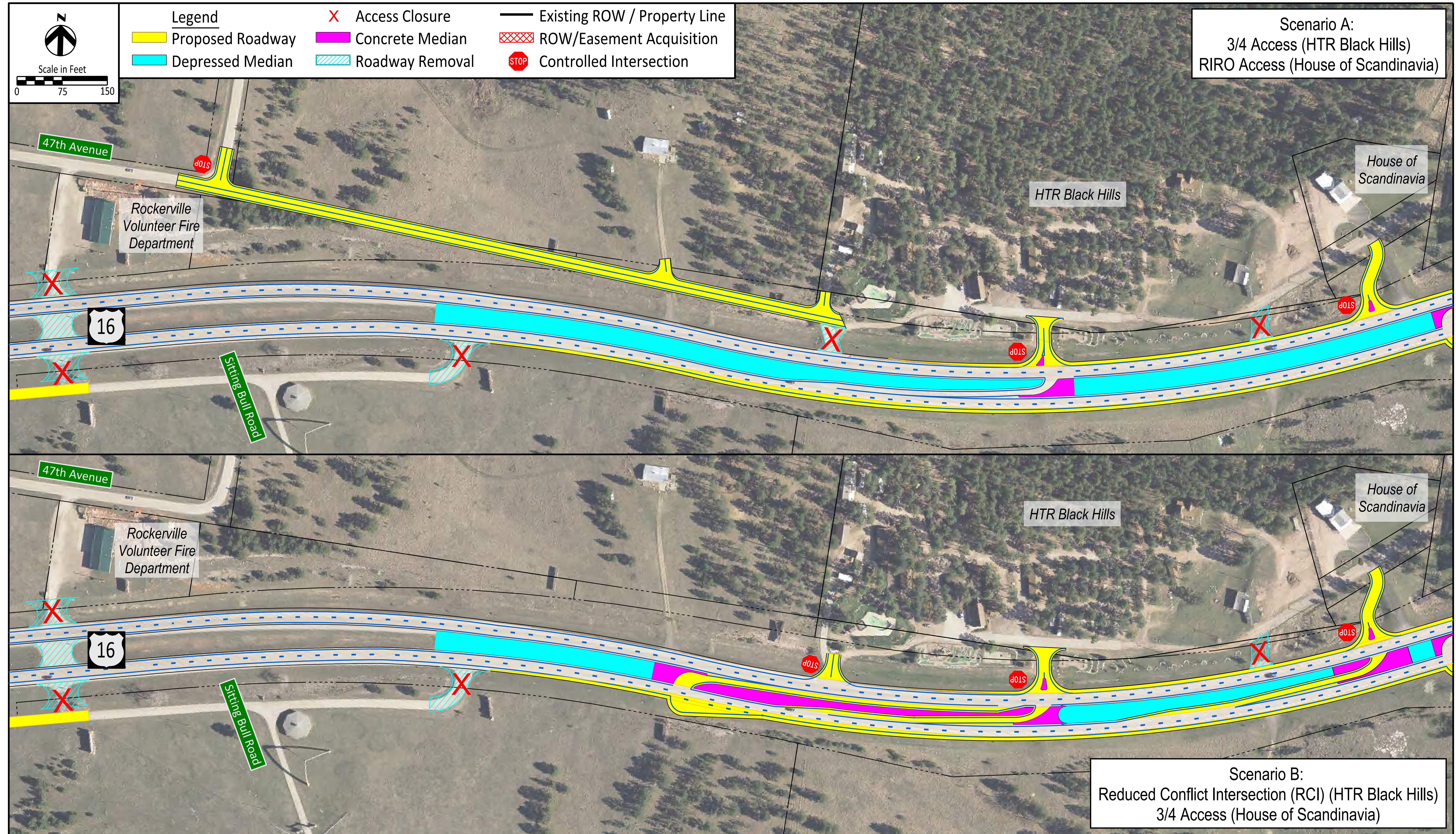


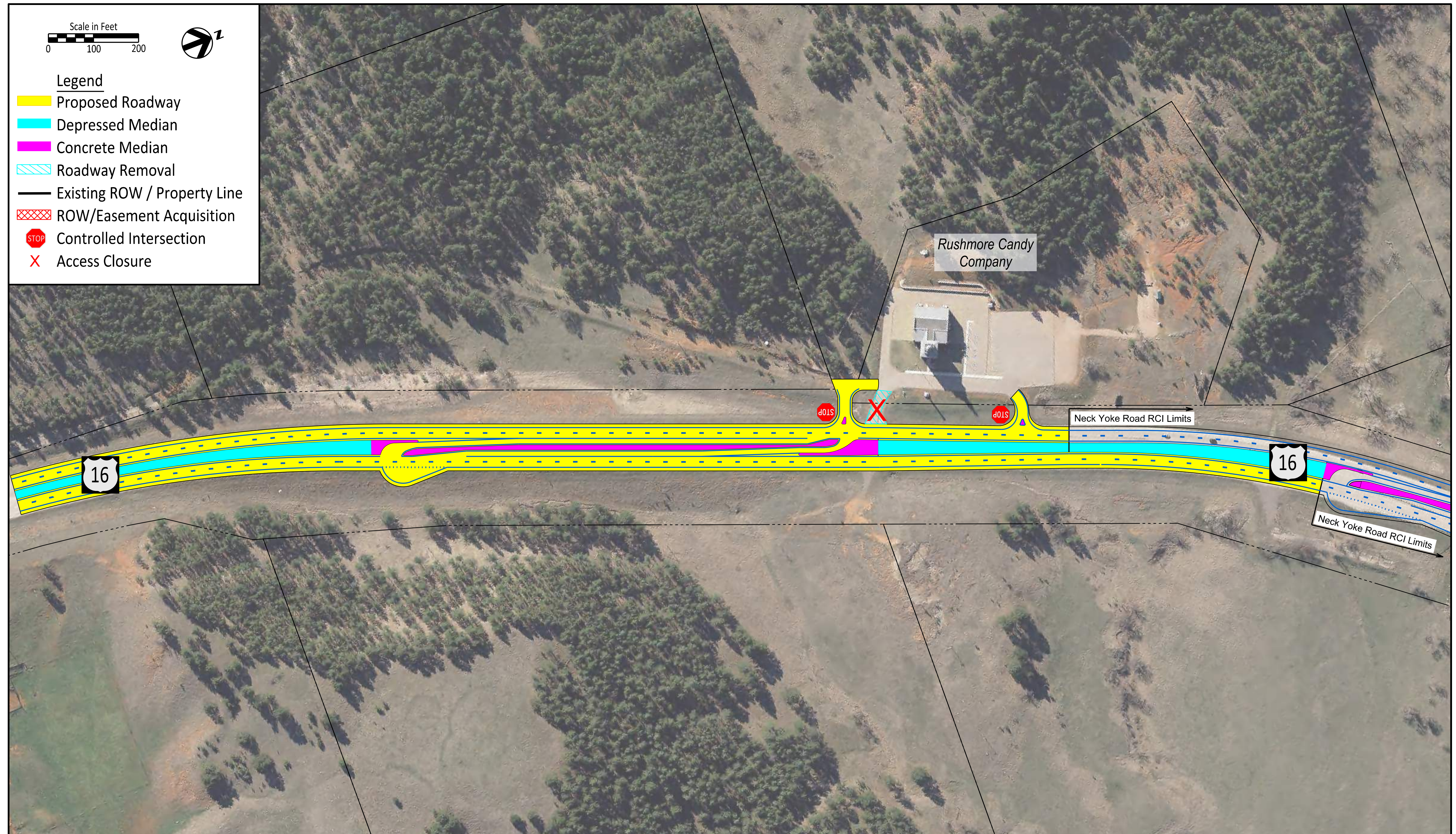
HTR BLACK HILLS RESORT AREA

U.S. HIGHWAY 16 CORRIDOR STUDY: RURAL SUB-AREA ANALYSIS



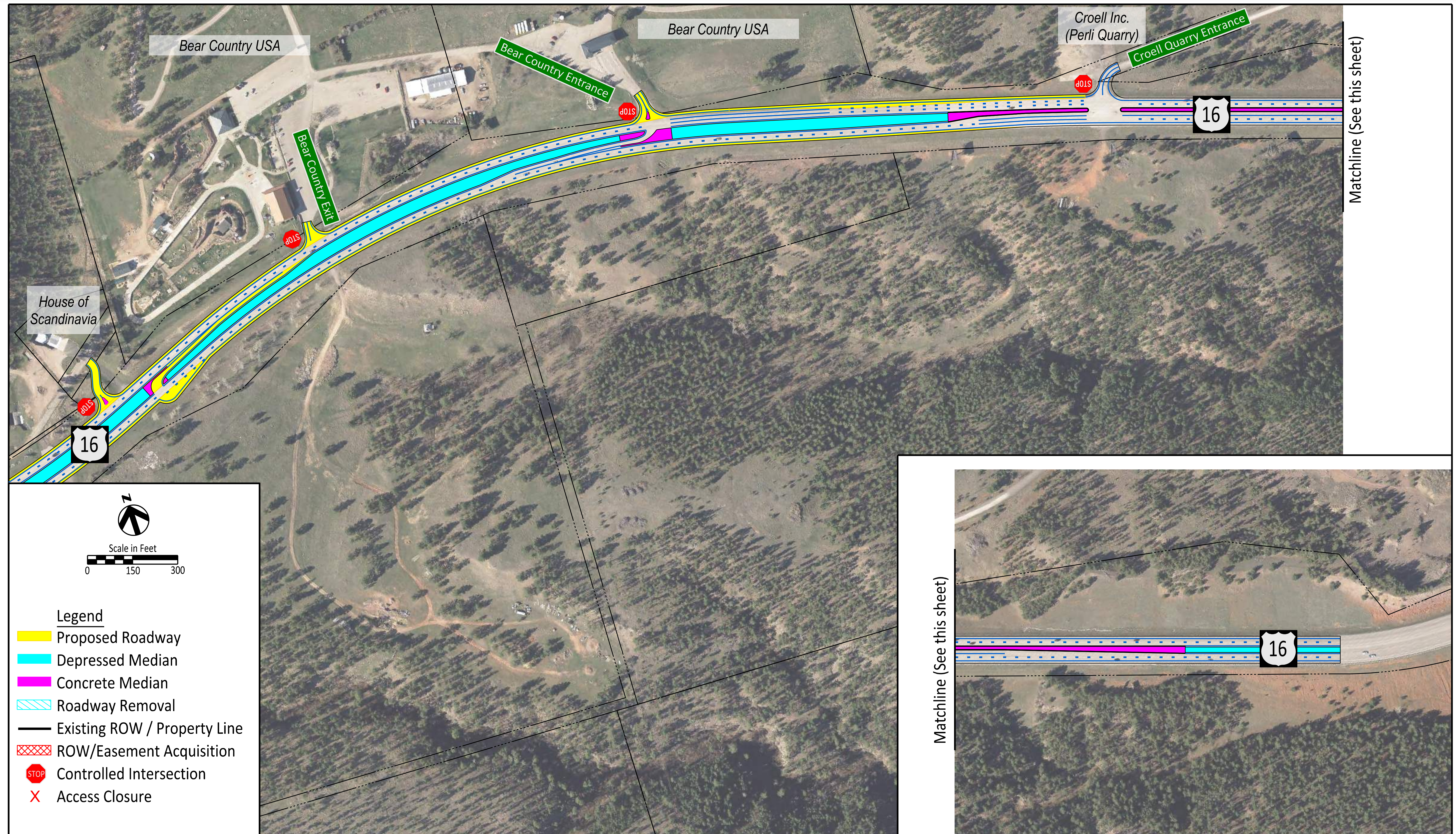
RUSHMORE CANDY COMPANY AREA

U.S. HIGHWAY 16 CORRIDOR STUDY: RURAL SUB-AREA ANALYSIS



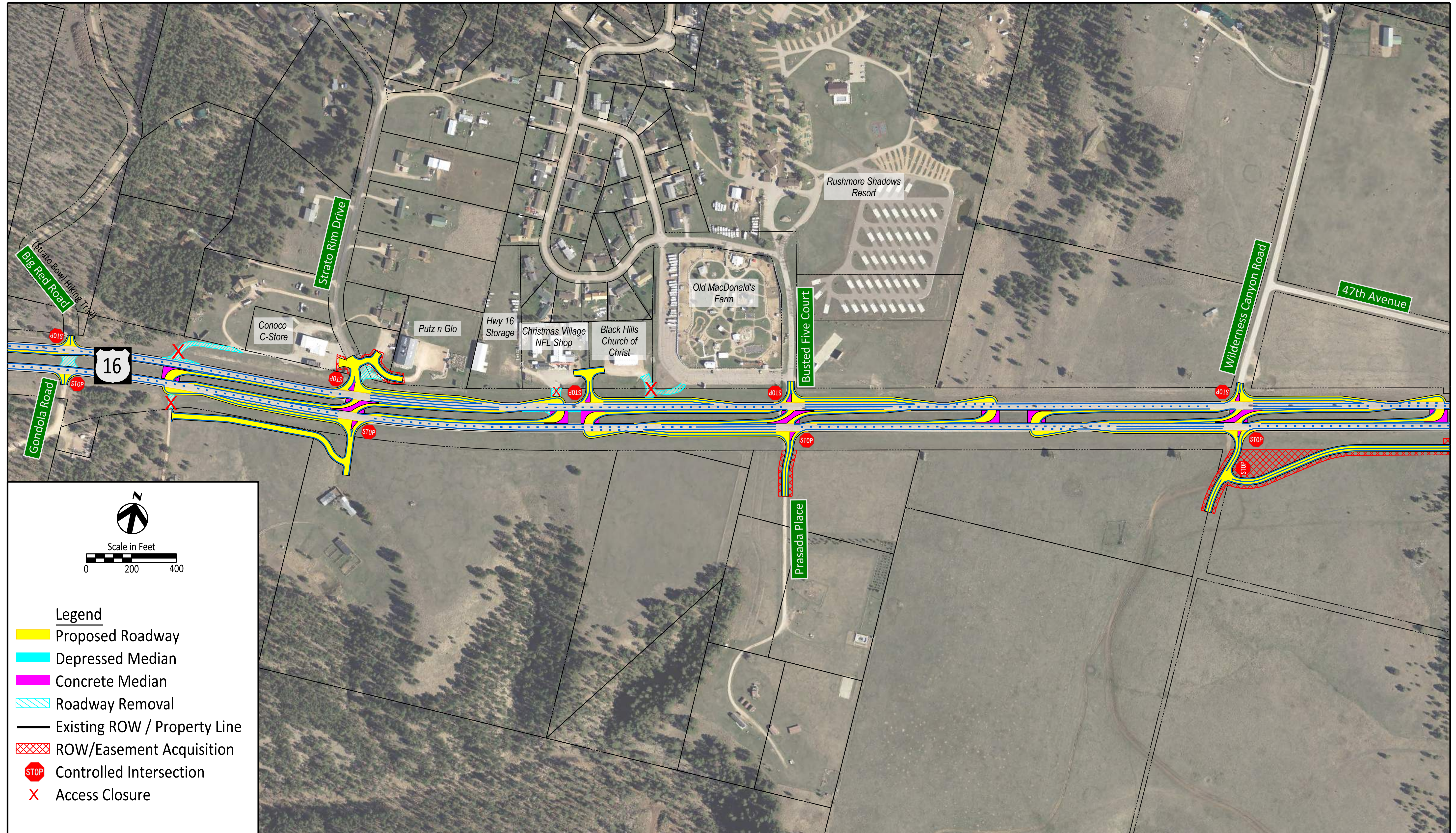
BEAR COUNTRY USA AREA

U.S. HIGHWAY 16 CORRIDOR STUDY: RURAL SUB-AREA ANALYSIS



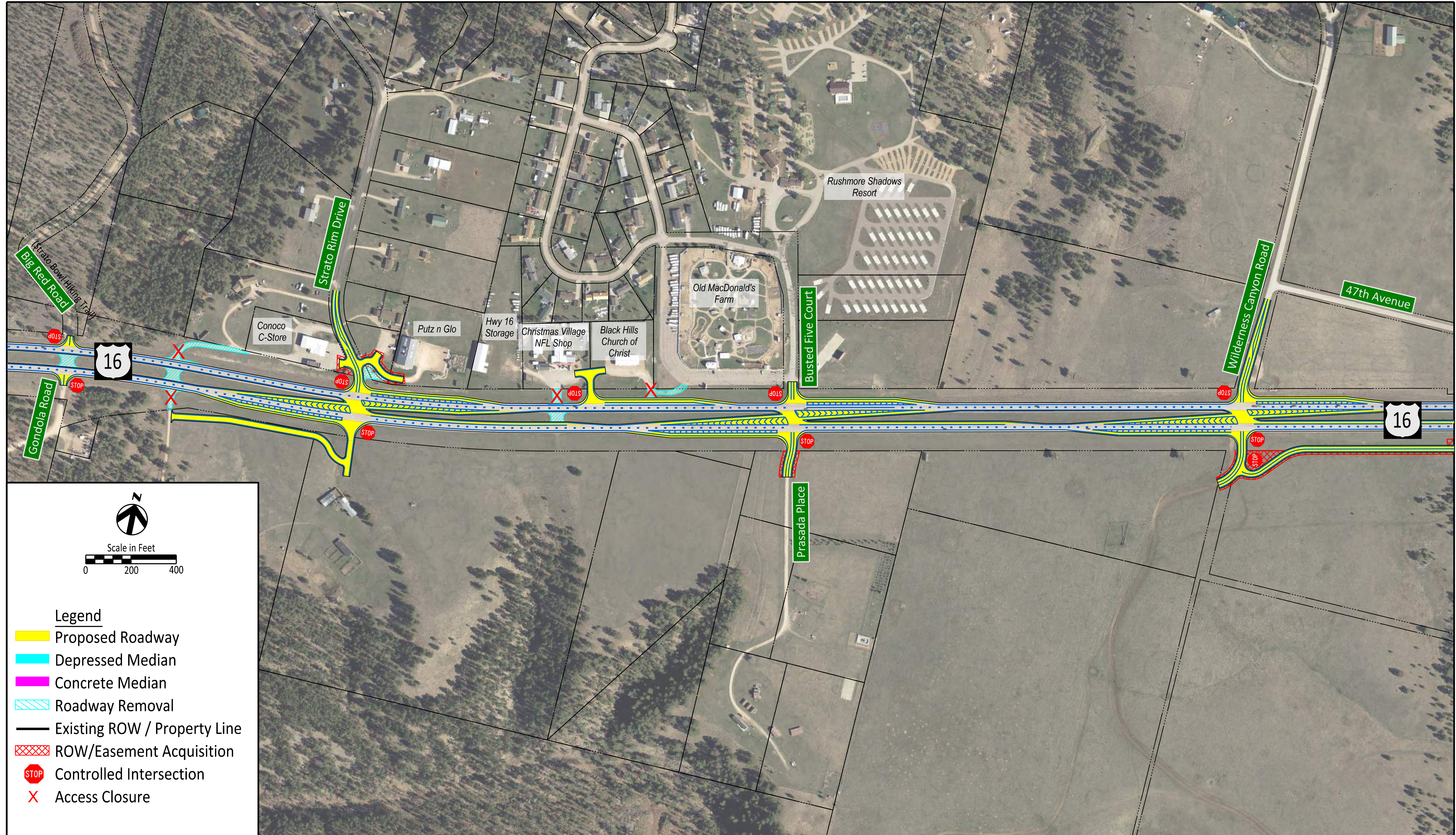
STRATO RIM – BUSTED FIVE – WILDERNESS CANYON AREA, SCENARIO A

U.S. HIGHWAY 16 CORRIDOR STUDY: RURAL SUB-AREA ANALYSIS



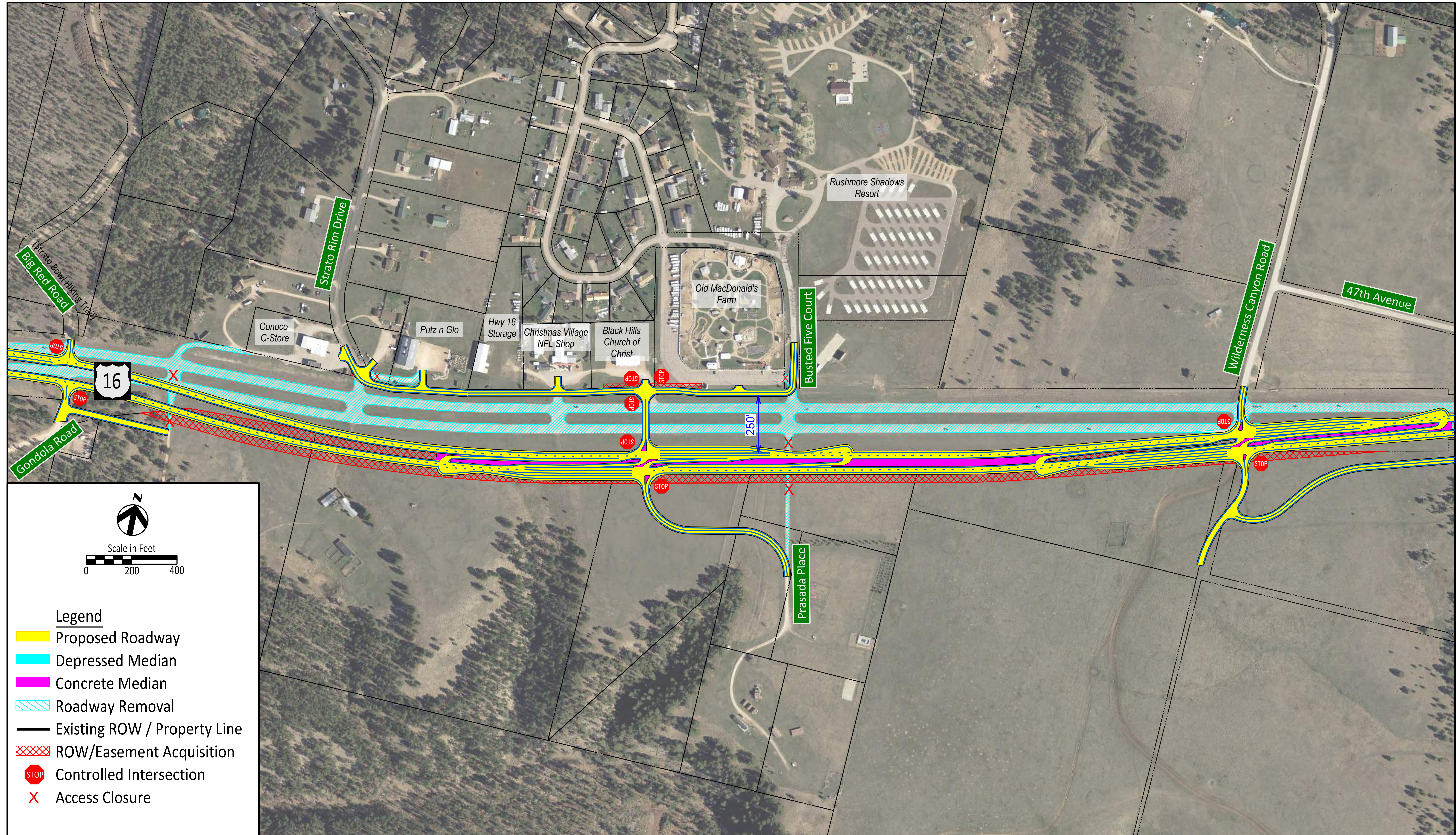
STRATO RIM – BUSTED FIVE – WILDERNESS CANYON AREA, SCENARIO B

U.S. HIGHWAY 16 CORRIDOR STUDY: RURAL SUB-AREA ANALYSIS



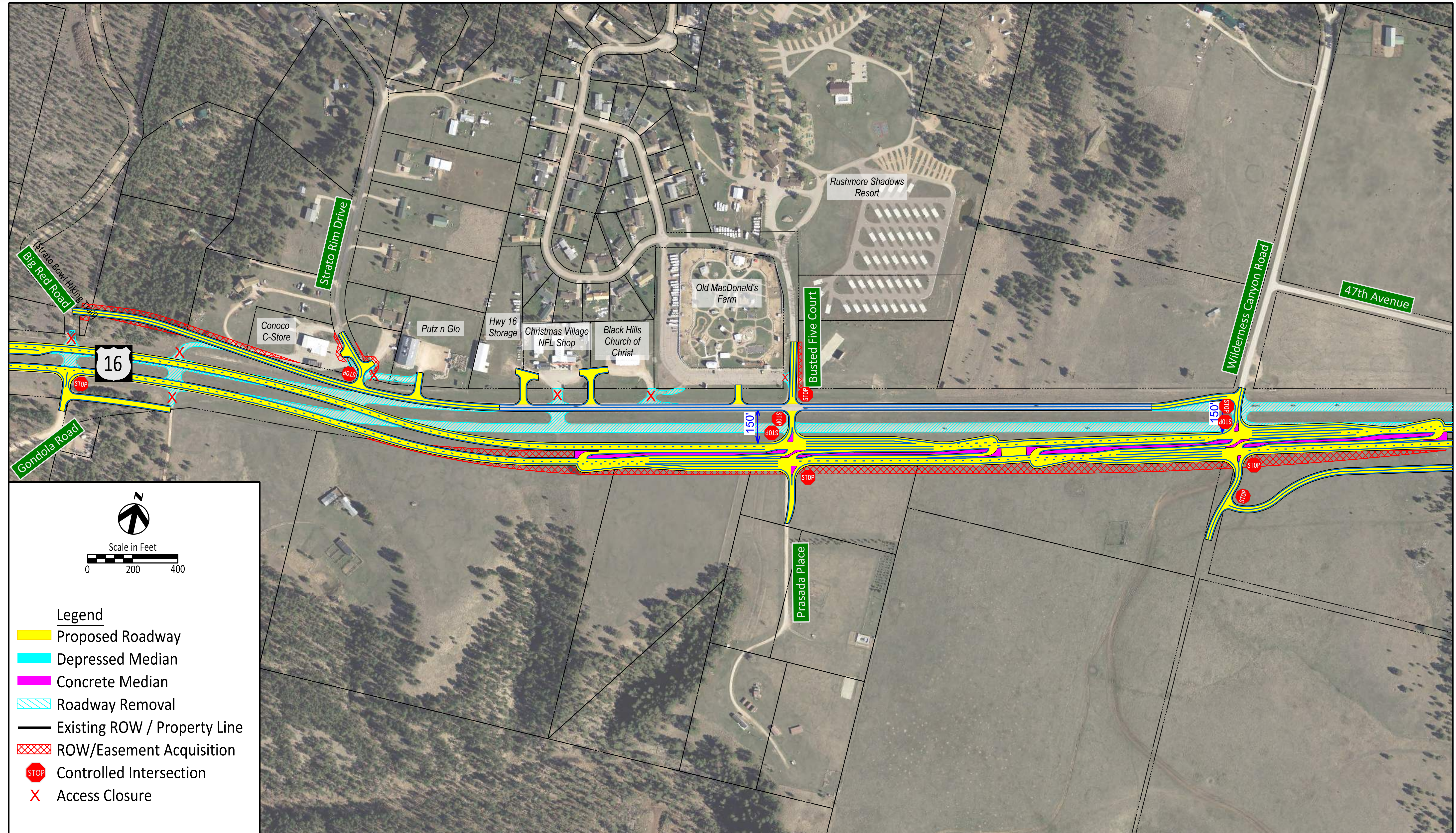
STRATO RIM – BUSTED FIVE – WILDERNESS CANYON AREA, SCENARIO C

U.S. HIGHWAY 16 CORRIDOR STUDY: RURAL SUB-AREA ANALYSIS



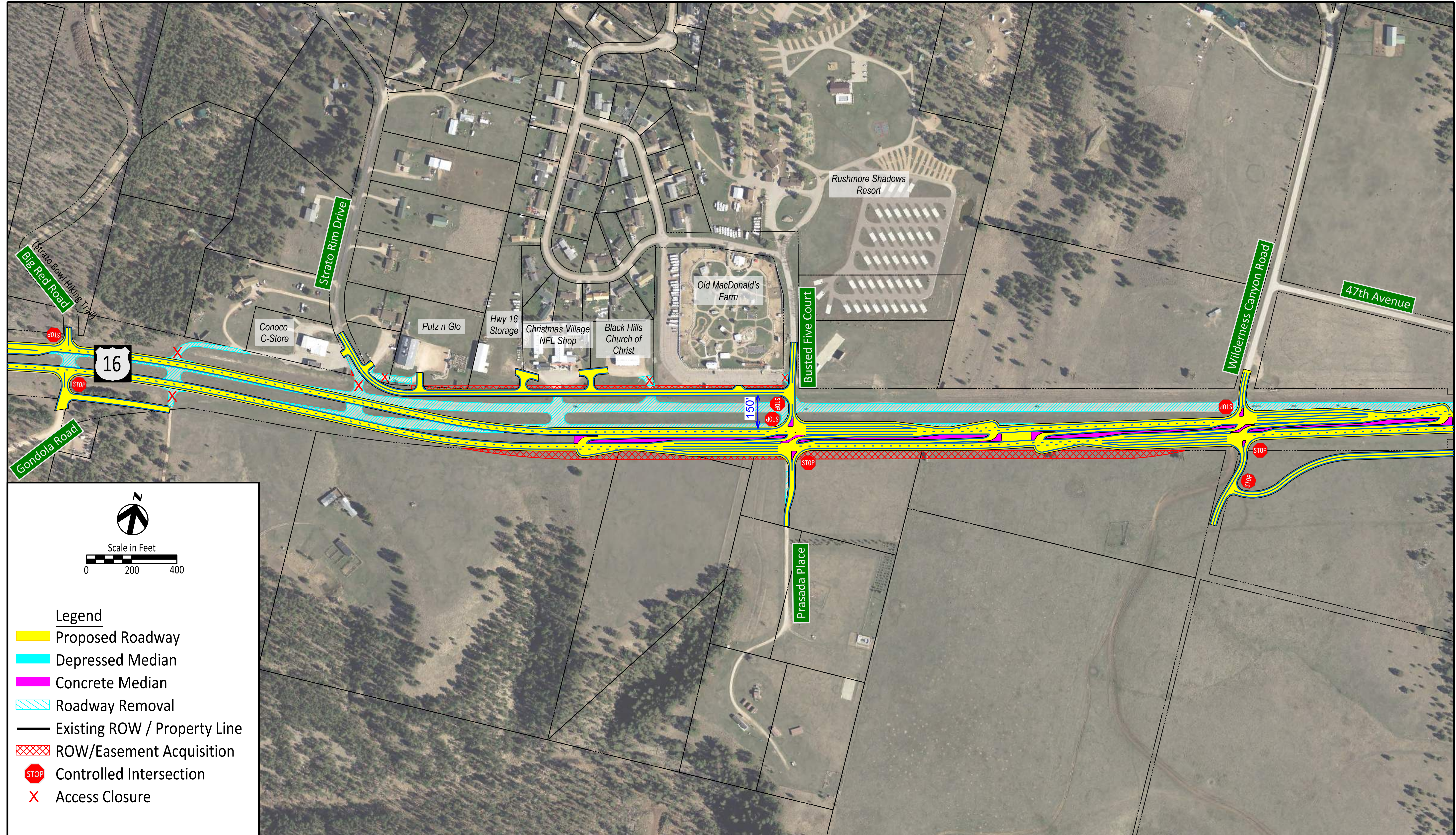
STRATO RIM – BUSTED FIVE – WILDERNESS CANYON AREA, SCENARIO D

U.S. HIGHWAY 16 CORRIDOR STUDY: RURAL SUB-AREA ANALYSIS



STRATO RIM – BUSTED FIVE – WILDERNESS CANYON AREA, SCENARIO E

U.S. HIGHWAY 16 CORRIDOR STUDY



STRATO RIM – BUSTED FIVE – WILDERNESS CANYON AREA, SUMMARY

U.S. HIGHWAY 16 CORRIDOR STUDY: RURAL SUB-AREA ANALYSIS

Scenario	2050 Planning Horizon Traffic Operations						Predicted Safety (2026 – 2050)	
	Strato Rim Drive Intersection		Busted Five Court Intersection		Wilderness Canyon Road Intersection		Fatal & Injury Crashes	Total Crashes
	Experienced Travel Time (sec)* AM / PM	RCI Stop-Controlled Delay (sec)* AM / PM	Experienced Travel Time (sec)* AM / PM	RCI Stop-Controlled Delay (sec)* AM / PM	Experienced Travel Time (sec)* AM / PM	RCI Stop-Controlled Delay (sec)* AM / PM	% Increase (+) or Decrease (-) from No Build	% Increase (+) or Decrease (-) from No Build
Scenario A <i>RCIs (3) on Existing Alignment</i>	35 / 39	14 / 18	32 / 39	15 / 17	38 / 35	16 / 17	-29%	-22%
Scenario B <i>Full Access Intersection Improvements (3) on Existing Alignment</i>	27-28 / 53-68	-	27-31 / 52- 75	-	43- 60 / 58-75	-	-14%	-12%
Scenarios C, D, and E <i>RCIs (2) on New Alignment</i>	-	-	34 / 52	18 / 28	38 / 35	16 / 17	-33%	-29%
No Build	29 / 49	-	31 / 67	-	64 / 145	-	Baseline	Baseline

* Reflects the worst-case condition, typically a vehicle turning left from the side-street (Strato Rim Drive, Busted Five Court, or Wilderness Canyon Road) to head towards Rapid City.

Experienced Travel Time (ETT) considers intersection delay plus extra distance travel time of the entire origin-destination path through the multiple intersections of an RCI. For a traditional intersection, ETT only reflects the intersection delay.

RCI stop-controlled delay reflects the time a motorist would wait at the side-street stop sign before finding an acceptable gap to turn into the RCI's median U-turn lane.

All Build condition scenarios result in intersection LOS A during the morning (AM) and afternoon (PM) peak hours. However, notable differences are expected across the scenarios for vehicles attempting to cross U.S. Highway 16 or turn left from the side-street.