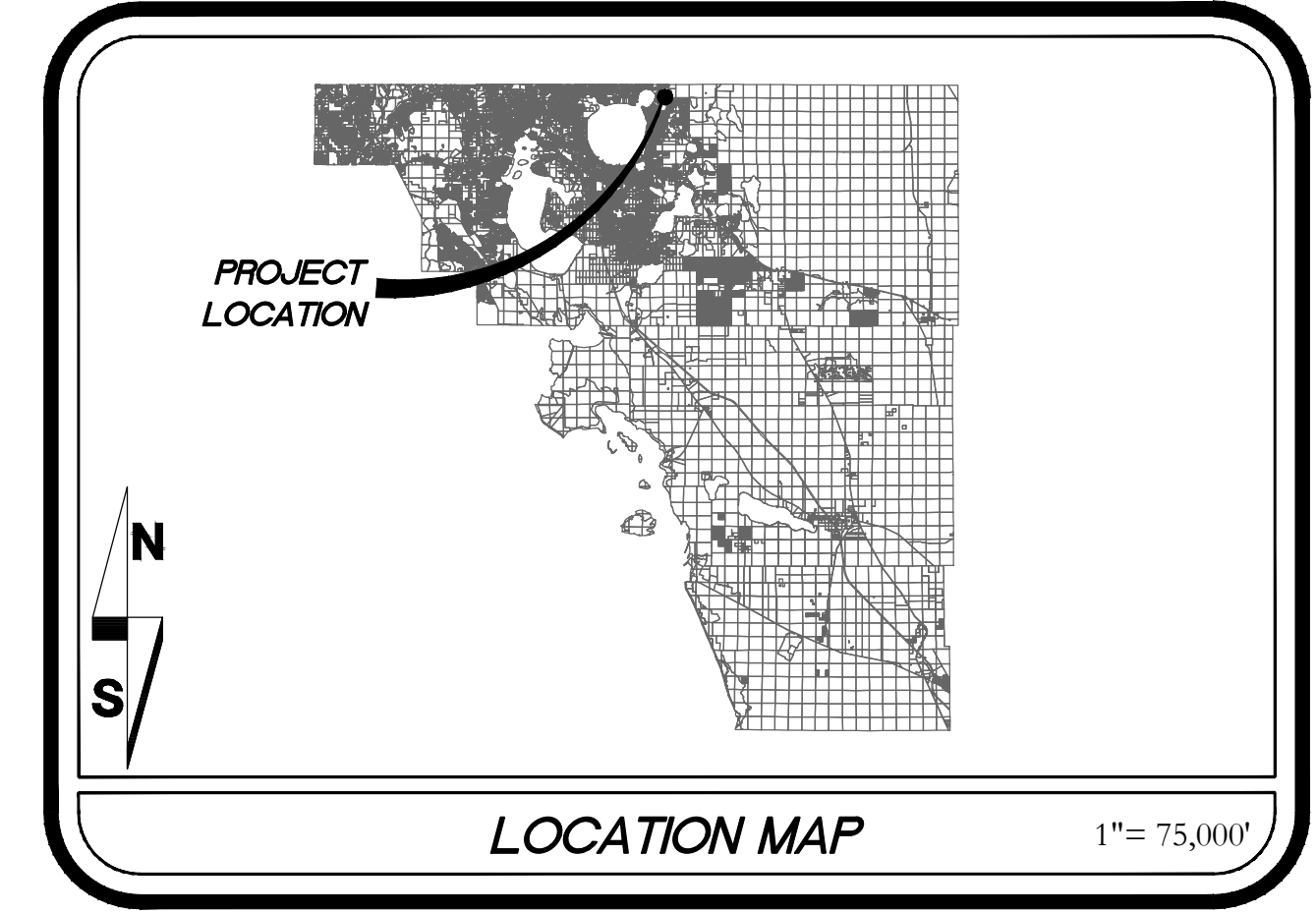


100% CONSTRUCTION PLANS FOR CYRILS DRIVE & NARCOOSSEE ROAD - INTERSECTION IMPROVEMENTS (SDP20-0136)

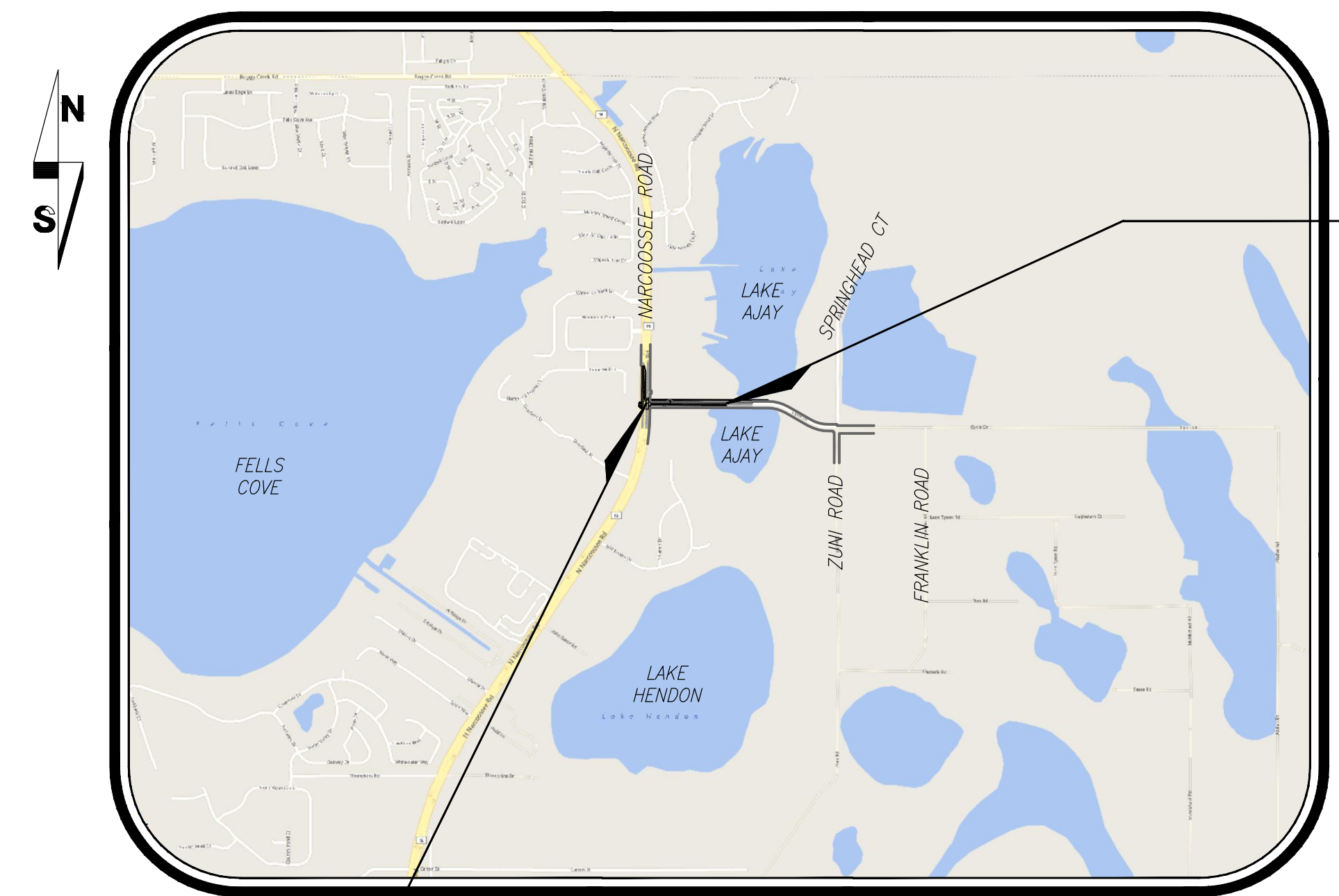
STA. **10+28.00** TO STA. 22+01.32
OSCEOLA COUNTY, FL

SECTION 4, TOWNSHIP 25 SOUTH, RANGE 31 EAST
SECTION 5, TOWNSHIP 25 SOUTH, RANGE 31 EAST
PARCEL ID. NO.:

OSCEOLA COUNTY: 04-25-31-4260-0001-0146
LAKE AJAY 15 & CYRILS NE LAND TRUST;
M L CARTER SERVICES INC TR: 04-25-31-4260-0001-0140
LAKE AJAY 15 & CYRILS SE LAND TRUST;
M L CARTER SERVICES INC TR: 09-25-31-4260-0001-0015



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4	EXISTING SURVEY & TOPOGRAPHY
5	EXISTING CONDITIONS - SOILS & FLOODPLAIN
6	RIGHT OF WAY AND EASEMENT INFORMATION
7	EROSION CONTROL PLAN & DETAILS
8	TYPICAL ROADWAY SECTIONS
9	DRAINAGE MAP
10	PROJECT LAYOUT
11-13	PLAN & PROFILE
14	NARCOOSSEE ROADWAY IMPROVEMENTS
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16-20	ROADWAY SOIL BORINGS
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39	TWA DETAILS
L300 - L301	LANDSCAPE PLANS
T1 - T3	SIGNALIZATION PLANS



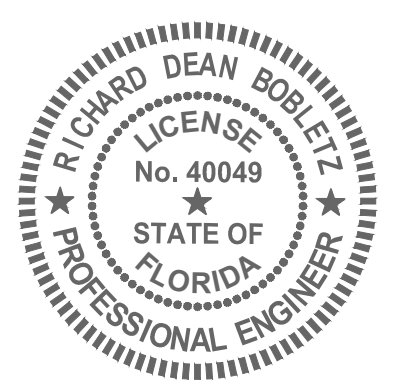
**BEGIN PROJECT
CYRILS DRIVE
STATION 10+28.00**

Vicinity Map
1" = 2000'

**END PROJECT
CYRILS DRIVE
STATION 22+01.32**

GOVERNING STANDARDS AND SPECIFICATIONS :
1. FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR ROAD CONSTRUCTION, "FDOT FY 2020-21"
2. FLORIDA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS, AND HIGHWAYS, DATED JUNE 2017.
3. OSCEOLA COUNTY LAND DEVELOPMENT CODE AND SPECIFICATIONS

DEVELOPER/APPLICANT:
TAVISTOCK EAST SERVICES, LLC
6900 TAVISTOCK LAKES BLVD, SUITE 200
ORLANDO, FL 32827



DATE: January 20, 2021 PROJECT MANAGER: RICHARD DEAN BOBLETZ
P.E. NO. 0040049

SOURCE OF BENCHMARK DATUM

B.M.
 NORTH AMERICAN VERTICAL DATUM 1988
 ELEVATION: 67.46 (NAVD 88)
 DESCRIPTION: N&D LB68
 LOCATION: IN SIDEWALK ON WEST SIDE OF NARCOOSSEE ROAD & CYRILS DRIVE INTERSECTION

PROJECT LENGTH:	FEET	MILES
TOTAL LENGTH:	1,173.32	0.22

UTILITY PROVIDERS

CENTURYLINK.....	(800)778-9140
ST CLOUD W/WW SYSTEMS DIVISION.....	(407)957-7110
CHARTER COMMUNICATIONS.....	(407)215-5870
832 COMMUNICATION.....	(407)462-7040
COMCAST COMMUNICATION.....	(800)778-9140
OSCEOLA COUNTY TRAFFIC.....	(407)343-7148
ORLANDO UTILITIES COMMISSION.....	(800)778-9140
TECO PEOPLES GAS - ORLANDO.....	(877)832-6747
AT&T DISTRIBUTION.....	(561)997-0240
UNITI FIBER.....	(877)652-2321

PREPARED BY:

POULOS & BENNETT
2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2594 www.poulosandbenett.com
Eng. Bus. No. 28567

MISC. SUBMITTALS	DATE
1. SUBMIT TO SFVMD	06/22/2020
4. SUBMIT TO SFVMD	11/06/2020

COUNTY REVISIONS	DATE
INITIAL SUBMITTAL	05/15/2020
2. 60% REVIEW	08/14/2020
3. 90% REVIEW	09/28/2020
5. 100% REVIEW	11/25/2020

DESIGNED BY: RB/JM	DATE: 06/18/2020
DRAWN BY: RD	DATE: 06/18/2020
CHECKED BY: RB	DATE: 11/03/2020
APPROVED BY: RB	DATE: 11/06/2020
PROJECT NO: 17-042	

SHEET 1
OF 40

GENERAL NOTES:

1. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THEREIN. PERMITS INCLUDED (BUT NOT NECESSARILY LIMITED TO) ARE:
 - WATER MANAGEMENT DISTRICT CONSUMPTIVE USE (WATER USE) FOR CONSTRUCTION DEWATERING (CUP)
 - WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT (ERP) OR MSSW
 - WATER MANAGEMENT DISTRICT WETLAND RESOURCE PERMIT
 - FDEP WATER DISTRIBUTION
 - FDEP SANITARY SEWER COLLECTION AND TRANSMISSION
 - FDEP REUSE
 - FDEP DREDGE AND FILL
 - ACOE NATIONWIDE OR INDIVIDUAL DREDGE AND FILL
 - LOCAL RIGHT OF WAY USE
 - LOCAL UNDERGROUND UTILITIES
 - FOOT DRIVEWAY CONNECTION
 - FOOT UTILITY
 - FOOT STORMWATER DISCHARGE CONNECTION
 - FDEP & EPA NPDES STORMWATER
 - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION TORTOISE INCIDENTAL TAKE
2. CONTRACTOR IS ADVISED THAT THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT OPERATORS FILE A NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES GENERAL PERMIT PRIOR TO BEGINNING WORK. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN SAME. A COPY SHALL BE SENT TO OWNER.
3. FLORIDA LAW (F.S. 553.851) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION IN ANY PUBLIC OR PRIVATE STREET, ALLEY, RIGHT-OF-WAY DEDICATED TO THE PUBLIC USE, OR GAS UTILITY EASEMENT WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION." THIS INCLUDES ANY OPERATION UTILIZING HAND TOOLS OR POWER TOOLS WHICH MOVES OR REMOVES ANY STRUCTURE, EARTH, ROCK, OR OTHER MASS OF MATERIAL BY SUCH METHODS AS DIGGING, BACKFILLING, DEMOLITION, GRADING, DITCHING, DRILLING, BORING AND CABLE FLOWING. THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATING (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS).
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROJECT SITE DURING CONSTRUCTION, TO PREVENT TRESPASSING OF UNAUTHORIZED PEDESTRIANS AND/OR VEHICLES IN ALL WORK AREAS. THE CONTRACTOR SHALL POST SIGNS, CONSTRUCT BARRIERS OR IMPLEMENT OTHER METHODS NECESSARY TO CONTROL ACCESS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR TRESPASSING ON THE CONSTRUCTION SITE OR DAMAGES TO ANY WORK RELATED THERETO.
5. CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO WATER, RECLAIMED WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV COMPANIES.
6. PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE POULOS & BENNETT WITH CONSTRUCTION SCHEDULE FOR VARIOUS SITE WORK ELEMENTS SO THAT PERIODIC SITE VISITS MAY BE COORDINATED TO ENSURE TIMELY CERTIFICATION OF COMPLETION TO AGENCIES AND AVOID DELAYS IN ISSUANCE OF CERTIFICATES OF OCCUPANCY/COMPLETION.
7. EXISTING UTILITIES HAVE BEEN FIELD VERIFIED BY THE PROJECT SURVEYOR AT AREAS OF CONNECTION AND AREAS OF CONFLICT AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD RE-VERIFICATION OF SIZE AND LOCATION OF ALL EXISTING UTILITIES AND RELATED CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK. SHALL THE CONTRACTOR OBSERVE ANY DEVIATIONS FROM WHAT IS SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SAID PRIOR TO COMMENCEMENT OF WORK. ANY WORK THAT MUST BE REDONE DUE TO FAILURE OF CONTRACTOR TO NOTIFY THE ENGINEER OF DEVIATIONS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTOR'S SOLE EXPENSE.
8. ANY DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND OWNER IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS FOR REVIEW BY THE ENGINEER AND OWNER.
9. AS PART OF THE CLEARING AND GRUBBING OPERATION, THE CONTRACTOR IS TO REMOVE ALL FENCING AND/OR EXISTING FACILITIES FROM THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING SITE VISIT TO UNDERSTAND THE EXISTING CONDITIONS OF THE SITE. IF REMOVAL OF EXISTING FACILITIES IS NOT INCLUDED IN THE BASE BID, THEN IT SHALL BE SPECIFICALLY IDENTIFIED.
10. CONTRACTOR SHALL PROTECT WETLANDS AND ALL ADJACENT PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
11. ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN OWNER'S SHALL BE REPORTED TO ENGINEER/OWNER/OWNER'S REPRESENTATIVE PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY ENGINEER/OWNER.
12. CONTRACTOR SHALL BE CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD. CONTRACTOR SHALL BECOME FAMILIAR WITH AND CONFORM WITH ALL TREE PROTECTION/PRESERVATION PROVISIONS OF THE CONTRACT DOCUMENTS AND LOCAL GOVERNMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT AND MITIGATION COSTS FOR ANY TREES REMOVED THAT WERE DESIGNATED TO BE PRESERVED.
13. ALL WORK SHALL BE OPEN TO AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE CITY, COUNTY, OWNER, INVOLVED UTILITY COMPANIES, PROJECT ENGINEER AND REGULATORY AGENCIES.
14. CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF PROJECT AND ADVISE ENGINEER OF ANY DISCREPANCIES.
15. NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS OR AS APPROVED BY ENGINEER/OWNER IN WRITING.
16. ALL FDOT DESIGN INDICES ARE HEREBY INCORPORATED AS PLAN REFERENCES HEREIN. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF ALL APPLICABLE INDEX DRAWINGS AND CONSTRUCTING ALL WORKS IN CONFORMANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, 2020 - 2021.
17. CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE ROAD CENTERLINE GEOMETRY AND COORDINATES PROVIDED IN THESE PLANS. CONTRACTOR SHALL CONFIRM WITH THE ENGINEER THAT THE PLAT IS CURRENT PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS

TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL.

18. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SURVEY MONUMENTATION. DISTURBED MONUMENTATION SHALL BE RESTORED BY A FLORIDA-LICENSED LAND SURVEYOR SELECTED BY THE OWNER AT CONTRACTOR'S EXPENSE.
19. IMMEDIATELY AT ONSET OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES CRITICAL TO COMPLETING THE PROJECT (INCLUDING WATER, REUSE, SEWER, POWER, TELEPHONE, GAS, AND CABLE TV) AND SHALL EVALUATE POTENTIAL CONFLICTS. ALL SUCH CONFLICTS SHALL BE REPORTED TO ENGINEER/OWNER IMMEDIATELY UPON DISCOVERY.
20. CONTRACTOR SHALL INSTRUCT THE GEOTECHNICAL TESTING LABORATORY PROVIDING CONSTRUCTION TESTING TO PROVIDE POULOS & BENNETT WITH COPIES OF ALL SITE-WORK TEST REPORTS AS THEY ARE GENERATED. CONTRACTOR SHALL MAINTAIN THE RESPONSIBILITY OF CONSTRUCTING THE PROJECT IN STRICT ACCORDANCE WITH THE PROJECT PLANS, SPECIFICATIONS AND REQUIREMENTS. RECEIPT OF COPIES OF GEOTECHNICAL REPORTS BY POULOS & BENNETT IN NO WAY OBLIGATES POULOS & BENNETT TO ANY REVIEW, COMMENTS OR ACTIONS REGARDING THE WORK.

AS-BUILT NOTES:

1. THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF AS-BUILTS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. AS-BUILTS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH MUNICIPALITY REQUIREMENTS AND THE FOLLOWING REQUIREMENTS.
 - 1.1. THE VERTICAL AND HORIZONTAL DATUMS USED SHALL BE AS STATED ON THE DRAWINGS.
 - 1.2. DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.
 - 1.3. DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, POTABLE WATER, RECLAIMED WATER, FORCEMAIN, SANITARY SEWER AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.
 - 1.4. DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIMED WATER MAINS/FORCEMAIN AT POINTS OF CROSSING IN ACCORDANCE WITH FDEP CRITERIA AND UTILITY PROVIDER REQUIREMENTS.
 - 1.5. DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER.
 - 1.6. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.
 - 1.7. LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES, AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO AND PREFERABLY THREE PERMANENT POINTS OR BY STATE PLANE COORDINATES OR OTHER UTILITY PROVIDER ACCEPTABLE REFERENCE.
 - 1.8. DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED AND THE INVERTS, AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE SHOWN.
 - 1.9. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. AS-BUILT POND CONTOURS SHALL BE PROVIDED AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AND ELEVATIONS SPECIFIED ON THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-GRADING POND SLOPES THAT ARE STEEPER THAN REQUIRED PER PLAN (HORIZONTAL:VERTICAL) TO A DEPTH OF 2 FT MINIMUM BELOW THE SLWT.
 - 1.10. EACH SHEET OF THE AS-BUILTS PLANS SHALL BE SIGNED, SEALED AND DATED BY REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILT DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".
 - 1.11. WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE CONSTRUCTED ELEVATIONS, ALONG WITH PHOTOGRAPHS OF EACH CROSSING, IN SUCH A WAY THAT THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THE ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
 - 1.12. WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSINGS. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
 - 1.13. WHERE UPGRADED PIPE MATERIALS ARE SHOWN IN THE PLANS OR AS DIRECTED IN THE FIELD BY THE ENGINEER OR MUNICIPALITY, THE LENGTH, LOCATIONS, FITTINGS, ETC. FOR UPGRADED PIPE SHALL BE SHOWN ON THE AS-BUILT DRAWINGS, RECORD DRAWINGS OR PHOTOS.
2. AS-BUILT DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH POULOS & BENNETT CAD STANDARDS.
3. COMPLETE AS-BUILTS AND ASSET TABLES, MEETING JURISDICTION HAVING AUTHORITY STANDARDS AND CONSTRUCTION SPECIFICATIONS, SHALL BE PROVIDED TO POULOS & BENNETT FOR REVIEW AND APPROVAL. PAY APPLICATIONS REQUESTING PAYMENT BEYOND 80% OF CONTRACT AMOUNT, PER SYSTEM, MAY BE HELD AT THE DISCRETION OF THE OWNER UNTIL THE AS-BUILTS AND ASSET TABLES ARE DEEMED COMPLETE BY POULOS & BENNETT.

EROSION CONTROL NOTES:

1. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING SURFACE WATERS. SUCH MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES, SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, OR SILT BARRIERS.
2. SODDING OF DETENTION PONDS SHALL BE ACCOMPLISHED WITHIN SEVEN (7) DAYS FOLLOWING COMPLETION OF GRADING TO MINIMIZE EROSION POTENTIAL.
3. AT A MINIMUM, THE RETENTION/DETENTION STORAGE AREA MUST BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATES. ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE STORAGE AREA PRIOR TO FINAL GRADING AND STABILIZATION.
4. IF DURING CONSTRUCTION, THE PROPOSED EROSION CONTROL SYSTEM DOES NOT PERFORM SATISFACTORILY, ALTERNATIVES AND ADDITIONAL METHODS OF PROTECTION SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH EPA, W.M.D, AND COUNTY EROSION PROTECTION STANDARDS. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL EROSION CONTROL COSTS INCLUDING ANY COSTS ASSOCIATED WITH COMPLIANCE ISSUES AND ENFORCEMENT ACTIONS.

5. 2' STRIP OF SOD SHALL BE PLACED BEHIND BACK OF CURB.
6. ALL PERMANENT EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 7 DAYS OF FINAL GRADING. ALL TEMPORARY EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE COMPLETED AND ESTABLISHED.
7. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH NPDES REQUIREMENTS.
8. CONTRACTOR SHALL REMAIN RESPONSIBLE FOR OPERATION AND MAINTENANCE OF POLLUTION PROTECTION/BMP MEASURES UNTIL CONSTRUCTION HAS BEEN COMPLETED IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT PLANS AND CERTIFIED AS SUCH BY POULOS & BENNETT, REGARDLESS OF WHETHER CONTRACTOR HAS SUBMITTED A NOTICE OF TERMINATION (NOT) TO FDEP.

SURVEY AND CONTROL:

1. BOUNDARY, EXISTING TOPOGRAPHY AND CONTOURS, AND BENCHMARKS BASED ON THE FOLLOWING:

SURVEYOR: ATLANTIC SURVEYING
308 S DILLARD ST.
WINTER GARDEN, FL 34787
(407) 656-4993

2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SURVEY MONUMENTATION, DISTURBED MONUMENTATION SHALL BE RESTORED BY A FLORIDA-LICENSED LAND SURVEYOR SELECTED BY THE OWNER AT THE CONTRACTOR'S SOLE EXPENSE.

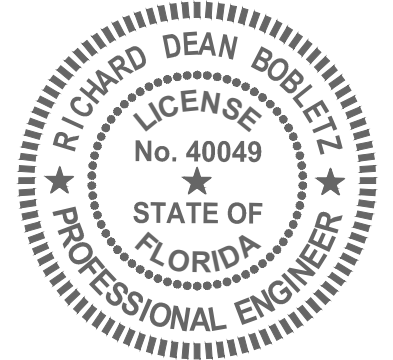
3. BENCHMARK LOCATION AND ELEVATION ARE AS REPRESENTED BY SURVEYOR AT THE TIME OF THE SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT TIME OF CONSTRUCTION.

4. GEOTECHNICAL ENGINEER: UNIVERSAL ENGINEERING SCIENCES
REPORT NO(S).: 1765631.V2
DATE (S): APRIL 22, 2020; REVISED MAY 11, 2020

5. MASTER DRAINAGE BY CHRISTINA BAXTER, PE OF POULOS & BENNETT, LLC

PAVING, DRAINAGE AND GRADING:

1. THE CONTRACTOR SHALL INSTALL, AS PART OF THE INFRASTRUCTURE AND PRIOR TO CERTIFICATE OF COMPLETION, DROP CURBS AND HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT TO MEET STATE OF FLORIDA ACCESSIBILITY CODE AND FEDERAL A.D.A. REQUIREMENTS.
2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING FDEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY IN ACCORDANCE OF FLORIDA ADMINISTRATIVE CODE 62-621.300 (2), 62-620, AND FLORIDA STATUTES CHAPTER 403.
3. DURING CONSTRUCTION, THE GEOTECHNICAL ENGINEER PROVIDING PROJECT TESTING SHALL MONITOR CONSTRUCTION CONDITIONS AND PROVIDE RECOMMENDATIONS FOR ADDITIONAL ROADWAY UNDERDRAINS AS NEEDED. ENGINEER SHALL BE NOTIFIED OF ANY SUCH RECOMMENDATIONS.
4. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD STAKE CONSERVATION AREA LINES. OWNER RESERVES THE RIGHT TO CHECK THE STAKING AND REQUIRE IT TO BE RELOCATED IF NECESSARY. IT SHALL REMAIN IN PLACE UNTIL ADJACENT CONSTRUCTION IS COMPLETE.
5. ALL SIGNAGE, PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH FDOT "DESIGN STANDARDS" 2020-2021 AND FLORIDA HIGHWAY ADMINSTRATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", 2009 WITH REVISION NUMBERS 1 AND 2 INCORPORATED, DATED MAY 2012.
6. REGULATORY SIGNS (STOP, ETC.) SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS, UNLESS SIGNAGE IS PROVIDED BY THE MUNICIPALITY.
7. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES AND FROM INVERTS OF ENDWALLS AND/OR MITERED END SECTIONS. BIDDERS SHALL ADJUST FOR PIPE LENGTHS WHEN BIDDING MITERED END SECTIONS.
8. CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS, TRACTS OR MEDIANS BEYOND LOCATIONS SHOWN IN ROADWAY CROSS SECTIONS. WHERE SUCH TREATMENT DOES OCCUR, IT SHALL BE REMOVED AND REPLACED WITH SUITABLE PLANTING SOILS ACCEPTABLE TO OWNER'S LANDSCAPE ARCHITECT.
9. ALL PAVEMENT RETURN RADII SHALL MEASURED FROM THE INTERFACE TO THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
10. SITE GRADING, PAVING AND DRAINAGE MATERIALS AND CONSTRUCTION SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, JULY 2020 (AND TO OSCEOLA COUNTY STANDARD SPECIFICATIONS).
11. STORM DRAINS SHALL BE REINFORCED CONCRETE PIPE, PER ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. LIFTING HOLES ARE PROHIBITED.
12. UNDERDRAIN DISCHARGE PIPE, UNDER PAVEMENT AND STRUCTURE CONNECTION, SHALL BE PVC ASTM D3034 SDR 35 WITH ELASTOMETRIC JOINTS, NON-PERFORATED. ALL OTHER LOCATIONS SHALL BE PERFORATED HOPE DRAIN PIPE WITH FILTER SOCK.



RICHARD DEAN BOBLETZ
FLORIDA
DATE: January 20, 2021

This item has been electronically signed and sealed by Richard Dean Bobletz on the date adjacent to the seal using a S&H authorization code. Printed copies of this document are not considered signed and sealed and the S&H authorization code must be verified on any electronic copies.

R E V I S I O N S			
DATE	DESCRIPTION	DATE	DESCRIPTION
05-15-2020	INITIAL SUBMITTAL		
08-14-2020	60% REVIEW		
09-28-2020	90% REVIEW		
11-06-2020	100% REVIEW		



Poulos & Bennett, LLC
2602 E. Livingston St., Orlando, FL 32803
Tel. 407.487.2394 www.poulosandbennett.com
Eng. Bus. No. 28567

OSCEOLA COUNTY
PROJECT NO. (SDP20-0136)

CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
GENERAL NOTES & DETAILS

SHEET
NO.

2

13. YARD DRAIN PIPING: PVC CONFORMING TO ASTM D3034, SDR35 SHALL BE USED FOR ALL PIPE RUNS IN WHICH ANY PART LIES UNDER PAVED AREAS. SAID PVC OR HEAVY DUTY CORRUGATED POLYETHYLENE MAY BE USED FOR ALL OTHER RUNS. MATERIAL SELECTION SHALL BE CONSISTENT THROUGHOUT THE PROJECT.

14. DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT.

15. FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS.

16. THE LIMITS OF THE POND TRACTS SHALL BE SODDED FROM TRACT LIMITS TO LIMITS SHOWN IN POND SECTION. IN THE CASE OF DRY BOTTOM PONDS, THE BOTTOM WILL BE SEED AND MULCHED UNLESS OTHERWISE SPECIFIED.

17. BLUE REFLECTIVE PAVEMENT MARKERS FOR ALL FIRE HYDRANTS SHALL BE PLACED IN THE CENTER OF THE NEAREST TRAVELED LANE TO MARK THEIR LOCATIONS.

18. TOP ELEVATIONS OF MANHOLES IN GRASSED AREAS SHALL BE AT MINIMUM 4 INCHES ABOVE FINISH GRADE AND SOD.

19. MINIMUM LONGITUDINAL SLOPE OF CURB SHALL BE 0.30% UNLESS SPECIFIED OTHERWISE.

20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE DOCUMENTATION, FOR ADS STORM PIPE, FROM THE PIPE MANUFACTURER CONFIRMING THAT SUFFICIENT COVER HAS BEEN PROVIDED TO PREVENT FLOTATION. IN THE EVENT THAT ADEQUATE COVER IS NOT PROVIDED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN DESIGN AND CONSTRUCTION SPECIFICATIONS FROM THE MANUFACTURER, FOR THE ADS PIPE ANCHORING SYSTEM. IF ADS STORM PIPE IS USED THEN MITERED END SECTIONS (MES) MAY BE SUBSTITUTED FOR FLARED END SECTIONS (FES) AT PIPE RUN TERMINATIONS.

21. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING PROPER TRAFFIC MAINTENANCE AND CONTROLS IN ACCORDANCE WITH REGULATORY STANDARDS. THE CONTRACTOR SHALL HAVE THE PLAN PREPARED BY AN FDOT CERTIFIED DESIGNER AND SUBMIT THE PLAN TO POULOS & BENNETT FOR APPROVAL.

22. GEOTECHNICAL SERVICES HAVE BEEN PROVIDED AS REFERENCED BELOW. GEOTECHNICAL RECOMMENDATIONS ARE NOT THE RESPONSIBILITY OF POULOS & BENNETT. POULOS & BENNETT HAS RELIED ON THE BELOW REFERENCED GEOTECHNICAL REPORT(S) IN PREPARATION OF THE DRAWINGS. ANY CONFLICT BETWEEN INFORMATION WITHIN THE REPORT AND THESE DRAWINGS SHALL BE REPORTED TO ENGINEER/OWNER. POULOS & BENNETT ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS OR ACCURACY OF GEOTECHNICAL INFORMATION.

GEOTECHNICAL ENGINEER: UNIVERSAL ENGINEERING SCIENCES
 REPORT NO(S): 1765631.V2
 DATE: APRIL 22, 2020, REVISED MAY 11, 2020

23. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL PAVEMENT TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO PROVIDE A SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHALL AREAS OF POOR DRAINAGE BE OBSERVED, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF CURBS OR PAVEMENT COURSES, SO THAT RECOMMENDATIONS FOR CORRECTION MAY BE MADE.

24. 100-YEAR FLOOD ELEVATIONS SHOWN HEREIN ARE DERIVED FROM (FEMA/FLOOD INSURANCE RATE MAP OF 12097C, COMMUNITY PANEL #12097C01056, DATED 6/18/2013)

25. ALL DISTURBED COUNTY RIGHTS OF WAY SHALL BE RESTORED. SOD SHALL BE PLACED FROM EDGE OF PAVEMENT TO THE TOE OF BANK AND ALL AREAS SHALL MATCH OR EXCEED PRECONSTRUCTION CONDITIONS.

26. ALL OFF-SITE DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION, OR BETTER.

27. ENGINEER RESERVES THE RIGHT TO WITHHOLD AUTHORIZATION FOR PAYMENT FOR ANY ROADWORK WHICH HAS NOT BEEN TESTED BY A FLORIDA-REGISTERED GEOTECHNICAL ENGINEER AND REPORTED TO CONFORM TO PROJECT SPECIFICATIONS.

28. ROAD GRADING AND CONSTRUCTION SHALL INCLUDE BRINGING ANY UTILITY EASEMENTS, AS SHOWN OR NOTED ON THE PLAT OR CONSTRUCTION DRAWINGS, ADJACENT TO THE RIGHT-OF-WAY LINE TO WITHIN 6 INCHES OF FINAL DESIGN GRADE. LOT GRADING REQUIREMENT MAY BE MORE STRINGENT.

29. INLETS WHICH ARE GRAPHICALLY SHOWN ON LOT LINES AND NOT OTHERWISE LOCATED BY STATIONING SHALL BE LOCATED SUCH THAT THE CENTERLINE OF THE INLET TOP IS ALIGNED WITH THE LOT LINE.

30. DRAINAGE MANHOLES AND INLETS (NOT INCLUDING CONTROL STRUCTURES) IN THE PLANS ARE IDENTIFIED BY TOP TYPE ONLY. CONTRACTOR SHALL PROVIDE STANDARD DITCH BOTTOM INLET, J OR P STRUCTURE BOTTOMS, SIZED AS REQUIRED TO ACCOMMODATE PIPE SIZES AND ORIENTATIONS SHOWN. SHOP DRAWINGS SHALL BE SUBMITTED WHICH CLEARLY REPRESENT SUCH DATA.

31. CONTRACTOR SHALL STABILIZE AND PROTECT ALL END WALL, MITERED END SECTION, FLARED END SECTION, ETC. STRUCTURES THROUGHOUT THE PROJECT UNTIL THE BANK SLOPES OF THE RECEIVING WATER BODY ARE STABILIZED AND ACCEPTED BY OWNER.

32. DRAINAGE STRUCTURE TOP ELEVATIONS REFER TO THE ELEVATION OF THE TOP OF CURB FOR CURB INLETS AND THE RIM OR GRATE ELEVATION FOR MANHOLES AND DITCH BOTTOM INLETS. ELEVATIONS FOR THE RETENTION POND CONTROL STRUCTURES ARE SHOWN ON THE CONTROL STRUCTURE DETAIL SHEETS.

33. STATION AND OFFSET FOR CURB INLETS REFERS TO THE LOCATION IDENTIFIED AS "CENTER OF BOX" IN FDOT STANDARD INDEX 211. STATION AND OFFSET FOR MITERED END SECTIONS REFERS TO THE LOCATION IDENTIFIED AS "LOCATION REFERENCE" IN FDOT STANDARD INDEX 272. STATION AND OFFSET FOR FLARED END SECTIONS REFERS TO THE LOCATION IDENTIFIED AS "C/L OF PIPE" IN FDOT STANDARD INDEX 270. STATION AND OFFSET FOR MANHOLES AND DITCH BOTTOM INLETS REFERS TO THE CENTER OF THE STRUCTURE.

DEMOLITION NOTES:

1. CONTRACTOR SHALL REMOVE ALL WASTE MATERIAL FOR DISPOSAL OFF-SITE. DISPOSAL SHALL CONFORM TO ALL APPLICABLE REGULATIONS.

2. ANY MATERIALS CLAIMED AS SALVAGE BY OWNER EITHER IN THE FIELD OR IN THE DRAWINGS SHALL BE STOCKPILED FOR OWNER'S REMOVAL.

3. CONTRACTOR SHALL BE KNOWLEDGEABLE OF THE CONSTRUCTION DOCUMENTS AND BE RESPONSIBLE FOR PROTECTING ANY EXISTING FACILITY SO DESIGNATED OR DESIGNATED TO BE UTILIZED IN THE WORK.

4. CONTRACTOR SHALL REMOVE ALL FOUNDATIONS, CONCRETE SLABS AND UNDERGROUND STRUCTURES, EXISTING ON THE SITE AT THE TIME OF BIDDING UNLESS OTHERWISE DIRECTED.

5. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES AND BE RESPONSIBLE FOR THE TERMINATION, CAPPING-OFF AND REMOVAL OF ALL UNDERGROUND AND ABOVE-GROUND UTILITY SERVICES EXISTING AT THE TIME OF BIDDING UNLESS DIRECTED TO BID OTHERWISE.

6. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND DISPOSING ALL WASTE MATERIALS CONSISTENT WITH ALL RULES AND REGULATIONS APPLICABLE TO THE SPECIFIC MATERIAL FOUND.

STANDARD SPECIAL PURPOSE NOTES:

1. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.

2. THE ENGINEER SHALL BE NOTIFIED OF ANY WELLS ENCOUNTERED DURING CONSTRUCTION. ALL WELLS NOT DESIGNATED TO REMAIN OR FUNCTION SHALL BE PROPERLY SEALED AND ABANDONED PER APPLICABLE AGENCY REQUIREMENTS.

CONSULTANTS:

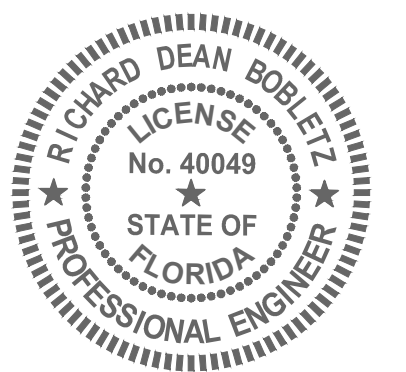
CIVIL: POULOS & BENNETT

SURVEY: ATLANTIC SURVEYING

GEOTECH: UNIVERSAL ENGINEERING SCIENCES

ENVIRONMENTAL: AUSTIN

TRAFFIC/TRANSPORTATION: TMC



RICHARD DEAN BOBLETZ
 LICENSE
 No. 40049
 STATE OF
 FLORIDA
 PROFESSIONAL ENGINEER
 DATE: January 20, 2021

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09-28-2020	90% REVIEW		
11-06-2020	100% REVIEW		



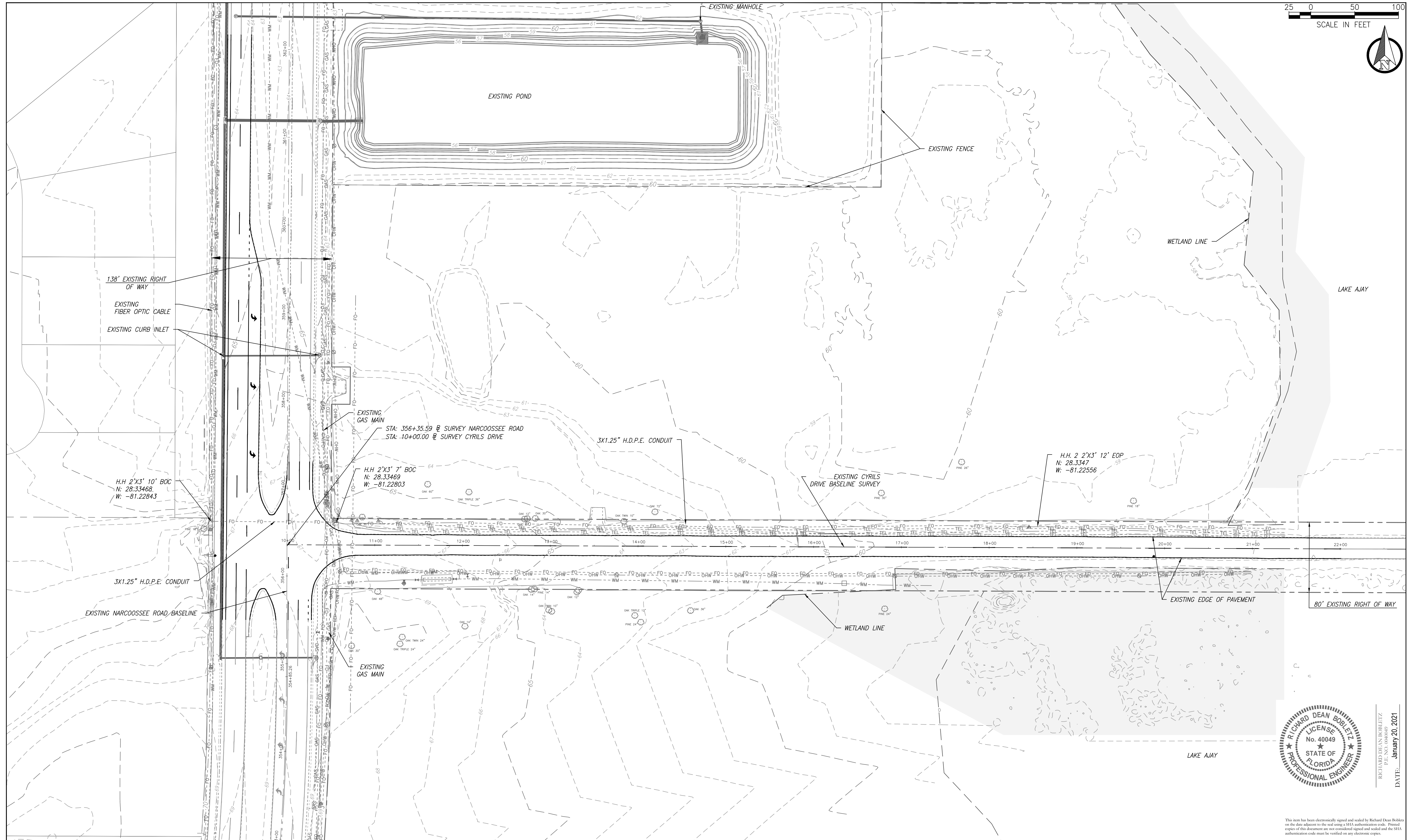
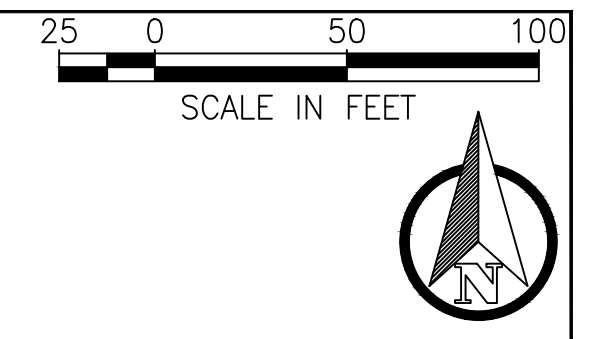
Poulos & Bennett, LLC
 2602 E. Livingston St., Orlando, FL 32803
 Tel. 407.487.2594 www.poulosandbennett.com
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OSCEOLA COUNTY
 PROJECT NO. (SDP20-0136)

**CYRILS DRIVE & NARCOOSSEE RD -
 INTERSECTION IMPROVEMENTS
 GENERAL NOTES & DETAILS**

SHEET
 NO.

3



Z:\2021\17-042 TAVISDOCK - SUNBRIDGE\CYRILS DR\NARCOOSSEE INTERSECTION\CAD\FINAL\COUNTY\17042-03BNA-EX

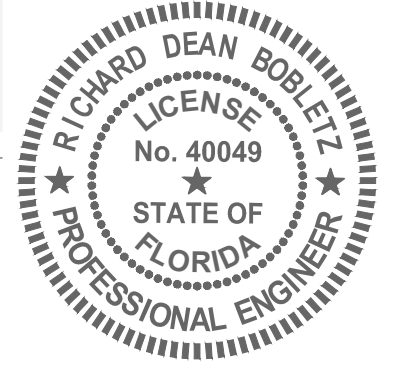
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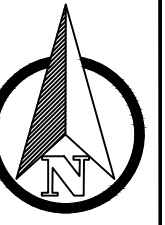
**CYRILS DRIVE & NARCOOSSEE RD -
 INTERSECTION IMPROVEMENTS
 EXISTING SURVEY & TOPOGRAPHY**
 (Per Atlantic Surveying-Narcoossee-Cyrils Intersection Survey Provided April 10, 2020)

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 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 DATE: January 20, 2021

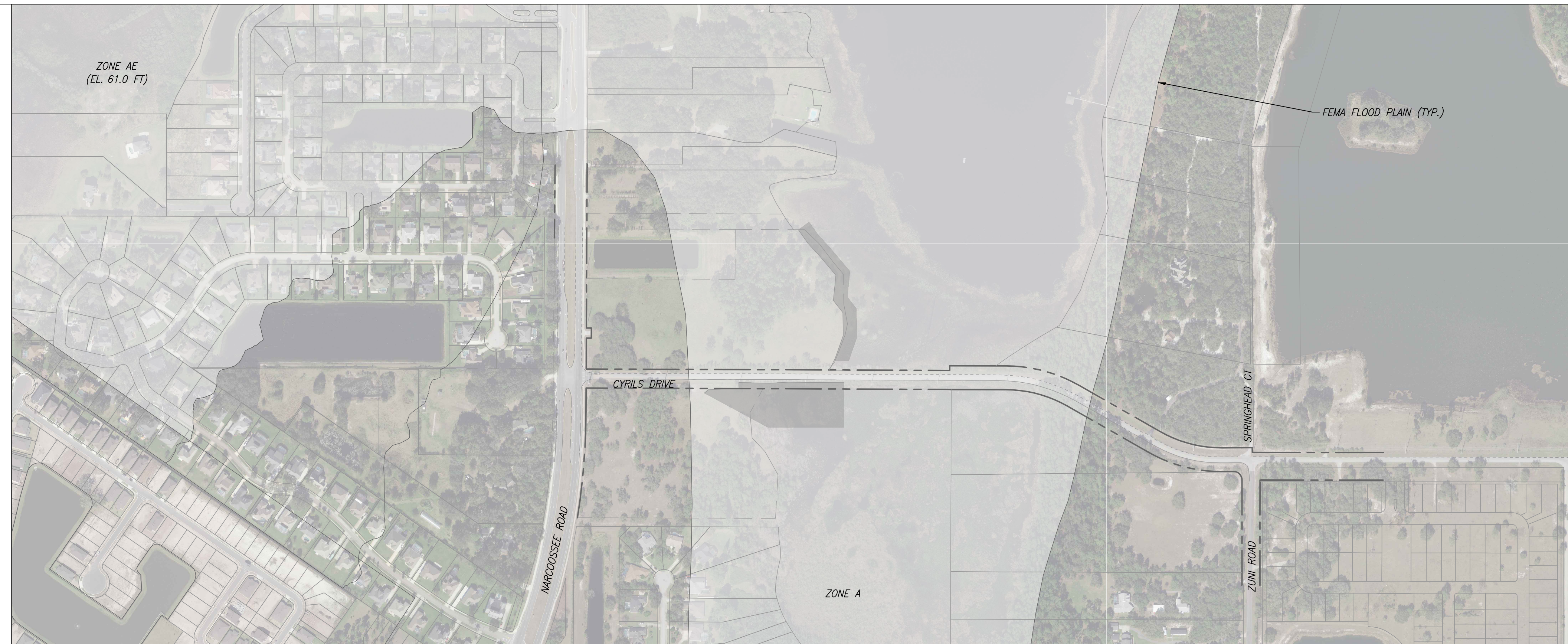
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SOILS VIEW
1" = 300'

Legend		
ID	Soil	Hydrologic Soil Group
1	ADAMSVILLE SAND	A
5	BASINGER FINE SAND	A/D
6	BASINGER FINE SAND, DEPRESSIONAL	A/D
16	IMMOKALEE FINE SAND	B/D
22	MYAKKA FINE SAND	A/D
32	PLACID FINE SAND, FREQUENTLY PONDED	A/D
34	POMELLO FINE SAND	A
40	SAMSULA MUCK, FREQUENTLY PONDED	A/D
42	SMYRNA FINE SAND	A/D
43	ST. LUCIE FINE SAND	A
99	WATER	--

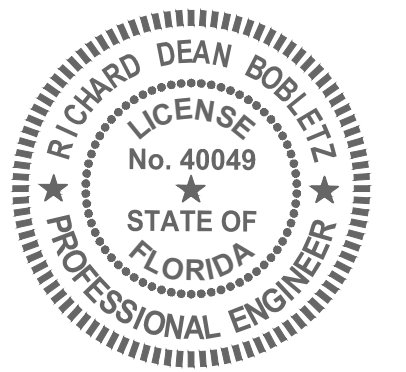
SOURCE: UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) WEB SOIL SURVEY



FLOOD ZONE MAP
1" = 300'

Flood Plain	
ZONE A	NO BASE FLOOD ELEVATIONS DETERMINED
ZONE AE	BASE FLOOD ELEVATIONS DETERMINED

MAP PANEL ID: 12097C0105G



RICHARD DEAN BOBLETZ
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DATE: January 20, 2021

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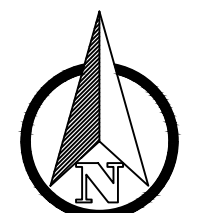
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OSCEOLA COUNTY
PROJECT NO. (SDP20-0136)

**CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
EXISTING CONDITIONS - SOILS &
FLOODPLAIN**

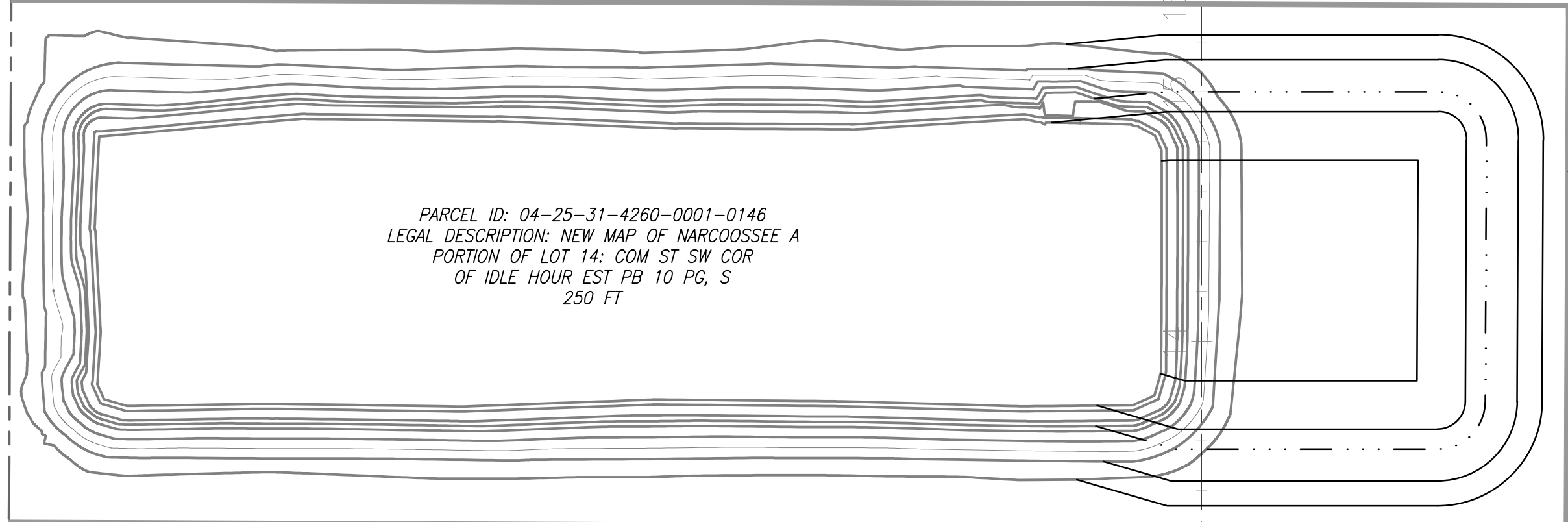
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5



Legend	
	EXISTING RIGHT-OF-WAY FROM SURVEY
	EXISTING PARCEL LINE FROM SURVEY
	PROPOSED RIGHT-OF-WAY LINE
	PROPOSED DRAINAGE/GRADING EASEMENT
	ADDITIONAL RIGHT-OF-WAY REQUIRED
	LANDSCAPE EASEMENT
	WETLAND

N. Narcoossee Rd. (CR 15)



25' X 25' PERMANENT DRAINAGE EASEMENT

25' DRAINAGE EASEMENT

PARCEL ID: 04-25-31-4260-0001-0140
 LEGAL DESCRIPTION: NEW MAP OF NARCOOSSEE PB 1 PG
 73 LOT 14 LESS N 65.75 FT AND LESS
 COM AT SW COR OF IDLE HOUR EST

STA: 10+50.04
 OFF: 64.15' LT
 ADDITIONAL RIGHT OF WAY FOR SIGNAL

20' TEMPORARY GRADING EASEMENT

STA: 10+62.84
 OFF: 49.35' LT
 39' ADDITIONAL RIGHT OF WAY

ADDITIONAL RIGHT OF WAY REQUIRED
 (0.93 AC.)

STA: 356+55.89
 OFF: 113.77' LT

STA: 356+65.861
 OFF: 103.72' LT

STA: 356+03.36
 OFF: 114.16' LT

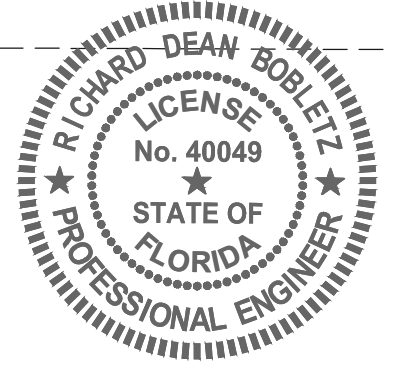
STA: 355+78.99
 OFF: 89.51' LT

Cyrils Dr.

80' EXISTING RIGHT OF WAY

20' TEMPORARY GRADING EASEMENT

119' PROPOSED RIGHT OF WAY



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 PROFESSIONAL ENGINEER
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OSCEOLA COUNTY
 PROJECT NO. (SDP20-0136)

CYRILS DRIVE & NARCOOSSEE RD -
 INTERSECTION IMPROVEMENTS
 RIGHT OF WAY AND EASEMENT
 INFORMATION

SHEET NO.
 6



STATE OF FLORIDA E&S DESIGNER & REVIEWER MANUAL, LATEST EDITION, JULY 2013

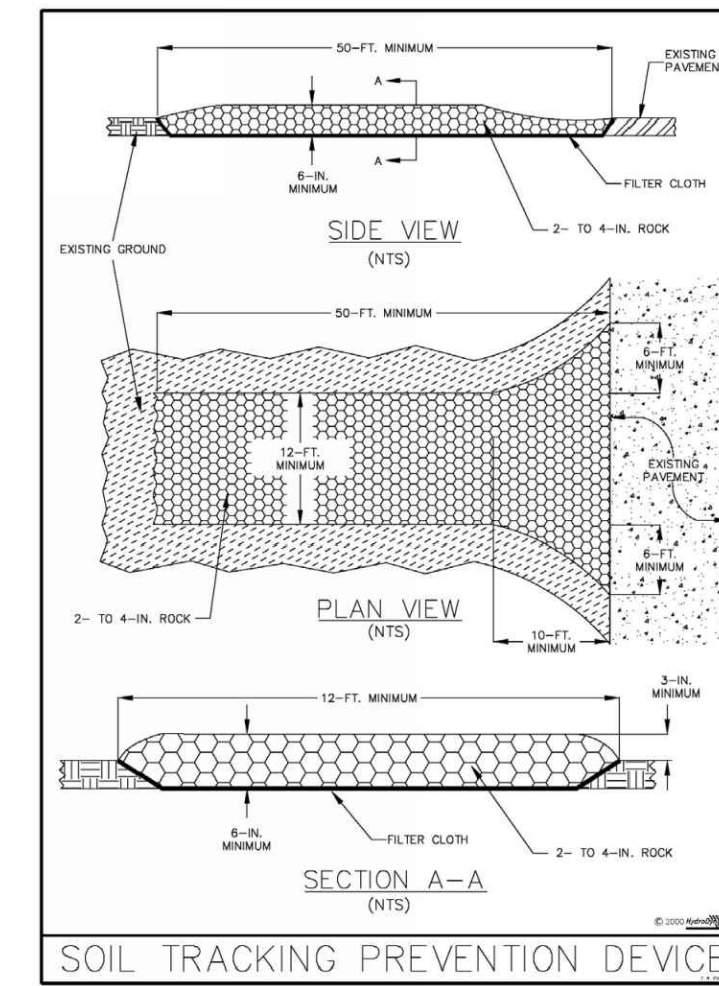
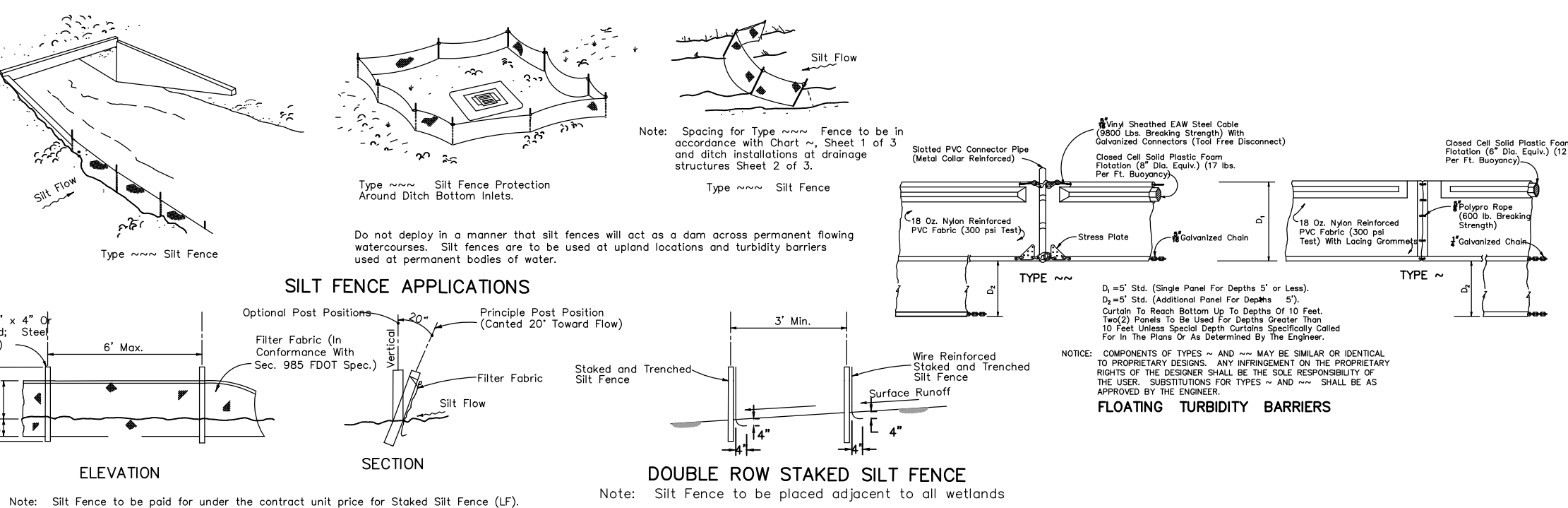


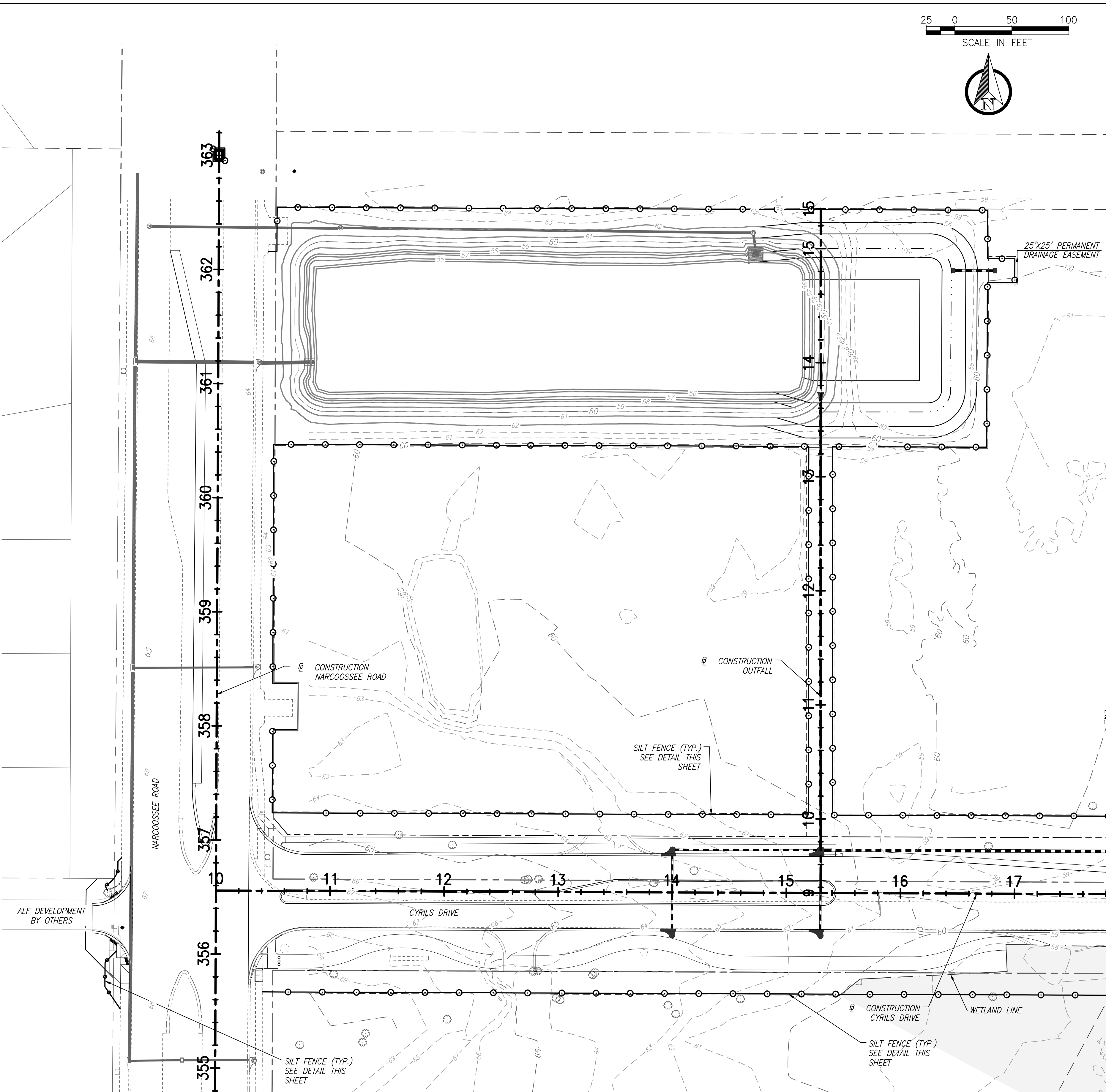
Figure Y-19: Illustration of a Soil Tracking Prevention Device
Reprinted in part from *Highway Dynamics* by permission of the publisher.

CONSTRUCTION ENTRANCE DETAIL
N.T.S.

- NOTES:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
 4. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE IN ACCORDANCE WITH FOOT EROSION AND SEDIMENT CONTROL MANUAL LATEST EDITION.



- EROSION CONTROL NOTES:**
1. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING SURFACE WATERS. SUCH MEASURES SHALL BE APPROVED BY THE PROJECT ENGINEER AND MAY INCLUDE, BUT NOT LIMITED TO, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES, SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, OR SILT BARRIERS.
 2. SODDING OF DETENTION PONDS SHOULD BE ACCOMPLISHED WITHIN SEVEN (7) DAYS FOLLOWING COMPLETION OF GRADING TO MINIMIZE EROSION POTENTIAL.
 3. AT A MINIMUM, THE RETENTION/DETENTION STORAGE AREA MUST BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATES. ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE STORAGE AREA PRIOR TO FINAL GRADING AND STABILIZATION.
 4. IF DURING CONSTRUCTION, THE PROPOSED EROSION CONTROL SYSTEM DOES NOT PERFORM SATISFACTORILY, ALTERNATIVES AND ADDITIONAL METHODS OF PROTECTION SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH S.F.W.M.D. AND OSCEOLA COUNTY EROSION PROTECTION STANDARDS. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL EROSION CONTROL COSTS INCLUDING ANY COSTS ASSOCIATED WITH COMPLIANCE ISSUES AND ENFORCEMENT ACTIONS.
 5. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED EROSION CONTROL PLAN TO OSCEOLA COUNTY FOR REVIEW AND APPROVAL A MINIMUM OF 2 WORKING DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING. AT A MINIMUM, THE EROSION CONTROL PLAN SHALL PROPOSE SILT SCREEN OR SYNTHETIC HAY BALES AND TURBIDITY BARRIERS, IN ACCORDANCE WITH THE CONSTRUCTION PLANS.
 6. 2' STRIP OF SOD SHALL BE PLACED BEHIND BACK OF CURB. THE CURBSIDE BMP SHALL BE INSTALLED AS INDICATED IN THE SWPPP WHILE GRADING IS ACTIVE.
 7. ALL PERMANENT EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 7 DAYS OF FINAL GRADING. ALL TEMPORARY EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE COMPLETED AND ESTABLISHED.
 8. CONTRACTOR SHALL STAKE IN ALL SOD UNTIL SUCH TIME THAT GROUND IS STABILIZED IN ORDER TO PREVENT EROSION.
 9. WORK SHALL BE DONE IN ACCORDANCE WITH EPA, FDEP, SWFMD, AND OSCEOLA COUNTY BEST MANAGEMENT PRACTICES AND EROSION CONTROL SPECIFICATIONS.
 10. DISCHARGE OF GROUNDWATER FROM DEWATERING OPERATIONS REQUIRES APPROVAL FROM FDEP AND THE APPLICABLE WATER MANAGEMENT DISTRICT. THE DEVELOPER/CONTRACTOR SHALL OBTAIN A FDEP GENERIC PERMIT FOR THE DISCHARGE OF GROUND WATER FROM DEWATERING OPERATIONS PURSUANT TO THE REQUIREMENTS OF 62-621.300(2)(A) AND 62-620 F.A.C. AND FLORIDA STATUTES CHAPTER 403.
 11. PRIOR TO THE START OF LAND DISTURBING ACTIVITIES, WHICH INCLUDES DEMOLITION, EARTHWORK AND/OR CONSTRUCTION, THE DEVELOPER/CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) A NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER THE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) PURSUANT TO THE REQUIREMENTS OF 62-621.300(4)(A) F.A.C. UPON COMPLETION OF ALL LAND DISTURBING ACTIVITIES AND AFTER FINAL STABILIZATION OF THE SITE IS COMPLETE, THE DEVELOPER/CONTRACTOR SHALL SUBMIT TO FDEP A NOTICE OF TERMINATION (NOT) TO END THEIR COVERAGE UNDER THE CGP.
 12. BMPs TO CONTROL DUST SHALL BE IMPLEMENTED, AS NEEDED, DURING THE COURSE OF LAND DISTURBING ACTIVITIES.
 13. EXCAVATION ACTIVITY SHALL BE CONDUCTED SO AS TO CONTROL THE GENERATION AND OFF-SITE MIGRATION OF DUSTS AND PARTICLES. ALL AREAS IN WHICH SUCH DUSTS OR PARTICLES MAY BE GENERATED SHALL BE KEPT WET, TREATED WITH CHEMICAL DUST DETERGENTS, OR CONTROLLED IN ANOTHER MANNER TO REDUCE THE POTENTIAL FOR THEIR OFFSITE MIGRATION. ATMOSPHERIC DISCHARGES FROM PROCESSING AND DRYING EQUIPMENT SHALL COMPLY WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL LAWS. TO MINIMIZE DUST AND TO PREVENT THE DEPOSIT OF SOIL EXCAVATION MATERIAL ON PAVED ROADS, TRUCKS SHALL BE COVERED WITH THEIR TAILGATES LATCHED, DIRT ROAD SEGMENTS OF THE DESIGNATED HAUL ROUTE SHALL REQUIRE REGULAR WATERING, AS NECESSARY, TO MINIMIZE DUST GENERATED BY HAULING ACTIVITIES.
 14. NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR DIRECTLY TO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
 15. CONTRACTOR TO EXTEND EROSION SOCK PIPE 1' (FT.) BEYOND CURB THROAT AT EACH END. THREE (3) SAND BAGS ARE REQUIRED FOR EACH SOCK PIPE.



REVISIONS

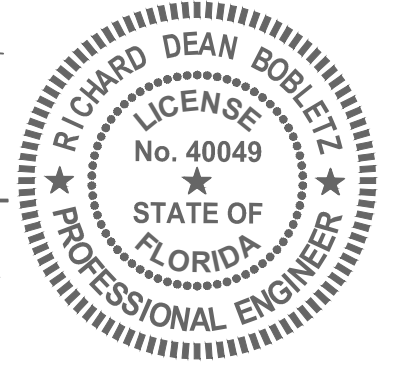
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POULOS & BENNETT
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 Tel. 407.487.2594 www.poulosandbennett.com
 Eng. Bus. No. 28567

OSCEOLA COUNTY
 PROJECT NO. (SDP20-0136)

**CYRILS DRIVE & NARCOOSSEE RD -
 INTERSECTION IMPROVEMENTS
 EROSION CONTROL PLAN & DETAILS**

SHEET NO.
 7



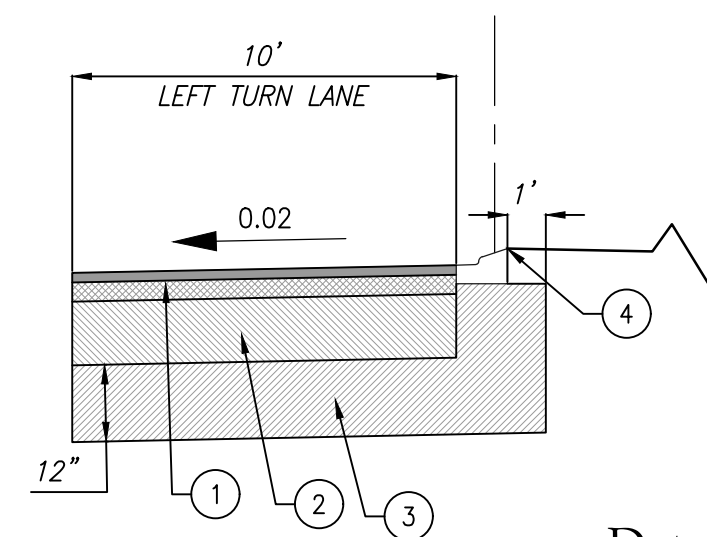
RICHARD DEAN BOBLETZ
 P.E.
 January 20, 2021
 DATE:

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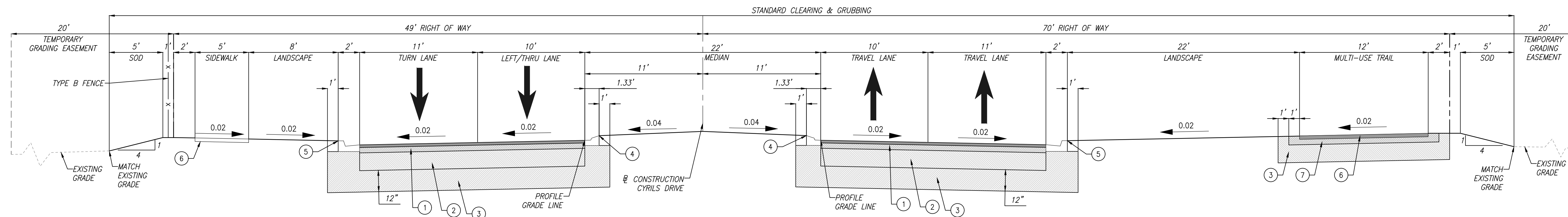
Z:\2017\17-042 TAMISTOCK - SUNBRIDGE\CYRILS DR\NARCOOSSEE INTERSECTION\CAD\FINAL\COUNTY\17042-020A-EEP

Legend	
ID	Description
①	3" STRUCTURAL COURSE TYPE SP-12.5
②	10" LIMEROCK BASE COURSE WITH LBR=100 (SN=3.86)
③	12" STABILIZED SUBGRADE WITH LBR=40
④	TYPE 'A' CURB & GUTTER
⑤	TYPE 'F' CURB & GUTTER

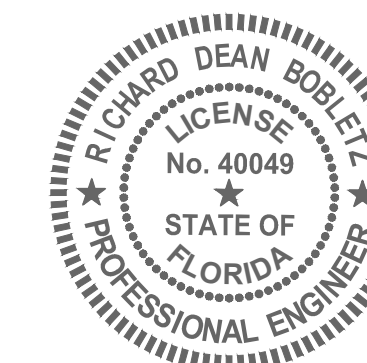
ID	Description
⑥	1" TYPE SP-9.5 (TRAFFIC A)
⑦	4" LIMEROCK BASE (LBR 100)
⑧	FC-12.5 (TRAFFIC C)(1.5")(RUBBER)
⑨	TYPE SP STRUCTURAL COURSE (TRAFFIC C)(3")(PG76-22)
⑩	11" LIMEROCK BASE (LBR 100)



Detail - Turn Lane - Cyrils Drive
Sta. 10+00.00 - Sta. 13+28.99 N.T.S.



Typical Road Section - Cyrils Drive
Sta. 10+28.00 - Sta. 33+43.00 Design Speed = 35 MPH N.T.S.



RICHARD DEAN BOBLETZ
FLORIDA
DATE: January 20, 2021

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09-28-2020	90% REVIEW		
11-06-2020	100% REVIEW		

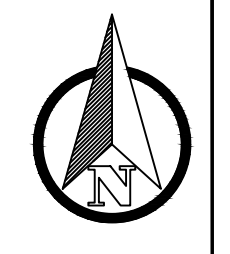
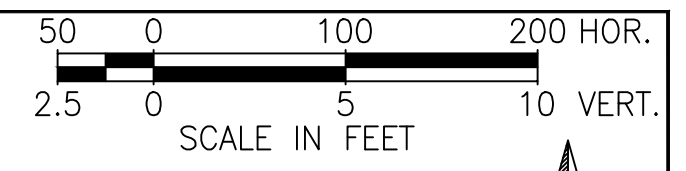
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PROJECT NO. (SDP20-0136)

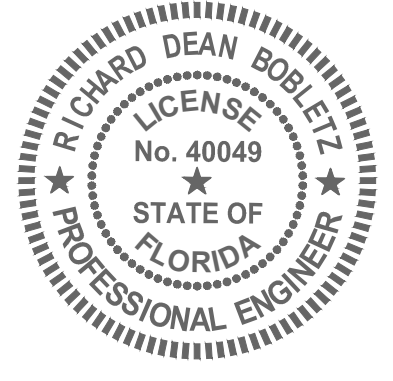
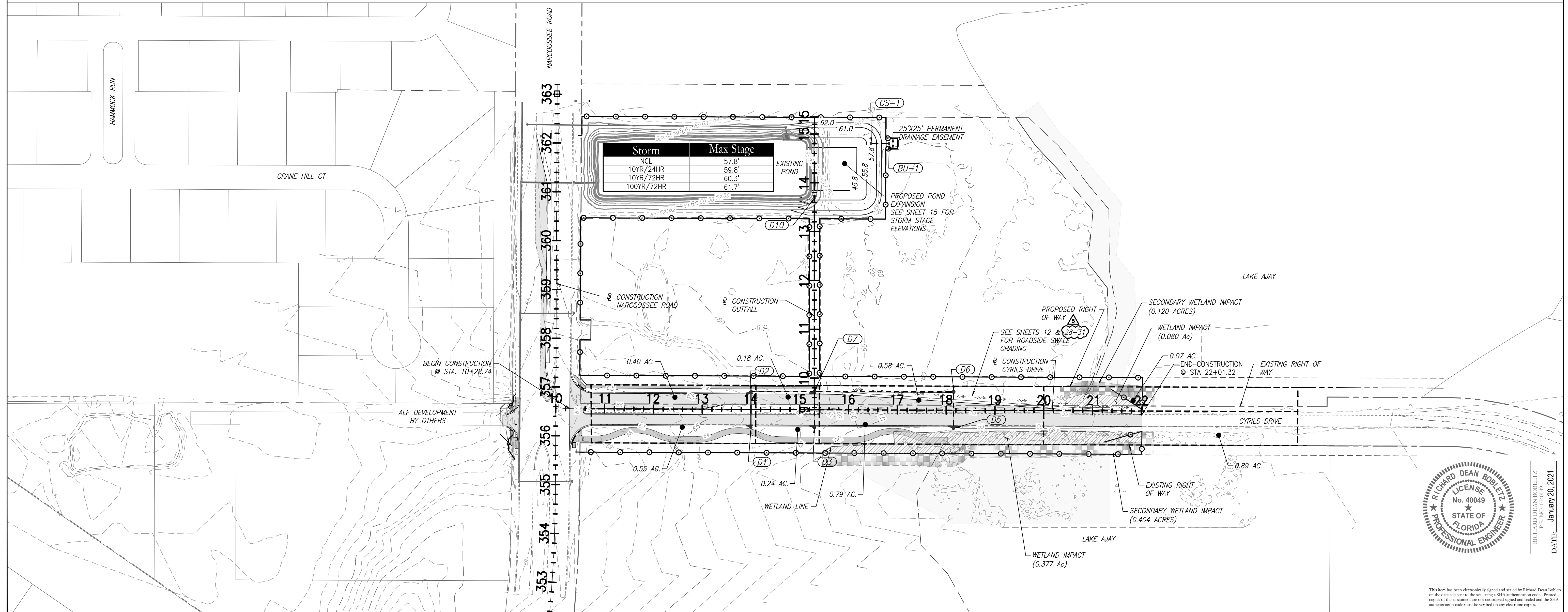
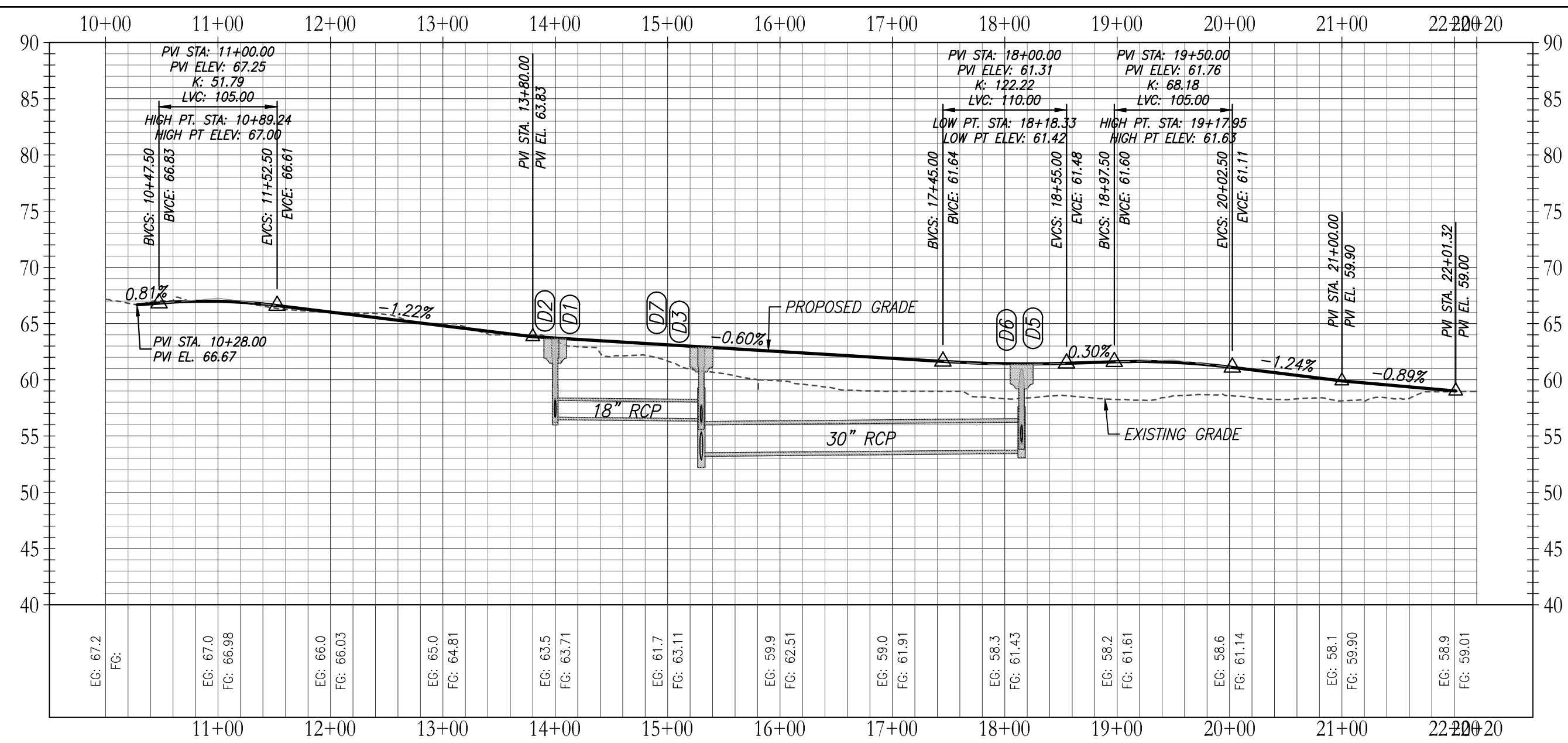
CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
TYPICAL ROADWAY SECTIONS

SHEET NO.

8



Legend	
Symbol	Description
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	BASIN LIMITS
	0.40 AC. SECONDARY BASIN ACREAGE
	WETLAND IMPACTS
	WETLAND BUFFER
	SECONDARY WETLAND IMPACT



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P.E. No. 40049
STATE OF FLORIDA
PROFESSIONAL ENGINEER
DATE: January 20, 2021

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09-28-2020	90% REVIEW		
11-06-2020	100% REVIEW		

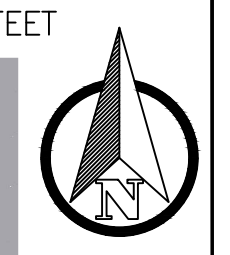
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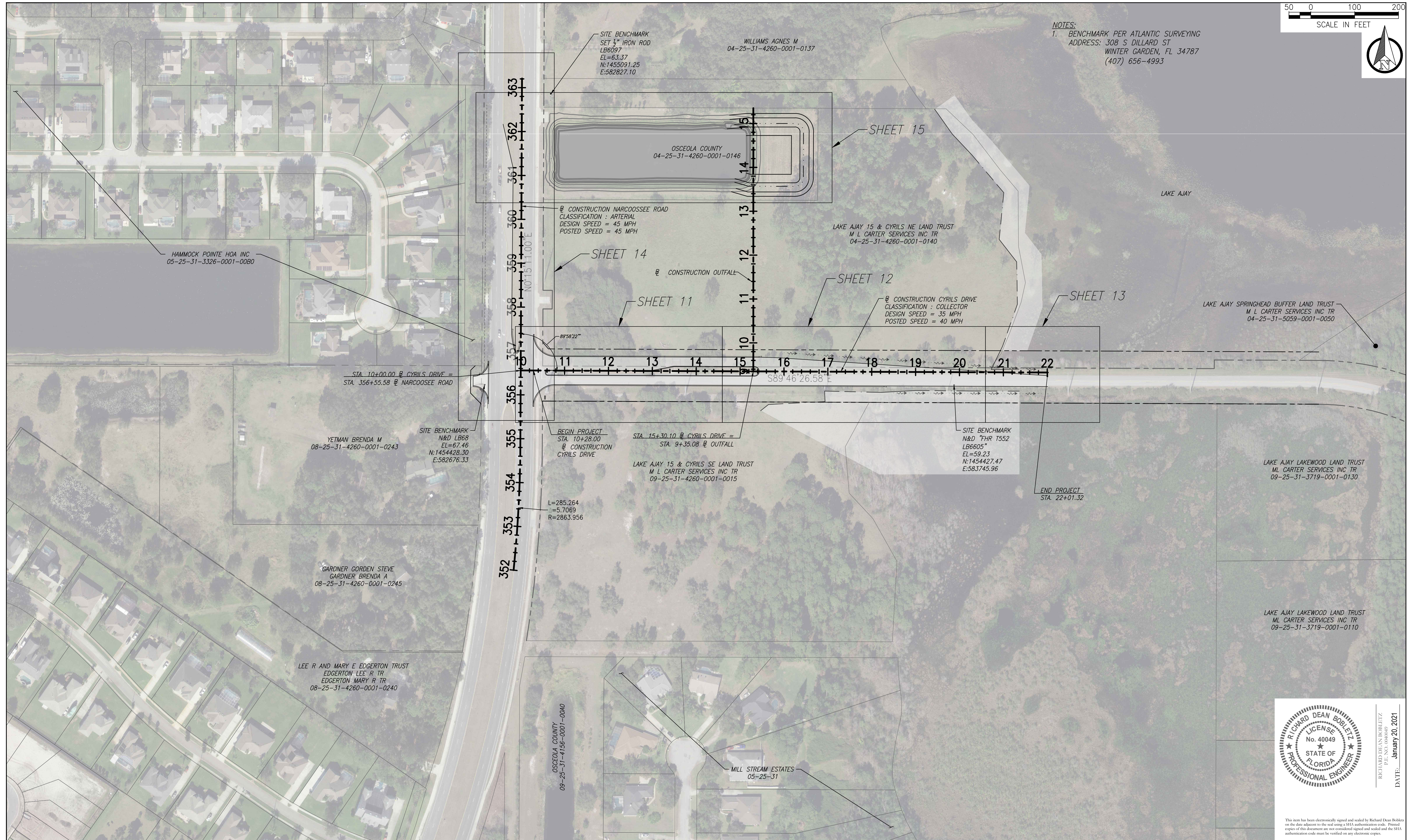
CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS

DRAINAGE MAP

SHEET NO.
9



NOTES:
1. BENCHMARK PER ATLANTIC SURVEYING
ADDRESS: 308 S DILLARD ST
WINTER GARDEN, FL 34787
(407) 656-4993



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PROJECT NO. (SDP20-0136)

CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
PROJECT LAYOUT

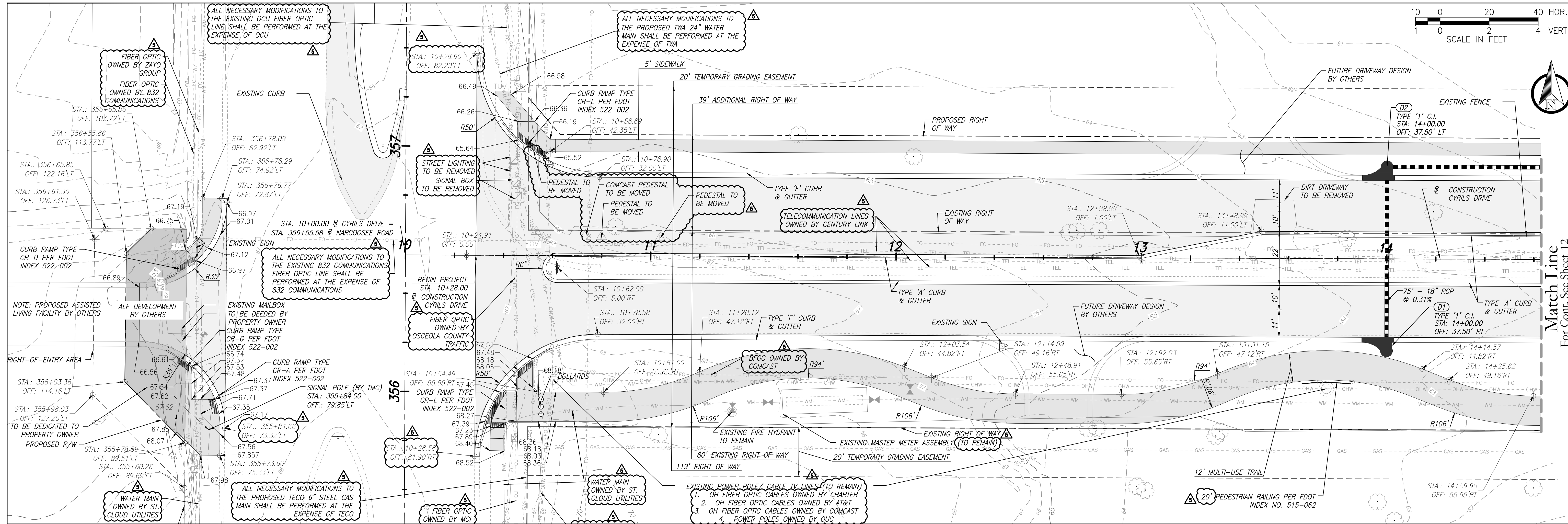
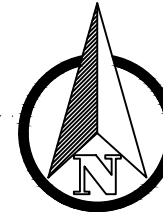
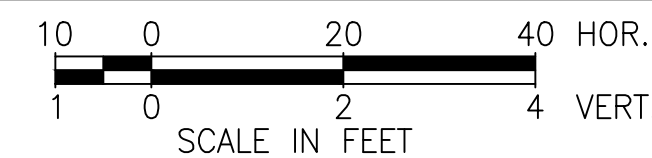
SHEET NO.	10
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FLORIDA
DATE: January 20, 2021

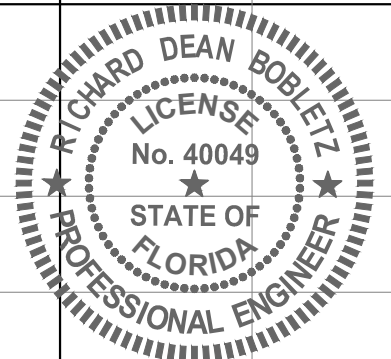
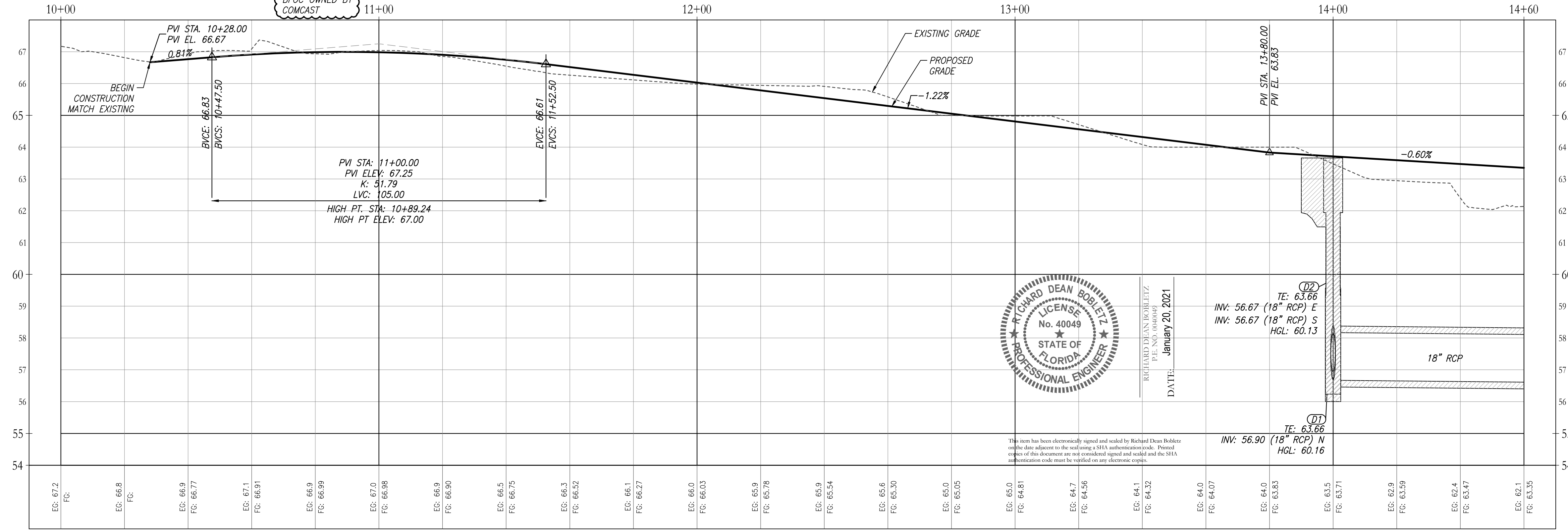
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Match Line
For Cont. See Sheet 12

- NOTES:
- ADJUST EXISTING VALVE CANS AND HYDRANTS TO THE PROPOSED GRADE.
 - UTILITY ADJUSTMENTS SHALL BE PERFORMED AT THE EXPENSE OF THE UTILITY COMPANIES.



RICHARD DEAN BOBLETZ
P.E. No. 40049
DATE: January 20, 2021

TE: 63.66
INV: 56.67 (18" RCP) E
INV: 56.67 (18" RCP) S
HGL: 60.13

TE: 63.66
INV: 56.90 (18" RCP) N
HGL: 60.16

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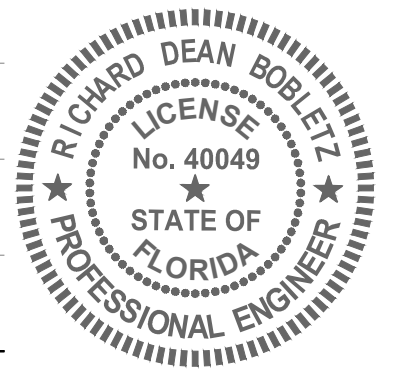
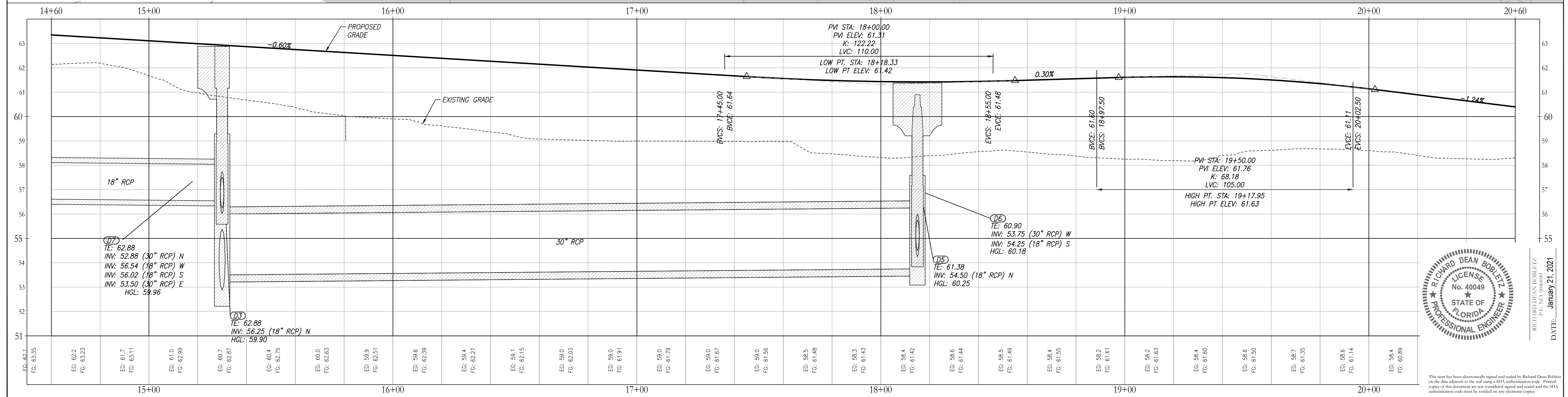
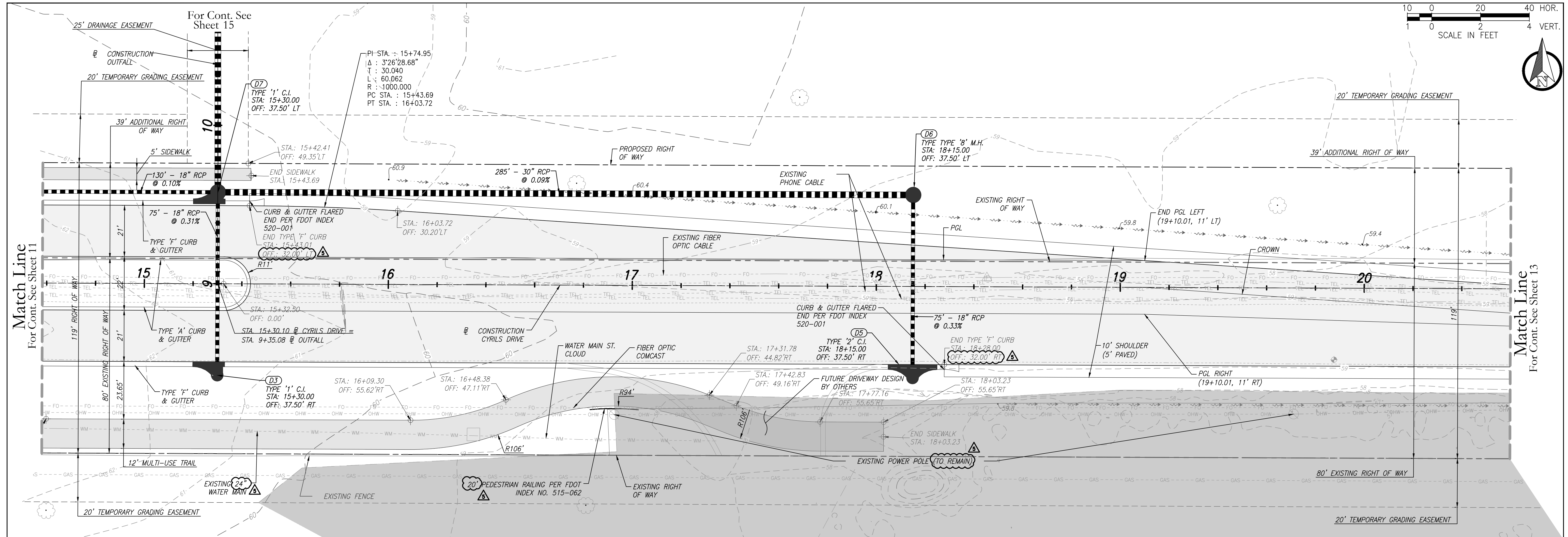
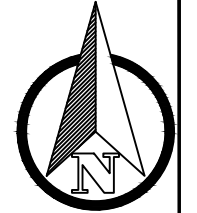
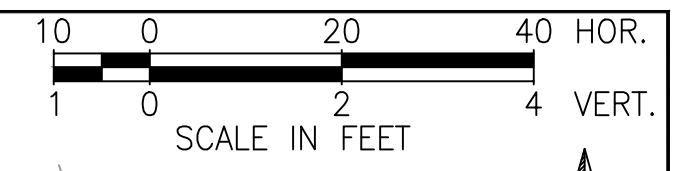
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OSCEOLA COUNTY
PROJECT NO. (SDP20-0136)

**CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
PLAN & PROFILE**

SHEET NO.
11



RICHARD DEAN BOBLETZ
 LICENSE No. 40049
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 DATE: January 21, 2021

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09-28-2020	90% REVIEW		
11-06-2020	100% REVIEW		

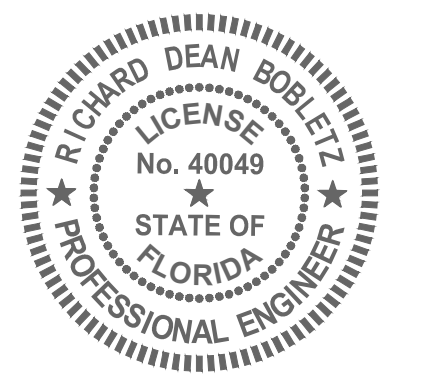
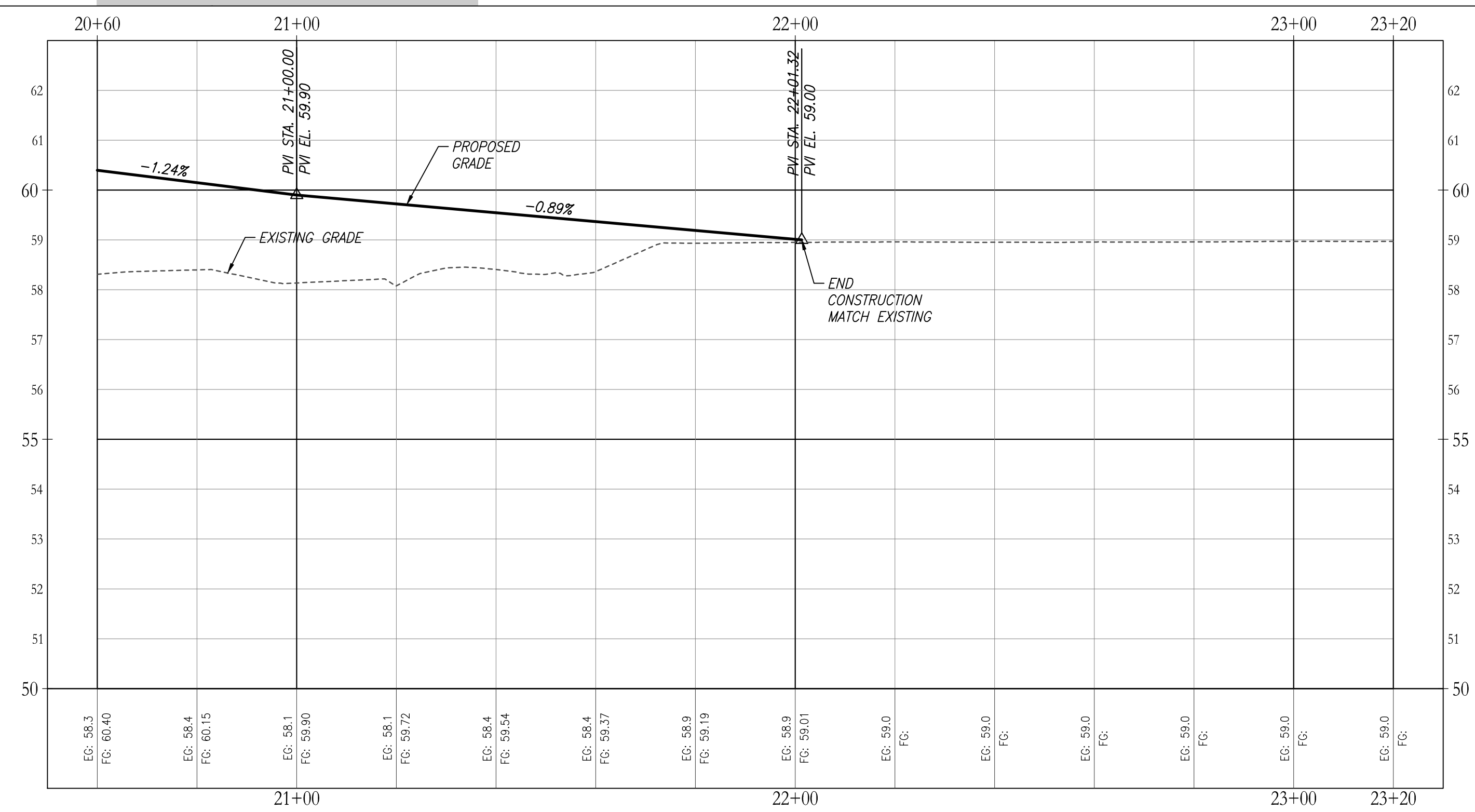
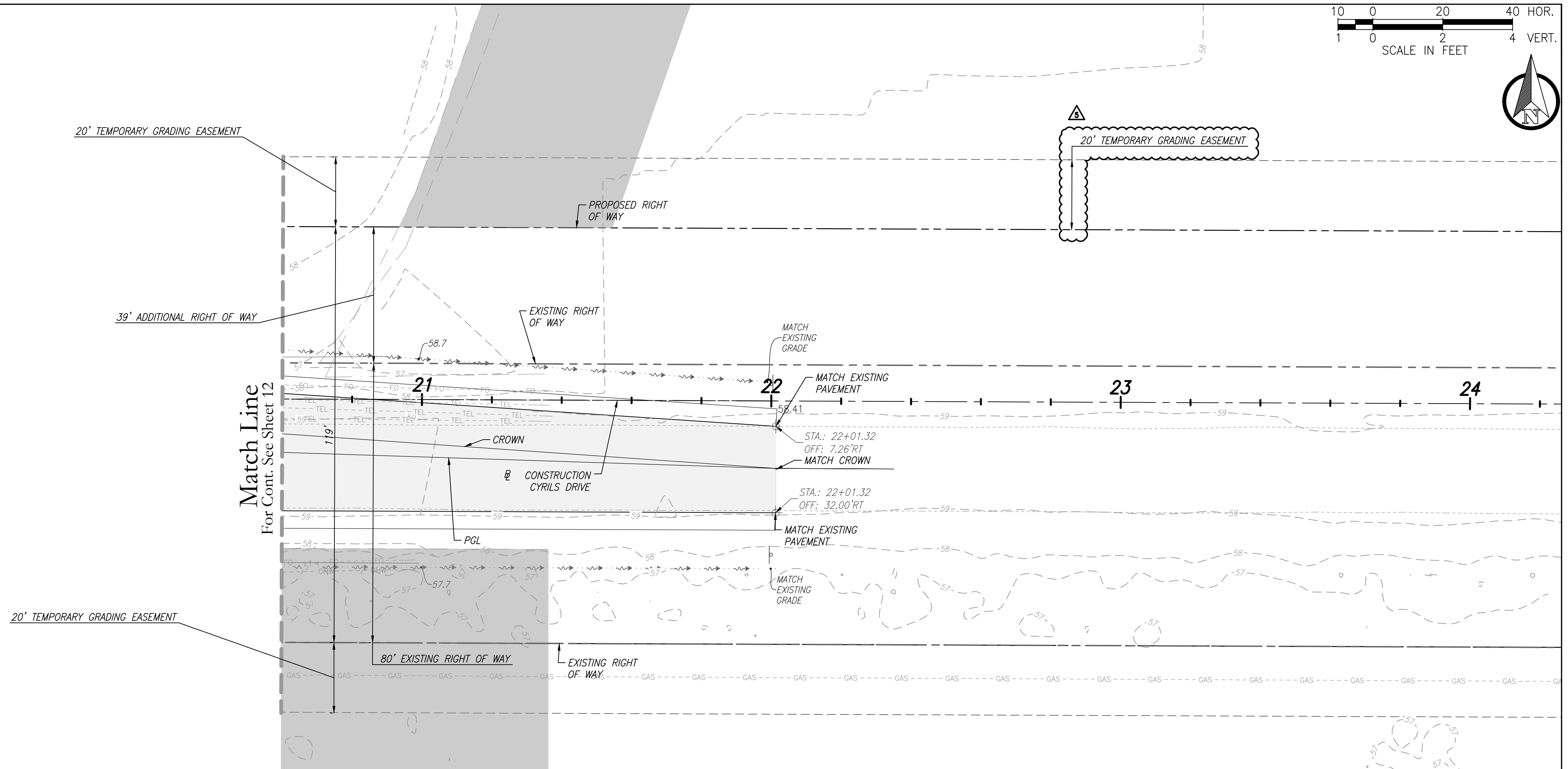
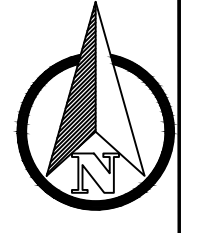
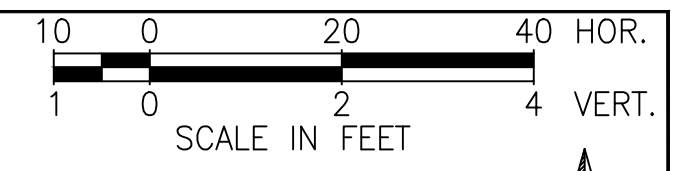
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**CYRILS DRIVE & NARCOOSSEE RD -
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 PLAN & PROFILE**

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 12

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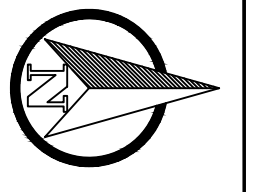
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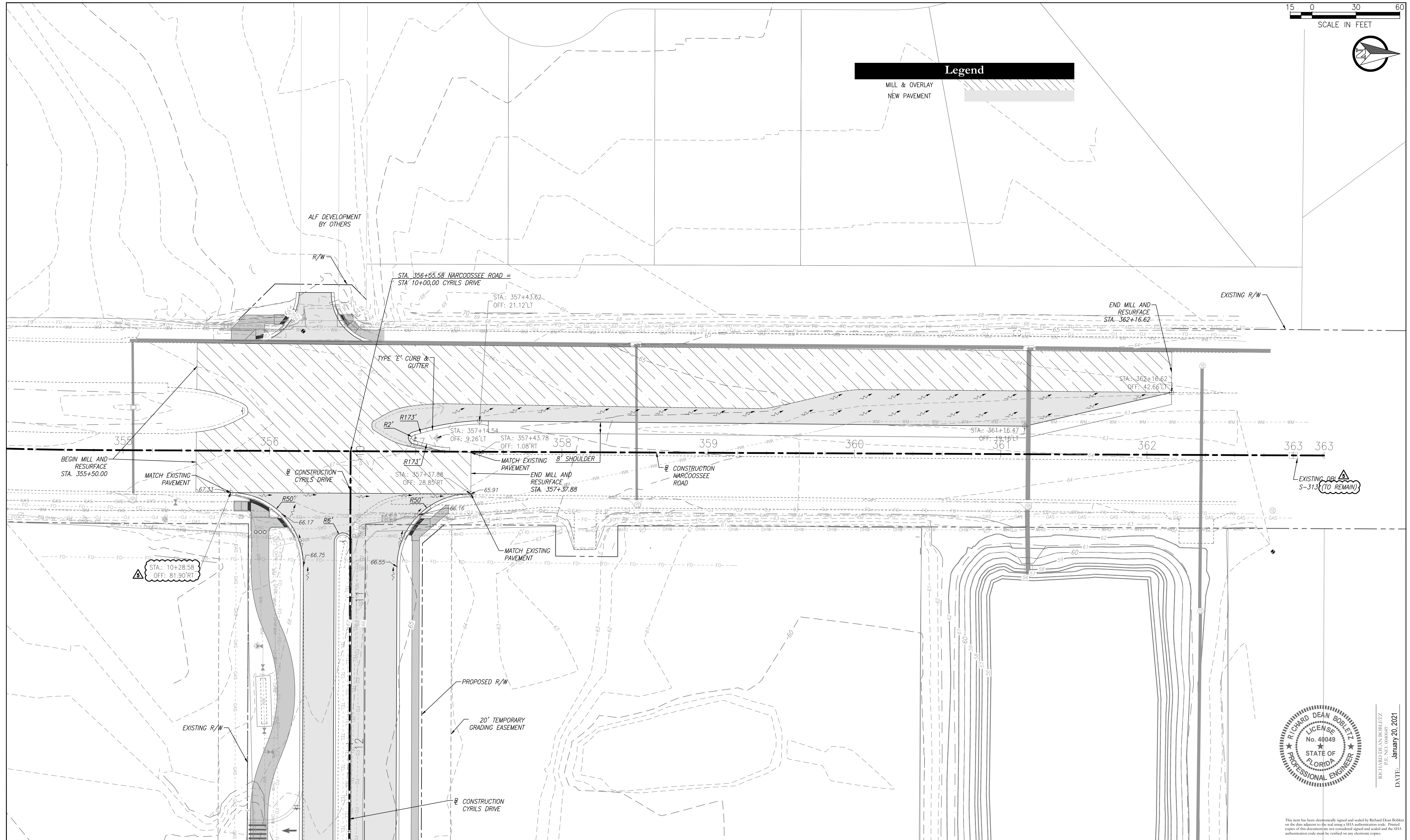
SHEET NO.
 13

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Legend

MILL & OVERLAY
NEW PAVEMENT



STA: 10+28.58
OFF: 31.90 RT

EXISTING DBL
S-313 (TO REMAIN)

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DATE	DESCRIPTION	DATE	DESCRIPTION
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09-28-2020	90% REVIEW		
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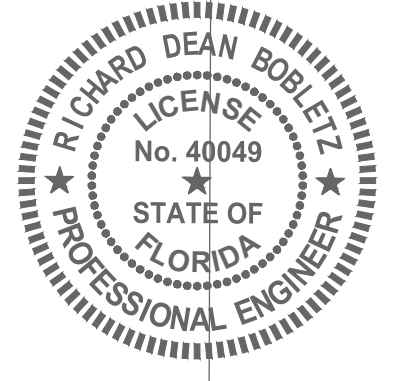
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**CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
NARCOOSSEE ROADWAY IMPROVEMENTS**

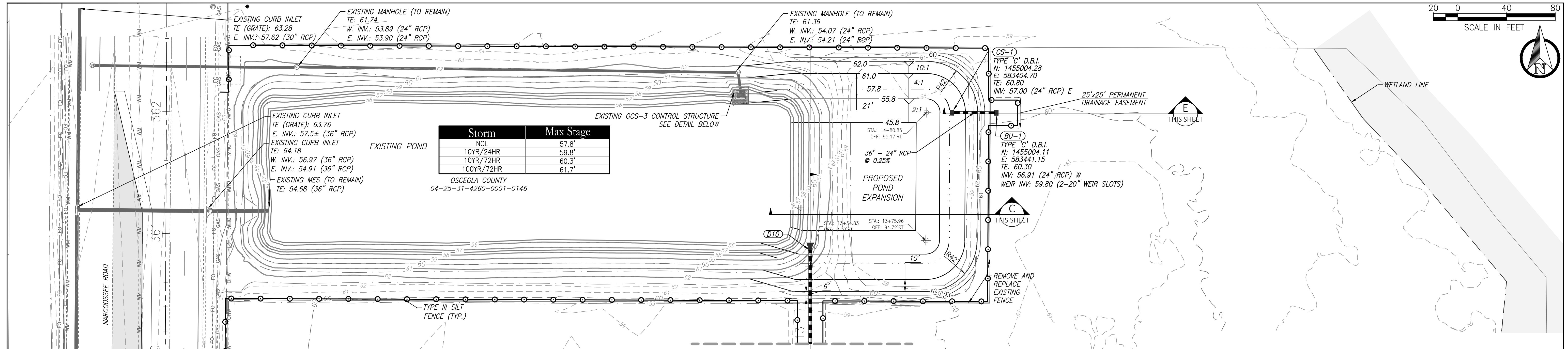
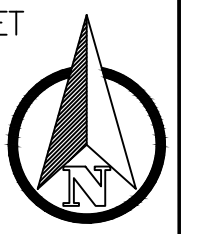
SHEET NO.
14



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PROFESSIONAL ENGINEER
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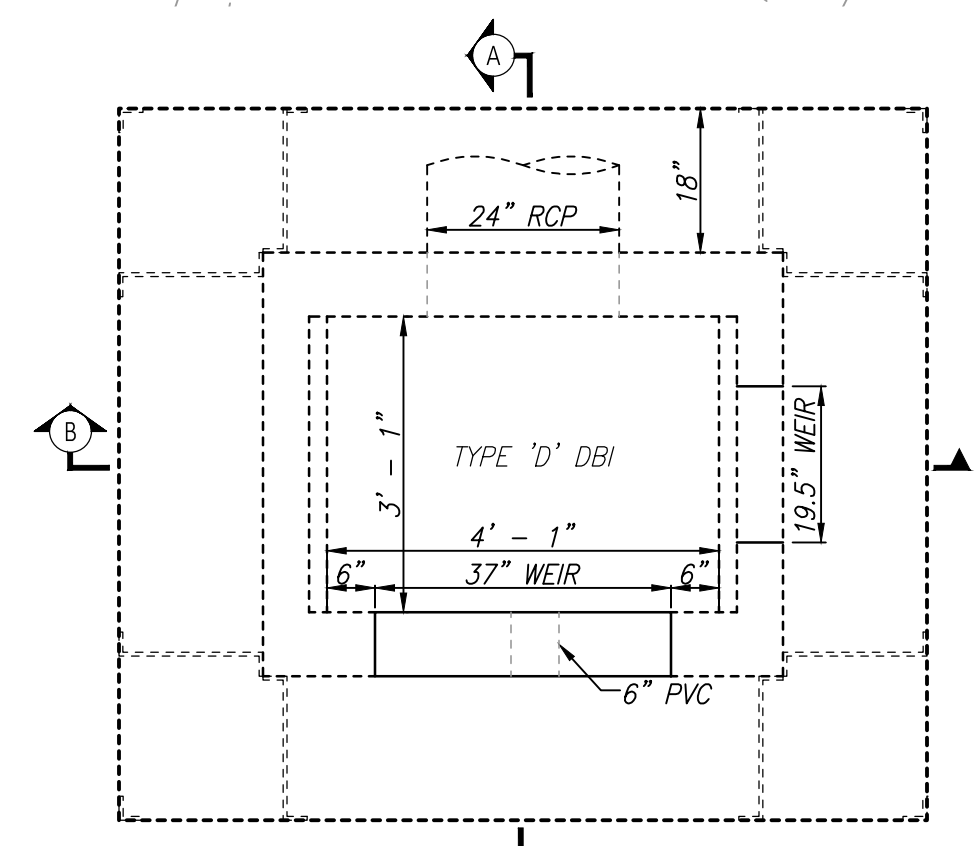
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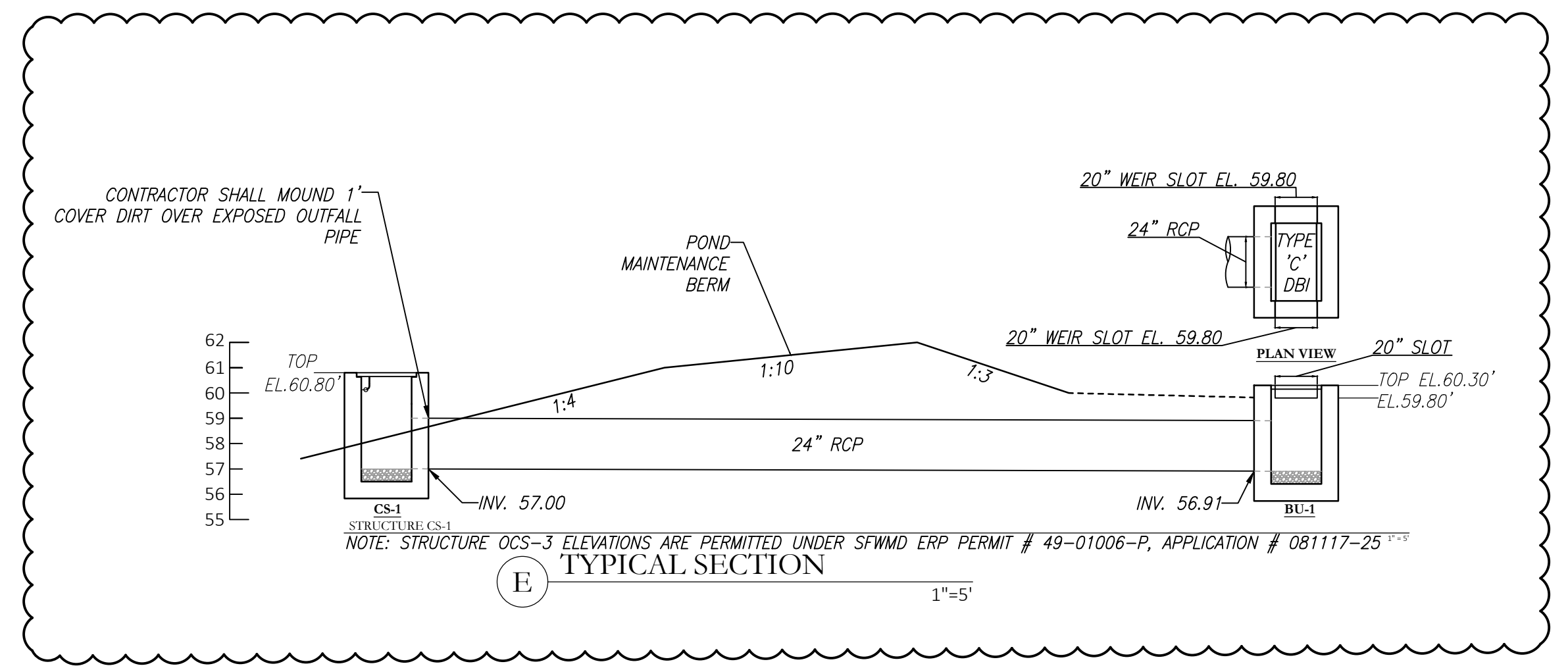
Storm	Max Stage
NCL	57.8'
10YR/24HR	59.8'
10YR/72HR	60.3'
100YR/72HR	61.7'

OSCEOLA COUNTY
04-25-31-4260-0001-0146

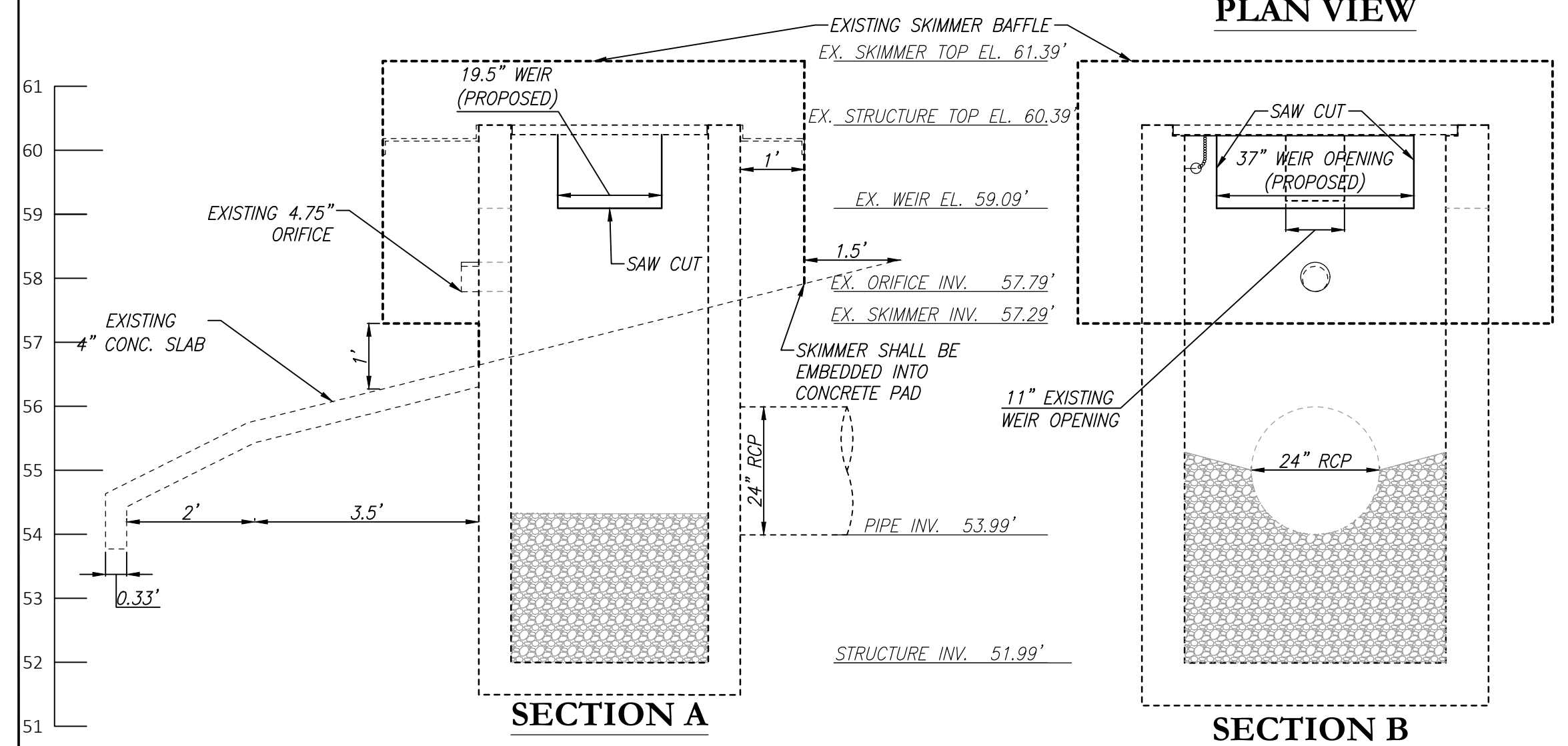
For Cont. See Sheet 12



PLAN VIEW



TYPICAL SECTION

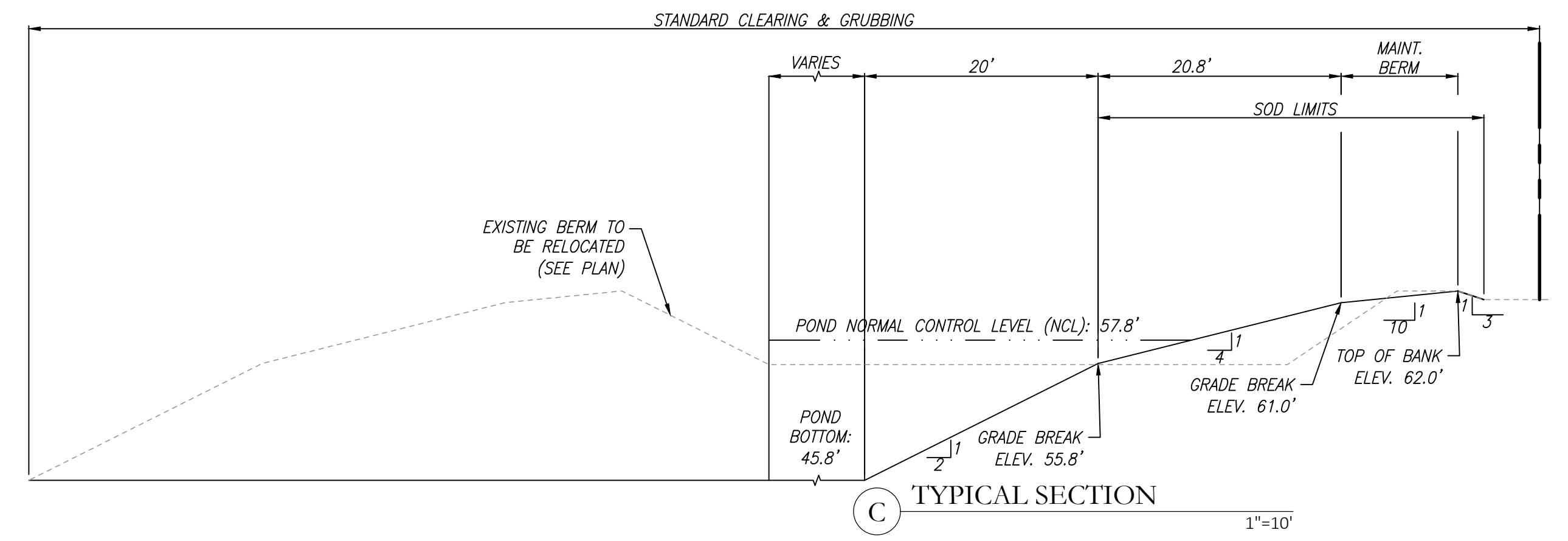


SECTION A

SECTION B

MODIFICATIONS TO EXISTING OUTFALL STRUCTURE OCS-3

NOTE: STRUCTURE OCS-3 ELEVATIONS ARE PERMITTED UNDER SFWMD ERP PERMIT # 49-01006-P, APPLICATION # 081117-25 1" = 2'



TYPICAL SECTION

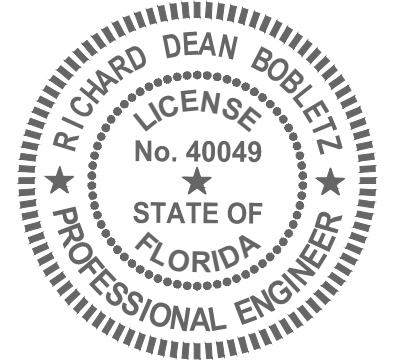
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CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
POND & CONTROL STRUCTURE DETAILS

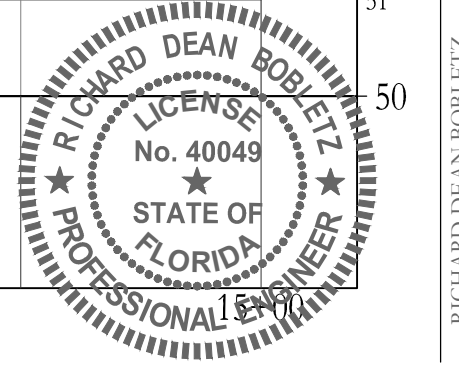
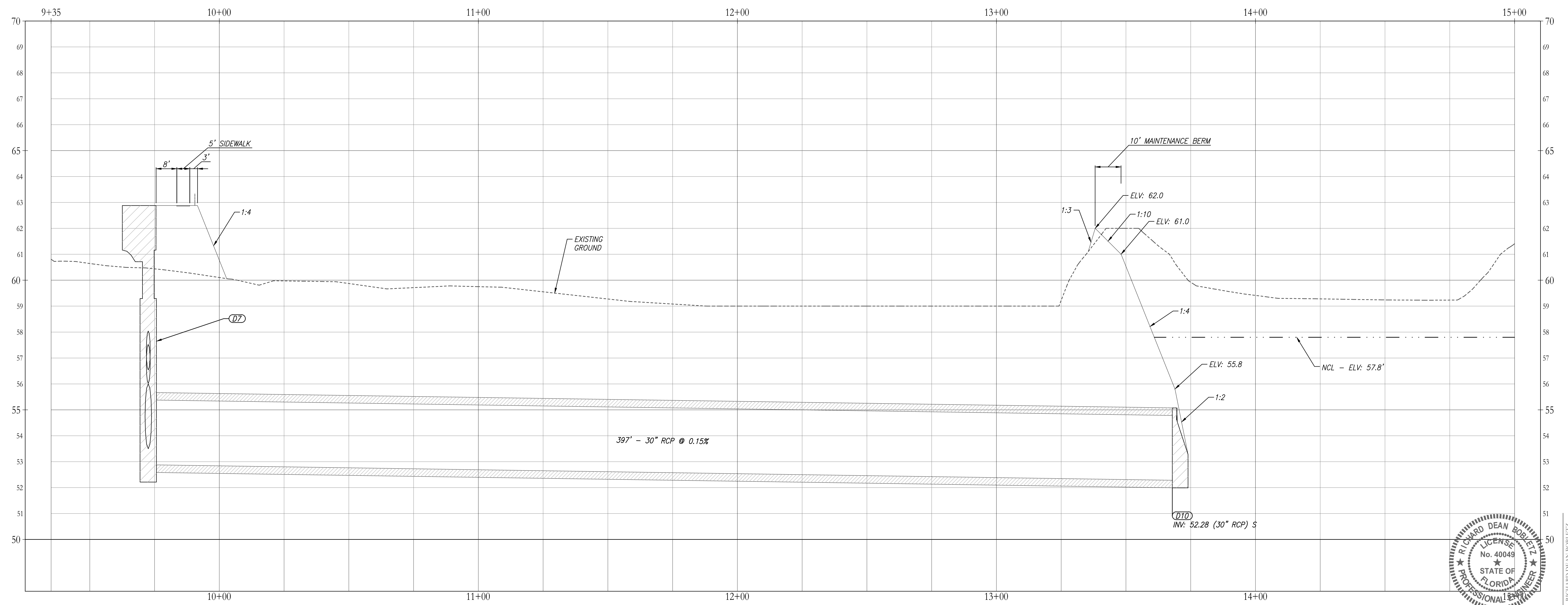
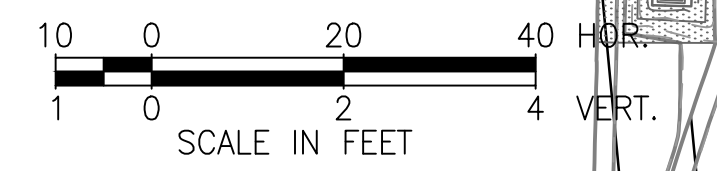
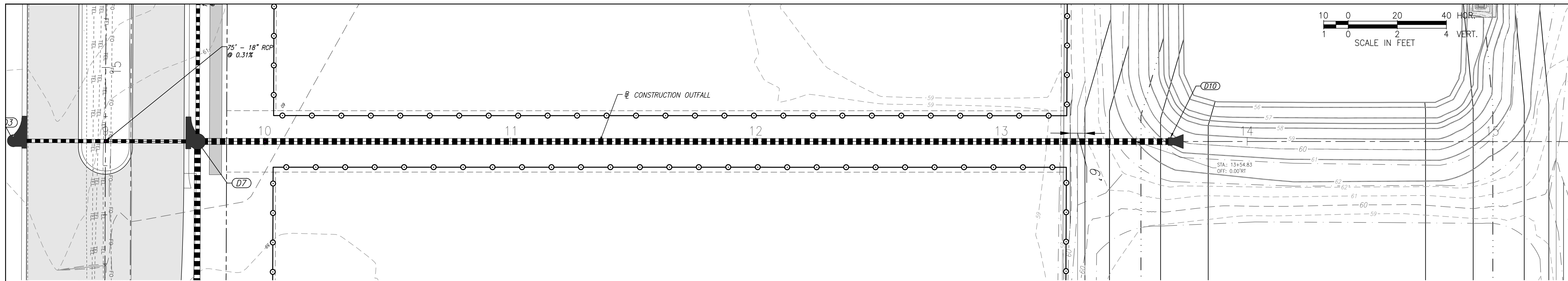
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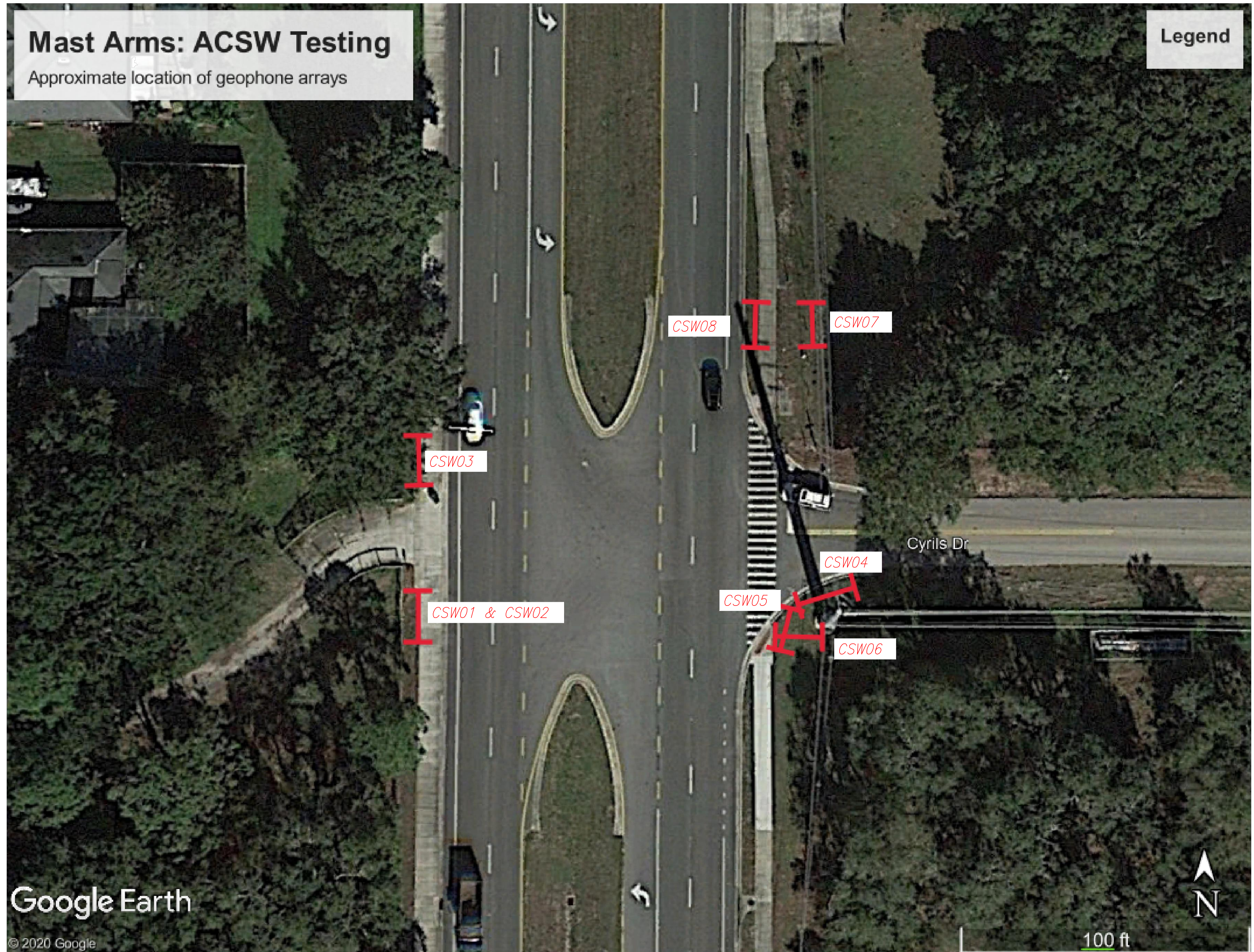
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**CYRILS DRIVE & NARCOOSSEE RD -
 INTERSECTION IMPROVEMENTS**
POND & CONTROL STRUCTURE DETAILS

SHEET NO.
 15A



REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
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CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS

ROADWAY SOIL BORINGS

SHEET NO.

16

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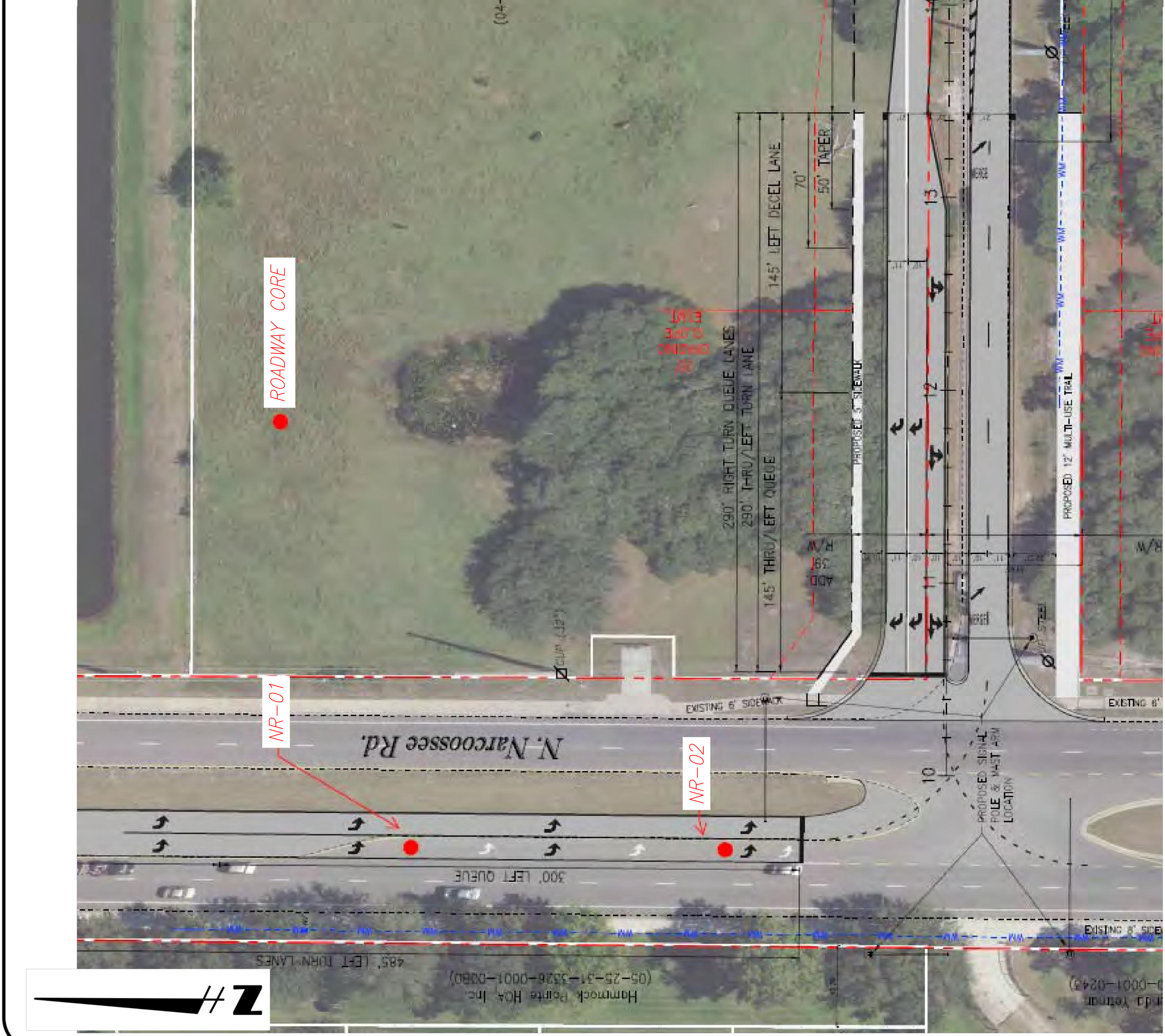
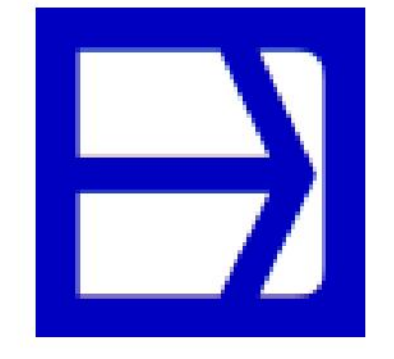


IMAGE SOURCE: Site Plan provided by Client

**ROADWAY CORES - CYRILS DRIVE WIDENING
SUNBRIDGE SUBDIVISION
OSCEOLA COUNTY, FLORIDA**

PAVEMENT CORE LOCATION PLAN

DRAWN BY: GSP	DATE: 4.22.2020	CHECKED BY: GSP	DATE: 4.22.2020
SCALE: Not Available	PROJECT NO: 0130-1700290.0013	REPORT NO: 1765631	PAGE NO: A-1



**UNIVERSAL
ENGINEERING SCIENCES**

SEE SIGNALIZATION PLANS FOR SIGNAL DESIGN INFORMATION

**CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS**

ROADWAY SOIL BORINGS

R E V I S I O N S			
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Table I – Summary of Pavement Section and Structural Numbers					
Core	Existing Pavement Condition	Measured Asphalt Structural Course Thickness (in)	Measured Base Course Thickness (in)	Measured Stabilized Subgrade Course Thickness (in)	Current Structural Number (SN)
NR-01	Good	4.8	10.8	12.0	4.5
NR-02	Good	5.0	11.0	12.0	4.6

**Notes: Structural number calculations
Per the FDOT 2018 Flexible Pavement Design Manual:
Asphalt Type SP = 0.44 (new), 0.34 (good), 0.25 (fair), 0.15 (poor), Sand Clay Base = 0.12, LR Base = 0.18,
Stabilized Subgrade = 0.08**

R E V I S I O N S			
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05-15-2020	INITIAL SUBMITTAL		
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11-06-2020	100% REVIEW		



OSCEOLA COUNTY
PROJECT NO. (SDP20-0136)

CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS

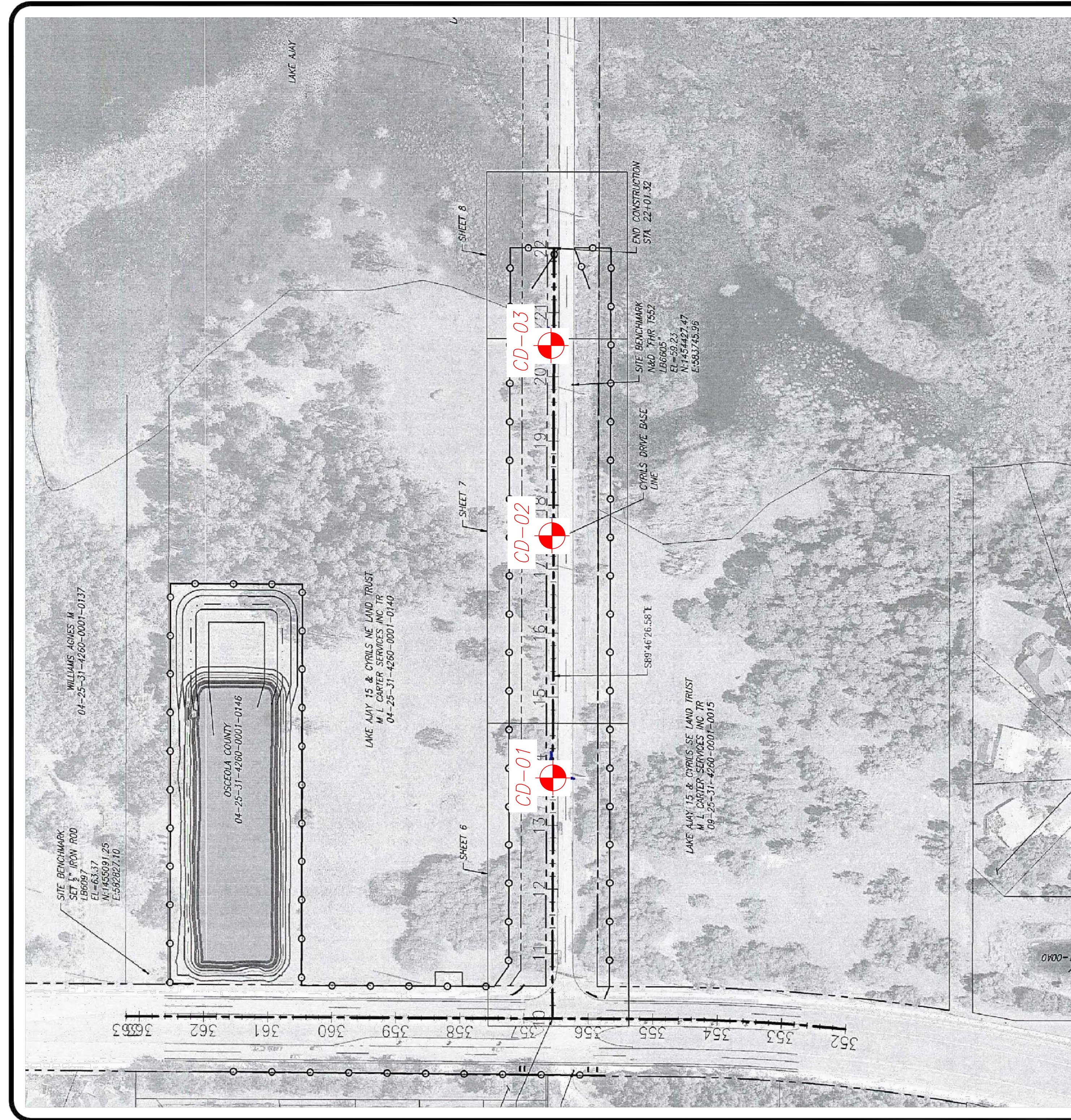
ROADWAY SOIL BORINGS

SHEET NO.

18

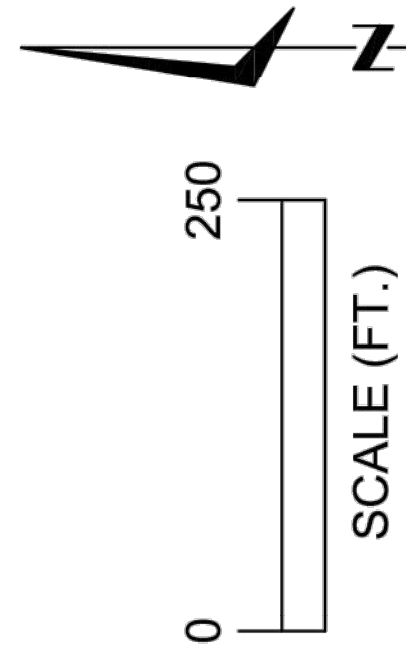
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NOTE: SEE SHEET 20 FOR BORING LOGS



LEGEND

 APPROX. STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 5/6/2020



THIS DRAWING CREATED USING PLAN PROVIDED BY CLIENT.



**LIMITED GEOTECHNICAL EXPLORATION
CYRILS DRIVE ROADWAY WIDENING
OSCEOLA COUNTY, FLORIDA**

BORING LOCATION PLAN

DRAWN BY:	N.F.	DATE:	5 - 6 - 2020	CHECKED BY:	G.P.	DATE:	
SCALE:	AS SHOWN	PROJECT NO:	0130.1700290.0013	REPORT NO:	1765631	PAGE NO:	B-1

20-02279-01

SEE SIGNALIZATION PLANS FOR SIGNAL DESIGN INFORMATION

**CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS**

ROADWAY SOIL BORINGS

R E V I S I O N S			
DATE	DESCRIPTION	DATE	DESCRIPTION
05-15-2020	INITIAL SUBMITTAL		
08-14-2020	60% REVIEW		
09-28-2020	90% REVIEW		
11-06-2020	100% REVIEW		

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OSCEOLA COUNTY
PROJECT NO. (SDP20-0136)

SHEET NO.

19



**UNIVERSAL ENGINEERING SCIENCES
BORING LOG**

PROJECT NO.: 0130.1700290.0013
REPORT NO.: 1765631
PAGE: B-2.1

PROJECT: LIMITED GEOTECHNICAL EXPLORATION
CYRILS DRIVE ROADWAY WIDENING
OSCEOLA COUNTY, FLORIDA

BORING I.D.: **CD-01** SECTION: TOWNSHIP: SHEET: **1 of 1**

CLIENT: POULOS & BENNETT G.S. ELEVATION (ft): N.S. DATE STARTED: 5/6/20

LOCATION: SEE BORING LOCATION PLAN WATER TABLE (ft): 6.0 DATE FINISHED: 5/6/20

REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED DATE OF READING: 5/6/2020 DRILLED BY: ORL - JB/CM/JM

EST. SHGWT (ft): 3.0 TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLING	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS		K (FT/ DAY)	ORG. CONT. (%)
									LL	PI		
0						Dark brown fine SAND with silt [SP-SM]						
						-- red brown						
5						-- medium dense						
6-9-8		17				Medium dense brown fine SAND [SP]						
8-9-8		17										
10		4-5-7	12									
15		5-7-9	16			BORING TERMINATED AT 15.0 FEET						



**UNIVERSAL ENGINEERING SCIENCES
BORING LOG**

PROJECT NO.: 0130.1700290.0013
REPORT NO.: 1765631
PAGE: B-2.2

PROJECT: LIMITED GEOTECHNICAL EXPLORATION
CYRILS DRIVE ROADWAY WIDENING
OSCEOLA COUNTY, FLORIDA

BORING I.D.: **CD-02** SECTION: TOWNSHIP: SHEET: **1 of 1**

CLIENT: POULOS & BENNETT G.S. ELEVATION (ft): N.S. DATE STARTED: 5/6/20

LOCATION: SEE BORING LOCATION PLAN WATER TABLE (ft): 3.5 DATE FINISHED: 5/6/20

REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED DATE OF READING: 5/6/2020 DRILLED BY: ORL - JB/CM/JM

EST. SHGWT (ft): 0.5 TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLING	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS		K (FT/ DAY)	ORG. CONT. (%)
									LL	PI		
0						Mix light grey dark brown fine SAND [SP]						
						-- very light grey						
5						-- loose, dark brown						
3-3-5		8				-- medium dense						
6-7-9		16										
10		6-6-9	15									
15		7-5-4	9			-- loose, brown						
						BORING TERMINATED AT 15.0 FEET						



**UNIVERSAL ENGINEERING SCIENCES
BORING LOG**

PROJECT NO.: 0130.1700290.0013
REPORT NO.: 1765631
PAGE: B-2.3

PROJECT: LIMITED GEOTECHNICAL EXPLORATION
CYRILS DRIVE ROADWAY WIDENING
OSCEOLA COUNTY, FLORIDA

BORING I.D.: **CD-03** SECTION: TOWNSHIP: SHEET: **1 of 1**

CLIENT: POULOS & BENNETT G.S. ELEVATION (ft): N.S. DATE STARTED: 5/6/20

LOCATION: SEE BORING LOCATION PLAN WATER TABLE (ft): 4.0 DATE FINISHED: 5/6/20

REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED DATE OF READING: 5/6/2020 DRILLED BY: ORL - JB/CM/JM

EST. SHGWT (ft): 1.0 TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLING	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS		K (FT/ DAY)	ORG. CONT. (%)
									LL	PI		
0						Dark brown fine SAND with silt [SP-SM]						
						-- loose						
5						-- very loose						
4-3-2		5				-- loose						
1-1-1		2										
10		3-3-3	6									
15		4-7-6	13			-- medium dense, brown						
						BORING TERMINATED AT 15.0 FEET						

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
05-15-2020	INITIAL SUBMITTAL		
08-14-2020	60% REVIEW		
09-26-2020	90% REVIEW		
11-06-2020	100% REVIEW		



OSCEOLA COUNTY
PROJECT NO. (SDP20-0136)

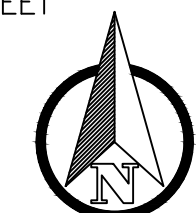
**CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS**

ROADWAY SOIL BORINGS

SHEET NO.

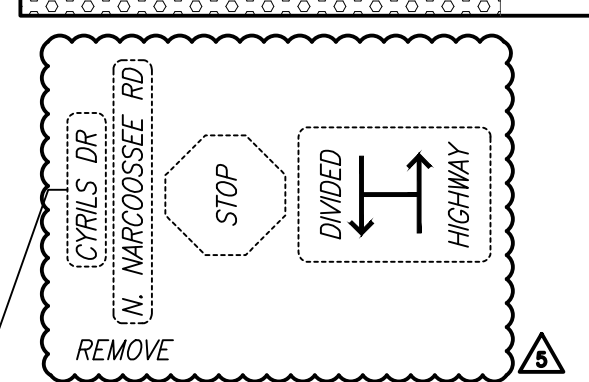
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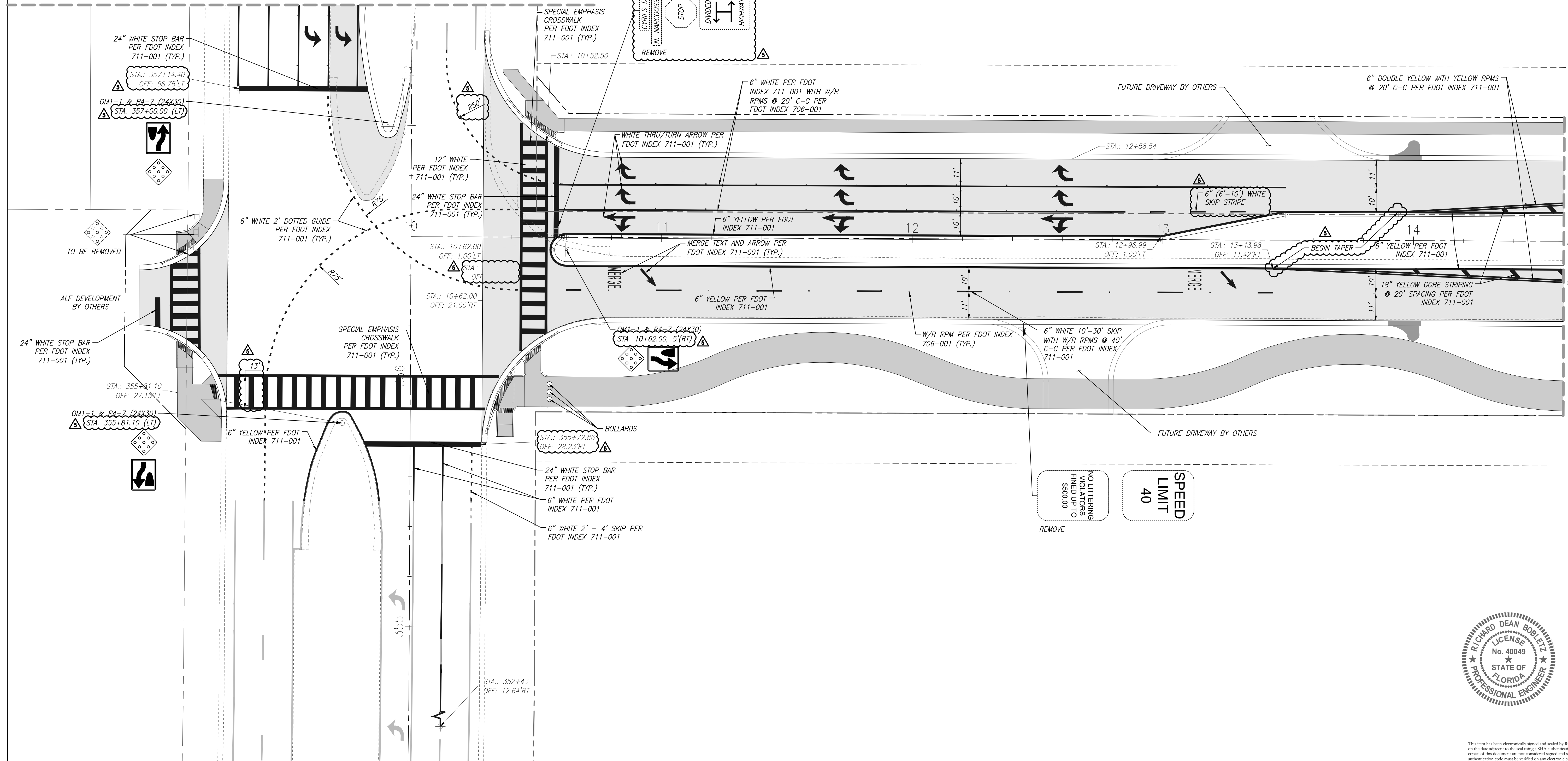


Legend

CAST IN PLACE DETECTABLE WARNING SURFACE



Match Line
For Cont. See Sheet 24



Match Line
For Cont. See Sheet 22

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
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08-14-2020	60% REVIEW		
09-28-2020	90% REVIEW		
11-06-2020	100% REVIEW		

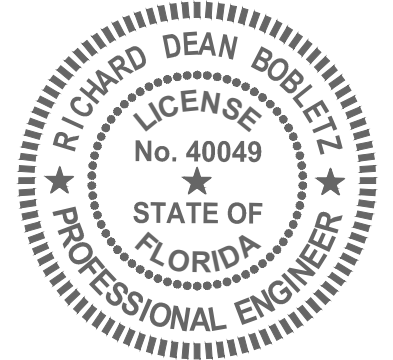


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PROJECT NO. (SDP20-0136)

**CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
SIGNING & PAVEMENT MARKING**

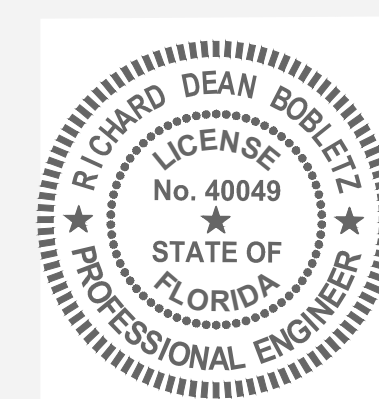
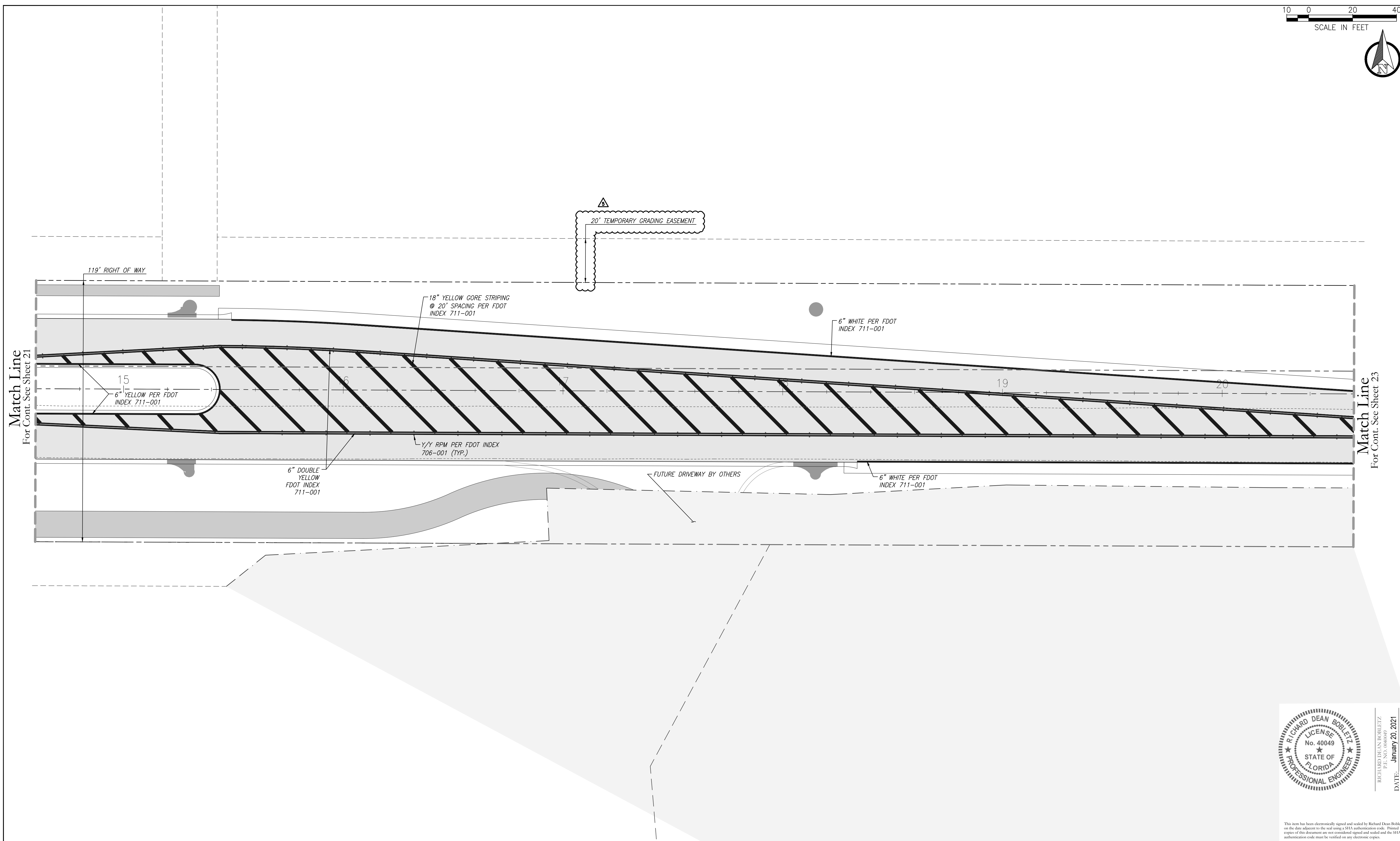
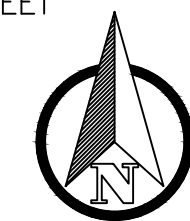
SHEET NO.
21



RICHARD DEAN BOBLETZ
Professional Engineer
No. 40049
STATE OF FLORIDA
DATE: January 20, 2021

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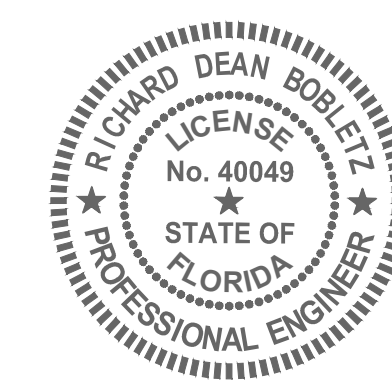
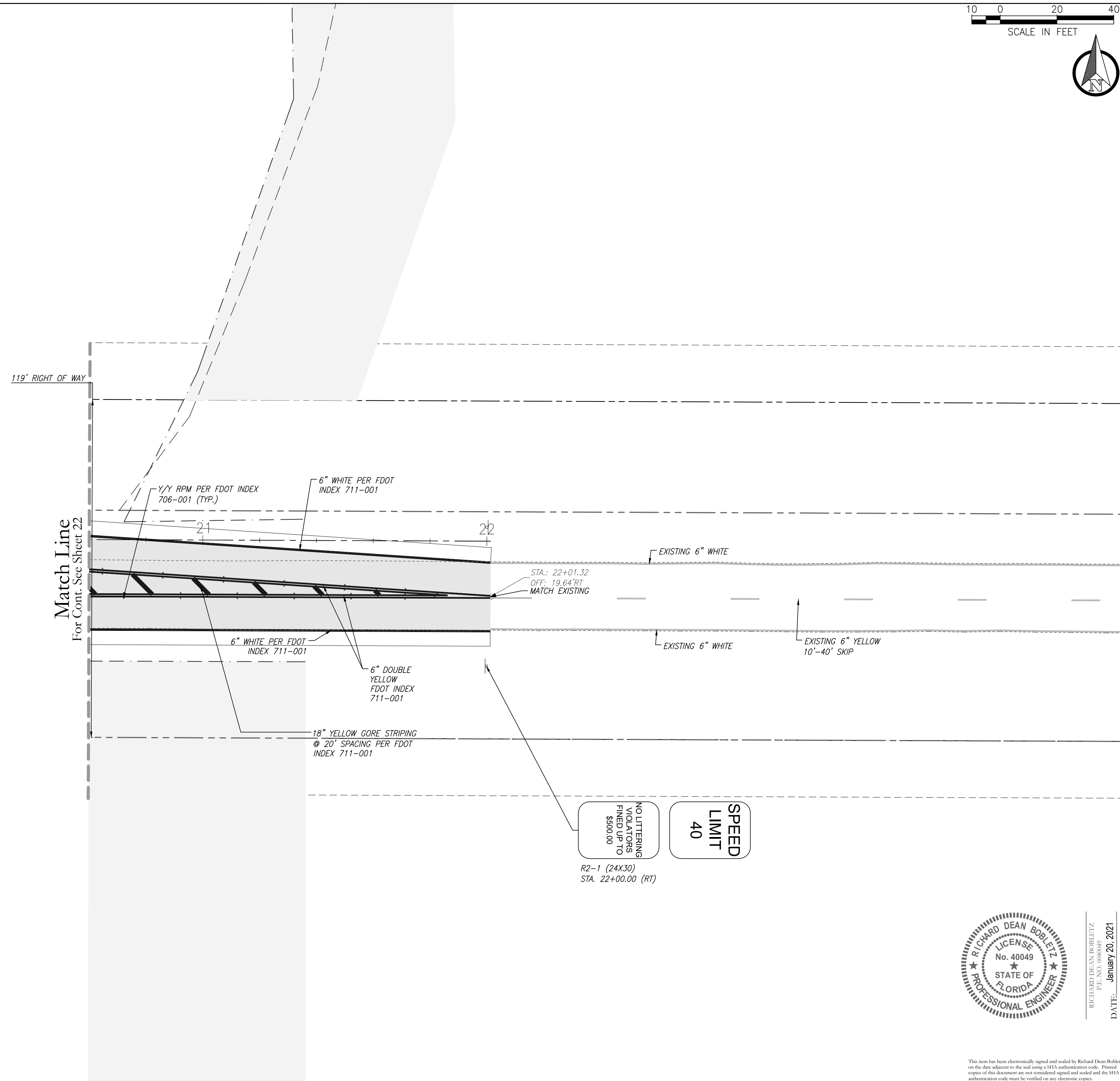
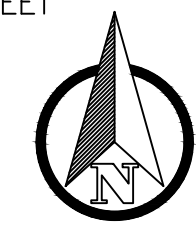
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**CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
SIGNING & PAVEMENT MARKING**

SHEET NO.

22



RICHARD DEAN BOBLETZ
 LICENSE
 No. 40049
 STATE OF
 FLORIDA
 PROFESSIONAL ENGINEER
 DATE: January 20, 2021

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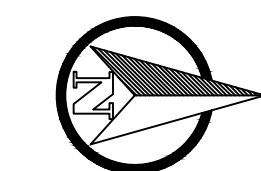
DATE	DESCRIPTION	DATE	DESCRIPTION
05-15-2020	INITIAL SUBMITTAL		
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CYRILS DRIVE & NARCOOSSEE RD -
 INTERSECTION IMPROVEMENTS
 SIGNING & PAVEMENT MARKING

SHEET NO.
 23




ALF DEVELOPMENT BY OTHERS

EXISTING OBJECT MARKERS TO BE REMOVED

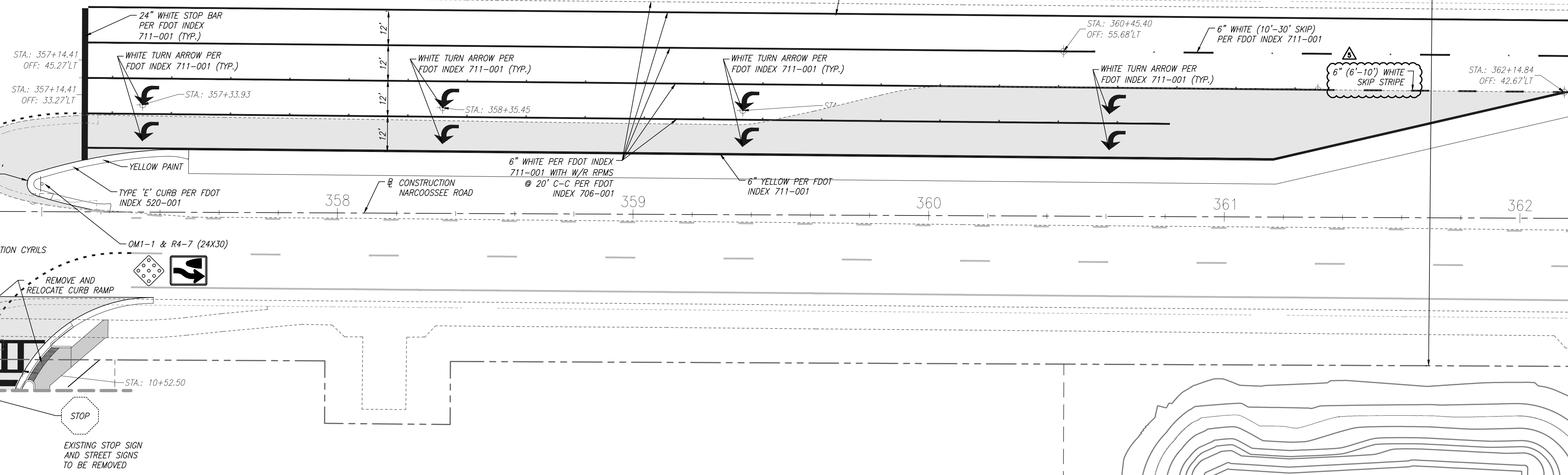
EXISTING RESIDENTIAL DRIVEWAY (TO REMAIN)

Legend

 CAST IN PLACE DETECTABLE WARNING SURFACE

Match Line
For Cont. See Sheet 21

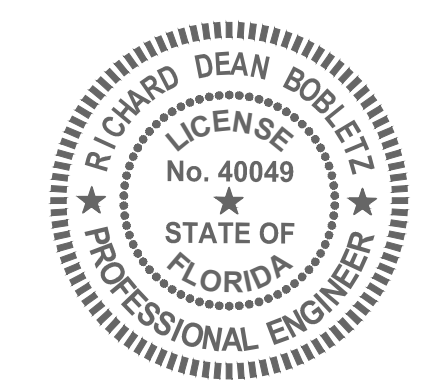
137' EXISTING RIGHT OF WAY



Match Line
For Cont. See Sheet 21

STOP

EXISTING STOP SIGN AND STREET SIGNS TO BE REMOVED



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FLORIDA
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09-28-2020	90% REVIEW		
11-06-2020	100% REVIEW		

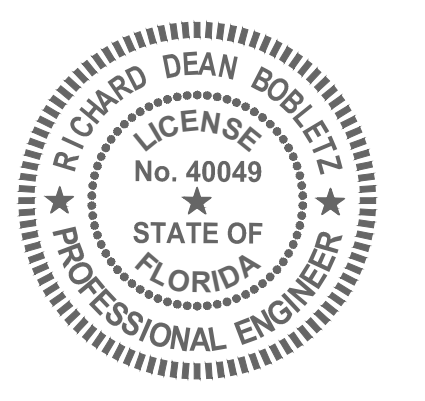
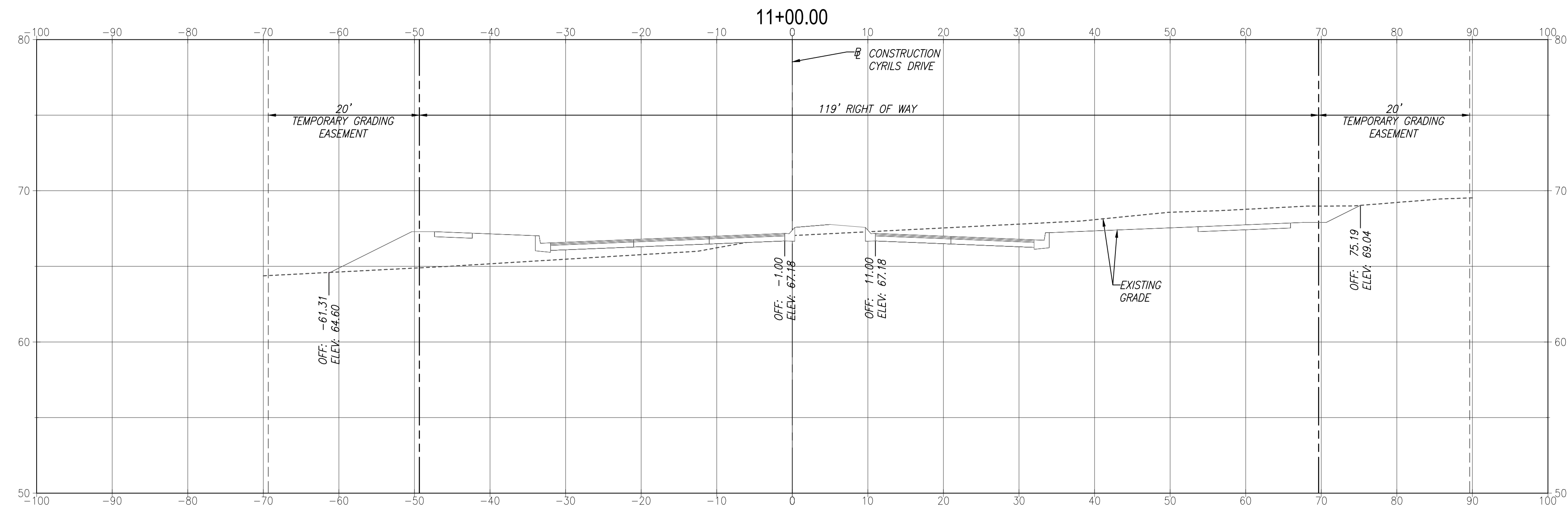
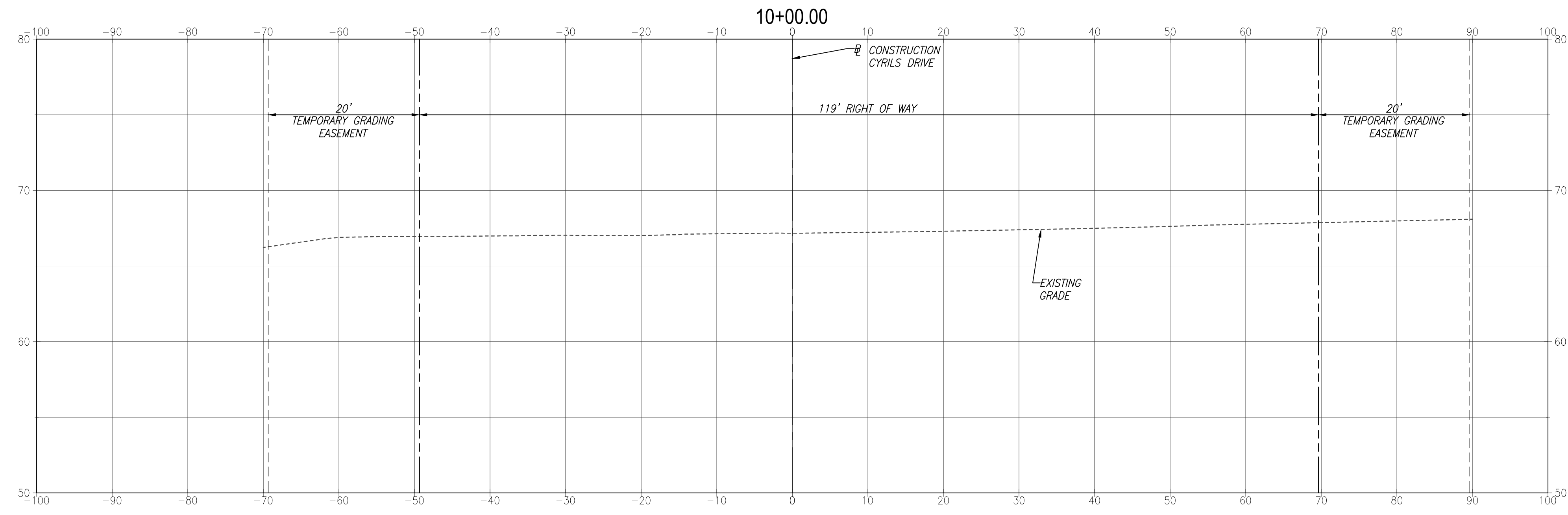
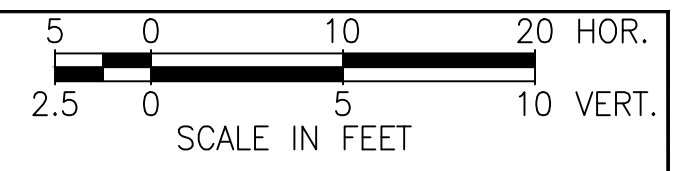
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PROJECT NO. (SDP20-0136)

CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
SIGNING & PAVEMENT MARKING

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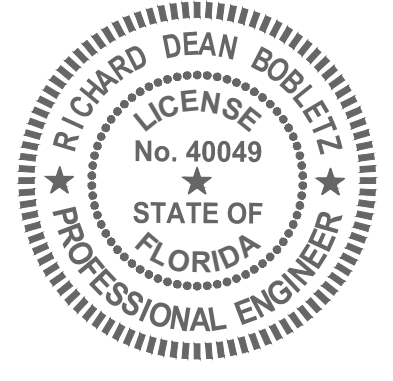
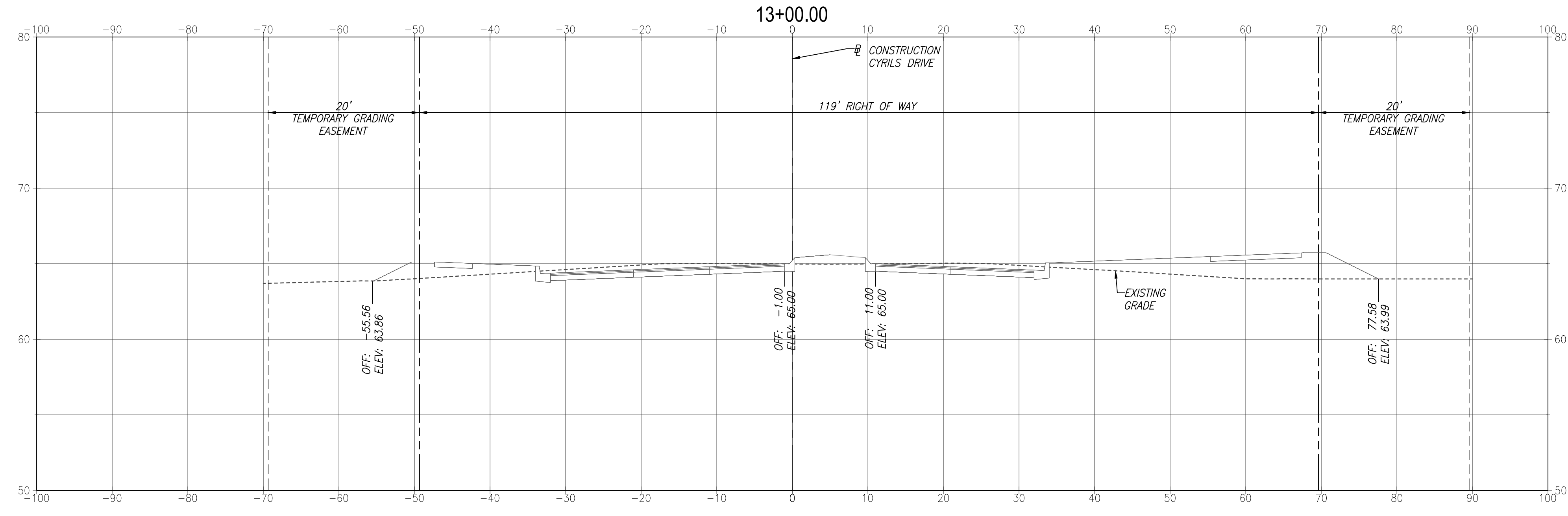
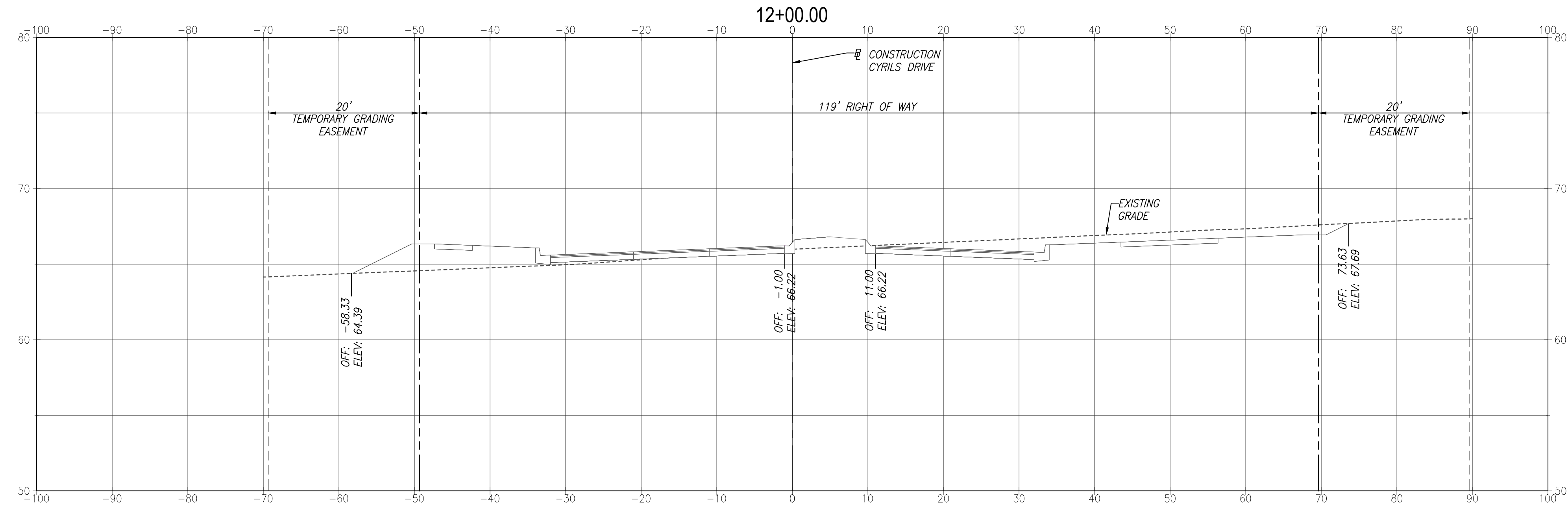
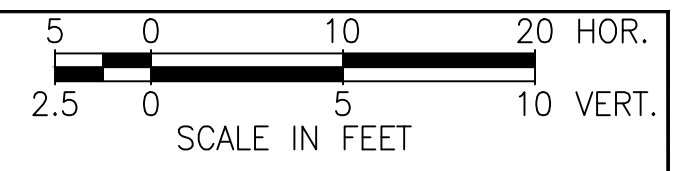
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CYRILS DRIVE & NARCOOSSEE RD -
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CROSS SECTIONS

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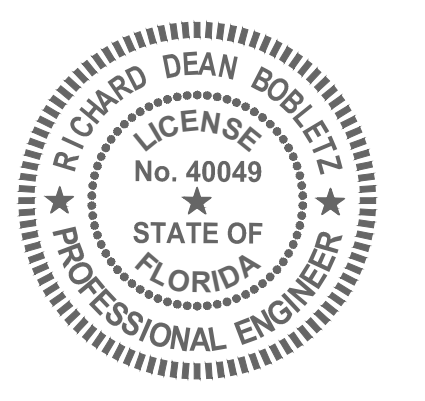
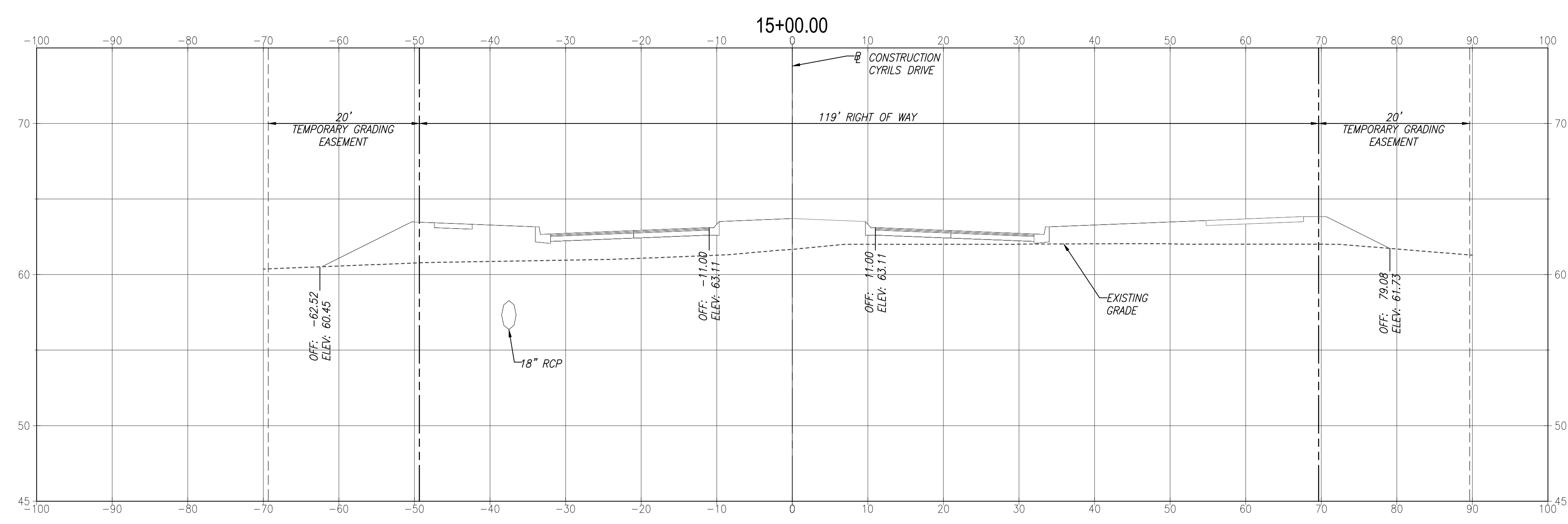
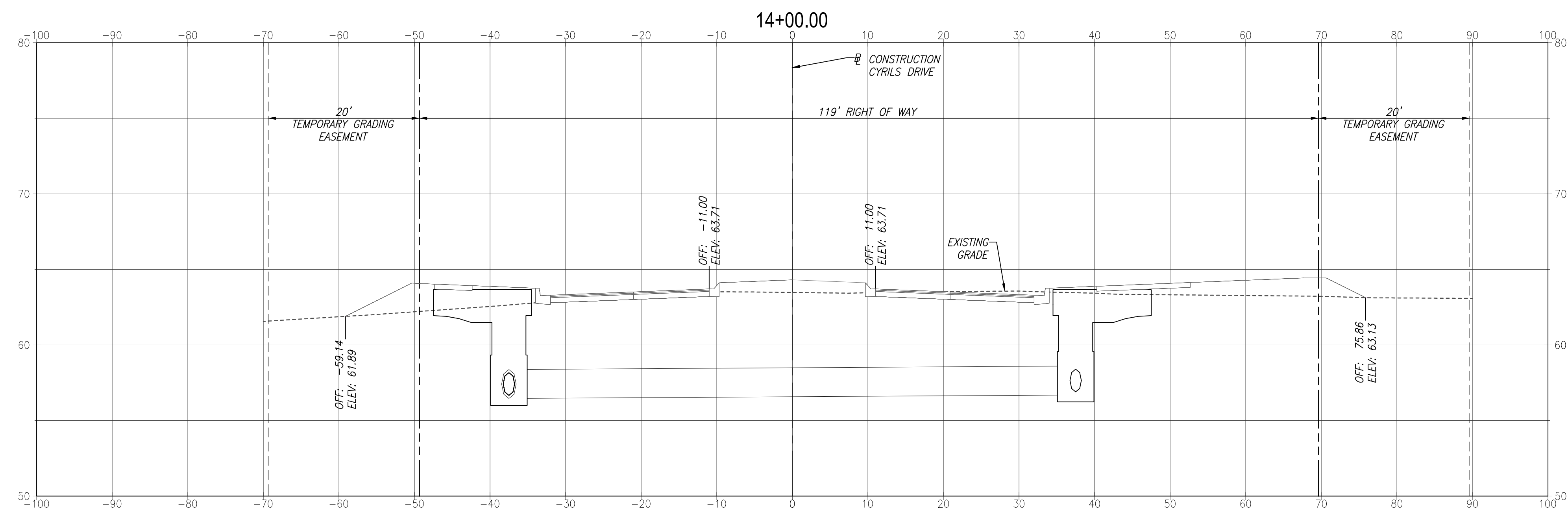
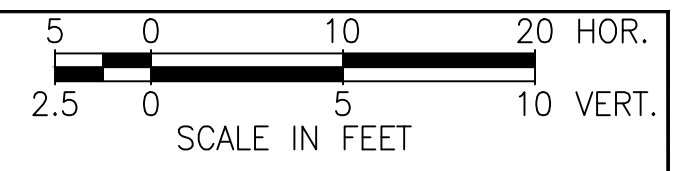
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OSCEOLA COUNTY
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CYRILS DRIVE & NARCOOSSEE RD -
 INTERSECTION IMPROVEMENTS
 CROSS SECTIONS

SHEET NO.
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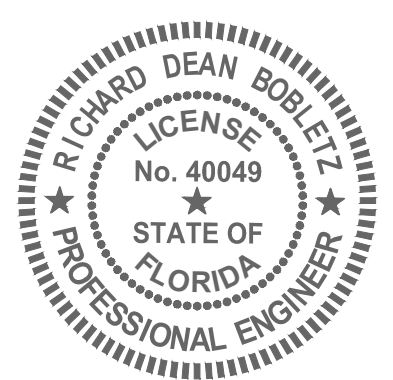
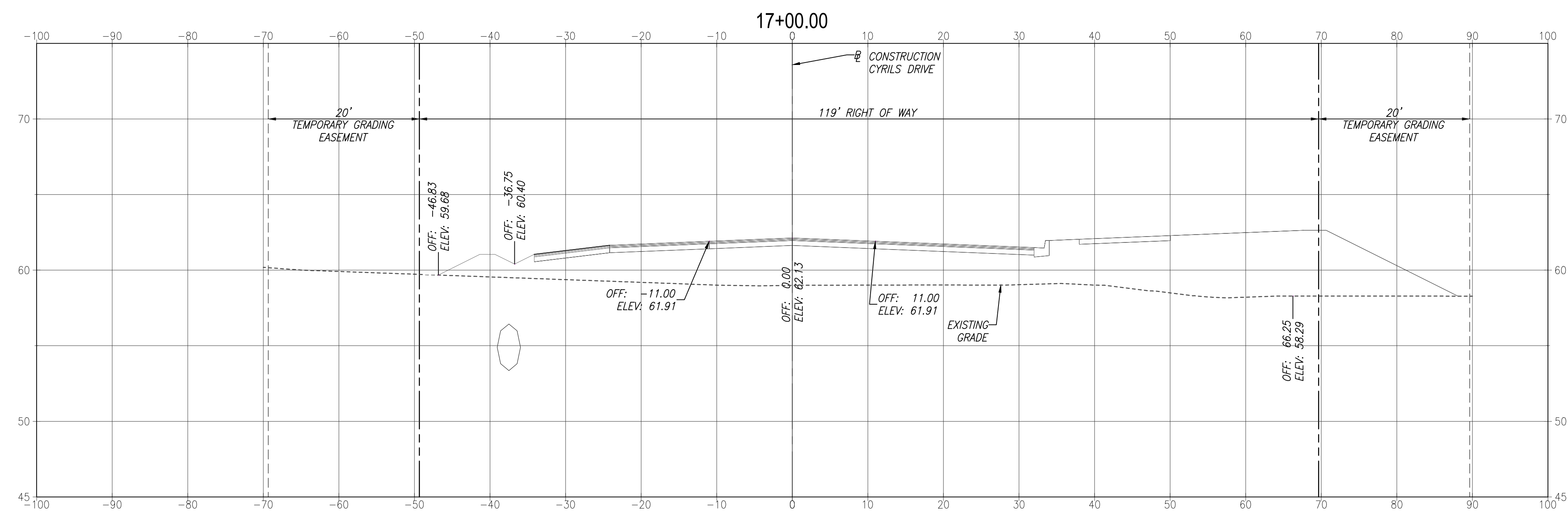
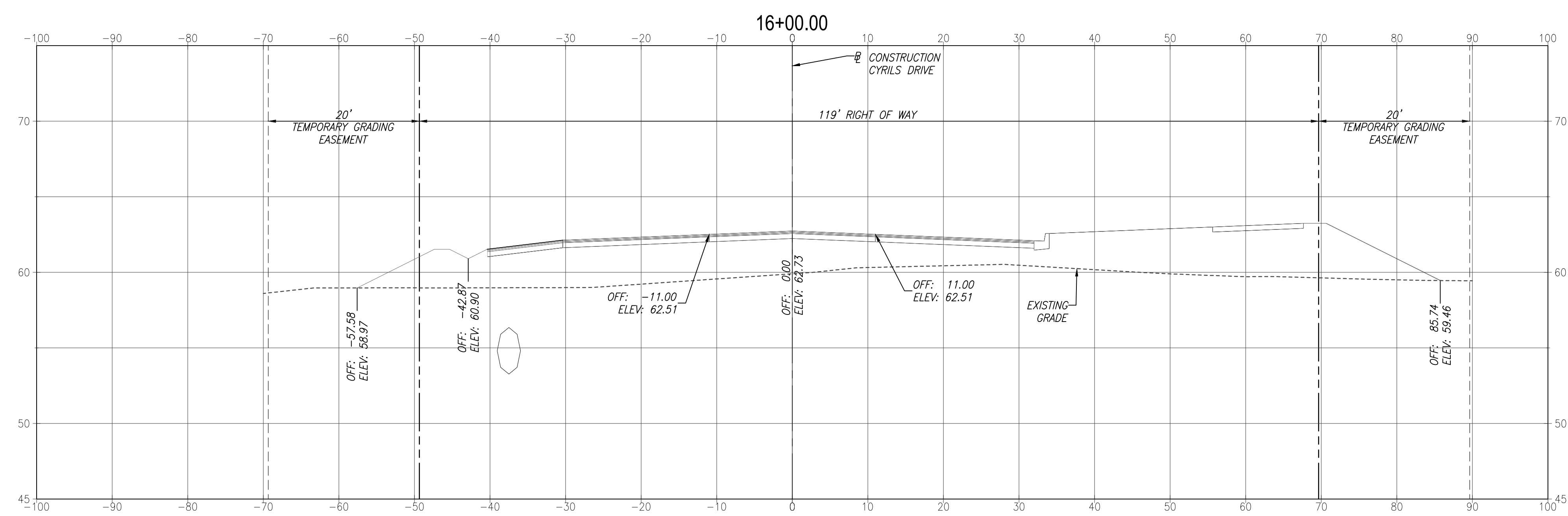
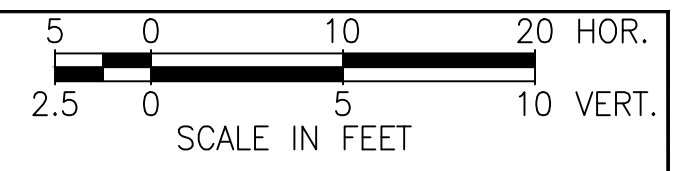
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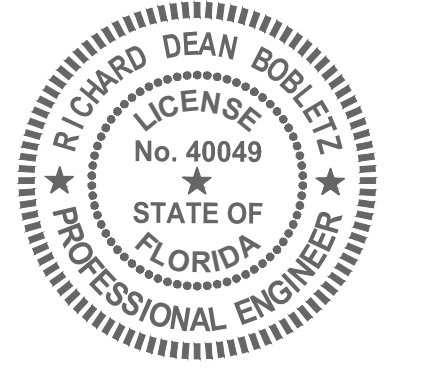
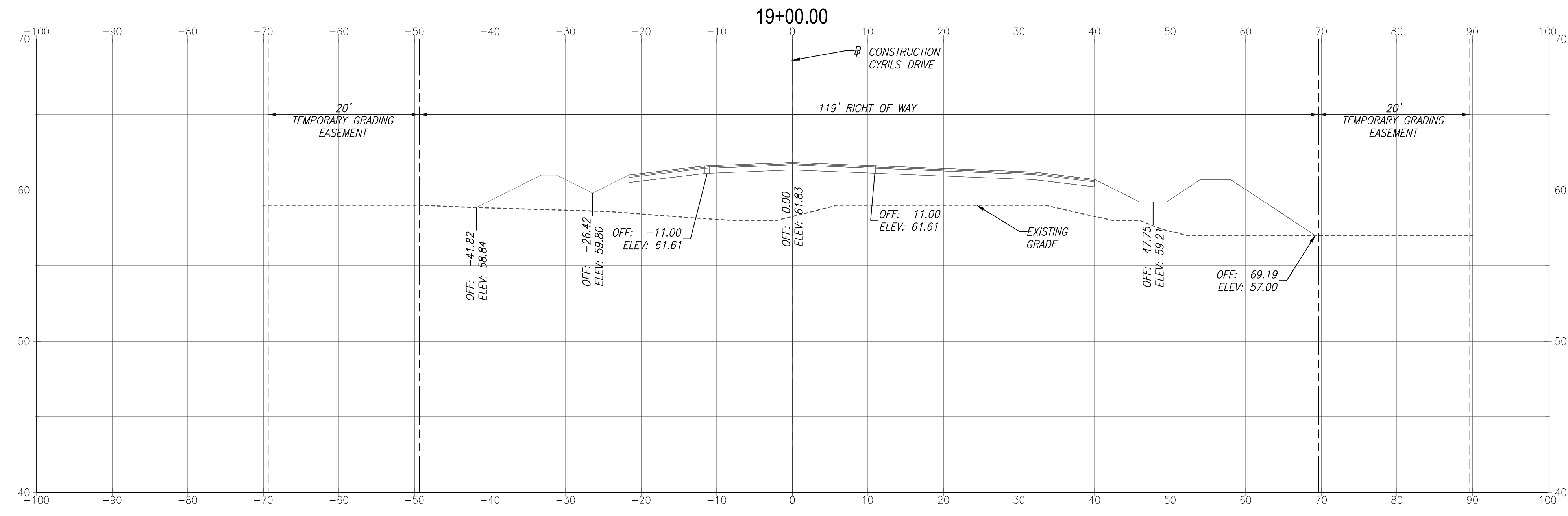
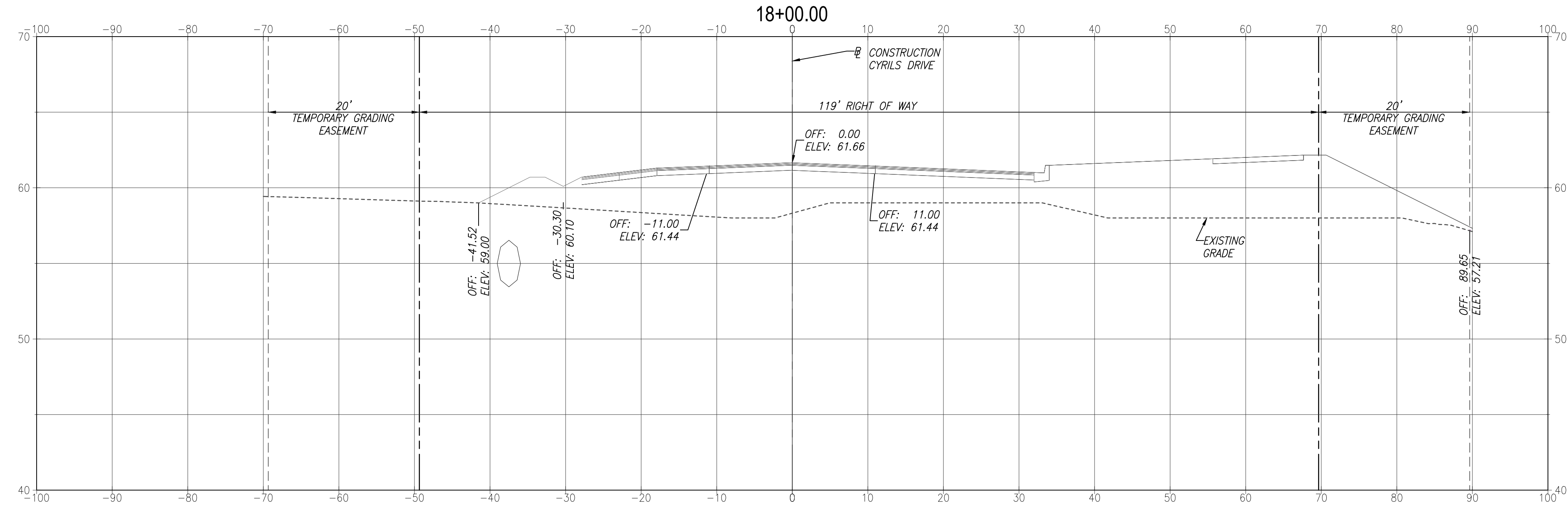
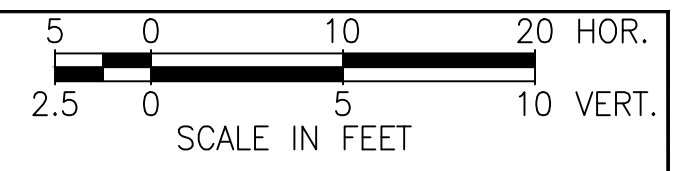
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CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
CROSS SECTIONS

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 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 DATE: January 20, 2021

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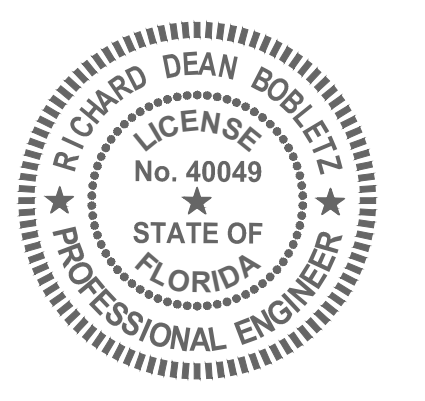
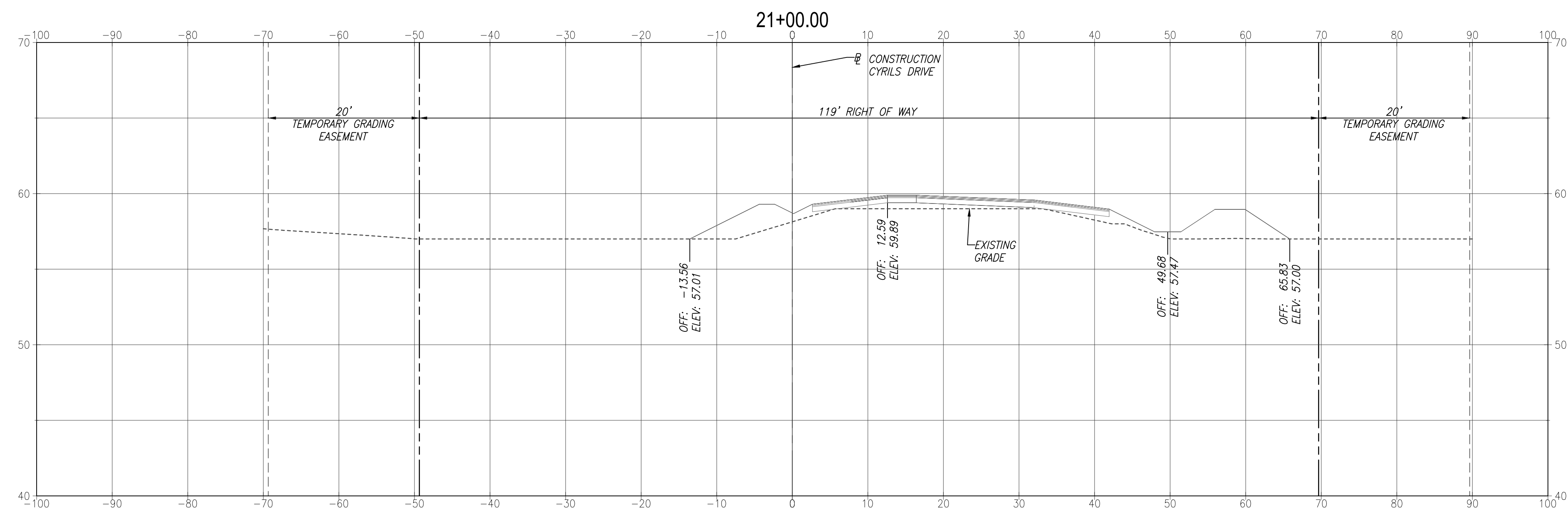
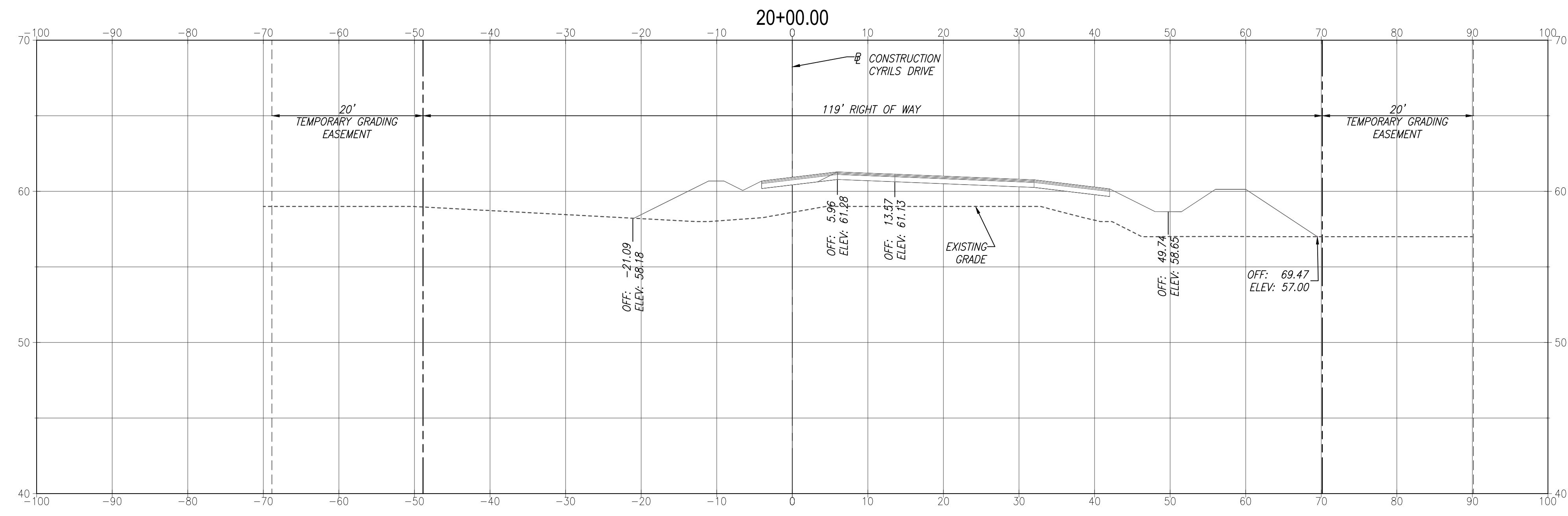
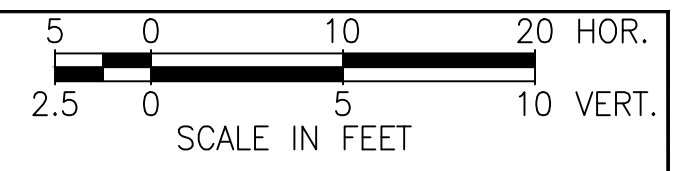
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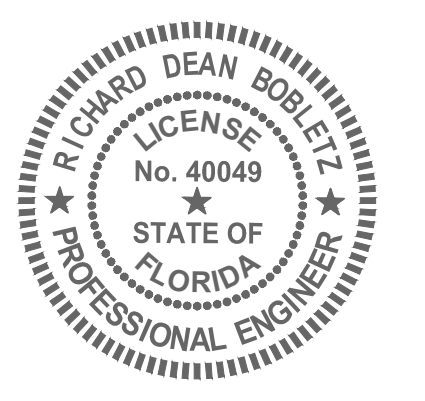
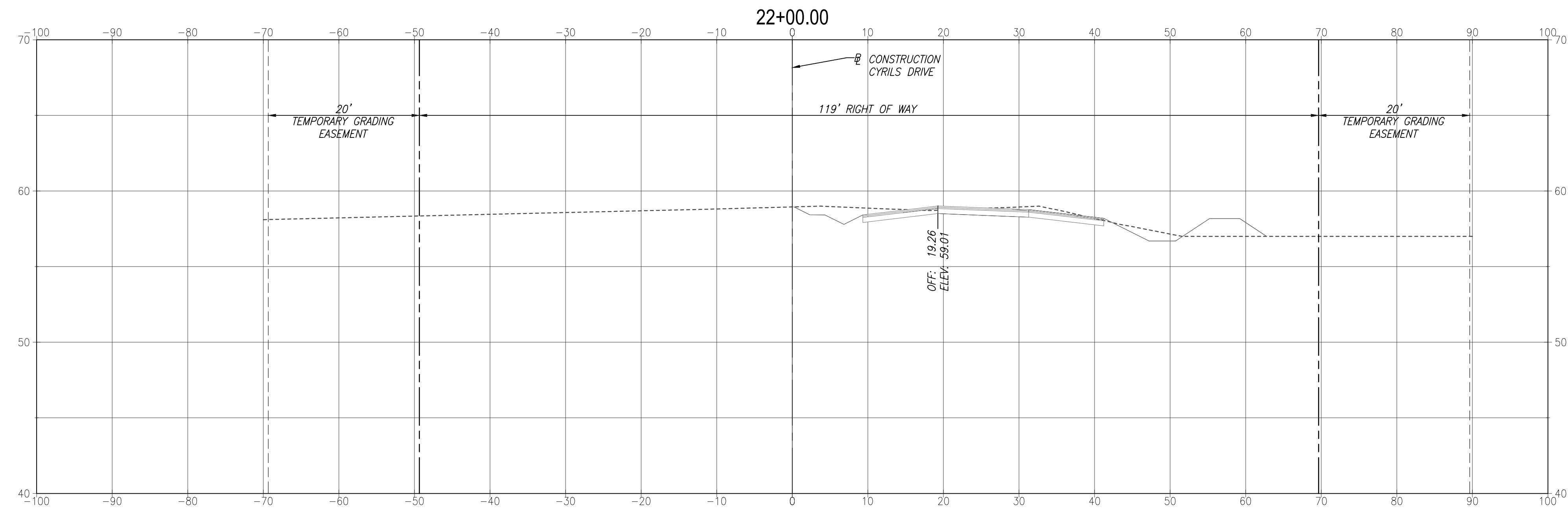
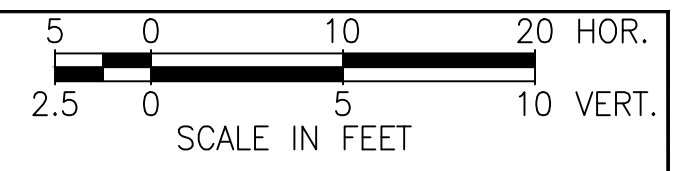
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CYRILS DRIVE & NARCOOSSEE RD -
 INTERSECTION IMPROVEMENTS
 CROSS SECTIONS

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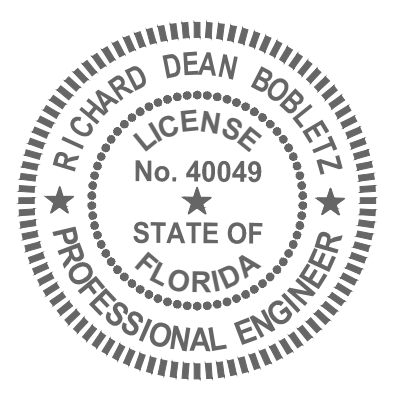
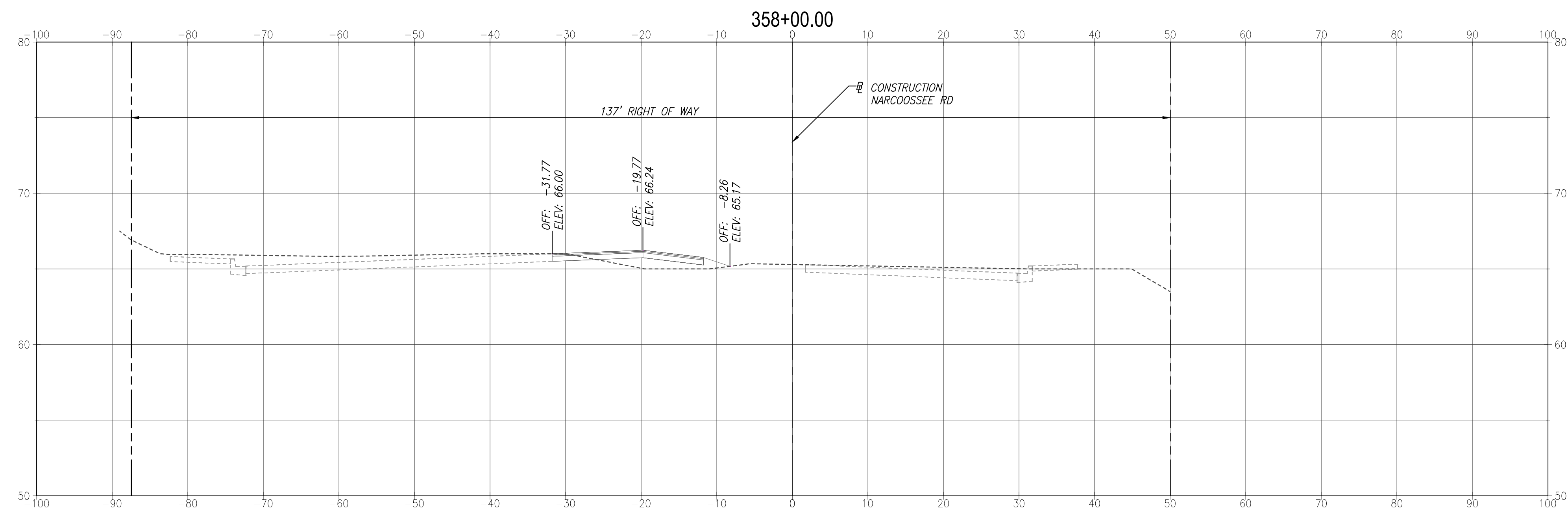
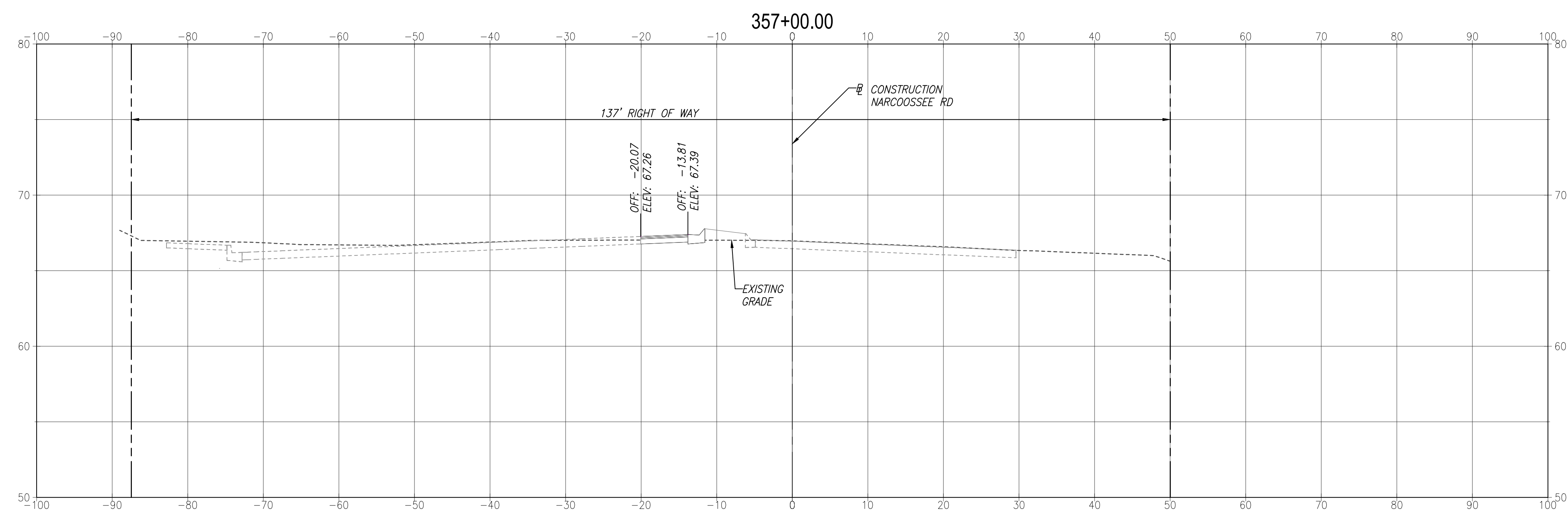
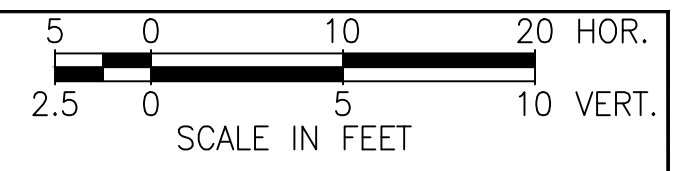
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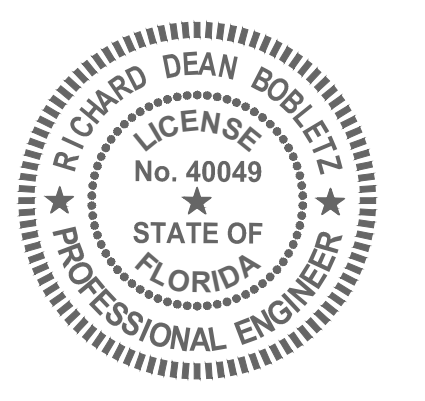
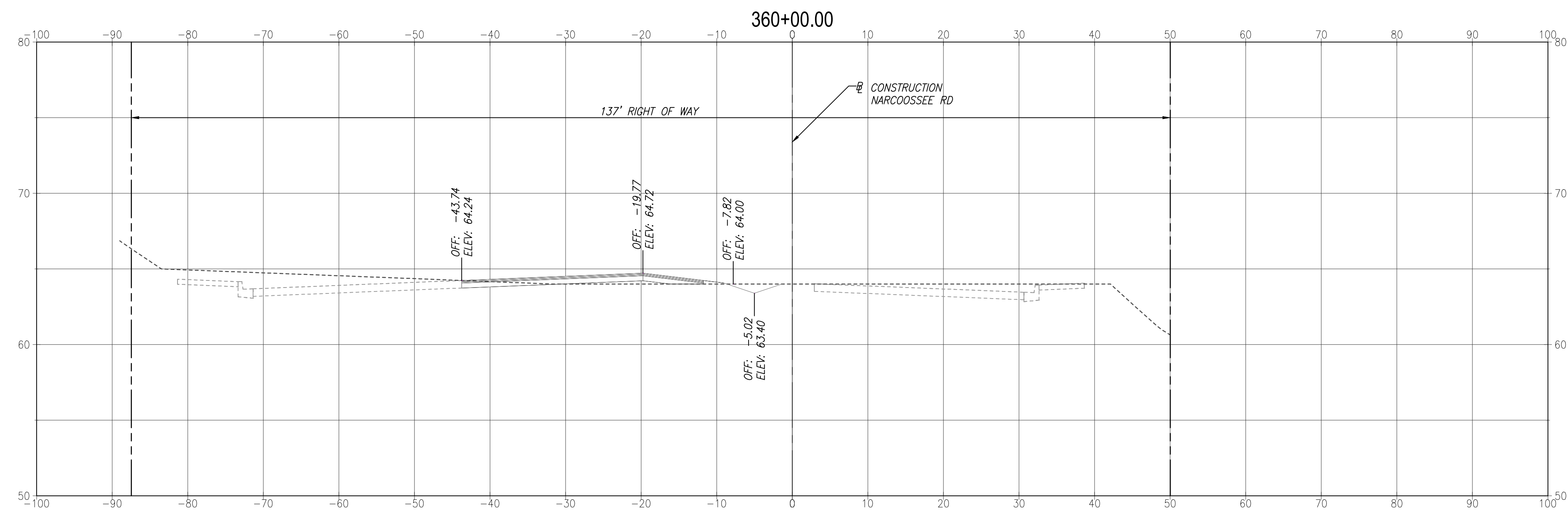
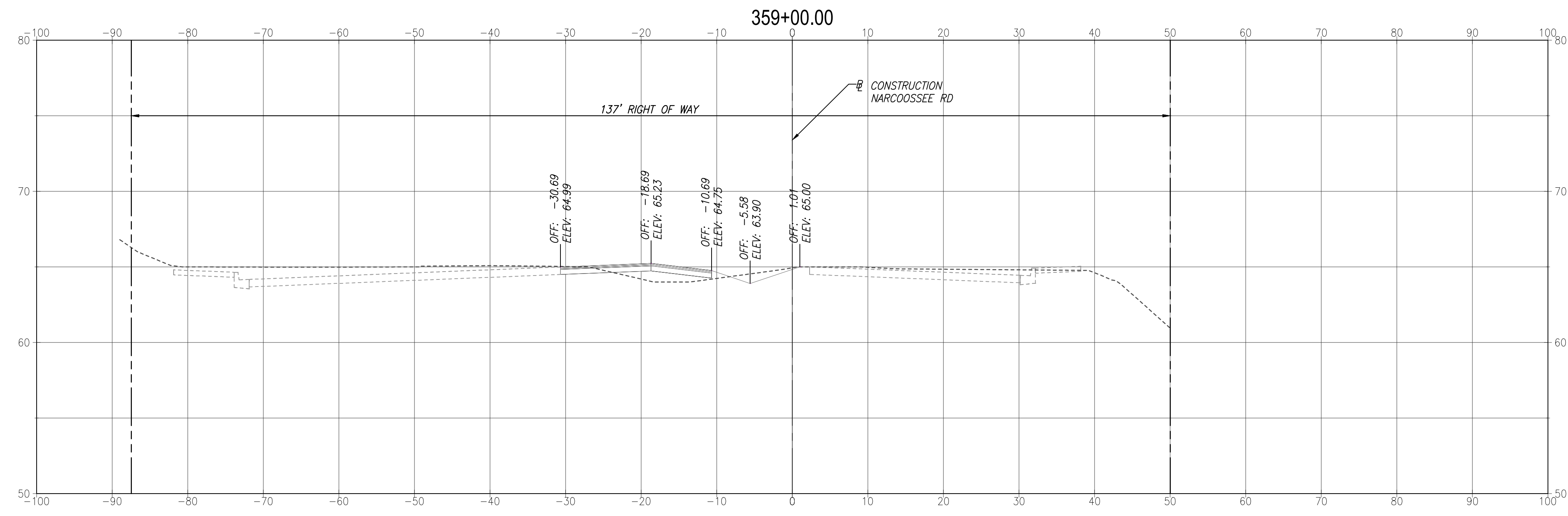
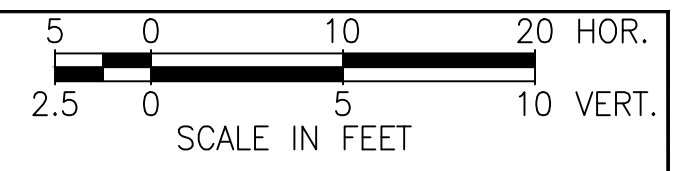
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 PROFESSIONAL ENGINEER
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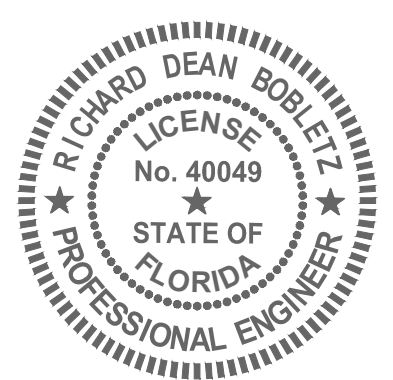
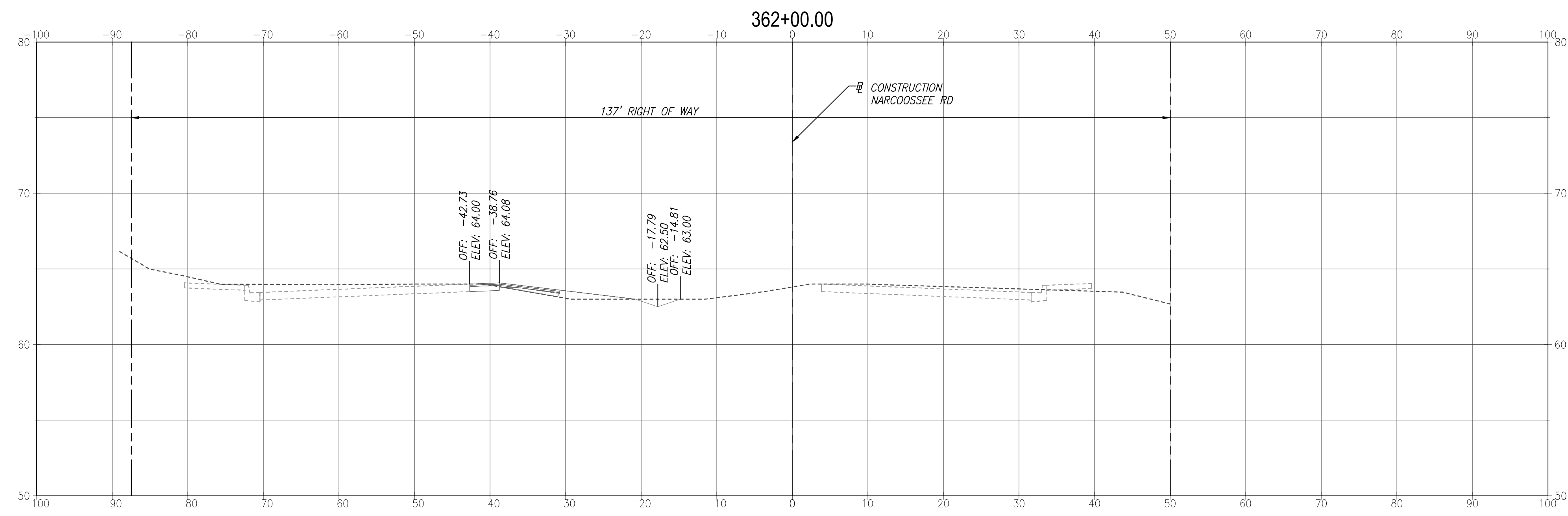
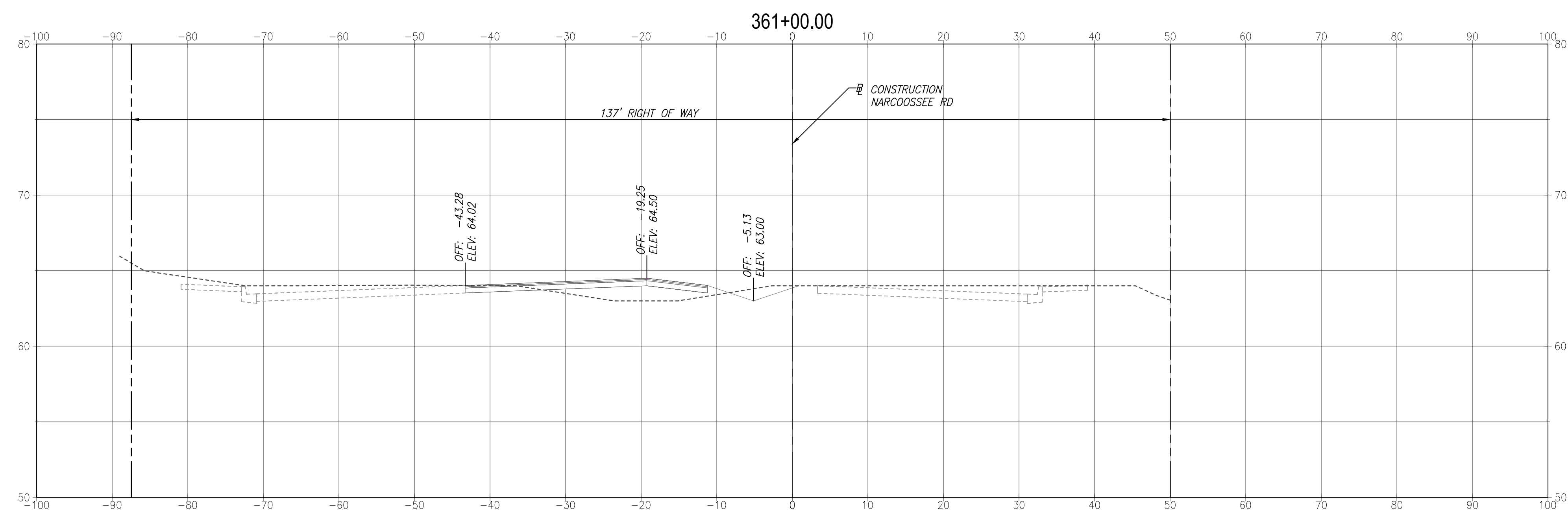
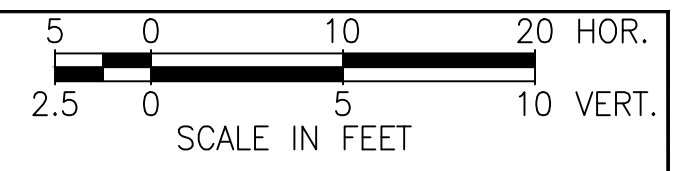
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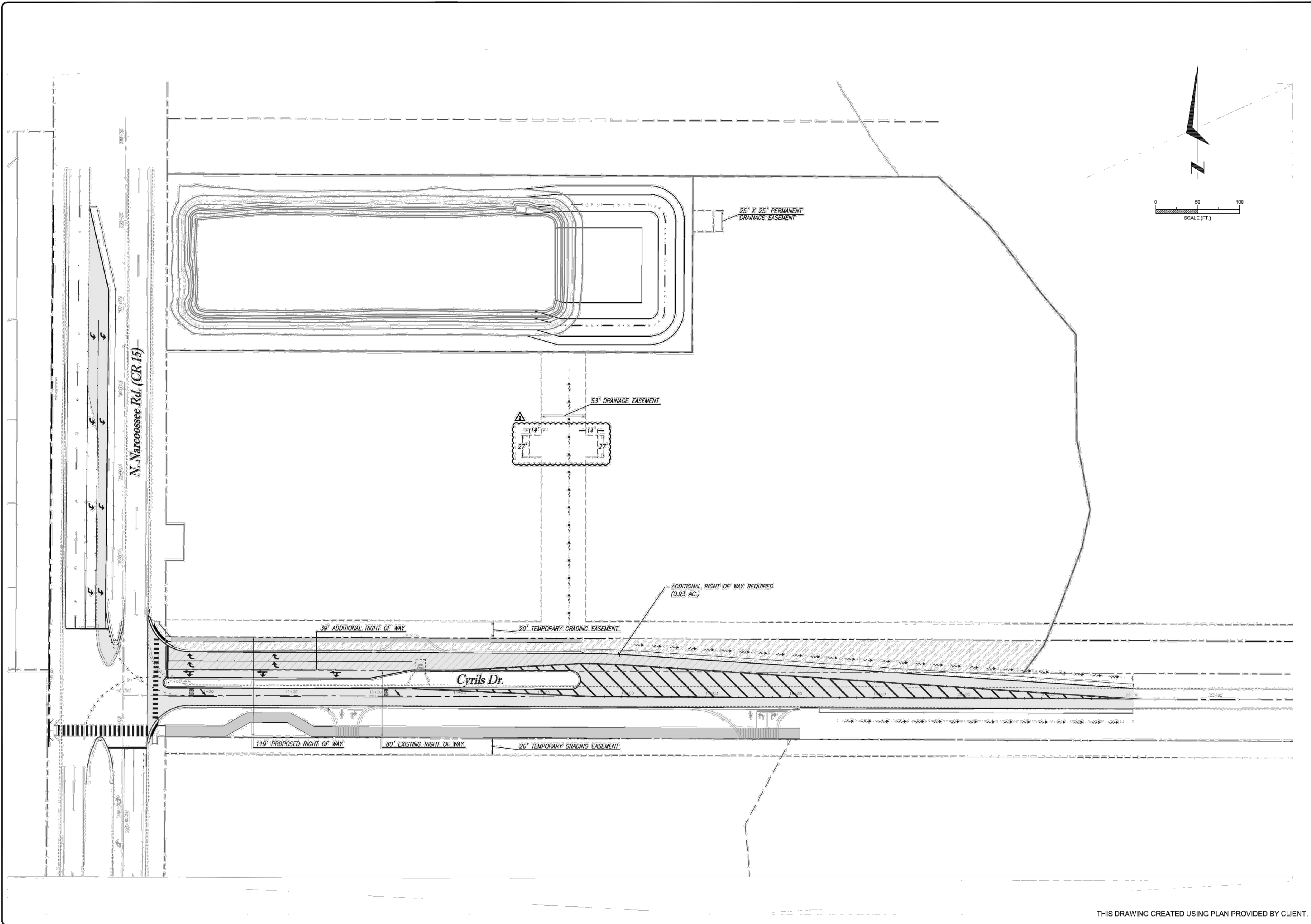
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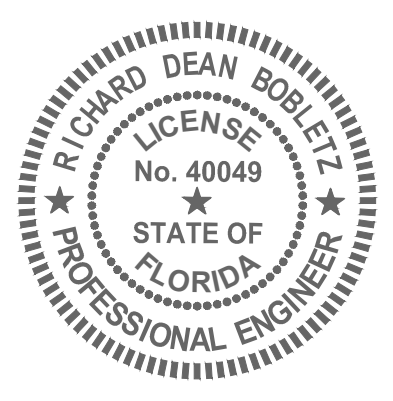
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20-0506-01



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FOR: POULOS & BENNETT	REVISION
	BY DATE
SFWM D STANDARD INDIVIDUAL WATER USE PERMIT APPLICATION CYRILS DRIVE & NARCOOSSEE ROAD INTERSECTION POND E-1 EXPANSION OSCEOLA COUNTY, FLORIDA	
MASTER SITE PLAN	
DRAWN BY:	N.F.
DATE:	8-19-2020
CHECKED BY:	M.D.
DATE:	
PROJ. MGR:	
SCALE:	AS SHOWN
PROJ. NO:	0130.1700290.0013
REPORT NO:	
 UNIVERSAL ENGINEERING SCIENCES	
INSERT NO:	MSP-1



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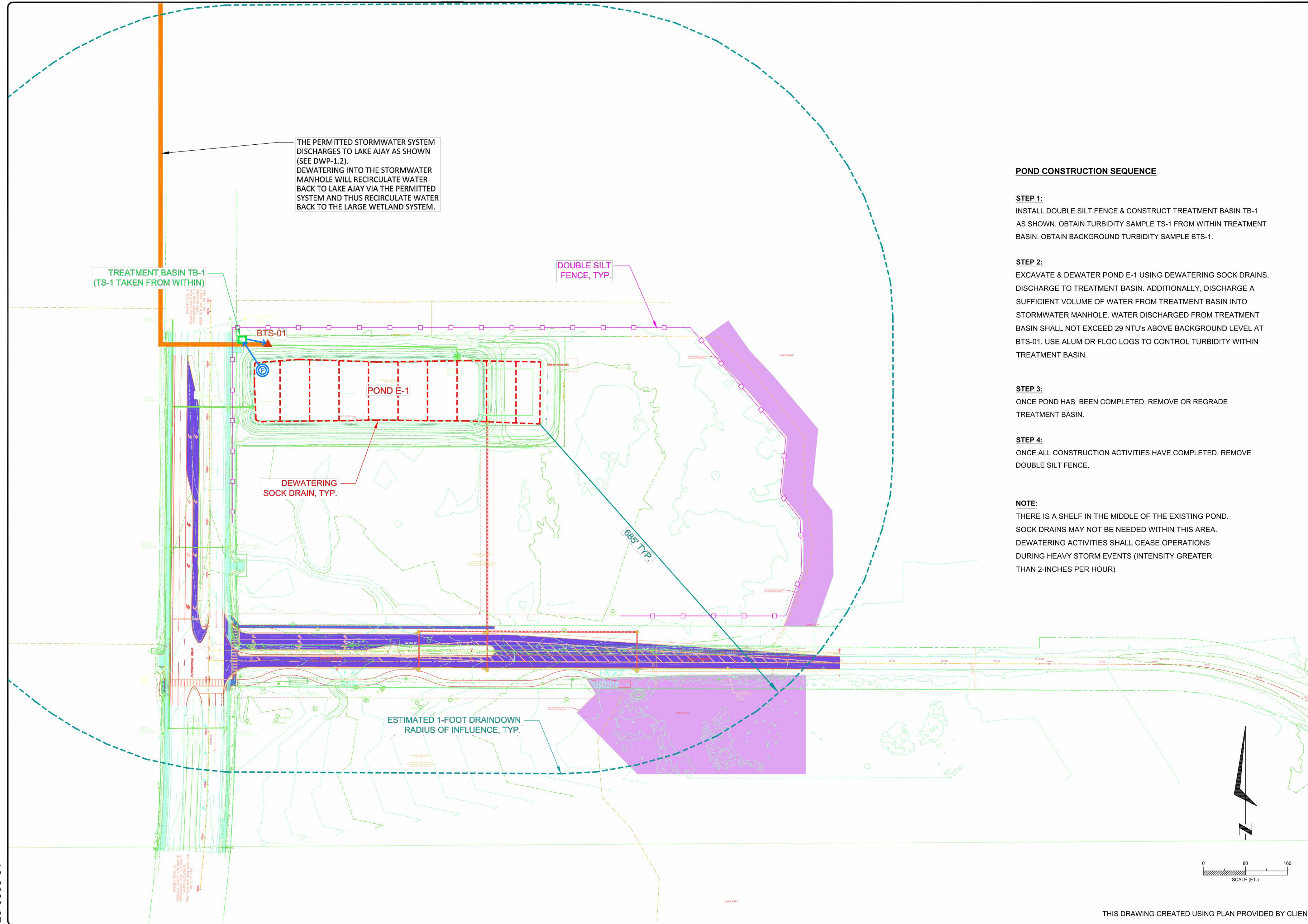
OSCEOLA COUNTY
PROJECT NO. (SDP20-0136)

CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
DEWATERING OPERATION PLAN

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20-0506-01



THE PERMITTED STORMWATER SYSTEM DISCHARGES TO LAKE AJAY AS SHOWN (SEE DWP-1.2). DEWATERING INTO THE STORMWATER MANHOLE WILL RECIRCULATE WATER BACK TO LAKE AJAY VIA THE PERMITTED SYSTEM AND THUS RECIRCULATE WATER BACK TO THE LARGE WETLAND SYSTEM.

TREATMENT BASIN TB-1 (TS-1 TAKEN FROM WITHIN)

DOUBLE SILT FENCE, TYP.

BTS-01

POND E-1

DEWATERING SOCK DRAIN, TYP.

685' TYP.

ESTIMATED 1-FOOT DRAINDOWN RADIUS OF INFLUENCE, TYP.

POND CONSTRUCTION SEQUENCE

STEP 1:
INSTALL DOUBLE SILT FENCE & CONSTRUCT TREATMENT BASIN TB-1 AS SHOWN. OBTAIN TURBIDITY SAMPLE TS-1 FROM WITHIN TREATMENT BASIN. OBTAIN BACKGROUND TURBIDITY SAMPLE BTS-1.

STEP 2:
EXCAVATE & DEWATER POND E-1 USING DEWATERING SOCK DRAINS. DISCHARGE TO TREATMENT BASIN. ADDITIONALLY, DISCHARGE A SUFFICIENT VOLUME OF WATER FROM TREATMENT BASIN INTO STORMWATER MANHOLE. WATER DISCHARGED FROM TREATMENT BASIN SHALL NOT EXCEED 29 NTU'S ABOVE BACKGROUND LEVEL AT BTS-01. USE ALUM OR FLOC LOGS TO CONTROL TURBIDITY WITHIN TREATMENT BASIN.

STEP 3:
ONCE POND HAS BEEN COMPLETED, REMOVE OR REGRADE TREATMENT BASIN.

STEP 4:
ONCE ALL CONSTRUCTION ACTIVITIES HAVE COMPLETED, REMOVE DOUBLE SILT FENCE.

NOTE:
THERE IS A SHELVE IN THE MIDDLE OF THE EXISTING POND. SOCK DRAINS MAY NOT BE NEEDED WITHIN THIS AREA. DEWATERING ACTIVITIES SHALL CEASE OPERATIONS DURING HEAVY STORM EVENTS (INTENSITY GREATER THAN 2-INCHES PER HOUR)

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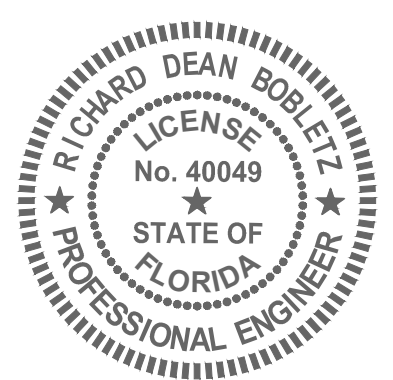
SFWMD STANDARD INDIVIDUAL WATER USE PERMIT APPLICATION
CYRILS DRIVE & NARCOOSSEE ROAD INTERSECTION
POND E-1 EXPANSION
OSCEOLA COUNTY, FLORIDA

DEWATERING OPERATIONS PLAN

DRAWN BY:	N.F.
DATE:	8-19-2020
CHECKED BY:	M.D.
DATE:	---
PROJ. MGR:	---
SCALE:	AS SHOWN
PROJ. NO:	0130.1700290.0013
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OSCEOLA COUNTY
PROJECT NO. (SDP20-0136)

CYRILS DRIVE & NARCOOSSEE RD -
INTERSECTION IMPROVEMENTS
DEWATERING OPERATION PLAN

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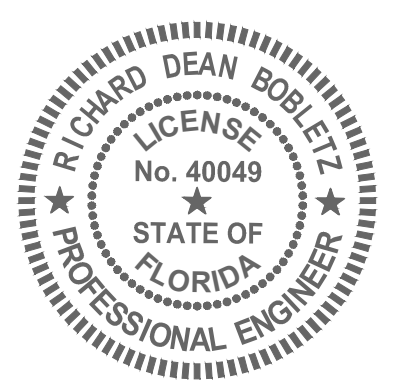
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SFWMD STANDARD INDIVIDUAL WATER USE PERMIT APPLICATION CYRILS DRIVE & NARCOOSSEE ROAD INTERSECTION POND E-1 EXPANSION OSCEOLA COUNTY, FLORIDA		NO. DATE	
DEWATERING OPERATIONS PLAN			
DRAWN BY:	N.F.		
DATE:	9 - 29 - 2020		
CHECKED BY:	M.D.		
DATE:	---		
PROJ. MGR:			
SCALE:	AS SHOWN		
PROJ. NO:	0130.1700290.0013		
REPORT NO:			
UNIVERSAL ENGINEERING SCIENCES		INSERT NO: DWP-1.2	



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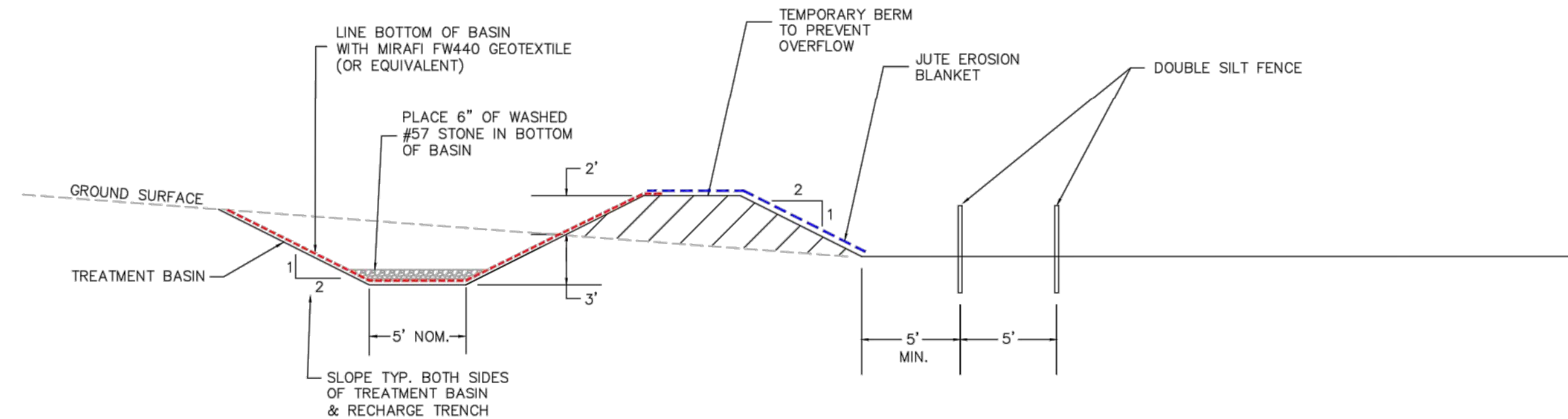
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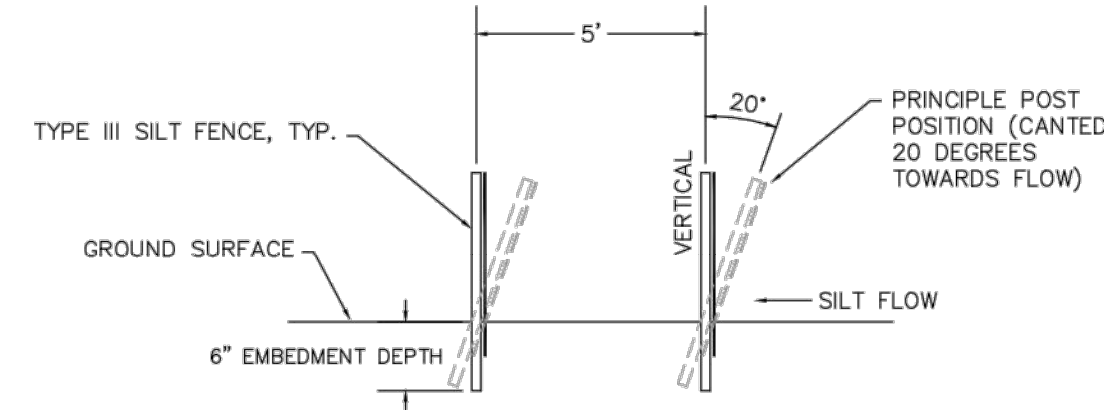
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DEWATERING OPERATION PLAN

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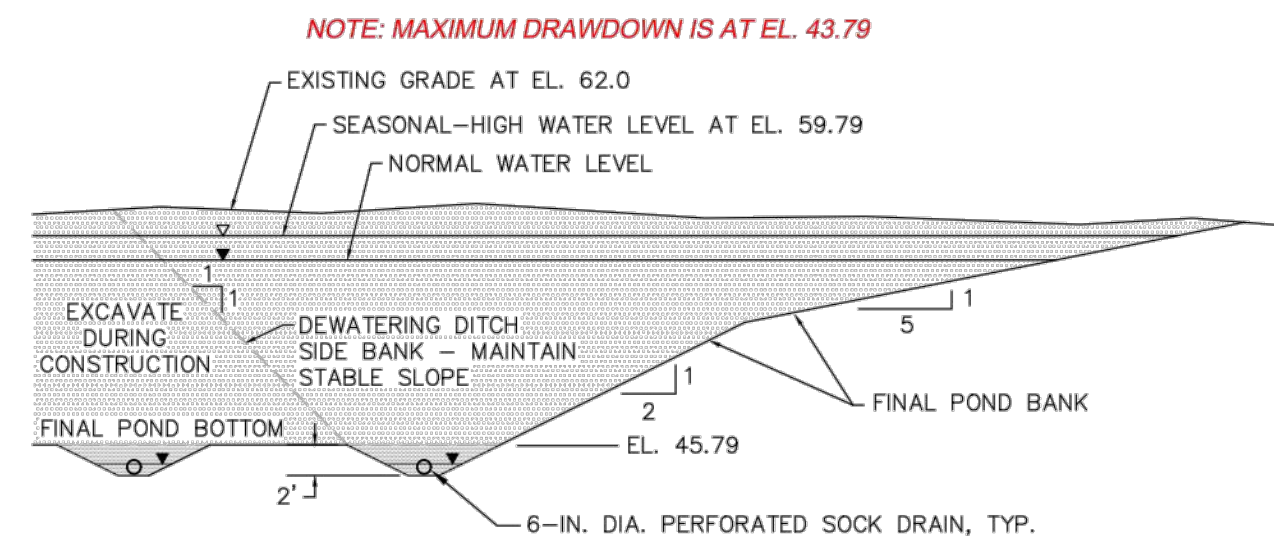
TREATMENT BASIN CROSS-SECTION

NOT TO SCALE



DOUBLE SILT FENCE CROSS-SECTION

NOT TO SCALE



REFERENCE DATUM IS NAVD 88

TYPICAL POND SECTION WITH DEWATERING SOCK DRAINS

NOT TO SCALE

GENERAL NOTES

1. This dewatering plan approved by SFWMD with associated limiting conditions discussed in the water use permit must be implemented in letter and spirit by the earthwork/excavation contractor. Any violation of dewatering permit issued will result in serious penalties imposed upon the contractor.
2. Prior to the excavation operations, both SFWMD and Universal Engineering Sciences must be informed of the proposed date of commencement, earthwork schedule and the contractors proposed means and method. Any significant changes proposed in the dewatering operations may require a permit modification and must be undertaken only after approval by the SFWMD.
3. All erosion Control measures outlined in the construction drawings and the attached dewatering plan in accordance with SFWMD and Orange County's requirements, must be implemented in place prior to the dewatering/earthwork operations.
4. Contractor must adopt best management practices, take all necessary precautions and measures listed in the dewatering plan including placement of impoundment berm around open excavations, as necessary to prevent overflow of surface run-off into adjacent unmitigated wetlands, water bodies of the state or off-site.
5. Any potential conflicts arising in the implementation of the Dewatering must be resolved after consultations with the engineers involved and SFWMD.
6. Provide double silt fences both embedded at least 6-inches into the native subgrade and separated by at least 5 feet along the length of all wetland areas not directly impacted by the development.
7. Provide a 25 foot minimum upland buffer as required between the silt fences and the wetland limits. All excavation activities must be outside the minimum 25-foot upland buffers from the wetlands.
8. Prior to initiating the dewatering operations at the retention ponds, the surface water collected on the site may be discharged to the upland portion of the development as long as adequate measures are taken to ensure that water does not over-flow into wetlands and the turbidity of the surface water discharged does not exceed 29 NTU's above background levels.
9. Once the erosion plan is adequately implemented, the dewatering for the retention pond may proceed with digging rim ditches conforming the final pond side slopes and must extend at least 2 to 4 feet below the pond bottom.
10. Alternatively, the water withdrawn from dewatering rim ditch may be contained within the site by storing into either a temporary storage areas, previously excavated ponds, or isolated existing pond/ditches on site, without any wetland discharge. Provide adequate erosion control measurements consistent with the SFWMD requirements at all inflow points.
11. All above ground berms for the temporary settling basins, recharge trench or impoundment berms must not exceed 3.5 feet in height and no steeper than 2:1 (H:V) side slopes.
12. The excavated material must be stockpiled no more than 20 feet in height, with a stable side slope (2:1, H:V or flatter), at least 100 feet away from the edge of excavations, wetland areas or water bodies of the state. Silt fences must be provided around the perimeter of the stockpile, and all run-off will be redirected away from wetlands, water bodies, or off-site areas.
13. The side banks for all the dewatering ditches, recharge trenches and excavations should have a minimum slope of 2:1 (H:V) and maintained stable during the entire dewatering/excavation operations, and must follow OSHA guidelines.
14. If deemed necessary by SFWMD, contractor will be responsible for implementing any corrective measures required by SFWMD as the dewatering operations proceed.

The dewatering operations and excavations for the proposed stormwater management area will be achieved by means of sock drains within the pond as shown in the Dewatering Operations Plan. The location and capacity of this pump vary as per the excavation requirements, and tentatively indicated on the operations plan. We anticipate one pump will be required per pond excavation. Pumps rated at a capacity of approximately 1500 gpm are likely to be used to pump out the surface water collected on site, discharging to the Treatment Basin (TB-1). A summary of a description of the surface water pump used in the dewatering operations is in the following Table B.

TABLE B: DESCRIPTION OF SURFACE WATER PUMPS

Pump Number or Designation	P
Pump Capacity (GPM)	1500
Purpose	Dewatering
Existing / Proposed	Proposed
Pump Type	Rotary / Diesel
Pump Horsepower	25
Elevation of intake EL. (ft)	43.79
Discharge Location	TB-1
Is pump two way?	Yes

*contractor responsible for final selection and specification of pumps

Ext. Duration = 20 Days
Pump Rate = 1500 GPM

POND	AREA (ac.)	Approx. Max Excavation Depth (ft.)	Ave. Dewatering Depth (ft.)	Est. Dewatering Duration (Days)	Ave. Volume Per Day (MGD)	Cumulative Volume (MG)	Max Theoretical Volume (MGD)	Discharge
POND E-1	2	18	18	20	2.64	105.40	5.27	TURBIDITY BASIN /STORM INLET

*Based on results calculated from Richard's Equation.

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FOR:	
NO. DATE	
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SFWMD STANDARD INDIVIDUAL WATER USE PERMIT APPLICATION
CYRILS DRIVE & NARCOOSSEE ROAD INTERSECTION
POND E-1 EXPANSION
OSCEOLA COUNTY, FLORIDA

DEWATERING DETAILS & NOTES - PROPOSED UTILITY INSTALLATION

DRAWN BY:	N.F.
DATE:	8-19-2020
CHECKED BY:	M.D.
DATE:	---
PROJ. MGR:	
SCALE:	AS SHOWN
PROJ. NO:	0130.1700290.0013
REPORT NO:	

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LICENSEE No. 40049
STATE OF FLORIDA
PROFESSIONAL ENGINEER

INSERT NO:
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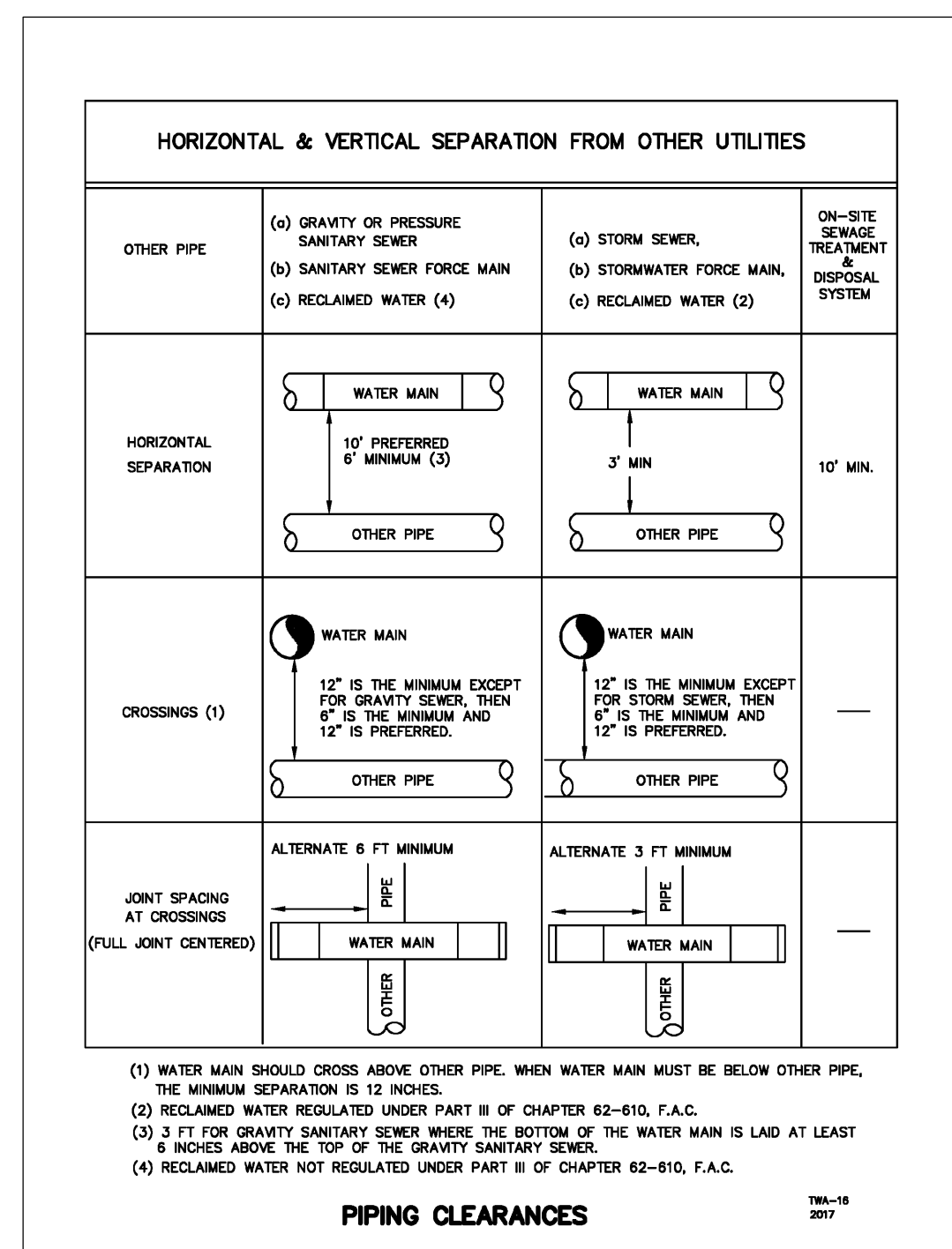
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