

CHATHAM COUNTY PURCHASING & CONTRACTING DEPARTMENT

ADDENDUM NO. 1 TO 18-0115-4

FOR: BENTON BOULEVARD EXTENSION

PLEASE SEE THE FOLLOWING FOR ADDITIONS, CLARIFICATIONS AND/OR CHANGES:

1. SEE ATTACHED QUESTIONS RECEIVED (4 pages)
2. REPLACE CURRENT BID SHEETS WITH THE ATTACHED **REVISED** BID SHEETS (7 pages)
3. REPLACE CURRENT *SPECIAL CONDITIONS* WITH THE ATTACHED **REVISED SPECIAL CONDITIONS** (6 pages)
4. FULL SIZE Plan Sheets : 16-0002A, 16-0002B and 22-0013
5. **REVISED** Plan Sheets : Cover Sheet, 03-0001, 05-0012, 05-0013, 23-0061, 23-0062
6. **REVISED** Plan Sheets : 06-0001, 07-0001

NOTE: No additional questions will be received after 3PM, November 20, 2018. Addendum 2 will be issued NLT close of business, Monday, November 26, 2018.

**NOTE: BID OPENING HAS BEEN EXTENDED TO:
2PM, TUESDAY, DECEMBER 4, 2018**

THE PROPOSER IS RESPONSIBLE FOR MAKING THE NECESSARY CHANGES AND MUST ACKNOWLEDGE RECEIPT OF ADDENDUM.

11/16/18
DATE


ROBERT E. MARSHALL
SENIOR PROCUREMENT SPECIALIST
CHATHAM COUNTY

Bid No. 18-0115-4
BENTON BOULEVARD EXTENSION
PRE-BID QUESTIONS

1. Could the bid date be changed from 11/27/18 to 12/4/18 due to the holidays the week prior?

Answer 1. Yes, given the Thanksgiving holiday, the bid opening may be changed by one week.

2. Can you please provide, if available, any electronic files associated with the project.

Answer 2. No, the design files will not be made available during bidding. Additional Earthwork information was added to the information available on the website.

3. The plans do not show the proposed force main and water relocations. Please issue sheets that show these relocations.

Answer 3. There are no sheets showing specific relocations for the water and force main. There are notes and details explaining what is required for relocations on an as needed basis.

4. Will any incidental asphalt required for maintenance of traffic be paid for under the provided asphalt items?

Answer 4. Some temporary leveling will most likely be needed for stage construction of the roundabouts. Additional leveling quantities will be added.

5. The notes on the typical sections say to install 6" GAB under all type 2 curb and type 7 curb within the following ranges:

- a. 62+80-65+50
- b. 88+89-End
- c. 198+69-201+35
- d. 297+54-302+36

Will the stone in this area be paid under the 6" GAB item or is it to be considered incidental to the curb?

Answer 5. The Graded Aggregate Base, six inch, placed under the curb as required by the plans will be paid for under the GAB, 6 inch pay item.

6. Pump Station on sheet number 13-002 Station 26+25 appears to be in conflict please confirm we have no responsibility with this structure.

Answer 6. The pump station at Benton Blvd and Highlands Blvd will be moved by others. It is possible that the sidewalk may need to be shifted slightly to accommodate utilities in this area.

7. Has Chatham County been given relocation schedules from “ATT, Ga Power etc” This can impact the project schedule given the potential of utility relocation delays. Will Chatham County allow time extensions associated with said delays.

Answer 7. No delays due to utility conflicts are expected to impact the overall construction schedule. It is the Contractors responsibility to coordinate work and relocations with the utility companies.

8. Can Highway 30 be closed over weekend periods?

Answer 8. No, closures of State Route 30 will not be allowed.

9. Are there any lane (closure) restrictions associated with normal working hours on the project?

Answer 9. Yes, lane closure restrictions will be added. See the revised Special Conditions.

10. Can we decrease full depth removal sections on HWY 30. If not we feel temporary paving will be necessary.

Answer 10. No, sufficient existing pavement will be retained that along with the new pavement will allow for a minimum of two 10 foot travel lanes during staging. See the plan sheets and cross sections for details.

11. What does the dash line represent near the existing travel lane on SR 30 and Highlands. Sheet 13-002 calls out dash line as “limits of overlay” this does conflict with typical sections on SR 30.

Answer 11. The existing pavement to remain is outlined with a hatched border that is called out as ‘limits of overlay’ on the plan sheets. The plan sheets and cross sections are correct. The typical sections are incorrect. See revised sheets.

12. Please confirm asphalt index is included as part of this project.

Answer 12. The asphalt index is included in the project. See Special Provision 109-Measurement and Payment.

13. Will Chatham County consider surface mounted islands as an alternative to curb and gutter with median paving / grassing at SR 30? This also would facilitate construction.

The County will consider integral concrete islands only in those areas noted as 'concrete island' on State Route 30.

14. One of our potential trucking subs has asked about the weight restrictions on Meinhard Road. Will these restrictions be enforced during construction of this project? This route would be the best way to get material to the north side of St Augustine Creek as soon as possible so the settlement period can begin.

Answer 14. The weight restriction is by Port Wentworth, most likely to minimize disruption to residences and damage to the pavement. A variance may be requested by the Contractor. I would expect that they would require any damage to the pavement to be repaired by the Contractor. Do not call Port Wentworth. Inquires will be made by County staff. Any additional information obtained will be provided.

15. Per special provision 209.2.A the top 12" of subgrade material must be class IIB3 material or better. If the material within the top 12" of subgrade meets the requirements of IIB3 or better but cannot be stabilized with reasonable efforts, will the removal and replacement of this material be measure for payment under the pay item for undercut excavation?

Answer 15. No, the Contractor is responsible for the first foot regardless. However, if the material meets specifications, it can be re-used on the project.

16. Is Sheet 23-0056 missing from the full size plans?

Answer 16. No, Sheet 23-0056 is not missing. However, there are three sheets that were scaled to half size rather than full size.

17. Will Metal Safety End Sections be allowed?

Answer 17. Yes, metal safety end sections are acceptable.

18. Will the 220 lbs/sy of 9.5mm asphalt on the path need to be placed in two lifts?

Answer 18. No, either the mix will be changed to 12.5mm or the asphalt thickness reduced to 165 lb/sy. This is currently under review by the designer.

19. Can the field office be placed on County right of way?

Answer 19. Yes, the field office may be placed on County right of way if there is room outside the construction limits. The existing portion of Benton Boulevard south of Highlands Boulevard is City of Savannah right of way. The City would have to approve placement of the field office there.

20. If irrigation is installed for the landscaping in the medians will it have to be removed?

Answer 20. The roundabouts with landscaping are within Port Wentworth and one of them is also within the Georgia Department of Transportation right of way. Port Wentworth will maintain them after construction is complete. Any installation of irrigation would have to be approved by Port Wentworth and GDOT as applicable.

21. Will burning be allowed on site?

Answer 21. Burning will be allowed as provided by federal, state and local jurisdictional ordinances.

22. Is there any way we can get soil samples at the pond locations?

Answer 22. Access would be allowed at the location of Pond #2 off of Meinhard Road, however, access is not permitted to the location of Pond #1 near State Route 30 at this time.

BID SHEET (REVISED ADDENDUM 1)
BENTON BOULEVARD EXTENSION

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
ROADWAY					
150-1000	TRAFFIC CONTROL - BENTON BLVD	LS	1		
150-1002	TRAFFIC CONTROL - HIGHLANDS BLVD	LS	1		
153-1300	FIELD ENGINEERS OFFICE TP 3	EA	1		
207-0203	FOUND BKFILL MATL, TP II	CY	700		
210-0100	GRADING COMPLETE - BENTON BLVD	LS	1		
210-0102	GRADING COMPLETE - HIGHLANDS BLVD	LS	1		
210-0250	UNDERCUT EXCAVATION	CY	8000		
310-5060	GR AGGR BASE CRS, 6 INCH, INCL MATL	SY	3600		
310-5080	GR AGGR BASE CRS, 8 INCH, INCL MATL	SY	6300		
310-5100	GR AGGR BASE CRS, 10 INCH, INCL MATL	SY	46000		
318-3000	AGGR SURF CRS	TN	320		
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	3000		
402-3102	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP1 OR 2, INCL BITUM MATL & H LIME	TN	560		
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	9300		
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	TN	5200		
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	5100		
413-0750	TACK COAT	GL	5300		
429-1000	RUMBLE STRIPS	EA	4		
430-0200	PLAIN PC CONC PVMT, CL 1 CONC, 10 INCH THK	SY	1170		
432-5010	MILL ASPH CONC PVMT, VARIABLE DEPTH	SY	3000		
433-1000	REINF CONC APPROACH SLAB	SY	230		
441-0016	DRIVEWAY CONCRETE, 6 IN	SY	12		
441-0018	DRIVEWAY CONCRETE, 8 IN	SY	75		
441-0050	CONC SLOPE DRAIN (FLUME)	SY	6		
441-0104	CONC SIDEWALK, 4 IN	SY	4600		
441-0108	CONC SIDEWALK, 8 IN	SY	540		
441-0303	CONC SPILLWAY, TP 3	EA	3		
441-0300	CONC SPILLWAY, SPCL DES	EA	4		
441-0740	CONCRETE MEDIAN, 4 IN	SY	420		
441-0741	STAMPED CONCRETE MEDIAN, 4 IN	SY	1540		
441-0748	CONCRETE MEDIAN, 6 IN	SY	100		
441-0754	CONCRETE MEDIAN, 7 1/2 IN	SY	650		
441-4020	CONC VALLEY GUTTER, 6 IN	SY	20		
441-4030	CONC VALLEY GUTTER, 8 IN	SY	20		

BID SHEET (REVISED ADDENDUM 1)
BENTON BOULEVARD EXTENSION

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
441-5008	CONCRETE HEADER CURB, 6 IN, TP 7	LF	660		
441-6022	CONC CURB & GUTTER, 6 IN X 30 IN, TP 2	LF	330		
441-6222	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	LF	9800		
441-6740	CONC CURB & GUTTER, 8 IN X 30 IN, TP 7	LF	10000		
441-6741	CONC CURB & GUTTER, 8 IN X 30 IN, TP 7 (MODIFIED: 4IN TYPE 9 FACE FOR TRUCK APRON)	LF	830		
446-1100	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH	LF	5600		
455-1000	FILTER FABRIC FOR EMBANKMENT STABILIZATION	SY	12000		
456-2015	INDENT RUMBLE STRIPS - GROUND-IN-PLACE (SKIP)	GLM	3		
500-3101	CLASS A CONCRETE	CY	470		
500-3201	CLASS B CONCRETE, RETAINING WALL	CY	35		
500-3800	CLASS A CONCRETE, INCL REINF STEEL	CY	10		
500-9999	CLASS B CONC, BASE OR PVMT WIDENING	CY	85		
511-1000	BAR REINF STEEL	LB	46000		
515-2020	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND	LF	115		
550-1150	STORM DRAIN PIPE, 15 IN, H 1-10	LF	30		
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF	3300		
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	LF	1300		
550-1300	STORM DRAIN PIPE, 30 IN, H 1-10	LF	590		
550-1360	STORM DRAIN PIPE, 36 IN, H 1-10	LF	120		
550-2180	SIDE DRAIN PIPE, 18 IN, H 1-10	LF	200		
550-2240	SIDE DRAIN PIPE, 24 IN, H 1-10	LF	150		
550-2300	SIDE DRAIN PIPE, 30 IN, H 1-10	LF	50		
550-2420	SIDE DRAIN PIPE, 42 IN, H 1-10	LF	50		
550-4118	FLARED END SECTION 18 IN, SIDE DRAIN	EA	8		
550-4124	FLARED END SECTION 24 IN, SIDE DRAIN	EA	2		
550-4142	FLARED END SECTION 42 IN, SIDE DRAIN	EA	4		
550-3618	SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE	EA	2		
550-3624	SAFETY END SECTION 24 IN, SIDE DRAIN, 6:1 SLOPE	EA	1		
550-3630	SAFETY END SECTION 30 IN, SIDE DRAIN, 6:1 SLOPE	EA	1		
550-4215	FLARED END SECTION 15 IN, STORM DRAIN	EA	1		
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	EA	15		
550-4224	FLARED END SECTION 24 IN, STORM DRAIN	EA	1		
550-4230	FLARED END SECTION 30 IN, STORM DRAIN	EA	6		
550-4236	FLARED END SECTION 36 IN, STORM DRAIN	EA	1		
572-1000	SLOPE UNDERDRAINS	LF	200		
573-2006	UNDDR PIPE INCL DRAINAGE AGGR, 6 IN	LF	2000		
600-0001	FLOWABLE FILL	CY	20		
611-3000	RECONSTR CATCH BASIN, GROUP 1	EA	1		
611-3020	RECONSTR SAN SEW MANHOLE, TYPE 1	EA	1		
611-8050	ADJUST MANHOLE TO GRADE	EA	20		

BID SHEET (REVISED ADDENDUM 1)
BENTON BOULEVARD EXTENSION

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
611-8140	ADJUST WATER VALVE BOX TO GRADE	EA	4		
634-1200	RIGHT OF WAY MARKERS	EA	125		
635-1000	BARRICADES	LF	40		
641-1100	GUARDRAIL, TP T	LF	84		
641-1200	GUARDRAIL, TP W	LF	480		
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	2		
641-5020	GUARDRAIL TERMINAL, TP 12B, 31 IN, FLARED, ENERGY- ABSORBING	EA	2		
643-8040	GATE, WOVEN WIRE, 12 FT (DETAIL F2)	EA	5		
643-8200	BARRIER FENCE (ORANGE), 4 FT	LF	4300		
668-1100	CATCH BASIN, GP 1	EA	60		
668-1110	CATCH BASIN, GP 1, ADDL DEPTH	LF	30		
668-2100	DROP INLET, GP 1	EA	30		
668-2110	DROP INLET, GP 1, ADDL DEPTH	LF	15		
668-4300	STORM SEWER MANHOLE, TP 1	EA	2		
668-4311	STORM SEWER MANHOLE, TP 1, ADDL DEPTH, CL 1	LF	4		
668-9800	OUTLET CONTROL STRUCTURE	EA	4		

TEMPORARY EROSION CONTROL

163-0232	TEMPORARY GRASSING	AC	60		
163-0240	MULCH	TN	730		
163-0300	CONSTRUCTION EXIT	EA	12		
163-0310	CONSTRUCTION EXIT TIRE WASH ASSEMBLY	EA	6		
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	EA	20		
163-0527	CONSTRUCT AND REMOVE RIP RAP CHECK DAMS, STONE PLAIN RIP RAP/SAND BAGS	EA	62		
163-0540	CONSTRUCT AND REMOVE RETROFIT	EA	2		
163-0541	CONSTRUCT AND REMOVE ROCK FILTER DAMS	EA	6		
163-0542	CONSTRUCT AND REMOVE STONE FILTER RING	EA	1		
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	100		
163-1925	CONSTRUCT AND REM COMPOST FILTER SOCK, 12 IN	LF	240		
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	LF	48000		
165-0020	MAINTENANCE OF TEMPORARY SILT FENCE, TP B	LF	300		
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	9900		
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES	LF	1270		
165-0050	MAINTENANCE OF SILT RETENTION BARRIER	LF	200		
165-0087	MAINTENANCE OF SILT CONTROL GATE, TP 3	EA	20		
165-0095	MAINTENANCE OF RETROFIT, STA NO -	EA	2		
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	EA	12		
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	EA	100		
165-0110	MAINTENANCE OF ROCK FILTER DAM	EA	6		

BID SHEET (REVISED ADDENDUM 1)
BENTON BOULEVARD EXTENSION

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
165-0111	MAINTENANCE OF STONE FILTER RING	EA	1		
165-0310	MAINT OF CONSTR EXIT TIRE WASH ASSEMBLY	EA	6		
165-1500	MAINT OF COMPOST FILTER SOCK (ALL SIZES)	LF	240		
167-1000	WATER QUALITY MONITORING AND SAMPLING	EA	10		
167-1500	WATER QUALITY INSPECTIONS	MO	18		
170-1000	FLOATING SILT RETENTION BARRIER	LF	200		
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	48000		
171-0020	TEMPORARY SILT FENCE, TYPE B	LF	300		
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	9900		

PERMANENT EROSION CONTROL

603-2182	STN DUMPED RIP RAP, TP 3, 24 IN	SY	1100		
603-7000	PLASTIC FILTER FABRIC	SY	1100		
700-6910	PERMANENT GRASSING	AC	32		
700-7000	AGRICULTURAL LIME	TN	190		
700-7010	LIQUID LIME	GL	480		
700-8000	FERTILIZER MIXED GRADE	TN	30		
700-8100	FERTILIZER NITROGEN CONTENT	LB	1550		
716-2000	EROSION CONTROL MATS, SLOPES	SY	4500		

SIGNING & MARKING

500-3104	CLASS A CONCRETE, SIGNS	CY	15		
611-5551	RESET SIGN	EA	2		
636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	SF	430		
636-1036	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 11	SF	520		
636-1041	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9	SF	370		
636-1077	HIGHWAY SIGNS, ALUM EXTRUDED PANELS, REFL SHEETING, TP 9	SF	190		
636-2070	GALV STEEL POSTS, TP 7	LF	1260		
636-2080	GALV STEEL POSTS, TP 8	LF	340		
636-2090	GALV STEEL POSTS, TP 9	LF	780		
636-3000	GALV STEEL STR SHAPE POST	LB	6000		
636-3010	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	EA	16		
636-9094	PILING IN PLACE, SIGNS, STEEL H, HP 12 X 53	LF	40		
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	EA	55		
653-0210	THERMOPLASTIC PVMT MARKING, WORD, TP 1	EA	2		
653-0296	THERMOPLASTIC PVMT MARKING, WORD, TP 15	EA	10		
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	LF	380		
653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	LF	6400		
653-2501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LM	5.40		

BID SHEET (REVISED ADDENDUM 1)
BENTON BOULEVARD EXTENSION

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
653-2502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LM	3.20		
653-4501	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	GLM	0.40		
653-4830	THERMOPLASTIC SKIP TRAF STRIPE, 18 IN, WHITE	GLF	430		
653-6004	THERMOPLASTIC TRAF STRIPING, WHITE	SY	590		
653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW	SY	5700		
654-1001	RAISED PVMT MARKERS TP 1	EA	570		
654-1003	RAISED PVMT MARKERS TP 3	EA	240		
657-1085	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	LF	500		
657-6085	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB	LF	500		

SIGNALIZATION

636-1049	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9 FOR MAST ARM SIGNS	SF	45		
639-3014	STEEL STRAIN POLE, TP IV, INCL LUMINAIRE ARM & 65' MAST ARM	EA	4		
647-1000	TRAFFIC SIGNAL INSTALLATION NO - 1	LS	1		
682-6233	CONDUIT, NONMETL, TP 3, 2 IN	LF	2070		
682-9954	DIRECTIONAL BORE - 4 IN	LF	200		
682-9956	DIRECTIONAL BORE - 6 IN	LF	340		
682-9958	DIRECTIONAL BORE - 8 IN	LF	150		
687-1000	TRAFFIC SIGNAL TIMING	LS	1		
926-2075	900 Mhz DIRECTIONAL RADIO ANTENNA AND CONNECTING CABLE	EA	1		

BRIDGE NO. 1 - ST. AUGUSTINE CREEK

500-0100	GROOVED CONCRETE	SY	680		
500-1006	SUPERSTR CONCRETE, CL AA, BR NO - 1	LS	1		
500-2100	CONCRETE BARRIER	LF	184		
500-3102	CLASS A CONCRETE, BR NO-1	CY	72		
507-8900	PSC BEAMS, AASHTO TYPE 1 MOD, BR NO - 1	LF	1115		
511-1002	BAR REINF STEEL - BR NO -1	LB	8400		
511-3000	SUPERSTR REINF STEEL, BR NO - 1	LS	1		
516-1100	ALUM HANDRAIL, STD 3626	LF	184		
520-2216	PILING, PSC, 16 IN SQ	LF	1320		
520-3216	TEST PILE, PSC, 16 IN SQ	EA	2		
520-4216	LOAD TEST, PSC, 16 IN SQ (IF REQD)	EA	1		
523-1100	DYNAMIC PILE TESTING	EA	2		
540-1102	REMOVAL OF EXISTING BR, BR NO - 1	LS	1		
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN	SY	1130		
603-7001	PLASTIC FILTER FABRIC	SY	1130		

BID SHEET (REVISED ADDENDUM 1)
BENTON BOULEVARD EXTENSION

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
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WATER AND SEWER RELOCATIONS

660-1230	SEWER FORCE MAIN, 10 IN, - PVC SDR 18, C-900	LF	1400		
660-1730	SEWER MAIN, FUSIBLE PVC, 10 IN INSTALLED BY DIRECTIONAL BORE WITOUT CASING	LF	300		
660-2070	LINE STOP - 10 IN, FOR SEWER FORCE MAIN, INCLUDES INSTALLATION OF FITTING, PRESSURE TAP AND INSTALLATION OF BLIND FLANGE	EA	5		
660-2405	AIR RELEASE VALVE ASSEMBLY, 2 IN INCL MANHOLE	EA	2		
660-9991	TEMPORARY SEWER FORCE MAIN BYPASS, 10 IN PIPE, INCLUDES INSTALLATION, MAINTENANCE AND REMOVAL OF PIPE	LF	2500		
660-9992	TEMPORARY SEWER FORCE MAIN BYPASS, PLUG AND BYPASS FITTINGS AT LINE STOP FITTING, INCLUDES INSTALLATION, MAINTENANCE AND REMOVAL OF PLUG AND FITTINGS AS NECESSARY TO IMPLEMENT THE BYPASS, AND INSTALLATION OF BLIND FLANGE ON LINE STOP FITTING AFTER REMOVAL OF BYPASS	EA	6		
670-1085	WATER MAIN, 8 IN, PVC	LF	30		
670-5750	LINE STOP - 8 IN, FOR WATER MAIN, INCLUDES INSTALLATION OF FITTING, PRESSURE TAP, INSTALLATION OF PLUG, REMOVAL OF PLUG AND INSTALLATION OF BLIND FLANGE ON LINE STOP FITTING	EA	2		

LIGHTING

681-4210	LIGHTING STD, 30 FT MH, POST TOP	EA	28		
681-9999	LUMINAIRE, TP 4, 4K, LED	EA	28		
682-1404	CABLE, TP XHHW, AWG NO 10	LF	16700		
682-6222	CONDUIT, NONMETL, TP 2, 2 IN	LF	5900		
682-6225	CONDUIT, NONMETL, TP 2, 2 1/2 IN	LF	100		
682-9000	MAIN SERVICE PICK UP POINT	LS	1		
682-9002	MAIN SERVICE PICK UP POINT - NO 2	LS	1		
682-9022	ELECTRICAL JUNCTION BOX, REINF PLASTIC MORTAR	EA	10		
682-9953	DIRECTIONAL BORE - 3 IN	LF	1000		

LANDSCAPING

700-9300	SOD	SY	680		
702-0212	CRATAEGUS VIRIDIS - 3 INCH CALIPER	EA	6		
702-0363	ILEX CORNUTA CARISSA - 3 GAL	EA	5		
702-0470	ILEX VOMITORIA NANA - 3 GAL	EA	420		

BID SHEET (REVISED ADDENDUM 1)
BENTON BOULEVARD EXTENSION

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
702-0910	QUERCUS VIRGINIANA - 3 INCH CALIPER	EA	2		
702-9005	SPRING APPLICATION FERTILIZER	LB	260		
702-9025	LANDSCAPE MULCH	SY	900		
725-0010	WEED CONTROL	SY	1600		

999-9000	FIELD ALLOWANCE	LS	1	50,000	
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TOTAL BID (Round off to whole dollar)

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Name/ Title

Company

Address

Phone/ Fax Numbers

E-mail

SPECIAL CONDITIONS BENTON BOULEVARD EXTENSION

1. DESCRIPTION OF WORK:

The work will consist of furnishing all materials, labor and equipment for:

Construction of a two lane road with associated drainage and sidewalk between Highlands Boulevard and State Route 30 with a bridge at St. Augustine Creek and a box culvert at Little Hearst Branch. It will also include widening on Highlands Boulevard from Benton Boulevard to just past Shellbark Way. Intersection improvements include roundabouts at Meinhard Road and State Route 30 as well as a traffic signal at Highlands Boulevard.

Construction plans, technical specifications and some special provisions for the project are provided separately and are considered part of the contract documents.

All work under this contract shall be done in accordance with the Georgia Department of Transportation (GDOT) Standard Specifications, latest edition and subsequent supplemental specifications; the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD); and the following Shelf Special Provisions which are available on the GDOT website at **www.dot.ga.gov/PS/Business/Source**: 105- Control of Work, 109- Measurement and Payment, 150 Traffic Control (60 page version), 161- Control of Erosion and Sediment, 163- Miscellaneous Erosion Control Items, 165- Maintenance of Temporary Erosion and Sedimentation Devices, 167- Water Quality Monitoring, 171- Silt Fence, 400 Hot Mix Asphaltic Concrete Construction, 647- Traffic Signal Installation, 800- Course Aggregates, 802- Aggregates for Asphaltic Concrete, 828 – Hot Mix Asphaltic Concrete Mixtures; except for certain items deleted or modified in these documents. Project Specific Special Provisions for: Prompt Payment, 153- Field Office, 208- Embankment, 209- Subgrade, 520- Piling, 687- Traffic Signal Timing and 881- Fabric are included in this proposal and will also apply.

Water and Sewer relocations within the City of Savannah, with the exception of the 10 inch force main belonging to Port Wentworth shall be completed in accordance with the Plans and City of Savannah Specifications Section 02550 Water Distribution System and Section 02554 – Wastewater Collection System. These specifications can be found on the City of Savannah website at **www.savannahga.gov/914/Specifications**.

Water and Sewer relocations within Port Wentworth and the 10 inch force main that runs from Highlands Boulevard north along the west side of the Benton Boulevard right of way to station 51+60 shall be completed in accordance with the Plans and Port Wentworth Specifications as provided. Contractor to notify Chris Lee with Clearwater Solutions prior to beginning water or sewer line work in Port Wentworth.

Contract administration and inspection will be performed by Chatham County. Water and sewer relocation inspection may be performed by City of Savannah or a consultant for Port Wentworth as well as County personnel. Inspection within the Georgia Department of Transportation (GDOT) right of way may be performed by GDOT as well as County personnel.

Testing will be performed by an Independent Laboratory hired by Chatham County. A minimum of 24 hours notice will be required prior to any work which requires testing. Sampling and testing will be performed as per GDOT Sampling and Testing Guidelines.

All materials used in the process of completion of the work included in the contract will be furnished from Georgia Department of Transportation certified suppliers only as per the GDOT Qualified Products List available on the website www.dot.ga.gov/PS/Materials/QPL.

The Prime Contractor must be pre-qualified by GDOT at the time of the bid opening. All subcontractors must be qualified or registered by GDOT prior to beginning work on the project. All subcontractors must be listed in the bid package or approved by the County in writing prior to performing work on the project.

It is the responsibility of the bidder to carefully examine and fully understand the construction contract, plans, technical specifications and other documents hereto attached and make a personal examination of the site of the proposed work, and satisfy him or herself as to the actual conditions and requirements of the work.

The bidder further agrees that the cost of any work performed, materials furnished, services provided, or expenses incurred, which are not specifically delineated in the contract documents but which are incidental to the scope, intent, and completion of the contract, shall be deemed to have been included in the prices bid for the various items scheduled.

2. **COMMENCEMENT AND COMPLETION:** The Contractor shall agree to commence work under this contract within ten (10) working days after the Notice to Proceed (NTP) is issued, and complete all work within 545 calendar days after the 10-day period. The Contractor shall work continuously on the project after the Notice to Proceed is issued.

Work is restricted to the area south of station 70+00 until the environmental permit for the north end is approved. Permit approval is anticipated by the end of the year, 2018. No additional time will be approved as long as the permit is approved within six months of NTP.

The Contractor shall notify the County when the work is substantially complete by submitting in writing a request, for a Certificate of Substantial Completion (Substantial Completion shall mean the date when the work has progressed to the point where it can be utilized for the purpose for which it is intended). The Certificate shall be a mutually agreed upon document listing the date of substantial completion, items of the work remaining to be completed or corrected and shall fix the time within which the Contractor shall complete items listed therein (no more than 60 days). The Certificate shall be signed by the Contractors Construction Manager and the County Project Manager. Time charges shall recommence if all work, including corrective work but excluding permanent grassing, is not complete within the time specified in the Certificate.

3. **MAINTENANCE:** Once the Notice to Proceed has been issued, the Contractor is held responsible for all maintenance within the limits of the project throughout the duration of the contract without exception.

4. **LIQUIDATED DAMAGES:** Failure to complete all work within 545 calendar days plus any extension authorized in writing by the County Engineer shall entitle the County to deduct as "Liquidated Damages" from the monies due the Contractor the amount of \$1000 for each calendar day in excess of the authorized construction time. The Georgia Department of Transportation schedule for liquidated damages will not be used.

5. **PRECONSTRUCTION CONFERENCE:** The Contractor shall attend a pre-construction conference prior to commencing any work.

6. **CONSTRUCTION SCHEDULE:** The Contractor shall prepare a detailed schedule showing progress dates and completion dates of all phases of construction, including the critical path for the project. The schedule must be submitted and approved prior to commencement of work.

7. **PAYMENT:** Quantities are approximate and payment shall be for measurements of actual in-place work as per the plans and specifications. Any quantities exceeding the contract amount shall be requested by the Contractor in writing, for approval by the County Engineer, prior to the work being performed. Payment will not be made for additional quantities without prior, written approval of the County Engineer.

8. **TRAFFIC CONTROL:** Traffic Safety is paramount. All existing roads must be open to traffic at all times. The Contractor will be responsible for all traffic control, in accordance with the Manual on Uniform Traffic Control Devices, GDOT standards and details, GDOT Special Provision 150 and all other safety measures that will enhance the safety of the construction site. All costs associated with this work shall be included in the bid price for traffic control. The Contractor shall submit a traffic control plan for approval prior to beginning any work. Any changes to the approved traffic control plan must be submitted and approved in writing.

The Contractor shall submit a staging plan, including traffic control, for each roundabout at least four weeks prior to beginning work within twenty feet of the proposed roundabouts. The traffic control plan for the roundabout at State Route 30 will require review and approval by GDOT as well as the County Engineer.

No lane closures will be allowed as follows:

SR 30 eastbound before 9 am, westbound after 4 pm
Benton Blvd (existing) southbound before 9 am, northbound after 4 pm
Highlands Blvd eastbound before 9 am, westbound after 4 pm

9. **INCIDENTAL ITEMS OF CONSTRUCTION:** The cost associated with any incidental items of construction in which no specific pay items are set up for shall be included in the overall cost of the project.

10. **FORCE ACCOUNT:** When no agreement is reached for additional work to be done at Lump Sum or Unit Prices, then such additional work shall be done based on the following Cost-Plus-Percentage basis of payment. The Georgia Department of Transportation specifications for the use of a force account will not be used.

a. For work performed by the prime contractor/general contractor, the contractor shall be reimbursed for actual cost incurred in doing the work, and an additional payment of 15% to cover overhead and profit.

b. For work performed by a sub-contractor, the sub-contractor shall be reimbursed for actual cost incurred in doing the work, and an additional payment of 10% to cover overhead and profit. The contractor shall be allowed an overhead and profit mark-up not to exceed 7% on the subcontractor's price. The County shall not recognize subcontractors of subcontractors.

c. The term "Actual Cost" shall include the cost of material and labor as follows:

- i. Material cost - Direct cost of material, sales tax, freight and equipment rental.
- ii. Labor cost - Man hour cost listed separately by trade, payroll costs including workman's compensation, social security, pension and retirement.

d. The term "Overhead and Profit" shall include bonds (Payment & Performance, Roof & Wall), insurance (Liability, Builders Risk), permits, supervision costs (cost of subcontractor to supervise own work, cost of contractor to supervise work of subcontractor), proposal preparation and all administrative costs.

11. **PRECONSTRUCTION INSPECTION:** A preconstruction video, DVD or CD of photographs is required and must be submitted to Chatham County Department of Engineering for approval prior to the start of work. Special emphasis shall be given to record the existing condition of pavement, signs, walls, fences, driveways, utilities and any other improvements within 50 feet of the project limits.

12. **GRADED AGGREGATE BASE:** The graded aggregate base (GAB) will be granite only. Limerock and recycled or crushed concrete are not approved base materials for this project. The pay limits for the GAB will be at curb and gutter and six inches beyond the edge of pavement without curb and gutter.

13. **BITUMINOUS TACK:** Only Asphalt Cement, performance grade PG 58-22, PG 64-22 or PG 67-22 will be allowed. Emulsified asphalt shall not be used.

14. **STORM DRAINAGE:** All storm drain pipe will be reinforced concrete pipe stamped by a Certified Pipe Technician. Pipe joints shall be wrapped with two layers of filter fabric four feet wide, centered on the joint with a minimum overlap of one foot. The cost for this shall be included in the bid price for storm drain pipe. Shop drawings for all drainage structures shall be submitted for approval. Contractor shall submit as-built plans (marked with any changes) and post construction survey invert elevations for storm drainage upon completion of the work.

15. **WORK HOURS:** Contractor work hours shall be restricted to daylight hours on weekdays unless specifically approved otherwise at least 48 hours in advance. Approval is at the discretion of the County Engineer. The Contractor is responsible for obtaining any waivers or permits from the City of Savannah or Port Wentworth as required due to noise levels from piling driving or construction equipment.

16. **UTILITIES:** The Contractor will be responsible for all utility coordination, including required relocation, and protection of utility facilities. The City of Savannah will be responsible

for relocation of the street lights on Highlands Boulevard. The Contractor will be responsible for coordinating the street light relocation with the City.

17. **PRIME CONTRACTOR SUPERINTENDENT:** A qualified Superintendent of the prime contractor shall be on-site at all times during construction activities, including those of subcontractors. A sub-contractor will not be an approved representative of the prime contractor. If the Superintendent is not present to control the work, work may be suspended by County personnel until such time as the Superintendent is on-site and has adequately addressed any problems or concerns.

18. **COOPERATION BETWEEN CONTRACTORS:** The proposed Effingham Parkway will connect with the proposed roundabout at Benton Boulevard and State Route 30. That project may begin prior to the completion of this project. If so, coordination of work and traffic control with the other contractor will be required to minimize duplication of effort and disruption to traffic.

19. **RED ROBIN COURT:** Red Robin Court may be closed as needed for construction within the Benton Boulevard right of way but should not be kept closed without cause. When practical, the road should be open to roadway and pedestrian traffic. Safe passage for pedestrian traffic shall be provided at the end of each work day.

20. **SPECIAL DESIGN SPILLWAYS:** Special Design Spillways will be paid for as each, this will include all work and materials to complete the spillways as per detail on sheet 38-0001 including a two foot transition between section C-C to section B-B. Required flume (section B-B) beginning from the end of the transition will be paid for by the square yard for concrete slope drain. Side walls shall be five inches minimum. Top for the spillway must extend a minimum of two feet beyond the sidewalk.

21. **HIGHLANDS BOULEVARD:** All traffic control and grading complete work to be completed between station 634+00 and 647+60 on Highlands Boulevard shall be included in the bid prices for Highlands Boulevard.

22. **DYNAMIC PILE TESTING:** Separate pay items are set up for test piles and for dynamic pile testing. Dynamic pile testing will be at the discretion of the County Engineer.

23. **SOIL SURVEY & BFI:** The Soil Survey and Bridge Foundation Investigation Reports will be made available for information only, separately from the bid package for this project.

24. **STATION NUMBERS:** Contractor to place and maintain stakes or paint (on pavement) with the centerline station numbers at 100 foot intervals along the project corridor including the mainline, Highlands, Meinhard and S.R. 30, within the right of way and within 50 ft. from the centerline. If the stakes or paint are offset from the centerline, offset distances must be noted.

25. **CLASS B PAVEMENT WIDENING:** The pay item for Class B Concrete Base or Pavement Widening shall be understood to be for those areas where there is a gap between the existing pavement to remain and the proposed curb and gutter. Up to six inches of the existing pavement may need to be removed to provide a neat edge. The cost for class B concrete to

replace existing pavement removed beyond six inches shall be the responsibility of the Contractor.

26. **MAILBOXES**: Mailboxes shall be relocated as required for construction. This work will be included in the bid price for grading complete. Any mailboxes that need to be moved to facilitate construction must be reset the same day and placed in a location as to allow for mail delivery.

27. **UNSUITABLE MATERIAL**: Some unsuitable material is expected to be encountered on this project based on the soil survey. Pay items are set up with estimated quantities for undercut excavation, embankment stabilization fabric, underdrain and slope underdrain. Locations for these items are not specified on the plans. Use of these pay items will be as directed by the County Engineer in any combination which will most efficiently address subgrade conditions. The Contractor should expect to install underdrain between stations 57+00 to 62+00 as a minimum. The Contractor is responsible for minimizing exposure of the subgrade to rain and heavy equipment. Temporary drainage may be required to keep water from ponding on subgrade soils. Once grading begins in cut sections, the Contractor is expected to work continuously to prepare the subgrade for placement of base material. Undercut will not be paid for due to Contractor negligence.

28. **PARCEL 22**: Contractor will place 22 SY of Aggregate Surface Course, six inch thickness at the end of the paved driveway, within the driveway easement at driveway number 18, station 305+50 Lt on State Route 30.

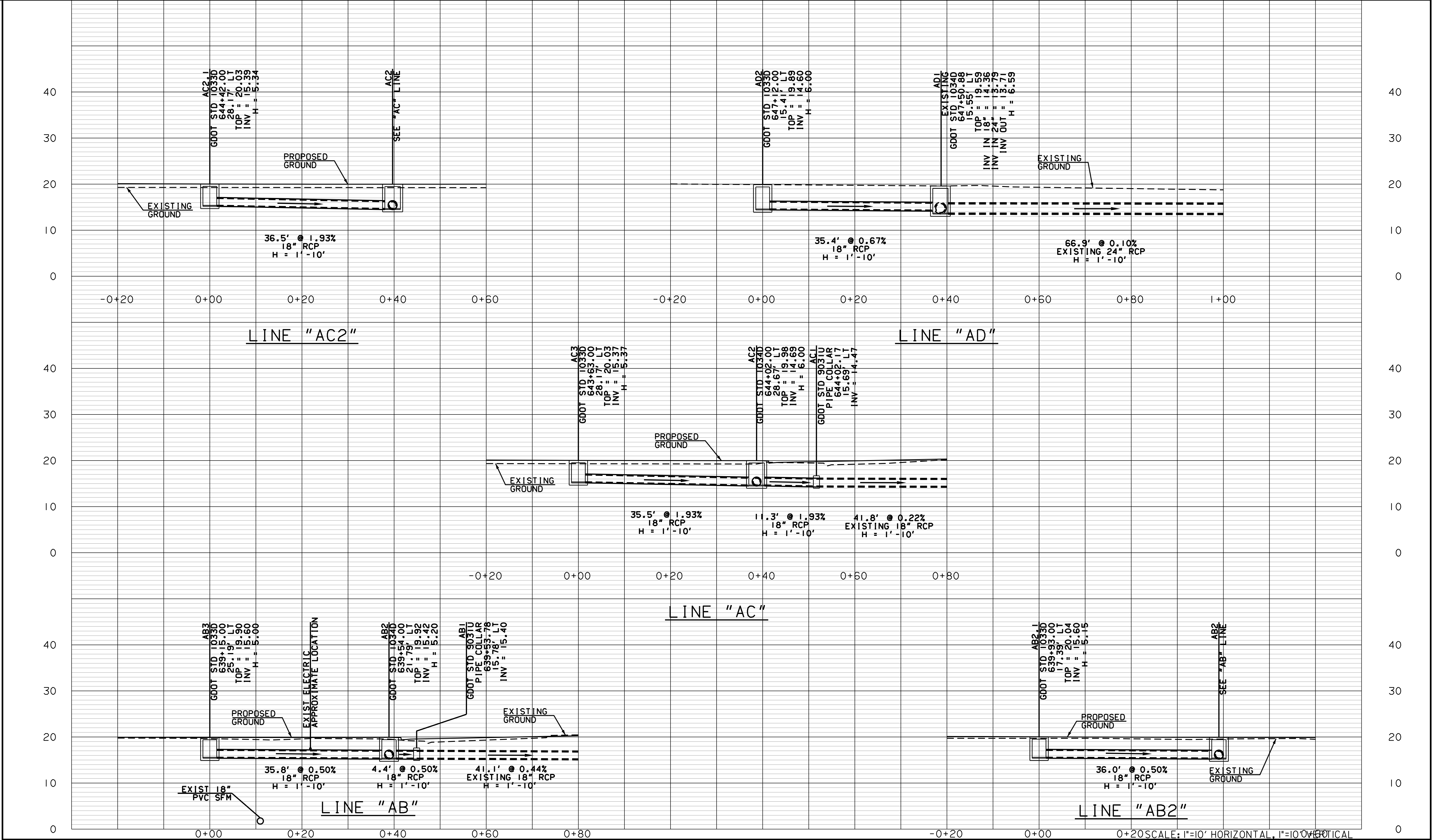
29. **FIELD CONDITION ALLOWANCE**: The field condition allowance shown on the bid sheet shall belong to Chatham County. The purpose of this Allowance is to allow the County to designate actions associated with completion of the project which are not indicated on the plans, but which are dictated by field conditions. Bidders shall not use this Allowance to assume any Contractor costs known or unknown at the bidding. Chatham County must approve use of the Allowance. All bidders shall include this Field Condition Allowance within their base bid. Any unused allowance shall revert to Chatham County.



CROSSROAD PROFILE
HIGHLANDS BLVD
BENTON BOULEVARD EXTENSION



<h1 style="text-align: center;">CROSSROAD PROFILE</h1> <h2 style="text-align: center;">HIGHLANDS, SHORT LEAF AND SHELLBARK</h2> <h3 style="text-align: center;">BENTON BOULEVARD EXTENSION</h3>			
CHECKED:		DATE:	DRAWING No. 16-0002B
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

REVISION DATES

CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAINAGE PROFILES

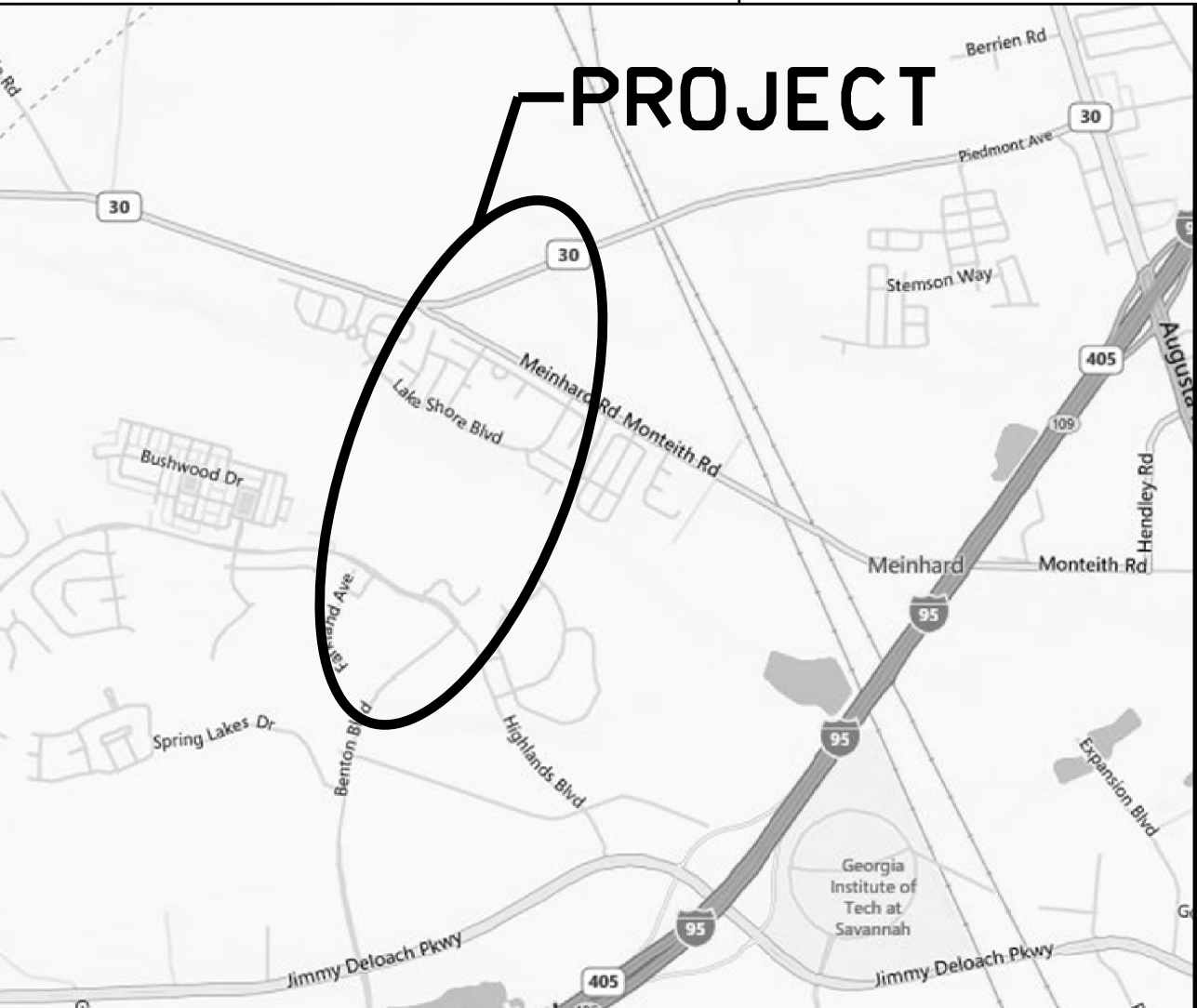
BENTON BOULEVARD EXTENSION

DRAWING No.

22-0013

11/20/2015

CONBOR



LOCATION SKETCH

DESIGN DATA:
TRAFFIC A.D.T.(2019): 9,900
TRAFFIC A.D.T.(2039): 24,000
DIRECTIONAL DIST: 65%
24 HR.TRUCKS %: 8%
SPEED DESIGN: 45 MPH

PROJECT DESIGNATION
EXEMPT

FUNCTIONAL CLASSIFICATION
MINOR ARTERIAL

VERTICAL DATUM : NAVD88
COORDINATE ZONE : GAS. COORDINATES SYS. 85 (NAD83)
PROJECT UNITS : ENGLISH
DESIGN SPEED : 45 MPH

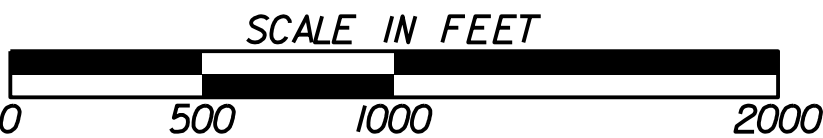
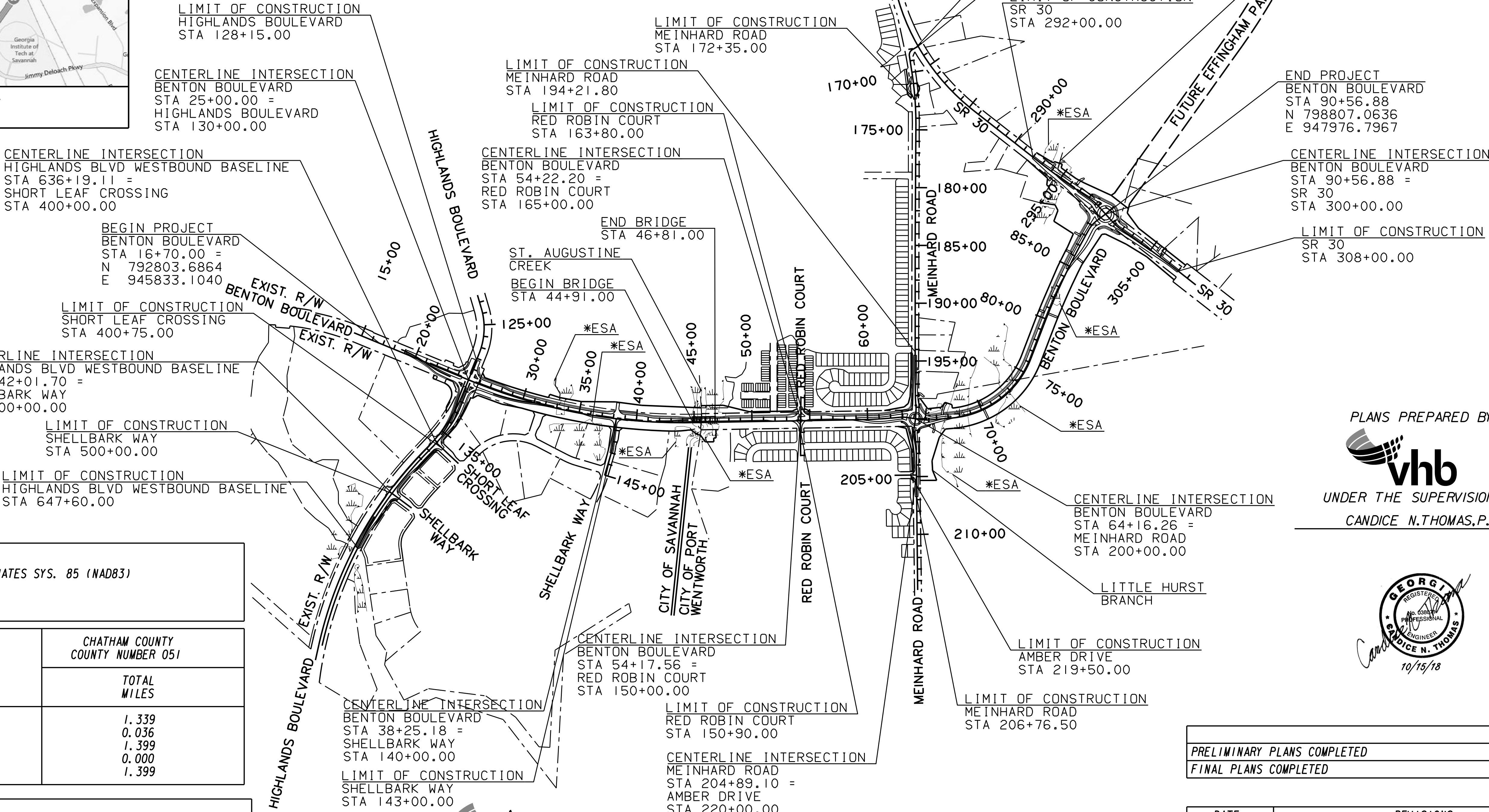
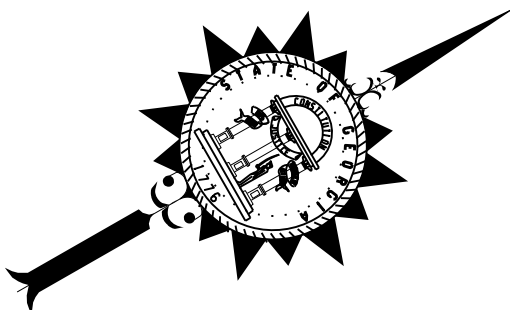
LENGTH OF PROJECT	CHATHAM COUNTY COUNTY NUMBER 051
	TOTAL MILES
NET LENGTH OF ROADWAY	1.339
NET LENGTH OF BRIDGES	0.036
NET LENGTH OF PROJECT	1.399
NET LENGTH OF EXCEPTIONS	0.000
GROSS LENGTH OF PROJECT	1.399

NOTE:
THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS,
OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN
ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED
TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS
INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND CHATHAM COUNTY
IN ANY WAY. THE ATTENTION OF THE BIDDER IS SPECIFICALLY DIRECTED TO
SUBSECTION 102.04, 102.05 AND 104.3 OF THE GEORGIA DEPARTMENT OF
TRANSPORTATION'S SPECIFICATIONS.

3003038
CHATHAM COUNTY

CHATHAM COUNTY, GEORGIA

BENTON BOULEVARD EXTENSION

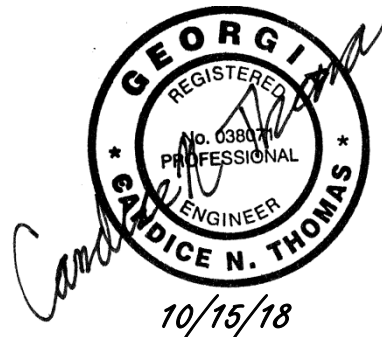


THIS PROJECT IS 100% IN CONGRESSIONAL DISTRICT NO. 1
THIS PROJECT IS 100% IN CHATHAM COUNTY, GMD 8
THIS PROJECT IS 100% IN CHATHAM COUNTY COMMISSION DISTRICT NO. 8

PLANS PREPARED BY:



UNDER THE SUPERVISION OF:
CANDICE N. THOMAS, P.E.



	DATE
PRELIMINARY PLANS COMPLETED	04/22/2016
FINAL PLANS COMPLETED	10/15/2018

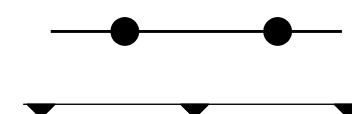
DATE	REVISIONS
11/12/18	
11/16/18	

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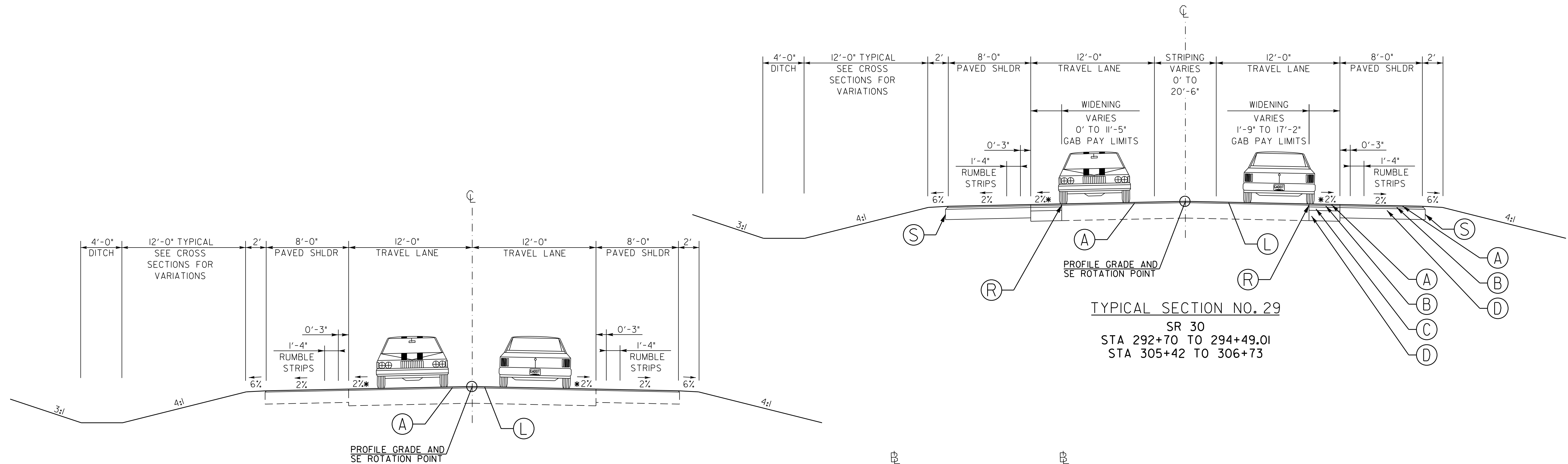
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----P-----
-----C-----F-----
[Hatched Box]
[Hatched Box]
[Cross-hatched Box]

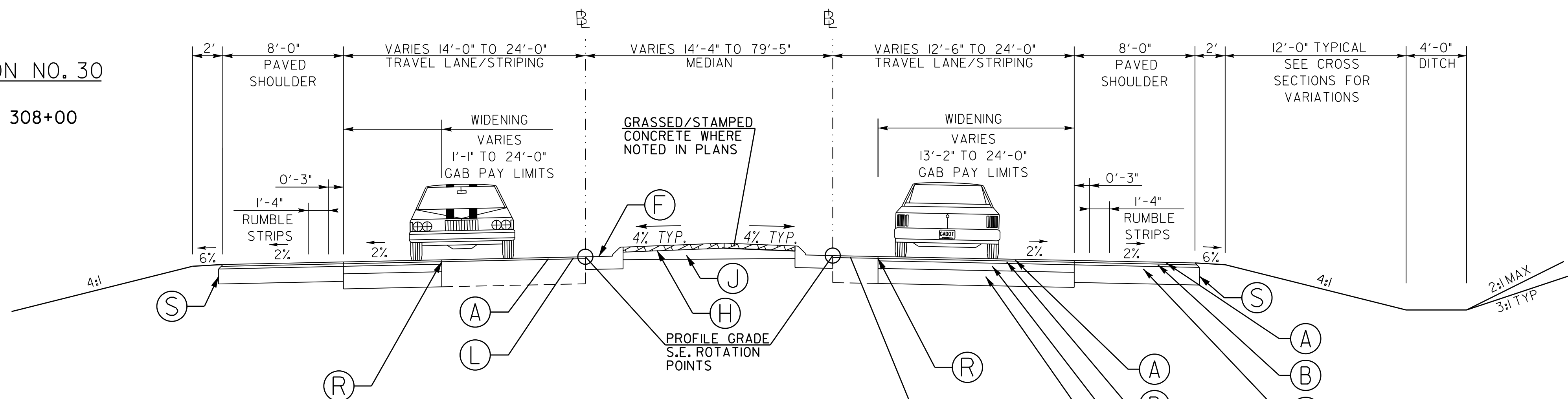
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



REVISION DATES			REVISION SUMMARY				
11/12/18							
11/16/18							
			BENTON BOULEVARD EXTENSION				
			CHECKED:		DATE:		DRAWING No. 03-0001
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		



TYPICAL SECTION NO. 30
SR 30
STA 307+42 TO 308+00



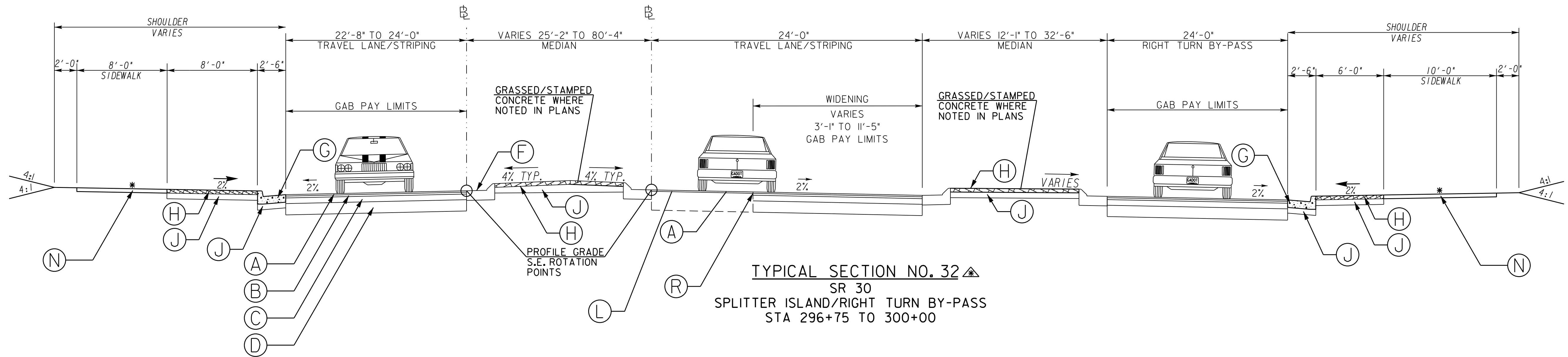
TYPICAL SECTION NO. 31
SR 30
SPLITTER ISLAND
STA 294+49.01 TO 296+75
STA 302+36 TO 305+12.19

PAVEMENT DESIGN

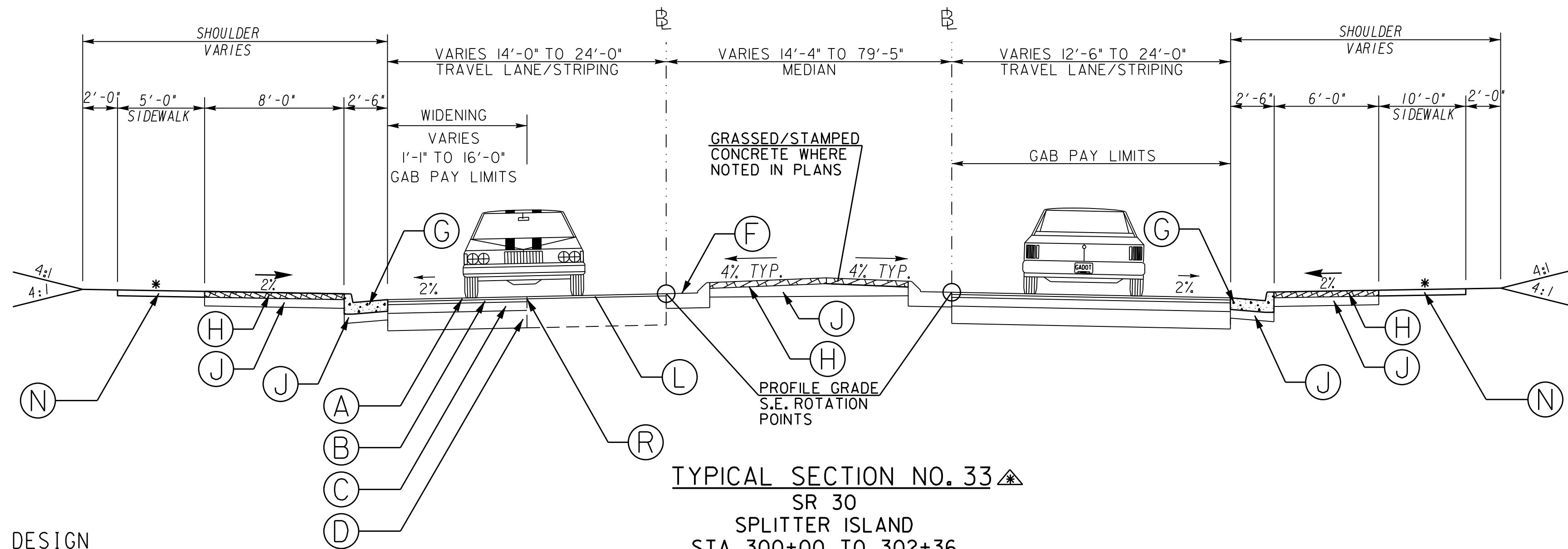
- | | |
|---|---|
| (A) 165 LB/SY RECYCLED ASPH CONC 12.5MM SUPERPAVE, GROUP 2 ONLY, INCL BITUM MATL & H LIME | (H) 4" THICK STAMPED CONCRETE, COLORED & SEALED SEE SHEET 5-0015 FOR DETAIL |
| (B) 220 LB/SY RECYCLED ASPH CONC 19MM SUPERPAVE, GROUP 1 OR 2, INCL BITUM MATL & H LIME | (J) 6" GRADED AGGREGATE BASE |
| (C) 440 LB/SY RECYCLED ASPH CONC 25MM SUPERPAVE, GROUP 1 OR 2, INCL BITUM MATL & H LIME | (L) ASPHALTIC CONCRETE LEVELING AS REQUIRED |
| (D) 10" GRADED AGGREGATE BASE | (R) PAVEMENT REINFORCEMENT FABRIC 18" WIDE |
| (F) GA DOT STD 9032B, TYPE 7 CONCRETE CURB & GUTTER, 8" X 30" | (S) SAFETY EDGE SEE GDOT DETAIL P-7 |

* SEE CONSTRUCTION PLANS FOR CROSS SLOPE TRANSITIONS AND EXACT LOCATION OF SIDEWALK PAVEMENT DESIGN CHANGES

PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES		ORANGE BARRIER FENCE ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)				REVISION DATES			TYPICAL SECTIONS		
						11/16/18			BENTON BOULEVARD EXTENSION		
						CHECKED:	DATE:	DRAWING No.			
						BACKCHECKED:	DATE:	05-0012			
						CORRECTED:	DATE:				
						VERIFIED:	DATE:				



TYPICAL SECTION NO. 32
SR 30
SPLITTER ISLAND/RIGHT TURN BY-PASS
STA 296+75 TO 300+00



TYPICAL SECTION NO. 33
SR 30
SPLITTER ISLAND
STA 300+00 TO 302+36

PAVEMENT DESIGN

- (A) 165 LB/SY RECYCLED ASPH CONC 12.5MM SUPERPAVE, GROUP 2 ONLY, INCL BITUM MATL & H LIME

(B) 220 LB/SY RECYCLED ASPH CONC 19MM SUPERPAVE, GROUP 1 OR 2, INCL BITUM MATL & H LIME

(C) 440 LB/SY RECYCLED ASPH CONC 25MM SUPERPAVE, GROUP 1 OR 2, INCL BITUM MATL & H LIME

(D) 10" GRADED AGGREGATE BASE

(E) GA DOT STD 9032B, TYPE 7 CONCRETE CURB & GUTTER, 8" X 30"
- (G) GA DOT STD 9032B, TYPE 2 CONCRETE CURB & GUTTER, 8" X 30"

(H) 4" THICK STAMPED CONCRETE, COLORED & SEALED SEE SHEET 5-0015 FOR DETAIL

(J) 6" GRADED AGGREGATE BASE

(L) ASPHALTIC CONCRETE LEVELING AS REQUIRED

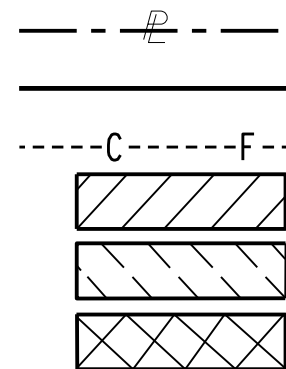
(N) CONC SIDEWALK, 4 IN

(R) PAVEMENT REINFORCEMENT FABRIC 18" WIDE

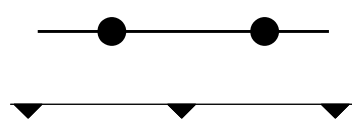
* SEE CONSTRUCTION PLANS FOR CROSS SLOPE TRANSITIONS AND EXACT LOCATION OF SIDEWALK PAVEMENT DESIGN CHANGES

INSTALL 6" GAB UNDER ALL TYPE 2 & TYPE 7 CURB & GUTTER WITHIN THE FOLLOWING STATION RANGES:
BENTON BLVD STA 62+80 TO 65+50
BENTON BLVD STA 88+89 TO END
MEINHARD ROAD STA 198+69 TO 201+35
SR 30 STA 297+54 TO 302+36

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



REVISION DATES

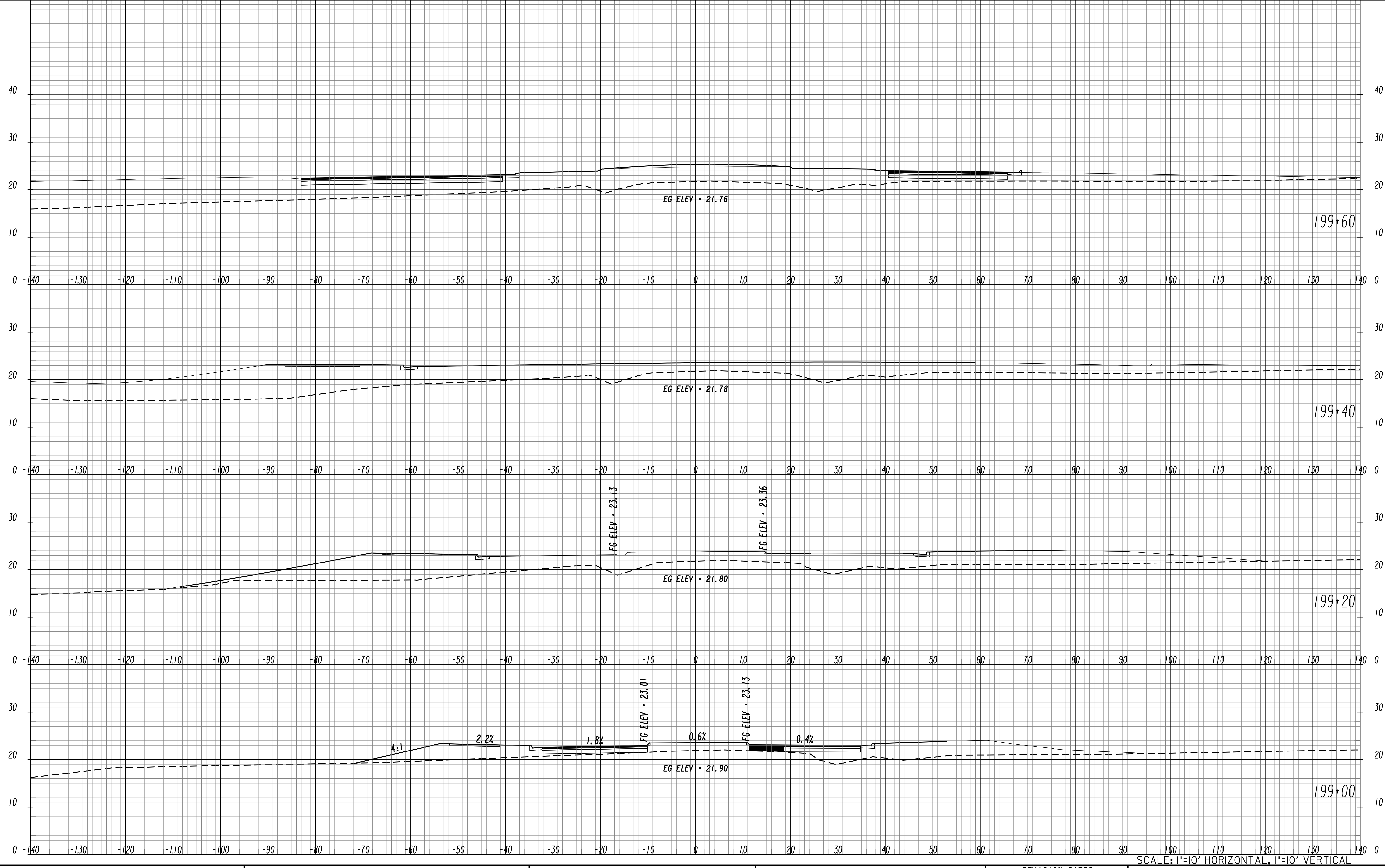
DATE	DESCRIPTION
11/16/18	

TYPICAL SECTIONS

BENTON BOULEVARD EXTENSION

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

05-0013



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

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

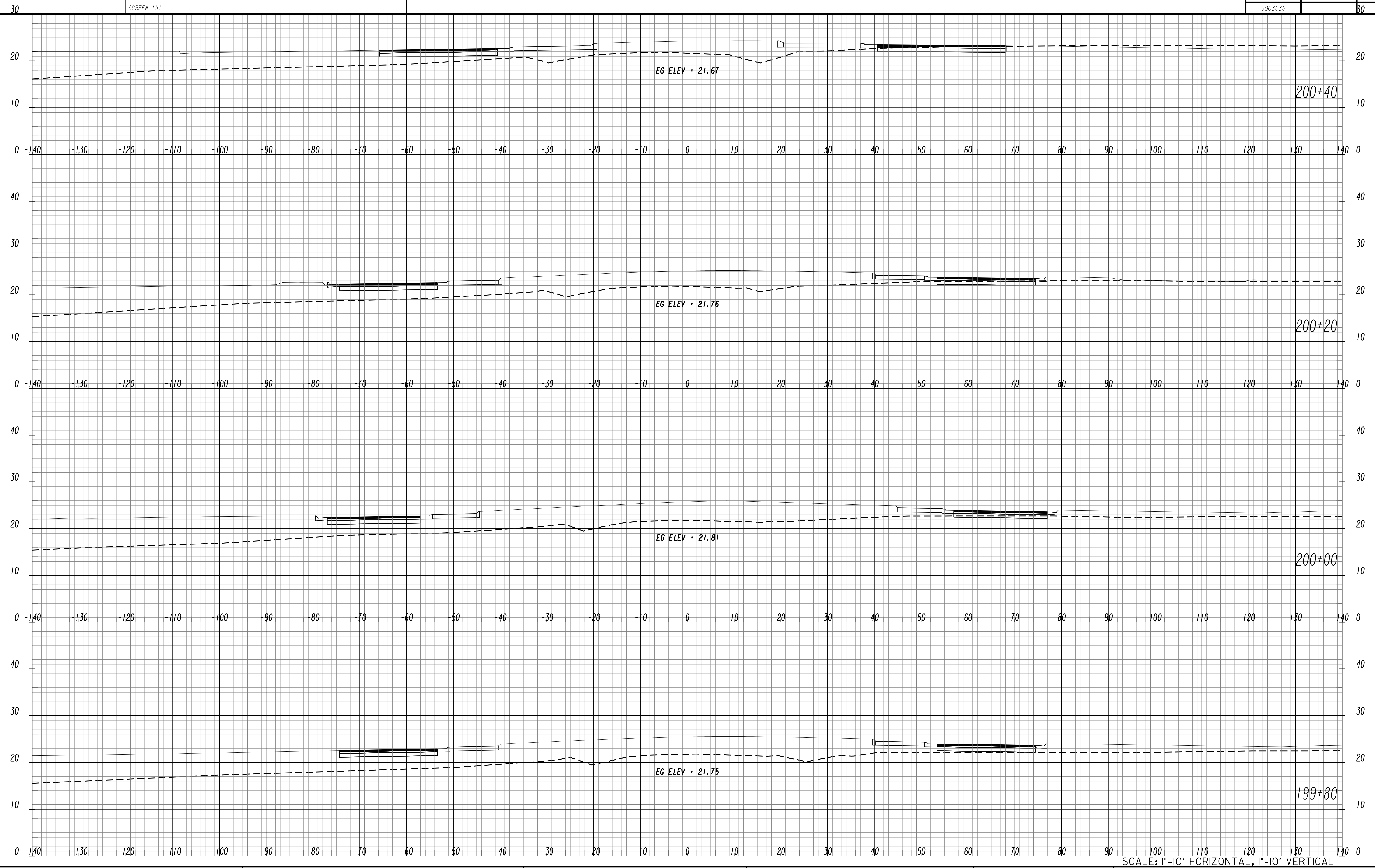
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

REVISION DATES
11/16/18

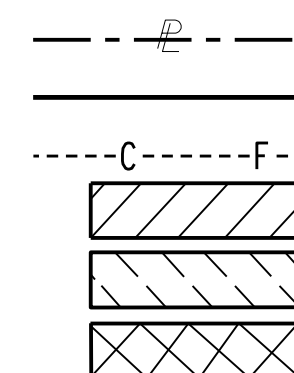
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VERIFIED:

DATE:
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DATE:

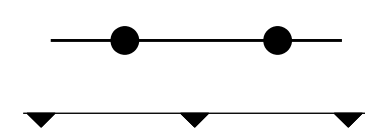
DRAWING No.
23-0061



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



ALL CROSS SLOPES, FORESLOPES, AND
BACKSLOPES ARE LABELED PERPENDICULAR
TO THE EDGE OF PAVEMENT BASELINES.

[illegible]

EARTHWORK CROSS SECTIONS
MEINHARD ROAD
BENTON BOULEVARD EXTENSION

CHECKED:	DATE:	DRAWING No. 23-0062
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

TRAFFIC CONTROL - BENTON BOULEVARD
LUMP SUM

TRAFFIC CONTROL - HIGHLANDS WIDENING
LUMP SUM

GRADING COMPLETE - BENTON BOULEVARD
LUMP SUM

GRADING COMPLETE - HIGHLANDS WIDENING
LUMP SUM

FIELD ENGINEERS OFFICE TP 3 - BENTON BOULEVARD	
	EA
PROJECT TOTAL	1

SPECIALTY EARTHWORK - BENTON BOULEVARD			
UNDERCUT EXCAVATION CY	FILTER FABRIC FOR EMBANKMENT STABILIZATION SY	SLOPE UNDERDRAINS LF	UNDDR PIPE INCL DRAINAGE AGGR, 6 IN LF
8000	12000	200	2000

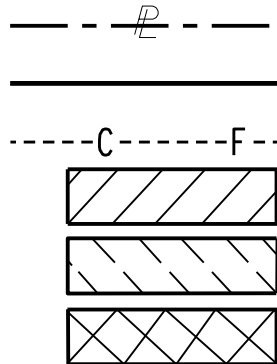
RIGHT OF WAY MARKERS - BENTON BOULEVARD	
	EA
PROJECT TOTAL	111

RIGHT OF WAY MARKERS - HIGHLANDS WIDENING	
	EA
PROJECT TOTAL	13

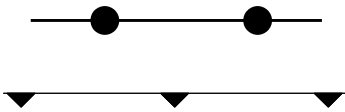
ROADWAY PAVING - BENTON BOULEVARD													
LOCATION	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	GR AGGR BASE CRS, 6 INCH, INCL MATL SY	GR AGGR BASE CRS, 8 INCH, INCL MATL SY	GR AGGR BASE CRS, 10 INCH, INCL MATL SY	TACK COAT GL	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	MILL ASPH CONC PVMT, VARIABLE DEPTH SY	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH LF	INDENTATIO N RUMBLE STRIPS - GROUND-IN- PLACE (SKIP) GLM	CLASS B CONC, BASE OR PVMT WIDENING CY
	TN	TN	TN	TN	SY	SY	SY	GL	TN	SY	LF	GLM	CY
BENTON BOULEVARD													
BEGIN TO STA 22+00	109		58	116			524	92	482	775	175		3
STA 22+00 TO 27+50	527	23	343	686		205	3117	475		1180	336	0.02	14
STA 27+50 TO 33+00	218	54	290	579		485	2628	263				0.13	
STA 33+00 TO 37+00	162	39	215	429		352	1946	195				0.16	
STA 37+00 TO 42+50	291	50	387	723		675	3285	340				0.21	
STA 42+50 TO 48+00	83	10	110	220		89	996	100				0.21	
STA 48+00 TO 52+50	126	44	167	333		392	1514	152				0.18	
STA 52+50 TO 57+50	251	38	333	659		379	2992	301				0.12	
STA 57+50 TO 62+00	135	44	180	359		398	1631	164				0.04	
STA 62+00 TO 67+50	432	23	548	1023	850	209	5077	511	416		367	0.05	1
STA 67+50 TO 72+00	118	40	156	311		363	1411	142				0.17	
STA 72+00 TO 77+50	140	52	185	369		465	1675	168				0.21	
STA 77+50 TO 83+00	143	53	189	378		480	1716	172				0.21	
STA 83+00 TO 88+50	181	52	240	480		469	2180	218				0.20	
STA 88+50 TO END	275	24	409	634	1342	211	3845	352	481		167	0.02	5
HIGHLANDS BOULEVARD													
STA 631+50 TO 634+15	141		89	178			807	126	129		179		20
SHELLBARK WAY													
STA 141+50 TO END	34		44			400		21					
MEINHARD ROAD													
BEGIN TO STA 169+50													
STA 169+50 TO 174+50	74		98	196			887	89					
STA 192+00 TO 198+00	91		8	16			70	59	216	321	94		11
STA 201+50 TO END	162		51	102			464	121	226	72	540		6
SR 30													
BEGIN TO STA 293+00	42		19	12			168	28	29	81	114	0.04	
STA 293+00 TO 298+00	320		325	456	94		2948	297	294		750	0.20	1
STA 301+50 TO 307+00	282		247	308	181		2238	240	182		694	0.21	2
STA 307+00 TO END	37		3	1			19	23		175	16	0.04	1
PROJECT TOTAL	4374	546	4694	8568	2467	5572	42138	4649	2455	2604	3432	3	64

ROADWAY PAVING - HIGHLANDS WIDENING									
LOCATION	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME TN	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME TN	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME TN	GR AGGR BASE CRS, 10 INCH, INCL MATL SY	TACK COAT GL	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME TN	MILL ASPH CONC PVMT, VARIABLE DEPTH SY	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH LF	CLASS B CONC, BASE OR PVMT WIDENING CY
HIGHLANDS BOULEVARD									
STA 634+15 TO 637+00	144	60	120	671	114	197	80	482	4
STA 637+00 TO 641+00	160	95	189	1080	140	247		650	3
STA 641+00 TO 646+50	242	108	215	1250	196	235	125	827	4
STA 646+50 TO 647+60	26			56	16	35	80		4
PROJECT TOTAL	572	263	524	3057	466	714	285	1959	15

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



REVISION DATES		
11/12/18		

SUMMARY QUANTITIES

BENTON BOULEVARD EXTENSION

CHECKED:	DATE:	DRAWING No. 06-0001
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

[illegible]

11/12/18

BENTON BOULEVARD EXTENSION

CHECKED:	DATE:	DRAWING No. 07-0001
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

CONBDR