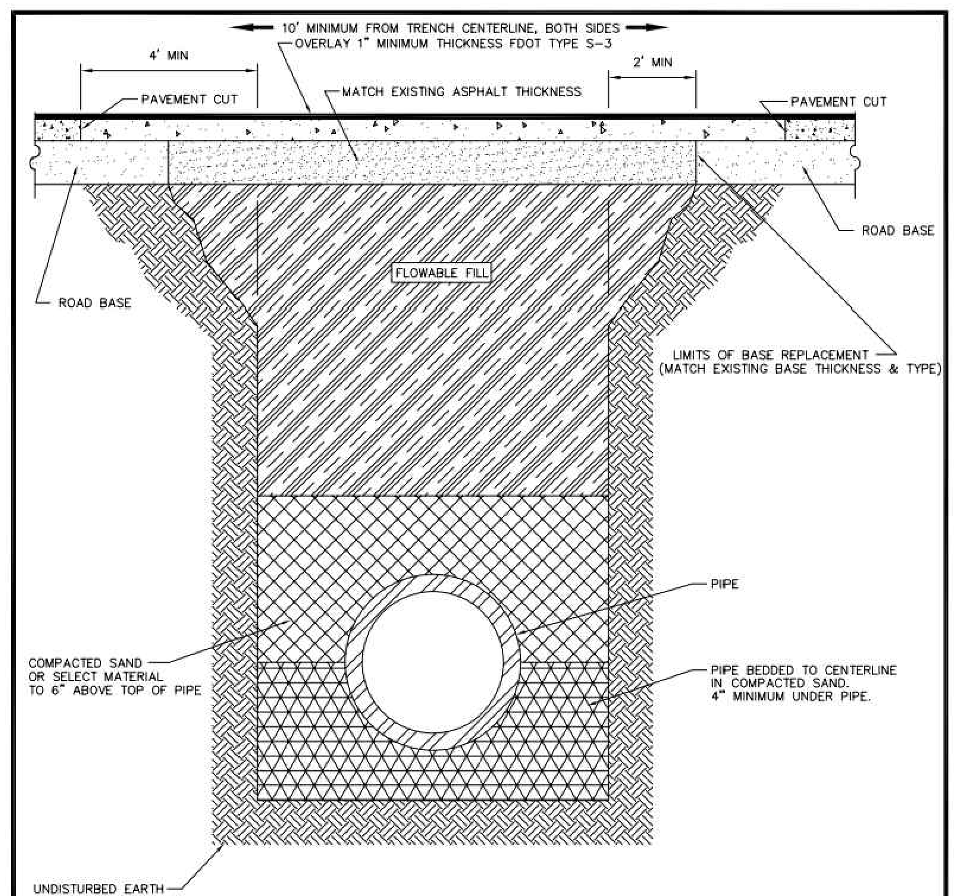
PASCO COUNTY UTILITIES — DETAIL 35



NOTE:
- SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS AND FOREIGN MATERIAL.
- COMPACTION TO TOP OF PILE 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
REVISED

PIPE LAYING CONDITIONS
FLOWABLE FILL BACKFILL
STANDARD EXISTING PAVED AREAS & ROADWAYS

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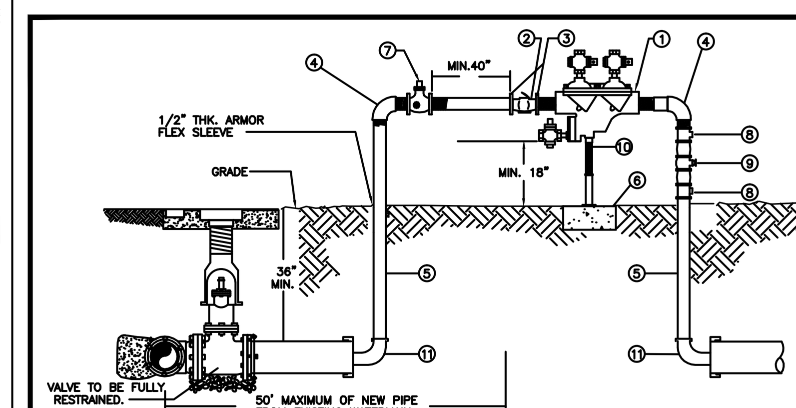
PASCO COUNTY UTILITIES — DETAIL 36



MATERIALS		
ITEM	QUANT.	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 SLAB
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 11/18/05
REVISED 05/30/06

TEMPORARY CONSTRUCTION WATER SERVICE
"JUMPER"

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PASCO COUNTY UTILITIES — DETAIL 01

DESIGNED JD
DRAWN TR
CHECKED AB
Q.C.

THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.

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CONCORD STATION, LLP
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PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
UTILITY DETAILS

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
EPN 241
F.B. & PG.
DATE: 2/20/14

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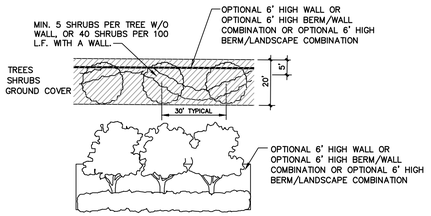
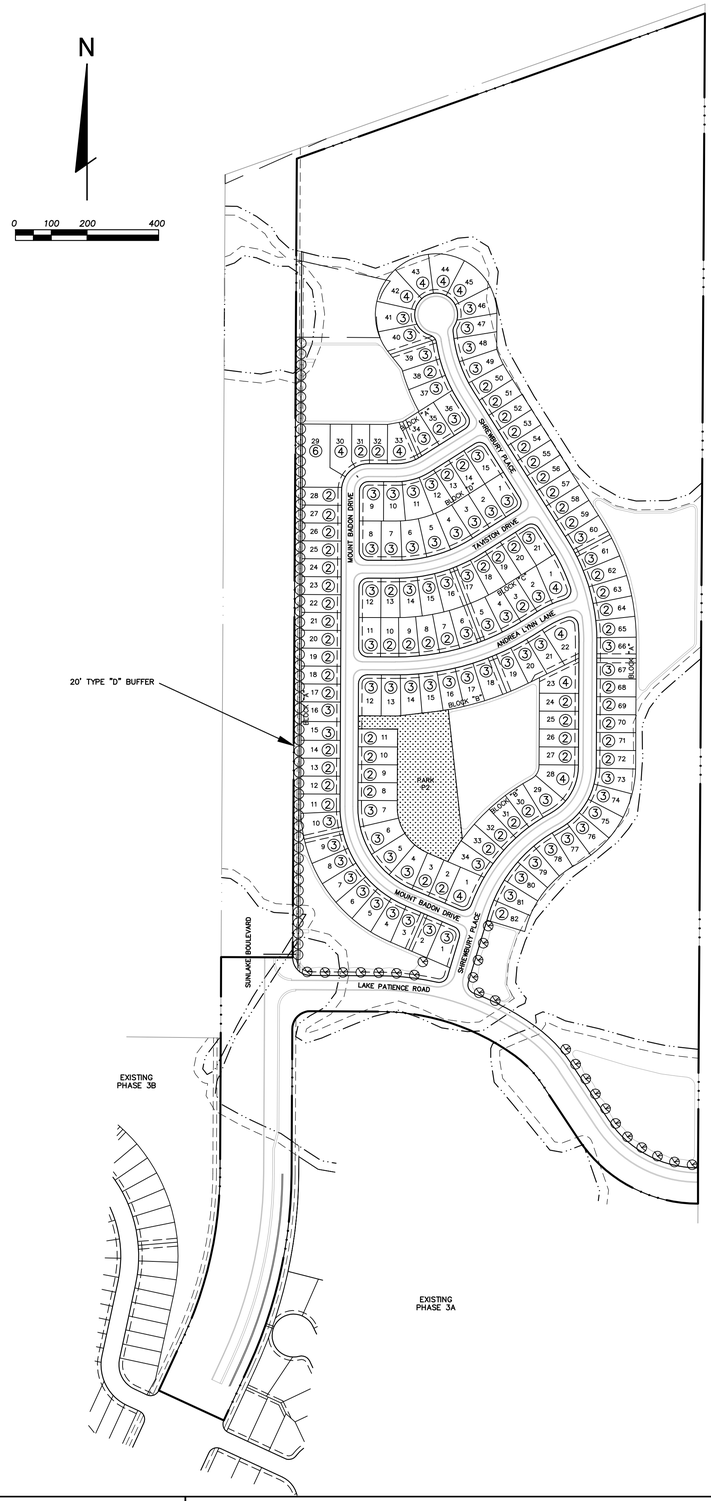
LEGEND

- PROPERTY BOUNDARY LINE
- STORMWATER DETENTION AREA
- WETLAND LINE
- = PROPOSED BUFFER/COMMON
- = PROPOSED POND TREE
- (2) = TREES REQUIRED PER LOT



TYPE D BUFFER



PLANT LIST:

	BOTANICAL NAME	COMMON NAME	SIZE / NOTES
LOT TREES–BUILDER PROVIDED			
405	ULMUS ALATA	WINGED ELM	10'–12' HT., 2" CAL.
	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	10'–12' HT., 2" CAL.
	ACER RUBRUM	RED MAPLE	10'–12' HT., 2" CAL.
	LIQUIDAMBAR STYRACIFLUA	SWEET GUM	10'–12' HT., 2" CAL.
	QUERCUS SHUMARDII	SHUMARD OAK	10'–12' HT., 2" CAL.
	QUERCUS VIRGINIANA	LIVE OAK	10'–12' HT., 2" CAL.
	CELTIS LAEVIGATA	SUGARBERRY	10'–12' HT., 2" CAL.
POND TREES–DEVELOPER PROVIDED			
25	ACER RUBRUM	RED MAPLE	10'–12' HT., 2" CAL.
	FRAXINUS PENNSYLVANICA	GREEN ASH	10'–12' HT., 2" CAL.
	QUERCUS VIRGINIANA	LIVE OAK	10'–12' HT., 2" CAL.
	TAXODIUM DISTICHUM	BALD CYPRESS	10'–12' HT., 2" CAL.
BUFFER TREES–DEVELOPER PROVIDED			
58	ACER RUBRUM	RED MAPLE	10'–12' HT., 2" CAL.
	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	10'–12' HT., 2" CAL.
	ULMUS ALATA	WINGED ELM	10'–12' HT., 2" CAL.
	QUERCUS SHUMARDII	SHUMARD OAK	10'–12' HT., 2" CAL.
	ULMUS AMERICANA	FLORIDA ELM	10'–12' HT., 2" CAL.
	FLORIDANA		

NOTE:
THE MAINTENANCE RESPONSIBILITY FOR THE PROPOSED LANDSCAPING SHALL BE WITH THE DEVELOPER OR SUBSEQUENT HOMEOWNER'S ASSOCIATION OR COMMUNITY DEVELOPMENT DISTRICT.

TREES REQUIRED

BUILDER PROVIDED TREES

SITE TYPICAL LOT SIZE–SF	NUMBER OF LOTS	NUMBER OF TREES REQUIRED BY CODE	DIAMETER OF TREES REQUIRED (INCHES)	TOTAL INCHES REQUIRED
3500–6000	65	2	2	260"
6001–7500	75	3	2	450"
7501–9500	11	4	2	88"
9501–16000	1	6	2	12"
16001 +	–	8	2	–
TOTALS	152	405		810"

DEVELOPER PROVIDED TREES

SITE AREAS	TOTAL TREES PROVIDED	DIAMETER OF TREES REQUIRED (INCHES)	TOTAL INCHES PROVIDED
PONDS	25	2	50"
TYPE D BUFFER	58	2	116"
PARK / COMMON	0	2	0
ADDN'L COMMON **	0	2	0
TOTALS	83	2	166"

TOTAL INCHES OF TREES REQUIRED FOR THE BUILDER OR DEVELOPER, AS SHOWN ABOVE, SHALL BE PROVIDED BY THE UTILIZATION OF PROPOSED TREES AS INDICATED ON THE PLANT LIST OR BY PRESERVING EXISTING TREES ON SITE, BY LEAVING IN PLACE OR TRANSPLANTING. FINAL LOCATIONS OF PROPOSED TREES TO BE PER DETAILED CONSTRUCTION PLANS.

GENERAL LANDSCAPE PLAN NOTES:

1. LANDSCAPE PLAN REQUIREMENTS ASSOCIATED WITH THE TREE PLAN PROVIDE 1 TREE PER 30 L.F. OF TYPE "D" LANDSCAPE BUFFER ALONG RIGHT OF WAY.
2. MINIMUM OF 8 TREE SPECIES ARE REQUIRED WHEN 40 OR MORE TREES ARE REQUIRED.
3. MINIMUM TREE SIZE: 2" CALIPER, MEASURED 6" FROM GROUND.
4. THE OWNER OR OWNER'S DESIGNATED ENTITY SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE TREES WITHIN COMMON AREAS.
5. INTENTIONALLY OMITTED.
6. TREES SHALL BE FLORIDA NO. 1 OR BETTER GRADE AS DESCRIBED IN THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF PLANT INDUSTRY, "GRADES AND STANDARDS FOR NURSERY PLANT", LATEST EDITION.
7. IRRIGATION FOR THE TREES SHALL BE PROVIDED BY EITHER A MASTER IRRIGATION SYSTEM OR INDIVIDUAL RESIDENTIAL LOT IRRIGATION SYSTEM. THE IRRIGATION SYSTEM SHALL MEET THE REQUIREMENTS OF PASCO COUNTY LANDSCAPE AND IRRIGATION ORDINANCE, 02–04. THE CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATER; OVER THE AMOUNT OF WATER SUPPLIED BY THE IRRIGATION SYSTEM, FOR THE ESTABLISHMENT OF ALL NEWLY INSTALLED TREES FOR 90 DAYS, COMMENCING IMMEDIATELY AFTER INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADJUST WATERING AMOUNTS AND FREQUENCY TO ENSURE PROPER ESTABLISHMENT OF ALL PLANT MATERIAL.
8. TREES FOR USE ON LOTS, STREET TREES, ALONG PONDS AND WITHIN BUFFERS ARE TO BE NATIVE TREE SPECIES AS LISTED IN THE PLANT LIST.
9. TREES ALONG POND AREAS SHALL BE PLACED TO CREATE A NATURAL APPEARANCE AND PROVIDE AN AVERAGE OF 1 TREE PER 50 L.F. OF POND FRONTAGE, FOR PONDS VISIBLE FROM PUBLIC RIGHT OF WAY.
10. THE FINAL PLACEMENT OF LOT TREES SHALL BE BASED ON THE FINAL DEVELOPMENT OF THE INDIVIDUAL LOT WITH CONSIDERATIONS FOR DRIVES, SIDEWALKS, BUILDINGS, UTILITIES AND OTHER FINAL SITE/LOT CONDITIONS.
11. ALL LANDSCAPE CONSTRUCTION AND PLACEMENT SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE PASCO COUNTY LANDSCAPE CODE.
12. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES, BEFORE PERFORMING ANY WORK. CONTRACTOR SHALL NOTIFY SUNSHINE STATE ONE CALL TO VERIFY LOCATION OF ANY UTILITIES AND THE CONTRACTOR SHALL REVIEW THE ENGINEERING DRAWINGS FOR THIS PROJECT FOR ADDITIONAL INFORMATION ON POSSIBLE UTILITY LOCATIONS, HOWEVER, ALL UTILITIES MAY NOT BE SHOWN ON PLANS. CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR RESOLUTION.
13. EXISTING TREES, PALMS, SHRUBS AND GROUNDCOVERS WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION AND SPECIFIED TO REMAIN ARE TO BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS WITH TREE BARRICADES.
14. ALL LANDSCAPE AREAS AND AROUND EXISTING TREES SHALL BE MULCHED UTILIZING SHREDDED PINE BARK NUGGETS (100% ORGANIC). MULCH SHALL BE INSTALLED TO A WETTED DEPTH OF 3". MULCH SHALL BE FREE OF EXTRANEOUS DEBRIS.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED DAMAGE OR CUTTING OF EXISTING TREES TO REMAIN ON SITE. DAMAGE MAY BE CAUSED BY OPERATION OF EQUIPMENT, STOCKPILING OF MATERIALS, ETC. DAMAGE ALSO INCLUDES THE COMPACTION OF THE ROOT ZONE BY DRIVING OR PARKING INSIDE THE DRIP–LINE OF TREES OR THE SPILLAGE OF DELETERIOUS CHEMICALS, OILS, DIESEL, ETC. WITHIN THE DRIP–LINE OF TREES.
16. PLANTING AREAS SHALL BE FREE OF EXTRANEOUS MATERIALS AND CAPABLE OF PERCOLATION PRIOR TO PLANTING AND PREPARED SOIL BACKFILL.
17. SHRUBS WITHIN BUFFERS SHALL BE A MINIMUM OF 2' IN HEIGHT AND FULL TO THE BASE, PLANTED ON 2' ON CENTER.
18. TREES SHOWN DO NOT INCLUDE TREES ON INDIVIDUAL LOTS. THESE WILL BE HANDLED WITH THE INDIVIDUAL BUILDING PERMIT DRAWINGS.

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SHEET DESCRIPTION:
CONCORD STATION
PHASE 5, UNITS A1 AND A2,
SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
TREE PLANTING PLAN

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
CPN 241
F.B. & PG.
DATE: 2/20/14
SHT. 26 OF 34

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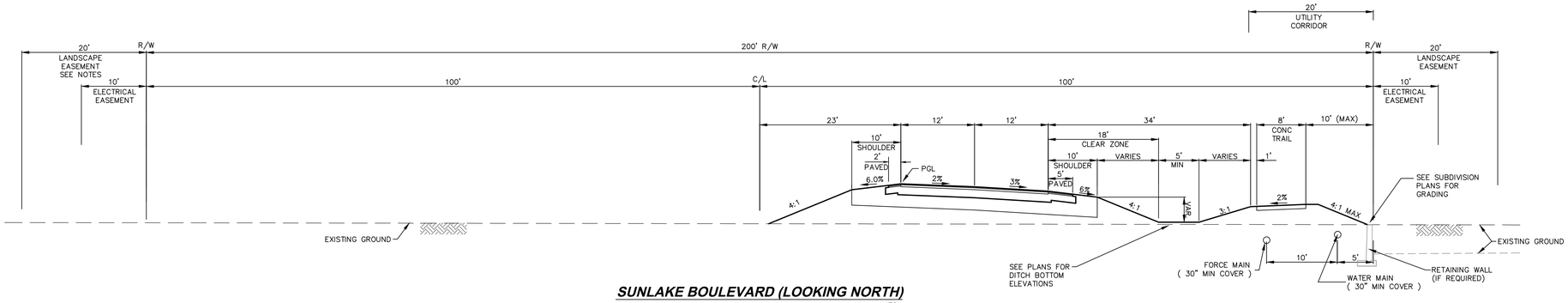


SUNLAKE BOULEVARD (LOOKING NORTH)

NTS

TYPICAL SECTION (2-LANE SEGMENT)
DESIGN SPEED = 40 MPH, POSTED SPEED = 35 MPH

STATION 1073+00 TO STATION 1085+40
ROADWAY CLASSIFICATION-ARTERIAL (OPEN DRAINAGE)

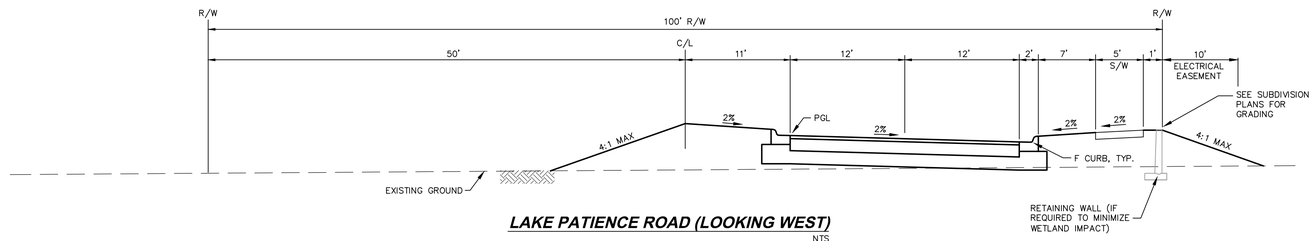
NOTES:
1) STA 1043+00 AHEAD NO LANDSCAPE OR ELECTRICAL EASEMENTS.
2) LANDSCAPE EASEMENT/ELECTRICAL NOT REQUIRED WHERE NATURAL WOODED WETLANDS ARE ADJACENT TO R/W.
3) MINIMUM 2' A-3 MATERIAL (SP) BELOW SUBGRADE.
4) NO BLENDING OF MATERIAL WITH CRUSHED CONCRETE BASE, UNLESS APPROVED BY THE DESIGN ENGINEER.

PAVEMENT SECTION	LAYER COEFF.	SN
1" TYPE FC-9.5 FRICTION COURSE	0.44	0.44
3.0" TYPE "S-1" SURFACE COURSE (300 LBS SY)	0.44	1.32
10" CRUSHED CONCRETE (MIN LBR 100)	0.18	1.80
12" TYPE "B" STABILIZED SUBGRADE (LBR-40)	0.08	0.96
		4.52

ALTERNATE PAVEMENT SECTION	LAYER COEFF.	SN
1" TYPE FC-9.5 FRICTION COURSE	0.44	0.44
3" TYPE "S-1" SURFACE COURSE (300 LBS SY)	0.44	1.32
15" SOIL CEMENT (300 PSI)	0.15	2.25
12" TYPE "B" STABILIZED SUBGRADE (LBR-20)	0.04	0.48
		4.49

SHOULDER SECTION	LAYER COEFF.	SN
1" TYPE FC-9.5 FRICTION COURSE	0.44	0.44
1 1/2" TYPE "S-1" ASPHALTIC CONCRETE STRUCTURAL COURSE	0.44	0.66
4" CRUSHED CONCRETE (MIN LBR 100)	0.18	0.72
12" TYPE "B" STABILIZED SUBGRADE (LBR-40)	0.08	0.96
		2.78

ALTERNATE SHOULDER SECTION	LAYER COEFF.	SN
1" TYPE FC-9.5 FRICTION COURSE	0.44	0.44
1 1/2" TYPE "S-1" ASPHALTIC CONCRETE STRUCTURAL COURSE	0.44	0.66
8" SOIL CEMENT (300 PSI)	0.15	1.20
12" TYPE "B" STABILIZED SUBGRADE (LBR-20)	0.04	0.48
		2.78



LAKE PATIENCE ROAD (LOOKING WEST)

NTS

TYPICAL SECTION (2-LANE SEGMENT)
DESIGN SPEED = 40 MPH, POSTED SPEED = 30 MPH

ROADWAY CLASSIFICATION-1A (CLOSED DRAINAGE)

NOTE:
1) LANDSCAPE EASEMENT/ELECTRICAL NOT REQUIRED WHERE NATURAL WOODED WETLANDS ARE ADJACENT TO R/W.
2) MINIMUM 2' A-3 MATERIAL (SP) BELOW SUBGRADE

PAVEMENT SECTION	LAYER COEFF.	SN
1" TYPE FC-5 FRICTION COURSE	0.44	0.44
3" TYPE "S-1" SURFACE COURSE (300 LBS SY)	0.44	1.32
10" CRUSHED CONCRETE (MIN LBR 100)	0.18	1.80
12" TYPE "B" STABILIZED SUBGRADE (LBR-40)	0.08	0.96
		4.52

ALTERNATE PAVEMENT SECTION	LAYER COEFF.	SN
1" TYPE FC-9.5 FRICTION COURSE	0.44	0.44
3" TYPE "S-1" SURFACE COURSE (300 LBS SY)	0.44	1.32
15" SOIL CEMENT (300 PSI)	0.15	2.25
12" TYPE "B" STABILIZED SUBGRADE (LBR-20)	0.04	0.48
		4.49

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DESIGNED JD	THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.	FLORIDA DESIGN CONSULTANTS, INC. THINK IT. ACHIEVE IT. 707 NORTH FRANKLIN STREET, 6TH FLOOR, TAMPA, FLORIDA 33602 PHONE: (800) 532-1047 WWW.FLDESIGN.COM L.B. NO 6707	PREPARED FOR: CONCORD STATION, LLP 4600 W. CYPRESS STREET, SUITE 200 TAMPA, FLORIDA 33607 PHONE: (813) 574-5700 FAX: (813) 574-5701	SHEET DESCRIPTION: CONCORD STATION PHASE 5, UNITS A1 AND A2, SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD TYPICAL SECTIONS	JOB NO. 595-220 EPN 241 F.B. & PG. DATE 2/20/14 SHT. 27 OF 34
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CHECKED AB					
Q.C.				NO. DATE REVISIONS APP'D BY	

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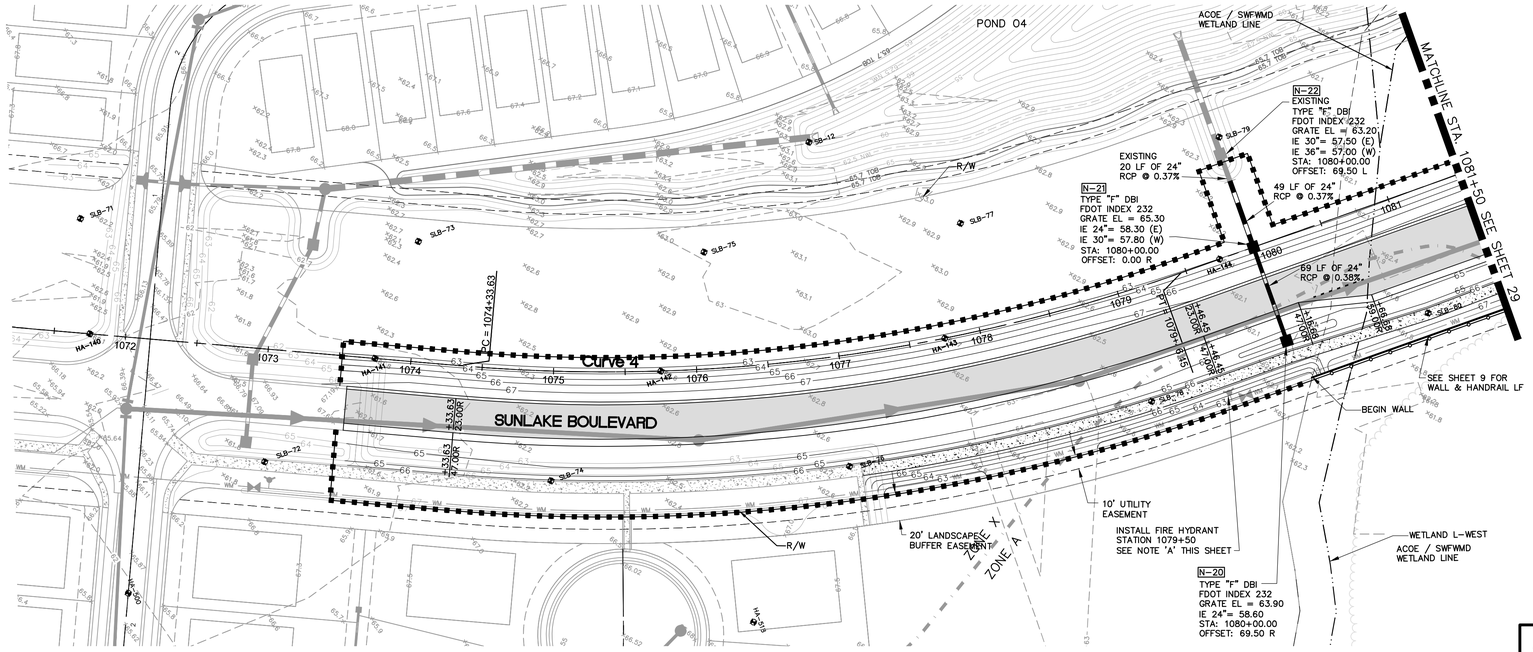
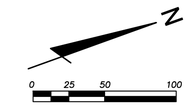
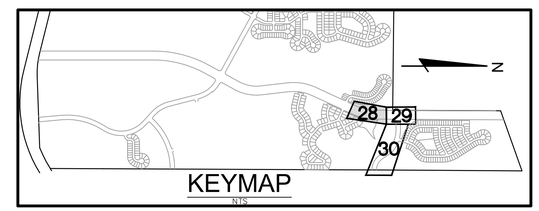
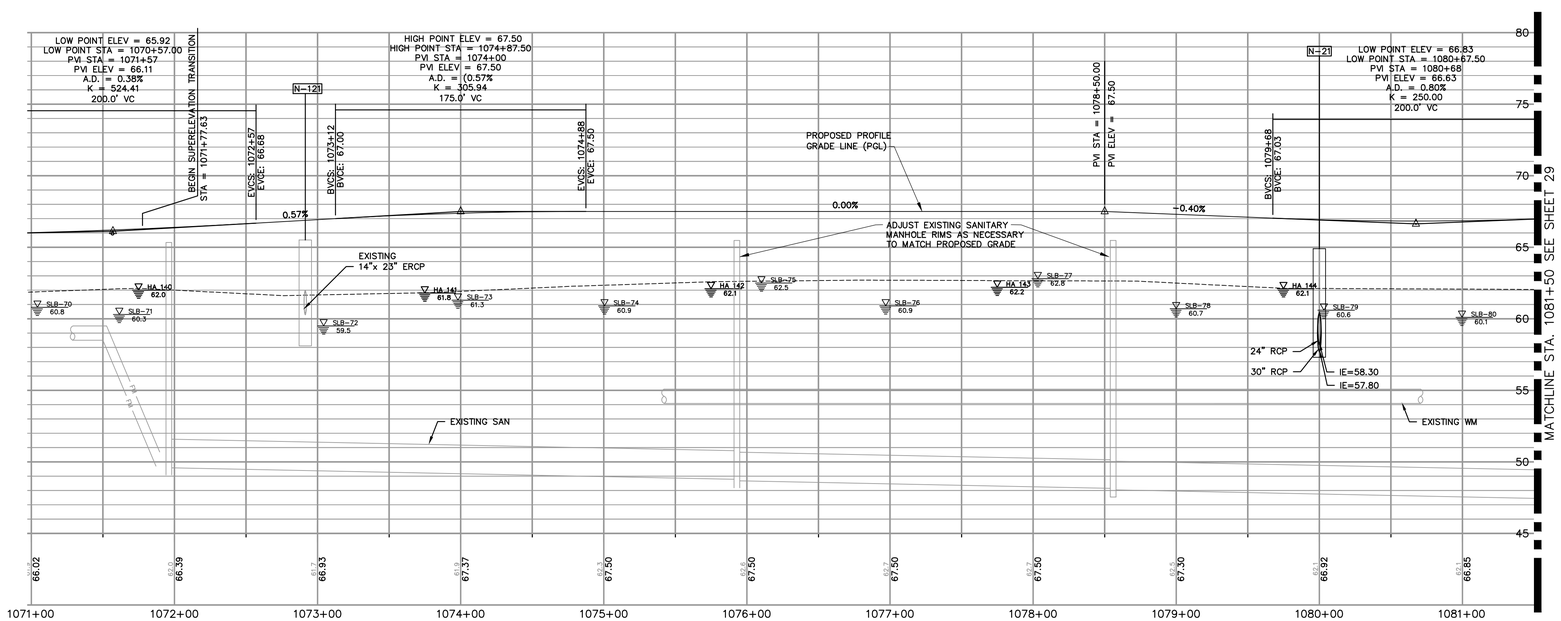




CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA	SUPERELEVATION
C4	1200.00'	512.82'	508.93'	N12°32'12"E	24°29'07"	5.8%



NOTE 'A':
INSTALL FIRE HYDRANT AT EXISTING VALVE. ADJUST VALVE HEIGHTS AND INSTALL VALVE PADS.



NOTE:
CONTRACTOR TO VERIFY LOCATION OF EXISTING WATER MAIN AND SANITARY SEWER ON SUNLAKE BLVD. PRIOR TO CONSTRUCTION AND ORDERING OF INLETS/PIPES.

CONTRACTOR TO VERIFY HORIZONTAL LOCATION OF EXISTING SANITARY SEWER MANHOLES RELATIVE TO THE PROPOSED CURB ALONG SUNLAKE BLVD. IF NECESSARY, THE CONTRACTOR SHALL REPLACE MANHOLE CONE WITH A PRECAST ECCENTRIC CONE PER FDOT INDEX 201 (SEE SHEET 24 FOR DETAIL) TO PROVIDE HORIZONTAL CLEARANCE FOR MANHOLE RIM BEHIND PROPOSED CURB.

CONTRACTOR TO MAINTAIN A MINIMUM CLEARANCE OF TWO FEET (2') FROM PROPOSED STORM PIPES. ADJUST EXISTING WATER MAIN, IF NECESSARY, TO PROVIDE MINIMUM CLEARANCE.

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PHONE: (813) 574-5700 FAX: (813) 574-5701

SHEET DESCRIPTION:
CONCORD STATION
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SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
PLAN AND PROFILE

NO.	DATE	REVISIONS	APP'D BY

JOB NO. 595-220
F.B. & PG. 241
DATE 2/20/14
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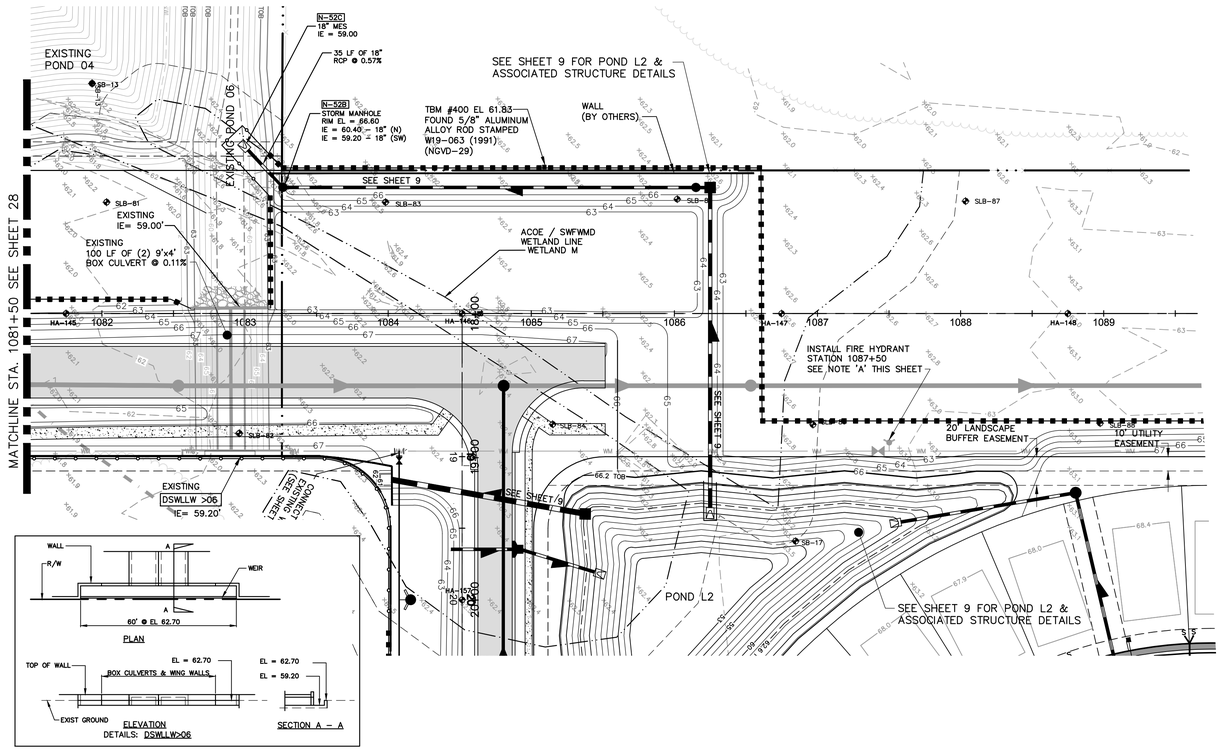

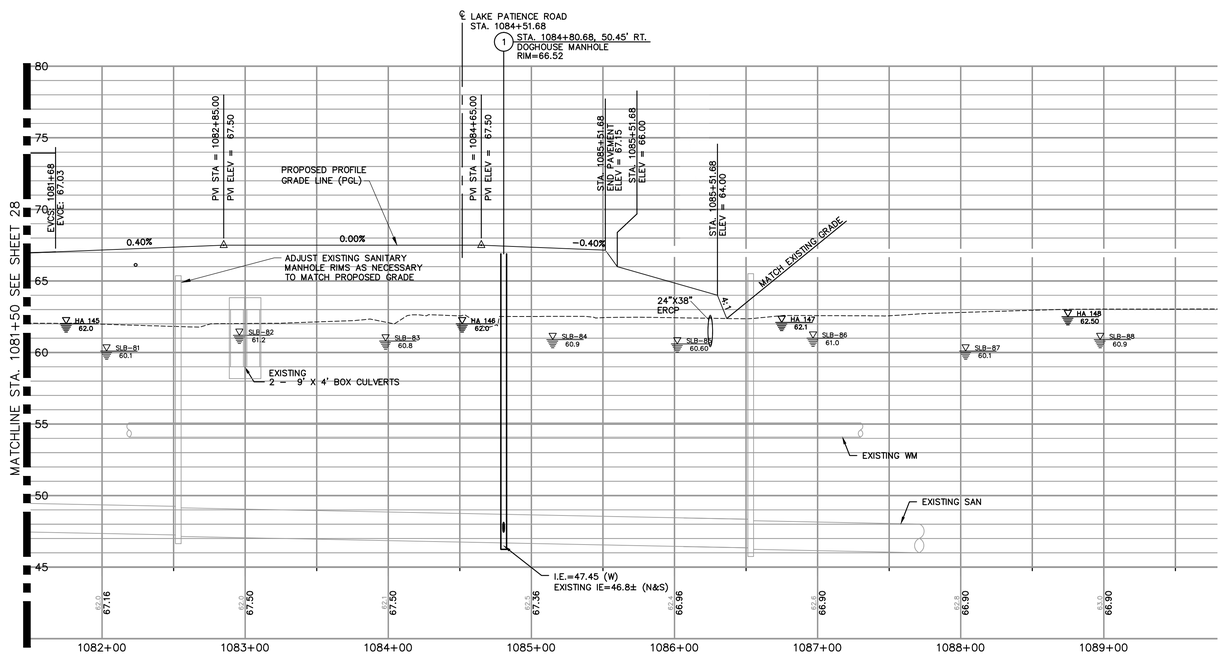

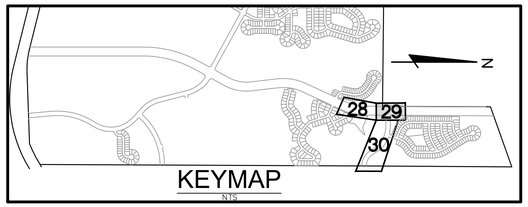

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SHEET DESCRIPTION:
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PLAN AND PROFILE

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DATE 2/20/14
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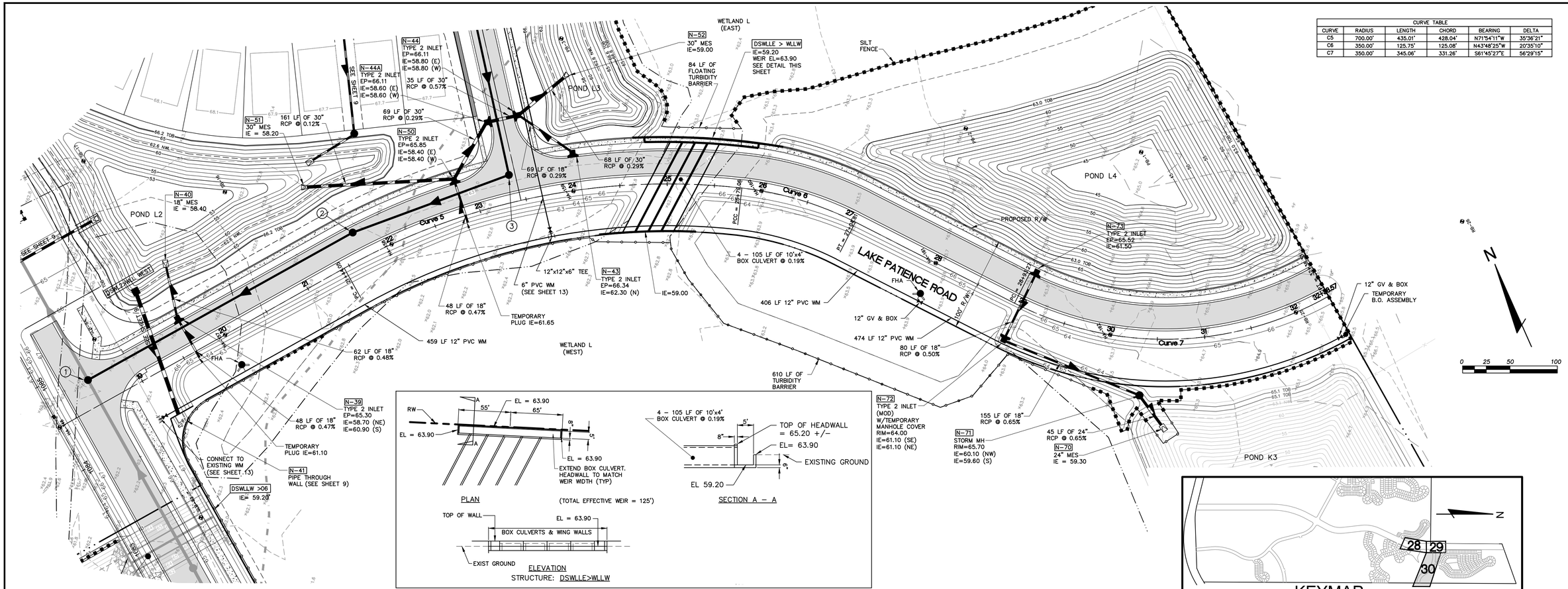
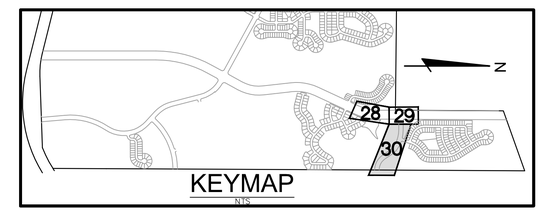
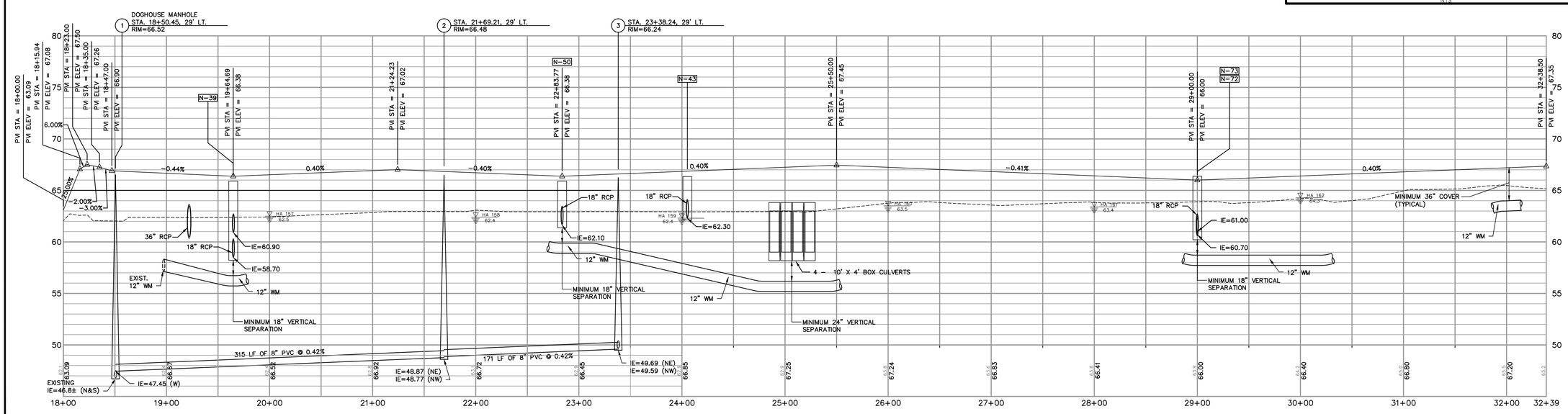
CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C5	700.00'	435.01'	428.04'	N71°54'11"W	35°36'21"
C6	350.00'	125.75'	125.08'	N43°48'25"W	20°35'10"
C7	350.00'	345.06'	331.26'	S61°45'27"E	56°29'15"







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SHEET DESCRIPTION:
CONCORD STATION
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SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
PLAN AND PROFILE

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SHT. 30 OF 34
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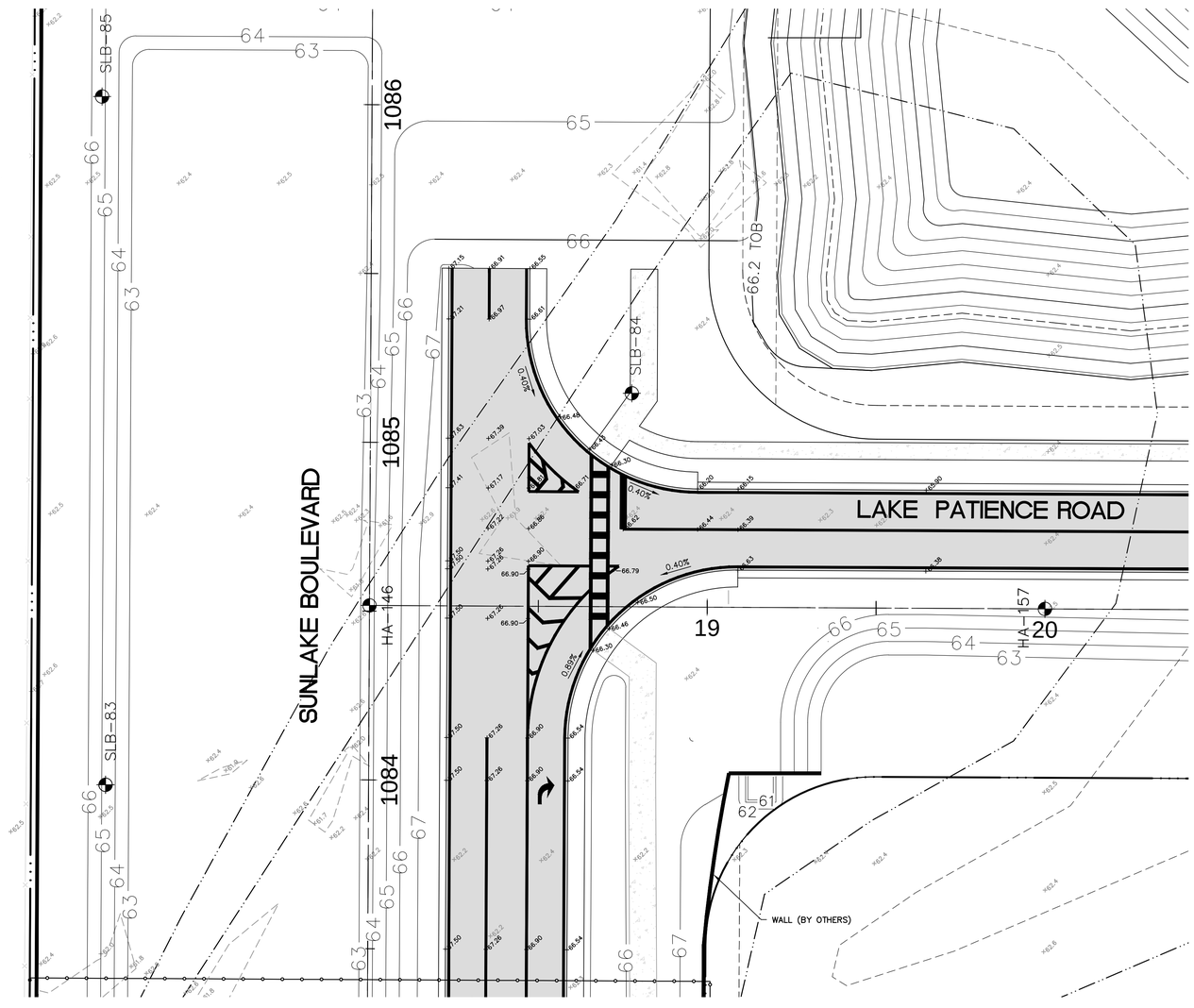

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INTERSECTION LAYOUT

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SHT.	31
OF	34

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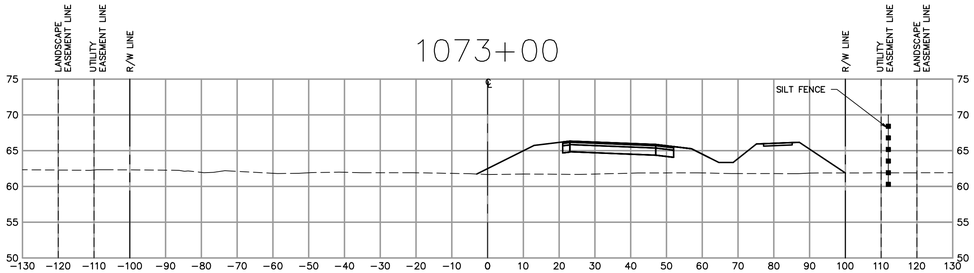

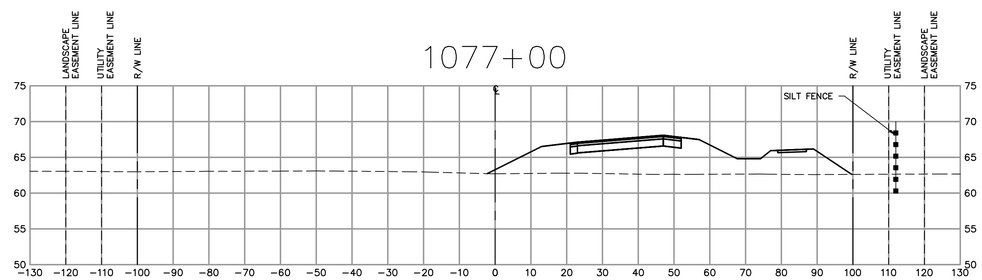

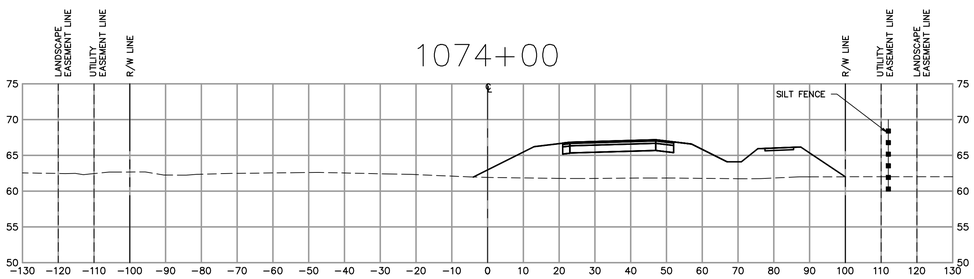

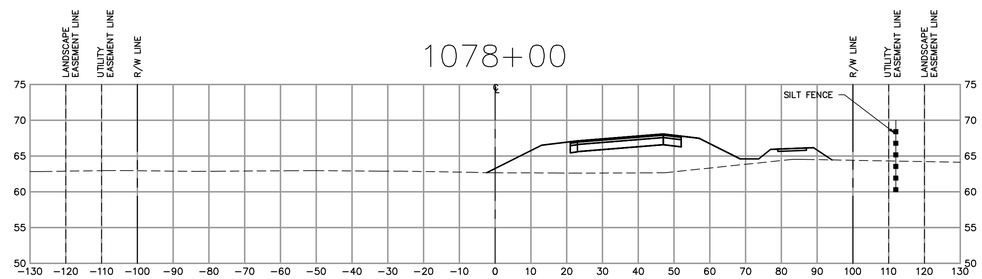

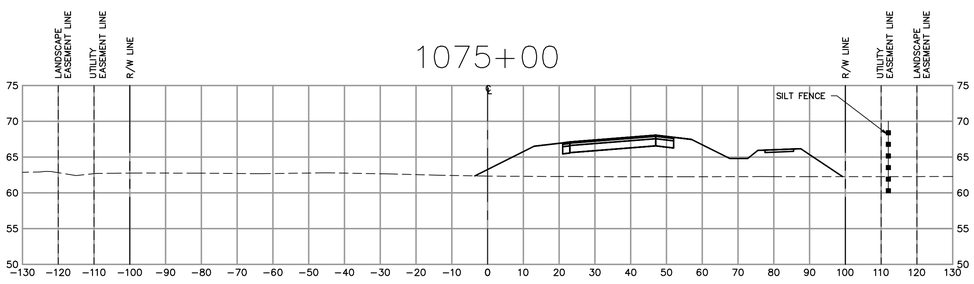

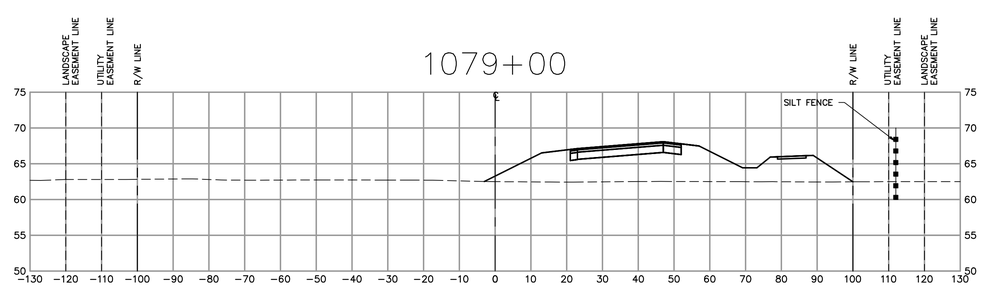

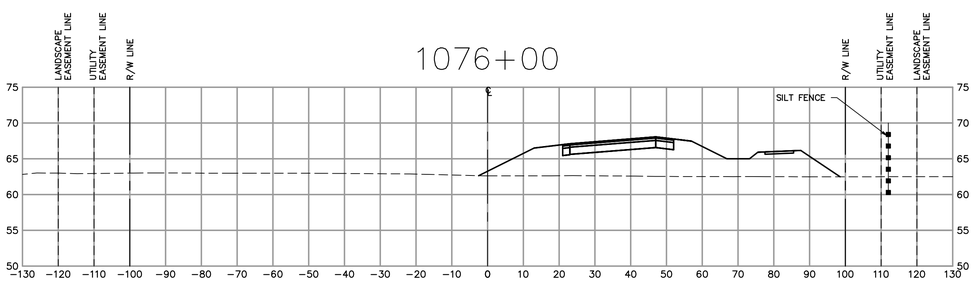

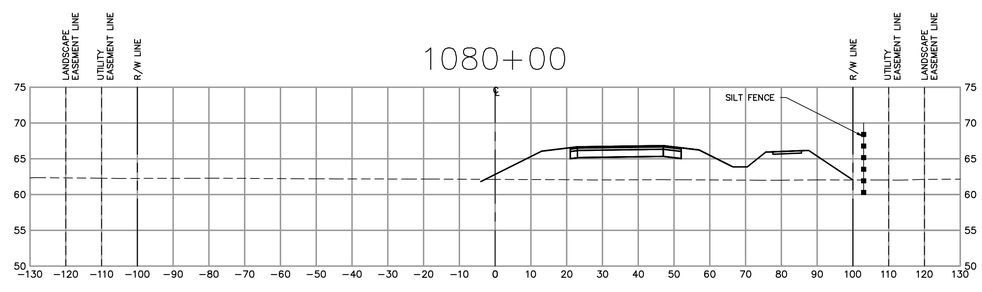

SCALE:
1"=20' HORIZ., 1"=10' VERT.

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SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
CROSS SECTIONS

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DATE: 2/20/14
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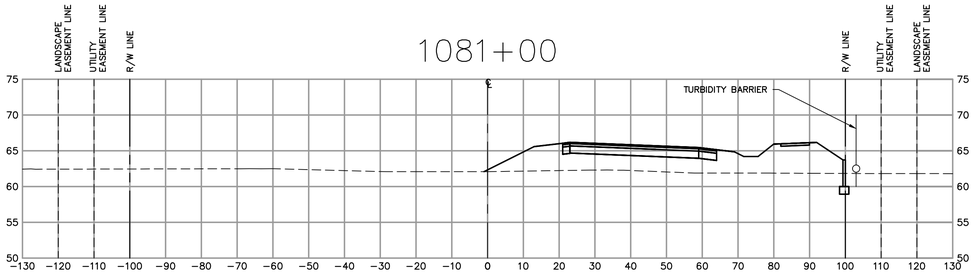

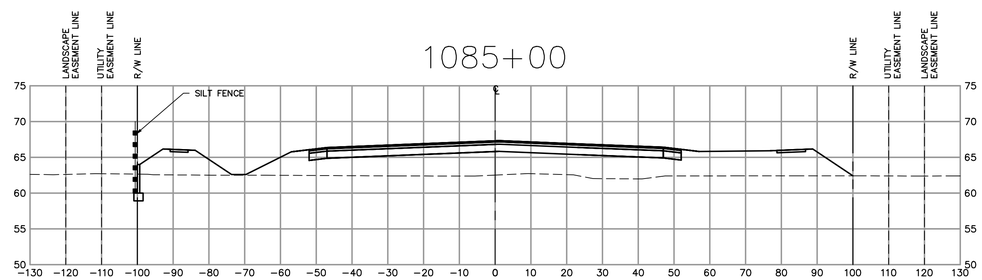

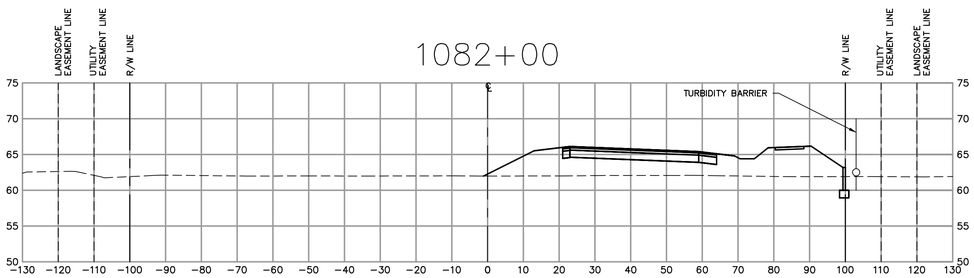

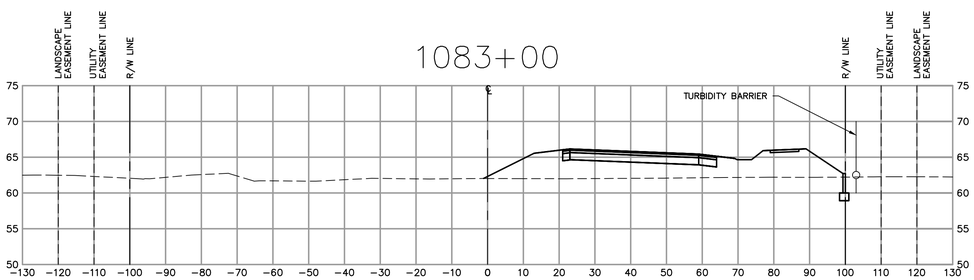

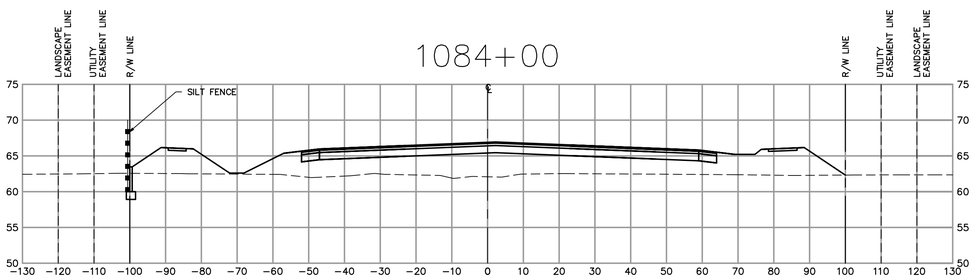

SCALE:
1"=20' HORIZ., 1"=10' VERT.

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SUNLAKE BOULEVARD PHASE III AND LAKE PATIENCE ROAD
CROSS SECTIONS

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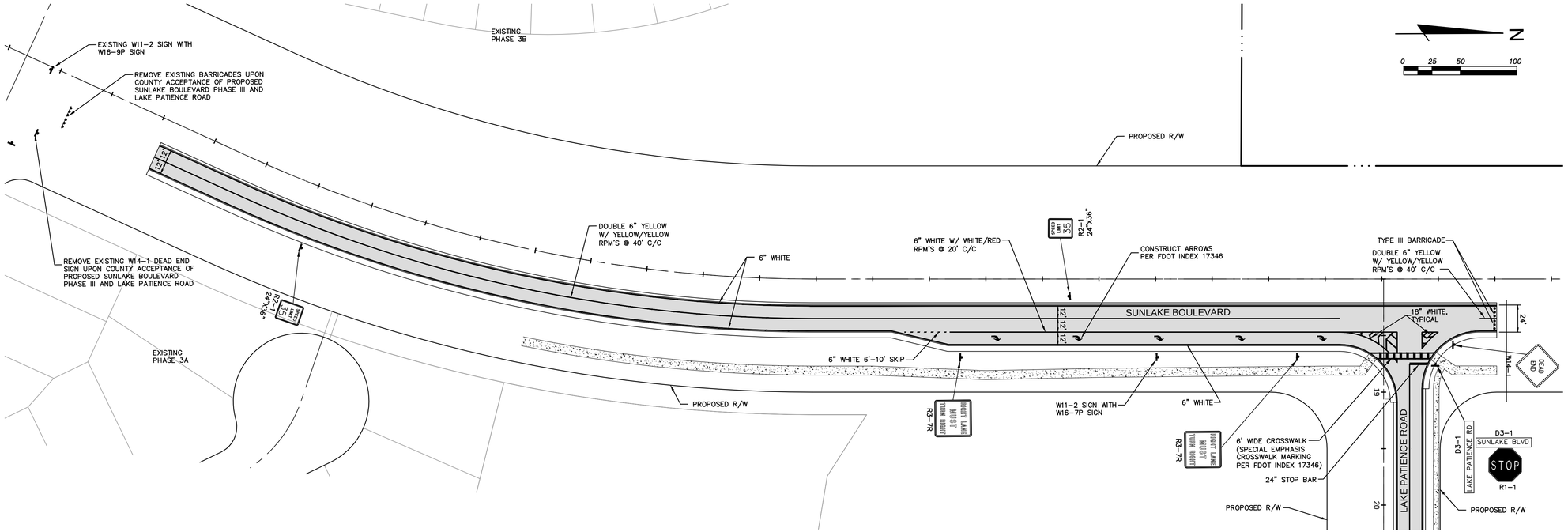

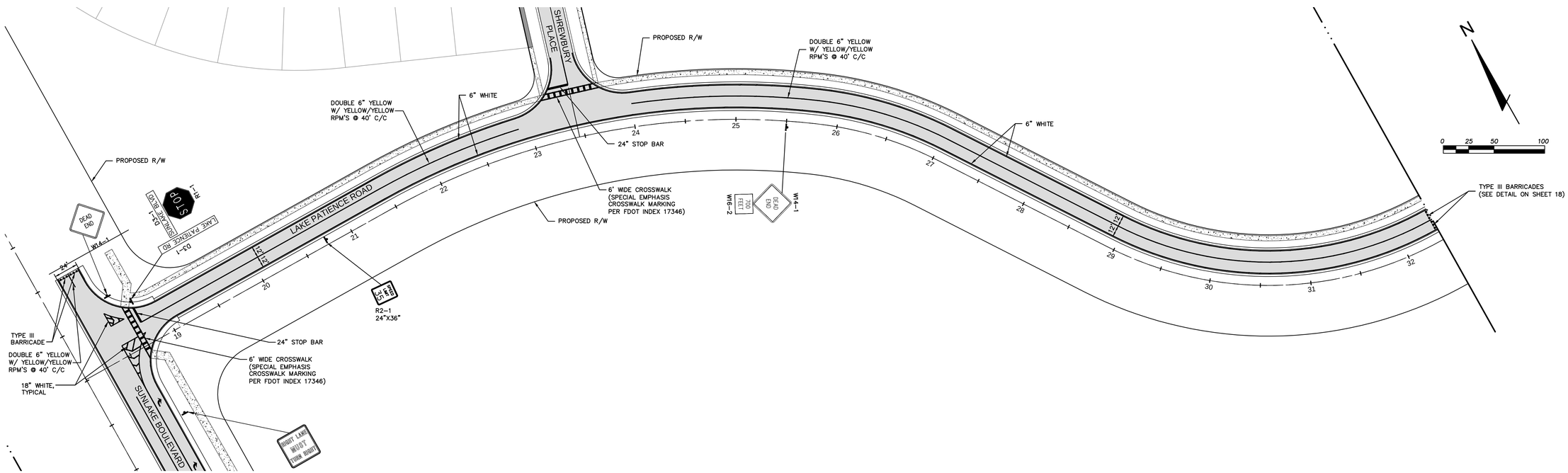

NOTE: SEE SHEET 18 FOR LEGEND AND TRAFFIC NOTES.

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SIGNAGE AND MARKING PLAN

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