COUNTRY CLUB CREEK/ PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

PLANS PREPARED FOR:

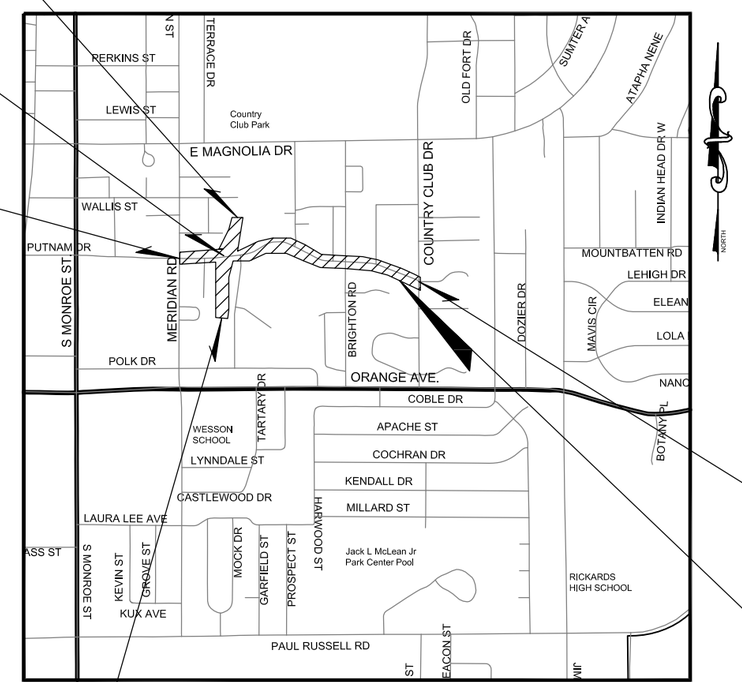
CITY OF TALLAHASSEE

UNDERGROUND UTILITIES DEPARTMENT
WATER RESOURCES ENGINEERING
STORMWATER MANAGEMENT
C.O.T. WORK ORDER NO. 1057273 (PUTNAM)
C.O.T WORK ORDER NO. 15062 (COUNTRY CLUB CREEK)

END BL-CONST
COUNTRY CLUB CREEK
STATION 21+68.27

STATION EQUATION
STATION 24+62.84
PUTNAM DRIVE
= STATION 17+81.57
COUNTRY CLUB CREEK

BEGIN BL-CONST
PUTNAM DRIVE
STATION 21+00.00



LOCATION MAP
1" = 800'

BEGIN BL-CONST
COUNTRY CLUB CREEK
STATION 10+00.00

END BL-CONST
PUTNAM DRIVE
STATION 48+10.83

PROJECT LOCATION

NORTH AMERICAN VERTICAL DATUM OF 1988

THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED USING A SHA AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND THE SHA AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

GOVERNING STANDARDS AND SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED FY 2017-18 AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED JANUARY 2018, AS AMENDED BY CONTRACT DOCUMENTS.

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

REVISIONS			
NO.	DESCRIPTION	BY	DATE

PLANS PREPARED BY:

EUTAW, INC.
2822 REMINGTON GREEN CIRCLE, SUITE 202
TALLAHASSEE, FLORIDA 32308
(850) 383-0400
WWW.EUTAWINC.COM

CERTIFICATE OF AUTHORIZATION #9961

INDEX OF SHEETS

ENGINEERS OF RECORD:

LANE P. LUCAS, P.E.
FLORIDA PE #53936
ROADWAY, SIDEWALK, DRAINAGE, SPM

BRIAN KEVER, P.E.
FLORIDA PE #65627
STRUCTURAL
(SHEETS T1-T5)

STEPHEN SHANLEY, P.E.
FLORIDA PE #40653
GEOTECHNICAL
(SHEETS 63-64)

APPROVED FOR CONSTRUCTION

Thomas L Napier, PE
STORMWATER MANAGEMENT DIVISION
DATE: *March 6, 2019* SET NO.: _____

Eric Houge, PE
PUBLIC INFRASTRUCTURE
DATE: *March 6, 2019* SET NO.: _____

COUNTRY CLUB CREEK / PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

User: matt
S:\Projects\COT Public Works\Putnam Drive\dwg\KEY SHEET.dwg 03/06/2019 09:15:08 AM

FROM MAGNOLIA DR.,
MAGNOLIA TERRACE,
YEAGER ST.

BASIN 600
0.60 AC

NORMA ST.

PROJECT LIMITS

BASIN 600A
0.76 AC

CONSTRUCT 10' BOTTOM WIDTH
ARMORED CHANNEL

BASIN 500
2.90 AC

BASIN 500A
0.47 AC

CONSTRUCT 10'X6'
CONCRETE BOX
CULVERT

PUTNAM DR.

BASIN 200B
1.16 AC

BASIN 200A
1.06 AC

MERIDIAN RD.

CONSTRUCT 10'X6'
CONCRETE BOX CULVERT
AND SWALE

BASIN 200
0.62 AC

GOLF TERRACE DR.

TO EAST DITCH

S-1 S-2 S-3

23+50 23+00 22+50 22+00 21+50 21+00 20+50 20+00 19+50 19+00 18+50 18+00 17+50 17+00 16+50 16+00 15+50 15+00 14+50 14+00 13+50 13+00 12+50

GRAPHIC SCALE
0 25 50 100
(IN FEET)

NORTH

GRAPHIC SCALE
0 250 500 1000
(IN FEET)

CAPITAL CITY
COUNTRY CLUB

MERIDIAN RD.

S. MONROE ST.

MAGNOLIA DR.

WATERSHED BOUNDARY
334 AC

PUTNAM DR.

PROJECT AREA

EAST DITCH

ENGINEER OF RECORD
LANE D. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53806
Signature _____ Date _____

ORIGINAL 03/04/2019
REVISIONS:
1 _____
2 _____
3 _____
4 _____
5 _____

SHEET
DRAINAGE MAP

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO. _____
DRAWN _____
DESIGNED _____
CHECKED _____
QC _____

2

User: matt
S:\Projects\COT Stormwater\CCC-Design\dwg\Construction Plans\Drainage Map.dwg 03/04/2019 03:50:46 PM

GENERAL NOTES

1. THE CONTRACTOR SHALL HAVE ALL REQUIRED PERMITS IN-HAND PRIOR TO BEGINNING CONSTRUCTION, AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMITS OBTAINED BY THE CITY AND THOSE PERMITS OBTAINED BY THE CONTRACTOR.

2. AT LEAST THREE CALENDAR DAYS PRIOR TO THE PRECONSTRUCTION CONFERENCE; THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A TENTATIVE BASE CONSTRUCTION SCHEDULE, A PRECONSTRUCTION SURVEY, A TRAFFIC CONTROL PLAN, AND A SEDIMENT AND EROSION CONTROL PLAN. NO WORK SHALL BEGIN PRIOR TO APPROVAL OF THE CONSTRUCTION SCHEDULE, PRECONSTRUCTION SURVEY, TRAFFIC CONTROL PLAN, AND SEDIMENT AND EROSION CONTROL PLAN.

3. THE CONSTRUCTION SCHEDULE SHALL DESCRIBE IN DETAIL HOW THE CONSTRUCTION IS TO BE PHASED, ESTABLISH START AND FINISH DATES FOR ALL SIGNIFICANT CONSTRUCTION ACTIVITIES, AND IDENTIFY ALL CONTROLLING ITEMS OF WORK. THE SCHEDULE IS TO BE APPROVED BY THE ENGINEER, AND SHALL BE UPDATED ON A MONTHLY BASIS TO REFLECT ACTUAL WORK PROGRESS. THE UPDATED SCHEDULE SHALL BE SUBMITTED TO THE ENGINEER NO LATER THAN THREE DAYS PRIOR TO EACH SCHEDULED MONTHLY PROGRESS MEETING. PAYMENT FOR PREPARING, UPDATING AND SUBMITTING THE SCHEDULE SHALL BE INCLUDED IN THE PAY ITEM FOR MOBILIZATION.

4. THE PRECONSTRUCTION SURVEY SHALL VERIFY THE CONTROL POINTS AND BENCH MARK ELEVATIONS PROVIDED BY THE ENGINEER AND SHALL ALSO ESTABLISH THE LOCATION AND DESCRIPTION OF ALL ADDITIONAL REFERENCE POINTS AND THE LOCATIONS, DESCRIPTIONS, AND ELEVATIONS OF ALL ADDITIONAL BENCHMARKS TO BE USED IN CONSTRUCTING THE PROJECT. THE SURVEY SHALL BE SIGNED AND SEALED BY A PROFESSIONAL SURVEYOR AND MAPPER REGISTERED IN THE STATE OF FLORIDA. SIGNIFICANT INCONSISTENCIES BETWEEN THE FIELD NOTES AND THE CONTROL POINTS AND BENCH MARK ELEVATIONS PROVIDED BY THE ENGINEER SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO ISSUANCE OF THE NOTICE TO PROCEED. PAYMENT SHALL BE INCLUDED IN THE PAY ITEM FOR MOBILIZATION.

5. THE GEOTECHNICAL INFORMATION SHOWN ON THE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING DESIGN CRITERIA FOR THE PROJECT. THIS INFORMATION MAY NOT ACCURATELY REFLECT ACTUAL SOIL CONDITIONS AS TO THE DEPTH, EXTENT OR CHARACTER OF THE MATERIAL TO BE ENCOUNTERED IN CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SUCH EXAMINATION OF THE SITE OF THE WORK AS MAY BE NECESSARY TO DETERMINE THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED.

6. THE CONTRACTOR IS RESPONSIBLE FOR PRESERVING ALL PROPERTY CORNERS AND MONUMENTS SHOWN ON THE DRAWINGS OR FOUND DURING CONSTRUCTION. IF A PROPERTY CORNER OR MONUMENT IS DESTROYED OR DISTURBED, THE CONTRACTOR WILL HAVE IT REPLACED AND CERTIFIED BY A PROFESSIONAL SURVEYOR AND MAPPER REGISTERED IN THE STATE OF FLORIDA. ALL COSTS FOR PRESERVING, REPLACING AND CERTIFYING PROPERTY CORNERS AND MONUMENTS WILL BE INCLUDED IN THE PAY ITEM FOR MOBILIZATION.

7. ANY NATIONAL GEODETIC SURVEY MONUMENT WITHIN THE LIMITS OF CONSTRUCTION MUST BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND:

   FDEP, BUREAU OF SURVEY AND MAPPING, MS 100
   3900 COMMONWEALTH BLVD.
   TALLAHASSEE, FLORIDA 32399
   (850) 245-2555 (OFFICE)
   (850) 245-2572 (FAX)

8. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON INFORMATION PROVIDED BY THE UTILITY OWNERS, AVAILABLE RECORDS, AND SURVEYED FIELD INFORMATION. THE INFORMATION MAY NOT REFLECT ACTUAL CONDITIONS, INCLUDE ALL UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR SHOW THE UTILITIES IN THE CORRECT HORIZONTAL OR VERTICAL LOCATIONS. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS NECESSARY TO ESTABLISH THEIR LOCATIONS AND AVOID DAMAGE. THE FOLLOWING UTILITIES SHOULD BE CONTACTED FOR INFORMATION CONCERNING TYPE AND LOCATION OF THEIR FACILITIES. THE LIST MAY NOT INCLUDE ALL UTILITIES IN THE AREA.

SUNSHINE STATE ONE-CALL OF FLORIDA	811 OR 800-432-4770 (5 DAYS NOTIFICATION PRIOR TO CONSTRUCTION)
CITY OF TALLAHASSEE/ELECTRICAL UTILITY	850-891-5091
CITY OF TALLAHASSEE/GAS UTILITY	850-891-5100
CITY OF TALLAHASSEE/WATER UTILITY	850-891-6107
CITY OF TALLAHASSEE/SEWER UTILITY	850-891-6107
COMCAST (CABLE TELEVISION)	850-574-4060
CENTURYLINK (TELEPHONE)	850-599-1502
SOUTHERN LIGHT (COMMUNICATIONS)	251-662-1170

9. PRIOR TO ANY SCHEDULED INTERRUPTION OF UTILITY SERVICE, THE CONTRACTOR SHALL COORDINATE SUCH INTERRUPTION WITH THE UTILITY PROVIDER AND SHALL PROVIDE A MINIMUM 24-HOUR NOTICE TO THE AFFECTED PARTIES. IN THE CASE OF A WATER MAIN SHUT DOWN, A MINIMUM 24-HOUR NOTICE ALSO SHALL BE PROVIDED TO THE TALLAHASSEE FIRE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE ELECTRIC UTILITY A MINIMUM OF TWO WEEKS PRIOR TO CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES.

10. THE CONTRACTOR SHALL NOTIFY THE GAS UTILITY (850-891-5100) A MINIMUM OF TWO WORKING DAYS PRIOR TO ANY EXCAVATION IN THE VICINITY OF GAS MAINS, AS REQUIRED BY CHAPTER 77-153 OF THE FLORIDA STATUTES. A GAS DEPARTMENT INSPECTOR WILL BE ON SITE WHEN WORK ACTIVITIES TAKE PLACE NEAR GAS MAINS. A MINIMUM OF 72 HOURS NOTICE SHALL BE PROVIDED FOR ANY REQUEST FOR GAS MAIN EXPOSURE OR ADJUSTMENT.

11. ALL UTILITIES IN CONFLICT WITH CONSTRUCTION ARE TO BE ADJUSTED OR RELOCATED BY OTHERS UNLESS NOTED OTHERWISE ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.

12. WHERE THE REQUIRED MINIMUM SEPARATION BETWEEN UTILITIES IS SPECIFIED, THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.

13. LIMITS OF CONSTRUCTION ARE DEFINED IN THE PLANS AND CONSIST OF ROADWAY RIGHTS-OF-WAY, CITY OF TALLAHASSEE PROPERTIES, DRAINAGE RIGHTS-OF-WAY, PERMANENT DRAINAGE AND/OR UTILITY EASEMENTS, AND TEMPORARY CONSTRUCTION EASEMENTS.

14. NO TRENCHES WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT.

15. ALL EXISTING DRAINAGE STRUCTURES AND PIPES, PAVEMENT, SIDEWALKS, CURBS, ETC., WITHIN THE LIMITS OF CONSTRUCTION ARE TO REMAIN UNLESS OTHERWISE NOTED ON THE DRAWINGS OR DIRECTED BY THE ENGINEER. ALL DRAINAGE STRUCTURES, PIPES, PAVEMENT, SIDEWALKS, CURBS, ETC., THAT ARE TO REMAIN THAT ARE DAMAGED DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND IF DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED WITH THE SAME TYPE AND MATERIAL AT NO COST TO THE CITY.

16. ALL STORM MANHOLES OR STRUCTURES DESIGNATED TO BE ABANDONED IN PLACE SHALL BE REMOVED TO A MINIMUM OF THREE FEET BELOW GRADE AND FILLED WITH COMPACTED SAND.

17. EXISTING CONCRETE AND ASPHALTIC CONCRETE DRIVEWAYS AND SIDEWALKS SHALL BE SAW-CUT AS REQUIRED FOR CONSTRUCTION.

18. ALL SIDEWALKS AND CURB RAMPS REMOVED DURING CONSTRUCTION SHALL BE RECONSTRUCTED TO MEET CURRENT ADA STANDARDS.

19. THE CONTRACTOR SHALL PUT FORTH EVERY REASONABLE EFFORT TO MINIMIZE DISRUPTION AND DISTURBANCE OF ADJACENT PROPERTIES. ACCESS BY PROPERTY OWNERS AND RESIDENTS TO THEIR PROPERTY SHALL BE MAINTAINED AT ALL TIMES, AND ANY BARRICADING OF ACCESS MUST BE COORDINATED WITH THE AFFECTED PROPERTY OWNERS AND RESIDENTS.

20. ALL FENCES IN CONFLICT WITH CONSTRUCTION SHALL BE REMOVED AND REPLACED IN THEIR ORIGINAL LOCATIONS OR IN OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR MAY, AT HIS OPTION, USE NEW FENCING MATERIAL OF THE SAME TYPE THAT WAS REMOVED OR REUSE THE FENCING MATERIAL THAT WAS REMOVED IF IT IS UNDAMAGED BY CONSTRUCTION ACTIVITIES. ALL FENCES DAMAGED BY CONSTRUCTION ACTIVITIES ARE TO BE REPLACED WITH NEW FENCING MATERIAL OF THE SAME TYPE THAT WAS REMOVED.

21. THE CONTRACTOR SHALL EXERCISE DUE CARE IN THE REMOVAL OF EXISTING FENCES TO MAINTAIN SECURITY AT THE AFFECTED PROPERTIES AND TO ENSURE THE SAFETY OF PETS, ANIMALS AND CHILDREN. IF IN THE OPINION OF THE ENGINEER, REMOVAL OF A FENCE WILL RESULT IN AN UNACCEPTABLE REDUCTION IN SECURITY OR SAFETY, THE CONTRACTOR SHALL INSTALL A TEMPORARY FENCE AS DIRECTED BY THE ENGINEER PRIOR TO REMOVAL OF THE EXISTING FENCE. THE TEMPORARY FENCE SHALL REMAIN IN PLACE UNTIL THE PERMANENT FENCE IS INSTALLED.

22. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL TREES AND LANDSCAPING ON ADJACENT PROPERTIES, AND WILL BE SOLELY LIABLE FOR DAMAGE TO VEGETATION ON PROPERTIES ADJACENT TO CONSTRUCTION WORK ZONES. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION THAT ARE NOT IDENTIFIED ON THE PLANS TO BE REMOVED SHALL BE PROTECTED TO THE MAXIMUM EXTENT PRACTICABLE. TREE PROTECTION BARRICADES SHALL BE INSTALLED AND MAINTAINED AROUND ALL TREES THAT ARE TO BE PROTECTED AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER.

23. THE CONTRACTOR SHALL NOT DISTURB GRASSING OR LANDSCAPING OUTSIDE CONSTRUCTION WORK ZONES. THE CONTRACTOR SHALL BE SOLELY LIABLE FOR DAMAGE TO VEGETATION OUTSIDE CONSTRUCTION WORK ZONES AND SHALL RESTORE AT NO COST TO THE CITY ANY AREAS THAT ARE DAMAGED INCLUDING AREAS WITHIN THE LIMITS OF CONSTRUCTION OR ON ADJACENT PROPERTIES USING, TO THE EXTENT PRACTICABLE, THE SAME TYPES AND SIZES OF PLANT MATERIAL THAT EXISTED PRIOR TO CONSTRUCTION.

24. THE LOCATION AND CONSTRUCTION OF MAILBOXES SHALL BE IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE UNITED STATES POSTAL SERVICE. WHEN A MAILBOX IN CONFLICT WITH CONSTRUCTION IS REMOVED, THE CONTRACTOR SHALL FURNISH AND INSTALL A TEMPORARY MAILBOX AND SHALL MAINTAIN THE TEMPORARY MAILBOX UNTIL A NEW MAILBOX IS INSTALLED. THE CONTRACTOR SHALL CONSTRUCT A NEW MAILBOX TO MATCH, AS CLOSE AS PRACTICABLE, THE LOCATION, TYPE, SIZE, MATERIAL, AND COLOR OF THE ORIGINAL MAILBOX. IN LIEU OF CONSTRUCTING A NEW MAILBOX, THE EXISTING MAILBOX MAY BE REUSED IF IT MEETS THE RULES AND REGULATIONS OF THE UNITED STATES POSTAL SERVICE AND IS FUNCTIONALLY SOUND.

25. DISTURBED AREAS SHALL BE COMPACTED (AT A MINIMUM) EQUAL TO ADJACENT UNDISTURBED GROUND EXCEPT WHEN OTHERWISE SPECIFIED.

26. PROPERTIES ADJACENT TO WORK ZONES SHALL BE GRADED TO DRAIN WITHIN THE LIMITS OF CONSTRUCTION.

27. ALL DISTURBED AREAS WITHIN CONSTRUCTION WORK ZONES ARE TO BE GRASSED EXCEPT FOR AREAS THAT ARE LANDSCAPED, PAVED, OR BELOW NORMAL WATER LEVEL. EXISTING GRASSED AREAS SHALL BE REPLANTED WITH SOD OF THE SAME GRASS TYPE AS EXISTING, UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER. CENTIPEDE SOD WILL BE USED FOR DISTURBED AREAS NOT CURRENTLY GRASSED. REINFORCEMENT MAT SHALL BE INSTALLED BENEATH SOD PLACED ON SLOPES OF 2H:1V OR STEEPER, AND THE SOD SHALL BE STAPLED. COSTS FOR REINFORCEMENT MAT, STAPLING, FERTILIZING, AND WATERING SHALL BE INCLUDED IN THE UNIT PRICE OF THE PAY ITEM FOR PERFORMANCE TURF.

SUPPLEMENTAL GENERAL NOTES

1. 3DS, INC. PROVIDED PORTIONS OF THE TOPOGRAPHY, BENCHMARKS, RIGHTS-OF-WAY AND UTILITY LOCATION THE COUNTRY CLUB CREEK PORTION OF THIS PROJECT. CITY OF TALLAHASSEE SURVEYING PROVIDED SUPPLEMENTAL RIGHT-OF-WAY AND PROPERTY SURVEYS FOR THE COUNTRY CLUB CREEK PORTION OF THE PROJECT. CITY OF TALLAHASSEE SURVEYING PROVIDED THE TOPOGRAPHY, BENCHMARKS, RIGHTS-OF-WAY AND UTILITY LOCATION INFORMATION FOR THE PUTNAM DRIVE SIDEWALK PORTION OF THE PROJECT. ELEVATIONS FROM ALL SURVEYS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

2. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL VALVE BOXES ON GAS AND WATER MAINS WITHIN THE LIMITS OF CONSTRUCTION THAT ARE TO REMAIN IN SERVICE. PRIOR TO COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES WITHIN CONSTRUCTION AREAS SO THE TOPS ARE FLUSH WITH FINISHED PAVEMENT OR WITH FINISHED GRADE IN UNPAVED AREAS.

3. ALL PUMPS USED FOR DEWATERING AND BYPASS PUMPING WILL BE SCREENED FROM RESIDENTIAL VIEW AND ENCLOSED TO REDUCE NOISE DURING OPERATION. AT NO TIME SHALL PUMPS BE PLACED WITHIN A RESIDENTIAL YARD OR 50 FEET OF A HOME WITHOUT APPROVAL FROM THE CITY. PAYMENT FOR SCREENING AND ENCLOSURE SHALL BE INCLUDED IN THE COST FOR CLEARING AND GRUBBING.

GENERAL NOTES FOR STORMWATER CONSTRUCTION

1. ALL NEW OR REPLACEMENT STORM DRAINS OR CULVERTS SHALL BE CLASS III STEEL REINFORCED CONCRETE PIPE IN ACCORDANCE WITH STANDARD SPECIFICATION 449-4 OR FDOT APPROVED POLYPROPYLENE PIPE UNLESS NOTED OTHERWISE ON THE DRAWINGS. WHEN THE PLANS DESIGNATE A TYPE OF PIPE, THE CONTRACTOR MAY USE ONLY THE TYPE DESIGNATED. THE CONTRACTOR SHALL NOT USE A TYPE OF PIPE NOT DESIGNATED ON THE DRAWINGS WITHOUT WRITTEN APPROVAL FROM THE ENGINEER. ALL PIPES SHALL BE CUT FLUSH WITH INSIDE OF DRAINAGE STRUCTURE.

2. ALL REINFORCED CONCRETE PIPE SHALL BE INSTALLED USING SELECT BEDDING MATERIAL TO PROVIDE A FOUR-INCH MINIMUM DEPTH FOUNDATION BENEATH THE BARREL OF THE PIPE AND FOR BACKFILL UP TO THE SPRINGLINE (CENTER) OF THE PIPE. BACKFILL AROUND POLYPROPYLENE PIPE SHALL BE IN ACCORDANCE WITH THE MANUFACTURERÕS SPECIFICATIONS.

3. ALL JOINTS OF CONCRETE PIPES, CULVERTS, AND STORM SEWERS SHALL HAVE A FILTER FABRIC JACKET AS DETAILED ON STANDARD INDEX NO. 280, UNLESS NOTED OTHERWISE ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.

4. ALL PIPE CULVERTS AND STORM SEWERS 48-INCHES OR LESS IN DIAMETER SHALL BE VIDEO TAPED IN ACCORDANCE WITH SECTION 430-4.8 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

5. ALL CURB INLETS, DITCH BOTTOM INLETS, AND MANHOLES SHALL HAVE TRAFFIC BEARING FRAMES AND COVERS OR GRATES MEETING HS-20 LOADING REQUIREMENTS UNLESS OTHERWISE SHOWN ON THE PLANS.

6. ALL STORM DRAIN COVERS SHALL BE TYPE USF TJ (U.S. FOUNDRY NO. 8017195), NPRI5-728 (EJ GROUP COVER NO. 3062A2), OR APPROVED EQUAL.

7. ALL TYPE J STRUCTURE BOTTOMS SHALL HAVE A MINIMUM 6'-0" WALL HEIGHT WHEN POSSIBLE.

8. ALL GRATES SHALL BE CHAINED AND LOCKED IN ACCORDANCE WITH STANDARD INDEX NO. 201. COST OF EYEBOLTS AND CHAIN SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE STRUCTURES.

9. UTILITIES IN CONFLICT WITH THE INSTALLATION OF A NEW STORM DRAIN ARE TO BE ADJUSTED OR RELOCATED TO ELIMINATE THE CONFLICT. IF THE CONFLICT CANNOT BE REASONABLY AVOIDED, A CONFLICT STRUCTURE WITH ACCESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD INDEX NO. 307 WITH THE EXCEPTION THAT FOR UTILITY CONFLICT CONDITION II (PRESSURE OR FLUID CARRIER INSTALLATIONS), A CARRIER PIPE IS NOT REQUIRED IF DUCTILE IRON PIPE IS USED FOR THE UTILITY AND NO PIPE JOINTS ARE LOCATED WITHIN THE CONFLICT STRUCTURE. "NOTCHING" OF A STORM DRAIN PIPE OR STRUCTURE TO ACCOMMODATE A UTILITY SHALL NOT BE ALLOWED. NO UTILITY SHALL BE INSTALLED THROUGH ANY PORTION OF A STORM DRAIN PIPE WITHOUT A CONFLICT STRUCTURE.

GENERAL NOTES FOR UTILITY CONSTRUCTION - POTABLE WATER

1. ALL UTILITY RELOCATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF TALLAHASSEE UTILITY STANDARDS AND SPECIFICATIONS.

2. POTABLE WATER SERVICE WILL BE MAINTAINED TO RESIDENCES AND BUSINESSES AT ALL TIMES, EXCEPT DURING THE TRANSFER OF SERVICES.

3. KEEP FIRE HYDRANTS OPERABLE AND ACCESSIBLE AT ALL TIMES. DO NOT PLACE EQUIPMENT OR MATERIALS WITHIN 15 FEET OF ANY FIRE HYDRANT. FIRE HYDRANTS TAKEN OUT-OF-SERVICE SHALL BE COVERED WITH BAGS, OR AS DIRECTED BY THE CITY'S INSPECTOR, TO CLEARLY INDICATE THAT THE HYDRANT IS INOPERABLE. THE CONTRACTOR SHALL REPORT OUT OF SERVICE HYDRANTS TO THE CITY INSPECTOR FOR NOTIFICATION TO THE FIRE DEPARTMENT DISPATCH CENTER.

4. DO NOT CUT, CAP, OR PLUG EXISTING LOOPED PUBLIC POTABLE WATER MAINS WITHOUT THE PRIOR APPROVAL OF THE CITY.

5. REPLACE ALL EXISTING SERVICES WITHIN THE CONSTRUCTION LIMITS, WHETHER SHOWN OR NOT, INSTALL NEW METER SETTINGS TO THE RIGHTS-OF-WAY LINES (UNLESS OTHERWISE NOTED), RECONNECT AND TEST ANY BACK FLOW DEVICES AND/OR PRESSURE REDUCING VALVES, AND RECONNECT TO THE CUSTOMERS' PLUMBING. WHERE THERE IS MORE THAN ONE METER AT A TAP, A NEW MANIFOLD WILL BE BUILT AND INSTALLED PER THE LATEST WATER DETAIL SHEET. IT IS THE CONTRACTOR'S RESPONSIBILITIES TO FIELD INSPECT AND DETERMINE THE LOCATION AND NUMBER OF METERS AT A TAP.

6. SET METER BOXES WITH ADEQUATE ROOM BEHIND THE METER TO REPAIR LEAKS WITHOUT DIGGING UP SIDEWALKS, PAVEMENT, WALLS, SPRINKLER LINES, ETC.; THERE WILL BE NO BOXES IN SWALES, UNDER DOWN SPOUTS, NEXT TO CONDENSATE DRAINS OR ANY OTHER SIMILAR SITUATION THAT MAY FILL THE BOX WITH WATER AND/OR MUD. NO STANDING WATER WILL BE ALLOWED IN METER BOXES.

GENERAL NOTES FOR UTILITY CONSTRUCTION - WASTEWATER

1. ALL UTILITY RELOCATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF TALLAHASSEE UTILITY STANDARDS AND SPECIFICATIONS.

2. MAINTAIN WASTEWATER COLLECTION SERVICE TO ALL CUSTOMERS AT ALL TIMES. PROVIDE WASTEWATER FLOW DIVERSION, AS NEEDED, TO MAINTAIN CONTINUOUS SANITARY SEWER SERVICE DURING CONSTRUCTION. WASTEWATER FLOW DIVERSION MAY CONSIST OF BY-PASS PUMPING, PUMPS, TRUCKS AND TRANSPORTATION; OR ANY OTHER METHOD APPROVED BY THE CITY.

3. DISPOSE OF SANITARY SEWER STRUCTURES AND PIPING, WHICH ARE REMOVED TO CONSTRUCT NEW SANITARY SEWER FACILITIES. THE COST IS INCIDENTAL TO PAY ITEMS FOR NEW SANITARY STRUCTURES AND PIPING.

4. EXISTING SANITARY SEWER PIPING AND STRUCTURES THAT ARE DESIGNATED ON THE PLANS TO BE PLACED OUT-OF-SERVICE (IN PLACE) SHALL BE PLUGGED AT INFLUENT AND EFFLUENT ENDS WITH MASONRY PLUGS UNLESS OTHERWISE NOTED. EXISTING STRUCTURES SHALL BE REMOVED THREE FEET BELOW FINISHED GRADE AND FILLED WITH EXCAVATABLE FLOWABLE FILL. THE COST IS INCIDENTAL TO PAY ITEMS FOR NEW SANITARY SEWER STRUCTURES AND PIPING.

5. SANITARY SEWER SERVICES - THE PLANS SHOW APPROXIMATE LOCATIONS OF ACTIVE AND INACTIVE SEWER SERVICE LATERALS, BASED ON PIPELINE INSPECTIONS CONDUCTED BY THE CITY. FIELD-VERIFY THE SIZE, MATERIAL AND LOCATION OF EXISTING ACTIVE SEWER LATERALS. ADJUST AND RECONNECT LATERALS AT THEIR FIELD-VERIFIED LOCATIONS AND SIZES, UNLESS OTHERWISE DIRECTED BY THE CITY. INSPECT ACTIVE PVC SEWER SERVICE LATERALS AND REPLACE IF NEEDED. TIE NEW SEWER SERVICE LATERALS TO EXISTING LATERALS WITH A CLEAN OUT AT THE PROPERTY LINE. PLUG INFLUENT AND EFFLUENT ENDS OF INACTIVE SEWER SERVICES WITH GROUT TO PLACE THEM OUT-OF-SERVICE.

6. SANITARY SEWER LATERALS THAT ARE TO BE CONSTRUCTED MAY BE INSTALLED BY OPEN-CUT, PIPE BURSTING OR OTHER TECHNIQUES ACCEPTABLE TO THE CITY. THE BID PRICE SHALL BE FULL COMPENSATION FOR SUCH INSTALLATIONS. PIPE BURSTING REQUIRES PRE AND POST CONSTRUCTION TV INSPECTIONS.

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53306
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET GENERAL NOTES

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

GENERAL PAY ITEM NOTES:

1. NO SEPARATE PAYMENT WILL BE MADE FOR DEWATERING. THE COSTS FOR DEWATERING SHALL BE INCLUDED IN THE UNIT PRICES FOR ANY ITEMS REQUIRING DEWATERING.

2. NO SEPARATE PAYMENT WILL BE MADE FOR FILTER FABRIC. THE COSTS FOR FILTER FABRIC SHALL BE INCLUDED IN THE UNIT PRICES FOR ANY ITEMS REQUIRING FILTER FABRIC.

3. NO SEPARATE PAYMENT WILL BE MADE FOR VIDEO TAPING PIPE CULVERTS. THE COSTS FOR VIDEO TAPING ARE INCLUDED IN THE UNIT PRICES FOR PIPE CULVERT.

4. ADDITIONAL QUANTITIES OF EROSION CONTROL AND/OR TREE PROTECTION ITEMS MAY BE NECESSARY AS DETERMINED DURING CONSTRUCTION BY THE CONTRACTOR, THE ENVIRONMENTAL INSPECTOR, OR BY THE ENGINEER AND MUST BE APPROVED BY THE ENGINEER.

5. UNIT PRICES FOR PIPES, CULVERTS, SEWER PIPE AND WATER MAIN INCLUDE THE COSTS FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVAL OF 1.5 INCH MINIMUM THICKNESS OF ASPHALT PAVEMENT MILLINGS OR FINE TYPE SP ASPHALTIC CONCRETE AT THE GROUND SURFACE OF ALL PIPE AND BOX CULVERT TRENCHES IN PAVED AREAS FOR THE PURPOSE OF SEDIMENT AND EROSION CONTROL UNTIL THE FINAL PAVEMENT IS PLACED.

STORMWATER PAY ITEM NOTES:

101-1: MOBILIZATION
THE UNIT PRICE ALSO INCLUDES ALL COSTS FOR PREPARATION OF AN APPROVED CONSTRUCTION PROGRESS SCHEDULE, AN APPROVED EROSION CONTROL PLAN, AN APPROVED TRAFFIC CONTROL PLAN, AN APPROVED DEWATERING PLAN, THE PRECONSTRUCTION SURVEY, PREPARING AND SUBMITTING APPROVED SHOP DRAWINGS, AND FURNISHING, INSTALLING, AND REMOVING THE PROJECT SIGNS.

102-1: MAINTENANCE OF TRAFFIC
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS REQUIRED TO IMPLEMENT THE APPROVED TRAFFIC CONTROL PLAN TO SAFELY MAINTAIN TRAFFIC AROUND OR THROUGH THE WORK ZONE NOT INCLUDED FOR PAYMENT UNDER OTHER RELATED PAY ITEMS, INCLUDING WARNING AND REGULATORY SIGNS, MESSAGE BOARDS, DRUMS, BARRICADES, CHANNELIZING DEVICES, TEMPORARY CONCRETE BARRIER, WARNING LIGHTS, FLAGGERS, BUSINESS ENTRANCE SIGNS, MAINTENANCE OF EXISTING DRIVEWAYS, TEMPORARY PAVEMENT, AND REMOVAL AND REINSTALLATION OF EXISTING SIGNS IN CONFLICT WITH CONSTRUCTION AS DIRECTED BY THE ENGINEER. NO ADJUSTMENTS WILL BE MADE TO THE CONTRACT PRICE FOR INCREASES IN CONTRACT TIME.

102-70: TEMPORARY BARRICADE FENCE (ORANGE)
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS NECESSARY FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY BARRICADE FENCE. THIS ITEM IS TO BE USED FOR PEDESTRIAN SAFETY, TREE PROTECTION, OR AS DIRECTED BY THE ENGINEER.

104-10-3: SEDIMENT BARRIER
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS NECESSARY FOR THE INSTALLATION AND MAINTENANCE OF SEDIMENT BARRIERS AS SHOWN ON THE PLANS AND/OR DESCRIBED IN THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL. THE PRICE ALSO INCLUDES PERIODIC REMOVAL AND DISPOSAL OF ACCUMULATED SEDIMENT, AND REMOVAL AND DISPOSAL OFF-SITE OF SEDIMENT BARRIERS AT COMPLETION OF CONSTRUCTION.

104-11: FLOATING TURBIDITY BARRIER
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS NECESSARY FOR THE INSTALLATION AND MAINTENANCE OF FLOATING TURBIDITY BARRIER AS DESCRIBED IN THE "STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL".

104-15: SOIL TRACKING PREVENTION DEVICE
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS NECESSARY FOR THE INSTALLATION AND MAINTENANCE OF SOIL TRACKING PREVENTION DEVICES AS SHOWN ON THE PLANS AND/OR DESCRIBED IN THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, INCLUDING EXCAVATION, GRADING, FILTER FABRIC, AND ROCK. THE PRICE ALSO INCLUDES REMOVAL AND DISPOSAL OFF-SITE OF ALL MATERIALS AT COMPLETION OF CONSTRUCTION, AND FURNISHING AND PLACING SUITABLE MATERIAL AS REQUIRED TO REPLACE EXCAVATED MATERIAL.

110-1-1: CLEARING AND GRUBBING
THE UNIT PRICE ALSO INCLUDES REMOVAL AND DISPOSAL OF ASPHALT, BASE, SUB-BASE, CURBS, SIDEWALKS, DRIVEWAYS, DRAINAGE STRUCTURES, PIPES, FENCES, SANITARY SEWER PIPES & STRUCTURES, AND ALL OTHER STRUCTURES AND OBSTRUCTIONS NECESSARY TO BE REMOVED AND FOR WHICH OTHER ITEMS OF THE CONTRACT DO NOT SPECIFY THE REMOVAL THEREOF. PARTIAL PAYMENTS WILL BE BASED UPON THE ESTIMATED TOTAL VALUE OF WORK COMPLETED TO THE DATE OF THE ESTIMATE AS DETERMINED BY THE ENGINEER. ALL PARTIAL ESTIMATES AND PAYMENTS ARE SUBJECT TO CORRECTION IN SUBSEQUENT ESTIMATES AND PAYMENT. THE UNIT PRICE ALSO INCLUDES ALL COSTS FOR REMOVAL OF EXISTING FENCES AND RELOCATION OR REPLACEMENT WITH NEW FENCE OR WITH THE FENCING MATERIAL THAT WAS REMOVED IF IT IS UNDAMAGED, AND FOR THE RELOCATION OR REPLACEMENT OF MAILBOXES.

120-1 AND 120-6: REGULAR EXCAVATION AND EMBANKMENT
FINAL PAY QUANTITY WILL BE PLAN QUANTITY WITH NO CONSIDERATION FOR SPECIFICATION TOLERANCES. THE UNIT PRICE ALSO INCLUDES ALL COSTS FOR TURBIDITY MONITORING IN COMPLIANCE WITH THE ENVIRONMENTAL PERMITS.

334-1-11, 334-1-12, 334-1-13: SUPERPAVE ASPHALTIC CONCRETE
THE UNIT PRICE ALSO INCLUDES ADJUSTMENT OF ALL EXISTING UTILITY FRAMES AND COVERS AND ALL WATER AND GAS VALVE BOXES WITHIN THE LIMITS OF CONSTRUCTION TO BE FLUSH WITH FINISHED PAVEMENT. THE CONTRACTOR SHALL INSTALL THE PAVEMENT IN LAYERS AS SHOWN IN THE TYPICAL PAVEMENT RECONSTRUCTION SECTION(S).

400-0-13: CONCRETE, CLASS NS, STEPS
THE UNIT PRICE FOR ALSO INCLUDES FURNISHING SELECT MATERIAL FOR BACKFILL WHEN SUITABLE MATERIAL IS NOT AVAILABLE ON SITE AND THE COST OF REINFORCING STEEL REQUIRED BY DETAILS.

400-4-2: CLASS IV CONCRETE (ENDWALL & WINGWALL)
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS NECESSARY TO FURNISH AND INSTALL THE ENDWALLS AND WINGWALLS, INCLUDING SHEETING AND/OR SHORING, DEWATERING, FILTER FABRIC, GROUT OR FLOWABLE BACKFILL BETWEEN THE NEW AND EXISTING CULVERTS, FURNISHING, PLACING AND COMPACTING SELECT BEDDING MATERIAL, COARSE AGGREGATE, AND FURNISHING SELECT MATERIAL FOR BACKFILL.

410-70-1006: PRECAST CONCRETE BOX CULVERT
THE UNIT PRICE ALSO INCLUDES PAYMENT FOR SHEETING AND/OR SHORING, DEWATERING, FILTER FABRIC, FURNISHING, PLACING AND COMPACTING SELECT BEDDING MATERIAL, AND FURNISHING SELECT MATERIAL FOR BACKFILL WHEN SUITABLE MATERIAL IS NOT AVAILABLE ON SITE.

425-1-311, 321, 351, 411, 412, 451, 461: CURB INLETS
UNLESS OTHERWISE NOTED IN THE PLANS, THE UNIT PRICE ALSO INCLUDES ALL COSTS FOR FURNISHING AND INSTALLING TWO-PIECE COVERS AND FRAMES WITH 3'-0" OPENINGS WHEN THE DEPTH OF THE STRUCTURES EXCEED 5'-0".

425-1-371: CURB INLET, TYPE 1HC & 2HC
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS REQUIRED TO CONSTRUCT A TYPE 1HC OR TYPE 2HC CURB INLET AS SHOWN ON THE PLANS, INCLUDING EXCAVATION, SHEETING AND/OR SHORING, DEWATERING, CONCRETE, REINFORCING STEEL, CAST IRON RING AND COVER, NOSE REINFORCING, AND RISER AND/OR STRUCTURE BOTTOM AS CALLED FOR ON THE PLANS.

425-1-521, 545: DITCH BOTTOM INLETS
UNLESS OTHERWISE NOTED IN THE PLANS, THE UNIT PRICES ALSO INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING TRAFFIC BEARING GRATES MEETING HS-20 LOADING REQUIREMENTS. THE UNIT PRICES FOR DITCH BOTTOM INLETS WITH SLOTS ALSO INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING 1 INCH DIAMETER POWDER COATED STEEL BARS CAST INTO THE STRUCTURES AS SHOWN IN THE PLANS.

425-2-41, 91: MANHOLES AND JUNCTION BOXES
UNLESS OTHERWISE NOTED IN THE PLANS, THE UNIT PRICES ALSO INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING TWO-PIECE COVERS AND FRAMES WITH 3'-0" OPENINGS WHEN THE DEPTH OF THE STRUCTURE EXCEEDS 5'-0".

430-175-115, 118, 124, 130, 136: PIPE CULVERT, OPTIONAL MATERIAL
THE UNIT PRICES ALSO INCLUDE PAYMENT FOR SHEETING AND/OR SHORING, DEWATERING, FILTER FABRIC, FURNISHING, PLACING AND COMPACTING SELECT BEDDING MATERIAL, AND FURNISHING SELECT MATERIAL FOR BACKFILL WHEN SUITABLE MATERIAL IS NOT AVAILABLE ON SITE.

430-834-1: CONCRETE COLLARS & JACKETS
THE UNIT PRICES CONSTITUTE FULL COMPENSATION FOR ALL LABOR AND MATERIALS REQUIRED TO INSTALL CONCRETE COLLARS FOR JOINING MAINLINE PIPES AND STUB PIPES, AND FOR INSTALLING CONCRETE JACKETS FOR CONNECTING DISSIMILAR TYPES OF PIPE AND FOR CONNECTING CONCRETE PIPES WITH DISSIMILAR JOINTS.

470-1: TEMPORARY ENDWALL AND WINGWALLS (TIMBER):
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS NECESSARY TO FURNISH AND INSTALL THE TEMPORARY TIMBER ENDWALLS AND WINGWALLS, INCLUDING SHEETING AND/OR SHORING, DEWATERING, FILTER FABRIC, GROUT OR FLOWABLE BACKFILL BETWEEN THE NEW AND EXISTING CULVERTS, FURNISHING, PLACING AND COMPACTING SELECT BEDDING MATERIAL, COARSE AGGREGATE, CONCRETE, REINFORCING AND FURNISHING SELECT MATERIAL FOR BACKFILL.

470-2: PERMANENT ENDWALL AND WINGWALLS (CONCRETE):
THE UNIT PRICE CONSTITUTES FULL COMPENSATION FOR ALL LABOR AND MATERIALS NECESSARY TO FURNISH AND INSTALL THE PERMANENT CONCRETE ENDWALLS AND WINGWALLS, INCLUDING SHEETING AND/OR SHORING, DEWATERING, FILTER FABRIC, GROUT OR FLOWABLE BACKFILL BETWEEN THE NEW AND EXISTING CULVERTS, FURNISHING, PLACING AND COMPACTING SELECT BEDDING MATERIAL, COARSE AGGREGATE, CONCRETE, REINFORCING AND FURNISHING SELECT MATERIAL FOR BACKFILL.

522-1, 522-2: CONCRETE SIDEWALK
THE UNIT PRICES ALSO INCLUDE FURNISHING AND INSTALLING DETECTABLE WARNING DEVICES.

524-1-2, 524-1-49: CONCRETE DITCH PAVING, 4" NON-REINFORCED AND 6" REINFORCED
THE UNIT PRICE WILL INCLUDE PAYMENT FOR ALL LABOR AND MATERIALS NECESSARY TO FURNISH AND INSTALL THE CONCRETE DITCH PAVEMENT, INCLUDING BUT NOT LIMITED TO DEWATERING, FILTER FABRIC, FURNISHING, PLACING AND COMPACTING SELECT BEDDING MATERIAL AND COARSE AGGREGATE AND REINFORCING WHEN REQUIRED.

530-3-4: RIPRAP RUBBLE DITCH LINING
THE UNIT PRICE WILL INCLUDE PAYMENT FOR ALL LABOR AND MATERIALS NECESSARY TO FURNISH AND INSTALL THE RIPRAP RUBBLE, INCLUDING BUT NOT LIMITED TO EXCAVATION, DEWATERING, FILTER FABRIC, AND FURNISHING AND PLACING THE RIPRAP RUBBLE AS DIRECTED IN PLANS.

550-10-222: FENCING, TYPE B
THE UNIT PRICES CONSTITUTE FULL COMPENSATION FOR FURNISHING AND ERECTING METAL CHAIN LINK FENCE WITH BLACK TYPE IV M181 CLASS A VINYL COATED FABRIC, INCLUDING ALL POSTS, RAILS, TRUSS RODS, TOP RAILS AND/OR TENSION WIRES AS INDICATED ON THE PLANS, TIE WIRES, STRETCHER BARS, MISCELLANEOUS FITTINGS, ANCHOR PLATES, ANCHORS, NUTS AND WASHERS, AND OTHER HARDWARE VINYL COATED OR PAINTED TO MATCH THE COLOR OF THE FABRIC.

570-1-2: PERFORMANCE TURF, SOD, CENTIPEDE AND ST. AUGUSTINE
THE UNIT PRICES CONSTITUTE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED FOR ESTABLISHING A STAND OF GRASS BY SODDING IN ACCORDANCE WITH SECTION 570 OF THE STANDARD SPECIFICATIONS, INCLUDING FURNISHING AND PLACING SOD, PEGGING WHEN SPECIFIED IN THE PLANS, LAPPING AND PINNING WHEN SLOPE IS 2:1 OR GREATER, AND FURNISHING AND APPLYING FERTILIZER AND WATER. THE UNIT PRICES ALSO INCLUDE AND MAINTENANCE, INCLUDING LITTER REMOVAL AND MOWING UNTIL FINAL ACCEPTANCE. SOD GRASS TYPE TO MATCH EXISTING ADJACENT GRASS TYPE.

WATER & SEWER PAY ITEM NOTES:

SMH-0406, SMH-0410, SMH-0414, CMH-10: SANITARY MANHOLE
THE UNIT PRICE FOR THE ABOVE ITEMS INCLUDES THE COST OF ADJUSTING AS NEEDED FOR ROADWAY MILLING AND RESURFACING.

GSM-01-0810, GSM-01-1006, GSM-01-1008, GSM-01-1010, GSM-01-1012, GSM-01-1014: GRAVITY SEWER MAIN
THE UNIT PRICE FOR THE ABOVE ITEMS INCLUDES ALL WORK FOR INSTALLING GRAVITY SEWER MAIN AS DESCRIBED IN THE CITY OF TALLAHASSEE "PAY ITEM MANUAL FOR WATER AND SEWER CONSTRUCTION", DATED OCTOBER 2018, EXCEPT THE COST OF STABILIZED SUBGRADE, ROADWAY BASE, AND ASPHALT PATCHING. STABILIZED SUBGRADE, ROADWAY BASE, AND ASPHALT PATCHING SHALL BE PAID FOR IN THE UNIT PRICE FOR THAT WORK.

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
PAY ITEM NOTES

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

EUTAW, INC
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

QTY.	STR.	STA	SIDE	DESCRIPTION	PIPE	LENGTH	BARRELS	STORM DRAIN PIPE					INLETS							MH		MES	DBI		CONC	CONC.	CONC.	DESCRIPTION
	NO.				SIZE								P-1	P 2	P 5	HC-1	J 5	J-6	J 1	P-7	J 8		C	D	CLASS I	CLASS I	DITCH PAVT.	
								15"	18"	24"	30"	36"	<10	<10	<10	<10	<10	<10	>10	<10	<10	18"	<10	PARTIAL	COLLARS	CY	SY	
P	S 1	13+70	LT	DBI	CBC																			1				Chimney to CBC
F																												
P	S 2	15+10	LT	DBI	C BC																			1				Chimney to CBC
F																												
P	S 3	16+25	LT	DBI	CBC																			1				Chimney to CBC
F																												
P	S 18	21+33	LT	DBI, Pipe	15	14	1	14															1					
F																												
P	S 19	21+47	LT	MH																1								Connect to Exist. 15" ADS
F																												
P	S 20	21+70	RT	Inlet, Pipe	18	180	1		180				1															
F																												
P	S 21	23+53	RT	Inlet, Pipe	18	136	1		136				1															
F																												
P	S 29	24+93	RT	Inlet, Pipe	36	22	1					22							1						2			5' Diameter, Includes connection to CBC
F																												
P	S 30	27+28	RT	Inlet, Pipe	36	232	1					232					1											Alt B. 4x6
F																												
P	S 31	28+08	LT	DBI, Pipe	18	24	1		24														1				4.8	
F																												
P	S 32	28+18	RT	MH, Pipe	36	86	1					86									1							Alt B. 4x6
F																												
P	S 33	29+18	RT	MH, Pipe	30	98	1				98										1							5' Diameter
F																												
P	S 34	30+52	RT	Inlet, Pipe	30	132	1				132		1															
F																												
P	S 35	31+40	RT	Inlet, Pipe	30	82	1				82							1										Alt B. 5x5
F																												
P	S 36	31+46	LT	EW, Pipe	24	25	1			25																2.24	12	
F																												
P	S 37	32+20	RT	Inlet, Pipe	24	75	1			75			1															
F																												
P	S 38	33+05	RT	Inlet, Pipe	24	81	1			81					1													Alt. B
F																												
P	S 39	34+30	RT	Inlet, Pipe	24	126	1			126			1															
F																												
P	S 40	34+30	LT	DBI, Pipe	24	27	1			27													1				1.2	
F																												
P	S 41	34+23	LT	MES, PIPE	18	7	1		7													1						
F																												
P	S 50	39+00	RT	Inlet, Pipe	18	41	1		41				1															
F																												
P	S 51	39+45	RT	Inlet, Pipe	18	26	1		26				1															
F																												
P	S 52	39+69	RT	Inlet, Pipe	24	31	1			31			1															Cat-In Place Top
F																												
P	S 53	40+03	RT	Inlet									1															Cat-In Place Top
F																												
P	S 54	40+32	RT	Inlet, Pipe	24	31	1			31				1														
F																												
P	S 55	41+61	RT	Inlet, Pipe	24	125	1			125			1															
F																												
P	S 56	42+40	RT	Inlet, Pipe	24	76	1			76			1															
F																												
P	S 57	42+98	RT	Inlet, Pipe	24	55	1			55						1												15' THROAT
F																												
P	S 60	48+40	LT	Inlet, Pipe	18	38	1		38						1													
F																												
P	S 61	44+59	RT	Inlet, Pipe	24	62	1		54	8			1												1			Alt B., Includes 18" Pipe to connect
F																												to Existing Pipe w/ Conc. Collar
P	S 62	44+59	RT	EW	24		1																			2.24	8	
F																												
								14	506	660	312	340	12	1	2	1	1	1	1	1	2	1	3	3	3	4.48	26	

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature Date

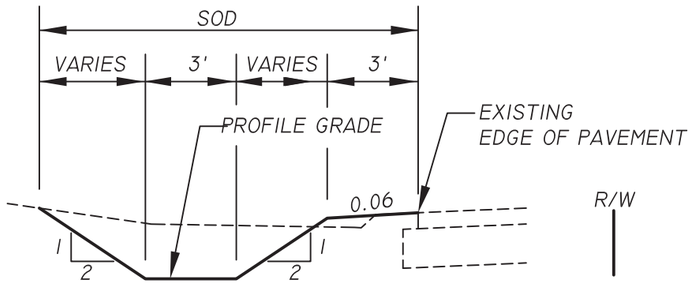
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
SUMMARY OF DRAINAGE STRUCTURES

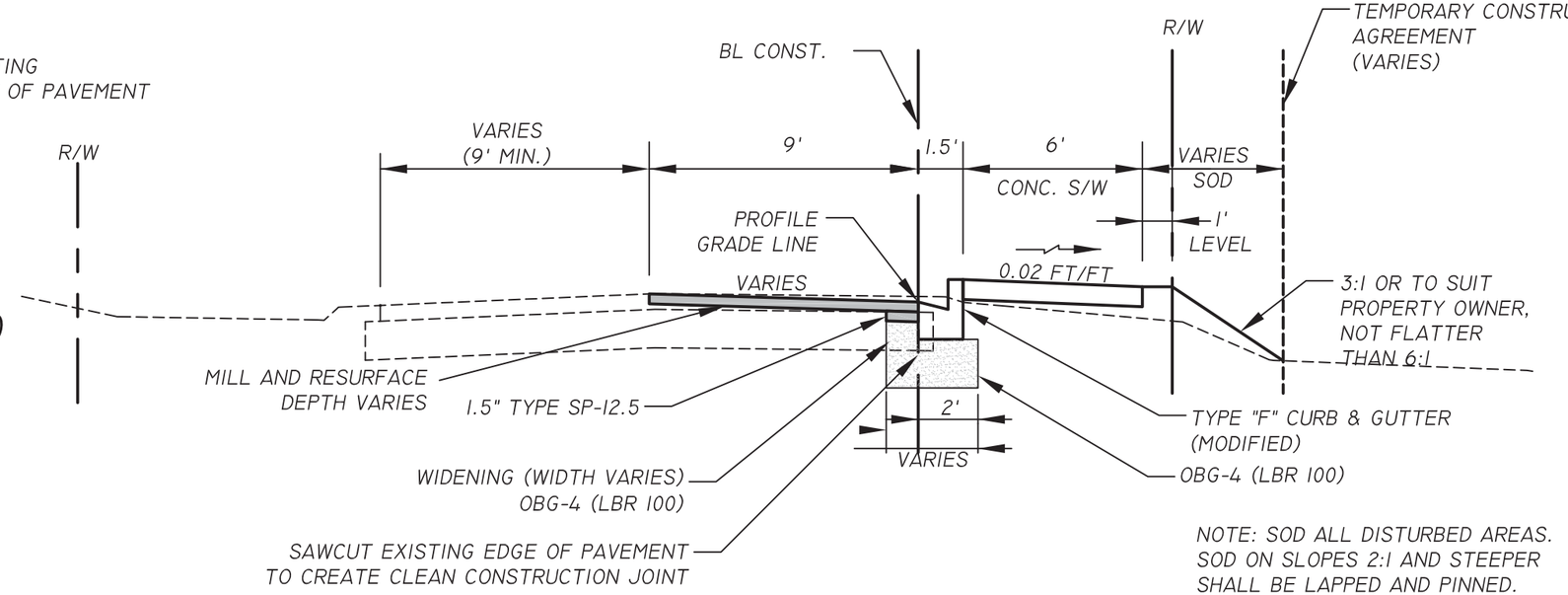
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

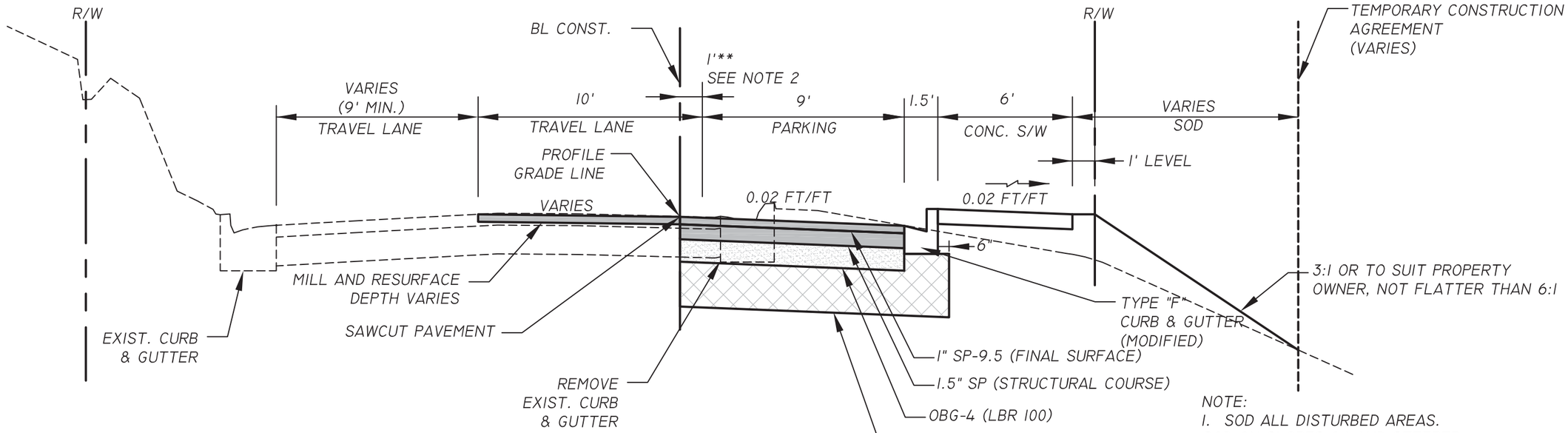


DITCH TYPICAL
STA. 31+20.00 TO 33+40.00



NOTE: SOD ALL DISTURBED AREAS. SOD ON SLOPES 2:1 AND STEEPER SHALL BE LAPPED AND PINNED.

TYPICAL SECTION #1
STATION 21+26.20 TO 43+46.80



NOTE:
1. SOD ALL DISTURBED AREAS. SOD ON SLOPES 2:1 AND STEEPER SHALL BE LAPPED AND PINNED.

2. 10' LANE TRANSITION OCCURS BETWEEN STATION 43+46.80 AND 44+51.37. SEE SIDEWALK AND CURB PLANS.

TYPICAL SECTION #2
SEGMENT 2
STATION 43+46.80 TO 47+96.16

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

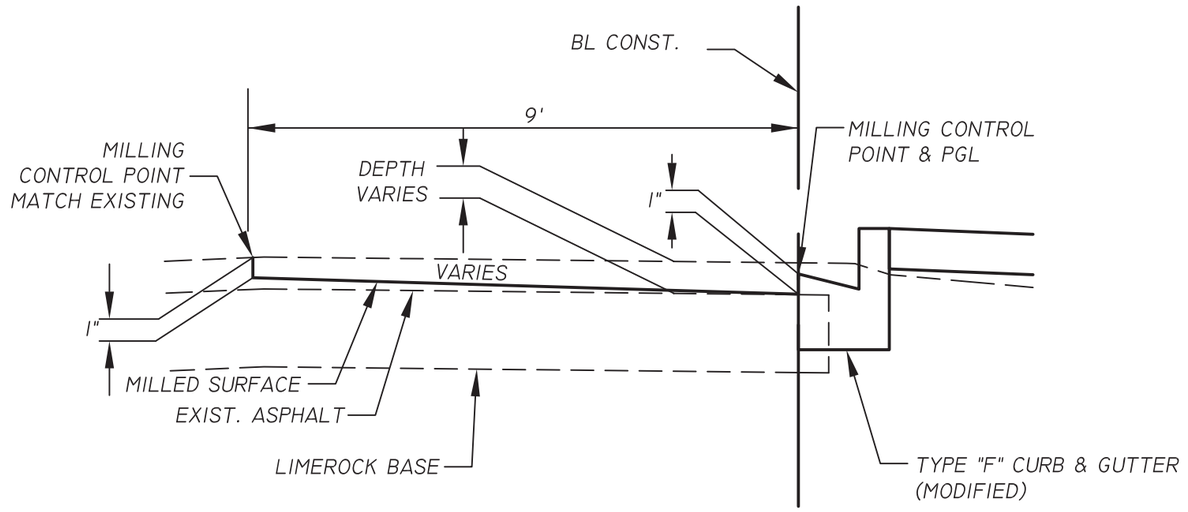
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
TYPICAL SECTIONS & DETAILS

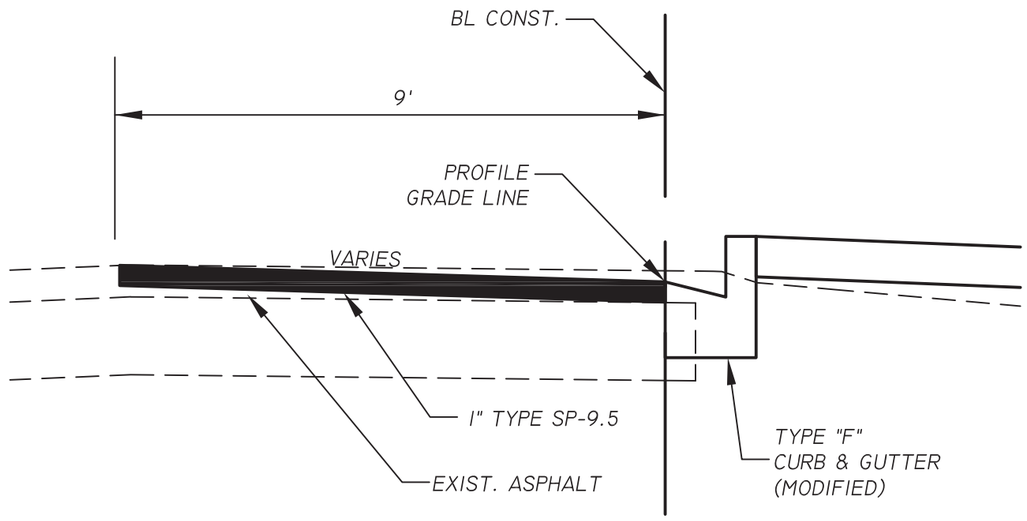
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering (Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



MILLING DETAIL



RESURFACING DETAIL

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

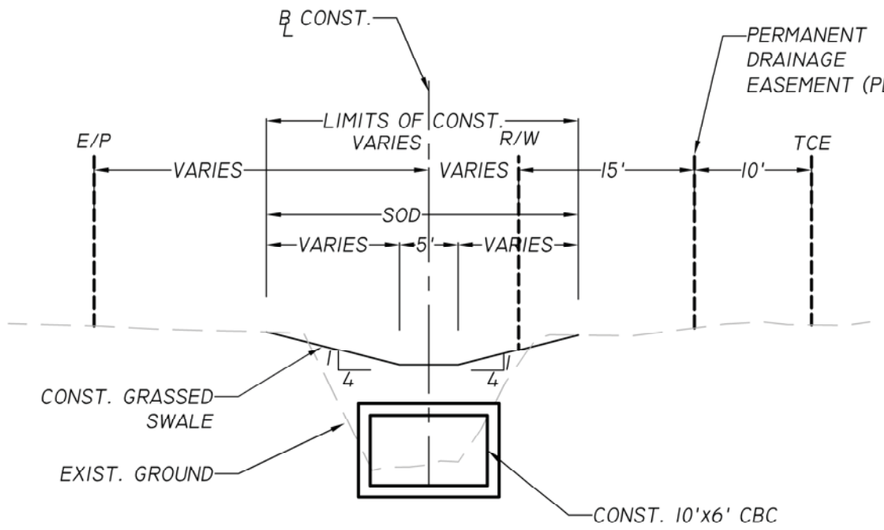
SHEET
TYPICAL SECTIONS & DETAILS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering (Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

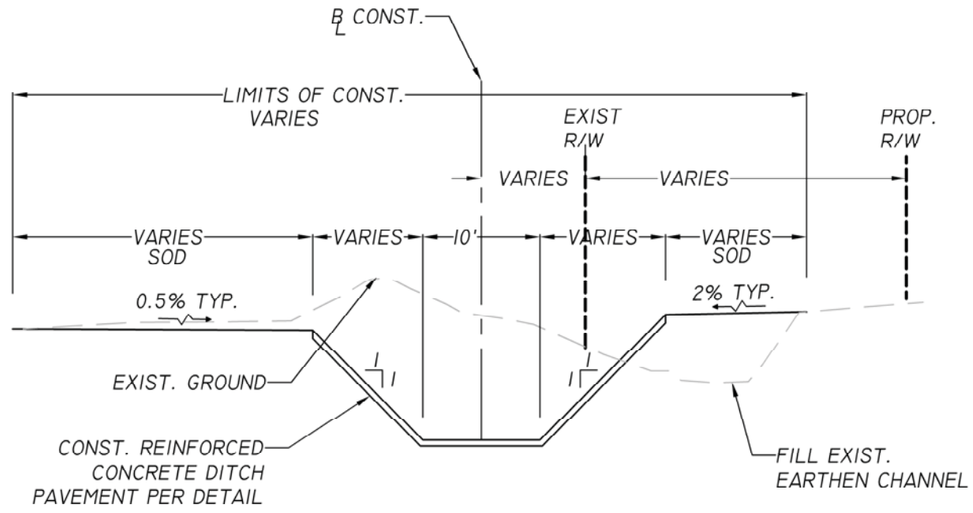
User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\Typical.dwg 03/05/2019 11:12:01 AM



NOTE: SOD ALL DISTURBED AREAS. SLOPES 2:1 AND GREATER SHALL BE LAPPED AND PINNED

CONCRETE BOX CULVERT & SWALE STA. 13+60 TO 17+25

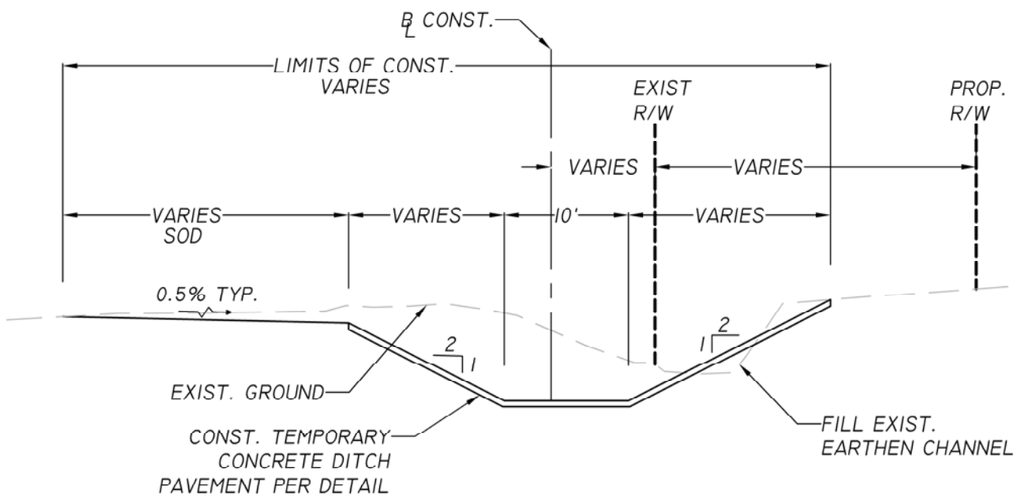
NTS



NOTE: SOD ALL DISTURBED AREAS. SLOPES 2:1 AND GREATER SHALL BE LAPPED AND PINNED

CONCRETE DITCH PAVEMENT STA. 18+41.56 TO 19+50

NTS



NOTES:

1. THIS SECTION WILL TRANSITION ALIGNMENT AND GRADE TO MATCH EXISTING AT STATION 20+50.
2. SOD ALL DISTURBED AREAS. SLOPES 2:1 AND GREATER SHALL BE LAPPED AND PINNED.

TEMPORARY TRANSITION STA. 19+50 TO 20+50

NTS

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/04/2019
REVISIONS:
1
2
3
4
5

SHEET
TYPICAL SECTIONS AND DETAILS

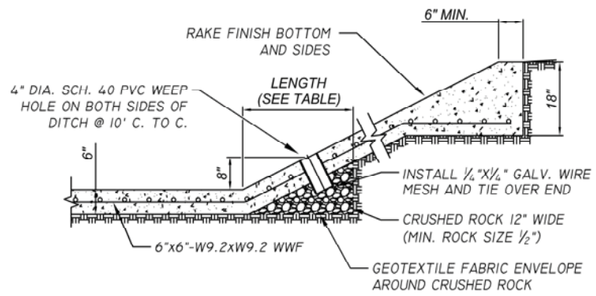
PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

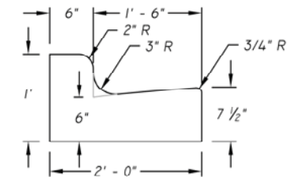
WEEP HOLE LENGTH AND CRUSHED ROCK QUANTITIES		
SIDE SLOPE	LENGTH	CRUSHED ROCK
2H:1V	2.25 FT	1.14 CU.FT.
3H:1V	2.75 FT	1.20 CU.FT.
4H:1V	3.25 FT	1.29 CU.FT.

QUANTITIES LISTED ARE FOR INFORMATION ONLY.

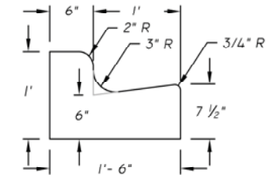


SECTION

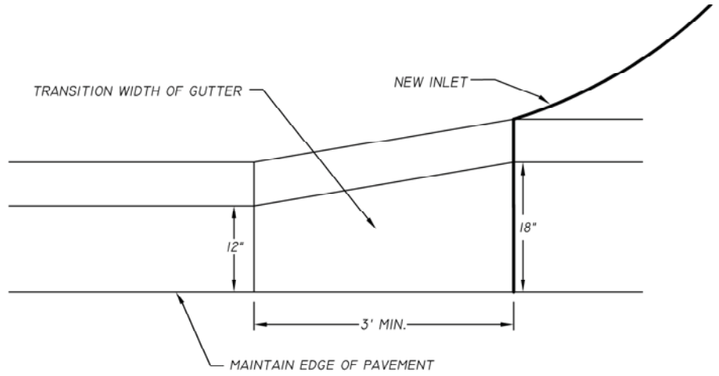
REINFORCED CONCRETE DITCH PAVEMENT
NTS



TYPE "F" CURB & GUTTER
NTS



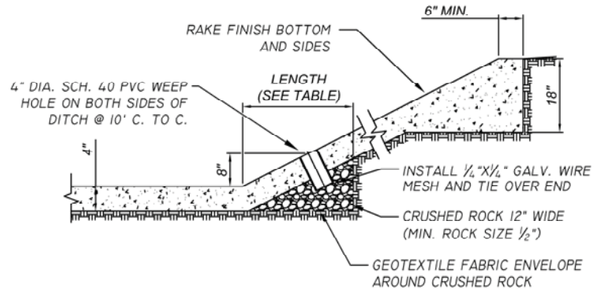
TYPE "F" CURB & GUTTER MODIFIED
NTS



CURB & GUTTER TRANSITION AT CURB INLETS
NTS

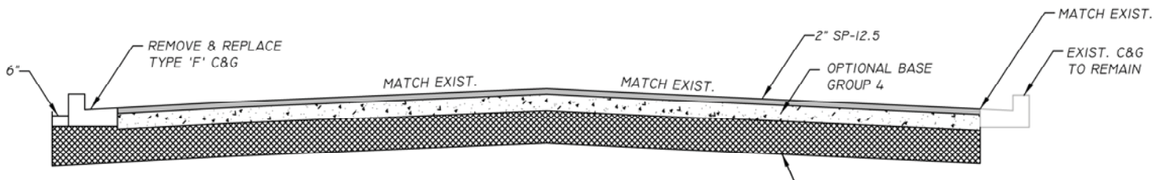
WEEP HOLE LENGTH AND CRUSHED ROCK QUANTITIES		
SIDE SLOPE	LENGTH	CRUSHED ROCK
2H:1V	2.25 FT	1.14 CU.FT.
3H:1V	2.75 FT	1.20 CU.FT.
4H:1V	3.25 FT	1.29 CU.FT.

QUANTITIES LISTED ARE FOR INFORMATION ONLY.



SECTION

TEMPORARY (NON-REINFORCED) CONCRETE DITCH PAVEMENT
NTS



NORMA ST. PAVEMENT RECONSTRUCTION DETAIL
NTS

ENGINEER OF RECORD
LANE P. LUCAS
Etan, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53506
Signature Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

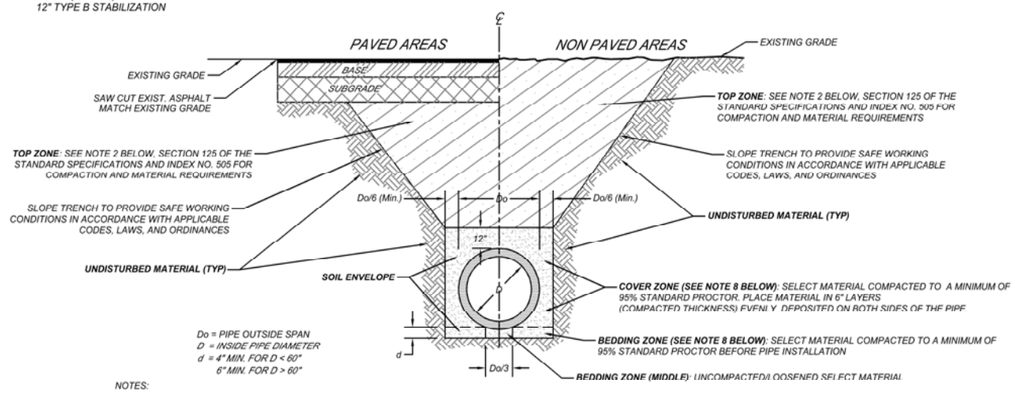
SHEET
TYPICAL SECTIONS AND DETAILS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Etan, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone (850) 383-0400
www.etaninc.com

Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

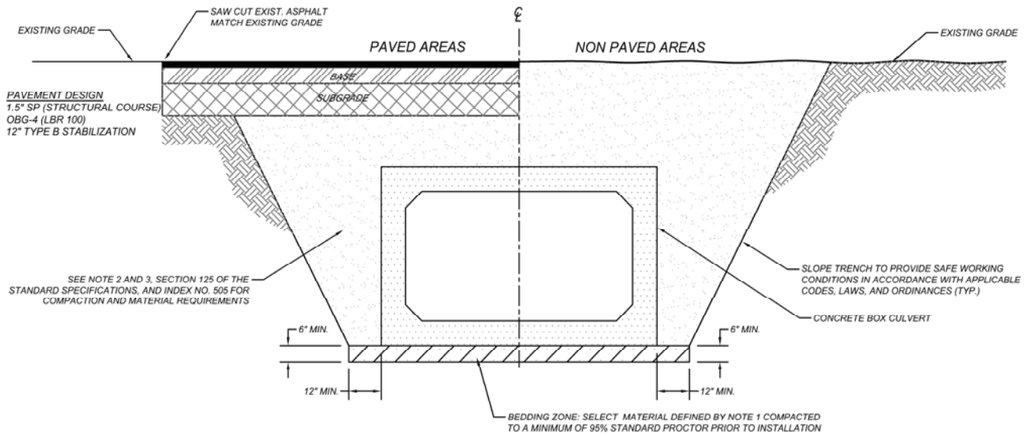


NOTES:

1. THE SOIL ENVELOPE SHALL USE MATERIAL MEETING AASHTO CLASSIFICATION OF A-1 SAND, A-3, OR A-2-4. FOR REINFORCED CONCRETE PIPE WITH DIAMETERS 30-INCHES OR GREATER, THE CONTRACTOR MAY CHOOSE TO REDUCE THE COVER ZONE TO THE SPRINGLINE OF THE PIPE. COST FOR SELECT MATERIAL FOR THE SOIL ENVELOPE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICES ASSOCIATED WITH THIS WORK.
2. THE TOP ZONE SHALL USE MATERIAL AS DEFINED IN INDEX NO. 505. NO A-4 MATERIAL SHALL BE PLACED BELOW THE WATER LEVEL. IF PLACED BELOW THE WATER LEVEL, A-2-4 MATERIAL MUST BE NONPLASTIC AND CONTAIN LESS THAN 15% PASSING THE NO. 200 SEIVE. IN PAVED AREAS HIGH PLASTIC AND/OR MUCK MATERIALS WILL NOT BE ALLOWED AS BACKFILL. IN NON-PAVED AREAS MUCK MATERIAL WILL NOT BE ALLOWED AS BACKFILL, UNLESS SPECIFICALLY SHOWN OTHERWISE IN THE PLANS OR SPECIFICATIONS, (E.G., LITTORAL SHELVES AND WETLAND RESTORATION AREAS).
3. TRENCHES ARE TO BE EXCAVATED IN ACCORDANCE WITH SUBARTICLE 125-4.4 OF THE STANDARD SPECIFICATIONS.
4. IF THE TRENCH IS OVEREXCAVATED, BACKFILL AND RECOMPACT IN ACCORDANCE WITH SECTION 125-9.2.1. MUCK AND ORGANIC MATERIAL SHALL NOT BE ALLOWED AS BACKFILL IN OVEREXCAVATED AREAS.
5. HAND DIG FOR BELL JOINTS. BEARING FROM JOINT TO JOINT WILL NOT BE ALLOWED.
6. PIPES ARE TO BE INSTALLED IN DRY TRENCHES. OPEN TRENCH PUMPING FOR DEWATERING SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
7. BACKFILL SHALL BE PLACED IN LIFTS THIN ENOUGH TO ALLOW COMPACTION TO BE ACHIEVED. LIFTS IN EXCESS OF TWELVE INCHES, MEASURED LOOSE, SHALL NOT BE ALLOWED.
8. IF THE PIPE IS BENEATH OR WITHIN 5-FEET OF ANY BUILDING, COMPACT TO 100% STANDARD PROCTOR. IF THE PIPE IS NEAR ANY STRUCTURE, COMPACT TO 100% STANDARD PROCTOR FOR A DISTANCE OF AT LEAST ONE PIPE DIAMETER, BUT NOT LESS THAN THREE FEET FROM THE OUTSIDE FACE OF THE STRUCTURE

STORM DRAIN PIPE INSTALLATION

N.T.S.



NOTES:

1. MATERIAL WITHIN THE BEDDING ZONE SHALL BE SELECT WITH NOT MORE THAN 15% FINES PASSING THE NO. 200 U.S. STANDARD SIEVE, IN ACCORDANCE WITH DESIGN STANDARDS, INDEX NO. 505, OR OTHER GRANULAR MATERIAL APPROVED BY THE ENGINEER. COST FOR THIS MATERIAL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICES ASSOCIATED WITH THIS WORK.
2. SELECT MATERIAL MEETING AASHTO CLASSIFICATION OF A-1 SAND, A-3, A-2-4, OR A-4 MAY BE USED AS BACKFILL ABOVE THE BEDDING ZONE.
3. PLASTIC MATERIAL AS DEFINED BY INDEX NO. 505 MAY BE USED FOR BACKFILL ABOVE THE BEDDING ZONE . HIGH PLASTIC AND/OR MUCK MATERIAL WILL NOT BE ALLOWED AS BACKFILL.
4. TRENCHES ARE TO BE EXCAVATED IN ACCORDANCE WITH SUBARTICLE 125-4.4 OF THE STANDARD SPECIFICATIONS.
5. IF THE TRENCH IS OVEREXCAVATED, BACKFILL AND RECOMPACT TO MATCH SURROUNDING DENSITY, THEN PLACE SELECT BEDDING MATERIAL AS SHOWN ABOVE.
6. CULVERTS ARE TO BE INSTALLED IN DRY TRENCHES TO THE EXTENT PRACTICABLE. OPEN TRENCH PUMPING FOR DEWATERING SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
7. UNDER WET CONDITIONS, COARSE AGGREGATE MAY BE USED BELOW THE ELEVATION AT WHICH MECHANICAL TAMPERS WOULD BE EFFECTIVE. COARSE AGGREGATE MUST MEET THE SIZE REQUIREMENTS SPECIFIED IN SUBARTICLE 125-9.3.4 OF THE STANDARD SPECIFICATIONS AND BE FULLY WRAPPED WITH A LAYER OF TYPE D-4 FILTER FABRIC. DO NOT PLACE COARSE AGGREGATE WITHIN 4 FEET OF THE ENDS OF THE TRENCH. USE NORMALLY ACCEPTED BACKFILL AT THE ENDS.
8. BACKFILL SHALL BE PLACED IN LIFTS THIN ENOUGH TO ALLOW COMPACTION TO BE ACHIEVED. LIFTS IN EXCESS OF TWELVE INCHES, MEASURED LOOSE, SHALL NOT BE ALLOWED.
9. BEFORE PLACING SOD IN GRASSED AREAS, PROVIDE A THREE-INCH MINIMUM THICK LAYER OF TOPSOIL THAT IS SUFFICIENTLY LOOSE TO PROMOTE ROOT GROWTH.

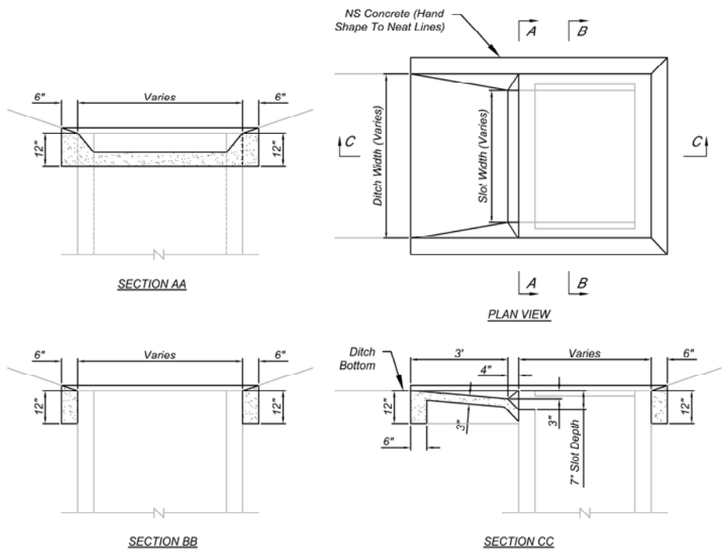
PRECAST CONCRETE BOX CULVERT INSTALLATION

N.T.S.

TRAVERSABLE SLOT CONCRETE QUANTITIES		
INLET TYPE	SINGLE SLOT	DOUBLE SLOT
C	0.53 CY	0.74 CY
D	0.63 CY	0.84 CY
E	0.66 CY	0.89 CY

NOTES:

1. SLOTS MAY BE CONSTRUCTED ON EITHER OR BOTH ENDS OF INLET AS SHOWN ON THE PLANS.
2. STEEL GRATES ARE TO BE USED ON ALL INLETS WITH TRAVERSABLE SLOTS.
3. COST OF SLOTS IS TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE INLET.
4. QUANTITIES LISTED ARE PROVIDED FOR INFORMATION ONLY.



MODIFIED TRAVERSABLE SLOT

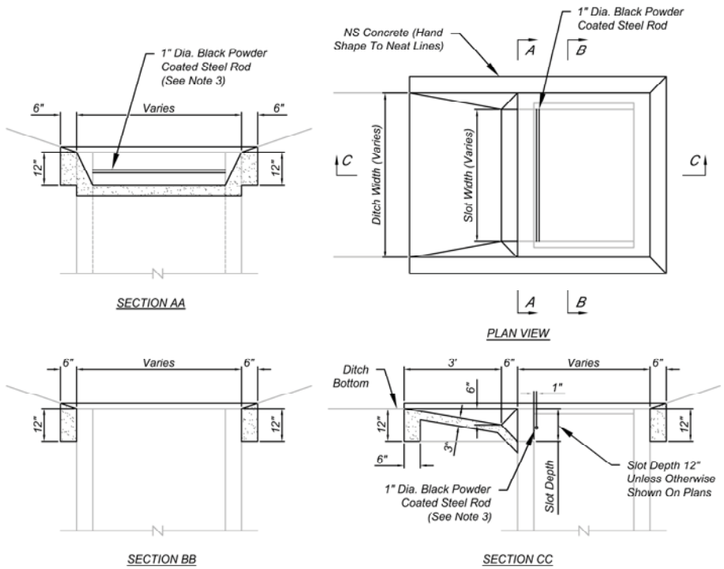
(TYPE D INLET SHOWN - TYPES C AND E SIMILAR)

N.T.S.

NONTRAVERSABLE SLOT CONCRETE QUANTITIES		
INLET TYPE	SINGLE SLOT	DOUBLE SLOT
C	0.55 CY	0.78 CY
D	0.64 CY	0.89 CY
E	0.67 CY	0.94 CY

NOTES:

1. SLOTS MAY BE CONSTRUCTED ON EITHER OR BOTH ENDS OF INLET AS SHOWN ON THE PLANS.
2. STEEL GRATES ARE TO BE USED ON ALL INLETS WITH NONTRAVERSABLE SLOTS.
3. COST OF SLOTS IS TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE INLET.
4. BLACK POWDER COATED STEEL ROD IS TO BE LOCATED VERTICALLY IN CENTER OF OPENING. COST TO FURNISH AND INSTALL ROD IS TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE INLET.
5. QUANTITIES LISTED ARE BASED ON 12" DEEP SLOT AND ARE PROVIDED FOR INFORMATION ONLY.



MODIFIED NONTRAVERSABLE SLOT

(TYPE D INLET SHOWN - TYPES C AND E SIMILAR)

N.T.S.

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53506

Signature Date

ORIGINAL 02/28/2019

REVISIONS:
1
2
3
4
5

SHEET
TYPICAL SECTIONS AND DETAILS

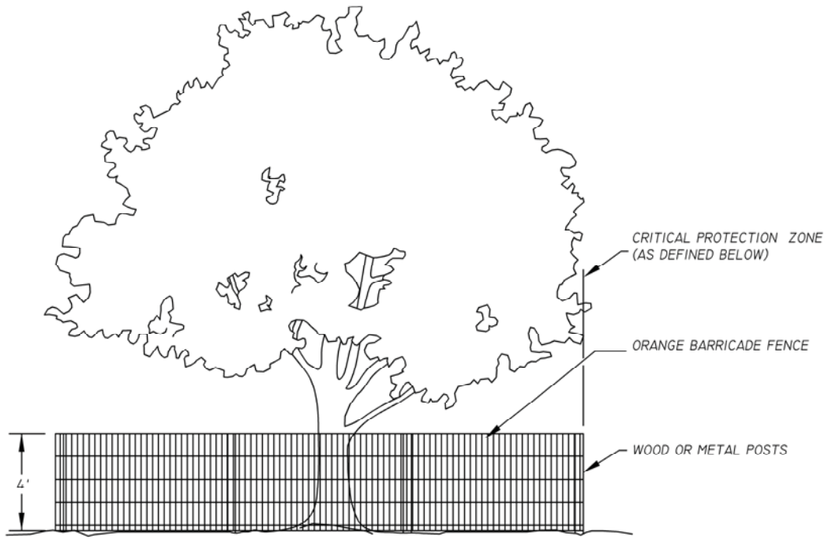
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com

Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

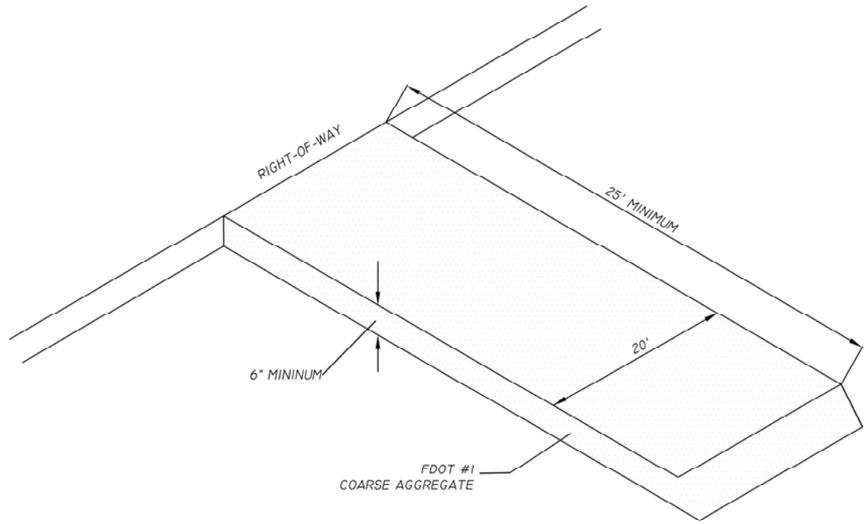
User: matt
S:\Projects\COT Stormwater\CCC-Design\dwg\Construction Plans\Notes & Details-CCC.dwg 02/28/2019 11:37:35 AM



NOTES:

THE TREE PROTECTION BARRICADE IS TO PREVENT DISTURBANCE OF THE CRITICAL PROTECTION ZONE (CPZ). THE C.P.Z. IS THE AREA SURROUNDING A TREE WITH A CIRCLE DESCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE'S DIAMETER AT BREAST HEIGHT. THE AREA WITHIN BARRICADE IS NOT TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT.

TREE PROTECTION BARRICADE
NTS



GRAVEL CONSTRUCTION ENTRANCE
NTS

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

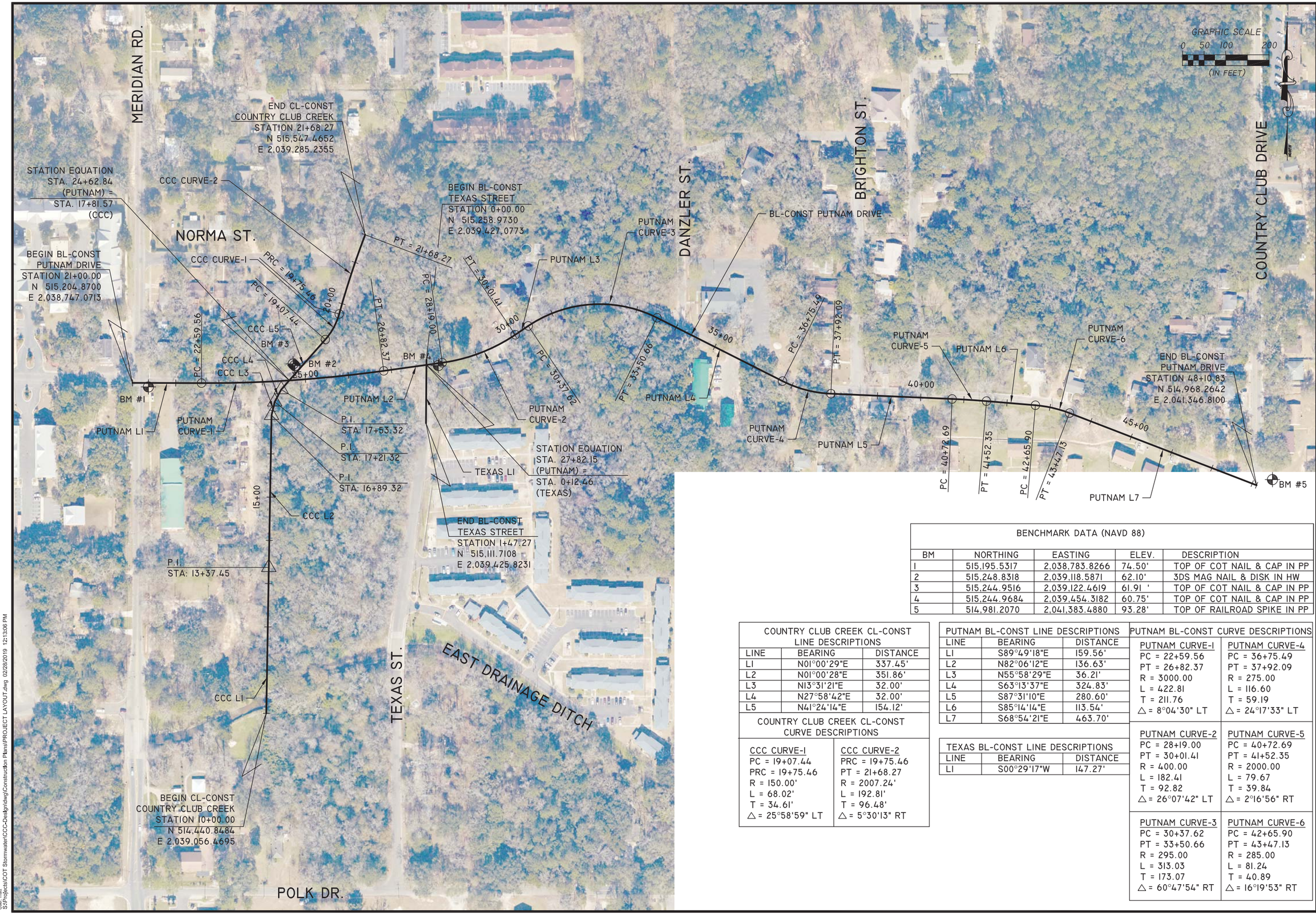
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
TYPICAL SECTIONS AND DETAILS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



BENCHMARK DATA (NAVD 88)				
BM	NORTHING	EASTING	ELEV.	DESCRIPTION
1	515,195.5317	2,038,783.8266	74.50'	TOP OF COT NAIL & CAP IN PP
2	515,248.8318	2,039,118.5871	62.10'	3DS MAG NAIL & DISK IN HW
3	515,244.9516	2,039,122.4619	61.91 '	TOP OF COT NAIL & CAP IN PP
4	515,244.9684	2,039,454.3182	60.75'	TOP OF COT NAIL & CAP IN PP
5	514,981.2070	2,041,383.4880	93.28'	TOP OF RAILROAD SPIKE IN PP

COUNTRY CLUB CREEK CL-CONST LINE DESCRIPTIONS		
LINE	BEARING	DISTANCE
LI	N01°00'29"E	337.45'
L2	N01°00'28"E	351.86'
L3	N13°31'21"E	32.00'
L4	N27°58'42"E	32.00'
L5	N41°24'14"E	154.12'

COUNTRY CLUB CREEK CL-CONST CURVE DESCRIPTIONS	
CCC CURVE-1	CCC CURVE-2
PC = 19+07.44	PRC = 19+75.46
PRC = 19+75.46	PT = 21+68.27
R = 150.00'	R = 2007.24'
L = 68.02'	L = 192.81'
T = 34.61'	T = 96.48'
△ = 25°58'59" LT	△ = 5°30'13" RT

PUTNAM BL-CONST LINE DESCRIPTIONS		
LINE	BEARING	DISTANCE
LI	S89°49'18"E	159.56'
L2	N82°06'12"E	136.63'
L3	N55°58'29"E	36.21'
L4	S63°13'37"E	324.83'
L5	S87°31'10"E	280.60'
L6	S85°14'14"E	113.54'
L7	S68°54'21"E	463.70'

TEXAS BL-CONST LINE DESCRIPTIONS		
LINE	BEARING	DISTANCE
LI	S00°29'17"W	147.27'

PUTNAM BL-CONST CURVE DESCRIPTIONS	
PUTNAM CURVE-1	PUTNAM CURVE-4
PC = 22+59.56	PC = 36+75.49
PT = 26+82.37	PT = 37+92.09
R = 3000.00	R = 275.00
L = 422.81	L = 116.60
T = 211.76	T = 59.19
△ = 8°04'30" LT	△ = 24°17'33" LT
PUTNAM CURVE-2	PUTNAM CURVE-5
PC = 28+19.00	PC = 40+72.69
PT = 30+01.41	PT = 41+52.35
R = 400.00	R = 2000.00
L = 182.41	L = 79.67
T = 92.82	T = 39.84
△ = 26°07'42" LT	△ = 2°16'56" RT
PUTNAM CURVE-3	PUTNAM CURVE-6
PC = 30+37.62	PC = 42+65.90
PT = 33+50.66	PT = 43+47.13
R = 295.00	R = 285.00
L = 313.03	L = 81.24
T = 173.07	T = 40.89
△ = 60°47'54" RT	△ = 16°19'53" RT

ENGINEER OF RECORD
LANE P. LUCAS, P.E.
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53806
Signature Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
PROJECT LAYOUT

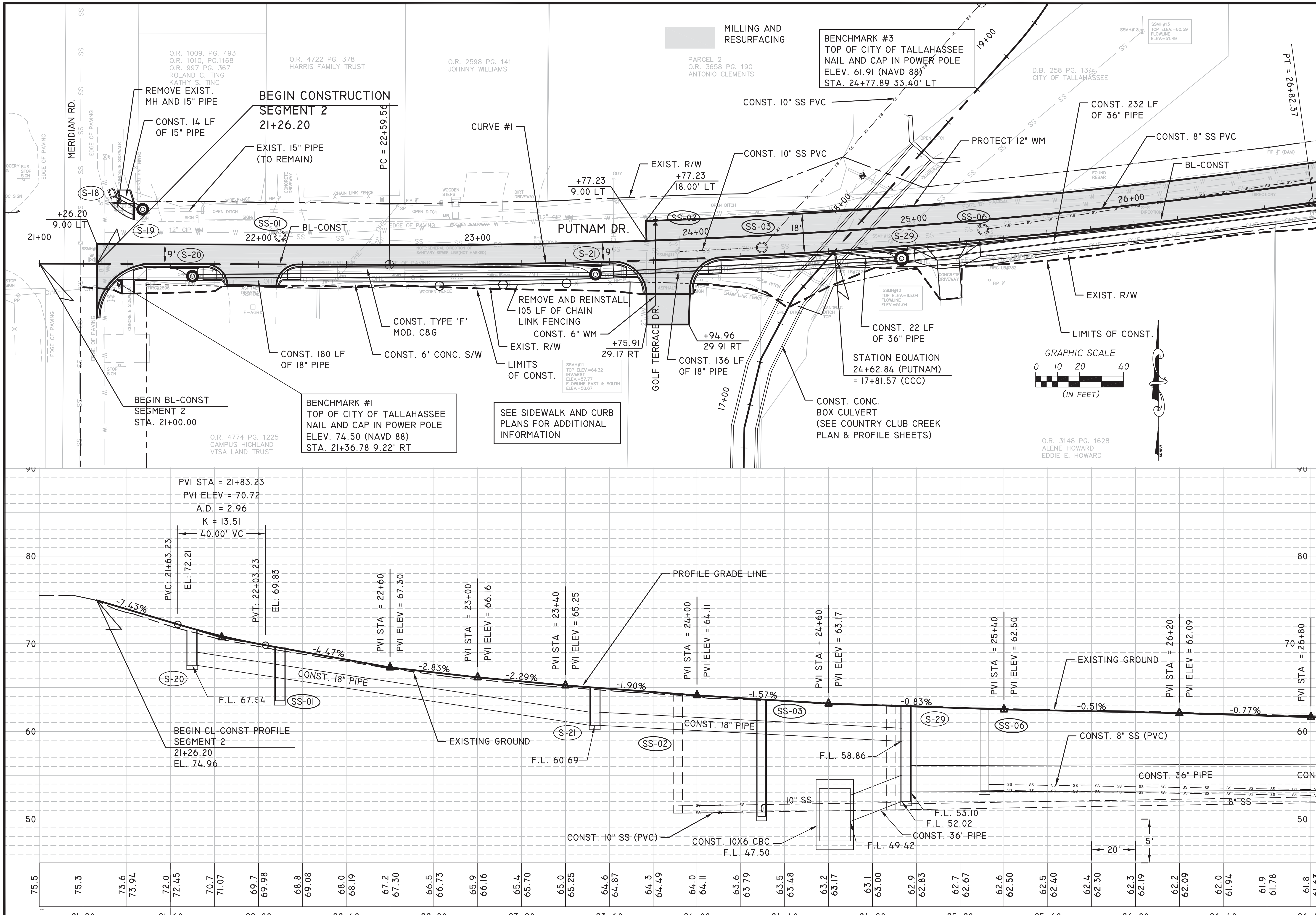
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc.
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN LPL
DESIGNED LPL
CHECKED MWH
QC LPL

12

User: matt
S:\Projects\COT Stormwater\CCC-Design\dwg\Construction Plans\PROJECT LAYOUT.dwg 02/28/2019 12:13:06 PM



MILLING AND RESURFACING
BENCHMARK #3
TOP OF CITY OF TALLAHASSEE NAIL AND CAP IN POWER POLE
ELEV. 61.91 (NAVD 88)
STA. 24+77.89 33.40' LT
MERIDIAN RD.
REMOVE EXIST. MH AND 15" PIPE
CONST. 14 LF OF 15" PIPE
BEGIN CONSTRUCTION SEGMENT 2
21+26.20
PC = 22+59.56
EXIST. 15" PIPE (TO REMAIN)
CURVE #1
CONST. 10" SS PVC
PROTECT 12" WM
CONST. 232 LF OF 36" PIPE
CONST. 8" SS PVC
BL-CONST
PT = 26+82.37
EXIST. R/W
+77.23
9.00 LT
+77.23
18.00' LT
+26.20
9.00 LT
21+00
22+00
23+00
24+00
25+00
26+00
18+00
19+00
17+00
PUTNAM DR.
GOLF TERRACE DR.
S-18
S-19
S-20
S-21
S-29
SS-01
SS-02
SS-03
SS-06
REMOVE AND REINSTALL 105 LF OF CHAIN LINK FENCING
CONST. 6" WM
CONST. TYPE 'F' MOD. C&G
CONST. 6' CONC. S/W
EXIST. R/W
LIMITS OF CONST.
CONST. 180 LF OF 18" PIPE
+75.91
29.17 RT
+94.96
29.91 RT
CONST. 136 LF OF 18" PIPE
CONST. 22 LF OF 36" PIPE
STATION EQUATION
24+62.84 (PUTNAM)
= 17+81.57 (CCC)
CONST. CONC. BOX CULVERT
(SEE COUNTRY CLUB CREEK PLAN & PROFILE SHEETS)
LIMITS OF CONST.
GRAPHIC SCALE
0 10 20 40
(IN FEET)
BEGIN BL-CONST SEGMENT 2
STA. 21+00.00
BENCHMARK #1
TOP OF CITY OF TALLAHASSEE NAIL AND CAP IN POWER POLE
ELEV. 74.50 (NAVD 88)
STA. 21+36.78 9.22' RT
SEE SIDEWALK AND CURB PLANS FOR ADDITIONAL INFORMATION
O.R. 1009, PG. 493
O.R. 1010, PG.1168
O.R. 997 PG. 367
ROLAND C. TING
KATHY S. TING
O.R. 4722 PG. 378
HARRIS FAMILY TRUST
O.R. 2598 PG. 141
JOHNNY WILLIAMS
PARCEL 2
O.R. 3658 PG. 190
ANTONIO CLEMENTS
D.B. 258 PG. 134
CITY OF TALLAHASSEE
O.R. 4774 PG. 1225
CAMPUS HIGHLAND VTSA LAND TRUST
O.R. 3148 PG. 1628
ALENE HOWARD
EDDIE E. HOWARD
PVI STA = 21+83.23
PVI ELEV = 70.72
A.D. = 2.96
K = 13.51
40.00' VC
PVC: 21+63.23
EL. 72.21
PVT: 22+03.23
EL. 69.83
-7.43%
-4.47%
-2.83%
-2.29%
-1.90%
-1.57%
-0.83%
-0.51%
-0.77%
PVI STA = 22+60
PVI ELEV = 67.30
PVI STA = 23+00
PVI ELEV = 66.16
PVI STA = 23+40
PVI ELEV = 65.25
PVI STA = 24+00
PVI ELEV = 64.11
PVI STA = 24+60
PVI ELEV = 63.17
PVI STA = 25+40
PVI ELEV = 62.50
PVI STA = 26+20
PVI ELEV = 62.09
PVI STA = 26+80
PVI ELEV = 61.63
PROFILE GRADE LINE
EXISTING GROUND
CONST. 18" PIPE
F.L. 67.54
BEGIN CL-CONST PROFILE SEGMENT 2
21+26.20
EL. 74.96
EXISTING GROUND
F.L. 60 69
CONST. 18" PIPE
F.L. 58.86
CONST. 8" SS (PVC)
CONST. 36" PIPE
10" SS
8" SS
F.L. 53.10
F.L. 52 02
CONST. 36" PIPE
F.L. 49.42
CONST. 10" SS (PVC)
CONST. 10X6 CBC
F.L. 47.50
20'
5'
90
80
70
60
50
75.5
75.3
73.6 73.94
72.0 72.45
70.7 71.07
69.7 69.98
68.8 69.08
68.0 68.19
67.2 67.30
66.5 66.73
65.9 66.16
65.4 65.70
65.0 65.25
64.6 64.87
64.3 64.49
64.0 64.11
63.6 63.79
63.5 63.48
63.2 63.17
63.1 63.00
62.9 62.83
62.7 62.67
62.6 62.50
62.5 62.40
62.4 62.30
62.3 62.19
62.2 62.09
62.0 61.94
61.9 61.78
61.8 61.63
21+20
21+60
22+00
22+40
22+80
23+20
23+60
24+00
24+40
24+80
25+20
25+60
26+00
26+40
26+80

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\Plan-Segment2.dwg 03/05/2019 11:27:34 AM

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

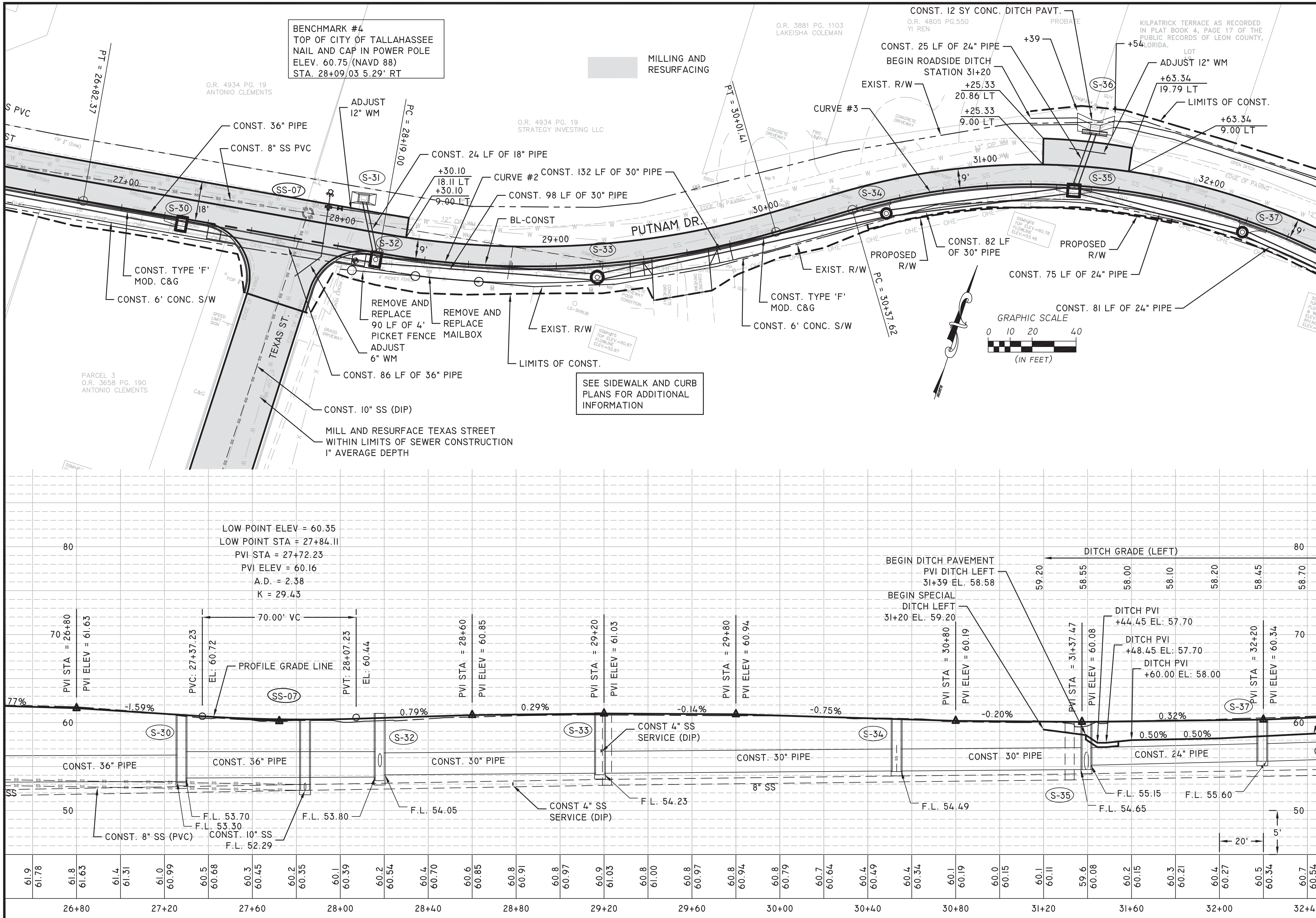
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
PLAN & PROFILE
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC


BENCHMARK #4
TOP OF CITY OF TALLAHASSEE
NAIL AND CAP IN POWER POLE
ELEV. 60.75 (NAVD 88)
STA. 28+09.03 5.29' RT
MILLING AND RESURFACING
O.R. 4934 PG. 19 ANTONIO CLEMENTS
O.R. 4934 PG. 19 STRATEGY INVESTING LLC
O.R. 3881 PG. 1103 LAKEISHA COLEMAN
O.R. 4805 PG.550 YI REN
KILPATRICK TERRACE AS RECORDED IN PLAT BOOK 4, PAGE 17 OF THE PUBLIC RECORDS OF LEON COUNTY, FLORIDA.
PARCEL 3 O.R. 3658 PG. 190 ANTONIO CLEMENTS
PT = 26+82.37
PC = 28+19.00
PT = 30+01.41
PC = 30+37.62
CONST. 36" PIPE
CONST. 8" SS PVC
ADJUST 12" WM
CONST. 24 LF OF 18" PIPE
+30.10 18.11 LT
+30.10 9.00 LT
CURVE #2
CONST. 132 LF OF 30" PIPE
CONST. 98 LF OF 30" PIPE
BL-CONST
PUTNAM DR.
TEXAS ST.
CONST. TYPE 'F' MOD. C&G
CONST. 6' CONC. S/W
REMOVE AND REPLACE 90 LF OF 4' PICKET FENCE
REMOVE AND REPLACE MAILBOX
ADJUST 6" WM
CONST. 86 LF OF 36" PIPE
EXIST. R/W
LIMITS OF CONST.
CONST. 10" SS (DIP)
MILL AND RESURFACE TEXAS STREET WITHIN LIMITS OF SEWER CONSTRUCTION 1" AVERAGE DEPTH
SEE SIDEWALK AND CURB PLANS FOR ADDITIONAL INFORMATION
CONST. 12 SY CONC. DITCH PAVT.
CONST. 25 LF OF 24" PIPE
BEGIN ROADSIDE DITCH STATION 31+20
EXIST. R/W
+25.33 20.86 LT
+25.33 9.00 LT
CURVE #3
+39
+54
ADJUST 12" WM
+63.34 19.79 LT
LIMITS OF CONST.
+63.34 9.00 LT
CONST. 82 LF OF 30" PIPE
PROPOSED R/W
EXIST. R/W
CONST. TYPE 'F' MOD. C&G
CONST. 6' CONC. S/W
PROPOSED R/W
CONST. 75 LF OF 24" PIPE
CONST. 81 LF OF 24" PIPE
GRAPHIC SCALE
0 10 20 40
(IN FEET)
S-30 S-31 S-32 S-33 S-34 S-35 S-36 S-37 SS-07
27+00 28+00 29+00 30+00 31+00 32+00
LOW POINT ELEV = 60.35
LOW POINT STA = 27+84.11
PVI STA = 27+72.23
PVI ELEV = 60.16
A.D. = 2.38
K = 29.43
70.00' VC
PVI STA = 26+80 PVI ELEV = 61.63
PVC: 27+37.23 EL: 60.72
PROFILE GRADE LINE
PVT: 28+07.23 EL: 60.44
PVI STA = 28+60 PVI ELEV = 60.85
PVI STA = 29+20 PVI ELEV = 61.03
PVI STA = 29+80 PVI ELEV = 60.94
PVI STA = 30+80 PVI ELEV = 60.19
PVI STA = 31+37.47 PVI ELEV = 60.08
PVI STA = 32+20 PVI ELEV = 60.34
BEGIN DITCH PAVEMENT PVI DITCH LEFT 31+39 EL. 58.58
BEGIN SPECIAL DITCH LEFT 31+20 EL. 59.20
DITCH GRADE (LEFT)
59.20 58.55 58.00 58.10 58.20 58.45 58.70
DITCH PVI +44.45 EL: 57.70
DITCH PVI +48.45 EL: 57.70
DITCH PVI +60.00 EL: 58.00
-1.59% 0.79% 0.29% -0.14% -0.75% -0.20% 0.32% 0.50% 0.50%
CONST. 36" PIPE
CONST. 30" PIPE
CONST. 24" PIPE
CONST 4" SS SERVICE (DIP)
8" SS
F.L. 53.70
F.L. 53.30
F.L. 53.80
F.L. 54.05
F.L. 54.23
F.L. 54.49
F.L. 55.15
F.L. 54.65
F.L. 55.60
CONST. 8" SS (PVC)
CONST. 10" SS F.L. 52.29
20'
5'
80 70 60 50
61.9 61.78 61.8 61.63 61.4 61.31 61.0 60.99 60.5 60.68 60.3 60.45 60.2 60.35 60.1 60.39 60.2 60.54 60.4 60.70 60.6 60.85 60.8 60.91 60.8 60.97 60.9 61.03 60.8 61.00 60.8 60.97 60.8 60.94 60.8 60.79 60.7 60.64 60.4 60.49 60.4 60.34 60.1 60.19 60.0 60.15 60.1 60.11 59.6 60.08 60.2 60.15 60.3 60.21 60.4 60.27 60.5 60.34 60.7 60.54
26+80 27+20 27+60 28+00 28+40 28+80 29+20 29+60 30+00 30+40 30+80 31+20 31+60 32+00 32+40

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

ORIGINAL 03/05/2019
REVISIONS: 1 2 3 4 5

SHEET
PLAN & PROFILE
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

MILLING AND RESURFACING

GRAPHIC SCALE
0 10 20 40
(IN FEET)

END ROADSIDE DITCH STATION 33+60

LIMITS OF CONST.

EXIST. R/W

CURVE #3

CONST. 6" WM

+17.86
19.32 LT

CONST. 7 LF OF 18" PIPE

CONST. 27 LF OF 24" PIPE

+50.44
18.86 LT

+50.44
9.00 LT

PC = 36+75.49

CURVE #4

PT = 37+92.09

KILPATRICK TERRACE AS RECORDED IN PLAT BOOK 4, PAGE 17 OF THE PUBLIC RECORDS OF LEON COUNTY, FLORIDA. BLOCK "P" LOT 17

DANZLER ST.

HILL TERRACE 1.30 IN DEED BOOK 1.13 OF THE PUBLIC OF LEON COUNTY, FLORIDA.

LOT 11

O.R. 4928 P.G. EMANUEL LANE

MAILBOX (2)

PUTNAM DR.

BL-CONST.

33+00

34+00

35+00

36+00

37+00

38+00

9'

S-38

S-39

S-40

S-41

SS-08

SS-09

PROPOSED R/W

PT = 33+50.66

CONST. 126 LF OF 24" PIPE

LIMITS OF CONST.

CONST. TYPE 'F' MOD. C&G

CONST. 6' CONC. S/W

SEE SIDEWALK AND CURB PLANS FOR ADDITIONAL INFORMATION

LIMITS OF CONST.

EXIST. R/W

LIMITS OF CONST.

EXIST. R/W

SEE DRIVEWAY DETAILS FOR DRIVEWAY AT 38+00 RIGHT

SSMH#7 TOP ELEV.=61.65 FLOWLINE EAST & WEST ELEV.=58.20 & 58.30 FLOWLINE NORTHEAST INVERT ELEV.=54.85

SSMH#8 TOP ELEV.=61.86 FLOWLINE ELEV.=55.16

SSMH#9 TOP ELEV.=62.75 FLOWLINE ELEV.=55.95

SSMH#10 TOP ELEV.=66.55 8"PVC CAPPED OFF

SSMH#11 TOP ELEV.=63.13

SSMH#12 TOP ELEV.=75.23 FLOWLINE ELEV.=63.13

SSMH#13 TOP ELEV.=72.40 FLOWLINE EAST ELEV.=61.96 FLOWLINE WEST ELEV.=61.96

DITCH GRADE (LEFT)

58.95 59.21 59.46 59.71 59.96

DITCH PVI +40 EL. 59.96

PVI STA = 33+40
PVI ELEV = 61.55

PVI STA = 34+00
PVI ELEV = 63.16

PVI STA = 34+60
PVI ELEV = 65.32

PVI STA = 35+40
PVI ELEV = 67.97

PVI STA = 36+00
PVI ELEV = 70.47

PVI STA = 36+60
PVI ELEV = 73.63

100.00' VC
HIGH POINT ELEV = 75.94
HIGH POINT STA = 37+45.32
PVI STA = 37+53.88
PVI ELEV = 76.99
A.D. = -8.62
K = 11.60

PVC: 37+03.88
EL: 75.20

PVT: 38+03.88
EL: 74.46

PVC: 38+18.82
EL: 73.71

DITCH GRADE (LEFT)
PROFILE GRADE LINE

END DITCH MATCH EXIST.

1.01%
1.26%
2.69%
3.59%
3.31%
4.17%
5.28%
3.57%
-5.05%

CONST. 24" PIPE
8" SS
F.L. 56.25
CONST. 24" PIPE
8" SS
F.L. 59.30
EXISTING GROUND
8" SS
8" SS

20' 5'

60.54 60.8 60.74 61.0 60.94 61.2 61.15 61.4 61.35 61.6 61.55 62.0 62.09 62.5 62.62 63.0 63.16 63.6 63.88 64.3 64.60 65.1 65.32 65.9 65.98 66.6 66.64 67.2 67.30 67.8 67.97 68.3 68.80 69.5 69.63 70.4 70.47 71.2 71.52 72.3 72.58 73.3 73.63 74.1 74.35 74.9 75.06 75.4 75.67 75.7 75.93 75.6 75.85 75.1 75.42 74.4 74.65 73.4 73.65 72.4

2+40 32+80 33+20 33+60 34+00 34+40 34+80 35+20 35+60 36+00 36+40 36+80 37+20 37+60 38+00 38+

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS: 1 2 3 4 5

SHEET
PLAN & PROFILE
PUTNAM DRIVE

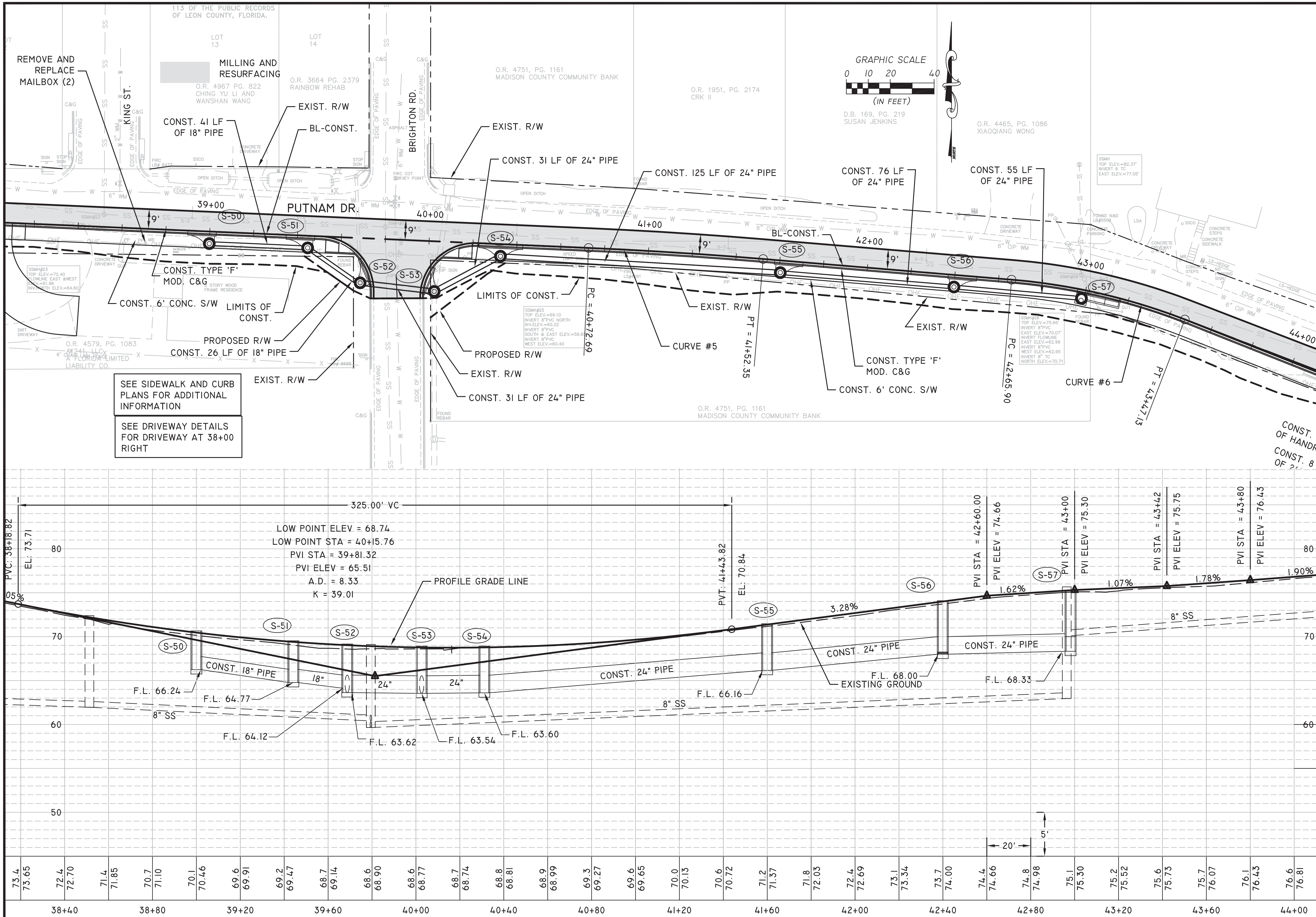
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

15

User: Lane
S:\Projects\COT Public Works\Putnam Dr\dwg\Plan-Segment2.dwg 03/05/2019 11:28:41 AM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

ORIGINAL 03/05/2019
REVISIONS:

SHEET
PLAN & PROFILE
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

16

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\Plan-Segment2.dwg 03/05/2019 11:30:53 AM

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
PLAN & PROFILE
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

GRAPHIC SCALE
0 10 20 40
(IN FEET)

SSMH#32
TOP ELEV.=59.27
FLOWLINE NORTH & SOUTH
ELEV.=50.05

SSMH#11
TOP ELEV.=64.32
INV.WEST
ELEV.=57.77
FLOWLINE EAST & SOUTH
ELEV.=50.67

NOTE: GOLF TERRACE DRIVE SHALL NOT BE UTILIZED FOR CONSTRUCTION ACCESS. DAMAGE TO ANY FEATURES OUTSIDE THE LIMITS OF CONSTRUCTION SHOWN SHALL BE REPAIRED AT NO EXPENSE TO THE CITY.

LIMITS OF CONSTRUCTION

BEGIN 10'X6' CONC. BOX CULVERT
STA. 13+60.00.
CONSTRUCT TEMPORARY ENDWALL
AND WINGWALLS (SEE STRUCTURAL PLANS).

CONSTRUCT 414 LF OF 6' CHAIN LINK CONSTRUCTION FENCE WITH EMBEDDED POSTS. REMOVE UPON COMPLETION OF WORK.

DEED BOOK 258, PAGE 137
SEWER EASEMENT

BEGIN CONSTRUCTION
STA 13+37.40
BL-CONST. CCC

ORB 112, PG. 277
DRAINAGE EASEMENT

10" VCP

14+53.28
29.91'L

15+01.28
28.64'L

RI5'

10" TC

EXIST. R/W

GOLF TERRACE DR.

BL-CONST.

PUTNAM DR.

SS-02

REPLACE 10" SS PVC

CONST. 10" SS PVC

SS-03

E/P

R/W

12+50 13+00 13+50 14+00 14+50 15+00 15+50 16+00 16+50 17+00 17+50 18+00

18'

TEMP. TRANSITION TO EXIST. CHANNEL

CONST. 56 SY RIPRAP RUBBLE

LIMITS OF CONSTRUCTION

CONST. 18' EARTHEN D/W PER INDEX 515 WITH 6:1 SIDE SLOPES

CONSTRUCT 36 LF 18" RCP W/ MES EACH SIDE

PROPOSED 15' PDE

PROPOSED 10' TCE

CONSTRUCT 10'X6' CBC

PROPERTY LINE

EXIST. R/W

REMOVE 95 LF 10" SEWER

REMOVE EXIST. GUARDRAIL

PROPOSED 6' CONC. S/W

REMOVE EXIST. 72" RCP AND CONC. ENDWALLS

12' ACCESS

SSMH#12

18+40.98
7.39'R

PROPERTY LINE
(LIMITS OF PHASE I)

S-1

STA. 13+70.00 0.00'L
MODIFIED TYPE D INLET RISER
W/ NON-TRAVERSABLE SLOT.
SEE DETAIL SHEET 10
GRATE: 55.32
SLOT: 54.74 (N)

S-2

STA. 15+10.00 0.00'L
MODIFIED TYPE D INLET RISER
W/ NON-TRAVERSABLE SLOT.
SEE DETAIL SHEET 10
GRATE: 56.39
SLOT: 55.39 (N)

S-3

STA. 16+25.00 0.00'L
MODIFIED TYPE D INLET RISER
W/ NON-TRAVERSABLE SLOT.
SEE DETAIL SHEET 10
GRATE: 57.25
SLOT: 56.25 (N)

INSTALL 38 LF OF ALUMINUM PIPE GUIDERAIL IN ACCORDANCE WITH FDOT DESIGN STANDARDS INDEX NO. 870

P/L

BEGIN CBC AND SWALE
STA. 13+60

TEMPORARY TRANSITION
(4% +/-)

BEGIN TEMP. TRANSITION
STA. 13+37.45

CONST. RIPRAP RUBBLE

F.L. 47.24

54.25

0.76%

55.92

6:1

18' D/W

CONST. 18" PIPE
W/ 2 MES

6:1

56.41

PROPOSED SWALE GRADE

54.32

0.75%

0.75%

54.39

CONST. 10'X6' CBC

EXISTING GROUND
@ BL-CONST.

0.05%

49.32	48.17	47.92	48.19	47.63	48.24	55.35	48.29	55.54	48.20	55.73	48.41	56.02	49.04	59.00	49.23	56.65	48.65	56.49	48.19	56.68	48.70	56.87	49.67	57.06	50.03	57.25	50.38	57.43	51.06	57.62	50.71	57.81	51.73	58.00
12+75	13+00	13+25	13+50	13+75	14+00	14+25	14+50	14+75	15+00	15+25	15+50	15+75	16+00	16+25	16+50	16+75	17+00	17+25																

SCALE
HORIZ: 1"=20'
VERT: 1"=5'

ENGINEER OF RECORD
LANE P. LUCAS
Etan, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53506
Signature Date

ORIGINAL 03/04/2019
REVISIONS:
1
2
3
4
5

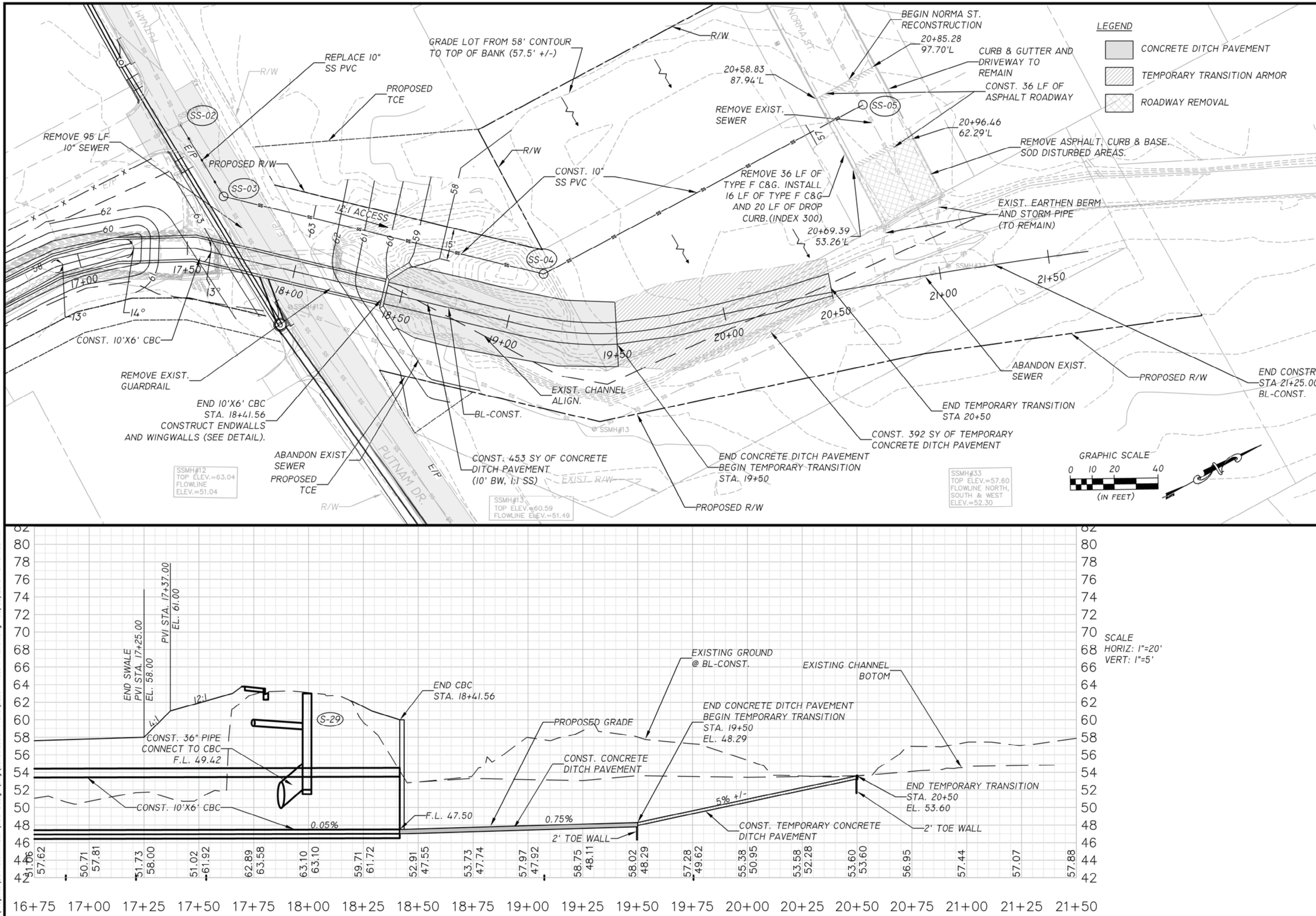
SHEET
PLAN & PROFILE
COUNTRY CLUB CREEK

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Etan, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.etaninc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: matt
S:\Projects\CCT Stormwater\CCC-Design\dwg\Construction Plans\Base-Phase I-XSRev.dwg 03/04/2019 04:59:43 PM


LEGEND
CONCRETE DITCH PAVEMENT
TEMPORARY TRANSITION ARMOR
ROADWAY REMOVAL
BEGIN NORMA ST. RECONSTRUCTION
20+85.28 97.70'L
CURB & GUTTER AND DRIVEWAY TO REMAIN
CONST. 36 LF OF ASPHALT ROADWAY
20+58.83 87.94'L
REMOVE EXIST. SEWER
SS-05
20+96.46 62.29'L
REMOVE ASPHALT, CURB & BASE. SOD DISTURBED AREAS.
GRADE LOT FROM 58' CONTOUR TO TOP OF BANK (57.5' +/-)
R/W
REPLACE 10" SS PVC
PROPOSED TCE
SS-02
REMOVE 95 LF 10" SEWER
PROPOSED R/W
SS-03
CONST. 10" SS PVC
REMOVE 36 LF OF TYPE F C&G. INSTALL 16 LF OF TYPE F C&G AND 20 LF OF DROP CURB.(INDEX 300)
EXIST. EARTHEN BERM AND STORM PIPE (TO REMAIN)
20+69.39 53.26'L
12:1 ACCESS
SS-04
17+00
17+50
18+00
18+50
19+00
19+50
20+00
20+50
21+00
21+50
CONST. 10'X6' CBC
REMOVE EXIST. GUARDRAIL
END 10'X6' CBC STA. 18+41.56 CONSTRUCT ENDWALLS AND WINGWALLS (SEE DETAIL).
ABANDON EXIST SEWER
PROPOSED TCE
BL-CONST.
EXIST. CHANNEL ALIGN.
CONST. 453 SY OF CONCRETE DITCH PAVEMENT (10' BW, 1:1 SS)
END CONCRETE DITCH PAVEMENT BEGIN TEMPORARY TRANSITION STA. 19+50
PROPOSED R/W
CONST. 392 SY OF TEMPORARY CONCRETE DITCH PAVEMENT
END TEMPORARY TRANSITION STA 20+50
ABANDON EXIST. SEWER
END CONSTRUC STA 21+25.00 BL-CONST.
SSMH#12 TOP ELEV.=63.04 FLOWLINE ELEV.=51.04
SSMH#13 TOP ELEV.=60.59 FLOWLINE ELEV.=51.49
SSMH#33 TOP ELEV.=57.60 FLOWLINE NORTH, SOUTH & WEST ELEV.=52.30
PUTNAM DR.
NORMA ST.
GRAPHIC SCALE 0 10 20 40 (IN FEET)
END SWALE PVI STA. 17+25.00 EL. 58.00
PVI STA. 17+37.00 EL. 61.00
CONST. 36" PIPE CONNECT TO CBC F.L. 49.42
S-29
CONST. 10'X6' CBC
0.05%
END CBC STA. 18+41.56
F.L. 47.50
PROPOSED GRADE
CONST. CONCRETE DITCH PAVEMENT
0.75%
2' TOE WALL
EXISTING GROUND @ BL-CONST.
EXISTING CHANNEL BOTOM
END CONCRETE DITCH PAVEMENT BEGIN TEMPORARY TRANSITION STA. 19+50 EL. 48.29
5% +/-
CONST. TEMPORARY CONCRETE DITCH PAVEMENT
END TEMPORARY TRANSITION STA. 20+50 EL. 53.60
2' TOE WALL
SCALE HORIZ: 1"=20' VERT: 1"=5'
16+75 17+00 17+25 17+50 17+75 18+00 18+25 18+50 18+75 19+00 19+25 19+50 19+75 20+00 20+25 20+50 20+75 21+00 21+25 21+50

User: matt
S:\Projects\COT Stormwater\CCC-Design\dwg\Construction Plans\Base-Phase 1-XSRev.dwg 03/05/2019 07:54:05 AM

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

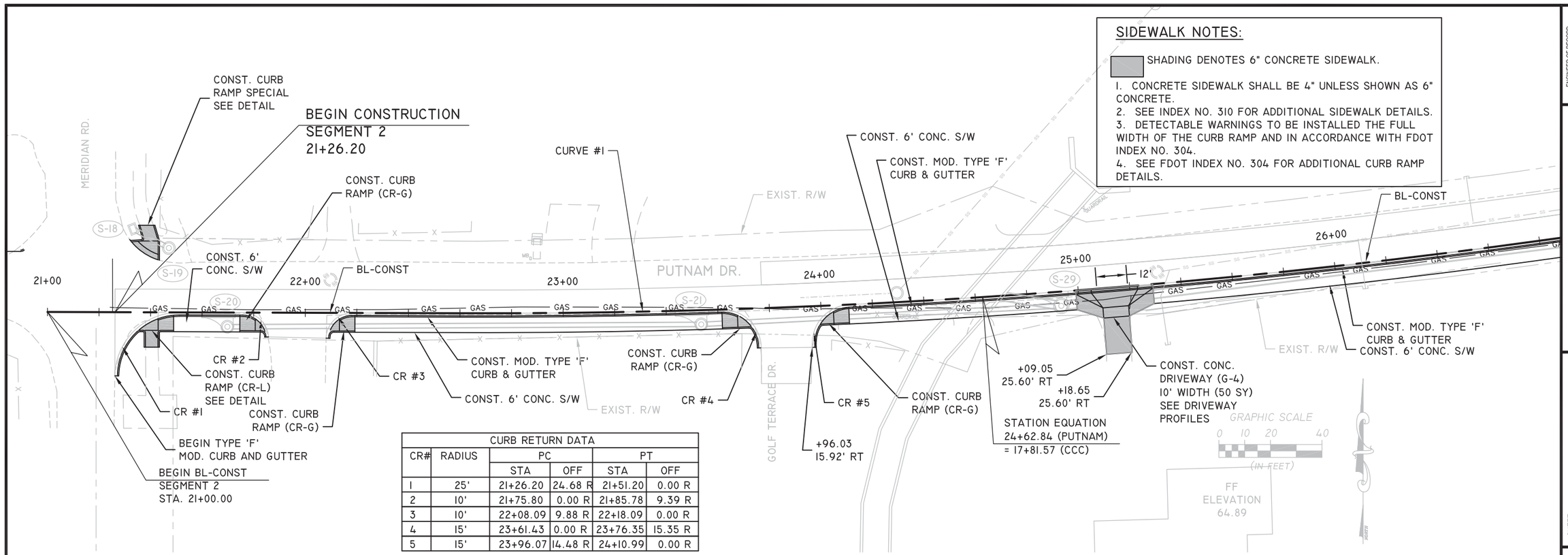
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
PLAN & PROFILE
COUNTRY CLUB CREEK

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir, Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



SIDEWALK NOTES:

SHADING DENOTES 6" CONCRETE SIDEWALK.

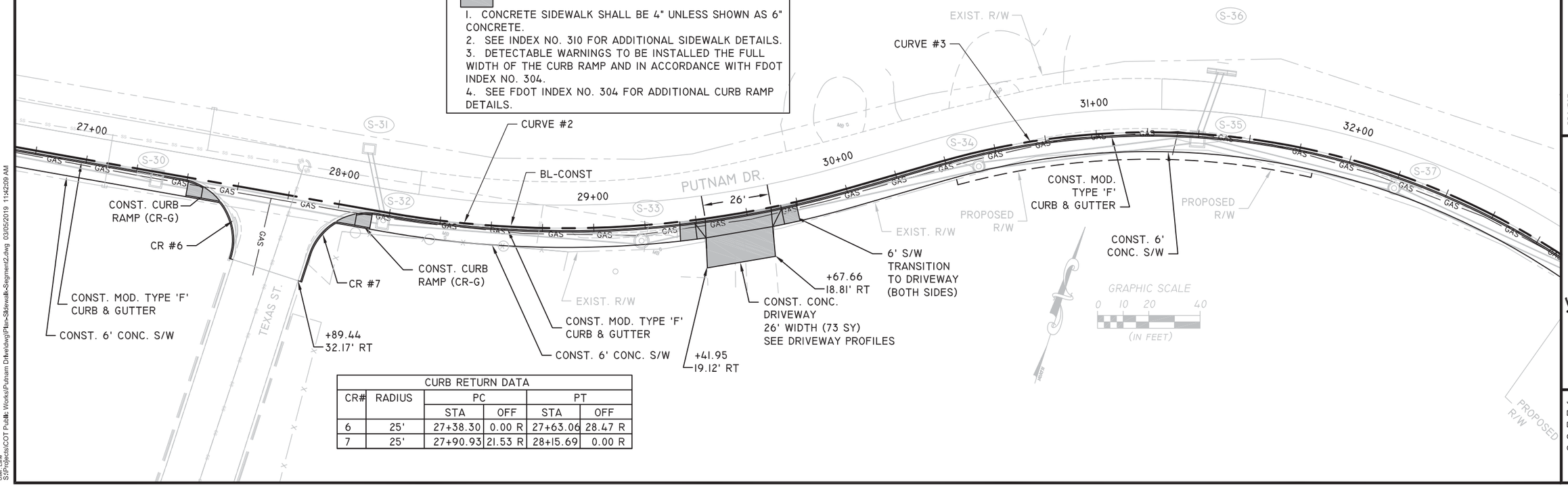
1. CONCRETE SIDEWALK SHALL BE 4" UNLESS SHOWN AS 6" CONCRETE.
2. SEE INDEX NO. 310 FOR ADDITIONAL SIDEWALK DETAILS.
3. DETECTABLE WARNINGS TO BE INSTALLED THE FULL WIDTH OF THE CURB RAMP AND IN ACCORDANCE WITH FDOT INDEX NO. 304.
4. SEE FDOT INDEX NO. 304 FOR ADDITIONAL CURB RAMP DETAILS.

CURB RETURN DATA					
CR#	RADIUS	PC		PT	
		STA	OFF	STA	OFF
1	25'	21+26.20	24.68 R	21+51.20	0.00 R
2	10'	21+75.80	0.00 R	21+85.78	9.39 R
3	10'	22+08.09	9.88 R	22+18.09	0.00 R
4	15'	23+61.43	0.00 R	23+76.35	15.35 R
5	15'	23+96.07	14.48 R	24+10.99	0.00 R

SIDEWALK NOTES:

SHADING DENOTES 6" CONCRETE SIDEWALK.

1. CONCRETE SIDEWALK SHALL BE 4" UNLESS SHOWN AS 6" CONCRETE.
2. SEE INDEX NO. 310 FOR ADDITIONAL SIDEWALK DETAILS.
3. DETECTABLE WARNINGS TO BE INSTALLED THE FULL WIDTH OF THE CURB RAMP AND IN ACCORDANCE WITH FDOT INDEX NO. 304.
4. SEE FDOT INDEX NO. 304 FOR ADDITIONAL CURB RAMP DETAILS.



CURB RETURN DATA					
CR#	RADIUS	PC		PT	
		STA	OFF	STA	OFF
6	25'	27+38.30	0.00 R	27+63.06	28.47 R
7	25'	27+90.93	21.53 R	28+15.69	0.00 R

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

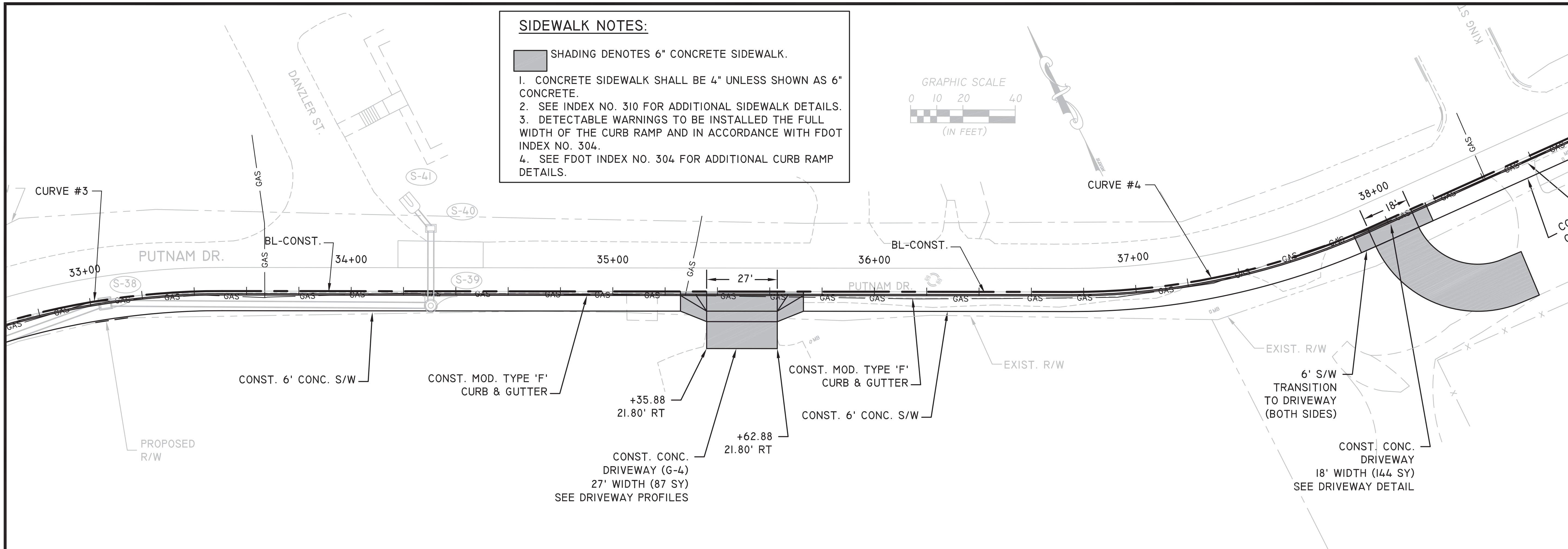
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
SIDEWALK AND CURB PLANS PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering (Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #99961

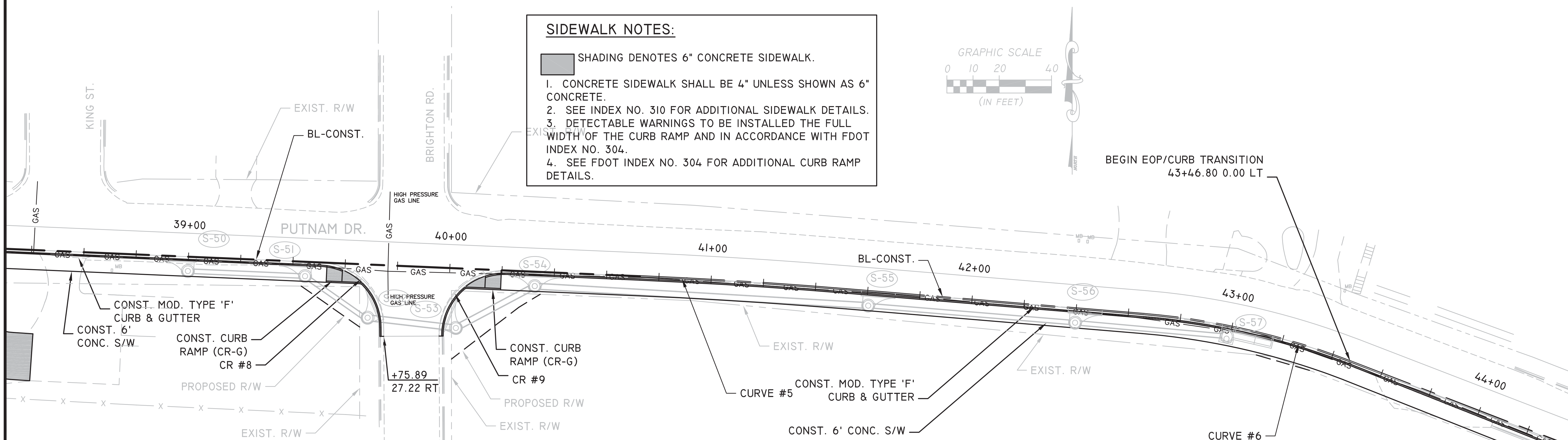
JOB NO.
DRAWN
DESIGNED
CHECKED
QC



SIDEWALK NOTES:

SHADING DENOTES 6" CONCRETE SIDEWALK.

1. CONCRETE SIDEWALK SHALL BE 4" UNLESS SHOWN AS 6" CONCRETE.
2. SEE INDEX NO. 310 FOR ADDITIONAL SIDEWALK DETAILS.
3. DETECTABLE WARNINGS TO BE INSTALLED THE FULL WIDTH OF THE CURB RAMP AND IN ACCORDANCE WITH FDOT INDEX NO. 304.
4. SEE FDOT INDEX NO. 304 FOR ADDITIONAL CURB RAMP DETAILS.



SIDEWALK NOTES:

SHADING DENOTES 6" CONCRETE SIDEWALK.

1. CONCRETE SIDEWALK SHALL BE 4" UNLESS SHOWN AS 6" CONCRETE.
2. SEE INDEX NO. 310 FOR ADDITIONAL SIDEWALK DETAILS.
3. DETECTABLE WARNINGS TO BE INSTALLED THE FULL WIDTH OF THE CURB RAMP AND IN ACCORDANCE WITH FDOT INDEX NO. 304.
4. SEE FDOT INDEX NO. 304 FOR ADDITIONAL CURB RAMP DETAILS.

CURB RETURN DATA

CR#	RADIUS	PC STA	PC OFF	PT STA	PT OFF
8	25'	39+50.75	0.00 R	39+75.72	23.80 R
9	25'	39+97.02	26.20 R	40+21.99	0.00 R

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature | Date

ORIGINAL 03/05/2019
REVISIONS: 1 2 3 4 5

SHEET: SIDEWALK AND CURB PLANS PUTNAM DRIVE

PROJECT: COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

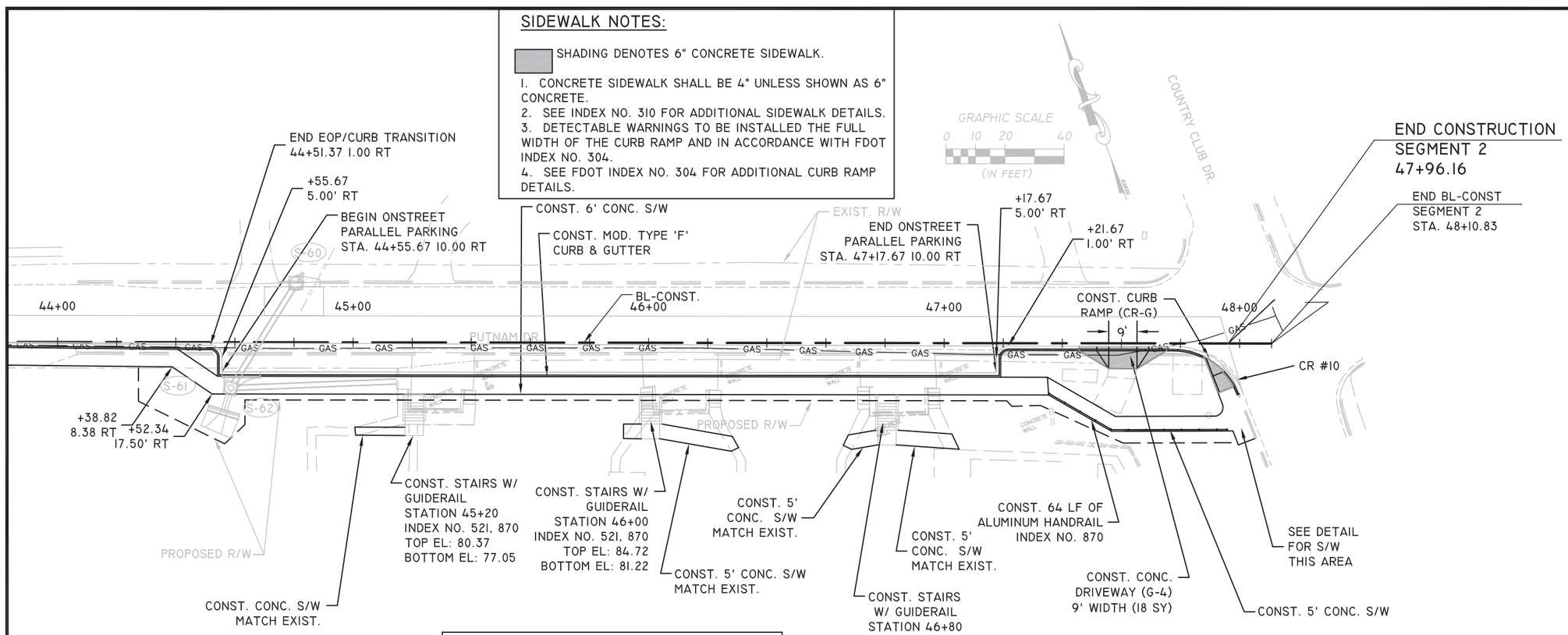
Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO. ______
DRAWN ______
DESIGNED ______
CHECKED ______
QC ______

SIDEWALK NOTES:

SHADING DENOTES 6" CONCRETE SIDEWALK.

1. CONCRETE SIDEWALK SHALL BE 4" UNLESS SHOWN AS 6" CONCRETE.
2. SEE INDEX NO. 310 FOR ADDITIONAL SIDEWALK DETAILS.
3. DETECTABLE WARNINGS TO BE INSTALLED THE FULL WIDTH OF THE CURB RAMP AND IN ACCORDANCE WITH FDOT INDEX NO. 304.
4. SEE FDOT INDEX NO. 304 FOR ADDITIONAL CURB RAMP DETAILS.



CURB RETURN DATA					
CR#	RADIUS	PC		PT	
		STA	OFF	STA	OFF
10	25'	47+77.94	1.00 R	48+00.59	16.78 R

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

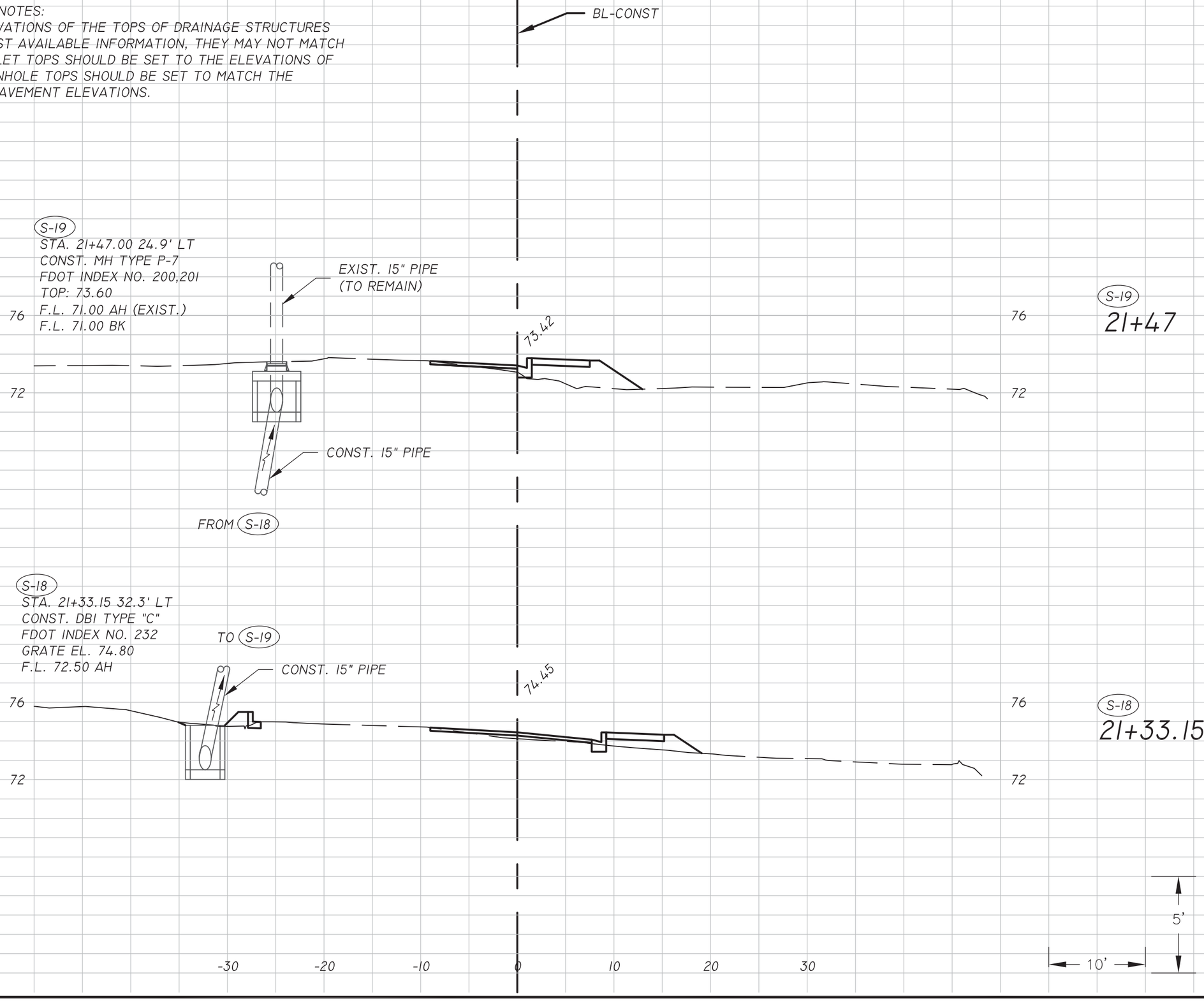
SHEET
SIDEWALK AND CURB
PLANS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

DRAINAGE STRUCTURE NOTES:
1. ALTHOUGH THE ELEVATIONS OF THE TOPS OF DRAINAGE STRUCTURES ARE BASED ON THE BEST AVAILABLE INFORMATION, THEY MAY NOT MATCH FIELD CONDITIONS. INLET TOPS SHOULD BE SET TO THE ELEVATIONS OF ADJACENT CURBS, MANHOLE TOPS SHOULD BE SET TO MATCH THE FINISHED GROUND OR PAVEMENT ELEVATIONS.



ENGINEER OF RECORD
LANE P. LUCAS
FLORIDA P.E. No.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
DRAINAGE STRUCTURES

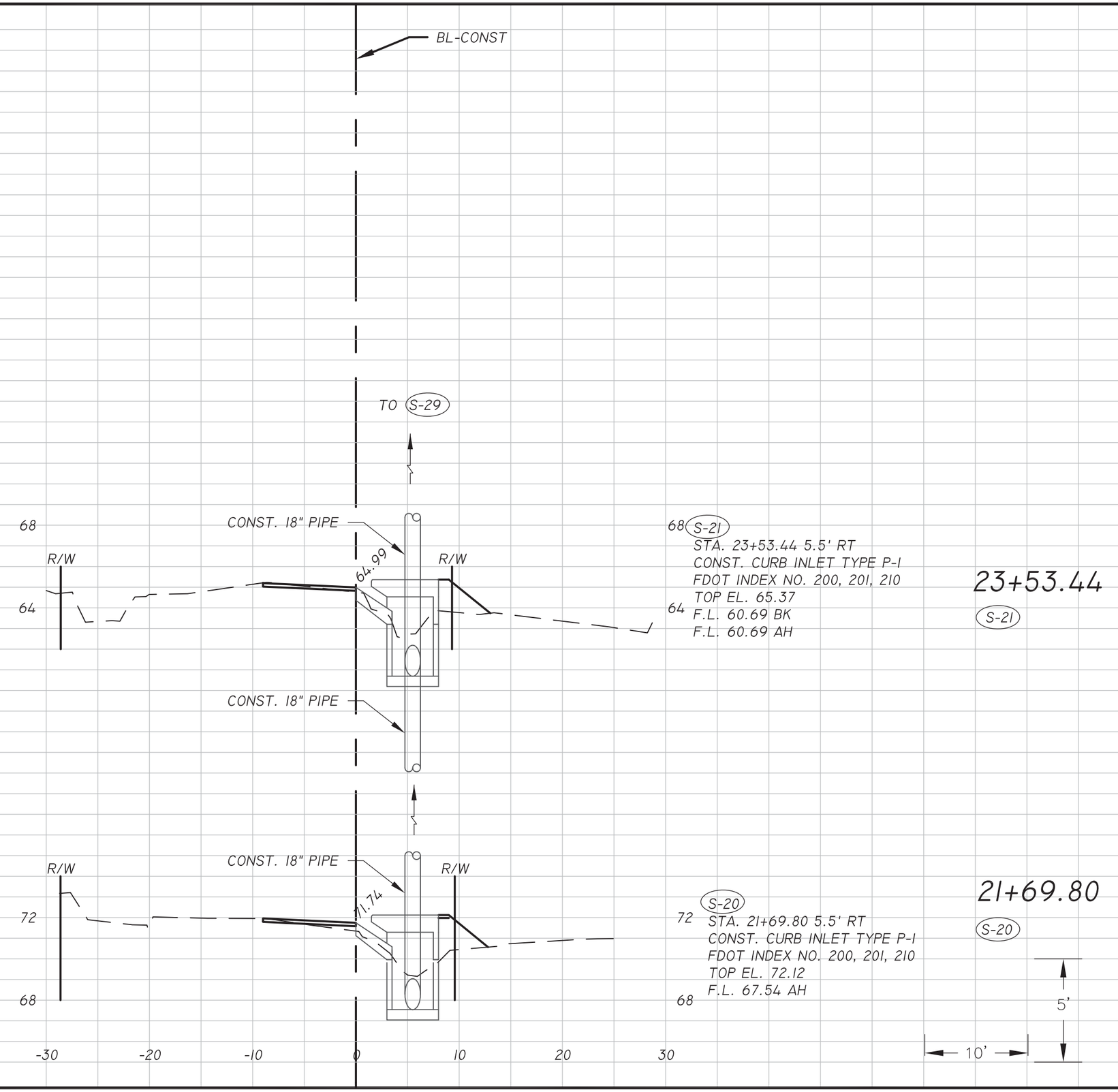
PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

23

User: Lane
S:\Projects\COT Public Works\Putnam Dr\edwg\XS-DRAINAGE-SEGMENT2.dwg 03/05/2019 12:23:58 PM



ENGINEER OF RECORD
LANE P. LUCAS
Etan, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

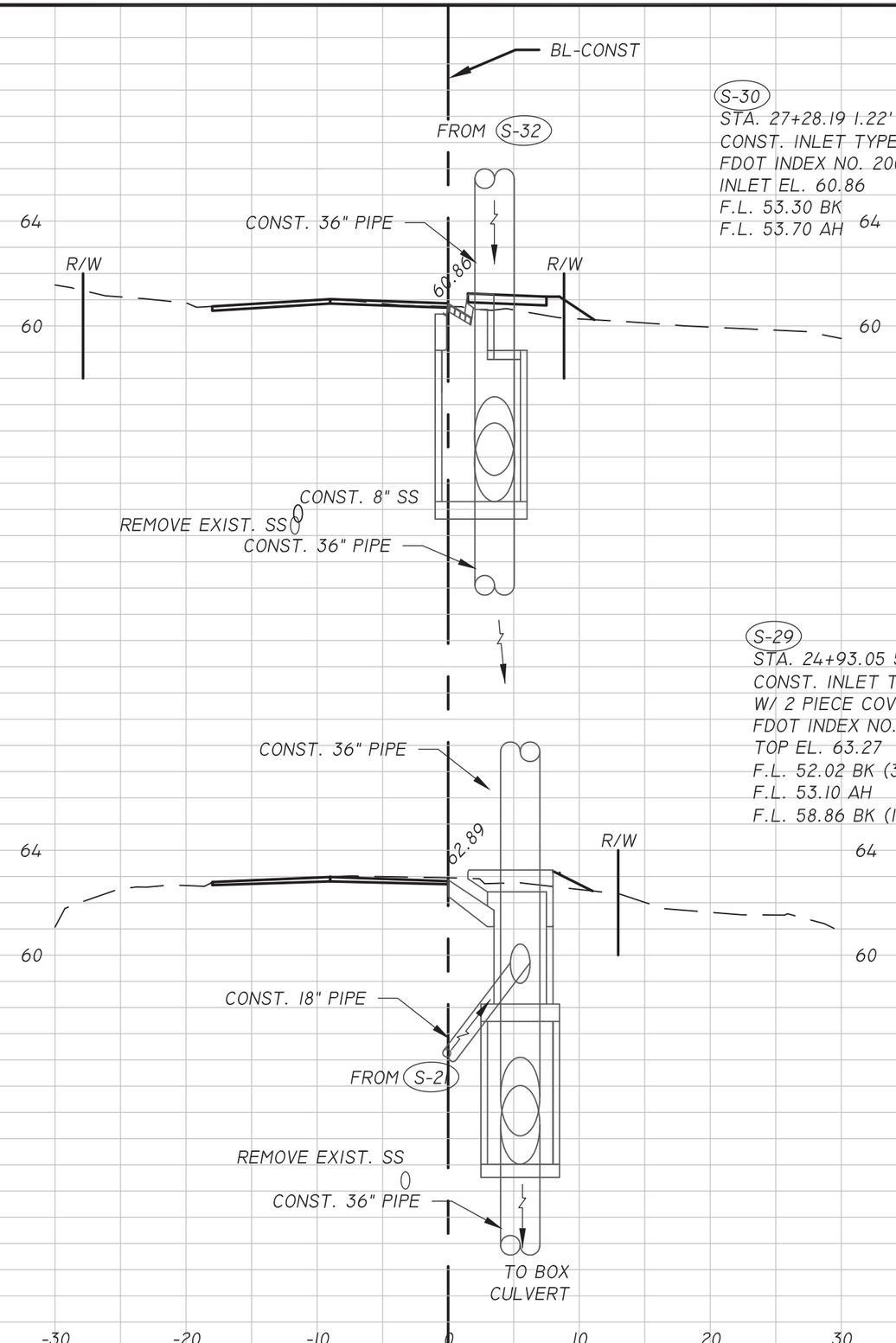
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
DRAINAGE STRUCTURES

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Etan, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.etaninc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



S-30
STA. 27+28.19 1.22' RT
CONST. INLET TYPE J-5 (ALT B 4 X 6)
FDOT INDEX NO. 200, 201, 211
INLET EL. 60.86
F.L. 53.30 BK
F.L. 53.70 AH

27+28.19
S-30

S-29
STA. 24+93.05 5.50' RT
CONST. INLET TYPE J-1 (5')
W/ 2 PIECE COVER
FDOT INDEX NO. 200, 201, 210
TOP EL. 63.27
F.L. 52.02 BK (36")
F.L. 53.10 AH
F.L. 58.86 BK (18")

24+93.05
S-29

10'
5'

ENGINEER OF RECORD
LANE P. LUCAS
P.E. No. 53936
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
DRAINAGE STRUCTURES

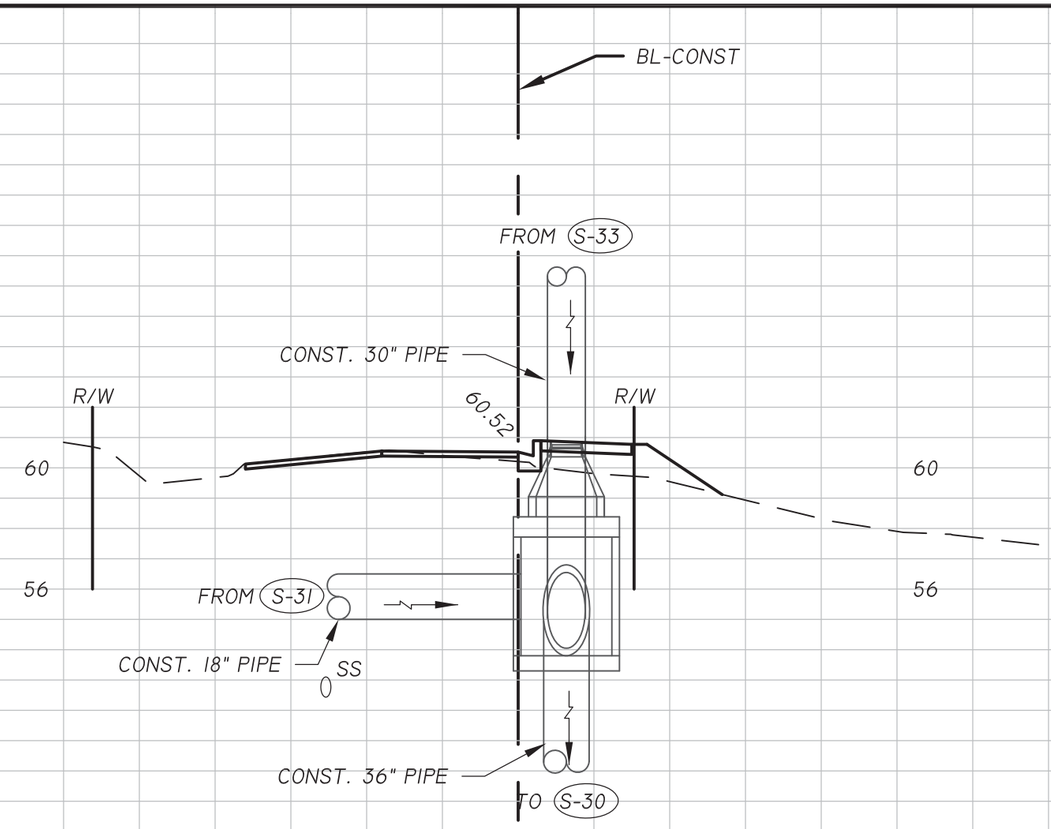
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

25

User: Lane
S:\Projects\COT Public Works\Putnam Dr\edwg\XS-DRAINAGE-SEGMENT2.dwg 03/05/2019 12:24:32 PM



28+18.04

S-32

S-32
STA. 28+18.04 3.16' RT
CONST. MH TYPE J-8 (ALT B. 4X6)
W/ 2 PIECE COVER
FDOT INDEX NO. 200, 201
TOP EL. 60.86
F.L. 53.80 BK
F.L. 54.05 AH
F.L. 55.00 LT

28+07.85

S-31

S-31
STA. 28+07.85 23.3' LT
CONST. DBI TYPE "C"
W/ MOD. TRAVERSABLE SLOTS (BK & AH)
FDOT INDEX NO. 232
GRATE EL. 59.50
F.L. 56.00 RT

5'
10'

ENGINEER OF RECORD
LANE P. LUCAS
Etan, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

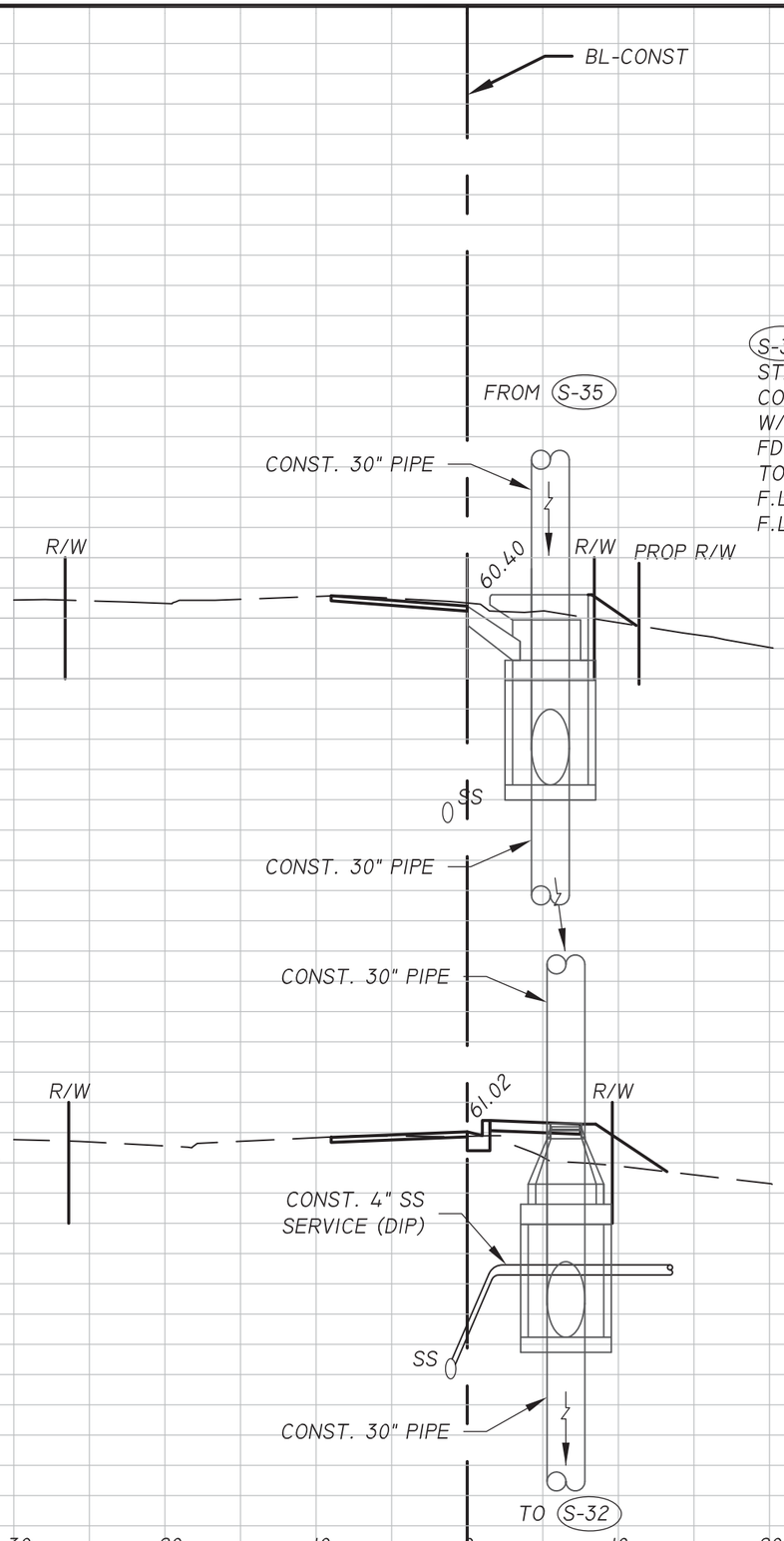
SHEET
DRAINAGE STRUCTURES

PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Etan, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.etaninc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\XS-DRAINAGE-SEGMENT2.dwg 03/05/2019 12:24:53 PM



S-34
STA. 30+52.29 5.5' RT
CONST. INLET TYPE P-1
W/ 2 PIECE COVER
FDOT INDEX NO. 200, 201, 210
TOP EL. 60.78
F.L. 54.49 BK
F.L. 54.49 AH

30+52.29
S-34

S-33
STA. 29+18.23 6.00' RT
CONST. CONFLICT MH TYPE J-8 (5')
W/ 2 PIECE COVER
FDOT INDEX NO. 200, 201
TOP EL. 61.30
F.L. 56.29 RT (4" SS DIP)
F.L. 56.25 LT (4" SS DIP)
F.L. 54.23 BK
F.L. 54.23 AH

29+18.23
S-33

5'
10'

ENGINEER OF RECORD
LANE P. LUCAS
Etan, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

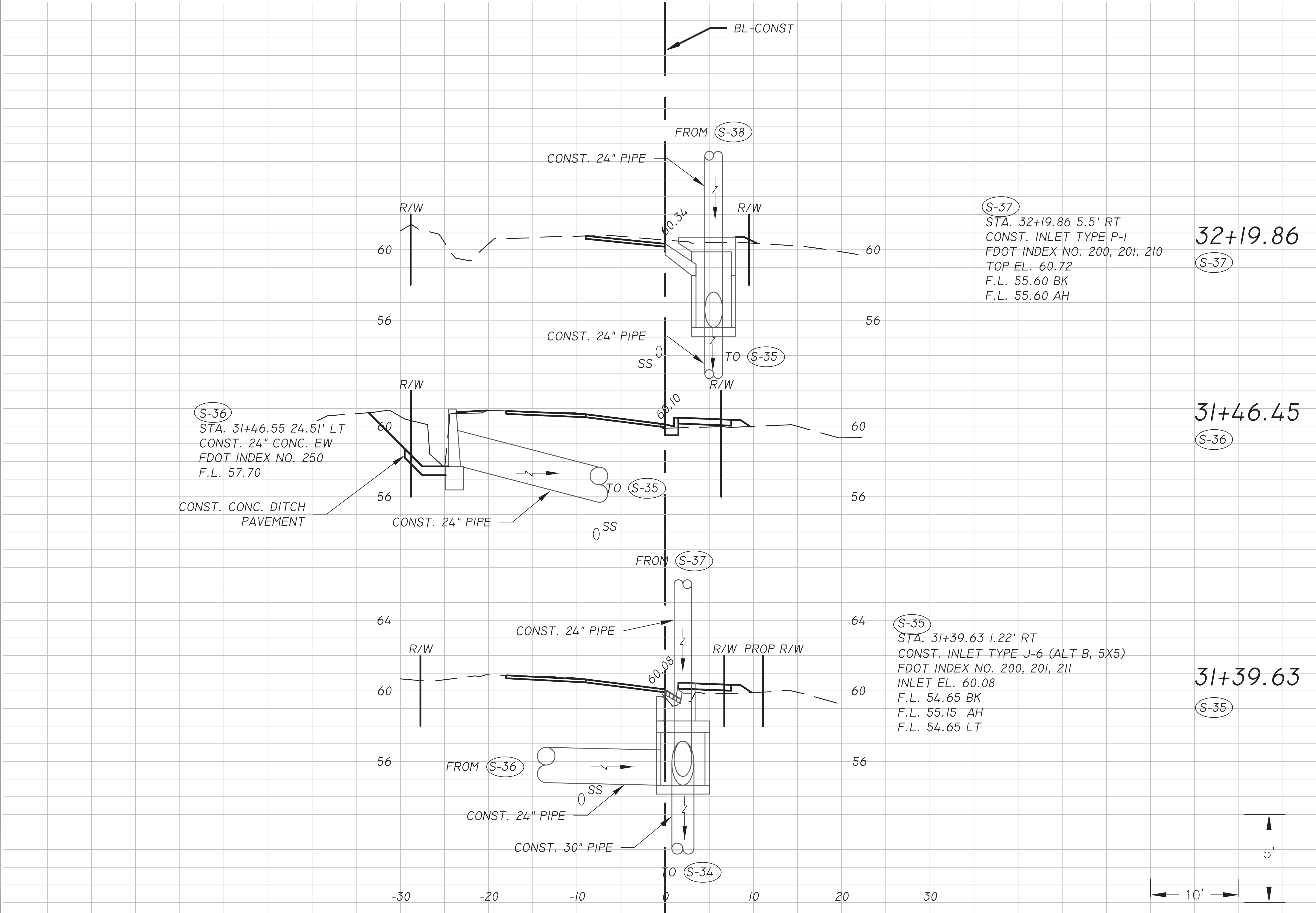
SHEET
DRAINAGE STRUCTURES

PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Etan, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.etaninc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\XS-DRAINAGE-SEGMENT2.dwg 03/05/2019 12:25:07 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
DRAINAGE STRUCTURES

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

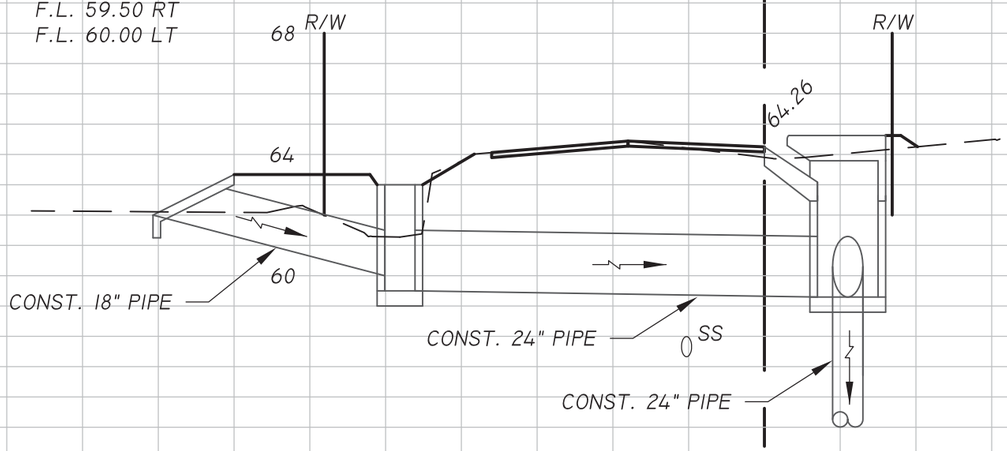
EUTAW, INC
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

BL-CONST

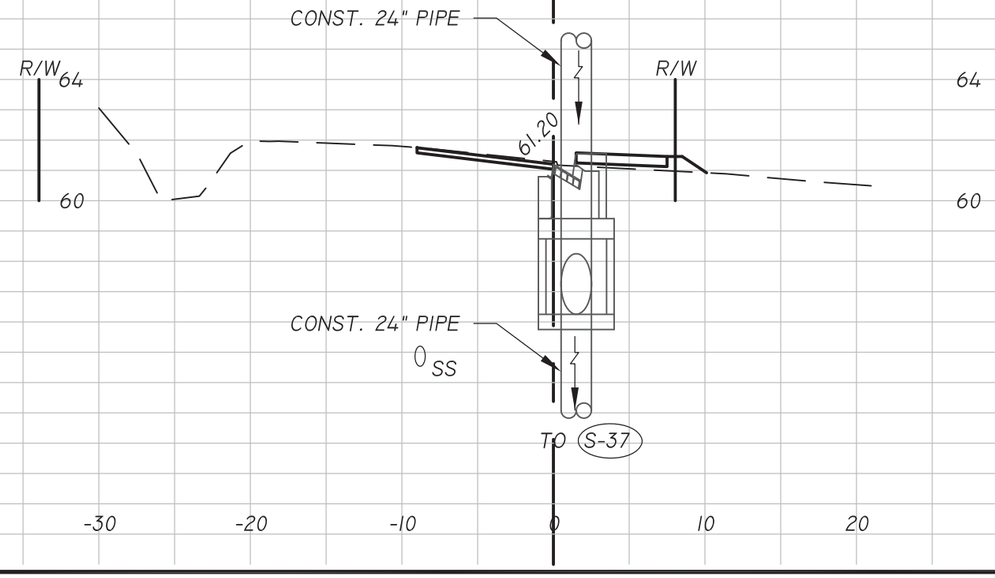
S-41
STA. 34+23.46 32.5' LT
CONST. 18" MES (4:1)
INDEX NO. 273
F.L. 62.00

S-40
STA. 34+30.44 24.0' LT
CONST. DBI TYPE "C"
W/ MOD. TRAVERSABLE SLOT (AH)
FDOT INDEX NO. 232
GRATE EL. 63.00
F.L. 59.50 RT
F.L. 60.00 LT



34+30.44
S-39 S-40

S-39
STA. 34+30.44 5.5' RT
CONST. INLET TYPE P-1
FDOT INDEX NO. 200, 201, 210
TOP EL. 64.63
F.L. 59.30 BK
F.L. 59.30 LT



33+05.55
S-38

S-38
STA. 33+05.55 1.22' RT
CONST. INLET TYPE P-5
FDOT INDEX NO. 200, 201, 211
INLET EL. 61.20
F.L. 56.25 BK
F.L. 56.25 AH

5'
10'

ENGINEER OF RECORD
LANE P. LUCAS
Etowah, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

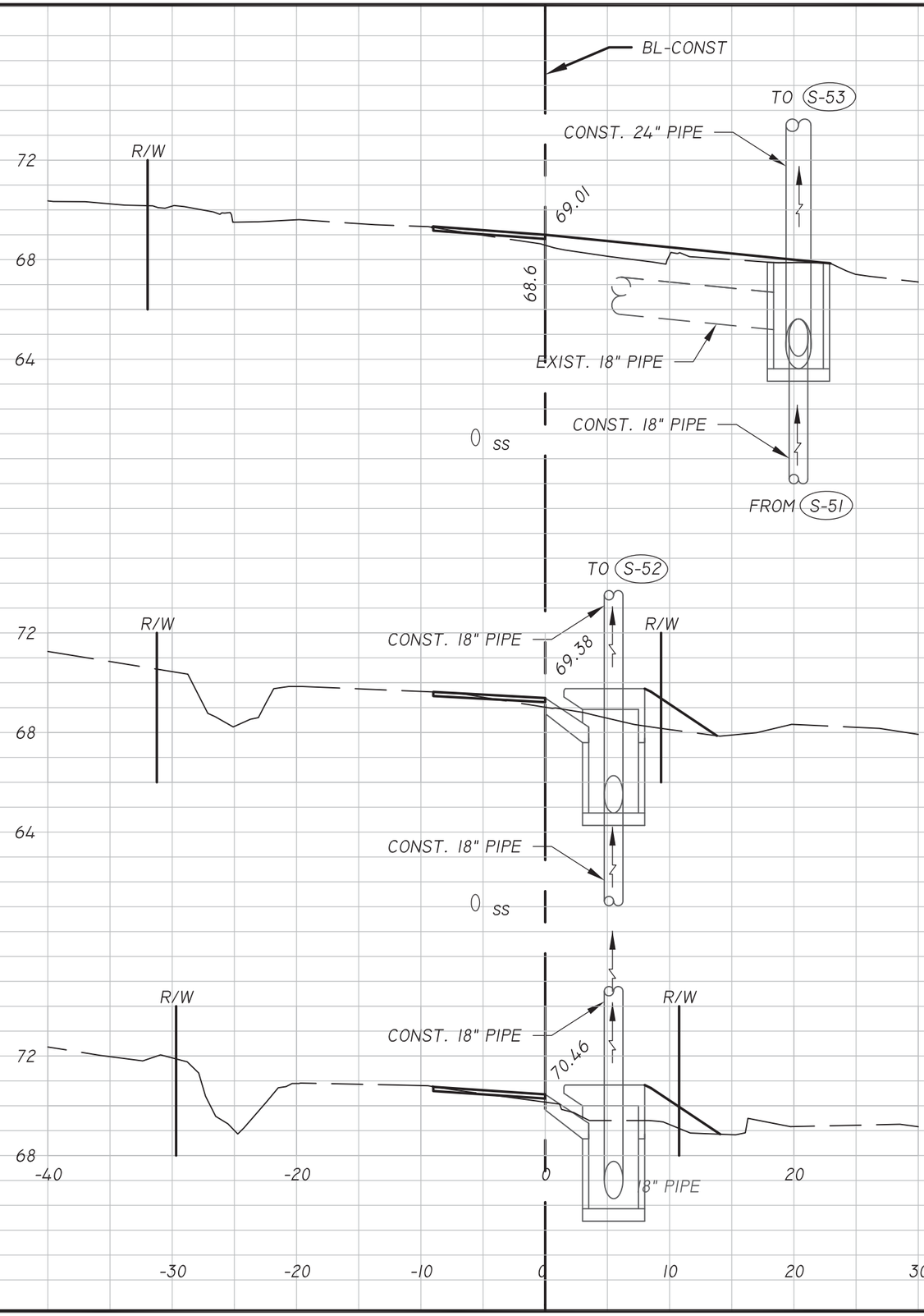
SHEET
DRAINAGE STRUCTURES

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Etowah, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.etowahinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\XS-DRAINAGE-SEGMENT2.dwg 03/05/2019 12:25:38 PM



S-52
STA. 39+69.41 20.37' RT
CONST. CURB INLET TYPE P-I
CAST-IN-PLACE CONSTRUCTION
FDOT INDEX NO. 200, 201, 210
INLET EL. 67.62
F.L. 64.12 BK
F.L. 63.62 AH
F.L. 65.19 LT (EXIST)

39+69.41
S-52

S-51
STA. 39+44.85 5.50' RT
CONST. CURB INLET TYPE P-I
FDOT INDEX NO. 200, 201, 210
TOP EL. 69.76
F.L. 64.77 BK
F.L. 64.77 AH

39+44.85
S-51

S-50
STA. 39+00.00 5.50' RT
CONST. CURB INLET TYPE P-I
FDOT INDEX NO. 200, 201, 210
TOP EL. 70.83
F.L. 66.24 AH

39+00.00
S-50

5'
10'

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

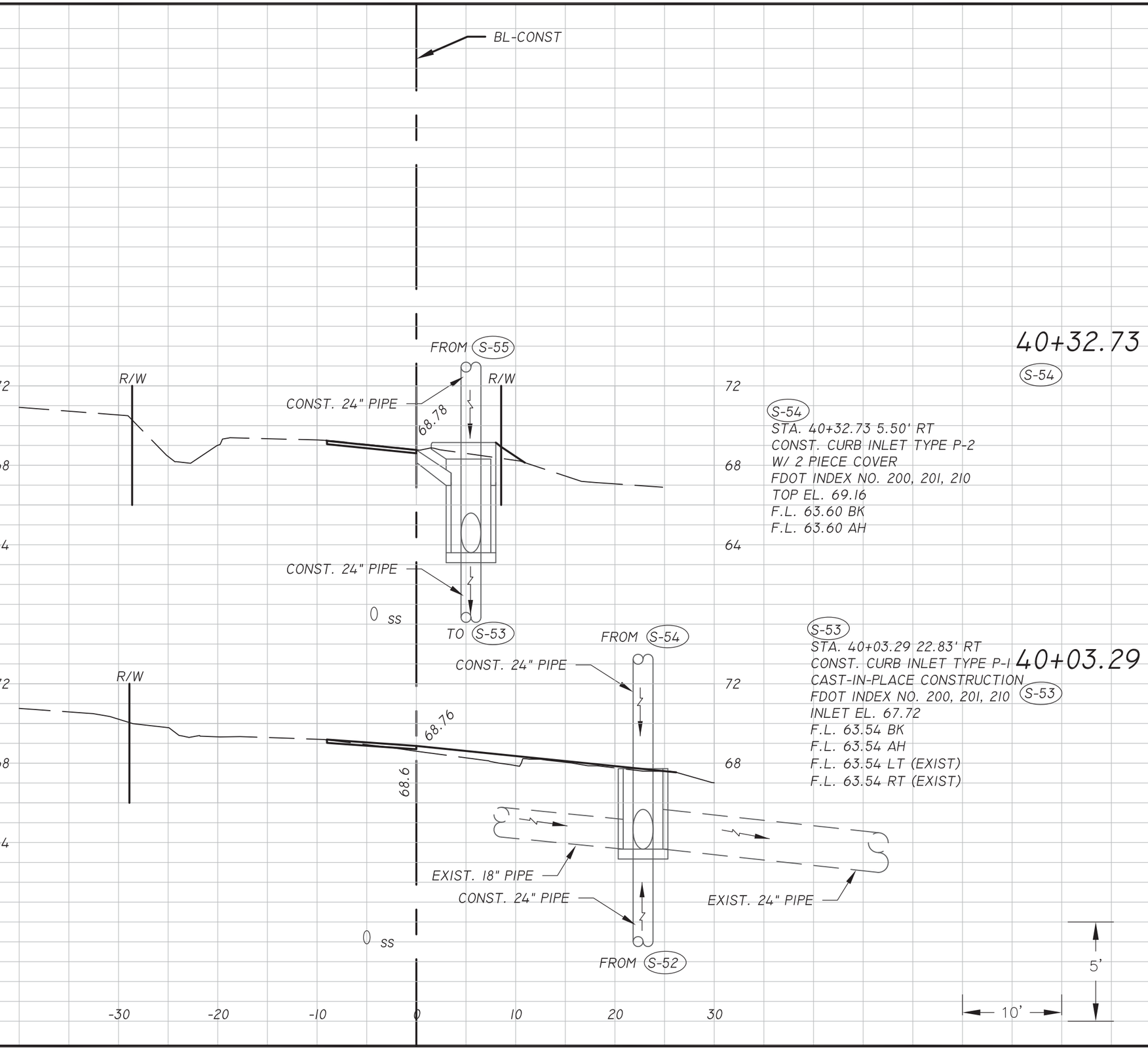
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
DRAINAGE STRUCTURES

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



40+32.73

S-54

S-54
STA. 40+32.73 5.50' RT
CONST. CURB INLET TYPE P-2
W/ 2 PIECE COVER
FDOT INDEX NO. 200, 201, 210
TOP EL. 69.16
F.L. 63.60 BK
F.L. 63.60 AH

S-53
STA. 40+03.29 22.83' RT
CONST. CURB INLET TYPE P-1
CAST-IN-PLACE CONSTRUCTION
FDOT INDEX NO. 200, 201, 210 S-53
INLET EL. 67.72
F.L. 63.54 BK
F.L. 63.54 AH
F.L. 63.54 LT (EXIST)
F.L. 63.54 RT (EXIST)

40+03.29

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
DRAINAGE STRUCTURES

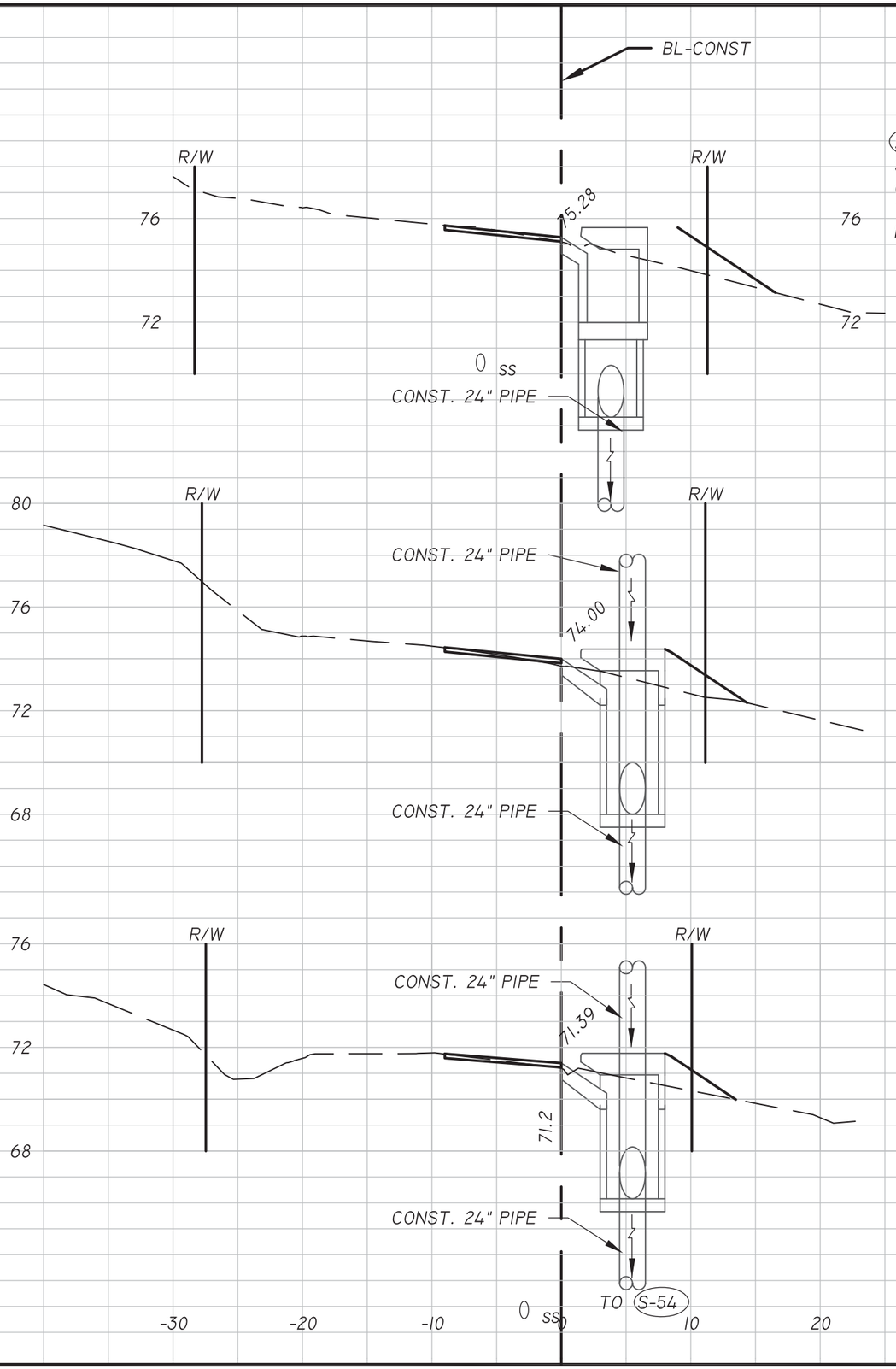
PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

31

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\XS-DRAINAGE-SEGMENT2.dwg 03/05/2019 12:26:26 PM



42+98.85

S-57

STA. 42+98.85 4.00' RT
CONST. CURB INLET I HC (I5' THROAT)
TOP EL. 75.65
F.L. 68.35 BK

42+40.00

S-56

STA. 42+40.00 5.50' RT
CONST. CURB INLET TYPE P-I
FDOT INDEX NO. 200, 201, 210
TOP EL. 74.38
F.L. 68.00 AH
F.L. 68.00 BK

41+60.64

S-55

STA. 41+60.64 5.50' RT
CONST. CURB INLET TYPE P-I
W/ 2 PIECE COVER
FDOT INDEX NO. 200, 201, 210
TOP EL. 71.77
F.L. 66.16 AH
F.L. 66.16 BK

5'
10'

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
DRAINAGE STRUCTURES

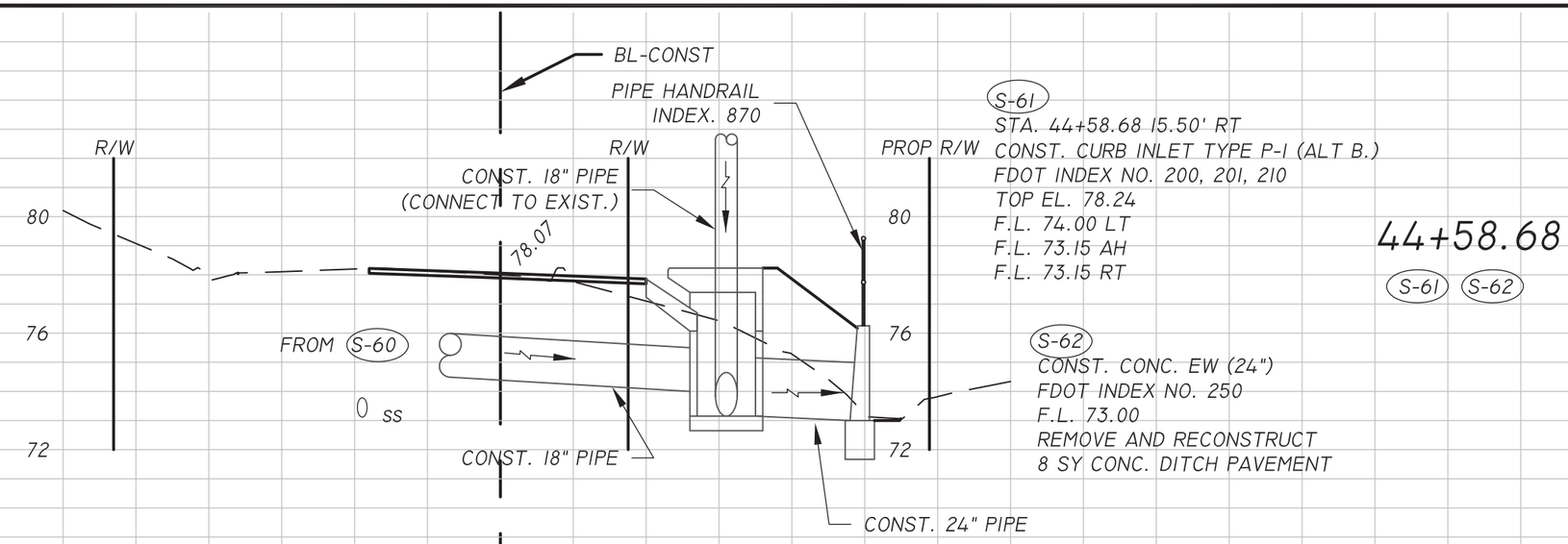
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

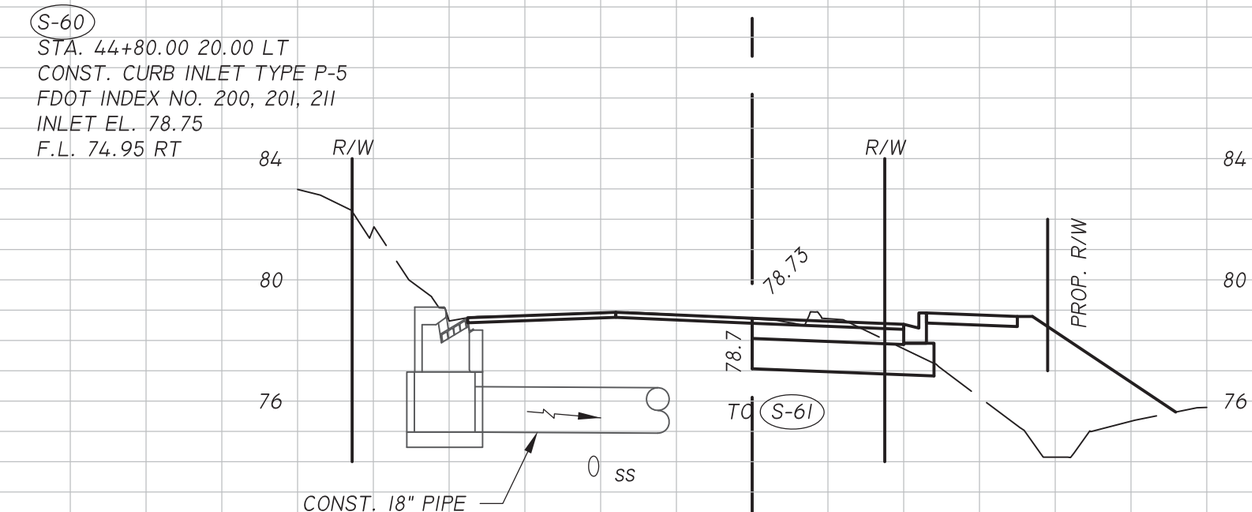
32

User: Lane
S:\Projects\COT Public Works\Putnam Dr\eva\dwg\XS-DRAINAGE-SEGMENT2.dwg 03/05/2019 12:28:47 PM



44+58.68

S-61 S-62



44+80

5'

10'

ENGINEER OF RECORD
LANE P. LUCAS
For the Firm
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

DRAINAGE STRUCTURES

SHEET

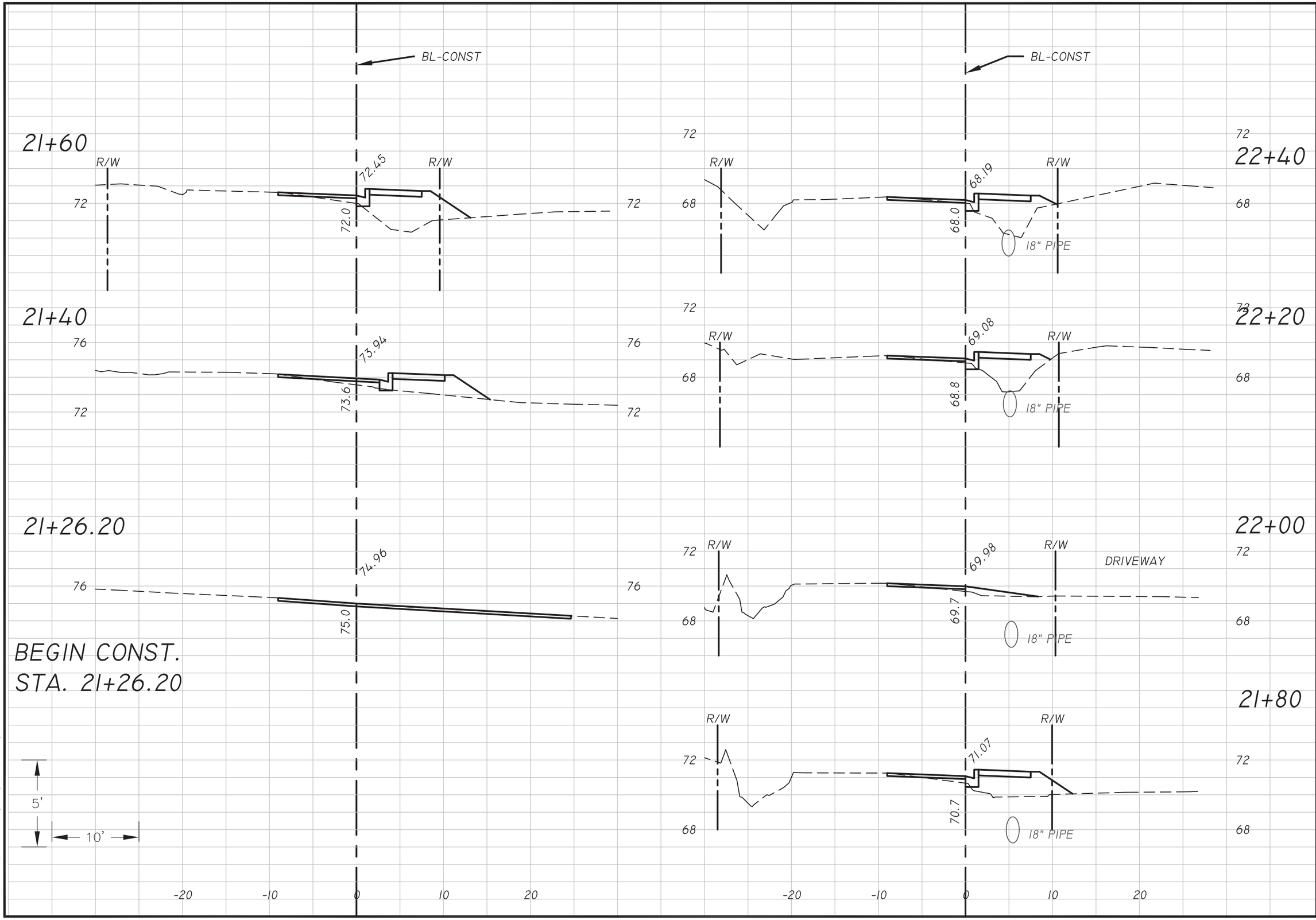
PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

33

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\XS-DRAINAGE-SEGMENT2.dwg 03/05/2019 12:27:02 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

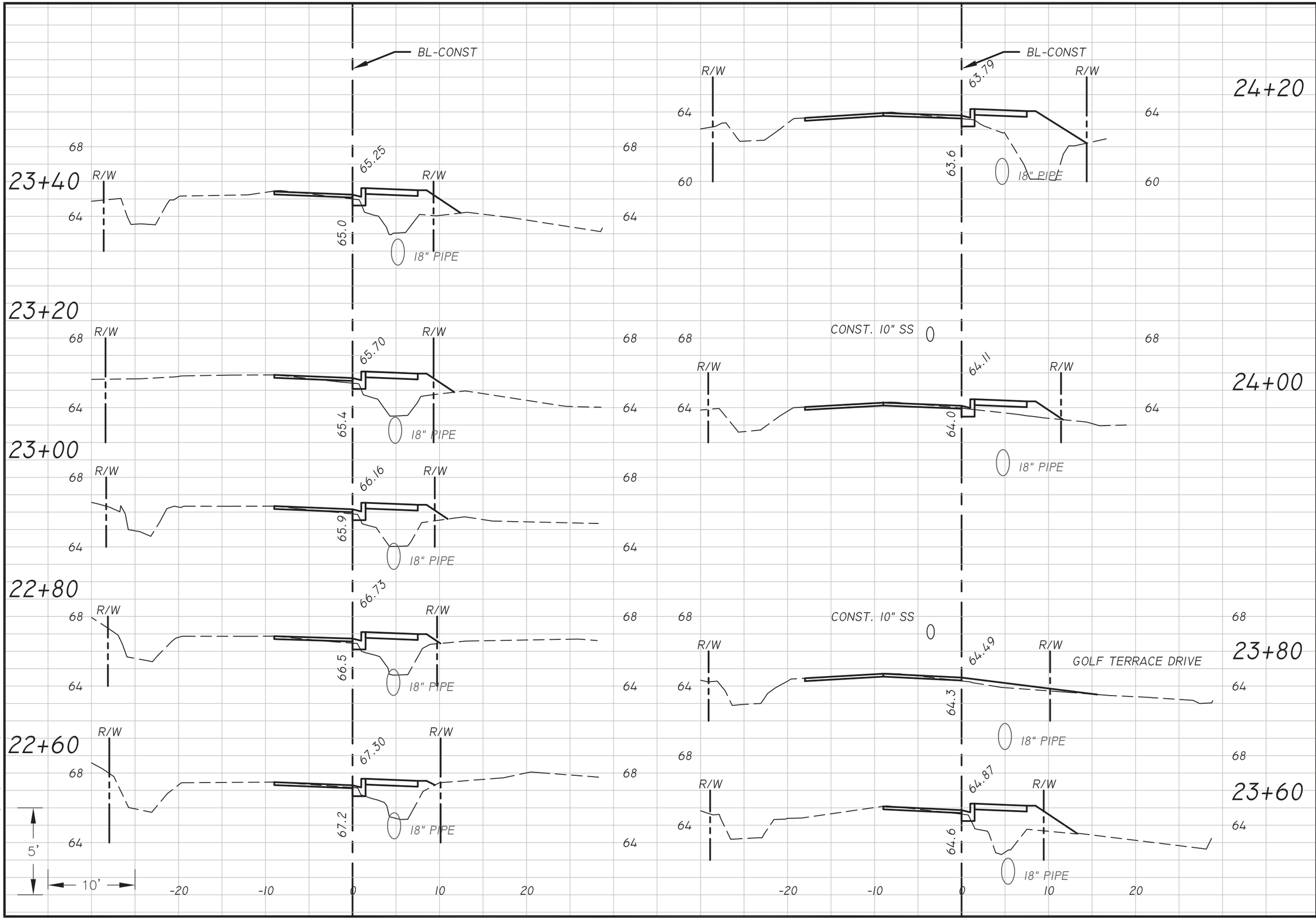
SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
C:\Users\Lane\Desktop\Putnam Drive\dwg\XS-Segment2-Updated.dwg 02/28/2019 12:07:05 PM



ENGINEER OF RECORD
LANE P. LUCAS
For the Firm
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

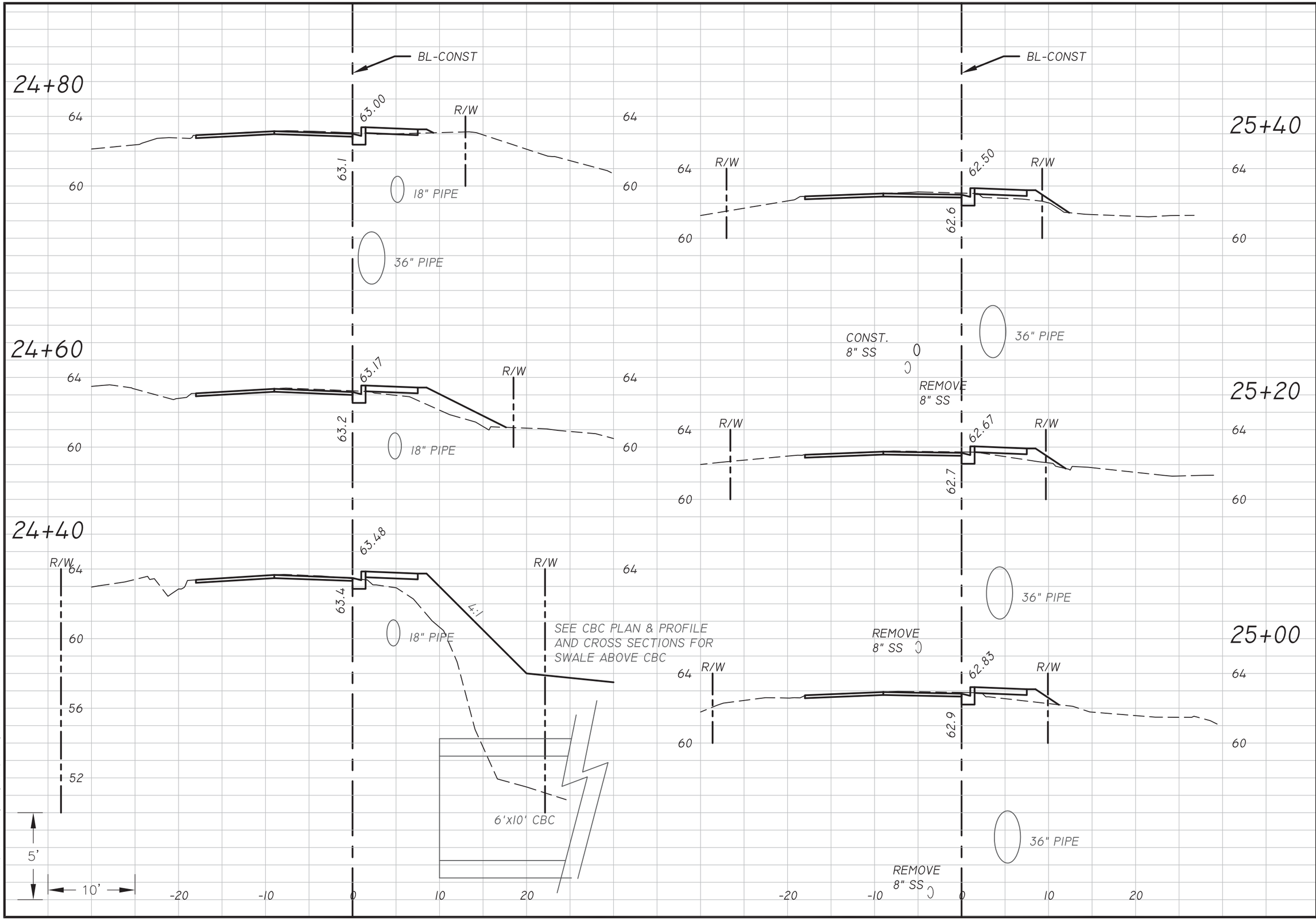
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
For the Firm
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

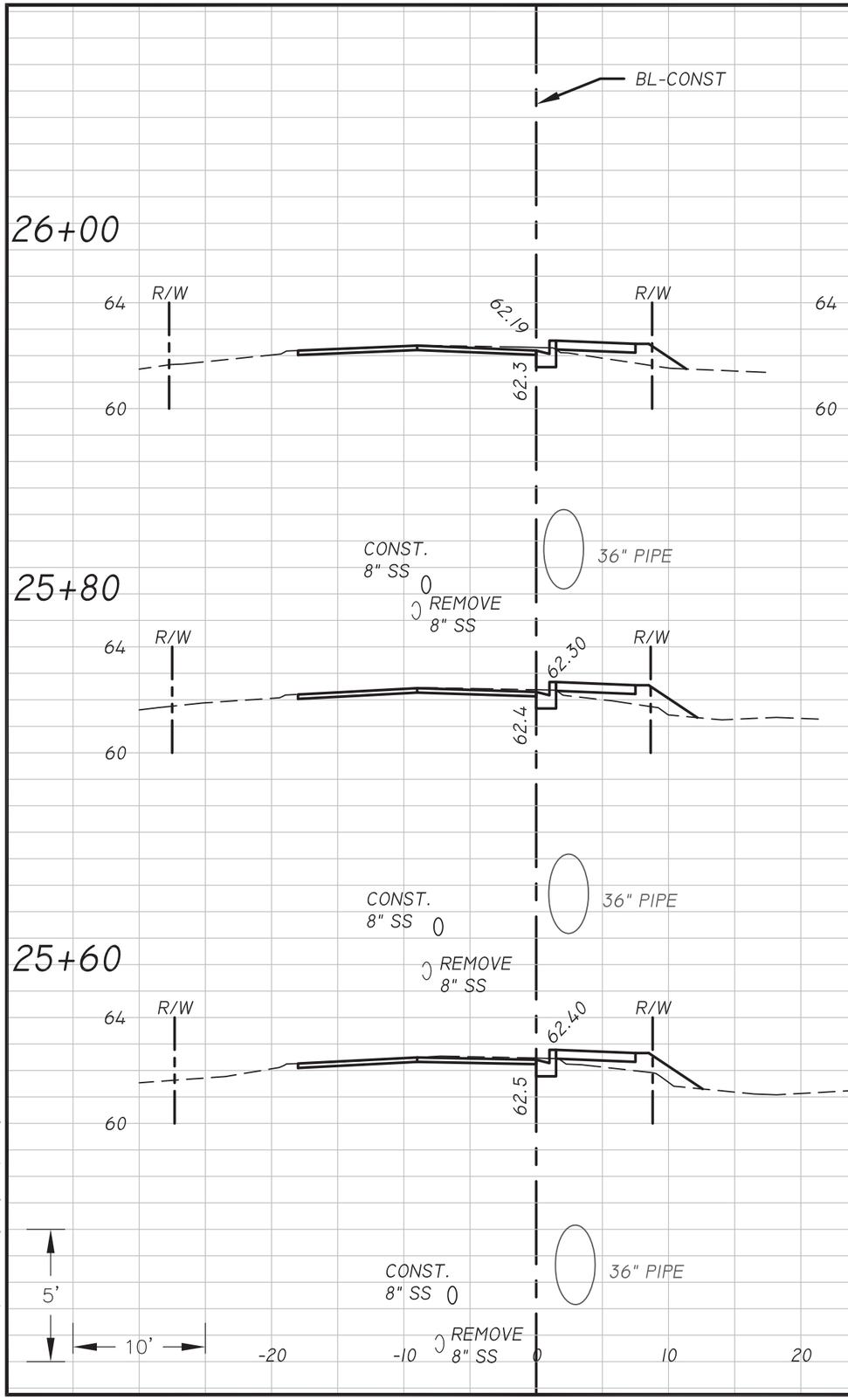
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

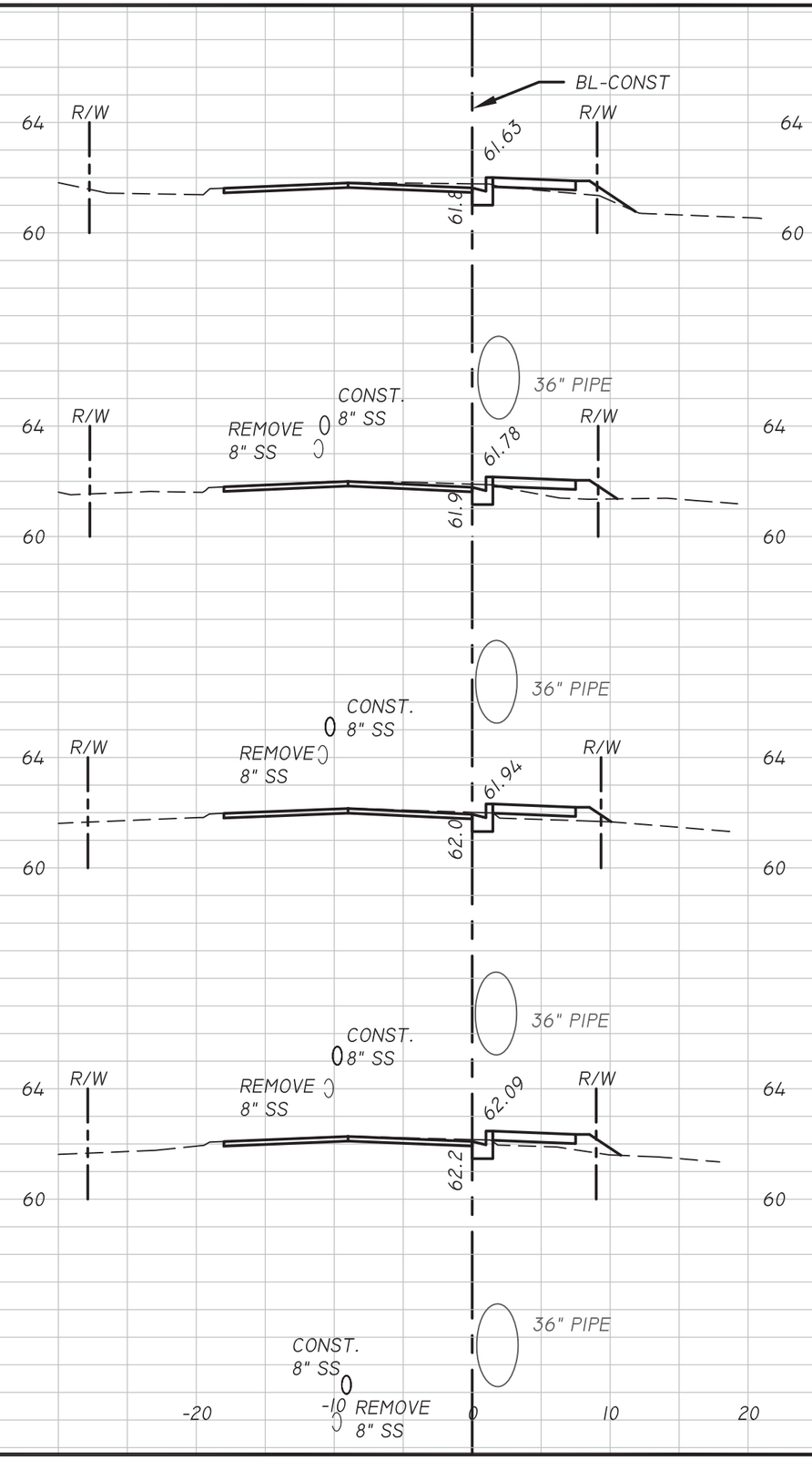
SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC





ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

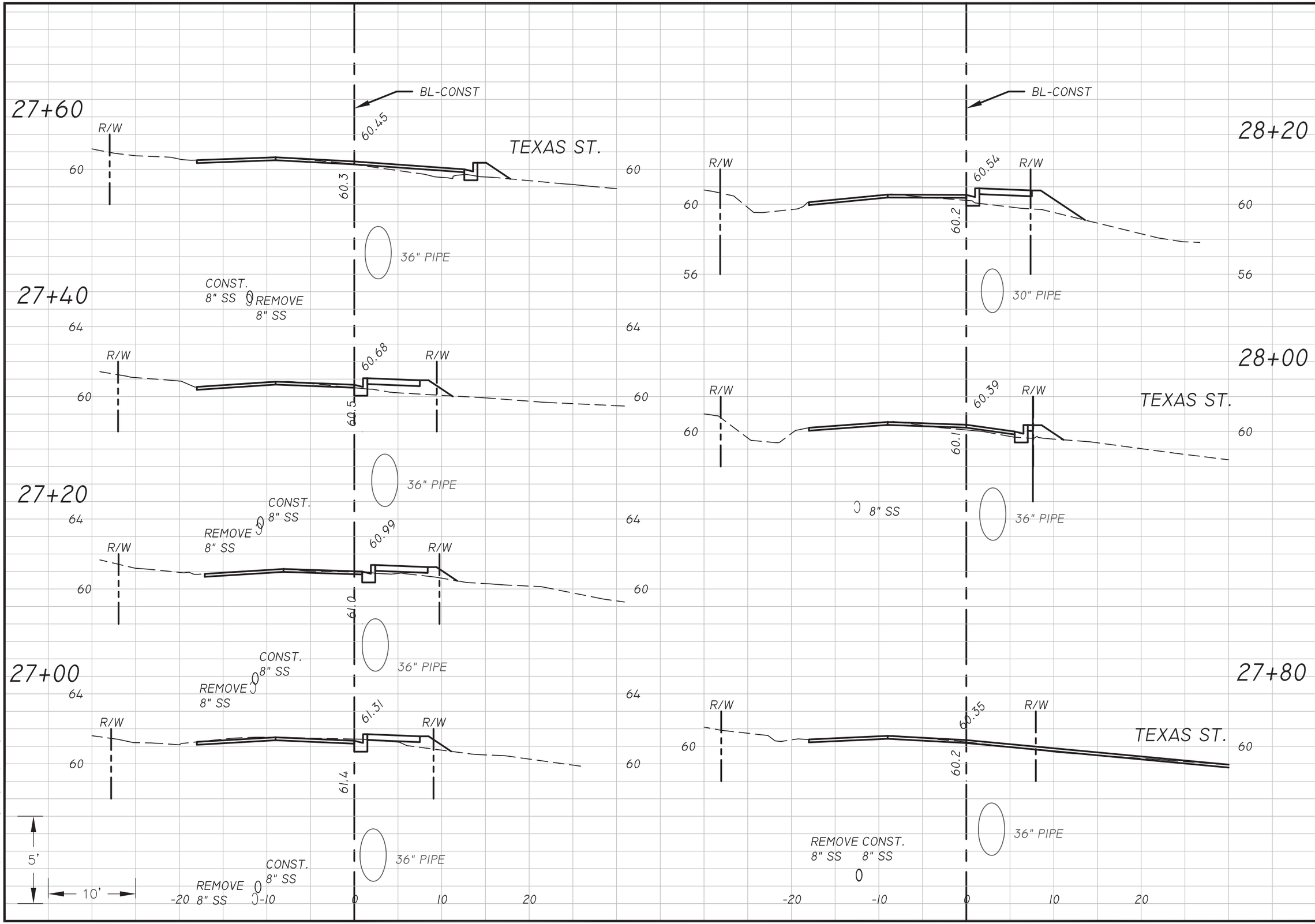
SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
C:\Users\Lane\Desktop\Putnam Dr\fw\dwg\XS-Segment2-Updated.dwg 02/28/2019 12:07:52 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

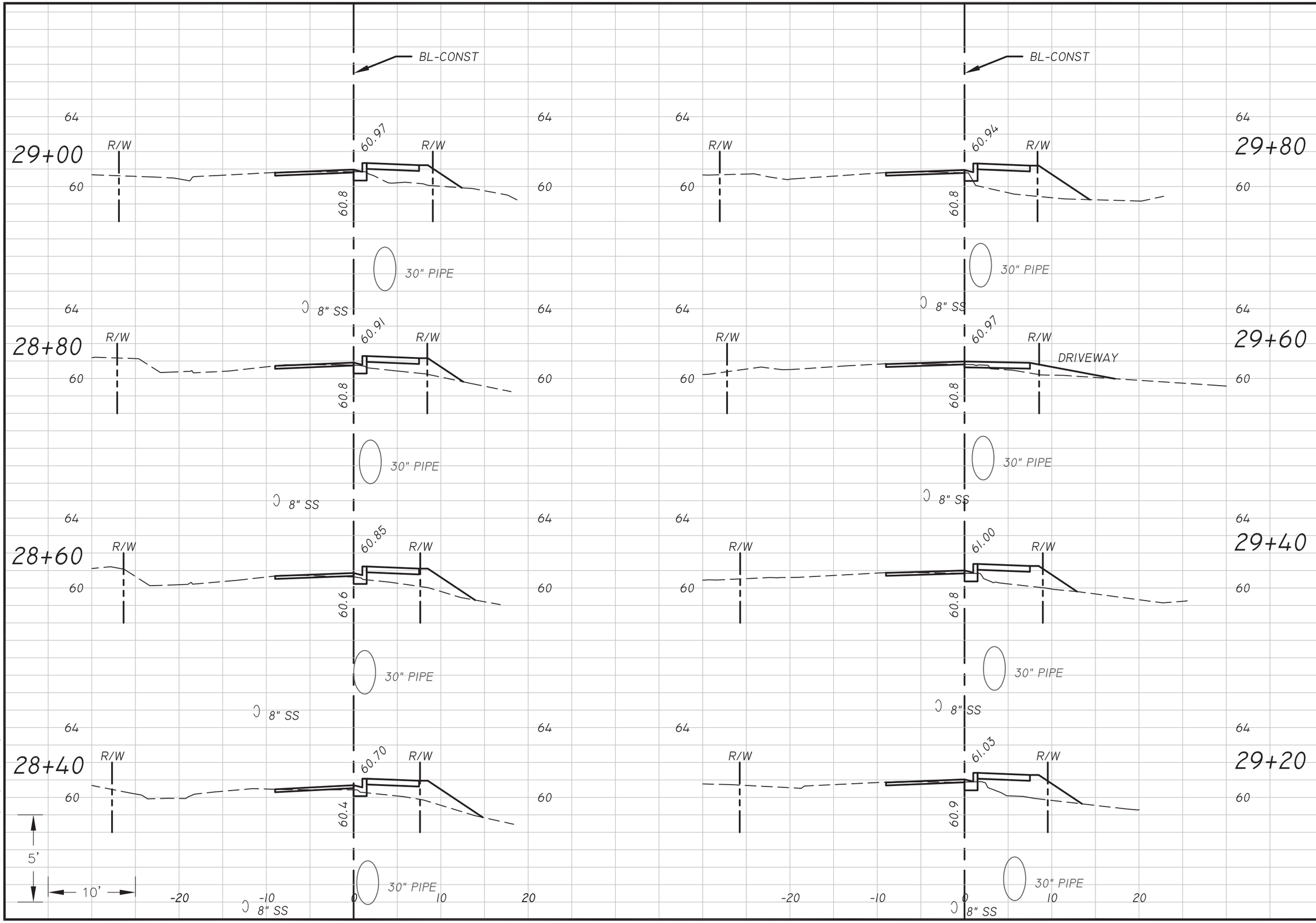
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
For the Firm
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

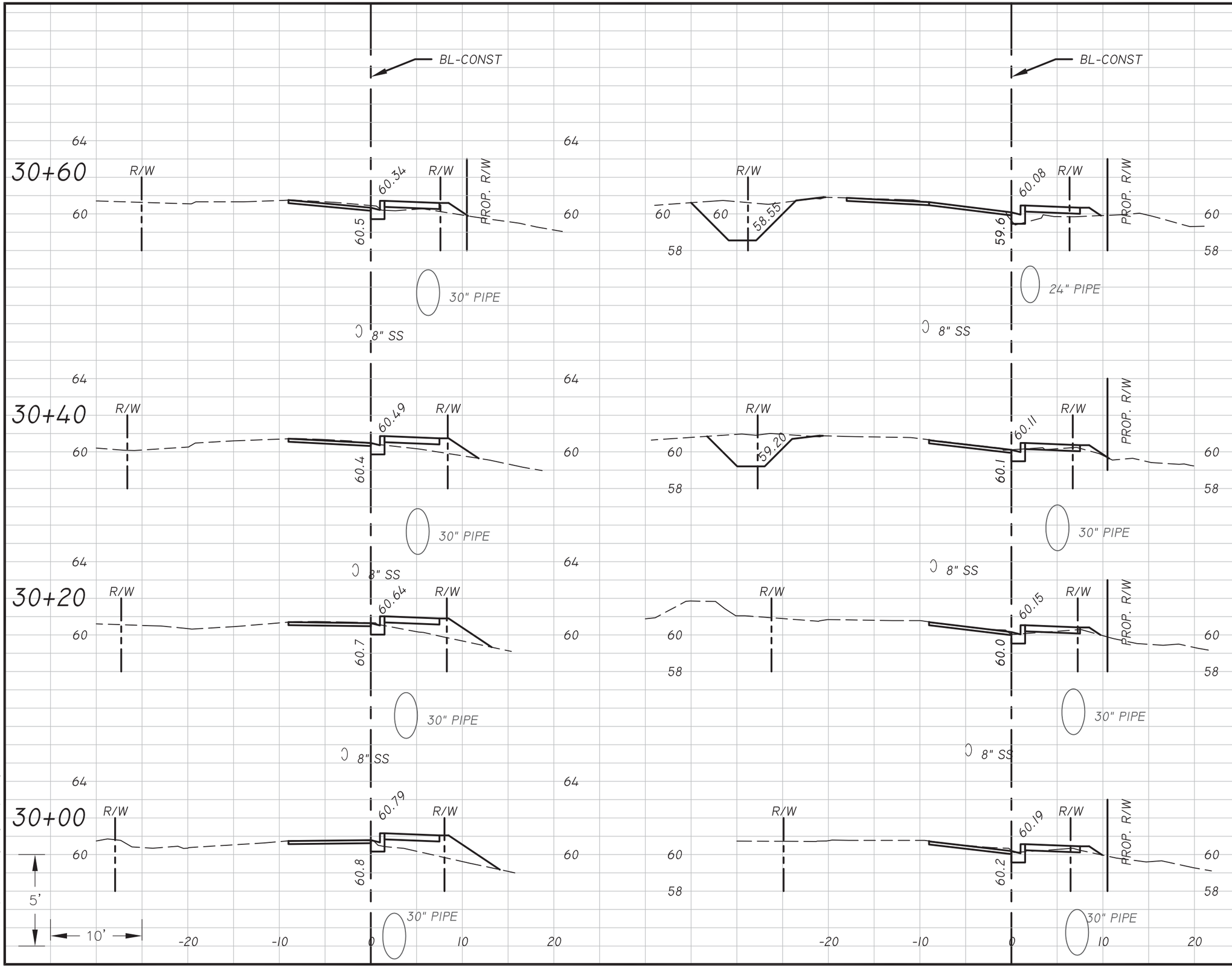
SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #99661

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
C:\Users\Lane\Desktop\Putnam Drive\dwg\XS-Segment2-Updated.dwg 02/28/2019 12:08:13 PM



ENGINEER OF RECORD
LANE P. LUCAS
Florida No.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

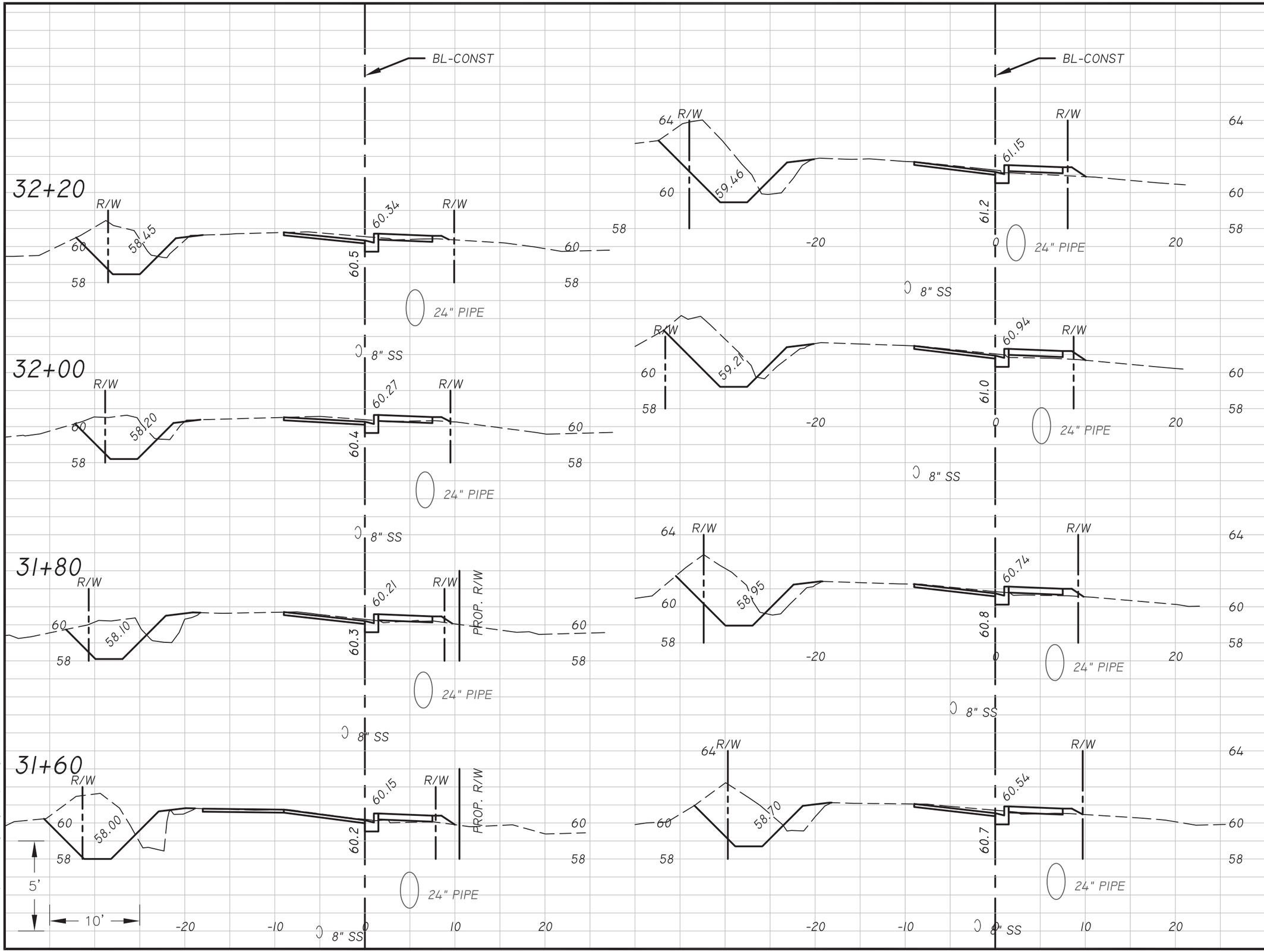
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

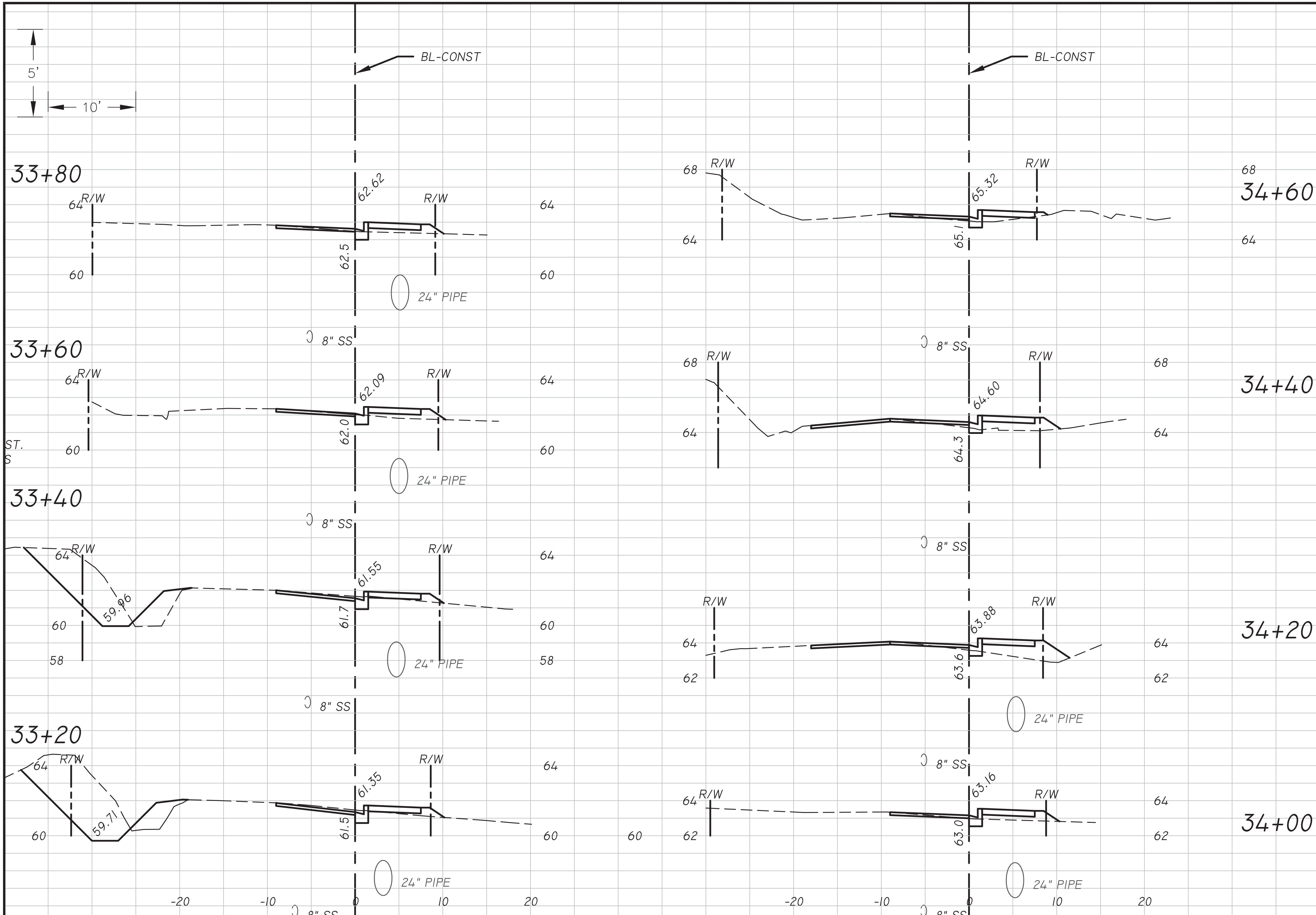
SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
C:\Users\Lane\Desktop\Putnam Dr\eviewg\XS-Segment2-Updated.dwg 02/28/2019 12:08:41 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

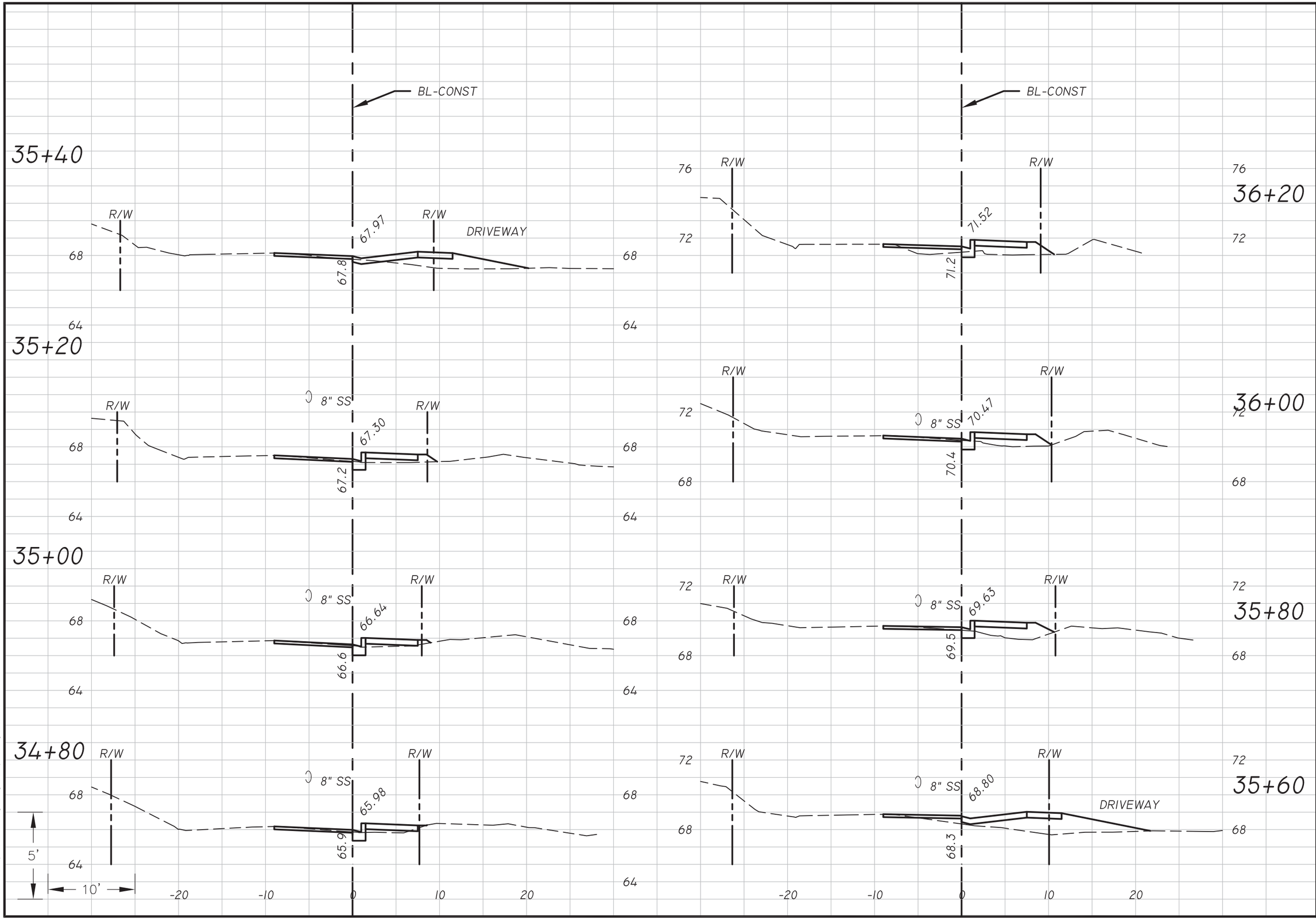
SHEET
CROSS SECTIONS PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
C:\Users\Lane\Desktop\Putnam Drive\dwg\XS-Segment2-Updated.dwg 02/28/2019 12:08:53 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

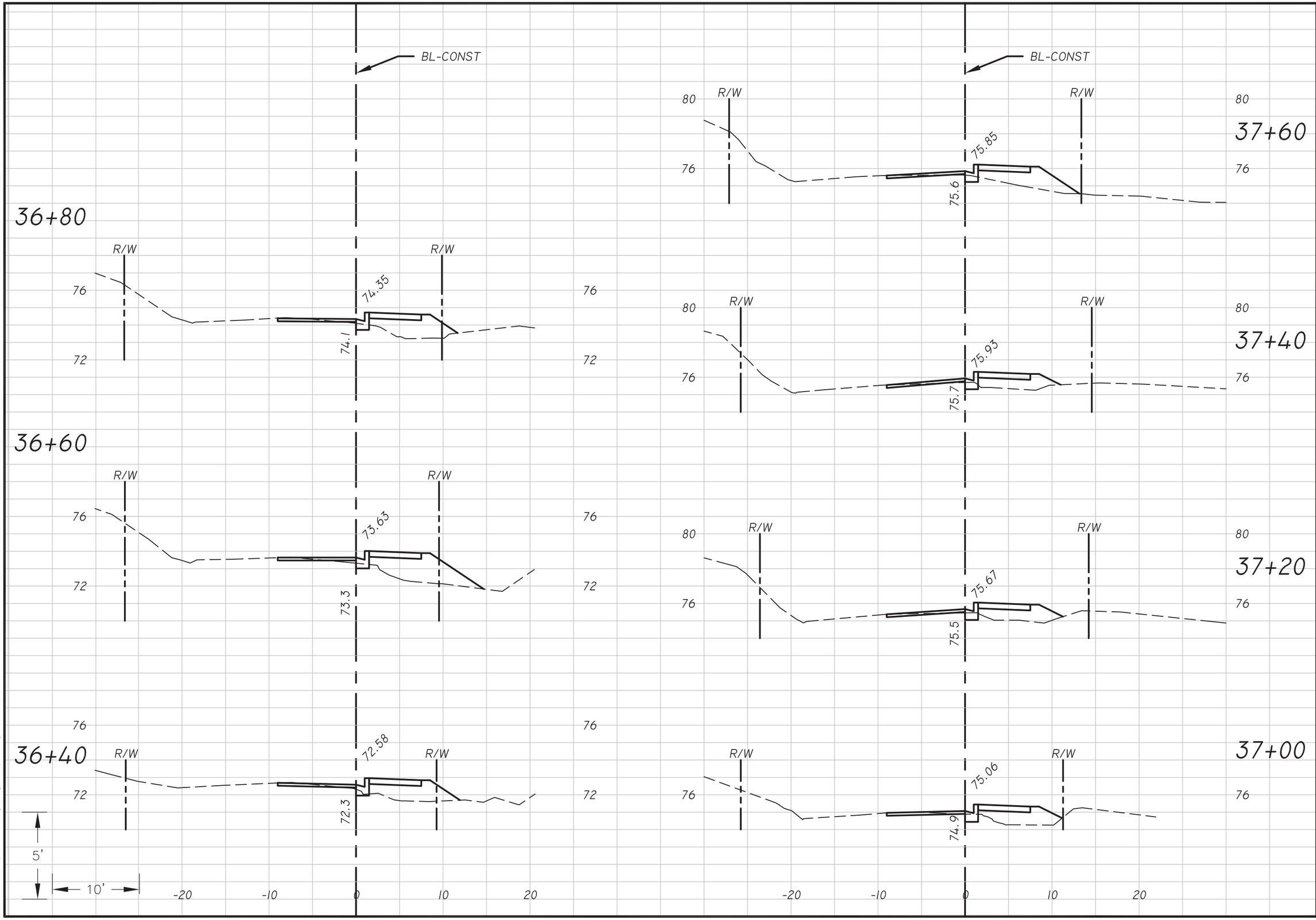
PROJECT
COUNTRY CLUB CREEK /
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

43

User: Lane
C:\Users\Lane\Desktop\Putnam Drive\dwg\XS-Segment2-4Updated.dwg 02/28/2019 12:09:03 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

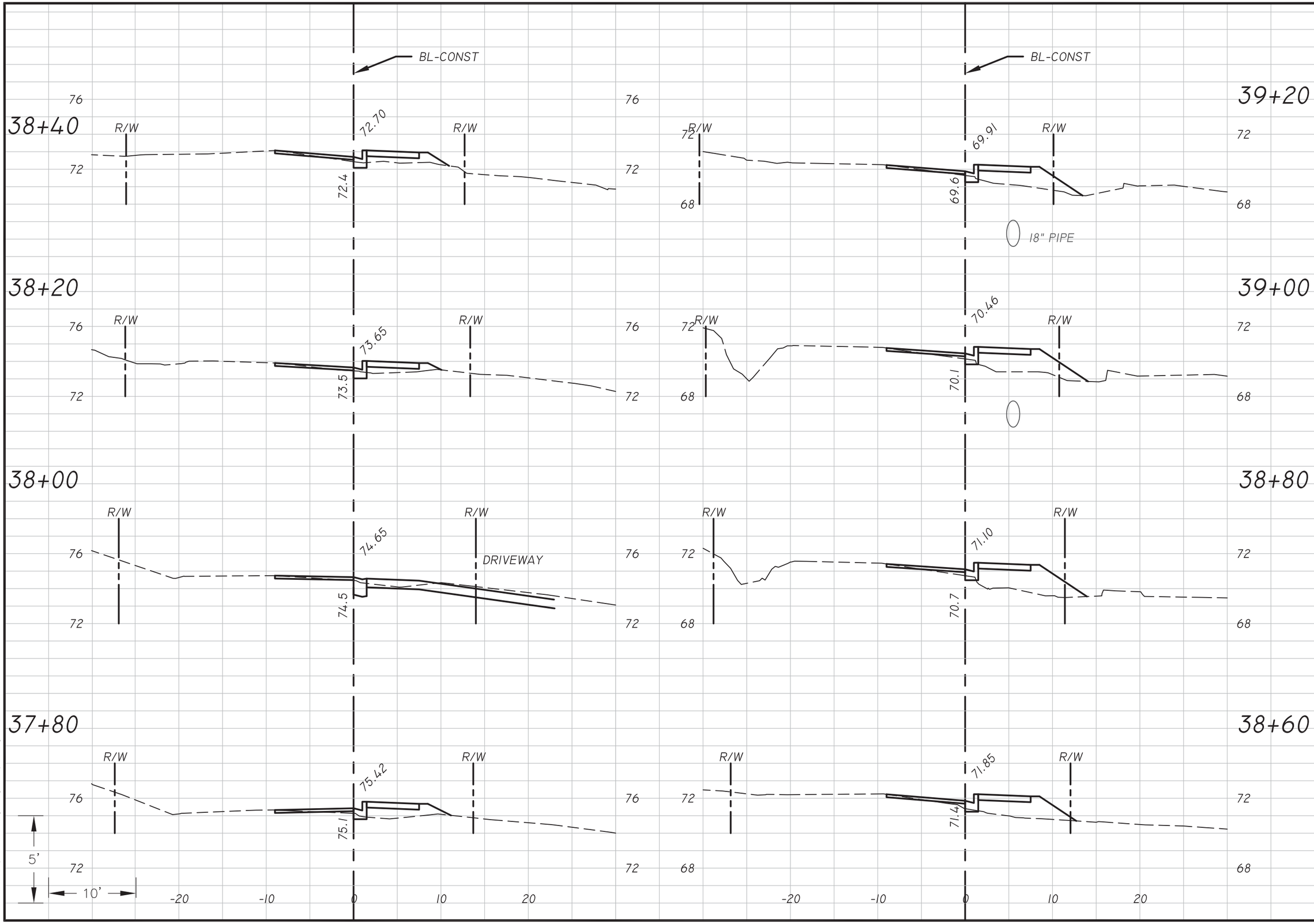
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #99661

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

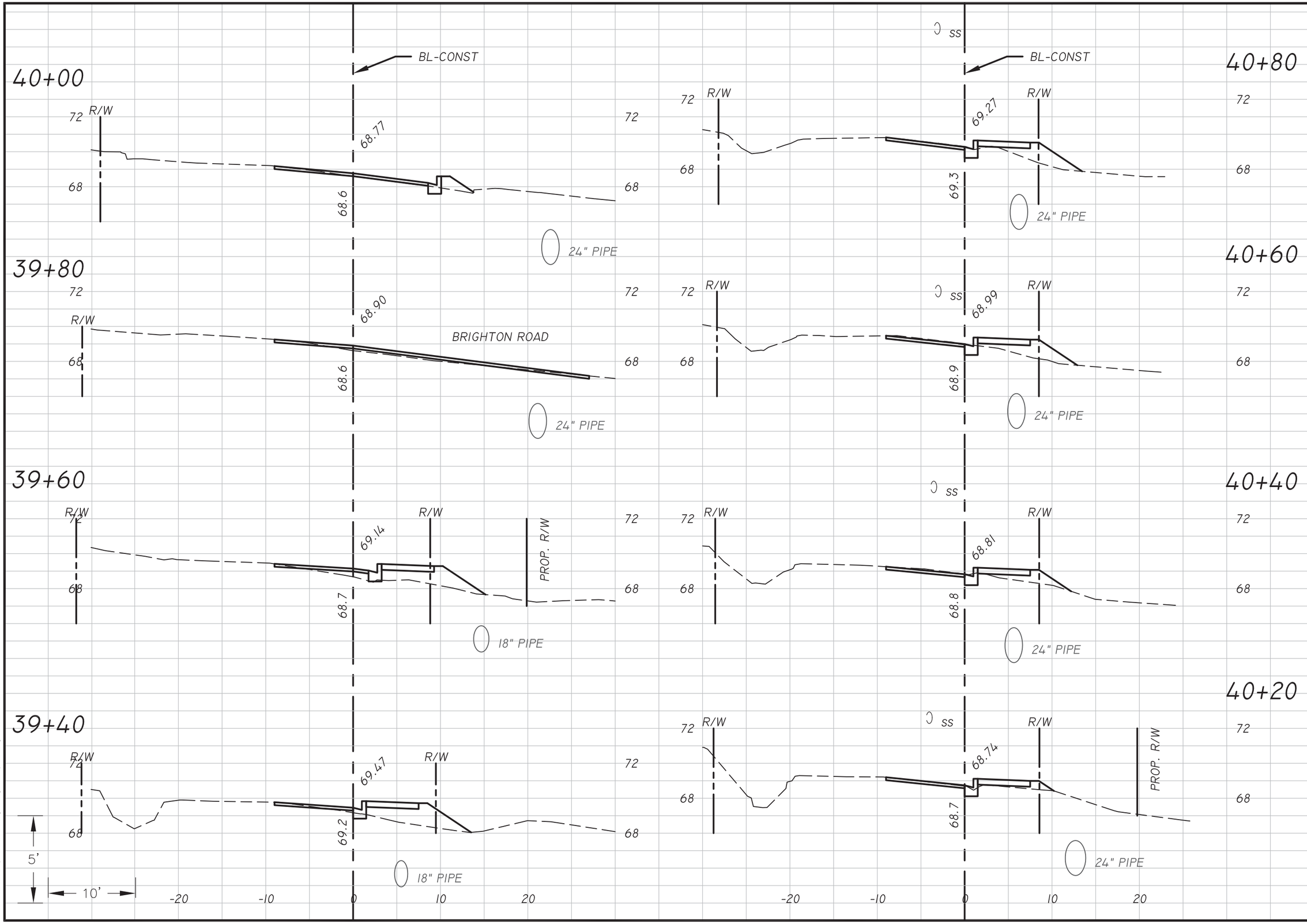
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
For the Firm
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

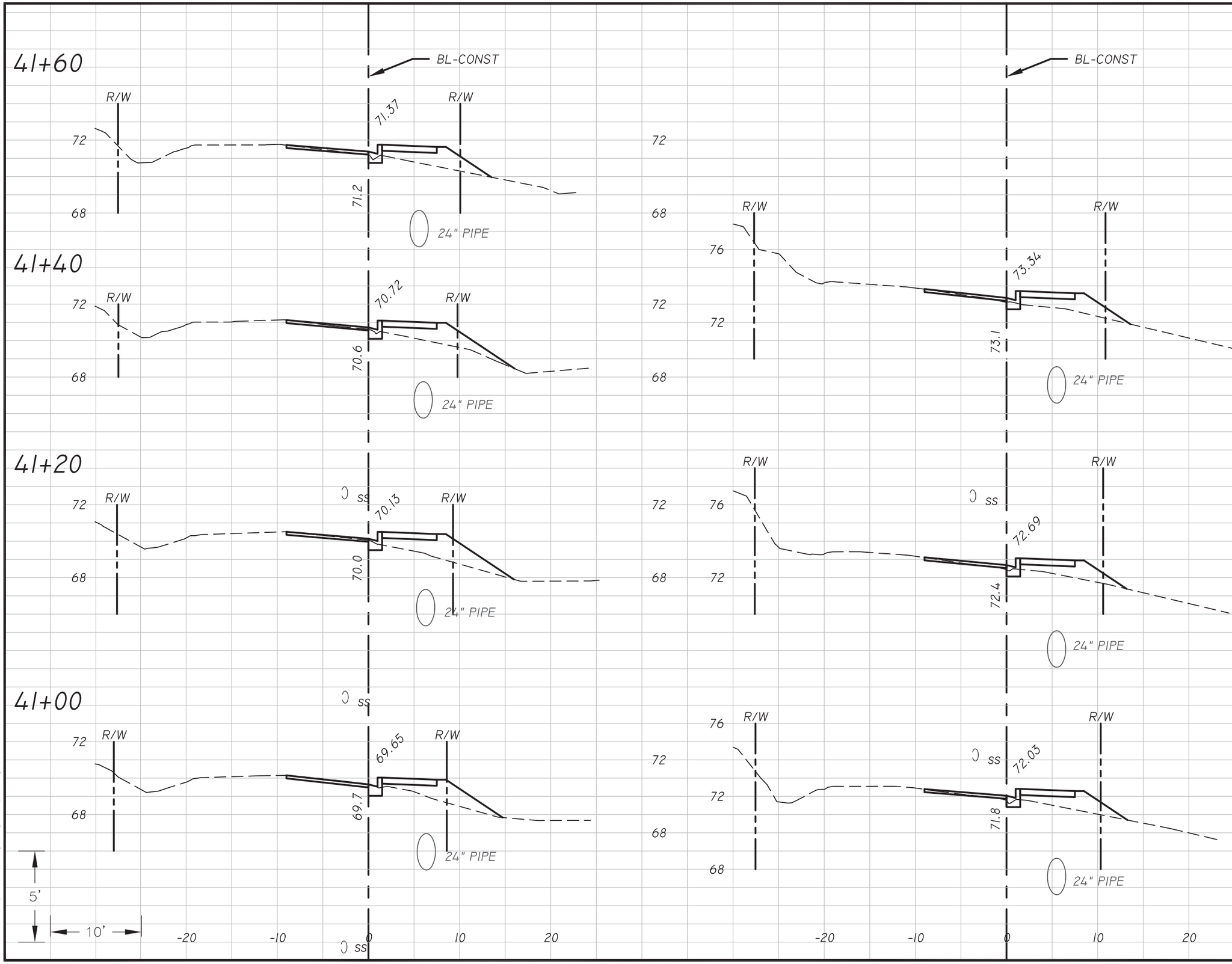
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
For the Firm
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

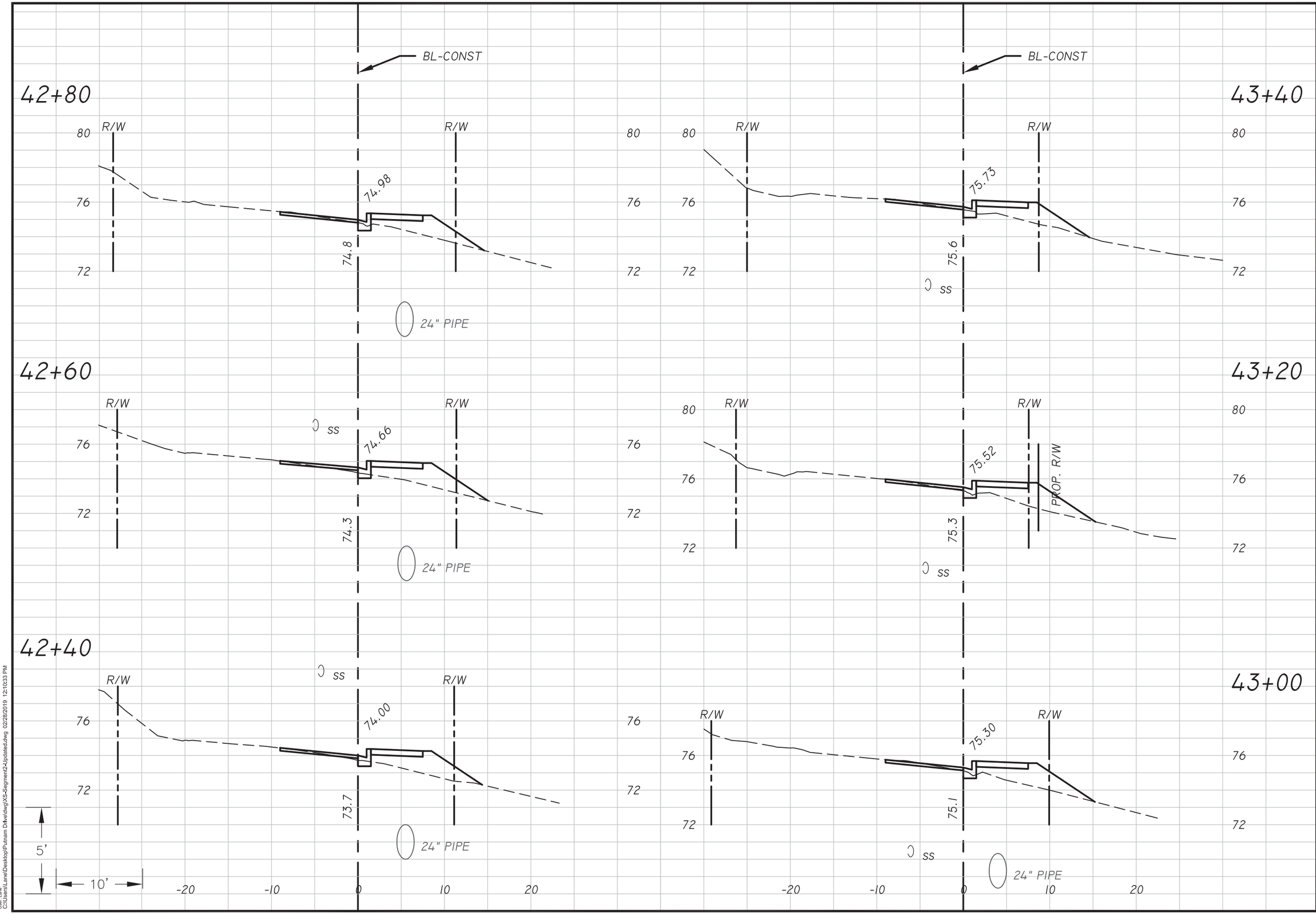
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #99661

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
For the Firm
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

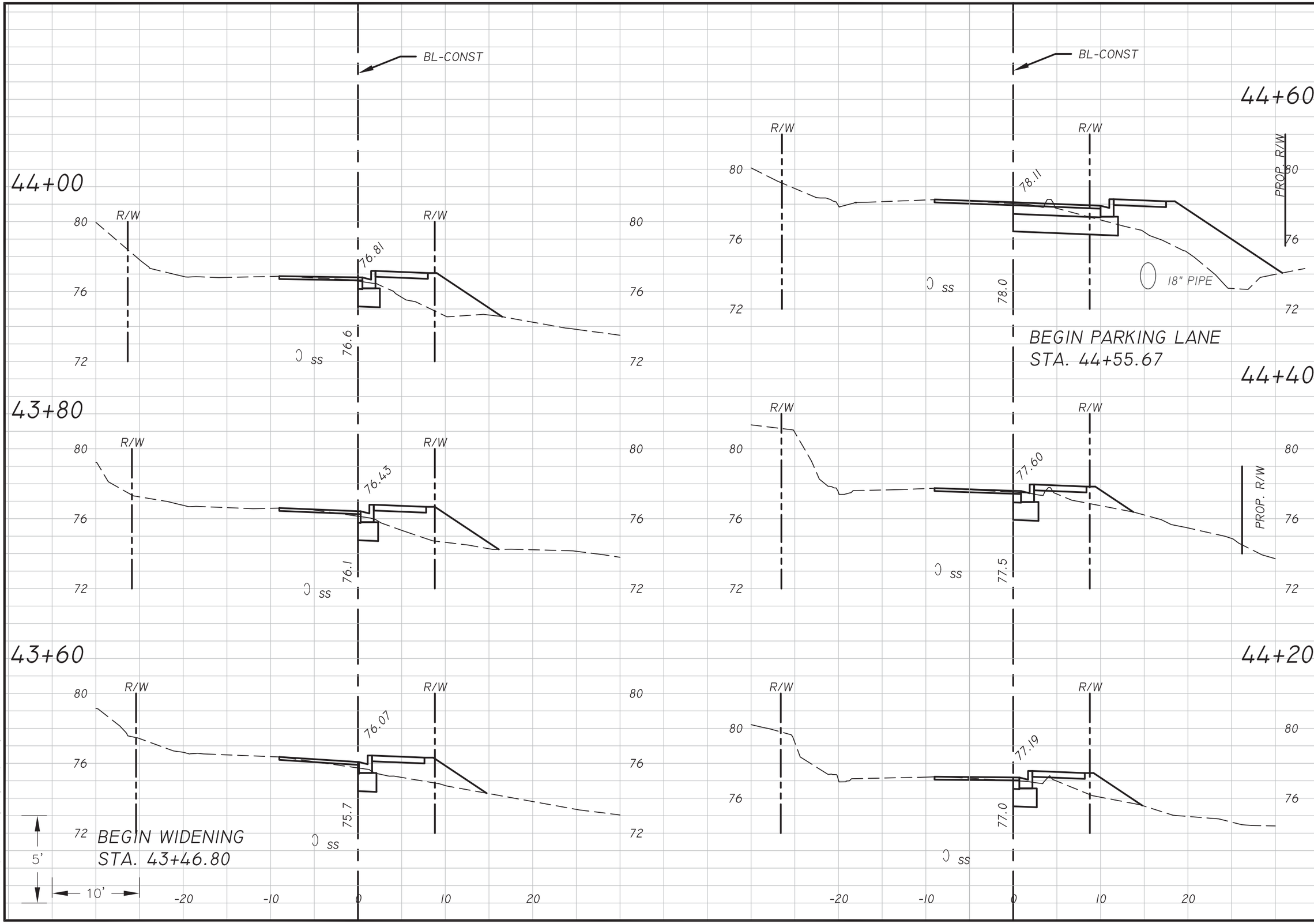
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

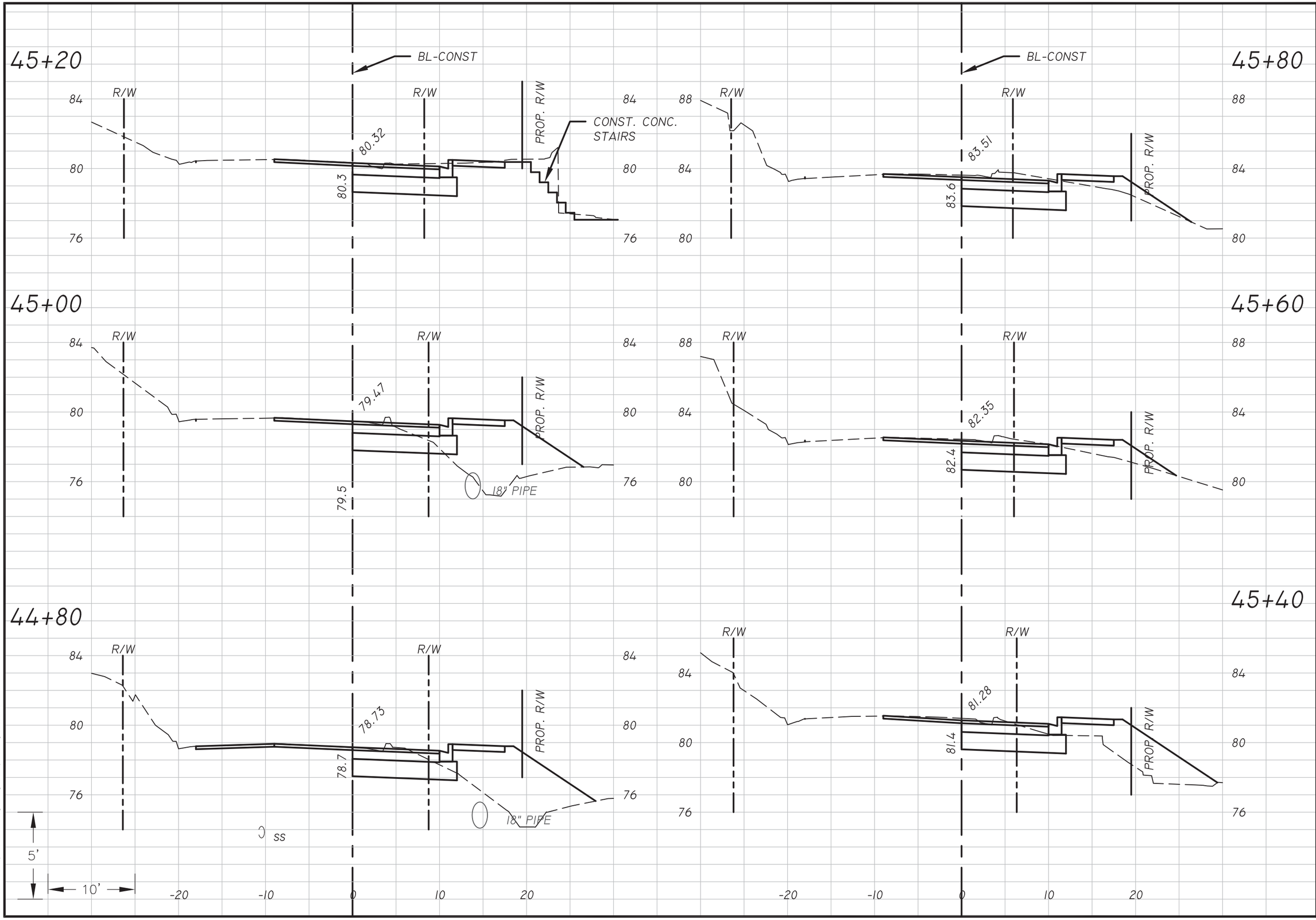
SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
C:\Users\Lane\Desktop\Putnam Drive\dwg\XS-Segment2-Updated.dwg 02/28/2019 12:10:43 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

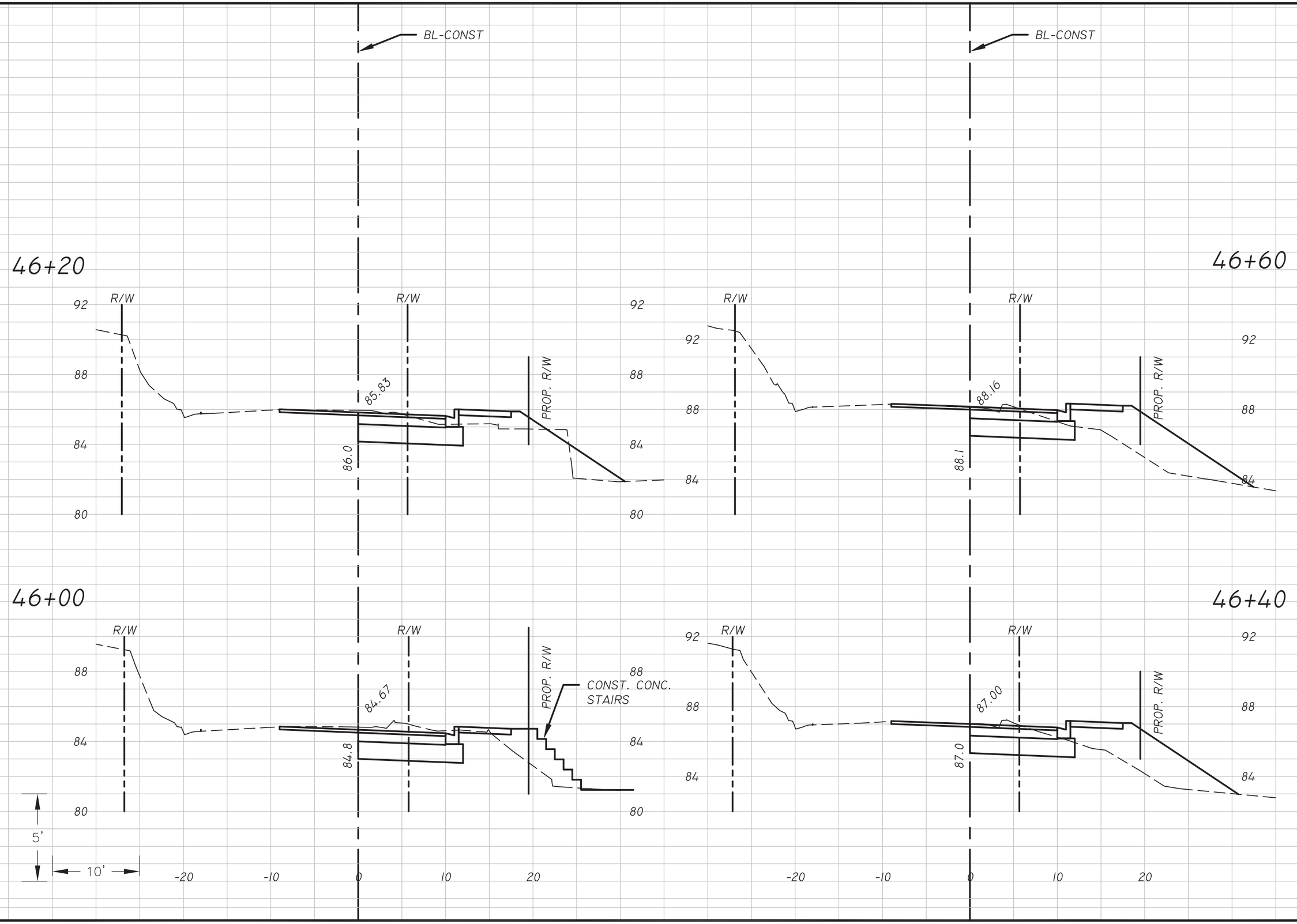
SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK /
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
C:\Users\Lane\Desktop\Putnam Drive\dwg\XS-Segment2-4Updated.dwg 02/28/2019 12:10:53 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

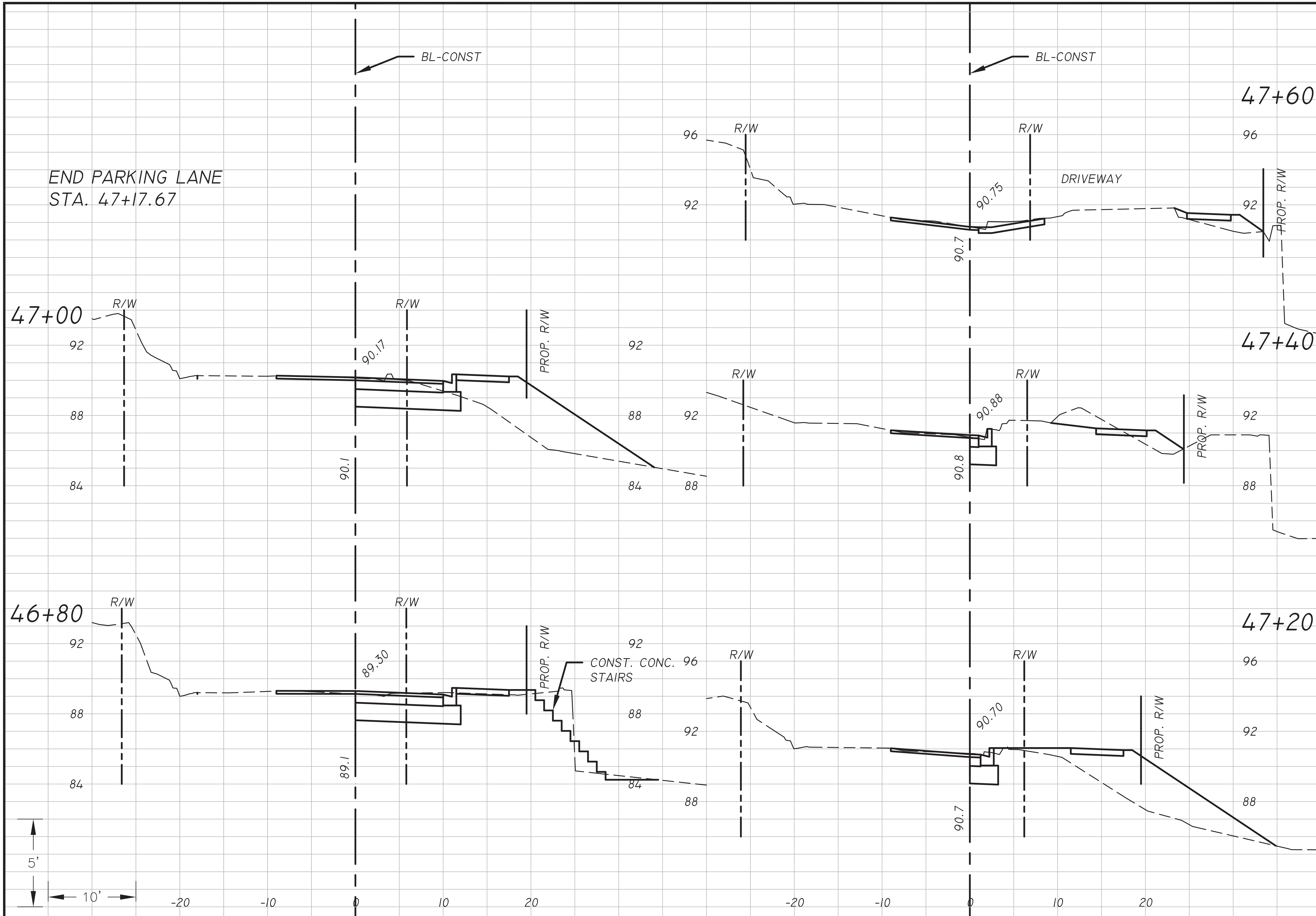
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK /
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature ____ Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

SHEET
CROSS SECTIONS
PUTNAM DRIVE

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

EUTAW, INC
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202 PHONE: (850) 383-0400
TALLAHASSEE, FLORIDA 32308 www.eutawinc.com
Certificate of Authorization #9961

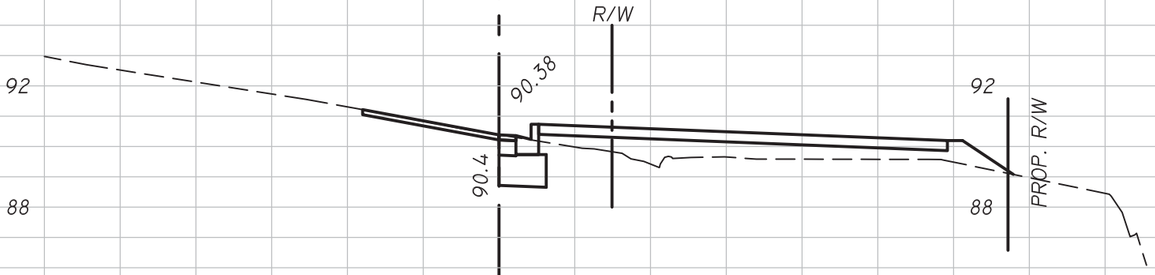
JOB NO. ____
DRAWN ____
DESIGNED ____
CHECKED ____
QC ____

BL-CONST

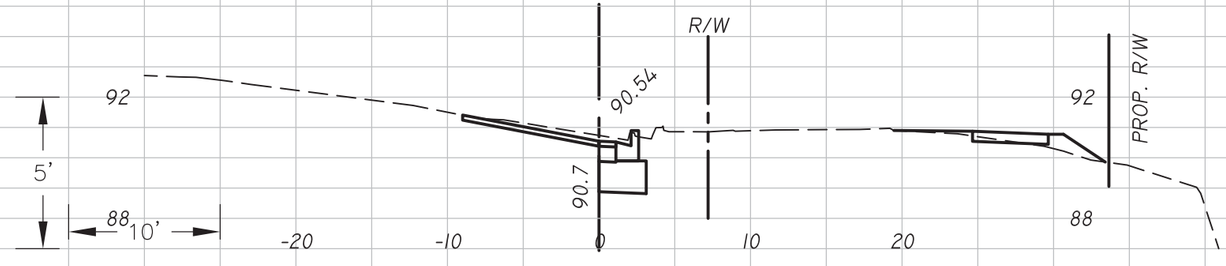
BL-CONST

END CONSTRUCTION
STA. 47+96.16

47+96.16



47+80



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

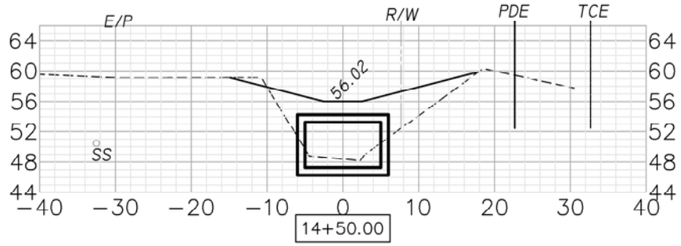
SHEET
CROSS SECTIONS
PUTNAM DRIVE

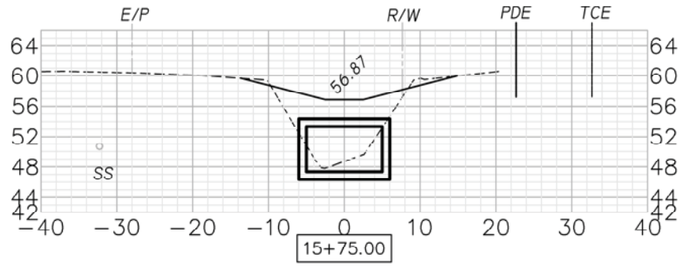
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

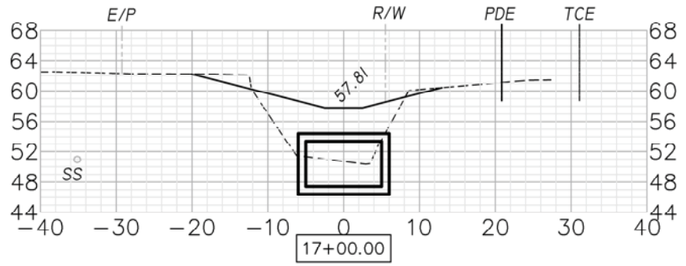
Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

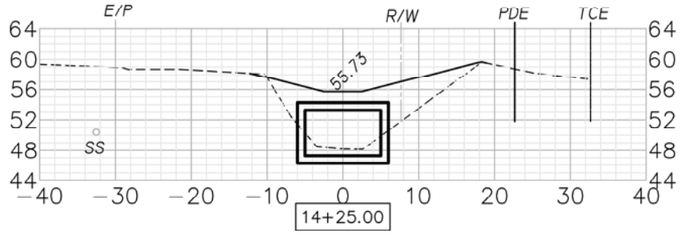
JOB NO.
DRAWN
DESIGNED
CHECKED
QC

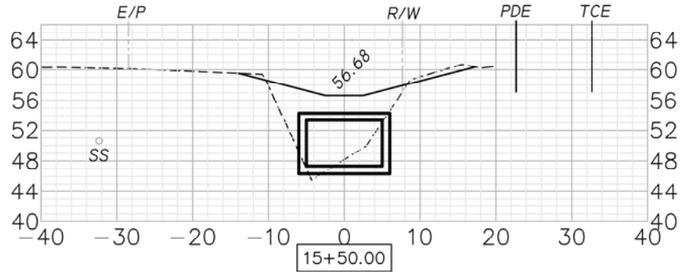
User: Lane
C:\Users\Lane\Desktop\Putnam Dr\eldwg\XS-Segment2-Updated.dwg 02/28/2019 12:11:45 PM

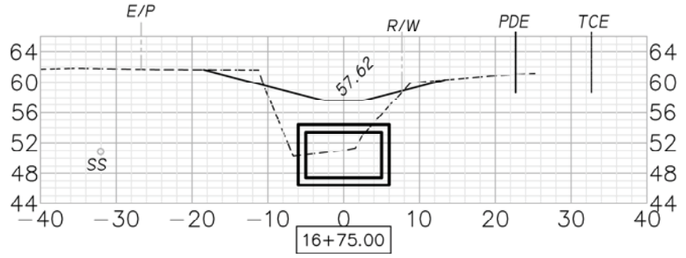


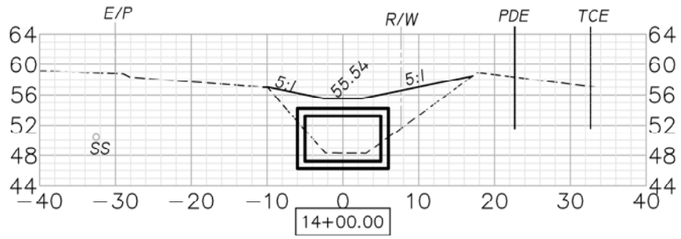


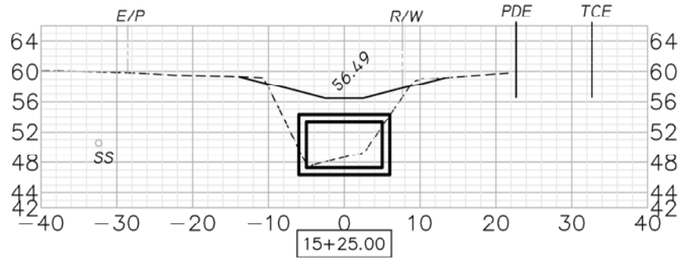


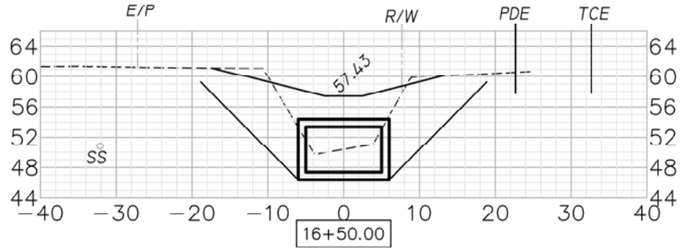


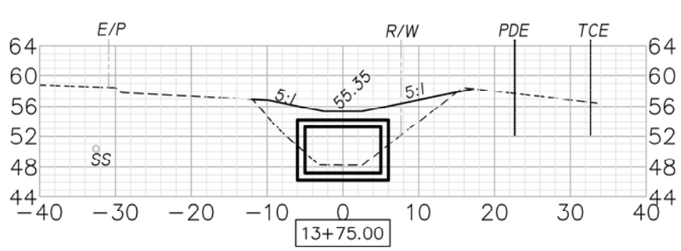


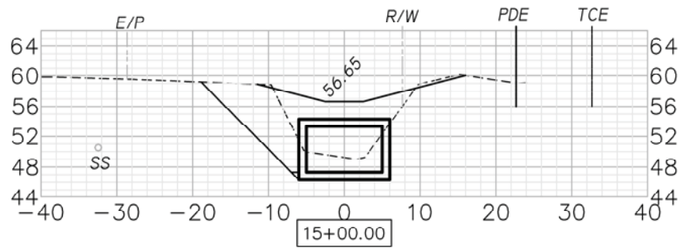


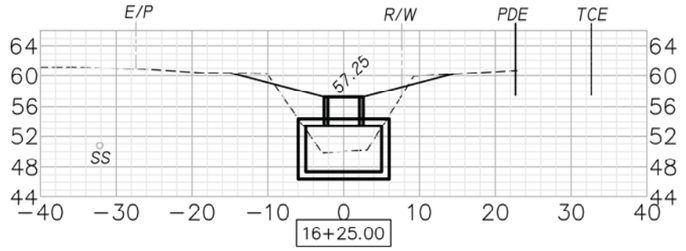


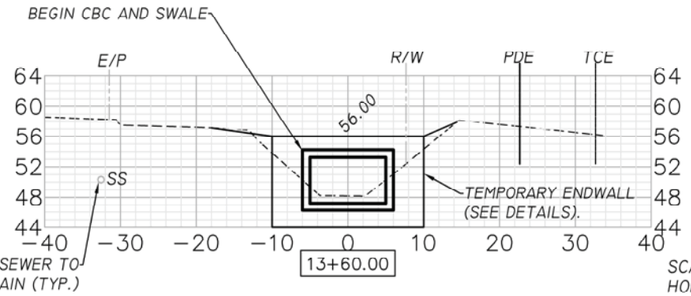


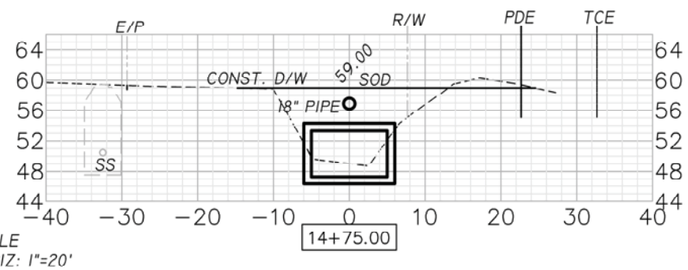


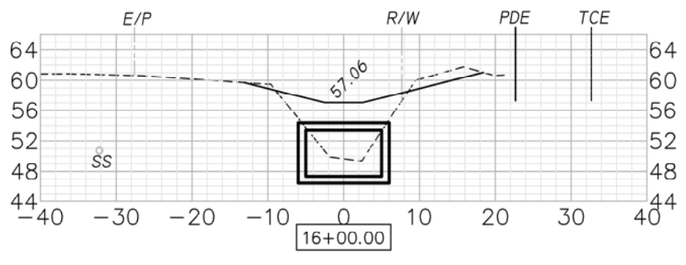












SCALE
HORIZ: 1"=20'
VERT: 1"=20'

ENGINEER OF RECORD
LANE P. LUCAS
Eitan, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53506
Signature Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

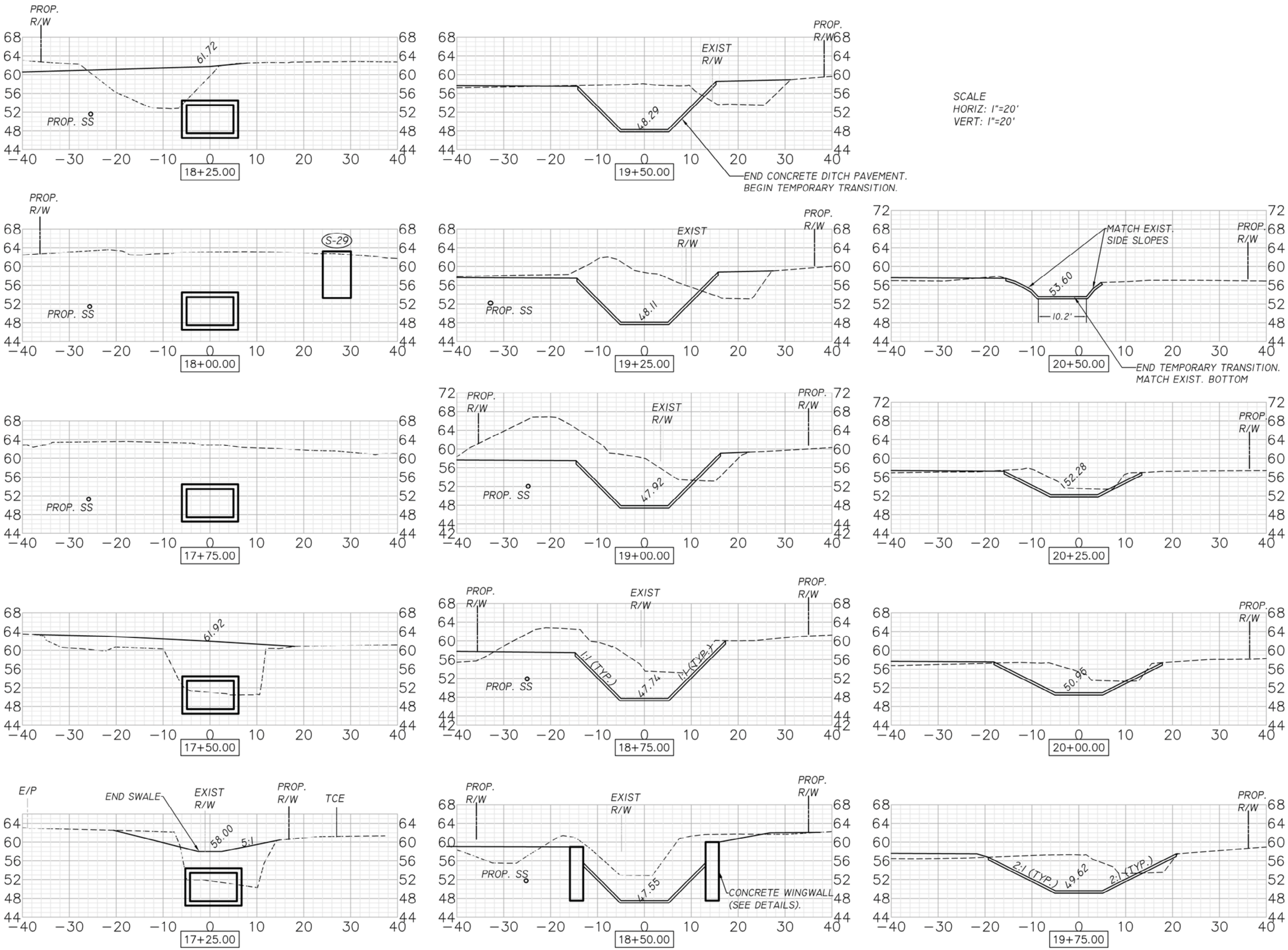
SHEET
CROSS SECTIONS
COUNTRY CLUB
CREEK

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eitan, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eitaninc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: matt
S:\Projects\CCT Stormwater\CCC-Design\dwg\Construction Plans\Base-Phase I-XSRev.dwg 02/28/2019 11:55:52 AM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

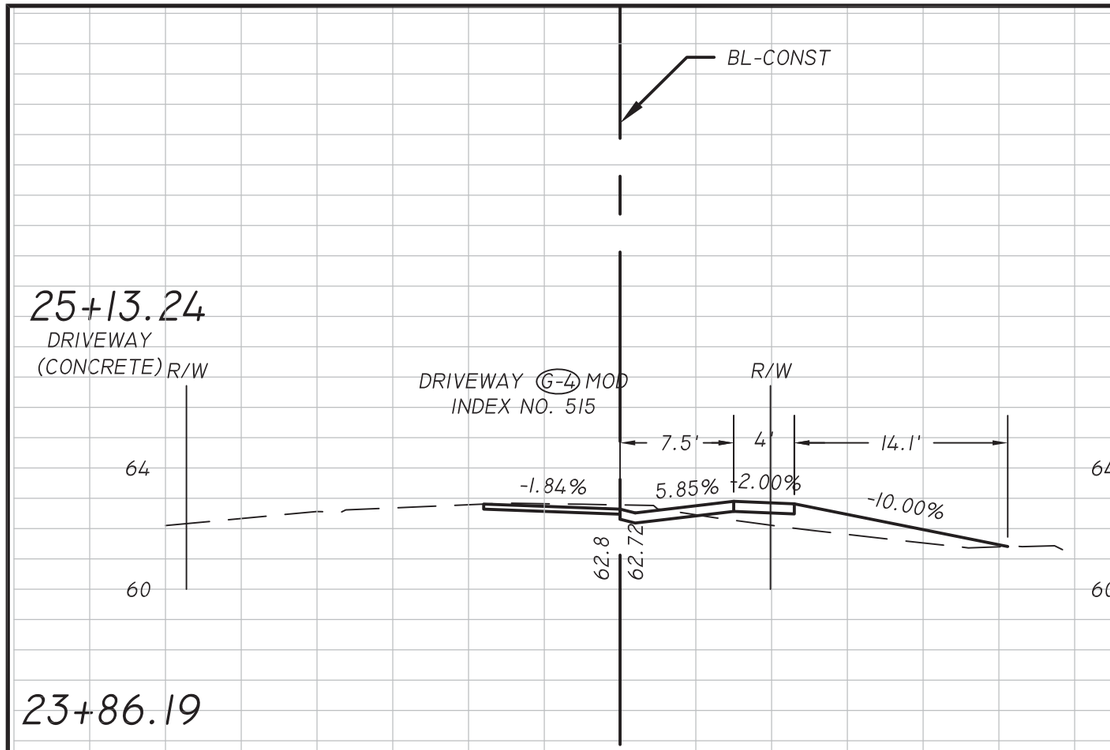
SHEET
CROSS SECTIONS
COUNTRY CLUB
CREEK

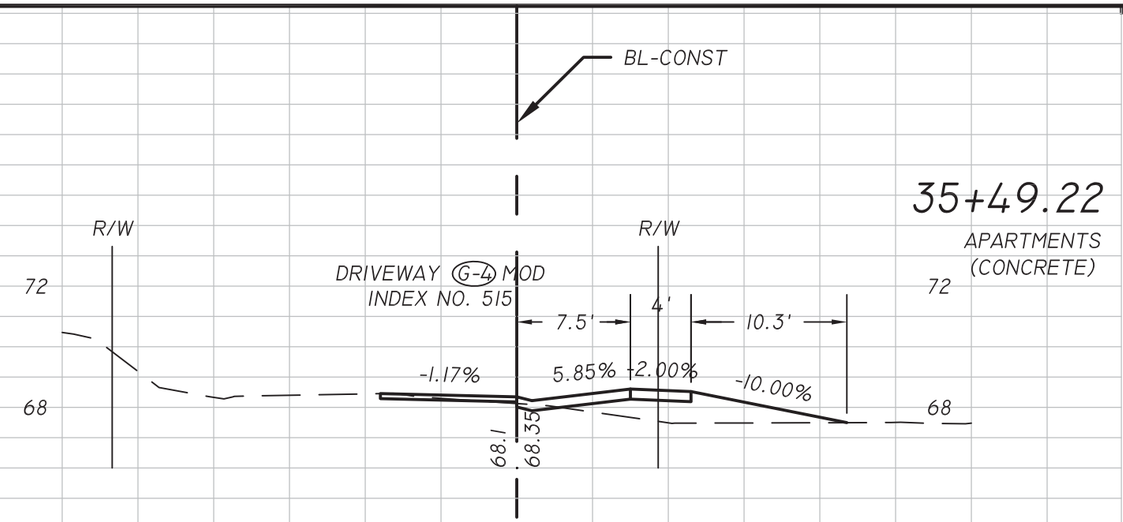
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

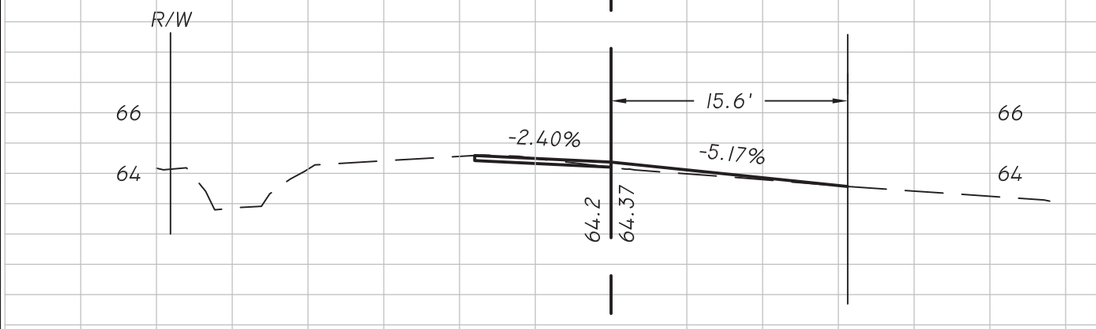
EUTAW, INC
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

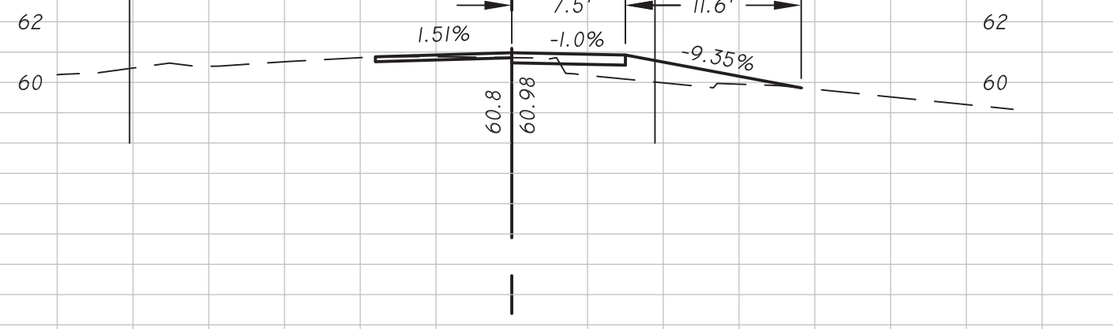
JOB NO.
DRAWN
DESIGNED
CHECKED
QC

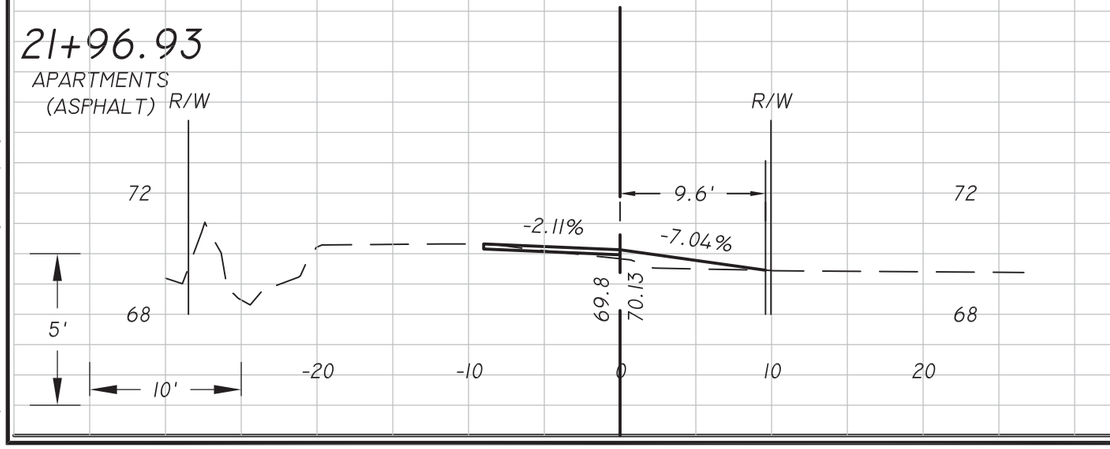
User: matt
S:\Projects\COT Stormwater\CCC-Design\dwg\Construction Plans\Base-Phase I-XSRev.dwg 02/28/2019 11:57:17 AM

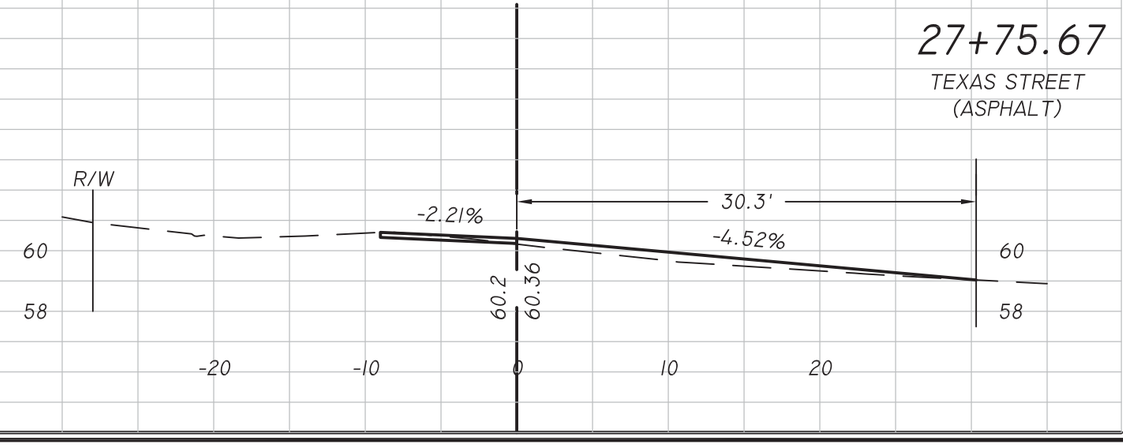












ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

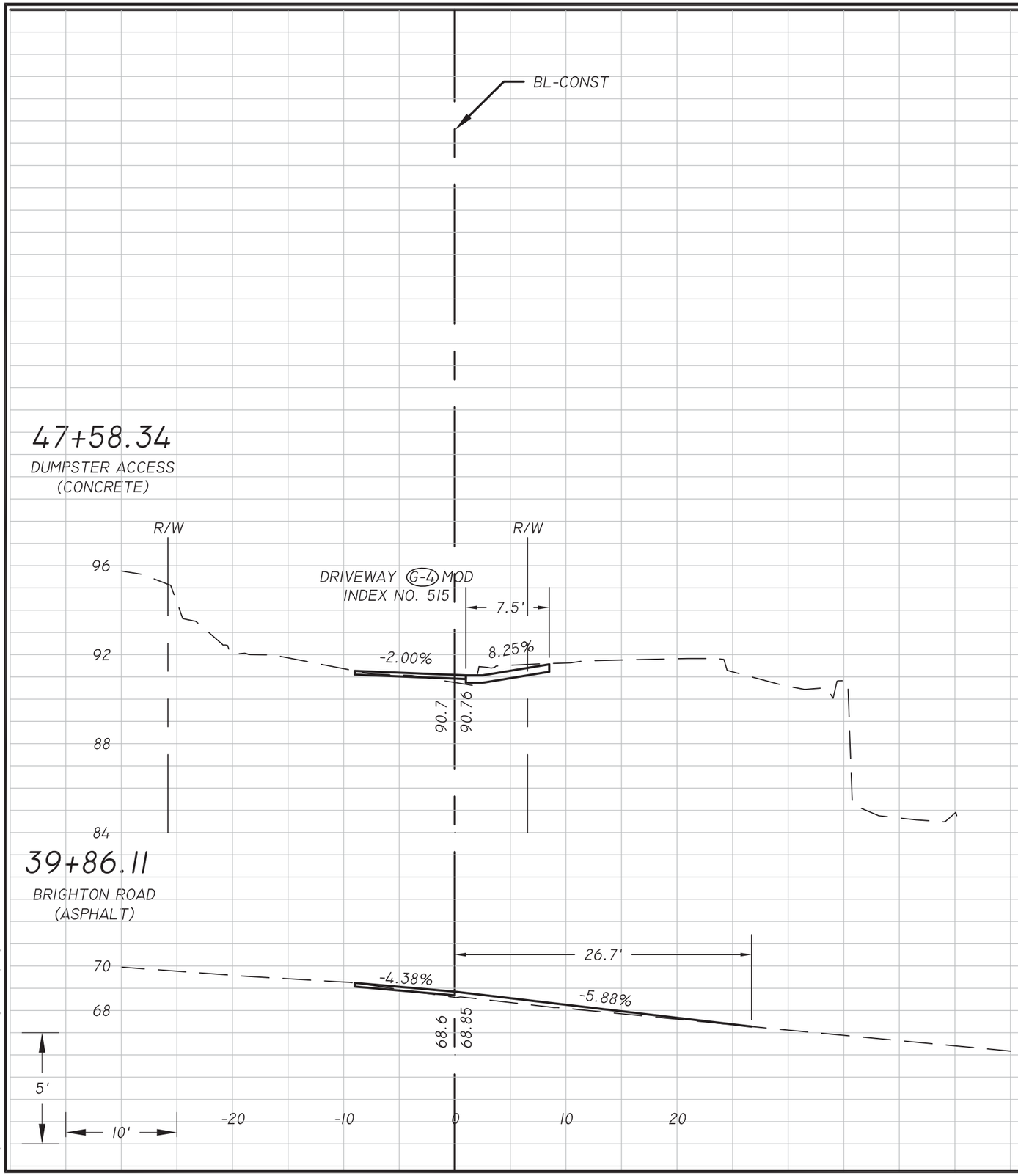
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
DRIVEWAY PROFILES

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature _____ Date _____

ORIGINAL 03/05/2019
REVISIONS:
1 _____
2 _____
3 _____
4 _____
5 _____

SHEET
DRIVEWAY PROFILES

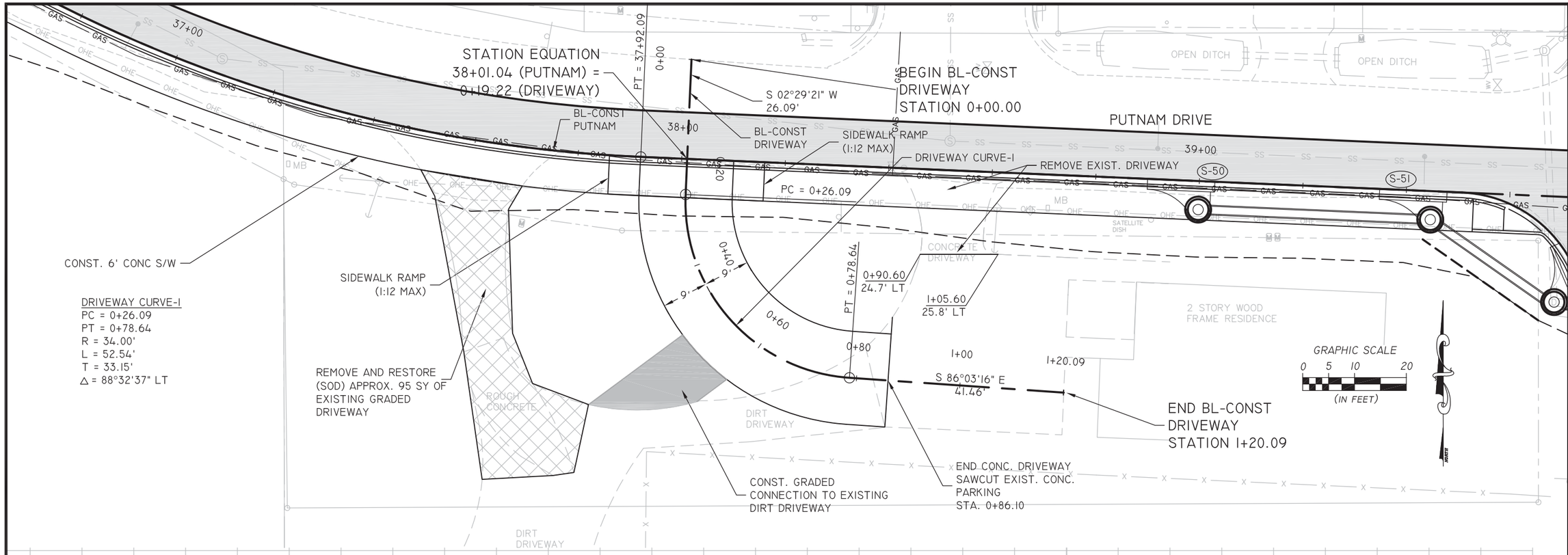
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE ANDSIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO. _____
DRAWN _____
DESIGNED _____
CHECKED _____
QC _____

57

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\XS-Driveways.dwg 03/05/2019 12:33:13 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature

Date

ORIGINAL 03/05/2019

REVISIONS:
1
2
3
4
5

SHEET

DRIVEWAY DETAILS

PROJECT

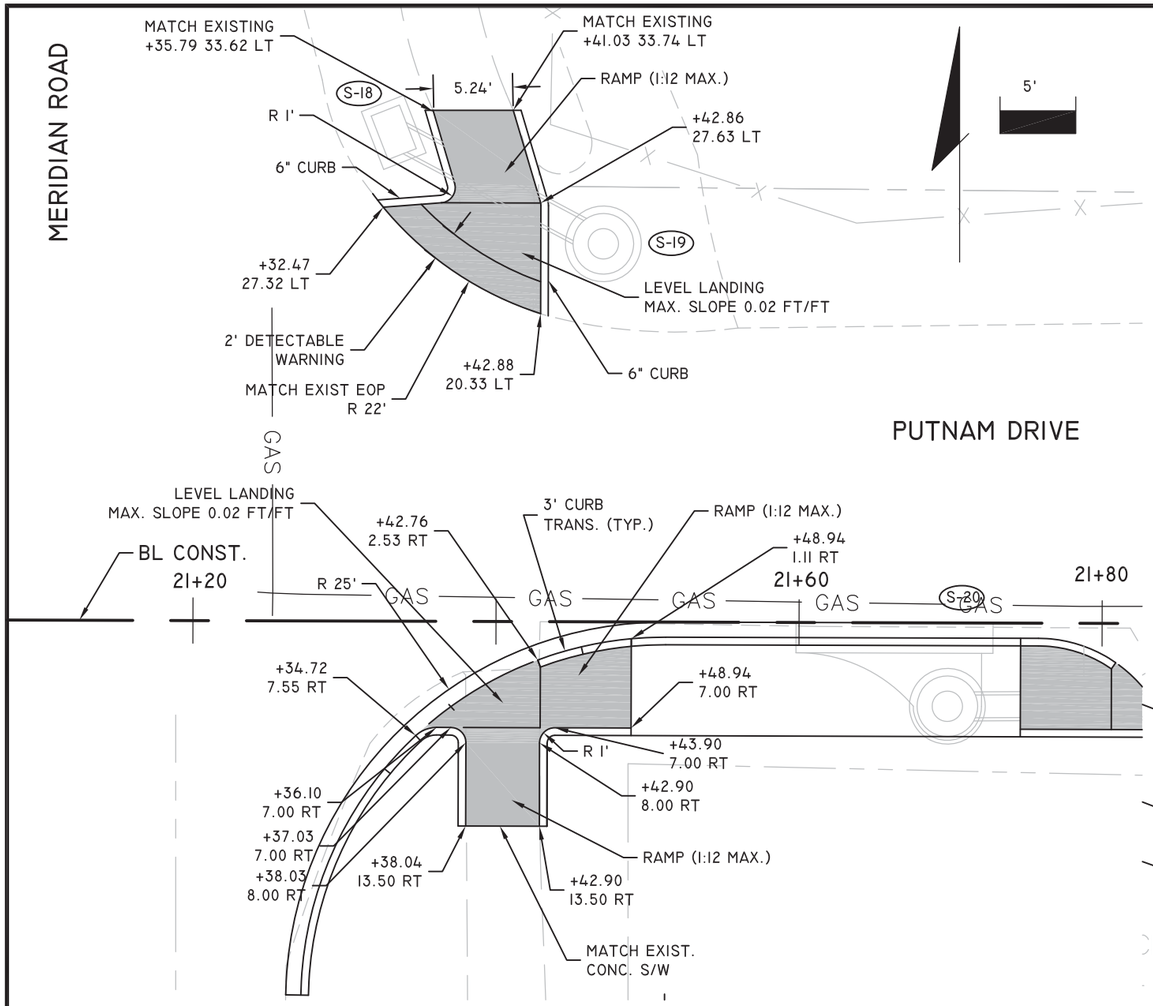
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com

Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\Driveway Detail.dwg 03/05/2019 12:36:48 PM



NOTE:
WITHIN LIMITS OF 32" LOK CRITICAL PROTECTION ZONE, SIDEWALK TO BE CONSTRUCTED AT GRADE.

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

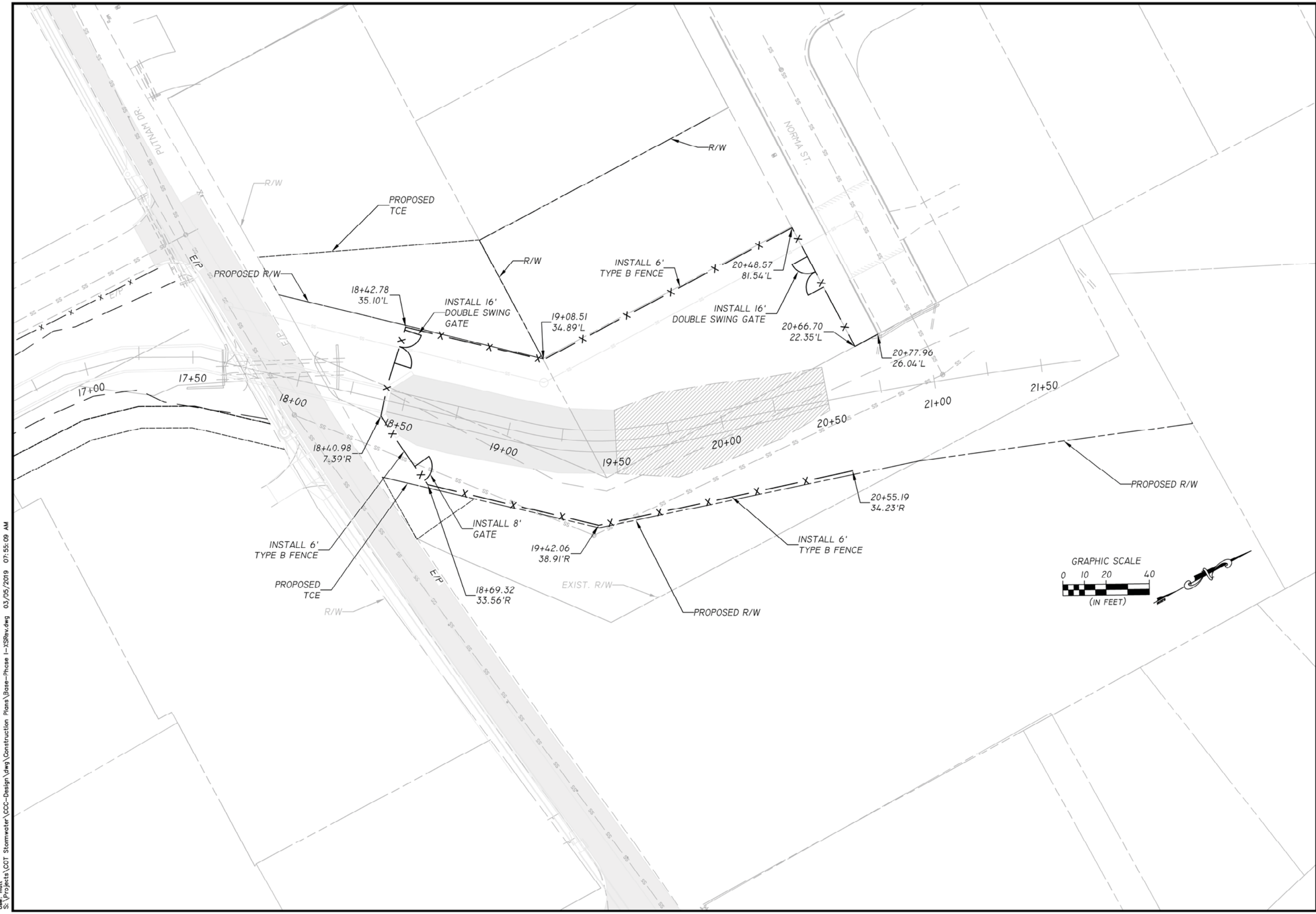
ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
SIDEWALK DETAILS

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #99961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC



ENGINEER OF RECORD
LANE P. LUCAS
Extaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53506
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
FENCING LAYOUT PLAN

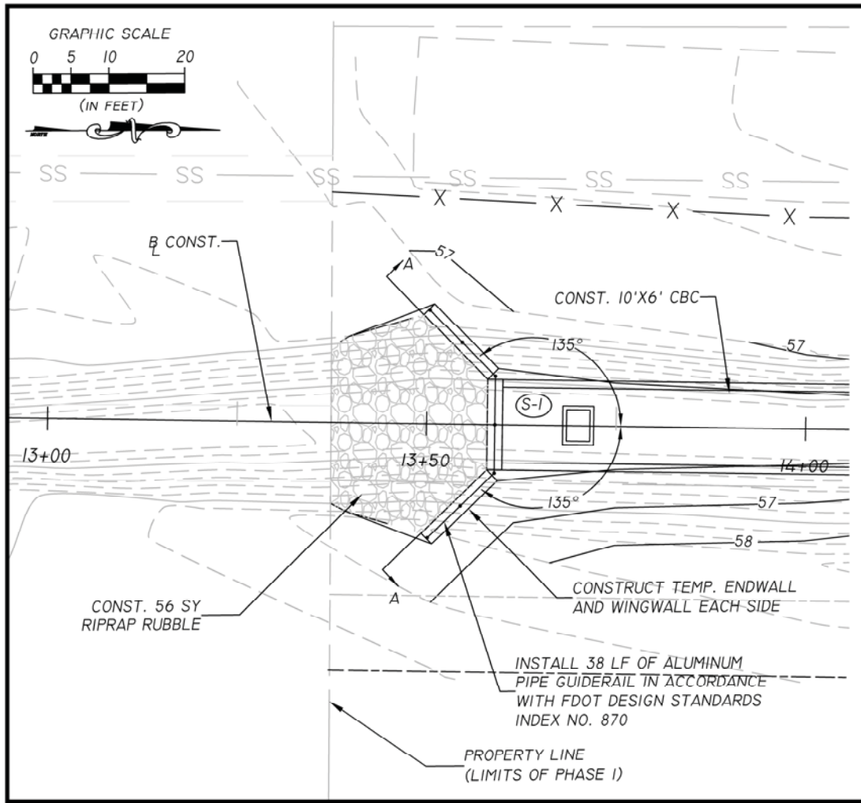
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

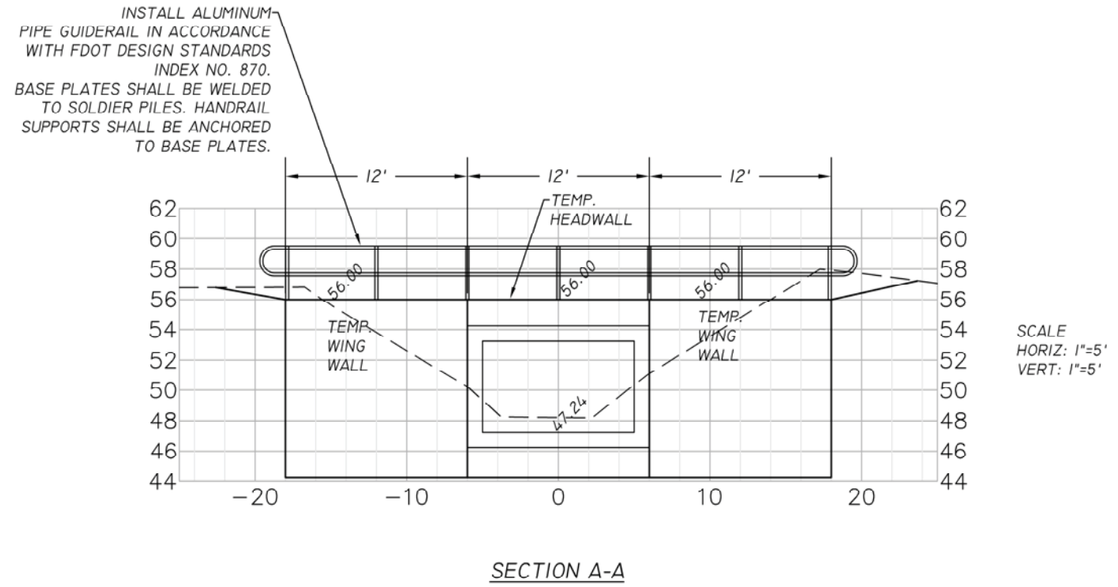
Extaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.extawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

60

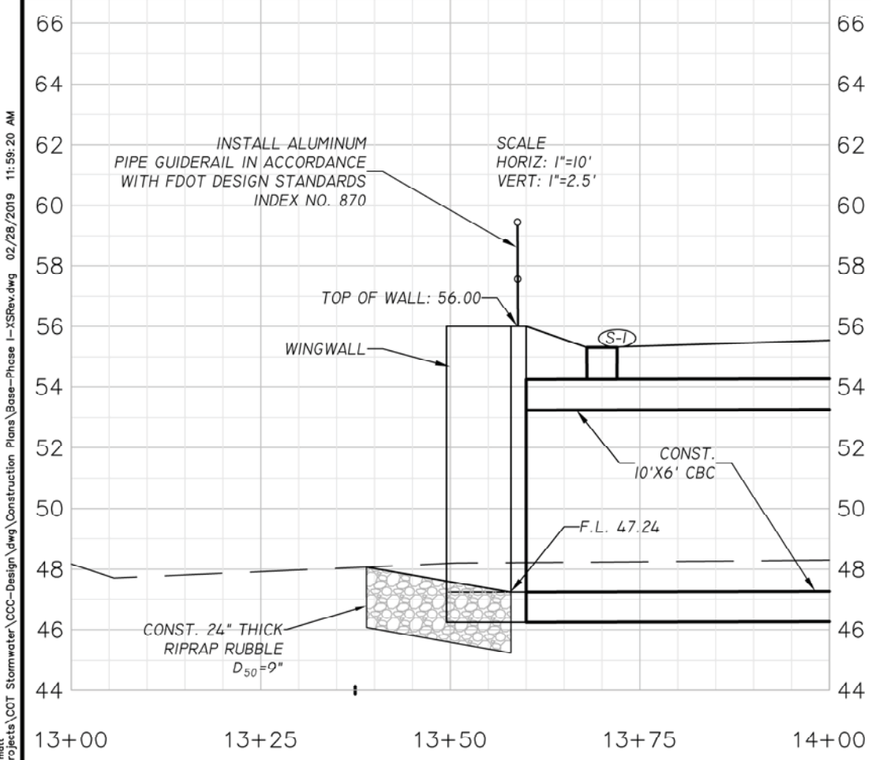
User: matt
S:\Projects\CCT Stormwater\CCC-Design\dwg\Construction Plans\Base-Phase I-XSRev.dwg 03/05/2019 07:55:09 AM





SECTION A-A

SCALE
HORIZ: 1"=5'
VERT: 1"=5'



User: matt
S:\Projects\CCT Stormwater\CCC-Design\dwg\Construction Plans\Base-Phase I-XSRev.dwg 02/28/2019 11:59:20 AM

ENGINEER OF RECORD
LANE P. LUCAS
Etan, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53506
Signature Date

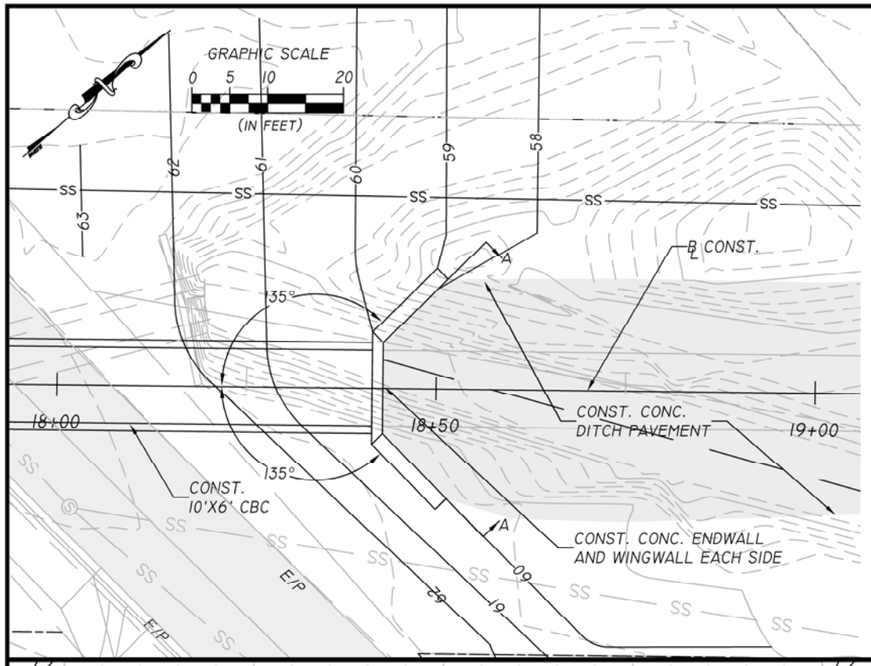
ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

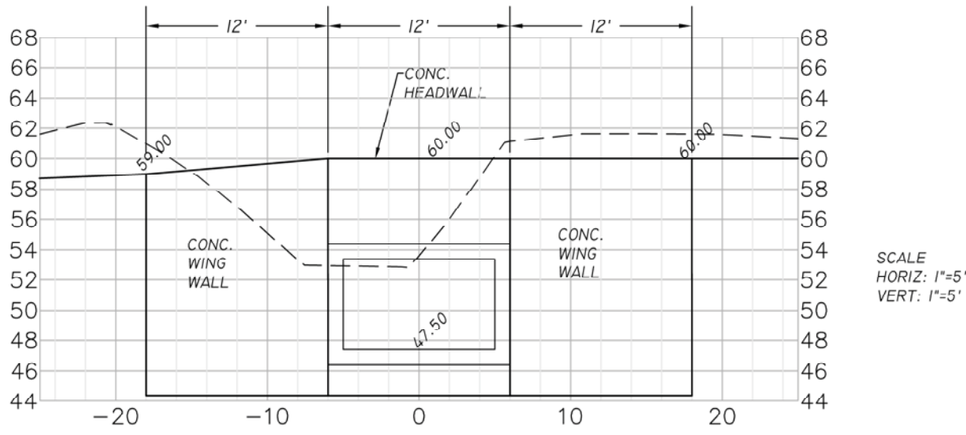
SHEET
DRAINAGE DETAILS
COUNTRY CLUB
CREEK

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Etan, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.etaninc.com
Certificate of Authorization #9961

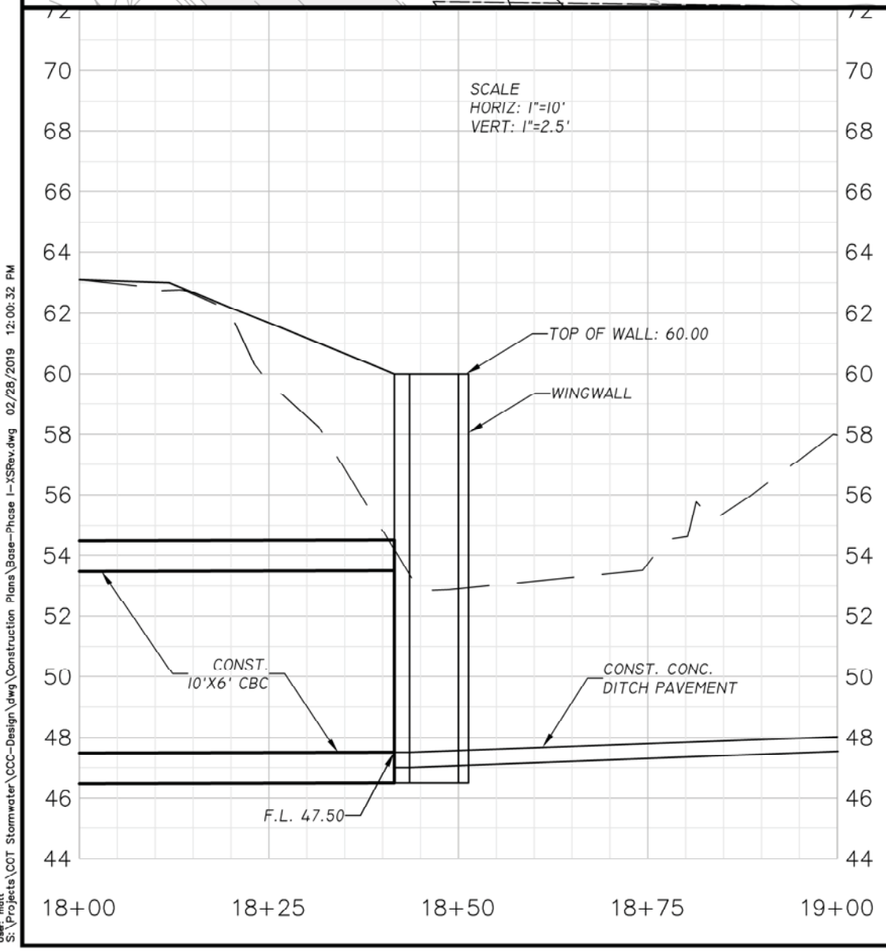
JOB NO.
DRAWN
DESIGNED
CHECKED
QC





SECTION A-A

SCALE
HORIZ: 1"=5'
VERT: 1"=5'



User: matt
S:\Projects\CCT Stormwater\CCC-Design\dwg\Construction Plans\Base-Phase I-XSRev.dwg 02/28/2019 12:00:32 PM

ENGINEER OF RECORD
LANE P. LUCAS
Extra, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53306
Signature Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

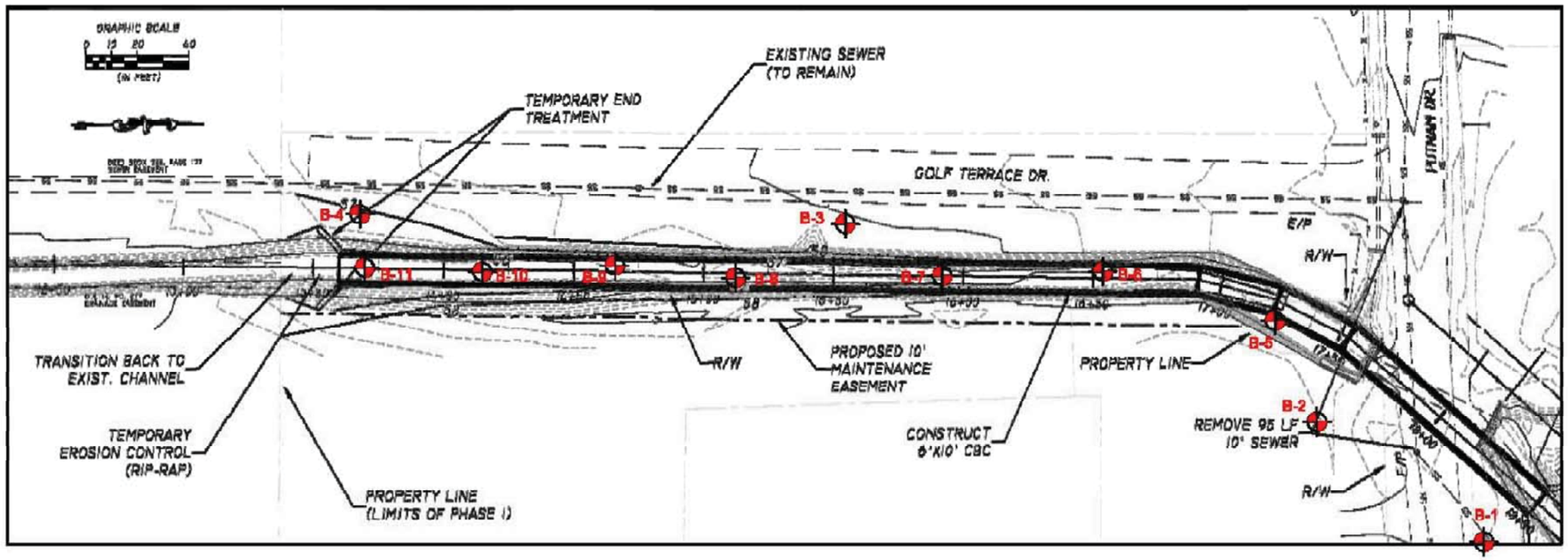
SHEET
DRAINAGE DETAILS
COUNTRY CLUB
CREEK

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Extra, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone (850) 383-0400
www.extrainc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

Soil Boring Locations



0 30 60
Scale, ft
(approximate)

Drawing Source: Eutaw, Inc.
Country Club Creek Drainage Improvements
Phase I Plan & Profile

STEPHEN P. SHANLEY
LICENSE
No. 40653
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Alpha Geotechnical and Testing Services, Inc.
Certificate of Authorization 00007967
4778-B Woodlane Circle
Tallahassee, FL 32303
(850) 514-4171 Fax: 514-4173 www.alpha-geotech.com

Stephen P. Shanley, PE
FL #40653
August 9, 2018

Subsurface Exploration and Foundation Evaluation for
Country Club Creek Drainage Improvements
Box Culvert Installation

Figure 1

File: 17-3272 sutaw putnam culvert fig 1

User: matt
S:\Projects\CCT Stormwater\CCC-Design\dwg\Construction Plans\Notes & Details-CCC.dwg 02/28/2019 11:39:21 AM

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53506
Signature Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

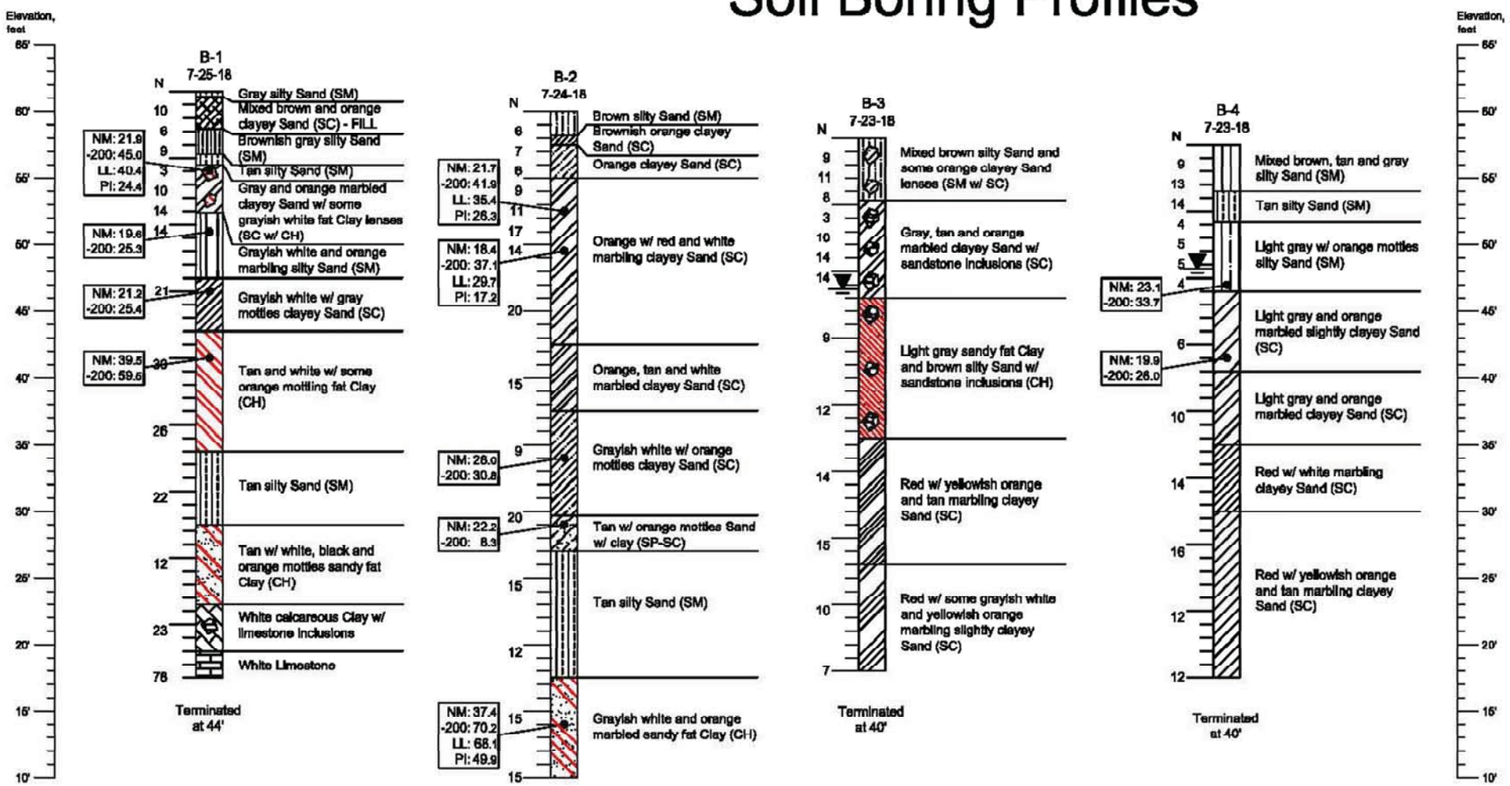
SHEET
SOIL SURVEY

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eutaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

Soil Boring Profiles



LEGEND

- **N** - Standard Penetration Test "N-value". Number of blows from 140-pound hammer to advance sampler last 12" of 18" drive.
- **NM** - Natural Moisture Content, %.
- **-200** - Finer than # 200 sieve, %.
- **LL** - Liquid Limit, %.
- **PI** - Plastic Index (LL - Plastic Limit), %.
- **(SC)** - Unified Soil Classification System, clayey sand (typical).
- ▼ - Groundwater level, if determined.

Penetration Resistance and Soil Properties on Basis of Standard Penetration Test

Sands (Fairly Reliable)		Clays (Rather Unreliable)	
Number of Blows per foot, N	Relative Density	Number of Blows per foot, N	Consistency
		Below 2	Very soft
0-4	Very loose	2-4	Soft
4-10	Loose	4-8	Medium
10-30	Medium	8-15	Stiff
30-50	Dense	15-30	Very stiff
Over 50	Very dense	Over 30	Hard

1- Table 5.3 from Peck, Hanson, Thornburn, Foundation Engineering, 2nd Edition, 1973

NOTES

1) Although the borings represent the subsurface conditions at their respective locations, it should be understood that significant differences could exist between borings.
2) Borings B-1 through B-4 were performed with a Simco model 2800 drill rig in accordance with the ASTM D 1586 (the Standard Penetration Test). B-5 through B-11 were conducted with hand operated augers in accord with ASTM D 1452.

STEPHEN P. SHANLEY LICENSE No. 40653 STATE OF FLORIDA PROFESSIONAL ENGINEER

Alpha Geotechnical and Testing Services, Inc. *Certificate of Authorization No. 00007967* 4778-B Woodlane Circle Tallahassee, FL 32303 (850) 514-4171 Fax: 514-4173	Stephen P. Shanley, PE FL #40653 August 9. 2018		Subsurface Exploration and Foundation Evaluation for Country Club Creek Drainage Improvements Box Culvert Installation	Figure 2

ENGINEER OF RECORD
LANE P. LUCAS
Eustaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 02/28/2019
REVISIONS: 1 2 3 4 5

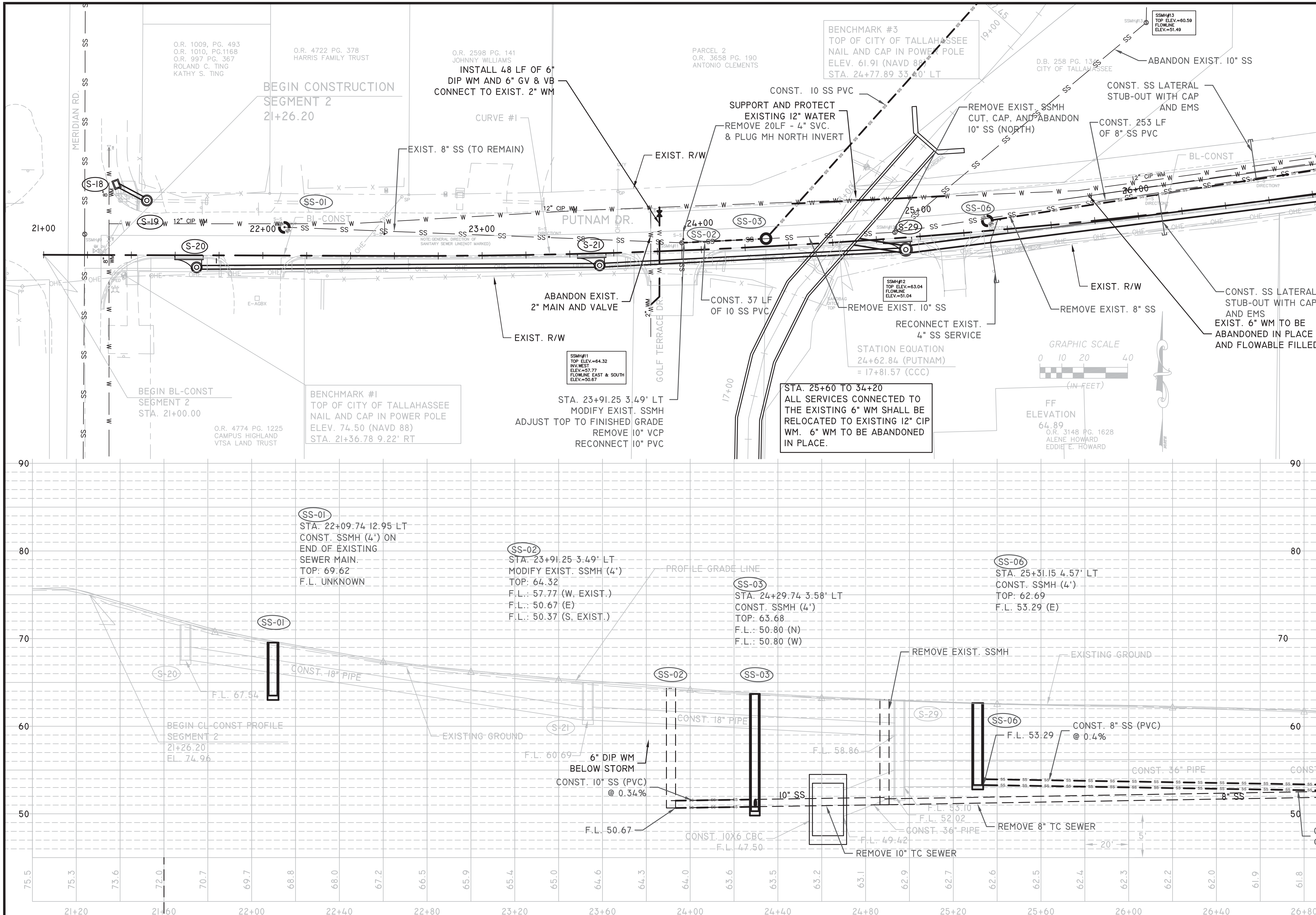
SHEET SOIL SURVEY

PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

Eustaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eustawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: matt
S:\Projects\CCT Stormwater\CCC-Design\dwg\Construction Plans\Notes & Details-CCC.dwg 02/28/2019 11:40:14 AM



User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\Utility Adjustments-Segment 2.dwg 03/05/2019 12:53:29 PM

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53536

Signature / Date

ORIGINAL 03/05/2019

REVISIONS:
1
2
3
4
5

SHEET
UTILITY ADJUSTMENTS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

BENCHMARK #4
TOP OF CITY OF TALLAHASSEE
NAIL AND CAP IN POWER POLE
ELEV. 60.75 (NAVD 88)
STA. 28+09.03 5.29' RT

EXIST. 10" SS

EXIST. 6" WM TO BE ABANDONED IN PLACE AND FLOWABLE FILLED

O.R. 4934 PG. 19
ANTONIO CLEMENTS

REMOVE EXIST. 8" SS

CONST. SS LATERAL STUB-OUT WITH CAP AND EMS

REMOVE AND RELOCATE FIRE HYDRANT AS DIRECTED BY INSPECTOR

INSTALL CONNECTION OF 6" TO 12" WM SEE DETAIL THIS SHEET

INSTALL 12" DIP WM ADJUSTMENT RESTRAIN ALL JOINTS

ADJUST SS MANHOLE RING AND COVER TO FINISHED GRADE

O.R. 4934 PG. 19
STRATEGY INVESTING LLC

O.R. 3881 PG. 1103
LAKEISHA COLEMAN

O.R. 4805 PG.550
YI REN

PROBATE

KILPATRICK TERRACE AS RECORDED IN PLAT BOOK 4, PAGE 17 OF THE PUBLIC RECORDS OF LEON COUNTY, FLORIDA.

LOT 19

LOT 18

EXIST. 6" WM TO BE ABANDONED IN PLACE AND FLOWABLE FILLED

INSTALL 12" DIP WM ADJUSTMENT RESTRAIN ALL JOINTS

ADJUST SS MANHOLE RING AND COVER TO FINISHED GRADE

EXIST. R/W

CURVE #3

CURVE #2

BL-CONST

PUTNAM DR

S-30 S-31 S-32 S-33 S-34 S-35 S-36 S-37

SS-07

24+00 28+00 29+00 30+00 31+00 32+00

12" CIP WM

6" WM

SSMH#16
TOP ELEV.=60.78
FLOWLINE ELEV.=51.48

SSMH#17
TOP ELEV.=
FLOWLINE E
N. WEST
ELEV.=54.20
SW/NORTHEA
ELEV.=54.85

PROPOSED R/W

EXIST. R/W

PROPOSED R/W

ABANDON 2 - 6" VALVES

CONST. SS LATERAL STUB-OUT WITH CAP AND EMS

STATION EQUATION
STA. 27+82.15 (PUTNAM) =
STA. 0+12.46 (TEXAS SEWER)

EXIST. R/W

SSMH#15
TOP ELEV.=60.87
FLOWLINE ELEV.=52.87

CONST. SS DIP LATERAL

CONST. 4" SS DIP LATERAL

INSTALL 6" DIP WM ADJUSTMENT
RESTRAIN ALL JOINTS
CONNECT TO EXISTING 6" WM

PARCEL 3
O.R. 3658 PG. 190
ANTONIO CLEMENTS

CONST. 147 LF OF 10" DIP @ 0.26%

TEXAS ST

6" CIP WM

1+00

SSMH#14
TOP EL

STA. 25+60 TO 34+20
ALL SERVICES CONNECTED TO THE EXISTING 6" WM SHALL BE RELOCATED TO EXISTING 12" CIP WM. 6" WM TO BE ABANDONED IN PLACE.

GRAPHIC SCALE
0 10 20 40
(IN FEET)

INSTALL 12" DIP WM
INSTALL 6" TO RELOCATED FH
INSTALL 6" GV & VB
INSTALL 12X6 REDUCER
EXIST. 12" WV
EXIST. 12" CIP WM
INSTALL 12X12X12X12 CROSS
INSTALL 12X6 REDUCER
INSTALL 12" GV & VB
INSTALL 12" DIP WM
INSTALL 6" GV & VB
INSTALL 6" DIP WM

WATER CONNECTION DETAIL

SS-07
STA. 27+83.97 12.32' LT
CONST. SSMH (4')
TOP: 60.50
F.L. 52.29 (E, EXIST.)
F.L. 52.29 (S)
F.L. 52.29 (W)

PROFILE GRADE LINE

CONST. 36" PIPE
CONST. 36" PIPE
CONST. 30" PIPE
CONST. 4" DIP LATERAL
CONST. 30" PIPE
CONST. 30" PIPE
CONST. 24" PIPE

F.L. 53.70
F.L. 53.30
F.L. 53.80
F.L. 54.05
F.L. 54.23
F.L. 54.49
F.L. 55.15
F.L. 54.65
F.L. 55.60

CONST. 8" SS (PVC) @ 0.4%
CONST. 10" SS (DIP)
F.L. 52.29
EXIST. 8" SS (TO REMAIN)
CONST. 4" DIP LATERAL
8" SS

80 70 60 50

61.9 61.8 61.4 61.0 60.5 60.3 60.2 60.1 60.2 60.4 60.6 60.8 60.8 60.9 60.8 60.8 60.8 60.8 60.7 60.4 60.4 60.1 60.0 60.1 59.6 60.2 60.3 60.4 60.5 60.7

26+80 27+20 27+60 28+00 28+40 28+80 29+20 29+60 30+00 30+40 30+80 31+20 31+60 32+00 32+40

20' 5'

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS: 1 2 3 4 5

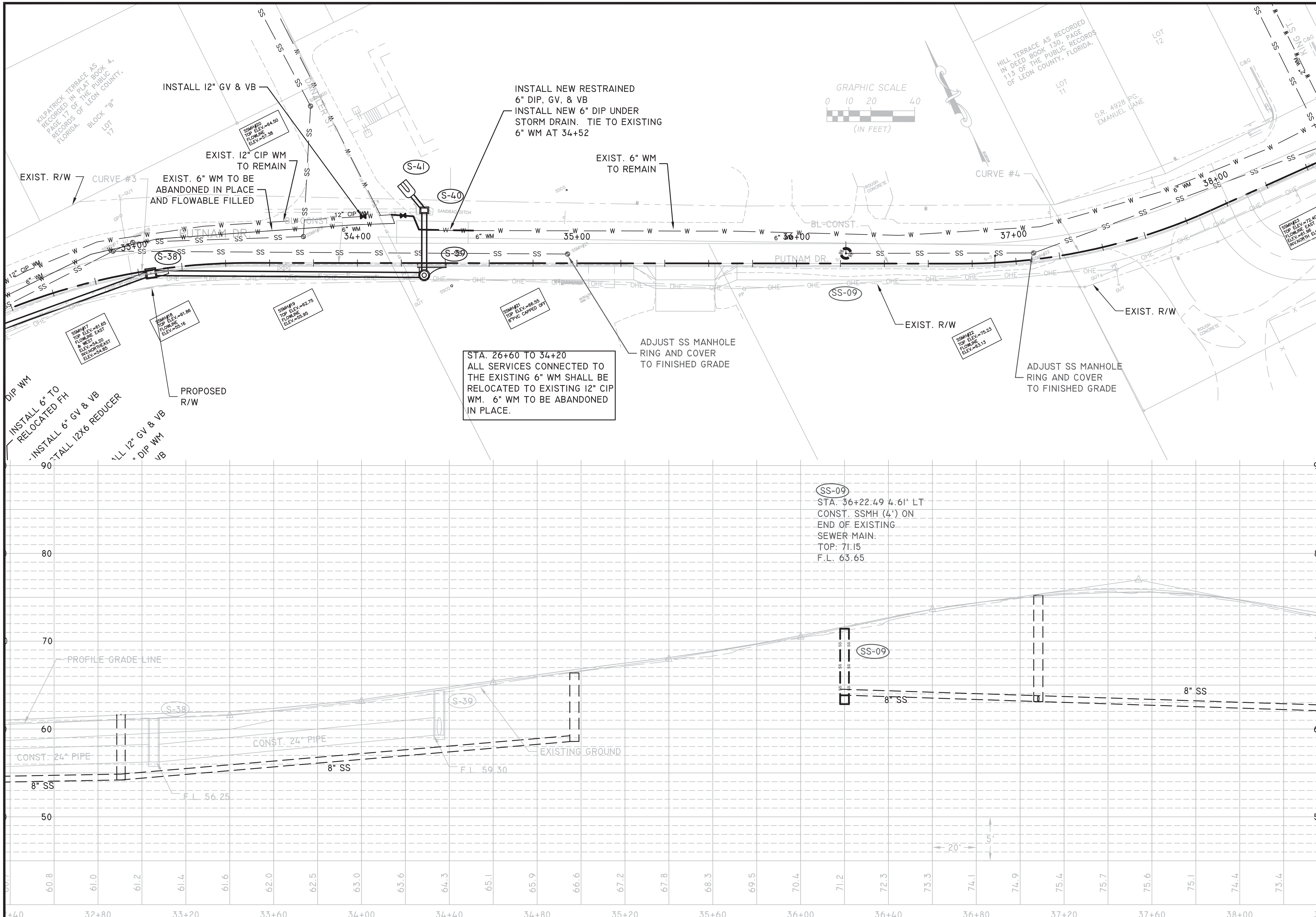
SHEET
UTILITY ADJUSTMENTS

PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\OOT Public Works\Putnam Drive\dwg\Utility Adjustments-Segment 2.dwg 03/05/2019 12:54:02 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature Date

ORIGINAL 03/05/2019

REVISIONS:
1
2
3
4
5

SHEET

UTILITY ADJUSTMENTS

PROJECT

COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO. ________
DRAWN ________
DESIGNED ________
CHECKED ________
QC ________

OF LEON COUNTY, FLORIDA.

LOT 13

LOT 14

O.R. 4967 PG. 822
CHING YU LI AND
WANSHAN WANG

O.R. 3664 PG. 2379
RAINBOW REHAB

O.R. 4751, PG. 1161
MADISON COUNTY COMMUNITY BANK

O.R. 1951, PG. 2174
CRK II

D.B. 169, PG. 219
SUSAN JENKINS

O.R. 4465, PG. 1086
XIAOQIANG WONG

KING ST.

BRIGHTON RD.

PUTNAM DR.

BL-CONST.

ADJUST SS MANHOLE
RING AND COVER
TO FINISHED GRADE

EXIST. R/W

ADJUST SS MANHOLE
RING AND COVER
TO FINISHED GRADE

EXIST. R/W

INSTALL 6" DIP WM ADJUSTMENT
RESTRAIN ALL JOINTS

ADJUST SS MANHOLE
RING AND COVER
TO FINISHED GRADE

SSMH
TOP ELEV.=82.37'
INVERT 6" TC
EAST ELEV.=77.05'

SSMH#23
TOP ELEV.=72.40
FLOWLINE EAST &WEST
ELEV.=61.96
INV.NORTH ELEV.=64.60

SSMH#25
TOP ELEV.=69.10
INVERT 8"PVC NORTH
INV.ELEV.=60.22
INVERT 8"PVC
SOUTH & EAST ELEV.=59.65
INVERT 8"PVC
WEST ELEV.=60.40

SSMH#28
TOP ELEV.=75.66'
INVERT 8"PVC
EAST ELEV.=70.07'
INVERT FLOWLINE
EAST ELEV.=62.99
INVERT 8"PVC
WEST ELEV.=62.95
INVERT 8" TC
NORTH ELEV.=70.71

39+00 40+00 41+00 42+00 43+00 44+00

S-50 S-51 S-52 S-53 S-54 S-55 S-56 S-57

PROPOSED R/W

EXIST. R/W

PROPOSED R/W

EXIST. R/W

EXIST. R/W

EXIST. R/W

CURVE #5

CURVE #6

2 STORY WOOD
FRAME RESIDENCE

O.R. 4579, PG. 1083
M241, LLC,
A FLORIDA LIMITED
LIABILITY CO.

O.R. 4751, PG. 1161
MADISON COUNTY COMMUNITY BANK

GRAPHIC SCALE
0 10 20 40
(IN FEET)

PROFILE GRADE LINE

CONST. 18" PIPE
F.L. 66.24
F.L. 64.77
F.L. 64.12

CONST. 24" PIPE
F.L. 63.62
F.L. 63.54
F.L. 63.60
F.L. 66.16
F.L. 68.00
EXISTING GROUND
F.L. 68.33

8" SS

90 80 70 60 50

73.4 72.4 71.4 70.7 70.1 69.6 69.2 68.7 68.6 68.6 68.7 68.8 68.9 69.3 69.6 70.0 70.6 71.2 71.8 72.4 73.1 73.7 74.4 74.8 75.1 75.2 75.6 75.7 76.1 76.6

38+40 38+80 39+20 39+60 40+00 40+40 40+80 41+20 41+60 42+00 42+40 42+80 43+20 43+60 44+00

20'

6"

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature Date

ORIGINAL 03/05/2019
REVISIONS: 1 2 3 4 5

SHEET
UTILITY ADJUSTMENTS

PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

68

User: Lane
S:\Projects\OOT Public Works\Putnam Drive\dwg\Utility Adjustments-Segment 2.dwg 03/05/2019 12:55:44 PM

CONST. 6" DIP WM ADJUSTMENT
RESTRAIN ALL JOINTS

REPLACE EXIST.
SS SERVICE

ADJUST SS MANHOLE
RING AND COVER
TO FINISHED GRADE

EXIST. R/W

PROPOSED R/W

PROPOSED R/W

GRAPHIC SCALE
0 10 20 40
(IN FEET)

COUNTRY CLUB DR.

END CONSTRUCTION
SEGMENT 2
47+96.16

END BL-CONST
SEGMENT 2
STA. 48+10.83

BL-CONST.

PUTNAM DR

S-60

S-61

S-62

SSMH#69
TOP ELEV.=79.12'
INVERT FLOWLINE
ELEV.=72.64

SSMH#68
TOP ELEV.=74.78
INVERT FLOWLINE
ELEV.=68.76'

BRICK APARTMENT BUILDING

44+00 45+00 46+00 47+00 48+00

6" CIP WM

EXISTING GROUND

PROFILE GRADE LINE

END CL-CONST PROFILE
SEGMENT 2
47+96.16
EL. 90.38

8" SS

F.L. 73.15

100 90 80 70 60

77.0 77.5 78.0 78.7 79.5 80.4 81.4 82.5 83.6 84.8 86.0 87.0 88.1 89.1 90.1 90.7 90.8 90.7 90.7 90.4 90.1

44+40 44+80 45+20 45+60 46+00 46+40 46+80 47+20 47+60 48+00

20' 5'

ENGINEER OF RECORD
LANE P. LUCAS
Etan, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1 2 3 4 5

SHEET
UTILITY ADJUSTMENTS

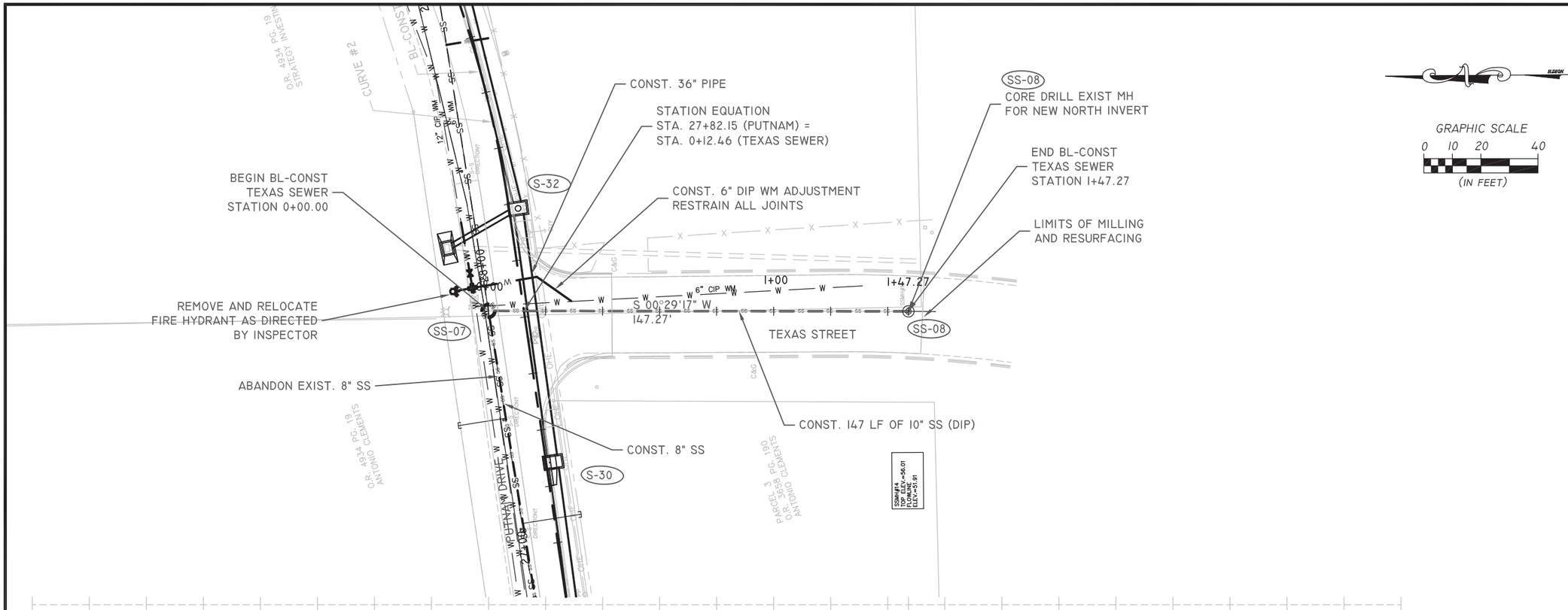
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE
DRAINAGE AND SIDEWALK
IMPROVEMENTS

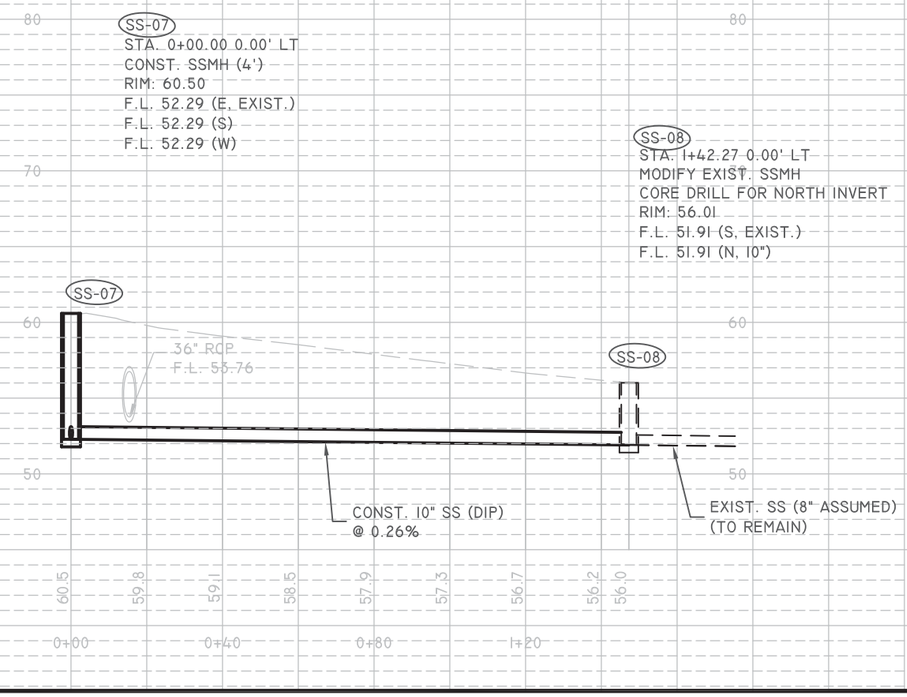
Etan, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.etaninc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

69

User: Lane
S:\Projects\COT Public Works\Putnam Dr\edwg\Utility Adjustments-Segment 2.dwg 03/05/2019 12:56:07 PM





ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

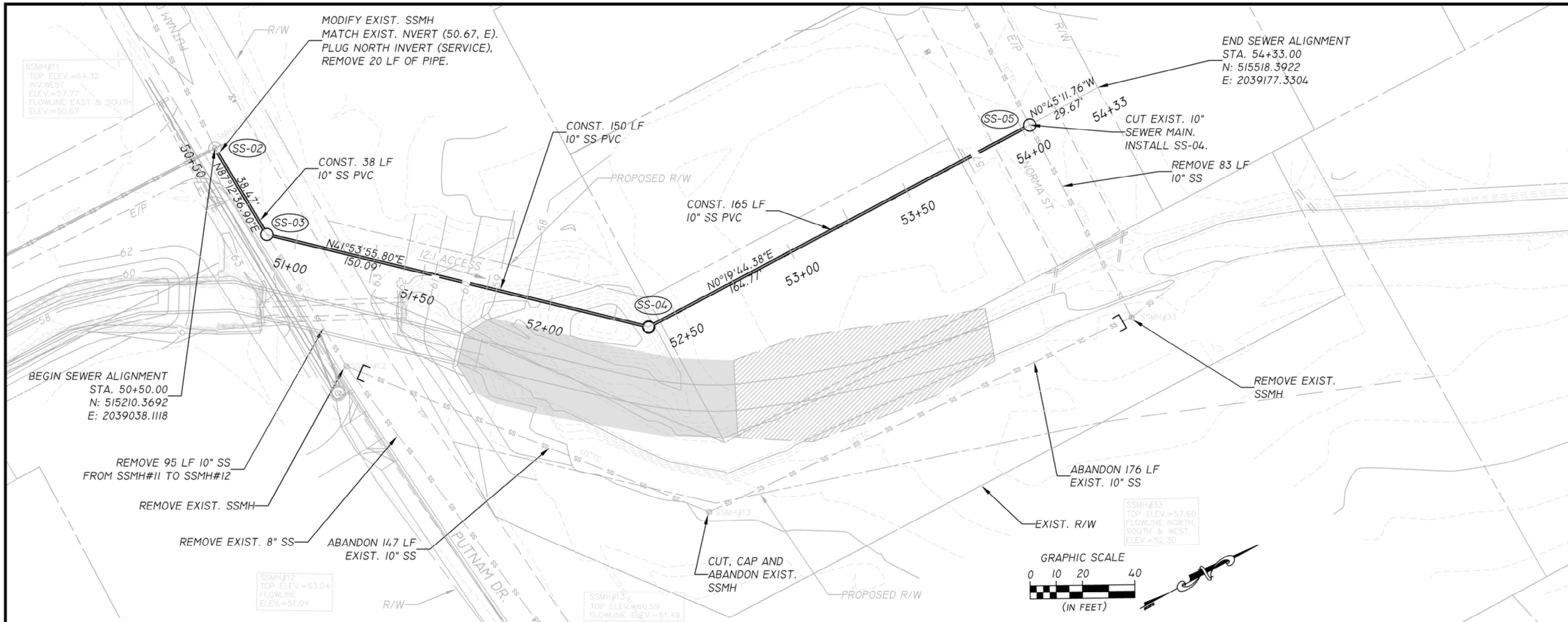
SHEET
UTILITY ADJUSTMENTS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

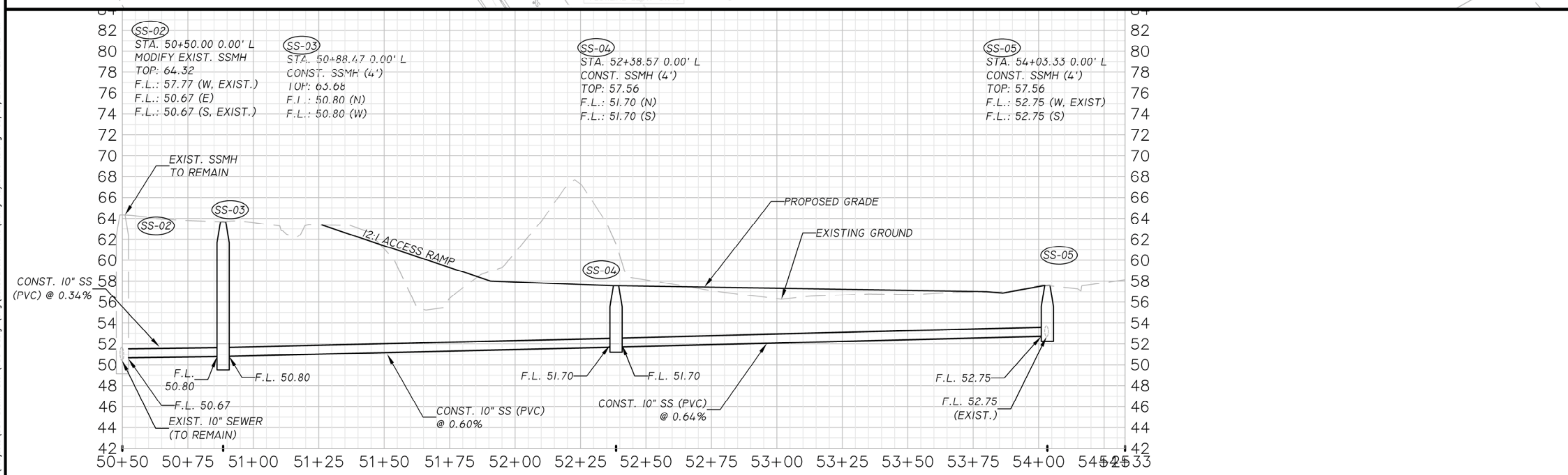
Eutaw, Inc
Engineering (Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\Utility Adjustments-Segment 2.dwg 03/05/2019 12:56:43 PM



MODIFY EXIST. SSMH
MATCH EXIST. NVERT (50.67, E).
PLUG NORTH INVERT (SERVICE),
REMOVE 20 LF OF PIPE.
SS-02
CONST. 38 LF
10" SS PVC
N87°12'36.90"E
38.47'
SS-03
N41°53'55.80"E
150.09'
CONST. 150 LF
10" SS PVC
PROPOSED R/W
12:1 ACCESS
SS-04
N0°19'44.38"E
164.77'
CONST. 165 LF
10" SS PVC
SS-05
N0°45'11.76"W
29.67'
END SEWER ALIGNMENT
STA. 54+33.00
N: 515518.3922
E: 2039177.3304
CUT EXIST. 10"
SEWER MAIN.
INSTALL SS-04.
REMOVE 83 LF
10" SS
NORMA ST.
50+50
51+00
51+50
52+00
52+50
53+00
53+50
54+00
54+33
BEGIN SEWER ALIGNMENT
STA. 50+50.00
N: 515210.3692
E: 2039038.1118
REMOVE 95 LF 10" SS
FROM SSMH#11 TO SSMH#12
REMOVE EXIST. SSMH
REMOVE EXIST. 8" SS
ABANDON 147 LF
EXIST. 10" SS
PUTNAM DR.
CUT, CAP AND
ABANDON EXIST.
SSMH
PROPOSED R/W
REMOVE EXIST.
SSMH
ABANDON 176 LF
EXIST. 10" SS
EXIST. R/W
R/W
E/P
GRAPHIC SCALE
0 10 20 40
(IN FEET)



SS-02
STA. 50+50.00 0.00' L
MODIFY EXIST. SSMH
TOP: 64.32
F.L.: 57.77 (W, EXIST.)
F.L.: 50.67 (E)
F.L.: 50.67 (S, EXIST.)
SS-03
STA. 50+88.47 0.00' L
CONST. SSMH (4')
TOP: 63.68
F.L.: 50.80 (N)
F.L.: 50.80 (W)
SS-04
STA. 52+38.57 0.00' L
CONST. SSMH (4')
TOP: 57.56
F.L.: 51.70 (N)
F.L.: 51.70 (S)
SS-05
STA. 54+03.33 0.00' L
CONST. SSMH (4')
TOP: 57.56
F.L.: 52.75 (W, EXIST)
F.L.: 52.75 (S)
EXIST. SSMH
TO REMAIN
PROPOSED GRADE
EXISTING GROUND
12:1 ACCESS RAMP
CONST. 10" SS
(PVC) @ 0.34%
F.L.
50.80
F.L. 50.80
F.L. 50.67
EXIST. 10" SEWER
(TO REMAIN)
CONST. 10" SS (PVC)
@ 0.60%
F.L. 51.70
F.L. 51.70
CONST. 10" SS (PVC)
@ 0.64%
F.L. 52.75
F.L. 52.75
(EXIST.)
42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84
50+50 50+75 51+00 51+25 51+50 51+75 52+00 52+25 52+50 52+75 53+00 53+25 53+50 53+75 54+00 54+25 54+33

User: matt
S:\Projects\COT Stormwater\CCC-Design\dwg\Construction Plans\Utility Adjustments.dwg 03/05/2019 08:22:42 AM

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
UTILITY ADJUSTMENTS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

EUTAW, INC
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

1. SITE DESCRIPTION

A. CONSTRUCTION ACTIVITY:

THE PROJECT CONSISTS OF CONSTRUCTING CONCRETE SIDEWALKS AND CURB AND GUTTER ALONG AN EXISTING PUBLIC ROADWAY. THE PROJECT ALSO INCLUDES THE CONSTRUCTION OF CONCRETE BOX CULVERT AND CONCRETE DITCH PAVING ALONG COUNTRY CLUB CREEK. ADDITIONAL WORK INCLUDES CONSTRUCTION OF ENCLOSED DRAINAGE SYSTEMS (INLETS AND PIPING), MILLING AND RESURFACING, AND DITCH IMPROVEMENTS ALONG PUTNAM DRIVE.
THE PROJECT INCLUDES TREE REMOVAL, CLEARING AND GRUBBING, EARTHWORK, DRAINAGE STRUCTURE CONSTRUCTION, CONCRETE BOX CONSTRUCTION, ENDWALL CONSTRUCTION, ASPHALT PAVING, AND PERMANENT EROSION CONTROL FEATURES.

B. MAJOR SOIL DISTURBING ACTIVITIES:

CLEARING AND GRUBBING
DRAINAGE STRUCTURES AND PIPING
BOX CULVERT CONSTRUCTION
DITCH CONSTRUCTION
PARKING LANE CONSTRUCTION

C. AREA ESTIMATES:

TOTAL PROJECT AREA: 3.86 ACRES
TOTAL AREA TO BE DISTURBED: 2.64 ACRES (EXCLUDING MILLING AND RESURFACING)

D. RUNOFF DATA:

RUNOFF COEFFICIENT (BEFORE CONSTRUCTION): 0.55
RUNOFF COEFFICIENT (DURING CONSTRUCTION): 0.55
RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 0.58

OUTFALL LOCATIONS:
THE PROJECT IS LOCATED WITHIN THE INDIANHEAD WATERSHED IN THE LAKE MUNSON BASIN. THE PROJECT HAS TWO OUTFALLS. THE FIRST IS TO COUNTRY CLUB CREEK WHICH DISCHARGES TO THE EAST DRAINAGE DITCH. THE SECOND IS TO AN ENCLOSED DRAINAGE SYSTEM ON BRIGHTON STREET, WHICH DISCHARGES TO THE EAST DITCH.

OUTFALL #1	N 30°24'52.24" W 84°16'33.93"
BRIGHTON OUTFALL	N 30°24'58.71" W 84°16'17.05"

2. CONTROLS

SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS:

CONTROLS SHALL BE INSTALLED PRIOR TO ANY EARTH CLEARING ACTIVITIES AND MAINTAINED UNTIL PERMANENT EROSION CONTROL FEATURES HAVE BEEN ESTABLISHED.

A. EROSION AND SEDIMENT CONTROLS

(1) STABILIZATION PRACTICES:
TEMPORARY SODDING
TEMPORARY GRASSING
PERMANENT SODDING OR SEEDING

(2) STRUCTURAL PRACTICES:
SEDIMENT BARRIER
TURBIDITY BARRIER
BERMS
SEDIMENT TRAPS/BASINS

NOTE: THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.

B. STORMWATER MANAGEMENT

STORMWATER MANAGEMENT IS NOT PROVIDED WITHIN THE PROJECT LIMITS IN THE EXISTING CONDITION. THE ADDITION OF THE SIDEWALKS AND ASSOCIATED CURBING IS EXEMPT FROM ENVIRONMENTAL PERMITTING. AS SUCH, NO NEW STORMWATER MANAGEMENT CAPACITY IS INCLUDED IN THE PROJECT.

C. OTHER CONTROLS

(1) WASTE DISPOSAL:
THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.

(2) OFFSITE VEHICLE TRACKING AND GENERATION OF DUST:
HAUL ROADS DAMPENED FOR DUST CONTROL
LOADED HAUL TRUCKS TO BE COVERED WITH TARP
EXCESS DIRT ON ROADWAY REMOVED DAILY
STABILIZED CONSTRUCTION ENTRANCE

(3) SANITARY OR SEPTIC WASTE:
ALL SANITARY WASTE WILL BE COLLECTED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.

(4) FERTILIZER:
FERTILIZER SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS BY A LICENSED OR CERTIFIED APPLICATOR AS DIRECTED BY THE PROJECT ENGINEER.

(5) PESTICIDES:
THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.

(6) NON-STORM WATER DISCHARGE INCLUDING SPILL REPORTING:
NO NON-STORM WATER DISCHARGES ARE ANTICIPATED.

3. PERMITS

PERMITS OBTAINED FOR THIS PROJECT INCLUDE:
GEN-073-284009-1 (NWFWMD)

4. MAINTENANCE

ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED FOLLOWING EACH RAINFALL EVENT. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS AT THE CONTROLS SHOULD BE REMOVED AFTER EACH STORM EVENT.

THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP PER SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.

5. INSPECTION

ALL CONTROLS SHALL BE INSPECTED WEEKLY BY THE CONTRACTOR AS WELL AS AFTER A STORM EVENT WITH 0.50" OR MORE OF RAIN. AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE PER EACH INSPECTION BASED UPON INSPECTION RESULTS. THE CONTROLS SHALL BE REVISED PER THE INSPECTION RESULTS.

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
STORMWATER POLLUTION PREVENTION PLAN

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

GENERAL NOTES - SEDIMENT AND EROSION CONTROL:

1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PREVENTION, CONTROL, AND ABATEMENT OF EROSION, WATER POLLUTION, AND THE TRANSPORTATION OF ERODED MATERIALS OFF SITE.

2. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SEDIMENT AND EROSION CONTROL PLAN TO ACCOMPANY THE STORMWATER POLLUTION PREVENTION PLAN AND THE SEDIMENT AND EROSION CONTROL PLAN INCLUDED IN THESE PLANS. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE PREPARED IN ACCORDANCE WITH THE "FLORIDA EROSION AND SEDIMENT CONTROL MANUAL" AND SHALL BE SPECIFIC TO THE MEANS, METHODS, AND SEQUENCE OF CONSTRUCTION TO BE EMPLOYED BY THE CONTRACTOR AND SHALL IDENTIFY THE TYPES AND LOCATIONS OF CONTROLS THAT ARE TO BE IMPLEMENTED DURING EACH PHASE OF CONSTRUCTION AS SHOWN ON THE APPROVED CONSTRUCTION SCHEDULE TO MINIMIZE EROSION, PREVENT THE TRANSFER OF ERODED MATERIALS ONTO ANY OFF SITE PARCEL OR INTO ANY RECEIVING WATER, AND PREVENT VIOLATING STATE AND/OR FEDERAL PERMIT REQUIREMENTS. PAYMENT FOR PREPARING AND SUBMITTING THE SEDIMENT AND EROSION CONTROL PLAN AND FOR ANY MODIFICATIONS TO THE SEDIMENT AND EROSION CONTROL PLAN DURING CONSTRUCTION WILL BE INCLUDED IN THE PAY ITEM FOR MOBILIZATION. THE SEDIMENT AND EROSION CONTROL PLAN SHALL DESCRIBE BUT NOT BE LIMITED TO THE FOLLOWING ITEMS FOR EACH PHASE OF CONSTRUCTION OPERATIONS OR ACTIVITIES:

   A. TYPES AND LOCATIONS OF ALL EROSION CONTROL DEVICES
   B. ESTIMATED TIME EROSION CONTROL DEVICES WILL BE IN OPERATION
   C. METHODS FOR CONTAINMENT OR REMOVAL OF ERODED MATERIALS FROM DISCHARGES RELATED TO DEWATERING OPERATIONS
   D. METHODS FOR CONTAINMENT OR REMOVAL OF POLLUTANTS OR HAZARDOUS WASTES
   E. METHODS FOR MAINTENANCE OF EROSION CONTROL DEVICES
   F. SCHEDULES FOR MONITORING AND MAINTAINING EROSION CONTROL DEVICES
   G. NAME AND PHONE NUMBERS OF PERSON RESPONSIBLE FOR MONITORING AND MAINTAINING EROSION CONTROL DEVICES

3. NO CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL THE SEDIMENT AND EROSION CONTROL PLAN HAS RECEIVED WRITTEN APPROVAL FROM THE ENGINEER.

4. THE CONTRACTOR SHALL UPDATE THE SEDIMENT AND EROSION CONTROL PLAN WHENEVER THERE IS A CHANGE IN CONSTRUCTION SEQUENCE OR ACTIVITIES THAT HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS OFF SITE OR INTO ANY RECEIVING WATER AND SHALL SUBMIT THE UPDATED PLAN FOR REVIEW AND APPROVAL BY THE ENGINEER.

5. EROSION AND SEDIMENT CONTROLS SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION AND SHALL BE IN PLACE BEFORE DISTURBING SOIL UPSTREAM OF THE CONTROL.

6. FIELD CONDITIONS MAY REQUIRE THE USE OF ADDITIONAL TYPES AND QUANTITIES OF SEDIMENT AND EROSION CONTROL DEVICES DURING CONSTRUCTION AS DETERMINED BY THE CONTRACTOR, THE ENVIRONMENTAL INSPECTOR, OR THE ENGINEER.

7. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROL DEVICES PRIOR TO SUSPENSION OF WORK ACTIVITIES EACH DAY, IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL TO ENSURE THAT THE DEVICES ARE PROPERLY LOCATED AND MAINTAINED FOR EFFECTIVENESS. ANY REQUIRED REMEDIAL ACTION SHALL BE PERFORMED IMMEDIATELY.

8. SEDIMENT TRAPPED BY THE EROSION CONTROL DEVICES IS TO BE REMOVED BY THE CONTRACTOR AFTER EACH RAIN STORM.

9. THE AMOUNT OF AREA DISTURBED AT ONE TIME SHALL BE LIMITED TO THE MINIMUM NECESSARY TO ADEQUATELY IMPLEMENT THE WORK. CONSTRUCTION OPERATIONS SHALL BE CONTROLLED TO MINIMIZE UNPROTECTED AREAS EXPOSED TO WEATHER, AND AREAS OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED.

10. EXCAVATED MATERIAL SHALL NOT BE DEPOSITED IN LOCATIONS WHERE IT COULD BE WASHED AWAY BY HIGH WATER OR BY STORMWATER RUNOFF, AND STOCKPILES SHALL BE COVERED OR ENCIRCLED WITH SEDIMENT CONTAINMENT DEVICES.

11. DURING THE INSTALLATION OF STORM DRAIN OR UTILITY PIPING, SYNTHETIC BALE BARRIERS SHALL BE PLACED BELOW THE WORK ZONES TO AID IN CONTROLLING THE TRANSFER OF ERODED MATERIAL OFF SITE.

12. NEW AND EXISTING DRAINAGE STRUCTURES SHALL BE PROTECTED FROM SILTATION DURING CONSTRUCTION. BARRIERS SHALL BE PLACED AROUND ALL INCOMPLETE STORMWATER INLETS AND MANHOLES DURING CONSTRUCTION. CURB INLET FILTERS SHALL BE PLACED ACROSS THE THROATS OF ALL EXISTING AND COMPLETED CURB INLETS.

13. EXISTING FLOW CAPACITY SHALL BE MAINTAINED IN THE DRAINAGE SYSTEMS TO CONVEY RUNOFF FROM RAIN STORMS THAT OCCUR DURING CONSTRUCTION. EXISTING DRAINAGE PIPES THAT ARE NOTED TO BE PLUGGED OR REMOVED SHALL REMAIN IN SERVICE UNTIL FLOWS CAN BE DIVERTED TO THE NEW DRAINAGE SYSTEM. WHERE NEW PIPES ARE TO BE INSTALLED IN CLOSE PROXIMITY TO EXISTING PIPES THAT ARE TO BE REMOVED, PROVISIONS SHALL BE MADE TO DIVERT FLOWS FROM THE EXISTING PIPES TO THE NEW PIPES PRIOR TO RAIN STORMS. TEMPORARY PIPES SHALL BE PLACED FOR THIS PURPOSE PRIOR TO SUSPENSION OF WORK ACTIVITIES EACH DAY.

14. NO MORE THAN 500 FEET OF STORM DRAIN OR UTILITY PIPING SHALL BE INSTALLED WITHOUT BACKFILLING AND COMPACTING THE PIPE TRENCH.

15. STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THOSE PORTIONS OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

16. PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL DISTURBED LAND AREAS SHALL BE COMPLETED IMMEDIATELY AFTER FINAL GRADING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY PROTECT A DISTURBED AREA IMMEDIATELY AFTER GRADING OPERATIONS, TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED. ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED.

17. THE CONTRACTOR SHALL OBTAIN AN ENVIRONMENTAL MANAGEMENT PERMIT FROM THE CITY OF TALLAHASSEE GROWTH MANAGEMENT DEPARTMENT FOR ALL STOCKPILE AND CONSTRUCTION STAGING AREAS LOCATED OUTSIDE THE LIMITS OF CONSTRUCTION.

GENERAL NOTES - TREE PROTECTION:

1. BARRICADE FENCING SHALL BE INSTALLED AT OR NEAR THE CRITICAL PROTECTION ZONE OF EACH TREE TO BE PROTECTED PRIOR TO INITIATION OF ANY CONSTRUCTION ACTIVITY, AND THE FENCING SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

2. ALL ROOTS 3/4" IN DIAMETER AND LARGER OF TREES TO BE PROTECTED OR PRESERVED THAT ARE EXPOSED DURING TRENCHING AND EXCAVATION SHALL BE CLEANLY CUT WITH A HANDSAW AND COVERED IMMEDIATELY WITH SOIL OR KEPT MOISTENED WITH WET BURLAP OR PEAT MOSS UNTIL THE TRENCH CAN BE FILLED. WHEN IT IS NOT POSSIBLE TO BACKFILL IN THE SAME DAY, THE ROOTS SHALL BE FRESHLY CUT WITH A HANDSAW A REASONABLE DISTANCE FROM THE ORIGINAL CUT AND BACKFILLED IMMEDIATELY TO AVOID SOIL OR ROOT DEHYDRATION.

3. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF A CERTIFIED ARBORIST TO RECOMMEND AND OVERSEE ANY TREE MITIGATION NEEDED AS A RESULT OF CONSTRUCTION OR BASED ON ANY PERMIT SPECIAL CONDITIONS. THE COST FOR PROVIDING AN ARBORIST AND ANY MITIGATION SHOULD BE INCLUDED IN THE COST OF MOBILIZATION.

LEGEND

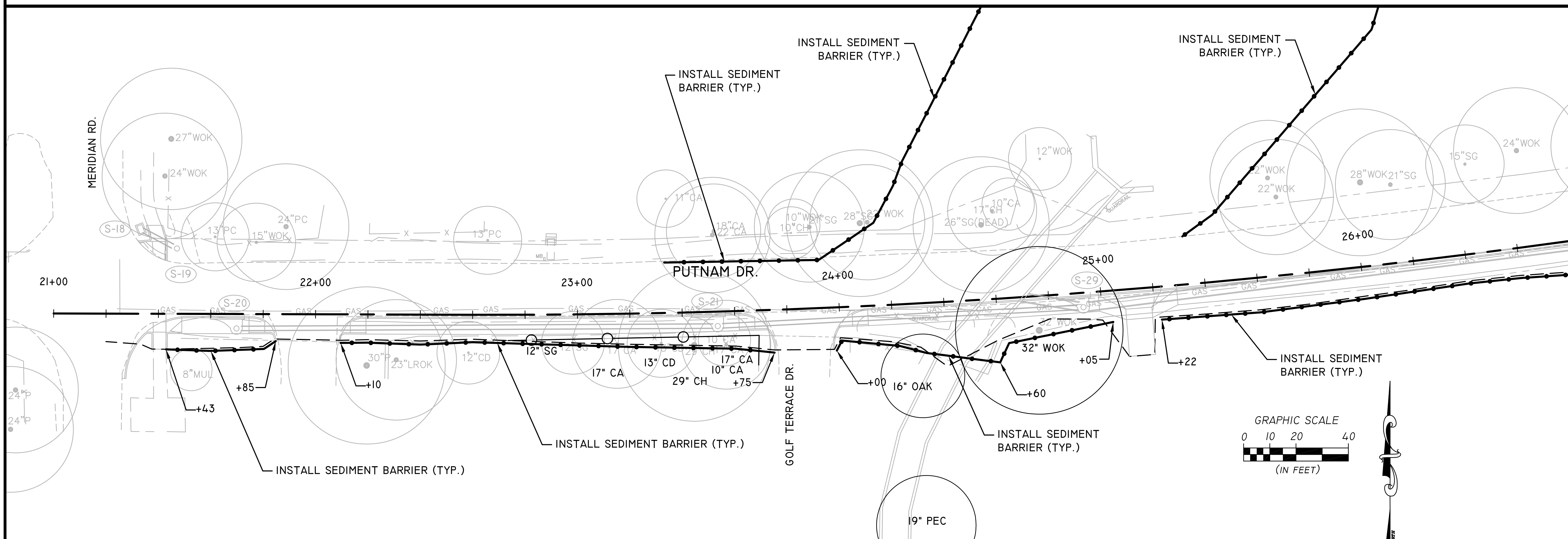
⊗ TREE REMOVAL

TREE REMOVALS - PUTNAM SIDEWALK

STATION	SIDE	DESCRIPTION
22+98	RT	12" SG
23+15	RT	17" CA
23+32	RT	13" CD
23+44	RT	29" CH
23+55	RT	10" CA
23+56	RT	17" CA
28+14	RT	14" PC
28+42	RT	30" P
28+70	RT	28" P
28+94	RT	17" SG
29+26	RT	16"PC
30+71	RT	31"PC
31+43	LT	12"M
31+52	LT	24" BG
31+55	LT	35" SG
32+37	LT	46" SG
32+52	LT	13" WOK
32+83	LT	26" WOK
38+78	RT	8" CYP
38+95	RT	10" CYP
39+17	RT	9" CYP
39+36	RT	6" CYP
39+56	RT	22"WOK
39+58	RT	28" WOK

TREES FOR ELECTRIC RELOCATION

STATION	SIDE	DESCRIPTION
29+74	LT	8" PC
30+39	LT	10" WOK
31+22	LT	35" WOK
32+09	LT	30" WOK



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936

Signature | Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

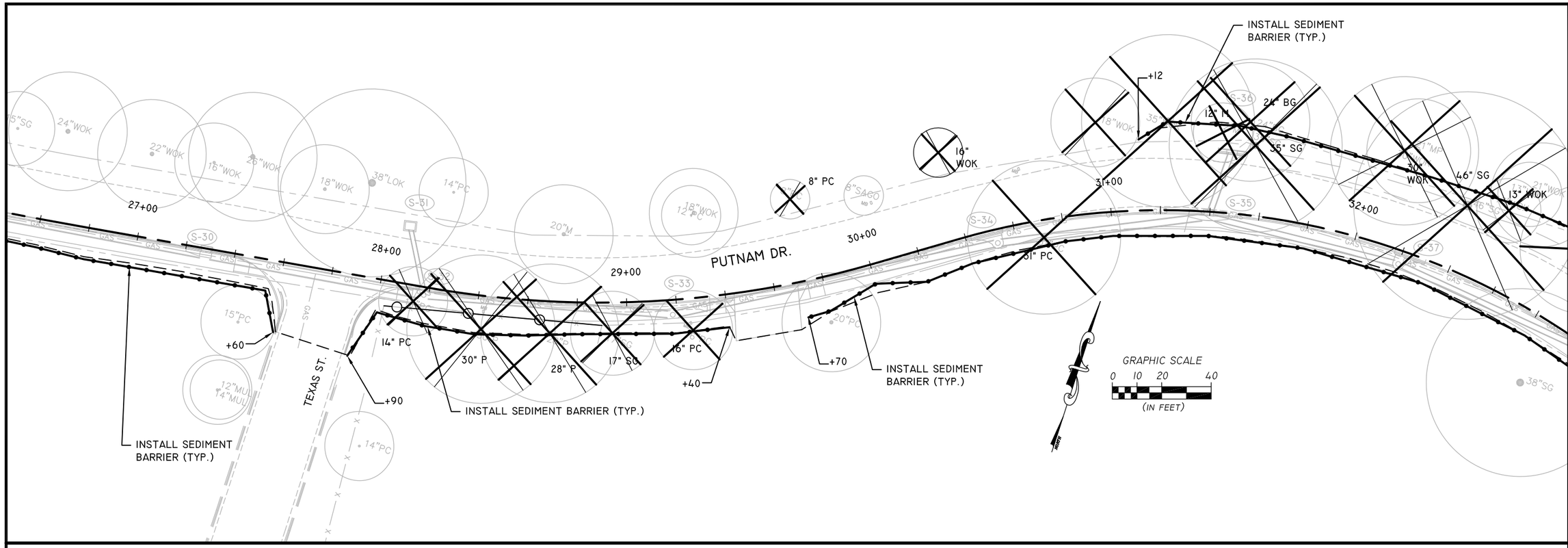
SHEET
TREE PROTECTION /REMOVAL AND EROSION CONTROL

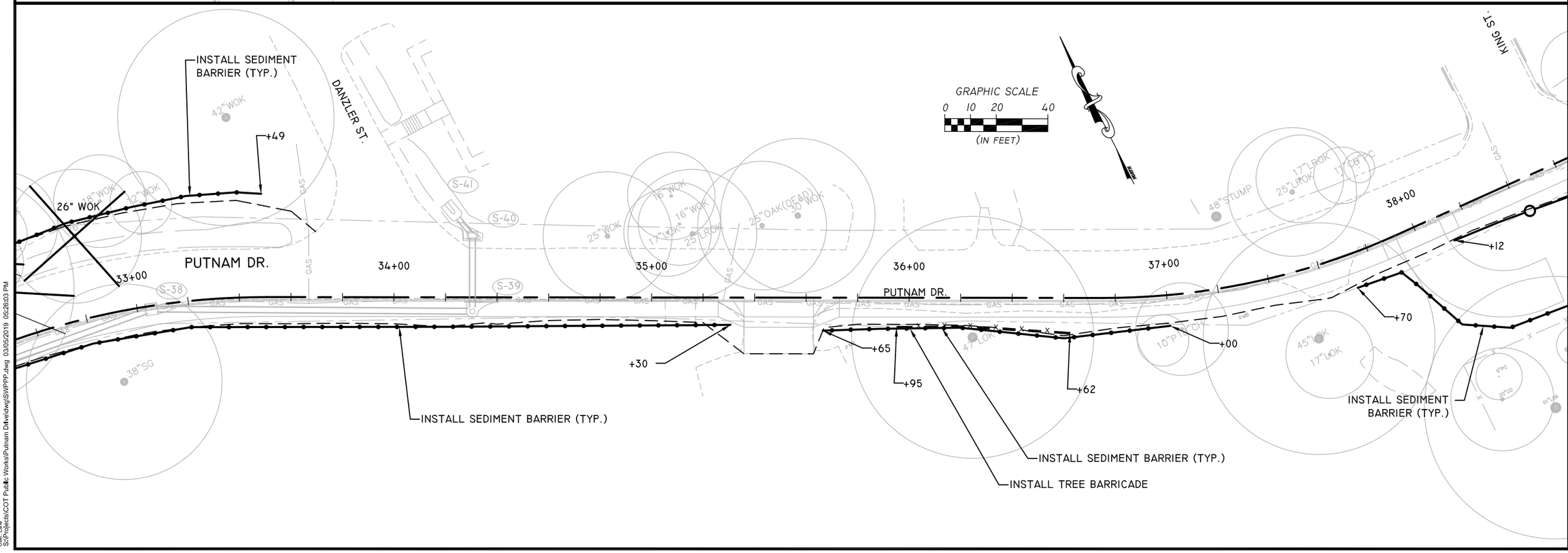
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\SWPPP.dwg 03/05/2019 05:25:21 PM





ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

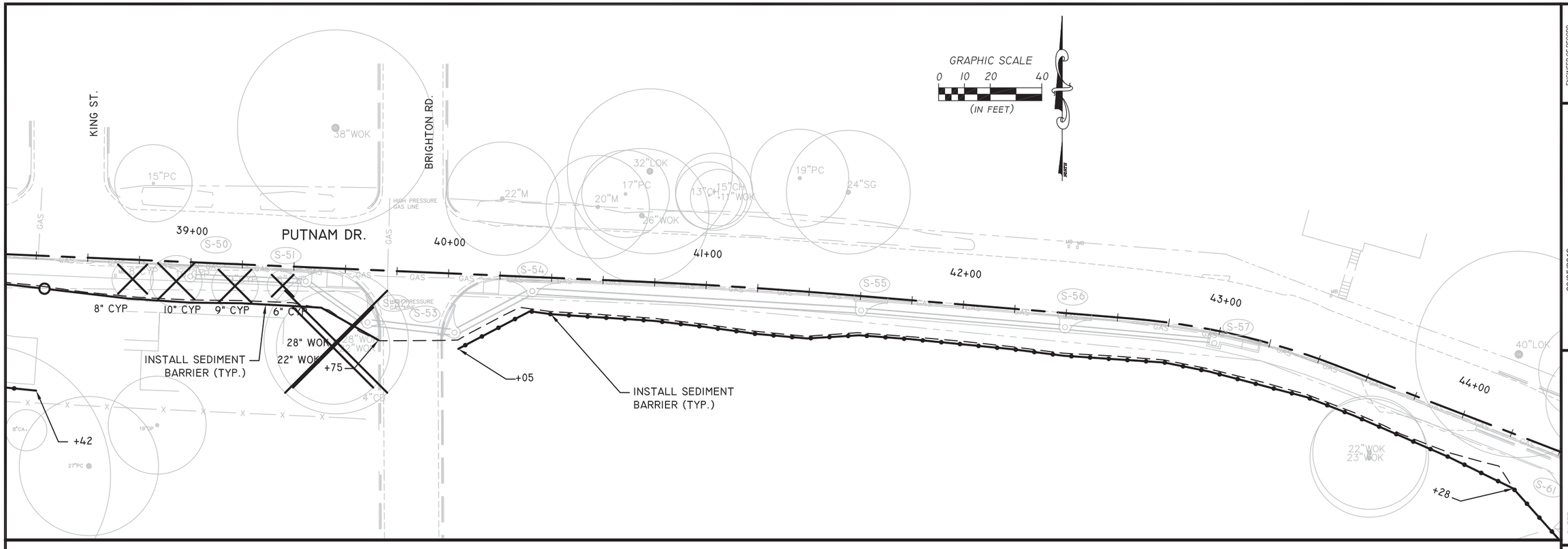
SHEET
TREE PROTECTION /REMOVAL AND EROSION CONTROL

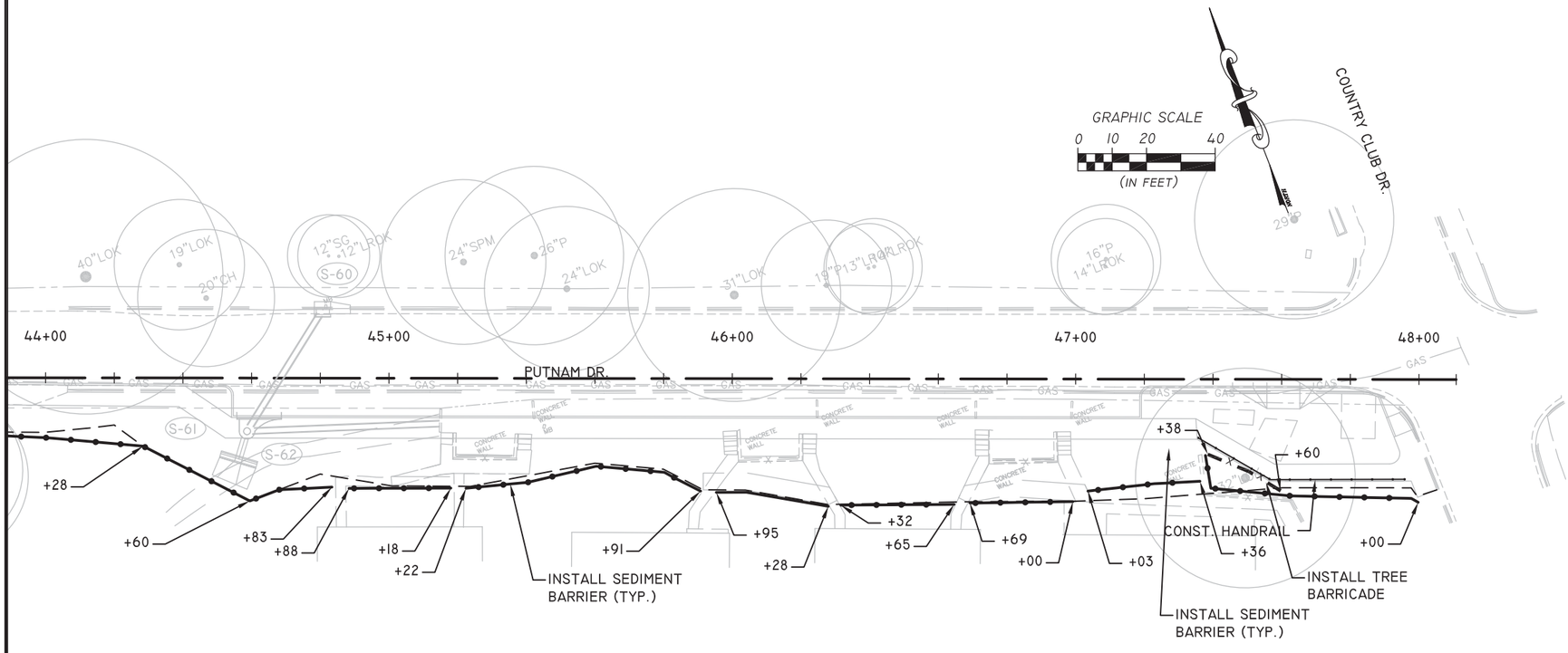
PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\SWPPP.dwg 03/05/2019 05:26:03 PM





ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature _____ Date _____

ORIGINAL 03/05/2019
REVISIONS:
1 _____
2 _____
3 _____
4 _____
5 _____

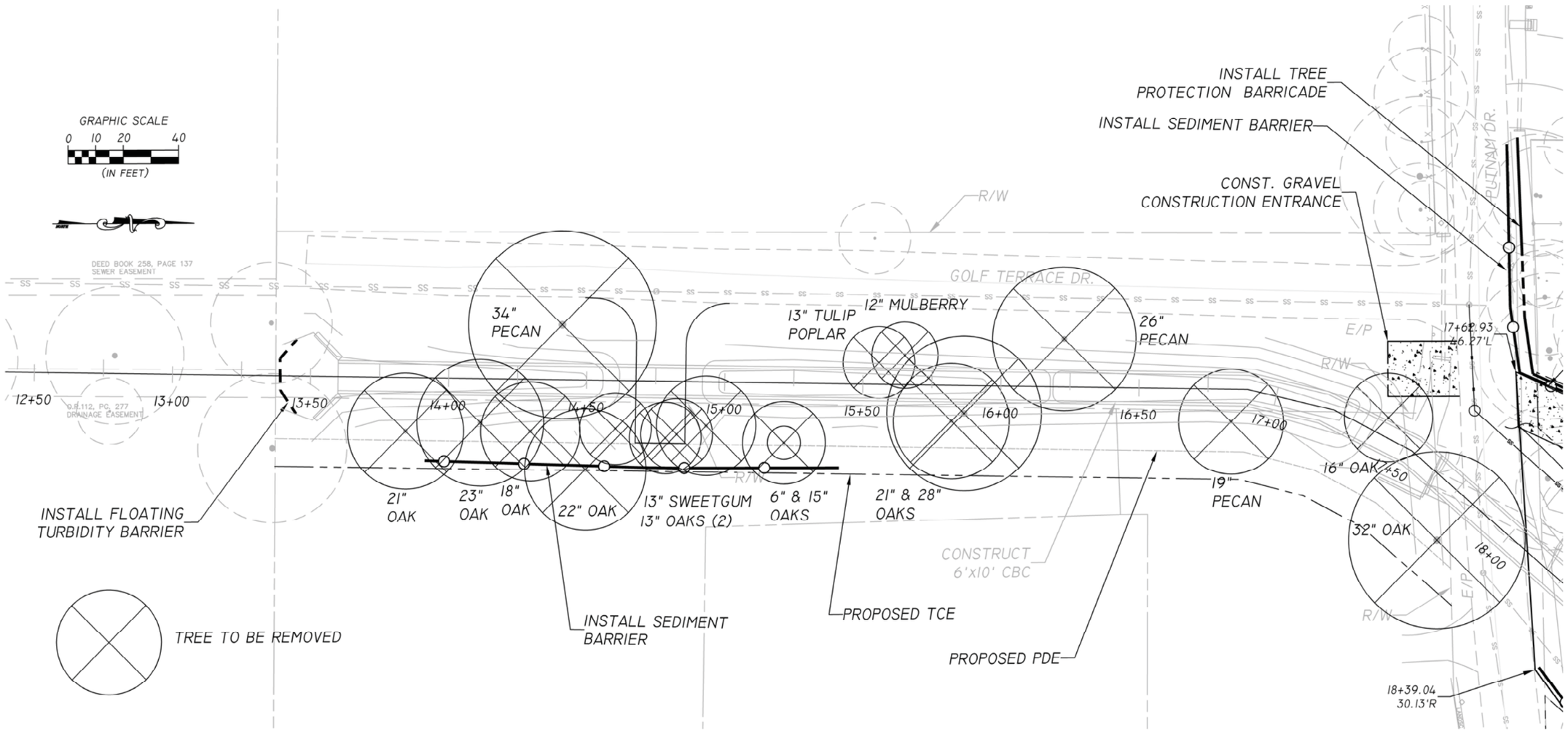
SHEET
TREE PROTECTION /REMOVAL AND EROSION CONTROL

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering (Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO. _____
DRAWN _____
DESIGNED _____
CHECKED _____
QC _____

User: Lane
S:\Projects\COT Public Works\Putnam Dr\edv\dwg\SWPPP.dwg 03/05/2019 01:02:37 PM



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 02/28/2019
REVISIONS:
1
2
3
4
5

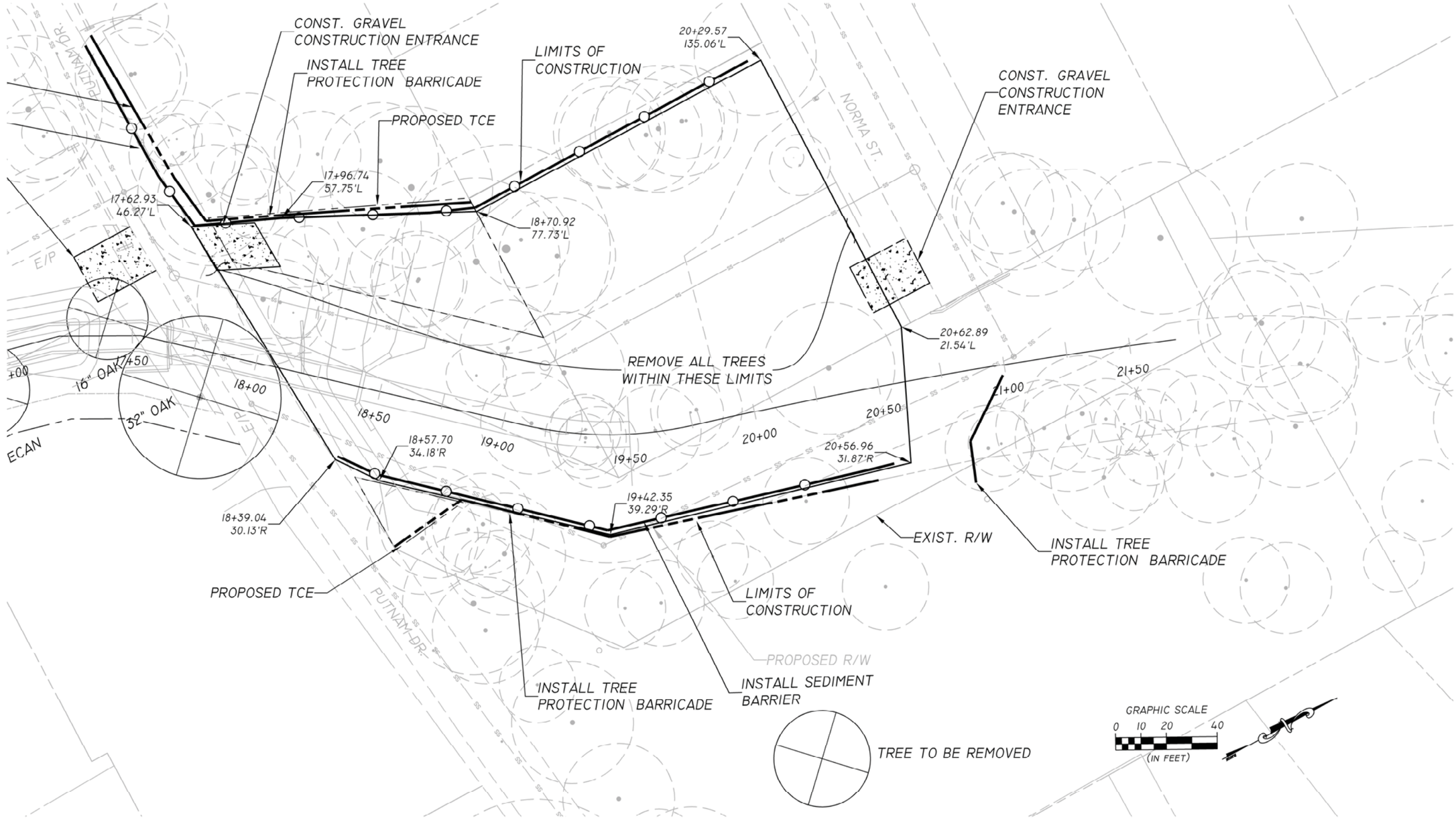
SHEET
TREE PROTECTION/ REMOVAL AND EROSION CONTROL

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: matt
S:\Projects\CCT Stormwater\CCC-Design\dwg\Construction Plans\Erosion and Trees.dwg 02/28/2019 12:08:48 PM



ENGINEER OF RECORD
LANE P. LUCAS
Erban, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53506
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
TREE PROTECTION/ REMOVAL AND EROSION CONTROL

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Erban, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.erbaninc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: matt
S:\Projects\COT Stormwater\CCC-Design\dwg\Construction Plans\Erosion and Trees.dwg 03/05/2019 08:31:11 AM

MAINTENANCE OF TRAFFIC NOTES

1. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN THAT DESCRIBES THE MEASURES TO BE EMPLOYED DURING CONSTRUCTION TO WARN MOTORISTS AND PEDESTRIANS OF HAZARDS, TO ADVISE MOTORISTS OF THE PROPER TRAVEL PATH THROUGH OR AROUND THE WORK AREA, TO DELINEATE AREAS WHERE TRAFFIC SHOULD NOT OPERATE, AND TO SEPARATE AND PROTECT MOTORISTS, PEDESTRIANS, AND THE WORK FORCE DURING ALL PHASES OF THE WORK. THE PLAN SHALL ALSO CONSIDER ACCESS TO BUSINESSES WITHIN THE CONSTRUCTION AREA AND PROVIDE BUSINESS ENTRANCE SIGNS TO ROUTE MOTORISTS TO DESIGNATED PARKING AREAS. THE CONTRACTOR SHALL OBTAIN APPROVAL OF THE TRAFFIC CONTROL PLAN FROM THE CITY OF TALLAHASSEE TRAFFIC MOBILITY MANAGEMENT SECTION PRIOR TO BEGINNING CONSTRUCTION. PAYMENT FOR PREPARING AND SUBMITTING THE TRAFFIC CONTROL PLAN SHALL BE INCLUDED IN THE PAY ITEM FOR MOBILIZATION.

2. ACCESS TO BUSINESS AND RESIDENTIAL DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.

3. NO ROADWAYS (INCLUDING COUNTY ROADS) SHALL BE CLOSED WITHOUT PRIOR APPROVAL OF THE CITY OF TALLAHASSEE TRAFFIC MOBILITY MANAGEMENT SECTION.

4. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND/OR THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, 600 SERIES.

5. ALL TRAFFIC CONTROL DEVICES SHALL BE IN PLACE BEFORE THE START OF CONSTRUCTION ON AFFECTED ROADWAYS.

6. WARNING LIGHTS SHALL BE USED ON BARRICADES DURING HOURS OF DARKNESS IN ACCORDANCE WITH INDEX NO. 600.

SUGGESTED CONSTRUCTION SEQUENCE

THE FOLLOWING SEQUENCE IS RECOMMENDED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS:

1. INSTALL EROSION CONTROL FEATURES
2. CLEARING AND GRUBBING
3. UTILITY ADJUSTMENTS
4. STORM SEWER AND BOX CULVERT CONSTRUCTION
5. ROADWAY STABILIZATION
6. OPTIONAL BASE CONSTRUCTION
7. CURB CONSTRUCTION
8. SIDEWALK CONSTRUCTION
9. DRIVEWAY CONSTRUCTION
10. PERMANENT EROSION CONTROL
11. MILLING AND RESURFACING
12. SIGNING AND PAVEMENT MARKINGS

ROADWAY SEGMENTS UNDER CONSTRUCTION MAY BE CLOSED TO THROUGH TRAFFIC. SEGMENTS SHALL BE LIMITED TO LENGTHS THAT CAN BE DETOURED THROUGH EXISTING PUBLIC STREETS. ALL DETOUR ROUTES AND ADVANCED SIGNING SHALL BE IN ACCORDANCE WITH FDOT DESIGN STANDARDS (600 SERIES) AND THE MUTCD. THE SUGGESTED PHASING OF WORK IS:

PHASE 1 - MERIDIAN ROAD TO TEXAS STREET - STORM, UTILITIES, BOX CULVERT, ROADWAY RECONSTRUCTION, CURBING, SIDEWALK AND DRIVEWAYS.

PHASE 2 - TEXAS STREET TO BRIGHTON ROAD - STORM, UTILITIES, ROADWAY RECONSTRUCTION, CURBING, SIDEWALK AND DRIVEWAYS.

PHASE 3 - BRIGHTON ROAD TO COUNTRY CLUB TERRACE - STORM, UTILITIES, ROADWAY RECONSTRUCTION, PARKING LANE CONSTRUCTION, CURBING, SIDEWALK AND DRIVEWAYS.

PHASE 4 - FINAL ROADWAY RESURFACING

PHASE 5 - SIGNING AND PAVEMENT MARKINGS.

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
TRAFFIC CONTROL PLAN

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

VARIABLE MESSAGE SIGN
MESSAGE 1: PUTNAM DR. CLOSED AHEAD

MESSAGE 2: USE POLK DR.

WORK ZONE

ROAD CLOSED AHEAD W20-3A

ROAD WORK AHEAD W20-1F

PUTNAM DR.
M9-4T
DETOUR

TYPE III BARRICADE
ROAD CLOSED TO THRU TRAFFIC R11-4
DETOUR M4-9L
PUTNAM DR.

END DETOUR M4-8A

DETOUR M9-4T
PUTNAM DR.

TYPE III BARRICADE
PUTNAM DR. M4-9R
DETOUR
ROAD CLOSED TO THRU TRAFFIC R11-4

END DETOUR M4-8A

DETOUR M9-4T
PUTNAM DR.

VARIABLE MESSAGE SIGN
MESSAGE 1: PUTNAM DR. CLOSED AHEAD

MESSAGE 2: USE POLK DR.

PUTNAM DR. M4-9L
DETOUR

DETOUR M4-9R
PUTNAM DR.

DETOUR
M4-9R
PUTNAM DR.

PUTNAM DR. M4-9R
DETOUR

PUTNAM DR. M4-9L
DETOUR

SUGGESTED DETOUR ROUTE

PHASE I

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
TRAFFIC CONTROL PLAN

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Dr\eldwg\MOT.dwg 03/05/2019 01:48:15 PM

WORK ZONE

TYPE III BARRICADE
R11-4
ROAD CLOSED TO THRU TRAFFIC
M4-9L
DETOUR
W20-3A
ROAD CLOSED AHEAD
W20-1F
ROAD WORK AHEAD
M4-9R
DETOUR

W20-1F
ROAD WORK AHEAD
W20-3A
ROAD CLOSED AHEAD

TYPE III BARRICADE
PUTNAM DR.
ROAD CLOSED TO THRU TRAFFIC
R11-4
M4-9R
DETOUR

END DETOUR
M4-8A

PUTNAM DR.
M9-4T
DETOUR

PUTNAM DR.
M4-9L
DETOUR

TYPE III BARRICADE
DETOUR
M4-9L
ROAD CLOSED TO THRU TRAFFIC
R11-4
PUTNAM DR.

W20-3A
ROAD CLOSED AHEAD
W20-1F
ROAD WORK AHEAD

END DETOUR
M4-8A

PUTNAM DR.
M9-4T
DETOUR

W20-3A
ROAD CLOSED AHEAD

W20-1F
ROAD WORK AHEAD

PUTNAM DR.
M4-9R
DETOUR

DETOUR
M4-9R
PUTNAM DR.

PUTNAM DR.
M4-9L
DETOUR

DETOUR
M4-9R
PUTNAM DR.

PUTNAM DR.
M4-9L
DETOUR

DETOUR
M4-9R
PUTNAM DR.

SUGGESTED DETOUR ROUTE

PHASE 2

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
TRAFFIC CONTROL PLAN

PROJECT
COUNTRY CLUB CREEK / PUTNAM DRIVE
DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #99661

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\MOT.dwg 03/05/2019 01:55:08 PM

ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
TRAFFIC COINTROL PLAN

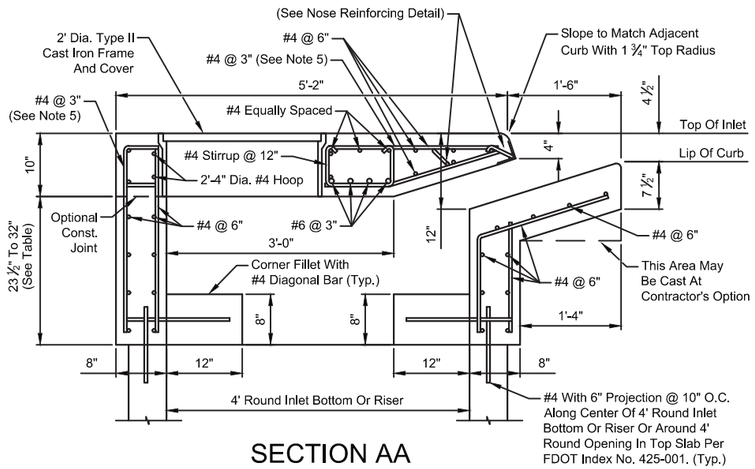
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

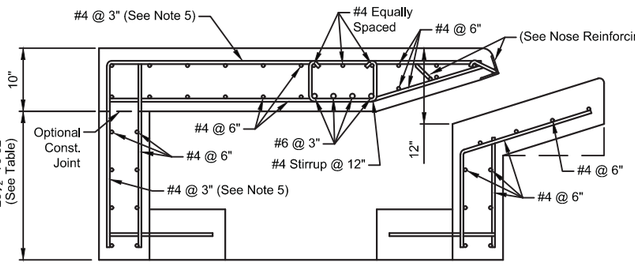
JOB NO.
DRAWN
DESIGNED
CHECKED
QC

81

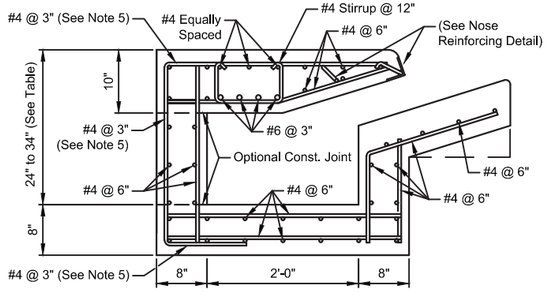
User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\MOT.dwg 03/05/2019 02:20:13 PM



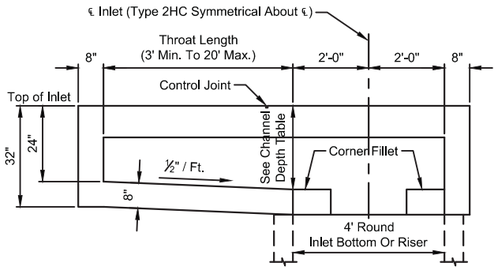
SECTION AA



SECTION BB



SECTION CC



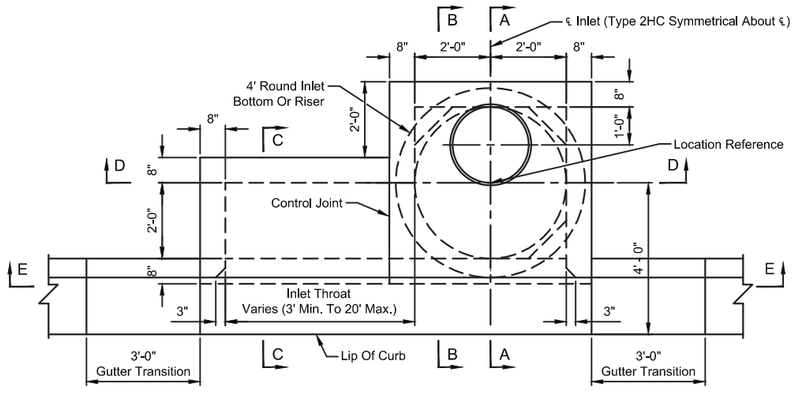
SECTION DD

CHANNEL DEPTH AT INLET BOTTOM OR RISER

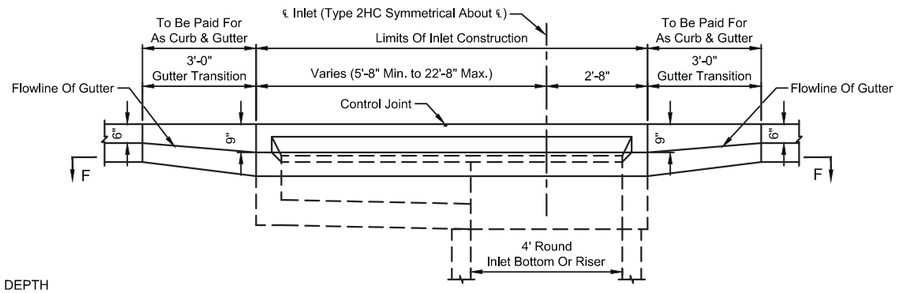
THROAT LENGTH	CHANNEL DEPTH
3 FT.	25 ½"
4 FT.	26"
5 FT.	26 ½"
6 FT.	27"
7 FT.	27 ½"
8 FT.	28"
9 FT.	28 ½"
10 FT.	29"
11 FT.	29 ½"
12 FT.	30"
13 FT.	30 ½"
14 FT.	31"
15 FT.	31 ½"
16 FT.	32"
17 FT.	32 ½"
18 FT.	33"
19 FT.	33 ½"
20 FT.	34"

GENERAL NOTES

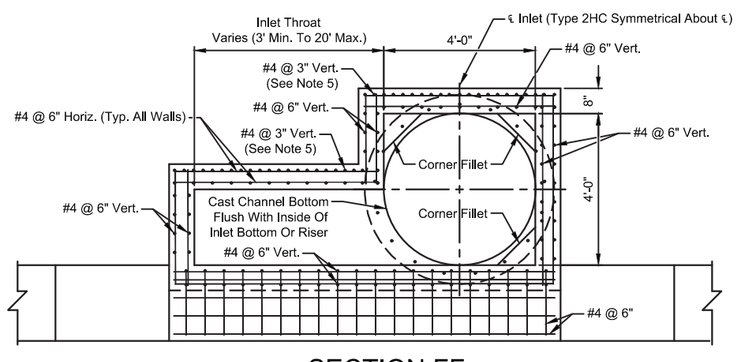
1. The top of the inlet is to be parallel to the vertical alignment of the lip of curb. Bend the reinforcing steel and nose reinforcing angle as required. When an inlet is constructed on a roadway with existing curb and gutter, the lip of curb elevation and location shall match the existing lip of curb unless shown otherwise. The Contractor shall provide surveyed control points as needed to re-establish the horizontal location and vertical alignment of the lip of curb and to set the elevations of the top of the inlet.
2. The top of the inlet shall slope toward the roadway at a 1.0% grade unless otherwise shown.
3. For inlets constructed on a curve, determine the radii and modify the inlet details accordingly. Bend the steel as required. The front and back edges of exposed concrete surfaces are to be parallel.
4. Inlet tops shall be cast-in-place using FDOT Class III, *f'c* = 5,000 psi, concrete.
5. All reinforcing steel is to be ASTM A-615 Grade 60 bars with 1 ¼ " minimum cover unless otherwise shown. Lap splices shall be a minimum of 16" in length for #4 bars and 24" in length for #6 bars, except as noted.
6. #4 bars @ 3" spacing in rear wall and top and bottom slabs are to be continuous. These bars may be spliced only if a minimum splice length of 16" is provided.
7. Horizontal reinforcement at outside corners of wall sections shall continue around corner with lap splice, or corner bars shall be used to lap splice with horizontal wall reinforcement of each adjoining wall.
8. Cast iron covers shall be USF TJ (No. 8017195) or EJ Group No. 3062A2.
9. See FDOT Index No. 425-010 for structure bottoms and Index No. 425-001 for supplemental details.
10. Inlets are to be paid for by the contract unit price for each inlet as identified by structure number. Payment shall include the cost of concrete, reinforcing steel, cast iron ring and cover, nose reinforcing, and riser and/or structure bottom as called for in the plans.



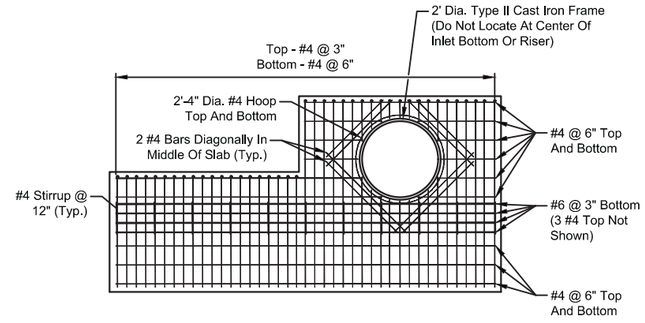
TOP VIEW



SECTION EE

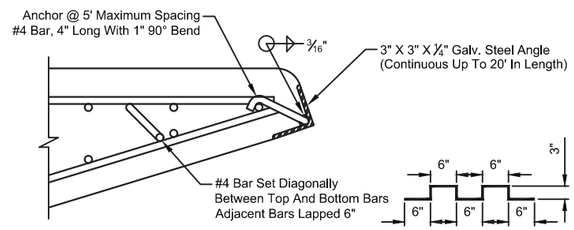


SECTION FF

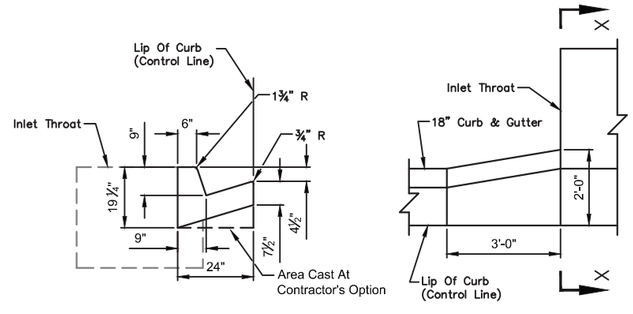


TOP SLAB REINFORCEMENT PLAN

(Diagonal #4 Nose Reinforcing Bars Not Shown)



NOSE REINFORCING DETAIL



18" CURB & GUTTER TRANSITION

Inlet Throat End Of Structure (Opposite End Reversed)

REVISIONS

DESCRIPTION	BY	DATE
Update Index References To FDOT Standard Plans	RJM	03/13/18

STRUCTURAL DESIGN BY
Stephen A. Nichols, P.E.
P.E. License No. 27463
Inovia Consulting Group
930 Thomasville Road, Suite 200
Tallahassee, Florida 32303

STANDARD DETAILS CURB INLET TOPS TYPES 1HC & 2HC

CITY OF TALLAHASSEE
STORMWATER MANAGEMENT
300 South Adams Street, B-35, Tallahassee, Florida 32301

LAST REVISION
03/13/18

SHEET 82 1

User: mosherb
S:\resources_standards\CIP\Plans Production\CAD Details\Drainage\Working\2018 Type 1HC Inlet – DONOTDISTRIBUTE.dwg 08/22/2018 07:49:12 AM

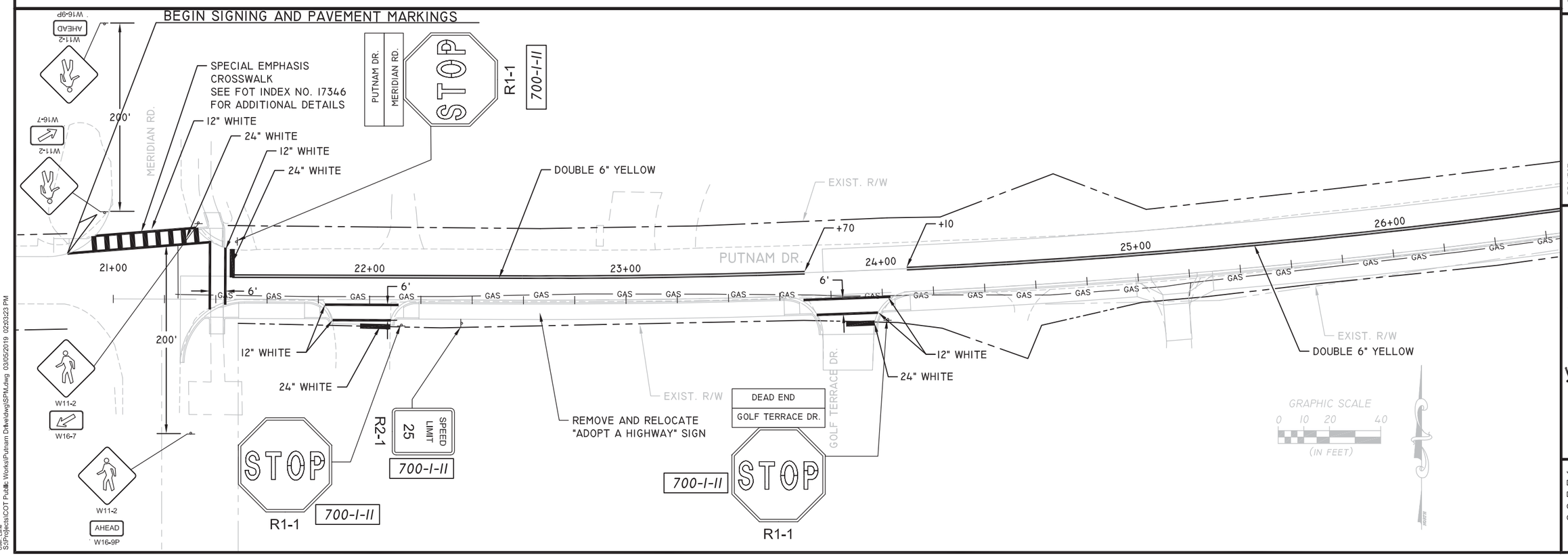
SIGNING AND PAVEMENT MARKING NOTES:

1. *SIGNING AND PAVEMENT MARKINGS ARE TO BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE PLANS, THE FDOT DESIGN STANDARDS, THE FDOT STANDARD SPECIFICATIONS, AND THE AMERICAN WITH DISABILITIES ACT.*

2. *THE PAVEMENT MARKINGS AT ALL EXISTING/PROPOSED INTERFACE LOCATIONS ARE TO MATCH IN TERMS OF ALIGNMENT AND COLOR.*

3. *SIDE ROAD STOP BAR LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION TO OBTAIN PROPER SIGHT DISTANCE.*

4. *PAINT SHALL INCLUDE TWO (2) APPLICATIONS, ONE OF PAINT, THE SECOND WITH THERMOPLASTIC MATERIALS.*



ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
SIGNING AND PAVEMENT MARKING PLANS

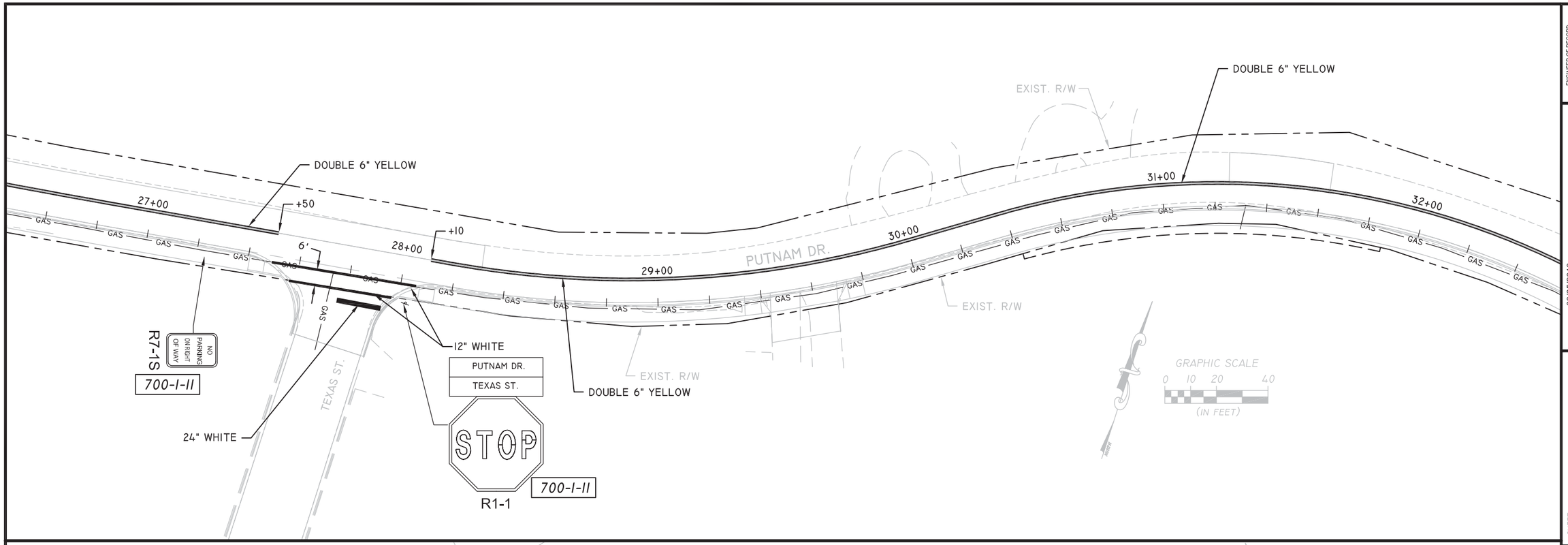
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

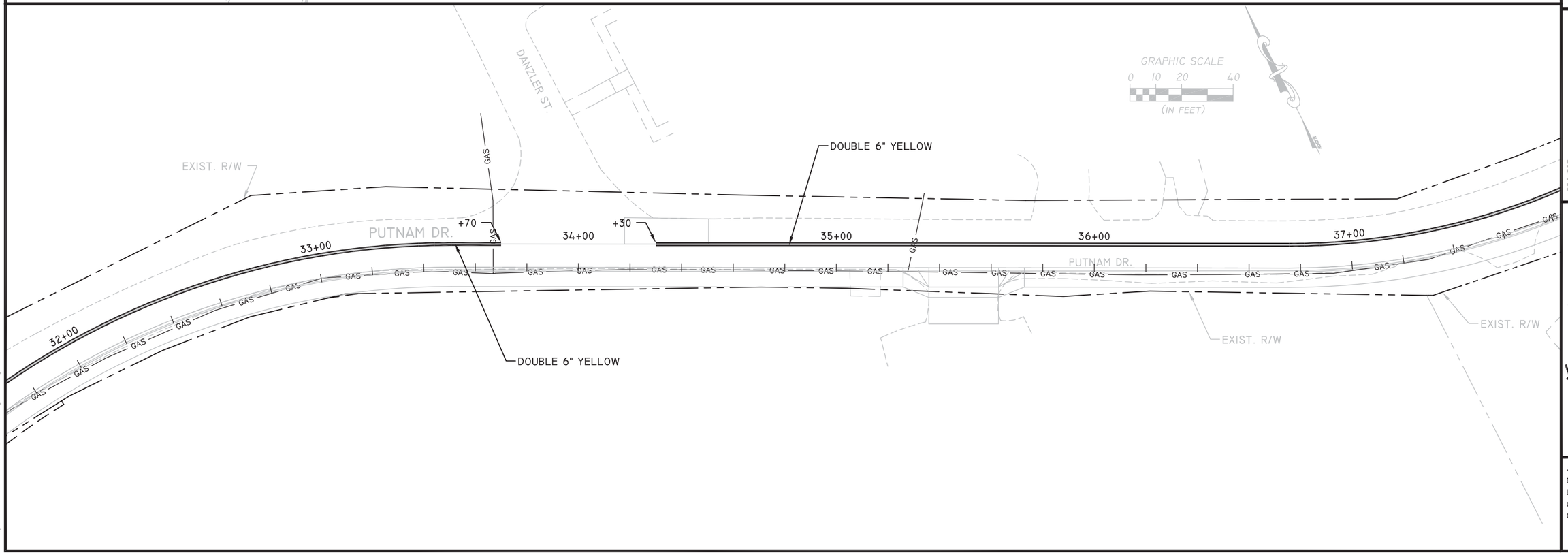
Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

S-1

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\SPM.dwg 03/05/2019 02:03:23 PM





ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature
Date

ORIGINAL 03/05/2019
REVISIONS:
1
2
3
4
5

SHEET
SIGNING AND PAVEMENT MARKING PLANS

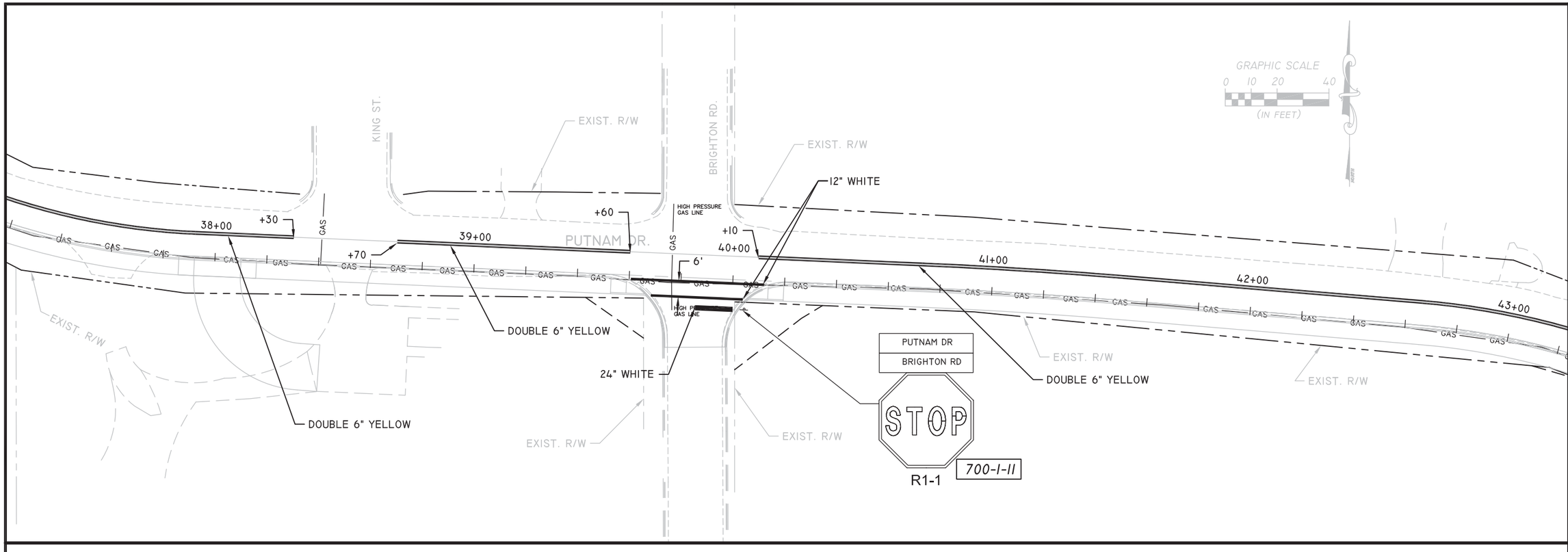
PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

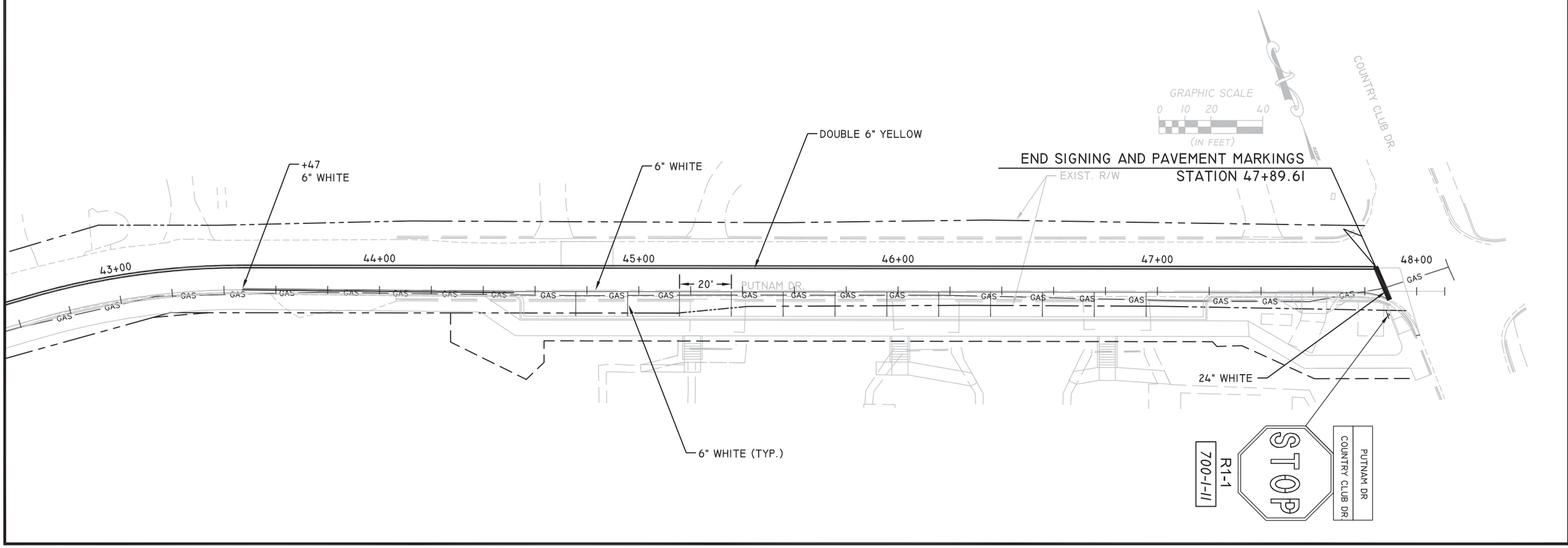
Eutaw, Inc
Engineering Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
Tallahassee, Florida, 32308
Phone: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

-2

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\SPM.dwg 03/05/2019 02:53:37 PM





ENGINEER OF RECORD
LANE P. LUCAS
Eutaw, Inc.
2822 Remington Green Circle
Suite 202
Tallahassee, FL 32308
P.E. NO. 53936
Signature _____ Date _____

ORIGINAL 03/05/2019
REVISIONS:
1 _____
2 _____
3 _____
4 _____
5 _____

SHEET
SIGNING AND PAVEMENT MARKING PLANS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

Eutaw, Inc
Engineering, Utilities, Transportation, and Water
2822 Remington Green Cir., Suite 202
TALLAHASSEE, FLORIDA 32308
PHONE: (850) 383-0400
www.eutawinc.com
Certificate of Authorization #9961

JOB NO. _____
DRAWN _____
DESIGNED _____
CHECKED _____
QC _____

User: Lane
S:\Projects\COT Public Works\Putnam Drive\dwg\SPM.dwg 03/05/2019 02:03:50 PM

ABBREVIATIONS

"	INCH, INCHES
#	NUMBER OR POUNDS
%	PERCENT
&	AND
'	FOOT, FEET
=	EQUAL
@	AT
°	DEGREE
±	PLUS OR MINUS
ø	DIAMETER
AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
ADD	ADDENDUM
ADDL	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ANCH	ANCHOR, ANCHORAGE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
AR	ANCHOR ROD
ARCH	ARCHITECT, ARCHITECTURAL
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATR	ALL THREADED ROD
AWS	AMERICAN WELDING INSTITUTE
BAL	BALANCE
BCX	BOTTOM CHORD EXTENSION
BF	BRACED FRAME
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOD	BOTTOM OF DECK
BOF	BOTTOM OF FOOTING, FOUNDATION
BOS	BOTTOM OF STEEL
BOT, B	BOTTOM
BP	BASE PLATE OR BUTTON PUNCH
BRB	BUCKLING RESTRAINT BRACE
BRG	BEARING
BS	BOTH SIDES
BSMT	BASEMENT
BTWN	BETWEEN
(c)	COLLECTOR
C	CAMBER OR CHANNEL
C/C	CENTER TO CENTER
C-GROUT	COURSE GROUT
CANT	CANTILEVER
CF	CUBIC FOOT, FEET
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL, ℄	CENTERLINE
CLR	CLEAR, CLEARANCE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMP	COMPOSITE OR COMPRESSION
CONC	CONCRETE
CONFIG	CONFIGURATION
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
CTR	CENTER, CENTERED
CU	CUBIC
CW	CURTAIN WALL
CY	CUBIC YARD
d	PENNY (NAIL)
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DC	DEMAND CRITICAL
DEG, °	DEGREE
DEMO	DEMOLISH, DEMOLITION
DIA	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DIM	DIMENSION
DISC	DISCONTINUE, DISCONTINUOUS
DL	DEAD LOAD
DN	DOWN
do	DITTO
DP, D	DEEP, DEPTH
DTL	DETAIL
DWG, DWGS	DRAWING, DRAWINGS
DWL, DWLS	DOWEL, DOWELS
EA	EACH
EB	EXPANSION BOLT
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC, ELECT	ELECTRICAL
ELEV	ELEVATOR
EMBED	EMBEDMENT, EMBEDDED
ENGR	ENGINEER
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL
EQP, EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXIST, (E)	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F-GROUT	FINE GROUT
FAB	FABRICATE
FB	FLAT BAR
FBC	FLORIDA BUILDING CODE
FCJ	FLOOR CONTROL JOINT
FDN, FDTN	FOUNDATION
FFE	FINISHED FLOOR ELEVATION
FIL	FILLET
FIN	FINISH, FINISHED
FLG	FLANGE
FLI	FERRULE LOOP INSERT
FLR	FLOOR
FOB	FACE OF BRICK
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FOV	FACE OF VENEER
FOW	FACE OF WALL
FRMG	FRAMING
FS	FAR SIDE
FT	FOOT, FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GLB	GLUE LAMINATED BEAM
GP	GUSSET PLATE
GR	GRADE, GRADING
GWB	GYPSUM WALL BOARD
HAS	HEADED ANCHOR STUD
HCP	HOLLOW CORE PLANK
HCS	HOLLOW CORE SLAB
HDG	HOT DIPPED GALVANIZED
HDR	HEADER
HGR	HANGER
HM	HOLLOW METAL
HORIZ, H	HORIZONTAL
HP	HIGH POINT OR BEARING PILE
HSB	HIGH STRENGTH BOLT
HSS	HOLLOW STRUCTURAL SECTION
HT	HEIGHT
HVAC	HEATING/VENTILATION/AIR CONDITIONING
IBC	INTERNATIONAL BUILDING CODE
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS
ICC-ES	ICC EVALUATION SERVICE
ICMU	INSULATED CONCRETE MASONRY UNIT
ID	INSIDE DIAMETER
IF	INSIDE FACE
IJ	ISOLATION JOINT
IN	INCH, INCHES
INCL	INCLUDED, INCLUDING
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JST	JOIST
JT, JTS	JOINT, JOINTS
K, KIP	KILOPOUND
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L	ANGLE OR LENGTH OR LONG
LAT	LATERAL
LB	LAG BOLT OR POUND
LE	LEFT END
LF	LINEAR FOOT
LFRS	LATERAL FORCE RESISTING SYSTEM
LGT, LONG	LONGITUDINAL
LIB	LOAD INDICATOR BOLT
LIN	LINEAR
LIW	LOAD INDICATOR WASHER
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LNDG	LANDING
LNTL	LINTEL
LOC	LOCATE, LOCATION
LP	LOW POINT
LSH	LONG SLOTTED HOLE
LSL	LAMINATED STUD LUMBER
LSV	LONG SLOTTED HOLT VERTICAL
LVL	LAMINATED VENEER LUMBER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT (A-307)
MC	MISCELLANEOUS CHANNEL
MCR	MODIFIED CHLOROPRENE RUBBER
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MEZZ	MEZZANINE
MF	MOMENT FRAME
MFR	MANUFACTURER
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLB	MICROLAM BEAM
MO	MASONRY OPENING
MPT	MAGNETIC PARTICAL TEST
MT	STRUCTURAL TEE CUT FROM M SECTION
MTL	METAL
N-GROUT	NON-SHRINK GROUT
NIC	NOT IN CONTRACT
NLB	NON-LOAD BEARING
NO	NUMBER
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OVERSIZED HOLE
OPNG	OPENING
OPP	OPPOSITE
OPP HD	OPPOSITE HAND
OPT	OPTIONAL
OWJ	OPEN WEB JOIST
PC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PDF	POWER DRIVEN FASTENERS
PEN	PENETRATION
PERIM	PERIMETER
PERP	PERPENDICULAR
PHW	PARTIAL HEIGHT WALL
PJP	PARTIAL JOINT PENETRATION
PL, ₹	PLATE
PLF	POUNDS PER LINEAL FOOT
PLYWD	PLYWOOD
PP	PARTIAL PENETRATION
PREFAB	PREFABRICATED
PRELIM	PRELIMINARY
PRSTR	PRESTRESSED
PSC	PRESTRESSED CONCRETE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	POINT
PTC	POST TENSION CONCRETE
PT	PRESSURE TREATED TIMBER
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
R	RADIUS
RC	REINFORCED CONCRETE
RE	REFER TO
RO	ROUGH OPENING
RTU	ROOF TOP UNIT
REF	REFERENCE
REINF	REINFORCE(D), (ING), (MENT)
REQ	REQUIRED
RETG	RETAINING
REV	REVISION, REVISED
RJ	RUSTICATION JOINT
S	AMERICAN STANDARD SHAPE
SC	SLIP CRITICAL
SCH, SCHED	SCHEDULE
SEC	SECURITY
SECT	SECTION
SF	SQUARE FOOT
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SOG	SLAB ON GRADE
SP	SPACE(S)
SPCG	SPACING
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SSH	SHORT SLOTTED HOLE
SSPC	SOCIETY FOR PROTECTIVE COATING
ST	STRUCTURAL TEE CUT FROM S SECTION
STD	STANDARD
STGD	STAGGERED
STIFF	STIFFENER
STL	STEEL
STR	STAIR
STRUCT	STRUCTURAL
SUPT	SUPPORT
SW	SHEAR WALL
SYM	SYMMETRICAL
T&B	TOP OF BOTTOM
T&G	TONGUE AND GROOVE
TCX	TOP CHORD EXTENSION
TEMP	TEMPERATURE, TEMPERED, TEMPORARY
TENS	TENSION
THK	THICK, THICKNESS
THRD	THREAD, THREADED
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOCW	TOP OF CONCRETE WALL
TOF	TOP OF FOOTING
TOP	TOP OF PARAPET
TOS	TOP OF STEEL
TOSLAB	TOP OF SLAB
TOW	TOP OF WALL
TPG	TOPPING
TRA	THREADED ROD IN ADHESIVE ANCHOR
TRANS	TRANSVERSE
TSF	THICKENED SLAB FOOTING
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UFRC	UPSET END FLANGE REBAR COUPLER
UNO	UNLESS NOTED OTHERWISE
UT	ULTRASONIC TEST
VERT, V	VERTICAL
VRY	VERIFY
VIF	VERIFY IN FIELD
VMS	VERTICAL MOVEMENT SYSTEM
VNR	VENEER
W	WIDTH OR WIDE FLANGE
W/	WITH
W/O	WITHOUT
WCJ	WALL CONTROL JOINT
WD	WOOD
WF	WIDE FLANGE
WP	WORKING POINT
WPS	WELDING PROCEDURES SPECIFICATIONS
WS	WELD STUD
WT	WEIGHT OR STRUCTURAL TEE CUT FROM W SECTION
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
X-STR	EXTRA STRONG
XX-STR	DOUBLE EXTRA STRONG

STRUCTURAL GENERAL NOTES

1. GENERAL NOTES

1.1. THE GOVERNING CODE FOR THIS PROJECT IS THE FLORIDA BUILDING CODE, 6th EDITION (2017). THIS CODE PRESCRIBES WHICH EDITION OF EACH REFERENCE STANDARD APPLIES TO THIS PROJECT. UNLESS OTHERWISE NOTED, ALL WORK AND MATERIALS SHALL CONFORM WITH THE GOVERNING BUILDING CODE AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL CODES, STANDARDS, REGULATIONS AND LAWS.

1.2. THE CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS, DIMENSIONS, AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS, USE ONLY PRINTED DIMENSIONS. REPORT ANY DISCREPANCIES OR FIELD CONDITIONS ENCOUNTERED IN CONFLICT WITH THE DRAWINGS IN WRITING TO THE ARCHITECT AND/OR ENGINEER PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE ARCHITECT OR ENGINEER OF RECORD.

1.3. THE STRUCTURE SHOWN ON THESE DRAWINGS IS SELF-SUPPORTING ONLY IN ITS COMPLETED FORM. THE DESIGN, ADEQUACY, SAFETY AND STABILITY OR ERECTION BRACING, FORMWORK, SHORING, AND TEMPORARY SUPPORTS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

1.4. DETAILS LABELED AS "TYPICAL" APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED, WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION.

1.5. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK, AND THE GENERAL PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSITE SAFETY INCLUDING ALL OSHA REQUIREMENTS. THE STRUCTURAL ENGINEER OF RECORD HAS NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION PERSONNEL RELATED TO THEIR WORK OR ANY HEALTH OR SAFETY PRECAUTIONS.

2. ASSUMED SOIL PROPERTIES & SUPERIMPOSED LOADS

MOIST UNIT WEIGHT	= 125 PCF
ANGLE OF INTERNAL FRICTION	= 30 DEGREES
ACTIVE PRESSURE COEF.	= 0.33
PASSIVE PRESSURE COEF.	= 3.00
COHESION	= 0 PSF
SURCHARGE	= 100 PSF

3. WIND LOADING

3.1. DESIGN CRITERIA PER ASCE 7-10 FOR INFORMATIONAL PURPOSES ONLY:

WIND SPEED (ULT/ASD)	= 120 MPH / 93 MPH
RISK CATEGORY	= II
WIND EXPOSURE CATEGORY	= B
ENCLOSURE CLASSIFICATION	= N/A

4. EARTHWORK FOR STRUCTURES

4.1. FOUNDATION DESIGN, SOIL PREPARATION AND COMPACTION ARE BASED ON GEOTECHNICAL INVESTIGATION, DATA AND RECOMMENDATIONS IN FILE NO. 17-3272 BY ALPHA GEOTECHNICAL AND TESTING SERVICES, INC. DATED AUGUST 9, 2018. ALL FOOTINGS SHALL BEAR ON COMPACTED FILL OR NATURAL SOIL PREPARED PER THE GEOTECHNICAL REPORT TO PROVIDE AND ALLOWABLE SOIL BEARING CAPACITY OF 2,500 PSF.

4.2. UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT, ALL SOIL BELOW FOOTINGS SHALL BE COMPACTED TO A DEPTH OF 12 INCHES AT OPTIMUM MOISTURE CONTENT TO 95% OF THE MODIFIED PROCTOR, ASTM D1557. FILL SHALL BE PLACED AND COMPACTED IN LIFTS NO GREATER THAN 12 INCHES.

4.3. SUB-GRADE PREPARATION SHALL BE FIELD CONTROLLED AND TESTED BY A LICENSED GEOTECHNICAL ENGINEER IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. AT COMPLETION, THAT ENGINEER SHALL PREPARE AND SUBMIT TO THE OWNER, ARCHITECT, CONTRACTOR, AND STRUCTURAL ENGINEER A SIGNED AND SEALED LETTER INDICATING THAT THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT HAVE BEEN FOLLOWED.

5. FORMWORK

5.1. DESIGN, ERECTION AND REMOVAL OF FORMWORK, AND SHORING AND RESHORING IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

5.2. CONSTRUCTION, ERECTION, AND REMOVAL OF FORMWORK SHALL BE IN ACCORDANCE WITH ACI 301 AND 347.

6. CONCRETE

6.1. ALL CONCRETE CONSTRUCTION SHALL COMPLY WITH ACI 301 AND 318 AND CRSI STANDARDS.

6.2. PROVIDE STRUCTURAL CONCRETE WITH A MINIMUM ULTIMATE COMPRESSIVE DESIGN STRENGTH IN 28 DAYS OF:

FOOTINGS	5,500 PSI	NW	FDOT CLASS IV
END WALLS	5,500 PSI	NW	FDOT CLASS IV

6.3. ALL CONCRETE SHALL BE NORMAL WEIGHT (NW), U.O.N.

6.4. CONTRACTOR SHALL MAKE SETS OF FOUR ACCEPTANCE CYLINDERS FOR STRENGTH TESTING FOR EACH 50 CUBIC YARDS OF CONCRETE PLACED. CYLINDERS SHALL BE MADE IN ACCORDANCE WITH ASTM C31 AND C172. TESTING SHALL BE PERFORMED BY AN ACI CERTIFIED TESTING LABORATORY AND SHALL BE PAID FOR BY THE CONTRACTOR. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER OF ANY TEST NOT MEETING THE REQUIREMENTS OF THE SPECIFIED TESTS. COPIES OF REPORTS DOCUMENTING THE TEST RESULTS SHALL BE MAINTAINED BY THE CONTRACTOR AND MADE AVAILABLE UPON REQUEST.

6.5. PROVIDE ASTM A-615 GRADE 60 REINFORCING STEEL. REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED AND FIRMLY TIED IN PLACE, WITH APPROPRIATE BAR SUPPORTS AND SPACERS. LAP CONTINUOUS REINFORCING AS SHOWN IN THE PROVIDED REBAR LAP SPLICE LENGTHS TABLE.

6.6. PROVIDE COVER OVER REINFORCING STEEL AS FOLLOWS:

CAST AGAINST & EXPOSED TO EARTH/WEATHER	3"
EXPOSED TO EARTH/WEATHER	
#6 THROUGH #18 REBAR	2"
#5 REBAR, W31/D31 WIRE OR SMALLER	1-1/2"
NOT EXPOSED TO EARTH/WEATHER	
SLABS, WALLS, JOISTS	
#14 AND #18 REBAR	1-1/2"
#11 REBAR AND SMALLER	3/4"
BEAMS AND COLUMNS	
REINF, TIES, STIRRUPS, SPIRALS	1-1/2"

6.7. CURE ALL CONCRETE SURFACES FOR A PERIOD OF SEVEN DAYS UNTIL AVERAGE COMPRESSIVE STRENGTH HAS REACHED 70% OF THE SPECIFIED 28 DAY STRENGTH. CURING SHALL BE BY PONDING, MOIST CURING WITH SAND OR ABSORPTIVE MATS KEPT CONTINUOUSLY WET, CONTINUOUS APPLICATION OF STEAM (NOT EXCEEDING 105° F) OR MIST SPRAY, WATERPROOF CURING PAPER, OR LIQUID MEMBRANE FORMING CURING COMPOUND. SELECTION OF CURING METHOD SHALL BE COMPATIBLE WITH THE FINISH TO BE APPLIED TO THE CONCRETE SURFACE.

6.8. PROVIDE REINFORCING STEEL PLACER WITH A SET OF STRUCTURAL DRAWINGS FOR FIELD REFERENCE. INSPECT REINFORCING STEEL PLACING FROM STRUCTURAL DRAWINGS.

7. SOLDIER PILE WALL

7.1. THE WALL SHOWN IN THESE PLANS IS INTENDED TO BE A TEMPORARY WALL THAT CAN BE REMOVED WHEN THE PROPOSED EXTENSION OF THE BOX CULVERT IS REQUIRED. THE LIFE SPAN OF THIS WALL IS ASSUMED TO BE NO MORE THAN 5 YEARS.

7.2. FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE, W/ AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH COMMENTARY, AND ALL OSHA REQUIREMENTS.

7.3. ALL STEEL CONNECTIONS SHALL CONFORM TO AISC MANUAL "STANDARD FRAMED BEAM CONNECTIONS" UNLESS SHOWN OTHERWISE.

7.4. STRUCTURAL STEEL SHAPES SHALL BE FABRICATED FROM THE FOLLOWING MATERIALS:

ROLLED W AND WT SHAPES:	ASTM A992, GRADE 50
ROLLED M, S, C AND MC SHAPES AND ANGLES:	ASTM A36, fy=36 KSI

7.5. ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE BY THE AMERICAN WELDING SOCIETY. USE E70 SERIES WELDING ELECTRODES, U.O.N. WHERE NECESSARY, REMOVE GALVANIZING OR PRIMER PRIOR TO WELDING.

7.6. CUT, DRILL, OR PUNCH HOLES PERPENDICULAR TO METAL SURFACES. REAM HOLES THAT MUST BE ENLARGED TO ADMIT BOLTS AS PERMITTED BY ARCHITECT. DO NOT ENLARGE UNFAIR HOLES BY BURNING OR USING DRIFT PINS.

7.7. HOT DIP GALVANIZATION (WHERE REQUIRED BY CONSTRUCTION DOCUMENTS)

7.7.1. ANY STRUCTURAL STEEL EXPOSED TO THE ELEMENTS SHALL BE HOT DIPPED GALVANIZED.
7.7.2. AFTER FABRICATION, STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED PER ASTM A123 TO A MINIMUM THICKNESS OF 3.9 MILS.
7.7.3. NO FIELD DRILLING, CUTTING, WELDING, OR OTHER ADJUSTMENTS WILL BE PERMITTED AFTER HOT DIP GALVANIZING.
7.7.4. TOUCH UP ANY DAMAGE TO GALVANIZED SURFACES WITH TWO COATS OF ZINC BASED TOUCH UP COATING SIMILAR TO ZRC COLD GALVANIZING COMPOUND MANUFACTURED BY ZRC WORLDWIDE.

7.8. SHOP AND FIELD PAINTING OF STEEL ELEMENTS

7.8.1. PRIMER: FABRICATOR'S STANDARD, LEAD AND CHROMATE FREE, NON-ASPHALTIC, RUSTING INHIBITING PRIMER CONFORMING TO SSPC-PAINT 25, TYPE II.
7.8.2. SURFACE PREPARATION: CLEAN SURFACES TO BE PRIMED TO REMOVE LOOSE RUST AND MILL SCALE USING SSPC-SP 2, "HAND TOOL CLEANING" AND SSPC-SP 3 "POWER TOOL CLEANING.
7.8.3. IMMEDIATELY AFTER SURFACE PREPARATION, APPLY TO PROVIDE A DRY FILM THICKNESS OF NOT LESS THAN 1.5 MILS.
7.8.4. FIELD TOUCH UP: RE-CLEAN AND REPAINT ALL PRIMED SURFACES (INCLUDING EXISTING STEEL SURFACES) DAMAGED BY ERECTION PROCESS, INCLUDING ALL FASTENERS AND OTHER STEEL SURFACES.

7.9. ALL TIMBER ELEMENTS SHOWN SHALL BE No. 2, SOUTHERN YELLOW PINE RATED FOR GROUND CONTACT.

8. CHEMICAL ADHESIVES FOR ANCHOR BOLTS AND RODS

8.1. USE AN EPOXY, ACRYLIC OR POLYESTER RESIN ADHESIVE SYSTEM SUCH AS THE POWERS RAWL POWER-FAST SYSTEM, HILTI HIT HY200, ITW RAMSET/RED HEAD EPCON A7 OR C6 INJECTION SYSTEM, ALLIED FASTENER ALLIED COLD A-1000, OR ACCEPTED EQUIVALENT. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR USE AND INSTALLATION.

8.2. CONFIRM THE ABSENCE OF REINFORCING STEEL BY DRILLING A ¼ INCH DIAMETER PILOT HOLE FOR EACH ANCHOR. DO NOT CUT REINFORCING STEEL WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

8.3. DRILL $\frac{1}{16}$ INCH LARGER DIAMTER HOLE THAN ANCHOR BOLT AND $\frac{1}{8}$ INCH LARGER HOLE THAN REINFORCING BAR. THOROUGHLY CLEAN HOLE INCLUDING REMOVAL OF DUST PRIOR TO FILLING WITH EPOXY.

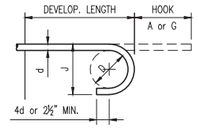
8.4. PROVIDE ANCHOR EMBEDMENT, SPACING AND EDGE DISTANCE AS SHOWN ON THE DRAWINGS.

8.5. THREADED RODS ARE A36 GALVANIZED STEEL, U.O.N.

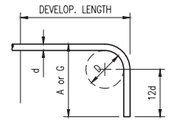
REBAR LAP SPLICE LENGTHS

BAR SIZE	f'_c = 3,000 PSI		f'_c = 4,000 PSI		f'_c = 5,000 PSI	
	CLASS A	CLASS B	CLASS A	CLASS B	CLASS A	CLASS B
#3	16"	21"	14"	18"	13"	17"
#4	22"	28"	19"	25"	17"	22"
#5	27"	36"	24"	31"	21"	28"
#6	33"	43"	28"	37"	25"	33"
#7	48"	62"	42"	54"	37"	48"
#8	55"	71"	47"	62"	42"	55"
#9	62"	80"	54"	70"	48"	62"
#10	70"	90"	60"	78"	54"	70"
#11	77"	100"	67"	87"	60"	78"

REBAR LAP SPLICE NOTES:
1. CLASS B SPLICES SHALL BE PROVIDED FOR ALL COLUMN REINFORCING STEEL.
2. CLASS A SPLICES ARE ALLOWED FOR CONTINUOUS REINFORCING STEEL IF NO MORE THAN 50% OF THE STEEL IS LAPPED AT THE SAME LOCATION.



180° HOOK



90° HOOK

BAR SIZE	STD. HOOK DIMENSIONS				DEVELOP. LENGTHS		
	PIN DIAM. D	180° HOOK		90° HOOK	CONC. COMPRESSIVE STRENGTH		
		A or G	J	A or G	3,000 PSI	4,000 PSI	5,000 PSI
#3	2¼"	0'-5"	0'-3"	0'-6"	6"	6"	6"
#4	3"	0'-6"	0'-4"	0'-8"	8"	7"	6"
#5	3¾"	0'-7"	0'-5"	0'-10"	10"	9"	8"
#6	4½"	0'-8"	0'-6"	1'-0"	12"	10"	9"
#7	5¼"	0'-10"	0'-7"	1'-2"	14"	12"	11"
#8	6"	0'-11"	0'-8"	1'-4"	16"	14"	12"
#9	9½"	1'-3"	0'-11¼"	1'-8"	18"	15"	14"
#10	10¾"	1'-5"	1'-1¼"	1'-10"	20"	17"	15"
#11	12"	1'-7"	1'-2¾"	2'-1"	22"	19"	17"

REBAR STANDARD HOOK NOTES:
1. D = FINISHED BEND DIAMETERS.
2. REFER TO ACI 315 FOR ALTERNATE BEND PATTERN DIMENSIONS AND REQUIREMENTS.
3. ASTM A767 REQUIRES THAT BARS BENT COLD PRIOR TO HOT DIP GALVANIZING MUST BE FABRICATED TO AMINIMUM BEND DIAMETER EQUAL TO 7 INCHES FOR #7 BAR AND 8 INCHES FOR #8 BAR.

ENGINEER OF RECORD
BRIAN E. KEVER, P.E.
KEVER MCKEE ENGINEERING
3370 CAPITAL CIRCLE NE, SUITE F
TALLAHASSEE, FL 32308
FLORIDA P.E. No. 65827
SIGNATURE _____ DATE _____

ORIGINAL NOV. 02, 2018
REVISIONS: 1 2 3 4 5

SHEET GENERAL NOTES

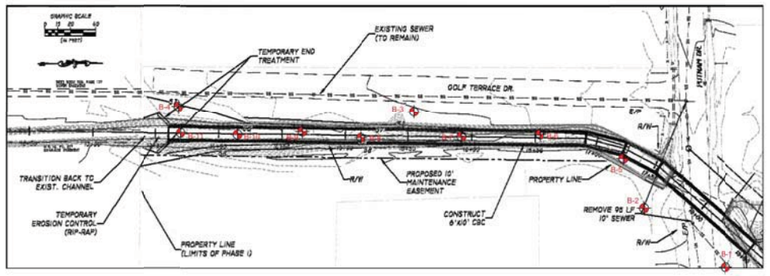
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE DRAINAGE
AND SIDEWALK
IMPROVEMENTS

KEVER | MCKEE ENGINEERING
3370 Capital Circle NE, Ste. F
Tallahassee, FL 32308
Office 850.727.5367
Authorization No. 31293
Brian E. Kever, P.E. FPE#65627

JOB NO. _____
DRAWN _____
DESIGNED _____
CHECKED _____
QC _____

T-1

Soil Boring Locations

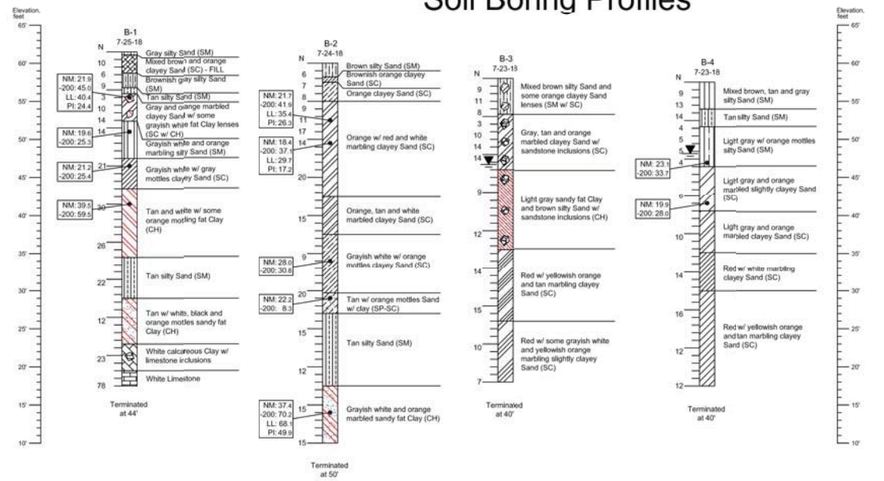


Drawing Source: Eutaw, Inc.
Country Club Creek Drainage Improvements
Phase I Plan & Profile

File: 17-3372 outlaw pulltrain culvert fig 1

Alpha Geotechnical and Testing Services, Inc. *Certificate of Authorization 0000796?* 4778-B Woodlane Crcle Tallahassee, FL 32303 (850) 514-4171 Fax: 514-4173 www.alpha-geotech.com	Stephen P. Shanley, PE FL #40653 August 9, 2018	STEPHEN P. SHANLEY LICENSE No. 40653 STATE OF FLORIDA PROFESSIONAL ENGINEER	Subsurface Exploration and Foundation Evaluation for Country Club Creek Drainage Improvements Box Culvert Installation	Figure 1

Soil Boring Profiles



LEGEND

- N - Standard Penetration Test "N-value". Number of blows from 140-pound hammer to advance sampler last 12" of 18" drive.
- NM - Natural Moisture Content, %.
- -200 - Finer than # 200 sieve, %.
- LL - Liquid Limit, %.
- PI - Plastic Index (LL - Plastic Limit), %.
- (SC) - Unified Soil Classification System, clayey sand (typical).
- ▼ - Groundwater level, if determined.

Penetration Resistance and Soil Properties on Basis of Standard Penetration Test

Sands (Fairly Reliable)		Clays (Rather Unreliable)	
Number of Blows per foot, N	Relative Density	Number of Blows per foot, N	Consistency
0-4	Very loose	Below 2	Very soft
4-10	Loose	2-4	Soft
10-30	Medium	4-8	Medium
30-50	Dense	8-15	Stiff
Over 50	Very dense	15-30	Very stiff
		Over 30	Hard

1- Table 5.3 from Peck, Hanson, Thornburn, Foundation Engineering, 2nd Edition, 1973

NOTES

1) Although the borings represent the subsurface conditions at their respective locations, it should be understood that significant differences could exist between borings.
2) Borings B-1 through B-4 were performed with a Simco mocel 2800 drill rig in accordance with the ASTM D 1586 (the Standard Penetration Test). B-5 through B-11 were conducted with hand operated augers in accord with ASTM D 1452.

Alpha Geotechnical and Testing Services, Inc. *Certificate of Authorization No. 0000796?* 4778-B Woodlane Circle Tallahassee, FL 32303 (850) 514-4171 Fax: 514-4173	Stephen P. Shanley, PE FL #40653 August 9, 2018	STEPHEN P. SHANLEY LICENSE No. 40653 STATE OF FLORIDA PROFESSIONAL ENGINEER	Subsurface Exploration and Foundation Evaluation for Country Club Creek Drainage Improvements Box Culvert Installation	Figure 2

GEOTECHNICAL INFORMATION NOTES

1. THE ABOVE EXCERPTS FROM THE PROJECT GEOTECHNICAL REPORT ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE USED FOR DESIGN OR CONSTRUCTION PURPOSES WITHOUT VERIFICATION.
2. SEE STRUCTURAL GENERAL NOTES FOR ADDITIONAL INFORMATION REGARDING THE PROJECT GEOTECHNICAL REPORT.

ENGINEER OF RECORD
Brian E. Kever, P.E.
Kever McKee Engineering
3370 Capital Circle NE, Suite F
Tallahassee, FL 32308
Florida P.E. No. 65627
Signature Date

ORIGINAL NOV. 02, 2018
REVISIONS:
1
2
3
4
5

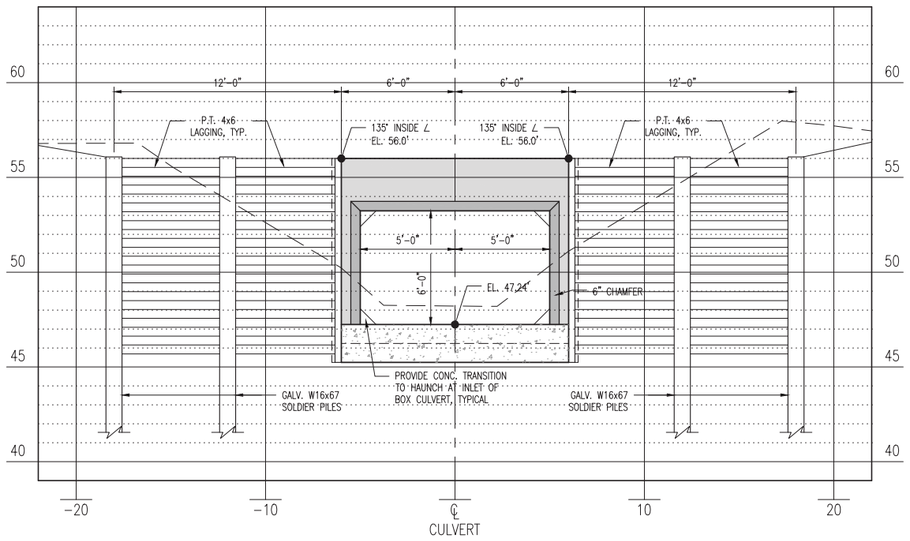
SHEET
GEOTECHNICAL INFORMATION

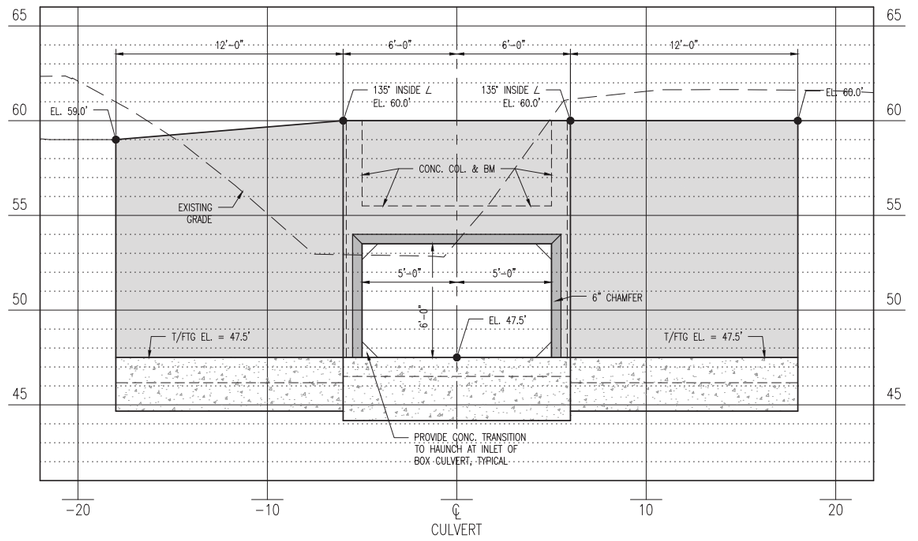
PROJECT
COUNTRY CLUB CREEK/
PUTNAM DRIVE DRAINAGE
AND SIDEWALK
IMPROVEMENTS

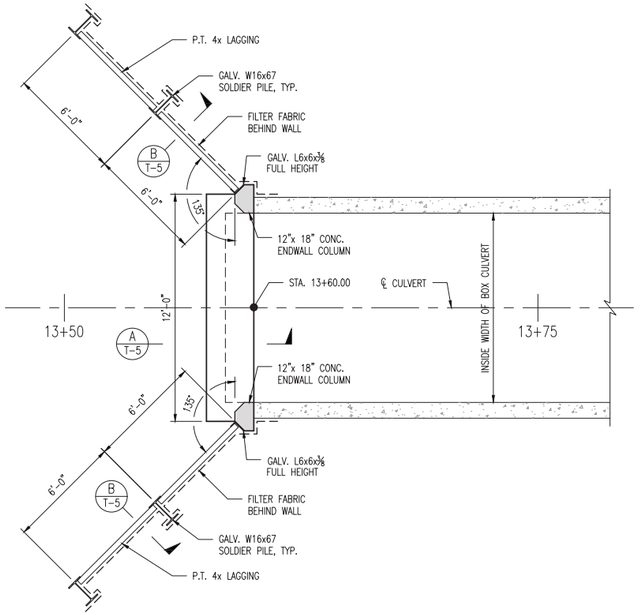
KEVER | MCKEE ENGINEERING
3370 Capital Circle NE, Ste. F
Tallahassee, Florida 32308
Office: 850.727.5367
Authorization No. 31293
Brian E. Kever, P.E. FPE#65627

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

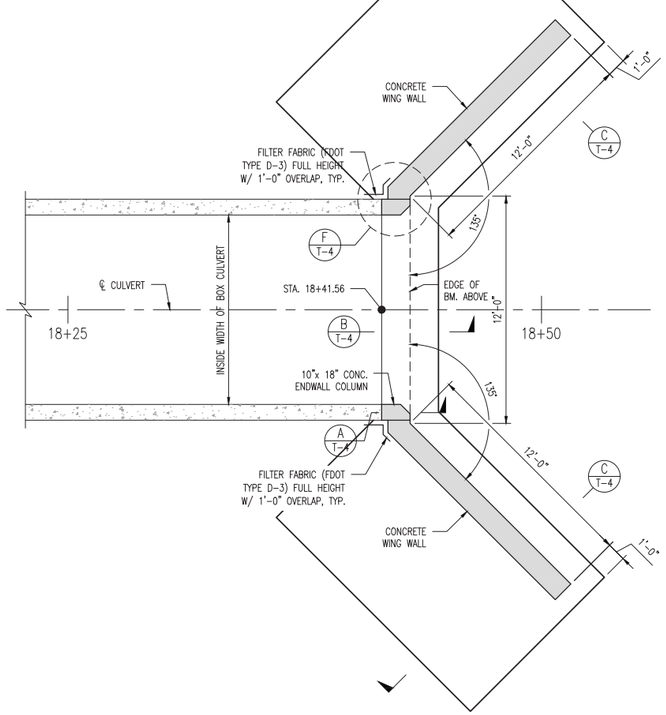
T-2







DOWNSTREAM ENDWALL PLAN (A T-3)
SCALE: ¼" = 1'-0"



UPSTREAM ENDWALL PLAN (B T-3)
SCALE: ¼" = 1'-0"

ENGINEER OF RECORD
Brian E. Kever, P.E.
Kever McKee Engineering
3370 Capital Circle NE, Suite F
Tallahassee, FL 32308
Florida P.E. No. 65627
Signature
Date

ORIGINAL NOV. 02, 2018
REVISIONS:
1
2
3
4
5

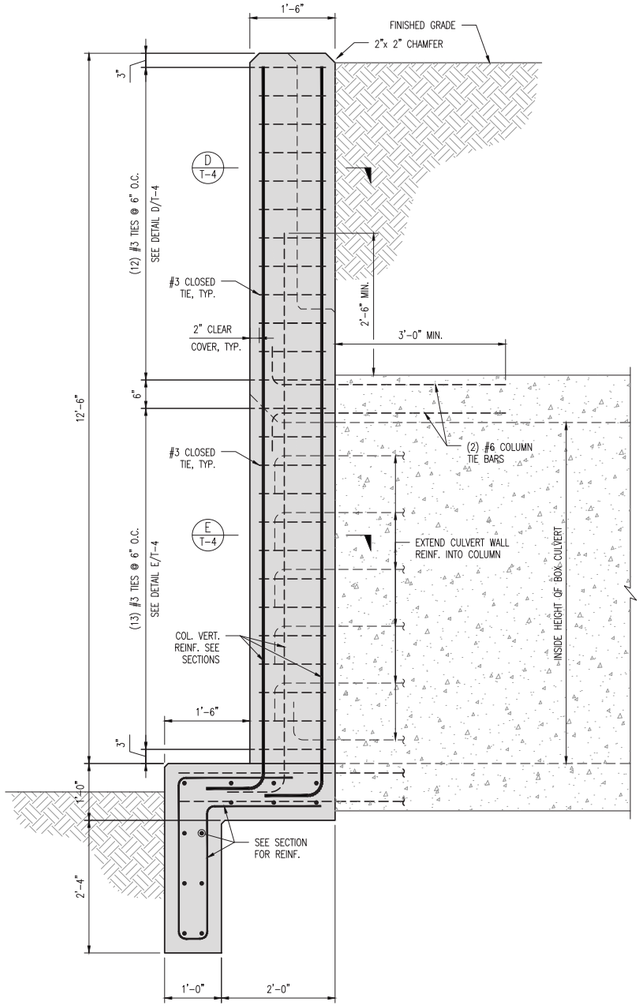
SHEET
ENDWALL PLANS & ELEVATIONS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

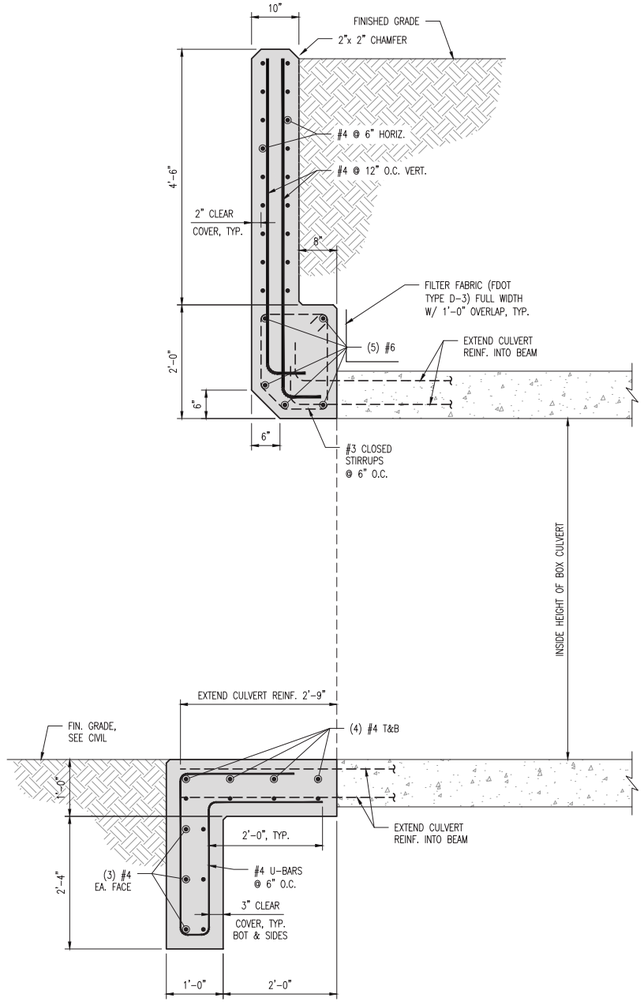
KEVER | MCKEE ENGINEERING
3370 Capital Circle NE, Ste. F
Tallahassee, Florida 32308
Office 850.727.5367
Authorization No. 31293
Brian E. Kever, P.E. FPE#65627

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

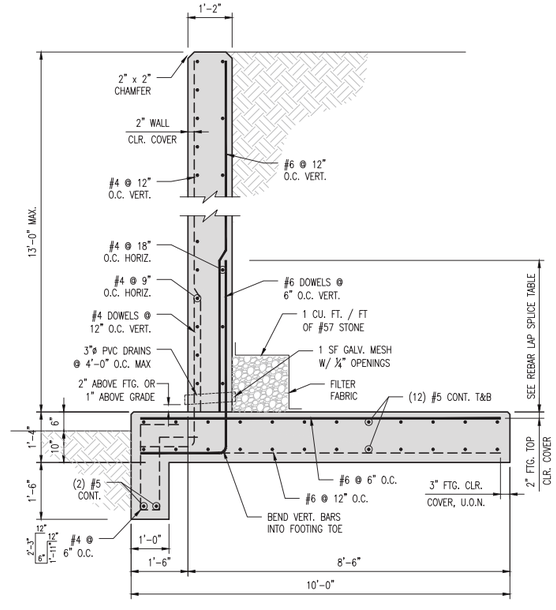
T-3



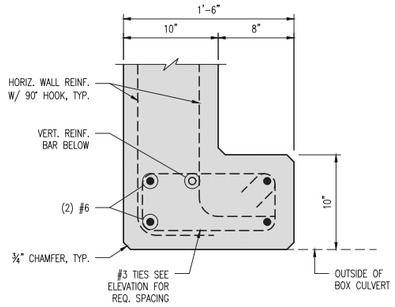
END WALL SECTION @ COL. A T-4
SCALE: ¾" = 1'-0"



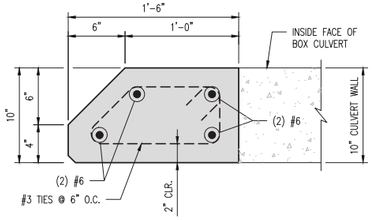
ENDWALL SECTION @ OPENING B T-4
SCALE: ¾" = 1'-0"



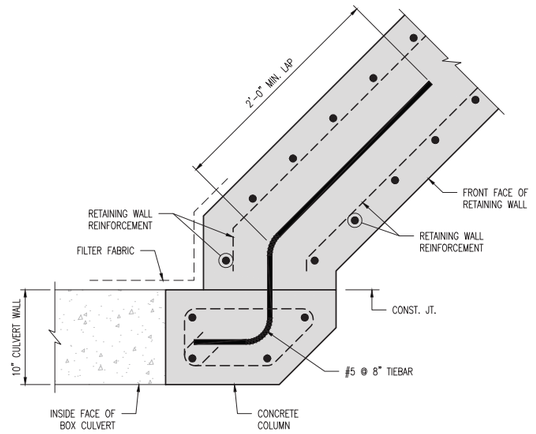
ENDWALL SECTION @ OPENING C T-4
SCALE: ¾" = 1'-0"



TYPICAL COLUMN SECTION D T-4
SCALE: 1½" = 1'-0"



TYPICAL COLUMN SECTION E T-4
SCALE: 1½" = 1'-0"



WALL – COLUMN JOINT F T-4
SCALE: 1½" = 1'-0"

ENGINEER OF RECORD
Brian E. Kever, P.E.
Kever McKee Engineering
3370 Capital Circle NE, Suite F
Tallahassee, FL 32308
Florida P.E. No. 65827
Signature
Date

ORIGINAL NOV. 02, 2018
REVISIONS:
1
2
3
4
5

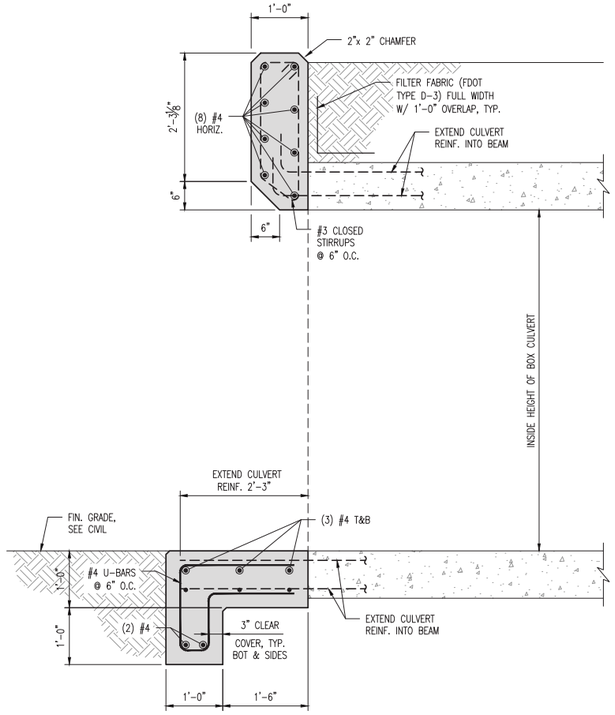
SHEET
UPSTREAM ENDWALL DETAILS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

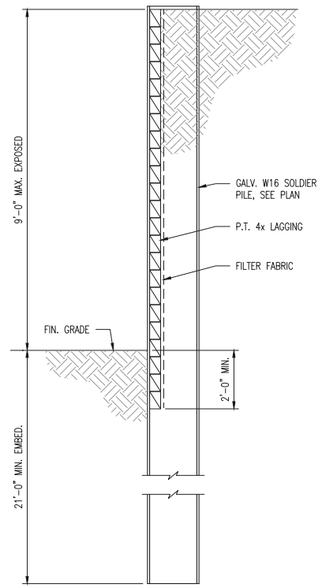
KEVER | MCKEE ENGINEERING
3370 Capital Circle NE, Ste F
Tallahassee, FL 32308
Office: 850.727.5367
Authorization No. 31293
Brian E. Kever, P.E. FPE#65627

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

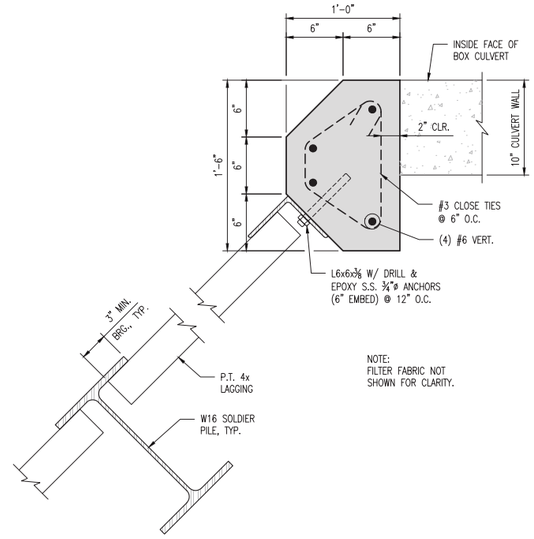
T-4



END WALL SECTION (A, T-5)
SCALE: ¾" = 1'-0"



SOLDIER PILE WALL SECTION (B, T-5)
SCALE: ½" = 1'-0"



SOLDIER PILE ENDWALL DETAIL (C, T-5)
SCALE: ½" = 1'-0"

ENGINEER OF RECORD
Brian E. Kever, P.E.
Kever McKee Engineering
3370 Capital Circle NE, Suite F
Tallahassee, FL 32308
Florida P.E. No. 65627
Signature
Date

ORIGINAL NOV. 02, 2018
REVISIONS:
1
2
3
4
5

SHEET
DOWNSTREAM ENDWALL DETAILS

PROJECT
COUNTRY CLUB CREEK/ PUTNAM DRIVE DRAINAGE AND SIDEWALK IMPROVEMENTS

KEVER | MCKEE ENGINEERING
3370 Capital Circle NE, Ste. F
Tallahassee, Florida 32308
Office: (850) 727.5367
Authorization No. 31293
Brian E. Kever, P.E. FPE#65627

JOB NO.
DRAWN
DESIGNED
CHECKED
QC

T-5