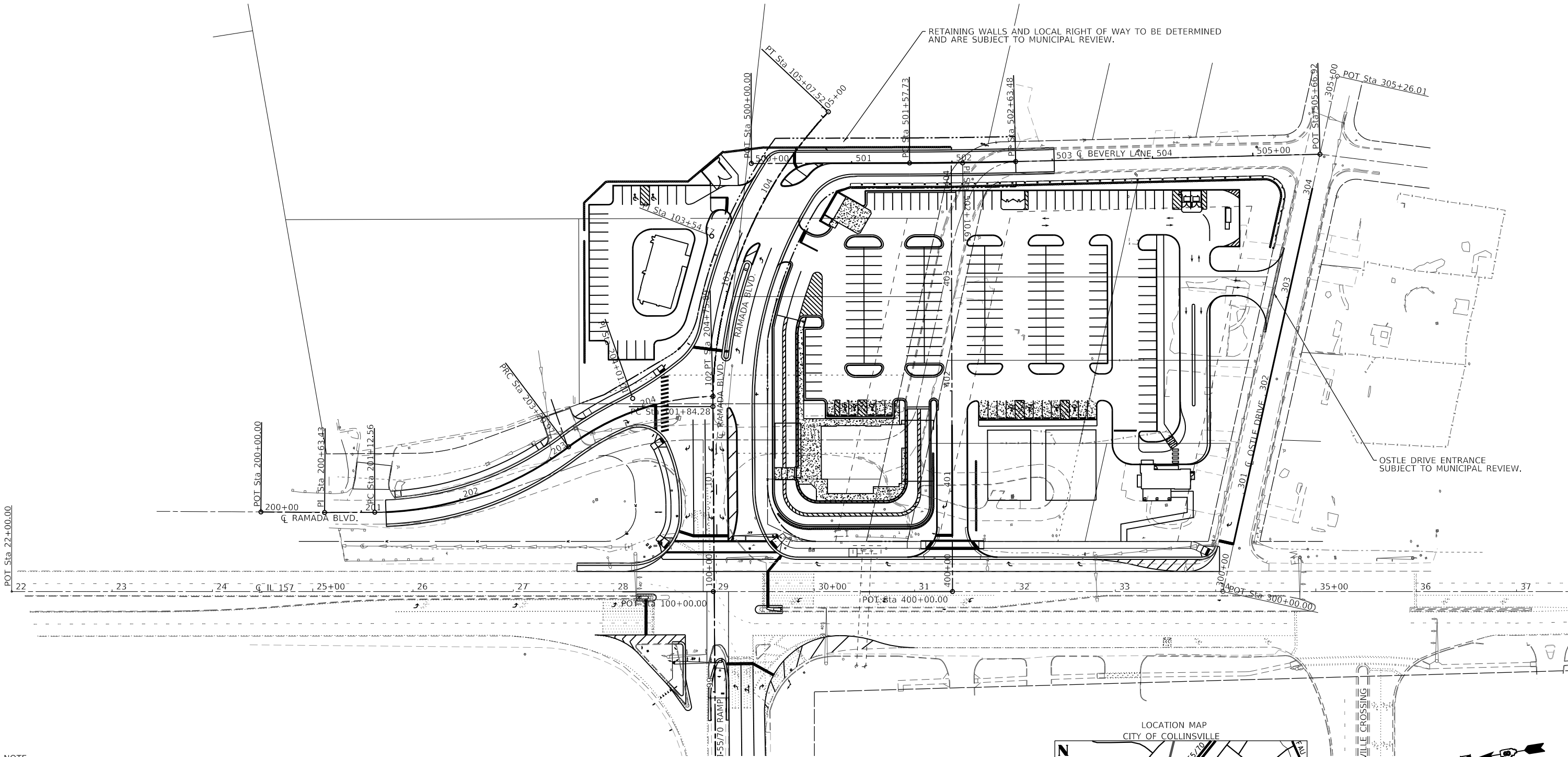




NOTE:
* INTERNAL SITE AND PARKING LAYOUTS ARE PRELIMINARY.
* SIDEWALK MAY BE ADDED TO DEVELOPMENT AS REQUIRED
AS PART OF THE CITY SUBDIVISION PROCESS.

HORIZONTAL CURVE DATA

PROP. CURVE PRRAMADA_3
PI STA. = 103+54.17
 Δ = 43° 34' 39" (RT)
D = 13° 28' 53"
R = 425.00'
T = 169.89'
L = 323.24'
E = 32.70'
e = N.C.
T.R. = _____
S.E. RUN = _____
P.C. STA. = 101+84.28
P.T. STA. = 105+07.52

PROP. CURVE PRCL_RAMADAN3_5
PI STA. = 202+20.51
 Δ = 36° 51' 20" (LT)
D = 17° 41' 02"
R = 324.00'
T = 107.95'
L = 208.41'
E = 17.51'
e = N.C.
T.R. = _____
S.E. RUN = _____
P.C. STA. = 201+12.56
P.R.C. STA. = 203+20.97

PROP. CURVE PRCL_RAMADAN3_6
PI STA. = 204+01.01
 Δ = 35° 30' 18" (RT)
D = 22° 55' 06"
R = 250.00'
T = 80.04'
L = 154.92'
E = 12.50'
e = N.C.
T.R. = _____
S.E. RUN = _____
P.R.C. STA. = 203+20.97
P.T. STA. = 204+75.89

PROP. CURVE PRBEVERLY_3
PI STA. = 502+10.61
 Δ = 1° 12' 42" (LT)
D = 1° 08' 45"
R = 5,000.00'
T = 52.88'
L = 105.75'
E = 0.28'
e = N.C.
T.R. = _____
S.E. RUN = _____
P.C. STA. = 501+57.73
P.T. STA. = 502+63.48

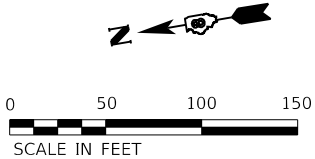
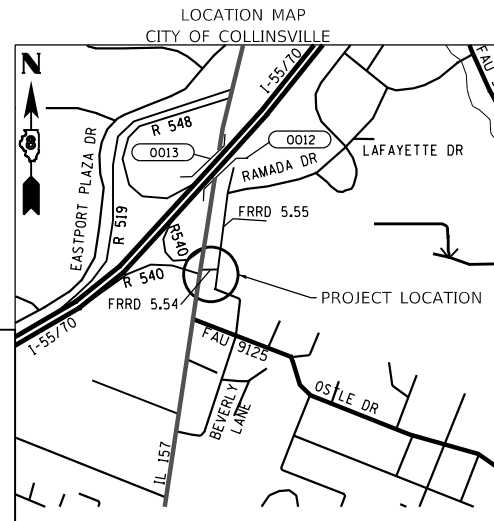
PREPARED BY:



OATES
ASSOCIATES

www.oatesassociates.com

ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115



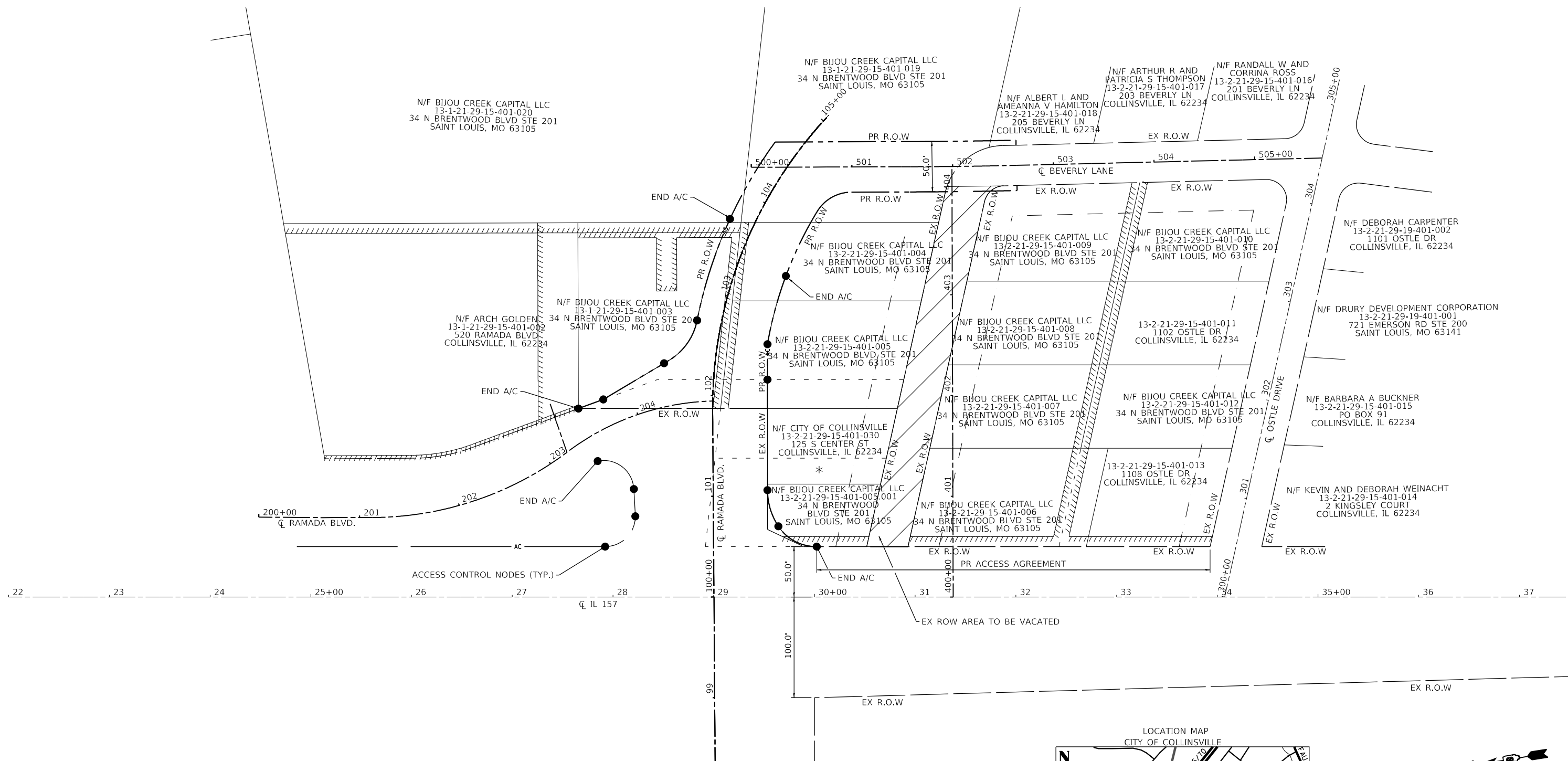
INTERSECTION DESIGN STUDY

FAI ROUTE 0070 WITH (I-55/70)
FAP ROUTE 0592 WITH (IL 157)
MUN ROUTE 0070 WITH (RAMADA BOULEVARD)

SEC. NO. _____ PROJ. NO. _____
SCALE 1" = 50' COUNTY MADISON
SIN : _____ REV. NO. _____

CADD FILE NAME : [OVERVIEW]

I.D.S. SHEET 1 OF 20



NOTE:

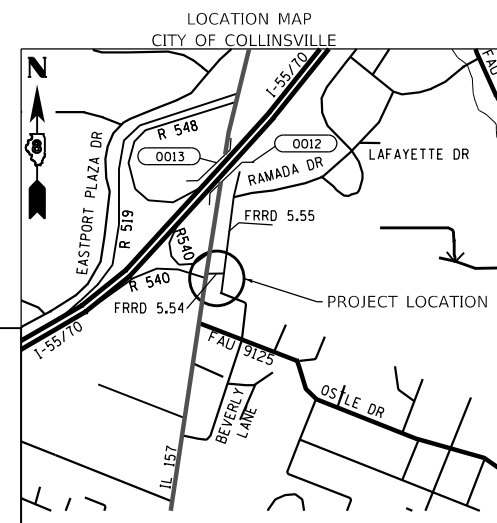
PROPOSED RIGHT OF WAY (R.O.W.) AND ACCESS CONTROL LIMITS ARE PRELIMINARY.

- * THE ACREAGE OF PROPOSED RIGHT OF WAY THAT CONVERTS PRIVATE LAND TO PUBLIC USE EXCEEDS THE COMBINED ACREAGE OF EXISTING RIGHT OF WAY TO BE VACATED AND PARCEL TRANSFER BY CITY. PARCEL 13-2-21-29-15-401-030 TO BE TRANSFERRED TO ADJACENT OWNER FOR USE IN THE PLANNED DEVELOPMENT.

PREPARED BY:



ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115



INTERSECTION DESIGN STUDY

FAI	ROUTE	0070	(1-55/70)
FAP	ROUTE	0592	(IL 157)
MUN	ROUTE	0070	(RAMADA BOULEVARD)

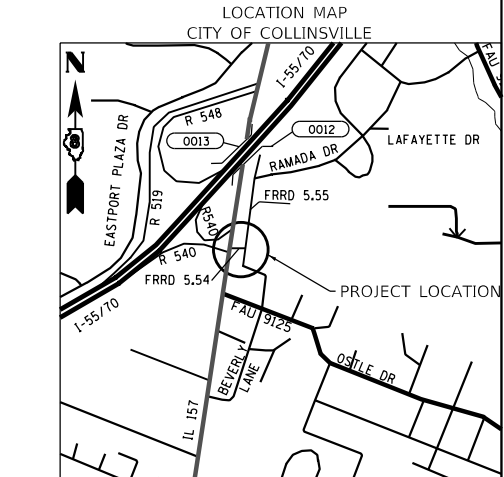
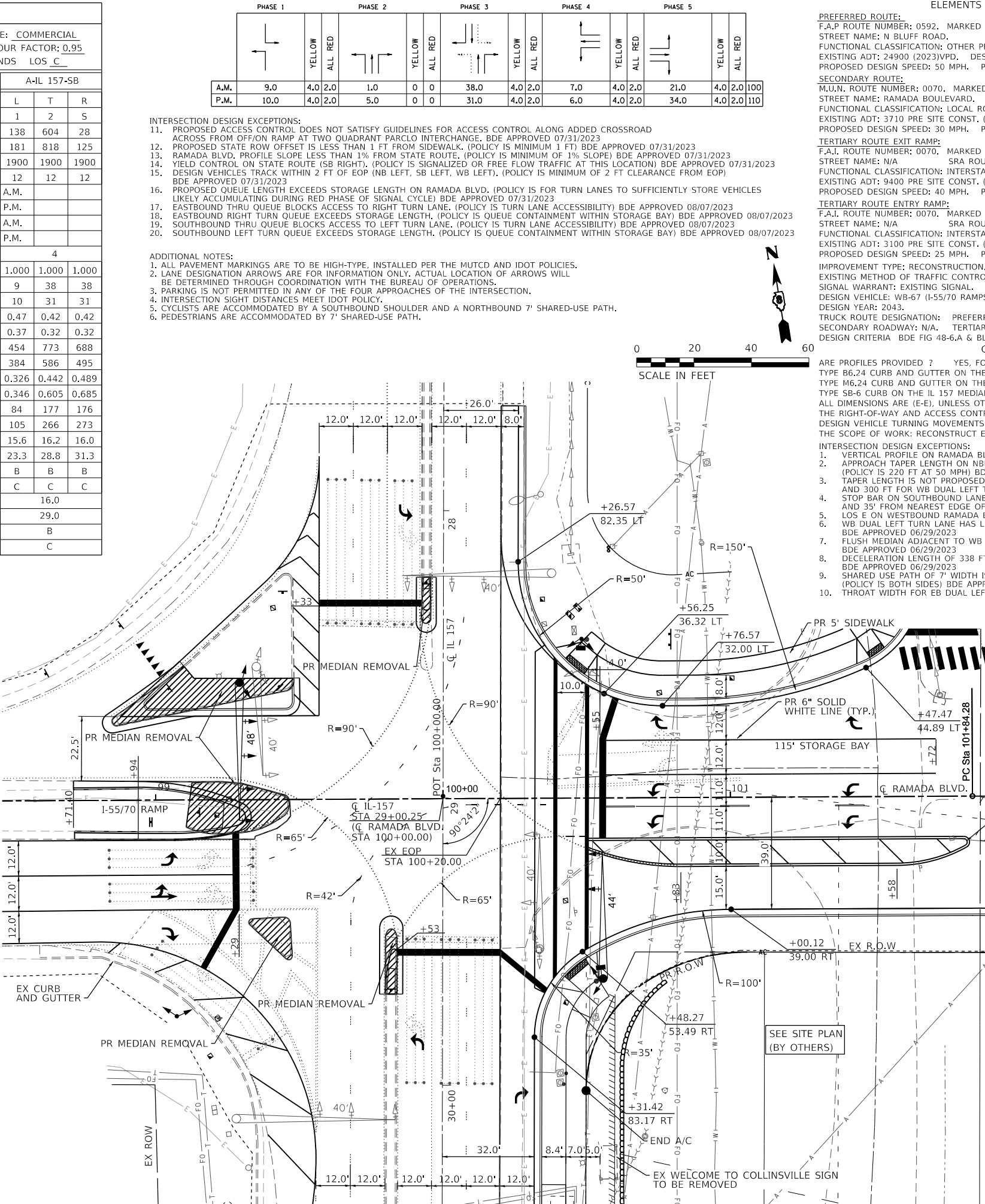
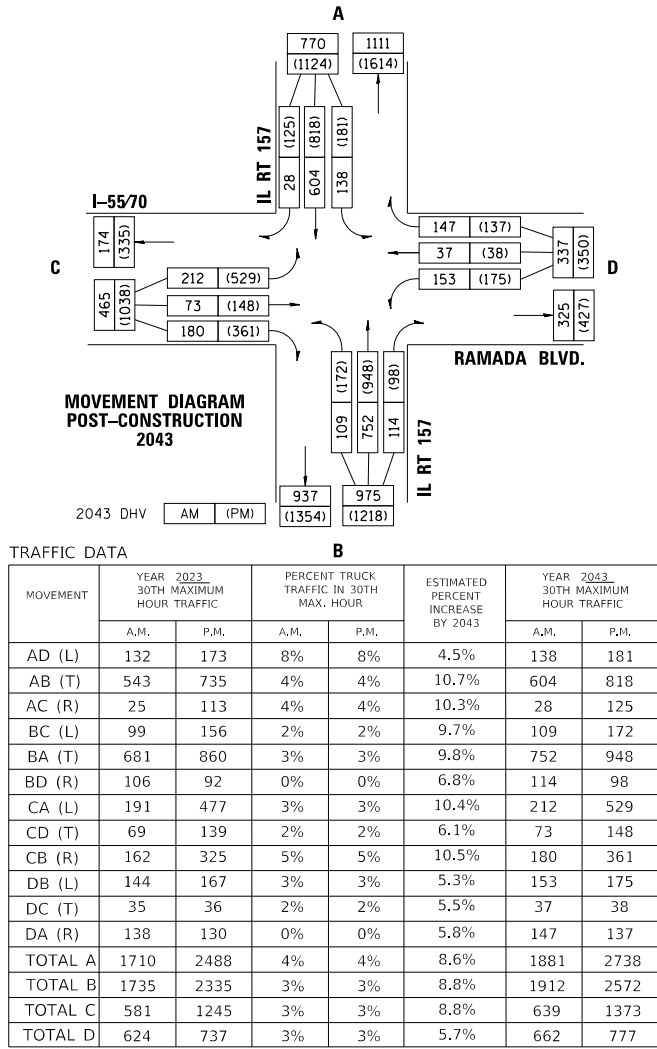
SEC. NO. _____ PROJ. NO. _____
SCALE 1" = 50' COUNTY MADISON
SJN : _____ REV. NO. _____

CADD FILE NAME : [R.O.W OWNERSHIP]

I.D.S. SHEET 2 OF 20

9/2/2025
H:\P20102 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-styl-ID5-cover.dgn
PLOT DATE
FILE NAME
PLOT SCALE
USER NAME

SIGNALIZED CAPACITY DESIGN ANALYSIS													
PROGRAM USED: <u>HCS STREETS</u> , VERSION: <u>2022</u> SIGNAL TYPE: <u>ACTUATED</u> AREA TYPE: <u>COMMERCIAL</u> NUMBER OF PHASES: (A.M.) <u>5</u> (P.M.) <u>5</u> CYCLE LENGTH: (A.M.) <u>100</u> SEC. (P.M.) <u>110</u> SEC. PEAK HOUR FACTOR: <u>0.95</u> INTERSECTION DELAY/LEVEL-OF-SERVICE <u>A.M. 24.4 SECONDS LOS C</u> <u>P.M. 32.3 SECONDS LOS C</u>													
APPROACH		C-I 55/70 RAMP-EB			D-RAMADA BLVD.-WB			B-IL 157-NB			A-IL 157-SB		
LANE GROUP		L	T	R	L	T	R	L	T	R	L	T	R
NUMBER OF LANES		2	5	1	2	1	1	1	2	1	1	2	5
2043 30TH MAX. HOUR TRAFFIC (veh/h)	A.M.	212	73	180	153	37	147	109	752	114	138	604	28
	P.M.	529	148	361	175	38	137	172	948	98	181	818	125
BASE SATURATION FLOW RATE (veh/h)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
LANE WIDTH (FT)		12	12	12	11	12	12	12	12	12	12	12	12
VOLUME OF RIGHT TURN ON RED (veh/h)		A.M.	65		A.M.	65		A.M.	50		A.M.		
		P.M.	100		P.M.	80		P.M.	35		P.M.		
PEDESTRIANS/HOUR (ped/h)		A.M.			A.M.			A.M.			A.M.		
		P.M.			P.M.			P.M.			P.M.		
ARRIVAL TYPE		3			3			4			4		
LANE UTILIZATION ADJ. FACTOR		1.000	1.000	1.000	0.971	1.000	1.000	1000	0.952	1.000	1.000	1.000	1.000
GREEN TIME (SECONDS)	A.M.	21	21	21	7	7	7	10	38	38	9	38	38
	P.M.	34	34	34	6	6	6	15	36	36	10	31	31
GREEN RATIO (g/C)	A.M.	0.21	0.21	0.21	0.07	0.07	0.07	0.48	0.43	0.43	0.47	0.42	0.42
	P.M.	0.32	0.32	0.32	0.05	0.05	0.05	0.43	0.36	0.36	0.37	0.32	0.32
CAPACITY (c)	A.M.	371	381	325	240	131	113	454	1519	628	454	773	688
	P.M.	546	576	478	250	102	88	404	1285	527	384	586	495
v/c RATIO (X)	A.M.	0.349	0.448	0.373	0.670	0.297	0.766	0.179	0.369	0.076	0.326	0.442	0.489
	P.M.	0.612	0.657	0.574	0.738	0.392	0.683	0.254	0.440	0.071	0.346	0.605	0.685
STORAGE QUEUE (FEET)	A.M.	122	164	117	99	43	129	42	140	25	84	177	176
	P.M.	312	348	266	131	50	92	70	191	26	105	266	273
LANE GROUP DELAY(SECONDS)	A.M.	33.9	34.8	34.1	51.1	44.6	69.9	14.9	15.5	15.2	15.6	16.2	16.0
	P.M.	33.8	34.9	33.0	59.7	50.2	67.6	21.0	23.0	21.5	23.3	28.8	31.3
LANE GROUP LEVEL-OF-SERVICE	A.M.	C	C	C	D	D	E	B	B	B	B	B	B
	P.M.	C	C	C	E	D	E	C	C	C	C	C	C
APPROACH DELAY (SECONDS/VEHICLE)	A.M.	34.3			55.9			15.4			16.0		
	P.M.	34.0			60.0			22.7			29.0		
APPROACH LEVEL-OF-SERVICE	A.M.	C			E			B			B		
	P.M.	C			E			C			C		



INTERSECTION DESIGN STUDY

FAI ROUTE 0070 (I-55/70)

FAP ROUTE 0592 WITH (IL 157)

MUN ROUTE 0070 WITH (RAMADA BOULEVARD)

SEC. NO. PROJ. NO.

SCALE 1" = 20' COUNTY MADISON

SIN : REV. NO.

DESIGNED BY BILL TINDALL, P.E. DATE 09/02/2025

OATES ASSOCIATES

SATISFACTORY DISTRICT GEOMETRICS ENGINEER DATE

SATISFACTORY DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE

SATISFACTORY DISTRICT OPERATIONS ENGINEER DATE

APPROVED REGIONAL ENGINEER DATE

CADD FILE NAME : [COVER] I.D.S. SHEET 3 OF 20

PLOT DATE = 9/2/2005
FILE NAME = H:\P20122 - Beverly Lane and IL157 Development\CADD\Microstation\CADD Drawings\220122-sht-IDS-cover.dgn
PLOT SCALE = 40.0000' / in.
USER NAME = roshan.pokhel



0 20 40 60
SCALE IN FEET

SEE SITE PLAN
(BY OTHERS)

2 CENTERED CURVE
60' - 350'
15.74' OFFSET



PI STA. = 103+54.17
 Δ = 43° 34' 39" (RT)
D = 13° 28' 53"
R = 425.00'
T = 169.89'
L = 323.24'
E = 32.70'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 101+84.28
P.T. STA. = 105+07.52

- NOTE:
- * RAISED MEDIAN ISLANDS TO INCLUDE CURB PAINT AND REFLECTORS PER HIGHWAY STANDARDS.
 - * PAVEMENT MARKINGS TO BE HIGH TYPE WITH RRPMS.
 - * EXISTING ARROWS ON PAVEMENT TO BE MOVED AND REPAINTED.

INTERSECTION DESIGN STUDY

FAI ROUTE 0070	(I-55/70)
FAP ROUTE 0592	(IL 157)
MUN ROUTE 0070	(RAMADA BOULEVARD)

SEC. NO. _____ PROJ. NO. _____

SCALE 1" = 20' COUNTY MADISON

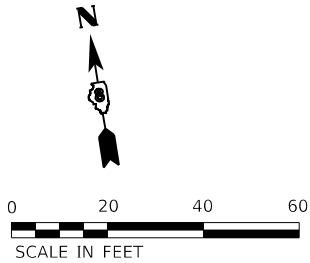
SIN : _____ REV. NO. _____

CADD FILE NAME : [COVER DETAIL]

I.D.S. SHEET 4 OF 20

BDE-9908

PLOT DATE 9/2/2025
FILE NAME H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-sht-IDS-cover.dgn
PLOT SCALE 40.0000' / in.
USER NAME roshan.pokhel



INTERSECTION DESIGN STUDY

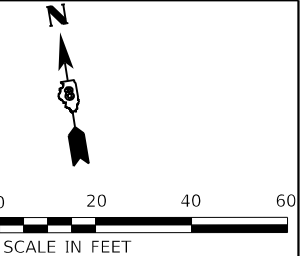
FAP ROUTE 0592 (IL 157)
FAU ROUTE 9125 WITH (OSTLE DRIVE)

SEC. NO. PROJ. NO.

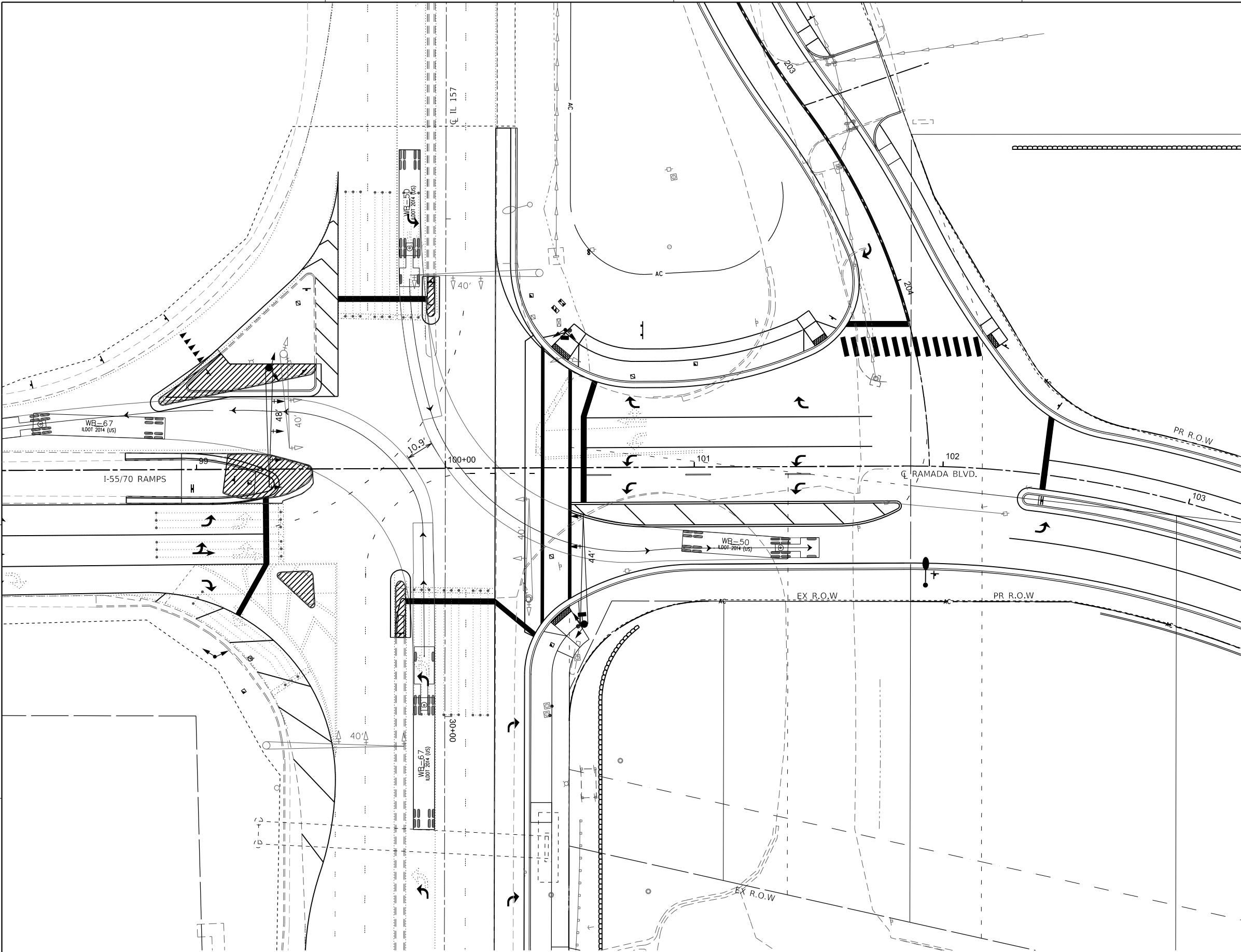
SCALE 1" = 20' COUNTY MADISON

SIN : REV. NO.

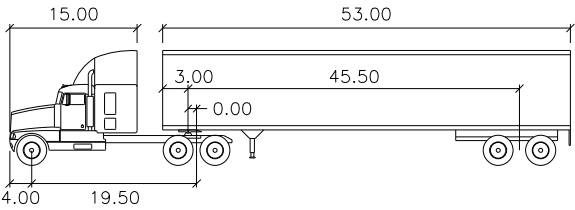
CADD FILE NAME : [COVER DETAIL] I.D.S. SHEET 5 OF 20

D.S. SHEET 6 OF 20

PLOT DATE : 9/25/2025
FILE NAME : H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-5th-IDS-Turn.dgn
PLOT SCALE : 40.0000' / in.
USER NAME : roshan.pokhrel



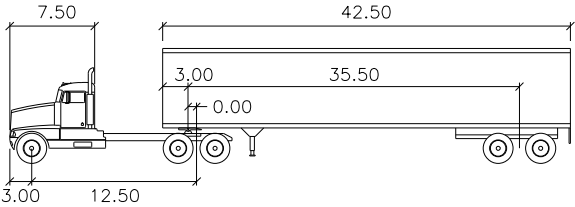
NORTHBOUND AND SOUTHBOUND WB-67 AND WB-50 LEFT TURN MOVEMENTS



WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.5
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

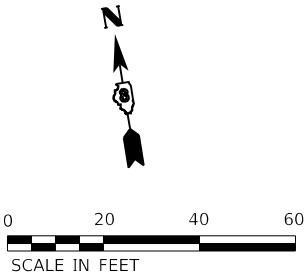
WB-67 DESIGN VEHICLE



WB-50

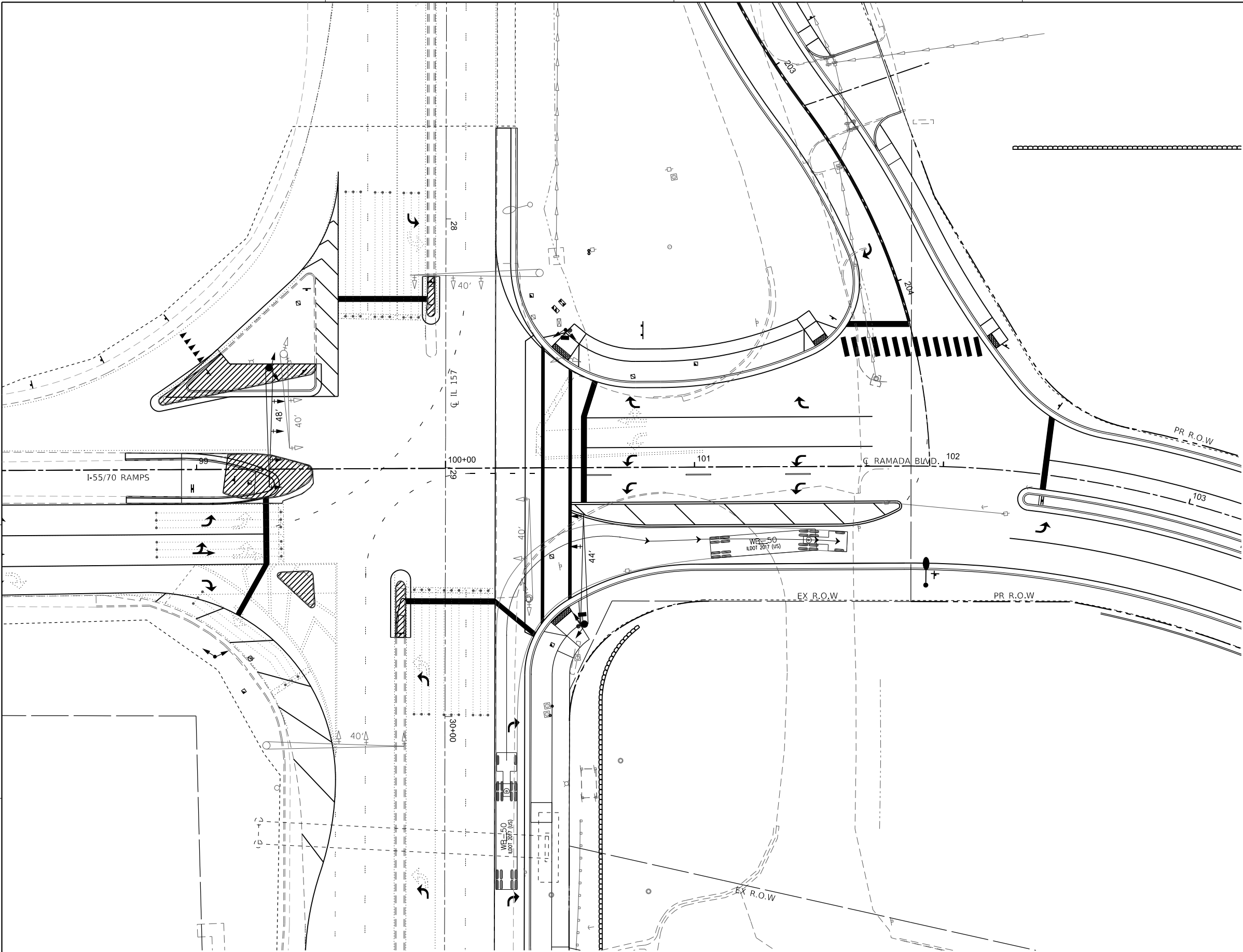
	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 17.8
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

WB-50 DESIGN VEHICLE



INTERSECTION DESIGN STUDY			
<u>FAI</u>	<u>ROUTE</u>	<u>0070</u>	(I-55/70)
<u>FAP</u>	<u>ROUTE</u>	<u>0592</u>	WITH (IL 157)
<u>MUN</u>	<u>ROUTE</u>	<u>0070</u>	WITH (RAMADA BOULEVARD)
SEC. NO.		PROJ. NO.	
SCALE 1" = 20'		COUNTY MADISON	
SJN :		REV. NO.	
CADD FILE NAME : [TURN MOVEMENTS]		I.D.S. SHEET 7 OF 20	

PLOT DATE : 9/2/2005
FILE NAME : H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-stylt-IDS-turn.dgn
PLOT SCALE : 40.0000' / in.
USER NAME : roshan.pokhrel



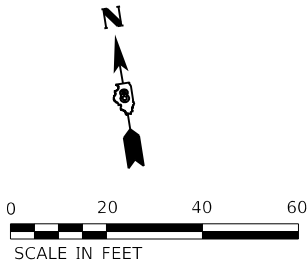
WB-50

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 17.8
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

WB-50 DESIGN VEHICLE

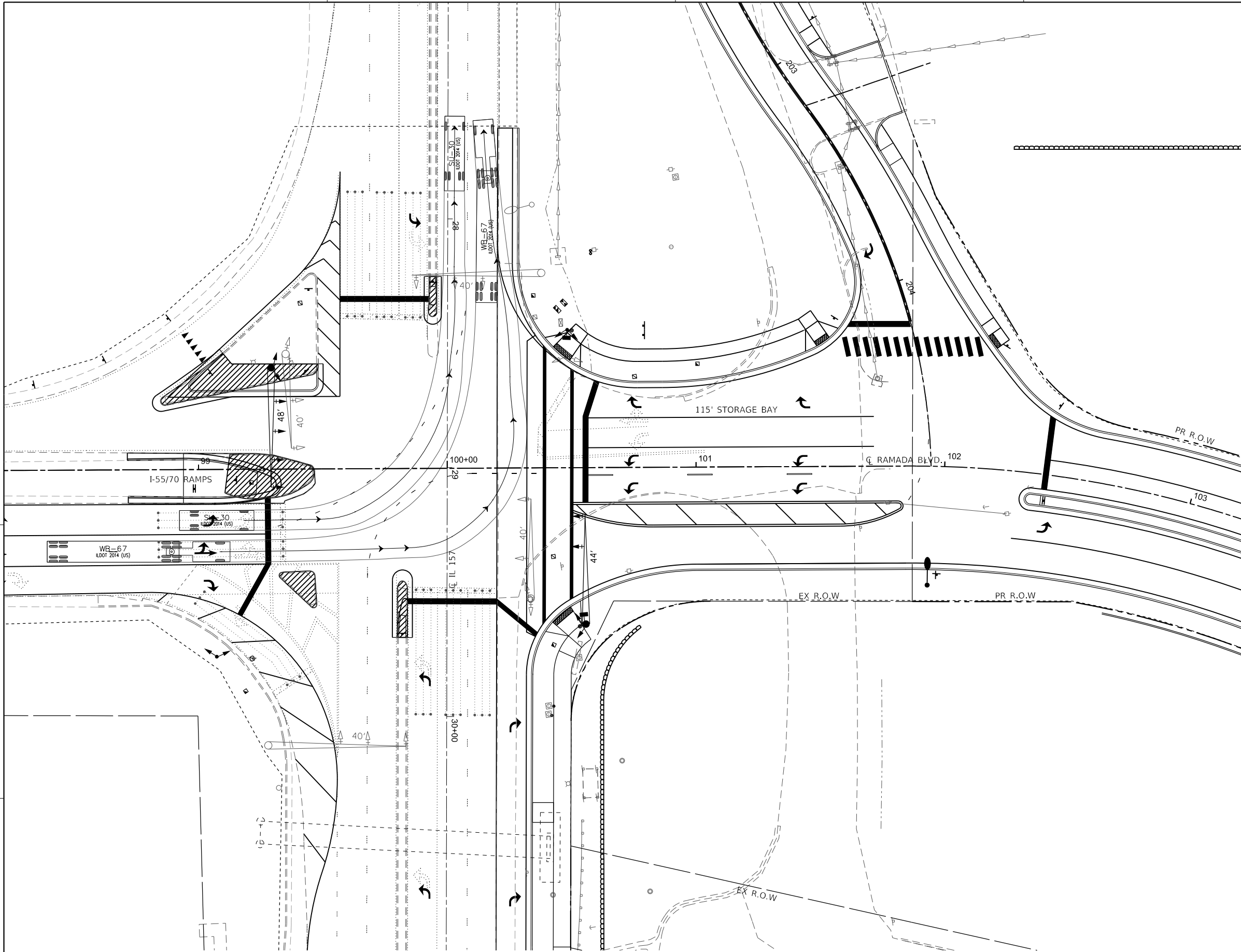
WB-50 NB RIGHT TURN MOVEMENT

*** WB-67 IS ACCOMMODATED WITHOUT ENCROACHMENT INTO THE DUAL LEFT TURN BAYS.**

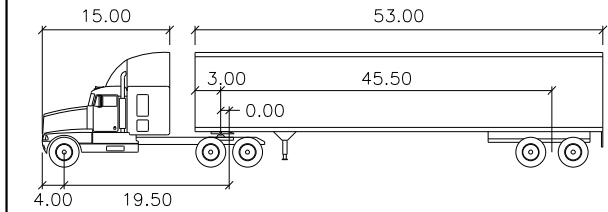


INTERSECTION DESIGN STUDY			
<u>FAI</u>	<u>ROUTE</u>	<u>0070</u>	(I-55/70)
<u>FAP</u>	<u>ROUTE</u>	<u>0592</u>	WITH (IL 157)
<u>MUN</u>	<u>ROUTE</u>	<u>0070</u>	WITH (RAMADA BOULEVARD)
SEC. NO.		PROJ. NO.	
SCALE 1" = 20'		COUNTY MADISON	
S/JN :		REV. NO.	
CADD FILE NAME : [TURN MOVEMENTS]		I.D.S. SHEET 8 OF 20	

PLOT DATE = 9/2/2025
FILE NAME = H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-stk-IL157-turn.dgn
PLOT SCALE = 40,000 / 1 in.
USER NAME = roshan.pokhrel



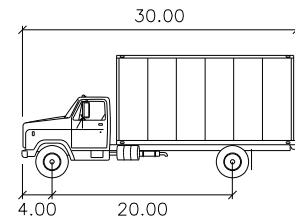
WB-67 AND SU-30 EB LEFT TURN MOVEMENTS



WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.5
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

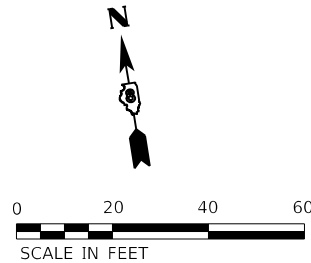
WB-67 DESIGN VEHICLE



SU-30

	feet	
Width	: 8.00	
Track	: 8.00	
Lock to Lock Time	: 6.0	
Steering Angle	: 32.0	

SU-30 DESIGN VEHICLE



INTERSECTION DESIGN STUDY

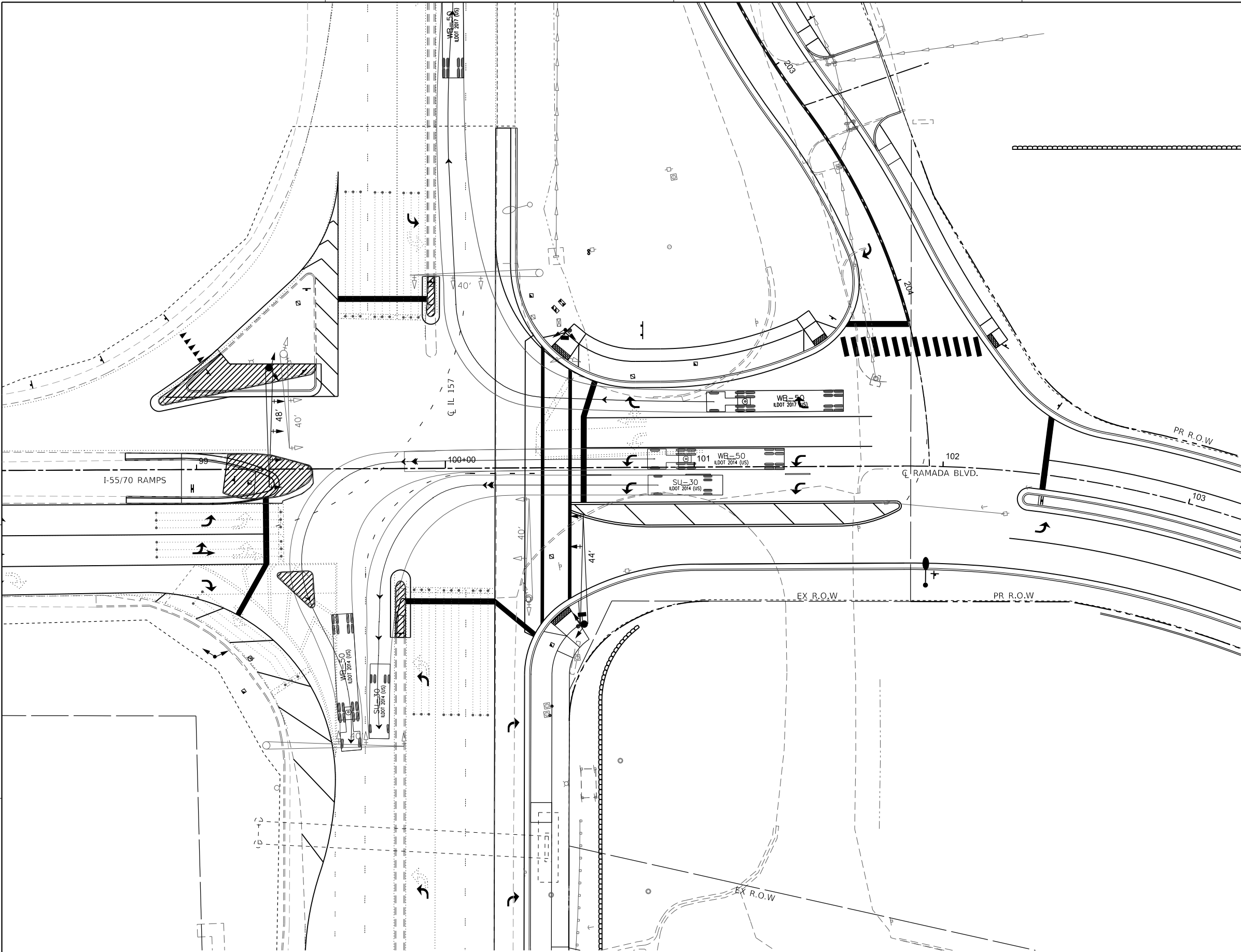
FAI ROUTE 0070	WITH (I-55/70)
FAP ROUTE 0592	WITH (IL 157)
MUN ROUTE 0070	WITH (RAMADA BOULEVARD)
SEC. NO. _____	PROJ. NO. _____
SCALE 1" = 20'	COUNTY MADISON
SIN : _____	REV. NO. _____

CADD FILE NAME : [TURN MOVEMENTS]

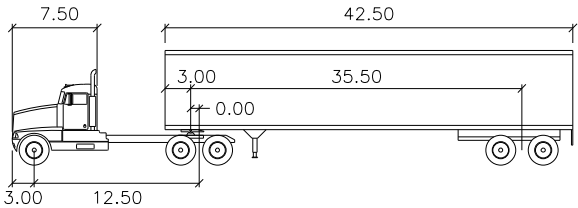
I.D.S. SHEET 9 OF 20

BDE-9908

PLOT DATE = 9/2/2025
FILE NAME = H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-sylh-IDS-turn.dgn
PLOT SCALE = 40.0000' / in.
USER NAME = roshan.pokhrel



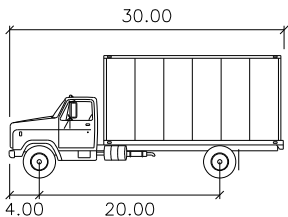
WB-50 AND SU-30 WB LEFT TURN MOVEMENTS
WB-50 WB RIGHT TURN MOVEMENT



WB-50

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 17.8
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

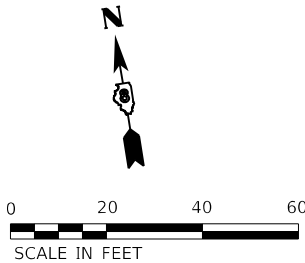
WB-50 DESIGN VEHICLE



SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 32.0

SU-30 DESIGN VEHICLE



INTERSECTION DESIGN STUDY

FAI ROUTE 0070	WITH (I-55/70)
FAP ROUTE 0592	WITH (IL 157)
MUN ROUTE 0070	WITH (RAMADA BOULEVARD)

SEC. NO. _____ PROJ. NO. _____

SCALE 1" = 20' COUNTY MADISON

S/N : _____ REV. NO. _____

CADD FILE NAME : [TURN MOVEMENTS]

I.D.S. SHEET 10 OF 20

BDE-9908

TWO-WAY STOP-CONTROLLED CAPACITY DESIGN ANALYSIS										
PROGRAM USED <u>HCS AWSC</u> VERSION <u>2022</u> PEAK HOUR FACTOR <u>0.95</u> SIGNALIZED INTERSECTION(S) WITHIN 0.25 MILES OF INTERSECTION ALONG MAJOR ROUTE? (YES/NO) <u>YES</u> FLARED APPROACH FOR MINOR STREET RIGHT-TURNING VEHICLE? (YES/NO): <u>NO</u> SINGLE OR TWO-STAGE GAP ACCEPTANCE? <u>SINGLE STAGE</u>										
APPROACH		C-RAMADA BLVD.-EB			D-RAMADA BLVD.-WB			A-RAMADA BLVD.-SB		
MAJOR OR MINOR LEG?		MAJOR			MAJOR			MINOR		
LANE GROUP		L	T	R	L	T	R	L	T	R
NUMBER OF LANES		S	1			2	S			1
2043 30TH MAX. HOUR TRAFFIC (V_f) (veh/h)	A.M.	147	144			138	16			171
	P.M.	187	255			182	12			141
PEDESTRIANS/HOUR (ped/h) COUNT OR ESTIMATE?	A.M.									
	P.M.									
CAPACITY ($C_{p,x}$ OR C_f) (veh/h)	A.M.					686	704			810
	P.M.					674	684			736
v/c RATIO ($v_f/C_{p,x}$)	A.M.					0.106	0.127			0.222
	P.M.					0.142	0.158			0.202
STORAGE QUEUE (FEET)	A.M.					10	10			20
	P.M.					13	15			20
CONTROL DELAY (SECONDS)	A.M.					8.6	8.6			8.7
	P.M.					8.9	8.9			9.1
LANE GROUP LEVEL OF SERVICE	A.M.					A	A			A
	P.M.					A	A			A
APPROACH DELAY, d (SEC)	A.M.				8.6			8.7		
	P.M.				8.9			9.1		
APPROACH LEVEL OF SERVICE	A.M.				A			A		
	P.M.				A			A		

MOVEMENT DIAGRAM (POST-CONSTRUCTION) 2043

2043 DHV AM (PM)

2043 DHV

AM	(PM)
----	------

MOVEMENT	YEAR 2023 30TH MAXIMUM HOUR TRAFFIC		PERCENT TRUCK TRAFFIC IN 30TH MAX. HOUR		ESTIMATED PERCENT INCREASE BY 2043	YEAR 2043 30TH MAXIMUM HOUR TRAFFIC	
	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.
AD (L)							
AB (T)							
AC (R)	155	128	2%	2%	9.8%	171	141
BC (L)							
BA (T)							
BD (R)							
CA (L)	133	169	2%	2%	10.1%	147	187
CD (T)	143	247	2%	2%	2.3%	144	255
CB (R)							
DB (L)							
DC (T)	137	181	2%	2%	0.6%	138	182
DA (R)	15	12	2%	2%	3.6%	16	12
TOTAL A	303	309	2%	2%	9.9%	334	340
TOTAL B							
TOTAL C	568	725	2%	2%	5.7%	600	765
TOTAL D	295	440	2%	2%	2.2%	298	449

MATCHLINE STA 202+00

PROP. CURVE PRCL_RAMADAN3_5
 PI STA. = 202+20.51
 $\Delta = 36^\circ 51' 20''$ (LT)
 $D = 17^\circ 41' 02''$
 $R = 324.00'$
 $T = 107.95'$
 $L = 208.41'$
 $E = 17.51'$
 $e = \quad$
 $T.R. = \quad$
 $S.E. RUN = \quad$
 $P.C. STA. = 201+12.56$
 $P.R.C. STA. = 203+20.97$

PR B6.24 CURB AND GUTTER

PR R2-1 SPEED LIMIT SIGN
 PR R12-1 WEIGHT LIMIT SIGN

END A/C

PR 6" DOUBLE YELLOW LINES (TYP.)

PR B6.24 CURB AND GUTTER

PR 6" CONC SIDEWALK
 $R=350'$

PI Sta 204+01.01

PR 24" WHITE STOP BAR (TYP.)

PR 24"x8" CROSSWALK

PR W11-2 SIGN
 PR W16-7P SIGN

PR R1-1 STOP SIGN
 PR W4-4bP SIGN
 PR R10-7 SIGN

PR 6" SOLID WHITE LINE (TYP.)

PR R.O.W.

120' STORAGE BAY

PR R4-7 SIGN

PR SOLID YELLOW 12" LINE (TYP.)

END A/C

PR 6" DOUBLE YELLOW LINES

PR RAISED MEDIAN

PR M6.24 CURB AND GUTTER

PR B6.24 CURB AND GUTTER

PR 6" SOLID WHITE LINE

END A/C

2 CENTERED CURVE
 60' - 350'
 15.74' OFFSET

SEE SITE PLAN (BY OTHERS)

SEE SITE PLAN (BY OTHERS)

SCALE IN FEET

0 20 40 60

M.U.N ROUTE NUMBER: 6982. MARKED STREET NAME: RAMADA BLVD.
 FUNCTIONAL CLASSIFICATION: LOCAL ROAD
 EXISTING ADT: 3100 (2023) VPD. DESIGN PROPOSED DESIGN SPEED: 30 MPH. PROJECT NO.: 2023-000000

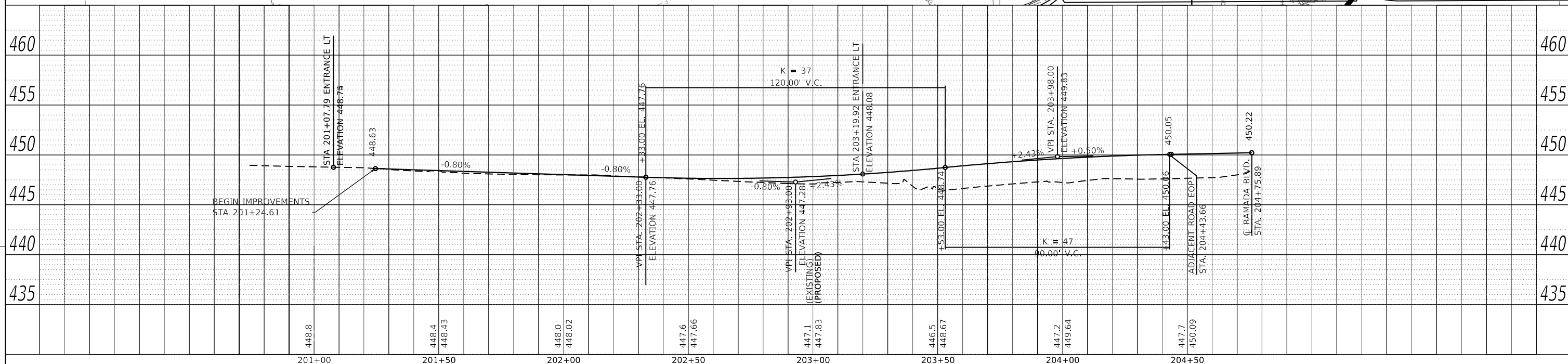
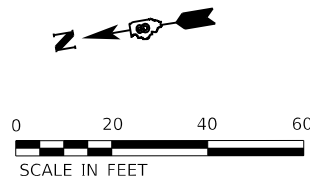
IMPROVEMENT TYPE: RECONSTRUCTION.
 EXISTING METHOD OF TRAFFIC CONTROL: SIGNAL
 DESIGN VEHICLE: WB-50 (WB-67 PHYSICAL MODEL)
 DESIGN YEAR: 2043.
 TRUCK ROUTE CLASS: PREFERRED ROADWAY
 SECONDARY ROADWAY: N/A.
 DESIGN CRITERIA IDOT BLR MANUAL FIGURE 2-10

ARE PROFILES PROVIDED? YES.
 TYPE B6.24 AND B6.18 CURB AND GUTTER ON THE LEFT SIDE OF THE ROADWAY.
 TYPE M6.24 CURB AND GUTTER ON THE RIGHT SIDE OF THE ROADWAY.
 ALL DIMENSIONS ARE (E-E), UNLESS OTHERWISE NOTED.
 THE RIGHT-OF-WAY AND ACCESS CONTROL SHALL BE AS SHOWN ON THE PLANS.
 DESIGN VEHICLE TURNING MOVEMENTS SHALL BE AS SHOWN ON THE PLANS.
 THE SCOPE OF WORK: RECONSTRUCTION OF THE INTERSECTION.

INTERSECTION DESIGN EXCEPTIONS:
 1. PROPOSED HORIZONTAL ALIGNMENT APPROVED 8/25/2023 BY LOCAL AGENCY.
 2. STOP BAR ON SOUTHBOUND RAMADA BLVD. APPROVED 8/25/2023 BY LOCAL AGENCY.
 3. TRAVEL WAY. (POLICY IS 30 FT) LOCAL AGENCY APPROVED 8/25/2023 BY LOCAL AGENCY.
 4. STORAGE PLATFORM GRADIENT AT (POLICY IS LESS THAN 4%) LOCAL AGENCY APPROVED 8/25/2023 BY LOCAL AGENCY.
 5. PROPOSED SURFACE WIDTH ALONG WITHIN THE RIGHT-OF-WAY. (POLICY IS 30') LOCAL AGENCY APPROVED 8/25/2023 BY LOCAL AGENCY.
 6. NO PEDESTRIAN ACCOMMODATION. LOCAL AGENCY APPROVED 8/25/2023 BY LOCAL AGENCY.
 7. PROPOSED ROW ALONG RAMADA BLVD. LOCAL AGENCY APPROVED 8/25/2023 BY LOCAL AGENCY.
 8. TURNING SPEED FROM EB RAMADA BLVD TO WB RAMADA BLVD. 15 10 AND 15 MPH. LOCAL AGENCY APPROVED 8/25/2023 BY LOCAL AGENCY.
 9. ENTRANCE RADIUS EXTENDS BEYOND THE RIGHT-OF-WAY. LOCAL AGENCY APPROVED 8/25/2023 BY LOCAL AGENCY.
 10. PROPOSED VERTICAL SAG CURVE K=0.5.

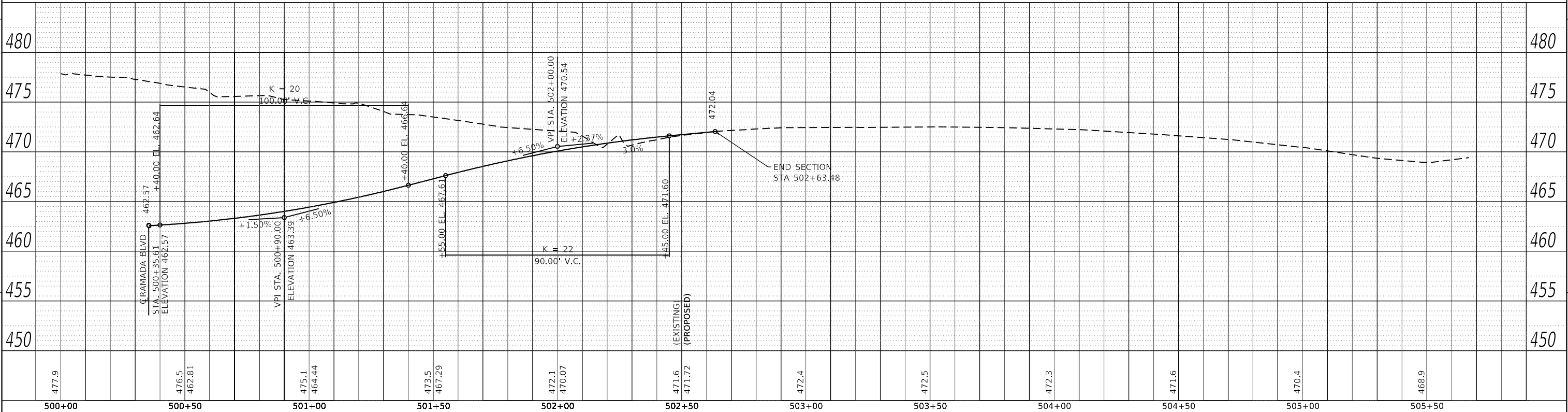
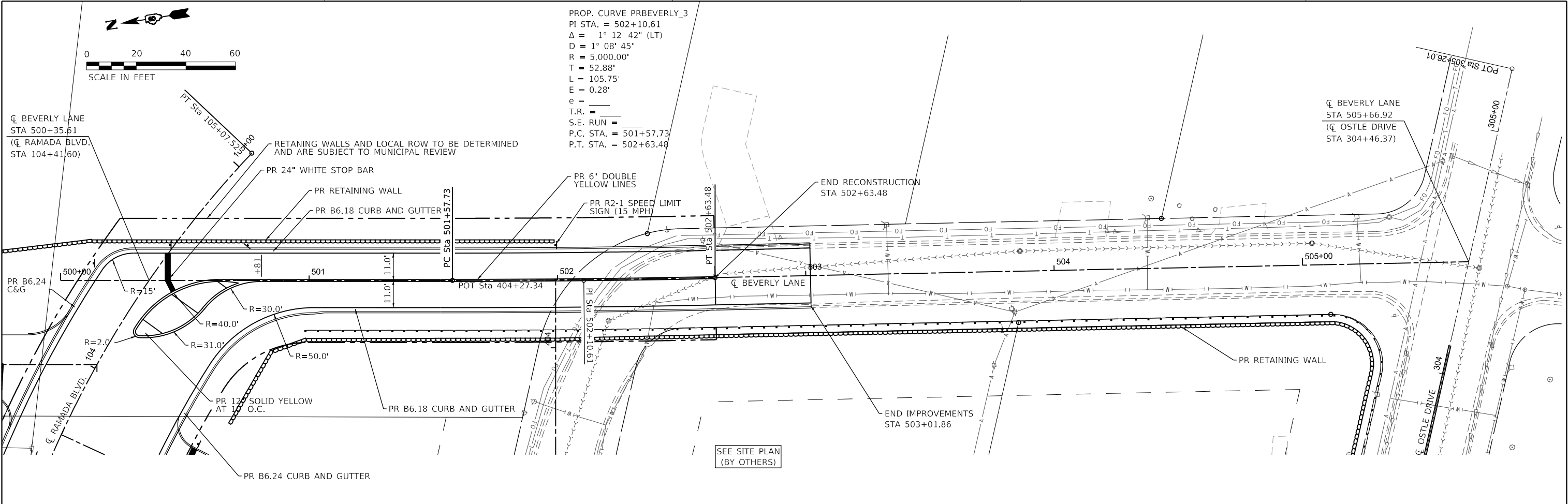
1. PROPOSED HORIZONTAL ALIGNMENT FOR RAMADA BLVD (NORTH) IS 250'. (POLICY IS 324' FOR 30 MPH)
LOCAL AGENCY APPROVED 8/25/2023.
2. STOP BAR ON SOUTHBOUND RAMADA BLVD (NORTH) IS 36' FROM NEAREST EDGE OF INTERSECTING
TRAVEL WAY. (POLICY IS 30 FT) LOCAL AGENCY APPROVED 8/25/2023.
3. STORAGE PLATFORM GRADIENT AT RAMADA BLVD, IS 5% AND AT BEVERLY LANE IS 1.5%-6.5%.
IS LESS THAN 4% LOCAL AGENCY APPROVED 8/25/2023.
4. PROPOSED SURFACE WIDTH ALONG RAMADA BLVD (NORTH)
RESPECTIVELY, (POLICY IS 30') LOCAL AGENCY APPROVED 8/25/2023.
5. NO PEDESTRIAN ACCOMMODATION ALONG RAMADA BLVD. EAST. (POLICY IS ACCOMMODATION)
LOCAL AGENCY APPROVED 8/25/2023.
6. PROPOSED ROW ALONG RAMADA BLVD. ON NORTH SIDE IS 6'. (POLICY IS 10')
LOCAL AGENCY APPROVED 8/25/2023.
7. TURNING SPEED FROM EB RAMADA BLVD. TO SB BEVERLY LN. AND NB BEVERLY LN. TO
WB RAMADA BLVD. IS 10 and 15 MPH RESPECTIVELY. (POLICY IS 30 MPH)
LOCAL AGENCY APPROVED 8/25/2023.
8. ENTRANCE RADIUS EXTENDS BEYOND PROPERTY LINE PROJECTION, (POLICY IS 3' WITHIN PROPERTY LINE)
LOCAL AGENCY APPROVED 8/25/2023.
9. PROPOSED VERTICAL SAG CURVE K=20. (POLICY IS K=37) LOCAL AGENCY APPROVED

<u>MUN</u>	ROUTE	<u>0070</u>	
			(RAMADA BOULEVARD)
<u>MUN</u>	ROUTE	<u>6982</u>	WITH (RAMADA BOULEVARD)
SEC. NO.	_____	PROJ. NO.	_____
SCALE	<u>1" = 20'</u>	COUNTY	<u>MADISON</u>
SIN :	_____	REV. NO.	_____
DESIGNED BY	<u>BILL TINDALL, P.E.</u>	DATE	<u>09/02/2010</u>
	OATES ASSOCIATES		
SATISFACTORY	_____		
	COLLINSVILLE CITY ENGINEER		DAT
SATISFACTORY	_____		
	DISTRICT GEOMETRICS ENGINEER		DAT
SATISFACTORY	_____		
	DISTRICT PROGRAM DEVELOPMENT ENGINEER		DAT
SATISFACTORY	_____		
	DISTRICT OPERATIONS ENGINEER		DAT
APPROVED	_____		
	REGIONAL ENGINEER		DAT
CADD FILE NAME : [COVER]		I.D.S. SHEET 11 OF 20	



BDE-9

9/25/2025
Beverly Lane and Il-157 Development
40.0000' / in.
roshan.pokhel

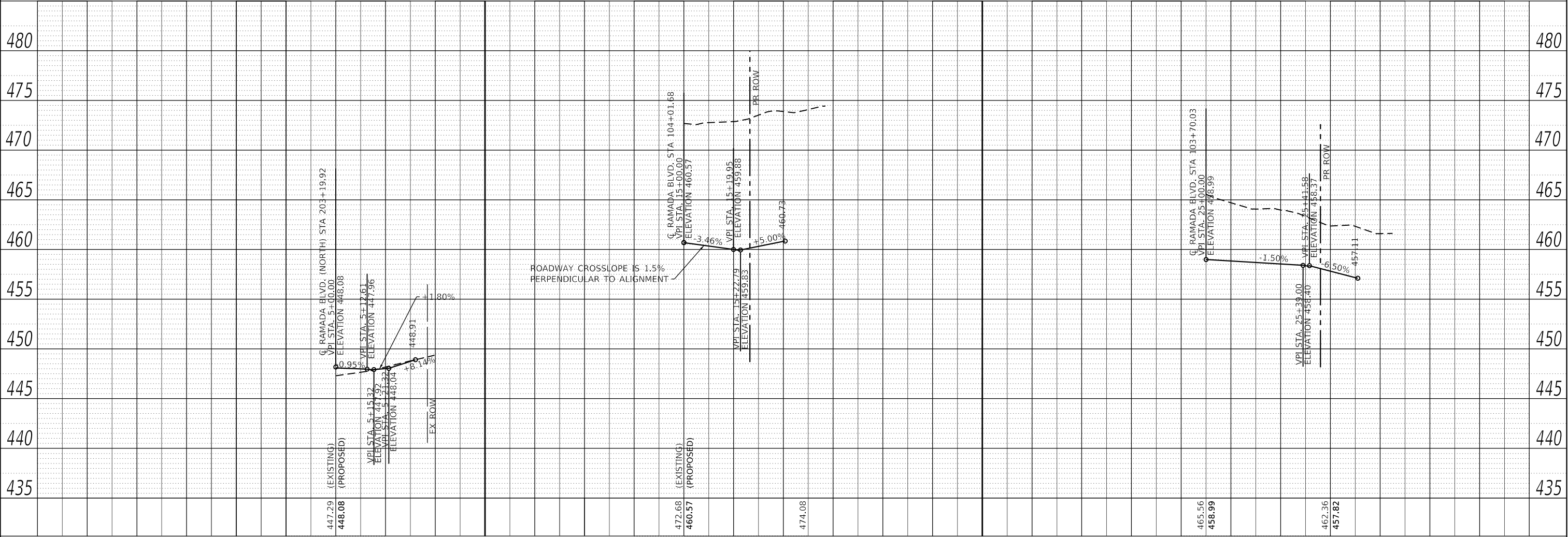


INTERSECTION DESIGN STUDY

MUN ROUTE 6180 (BEVERLY LANE)
MUN ROUTE 0070 WITH (RAMADA BOULEVARD)

SEC. NO.
SCALE H: 1" = 20'
V: 1" = 5'
SIN :
COUNTY MADISON
PROJ. NO.

PLOT DATE = 9/2/2025
FILE NAME = H:\P\220122 - Beverly Lane and IL 157 Development\CADD\Microstation\CADD Drawings\220122-shr-IDS-Pinprf.dgn
PLOT SCALE = 40.0000' / in.
USER NAME = roshan.pokhrel



McDonalds Entrance

Commercial Entrance North of Ramada Blvd.

Commercial Entrance South of Ramada Blvd.

NOTE: PROFILE IS BASED ON PRELIMINARY DESIGN FOR INTERSECTION DESIGN STUDY. FINAL DESIGN AND PROJECT DESIGN EXCEPTIONS SHALL BE CONFIRMED DURING ROADWAY DESIGN PHASE.

INTERSECTION DESIGN STUDY

MUN ROUTE 0070

(RAMADA BLVD.)

MUN ROUTE 6982

WITH (RAMADA BLVD.)

SEC. NO.

H: 1" = 20'

V: 1" = 5'

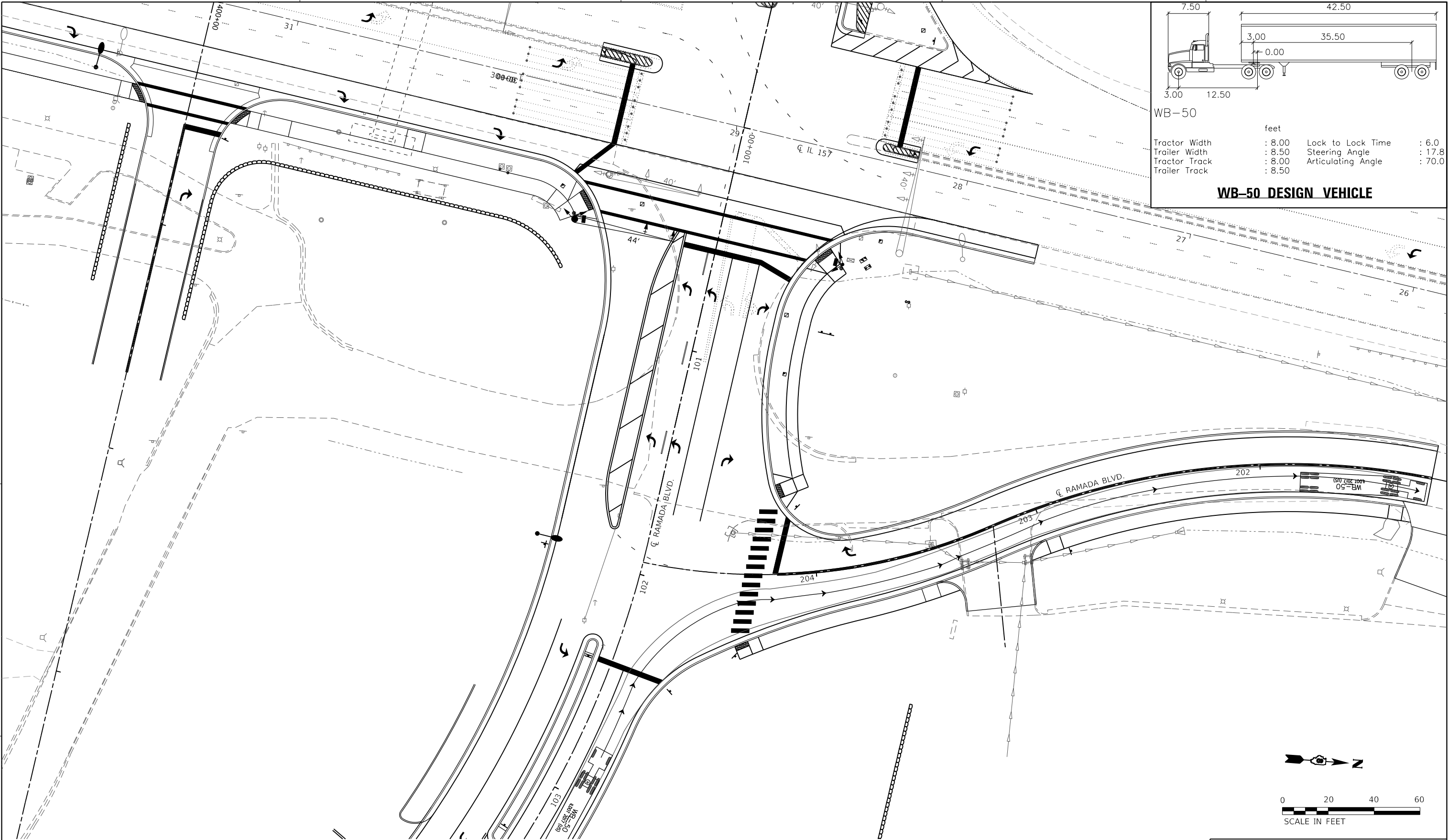
COUNTY MADISON

SJN :

PROJ. NO.

I.D.S. SHEET 14 OF 20

PLOT DATE 9/25/2025
FILE NAME H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-5th-ID5-turn.dgn
PLOT SCALE 40.0000' / in.
USER NAME roshan.pokhel



WB-50

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 17.8
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

WB-50 DESIGN VEHICLE

WB RIGHT AND SB RIGHT WB-50 TURN MOVEMENTS

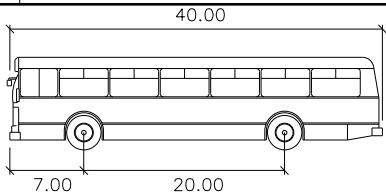
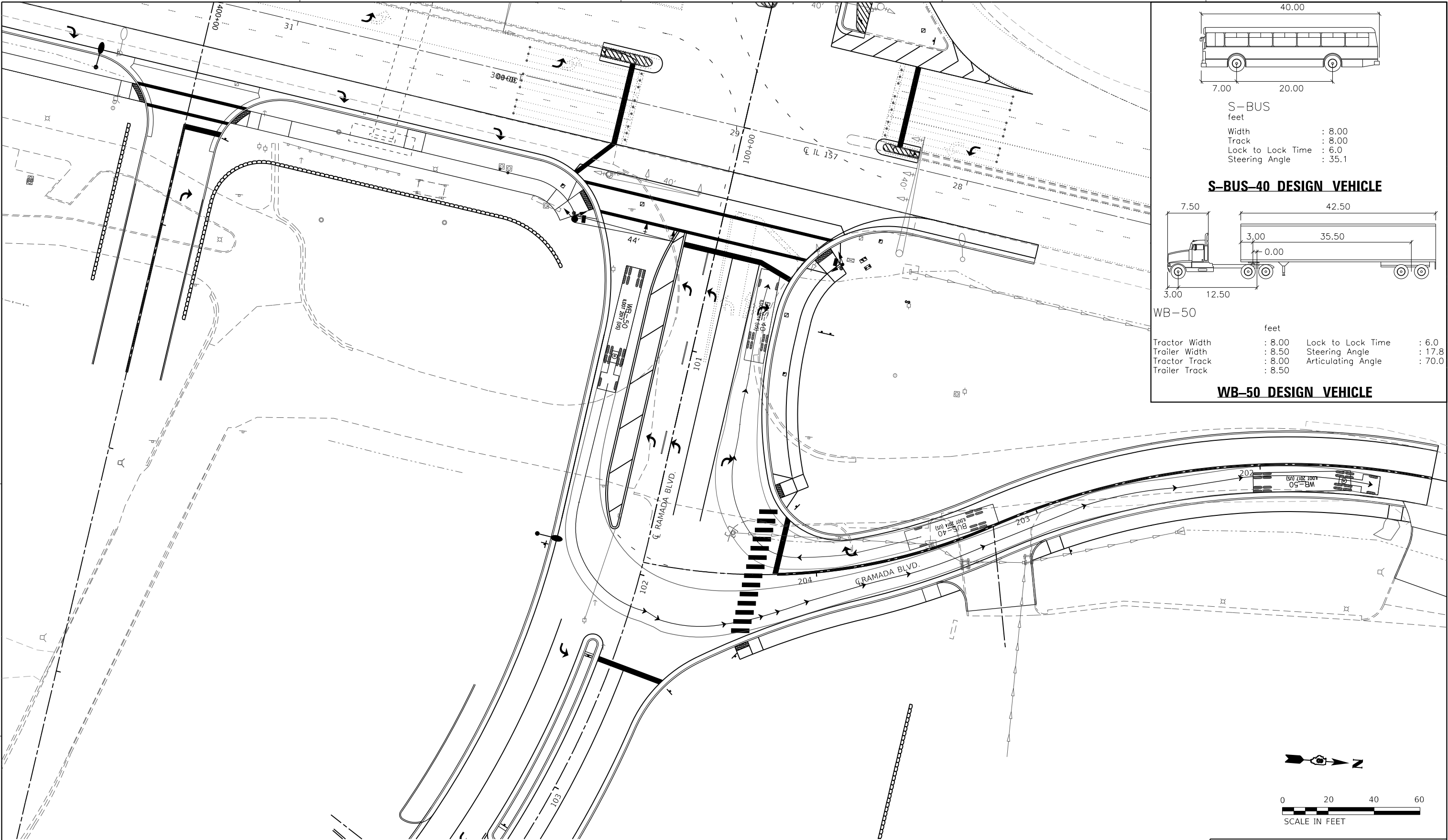
INTERSECTION DESIGN STUDY

MUN ROUTE 0070 (RAMADA BOULEVARD)
MUN ROUTE 6982 WITH (RAMADA BOULEVARD)

SEC. NO. _____ PROJ. NO. _____
SCALE 1" = 20' COUNTY MADISON
S/JN : _____ REV. NO. _____

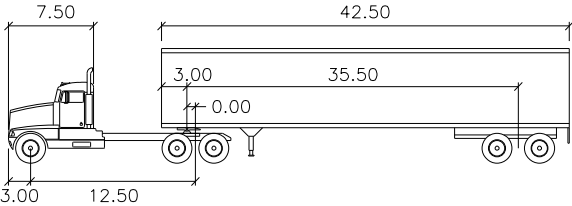
CADD FILE NAME : [TURN MOVEMENTS] I.D.S. SHEET 15 OF 20

PLOT DATE : 9/2/2025
FILE NAME : H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-5th-IDS-turn.dgn
PLOT SCALE : 40.0000' / in.
USER NAME : roshan.pokhrel



S-BUS
feet
Width : 8.00
Track : 8.00
Lock to Lock Time : 6.0
Steering Angle : 35.1

S-BUS-40 DESIGN VEHICLE



WB-50
feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 17.8
Articulating Angle : 70.0

WB-50 DESIGN VEHICLE

SB RIGHT TURN BUS-40 TURN MOVEMENT
EB LEFT TURN WB-50 TURN MOVEMENT

INTERSECTION DESIGN STUDY

MUN ROUTE 0070 (RAMADA BOULEVARD)

MUN ROUTE 6982 (RAMADA BOULEVARD)

WITH

SEC. NO. _____

SCALE 1" = 20'

S/JN : _____

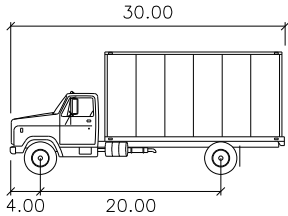
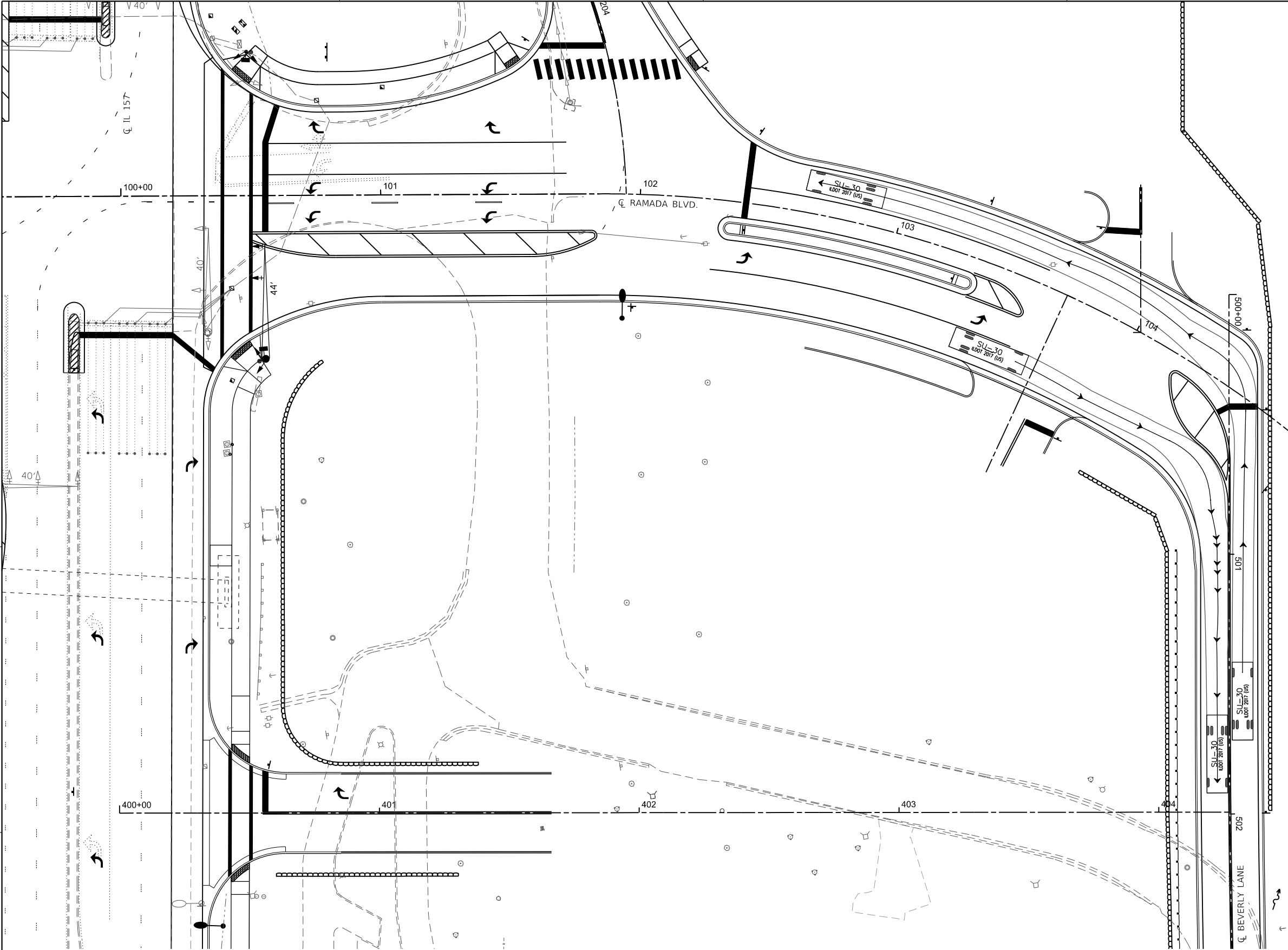
PROJ. NO. _____

COUNTY MADISON

REV. NO. _____

CADD FILE NAME : [TURN MOVEMENTS] I.D.S. SHEET 16 OF 20

PLOT DATE : 9/2/2005
FILE NAME : H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-3\h1DS-turn.dgn
PLOT SCALE : 40.0000' / in.
USER NAME : roshan.pokhrel



SU-30

Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 32.0

SU-30

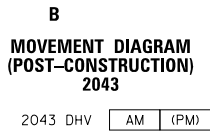
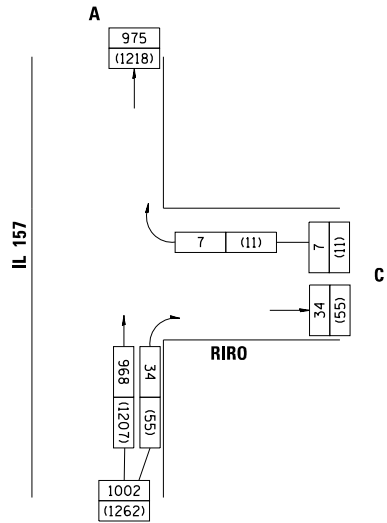


0 20 40 60
SCALE IN FEET

SU-30 TURN MOVEMENTS

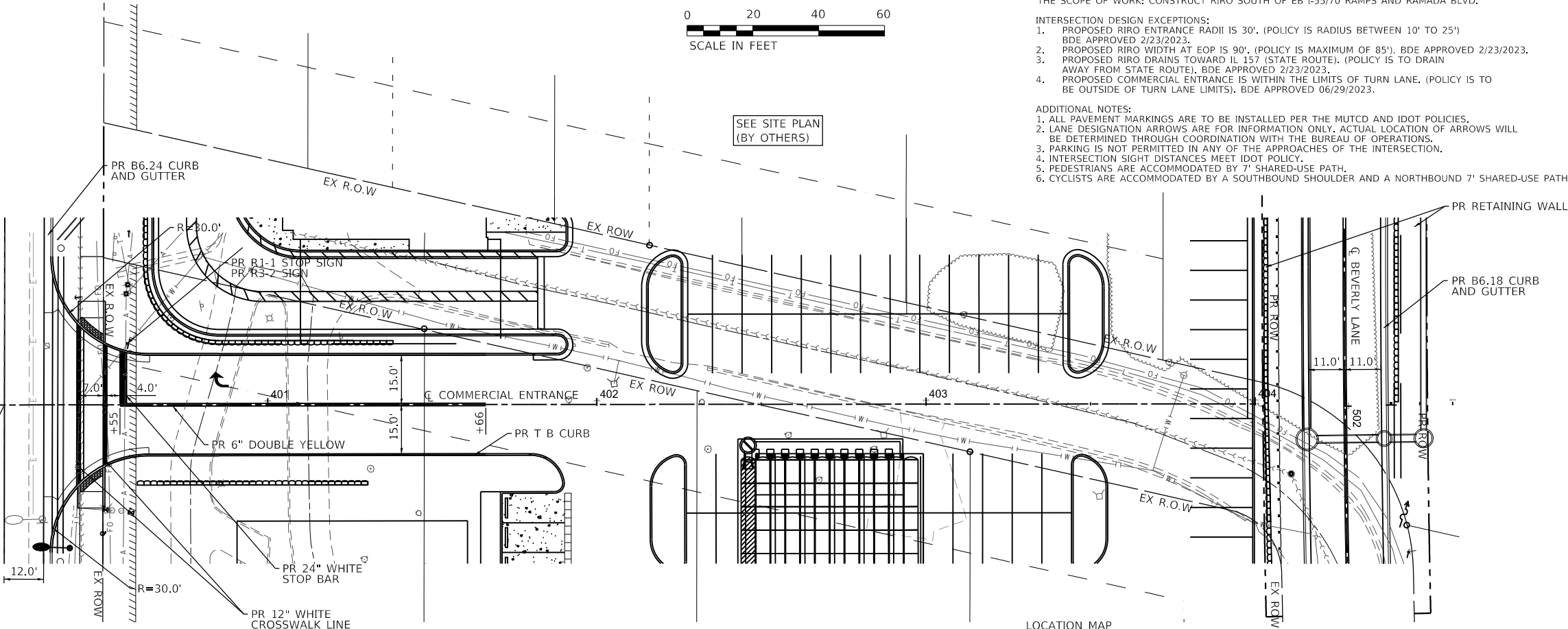
INTERSECTION DESIGN STUDY			
MUN ROUTE 0070	(RAMADA BOULEVARD)	WITH	
MUN ROUTE 6180	(BEVERLY LANE)		
SEC. NO. _____	PROJ. NO. _____		
SCALE 1" = 20'	COUNTY MADISON		
SIN : _____	REV. NO. _____		
CADD FILE NAME : [TURN MOVEMENTS]		I.D.S. SHEET 17 OF 20	

9/2/2025
H:\P\20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-styl-ID5-cover.dgn
Beverly Lane and IL-157 Development
PLOT DATE
FILE NAME
PLOT SCALE
USER NAME
roshan.pokhel

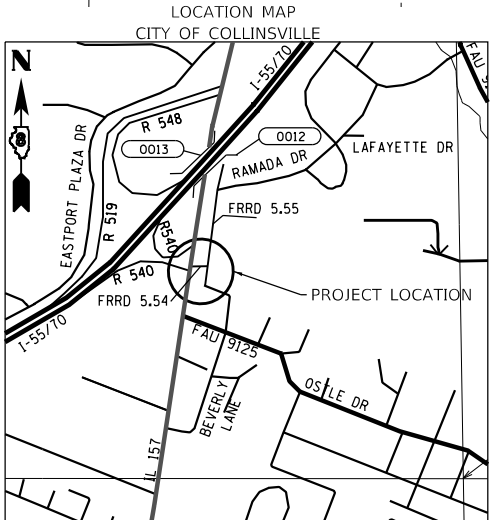


MOVEMENT	YEAR 2023 30TH MAXIMUM HOURLY TRAFFIC		PERCENT TRUCK TRAFFIC IN 30TH MAX. HOUR		ESTIMATED PERCENT INCREASE BY 2043	YEAR 2043 30TH MAXIMUM HOURLY TRAFFIC	
	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.
AD (L)							
AB (T)							
AC (R)							
BD (L)							
BA (T)	879	1097	3%	3%	10.5%	968	1207
BC (R)	34	55	2%	2%	0%	34	55
CB (L)							
CD (T)							
CA (R)	7	11	2%	2%	0%	7	11
DB (L)							
DC (T)							
DA (R)							
TOTAL A	886	1108	3%	3%	5.3%	975	1218
TOTAL B	913	1152	3%	3%	10.5%	1002	1262
TOTAL C	41	66	2%	2%	0%	41	66
TOTAL D							

T = THROUGH, L = LEFT, R = RIGHT



SEE SITE PLAN
(BY OTHERS)



GEOMETRIC DETAIL

FAP ROUTE 0592 (IL 157)
WITH ROUTE (COMMERCIAL ENTRANCE)

SEC. NO. PROJ. NO.
SCALE 1" = 20' COUNTY MADISON
SIN : REV. NO.

DESIGNED BY BILL TINDALL, P.E. DATE 09/02/2025
OATES ASSOCIATES

SATISFACTORY DISTRICT GEOMETRICS ENGINEER DATE

CADD FILE NAME : [COVER] I.D.S. SHEET 18 OF 20

ELEMENTS CONTROLLING DESIGN

PREFERRED ROUTE:

F.A.P ROUTE NUMBER: 0592. MARKED ROUTE NUMBER: IL 157.
STREET NAME: N BLUFF ROAD. SRA ROUTE ? NO.
FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN? NO.
EXISTING ADT: 24900 (2023)VPD. DESIGN YEAR ADT: 27400 (2043) VPD.
PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 45 MPH.

SECONDARY ROUTE:

M.U.N. ROUTE NUMBER:N/A. MARKED ROUTE NUMBER: N/A.
STREET NAME: COMMERCIAL ENTRANCE SRA ROUTE ? NO.
FUNCTIONAL CLASSIFICATION: LOCAL ROAD. OSOW DESIGN? NO.
EXISTING ADT: N/A. DESIGN YEAR ADT: 700 APPROX. AFTER SITE CONST. (2043) VPD.
PROPOSED DESIGN SPEED: 25 MPH. PROPOSED POSTED SPEED: 20 MPH.

IMPROVEMENT TYPE: NEW CONSTRUCTION. ANTICIPATED YEAR OF CONSTRUCTION: 2023.
EXISTING METHOD OF TRAFFIC CONTROL: N/A. PROPOSED METHOD: OWSC.
SIGNAL WARRANT: N/A.
DESIGN VEHICLE: SU-30 (WB-50 PHYSICALLY ACCOMMODATED).
DESIGN YEAR: 2043
TRUCK ROUTE DESIGNATION: PREFERRED ROADWAY: N/A.
SECONDARY ROADWAY: N/A.
DESIGN CRITERIA IDOT BDE FIG 36-7.A

GENERAL NOTES

ARE PROFILES PROVIDED ? YES, FOR THE COMMERCIAL ENTRANCE.
TYPE B6.24 CURB AND GUTTER ON THE OUTSIDE OF THE ROADWAY/SHOULDERS.
TYPE B CURB ON THE INTERNAL ROADWAY CONNECTION AT THE SITE.
ALL DIMENSIONS ARE (E-E), UNLESS OTHERWISE NOTED
THE RIGHT-OF-WAY LIMITS ARE PRELIMINARY.
DESIGN VEHICLE TURNING MOVEMENTS ARE ACCOMMODATED PER "AUTO-TURN" SOFTWARE, VERSION 10.0.
THE SCOPE OF WORK: CONSTRUCT RIRO SOUTH OF EB I-55/70 RAMP AND RAMADA BLVD.

INTERSECTION DESIGN EXCEPTIONS:

- PROPOSED RIRO ENTRANCE RADIUS IS 30'. (POLICY IS RADIUS BETWEEN 10' TO 25')
BDE APPROVED 2/23/2023.
- PROPOSED RIRO WIDTH AT EOP IS 90'. (POLICY IS MAXIMUM OF 85'). BDE APPROVED 2/23/2023.
- PROPOSED RIRO DRAINS TOWARD IL 157 (STATE ROUTE). (POLICY IS TO DRAIN AWAY FROM STATE ROUTE). BDE APPROVED 2/23/2023.
- PROPOSED COMMERCIAL ENTRANCE IS WITHIN THE LIMITS OF TURN LANE. (POLICY IS TO BE OUTSIDE OF TURN LANE LIMITS). BDE APPROVED 06/29/2023.

ADDITIONAL NOTES:

- ALL PAVEMENT MARKINGS ARE TO BE INSTALLED PER THE MUTCD AND IDOT POLICIES.
- LANE DESIGNATION ARROWS ARE FOR INFORMATION ONLY. ACTUAL LOCATION OF ARROWS WILL BE DETERMINED THROUGH COORDINATION WITH THE BUREAU OF OPERATIONS.
- PARKING IS NOT PERMITTED IN ANY OF THE APPROACHES OF THE INTERSECTION.
- INTERSECTION SIGHT DISTANCES MEET IDOT POLICY.
- PEDESTRIANS ARE ACCOMMODATED BY 7' SHARED-USE PATH.
- CYCLISTS ARE ACCOMMODATED BY A SOUTHBOUND SHOULDER AND A NORTHBOUND 7' SHARED-USE PATH.

PR RETAINING WALL

PR B6.18 CURB
AND GUTTER

11.0'

11.0'

502

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

PR ROW

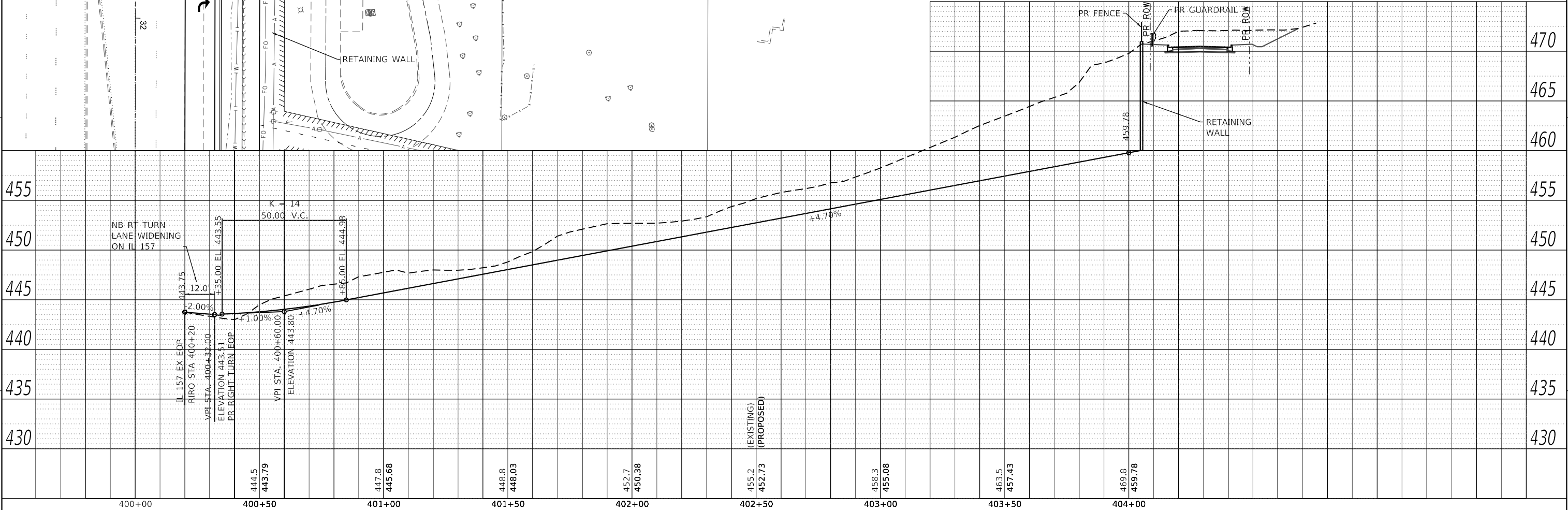
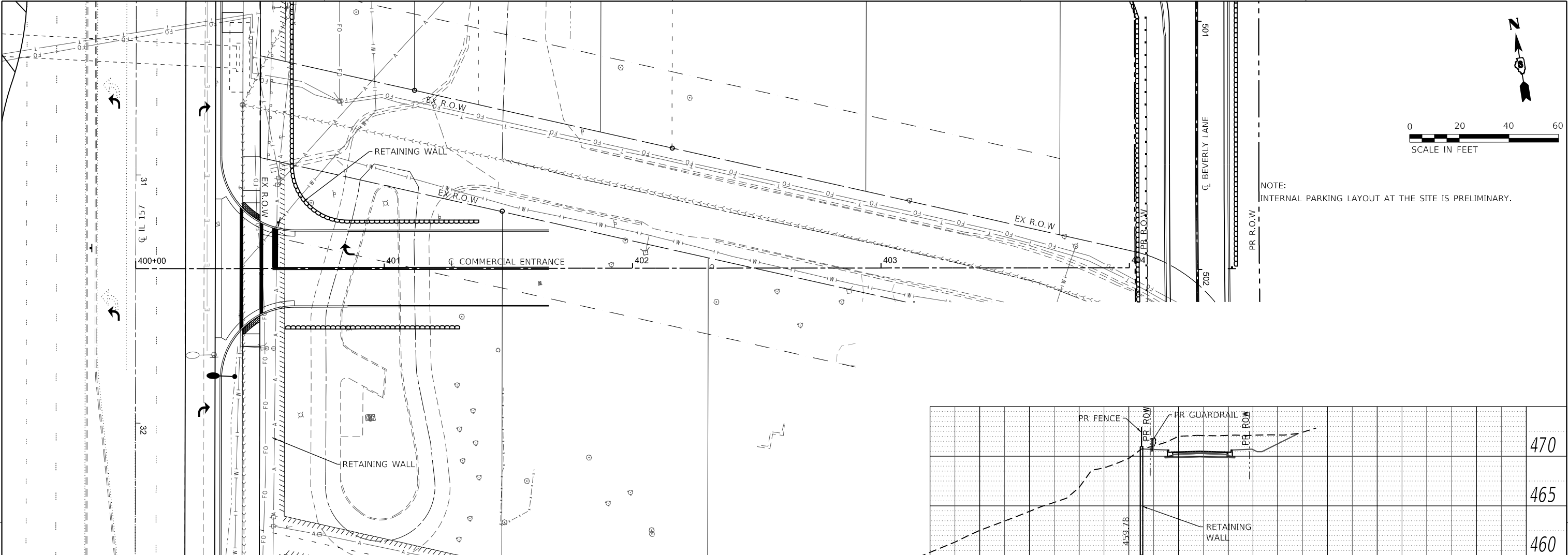
PR ROW

PR ROW

PR ROW

PR ROW

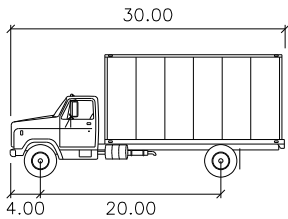
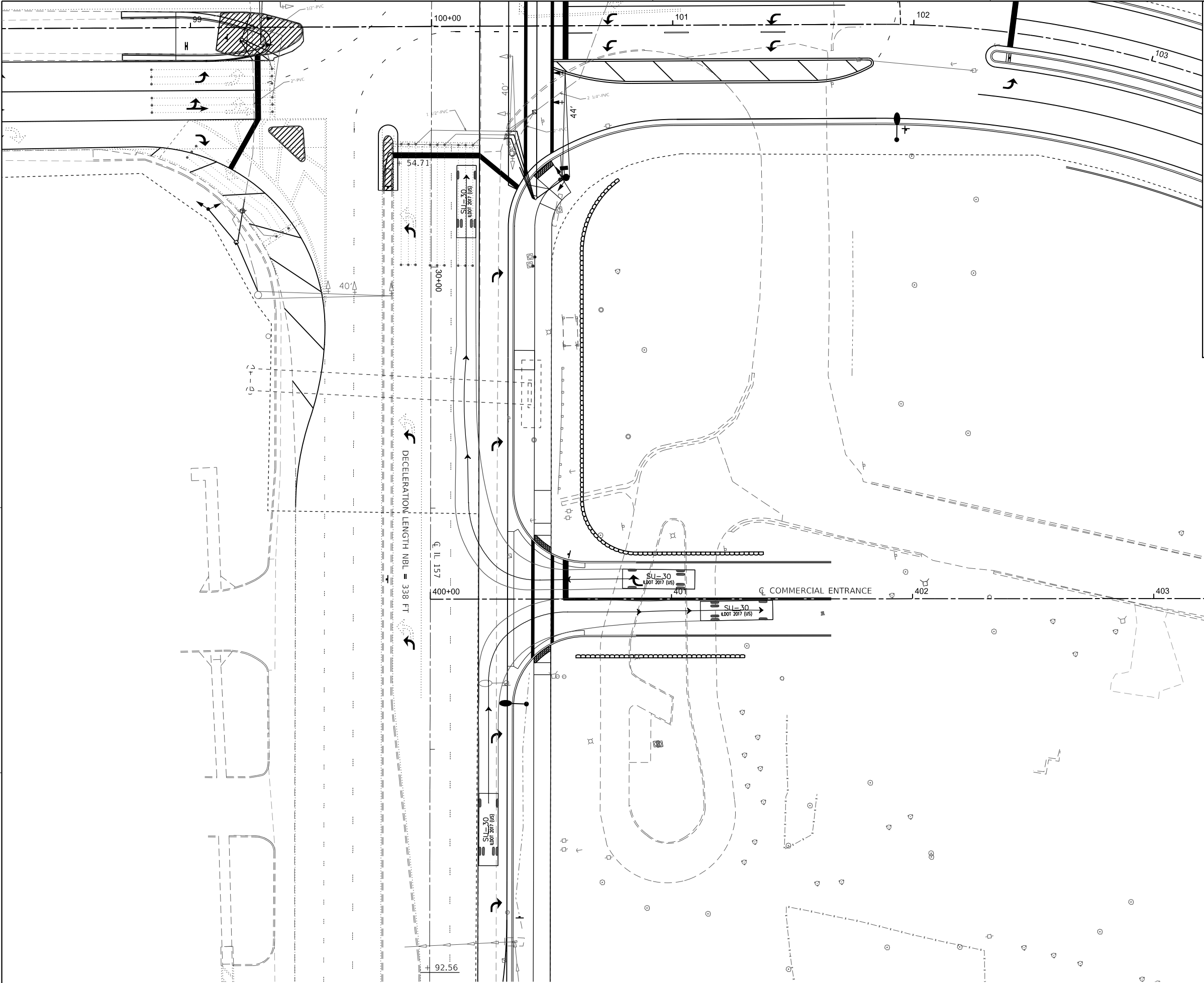
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FILE NAME: H:\P20122 - Beverly Lane and IL157 Development\CADD\Microstation\CADD Drawings\220122-sht-IDS-Pkplot.dgn
PLOT SCALE: 40.0000' / in.
USER NAME: roshan.pokhel



GEOMETRIC DETAIL

FAP ROUTE 0592 (IL 157)
ROUTE WITH (COMMERCIAL ENTRANCE)

SEC. NO. _____
SCALE H: 1" = 20'
V: 1" = 5'
COUNTY MADISON
SIN : _____ PROJ. NO. _____



SU-30

Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 32.0

SU-30



GEOMETRIC DETAIL

FAP ROUTE 0592 (IL 157)
ROUTE WITH (COMMERCIAL ENTRANCE)

SEC. NO. PROJ. NO.

SCALE 1" = 20' COUNTY MADISON

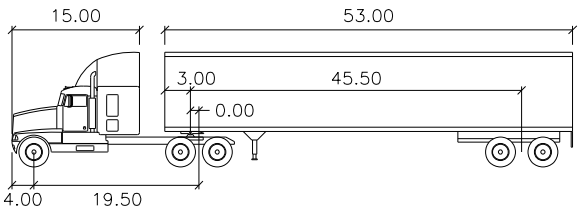
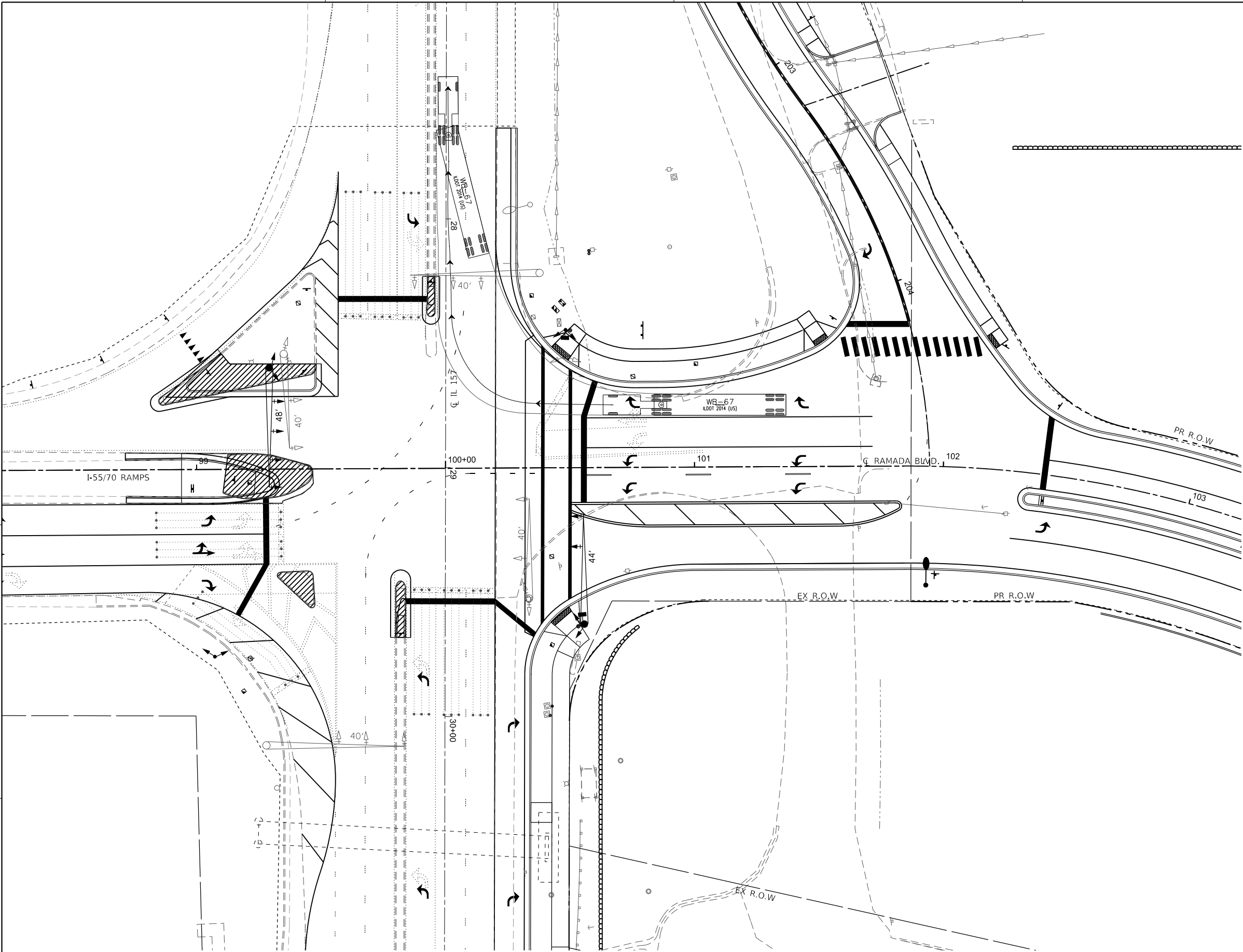
SIN : REV. NO.

CADD FILE NAME : [TURN MOVEMENTS]

I.D.S. SHEET 20 OF 20

SU-30 TURN MOVEMENTS

PLOT DATE = 9/2/2025
FILE NAME = H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-sht-ILS-turn.dgn
PLOT SCALE = 40.0000' / in.
USER NAME = roshan.pokhrel



WB-67

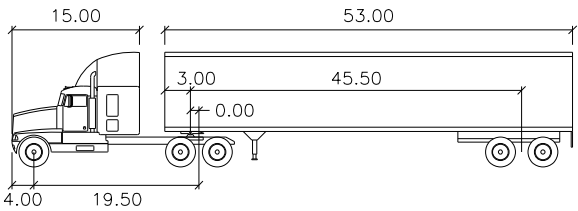
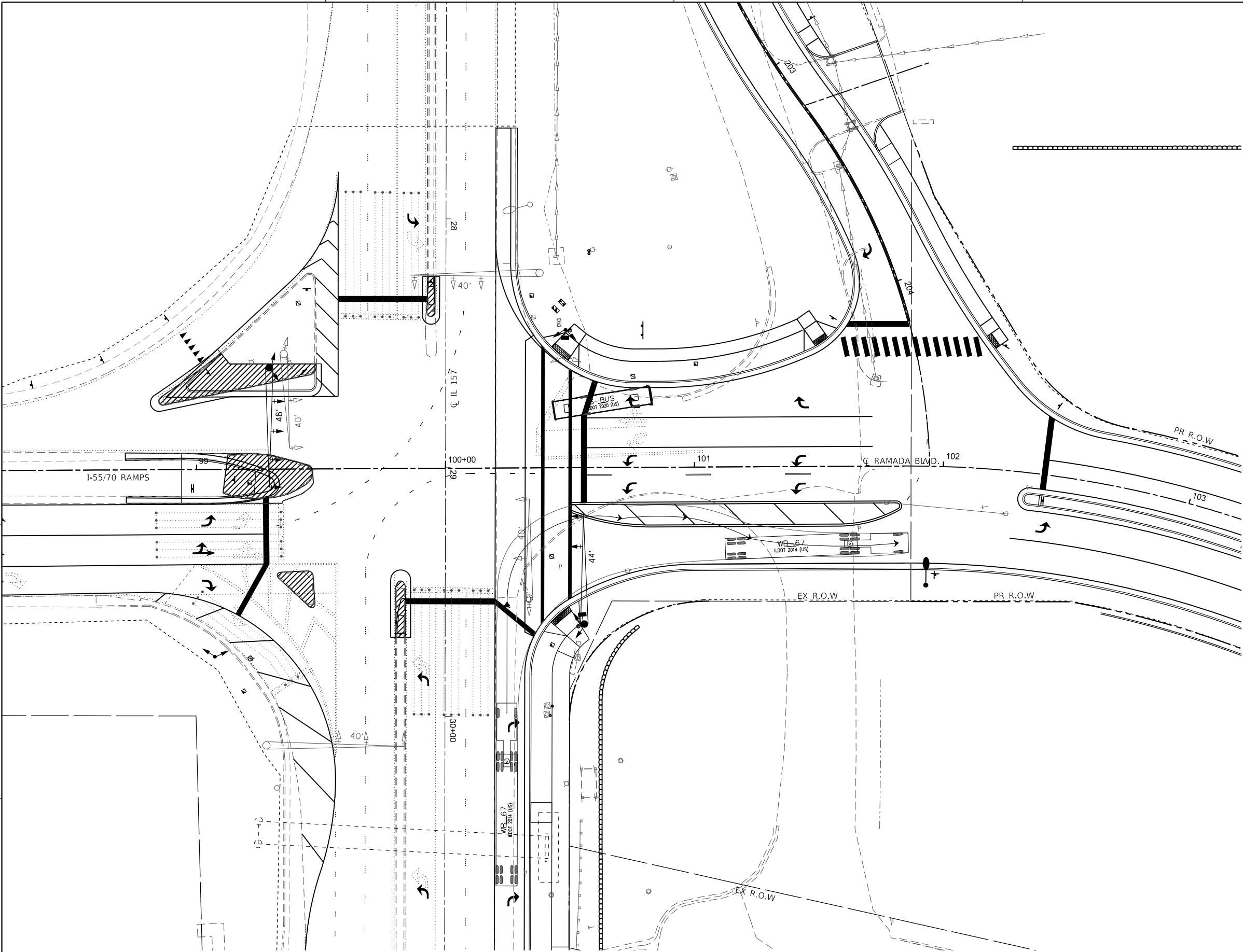
	feet	
Tractor Width	: 8.00	Lock to Lock Time : 6.0
Trailer Width	: 8.50	Steering Angle : 28.5
Tractor Track	: 8.00	Articulating Angle : 70.0
Trailer Track	: 8.50	

WB-67 DESIGN VEHICLE

WB-67 WB RIGHT TURN MOVEMENT

INTERSECTION DESIGN STUDY			
FAI ROUTE	0070	WITH	(I-55/70)
FAP ROUTE	0592	WITH	(IL 157)
MUN ROUTE	0070	WITH	(RAMADA BOULEVARD)
SEC. NO.			
SCALE	1" = 20'	COUNTY	MADISON
SIN :			
REV. NO.			

PLOT DATE : 9/25/2025
FILE NAME : H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-ylv-IDS-turn.dgn
PLOT SCALE : 40.0000' / in.
USER NAME : roshan.pokhrel

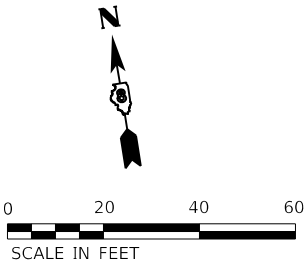


WB-67

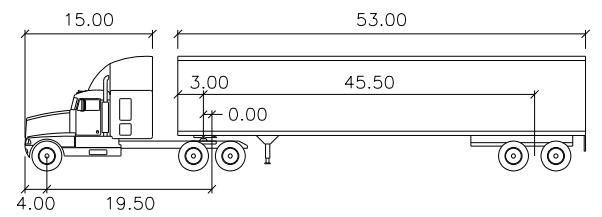
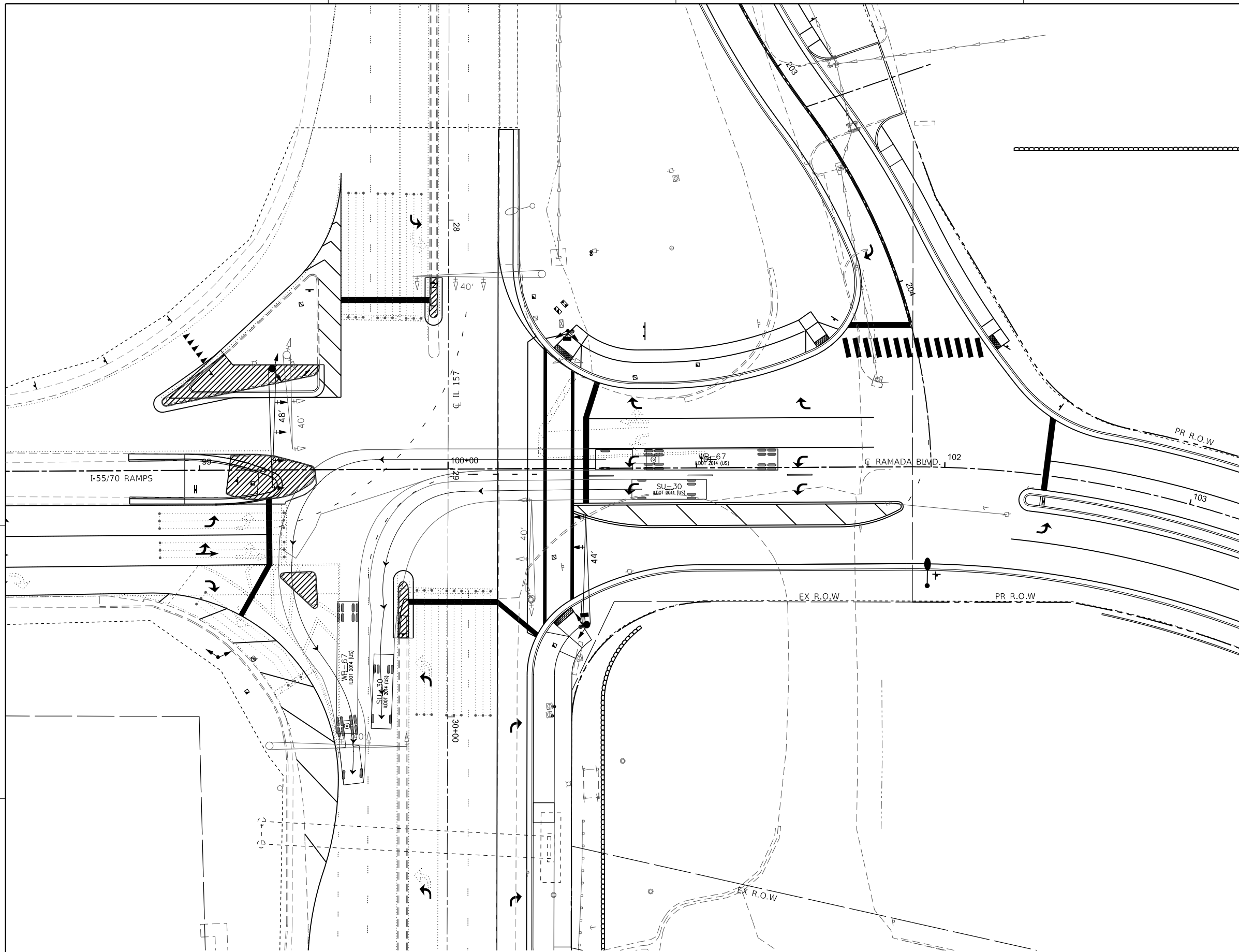
	feet	
Tractor Width	: 8.00	Lock to Lock Time : 6.0
Trailer Width	: 8.50	Steering Angle : 28.5
Tractor Track	: 8.00	Articulating Angle : 70.0
Trailer Track	: 8.50	

WB-67 DESIGN VEHICLE

WB-67 NB RIGHT TURN MOVEMENT



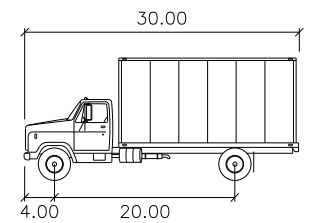
INTERSECTION DESIGN STUDY			
FAI ROUTE	0070	WITH	(I-55/70)
FAP ROUTE	0592	WITH	(IL 157)
MUN ROUTE	0070	WITH	(RAMADA BOULEVARD)
SEC. NO.		PROJ. NO.	
SCALE	1" = 20'	COUNTY	MADISON
S/JN :		REV. NO.	
CADD FILE NAME : [TURN MOVEMENTS] SUPPLEMENTAL SHEET 2 OF 4			



WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.5
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

WB-67 DESIGN VEHICLE



SU-30

```

                                feet
Width                           : 8.00
Track                           : 8.00
Lock to Lock Time               : 6.0
Steering Angle                  : 32.0

```

SU-30 DESIGN VEHICLE



INTERSECTION DESIGN STUDY

FAI	ROUTE	0070	(I-55/70)
FAP	ROUTE	0592	(IL 157)
MUN	ROUTE	0070	(RAMADA BOULEVARD)

SEC. NO. _____ PROJ. NO. _____

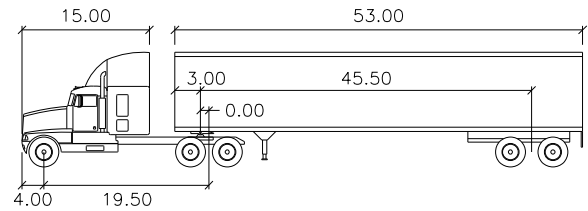
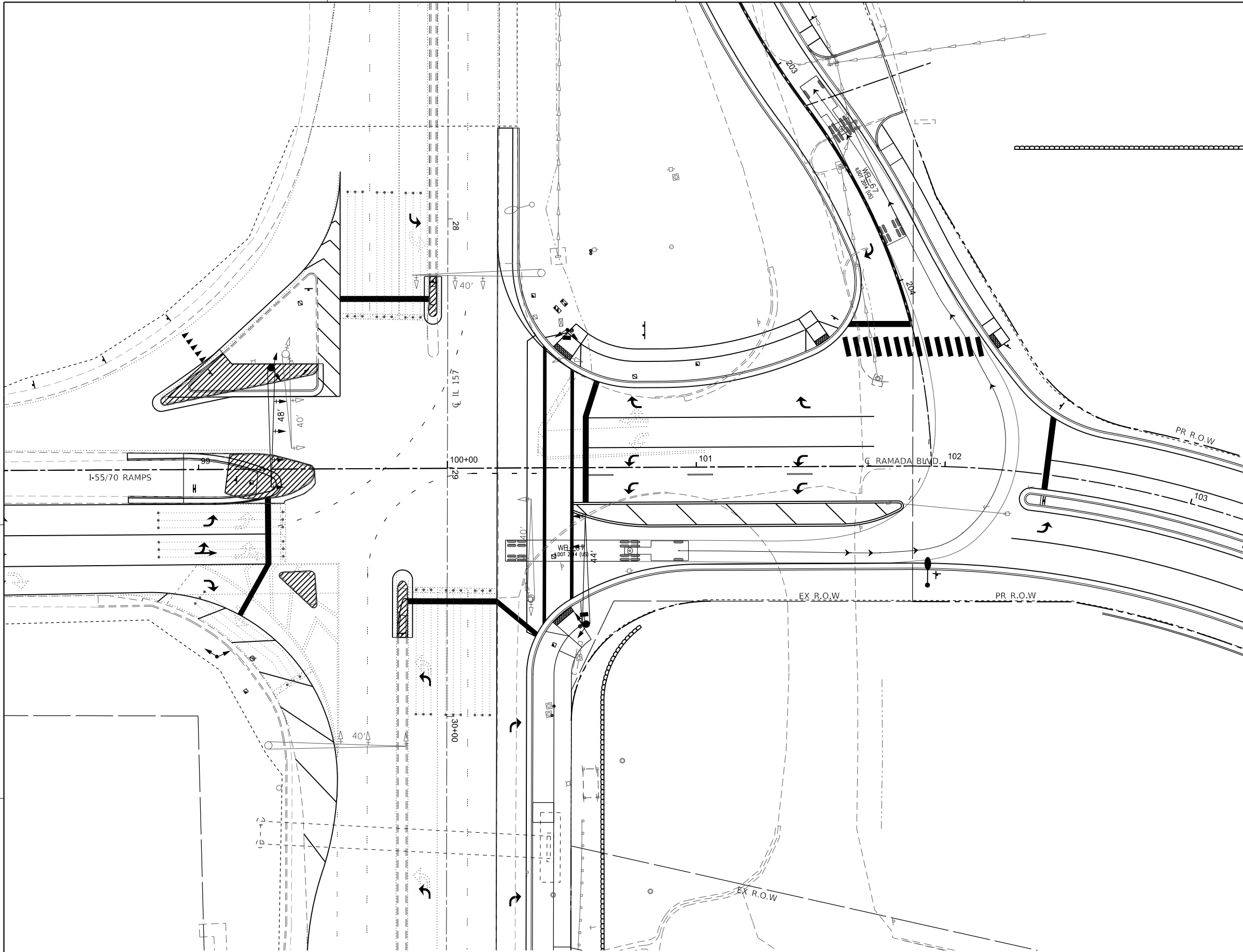
SCALE 1" = 20' COUNTY MADISON

CADD FILE NAME : [TURN MOVEMENTS] SUPPLEMENTAL SHEET 3 OF 4

BDE-9908

WB-67 AND SU-30 WB DUAL LEFT TURN MOVEMENT

PLOT DATE : 9/2/2005
FILE NAME : H:\P20122 - Beverly Lane and IL-157 Development\CADD\Microstation\CADD Drawings\220122-ylv-IDS-turn.dgn
PLOT SCALE : 40.0000' / in.
USER NAME : roshan.pokhrel

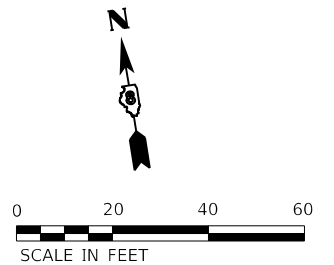


WB-67

	feet	
Tractor Width	: 8.00	Lock to Lock Time : 6.0
Trailer Width	: 8.50	Steering Angle : 28.5
Tractor Track	: 8.00	Articulating Angle : 70.0
Trailer Track	: 8.50	

WB-67 DESIGN VEHICLE

WB-67 EB LEFT TURN MOVEMENT



INTERSECTION DESIGN STUDY

FAI ROUTE 0070 WITH (I-55/70)
FAP ROUTE 0592 WITH (IL 157)
MUN ROUTE 0070 WITH (RAMADA BOULEVARD)

SEC. NO. _____ PROJ. NO. _____
SCALE 1" = 20' COUNTY MADISON

S/JN : _____ REV. NO. _____