

**PROPOSED BRIDGE CONSISTS OF**

- 4 - 40'-0" NEXT BEAM SPANS ----- SPECIAL DESIGN
  - 1 - 60'-0" NEXT BEAM SPAN ----- SPECIAL DESIGN
  - 2 - PILE END BENTS ----- SPECIAL DESIGN
  - 4 - PILE INTERMEDIATE BENTS ----- SPECIAL DESIGN
- 24" TYPE I RIP RAP

**NOTES**

- CROSS-SLOPE - THE PROPOSED BRIDGE DECK IS TO BE BUILT ON A NORMAL CROWN OF 2.0%.
- DECK DRAINS - DECK DRAINS TO BE PLACED AT 10 FT SPACING. ELIMINATE DECK DRAINS OVER ENDFILLS.
- TOWER BENTS - INTERMEDIATE BENTS 3 AND 4 SHALL NOT BE TOWER BENTS.
- BEAM ELEVATION - MINIMUM BOTTOM OF BEAM ELEVATION FOR PROPOSED BRIDGE SHALL BE NO LOWER THAN ELEVATION 189.76.
- BRIDGE REMOVAL - REMOVE EXISTING BRIDGE. REMOVE EXISTING SUBSTRUCTURE AS PER THE SPECIFICATIONS.
- SR 64 WILL BE CLOSED TO TRAFFIC DURING THE PROPOSED CONSTRUCTION. TRAFFIC TO BE MAINTAINED BY UTILIZING AN OFF-SITE DETOUR.

**TRAFFIC DATA**

TRAFFIC -----	ADT = 450 (2018)
	ADT = 600 (2038)
DESIGN SPEED -----	55 MPH
TRUCKS -----	9.5 %
24 HR TRUCKS -----	11 %
DIRECTIONAL -----	60 %

**EXISTING UTILITIES**

OVERHEAD UTILITY DOWNSTREAM SIDE OF EXISTING BRIDGE  
BURIED UTILITY DOWNSTREAM SIDE OF EXISTING BRIDGE

BRIDGE SERIAL NO. I73-0012-0  
BRIDGE I.D. NO. I73-00064D-00193E  
PROJECT P.I. NO. 0007181

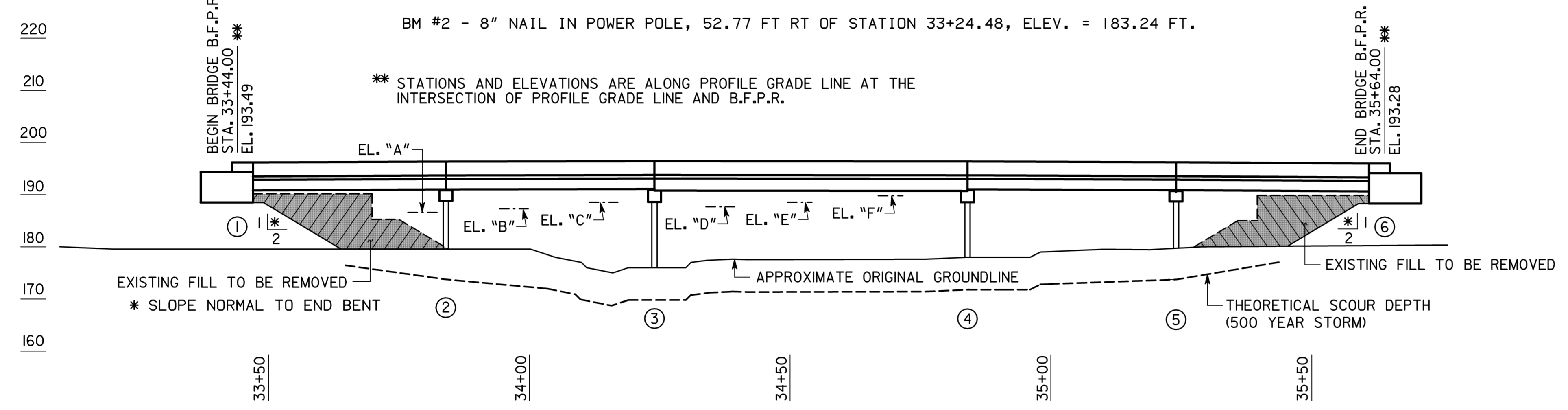
BRIDGE NO. 1

GEORGIA  
**DEPARTMENT OF TRANSPORTATION**  
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

PRELIMINARY LAYOUT  
SR 64 OVER TEN MILE CREEK  
LANIER COUNTY CSBRG-0007-00(I81)

SCALE: 1" = 15'-0", UNLESS NOTED MARCH 2014

DRAWING NO. 35-001	DESIGNED CRP	CHECKED STB	REVIEWED DLC/WMD
BRIDGE SHEET 1 OF 1	DRAWN RGE	DESIGN GROUP STB	APPROVED BFR



**ELEVATION**

**FLOODSTAGE ELEVATIONS (CREEK FLOODS)**

- "A" = 50 YEAR CREEK FLOODSTAGE ELEV. = 186.77
- "B" = 100 YEAR CREEK FLOODSTAGE ELEV. = 187.37
- "C" = 500 YEAR CREEK FLOODSTAGE ELEV. = 188.56

**FLOODSTAGE ELEVATIONS (ABNORMAL FLOODS)**

- "D" = 50 YEAR ABNORMAL FLOODSTAGE ELEV. = 187.76
- "E" = 100 YEAR ABNORMAL FLOODSTAGE ELEV. = 188.46
- "F" = 500 YEAR ABNORMAL FLOODSTAGE ELEV. = 189.83

**DESIGN DATA**

SPECIFICATIONS ----- AASHTO LRFD 5TH EDITION, 2010  
TYPICAL HL-93 LOADING ----- IMPACT ALLOWED  
FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT

**DRAINAGE DATA**

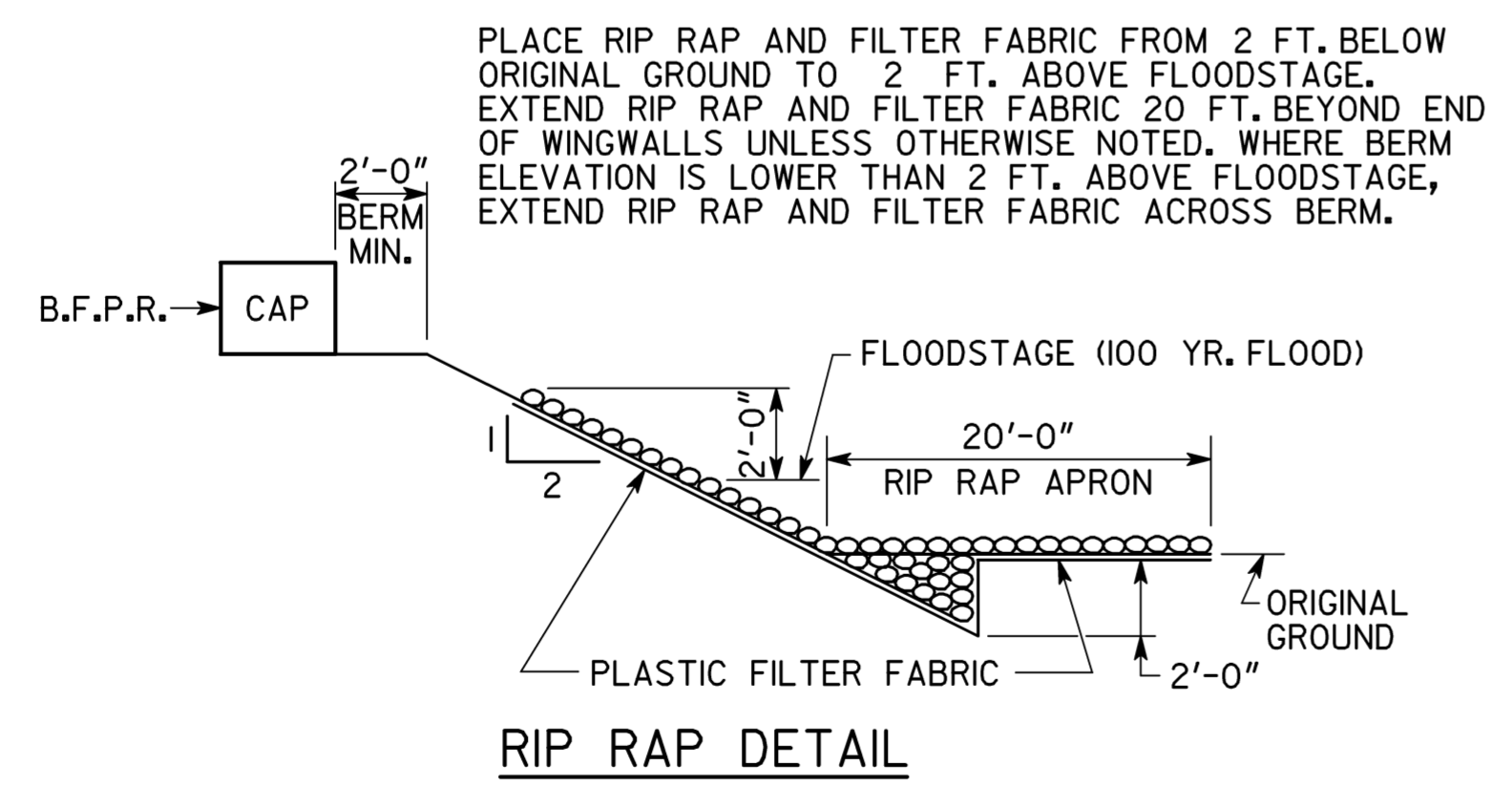
DRAINAGE AREA ----- 50.8 SQ MILES

**CREEK FLOOD STAGE**

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	3,260 CFS	2.20 FPS	1,481 SQ FT	0.33 FT
100 YEAR	3,920 CFS	2.45 FPS	1,602 SQ FT	0.38 FT
500 YEAR	5,420 CFS	2.93 FPS	1,849 SQ FT	0.49 FT

**ABNORMAL FLOOD STAGE**

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	3,260 CFS	1.95 FPS	1,676 SQ FT	0.23 FT
100 YEAR	3,920 CFS	2.15 FPS	1,822 SQ FT	0.27 FT
500 YEAR	5,420 CFS	2.56 FPS	2,118 SQ FT	0.34 FT



**RIP RAP DETAIL**

END BENT	ELEVATIONS
1 LT & RT	188.31
6 LT & RT	188.10

NOTE: FOR BRIDGE ENDROLL STAKING PURPOSES ONLY.

BENT LOCATION	100 YEAR STORM			500 YEAR STORM		
	GENERAL	LOCAL	TOTAL	GENERAL	LOCAL	TOTAL
BENT 2	1.8	2.0	3.8	3.6	2.2	5.8
BENTS 3 & 4	1.8	2.3	4.1	3.6	2.6	6.2
BENT 5	1.8	2.2	4.0	3.6	2.5	6.1

NOTE: THE 500 YEAR SCOUR IN THE CREEK IS 3.6 FT

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