



TH 371/TH 210 QUADRANT INTERCHANGE CONCEPT

Concept Cost Estimate (based upon 2021 bid price information)

Prepared By: SRF Consulting Group, Inc., **November 18, 2022**

				TOTAL	
ITEM DESCRIPTION	UNIT	UNIT PRICE	EST. QUANTITY	EST. AMOUNT	
PAVING AND GRADING COSTS					
GrP 1a	2106 Excavation - common & subgrade	(3) cu. vd.	\$11.00	29,400	\$323,400
GrP 2a	2106 Common Embankment (CV)	(4) cu. vd.	\$4.00	342,507	\$1,370,030
GrP 2d	2106 Granular Subgrade (CV)	(1)(8) cu. vd.	\$13.50	42,800	\$577,800
GrP 3a	Mainline Pavement	(1) sq. vd.	\$40.00	23,949	\$957,960
GrP 3b	Mainline Shoulder Pavement	(1) sq. vd.	\$35.00	9,449	\$330,715
GrP 3c	Ramp Pavement	(1) sq. vd.	\$40.00	6,663	\$266,520
GrP 3d	Ramp Shoulder Pavement	(1) sq. vd.	\$35.00	481	\$16,835
GrP 3e	Local Road Pavement	(8) sq. vd.	\$30.00	2,566	\$76,980
GrP 3f	Local Road Shoulder Pavement	(8) sq. vd.	\$25.00	444	\$11,100
GrP 4a	Concrete Walk / Trail / Median	(2) sq. vd.	\$75.00	16,317	\$1,223,792
GrP 4c	ADA Pedestrian Curb Ramp	each	\$1800.00	12	\$21,600
GrP 5	Concrete Curb and Gutter	lin. ft.	\$25.00	17,470	\$436,750
SUBTOTAL PAVING AND GRADING COSTS:					\$5,613,481
DRAINAGE, UTILITIES AND EROSION CONTROL					
Dr 5	Drainage - urban & rural	10%			\$564,000
Dr 7	Turf Establishment & Erosion Control	2%			\$114,000
SUBTOTAL DRAINAGE, UTILITIES AND EROSION CONTROL					\$678,000
BRIDGE COSTS					
Br 1	Bridge - Combined TH 371 over TH 210 and Railro	sq. ft.	\$225	46,689	\$10,505,025
SUBTOTAL BRIDGE COSTS:					\$10,505,025
RETAINING WALLS & OTHER MINOR STRUCTURAL COSTS					
RW 3	CIP Ret. Walls 5' high (spread foundation)	(5) lin. ft.	\$430	125	\$53,750
RW 4	CIP Ret. Walls 10' high (spread foundation)	(5) lin. ft.	\$830	125	\$103,750
RW 5	CIP Ret. Walls 15' high (spread foundation)	(5) lin. ft.	\$1,360	125	\$170,000
RW 6	CIP Ret. Walls 20' high (spread foundation)	(5) lin. ft.	\$2,080	75	\$156,000
RW 30	Ret. Walls Architectural Treatments (normal)	sq. ft.	\$15	5,250	\$78,750
SUBTOTAL RETAINING WALLS & OTHER MINOR STRUCTURAL COSTS:					\$562,250
SIGNAL AND LIGHTING COSTS					
SGL 1	Signals (permanent)	each	\$350,000	1	\$350,000
SGL 6	Interchange Lighting (permanent, standard)	3%			\$485,000
SUBTOTAL SIGNAL AND LIGHTING COSTS:					\$835,000
INTELLIGENT TRANSPORTATION SYSTEMS COSTS					
ITS 2	Permanent ITS - rural	mile	\$100,000	1.4	\$140,000
SUBTOTAL INTELLIGENT TRANSPORTATION SYSTEMS COSTS:					\$140,000
SIGNING & STRIPING COSTS					
SGN 1	Mainline Signing (C&D)	mile	\$35,000	1.8	\$63,000
SGN 2	Mainline Striping	mile	\$5,000	1.8	\$9,000
SGN 3	Mainline Signing (A, OH, Br Mtd)	each	\$50,000	2	\$100,000
SUBTOTAL SIGNING & STRIPING COSTS:					\$172,000
SUBTOTAL CONSTRUCTION COSTS:					\$18,505,756
MISCELLANEOUS COSTS					
M 1	Mobilization	5%			\$927,000
M 2	Non Quantified Minor Items	(6) 15%			\$2,777,000
M 7	Temporary Pavement & Drainage	5%			\$927,000
M 8	Traffic Control	3%			\$556,000
SUBTOTAL MISCELLANEOUS COSTS:					\$5,187,000
ESTIMATED TOTAL CONSTRUCTION COSTS without Contingency:					\$23,692,756
1	Contingency or "risk"	(7) 15%			\$3,556,000
ESTIMATED TOTAL CONSTRUCTION COSTS PLUS CONTINGENCY:					\$27,248,756
OTHER PROJECT COSTS:					
DESIGN ENG. & CONSTRUCTION ADMIN.		Lump Sum	20%		\$5,452,000
SUBTOTAL OTHER PROJECT COSTS					\$5,452,000
TOTAL PROJECT COST					\$32,700,756
INFLATION COST (2022 TO 2027)					
(9)	5 Years	16%			\$5,400,000
TOTAL PROJECT COST (OPENING YEAR DOLLARS)					\$38,100,756

NOTE: (1) Mainline and ramp pavement section assumed to be 8" bituminous, 6" aggregate base class 6, and 36" of select gran
 (2) Includes aggregate base class 6.
 (3) Calculated based on no profile grade change on TH 210, and 25' vertical profile raise on TH 371
 (4) Calculated based on no profile grade change on TH 210, and 25' vertical profile raise on TH 371, with 1:6 inslopes for
 (5) Assumes Mn/DOT Standard Plan Sheet designs; does not include excavation or backfill.
 (6) Includes all removals and local utilities
 (7) Includes railroad, utility, and turn back agreements, project mitigation, and right of way acquisitions
 (8) Local road pavement section of 6" bituminous, 6" aggregate base class 6, and 24" of select granular embankment. Sh
 (9) Assumed 3% annual inflation for a period of 5 years