LAYOUT HISTORY

DATE	DESCRIPTION
Aug 2006 1	Joint Local Officials Workshop - The Local Advisory Committee identified five general Build Alternatives that considered general access locations only.
Sep 2006 2	Tech Memo 2 Alternative Screening - Through the screening process, two alternatives for general access were chosen to proceed with further study. Alt.1-Compressed diamond interchange at present intersection of TH 169 and CSAH 4. Alt.3- Partial folded diamond interchange on the CSAH 4 alignment east of existing TH 169.
Nov 2006 3	Tech Memo 3 Alternative Evaluation - After further refinement of the two above remaining options, sub-alternatives for each were developed. For Alternative 1, two options were explored: Alternative 1A - Partial Tight Urban Diamond with Folded Diamond in Southeast Quadrant, and Alternative 1B - Tight Urban Diamond. Three options for Alternative 3 were explored: Alternative 3A - Shifted TH 169 with Partial Tight Urban Diamond and Folded Diamond in Northeast Quadrant, Alternative 3B- Shifted TH 169 with Partial Super Tight Urban Diamond and Folded Diamond in Southeast Quadrant, and Alternative 3C - Shifted TH 169 with Split Fly-Over Ramps. Alternatives 1B and 3B were chosen to be carried forward, based on criteria established by the study team and the Local Advisory Committee. After further traffic analysis and impact studies, Alternative 3B (partial folded diamond interchange on existing CSAH 4 alignment west of the existing TH 169 / CSAH 4 intersection) was chosen as the recommended option.
Sep 2007 4	Initial review by Mn/DOT Central Office - Based on initial Mn/DOT C.O. review, horizontal curves on TH 169 at the north connection were revised to eliminate broken back curves.
Nov 2007 4	Moved pond from NE quadrant to SW quadrant, based on comments from Local Officials.

LAYOUT No._1_ SECTION No._5_ COPY No.____
T.H. 169 VICINITY OF CSAH 4, CITY OF ZIMMERMAN
FROM 3000' SOUTH OF 247TH STREET TO 7000' NORTH OF CSAH 4

Prepared OCTOBER 20 07 Scale: Hor. 1 inch = 100 ft.
By SRF CONSULTING GROUP, INC.

The alignment and grades shown on this map are tentative and subject to change without notice.	Staff Approval Date: XX-XX-XX.	The traffic volumes shown are estimated for year 2030 Prepared OCT 20 07

S.P. 7106-71 T.H. X A.J. X PPMS Activity X
S.P.____ T.H.____ A.J.____ PPMS Activity ____
S.P.____ T.H.____ A.J.____ PPMS Activity ____
Copy To: ________ For: ________

DESIGN FILE: H:\Projects\7361\HI-MU\Base\TH 169\Zimmerman Alignment Study\CP710673_loe.dgn
DATE: 10/21/2011 - DATE PLOTTED

Level 1 LAYOUT APPROVAL

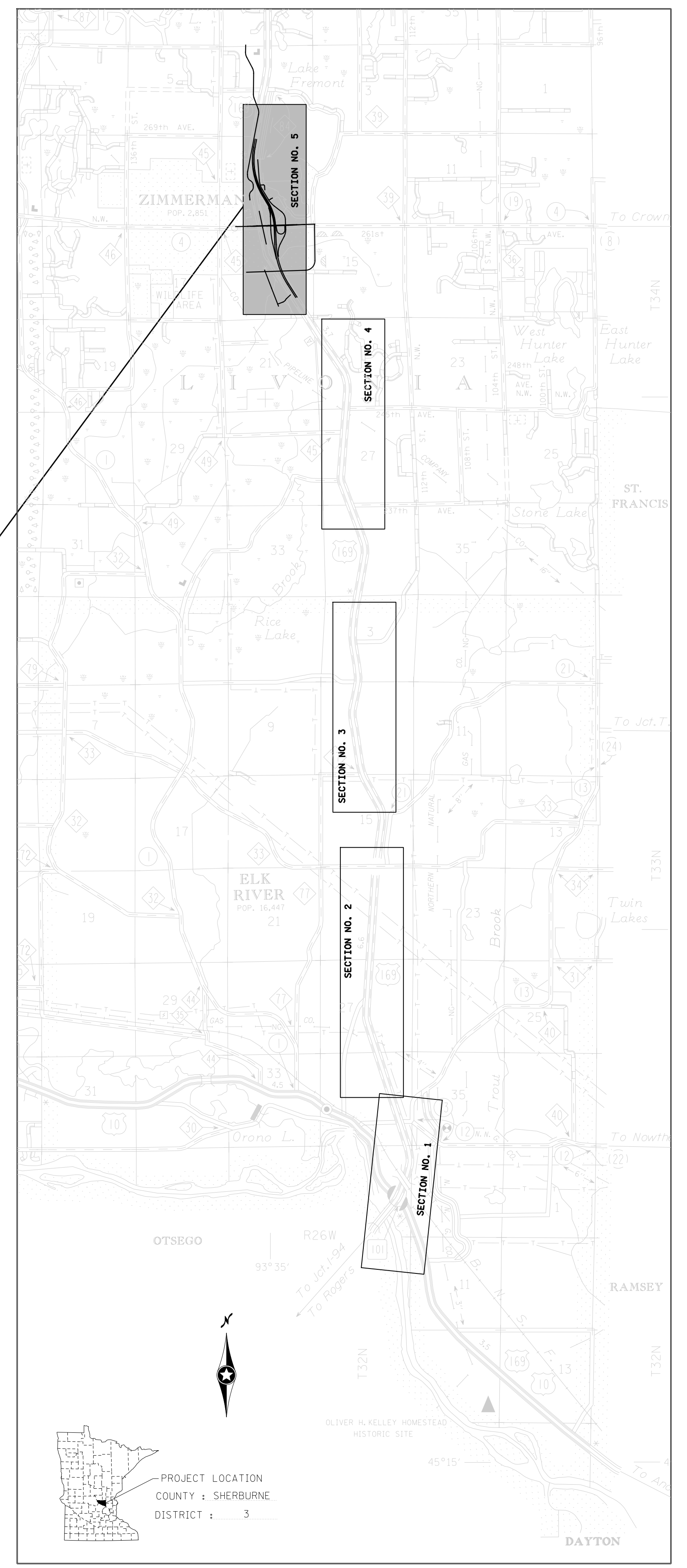
Programmed Letting Date X
Prepared By SRF CONSULTING GROUP, INC. 20__
Reviewed By ____ District Design or Preliminary Design Engineer 20__
Reviewed By ____ District Traffic Engineer 20__
Reviewed By ____ State Geometrics Engineer 20__
Approved By ____ Transportation District Engineer 20__
Approved By ____ State Design Engineer 20__

I HEREBY CERTIFY THAT THIS LAYOUT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: ____ LIC. NO.: ____ ENGR.: ____

PROJECT LOCATION

LOCATION MAP


SECTION NO. 5
SECTION NO. 4
SECTION NO. 3
SECTION NO. 2
SECTION NO. 1
ZIMMERMAN
LIVONIA
Lake Fremont
ELK RIVER
OTSEGO
RAMSEY
DAYTON
ST. FRANCIS
T34N
T33N
T32N
OLIVER H. KELLEY HOMESTEAD HISTORIC SITE
PROJECT LOCATION
COUNTY : SHERBURNE
DISTRICT : 3

LEGEND
PAVED ROADWAY
AGGREGATE ROADWAY/DRIVEWAY
BRIDGES
RAISED MEDIANS & CURBS
PAVED SHOULDERS
BITUMINOUS TRAILS & BIKEWAYS
CONCRETE TRAILS & SIDEWALKS
CONSTRUCTION "BY OTHERS"
PROPOSED PONDING LOCATION
REMOVAL
PROPOSED TRAFFIC SIGNAL
EXISTING TRAFFIC SIGNAL
PRELIMINARY CONSTRUCTION LIMITS
WETLANDS
WETLANDS SUPL. INFORMATION
PROPOSED RETAINING WALL
PRELIMINARY
SUBJECT TO CHANGE
10/21/2011
SRF CONSULTING GROUP, INC.
0 100 200
scale in feet
℄ 247TH AVE.
℄ 2ND ST.
℄ MALLARD TERRACE
℄ S.B. T.H. 169
℄ N.B. T.H. 169
T.H. 169: 67,000 ADT
T.H. 169: 65,000 ADT
T.H. 169
MAIN ST.
2ND ST.
3RD ST.
2ND AVE.
5TH AVE.
GATEWAY DR.
C.S.A.H. 4
℄ OLD 169
FREEMONT DR.
OAK ST.
TERRACE DR.
ISLE RD.
HILLSIDE DR.
℄ PINE ST.
℄ N.E. RAMP
℄ S.W. RAMP
℄ S.E. LOOP
℄ S.E. RAMP
℄ E.B. C.S.A.H. 4
℄ W.B. C.S.A.H. 4
℄ FREEMONT LN.
℄ FREEMONT DR.
FREEMONT LANE
CLOSE
1065A/490P/8000 ADT
510A/530P/5200 ADT
320A/600P/5600 ADT
220A/885P/7000 ADT
DESIGN VEHICLE WB-62 (48' TRAILER)
OLD 169
N.W. RAMP
S.W. RAMP
S.E. LOOP
FREEMONT DR.
S.E. RAMP
MALLARD TERRACE DESIGN SPEED = 30 MPH STATE AID MANUAL SECTION 8820.9920
2ND STREET DESIGN SPEED = 40 MPH STATE AID MANUAL SECTION 8820.9920
247TH AVENUE DESIGN SPEED = 40 MPH STATE AID MANUAL SECTION 8820.9920
N.E. RAMP IN RED
N.W. RAMP, S.W. RAMP, & S.E. RAMP - RURAL RAMPS DESIGN SPEED = 50 MPH ROAD DESIGN MANUAL TABLE 6-3.04C
S.E. LOOP DESIGN SPEED = 30 MPH ROAD DESIGN MANUAL TABLE 6-3.04C
CSAH 4 - 4 LANE DIVIDED WITH TURN LANE SECTION DESIGN SPEED = 45 MPH MN STATUTES, STATE AID RULES 8820.9920, 8820.9936
EAST FRONTAGE ROAD DESIGN SPEED = 40 MPH STATE AID MANUAL SECTION 8820.9920
OLD 169 DESIGN SPEED = 40 MPH MN STATUTES, STATE AID RULES 8820.9920, 8820.9936
T.H. 169 - 4-LANE TYPICAL SECTION DESIGN SPEED = 70 MPH ROAD DESIGN MANUAL TABLE 2-7.01D OR 2-7.01F, 4-4.01A & 4-4.01B
54' Between Centerlines
62' Between Centerlines
USE URBAN SECTION; REPLACE DITCH WITH MEDIAN BARRIER AND C &G
REPLACE NOISE BERM WITH A NOISE WALL
T.H. 169 - 4-LANE TYPICAL SECTION UNDER BRIDGE DESIGN SPEED = 70 MPH ROAD DESIGN MANUAL TABLE 2-7.01D OR 2-7.01F, 4-4.01A & 4-4.01B
APPROX. 5' STRUCTURE DEPTH AT 247TH AVE.
APPROX. 6' STRUCTURE DEPTH AT CSAH 4
PROP. R/W
PROFILE GRADE
THRU
SHLD
BERM
RT TURN
LT TURN / SHLD
CLEAR ZONE
B624 C&G
B424 C&G

Evaluating option to reduce number of lanes between frontage roads from 6-lane to 4-lane