

VOLUME I

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VOLUME II

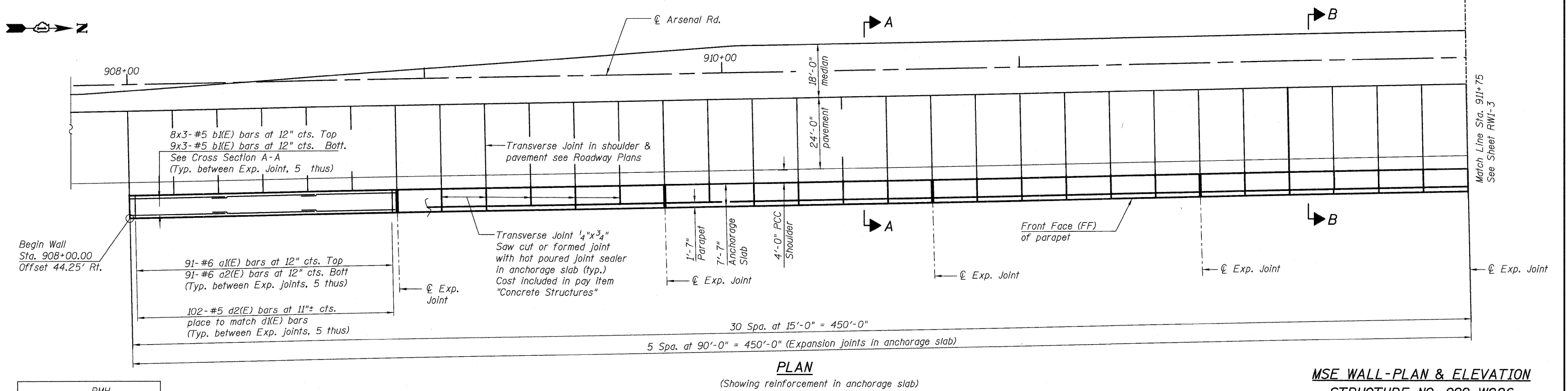
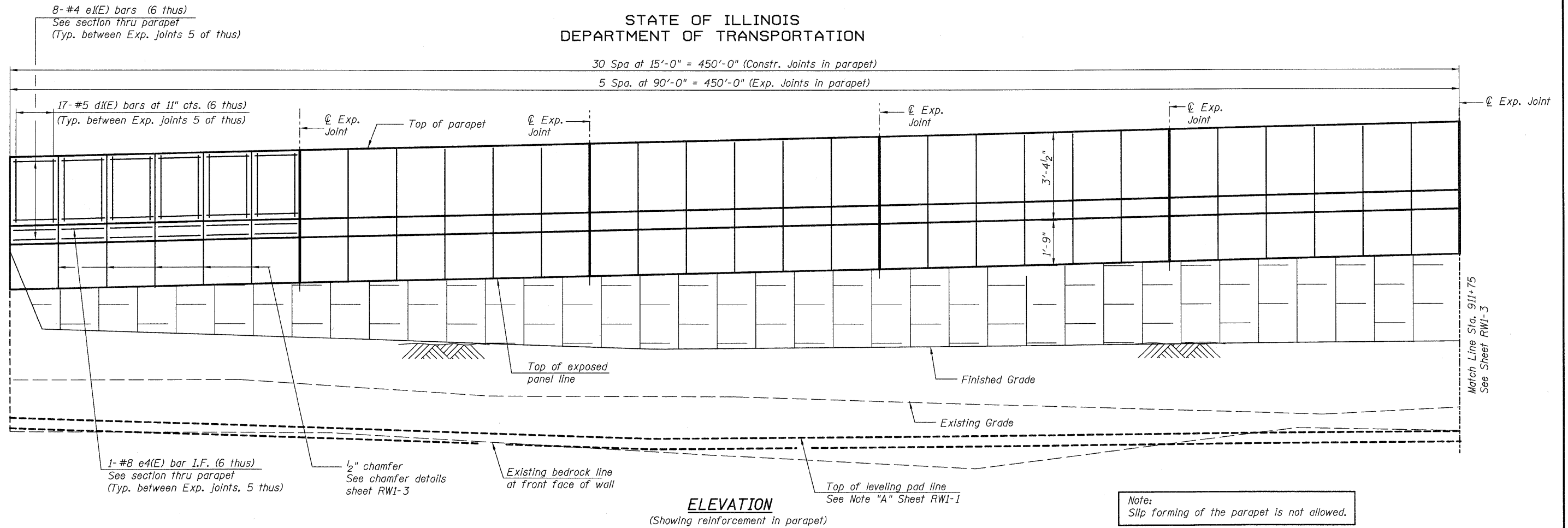
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SHEET NO.	DRAWING NO.	DESCRIPTION
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STATE OF ILLINOIS
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30 Spa. at 15'-0" = 450'-0" (Constr. Joints in parapet)

5 Spa. at 90'-0" = 450'-0" (Exp. Joints in parapet)



DESIGNED	PMH
CHECKED	MJL
DRAWN	RJ
CHECKED	BKB

MIN. LAP

#4 bar = 1'-4"
#5 bar = 1'-8"
#8 bar = 3'-8"

Notes:
Work this sheet with sheet RW1-1 & RW3-3.
For Bill of Material see Sheet RW3-5.

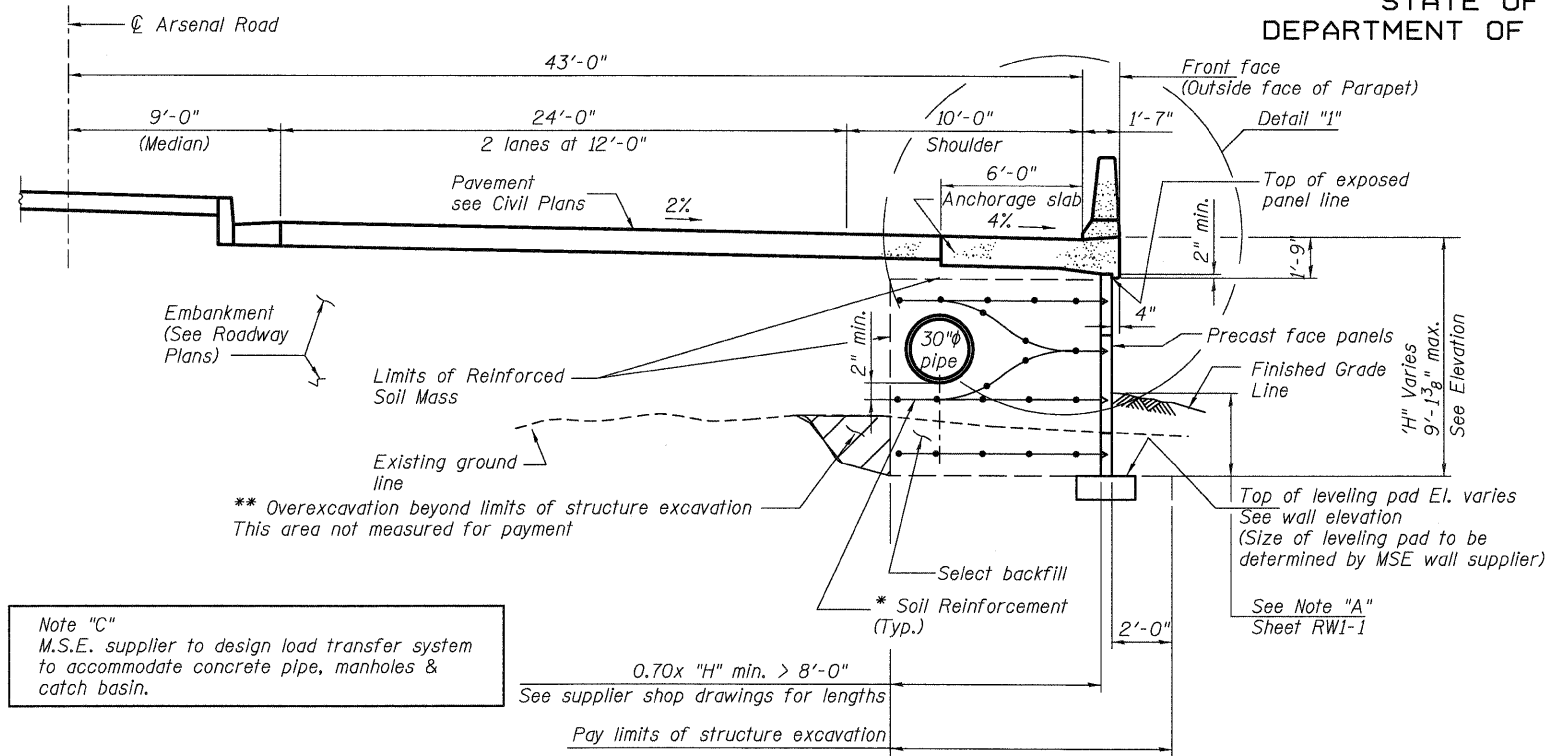


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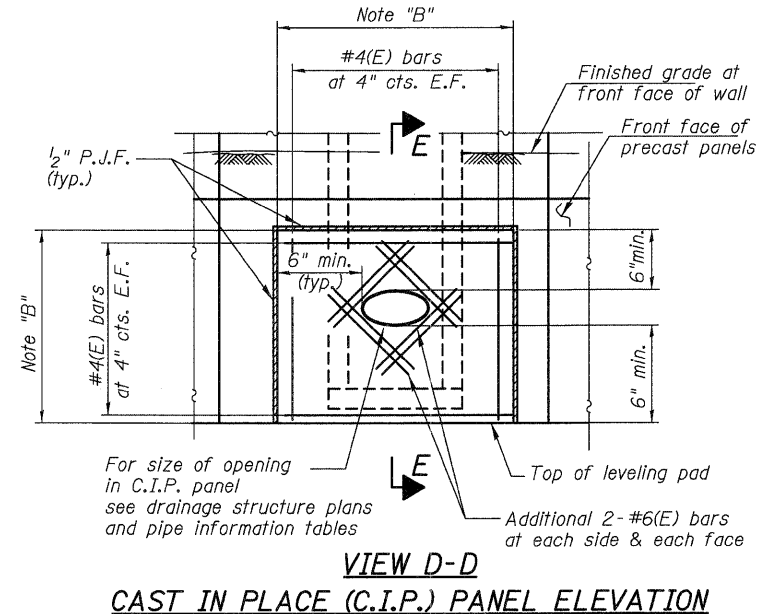
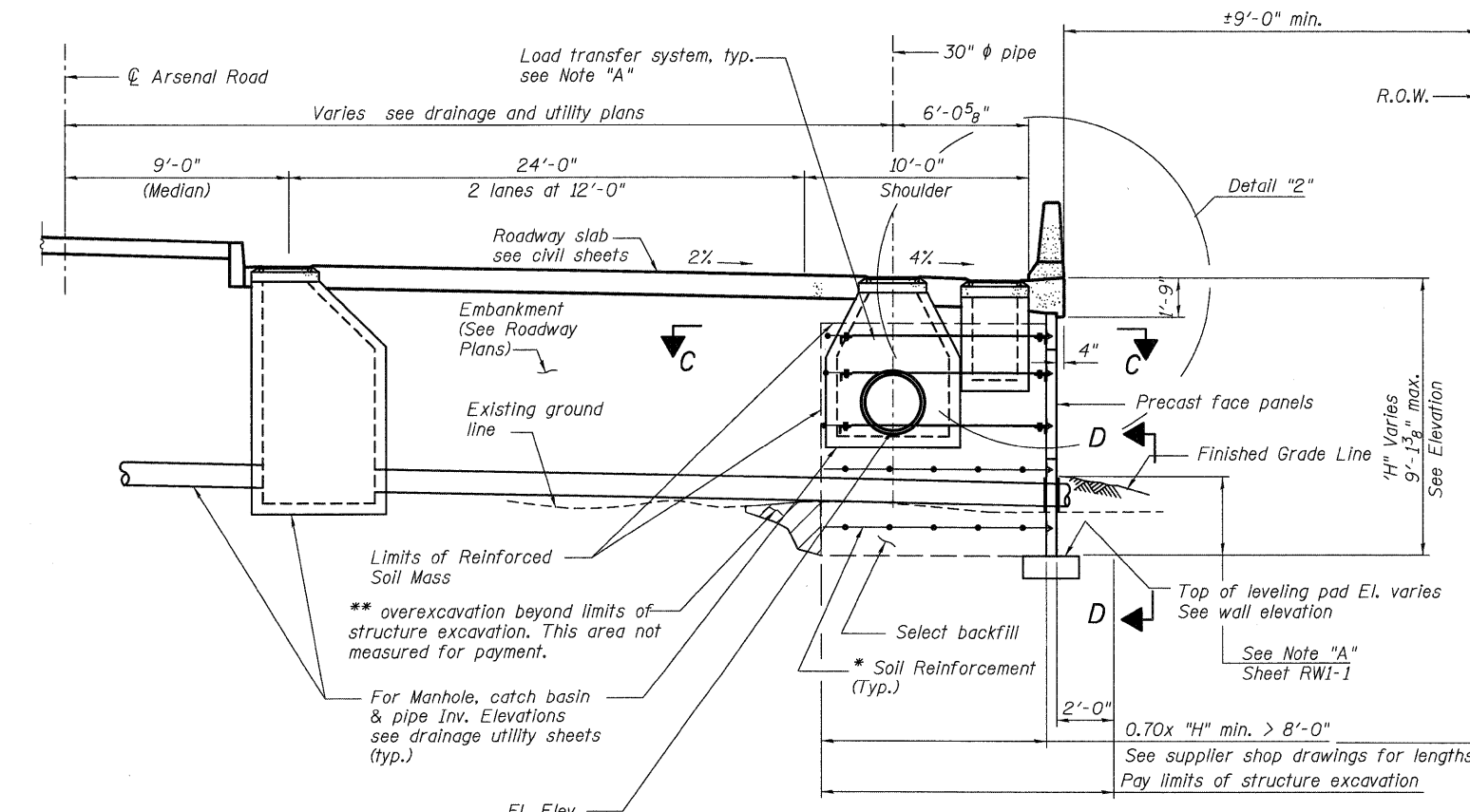
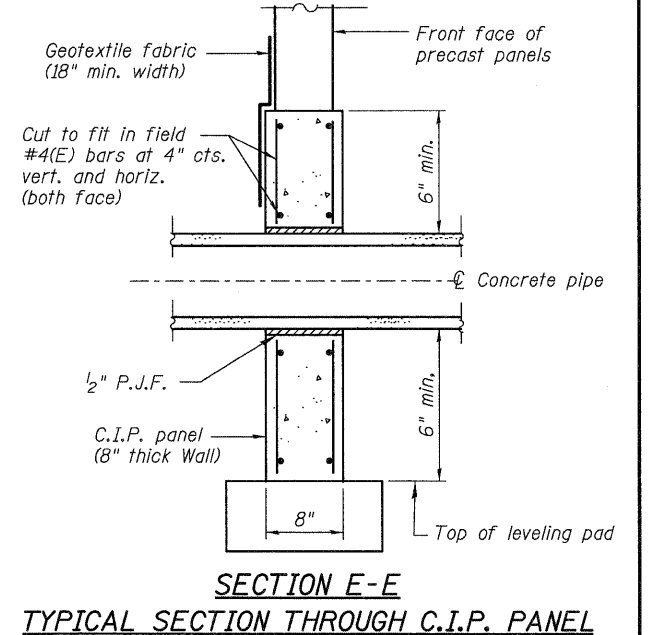
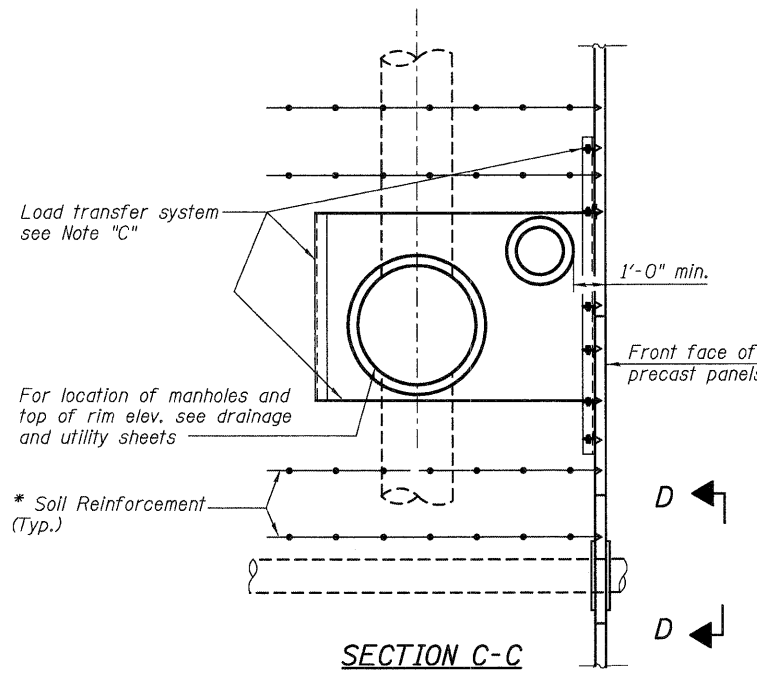
**MSE WALL-PLAN & ELEVATION
STRUCTURE NO. 099-W026**

SHEET NO. RW1-2 SHEETS RW1-9	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	303
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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DEPARTMENT OF TRANSPORTATION



Note "C"
M.S.E. supplier to design load transfer system to accommodate concrete pipe, manholes & catch basin.



Note:
For details 1 & 2 see Sheet RWI-5.

Note "B"
Cast-in-place panel (C.I.P.) Dimensions to be determined by Precast panel supplier.
Cost of C.I.P. panels including Reinforcement in the C.I.P. panel is included in the pay item "Mechanically Stabilized Earth Retaining Wall".
Note:
Removal of top soil & unsuitable material will be paid for under item "Removal and Disposal of unsuitable Material for Structures."

DESIGNED	PMH
CHECKED	MJL
DRAWN	RJ
CHECKED	BKB

*The MSE wall suppliers internal stability design shall account for the anchorage slabs bearing pressure of 1.0 Ksf and horizontal sliding force of 0.5 Kips/ft. of wall.
** Backfill Overexcavation with same aterial as used for select fill.

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SECTIONS AND DETAILS
STRUCTURE NO. 099-W026

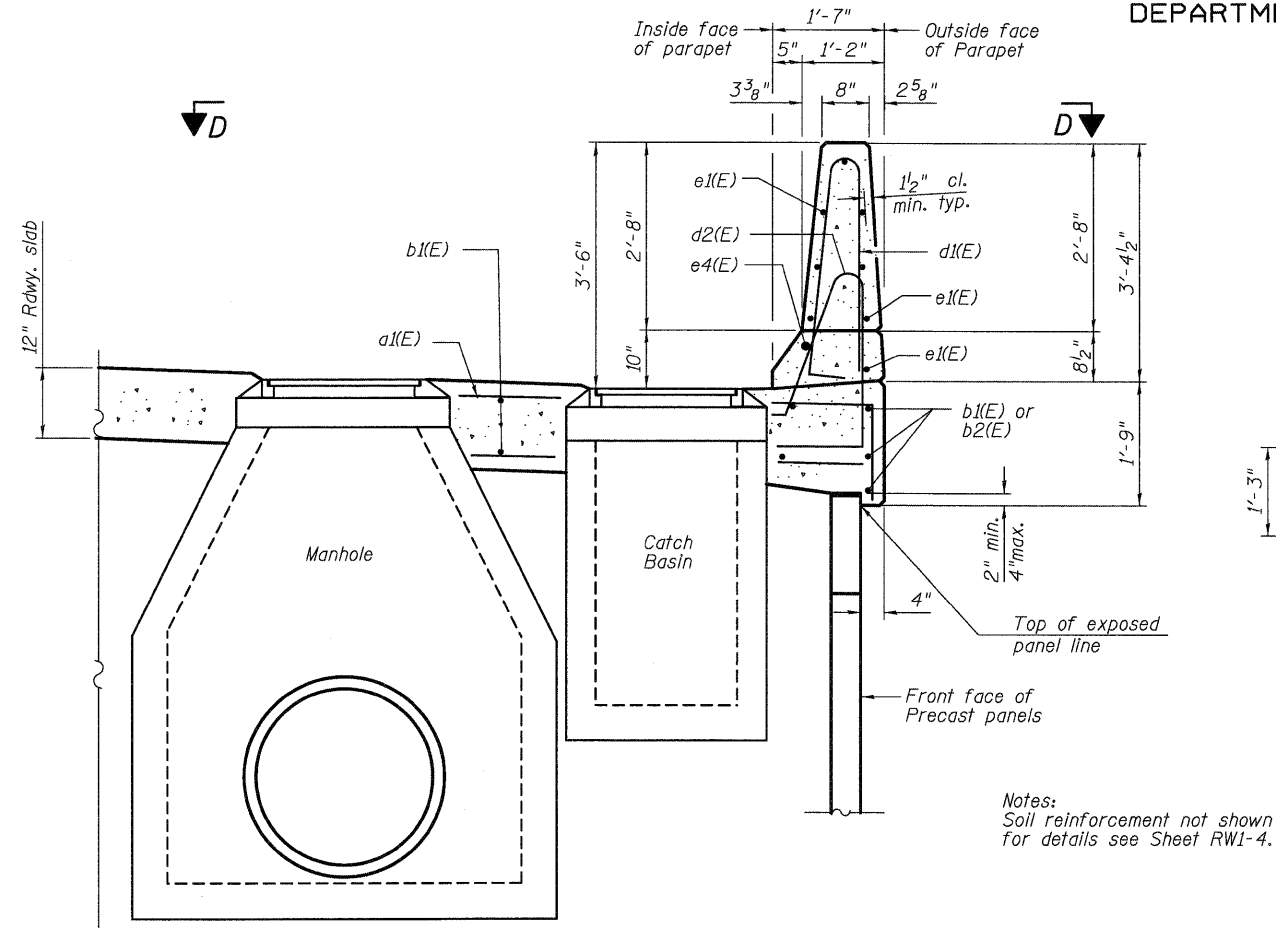
SHEET NO. RWI-4 SHEETS RWI-9	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	305
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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DEPARTMENT OF TRANSPORTATION

BILL OF MATERIAL

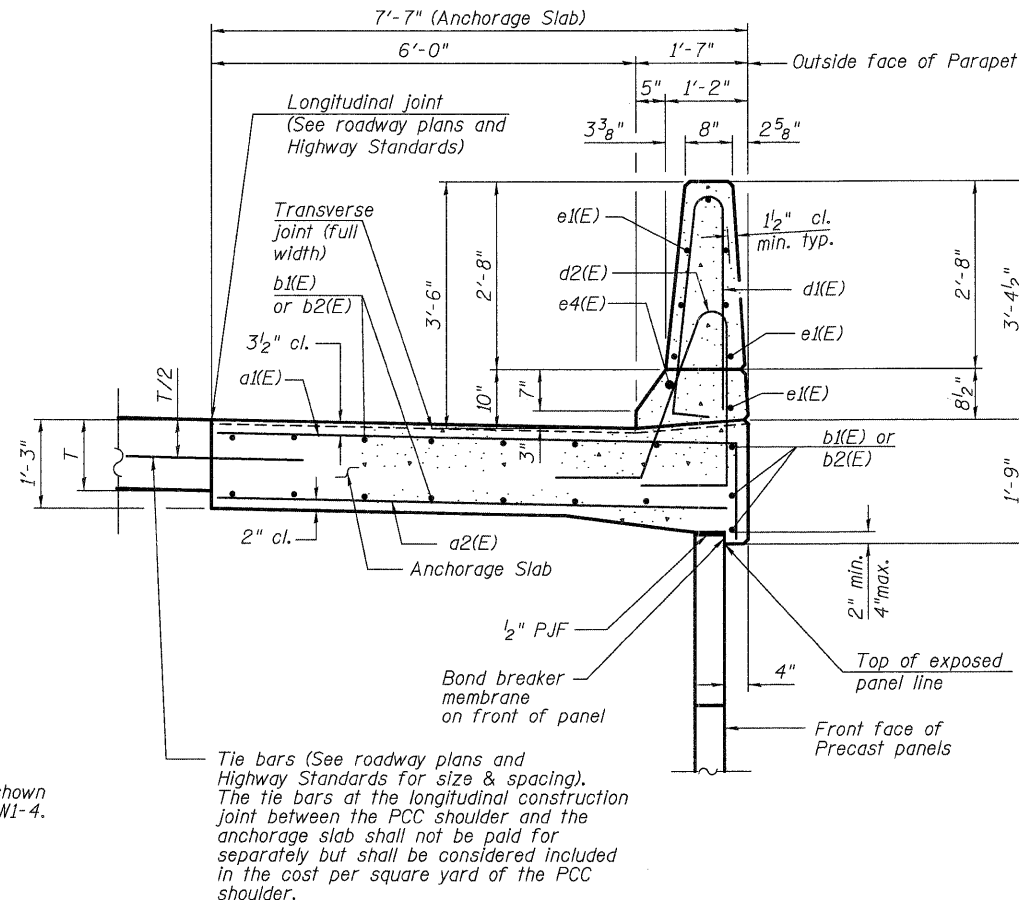
Bar	No.	Size	Length	Shape
a1(E)	804	#6	8'-7"	—
a2(E)	804	#6	7'-3"	—
b1(E)	408	#5	31'-3"	—
b2(E)	51	#5	26'-3"	—
d1(E)	901	#5	6'-10"	⌋
d2(E)	901	#5	7'-5"	⌋
e1(E)	424	#4	14'-8"	—
e4(E)	53	#8	14'-8"	—
h1(E)	128	#5	5'-0"	—
Structure Excavation			Cu. Yd.	675
Concrete Structures			Cu. Yd.	400
Reinforcement Bars, Epoxy Coated			Pound	54,104
Mechanically Stabilized Earth Retaining Wall			Sq. Ft.	6,580
Removal and Disposal of unsuitable material for Structures			Cu. Yd.	277.3

Notes:
Bars indicated thus 8x3-#5 indicates 8 lines of bars with 3 lengths per line.
Anchorage slab & parapet will be paid under item "Concrete Structures".



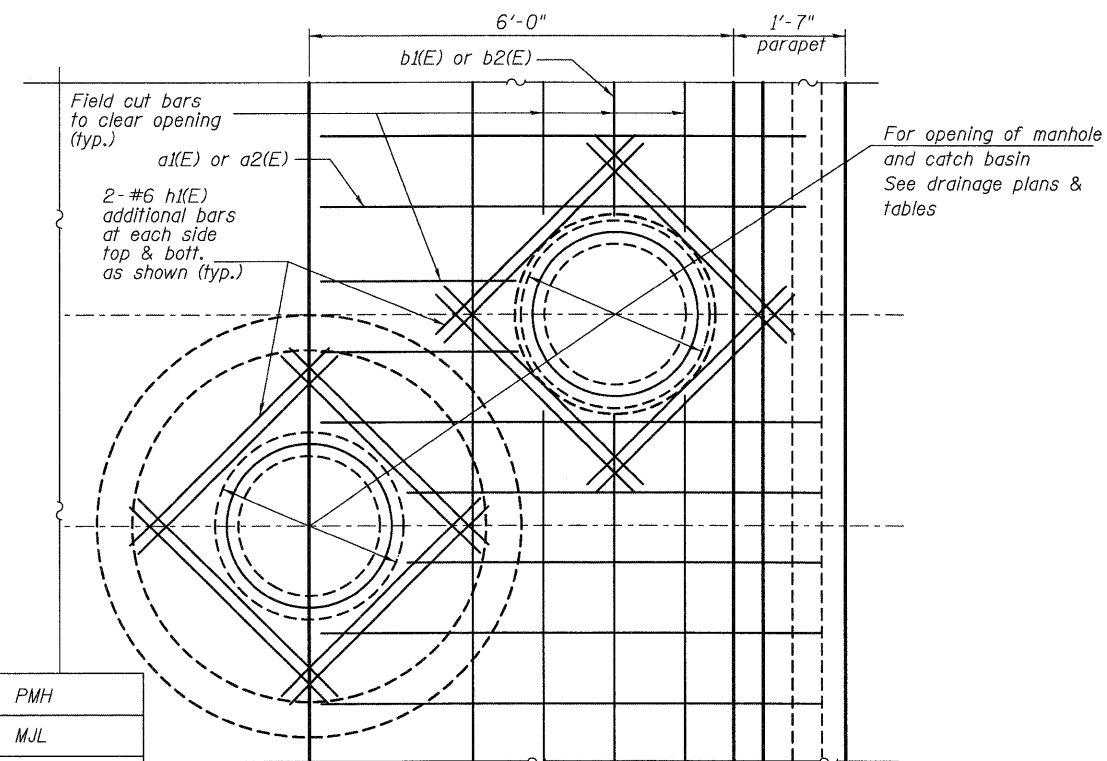
DETAIL "2"

SECTION THRU ANCHORAGE SLAB & PARAPET (AT DRAINAGE STRUCTURES)



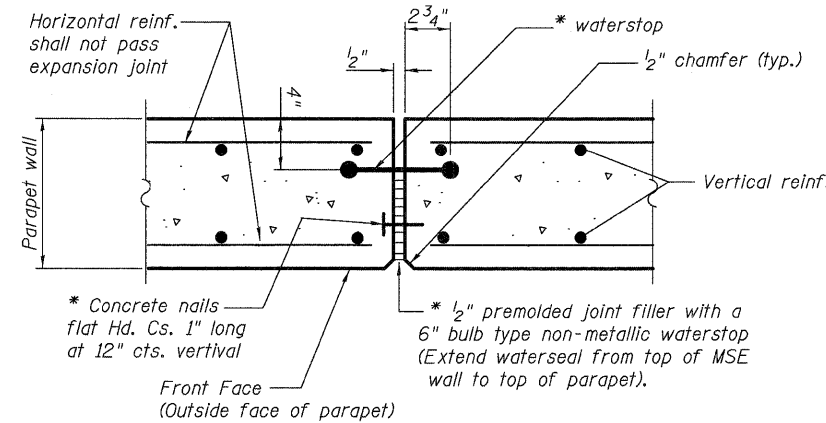
DETAIL "1"

SECTION THRU ANCHORAGE SLAB & PARAPET



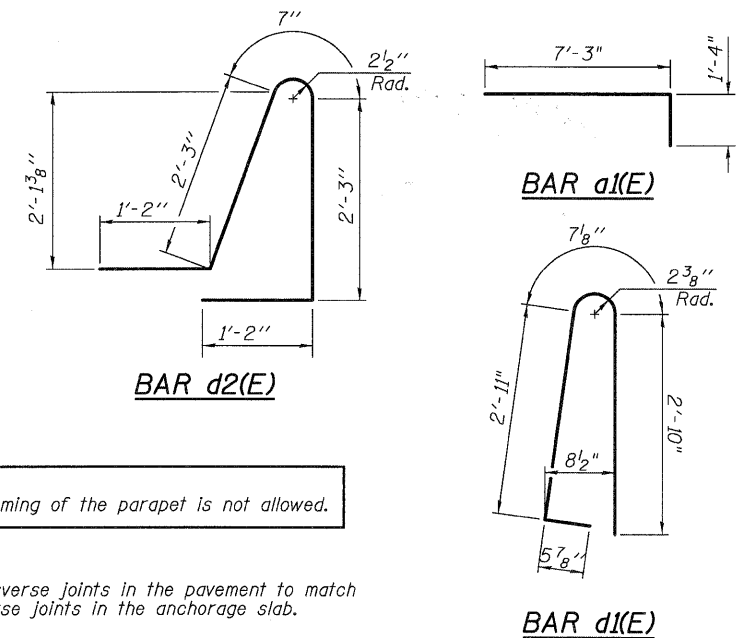
VIEW D-D

(PLAN AT DRAINAGE STRUCTURES)



EXPANSION JOINT DETAILS

For expansion joints in anchorage slab see Roadway Plans and Highway Standards. (STD 420001-07)
* Cost included with "Concrete Structures".



Note:
Slip forming of the parapet is not allowed.

Note:
1. Transverse joints in the pavement to match transverse joints in the anchorage slab.

SECTIONS AND DETAILS
STRUCTURE NO. 099-W026

DESIGNED	PMH
CHECKED	MJL
DRAWN	RJ
CHECKED	BKB

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SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RWI-5	55	(99-1&2) AC-3	WILL	524	306
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOG RWN-39 Page 1 of 1

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WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NAVD
Elevation: 532.17 ft
North: 1725124.30 ft
East: 1022837.02 ft
Station: 911+05.59
Offset: 45.05 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
532.0	2-inch thick, black CLAY LOAM --TOPSOIL--	0											
	Very dense, brown SANDY LOAM, some rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 2' 3"--	9											
		24	1	NP	57								
		37											
			2	NP									
528.9	Boring terminated at 2.25 ft												

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-10-2008	Complete Drilling	12-10-2008
Drilling Contractor	Wang Testing Service	Drill Rig	Mobile B-57 TMR
Driller	K & J	Logger	F. Bozga
Checked by	S. Sugiarto	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA

BORING LOG RWN-40 Page 1 of 1

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WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NAVD
Elevation: 532.55 ft
North: 1725201.25 ft
East: 1022827.12 ft
Station: 911+82.93
Offset: 38.81 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
532.4	2-inch thick, black CLAY LOAM --TOPSOIL--	0											
	Very dense, brown SANDY LOAM, some rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 1' 1"--	1											
		50/4"											
531.5	Poor, brown and gray, weathered DOLOSTONE --BEDROCK-- --RUN #1 (1' 1" to 6' 1")-- --REC=96.7%-- --RQD=31%--												
	Boring terminated at 6.08 ft												

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-10-2008	Complete Drilling	12-10-2008
Drilling Contractor	Wang Testing Service	Drill Rig	Mobile B-57 TMR
Driller	K & J	Logger	F. Bozga
Checked by	S. Sugiarto	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA

BORING LOG RWN-41 Page 1 of 1

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WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NAVD
Elevation: 532.30 ft
North: 1725279.59 ft
East: 1022828.64 ft
Station: 912+61.11
Offset: 44.05 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
532.1	2-inch thick, black CLAY LOAM --TOPSOIL--	0											
	Very dense, brown SANDY LOAM, some rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 1' 2"--	1											
		6											
		50/2"											
531.1	Boring terminated at 1.17 ft												

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-10-2008	Complete Drilling	12-10-2008
Drilling Contractor	Wang Testing Service	Drill Rig	Mobile B-57 TMR
Driller	K & J	Logger	F. Bozga
Checked by	S. Sugiarto	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA

DESIGNED	XXX
CHECKED	
DRAWN	AMV
CHECKED	

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SHEET NO. RWI-7 SHEETS RWI-9	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	308
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

**SOIL BORING LOGS
RETAINING WALL 1
STRUCTURE NO. 099-W026**

STATE OF ILLINOIS
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BORING LOG RWN-42

WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NAVD
Elevation: 533.04 ft
North: 1725361.81 ft
East: 1022830.90 ft
Station: 913+44.13
Offset: 50.13 RT

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Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
532.9	2-inch thick, black CLAY LOAM --TOPSOIL--	0											
	Very loose, brown SANDY LOAM, trace rock fragments	1			NP	41							
	--WEATHERED BEDROCK-- --AUGER REFUSAL @ 1' 6"--	2											
531.5		50.0'											
	Boring terminated at 1.50 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-10-2008	Complete Drilling	12-10-2008	While Drilling	▽	0.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	Mobile B-57 TMR	At Completion of Drilling	▽	0.00 ft	
Driller	K & J	Logger	F. Bozga	Checked by	S. Sugiarto	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite			Depth to Water	▽	NA	
	upon completion						

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG RWN-43

WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NAVD
Elevation: 532.47 ft
North: 1725444.08 ft
East: 1022832.90 ft
Station: 914+26.32
Offset: 54.38 RT

Page 1 of 1

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
532.3	2-inch thick, black CLAY LOAM --TOPSOIL--	0											
	Very dense, brown SANDY LOAM	1			NP	8							
	--WEATHERED BEDROCK-- --AUGER REFUSAL @ 1' 2"--	50.5'											
531.3													
	Boring terminated at 1.17 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-10-2008	Complete Drilling	12-10-2008	While Drilling	▽	0.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	Mobile B-57 TMR	At Completion of Drilling	▽	0.00 ft	
Driller	K & J	Logger	F. Bozga	Checked by	S. Sugiarto	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite			Depth to Water	▽	NA	
	upon completion						

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG RWN-44

WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NAVD
Elevation: 533.86 ft
North: 1725512.85 ft
East: 1022826.48 ft
Station: 914+95.24
Offset: 49.85 RT

Page 1 of 1

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
533.0	10-inch thick, black CLAY LOAM --TOPSOIL--	0											
		1											
	Medium dense to very dense, brown SANDY LOAM	1			NP	49							
	--WEATHERED BEDROCK-- --AUGER REFUSAL @ 2' 11"--	4											
		15											
		35											
		50.5'			NP	15							
530.8													
	Boring terminated at 2.92 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-10-2008	Complete Drilling	12-10-2008	While Drilling	▽	0.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	Mobile B-57 TMR	At Completion of Drilling	▽	0.00 ft	
Driller	K & J	Logger	F. Bozga	Checked by	S. Sugiarto	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite			Depth to Water	▽	NA	
	upon completion						

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	XXX
CHECKED	
DRAWN	AMV
CHECKED	

SOIL BORING LOGS
RETAINING WALL 1
STRUCTURE NO. 099-W026

McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RWI-8 SHEETS RWI-9	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	309
CONTRACT NO. 60C31			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGN STRESSES
FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

PRECAST UNITS

$f'_c = 4,500$ psi (pre-cast units)

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

CURVE DATA

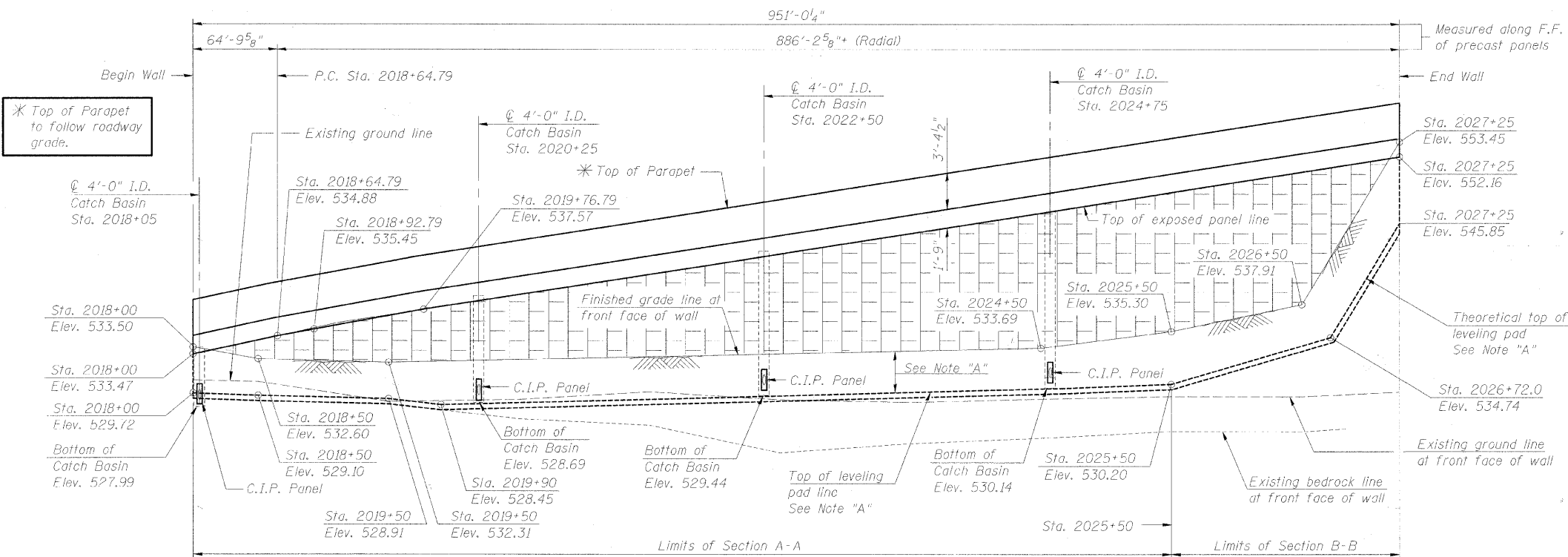
Ramp C
PI STA. = 2037+82.40
 $\Delta = 132^\circ 56' 23.34"$ (LT)
 $D = 6^\circ 51' 42"$
 $R = 835.00'$
 $T = 1917.61'$
 $L = 1937.40'$
 $E = 1256.52'$
S.E. RUN = 0.06 Ft./Ft.
P.C. STA. = 2018+64.79
P.T. STA. = 2038+02.19

Full SE from Sta. 2019+76.79 to end of wall.
For transition of SE from Sta. 2019+76.79 to beginning of wall see Sheet RW3-2.

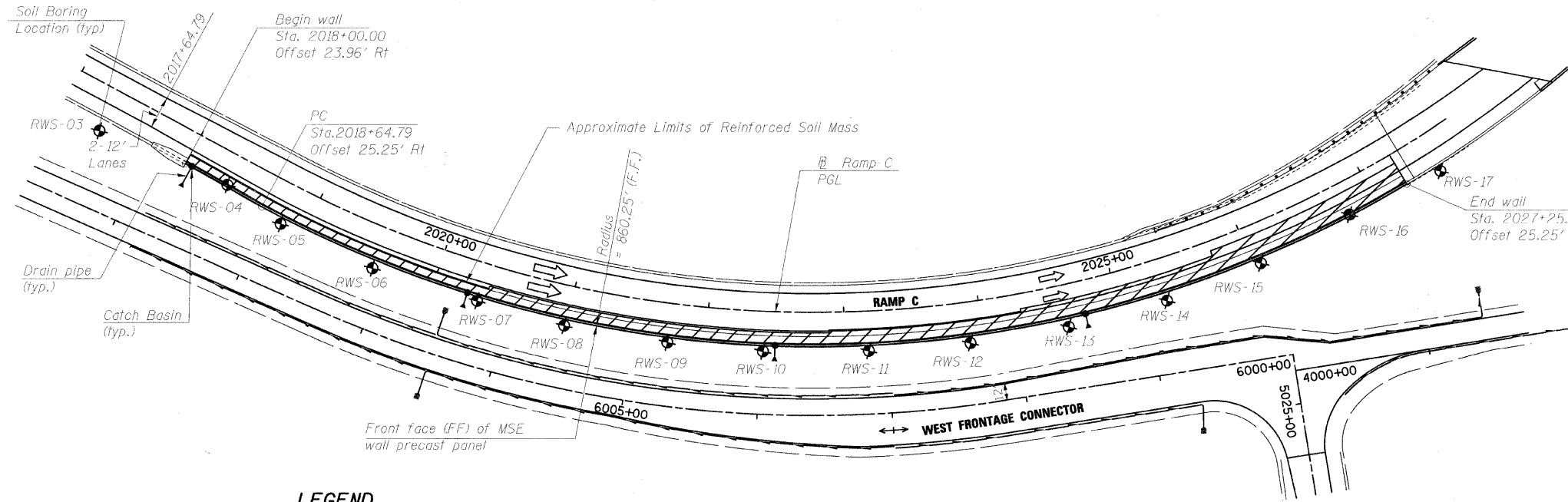
Parapet and Anchorage Slab are not part of this Contract

Note "A":
The top of levelling pad shall be established at minimum depth of 3.5 ft. below finished grade unless sound bed rock is encountered higher. When sound bed rock is encountered less than 1 foot below finished grade, the minimum embedment depth below the finished grade shall be 1 foot.

Bench Mark:
(BMRR) Box cut at top of S.E. wingwall of Grant Creek Bridge on E. Frontage Rd. of I 55, Elev. 520.80
Existing Structure:
None.



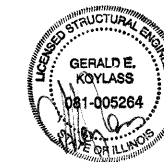
ELEVATION
(Looking at F.F. of wall)



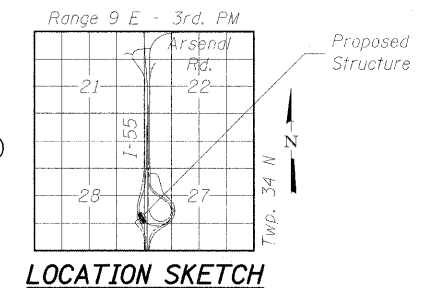
PLAN

Note:
Wall offsets are measured from the Ramp C to the front face of precast panels.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Robert E. Anderson (TJD)
ENGINEER OF BRIDGES AND STRUCTURES



Exp: 11/30/2010



LOCATION SKETCH

GENERAL PLAN & ELEVATION
MSE WALL - RAMP C
F.A.I. RTE. 55 - SEC. (99-1&2) R-6
WILL COUNTY
STATION 2018+00 TO 2027+25
STRUCTURE NO. 099-W028

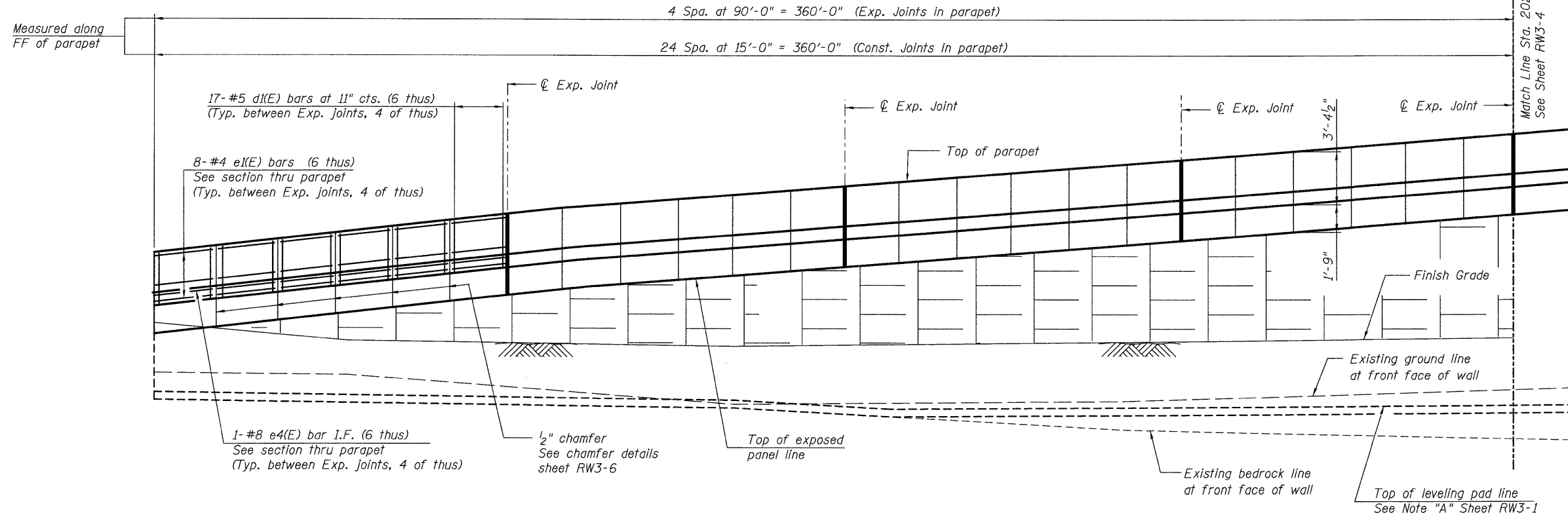
LEGEND

DESIGNED	PMH	Manhole	○
CHECKED	MJL	Catch Basin	●
DRAWN	RJ	Soil Boring	⊕
CHECKED	BKB	F.F. = Front Face	
		B.F. = Back Face	
		E.F. = Each Face	
		I.I. = Inside Face	
		O.F. = Outside Face	

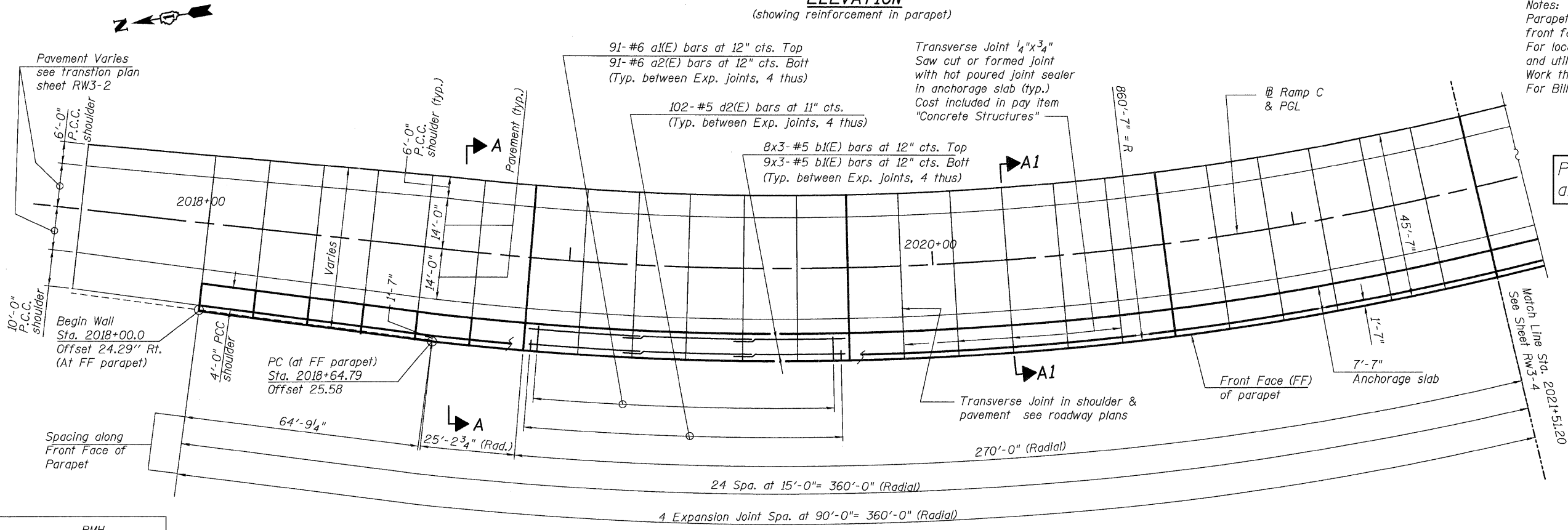
McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RW3-1 SHEETS RW3-12	F.A.I. RTE. 55	SECTION (99-1&2) AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 311
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(showing reinforcement in parapet)



PLAN
(showing reinforcement in anchorage slab)

MIN. LAP
#4 bar = 1'-4"
#5 bar = 1'-8"
#8 bar = 3'-8"

DESIGNED	PMH
CHECKED	MJL
DRAWN	RJ
CHECKED	BKB

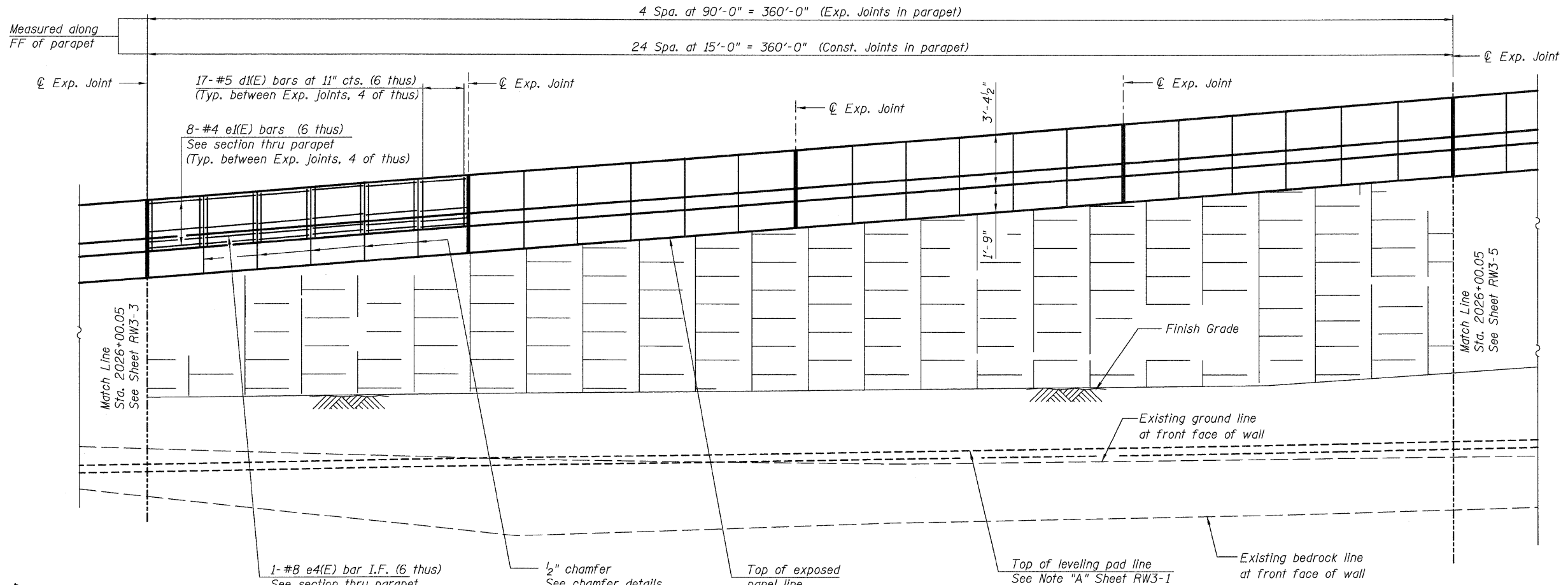
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Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RW3-3 SHEETS RW3-12	F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	313
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

**MSE WALL - PLAN & ELEVATION
STRUCTURE NO. 099-W028**

Notes:
Parapet offsets are measured from the @ Ramp C to the front face of parapet.
For locations and sizes of manholes and pipes see drainage and utility plans.
Work this sheet with sheets RW3-1 & RW3-4.
For Bill of Material see sheet RW3-7.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

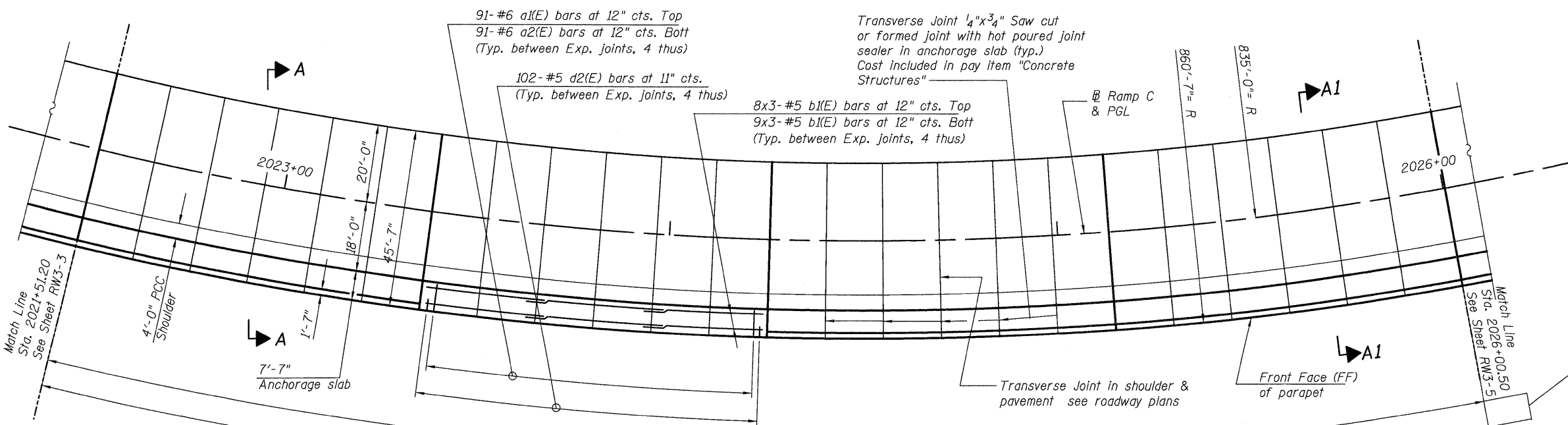


ELEVATION
(showing reinforcement in parapet)

Note:
Slip forming of the parapet is not allowed.

Note:
Work this sheet with sheets RW3-1, RW3-3 & RW3-5.

Parapet and Anchorage Slab are not part of this Contract



PLAN
(showing reinforcement in anchorage slab)

MSE WALL - PLAN & ELEVATION
STRUCTURE NO. 099-W028

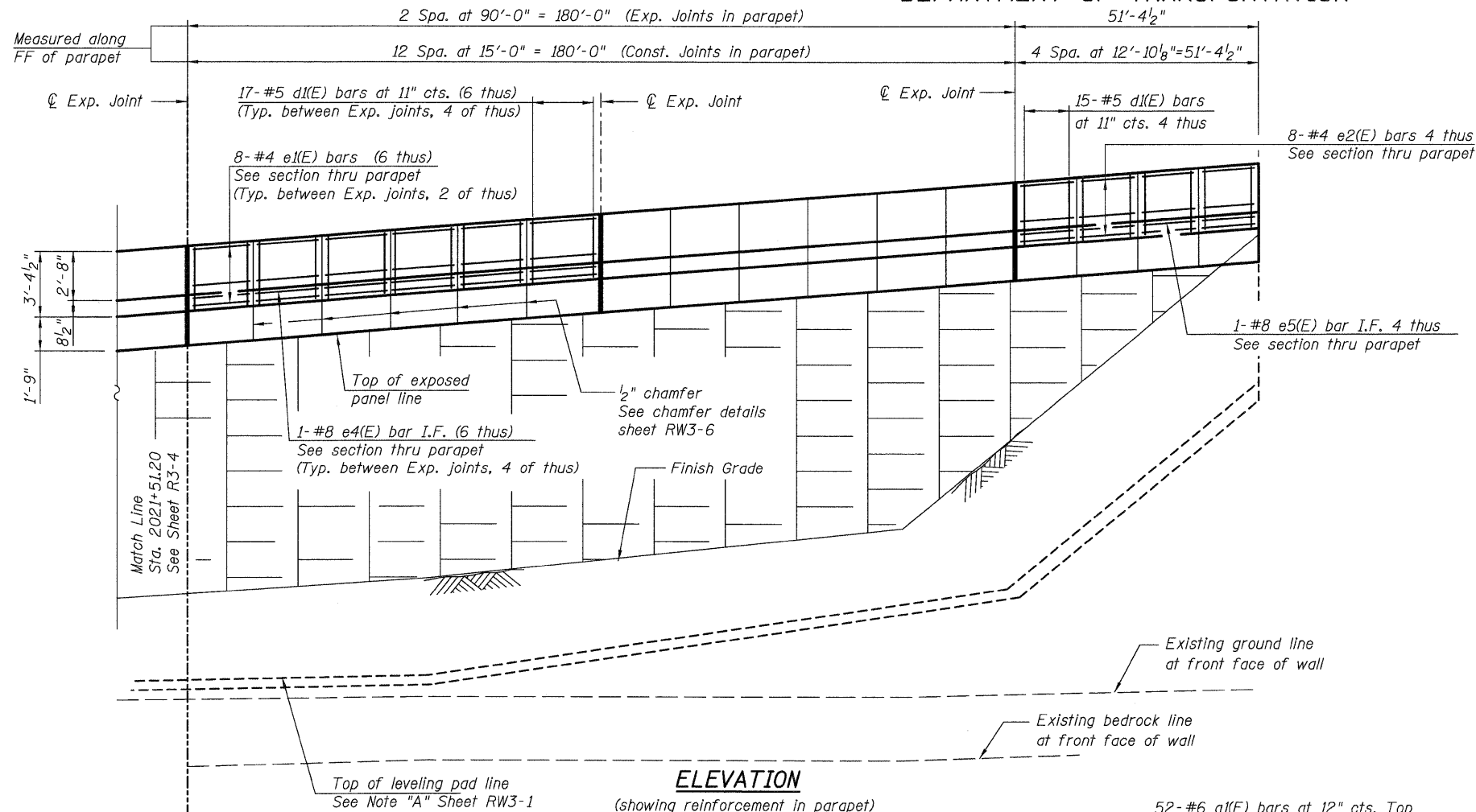
DESIGNED	PMH
CHECKED	MJL
DRAWN	RJ
CHECKED	BKB

MIN. LAP
#4 bar = 1'-4"
#5 bar = 1'-8"
#8 bar = 3'-8"

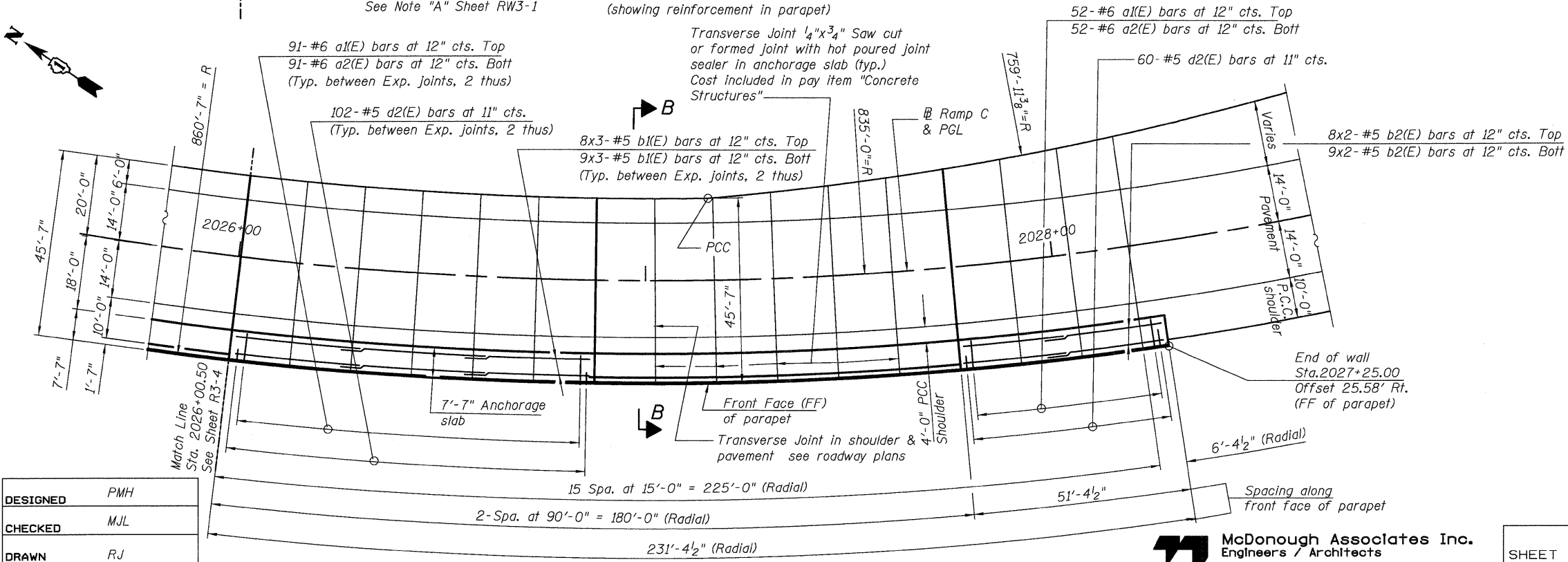
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SHEET NO. RW3-4 SHEETS RW3-12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	314
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(showing reinforcement in parapet)



PLAN
(showing reinforcement in anchorage slab)

Note:
Slip forming of the parapet is not allowed.

Note:
Work this sheet with sheets RW3-1 thru RW3-4.

Parapet and Anchorage Slab
are not part of this Contract

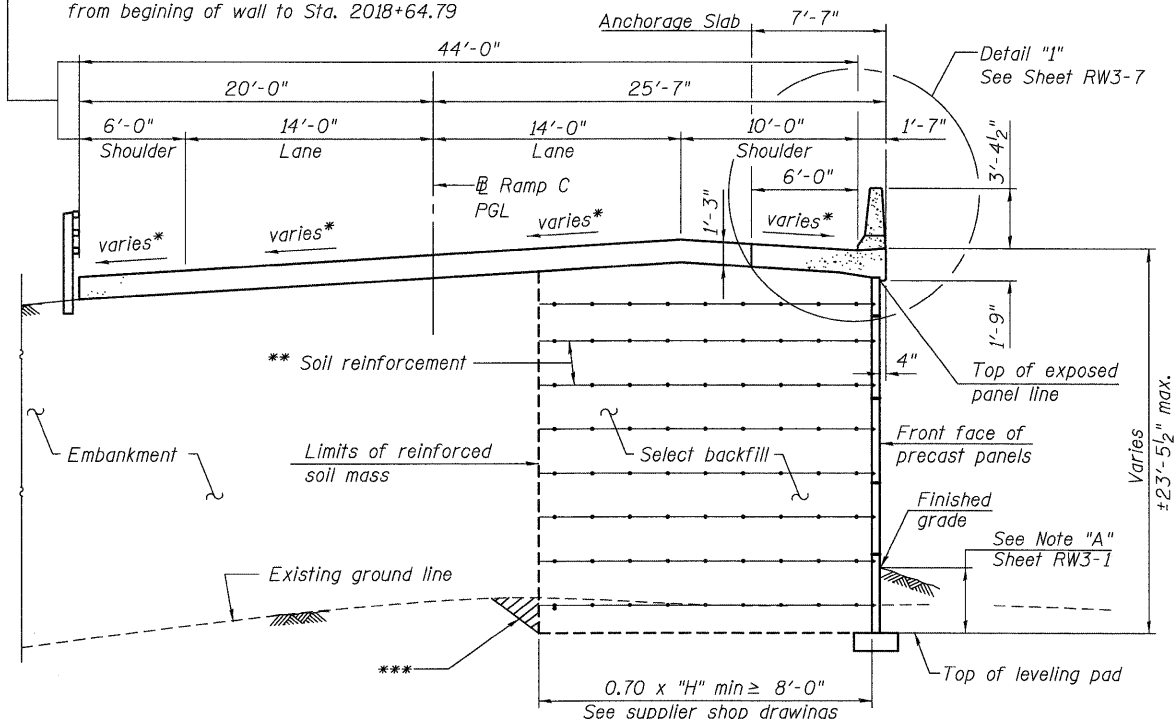
MSE WALL - PLAN & ELEVATION
STRUCTURE NO. 099-W028

DESIGNED	PMH
CHECKED	MJL
DRAWN	RJ
CHECKED	BKB

McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RW3-5 SHEETS RW3-12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	315
CONTRACT NO. 60C31			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

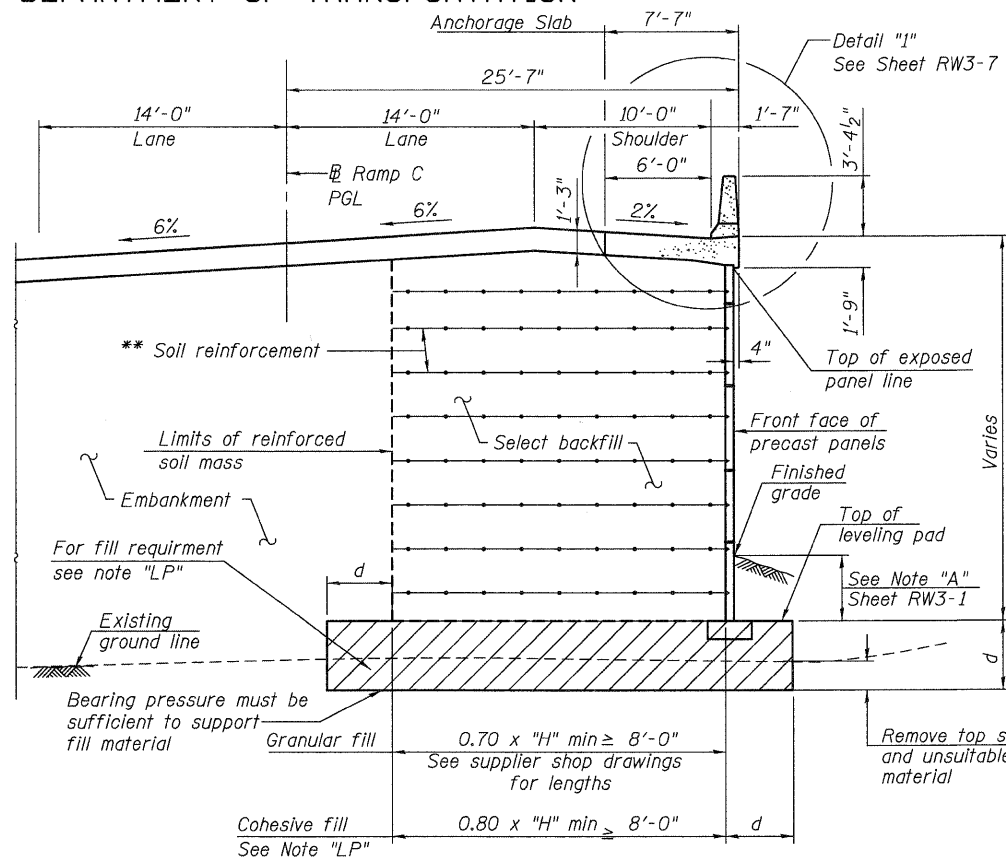
From Sta. 2018+64.79 to end of wall.
See transition plan for details
from beginning of wall to Sta. 2018+64.79



SECTION A-A
TYPICAL WALL SECTION

From Sta. 2018+00.00 to Sta. 2025+75.00
Looking (upstation) South

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION B-B
TYPICAL WALL SECTION

From Sta. Sta. 2025+75.00 to Sta. 2027+25.00
Looking (upstation) South

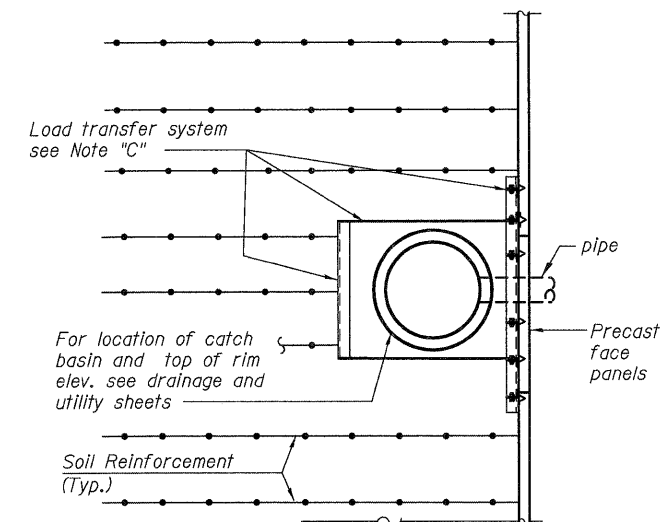
Notes:
Place the top most layer of soil reinforcement 3 feet below the gutter line elevation.

Quantity of the embankment fill is included with Roadway Quantities.

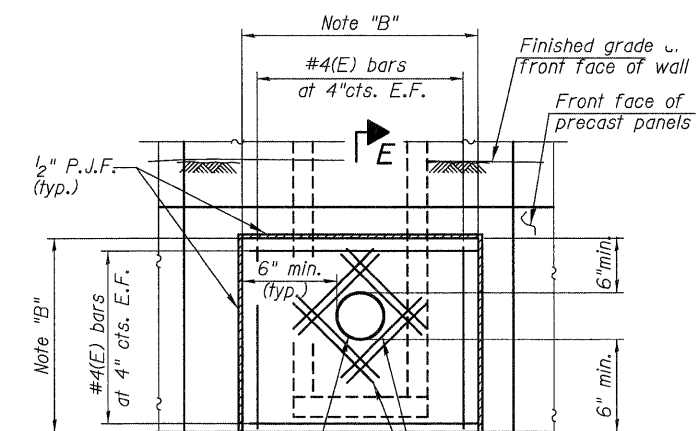
Removal of top soil & unsuitable material will be paid for under item "Removal and Disposal of unsuitable material for Structures".

Note "LP":

If the leveling pad is placed on top of cohesive fill material, the embankment fill below the leveling pad shall achieve an unconfined compressive strength of 1.5 tons per square foot, which may require that the degree of compaction is higher than 95% of the maximum dry density according to AASHTO T99. The embankment material should be placed in layers no more than 8 inches in loose thickness. The dynamic cone penetrometer reading must be equal to or less than 1.3 inches per blow, when testing the penetration rate in accordance with the IDOT Geotechnical Manual.



SECTION C-C



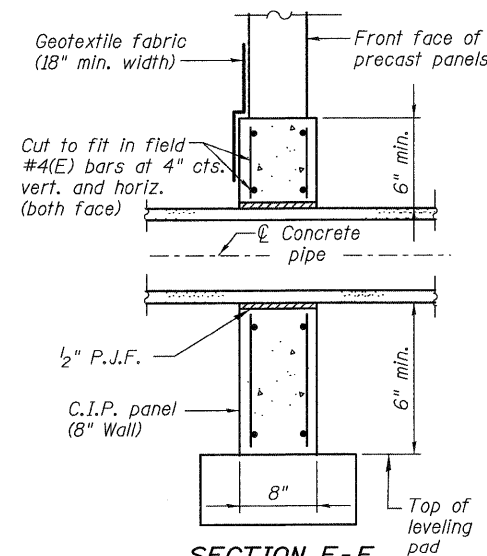
For size of opening in C.I.P. panel see drainage structure plans and pipe information tables

VIEW D-D

CAST IN PLACE (C.I.P.) PANEL ELEVATION

Note "B":
Cast-in-place panel (C.I.P.) Dimensions to be determined by Precast panel supplier.

Cost of C.I.P. panels including Reinforcement in the C.I.P. panel is included in the pay item "Mechanically Stabilized Earth Retaining Wall".



SECTION E-E

TYPICAL SECTION THROUGH C.I.P. PANEL

Parapet and Anchorage Slab are not part of this Contract

SECTIONS AND DETAILS
STRUCTURE NO. 099-W028

DESIGNED	PMH
CHECKED	MJL
DRAWN	RJ
CHECKED	BKB

* See transition plan (Sheet RW3-2)

** The MSE wall suppliers internal stability design shall account for the anchorage slabs bearing pressure of 1.0KSF and horizontal sliding force of 0.5 Kips/ft. of wall.

*** Overexcavation beyond limits of structure excavation. This area not measured for payment. Backfill Overexcavation with same material as used for select fill.

Note "C"
M.S.E. supplier to design load transfer system to accommodate catch basins.

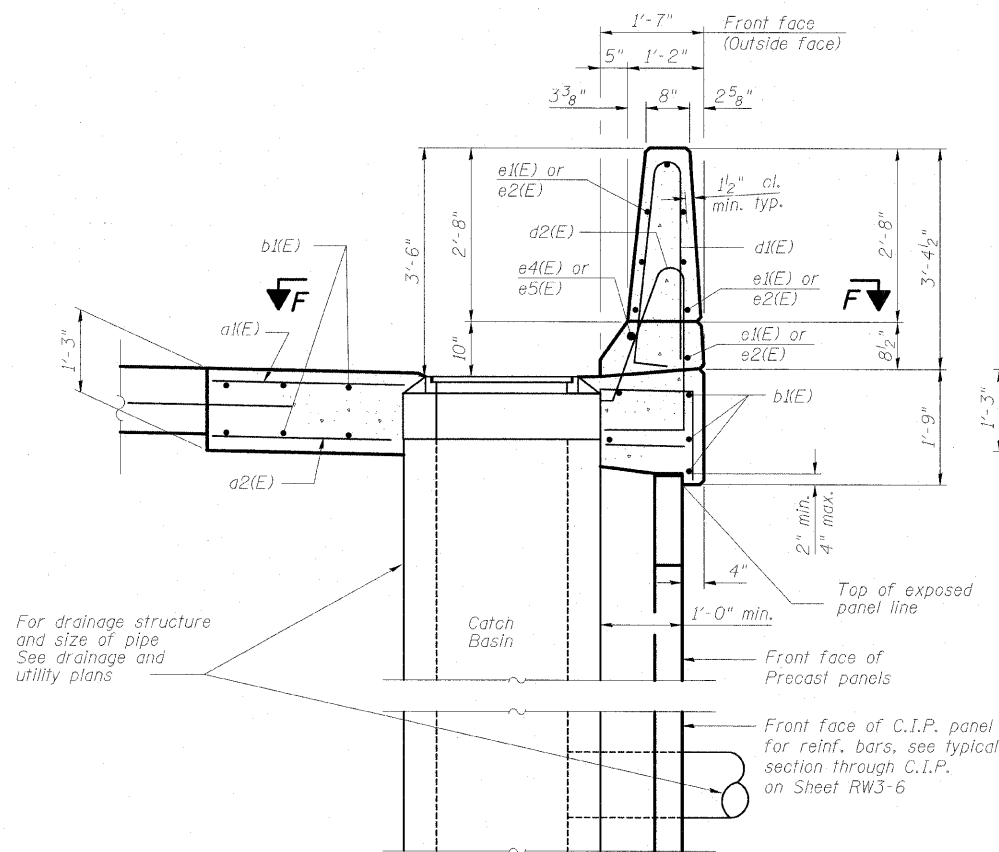
McDonough Associates Inc.
Engineers / Architects
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Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RW3-6 SHEETS RW3-12	F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	316
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

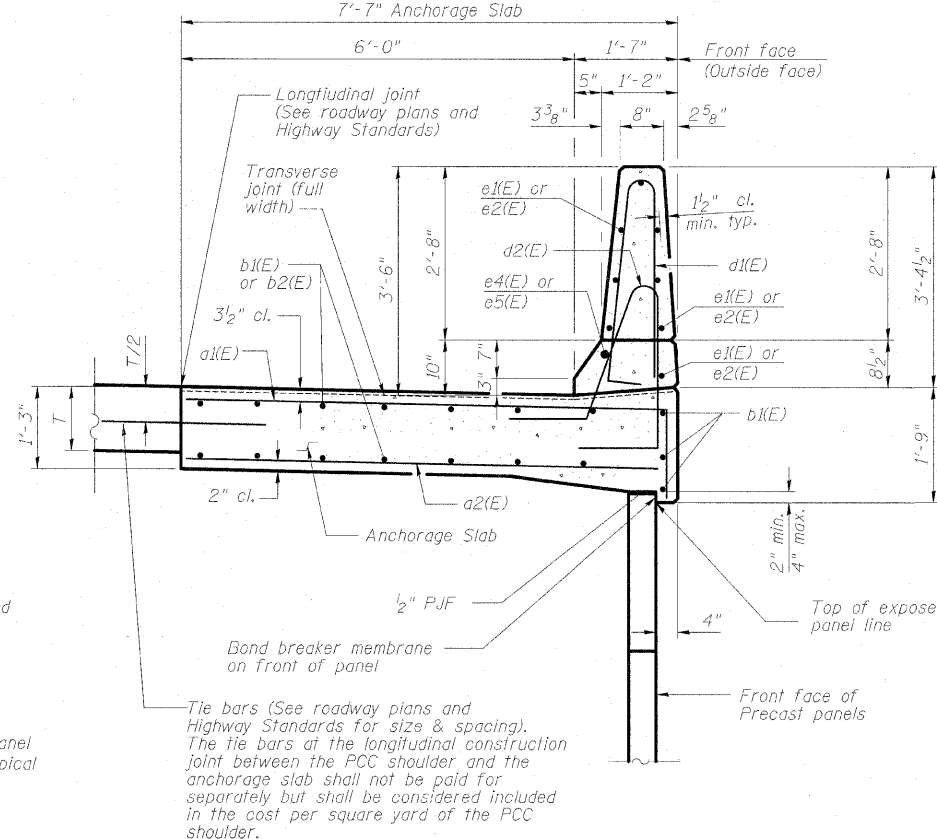
MSE WALL - BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	962	#6	8'-7"	—
a2(E)	962	#6	7'-3"	—
b1(E)	510	#5	31'-3"	—
b2(E)	34	#5	26'-6"	—
d1(E)	1080	#5	6'-10"	—
d2(E)	1080	#5	7'-5"	—
e1(E)	480	#4	14'-8"	—
e2(E)	32	#4	12'-6"	—
e4(E)	60	#8	14'-8"	—
e5(E)	4	#8	12'-6"	—
h(E)	64	#6	5'-0"	—
Structure Excavation			Cu. Yd.	689
Concrete Structures			Cu. Yd.	472.5
Reinforcement Bars, Epoxy Coated			Pound	64,430
Mechanically Stabilized Earth Retaining Wall			Sq. Ft.	12,022
Rock Excavation for Structures			Cu. Yd.	114.1
Removal and Disposal of unsuitable material for Structures			Cu. Yd.	424



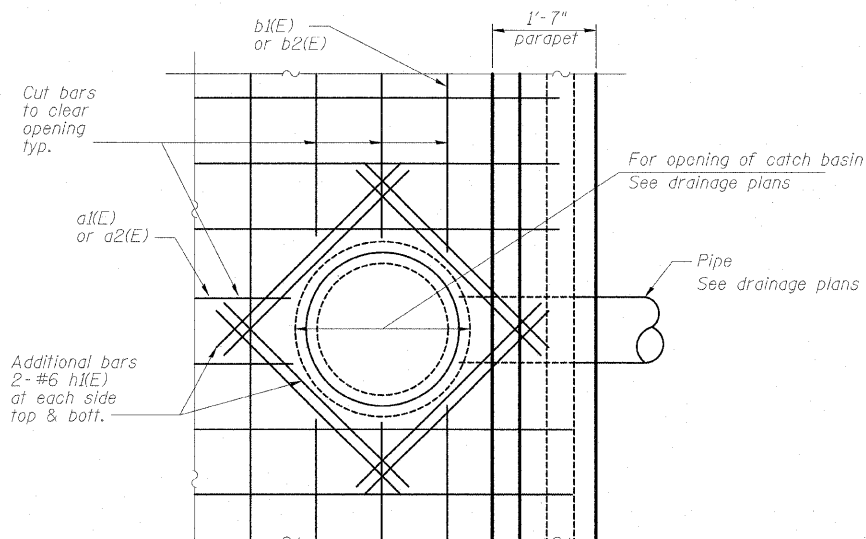
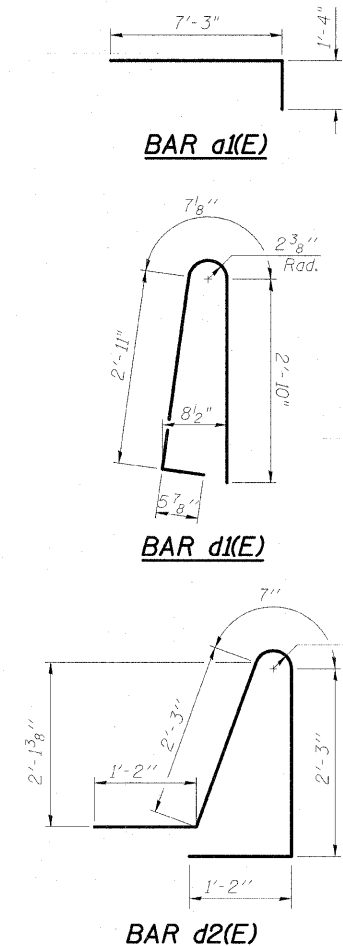
DETAIL "2"

SECTION THRU ANCHORAGE SLAB & PARAPET AT CATCH BASINS



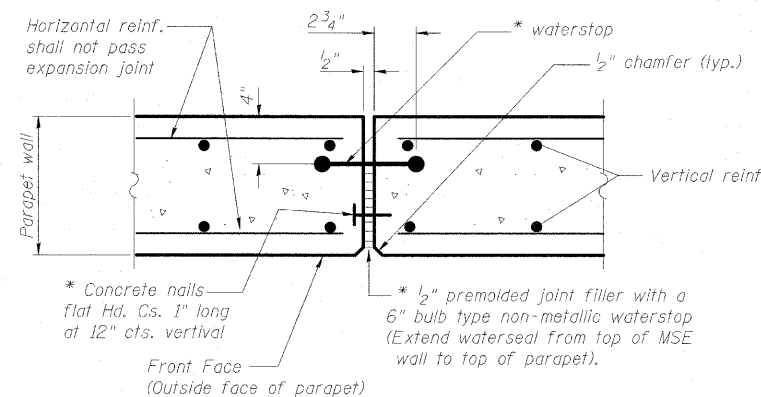
DETAIL "1"

SECTION THRU ANCHORAGE SLAB & PARAPET



SECTION F-F

DETAIL "3" PLAN AT DRAINAGE



EXPANSION JOINT DETAILS IN PARAPET

For expansion joints in anchorage slab, see Roadway Plans and Highway Standards. (STD 420001-07)
* Cost included with "Concrete Structures".

Note:

The parapet and anchorage slab are not part of this contract, therefore the wall system designer shall design the wall to meet all stability requirements without the parapet and anchorage slab in place.

Note:

Bars indicated thus 8x3-#5 indicates 8 lines of bars with 3 lengths per line.

Anchorage slab & parapet will be paid under item "Concrete Structures".

Note:

Slip forming of the parapet is not allowed.

Parapet and Anchorage Slab are not part of this Contract

SECTIONS AND DETAILS
STRUCTURE NO. 099-W028

DESIGNED	PMH
CHECKED	MJL
DRAWN	RJ
CHECKED	BKB

McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RW3-7 SHEETS RW3-12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	317
FED. ROAD DIST. NO. 1				ILLINOIS FED. AID PROJECT	
CONTRACT NO. 60C31					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOG RWS-03 Page 1 of 1

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 629.80 ft
North: 1723201.03 ft
East: 1022370.72 ft
Station: 2017+30.78
Offset: 30.83 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
529.4	5-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--		5										
529.4	Weathered bedrock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 1'-0"--	1.00	1		41								
528.8	Boring terminated at 1.00 ft	50/1"											

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling 12-15-2008	Complete Drilling 12-15-2008	While Drilling	Dry
Drilling Contractor Wang Testing Service	Drill Rig Diedrich D-50	At Completion of Drilling	Dry
Driller K & J	Logger F. Bozga	Time After Drilling	NA
Checked by H. Suhail		Depth to Water	NA
Drilling Method 3.25" IDA HSA; Boring backfilled with bentonite upon completion		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

BORING LOG RWS-04 Page 1 of 1

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 530.91 ft
North: 1723099.98 ft
East: 1022351.55 ft
Station: 2018+33.19
Offset: 21.31 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
530.2	8-inch thick, soft, black SILTY CLAY LOAM --TOPSOIL--		9										
530.2	Very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 2'-0"--	0.25	1	50/5"	35								
528.6	Boring terminated at 2.00 ft	50/0"	2										

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling 12-15-2008	Complete Drilling 12-15-2008	While Drilling	Dry
Drilling Contractor Wang Testing Service	Drill Rig Diedrich D-50	At Completion of Drilling	Dry
Driller K & J	Logger F. Bozga	Time After Drilling	NA
Checked by H. Suhail		Depth to Water	NA
Drilling Method 3.25" IDA HSA; Boring backfilled with bentonite upon completion		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

BORING LOG RWS-05 Page 1 of 1

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
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Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 530.13 ft
North: 1723055.39 ft
East: 1022331.85 ft
Station: 2018+80.95
Offset: 28.07 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
529.8	6-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--		6										
529.8	Loose to very dense, brown SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 2'-0"--	1.00	1		53								
528.1	Boring terminated at 2.00 ft	50/2"	3										

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling 12-15-2008	Complete Drilling 12-15-2008	While Drilling	Dry
Drilling Contractor Wang Testing Service	Drill Rig Diedrich D-50	At Completion of Drilling	Dry
Driller K & J	Logger F. Bozga	Time After Drilling	NA
Checked by H. Suhail		Depth to Water	NA
Drilling Method 3.25" IDA HSA; Boring backfilled with bentonite upon completion		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

DESIGNED	XXX
CHECKED	
DRAWN	AV/RJ
CHECKED	

McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SOIL BORING LOGS
STRUCTURE NO. 099-W028

SHEET NO. RW3-8 SHEETS RW3-12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	318
FED. ROAD DIST. NO. 1 ILLINOIS			CONTRACT NO. 60C31		
FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOG RWS-06 Page 1 of 1

Wang Engineering, Inc.
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

Client: **McDonough Associates, Inc.**
Project: **I-55 at Arsenal Road**
Location: **T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois**

Datum: NGVD
Elevation: 528.87 ft
North: 1722981.94 ft
East: 1022314.16 ft
Station: 2019+53.99
Offset: 29.53 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
523.5	4-inch thick, black SILTY CLAY LOAM --TOPSOIL--	1	4	1.00	37								
523.0	Very dense, weathered bedrock fragments --WEATHERED BEDROCK--												
522.0	--AUGER REFUSAL @ 6"--												
	Boring terminated at 0.50 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	▼	Dry	
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	▼	Dry	
Driller	K & J	Logger	F. Bozga	Time After Drilling	NA		
Checked by	H. Suhail			Depth to Water	▼	NA	
Drilling Method 3.25" IDA HSA; Boring backfilled with bentonite upon completion				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

BORING LOG RWS-07 Page 1 of 1

Wang Engineering, Inc.
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

Client: **McDonough Associates, Inc.**
Project: **I-55 at Arsenal Road**
Location: **T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois**

Datum: NGVD
Elevation: 528.61 ft
North: 1722908.43 ft
East: 1022306.56 ft
Station: 2020+25.44
Offset: 27.49 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
527.9	8-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	2											
527.0	Very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK--												
526.4	--AUGER REFUSAL @ 1' 6"--												
527.1	Fair, brown and gray, weathered DOLOSTONE --BEDROCK--												
	--RUN #1 (1.5' to 6.0')--												
	--REC=100%--												
	--RQD=75%--												
	Boring terminated at 6.00 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	▼	Dry	
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	▼	Dry	
Driller	K & J	Logger	F. Bozga	Time After Drilling	NA		
Checked by	H. Suhail			Depth to Water	▼	NA	
Drilling Method 3.25" IDA HSA; Boring backfilled with bentonite upon completion				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

BORING LOG RWS-08 Page 1 of 1

Wang Engineering, Inc.
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

Client: **McDonough Associates, Inc.**
Project: **I-55 at Arsenal Road**
Location: **T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois**

Datum: NGVD
Elevation: 529.59 ft
North: 1722834.35 ft
East: 1022302.99 ft
Station: 2020+97.26
Offset: 27.74 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
529.2	7-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	4											
528.9	Medium dense to very dense, brown SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK--												
528.6	--AUGER REFUSAL @ 3'--												
	Boring terminated at 3.00 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	▼	2.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	▼	2.00 ft	
Driller	K & J	Logger	F. Bozga	Time After Drilling	NA		
Checked by	H. Suhail			Depth to Water	▼	NA	
Drilling Method 3.25" IDA HSA; Boring backfilled with bentonite upon completion				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

DESIGNED	XXX
CHECKED	
DRAWN	AV/RJ
CHECKED	

SOIL BORING LOGS
STRUCTURE NO. 099-W028

McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RW3-9 SHEETS RW3-12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	319
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOG RWS-09 Page 1 of 1
 Wang Engineering, Inc. Consulting Geotechnical and Environmental Engineers
 wangeng@wangeng.com
 1145 Main Street
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 Telephone: 630 953-9928
 Fax: 630 953-9938
 WEI Job No.: 201-34-01
 Client: McDonough Associates, Inc.
 Project: I-55 at Arsenal Road
 Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois
 Datum: NGVD
 Elevation: 529.70 ft
 North: 1722757.10 ft
 East: 1022307.45 ft
 Station: 2021+72.20
 Offset: 26.61 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
529.6	9-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	0		4											
529.6	Medium dense to very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 3' 6" --	3.5		1	6	1.25	27								
529.2	Boring terminated at 3.50 ft	3.5		2	28	NP	12								
		50/3"													

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	2.00 ft		
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	2.00 ft		
Driller	K & J	Logger	F. Bozga	Time After Drilling	NA		
Checked by	H. Suhail	Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA		

BORING LOG RWS-10 Page 1 of 1
 Wang Engineering, Inc. Consulting Geotechnical and Environmental Engineers
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 Telephone: 630 953-9928
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 WEI Job No.: 201-34-01
 Client: McDonough Associates, Inc.
 Project: I-55 at Arsenal Road
 Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois
 Datum: NGVD
 Elevation: 529.05 ft
 North: 1722882.65 ft
 East: 1022316.54 ft
 Station: 2022+44.88
 Offset: 27.36 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
528.5	7-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	0		2											
528.5	Medium dense to very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 5' 8" --	5.5		1	4	1.00	47								
	Boring terminated at 5.50 ft	5.5		10											
		11		11											
		12		12											
		19		19	NP	10									
		26		26											
		44		44											
		38		38	NP	12									
		50/3"													

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	2.00 ft		
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	2.00 ft		
Driller	K & J	Logger	F. Bozga	Time After Drilling	NA		
Checked by	H. Suhail	Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA		

BORING LOG RWS-11 Page 1 of 1
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 WEI Job No.: 201-34-01
 Client: McDonough Associates, Inc.
 Project: I-55 at Arsenal Road
 Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois
 Datum: NGVD
 Elevation: 528.64 ft
 North: 1722610.05 ft
 East: 1022333.12 ft
 Station: 2023+17.04
 Offset: 26.89 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
527.6	12-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	0		2											
527.6	Very dense, brown SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 4' --	4		1	3	1.00	53								
524.6	Fair, brown and gray, weathered DOLOSTONE --BEDROCK-- --RUN #1 (4.0' to 9.0')-- --REC=93%-- --RQD=52%--	9.0		3											
519.8	Boring terminated at 9.00 ft	9.0		43											
		15		15	NP	21									
		50/3"													

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	2.00 ft		
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	2.00 ft		
Driller	K & J	Logger	F. Bozga	Time After Drilling	NA		
Checked by	H. Suhail	Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA		

DESIGNED	XXX
CHECKED	
DRAWN	AV/RJ
CHECKED	

McDonough Associates Inc.
 Engineers / Architects
 130 East Randolph Street
 Chicago, Illinois 60601
 (312) 946-8600

SHEET NO. RW3-10 SHEETS RW3-12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	320
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

SOIL BORING LOGS
STRUCTURE NO. 099-W028

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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BORING LOG RWS-12
WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 528.93 ft
North: 1722537.80 ft
East: 1022354.78 ft
Station: 2023+90.07
Offset: 27.94 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
527.7	15-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	5											
		5											
		1		1.75	34								
		7											
	Very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 4' 6" --	7											
		4											
		2			NP	33							
		90/4"											
		3			NP	18							
		50/1"											
524.4	Boring terminated at 4.50 ft	5											

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	▽	2.50 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	▽	2.50 ft	
Driller	K & J	Logger	F. Bozga	Checked by	H. Suhail		
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion			Time After Drilling	NA		
				Depth to Water	▽	NA	

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG RWS-13
WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 529.16 ft
North: 1722469.19 ft
East: 1022381.77 ft
Station: 2024+61.39
Offset: 29.18 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
528.3	10-inch thick, black SILTY LOAM --TOPSOIL--	4											
		5											
	Medium dense to very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 4' --	1			NP	41							
		6											
		12											
		6											
		2			NP	16							
		30											
		50/2"											
525.2	Boring terminated at 4.00 ft	5											

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	▽	Dry	
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	▽	Dry	
Driller	K & J	Logger	F. Bozga	Checked by	H. Suhail		
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion			Time After Drilling	NA		
				Depth to Water	▽	NA	

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG RWS-14
WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 529.28 ft
North: 1722402.34 ft
East: 1022416.38 ft
Station: 2025+34.14
Offset: 29.19 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
528.7	7-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	2											
		3											
	Medium dense to very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 3' 6" --	1			1.00	31							
		4											
		11											
		7			NP	28							
		50/2"											
525.5	Boring terminated at 3.50 ft	5											

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008	While Drilling	▽	2.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50	At Completion of Drilling	▽	2.00 ft	
Driller	K & J	Logger	F. Bozga	Checked by	H. Suhail		
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion			Time After Drilling	NA		
				Depth to Water	▽	NA	

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	XXX
CHECKED	
DRAWN	AV/RJ
CHECKED	

McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RW3-11 SHEETS RW3-12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	321
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

SOIL BORING LOGS
STRUCTURE NO. 099-W028

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOG RWS-15 Page 1 of 1

Wang Engineering, Inc.
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WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 529.44 ft
North: 1722340.36 ft
East: 1022458.25 ft
Station: 2026+06.49
Offset: 26.99 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
529.3	14-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	0-4	4				529.3	7-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	0-6	6			
528.3	Very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 4'--	4-12	1	1.25 P	26		528.8	Medium dense to very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 3' 6"--	6-8	1	NP	36	
528.4	Boring terminated at 4.00 ft	12-50/3"	2	NP	23		528.8	Good, brown and gray, weathered DOLOSTONE --BEDROCK-- --RUN #1 (3.5' to 8.5')-- --REC=85%-- --RQD=88%--	8-50/3"	2	NP		

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50
Driller	K & J	Logger	F. Bozga
Checked by	H. Suhail	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA

BORING LOG RWS-16 Page 1 of 1

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WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 529.28 ft
North: 1722283.89 ft
East: 1022507.56 ft
Station: 2026+79.19
Offset: 22.03 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
528.7	7-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL--	0-6	6				528.8	Medium dense to very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 3' 6"--	0-6	6			
528.8	Good, brown and gray, weathered DOLOSTONE --BEDROCK-- --RUN #1 (3.5' to 8.5')-- --REC=85%-- --RQD=88%--	6-50/3"	1	NP	36		528.8	Boring terminated at 8.50 ft	6-8	1	NP	36	
		8-50/3"	2	NP					8-50/3"	2	NP		

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-12-2008	Complete Drilling	12-12-2008
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50
Driller	K & J	Logger	F. Bozga
Checked by	H. Suhail	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA

BORING LOG RWS-17 Page 1 of 1

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WEI Job No.: 201-34-01
Client: McDonough Associates, Inc.
Project: I-55 at Arsenal Road
Location: T34, R9E, Sec. 21, 22, 28, 27, Will Co., Illinois

Datum: NGVD
Elevation: 529.88 ft
North: 1722225.03 ft
East: 1022553.38 ft
Station: 2027+51.42
Offset: 27.77 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
528.9	12-inch thick, black SILTY CLAY LOAM --TOPSOIL--	0-22	22				528.9	12-inch thick, black SILTY CLAY LOAM --TOPSOIL--	0-22	22			
528.9	Very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 3'--	22-29	1	1.75 P	29		528.9	Very dense, brown, medium SANDY LOAM and weathered dolostone rock fragments --WEATHERED BEDROCK-- --AUGER REFUSAL @ 3'--	22-29	1	1.75 P	29	
	Boring terminated at 3.00 ft	29-50/3"	2	NP	16			Boring terminated at 3.00 ft	29-50/3"	2	NP	16	

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-17-2008	Complete Drilling	12-17-2008
Drilling Contractor	Wang Testing Service	Drill Rig	Diedrich D-50
Driller	K & J	Logger	F. Bozga
Checked by	E. Datz	Time After Drilling	NA
Drilling Method	3.25" IDA HSA; Boring backfilled with bentonite upon completion	Depth to Water	NA

DESIGNED	XXX
CHECKED	
DRAWN	AV/RJ
CHECKED	

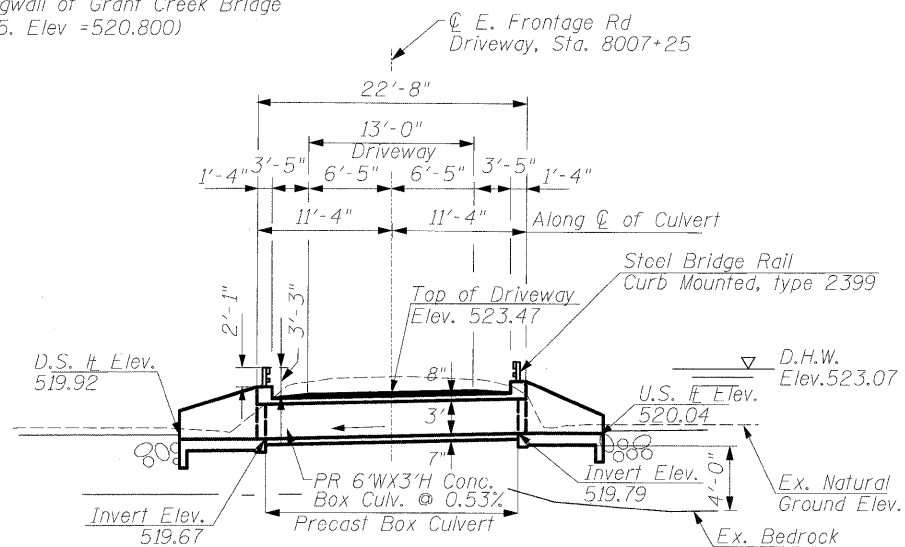
McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. RW3-12 SHEETS RW3-12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) AC-3	WILL	524	322
CONTRACT NO. 60C31					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

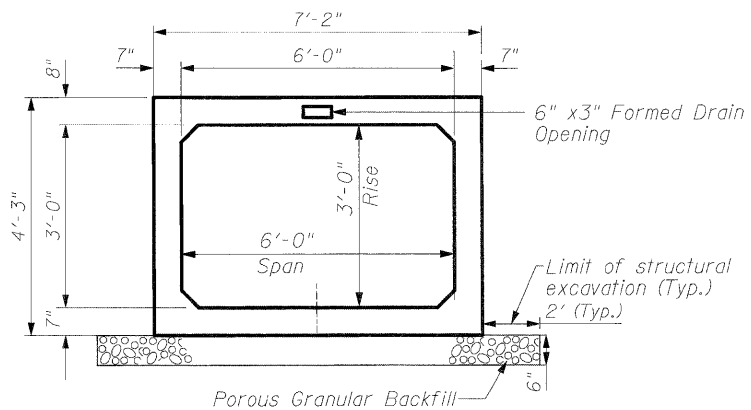
SOIL BORING LOGS
STRUCTURE NO. 099-W028

Bench Mark: BM 1
 (Box Cut at top of SE Wingwall of Grant Creek Bridge
 on E. Frontage Rd of I-55. Elev =520.800)
 Existing Structures: None

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



LONGITUDINAL SECTION
 N.T.S.



SECTION THRU BARREL
 N.T.S.

DESIGN SPECIFICATIONS
 AASHTO 2002

LOADING HS-20-44

Allow 50 lbs/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

Cast-In-Place Units

$f'_c = 3,500$ psi (Concrete)

$f_y = 60,000$ psi (Reinforcement)

Precast Units

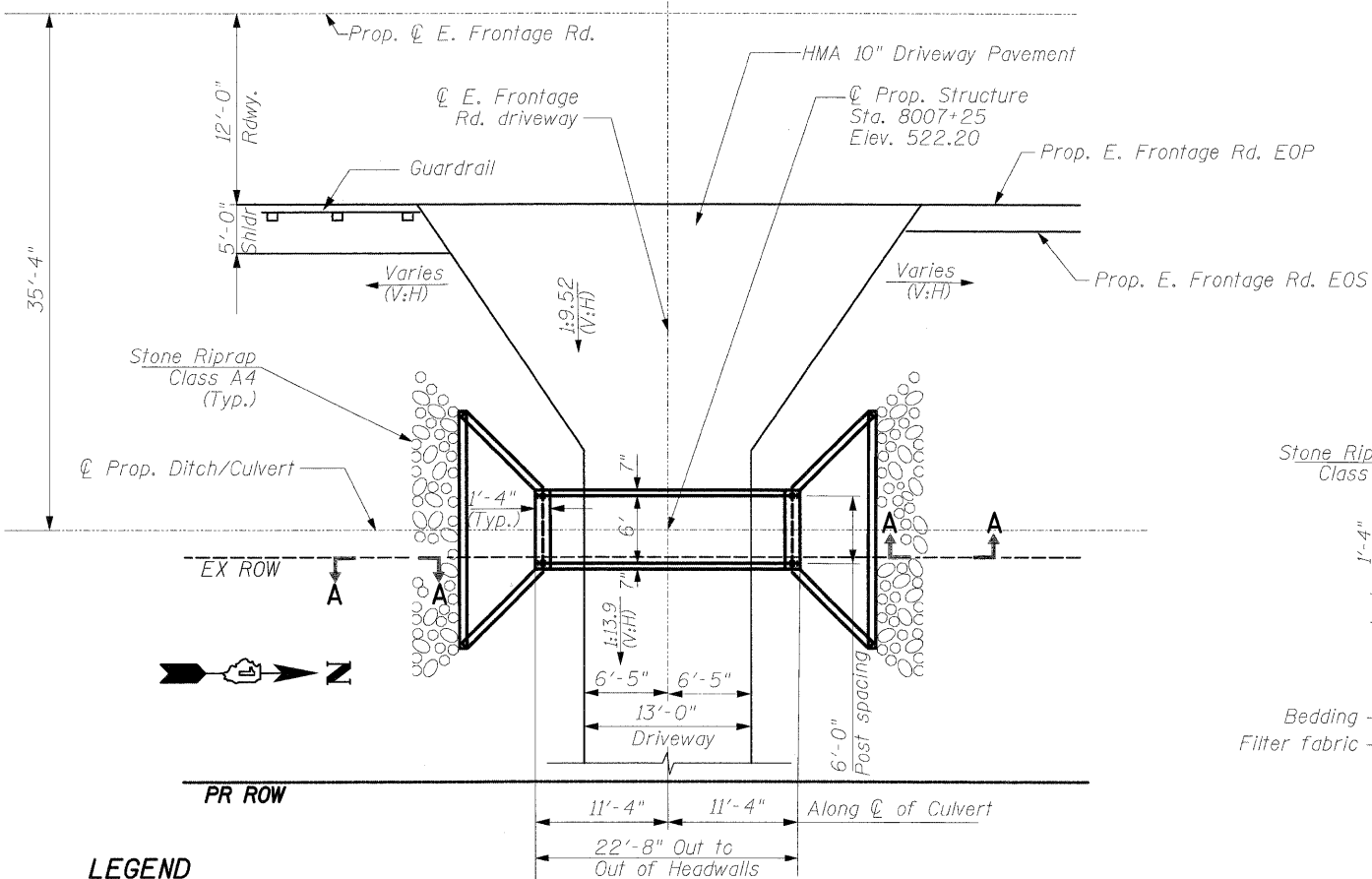
$f'_c = 5,000$ psi (Concrete)

$f_y = 65,000$ psi (Welded Wire Fabric)

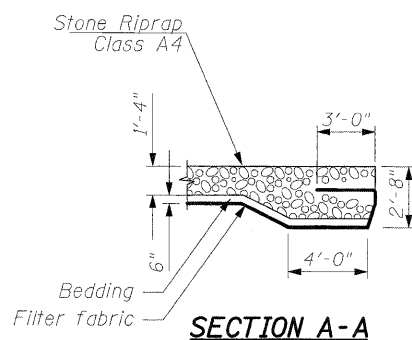
SEISMIC DATA

Seismic Performance Zone (SPC) = A
 Bedrock Acceleration Coeff.(A) = 0.04g
 Site Coefficient (S) = 1.0

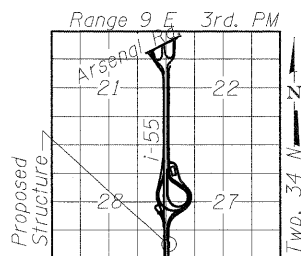
RBN-02



PLAN
 N.T.S.



SECTION A-A



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 0.177 sq. mi. Low Grade Elev. 525.16 @ Sta. 8007+25 E. Frontage Rd.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft.		Nat. H.W.E.	Head -Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	91	N/A	9.7	521.91	N/A	1.16	N/A	523.07
Base	100	114	N/A	10.9	522.20	N/A	1.32	N/A	523.52
Overtopping									

**GENERAL PLAN & ELEVATION
 EAST FRONTAGE ROAD DRIVEWAY
 OVER UNNAMED DITCH
 F.A.I. ROUTE 55 - SEC. (99-1&2)AC-3
 WILL COUNTY
 STATION 8007+25
 STRUCTURE NO. 099-3034**

LEGEND

Soil Boring Location

DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

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 CONSULTING ENGINEERS
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 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2)AC-3	WILL	524	323
SHEETS	Sta. 8007+25 (E. Frontage Rd.)		CONTRACT NO. 60C31		
	FED. RD. DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES:

1. All work on these sheets are to be performed in accordance with Articles 503, 540 and 543 of the Standard Specifications. See next sheet for the "Concrete End Sections" details.
2. This box culvert has no fill height. Precast concrete box culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M273 (ASTM C 850), except that the aggregate shall conform to the requirements of Article 1003.02 of the Standard Specifications.
3. The Contractor shall determine whether culvert can be installed in two (2) or three (3) phases (Staging shown here is suggested only) and order sections' lengths as required. Joints to be sealed in accordance with Article 540.06 of the Standard Specifications.
4. For backfilling of embankment, see Article 207 thru 209 of the Standard Specifications.
5. Lifting holes shall be filled with concrete plugs and mastic, after box sections are in place.
6. Reinforcement and Concrete Quantities are provided for information only.

TOTAL BILL OF MATERIAL

Pay Item	Unit	Total
Cast-in-Place Reinforced Concrete End Sections	Each	2
Precast Concrete Box Culvert, 6'X3'	Foot	23
Steel Railing, Type 2399	Foot	20
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	5

BILL OF MATERIAL

Bar	No	Size	Length	Shape
b1	4	No. 5	8'-0"	—
b2	2	No. 4	11'-0"	—
b3	4	No. 4	14'-0"	—
b4	4	No. 4	16'-8"	—
b5	28	No. 4	5'-0"	—
b6	4	No. 4	6'-3"	—
d	24	No. 4	4'-3"	└┘
h1	6	No. 5	21'-0"	∧
h2	8	No. 5	6'-6"	—
v	4	No. 5	7'-1"	└┘
v1	4	No. 5	7'-1"	└┘
v2	4	No. 5	6'-9"	└┘
v3	4	No. 5	6'-6"	└┘
v4	4	No. 5	6'-2"	└┘
v5	4	No. 5	5'-11"	└┘
v6	4	No. 5	5'-8"	└┘
v7	4	No. 5	5'-4"	└┘
v8	4	No. 4	3'-1"	└┘

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DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

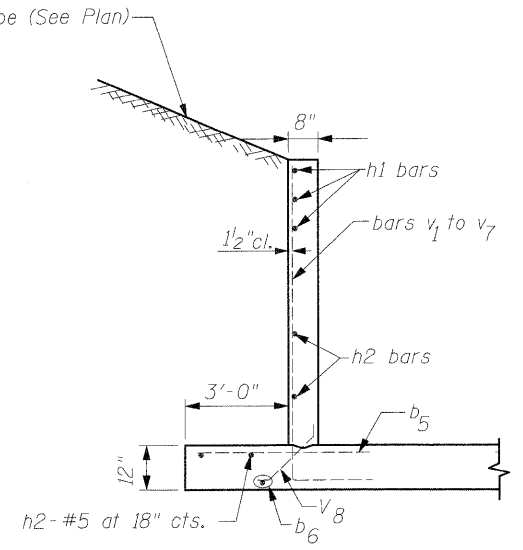
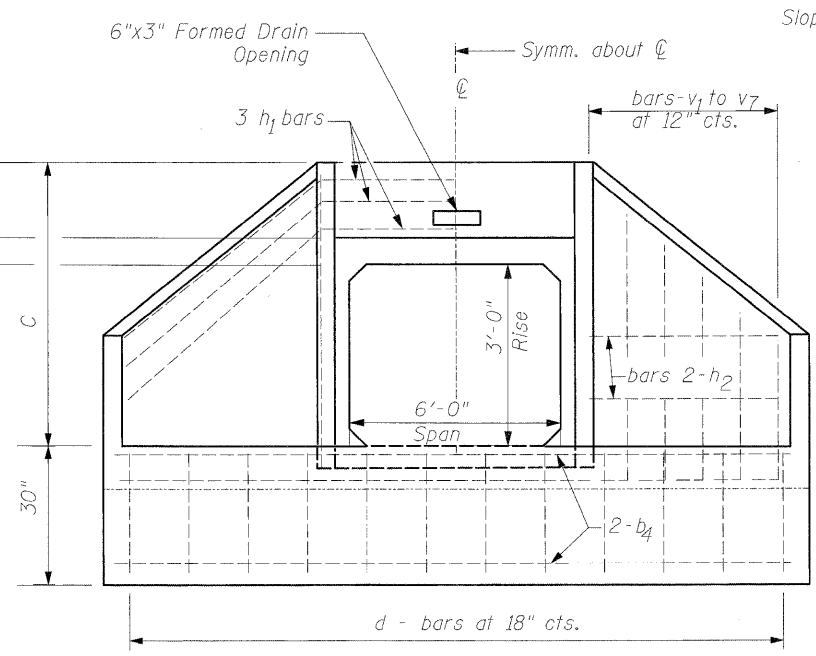
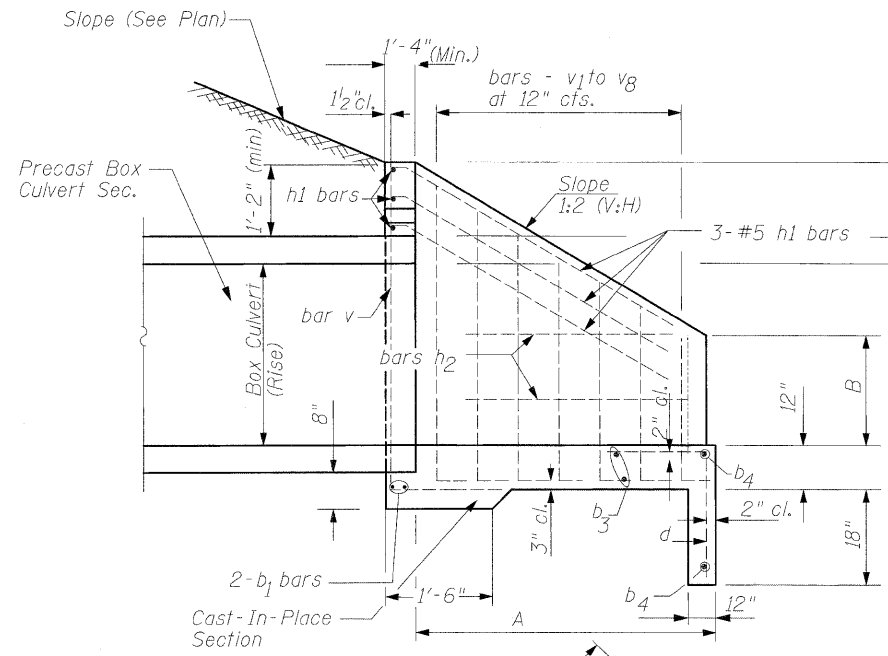
SINGH <small>SINGH & ASSOCIATES, INC. CONSULTING ENGINEERS</small>	<small>300 W. ADAMS ST. CHICAGO, IL 60606 TEL: (312) 629-0240 FAX: (312) 629-8449</small>	SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		SHEETS	55	(99-1&2)AC-3	WILL	524	324
		Sta. 8007+25 (E. Frontage Rd.)		CONTRACT NO. 60C31		FED. RD. DIST. NO. 1 ILLINOIS FED. AID PROJECT	

FINAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**BARS IN ONE
END SECTION**

Bars	No.
d	12
b ₁	2
b ₂	1
b ₃	2
b ₄	2
b ₅	14
b ₆	2
h ₁	3
h ₂	4
v	2
v ₁	2
v ₂	2
v ₃	2
v ₄	2
v ₅	2
v ₆	2
v ₇	2
v ₈	14



SECTION B-B

SECTION A-A

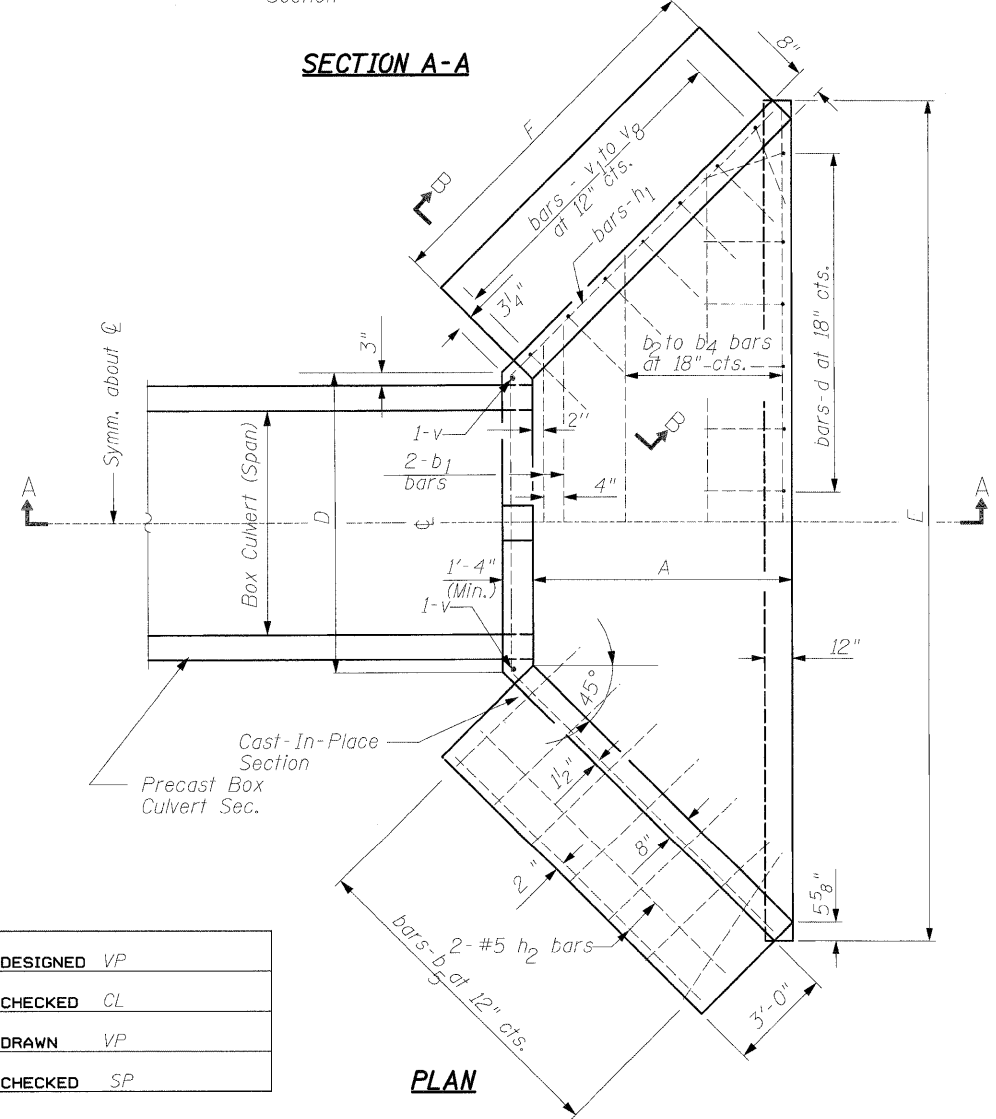
END ELEVATION

DIMENSIONS OF STRAIGHT BARS

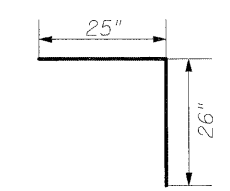
Bar	Size	Length
b ₁	No. 5	8'-0"
b ₂	No. 4	11'-0"
b ₃	No. 4	14'-0"
b ₄	No. 4	16'-8"
b ₅	No. 4	5'-0"
b ₆	No. 4	6'-3"
h ₂	No. 5	6'-6"

DIMENSIONS OF BENT BARS

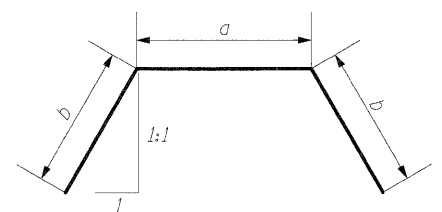
No. 5 - bars h ₁			
BARS	a	b	Total Length
h ₁	7'-8"	6'-8"	21'-0"
No. 5 - bars v to v ₇			
BARS	c	Total Length	
v	5'-1"	7'-1"	
v ₁	5'-1"	7'-1"	
v ₂	4'-9"	6'-9"	
v ₃	4'-6"	6'-6"	
v ₄	4'-2"	6'-2"	
v ₅	3'-11"	5'-11"	
v ₆	3'-8"	5'-8"	
v ₇	3'-4"	5'-4"	



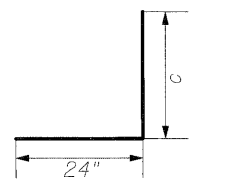
PLAN



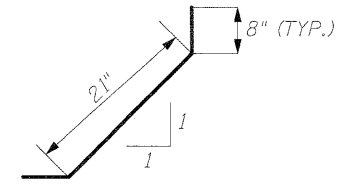
No. 4 BAR-d



BARS-h₁
Bend in field



BARS - v to v₇



BARS-v₈

DIMENSIONS AND QUANTITIES

Box Culvert	Slope of Wing Walls	Dimensions						Concrete for two (2) End Sections (Cu. Yd.)	Reinf. Bars for two (2) End Sections (Lbs.)	
		Rise	Span	A	B	C	D			E
36"	72"	1:2	4'-7"	34 1/2"	4'-9"	8'-0"	17'-2"	6'-9"	15	765

NOTE:
1. Cast-In-Place Reinforced Concrete End Sections shall be constructed of Class SI concrete as per Article 503.

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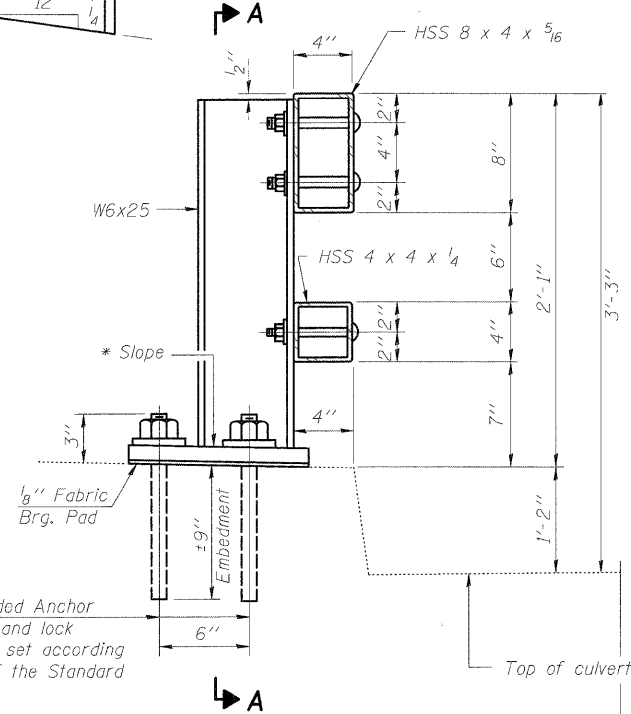
SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	325
Sta. 8007+25 (E. Frontage Rd.)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1		ILLINOIS FED. AID PROJECT		

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FINAL SB-03

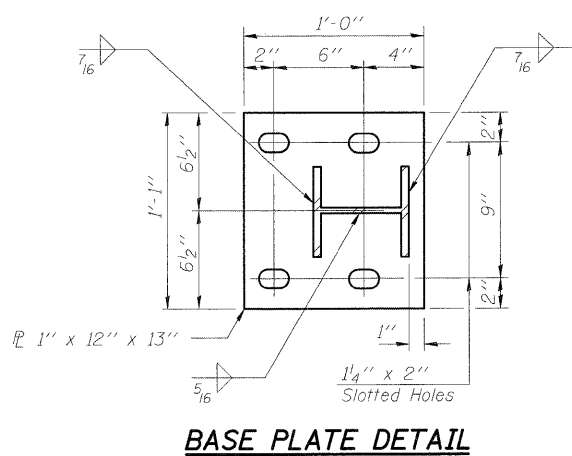
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DEPARTMENT OF TRANSPORTATION

* Cut bottom end of post to curb slope.

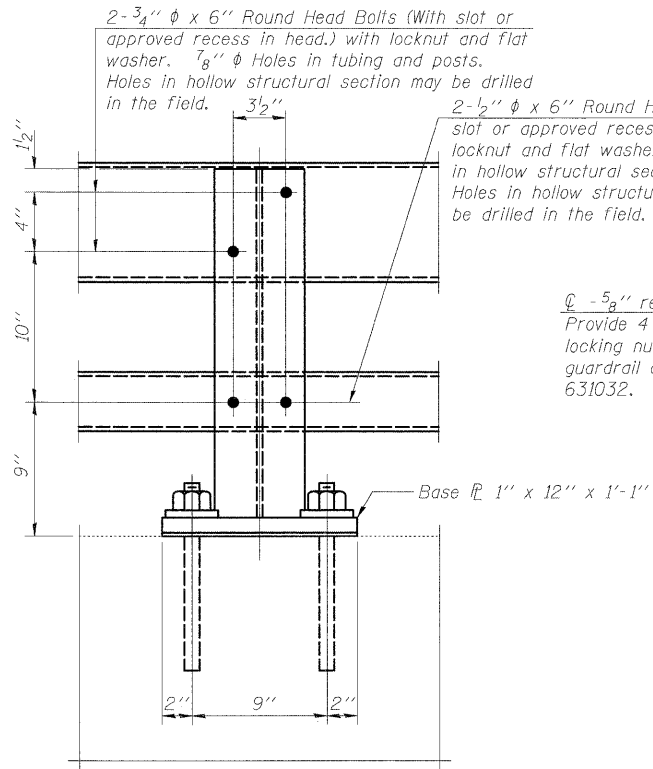


4- 1" ϕ H.S. Threaded Anchor Rods with hex nuts and lock washers, drilled and set according to Article 509.06 of the Standard Specifications.

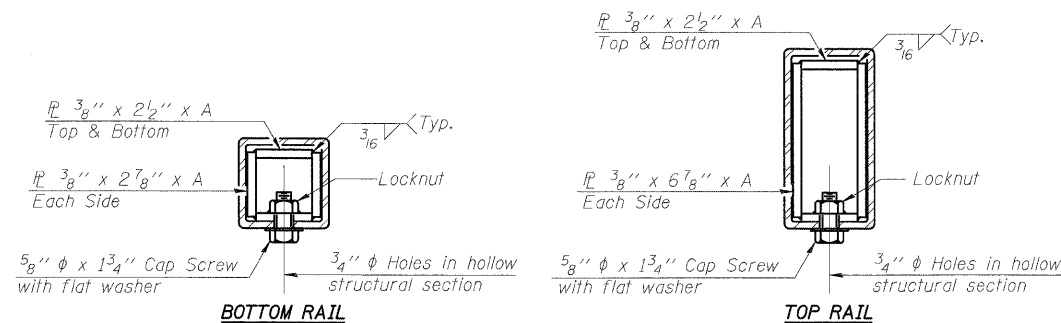
SECTION AT RAIL POST



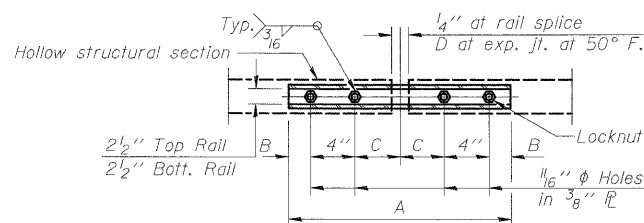
BASE PLATE DETAIL



SECTION A-A

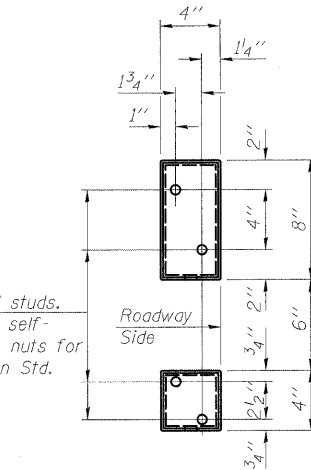
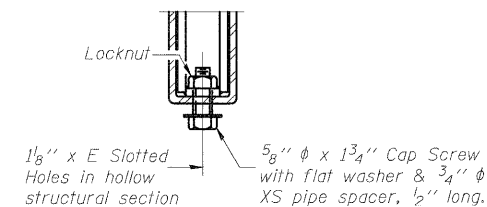


SECTIONS AT RAIL SPLICE

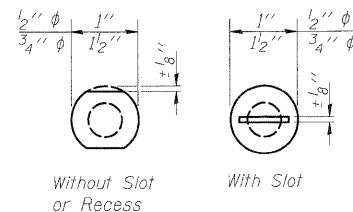


PLAN-BOTT. SPLICE TYPICAL

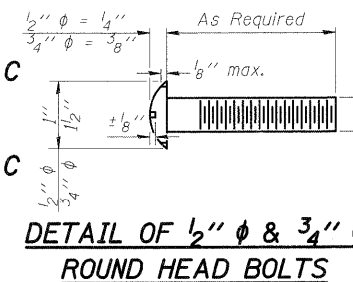
RAIL SPLICE CONNECTION AT EXPANSION JT.



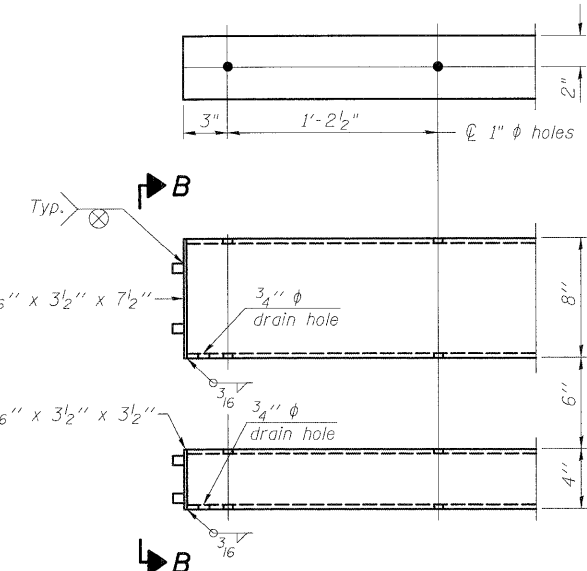
VIEW B-B



VIEW C-C



DETAIL OF 1/2" ϕ & 3/4" ϕ ROUND HEAD BOLTS



END OF RAIL DETAILS

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow ralling movement.
Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	20

STEEL RAILING, TYPE 2399
STRUCTURE NO. 099-3034

DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

R-31 10-1-08 (6'-3" Maximum Post Spacing)

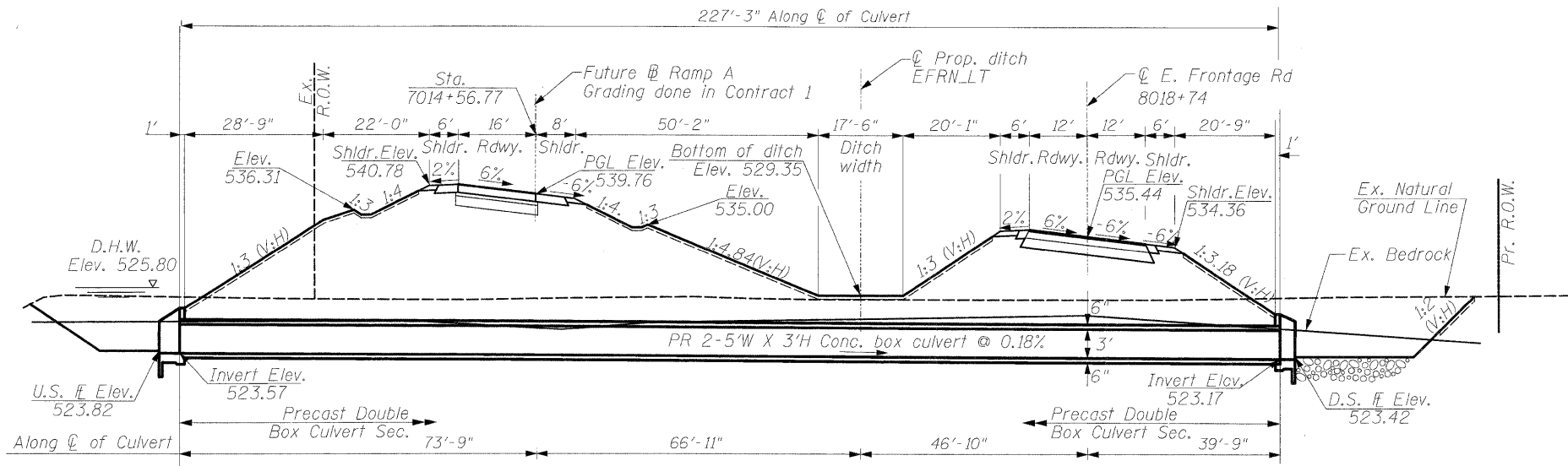
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CHICAGO, IL 60606
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FAX: (312) 629-8449

SHEET NO.
SHEETS

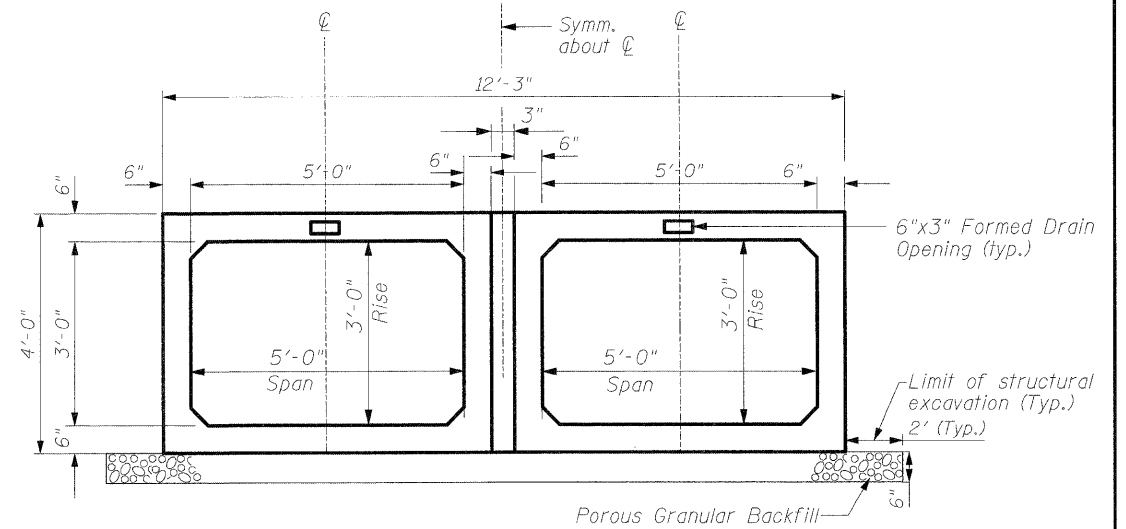
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	326
Sta. 8007+25 (E. Frontage Rd.)			CONTRACT NO. 60C31	
FED. RD. DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

Bench Mark: BM 7
 (RR spike in E. side of power pole +6.5' tall at the South Edge
 of a pond on the E. side of E. Frontage Rd. between CPT'S 214 & 215. Elev.=556.123
 Existing Structures: None.

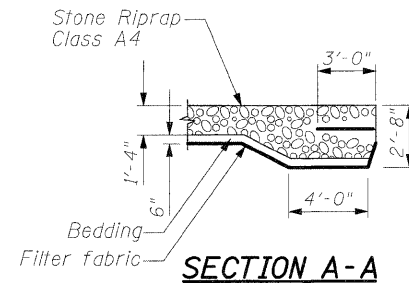
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



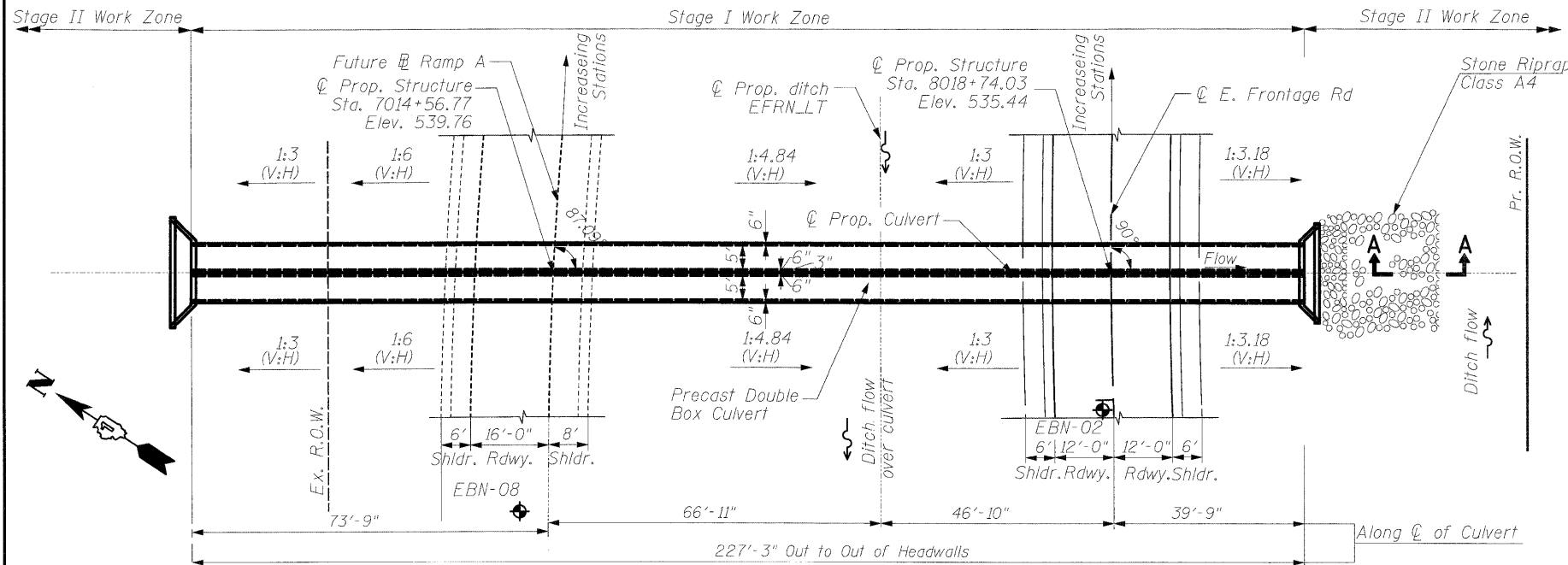
LONGITUDINAL SECTION
 N.T.S.



SECTION THRU BARREL
 N.T.S.



SECTION A-A



PLAN
 N.T.S.

CURVE DATA

P.I. Station 8015+77.77
 Delta = 36° 00' 38.32" (RT)
 Degree = 5° 21' 17.08"
 Tangent = 347.7740'
 Length = 672.4996'
 Radius = 1,070.00'
 External = 55.0985'
 Long Chord = 661.4854'
 Mid. Ord. = 52.4002'
 P.C. Station 8012+30.00
 P.T. Station 8019+02.50

CURVE DATA

P.I. Station 7015+25.31
 Delta = 61° 20' 36.44" (RT)
 Degree = 6° 51' 42.37"
 Tangent = 495.2296'
 Length = 893.9888'
 Radius = 835.00'
 External = 135.8127'
 Long Chord = 851.8980'
 Mid. Ord. = 116.8131'
 P.C. Station 7010+30.08
 P.T. Station 7019+24.07

DESIGN SPECIFICATIONS

AASHTO 2002

LOADING HS-20-44

Allow 50 lbs/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

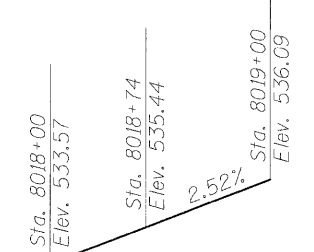
Cast-In-Place Units
 $f'_c = 3,500$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)

Precast Units

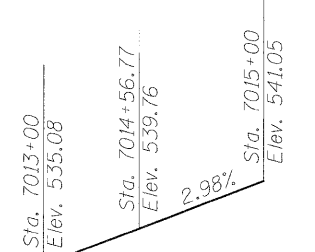
$f'_c = 5,000$ psi (Concrete)
 $f_y = 65,000$ psi (Welded Wire Fabric)

SEISMIC DATA

Seismic Performance Zone (SPC) = A
 Bedrock Acceleration Coeff.(A) = 0.04g
 Site Coefficient (S) = 1.0



PROFILE GRADE
 (Along E. Frontage Rd.)



PROFILE GRADE
 (Along Ramp A)

GENERAL PLAN & ELEVATION-RAMP A
 OVER UNNAMED DITCH
 F.A.I. ROUTE 55 - SEC. (99-1&2)AC-3
 WILL COUNTY
 STATION 7014+56.77
 STRUCTURE NO. 099-0523

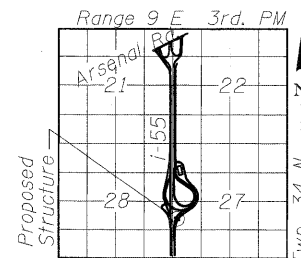
LEGEND

◆ - Soil Boring Location

WATERWAY INFORMATION

Drainage Area = 0.168 sq. mi. Low Grade Elev. 534.36 @ Sta. 8018+74 E. Frontage Rd.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft.		Nat. H.W.E.	Head - Ft.			Headwater El.
			Exist.	Prop.		Exist.	Prop.	Exist.	
Design	50	83	N/A	16.3	524.63	N/A	1.17	N/A	525.80
Base	100	109	N/A	19.6	524.94	N/A	1.3	N/A	526.24
Overtopping		405							



LOCATION SKETCH

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 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

SHEET NO.
 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	327
Sta. 8018+74 (E. Frontage Rd.)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES:

1. All work on these sheets are to be performed in accordance with Articles 503, 540 and 543 of the Standard Specifications. See next sheet for the "Concrete End Sections" details.
2. This box culvert has an approximate fill height of 11.0-ft. The precast concrete box culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M259 (ASTM C 789), except that the aggregate shall conform to the requirements of Article 1003.02 of the Standard Specifications.
3. The Contractor shall determine whether culvert can be installed in two (2) or three (3) phases (Staging shown here is suggested only) and order sections' lengths as required. Joints to be sealed in accordance with Article 540.06 of the Standard Specifications.
4. For backfilling of embankment, see Article 207 thru 209 of the Standard Specifications.
5. 3-inch void between individual precast box culverts is to be filled with Class SI concrete in accordance with Article 540.06 of the Standard Specifications, no additional payment will be made for the Class SI concrete. The cost of the Class SI concrete is included with the unit price bid for "Precast Concrete Box Culvert 5-ft by 3-ft" size as indicated.
6. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
7. Reinforcement and Concrete Quantities are provided for information only.

TOTAL BILL OF MATERIAL

Pay Item	Unit	Total
Cast-in-Place Reinforced Concrete End Sections	Each	2
Precast Concrete Box Culvert, 5'X3'	Foot	455
Rock Excavation For Structures	Cu.Yd.	412
Removal and Disposal of Unsuitable Material for Structures	Cu.Yd.	77

BILL OF MATERIAL

Bar	No	Size	Length	Shape
b ₁	4	No. 5	12'-9"	—
b ₂	2	No. 4	15'-9"	—
b ₃	4	No. 4	18'-9"	—
b ₄	4	No. 4	21'-9"	—
b ₅	28	No. 4	5'-0"	—
b ₆	4	No. 4	6'-3"	—
d	32	No. 4	4'-3"	└
h ₁	6	No. 5	25'-9"	∩
h ₂	8	No. 5	6'-6"	—
v	8	No. 5	7'-1"	└
v ₁	4	No. 5	7'-1"	└
v ₂	4	No. 5	6'-9"	└
v ₃	4	No. 5	6'-6"	└
v ₄	4	No. 5	6'-2"	└
v ₅	4	No. 5	5'-11"	└
v ₆	4	No. 5	5'-8"	└
v ₇	4	No. 5	5'-4"	└
v ₈	28	No. 4	3'-1"	└

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DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

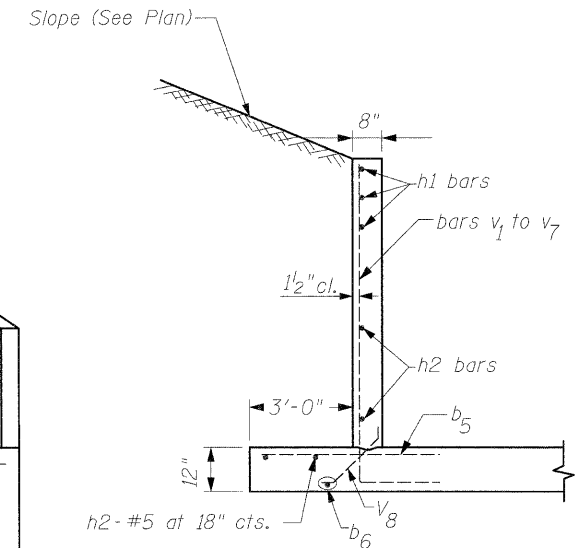
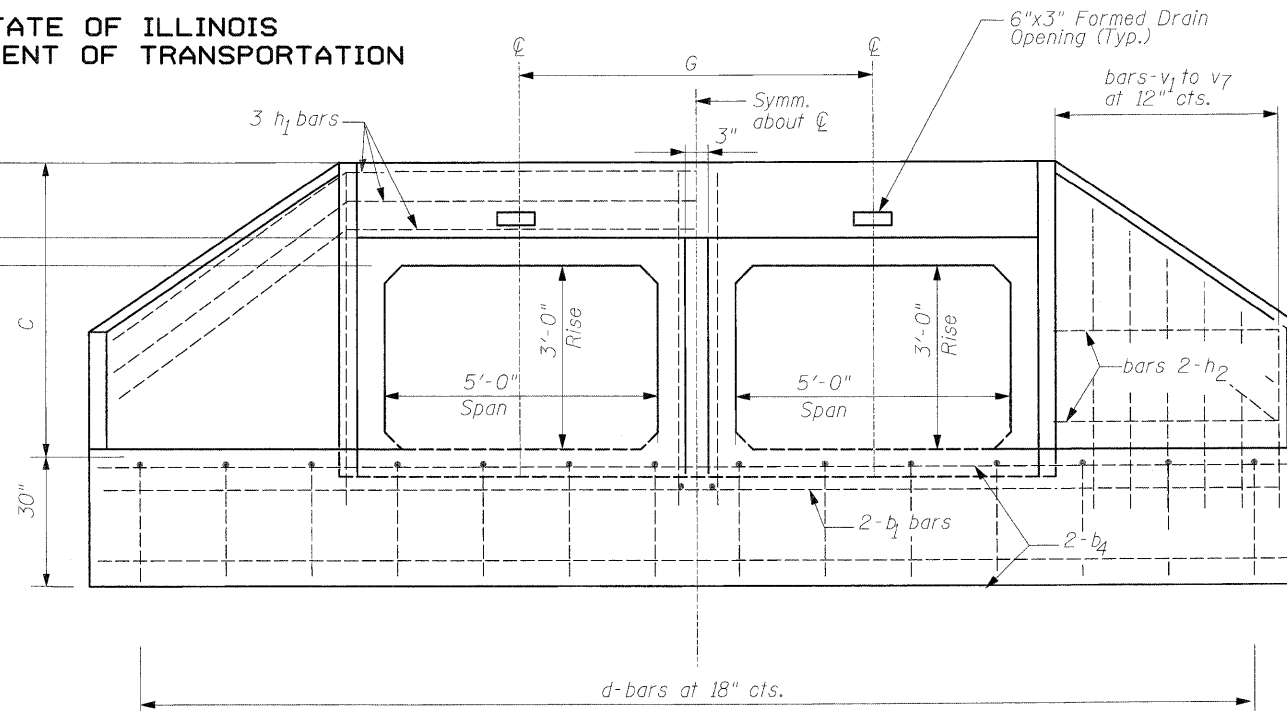
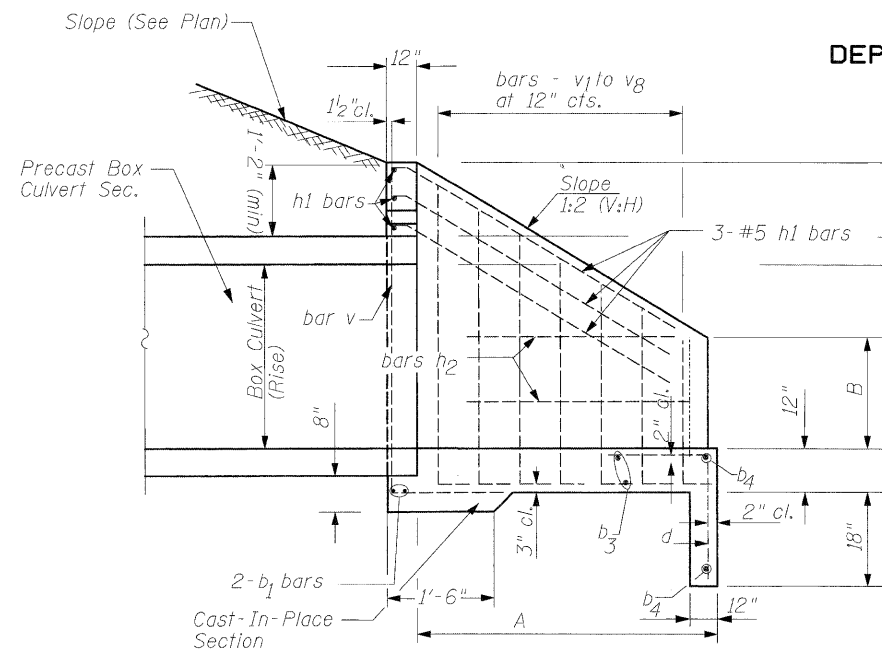
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SHEET NO.
SHEETS

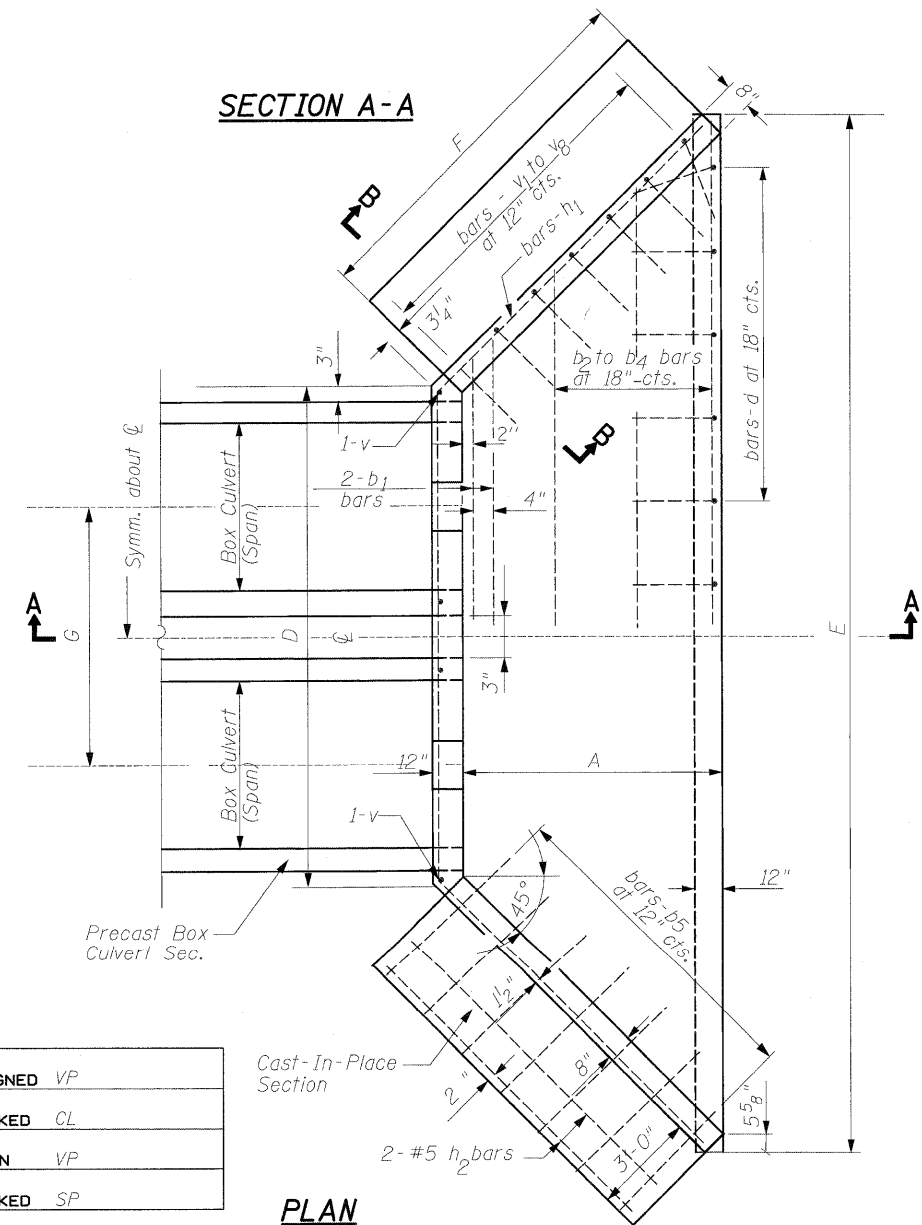
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	328
Sta. 8018+74 (E. Frontage Rd.)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



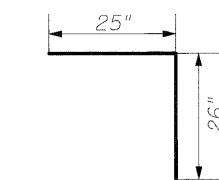
SECTION B-B

SECTION A-A

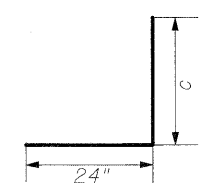


PLAN

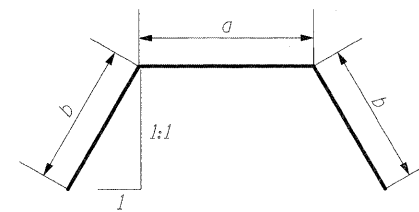
END ELEVATION



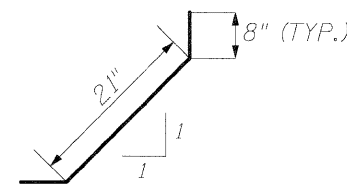
No. 4 BAR-d



BARS - v1 to v7



BARS-h1
Bend in field



BARS-v8

BARS IN ONE END SECTION

Box Culvert 5'x3'	Bars	No.
d	16	
b1	2	
b2	1	
b3	2	
b4	2	
b5	14	
b6	2	
h1	3	
h2	4	
v	4	
v1	2	
v2	2	
v3	2	
v4	2	
v5	2	
v6	2	
v7	2	
v8	14	

DIMENSIONS OF STRAIGHT BARS

Bar	Size	Length
b1	No. 5	12'-9"
b2	No. 4	15'-9"
b3	No. 4	18'-9"
b4	No. 4	21'-9"
b5	No. 4	5'-0"
b6	No. 4	6'-3"
h2	No. 5	9'-8"

DIMENSIONS OF BENT BARS

No. 5 - bars h1			
BARS	a	b	Total Length
h1	12'-5"	6'-8"	25'-9"
No. 5 - bars v to v7			
BARS	c	Total Length	
v	5'-1"	7'-1"	
v1	5'-1"	7'-1"	
v2	4'-9"	6'-9"	
v3	4'-6"	6'-6"	
v4	4'-2"	6'-2"	
v5	3'-11"	5'-11"	
v6	3'-8"	5'-8"	
v7	3'-4"	5'-4"	

DIMENSIONS AND QUANTITIES

Box Culvert	Slope of Wing Walls	Dimensions							Concrete for two (2) End Sections (Cu. Yd.)	Reinf. Bars for two (2) End Sections (Lbs.)	
		Rise	Span	A	B	C	D	E			F
36"	60"	1:2	4'-7"	34 1/2"	4'-9"	12'-9"	21'-11"	6'-9"	6'-3"	36	885

NOTE:

1. Cast-In-Place Reinforced Concrete End Sections shall be constructed of Class SI concrete as per Article 503.

SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS
300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

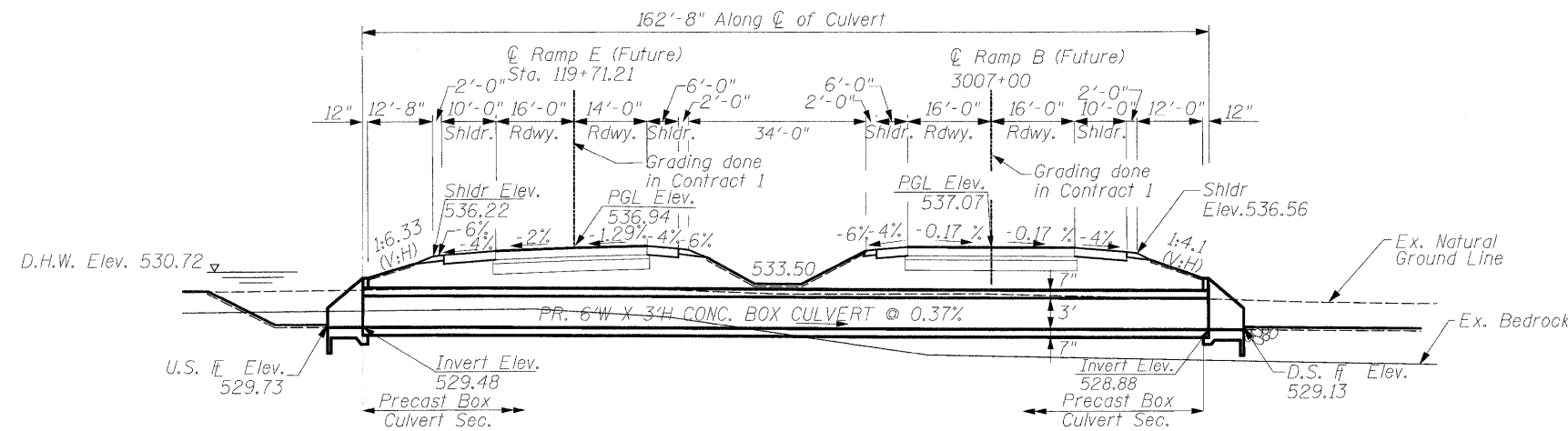
SHEET NO.
SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	329
Sta. 8018+74 (E. Frontage Rd.)			CONTRACT NO. 60C31	
FED. RD. DIST. NO. 1			ILLINOIS FED. AID PROJECT	

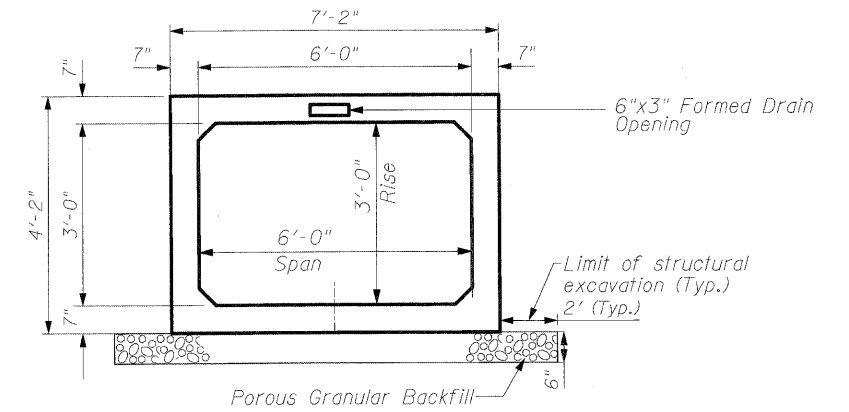
12/11/2009 10:19:15 PM \$FILE\$

Bench Mark: BM 9
 Box Cut on S. corner of traffic handhole foundation at the SE corner
 of Arsenal Road and E. Frontage Road. Elev.= 545.485
 Existing Structures: None

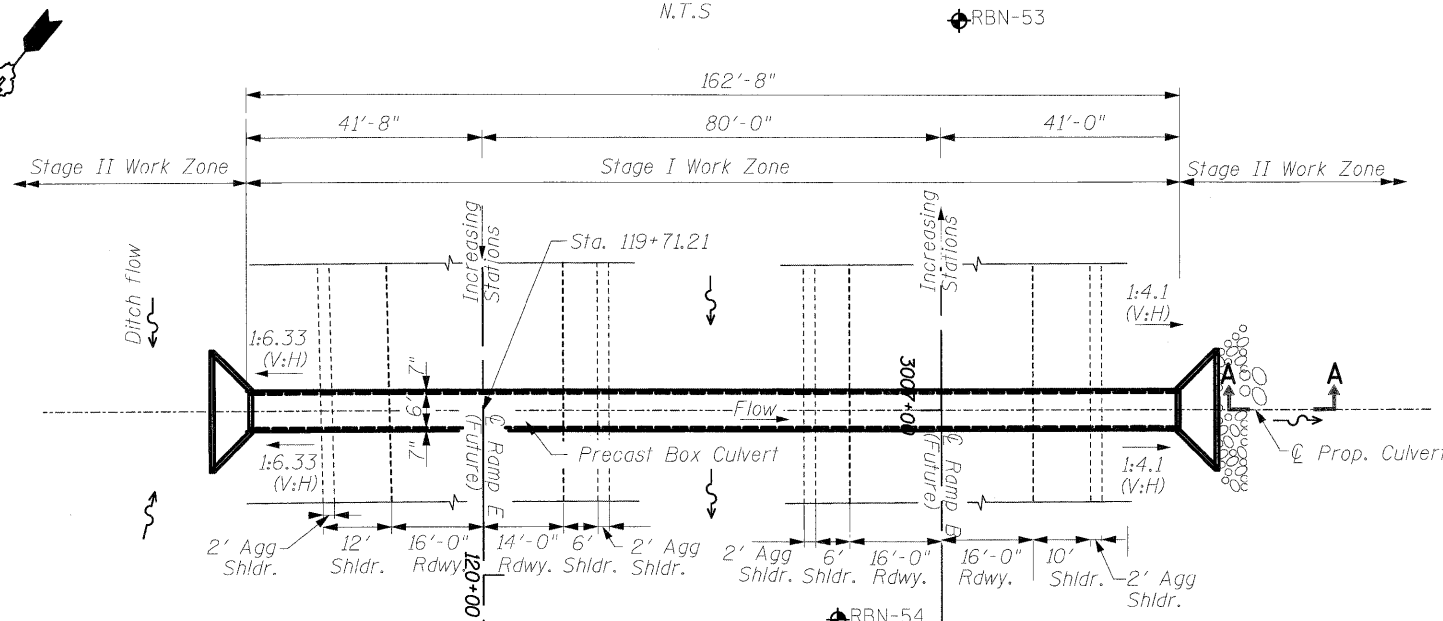
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



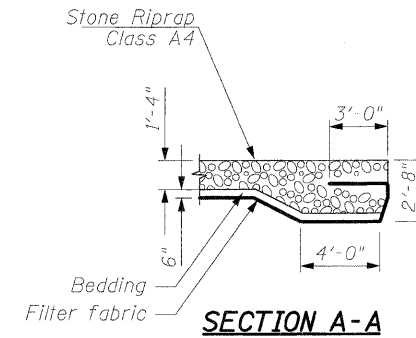
LONGITUDINAL SECTION
 N.T.S.



SECTION THRU BARREL
 N.T.S.



PLAN
 N.T.S.



SECTION A-A

DESIGN SPECIFICATIONS

AASHTO 2002

LOADING HS-20-44

Allow 50 lbs/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

Cast-In-Place Units

$f'_c = 3,500$ psi (Concrete)

$f_y = 60,000$ psi (Reinforcement)

Precast Units

$f'_c = 5,000$ psi (Concrete)

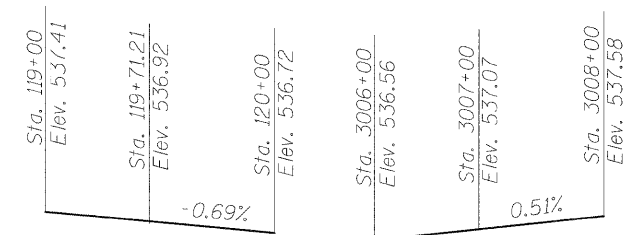
$f_y = 65,000$ psi (Welded Wire Fabric)

SEISMIC DATA

Seismic Performance Zone (SPC) = A

Bedrock Acceleration Coeff.(A) = 0.04g

Site Coefficient (S) = 1.0



PROFILE GRADE

(Along Ramp E)

PROFILE GRADE

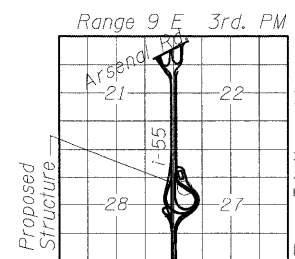
(Along Ramp B)

GENERAL PLAN & ELEVATION-RAMP B
 OVER UNNAMED DITCH
 F.A.I. ROUTE 55 - SEC. (99-1&2)AC-3
 WILL COUNTY
 STATION 3007+00

WATERWAY INFORMATION

Drainage Area = 0.0162 sq. mi. Low Grade Elev. 536.22 @ Sta. 3007+00 Ramp B

Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft.		Nat. H.W.E.	Head -Ft.			Headwater El.
			Exist.	Prop.		Exist.	Prop.	Exist.	
Design	50	24.8	N/A	4.5	530.00	N/A	0.72	N/A	530.72
Base	100	29.1	N/A	5.1	530.09	N/A	0.77	N/A	530.86
Overtopping		190.9							



LOCATION SKETCH

SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS

300 W. ADAMS ST.
 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

SHEET NO.
 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	330
Sta. 3007+00 (Ramp B)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES:

1. All work on these sheets are to be performed in accordance with Articles, 503, 540 and 543 of the Standard Specifications. See next sheet for the "Concrete End Sections" details.
2. This box culvert has an approximate fill height of 4.0-ft. The precast concrete box culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M259 (ASTM C 789), except that the aggregate shall conform to the requirements of Article 1003.02 of the Standard Specifications.
3. The Contractor shall determine whether culvert can be installed in two (2) or three (3) phases (Staging shown here is suggested only) and order sections' lengths as required. Joints to be sealed in accordance with Article 540.06 of the Standard Specifications.
4. For backfilling of embankment, see Article 207 thru 209 of the Standard Specifications.
5. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
6. Reinforcement and Concrete Quantities are provided for information only.

TOTAL BILL OF MATERIAL

Pay Item	Unit	Total
Cast-in-Place Reinforced Concrete End Sections	Each	2
Precast Concrete Box Culvert, 6'X3'	Foot	163
Rock Excavation For Structures	Cu.Yd.	36
Removal and Disposal of Unsuitable Material for Structures	Cu.Yd.	32

BILL OF MATERIAL

Bar	No	Size	Length	Shape
b1	4	No. 5	8'-0"	—
b2	2	No. 4	11'-0"	—
b3	4	No. 4	14'-0"	—
b4	4	No. 4	16'-8"	—
b5	28	No. 4	5'-0"	—
b6	4	No. 4	6'-3"	—
d	24	No. 4	4'-3"	└┘
h1	6	No. 5	21'-0"	▤
h2	8	No. 5	6'-6"	—
v	4	No. 5	7'-1"	└┘
v1	4	No. 5	7'-1"	└┘
v2	4	No. 5	6'-9"	└┘
v3	4	No. 5	6'-6"	└┘
v4	4	No. 5	6'-2"	└┘
v5	4	No. 5	5'-11"	└┘
v6	4	No. 5	5'-8"	└┘
v7	4	No. 5	5'-4"	└┘
v8	28	No. 4	3'-1"	└┘

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DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

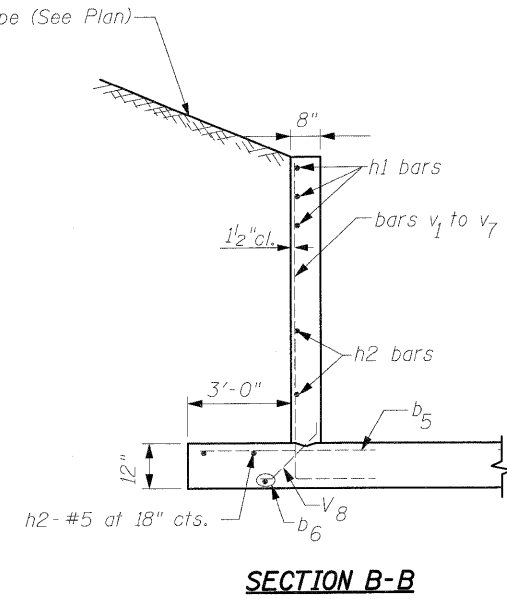
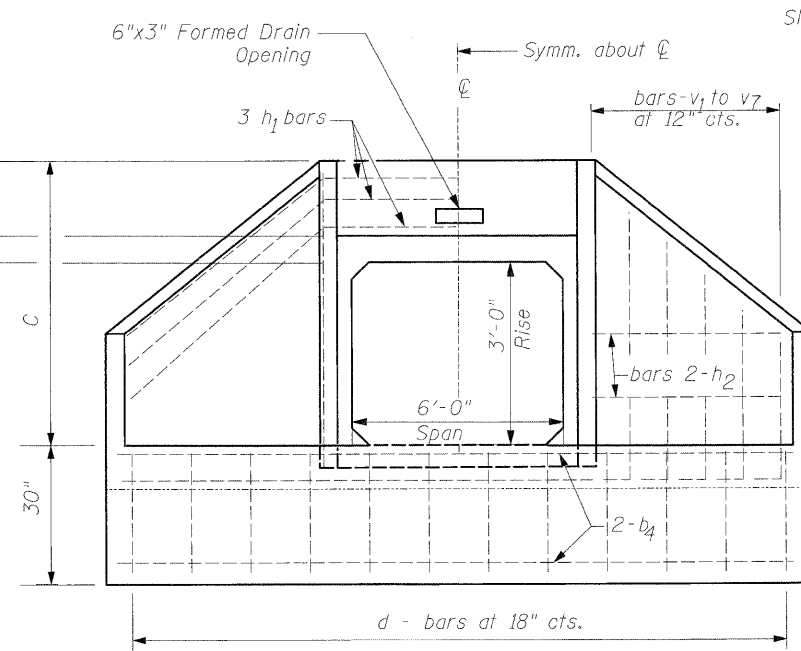
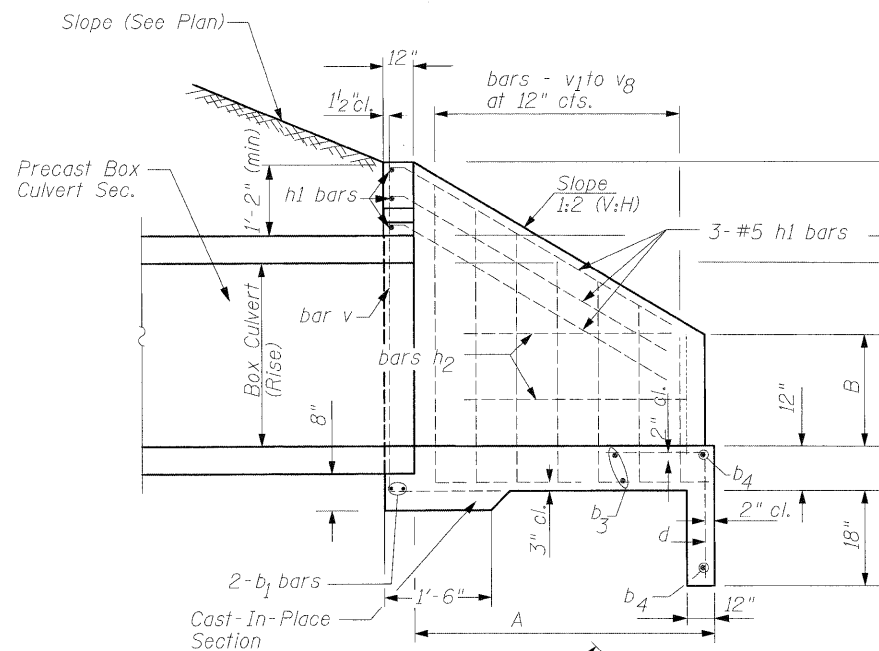
SINGH 300 W. ADAMS ST.
CHICAGO, IL 60606
SINGH & ASSOCIATES, INC. TEL: (312) 629-0240
CONSULTING ENGINEERS FAX: (312) 629-8449

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2)AC-3	WILL	524	331
SHEETS	Sta. 3007+00 (Ramp B)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**BARS IN ONE
END SECTION**

Bars	No.
d	12
b ₁	2
b ₂	1
b ₃	2
b ₄	2
b ₅	14
b ₆	2
h ₁	3
h ₂	4
v	2
v ₁	2
v ₂	2
v ₃	2
v ₄	2
v ₅	2
v ₆	2
v ₇	2
v ₈	14



SECTION B-B

SECTION A-A

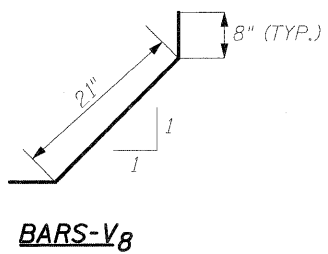
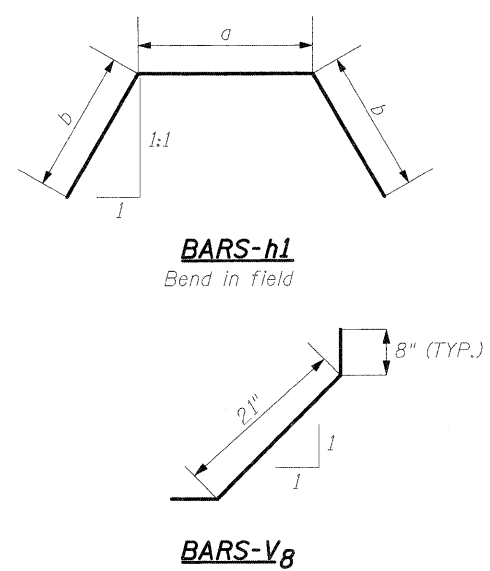
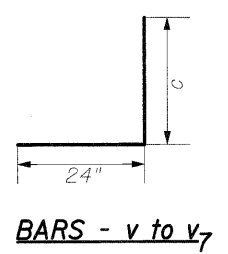
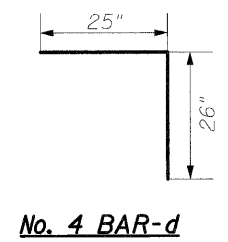
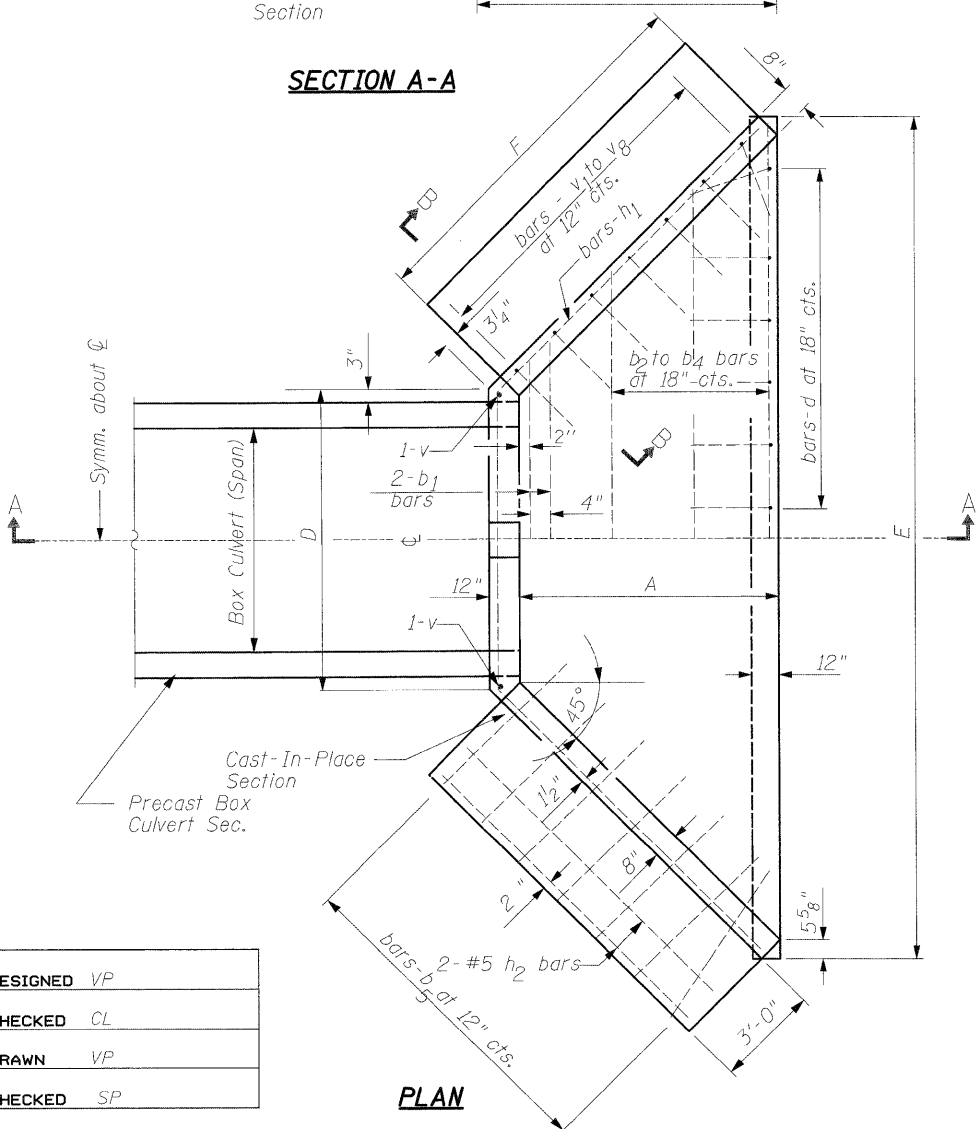
END ELEVATION

DIMENSIONS OF STRAIGHT BARS

Bar	Size	Length
b ₁	No. 5	8'-0"
b ₂	No. 4	11'-0"
b ₃	No. 4	14'-0"
b ₄	No. 4	16'-8"
b ₅	No. 4	5'-0"
b ₆	No. 4	6'-3"
h ₂	No. 5	6'-6"

DIMENSIONS OF BENT BARS

No. 5 - bars h ₁			
BARS	a	b	Total Length
h ₁	7'-8"	6'-8"	21'-0"
No. 5 - bars v to v ₇			
BARS	c	Total Length	
v	5'-1"	7'-1"	
v ₁	5'-1"	7'-1"	
v ₂	4'-9"	6'-9"	
v ₃	4'-6"	6'-6"	
v ₄	4'-2"	6'-2"	
v ₅	3'-11"	5'-11"	
v ₆	3'-8"	5'-8"	
v ₇	3'-4"	5'-4"	



DIMENSIONS AND QUANTITIES

Box Culvert	Slope of Wing Walls	Dimensions						Concrete for two (2) End Sections (Cu. Yd.)	Reinf. Bars for two (2) End Sections (Lbs.)	
		Rise	Span	A	B	C	D			E
36"	72"	1:2	4'-7"	34 1/2"	4'-9"	8'-0"	17'-2"	6'-9"	15	765

NOTE:
1. Cast-In-Place Reinforced Concrete End Sections shall be constructed of Class SI concrete as per Article 503.

DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

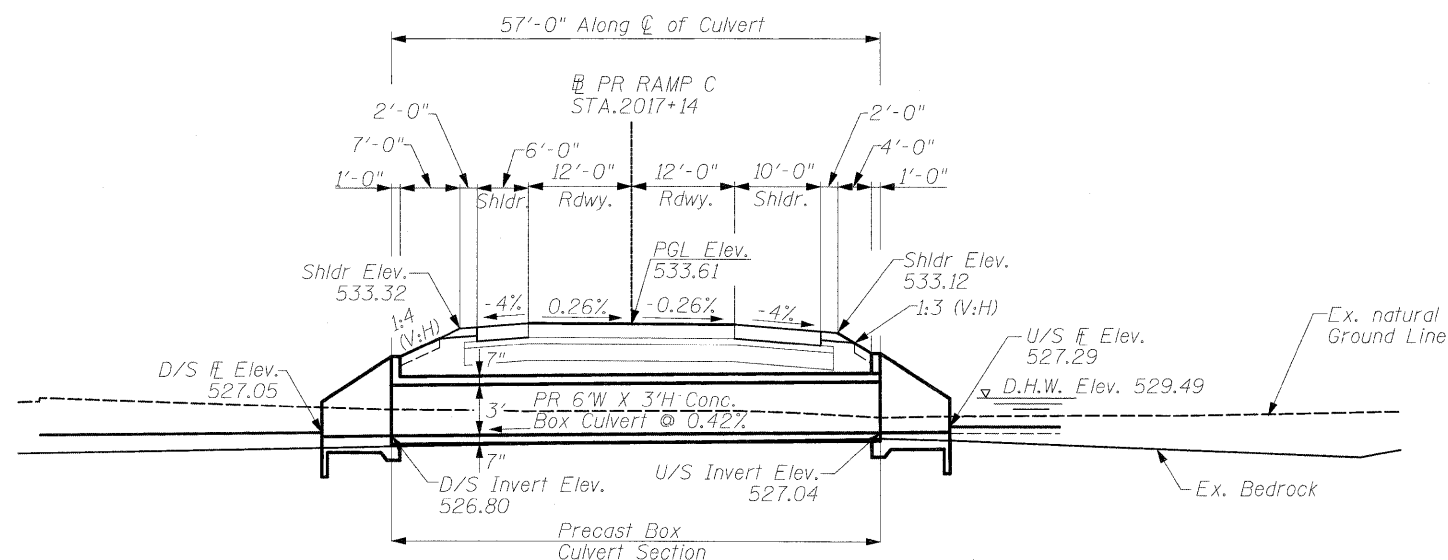
SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	55	(99-1&2)AC-3	WILL	524	332
Sta. 3007+00 (Ramp B)			CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1			ILLINOIS FED. AID PROJECT		

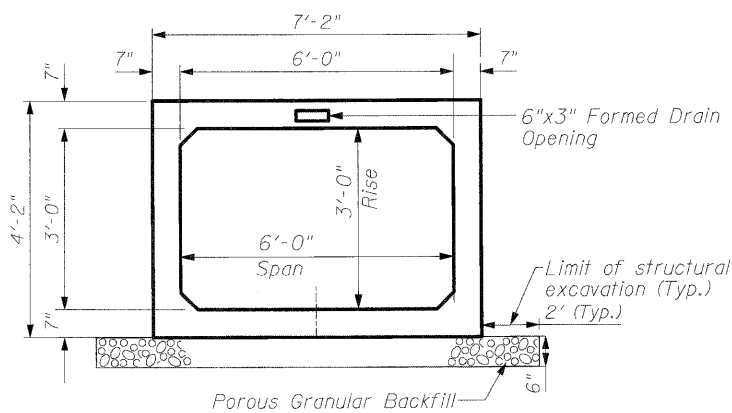
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Bench Mark: BM 4
 (RR spike in 2nd power pole North of CPT 207 ±1' above ground. Elev. = 534.690)
 Existing Structures: None

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



LONGITUDINAL SECTION
 N.T.S.



SECTION THRU BARREL
 N.T.S.

DESIGN SPECIFICATIONS
 AASHTO 2002

LOADING HS-20-44
 Allow 50 lbs/sq. ft. for future wearing surface.

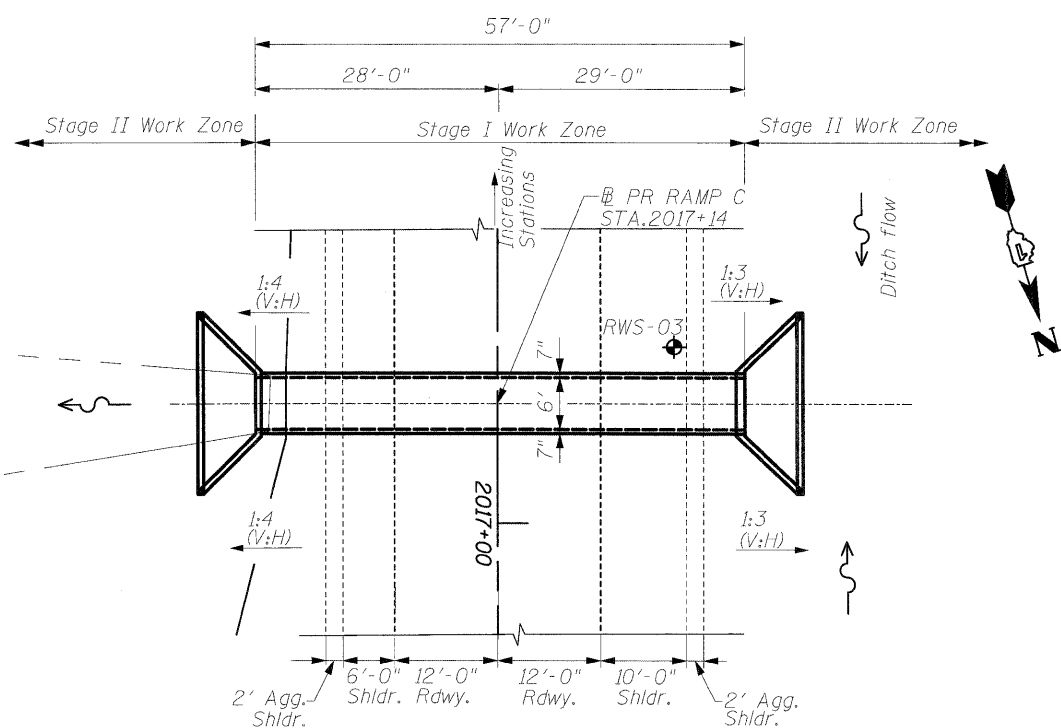
DESIGN STRESSES
 FIELD UNITS

Cast-In-Place Units
 $f'_c = 3,500$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)

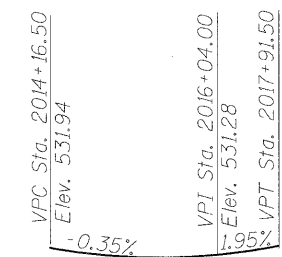
Precast Units
 $f'_c = 5,000$ psi (Concrete)
 $f_y = 65,000$ psi (Welded Wire Fabric)

SEISMIC DATA

Seismic Performance Zone (SPC) = A
 Bedrock Acceleration Coeff.(A) = 0.04g
 Site Coefficient (S) = 1.0



PLAN
 N.T.S.



PROFILE GRADE
 (Along Ramp C)

WATERWAY INFORMATION

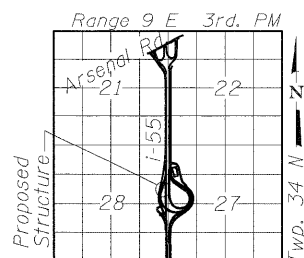
Drainage Area = 0.0296 sq. mi. Low Grade Elev. 533.12 @ Sta. 2017+14

Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	Nat. H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	50	59.5	N/A	7.8	527.65	N/A	1.81	N/A	529.49
Base	100	69.0	N/A	8.7	528.03	N/A	1.71	N/A	529.74
Overtopping		145.80							

**GENERAL PLAN & ELEVATION-RAMP C
 OVER UNNAMED DITCH
 F.A.I. ROUTE 55 - SEC. (99-1&2)AC-3
 WILL COUNTY
 STATION 2017+14**

DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

LEGEND
 ◆ - Soil Boring Location



LOCATION SKETCH

SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 300 W. ADAMS ST.
 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

SHEET NO.
 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	333
Sta. 2017+14 (Ramp C)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1 ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES:

1. All work on these sheets are to be performed in accordance with Articles 503, 540 and 543 of the Standard Specifications. See next sheet for the "Concrete End Sections" details.
2. This box culvert has an approximate fill height of 3.0-ft. The precast concrete box culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M259 (ASTM C 789), except that the aggregate shall conform to the requirements of Article 1003.02 of the Standard Specifications.
3. The Contractor shall determine whether culvert can be installed in two (2) or three (3) phases (Staging shown here is suggested only) and order sections' lengths as required. Joints to be sealed in accordance with Article 540.06 of the Standard Specifications.
4. For backfilling of embankment, see Article 207 thru 209 of the Standard Specifications.
5. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
6. Reinforcement and Concrete Quantities are provided for information only.

TOTAL BILL OF MATERIAL

Pay Item	Unit	Total
Cast-in-Place Reinforced Concrete End Sections	Each	2
Precast Concrete Box Culvert, 6'X3'	Foot	57
Rock Excavation For Structures	Cu.Yd.	13
Removal and Disposal of Unsuitable Material for Structures	Cu.Yd.	11

BILL OF MATERIAL

Bar	No	Size	Length	Shape
b1	4	No. 5	8'-0"	—
b2	2	No. 4	11'-0"	—
b3	4	No. 4	14'-0"	—
b4	4	No. 4	16'-8"	—
b5	28	No. 4	5'-0"	—
b6	4	No. 4	6'-3"	—
d	24	No. 4	4'-3"	└
h1	6	No. 5	21'-0"	∩
h2	8	No. 5	6'-6"	—
v	4	No. 5	7'-1"	┘
v1	4	No. 5	7'-1"	┘
v2	4	No. 5	6'-9"	┘
v3	4	No. 5	6'-6"	┘
v4	4	No. 5	6'-2"	┘
v5	4	No. 5	5'-11"	┘
v6	4	No. 5	5'-8"	┘
v7	4	No. 5	5'-4"	┘
v8	28	No. 4	3'-1"	┘

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DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

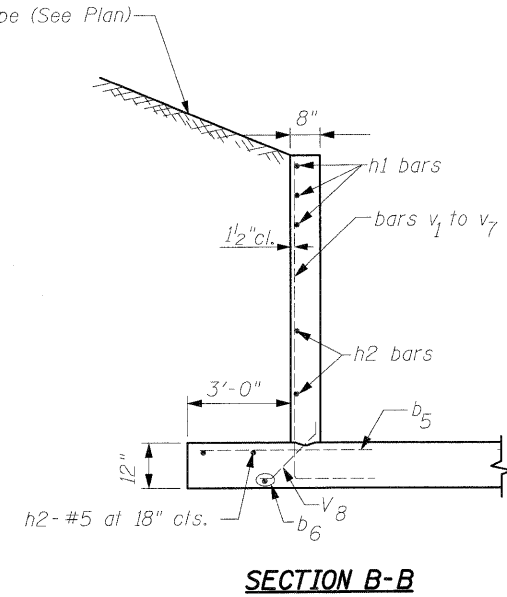
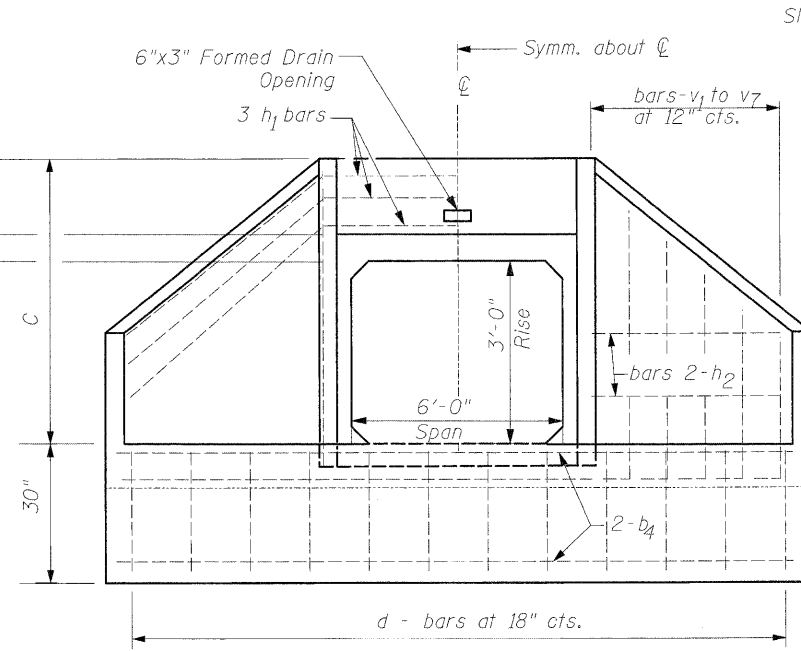
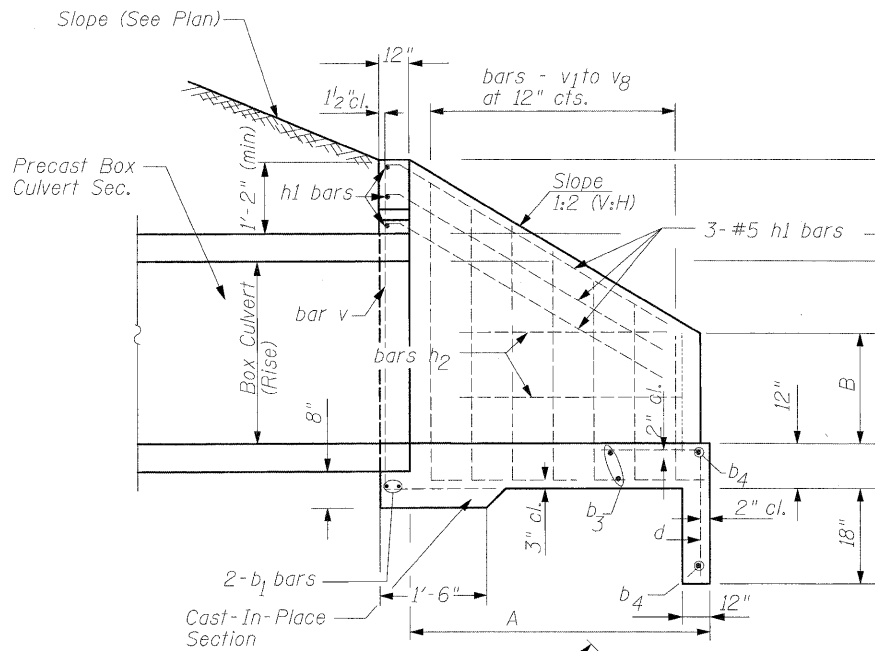
SINGH SINGH & ASSOCIATES, INC. CONSULTING ENGINEERS	300 W. ADAMS ST. CHICAGO, IL 60606 TEL: (312) 629-0240 FAX: (312) 629-8449	SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		SHEETS	55	(99-1&2)AC-3	WILL	524	334
		Sta. 2017+14 (Ramp C)		CONTRACT NO. 60C31		FED. RD. DIST. NO. 1 ILLINOIS FED. AID PROJECT	

FINAL SB-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**BARS IN ONE
END SECTION**

Bars	No.
d	12
b ₁	2
b ₂	1
b ₃	2
b ₄	2
b ₅	14
b ₆	2
h ₁	3
h ₂	4
v	2
v ₁	2
v ₂	2
v ₃	2
v ₄	2
v ₅	2
v ₆	2
v ₇	2
v ₈	14



SECTION B-B

SECTION A-A

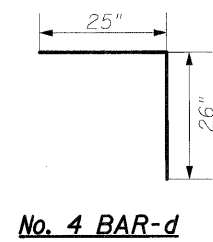
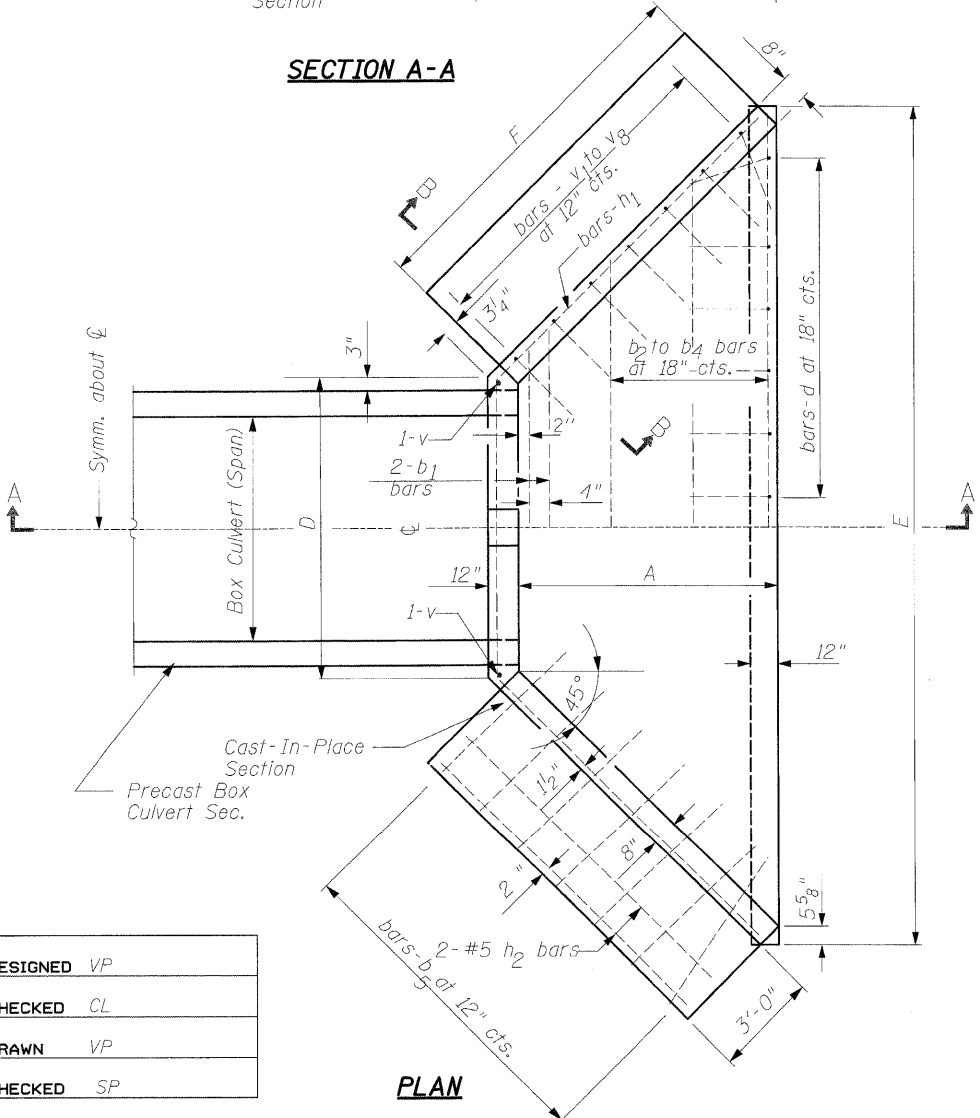
END ELEVATION

DIMENSIONS OF STRAIGHT BARS

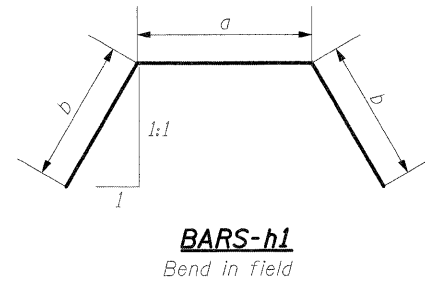
Bar	Size	Length
b ₁	No. 5	8'-0"
b ₂	No. 4	11'-0"
b ₃	No. 4	14'-0"
b ₄	No. 4	16'-8"
b ₅	No. 4	5'-0"
b ₆	No. 4	6'-3"
h ₂	No. 5	6'-6"

DIMENSIONS OF BENT BARS

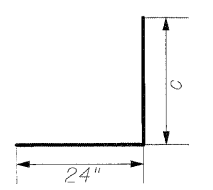
No. 5 - bars h ₁			
BARS	a	b	Total Length
h ₁	7'-8"	6'-8"	21'-0"
No. 5 - bars v to v ₇			
BARS	c	Total Length	
v	5'-1"	7'-1"	
v ₁	5'-1"	7'-1"	
v ₂	4'-9"	6'-9"	
v ₃	4'-6"	6'-6"	
v ₄	4'-2"	6'-2"	
v ₅	3'-11"	5'-11"	
v ₆	3'-8"	5'-8"	
v ₇	3'-4"	5'-4"	



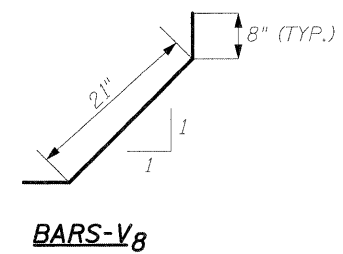
No. 4 BAR-d



BARS-h₁
Bend in field



BARS - v to v₇



BARS-V₈

DIMENSIONS AND QUANTITIES

Box Culvert Rise	Box Culvert Span	Slope of Wing Walls	Dimensions						Concrete for two (2) End Sections (Cu. Yd.)	Reinf. Bars for two (2) End Sections (Lbs.)
			A	B	C	D	E	F		
36"	72"	1:2	4'-7"	34 1/2"	4'-9"	8'-0"	17'-2"	6'-9"	15	765

NOTE:
1. Cast-In-Place Reinforced Concrete End Sections shall be constructed of Class SI concrete as per Article 503.

DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

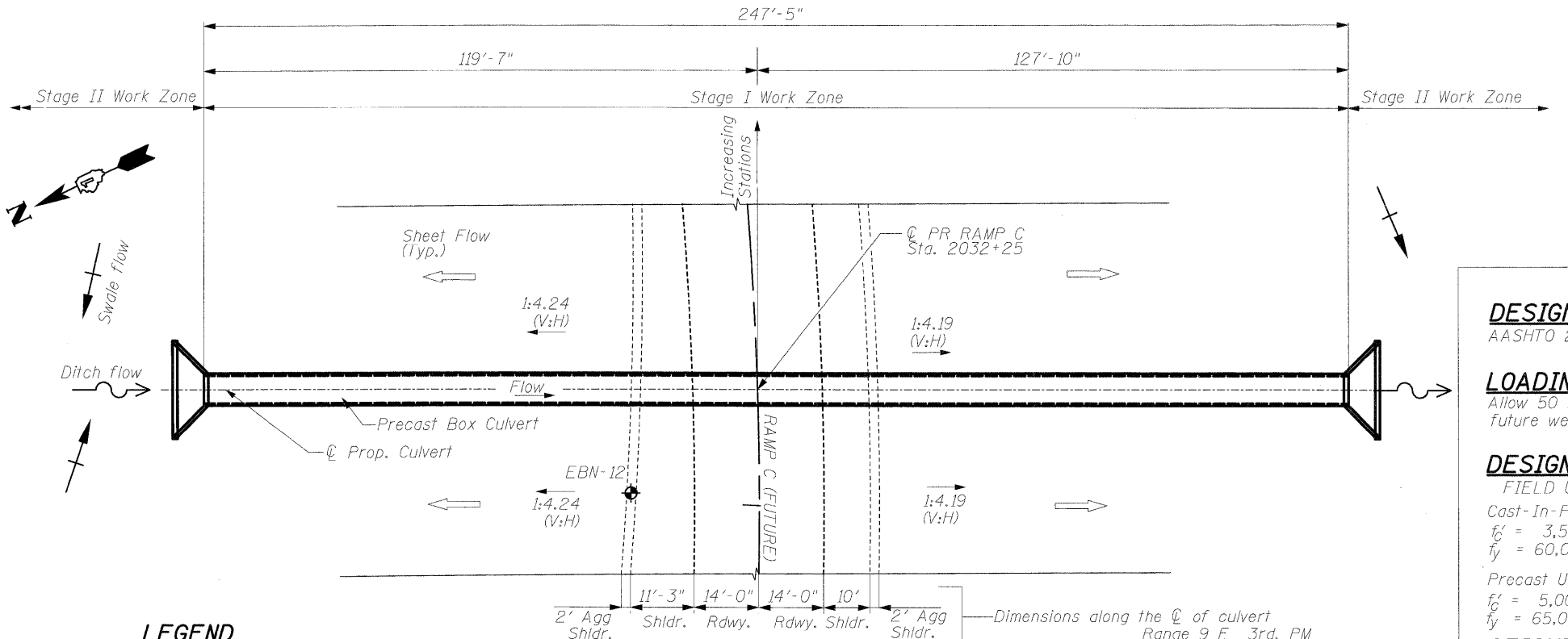
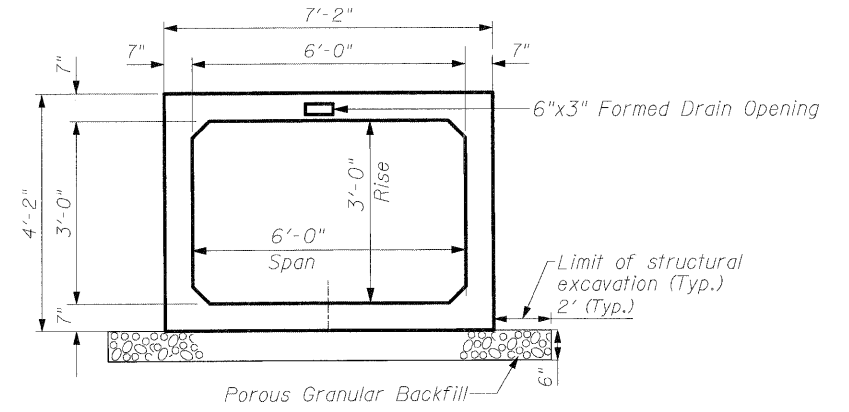
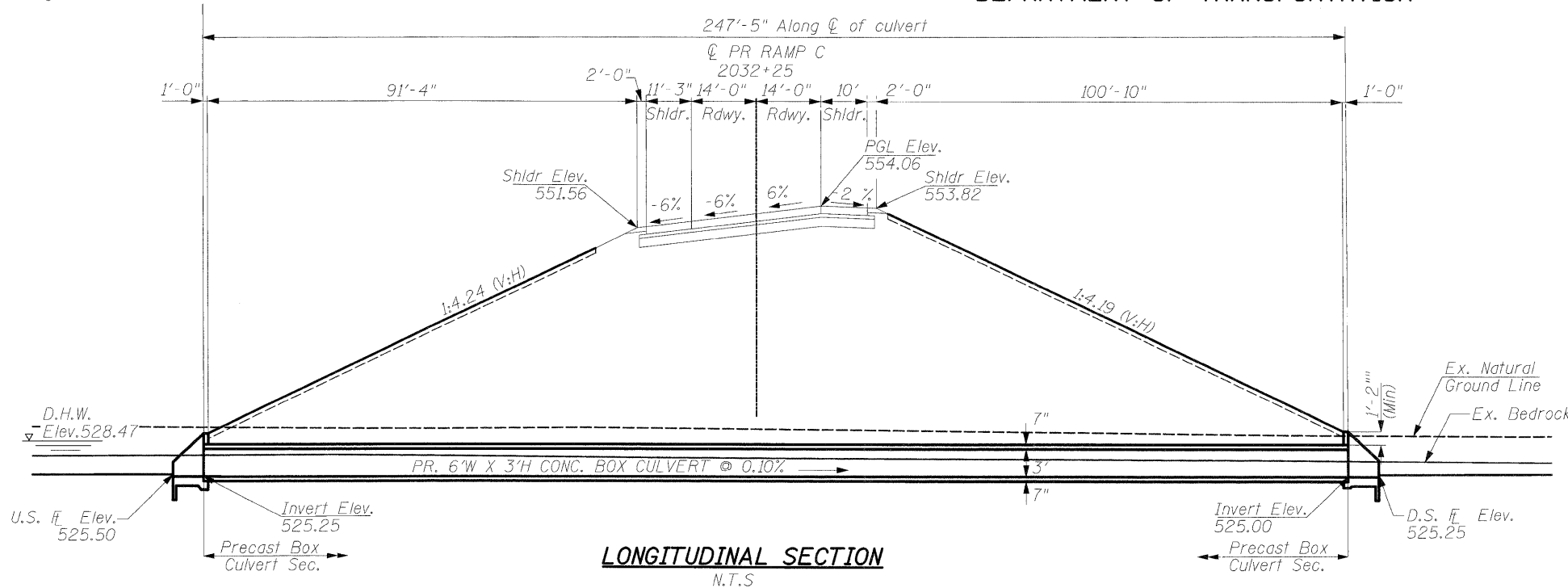
SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS
300 W. ADAMS ST.
CHICAGO, IL 60606
TEL: (312) 629-0240
FAX: (312) 629-8449

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS	55	(99-1&2)AC-3	WILL	524	335
S+a, 2017+14 (Ramp C)			CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1			ILLINOIS FED. AID PROJECT		

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Bench Mark: BM 2
 (RR spike in 1st power pole North of CPT 203 ±1' above ground. Elev.= 529.734)
 Existing Structures: None

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



CURVE DATA
 Ramp C
 P.I. Station 2037+82.40
 Delta = 132° 56' 23" (LT)
 Degree = 6° 51' 42"
 Tangent = 1,917.61'
 Length = 1,937.40'
 Radius = 835.00'
 External = 1,256.52'
 Long Chord = 1,531.14'
 Mid. Ord. = 501.64'
 P.C. Station 2018+64.79
 P.T. Station 2038+02.19

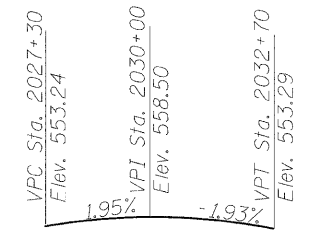
DESIGN SPECIFICATIONS
 AASHTO 2002

LOADING HS-20-44
 Allow 50 lbs/sq. ft. for future wearing surface.

DESIGN STRESSES
 FIELD UNITS
 Cast-In-Place Units
 $f'_c = 3,500$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)

Precast Units
 $f'_c = 5,000$ psi (Concrete)
 $f_y = 65,000$ psi (Welded Wire Fabric)

SEISMIC DATA
 Seismic Performance Zone (SPC) = A
 Bedrock Acceleration Coeff.(A) = 0.04g
 Site Coefficient (S) = 1.0



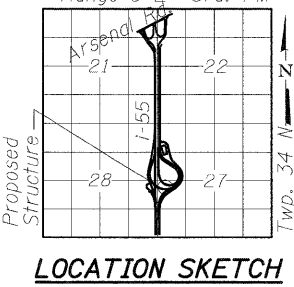
**GENERAL PLAN & ELEVATION-RAMP C
 OVER UNNAMED DITCH
 F.A.I. ROUTE 55 - SEC. (99-1&2)AC-3
 WILL COUNTY
 STATION 2032+25**

LEGEND
 - Soil Boring Location

WATERWAY INFORMATION

Drainage Area = 0.1519 sq. mi. Low Grade Elev. 552.51 @ Sta. 2032+25 Ramp C

Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	80	N/A	16.1	527.57	N/A	0.90	N/A	528.47
Base	100	106	N/A	18.0	527.92	N/A	1.26	N/A	529.18
Overtopping		150							



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 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

SHEET NO.
 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	336
Sta. 2032+25 (Ramp C)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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FINAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES:

1. All work on these sheets are to be performed in accordance with Articles 503, 540 and 543 of the Standard Specifications. See next sheet for the "Concrete Headwalls" details.
2. This box culvert has an approximate fill height of 25.0-ft. The precast concrete box culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M273 (ASTM C 850), except that the aggregate shall conform to the requirements of Article 1003.02 of the Standard Specifications.
3. The Contractor shall determine whether culvert can be installed in two (2) or three (3) phases (Staging shown here is suggested only) and order sections' lengths as required. Joints to be sealed in accordance with Article 540.06 of the Standard Specifications.
4. For backfilling of embankment, see Article 207 thru 209 of the Standard Specifications.
5. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
6. Reinforcement and Concrete Quantities are provided for information only.

TOTAL BILL OF MATERIAL

Pay Item	Unit	Total
Cast-in-Place Reinforced Concrete End Sections	Each	2
Precast Concrete Box Culvert, 6'X3'	Foot	248
Rock Excavation For Structures	Cu.Yd.	263
Removal and Disposal of Unsuitable Material for Structures	Cu.Yd.	49

BILL OF MATERIAL

Bar	No	Size	Length	Shape
b1	4	No. 5	8'-0"	—
b2	2	No. 4	11'-0"	—
b3	4	No. 4	14'-0"	—
b4	4	No. 4	16'-8"	—
b5	28	No. 4	5'-0"	—
b6	4	No. 4	6'-3"	—
d	24	No. 4	4'-3"	┌
h1	6	No. 5	21'-0"	∧
h2	8	No. 5	6'-6"	—
v	4	No. 5	7'-1"	┘
v1	4	No. 5	7'-1"	┘
v2	4	No. 5	6'-9"	┘
v3	4	No. 5	6'-6"	┘
v4	4	No. 5	6'-2"	┘
v5	4	No. 5	5'-11"	┘
v6	4	No. 5	5'-8"	┘
v7	4	No. 5	5'-4"	┘
v8	4	No. 4	3'-1"	┘

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DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

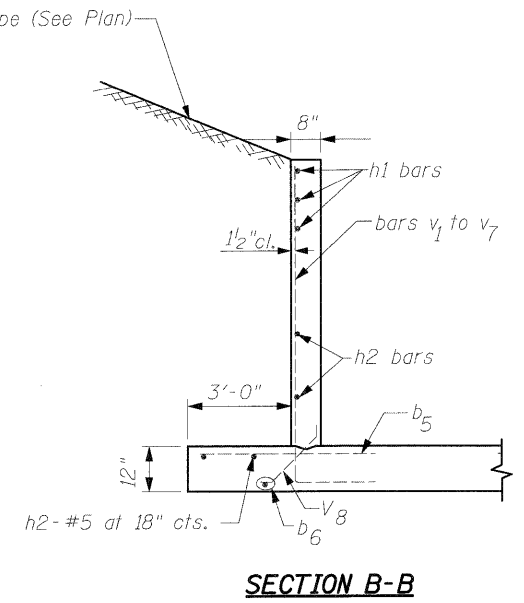
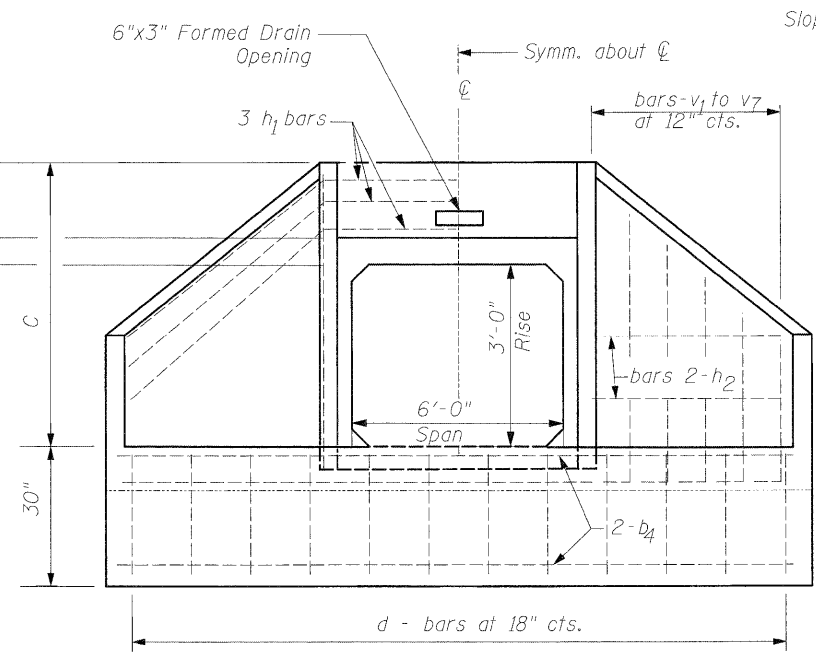
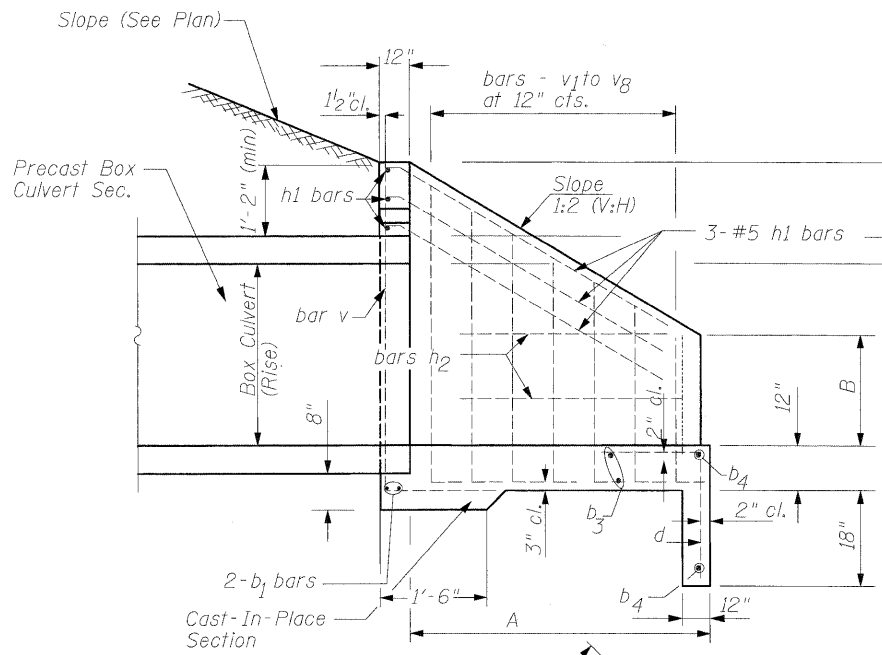
SINGH SINGH & ASSOCIATES, INC. CONSULTING ENGINEERS	300 W. ADAMS ST. CHICAGO, IL 60606 TEL: (312) 629-0240 FAX: (312) 629-8449	SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		SHEETS	55	(99-1&2)AC-3	WILL	524	337
				Sta. 2032+25 (Ramp C)		CONTRACT NO. 60C31	
		FED. RD. DIST. NO. 1		ILLINOIS FED. AID PROJECT			

FINAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**BARS IN ONE
END SECTION**

Bars	No.
d	12
b ₁	2
b ₂	1
b ₃	2
b ₄	2
b ₅	14
b ₆	2
h ₁	3
h ₂	4
v	2
v ₁	2
v ₂	2
v ₃	2
v ₄	2
v ₅	2
v ₆	2
v ₇	2
v ₈	14



SECTION B-B

SECTION A-A

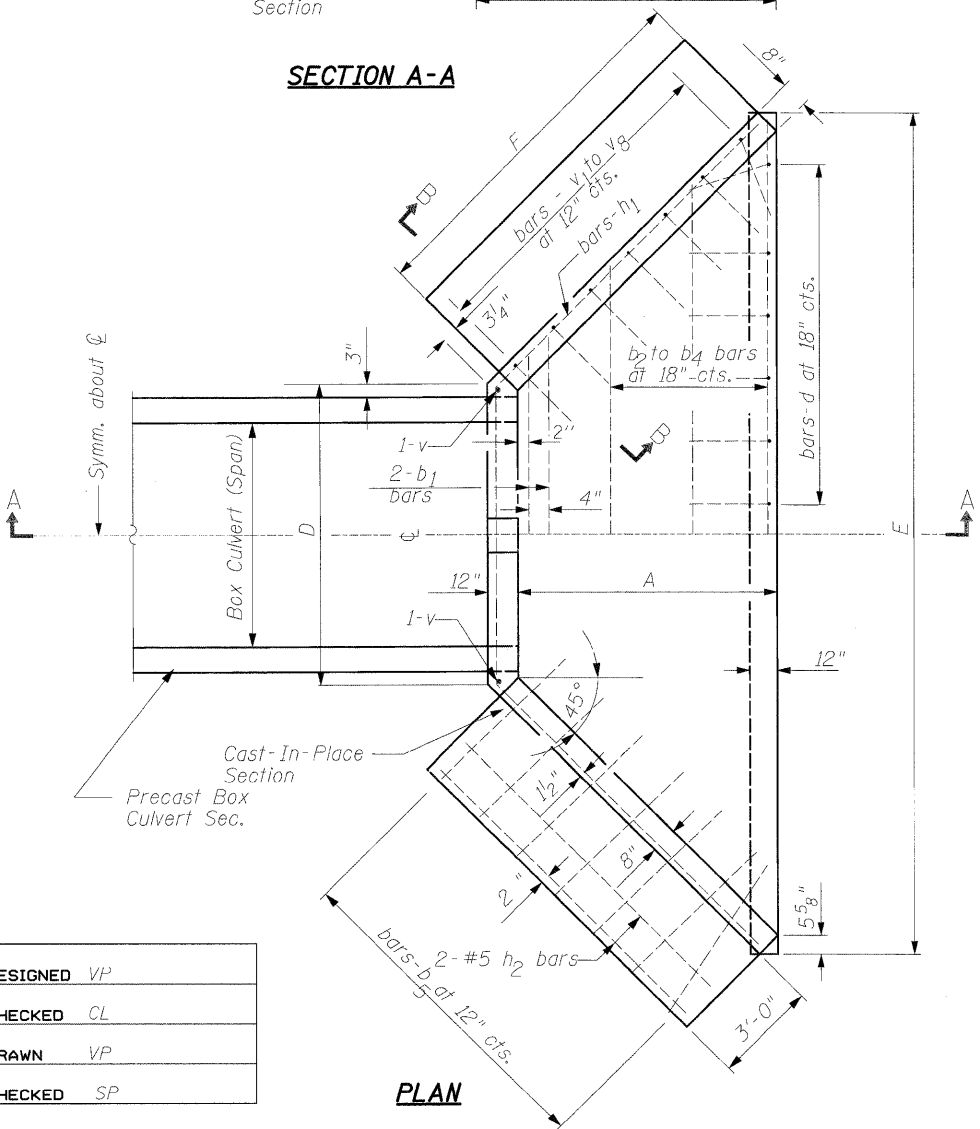
END ELEVATION

DIMENSIONS OF STRAIGHT BARS

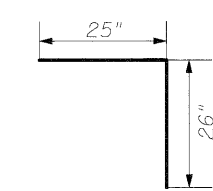
Bar	Size	Length
b ₁	No. 5	8'-0"
b ₂	No. 4	11'-0"
b ₃	No. 4	14'-0"
b ₄	No. 4	16'-8"
b ₅	No. 4	5'-0"
b ₆	No. 4	6'-3"
h ₂	No. 5	6'-6"

DIMENSIONS OF BENT BARS

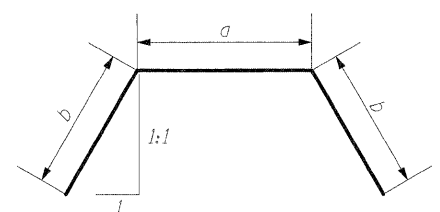
No. 5 - bars h ₁			
BARS	a	b	Total Length
h ₁	7'-8"	6'-8"	21'-0"
No. 5 - bars v to v ₇			
BARS	c	Total Length	
v	5'-1"	7'-1"	
v ₁	5'-1"	7'-1"	
v ₂	4'-9"	6'-9"	
v ₃	4'-6"	6'-6"	
v ₄	4'-2"	6'-2"	
v ₅	3'-11"	5'-11"	
v ₆	3'-8"	5'-8"	
v ₇	3'-4"	5'-4"	



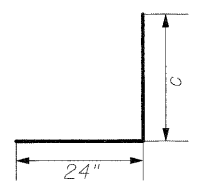
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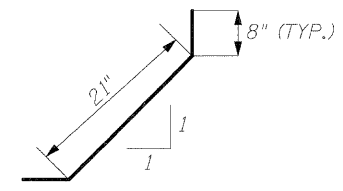
No. 4 BAR-d



BARS-h₁
Bend in field



BARS - v to v₇



BARS-V₈

DIMENSIONS AND QUANTITIES

Box Culvert Rise	Box Culvert Span	Slope of Wing Walls	Dimensions						Concrete for two (2) End Sections (Cu. Yd.)	Reinf. Bars for two (2) End Sections (Lbs.)
			A	B	C	D	E	F		
36"	72"	1:2	4'-7"	34 1/2"	4'-9"	8'-0"	17'-2"	6'-9"	15	765

NOTE:
1. Cast-In-Place Reinforced Concrete End Sections shall be constructed of Class SI concrete as per Article 503.

DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

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CONSULTING ENGINEERS

SHEET NO.
SHEETS

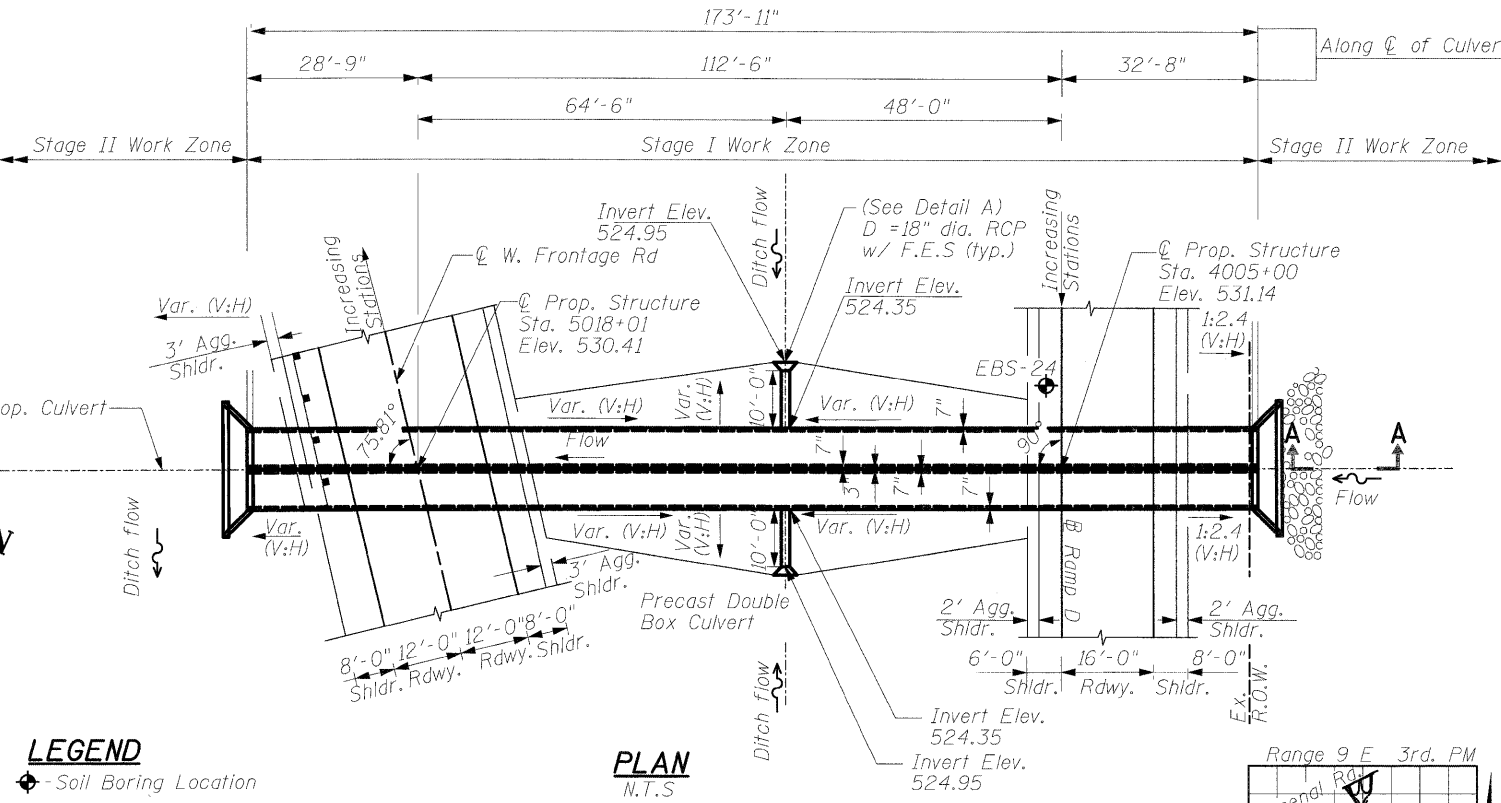
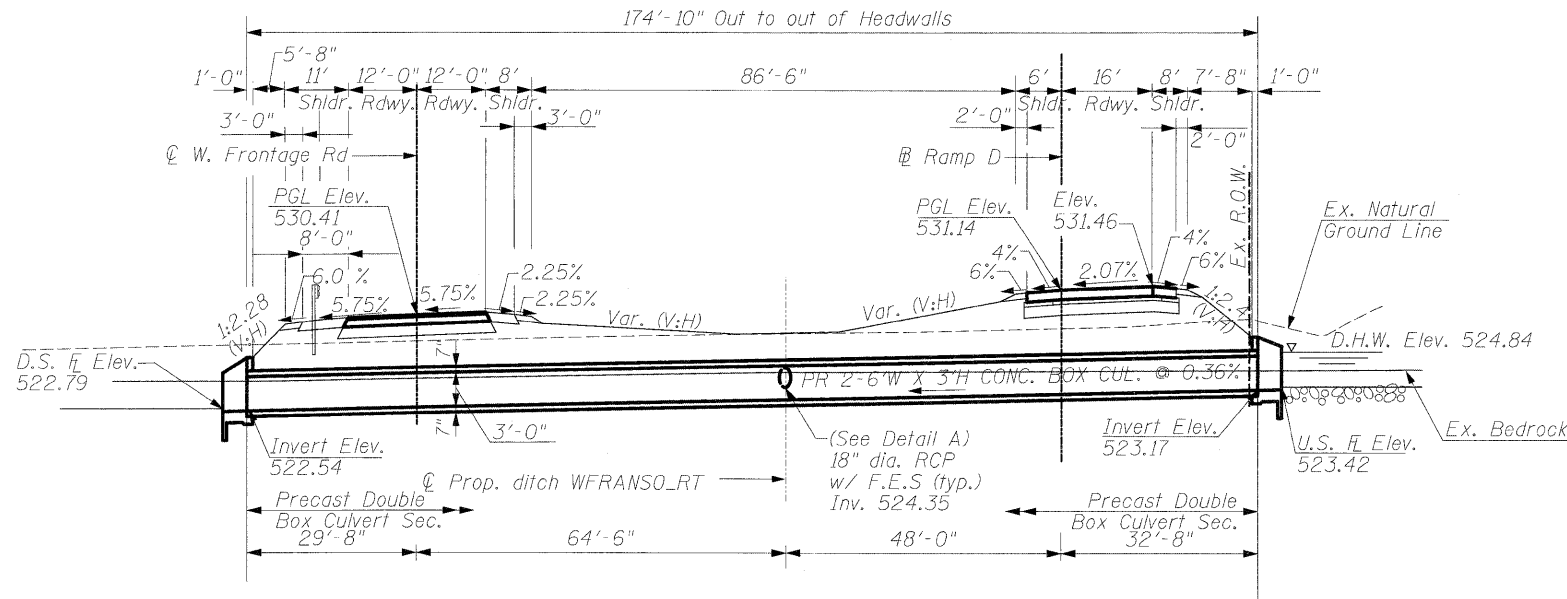
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	338
S+g. 2032+25 (Ramp C)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1	ILLINOIS FED. AID PROJECT			

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FINAL

Bench Mark: BM 11
 (RR spike in 2nd power pole West of I-55 Southbound entrance
 ramp at N. side of Arsenal Rd., ±1' N of guardrail. Elev. = 549.615)
 Existing Structures: None

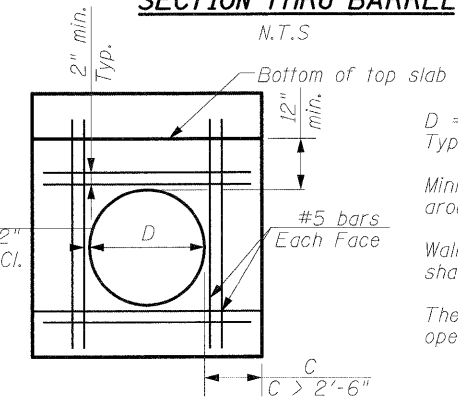
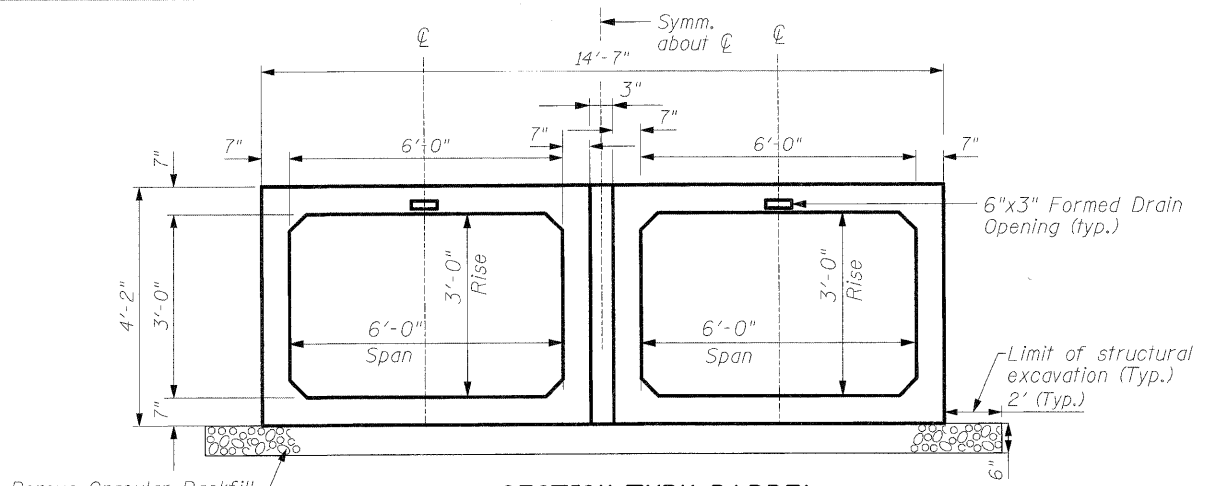
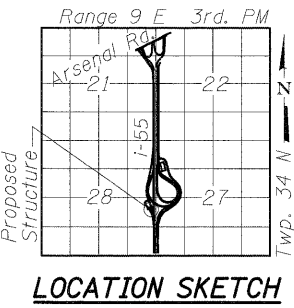
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



WATERWAY INFORMATION

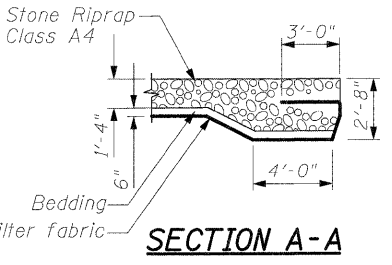
Drainage Area = 0.052 sq. mi. Low Grade Elev. 529.30 @ Sta. 5018+01 W. Frontage Rd.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	42	N/A	8.64	524.65	N/A	0.19	N/A	524.84
Base	100	51	N/A	9.85	524.87	N/A	0.20	N/A	525.07
Overtopping		229.5							



DETAIL A: ADDITIONAL WALL REINFOR. FOR PRECAST CONC. BOX CULV. WITH OPENING

CURVE DATA	CURVE DATA
W. Frontage Rd. P.I. Station 5015+80.03 Delta = 42° 50' 05.43" (LT) Degree = 5° 12' 31.35" Tangent = 431.4712' Length = 822.3699' Radius = 1,100.00' External = 81.5953' Long Chord = 803.3517' Mid. Ord. = 75.9607' P.C. Station 5011+48.56 P.T. Station 5019+70.93	Ramp D P.I. Station 4008+27.72 Delta = 18° 36' 40.15" (RT) Degree = 6° 51' 42.37" Tangent = 136.8199' Length = 271.2296' Radius = 835.00' External = 11.1352' Long Chord = 270.0388' Mid. Ord. = 10.9886' P.C. Station 4006+90.90 P.T. Station 4009+62.13



DESIGN SPECIFICATIONS
 AASHTO 2002

LOADING HS-20-44
 Allow 50 lbs/sq. ft. for future wearing surface.

DESIGN STRESSES
 FIELD UNITS

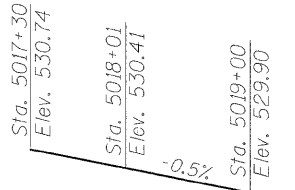
Cast-In-Place Units
 $f'_c = 3,500$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)

Precast Units
 $f'_c = 5,000$ psi (Concrete)
 $f_y = 65,000$ psi (Welded Wire Fabric)

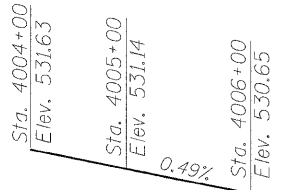
SEISMIC DATA

Seismic Performance Zone (SPC) = A
 Bedrock Acceleration Coeff.(A) = 0.04g
 Site Coefficient (S) = 1.0

PROFILE GRADE
 (Along W. Frontage Rd.)



PROFILE GRADE
 (Along Ramp D)



GENERAL PLAN & ELEVATION-RAMP D
 OVER UNNAMED DITCH

F.A.I. ROUTE 55 - SEC. (99-1&2)AC-3
 WILL COUNTY
 STATION 4005+00
 STRUCTURE NO. 099-0524

DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

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 CONSULTING ENGINEERS

300 W. ADAMS ST.
 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	339
Sta. 4005+00 (Ramp D)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES:

1. All work on these sheets are to be performed in accordance with Articles 503, 540 and 543 of the Standard Specifications. See next sheet for the "Concrete Headwalls" details.
2. This box culvert has an approximate fill height of 4.0-ft. The precast concrete box culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M259 (ASTM C 789), except that the aggregate shall conform to the requirements of Article 1003.02 of the Standard Specifications.
3. The Contractor shall determine whether culvert can be installed in two (2) or three (3) phases (Staging shown here is suggested only) and order sections' lengths as required. Joints to be sealed in accordance with Article 540.06 of the Standard Specifications.
4. For backfilling of embankment, see Article 207 thru 209 of the Standard Specifications.
5. 3-inch void between individual precast box culverts is to be filled with Class SI concrete in accordance with Article 540.06 of the Standard Specifications, no additional payment will be made for the Class SI concrete. The cost of the Class SI concrete is included with the unit price bid for "Precast Concrete Box Culvert 6-ft by 3-ft" size as indicated.
6. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
7. Reinforcement and Concrete Quantities are provided for information only.

TOTAL BILL OF MATERIAL

Pay Item	Unit	Total
Cast-in-Place Reinforced Concrete End Sections	Each	2
Precast Concrete Box Culvert, 6'X3'	Foot	350
Rock Excavation For Structures	Cu.Yd.	292
Removal and Disposal of Unsuitable Material for Structures	Cu.Yd.	73

BILL OF MATERIAL

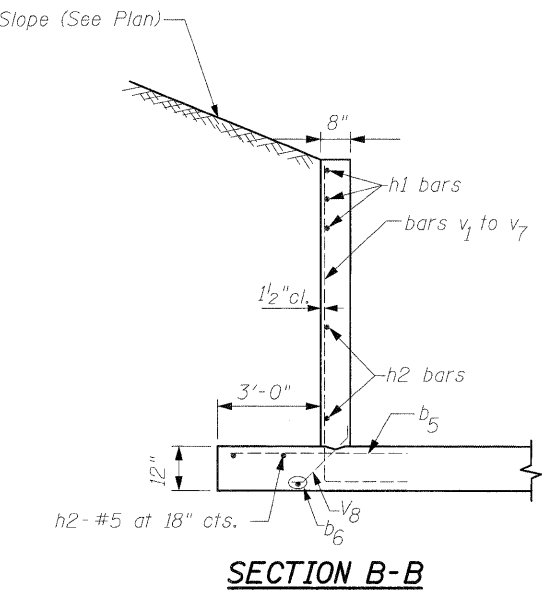
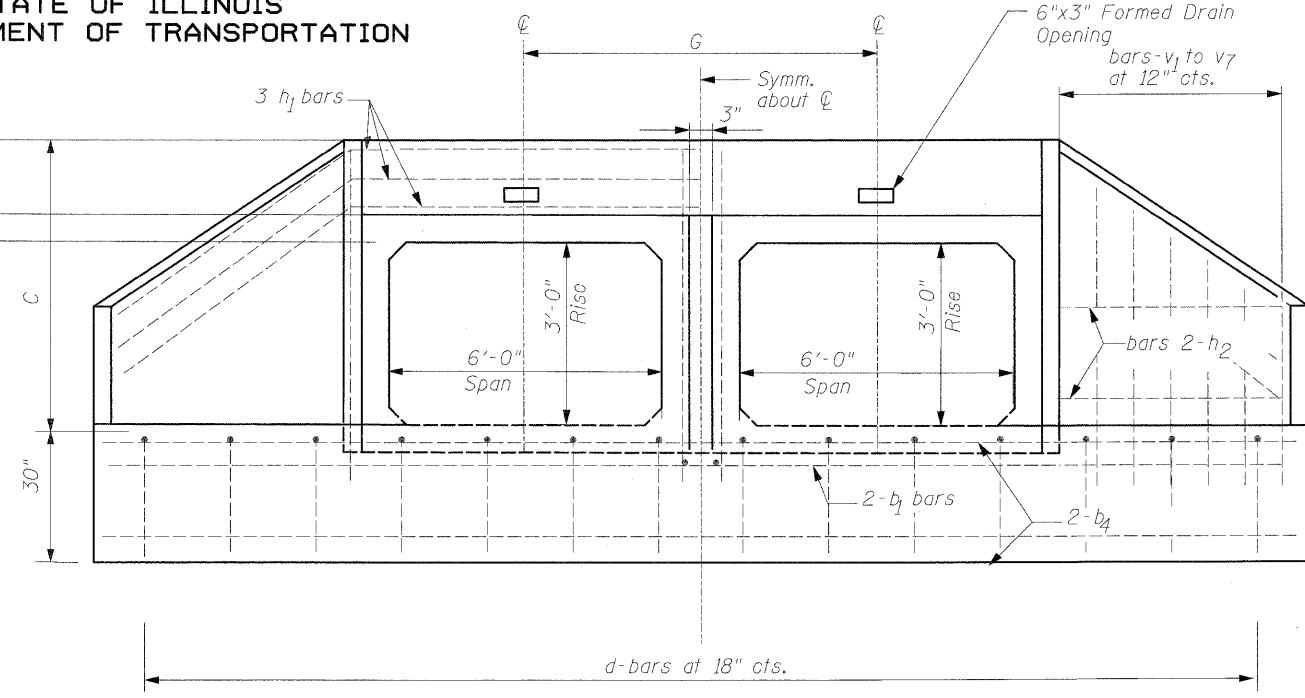
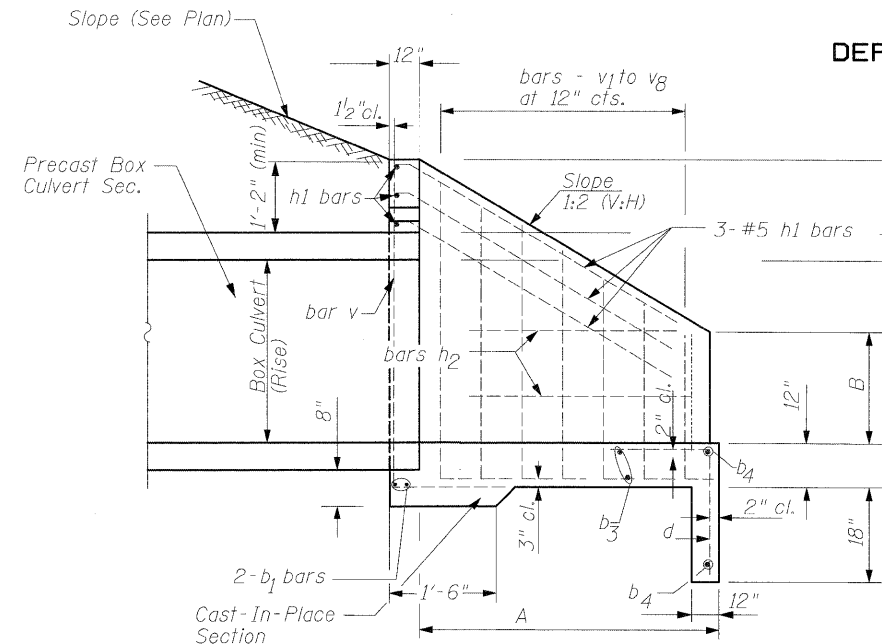
Bar	No	Size	Length	Shape
b ₁	4	No. 5	14'-9"	—
b ₂	2	No. 4	17'-9"	—
b ₃	4	No. 4	20'-9"	—
b ₄	4	No. 4	23'-9"	—
b ₅	28	No. 4	5'-0"	—
b ₆	4	No. 4	6'-3"	—
d	34	No. 4	4'-3"	└┘
h ₁	6	No. 5	27'-9"	∧
h ₂	8	No. 4	6'-6"	—
v	8	No. 5	7'-1"	└┘
v ₁	4	No. 5	7'-1"	└┘
v ₂	4	No. 5	6'-9"	└┘
v ₃	4	No. 5	6'-6"	└┘
v ₄	4	No. 5	6'-2"	└┘
v ₅	4	No. 5	5'-11"	└┘
v ₆	4	No. 5	5'-8"	└┘
v ₇	4	No. 5	5'-4"	└┘
v ₈	28	No. 4	3'-1"	└┘

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DESIGNED	VP
CHECKED	CL
DRAWN	VP
CHECKED	SP

SINGH SINGH & ASSOCIATES, INC. CONSULTING ENGINEERS	300 W. ADAMS ST. CHICAGO, IL 60606 TEL: (312) 629-0240 FAX: (312) 629-8449	SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		SHEETS	55	(99-1&2)AC-3	WILL	524	340
		Sta. 4005+00 (Ramp D)		CONTRACT NO. 60C31		FED. RD. DIST. NO. 1 ILLINOIS FED. AID PROJECT	

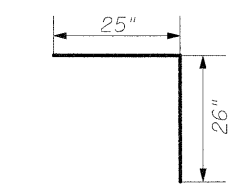
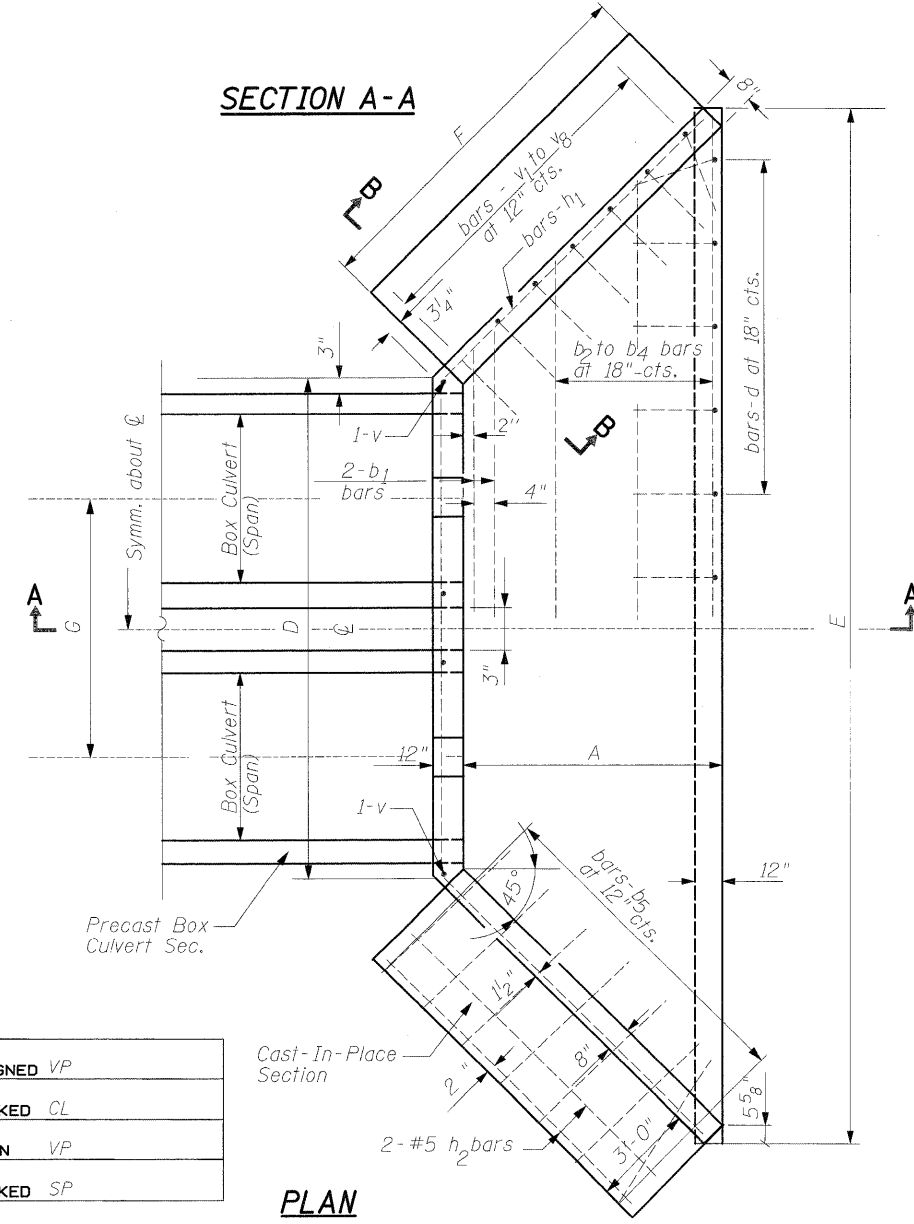
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



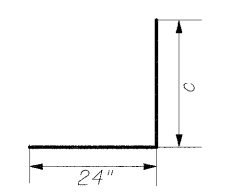
SECTION A-A

END ELEVATION

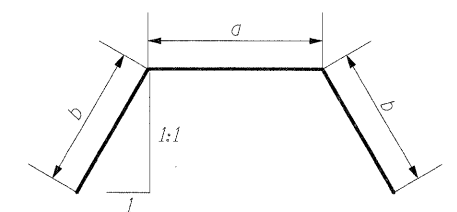
SECTION B-B



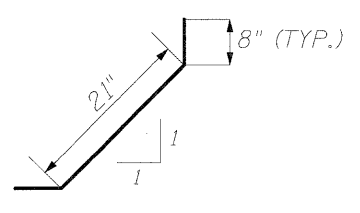
No. 4 BAR-d



BARS - v₁ to v₇



BARS-h₁
Bend in field



BARS-v₈

BARS IN ONE END SECTION

Box Culvert 6'x3'	Bars	No.
d	17	
b ₁	2	
b ₂	1	
b ₃	2	
b ₄	2	
b ₅	14	
b ₆	2	
h ₁	3	
h ₂	4	
v	4	
v ₁	2	
v ₂	2	
v ₃	2	
v ₄	2	
v ₅	2	
v ₆	2	
v ₇	2	
v ₈	14	

DIMENSIONS OF STRAIGHT BARS

Bar	Size	Length
b ₁	No. 5	14'-11"
b ₂	No. 4	17'-11"
b ₃	No. 4	20'-11"
b ₄	No. 4	23'-11"
b ₅	No. 4	5'-11"
b ₆	No. 4	6'-3"
h ₂	No. 5	6'-11"

DIMENSIONS OF BENT BARS

No. 5 - bars h ₁			
BARS	a	b	Total Length
h ₁	14'-7"	6'-8"	27'-11"
No. 5 - bars v to v ₇			
BARS	c	Total Length	
v	5'-1"	7'-1"	
v ₁	5'-1"	7'-1"	
v ₂	4'-9"	6'-9"	
v ₃	4'-6"	6'-6"	
v ₄	4'-2"	6'-2"	
v ₅	3'-11"	5'-11"	
v ₆	3'-8"	5'-8"	
v ₇	3'-4"	5'-4"	

DIMENSIONS AND QUANTITIES

Box Culvert	Slope of Wing Walls	Dimensions								Concrete for two (2) End Sections (Cu. Yd.)	Reinf. Bars for two (2) End Sections (Lbs.)
		Rise	Span	A	B	C	D	E	F		
36"	72"	1:2	4'-7"	34 ¹ / ₂ "	4'-9"	14-9"	23'-11"	6'-9"	7'-3"	40	925

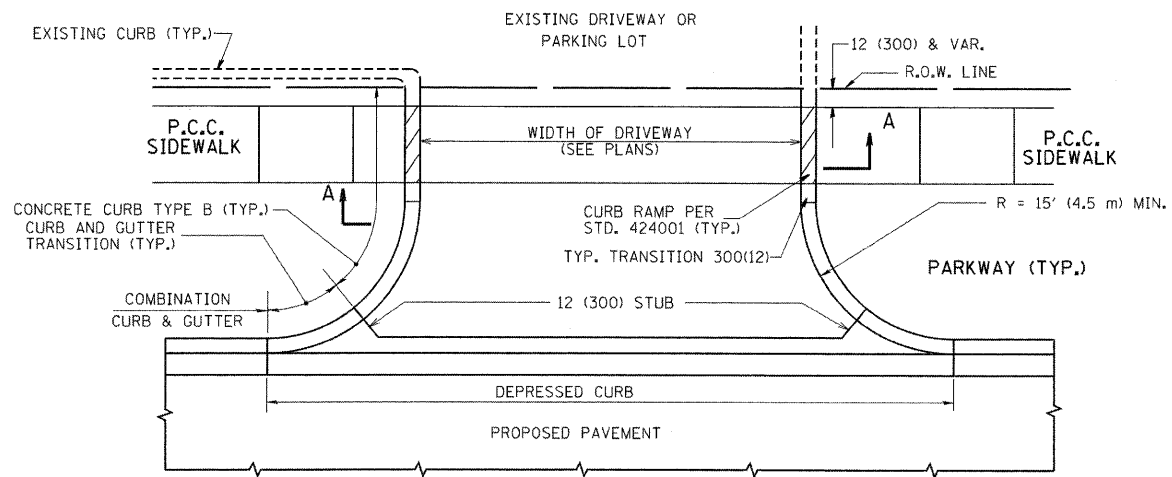
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CHECKED	CL
DRAWN	VP
CHECKED	SP

PLAN

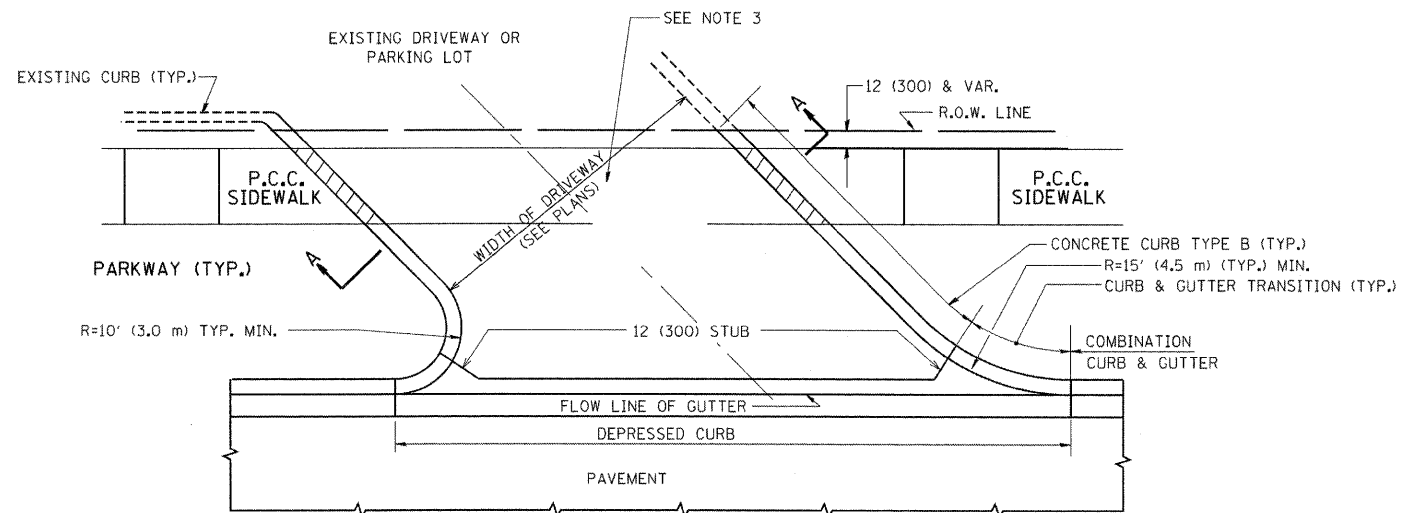
NOTE:
1. Cast-In-Place Reinforced Concrete End Sections shall be constructed of Class SI as per Article 503.

SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

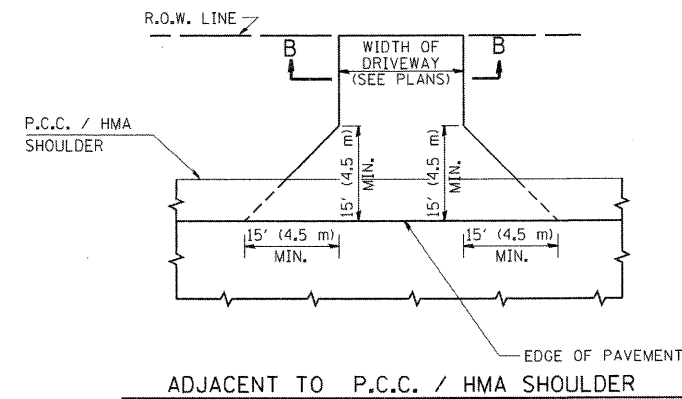
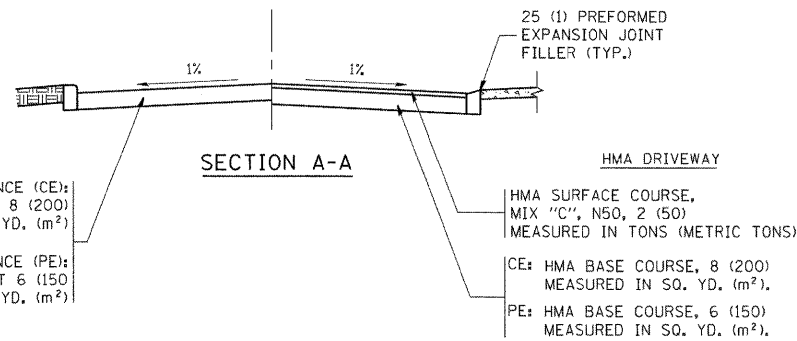
300 W. ADAMS ST. CHICAGO, IL 60606 TEL: (312) 629-0240 FAX: (312) 629-8449	SHEET NO. SHEETS	F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 341
Sta. 4005+00 (Ramp D)			CONTRACT NO. 60C31			
FED. RD. DIST. NO. 1			ILLINOIS FED. AID PROJECT			



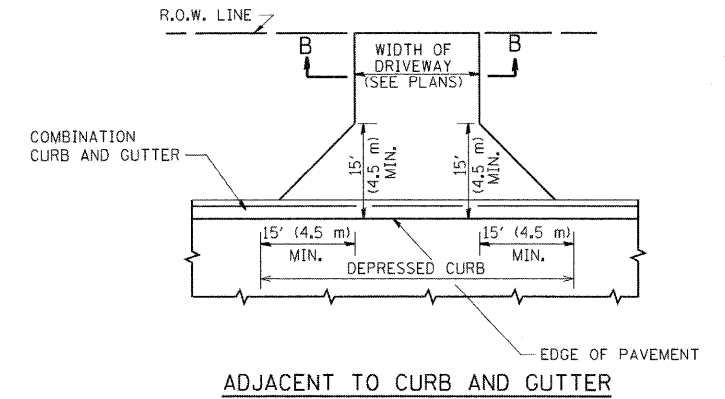
WITH CONCRETE CURB, TYPE B



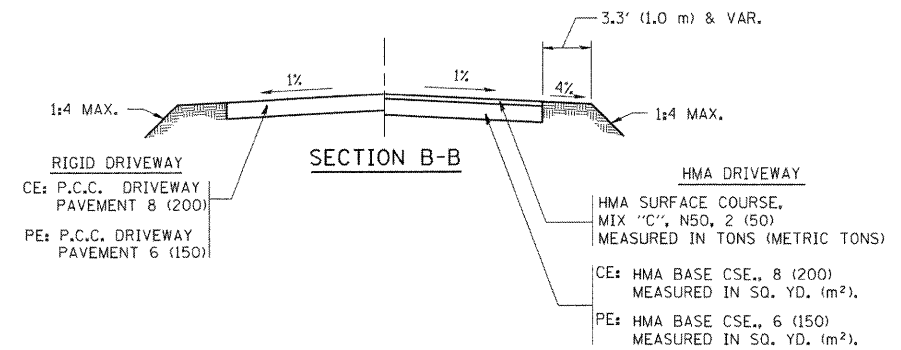
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

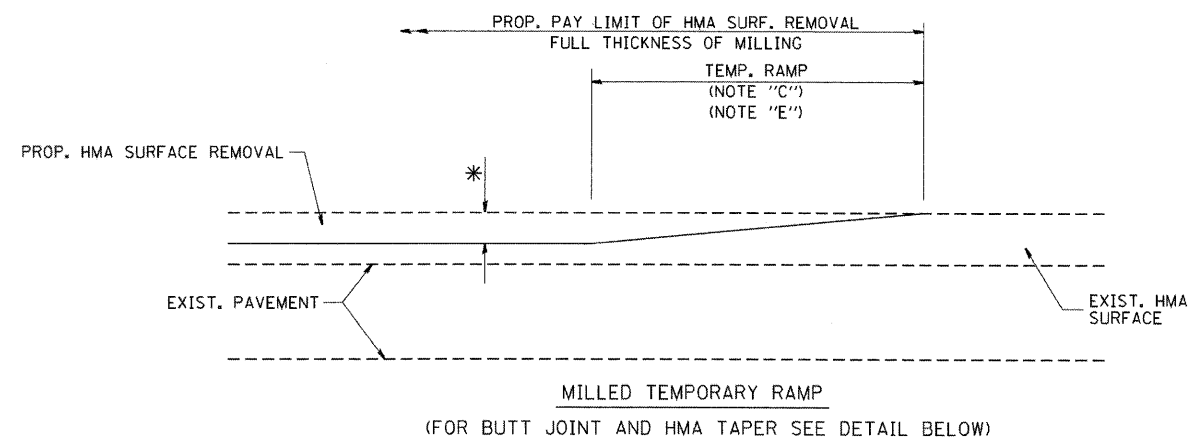
THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

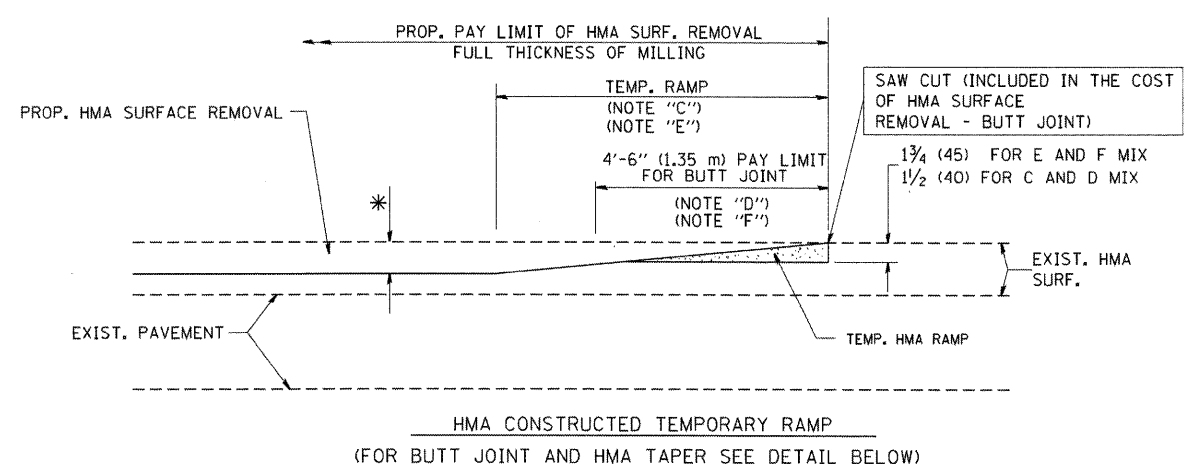
1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

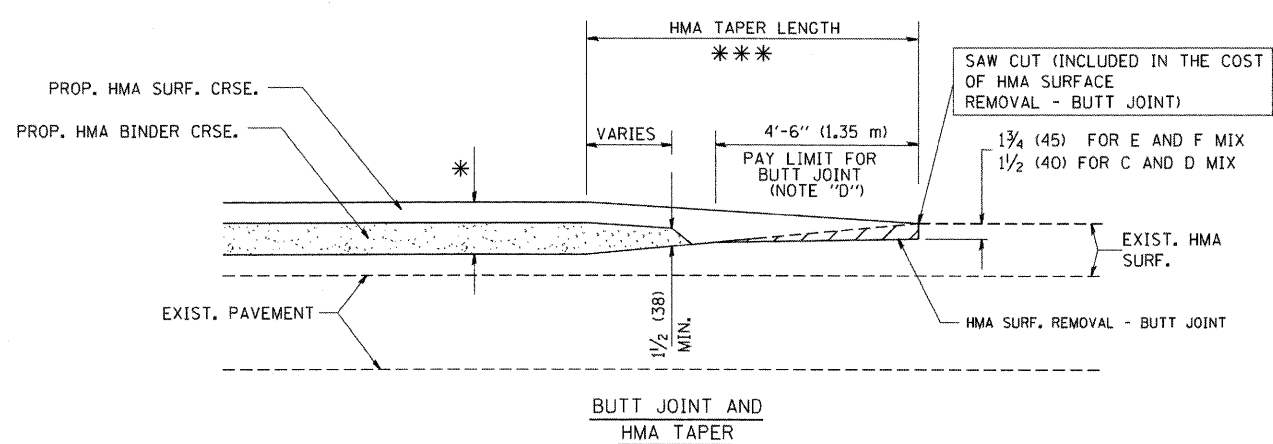
FILE NAME = c:\projects\dstsd22x34\bd01.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)			F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 342
	PLOT SCALE = 49.9999' / IN.	DRAWN -	REVISED - P. LOFLUER 04-15-03		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD0156-07 (BD-01)		CONTRACT NO. 60C31	
	PLOT DATE = 6/12/2008	CHECKED -	REVISED - R. BORO 01-01-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		DATE - 11-04-95	REVISED - R. BORO 06-11-08									



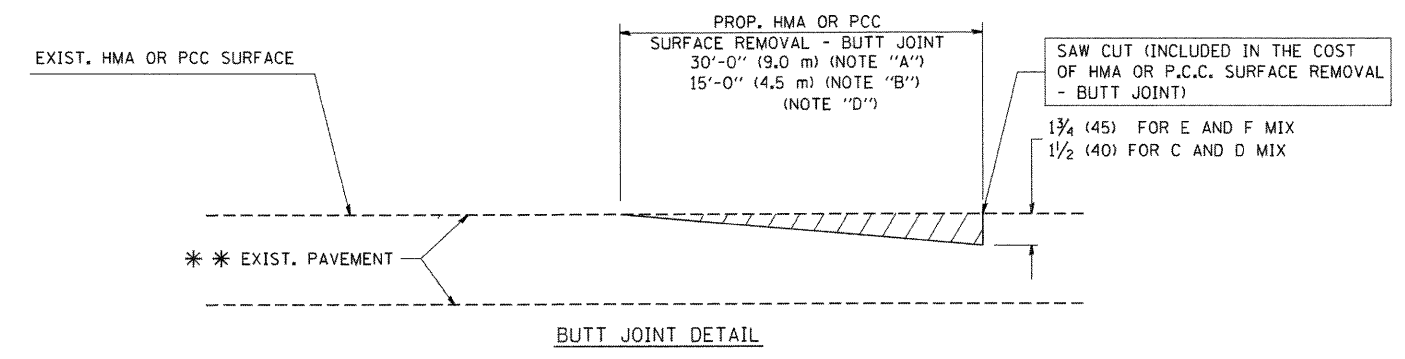
OPTION 1



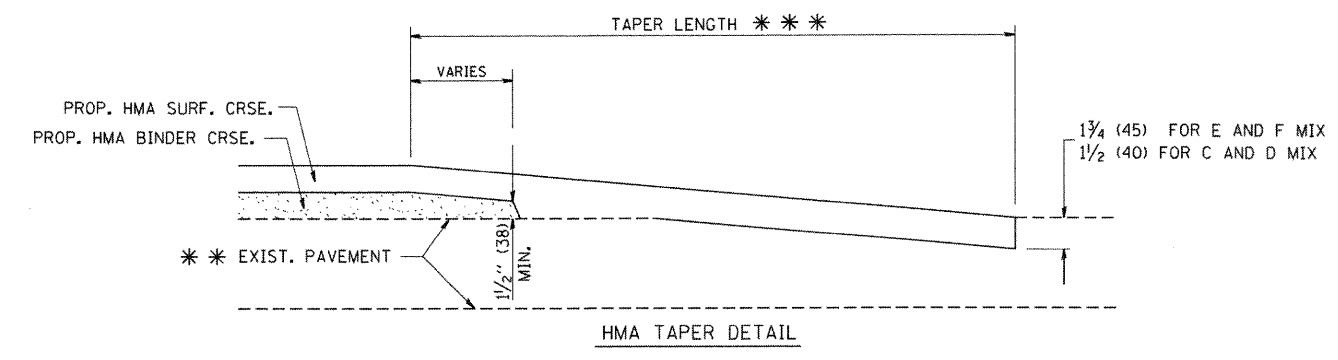
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B").

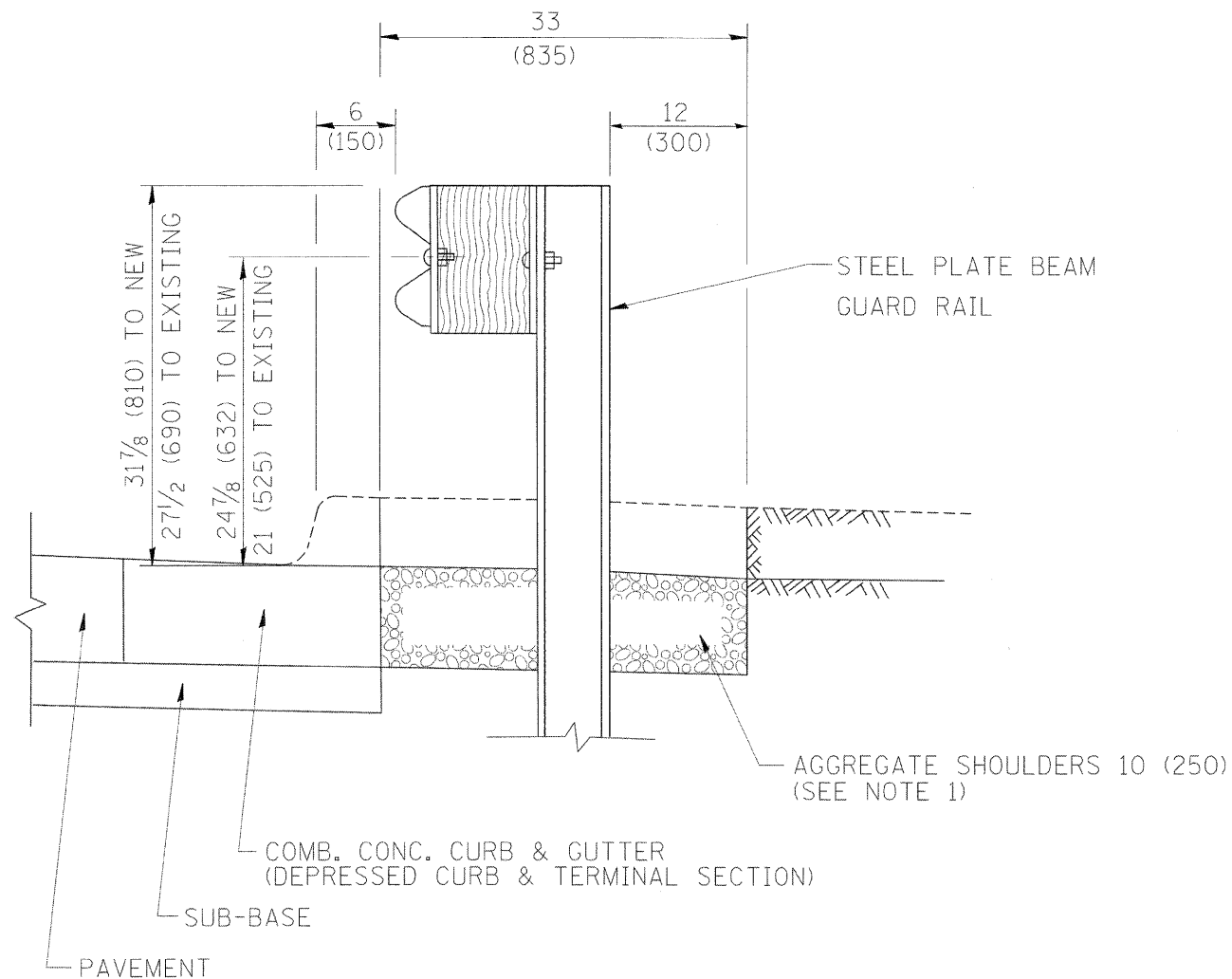
BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS			F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 343
	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD400-05 BD32		CONTRACT NO. 60C31	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - M. GOMEZ 04-06-01		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		DATE - 06-13-90	REVISED - R. BORO 01-01-07									

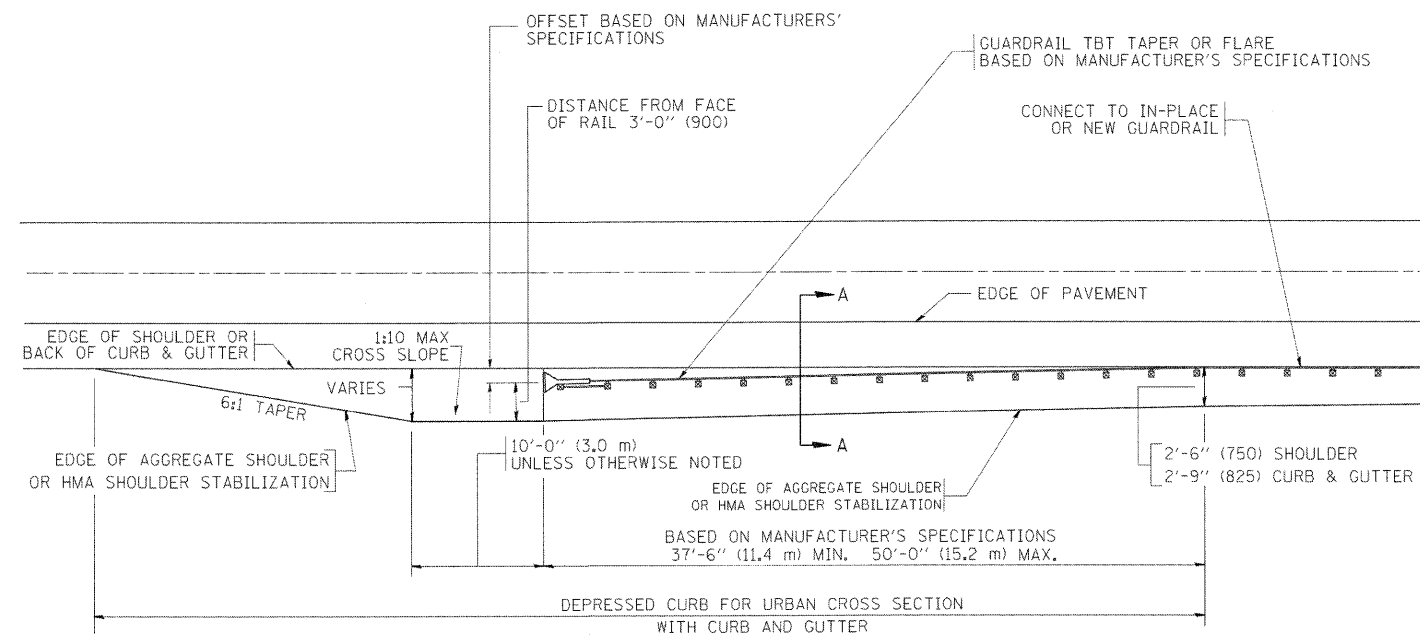
FINAL



SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

DETAILS FOR STEEL PLATE BEAM
 GUARD RAIL ADJACENT TO CURB AND GUTTER
 [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



DEPRESSED CURB AND GUTTER AND
 SHOULDER TREATMENT AT TBT TY. 1 SPL.

BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL
 ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = drivakosgn	DESIGNED - M. DE YONG	REVISED - E. GOMEZ 08-28-00
cr:\p\work\p\DOT\DRIVAKOSGN\2108315\2108315.dgn		DRAWN -	REVISED - R. BORO 01-01-07
		CHECKED -	REVISED - R. BORO 12-08-2008
		DATE - 09-22-90	REVISED - R. BORO 09-14-2009

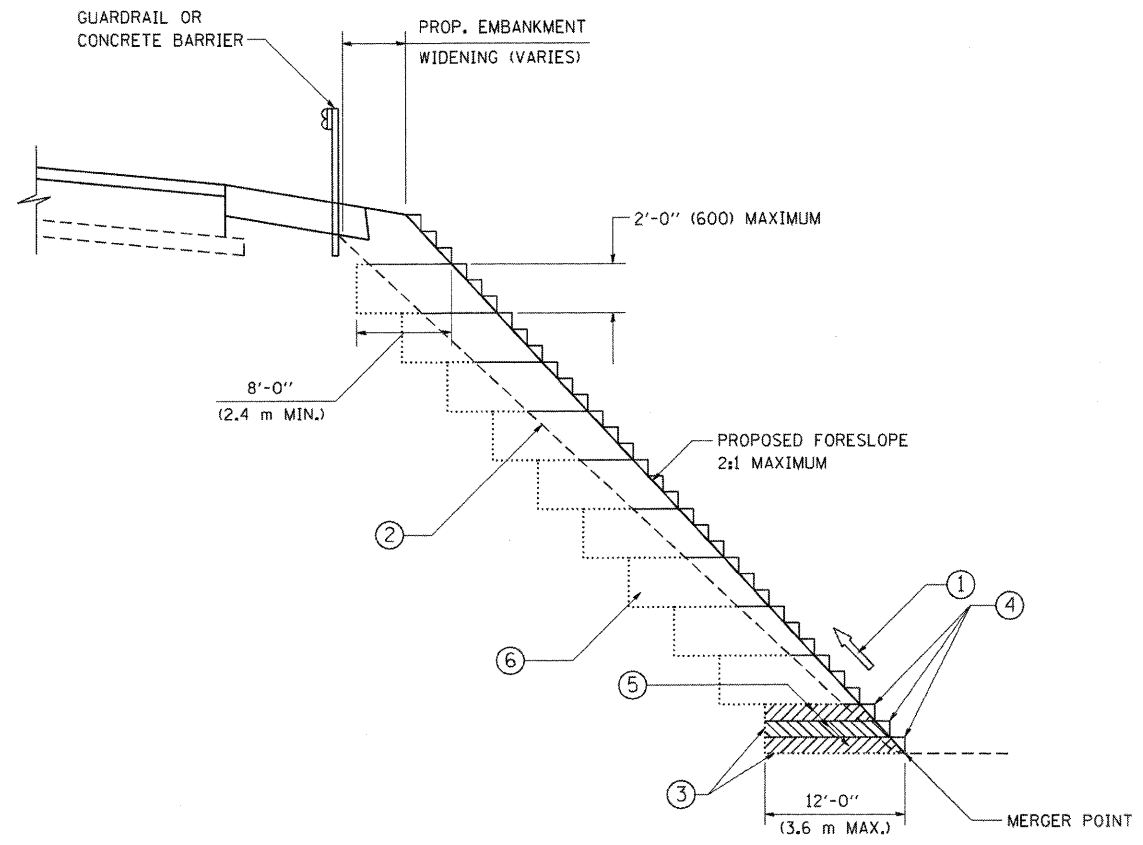
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DETAILS FOR DEPRESSED CURB & GUTTER AND
 SHOULDER TREATMENT AT TBT TY 1 SPL.

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	344
BD600-10 (BD 34)		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = geglienobt	DESIGNED - DRAWN - CADD	REVISED - REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

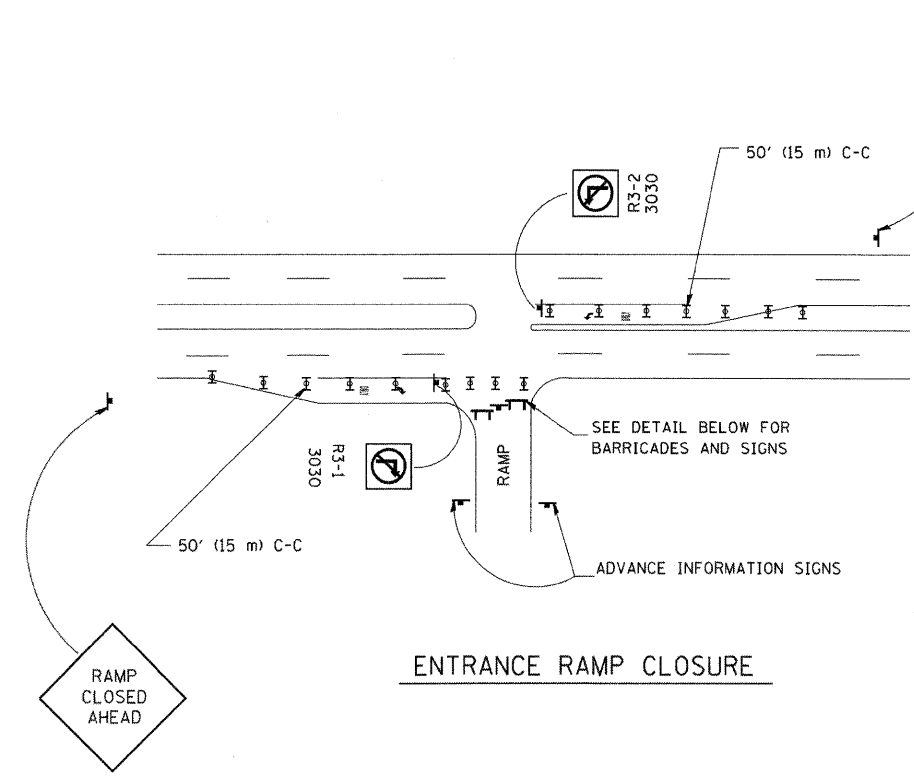
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BENCHING DETAIL
FOR EMBANKMENT WIDENING**

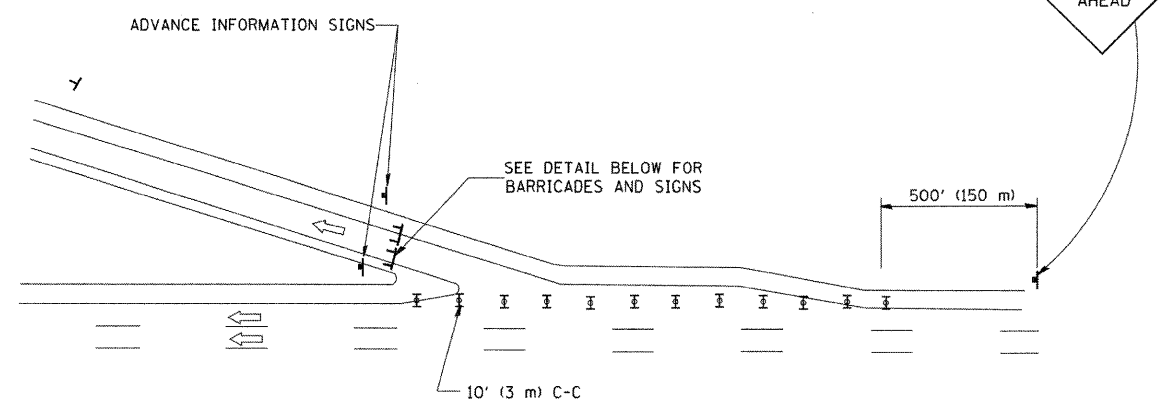
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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BD-51		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

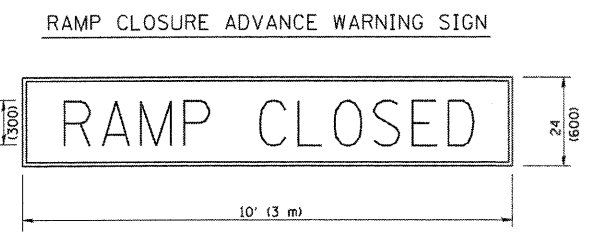
FINAL



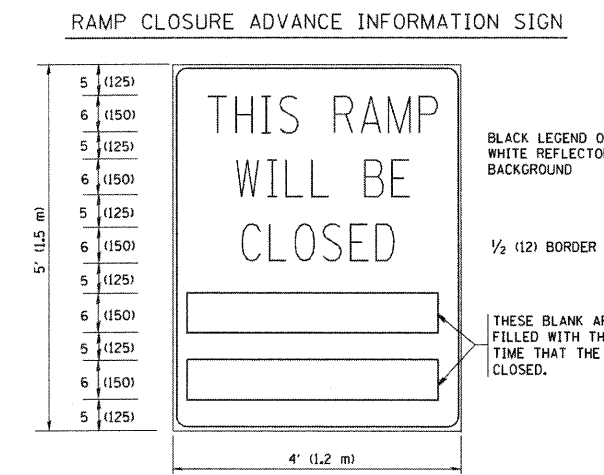
ENTRANCE RAMP CLOSURE



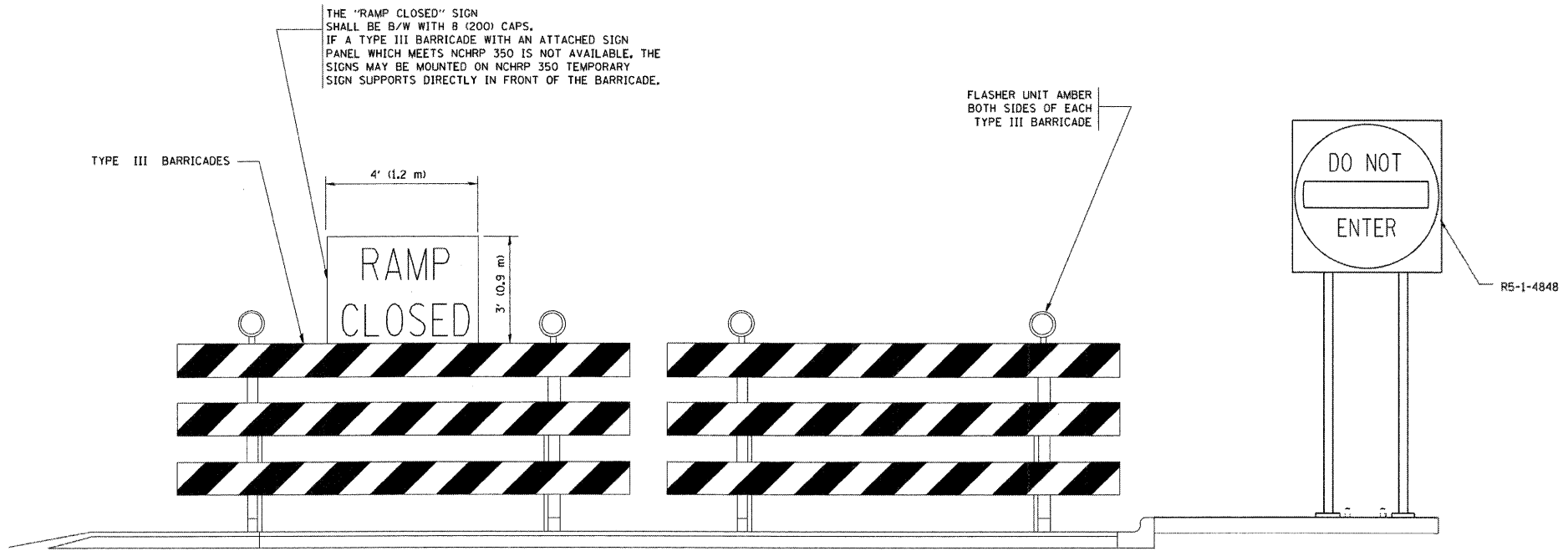
EXIT RAMP CLOSURE



BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND
1 (25) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMPS.



BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND
1/2 (12) BORDER
THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.
THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.



DETAIL FOR REQUIRED BARRICADES & SIGNS

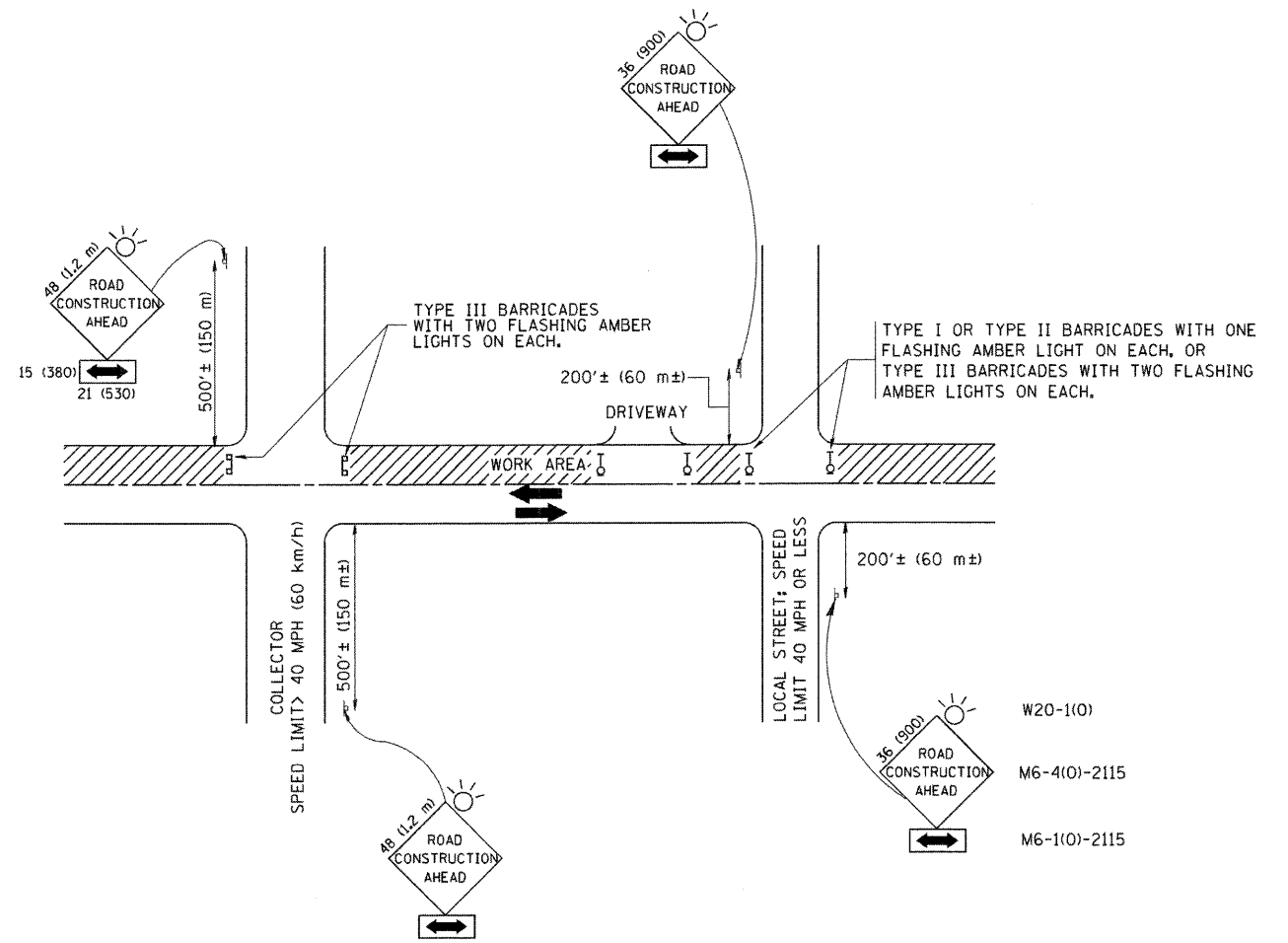
- SYMBOLS**
- ▬ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
 - ▬ TYPE III BARRICADE WITH FLASHING LIGHT

- GENERAL NOTES:**
1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
 2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
 4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
 5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
 6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
 7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = geglionobt	DESIGNED - DWS	REVISED - DWS 12-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FREEWAY ENTRANCE AND EXIST RAMP CLOSURE DETAILS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
W:\diststd\22x34\to08.dgn		DRAWN -	REVISED - DWS/JAF 12-02		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	55	(99-1&2)AC-3	WILL	524	346
		PLLOT SCALE = 50.000' / IN.	REVISIED - JAF 02-06						TC-08		CONTRACT NO.	60C31	
		PLLOT DATE = 1/4/2008	REVISIED - SPB 01-07						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = M:\diststd\22x34\to10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
		CHECKED -	REVISED - A. HOUSEH 10-15-96
		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

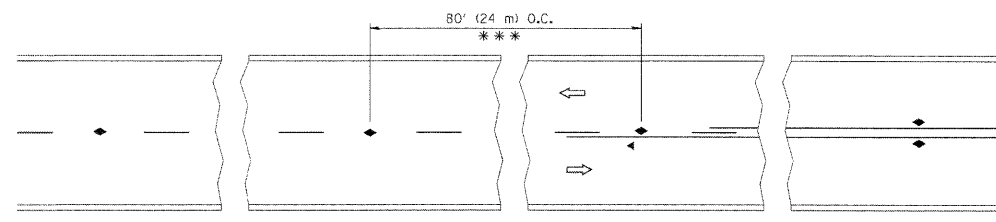
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

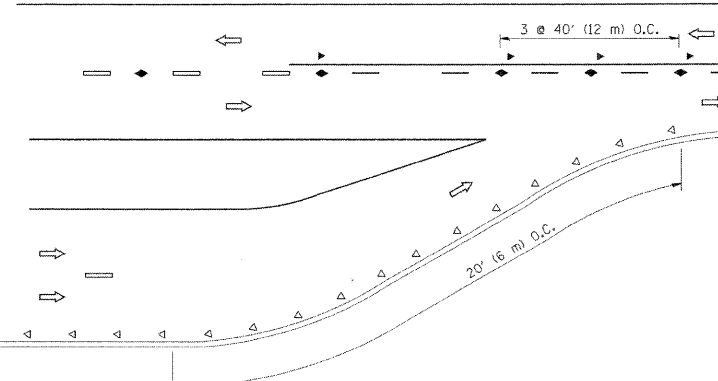
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	347
TC-10		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

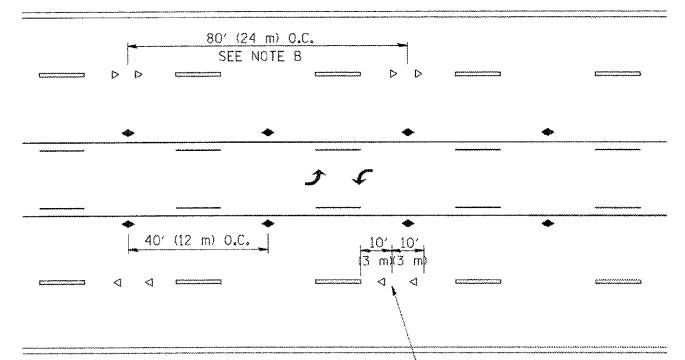


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

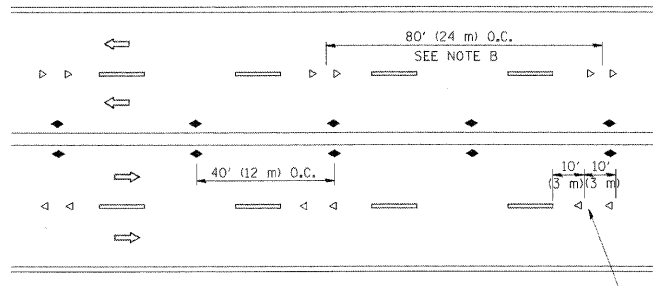
TWO-LANE/TWO-WAY



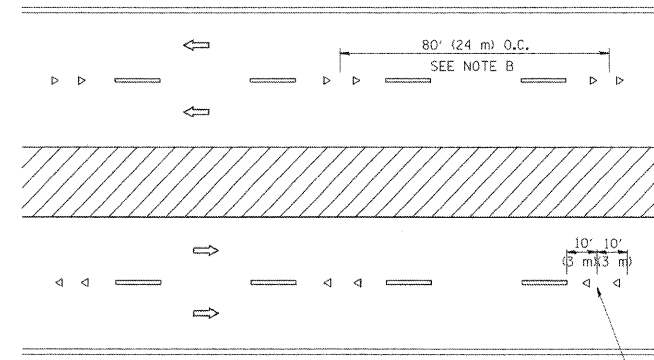
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

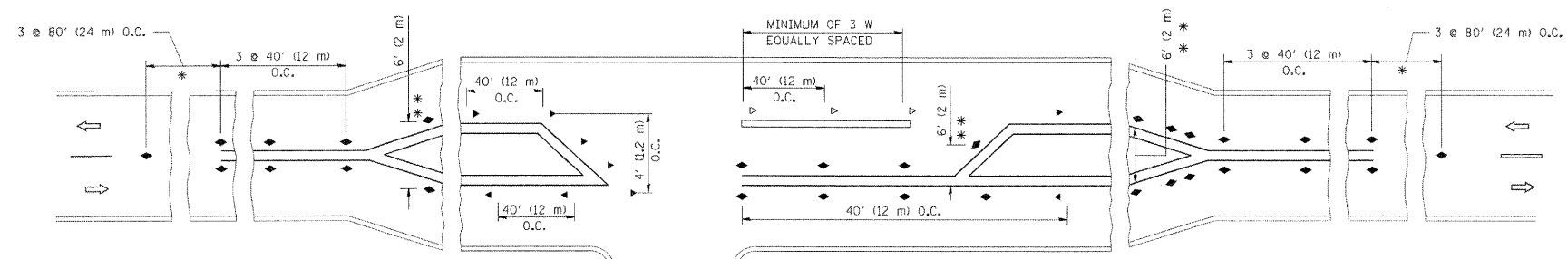
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
c:\pwworksp\pindot\drivakosgn\0128315\to	1.dgn	DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 9/9/2009	DATE -	REVISED - C. JUCCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

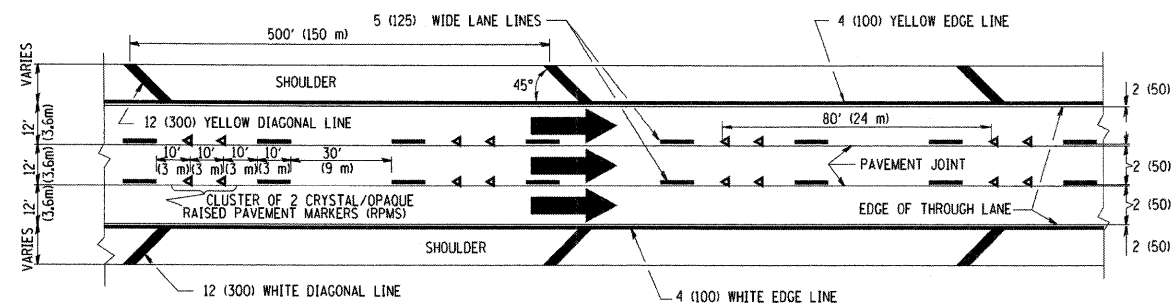
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	348
TC-11		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

FINAL

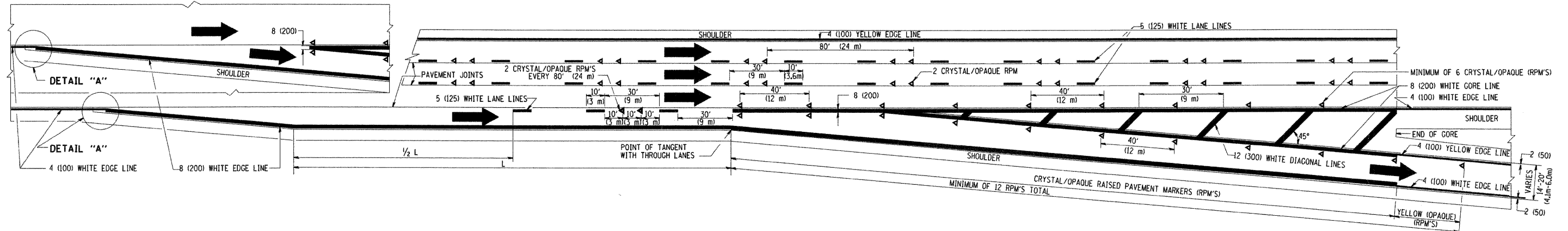
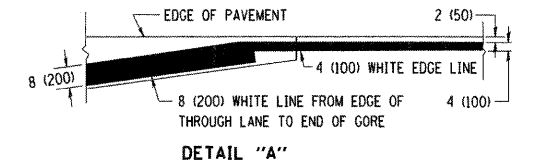
THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH
THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH



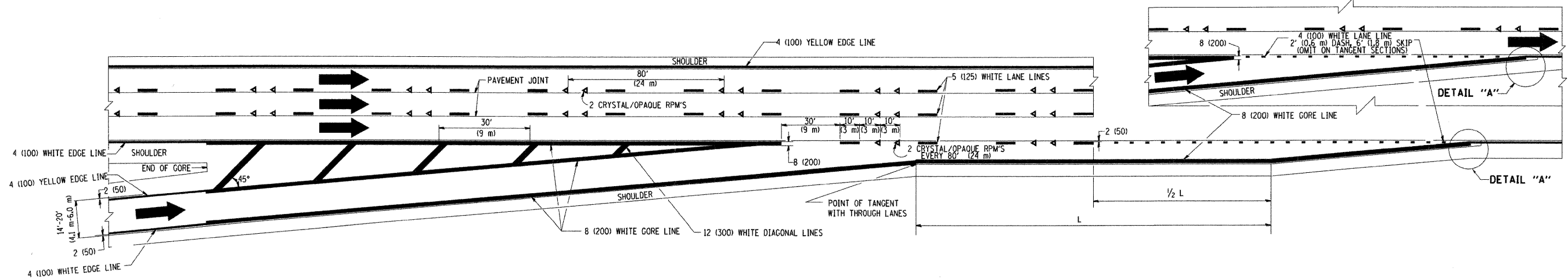
TYPICAL EDGE LINES & LANE LINES

NOTES:

1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC

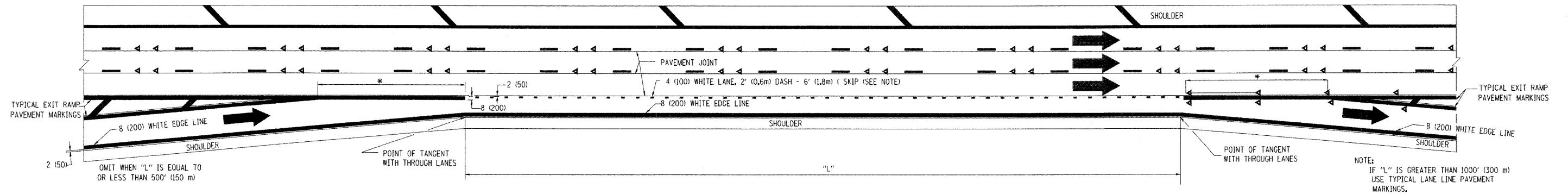


TYPICAL EXIT RAMP PAVEMENT MARKINGS

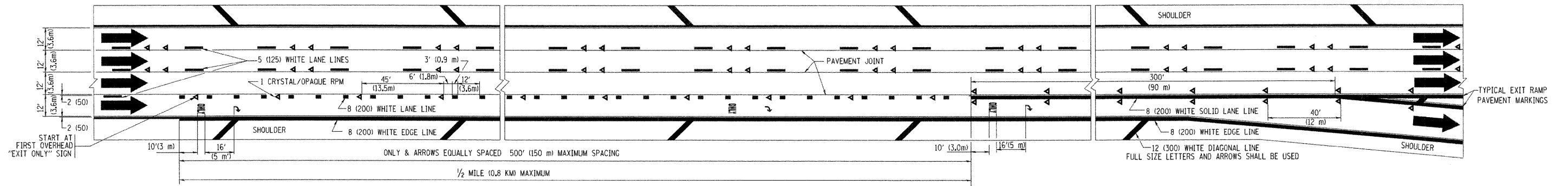


TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

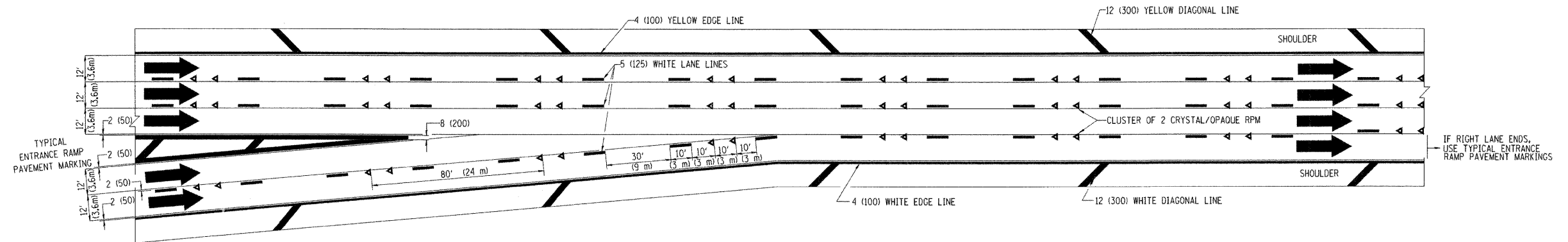
FILE NAME = W:\distatd\22x34\to12.dgn	USER NAME = geglanobt	DESIGNED - D.W.S.	REVISED - A.H. 03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS			F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 349
	PLLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - D.W.S. 07-96		SCALE: NONE	SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.	TC-12		CONTRACT NO. 60C31	
	PLLOT DATE = 1/4/2008	CHECKED -	REVISED - J.A.F. 02-06		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		DATE - 01-90	REVISED - S.P.B. 01-07									



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

FILE NAME =
c:\projects\dststd22x34\tcl2.dgn

USER NAME = beaurd1
PLOT SCALE = 50.000" / IN.
PLOT DATE = 10/3/2008

DESIGNED - D.W.S.
DRAWN -
CHECKED -
DATE - 01-90

REVISED - A.H. 03-96
REVISED - D.W.S. 07-96
REVISED - J.A.F. 02-06
REVISED - S.P.B. 01-07

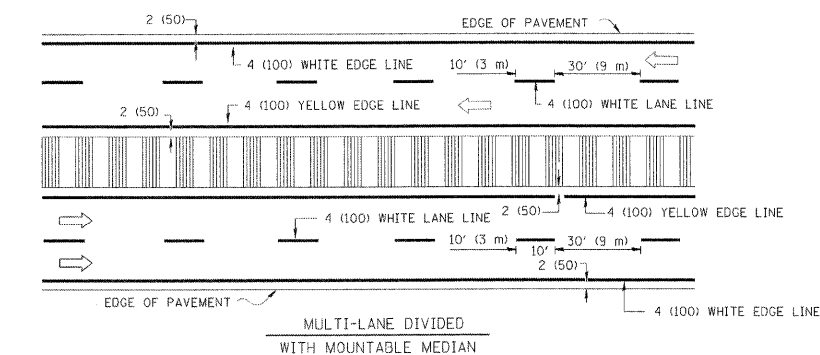
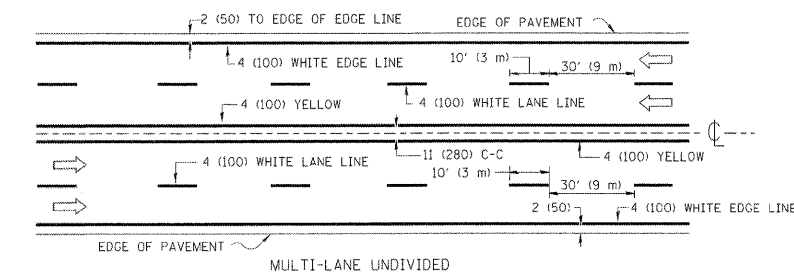
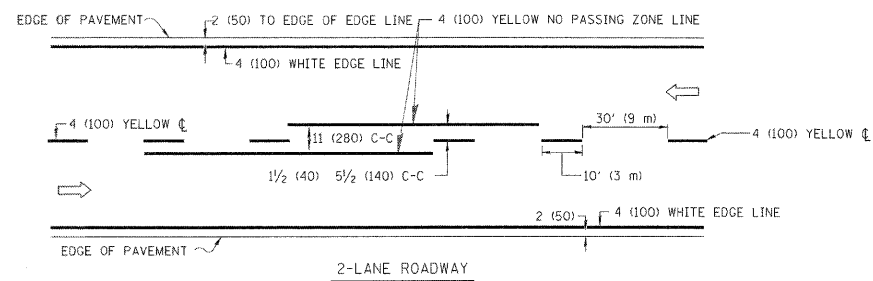
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MULTI-LANE FREEWAY
PAVEMENT MARKING DETAILS**

SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.

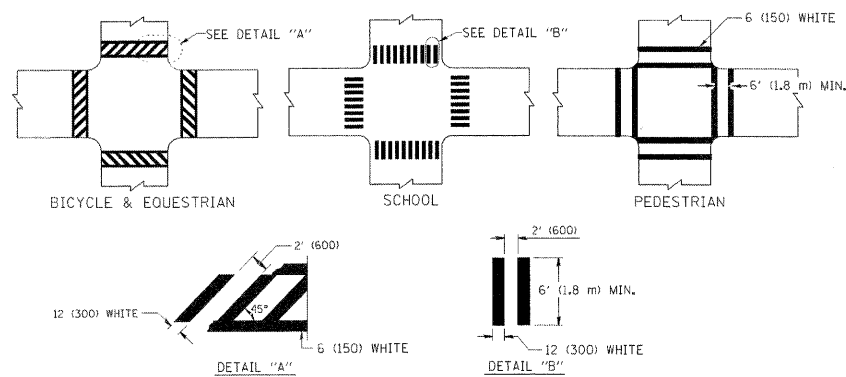
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	350
TC-12		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

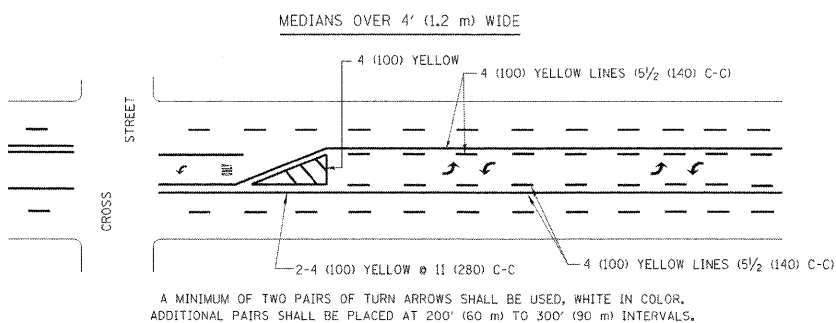
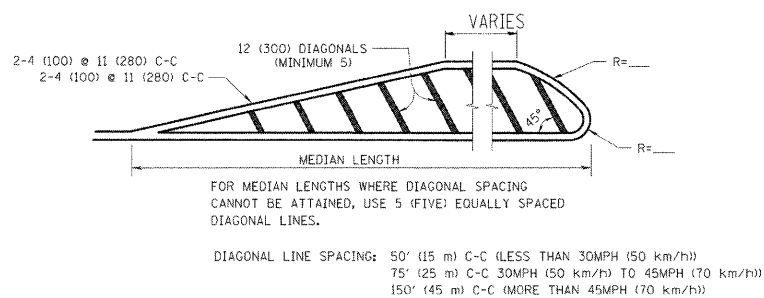
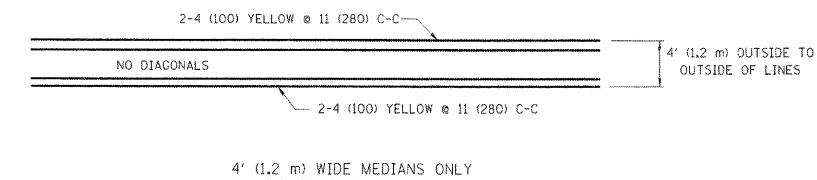


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

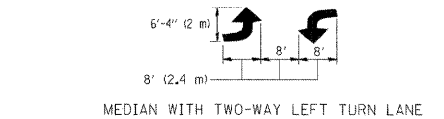
TYPICAL LANE AND EDGE LINE MARKING



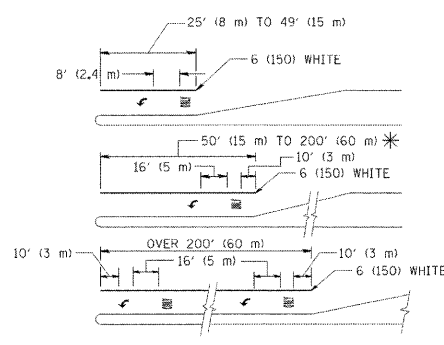
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING

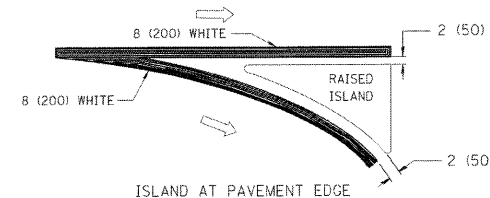
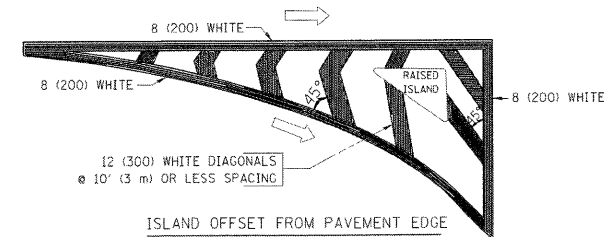


TYPICAL TURN LANE MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = drsvkosgn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
c:\pawork\pawdot\drsvkosgn\ad0108315\to3.dgn		DRAWN -	REVISED - C. JUCIUS 09-09-09
		PLOT SCALE = 50.000 "/ IN.	REVISI -
		PLOT DATE = 9/9/2009	REVISI -

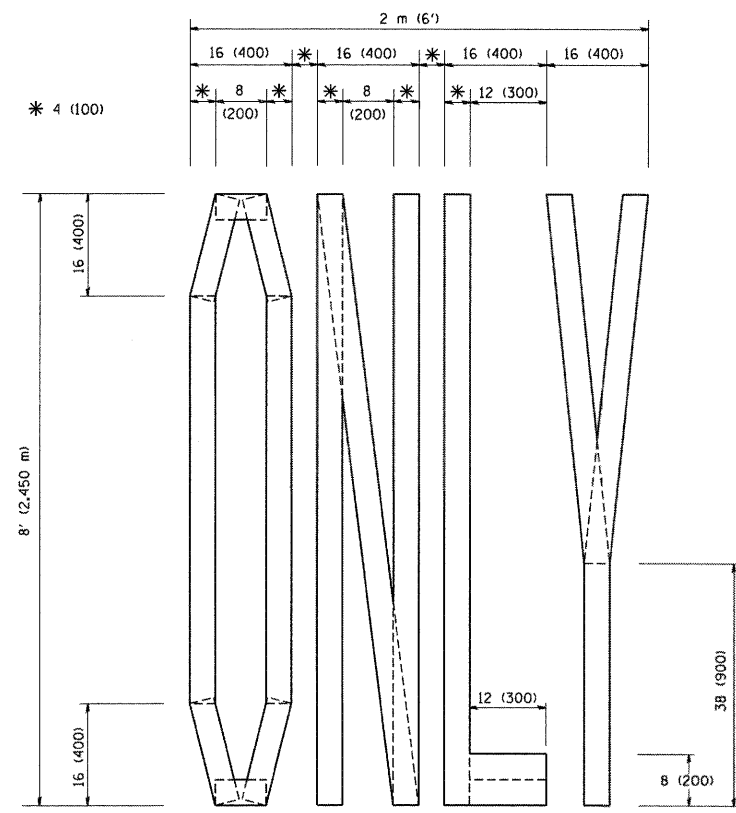
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

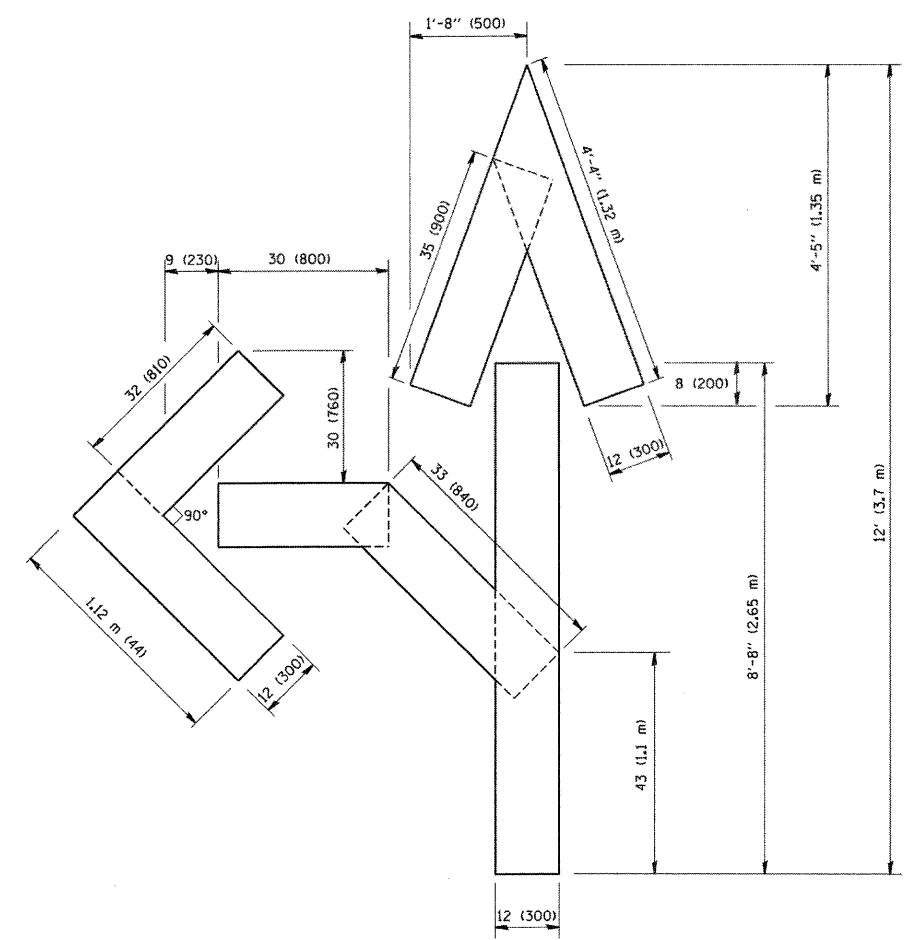
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	351
TC-13		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

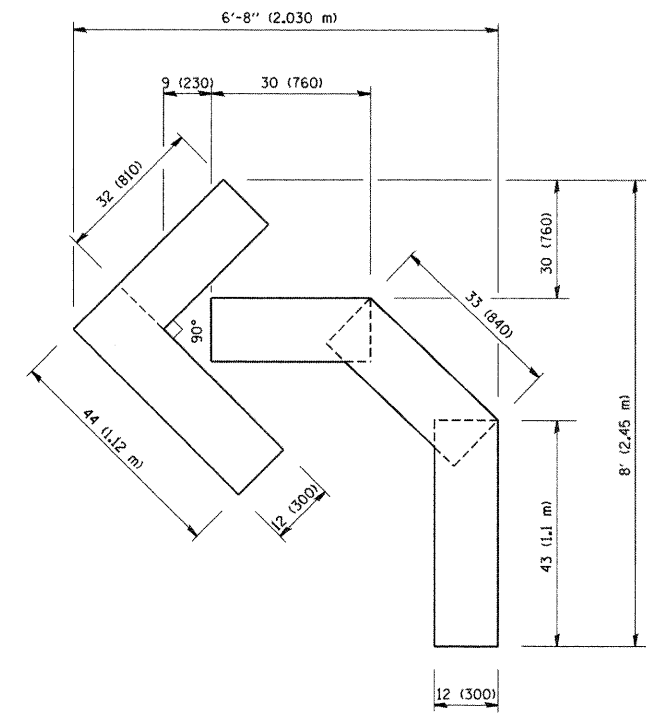
FINAL



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\dststd\22x34\ta16.dgn	USER NAME = geglionebt	DESIGNED - DRAWN -	REVISED -T. RAMMACHER 06-05-96 REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 "/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

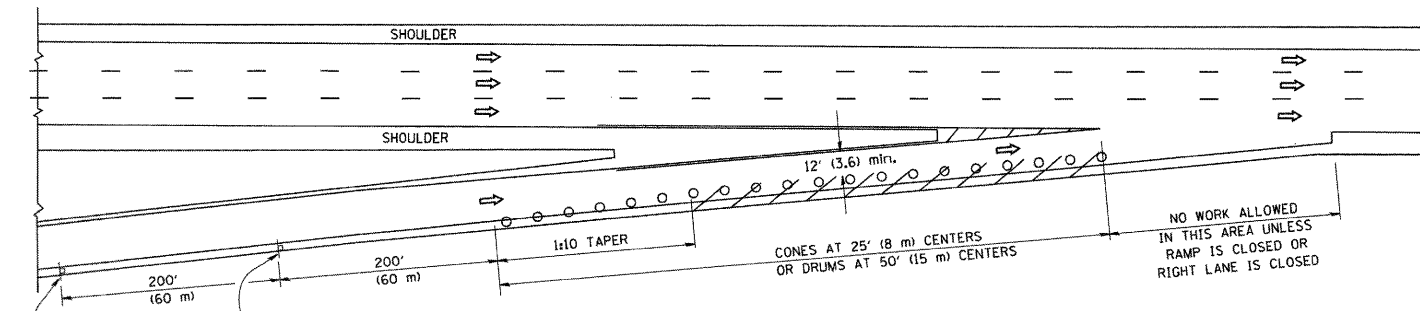
PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

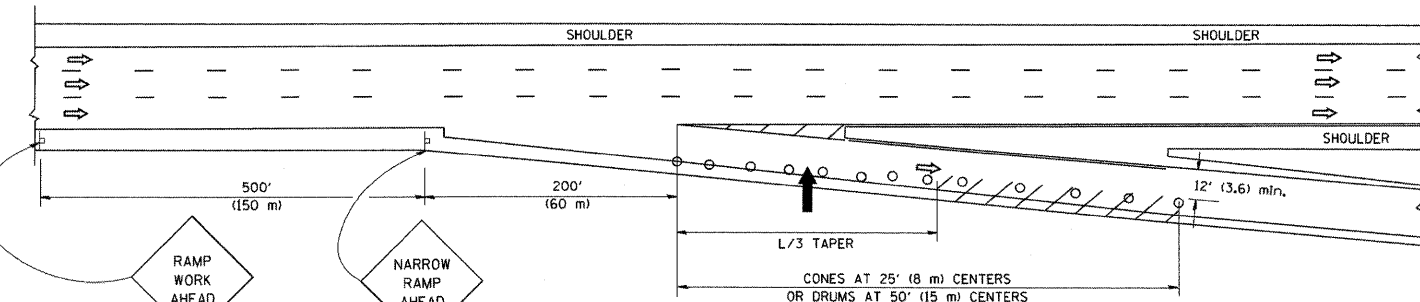
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-16		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

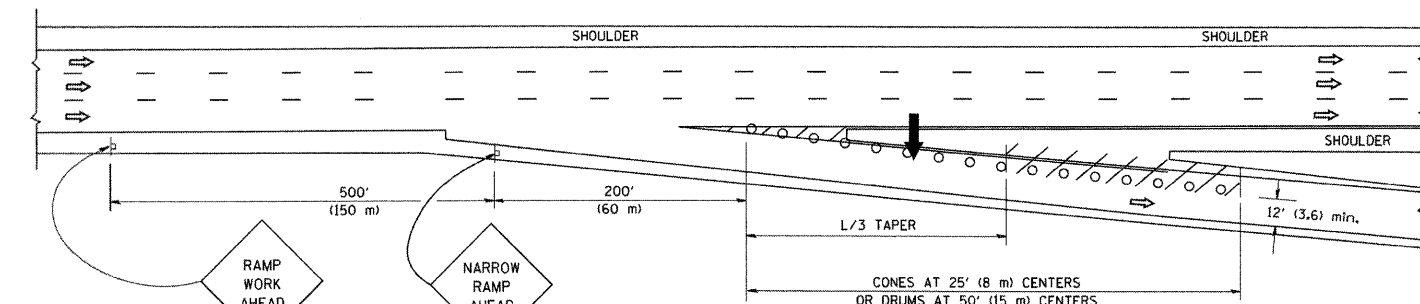
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

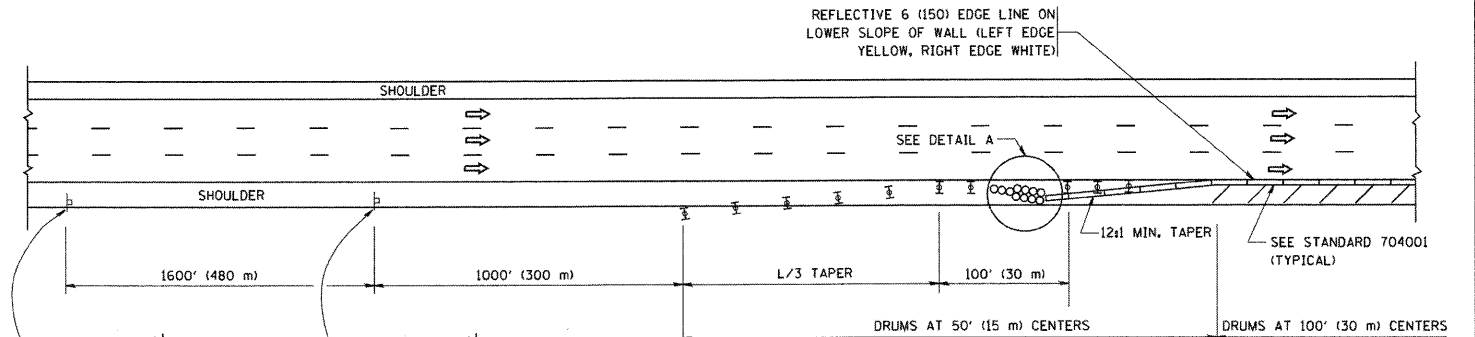
- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

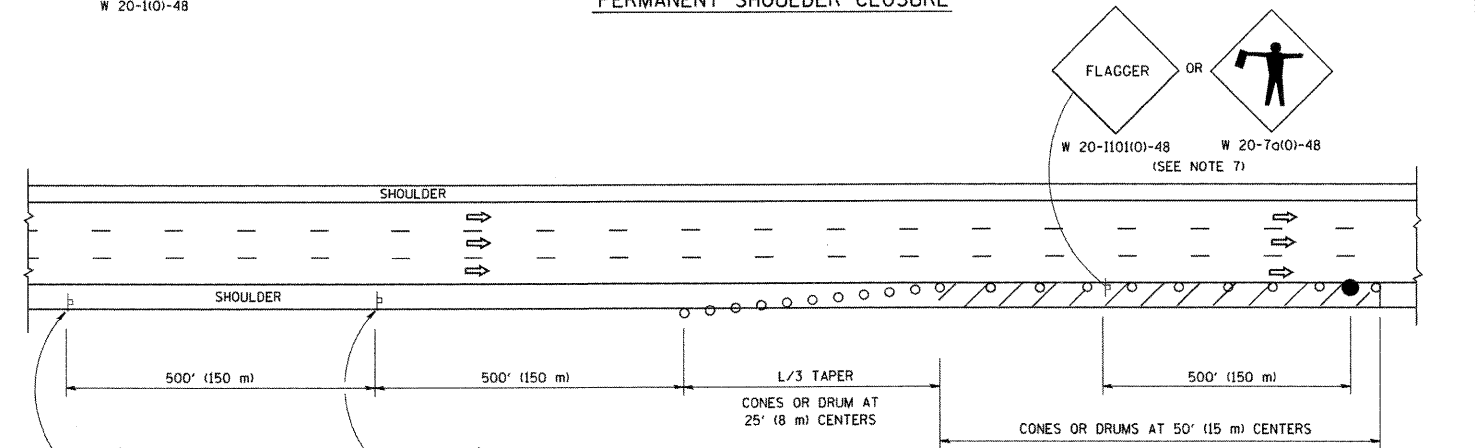
1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC ENGLISH L=0.65(WXS) L=(WXS)
W = WIDTH OF OFFSET IN FEET (METERS)	
S = NORMAL POSTED SPEED MPH (KM/H)	
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS



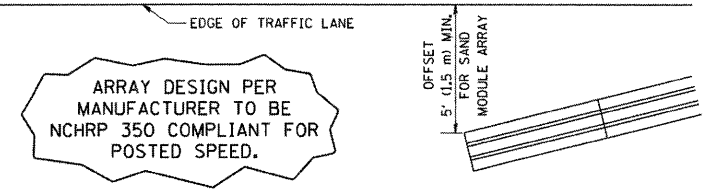
PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

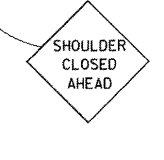
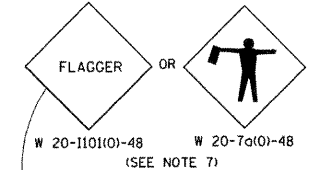
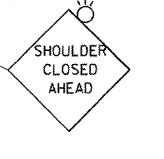
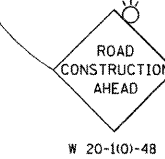
THIS DETAIL IS USED WHERE:

1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



FILE NAME = W:\diststd\22x34\t017.dgn

USER NAME = geglianabt

DESIGNED -
DRAWN - D.W.S.

REVISED - J.A.F. 12-02
REVISED - 04-03

CHECKED - J.A.F. 12-06
REVISED - S.P.B. 01-07

DATE - 11-96

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

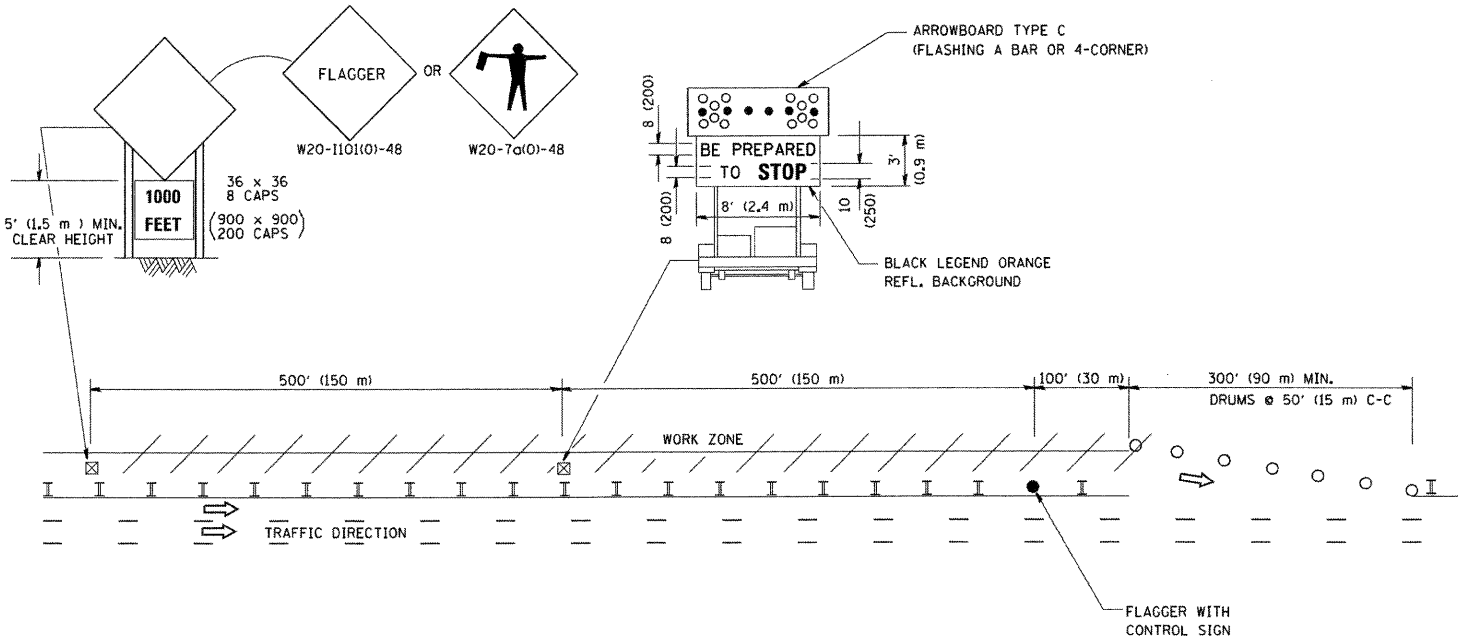
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	353
TC-17		CONTRACT NO.	60C31	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

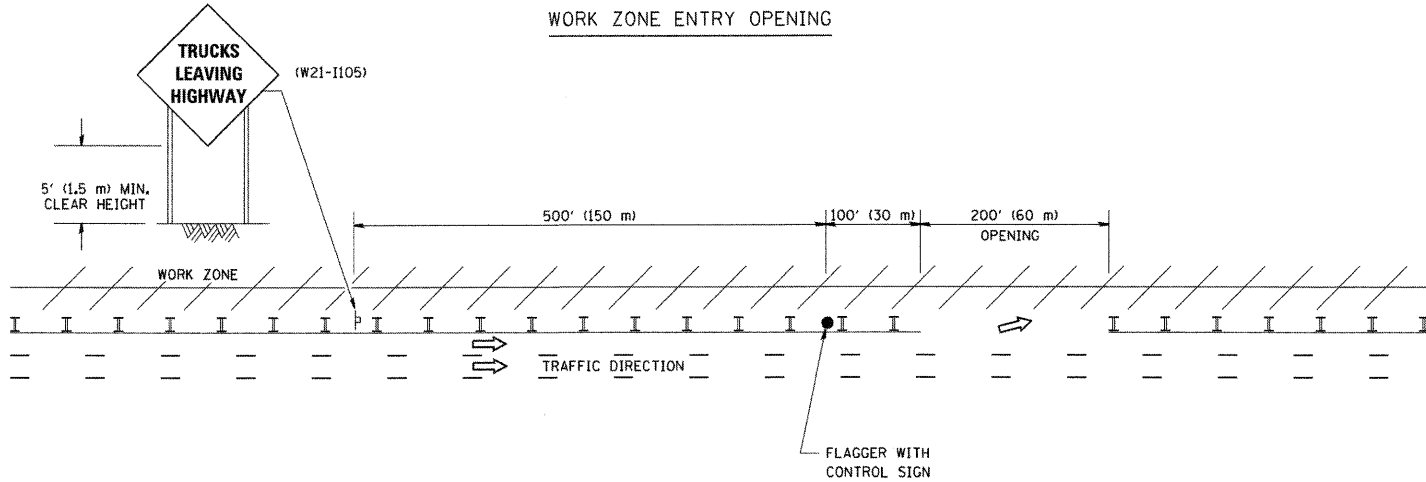
FINAL

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = W:\diststd\22x34\to18.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - D.W.S. 08-98
		DRAWN -	REVISED - J.A.F. 04-03
		CHECKED -	REVISED - J.A.F. 02-06
		DATE -	REVISED - S.P.B. 01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	354
TC-18		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

ROUTE MARKERS

FOR U.S. ROUTES
M1-40-2424

FOR ILLINOIS ROUTES
M1-50-2424

R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-1-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

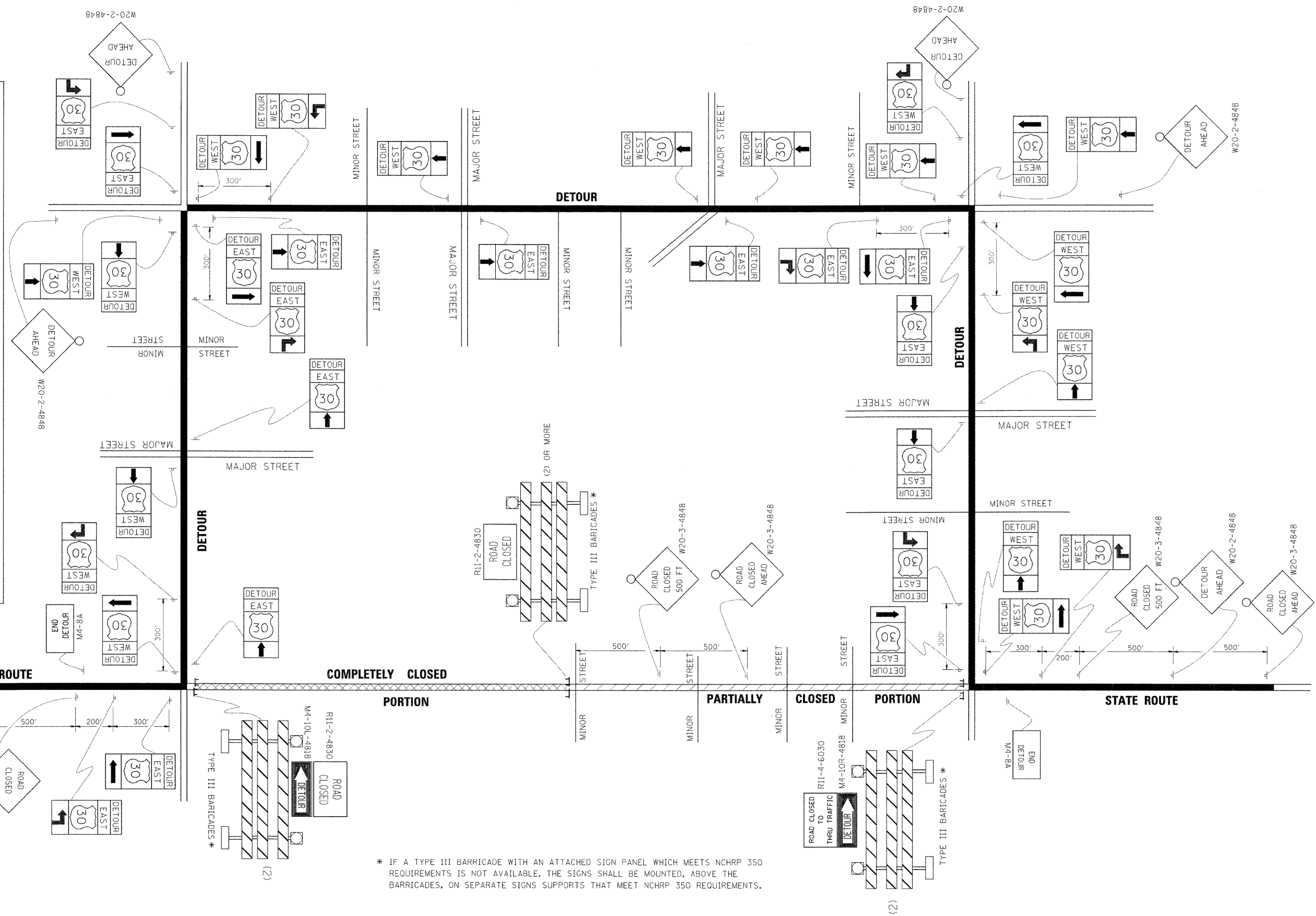
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

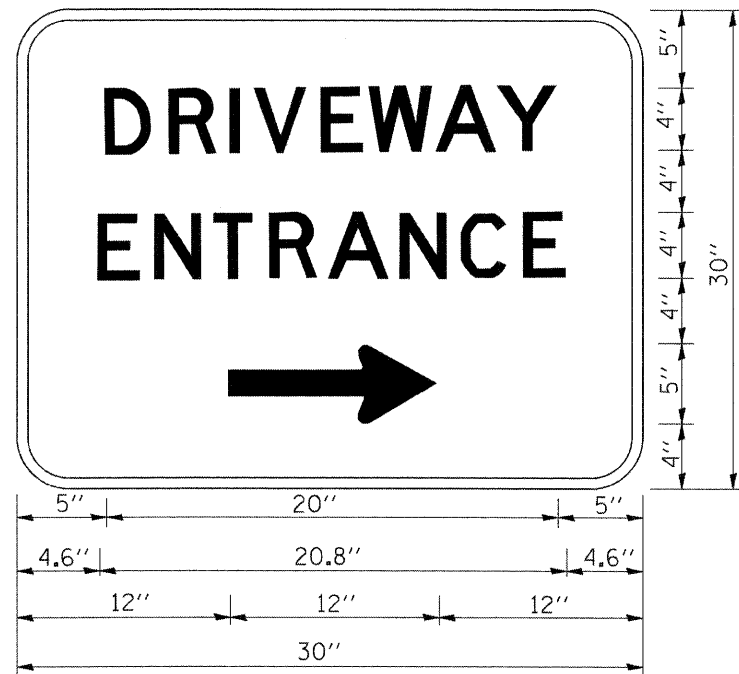
DETOUR M4-8-2412



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - 10-18-02	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\p\work\PIW00T\DRIVAKOSGN\d0108315\21.dgn		DRAWN -	REVISED - R. BORO 09-14-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	55	(99-1&2)AC-3	WILL	524	355
		PLDT SCALE = 49,9999 / / IN.	CHECKED -		REVISED -				TC-21		CONTRACT NO. 60C31		
		PLDT DATE = 9/14/2009	DATE -		REVISED -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME = W:\diststd\22x34\to26.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
		DRAWN -	REVISED -
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

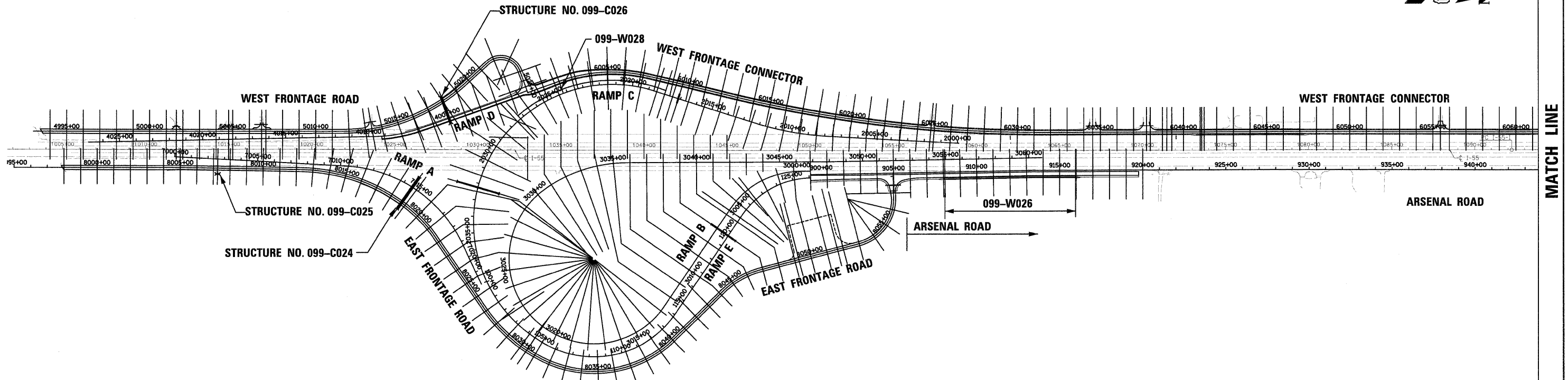
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

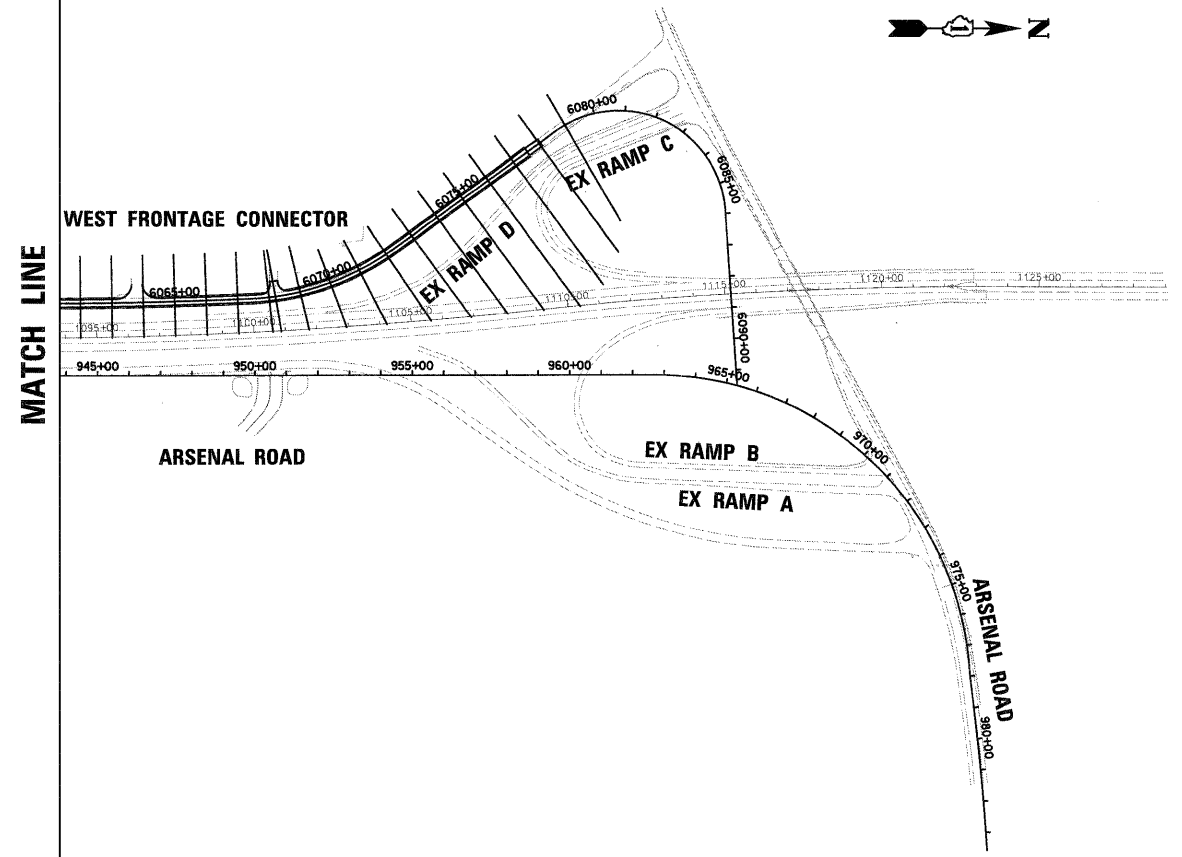
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	356
TC-26		CONTRACT NO. 60C31		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL



NOTE:
 RAMP B ROADWAY GRADING SHOWN FROM XS-89 TO XS-108.
 RAMP B POND GRADING SHOWN FROM XS-109 TO XS-124.



FILE NAME = D:\62031-SHT-XSSH00.dgn	USER NAME = TKluegal	DESIGNED -	REVISED -
PLOT SCALE = 1:300	CHECKED -	DRAWN -	REVISED -
PLOT DATE = 12/15/2009	DATE = 12/18/09		

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTION KEY MAP

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	357
CONTRACT NO. 60C31			ILLINOIS FED. AID PROJECT	

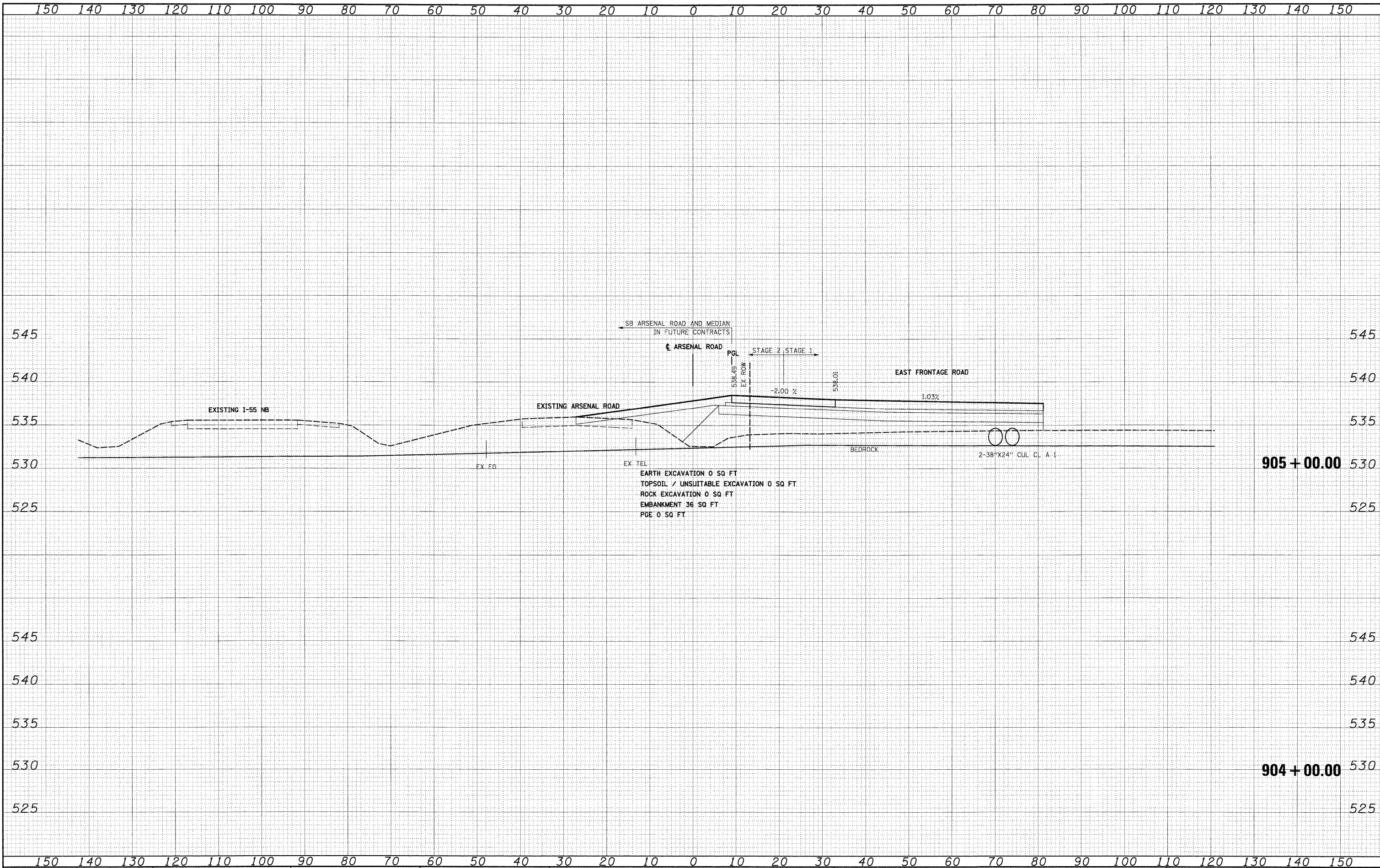
MATCH LINE

FINAL

FINAL SURVEY	DATE
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ORIGINAL SURVEY	DATE
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FILE NAME = D:\60C31-SHT-XSSH11.dgn

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PLOT SCALE = 1:10	DRAWN - TRK	REVISED -
PLOT DATE = 12/11/2009	CHECKED - DLT	REVISED -
	DATE - 12/18/09	REVISED -

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DRAWN - TRK	REVISED -
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DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STAGE 1 ARSENAL ROAD CROSS SECTIONS

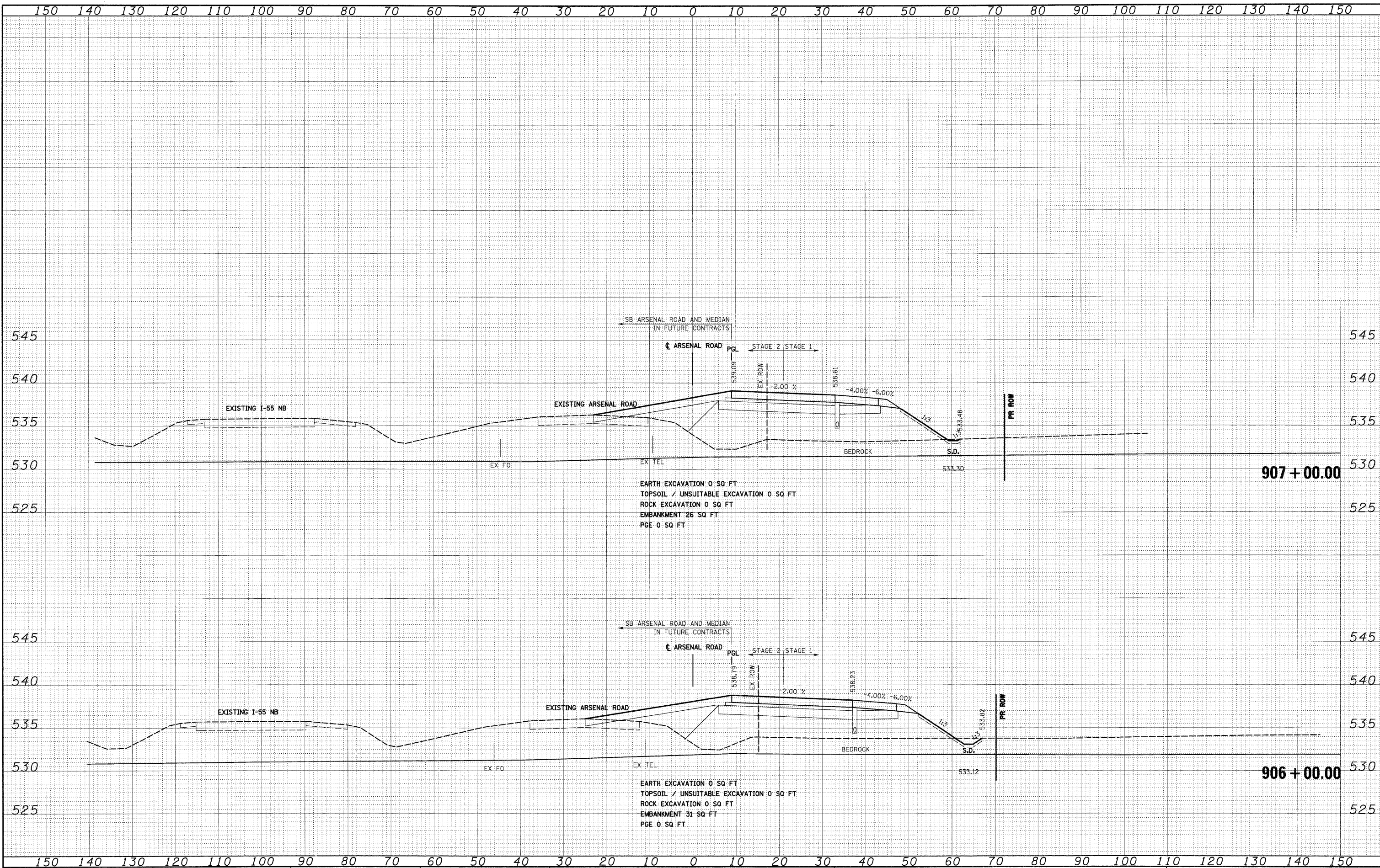
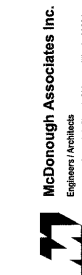
SCALE: 1"=10'H; 1"=5'V SHEET NO. 1 OF 2 SHEETS STA. 904+00.00 TO STA. 905+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	358
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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ORIGINAL SURVEY	DATE
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EARTH EXCAVATION 0 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 0 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 26 SQ FT
 PGE 0 SQ FT

EARTH EXCAVATION 0 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 0 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 31 SQ FT
 PGE 0 SQ FT

FILE NAME = D:\160C31-SHT-XSSH11.dgn

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	DRAWN - TRK	REVISED -
PLOT SCALE = 1:10	CHECKED - DLT	REVISED -
PLOT DATE = 12/11/2009	DATE - 12/18/09	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STAGE 1 ARSENAL ROAD CROSS SECTIONS

SCALE: 1"=10'H; 1"=5'V SHEET NO. 2 OF 2 SHEETS STA. 906+00.00 TO STA. 907+00.00

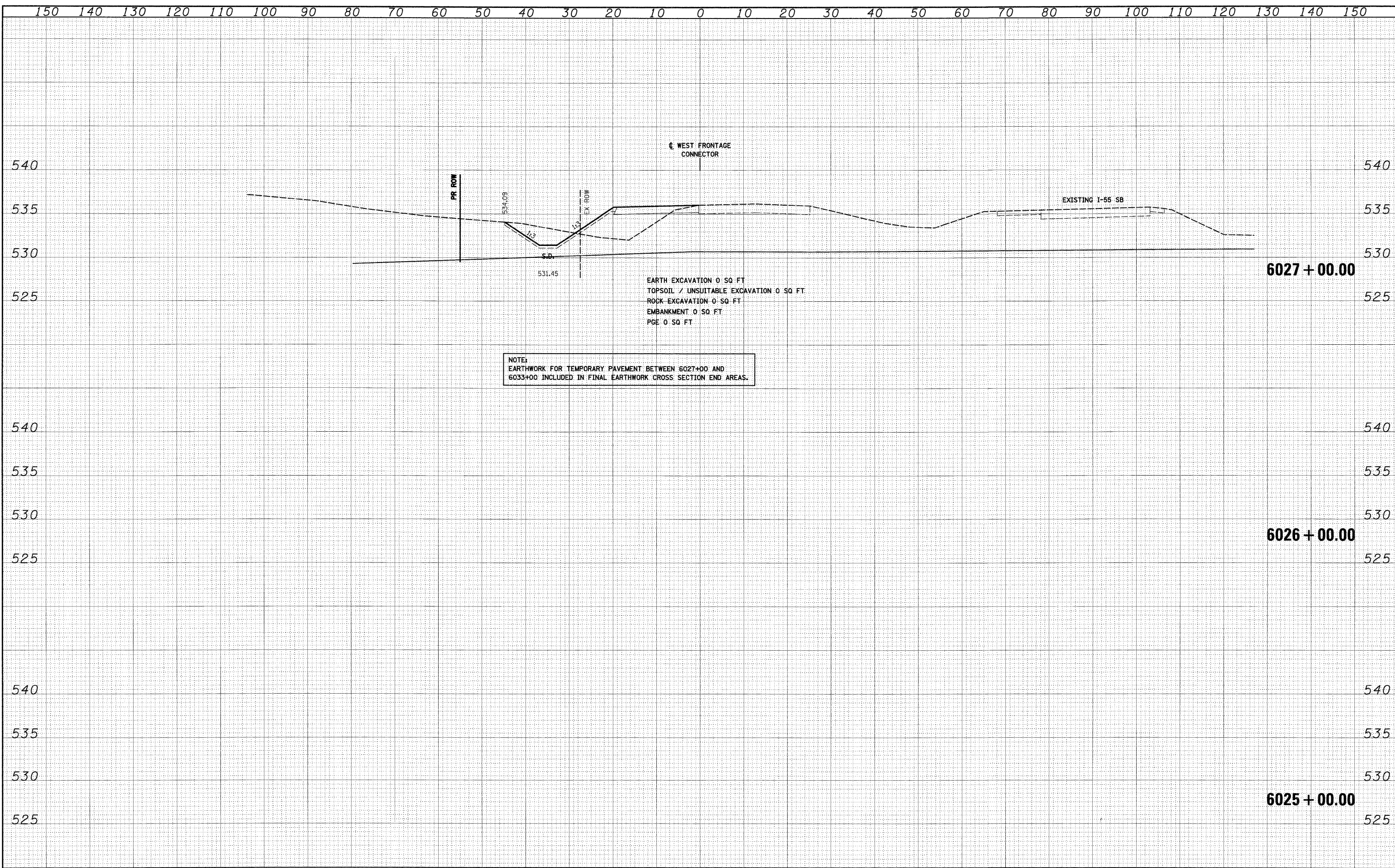
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	359
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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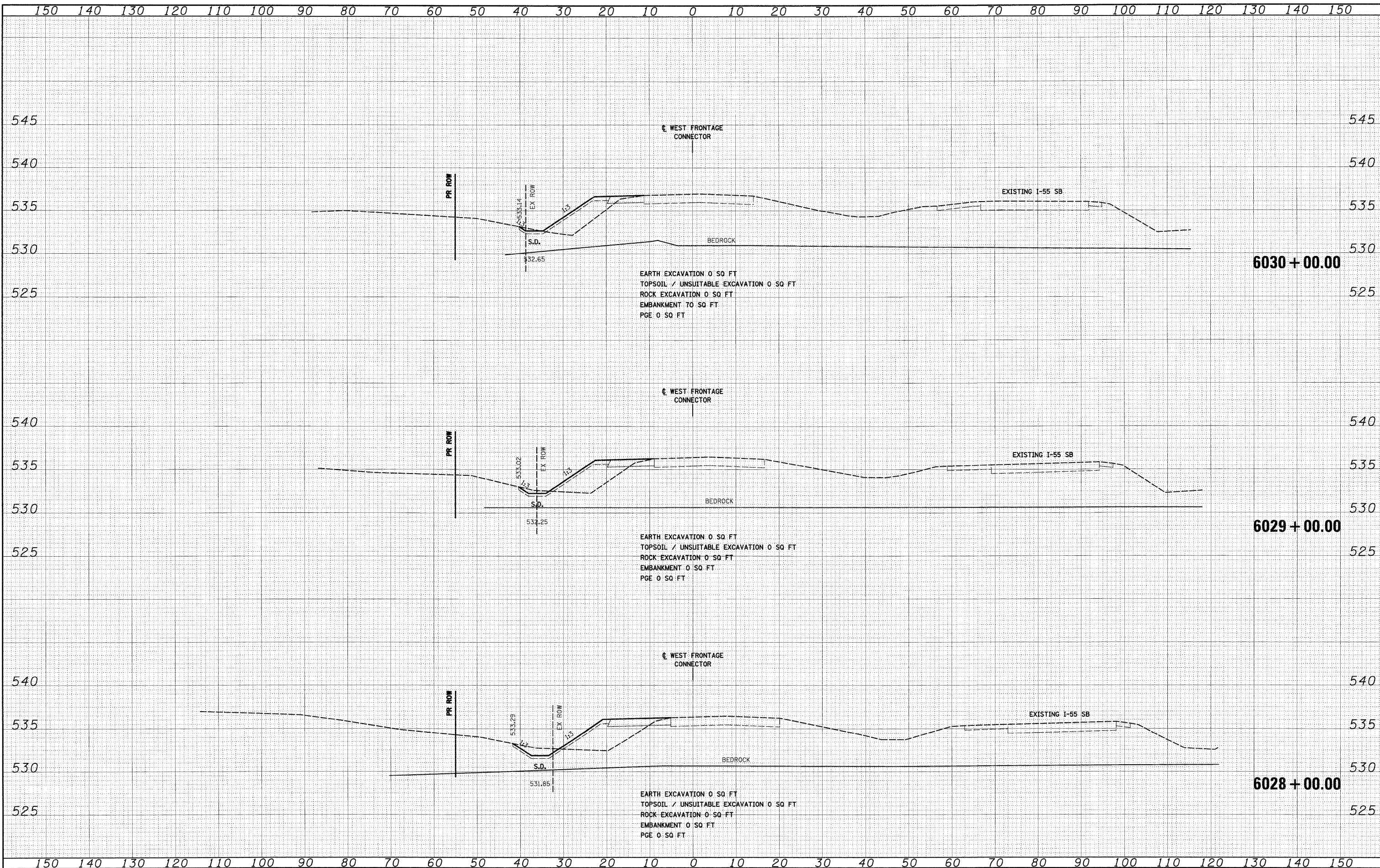
NOTE:
 EARTHWORK FOR TEMPORARY PAVEMENT BETWEEN 6027+00 AND 6033+00 INCLUDED IN FINAL EARTHWORK CROSS SECTION END AREAS.

FILE NAME = D:\60C31-SHT-XSSH112.dgn	USER NAME = TKLuegel	DESIGNED - TRK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE 1 WEST FRONTAGE ROAD CONNECTOR	F.A.I. R.T.E. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 360		
PLOT SCALE = 1:100	CHECKED - DLT	REVISED -	SCALE: 1"=10'H; 1"=5'V			SHEET NO. 1 OF 5 SHEETS	STA. 6025+00.00 TO STA. 6027+00.00	CONTRACT NO. 60C31		ILLINOIS FED. AID PROJECT		
PLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -										

FINAL

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FILE NAME = D:\60C31-SHT-XSH112.dgn

USER NAME = tkluogal

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DRAWN - TRK

CHECKED - DLT

DATE - 12/18/09

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1 WEST FRONTAGE ROAD CONNECTOR

SCALE: 1"=10'H; 1"=5'V SHEET NO. 2 OF 5 SHEETS STA. 6028+00.00 TO STA. 6030+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	361
CONTRACT NO. 60C31				

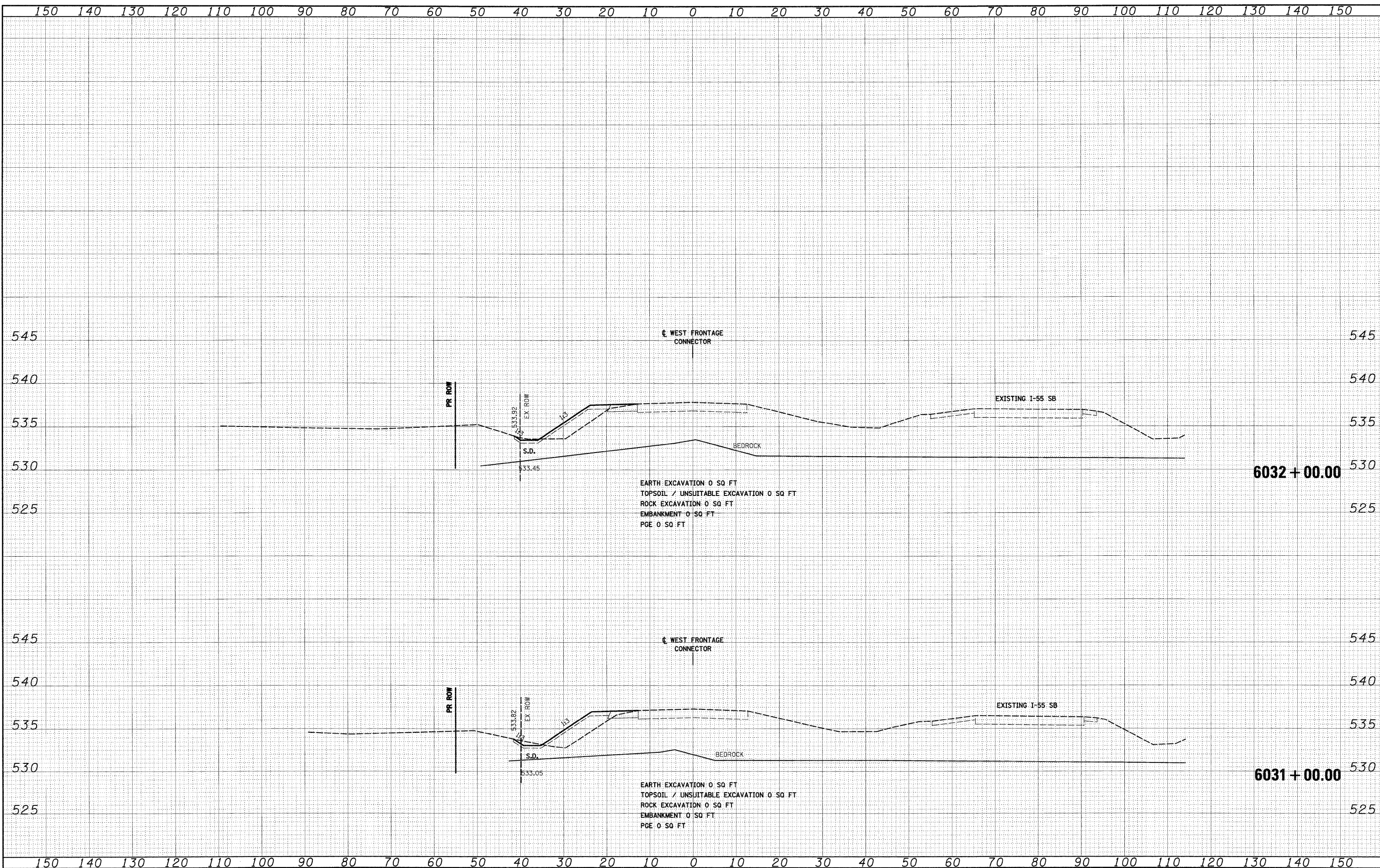
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

FINAL

FINAL SURVEY	BY	DATE
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ORIGINAL SURVEY	BY	DATE
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FILE NAME = D:\62C31-SHT-XSH112.dgn

USER NAME = tk1uegal
 DESIGNED - TRK
 DRAWN - TRK
 CHECKED - DLT
 DATE - 12/18/09

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STAGE 1 WEST FRONTAGE ROAD CONNECTOR

SCALE: 1"=10'H; 1"=5' V SHEET NO. 3 OF 5 SHEETS STA. 6031+00.00 TO STA. 6032+00.00

F.A. I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	362
CONTRACT NO. 60C31				

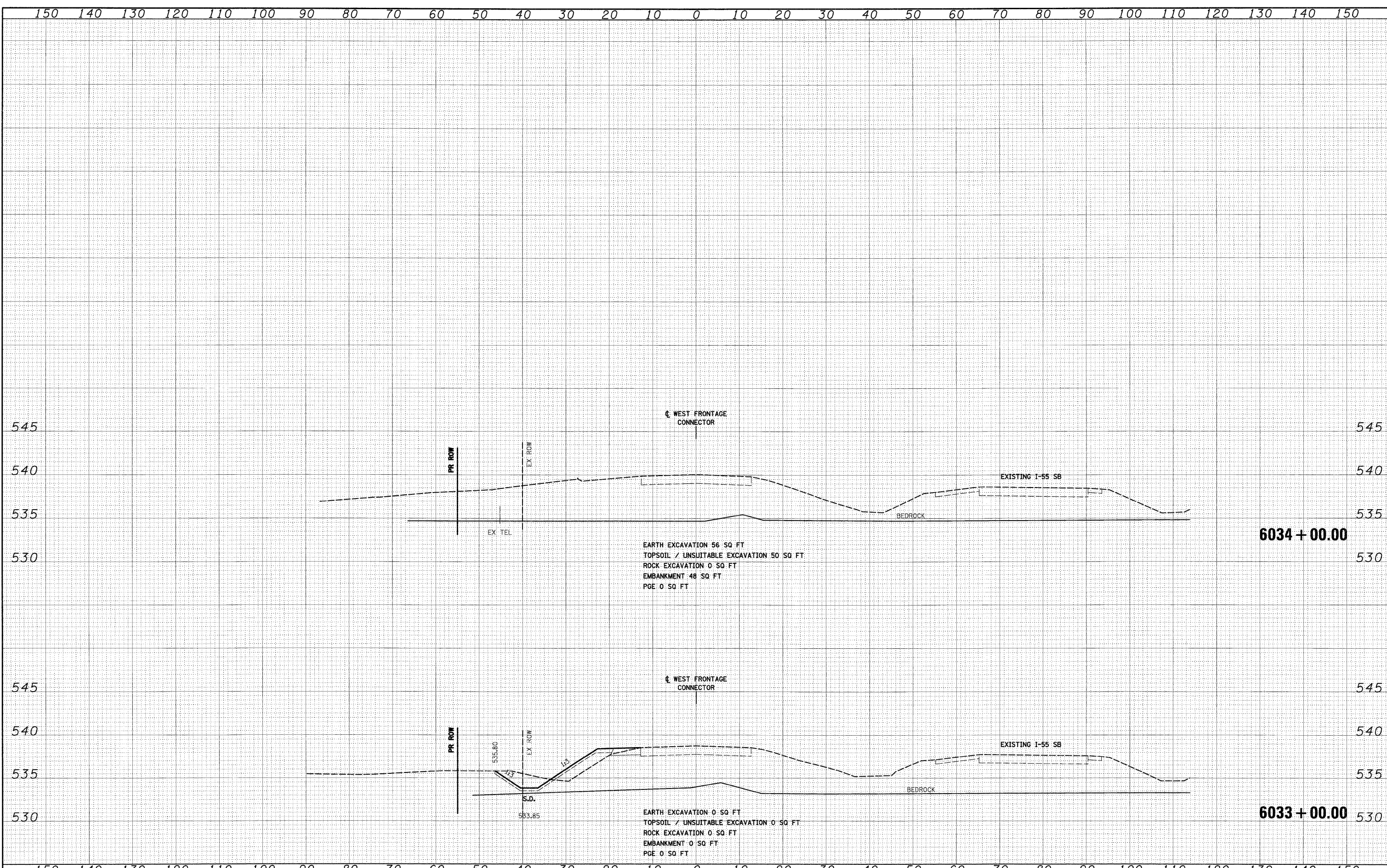
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

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NOTE BOOK	
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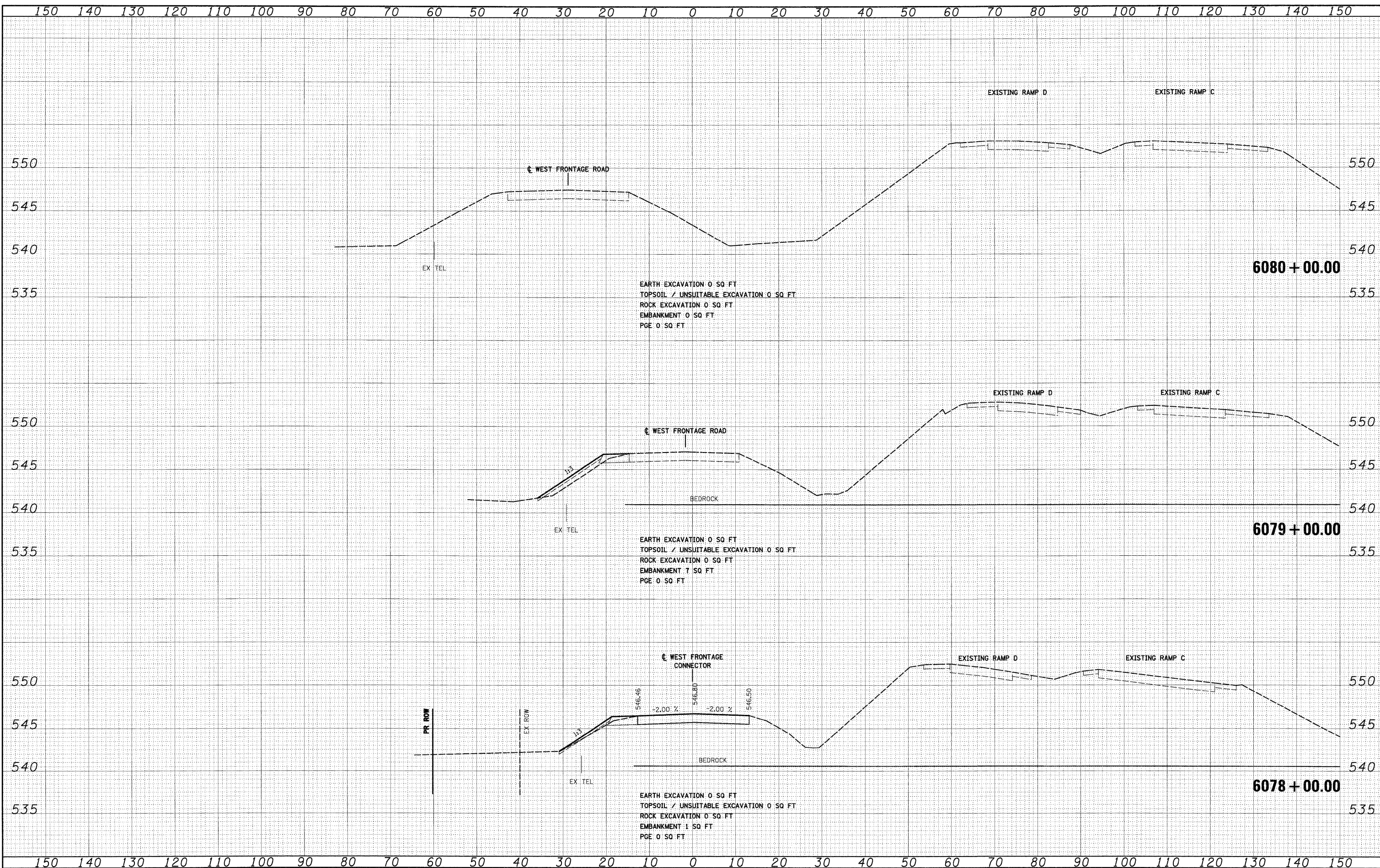
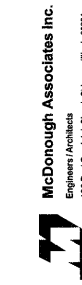


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PLOT SCALE = 1:10	CHECKED - DLT	DATE - 12/18/09	REVISED -			CONTRACT NO. 60C31				
PLOT DATE = 12/15/2009	REVISED -	REVISED -	SCALE: 1"=10'H; 1"=5'V SHEET NO. 4 OF 5 SHEETS STA. 6033+00.00 TO STA. 6034+53.77							
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT								

FINAL

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NOTE BOOK	
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NOTE BOOK	
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PLLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1 WEST FRONTAGE ROAD CONNECTOR

SCALE: 1"=10'H; 1"=5'V SHEET NO. 5 OF 5 SHEETS STA. 6077+00.00 TO STA. 6079+00.00

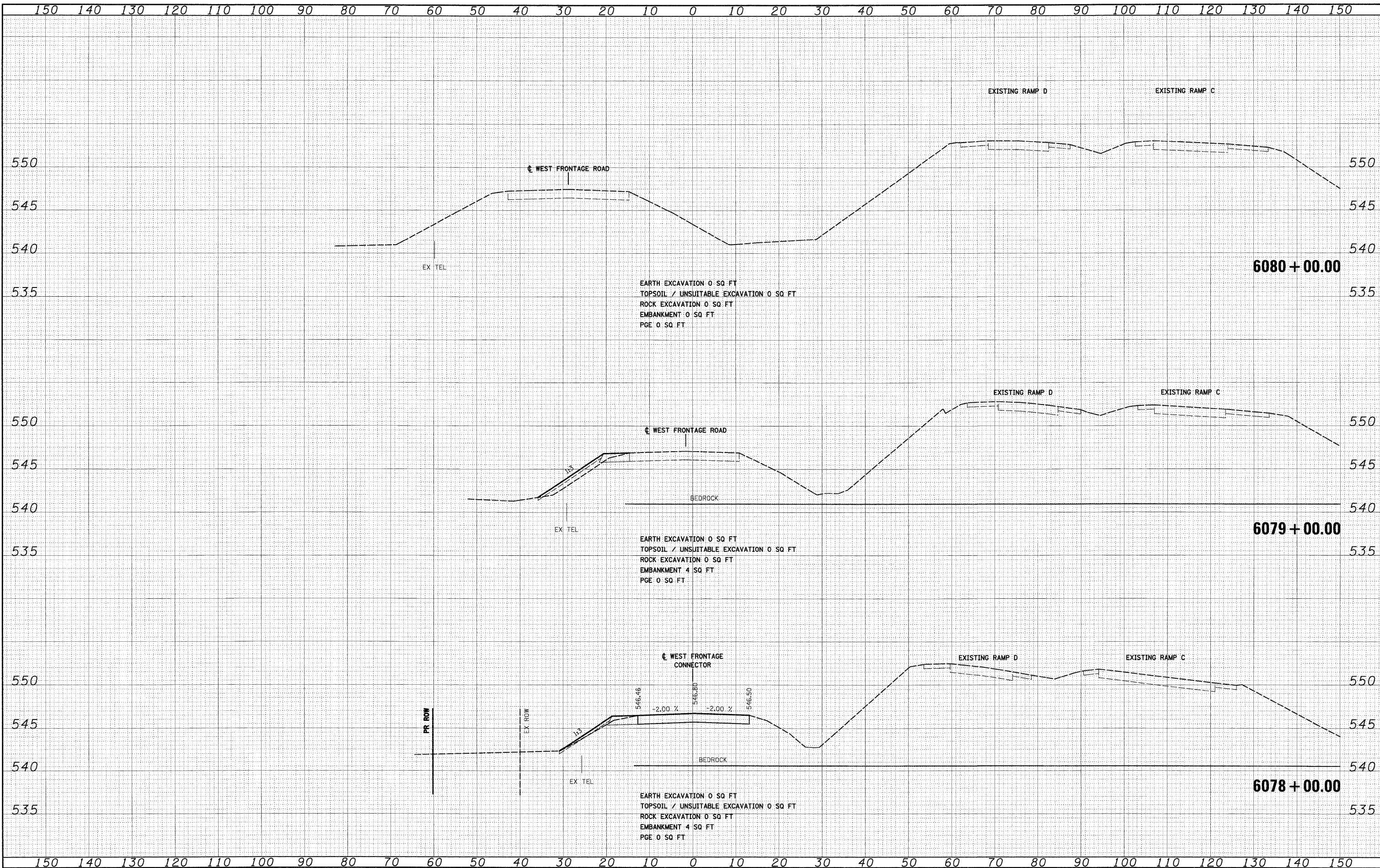
F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	364
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

FINAL SURVEY	DATE
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ORIGINAL SURVEY	DATE
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PLLOT SCALE = 1:10	DRAWN - TRK	REVISED -
PLLOT DATE = 12/11/2009	CHECKED - DLT	REVISED -
	DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STAGE 2 WEST FRONTAGE ROAD CONNECTOR

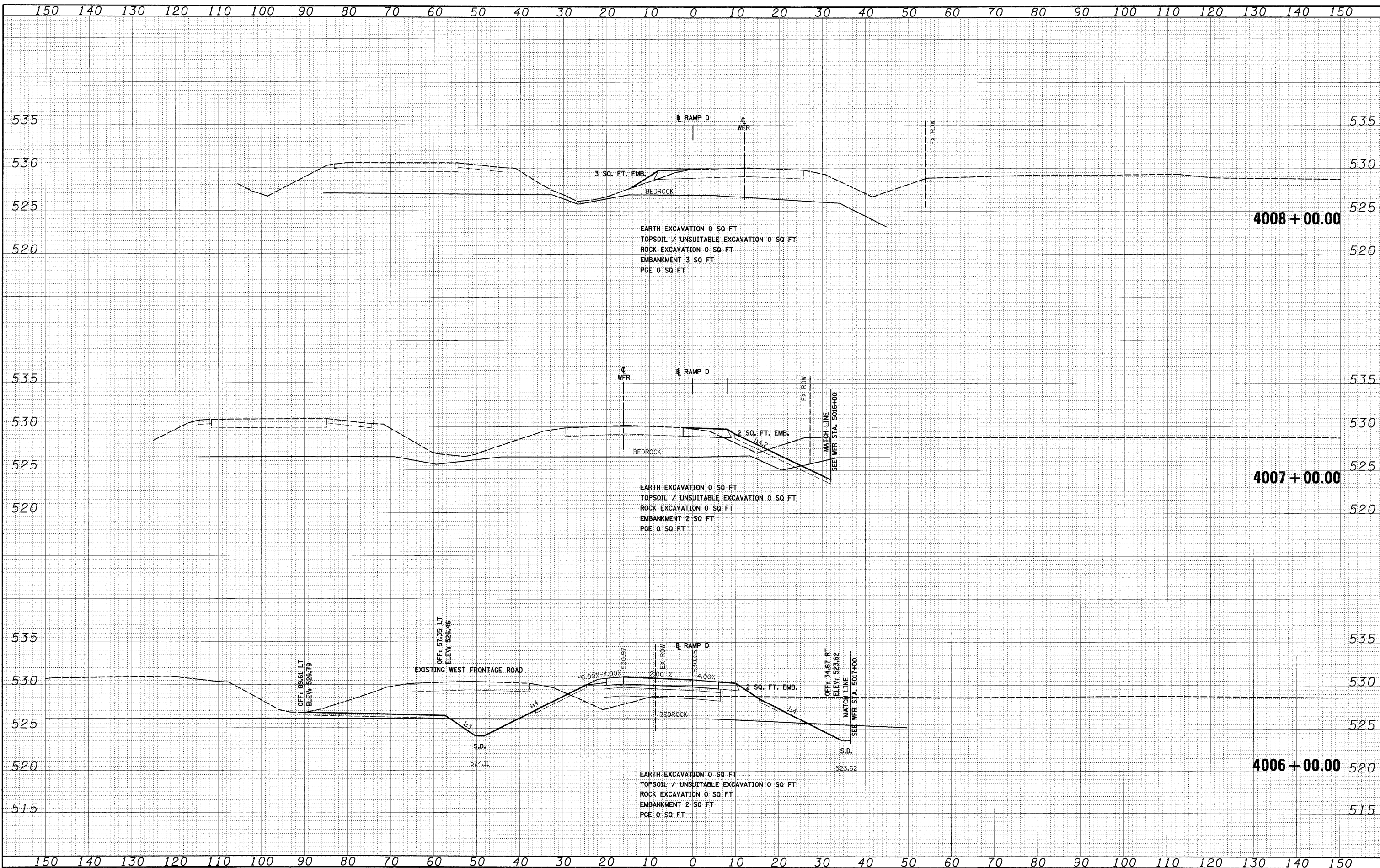
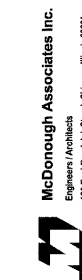
SCALE: 1"=10'H; 1"=5'V SHEET NO. 1 OF 1 SHEETS STA. 6077+00.00 TO STA. 6079+00.00

F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	365
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

FINAL SURVEY	DATE
SURVEYED	BY
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NOTE BOOK	
AREAS CHECKED	
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ORIGINAL SURVEY	DATE
SURVEYED	BY
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FILE NAME = D:\62C\31-SHT-XSSH17.dgn

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PLOT SCALE = 1:10	DRAWN - TRK	REVISED -
PLOT DATE = 12/11/2009	CHECKED - DLT	REVISED -
	DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1 RAMP D CROSS SECTIONS

SCALE: 1"=10'H; 1"=5'V SHEET NO. 1 OF 2 SHEETS STA. 4006+00.00 TO STA. 4008+00.00

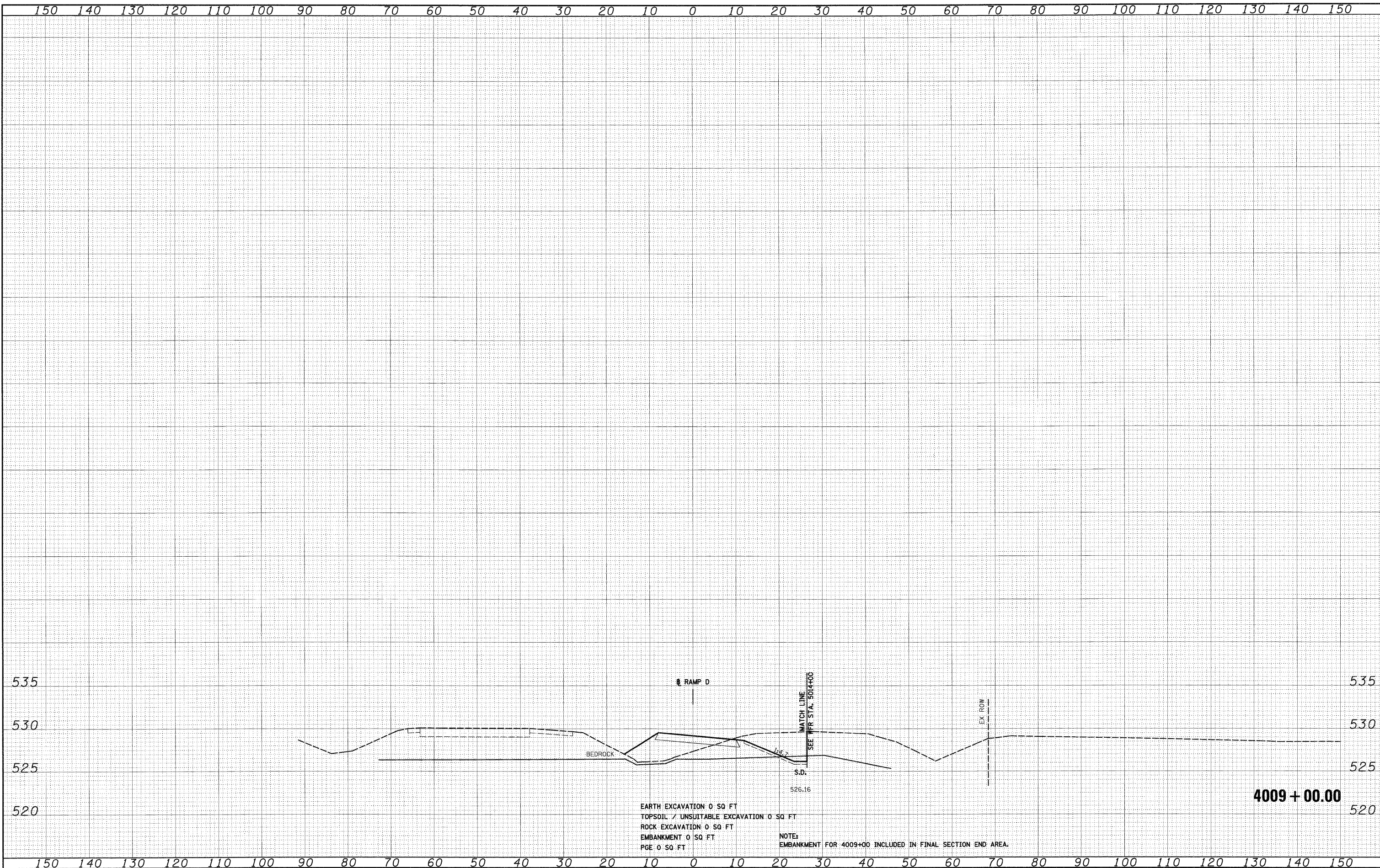
F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 366
CONTRACT NO. 60C31			ILLINOIS FED. AID PROJECT	

FINAL

FINAL SURVEY	BY	DATE
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NOTE BOOK		
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ORIGINAL SURVEY	BY	DATE
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EARTH EXCAVATION 0 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 0 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 0 SQ FT
 PGE 0 SQ FT

NOTE:
 EMBANKMENT FOR 4009+00 INCLUDED IN FINAL SECTION END AREA.

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DESIGNED - TRK	REVISED -
DRAWN - TRK	REVISED -
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DATE - 12/18/09	REVISED -

PLOT SCALE = 1:10
PLOT DATE = 12/11/2009

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STAGE 1 RAMP D CROSS SECTIONS

SCALE: 1"=10'H; 1"=5'V SHEET NO. 2 OF 2 SHEETS STA. 4009+00.00 TO STA. 4009+00.00

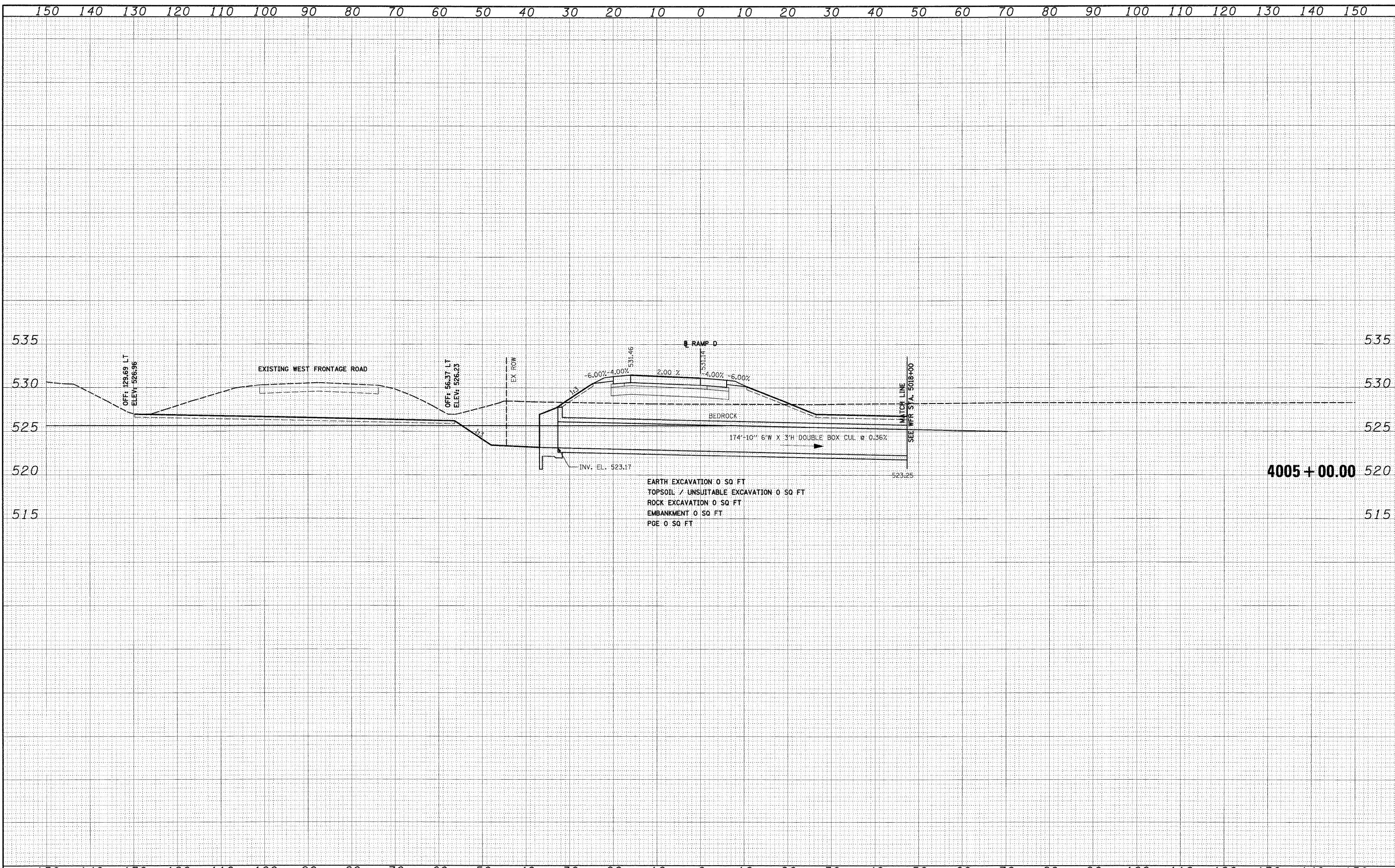
F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	367
CONTRACT NO. 60C31				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

FINAL

FINAL SURVEY	BY	DATE
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ORIGINAL SURVEY	BY	DATE
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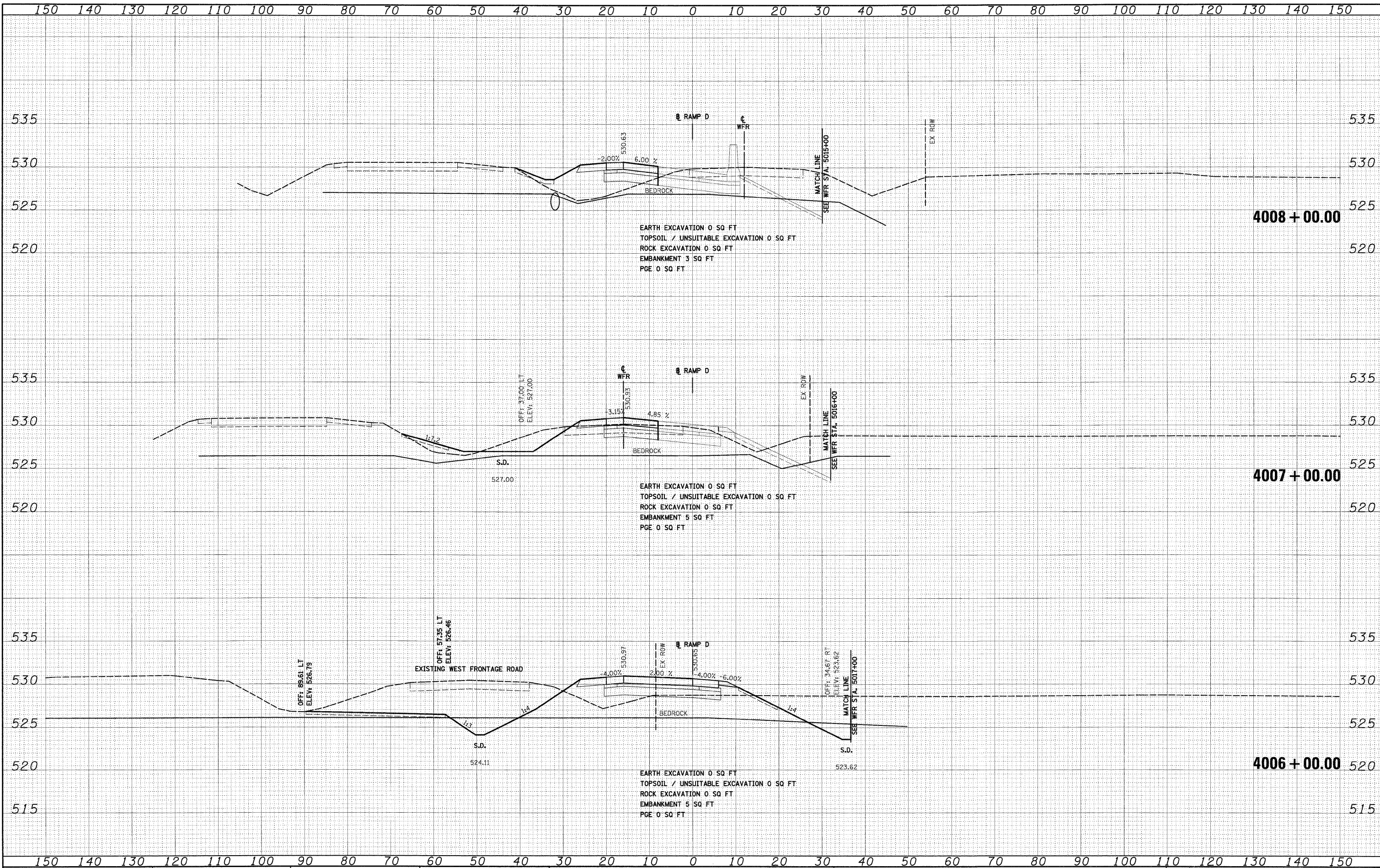
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	PLOT SCALE = 1:10	CHECKED - DLT	REVISED -		SCALE: 1"=10'H; 1"=5'V	SHEET NO. 1 OF 3 SHEETS	STA. 4004+00.00 TO STA. 4005+00.00	CONTRACT NO. 60C31		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
	PLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -									
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	DATE - 12/18/09	REVISED -

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DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1A RAMP D CROSS SECTIONS

SCALE: 1"=10'H; 1"=5'V SHEET NO. 2 OF 3 SHEETS STA. 4006+00.00 TO STA. 4008+00.00

F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 369
CONTRACT NO. 60C31			ILLINOIS FED. AID PROJECT	

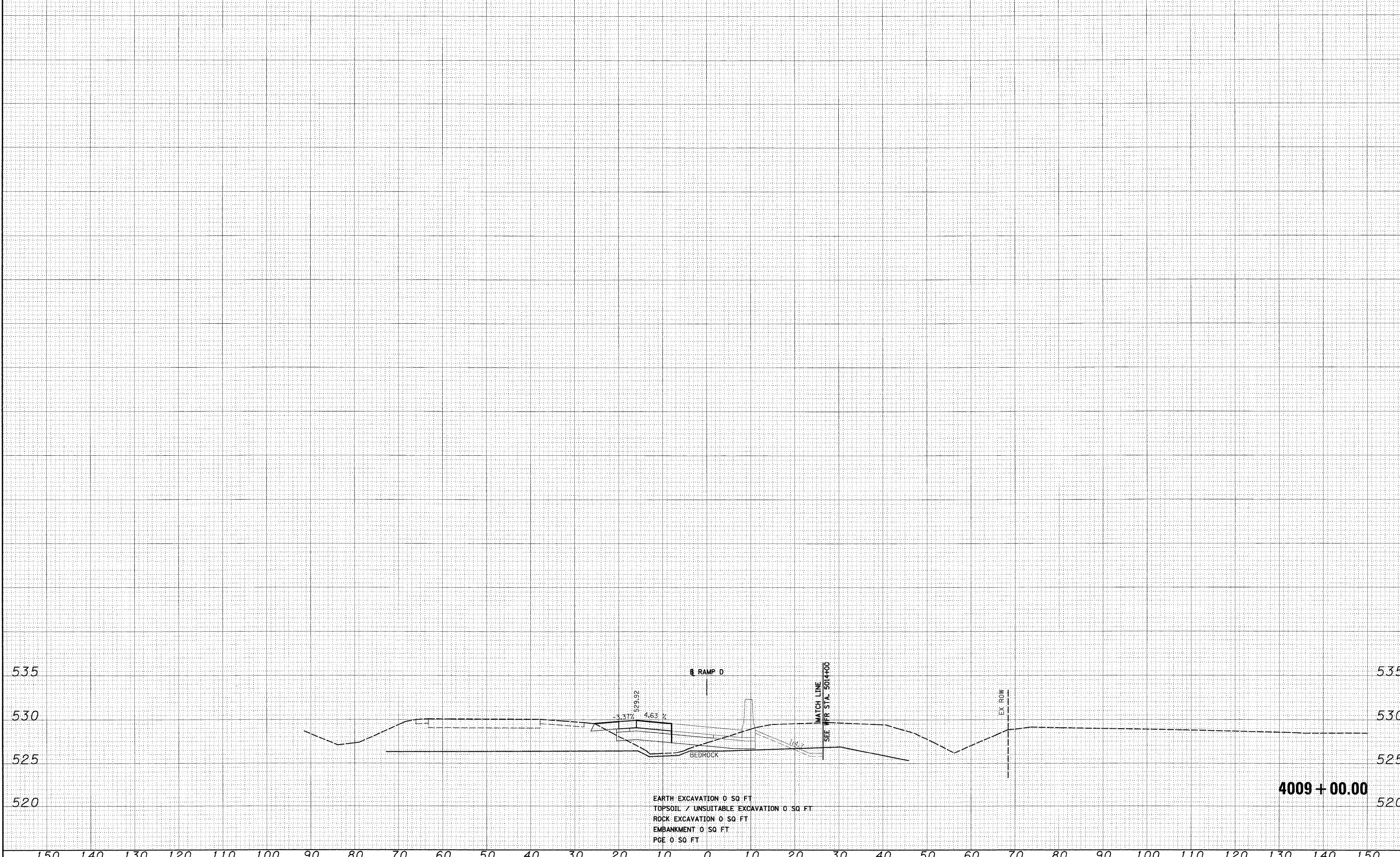
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ORIGINAL SURVEY	DATE
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EARTH EXCAVATION 0 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 0 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 0 SQ FT
 PGE 0 SQ FT

4009 + 00.00

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PLLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STAGE 1A RAMP D CROSS SECTIONS

SCALE: 1"=10'H; 1"=5'V SHEET NO. 3 OF 3 SHEETS STA. 4009+00.00 TO STA. 4009+00.00

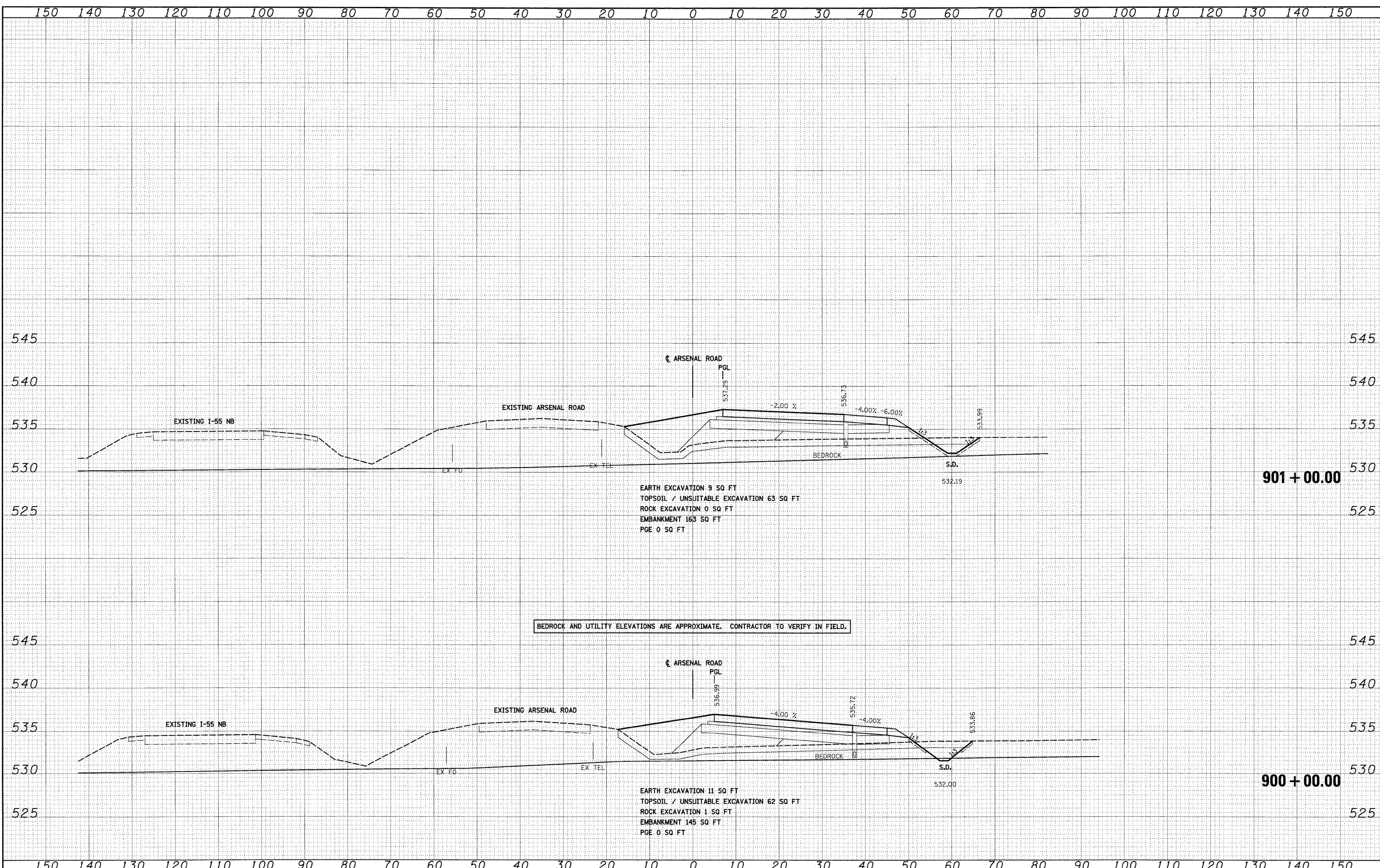
F.A.1 RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	370
CONTRACT NO. 60C31				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

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AREAS CHECKED	
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FILE NAME = D:\60C31-SHT-XSSH21.dgn
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DRAWN - TRK	REVISED -
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DATE - 12/18/09	REVISED -

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DATE - 12/18/09	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ARSENAL ROAD CROSS SECTIONS

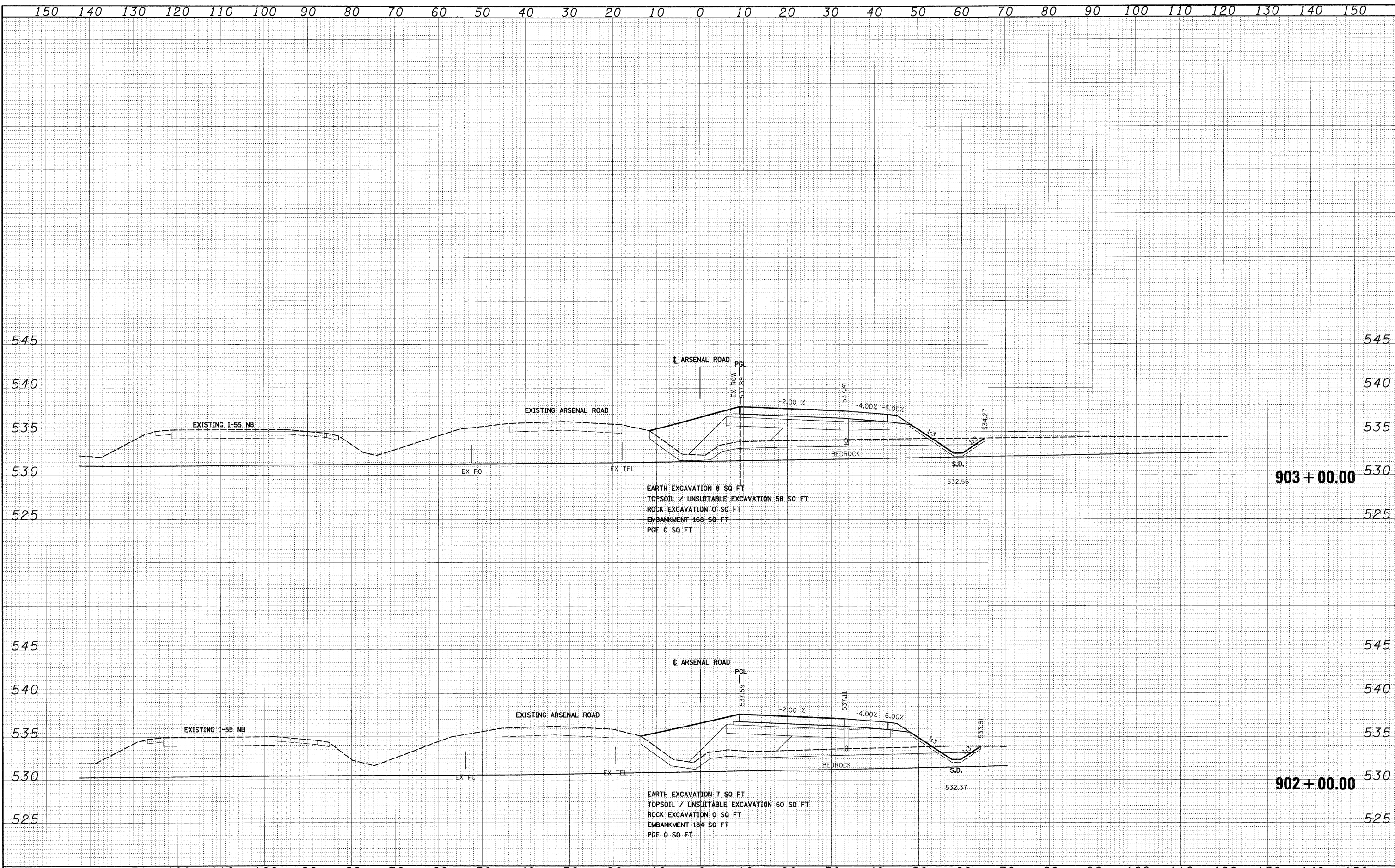
SCALE: 1"=10'H; 1"=5'V SHEET NO. 1 OF 11 SHEETS STA. 900+00.00 TO STA. 901+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	371
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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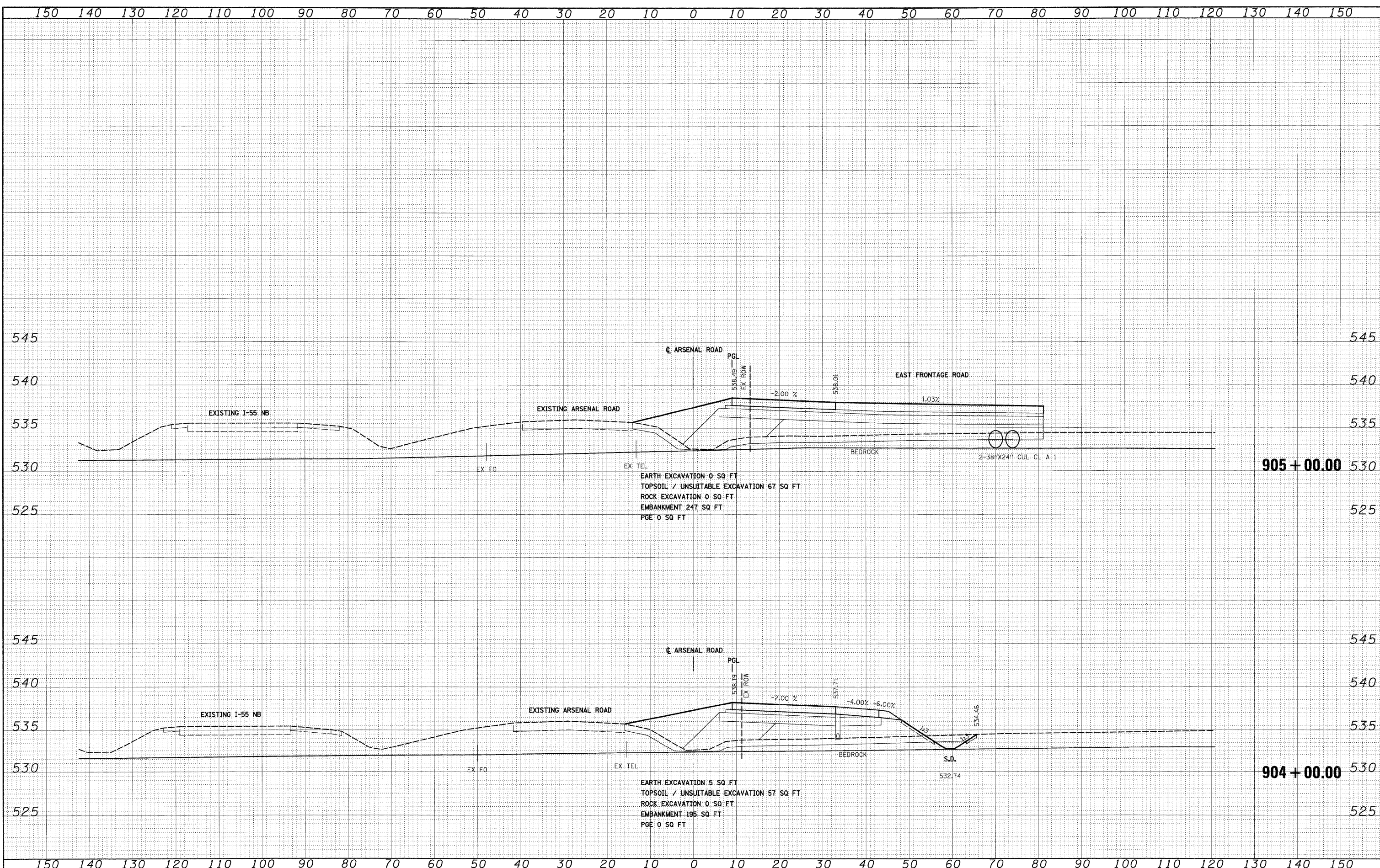
McDonough Associates Inc.
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PLOT SCALE = 1:10	CHECKED - DLT	REVISED -	SCALE: 1"=10'H; 1"=5'V			SHEET NO. 2 OF 11 SHEETS	STA. 902+00.00 TO STA. 903+00.00	CONTRACT NO. 60C31		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
PLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -									

FINAL SURVEY	DATE
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

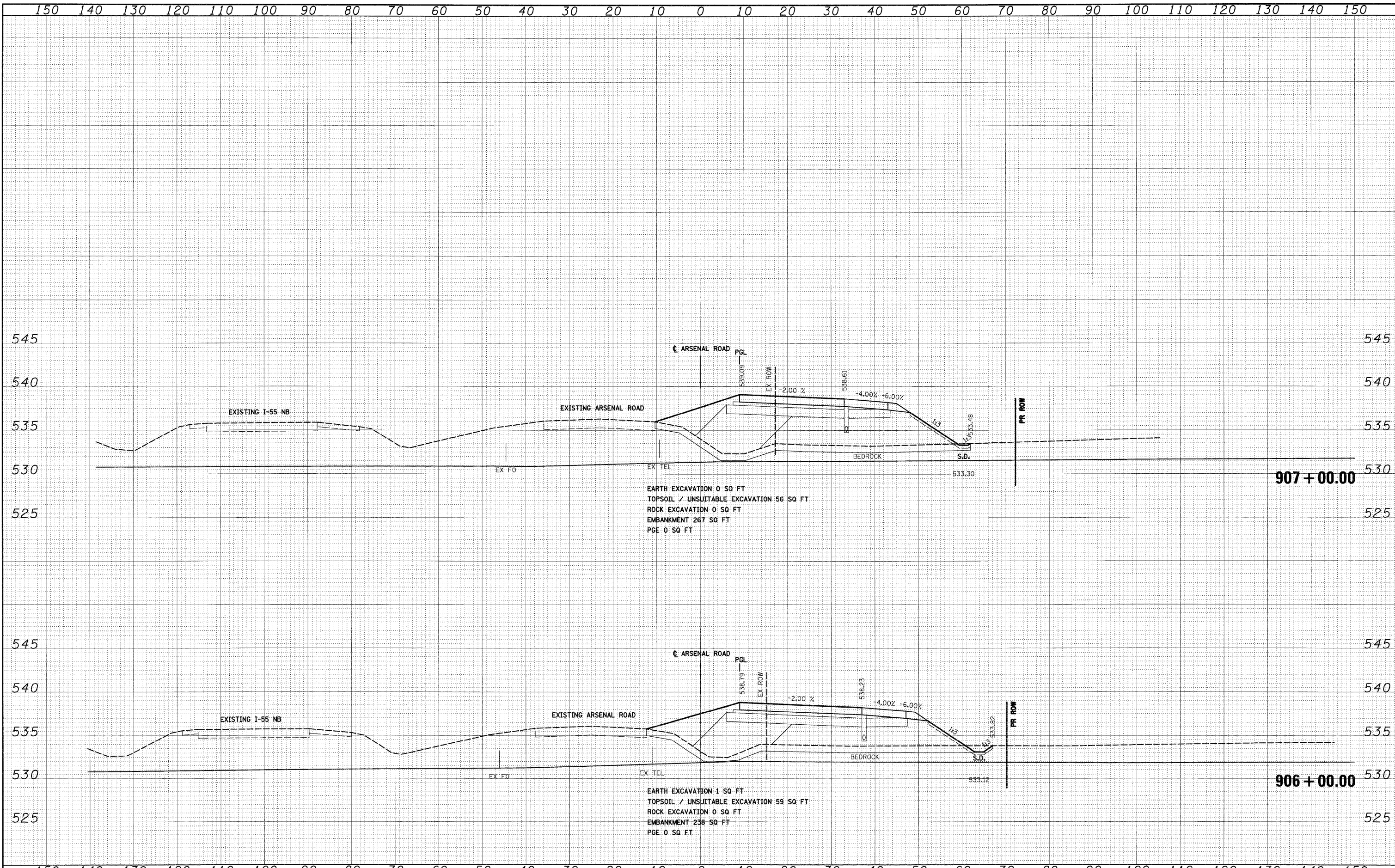
ARSENAL ROAD CROSS SECTIONS

SCALE: 1"=10'H; 1"=5'V SHEET NO. 3 OF 11 SHEETS STA. 904+00.00 TO STA. 905+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	373
CONTRACT NO. 60C31			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

FINAL SURVEY	DATE
SURVEYED	BY
PLotted	
NOTE BOOK	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	BY
PLotted	
NOTE BOOK	
AREAS CHECKED	



EARTH EXCAVATION 0 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 56 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 267 SQ FT
 PGE 0 SQ FT

EARTH EXCAVATION 1 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 59 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 238 SQ FT
 PGE 0 SQ FT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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 USER NAME - TK.uegal
 PLOT SCALE = 1:10
 PLOT DATE = 12/15/2009

DESIGNED - TRK
 DRAWN - TRK
 CHECKED - DLT
 DATE - 12/18/09

REVISED -
 REVISED -
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 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARSENAL ROAD CROSS SECTIONS

SCALE: 1"=10'H; 1"=5'V SHEET NO. 4 OF 11 SHEETS STA. 906+00.00 TO STA. 907+00.00

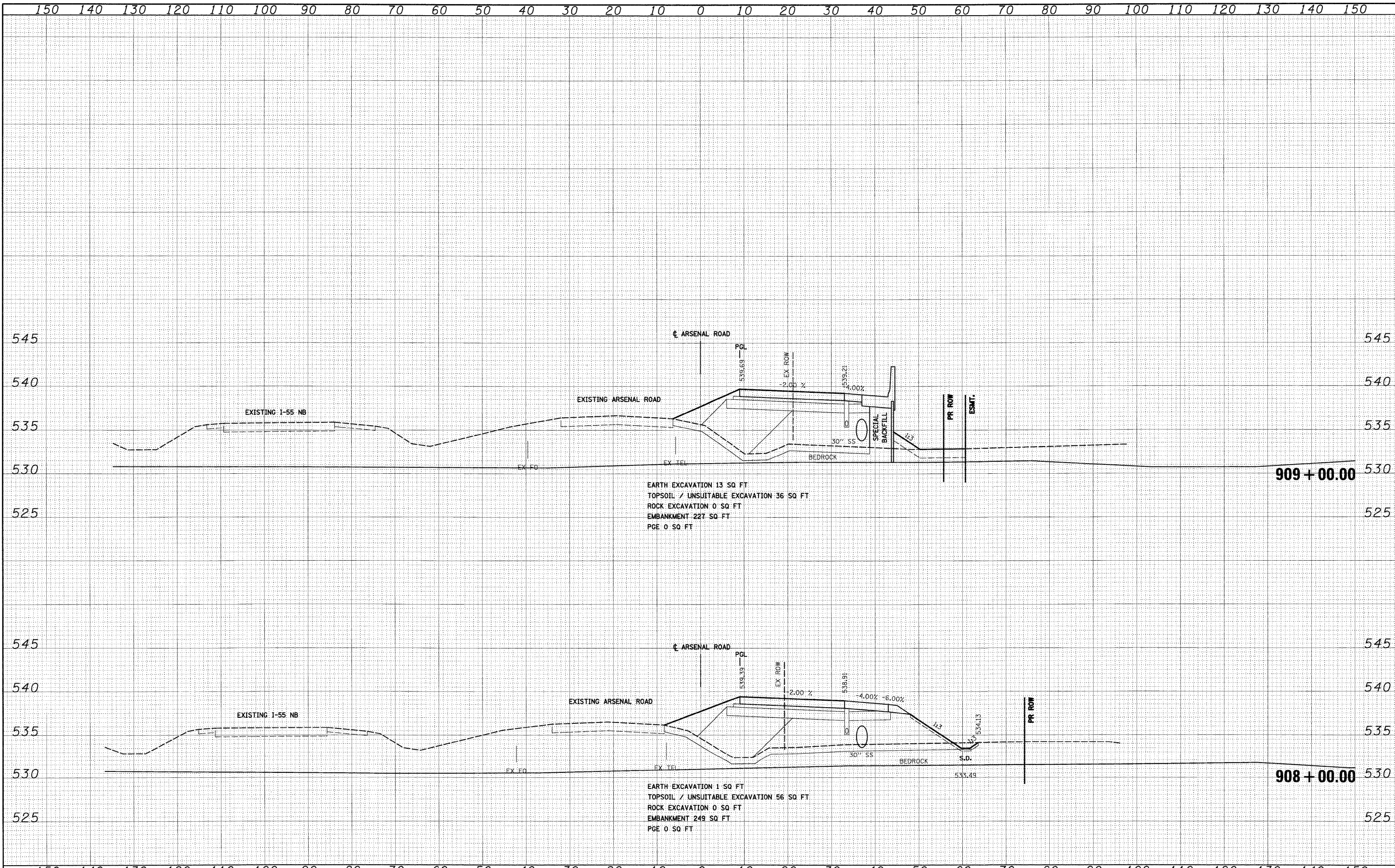
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	374
CONTRACT NO. 60C31			ILLINOIS FED. AID PROJECT	

FINAL

FINAL SURVEY	DATE
SURVEYED	BY
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NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

McDonough Associates Inc.
 Engineers/Architects
 200 East Randolph Street, Chicago, Illinois 60601

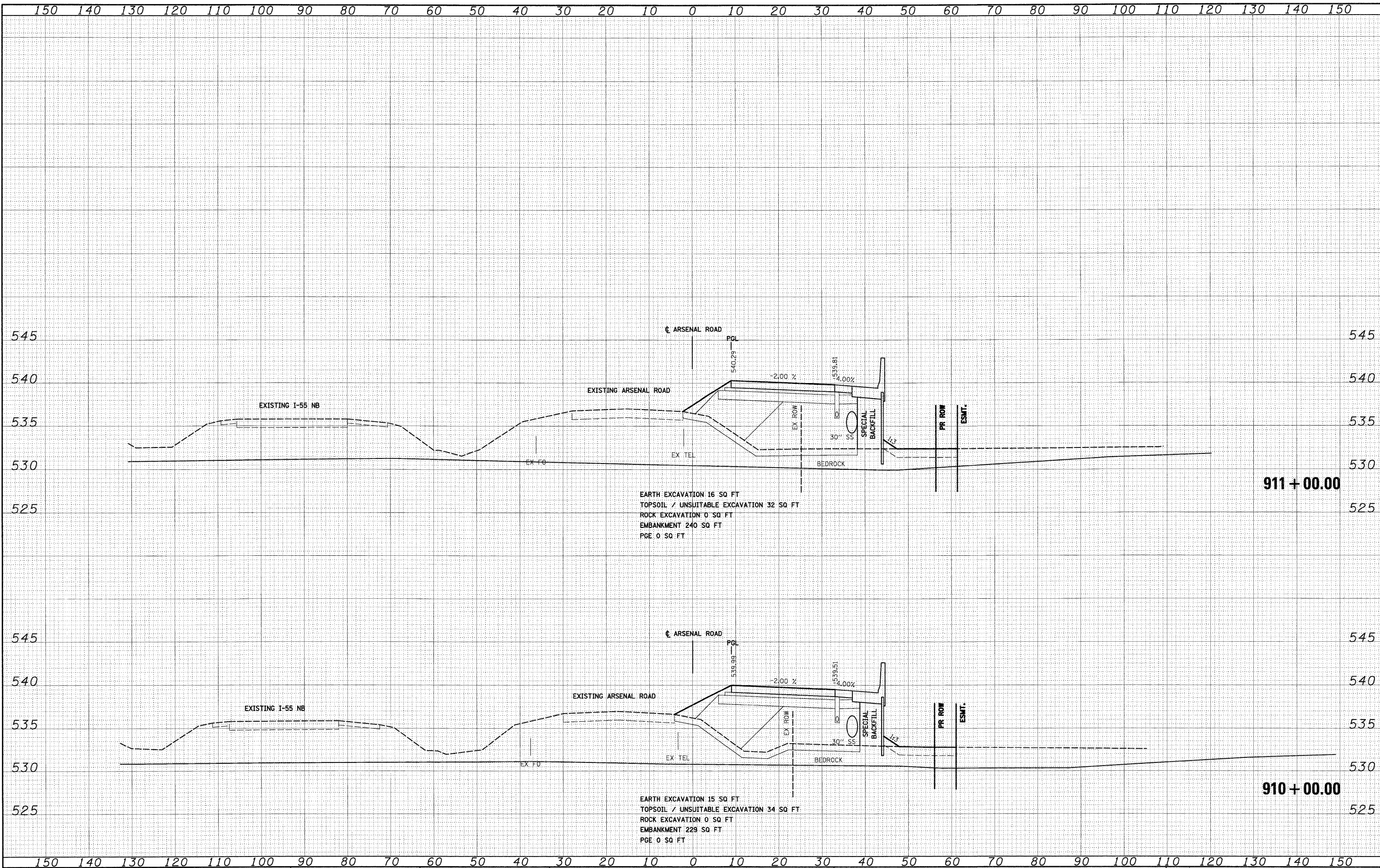


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PLOT SCALE = 1:10	CHECKED - DLT	DATE - 12/18/09	REVISED -			SCALE: 1"=10'H; 1"=5'V	SHEET NO. 5 OF 11 SHEETS	STA. 908+00.00 TO STA. 909+00.00	CONTRACT NO. 60C31		
PLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					
FINAL											

FINAL SURVEY	DATE
NOTED	
NO. _____	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
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AREAS CHECKED	

McDonough Associates Inc.
 Engineers/Architects
 100 West Madison Street, Chicago, Illinois 60601



FILE NAME = D:\62C31-SHT-XSSH101.dgn
 USER NAME = TK:legal

DESIGNED - TRK	REVISED -
DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ARSENAL ROAD CROSS SECTIONS
 SCALE: 1"=10'H; 1"=5'V SHEET NO. 6 OF 11 SHEETS STA. 910+00.00 TO STA. 911+00.00

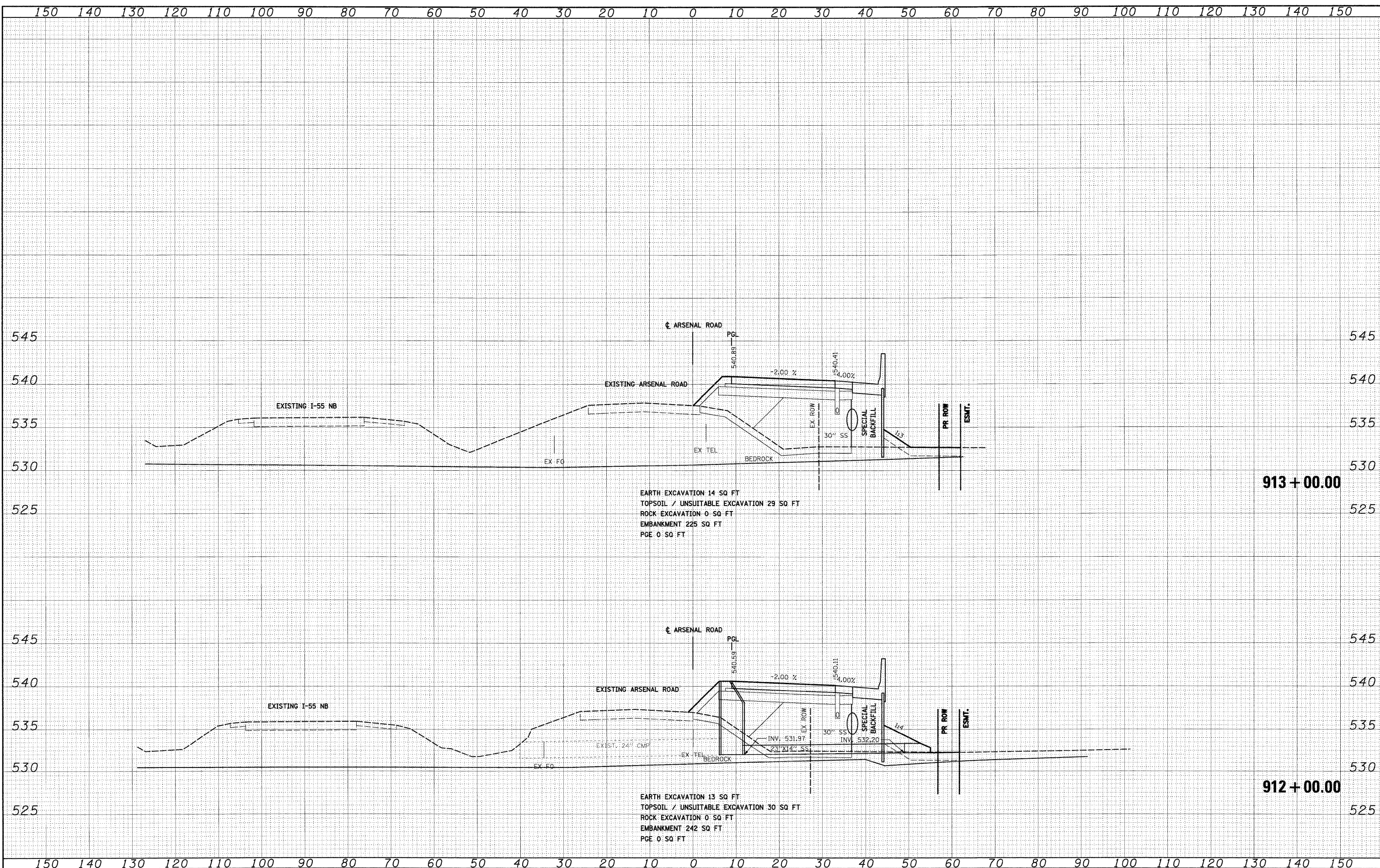
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	376
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

FINAL SURVEY	DATE
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY	DATE
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

McDonough Associates Inc.
 Engineers / Architects
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FILE NAME = D:\60C31-SHT-XSSH101.dgn
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DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

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DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

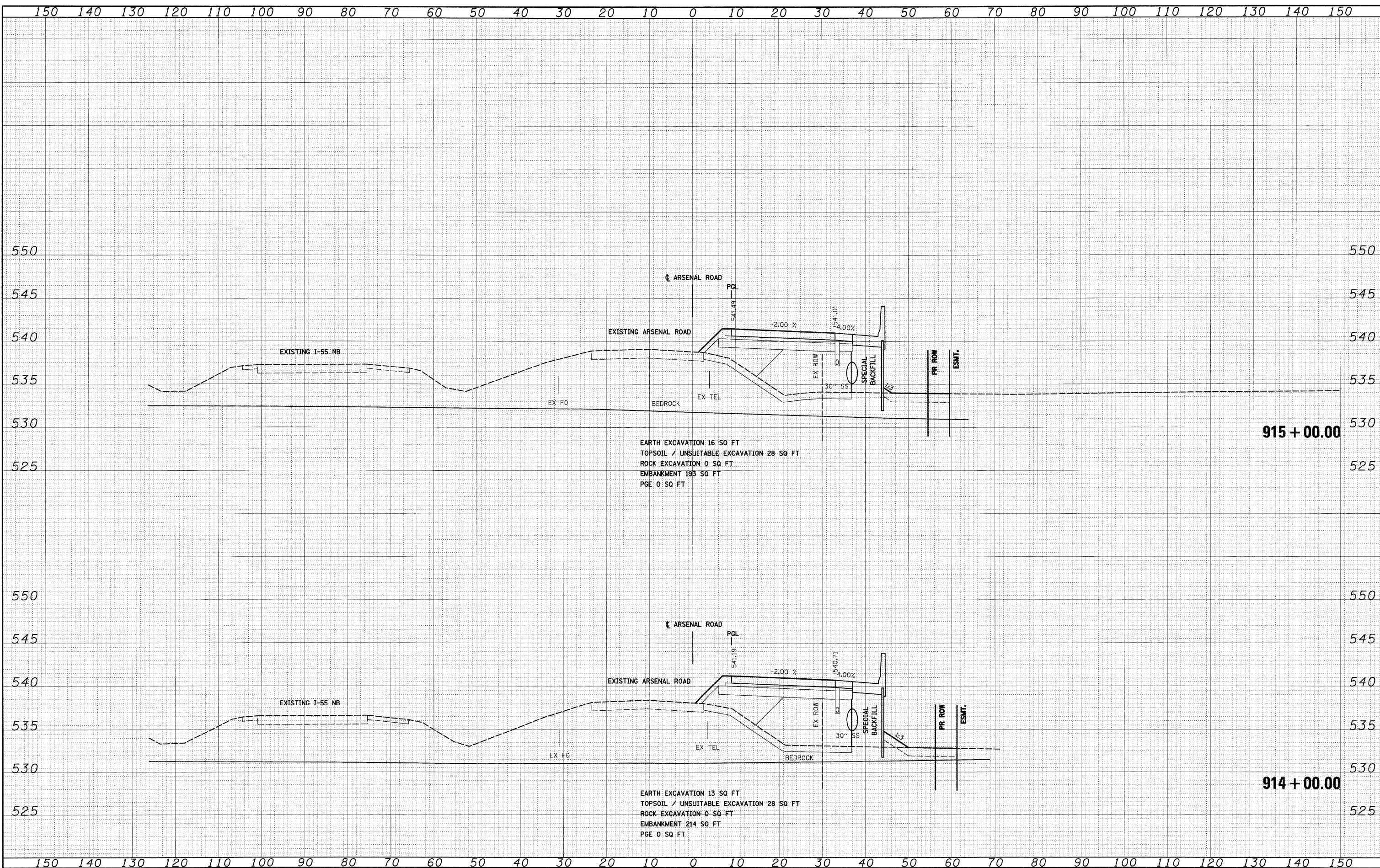
ARSENAL ROAD CROSS SECTIONS

SCALE: 1"=10'H; 1"=5' V SHEET NO. 7 OF 11 SHEETS STA. 912+00.00 TO STA. 913+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	377
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY	BY	DATE
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NOTE BOOK		
AREAS CHECKED		
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ORIGINAL SURVEY	BY	DATE
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		



EARTH EXCAVATION 16 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 28 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 193 SQ FT
 PGE 0 SQ FT

EARTH EXCAVATION 13 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 28 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 214 SQ FT
 PGE 0 SQ FT

FILE NAME = D:\60C31-SHT-XSSH101.dgn
 USER NAME = TKLuega

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DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

PLLOT SCALE = 1:10
PLLOT DATE = 12/15/2009

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARSENAL ROAD CROSS SECTIONS

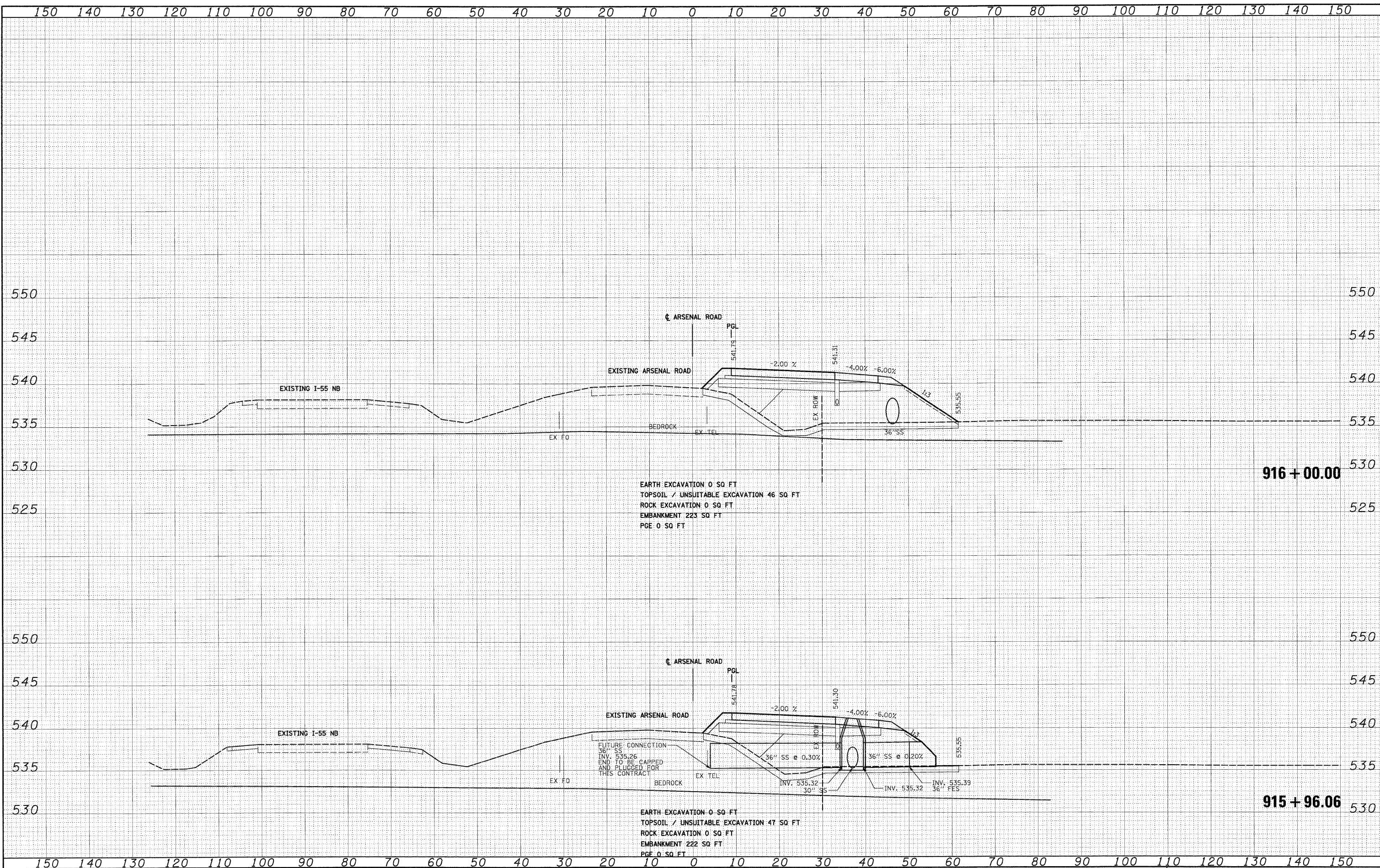
SCALE: 1"=10'H; 1"=5'V SHEET NO. 8 OF 11 SHEETS STA. 914+00.00 TO STA. 915+00.00

F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	378
CONTRACT NO. 60C31			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

FINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		

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 120 East Randolph Street, Chicago, Illinois 60601



FILE NAME = 0160C31-SHT-XSSH101.dgn
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DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ARSENAL ROAD CROSS SECTIONS

SCALE: 1"=10'H; 1"=5'V SHEET NO. 9 OF 11 SHEETS STA. 915+96.06 TO STA. 916+00.00

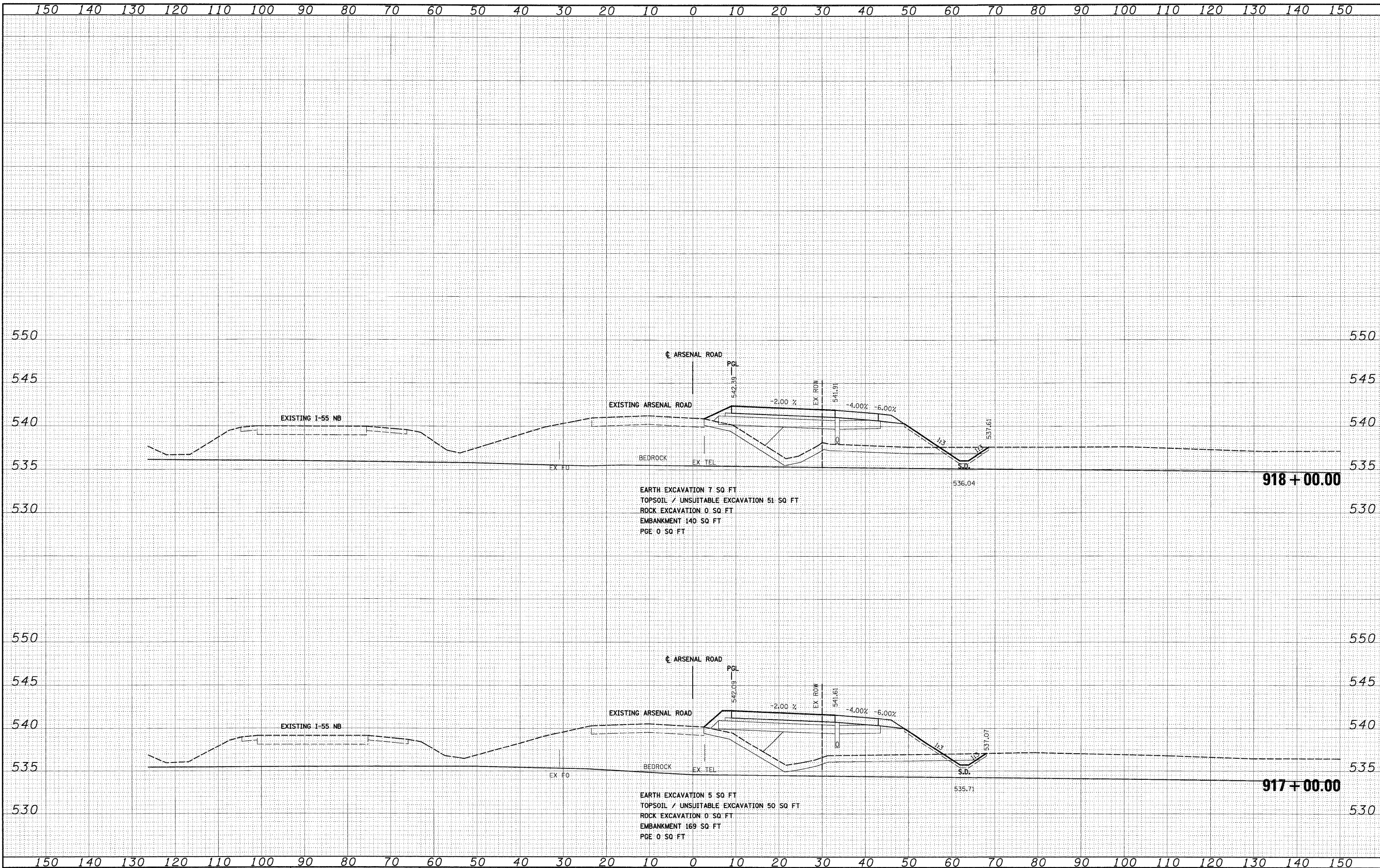
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	379
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

FINAL SURVEY	DATE
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NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY	DATE
PLOTTED	BY
NOTE BOOK	
AREAS CHECKED	
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McDonough Associates Inc.
 Engineers/Architects
 100 East Randolph Street, Chicago, Illinois 60601



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DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

DESIGNED - TRK	REVISED -
DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ARSENAL ROAD CROSS SECTIONS

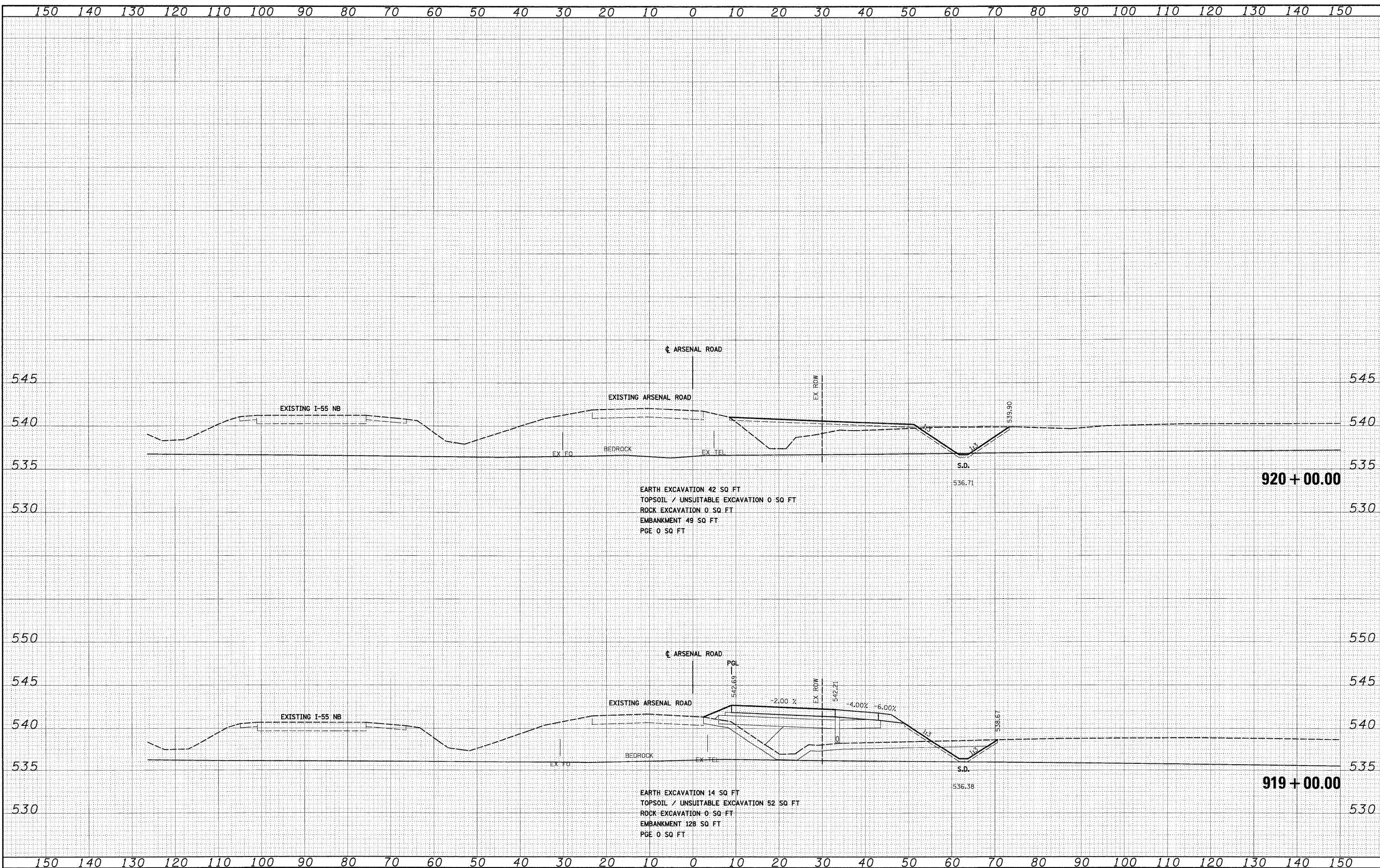
SCALE: 1"=10'H; 1"=5'V SHEET NO. 10 OF 11 SHEETS STA. 917+00.00 TO STA. 918+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	380
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY	BY	DATE
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NOTE BOOK		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
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PLOT SCALE = 1:10	CHECKED - DLT	REVISED -
PLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ARSENAL ROAD CROSS SECTIONS

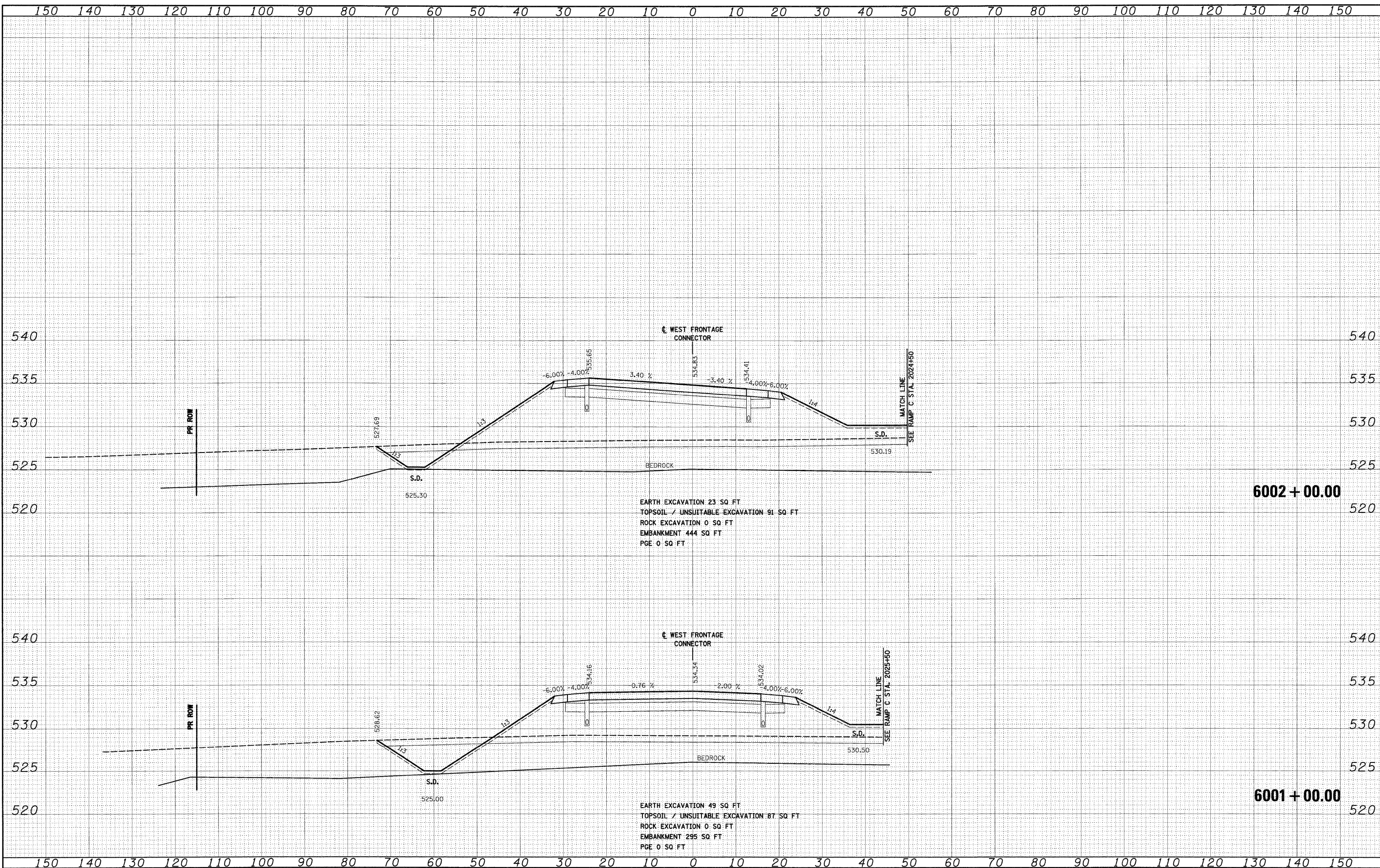
SCALE: 1"=10'H; 1"=5'V SHEET NO. 11 OF 11 SHEETS STA. 919+00.00 TO STA. 920+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	381
CONTRACT NO. 60C31				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

FINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	DATE
NOTE BOOK	NO.
AREAS CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	DATE
NOTE BOOK	NO.
AREAS CHECKED	



6002 + 00.00

EARTH EXCAVATION 23 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 91 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 444 SQ FT
 PGE 0 SQ FT

6001 + 00.00

EARTH EXCAVATION 49 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 87 SQ FT
 ROCK EXCAVATION 0 SQ FT
 EMBANKMENT 295 SQ FT
 PGE 0 SQ FT

FILE NAME = D:\60C31-SHT-X55HT\2.dgn

USER NAME = TKLegal

PLOT SCALE = 1:10

PLOT DATE = 12/15/2009

DESIGNED - TRK

DRAWN - TRK

CHECKED - DLT

DATE - 12/18/09

REVISED -

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WEST FRONTAGE ROAD CONNECTOR

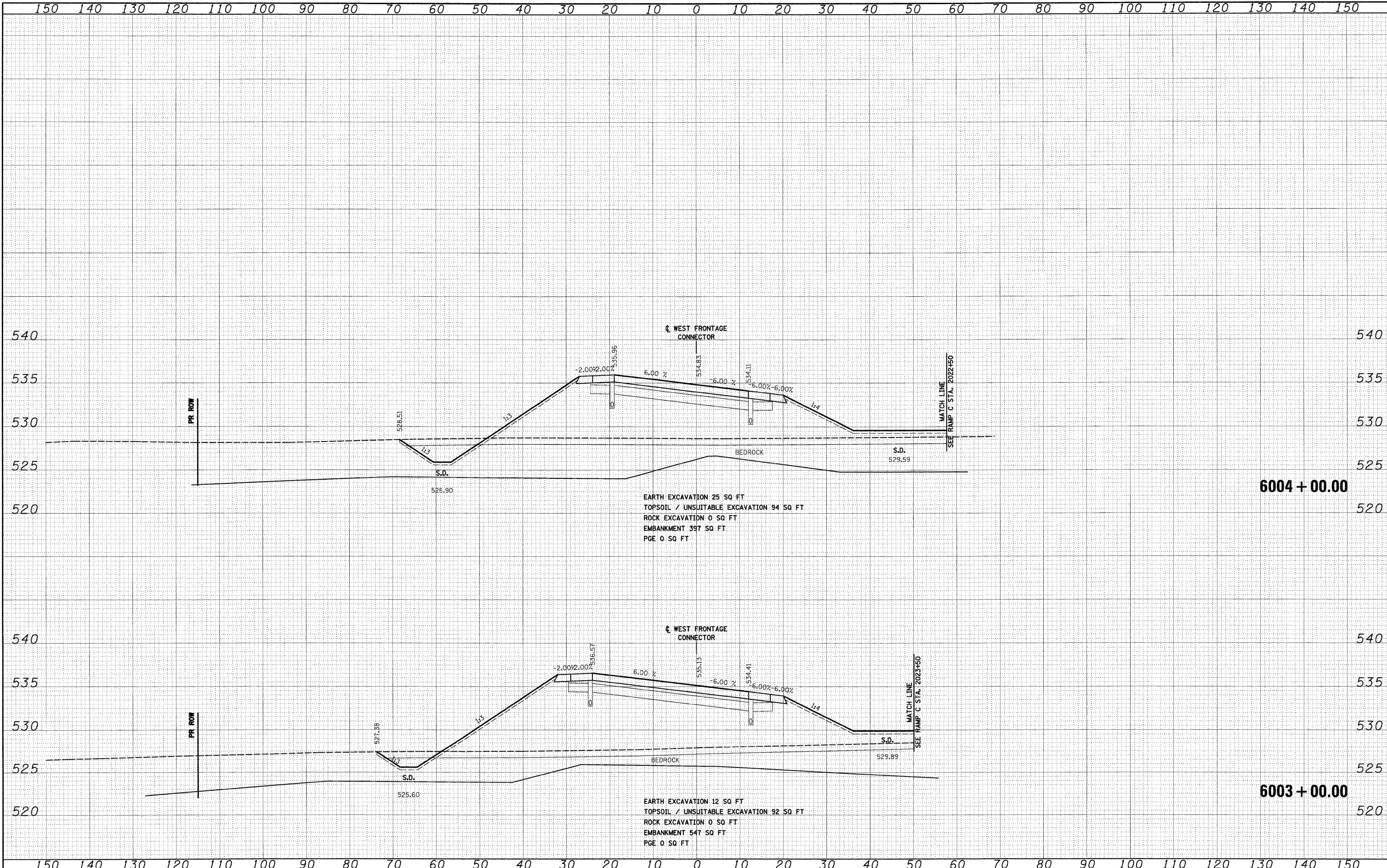
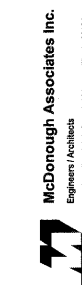
SCALE: 1"=10'H; 1"=5'V SHEET NO. 1 OF 34 SHEETS STA. 6001+00.00 TO STA. 6002+00.00

F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	382
CONTRACT NO. 60C31				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED DATE		
	AREAS CHECKED		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED DATE		
	AREAS CHECKED		
	AREAS CHECKED		



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 PLOT DATE = 12/15/2009

DESIGNED - TRK
 DRAWN - TRK
 CHECKED - DLT
 DATE - 12/18/09

REVISED -
 REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

WEST FRONTAGE ROAD CONNECTOR

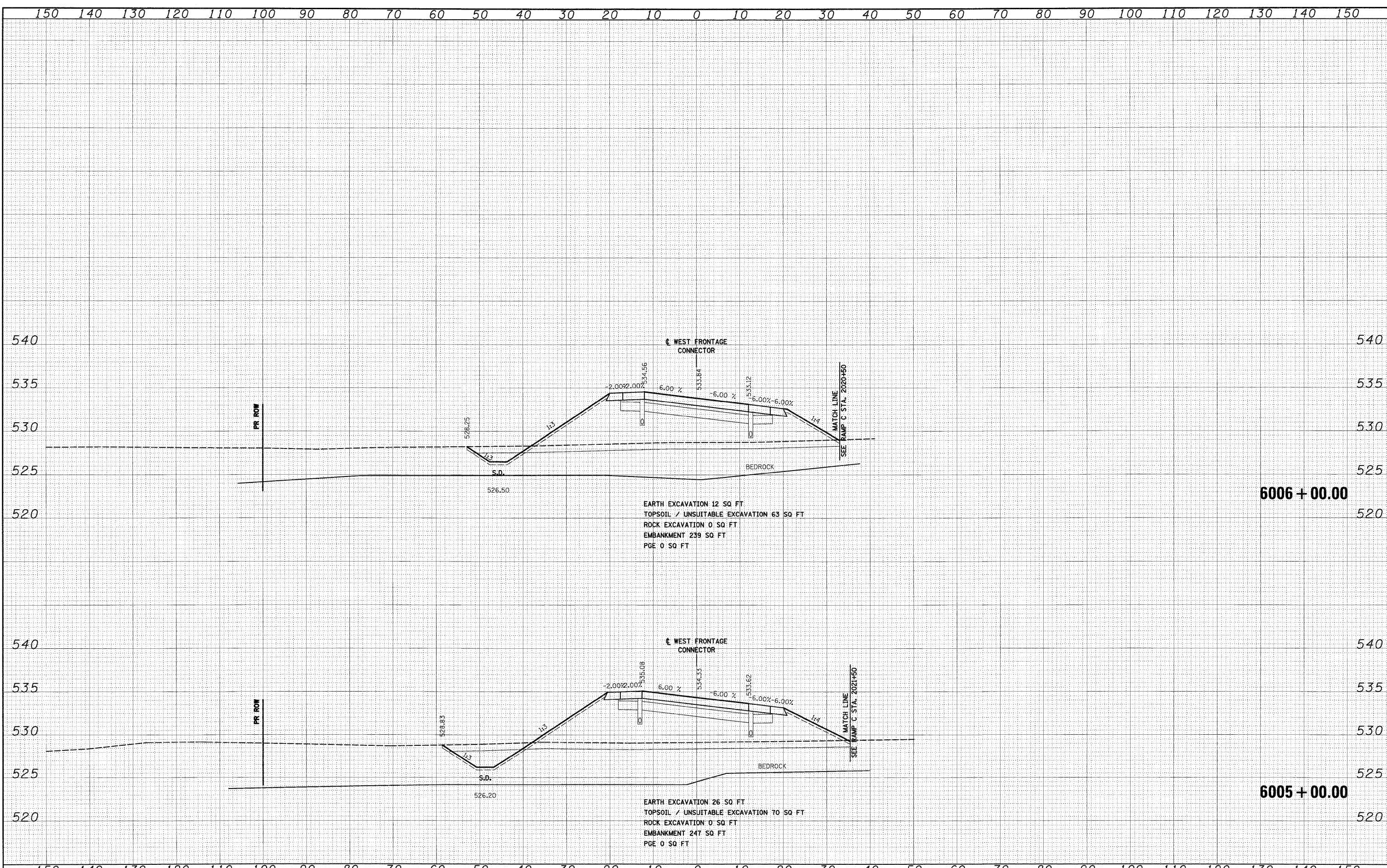
SCALE: 1"=10'H; 1/2"=5' V SHEET NO. 2 OF 34 SHEETS STA. 6003+00.00 TO STA. 6004+00.00

F.A.1 RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	383
CONTRACT NO. 60C31				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

FINAL SURVEY	DATE
SURVEYED	BY
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NOTE BOOK	
AREAS CHECKED	
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ORIGINAL SURVEY	DATE
SURVEYED	BY
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NOTE BOOK	
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 PLLOT SCALE = 1:10
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DESIGNED - TRK	REVISED -
DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WEST FRONTAGE ROAD CONNECTOR

SCALE: 1"=10'H; 1"=5'V SHEET NO. 3 OF 34 SHEETS STA. 6005+00.00 TO STA. 6006+00.00

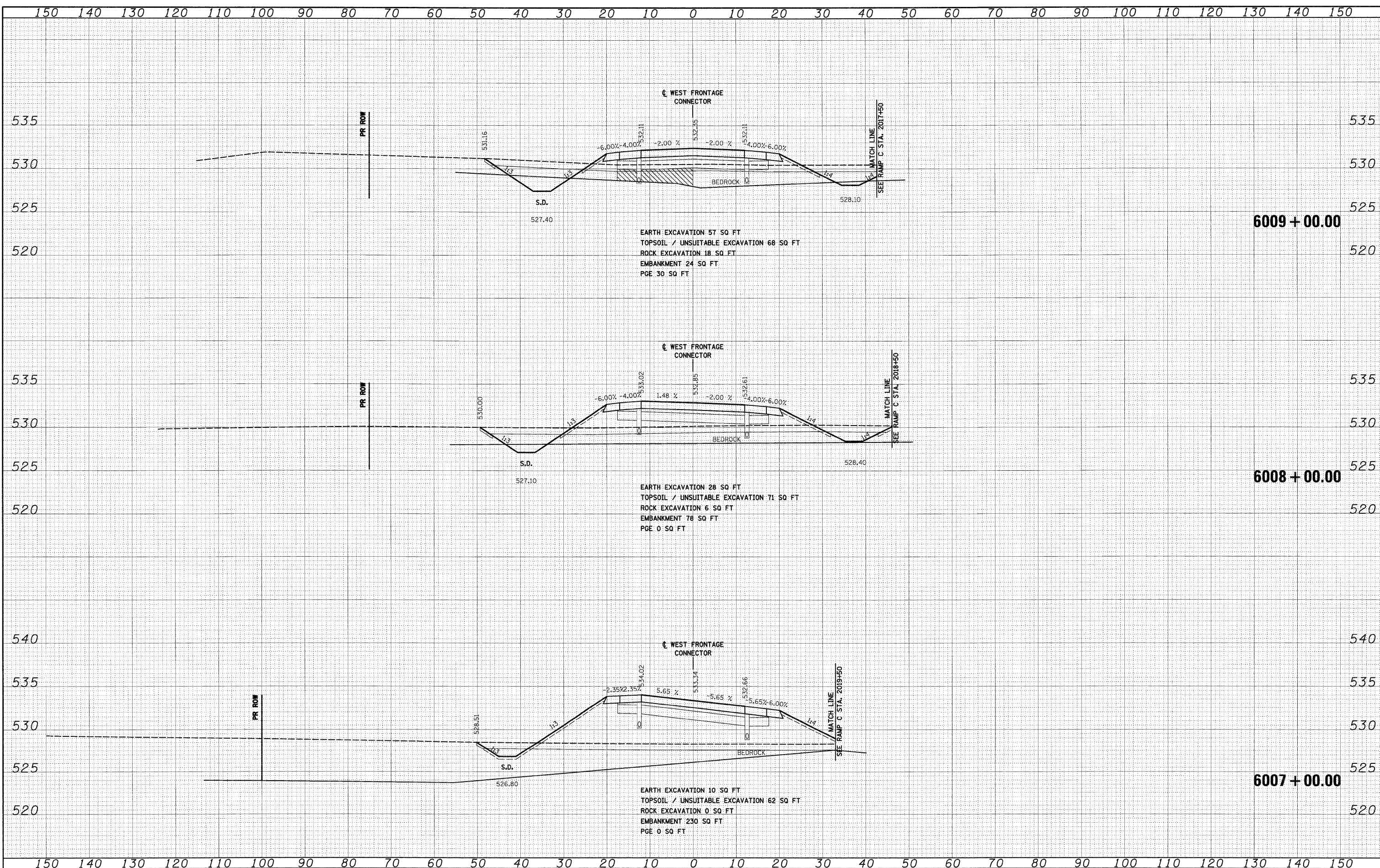
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	384
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL

DATE	
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NOTE BOOK	
AREAS CHECKED	
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NOTE BOOK	
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 Engineers, Architects
 100 East Randolph Street, Chicago, Illinois 60601



FILE NAME = D:\62C31-SHT-XSSH102.dgn
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DRAWN -	TRK	REVISED -	
CHECKED -	DLT	REVISED -	
DATE -	12/18/09	REVISED -	

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

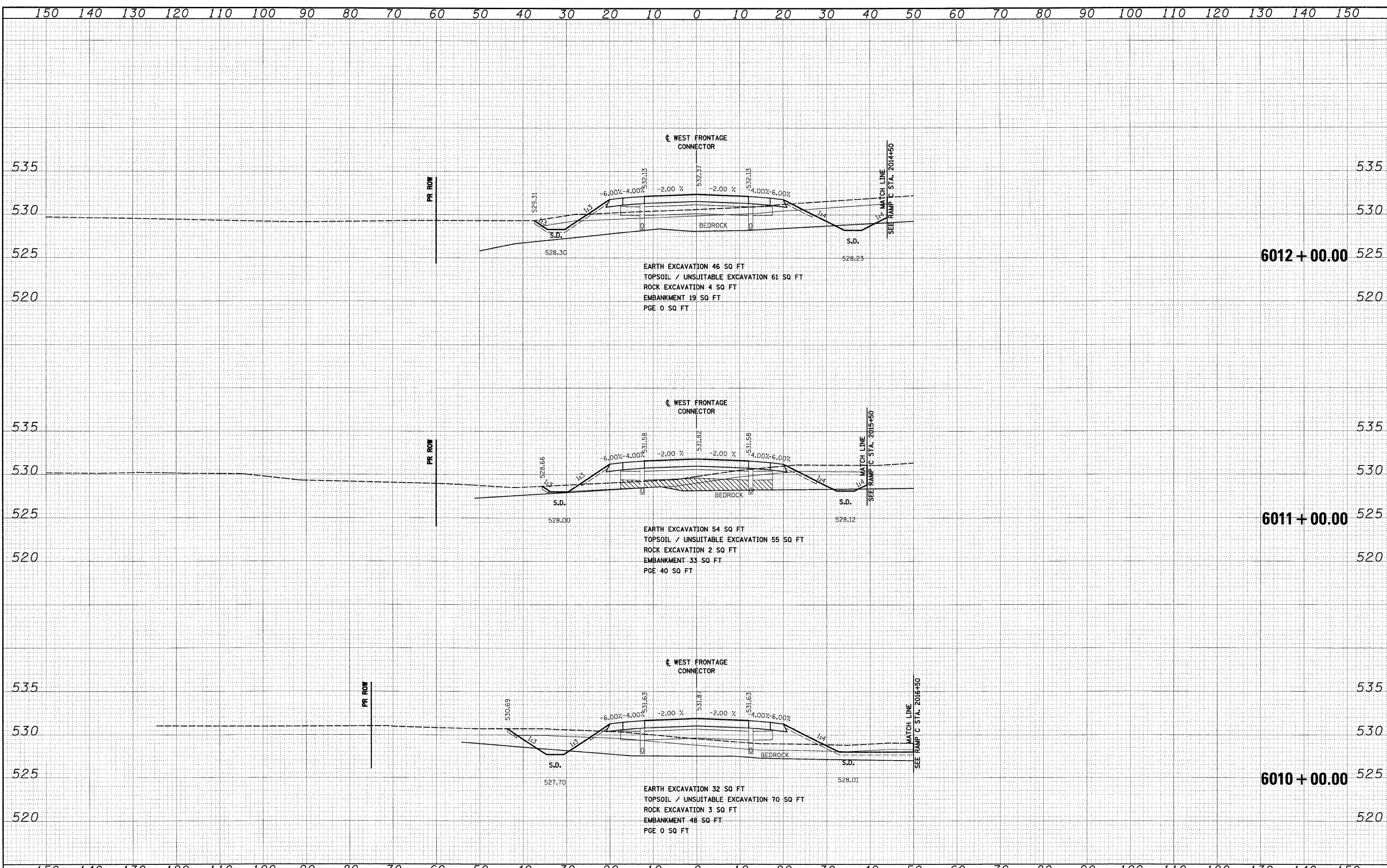
WEST FRONTAGE ROAD CONNECTOR

SCALE: 1"=10'H; 1"=5'V SHEET NO. 4 OF 34 SHEETS STA. 6007+00.00 TO STA. 6009+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	385
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

DATE	
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FINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
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ORIGINAL SURVEY	
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NOTE BOOK	
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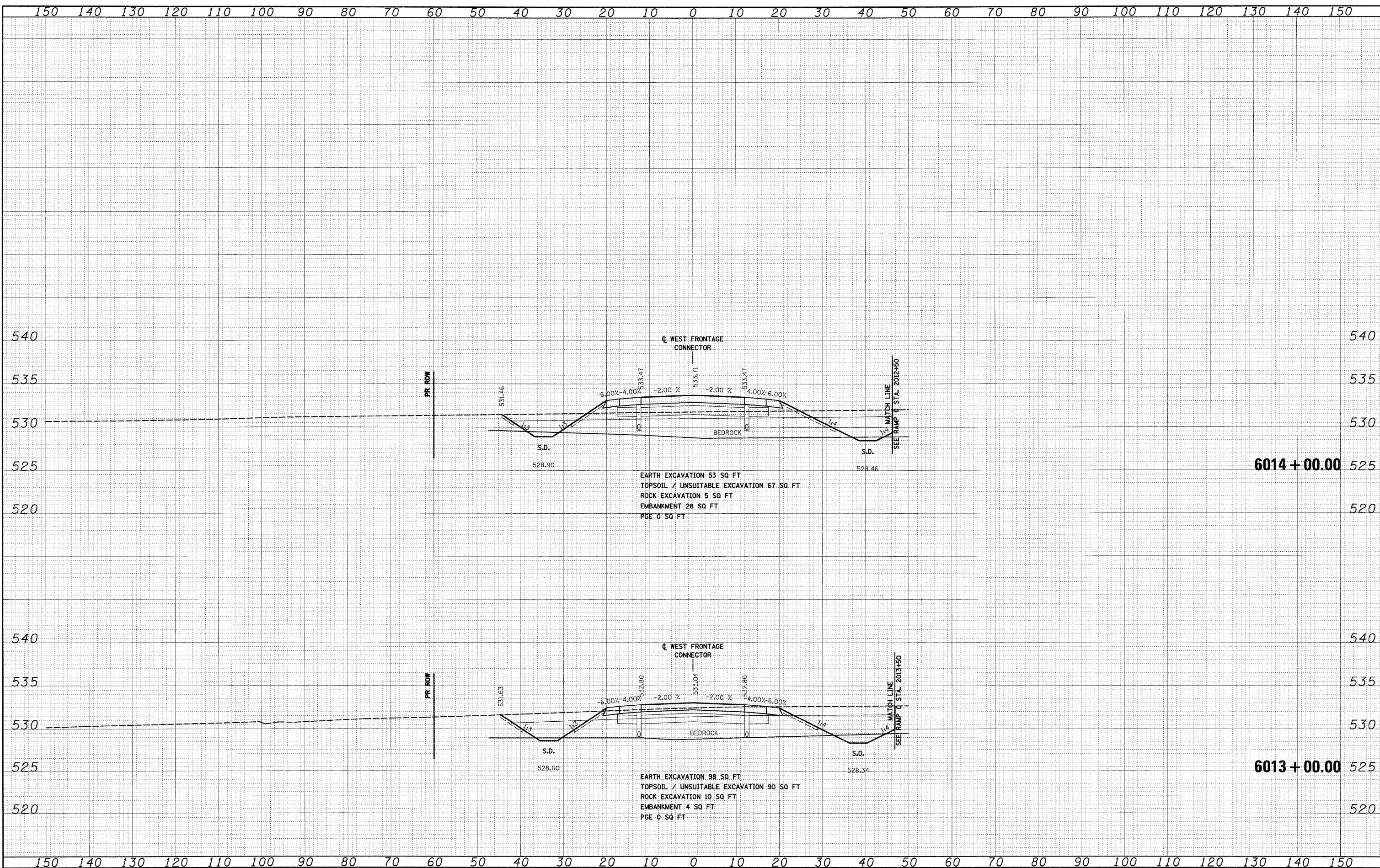


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	PLOT DATE = 12/15/2009	CHECKED - DLT	REVISED -		FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT				
		DATE - 12/18/09	REVISED -								

FINAL

DATE	
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SURVEYED	
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NOTE BOOK	
AREAS CHECKED	
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DATE	
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SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	



EARTH EXCAVATION 53 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 67 SQ FT
 ROCK EXCAVATION 5 SQ FT
 EMBANKMENT 28 SQ FT
 PGE 0 SQ FT

EARTH EXCAVATION 98 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 90 SQ FT
 ROCK EXCAVATION 10 SQ FT
 EMBANKMENT 4 SQ FT
 PGE 0 SQ FT

FILE NAME =	D:\62C31-SHT-X55HT02.dgn
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USER NAME =	TKluemel
DESIGNED -	TRK
DRAWN -	TRK
CHECKED -	DLT
DATE -	12/18/09

REVISED -	
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

WEST FRONTAGE ROAD CONNECTOR

SCALE: 1"=10'H; 1"=5'V SHEET NO. 6 OF 34 SHEETS STA. 6013+00.00 TO STA. 6014+00.00

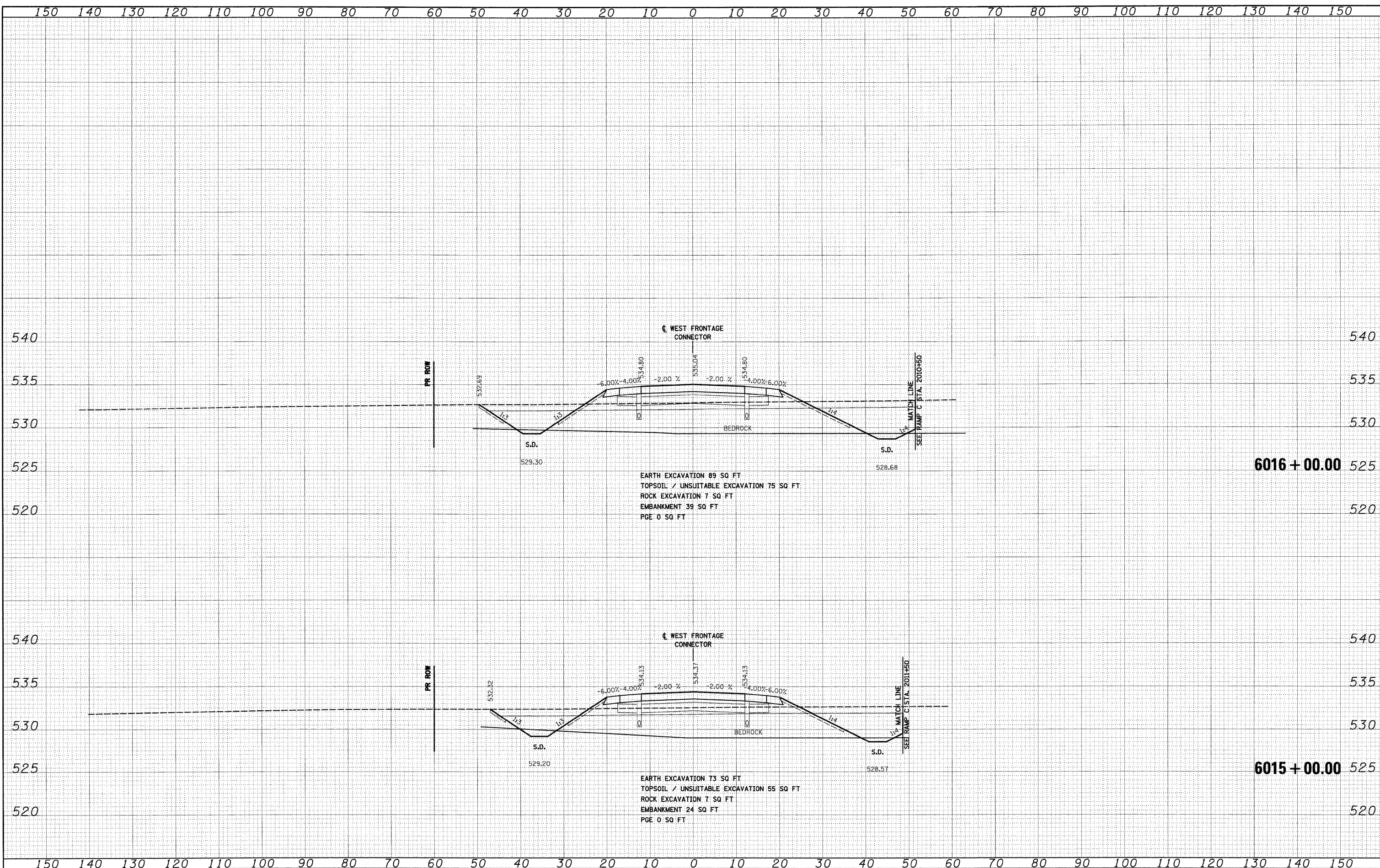
F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	387
CONTRACT NO. 60C31				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		

McDonough Associates Inc.
 Engineers / Architects
 100 East Randolph Street, Chicago, Illinois 60601



FILE NAME - D:\60C31-SHT-XSSH102.dgn
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DESIGNED - TRK
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 CHECKED - DLT
 DATE - 12/18/09

REVISED -
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 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

WEST FRONTAGE ROAD CONNECTOR

SCALE: 1"=10'H; 1"=5'V SHEET NO. 7 OF 34 SHEETS STA. 6015+00.00 TO STA. 6016+00.00

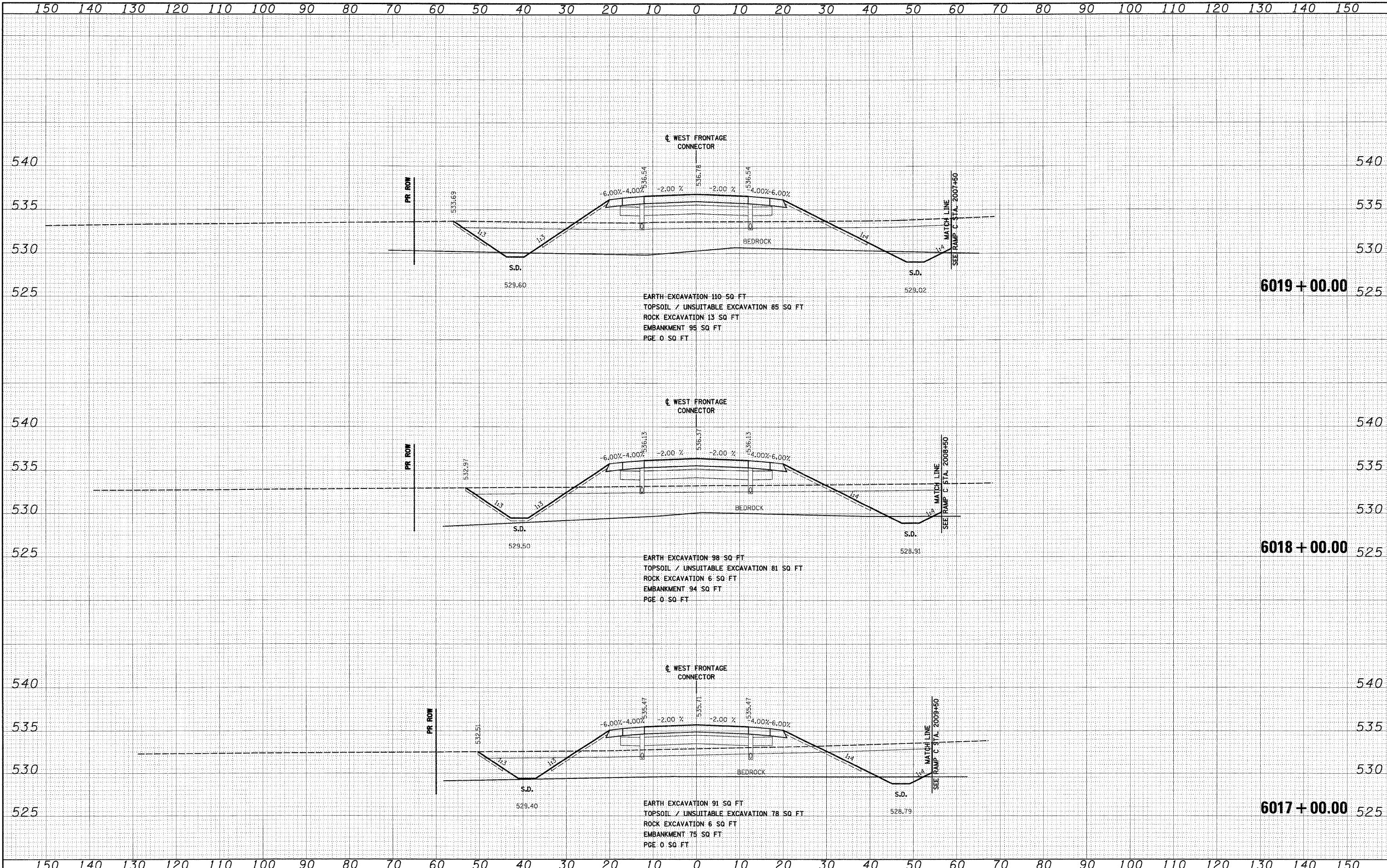
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	388
CONTRACT NO. 60C31				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

FINAL

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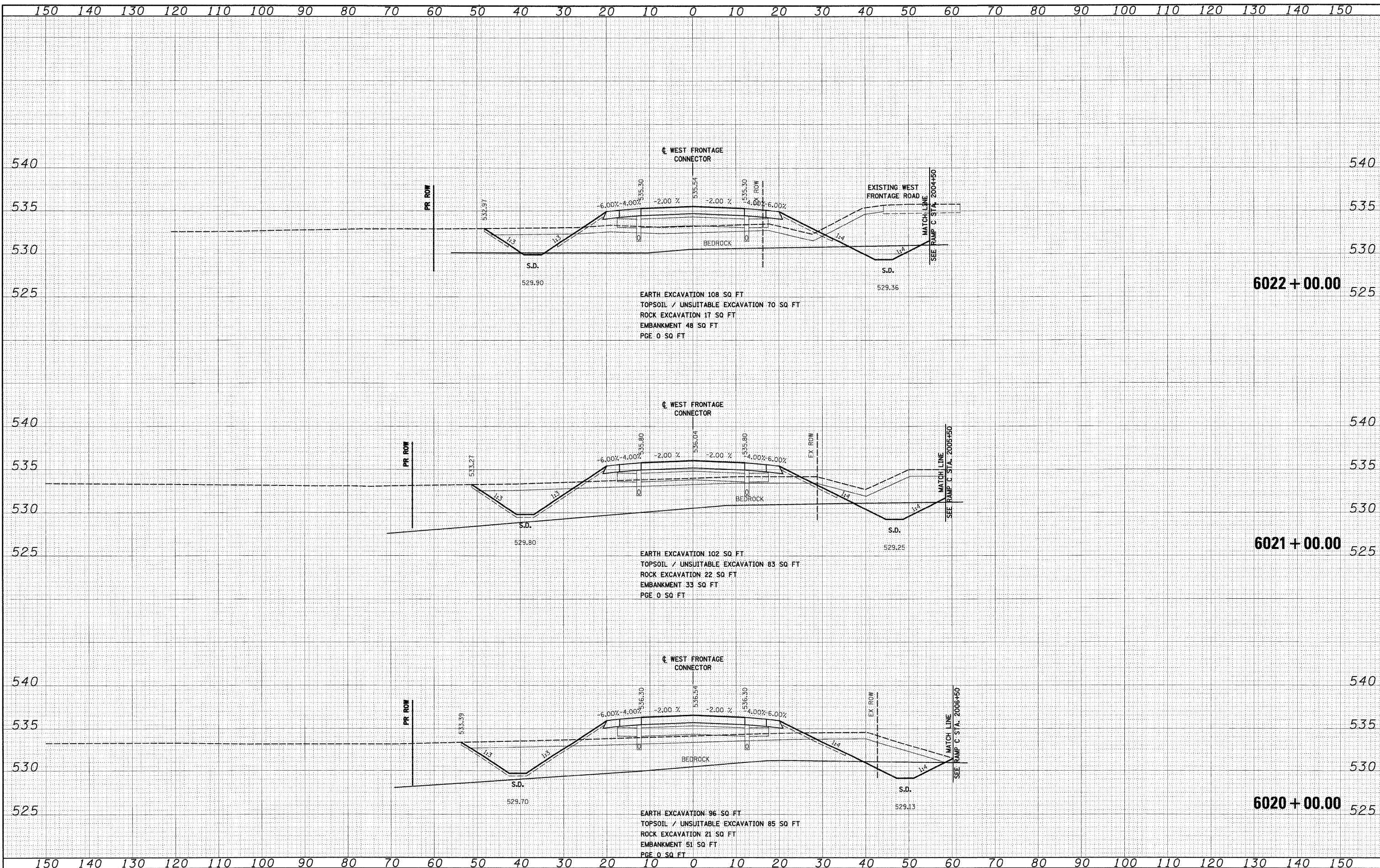
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NOTE BOOK	
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PLOT SCALE = 1:100	CHECKED - DLT	REVISED -	SCALE: 1"=10'H/1"=5'V			SHEET NO. 8 OF 34 SHEETS	STA. 6017+00.00 TO STA. 6019+00.00	CONTRACT NO. 60C31		FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT
PLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -									

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WEST FRONTAGE ROAD CONNECTOR

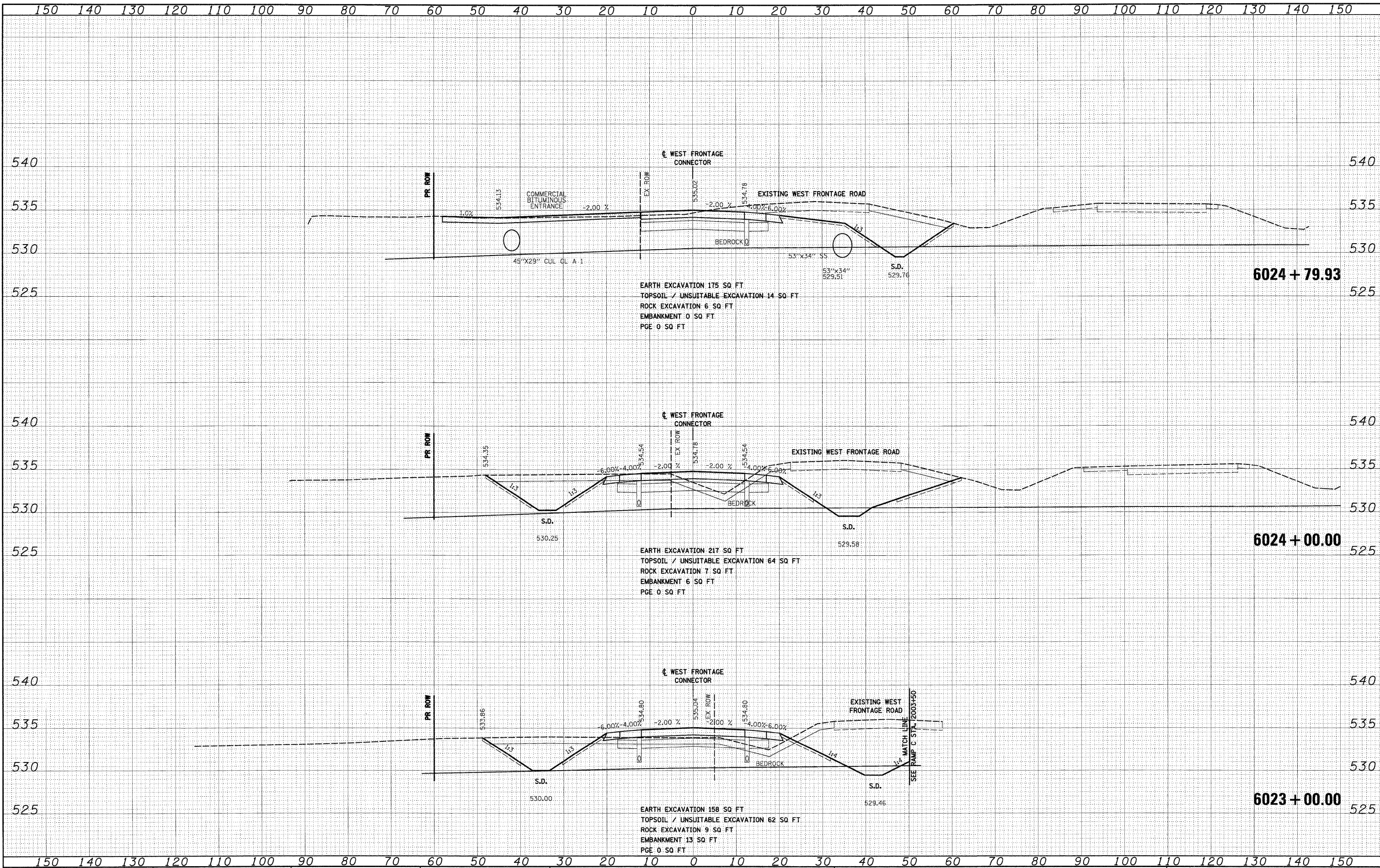
SCALE: 1"=10'H; 1"=5'V SHEET NO. 9 OF 34 SHEETS STA. 6020+00.00 TO STA. 6022+00.00

F.A.1	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	390
CONTRACT NO. 60C31			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

FINAL

FINAL SURVEY	DATE
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NOTE BOOK	
AREAS CHECKED	
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ORIGINAL SURVEY	DATE
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NOTE BOOK	
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 USER NAME = TKluegel

DESIGNED - TRK	REVISED -
DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

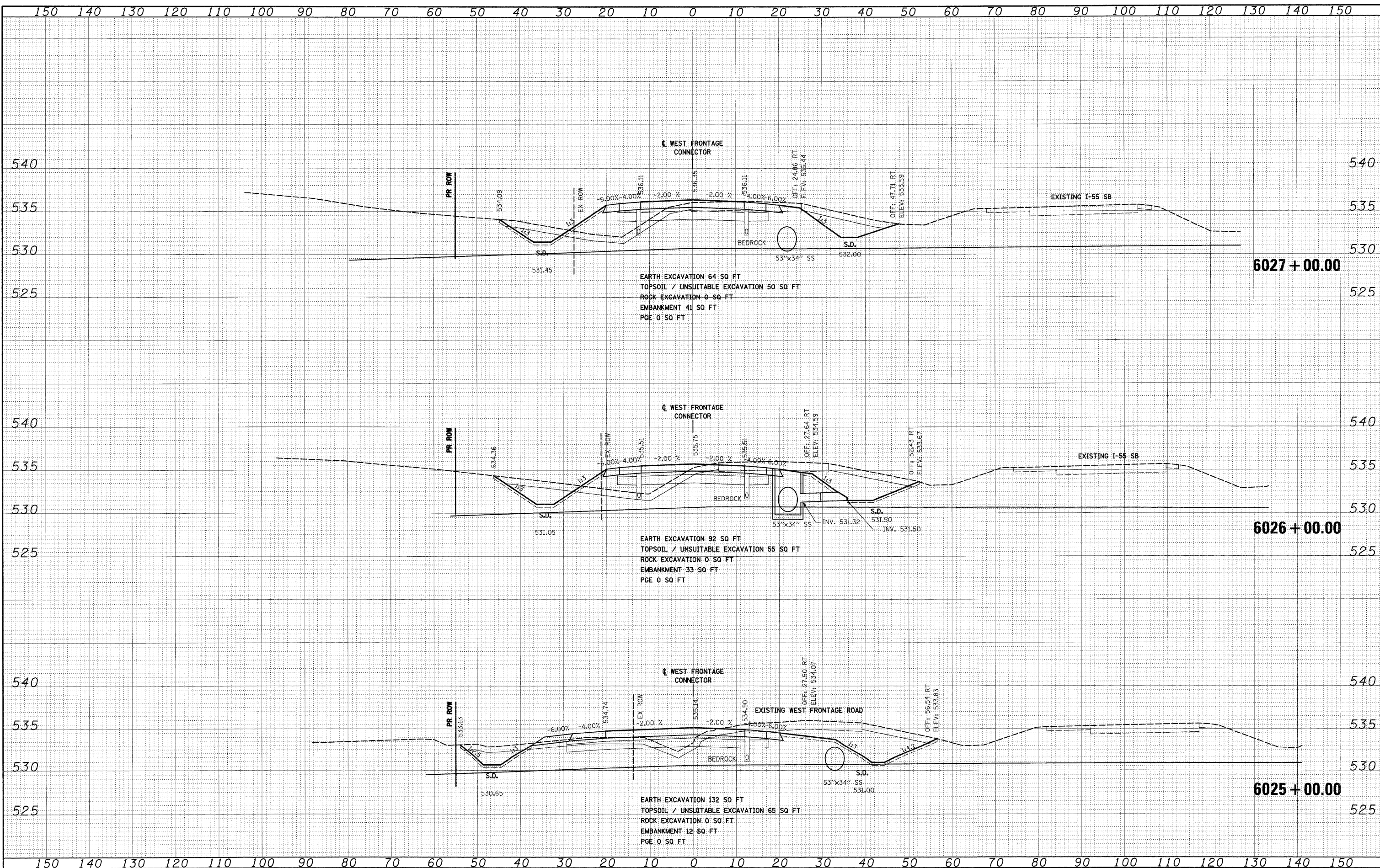
WEST FRONTAGE ROAD CONNECTOR

SCALE: 1"=10'H; 1"=5'V SHEET NO. 10 OF 34 SHEETS STA. 6023+00.00 TO STA. 6024+79.93

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	391
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

DATE	
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NOTE BOOK	
AREAS CHECKED	
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PLOTTED	
NOTE BOOK	
AREAS CHECKED	
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FILE NAME = D:\60C31-SHT-XSSH102.dgn
 USER NAME = TKluagl
 PLOT SCALE = 1:10
 PLOT DATE = 12/15/2009

DESIGNED - TRK	REVISED -
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DATE - 12/18/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

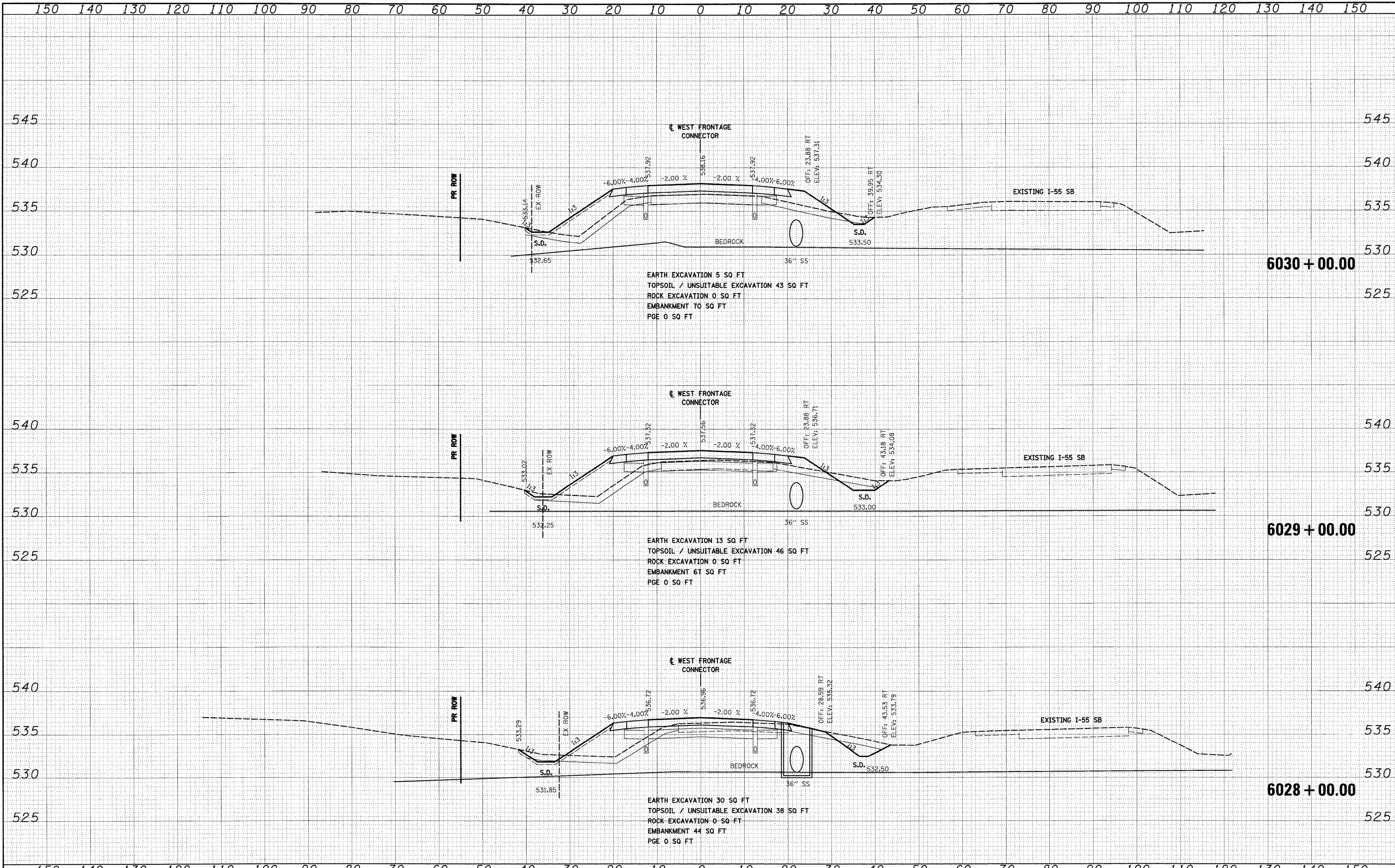
WEST FRONTAGE ROAD CONNECTOR
 SCALE: 1"=10'H; 1"=5'V SHEET NO. 11 OF 34 SHEETS STA. 6025+00.00 TO STA. 6027+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	392
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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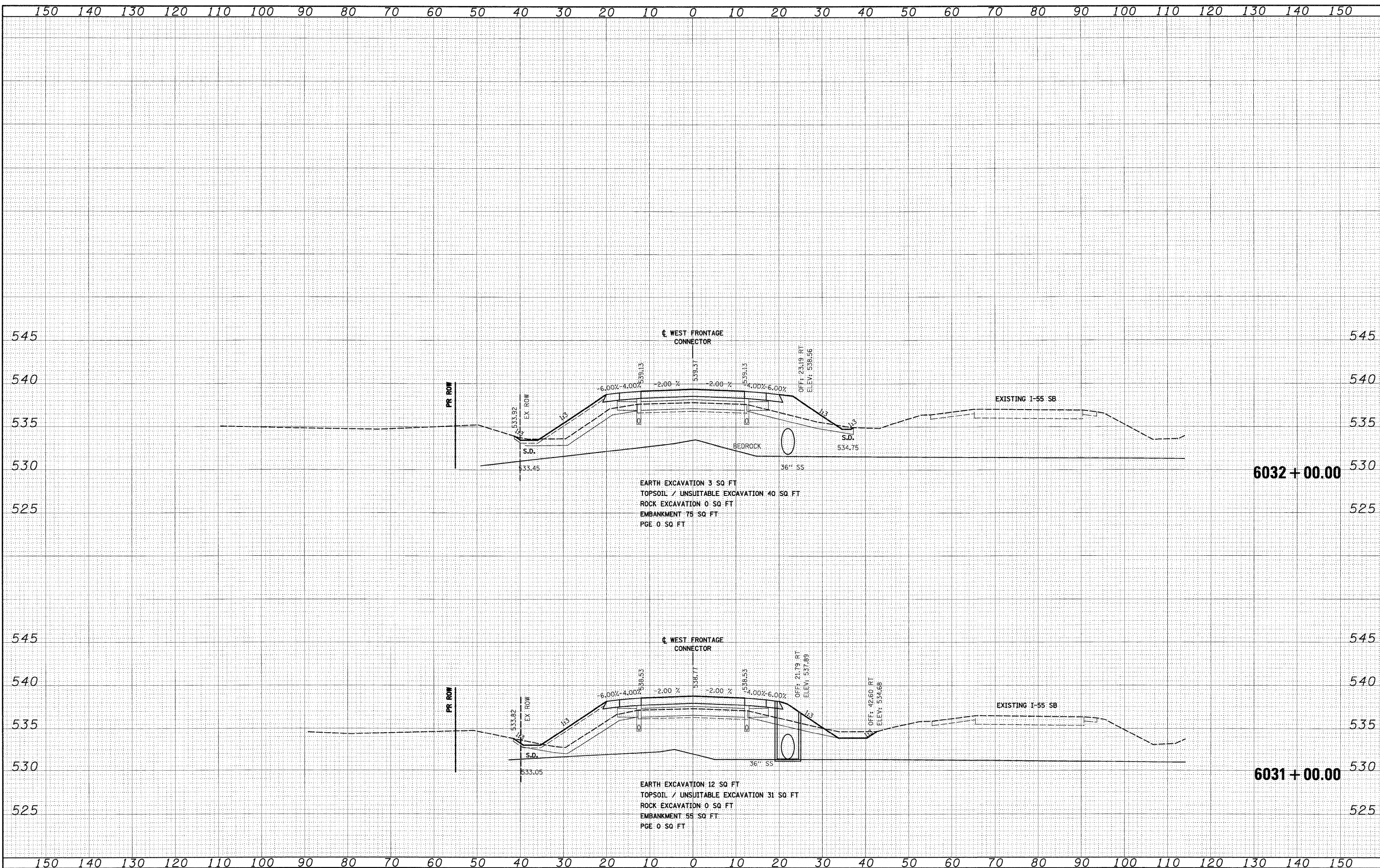
McDonough Associates Inc.
 Engineers / Architects
 100 East Randolph Street Chicago, Illinois 60601



FILE NAME = D:\160C31-SHT-XSSH102.dgn	USER NAME = TKLuergel	DESIGNED - TRK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST FRONTAGE ROAD CONNECTOR	F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 393	
PLOT SCALE = 1:10	CHECKED - DLT	REVISOR -	REVISOR -			SCALE: 1"=10'H; 1"=5'V SHEET NO. 12 OF 34 SHEETS		STA. 6028+00.00 TO STA. 6030+00.00		CONTRACT NO. 60C31	
PLOT DATE = 12/15/2009	DATE - 12/18/09	REVISOR -	REVISOR -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					
FINAL											

FINAL SURVEY	BY	DATE
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NOTE BOOK		
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ORIGINAL SURVEY	BY	DATE
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FILE NAME = D:\60C31-SHT-XSSH102.dgn
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DRAWN - TRK	REVISED -
CHECKED - DLT	REVISED -
DATE - 12/18/09	REVISED -

PLLOT SCALE = 1:10
PLOT DATE = 12/15/2009

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WEST FRONTAGE ROAD CONNECTOR

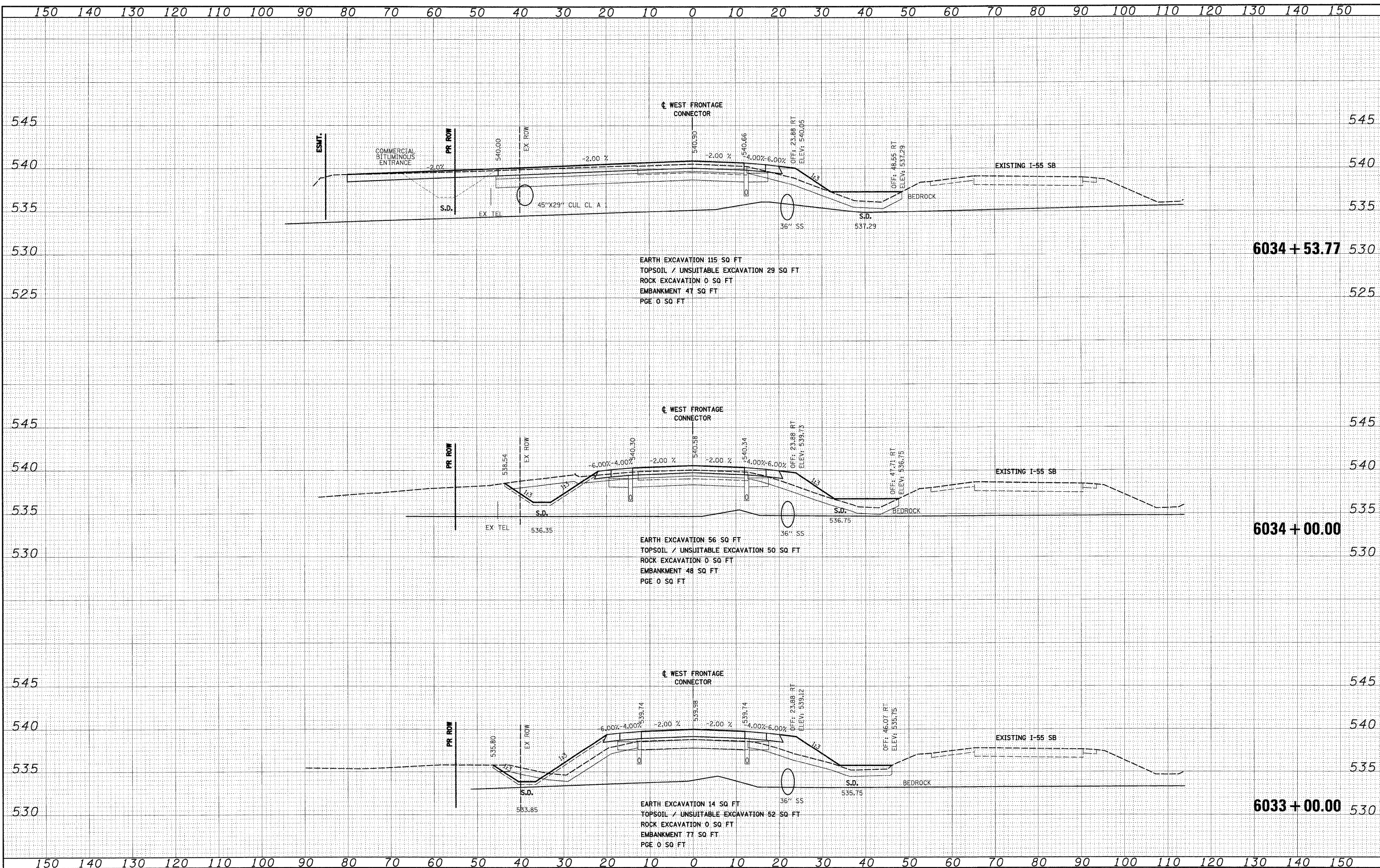
SCALE: 1"=10'H; 1"=5'V SHEET NO. 13 OF 34 SHEETS STA. 6031+00.00 TO STA. 6032+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	394
CONTRACT NO. 60C31			ILLINOIS FED. AID PROJECT	

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 128 East Randolph Street, Chicago, Illinois 60601



FILE NAME =	D:\60C31-SHT-XSSH102.dgn
USER NAME =	TKluugel
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PLDT DATE =	12/15/2009
DATE -	12/18/09

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

WEST FRONTAGE ROAD CONNECTOR

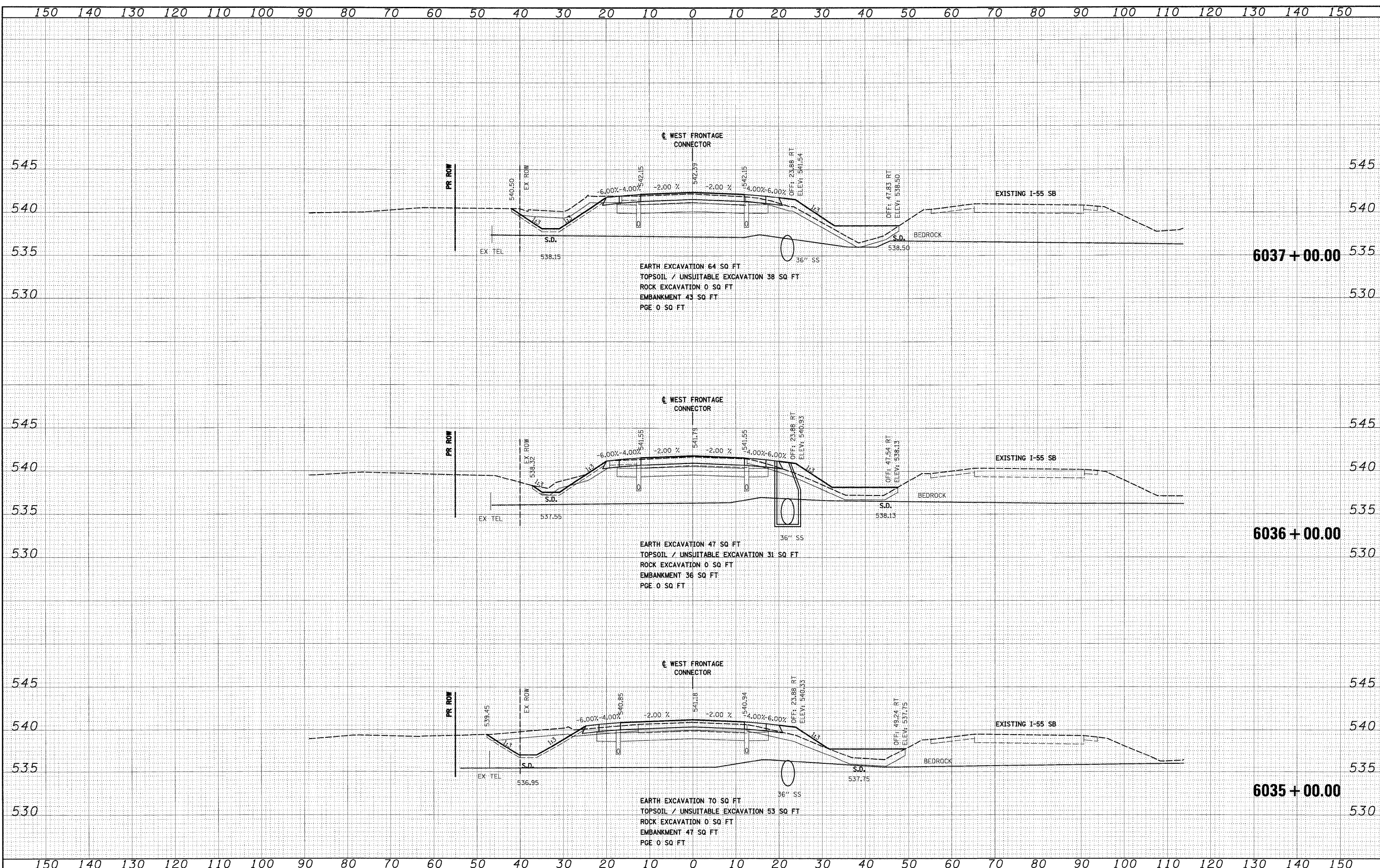
SCALE: 1"=10'H; 1/2"=5'V SHEET NO. 14 OF 34 SHEETS STA. 6033+00.00 TO STA. 6034+53.77

F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	395
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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NOTE BOOK	
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 100 East Randolph Street, Chicago, Illinois 60601



EARTH EXCAVATION: 64 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 38 SQ FT
 ROCK EXCAVATION: 0 SQ FT
 EMBANKMENT 43 SQ FT
 PGE 0 SQ FT

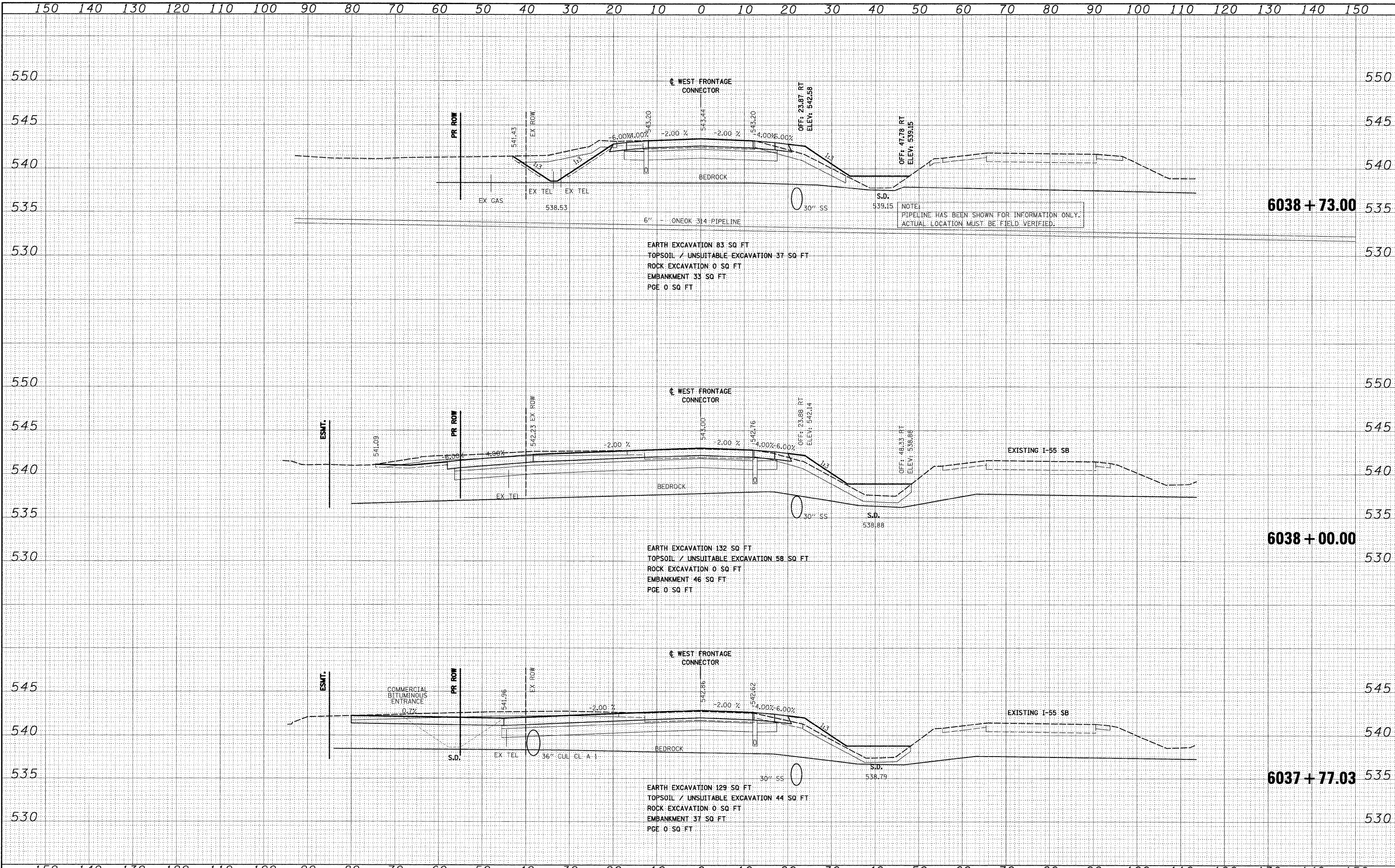
EARTH EXCAVATION: 47 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 31 SQ FT
 ROCK EXCAVATION: 0 SQ FT
 EMBANKMENT 36 SQ FT
 PGE 0 SQ FT

EARTH EXCAVATION: 70 SQ FT
 TOPSOIL / UNSUITABLE EXCAVATION 53 SQ FT
 ROCK EXCAVATION: 0 SQ FT
 EMBANKMENT 47 SQ FT
 PGE 0 SQ FT

FILE NAME = D:\160C31-SHT-XSSH102.dgn	USER NAME = TKJuegel	DESIGNED - TRK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST FRONTAGE ROAD CONNECTOR		F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 396
PLLOT SCALE = 1:10	CHECKED - DLT	REVISED -	REVISED -		SCALE: 1"=10'H 1/2"=5' V SHEET NO. 15 OF 34 SHEETS STA. 6035+00.00 TO STA. 6037+00.00		CONTRACT NO. 60C31		ILLINOIS FED. AID PROJECT		
PLLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -	REVISED -								

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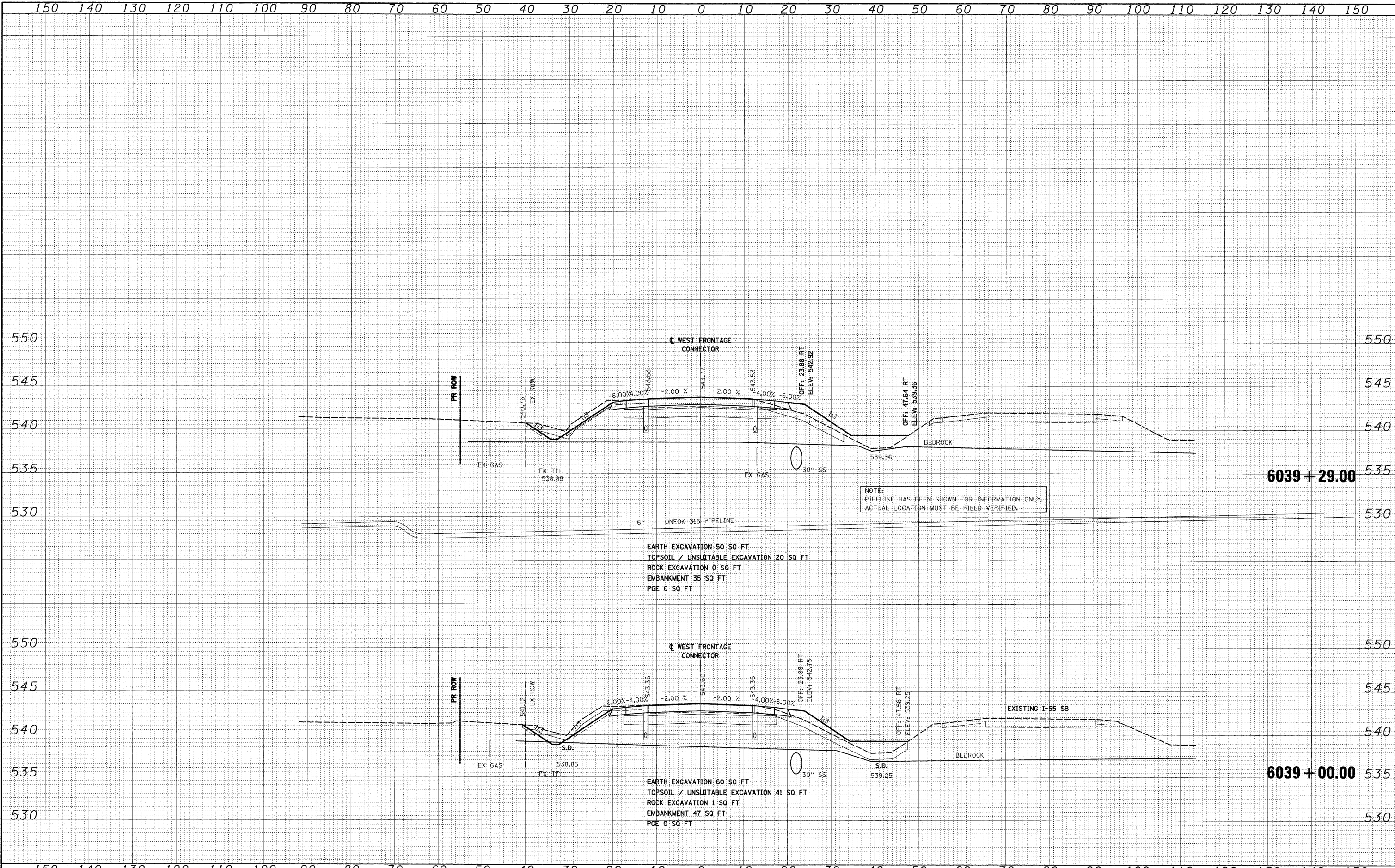
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PLOT SCALE = 1:10	CHECKED - DLT	REVISOR -	SCALE: 1"=10'H; 1"=5'V			SHEET NO. 16 OF 34 SHEETS	STA. 6037+77.03 TO STA. 6038+73.00	CONTRACT NO. 60C31		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
PLOT DATE = 1/19/2010	DATE = 12/18/09	REVISOR -									

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 Engineers / Architects
 130 East Randolph Street Chicago, Illinois 60601

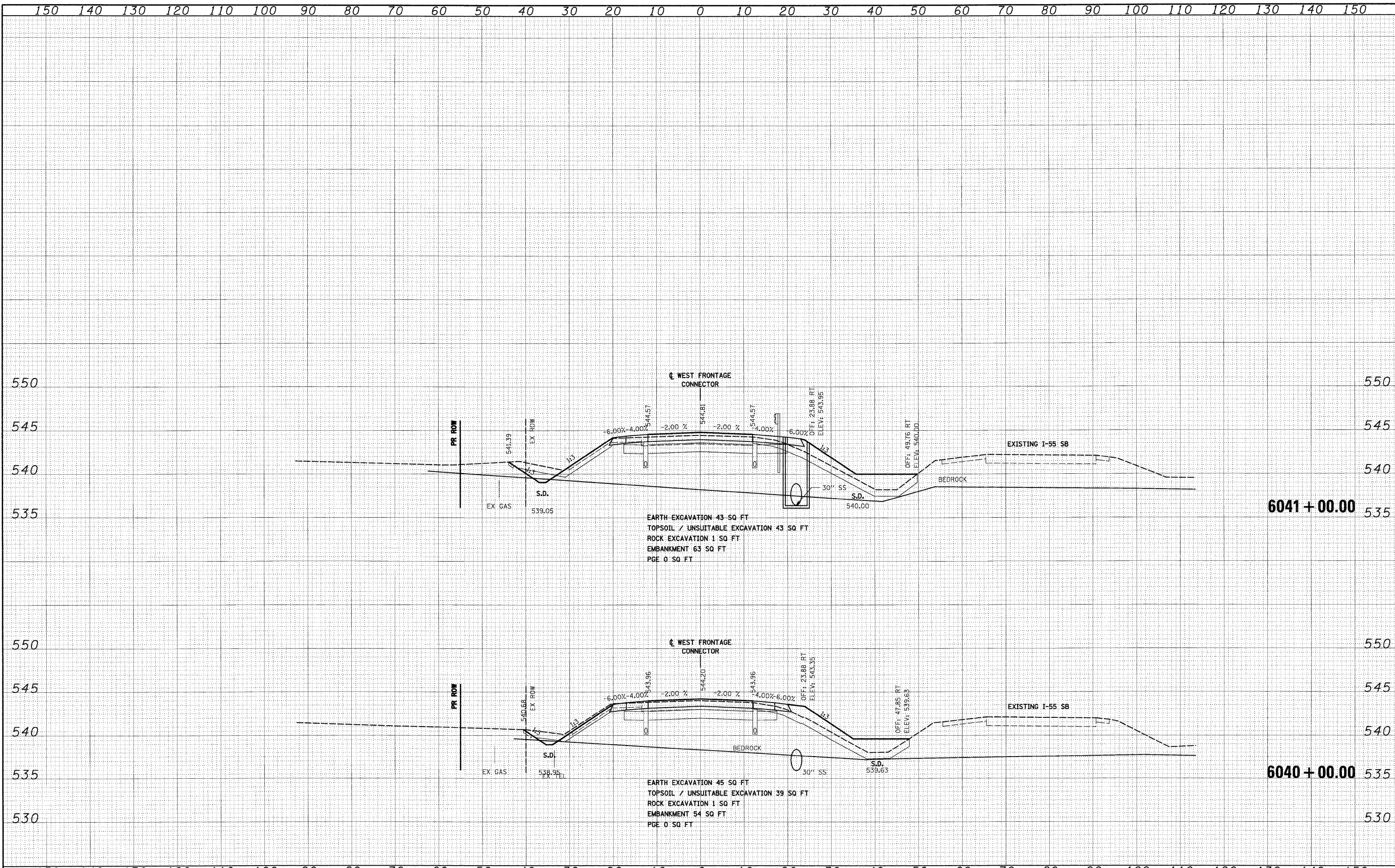


FILE NAME = D:\160C31-SHT-XSSHT02.dgn	USER NAME = j1etour	DESIGNED - TRK	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST FRONTAGE ROAD CONNECTOR	F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 398
PLOT SCALE = 1:10	CHECKED - DLT	DATE - 12/18/09	REVISED -			SCALE: 1"=10'H; 1"=5'V	SHEET NO. 17 OF 34 SHEETS	STA. 6039+00.00 TO STA. 6039+29.00	CONTRACT NO. 60C31	
PLOT DATE = 1/19/2010	DATE - 12/18/09	REVISED -	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

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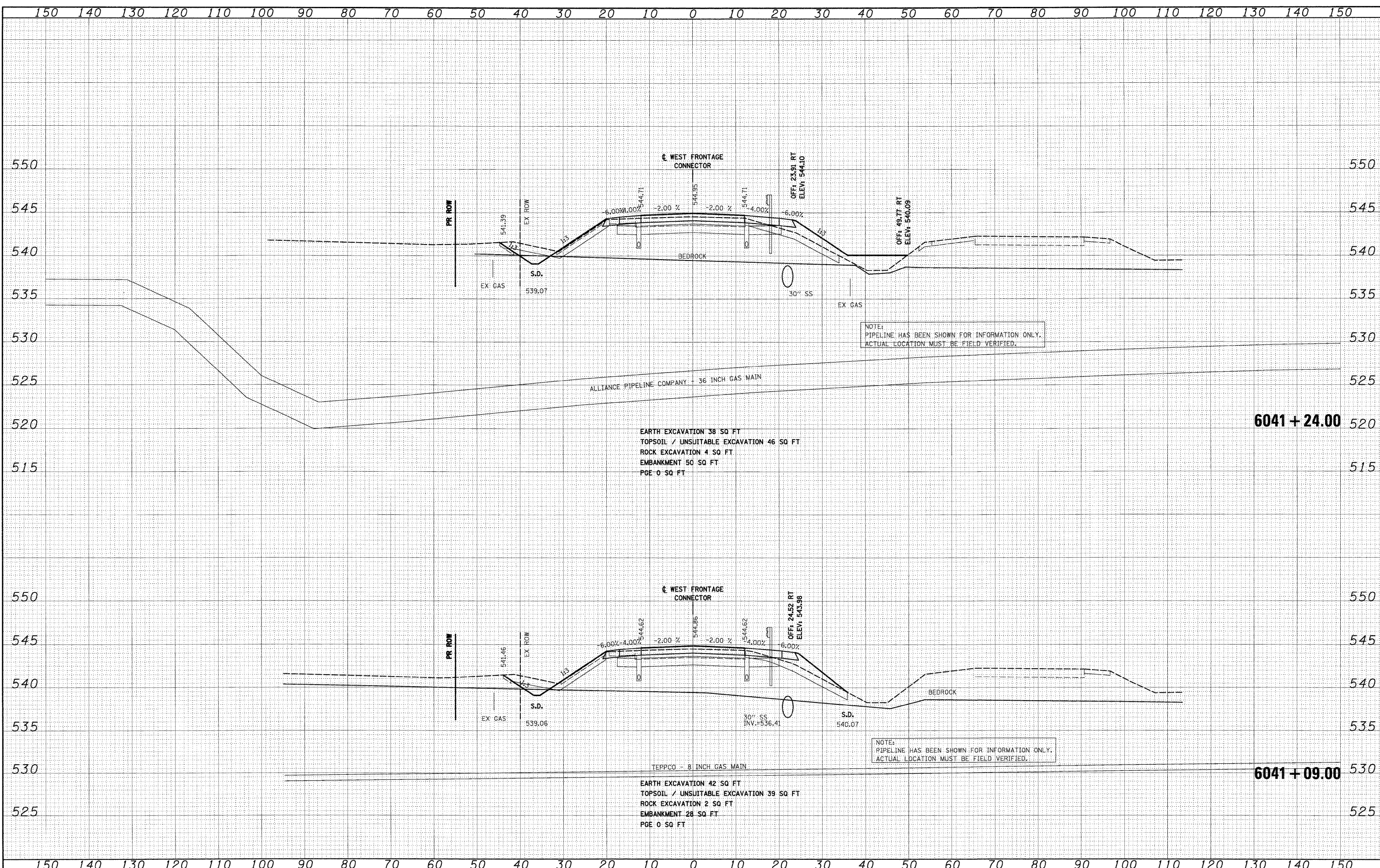


FILE NAME = D:\60C31-SHT-XSSH102.dgn	USER NAME = TKLuegel	DESIGNED - TRK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST FRONTAGE ROAD CONNECTOR	F.A.I. RTE. 55	SECTION (99-1&2)AC-3	COUNTY WILL	TOTAL SHEETS 524	SHEET NO. 399		
PLOT SCALE = 1:10	DRAWN - TRK	CHECKED - DLT	REVISED -			SCALE: 1"=10'H; 1"=5'V	SHEET NO. 18 OF 34 SHEETS	STA. 6040+00.00 TO STA. 6041+00.00	CONTRACT NO. 60C31			
PLOT DATE = 12/15/2009	DATE - 12/18/09	REVISED -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						
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 100 East Randolph Street, Chicago, Illinois 60601



FILE NAME = D:\60C31-SHT-XSSH102.dgn
 USER NAME = TKLuegel
 DESIGNED - TRK
 DRAWN - TRK
 CHECKED - DLT
 PLOT DATE = 12/15/2009

REVISIONS:
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

WEST FRONTAGE ROAD CONNECTOR
 SCALE: 1"=10'H; 1"=5'V SHEET NO. 19 OF 34 SHEETS
 STA. 6041+09.00 TO STA. 6041+24.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	400
CONTRACT NO. 60C31				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				