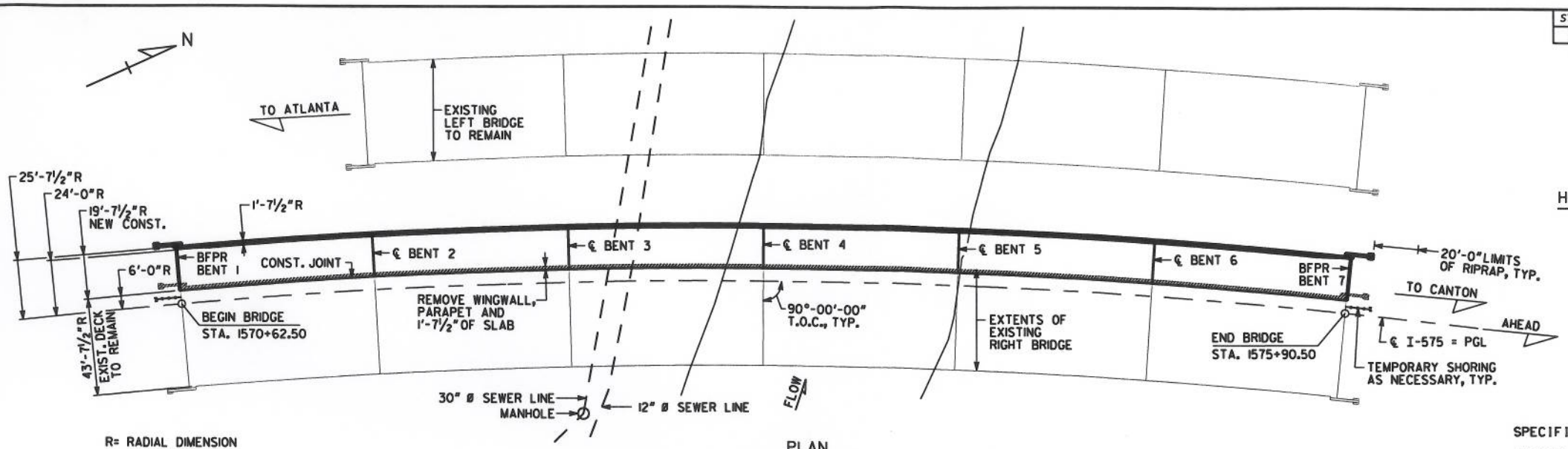
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	NH000-0575-01(028)		



R= RADIAL DIMENSION

PLAN
SCALE: 1" = 30'-0"

P.I. STA. = 1571+36.58
Δ = 34°-59'-10"
D = 2°-00'-12"
T = 901.38 FT
L = 1746.39 FT
R = 2860.00 FT

℄ I-575
HORIZONTAL CURVE DATA

-2.9152% +3.0000%
P.V.I. STA. 1573+59.50 EL. 886.88
1200 FT V.C.

I-575
GRADE DATA

BERM ELEVATIONS ⊛		
BENT	LEFT	RIGHT
1	891.46	890.55
7	890.83	889.92

⊛ NOTE: FOR BRIDGE ENDROLL STAKING PURPOSES ONLY.

DESIGN DATA

SPECIFICATIONS ---------- AASHTO 17TH EDITION, 2002
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY B)
TYPICAL HS20-44 AND/OR MILITARY LOADING --- IMPACT ALLOWED
FUTURE PAVING ALLOWANCE ---------- 30 LBS PER SQ FT

~~WIDENED~~ WIDENED BRIDGE CONSISTS OF

6 - 88'-0" BULB TEE, 54 IN, PSC BEAM SPANS -------- SPECIAL DESIGN
2 - PILE END BENTS ---------- SPECIAL DESIGN
5 - CONCRETE INTERMEDIATE BENTS ---------- SPECIAL DESIGN

24" TYPE I RIP RAP

EXISTING UTILITIES UNDER BRIDGE

30" STEEL SANITARY SEWER LINE
12" STEEL SANITARY SEWER LINE

DRAINAGE DATA

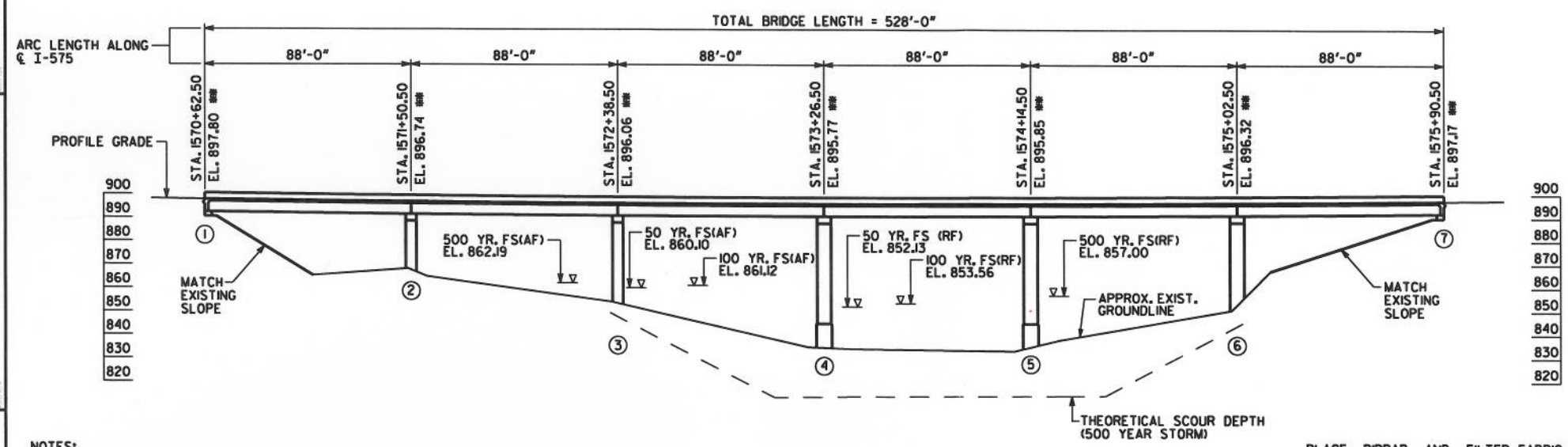
DRAINAGE AREA ---------- 142.0 SQ MI

RIVER FLOODS

FLOOD FREQUENCY	DISCHARGE THRU BRIDGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	15,780 CFS	5.55 FPS	2,846 SQ FT	0.16 FT
100 YEAR	18,250 CFS	5.80 FPS	3,145 SQ FT	0.17 FT
500 YEAR	24,913 CFS	6.39 FPS	3,901 SQ FT	0.20 FT

ABNORMAL FLOODS

FLOOD FREQUENCY	DISCHARGE THRU BRIDGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	15,780 CFS	3.35 FPS	4,705 SQ FT	0.06 FT
100 YEAR	18,250 CFS	3.69 FPS	4,945 SQ FT	0.08 FT
500 YEAR	24,913 CFS	4.80 FPS	5,187 SQ FT	0.13 FT

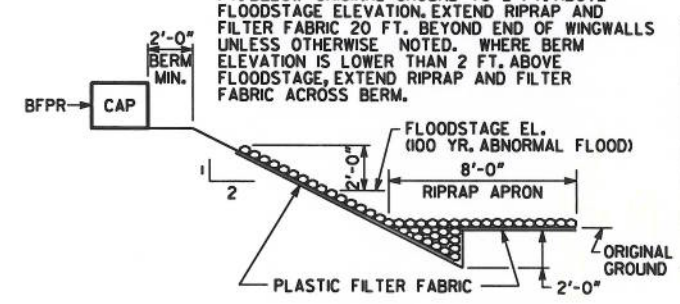


ELEVATION
SCALE: 1" = 30'-0"

NOTES:

1. *** STATIONS ARE ALONG ℄ I-575 AT THE INTERSECTION OF ℄ I-575 AND BFPR OR ℄ BENT. ELEVATIONS ARE ALONG PGL.
2. END BENT PILES NOT SHOWN.
3. THE PROPOSED BRIDGE DECK IS TO BE BUILT ON A CONSTANT CROSS SLOPE OF 7%, SLOPING DOWN TO THE RIGHT.
4. REPAIR AND REPLACE EXISTING RIPRAP AS NEEDED. EXTEND APRON ACROSS TOE OF EXISTING SLOPES.
5. THE MINIMUM BOTTOM OF BEAM ELEVATION FOR THE PROPOSED BRIDGE SHALL BE NO LOWER THAN ELEVATION 863.10
6. THE PROPOSED BRIDGE BOTTOM OF BEAM ELEVATION IS 890.95
7. ALL BENTS ARE RADIAL.

PLACE RIPRAP AND FILTER FABRIC FROM FT. BELOW ORIGINAL GROUND TO 2 FT. ABOVE FLOODSTAGE ELEVATION. EXTEND RIPRAP AND FILTER FABRIC 20 FT. BEYOND END OF WINGWALLS UNLESS OTHERWISE NOTED. WHERE BERM ELEVATION IS LOWER THAN 2 FT. ABOVE FLOODSTAGE, EXTEND RIPRAP AND FILTER FABRIC ACROSS BERM.



RIPRAP DETAIL
NO SCALE

THEORETICAL SCOUR DEPTHS (FT)						
	100 YEAR STORM			500 YEAR STORM		
BENT LOCATION	GENERAL	LOCAL	TOTAL	GENERAL	LOCAL	TOTAL
BENT 2	0.0	0.0	0.0	0.0	0.0	0.0
BENT 3	0.0	0.0	0.0	0.0	3.3	3.3
BENT 4	4.5	5.4	9.9	13.3	6.1	19.4
BENT 5	7.4	10.2	17.6	9.8	11.1	20.9
BENT 6	0.0	0.0	0.0	0.0	3.3	3.3

EXISTING RIGHT BRIDGE SERIAL NO. 057-0044-0
EXISTING RIGHT BRIDGE I.D. NO. 057-00417D-010.44N
PROJECT P.I. NO. 713640

BRIDGE NO. 42

ABBAS ESHAGIEH-MEYBODI	11/20/09	DRAWN BY
		CHECKED BY
		SUPERVISOR
		APPROVED

REVISIONS

NO	DATE	DESCRIPTION	ORIG	CHKR	SUPV	APPR
A	6/30/09	Progress Drawings (SO II Revision 2)	AEM	JCR	GLE	SJL
B	9/25/09	50% SUBMISSION	AEM	JCR	GLE	SJL
C	11/20/09	HYDRAULIC STUDY SUBMISSION	AEM	JCR	GLE	SJL

GTP Georgia Transportation Partners

NORTHWEST 1-75/1-575 CORRIDOR

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

JBT J.B. Trimble, Inc.
2550 Heritage Ct, SE Suite 250
Atlanta GA 30339-3062
(770) 952-1022

GEORGIA REGISTERED PROFESSIONAL ENGINEER JOHN R. McWHORTER 11-25-09

BRIDGE SHEET
1 OF 2

1-75 / 1-575 NORTHWEST CORRIDOR

1-575 REVERSIBLE OVER LITTLE RIVER
PLAN AND ELEVATION

CHEROKEE COUNTY NH000-0575-01(028)

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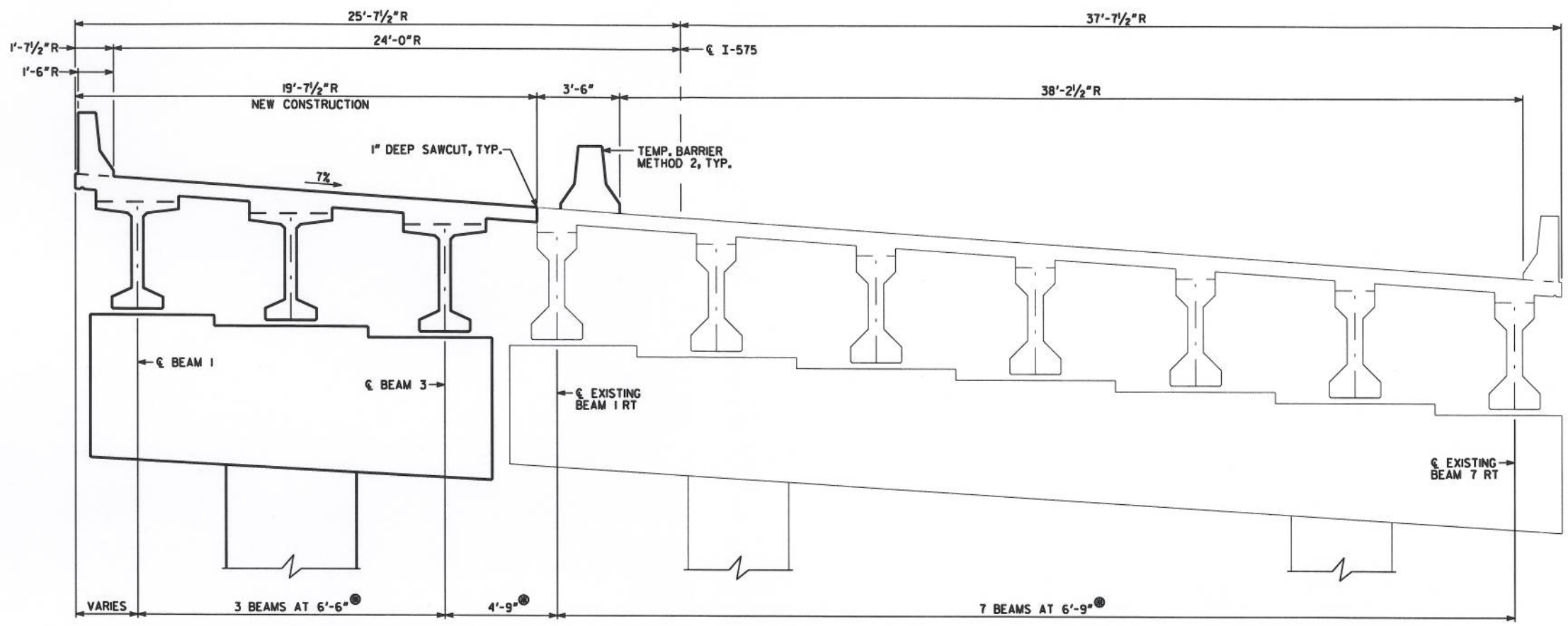
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	NH000-0575-01(028)		

R = RADIAL DIMENSION



ALL BEAMS ARE CHORDS OF CONCENTRIC CIRCLES MEASURED BETWEEN ℄ BENTS OR BACK FACE PAVING REST.

TYPICAL SECTION
(LOOKING AHEAD, RIGHT BRIDGE)

CONSTRUCTION SEQUENCE

1. PLACE TEMPORARY BARRIER. MAINTAIN TWO 12'-0" LANES OF TRAFFIC ON EXISTING NORTHBOUND BRIDGE.
2. REMOVE PORTIONS OF EXISTING NORTHBOUND BRIDGE AS NECESSARY FOR NEW CONSTRUCTION.
3. CONSTRUCT NEW SUBSTRUCTURE.
4. CONSTRUCT NEW SUPERSTRUCTURE.

BRIDGE NO. 42

ABBAS ESHAGJEH-MEYBODI	11/20/09	DRAWN BY / DATE
		CHECKED BY / DATE
		SUPERVISOR / DATE
		APPROVED / DATE

REVISIONS

NO	DATE	DESCRIPTION	ORIG	CHKR	SUPV	APPR
A	6/30/09	Progress Drawings (50 11 Revision 2)	AEM	JCR	GLE	SJL
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GTP Georgia Transportation Partners

NORTHWEST I-75/I-575 CORRIDOR

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STATE OF GEORGIA

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2550 Heritage Ct. SE Suite 250
Atlanta GA 30339-3062
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BRIDGE SHEET
2 OF 2

I-75 / I-575 NORTHWEST CORRIDOR

I-575 REVERSIBLE OVER LITTLE RIVER
CONSTRUCTION SEQUENCE

CHEROKEE COUNTY NH000-0575-01(028)

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