

STATEMENT OF ESTIMATED QUANTITIES					
SPEC. REF.	ITEM	UNIT	QUANTITIES		
			S.A.P.	OTHER	
2521.501	4" CONCRETE SIDEWALK	S.F.	3150	1850	
2521.511	2" BITUMINOUS SIDEWALK	S.F.	3345	1965	
2511.501	AGGREGATE BASE CLASS 5	TON	88	52	
2501.511	12" CM PIPE CULVERT	L.F.	60		
2501.515	12" CM APRONS	EA.	2		
2575.505	SODDING, TYPE LAWN & BOULEVARD	S.Y.	2000		

BASIS FOR PLANNED QUANTITIES

AGGREGATE BASE, CLASS 5:
 COMPACTED DRY DENSITY 1.86 TON/C.Y.

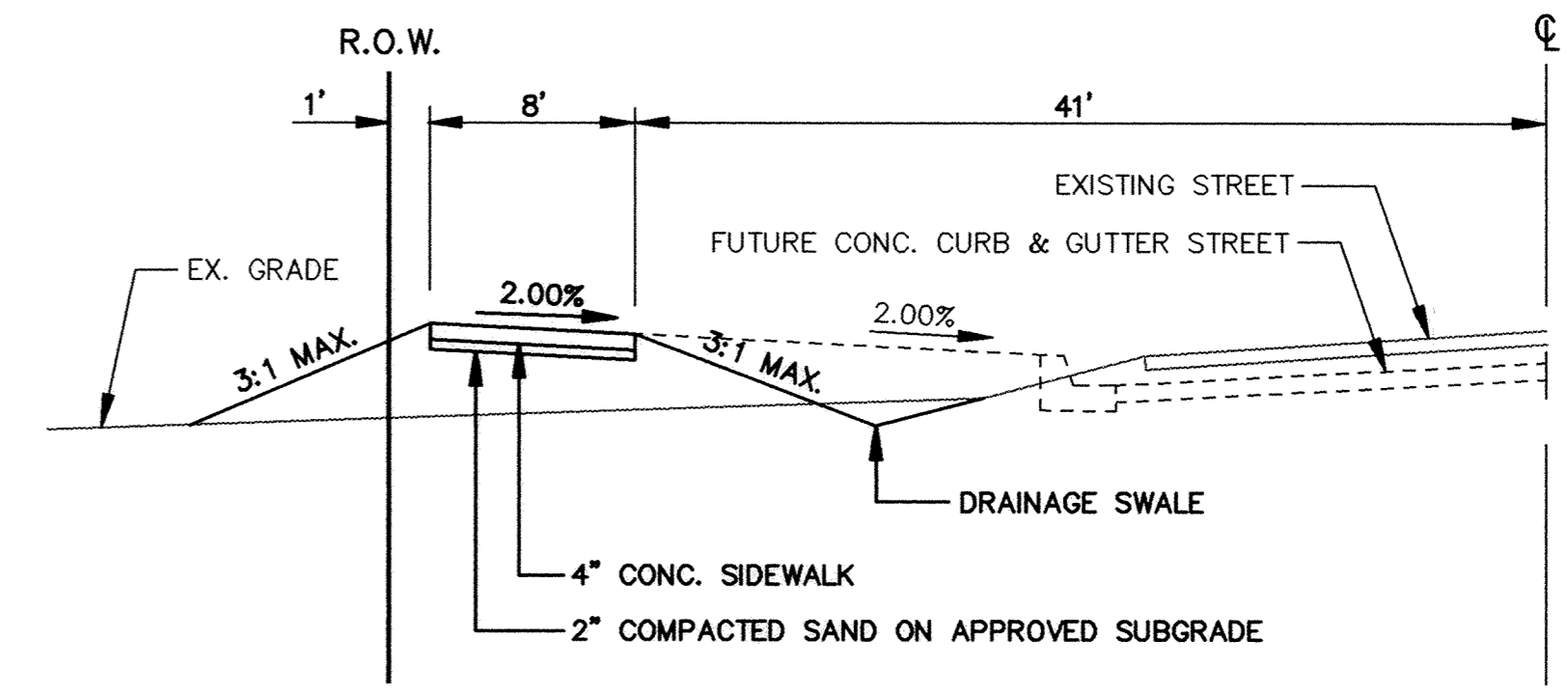
2331 TYPE 31 BITUMINOUS BASE COURSE:
 BITUMINOUS MATERIAL - 5.0% OF MIXTURE BY WEIGHT
 BITUMINOUS MIXTURE - 1.98 TON/C.Y.

2331 TYPE 41 BITUMINOUS WEAR COURSE:
 BITUMINOUS MATERIAL - 6.1% OF MIXTURE BY WEIGHT
 BITUMINOUS MIXTURE - 1.98 TON/C.Y.

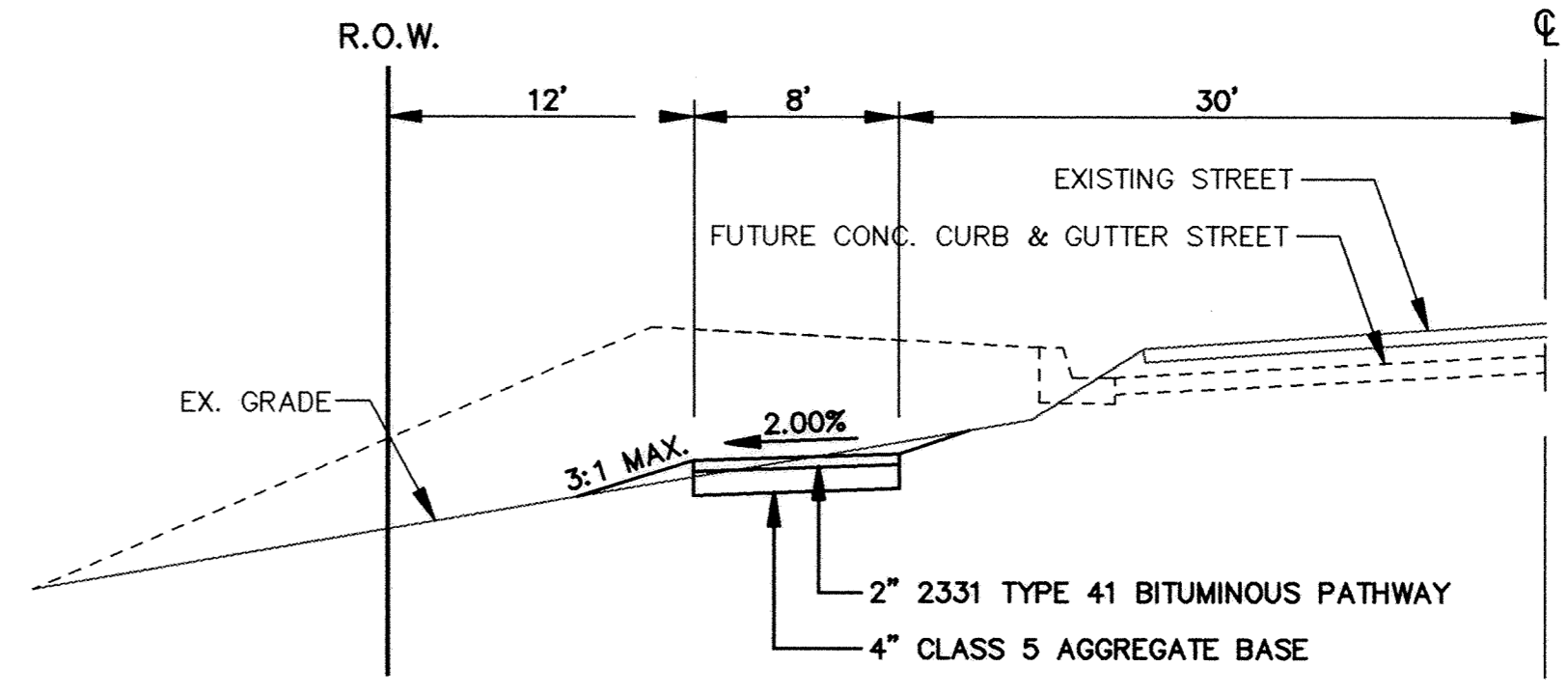
BITUMINOUS TACK COAT:
 0.05 GAL./S.Y.

THE FOLLOWING STANDARD PLATES AS APPROVED BY FHWA SHALL APPLY:

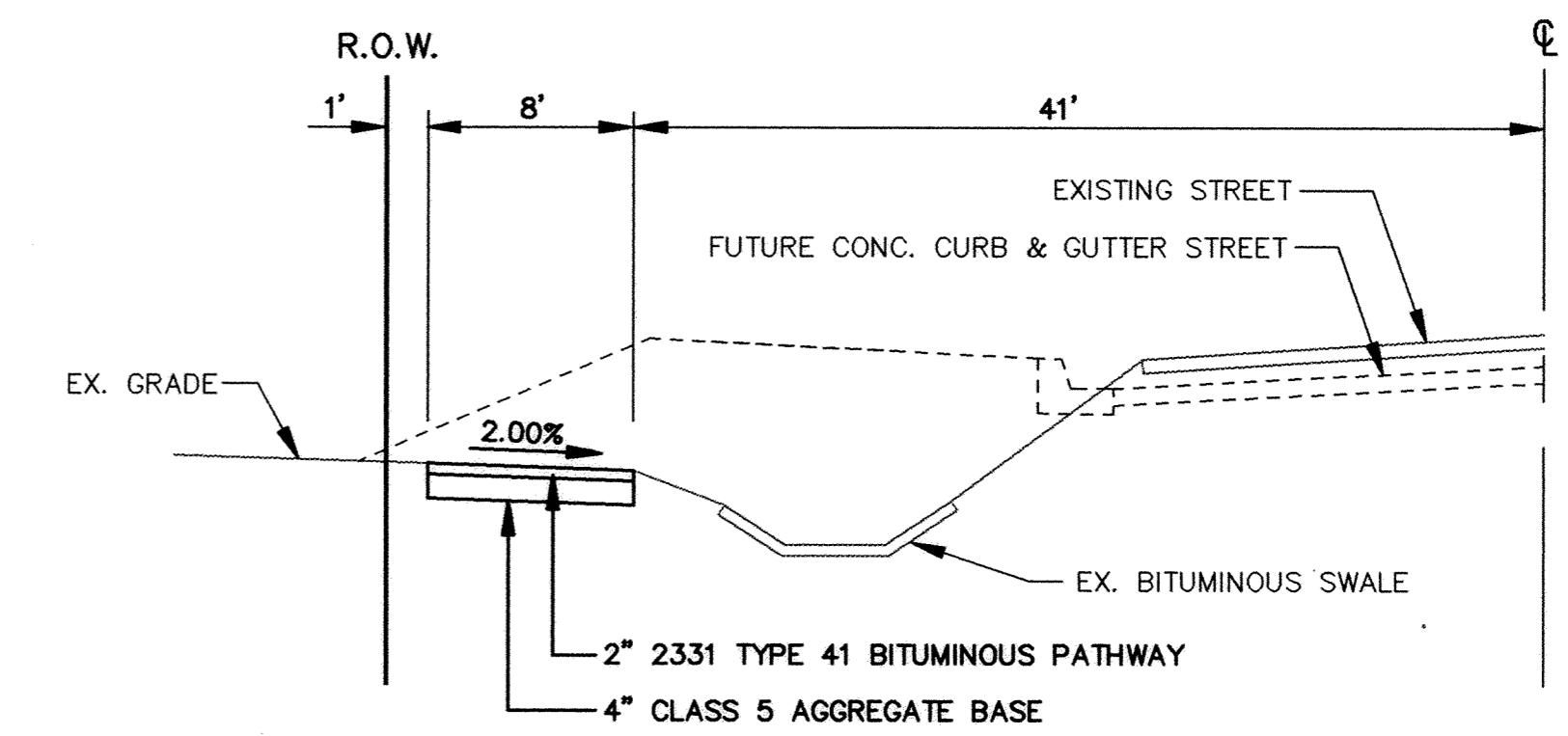
STANDARD PLATES	
PLATE NO.	DESCRIPTION
0005A	SPECIFICATION REFERENCE TO STANDARD PLATES
3040F	CORRUGATED METAL PIPE CULVERT
3123J	METAL APRON FOR CS PIPE
3124B	METAL APRON CONNECTION
7035J	CONCRETE WALK & CURB RETURNS AT ENTRANCES
7036D	PEDESTRIAN CURB RAMP
8000I	STANDARD BARRICADES
9102D	TURF ESTABLISHMENT AREAS AT PIPE ENDS



TYPICAL SECTION
 STA. 0+40 TO 6+35



TYPICAL SECTION
 STA. 6+60 TO 10+75



TYPICAL SECTION
 STA. 11+25 TO 12+35

RECORD PLAN
 SEPT. 1994

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Mark J. Abraham
 DATE 9/17/93 REG. NO. 19130

MS&A CONSULTING ENGINEERS
 Maier Stewart & Associates Inc.

1959 SLOAN PLACE (612) 774-6021 ST. PAUL, MINNESOTA 55117
 9800 SHELARD PARKWAY (612) 546-0432 MINNEAPOLIS, MINNESOTA 55441

REVISIONS	DATE	DESCRIPTION	DESIGNED	CHECKED	DRAWN
			GG	MJG	GG

CITY OF ELK RIVER
 JACKSON AVENUE SIDEWALK
 S.A.P. 204-104-05
 PROJECT LOCATION & TYPICAL SECTIONS

DATE SEPT. 1993 SHEET 2 OF 6 SHEETS PROJECT NO. 230-175