HNTB
HNTB Corporation
The HNTB Companies
Engineers Architects Planners

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Level 1 LAYOUT APPROVAL

Programmed Letting Date December 15, 2011

Prepared By ______________ 20___
District Design or Preliminary Design Engineer

Reviewed By ______________ 20___
District Traffic Engineer

Reviewed By ______________ 20___
State Geometrics Engineer

Approved By ______________ 20___
Transportation District Engineer

Approved By ______________ 20___
State Design Engineer

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.______________

DRAFT FINAL
Preliminary
Layout

DESIGN FILE: \\MNMN00\PMwork\Jobs\46361 - MnDOT GEC\WO-22 I35W-4th St S Auxiliary Lane\TechProd\Work\CADD\CD\cp2783136_lo4.dgn
PLOTTED ON: Thursday, September 01, 2011 TIME: 6:27:11 PM
PLOTTED BY: nellingson
PEN TABLE: \\mnw00\cadd\b\mstn\Workspace\Agency\MnDOT\plot\MnDOT-fl-clr.pen

LAYOUT No. 1 COPY No.____
T.H. 35W VICINITY OF CITY OF MINNEAPOLIS
FROM 4TH STREET SOUTH TO JOHNSON ST NE
IN HENNEPIN COUNTY
Prepared SEPTEMBER 2011 Scale: Hor. 1 inch = 100 ft.
By HNTB CORPORATION

The alignment and grades shown on this map are tentative and subject to change without notice.

Staff Approval
Date:

The traffic volumes shown are estimated for year ______________
Prepared ______________ 20___

S.P. 2783-136 T.H. 35W A.J. T9H051 PPMS Activity 1140
S.P.______ T.H.____ A.J.____ PPMS Activity____
S.P.______ T.H.____ A.J.____ PPMS Activity____
Copy To:______________ For:______________

DESIGN FILE: $$$@PATHFILENAME@$$$
DATE: $$$$@DATE@$$$$

LAYOUT HISTORY

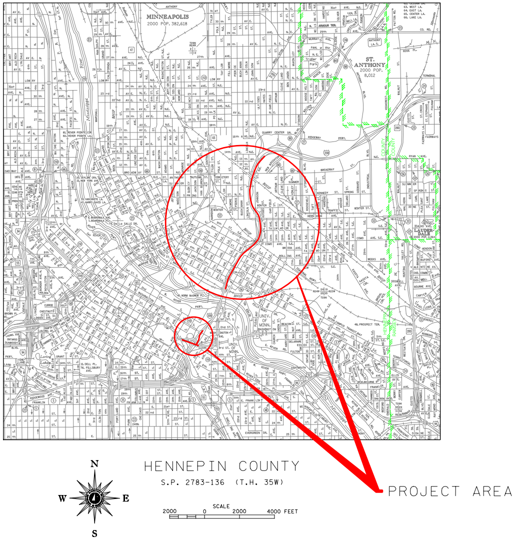
JUNE 2008
A study was performed at the direction of the City of Minneapolis in partnership with Mn/DOT and Hennepin County. A Feasibility Report was released which detailed the project need and analyzed alternative concepts. The Feasibility Report identified the need for a new on-ramp from 4th St S to northbound I-35W in downtown Minneapolis, and also the need for an added lane on northbound I-35W from University Ave SE to the Johnson St NE exit.

JUNE 2011 TO PRESENT
Preliminary engineering performed based on recommended Feasibility Report alternative, and development of geometric layout for staff approval.

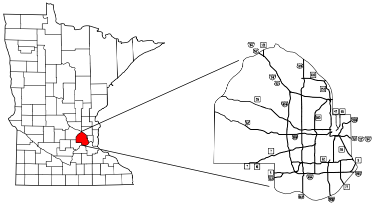
AUGUST 23, 2011
An informal public open house was held in the City of Minneapolis to present the project needs and goals to the public. Preliminary geometrics and noise analysis data was displayed.

PROJECT LOCATION

ST. PAUL / MINNEAPOLIS
METROPOLITAN AREA


MINNEAPOLIS
2000 POP. 382,618
ST. ANTHONY
2000 POP. 8,012
PROJECT AREA
N
S
E
W
SCALE
2000
0
2000
4000 FEET

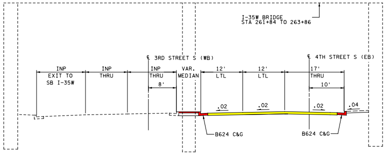
HENNEPIN COUNTY
S.P. 2783-136 (T.H. 35W)



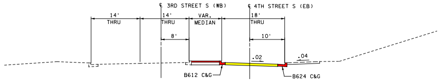
DESIGN EXCEPTIONS:

1) SHOULDER WIDTH - I-35W NB, INSIDE AND OUTSIDE SHOULDERS, FROM UNIVERSITY AVE SE TO JOHNSON ST NE
2) HORIZONTAL CLEARANCE - I-35W NB AT UNIVERSITY AVE SE BRIDGE, RIGHT-HAND SIDE
3) SIGHT DISTANCE - I-35W NB AT UNIVERSITY AVE SE BRIDGE, RIGHT-HAND SIDE

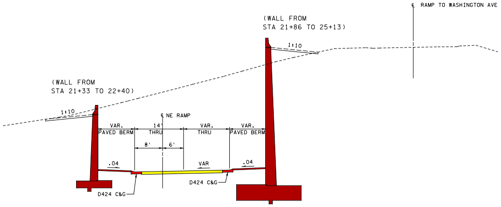
PROPOSED TYPICAL SECTION
4TH STREET S
(APPROX. STA 259+00 TO 264+00)


I-35W BRIDGE
STA 261+84 TO 263+86
℄ 3RD STREET S (WB)
℄ 4TH STREET S (EB)
INP
EXIT TO
SB I-35W
INP
THRU
INP
THRU
VAR.
MEDIAN
12'
LTL
12'
LTL
17'
THRU
8'
10'
.02
.02
.02
.04
B624 C&G
B624 C&G

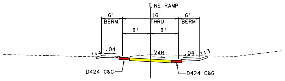
PROPOSED TYPICAL SECTION
4TH STREET S
(APPROX. STA 264+40 TO EAST PROJECT LIMITS)


℄ 3RD STREET S (WB)
℄ 4TH STREET S (EB)
14'
THRU
14'
THRU
VAR.
MEDIAN
18'
THRU
8'
10'
.02
.04
B612 C&G
B624 C&G

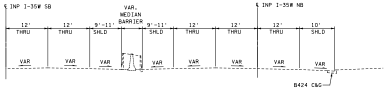
PROPOSED TYPICAL SECTION
NE RAMP FROM 4TH STREET S TO I-35W NB (WALL SECTION)


℄ RAMP TO WASHINGTON AVE
(WALL FROM
STA 21+86 TO 25+13)
(WALL FROM
STA 21+33 TO 22+40)
1:10
1:10
℄ NE RAMP
VAR.
PAVED BERM
14'
THRU
VAR.
THRU
VAR.
PAVED BERM
8'
6'
.04
VAR
.04
D424 C&G
D424 C&G

PROPOSED TYPICAL SECTION
NE RAMP FROM 4TH STREET S TO I-35W NB
(STA 25+13 TO ENTRANCE NOSE, RAMP TAPERS TO 16' WIDTH)

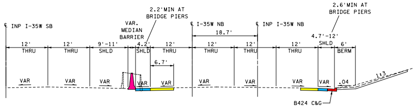

℄ NE RAMP
6'
BERM
16'
THRU
6'
BERM
8'
8'
1:4
.04
VAR
.04
1:3
D424 C&G
D424 C&G

INPLACE TYPICAL SECTION
I-35W (NORTH OF MISSISSIPPI RIVER)


℄ INP I-35W SB
VAR.
MEDIAN
BARRIER
℄ INP I-35W NB
12' THRU
12' THRU
9'-11' SHLD
9'-11' SHLD
12' THRU
12' THRU
12' THRU
10' SHLD
VAR
B424 C&G

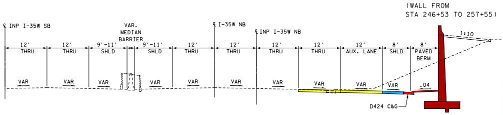
PROPOSED TYPICAL SECTION
I-35W NEAR 4TH STREET SE

(APPROX. STA 237+90 TO 243+50)


℄ INP I-35W SB
VAR.
MEDIAN
BARRIER
2.2'MIN AT
BRIDGE PIERS
℄ I-35W NB
18.7'
℄ INP I-35W NB
2.6'MIN AT
BRIDGE PIERS
12' THRU
12' THRU
9'-11' SHLD
4.2' SHLD
12' THRU
6.7'
12' THRU
12' THRU
12' THRU
4.7'-12' SHLD
6' BERM
VAR
.04
1:3
B424 C&G

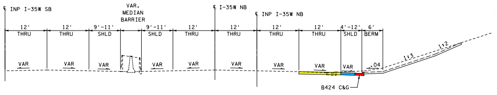
PROPOSED TYPICAL SECTION
I-35W NEAR 8TH STREET SE

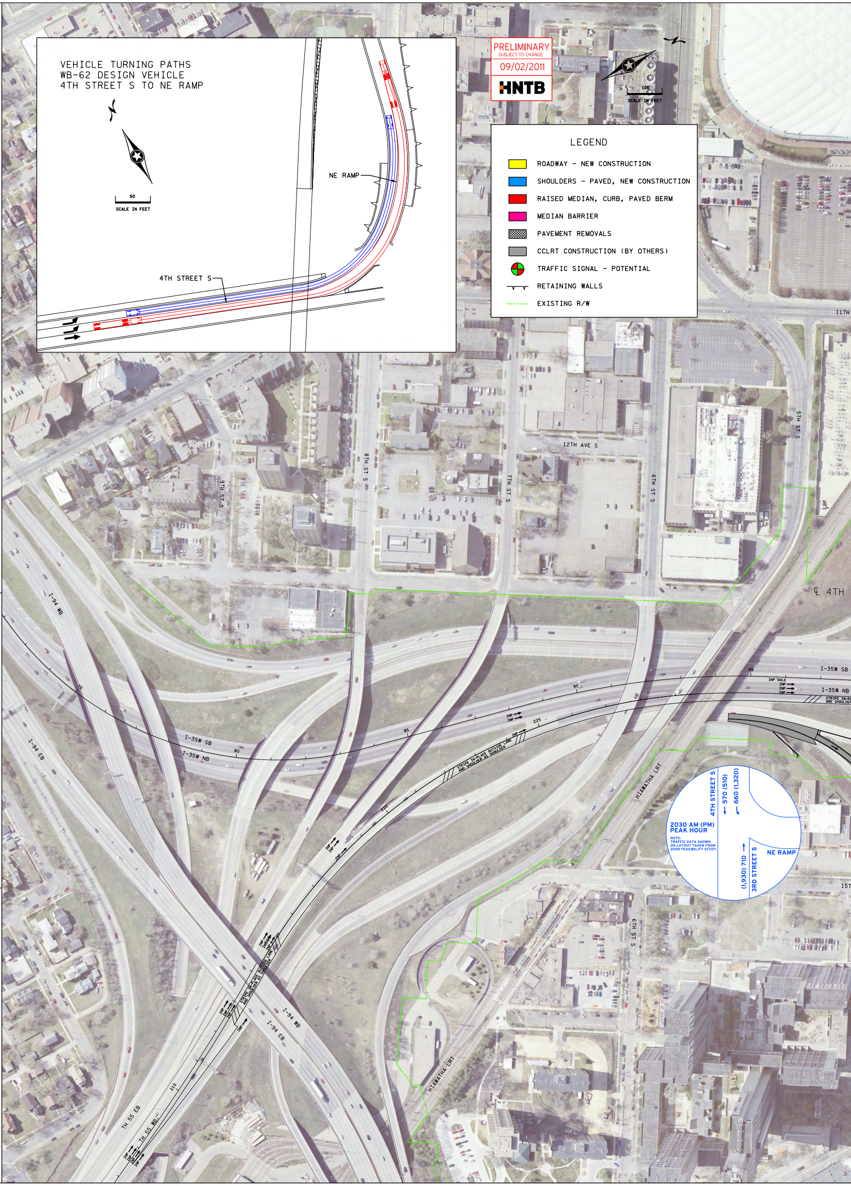
(APPROX. STA 252+20 TO 260+00)


(WALL FROM
STA 246+53 TO 257+55)
℄ INP I-35W SB
VAR.
MEDIAN
BARRIER
℄ I-35W NB
℄ INP I-35W NB
12' THRU
12' THRU
9'-11' SHLD
9'-11' SHLD
12' THRU
12' THRU
12' THRU
12' THRU
12' AUX. LANE
8' SHLD
8' PAVED BERM
VAR
.04
1:10
D424 C&G

PROPOSED TYPICAL SECTION
I-35W FROM BNSF RAILROAD TO JOHNSON ST NE EXIT

(APPROX. STA 260+00 TO 296+00)


℄ INP I-35W SB
VAR.
MEDIAN
BARRIER
℄ I-35W NB
℄ INP I-35W NB
12' THRU
12' THRU
9'-11' SHLD
9'-11' SHLD
12' THRU
12' THRU
12' THRU
12' THRU
4'-12' SHLD
6' BERM
VAR
.04
1:3
1:2
B424 C&G



VEHICLE TURNING PATHS
WB-62 DESIGN VEHICLE
4TH STREET S TO NE RAMP

PRELIMINARY
SUBJECT TO CHANGE
09/02/2011
HNTB

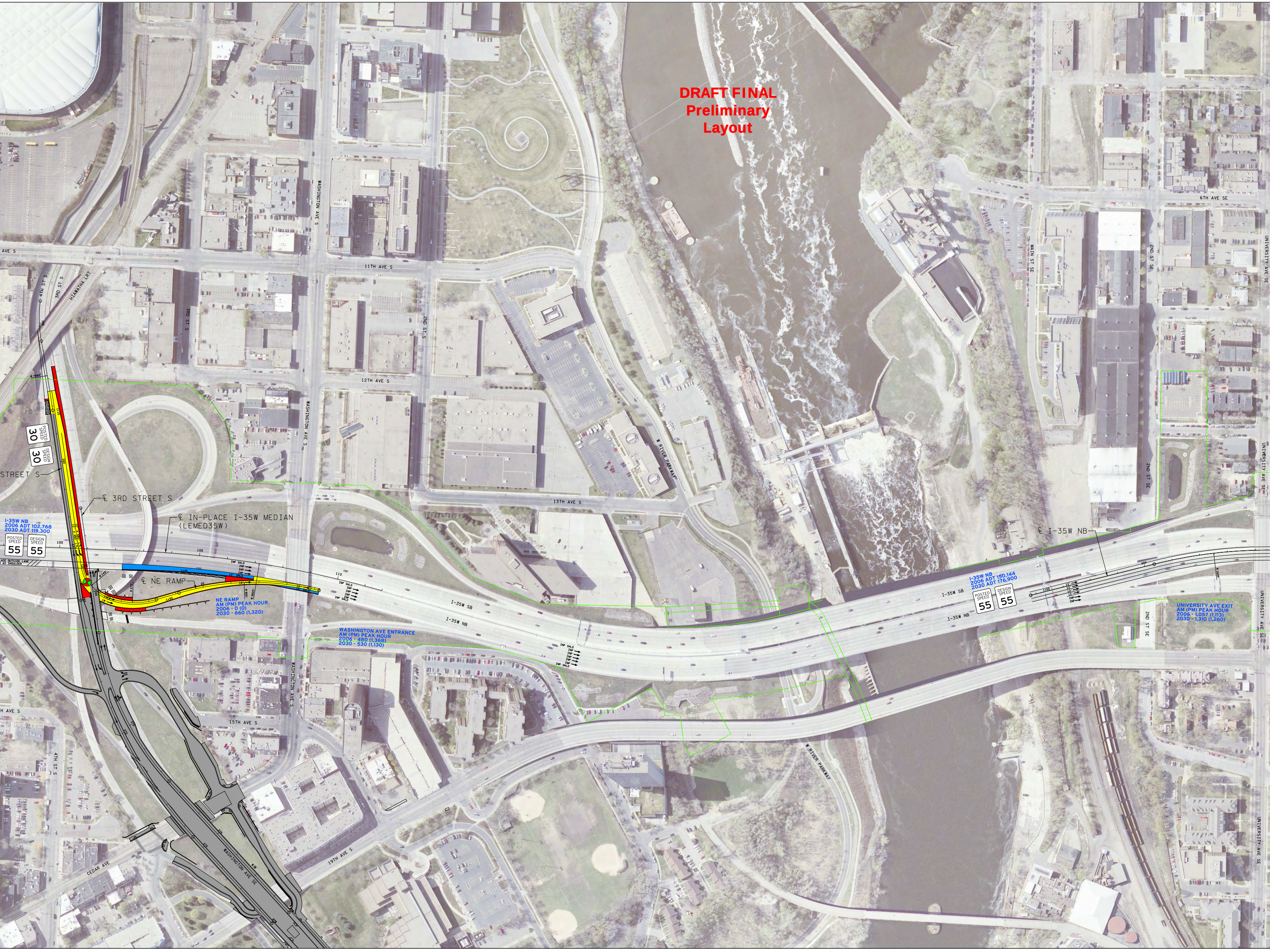
LEGEND

🟨	ROADWAY - NEW CONSTRUCTION
🟦	SHOULDERS - PAVED, NEW CONSTRUCTION
🟥	RAISED MEDIAN, CURB, PAVED BERM
🟪	MEDIAN BARRIER
▨	PAVEMENT REMOVALS
⬜	CCLRT CONSTRUCTION (BY OTHERS)
●	TRAFFIC SIGNAL - POTENTIAL
┬┬	RETAINING WALLS
---	EXISTING R/W

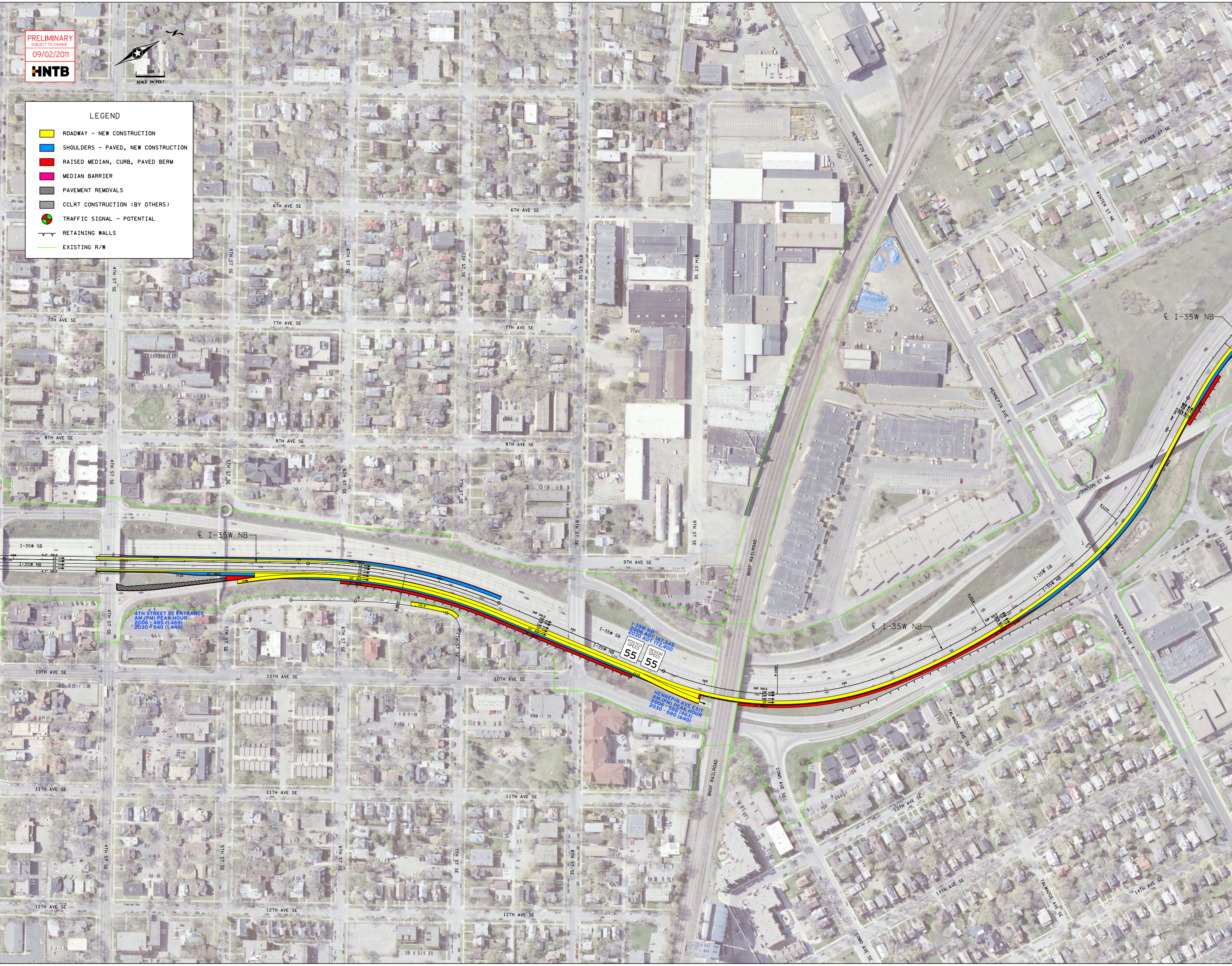
2030 AM (PM)
PEAK HOUR

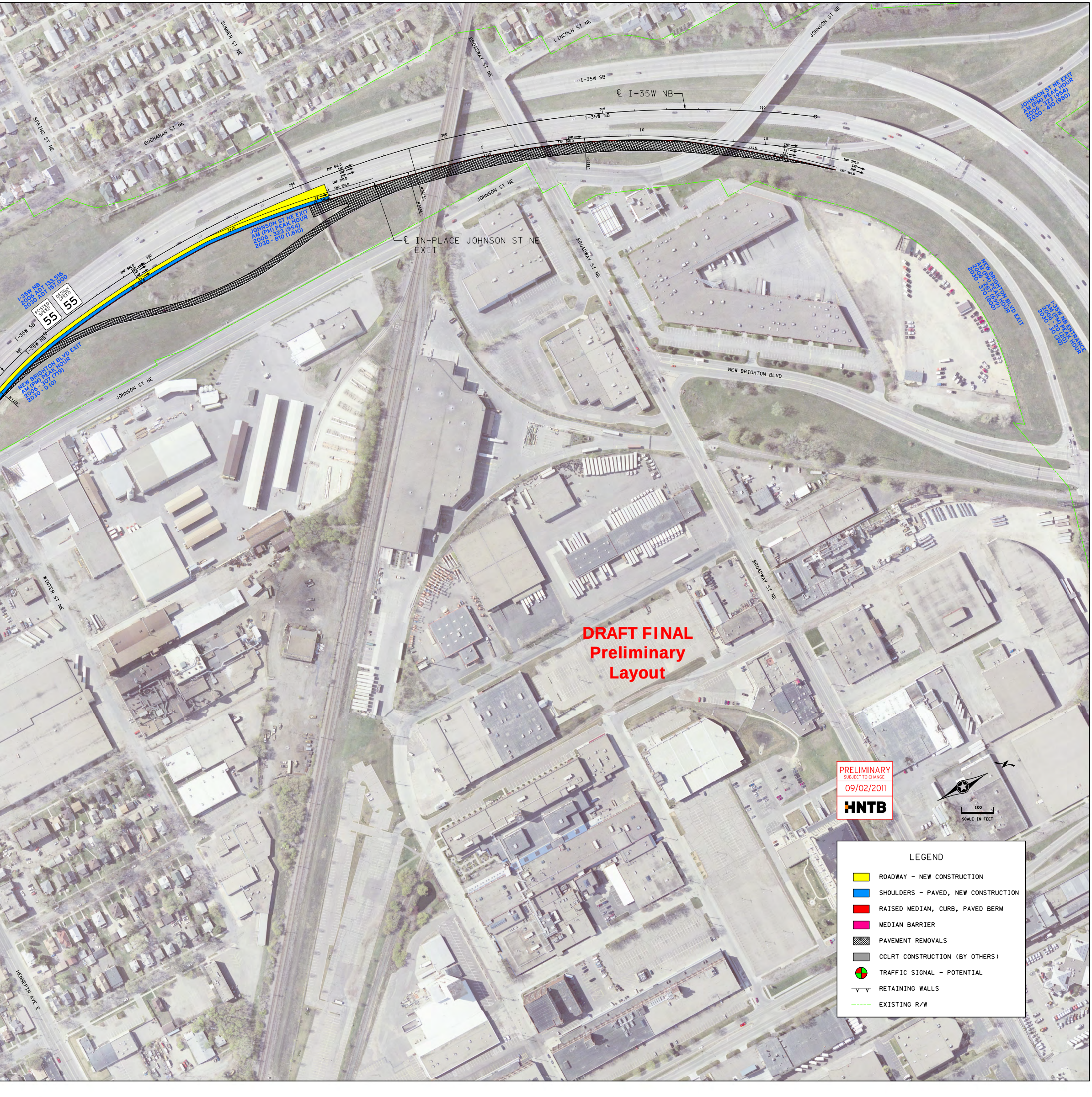
NOTE:
TRAFFIC DATA SHOWN
ON LAYOUT TAKEN FROM
2008 FEASIBILITY STUDY

50
SCALE IN FEET
NE RAMP
4TH STREET S
100
SCALE IN FEET
11TH
12TH AVE S
5TH ST S
6TH ST S
7TH ST S
8TH ST S
9TH ST S
℄ 4TH
I-94 WB
I-94 EB
I-35W SB
I-35W NB
INP SHLD
INP
STRIPE IN-PLACE OUTSIDE LANE AND SHOULDER AS SHOULDER
85
90
95
220
225
210
HIAWATHA LRT
4TH STREET S
← 570 (510)
660 (1,320)
(1,930) 710 →
3RD STREET S
NE RAMP
15T
6TH ST S
TH 55 EB
TH 55 WB


DRAFT FINAL
Preliminary
Layout

AVE S
11TH AVE S
12TH AVE S
13TH AVE S
15TH AVE S
19TH AVE S
H AVE S
4TH ST S
3RD ST S
2ND ST S
HIAWATHA LRT
WASHINGTON AVE S
W RIVER PARKWAY
6TH AVE SE
MAIN ST SE
2ND ST SE
UNIVERSITY AVE SE
CEDAR AVE
WASHINGTON AVE SE
POSTED SPEED 30
DESIGN SPEED 30
STREET S
℄ 3RD STREET S
℄ IN-PLACE I-35W MEDIAN (LEMED35W)
I-35W NB
2006 ADT 102,768
2030 ADT 119,300
POSTED SPEED 55
DESIGN SPEED 55
100
105
110
LACE OUTSIDE LANE
R AS SHOULDER
R 7994'
R 144'
R 272'
R 955'
R 3820'
1:15
1:45
1:30
12' x 480' L.L.
12' SHLD
10' SHLD
12'
18'
25
260
265
INP SHLD
INP
℄ NE RAMP
NE RAMP
AM (PM) PEAK HOUR
2006 - 0 (0)
2030 - 660 (1,320)
I-35W SB
I-35W NB
WASHINGTON AVE ENTRANCE
AM (PM) PEAK HOUR
2006 - 480 (1,368)
2030 - 530 (1,130)
℄ I-35W NB
I-35W NB
2006 ADT 150,144
2030 ADT 176,900
POSTED SPEED 55
DESIGN SPEED 55
1:55
230
R 1649'
UNIVERSITY AVE EXIT
AM (PM) PEAK HOUR
2006 - 1,057 (1,113)
2030 - 1,310 (1,260)


PRELIMINARY
SUBJECT TO CHANGE
09/02/2011
HNTB
100
SCALE IN FEET
LEGEND
ROADWAY - NEW CONSTRUCTION
SHOULDERS - PAVED, NEW CONSTRUCTION
RAISED MEDIAN, CURB, PAVED BERM
MEDIAN BARRIER
PAVEMENT REMOVALS
CCLRT CONSTRUCTION (BY OTHERS)
TRAFFIC SIGNAL - POTENTIAL
RETAINING WALLS
EXISTING R/W
℄ I-35W NB
I-35W SB
I-35W NB
4TH STREET SE ENTRANCE
AM (PM) PEAK HOUR
2006 - 485 (1,469)
2030 - 540 (1,440)
I-35W NB
2006 ADT 147,545
2030 ADT 172,400
POSTED SPEED 55
DESIGN SPEED 55
HENNEPIN AVE EXIT
AM (PM) PEAK HOUR
2006 - 586 (463)
2030 - 680 (640)
℄ I-35W NB
℄ I-35W NB
12' SHLD
1:15
255
260
6TH AVE SE
7TH AVE SE
8TH AVE SE
9TH AVE SE
10TH AVE SE
11TH AVE SE
12TH AVE SE
13TH AVE SE
14TH AVE SE
4TH ST SE
5TH ST SE
6TH ST SE
7TH ST SE
8TH ST SE
9TH ST SE
BNSF RAILROAD
HENNEPIN AVE E
JOHNSON ST NE
FILLMORE ST NE
PIERCE ST NE
WINTER ST NE
COMO AVE SE
TALMADGE AVE SE


SUMMER ST NE
SPRING ST NE
BUCHANAN ST NE
BROADWAY ST NE
LINCOLN ST NE
JOHNSON ST NE
I-35W SB
℄ I-35W NB
I-35W NB
INP SHLD
INP
12'
12' SHLD
1:15
℄ IN-PLACE JOHNSON ST NE EXIT
JOHNSON ST NE EXIT
AM (PM) PEAK HOUR
2006 - 323 (954)
2030 - 810 (1,810)
I-35W NB
2006 ADT 133,516
2030 ADT 157,000
POSTED SPEED 55
DESIGN SPEED 55
NEW BRIGHTON BLVD EXIT
AM (PM) PEAK HOUR
2006 - 307 (719)
2030 - 0 (0)
JOHNSON ST NE EXIT
AM (PM) PEAK HOUR
2006 - 323 (954)
2030 - 410 (980)
NEW BRIGHTON BLVD EXIT
AM (PM) PEAK HOUR
2006 - 287 (699)
2030 - 370 (800)
I-35W NB ENTRANCE
AM (PM) PEAK HOUR
2006 - 20 (20)
2030 - 30 (30)
NEW BRIGHTON BLVD
WINTER ST NE
HENNEPIN AVE E
100
SCALE IN FEET
LEGEND
ROADWAY - NEW CONSTRUCTION
SHOULDERS - PAVED, NEW CONSTRUCTION
RAISED MEDIAN, CURB, PAVED BERM
MEDIAN BARRIER
PAVEMENT REMOVALS
CCLRT CONSTRUCTION (BY OTHERS)
TRAFFIC SIGNAL - POTENTIAL
RETAINING WALLS
EXISTING R/W

DRAFT FINAL
Preliminary
Layout

PRELIMINARY
SUBJECT TO CHANGE
09/02/2011
HNTB