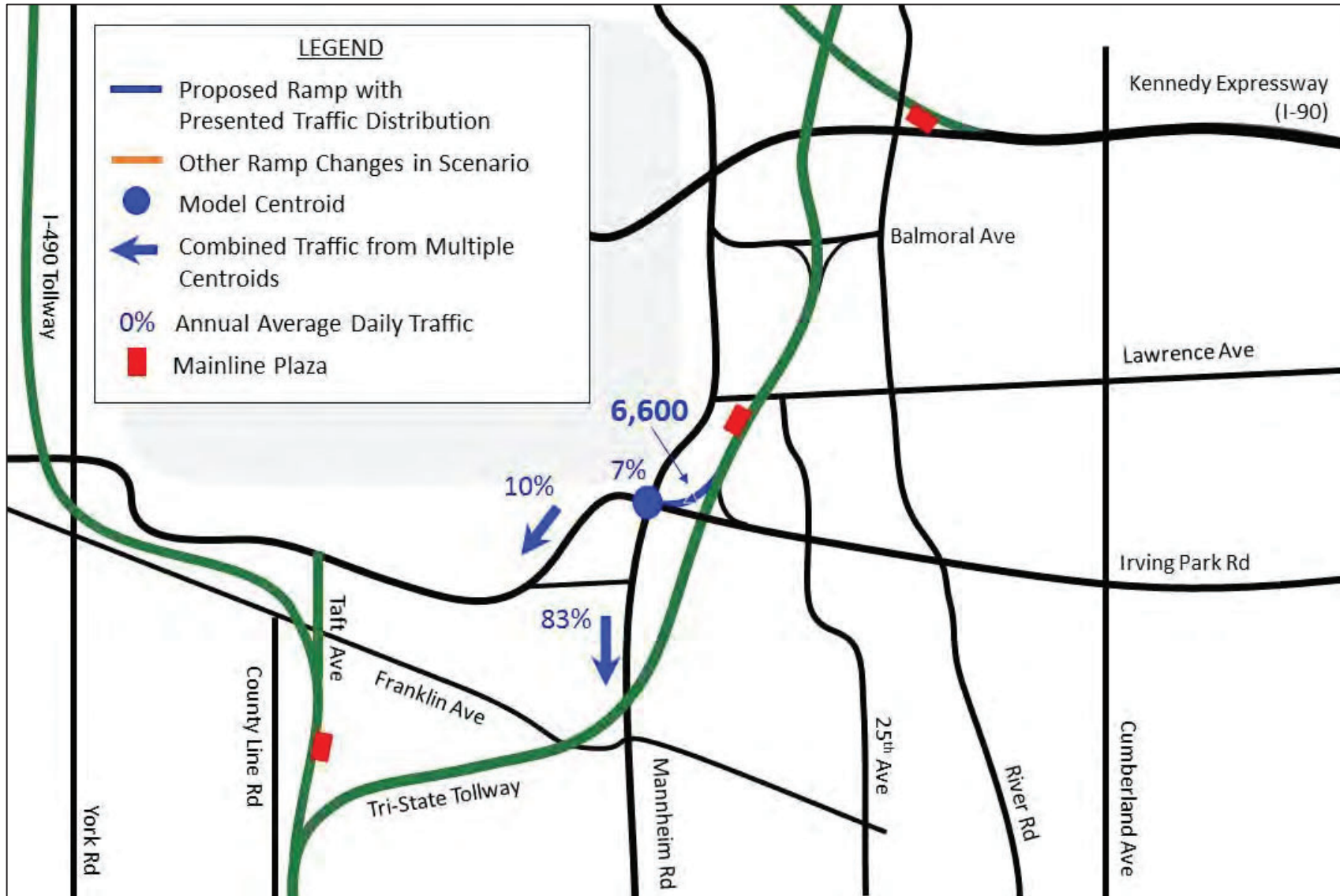




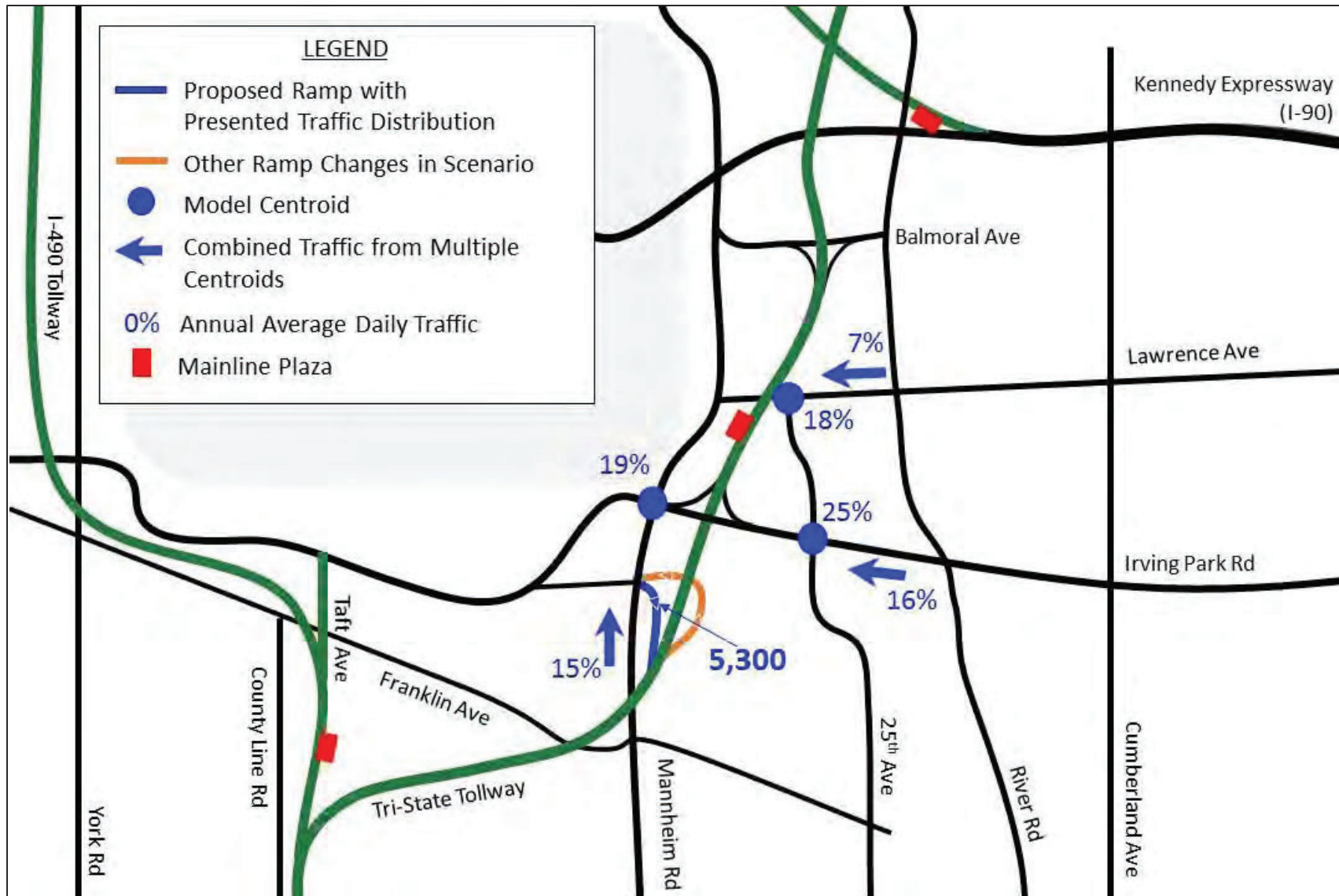
Tollway Contract 4383-Task Order 1
I-294 at Irving Park Road
Interchange Feasibility Study

Appendix C
Level 2 Analysis Exhibits



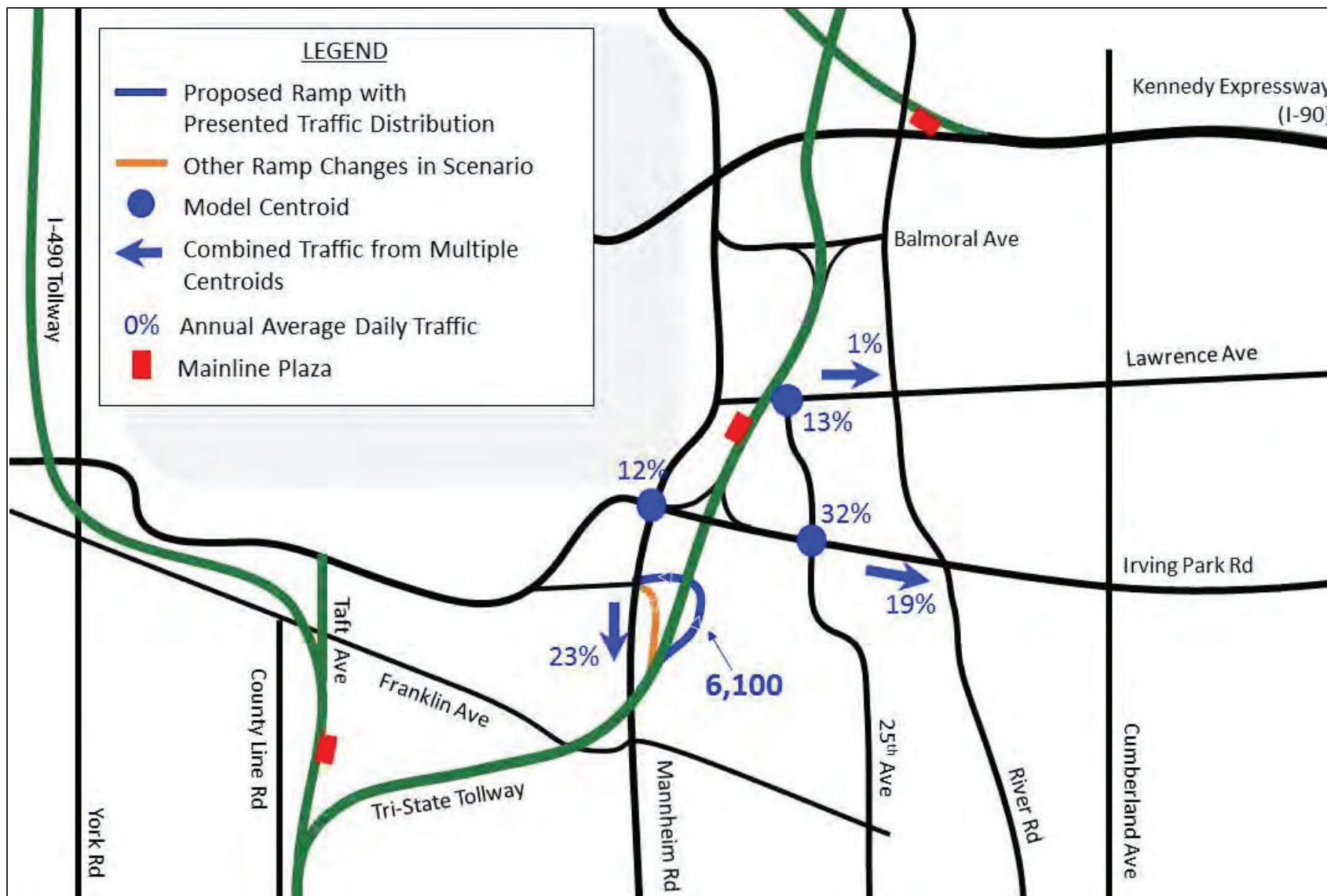
2020 No Build – Average Weekday Traffic

Distribution of Traffic from Southbound Exit Ramp to Westbound Irving Park Road



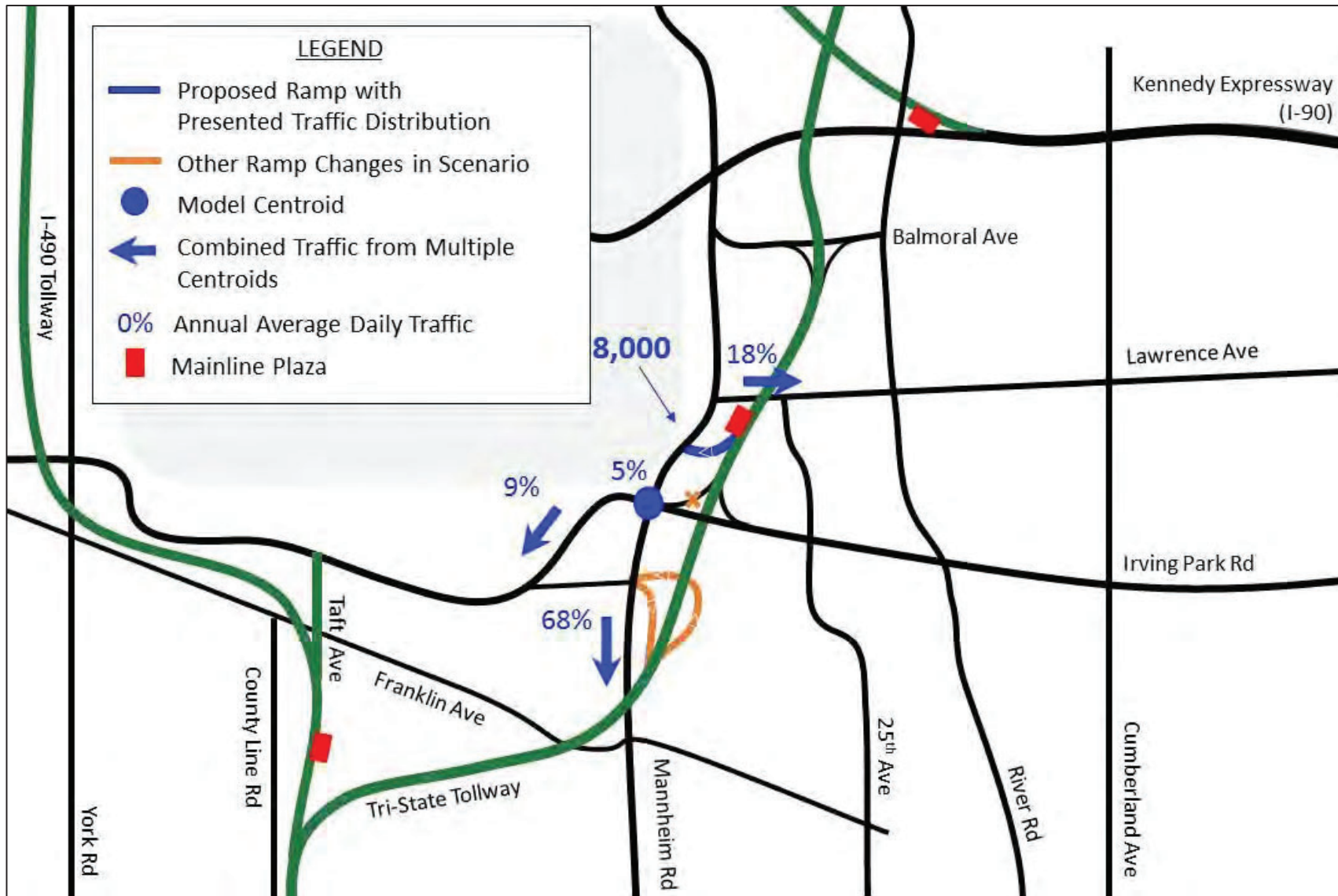
2020 Scenario 1 – Average Weekday Traffic

Distribution of Traffic from Seymour Avenue/Mannheim Road to Southbound I-294



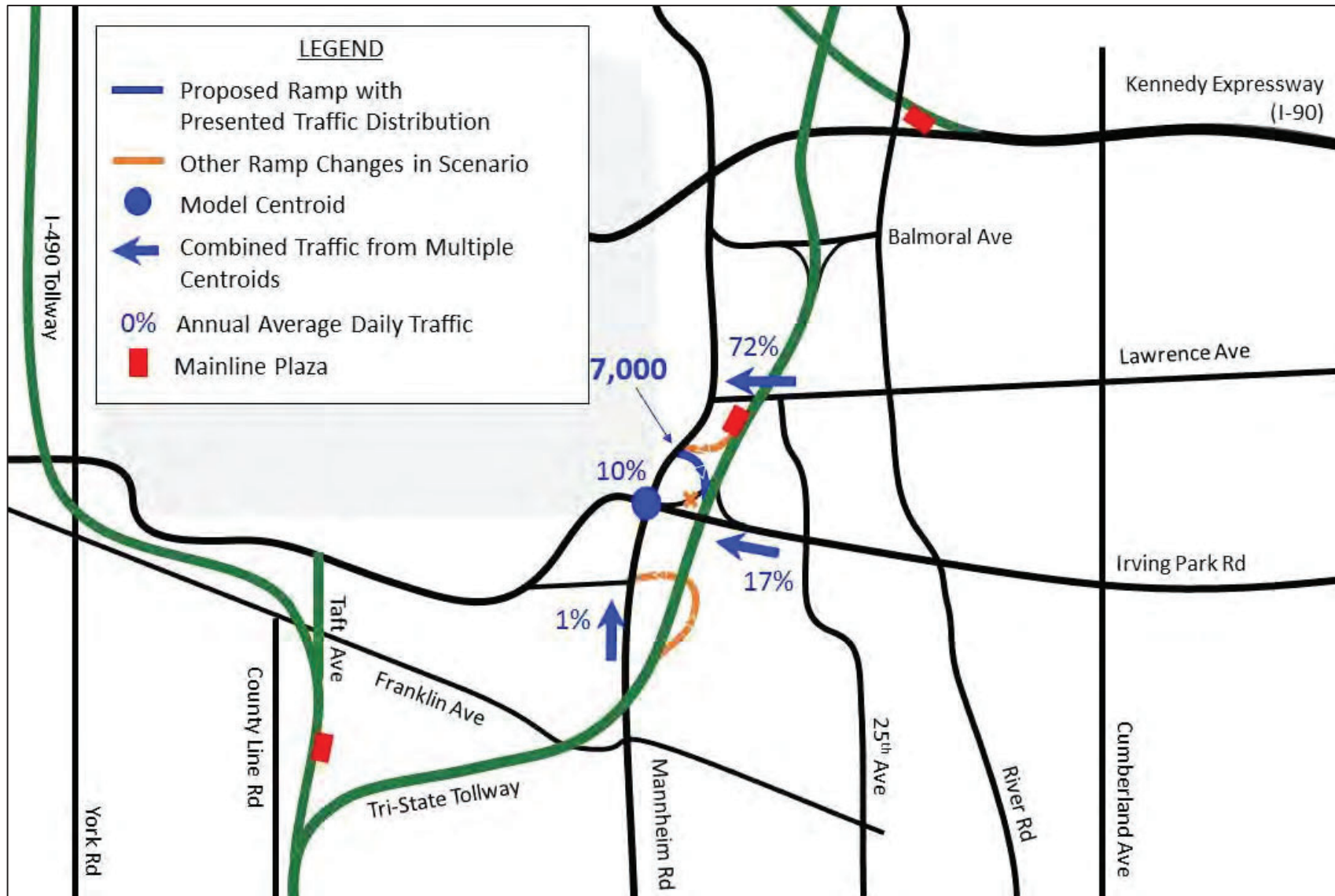
2020 Scenario 1 – Average Weekday Traffic

Distribution of Traffic from Northbound I-294 to Seymour Avenue/Mannheim Road



2020 Scenario 2 – Average Weekday Traffic

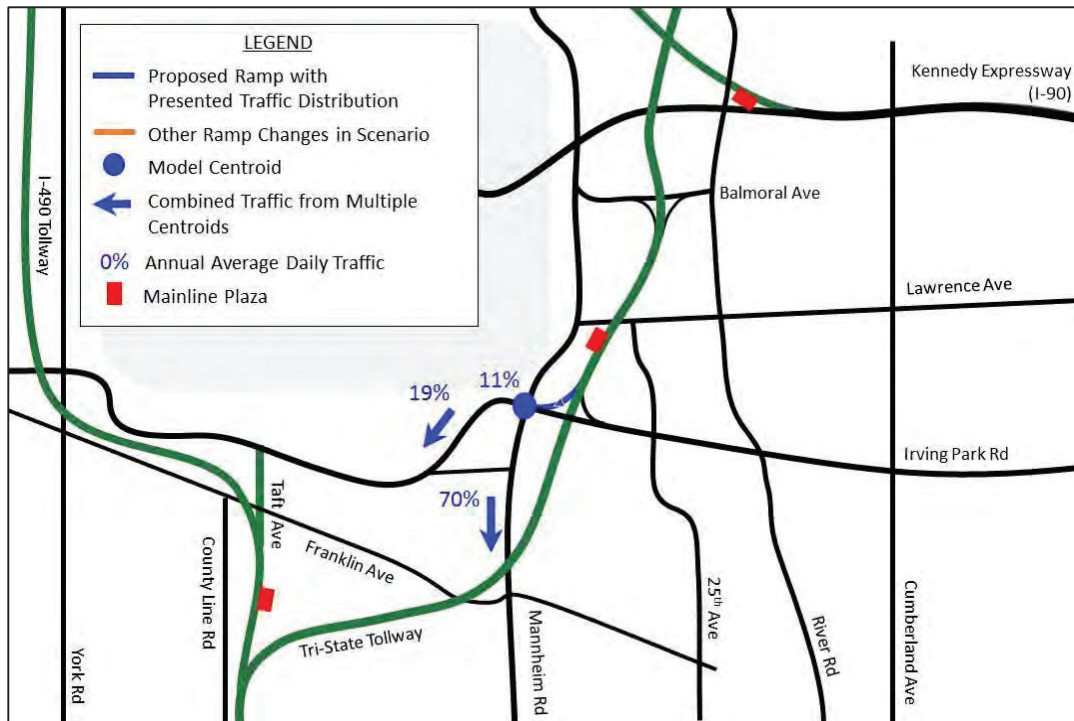
Distribution of Traffic from Southbound I-294 to Montrose Avenue/Mannheim Road



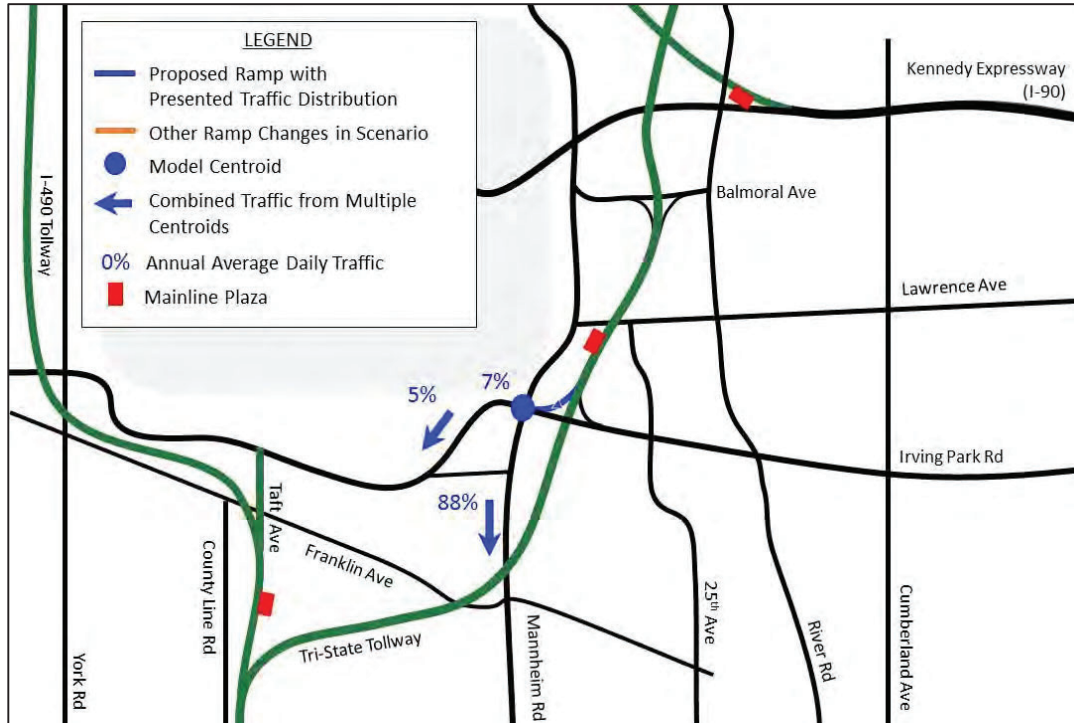
2020 Scenario 3 – Average Weekday Traffic

Distribution of Traffic from Montrose Avenue/Mannheim Road to Southbound I-294

AM Peak Period (7:00 a.m. to 9:00 a.m.)

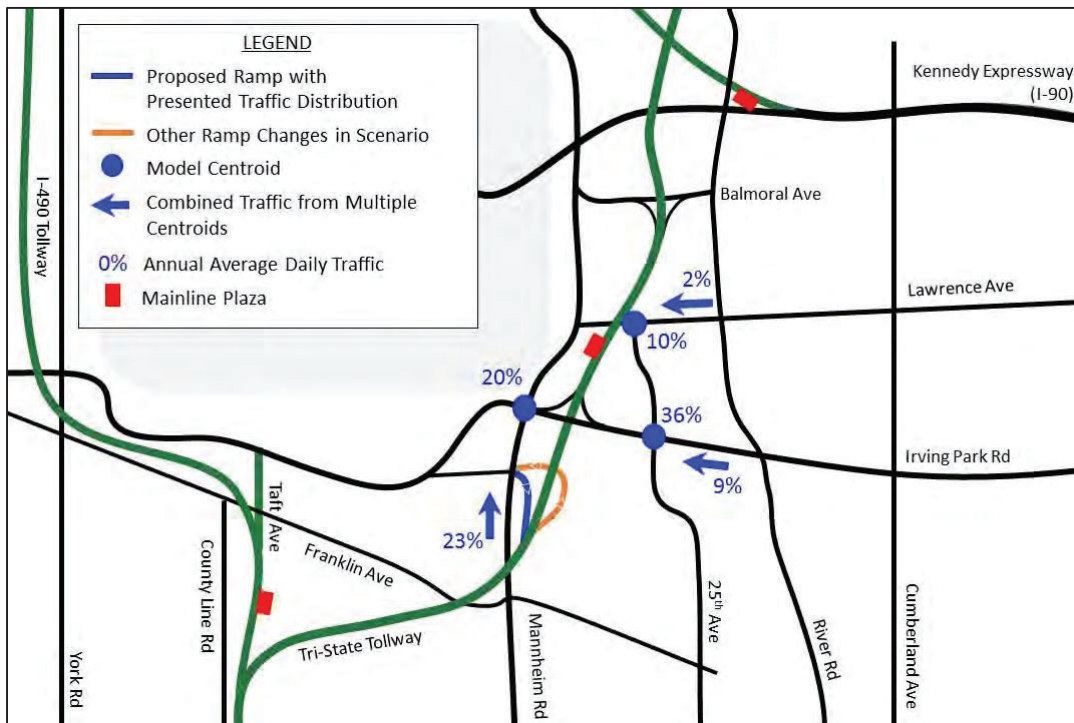


PM Peak Period (4:00 p.m. to 6:00 p.m.)

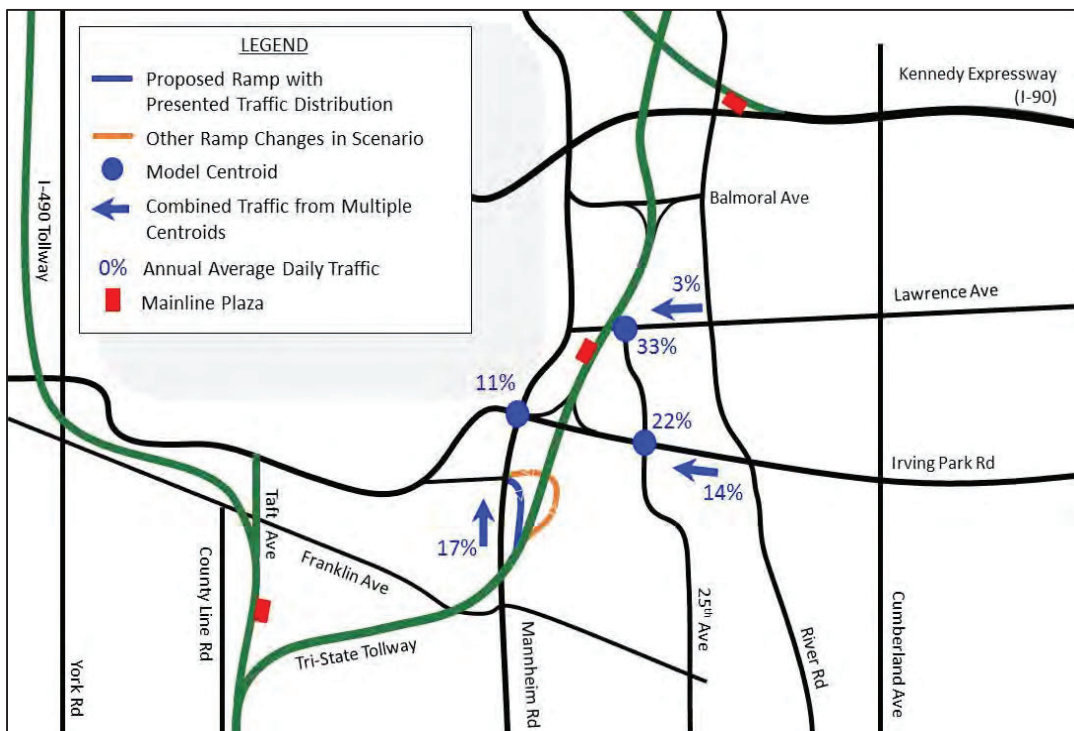


**2020 No Build – Peak Period
Distribution of Traffic from Southbound Exit Ramp
to Westbound Irving Park Road**

AM Peak Period (7:00 a.m. to 9:00 a.m.)

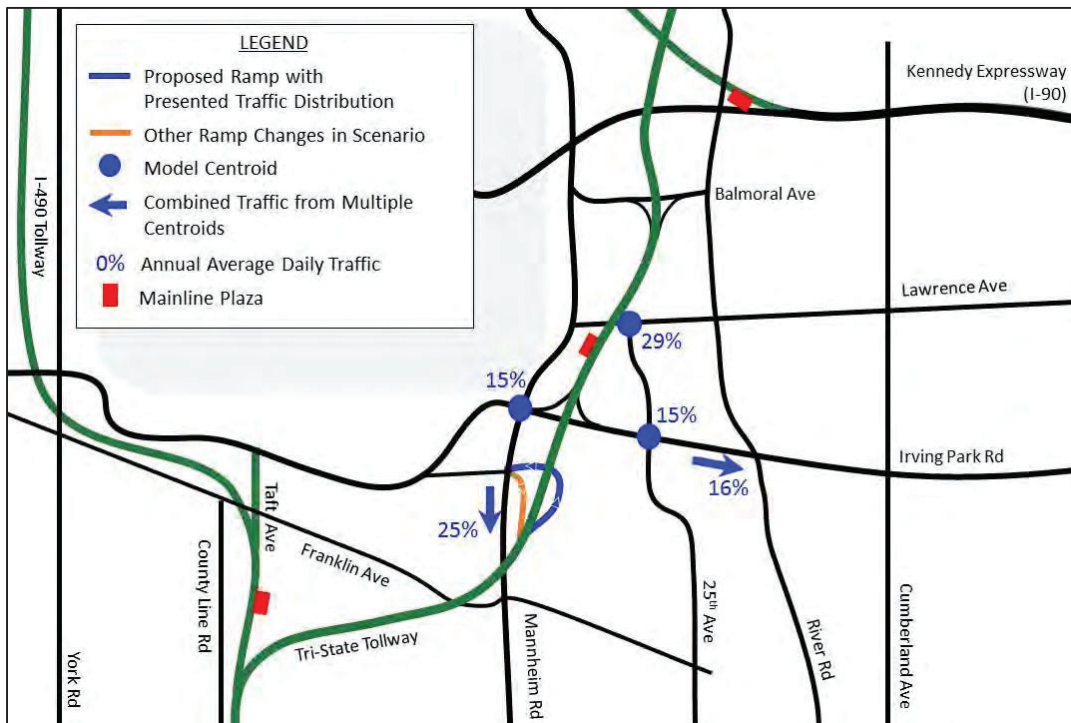


PM Peak Period (4:00 p.m. to 6:00 p.m.)

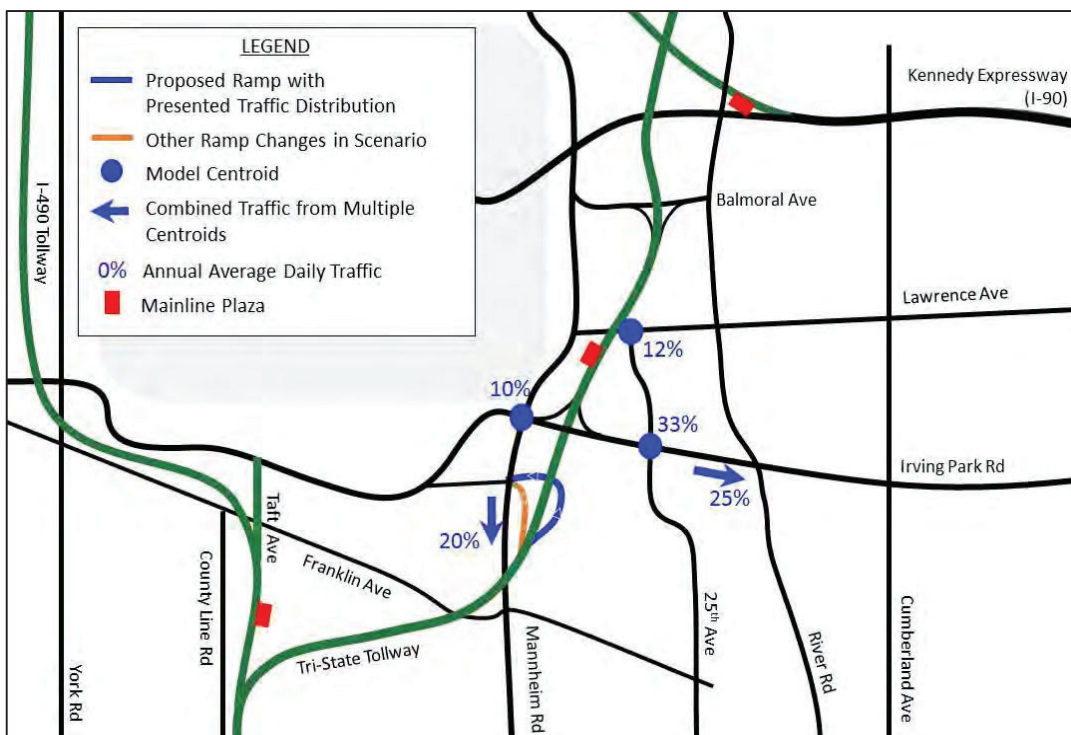


**2020 Scenario 1– Peak Period
Distribution of Traffic from Seymour Avenue/Mannheim Road
to Southbound I-294**

AM Peak Period (7:00 a.m. to 9:00 a.m.)

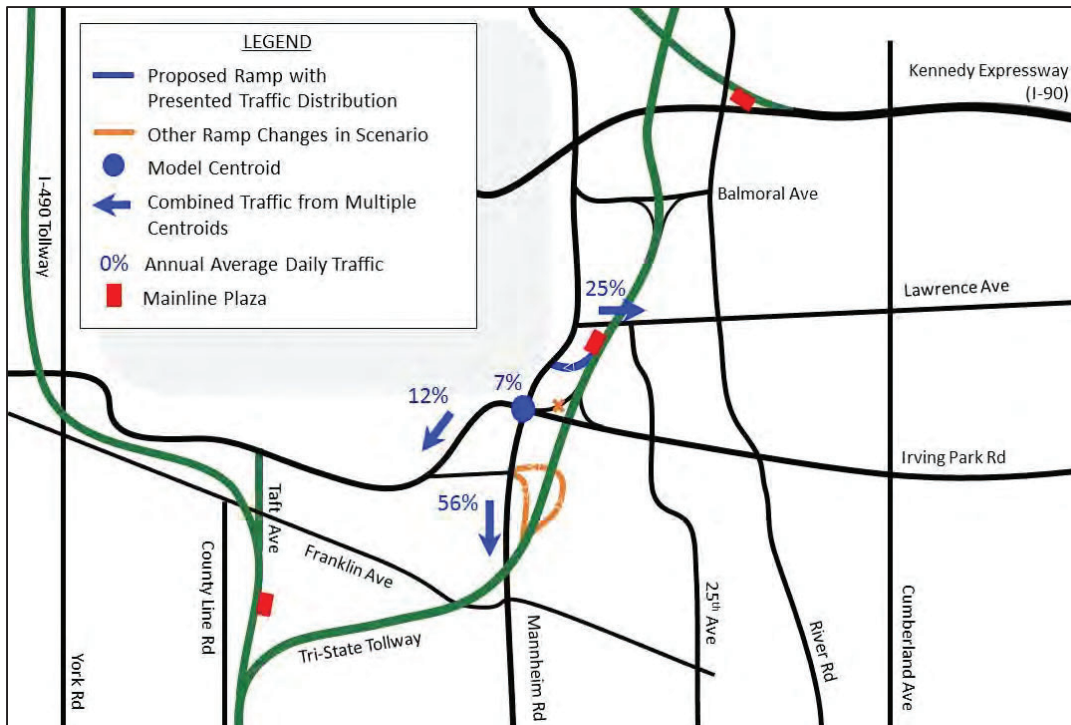


PM Peak Period (4:00 p.m. to 6:00 p.m.)

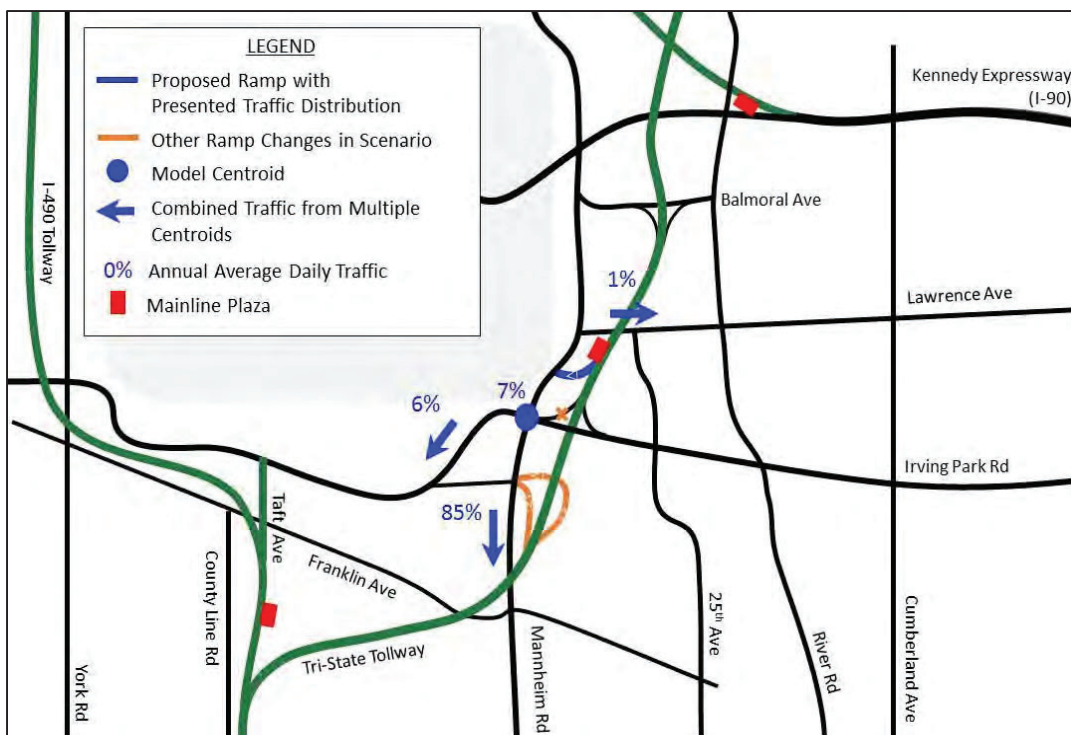


**2020 Scenario 1– Peak Period
Distribution of Traffic to Seymour Avenue/Mannheim Road
from Northbound I-294**

AM Peak Period (7:00 a.m. to 9:00 a.m.)

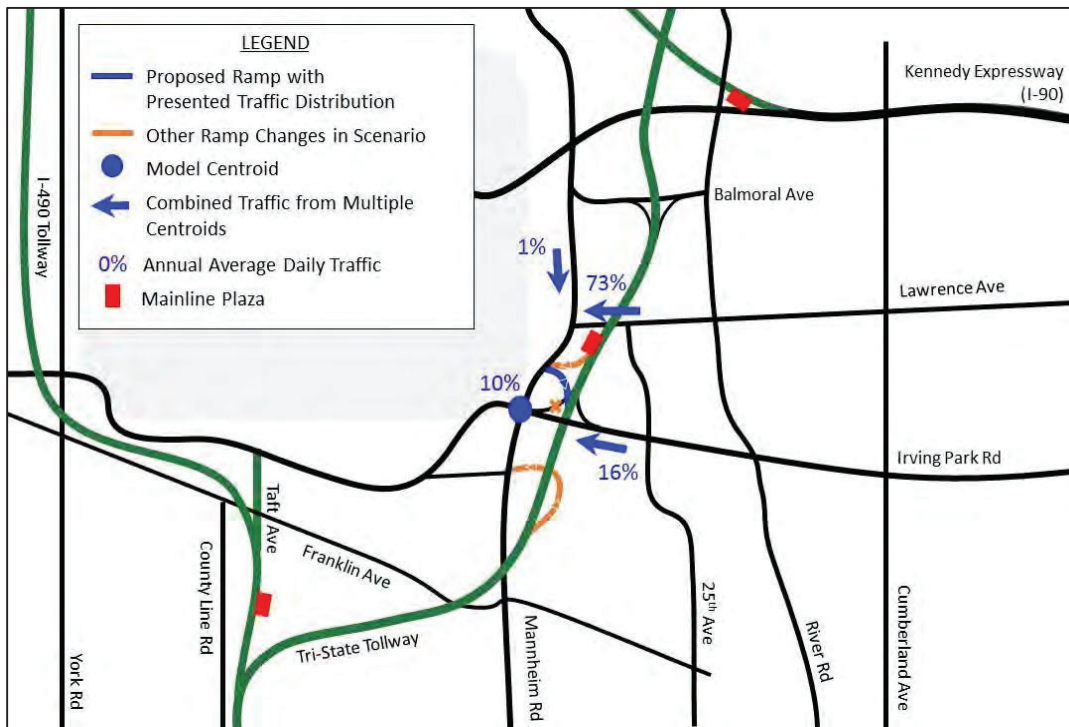


PM Peak Period (4:00 p.m. to 6:00 p.m.)

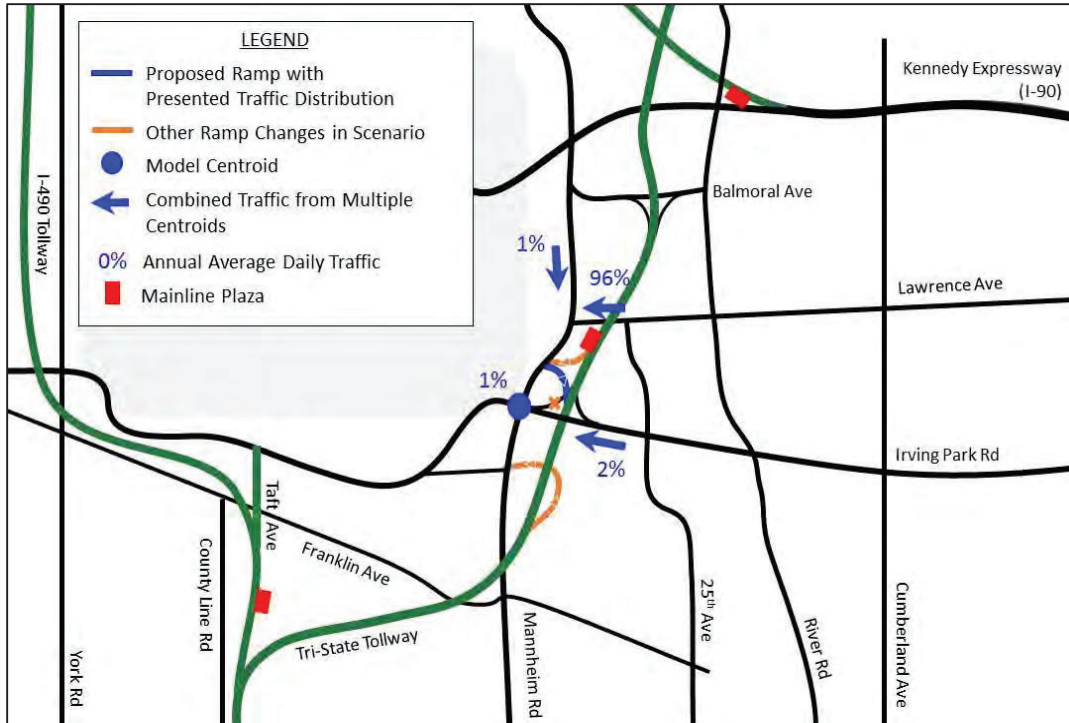


**2020 Scenario 2 – Peak Period
Distribution of Traffic to Montrose Avenue/Mannheim Road
from Southbound I-294**

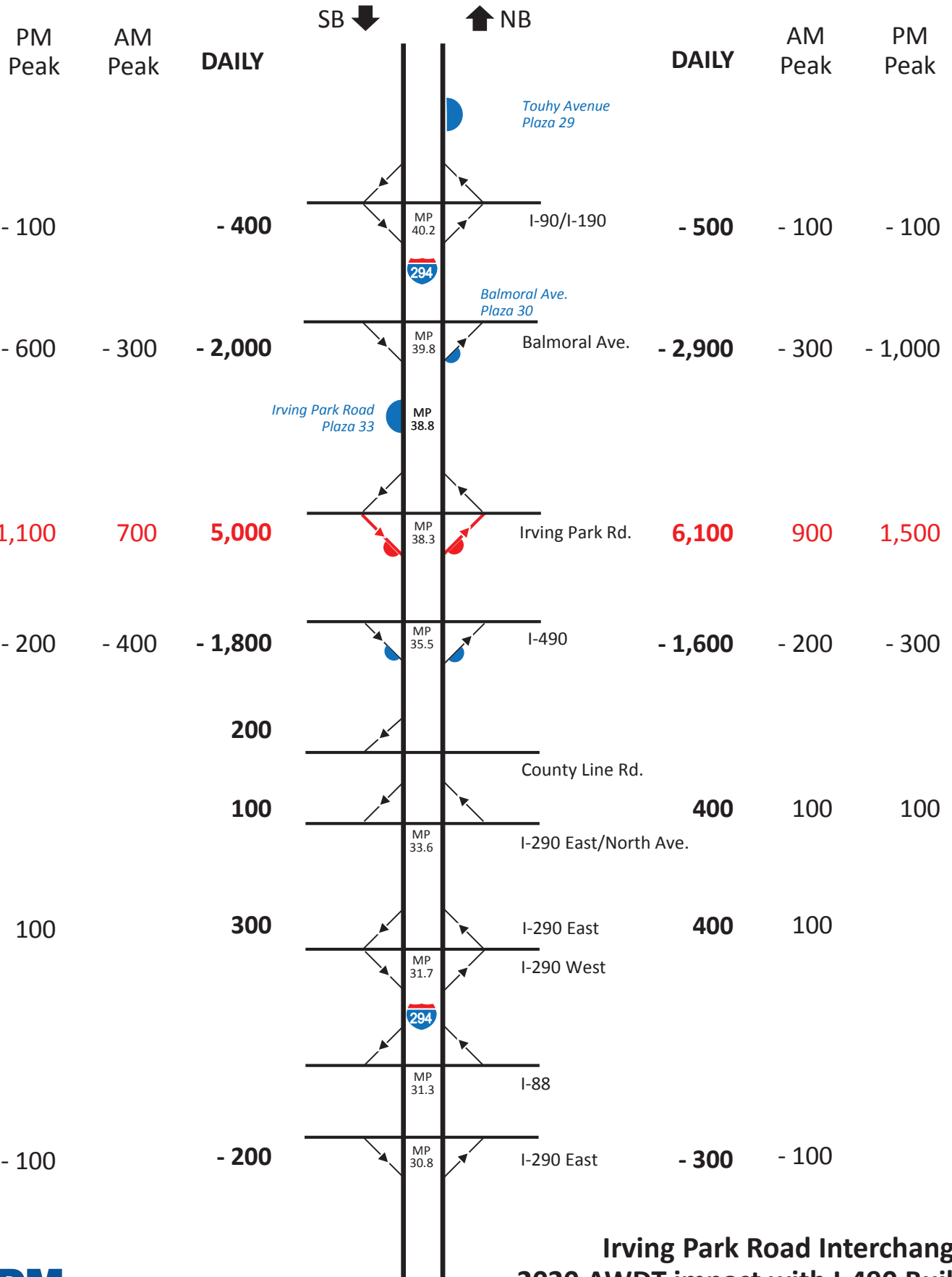
AM Peak Period (7:00 a.m. to 9:00 a.m.)



PM Peak Period (4:00 p.m. to 6:00 p.m.)



**2020 Scenario 3 – Peak Period
Distribution of Traffic from Montrose Avenue/Mannheim Road
to Southbound I-294**

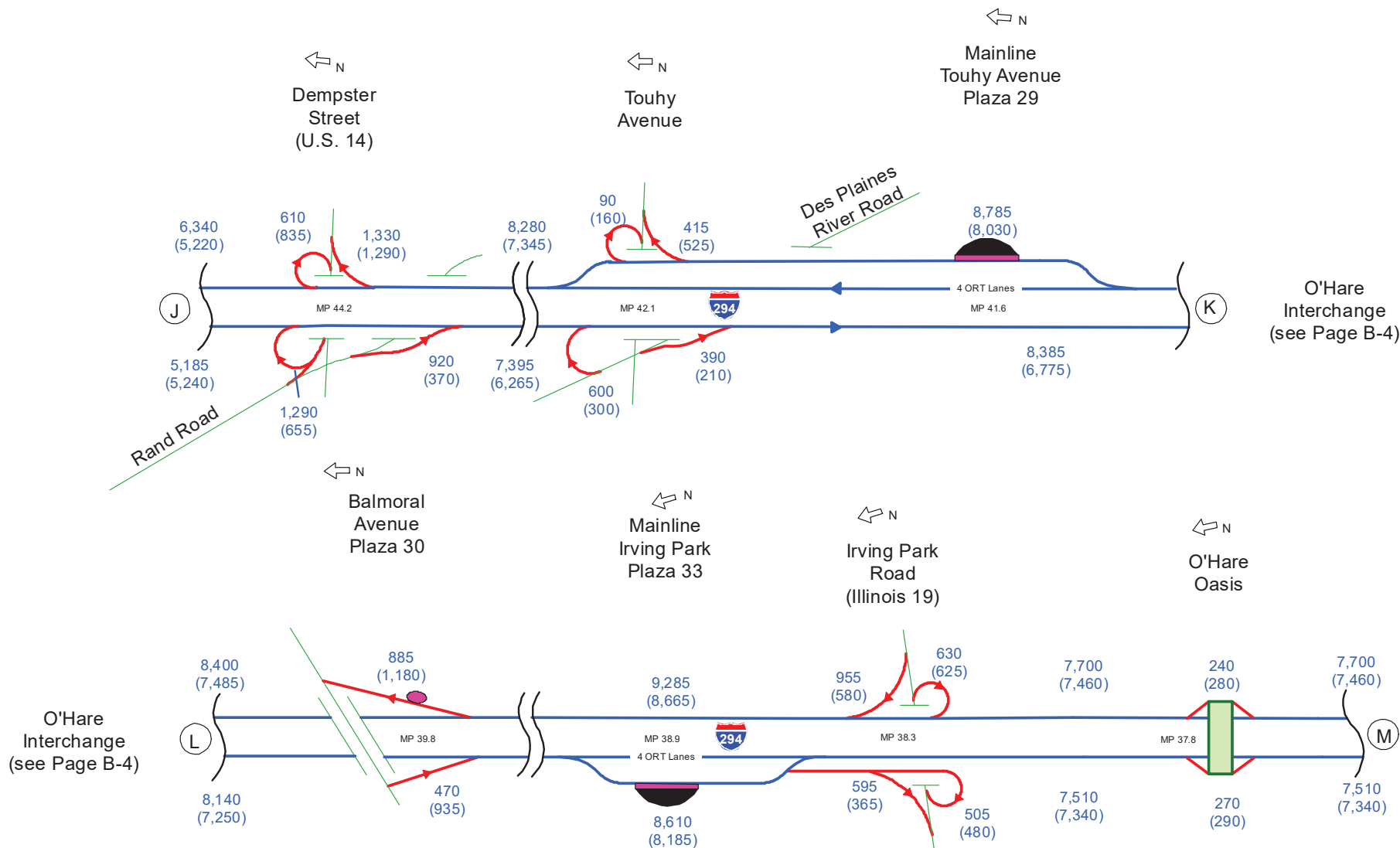


Irving Park Road Interchange
2020 AWDT impact with I-490 Build



2017 A.M. & P.M. Peak Hour Traffic

On Tri-State Tollway, from Dempster Street to O'Hare Oasis



Note:
The 2016 AM & PM peak-hour volumes are defined as the 85th Percentile volumes occurring in the 6:00 to 8:00 AM and the 4:00 to 6:00 PM periods respectively. Peak-hour volumes are calculated from Monday through Thursday hourly traffic volume data only, and exclude holidays.

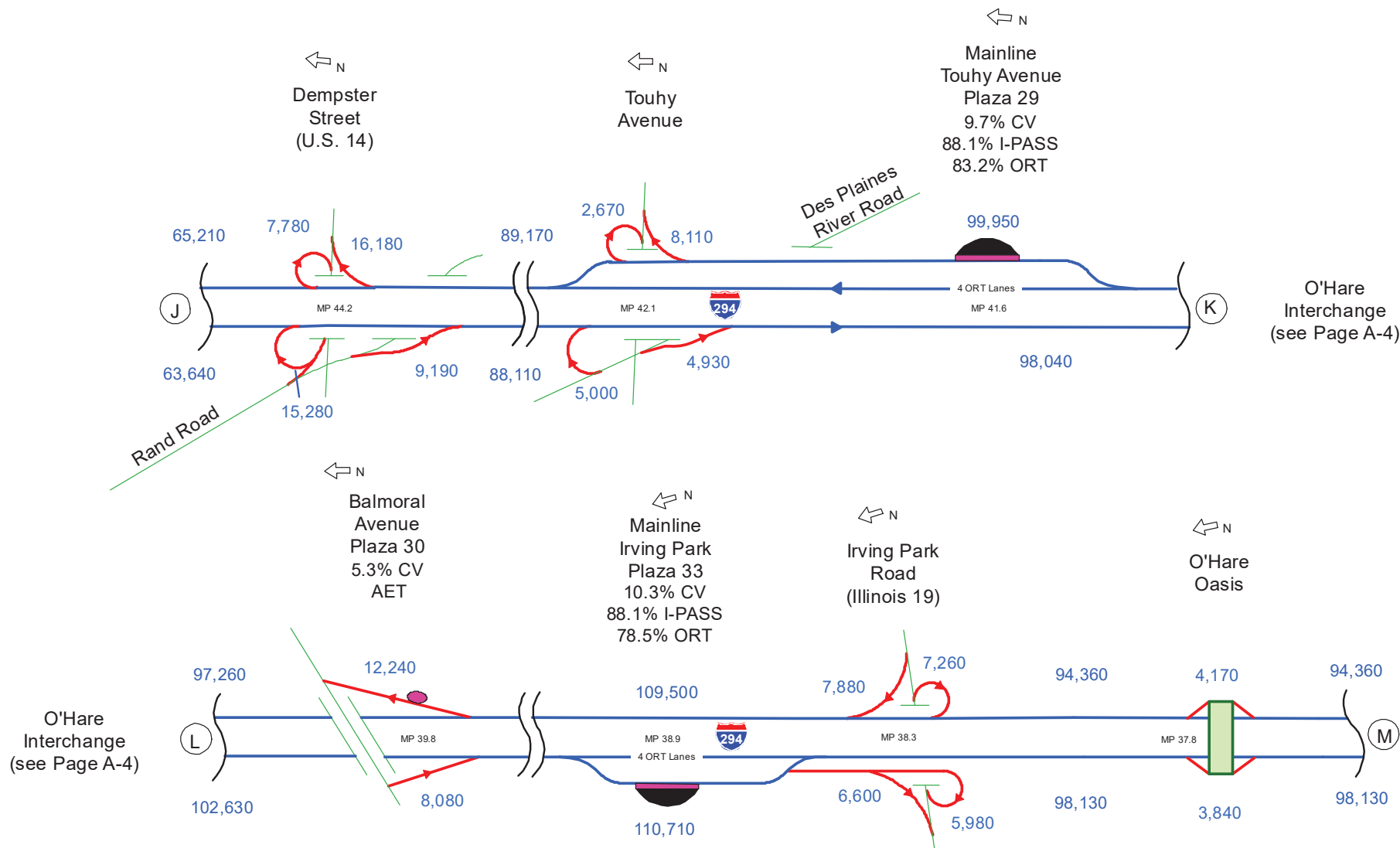
*** = A.M. Peak
(* , ***) = P.M. Peak





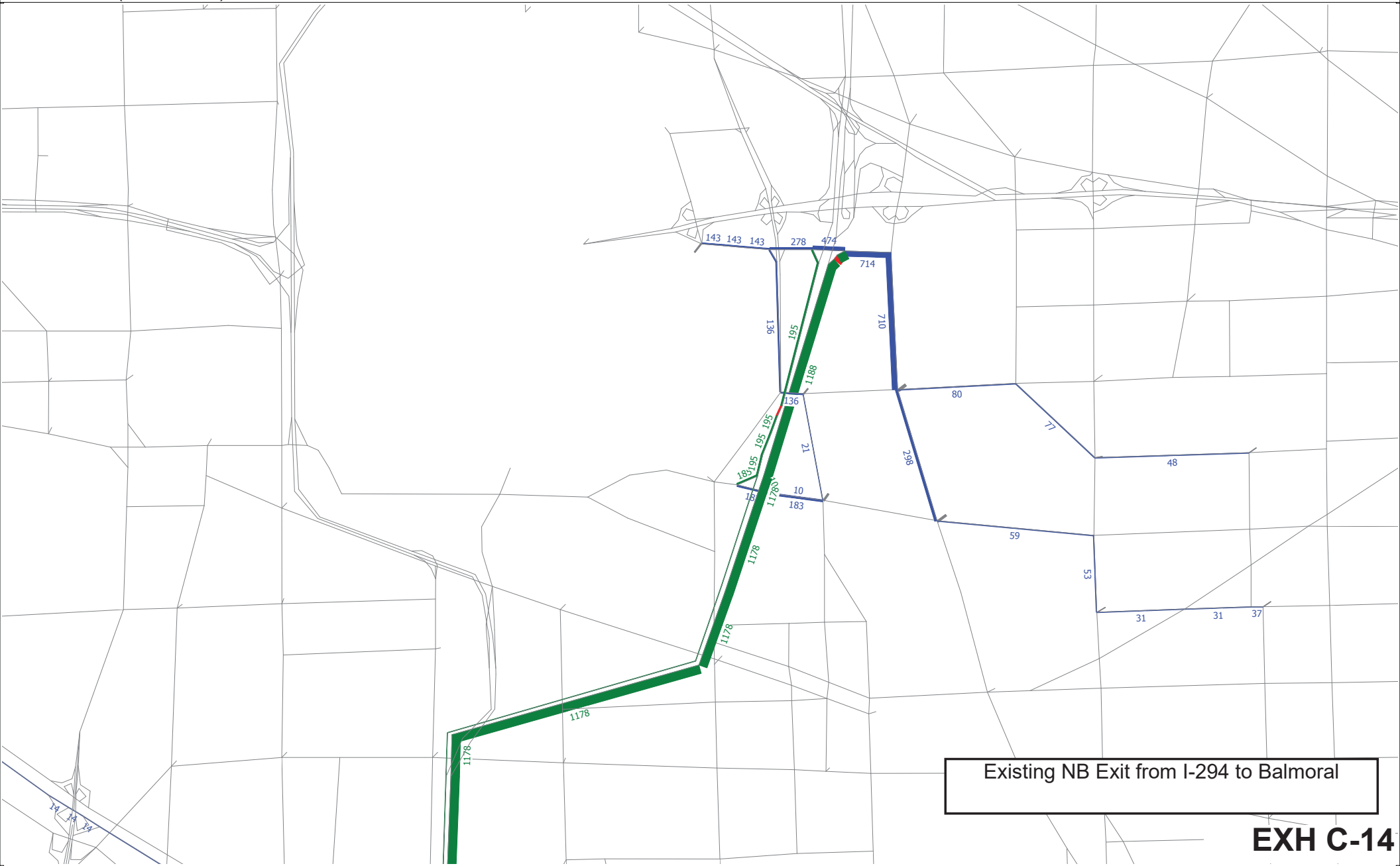
2017 Annual Average Daily Traffic

On Tri-State Tollway, from Dempster Street to O'Hare Oasis



CV = Commercial Vehicles
 I-PASS = I-PASS Electronic Toll Collection
 ORT = Open Road Tolling Lanes
 AET = All Electronic Tolling





Existing NB Exit from I-294 to Balmoral

EXH C-14

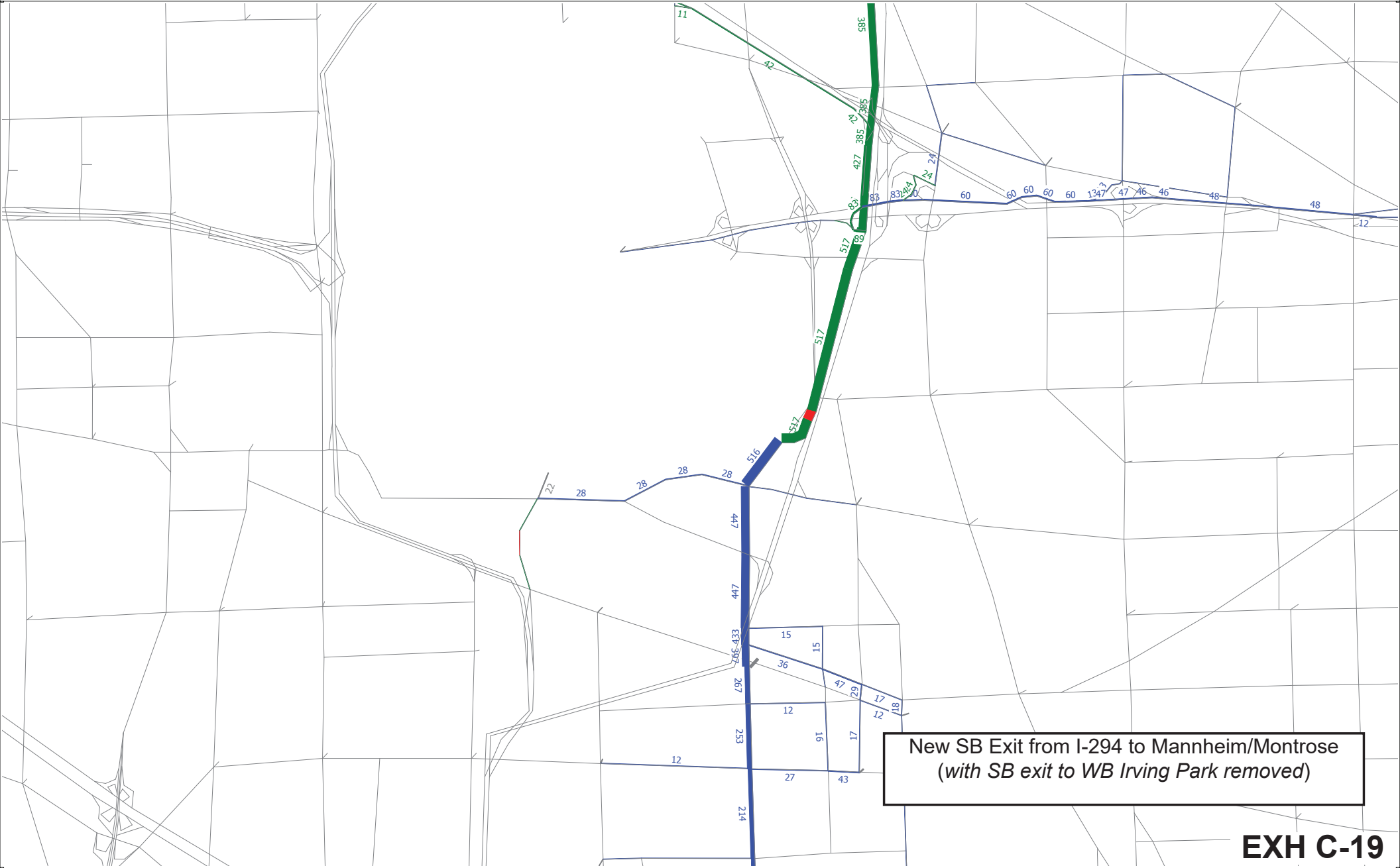
(Licensed to CDM Smith)

EXH C-16

EXH C-17

New SB Entrance from Mannheim/ Seymour to I-294

(Licensed to CDM Smith)



New SB Exit from I-294 to Mannheim/Montrose
(with SB exit to WB Irving Park removed)

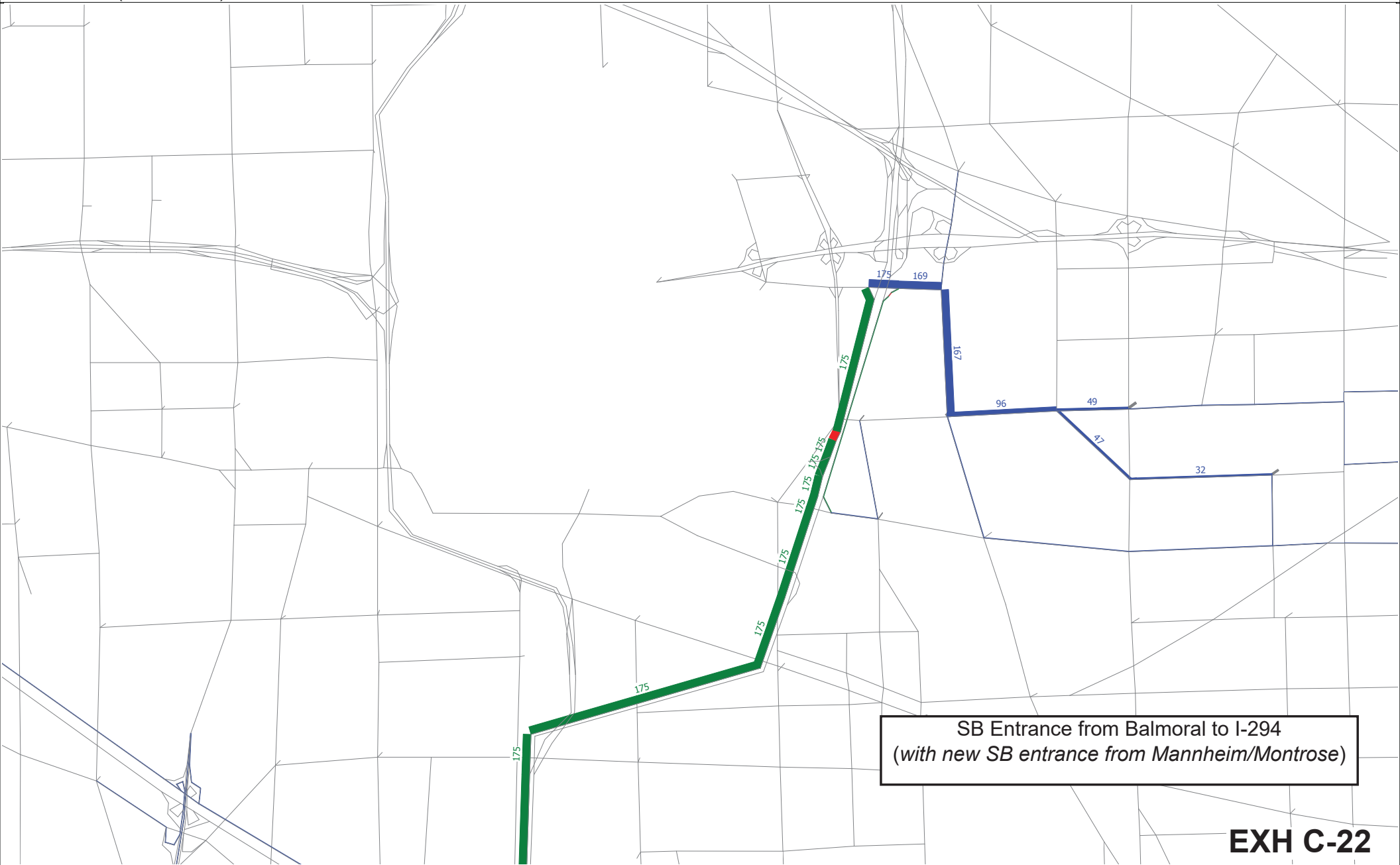
EXH C-19

(Licensed to CDM Smith)

New SB Entrance from Mannheim/Montrose to I-294
(without new SB entrance at Mannheim/Seymour)

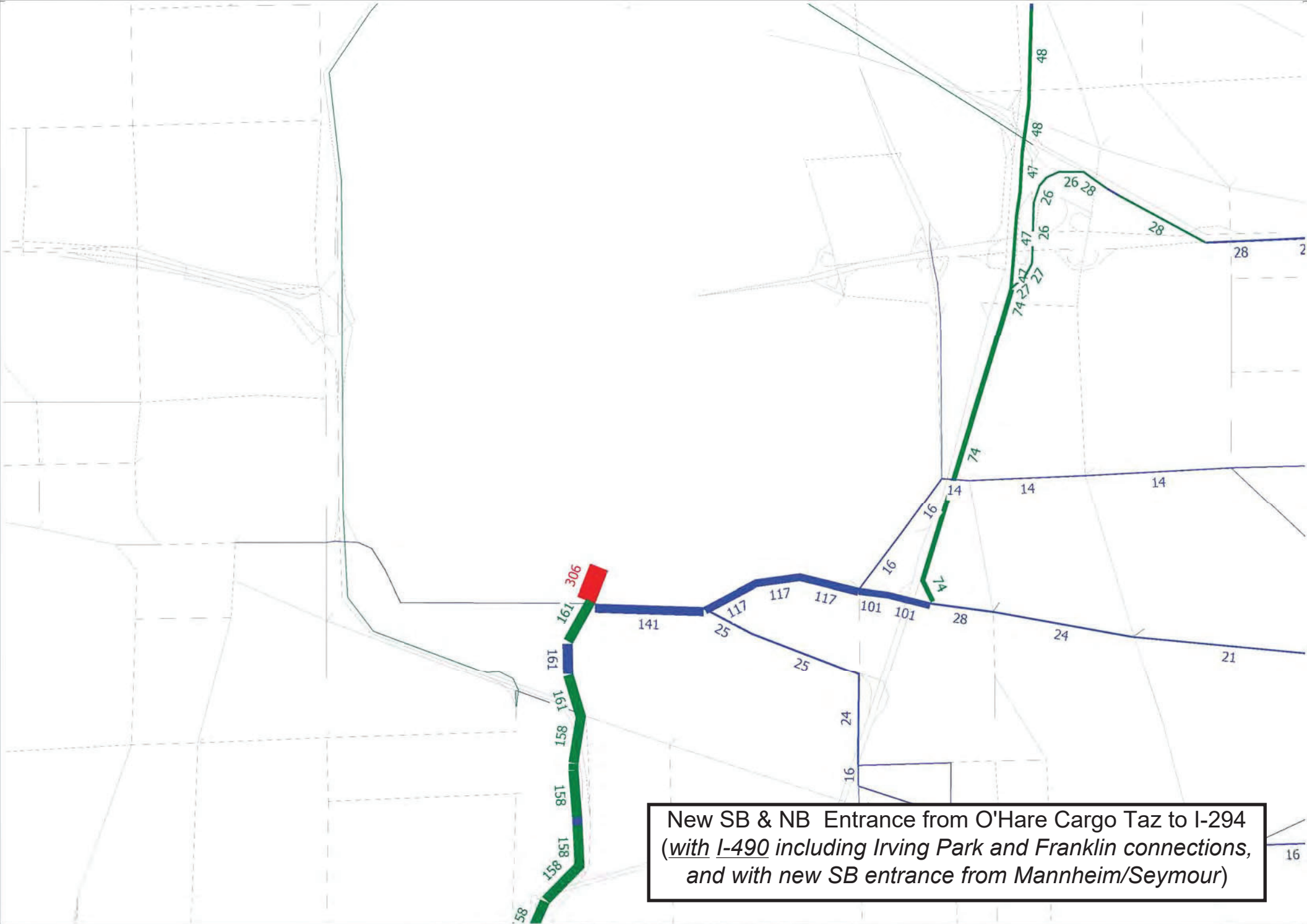
EXH C-20





SB Entrance from Balmoral to I-294
(with new SB entrance from Mannheim/Montrose)

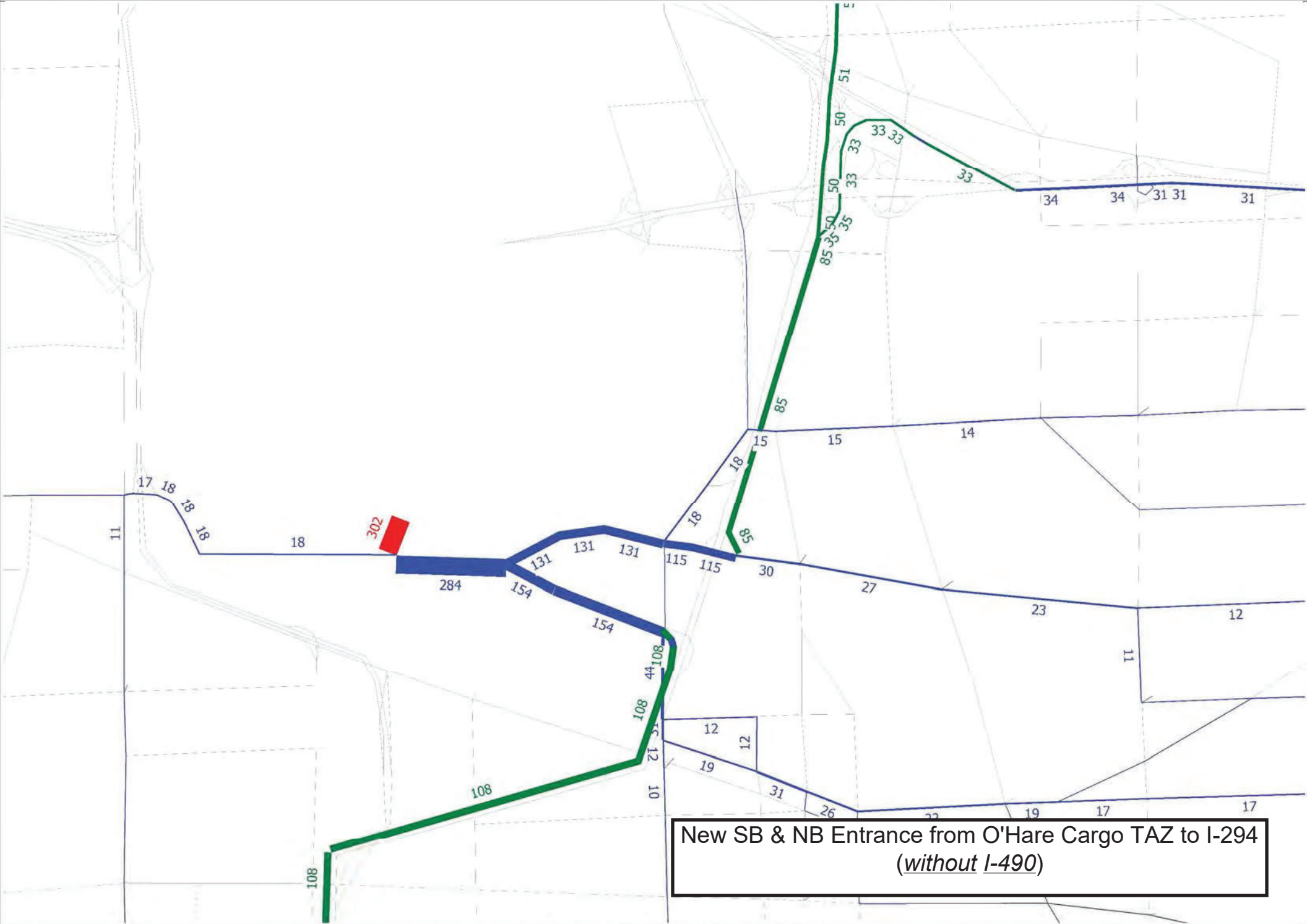
EXH C-22



2020 Select Link Traffic Analysis - With Taft Ave. Bridge
O'Hare South Cargo Area TAZ 96 Outbound (PM PK)

EXH C-23

(Licensed to CDM Smith)



New SB & NB Entrance from O'Hare Cargo TAZ to I-294
(without I-490)

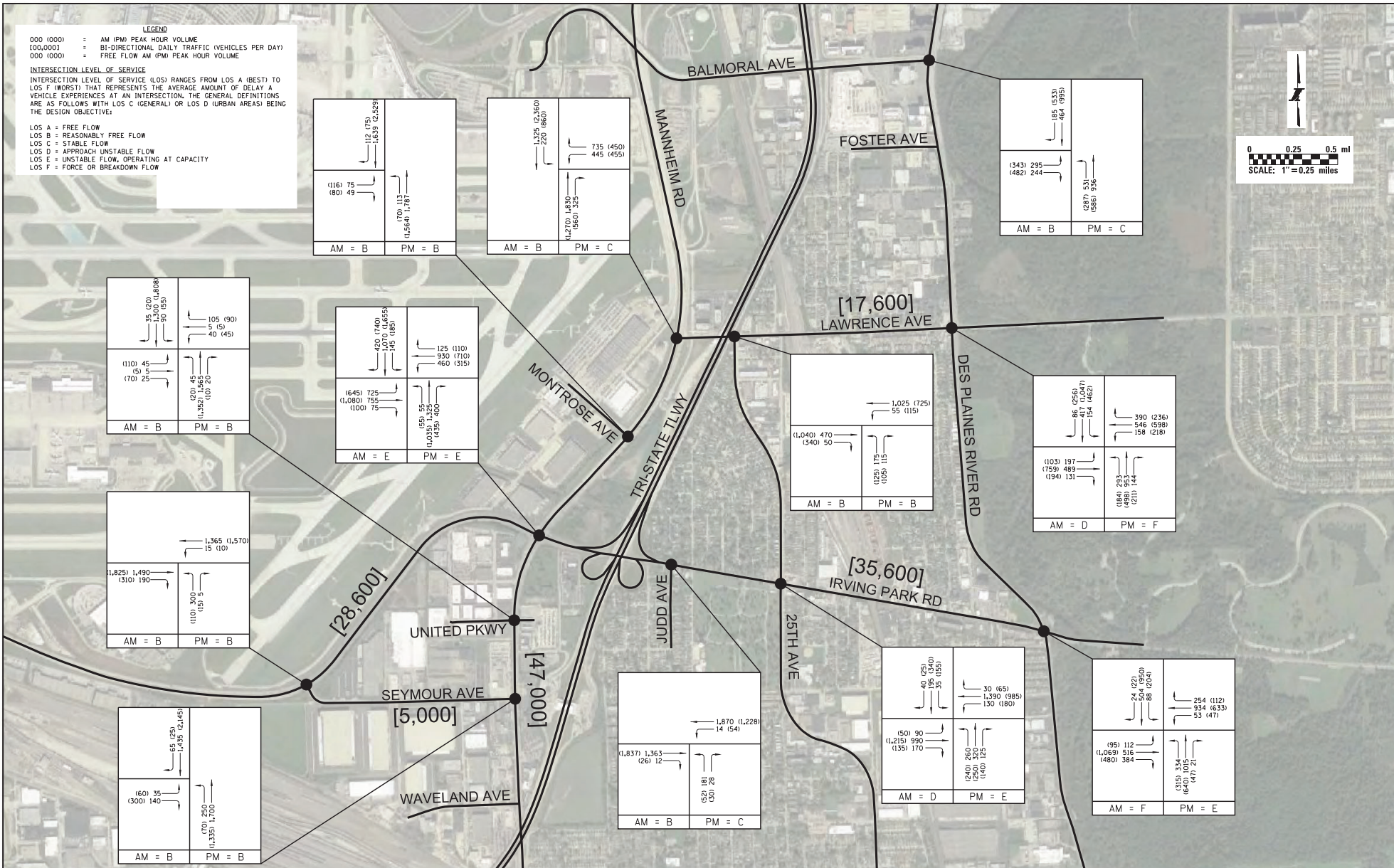
2020 Select Link Traffic Analysis - Without Taft Ave. Bridge
O'Hare South Cargo Area TAZ 96 Outbound (PM PK)

EXH C-24

(Licensed to CDM Smith)



11/25/2019 3:19:54 PM SHY-EXISTINGTRAFFIC.DGN



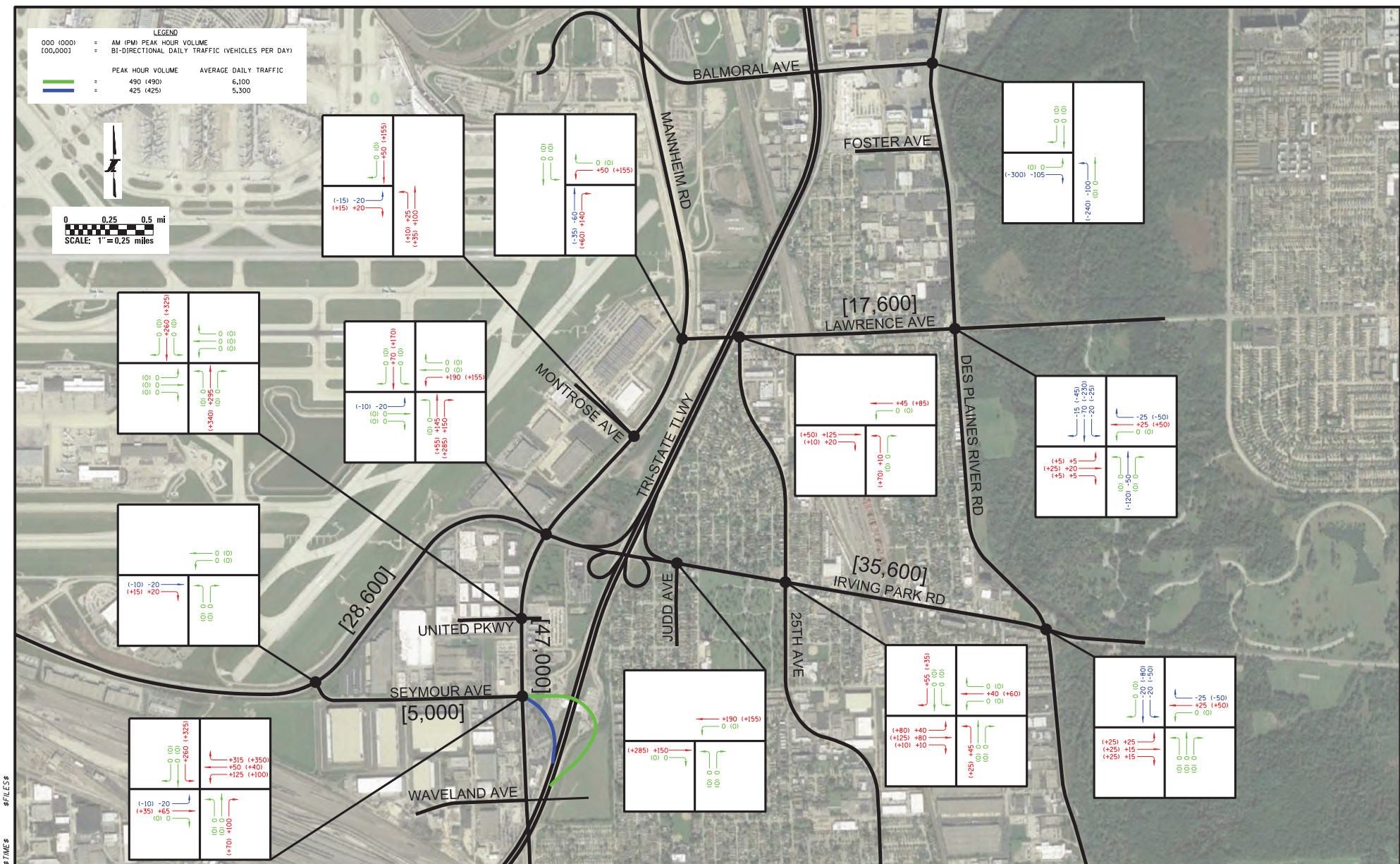
DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

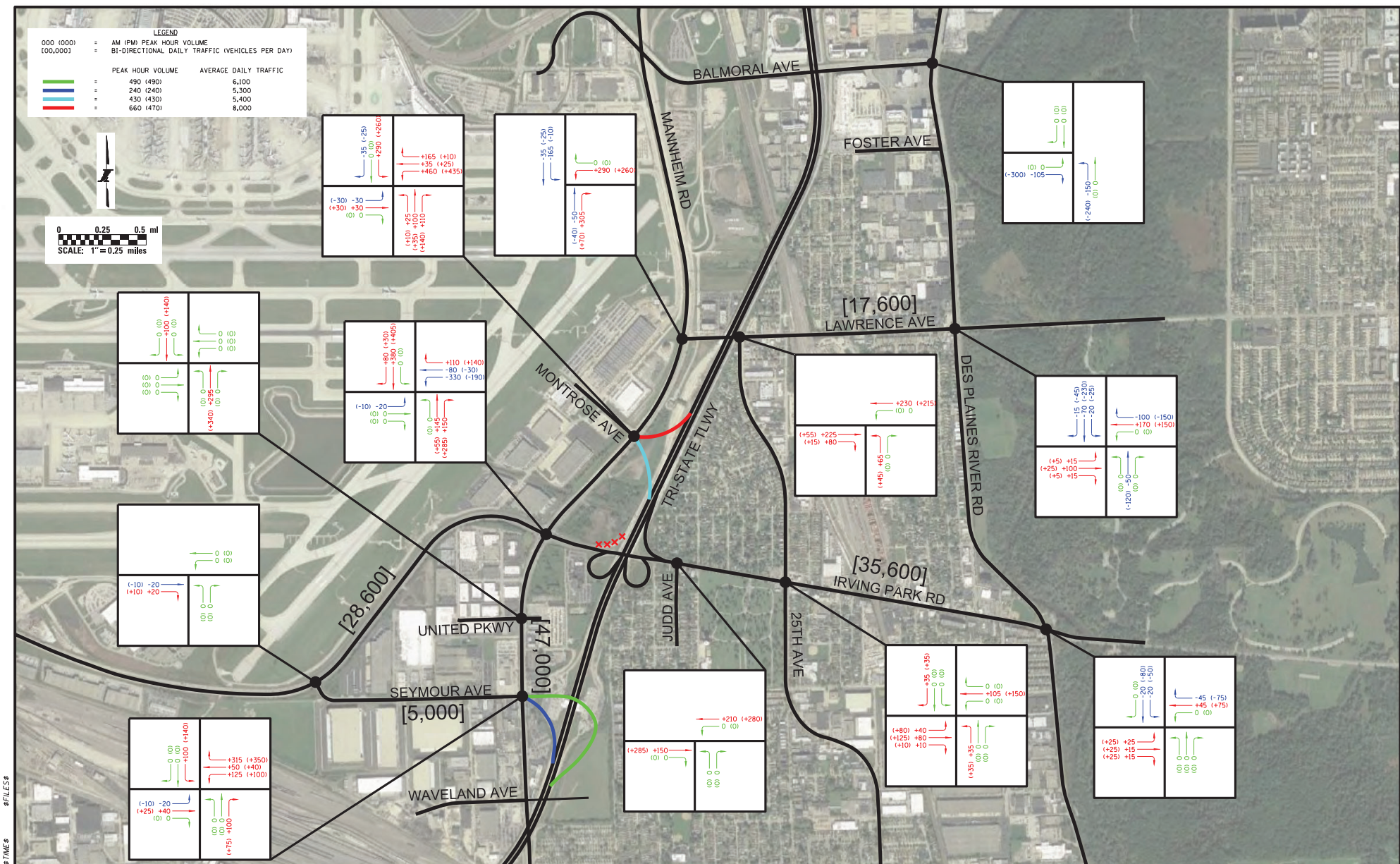
CLIENT:



Existing Conditions
 Daily and Peak Hour Traffic

EXH C-25





\$DATES \$TIMES \$FILES\$

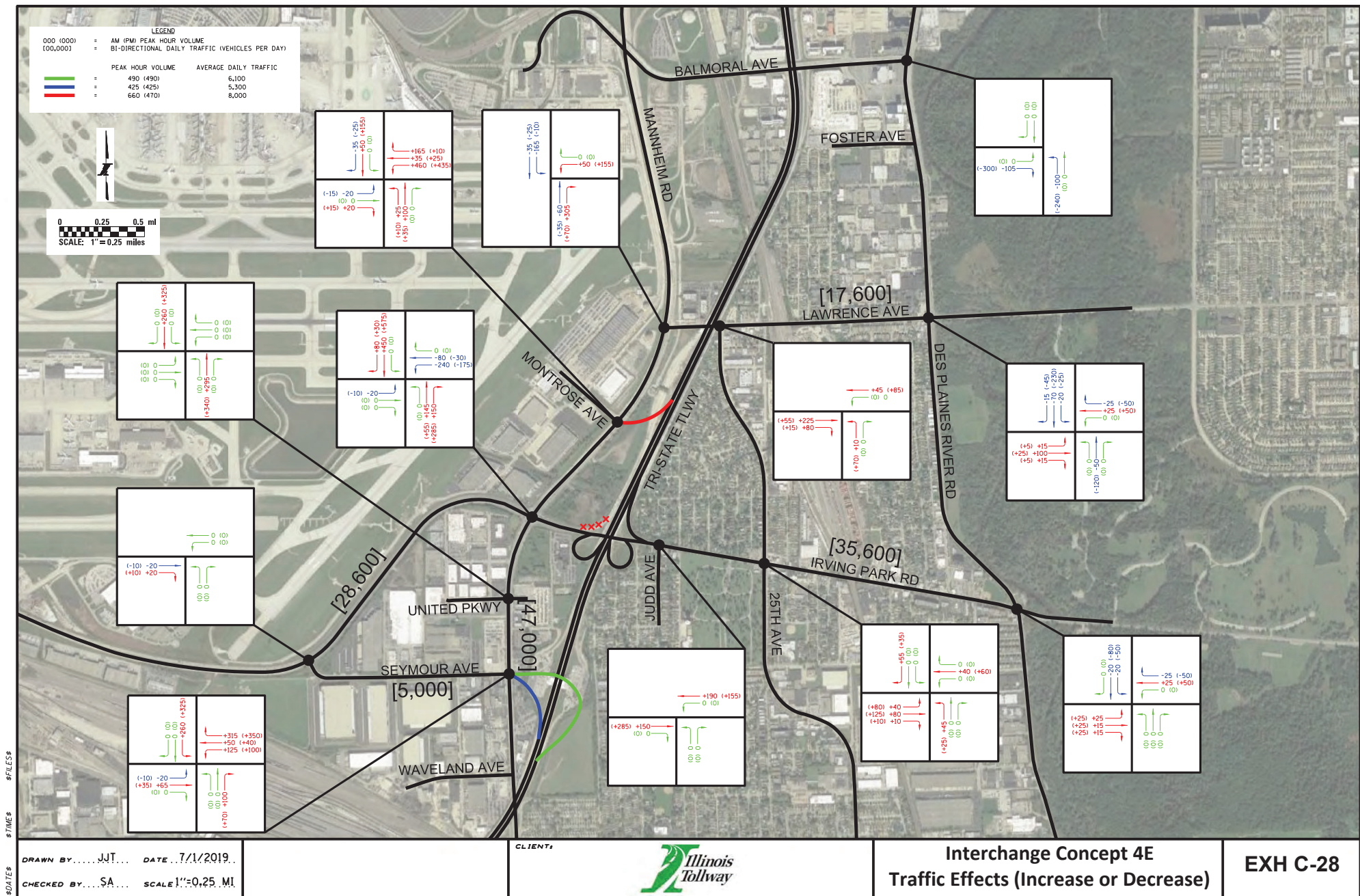
DRAWN BY...JIT... DATE 6/19/2019
 CHECKED BY...SA... SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 4D
Traffic Effects (Increase or Decrease)

EXH C-27



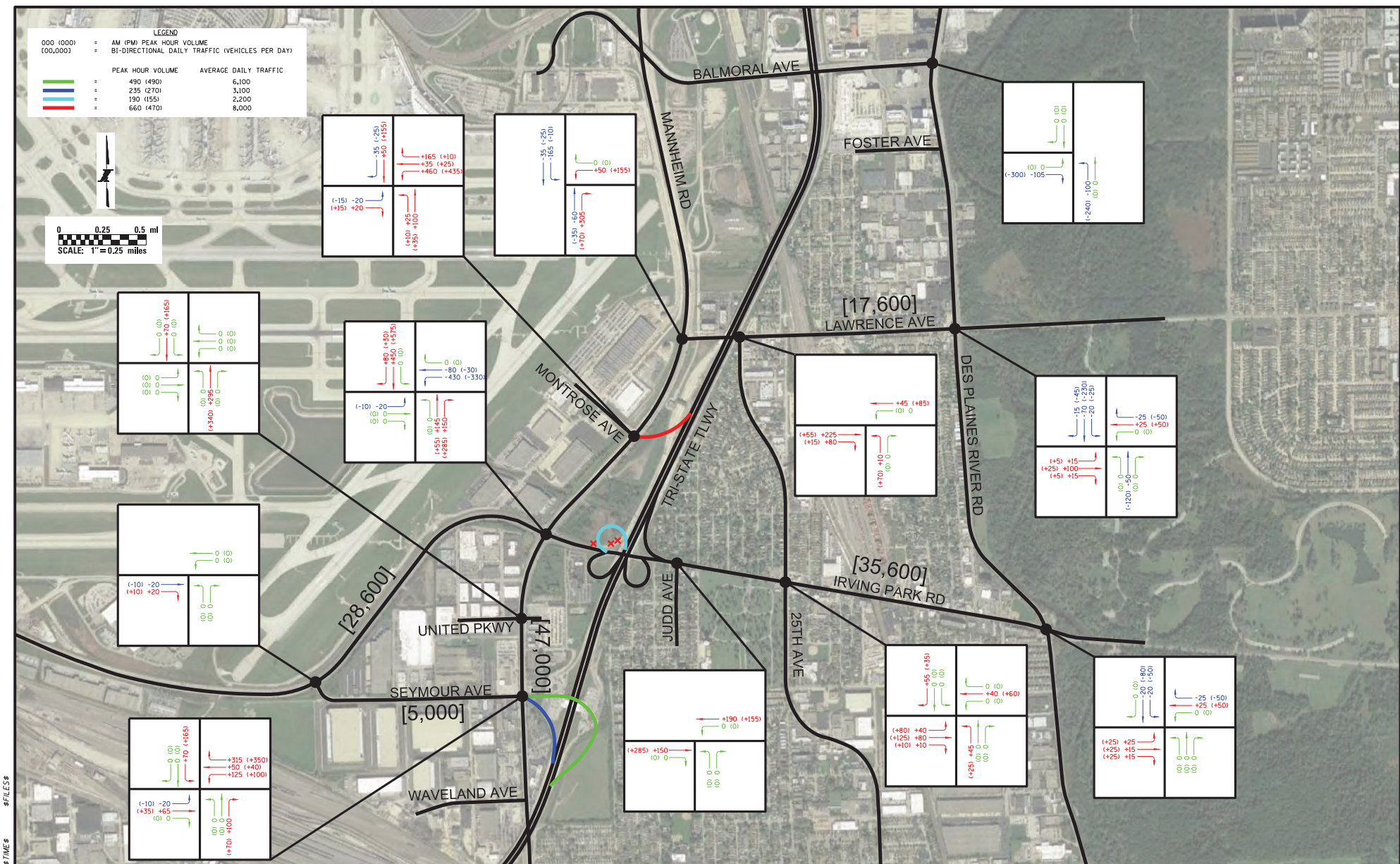
\$DATE\$ \$TIME\$ \$FILES\$

DRAWN BY... JT... DATE 7/1/2019...
 CHECKED BY... SA... SCALE 1"=0.25 MI

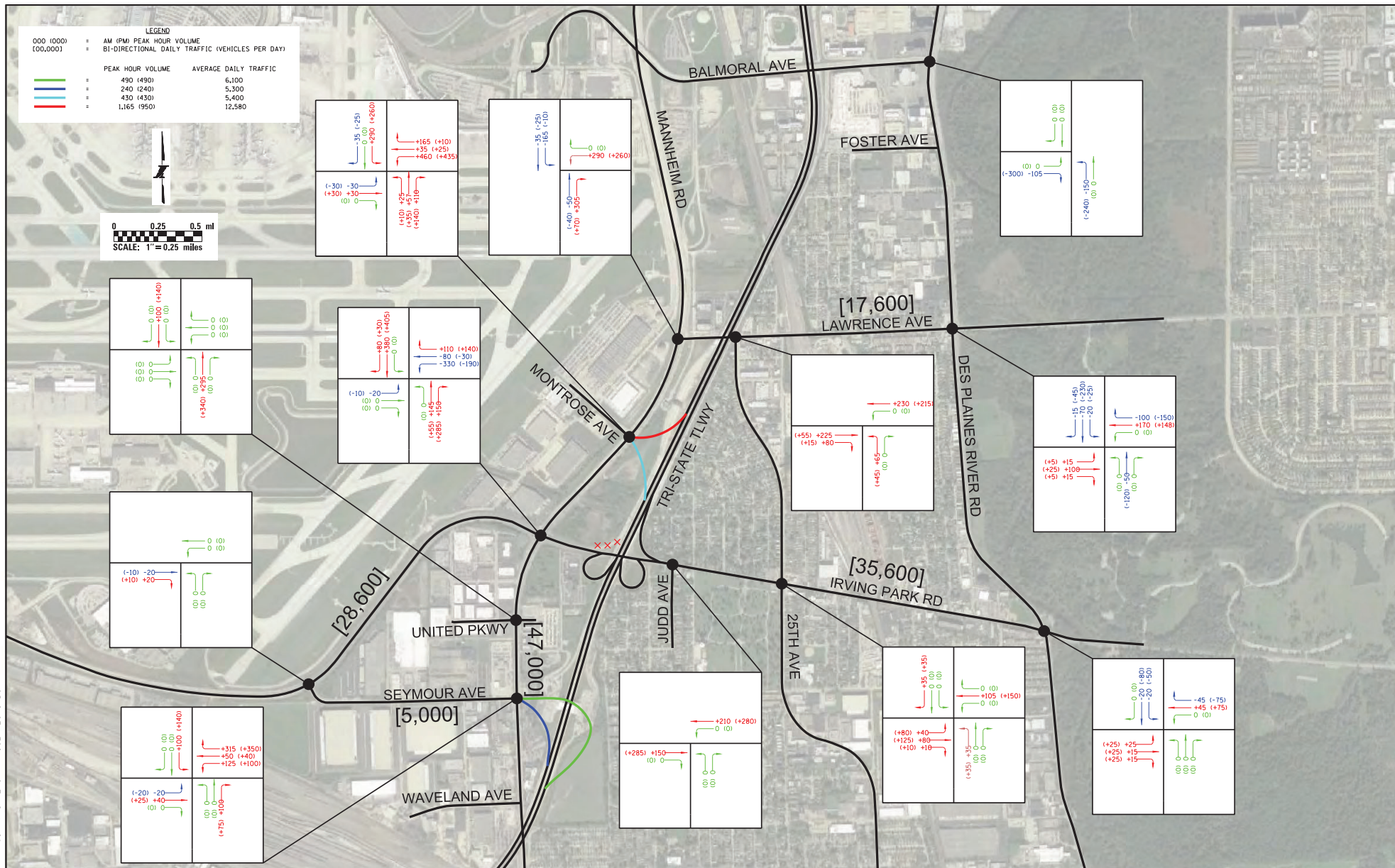
CLIENT:



Interchange Concept 4E
 Traffic Effects (Increase or Decrease)



11/25/2019 1:41:09 PM SHI_4GTRAFFICEFFECTS.DGN



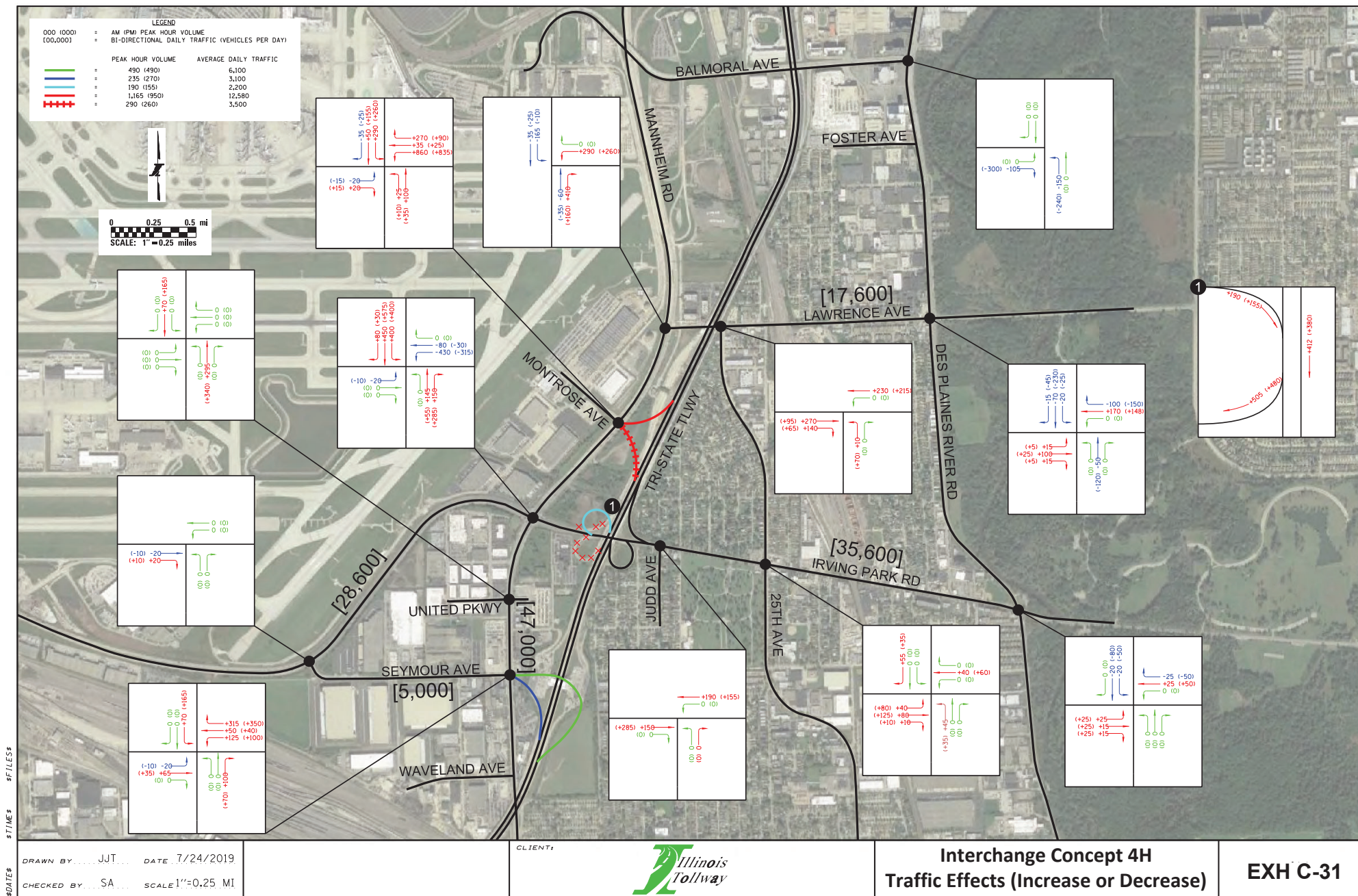
DRAWN BY JJT DATE 7/24/2019
CHECKED BY SA SCALE 1" = 0.25 MI

CLIENT:



Interchange Concept 4G
Traffic Effects (Increase or Decrease)

EXH C-30



DATE: 7/24/2019
 TIME: 10:00 AM
 FILES: 1

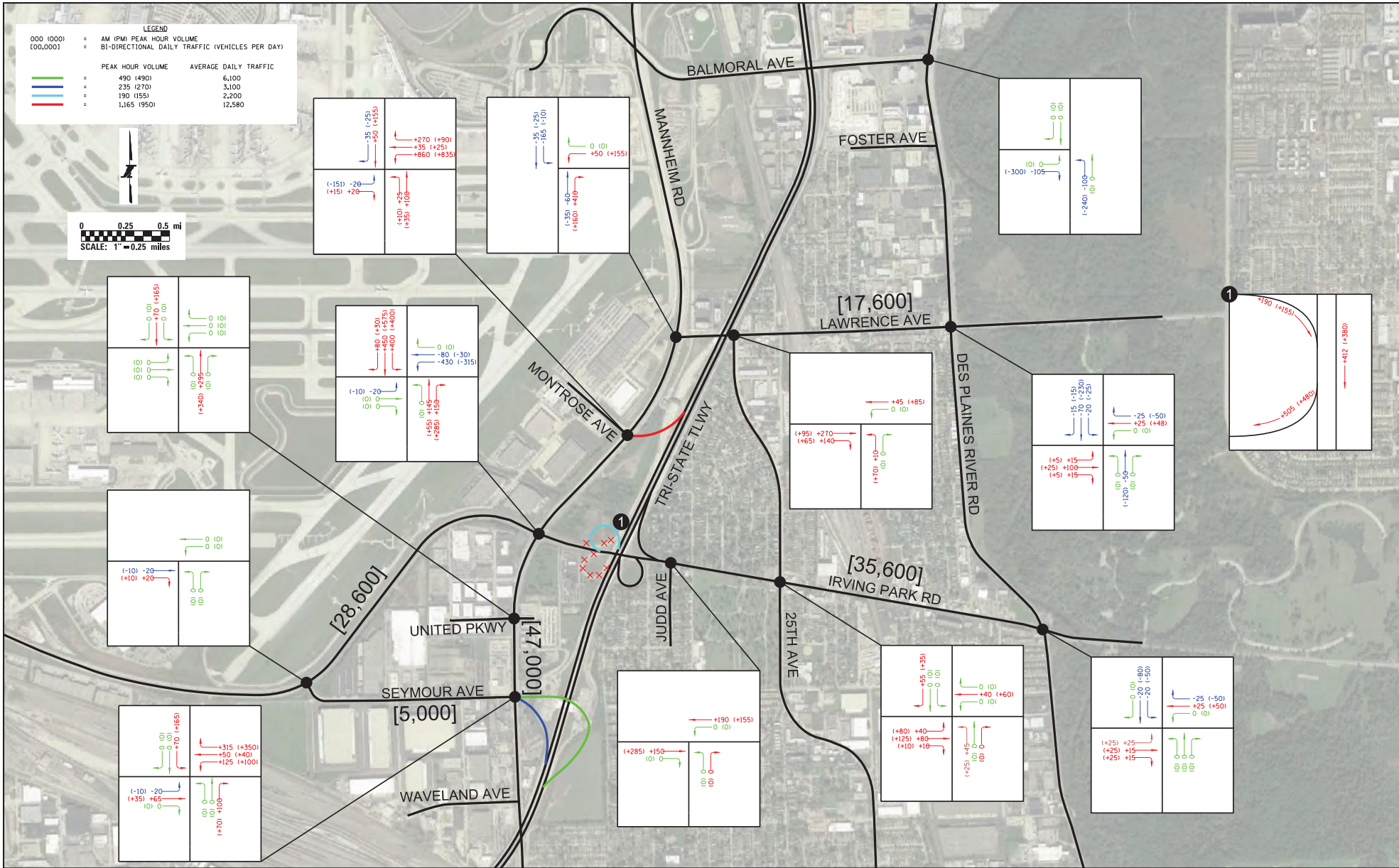
DRAWN BY: JJT
 CHECKED BY: SA
 SCALE: 1" = 0.25 MI

CLIENT:



Interchange Concept 4H
Traffic Effects (Increase or Decrease)

EXH C-31



11/25/2019 1:45:09 PM SHI_41 TRAFFIC EFFECTS.DGN

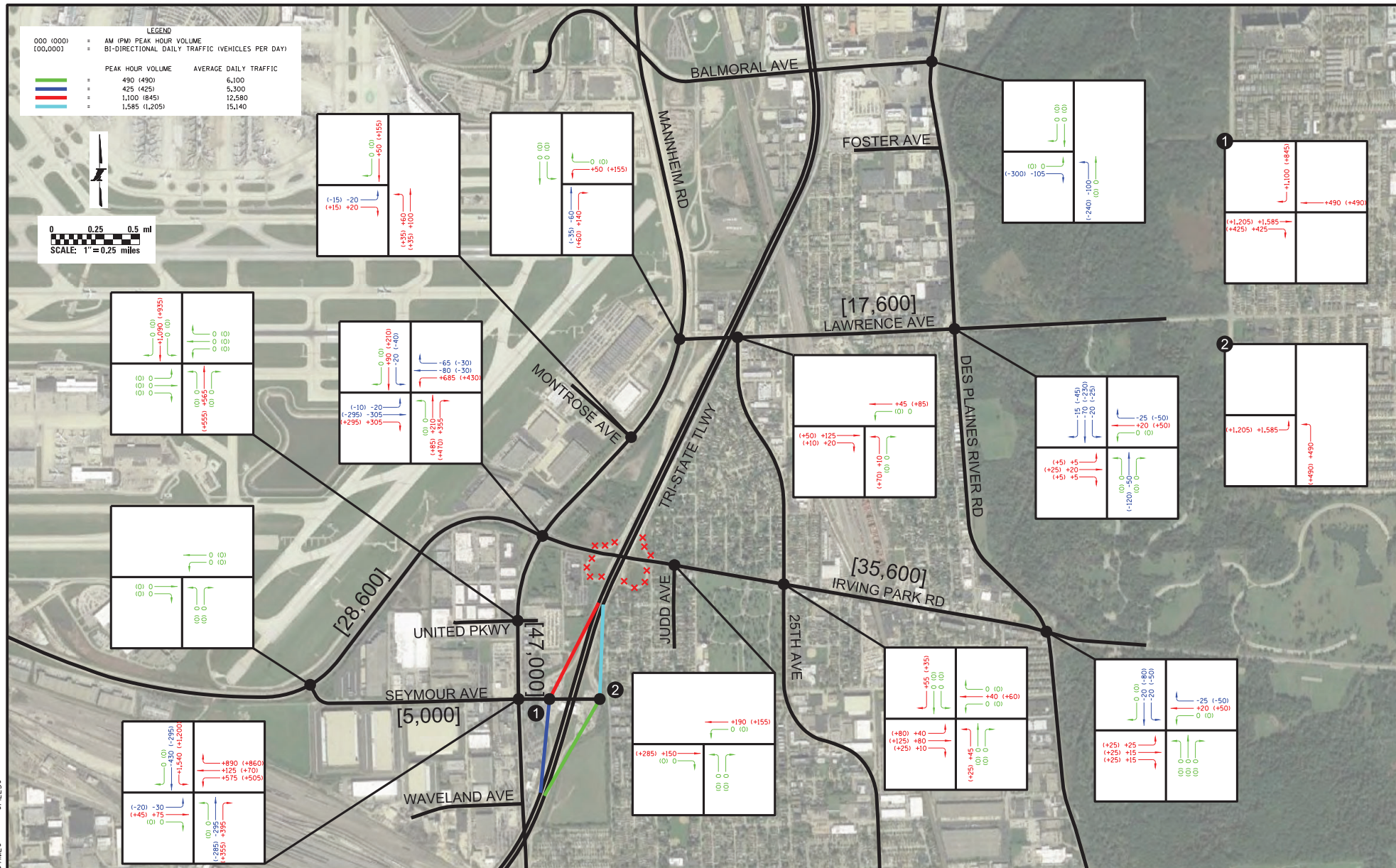
DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1" = 0.25 MI

CLIENT:



Interchange Concept 4I
Traffic Effects (Increase or Decrease)

EXH C-32



\$DATES \$TIME\$ \$FILES\$

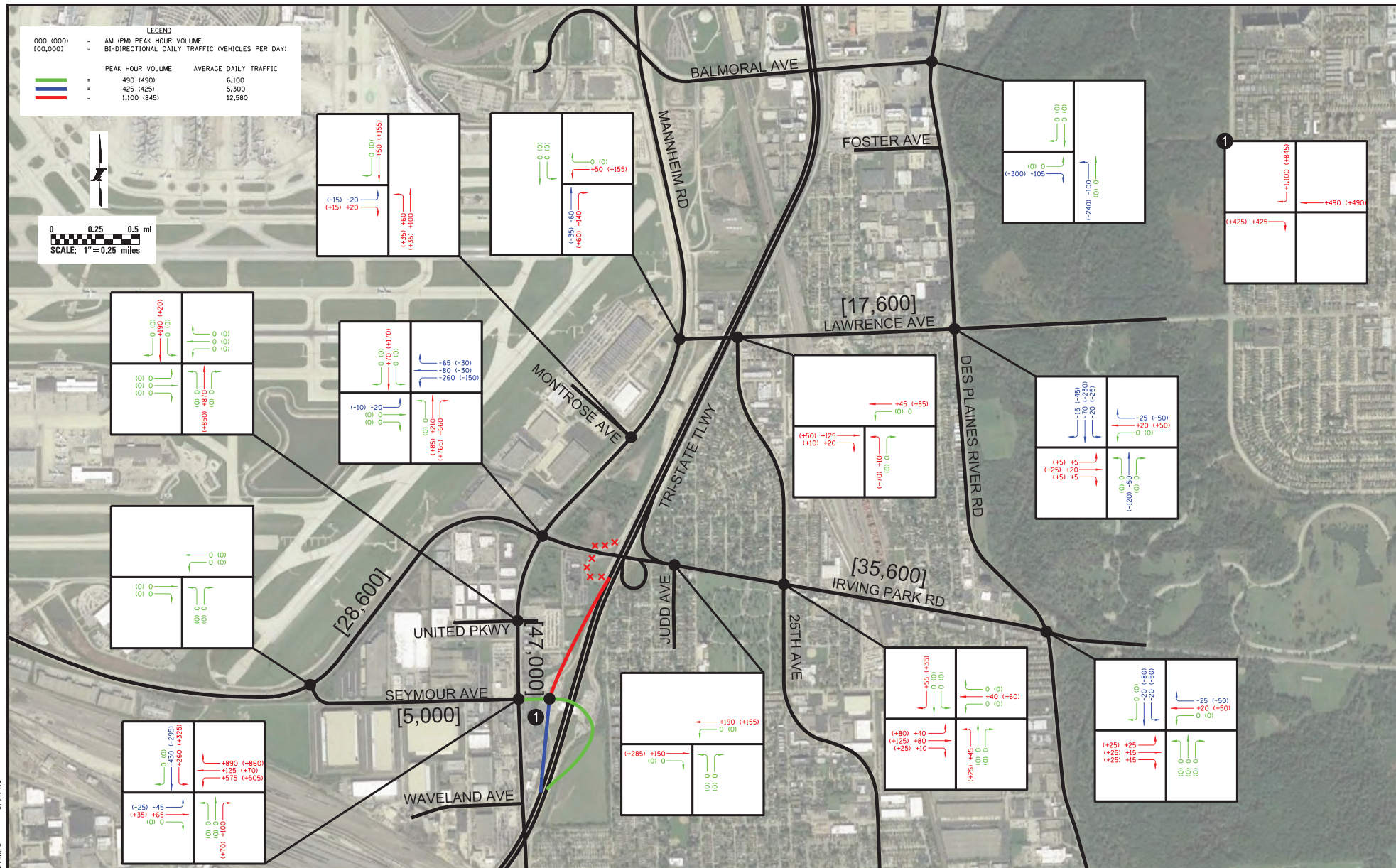
DRAWN BY...JIT... DATE 7/1/2019...
CHECKED BY...SA... SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 5A
Traffic Effects (Increase or Decrease)

EXH C-33



\$FILES\$
\$TIME\$
\$DATE\$

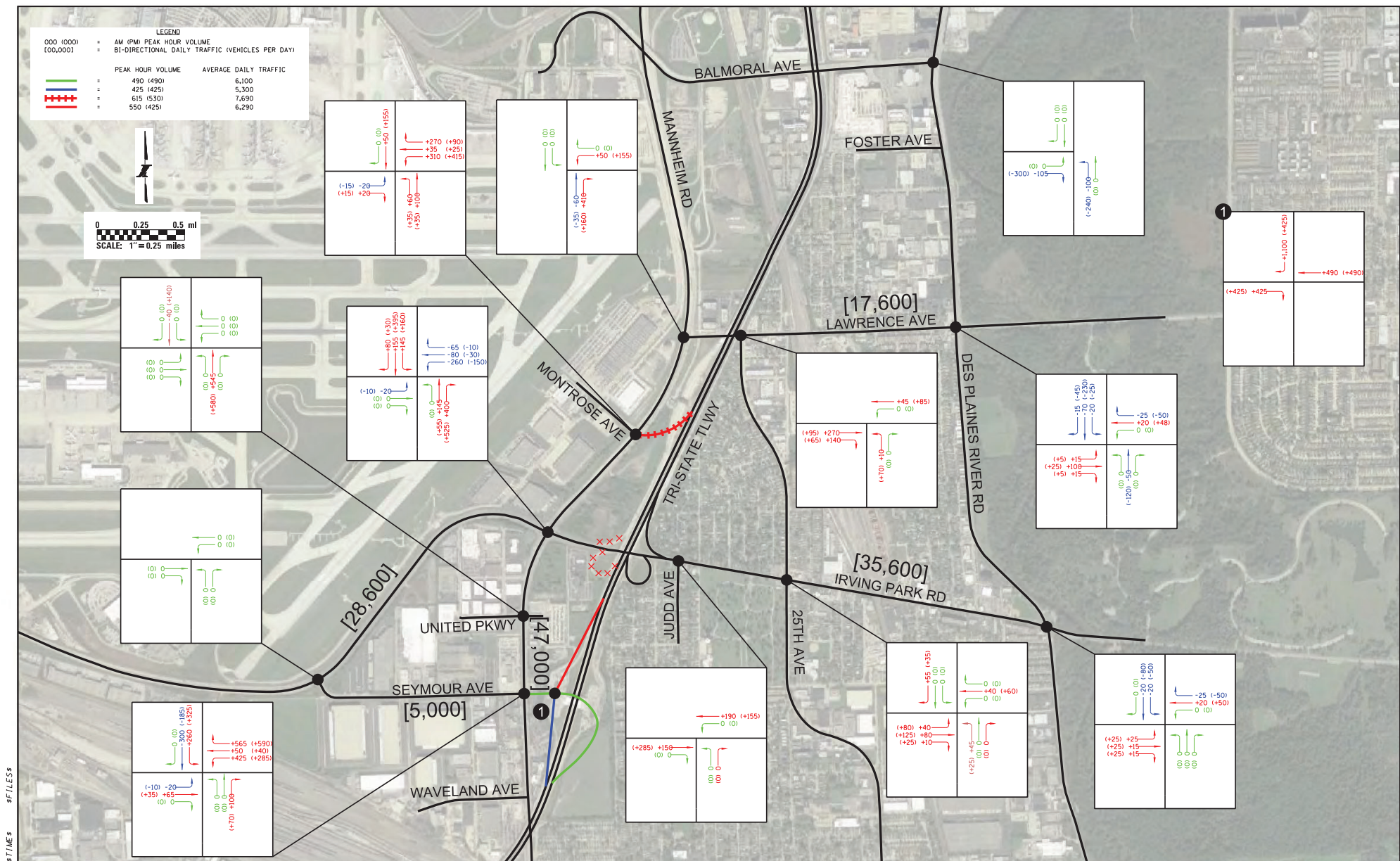
DRAWN BY...JIT... DATE 7/1/2019
 CHECKED BY...SA... SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 5B
 Traffic Effects (Increase or Decrease)

EXH C-34



DATE: 7/24/2019
 TIME: 10:00 AM
 FILES: 1

DRAWN BY: JJT
 CHECKED BY: SA
 SCALE: 1"=0.25 MI

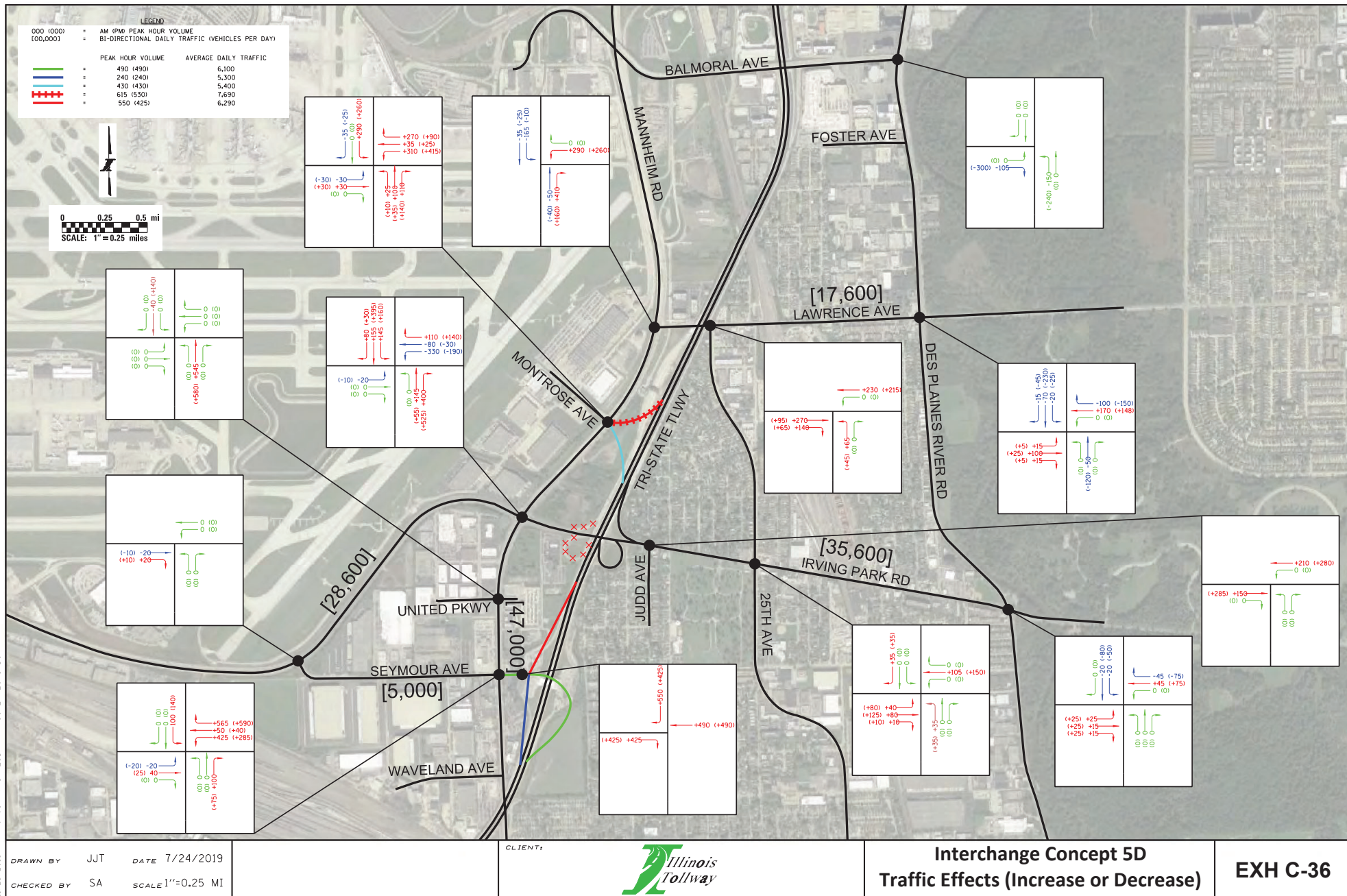
CLIENT:



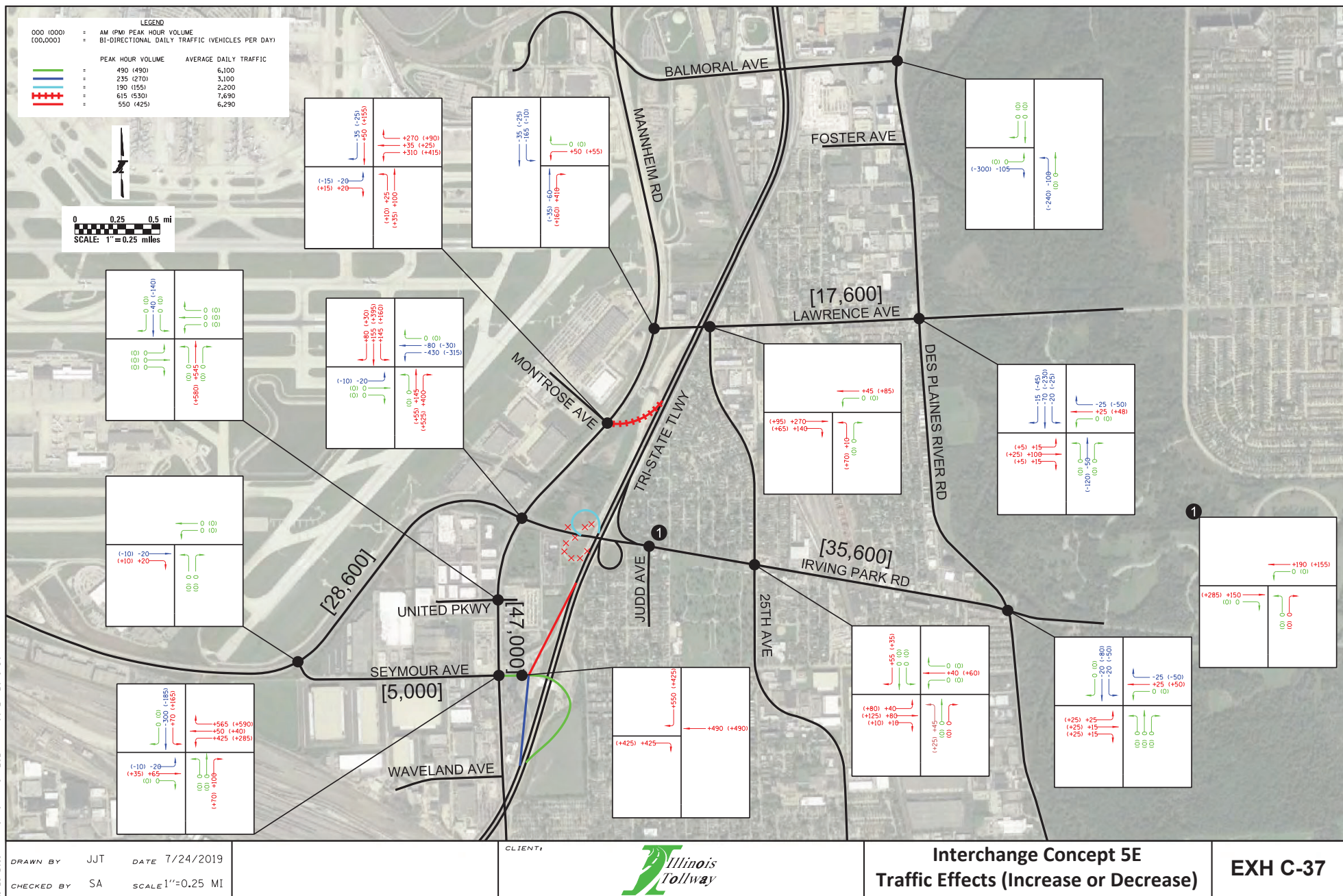
Interchange Concept 5C
Traffic Effects (Increase or Decrease)

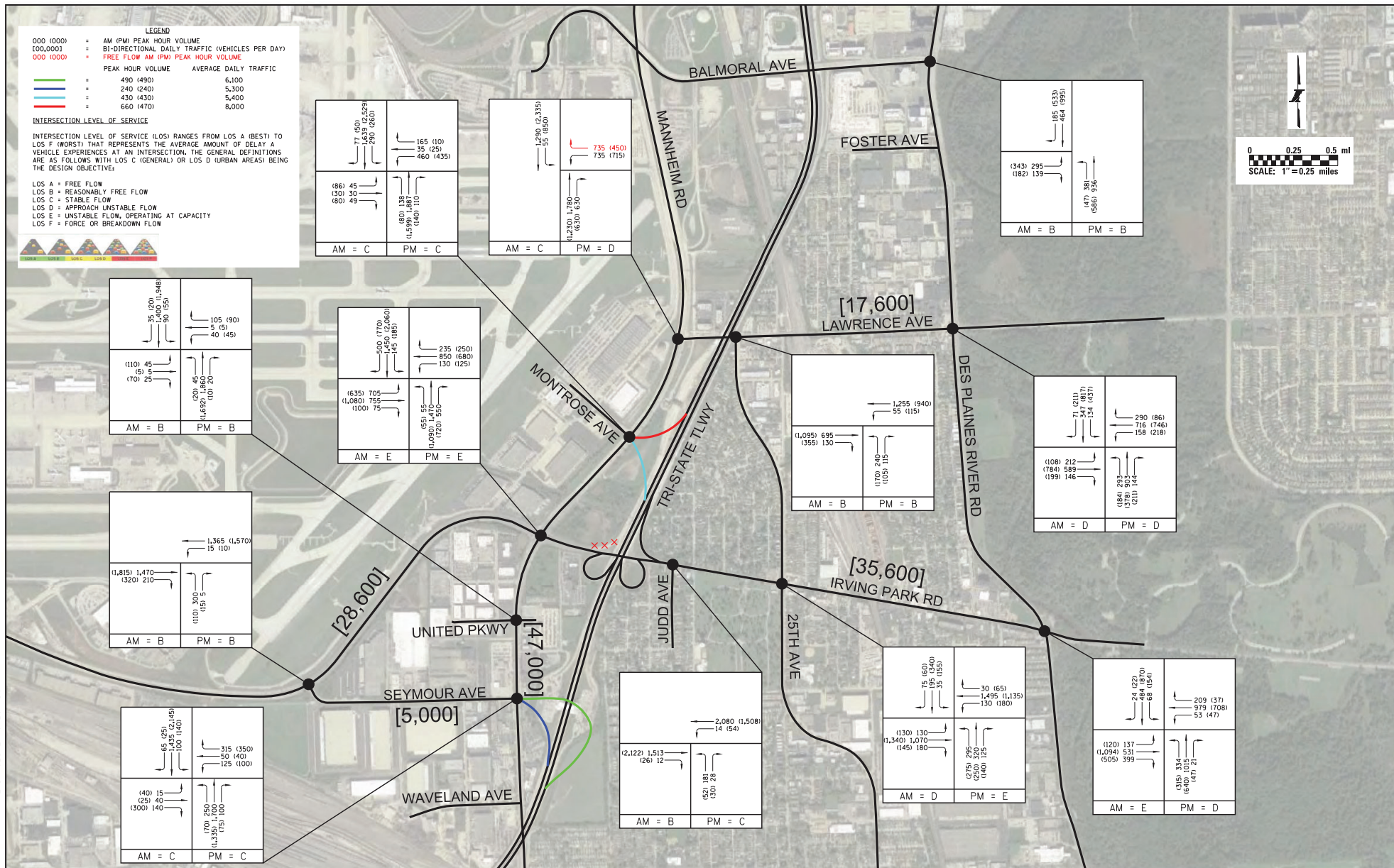
EXH C-35

11/25/2019 1:48:09 PM SHI_5D TRAFFIC EFFECTS.DGN



11/25/2019 1:49:45 PM SHI_SE TRAFFIC EFFECTS.DGN





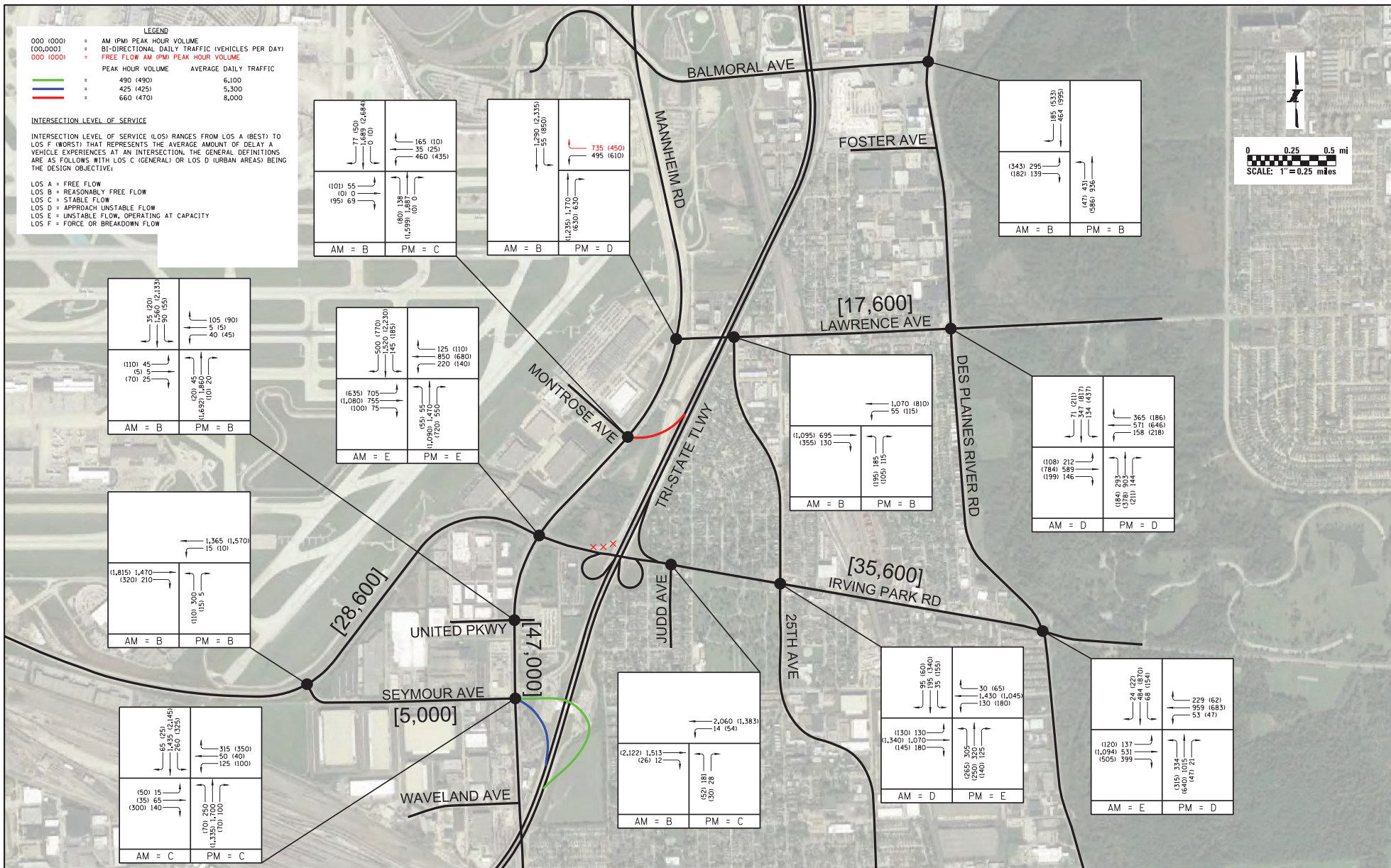
DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 4D
 Peak Hour Traffic and LOS

EXH C-39



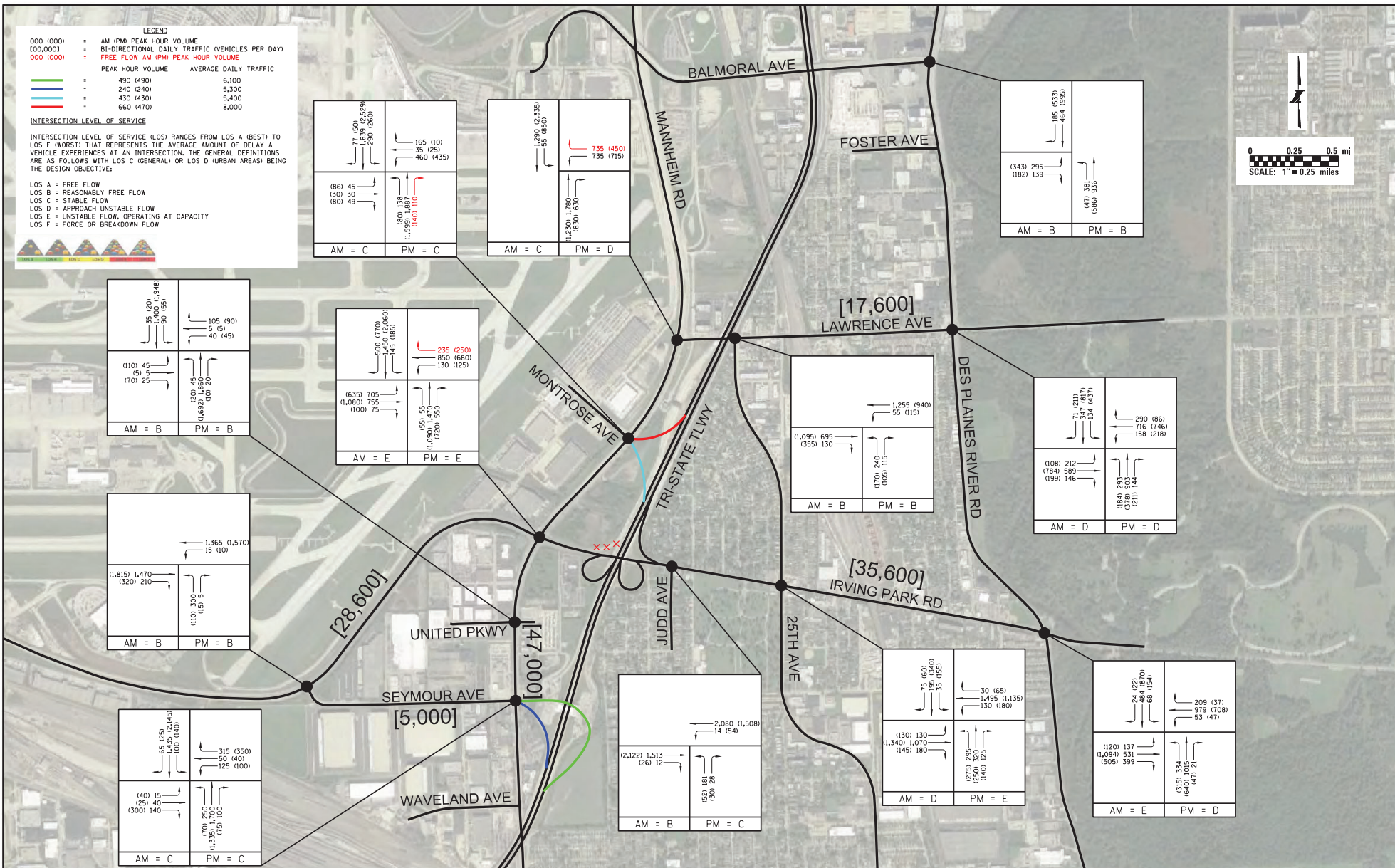
DRAWN BY BCD DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 4E
 Peak Hour Traffic and LOS

EXH C-40



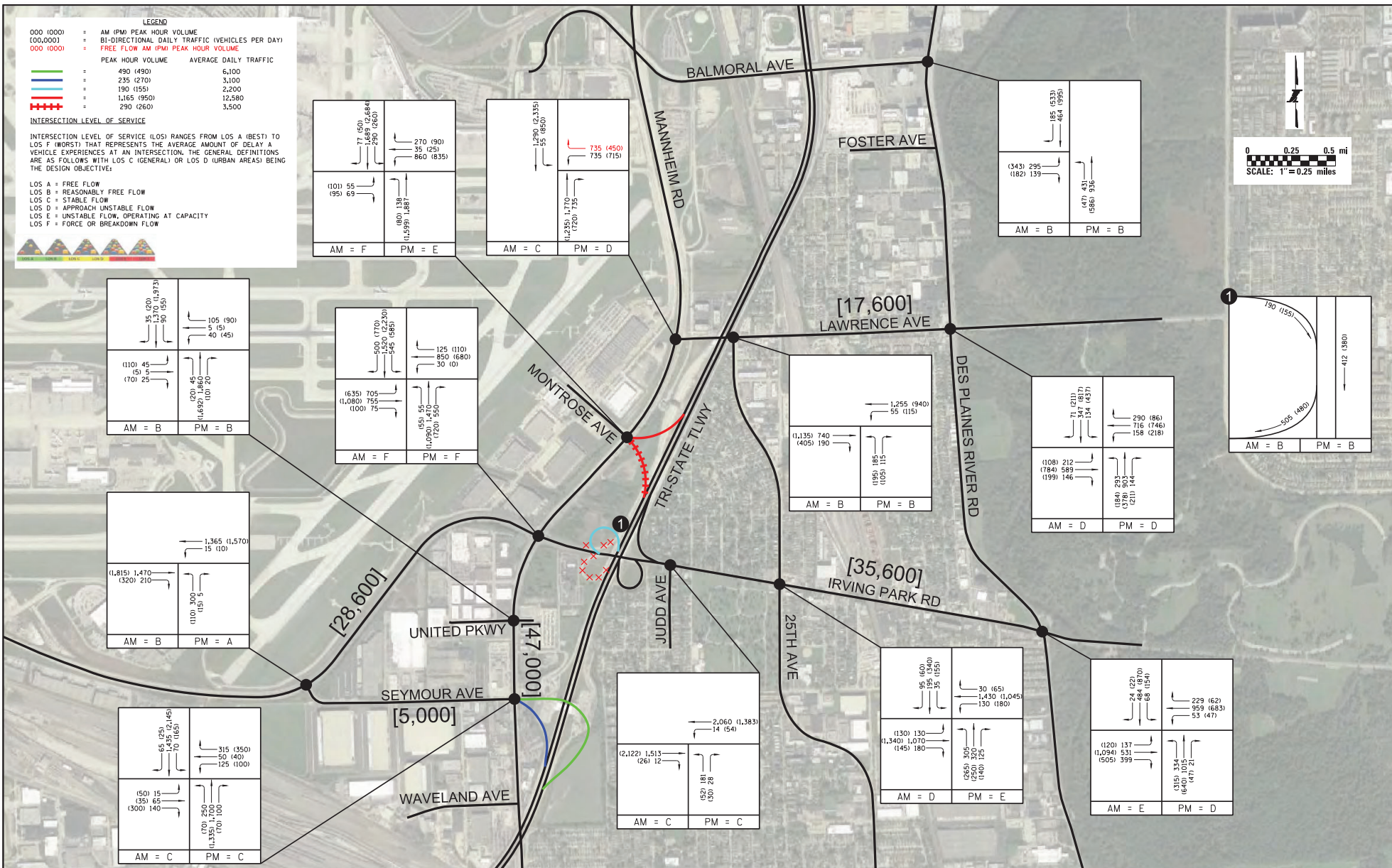
DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 4G
 Peak Hour Traffic and LOS

EXH C-42



DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

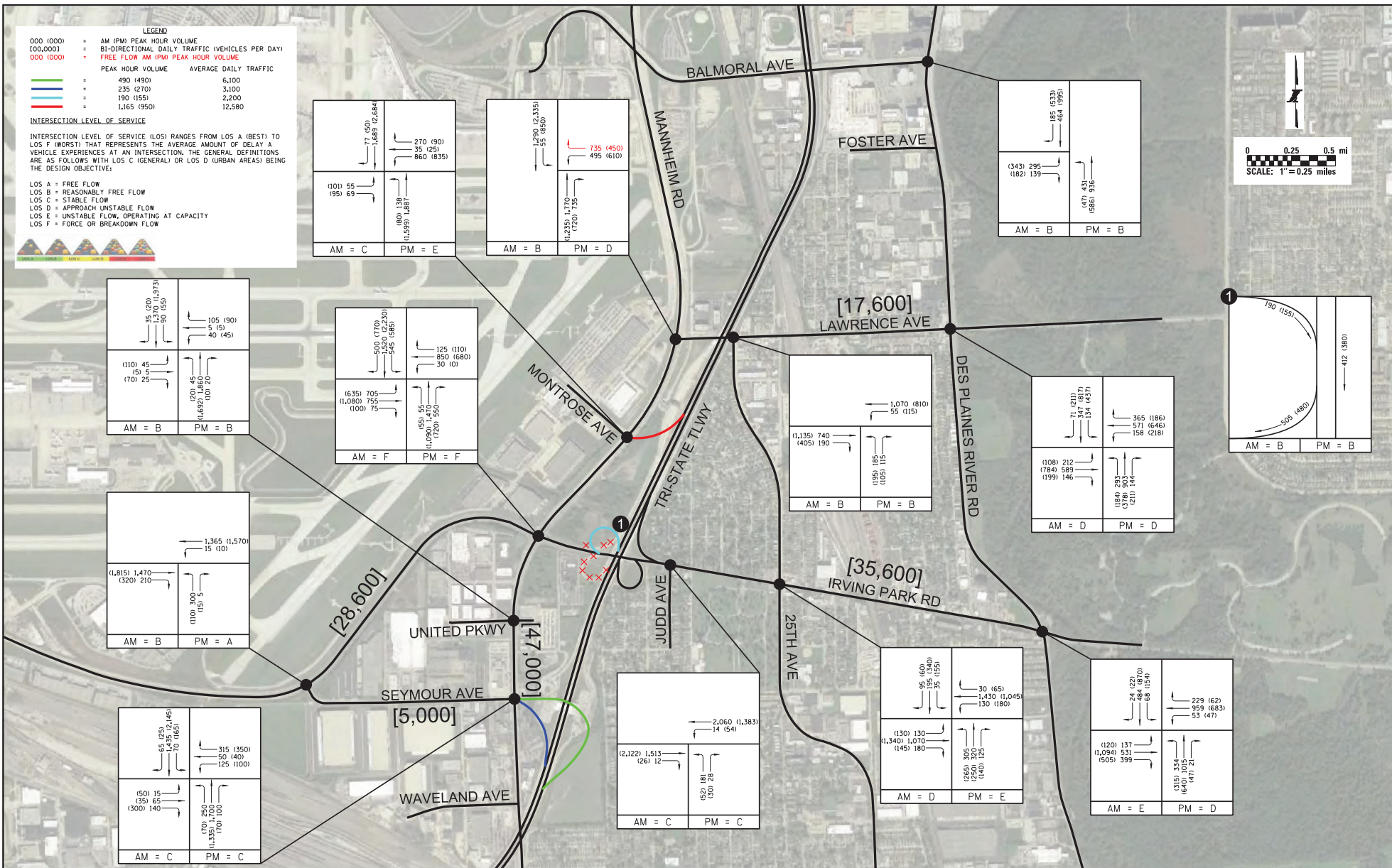
CLIENT:



Interchange Concept 4H
 Peak Hour Traffic and LOS

EXH C-43

11/25/2019 11:04:05 AMSHT_41 VOLUMES & LOS.DGN



DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

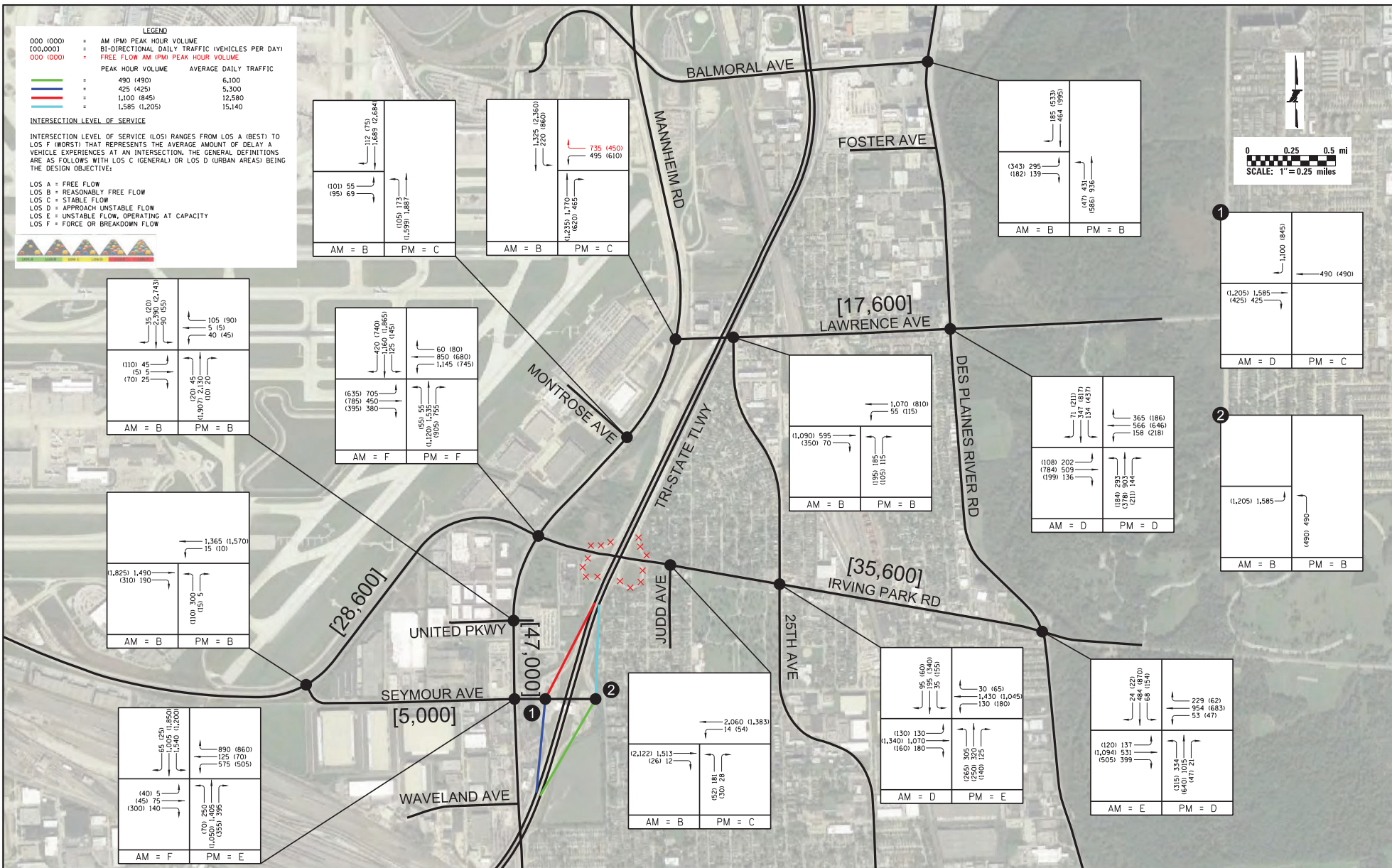
CLIENT:



Interchange Concept 4I
 Peak Hour Traffic and LOS

EXH C-44

11/23/19 AMSHT_5A VOLUMES B LOS.DGN



DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 5A
 Peak Hour Traffic and LOS

EXH C-45

LEGEND

000 (000) = AM (PM) PEAK HOUR VOLUME
 (00,000) = BI-DIRECTIONAL DAILY TRAFFIC (VEHICLES PER DAY)
 000 (000) = FREE FLOW AM (PM) PEAK HOUR VOLUME

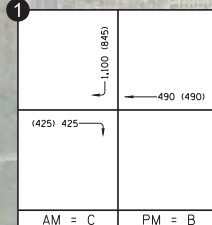
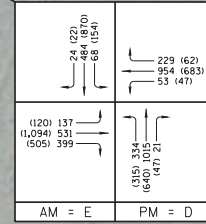
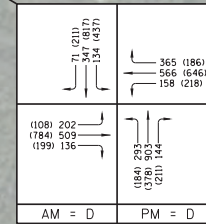
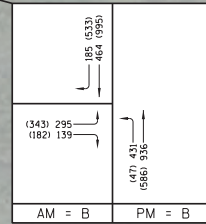
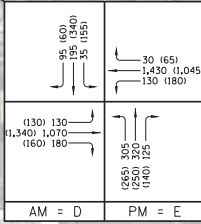
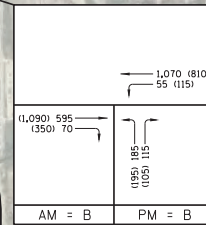
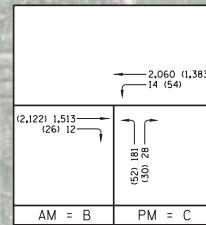
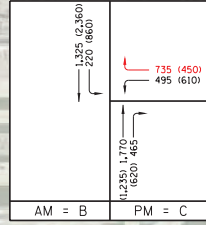
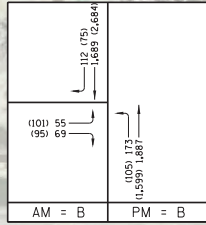
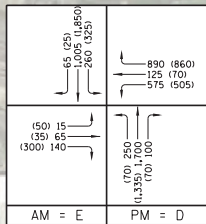
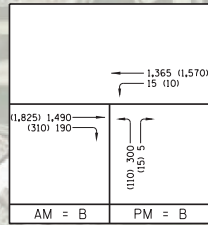
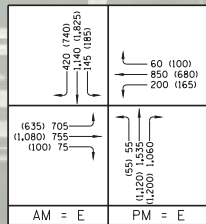
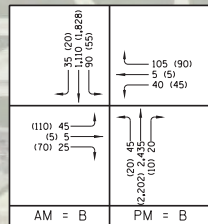
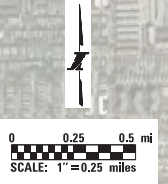
PEAK HOUR VOLUME AVERAGE DAILY TRAFFIC

490 (490) 6,100
 425 (425) 5,300
 1,100 (845) 12,580

INTERSECTION LEVEL OF SERVICE

INTERSECTION LEVEL OF SERVICE (LOS) RANGES FROM LOS A (BEST) TO LOS F (WORST) THAT REPRESENTS THE AVERAGE AMOUNT OF DELAY A VEHICLE EXPERIENCES AT AN INTERSECTION. THE GENERAL DEFINITIONS ARE AS FOLLOWS WITH LOS C (GENERAL) OR LOS D (URBAN AREAS) BEING THE DESIGN OBJECTIVE:

LOS A = FREE FLOW
 LOS B = REASONABLY FREE FLOW
 LOS C = STABLE FLOW
 LOS D = APPROACH UNSTABLE FLOW
 LOS E = UNSTABLE FLOW, OPERATING AT CAPACITY
 LOS F = FORCE OR BREAKDOWN FLOW



11/26/2019 12:49:56 PM SH-56 VOLUMES B LOS.DGN

DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

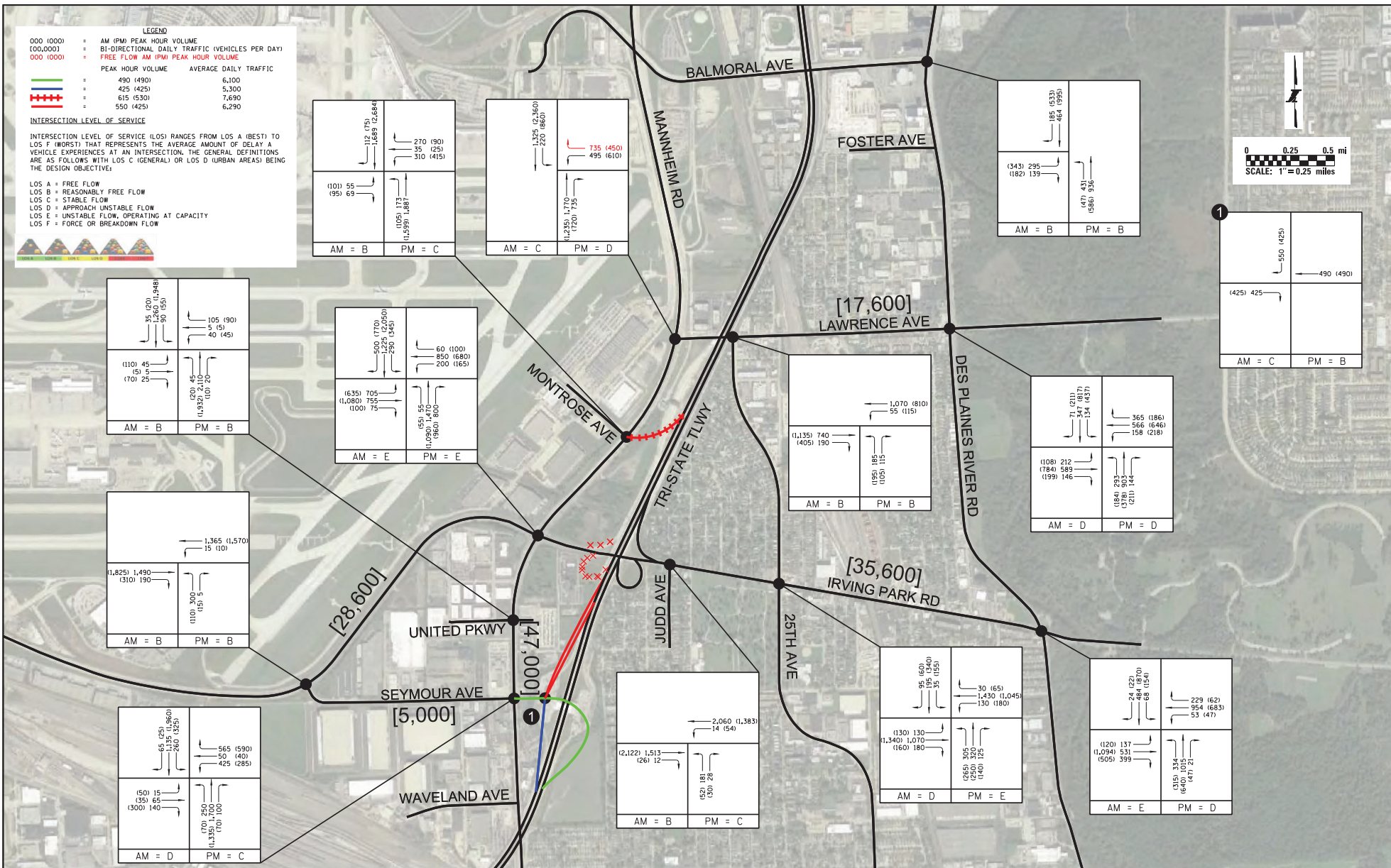
CLIENT:



Interchange Concept 5B
 Peak Hour Traffic and LOS

EXH C-46

11/25/2019 12:52:41 PMSHT_5C VOLUMES B LOS.DGN



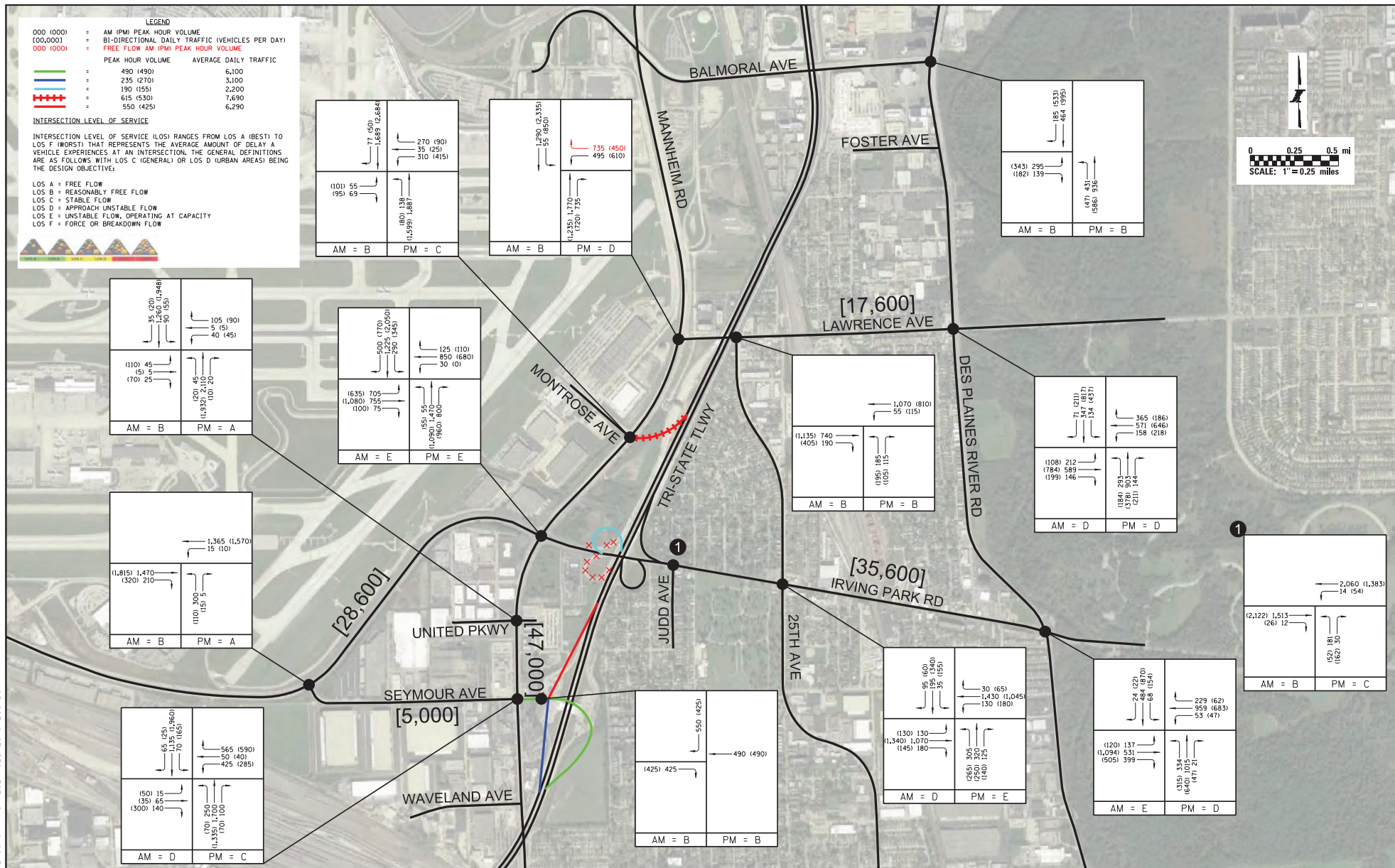
DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 5C
 Peak Hour Traffic and LOS

EXH C-47



DRAWN BY JJT DATE 7/24/2019
 CHECKED BY SA SCALE 1"=0.25 MI

CLIENT:



Interchange Concept 5E
 Peak Hour Traffic and LOS

EXH C-49