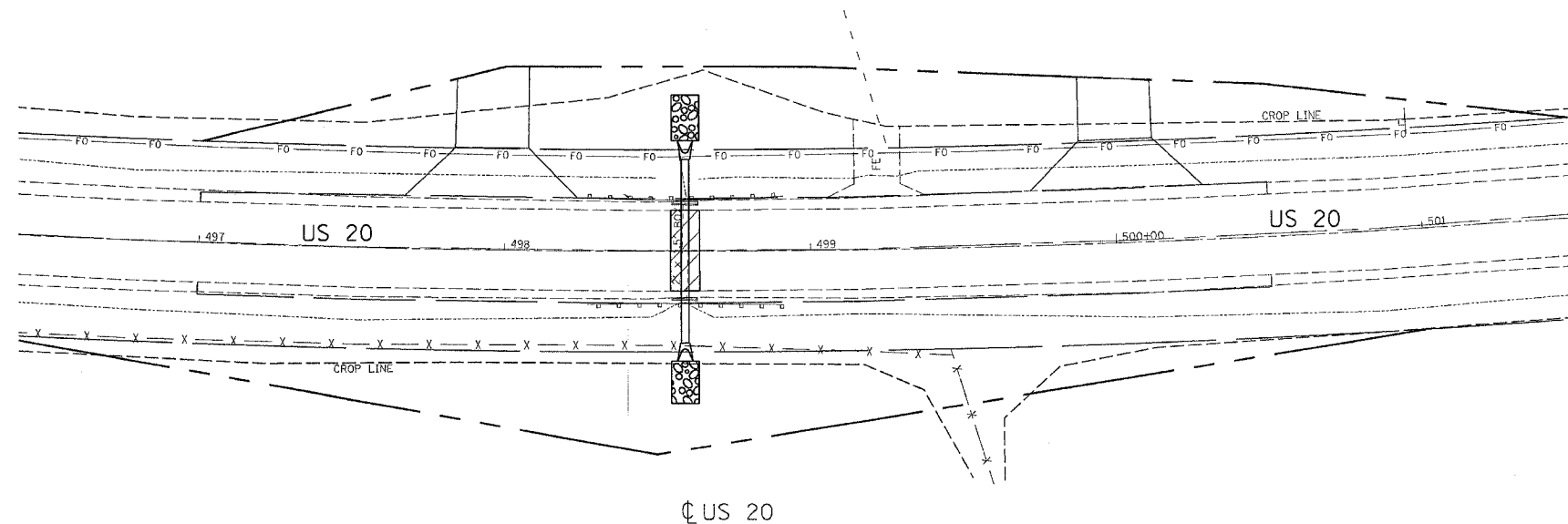


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	21
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

# CULVERT LOCATION NO. 3

## 30" EQRS ARCH PIPE

### STA. 498 + 59.03



Build tops of headwalls parallel to grade line.

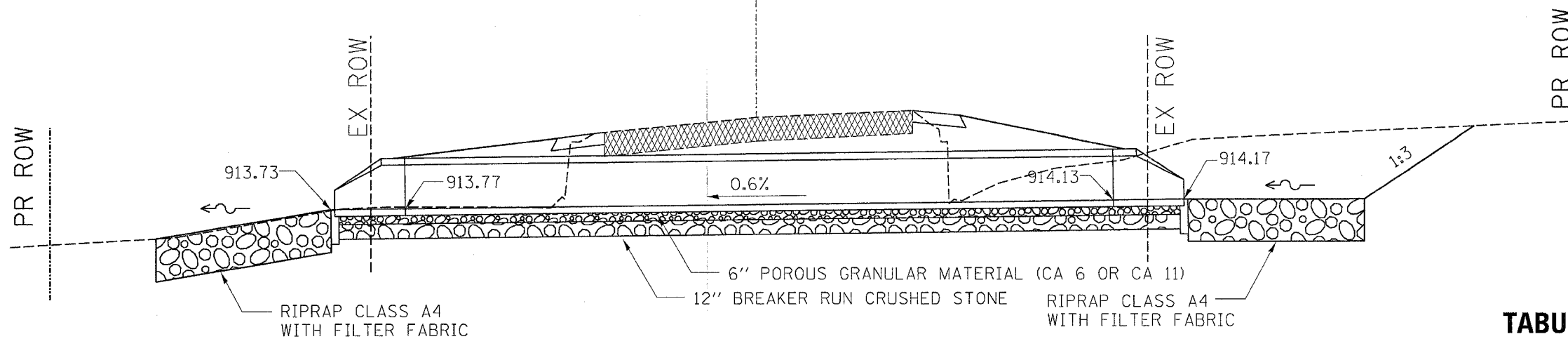
Class "SI" concrete shall be used throughout. Exposed edges shall be beveled 3/4 inch.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, grade 60.

A layer of Porous Granular Bedding Material (min 6") shall be placed below the elevation of the bottom of the box culvert and extend at least 2 feet beyond each side of the box culvert, according to Section 540 of the Standard Specifications.

The contractor is responsible for maintaining flow in the manner acceptable to the engineer.

SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION



### TABULATION OF CULVERT QUANTITIES

Drainage Area =		11.6 acres		
Existing Low Grade Elevation:		917.65 ft. @ 498+59.03		
Proposed Low Grade Elevation:		917.65 ft. @ 498+59.03		
Flood	Frequency Year	Discharge cfs	Headwater Elev. Existing	(ft) Proposed
Ten-Year	10	9	915.68	915.24
Design	50	13	916.07	915.57
Base	100	15	916.25	915.74
EX Overtopping				
PR Overtopping				
Max Calc	500	21	916.88	916.23

DESCRIPTION	UNIT	QTY.
PIPE CULV, CLASS A, TYPE 1 EQRS 30"	FOOT	60
PRC Flared End Sections, EQRS 30"	EACH	2
Breaker Run Crushed Stone (12")	TON	41.5
Removal of Existing Structures No. 3	EACH	1
Stone Rip Rap Class A4 (2 - 9' X 15')	SQ. YD.	30
Filter Fabric (2 - 9' X 15')	SQ. YD.	30

10-Year Velocity through Existing Culvert = 5.8 fps  
 10-Year Velocity through Proposed Culvert = 5.3 fps