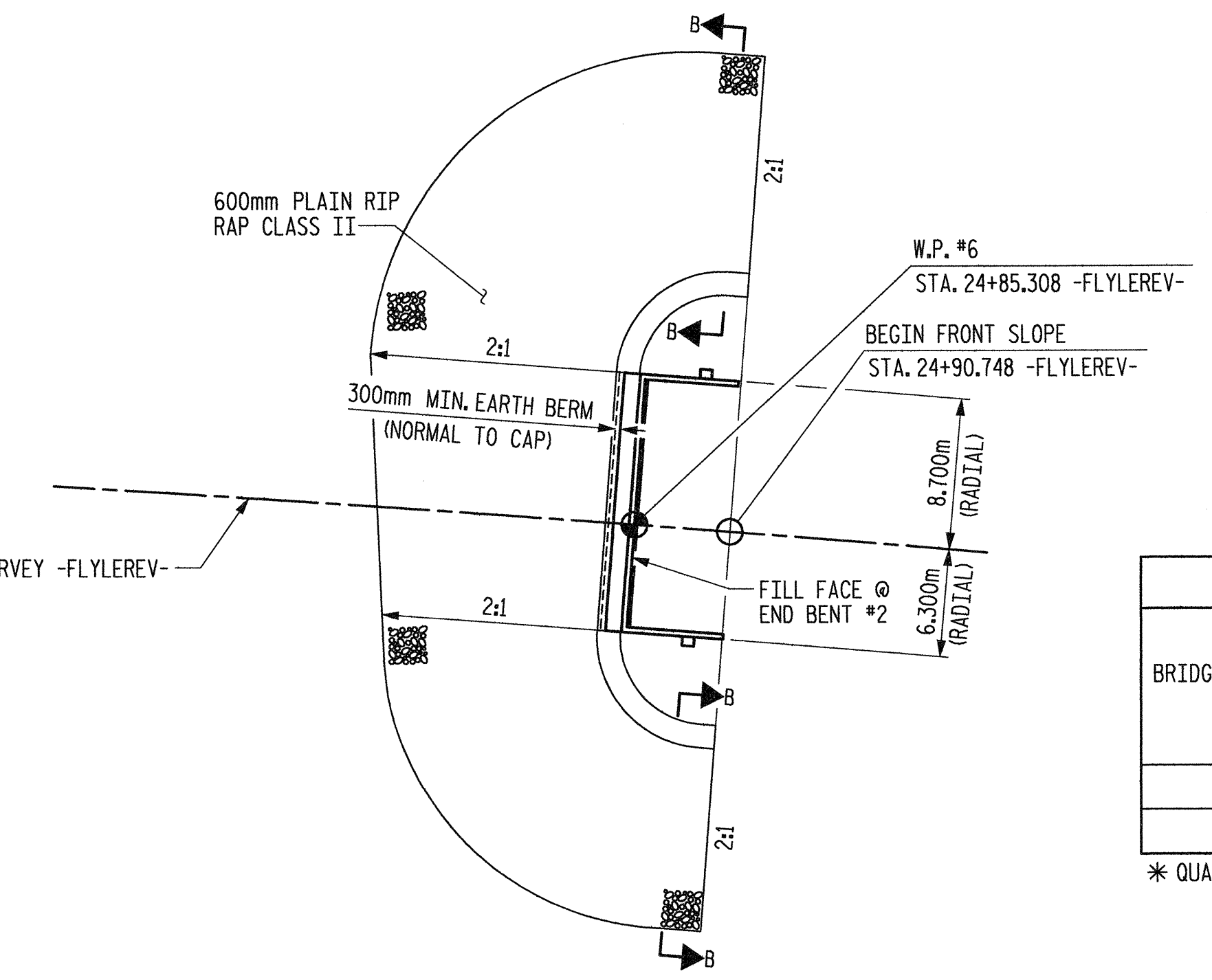


PLAN AT END BENT #1
(ALTERNATE "A" SLOPE PROTECTION)



PLAN AT END BENT #2
(CLASS II RIP RAP)

GENERAL NOTES

SLOPE PROTECTION SHALL BE PLACED UNDER THE ENDS OF THE BRIDGE AS SHOWN IN THE DETAILS. THE CONTRACTOR, AT HIS OPTION, MAY USE ALTERNATE "B" ONLY FOR HIGHWAY OVER HIGHWAY GRADE SEPARATIONS WITH 2:1 END BENT SLOPE IN RURAL, UNPOPULATED AREAS. STRAIGHT EDGING WILL NOT BE REQUIRED UNLESS, IN THE OPINION OF THE ENGINEER, VISUAL INSPECTION INDICATES A NEED FOR IT. METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE AS PRESCRIBED IN SECTION 462 OF THE STANDARD SPECIFICATIONS. FOR BERM WIDTH, SEE GENERAL DRAWING.

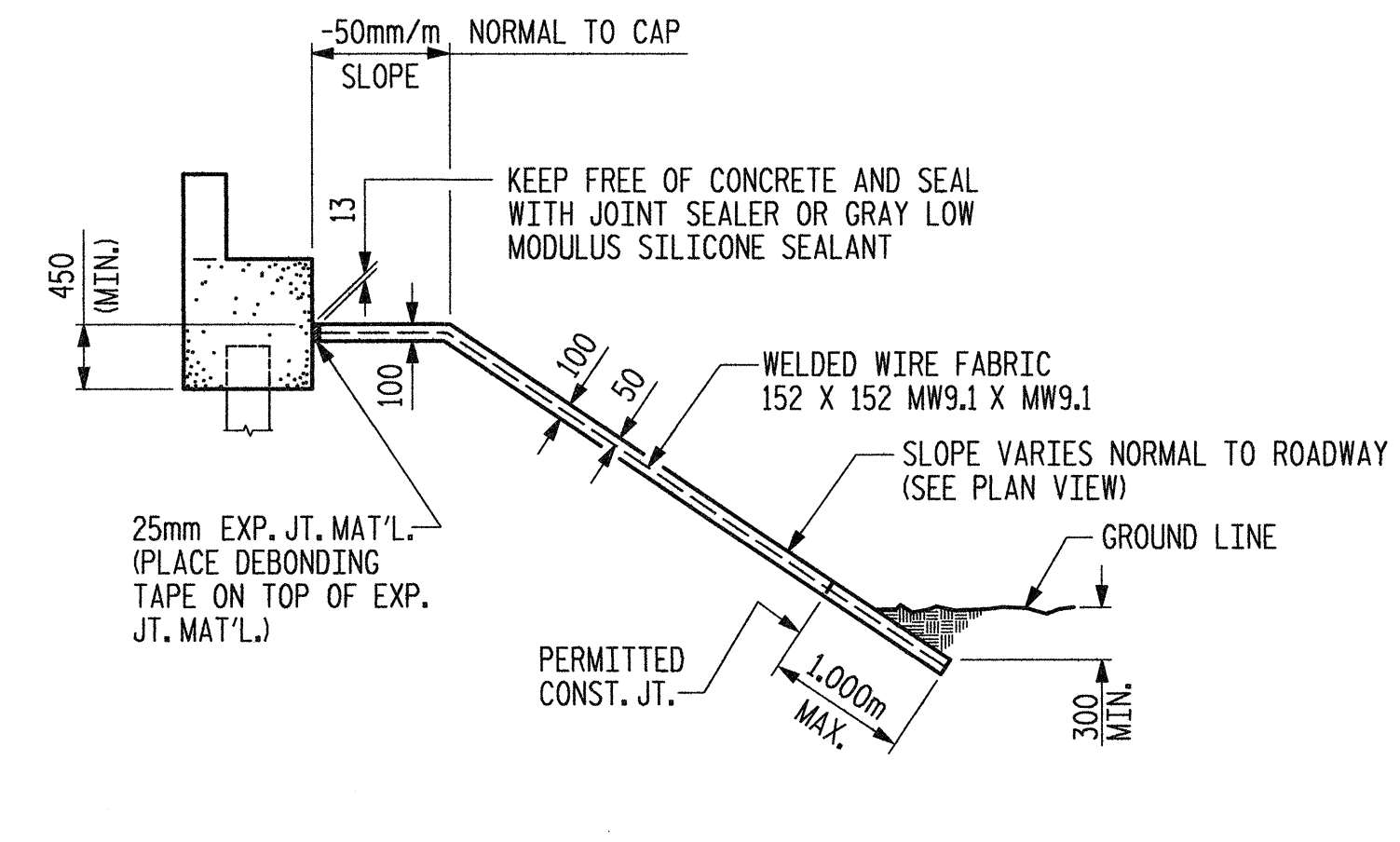
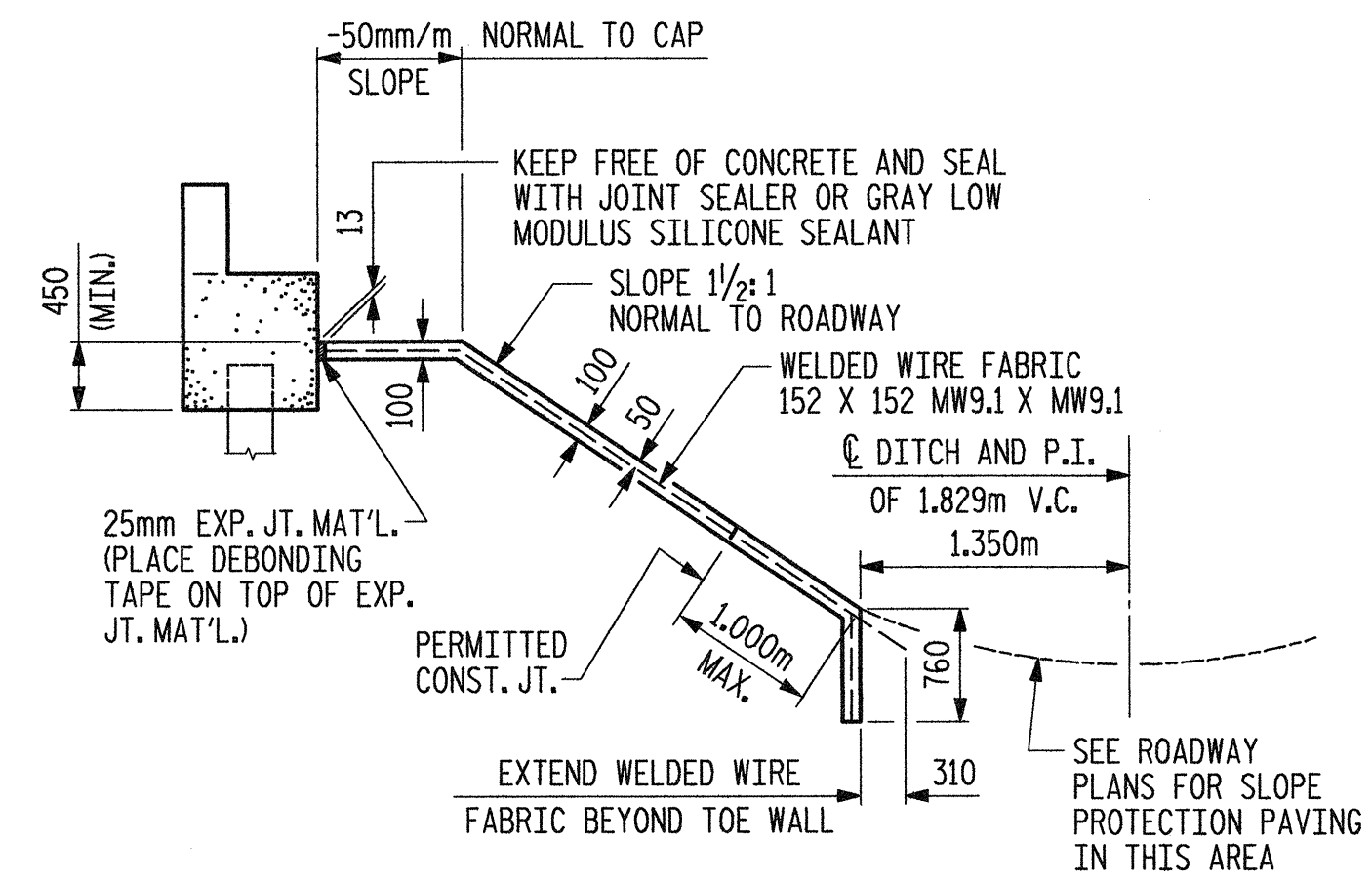
ALTERNATE "A"

ALTERNATE "A" SHALL CONSIST OF 100mm POURED-IN-PLACE CONCRETE PAVING AS SHOWN IN THE DETAILS ON THIS SHEET. CONCRETE SHALL BE CLASS "B". THE CONCRETE SURFACE SHALL BE FLOATED WITH A WOODEN FLOAT AND FINISHED. WELDED WIRE FABRIC REINFORCING SHALL BE 152 X 152 - W9.1 X W9.1, 1520mm WIDE. SLOPE PROTECTION SHALL BE POURED IN 1520mm STRIPS AS SHOWN IN THE "POURING DETAIL" WITH 600mm LONG #13 BARS PLACED ALONG THE SLOPE BETWEEN STRIPS AT 450mm MAXIMUM SPACING. SLOPE PROTECTION MAY BE POURED IN ALTERNATE 1220mm AND 1520mm STRIPS AS SHOWN IN THE "OPTIONAL POURING DETAIL" WITH ADJACENT RUNS OF WELDED WIRE FABRIC LAPPING AT LEAST 152mm. THE COST OF THE WELDED WIRE FABRIC AND #13 BARS, IF USED, SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER SQUARE METER FOR SLOPE PROTECTION.

FOR BERM WIDTH DIMENSIONS, SEE GENERAL DRAWING.

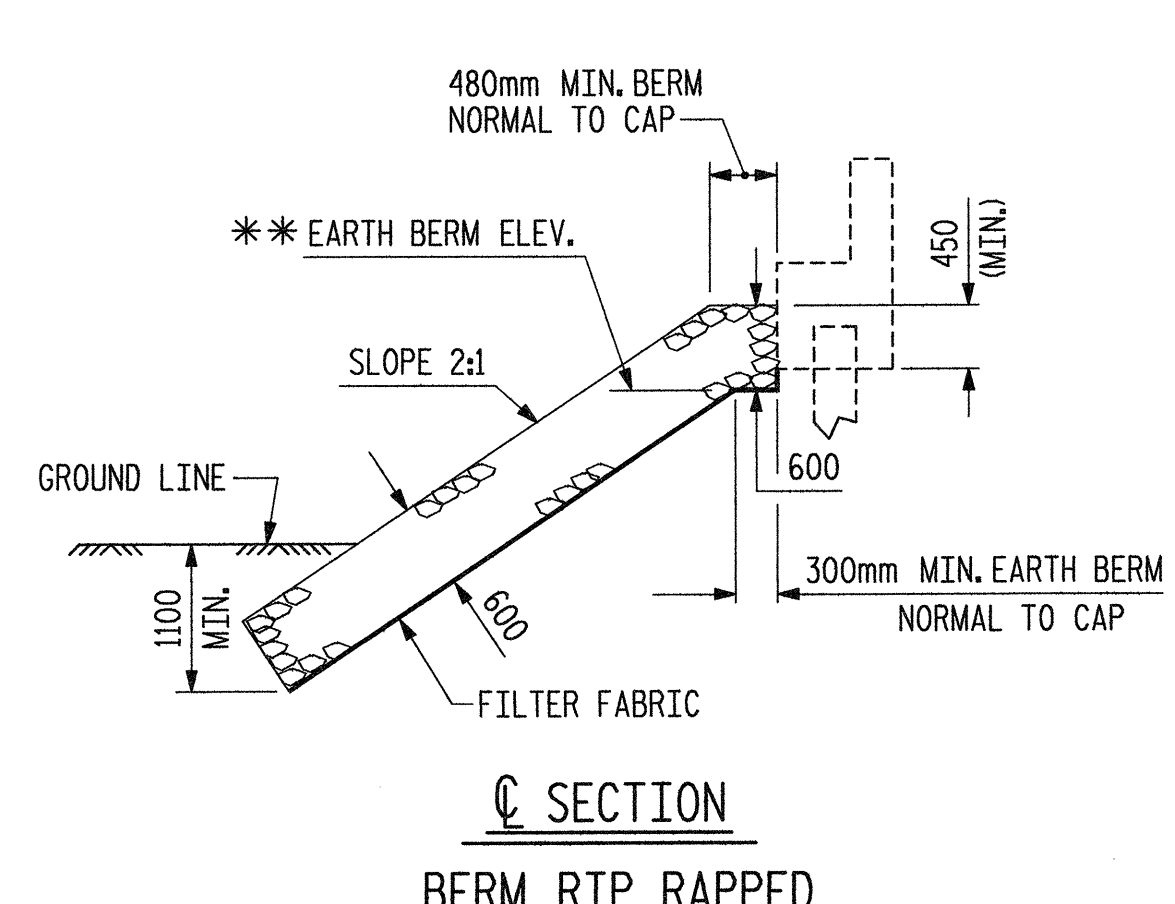
ESTIMATED QUANTITIES				
BRIDGE @ STA. 28+31.359 -I1Y1-	100mm SLOPE PROTECTION	* WELDED WIRE FABRIC 1520mm WIDE	600mm PLAIN RIP RAP CLASS II	FILTER FABRIC FOR DRAINAGE
	SQUARE METERS	APPROX. METERS	METRIC TON	SQUARE METERS
END BENT #1	245	161	—	—
END BENT #2	—	—	825	850

* QUANTITY SHOWN IS BASED ON 1520mm POURS.

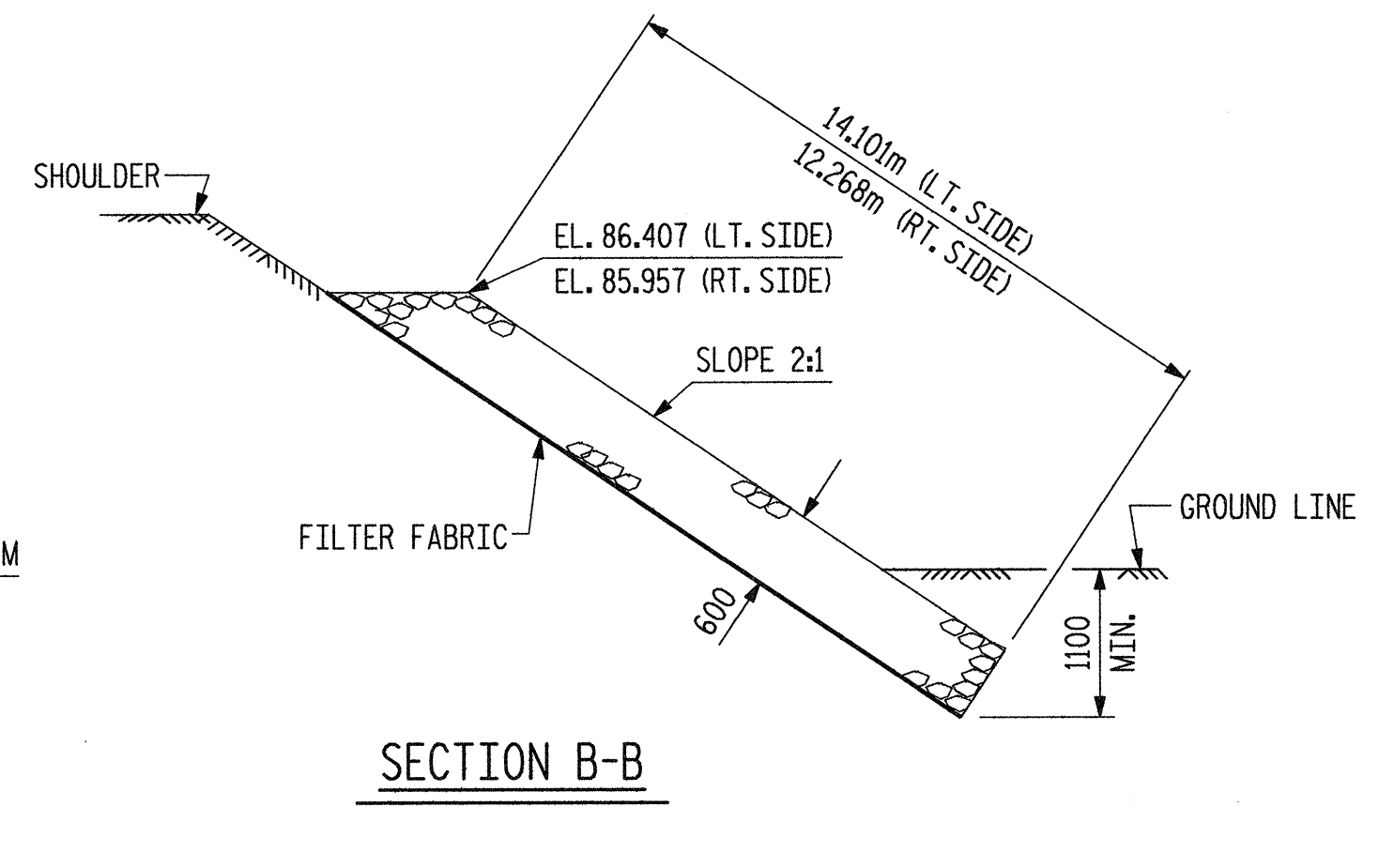


SECTION ALONG C ROADWAY WHEN FILL CATCHES IN DITCH

SECTION ALONG C ROADWAY WHEN DITCH IS NOT PROVIDED

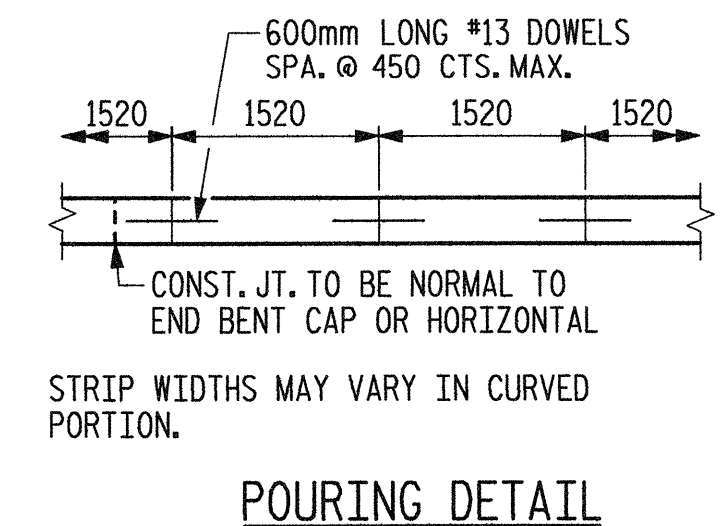


C SECTION BERM RIP RAPPED
** FOR BERM ELEVATIONS, SEE GENERAL DRAWING.

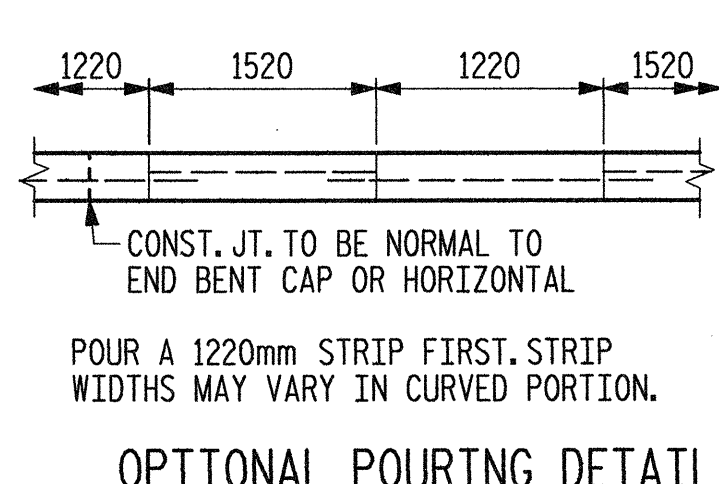


SECTION B-B

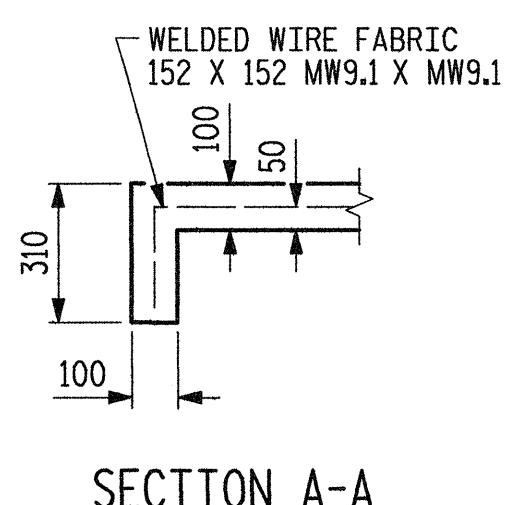
DETAILS FOR ALTERNATE "A"



POURING DETAIL

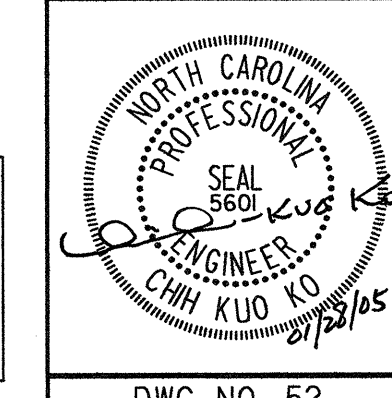
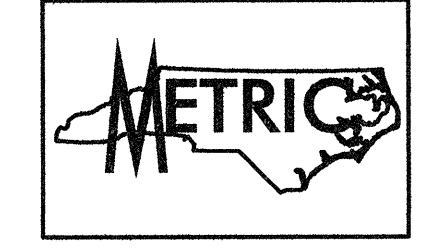


OPTIONAL POURING DETAIL



SECTION A-A

PROJECT NO. R-2552AA
WAKE-JOHNSTON COUNTY
STATION: 28+31.359 -I1Y1-



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SLOPE PROTECTION AND RIP RAP DETAILS

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	DATE:	
1			3		5-135
2			4		429

Plans prepared by:
KO & ASSOCIATES, P.C.
Consulting Engineers
101 SCHAUB DR. SUITE #202
RALEIGH, N.C. 27606
For Division of Highways

DWG. NO. 52

PLOT: 01/27/2005 04:02:32 PM Ko & Associates, P.C. FILE NAME: r:\p\2552aa.spl.sp_03.dwg

DRAWN BY: B.E. LANNING DATE: JAN. 2005
CHECKED BY: A.K. ORR DATE: JAN. 2005