FED. ROAD DIV. NO.	STATE	F.A.P.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MONT.	I 90-9(54)525		26	

~~881+65~~
~~Power Line X-ing ℄~~
~~4 Wires~~
~~Clearance = 21'~~
POWER LINE ABANDONED AND REMOVED

T6S R36E

R/W 200' LT. 897+00 I-90

R/W 300' LT. 898+50 I-90

R/W 300' LT. 905+17.7 I-90

R/W 350' LT. 909+80 I-90

R/W 340.7' LT. 910+00 I-90

C.M.P. CAP
● IRON PIN

W.B.T.S. 880+90.3 BK = 19.5' LT.
℄ I-90 P.O.T. 881+17.7 AH.
S 22°50'00" E

℄ I-90

℄ W.B. LANES
℄ E.B. LANES

P.I. 899 + 36.4

Bit. Curb

P.C. 893 + 51.0

P.T. 905 + 17.7

S 22° 10' 00" E

70°42'00"

℄ I-90

P.O.T. 908+55.2 I-90
SEC. COR. 2814.5 RT.

Drainage Blanket

E.B. T.S. 880+33.7 BK = 19.5' RT.
℄ I-90 P.O.T. 880+09.6 AH.

R/W 200' RT. 884+00 I-90

R/W 300' RT. 895+810 I-90

R/W 270' RT. 897+00 I-90

P.I. 899 + 36.4 I-90
Δ = 19°40'00" RT.
D = 1°00'
L = 1166.67'
T = 585.36'
R = 5729.58'
S = 0.04W

R/W 270' RT. 909+00 I-90

R/W 278.6 RT. 910+00 I-90

FENCE COR. ASSUMED SEC. COR.

SCALES:
HORIZONTAL 1" = 100'
VERTICAL 1" = 20'
THE KEN R. WHITE CO.
HELENA MONT.

884+75 60'
New 12"x 76' Emb. Prot.
Std. End Outlet
10 C.Y. Culv. Exc. 12.5 C.Y.
+3 C.Y. Bank Prot. Type 3
1.8

892+50 Rt. E.B.
New 12"x 84' Emb. Prot.
Std. Dwg. No. 29
9+16 2.4
Sq. End Alt. Outlet
10 C.Y. Culv. Exc. 5.6 C.Y.
+5 C.Y. Bank Prot. Type 3
3.3

893+70
New 24"x 466' Pipe Dr.
Th. = 0.109", Cover = 6.0'
20° Skew Rt. 13.3
Sq. Ends Lt. & Rt.
15 C.Y. Culv. Exc.
C.M.P.

903+50 Rt. E.B.
New 12"x 104' Emb. Prot.
Std. Dwg. No. 29
9+16 2.5
Sq. End Alt. Outlet
10 C.Y. Culv. Exc. 10.2 C.Y.
+5 C.Y. Bank Prot. Type 3
3.7

904+30
New 24"x 104' Pipe Dr.
Th. = 0.109", Cover = 8.0'
28° Skew Lt. 27.2
Sq. End Lt. & Rt.
10 C.Y. Culv. Exc.
C.M.P.

908+25 Rt. E.B.
New 12"x 72' Emb. Prot.
Std. Dwg. No. 29
9+16 2.2
Sq. End Alt. Outlet
10 C.Y. Culv. Exc. 7.2 C.Y.
+5 C.Y. Bank Prot. Type 3
1.5

EMB 254,111 C.Y. | UNCL. EXC. 478856 C.Y.
199,637 | 453,981
+50.0 +75.8

HAUL = 18,881 M. YD.
71,774

TYP. SECT. NO. 9 | 200' TRANSITION | TYP. SECT. NO. 10 | 200' TRANSITION | TYP. SECT. NO. 9

+177 | +51.0 | +51.0 | +17.7 | +17.7

882+00 To 889+50 W.B.
SUB. EXC.
INCL. IN ROADWAY QUANT.

894+50
886+00 To 895+00 Rt.
Drainage Blanket
See Sheet No. 7 B
Special Provisions
2300 C.Y. Special Borrow = 2726.7 C.Y.
2300 C.Y. Add. Exc.
INCL. IN ROADWAY QUANT.

892+70
893+70
Pipe Outlet Rt.
15 C.Y. Random Riprap = 11.2 C.Y.
CL-2

895+50 To 896+00 W.B.
SUB. EXC.
INCL. IN ROADWAY QUANT.

TRANSITION TO MATCH EXIST. E.B. & W.B. SUBGRADE - SURFACE PART'L. INCL. IN ROADWAY QUANT.

8974.20 YD. 902+80 W.B.
SUB. EXC.
INCL. IN ROADWAY QUANT.

902+00 To 903+00 W.B.
SUB. EXC.
INCL. IN ROADWAY QUANT.

75
904+20
Pipe Outlet Rt.
10 C.Y. Random Riprap = 13.33 C.Y.
CL-2

903+00 To 904+30 W.B.
SUB. EXC.
INCL. IN ROADWAY QUANT.

+00 = 80.10 E.B. & W.B.
+00 = 08.30 E.B. & W.B.
+00 = 99.98 E.B. & W.B.

+2.39% W.B.
+2.298% E.B.
+1.88% E.B. & W.B. PROFILE
-0.64% E.B. & W.B.

1000' V.C. E.B. & W.B.

880+095 E.B. AH. = EQUA.
880+33.7 E.B. BK.
880+90.3 W.B. BK. = EQUA.
881+17.7 W.B. AH.

+50 +75 +00 +50 +00 +25 +00 +50 +00 +50 +00 +25 +00 +50 +00 +25 +00

1574 1250.0 Lin. Ft. New Bit. Curb Rt. E.B.

2537.5 2450.0 Lin. Ft. New Metal Guard Rail Rt. E.B.

864 825 Lin. Ft. New Bit. Curb Rt. E.B.

B.M. Iron Pin 74' Lt. El. 3689.407
℄ 359°½'10"
B.M. Iron Pin 250.0' Rt. 890+00 El. 3508.41

B.M. Iron Pin 258.5' Rt. 894+50 ℄ 35°24.55'

B.M. Iron Pin 331' Lt. 897+00 ℄ 3°30'

B.M. Iron Pin 190.0' Rt. 898+70 El. 3684.30

B.M. Iron Pin 297' Lt. 903+00 ℄ 359°19'

B.M. Iron Pin 251' Lt. 905+80 ℄ 36°01.5'

3660 3640 3620 3600 3580 3560 3540 3520 3500

880 1 2 3 4 885 6 7 8 9 890 1 2 3 4 895 6 7 8 9 900 1 2 3 4 905 6 7 8 9 910

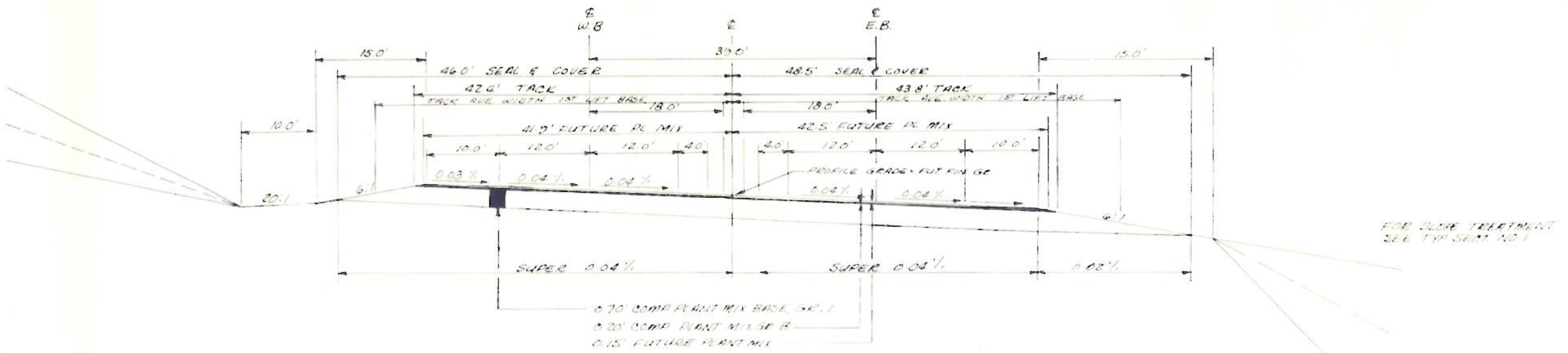
CONST. SUMM. NO. 5

TYPICAL SECTION NO. 10

I-90-9(54)525 7

893+51.0 TO 905+17.7

905+17.7 TO 907+17.7 TRANS TO SEC. 9



QUANTITIES

GRAVEL

	PLANT MIX GR. B	PLANT MIX BASE GRADE 1	CONMAT GR. B
AREA SQ. FT.	7.8	30.9	
C.Y. PER STA.	28.9	114.4	
* TONS PER STA.	60.7	204.2	6.6

* INCL. WT. OF PL MIX C/C

BIT. MATERIAL

	PLANT MIX SURF.	PLANT MIX BASE	SEAL COVER	@ TRAF.
SQ. YDS PER STA.	434.7	491.1	511.1	362.2
TONS PER STA.	3.1	10.7	0.6	
GAL PER STA.				28.3

@ 2 APPLICATIONS

GRAVEL

	PLANT MIX GR. B	PLANT MIX BASE GRADE 1	CONMAT GR. B
AREA SQ. FT.	8.4	32.3	
C.Y. PER STA.	31.1	119.6	
* TONS PER STA.	65.5	215.5	7.0

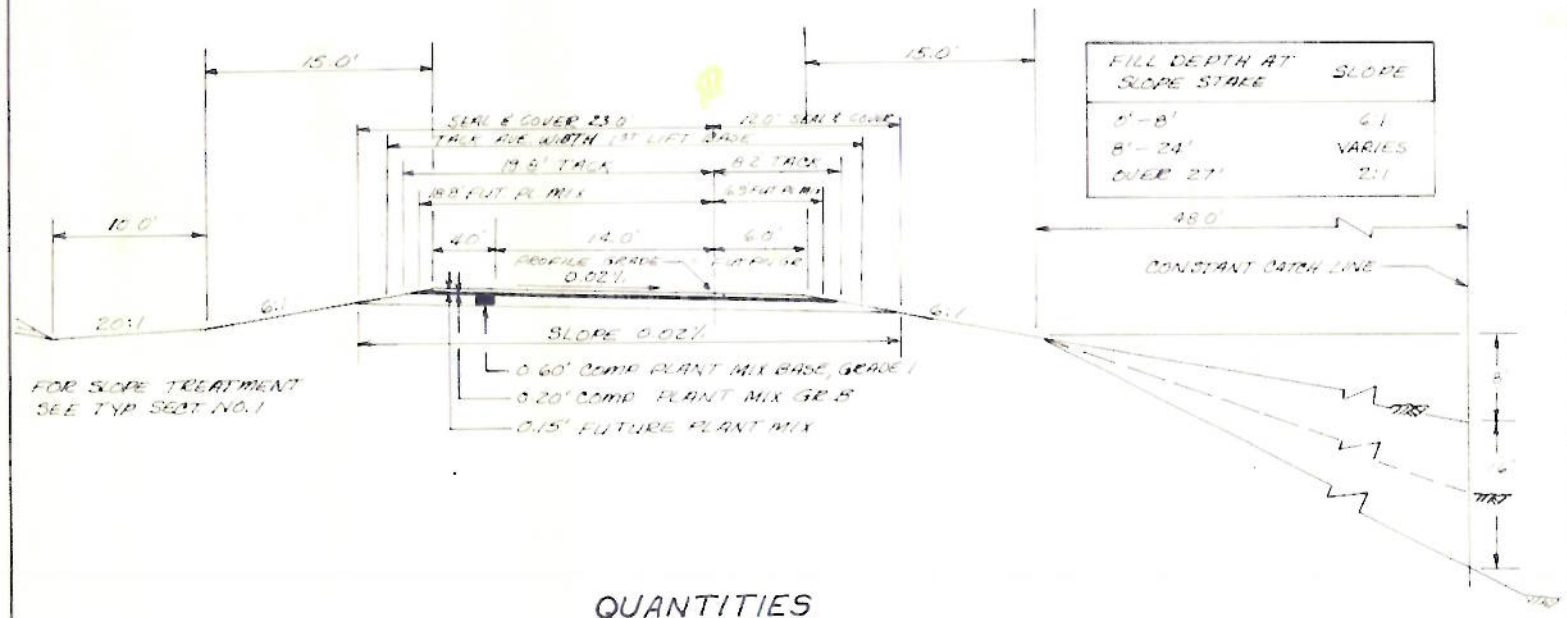
BIT. MATERIAL

	PLANT MIX SURF.	PLANT MIX BASE	SEAL COVER	@ TRAF.
SQ. YDS PER STA.	468.3	512.8	538.9	390.4
TONS PER STA.	3.3	11.2	0.6	
GAL PER STA.				34.2

@ 2 APPLICATIONS

TYPICAL SECTION NO. 11

RAMPS "A-1", "A-2", "A-3" & "A-4"



QUANTITIES

GRAVEL

	PLANT MIX GR. B	PLANT MIX BASE GRADE 1	CONMAT GR. B
AREA SQ. FT.	5.4	18.9	
C.Y. PER STA.	20.0	70.0	
* TONS PER STA.	45.1	132.8	2.9

* INCL. WT. OF PL MIX C/C

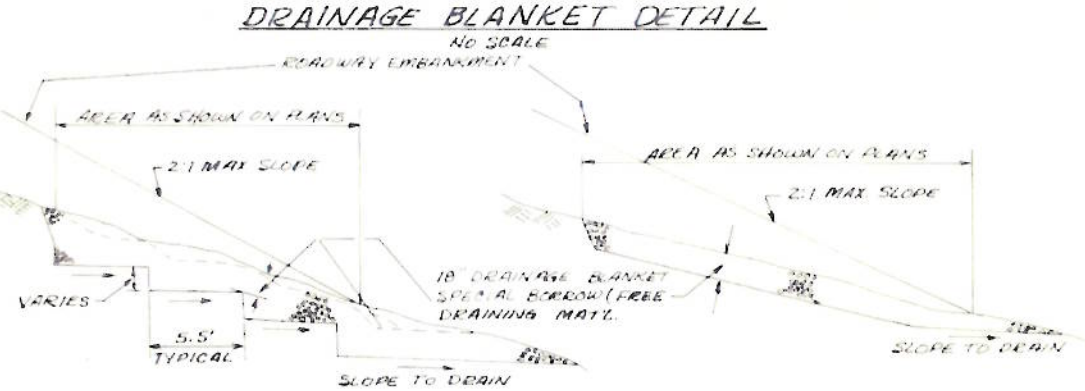
BIT. MATERIAL

	PLANT MIX SURF.	PLANT MIX BASE	SEAL COVER	@ TRAF. COAT
SQ. YDS PER STA.	298.9	350.0	328.9	661.1
TONS PER STA.	2.6	6.7	0.2	
GAL PER STA.				8.4

@ 2 APPLICATIONS

DRAINAGE BLANKET DETAIL

No SCALE



SLOPES STEEPER THAN 4:1

SLOPES 4:1 & FLATTER

DRAINAGE BLANKET

STATION FROM	STATION TO	CU. YDS. SPECIAL BORROW	REMARKS
747+60	750+45	549.6	RT
751+40	753+45	685.4	RT
762+00	763+90	680.4	RT
833+00	834+25	482.2	RT
886+00	894+60	2728.1	RT
TOTAL		5325.7	I-90-9(54)525

DITCH TYPICAL NO. 2

858+60 - 859+75 RT

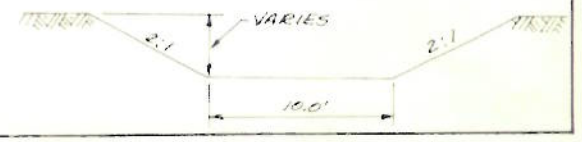
1014+75 - 1012+04 LT

DITCH TYPICAL NO. 3

774+35 - 776+06 LT

780+50 LT

1024+10 LT



GENERAL NOTES FOR TYPICAL SECTIONS

USED TYP. NO. 1 AS AVERAGE

Pl. Mix Oil	5.5% of wt. Pl. Mix Surf. Gr. B 5.1% of wt. Pl. Mix Base Gr. 1
Pl. Mix Surf.	Weighs 130.1 Lbs. Per 0.10 Ft. Thick
Pl. Mix Base	Weighs 125.6 Lbs. Per 0.10 Ft. Thick
Tack Coat Oil	0.02 Gal. Per Sq. yd. Applied on 1st Lift of Base & before Top Lift
Seal Oil	0.25 Gal. Per Sq. yd. @ 8.454 #'s Gal.
Cover Mat'l.	20.3 Lbs. Per Sq. yd.

CONST. SUMM. NO. 1

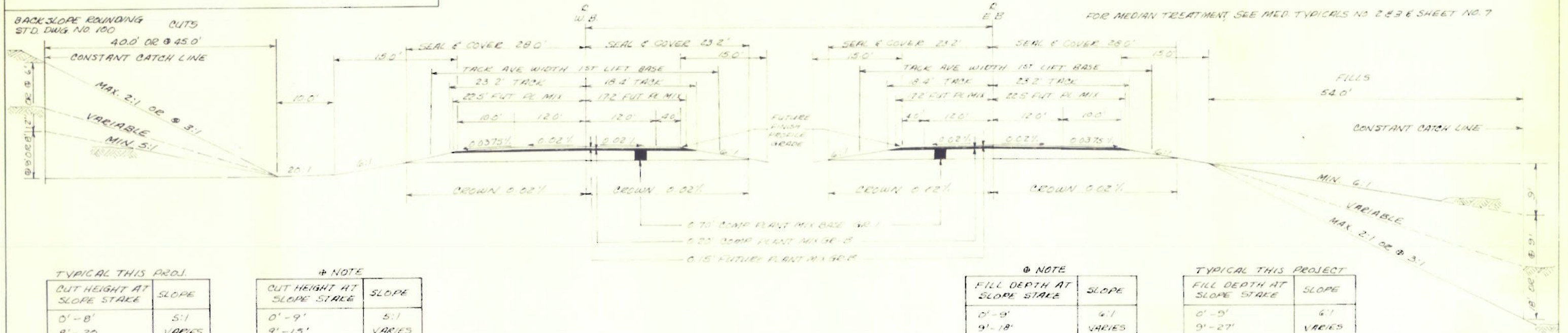
TYPICAL SECTION NO. 1

I-90-3(54)525 3

719+24.0 TO 726+99.1
726+99.1 TO 729+66.1 TRANS. TO SEC. 5

741+16.4 TO 753+68.2
763+68.2 TO 784+35.2 TRANS. TO SEC. 5
787+60.6 TO 787+78.0
787+78.0 TO 789+78.0 TRANS. TO SEC. 4
806+11.3 TO 818+83.9
818+83.9 TO 821+63.9 TRANS. TO SEC. 5

846+21.7 TO 863+71.8
863+71.8 TO 865+28.3 TRANS. TO SEC. 5
957+05.6 TO 992+54.4
992+54.4 TO 994+54.4 TRANS. TO SEC. 4
1009+87.7 TO 1035+00.0 END OF PROJ.



FOR MEDIAN TREATMENT SEE MED. TYPICALS NO. 2 & 3 & SHEET NO. 7

TYPICAL THIS PROJ.

CUT HEIGHT AT SLOPE STAKE	SLOPE
0'-8'	5:1
8'-20	VARIES
OVER 20'	2:1

@ NOTE

CUT HEIGHT AT SLOPE STAKE	SLOPE
0'-9'	5:1
9'-15'	VARIES
OVER 15'	3:1

@ 3:1 MAX. CUT SLOPE APPLIES ONLY

@ NOTE

FILL DEPTH AT SLOPE STAKE	SLOPE
0'-9'	6:1
9'-18'	VARIES
OVER 18'	3:1

@ 3:1 MAX. FILL SLOPE APPLIES ONLY

TYPICAL THIS PROJECT

FILL DEPTH AT SLOPE STAKE	SLOPE
0'-9'	6:1
9'-27'	VARIES
OVER 27'	2:1

QUANTITIES

WESTBOUND

	GRAVEL				BIT. MATERIAL			
	PLANT MIX GR. B	PLANT MIX BASE GRADE 1	COV. MAT'L. GR. 3		PLANT MIX SURF.	PLANT MIX BASE	SEAL CSS-2	@ TACK
AREA SQ. FT.	7.6	32.5		SQ. YD. PER STA.	422.8	515.6	SQR. 5	377.8
S.Y. PER STA.	28.1	120.4		TONS PER STA.	3.0	11.6	0.6	
* TONS PER STA.	55.0	226.6	5.8	GAL. PER STA.				22.1

* INCL. WT. OF PL. MIX OIL

@ 2 APPLICATIONS

EASTBOUND

SAME AS WESTBOUND