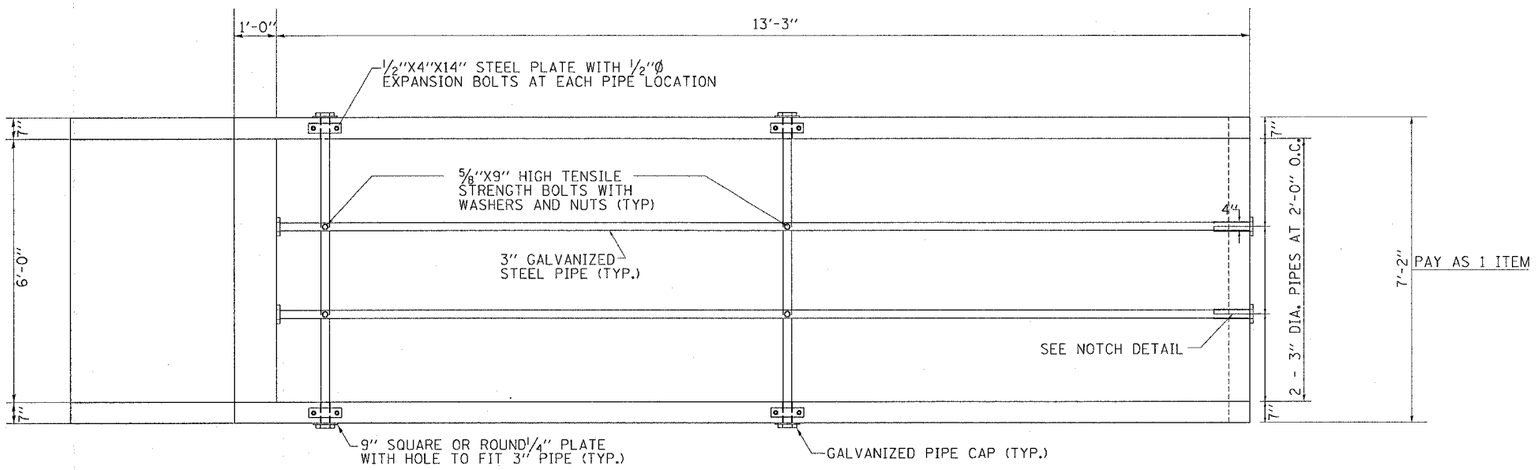
GRATED CULVERT EXTENSION NO. 3

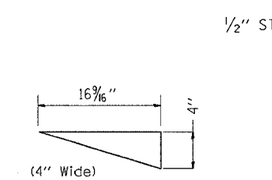
RT STA. 651+37.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	201
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

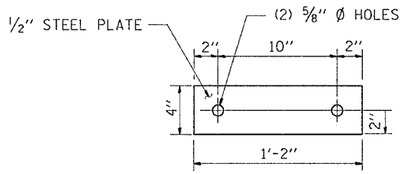
CONTRACT NO. 64178



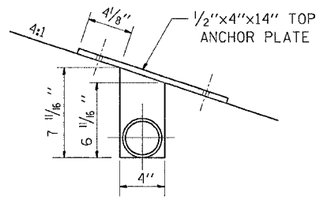
PLAN VIEW



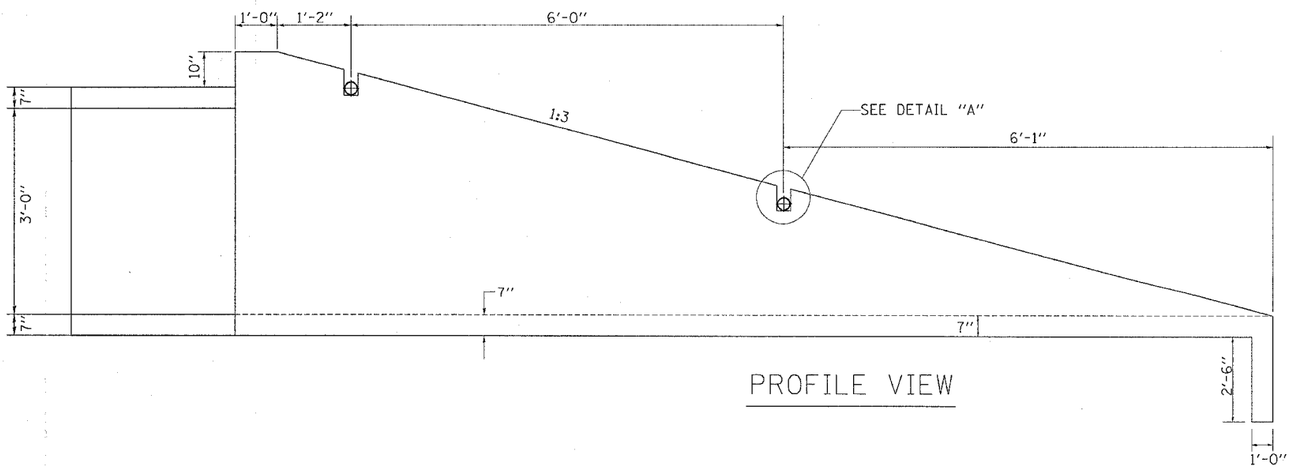
NOTCH DETAIL



TOP ANCHOR PLATE



DETAIL "A"



PROFILE VIEW

BILL OF MATERIALS
(FOR ONE EXTENSION)

DESCRIPTION	UNIT	QTY.
3" Galvanized Steel Pipe	2@	13'-3"
	2@	7'-6"
3" Galv Pipe Caps	EACH	8
1/4" Galv. Stl. Plate (9" Nominal)	EACH	4
1/2"x4"x14" Galv. Steel Plate	EACH	4
5/8"x9" Galv. Steel Bolts	EACH	4
Expansion Bolts 1/2"Ø	EACH	8

GENERAL NOTES:

Slope flow line of the extension at the same rate as the flow line of the box.

Bolts, Nuts, and Washers shall be in accordance with Article 710.11 of the standard specification and shall be galvanized.

The contract unit price "Each" for Grated Culvert Extension No. 3 shall be of precast construction. It shall also include the Class SI Concrete for the Collar, Galvinized Pipe, Bolts, Nuts, Washers, Steel Plates.

Steel pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contrator shall field verify pipe length.

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

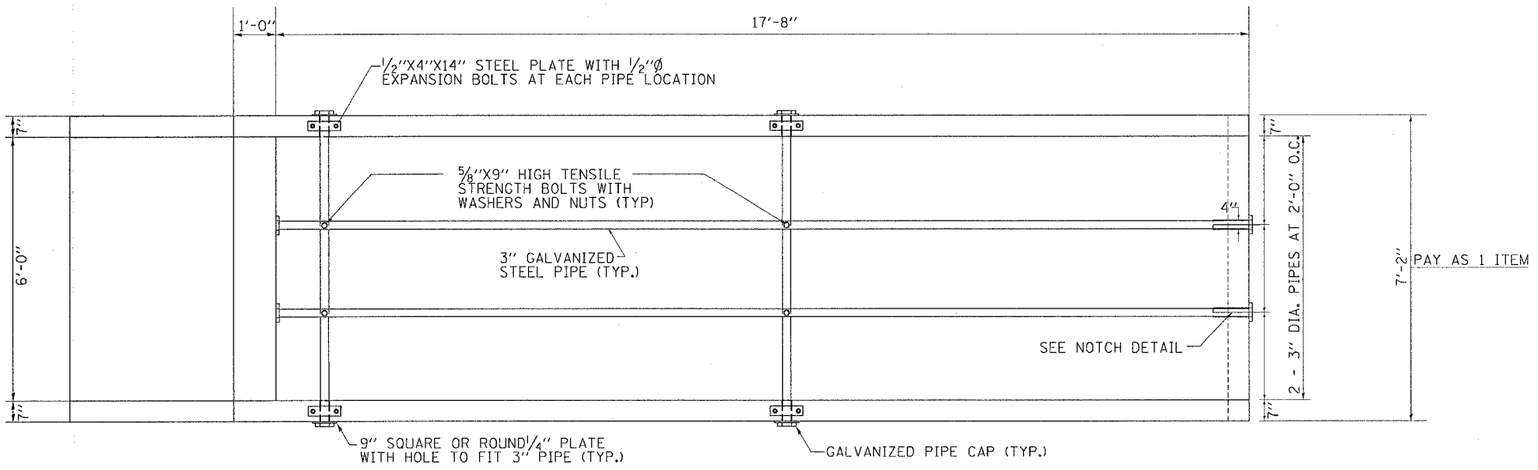
SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION
SEE CULVERT LOCATION PLANS FOR MORE INFORMATION

GRATED CULVERT EXTENSION NO. 4

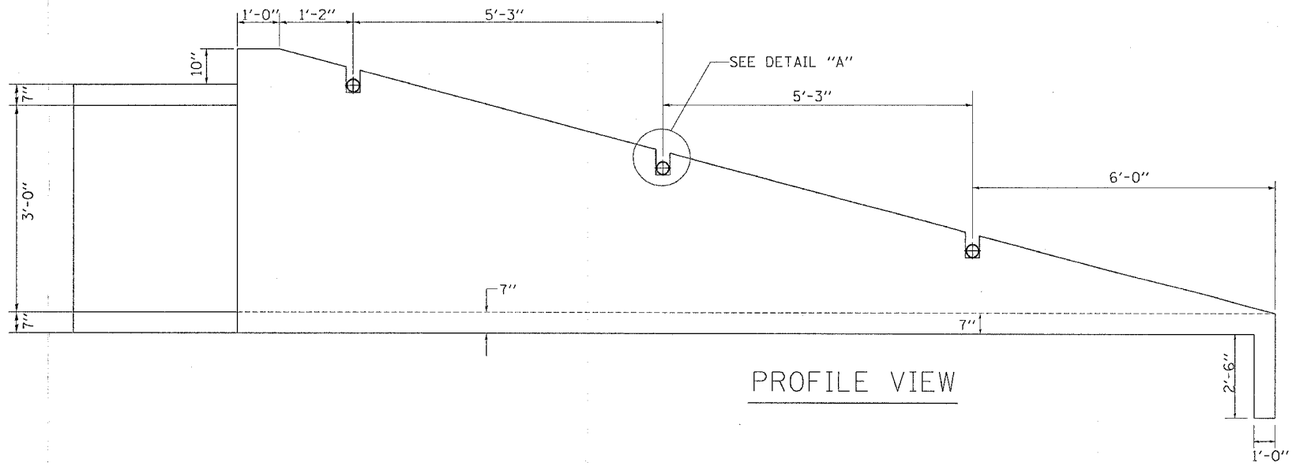
LT STA. 651 + 37.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	202
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

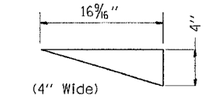
CONTRACT NO. 64178



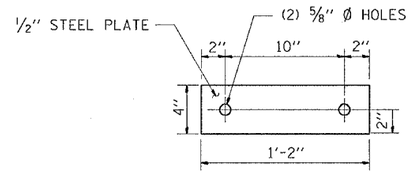
PLAN VIEW



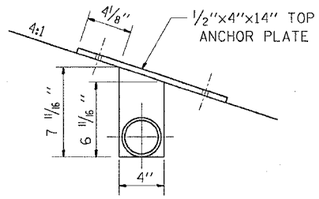
PROFILE VIEW



NOTCH DETAIL



TOP ANCHOR PLATE



DETAIL "A"

BILL OF MATERIALS
(FOR ONE EXTENSION)

DESCRIPTION	UNIT	QTY.
3" Galvanized Steel Pipe	2@	17'-8"
	3@	7'-6"
3" Galv Pipe Caps	EACH	10
1/4" Galv. Stl. Plate (9" Nominal)	EACH	6
1/2"x4"x14" Galv. Steel Plate	EACH	6
5/8"x9" Galv. Steel Bolts	EACH	6
Expansion Bolts 1/2"Ø	EACH	12

GENERAL NOTES:

Slope flow line of the extension at the same rate as the flow line of the box.

Bolts, Nuts, and Washers shall be in accordance with Article 710.11 of the standard specification and shall be galvanized.

The contract unit price "Each" for Grated Culvert Extension No. 4 shall be of precast construction. It shall also include the Class SI Concrete for the Collar, Galvinized Pipe, Bolts, Nuts, Washers, Steel Plates.

Steel pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contrator shall field verify pipe length.

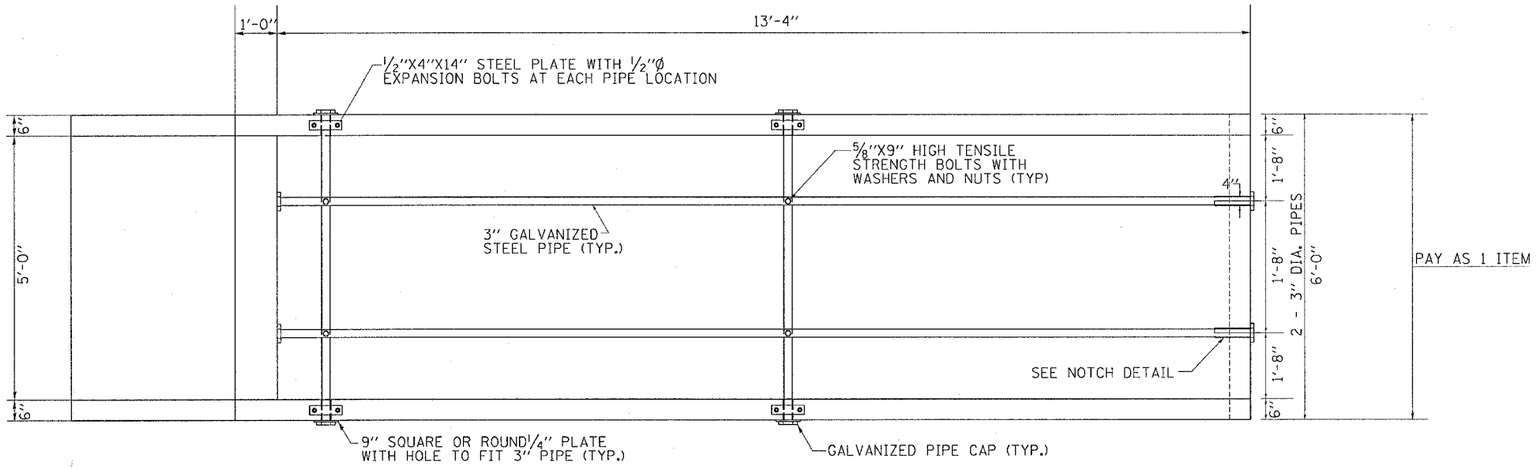
Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION
SEE CULVERT LOCATION PLANS FOR MORE INFORMATION

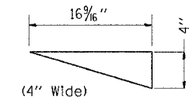
GRATED CULVERT EXTENSION NO. 5 & 6
RT /LT STA. 664 + 12.23
RT /LT STA. 671 + 36.73

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	203
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

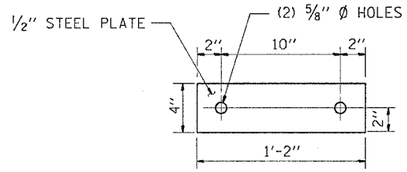
CONTRACT NO. 64178



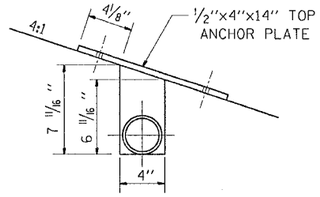
PLAN VIEW



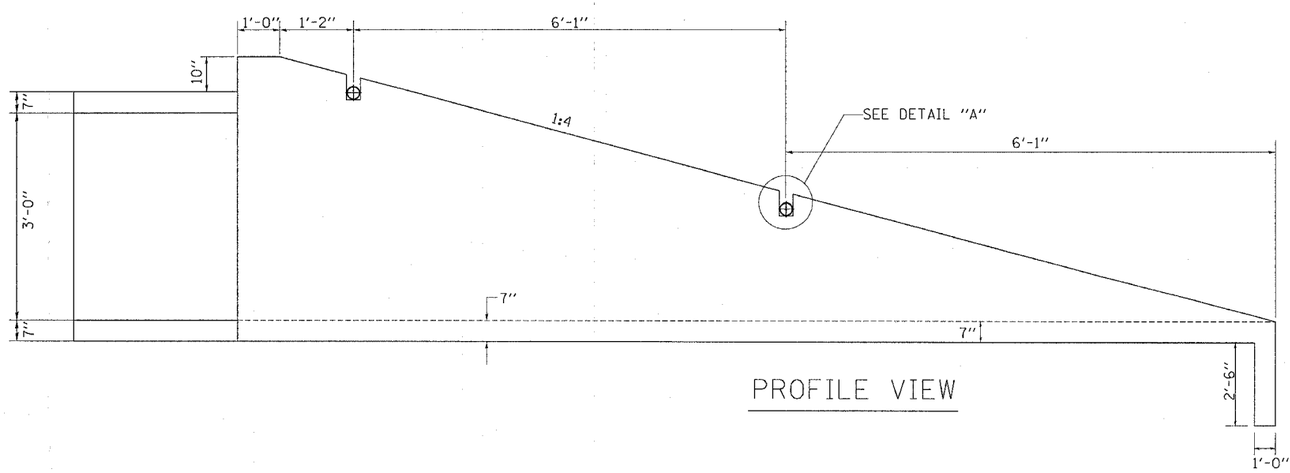
NOTCH DETAIL



TOP ANCHOR PLATE



DETAIL "A"



PROFILE VIEW

BILL OF MATERIALS
(FOR ONE EXTENSION)

DESCRIPTION	UNIT	QTY.
3" Galvanized Steel Pipe	2@	13'-4"
	2@	6'-4"
3" Galv Pipe Caps	EACH	8
1/4" Galv. Stl. Plate (9" Nominal)	EACH	4
1/2"x4"x14" Galv. Steel Plate	EACH	4
5/8"x9" Galv. Steel Bolts	EACH	4
Expansion Bolts 1/2"Ø	EACH	8

GENERAL NOTES:

Slope flow line of the extension at the same rate as the flow line of the box.

Bolts, Nuts, and Washers shall be in accordance with Article 710.11 of the standard specification and shall be galvanized.

The contract unit price "Each" for Grated Culvert Extension No. 5 & 6 shall be of precast construction. It shall also include the Class SI Concrete for the Collar, Galvinized Pipe, Bolts, Nuts, Washers, Steel Plates.

Steel pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contrator shall field verify pipe length.

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

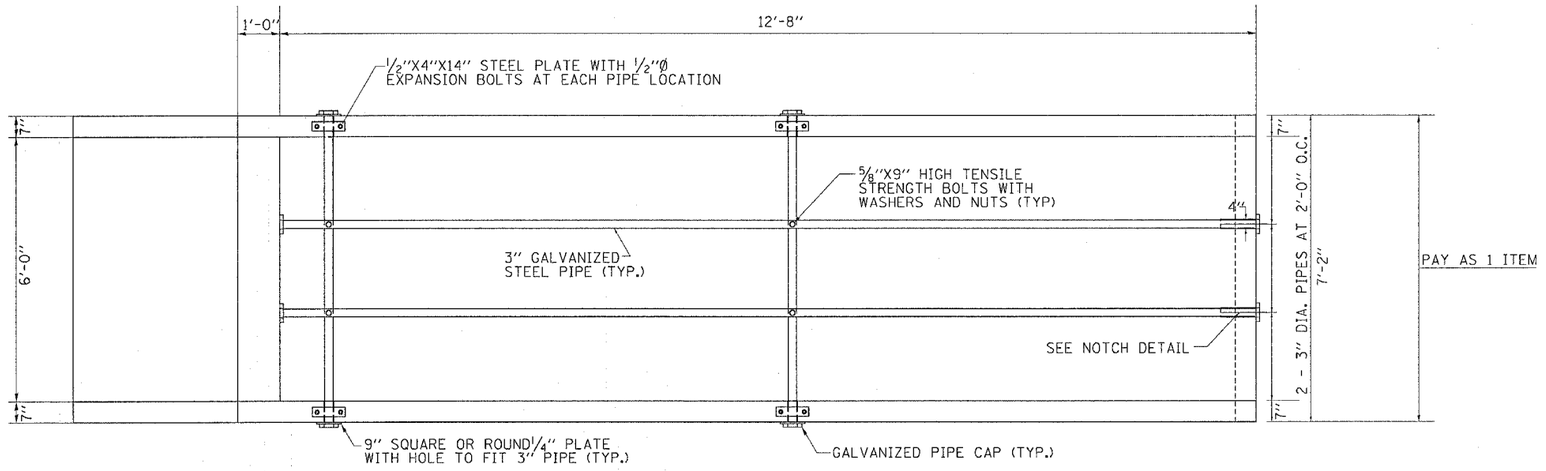
SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION
SEE CULVERT LOCATION PLANS FOR MORE INFORMATION
SEE CULVERT STAGING PLANS FOR MORE INFORMATION

•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

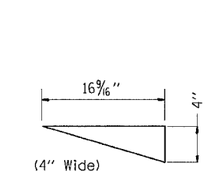
GRATED CULVERT EXTENSION NO. 7
RT /LT STA. 748 + 80.27

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	204
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

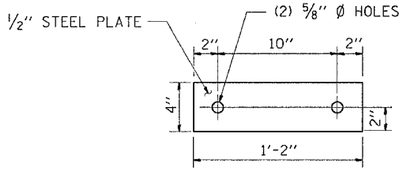
CONTRACT NO. 64178



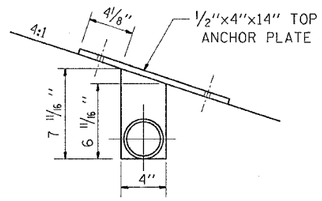
PLAN VIEW



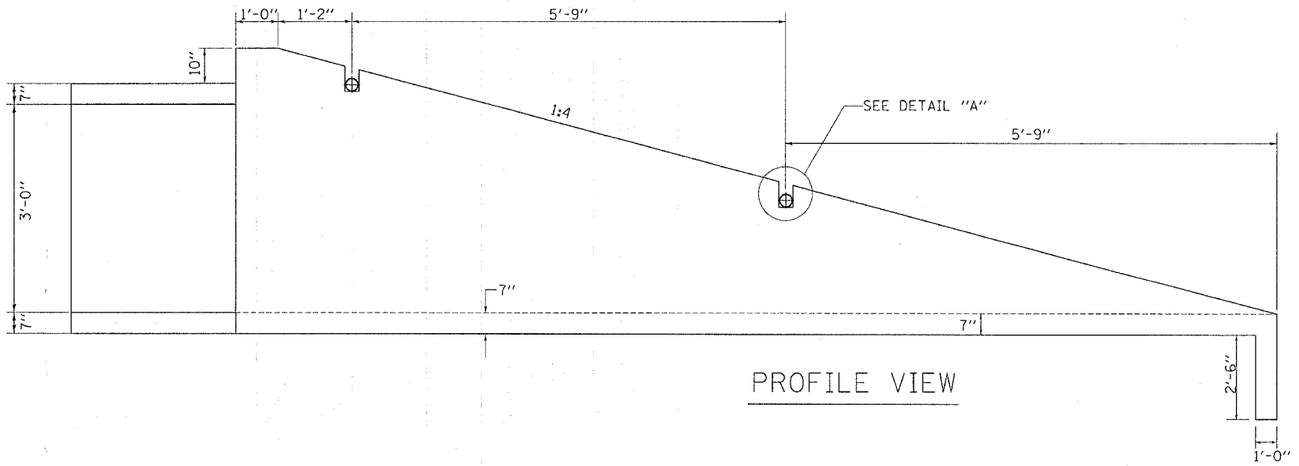
NOTCH DETAIL



TOP ANCHOR PLATE



DETAIL "A"



PROFILE VIEW

BILL OF MATERIALS
(FOR ONE EXTENSION)

DESCRIPTION	UNIT	QTY.
3" Galvanized Steel Pipe	2@	12'-10"
	2@	7'-6"
3" Galv Pipe Caps	EACH	8
1/4" Galv. Stl. Plate (9" Nominal)	EACH	4
1/2"x4"x14" Galv. Steel Plate	EACH	4
5/8"x9" Galv. Steel Bolts	EACH	4
Expansion Bolts 1/2"Ø	EACH	8

GENERAL NOTES:

Slope flow line of the extension at the same rate as the flow line of the box.

Bolts, Nuts, and Washers shall be in accordance with Article 710.11 of the standard specification and shall be galvanized.

The contract unit price "Each" for Grated Culvert Extension No. 7 shall be of precast construction. It shall also include the Class SI Concrete for the Collar, Galvinized Pipe, Bolts, Nuts, Washers, Steel Plates.

Steel pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contrator shall field verify pipe length.

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION
SEE CULVERT LOCATION PLANS FOR MORE INFORMATION
SEE CULVERT STAGING PLANS FOR MORE INFORMATION

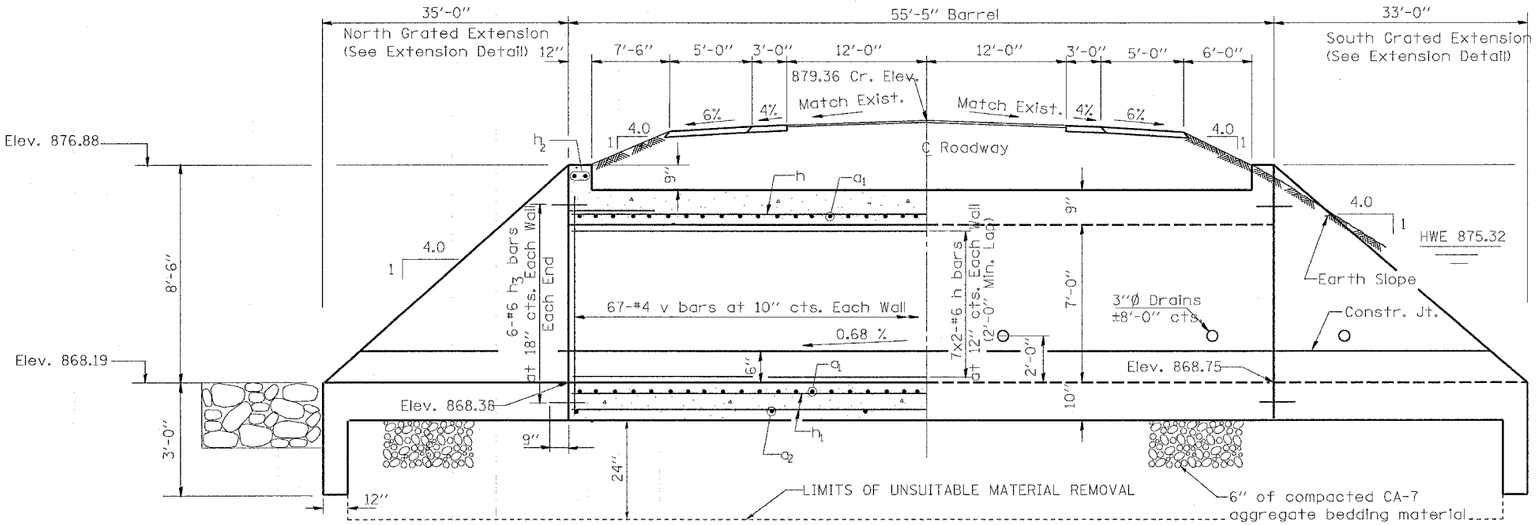
•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

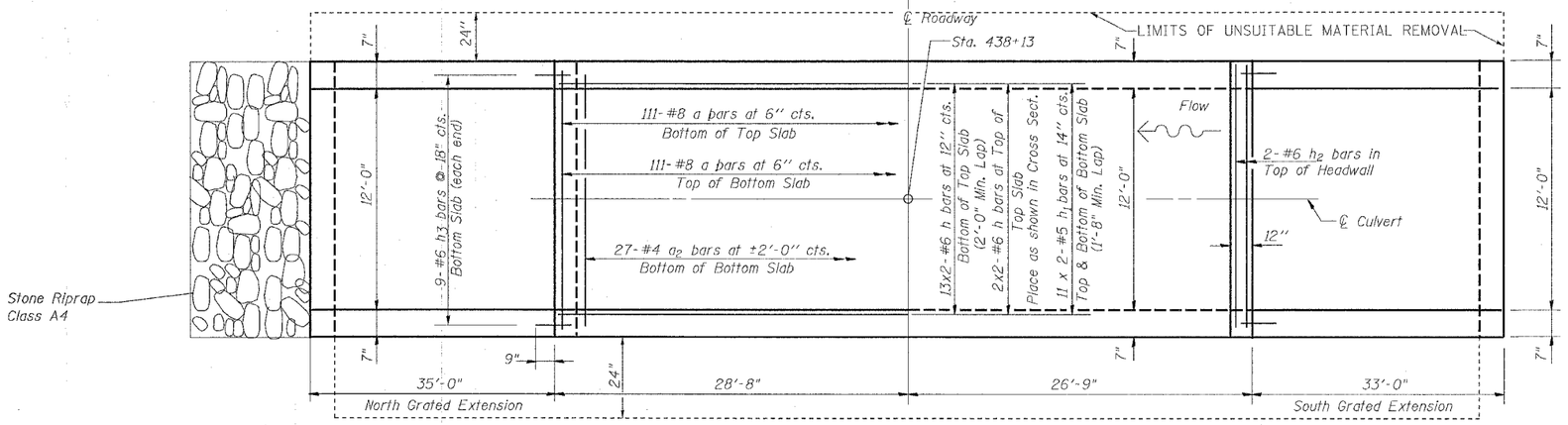
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	205
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET 1 OF 3

CONCRETE BOX CULVERTS STA 438+13

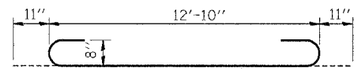


HALF LONG. SECTION **HALF ELEVATION**

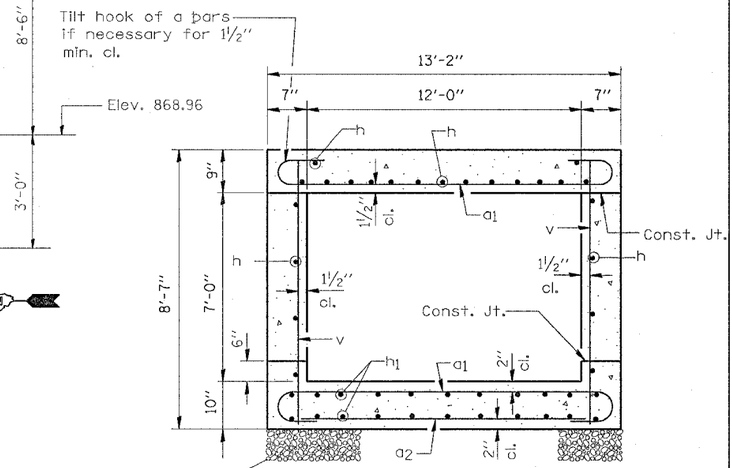


SHOWING REINFORCEMENT **SHOWING OUTLINES**

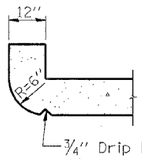
PLAN



BAR a1



SECTION THRU BARREL



SECTION THRU HEADWALL
(Up Stream End Only)

BILL OF MATERIAL
(Barrel Only)

Bar	No.	Size	Length	Shape
a_1	222	#8	14'-8"	⊂⊃
a_2	27	#4	12'-10"	—
h	58	#6	31'-5"	—
h_1	44	#5	30'-8"	—
h_2	4	#6	12'-10"	—
h_3	42	#6	1'-6"	—
v	134	#4	8'-3"	—
Concrete Box Culverts			Cu. Yd.	60.6
Reinforcement Bars			Ton	13979.43
Remove Unsuitable Material			Cu. Yd.	137.3
Breaker-Run Stone			Ton	211

NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

All construction joints shall be bonded.

6" of compacted CA-7 aggregate bedding material shall be place beneath the box culvert. The cost for the Ca-7 aggregate shall be included in the cost of Concrete Box Culverts.

The cost of excavation and backfilling shall be included in the cost of Concrete Box Culverts.

WATERWAY INFORMATION

Drainage Area = 1.2 sq mi Low Grade Elev. 879.39 (Exist) 879.58 (Proposed) @ Sta 438+13

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Ten-Year	10	384	48.7	71.4	874.70	0.99	0.33	875.69	875.03
Design	50	596	56.2	78.8	875.32	2.05	1.14	877.37	876.46
Base	100	685	58.6	81.2	875.52	2.53	1.62	878.05	877.14
Overtop (Ex.)	250	805	76.3	-	877.00	2.39	-	879.39	-
Overtop (Pr.)	500	897	-	84.0	875.85	-	3.16	-	879.01

DESIGN STRESSES

fy = 60,000 psi

f'c = 3,500 psi

LOADING HS 20-44 & ALT.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. HORIZ. DRAWN BY

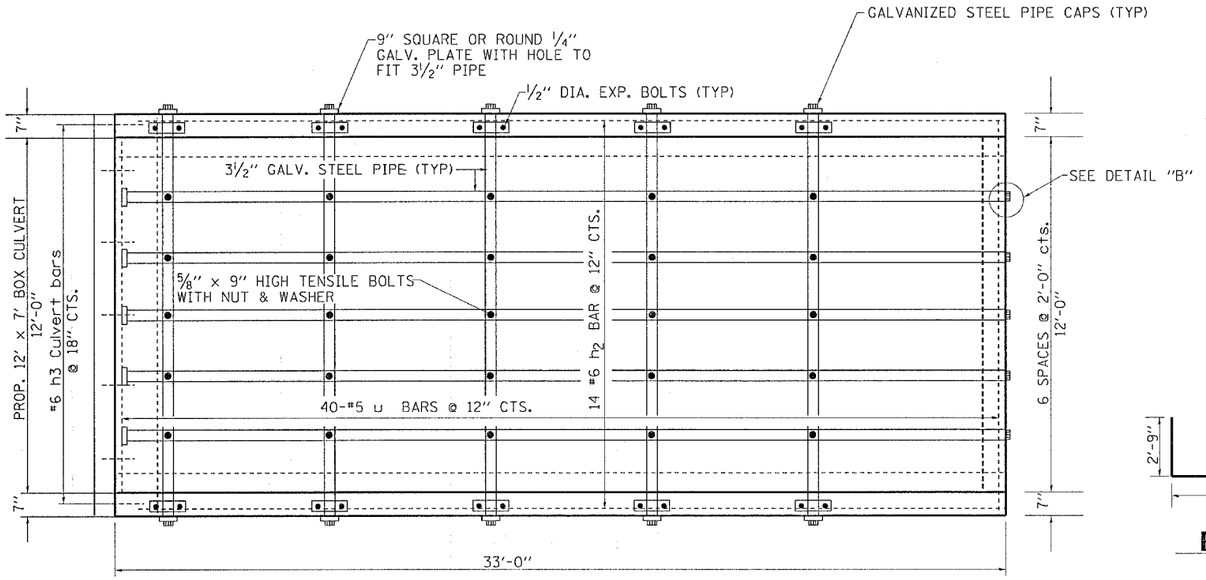
DATE CHECKED BY

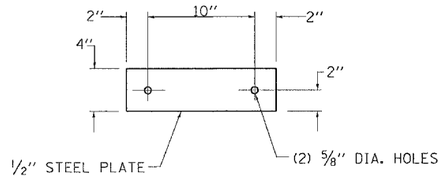
PLOT DATE = Wed Feb 09 07:49:17 2005
FILE NAME = C:\projects\s280457\d802457pd.dgn
PLOT SCALE = 50.0000 ' / IN.

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	206
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

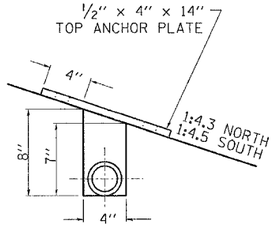
CONCRETE BOX CULVERT END SECTION STA 438+13 RT





TOP ANCHOR PLATE

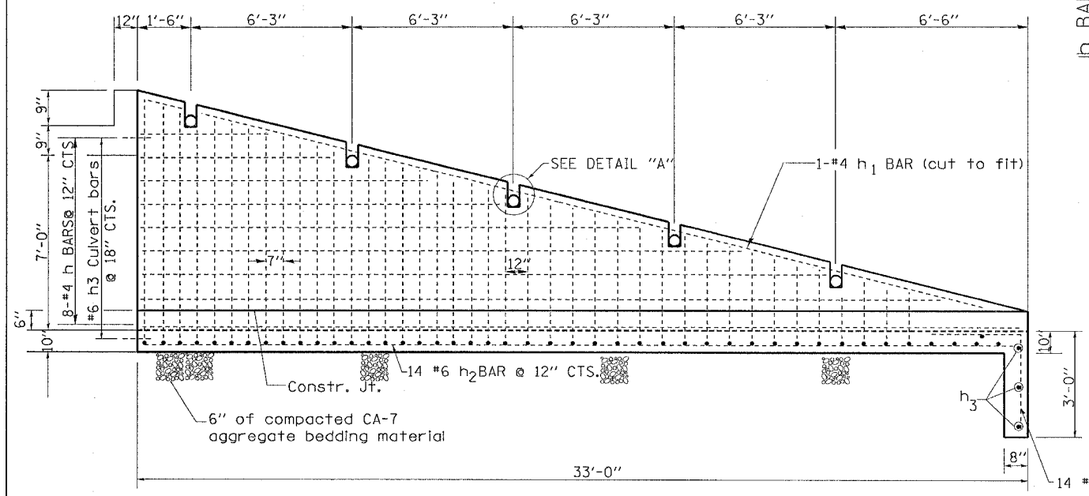
BAR "u"

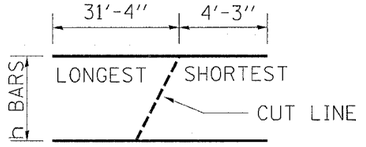


DETAIL "A"

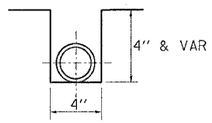
BAR	NUMBER	SIZE	LENGTH	QTY.
d	14	#4	4'-6"	42.08
h	9	#4	33'-0""	198.4
h_1	2	#4	33'-7""	44.87
h_2	14	#6	32'-9"	688.61
h_3	3	#5	12'-11"	40.42
u	40	#5	17'-9"	740.53
v	40	#5	10'-3"	427.63
REINFORCEMENT BARS			LB	2182.59
CONCRETE BOX CULVERTS			CU YD	19.6
3 1/2" GALV. STEEL PIPE			EACH	5 @ 33'-2" 5 @ 13'-4"
1/2" x 4" x 14" GALV. ANCHOR PLATE			EACH	10
5/8" x 9" GALV. BOLTS			EACH	25
GALV. STEEL PIPE CAPS			EACH	20
1/2" Ø GALV. EXP. BOLTS			EACH	20
9" SQ. OR ROUND 1/4" GALV. PLATE			EACH	10

BILL OF MATERIALS

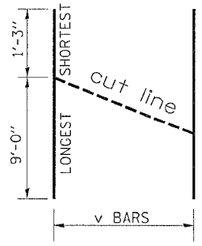




BAR "h" CUT DIAGRAM



DETAIL "B"



BAR "v" CUT DIAGRAM

GENERAL NOTES:

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, & SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 & SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

BOLTS, NUTS, & WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED.

6" OF COMPACTED CA-7 AGGREGATE SHALL BE PLACED BENEATH THE EXTENSION

THE CONTRACT UNIT PRICE "CU YD " FOR CONCRETE BOX CULVERTS SHALL INCLUDE THE GALVANIZED PIPES, BOLTS, NUTS, WASHERS, STEEL PLATES, EARTH EXCAVATION, BACKFILLING, COMPACTED CA-7 AGGREGATE BEDDING MATERIAL AND NECESSARY GRADING.

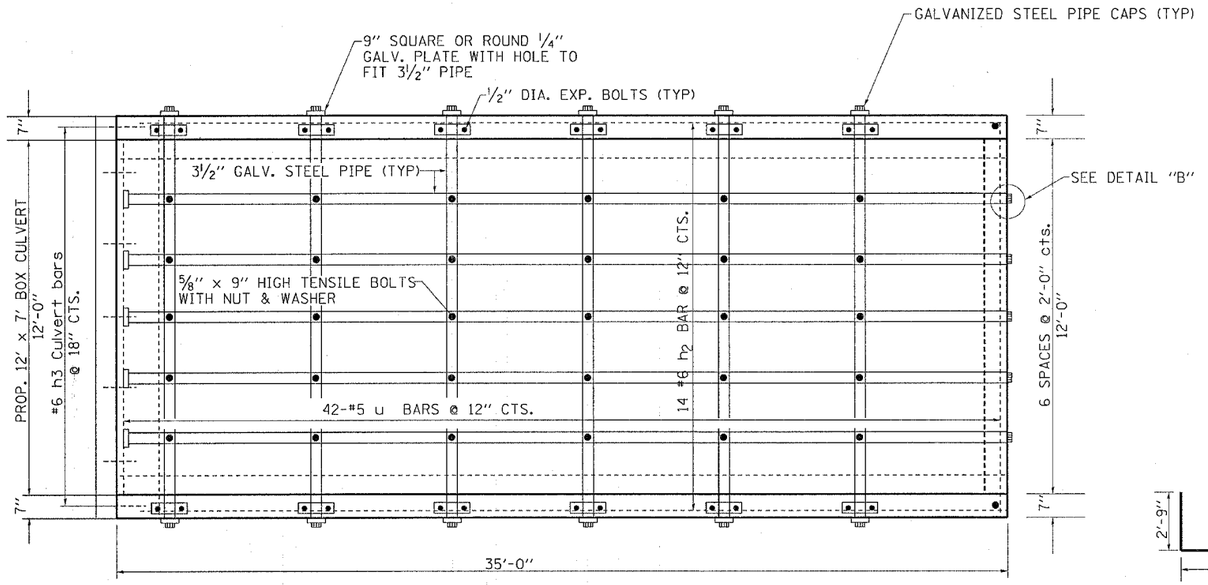
REINFORCEMENT BARS WILL BE PAID FOR SEPARATELY

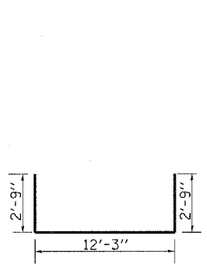
ORDER v AND h BARS AT FULL LENGTH. CUT TO FIT AS SHOWN AND USE REMAINDER OF BARS IN OPPOSITE WALL.

CONTRACT NO. 64178

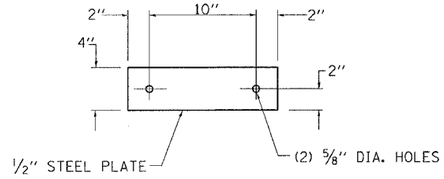
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	207
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONCRETE BOX CULVERT END SECTION STA 438+13 LT

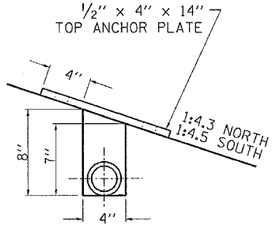




BAR "u"



TOP ANCHOR PLATE



DETAIL "A"

BAR	NUMBER	SIZE	LENGTH	QTY.
d	14	#4	4'-6"	42.08
h	9	#4	35'-0"	210.42
h_1	2	#4	35'-6"	47.43
h_2	14	#6	34'-9"	730.72
h_3	3	#5	12'-11"	40.42
u	42	#5	17'-9"	777.56
v	42	#5	10'-2"	445.63
REINFORCEMENT BARS			LB	2293.99
CONCRETE BOX CULVERTS			CU YD	20.7
3 1/2" GALV. STEEL PIPE			EACH	5 @ 35'-3" 6 @ 13'-4"
1/2" x 4" x 14" GALV. ANCHOR PLATE			EACH	12
5/8" x 9" GALV. BOLTS			EACH	27
GALV. STEEL PIPE CAPS			EACH	22
1/2" Ø GALV. EXP. BOLTS			EACH	22
9" SQ. OR ROUND 1/4" GALV. PLATE			EACH	12

BILL OF MATERIALS

GENERAL NOTES:

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, & SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 & SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

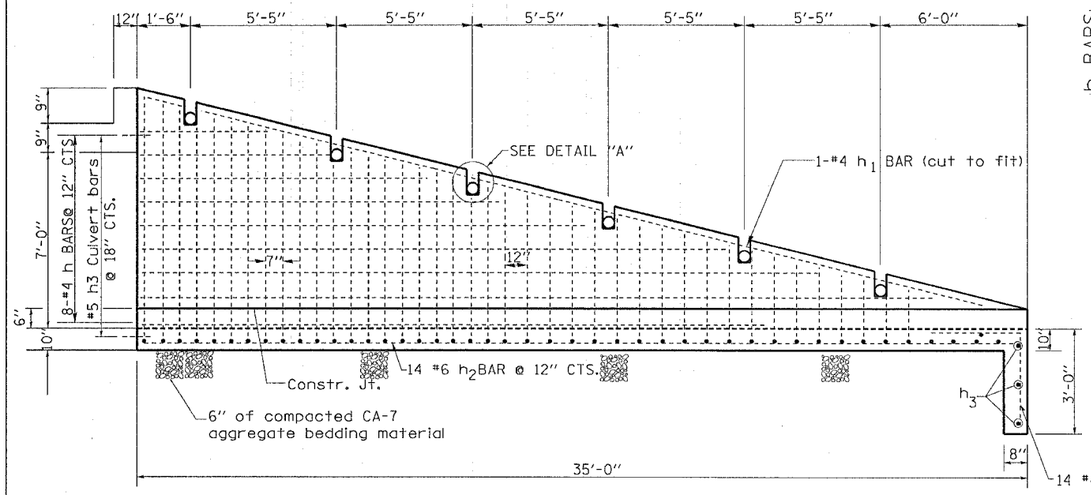
BOLTS, NUTS, & WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED.

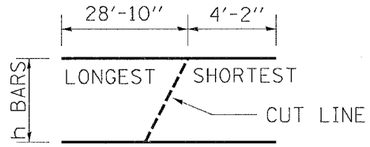
6" OF COMPACTED CA-7 AGGREGATE SHALL BE PLACED BENEATH THE EXTENSION

THE CONTRACT UNIT PRICE "CU YD " FOR CONCRETE BOX CULVERTS SHALL INCLUDE THE GALVANIZED PIPES, BOLTS, NUTS, WASHERS, STEEL PLATES, EARTH EXCAVATION, BACKFILLING, COMPACTED CA-7 AGGREGATE BEDDING MATERIAL AND NECESSARY GRADING.

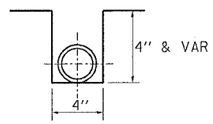
REINFORCEMENT BARS WILL BE PAID FOR SEPARATELY

ORDER v AND h BARS @ FULL LENGTH. CUT TO FIT AS SHOWN AND USE REMAINDER OF BARS IN OPPOSITE WALL.

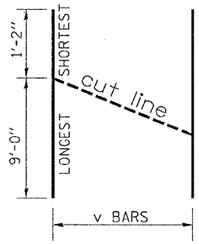




BAR "h" CUT DIAGRAM



DETAIL "B"



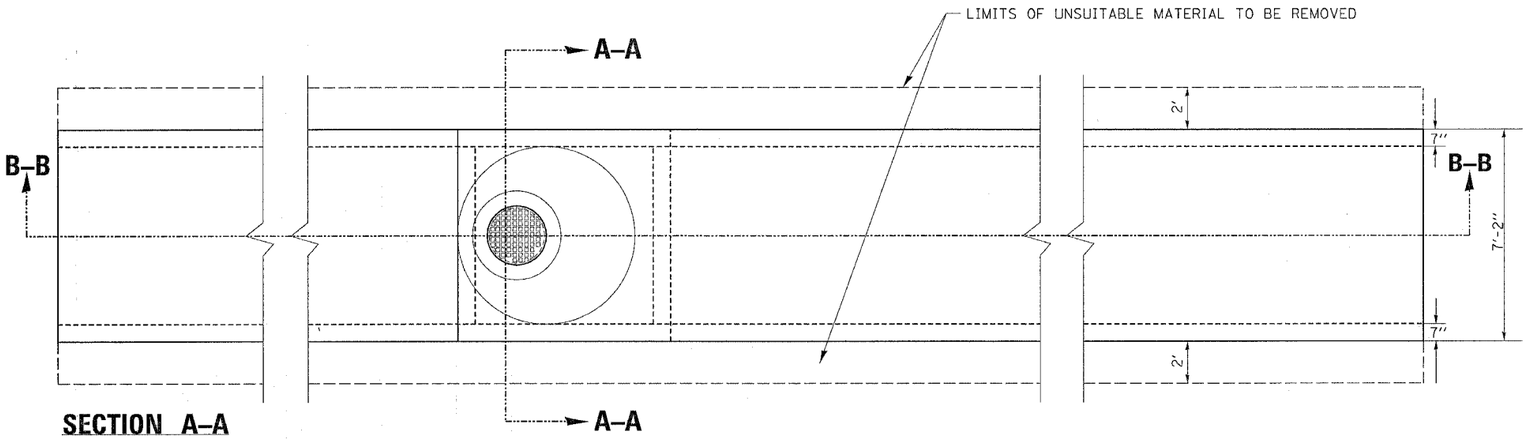
BAR "v" CUT DIAGRAM

CONTRACT NO. 64178

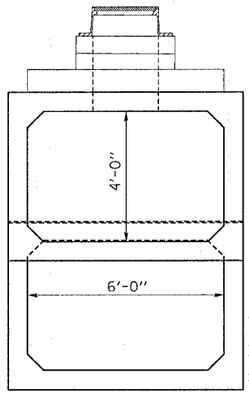
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	208
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PRECAST BOX CULVERT & CULVERT DROP BOX DETAILS

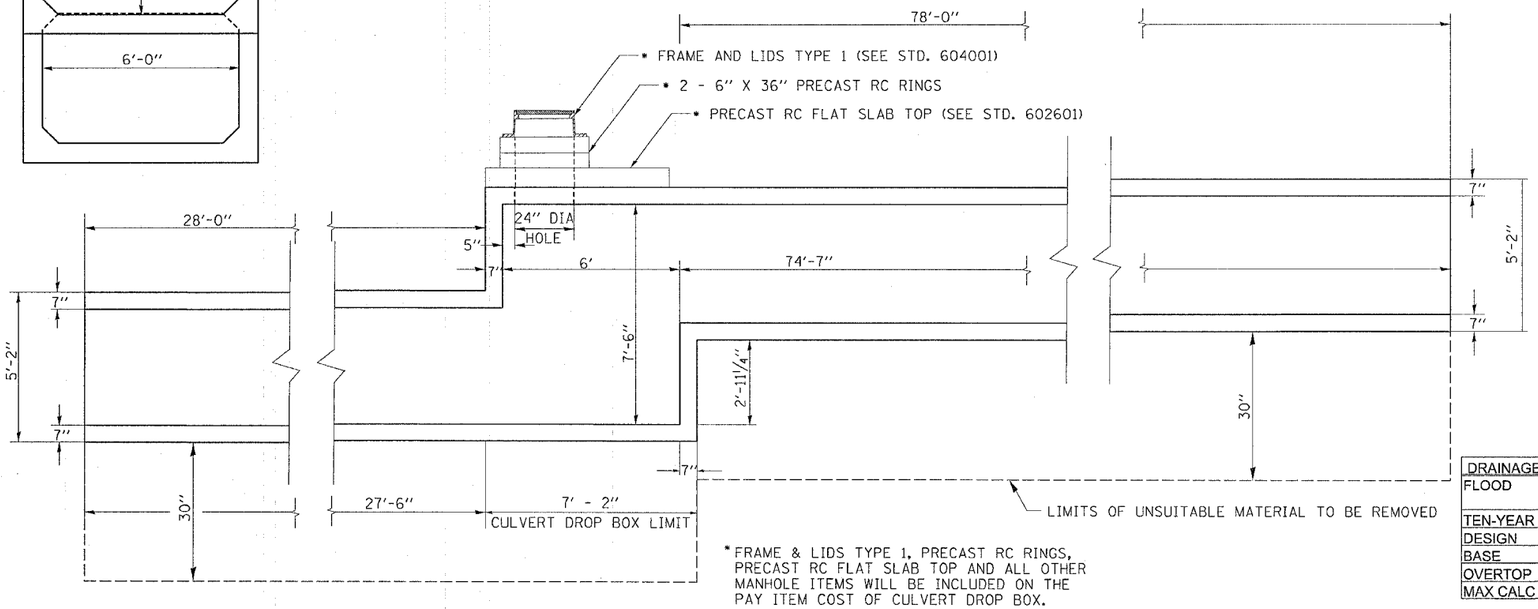
PLAN STA 517+98



SECTION A–A



SECTION B–B



*FRAME & LIDS TYPE 1, PRECAST RC RINGS, PRECAST RC FLAT SLAB TOP AND ALL OTHER MANHOLE ITEMS WILL BE INCLUDED ON THE PAY ITEM COST OF CULVERT DROP BOX.

GENERAL NOTES

THIS WORK CONSISTS OF FURNISHING AND INSTALLING A PRECAST BOX CULVERT AT STA. 517+98 AS SHOWN ON THE PLANS AND SPECIFIED HEREIN.

THE EXCAVATION AND BACKFILLING FOR PRECAST CONCRETE BOX CULVERT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 502 OF THE STANDARD SPECIFICATIONS EXCEPT A LAYER OF POROUS GRANULAR BACKFILL, AT LEAST 6" IN THICKNESS, SHALL BE PLACED BELOW THE ELEVATION OF THE BOTTOM OF THE BOX. THE POROUS GRANULAR BACKFILL SHALL BE PLACED TO EXTEND AT LEAST 2 FT EACH SIDE OF THE BOX. THE PRECAST CONCRETE BOX CULVERT SHALL BE LAID IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ARTICLE 542.04 (d) OF THE STANDARD SPECIFICATIONS SHOP PLANS FOR THE PRECAST CONCRETE BOX CULVERT SECTIONS SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504.04 (a) OF THE STANDARD SPECIFICATIONS.

THE PRECAST CONCRETE BOX CULVERT, EXCLUDING END SECTIONS AND CULVERT DROP BOX, SHALL BE MEASURED ON A LINEAR FOOT BASIS. THE PRECAST BOX CULVERT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR PRECAST CONCRETE BOX CULVERT OF THE SIZE SPECIFIED, AND INCLUDES TRENCH BACKFILL, AND ALL EARTH EXCAVATION, EXCEPT THE REMOVAL OF ALL UNSUITABLE MATERIAL BELOW BEDDING GRADE.

THE CULVERT DROP BOX SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH.

BILL OF MATERIALS

DESCRIPTION	UNIT	QTY.
Culvert Drop Box	EACH	1
Precast Concrete Box Culvert 6' x 4'	FOOT	107
Removal & Disposal of Unsuit. Matl	CU YD	118
Breaker-Run Crushed Stone	TON	194
Box Culvert End Sec. Culv. No.3	EACH	2

WATER WAY INFORMATION

DRAINAGE AREA = 83 Ac — LOW GRADE ELE (FT) 860.61(Exist) 860.86 (Proposed) @ Sta 518+00

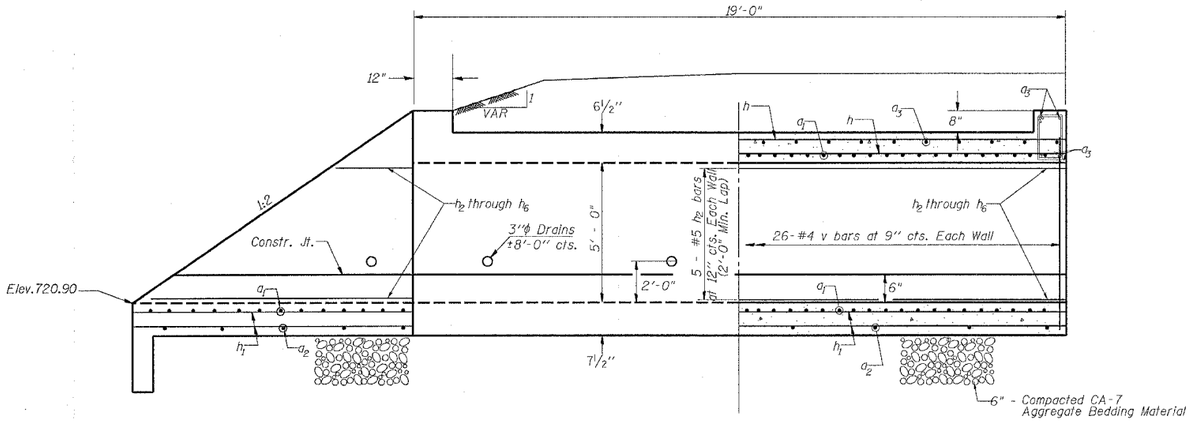
FLOOD	FREQUENCY (YEAR)	Q C.F.S.	OPENING (SQ. FT.) EXIST.	OPENING (SQ. FT.) PROP.	NAT. H.W. ELEV. (Ft)	HEAD (Ft) EXIST.	HEAD (Ft) PROP.	HEADWATER ELE. (Ft) EXIST.	HEADWATER ELE. (Ft) PROP.
TEN-YEAR	10	63	8.8	16.3	852.22	1.17	0.00	853.39	851.93
DESIGN	50	118	11.9	20.0	852.83	1.86	0.29	854.69	853.12
BASE	100	140	13.0	21.3	853.05	2.15	0.52	855.20	853.57
OVERTOP									
MAX CALC	500	191	15.0	23.6	853.44	2.85	1.36	856.29	854.80

CONTRACT NO. 64178

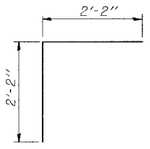
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	209
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONCRETE BOX CULVERTS

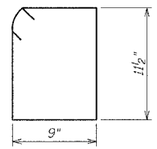
STA. 584+14.64 RT



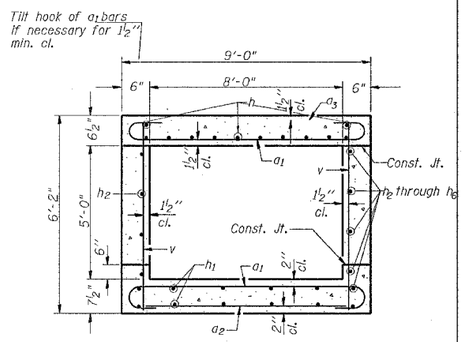
HALF ELEVATION HALF LONG. SECTION



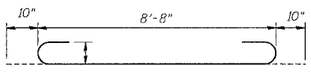
BAR d



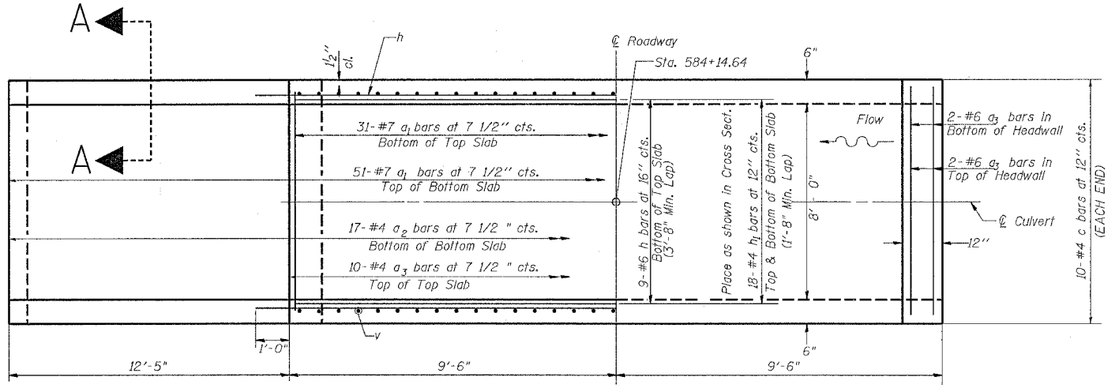
BAR C



SECTION THRU BARREL

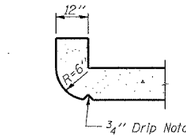


BAR a1

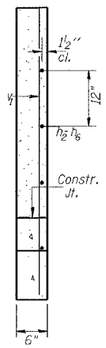


SHOWING REINFORCEMENT SHOWING OUTLINES

PLAN



SECTION THRU HEADWALL
(Up Stream End Only)



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	3	#4	8'-9"	
a1	82	#7	10'-4"	
a2	17	#4	8'-3"	
a3	18	#6	8'-9"	
d	10	#5	4'-4"	
h	9	#6	18'-9"	
h1	18	#4	31'-3"	
h2	2	#5	21'-8"	
h3	2	#5	23'-8"	
h4	2	#5	25'-8"	
h5	2	#5	27'-8"	
h6	2	#5	29'-8"	
h7	2	#5	13'-5"	
v	52	#4	5'-10"	
v1	15	#4	7'-4"	
c	20	#4	3'-6 3/4"	
Concrete Box Culverts			Cu. Yd.	15.70
Reinforcement Bars			Pound	3372.80
Expansion Bolts, 3/4"			Each	16

DESIGN STRESSES

fy = 60,000 psi
f'c = 3,500 psi

LOADING HS 20-44 & ALT.

NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

All construction joints shall be bonded.

6" of compacted CA-7 aggregate bedding material shall be place beneath the box culvert. The cost for the Ca-7 aggregate shall be included in the cost of Concrete Box Culverts.

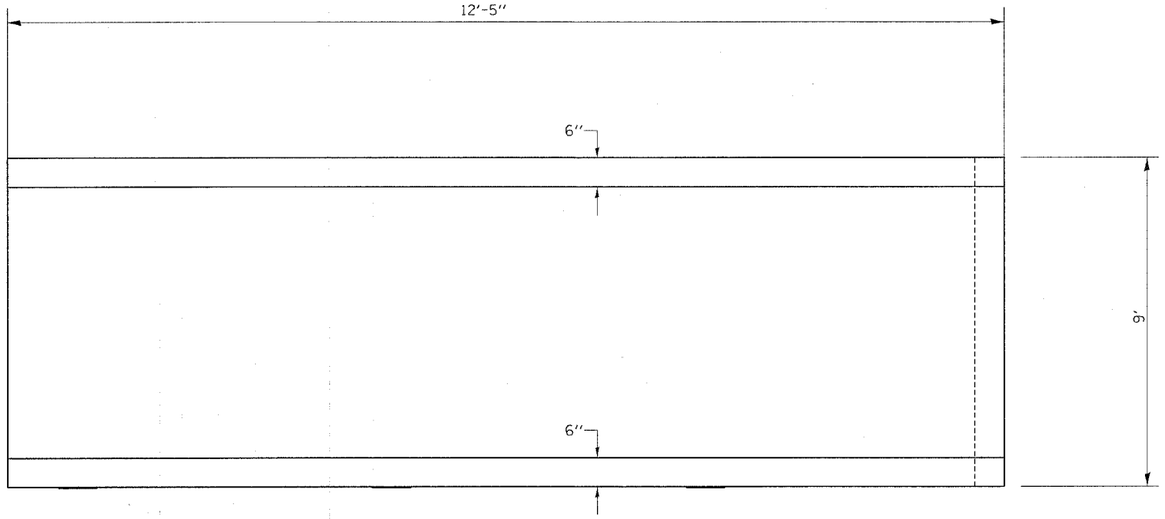
The cost of excavation and backfilling shall be included in the cost of Concrete Box Culverts.

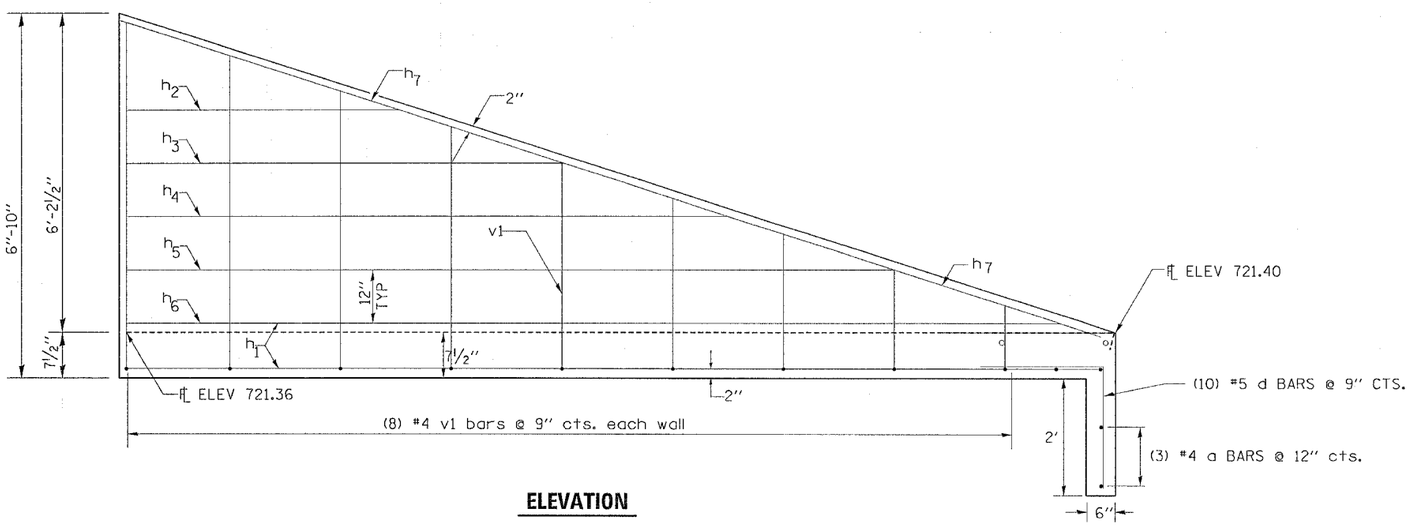
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	210
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

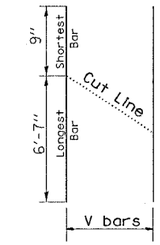
CONCRETE BOX CULVERT END SECTION

STA. 584+14.64 RT





ELEVATION



BAR v_1
cut diagram

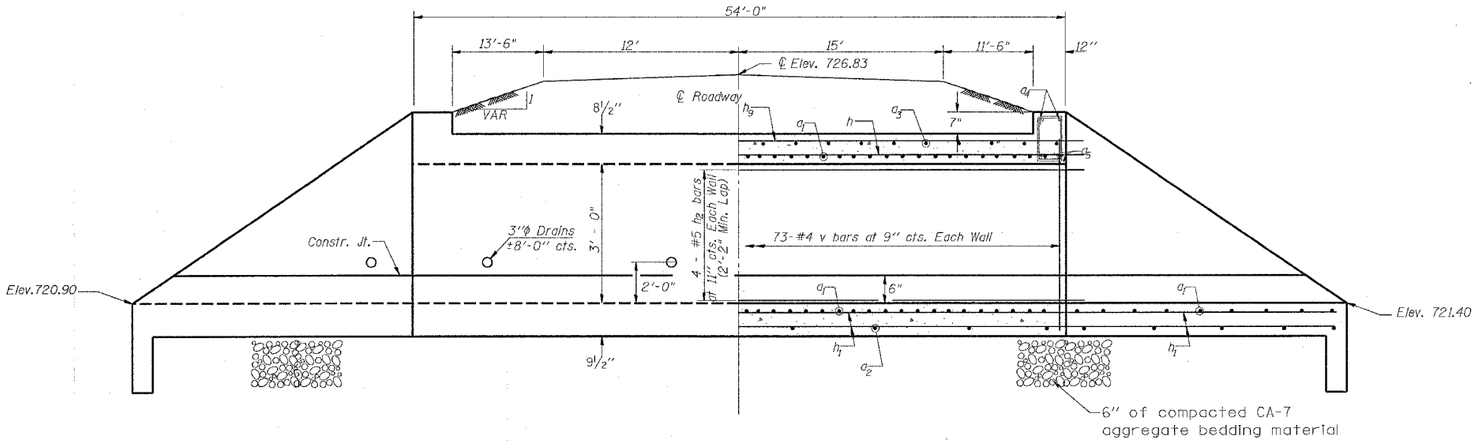
Order V_1 bars full length
Cut to fit as shown and
use remainder of bars in
opposite wall.

CONTRACT NO. 64178

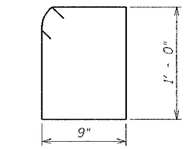
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116 RS-1	OGLE	593	211
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONCRETE BOX CULVERTS

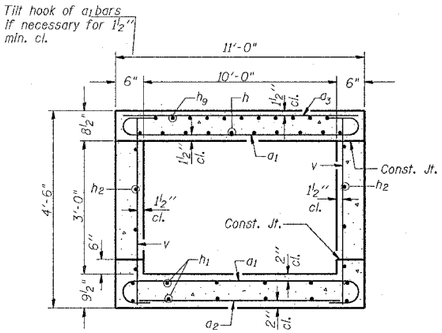
STA 700+65.73



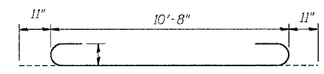
HALF ELEVATION HALF LONG. SECTION



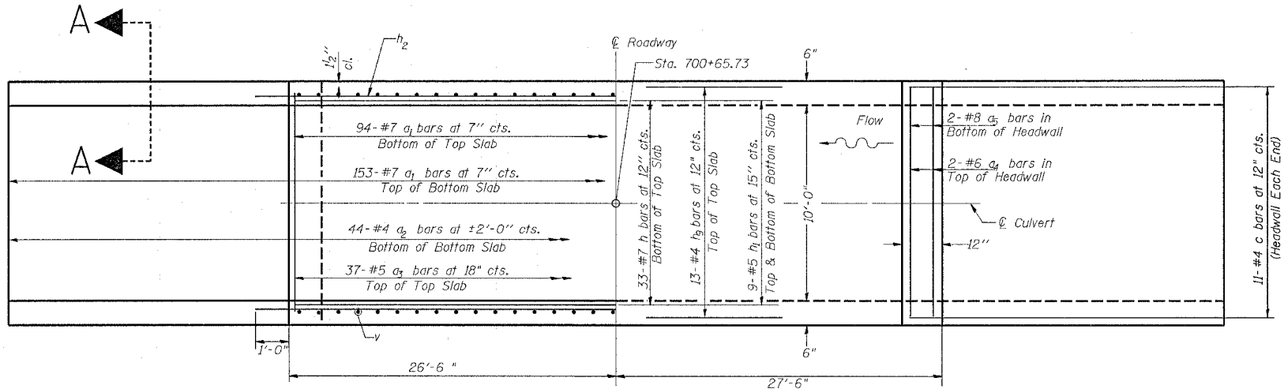
BAR C



SECTION THRU BARREL

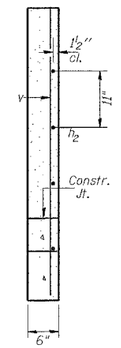


BAR a1

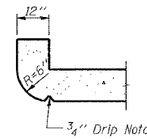


SHOWING REINFORCEMENT SHOWING OUTLINES

PLAN



SECTION A-A



SECTION THRU HEADWALL
(Up Stream End Only)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	247	#7	12'-6"	⊂⊃
a2	45	#4	10'-3"	—
a3	37	#5	10'-9"	—
a4	4	#6	10'-9"	—
a5	4	#8	10'-9"	—
h	22	#7	31'-3"	—
h1(B)	36	#5	30'-10"	—
h1(W)	36	#5	19'-2"	—
h2	16	#5	31'-4"	—
h3	26	#4	28'-4"	—
v	146	#4	4'-3"	—
C	22	#4	3'-6"	
Conc. Box Culverts(B)			Cu. Yd.	39.47
Reinforcement Bars			Pound	11976.66

B= Barrel
W= Wingwalls

NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

All construction joints shall be bonded.

6" of compacted CA-7 aggregate bedding material shall be place beneath the box culvert. The cost for the Ca-7 aggregate shall be included in the cost of Concrete Box Culverts.

The cost of excavation and backfilling shall be included in the cost of Concrete Box Culverts.

LOADING HS20-44 & ALT.

DESIGN SPECIFICATIONS

1996 AASHTO with 1997, 1998, 1999 and 2000 Interims

DESIGN STRESSES

FIELD UNITS

fy = 60,000 psi
f'c = 3,500 psi

WATERWAY INFORMATION

DRAINAGE AREA = 0.80sq mi LOW GRADE ELEV. (FT) 765.24 (Exist) 765.49 (Proposed) @ Sta. 419+57

FLOOD	FREQUENCY (YEAR)	Q C.F.S.	OPENING (SQ. FT.) EXIST.	OPENING (SQ. FT.) PROP.	NAT. H.W. ELEV. (Ft)	HEAD (Ft) EXIST.	HEAD (Ft) PROP.	HEADWATER ELEV. (Ft) EXIST.	HEADWATER ELEV. (Ft) PROP.
DESIGN	10	271	45.8	54.7	761.36	2.02	2.00	763.38	763.36
BASE	100	482	47.7	57.0	761.55	2.05	1.40	763.60	762.95
OVERTOP EX	385	599	55.0		762.28	2.97		765.25	
MAX CALC	500	630		60.0	762.30		2.34		764.64

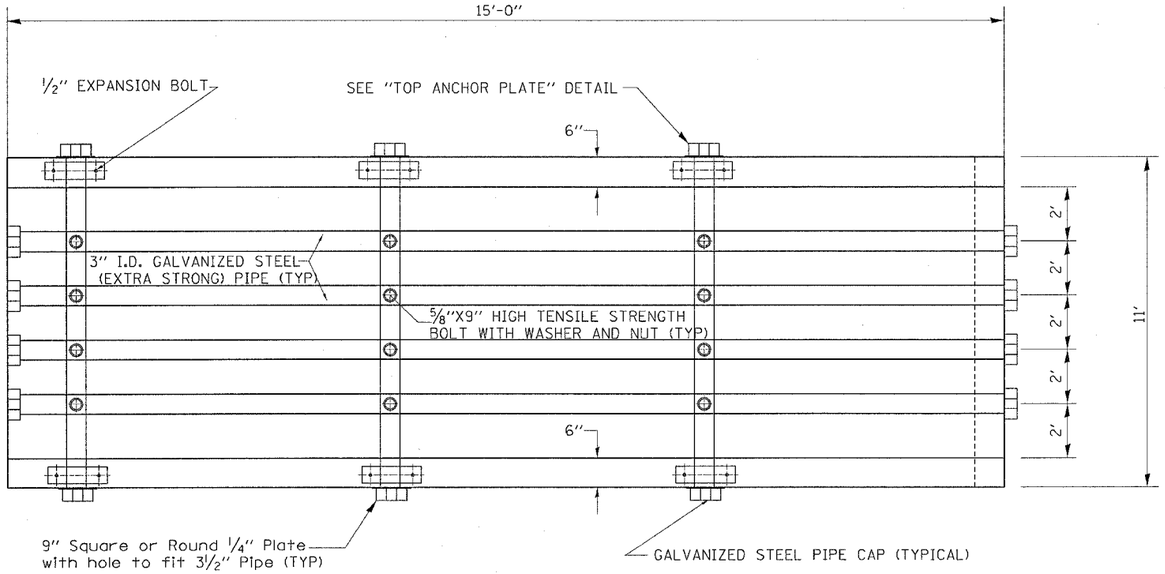
•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

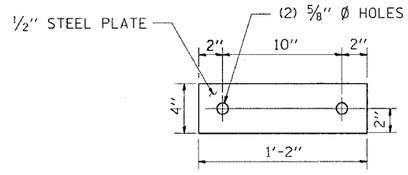
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116 RS-1	OGLE	593	212
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

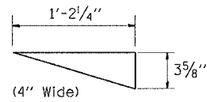
CONCRETE BOX CULVERT END SECTION

STA. 700+65.73 RT & LT

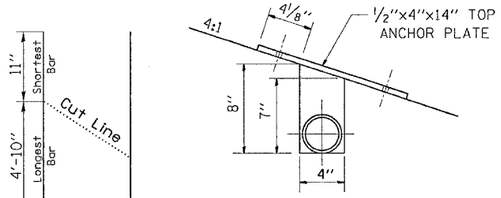




TOP ANCHOR PLATE

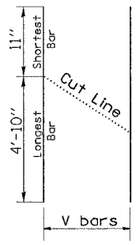


NOTCH DETAIL

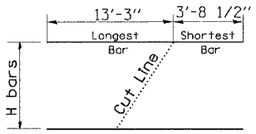


DETAIL "A"

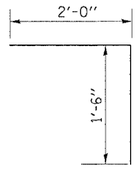
Order v AND h bars full length
Cut to fit as shown and
use remainder of bars in
opposite wall.



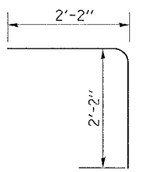
BAR v
cut diagram



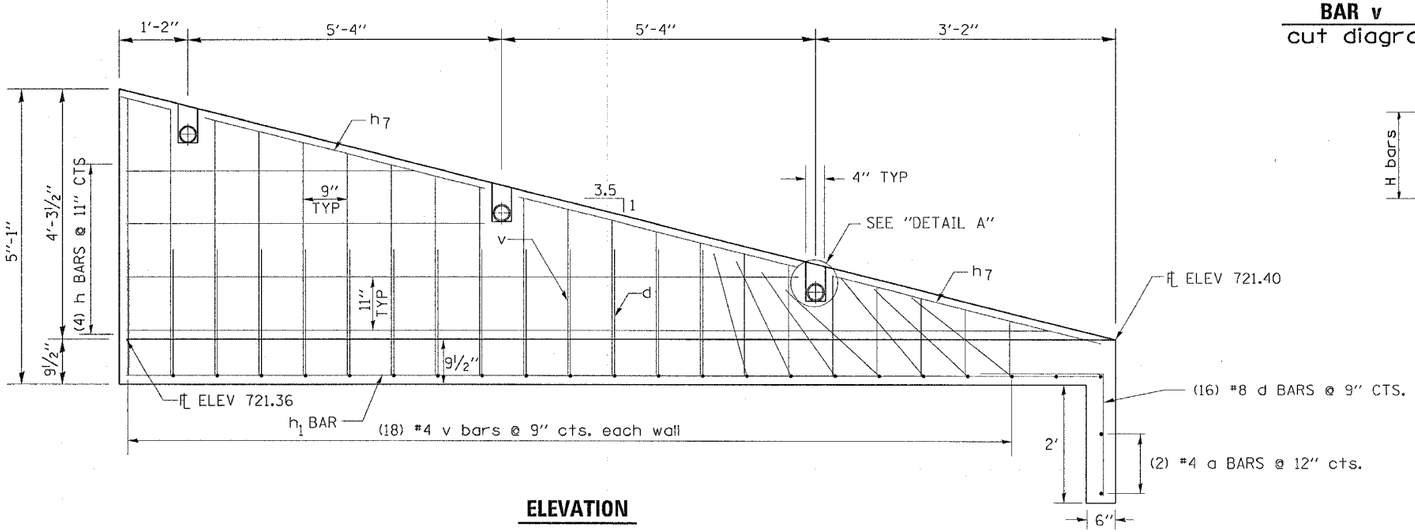
BAR h
cut diagram



BAR d_1



BAR d



ELEVATION

BILL OF MATERIALS
(Both Ends)

BAR	NUMBER	SIZE	LENGTH
h	8	#5	14'-0"
v	36	#4	5'-9"
d	2	#8	4'-4"
a	2	#4	10'-9"
d_1	18	#5	3'-6"

DESCRIPTION	UNIT	QTY.
Class "SI" Concrete	CU. YD	14.3
Reinforcement Bars	LBS.	716.6
3" I.D. Galvanized Steel Pipe	4@	15'-4 "
	3@	11'-4"
3" Galv Pipe Caps	EACH	14
1/4" Galv. Stl. Plate (9" Nominal)	EACH	6
1/2"x4"x14" Galv. Steel Plate	EACH	6
5/8"x9" Galv. Steel Bolts	EACH	12
Expansion Bolts 1/2"	EACH	12

GENERAL NOTES:

Class "SI" concrete shall be used throughout.
Exposed edges shall be beveled 3/4".

Bolts, Nuts, and Washers shall be in accordance with Article 540 of the standard specification and shall be galvanized.

All work and materials incorporated (Except Rein. Bars) into the construction of the Box Culvert, End Sections and grates shall be paid for at the contract unit price cu yd for CONCRETE BOX CULVERTS.
bars will be paid for at the contract unit price pound for REINFORCEMENT BARS

Steel pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

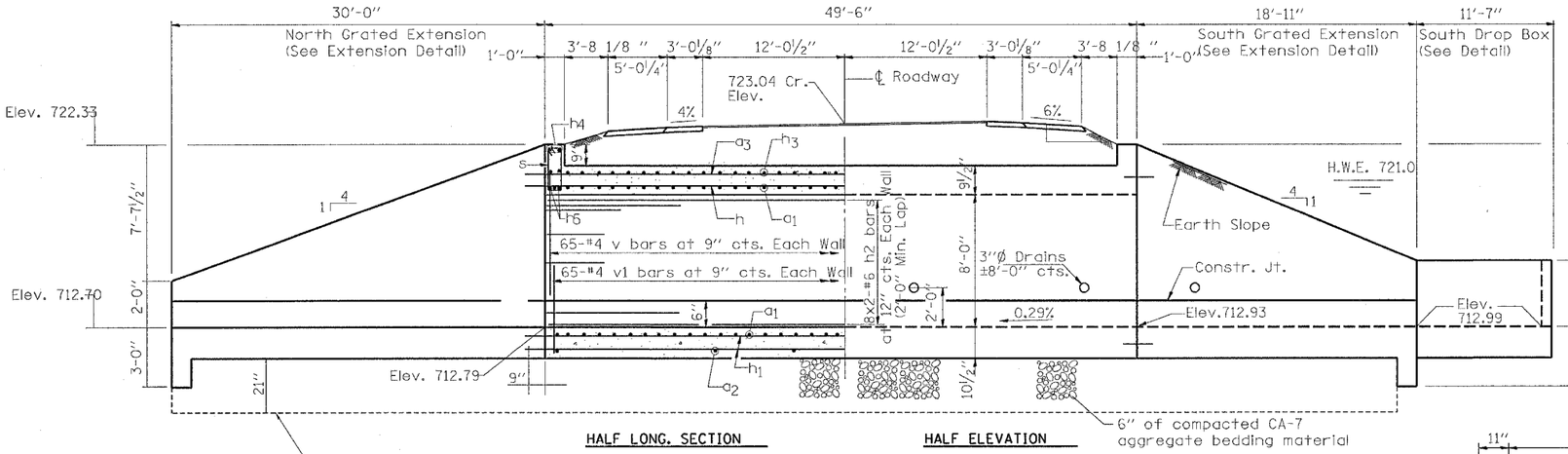
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, grade 60.

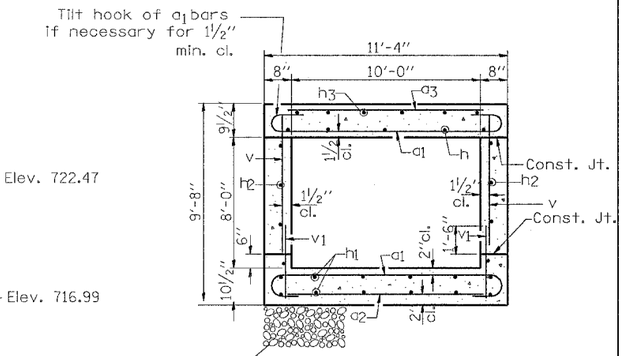
DATE-TIME
DGN-SPEC
*REF
*REF
*REF
*REF
*REF

CONTRACT NO. 64178

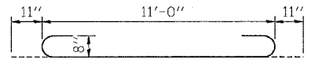
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	213
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONCRETE BOX CULVERTS
STA 732+53





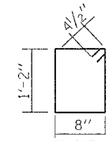
SECTION THRU BARREL



BAR a1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	184	#8	12'-10"	
a2	25	#4	11'-0"	
a3	33	#5	11'-0"	
h	18	#7	26'-9"	
h1	40	#5	29'-0"	
h2	32	#6	29'-4"	
h3	22	#4	26'-0"	
h4	4	#6	11'-0"	
h5	4	#8	11'-0"	
s	24	#4	4'-5"	
v	130	#4	8'-2"	
v1	130	#4	2'-5"	
Concrete Box Culverts		Cu. Yd.	55.0	
Reinforcement Bars		Pound	12026.54	
Rem. of Unsuitable Material		Cu. Yd.	109	
Breaker-Run Stone		Ton	159	
Concrete Box Culvert Total		Cu. Yd.	96.2	
Reinforcement Bars Total		Pound	18,742	



BAR s

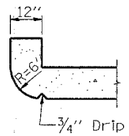
SHOWING REINFORCEMENT PLAN

SHOWING OUTLINES

DESIGN STRESSES

fy = 60,000 psi
f'c = 3,500 psi

LOADING HS 20-44 & ALT.



SECTION THRU HEADWALL

(Up Stream End Only)

NOTES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Bars indicated thus 11 x 2-#4 etc. indicates 11 lines of bars with 2 lengths per line.

All construction joints shall be bonded.

6" of compacted CA-7 aggregate bedding material shall be place beneath the box culvert. The cost for the Ca-7 aggregate shall be included in the cost of Concrete Box Culverts.

The cost of excavation and backfilling shall be included in the cost of Concrete Box Culverts.

WATERWAY INFORMATION

Drainage Area = 0.51 sq mi Low Grade Elev. 723.42 (Exist) 723.61 (Proposed) ø Sta 732+53

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
~~Ten-Year~~	10	285	72.4	80.0	721.00	1.14	1.14	722.14	722.14
~~Design~~	50	450	72.4	80.0	721.00	2.75	2.75	723.75	723.75
~~Base~~	100	521	72.4	80.0	721.00	3.14	3.13	724.14	724.13
~~Overtop (Ex.)~~	37	417	72.4	-	721.00	2.43	-	723.43	-
Overtop (Pr.)	42	432	-	80.0	721.00	-	2.62	-	723.62

ILLINOIS DEPARTMENT OF TRANSPORTATION

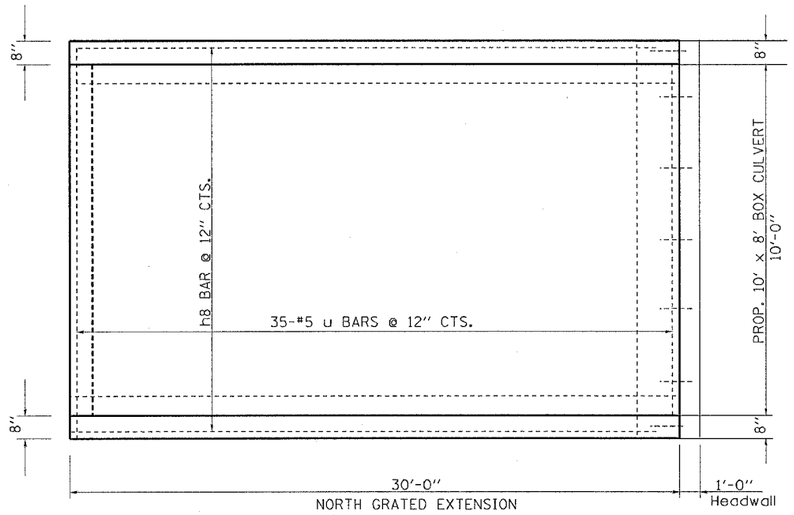
SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

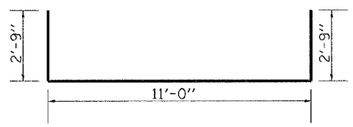
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	214
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

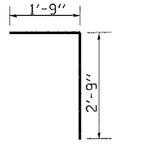
CONCRETE BOX CULVERT END SECTION

NORTH SIDE
STA 732+53 LT

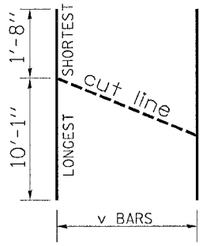




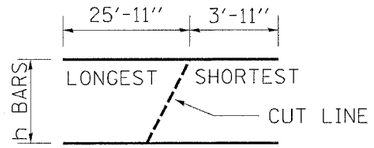
BAR "h_9"



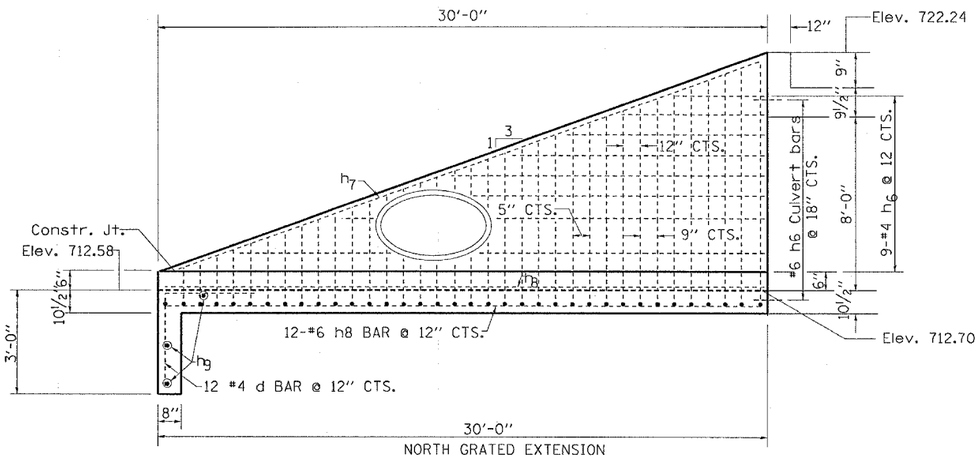
BAR "d"



BAR "v"
CUT DIAGRAM



BAR "h_7"



BILL OF MATERIALS

NORTHSIDE GRATED EXTENSION ONLY

BAR	NUMBER	SIZE	LENGTH	QTY.
d	12	#4	4'-6"	36.07
h_6	10	#4	30'-0"	200.40
h_7	2	#4	30'-11"	41.30
h_8	14	#4	29'-6"	275.88
h_9	3	#4	11'-0"	22.04
u	35	#6	16'-6"	867.41
v	31	#5	11'-9"	379.91
REINFORCEMENT BARS			LB	1823.02
CONCRETE BOX CULVERTS			CU YD	17.4

GENERAL NOTES:

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, & SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120.

6" OF COMPACTED CA-7 AGGREGATE SHALL BE PLACED BENEATH THE EXTENSION

THE CONTRACT UNIT PRICE "CU YD" FOR CONCRETE BOX CULVERTS SHALL INCLUDE THE EARTH EXCAVATION, BACKFILLING, COMPACTED CA-7 AGGREGATE BEDDING MATERIAL AND NECESSARY GRADING.

REINFORCEMENT BARS WILL BE PAID FOR SEPARATELY

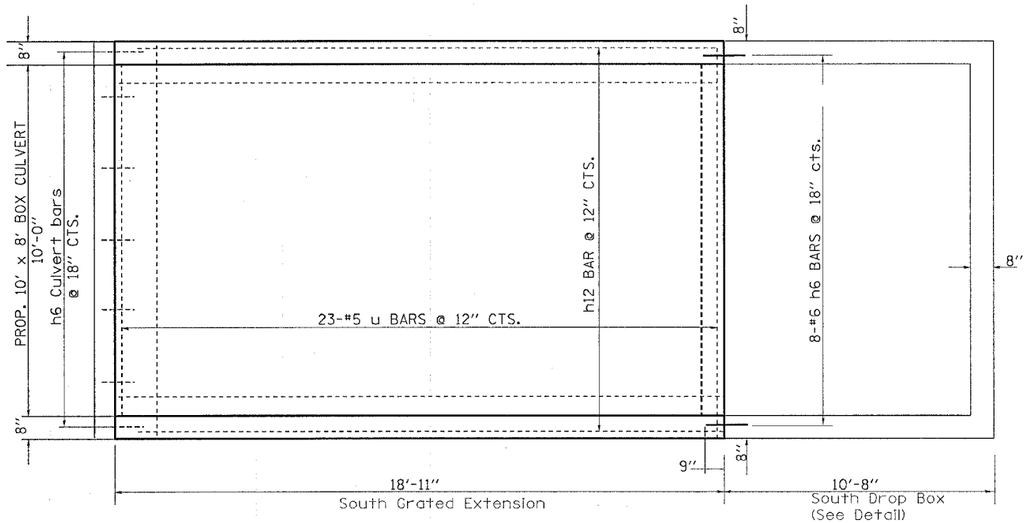
ORDER v AND h BARS FULL LENGTH. CUT TO FIT AS SHOWN AND USE REMAINDER OF BARS IN OPPOSITE WALL.

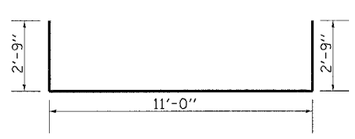
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	215
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

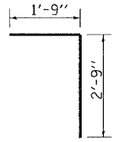
CONCRETE BOX CULVERT END SECTION

SOUTH SIDE
STA 732+53 RT

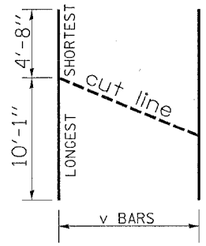




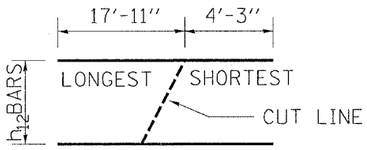
BAR "u"



BAR "d1"



BAR "v"
CUT DIAGRAM

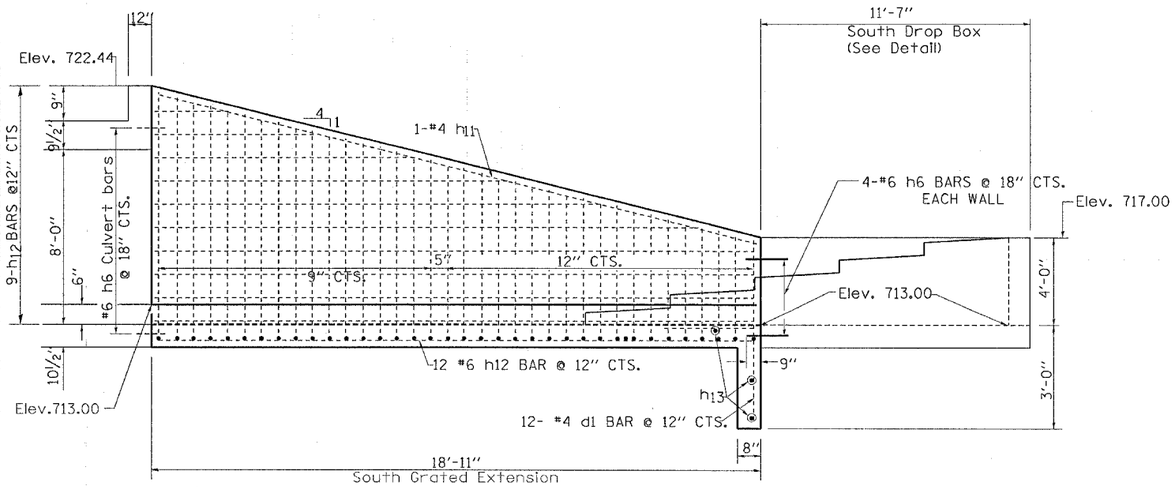


BAR "h_{12}"

BILL OF MATERIALS

For South Grated Extension Only

BAR	NUMBER	SIZE	LENGTH	QTY.
d_1	12	#4	4'-6"	36.07
h_{11}	2	#4	35'-0"	46.76
h_{12}	26	#6	18'-8"	728.97
h_{13}	3	#5	12'-11"	40.42
u	23	#5	16'-6"	395.82
v	23	#5	14'-9"	353.84
REINFORCEMENT BARS			LB	1601.88
CONCRETE BOX CULVERTS			CU YD	14.3



GENERAL NOTES:

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, & SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120.

6" OF COMPACTED CA-7 AGGREGATE SHALL BE PLACED BENEATH THE EXTENSION

THE CONTRACT UNIT PRICE "CU YD" FOR CONCRETE BOX CULVERTS SHALL INCLUDE THE EARTH EXCAVATION, BACKFILLING, COMPACTED CA-7 AGGREGATE BEDDING MATERIAL AND NECESSARY GRADING.

REINFORCEMENT BARS WILL BE PAID FOR SEPARATELY

ORDER v AND h BARS FULL LENGTH . CUT TO FIT AS SHOWN AND USE REMAINDER OF BARS IN OPPOSITE WALL.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = Wed Feb 09 07:40:22 2005
FILE NAME = C:\projects\p208497\d08497spl.dgn
PLOT SCALE = 50.0000 ' / IN.

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	216
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONCRETE BOX CULVERT DROP BOX
STA 732+53 RT

BILL OF MATERIALS

BAR	NUMBER	SIZE	LENGTH
a_1	21	#8	13'-6"
a_2	8	#4	10'-4"
d	43	#5	4'-0"
h_1	20	#5	11'-3.5"
h_2	8	#5	11'-3.5"
h_3	4	#5	11'-0"
v	35	#5	4'-6"
u_1	12	#6	7'-2"
u_2	12	#6	6'-8"
u_3	12	#6	6'-2"
u_4	12	#6	5'-1"
u_5	12	#6	4'-4"
u_6	12	#6	2'-6"
h_4	6	#5	31'-8"
h_5	76	#5	4'-6"
d_1	18	#5	3'-0"

DESCRIPTION	UNIT	QTY.
CONCRETE BOX CULVERTS	CU YD	7.1
Reinforcement Bars	LB	3290.58

GENERAL NOTES:

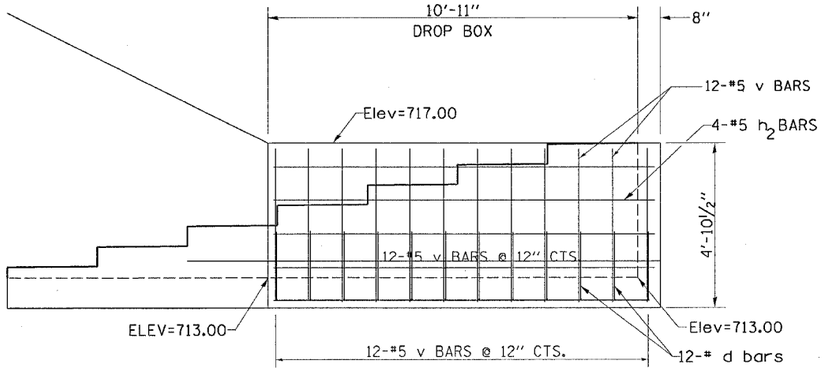
6" Compacted CA-7 gravel shall be placed beneath drop boxes (See Culvert Extension Detail)

Class "SI" concrete shall be used throughout. Exposed edges shall be beveled ¾".

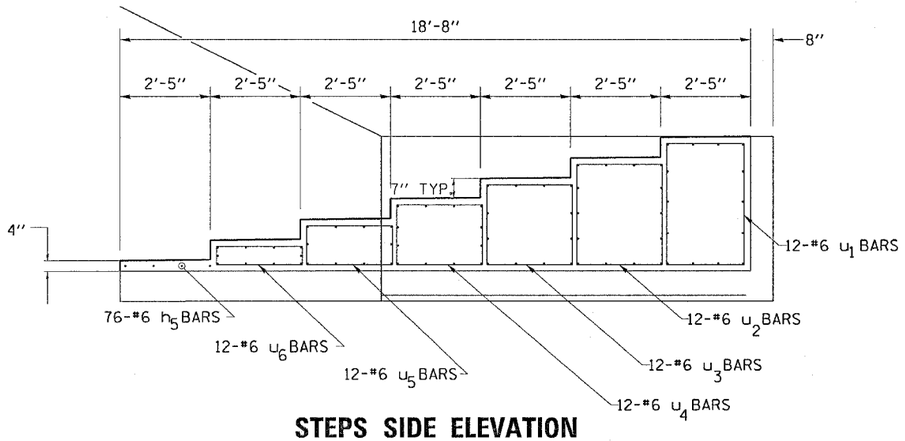
All work and materials incorporated into the onstruction of the Concrete Box Culvert, the end sections and drop box will be paid for at the contract unit price "cu yd" for CONCRETE BOX CULVERTS.

Reinforcement bars, Rem. of unsuitable mat'l, and breaker-run will be paid for Separately.

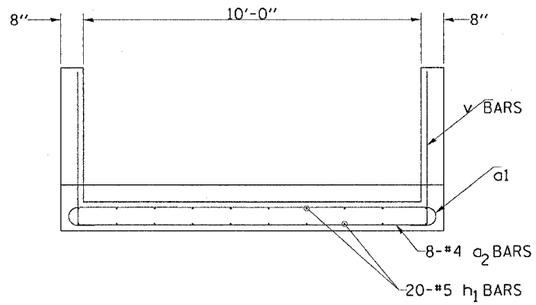
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, grade 60.



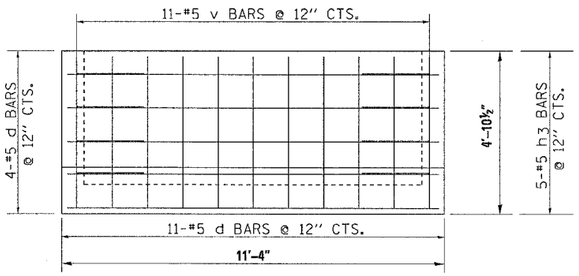
SIDE ELEVATION



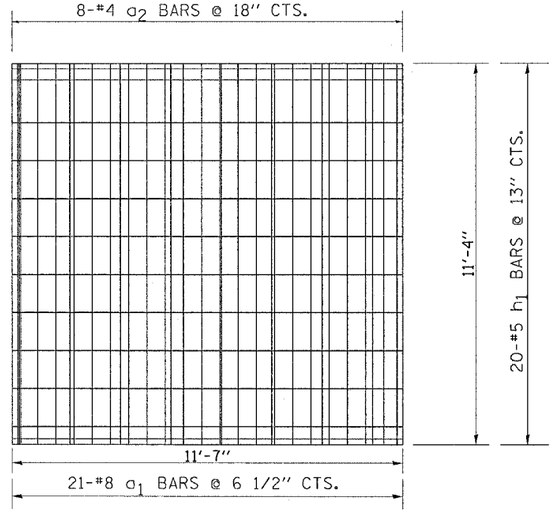
STEPS SIDE ELEVATION



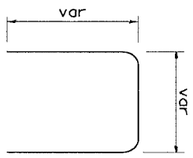
FRONT ELEVATION



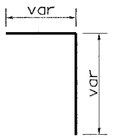
BACK ELEVATION



BOTTOM



u BARS



d BARS

REVISIONS NAME	DATE

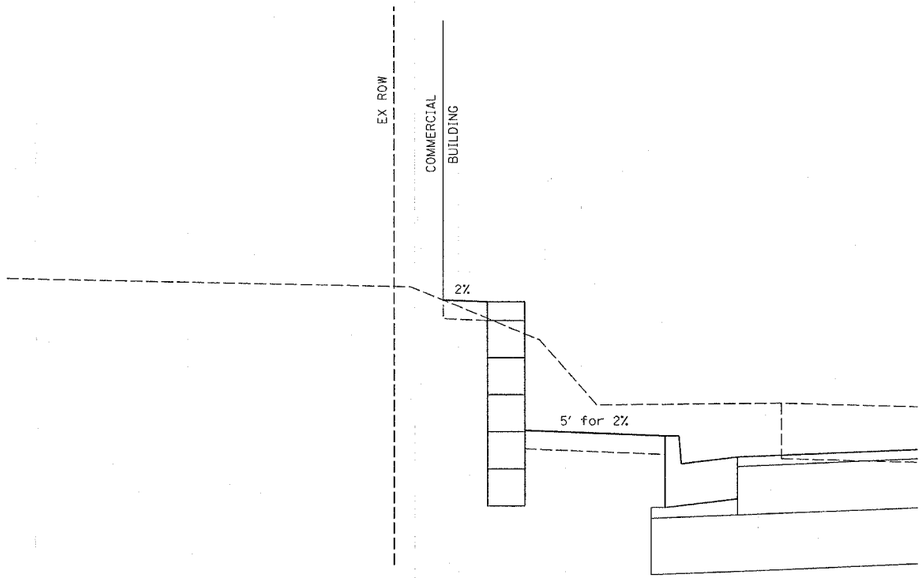
ILLINOIS DEPARTMENT OF TRANSPORTATION

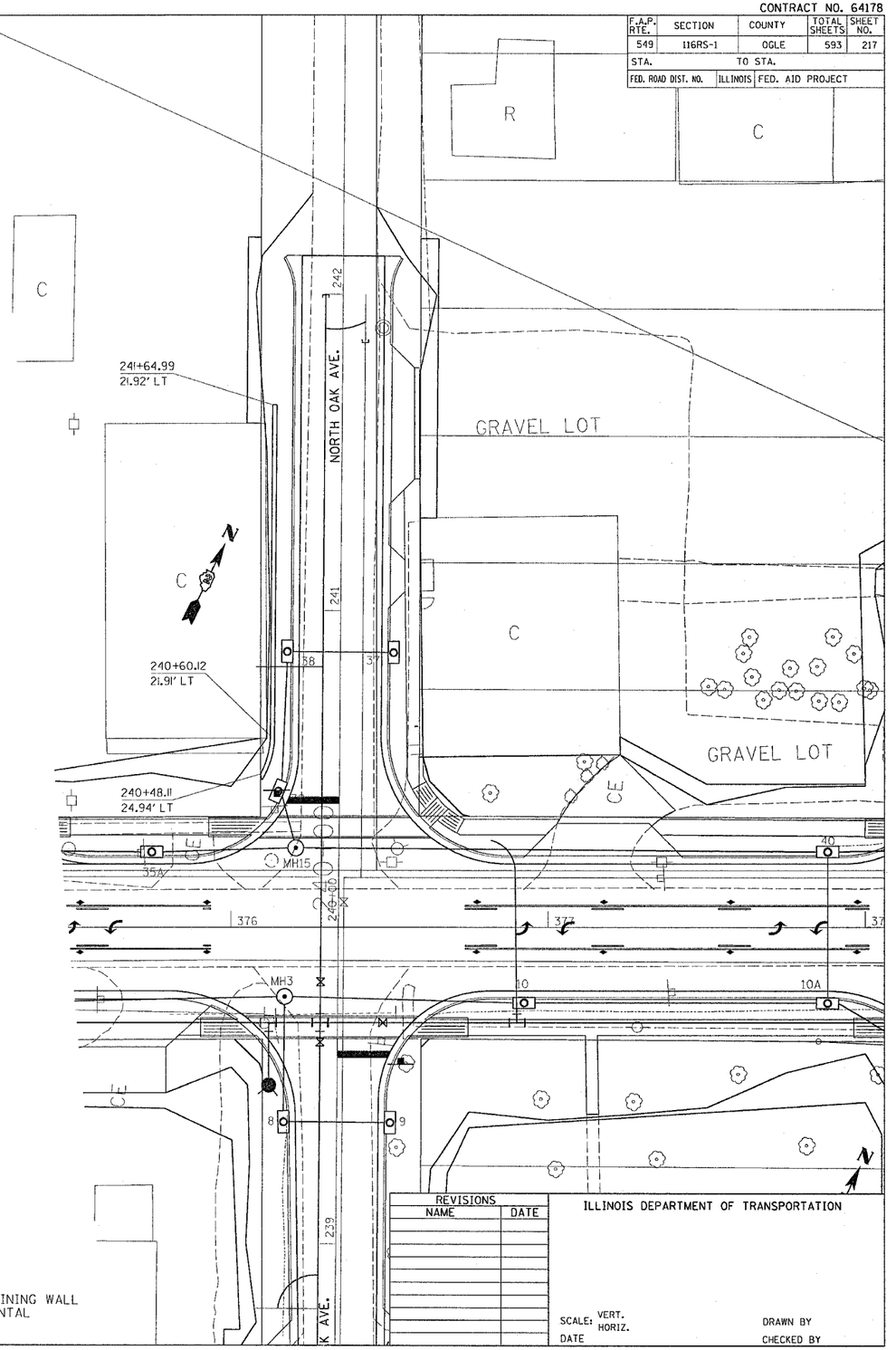
SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	217
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEGMENTAL CONCRETE BLOCK WALL





BILL OF MATERIALS

DESCRIPTION	UNIT	QTY
SEGEMENTED CONCRETE BLOCK WALL	SQ FT	365.82

*ALL MATERIALS NEEDED TO CONSTRUCT THE RETAINING WALL SHALL BE INCLUDED UNDER THE PAY ITEM SEGMENTAL CONCRETE BLOCK WALL (SQ FT)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

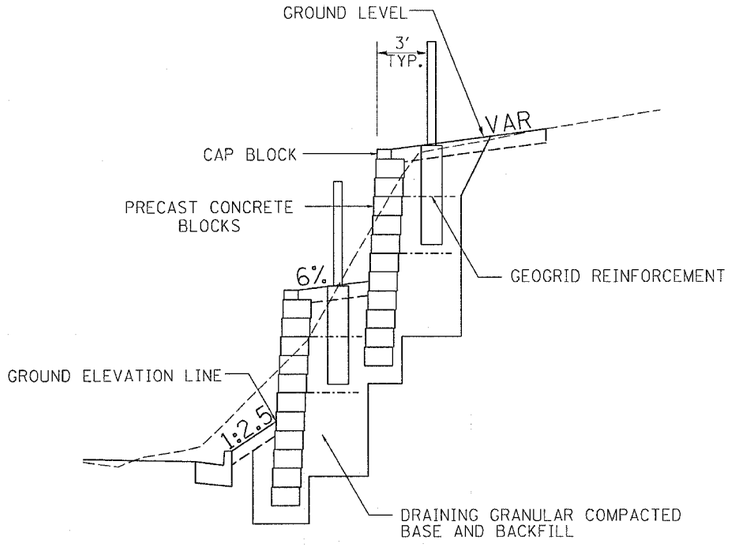
PLOT DATE = Wed Feb 03 07:48:15 2005
FILE NAME = C:\projects\sp20497\sd80497spl.dgn
PLOT SCALE = 20.0000 ' / IN.
REFERENCE = REF

SEGMENTAL CONCRETE BLOCK WALL @ SW IL 72 & NORTH OAK

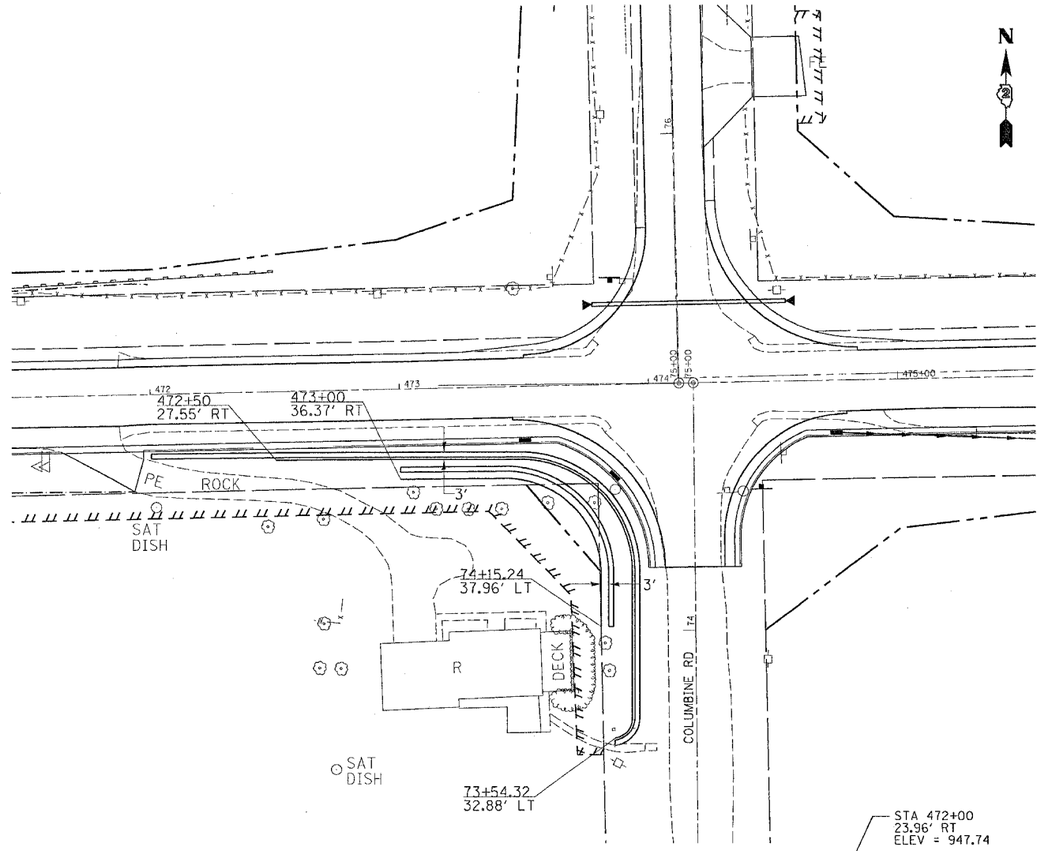
CONTRACT NO. 64178

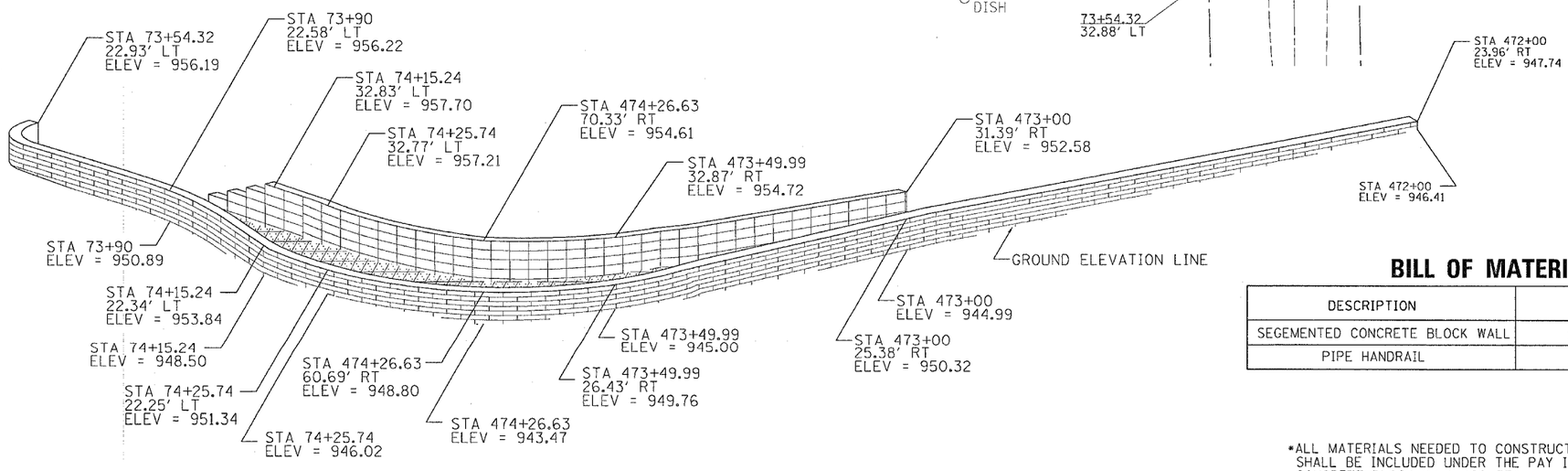
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	218
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEGMENTAL CONCRETE BLOCK WALL



TYPICAL WALL SECTION





BILL OF MATERIALS

DESCRIPTION	UNIT	QTY
SEGEMENTED CONCRETE BLOCK WALL	SQ FT	2785
PIPE HANDRAIL	FOOT	368

*ALL MATERIALS NEEDED TO CONSTRUCT THE RETAINING WALL SHALL BE INCLUDED UNDER THE PAY ITEM SEGMENTAL CONCRETE BLOCK WALL (SQ FT)

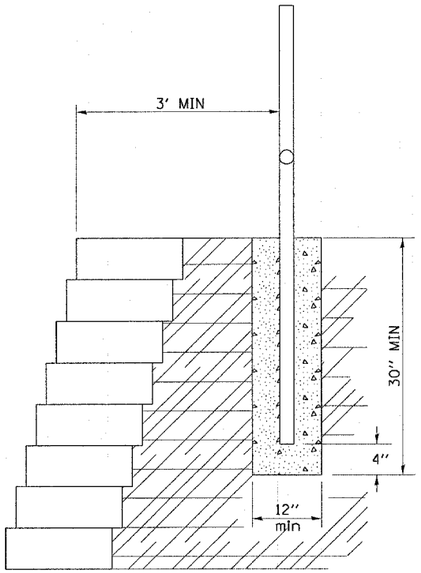
•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

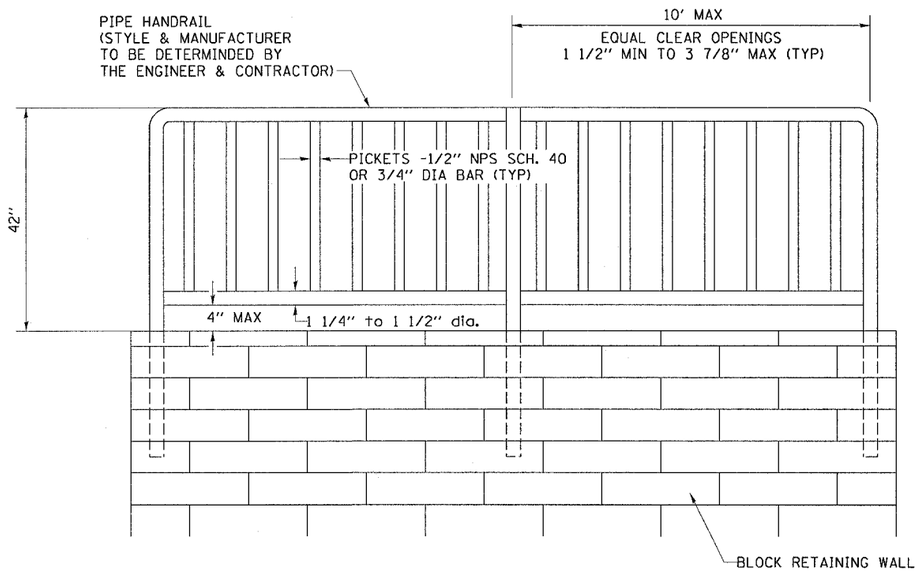
SEGMENTAL CONCRETE BLOCK WALL
@ SW IL 72 & COLUMBINE RD

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	219
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PIPE HANDRAIL FOR RETAINING WALLS
RT. STA 472+50 TO LT STA 73+54.32 (COLUMBINE RD.)





NOTES:

GRIPPING SURFACES SHALL BE UNINTERRUPTED BY CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS.

ENDS OF SAFETY RAIL SHALL BE EITHER ROUNDED OR RETURNED SMOOTHLY TO, THE GROUND

SAFETY RAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

SAFETY RAIL SHALL CONFORM TO SECTION 510 WITH THE EXCEPTION THAT ALL PIPE AND CONNECTIONS SHALL BE WELDED GALVANIZED OR ALUMINUM ACCORDING TO ARTICLE 1006.27, 1006.30, OR 1006.34.

THE DIAMETER OF THE GRIPPING SURFACE OF THE HANDRAIL SHALL BE 1 1/4" TO 1 1/2".

CLASS SI CONCRETE AND #4 REBAR INCLUDED IN THE COST OF THE SAFETY RAIL.

SAFETY RAIL REQUIRED WHEN HIEGHT DIFFERENCE IS 4' OR GREATER.

DATE_TIME
DGN-SPEC
*REF
*REF
*REF
*REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	220
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 1/13/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, .8 mile west of Mt. Morris Blacktop LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Leaf River - 34 NW, SEC. , TWP. 25N, RNG. 9E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 732 + 50

BORING NO. B-1a
Station 732 + 58
Offset 34.00ft Rt CL
Ground Surface Elev. 94.0 ft

Surface Water Elev. 91.2 ft
Stream Bed Elev. 85.0 ft

Groundwater Elev.:
First Encounter 87.5 ft
Upon Completion Wash ft
After ____ Hrs. ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SOFT brown SILTY CLAY LOAM				
	92.00		0.25 P	29
MEDIUM brown LOAM		1		
		2 3	0.75 P	31
	90.50			
MEDIUM tanish gray SANDY LOAM with LIMESTONE	-5	1		
		4 7		14
	87.50			
LOOSE tanish brown dirty SAND with LIMESTONE		1		
		2 3		
	85.50			
MEDIUM tanish brown dirty SAND & GRAVEL	-10	5		
		6 7		
	83.00			
MEDIUM tanish brown dirty SAND & GRAVEL, with bottom 4" SAND		4		
		6 6		
	80.50			
LOOSE tanish brown fine SAND	-15	2		
		3 6		
	78.00			
MEDIUM Same as above		4		
		5 8		
	75.50			
	-20			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Wash		3		
LOOSE/MEDIUM tan dirty SAND with SILT lens (continued)	73.00	3 7		
Wash		6		
MEDIUM tan dirty SAND with LIMESTONE	70.50	8 9		
MEDIUM tan SAND & GRAVEL	-25	8		
		11 10		
	68.00			
	65.50			
MEDIUM tan SANDY GRAVEL	-30	9		
		11 12		
	63.00			
	60.50			
Wash	-35	6		
MEDIUM tan fine SAND		13 13		
	58.00			
	-40			

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, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 1/12/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72 between Forrestone & Mt. Morris Blacktop LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 32 NE, SEC. , TWP. 25N, RNG. 9E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 644 + 40

BORING NO. B-1b
Station 644 + 08
Offset 13.00ft Rt CL
Ground Surface Elev. 99.3 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 94.0 ft

Groundwater Elev.:
First Encounter 77.3 ft
Upon Completion 78.3 ft
After ____ Hrs. ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SOFT brown CLAY FILL				
	97.30		0.5 P	19
MEDIUM tanish brown LOAM		3		
		2 4	1.0 P	27
	95.80			
STIFF brown LOAM	-5	1		
		3 5	1.5 P	28
	93.30			
MEDIUM brown SILTY LOAM, very little recovery		3		
		3 3	1.0 P	24
	90.80			
MEDIUM tanish brown SILTY CLAY LOAM with SAND lens	-10	1		
		2 3	1.0 P	26
	88.30			
STIFF yellowish tan weathered LIMESTONE with LOAM		4		
		7 7	2.0 P	12
	85.80			
LOOSE rust dirty SAND	-15	4		
		3 4		
	82.80			
MEDIUM rust/yellow dirty SAND weathered LIMESTONE		4		
		5 10		
	80.80			
	-20			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
DENSE yellowish fine SAND LIMESTONE (continued)		6		
	78.30	14 18		
VERY DENSE tanish yellow rust weathered SANDSTONE		25		
		36 39		
	75.80			
	-25			
	-30			
	-35			
	-40			

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	221
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 1/18/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, 4.5 miles east of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 32 NW, SEC. , TWP. 25N, RNG. 9E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 619 + 18

BORING NO. B-1c
Station 619 + 00
Offset 14.00ft Rt CL
Ground Surface Elev. 99.5 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 83.5 ft

Groundwater Elev.:
First Encounter 85.0 ft
Upon Completion ____ ft
After ____ Hrs. ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY SOFT brown SILTY CLAY LOAM	97.50		0.25 P	15
		12		
VERY SOFT tanish brown weathered LIMESTONE with LOAM	96.00	9 6	0.25 P	11
STIFF tanish brown SILTY CLAY TILL	-5	4 5 9	1.25 P	17
	93.50			
STIFF tanish brown SILTY CLAY TILL with LIME ROCK	91.00	5 4 6	1.25 P	17
STIFF brown SILTY LOAM with ORGANICS	-10	3 3 5	1.5 P	23
	88.50			
SOFT gray SILTY LOAM with SAND and TILL lens	86.00	1 2 2	0.41 B	25
MEDIUM brown LOAM TILL	-15	1 3 6	0.75 P	23
	83.50			
STIFF rust tan gray SILT	81.00	3 4 6	1.31 S	25
	-20			
STIFF rust tan SILT, bottom 6" SILT TILL with GRAVEL (continued)	78.00	3 5 7	1.57 S	19
DENSE tan dirty SAND	76.00	7 12 22		
MEDIUM brown dirty SAND	-25 73.00	9 10 16		
MEDIUM gray SILTY SAND	71.00	10 13 12		
VERY STIFF gray SILT	-30	7 13 21	2.53 S	22
	66.00	7 9 15	2.18 S	24
VERY STIFF gray SILT, bottom 4" LIMESTONE	-35 63.50	8 11 32	4.0 P	19
HARD gray/olive green SILTY CLAY TILL	61.00	8 13 20	5.02 S	17
	-40			

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, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 1/18/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, 4.5 miles east of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 32 NW, SEC. , TWP. 25N, RNG. 9E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 619 + 18

BORING NO. B-1c
Station 619 + 00
Offset 14.00ft Rt CL
Ground Surface Elev. 99.5 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 83.5 ft

Groundwater Elev.:
First Encounter 85.0 ft
Upon Completion ____ ft
After ____ Hrs. ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF gray SILTY CLAY, top 6" SILTY CLAY TILL (continued)	58.50	8 11 15	3.71 S	22
	-45			
	-50			
	-55			
	-60			

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DGN SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	222
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Page 1 of 1

Date 1/27/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, 2.6 miles east of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 36 NW, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD HAMMER TYPE

STRUCT. NO.
Station 522 + 64

BORING NO. B-1d
Station 523 + 09
Offset 16.00ft Rt CL
Ground Surface Elev. 98.5 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 88.0 ft

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

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM tanish brown CLAY LOAM			0.5 P	13
	96.50			
VERY STIFF tanish brown SILTY CLAY TILL		3		
		4	3.0 P	19
	95.00	5		
STIFF tanish brown SANDY CLAY TILL	-5	2		
		2	1.03 B	14
	92.50	4		
SOFT brown CLAY TILL		1		
		2	0.41 B	21
	90.00	2		
MEDIUM brown LOAM with LIMESTONE	-10	1		
		2	1.0 P	26
	87.00	3		
VERY DENSE tan weathered LIMESTONE		100/8"		
	85.00			
VERY DENSE white tan weathered LIMESTONE	83.50 -15	100/5"		
	-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, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Page 1 of 1

Date 1/27/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert over a ditch, 2.5 miles east of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 36 NW, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD HAMMER TYPE

STRUCT. NO.
Station 518 + 00

BORING NO. B-1e
Station 517 + 75
Offset 17.00ft Rt CL EB
Ground Surface Elev. 99.1 ft

Surface Water Elev. 86.9 ft
Stream Bed Elev. 87.0 ft

Groundwater Elev.:
First Encounter 84.6 ft
Upon Completion 79.1 ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
STIFF tanish brown CLAY LOAM			1.75 P	20
	97.10			
VERY STIFF brown SILTY CLAY		3		
		5	3.71 S	18
	95.60	8		
VERY STIFF brown SILTY CLAY	-5	3		
		3	2.01 S	23
	93.10	5		
STIFF tanish brown SILTY CLAY		1		
		2	1.40 B	29
	90.60	3		
MEDIUM black LOAM	-10	1		
		2	.75 P	38
	88.10	7		
VERY SOFT tanish gray SILTY TILL		0		
		0	0.16 B	19
	85.60	0		
SOFT tanish gray SILTY CLAY TILL with ORGANICS	-15	0		
		1	0.49 B	17
	83.10	2		
STIFF rust gray SILTY CLAY TILL		1		
		3	1.40 B	15
	80.60	5		
HARD rust gray SILTY CLAY TILL	-20			
HARD rust gray SILTY CLAY TILL (continued)		3	5.98 B	14
		6		
	77.60	13		
MEDIUM tanish white weathered LIMESTONE		3		
		7		
	75.60	13		
MEDIUM weathered rust SANDSTONE with LIMEROCK	-25	7		
		8		
	73.10	3		
DENSE weathered rust SANDSTONE with LIME ROCK		15		
		14		
	70.60	18		
VERY DENSE rust weathered LIME ROCK	69.10 -30	100/4"		
	-35			
	-40			

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	223
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Page 1 of 1

Date 1/28/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, .9 mile esat of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 27 SE, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 438 + 13

BORING NO. B-1f
Station 428 + 29
Offset 12.50ft Lt CL
Ground Surface Elev. 99.0 ft

Surface Water Elev. 90.1 ft
Stream Bed Elev. 90.0 ft

Groundwater Elev.:
First Encounter 84.5 ft
Upon Completion 63.0 ft
After ____ Hrs. ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
STIFF brown LOAM				
			1.25	20
	97.00		P	
brown LOAM with ORGANICS		5		
		6	7.83	29
	95.50	7	B	
STIFF dark brown LOAM	-5	2		
		3	1.5	33
	93.00	4	P	
STIFF brown SILTY CLAY LOAM		2		
		2	1.24	37
	90.50	4	B	
STIFF gray tan SILTY LOAM with GRAVEL	-10	1		
		1	1.25	21
		3	P	
	87.50			
LOOSE tanish gray SAND & GRAVEL		0		
		2		
	85.50	3		
MEDIUM gray fine SAND	-15	2		
		5		
	83.00	6		
MEDIUM gray medium coarse SAND		5		
		7		
	80.50	9		
	-20			
MEDIUM gray medium coarse SAND, bottom 6" olive green weathered LIMESTONE (continued)	78.00	9		
		12		
		15		
15" Wash double pound		5		
MEDIUM gray olive-green medium coarse SAND		9		
	75.00	13		
HARD gray SILTY CLAY TILL	-25	6		
		8	4.53	11
	73.00	12	B	
VERY STIFF gray SILTY CLAY TILL		3		
		5	2.27	14
	70.50	8	B	
STIFF gray SILTY CLAY TILL with fine SAND lens	-30	1		
		4	1.65	14
	68.00	7	B	
VERY STIFF gray SILTY CLAY TILL		4		
		6	3.92	12
	65.50	9	B	
STIFF gray SILTY CLAY TILL with fine SAND lens	-35	2		
		4	1.65	14
	63.00	7	B	
VERY STIFF gray SILTY CLAY TILL, bottom 6" fine SAND		5		
		7	2.47	15
	60.50	8	B	
	-40			

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, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Page 1 of 1

Date 1/25/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert over access drive, .8 mile west of Columbine Road LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 27 SE, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 433 + 25

BORING NO. B-1g
Station 433 + 55
Offset 86.50ft Lt CL
Ground Surface Elev. 95.0 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 85.5 ft
Upon Completion ____ ft
After 24 Hrs. Spring ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
brown, frozen soil SILTY CLAY LOAM				
				37
	93.00			
SOFT brown SILTY CLAY LOAM		3		
		3	0.41	29
	91.50	3	B	
SOFT grayish brown SILTY CLAY LOAM	-5	1		
		2	0.5	28
		2	P	
	88.50			
VERY STIFF tanish gray SILTY LOAM TILL		2		
		3	2.06	15
	86.50	5	B	
STIFF olive-green SILTY LOAM TILL	-10	3		
		4	1.24	15
	84.00	6	B	
gray SILTY CLAY TILL		2		
		3	1.65	13
	81.50	5	B	
VERY STIFF gray SILTY CLAY TILL	-15	3		
		4	3.30	12
	78.50	8	B	
VERY STIFF gray SILT		4		
		7	2.84	18
	76.50	12	S	
HARD gray SILT	-20			
HARD gray SILT (continued)		15	4.5	17
	74.00	13	P	
		16		
VERY STIFF gray SILT		9		
		12	3.5	18
	71.50	12	P	
VERY STIFF gray SILTY CLAY	-25	3		
		7	2.89	17
	69.00	12	B	
HARD gray SILTY CLAY TILL		3		
		6	4.12	16
	66.50	9	B	
Water table came up to the ground surface (under pressure) DENSE tan white rocks, weathered LIMESTONE	-30	2		
		7		
		37		
	63.50			
VERY DENE tan weathered LIMESTONE	62.50	100/4"		
	-35			
	-40			

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	224
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 1/13/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, .8 mile west of Mt. Morris Blacktop LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Leaf River - 34 NW, SEC. , TWP. 25N, RNG. 9E, PM

COUNTY Ogle DRILLING METHOD HAMMER TYPE

STRUCT. NO.
Station 732 + 50

BORING NO. B-2a
Station 732 + 37
Offset 15.00ft Lt CL
Ground Surface Elev. 99.3 ft

Surface Water Elev. 91.2 ft
Stream Bed Elev. 90.3 ft

Groundwater Elev.:
First Encounter 87.3 ft
Upon Completion Wash ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				MEDIUM/STIFF brown SILTY CLAY LOAM
		1.0 P	22	
97.30				
	2			STIFF brown SILTY CLAY
	3	1.25	25	
95.80	5	P		
				VERY STIFF Same as above
-5	3			
	4	2.25	27	
	9	P		
92.80				
	3			LOOSE brown dirty fine SAND
	3		19	
90.80	4			
				LOOSE tanish brown fine SAND
-10	2			
	3			
88.30	5			
	1			LOOSE tanish brown fine SAND with little GRAVEL at bottom
	0			
85.80	5			
	1			LOOSE tanish brown fine SAND
-15	3			
83.30	4			
	3			LOOSE tanish brown fine SAND
	4			
80.80	5			
-20				
	4			tanish brown fine SAND with medium coarse GRAVEL lens (continued)
78.30	6			
	10			
	4			Wash
	6			MEDIUM tanish brown fine SAND
75.80	7			
-25	4			MEDIUM tanish brown fine SAND
	9			
73.30	11			
70.80				
	7			Wash
-30	8			MEDIUM tanish brown weathered LIMESTONE SANDY GRAVEL
68.30	8			
65.80				
-35	15			MEDIUM tan SANDY GRAVEL with dirty LIMESTONE
	14			
63.30	15			
60.80				
-40				

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, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 1/13/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, .8 mile west of Mt. Morris Blacktop LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Leaf River - 34 NW, SEC. , TWP. 25N, RNG. 9E, PM

COUNTY Ogle DRILLING METHOD HAMMER TYPE

STRUCT. NO.
Station 732 + 50

BORING NO. B-2a
Station 732 + 37
Offset 15.00ft Lt CL
Ground Surface Elev. 99.3 ft

Surface Water Elev. 91.2 ft
Stream Bed Elev. 90.3 ft

Groundwater Elev.:
First Encounter 87.3 ft
Upon Completion Wash ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	6			Wash
58.30	9			MEDIUM tanish brown SANDY GRAVEL (continued)
	11			
-45				
-50				
-55				
-60				

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	225
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Page 1 of 1

Date 1/12/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, 5.2 miles east of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 32 NE, SEC. , TWP. 25N, RNG. 9E, PM

COUNTY Ogle DRILLING METHOD HAMMER TYPE

STRUCT. NO.
Station 644 + 40

BORING NO. B-2b
Station 644 + 65
Offset 12.50ft Lt CL
Ground Surface Elev. 99.2 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 94.0 ft

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

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown CLAY FILL				
			0.5	28
	97.20		P	
MEDIUM brown SILTY LOAM with ORGANICS		4		
		2	0.5	28
	95.70	3	P	
MEDIUM brown SILTY LOAM	-5	1		
		1	1.0	31
	93.20	4	P	
VERY STIFF tan CLAY LOAM		2		
		4	2.25	26
	90.70	5	P	
STIFF tan SILTY CLAY LOAM	-10	1		
		2	1.25	23
		3	P	
	87.70			
MEDIUM tanish yellow weathered LIMESTONE with fine SAND		5		
		9		10
	85.70	9		
MEDIUM tanish yellow SANDY LIMESTONE with little SILT	-15	3		
		5		
	83.20	9		
DENSE tanish yellow weathered SANDSTONE with LIMESTONE		10		
		17		
	80.70	28		
	-20			
DENSE tanish yellow fine SAND with LIME ROCK (continued)		16		
	78.20	23		
		20		
light blue weathered SANDSTONE		28		
	75.70	30		
		36		
	-25			
	-30			
	-35			
	-40			

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, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Page 1 of 1

Date 1/18/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, 4.7 miles east of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 32 NW, SEC. , TWP. 25N, RNG. 9E, PM

COUNTY Ogle DRILLING METHOD HAMMER TYPE

STRUCT. NO.
Station 619 + 18

BORING NO. B-2c
Station 618 + 51
Offset 12.50ft Lt CL
Ground Surface Elev. 98.9 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 82.9 ft

Groundwater Elev.:
First Encounter 76.4 ft
Upon Completion 62.6 ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
tan LOAM				14
	96.90			
STIFF tanish brown CLAY TILL		2		
		6	2.0	25
	95.40	4	P	
MEDIUM tanish brown SILTY CLAY TILL with ORGANICS	-5	2		
		2	1.0	22
	92.90	3	P	
MEDIUM gray SILTY TILL with ORGANICS		1		
		2	0.75	26
	90.40	3	P	
MEDIUM brown, tan, olive SILTY TILL	-10	1		
		2	0.75	23
	87.90	3	P	
SOFT gray SILTY CLAY TILL with 15% ORGANICS		1		
		1	0.5	80
	85.40	2	P	
MEDIUM gray SILTY CLAY TILL	-15	2		
		3	0.75	20
	82.90	3	P	
MEDIUM gray tan SILTY CLAY TILL		2		
		3	0.62	21
	80.40	4	B	
	-20			
STIFF tanish gray SILTY CLAY TILL with dirty SAND lens (continued)		1	1.03	26
		1	B	
	77.40	2		
MEDIUM light rust tan dirty SAND		2		
		4		
	75.40	7		
MEDIUM tan fine SAND	-25	4		
		6		
		11		
	72.40			
VERY STIFF gray/tan SANDY CLAY TILL		3		
		6	2.18	17
	70.40	9	S	
HARD gray SILTY CLAY TILL with dirty SAND lens	-30	4		
		7	6.39	18
	67.90	13	B	
STIFF gray SILTY CLAY		4		
		6	1.31	28
	65.40	10	S	
STIFF gray SILT	-35	6		
		9	1.75	23
	62.90	12	S	
VERY DENSE light gray with brown lines LIMESTONE	61.60	100/4"		
	-40			

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DWG-DEG•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	226
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Page 1 of 1

Date 1/27/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert on IL 72, 2.6 miles east of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 36 NW, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 522 + 64

BORING NO. B-2d
Station 522 + 25
Offset 14.00ft Lt CL WB
Ground Surface Elev. 98.4 ft

Surface Water Elev. Dry ft
Stream Bed Elev. 88.0 ft

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

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SOFT tanish brown SILTY CLAY LOAM			0.5	15
	96.40		P	
VERY STIFF tanish brown CLAY TILL		3		
		4	3.25	21
	94.90	6	P	
STIFF tan SANDY LOAM with GRAVEL	-5	2		
		2	1.25	13
	92.40	3	P	
STIFF tan SILTY CLAY TILL		1		
		1	1.75	22
	89.90	4	P	
STIFF tanish brown SANDY LOAM with LIME ROCk	-10	1		
		3	1.25	16
		4	P	
	86.90			
VERY DENSE tanish white weathered LIMESTONE		3		
		31		
	84.90	45		
VERY DENSE tan weathered LIMESTONE	83.40 -15	100/6.5"		
	-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, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Page 1 of 1

Date 1/27/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert, 2.5 miles east of Forreston LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 36 NW, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 518 + 00

BORING NO. B-2e
Station 518 + 30
Offset 14.00ft Lt CL WB
Ground Surface Elev. 99.0 ft

Surface Water Elev. 86.42 ft
Stream Bed Elev. 86.0 ft

Groundwater Elev.:
First Encounter 82.0 ft
Upon Completion 83.0 ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY SOFT brown LOAM			0.0	24
	97.00		P	
STIFF brown tan LOAM TILL		4		
		4	1.24	14
	95.50	5	B	
HARD brown tan gray SILTY LOAM	-5	2		
		4	4.25	15
	93.00	6	P	
HARD tan LOAM (fill) contains weathered LIMESTONE		1		
		5	4.5	16
	90.50	5	P	
MEDIUM black SILT LOAM (looks organic)	-10	2		
		2	0.5	32
	88.00	2	B	
VERY SOFT black SILTY CLAY LOAM		1		
		2	0.25	23
	85.50	3	B	
MEDIUM tan/gray SILT	-15	1		
		2	0.75	21
	82.50	4	B	
MEDIUM tan SAND, contains weathered LIMESTONE		6		
		11		
	80.50	11		
HARD Same as above	79.00 -20			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
		100/4"		
	-25			
	-30			
	-35			
	-40			

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	227
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 2/1/00

ROUTE FA 549 DESCRIPTION P-92-004-97 IL 72 over a culvert, 0.8 mile south of Forreston LOGGED BY Montgomery

SECTION 116 RS-1 LOCATION Maryland Twp. - 27 SE, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD HAMMER TYPE

STRUCT. NO.
Station 438 + 13

BORING NO. B-2f
Station 427 + 90
Offset 14.00ft Rt CL
Ground Surface Elev. 99.6 ft

Surface Water Elev. 91.33 ft
Stream Bed Elev. 90.0 ft

Groundwater Elev.:
First Encounter 84.6 ft
Upon Completion Wash ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
STIFF brown CLAY LOAM		1.5 P	19	Begin Wash	7		
				MEDIUM Same as above	10		
				78.10	12		
97.60							
VERY STIFF Same as above (fill)	7						
	6	6.5	23	MEDIUM gray fine SAND	12		
	7	B			12		
95.60					12		
				75.10			
-5				-25			
VERY STIFF Same as above (fill)	2			STIFF gray CLAY TILL	4		
	2	2.0	22		5	1.25	14
	2	B			6	B	
93.10				73.10			
	1			STIFF gray SILT (sample ripped up) (very soft & plastic)	5		
MEDIUM black SILTY LOAM, 11% ORGANICS	2	0.5	52		6	2.0	20
	2	B			7	P	
90.60				70.60			
-10				-30			
MEDIUM gray SANDY LOAM (SAND lenses)	1			STIFF Same as above	2		
	2	0.5	28		4	1.5	15
	4	B			5	B	
87.60				68.10			
LOOSE gray SAND	2			STIFF gray CLAY TILL	4		
	4				5	1.5	13
	5				5	B	
85.60				65.60			
-15				-35			
LOOSE Same as above	3			VERY STIFF Same as above	5		
	4				5	3.0	9
	4			hard drilling	10	B	
83.10				63.10			
MEDIUM tan SAND & GRAVEL	1			VERY STIFF Same as above	8		
	5				10	3.0	15
	8				13	B	
80.60				60.60			
-20				-40			

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, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 2/1/00

ROUTE FA 549 DESCRIPTION P-92-004-97 IL 72 over a culvert, 0.8 mile south of Forreston LOGGED BY Montgomery

SECTION 116 RS-1 LOCATION Maryland Twp. - 27 SE, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD HAMMER TYPE

STRUCT. NO.
Station 438 + 13

BORING NO. B-2f
Station 427 + 90
Offset 14.00ft Rt CL
Ground Surface Elev. 99.6 ft

Surface Water Elev. 91.33 ft
Stream Bed Elev. 90.0 ft

Groundwater Elev.:
First Encounter 84.6 ft
Upon Completion Wash ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF Same as above	7		
	8	3.0	13
	10	B	
57.60			
MEDIUM tan SAND, contains weathered LIMESTONE	7		
	8		
	11		
55.60			
-45			
DENSE Same as above	30		
	25		
	11		
53.10			
-50			
-55			
-60			

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DGN SPEC•
•REF
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	228
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BORING LOGS

Illinois Department of Transportation
Division of Highways
Illinois Dept. of Transportation

SOIL BORING LOG

Date 1/28/00

ROUTE FA 549 DESCRIPTION P-92-004-97 Culvert over access drive, .8 mile west of Columbine Road LOGGED BY W. Garza

SECTION 116 RS-1 LOCATION Maryland Twp. - 27 SE, SEC. , TWP. 25N, RNG. 8E, PM

COUNTY Ogle DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. _____
Station 433 + 25

BORING NO. B-2g
Station 433 + 05
Offset 16.00ft Lt CL WB
Ground Surface Elev. 98.8 ft

Surface Water Elev. _____ ft
Stream Bed Elev. 90.0 ft

Groundwater Elev.:
First Encounter 81.8 ft
Upon Completion 96.0 ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
STIFF brown CLAY LOAM				
			1.0	21
	96.80		P	
VERY STIFF tanish brown SILTY CLAY		5		
		4	3.5	23
	95.30	4	P	
MEDIUM brown SILTY CLAY LOAM	-5	3		
		4	1.0	28
	92.80	5	P	
MEDIUM gray brown SILTY CLAY LOAM		2		
		3	0.75	25
	90.30	3	P	
MEDIUM light blue SANDY LOAM with GRAVEL, SAND lens	-10	0		
		2	0.75	20
	87.80	3	P	
MEDIUM tan brown gray SANDY LOAM TILL		0		
		2	0.75	25
	85.30	3	P	
STIFF gray SANDY CLAY TILL	-15	3		
		3	1.90	11
	82.80	4	B	
HARD gray SILT with SAND lens		3		
		6	5.24	16
	80.30	9	S	
VERY STIFF gray SILTY TILL	-20			
VERY STIFF gray SILTY TILL (continued)		3	2.62	17
	77.80	6	S	
		9		
HARD gray SILTY TILL		8		
		11	4.36	15
	75.30	12	S	
VERY STIFF gray SILT with rocks	-25	18		
		12	3.5	18
	72.80	15	P	
HARD gray SILT with CLAY lens		10		
		7	4.58	16
	70.30	12	S	
HARD gray SILTY CLAY	-30	5		
		11	4.53	17
	67.80	14	B	
STIFF gray SILTY CLAY TILL, bottom 6" white LIMESTONE		3		
		6	1.65	18
		48	B	
	64.80			
VERY DENSE white-ish tan LIMESTONE	63.80 -35	100/9"		
	-40			

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, from 137 (Rev. 8-99)

•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	229
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

WATER MAIN IMPROVEMENTS

FITTINGS (RJT)

WM - F1
6" PLUG
STA 370+15

WM - F2
TAPPING VALVES
& SLEEVES 6"
LOCATE IN FIELD

WM - F3
6" X 6" TEE
STA 369+92

WM - F4
6" X 6" TEE
STA 372+60

WM - F5
6" X 6" TEE
STA 371+92

WM - F6, F7
6" 45° BEND
LOCATE IN FIELD

WM - F8, F10, F11
6" PLUG
LOCATE IN FIELD

WM - F9
6" X 6" TEE
STA 373+86

WM - F13
6" PLUG
LOCATE IN FIELD

SERVICES

WM - S1, S11, S12
WATER SERVICE CONNECTION - 1"
LOCATE IN FIELD

WM - S6
WATER SERVICE CONNECTION - 2"
LOCATE IN FIELD

WS - S1, - 50'
WATER SERVICE LINE 1"
LOCATE IN FIELD

WS - S6 - 20'
WATER SERVICE LINE 2"
LOCATE IN FIELD

WS - S11 - 56'
WATER SERVICE LINE 1"
LOCATE IN FIELD

WS - S12 - 73'
WATER SERVICE LINE 1"
LOCATE IN FIELD

DS - 1
DOMESTIC WATER SERVICE BOXES
LOCATE IN FIELD

VALVES

WM - VB1, VB2, VB3, VB4
ABANDON EXISTING GATE VALVE BOX - 6"
LOCATE IN FIELD

WM - GV1, GV2, GV3, GV4
GATE VALVE WITH BOX - 6"
LOCATE IN FIELD

FIRE HYDRANT

WM - FH1
FIRE HYDRANT TO BE REMOVED
STA 370+00
SALVAGE TO VILLAGE OF FORRESTON

WM - FH2
FIRE HYDRANT WITH AUXILIARY VALVE & VALVE BOX
STA 369+92
PROVIDED BY VILLAGE OF FORRESTON
LOCATE IN FIELD

WM - FH3
FIRE HYDRANT TO BE REMOVED
STA 372+05
SALVAGE TO VILLAGE OF FORRESTON

PIPES

WM - P1
APPROX. 45 L.F. OF 6"
FROM STA 369+47 TO 369+92

WM - P2
APPROX 14 L.F. OF 6"
ADDITIONAL HYDRANT LEADER

WM - P3
APPROX 200 L.F. OF 6"
FROM STA 369+92 TO 371+92

WM - P4
APPROX 20 L.F. OF 6"

WM - P5
APPROX 68 L.F. OF 6"
FROM STA 371+92 TO STA 372+60

WM - P6
APPROX 75 L.F. OF 6"
FROM STA 198+96 TO STA 199+70 (ASH)

WM - P7
APPROX 126 L.F. OF 6"
FROM STA 372+60 TO 373+86

WM - P8
APPROX 180 L.F. OF 6"
FROM STA 219+70 TO STA 221+50

WM - P9
APPROX 242 L.F. OF 6"
FROM STA 373+86 TO STA 376+28

MATCHLINE STA 375+00

ASH AVE.
CHESTNUT AVE.
370+00
371
372
373
374
200+00
220+00
201
221
219
218
199
IL 72

EXISTING WATER LINE TO BE ABANDONED IN PLACE

PAVEMENT PATCHING, TYPE III - 8"

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

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WATER MAIN IMPROVEMENTS

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	230
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

WATER MAIN IMPROVEMENTS

FITTINGS (RJT)

WM - F12
6" X 6" CROSS
STA 376+28

WM - F14
6" X 6" TEE
STA 376+29

WM - F15, F16, F18
6" PLUG
LOCATE IN FIELD

WM - F17
6" - 11 1/4° BEND
STA 378+41

VALVES

WM - GV5, GV6, GV7
GATE VALVE WITH BOX - 6"
LOCATE IN FIELD

FIRE HYDRANT

WM - FH3A
STA 376+52
FIRE HYDRANT AND VALVE TO BE MOVED

WM - FH3B
STA 240+48 (OAK)
RELOCATE HYDRANT AND VALVE FH3A

SERVICES

WM - S2, S3, S4, S5
WATER SERVICE CONNECTION - 1"
LOCATE IN FIELD

WM - S7
WATER SERVICE CONNECTION - 1-1/4"
LOCATE IN FIELD

WS - S2 - 21'
WATER SERVICE LINE - 1"
LOCATE IN FIELD

WS - S3 - 18'
WATER SERVICE LINE - 1"
LOCATE IN FIELD

WS - S4 - 24'
WATER SERVICE LINE - 1"
LOCATE IN FIELD

WS - S5 - 61'
WATER SERVICE LINE - 1"
LOCATE IN FIELD

WS - S7 - 20'
WATER SERVICE LINE - 1 1/4"
LOCATE IN FIELD

PIPES

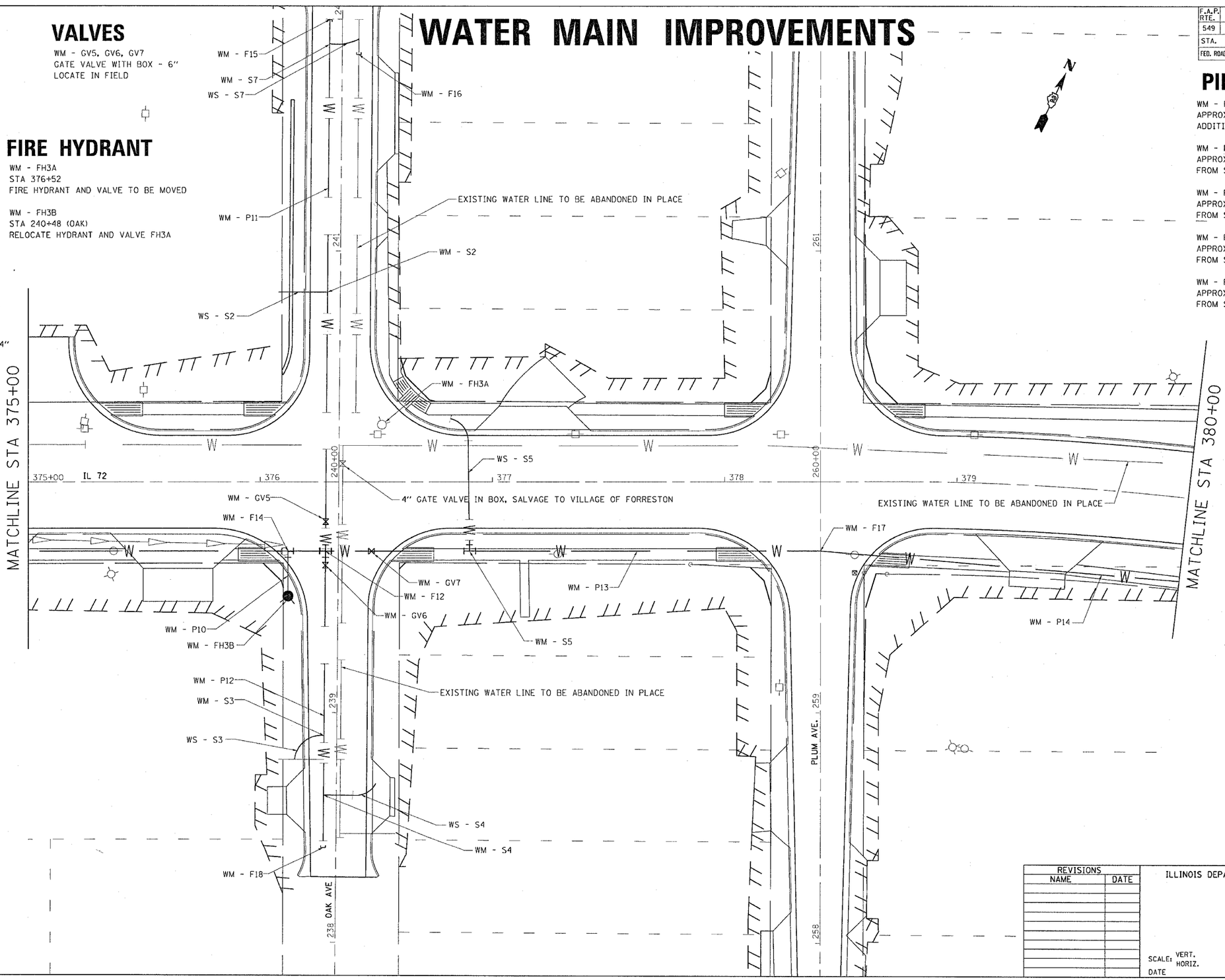
WM - P10
APPROX 20 L.F. OF 6"
ADDITIONAL HYDRANT LEADER

WM - P11
APPROX 230 L.F. OF 6"
FROM STA 239+70 TO STA 242+00 (OAK)

WM - P12
APPROX 130 L.F. OF 6"
FROM STA 238+40 TO 239+70 (OAK)

WM - P13
APPROX 213 L.F. OF 6"
FROM STA 376+28 TO 378+41

WM - P14
APPROX 168 L.F. OF 6"
FROM STA 378+41 TO 380+13



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

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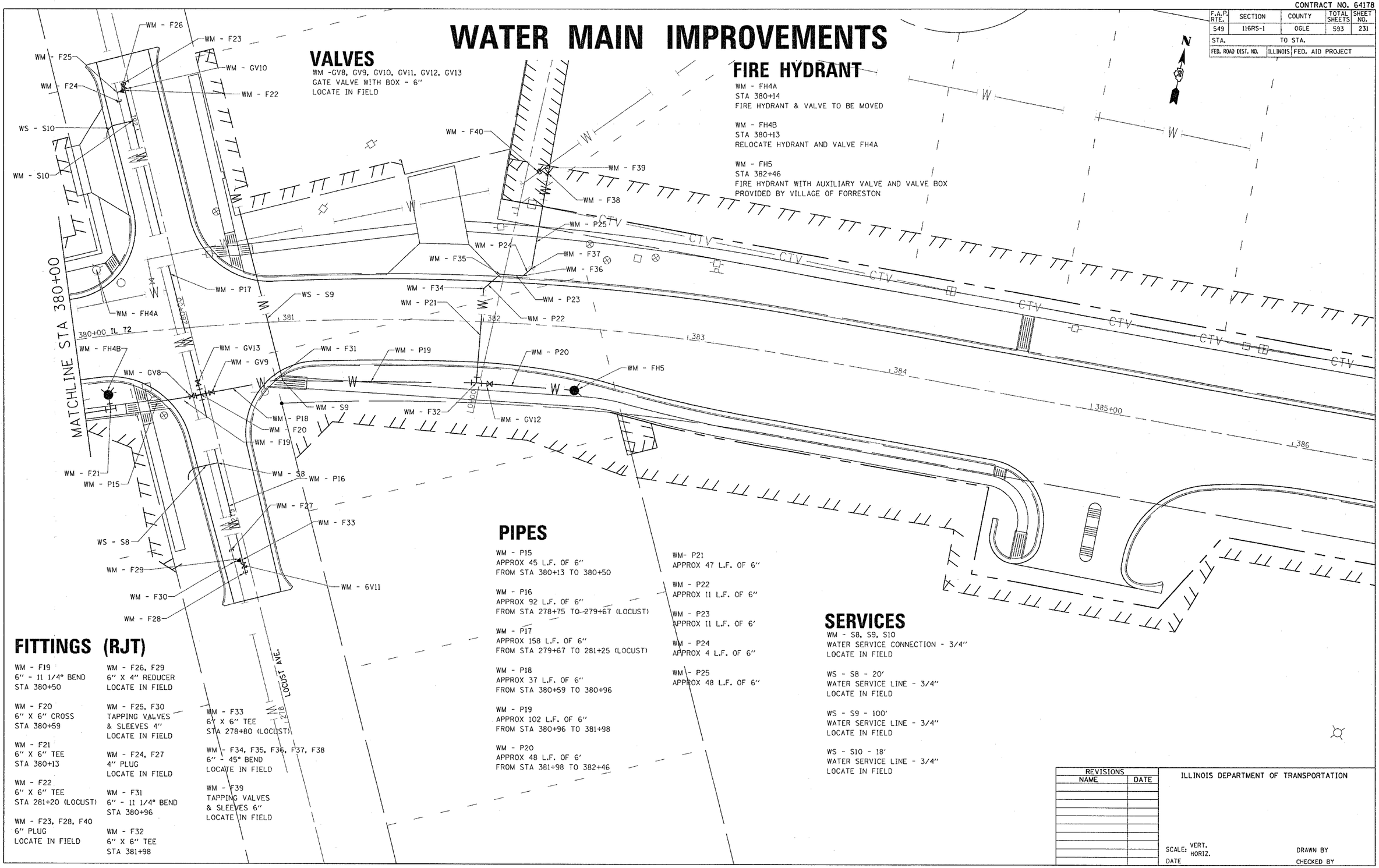
WATER MAIN IMPROVEMENTS

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	231
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

WATER MAIN IMPROVEMENTS



VALVES

WM -GV8, GV9, GV10, GV11, GV12, GV13
GATE VALVE WITH BOX - 6"
LOCATE IN FIELD

FIRE HYDRANT

WM - FH4A
STA 380+14
FIRE HYDRANT & VALVE TO BE MOVED

WM - FH4B
STA 380+13
RELOCATE HYDRANT AND VALVE FH4A

WM - FH5
STA 382+46
FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX
PROVIDED BY VILLAGE OF FORRESTON

FITTINGS (RJT)

WM - F19
6" - 11 1/4° BEND
STA 380+50

WM - F20
6" X 6" CROSS
STA 380+59

WM - F21
6" X 6" TEE
STA 380+13

WM - F22
6" X 6" TEE
STA 281+20 (LOCUST)

WM - F23, F28, F40
6" PLUG
LOCATE IN FIELD

WM - F26, F29
6" X 4" REDUCER
LOCATE IN FIELD

WM - F25, F30
TAPPING VALVES
& SLEEVES 4"
LOCATE IN FIELD

WM - F24, F27
4" PLUG
LOCATE IN FIELD

WM - F31
6" - 11 1/4° BEND
STA 380+96

WM - F32
6" X 6" TEE
STA 381+98

WM - F33
6" X 6" TEE
STA 278+80 (LOCUST)

WM - F34, F35, F36, F37, F38
6" - 45° BEND
LOCATE IN FIELD

WM - F39
TAPPING VALVES
& SLEEVES 6"
LOCATE IN FIELD

PIPES

WM - P15
APPROX 45 L.F. OF 6"
FROM STA 380+13 TO 380+50

WM - P16
APPROX 92 L.F. OF 6"
FROM STA 278+75 TO 279+67 (LOCUST)

WM - P17
APPROX 158 L.F. OF 6"
FROM STA 279+67 TO 281+25 (LOCUST)

WM - P18
APPROX 37 L.F. OF 6"
FROM STA 380+59 TO 380+96

WM - P19
APPROX 102 L.F. OF 6"
FROM STA 380+96 TO 381+98

WM - P20
APPROX 48 L.F. OF 6'
FROM STA 381+98 TO 382+46

WM- P21
APPROX 47 L.F. OF 6"

WM - P22
APPROX 11 L.F. OF 6"

WM - P23
APPROX 11 L.F. OF 6'

WM - P24
APPROX 4 L.F. OF 6"

WM - P25
APPROX 48 L.F. OF 6"

SERVICES

WM - S8, S9, S10
WATER SERVICE CONNECTION - 3/4"
LOCATE IN FIELD

WS - S8 - 20'
WATER SERVICE LINE - 3/4"
LOCATE IN FIELD

WS - S9 - 100'
WATER SERVICE LINE - 3/4"
LOCATE IN FIELD

WS - S10 - 18'
WATER SERVICE LINE - 3/4"
LOCATE IN FIELD

REVISIONS NAME	DATE

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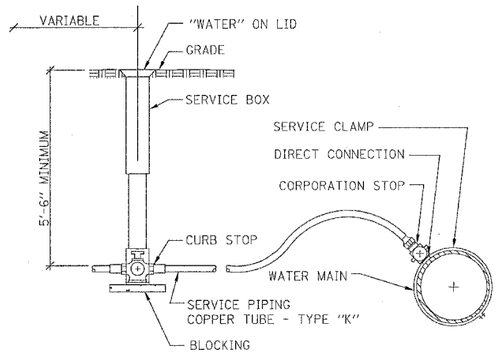
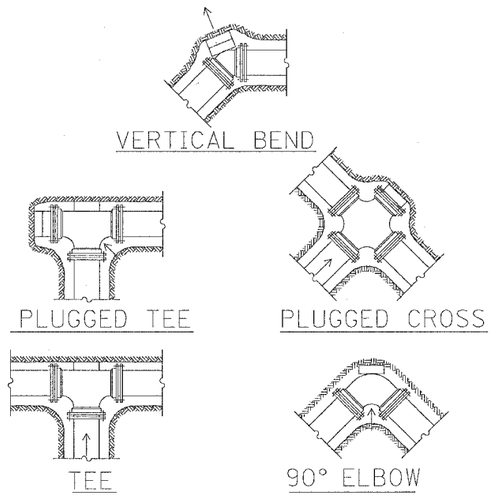
WATER MAIN IMPROVEMENTS

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	232
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TAP SERVICE
PIPING INSTALLATION – COPPER
2594.2–B N.T.S.

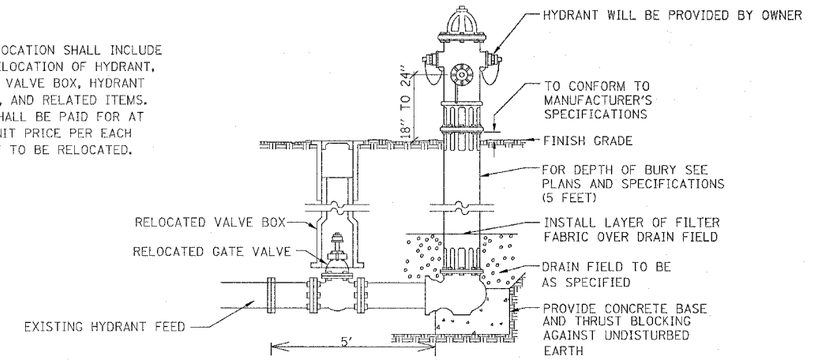


NOTES:
ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH.
ARROWS INDICATE DIRECTION OF THRUST.
ALL BLOCKS TO BE 3000 PSI CONCRETE.
ALL FITTINGS SHOWN IN PLAN VIEW EXCEPT VERTICAL BEND.

2594.1–B THRUST BLOCK INSTALLATION
N.T.S.

NOTE:

HYDRANT RELOCATION SHALL INCLUDE COMPLETE RELOCATION OF HYDRANT, GATE VALVE, VALVE BOX, HYDRANT BRANCH PIPE, AND RELATED ITEMS. THIS UNIT SHALL BE PAID FOR AT CONTRACT UNIT PRICE PER EACH FOR HYDRANT TO BE RELOCATED.



NOTES:
CONCRETE BASE AND BLOCKING MATERIAL SHALL NOT BLOCK NOR OBSTRUCT HYDRANT DRAIN.

HYDRANT INSTALLATION COMPLETE SHALL INCLUDE HYDRANT, GATE VALVE, VALVE BOX, HYDRANT BRANCH PIPE, AND TEE. THIS UNIT SHALL BE PAID FOR AT CONTRACT UNIT PRICE PER EACH FOR HYDRANT INSTALLATION COMPLETE.

02594.3–C HYDRANT INSTALLATION
N.T.S.

GENERAL NOTES:

R.J.T. INDICATES RESTRAINED JOINT TYPE.

COORDINATE WITH VILLAGE PUBLIC WATER DEPARTMENT FOR FILLING, DISINFECTING, FLUSHING AND TESTING OF MAINS. INSTALL TEMPORARY FITTINGS AS NECESSARY. COST INCIDENTAL TO 6" WATER MAIN.

ALL WATER MAIN SHALL HAVE 5.5 FOOT MINIMUM BURY DEPTH AND 10' MINIMUM HORIZONTAL AND 18" VERTICAL SEPARATION FROM SANITARY AND STORM SEWER.

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS, LATEST EDITION

CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY LOCATIONS IN FIELD.

QUANTITIES SHOWN ARE ESTIMATES FOR INFORMATION ONLY. PAYMENT WILL BE BASED ON ACTUAL QUANTITIES MEASURED IN THE FIELD OR ON PAYMENT LIMIT DETAILS.

ALL EXCAVATIONS FOR STRUCTURES SHALL BE KEPT DE WATERED DURING CONSTRUCTION UNTIL BACK FILL IS IN PLACE.

ALL WATER MAIN SHALL BE DUCTILE IRON, CLASS 52.

ALL WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 41-2.14 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.

TRENCH BACK FILL SHALL BE USED IN LOCATIONS WHERE THERE IS EXISTING AND PROPOSED PAVEMENT. THE PAVEMENT AND BASE SHALL BE REPLACED WITH THE SAME TYPE AND SPECIFICATIONS USED FOR THE EXISTING PAVEMENT.

DIMENSIONS SHOWING PROPOSED WATER MAIN LOCATIONS ARE APPROXIMATE. THE HORIZONTAL ALIGNMENT MAY BE ADJUSTED WITH THE ENGINEER'S APPROVAL WHERE EXISTING BURIED UTILITIES MAY CONFLICT.

CONNECTION OF WATER SERVICES SHALL INCLUDE CORPORATION STOP AND CONNECTION OF COPPER WATER SERVICE TO CORPORATION. LOCATION OF WATER SERVICES AND CURB STOPS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.

MAIN SHUT DOWNS SHALL BE KEPT TO A MINIMUM. WORK SHALL BE COORDINATED WITH VILLAGE OF PUBLIC WORKS PERSONNEL. NO USER SHALL BE WITHOUT WATER SERVICE FOR MORE THAN 24 HOURS UNLESS SPECIAL APPROVAL IS OBTAINED.

ALL WATER MAIN SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 41-2.13 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.

CONTRACTOR SHALL COORDINATE ALL WATER MAIN CONSTRUCTION ACTIVITIES WITH THE VILLAGE OF FORRESTON PUBLIC WORKS DEPARTMENT (ALAN CRUTHIS, SUPERINTENDENT OF PUBLIC WORKS) AND VILLAGE ENGINEER (FEHR-GRAHAM & ASSOCIATES, CONTACT MICK GRONEWOLD).

CONTRACTOR SHALL COORDINATE WATER MAIN CONSTRUCTION ACTIVITIES IN FRONT OF THE VILLAGE OF FORRESTON FIRE STATION WITH FIRE CHIEF JIM DAWS (815)938-2345. CONTRACTOR SHALL GIVE THE FIRE DEPARTMENT A MINIMUM ONE WEEK NOTICE PRIOR TO BEGINNING THIS WORK.

ACTUAL LOCATION OF FIRE HYDRANTS TO BE DETERMINED BY VILLAGE OF FORRESTON SUPERINTENDENT OF PUBLIC WORKS AND FORRESTON FIRE PROTECTION DISTRICT FIRE CHIEF.

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CONTRACT NO. 64178

LIGHTING IMPROVEMENTS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	233
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LIGHTING FOUNDATION REMOVAL

LR - FR1
STA 369+89.06
RELOCATE EXISTING LIGHTING UNIT TO LR - PF1

LR - FR2
STA 372+11.70
RELOCATE EXISTING LIGHTING UNIT TO LR - PF2

LR - FR3
STA 373+63.88
RELOCATE EXISTING LIGHTING UNIT TO LR - PF3

LIGHT POLE FOUNDATION

LR - PF1
LIGHT POLE FOUNDATION 24" DIAMETER, WITH GROUND ROD
STA. 369+89.06
FIELD LOCATE
2' BEHIND CURB

LR - PF2
LIGHT POLE FOUNDATION 24" DIAMETER, WITH GROUND ROD
STA 372+00
5' BEHIND CURB

LR - PF3
LIGHT POLE FOUNDATION 24" DIAMETER, WITH GROUND ROD
STA 374+20
5' BEHIND CURB

CONDUIT IN TRENCH

LR - C1 - 64'
CONDUIT IN TRENCH, 1 1/2" INTERMEDIATE METAL
STA 369+89

LR - C2 - 41'
CONDUIT IN TRENCH, 1 1/2" INTERMEDIATE METAL
STA 372+00 TO 372+11

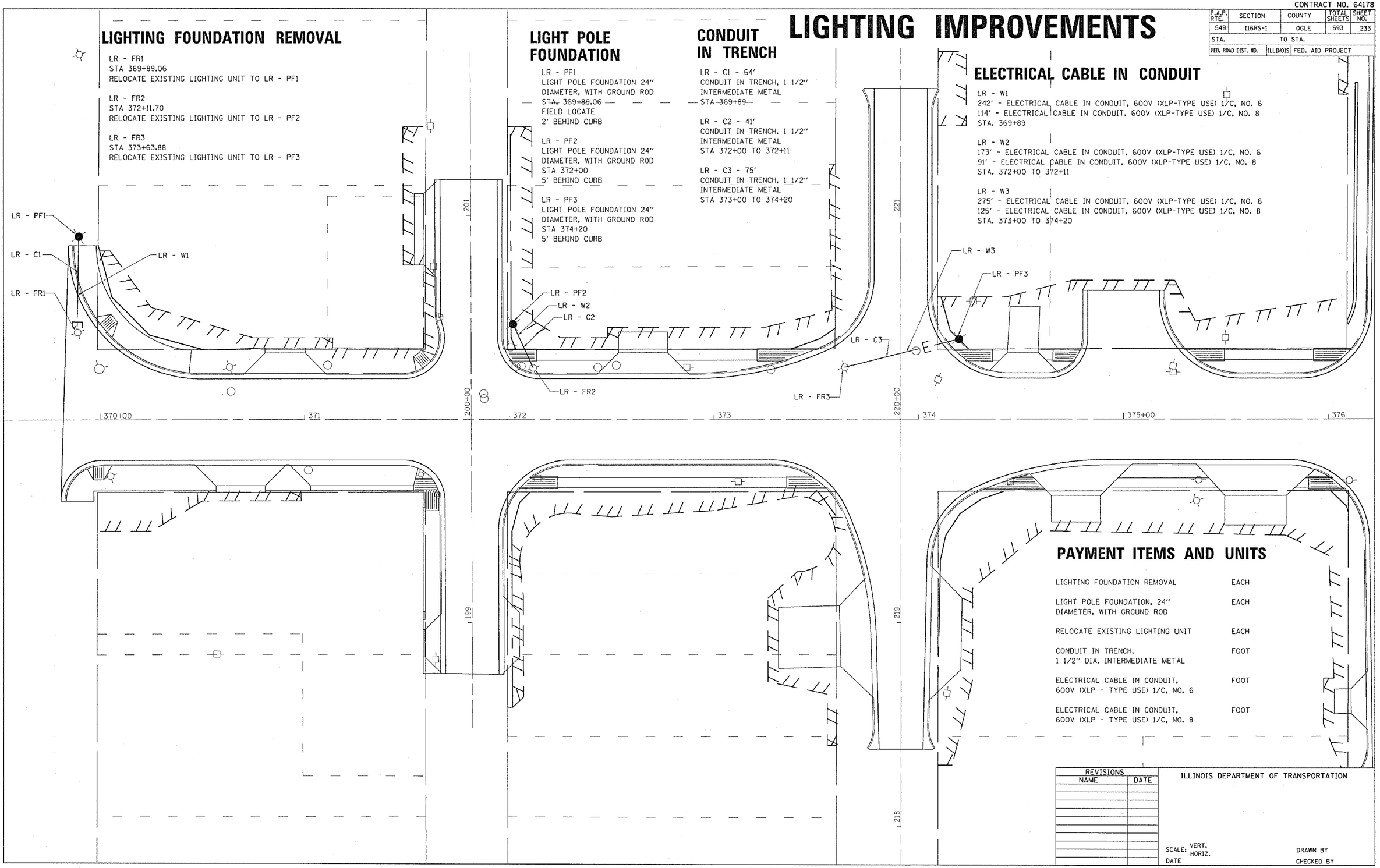
LR - C3 - 75'
CONDUIT IN TRENCH, 1 1/2" INTERMEDIATE METAL
STA 373+00 TO 374+20

ELECTRICAL CABLE IN CONDUIT

LR - W1
242' - ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C, NO. 6
114' - ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C, NO. 8
STA. 369+89

LR - W2
173' - ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C, NO. 6
91' - ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C, NO. 8
STA. 372+00 TO 372+11

LR - W3
275' - ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C, NO. 6
125' - ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C, NO. 8
STA. 373+00 TO 374+20



PAYMENT ITEMS AND UNITS

LIGHTING FOUNDATION REMOVAL	EACH
LIGHT POLE FOUNDATION, 24" DIAMETER, WITH GROUND ROD	EACH
RELOCATE EXISTING LIGHTING UNIT	EACH
CONDUIT IN TRENCH, 1 1/2" DIA. INTERMEDIATE METAL	FOOT
ELECTRICAL CABLE IN CONDUIT, 600V (XLP - TYPE USE) 1/C, NO. 6	FOOT
ELECTRICAL CABLE IN CONDUIT, 600V (XLP - TYPE USE) 1/C, NO. 8	FOOT

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LIGHTING IMPROVEMENTS

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	234
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

METAL END SECTIONS, SPECIAL
STA 672+00 LT

CONTECH PIPES NOTES:

1) ALL ELEVATIONS, DIMENSIONS AND LOCATIONS OF PIPES, SHALL BE VERIFIED BY THE ENGINEER PRIOR TO RELEASING FOR FABRICATION.
2) ALL CUTS, AND WELDS SHALL BE PAINTED WITH A ZINC RICH PAINT (GALVANOX OR EQUIVALENT) BASED PAINT.
3) IN SITUATIONS WHERE A FINE-GRAINED BACKFILL MATERIAL IS USED ADJACENT TO THE PIPE SYSTEM, AND ESPECIALLY IN SITUATIONS INVOLVING HIGH GROUNDWATER TABLES, CONSIDERATION SHOULD BE GIVEN TO THE USE OF GASKETED PIPE JOINTS. AT THE VERY LEAST, THE PIPE JOINTS SHOULD BE WRAPPED IN A SUITABLE, NON-WOVEN GEOTEXTILE FABRIC TO PREVENT INFILTRATION OF FINES INTO THE PIPE SYSTEM."
4) PIPE MADE FROM 48"*9 EQRS, 3"x1" ALT2, XXga., CORRUGATED STEEL PIPE ARCH
5) MINIMUM COVER HEIGHT FOR PIPE DESCRIBED IN NOTE #4 IS 12".
6) CSP IS SUBJECT TO MANUFACTURERS TOLERANCES.
7) THE METAL END SECTIONS, SPECIAL SHALL BE CONSTRUCTED ACCORDING TO SECTION 542 OF THE STANDARD SPECIFICATION AND AS SPECIFIED HEREIN.
8) THE METAL END SECTIONS, SPECIAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR METAL END SECTIONS, SPECIAL WHICH PRICE SHALL INCLUDE WALE NUTS, BOLTS, NUTS, WALE BEAMS, ANCHOR RODS, DEADMAN ANCHORS, HUGGER BAND, PLATES, ALUMINUM 48" EQRS PIPE, CORRUGATED ALUMINUM (SOLID STUB), AND NECESSARY ONSITE FABRICATION NEEDED TO ASSEMBLE IN PLACE.

SPECIFICATION FOR ALUMINUM STRUCTURAL PLATE

SCOPE: THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE ALUMINUM STRUCTURAL PLATE STRUCTURE DETAILED IN THE PLANS.

MATERIAL: THE ALUMINUM STRUCTURAL PLATE STRUCTURE SHALL CONSIST OF PLATES AND APPURTENANT ITEMS AS SHOWN ON THE PLANS AND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO 219 AND ASTM B 746. THE CORRUGATED PLATE (AND RIBS IF REQUIRED) SHALL BE CURVED AND BOLT HOLE PUNCHED AT THE PLANT. PLATE THICKNESS AND RIB SPACINGS SHALL BE AS INDICATED ON THE PLANS. ALL MANUFACTURING PROCESSES INCLUDING CORRUGATING, PUNCHING, CURVING AND GALVANIZING SHALL BE PERFORMED WITHIN THE UNITED STATES USING RAW MATERIALS MADE IN THE UNITED STATES.

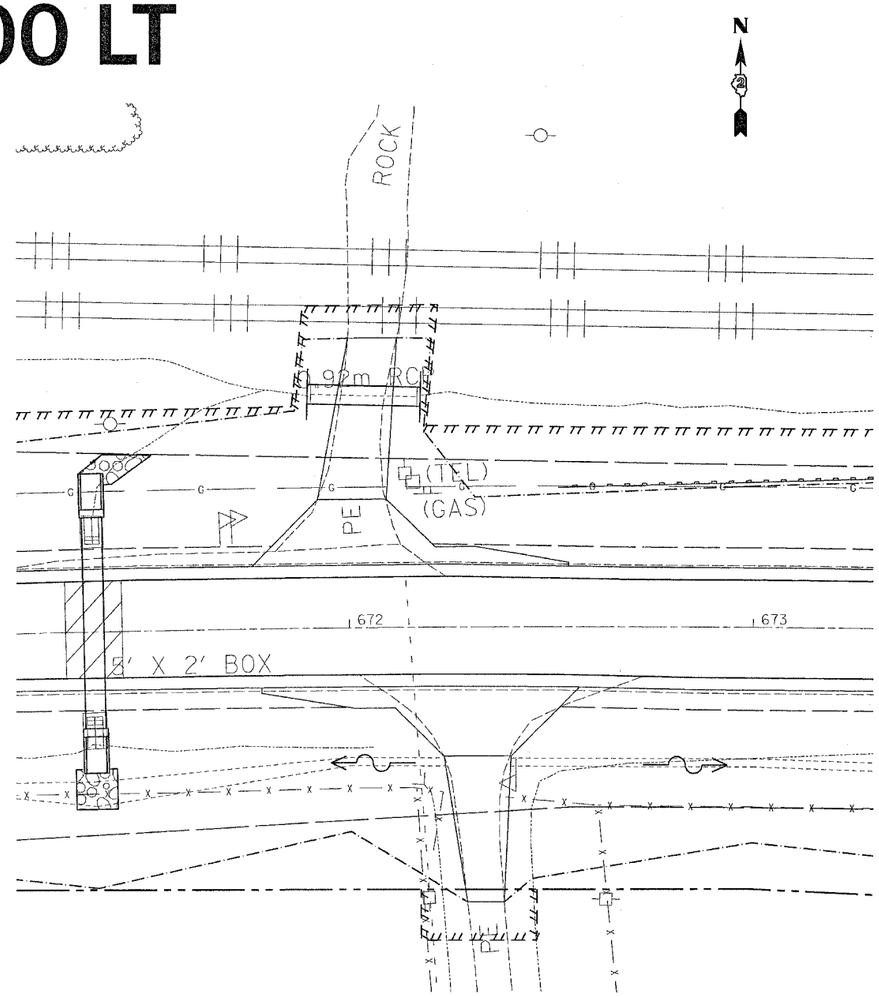
BOLTS AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307 OR ASTM A449.

ASSEMBLY: THE STRUCTURE SHALL BE ASSEMBLED IN ACCORDANCE WITH THE SHOP DRAWINGS PROVIDED BY THE MANUFACTURER AND PER THE MANUFACTURER'S RECOMMENDATIONS. BOLTS SHALL BE TIGHTENED USING AN APPLIED TORQUE OF BETWEEN 100 AND 150 FT.-LBS.

INSTALLATION: THE STRUCTURE SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDATIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26 (DIVISION II).

BACKFILL: THE STRUCTURE SHALL BE BACKFILLED USING CLEAN WELL GRADED GRANULAR MATERIAL THAT MEETS THE REQUIREMENTS OF AASHTO M 145 FOR SOIL CLASSIFICATIONS A-1, A-2 OR A3. BACKFILL MUST BE PLACED SYMMETRICALLY ON EACH SIDE OF THE STRUCTURE IN 6 TO 8 INCH LIFTS. EACH LIFT SHALL BE COMPACTED TO A MINIMUM OF 90 PERCENT DENSITY PER AASHTO T-99.

NOTE: CONSTRUCTION LOADS THAT EXCEED HIGHWAY LOAD LIMITS ARE NOT ALLOWED ON THE STRUCTURE WITHOUT APPROVAL FROM THE ENGINEER.



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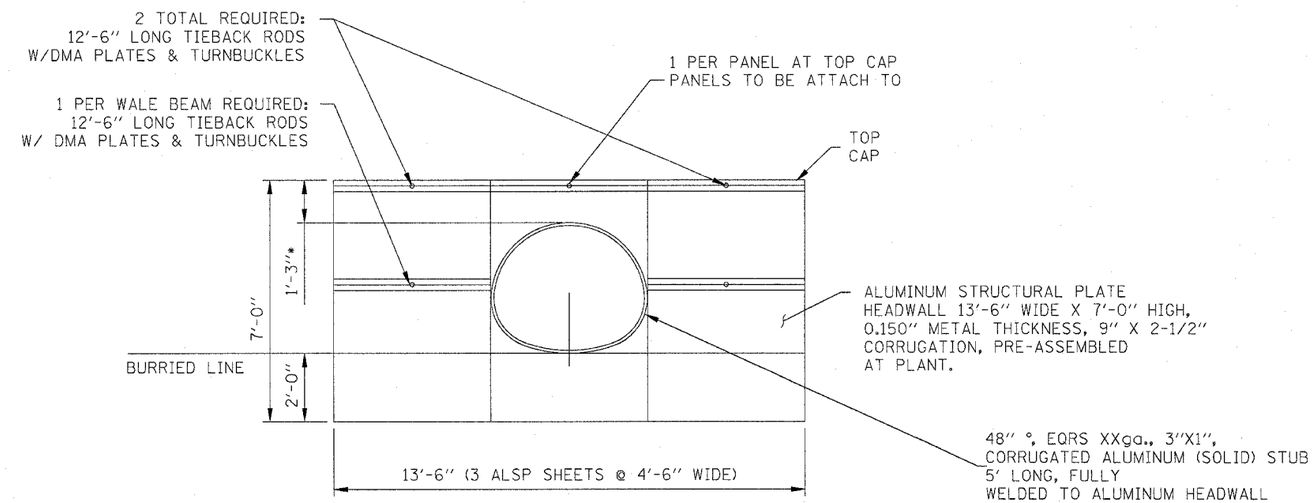
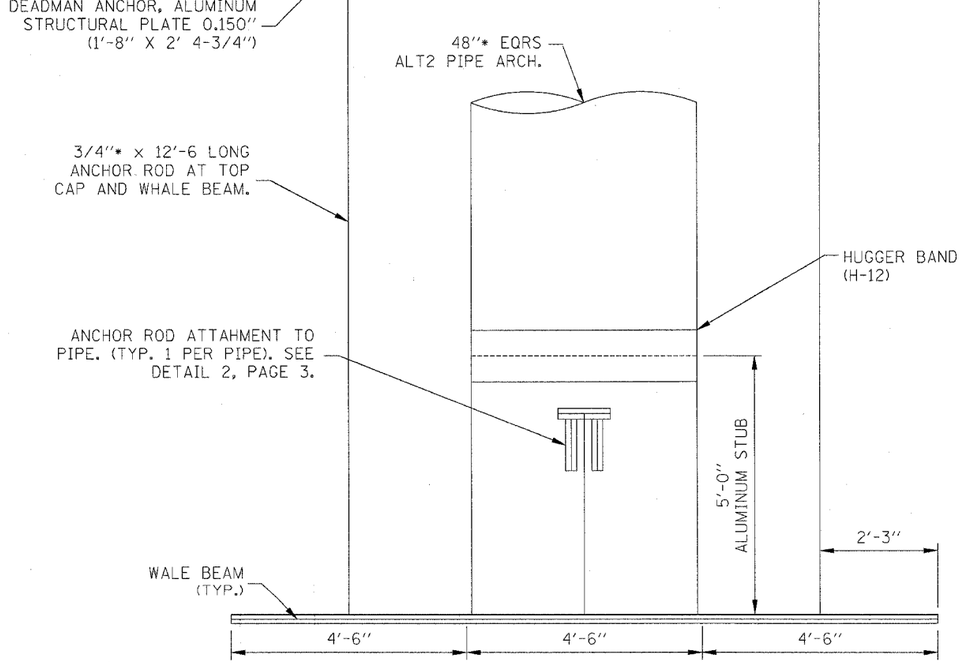
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	11685:1	OGLE	593	235
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



1 END VIEW
SCALE : 1/4" = 1'-0"



2 PLAN VIEW
SCALE : 3/8" = 1'-0"

REVISIONS NAME	DATE

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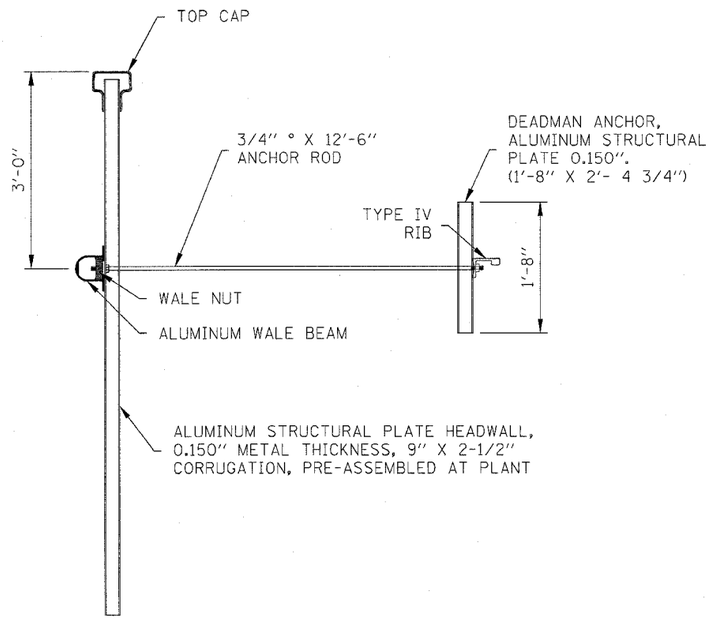
REFERENCE = REF

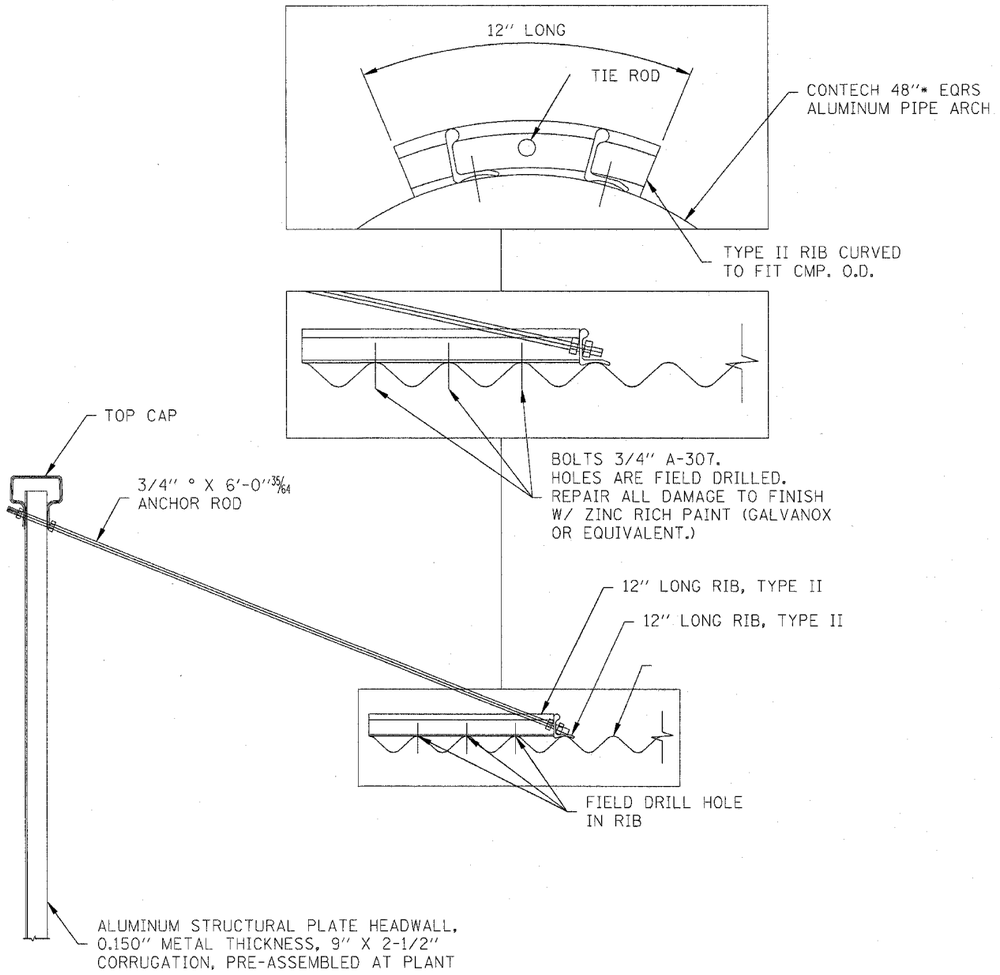
METAL END SECTIONS, SPECIAL

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	236
STA. _____	TO STA. _____			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



1 HEADWALL ASSEMBLY AND DEADMAN ANCHOR
SCALE : N.T.S.



2 HEADWALL ASSEMBLY AND CROWN RIB ORIENTATION
SCALE : N.T.S.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

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METAL END SECTIONS, SPECIAL

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	237
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

MANHOLES, SPECIAL

GENERAL NOTES

THE MANHOLES, SPECIAL SHALL BE CONSTRUCTED ACCORDING TO SECTION 602 OF THE STANDARD SPECIFICATION AND AS SPECIFIED HEREIN.

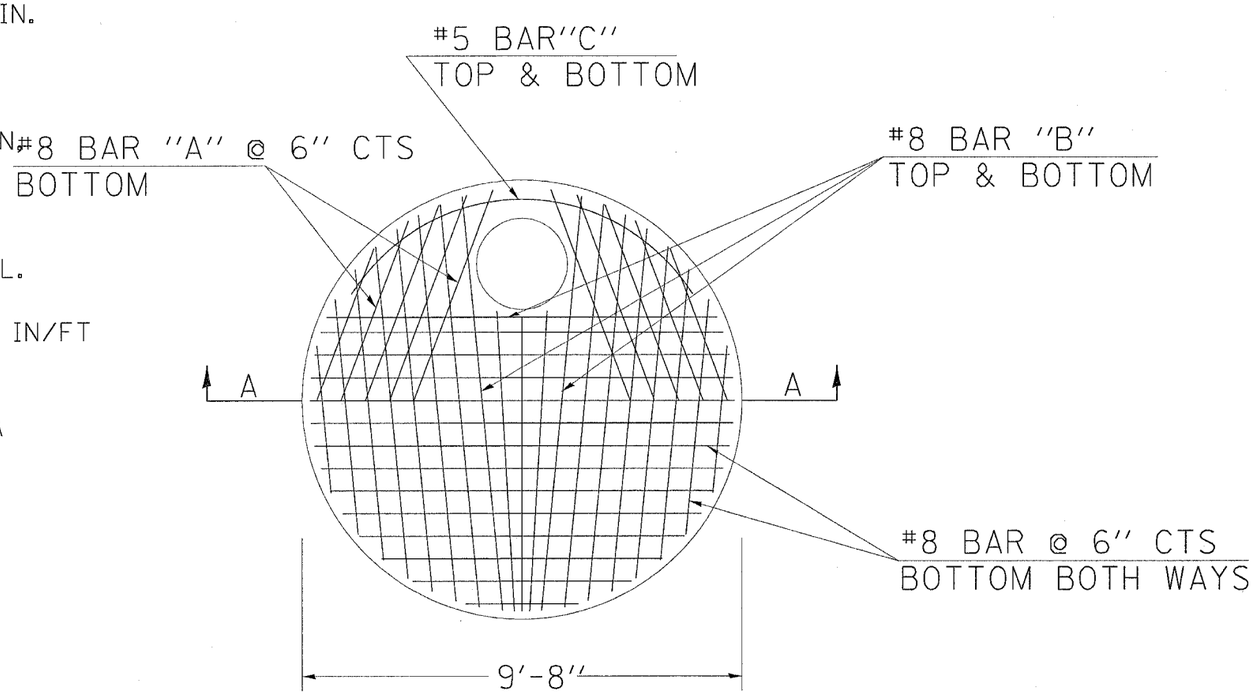
THE MANHOLES, SPECIAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, MANHOLES SPECIAL, WHICH PRICE SHALL INCLUDE ALL FRAMES, LIDS, CLASS SI CONCRETE, REINFORCEMENT BARS, SAND CUSHION, FLAT SLAB TOPS AND ALL EXCAVATION AND BACKFILLING.

*THE CONTRACTOR SHALL USE AN INVERTED PIPE CULVERT CLASS A, TYPE 1, 96" TO CONSTRUCT THE MANHOLES, SPECIAL.

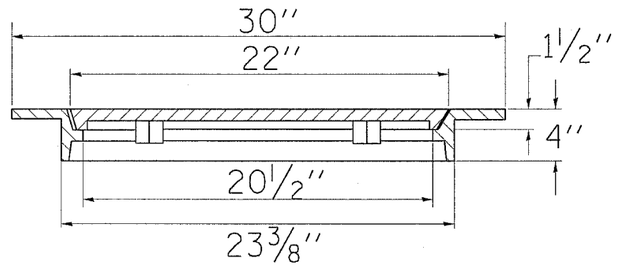
*THE BOTTOM SLAB SHALL BE REINFORCED WITH A MINIMUM OF 0.46 SQ IN/FT IN BOTH DIRECTIONS.

*THE TOP SLAB SHALL BE CONSTRUCTED OF CLASS SI CONCRETE WITH A MINIMUM OF 1.495 SQ IN/FT OF REINFORCEMENT.

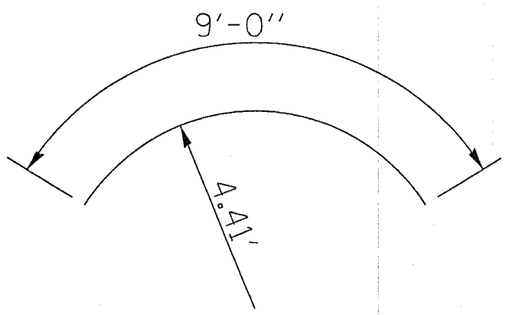
*LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.



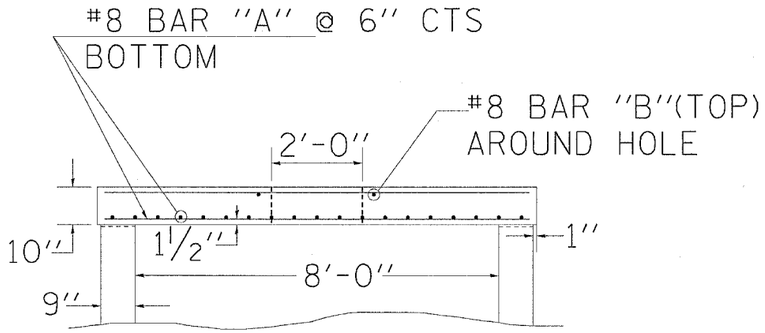
PLAN



FRAME AND LID DETAIL



BAR C



SECTION A-A

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. HORIZ.

DATE

DRAWN BY

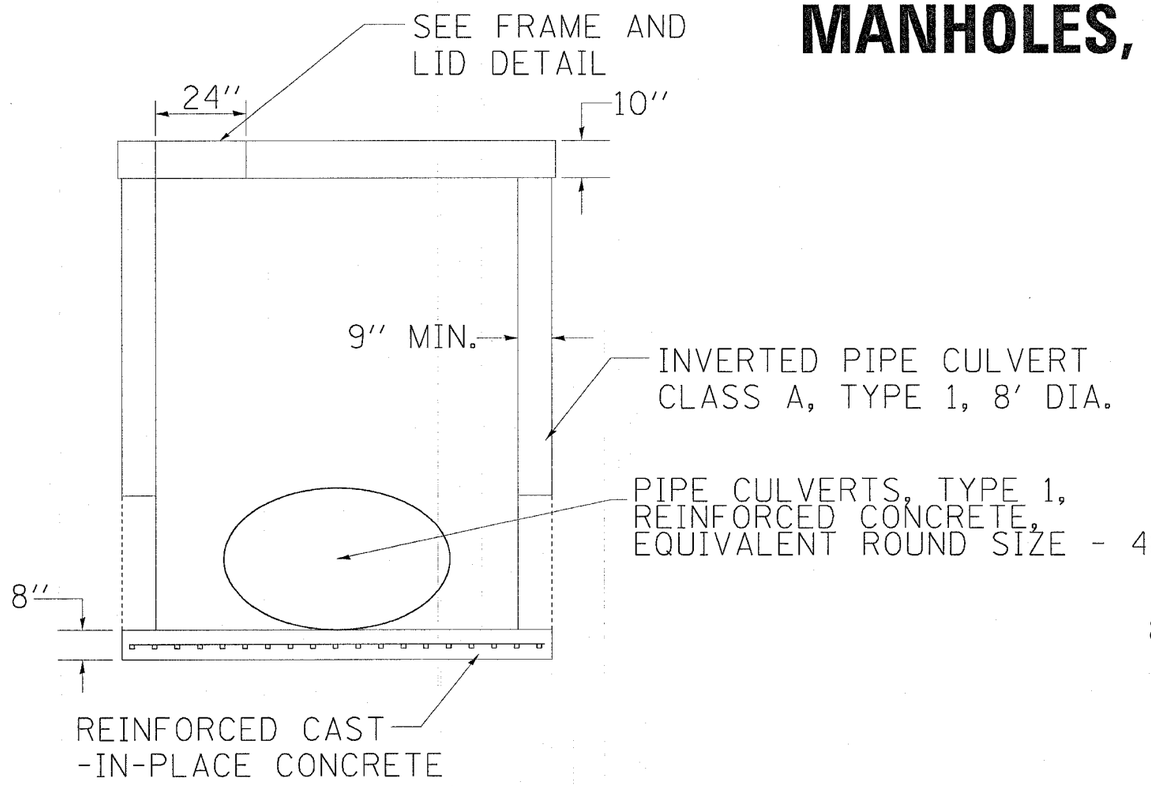
CHECKED BY

PLOT DATE = Wed Feb 05 07:48:16 2025
FILE NAME = c:\projects\c2804497\c2804497sp1.dgn
PLOT SCALE = 50.8125 '/ IN.
REFERENCE = REF

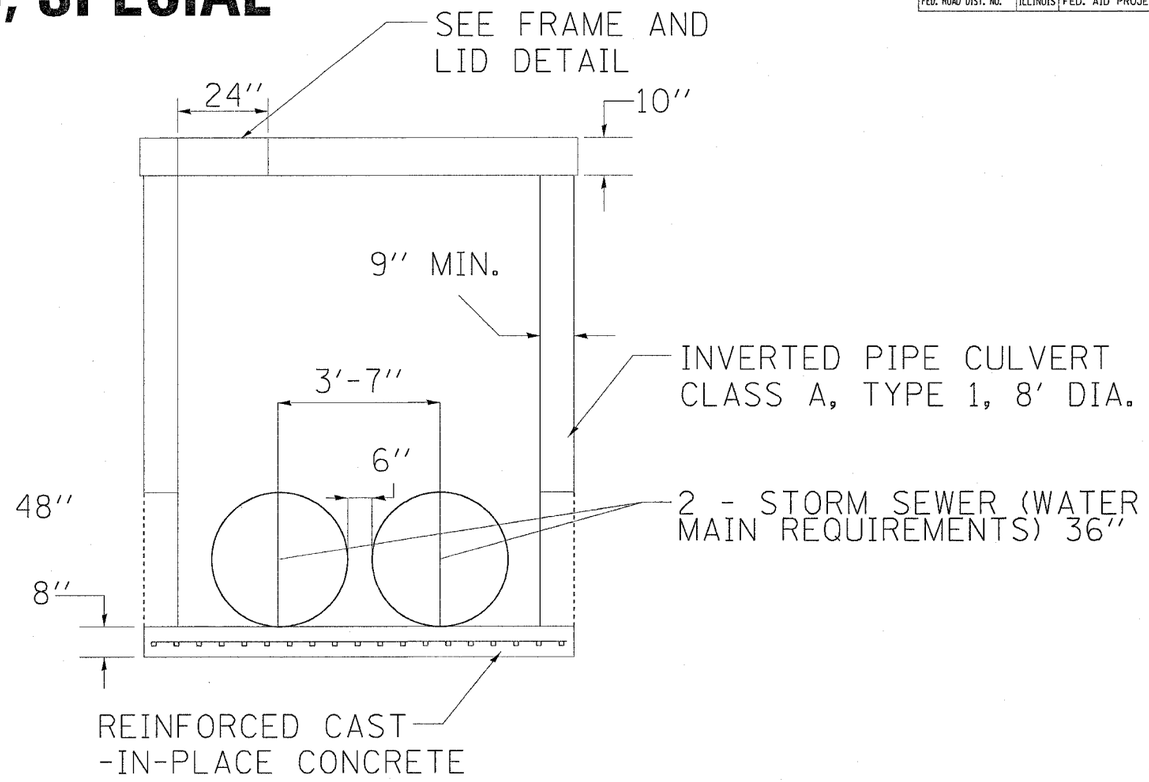
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	238
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

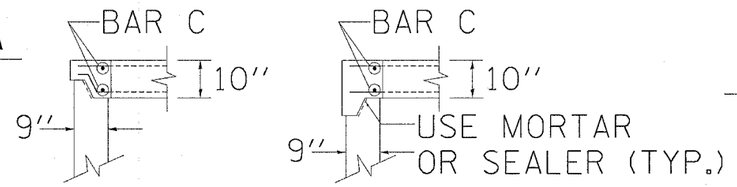
MANHOLES, SPECIAL



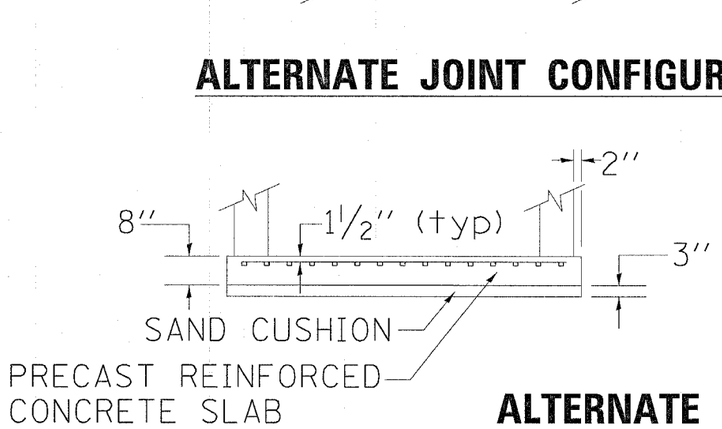
ELEVATION OF MH22A

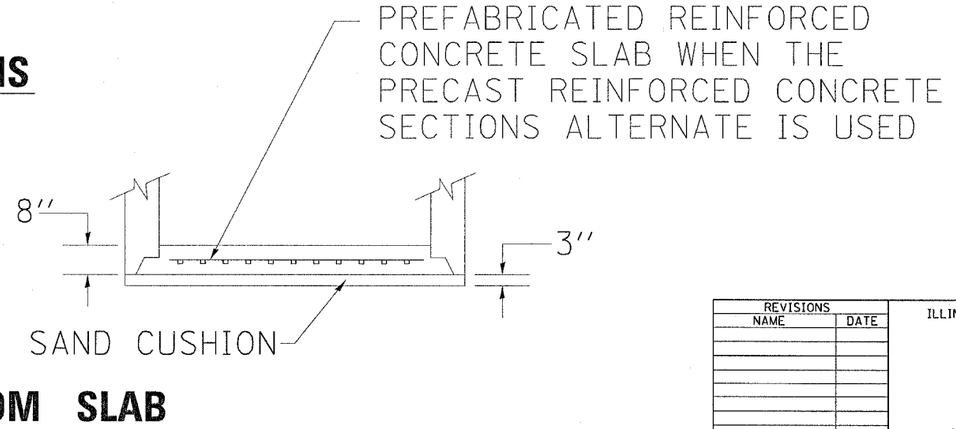


ELEVATION OF MH21



ALTERNATE JOINT CONFIGURATIONS





ALTERNATE BOTTOM SLAB

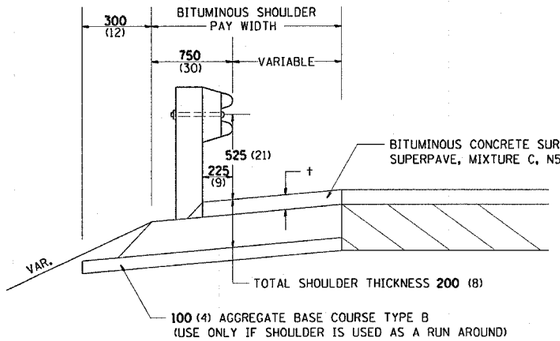
REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = Wed Feb 09 07:48:16 2005
FILE NAME = I:\projects\p208497\d208497epl.dgn
PLOT SCALE = 38.8185 ' / IN.
REFERENCE = ASEP-B

DETAIL OF BITUMINOUS SHOULDER AT GUARD RAIL



† = SEE TYPICAL SECTIONS FOR THICKNESS

GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED.

THE HEIGHT OF THE GUARD RAIL SHALL BE SET **525** (21) FROM THE FINISHED SURFACE.

THE BITUMINOUS SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50, AND SQUARE METER (SQUARE YARD) FOR BITUMINOUS SHOULDERS SUPERPAVE OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50.

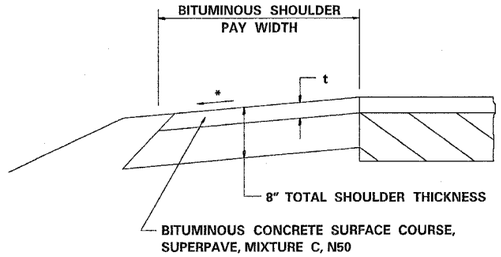
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

DATE 1-17-02 23.4

BITUMINOUS SHOULDER

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	239
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



t = SEE TYPICAL SECTIONS FOR THICKNESS

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

GENERAL NOTES

THE BITUMINOUS SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50, AND SQUARE YARD FOR BITUMINOUS SHOULDERS SUPERPAVE OF THE THICKNESS SPECIFIED.

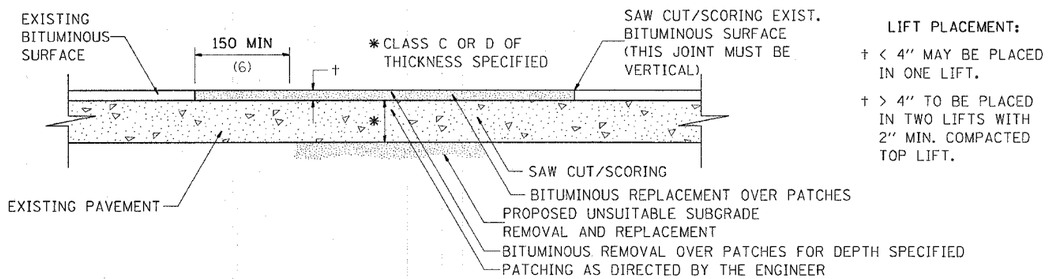
USE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50, WHEN RESURFACING EXISTING BITUMINOUS SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE BITUMINOUS SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

REV. 5-30-03 23.4a

PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT



LIFT PLACEMENT:

† < 4" MAY BE PLACED IN ONE LIFT.

† > 4" TO BE PLACED IN TWO LIFTS WITH 2" MIN. COMPACTED TOP LIFT.

SEQUENCE OF CONSTRUCTION:

1. REMOVE THE EXISTING BITUMINOUS SURFACE.
2. RESIDENT ENGINEER WILL DETERMINE IF LOCATION IS TO BE PATCHED OR TO ONLY REPLACE BITUMINOUS SURFACE.
3. REMOVE AND REPLACE FULL DEPTH PATCHES AT LOCATIONS DIRECTED BY THE ENGINEER.
4. REPLACE BITUMINOUS SURFACE OVER FULL DEPTH PATCHES AND AT LOCATIONS OF BITUMINOUS SURFACE REMOVAL.

GENERAL NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE **300** (12) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR BASIS OF PAYMENT: SEE SPECIAL PROVISION "PATCHING WITH BITUMINOUS OVERLAY REMOVAL".

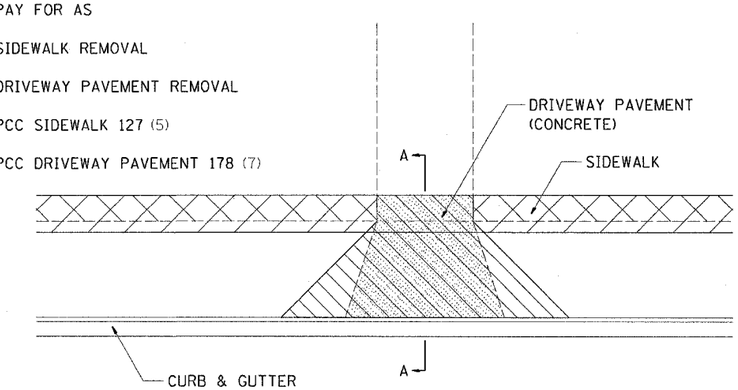
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

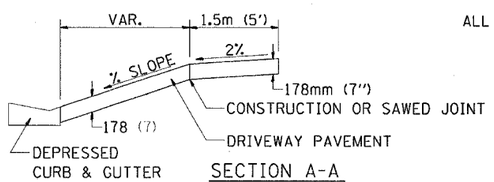
6-21-01 32.4

SIDEWALK AND DRIVEWAY PAVEMENT PAY AREAS

PAY FOR AS

- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- PCC SIDEWALK 127 (5)
- PCC DRIVEWAY PAVEMENT 178 (7)





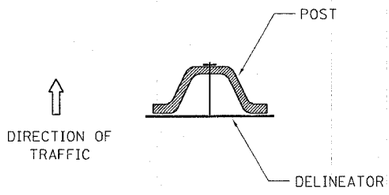
SECTION A-A

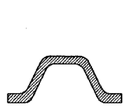
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

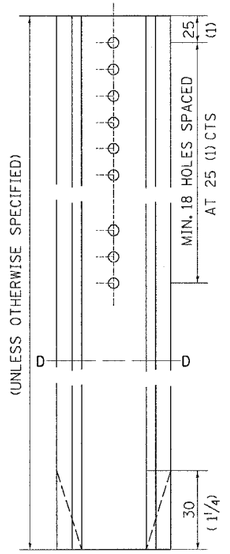
FOR DETAILS ON DIMENSIONS AND GRADES, SEE DISTRICT STANDARD 25.1 OR PLANS.

35.4

DELINEATOR AND POST ORIENTATION




SECTION D-D



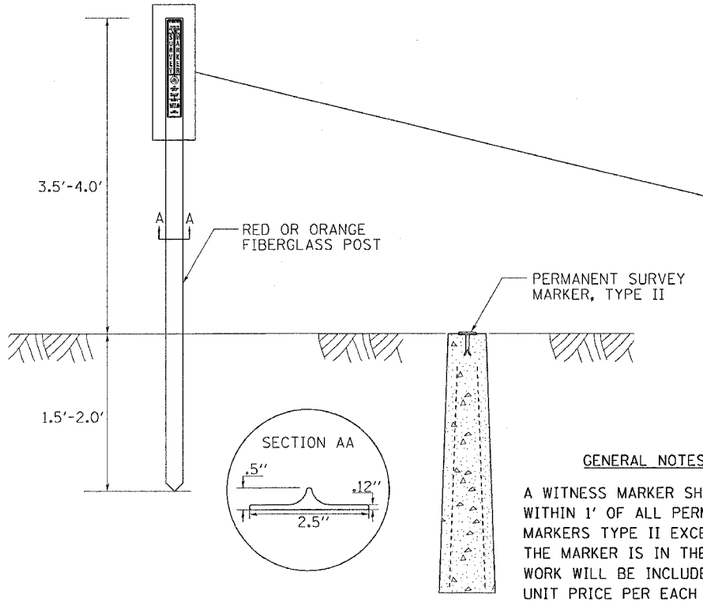
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180° . THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHECD AS SHOWN ABOVE.

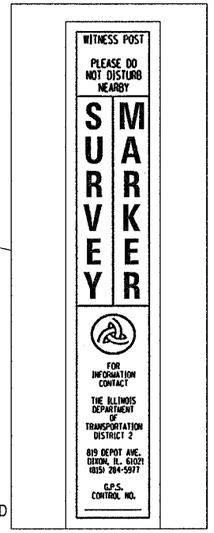
37.4

WITNESS MARKER FOR PERMANENT SURVEY MARKERS TYPE II

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	240
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



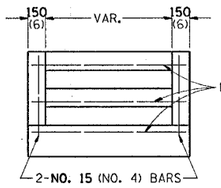


GENERAL NOTES

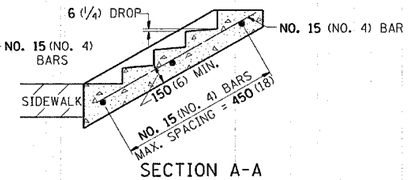
A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

1-31-00 38.4

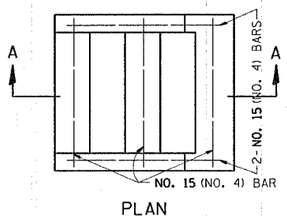
DETAIL OF CONCRETE STEPS



END ELEVATION



SECTION A-A



PLAN

TABLE OF TREADS & RISERS

SLOPE	TREAD	RISER
1:2	300 (12)	150 (6)
1:3	375 (15)	125 (5)
1:4	425 (17)	106 (4 ¼)

WHERE SLOPES FALL BETWEEN THOSE SHOWN IN THE TABLE ABOVE, THE STAIR RAIL SHOULD FIT THE SLOPE AND THE TREAD IN **mm** (INCHES) x THE RISER IN **mm** (INCHES) SHOULD BE BETWEEN **45000** (72) AND **48750** (78).

EXAMPLE:

FOR A 1:4 SLOPE USE y = RISER HEIGHT $4y^2 = 46875$ (75).
SOLVING $y^2 = \frac{46875}{4}$ (75), y= **108** (4.3) (USE **106** (4 ¼) FOR CONVENIENCE.)

TREAD WOULD THEN BE **106** (4 ¼)x 4 = **424** (17)

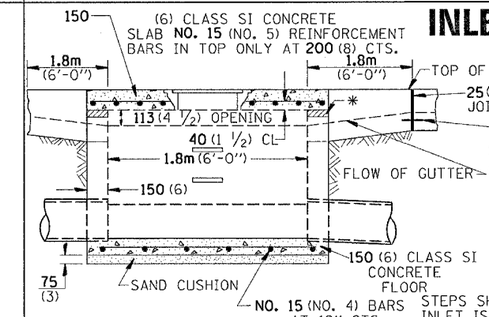
COST OF REINFORCEMENT BARS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER **Kg** (LBS) REINFORCEMENT BARS.

CLASS SI CONCRETE SHALL BE USED THROUGHTOUT, WHICH SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER **CUBIC METER (CUBIC YARD) FOR CLASS SI CONCRETE (MISCELLANEOUS).**

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

REVISED 2-26-93 71.4

INLET SPECIAL NO. 3



FRONT VIEW

STEPS AT **300**(12) TO **400**(16) CTS. **200**(18)

* THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.

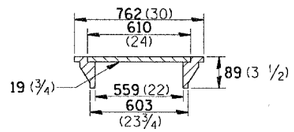
THE HEIGHT OF THE BOX MAY BE CONSTRUCTED **150** (6) SHORT TO ALLOW FOR FIELD ADJUSTMENTS.

25 (1) PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED TROUGHOUT.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.

LIGHT WEIGHT MANHOLE CASTING



TOTAL WEIGHT **73 KG.** (160 LBS.)

NOTES

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 1.5 m (5 ft.)

THE INLET SHALL BE CAST IN PLACE OR PRECAST.
SEE STANDARD 602701 FOR DETAILS OF STEPS.
EXCEPT AS NOTED HEREON INLET SPECIAL NO. 3 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

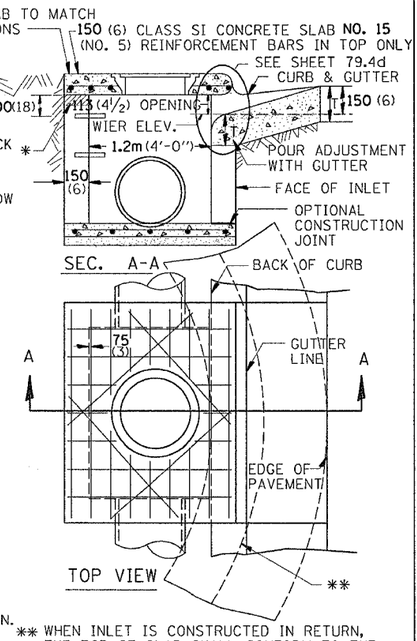
THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 3 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).

THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.

THE CURB AND GUTTER ADJACENT TO AND **1.8m** (6 FT) ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.

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

SLOPE TOP SLAB TO MATCH FINAL CONDITIONS



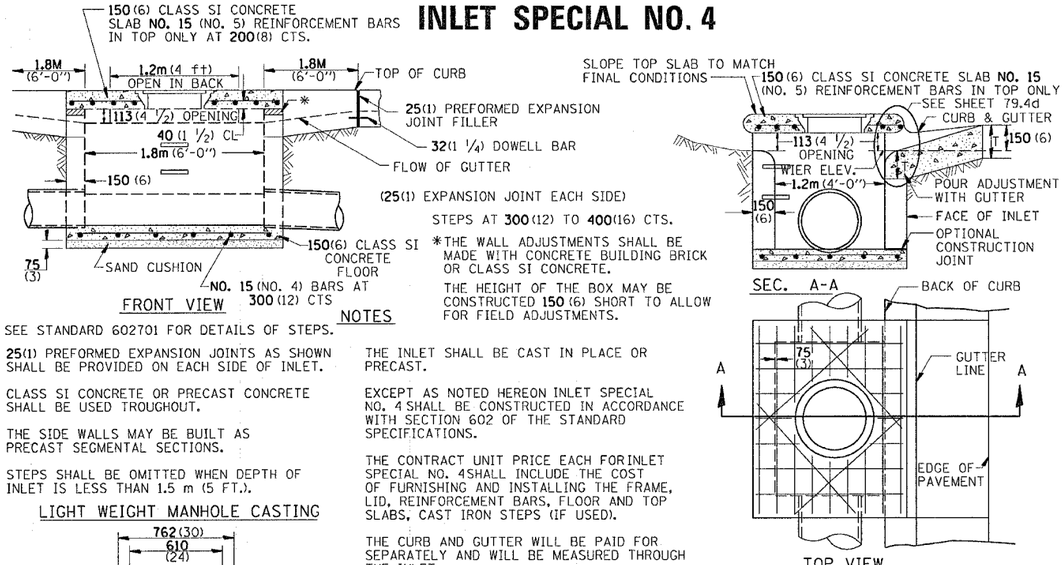
** WHEN INLET IS CONSTRUCTED IN RETURN, THE TOP OF SLAB SHALL CONFORM TO THE RADIUS OF THE RETURN.

REVISED 11-10-94 79.4

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	241
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INLET SPECIAL NO. 4



NOTES

SEE STANDARD 602701 FOR DETAILS OF STEPS.

25(1) PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED TROUGHOUT.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 1.5 m (5 FT.).

THE INLET SHALL BE CAST IN PLACE OR PRECAST.

EXCEPT AS NOTED HEREON INLET SPECIAL NO. 4 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

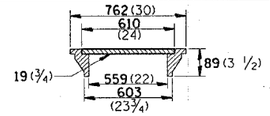
THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 4 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).

THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.

THE CURB AND GUTTER ADJACENT TO AND 1.8m (6 FT) ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.

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

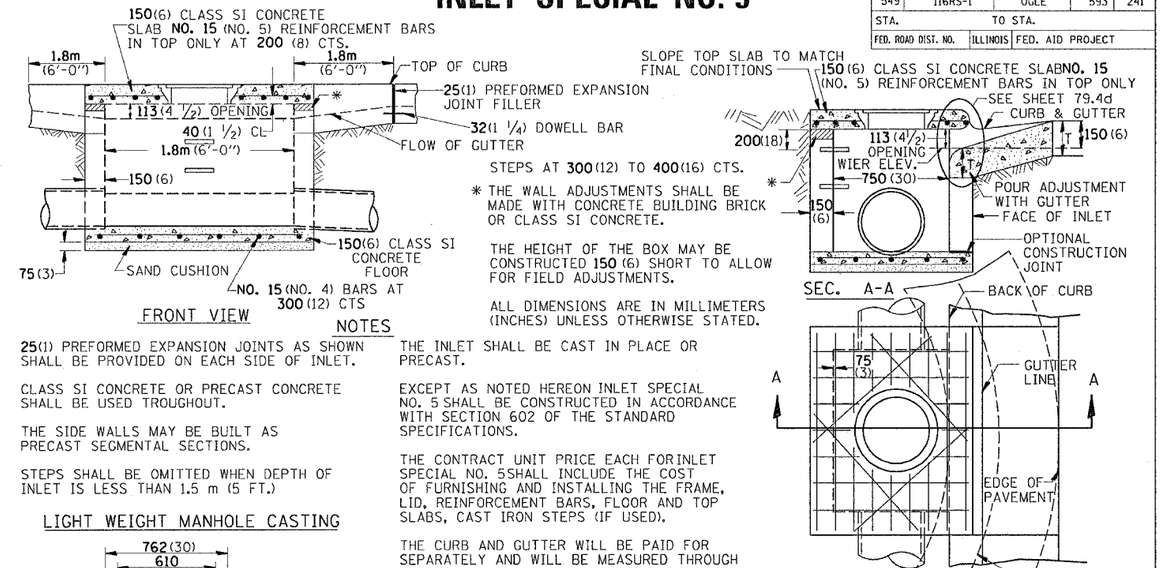
LIGHT WEIGHT MANHOLE CASTING



TOTAL WEIGHT 73 Kg. (160 LBS.)

REVISED 11-10-94 79.4a

INLET SPECIAL NO. 5



NOTES

25(1) PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED TROUGHOUT.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 1.5 m (5 FT.)

THE INLET SHALL BE CAST IN PLACE OR PRECAST.

EXCEPT AS NOTED HEREON INLET SPECIAL NO. 5 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

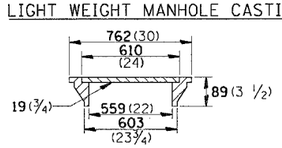
THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 5 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).

THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.

THE CURB AND GUTTER ADJACENT TO AND 1.8m (6 FT) ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.

SEE STANDARD 602701 FOR DETAILS OF STEPS.

LIGHT WEIGHT MANHOLE CASTING

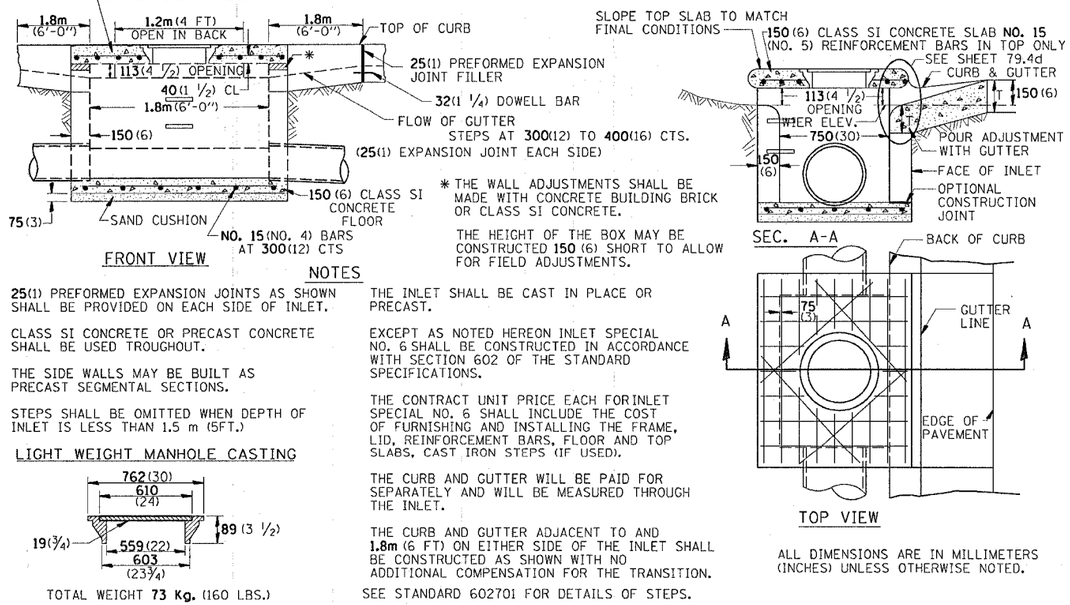


TOTAL WEIGHT 73Kg. (160 LBS.)

** WHEN INLET IS CONSTRUCTED IN RETURN, THE TOP OF SLAB SHALL CONFORM TO THE RADIUS OF THE RETURN.

REVISED 11-10-94 79.4b

INLET SPECIAL NO. 6



NOTES

25(1) PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED TROUGHOUT.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 1.5 m (5FT.)

THE INLET SHALL BE CAST IN PLACE OR PRECAST.

EXCEPT AS NOTED HEREON INLET SPECIAL NO. 6 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 6 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).

THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.

THE CURB AND GUTTER ADJACENT TO AND 1.8m (6 FT) ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.

SEE STANDARD 602701 FOR DETAILS OF STEPS.

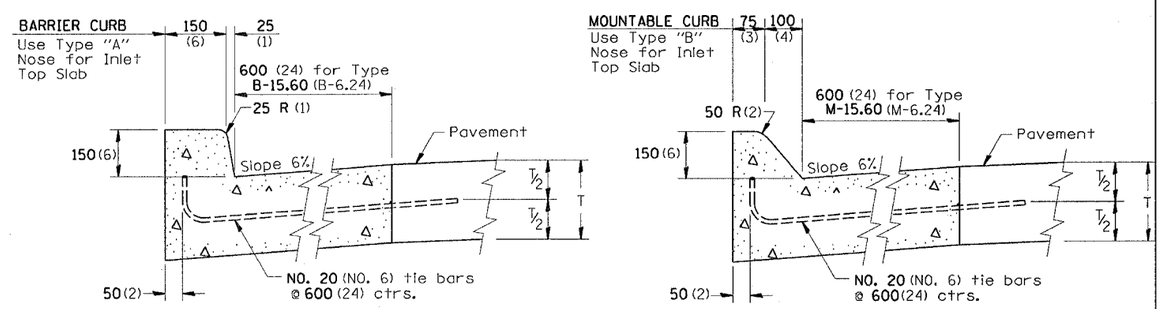
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

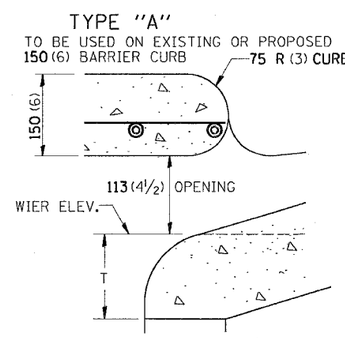
LIGHT WEIGHT MANHOLE CASTING

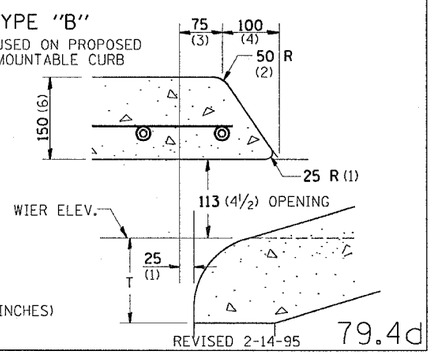
TOTAL WEIGHT 73 Kg. (160 LBS.)

REVISED 11-10-94 79.4c

NOSE TYPE FOR INLET TOP SLAB



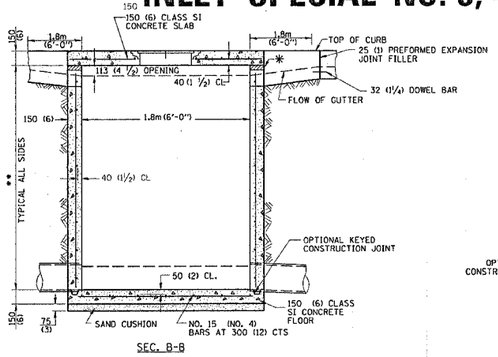




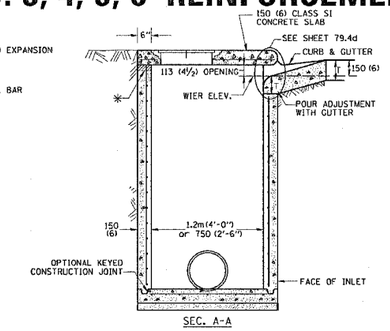
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED 2-14-95 79.4d

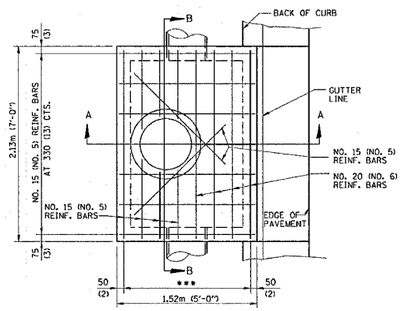
INLET SPECIAL NO. 3, 4, 5, 6 REINFORCEMENT DETAIL



SEC. B-B



SEC. A-A



TOP VIEW

* THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.

THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 150 (6) SHORT TO ALLOW FOR FIELD ADJUSTMENTS.

** 1.2m (4'-0") TO 2.4m (8'-0") -
NO. 15 (NO. 5) REINF. BARS AT 300 (12) CTS. E.W.
2.4m (8'-0") TO 4.0m (13'-0") -
NO. 15 (NO. 5) REINF. BARS AT 250 (10) CTS. E.W.
4.0m (13'-0") TO 4.6m (15'-0") -
NO. 15 (NO. 5) REINF. BARS AT 200 (8) CTS. E.W.

*** 7 SPA. AT 200 mm (8") INLET SPECIAL * 3,4
5 SPA AT 208 mm (7⅝") INLET SPECIAL * 5, 6

NOTES

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

TOP SLAB REINFORCEMENT TO BE EPOXY COATED BARS.

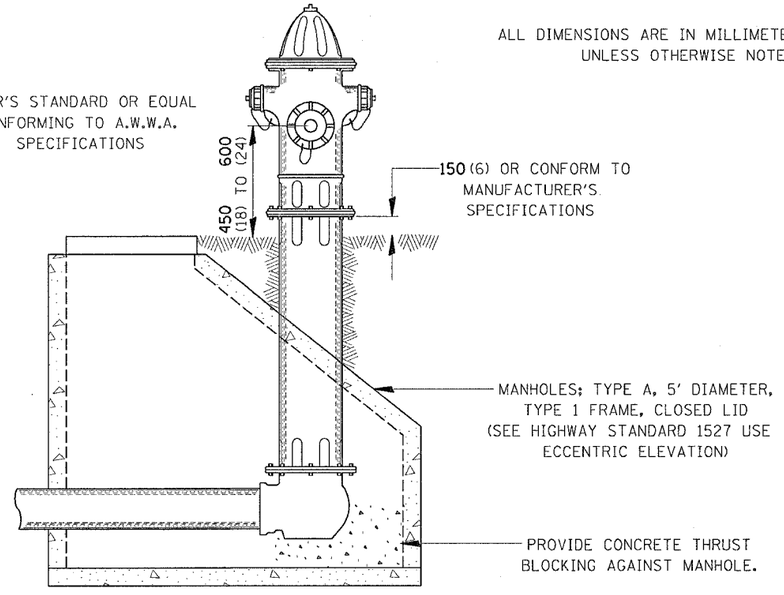
79.4e

TYPICAL HYDRANT INSTALLATION

CONTRACT NO. 64178

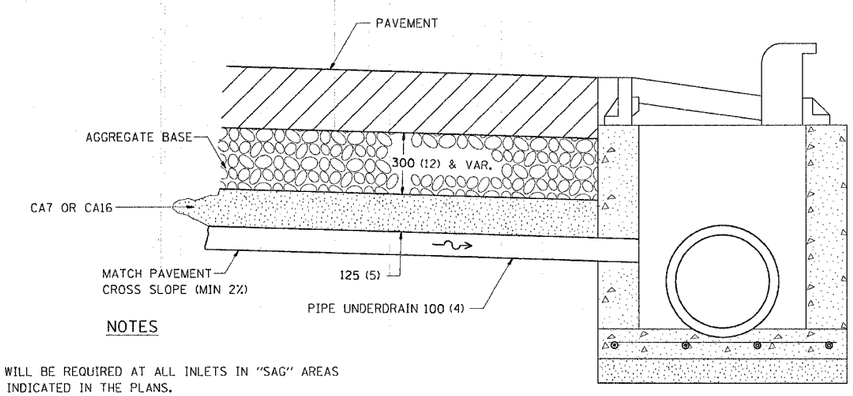
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	242
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



REVISED 1-8-96 **81.4**

DRAIN FOR AGGREGATE BASES IN URBAN AREAS



NOTES

DRAINS WILL BE REQUIRED AT ALL INLETS IN "SAG" AREAS AND AS INDICATED IN THE PLANS.

THIS WORK SHALL BE COMPLETED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS.

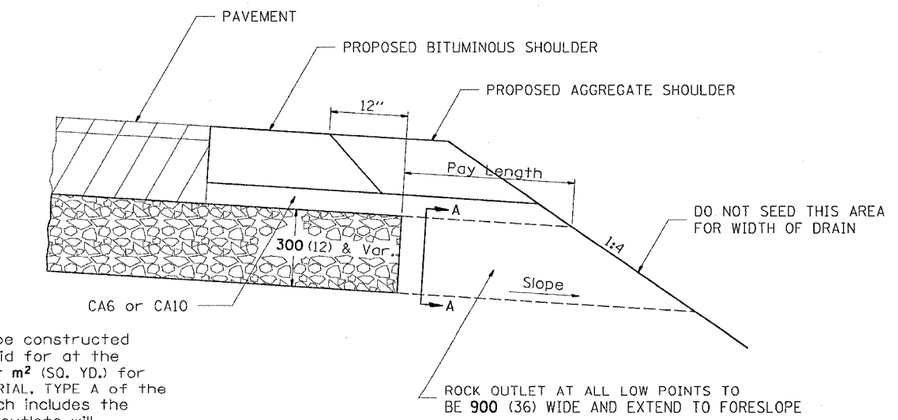
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER (FOOT) FOR PIPE UNDERDRAINS OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

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

REVISED 4-7-99 **88.4**

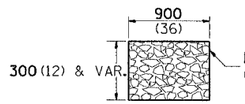
DRAIN FOR AGGREGATE BASE COURSE

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



NOTES:

The rock outlets shall be constructed using CA7 and will be paid for at the contract unit price per **m²** (SQ. YD.) for SUB-BASE GRANULAR MATERIAL, TYPE A of the thickness specified which includes the filter fabric. The Rock outlets will be measured in **m²** (SQ. YD.), the width being **900** (36) by the length shown above. The cost of the CA6 or CA10 under the shoulder shall be included in the contract unit price per **m²** (SQ. YD.) for SUB-BASE GRANULAR MATERIAL, TYPE A of the thickness specified. The filter fabric to be used shall conform to the filter fabric used for Riprap.



SECTION A-A

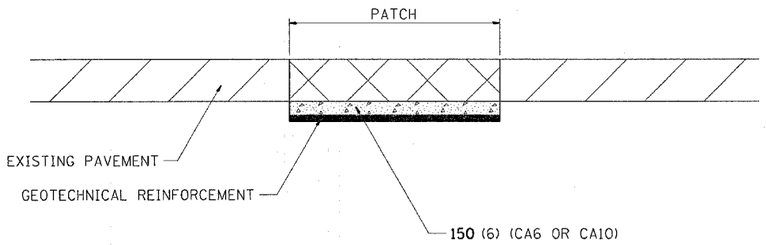
NOTE: Slope same as shoulder with 2% min.

REVISED 13-JULY-95 **96.4**

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	243
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUBGRADE REPLACEMENT



NOTES:

The Engineer will determine which patches will require Subgrade Replacement, generally when the Qu of the Subgrade < 0.3TSF or if patch density is questionable.

UNSTABLE SUBGRADE MATERIAL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

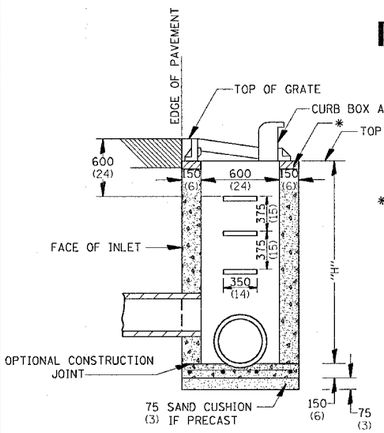
This work will be paid for at the contract unit price per m^3 (CU. YD.) for GRANULAR SUBGRADE REPLACEMENT and per m^2 (SQ. YD.) for GEOTECHNICAL REINFORCEMENT.

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

4-23-93 97.4

PLOT DATE = Wed Feb 09 07:48:25 2005
FILE NAME = c:\projects\c280497\d280497pl.dgn
PLOT SCALE = 2.000000 / IN.
REFERENCE = RSF

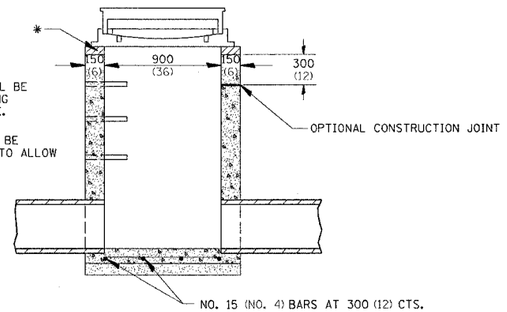
INLET SPECIAL



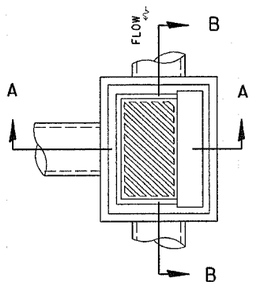
SEC. A-A

* THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.

THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 150 (6) SHORT TO ALLOW FOR FIELD ADJUSTMENTS.



SEC. B-B



DETAIL OF FRAME & GRATE

NOTES

SEE STANDARD 602701 FOR DETAILS OF STEPS.

EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.

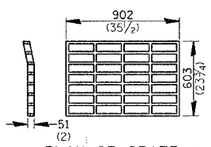
ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.

WEIGHT OF CAST IRON FRAME & GRATE = 240 kg (530 lbs.) ± . STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 1.5 m (5 ft) .

NOTES

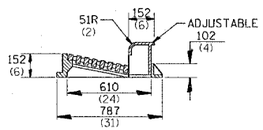
CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 27.5 MPa (4,000 psi) AFTER 28 DAYS.

THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE CAST IRON STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.



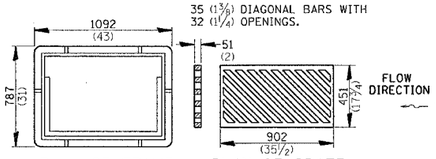
PLAN OF GRATE *

* THIS GRATE TO BE USED WITHOUT CURB BOX WHEN INLET IS IN DRIVEWAY.

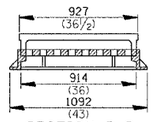


SECTION A-A

35 (1⅜) DIAGONAL BARS WITH 32 (1¼) OPENINGS.



PLAN OF FRAME PLAN OF GRATE



SECTION B-B

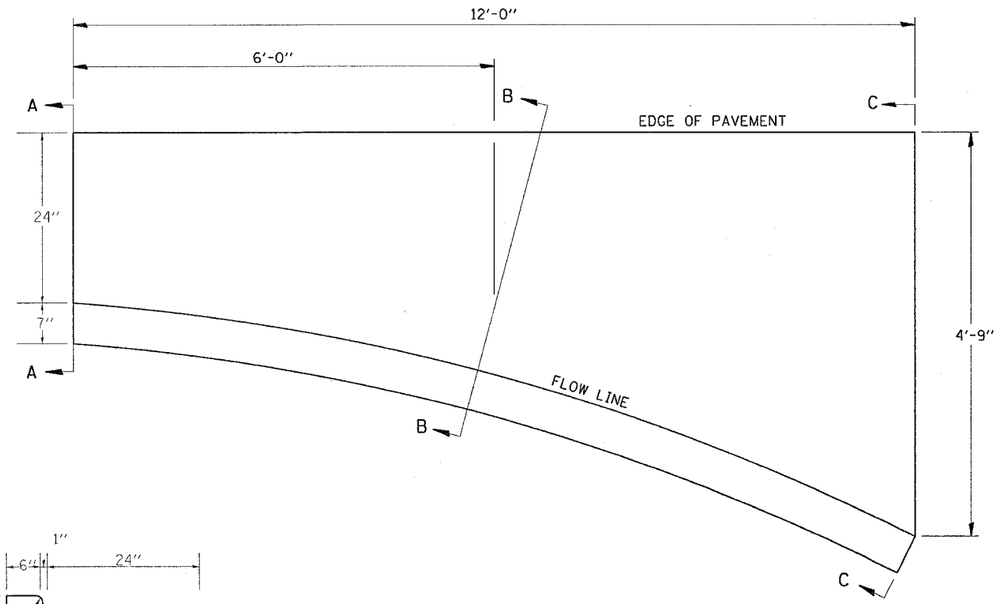
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

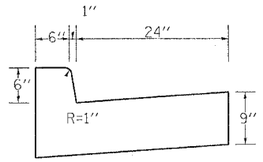
REVISED 11-10-94

CONTRACT NO. 64178

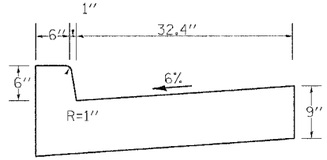
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	244
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STANDARD INLET FOR CURB & GUTTER TYPE B-6.24

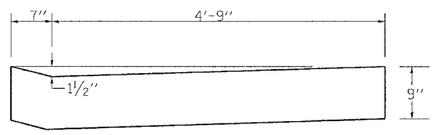




SECTION A-A



SECTION B-B



SECTION C-C

NOTES

Class SI Concrete shall be used throughout.

The Curb and Gutter inlet will be paid for at the contract unit price per cubic yard for Class SI Concrete (OUTLETS).

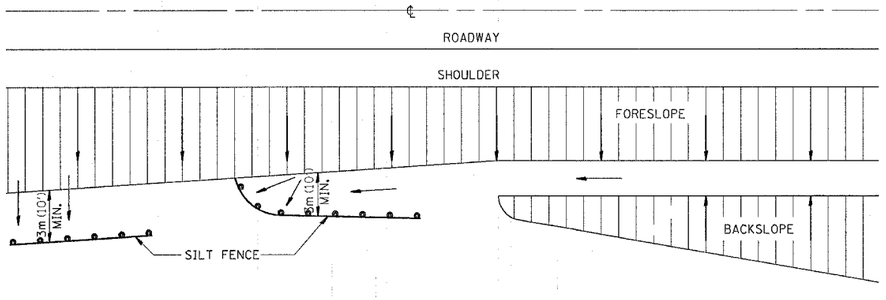
Joints shall be constructed in accordance with the requirementsof Article 606.06 of the Standard Specifications.

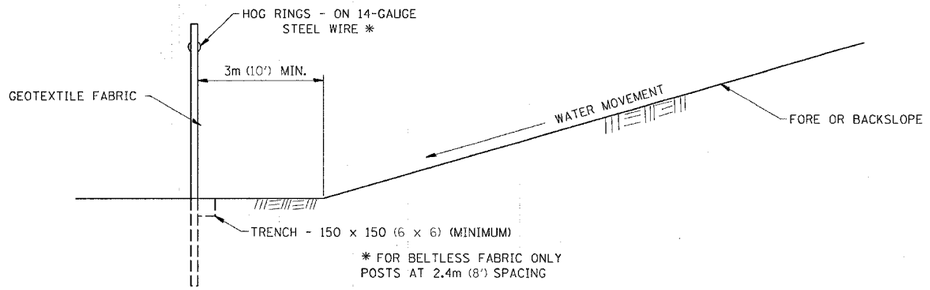
When curb and gutter is constructed adjacent to flexible pavement, a 1" expansion joint shall be installed at construction joints.

- QUANTITY -

Section A-A to C-C
(1.23 Cu. Yds.)
Class SI Concrete

EROSION CONTROL DETAILS
FOR SILT FENCE





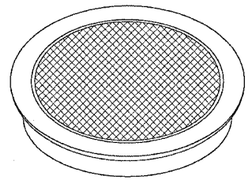
DETAILS OF SILT FENCE

REVISED 10-22-01

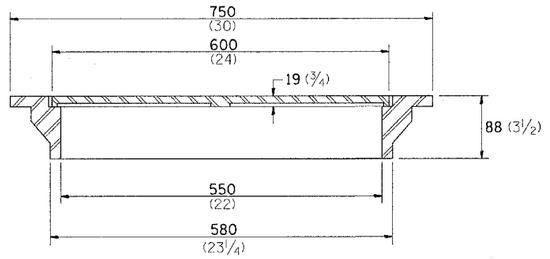
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	245
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FIELD TILE JUNCTION VAULTS
600 (24) AND 900 (36) DIA.

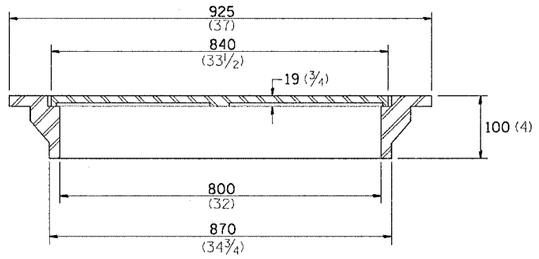


FRAME & LID FOR
600 (24) VAULT

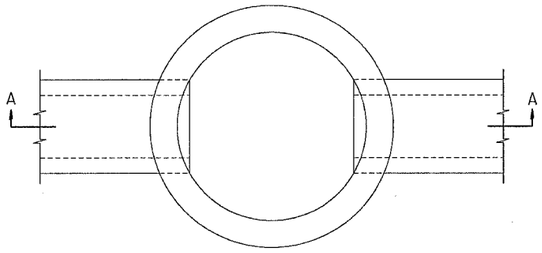


TOTAL WEIGHT: 66 Kg (146 lbs)

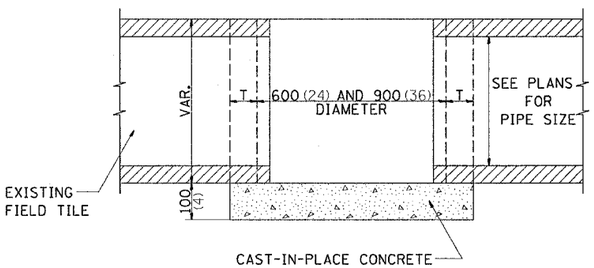
FRAME & LID FOR
900 (36) VAULT



TOTAL WEIGHT: 127 Kg (280 lbs)



PLAN

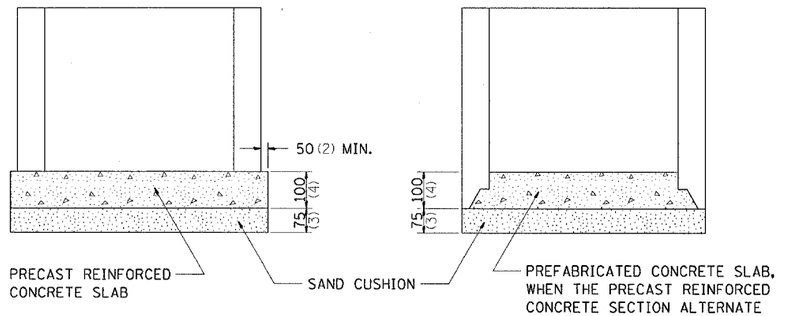


SECTION A-A

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	200 (8)
CAST-IN-PLACE CONCRETE	150 (6)
CONCRETE MASONRY UNIT	125 (5)
PRECAST REINFORCED CONCRETE SECTION	75 (3)

NOTE: THE FRAME AND LID IS REQUIRED ON ALL JUNCTION VAULTS.

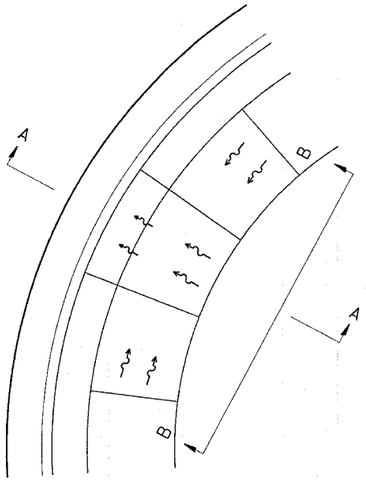
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

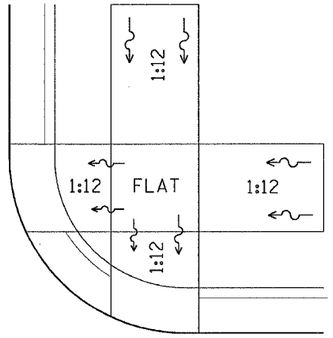


ALTERNATE METHODS

REVISED 05-03-94

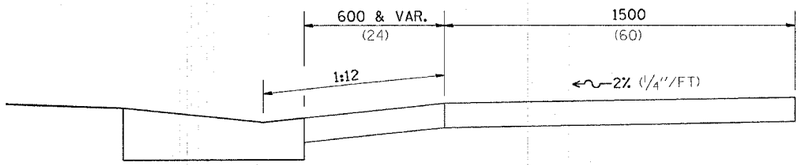
DISABLED RAMP DETAIL



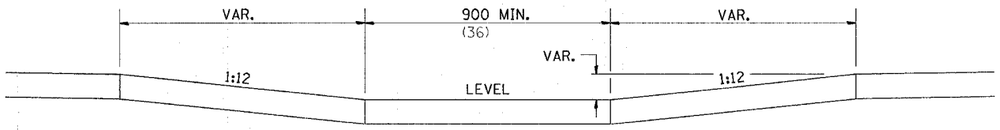


SEE STANDARD 424001
FOR SIDE FLARE DETAIL
& SEE PLANS FOR RAMP TYPE.

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



SECTION A-A



SECTION B-B

NOTES : THIS DETAIL TO BE USED IN CONJUNCTION WITH STATE STANDARD 424001.
THE MAXIMUM ALLOWABLE CROSS SLOPE FOR SIDEWALK IS 2% (1/4"/FT).
THE MAXIMUM ALLOWABLE SIDEWALK GRADE IS 8% (1/12"/FT). IF SPACE LIMITATIONS PROHIBIT THE USE OF THE 1:12 SLOPE, THEN SLOPES BETWEEN 1:10 ARE 1:12 ARE PERMITTED FOR A MAXIMUM RISE OF 150 (6). SLOPES 1:8 AND 1:10 ARE ALLOWED FOR A MAXIMUM RISE OF 75 (3). SLOPES STEEPER THAN 1:8 ARE NOT PERMITTED.
THE DEPRESSED CURB IS NOT STANDARD. THE RISE IS 13 (1/2) INSTEAD OF 40 (1 1/2).

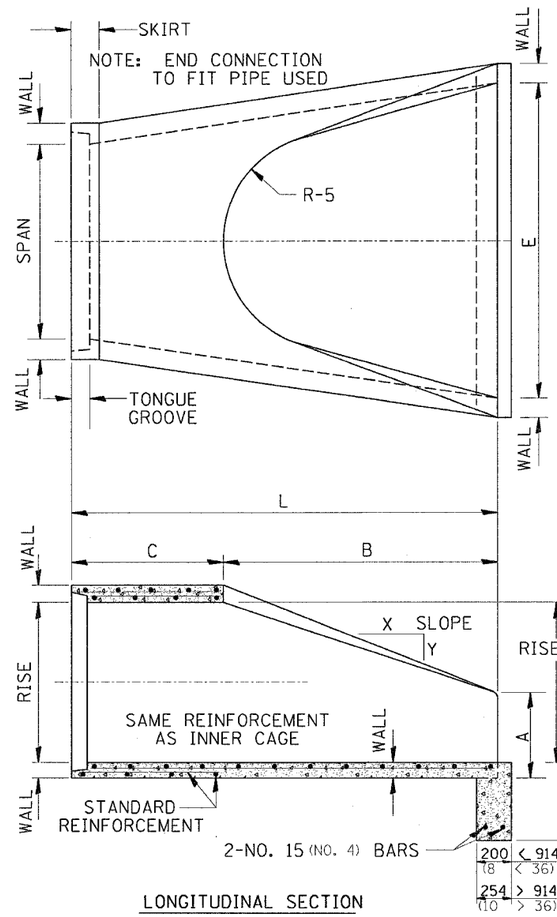
REVISED 12/08/92

CONTRACT NO. 64178

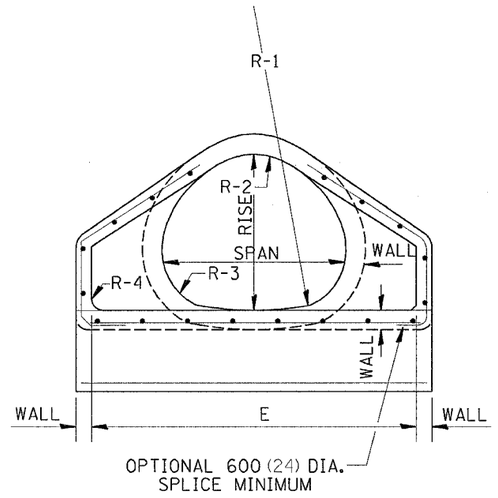
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	246
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PRECAST REINFORCED CONCRETE ARCH DIAMETER FLARED END SECTION

SIZE	WALL	SPAN	RISE	L	B	C	E	A	SLOPE	R-1	R-2	R-3	R-4	R-5
450 (18)	64 (2 1/2)	559 (22)	343 (13 1/2)	1829 (72)	686 (27)	1143 (45)	914 (36)	178 (7)	1:2.16	699 (27 1/2)	349 (13 3/4)	133 (5 1/4)	51 (2)	305 (12)
600 (24)	76 (3)	724 (28 1/2)	457 (18)	1829 (72)	991 (39)	838 (33)	1219 (48)	203 (8)	1:2.29	1033 (40 11/16)	370 (14 9/16)	117 (4 19/32)	76 (3)	356 (14)
750 (30)	89 (3 1/2)	921 (36 1/4)	572 (22 1/2)	1829 (72)	1219 (48)	610 (24)	1524 (60)	254 (10)	1:2.34	1295 (51)	476 (18 3/4)	156 (6 1/8)	76 (3)	381 (15)
900 (36)	102 (4)	1111 (43 3/4)	676 (26 5/8)	2438 (96)	1524 (60)	914 (36)	1828 (72)	270 (10 5/8)	1:2.4	1575 (62)	572 (22 1/2)	165 (6 1/2)	152 (6)	508 (20)
1050 (42)	114 (4 1/2)	1308 (51 1/8)	795 (31 5/16)	2438 (96)	1524 (60)	914 (36)	1981 (78)	402 (15 13/16)	1:2.35	1854 (73)	667 (26 1/4)	197 (7 3/4)	152 (6)	559 (22)
1200 (48)	127 (5)	1485 (58 1/2)	914 (36)	2438 (96)	1524 (60)	914 (36)	2134 (84)	533 (21)	1:2.31	2134 (84)	762 (30)	225 (8 7/8)	152 (6)	559 (22)
1350 (54)	140 (5 1/2)	1651 (65)	1016 (40)	2438 (96)	1524 (60)	914 (36)	2286 (90)	648 (25 1/2)	1:2.26	2350 (92 1/2)	848 (33 3/8)	254 (10)	152 (6)	610 (24)
1500 (60)	152 (6)	1854 (73)	1143 (45)	2438 (96)	1905 (75)	533 (21)	2438 (96)	660 (26)	1:2.34	2667 (105)	953 (37 1/2)	281 (11 1/16)	152 (6)	533 (21)
1800 (72)	178 (7)	2235 (88)	1371 (54)	2540 (100)	1981 (78)	559 (22)	3048 (120)	889 (35)	1:2.29	3200 (126)	1143 (45)	338 (13 5/16)	152 (6)	610 (24)



LONGITUDINAL SECTION



END VIEW

NOTES:

PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENT OF AASHTO M-206.

PRECAST CONCRETE FLARED END SECTION FOR PIPE ARCH DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.

THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE FLARED END SECTION. THE END BLOCK SHALL BE BACKFILLED IN ACCORDANCE WITH ART. 502.10 (502.11) OF THE STANDARD SPECIFICATIONS, COST INCIDENTAL TO END SECTION.

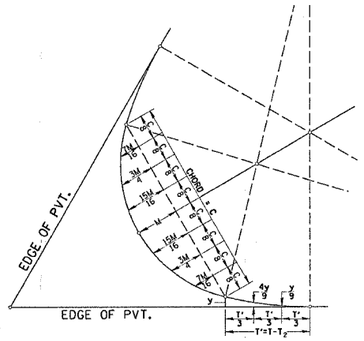
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED 10-20-87

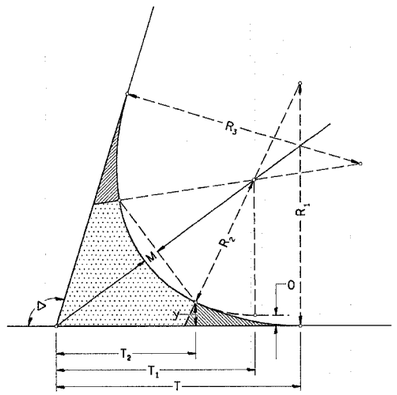
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	247
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

THREE CENTER CURVE DATA



FIELD LAYOUT METHOD



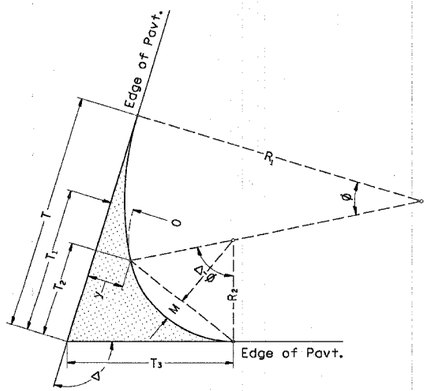
FOR SYMMETRICAL CURVES

SYMMETRICAL CURVES

CURVE #							
R_1							
R_2							
R_3							
O							
Δ							
T							
T_1							
T_2							
T'							
y							
$\frac{4y}{9}$							
$\frac{y}{9}$							
M							
$\frac{15M}{16}$							
$\frac{3M}{4}$							
$\frac{7M}{16}$							
C							

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TWO CENTER CURVE DATA

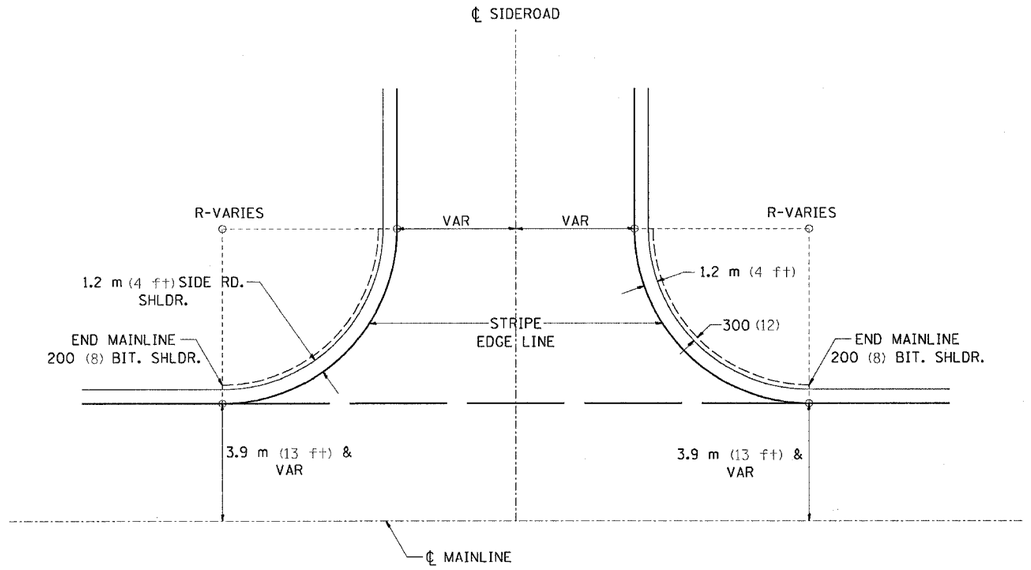


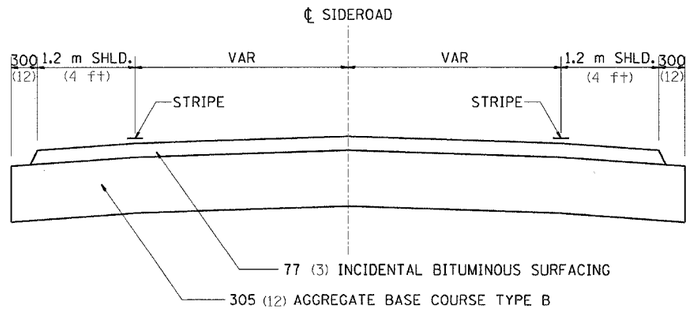
TWO CENTER CURVES

CURVE #	1	2	3	4	5	6	7	8
R_1	160	160	160	200	200	240	400	400
R_2	40	40	40	45	50	40	35	70
O	10	10	10	10	8	7	8	8
Δ	88.5	90	88.8	89.1	87.7	60	101.26	101.62
T	86.66	87.96	86.92	98.91	96.06	71.5	120.25	159.73
T_1	38.70	40	38.96	44.14	47.73	19.05	44.25	87.5
T_2	22.72	24.01	22.98	28.24	31.62	8.56	36.96	72.18
T_3	48.97	50.00	49.17	54.3	56.06	31.18	50.81	94.03
y	13.33	13.33	13.33	12.9	10.67	8.4	8.77	9.7
$\frac{4y}{9}$	5.93	5.93	5.93	5.73	4.74	3.73	3.9	4.31
$\frac{y}{9}$	1.48	1.48	1.48	1.43	1.19	0.93	0.97	1.08
M	6.25	6.54	6.31	7.78	8.77	3.02	10.09	20.06
$\frac{15M}{16}$	5.86	6.13	5.92	7.3	8.23	2.83	9.46	18.81
$\frac{3M}{4}$	4.69	4.90	4.73	5.84	6.58	2.26	7.57	15.05
$\frac{7M}{16}$	2.74	2.86	2.76	3.4	3.84	1.32	4.41	8.78
C	42.95	43.83	43.13	50.59	56.59	30.48	49.17	98.11

REVISED 3-22-90 92.2

TYPICAL AGGREGATE BASE SIDEROAD





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

DATE 9-15-93 93.2

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	248
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STORM WATER POLLUTION PREVENTION PLAN
EROSION CONTROL PLAN

THE FOLLOWING PLAN WAS ESTABLISHED AND INCLUDED IN THESE PLANS TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE SILTATION WITHIN THE CONSTRUCTION ZONE AND TO ELIMINATE SEDIMENTS FROM ENTERING AND LEAVING THE CONSTRUCTION ZONE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN ITEMS, AS SHOWN IN THIS PLAN AND REFERENCED BY THE LEGEND, SHALL BE PLACED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION RESULTING FROM THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL PLACE PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A REASONABLE AMOUNT OF TIME: THEREFORE, REDUCING THE AMOUNT OF AREA BEING OPEN TO THE POSSIBILITY OF EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE RESIDENT ENGINEER WILL DETERMINE IF TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED, THE SIZE OF THE PROPOSED DITCH CHECKS, THE PROPER METHOD OF INSTALLATION, AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS SHALL BE ADDED WHICH ARE NOT INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

SITE DESCRIPTION

DESCRIPTION OF CONSTRUCTION ACTIVITY:

THIS PROJECT CONSISTS OF PAVEMENT REPLACEMENT FROM WALNUT AVE. TO FORRESTON HIGH SCHOOL FOR A TOTAL LENGTH OF 1640', ADDITION OF TURN LANES, INSTALLATION OF STORM SEWER, SIDEWALK, CURB & GUTTER, REDITCHING OF 9 MILES OF RURAL HIGHWAY, AND REPLACEMENT OF 28 BOX/PIPE CULVERTS.

DESCRIPTION OF INTENDED SEQUENCE OF ACTIVITIES:

THE SEQUENCE OF EVENTS ARE AS FOLLOW: CLEARING, EMBANKMENT, EXCAVATION, GRADING AND PAVING. THIS PROJECT WILL BE CONSTRUCTED IN SEGMENTS AS SHOWN IN THE "STAGING PLANS".

AREA OF CONSTRUCTION SITE:

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 27 ACRES OF NEW R.O.W. WITH 133 ACRES OF EXISTING R.O.W. OF WHICH 106 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING AND OTHER ACTIVITIES.

SUPPORTING REPORTS AND PLANS

THE FOLLOWING ASSISTED IN DEVELOPING THE EROSION CONTROL PLAN AS REFERENCED DOCUMENTS:

SOIL PROFILE SHEETS, SOILS REPORTS, BORING LOGS
USGS DRAINAGE MAPS, PROJECT PLAN DOCUMENTS

DRAINAGE TRIBUTARIES RECEIVING WATER FROM CONSTRUCTION SITE

LEAF RIVER, MUD CREEK

EROSION CONTROLS AND SEDIMENT CONTROL PROCEDURES

STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:

PERIMETER EROSION CONTROL SHALL BE PLACED PRIOR TO BEGINNING EARTHWORK.

STABILIZATION PRACTICES DURING CONSTRUCTION:

AS EARTH EXCAVATION AND EMBANKMENT ARE BEING COMPLETED THE CONTRACTOR SHALL PLACE DITCH CHECKS, INLET AND PIPE PROTECTION, EROSION CONTROL BLANKET, AND SEEDING AS STAGES OF THE PROJECT ARE COMPLETED. PERIMETER EROSION BARRIER WILL BE INSTALLED AT ADDITIONAL LOCATIONS AS THE PROJECT PROGRESSES. SEEDING SHALL BE COMPLETED AS SPECIFIED IN THE EROSION CONTROL/ SEEDING MOBILIZATION AND TEMPORARY SEEDING SPECIAL PROVISION.

MAINTENANCE AFTER FINAL GRADING

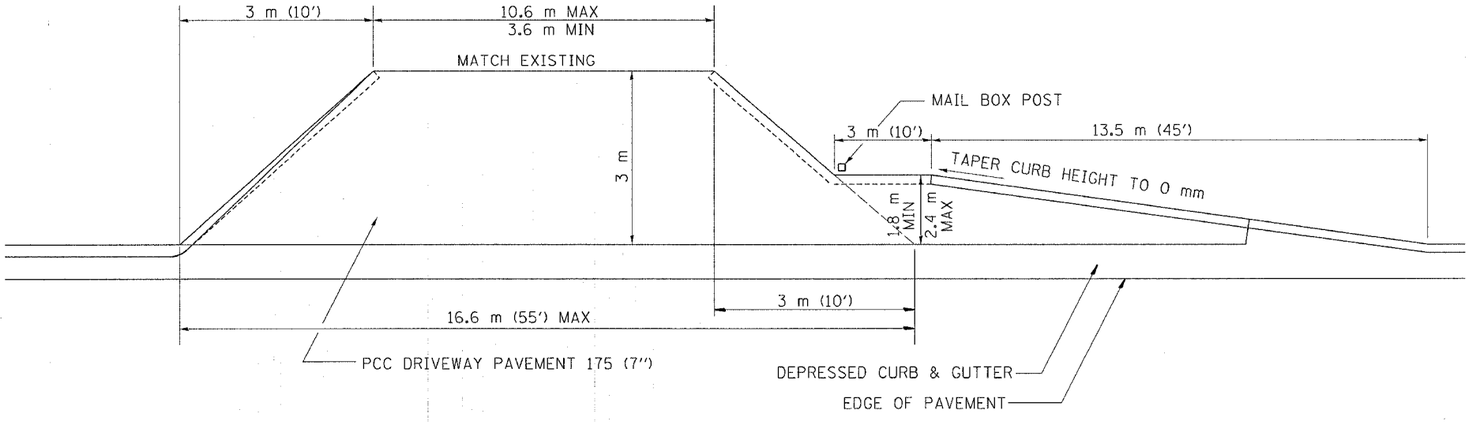
TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED WITH THE PROPER STAND. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP AND DISTURBED TURF RESEEDED.

DATE_TIME
DGN-SPEC
*REF
*REF
*REF
*REF

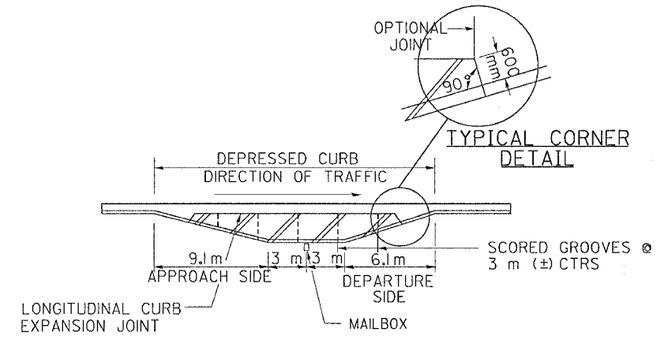
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	249
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

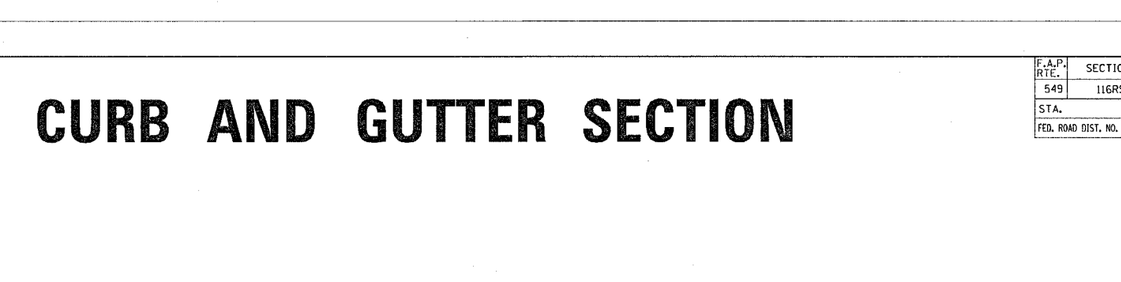
MAILBOX TURNOUT IN CURB AND GUTTER SECTION



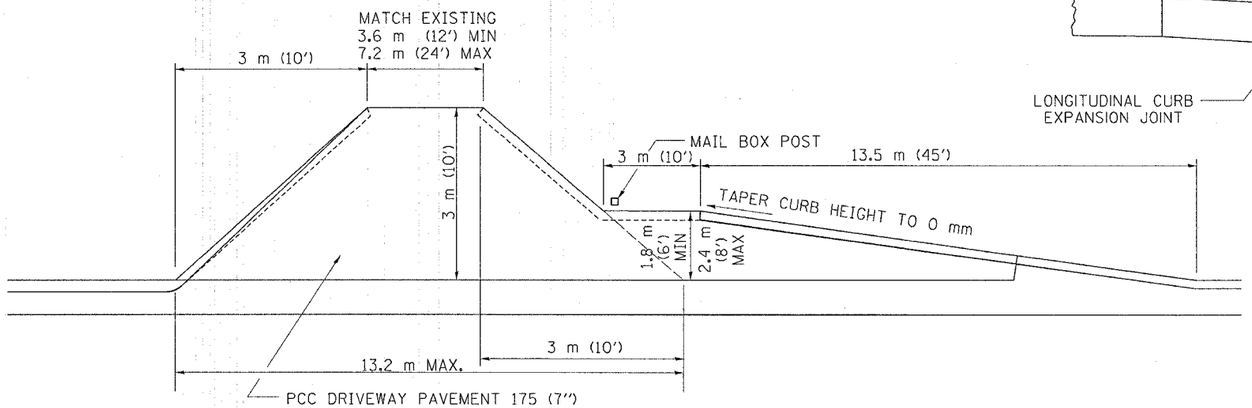
COMMERCIAL ENTRANCE WITH MAIL BOX TURNOUT



MAIL BOX TURNOUT



TYPICAL CROSS SECTION



PRIVATE ENTRANCE WITH MAIL BOX TURNOUT

GENERAL NOTES

1.) THE LONGITUDINAL CURB EXPANSION JOINT SHALL CONFORM TO SECTION 715 OF THE STANDARD SPECIFICATIONS.

2.) THE MAILBOX TURNOUT CROSS SLOPE WILL BE AS SHOWN ABOVE, AS SHOWN ON THE STATION CROSS SECTIONS OR AS DIRECTED BY THE ENGINEER.

3.) THE MAILBOX TURNOUT SHALL BE CONSTRUCTED WITH SCORED GROOVES, AS SPECIFIED IN ARTICLE 624.07 OF THE STANDARD SPECIFICATIONS, AT APPROXIMATELY 3.05 m CENTERS. IN THE EVENT THERE IS EXISTING OR PROPOSED SIDEWALK PRESENT, THESE SCORED GROOVES SHALL BE PLACED IN LINE WITH EVERY OTHER JOINT IN THE ADJACENT SIDEWALK.

4.) THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR P.C. CONCRETE DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED IN THE PLANS WHICH PRICE SHALL INCLUDE THE LONGITUDINAL CURB EXPANSION JOINT, MONOLITHIC CURB AS SHOWN, SCORED GROOVES, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

5) SEE THE DISTRICT STANDARD 25.1 FOR ADDTIONAL DETAILS.

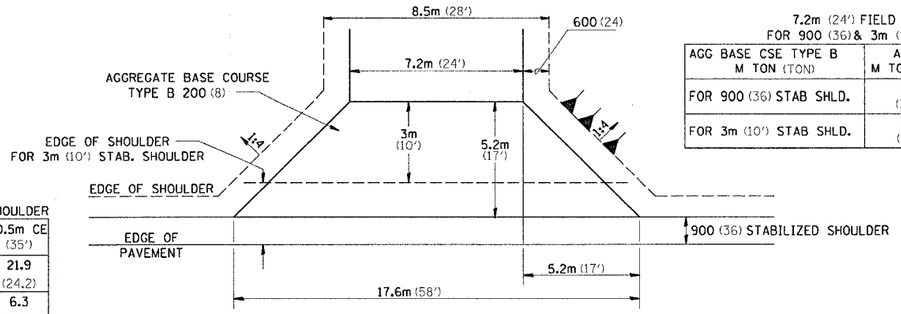
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

PLOT DATE = Wed Feb 09 07:49:26 2005
FILE NAME = E:\pro_gets\s280497\d081977ael.dgn
PLOT SCALE = 58.0000 ' / IN.

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	250
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BITUMINOUS APPROACHES & MAILBOX TURNOUTS



FIELD ENTRANCE

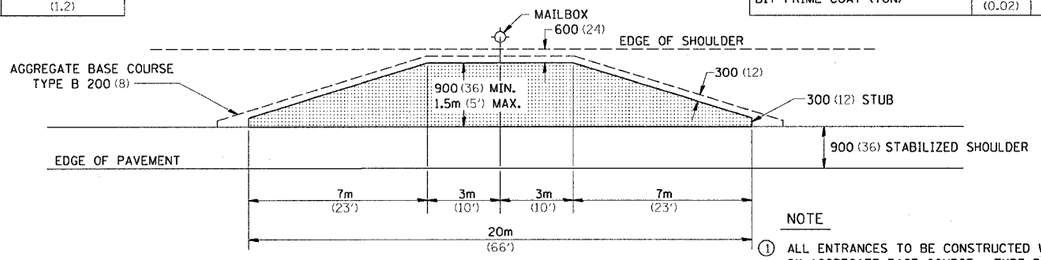
PE & CE FOR 3m (10') STAB. SHOULDER

	3.6m PE (12')	10.5m CE (35')
AGG BASE CSE (TON)	11.4 (12.6)	21.9 (24.2)
INC BIT SURF (TON)	3.1 (3.4)	6.3 (7.0)
PRIME (TON)	0.04 (0.04)	0.06 (0.07)

7.2m (24') FIELD ENTRANCE FOR 900 (36) & 3m (10') SHOULDERS

AGG BASE CSE TYPE B M TON (TON)	APRON M TON (TON)	PER METER (FOOT) ADD. RUN
FOR 900 (36) STAB SHLD.	31.3 (35.3)	3.5 (1.2)
FOR 3m (10') STAB SHLD.	14.9 (17.2)	3.5 (1.2)

	900 (36)	1.5m (5')
AGG BASE CSE T-B (TON)	10.7 (11.8)	14.4 (15.9)
INC BIT SURF 50 (2) (TON)	2.2 (2.4)	3.4 (3.8)
BIT PRIME COAT (TON)	0.02 (0.02)	0.04 (0.04)



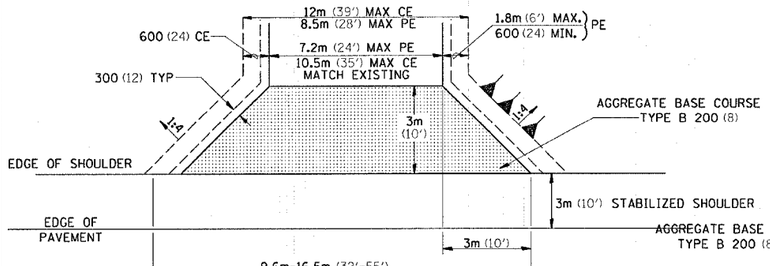
MAILBOX TURNOUT

10.5m (35') COMMERCIAL ENTRANCE FOR 900 (36) STAB. SHOULDER

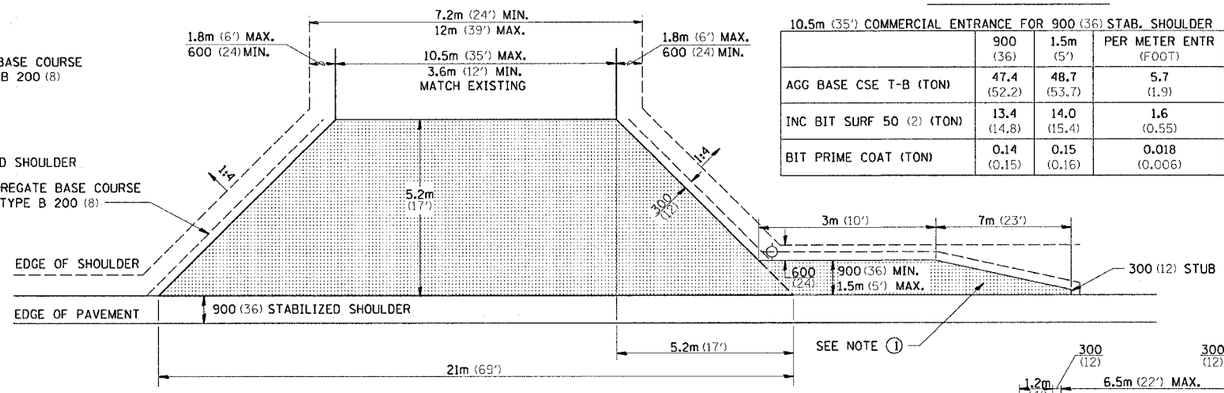
	900 (36)	1.5m (5')	PER METER ENTR (FOOT)
AGG BASE CSE T-B (TON)	47.4 (52.2)	48.7 (53.7)	5.7 (1.9)
INC BIT SURF 50 (2) (TON)	13.4 (14.8)	14.0 (15.4)	1.6 (0.55)
BIT PRIME COAT (TON)	0.14 (0.15)	0.15 (0.16)	0.018 (0.006)

NOTE

1. ALL ENTRANCES TO BE CONSTRUCTED WITH AN 8" AGGREGATE BASE COURSE, TYPE B AND WITH A 2" BITUMINOUS SURFACING, UNLESS OTHERWISE NOTED.
2. TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
3. ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
4. FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN WHICH EVER IS GREATER.
5. QUANTITIES SHOWN ARE FOR NEW CONSTRUCTION.
6. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



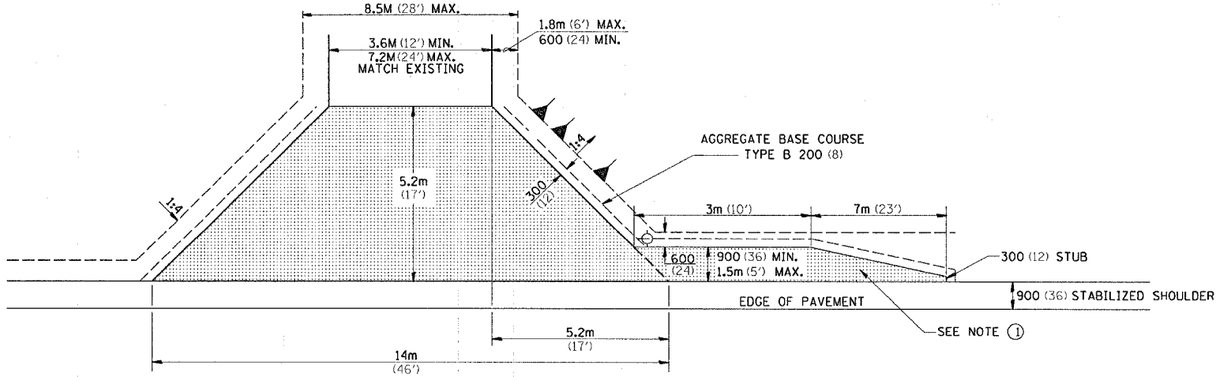
PE & CE FOR 3m (10') STAB. SHOULDERS



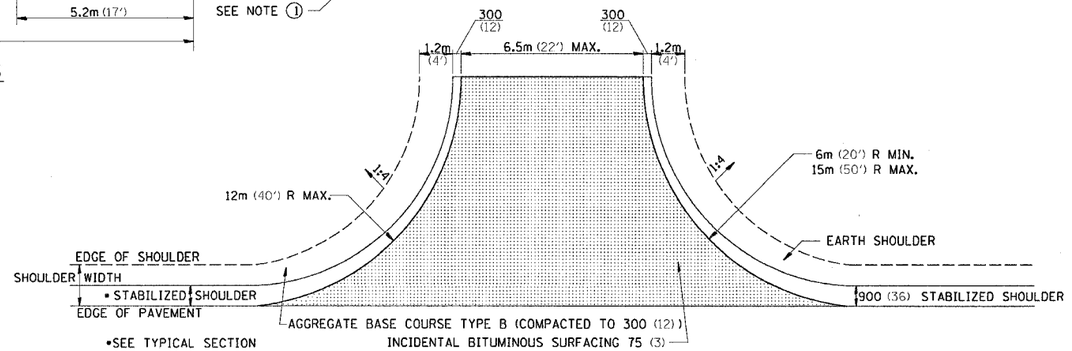
CE FOR 900 (36) STAB. SHOULDERS

3.6m (12') PRIVATE ENTRANCE FOR 900 (36) STAB. SHOULDER

	900 (36)	1.5m (5')	PER METER ENTR (FOOT)
AGG BASE CSE (TON)	29.4 (32.4)	30.8 (33.9)	0.64 (0.7)
INC BIT SURF 50 (2) (TON)	7.8 (8.6)	8.4 (9.3)	0.17 (0.19)
BIT PRIME COAT (TON)	0.08 (0.09)	0.09 (0.10)	0.006 (0.002)



PRIVATE ENTRANCE FOR 900 (36) STAB. SHOULDERS



SIDE ROAD RETURN

	6m (20') RADIUS			9m (30') RADIUS			12m (40') RADIUS		
	5.5m (18')	6m (20')	6.5m (22')	5.5m (18')	6m (20')	6.5m (22')	5.5m (18')	6m (20')	6.5m (22')
AGG BASE CSE T-B (TON)	20 (22.1)	21.6 (23.8)	23.1 (25.5)	37 (40.8)	39.5 (43.5)	42 (46.3)	57.9 (63.8)	61.3 (67.6)	64.7 (71.3)
INC BIT SURF 75 (3) (TON)	5.5 (6.1)	6.2 (6.8)	6.6 (7.25)	10.5 (11.6)	11.2 (12.4)	12.1 (13.3)	16.7 (18.4)	17.7 (19.5)	18.7 (20.6)
BIT PRIME CSE T-B (TON)	0.05 (0.06)	0.06 (0.07)	0.06 (0.07)	0.11 (0.12)	0.11 (0.12)	0.12 (0.13)	0.16 (0.18)	0.18 (0.20)	0.19 (0.21)

NOTE: USE 50 (2) INC. BIT. SURF. ON EXISTING RETURNS

•DATE-TIME•
•DGN-SPEC•
•REF•
•REF•
•REF•
•REF•

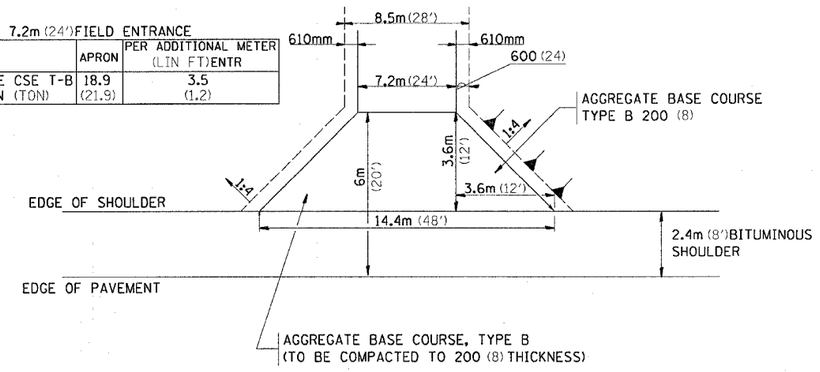
REVISED 5/15/90

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	251
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

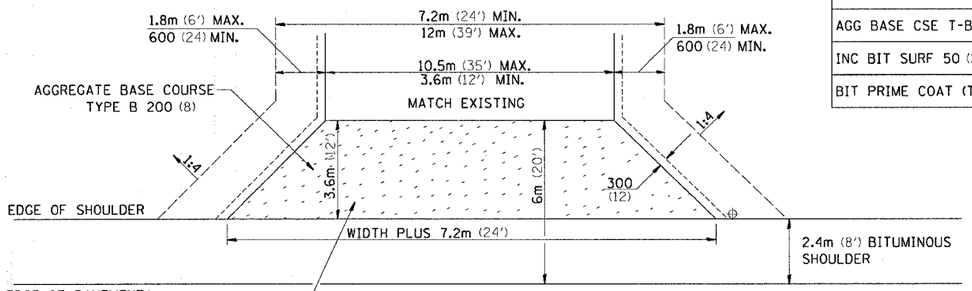
ENTRANCE AND SIDEROADS WITH 2.4m (8') BITUMINOUS SHOULDERS

7.2m (24') FIELD ENTRANCE	APRON	PER ADDITIONAL METER (LIN FT) ENTR
AGG BASE CSE T-B M TON (TON)	18.9 (21.9)	3.5 (1.2)

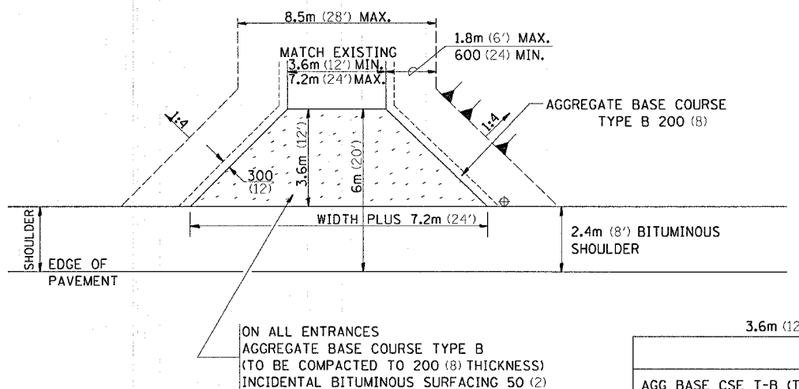


FIELD ENTRANCE

COMMERICAL ENTRANCE	3.6m (12')	10.5m (35')	PER METER ENTR (FOOT) 3.6m (12')	10.5m (35')
AGG BASE CSE T-B (TON)	14.3 (15.8)	27.0 (29.8)	0.64 (0.70)	1.70 (1.87)
INC BIT SURF 50 (2) (TON)	3.3 (3.6)	6.35 (7.0)	0.14 (0.15)	0.40 (0.44)
BIT PRIME COAT (TON)	0.042 (0.046)	0.082 (0.090)	0.002 (0.002)	0.005 (0.006)



COMMERCIAL ENTRANCE

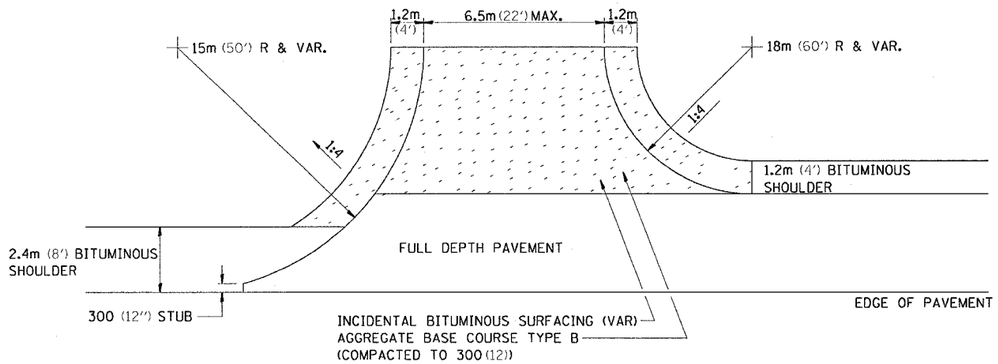


PRIVATE ENTRANCE

3.6m (12') PRIVATE ENTRANCE	3.6m (12')	7.2m (24')	PER METER ENTR (FOOT) 3.6m (12')	7.2m (24')
AGG BASE CSE T-B (TON)	14.3 (15.8)	21.0 (23.1)	0.64 (0.70)	1.20 (1.32)
INC BIT SURF 50 (2) (TON)	3.3 (3.6)	4.9 (5.4)	0.14 (0.15)	0.27 (0.30)
BIT PRIME COAT (TON)	0.042 (0.046)	0.063 (0.069)	0.002 (0.002)	0.004 (0.004)

NOTE

1. ALL PE & CE ARE TO BE BITUMINOUS SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
2. FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN, WHICH EVER IS GREATEST.
3. QUANTITIES ARE CALCULATED WITH 2.4m BITUMINOUS SHOULDER IN PLACE. AGGREGATE QUANTITIES SHOWN ARE FOR NEW CONSTRUCTION.
4. EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE CONSIDERED INCIDENTAL TO THE AGGREGATE BASE COURSE.
5. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



SIDE ROAD RETURN

	6m RADIUS (20')			9m RADIUS (30')			12m RADIUS (40')		
AGG BASE CSE T-B (TON)									
INC BIT SURF AT 25 (1) (TON)									
BIT PRIME COAT (TON)									

NOTE: USE 50 (2) INC. BIT. SURF. ON EXISTING RETURNS

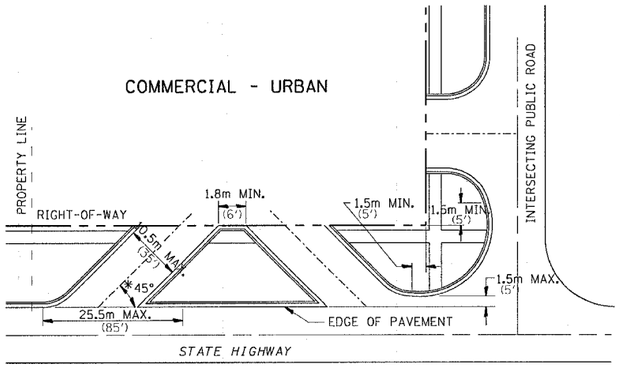
•DATE TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

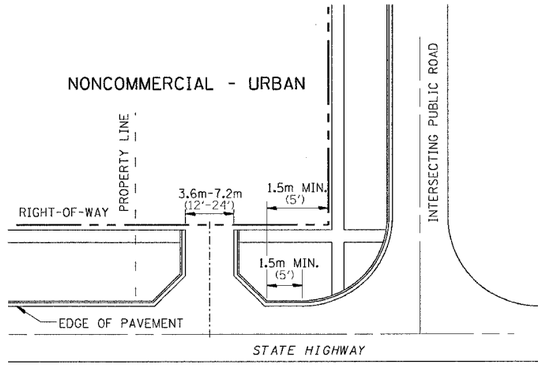
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	252
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ENTRANCE APPROACHES – URBAN AREA

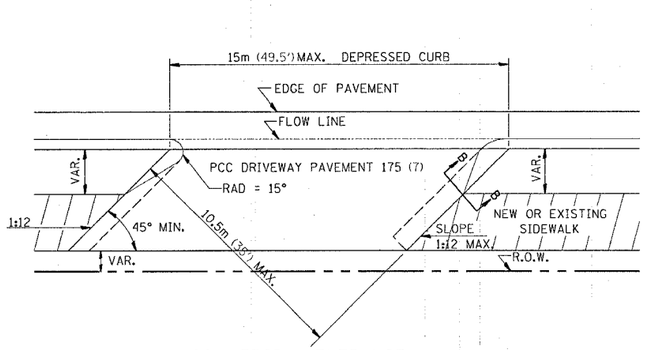
TYPICAL APPLICATION OF ENTRANCES



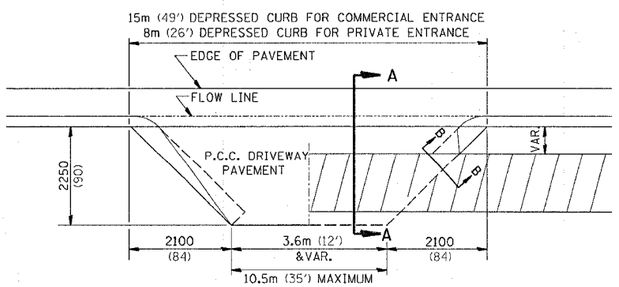


WHEN THE ISLAND BETWEEN DRIVES IS LESS THAN 7.5m (25') LONG OR LESS THAN 10 FEET WIDE, IT SHALL BE DEFINED BY CURBS, MASONRY, OR OTHER DEVICES.

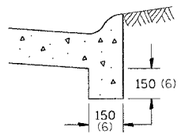
* 45° MIN. ANGLE PERMITTED ONLY FOR ONE-WAY DRIVEWAYS. 60° MIN. ANGLE FOR TWO-WAY DRIVEWAYS.



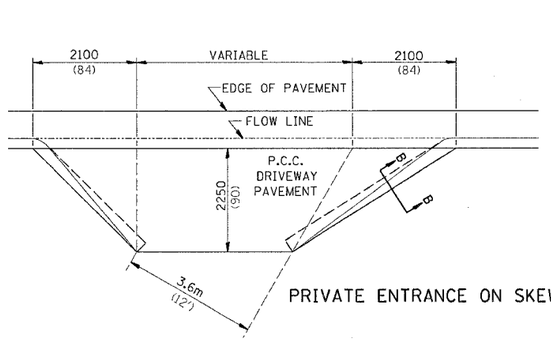
COMMERCIAL ENTRANCE



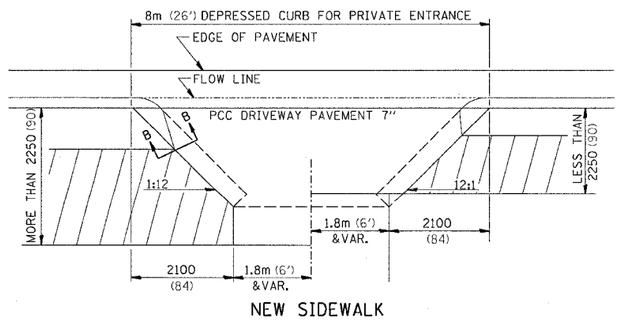
NO SIDEWALK EXISTING SIDEWALK



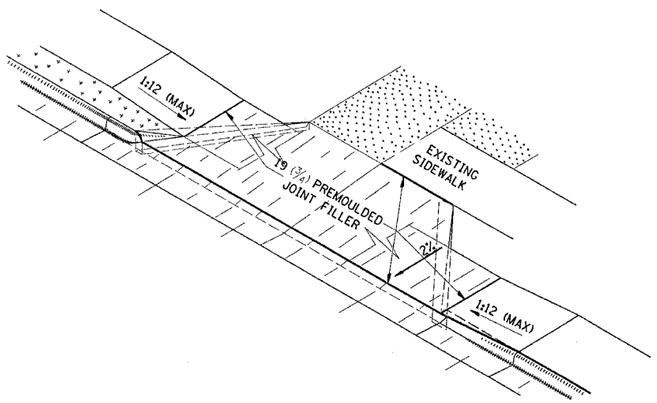
SEC B-B

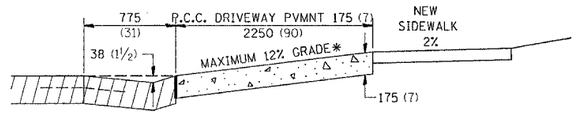


PRIVATE ENTRANCE ON SKEW

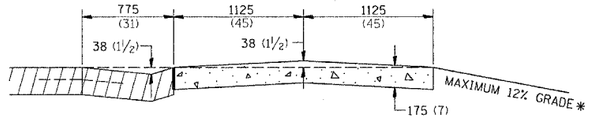


NEW SIDEWALK





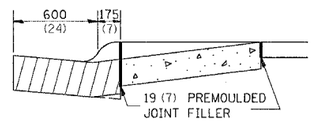
ASCENDING APPROACH



DESCENDING APPROACH

* IN CASES WHERE GRADE EXCEEDS 12%, THE RESIDENT ENGINEER SHALL CHECK WITH DISTRICT DESIGN OFFICE TO DETERMINE NEW APPROACH GRADE. PARTICULAR ATTENTION SHALL BE PAID TO THE NEGATIVE GRADE TO PREVENT DRAINAGE FROM OVER FLOWING INTO THE PRIVATE ENTRANCE.

SECTION A-A



THE VARIABLE HEIGHT INTEGRAL CURB AND PREMOULDED JOINT FILLER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED.

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

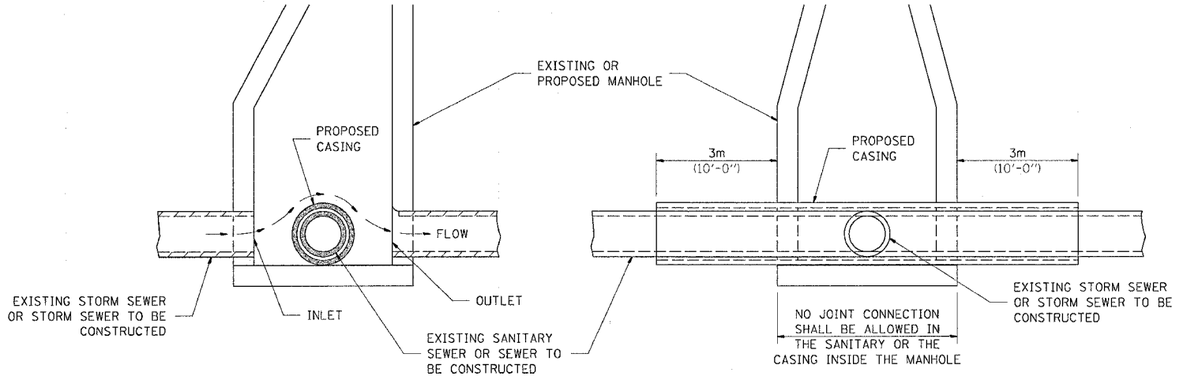
•DATE-TIME•
•DGN-SPEC•
•REF•
•REF•
•REF•
•REF•

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	253
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEWER AND WATER MAIN CROSSINGS

THIS DETAIL IS FOR UNKNOWN UTILITIES UNLESS QUANTITIES ARE INCLUDED IN THE PLANS THE EXTRA WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.



ELEVATION - ECCENTRIC

ELEVATION - CONCENTRIC

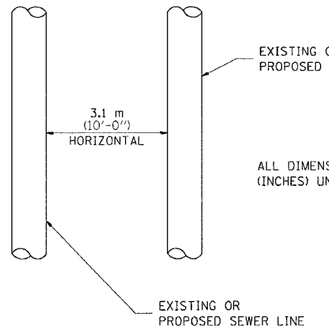
CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

AT GRADE CROSSING OF SANITARY AND STORM SEWER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

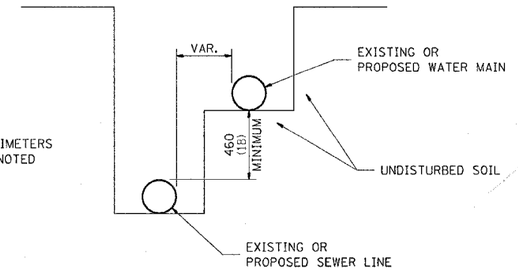
WHEN PROPOSED SEWER (OR WATER) IS LOCATED 3.1 m (10'-0") OR MORE FROM EXISTING WATER (OR SEWER) NO SPECIAL CONSTRUCTION REQUIRED.

WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 3.1 m (10'-0") FROM EXISTING WATER (OR SEWER) DETAILS BELOW SHALL APPLY.



PLAN VIEW

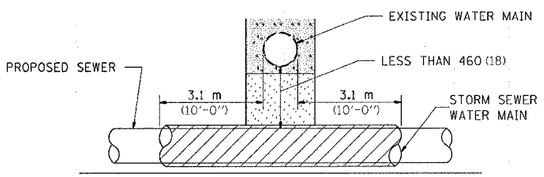
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED



WATER AND SEWER HORIZONTAL SEPARATION REQUIREMENTS

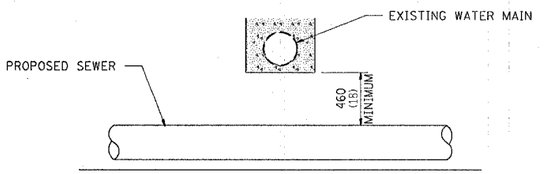
POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH



PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH

MAINTAIN 460 (18) MINIMUM VERTICAL SEPARATION FOR 3.1m (10') HORIZONTALLY

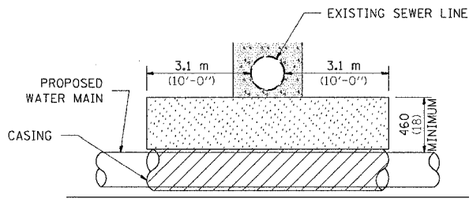


ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN

PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT

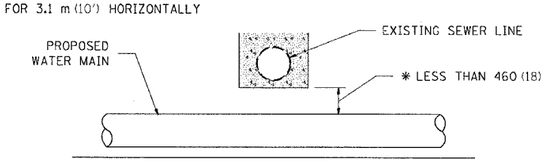
PLACE TRENCH BACKFILL FOR 3.1 m (10') ON EITHER SIDE OF SEWER LINE



CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH

MAINTAIN 460 (18) MINIMUM VERTICAL SEPARATION FOR 3.1 m (10') HORIZONTALLY

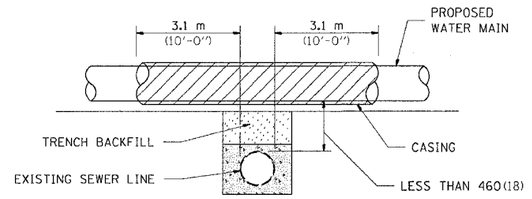


* NOT ALLOWED
MUST MAINTAIN 460 (18) VERTICAL SEPARATION

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE

POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATER MAIN CASING AND SEWER

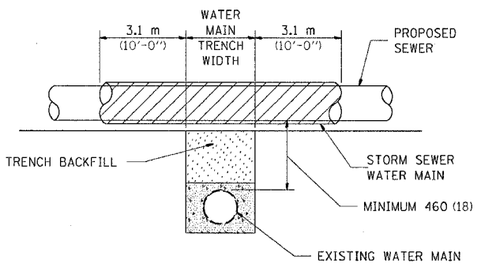


CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE

PROVIDE ADEQUATE SUPPORT FOR SEWER TO PREVENT SETTLING AND BREAKING THE WATER MAIN.



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

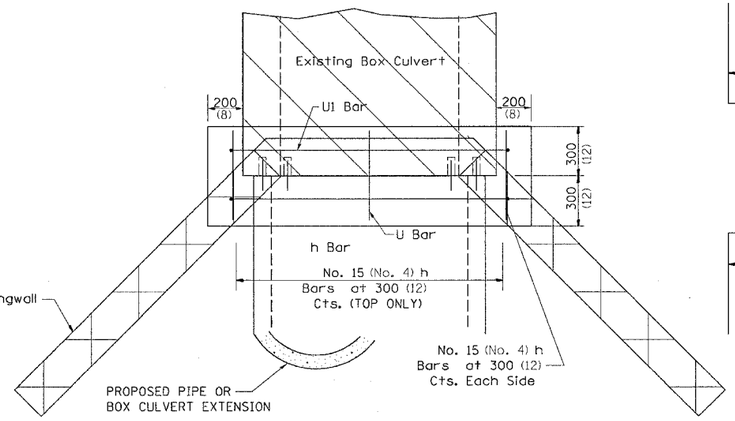
EXISTING WATER MAIN BELOW PROPOSED SEWER LINE WITH MINIMUM 460 (18) VERTICAL SEPARATION

•DATE-TIME•
•DGN-SPEC•
•REF•
•REF•
•REF•
•REF•

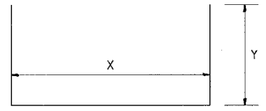
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	254
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

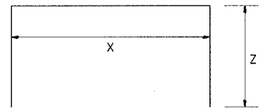
CONCRETE COLLARS FOR PIPE OR BOX CULVERT EXTENSIONS



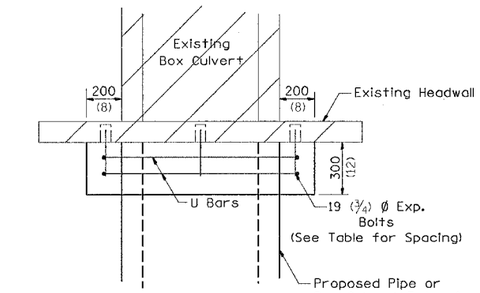
PLAN OF CULVERT WITH ANGLED WING WALLS



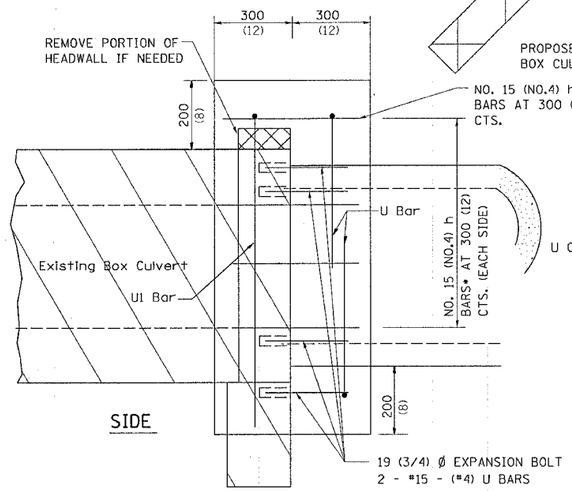
(#4) U BAR



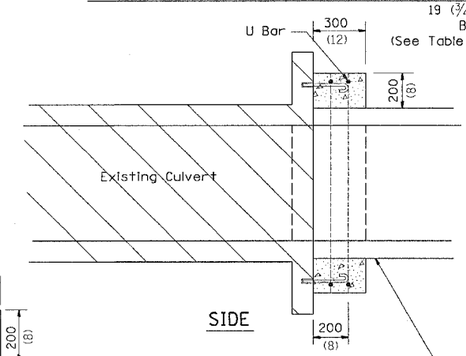
(#4) U1 BAR



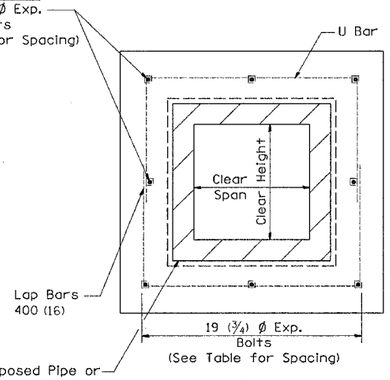
PLAN OF CULVERT WITH STRAIGHT HEADWALL



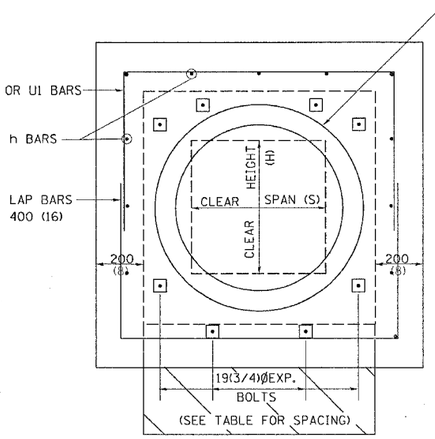
SIDE



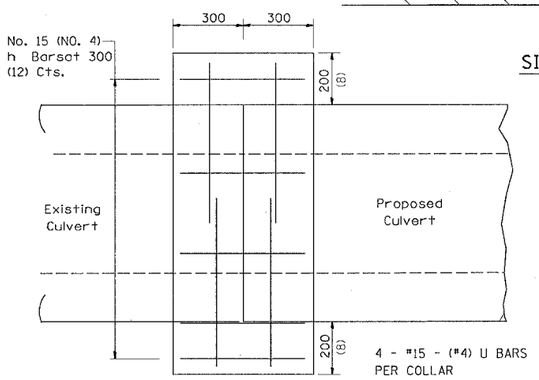
SIDE



FRONT



FRONT



CULVERT CONNECTION WITHOUT EXISTING HEADWALL

PLACEMENT DETAILS FOR EXPANSION BOLTS

H OR S	NUMBER OF EXPANSION BOLTS REQUIRED PER SIDE			
	EXTENSIONS < 4.57m (15')		EXTENSIONS > 4.57m (15')	
	NUMBER	SPACING	NUMBER	SPACING
600 (24)	*		*	
750 (30)	2	450 (18)	2	450 (18)
900 (36)	2	600 (24)	2	600 (24)
1200 (48)	3	450 (18)	3	450 (18)
1500 (60)	4	400 (16)	3	600 (24)
1800 (72)	5	375 (15)	4	500 (20)
2100 (84)	5	450 (18)	4	600 (24)
2400 (96)	6	375 (15)	5	525 (21)
2700 (108)	6	475 (19)	5	600 (24)
3000 (120)	7	450 (18)	6	525 (21)
3300 (132)	8	425 (17)	6	600 (24)
3600 (144)	8	475 (19)	7	550 (22)

* MINIMUM ONE PER SIDE

Bill of Materials

STATION	DIMENSIONS X	DIMENSIONS Y	h Bar No.	U Bar No.	U Bar Length	EXPANSION BOLTS No.	CONCRETE COLLAR Cu. yds.	REINF. BARS LBS
481+36.12	6'-8"	4'-0"	28	4	14'-8"		1.85	64.13
503+85.31	5'-5"	3'-2"	20	4	11'-9"		0.89	49.21
603+77.34	5'-5"	3'-2"	20	4	11'-9"		0.89	49.21
611+38.60	6'-8"	3'-5"	24	4	13'-6"		0.73	57.45
All h Bars 450 (18) Long					Total		436	162.99

General Notes

Concrete Collars shall be constructed of Class SI Concrete in accordance with Section 503 of the Standard Specifications

Reinforcement bars shall conform to Section 508 of the Standard Specifications.

The concrete will be paid for at the contract unit price per cubic meter (cubic yard) for CONCRETE COLLAR. Reinforcement will be paid for at the contract unit price per kilogram (pound) for REINFORCEMENT BARS. Expansion Bolts, when required, will be paid for at the contract unit price each for EXPANSION BOLTS of the size indicated, which price shall include furnishing, drilling holes, and installing the expansion bolts complete in place. These bolts shall extend at least 200 (8 inches) into the new concrete.

ILLINOIS DEPARTMENT OF TRANSPORTATION

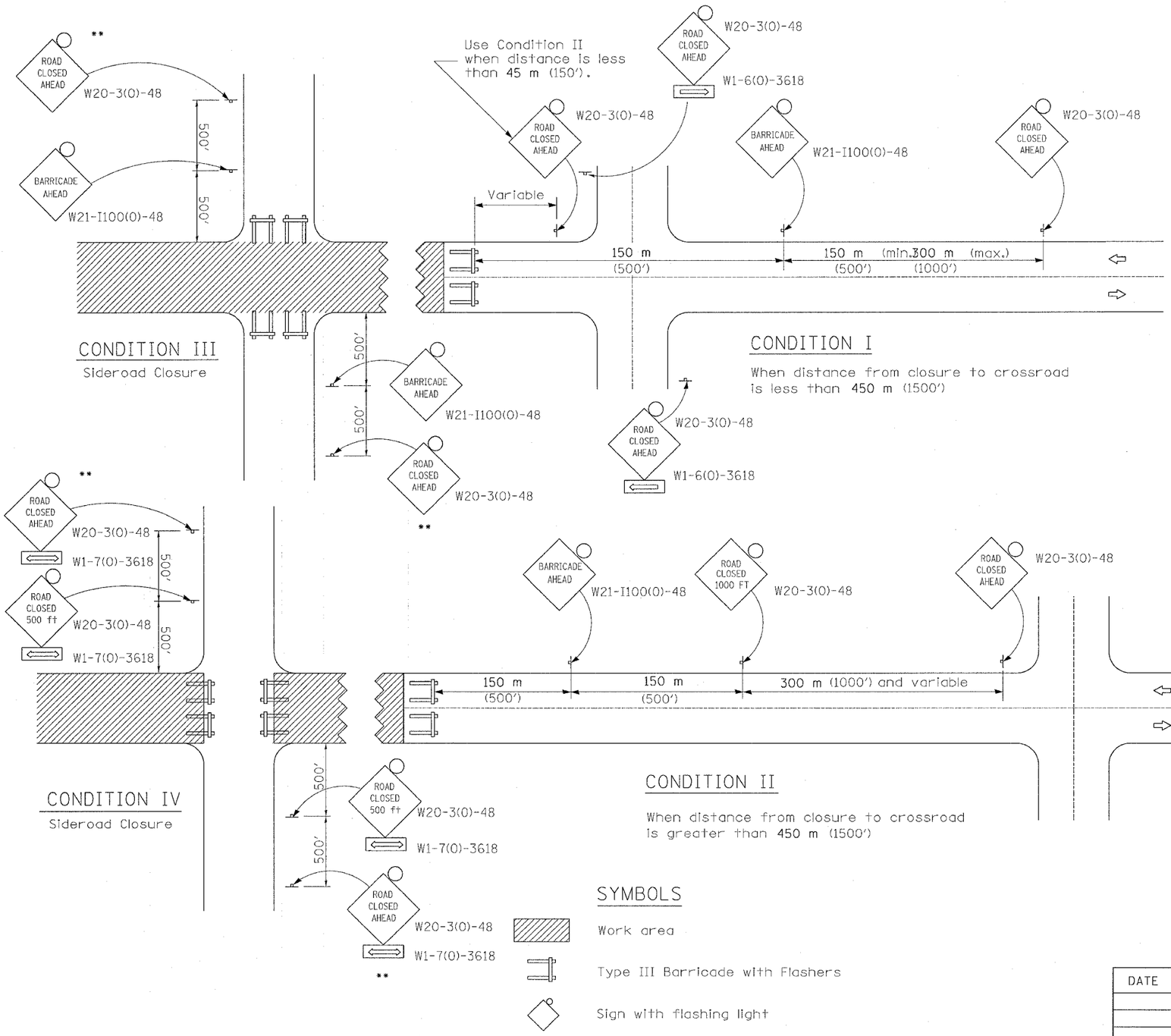
REVISIONS NAME	DATE

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

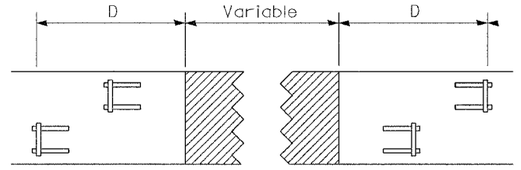
•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	255
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ROAD CLOSED TO THRU TRAFFIC BARRICADE SET UP



Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To All Thru Traffic" detail on Highway Standard 702001. If the distance "D" exceeds 600 m (2000') an additional set of barricades and R11-4-4830 shall be placed at each end of the work area.

GENERAL NOTES

** Where local access is to be maintained, barricades are to be set up as shown above in Road Closed to thru traffic.

Type III Barricades and R11-2-4830 signs shall be as shown in "Road Closed To All Traffic" detail on Highway Standard 702001.

Longitudinal dimensions may be adjusted to fit field conditions.

When the distance between the barricade and the intersection is between 450 m (1500') and 600 m (2000'), the advance sign shall be placed at the intersection. When the distance between the barricade and the intersection is over 600 m (2000'), an additional sign shall be placed at the intersection. The additional sign shall give the distance to the barricade in miles or fractions of a mile.

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

DATE	REVISIONS

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR ROAD CLOSURE

TRAFFIC CONTROL FOR ROAD CLOSURE

REVISED 1/28/03 **40.1**

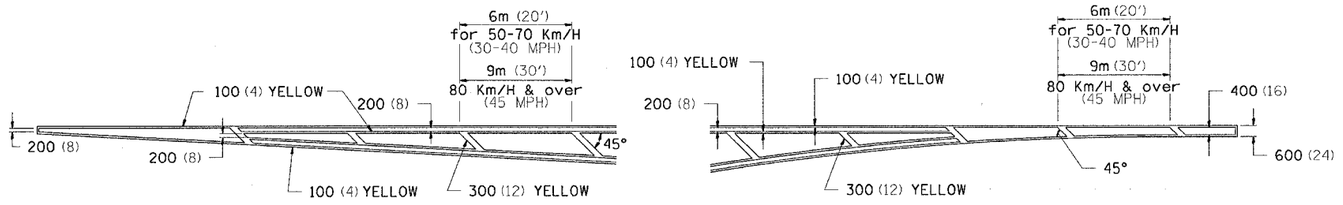
•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

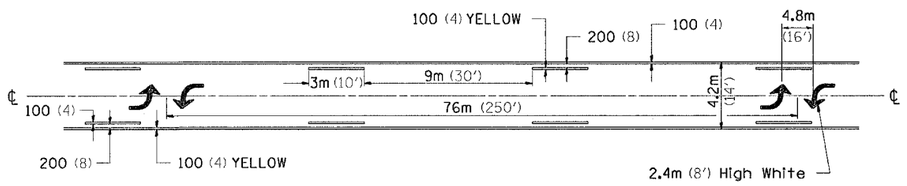
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	256
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

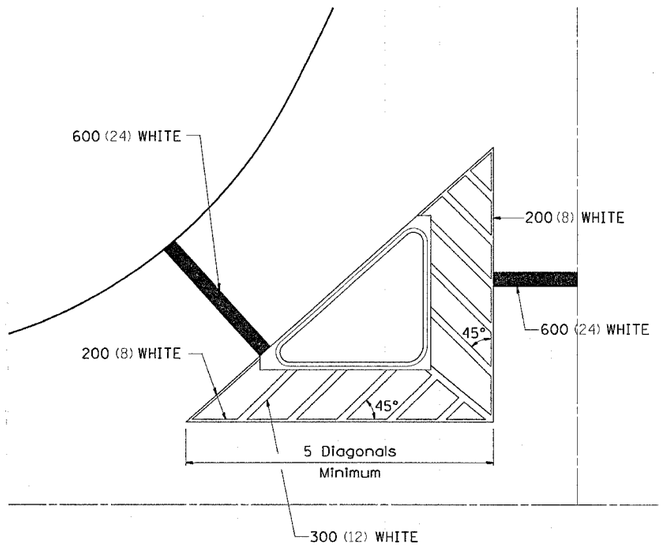
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



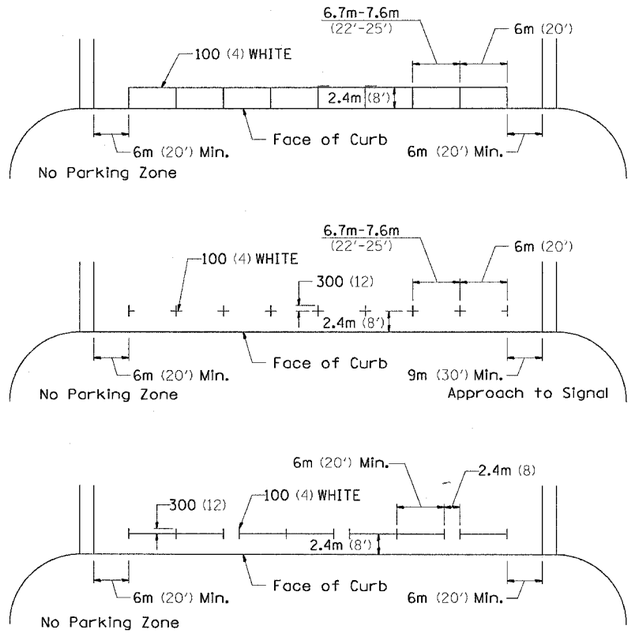
MEDIAN PAVEMENT MARKING



TYPICAL ISLAND OFFSET SHOULDER WIDTH



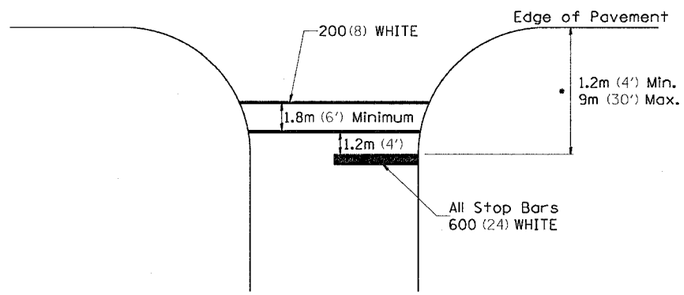
TYPICAL PARKING SPACING



•• ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

STANDARD CROSSWALK MARKING

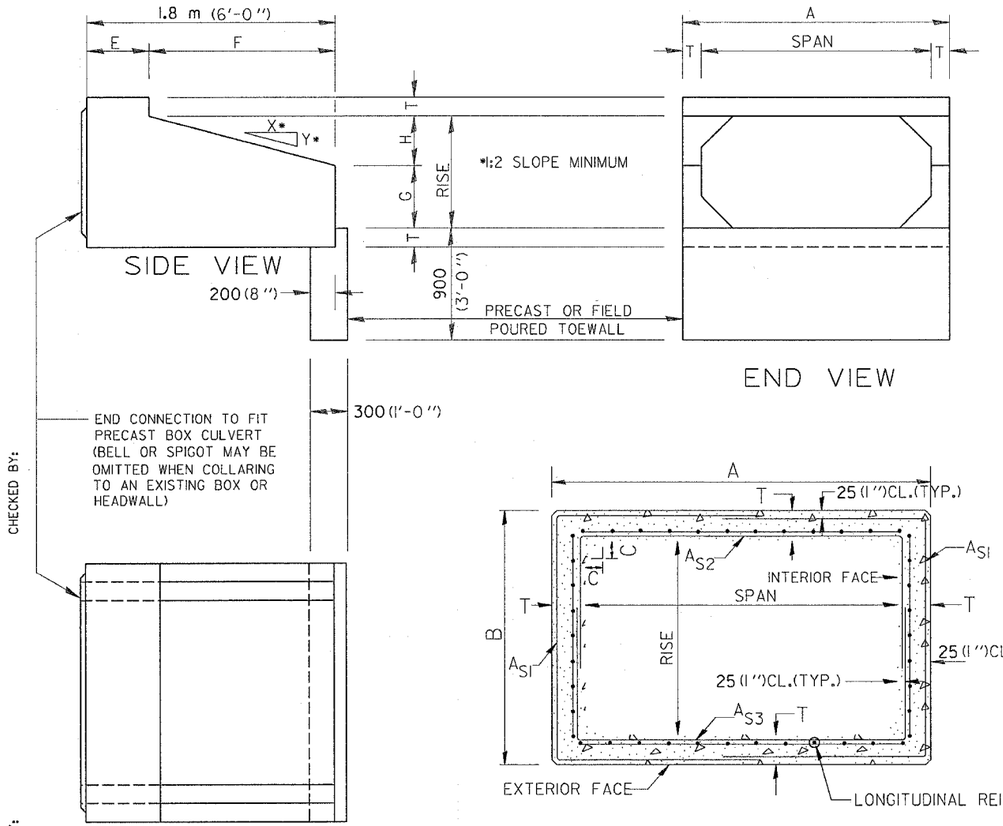
See Schedules for Locations



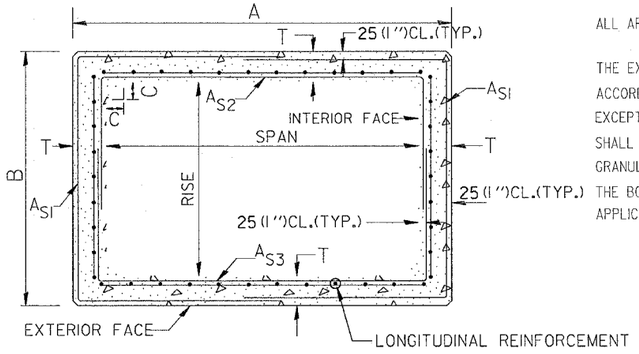
• Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

CONTRACT NO. 64178

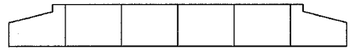
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	257
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN



CROSS-SECTION



GENERAL NOTES

PRECAST CONCRETE BOX CULVERTS AND PRECAST CONCRETE BOX CULVERT END SECTIONS

THIS WORK CONSISTS OF FURNISHING AND INSTALLING PRECAST BOX CULVERTS AND BOX CULVERT END SECTIONS AS SHOWN ON THE PLANS AND SPECIFIED HEREIN.

IF THE EARTH COVER IS 600 (2 ft) OR MORE, THE PRECAST CONCRETE BOX CULVERT SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C789 EXCEPT THAT THE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLES 1003.02 AND 1004.02 OF THE STANDARD SPECIFICATIONS, WITH THE EXCEPTION OF A GRADATION.

IF THE EARTH COVER IS LESS THAN 600 (2 ft), THE PRECAST BOX CULVERT BARREL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C850 AND THE END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C789. WITH THE EXCEPTION OF GRADATION, THE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLES 1003.02 AND 1004.02 OF THE STANDARD SPECIFICATIONS.

ALL APPLICABLE REQUIREMENTS OF ARTICLE 540 OF THE STANDARD SPECIFICATIONS.

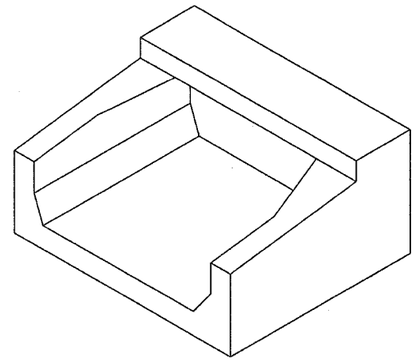
THE EXCAVATION AND BACKFILLING FOR PRECAST CONCRETE BOX CULVERT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 502 OF THE STANDARD SPECIFICATIONS EXCEPT A LAYER OF POROUS GRANULAR BACKFILL, AT LEAST 150 (6") IN THICKNESS, SHALL BE PLACED BELOW THE ELEVATION OF THE BOTTOM OF THE BOX. THE POROUS GRANULAR BACKFILL SHALL BE PLACED TO EXTEND AT LEAST 600 (2 ft) EACH SIDE OF THE BOX. THE PRECAST CONCRETE BOX CULVERT SHALL BE LAID IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ARTICLE 542.04 (d) OF THE STANDARD SPECIFICATIONS

SHOP PLANS FOR THE PRECAST CONCRETE BOX CULVERT SECTIONS AND THE END SECTIONS SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504.04 (a) OF THE STANDARD SPECIFICATIONS.

THE PRECAST CONCRETE BOX CULVERT EXCLUDING END SECTIONS WILL BE MEASURED ON A METER (LINEAL FOOT) BASIC. THE PRECAST BOX CULVERT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER (LINEAL FOOT) FOR PRECAST CONCRETE BOX CULVERT, OF THE SIZE SPECIFIED, AND INCLUDES POROUS GRADULAR BACKFILL EXCAVATION EXCEPT EXCAVATION OF ROCK AND/OR UNSTABLE OR UNSUITABLE MATERIAL BELOW BEDDING GRADE

THE PRECAST CONCRETE BOX CULVERT END SECTION WILL BE MEASURED ON AN EACH BASIS. THE END SECTIONS WILL BE PAID FOR AT THE CONCTRACT UNIT PRICE EACH FOR BOX CULVERT END SECTIONS, OF THE CULVERT NUMBER SPECIFIED, AND INCLUDE EXCAVATION, TOEWALL AND COLLARS.

* ALL DIMENSIONS SHOULD BE VERIFIED WITH SUPPLIER.



ISOMETRIC VIEW

DIMENSIONS (FOR ASTM C789)*

SPAN X RISE (ft) meter	T mm (INCHES)	A mm (FT.-IN.)	B mm (FT.-IN.)	C mm (INCHES)	F mm (FT.-IN.)	F mm (FT.-IN.)	G mm (FT.-IN.)	H mm (FT.-IN.)	SLOPE (X : Y)
0.6 x 0.6 (2'x2')	100 (4)	800 (2-8)	800 (2-8)	100 (4)	900 (3-0)	900 (3-0)	300 (1-0)	300 (1-0)	1:3
0.9 x 0.6 (3'x2')	100 (4)	1100 (3-8)	800 (2-8)	100 (4)	900 (3-0)	900 (3-0)	300 (1-0)	300 (1-0)	1:3
0.9 x 0.75 (3'x2.5')	100 (4)	1100 (3-8)	950 (3-2)	100 (4)	900 (3-0)	900 (3-0)	375 (1-3)	375 (1-3)	1:3
0.9 x 0.9 (3'x3')	100 (4)	1100 (3-8)	1100 (3-8)	100 (4)	600 (2-0)	1200 (4-0)	500 (1-8)	400 (1-4)	1:3
1.2 x 0.6 (4'x2')	125 (5)	1450 (4-10)	850 (2-10)	125 (5)	900 (3-0)	900 (3-0)	300 (1-0)	300 (1-0)	1:3
1.2 x 0.9 (4'x3')	125 (5)	1450 (4-10)	1150 (3-10)	125 (5)	600 (2-0)	1200 (4-0)	500 (1-8)	400 (1-4)	1:3
1.2 x 1.2 (4'x4')	125 (5)	1450 (4-10)	1450 (4-10)	125 (5)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
1.5 x 0.6 (5'x2')	150 (6)	1800 (6-0)	900 (3-0)	150 (6)	900 (3-0)	900 (3-0)	300 (1-0)	300 (1-0)	1:3
1.5 x 0.9 (5'x3')	150 (6)	1800 (6-0)	1200 (4-0)	150 (6)	600 (2-0)	1200 (4-0)	500 (1-8)	400 (1-4)	1:3
1.5 x 1.2 (5'x4')	150 (6)	1800 (6-0)	1500 (5-0)	150 (6)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
1.5 x 1.5 (5'x5')	150 (6)	1800 (6-0)	1800 (6-0)	150 (6)	600 (2-0)	1200 (4-0)	900 (3-0)	600 (2-0)	1:3
1.8 x 0.6 (6'x2')	175 (7)	2150 (7-2)	950 (3-2)	175 (7)	900 (3-0)	900 (3-0)	300 (1-0)	300 (1-0)	1:3
1.8 x 0.9 (6'x3')	175 (7)	2150 (7-2)	1250 (4-2)	175 (7)	600 (2-0)	1200 (4-0)	500 (1-8)	400 (1-4)	1:3
1.8 x 1.2 (6'x4')	175 (7)	2150 (7-2)	1550 (5-2)	175 (7)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
1.8 x 1.5 (6'x5')	175 (7)	2150 (7-2)	1850 (6-2)	175 (7)	600 (2-0)	1200 (4-0)	900 (3-0)	600 (2-0)	1:2
1.8 x 1.8 (6'x6')	175 (7)	2150 (7-2)	2150 (7-2)	175 (7)	600 (2-0)	1200 (4-0)	1200 (4-0)	600 (2-0)	1:2

SPAN X RISE (ft) meter	T mm (INCHES)	A mm (FT.-IN.)	B mm (FT.-IN.)	C mm (INCHES)	E mm (FT.-IN.)	F mm (FT.-IN.)	G mm (FT.-IN.)	H mm (FT.-IN.)	SLOPE (X : Y)
2.1 x 0.9 (7'X3')	200 (8)	2500 (8-4)	1300 (4-4)	200 (8)	600 (2-0)	1200 (4-0)	300 (1-0)	600 (2-0)	1:2
2.1 x 1.2 (7'x4')	200 (8)	2500 (8-4)	1600 (5-4)	200 (8)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
2.1 x 1.5 (7'x5')	200 (8)	2500 (8-4)	1900 (6-4)	200 (8)	600 (2-0)	1200 (4-0)	900 (3-0)	600 (2-0)	1:2
2.1 x 1.8 (7'x6')	200 (8)	2500 (8-4)	2200 (7-4)	200 (8)	600 (2-0)	1200 (4-0)	1200 (4-0)	600 (2-0)	1:2
2.1 x 2.1 (7'x7')	200 (8)	2500 (8-4)	2500 (8-4)	200 (8)	600 (2-0)	1200 (4-0)	1500 (5-0)	600 (2-0)	1:2
2.4 x 0.9 (8'x3')	200 (8)	2800 (9-4)	1300 (4-4)	200 (8)	600 (2-0)	1200 (4-0)	300 (1-0)	600 (2-0)	1:2
2.4 x 1.2 (8'x4')	200 (8)	2800 (9-4)	1600 (5-4)	200 (8)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
2.4 x 1.5 (8'x5')	200 (8)	2800 (9-4)	1900 (6-4)	200 (8)	600 (2-0)	1200 (4-0)	900 (3-0)	600 (2-0)	1:2
2.4 x 1.8 (8'x6')	200 (8)	2800 (9-4)	2200 (7-4)	200 (8)	600 (2-0)	1200 (4-0)	1200 (4-0)	600 (2-0)	1:2
2.4 x 2.1 (8'x7')	200 (8)	2800 (9-4)	2500 (8-4)	200 (8)	600 (2-0)	1200 (4-0)	1500 (5-0)	600 (2-0)	1:2
2.4 x 2.4 (8'x8')	200 (8)	2800 (9-4)	2800 (9-4)	200 (8)	600 (2-0)	1200 (4-0)	1800 (6-0)	600 (2-0)	1:2
2.7 x 0.9 (9'x3')	225 (9)	3150 (10-6)	1350 (4-6)	225 (9)	600 (2-0)	1200 (4-0)	300 (1-0)	600 (2-0)	1:2
2.7 x 1.2 (9'x4')	225 (9)	3150 (10-6)	1650 (5-6)	225 (9)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
2.7 x 1.5 (9'x5')	225 (9)	3150 (10-6)	1950 (6-6)	225 (9)	600 (2-0)	1200 (4-0)	900 (3-0)	600 (2-0)	1:2
2.7 x 1.8 (9'x6')	225 (9)	3150 (10-6)	2250 (7-6)	225 (9)	600 (2-0)	1200 (4-0)	1200 (4-0)	600 (2-0)	1:2
2.7 x 2.1 (9'x7')	225 (9)	3150 (10-6)	2600 (8-6)	225 (9)	600 (2-0)	1200 (4-0)	1500 (5-0)	600 (2-0)	1:2

SPAN X RISE (ft) meter	T mm (INCHES)	A mm (FT.-IN.)	B mm (FT.-IN.)	C mm (INCHES)	E mm (FT.-IN.)	F mm (FT.-IN.)	G mm (FT.-IN.)	H mm (FT.-IN.)	SLOPE (X : Y)
2.7 x 2.4 (9'x8')	225 (9)	3150 (10-6)	2900 (9-6)	225 (9)	600 (2-0)	1200 (4-0)	1800 (6-0)	600 (2-0)	1:2
2.7 x 2.7 (9'x9')	225 (9)	3150 (10-6)	3150 (10-6)	225 (9)	600 (2-0)	1200 (4-0)	2100 (7-0)	600 (2-0)	1:2
3.0 x 0.9 (10'x3')	255 (10)	3550 (11-8)	1425 (4-8)	250 (10)	600 (2-0)	1200 (4-0)	500 (1-8)	400 (1-4)	1:3
3.0 x 1.2 (10'x4')	255 (10)	3550 (11-8)	1725 (5-8)	250 (10)	600 (2-0)	1200 (4-0)	300 (1-0)	600 (2-0)	1:2
3.0 x 1.5 (10'x5')	255 (10)	3550 (11-8)	2025 (6-8)	250 (10)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
3.0 x 1.8 (10'x6')	255 (10)	3550 (11-8)	2350 (7-8)	250 (10)	600 (2-0)	1200 (4-0)	900 (3-0)	600 (2-0)	1:2
3.0 x 2.1 (10'x7')	255 (10)	3550 (11-8)	2650 (8-8)	250 (10)	600 (2-0)	1200 (4-0)	1200 (4-0)	600 (2-0)	1:2
3.0 x 2.4 (10'x8')	255 (10)	3550 (11-8)	2950 (9-8)	250 (10)	600 (2-0)	1200 (4-0)	1800 (6-0)	600 (2-0)	1:2
3.0 x 2.7 (10'x9')	255 (10)	3550 (11-8)	3250 (10-8)	250 (10)	600 (2-0)	1200 (4-0)	2100 (7-0)	600 (2-0)	1:2
3.0 x 3.0 (10'x10')	255 (10)	3550 (11-8)	3550 (11-8)	250 (10)	600 (2-0)	1200 (4-0)	2400 (8-0)	600 (2-0)	1:2
3.3 x 0.9 (11'x3')	280 (11)	3900 (12-10)	1475 (4-10)	275 (11)	600 (2-0)	1200 (4-0)	300 (1-0)	600 (2-0)	1:2
3.3 x 1.2 (11'x4')	280 (11)	3900 (12-10)	1775 (5-10)	275 (11)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
3.3 x 1.5 (11'x5')	280 (11)	3900 (12-10)	2075 (6-10)	275 (11)	600 (2-0)	1200 (4-0)	900 (3-0)	600 (2-0)	1:2
3.3 x 1.8 (11'x6')	280 (11)	3900 (12-10)	2400 (7-10)	275 (11)	600 (2-0)	1200 (4-0)	1200 (4-0)	600 (2-0)	1:2
3.3 x 2.1 (11'x7')	280 (11)	3900 (12-10)	2700 (8-10)	275 (11)	600 (2-0)	1200 (4-0)	1500 (5-0)	600 (2-0)	1:2
3.3 x 2.4 (11'x8')	280 (11)	3900 (12-10)	3000 (9-10)	275 (11)	600 (2-0)	1200 (4-0)	1800 (6-0)	600 (2-0)	1:2

SPAN X RISE (ft) meter	T mm (INCHES)	A mm (FT.-IN.)	B mm (FT.-IN.)	C mm (INCHES)	E mm (FT.-IN.)	F mm (FT.-IN.)	G mm (FT.-IN.)	H mm (FT.-IN.)	SLOPE (X : Y)
3.3 x 2.7 (11'x9')	280 (11)	3900 (12-10)	3300 (10-10)	275 (11)	600 (2-0)	1200 (4-0)	2100 (7-0)	600 (2-0)	1:2
3.3 x 3.0 (11'x10')	280 (11)	3900 (12-10)	3600 (11-10)	275 (11)	600 (2-0)	1200 (4-0)	2400 (8-0)	600 (2-0)	1:2
3.3 x 3.3 (11'x11')	280 (11)	3900 (12-10)	3900 (12-10)	275 (11)	600 (2-0)	1200 (4-0)	2700 (9-0)	600 (2-0)	1:2
3.6 x 0.9 (12'x3')	300 (12)	4250 (14-0)	1525 (5-0)	300 (1-0)	600 (2-0)	1200 (4-0)	300 (1-0)	600 (2-0)	1:2
3.6 x 1.2 (12'x4')	300 (12)	4250 (14-0)	1825 (6-0)	300 (1-0)	600 (2-0)	1200 (4-0)	600 (2-0)	600 (2-0)	1:2
3.6 x 1.5 (12'x5')	300 (12)	4250 (14-0)	2125 (7-0)	300 (1-0)	600 (2-0)	1200 (4-0)	900 (3-0)	600 (2-0)	1:2
3.6 x 1.8 (12'x6')	300 (12)	4250 (14-0)	2425 (8-0)	300 (1-0)	600 (2-0)	1200 (4-0)	1200 (4-0)	600 (2-0)	1:2
3.6 x 2.1 (12'x7')	300 (12)	4250 (14-0)	2725 (9-0)	300 (1-0)	600 (2-0)	1200 (4-0)	1500 (5-0)	600 (2-0)	1:2
3.6 x 2.4 (12'x8')	300 (12)	4250 (14-0)	3025 (10-0)	300 (1-0)	600 (2-0)	1200 (4-0)	1800 (6-0)	600 (2-0)	1:2

REVISIONS NAME	DATE
S. L. P.	9/14/89
L.A.D.	
R.A.N.	
T.E.C.	10/17/91
CADD	3/9/92
CADD	8/02/00
CADD	3/19/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF PRECAST CONCRETE BOX CULVERTS AND END SECTIONS

CADD STANDARD J-12.03

SCALE: NOT DRAWN TO SCALE DRAWN BY CADD

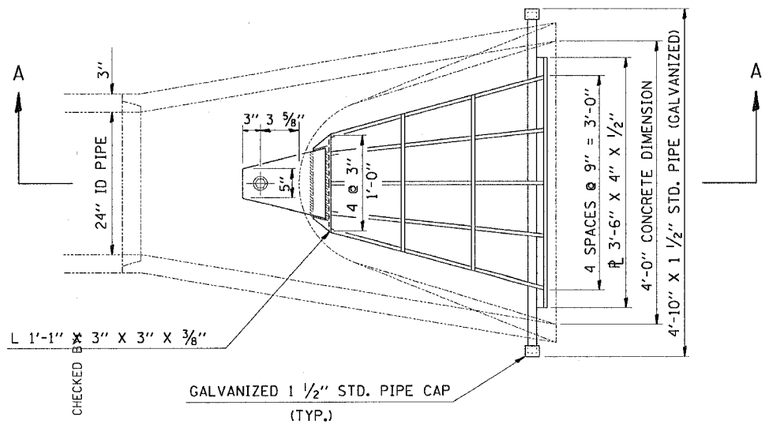
DATE CHECKED BY

•DATE-TIME•
•DGN SPEC•
•REF
•REF
•REF

71.1

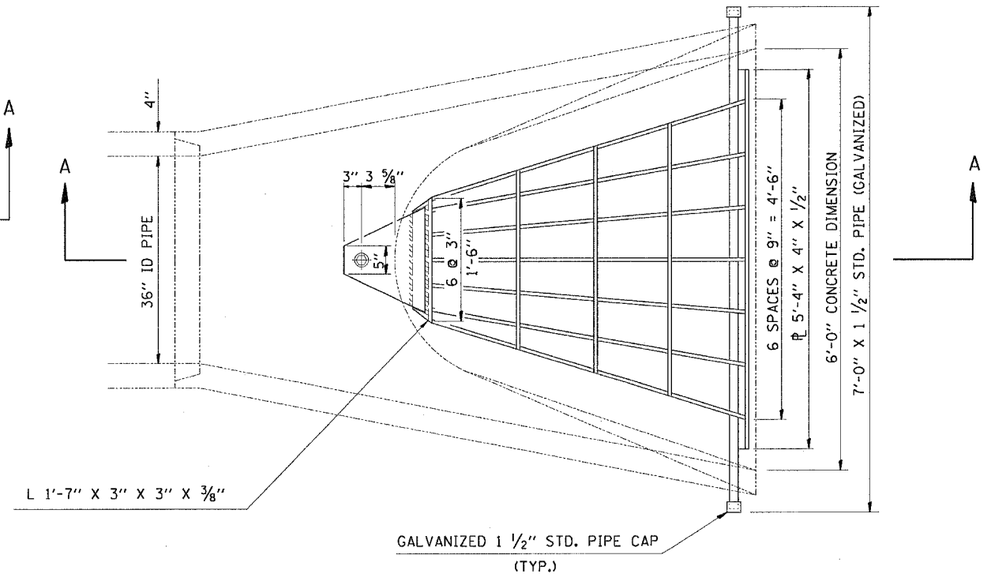
CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	258
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



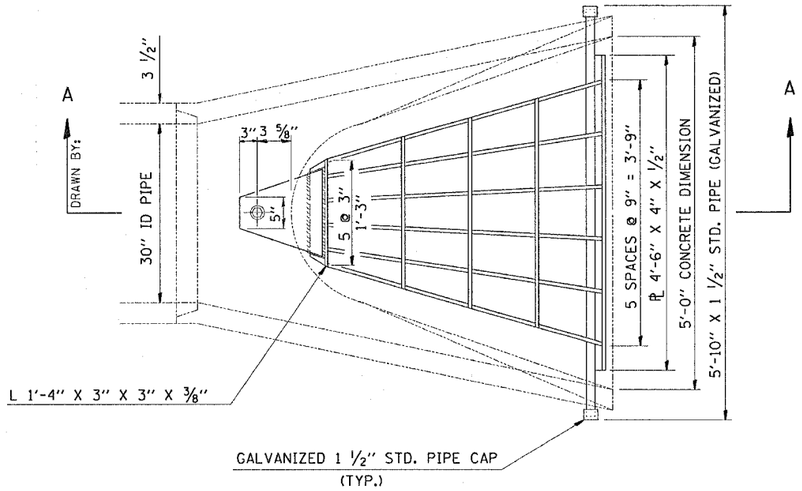
PLAN

APPROX. WEIGHT OF STEEL = 140 LBS.



PLAN

APPROX. WEIGHT OF STEEL = 270 LBS.



PLAN

APPROX. WEIGHT OF STEEL = 210 LBS.

GENERAL NOTES

GRATING DETAILS SHOWN ARE INTENDED FOR USE WITH PARTICULAR SIZES OF PRECAST REINFORCED CONCRETE FLARED END SECTIONS AS SHOWN ON STANDARD 542601.

STRUCTURAL STEEL SHAPES AND PLATES SHALL BE IN ACCORDANCE WITH ARTICLE 1006.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

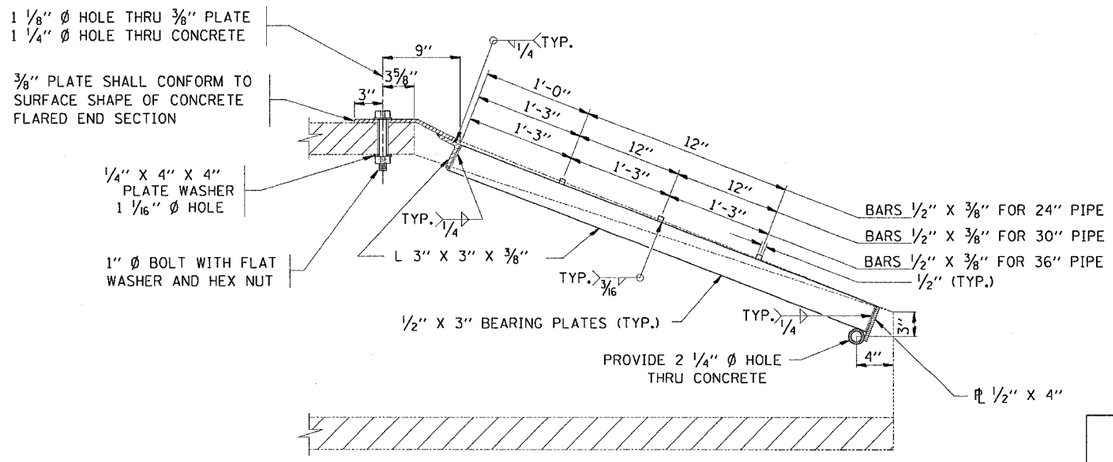
GALVANIZED STEEL PIPE SHALL BE IN ACCORDANCE WITH ARTICLE 542.07 (d) OF THE STANDARD SPECIFICATIONS. STEEL PIPE SHALL CONFORM TO ASTM A-53 (TYPE E OR S) GRADE B SCHEDULE 40.
BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATIONS.

ALL FABRICATION SHALL BE COMPLETED AND READY FOR ASSEMBLY BEFORE GALVANIZING.

THE CORED HOLES IN THE PRECAST CONCRETE FLARED END SECTIONS SHALL BE TO THE DIAMETERS NOTED. IF CONE-OUT ON THE OTHER END OF THE HOLE OCCURS, THE HOLE SHALL BE FILLED WITH GROUT TO CORRECT DIAMETER OF THE HOLE.

APPROXIMATE WEIGHT OF STEEL SHOWN INCLUDES TOTAL WEIGHT OF GRATING , BOLTS, WASHERS, NUTS AND STEEL PIPE.

THE CONTRACT UNIT PRICE " EACH " FOR GRATING FOR CONCRETE FLARED END SECTION EQUIVALENT ROUND-SIZE OF THE SIZE INDICATED SHALL INCLUDE FABRICATION AND INSTALLATION OF THE GRATING AS DETAILED HEREON, INCLUDING FABRICATION OF THE NECESSARY MOUNTING HOLES IN THE FLARED END SECTION. THIS PRICE DOES NOT INCLUDE THE COST OF THE PRECAST CONCRETE FLARED END SECTION.



SECTION A-A

GRATING FOR HORIZONTAL ELLIPTICAL CONCRETE FLARED END SECTION (FOR 24", 30", & 36" PIPE)

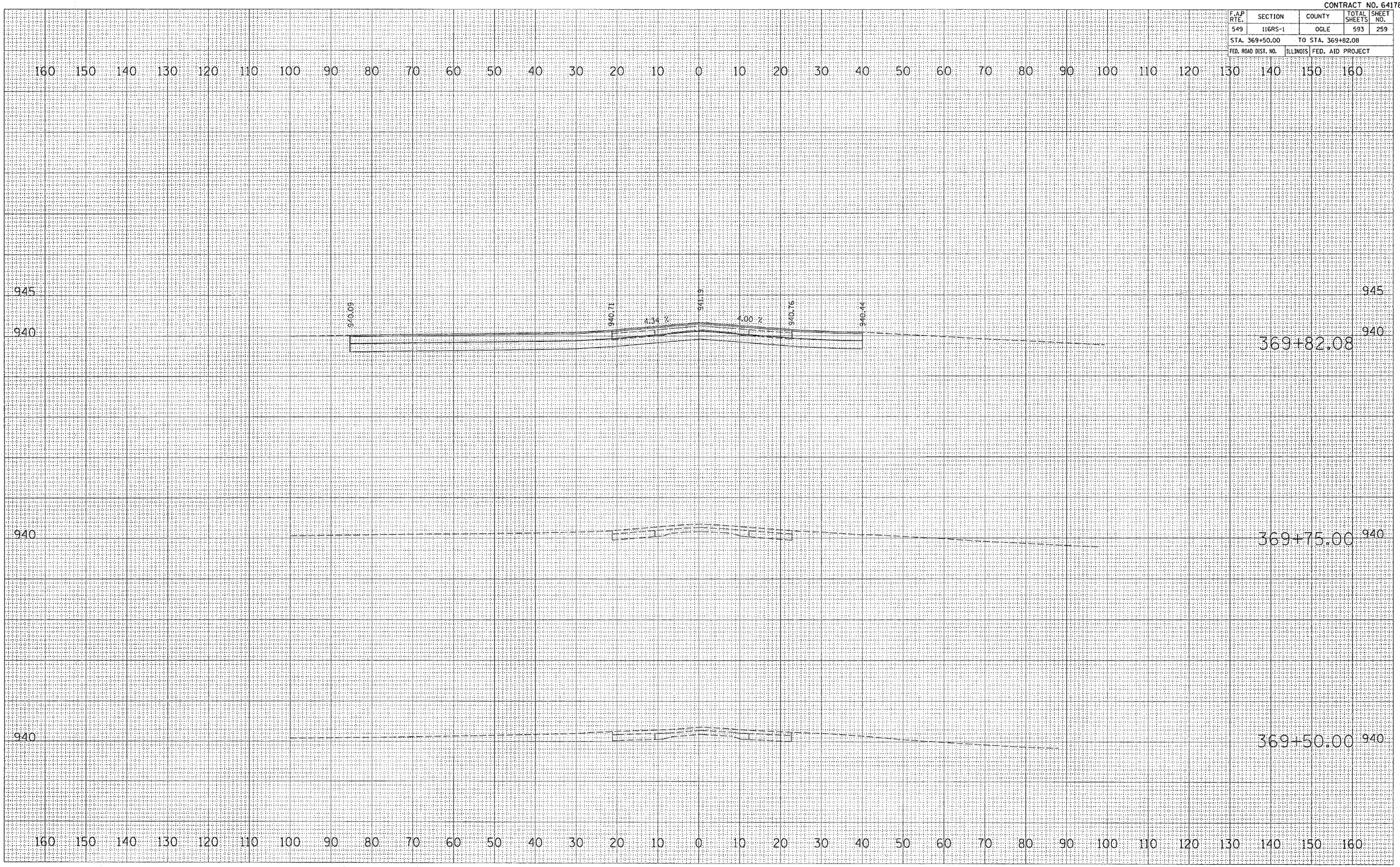
STANDARD 542311 (SPECIAL)

REVISED 4/19/93

•DATE-TIME•
•DGN-SPEC•
•REF
•REF
•REF
•REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	259
STA. 369+50.00		TO STA. 369+82.08		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE Book	TOPO MAP		
	AREAS		
NO.	AREAS CHECKED		

PLOT DATE = Tue Feb 08 11:23:46 2005
FILE NAME = C:\projects\s2004\7\s204497\m3\dgn\TE Book
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	260
STA. 370+00.00		TO STA. 370+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

945
940
935

COMMERCIAL BUILDING
TEMP. ESMT.
PR ROW
EX ROW
2.00 %
999.55
2.00 %
935.35
2.00 %
0.32 %
2.00 %
999.67
2.00 %
EX ROW
TEMP. ESMT.
C=47.39 F=0.00
370+50.00

945
940

COMMERCIAL BUILDING
TEMP. ESMT.
PR ROW
EX ROW
2.00 %
940.05
2.48 %
2.00 %
940.57
2.00 %
1.43 %
2.00 %
940.21
2.00 %
EX ROW
TEMP. ESMT.
C=57.15 F=0.56
370+25.00

945
940

PR ROW
COMMERCIAL BUILDING
TEMP. ESMT.
940.26
0.72 %
EX ROW
2.00 %
941.19
2.00 %
2.55 %
2.00 %
940.75
2.00 %
EX ROW
TEMP. ESMT.
C=122.31 F=0.00
370+00.00

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

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

ORIGINAL SURVEY	BY	DATE
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
NO.	AREAS CHECKED	

PLOT DATE = Tue Feb 08 11:23:07 2005
FILE NAME = c:\projects\k26847\d00497\e03\profile\pro00497.dgn
USER NAME = Jim
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	261
STA. 370+68.72		TO STA. 370+90.45		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

PLOT DATE = Tue Feb 03 11:23:07 2005
FILE NAME = c:\prognet\v20\64178\v20178497.mdl
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

940
935
945

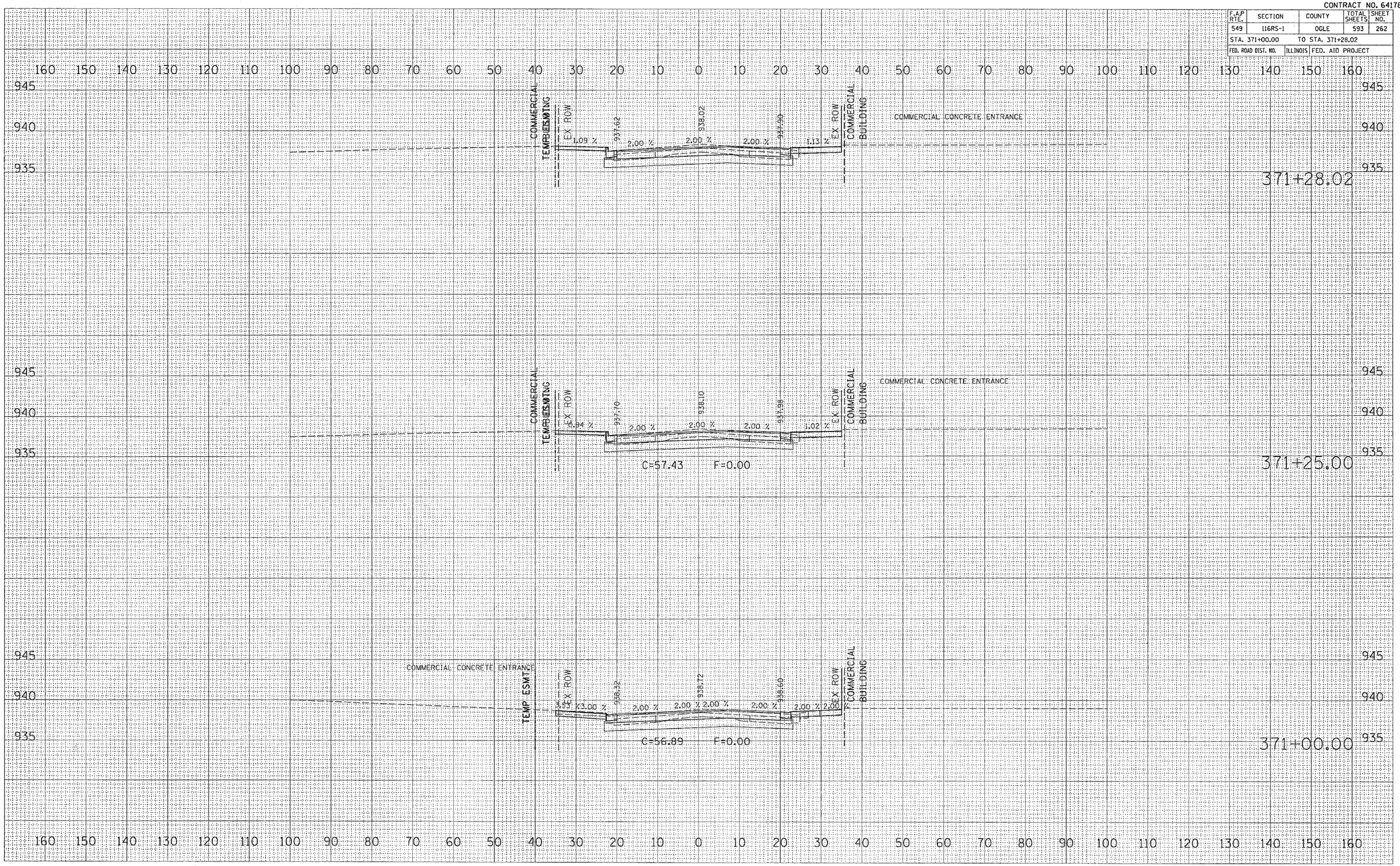
COMMERCIAL CONCRETE ENTRANCE
TEMP. ESMT.
EX. ROW
2.00 %
3.00 %
938.55
2.00 %
938.95
2.00 % 1.11 %
2.00 %
938.77
2.00 %
EX. ROW
TEMP. ESMT.
370+90.45

COMMERCIAL BUILDING
TEMP. ESMT.
EX. ROW
2.00 %
938.53
2.00 %
939.33
2.00 % 0.94 %
2.00 %
939.14
2.00 %
EX. ROW
TEMP. ESMT.
COMMERCIAL CONCRETE ENTRANCE
C=45.69 F=0.22
370+75.00

COMMERCIAL BUILDING
TEMP. ESMT.
EX. ROW
2.00 %
939.09
2.00 %
939.49
2.00 % 0.58 %
2.00 %
939.27
2.00 %
EX. ROW
TEMP. ESMT.
COMMERCIAL CONCRETE ENTRANCE
370+68.72

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	262
STA. 371+00.00	TO STA. 371+28.02			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

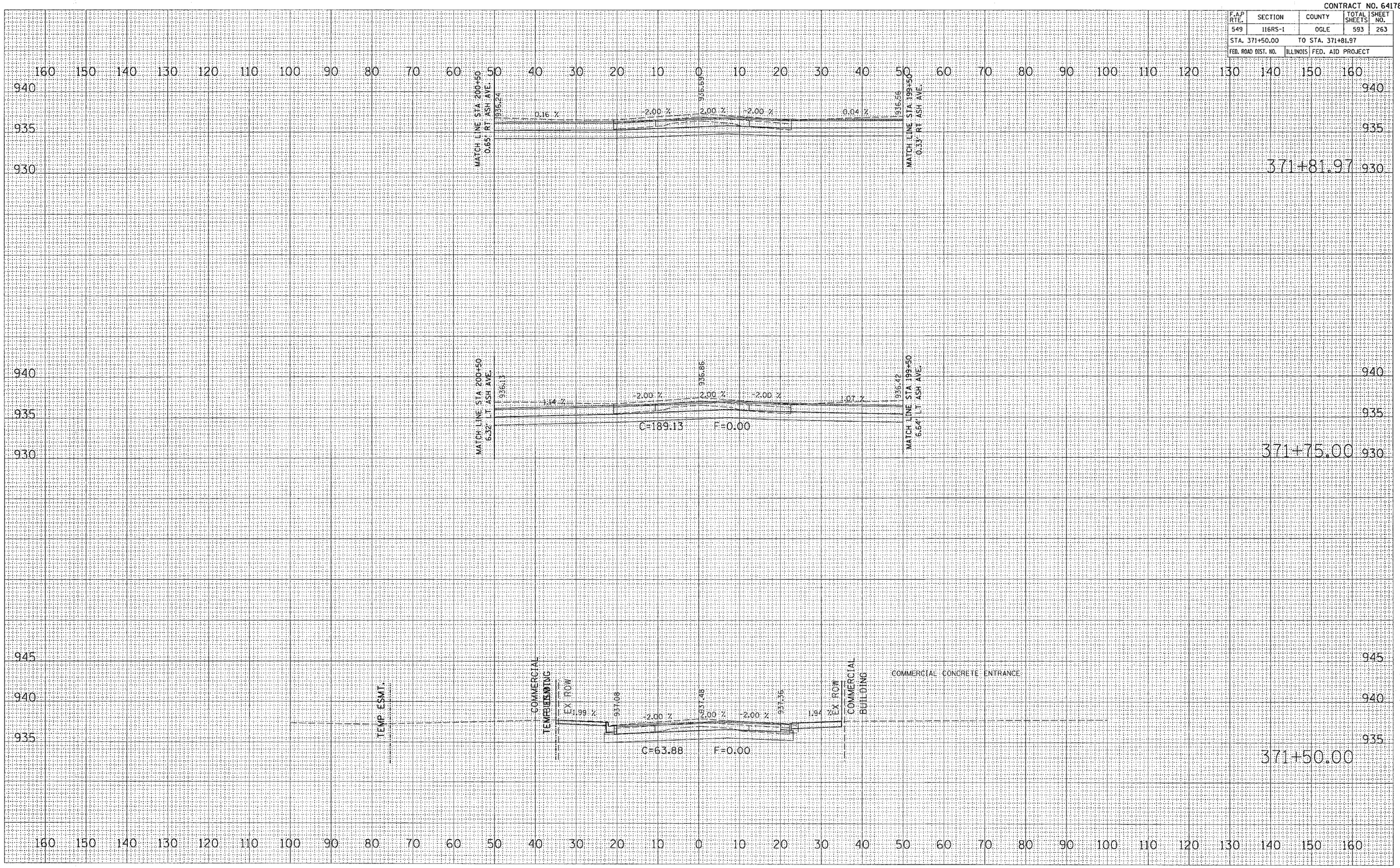
PLOT DATE = Tue Feb 03 11:23:08 2026
FILE NAME = c:\projects\b208497\sht497.dgn
PLOT SCALE = 10.2000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	263
STA. 371+50.00		TO STA. 371+81.97		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



PLOT DATE = Tue Feb 08 11:23:08 2005
FILE NAME = c:\projects\20847\d08447.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	264
STA. 372+00.00		TO STA. 372+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

940
935

TEMP. ESMT.
EX. ROW
VAR. 2.00 % 8.00 % 934.61 -2.00 % 935.01 -2.00 % 2.00 % 934.83 2.00 % 2.00 % EX. ROW VAR.
C=83.14 F=0.49
TEMP. ESMT.
COMMERCIAL BUILDING

372+50.00

940
935

TEMP. ESMT.
EX. ROW
VAR. 2.00 % 2.00 % 935.23 -2.00 % 935.63 -2.00 % 935.49 2.00 % EX. ROW VAR.
2.00 %
C=73.38 F=0.41
TEMP. ESMT.
COMMERCIAL BUILDING

372+25.00

940
935

MATCH LINE: STA. 200+50
18.68' RT, ASH AVE
VAR. FENCE EX. ROW
935.81 0.66 % -2.00 % 936.24 2.00 % 2.00 % 0.09 % EX. ROW 936.1 VAR.
C=136.68 F=0.00
MATCH LINE: STA. 199+50
18.36' RT, ASH AVE

372+00.00

940
935

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

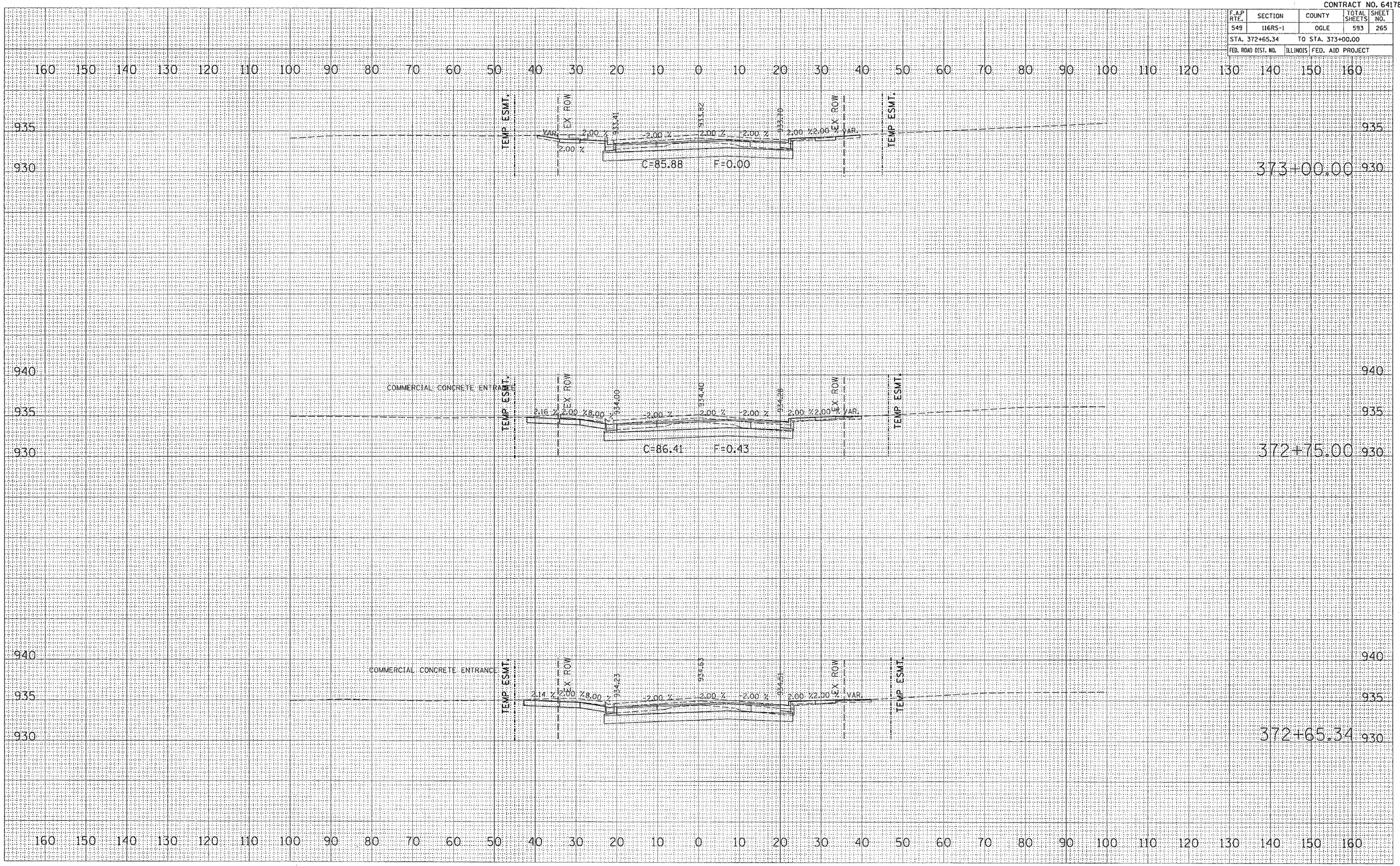
FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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

PLOT DATE = Tue Feb 08 11:23:03 2005
FILE NAME = c:\projects\c064497\c064497xsd.dgn
FILE SCALE = 1:1000 / 1IN
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	265
STA. 372+65.34		TO STA. 373+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

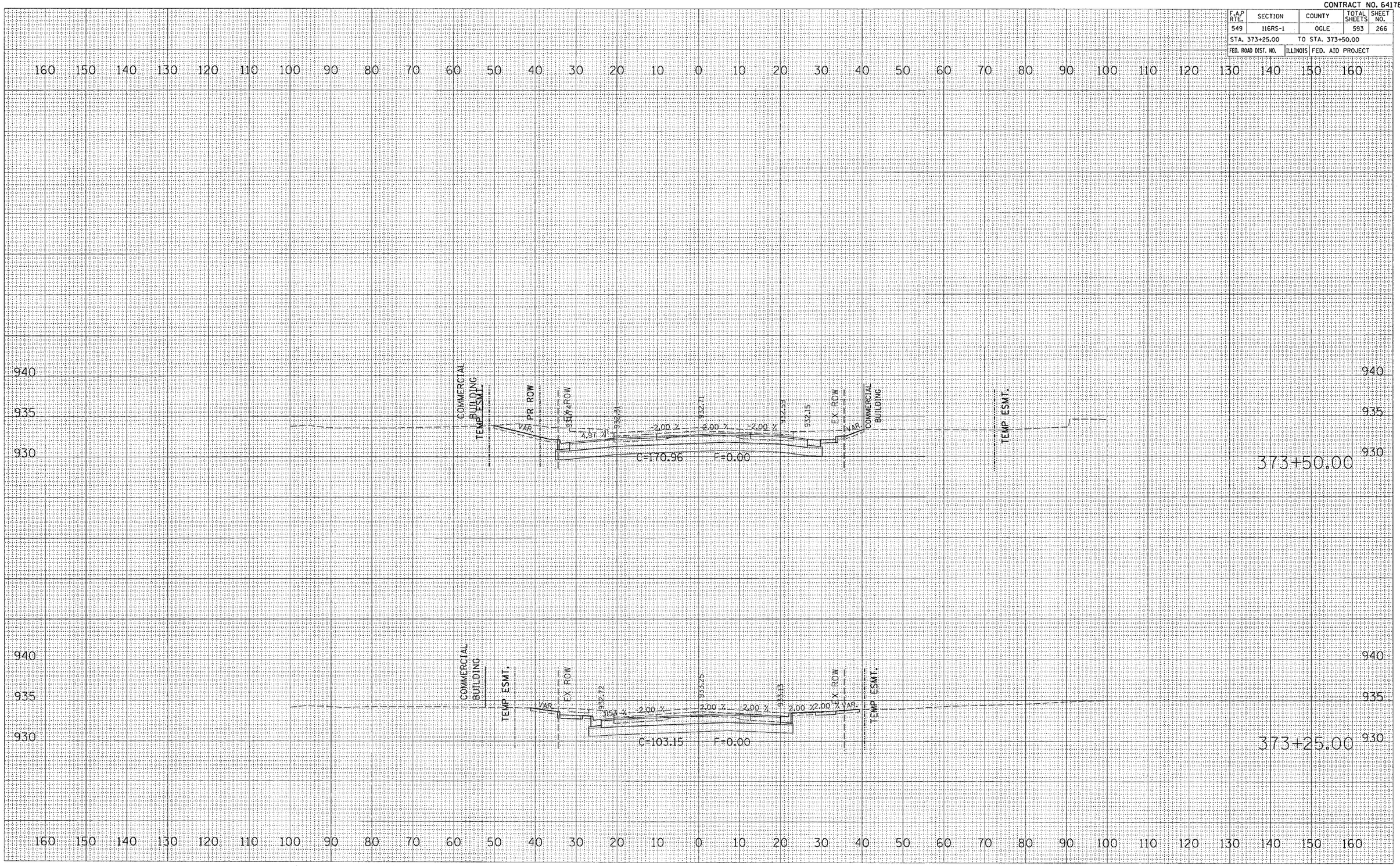
FINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TYPICALS	
	AREAS	
	AREAS CHECKED	

PLOT DATE = Tue Feb 08 11:23:09 2005
FILE NAME = C:\projects\p2084197\d084197sm3.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	266
STA. 373+25.00		TO STA. 373+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

PLOT DATE = Tue Feb 08 11:23:0 2005
FILE NAME = c:\projects\c204497\c08497.mx
PLT SCALE = 10.0000 / IN.
REFERENCE = #REF#

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	267
STA. 373+75.00		TO STA. 373+91.26		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NO.	AREAS CHECKED	

ORIGINAL SURVEY

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NO.	AREAS CHECKED	

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

935
930
925

MATCH LINE STA. 220+50
0.00' RT. N. CHESTNUT AVE.
930.18
0.12 %
931.47
2.00 %
931.87
2.00 %
2.00 %
931.70
1.67 %
931.28
MATCH LINE STA. 219+50
0.00' RT. S. CHESTNUT AVE.

373+91.26

940
935
930
925

MATCH LINE STA. 220+50
16.25' LT. N. CHESTNUT AVE.
931.11
2.40 %
931.71
2.00 %
932.20
2.00 %
2.00 %
932.03
2.80 %
931.33
MATCH LINE STA. 219+50
16.27' LT. S. CHESTNUT AVE.

C=253.40 F=0.00

373+75.00

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

PLOT DATE = Tue Feb 09 11:23:18 2005
FILE NAME = I:\projects\c208497\c208497sm2.dgn
PLOT SCALE = 10.0000 ' / IN.
PLOT DATE = #REF#
REFERENCE = #REF#

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	268
STA. 374+00.00		TO STA. 374+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

935 930

COMMERCIAL CONCRETE ENTRANCE

TEMP ESMT

EX ROW

6.63 %

2.00%

3.00 %

930.38

-2.00 %

930.78

2.00 %

2.00 %

930.55

EX ROW

VAR

TEMP ESMT.

C=245.80 F=0.00

374+50.00

940 935 930

COMMERCIAL ENTRANCE EXISTING

TEMP ESMT

EX ROW

VAR

930.76

1.40 %

-2.00 %

931.23

2.00 %

-2.00 %

1.08 %

930.35

EX ROW

PR ROW

VAR

C=240.69 F=0.00

374+25.00

935 930 925

MATCH LINE STA 220+50
8.75' RT. N. CHESTNUT AVE.

931.31

0.12 %

931.28

-2.00 %

931.10

2.00 %

-2.00 %

930.54

0.16 %

931.49

C=266.84 F=0.00

MATCH LINE STA 219+50
8.73' RT. S. CHESTNUT AVE.

374+00.00

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

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

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

PLOT DATE = Tue Feb 08 11:23:11 2005
FILE NAME = c:\projects\p20804?\d20497xm3.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	269
STA. 374+75.00		TO STA. 375+25.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

935
930

TEMP ESMT.
VAR
EX ROW
929.59
2.19 % 2.00 % 3.00 % 2.00
929.56
2.00 % -2.00 % 2.00 %
929.44
EX ROW
VAR
TEMP ESMT.
COMMERCIAL BUILDING
C=305.60 F=0.00

375+25.00

COMMERCIAL CONCRETE ENTRANCE

TEMP ESMT.
6.34 %
EX ROW
2.00 % 3.00 %
929.52
929.34
-2.00 % 2.00 % -2.00 %
929.82
EX ROW
2.00 %
VAR
TEMP ESMT.
COMMERCIAL BUILDING
C=356.55 F=0.00

375+00.00

TEMP ESMT.
VAR
EX ROW
930.03
1.81 % -2.00 %
930.35
2.00 % -2.00 %
930.20
EX ROW
3.00 %
5.87 %
COMMERCIAL CONCRETE ENTRANCE
TEMP ESMT.
2.00 %
C=278.28 F=0.00

374+75.00

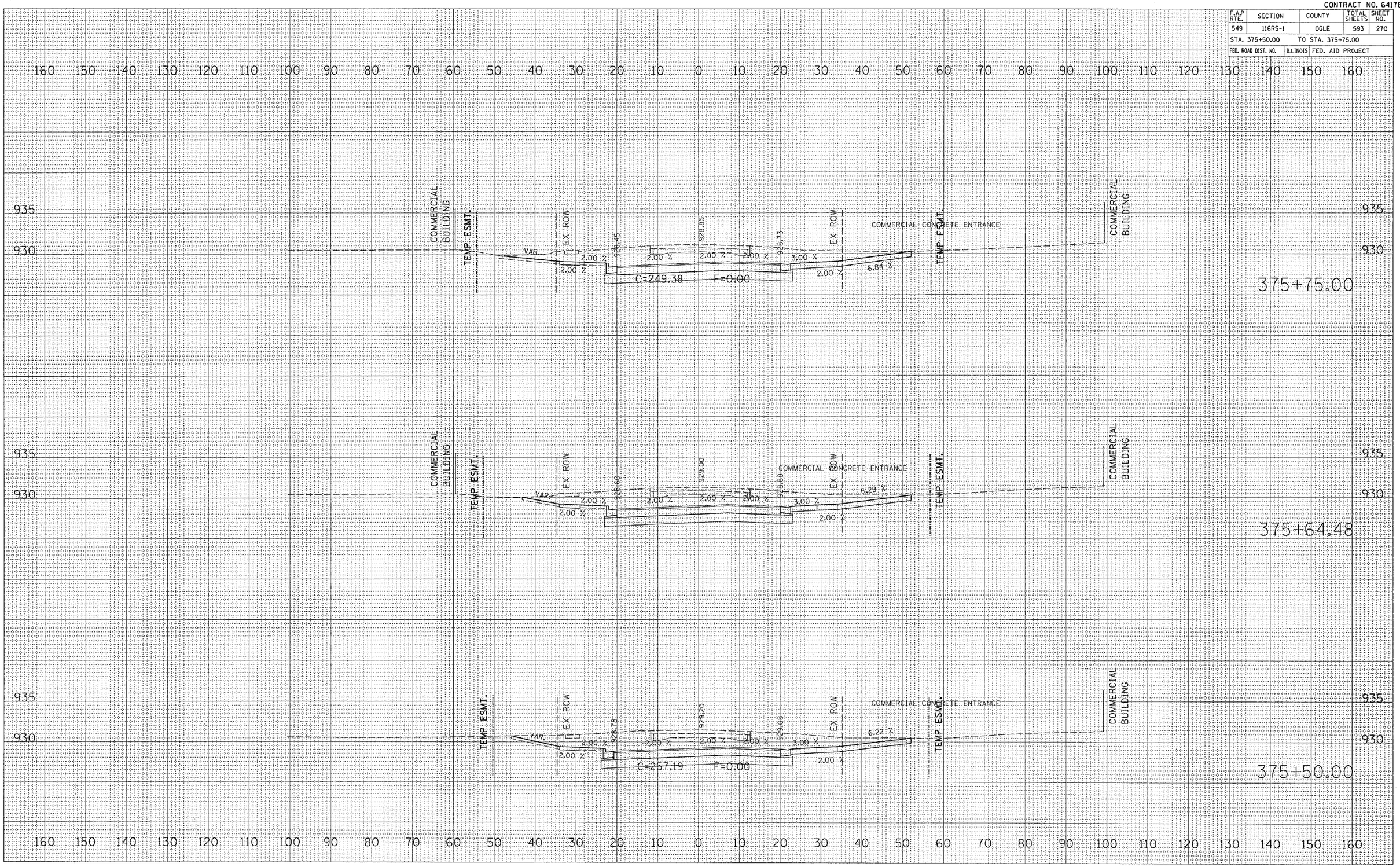
FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
DRAWN		
AREAS		
AREAS CHECKED	DATE	

ORIGINAL SURVEY	
SURVEYED	BY
PLOTTED	
DRAWN	
AREAS	
AREAS CHECKED	DATE

PLOT DATE = Tue Feb 08 11:23:11 2005
FILE NAME = c:\projects\p2004s7\d00497\m3\dgn\01E.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	270
STA. 375+50.00		TO STA. 375+75.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	SURVEYED	BY	DATE
	SUPPLIED		
NOTE BOOK	TOPSITE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
	SUPPLIED		
NOTE BOOK	TOPSITE		
	AREAS		
NO.	AREAS CHECKED		

PLOT DATE = Tue Feb 08 11:23:12 2005
FILE NAME = C:\projects\pc208497\d08497.m3
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	271
STA. 376+00.00		TO STA. 376+33.78		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

930 925

376+33.78

MATCH LINE STA. 240+50
0.43' LT. N. OAK AVE.

927.48

0.49 %

928.03

-2.00 %

2.00 %

-2.00 %

0.99 %

927.61

MATCH LINE STA. 239+50
0.36' LT. S. OAK AVE.

935 930 925

376+25.00

MATCH LINE STA. 240+50
9.20' LT. N. OAK AVE.

927.30

1.50 %

928.15

-2.00 %

2.00 %

-2.00 %

2.00 %

927.43

MATCH LINE STA. 239+50
8.41' LT. S. OAK AVE.

C=363.07 F=0.00

935 930 925

376+00.00

COMMERCIAL BUILDING

TEMP ESMT.

EX. ROW

927.94

5.68 %

-2.00 %

928.50

2.00 %

-2.00 %

928.26

2.30 %

EX. ROW

TEMP ESMT.

C=255.30 F=0.00

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

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

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

PLOT DATE = Tue Feb 03 11:23:12 2009
FILE NAME = c:\projects\c064178\sht\c064178sht03.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	272
STA. 376+50.00		TO STA. 377+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

935 930 925

COMMERCIAL
TEMP ESMT.
EXISTING
VAR.
12.00'
40.00'
EX ROW
926.76
2.00 %
927.10
2.00 %
3.00 %
926.98
2.00 %
2.00 %
PR ROW
VAR.
TEMP ESMT.
HOUSE
C=207.81
F=5.01

377+00.00

COMMERCIAL
TEMP ESMT.
EXISTING
VAR.
7.26 %
PR ROW
EX ROW
927.00
2.59 %
2.00 %
927.45
2.00 %
8.00 %
927.32
2.00 %
2.00 %
PR ROW
VAR.
TEMP ESMT.
C=207.91
F=7.52

376+75.00

MATCH LINE STA. 240+50
15.80' RT. N. OAK AVE.
927.19
0.82 %
2.00 %
927.80
2.00 %
2.00 %
1.39 %
927.41
MATCH LINE STA. 239+50
16.59' RT. S. OAK AVE.
C=309.59
F=0.06

376+50.00

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

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

PLOT DATE = Tue Feb 09 11:23:13 2005
FILE NAME = c:\projects\jan-13-2004\97-0004\97-0004.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	273
STA. 377+13.66		TO STA. 377+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

930
925

TEMP ESMT.
EX ROW
2.00 %
926.00
-2.00 %
926.40
2.00 %
4.00 %
926.28
2.00 %
EX ROW
VAR.
2.00 %
TEMP ESMT.
C=193.66 F=0.03

377+50.00

COMMERCIAL CONCRETE ENTRANCE
TEMP ESMT.
EX ROW
8.17 %
10.00 %
926.35
-2.00 %
926.75
2.00 %
4.00 %
926.63
2.00 %
EX ROW
VAR.
2.00 %
12.00 %
TEMP ESMT.
HOUSE
C=212.42 F=2.55

377+25.00

935
930
925

COMMERCIAL CONCRETE ENTRANCE
TEMP ESMT.
EX ROW
8.17 %
10.00 %
926.51
2.00 %
926.91
2.00 %
4.00 %
926.78
2.00 %
2.00 %
EX ROW
VAR.
2.00 %
TEMP ESMT.
HOUSE

377+13.66

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

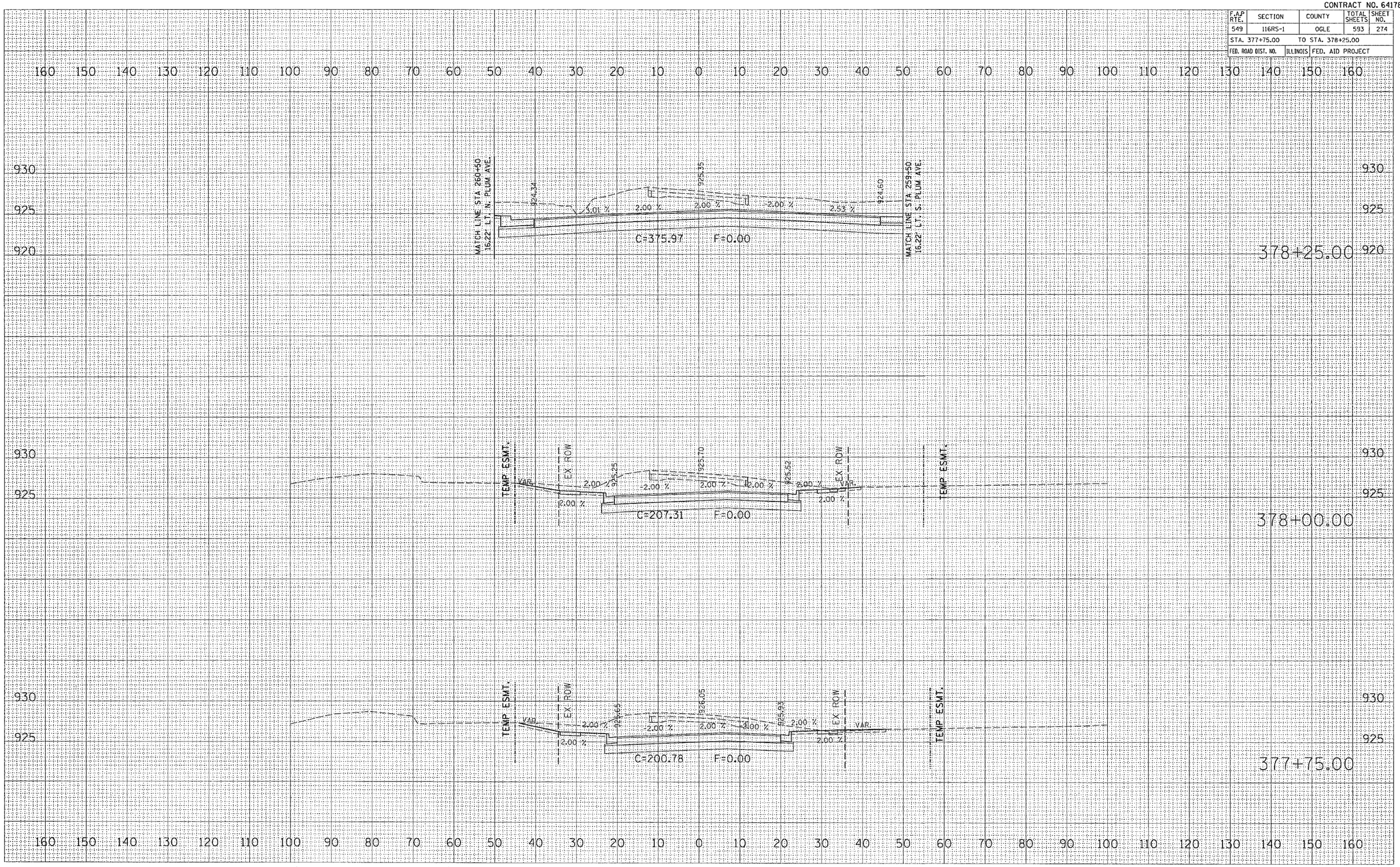
FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

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

PLOT DATE = Tue Feb 09 11:23:13 2005
FILE NAME = c:\projects\b208497\sht\b208497sht3.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	274
STA. 377+75.00	TO STA. 378+25.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



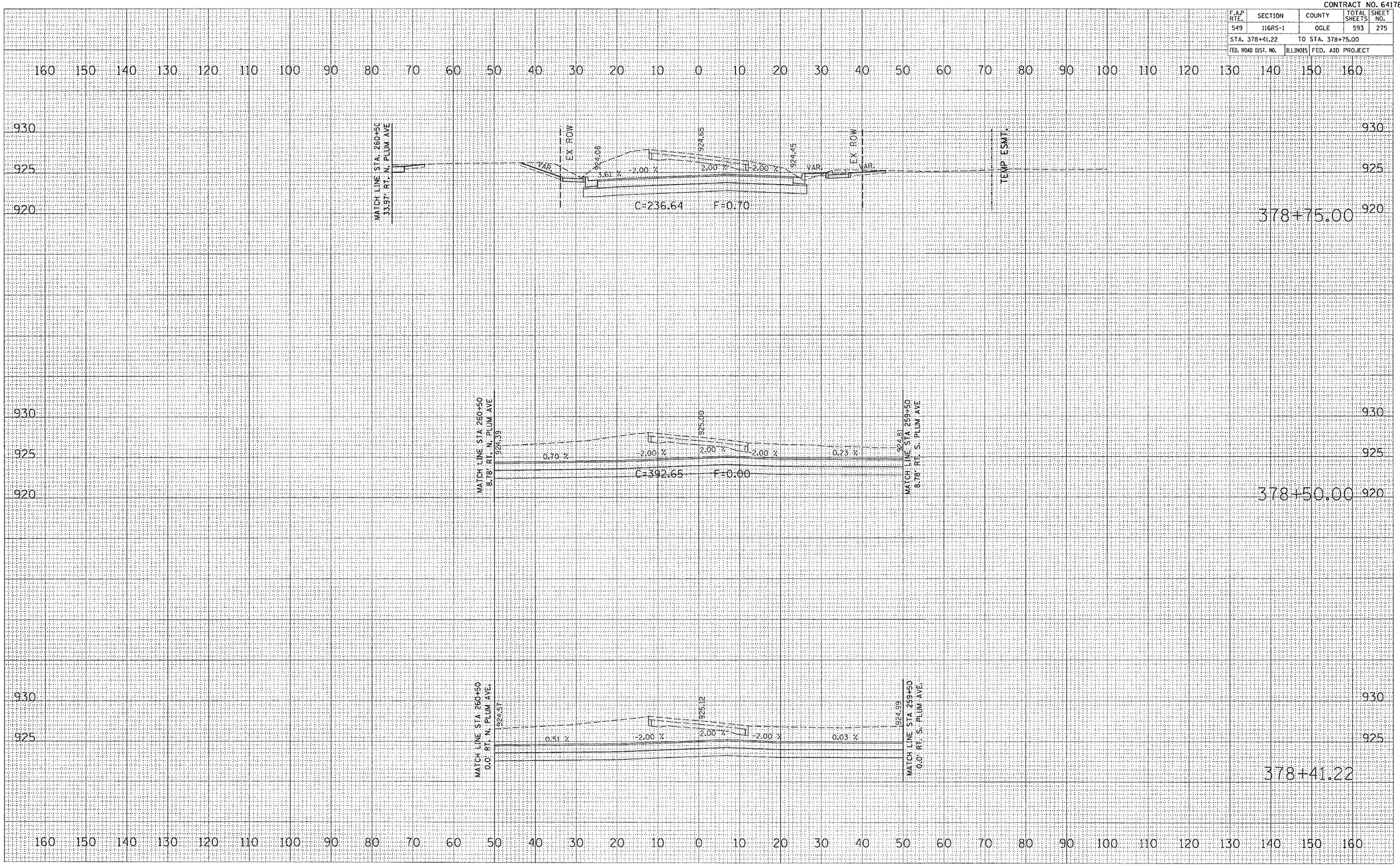
FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS		
AREAS CHECKED		
NO.		

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

PLOT DATE = Tue Feb 08 11:23:14 2005
FILE NAME = c:\prj_pass\p220497\sd08497.mn3.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	275
STA. 378+41.22		TO STA. 378+75.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY

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

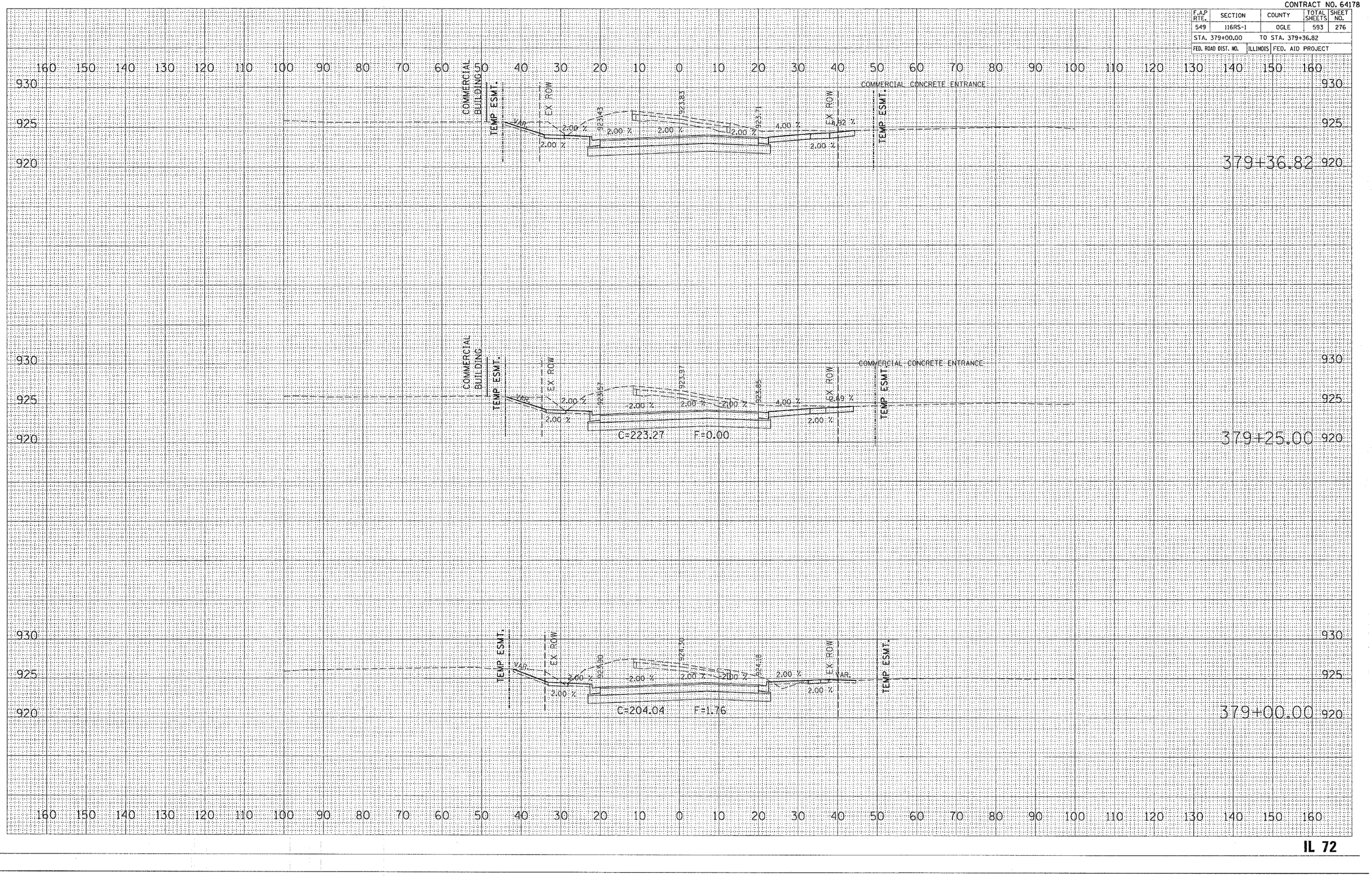
ORIGINAL SURVEY

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

PLOT DATE = Tue Feb 08 11:23:14 2005
FILE NAME = c:\projects\c280497\c280497m3.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	276
STA. 379+00.00		TO STA. 379+36.82		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



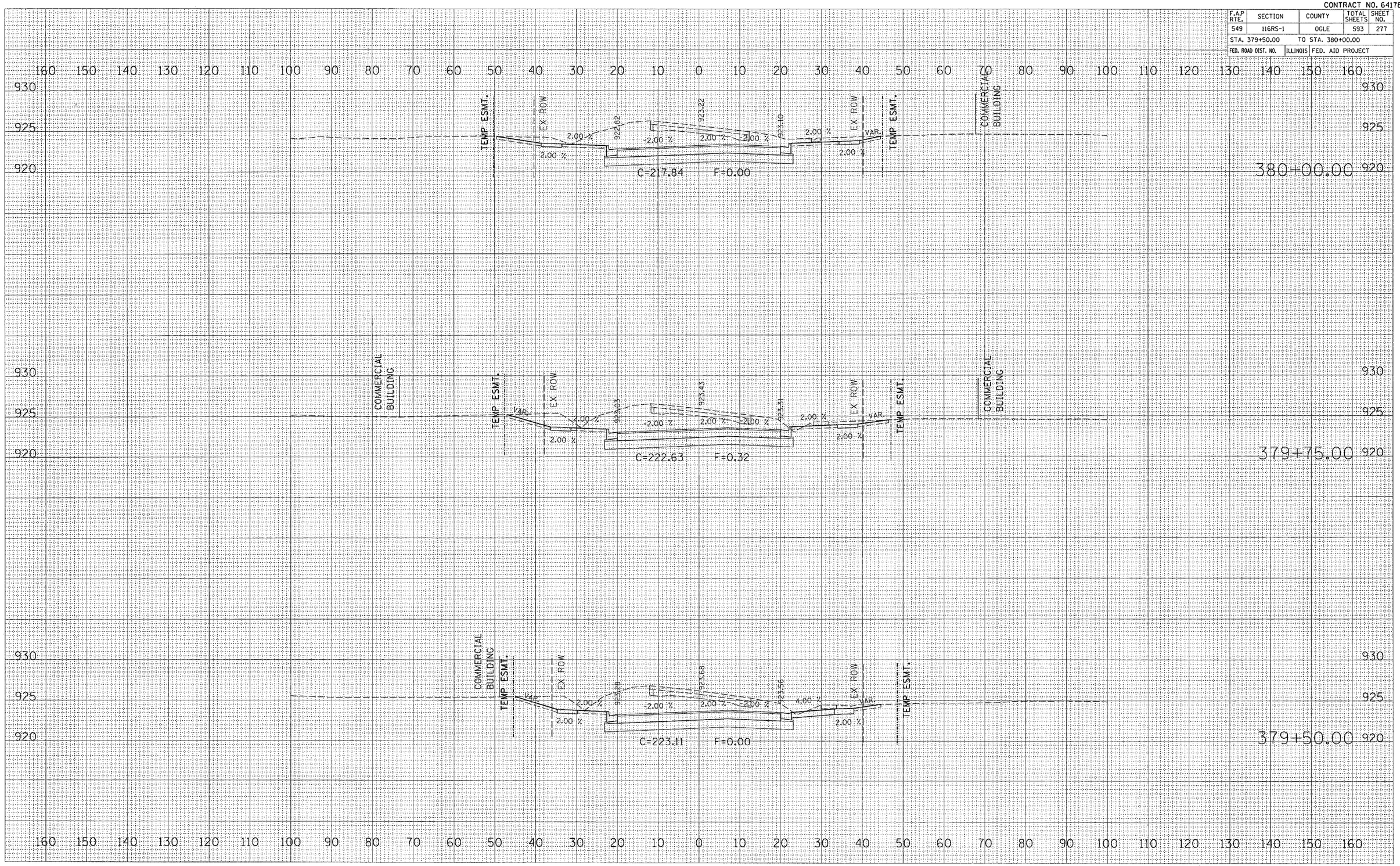
FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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

PLOT DATE = Tue Feb 08 11:23:15 2005
FILE NAME = c:\projects\c208497\c208497sht3.dgn
PLOT SCALE = 10.0000 ' / IN.
PLOT DEPTH = 1
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	277
STA. 379+50.00		TO STA. 380+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY
NOTE BOOK
NO.

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

ORIGINAL SURVEY
NOTE BOOK
NO.

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

PLOT DATE = Tue Feb 08 11:23:15 2005
FILE NAME = c:\projects\c208497\c208497sht2.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	278
STA. 380+25.00		TO STA. 380+56.41		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TRACED		
AREAS		
AREAS CHECKED		

	BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TRACED		
AREAS		
AREAS CHECKED		

	BY	DATE

PLOT DATE = Tue Feb 09 11:23:16 2005
FILE NAME = C:\projects\p2002497\s2002497m3.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

MATCH LINE STA 280+50
0.00' RT N. LOCUST AVE.
922.53
0.11 %
-1.91 %
922.88
1.91 %
-2.04 %
0.63 %
922.94
MATCH LINE STA 279+50
0.00' RT S. LOCUST AVE.

380+56.41

MATCH LINE STA 280+50
1.36' RT N. LOCUST AVE
922.50
0.04 %
-2.00 %
922.91
2.00 %
-2.00 %
0.81 %
922.57
MATCH LINE STA 279+50
14.35' LT S. LOCUST AVE
C=392.61
F=0.00

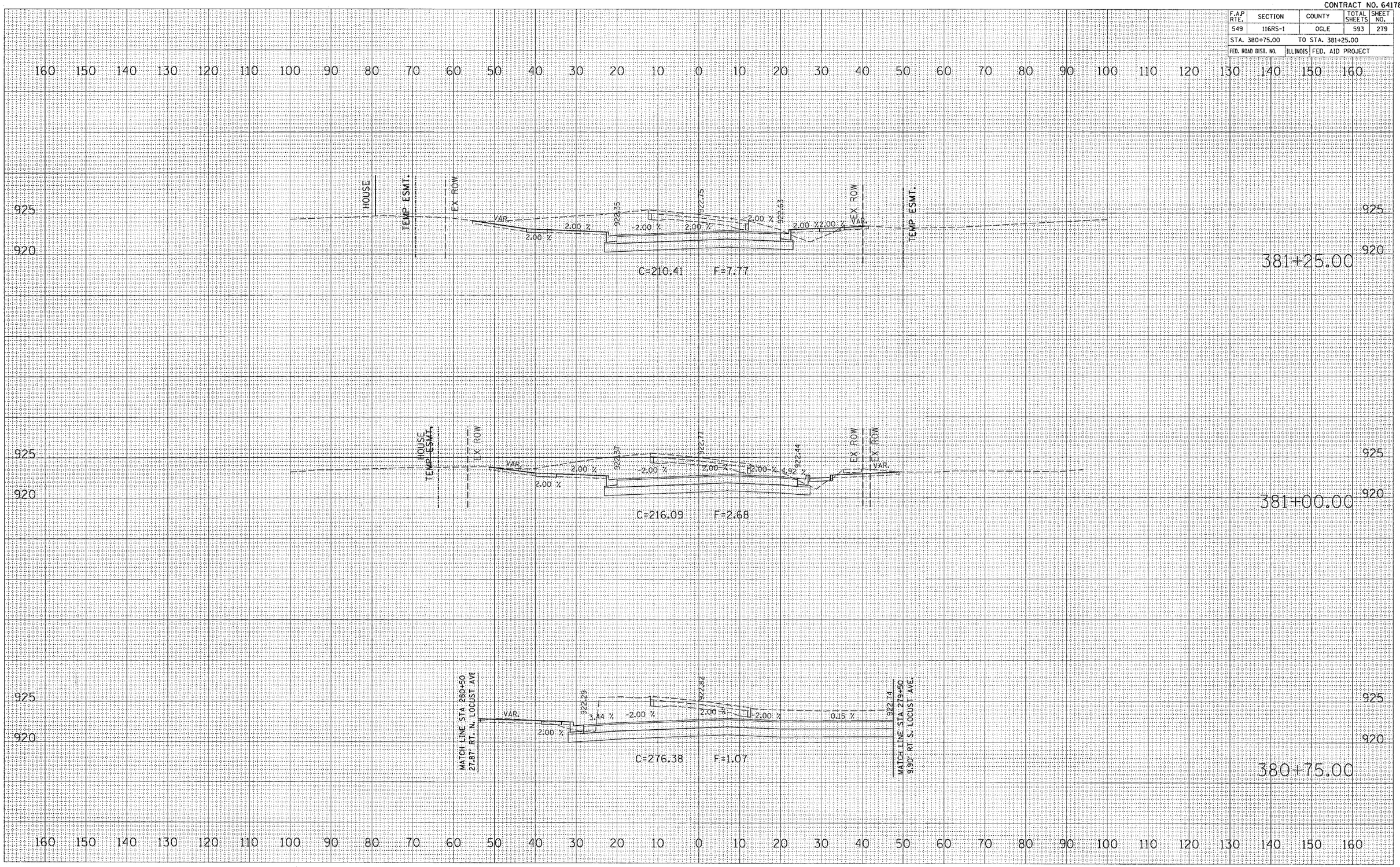
380+50.00

MATCH LINE STA 280+50
24.96' LT N. LOCUST AVE
VAR.
922.17
4.89 %
-2.00 %
923.04
2.00 %
-12.00 %
922.86
2.00 %
EX. ROW
VAR.
2.00
C=265.88
F=0.00
TEMP. ESMT.

380+25.00

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	279
STA. 380+75.00	TO STA. 381+25.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = Tue Feb 08 11:23:15 2005
FILE NAME = C:\projects\c204497\d08497.m3d
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = #REF#

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	280
STA. 381+50.00		TO STA. 381+80.08		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

PRIVATE CONCRETE ENTRANCE

GARAGE — EX ROW — TEMP ESMT. — EX ROW

3.81 % — 2.00 % — 3.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 %

923.46 — 922.86 — 922.74

381+80.08

PRIVATE CONCRETE ENTRANCE

GARAGE — EX ROW — TEMP ESMT. — EX ROW

4.05 % — 2.00 % — 3.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 %

923.44 — 922.84 — 922.72

C=227.86 F=8.34

381+75.00

TEMP ESMT. — EX ROW — TEMP ESMT. — EX ROW

VAR. — 2.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 % — 2.00 % — VAR.

923.38 — 922.78 — 922.66

C=209.64 F=7.79

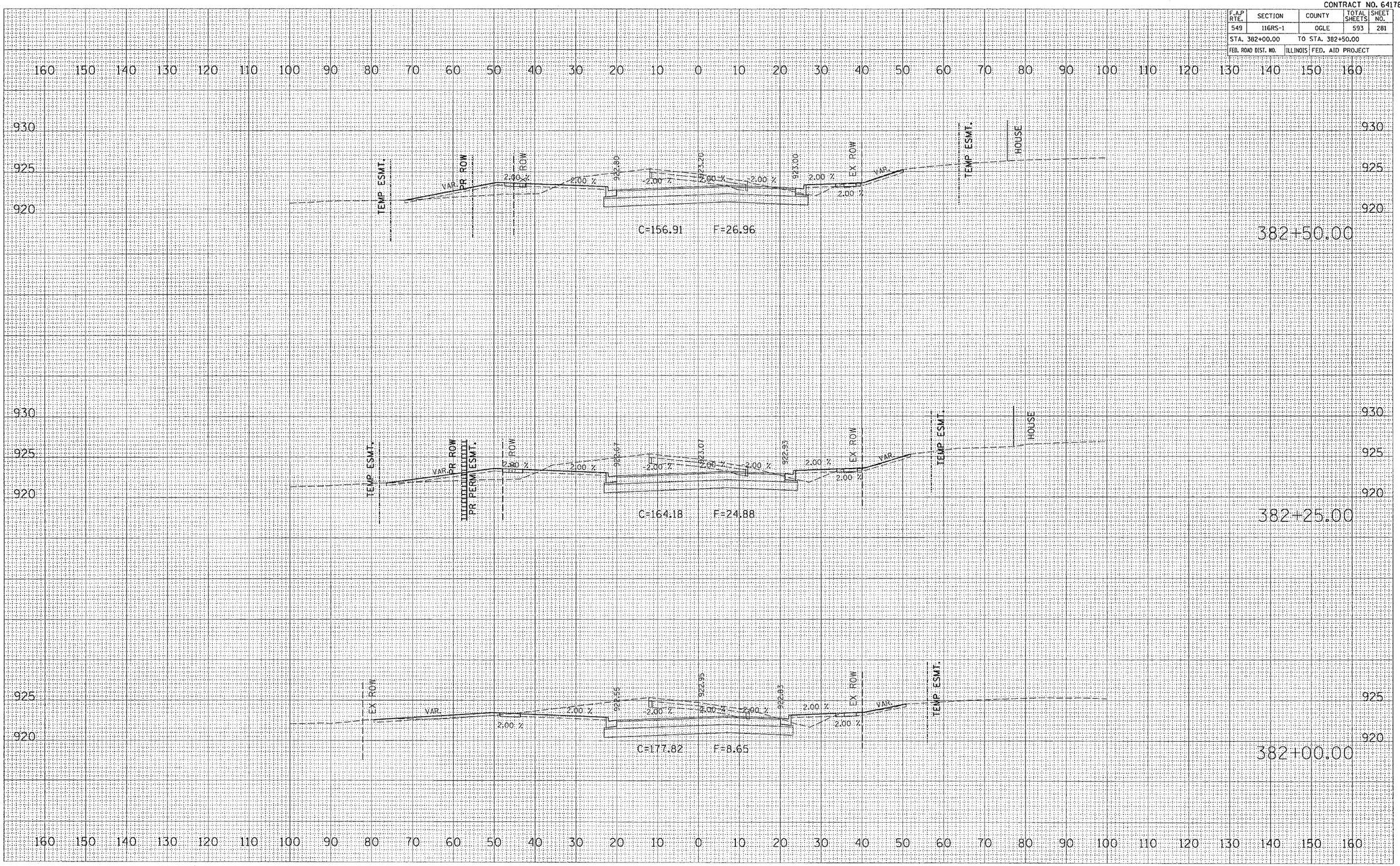
381+50.00

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

PLOT DATE = Tue Feb 08 11:23:17 2005
FILE NAME = c:\projects\c282497\d0804?.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	281
STA. 382+00.00		TO STA. 382+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TOPO. AS		
AREAS		
AREAS CHECKED		

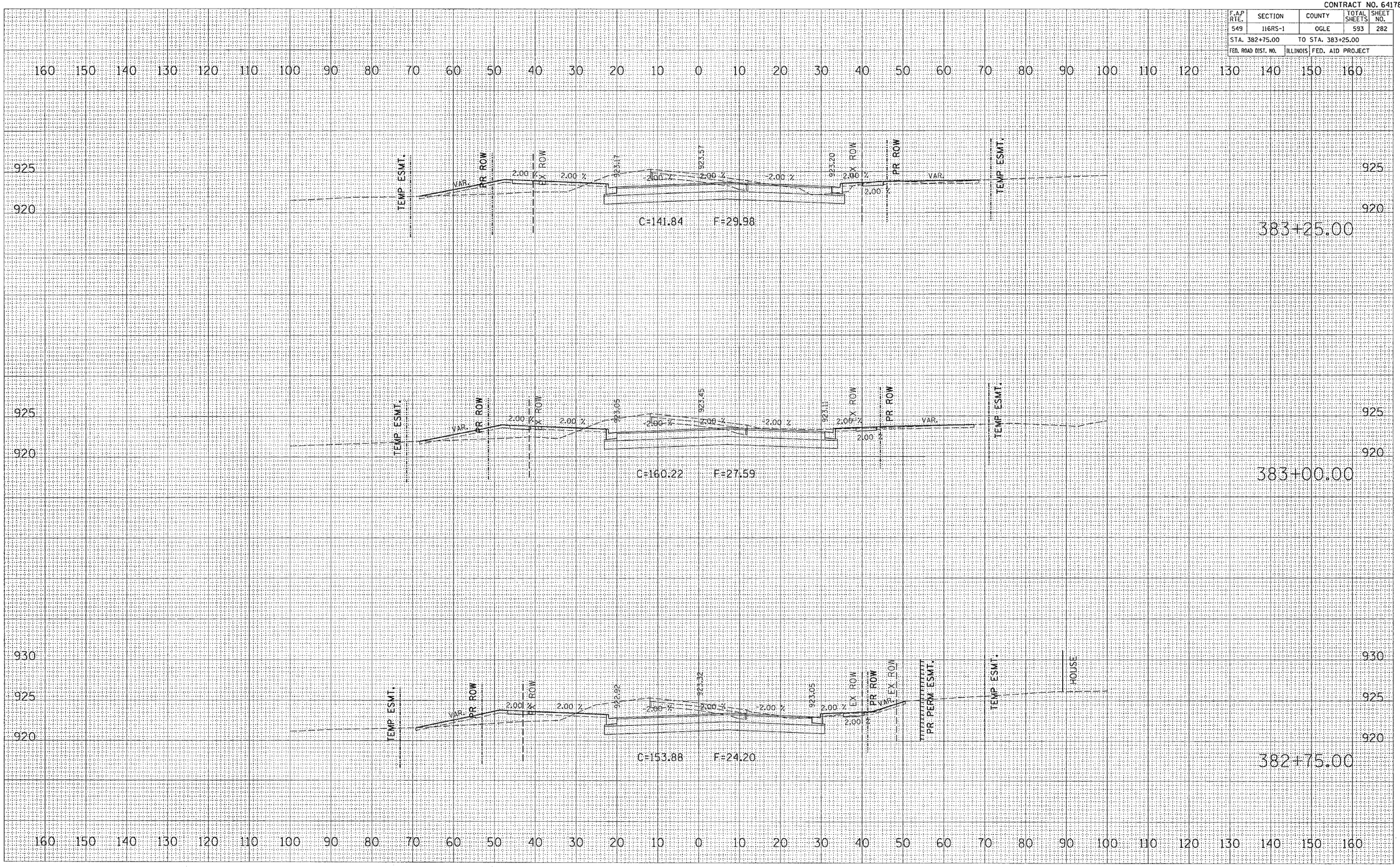
ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TOPO. AS		
AREAS		
AREAS CHECKED		

BY	DATE

PLOT DATE = Tue Feb 08 11:22:17 2005
FILE NAME = C:\prg_pws\p2004\7\d04573m3.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	282
STA. 382+75.00		TO STA. 383+25.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



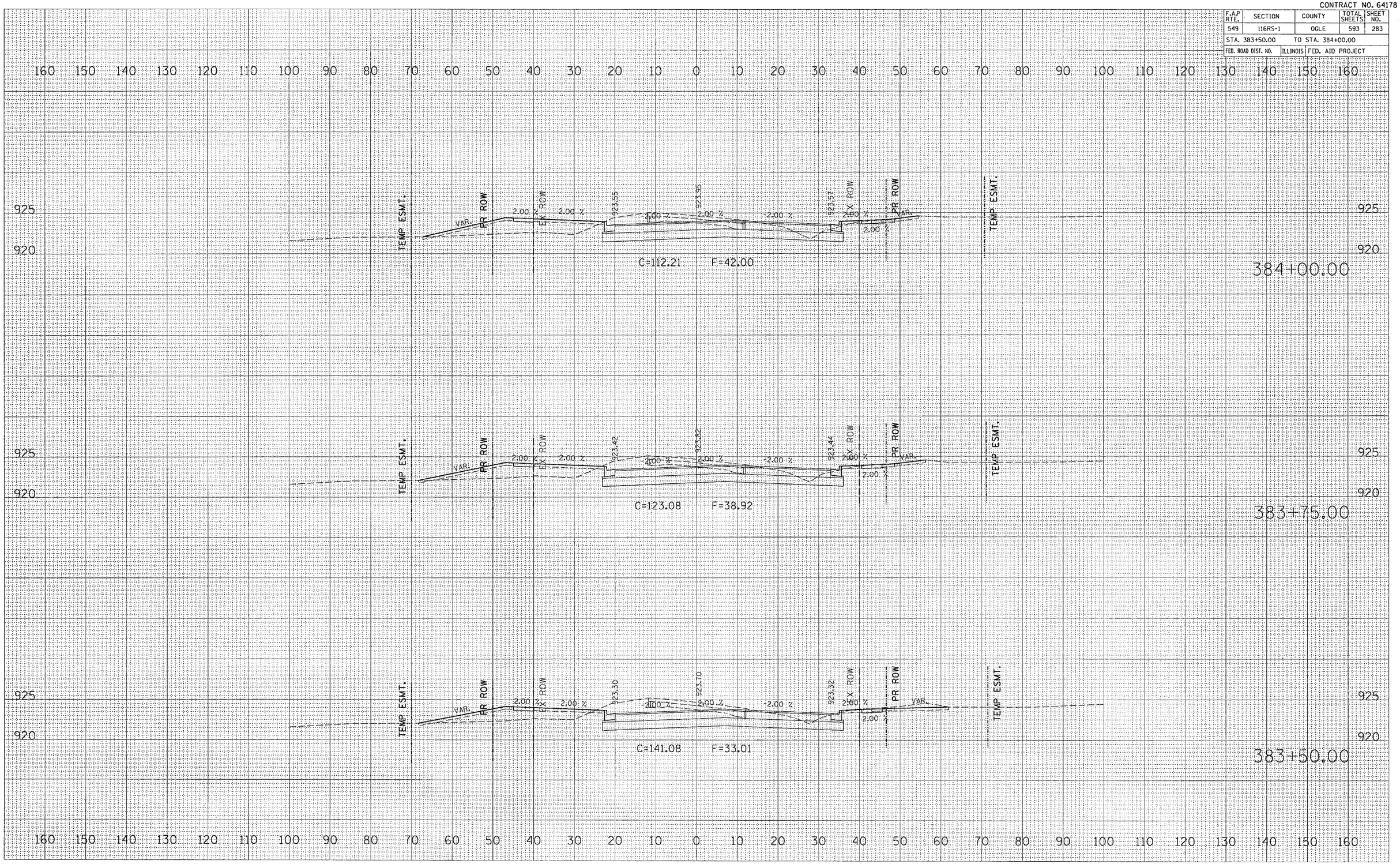
FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED
PLOTTED
TRIANGLE
AREAS
AREAS CHECKED

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

PLOT DATE = Tue Feb 08 11:23:18 2005
FILE NAME = C:\projects\x2004197\d004197m3.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = #REF'S

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	283
STA. 383+50.00		TO STA. 384+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



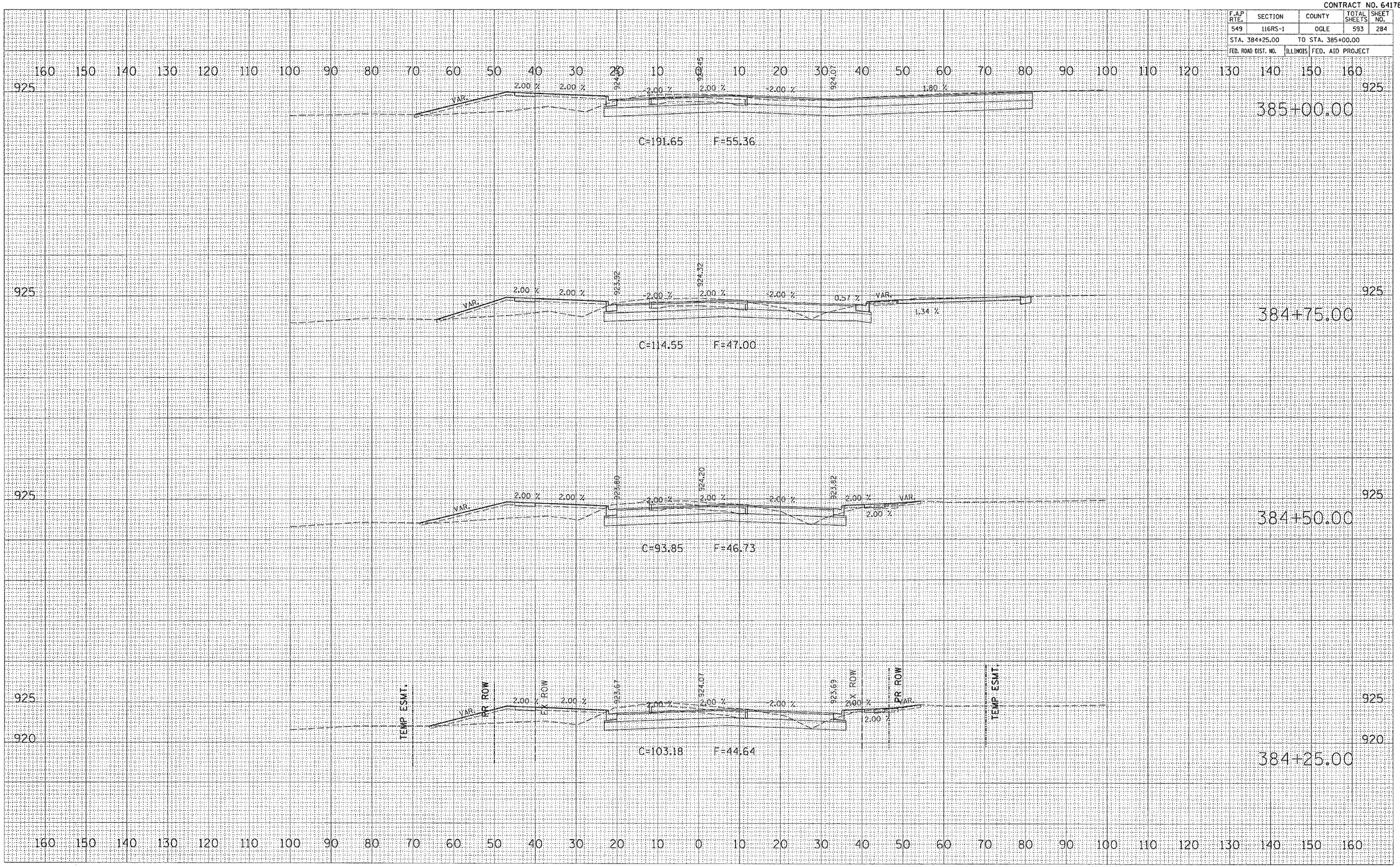
FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TRACED — AREAS — AREAS CHECKED — BY — DATE

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

PLOT DATE = Tue Feb 00 11:23:18 2025
FILE NAME = C:\projects\c202497\c202497x03.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	284
STA. 384+25.00		TO STA. 385+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = Tue Feb 08 11:23:19 2005
FILE NAME = c:\projects\c64178\sht\s0284.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = #REF#

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	285
STA. 385+25.00		TO STA. 385+75.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

930

925

920

TEMP. ESMT.

VAR.

PR. ROW

2.00 %

EX. ROW

2.00 %

924.42

-2.00 %

924.82

2.00 %

-2.00 %

924.63

1:12

EX. ROW

PR. ROW

TEMP. ESMT.

C=57.60 F=56.89

385+75.00

925

VAR.

2.00 %

2.00 %

924.30

-2.00 %

924.70

2.00 %

-2.00 %

924.34

1:8

C=97.05 F=48.34

385+50.00

925

VAR.

2.00 %

2.00 %

924.17

-2.00 %

924.57

2.00 %

-2.00 %

924.19

1.83 %

C=186.63 F=54.66

385+25.00

925

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

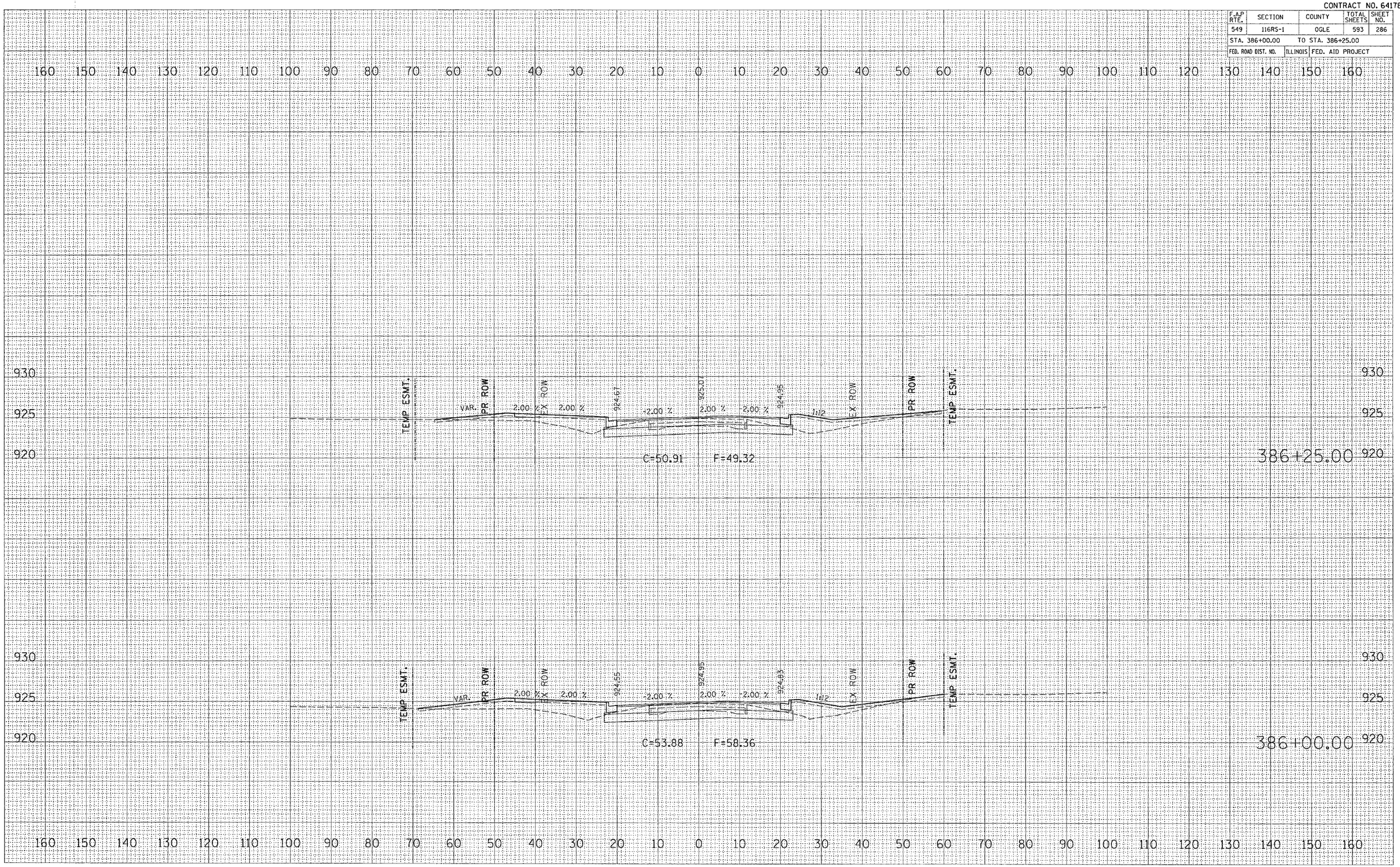
FINAL SURVEY / ORIGINAL SURVEY

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

PLOT DATE = Tue Feb 08 11:23:13 2005
FILE NAME = c:\projects\c208497\c208497sh5.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	286
STA. 386+00.00		TO STA. 386+25.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = Tue Feb 08 11:23:28 2005
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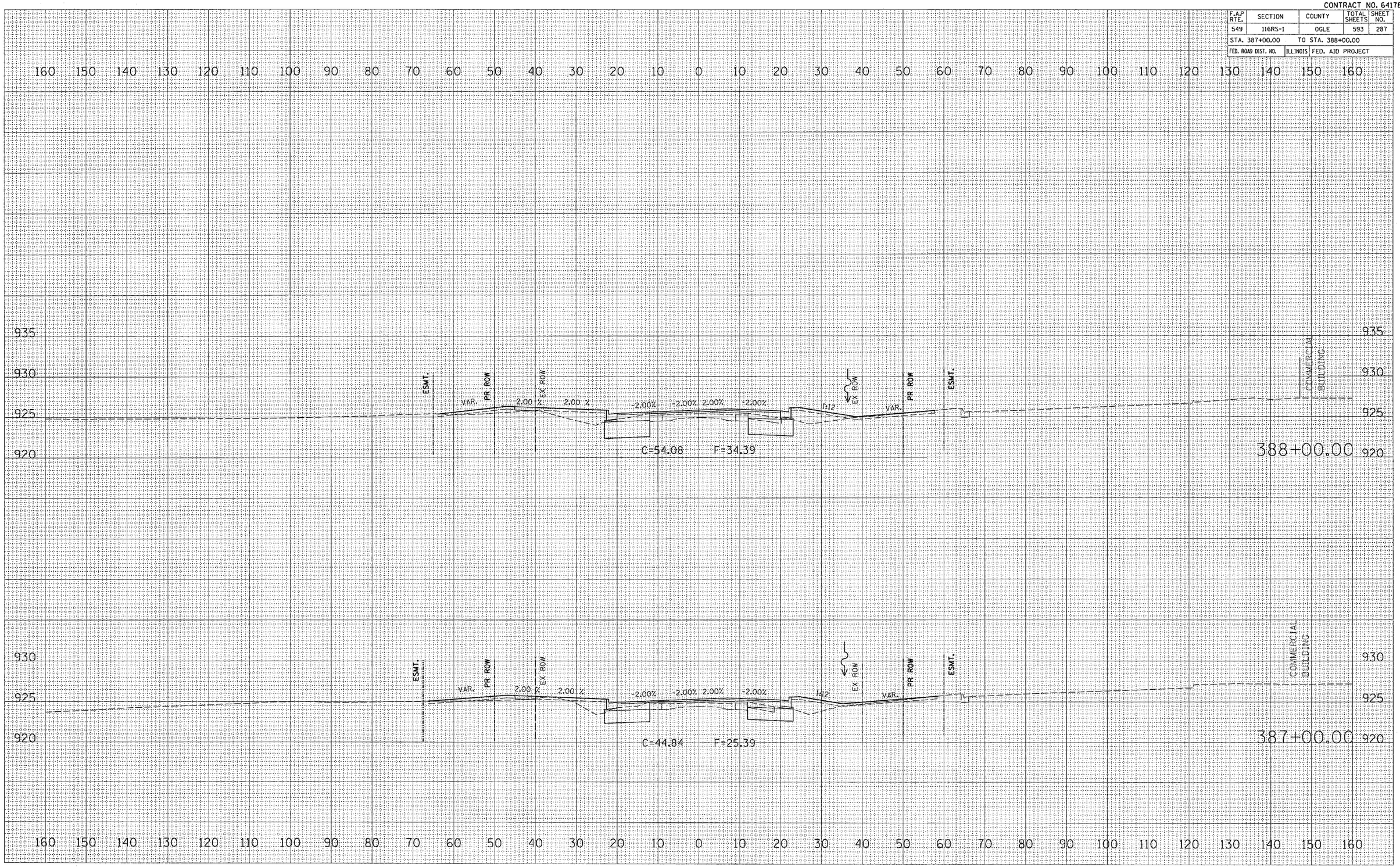
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = $REPS

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	287
STA. 387+00.00		TO STA. 388+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = Tue Feb 03 11:23:26 2015
FILE NAME = c:\projects\ilroads\64178\000497.mstn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = $REFS

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	288
STA. 389+00.00		TO STA. 391+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		

PLOT DATE = Tue Feb 08 11:33:36 2005
FILE NAME = c:\projects\20064971\d06497.xmsh
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

930
925

ESMT. VAR. PR ROW 2.00 % EX ROW 2.00 % -2.00% -2.00% 2.00% -2.00% EX ROW 1:10 PR ROW VAR. ESMT.

C=42.92 F=36.53

391+00.00

COMMERCIAL BUILDING

ESMT. VAR. PR ROW 2.00 % EX ROW 2.00 % -2.00% -2.00% 2.00% -2.00% EX ROW 1:10 PR ROW VAR. ESMT.

C=67.72 F=33.51

390+00.00

COMMERCIAL

ESMT. VAR. PR ROW 2.00 % EX ROW 2.00 % -2.00% -2.00% 2.00% -2.00% 1:10 EX ROW VAR. PR ROW ESMT.

C=50.52 F=41.10

389+00.00

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	289
STA. 392+00.00		TO STA. 393+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

935
930
925

COMMERCIAL ENTRANCE

PR ROW | EX ROW | EX ROW | PR ROW | ESMT.

-2.00% 2.00% -2.00% 4.00 %

C=74.27 F=0.09

393+00.00

COMMERCIAL ENTRANCE

PR ROW | EX ROW | EX ROW | PR ROW | ESMT.

-2.00% 2.00% -2.00% 4.44 %

392+68.80

ESMT. | PR ROW | EX ROW | 2.00 | 2.00 % | -2.00% | 2.00% | 2.00% | -2.00% | EX ROW | 1.8% | VAR. | PR ROW | ESMT

C=45.69 F=25.44

392+00.00

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

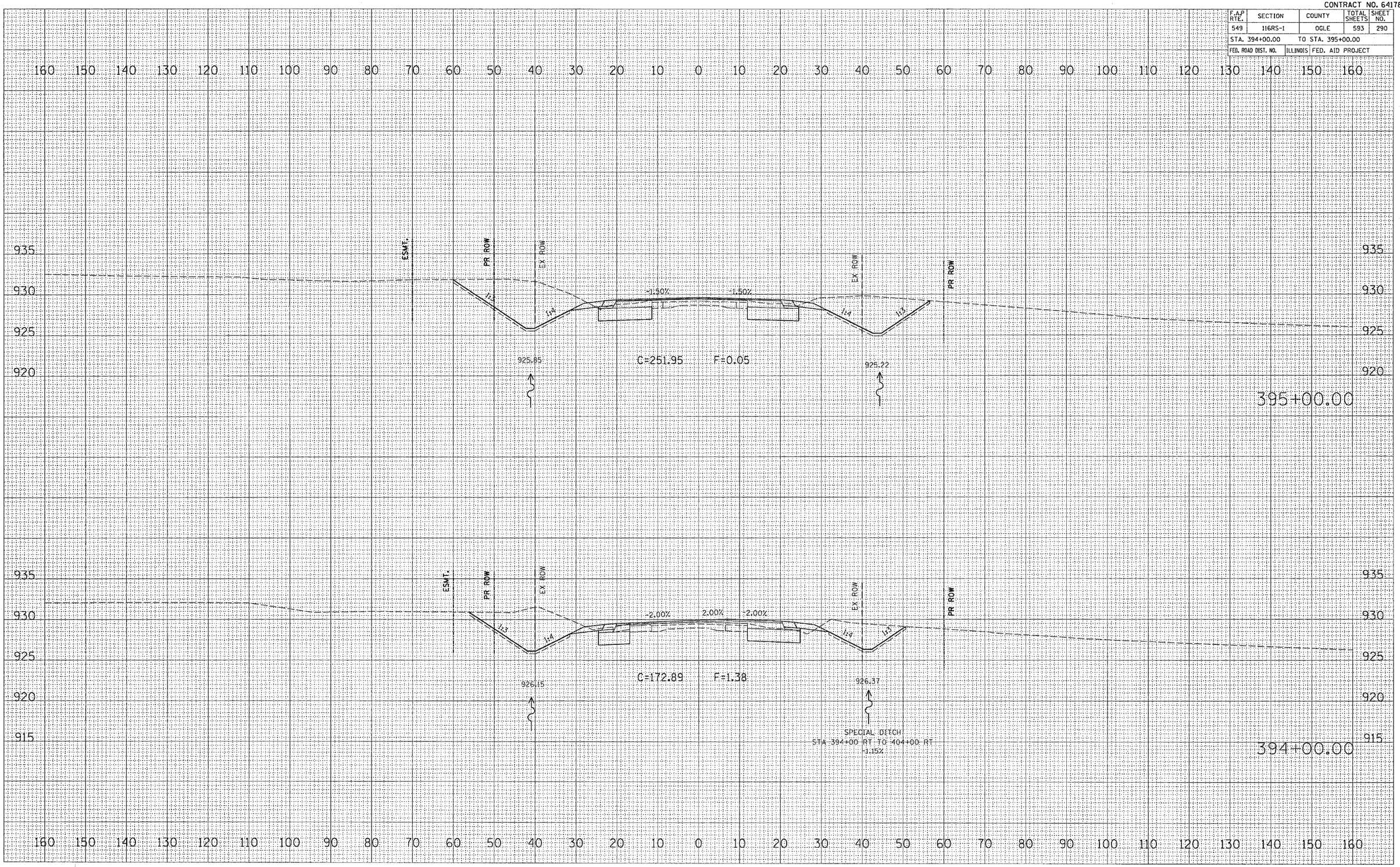
ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TRACED	
	AREAS CHECKED	

PLOT DATE = Tue Feb 08 11:33:37 2005
FILE NAME = c:\projects\1420049\sheets\1420049sht-ilgate.dgn
PLOT SCALE = 10.0000 '/ IN.
REFERENCE = REF

IL 72

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	290
STA. 394+00.00		TO STA. 395+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

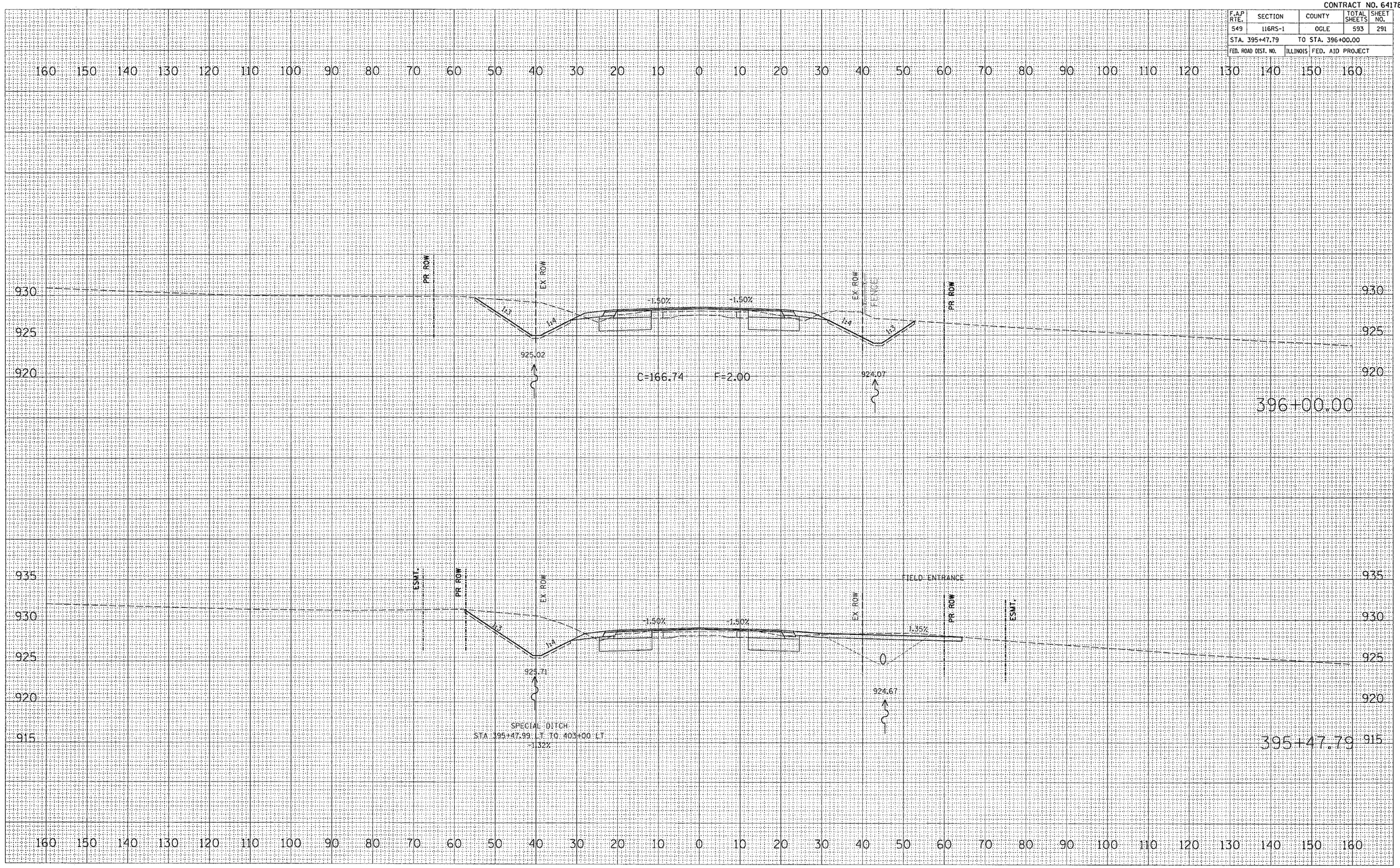


FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED BY
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
DATE

PLOT DATE = Tue Feb 08 11:33:37 2005
FILE NAME = c:\projects\x2004417\s004417xmsh.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	291
STA. 395+47.79		TO STA. 396+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



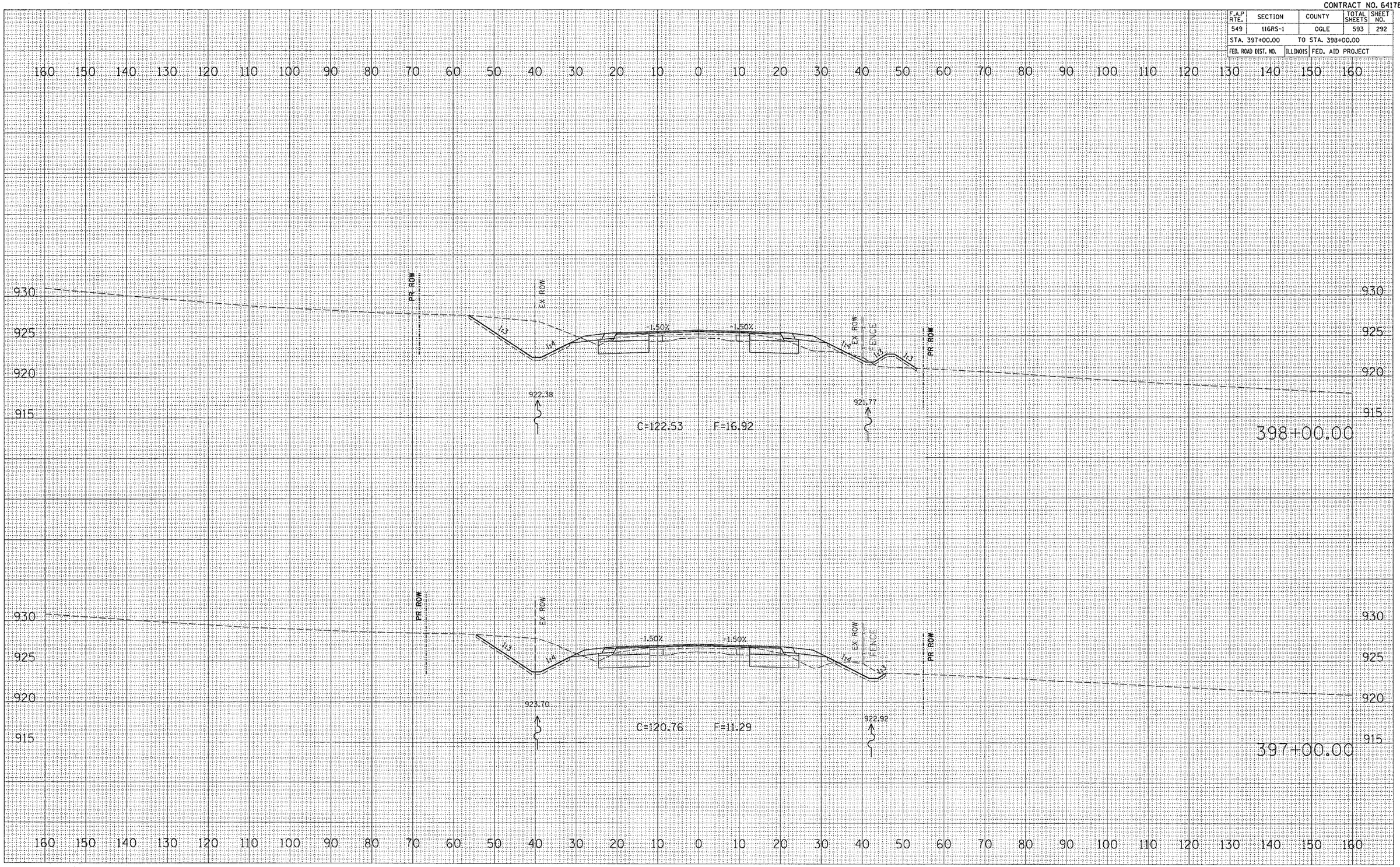
FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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

PLOT DATE = Tue Feb 08 11:33:38 2005
FILE NAME = c:\projects\20064\1\sd64197.xmsb
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	292
STA. 397+00.00		TO STA. 398+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

PLOT DATE = Tue Feb 08 11:33:39 2005
FILE NAME = c:\projects\c208457\sd08457.mesh.dgn
PLOT SCALE = 10.0000 / IN.
REFERENCE = 49E24

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	293
STA. 399+00.00		TO STA. 400+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

930 925 920 915

PR. ROW

EX. ROW

1:3

1:4

-1.50%

-1.50%

1:4

VARY

EX. ROW

PR. ROW

919.74

919.48

C=144.20 F=3.70

400+00.00

930 925 920 915

PR. ROW

EX. ROW

1:3

1:4

1.50%

-1.50%

1:4

EX. ROW

FENCE

1:3

1:3

PR. ROW

921.06

920.63

C=135.89 F=10.28

399+00.00

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

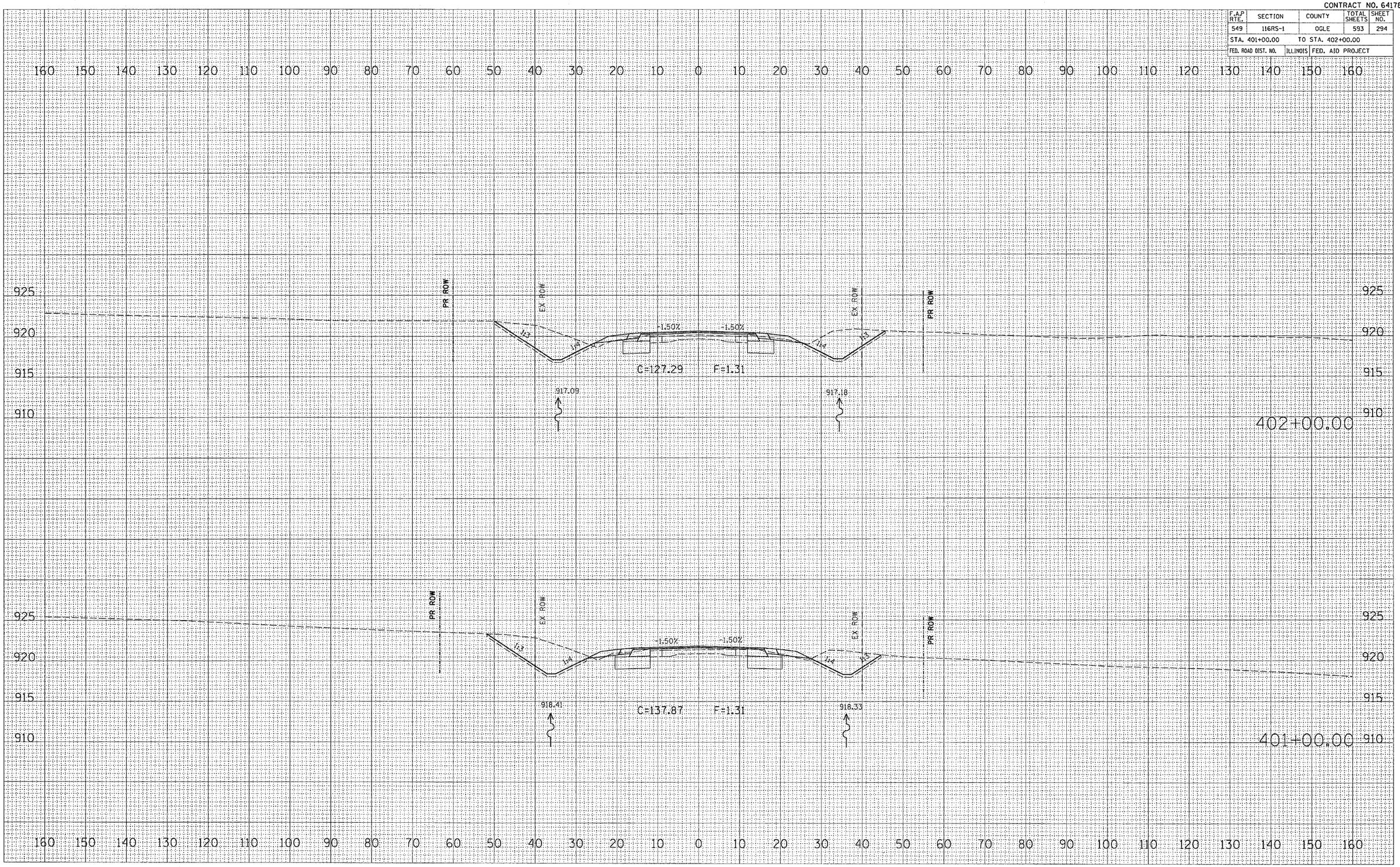
PLOT DATE = Tue Feb 08 11:33:35 2005
FILE NAME = c:\projects\20045\c600497.xmsa
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	294
STA. 401+00.00		TO STA. 402+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
ISSUED		
AREAS CHECKED		



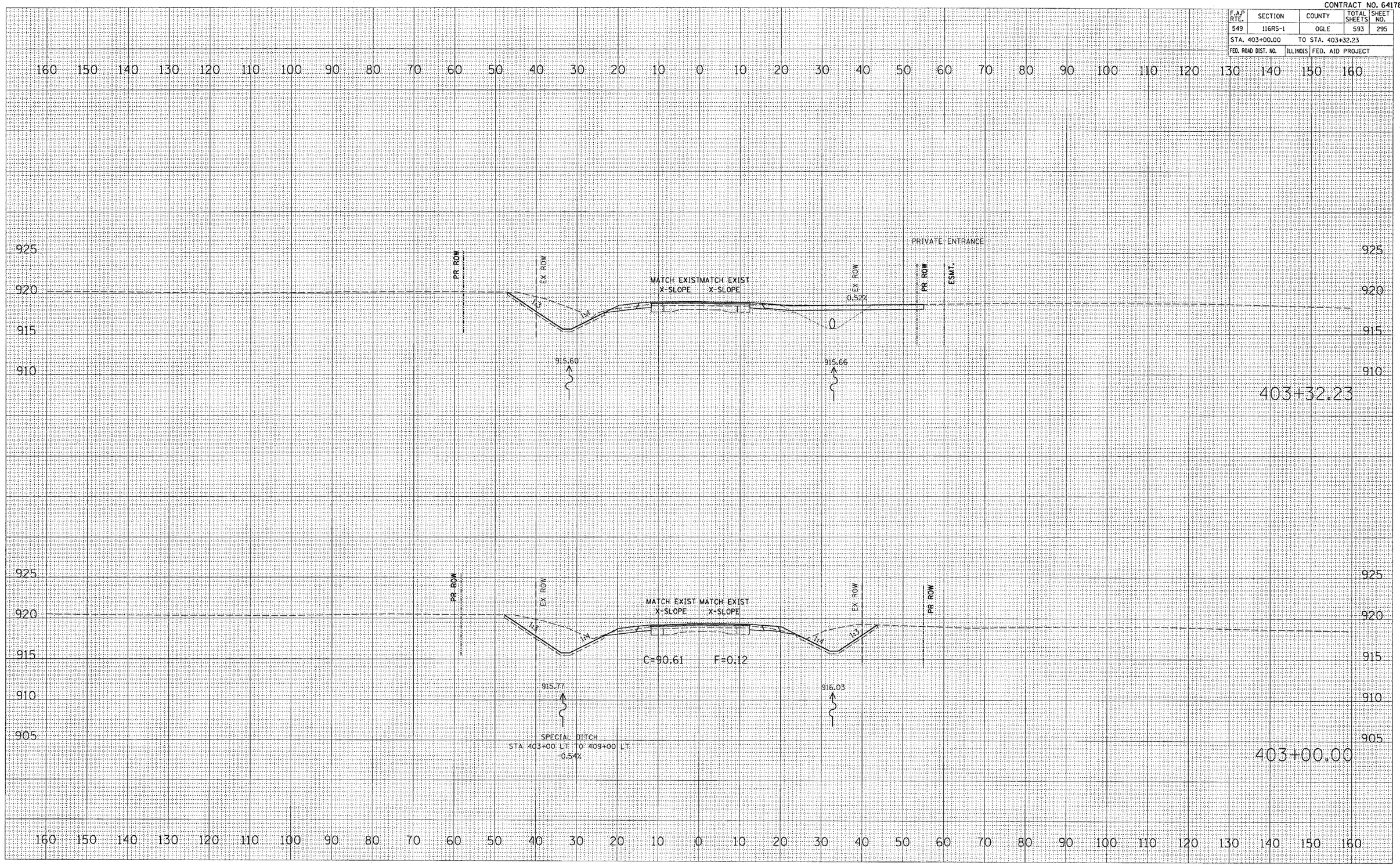
ORIGINAL SURVEY — NOTE BOOK — NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
ISSUED		
AREAS CHECKED		

PLOT DATE = Tue Feb 08 11:33:48 2005
FILE NAME = c:\projects\620647\1000417\combined\
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	295
STA. 403+00.00		TO STA. 403+32.23		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY / ORIGINAL SURVEY

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

PLOT DATE = Tue Feb 03 11:23:40 2015
FILE NAME = c:\projects\20647\c08417\mainfile.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = #REF#

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	296
STA. 403+95.00		TO STA. 404+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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

404+00.00

FIELD ENTRANCE

ESMT. | PR ROW | EX ROW | -0.93% | MATCH EXIST X-SLOPE | MATCH EXIST X-SLOPE | 1:4 | 1:3 | EX ROW | FENCE | PR ROW

915.23 | C=39.22 | F=18.27 | 914.88

SPECIAL DITCH
STA 404+00 RT TO 409+00 RT
-0.49%

925 920 915 910 905

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

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

403+95.00

FIELD ENTRANCE

ESMT. | PR ROW | EX ROW | -0.90% | MATCH EXIST X-SLOPE | MATCH EXIST X-SLOPE | 1:4 | 1:3 | EX ROW | FENCE | PR ROW

915.26 | 914.94

925 920 915 910

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

PLOT DATE = Tue Feb 08 11:23:41 2005
FILE NAME = D:\projects\s208497\s208497xmsh.dgn
CELL SCALE = 10.000000 / IN.
REFERENCE = #REF#

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	297
STA. 405+00.00		TO STA. 406+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

920
915
910

PR ROW

EX ROW

MATCH EXISTMATCH EXIST
X-SLOPE X-SLOPE

1:3 1:4 1:4 1:3

EX ROW

FENCE

PR ROW

914.16

913.89

C=43.04 F=0.04

406+00.00

920
915
910

PR ROW

EX ROW

MATCH EXISTMATCH EXIST
X-SLOPE X-SLOPE

1:3 1:4 1:4 1:3

EX ROW

FENCE

PR ROW

914.69

914.39

C=31.01 F=0.01

405+00.00

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

ORIGINAL SURVEY

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

PLOT DATE = Tue Feb 09 11:23:41 2005
FILE NAME = c:\projects\220497\c60b497.mmb
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	298
STA. 407+00.00		TO STA. 408+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY | ORIGINAL SURVEY

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

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

920 915 910 905

PR ROW | EX. ROW | MATCH EXIST X-SLOPE | MATCH EXIST X-SLOPE | EX. ROW | FENCE | PR ROW

1:3 1:4 1:4 1:3

913.08 912.90

C=31.83 F=1.01

408+00.00

920 915 910 905

PR ROW | EX. ROW | MATCH EXIST X-SLOPE | MATCH EXIST X-SLOPE | EX. ROW | FENCE | PR ROW

1:3 1:4 1:4 1:3

913.62 913.40

C=34.50 F=0.74

407+00.00

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

PLOT DATE = Tue Feb 08 11:53:42 2005
FILE NAME = c:\projects\20045\c400497\sht\s400497sht.dgn
PLOT SCALE = 10.0000 ' / IN.
REFERENCE = REF

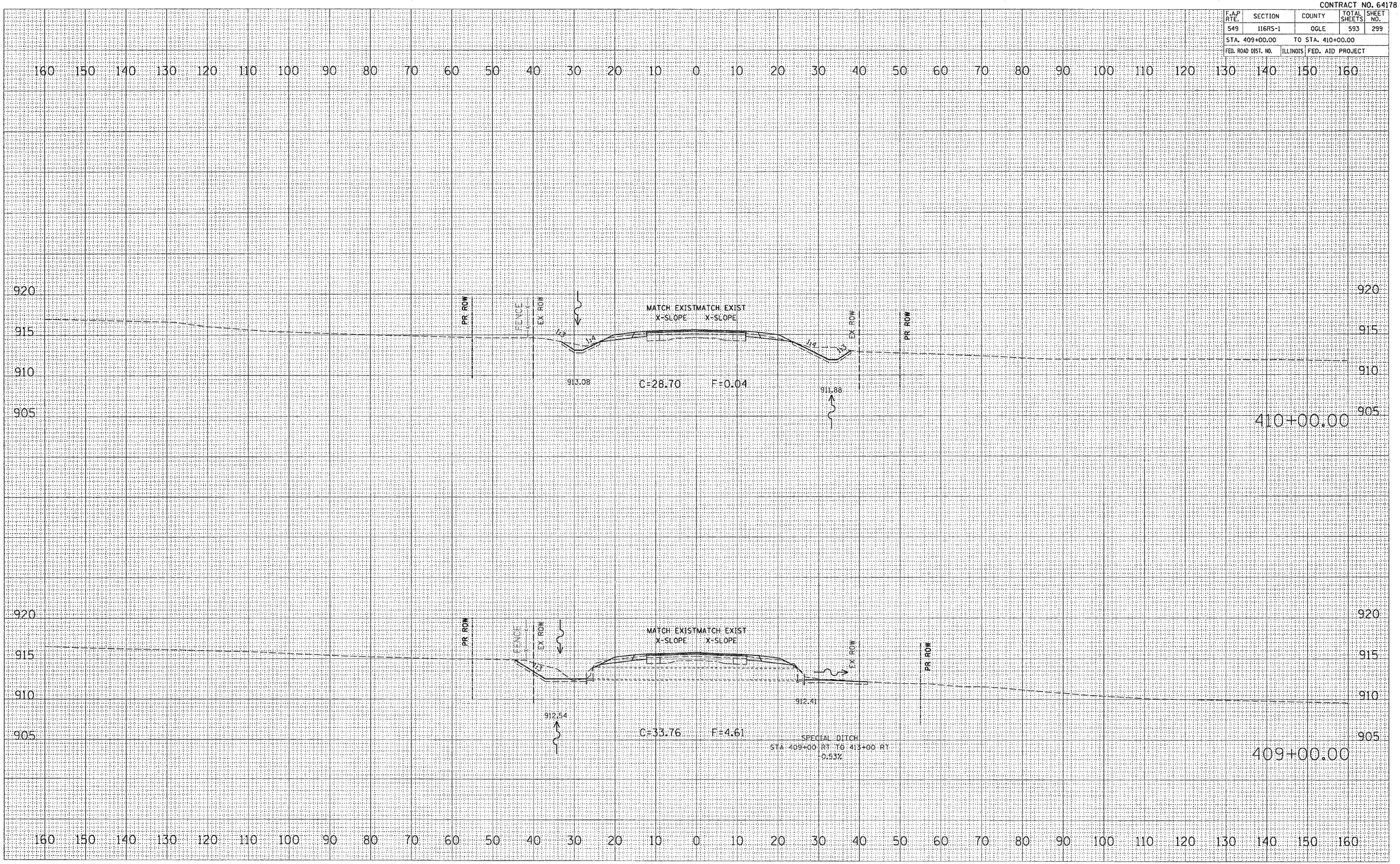
CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	299
STA. 409+00.00		TO STA. 410+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

PLOT DATE = Tue Feb 08 11:23:43 2005
FILE NAME = c:\projects\ic2004\97\c80497.msh
USER NAME = IL2004 / NA
PLOT SCALE = #REF#
REFERENCE = #REF#



CONTRACT NO. 64178

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	300
STA. 410+89.71		TO STA. 411+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

920 915 910 905

ESMT.
PR ROW
VAR.
FENCE
EX ROW
MATCH EXIST X-SLOPE
MATCH EXIST X-SLOPE
1:4
1:3
EX ROW
PR ROW
C=69.13 F=0.00
911.35
411+00.00

PRIVATE ENTRANCE
ESMT.
PR ROW
EX ROW
2.18%
MATCH EXIST X-SLOPE
MATCH EXIST X-SLOPE
1:4
1:3
EX ROW
PR ROW
911.40
410+89.71

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

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

PLOT DATE = Tue Feb 08 11:33:43 2005
FILE NAME = c:\projects\k2004497\sht0497.mxd
PLOT SCALE = 1'/20.0000 ' / IN.
REFERENCE = REF