T.H. 210 (WASHINGTON STREET) LAYOUT

S.P. 1805-80

Sambatek | SEH | mn DEPARTMENT OF TRANSPORTATION

INDEX MAP

CROW WING

LAYOUT HISTORY

THIS PORTION OF TH 210 AND THE LARGEST TRAFFIC VOLUME IN CROW WING COUNTY WITH A VARIETY OF NEEDS INCLUDING SAFETY CONCERNS AND CONGESTION, ALONG WITH A VARIETY OF ADJACENT LAND USES, ACCESSES AND ACTIVITIES BOTH ALONG AND CROSSING THE 210. THE PURPOSE OF THE TH 210 PROJECT IS TO IMPROVE TRAVEL MOBILITY, ADDRESS PAVEMENT CONDITIONS, IMPROVE CONVEYANCE, ENHANCE SAFETY AND MOBILITY FOR PEDS, BIKES, AND VEHICLES, ADDRESS ADA DEFICIENCIES, AND PAVEMENT CONDITIONS ON TH 210 BETWEEN BAXTER DRIVE AND PINE CHURCH ROAD.

MARCH 14, 2020: PRELIMINARY GEOMETRIC LAYOUT AND PROJECT PURPOSE AND NEED WERE REVIEWED BY MN/DOT DIST. DISTRICT, SJ ECHO, AND THE CITIES OF BAXTER AND BRAINERD REVIEWED THE LAYOUT AND PROVIDED COMMENTS. THE PROJECT PURPOSE AND NEED REVISITED AND MEETING WAS HELD ON 05/05/20 AND WITH REVISIONS.

SIGNIFICANT CHANGES INCLUDE:

PAGE 01:
-ADDED A WALK ON SOUTH SIDE OF BETWEEN BAXTER DR AND NW 9TH ST IN COORDINATION WITH CITY OF BAXTER. -ADDED A WALK ON NORTH SIDE OF BETWEEN BAXTER DR INTERSECTIONS THAT HAD ONLY ONE DEPORE (EXCEPT NW 4TH AND NW 5TH ST DUE TO ROW.
-GENERALLY REMOVED WIDER LEG DESIGN PURCHASES AND WILL RESTRICT SLIGHAL THROUGLEFTS FROM MINOR ROADS TO ALLOW FOR NARROWER LEGS AND EXTENDED MEDIAN NOSES ALONG TH 210.
-ELIMINATED THE ELLEFT ON N 6TH ST TO PRIORITIZE THE WALK ON THE WEST SIDE OF N 6TH ST.
PAGE 02:
-ADJUSTED TH 210 BETWEEN N 6TH ST AND N 4TH ST TO CONTINUE THE WIDER WALK ON THE NORTH SIDE OF TH 210 AND TO ALLOW FOR THE WALK TO CROSS TH 210 AT THIS REQUIRED ALIGNMENT AND PROFILE ADJUSTATIONS.
-ELIMINATED THE EB LEFTS ONTO 4TH AVE NE, ALLOWING FOR A NARROWER MEDIAN.
-REVISED DESIGN AND CONTROL VEHICLE SELECTIONS, ADJUSTED SIGNAL TIMINGS, AND ADJUSTED SIGNAL CONTROL FOR UNSIGNAL INTERSECTIONS IN GENERAL, ALONG WITH ADDING ADA RAMPS AT SIGNALIZED INTERSECTIONS. INTERSECTIONS, WITH THE ARRIVAL AS THE DESIGN VEHICLE FOR KEY INTERSECTIONS AND MOVEMENTS.

PAGE 03:
-ADDED A NORTH LEG TO THE ROUNDABOUT AT TH 25 INTO THE ROUNDABOUT TO ALLOW FOR A WALK ON THE NORTH SIDE. TRAIL CONNECTION TO 210 INTO THE TH 25 RR BRIDGE. -ADDED A WALK ON THE NORTH SIDE.
-ADDED SLIP RAMPS TO THE SOUTHWEST AND NORTHEAST QUADRANTS TO ALLOW FOR CONVEYANCE.
-ADDED SLIP RAMPS TO THE SOUTHWEST AND NORTHEAST QUADRANTS TO ALLOW FOR CONVEYANCE.
-ADDED A 5' WALK.

KEY MEETINGS WERE HELD WITH THE CITY OF BRAINERD TO DRIVE RESOLUTION ON 09/30/22 AND ON 11/04/22.

SIGNIFICANT CHANGES INCLUDE:

PAGE 01:
-ADDED BUMP OUTS AT BAXTER DR, NW 7TH ST IN COORDINATION WITH CITY OF BRAINERD.-ALLOWED LEFT TURNS OUT OF W 2ND ST, RESTRICTED W 2ND ST TO RIGHT IN/RIGHT OUT. -ADDED A WALK ON NORTH SIDE OF 5TH ST. -ADDED A GRASS BERM BETWEEN THE CLOSED 2ND AVE NE AND THE 210 AND INSTEAD ADDED A WALK TO THE SOUTH SIDE.

PAGE 02:
-CONVERTED THE 4TH AVE NE BUSINESS SIGN ACCESSED FROM TH 25 TO A RIGHT-IN RIGHT-OUT DRIVEWAY ACCESS ONLY. -ADDED A WALK ON THE NORTH SIDE. -ADDED A WALK ON A WEST TO SOUTH LEFT TO ADDRESS THE SEVERE DATA. ALLOWING FOR A PEDESTRIAN BRIDGE. TURN LINES WERE ADJUSTED TO ALLOW FOR ADEQUATE SIGNAL TRAFFIC AS IT ENTERS THE CITY FROM THE EAST.

THE GEOMETRIC LAYOUT HAS BEEN ADVANCED TO 1a.

DRAFT
01/18/2023

Level 1a LAYOUT APPROVAL

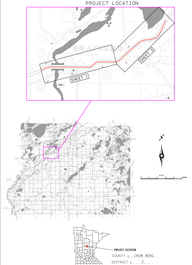
Prepared by:	Sambatek	Date:
Reviewed by:	MN/DOT Project Manager	Date:
Reviewed by:	MN/DOT Traffic Engr.	Date:
Reviewed by:	MN/DOT Bridge Engr.	Date:
Reviewed by:	MN/DOT District Engr.	Date:
Reviewed by:	MN/DOT Metro Engr.	Date:
Reviewed by:	MN/DOT Design Engr.	Date:
Reviewed by:	MN/DOT Operations Engr.	Date:
Reviewed by:	MN/DOT Assistant Commissioner	Date:

LAYOUT No. 1a
T.H. 210 (WASHINGTON STREET) FROM BAXTER DRIVE, S.P. 2806-(90)(90), PART 1 OF 2

Recommended for approval:	Approved for use:
Project Manager	District Engineer
Traffic Engineer	Metro Engineer
Bridge Engineer	Assistant Commissioner
Design Engineer	Operations Engineer
Date:	Date:

Date: 01/18/23
File name: 1a_LAYOUT.dgn
Location: C:\Users\jeff.sambatek\Desktop\210 Layout Updates\
Plot Date: 1/18/2023 8:01:03 PM

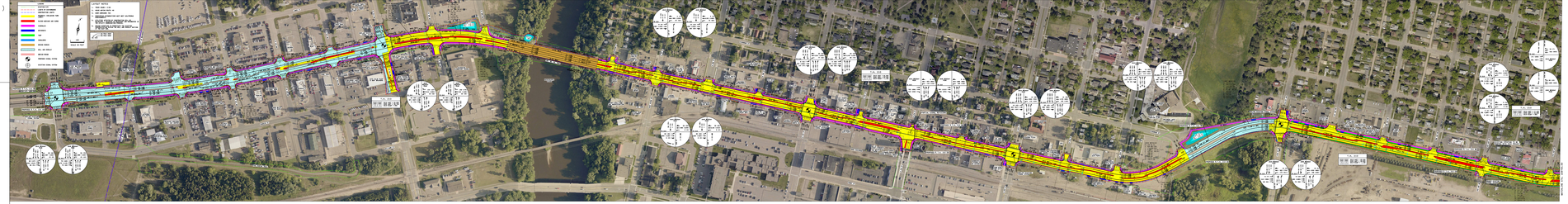
PROJECT LOCATION



PURPOSE AND NEED

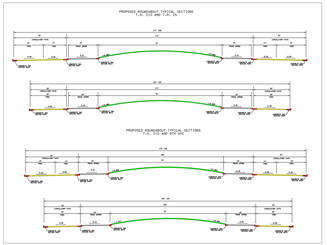
THE NEED ON THIS PROJECT IS PAVEMENT WORK IN ADDITION TO THE ONE OR TWO LOCATIONS WITH SECONDARY NEEDS AND BRIDGE WORK CONDITIONS. PAVEMENT CONDITIONS, CONVEYANCE, STORM SEWER, DOWNTOWN LOCAL SITE IMPACTS, VEHICLE-PEDESTRIAN-BIKE SAFETY AND MOBILITY.

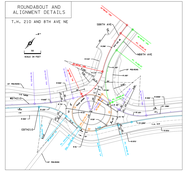
PROJECT PURPOSE IS TO IMPROVE PAVEMENT AND INFRASTRUCTURE CONDITION AND ALSO ADDRESS SAFETY AND MOBILITY FOR ALL USERS.

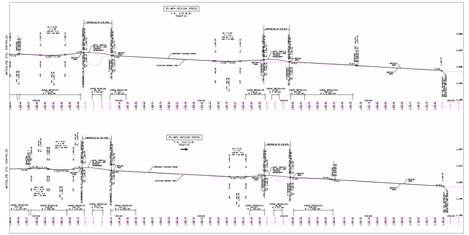


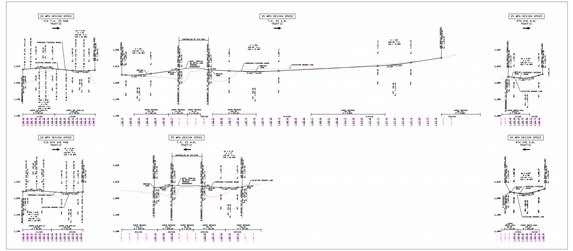
T.H. 210 (WASHINGTON STREET) LAYOUT

S.P. 1805-80







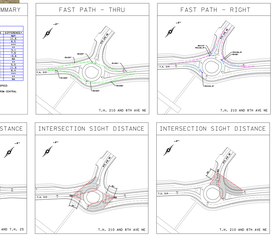
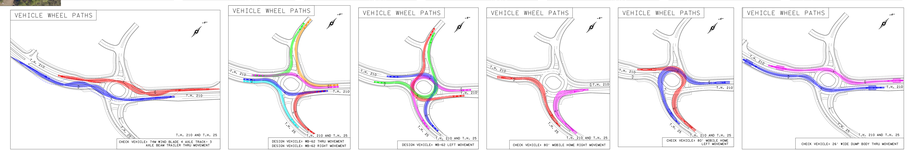
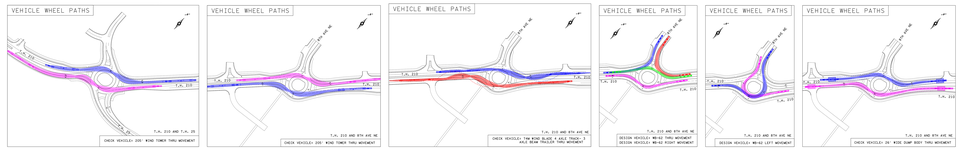


ROUNDABOUT SPEED SUMMARY

APPROACH	TARGET	CURVE	RADIUS	LENGTH	CURVATURE
NB TO SB					
PHASE 1 - ON A SEGMENTED	30	1	90	47	0.53
PHASE 1 - ON A SEGMENTED	30	2	90	47	0.53
SB TO NB					
PHASE 1 - ON A SEGMENTED	30	1	90	47	0.53
PHASE 1 - ON A SEGMENTED	30	2	90	47	0.53
WB TO EB					
PHASE 1 - ON A SEGMENTED	30	1	90	47	0.53
PHASE 1 - ON A SEGMENTED	30	2	90	47	0.53
EB TO WB					
PHASE 1 - ON A SEGMENTED	30	1	90	47	0.53
PHASE 1 - ON A SEGMENTED	30	2	90	47	0.53

NOTE: ALL CURVES ARE CIRCULAR
1. ALL SEGMENTS ARE ASSUMED TO BE 30 MPH
2. ALL SEGMENTS ARE ASSUMED TO BE 0' OFFSET FROM CENTRAL ISLAND
3. ALL CURVATURE = CONTROLLED BY ALL

ROUNDABOUT SPEED SUMMARY

APPROACH	TARGET	CURVE	RADIUS	LENGTH	CURVATURE
NB TO SB					
PHASE 1 - ON A SEGMENTED	30	1	90	47	0.53
PHASE 1 - ON A SEGMENTED	30	2	90	47	0.53
SB TO NB					
PHASE 1 - ON A SEGMENTED	30	1	90	47	0.53
PHASE 1 - ON A SEGMENTED	30	2	90	47	0.53
WB TO EB					
PHASE 1 - ON A SEGMENTED	30	1	90	47	0.53
PHASE 1 - ON A SEGMENTED	30	2	90	47	0.53
EB TO WB					
PHASE 1 - ON A SEGMENTED	30	1	90	47	0.53
PHASE 1 - ON A SEGMENTED	30	2	90	47	0.53

NOTE: ALL CURVES ARE CIRCULAR
1. ALL SEGMENTS ARE ASSUMED TO BE 30 MPH
2. ALL SEGMENTS ARE ASSUMED TO BE 0' OFFSET FROM CENTRAL ISLAND
3. ALL CURVATURE = CONTROLLED BY ALL