ORANGE COUNTY GOVERNMENT
FLORIDA

TERESA JACOBS, COUNTY MAYOR

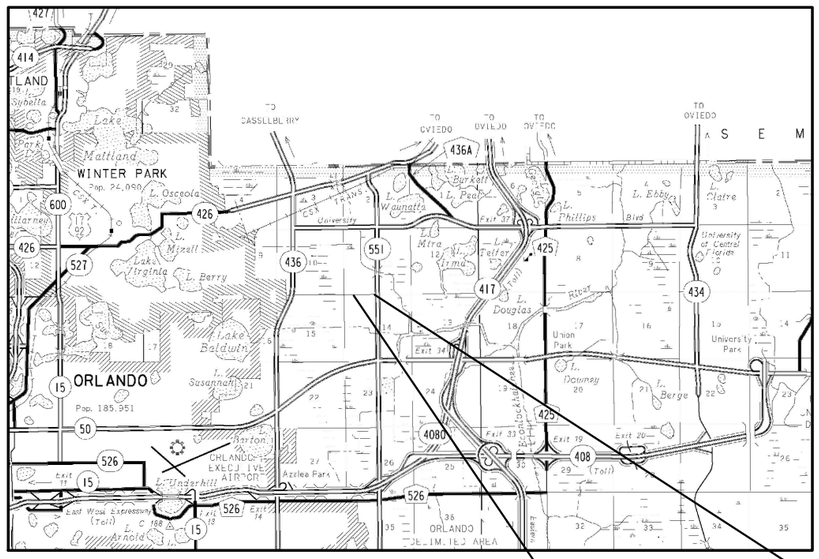
BOARD OF COUNTY COMMISSIONERS

SCOTT BOYD	DISTRICT 1
BRYAN NELSON	DISTRICT 2
PETE CLARKE	DISTRICT 3
JENNIFER THOMPSON	DISTRICT 4
TED EDWARDS	DISTRICT 5
VICTORIA P. SIPLIN	DISTRICT 6

MARK MASSARO, P.E., PUBLIC WORKS DIRECTOR

BELMONT ESTATES
DRAINAGE IMPROVEMENTS
COMMISSIONER DISTRICT 5
ORANGE COUNTY, FLORIDA
FINAL PLANS

TO SANFORD



TO CLERMONT

TO TITUSVILLE

TO OSCEOLA COUNTY

VICINITY MAP
1" = 12,000'

BEGIN PROJECT
STA. 12+85.27

END PROJECT
STA. 25+70.27

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2013, AS AMENDED BY CONTRACT DOCUMENTS.

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

COUNTY BENCHMARK DATA:

S1372003
DESCRIPTION: FOUND 3" ORANGE COUNTY CONTROL DISK IN CENTERLINE OF "T" INTERSECTION OF CONCRETE SIDEWALK, 31 FEET +/- SOUTHWEST OF BUILDING "H" AND 90 FEET +/- SOUTHWEST OF BUILDING "I" AND 80 FEET +/- SOUTHEAST OF SWIMMING POOL.
PUBLISHED ELEVATION: 68.259 FEET (NAVD88).

S1372005
DESCRIPTION: FOUND 3" ORANGE COUNTY CONTROL DISK ON NORTHWEST CORNER OF 3.0 FEET X 7.5 FEET CONCRETE PAD OF DOOR STEP FOR BUILDING "L" ADDRESS 3015 AND 37 FEET +/- EAST OF ASPHALT DRIVEWAY
PUBLISHED ELEVATION: 72.273 (NAVD88)

LENGTH OF PROJECT		
	LINEAR FT.	MILES
DRAINAGE PIPE	2392	0.453
BRIDGES	0	0
NET LENGTH OF PROJ.	1285	0.243
EXCEPTIONS	0	0
GROSS LENGTH OF PROJ.	1285	0.243

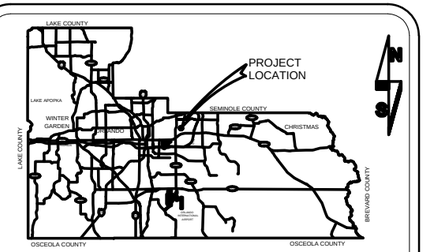
NOTE

PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLANS PREPARATION. NEEDS, CONDITIONS AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVES. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY HAVE CHANGED SINCE PLANS PREPARATION.

CERTIFICATION TO PLANS

THIS IS TO CERTIFY THAT THE CONSTRUCTION PLANS AND SPECIFICATIONS AS CONTAINED HEREIN WERE DESIGNED TO APPLICABLE STANDARDS AS SET FORTH IN THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS", STATE OF FLORIDA, AS PREPARED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION TALLAHASSEE, FLORIDA. DATED LATEST EDITION.

DATE: _____ ENGINEER: _____ REG. NO. FL PE #69032
THOMAS D. AMSTADT



SECTION 11,14 TOWNSHIP 22S. RANGE 30E

LOCATION MAP

INDEX OF SHEETS

UTILITIES ENCOUNTERED

POWER: DUKE ENERGY	PHONE:800-778-9140
PHONE: CENTURY LINK	PHONE: 855-742-6062
CATV: BRIGHTHOUSE	PHONE: 407-291-2500
WATER: WINTER PARK	PHONE: 407-599-3566
ORANGE COUNTY UTILITIES	PHONE: 407-836-6818
SEWER: ORANGE COUNTY UTIL	PHONE: 407-836-6818
GAS: TECO/PEOPLES GAS	PHONE: 407-466-7170

Geosyntec consultants
THOMAS AMSTADT
FL PE #69032
Certificate 4321
3525 W. Lake Mary Blvd, #306
Lake Mary, FL 32746

REVISIONS	DATE	BY

DESIGNED BY:LGM	DATE: 06-10-15	
DRAWN BY : LGM	DATE: 06-10-15	
CHECKED BY: TDA	DATE: 06-10-15	
APPROVED BY: MWE	DATE: 06-10-15	
PROJECT NO: FW2428		

SHEET 1
OF 21

SUMMARY OF PAY ITEMS

REFERENCE NUMBER	PAY ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY TOTAL	
				PLANS	FINAL
1	101- 1	MOBILIZATION	LS	1	
2	102- 1	MAINTENANCE OF TRAFFIC	LS	1	
3	104- 1	PREVENTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION	LS	1	
4	110- 1- 1	CLEARING AND GRUBBING	LS	1	
5	120-4	SUBSOIL EXCAVATION (ORGANICS AND MUCK)	CY	1300	
6	120- 6	EXCAVATION, EMBANKMENT, AND GRADING	LS	1	
7	425-2-71	MANHOLE, J-7, <10'	EA	3	
8	425- 2- 101	INLETS, SPECIAL, J BOTTOM < 10'	EA	2	
9	430- 175- 130	PIPE CULVERT, STEEL REINFORCED CONCRETE PIPE (ROUND) (30" SD)	LF	1137	
10	430-175-136	PIPE CULVERT, STEEL REINFORCED CONCRETE PIPE (ROUND) (36" SD)	LF	525	
11	430-175-236	PIPE CULVERT, STEEL REINFORCED CONCRETE PIPE (ELLIP) (45" X 29" SD)	LF	556	
12	430-175-242	PIPE CULVERT, STEEL REINFORCED CONCRETE PIPE (ELLIP) (53" X 34" SD)	LF	175	
13	430-984-640	MITERED END SECT, STEEL REINFORCED CONCRETE PIPE (ELLIP), 53" X 34" SD	EA	2	
14	530-3-4	RIPRAP, RUBBLE, F&I, DITCH LINING 18" DEEP	TN	183	
15	570- 1- 2	PERFORMANCE TURF, SOD (BAHIA)	SY	3150	
16	900- 1	AS-BUILT PLANS	LS	1	
17	900- 2	INDEMNIFICATION	LS	1	
18	900-3	GROUNDWATER - TREATMENT AND DISPOSAL	DAY	60	

PAY ITEM FOOTNOTES:

- 104-1 - INCLUDES THE COST TO REMOVE ANY INTERNAL DEBRIS AND SAND/SILT THEREFROM. ALSO INCLUDES THE COST OF SILT FENCE, SYNTHETIC HAY BALES, AND SOIL TRACKING PREVENTION DEVICE AS SHOWN IN THE PLANS OR AS DIRECTED BY THE COUNTY.
- 110-1-1 - INCLUDES THE REMOVAL OF TREES AND SHRUBS, NON-PERMANENT STRUCTURES AND TEMPORARY RESIDENTIAL EQUIPMENT/MATERIAL WITHIN THE COUNTY RIGHT OF WAY, INCLUDING EXISTING RESIDENTIAL FENCING WITHIN THE COUNTY RIGHT OF WAY. INCLUDES THE FULL REPLACEMENT OF ALL REMOVED RESIDENTIAL FENCING AT THE RESIDENTIAL PROPERTY LINE. TEMPORARY CONSTRUCTION FENCING SHALL BE PROVIDED FOR ALL REMOVED RESIDENTIAL FENCING DURING CONSTRUCTION OPERATIONS.
- 120-4 - INCLUDES THE FULL EXCAVATION AND OFF-SITE DISPOSAL OF ALL SUBSOIL ORGANICS AND MUCK WITHIN AN AREA 3 FEET AROUND THE PROPOSED TRENCHING LIMITS OF THE STORMSEWER PIPES AND STRUCTURES. SUBSOIL ORGANICS AND MUCK THAT MIGRATE INTO OPEN TRENCHES EXCAVATED BY CONTRACTOR SHALL BE REMOVED, BUT WILL NOT BE REIMBURSED BY COUNTY. COSTS INCLUDE ANY TEMPORARY SHORING OR SHEETING THAT MAY BE NECESSARY TO EXCAVATE SUBSOILS. REMOVAL AND REPLACEMENT OF UNSUITABLE SOIL - THE CONTRACTOR SHALL PROVIDE ORANGE COUNTY HIGHWAY CONSTRUCTION WITH A SIGNED AND SEALED SURVEY, PREPARED BY A REGISTERED FLORIDA SURVEYOR, INCLUDING ELEVATIONS AND CROSS SECTIONS OF THE AREA WHERE UNSUITABLE SOILS ARE FOUND. THE ELEVATIONS SHALL BE PROVIDED EVERY 25 FEET AND SHALL BE REPRESENTATIVE OF THE CONDITIONS. THE PURPOSE OF THE SURVEY, WITH CROSS SECTIONS, IS TO VERIFY THE QUANTITY OF UNSUITABLE SOILS REMOVED.
- 120-6 - INCLUDES GRADING OF SLOPES, COMPACTION, FINAL DRESSING, AND ALL WORK REQUIRED FOR COMPLETING THE PROJECT THAT IS NOT PAID FOR UNDER THE OTHER PAY ITEMS. ALSO INCLUDED IS REMOVAL AND PERMITTED OFF-SITE DISPOSAL OR ON-SITE UTILIZATION OF ALL MATERIALS, STRUCTURES, ABANDONED UTILITIES, AND OBSTRUCTIONS, AS DIRECTED BY THE ENGINEER.
- 425-2-71, 425-2-101, 430-982-640 - INCLUDES FURNISHING ALL MATERIALS AND COMPLETING ALL WORK DESCRIBED HEREIN OR SHOWN ON THE PLANS FOR MANHOLE STRUCTURES, INLETS, AND MITERED END SECTIONS, INCLUDING ALL EXCAVATION AND REMOVAL, DEMOLITION, AND DISPOSAL OF STORM SEWERS AND MANHOLE STRUCTURES; DEWATERING; SOIL EXCAVATION AND REPLACEMENT MATERIAL; BACKFILLING AND COMPACTING AROUND STRUCTURES; TEMPORARY SHORING OR SHEETING FOR TRENCHING THAT MAY BE NECESSARY; DISPOSAL OF SURPLUS MATERIAL; FURNISHING AND INSTALLING ALL CONCRETE; REINFORCING STEEL; GRATINGS; FRAMES; COVERS, AND ANY OTHER NECESSARY FITTINGS AS SHOWN IN THE PLANS, REQUIRED FOR ACCEPTABLE CONSTRUCTION, OR AS DIRECTED BY THE ENGINEER.
- 430-175-130 - 430-175-242 - INCLUDES EXCAVATION (IN WHATEVER MATERIAL IS ENCOUNTERED), REMOVING UNSUITABLE MATERIAL AND REPLACING WITH SELECT BEDDING MATERIAL, BACKFILLING, COMPACTION, FURNISHING AND INSTALLING ALL PIPE, DISPOSING OF SURPLUS MATERIALS, BACKFILL, COMPACT, AND OTHER WORK AS MAY BE REQUIRED FOR AN ACCEPTABLE INSTALLATION. INCLUDES HAULING OFF OR OTHERWISE DISPOSING OF MATERIAL EXCAVATED. INCLUDES ANY TEMPORARY SHORING OR SHEETING THAT MAY BE NECESSARY.
- 570-1-2 - INCLUDES GROUND PREPARATION, FERTILIZING, SODDING, WATERING, MOWING AND COMPLETE MAINTENANCE OF THE GRASSED AREA UNTIL FINAL COMPLETION AND ACCEPTANCE BY THE ENGINEER.

SUMMARY OF EARTHWORK

STATION TO STATION	CY	
	P	F
EXCAVATION	455	
EMBANKMENT	160	

SUMMARY OF SOD

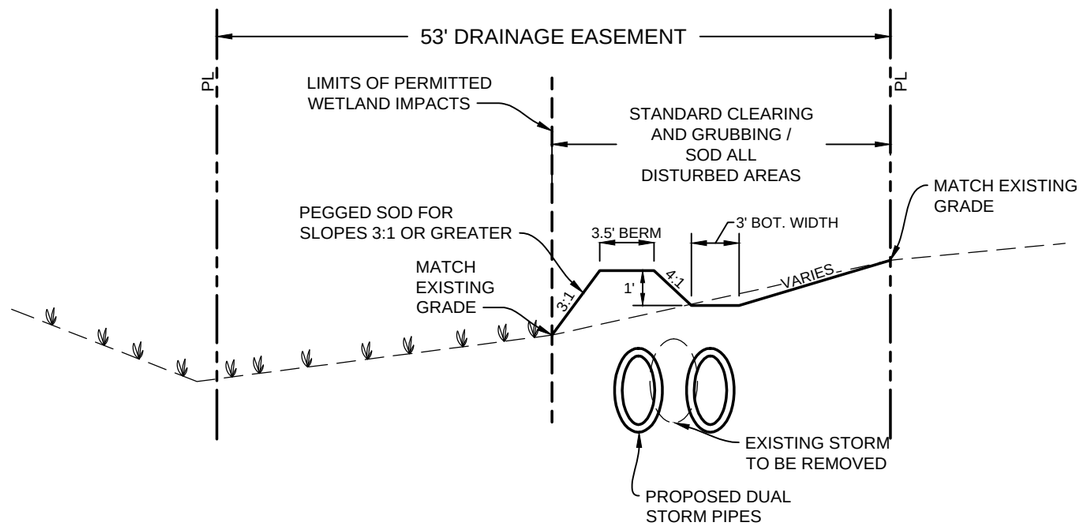
STATION TO STATION	SY	
	P	F
10+00 TO 12+51	3150	
TOTAL:	3150	

SUMMARY OF SILT FENCE

STATION TO STATION	LF	
	P	F
12+50 TO 25+75	2880	
TOTAL:	2880	

SUMMARY OF SUBSOIL EXCAVATION

STATION TO STATION	CY	
	P	F
EXCAVATION	1300	



TYPICAL SECTION BELMONT SWALE

NOT TO SCALE

REVISIONS

DATE	BY	DESCRIPTION

BELMONT ESTATES
DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

SUMMARY OF PAY ITEMS AND QUANTITIES

SHEET NO. 2

P:\PROJECTS\ORANGE_SW_1239\FW2428_BELMONT_ESTATES_DESIGN\CAD\FINAL\FW2428P020.DWG (10 June 2015 - 12:50 PM) Lmulon

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENT OF THE PROJECT SPECIFICATION, THE YEAR 2013 EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FDOT), AND SUPPLEMENTS THERETO.
2. SUBSURFACE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING DESIGN CRITERIA FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE OF THE ENGINEER IF ADDITIONAL INFORMATION IS AVAILABLE, TO MAKE ARRANGEMENTS TO REVIEW SAME PRIOR TO BIDDING, AND TO MAKE HIS OWN DETERMINATION AS TO ALL SUBSURFACE CONDITIONS.
3. ALL PERSONAL PROPERTY, EXCEPT MAIL BOXES, WITHIN THE RIGHT-OF-WAY NOT RELOCATED BY THE PROPERTY OWNER SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AS NECESSARY TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS. MAIL BOXES SHALL BE RELOCATED BY THE CONTRACTOR IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARD 532.
4. THE DISPOSAL OF EXCESS EARTHWORK MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVALS OF DISPOSAL SITES SHALL BE OBTAINED FROM ORANGE COUNTY PRIOR TO DISPOSAL. ALL EXCESS MATERIAL IS THE PROPERTY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL SOD ALL DISTURBED AREAS. SOD IN DISTURBED AREAS SHALL MATCH EXISTING TYPE SOD, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. INSTALL A 4" MUCK BLANKET OR TOPSOIL ON ALL PERMANENT GRASS AREAS. COST TO BE INCLUDED IN CONTRACT UNIT PRICE FOR SOD.
7. ALL OFFSETS SHOWN ARE TO PROPOSED BASELINE OF CONSTRUCTION.
8. THE CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH REQUIREMENTS OF THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT PERMIT 124130-2 AND U.S. ARMY CORPS PERMIT SAJ-2015-01024 INCLUDED IN THE BID SPECIFICATIONS. PAYMENT IS INCLUDED IN THE UNIT PRICES STATED ON THE SUMMARY OF PAY ITEMS; EXCLUDING ITEMS SPECIFIED ELSEWHERE. ENVIRONMENTAL CONTROLS SHALL BE USED AT LOCATIONS DESIGNATED IN THE PLANS AND/OR DESIGNATED BY THE ENGINEER.
9. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH PROJECT CONSTRUCTION. PRIOR TO ORDERING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL DETERMINE IF DRAINAGE/UTILITY CONFLICTS EXIST. INFORMATION ON CONFLICTS IS TO BE SUBMITTED TO THE ENGINEER AS SOON AS POSSIBLE AFTER DISCOVERY FOR RESOLUTION.
10. PRIOR TO COMMENCEMENT OF WORK CONTRACTOR SHALL CALL SUNSHINE ONE 48 HOURS IN ADVANCE OF PERFORMING ANY UTILITY ADJUSTMENTS OR RELOCATIONS. SUNSHINE ONE PHONE NUMBER IS 1-800-432-4770.
11. UTILITIES ARE TO BE ADJUSTED BY OTHERS OR AS DIRECTED BY THE ENGINEER.
12. THE CONTRACTOR SHALL NOTIFY ALL GAS UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION AS REQUIRED BY CHAPTER 77-153 OF THE FLORIDA STATUTES.
13. INSTALLATION OR RELOCATION OF ANY UTILITY, INCLUDING STORM SEWER, SHALL MAINTAIN PROPER UTILITY SEPARATIONS PER FDEP 62-555.314, LOCATION OF PUBLIC WATER SYSTEM MAINS.
14. ALL DRAINAGE PIPES SHALL BE STEEL REINFORCED CONCRETE PIPE (RCP), UNLESS OTHERWISE NOTED.
15. ALL STORM SEWER STRUCTURES SHALL HAVE A WALL THICKNESS OF 8 INCHES MINIMUM
16. MEASUREMENT OF DRAINAGE PIPE FOR PAYMENT SHALL BE DETERMINED FROM ACTUAL LENGTHS INSTALLED.
17. ALL MANHOLE COVERS SHALL INCLUDE THE ORANGE COUNTY LOGO AND BE IDENTIFIED AS "ORANGE COUNTY STORM" .
18. ALL INLET/MANHOLE - PIPE JOINTS SHALL BE FILLED WITH NON-SHRINK GROUT, COVERED WITH AN ASPHALT MASTIC COATING, AND WRAPPED WITH A PLASTIC FILTER FABRIC MATERIAL PER SECTION 13.03.03 OF THE ORANGE COUNTY ROAD CONSTRUCTION SPECIFICATIONS. ALL PIPE JOINTS IN THIS PROJECT SHALL BE WRAPPED PER FDOT STANDARD INDEX No. 280 OR AS DIRECTED BY THE ENGINEER. COST TO BE INCLUDED IN THE COST OF THE PIPE CULVERT.
19. ALL CURB INLETS, DITCH BOTTOM INLETS, AND MANHOLES SHALL HAVE TRAFFIC BEARING FRAMES AND COVERS OR GRATES MEETING HS-20 LOADING REQUIREMENTS.
20. ALL EXISTING DRAINAGE STRUCTURES AND PIPES IF ABANDONED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED, UNLESS OTHERWISE SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER.
21. DESIGN CHANGES OF PIPE INVERTS NOT EXCEEDING PLUS OR MINUS ONE FOOT WILL NOT BE CONSIDERED AS A BASIS FOR ADDITIONAL COMPENSATION FOR THE PERTINENT PIPE BID ITEM OR FOR MODIFICATION OF PRECAST STRUCTURES.
22. ALL (P.R.M.'s) IRONS AND MONUMENTS SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THOSE SHOWN IN PROPOSED PAVEMENT SHALL BE PROTECTED WITH A CAST IRON VALVE BOX.
23. ANY U.S.C. AND G.S. MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, ORANGE COUNTY SURVEY SECTION 407-836-7940 AND BOTH SHALL NOTIFY:

    STATE GEODETIC ADVISOR, 3900 COMMONWEALTH BOULEVARD, SUITE 309, TALLAHASSEE, FL, 850-245-2606
24. PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE COUNTY SURVEYOR, WITHOUT DELAY, BY TELEPHONE 407-836-7940). THE CONTRACTOR SHALL PROVIDE WRITTEN FOLLOW UP CONFIRMATION WITHIN 48 HOURS OF TELEPHONE NOTIFICATION.
25. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO ORANGE COUNTY HIGHWAY CONSTRUCTION DEPARTMENT A SET OF FIELD NOTES VERIFYING THE BENCHMARK ELEVATIONS AND THE REFERENCE POINT TIES SHOWN ON THE TITLE SHEET AND PROJECT LAYOUT SHEET, AND/OR A SET OF FIELD NOTES FOR ALL ADDITIONAL BENCHMARK AND REFERENCE POINT TIES PROPOSED TO BE USED IN CONSTRUCTING THE PROJECT WITH THEIR LOCATION, DESCRIPTION AND ELEVATION, BASED ON ORANGE COUNTY DATUM. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
26. THE CONTRACTOR SHALL RELOCATE EXISTING TRAFFIC SIGNS AS REQUIRED DURING CONSTRUCTION. SIGNS, WHICH ARE DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE COUNTY. THE CONTRACTOR SHALL REMOVE AND STORE EXISTING TRAFFIC SIGNS THAT ARE NOT USED DURING CONSTRUCTION. THE CONTRACTOR SHALL RE-INSTALL THE STORED SIGNS AS DIRECTED BY THE ENGINEER. SIGNS NOT TO BE RE-INSTALLED SHALL BE DELIVERED TO ORANGE COUNTY'S TRAFFIC SIGN SHOP. DAMAGE SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO ORANGE COUNTY. COST OF RELOCATION, MAINTENANCE, REMOVAL AND LEFTOVER SHALL BE INCLUDED IN THE UNIT PRICES STATED ON THE SUMMARY OF PAY ITEMS.
27. ALL EXCAVATIONS SHALL BE REQUIRED TO CONFORM TO THE PROVISION OS PART IV OF CHAPTER 553.60, F.S., AKA THE "TRENCH SAFETY ACT". TO PROTECT EXISTING PAVEMENT, STRUCTURES, FOUNDATIONS, AND CONSTRUCTION PERSONNEL DURING CONSTRUCTION OF THE PROJECT.
28. CONTRACTOR IS TO MAINTAIN UNINTERRUPTED ACCESS TO ALL DRIVEWAYS AND SIDE STREETS AT ALL TIMES AND IS TO NOTIFY PROPERTY OWNERS FIVE DAYS PRIOR TO STARTED CONSTRUCTION.
29. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK (INCLUDING FENCING) SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION. COST TO BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
30. ALL EXISTING TREES WITHIN THE RIGHT-OF-WAY THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED. ALL OTHER TREES SHALL REMAIN AND BE PROTECTED DURING CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
31. PEGGED SOD TO BE PLACED ON ALL SLOPES 3:1 OR STEEPER.
32. A WRITTEN DEWATERING PLAN WITH SCHEMATIC DRAWINGS SHALL BE PROVIDED TO THE COUNTY 2 WEEKS PRIOR TO MOBILIZATION FOR REVIEW AND APPROVAL. ALL COUNTY COMMENTS SHALL BE INCORPORATED INTO THE PLAN. COST TO THIS PLAN SHALL BE INCLUDED IN THE PRICE BID FOR PAY ITEM NO. 101- 1 MOBILIZATION.
33. A MAINTENANCE OF TRAFFIC PLAN SHALL BE PROVIDED TO THE COUNTY 2 WEEKS PRIOR TO MOBILIZATION FOR REVIEW AND APPROVAL. ALL COUNTY COMMENTS SHALL BE INCORPORATED INTO THE PLAN. COST TO THIS PLAN SHALL BE INCLUDED IN THE PRICE BID FOR PAY ITEM NO. 101-1 MOBILIZATION.
34. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING TEMPORARY DRAINAGE AND MAINTENANCE OF ALL EXISTING RUNOFF DISCHARGES DURING CONSTRUCTION TO AVOID THE TRANSPORT OF SEDIMENT AND ERODIBLE SOILS UNTIL THE WORK HAS BEEN ACCEPTED BY THE COUNTY.
35. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A STAGING AREA TO STORE EQUIPMENT, SUPPLIES, & MATERIALS, PROVIDE EMPLOYEE PARKING, AND ETC. FOR THE DURATION OF CONSTRUCTION OR AS APPROVED BY THE ENGINEER. THE USE OF EXISTING COUNTY EASEMENTS AND RIGHT OF WAY SHOULD BE USED UNLESS OTHERWISE DIRECTED BY THE COUNTY.
36. ALL CONSTRUCTION ACTIVITIES ARE TO OCCUR WITHIN COUNTY RIGHT-OF-WAY OR WITHIN EXISTING COUNTY EASEMENTS. THE 10 FEET EASEMENT (PB 3, PG 71 & PB 2, PG 133) ALONG THE SOUTHERN BORDER OF THE PROJECT CORRIDOR SHALL BE UTILIZED ONLY WHEN NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS. ENCROACHING ONTO THE SOUTHERN 10 FEET EASEMENT SHALL REQUIRE THE CONTRACTOR TO COORDINATE AND OBTAIN APPROVAL BY THE COUNTY AND TO ALERT ANY RESIDENTIAL OCCUPANT AT LEAST 48 HOURS PRIOR. ALL DISTURBED PRIVATE PROPERTY SHALL BE RESTORED TO ITS ORIGINAL CONDITION. CONTRACTOR SHALL NOT ENCROACH OUTSIDE OF EXISTING COUNTY EASEMENTS AND RIGHTS-OF-WAY, OR WITHIN UNDESIGNATED WETLAND IMPACT AREAS. CONTRACTOR SHALL USE APPROVED TEMPORARY SHORING OR SHEETING MEASURES AS APPROPRIATE TO MAINTAIN CONSTRUCTION WITHIN LIMITS OF DISTURBANCE.
37. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND RESTORE ANY GRADES INSIDE OR OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED DURING CONSTRUCTION.
38. CONTRACTOR TO REVIEW GEOTECHNICAL REPORT PREPARED BY DEVO ENGINEERING, INC. DATED OCTOBER 8, 2014. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL RECOMMENDATIONS FOR DEMUCKING AND BACKFILL, EARTHWORKS RECOMMENDATIONS FOR PIPE TRENCH, AND RECOMMENDATIONS FOR MINOR STORMWATER STRUCTURES.
39. THE CONTRACTOR SHALL OVER-EXCAVATE THE LIMITS OF ALL ENCOUNTERED MUCK, OR ORGANIC DEPOSITS WITHIN 3 FEET HORIZONTALLY OF THE PROPOSED STORMWATER STRUCTURES, AS WELL AS THE FULL DEPTH OF ENCOUNTERED MUCK BENEATH THE PROPOSED STORMWATER STRUCTURES. THE QUANTITIES OF SUBSOIL EXCAVATION DETAILED ON THE QUANTITY AND PAY ITEMS SHEET HAS BEEN DERIVED FROM MUCK PROBES AND GEOTECHNICAL TESTING. THE CONTRACTOR SHALL VERIFY THE EXTENT OF EXISTING MUCK AND OTHER UNSUITABLE SOILS BY PROVIDING TO ORANGE COUNTY HIGHWAY CONSTRUCTION A SIGNED AND SEALED SURVEY, PREPARED BY A REGISTERED FLORIDA SURVEYOR, INCLUDING ELEVATIONS AND CROSS SECTIONS OF THE AREA WHERE UNSUITABLE SOILS ARE FOUND. ELEVATIONS SHALL BE PROVIDED EVERY 25 FEET AND SHALL BE REPRESENTATIVE OF THE CONDITIONS. CONTRACTOR SHALL PREVENT THE MIGRATION OF MUCK AND ORGANIC DEPOSITS FROM MIGRATING INTO OPEN TRENCHES, BY USE OF APPROPRIATE TEMPORARY SHORING OR SHEETING PRACTICES. APPROVED TEMPORARY SHORING OR SHEETING MEASURES SHALL NOT USE VIBRATORY INSTALLATION IF WITHIN 75 FEET OF RESIDENTIAL STRUCTURES.
40. PROJECT REFERENCE DOCUMENTS:

1. GEOTECHNICAL ENGINEERING REPORT DATED OCTOBER 8, 2014 PREPARED BY DEVO ENGINEERING.
2. DRAINAGE REPORT FOR BELMONT ESTATES DRAINAGE IMPROVEMENTS DATED OCTOBER 2014 PREPARED BY GEOSYNTEC CONSULTANTS, INC.
3. TOPOGRAPHIC SURVEY - BELMONT ESTATES DRAINAGE IMPROVEMENTS PROJECT DATED SEPTEMBER 10, 2014 BY GEODATA CONSULTANTS, INC.

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REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES
DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

GENERAL NOTES

SHEET NO.
3

NOTE:
THE DATA REFERENCED HEREIN IS BASED ON A TOPOGRAPHIC SURVEY COMPLETED ON 10-10-2014 BY GEODATA CONSULTANTS, INC.

LEGEND:

BENCHMARK

MONUMENT

NOT PLATTED

BEGIN ℄ SURVEY
STA 14+00.00
SET 5/8" IRC
"TRAV PT LB 6556"

20' UTILITY & DRAINAGE EASEMENT (P)

STA 12+95.37
7.87' RT

PROPERTY LINE

℄ OF SURVEY

N89°20'48"E

S89°19'33"W (C)

CONST BL AT 14+00.00 =
SURVEY BL STA 14+00.00
OFFSET 65.89' (R)
N: 1544723.32
E: 563058.12

BASELINE OF CONSTRUCTION

LANDS DESCRIBED IN ORB 3127, PG 1249

STA 16+80.37
7.73' RT
FOUND 5/8" IRON ROD
NO IDENTIFICATION

SURVEY BASELINE
STA 17+49.86
N 1544793.19
E 563407.20

69.10'
S0° 39' 11.51"E

SITE BENCHMARK 3
STA 17+49.86, 69.10' LT
SET NAIL & DISK
"GEODATA LB 6556"
EL = 71.35' (NAVD88)

0 50'

MATCHLINE
STA 19+50

POT STA 17+84.97
SET 5/8" IRC
"TRAV PT LB 6556"

STA 18+18.57
60.68' RT

STA 12+95.49
60.87' RT

SECTION 11, TOWNSHIP 22 SOUTH, RANGE 30 EAST
SECTION 14, TOWNSHIP 22 SOUTH, RANGE 30 EAST

N89° 20' 48.49"E
1421.81'

Construction Baseline
STA 12+50.00
N 1544721.61
E 562908.13

STA 12+95.41
113.87' RT

STA 18+18.52
93.68' RT

STA 18+18.49
113.68' RT

20' DRAINAGE EASEMENT
ORB 2476, PG 1950

53' DRAINAGE EASEMENT
ORB 2031, PG 53

LANDS DESCRIBED IN
ORB 3127, PG 1250

LANDS DESCRIBED IN
ORB 10737, PG 3323

S89°19'33"W 1278.65'(C) 1279.11'(P)

DRAINAGE & UTILITY EASEMENT (P)

10' DRAINAGE & UTILITY EASEMENT (P)

50.00' (D)

INGRESS & EGRESS EASEMENT
ORB 2850, PG 1950

SITE BENCHMARK 1
STA 24+16.09, 13.80' LT
SET SQUARE CUT IN
CONCRETE ISLAND
EL = 67.51' (NAVD88)

SITE BENCHMARK 2
STA 20+06.33, 16.92' LT
FOUND 3 1/2" ORANGE
COUNTY DISK "S1372003"
PUBLISHED EL = 68.259'
(NAVD88)

POT STA 20+88.69
SET 5/8" IRC
"TRAV PT LB 6556"

STA 22+38.97
7.52' RT
FOUND 1" IRON PIPE
NO IDENTIFICATION

STA 23+43.26
15.16' LT

STA 24+26.21
13.70' LT

15' DRAINAGE EASEMENT
ORB 2450, PG 725

END ℄ SURVEY
STA 25+71.81
SET 5/8" IRC
"TRAV PT LB 6556"

STA 25+73.97
7.40' RT
FOUND 5/8" IRON ROD & CAP
"LB 2648 DRMP"

STA 23+42.99
0.16' LT

STA 24+20.02
1.19' RT

MAKE SHIFT WOOD STRUCTURE
(NOTHING FOUND NORTHWEST
OF STRUCTURE)

15' DRAINAGE EASEMENT
ORB 2450, PG 727

STA 24+81.04
60.43' RT

STA 25+02.56
60.42' RT

STA 25+74.14
60.40' RT

STA 26+24.14
60.38' RT
FOUND BOX CUT
IN ASPHALT

GOLDENROD ROAD

N89° 20' 48.49"E
1421.81'

BASELINE OF CONSTRUCTION

Construction Baseline
STA 26+71.81
N 1544737.82
E 564329.85

53' DRAINAGE EASEMENT
ORB 2031, PG 53

LANDS DESCRIBED IN
ORB 3182, PG 1285

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REVISIONS		
DATE	BY	DESCRIPTION

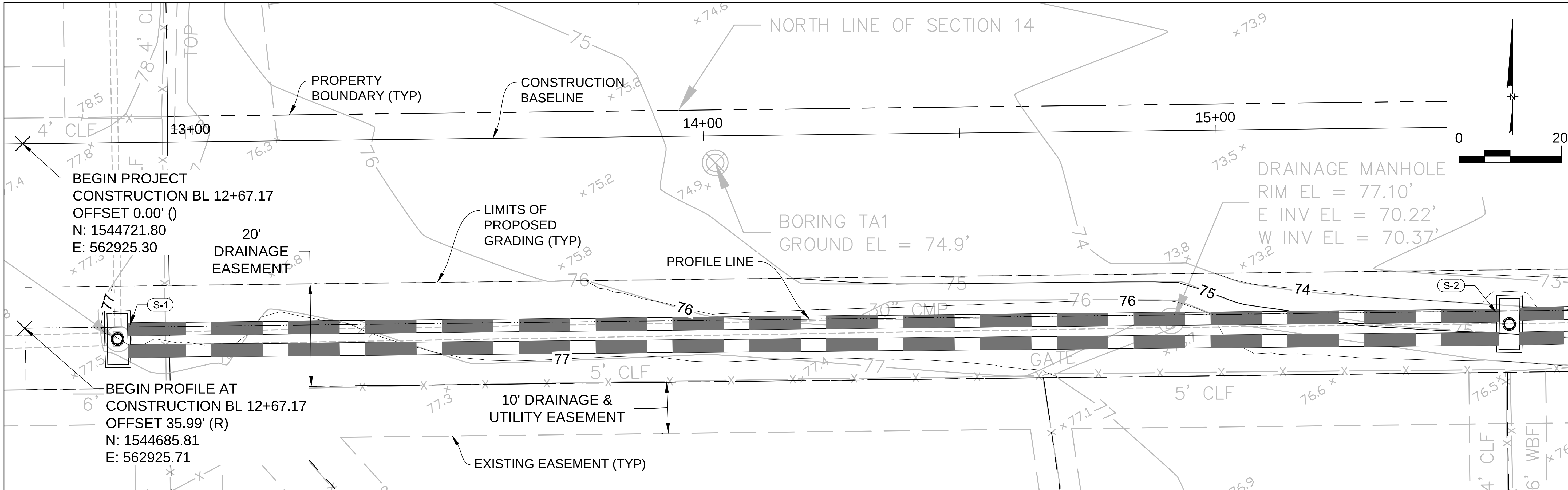
BELMONT ESTATES DRAINAGE IMPROVEMENTS

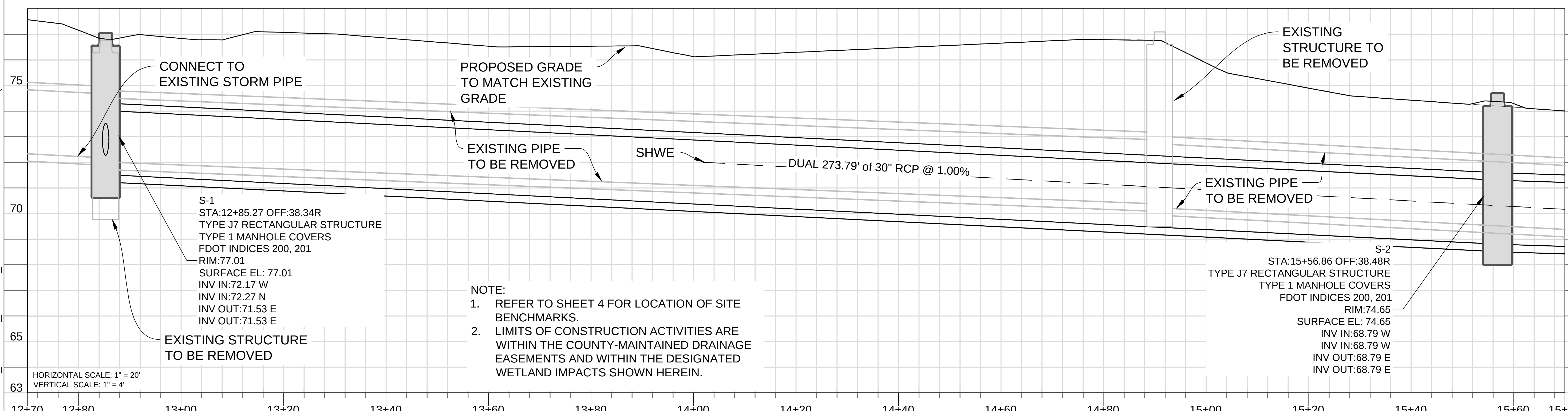
ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

PROJECT LAYOUT

SHEET NO.
4





NOTE:
1. REFER TO SHEET 4 FOR LOCATION OF SITE BENCHMARKS.
2. LIMITS OF CONSTRUCTION ACTIVITIES ARE WITHIN THE COUNTY-MAINTAINED DRAINAGE EASEMENTS AND WITHIN THE DESIGNATED WETLAND IMPACTS SHOWN HEREIN.

12+72.00	77.52
12+76.00	77.42
12+80.00	77.15
12+84.00	76.85
12+88.00	76.85
12+92.00	76.99
12+96.00	76.91
13+00.00	76.83
13+04.00	76.79
13+08.00	76.78
13+12.00	76.98
13+16.00	77.10
13+20.00	77.07
13+24.00	77.05
13+28.00	77.02
13+32.00	76.98
13+36.00	76.92
13+40.00	76.85
13+44.00	76.79
13+48.00	76.72
13+52.00	76.66
13+56.00	76.59
13+60.00	76.53
13+64.00	76.51
13+68.00	76.51
13+72.00	76.52
13+76.00	76.53
13+80.00	76.53
13+84.00	76.54
13+88.00	76.55
13+92.00	76.44
13+96.00	76.28
14+00.00	76.12
14+04.00	76.15
14+08.00	76.19
14+12.00	76.22
14+16.00	76.26
14+20.00	76.29
14+24.00	76.33
14+28.00	76.37
14+32.00	76.40
14+36.00	76.44
14+40.00	76.47
14+44.00	76.51
14+48.00	76.55
14+52.00	76.58
14+56.00	76.62
14+60.00	76.65
14+64.00	76.69
14+68.00	76.73
14+72.00	76.76
14+76.00	76.79
14+80.00	76.78
14+84.00	76.78
14+88.00	76.77
14+92.00	76.68
14+96.00	76.28
15+00.00	75.88
15+04.00	75.50
15+08.00	75.34
15+12.00	75.19
15+16.00	75.04
15+20.00	74.90
15+24.00	74.75
15+28.00	74.60
15+32.00	74.54
15+36.00	74.48
15+40.00	74.42
15+44.00	74.37
15+48.00	74.31
15+52.00	74.29
15+56.00	74.38
15+60.00	74.29
15+64.00	74.09
15+68.00	74.03

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REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES
DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
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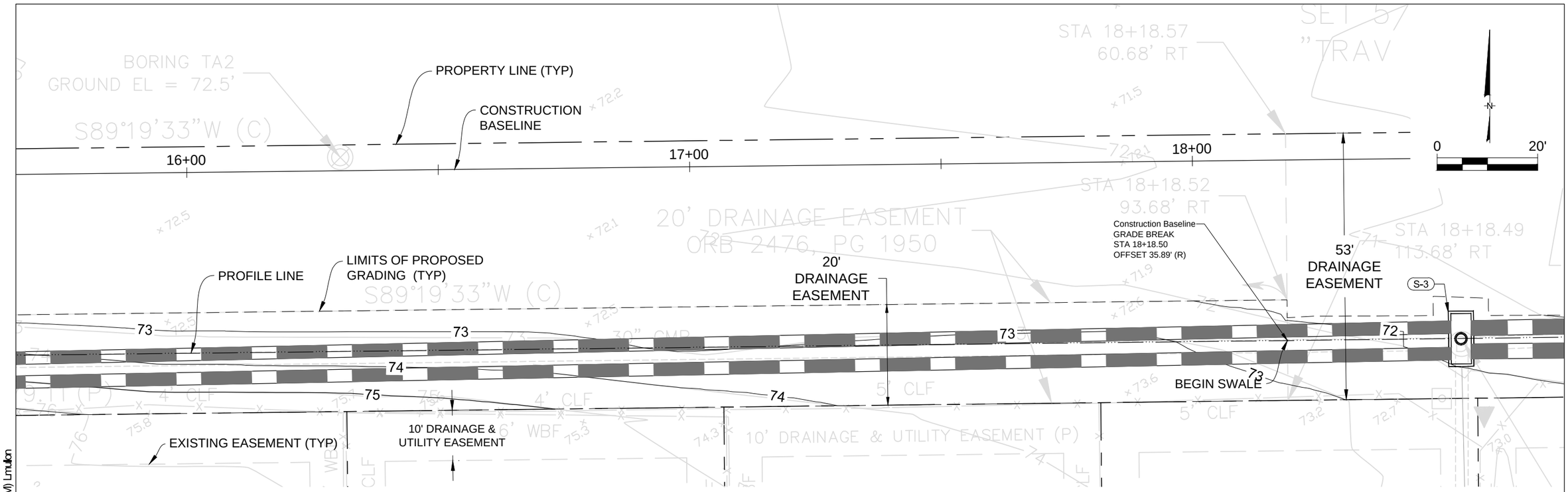
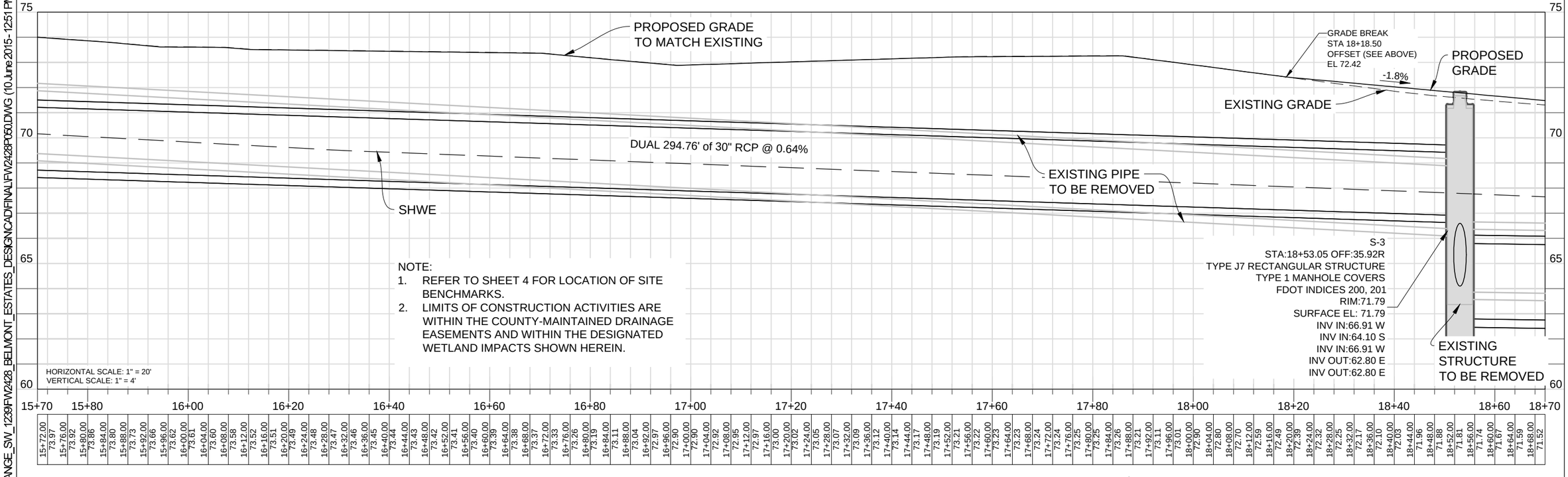
AUTHORIZATION NUMBER 4321

PLAN AND PROFILE

SHEET NO.
5





NOTE:
1. REFER TO SHEET 4 FOR LOCATION OF SITE BENCHMARKS.
2. LIMITS OF CONSTRUCTION ACTIVITIES ARE WITHIN THE COUNTY-MAINTAINED DRAINAGE EASEMENTS AND WITHIN THE DESIGNATED WETLAND IMPACTS SHOWN HEREIN.

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REVISIONS		
DATE	BY	DESCRIPTION

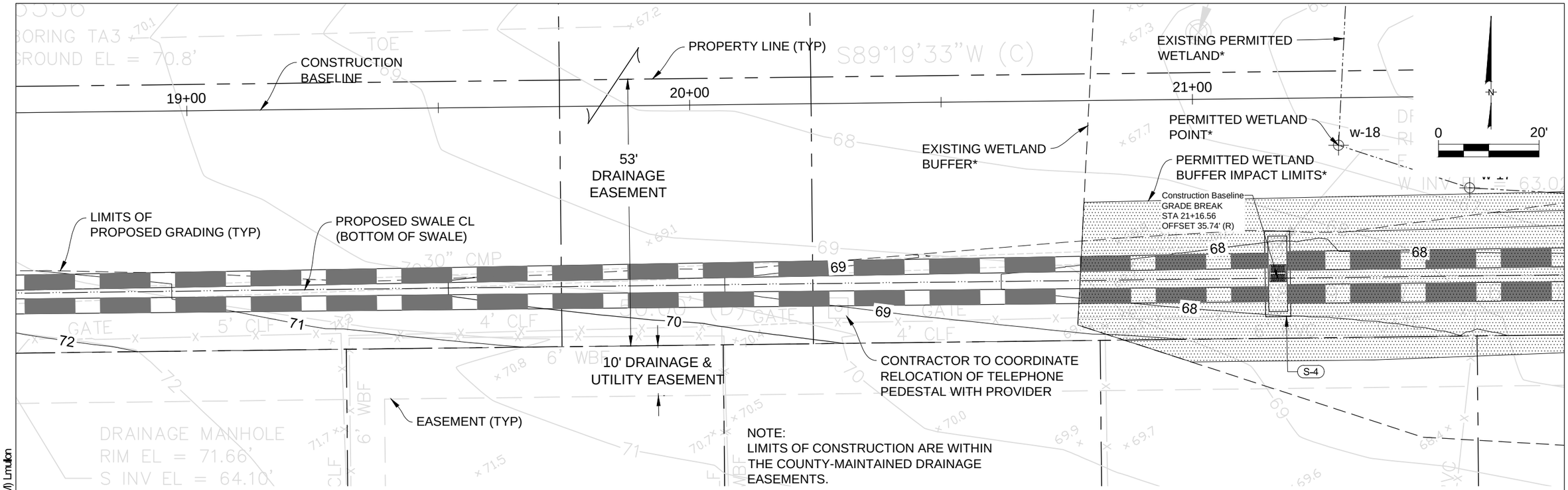
BELMONT ESTATES DRAINAGE IMPROVEMENTS

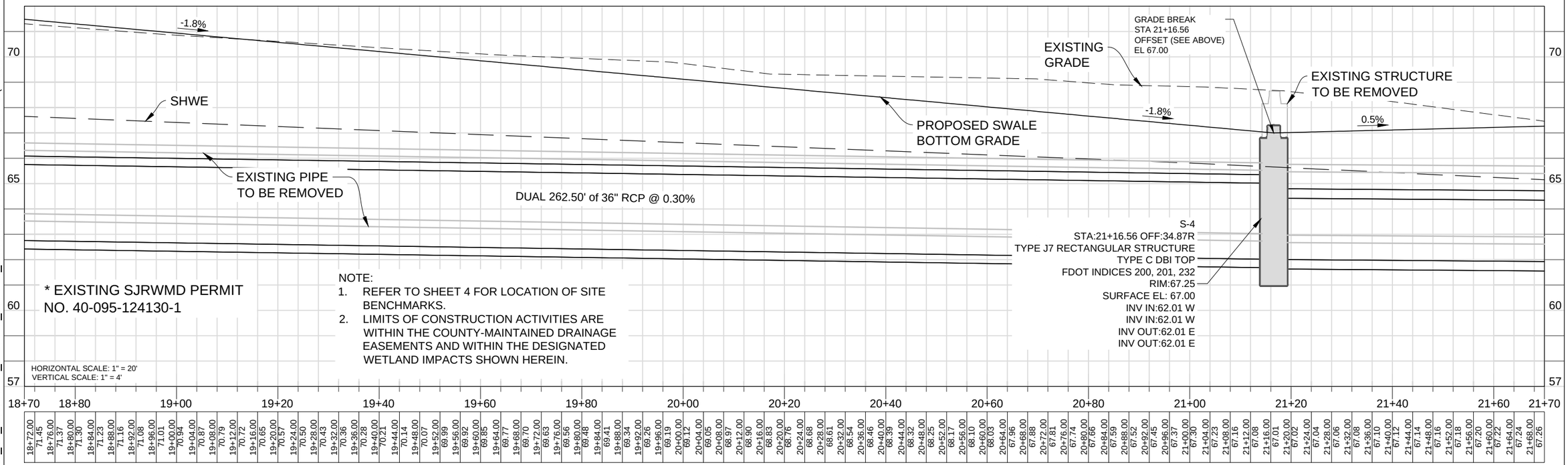
ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

PLAN AND PROFILE

SHEET NO.
6





* EXISTING SJRWMD PERMIT NO. 40-095-124130-1

NOTE:
1. REFER TO SHEET 4 FOR LOCATION OF SITE BENCHMARKS.
2. LIMITS OF CONSTRUCTION ACTIVITIES ARE WITHIN THE COUNTY-MAINTAINED DRAINAGE EASEMENTS AND WITHIN THE DESIGNATED WETLAND IMPACTS SHOWN HEREIN.

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
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AUTHORIZATION NUMBER 4321

PLAN AND PROFILE

SHEET NO. 7

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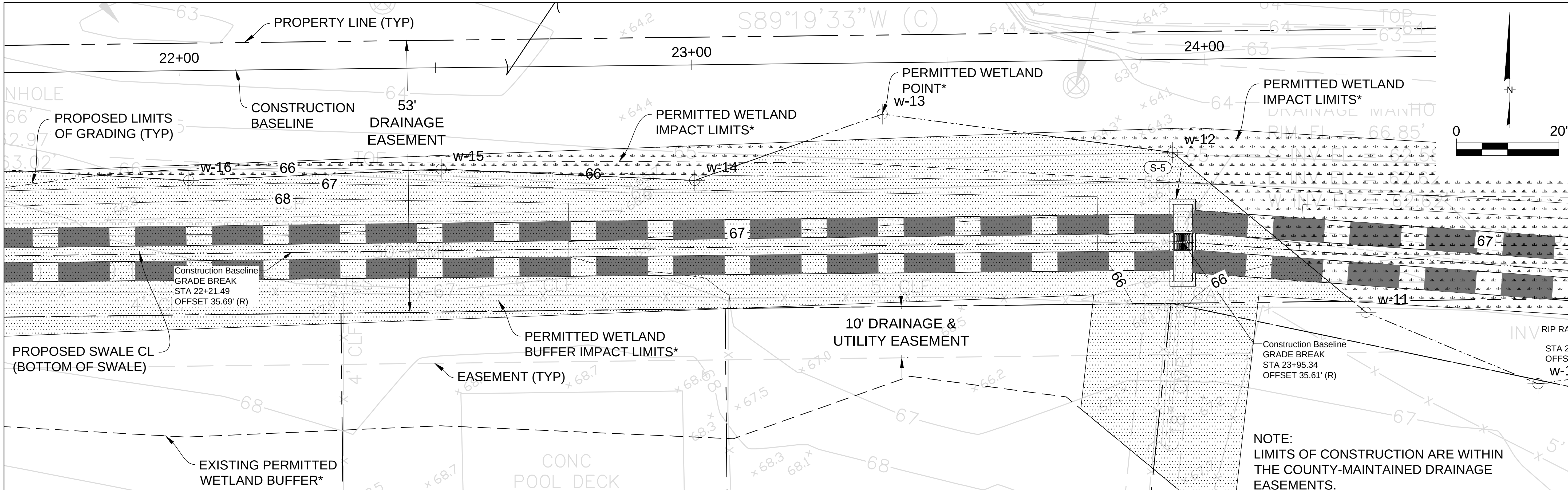

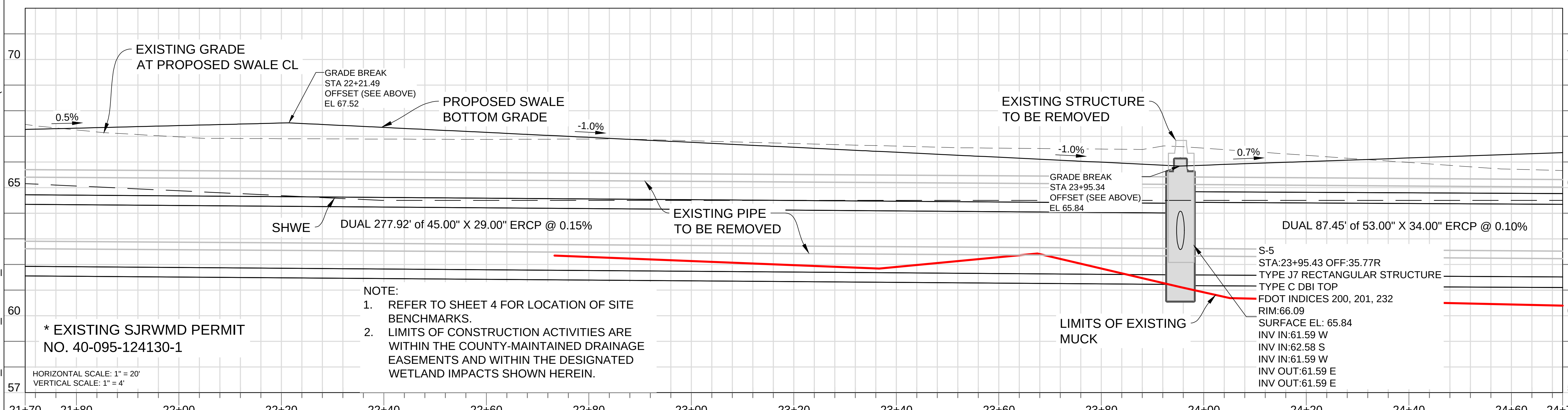

NOTE:
1. REFER TO SHEET 4 FOR LOCATION OF SITE BENCHMARKS.
2. LIMITS OF CONSTRUCTION ACTIVITIES ARE WITHIN THE COUNTY-MAINTAINED DRAINAGE EASEMENTS AND WITHIN THE DESIGNATED WETLAND IMPACTS SHOWN HEREIN.

21+72.00	67.28
21+76.00	67.30
21+80.00	67.32
21+84.00	67.34
21+88.00	67.36
21+92.00	67.38
21+96.00	67.40
22+00.00	67.42
22+04.00	67.44
22+08.00	67.46
22+12.00	67.48
22+16.00	67.50
22+20.00	67.52
22+24.00	67.50
22+28.00	67.46
22+32.00	67.42
22+36.00	67.38
22+40.00	67.35
22+44.00	67.31
22+48.00	67.27
22+52.00	67.23
22+56.00	67.19
22+60.00	67.15
22+64.00	67.11
22+68.00	67.07
22+72.00	67.04
22+76.00	67.00
22+80.00	66.96
22+84.00	66.92
22+88.00	66.88
22+92.00	66.84
22+96.00	66.80
23+00.00	66.76
23+04.00	66.73
23+08.00	66.69
23+12.00	66.65
23+16.00	66.61
23+20.00	66.57
23+24.00	66.53
23+28.00	66.49
23+32.00	66.45
23+36.00	66.42
23+40.00	66.38
23+44.00	66.34
23+48.00	66.30
23+52.00	66.26
23+56.00	66.22
23+60.00	66.18
23+64.00	66.14
23+68.00	66.10
23+72.00	66.07
23+76.00	66.03
23+80.00	65.99
23+84.00	65.95
23+88.00	65.91
23+92.00	65.87
23+96.00	65.84
24+00.00	65.87
24+04.00	65.90
24+08.00	65.93
24+12.00	65.96
24+16.00	65.99
24+20.00	66.01
24+24.00	66.04
24+28.00	66.07
24+32.00	66.10
24+36.00	66.13
24+40.00	66.15
24+44.00	66.18
24+48.00	66.21
24+52.00	66.24
24+56.00	66.27
24+60.00	66.29
24+64.00	66.32
24+68.00	66.35

REVISIONS

DATE	BY	DESCRIPTION

BELMONT ESTATES DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
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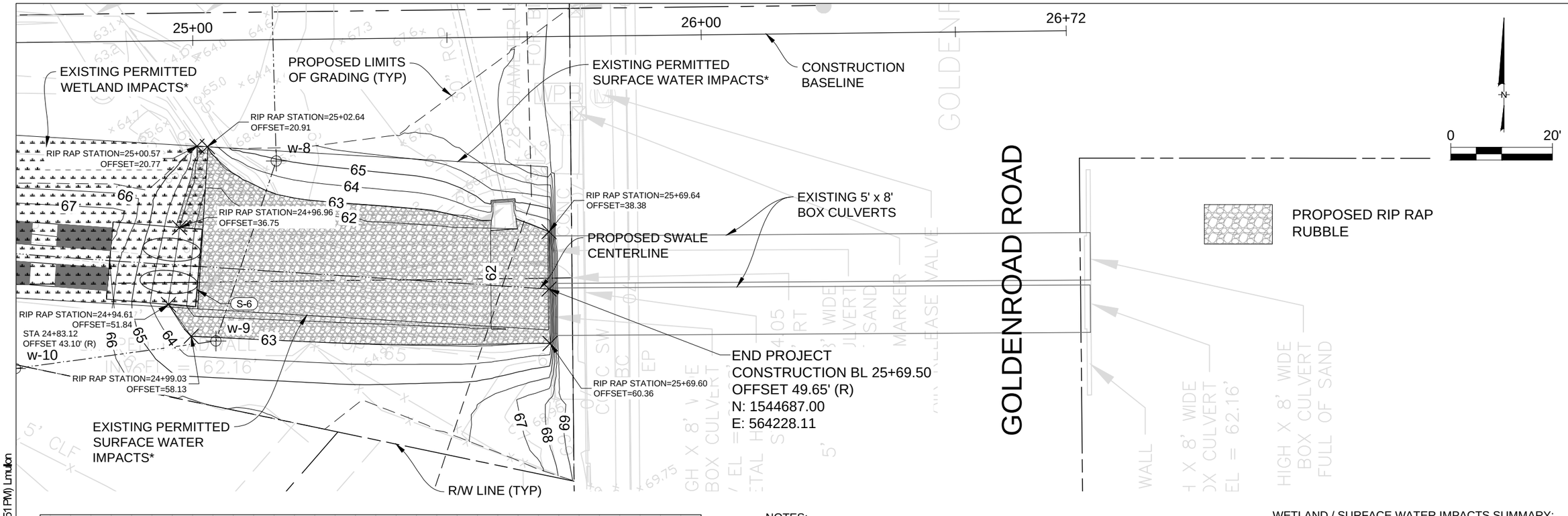
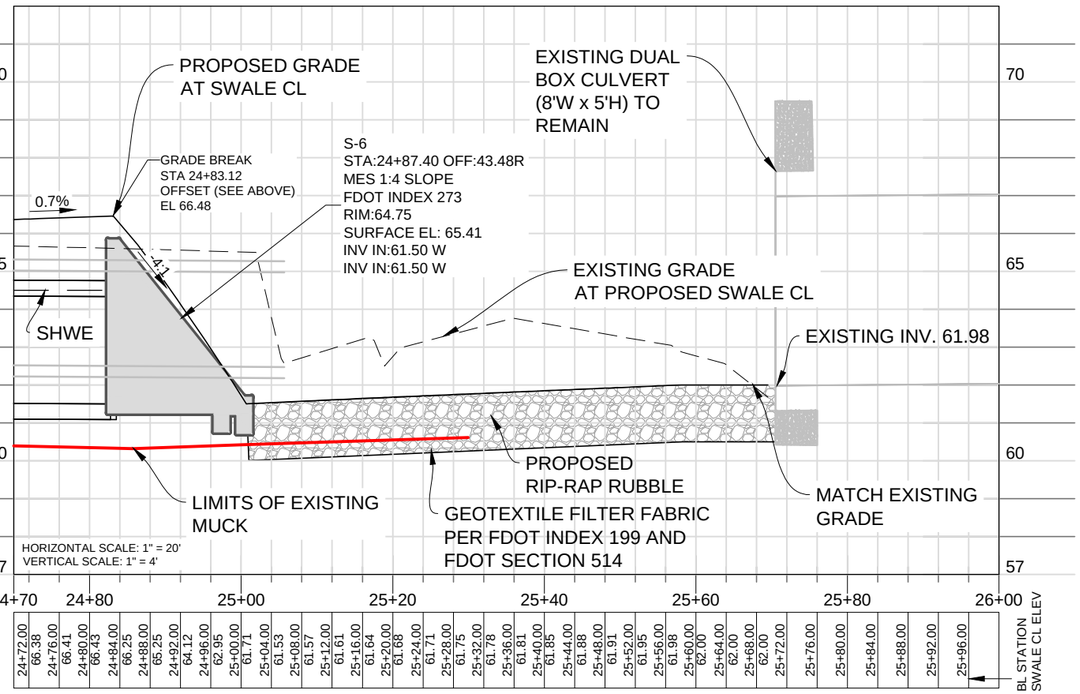
FL PE# 69032
AUTHORIZATION NUMBER 4321

PLAN AND PROFILE

SHEET NO. 8

P:\PROJECTS\ORANGE_SW_1239\FW2428_BELMONT_ESTATES_DESIGN\CAD\FINAL\FW2428P050.DWG (10 June 2015 - 12:51 PM) Lmullon





NOTES:

1. THE EXISTING PERMITTED WETLAND IMPACTS, PERMITTED WETLAND BUFFER IMPACTS AND PERMITTED SURFACE WATER IMPACTS WERE APPROVED BY SJRWMD ON JULY 12, 2011 PER PERMIT 40-095-124130-1. THE PROPOSED IMPROVEMENTS ASSOCIATED WITH THESE CONSTRUCTION PLANS SHALL NOT ENCROACH BEYOND THESE PERMITTED LIMITS.
2. RIPRAP RUBBLE SHALL BE CONSTRUCTED PER FDOT SPECIFICATIONS SECTION 530 FOR DITCH LINING, AND SHALL HAVE A MINIMUM THICKNESS OF 18 INCHES.
3. ALL PROPOSED SURFACES WITHIN THE LIMITS OF GRADING SHALL BE SODDED, UNLESS OTHERWISE NOTED. SODDING ALONG PROPOSED SWALE SHALL BE PER FDOT INDEX 281.
4. ALL PROPOSED RESIDENTIAL FENCES WITHIN COUNTY EASEMENTS OR RIGHT-OF-WAY TO BE REMOVED AS NECESSARY FOR THE INSTALLATION OF THE PROPOSED IMPROVEMENTS. CONTRACTOR SHALL REPLACE ALL REMOVED RESIDENTIAL FENCES AND RELOCATE THEM TO THE RESIDENTIAL PROPERTY LINE. INCLUDE COSTS TO REMOVE AND REPLACE FENCING IN BASE BID.
5. THE LIMITS OF EXISTING MUCK ARE BASED UPON THE GEOTECHNICAL REPORT PREPARED BY DEVO ENGINEERING DATED OCTOBER 8, 2014. ACTUAL LIMITS MAY VARY. CONTRACTOR SHALL OVER EXCAVATE ALL MUCK WITHIN 3 FEET OF THE PROPOSED STORMWATER IMPROVEMENTS.
6. REFER TO SHEET 4 FOR LOCATION OF SITE BENCHMARKS.
7. LIMITS OF CONSTRUCTION ARE WITHIN THE COUNTY-MAINTAINED DRAINAGE EASEMENTS AND WITHIN THE DESIGNATED WETLAND IMPACTS SHOWN HEREIN.

WETLAND / SURFACE WATER IMPACTS SUMMARY:

1. WETLAND IMPACT AREA = 0.08 ACRES
2. BUFFER IMPACT AREA = 0.25 ACRES
3. SURFACE WATER IMPACT AREA = 0.045 ACRES

* EXISTING SJRWMD PERMIT NO. 40-095-124130-1

REVISIONS		
DATE	BY	DESCRIPTION
04-20-15	LGM	USACE WETLAND IMPACT SUMMARY

BELMONT ESTATES DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
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Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

PLAN AND PROFILE

SHEET NO. 9

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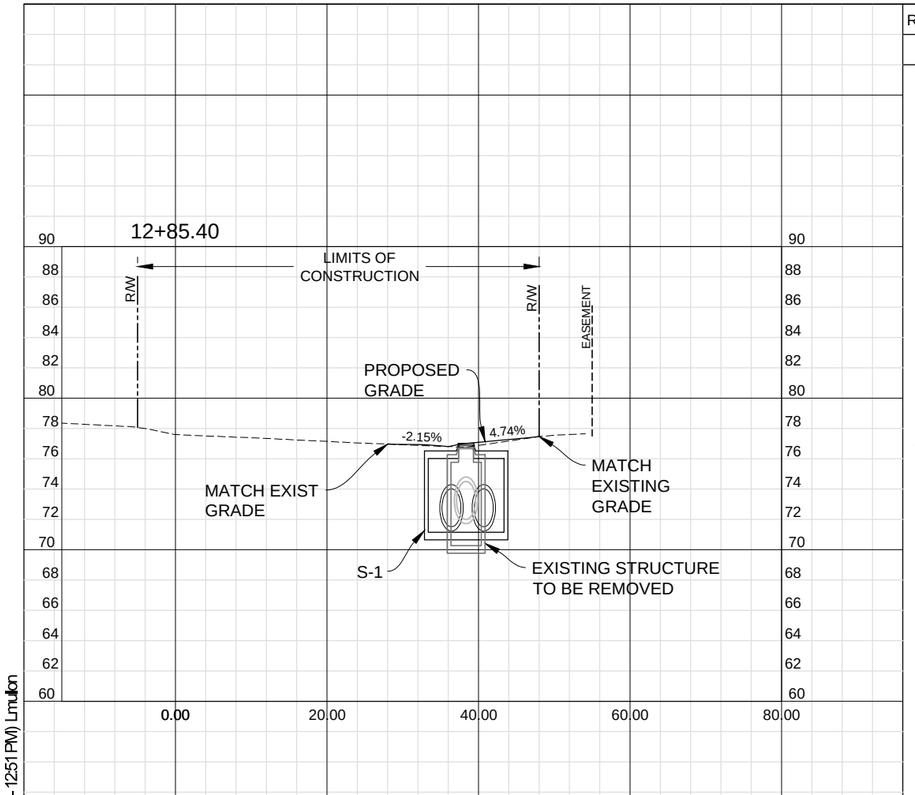
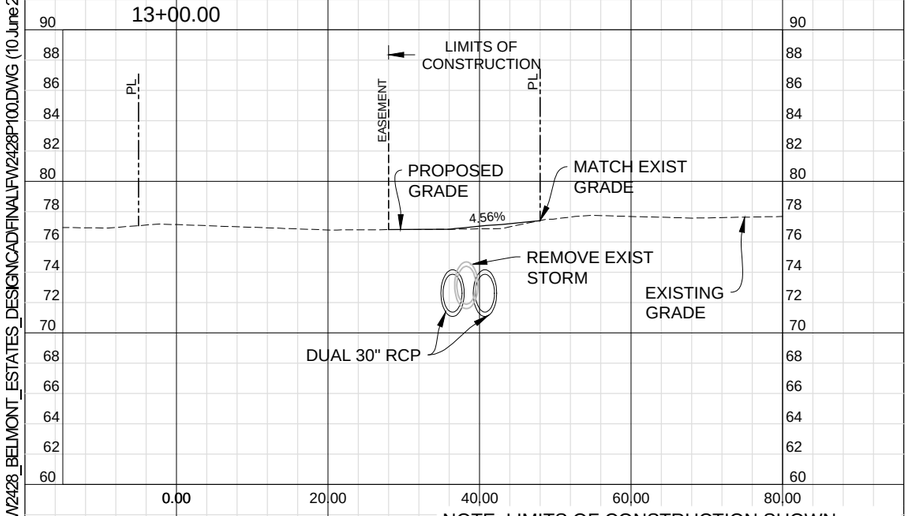
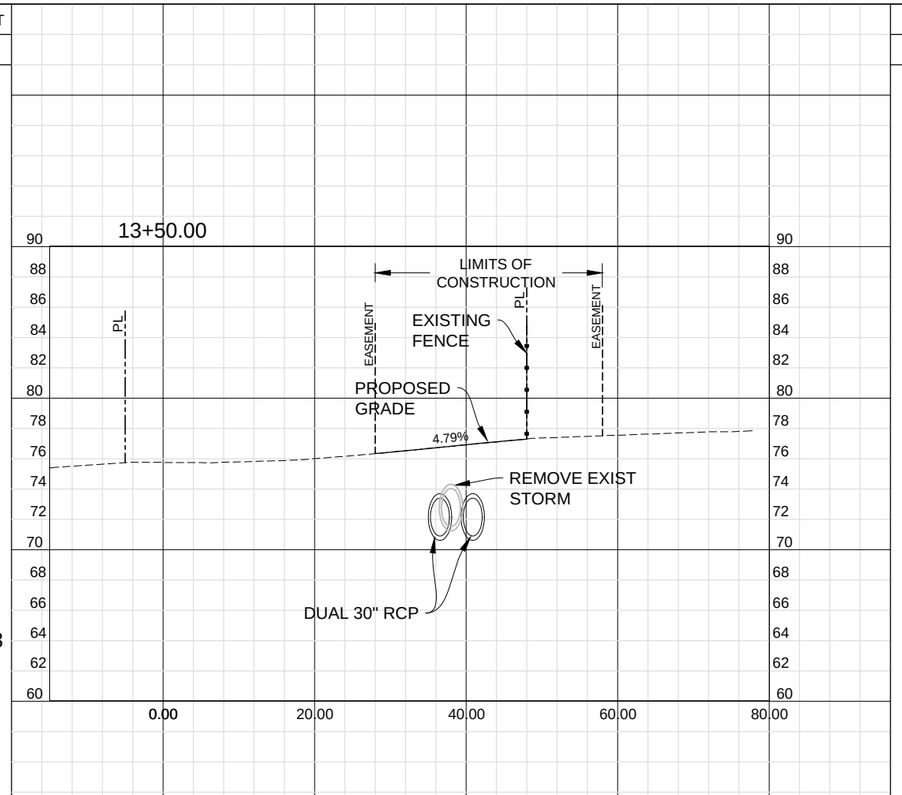
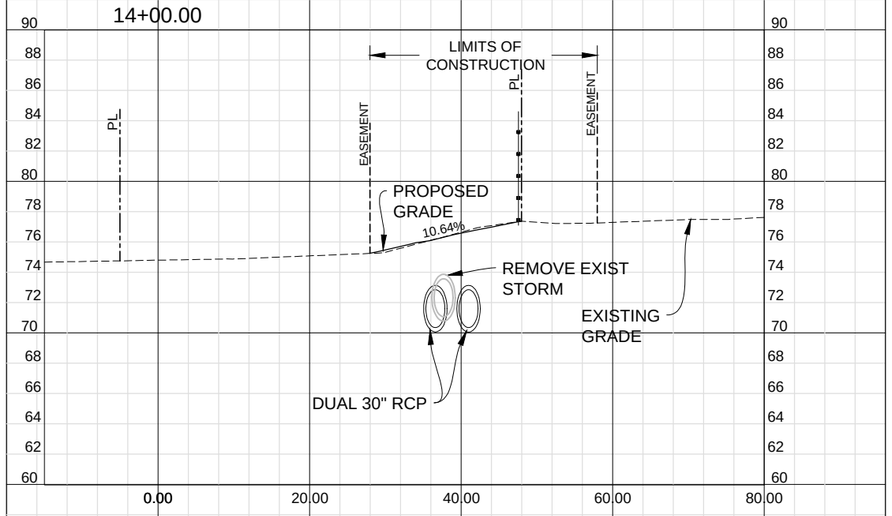




HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

NOTE: LIMITS OF CONSTRUCTION SHOWN REFLECT THE ALLOWABLE LIMITS OF CONTRACTOR ENCROACHMENTS BASED ON EXISTING PROPERTY LIMITS, EASEMENTS AND/OR PERMITTED WETLAND IMPACTS.





CAUTION: AN EXISTING 7200V UNDERGROUND POWER UTILITY BY DUKE ENERGY EXISTS WITHIN THE 10 FEET DRAINAGE AND UTILITY EASEMENT WITHIN THE SOUTHERLY RESIDENTIAL PROPERTIES. THIS UTILITY WAS NOT LOCATED BY THE FIELD TOPOGRAPHIC SURVEY AND IS NOT SHOWN ON THESE CONSTRUCTION DOCUMENTS.

REGULAR EXC.		EMBANKMENT	
A	V	A	V
0.00	0.00	0.00	0.73
0.00	0.00	1.55	1.44

REGULAR EXC.		EMBANKMENT	
A	V	A	V
0.00	0.46	0.00	0.56
0.50	2.18	0.60	0.56

REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

CROSS SECTIONS

SHEET NO. 10

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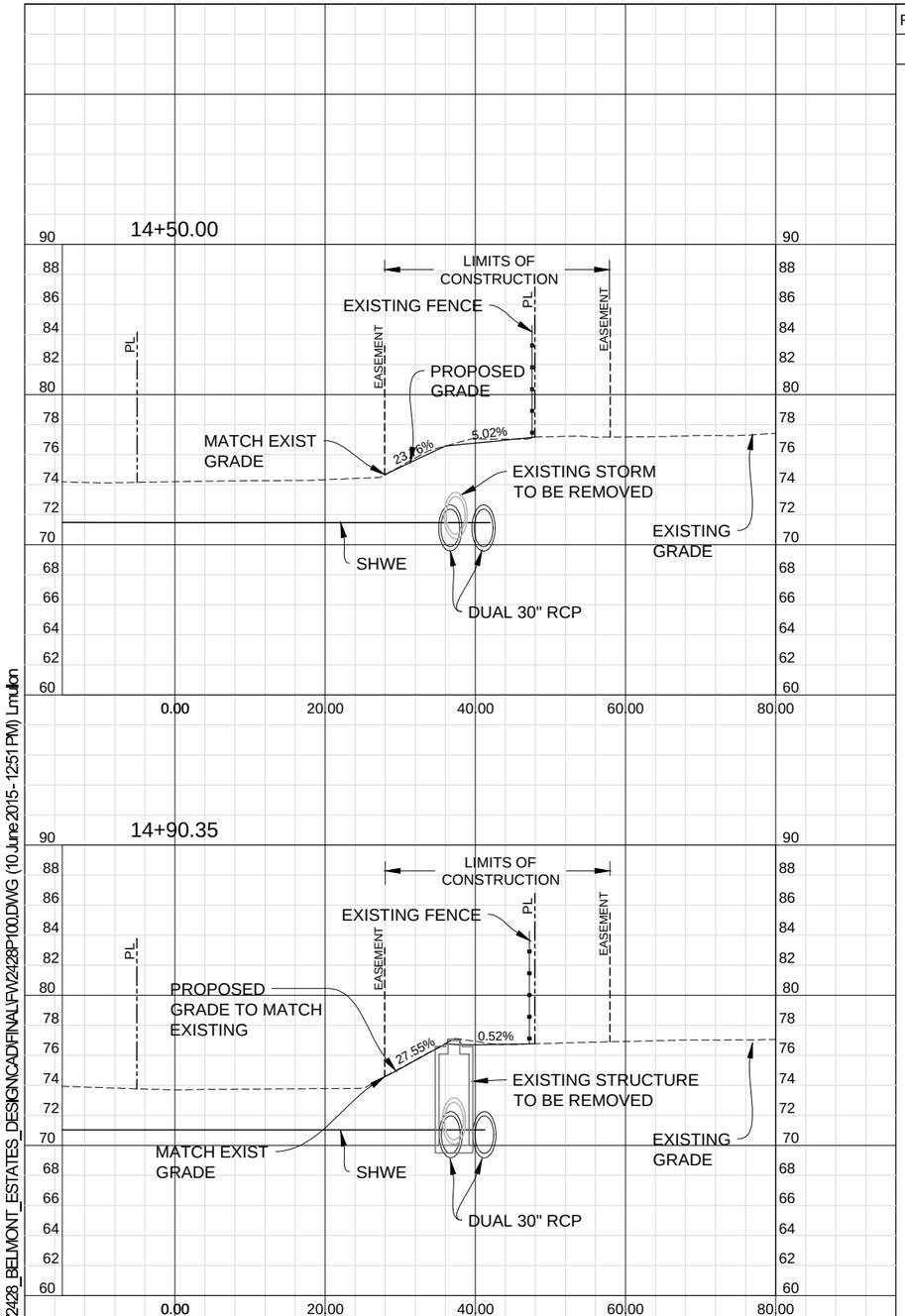
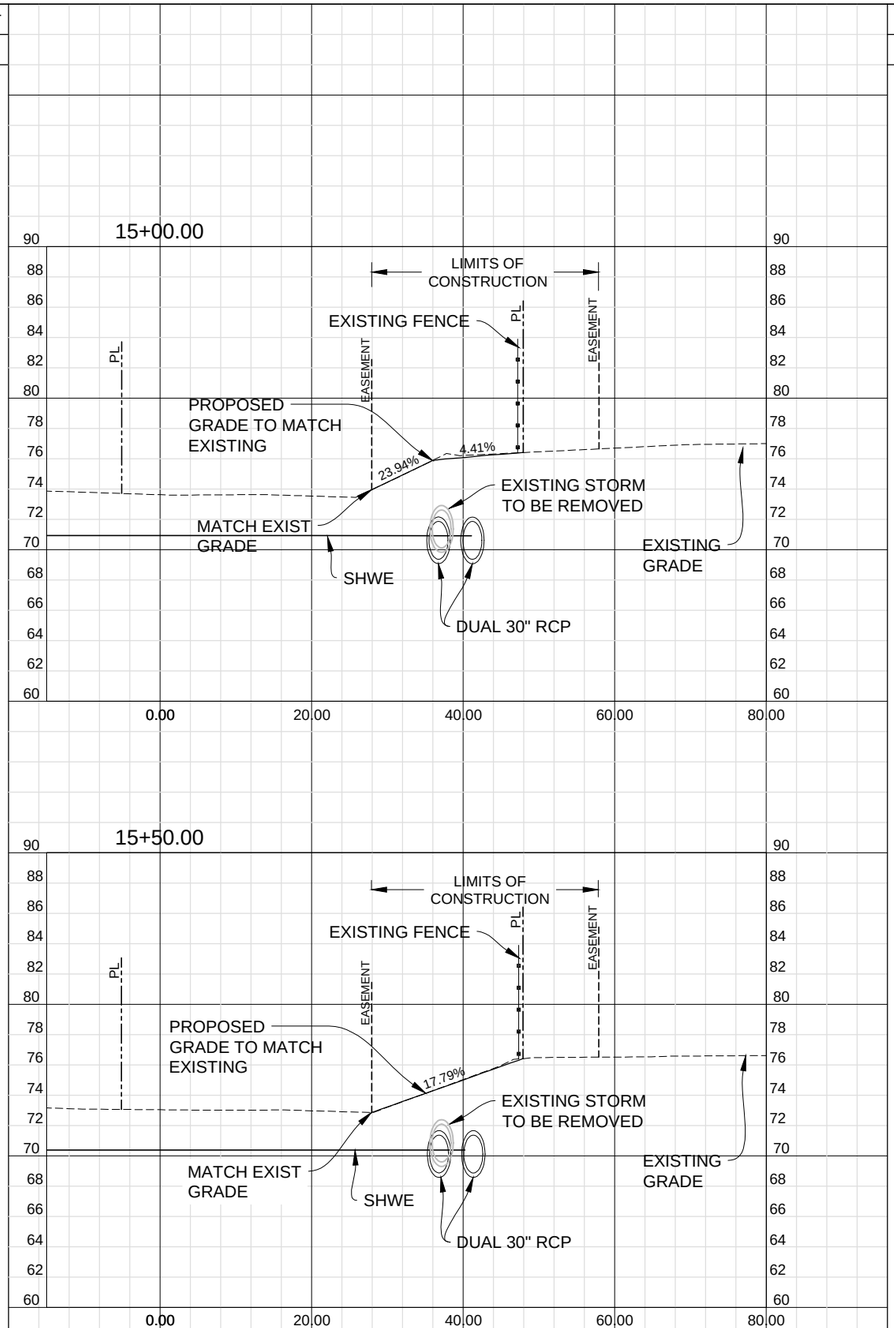


REGULAR EXC.		EMBANKMENT	
A	V	A	V
1.85		0.00	
	2.24		0.73
1.15		0.00	
	0.39		1.44

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

NOTE: LIMITS OF CONSTRUCTION SHOWN REFLECT THE ALLOWABLE LIMITS OF CONTRACTOR ENCROACHMENTS BASED ON EXISTING EASEMENTS AND/OR PERMITTED WETLAND IMPACTS.



REGULAR EXC.		EMBANKMENT	
A	V	A	V
1.05		0.00	
	1.20		0.00
0.25		0.60	
	0.03		0.33

CAUTION: AN EXISTING 7200V UNDERGROUND POWER UTILITY BY DUKE ENERGY EXISTS WITHIN THE 10 FEET DRAINAGE AND UTILITY EASEMENT WITHIN THE SOUTHERLY RESIDENTIAL PROPERTIES. THIS UTILITY WAS NOT LOCATED BY THE FIELD TOPOGRAPHIC SURVEY AND IS NOT SHOWN ON THESE CONSTRUCTION DOCUMENTS.

REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES DRAINAGE IMPROVEMENTS

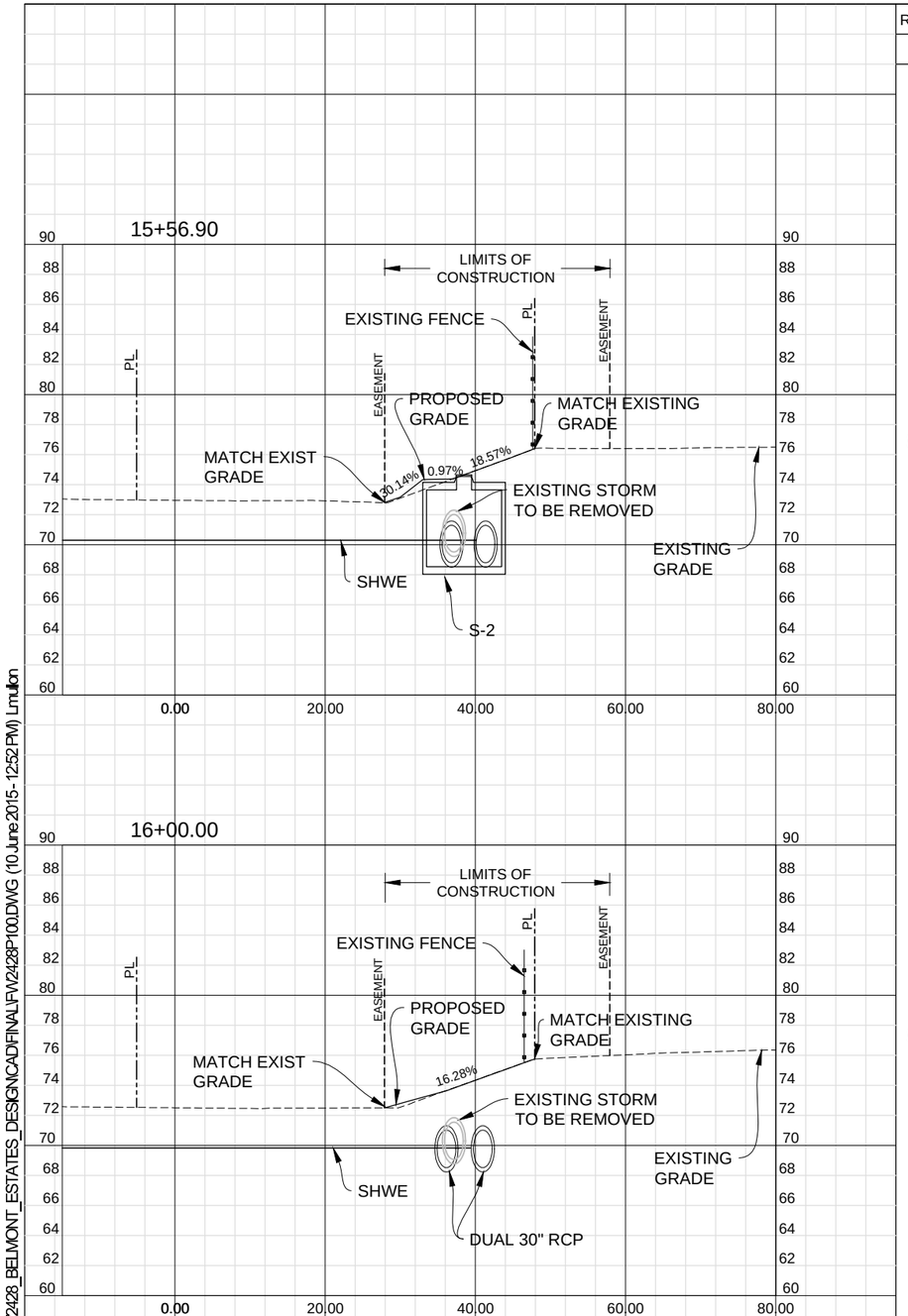
ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

CROSS SECTIONS

SHEET NO. 11

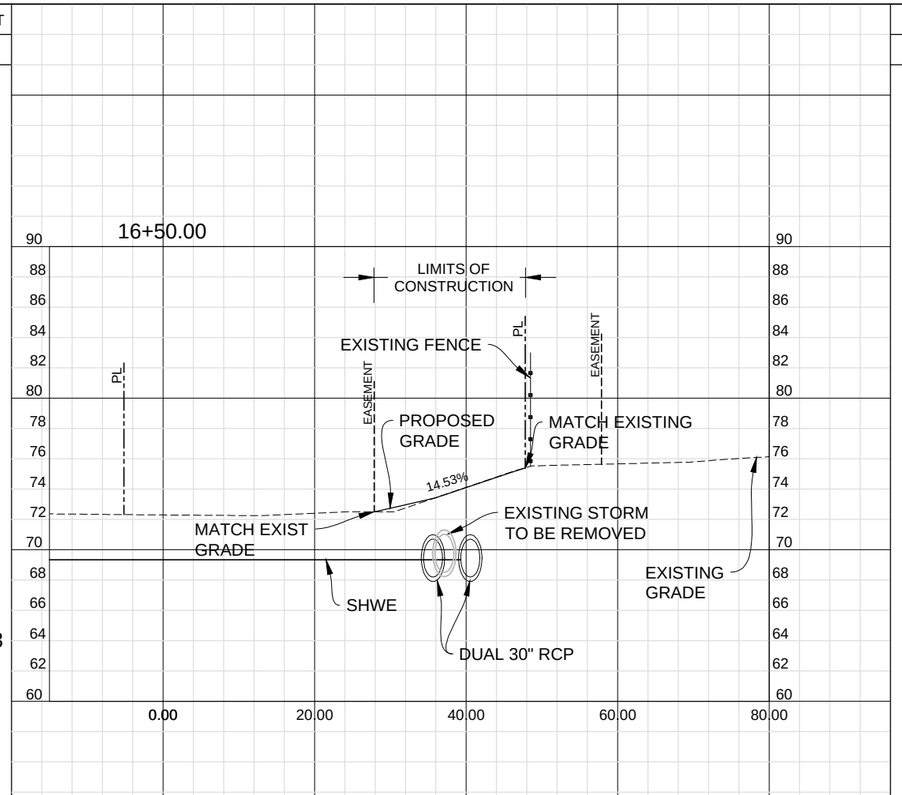
P:\PROJECTS\ORANGE_SW_1239\FW2428_BELMONT_ESTATES_DESIGN\CAD\FINAL\FW2428P100.DWG (10 June 2015 - 12:51 PM) Lmulton

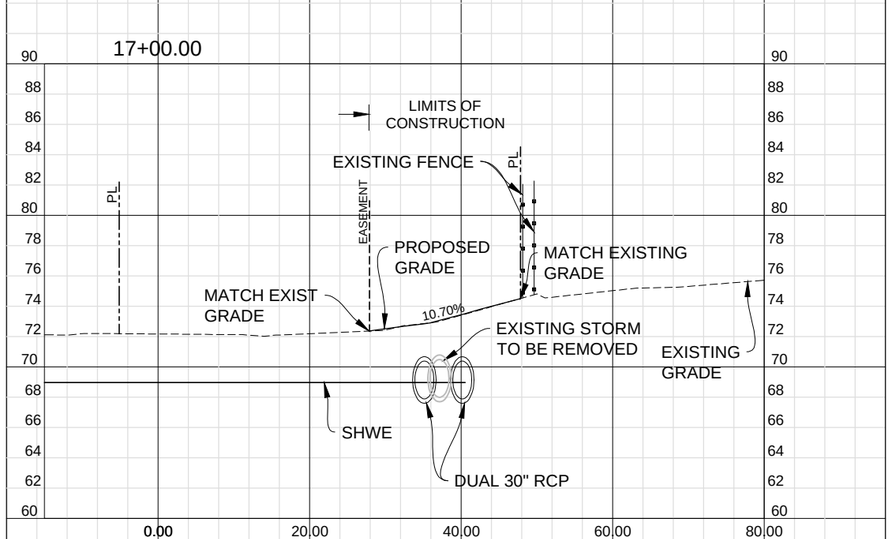


HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

NOTE: LIMITS OF CONSTRUCTION SHOWN REFLECT THE ALLOWABLE LIMITS OF CONTRACTOR ENCROACHMENTS BASED ON EXISTING EASEMENTS AND/OR PERMITTED WETLAND IMPACTS.

REGULAR EXC.		EMBANKMENT	
A	V	A	V
0.00		2.60	
	0.00		2.83
0.00		0.95	
	0.00		1.90





CAUTION: AN EXISTING 7200V UNDERGROUND POWER UTILITY BY DUKE ENERGY EXISTS WITHIN THE 10 FEET DRAINAGE AND UTILITY EASEMENT WITHIN THE SOUTHERLY RESIDENTIAL PROPERTIES. THIS UTILITY WAS NOT LOCATED BY THE FIELD TOPOGRAPHIC SURVEY AND IS NOT SHOWN ON THESE CONSTRUCTION DOCUMENTS.

REGULAR EXC.		EMBANKMENT	
A	V	A	V
0.00		1.10	
	0.00		1.16
0.50		0.15	
	0.00		0.14

REVISIONS

DATE	BY	DESCRIPTION

BELMONT ESTATES DRAINAGE IMPROVEMENTS

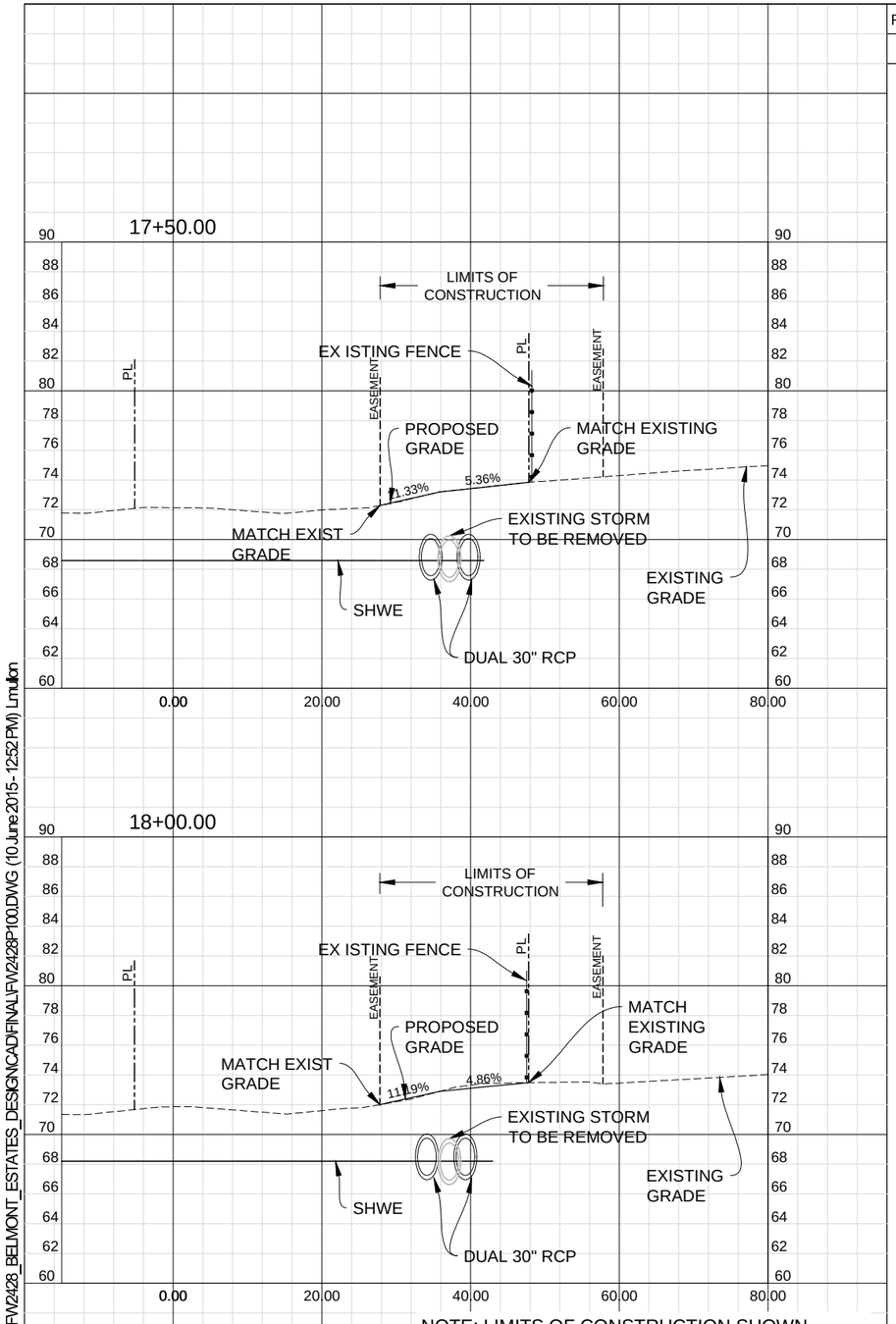
ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

CROSS SECTIONS

SHEET NO. 12

P:\PROJECTS\ORANGE_SW_1239\FW2428_BELMONT_ESTATES_DESIGN\CAD\FINAL\FW2428P100.DWG (10 June 2015 - 12:52 PM) Lmullon



	REGULAR EXC.		EMBANKMENT	
	A	V	A	V
17+50.00	0.00	1.39	0.00	0.19
18+00.00	1.50	1.39	0.20	2.04
18+50.00	0.00	0.00	2.00	0.38
18+54.36	0.50	0.00	2.75	2.66

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

NOTE: LIMITS OF CONSTRUCTION SHOWN REFLECT THE ALLOWABLE LIMITS OF CONTRACTOR ENCROACHMENTS BASED ON EXISTING EASEMENTS AND/OR PERMITTED WETLAND IMPACTS.

CAUTION: AN EXISTING 7200V UNDERGROUND POWER UTILITY BY DUKE ENERGY EXISTS WITHIN THE 10 FEET DRAINAGE AND UTILITY EASEMENT WITHIN THE SOUTHERLY RESIDENTIAL PROPERTIES. THIS UTILITY WAS NOT LOCATED BY THE FIELD TOPOGRAPHIC SURVEY AND IS NOT SHOWN ON THESE CONSTRUCTION DOCUMENTS.

REVISIONS

DATE	BY	DESCRIPTION

BELMONT ESTATES DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
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AUTHORIZATION NUMBER 4321

CROSS SECTIONS

SHEET NO. 13

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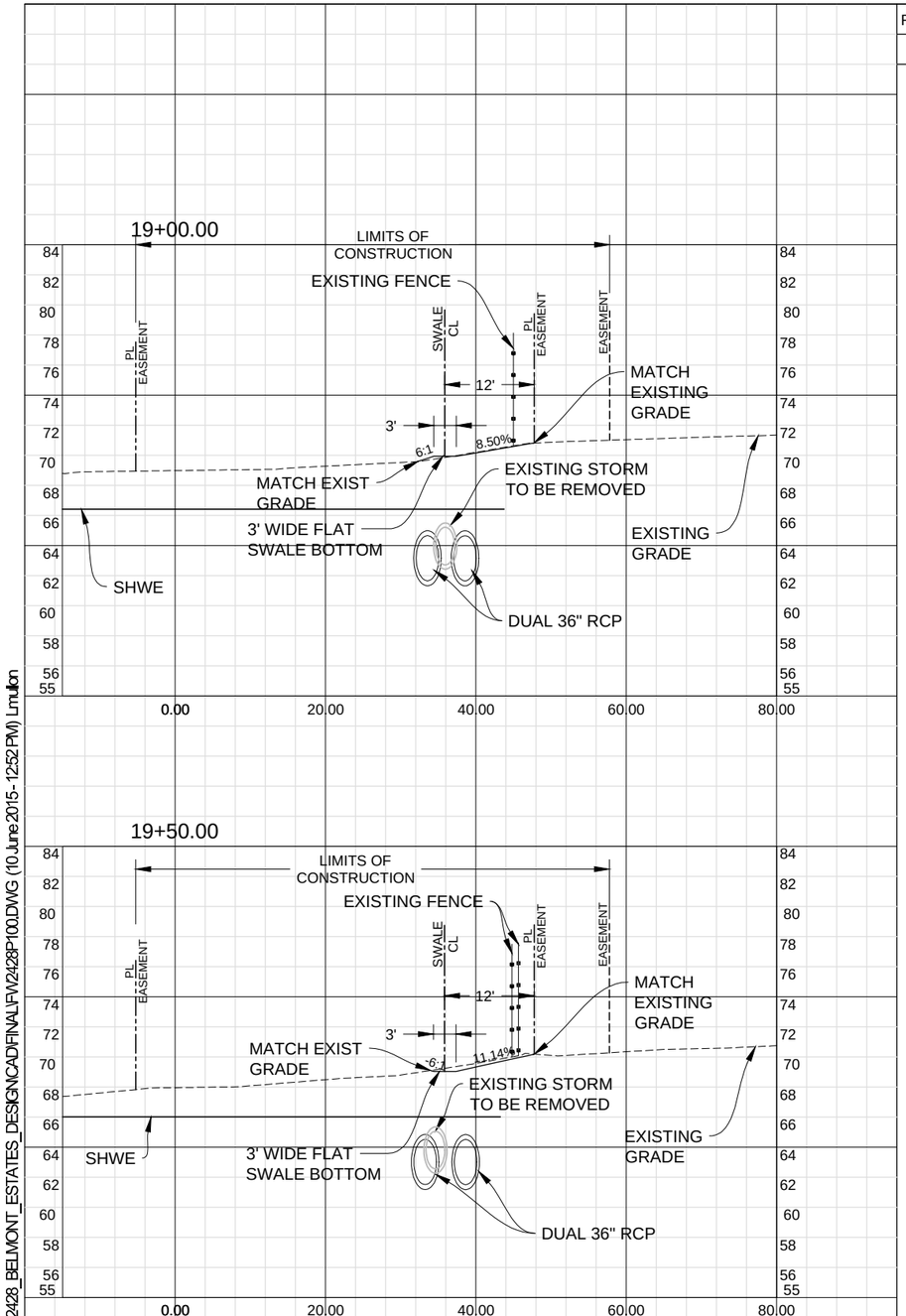
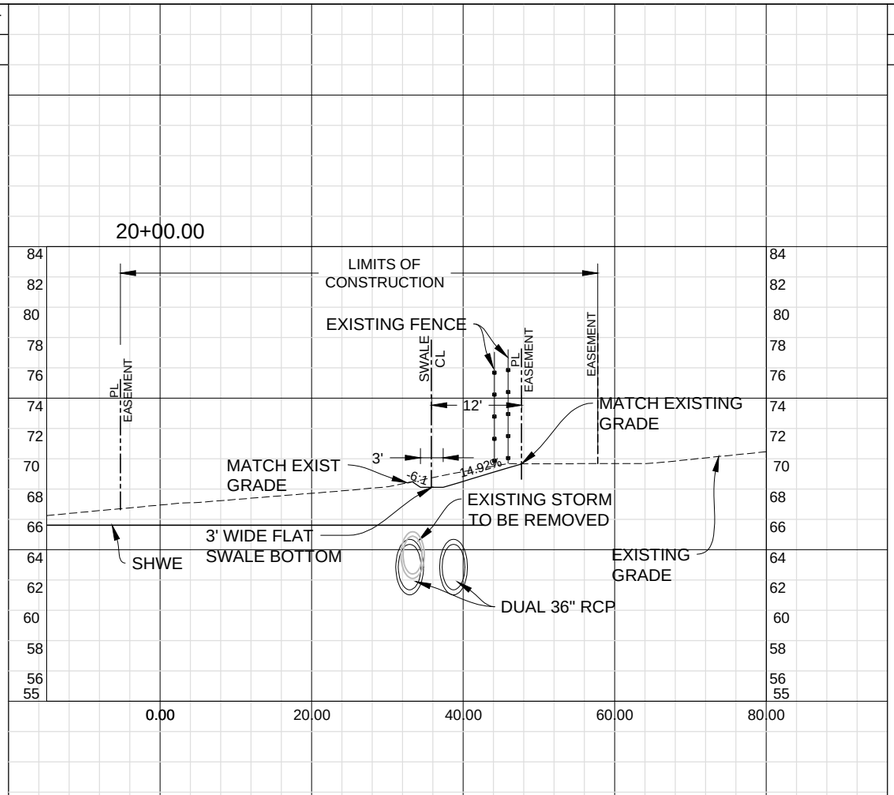
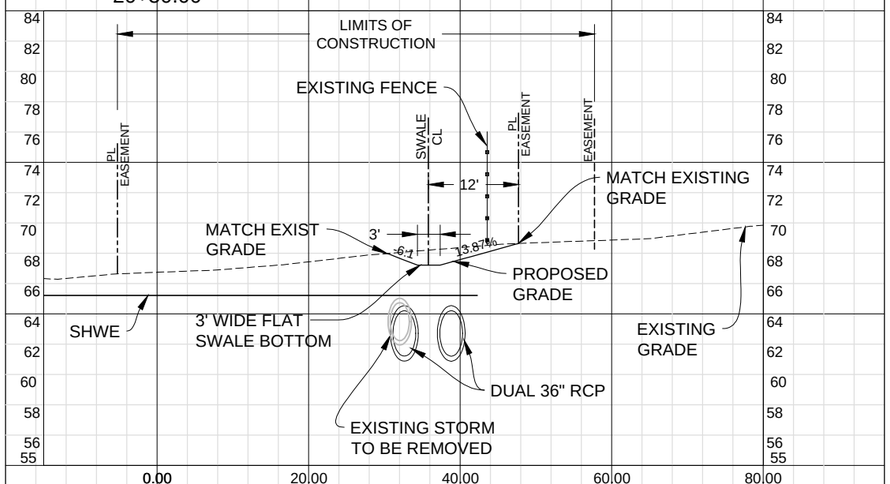


REGULAR EXC.		EMBANKMENT	
A	V	A	V
0.00	2.45	0.40	0.37



REGULAR EXC.		EMBANKMENT	
A	V	A	V
7.10	16.30	0.00	0.00

2.65	9.03	0.00	1.44



10.50	26.57	0.00	0.00

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

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CROSS SECTIONS

SHEET NO. 14

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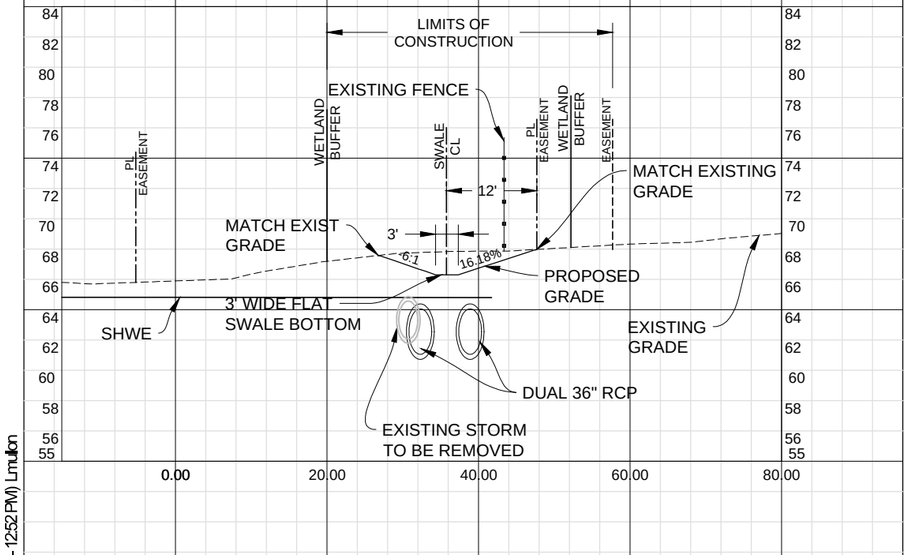
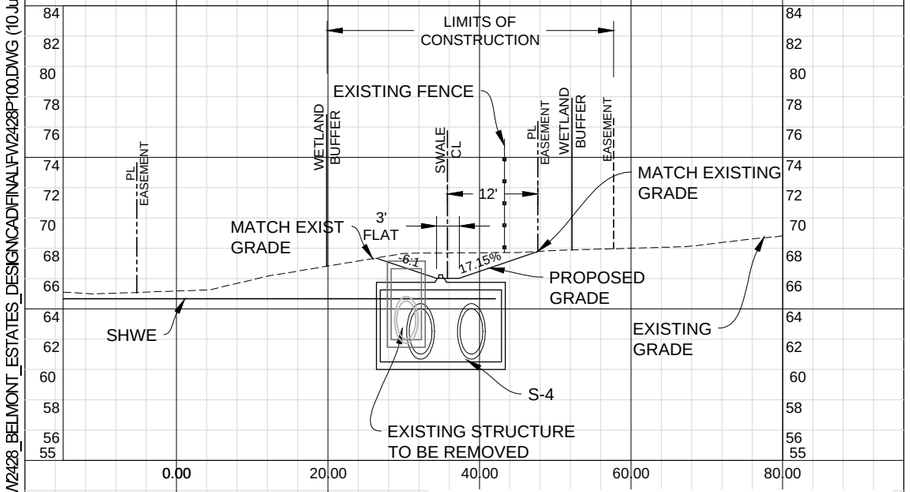
NOTE:
WETLAND, WETLAND BUFFER, AND SURFACE WATER LIMITS DEPICT THE PREVIOUSLY PERMITTED SJRWMD (40-095-124130-1) IMPACTS TO EACH, RESPECTIVELY.

21+00.00



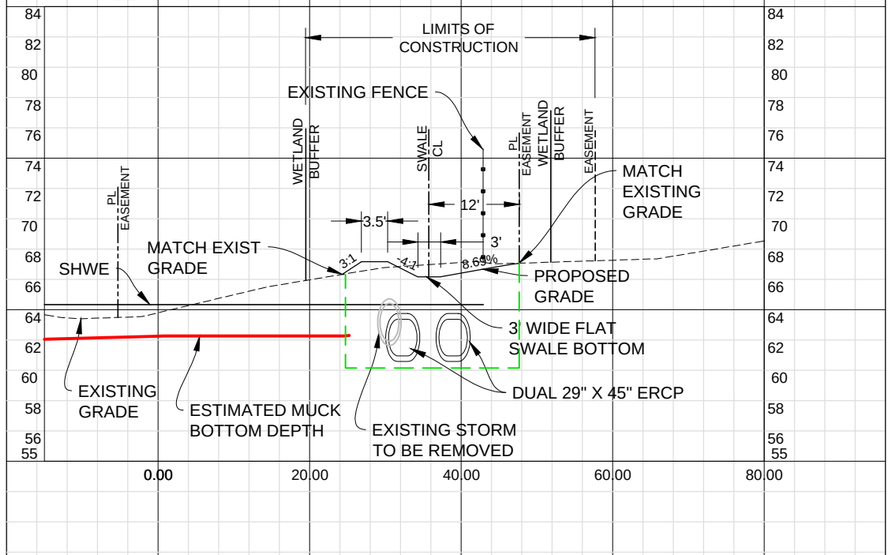
21+15.54



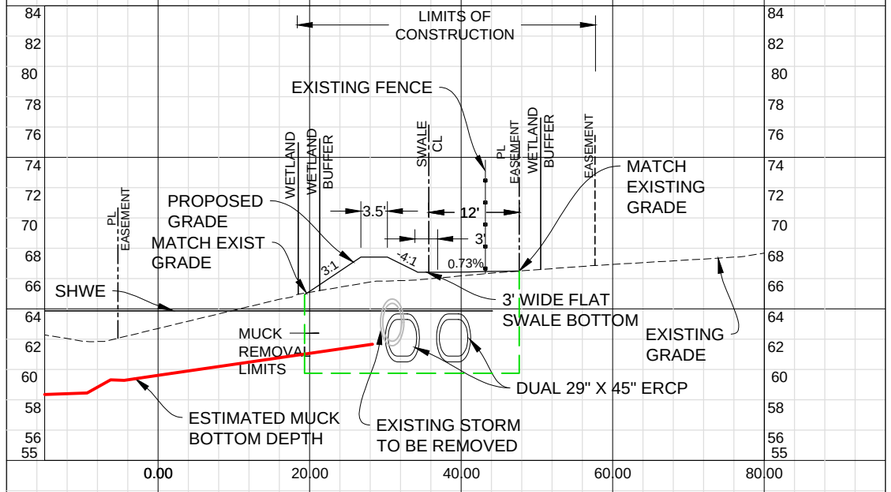
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

NOTE: LIMITS OF CONSTRUCTION SHOWN REFLECT THE ALLOWABLE LIMITS OF CONTRACTOR ENCROACHMENTS BASED ON EXISTING EASEMENTS AND/OR PERMITTED WETLAND IMPACTS.

21+50.00



22+00.00



CAUTION: AN EXISTING 7200V UNDERGROUND POWER UTILITY BY DUKE ENERGY EXISTS WITHIN THE 10 FEET DRAINAGE AND UTILITY EASEMENT WITHIN THE SOUTHERLY RESIDENTIAL PROPERTIES. THIS UTILITY WAS NOT LOCATED BY THE FIELD TOPOGRAPHIC SURVEY AND IS NOT SHOWN ON THESE CONSTRUCTION DOCUMENTS.

	REGULAR EXC.		EMBANKMENT	
	A	V	A	V
	18.20		0.00	
		11.18		0.73
	20.65		0.00	
		18.47		1.72

	REGULAR EXC.		EMBANKMENT	
	A	V	A	V
	8.30		2.70	
		7.69		20.32
	0.00		19.25	
		0.00		34.63

REVISIONS

DATE	BY	DESCRIPTION

BELMONT ESTATES DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
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CROSS SECTIONS

SHEET NO. 15

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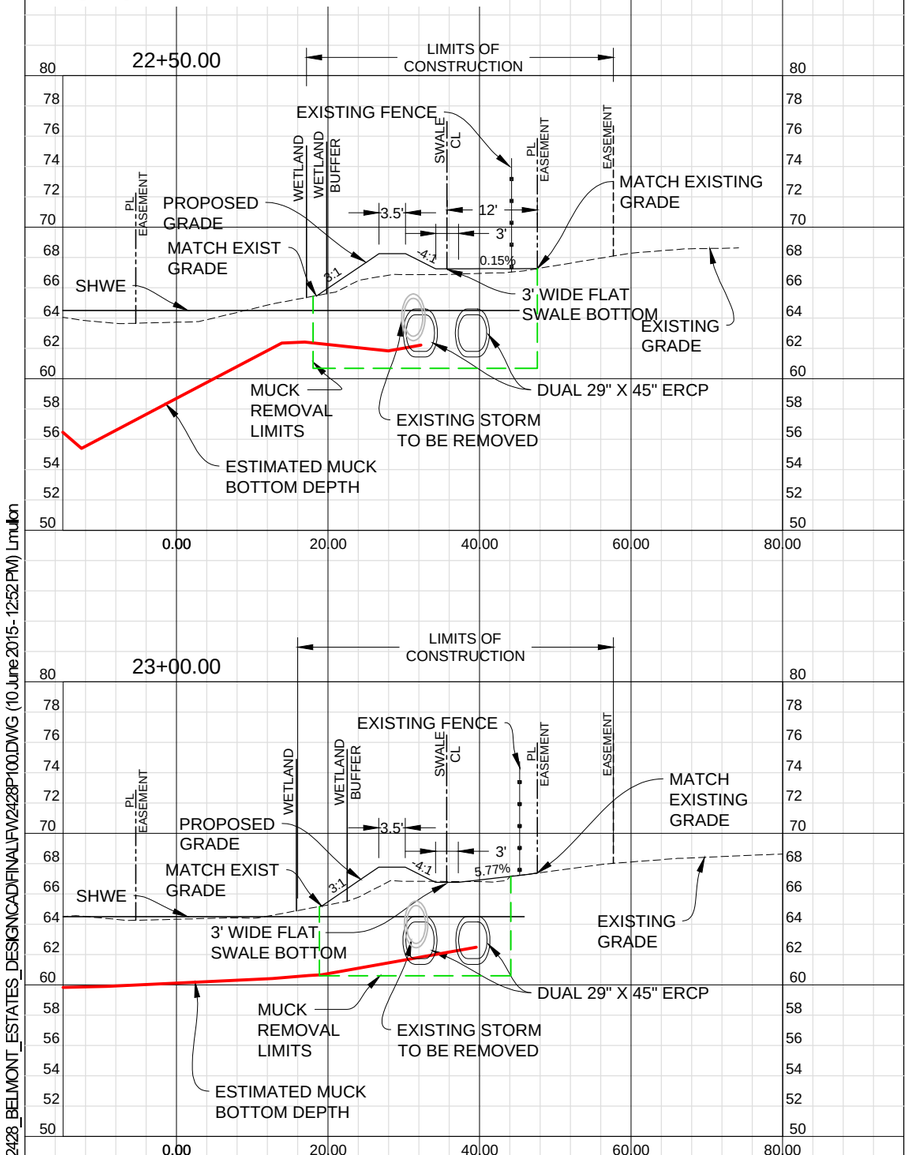
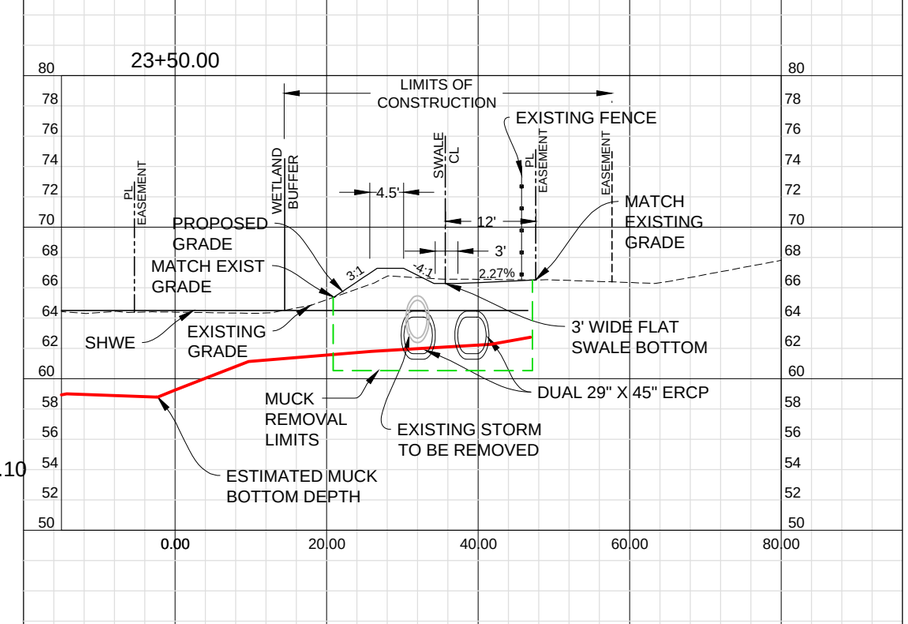
NOTE:
WETLAND, WETLAND BUFFER, AND SURFACE WATER LIMITS DEPICT THE PREVIOUSLY PERMITTED SJRWMD (40-095-124130-1) IMPACTS TO EACH, RESPECTIVELY.

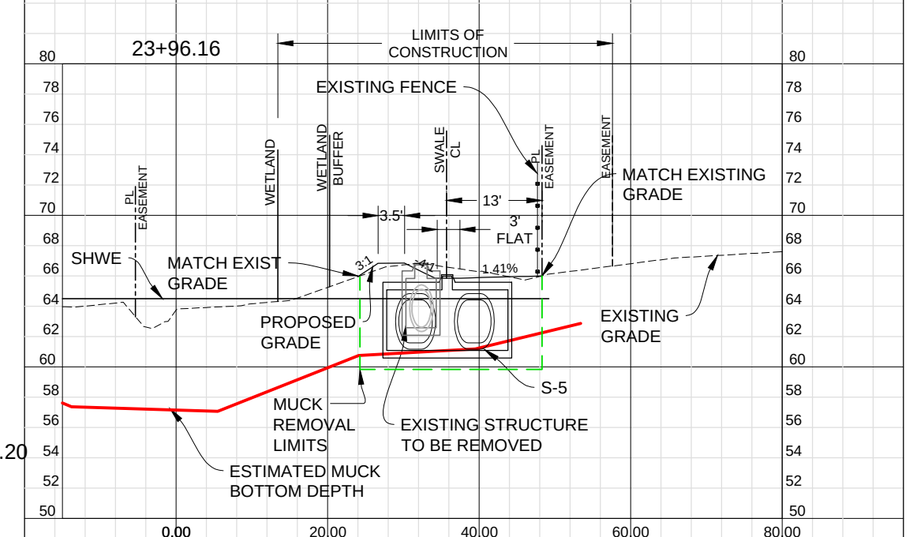


REGULAR EXC.		EMBANKMENT	
A	V	A	V
0.00	0.19	18.15	28.10



REGULAR EXC.		EMBANKMENT	
A	V	A	V
2.60	7.61	5.30	6.07

REGULAR EXC.		EMBANKMENT	
A	V	A	V
0.20	2.59	12.20	16.20



REGULAR EXC.		EMBANKMENT	
A	V	A	V
6.30	0.82	1.80	0.29

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

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BELMONT ESTATES DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
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Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

CROSS SECTIONS

SHEET NO. 16

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NOTE:
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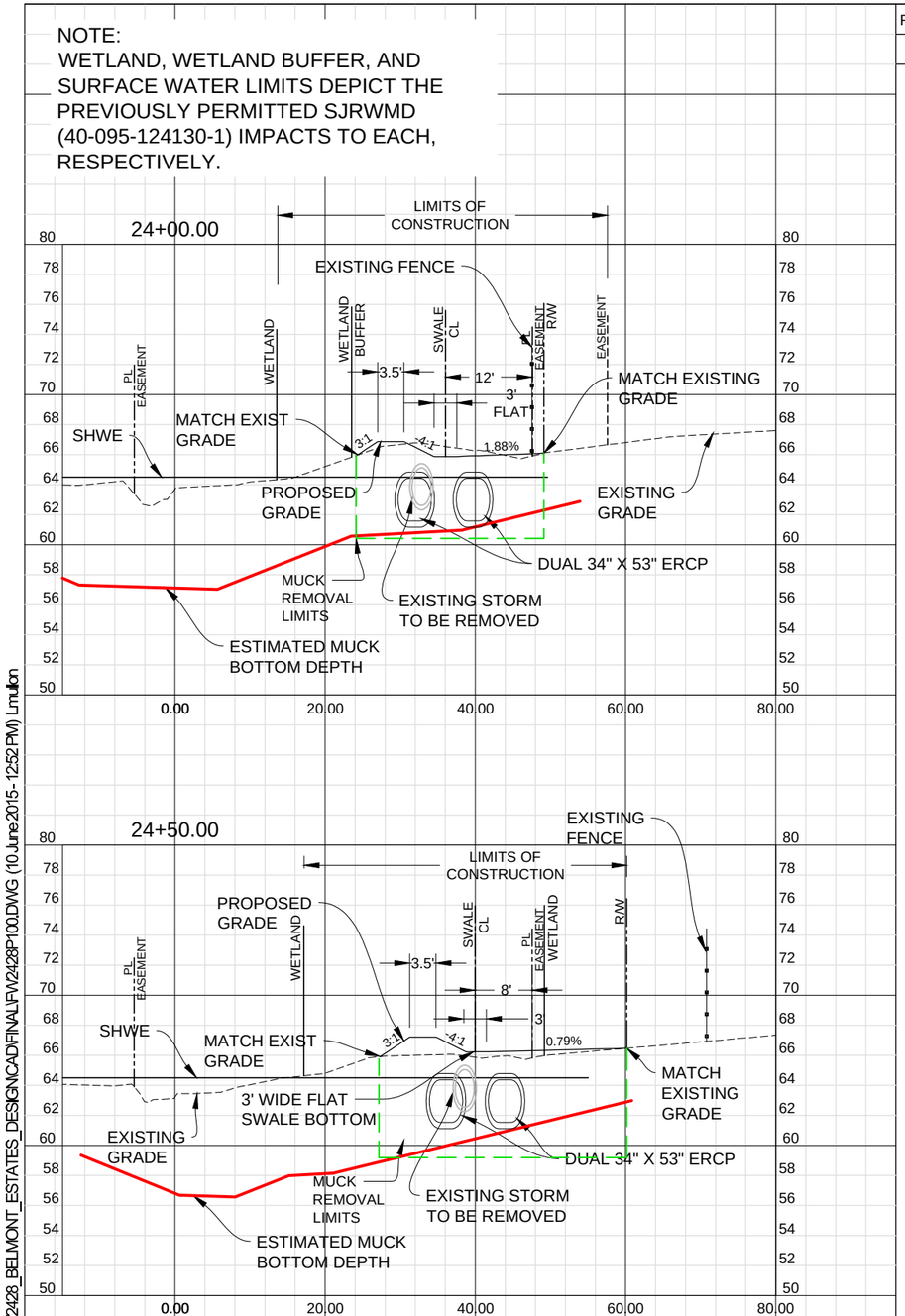
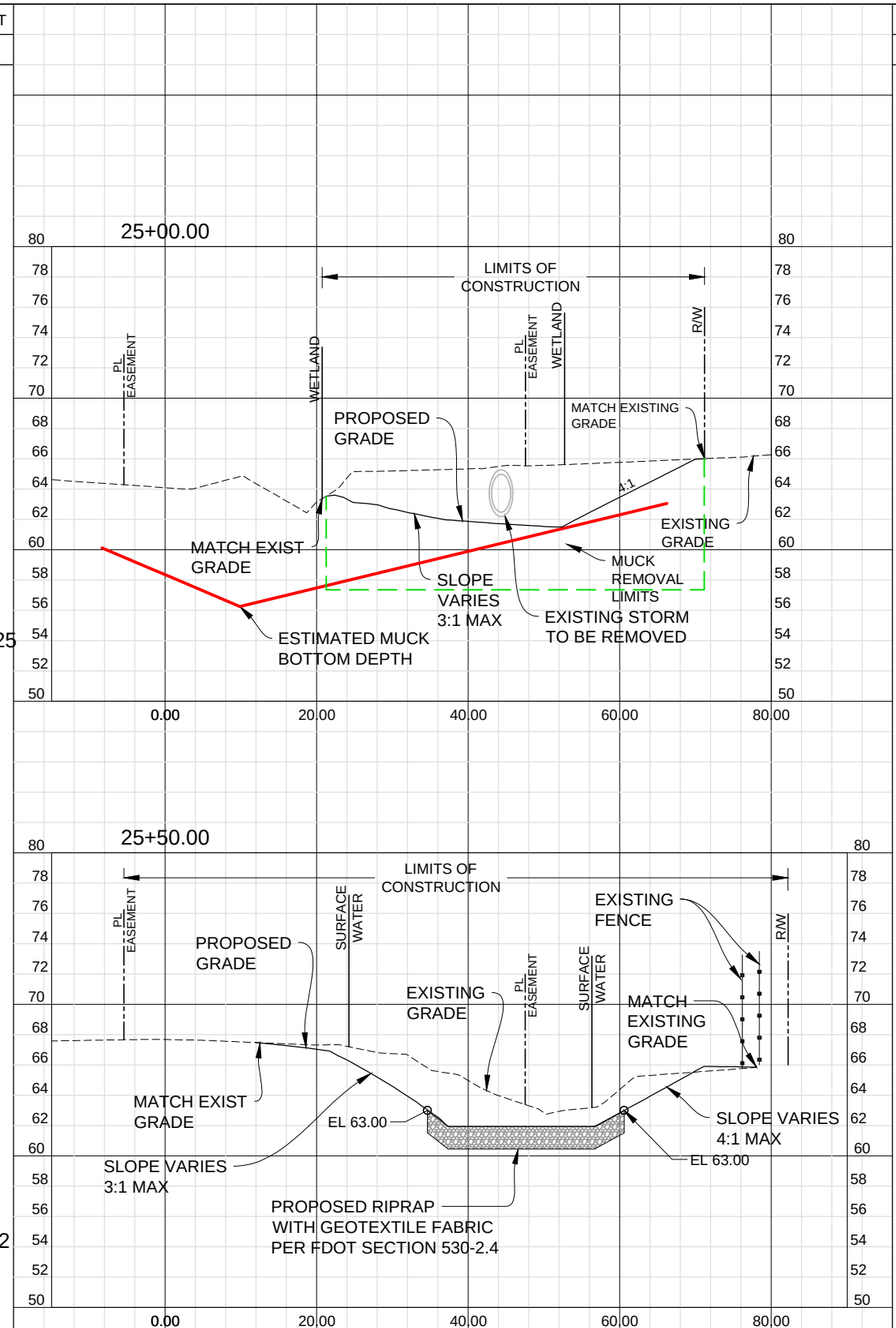


HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

NOTE: LIMITS OF CONSTRUCTION SHOWN REFLECT THE ALLOWABLE LIMITS OF CONTRACTOR ENCROACHMENTS BASED ON EXISTING EASEMENTS AND/OR PERMITTED WETLAND IMPACTS.



NOTE: REMOVE ALL LIMITS OF ENCOUNTERED MUCK BENEATH PROPOSED RIP RAP.

CAUTION: AN EXISTING 7200V UNDERGROUND POWER UTILITY BY DUKE ENERGY EXISTS WITHIN THE 10 FEET DRAINAGE AND UTILITY EASEMENT WITHIN THE SOUTHERLY RESIDENTIAL PROPERTIES. THIS UTILITY WAS NOT LOCATED BY THE FIELD TOPOGRAPHIC SURVEY AND IS NOT SHOWN ON THESE CONSTRUCTION DOCUMENTS.

	REGULAR EXC.		EMBANKMENT	
	A	V	A	V
	5.30		2.30	
		4.91		16.25
	0.00		15.25	
		118.80		14.12

	REGULAR EXC.		EMBANKMENT	
	A	V	A	V
	128.30		0.00	
		195.60		1.34
	82.95		1.45	
		23.99		1.44

REVISIONS

DATE	BY	DESCRIPTION

BELMONT ESTATES DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
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Suite 1005
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AUTHORIZATION NUMBER 4321

CROSS SECTIONS

SHEET NO. 17

P:\PROJECTS\ORANGE_SW_1239\FW2428_BELMONT_ESTATES_DESIGN\CAD\FINAL\FW2428P100.DWG (10 June 2015 - 12:52 PM) Lmulon

NOTE:
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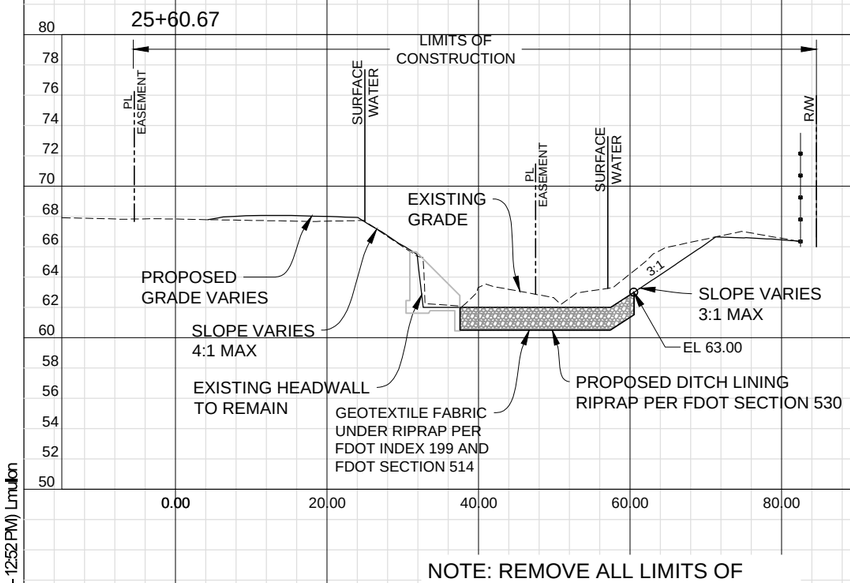

NOTE: REMOVE ALL LIMITS OF ENCOUNTERED MUCK BENEATH PROPOSED RIP RAP.

NOTE: LIMITS OF CONSTRUCTION SHOWN REFLECT THE ALLOWABLE LIMITS OF CONTRACTOR ENCROACHMENTS BASED ON EXISTING EASEMENTS AND/OR PERMITTED WETLAND IMPACTS.

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

REGULAR EXC.		EMBANKMENT	
A	V	A	V
38.45		5.85	

REGULAR EXC.		EMBANKMENT	
A	V	A	V

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REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES
DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

CROSS SECTIONS

SHEET NO.
18

The following narrative is the Stormwater Prevention Plan and contains references to the FDOT Standards Specifications for Road and Bridge Construction, the FDOT Design Standards (latest edition), and other sheets of these construction plans. The complete Stormwater Pollution Prevention plan includes several items:

- this narrative description,
- the documents referenced in this narrative,
- the Contractor's approved Erosion Control Plan required by Section 104 of the FDOT Standard Specifications for Road and Bridge Construction (latest edition) herein after referred to as the Section 104 Erosion Control Plan', and
- reports of inspection made during construction.

1.0 SITE DESCRIPTION

1.a Nature of Construction Activity:

The project area is located within the Belmont Estates subdivision west of Goldenroad Road and north of Faculty Drive. The proposed design involves the construction of an up-sized storm sewer system to serve Belmont Estates property for flood protection. The storm sewer will be installed within the Bates Road Right-of-Way and within an Orange County drainage easement, and discharge to the existing dual box culvert system at Goldenrod Road. A small swale with ditch bottom inlets will also be constructed to convey surface runoff from the existing canal and residential area.

1.b Sequence of Major Soil Disturbing Activities:

In the Section 104 Erosion Control Plan, the Contractor shall provide a detailed sequence of construction activities. The Contractor shall follow the sequence provided below, unless an alternative sequence proposed by the Contractor is approved by the County.

1. Install all temporary erosion control devices consistent with the Phase I and Phase II Site Maps decpicted on Sheet 21.

2. Excavate the unwanted, existing soils and muck to be hauled overland for proper disposal. Remove existing soils, pipe and pavement, etc. and prepare the area for proposed improvements.

3. Construct the proposed pipes, inlets, and curbs

4. Stabilize the site with sod.

1.c Area Estimates:

Total project contributing drainage area: 96.26 acres.

Total area to be disturbed: 1.12 acres.

1.d Runoff Data:

Runoff (10 year 24 hour event) = 54.9 cfs

1.e Soils Data:

High soil variability exists on-site with moderately well draining soils along the western portion of the site to very poorly draining soils located to the east. In the eastern portion of the site, deep muck pockets exist, which shall be overexcavated and removed by the Contractor within the boundary of the proposed storm improvements. For additional information, see the geotechnical report prepared by Devo Engineering, dated October, 2014.

1.f Outfall Information Description:

Under existing conditions runoff flows from the residential and surrounding industrial areas of Belmont Estates through an existing 30 inch storm sewer within the existing drainage easement. The storm sewer discharges to the east, just upstream of the existing box culvert sytem underneath Goldenrod Road. The proposed condition drainage system will increase the storm sewer's capacity to convey flow downstream, but will otherwise match the existing condition.

1.g Site Map:

The site maps consist of the construction plans. The location of the required information is described below. The sheet numbers for the plan sheets referenced are identified on the Key Sheet.

- Drainage Patterns - The proposed flow directions are shown on the plan and profile sheets.
- Approximate Slopes - The slopes of the site can be seen in the Cross Section Sheets and Plan and Profile Sheets.
- Areas of Soil Disturbance - The areas to be disturbed are indicated on the Plan Sheets and the Cross Section Sheets.
- Locations of Temporary Controls - The temporary erosion control measures are depicted in the Phase I and Phase II Stormwater Pollution Prevention Plan (SWPPP) Maps on Sheet 21. Phase I SWPPP map depicts the erosion control protection devices required when the contractor first mobilizes, including silt fencing, synthetic hay bales, and soil tracking prevention devices. Phase II SWPPP map depicts the erosion control protection devices required during and after the stormwater infrastructure has been improved, and includes silt fencing, synthetic hay bales, soil tracking prevention devices, and inlet protection for the proposed inlets. The Summary of Quantities provides quantities for silt fencing. Additional temporary controls shall be implemented as necessary during interim construction periods, or where the proposed controls do not adequately protect off-site regions from experiencing sediment releases from on-site areas.
- Locations of Permanent Controls - The permanent erosion control measures include sodding of pervious areas. The Summary of Pay Items provides quantities for sodding.
- Areas To Be Stabilized - Temporary stabilization practices are shown in the Contractor's Erosion Control Plan. Permanent stabilization consists of sodding disturbed areas. The limits of sod are shown on the cross-sections.
- Surface Waters - The project drainage system design does not convey stormwater directly to any downstream surface waters (lakes, rivers, etc...).

2.0 CONTROLS:

2.a Erosion And Sediment Controls:

In the Section 104 Erosion Control Plan, the Contractor shall describe the proposed stabilization and structural practices based on the Contractor's proposed Traffic Control Plan. The following recommended guidelines are based on the Traffic Control Plan (TCP) outlined in the construction plans. The Contractor may elect to accept the following guidelines or modify them in the Section 104 Erosion Control Plan, subject to approval of the County Engineer. As work progresses, the Contractor may need to modify the plan to adapt to seasonal variation, and changes in construction activities.

2.a.1 Stabilization Practices:

In the Section 104 Erosion Control Plan, the Contractor shall describe the stabilization practices proposed to control erosion. The Contractor shall initiate all stabilization measures as soon as practical, but in no case more than 7 days, in portions of the site where construction activities have temporarily or permanently ceased. The stabilization practices shall include at least the following, unless otherwise approved by the County Engineer.

Temporary:

- Artificial coverings in accordance with Specification Section 104.
- Seeding / Sod in accordance with Specification Section 104.

Permanent:

- Sod in accordance with Specification Section 575.

2.a.2 Structural Practices:

In Section 104 Erosion Control Plan, the Contractor shall describe the proposed structural practices to prevent the discharge of sediments from exposed areas of the site. Sediment controls shall be in place before disturbing soil upstream of the control. The structural practices shall include at least the following unless otherwise approved by the County Engineer.

Temporary:

- Silt fence in accordance with Index 102 and Specification Section 104.
- Permanent:
- Sod in accordance with Specification Section 575.

2.b Stormwater Management:

A storm drain system will be constructed to convey runoff downstream. This system complies with St. John's River Water Management District (SJRWMD) Permit Number: [To be Determined upon Permit Issuance].

2.c Other Controls:

2.c.1 Waste Disposal:

In the Section 104 Erosion Control Plan, the Contractor shall describe the proposed methods to prevent the discharge of solid materials, including building materials, to waters of the United States. The proposed methods shall include at least the following.

- Providing litter control and collection within the project during construction activities. Disposing of all fertilizer or other chemical containers according to EPA's standard practices as detailed by the manufacturer.
- Disposing of solid materials including building and construction materials off the project site.

2.c.2 Off-Site Vehicle Tracking & Dust Control:

In the Section 104 Erosion Control Plan, the Contractor shall describe the proposed methods for minimizing offsite tracking of sediments and dust. The methods shall include at least the following.

- Covering loaded haul trucks with tarpaulins.
- Removing excess dirt from roads daily.
- Using roadway sweepers during dust generating activities such as excavation and hauling operations.

2.c.3 State and Local Regulations For Waste Disposal, Sanitary

Sewer, Or Septic Tank Regulations - In the Section 104 Erosion Control Plan, the Contractor shall describe the proposed procedures to comply with applicable state and local regulations for waste disposal, and sanitary sewer or septic systems.

2.c.4 Fertilizers and Pesticides - In the Section 104 Erosion Control Plan, the Contractor shall describe the procedures for applying fertilizers and pesticides. The proposed procedures shall comply with applicable subsections of either Section 570 or 577 of the Specifications.

2.c.5 Toxic Substances - In the Section 104 Erosion Control Plan, the Contractor shall provide a list of toxic substances that are likely to be used on the job and provide a plan addressing the generation, application, migration, storage, and disposal of these substances.

2.d Approved State and Local Plans and Permits- SJRWMD ERP#: [To Be Determined].

3.0 MAINTENANCE:

In the Section 104 Erosion Control Plan, the Contractor shall provide a plan for maintaining all erosion and sediment controls throughout construction. The maintenance plan shall at a minimum, comply with the maintenance of silt fence and inlet protection per Section 104.

4.0 INSPECTIONS:

Qualified personnel shall inspect the following items at least once every seven calendar days and within 24 hours of the end of a storm that is 0.25 inches or greater. The Contractor shall install and maintain rain gages and record daily rainfall.

- Disturbed areas of the site that have not been finally stabilized.
- Areas used for storage of materials that are exposed to precipitation.
- Structural controls.
- Stormwater management systems.
- Locations where vehicles enter or exit the site.

The Contractor shall initiate repairs within 24 hours of inspections that indicate items require repairs. If inspections indicate that the installed stabilization and structural practices are not sufficient to minimize erosion, retain sediment, and prevent discharging pollutants, the Contractor shall provide additional measures, as approved by the County.

5.0 NON-STORMWATER DISCHARGES:

In the Section 104 Erosion Control Plan, the Contractor shall identify all anticipated non-stormwater discharges (except flows from firefighting activities). The Contractor shall describe the proposed measures to prevent pollution of these non-stormwater discharges such as:

- Dewatering - The Contractor shall develop, as needed, any dewatering system that provides pretreatment of effluent prior to discharge along with meeting any Federal, State, and local dewatering permit laws, rules, and regulations.
- Dust Control - The Contractor shall develop in Section 104 Erosion Control Plan dust control plan and remedial action to correct any malfunctioning measures.
- Equipment Washout - The Contractor shall develop in Section 104 Erosion Control Plan an effective plan to control equipment washout and other erosive conditions from equipment cleaning processes, and remedial action to correct any malfunctioning measures.
- Hazardous Material Spill - The Contractor shall develop in Section 104 Erosion Control Plan an effective plan to control in the event any hazardous materials should spill and remedial action to correct any malfunctioning measures. If the Contractor encounters contaminated soil or groundwater, the Contractor shall contact the Orange County Health Department, and the County immediately.

EROSION CONTROL GENERAL NOTES

1. The contractor shall execute all measures necessary to limit the transport of sediments outside the limits of the project to the volume and amount that are existing prior to the commencement of construction. This condition will be satisfied for the total anticipated construction period. Provisions must be made to preserve the integrity and capacity of grading patterns and BMPs required to meet this provision throughout the life of the construction. The contractor shall provide silt barriers, inlet proection, temporary grassing, etc. as required to fully comply with the intent of this specification.
2. No excavated material shall be stockpiled in such a manner as to direct runoff directly off the project site or into any adjacent water body or stormwater collection facility.
3. The surface area of open, raw erodible soil exposed by clearing and grubbing operations or excavation and filling operations shall be controlled, so that this operation will not significantly affect off-site deposit of sediments.
4. Water quality units and ditch bottom inlets shall be protected from sediment laden stormwater runoff until the completion of all construction operations that may contribute sediment to the inlet.
5. Areas opened by construction operations that are not anticipated to be dressed or receive final grassing treatment within thirty days shall be seeded with a quick growing grass species which will provide an early cover during the season in which it is planted. Temporary seeding shall be controlled so as to not alter or compete with permanent grassing. The rate of seeding shall be 30 pounds per acre.
6. The seeded or seeded and mulched area(s) shall be rolled and watered as required to assure optimum growing conditions for the establishment of a good grass cover.
7. If after 14 days, the temporary grassed areas have not attained a minimum of 75% good grass cover, the area will be reworked and additional seed applied to establish the desired vegetation cover.
8. All features of the project shall be constructed to prevent erosion and sediment and shall be maintained during the life of the construction so as to function properly without the transport of sediments outside the limits of the project.
9. All disturbed areas outside the excavation and fill limits will be restored to a condition equal to or better than their condition prior to construction.
10. The contractor will be responsible for maintenance of all newly planted grasses or vegetation and retention/detention facilities until the work has been accepted by the County.
11. The contractor shall be responsible for the stability of embankments and shall replace any portion, which in the opinion of the engineer, has become displaced due to erosion or due to carelessness or negligence on the part of the contractor.
12. The contractor shall comply with all federal, state and local laws and regulations controlling pollution of the environment. Measures shall be taken by the contractor to control erosion and sediment runoff from the site during construction. Such methods shall be in accordance with the current FDOT standards.
13. Absolutely no work will be allowed within any conservation area, buffer area, mitigation area or designated wetland area unless so specifically described by the plans and granted by reason of permit from the governmental entity having jurisdiction over said area.
14. All fill embankment and graded areas shall be protected against erosion by methods stated in section 104, "F.D.O.T. Standard Specifications for Bridge and Road Construction." Side slopes may be seeded and mulched, provided that the mulch material is disk harrowed and the side slopes are neither greater than 3:1 nor part of a drainage conveyance.

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REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES
DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
1511 East State Road 434
Suite 1005
Winter Springs, FL 32708
Thomas D. Amstadt, PE
FL PE# 69032
AUTHORIZATION NUMBER 4321

SWPPP NOTES

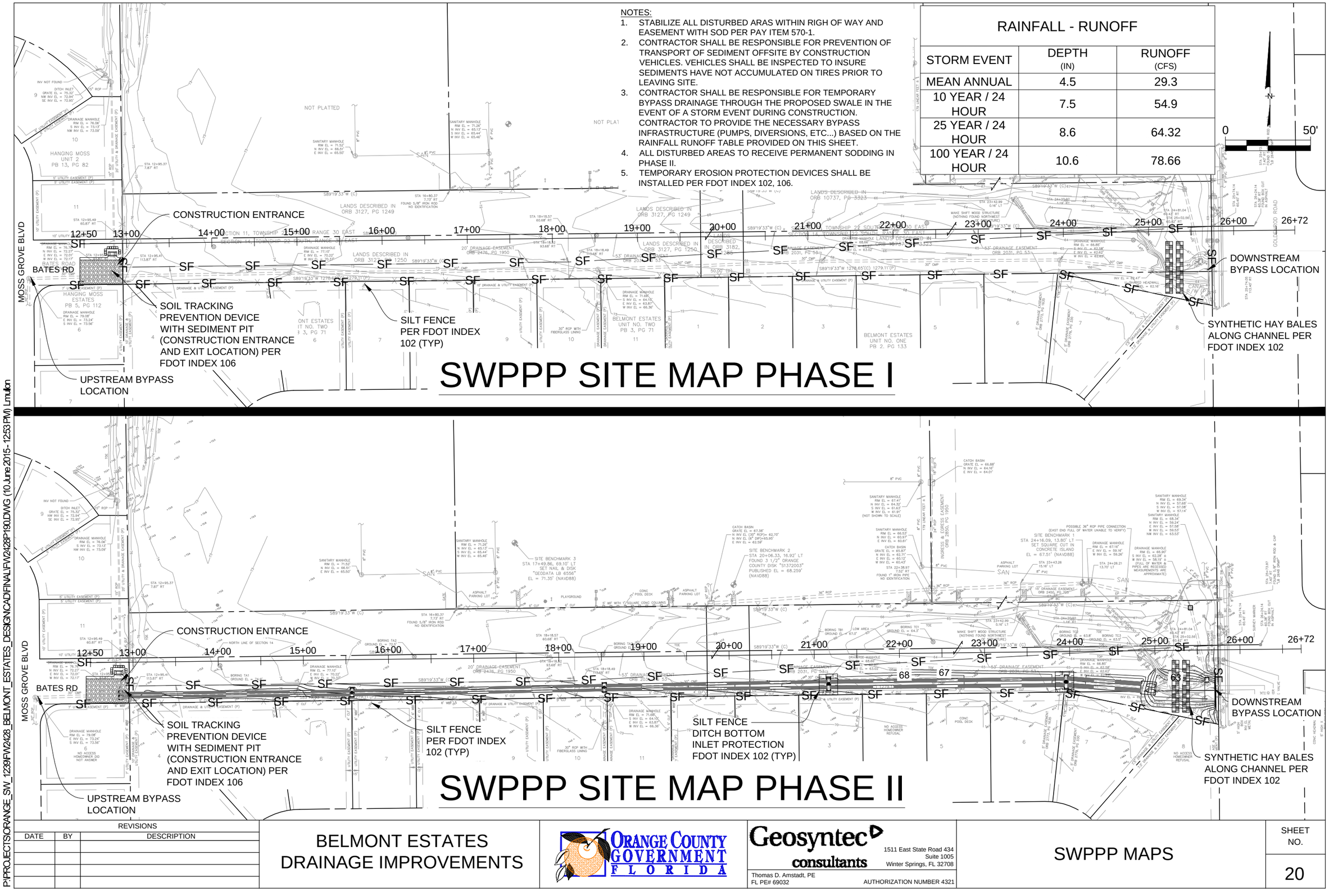
SHEET NO.

19

NOTES:

1. STABILIZE ALL DISTURBED ARAS WITHIN RIGH OF WAY AND EASEMENT WITH SOD PER PAY ITEM 570-1.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTION OF TRANSPORT OF SEDIMENT OFFSITE BY CONSTRUCTION VEHICLES. VEHICLES SHALL BE INSPECTED TO INSURE SEDIMENTS HAVE NOT ACCUMULATED ON TIRES PRIOR TO LEAVING SITE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY BYPASS DRAINAGE THROUGH THE PROPOSED SWALE IN THE EVENT OF A STORM EVENT DURING CONSTRUCTION. CONTRACTOR TO PROVIDE THE NECESSARY BYPASS INFRASTRUCTURE (PUMPS, DIVERSIONS, ETC...) BASED ON THE RAINFALL RUNOFF TABLE PROVIDED ON THIS SHEET.
4. ALL DISTURBED AREAS TO RECEIVE PERMANENT SODDING IN PHASE II.
5. TEMPORARY EROSION PROTECTION DEVICES SHALL BE INSTALLED PER FDOT INDEX 102, 106.

RAINFALL - RUNOFF		
STORM EVENT	DEPTH (IN)	RUNOFF (CFS)
MEAN ANNUAL	4.5	29.3
10 YEAR / 24 HOUR	7.5	54.9
25 YEAR / 24 HOUR	8.6	64.32
100 YEAR / 24 HOUR	10.6	78.66



SWPPP SITE MAP PHASE I

SWPPP SITE MAP PHASE II

REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES
DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

Geosyntec consultants
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SWPPP MAPS

SHEET NO.
20

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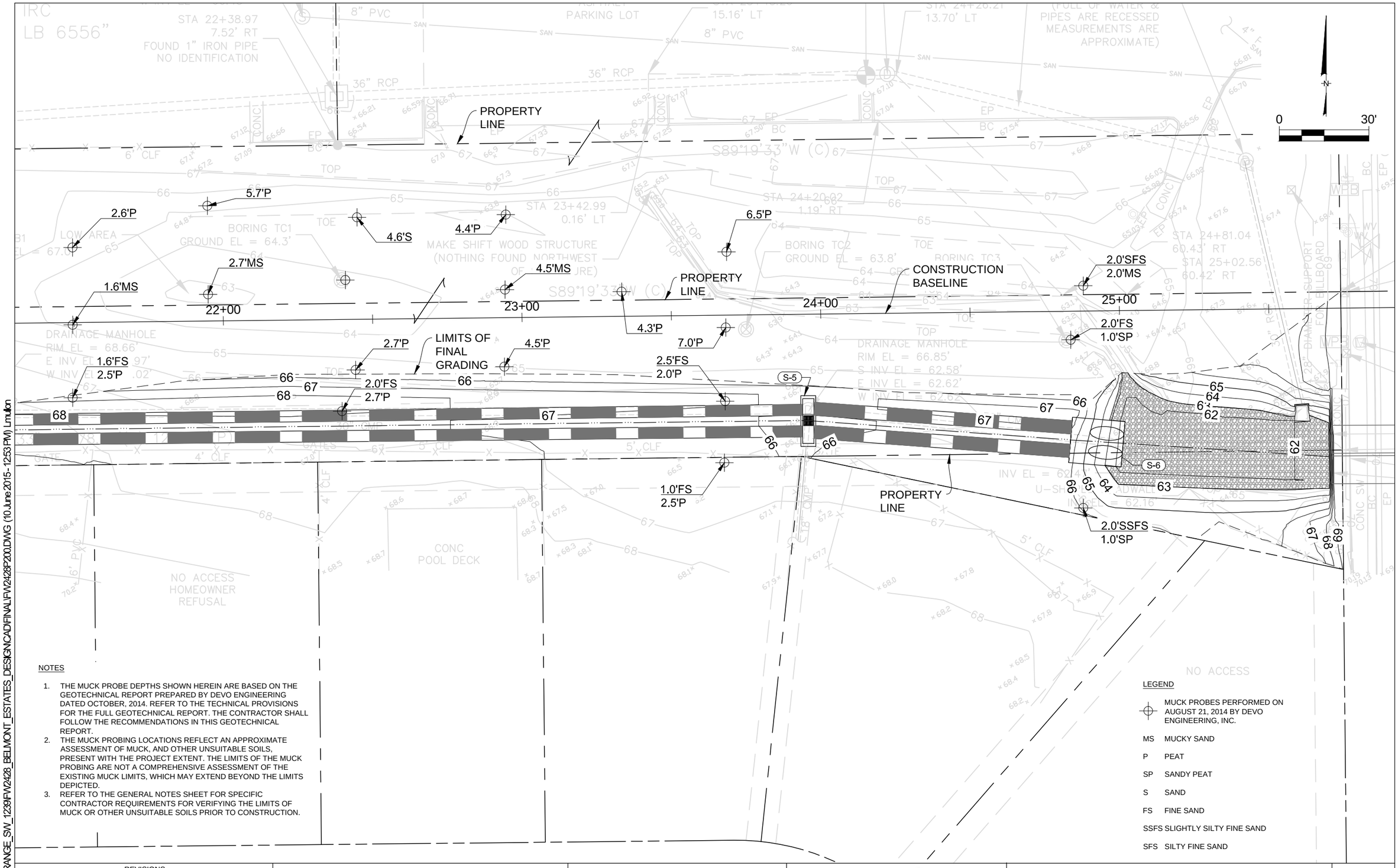

NOTES

1. THE MUCK PROBE DEPTHS SHOWN HEREIN ARE BASED ON THE GEOTECHNICAL REPORT PREPARED BY DEVO ENGINEERING DATED OCTOBER, 2014. REFER TO THE TECHNICAL PROVISIONS FOR THE FULL GEOTECHNICAL REPORT. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS IN THIS GEOTECHNICAL REPORT.
2. THE MUCK PROBING LOCATIONS REFLECT AN APPROXIMATE ASSESSMENT OF MUCK, AND OTHER UNSUITABLE SOILS, PRESENT WITH THE PROJECT EXTENT. THE LIMITS OF THE MUCK PROBING ARE NOT A COMPREHENSIVE ASSESSMENT OF THE EXISTING MUCK LIMITS, WHICH MAY EXTEND BEYOND THE LIMITS DEPICTED.
3. REFER TO THE GENERAL NOTES SHEET FOR SPECIFIC CONTRACTOR REQUIREMENTS FOR VERIFYING THE LIMITS OF MUCK OR OTHER UNSUITABLE SOILS PRIOR TO CONSTRUCTION.

LEGEND

⌖	MUCK PROBES PERFORMED ON AUGUST 21, 2014 BY DEVO ENGINEERING, INC.
MS	MUCKY SAND
P	PEAT
SP	SANDY PEAT
S	SAND
FS	FINE SAND
SSFS	SLIGHTLY SILTY FINE SAND
SFS	SILTY FINE SAND

REVISIONS		
DATE	BY	DESCRIPTION

BELMONT ESTATES
DRAINAGE IMPROVEMENTS

ORANGE COUNTY GOVERNMENT FLORIDA

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FL PE# 69032
AUTHORIZATION NUMBER 4321

GEOTECHNICAL INFORMATION
MUCK PROBE DEPTH PLAN

SHEET NO.
21

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