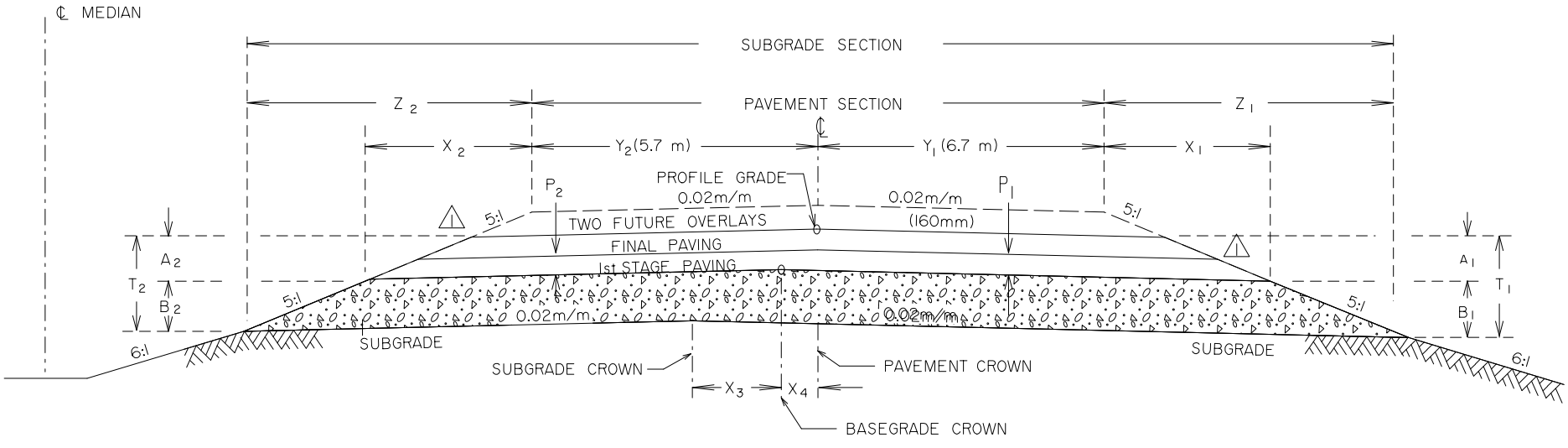

NOTE:
THIS DRAWING MAY BE USED TO CALCULATE THE REQUIRED SUBGRADE WIDTH BASED ON SURFACING THICKNESS ON FOUR LANE DIVIDED HIGHWAYS.

NOTES:

* THE PROFILE GRADE IS ON THE CENTRELINE OF THE FINISHED TRAVEL LANES.
* SUPERELEVATION IS NORMALLY ATTAINED BY ROTATING INDIVIDUAL ROADWAYS ABOUT THE CENTRELINE OF TRAVEL LANES.

SUBGRADE AND SURFACING DIMENSIONS

A_1, A_2 = THICKNESS OF ACP (1st STAGE + FINAL STAGE PAVING)
B_1, B_2 = THICKNESS OF BASE
$T_1 = A_1 + B_1$, $T_2 = A_2 + B_2$
P_1, P_2 = THICKNESS OF FIRST STAGE PAVING

EXAMPLE: IF A_1 = 220mm, A_2 = 200mm, B_1 = 400mm, B_2 = 350mm
P_1 = 100mm, P_2 = 80mm
T_1 = 620mm, T_2 = 550mm, Y_1 = 6.70m, AND Y_2 = 5.70m

$$X_3 = \frac{B_1 - B_2}{40} = \frac{400 - 350}{40} = 1.25\text{m}$$;(OFFSET DISTANCE FROM SUBGRADE CROWN TO BASECOURSE CROWN)

$$X_4 = \frac{P_1 - P_2}{40} = \frac{100 - 80}{40} = 0.5\text{m}$$;(OFFSET DISTANCE FROM BASECOURSE CROWN TO PAVEMENT CROWN)

$Z_1 = 5(T_1 + 0.16) = 5(0.62 + 0.16) = 3.9\text{m}$
$Z_2 = 5(T_2 + 0.16) = 5(0.55 + 0.16) = 3.55\text{m}$

$\therefore$ TOTAL SUBGRADE WIDTH = FINISHED PAVEMENT + Z_1 + Z_2
= 5.7 + 6.7 + 3.9 + 3.55
= 19.85 m

No.	REVISIONS	BY	DATE
1	5:1 Pavement Slope	BK	27/06/05

Alberta
INFRASTRUCTURE AND TRANSPORTATION

FIGURE C-8.1g

SUPERSEDED

DATE: DECEMBER 2002

TYPICAL PAVEMENT DESIGN
FOR FOUR LANE DIVIDED HWY
RFD-412.4-130 &
RAD-412.4-120

Prepared By: T.N.	Checked By: BK	Scale: N.T.S.	PAGE C- 95