03-10-2023 LETTING ITEM 072

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	1
	ILLINOIS	CONTRACT NO. 76M44		

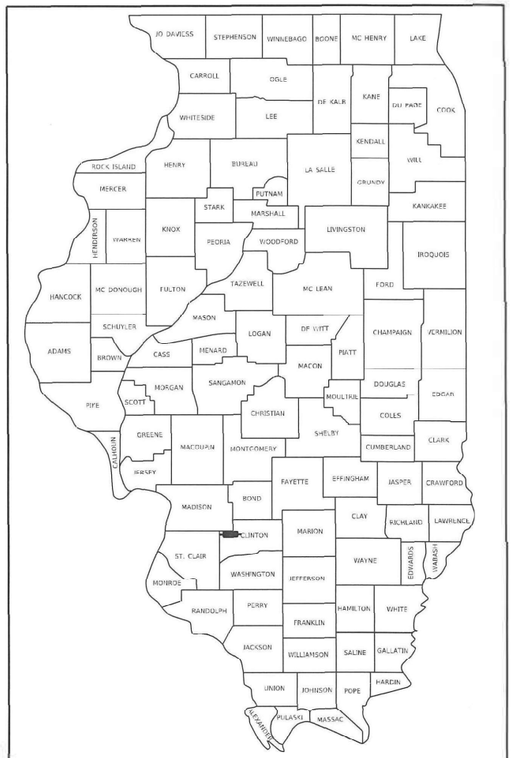
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAS ROUTE 1780 (OLD US 50)
SECTION 28CR-1
PROJECT COVD-4QN3(132)
CULVERT REPLACEMENT
CLINTON COUNTY

C-98-076-19

D-98-057-19



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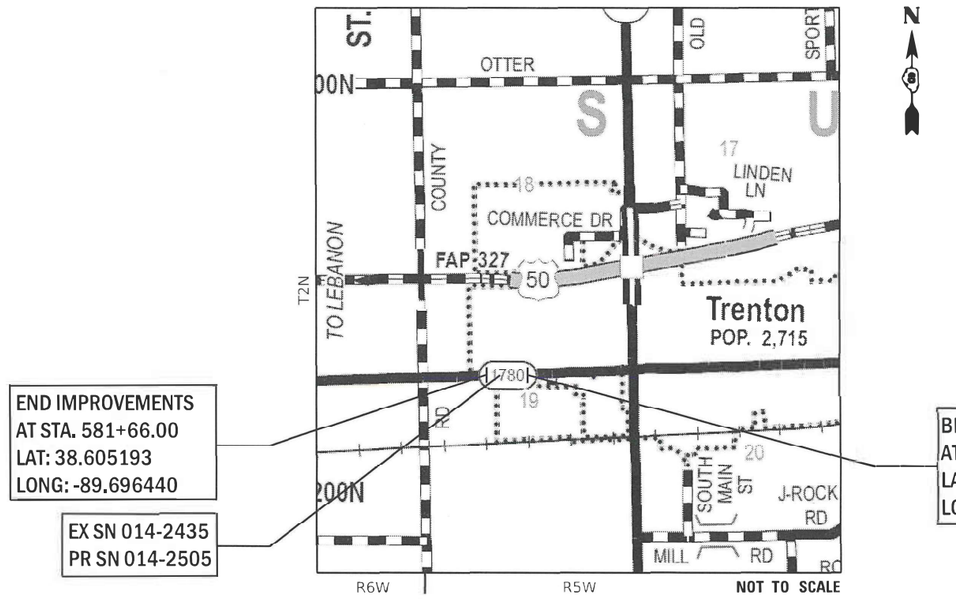

END IMPROVEMENTS
AT STA. 581+66.00
LAT: 38.605193
LONG: -89.696440

EX SN 014-2435
PR SN 014-2505

BEGIN IMPROVEMENTS
AT STA. 581+41.00
LAT: 38.605195
LONG: - 89.696353

NOT TO SCALE

LOCATION MAP

GROSS LENGTH = 25.0 FT. = 0.005 MILE
NET LENGTH = 25.0 FT. = 0.005 MILE

INDEX

DESIGN DESIGNATION

FAS 1780 (OLD US 50)
MAJOR COLLECTOR

2015 ADT = 3,100 (ACTUAL)
2023 ADT = 3,300 (ESTIMATED)
2043 ADT = 4,200 (ESTIMATED)
SU = 2.6%, MU = 1.6%

LICENSED PROFESSIONAL ENGINEER
SEAN D. MAXWELL
062.071986
OF ILLINOIS

Sean D Maxwell 11/23/2022
SEAN D. MAXWELL ILLINOIS P.E. 062.071986 DATE
EXPIRES 11/30/2023

QEI
QUIGG ENGINEERING INC
2351 SOUTH DIRKSEN PARKWAY
SPRINGFIELD, ILLINOIS 62703
217 -670-0563 (P) / 217-679-2204 (F)
www.quiggengineering.com

0 100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER BILLIE OWEN

CONTRACT NO. 76M44

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Dec. 9 20 2022
Kirk Brown ODS
REGIONAL ENGINEER

February 3, 2023
ENGINEER OF DESIGN AND ENVIRONMENT

February 3, 2023
Stephen McGraw
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV. - MS

HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
442101-09	CLASS B PATCHES
515001-04	NAME PLATE FOR BRIDGES
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
420001-10	PAVEMENT JOINTS
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION

GENERAL NOTES

1. UTILITIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA:

UTILITY	TYPE	ABOVE GROUND	BELOW GROUND
AMEREN ILLINOIS	GAS & ELECTRIC	X	X
AT&T ILLINOIS	COMMUNICATIONS	X	X
CHARTER COMMUNICATIONS, INC.	CABLE TV	X	X
CLEARWAVE COMMUNICATIONS	COMMUNICATIONS	X	X
CITY OF TRENTON	WATER & SS		X

2. THE PROPOSED PAVEMENT MARKING SHALL MATCH THE LOCATIONS OF THE EXISTING PAVEMENT MARKING, AS DIRECTED BY THE ENGINEER.
3. THE CONTRACTOR SHALL STAGE ALL WORK IN SUCH A WAY AS TO MAINTAIN INGRESS AND EGRESS TO ALL ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION.
4. THE TWO (2) CHANGEABLE MESSAGE SIGNS REQUIRED FOR THIS PROJECT SHALL BE IN PLACE AND OPERATION TWO (2) WEEKS PRIOR TO ANY LANE CLOSURE AT LOCATIONS DETERMINED BY THE ENGINEER. THE ENGINEER WILL PROVIDE THE MESSAGE TO THE CONTRACTOR FOR THE TWO (2) WEEKS PRIOR TO CONSTRUCTION AND DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL PROVIDE POSITIVE AND ADEQUATE DRAINAGE AT ALL TIMES.
6. ALL ELEVATIONS REFER TO THE USGS MEAN SEA LEVEL DATUM, NAVD 88.

COMMITMENTS

1. THE CONTRACTOR SHALL GIVE NOTICE TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION, BUREAU OF OPERATIONS, THE CITY OF TRENTON, AND SUGAR CREEK FIRE DEPARTMENT THREE WEEKS PRIOR TO START OF CONSTRUCTION AND DETOUR.

REV. - MS

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	DRAWN - TO	REVISED -
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PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	2
		CONTRACT NO. 76M44		
	ILLINOIS	FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE 100% FEDERAL BOX CULVERT 0004 RURAL
20200100	EARTH EXCAVATION	CU YD	5	5
20700220	POROUS GRANULAR EMBANKMENT	CU YD	40	40
25100630	EROSION CONTROL BLANKET	SQ YD	44.0	44.0
28000305	TEMPORARY DITCH CHECKS	FOOT	41.0	41.0
28100107	STONE RIPRAP, CLASS A4	SQ YD	52	52
28200200	FILTER FABRIC	SQ YD	52	52
44200050	WELDED WIRE REINFORCEMENT	SQ YD	78	78
44201299	DOWEL BARS 1 1/2"	EACH	52	52
44213200	SAW CUTS	FOOT	125	125
44213204	TIE BARS 3/4"	EACH	30	30

REV. - MS

MODEL: Default
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PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	3
		CONTRACT NO. 76M44		
	ILLINOIS FED. AID PROJECT			

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE 100% FEDERAL BOX CULVERT 0004 RURAL
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
	51500100	NAME PLATES	EACH	1	1
	54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2
	54010703	PRECAST CONCRETE BOX CULVERTS 7' X 3'	FOOT	26	26
	67100100	MOBILIZATION	L SUM	1	1
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	36	36
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	57	57
	Z0016702	DETOUR SIGNING	L SUM	1	1
	X4420684	CLASS B PATCHES, TYPE IV, 10 INCH (SPECIAL)	SQ YD	78	78
	X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	4
		CONTRACT NO. 76M44		
	ILLINOIS FED. AID PROJECT			

EARTHWORK SCHEDULE

1	2	3	4	5	6
LOCATION	20200100 EARTH EXCAVATION	20700220 POROUS GRAN EMB SUBGR	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (15%)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)
OLD US 50					
STA 581+00 TO STA 581+41	2.36	0.00	2.01	1.38	0.63
STA 581+66 TO STA 582+00	2.35	0.00	2.00	1.50	0.50
PR BOX CULVERT					
STA 581+41 TO STA 581+66	0.00	40.00	34.00	0.00	34.00
TOTALS	4.71	40.00	38.01	2.88	35.13
USE	5.00	40.00	39.00	3.00	36.00

COLUMN 1 - LOCATION FROM PLANS
COLUMN 2 - CUT QUANTITIES FROM CROSS SECTIONS
COLUMN 3 - PGE USE FOR BACKFILL AT PR BOX CULVERT
COLUMN 4 - ADJUSTED EARTH EXCAVATION QUANTITIES THAT ARE TO BE USED AS EMBANKMENT
COLUMN 5 - FILL QUANTITIES FROM CROSS SECTIONS
COLUMN 6 - OFFSITE MATERIAL NEEDED OR WASTE

PAVEMENT MARKING SCHEDULE

LOCATION						PAINT PAVEMENT MARKING - LINE 4"
						FOOT
STA	OFFSET	STA	OFFSET	LT/RT	COLOR	
581+41.00	11	581+66.00	11	RT	WHITE	25
581+41.00	0	581+66.00	0	N/A	YELLOW	7
581+41.00	11	581+66.00	11	LT	WHITE	25
TOTAL						57

PAVING SCHEDULE

LOCATION				WELDED WIRE REINFORCEMENT	DOWEL BARS	SAW CUTS	TIE BARS 3/4"	CLASS B PATCHES, TYPE IV, 10 INCH (SPECIAL)
				SQ YD	EACH	FOOT	EACH	SQ YD
STA	STA	LENGTH	WIDTH					
581+41.00	581+66.00	25	28	77.8	52		30	78
581+41.00			25	-		100		-
581+66.00			25	-		25		-
TOTAL				78	52	125	30	78

LANDSCAPING AND EROSION CONTROL SCHEDULE

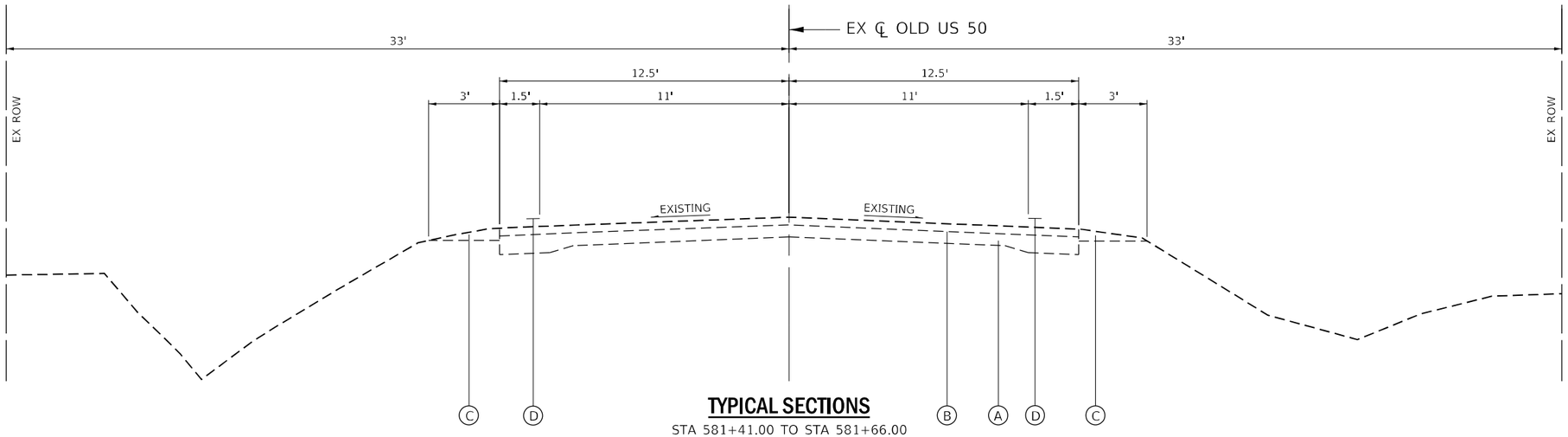
LOCATION						SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	EROSION CONTROL BLANKET	TEMPORARY DITCH CHECKS	STONE RIPRAP, CLASS A4	FILTER FABRIC
						ACRE	POUND	POUND	POUND	SQ YD	FOOT	SQ YD	SQ YD
STA	OFFSET	STA	OFFSET	LT/RT	AREA								
581+41.00		581+66.00		LT	163.42	0.004	0.36	0.36	0.36	18.16	-	-	-
581+41.00		581+66.00		RT	228.59	0.006	0.54	0.54	0.54	25.4	-	-	-
581+42.19	21.32			LT	-	-	-	-	-	-	16	-	-
581+53.95	31.15			RT	-	-	-	-	-	-	15	-	-
581+67.78	24.12			LT	-	-	-	-	-	-	10	-	-
581+53.76	23			LT	-	-	-	-	-	-	-	-	-
581+45.36	20	581+61.34	33	LT	278.46	-	-	-	-	-	-	31	31
581+45.53	20	581+70.53	33	RT	187.91	-	-	-	-	-	-	20.9	20.9
						0.01	0.9	0.9	0.9	43.56	41.0	51.9	51.9
TOTAL						0.01	0.90	0.90	0.90	44.0	41.0	52	52

NOTE: SEEDING, FERTILIZER AND MULCH QUANTITIES ARE FOR INFORMATION ONLY.

REV. - MS

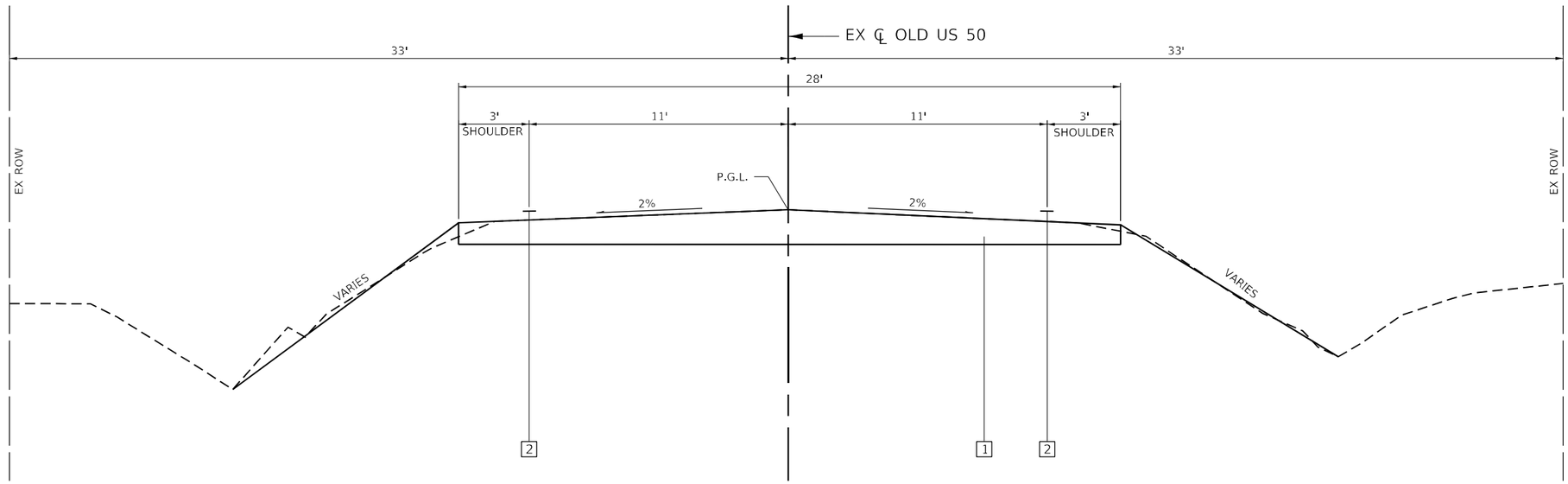
LEGEND

- (A) EXISTING PCC PAVEMENT, (9-6-9)
- (B) EXISTING HOT MIX ASPHALT OVERLAY, 4"
- (C) EXISTING AGGREGATE WEDGE SHOULDER TYPE B
- (D) EXISTING PAINT PAVEMENT MARKING LINE - 4"
- [1] PR CLASS B PATCHES, TYPE IV, 10 INCH SPECIAL
- [2] PR PAINT PAVMENT MARKING - LINE 4"



TYPICAL SECTIONS

STA 581+41.00 TO STA 581+66.00



TYPICAL SECTIONS

STA 581+41.00 TO STA 581+66.00

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PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -	

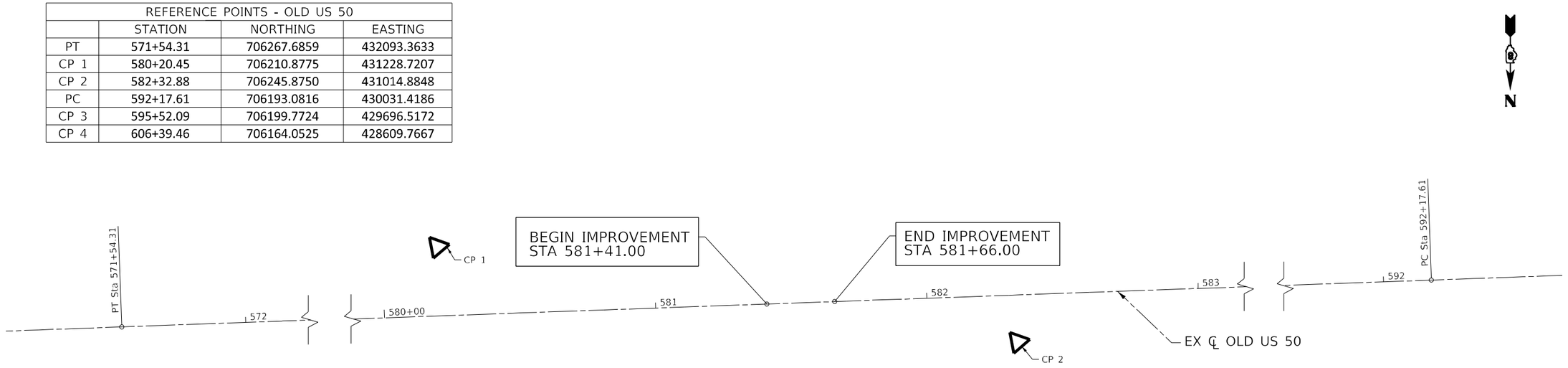
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
OLD US 50

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. 581+41.00 TO STA. 581+66.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	6
		CONTRACT NO. 76M44		
	ILLINOIS	FED. AID PROJECT		

REFERENCE POINTS - OLD US 50			
	STATION	NORTHING	EASTING
PT	571+54.31	706267.6859	432093.3633
CP 1	580+20.45	706210.8775	431228.7207
CP 2	582+32.88	706245.8750	431014.8848
PC	592+17.61	706193.0816	430031.4186
CP 3	595+52.09	706199.7724	429696.5172
CP 4	606+39.46	706164.0525	428609.7667



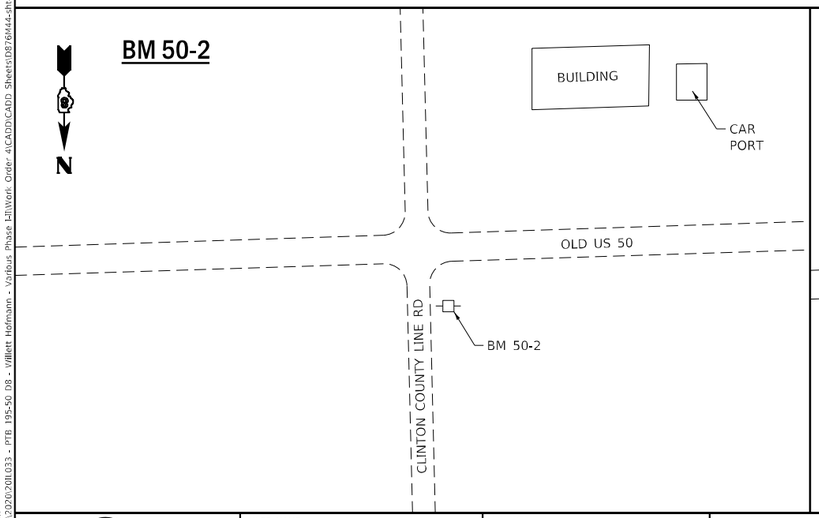
BENCHMARK DATA

BM NUMBER	DESCRIPTION	ELEVATION
BM MW-4	FOUND CUT "□" ON SE CORNER OF CONC. FOUNDATION FOR A STOP SIGN AT NORTH WEST QUAD OF OLD US 50 (W. BROADWAY ST.) & IL 160	493.46'
BM 50-1	SET RR SPIKE IN POWER POLE W/ LIGHT AT NORTH SIDE OF OLD US 50, ±0.5 MI WEST OF IL 160, AND AT SOUTH EAST CORNER OF WEST GATE BAPTIST CHURCH PROPERTY.	505.57'
BM 50-2	SET RR SPIKE IN POWER POLE AT NORTH WEST QUAD OF OLD US 50 & COUNTY LINE RD, ±1 MI WEST OF IL 160, ±100' NORTH OF OLD US 50.	511.33'

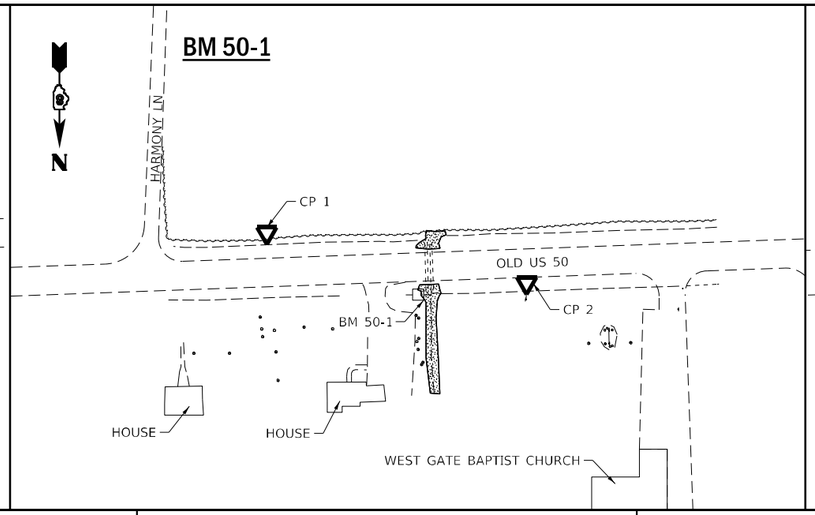
NOTES

1. BEARINGS ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD 83 (1997). THE DISTANCES ARE SHOWN HEREON, EXCEPT AS NOTED, ARE GROUND DISTANCES. THE AVERAGE GRID FACTOR USED FOR THIS PLAT IS 0.99994836. THE GRID COORDINATES WHEN DIVIDED BY THE AVERAGE GRID FACTOR WILL PROVIDE THE GROUND COORDINATES.
2. PROJECT COORDINATES ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD 83 (1997). TWO MILLION HAS BEEN TRUNCATED FROM THE EASTING TO DISTINGUISH PROJECT COORDINATES AS GROUND COORDINATES.
3. ALL ELEVATIONS REFER TO USGS MEAN SEA LEVEL DATUM, NAVD 88.

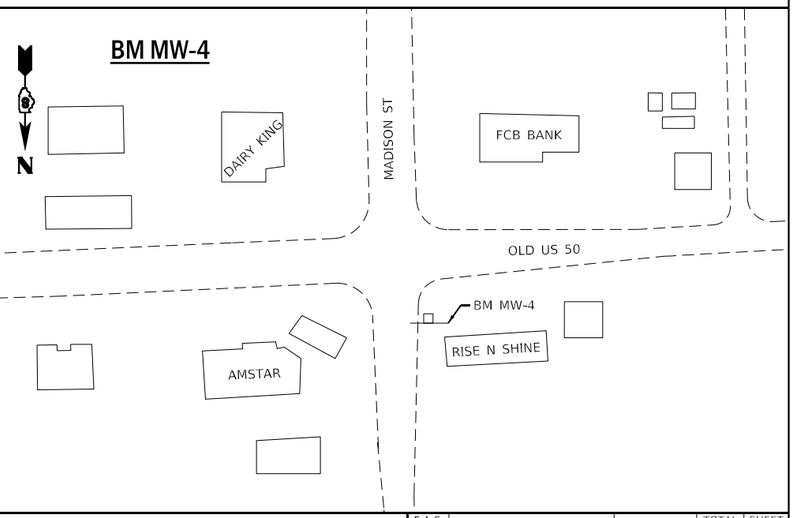
BM 50-2



BM 50-1



BM MW-4



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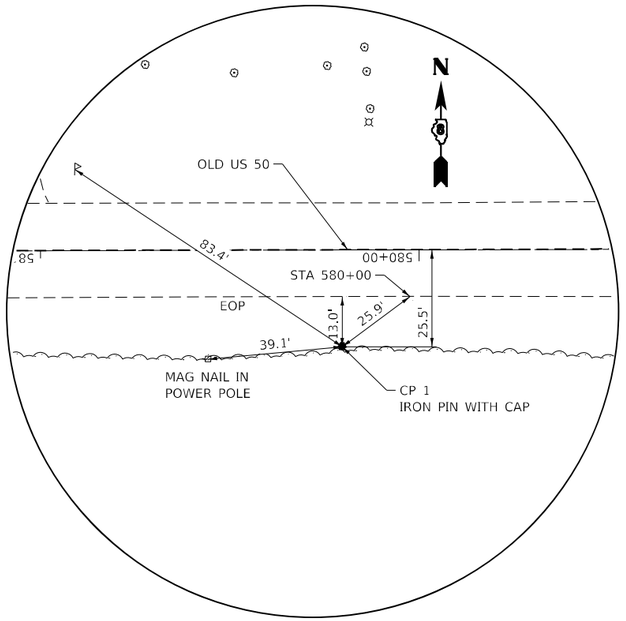
PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT TIES AND BENCHMARKS
OLD US 50

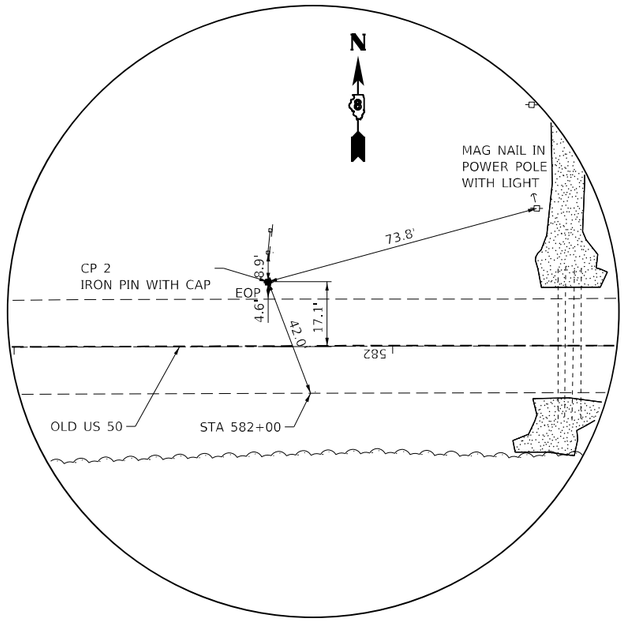
SCALE: NONE | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	7
		CONTRACT NO. 76M44		
		ILLINOIS	FED. AID PROJECT	



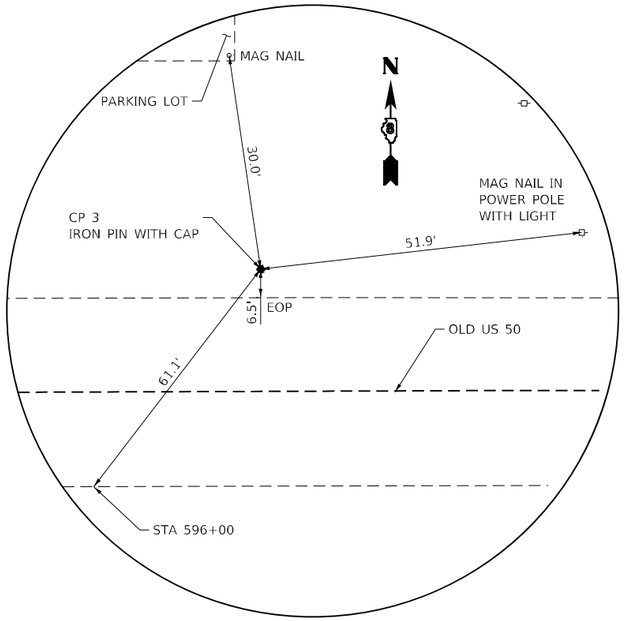
CP 1

STA 580+20.45



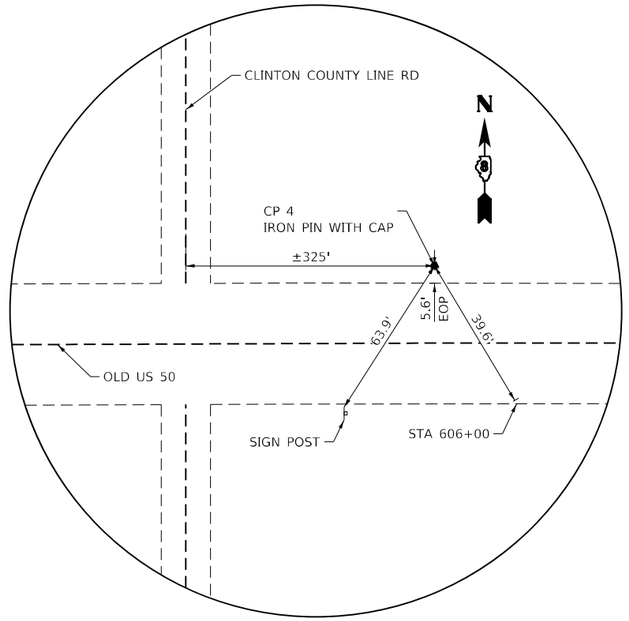
CP 2

STA 582+32.88



CP 3

STA 595+52.09



CP 4

STA 606+39.46

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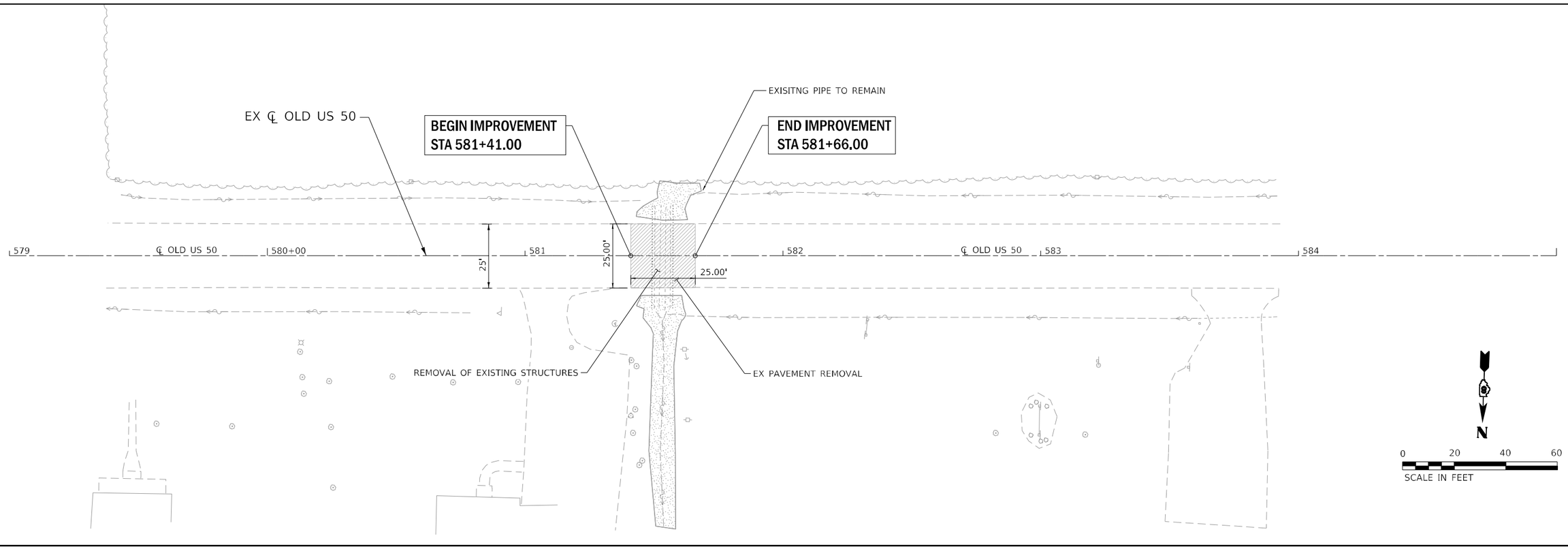
PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -	

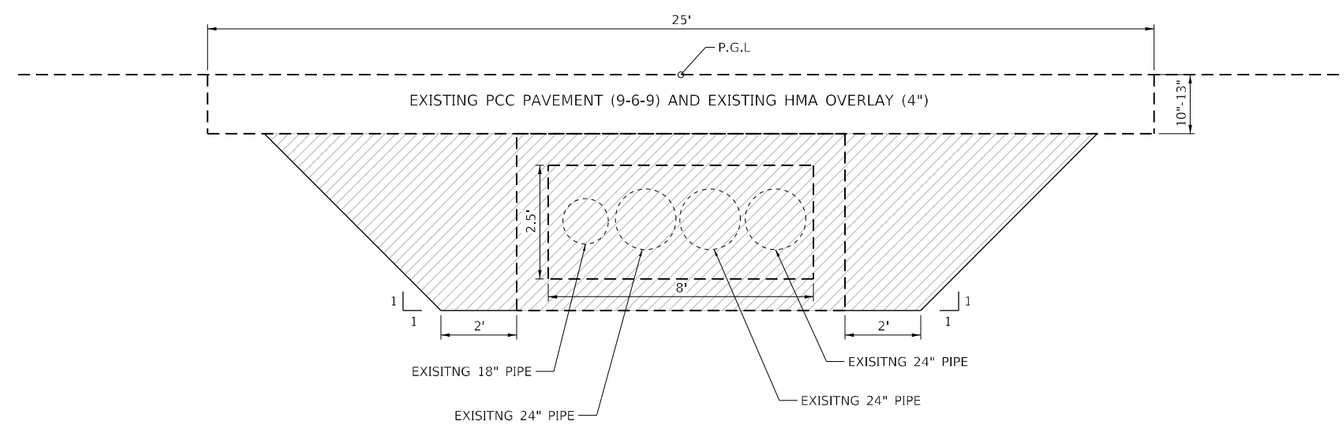
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT TIES AND BENCHMARKS
OLD US 50

SCALE: NONE | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	8
		CONTRACT NO. 76M44		
		ILLINOIS	FED. AID PROJECT	





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DRAWING CHECKED
NOTE BOOK SPL NOTED
NO. STRUCTURE NOTATNS COMD

PLOTTED
ALIGNMENT CHECKED
R.O. WAY CHECKED
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QUIGG ENGINEERING INC

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PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL
OLD US 50

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. 581+41.00 | TO STA. 581+66.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	9
		CONTRACT NO. 76M44		
	ILLINOIS	FED. AID PROJECT		

PAINT PAVEMENT MARKING
LINE 4" SKIP-DASH YELLOW

PAINT PAVEMENT MARKING
LINE 4" SOLID WHITE

EXISTING PIPE TO REMAIN

BEGIN IMPROVEMENT
STA 581+41.00

END IMPROVEMENT
STA 581+66.00

CONSTRUCTION LIMITS

EX ℄ OLD US 50

EX ROW

EX ROW

33'

25'

28.00'

25.00'

33'

579 | ℄ OLD US 50 | 580+00 | 581 | 582 | ℄ OLD US 50 | 583 | 584

EX ROW

CONSTRUCTION LIMITS

EX ROW

PROPOSED 7'x3' PC CULVERT (014-2505)
STA 581+53.44

PR PCC PAVEMENT PATCH

PAINT PAVEMENT MARKING
LINE 4" SOLID WHITE

N

0 20 40 60
SCALE IN FEET

BM 50-1
ELEV = 505.57
SEE ATB SHEET FOR DESCRIPTION

EX 8'X2.5' BOX CULVERT
PR PROFILE ℄ OLD US 50

EX PROFILE ℄ OLD US 50

STA 579+37.91
ELEV 505.59

STA 581+41.00
ELEV 505.89

0.16%

STA 581+66.00
ELEV 505.93

STA 583+92.77
ELEV 506.28

+66.00 RT
EL 502.70

+41.00 LT
EL 503.50

+66.00 LT
EL 502.00

+49.27 LT
EL 501.78

+57.61 LT
EL 501.78

+57.61 RT
EL 501.45

PR 7'X3' CULVERT

DSFL
501.45

USFL
501.78

520 510 500 490 480

505.59 505.63 505.65 505.67 505.68 505.70 505.72 505.75 505.78 505.83 505.89 505.92 501.61 505.95 505.98 506.02 506.06 506.09 506.11 506.12 506.15 506.20 506.24 506.27

579+00 | 579+50 | 580+00 | 580+50 | 581+00 | 581+50 | 582+00 | 582+50 | 583+00 | 583+50 | 584+00 | 584+50 | 585+00

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

MODEL: Default
FILE NAME: S:\2020\20IL033 - PTB 195-50 08 - Willett Hofmann - Various Phase III\Work Order #\CADD\CADD Sheets\PB76M44-alt-P&P.dgn

QUIGG ENGINEERING INC

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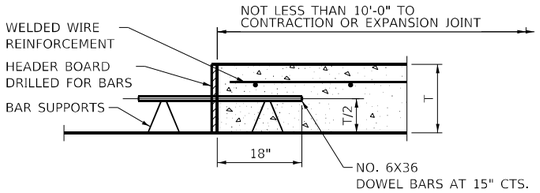
	DRAWN - SL	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - SM	REVISED -
PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
OLD US 50

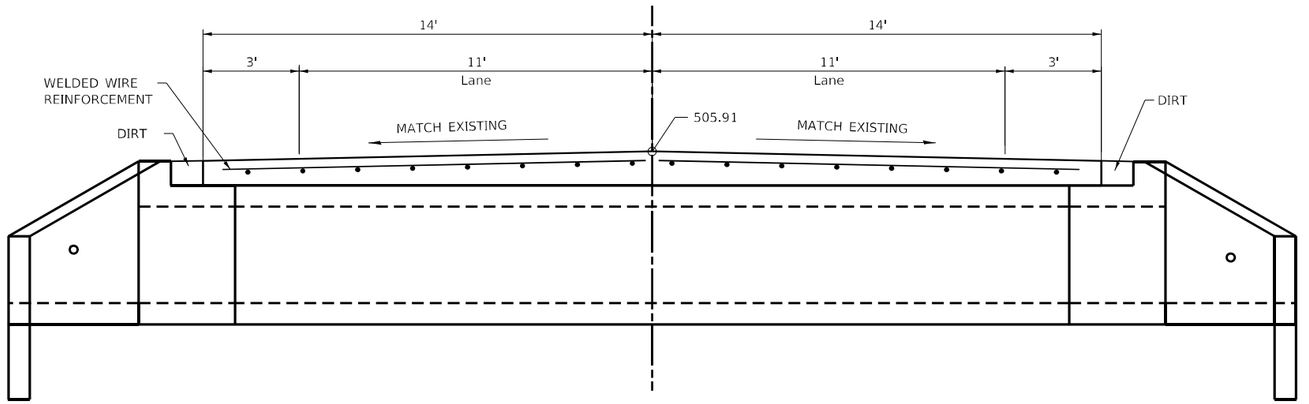
SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. 581+41.00 | TO STA. 581+66.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	10
		CONTRACT NO. 76M44		
	ILLINOIS FED. AID PROJECT			

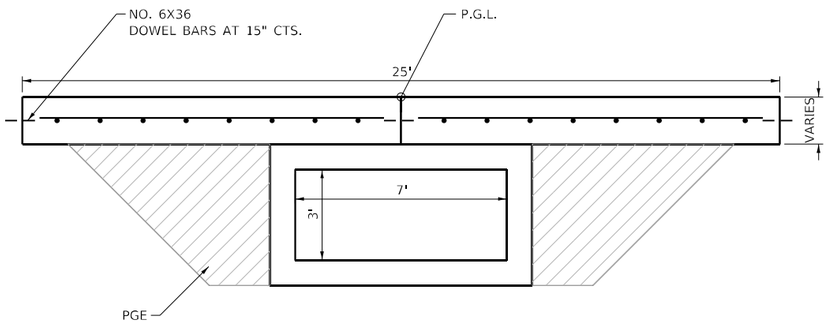


TRANSVERSE CONSTRUCTION JOINT

(IF NEEDED PER STANDARD SPECIFICATIONS)



SECTION A–A

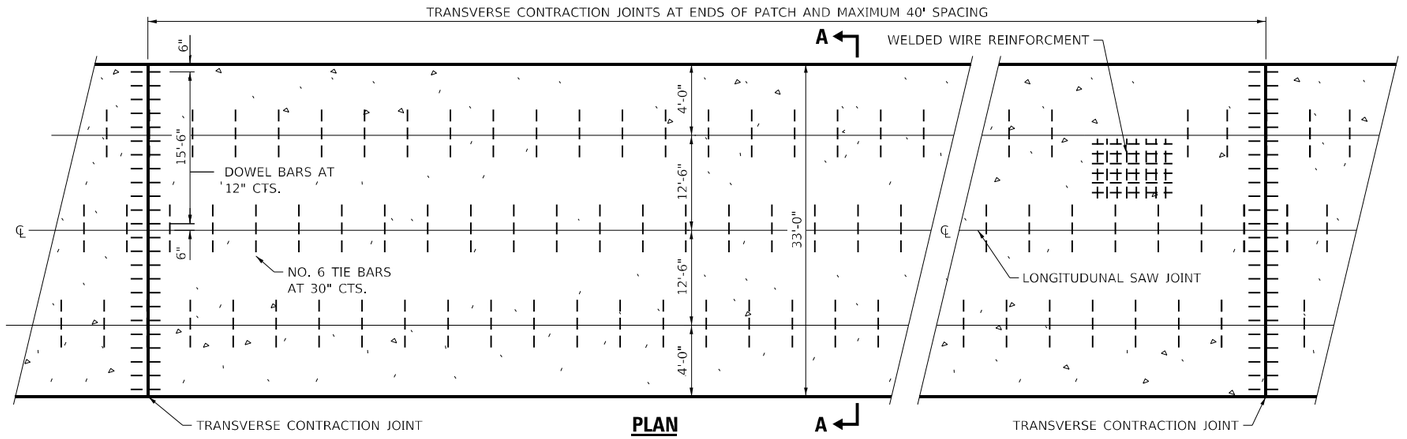


GENERAL NOTES

SEE STANDARD 442101 FOR DETAILS NOT SHOWN.

SEE STANDARD 420701 FOR WELDED WIRE REINFORCEMENT DETAILS.

ACTUAL DIMENSIONS TO MATCH FIELD CONDITIONS AND CONSTRUCTION METHODS.



PLAN

QUIGG ENGINEERING INC

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	DRAWN - TO	REVISED -
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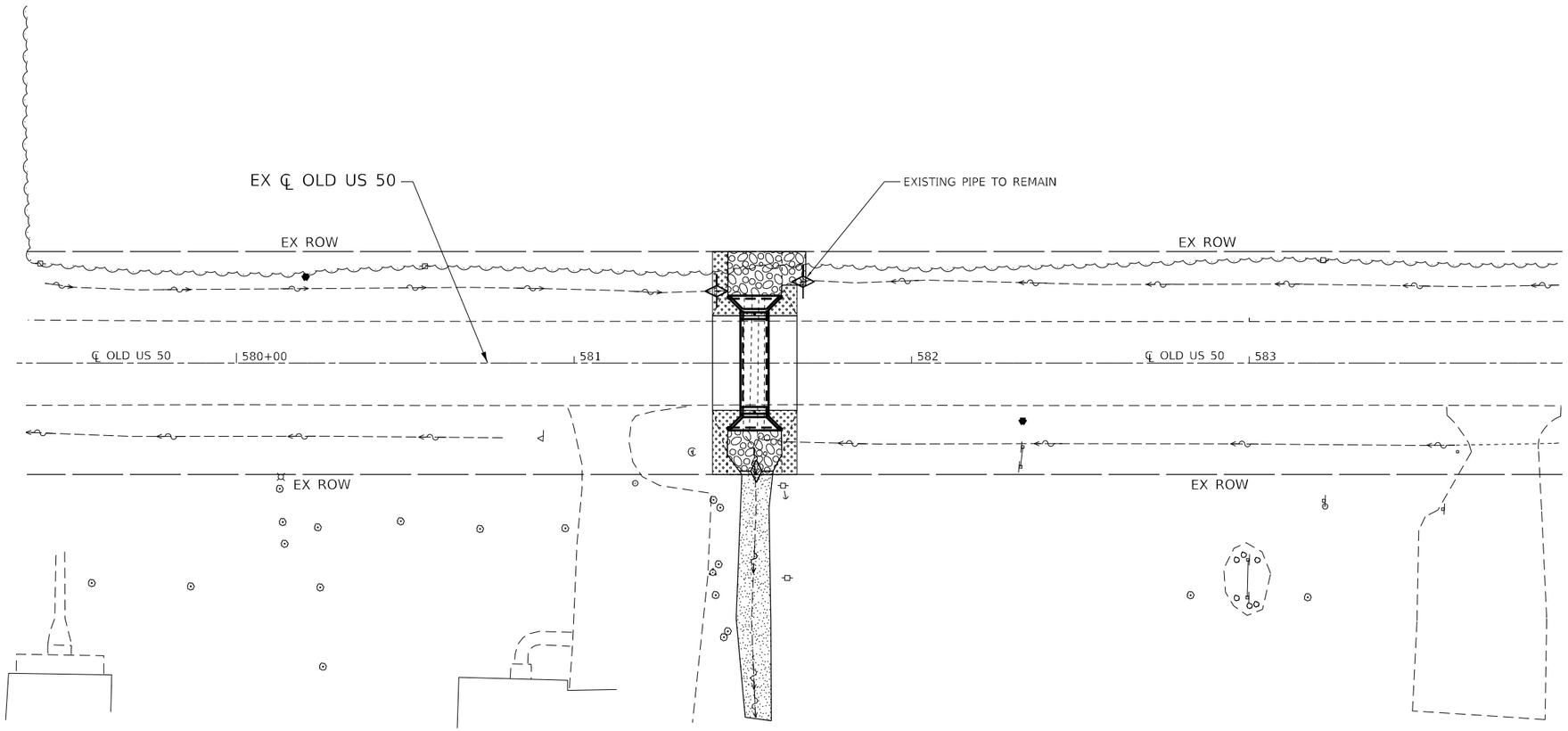
PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CLASS B PATCH OVER CULVERT DETAIL
OLD US 50

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	11
		CONTRACT NO. 76M44		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- SEEDING, CLASS 2A WITH EROSION CONTROL BLANKET
- PROPOSED STONE RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK

MODEL: Default
FILE NAME: S:\2020\20IL033 - IPB I95-90 08 - Willett Hofmann - Varibus Phase II\Work Order 4\CADD\CADD Sheets\D8786M44-sht-Erosion Control.dgn

QUIGG ENGINEERING INC

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	DRAWN - MW	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - SM	REVISED -	
PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL & LANDSCAPING PLAN
OLD US 50

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. 581+41.00 TO STA. 581+66.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	12
		CONTRACT NO. 76M44		
	ILLINOIS FED. AID PROJECT			

NOTE

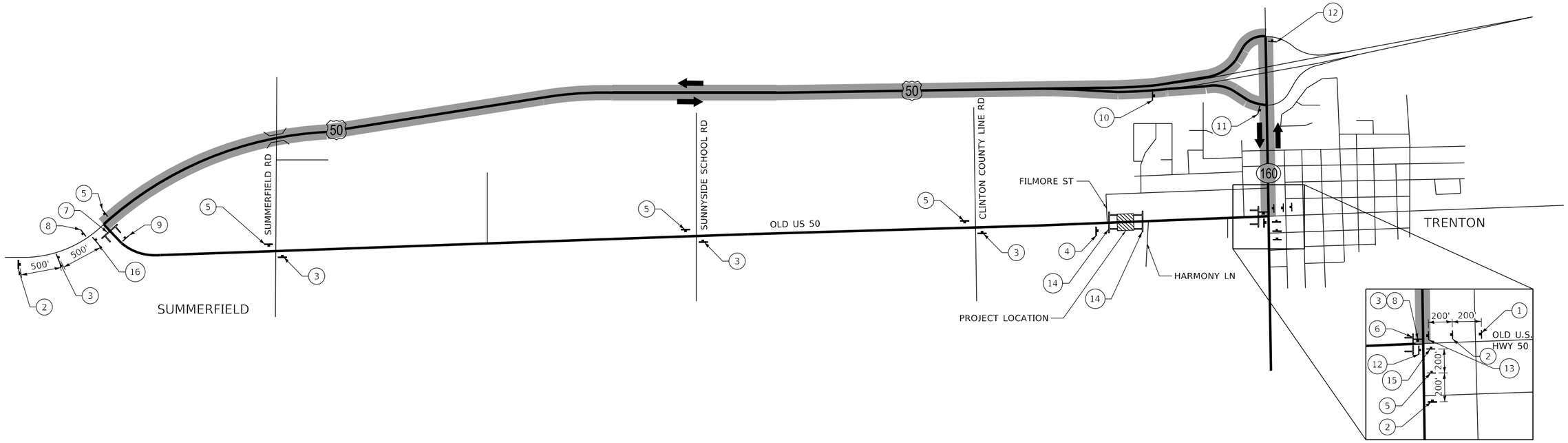
A DETOUR ROUTE WILL BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION. THE ROADWAY AT THE PROJECT LOCATION WILL BE CLOSED TO THROUGH TRAFFIC. LOCAL ACCESS IS TO BE MAINTAINED TO ALL ENTRANCES OUTSIDE OF THE IMPROVEMENT LIMITS.

SIGNS WILL BE PLACED 100' PRIOR TO INTERSECTION OR TO FIT FIELD CONDITIONS, UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.

LEGEND

- WORK AREA
- DETOUR ROUTE
- TRAFFIC FLOW
- TYPE III BARRICADE
- DETOUR SIGN

N



1 ROAD CLOSED AHEAD — W20-3(O)-4848

2 DETOUR AHEAD — W20-2(O)-4848

3 ROAD CLOSED AHEAD — W20-3(O)-4848, M6-1R(O)-3021

4 ROAD CLOSED 500 FT — W20-3(O)-4848

5 ROAD CLOSED AHEAD — W20-3(O)-4848, M6-1L(O)-3021

6 ROAD CLOSED 0.5 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3a-6030

7 ROAD CLOSED 3.7 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3a-6030

8 END DETOUR — M4-8A(O)-2418

9 DETOUR EAST / OLD ROUTE 50 — M4-8(O)-2412, M3-2(O)-2412, CUSTOM-4824, M6-1R(O)-2115

10 DETOUR EAST / OLD ROUTE 50 — M4-8(O)-2412, M3-2(O)-2412, CUSTOM-4824, M6-2(O)-2115

11 DETOUR EAST / OLD ROUTE 50 — M4-8(O)-2412, M3-2(O)-2412, CUSTOM-4824, M6-1R(O)-2115

12 DETOUR WEST / OLD ROUTE 50 — M4-8(O)-2412, M3-4(O)-2412, CUSTOM-4824, M6-1L(O)-2115

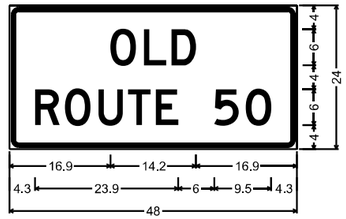
13 DETOUR WEST / OLD ROUTE 50 — M4-8(O)-2412, M3-4(O)-2412, CUSTOM-4824, M6-1R(O)-2115

14 ROAD CLOSED — R11-2(O)-4830

15 DETOUR WEST / OLD ROUTE 50 — M4-8(O)-2412, M3-4(O)-2412, CUSTOM-4824, M6-3(O)-2115

16 DETOUR EAST / OLD ROUTE 50 — M4-8(O)-2412, M3-2(O)-2412, CUSTOM-4824, M6-3(O)-2115

CUSTOM SIGN DETAIL



BACKGROUND TYPE : ORANGE
1.5" RADIUS, 0.6" BORDER, 0.4" INDENT, BLACK ON ORANGE
"OLD", D 2K; "ROUTE 50", D 2K
QUANTITY : 7

MODEL: Default
FILE NAME: S:\2020\20IL033 - PTB 195-50 08 - Villett Hofmann - Various Phase I\Work Order 4\CADD\CADD Sheets\D876M44-DH-Detour Route.dgn

QUIGG ENGINEERING INC

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	DRAWN - TO	REVISED -	
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PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR MAP
OLD US 50

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

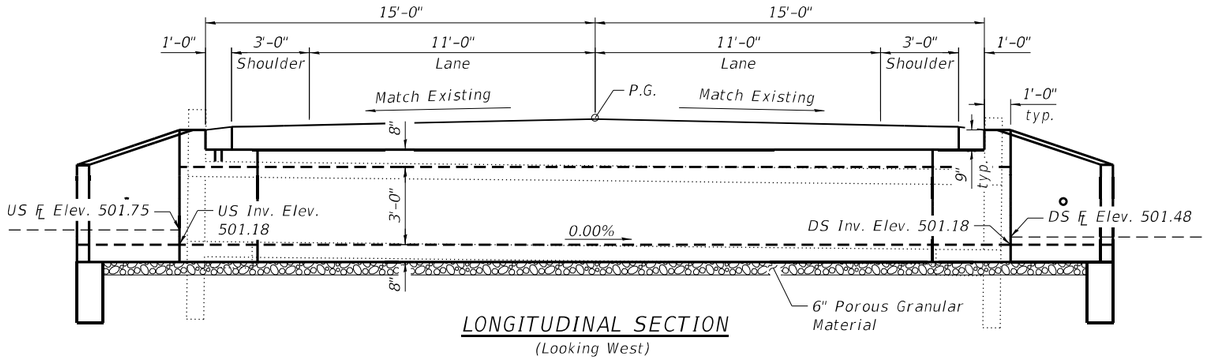
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	13
		CONTRACT NO. 76M44		
	ILLINOIS	FED. AID PROJECT		

Benchmark: BM 50-1 Set railroad spike in power pole with light at north side of old US 50, ±0.50 miles west of IL 160, and at southeast corner of West Gate Baptist Church property. Elevation 505.57.

Existing Structure: S.N. 014-2435 Built in 1923 as part of SBI Route 12, Section 28. The structure is a single cell 8' x 2.5' concrete box culvert with no skew. The out-to-out headwall length is 31'-4". Structure to be removed and replaced using road closure and a detour to maintain traffic.

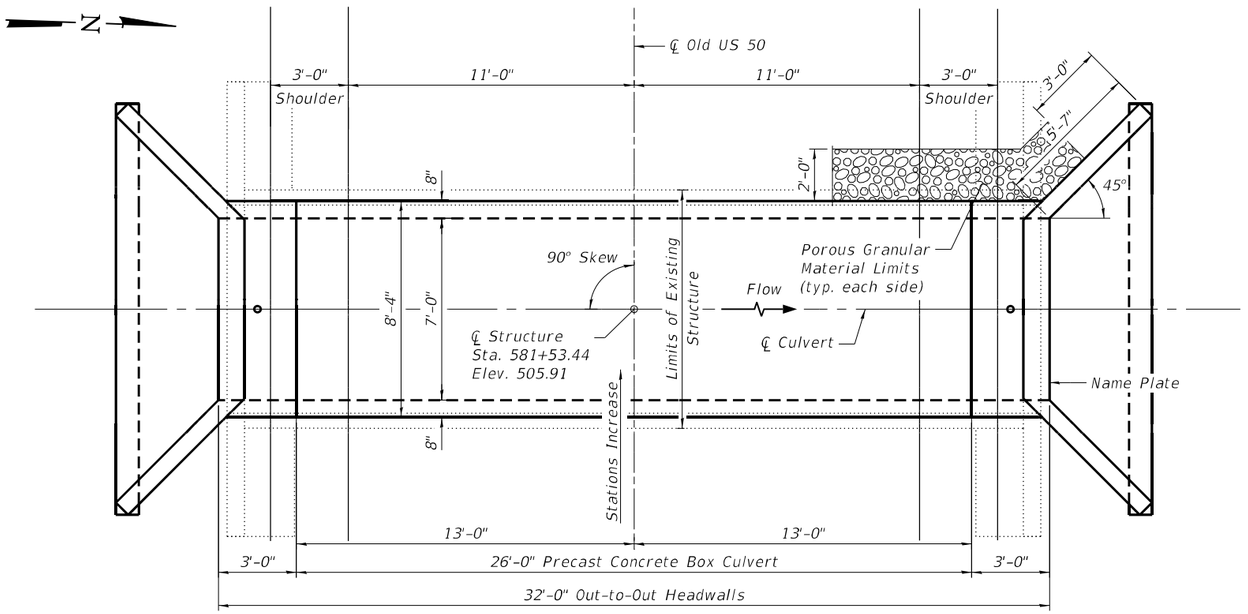
No Salvage.

INDEX OF SHEETS

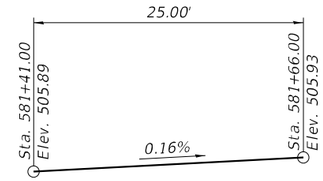


LONGITUDINAL SECTION

(Looking West)



PLAN



PROFILE

(Along ℄ Old US 50)

GENERAL NOTES

The design fill height for this box is 1.06 ft. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum Weight of the fabric shall be 6 ounces per square yard.

Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment in the required excavation areas on the sides of the box culvert from the top of the box culvert to the bottom of the box culvert. This area of PGE is included in the Porous Granular Embankment pay item. The 6-inch thick layer of porous granular material required under the precast concrete box culvert, according to Section 540.06 of the standard specifications, shall also apply to the end sections. Cost of this porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

LOADING HL-93

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

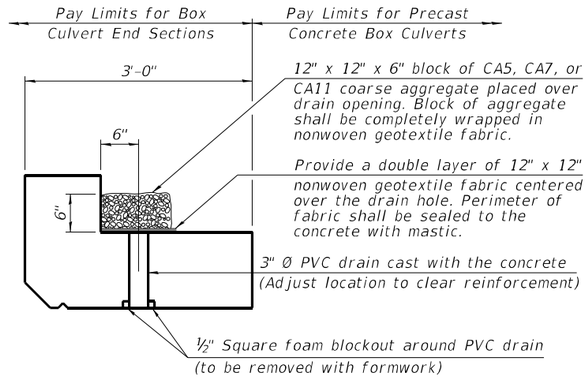
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
fy = 65,000 psi (Welded Wire Fabric)
fy = 60,000 psi (Reinforcement)



DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

KEITH W. BENTING
STATE OF ILLINOIS
4777
DECATUR, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Keith W. Benting 11/23/2022

Keith W. Benting, Illinois S.E. 081-004777 Date
Expires 11/30/2024

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	40
Removal of Existing Structures	Each	1
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 1	Each	2
Precast Concrete Box Culverts, 7' x 3'	Foot	26

WATERWAY INFORMATION

Drainage Area = 0.14 Square Miles
Exist. Overtopping Elev. 505.58
Prop. Overtopping Elev. 505.58

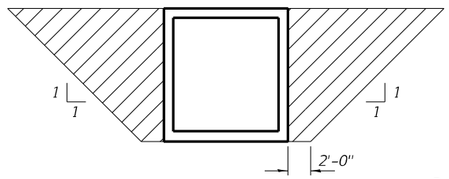
Flood	Freq. Yr.	Q C.F.S.	Opening Ft² Exist.	Opening Ft² Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	45	20	21				504.93	504.91
Design	50	71	20	21				505.27	505.23
Base	100	87	20	21				505.49	505.44
Exist. OVT	199	93	20	-				505.58	-
Prop. OVT	261	97	-	21				-	505.58
Max. Calc.	500	-	-	-				-	-

OVT = Overtopping Event

STATION 581+53.44
BUILT 202_ BY
STATE OF ILLINOIS
F.A.S. RT. 1780 SEC. 28CR-1
LOADING HL-93
STRUCTURE NO. 014-2505

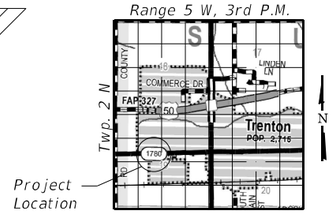
NAME PLATE

See Std. 515001



PAY LIMITS FOR POROUS GRANULAR EMBANKMENT

(Hatched area)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
FAS ROUTE 1780 (OLD US 50)
OVER DRAINAGE DITCH
SECTION 28CR-1
CLINTON COUNTY
STATION 581+53.44
STRUCTURE NO. 014-2505

QUIGG ENGINEERING INC

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PLOT DATE =	CHECKED -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 014-2505
SHEET 1 OF 3 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	14
		CONTRACT NO. 76M44		
		ILLINOIS	FED. AID PROJECT	

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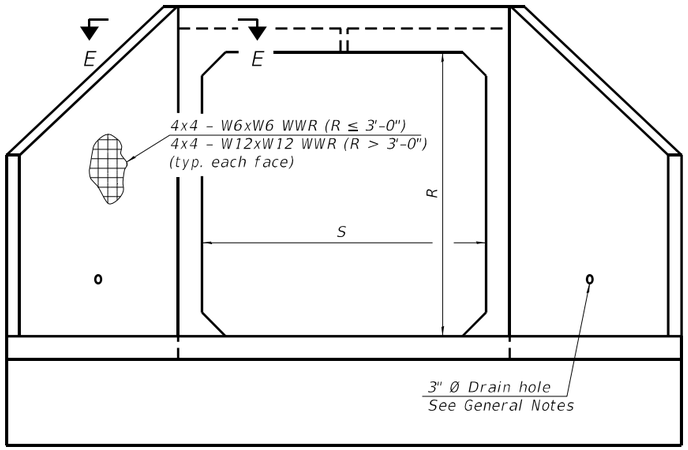
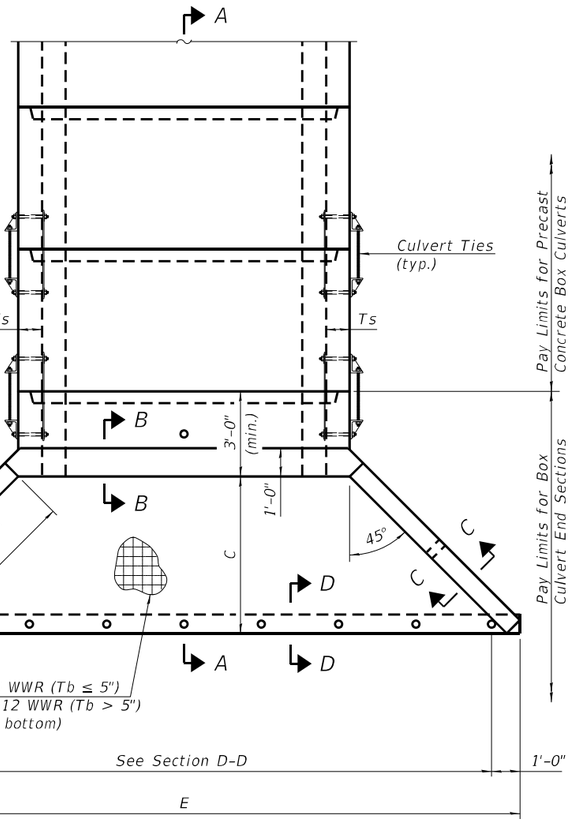


END VIEW



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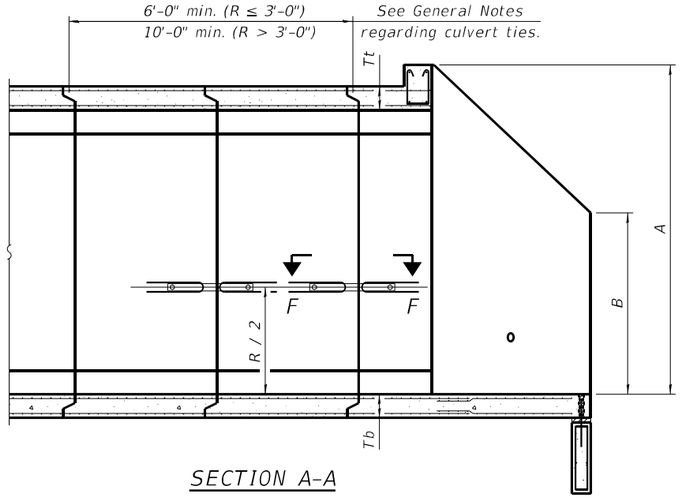

SECTION A-A

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. End sections will be paid for at the contract unit price per each for Box Culvert End Sections.

The Contractor may furnish the end section as a single precast concrete piece or construct the end section in the field using cast-in-place (CIP) construction. For CIP construction, the bottom slab thickness shall be increased by 2" and the clear cover to the bottom mat of reinforcement shall be increased to 3".

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

The number of culvert ties shall be sufficient to engage the minimum length of culvert barrel shown within the pay limits for Precast Concrete Box Culverts and will be dependent upon the length of box culvert segments furnished by the Contractor. Culvert ties are not required for box culverts having a rise (R) less than or equal to 3 ft and a span (S) greater than or equal to 10 ft.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the unit price for Box Culvert End Sections of the culvert number specified.

Shop drawings that detail slab thickness and reinforcement layout for the Box Culvert End Sections shall be provided to the Engineer for review and approval. Reinforcement bars not detailed herein shall be detailed with a clear distance at the end of the reinforcement not less than ½" nor more than 2". For the precast option, it shall be the Contractor's responsibility for determining a method of handling and a construction procedure shall be included on the shop drawings. The Contractor shall determine and detail in the shop drawings any necessary strengthening or stiffening provisions necessary to handle the precast segment. Any required modifications shall be at no extra charge.

The Contractor may use reinforcement bars in lieu of welded wire reinforcement (WWR). Reinforcement bars shall be limited to the sizes of #3 through #5 bars, a maximum spacing of the lesser of 8" or the member thickness, and shall result in an area of reinforcement equal to or greater than that provided by the WWR. Minimum lap lengths detailed herein are applicable to WWR and reinforcement bars.

Reinforcement (circumferential and longitudinal) in the culvert barrel portion of the end section being lapped with reinforcement from the wingwalls or bottom slab of the end section shall not be less than that required by ASTM C 1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

One drain hole shall be provided in each wingwall for end sections of box culverts having an opening with a clear rise greater than 3 ft. The drain hole shall be located within the lower 1/3 of the clear rise of the box culvert and shall conform to the requirements of Article 503.11 of the Standard Specifications.

APRON END SECTION DIMENSIONS

Span (S)	Rise (R)	Tt	Tb	Ts	A	B	C	D	E	Concrete Cu. Yd.	Culvert Ties Required
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10⅝"	4'-1"	10'-4⅝"	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7⅞"	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10⅝"	5'-6"	12'-4⅝"	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7⅞"	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7.5"	6"	5"	3'-4½"	2'-2½"	2'-11⅜"	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8½"	3'-10"	11'-2⅜"	2.8	Yes
4'-0"	3'-0"	7.5"	6"	5"	4'-4½"	2'-8½"	3'-11⅜"	5'-7"	13'-8⅛"	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8½"	5'-3"	13'-2⅜"	3.7	Yes
4'-0"	4'-0"	7.5"	6"	5"	5'-4½"	3'-2½"	4'-11⅜"	7'-0"	15'-8⅛"	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8⅝"	6'-8"	15'-2½"	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11⅜"	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7¼"	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11⅜	5'-7"	14'-10⅛"	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7¼"	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11⅜"	7'-0"	16'-10⅛"	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9¼"	6'-9"	16'-5⅞"	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11⅜"	8'-5"	18'-10⅛"	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9¼"	8'-2"	18'-5⅞"	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11⅜"	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10⅝"	4'-1"	13'-10⅝"	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11⅜"	5'-7"	16'-0⅛"	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10⅝"	5'-6"	15'-10⅜"	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11⅜"	7'-0"	18'-0⅛"	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10¾"	6'-11"	17'-10¾"	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11⅜"	8'-5"	20'-0⅛"	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10¾"	8'-4"	19'-10¾"	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11½"	9'-10"	22'-0¼"	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10¾"	9'-9"	21'-10¾"	9.3	Yes
7'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11⅜"	4'-2"	15'-2"	4.9	Yes
7'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11⅜"	5'-7"	17'-2⅛"	6.1	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11⅜"	7'-0"	19'-2⅛"	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11⅜"	8'-5"	21'-2⅛"	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11½"	9'-10"	23'-2¼"	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11⅜"	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11⅜"	5'-7"	18'-2⅛"	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11⅜"	7'-0"	20'-2⅛"	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11⅜"	8'-5"	22'-2⅛"	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11½"	9'-10"	24'-2¼"	11.0	Yes
9'-0"	2'-0"	9"	9"	9"	3'-6"	2'-3"	3'-0¾"	4'-4"	17'-6⅞"	6.2	Yes
9'-0"	3'-0"	9"	9"	9"	4'-6"	2'-9"	4'-0¾"	5'-9"	19'-6⅛"	7.5	Yes
9'-0"	4'-0"	9'	9"	9"	5'-6"	3'-3"	5'-0¾"	7'-2"	21'-6⅞"	9.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0⅞"	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0⅛"	9'-11"	25'-5⅝"	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1½"	4'-5"	18'-10¼"	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1½"	5'-10"	20'-10¼"	8.6	No
10'-0"	4'-0"	10"	10"	10"	5'-7"	3'-4"	5'-1½"	7'-3"	22'-10⅜"	10.2	Yes
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1½"	8'-8"	24'-10⅜"	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1½"	10'-1"	26'-10⅜"	13.9	Yes
11'-0"	2'-0"	11"	11"	11"	3'-8"	2'-4"	3'-2⅞"	4'-7"	20'-3⅛"	8.2	No
11'-0"	3'-0"	11"	11"	11"	4'-8"	2'-10"	4'-2⅞"	6'-0"	22'-3⅛"	9.8	No
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2¼"	7'-4"	24'-1¾"	11.5	Yes
11'-0"	5'-0"	11"	11"	11"	6'-8"	3'-10"	6'-2¼"	8'-9"	26'-1¾"	13.3	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2¼"	10'-2"	28'-1⅞"	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3⅜"	4'-8"	21'-6½"	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3⅜"	6'-1"	23'-6½"	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3⅜"	7'-6"	25'-6⅝"	13.0	Yes
12'-0"	5'-0"	12"	12"	12"	6'-9"	3'-11"	6'-3⅝"	8'-11"	27'-6⅝"	14.1	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3⅝"	10'-4"	29'-6⅝"	17.4	Yes

Note:
Two sets of apron end section dimensions are shown above for some box culvert sizes due to the top and bottom slabs having different thicknesses per ASTM C 1577 for design fill heights less than 2 ft.

(Sheet 1 of 2)

SCB-AES 2-17-2017

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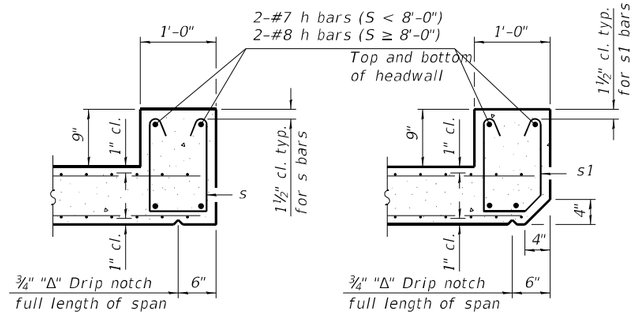
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

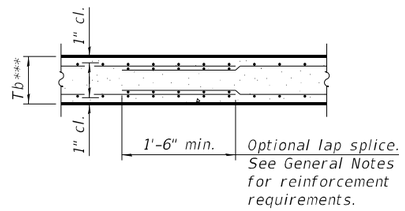
PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS
STRUCTURE NO. 014-2505
SHEET 2 OF 3 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	15
		CONTRACT NO. 76M44		
	ILLINOIS FED. AID PROJECT			

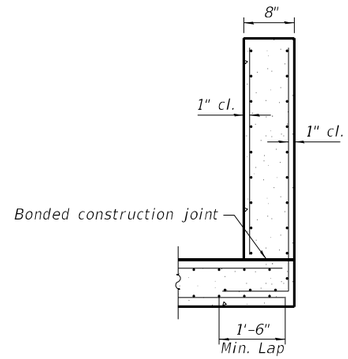


SECTION B-B
(Top slab at downstream end)

SECTION B-B
(Top slab at upstream end)



SECTION B-B
(Bottom Slab)



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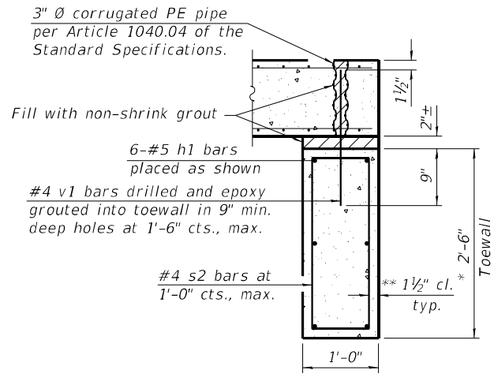
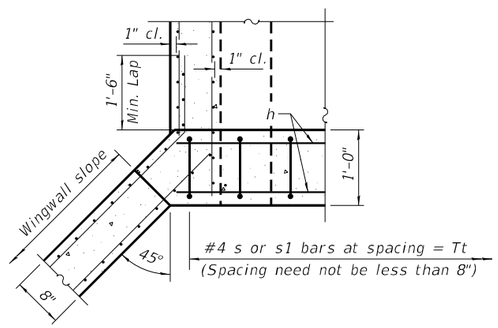
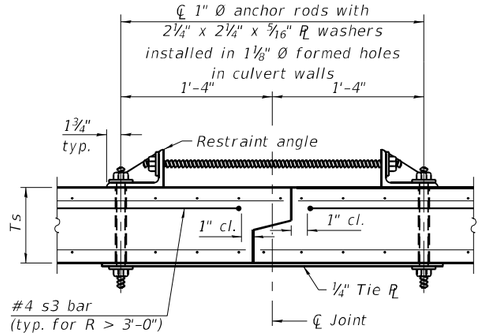


SECTION D-D

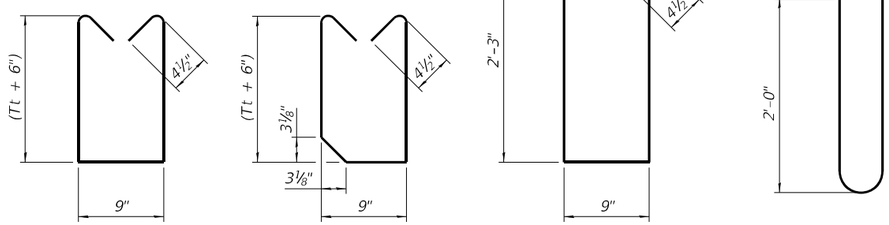
*** This dimension shall be increased by 2" for CIP construction.



SECTION E-E



SECTION F-F
(Showing culvert tie details)

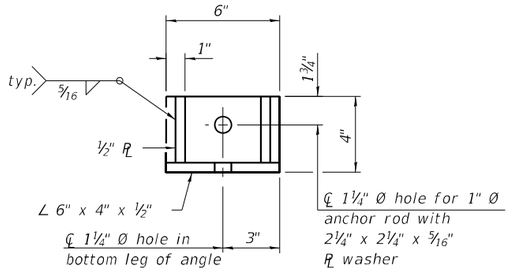


BAR s

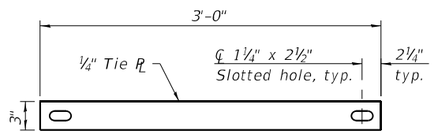
BAR s1

BAR s2

BAR s3



RESTRAINT ANGLE DETAIL



TIE PLATE DETAIL

TOEWALL CONSTRUCTION SEQUENCE

1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

** If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.

Notes:

1" Ø anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2¼"x2¼"x5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional ½ turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

SCB-AES

2-17-2017

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS
STRUCTURE NO. 014-2505
SHEET 3 OF 3 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	16
		CONTRACT NO. 76M44		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 4/27/22

ROUTE FAS 1780 DESCRIPTION EB side of structure LOGGED BY SSS

SECTION 28CR-1 LOCATION SEC., TWP., RNG.,
Latitude , Longitude

COUNTY Clinton DRILLING METHOD HAMMER TYPE

STRUCT. NO. 014-2435
Station

BORING NO. 1EB
Station
Offset 22.0 ft CL
Ground Surface Elev. 100.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 96.5 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Brown Clayey Soil			0.5 P	41
Classification at 1.5Ft			1.0 P	31
97.50			2.0 P	27
Dark & Light Brown Clayey Soil w/Sand ▼			2.5 P	27
	-5		2.0 P	34
94.50			2.3 P	26
Gray Clayey Soil w/Sand			2.5 P	25
93.00				
End of Boring				
	-10			
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 4/27/22

ROUTE FAS 1780 DESCRIPTION WB side of structure LOGGED BY SSS

SECTION 28CR-1 LOCATION SEC., TWP., RNG.,
Latitude , Longitude

COUNTY Clinton DRILLING METHOD HAMMER TYPE

STRUCT. NO. 014-2435
Station

BORING NO. 2WB
Station
Offset 24.0 ft CL
Ground Surface Elev. 100.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 100.0 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Clayey Soil w/Sand			0.8 P	36
98.00			2.0 P	31
Brown & Gray Clayey Soil w/Sand			2.3 P	32
96.00			1.8 P	33
Gray Clayey Soil w/ Sand	-5		1.8 P	31
Classification @ 5.5FT			1.5 P	29
93.00			2.3 P	27
End of Boring				
	-10			
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 014–2435

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

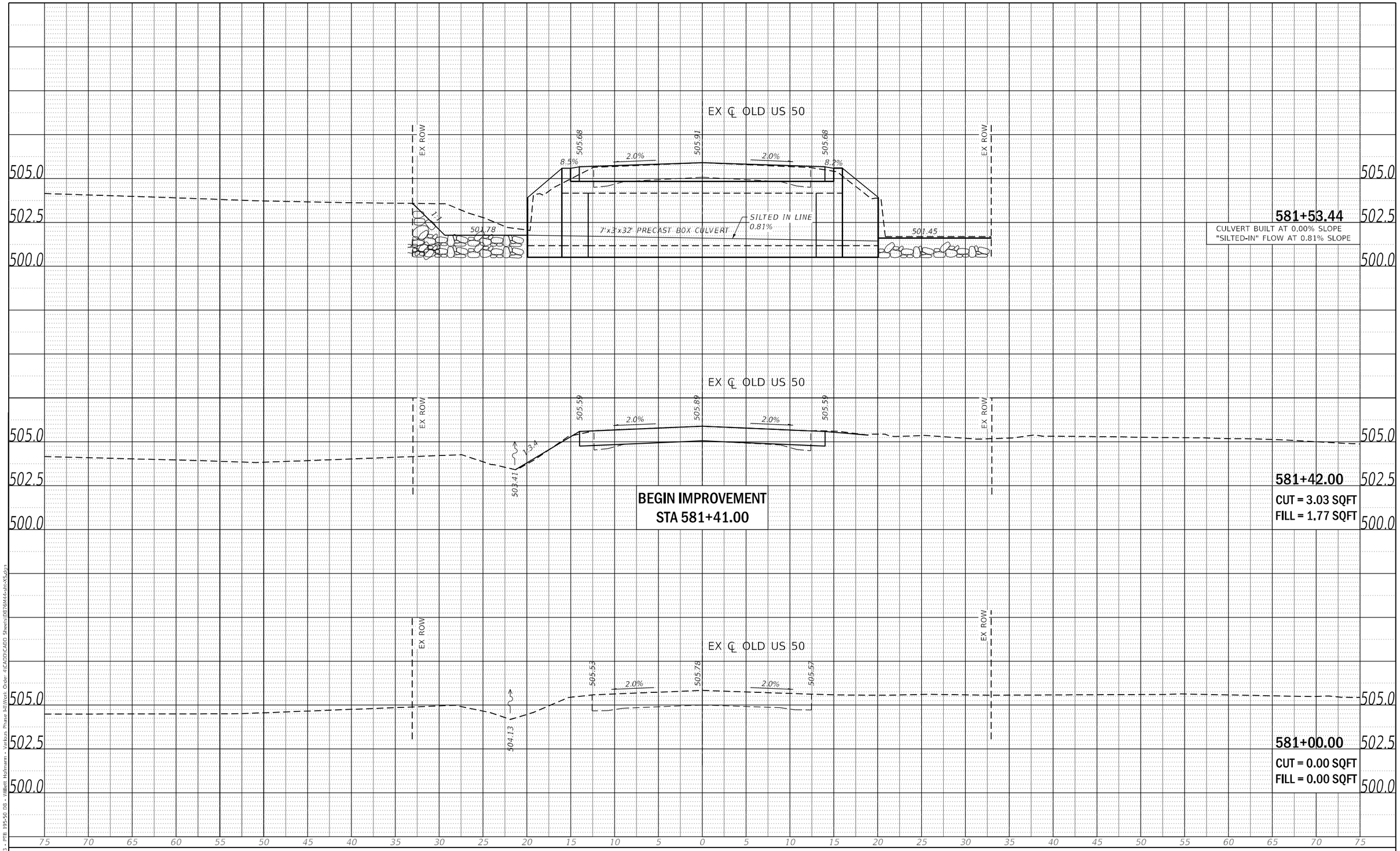
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	17
		CONTRACT NO. 76M44		
	ILLINOIS	FED. AID PROJECT		

PLAN

SURVEYED	BY
PLOTTED	
ALIGNMENT CHECKED	
R.O.W. CHECKED	
NOTE BOOK	
NO.	

PROFILE

SURVEYED	BY
PLOTTED	
CROSS SECTIONS CHECKED	
BM. NOTED	
STRUCTURE NOTATIONS CHKD	



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PLOT DATE = 11/22/2022	DATE - 08/15/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
OLD US 50

SCALE: 10H:5V | SHEET 1 OF 2 SHEETS | STA. 581+00.00 | TO STA. 581+53.44

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	18
		CONTRACT NO. 76M44		
	ILLINOIS	FED. AID PROJECT		

PLAN
SURVEYED
PLOTTED
CHECKED
ALIGNMENT CHECKED
R.O.W. CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
CHECKED
ALIGNMENT CHECKED
R.O.W. CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

MODEL: Default
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EX ROW
EX ℄ OLD US 50
EX ROW

505.0
502.5
500.0

505.73
505.98
505.73
2.0%
2.0%
502.60
502.43

END IMPROVEMENT
STA 581+66.00

582+00.00
CUT = 0.00 SQFT
FILL = 0.00 SQFT

EX ROW
EX ℄ OLD US 50
EX ROW

505.0
502.5
500.0

505.63
505.95
505.63
2.0%
2.0%
1:2.7
1:3.4
502.12
502.82

581+65.00
CUT = 3.63 SQFT
FILL = 2.32 SQFT

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

QUIGG ENGINEERING INC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
OLD US 50

SCALE: 10H:5V | SHEET 2 OF 2 SHEETS | STA. 581+66.00 | TO STA. 582+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1780	28CR-1	CLINTON	19	19
		CONTRACT NO. 76M44		
	ILLINOIS FED. AID PROJECT			