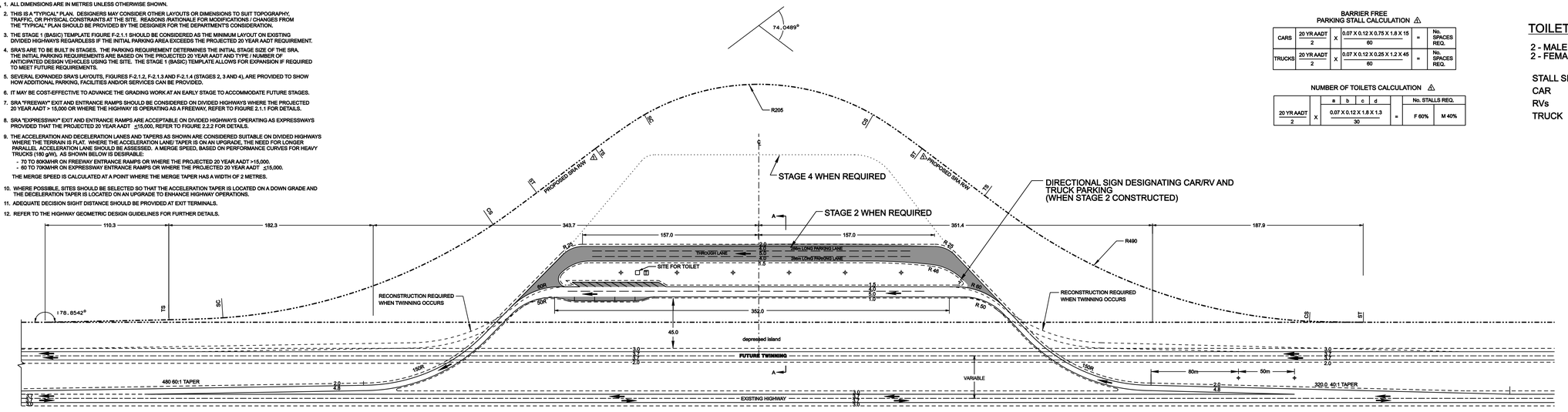
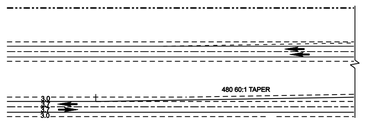
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
2. THIS IS A "TYPICAL" PLAN. DESIGNERS MAY CONSIDER OTHER LAYOUTS OR DIMENSIONS TO SUIT TOPOGRAPHY, TRAFFIC, OR PHYSICAL CONSTRAINTS AT THE SITE. REASONS /RATIONALE FOR MODIFICATIONS / CHANGES FROM THE "TYPICAL" PLAN SHOULD BE PROVIDED BY THE DESIGNER FOR THE DEPARTMENT'S CONSIDERATION.
3. THE STAGE 1 (BASIC) TEMPLATE FIGURE F-2.1.1 SHOULD BE CONSIDERED AS THE MINIMUM LAYOUT ON EXISTING DIVIDED HIGHWAYS REGARDLESS IF THE INITIAL PARKING AREA EXCEEDS THE PROJECTED 20 YEAR AADT REQUIREMENT.
4. SRA'S ARE TO BE BUILT IN STAGES. THE PARKING REQUIREMENT DETERMINES THE INITIAL STAGE SIZE OF THE SRA. THE INITIAL PARKING REQUIREMENTS ARE BASED ON THE PROJECTED 20 YEAR AADT AND TYPE / NUMBER OF ANTICIPATED DESIGN VEHICLES USING THE SITE. THE STAGE 1 (BASIC) TEMPLATE ALLOWS FOR EXPANSION IF REQUIRED TO MEET FUTURE REQUIREMENTS.
5. SEVERAL EXPANDED SRA'S LAYOUTS, FIGURES F-2.1.2, F-2.1.3 AND F-2.1.4 (STAGES 2, 3 AND 4), ARE PROVIDED TO SHOW HOW ADDITIONAL PARKING, FACILITIES AND/OR SERVICES CAN BE PROVIDED.
6. IT MAY BE COST-EFFECTIVE TO ADVANCE THE GRADING WORK AT AN EARLY STAGE TO ACCOMMODATE FUTURE STAGES.
7. SRA "FREEWAY" EXIT AND ENTRANCE RAMPS SHOULD BE CONSIDERED ON DIVIDED HIGHWAYS WHERE THE PROJECTED 20 YEAR AADT > 15,000 OR WHERE THE HIGHWAY IS OPERATING AS A FREEWAY, REFER TO FIGURE 2.1.1 FOR DETAILS.
8. SRA "EXPRESSWAY" EXIT AND ENTRANCE RAMPS ARE ACCEPTABLE ON DIVIDED HIGHWAYS OPERATING AS EXPRESSWAYS PROVIDED THAT THE PROJECTED 20 YEAR AADT ≤15,000, REFER TO FIGURE 2.2.2 FOR DETAILS.
9. THE ACCELERATION AND DECELERATION LANES AND TAPERS AS SHOWN ARE CONSIDERED SUITABLE ON DIVIDED HIGHWAYS WHERE THE TERRAIN IS FLAT. WHERE THE ACCELERATION LANE/ TAPER IS ON AN UPGRADE, THE NEED FOR LONGER PARALLEL ACCELERATION LANE SHOULD BE ASSESSED. A MERGE SPEED, BASED ON PERFORMANCE CURVES FOR HEAVY TRUCKS (180 g/W), AS SHOWN BELOW IS DESIRABLE:
   - 70 TO 80KM/HR ON FREEWAY ENTRANCE RAMPS OR WHERE THE PROJECTED 20 YEAR AADT >15,000.
   - 60 TO 70KM/HR ON EXPRESSWAY ENTRANCE RAMPS OR WHERE THE PROJECTED 20 YEAR AADT ≤15,000.

   THE MERGE SPEED IS CALCULATED AT A POINT WHERE THE MERGE TAPER HAS A WIDTH OF 2 METRES.
10. WHERE POSSIBLE, SITES SHOULD BE SELECTED SO THAT THE ACCELERATION TAPER IS LOCATED ON A DOWN GRADE AND THE DECELERATION TAPER IS LOCATED ON AN UPGRADE TO ENHANCE HIGHWAY OPERATIONS.
11. ADEQUATE DECISION SIGHT DISTANCE SHOULD BE PROVIDED AT EXIT TERMINALS.
12. REFER TO THE HIGHWAY GEOMETRIC DESIGN GUIDELINES FOR FURTHER DETAILS.





TYPICAL CROSS-SECTION A-A
N.T.S.

NOTE:
DESIGNER MAY CHOOSE AN ALTERNATIVE CROSS-SECTION TO BETTER SUIT THE SITE TOPOGRAPHY.

BARRIER FREE PARKING STALL CALCULATION ⚠

CARS	20 YR AADT / 2	X	0.07 X 0.12 X 0.75 X 1.8 X 15 / 60	=	No. SPACES REQ.	
TRUCKS	20 YR AADT / 2	X	0.07 X 0.12 X 0.25 X 1.2 X 45 / 60	=	No. SPACES REQ.	

NUMBER OF TOILETS CALCULATION ⚠

		a	b	c	d		No. STALLS REQ.	
20 YR AADT / 2	X	0.07 X 0.12 X 1.8 X 1.3 / 30				=	F 60%	M 40%

TOILET STALLS

2 - MALE
2 - FEMALE

STALL SIZES

CAR	3.5 X 6.0
RVs	3.5 X 15.0
TRUCK	3.5 X 40.0

STAGE IV ⚠
TOTAL AREA REQUIRED = 9.5ha
IN ADDITION TO HIGHWAY RIGHT-OF-WAY

✧ PROPOSED LIGHTING
T POSSIBLE TELEPHONE

No.	REVISIONS	BY	DATE
⚠			
⚠	Parking, R/W and notes revised	B.K.	14 JAN 08

Alberta Infrastructure and Transportation

FIGURE F-2.2.1

Date: MARCH 2007

TYPICAL SAFETY REST AREA ON UNDIVIDED HIGHWAYS

FUTURE TWINNING ON SAME SIDE

Prepared By: RS	Checked By: WmK	Scale: 1:2000