

BENCH MARK: BM 211
 STA. 188+46.596, 73.673' RT. EL. 701.457
 CHISELED SQUARE ON WALK ON SOUTH
 SIDE OF ROUTE 30, IN FRONT OF J.C. FLICKS VIDEO

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 353	12 & 13	WILL.	683	21
FED. ROAD DIST. #	ILLINOIS	FED. AID PROJECT		
* REVISIONS TO BE SHOWN IN THIS MANNER				
* CONTRACT NO. 099-C013				

EXISTING STRUCTURE: 36" Ø x 117'-0" R.C.P.

NO SALVAGE

PROPOSED IMPROVEMENTS:
 CONSTRUCTION OF NEW SINGLE 10'-0" x 4'-0" AND
 SINGLE 3'-0" x 2'-0" BOX CULVERTS IN STAGES MAINTAINING
 TWO LANES OF TRAFFIC.

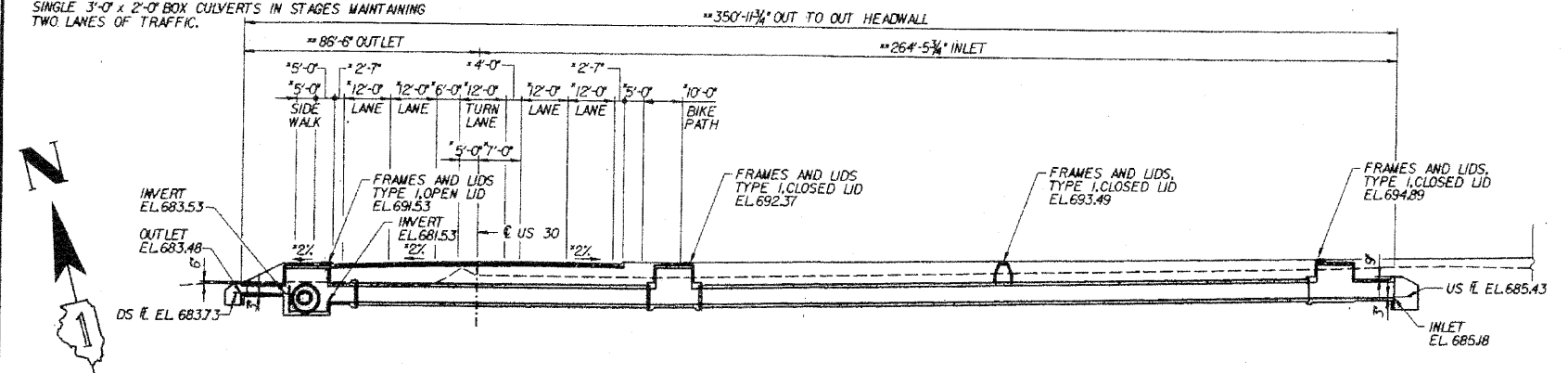
STATION 182+31.00
 BUILT BY
 STATE OF ILLINOIS
 FAP 353 SECT. (12 & 13) WRS-3
 LOADING HS20
 STR. NO. 099-C013

NAME PLATE

NOTE: SEE STANDARD DRAWING 515001
 FOR NAME PLATE DETAILS.

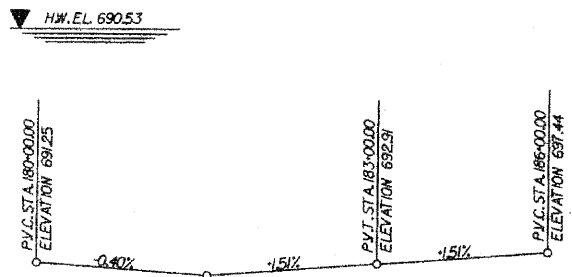
GENERAL NOTES

1. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53 GRADE 60.
2. A DISTANCE NOT LESS THAN 6'-0" OF THE BARREL SHALL BE POURED MONOLITHICALLY WITH THE WINGWALLS.
3. EXPOSED EDGES SHALL HAVE A 3/4" CHAMFER.
4. IN ACCORDANCE WITH ARTICLE 540.04 OF THE STANDARD SPECIFICATIONS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DIVERT STREAM FLOW DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREAS FREE OF WATER. THE METHOD OF WATER DIVERSION SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER AND THE COST SHALL BE INCLUDED WITH "REMOVAL OF EXISTING STRUCTURES". CLEAN FILL (GRANULAR) MATERIAL WILL ONLY BE ALLOWED.
5. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M259 (DESIGN FILL HEIGHT - 6'-0")



LONGITUDINAL SECTION

* MEASURED PERPENDICULAR TO CENTERLINE OF ROADWAY
 ** MEASURED ALONG CENTERLINE OF CULVERT



PROFILE GRADE

© P.G. WBD & EBD.

DESIGN SPECIFICATIONS

AASHTO 2002 SPECIFICATIONS.

LOADING HS20-44

ALLOW 50"/SQ.FT. FOR FUTURE WEARING SURFACE.

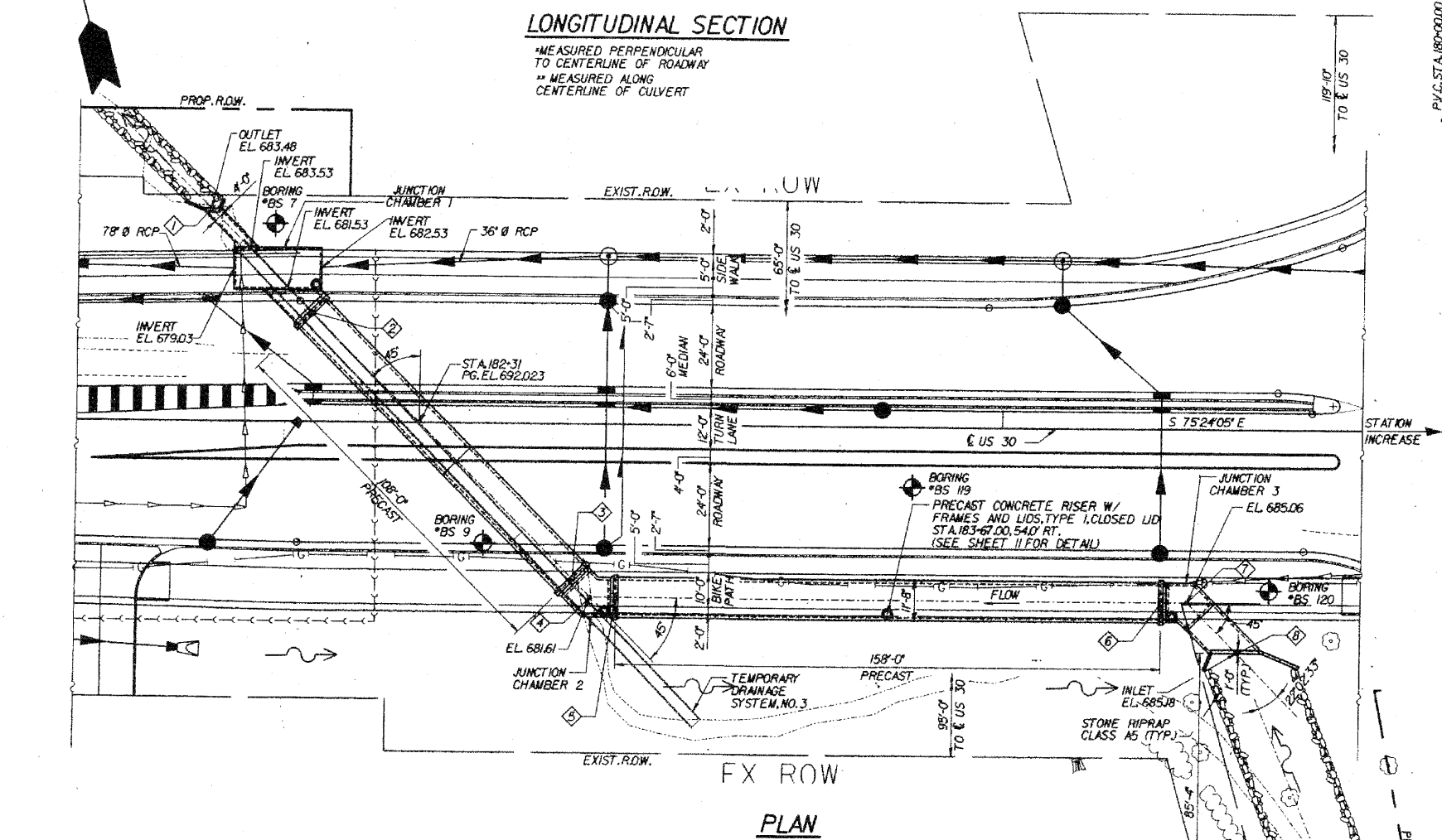
DESIGN STRESSES

FIELD UNITS
 f_c = 3,500 PSI
 f_y = 60,000 PSI (REINFORCEMENT)
 PRECAST UNITS
 f_c = 5,000 PSI
 f_y = 60,000 PSI (REINFORCEMENT)

PT.	STATION	OFFSET
1	181+69.83	617'2" LT.
2	181+99.33	3167' LT.
3	182+75.70	44697' RT.
4	182+81.00	50000' RT.
5	182+88.50	50000' RT.
6	184+46.50	50000' RT.
7	184+54.00	50000' RT.
8	184+68.67	6467'2" RT.

TOTAL BILL OF MATERIALS

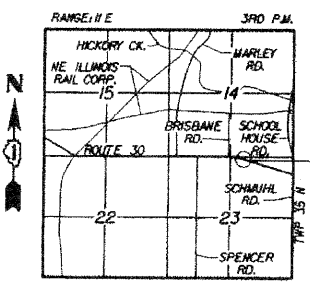
ITEM	UNIT	QUANTITY
STONE RIPRAP, CLASS A5	TON	315
FILTER FABRIC	SQ.YD.	320
REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1
REINFORCEMENT BARS	POUND	25,966
TEMPORARY SHEET PILING	SQ.FT.	1,830
NAME PLATES	EACH	1
CONCRETE BOX CULVERTS	CU.YD.	130.9
PRECAST CONCRETE BOX CULVERT 10' x 4'	FOOT	266.0
FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	1
FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	3
GEOTEXTILE RETAINING WALL	SQ.FT.	155
TEMPORARY DRAINAGE SYSTEM, NO. 3	FOOT	75
PRECAST CONCRETE RISER	EACH	1



WATERWAY INFORMATION

DRAINAGE AREA (SQ.MI.) ± 0.21		LOW GRADE ELEV. (FEET) EXIST = 690.00 AT STA. 177+38		MAX. RECORDED H.W.E. -		
		PROPOSED = 691.12 AT STA. 180+63				
FLOOD	FREQ. YR.	DISCHARGE C.F.S.	WATERWAY OPENING EXISTING (square feet)	NATURAL H.W.E. EXISTING U/S Face	CREATED HEAD EXISTING (feet)	HEADWATER ELEVATION EXISTING
			PROPOSED (square feet)	PROPOSED U/S Face	PROPOSED (feet)	PROPOSED
OVERTOPPING (EX)	3	43	6.00	688.89	1.11	690.00
	10	97	6.00	690.28	0.00	690.14
DESIGN	50	255	6.00	692.57	0.00	691.79
BASE	100	304	6.00	693.08	0.00	693.08
OVERTOPPING (PT)	150	354	40.00	690.91	0.21	691.12
MAX. CALC.	500	730	6.00	696.20	0.00	696.20

DESIGNED	ASP
CHECKED	LNB
DRAWN	BEM
CHECKED	ASP



LOCATION SKETCH



Wayne A. Tripp
 11-30-10



DLZ 85 W. Algonquin Rd. Ste. 220
 Arlington Heights IL 60005

CULVERT 'J'
 GENERAL PLAN
 U.S. ROUTE 30 (LINCOLN HIGHWAY)
 F.A.P. 353 (U.S. 30)
 SECTION (12 & 13) WRS-3
 STATION 182+31.00
 WILL COUNTY
 STRUCTURE NUMBER 099-C013

REVISIONS	
NAME	DATE