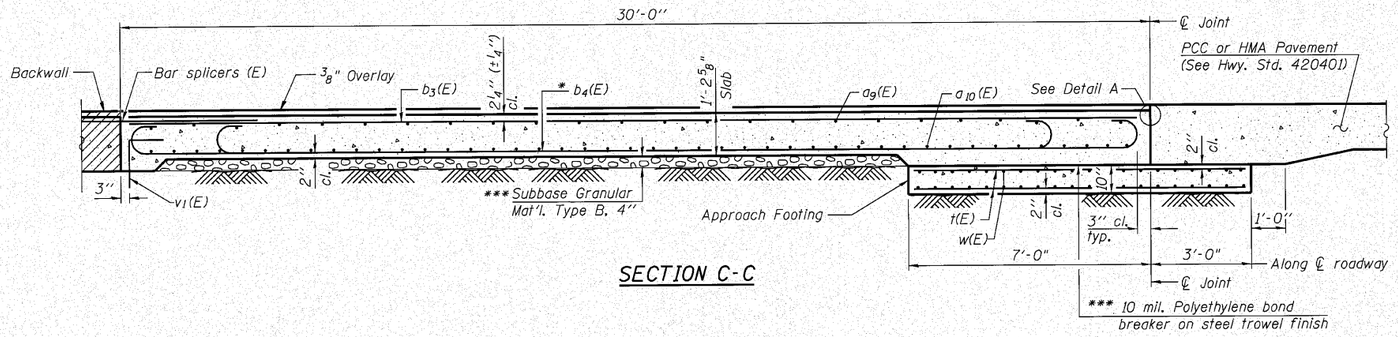
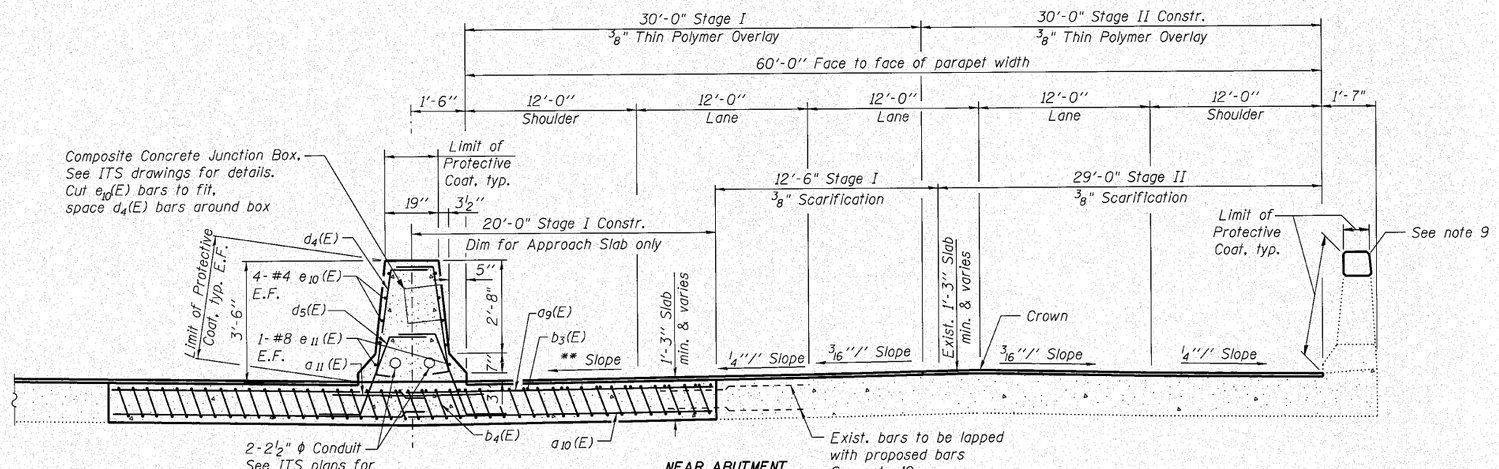


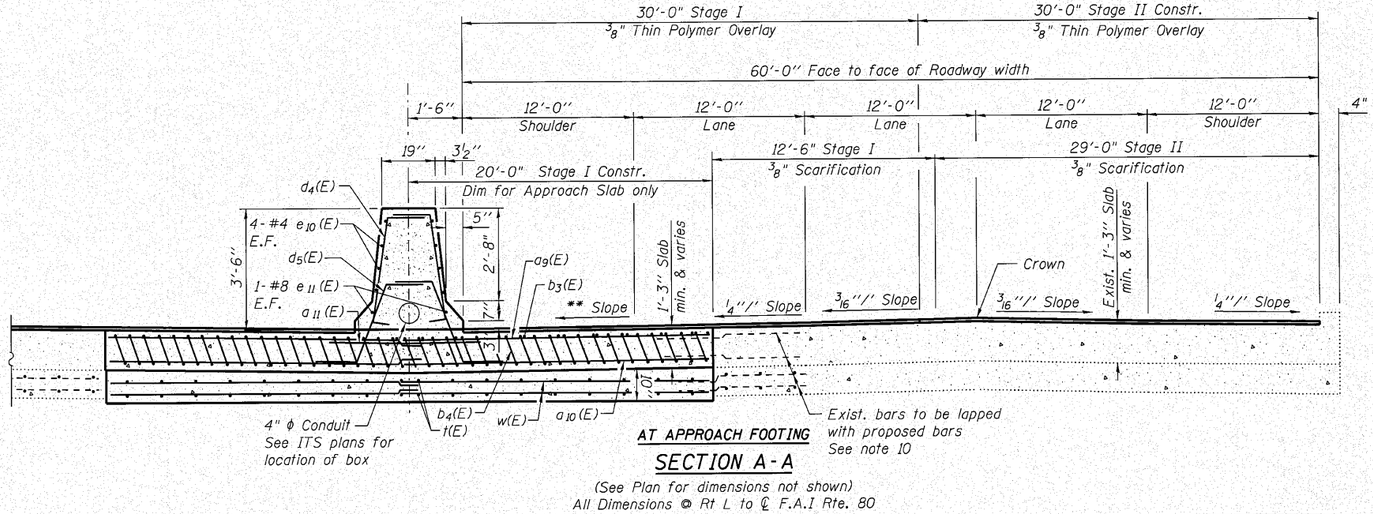
SECTION C-C



NEAR ABUTMENT

SECTION D-D

(See Plan for dimensions not shown)
All Dimensions @ Rt L to ℄ F.A.I Rte. 80



AT APPROACH FOOTING

SECTION A-A

(See Plan for dimensions not shown)
All Dimensions @ Rt L to ℄ F.A.I Rte. 80

Notes:
1. Work this sheet with sheet S-12.
2. Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
3. Approach footing concrete shall be paid for as Concrete Structures.
4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
5. For v_1(E) bar details, see sheet S-21.
6. Approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
7. For bar splicer details, see sheets S-20 and S-26.
8. Cost of excavation for approach footing included with Concrete Structures.
9. For additional parapet details, see sheet S-11.
10. Existing reinforcement shall be cleaned and incorporated into new construction. Cost included with concrete removal.
11. For approach slab removal details see sheet S-21.
12. Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
13. Bridge Deck Thin Polymer Overlay and Concrete Bridge Deck Scarification shown on approach slabs uses same special provisions as for the bridge deck.

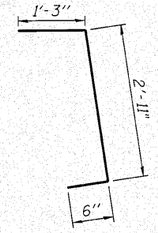
* Tilt #9 b_4(E) bars as required to maintain clearance.

** Cross slope varies, see roadway plan & profile sheets for details.

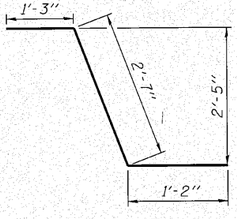
*** Cost included with Concrete Superstructure.

TWO APPROACHES BILL OF MATERIAL

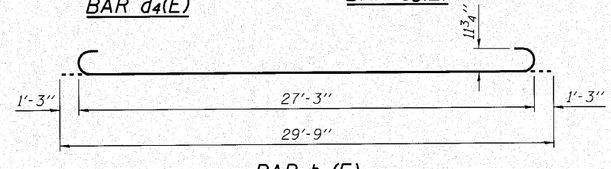
Bar	No.	Size	Length	Shape
a_9(E)	150	#4	21'-0"	
a_{10}(E)	184	#5	30'-7"	
a_{11}(E)	48	#6	6'-6"	
b_3(E)	66	#4	29'-8"	
b_4(E)	192	#9	29'-9"	
d_4(E)	136	#5	4'-8"	
d_5(E)	136	#5	5'-0"	
e_{10}(E)	16	#4	29'-8"	
e_{11}(E)	4	#8	29'-8"	
t(E)	80	#4	14'-3"	
w(E)	120	#5	20'-0"	
w_1(E)	80	#5	28'-7"	
Concrete Superstructure		Cu. Yd.	141.7	
Concrete Structures		Cu. Yd.	36.0	
Reinforcement Bars, Epoxy Coated		Pound	34,450	
Protective Coat		Sq. Yd.	67	
Bridge Deck Thin Polymer Overlay 3/8"		Sq. Yd.	800	
Concrete Bridge Deck Scarification 3/8"		Sq. Yd.	554	



BAR d_4(E)



BAR d_5(E)



BAR b_4(E)

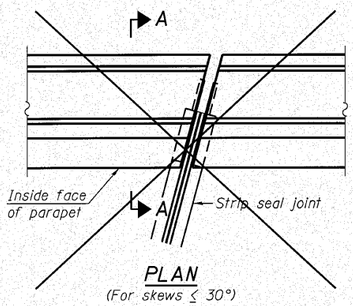
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FILE NAME =	USER NAME = rdanley	DESIGNED - BWS	REVISED -
Clorba Group, Inc. CONSULTING ENGINEERS 6007 North Cumberland Avenue Norridge, Illinois 60656 Tel 773.775.7000 Fax 773.775.4414 Email: clorba@clorba.com		CHECKED - EKM	REVISED -
	PLOT SCALE =	DRAWN - RD	REVISED -
	PLOT DATE = 10/28/2010	CHECKED - SCD	REVISED -

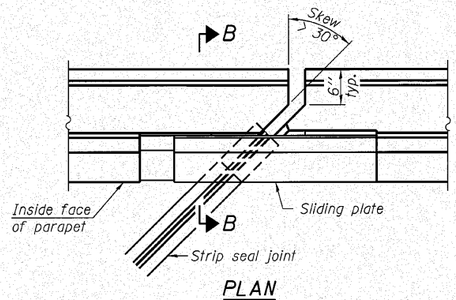
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS II
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-13 OF S-27 SHEETS

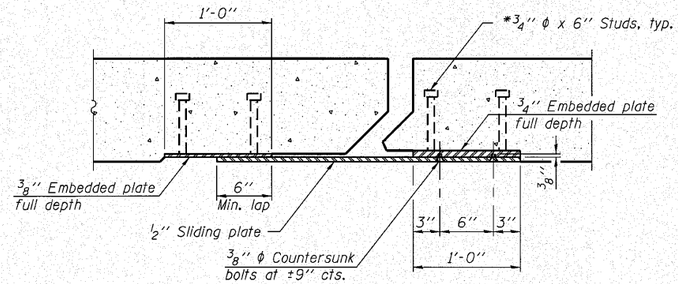
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			



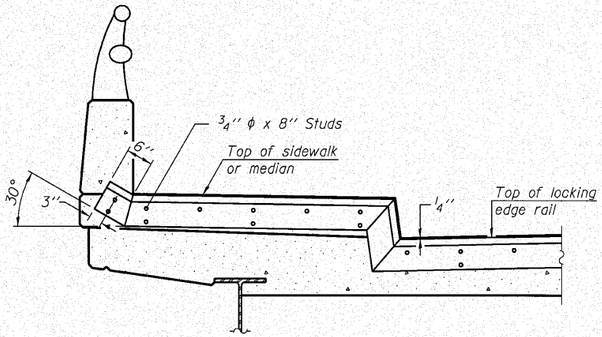
PLAN
(For skews ≤ 30°)



PLAN
(For skews > 30°)
Showing point block

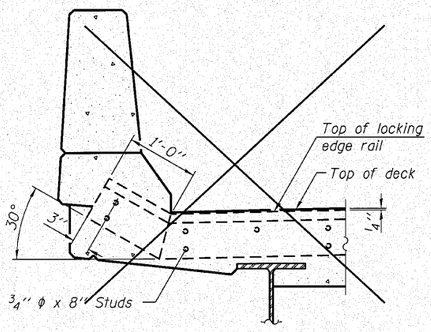


SECTION C-C

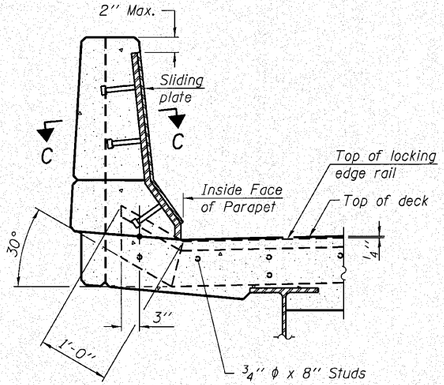


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

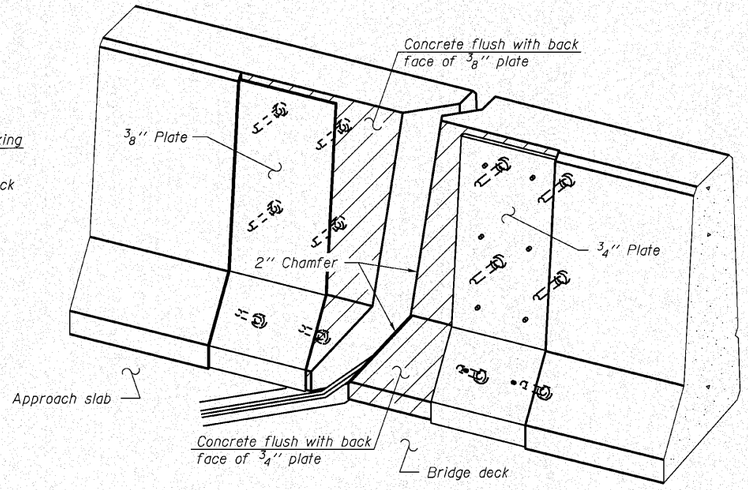
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A



SECTION B-B



TRIMETRIC VIEW
(Showing back plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

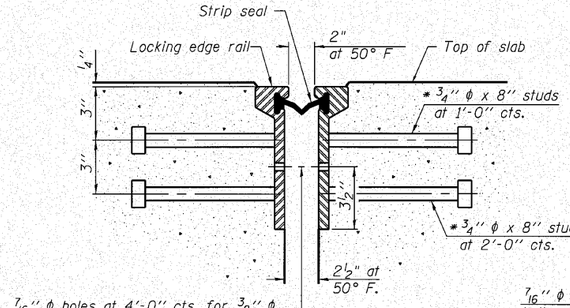
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

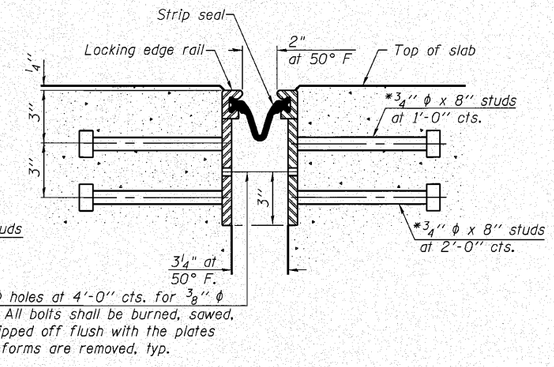
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

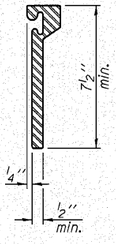


SECTION THRU ROLLED RAIL JOINT

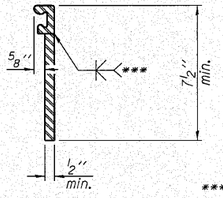


SECTION THRU WELDED RAIL JOINT

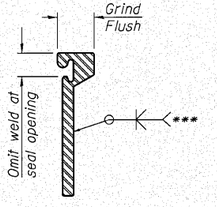
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED EXTRUDED RAIL



WELDED RAIL



*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	364

EJ-SSJ

7-1-10

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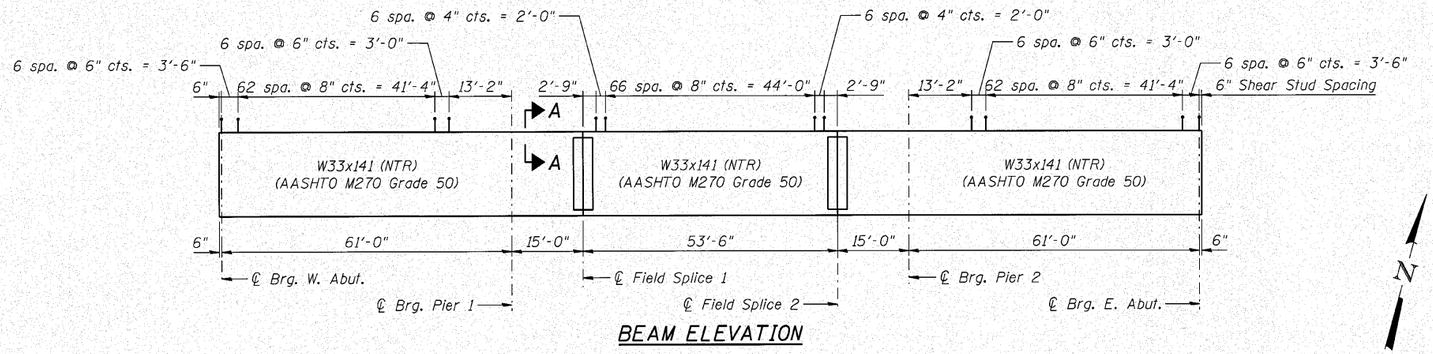
Ciorba Group, Inc.
CONSULTING ENGINEERS
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Suite 402 Chicago, Illinois 60656
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Email chicago@ciorba.com

FILE NAME =	USER NAME = rdanley	DESIGNED - BWS	REVISED -
		CHECKED - EKM	REVISED -
	PLOT SCALE =	DRAWN - RD	REVISED -
	PLOT DATE = 10/28/2010	CHECKED - SCD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-14 OF S-27 SHEETS

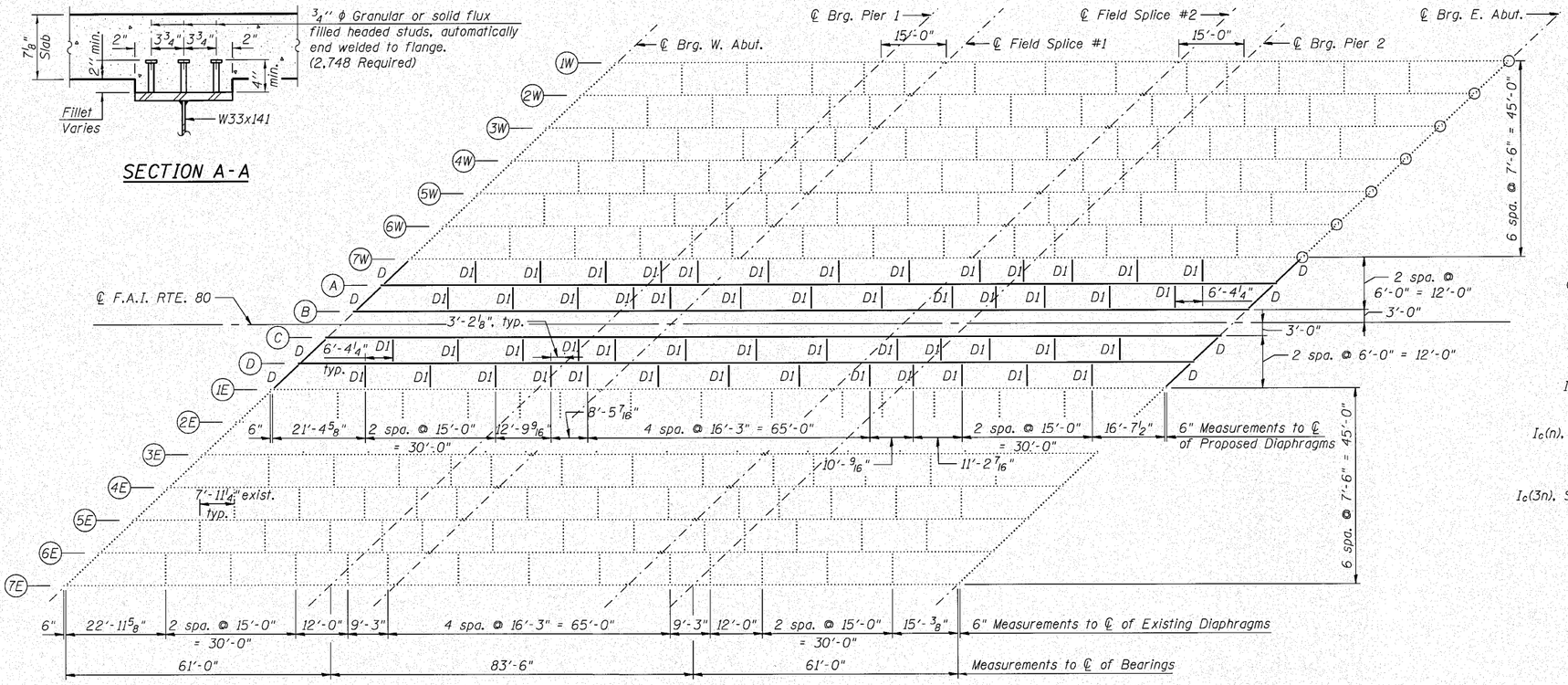
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	202
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			



BEAM ELEVATION

3/4" ϕ Granular or solid flux filled headed studs, automatically end welded to flange. (2,748 Required)

SECTION A-A



FRAMING PLAN

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing and Erecting Structural Steel	L. Sum	1.0
Stud Shear Connectors	Each	2,748

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Piers	0.5 Sp. 2
I_s	(in^4)	7,450	7,450	7,450
$I_c(n)$	(in^4)	17,516		17,516
$I_c(3n)$	(in^4)	12,859		12,859
S_s	(in^3)	447	447	447
$S_c(n)$	(in^3)	618		618
$S_c(3n)$	(in^3)	559		559
Z	(in^3)		514	
ϱ	(k/')	0.729	0.729	0.729
$M\varrho$	('k)	167	395	239
$s\varrho$	(k/')	0.282	0.282	0.282
$M_s\varrho$	('k)	67	138	98
M_L	('k)	338	262	382
M_{IM}	('k)	91	65	92
$5/3\,[M_L + I]$	('k)	714	546	790
M_a	('k)	1,232	1,403	1,466
* M_u	('k)	3,042	1,964	3,042
f_s ϱ non-comp	(ksi)	4.47	10.59	6.4
f_s ϱ (comp)	(ksi)	1.44	3.71	2.1
f_s $5/3\,[M_L + M_I]$	(ksi)	13.86	14.63	15.3
f_s (Overload)	(ksi)	19.77	28.94	23.9
f_s (Total)	(ksi)			
VR	(k)	47		53

INTERIOR GIRDER REACTION TABLE			
		Abuts	Piers
$R\varrho$	(k)	22.8	81.7
R_L	(k)	34.5	47.4
R_I	(k)	8.6	11.9
R_{Total}	(k)	65.9	141.0

* Compact section

○ Location of Bearings to be repaired as per details on Sheet S-19.

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in.^{4} and in.^{3}).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in.^{4} and in.^{3}).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).

Z: Plastic Section Modulus of the steel section in non-composite areas (in.^{3}).

ϱ: Un-factored non-composite dead load (kips/ft.).

$M\varrho$: Un-factored moment due to non-composite dead load (kip-ft.).

$s\varrho$: Un-factored long-term composite (superimposed) dead load (kips/ft.)

$M_s\varrho$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_L: Un-factored live load moment (kip-ft.).

M_I: Un-factored moment due to impact (kip-ft.).

M_a: Factored design moment (kip-ft.). $1.3\,[M\varrho + M_s\varrho + \frac{5}{3}(M_L + M_I)]$

M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi). $M\varrho + M_s\varrho + \frac{5}{3}(M_L + M_I)$

f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi). $1.3\,[M\varrho + M_s\varrho + \frac{5}{3}(M_L + M_I)]$

VR: Maximum L + impact shear range within the composite portion of the span for stud shear connector design (kips).

Notes:

1. Contractor to verify existing dimensions in the field and make necessary approved adjustments prior to ordering materials.
2. All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
3. Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
4. Top of Beam elevations shown on sheet S-16.

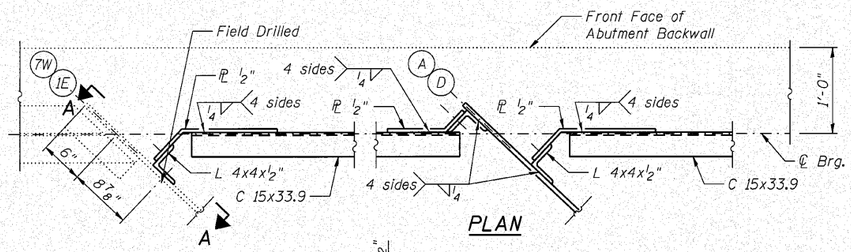
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FILE NAME =	USER NAME = rdanley	DESIGNED - BWS	REVISED -	
Clorba Group, Inc. CONSULTING ENGINEERS 6007 North Cumberland Avenue Suite 103 Chicago, Illinois 60656 Tel: 773.775.6088 Fax: 773.775.6144 Email: chicago@clorba.com		CHECKED - EKM	REVISED -	
	PLOT SCALE =	DRAWN - RD	REVISED -	
	PLOT DATE = 10/28/2010	CHECKED - SCD	REVISED -	

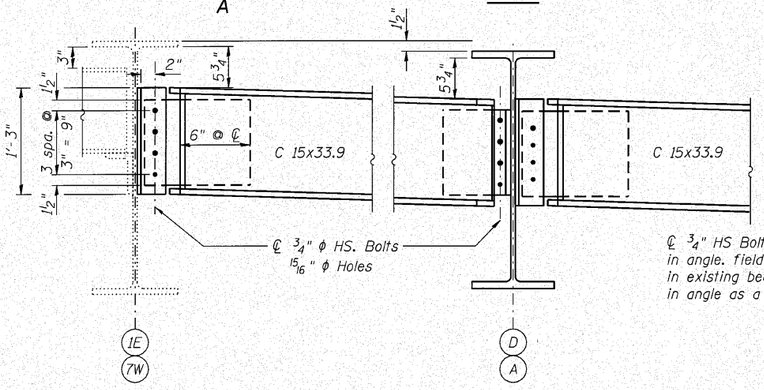
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-15 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60M59		
		ILLINOIS	FED. AID PROJECT	



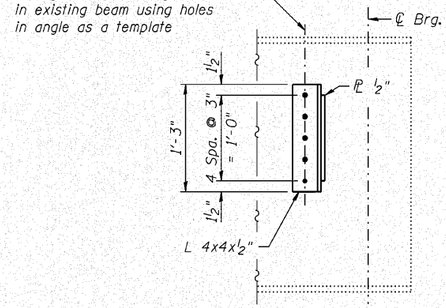
PLAN



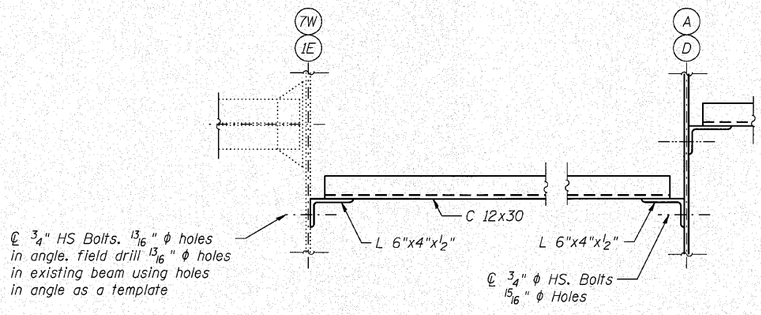
ELEVATION

END DIAPHRAGM D

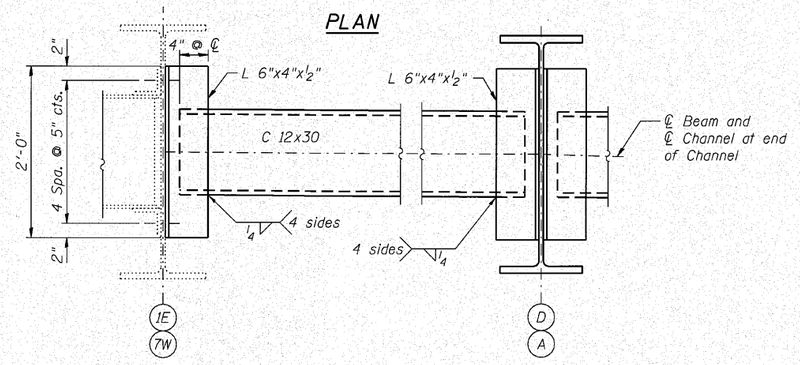
(8 Required)



VIEW A-A



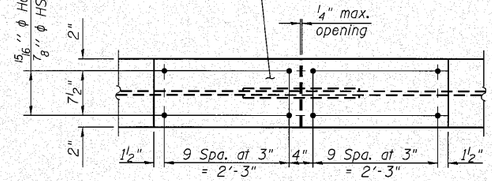
PLAN



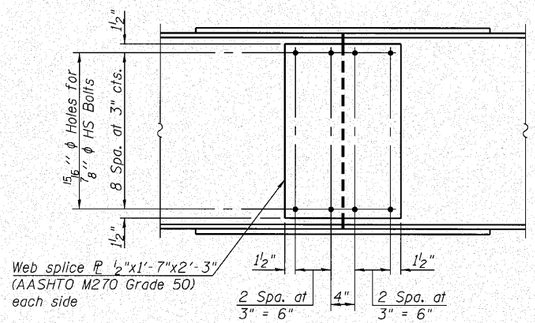
ELEVATION

DIAPHRAGM D1

(52 Required)



PLAN



Note: HS Bolts shall be 7/8" ϕ AASHTO M164/ASTM A325

ELEVATION

SPLICE DETAIL

(8 Required)

TOP OF BEAM ELEVATIONS

(For Fabrication Only)

	℄ BRG. W. ABUT.	℄ PIER 1	℄ SPLICE 1	℄ SPLICE 2	℄ PIER 2	℄ BRG. E. ABUT.
Beam A	686.09	686.22	686.26	686.40	686.45	686.65
Beam B	685.95	686.08	686.11	686.26	686.31	686.50
Beam C	685.83	685.96	686.00	686.10	686.16	686.39
Beam D	685.94	686.07	686.11	686.25	686.30	686.49

NOTES:

1. All Splice plate material shall meet notch toughness requirements.
2. Two hardened washers required for each set of oversized holes.
3. Cost of field drilling included with "Furnishing and Erecting Structural Steel".

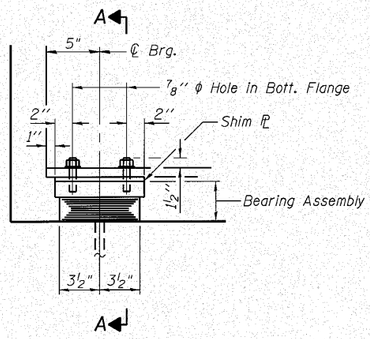
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FILE NAME =	USER NAME = rdanley	DESIGNED - BWS	REVISED -
Clorba Group, Inc. CONSULTING ENGINEERS 5247 North Dunning Avenue Suite 102 Chicago, Illinois 60656 Tel. 773.775.4005 Fax 773.775.4014 Email chicago@clorba.com		CHECKED - EKM	REVISED -
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	PLOT DATE = 10/26/2010	CHECKED - SCD	REVISED -

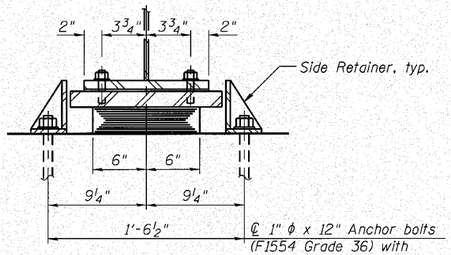
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-16 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60M59		
		ILLINOIS	FED. AID PROJECT	

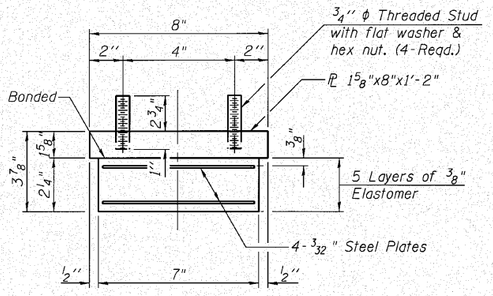


ELEVATION AT W. ABUT.



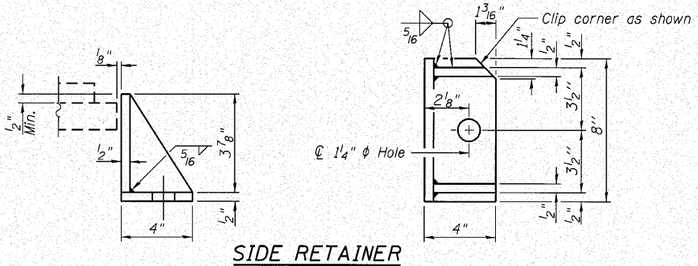
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

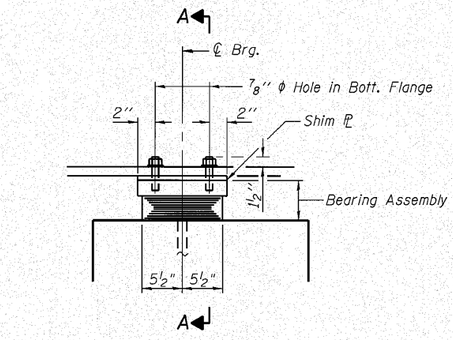
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

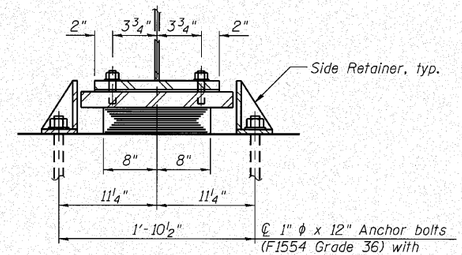
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Two ⅛" adjusting shims shall be provided for each bearing in addition to all other plates or shims as shown on bearing details.

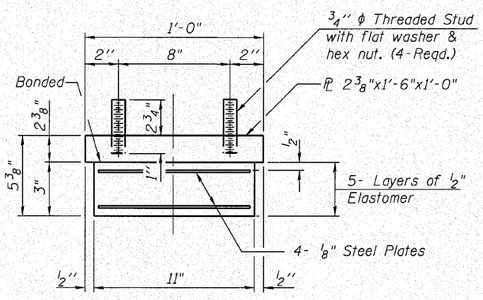


ELEVATION AT PIER 2



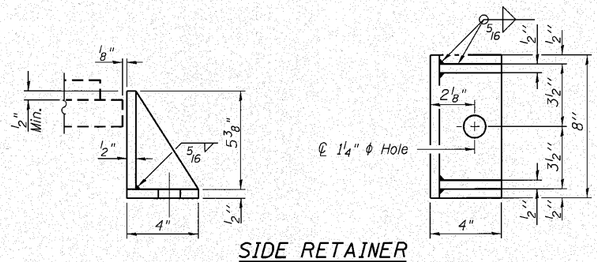
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	8
Anchor Bolts, 1"	Each	16

I-2E-1

7-1-10

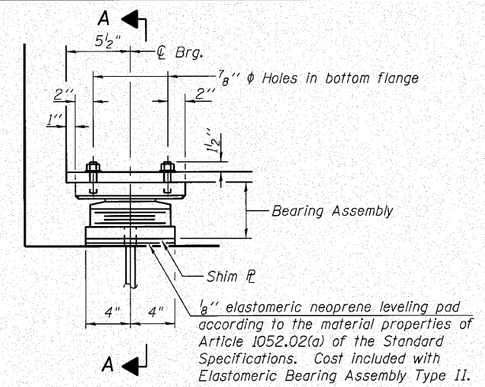
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FILE NAME =	USER NAME = rdanley	DESIGNED - BWS	REVISED -
Clarke Group, Inc. CONSULTING ENGINEERS 1007 North Cumberland Avenue Suite #25 Chicago, Illinois 60656 Tel: 773.775.4050 Fax: 773.775.4016 Email: cmaps@clarke.com		CHECKED - EKM	REVISED -
	PLOT SCALE =	DRAWN - RD	REVISED -
	PLOT DATE = 10/28/2010	CHECKED - SCD	REVISED -

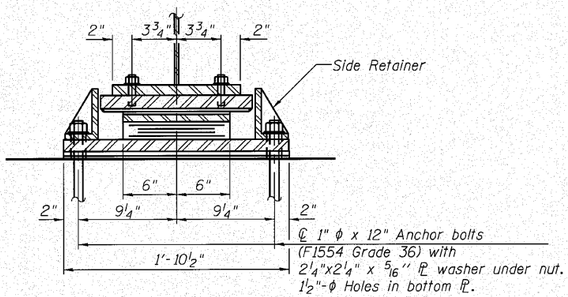
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS I
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-17 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			

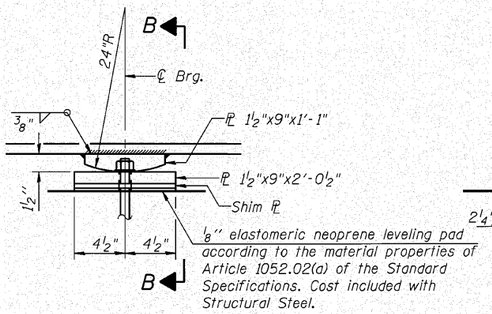


ELEVATION AT EAST ABUT.

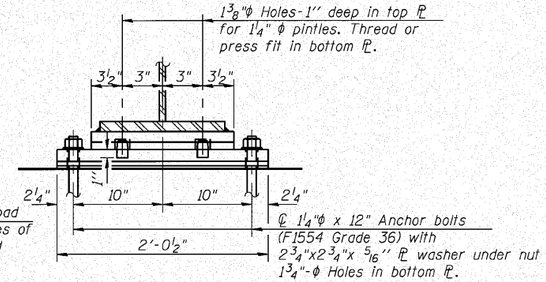


SECTION A-A

TYPE II ELASTOMERIC EXP. BRG.

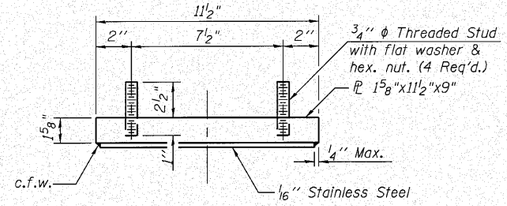


ELEVATION AT PIER 1

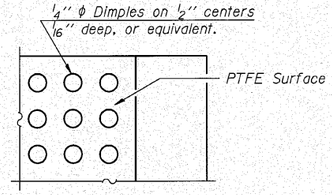


SECTION B-B

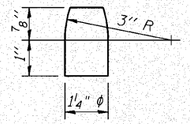
FIXED BEARING



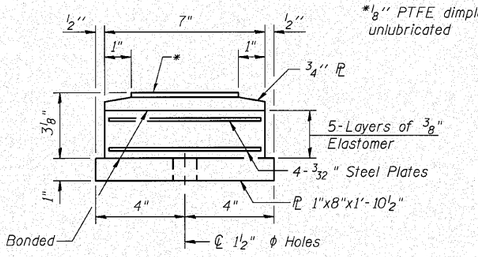
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

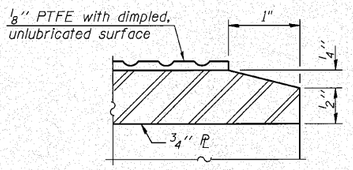


PINTLE

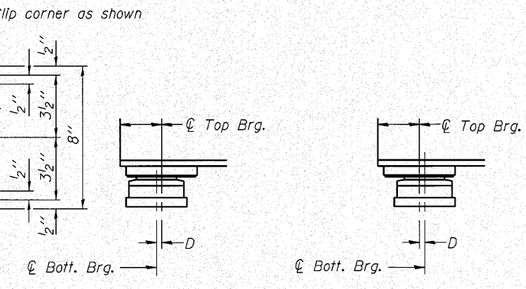


TOP BEARING ASSEMBLY

*⅛" PTFE dimpled, unlubricated

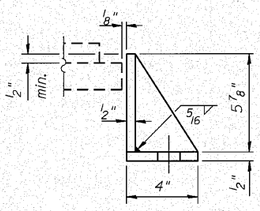


PLAN-PTFE SURFACE



SECTION THRU PTFE

BOTTOM BEARING ASSEMBLY



SIDE RETAINER

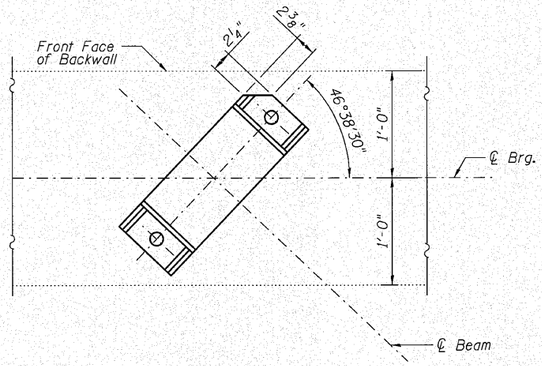
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BELOW 50°F.
(Move bott. brg. away from fixed brg.)

ABOVE 50°F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

All steel plates shown on this sheet shall be M270 Grade 36 unless otherwise noted.

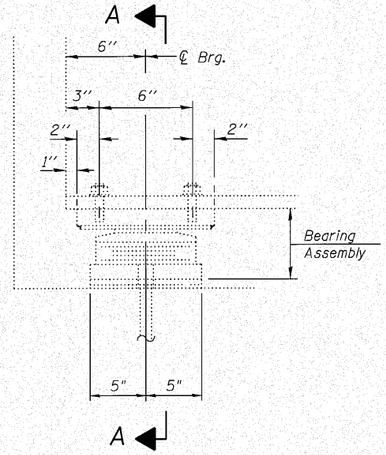
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	4
Anchor Bolts, 1¼"	Each	8
Anchor Bolts, 1"	Each	8

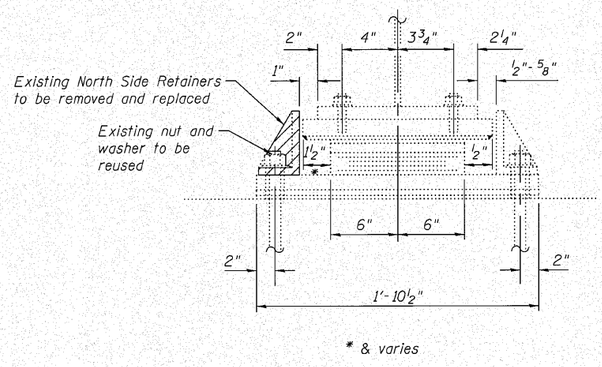
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FILE NAME =	USER NAME = rdanley	DESIGNED - BWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING DETAILS II
Ciorba Group, Inc. CONSULTING ENGINEERS 1037 North Cumberland Avenue Suite 1E, Chicago, Illinois 60656 Tel. 773.775.4009 Fax 773.775.4016 Email: ciorba@ciorba.com		CHECKED - EKM	REVISED -		STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
	PLOT SCALE =	DRAWN - RD	REVISED -		SHEET NO. S-18 OF S-27 SHEETS
	PLOT DATE = 10/28/2010	CHECKED - SCD	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		ILLINOIS FED. AID PROJECT		

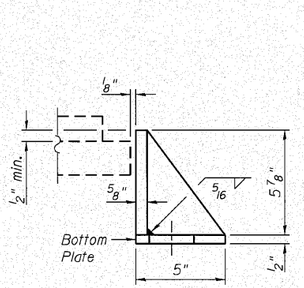


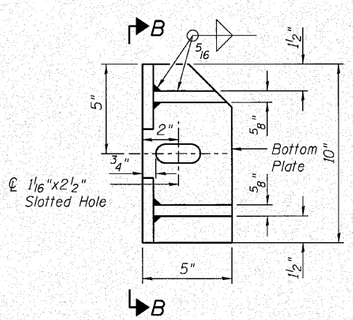
ELEVATION AT EAST ABUTMENT
WB STRUCTURE



SECTION A-A

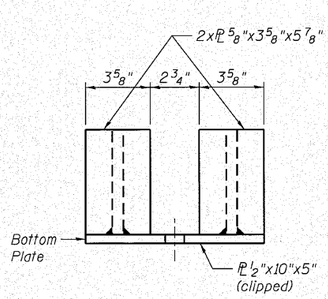
Existing dimensions for information only to be verified prior to fabrication of new side retainers.



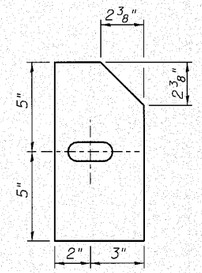


SIDE RETAINER
(7 THUS)

Cost of Side Retainers to be included with Furnishing and Erecting Structural Steel



VIEW B-B



BOTTOM PLATE

NOTES:

1. *For location of bearings to be repaired see Sheet S-15.*
2. *No Salvage of the removed side retainers.*

n:\proj\33841\3_east\design\structural\i-80 over n&s\cad\33841_i-80 N&S 19 Bearing Repairs.dgn

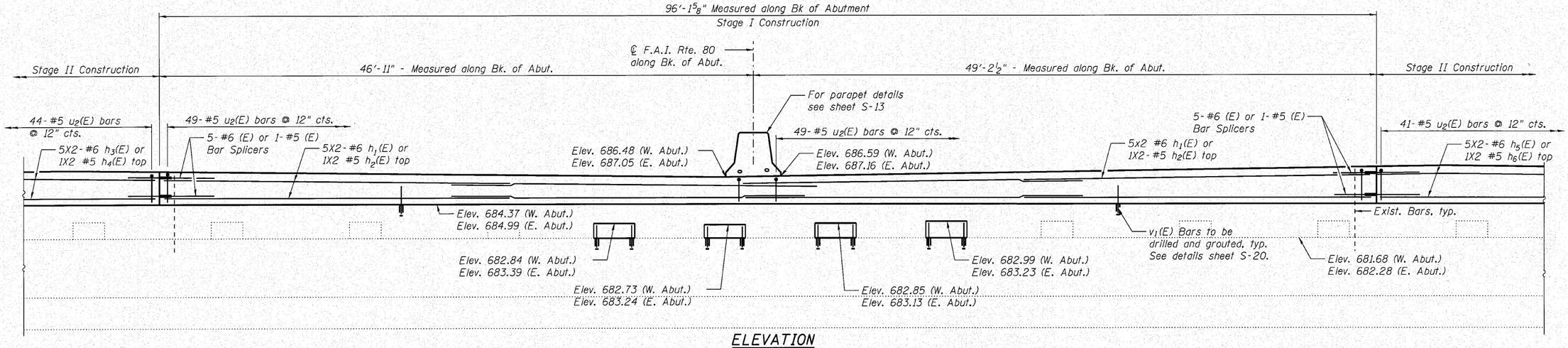
Ciorba Group, Inc.
CONSULTING ENGINEERS
9037 North Cumberland Avenue
Suite 453 - Chicago, Illinois 60656
Ph: 773.774.4014
Fax: 773.774.4015
Email: chicago@ciorba.com

FILE NAME =	USER NAME = rdanley	DESIGNED - BWS	REVISED -
		CHECKED - EKM	REVISED -
	PLOT SCALE =	DRAWN - RD	REVISED -
	PLOT DATE = 10/28/2010	CHECKED - SCD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING REPAIRS
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-19 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	ILLINOIS FED. AID PROJECT			



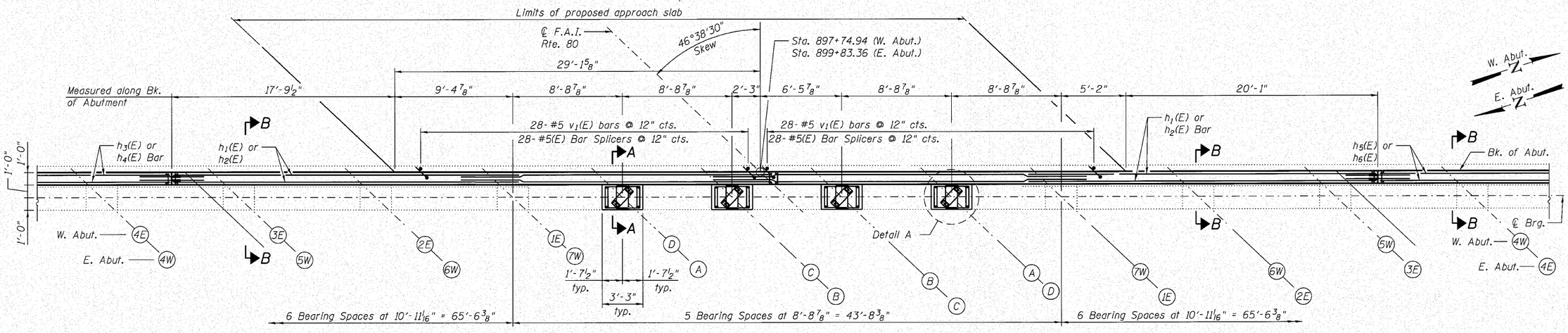
ELEVATION

Elevation shown is taken looking west at West Abutment and looking east at East Abutment.

Top of backwall elevations shown are at Bk. of Abutments.

MINIMUM BAR LAP

#5 Bars = 3'-3"
#6 Bars = 3'-10"



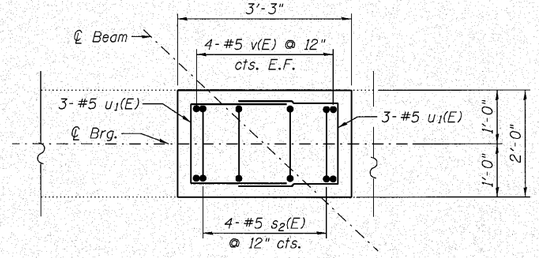
PLAN

NOTES:

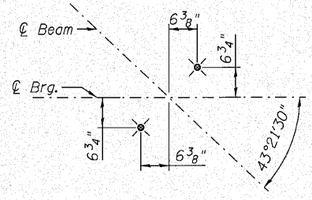
1. For Sections A-A, B-B see Sheet S-21.
2. For Bill of Materials, see Sheet S-21.
3. Concrete Sealer to be applied to all exposed surfaces of exist. abutments and new pedestals.
4. Bars indicated thus 2x5-#5 etc. indicates 2 lines of bars with 5 thus per line.
5. For removal details see Sheet S-21.

PEDESTAL HEIGHTS

	Beam A	Beam B	Beam C	Beam D
W. Abut.	1'-3 1/2"	1'-1 7/8"	1'-0 5/8"	1'-2"
E. Abut.	1'-1 3/8"	11 3/4"	10"	11 1/8"

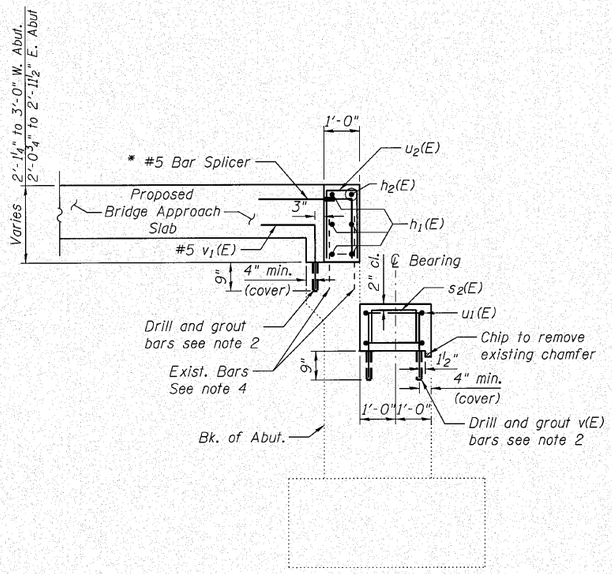


DETAIL A



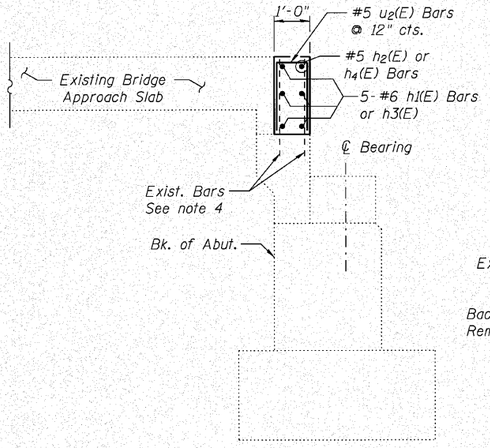
APPROACH BOLT LOCATION

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PLOT DATE = 10/28/2010
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CHECKED - EKM
DRAWN - RD
CHECKED - SCD
REVISED -
REVISED -
REVISED -
REVISED -
Ciorba Group, Inc. CONSULTING ENGINEERS 900 North Cumberland Avenue Suite 403 Chicago, Illinois 60656 Tel. 773.774.4014 Fax. 773.774.4017 Email: ciorba@ciorba.com
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ABUTMENT REPAIRS AND JOINT REPLACEMENT
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-20 OF S-27 SHEETS
F.A.I. RTE. 80
SECTION 99(5&5-1) Y-1
COUNTY WILL
TOTAL SHEETS 309
SHEET NO. 208
CONTRACT NO. 60M59
ILLINOIS FED. AID PROJECT

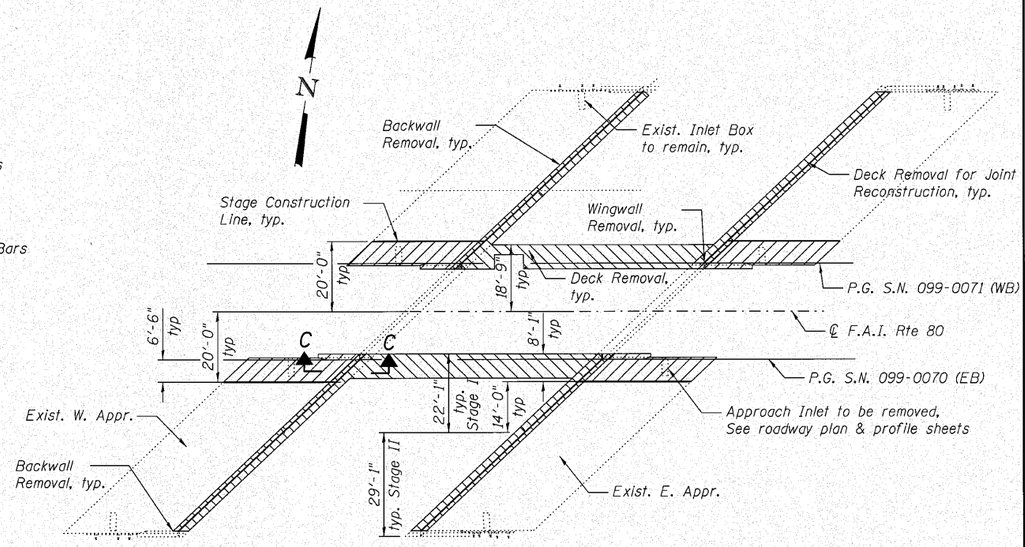


SECTION A-A

* Align Bar Splicer parallel to approach slab reinforcement



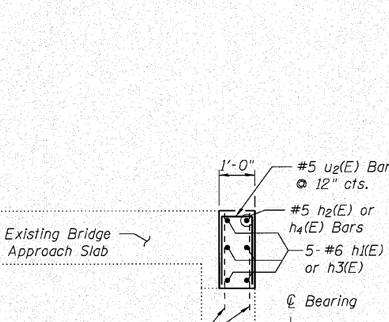
SECTION B-B



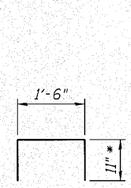
REMOVAL PLAN

VIEW C-C

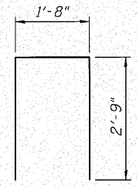
Top of existing wingwall limits of removal



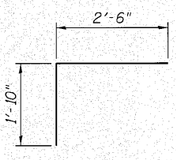
SECTION D-D



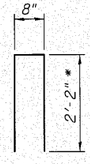
Bar $s_2(E)$



Bar $u_1(E)$



Bar $v_1(E)$



Bar $u_2(E)$

* Field cut legs to maintain clearances

LEGEND:

Concrete removal

NOTES:

1. For approach slab details see sheets S-12 and S-13.
2. Drill and grout bars according to section 584 of Standard Specification. Cost included with cost of Reinforcement Bars, Epoxy Coated.
3. Quantity of Concrete in backwall included in Bill of Materials on sheet S-10.
4. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	40	# 6	26'-8"	—
$h_2(E)$	8	# 5	26'-3"	—
$h_3(E)$	20	# 6	23'-1"	—
$h_4(E)$	4	# 5	22'-10"	—
$h_5(E)$	20	# 6	21'-11"	—
$h_6(E)$	4	# 5	21'-8"	—
$s_2(E)$	32	# 5	3'-4"	⊓
$u_1(E)$	48	# 5	7'-2"	⊓
$u_2(E)$	366	# 5	5'-0"	⊓
$v(E)$	64	# 5	1'-6"	—
$v_1(E)$	112	# 5	4'-4"	⌐
Concrete Structures			Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated			Pound	6,350
Concrete Removal			Cu. Yd.	214.4
Concrete Sealer			Sq. Ft.	2,666
Bar Splicers			Each	136

d:\proj\33843_east\design\structural\I-80 over n&s\cad\33843_I-80 N&S 21 Abutment Details.dgn

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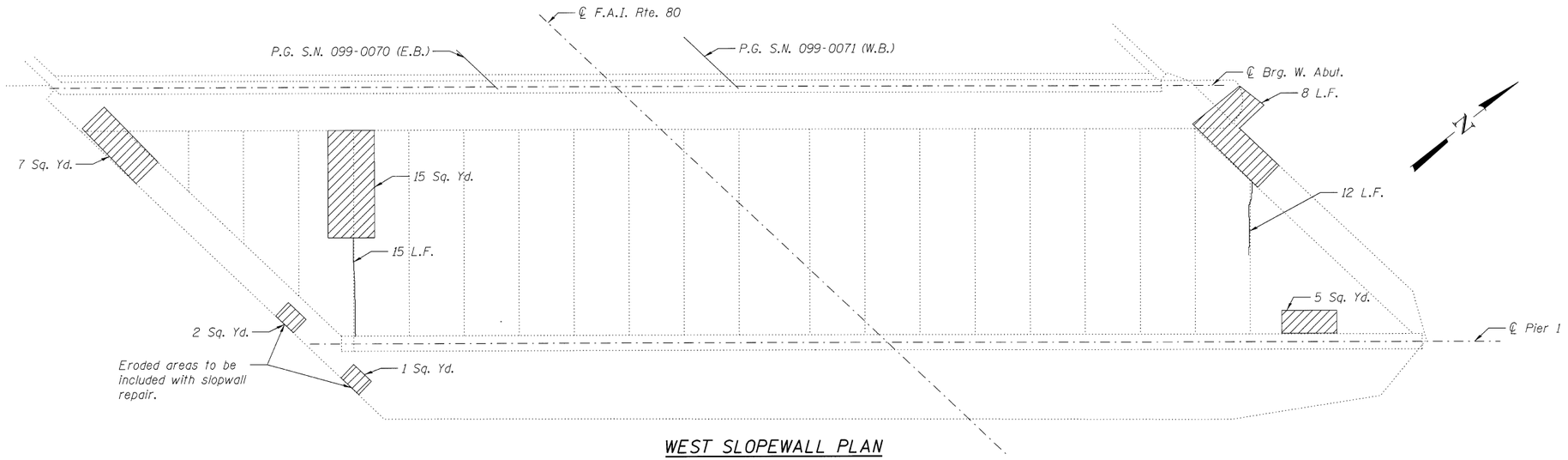
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT AND REMOVAL DETAILS
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)

SHEET NO. S-21 OF S-27 SHEETS

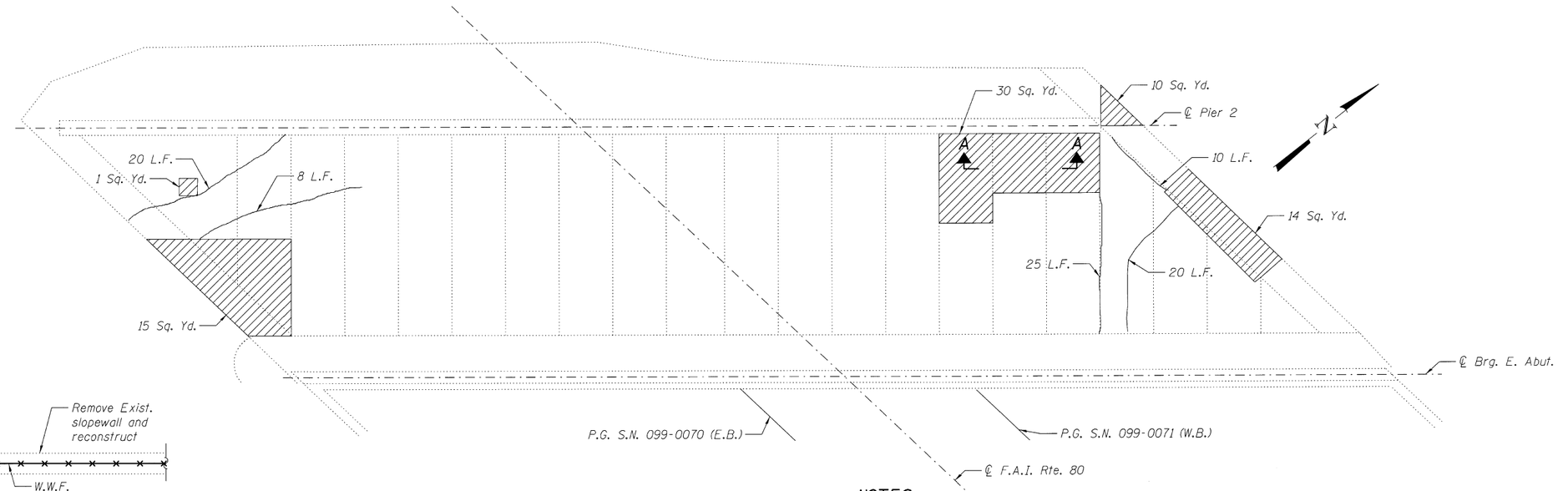
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		CONTRACT NO. 60M59		
		ILLINOIS FED. AID PROJECT		



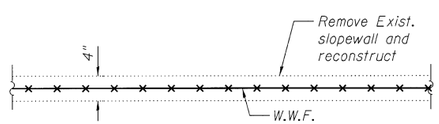
WEST SLOPEWALL PLAN

LEGEND:

- Slopewall repair
- Epoxy Crack Injection



EAST SLOPEWALL PLAN



SECTION A-A

NOTES:

1. Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs per 100 sq. ft.
2. Repairs of the existing slopewalls shall include but not limited to areas to areas shown. The actual areas to be determined by an engineer at the time of construction.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Slopewall repair	Sq. Yd.	108
Epoxy Crack Injection	L.F.	110

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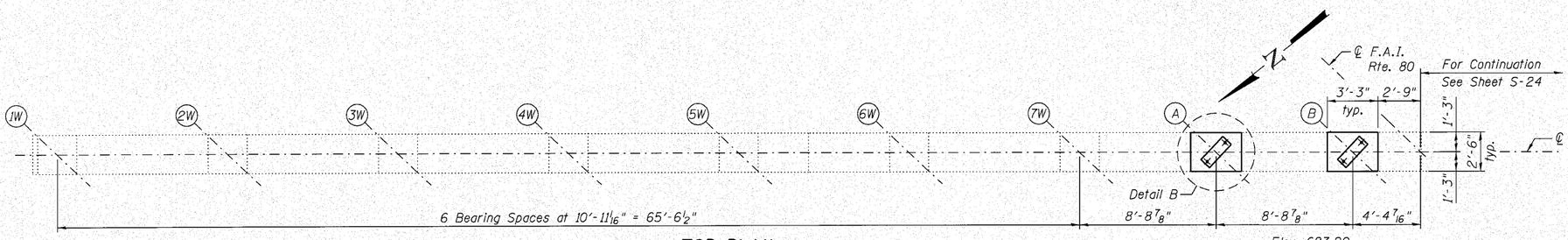
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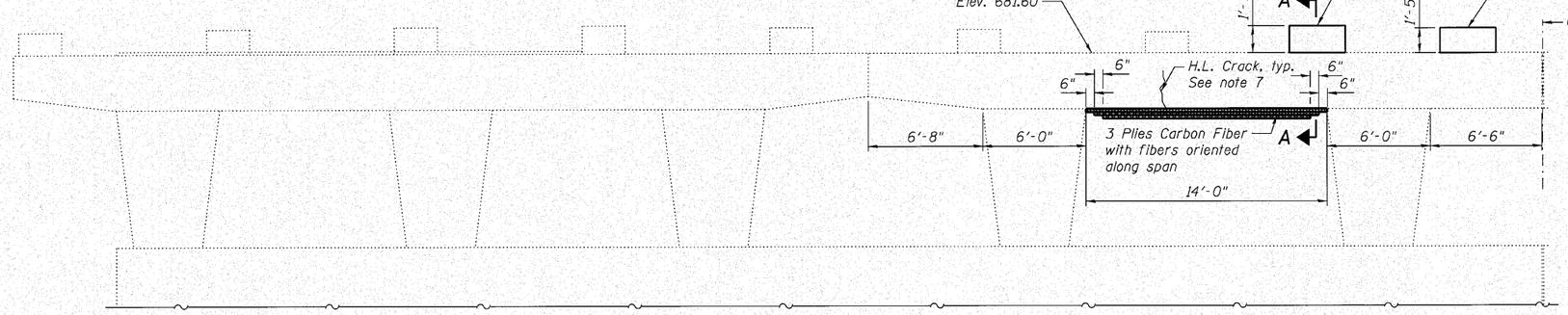
SLOPEWALLS REPAIRS
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-22 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	210
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			

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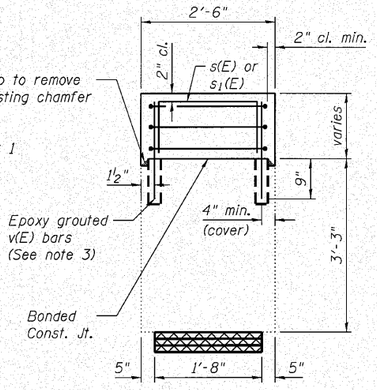


TOP PLAN

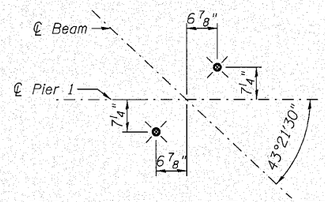


PIER 1 ELEVATION

(Looking East)



SECTION A-A

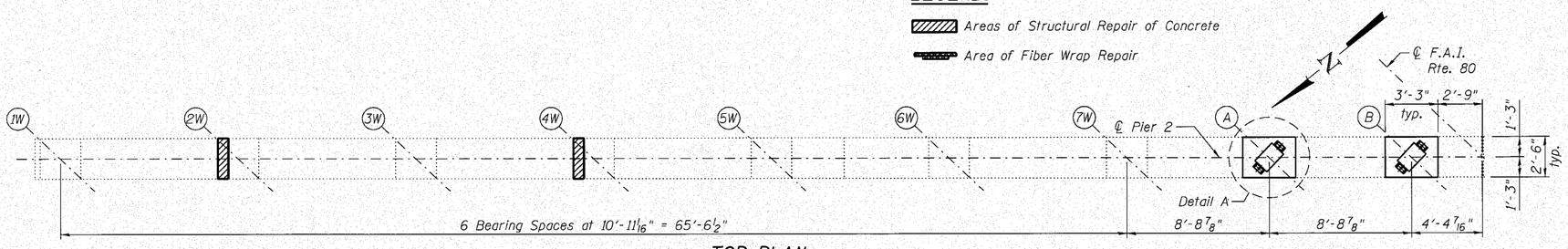


PIER 1 ANCHOR BOLT LOCATIONS

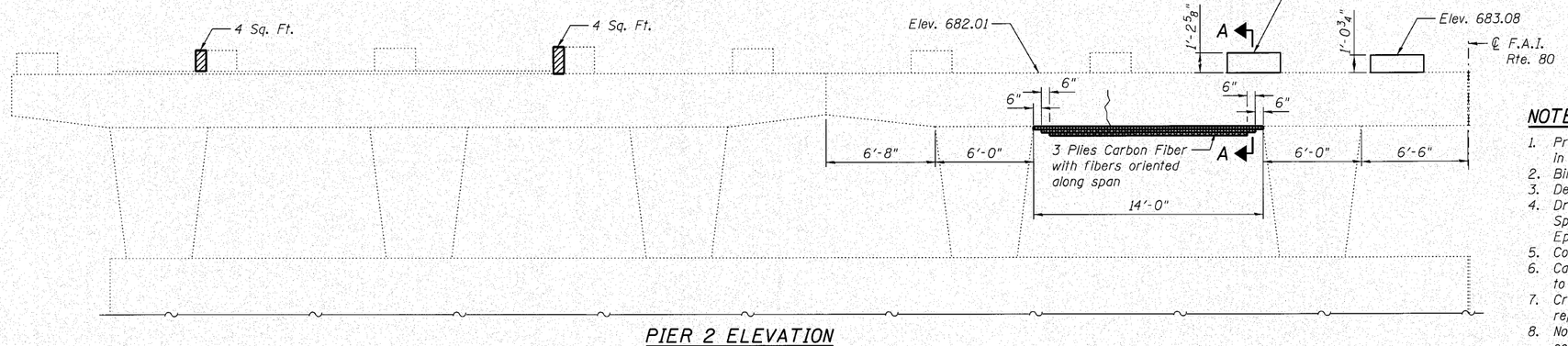
LEGEND:

Areas of Structural Repair of Concrete

Area of Fiber Wrap Repair

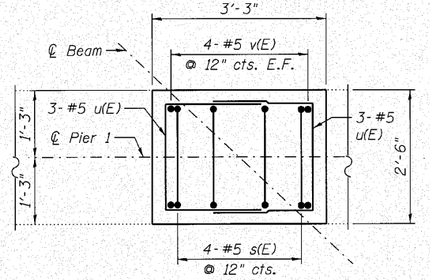


TOP PLAN



PIER 2 ELEVATION

(Looking East)



DETAIL A

MINIMUM CURED LAMINATE PROPERTIES

f_{ru} = 550,000 psi
E_f = 33,000,000 psi
Ply thickness = 0.0130"

NOTES:

1. Prior to ordering any material the contractor shall verify in the field all bearing height and shim thickness dimensions.
2. Bill of Material and Bar dimensions shown on Sheet S-24.
3. Detail B shown on sheet S-24.
4. Drill and grout bars according to section 584 of the Standard Specification. Cost included with cost of Reinforcement Bars Epoxy Coated.
5. Concrete Sealer to be applied on all surfaces of new concrete.
6. Carbon Fiber Repair shall be performed after deck removal and prior to the erection of Structural Steel and pouring of the new deck.
7. Cracks to be sealed using epoxy crack injection prior to fiber wrap repair. See Fiber Wrap Special Provisions.
8. No jacking or temporary supprot of the cap will be required. If the contractor proposes a different construction sequence, design plans and calculations have to be submitted for Engineer's approval.

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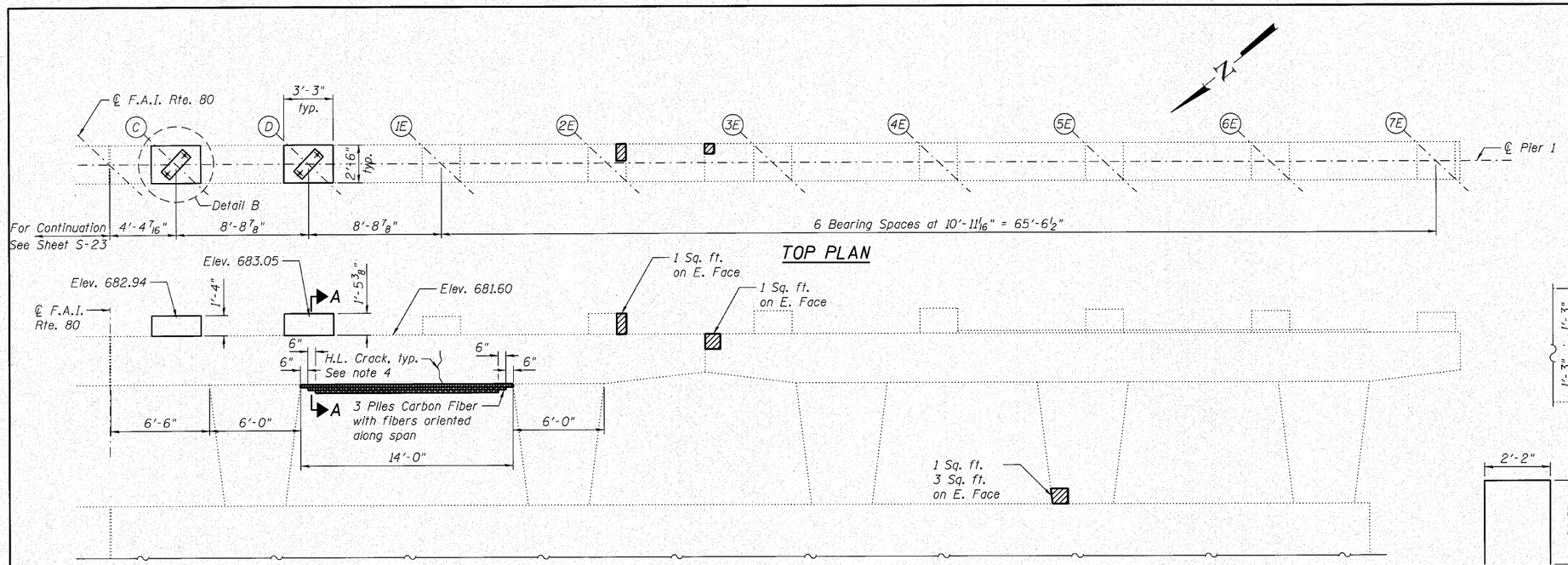
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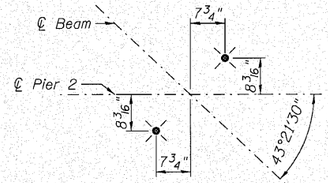
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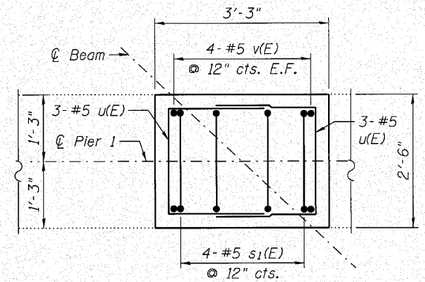
WEST BOUND PIER REPAIRS
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-23 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	211
		CONTRACT NO. 60M59		
		ILLINOIS	FED. AID PROJECT	

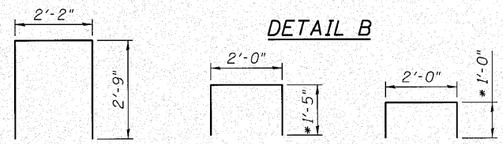




PIER 2 ANCHOR BOLT LOCATIONS



DETAIL B



u(E) S1(E) S(E)

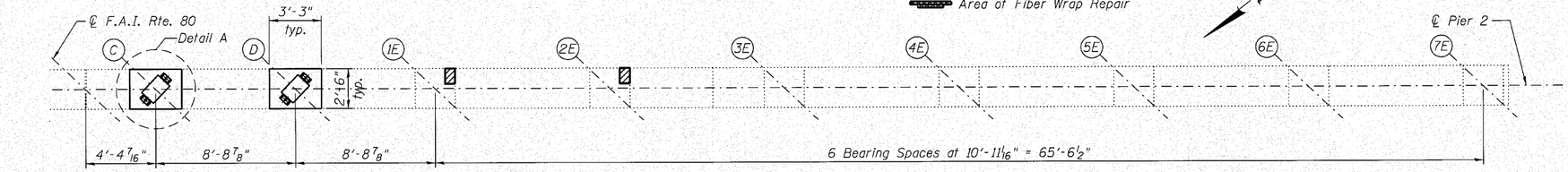
* Cut legs in field if required to maintain clearances

MINIMUM CURED LAMINATE PROPERTIES

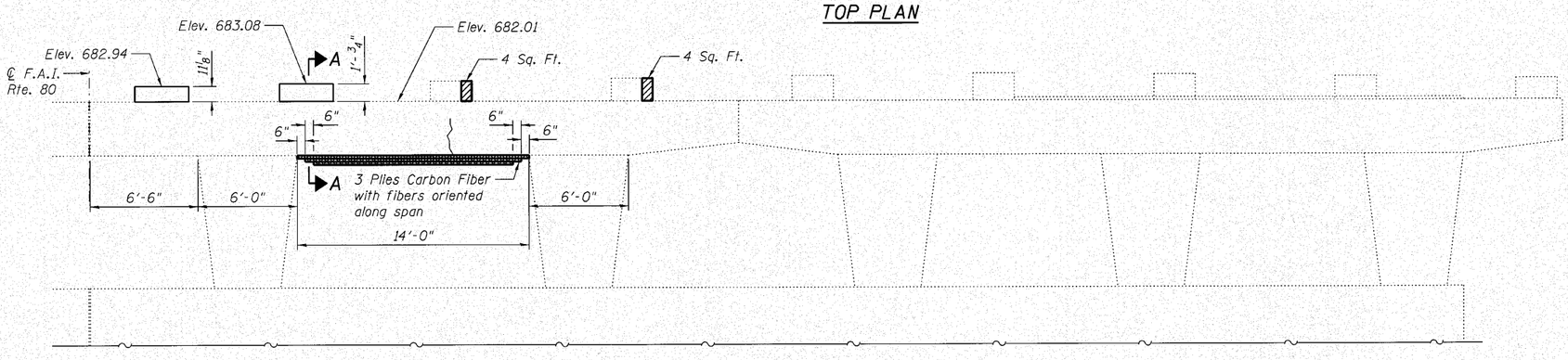
f_{fu} = 550,000 psi
Er = 33,000,000 psi
Ply thickness = 0.0130"

NOTES:

1. For Detail A and Section A-A see sheet S-23.
2. See notes 4 thru 8 on Sheet S-23.



TOP PLAN



PIER 2 ELEVATION
(Looking East)

LEGEND:

Areas of Structural Repair of Concrete

Area of Fiber Wrap Repair

BILL OF MATERIAL
FOUR PIERS

Bar	No.	Size	Length	Shape
s1(E)	16	#5	4'-0"	
s2(E)	16	#5	4'-10"	
u(E)	48	#5	7'-8"	
v(E)	64	#5	1'-6"	
Structural Repair of Concrete (Depth Equal to or less than 5")			Sq. Ft.	22
Fiber Wrap			Sq. Ft.	260
Reinforcement Bars, Epoxy Coated			Lb.	640
Concrete Structures			Cu. Yd.	3.1
Acrylic Coating			Sq. Yd.	16
Concrete Sealer			Sq. Ft.	149
Epoxy Crack Injection			Foot	10

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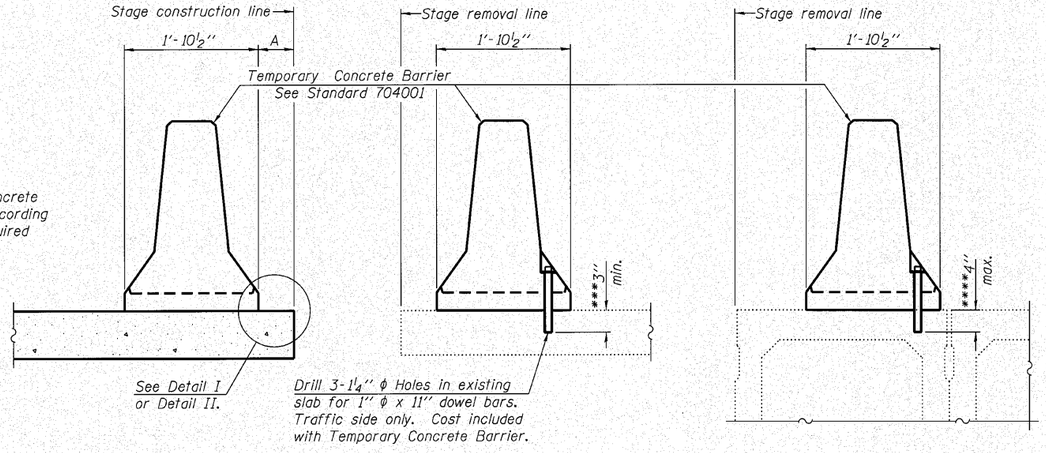
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST BOUND PIER REPAIRS
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-24 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	212
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			

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When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

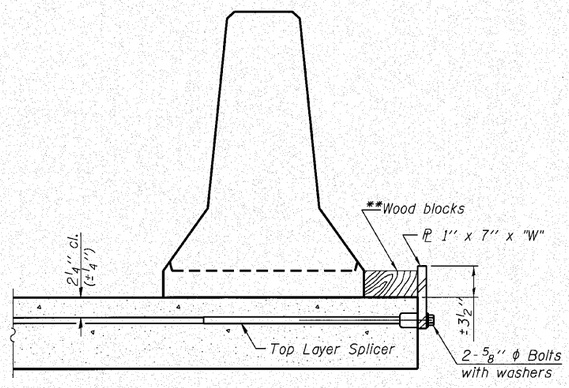
Cost of anchorage is included with Temporary Concrete Barrier.

The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

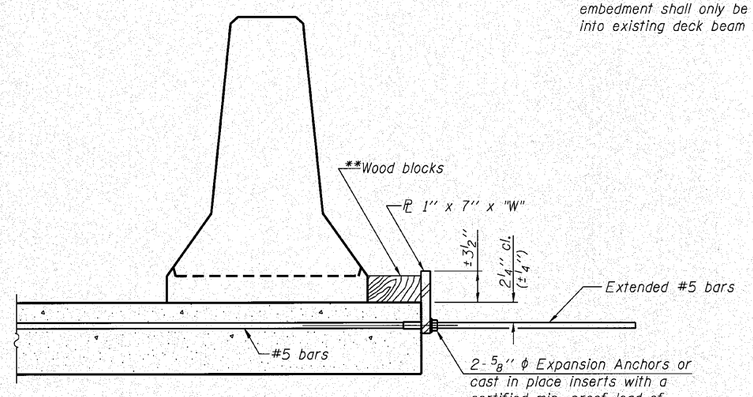
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



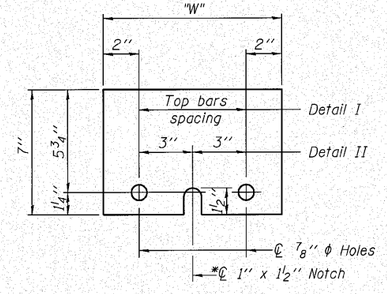
DETAIL I



DETAIL II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"



STEEL RETAINER ℙ 1" x 7" x "W"

* Required only with Detail II

R-27

7-1-10

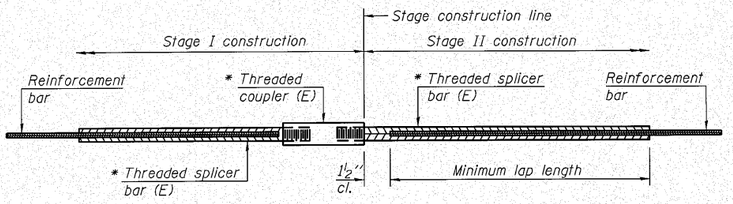
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Clorba Group, Inc. CONSULTING ENGINEERS 5001 NW. Dempster Suite 100 Skokie, Illinois 60077 Tel. 773.774.4000 Fax 773.773.4514 Email chicago@clorba.com		CHECKED - EKM	REVISED -
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	PLOT DATE = 10/28/2010	CHECKED - SCD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-25 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	213
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			

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STANDARD BAR SPLICER ASSEMBLY

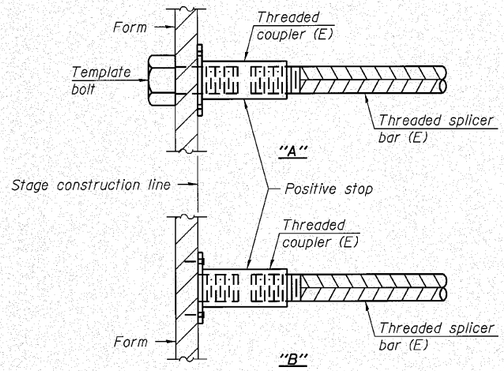
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1½" + thread length

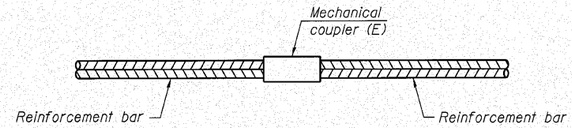
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck, Joint Replacement	#7	16	Table 4
Deck	#7	4	Table 3
Abutment Backwall	#6	20	Table 3
Abutment Backwall	#5	4	Table 3



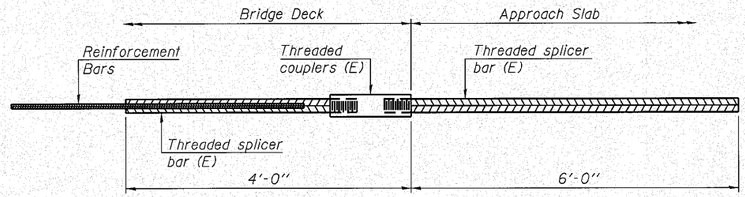
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



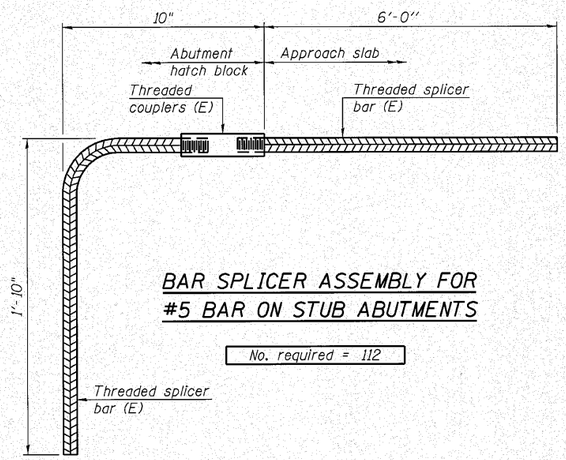
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 112

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See special provision for Mechanical Splicers.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

7-1-10

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DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-26 OF S-27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	214
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			

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BORING NO. B-1		N	R in	Qu tsf	W %
Ground Surface Elev. 686.91					
Silty CLAY-trace sand and gravel-brown-very stiff to hard (CL) - Fill		4			
		8 5		4.5P	14
		6			
	-5	7 9		4.5P	16
		4			
		5 7		4.0P	16
		4			
	-10	6 9		3.3P	19
		4			
		7		3.5P	19
Black TOPSOIL-Fill		10			24
Silty CLAY-trace sand and gravel-brown-very stiff to hard (CL) - Fill		2			*103*
	-15	8 9		4.5P	17
		4			*108*
		7 9		3.8P	16
		6			*103*
	-20	8 14		4.5P	16
		4			*100*
		6 9		3.5P	19
		5			
	-25	6 7		4.5P	16
		7			
		7 11		4.5P	18
		3			*106*
	-30	8 12		4.3P	15

BORING NO. B-1		N	R in	Qu tsf	W %
Continued					
Silty CLAY-trace sand and gravel-brown-very stiff to hard (CL) - Fill		5			
Black TOPSOIL		8 14			37
Silty CLAY-trace sand and gravel-brown and gray - stiff (CL) wet		2			*106*
	-35	4 5		1.8B	25
Well graded clayey SAND & GRAVEL-gray-medium to dense (GC)		8			
		14 18		NP	8
		23			
	-40	13 10		NP	4
Well graded clayey SAND some gravel-medium to dense (GC)		12			
		9 7		NP	15
		15			
	-45	16 16		NP	16
		14			
		17 12		NP	10
Well graded clayey SAND & GRAVEL-gray-loose to very dense (GC)		21			
	-50	13 18		NP	14
		4			
		5 2		NP	8
		100 5		NP	5
End of Boring Refusal at -54.0' (Apparent Bedrock) Water Level: 12.0' acr	-55				
	-60				

BORING NO. B-2		N	R in	Qu tsf	W %
Ground Surface Elev. 686.40					
Silty CLAY-trace sand and gravel-brown-medium to hard (CL) - Fill		2			
		3 4		3.3P	16
		2			
		2 1		2.5P	*104* 17
		2			
	-5	1 2		1.0P	*100* 19
		2			
		2 4		2.7B	*105* 18
		4			
		3 4		2.3P	*106* 22
		2			
	-10	3 4		3.5P	*109* 21
		2			
		2 4		3.8P	17
		3			
		3 12		4.0P	*104* 18
		3			
		5 9		4.5P	*116* 17
	-15	4			
		7 9		3.3P	*107* 18
		4			
		6 10		4.0P	*105* 22
		4			*106*
	-20	6 11		3.1B	23
		5			
		8 9		3.4B	17
		3			*107*
	-25	7 10		4.3P	16
Silty CLAY-some topsoil -brown and black- hard (CL) - Fill		4			*105*
		8 12		5.0B	19
Silty CLAY-trace sand, gravel and topsoil -brown-stiff to hard (CL) - Fill		4			*101*
	-30	8 11		4.0P	19

BORING NO. B-2		N	R in	Qu tsf	W %
Continued					
Silty CLAY-trace sand, gravel and topsoil -brown-stiff to hard (CL) - Fill		6			
		9 12		1.8P	19
Silty CLAY-trace to some topsoil-brown and black- very stiff (CL)- Fill		2			
	-35	4 8		2.5P	27
Well graded clayey SAND -some gravel, trace topsoil-brown and gray-medium(SC) -Possible Fill		3			
		4 3		NP	10
Clayey Silt-trace sand -gray-very stiff (ML)		3			*130*
	-40	4 12		3.0P	17
Clayey SAND-trace gravel-gray-medium (SC)		6			
		9 9		NP	10
Clayey SAND-some silt and gravel-gray-loose (SC-SM)		2			
	-45	3 5		NP	18
Well graded clayey SAND -trace gravel-gray-medium (SC)		5			
		8 12		NP	18
Well graded clayey SAND & GRAVEL-gray-medium to dense (SC)		1			
	-50	5 9		NP	13
		8			
		12 38		NP	8
		17			
	-55	25 25		NP	10
		No Sample			
End of Boring Refusal at -59.5' (Apparent Bedrock) Water Level: 8.0' acr					
	-60	No Sample			

N - Standard Penetration Test (ASTM D-1586)

R - Recovery in inches

Type Failure

B-Bulge Failure

E-Estimated Value

S-Shear Failure

P-Penetrometer

Qu-Unconfined Compressive Strength (tsf)

W-Water Content, percent dry weight

Unit wt. (pcf) noted italics above Water Content

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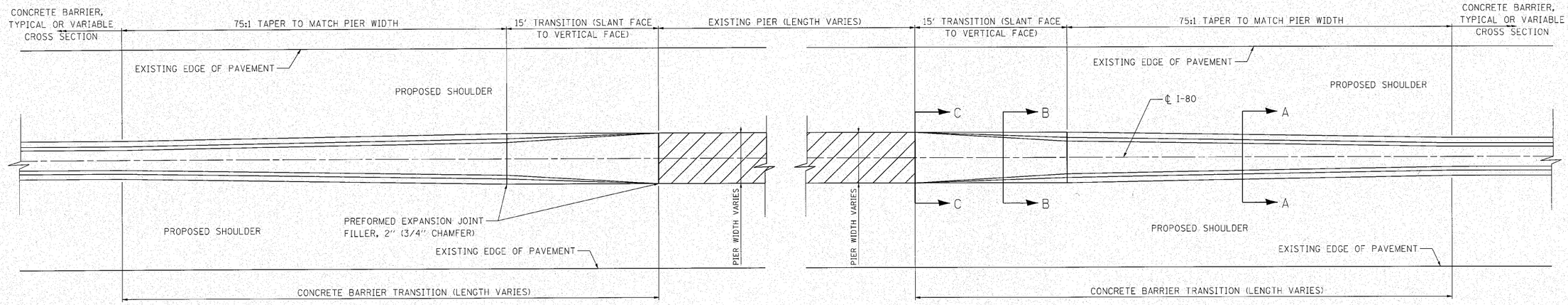
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FILE NAME =	USER NAME = rdanley	DESIGNED - BWS	REVISED -
		CHECKED - EKM	REVISED -
	PLOT SCALE =	DRAWN - RD	REVISED -
	PLOT DATE = 10/28/2010	CHECKED - SCD	REVISED -

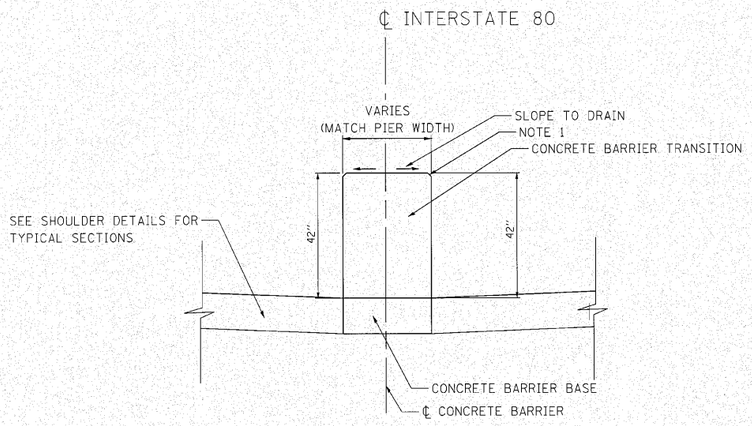
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 099-0070 (E.B.) & 099-0071 (W.B.)
SHEET NO. S-27 OF S-27 SHEETS

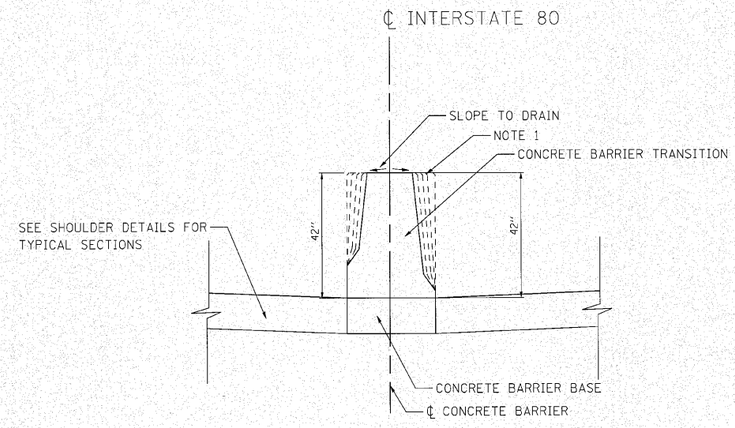
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			



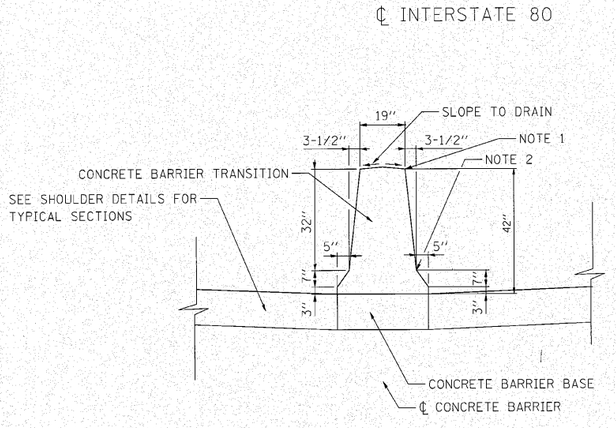
CONCRETE BARRIER TRANSITION AT WOLF ROAD PLAN VIEW



SECTION C-C



SECTION B-B



SECTION A-A

NOTE 1 - 3/4" CHAMFER OR 1" RADIUS (OPTIONAL)

NOTE 2 - 10" RADIUS (OPTIONAL)

GENERAL NOTES:

- SEE ROADWAY PLANS FOR EXACT TRANSITION DIMENSIONS.
- FURNISHING AND INSTALLING THE PREFORMED JOINT FILLER OF THE SIZE SPECIFIED SHALL BE INCLUDED IN THE COST OF THE CONCRETE BARRIER TRANSITION.
- FOR ADDITIONAL CONCRETE BARRIER DETAILS, SEE THE TYPICAL SECTIONS AND CONCRETE BARRIER DETAILS.
- FOR ADDITIONAL SHOULDER DETAILS, SEE THE TYPICAL SECTIONS.

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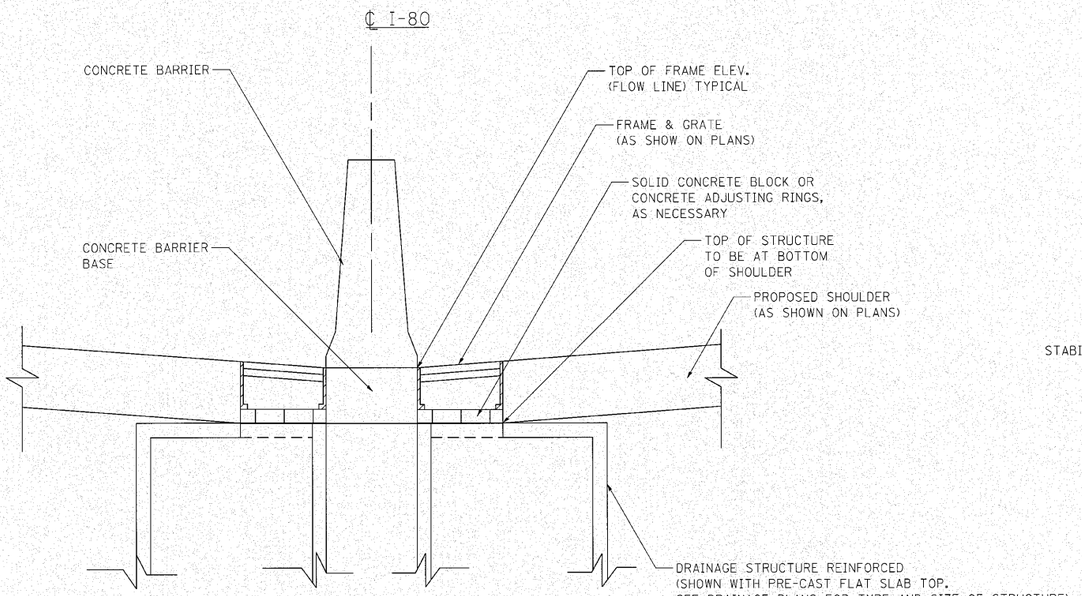
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -	

STATE OF ILLINOIS
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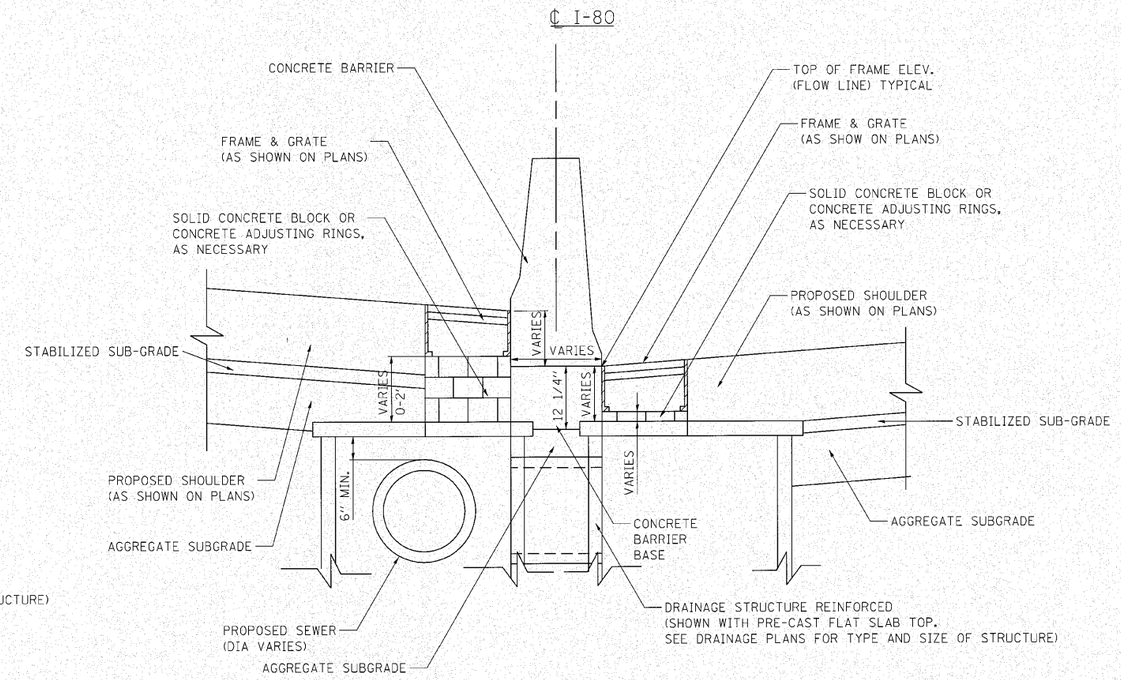
F.A.I. 80 FROM US 30 TO NS RAILROAD
CONCRETE BARRIER TRANSITION DETAIL

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	216
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			



SIDE ELEVATION
CONCRETE BARRIER



SIDE ELEVATION
CONCRETE BARRIER, VARIABLE CROSS SECTION

NOTES:

1. THE COST OF SOLID CONCRETE BLOCK OR CONCRETE ADJUSTING RINGS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF DRAINAGE STRUCTURES OF TYPE OR SIZE SPECIFIED.
2. SEE STATE AND DISTRICT 1 STANDARDS FOR DRAINAGE STRUCTURE DETAILS.
3. FOR STRUCTURE AND PIPE INFORMATION SEE DRAINAGE SCHEDULES.

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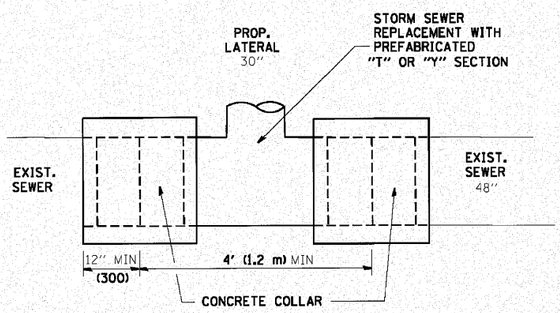
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

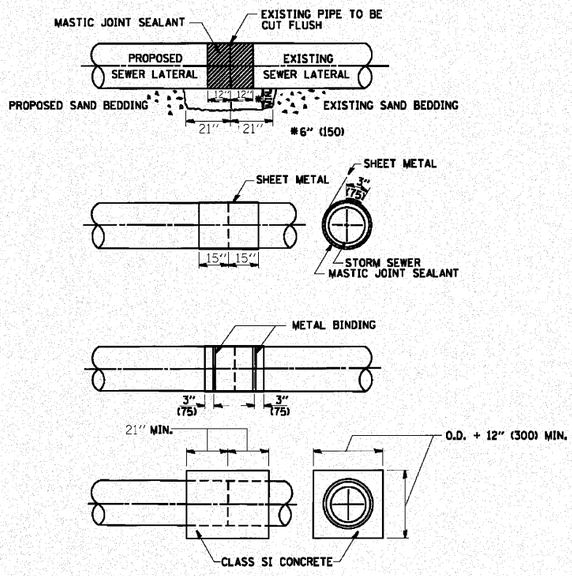
F.A.I. 80 FROM NS RAILROAD TO US 45
DRAINAGE STRUCTURES AT BARRIER WALL

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	217
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			



REINFORCED CONCRETE PIPE TEE

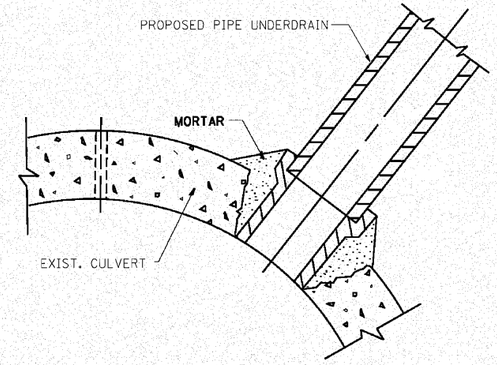


CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 12" OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 21" X 12" DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.041B) 30" WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 15" ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

UNDERDRAIN CONNECTION
TO STRUCTURE



BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

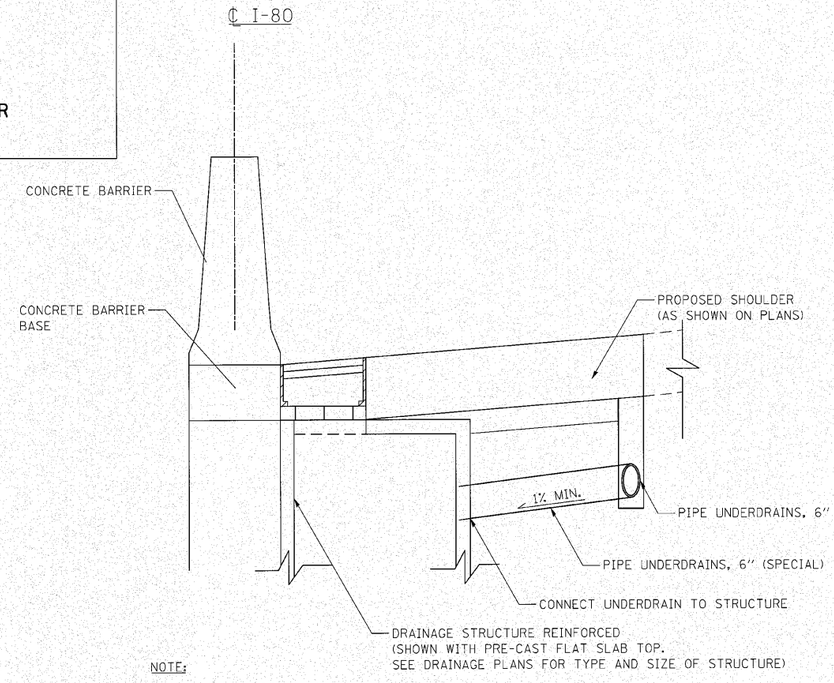
1. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.



NOTE:

THE CONTRACTOR SHALL CAREFULLY CORE INTO THE EXISTING DRAINAGE STRUCTURE THE SAME SIZE AS THE EXTERNAL DIAMETER OF THE PROPOSED PIPE UNDERDRAIN AT THE LINE AND GRADE AS SHOWN IN THE PLANS. THE PROTRUSION OF THE PROPOSED PIPE UNDERDRAIN INTO THE DRAINAGE STRUCTURE MUST NOT EXCEED A MAXIMUM OF ONE INCH. AFTER THE PIPE UNDERDRAIN IS INSTALLED, THE DRAINAGE STRUCTURE SHALL BE MORTARED WITH A NON-SHRINK CONCRETE GROUT.

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

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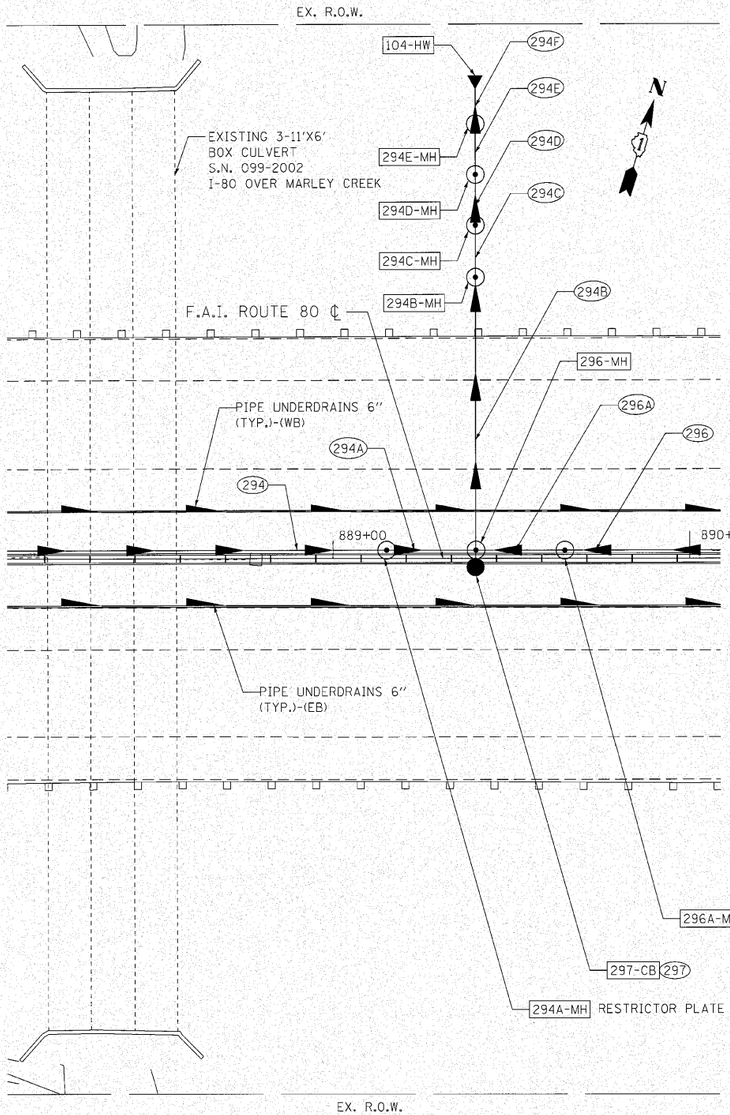
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	DRAWN - JMK	REVISED -
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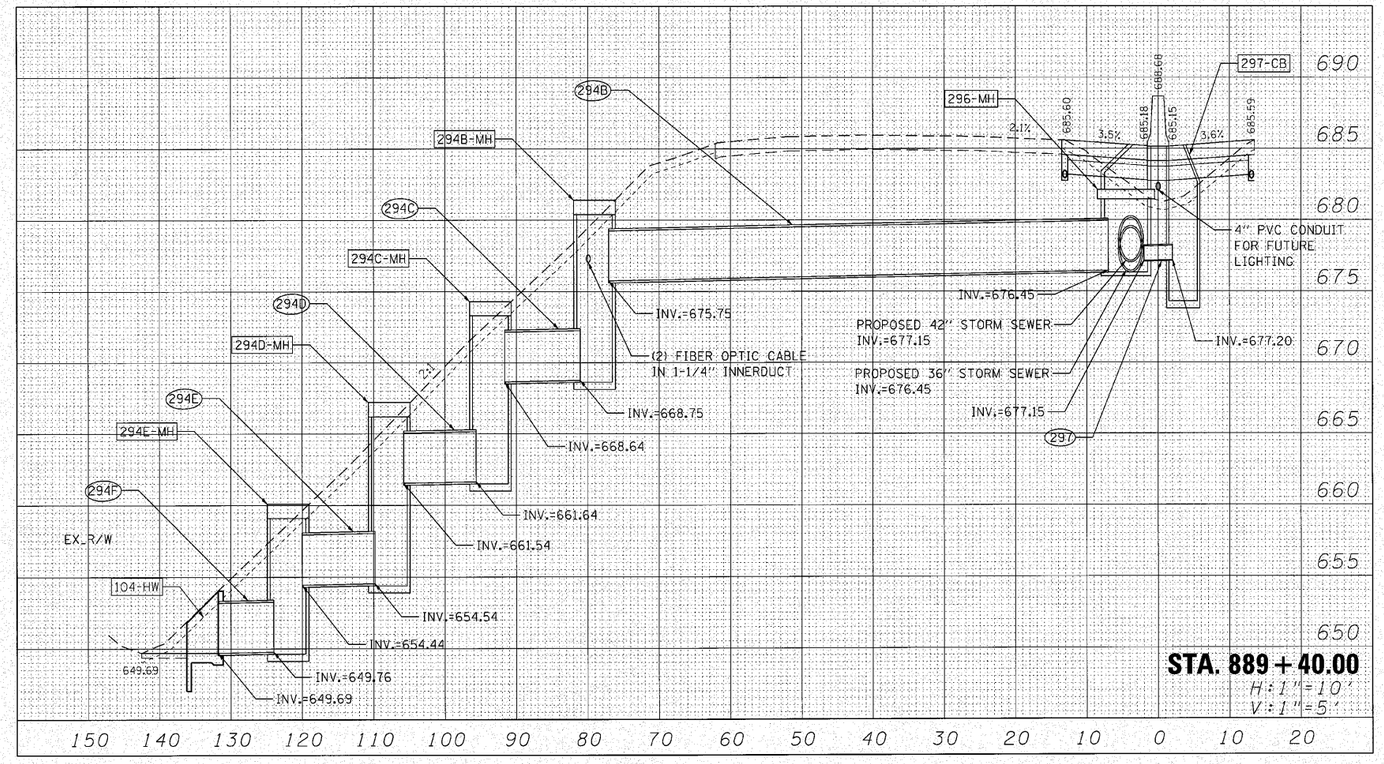
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE CONNECTIONS DETAILS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	218
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			





294
STORM SEWERS,
CLASS A, TYPE 2, 36"
115' @ 0.30%
TBF=99 CY

294A
STORM SEWERS,
CLASS A, TYPE 2, 36"
25' @ 0.32%
TBF=21 CY

294B
STORM SEWERS
JACKED IN PLACE, 42"
70' @ 1.00%

294C
STORM SEWERS
JACKED IN PLACE, 42"
11' @ 1.00%

294D
STORM SEWERS
JACKED IN PLACE, 42"
10' @ 1.00%

294E
STORM SEWERS
JACKED IN PLACE, 42"
10' @ 1.00%

294F
STORM SEWERS
JACKED IN PLACE, 42"
8' @ 0.87%

296
STORM SEWERS,
CLASS A, TYPE 2, 42"
125' @ 0.20%
TBF=105 CY

296A
STORM SEWERS,
CLASS A, TYPE 2, 36"
25' @ 0.20%
TBF=25 CY

297
STORM SEWERS,
CLASS A, TYPE 2, 12"
5' @ 1.00%
TBF=4 CY

294A-MH
STA 889+15/1.5' LT
MANHOLES, TYPE A, 6'-DIA
WITH TYPE 20 FRAME AND GRATE
RESTRICTOR PLATE
ORIFICE SIZE = 13"
OVERFLOW = 681.23
℄=685.28
INV.=677.23 (W)(E)

294B-MH
STA. 889+40/79.0' LT
MANHOLES, TYPE A, 5'-DIA
WITH TYPE 1 FRAME, CLOSED LID
T/F=681.40
INV.= 675.75 (S)
INV.= 668.75 (N)

294C-MH
STA. 889+40/93.6' LT
MANHOLES, TYPE A, 5'-DIA
WITH TYPE 1 FRAME, CLOSED LID
T/F=674.29
INV.= 668.64 (S)
INV.= 661.64 (N)

294D-MH
STA. 889+40/107.8' LT
MANHOLES, TYPE A, 5'-DIA
WITH TYPE 1 FRAME, CLOSED LID
T/F=667.19
INV.= 661.54 (S)
INV.= 654.54 (N)

294E-MH
STA. 889+40/122.0' LT
MANHOLES, TYPE A, 5'-DIA
WITH TYPE 1 FRAME, CLOSED LID
T/F=660.09
INV.= 654.44 (S)
INV.= 649.76 (N)

296-MH
STA. 889+40/1.5' LT
MANHOLES, TYPE A, 6'-DIA
WITH TYPE 20 FRAME AND GRATE
℄=685.18
INV.= 676.45 (E)(N)
INV.=677.15 (W)(S)

296A-MH
STA 889+65/1.5' LT
MANHOLES, TYPE A, 6'-DIA
WITH TYPE 20 FRAME AND GRATE
RESTRICTOR PLATE
ORIFICE SIZE = 14"
OVERFLOW = 680.00
℄=685.09
INV.=676.50 (W)(E)

297-CB
STA. 889+40/1.5' RT
CATCH BASINS, TYPE A, 4'-DIA
WITH TYPE 20 FRAME AND GRATE
℄=685.15
INV.=677.20 (N)

104-HW
STA. 889+40/131.8' LT
CAST-IN-PLACE REINFORCED
CONCRETE END SECTIONS, 42"
INV.=649.69

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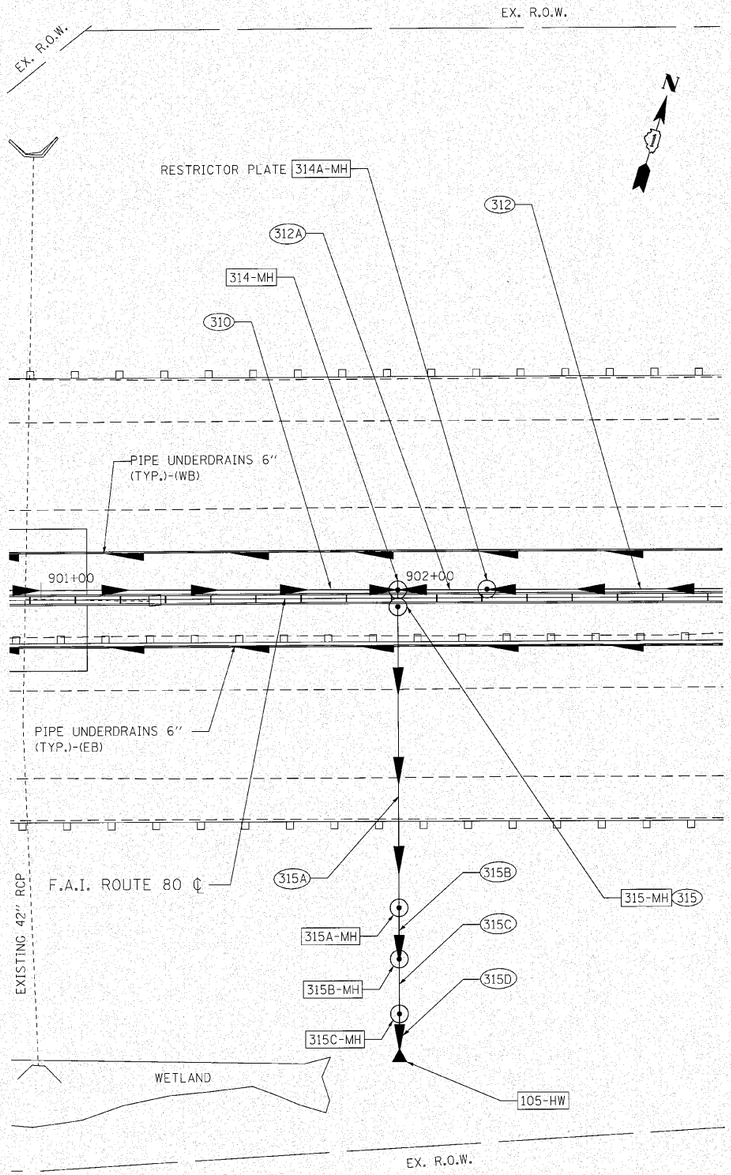
ENGINEERING CONSULTANT	USER NAME = jkjellman	DESIGNED - CRC	REVISED -
Ciorba Group, Inc. CONSULTING ENGINEERS 5507 North Cumberland Avenue, Suite 402 Chicago, IL 60656 Ph: 773.775.4300 Fax 773.775.4014 Email: chicago@ciorba.com		DRAWN - JMK	REVISED -
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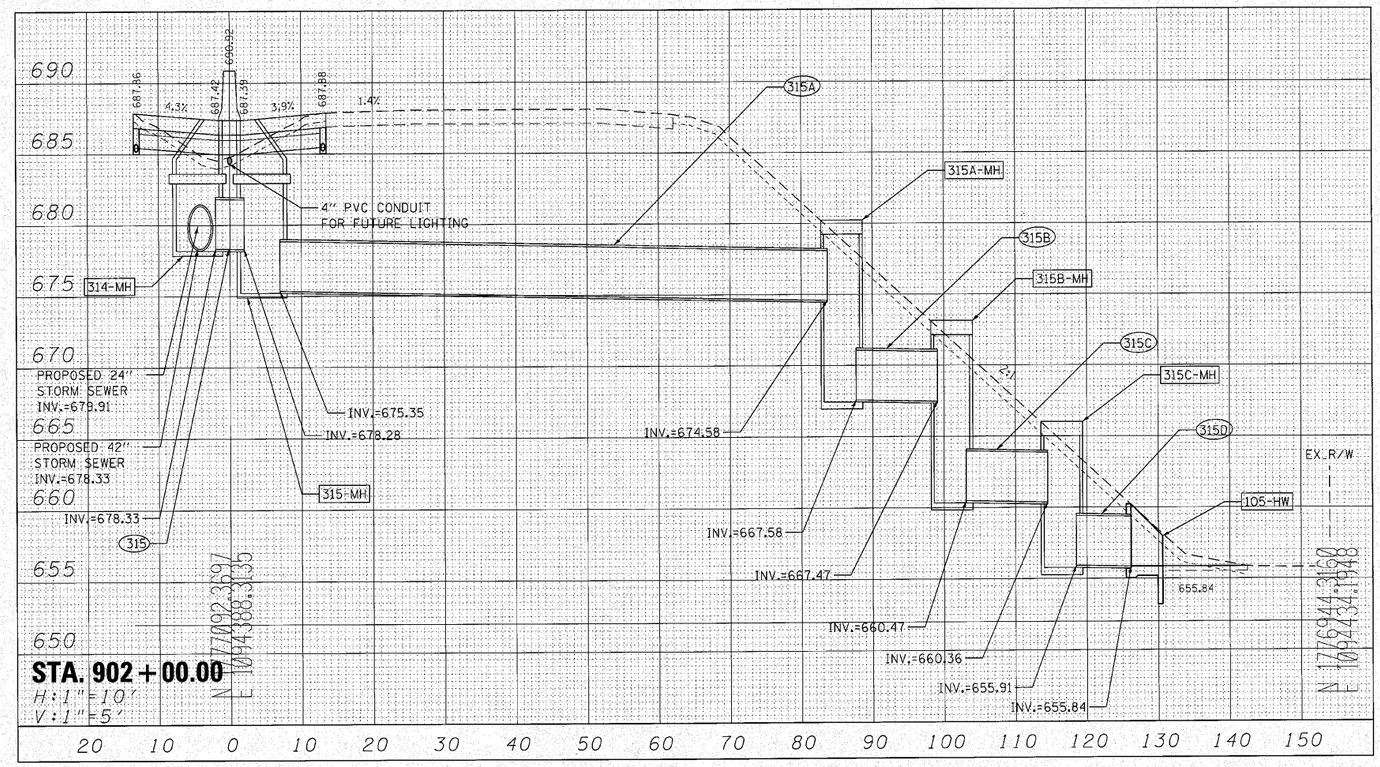
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. 80 FROM NS RAILROAD TO US 45
STATION 889+40 OUTFALL DETAIL

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	219
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			





312
STORM SEWERS,
CLASS A, TYPE 2, 48"
75' @ 0.31%
TBF=78 CY

312A
STORM SEWERS,
CLASS A, TYPE 2, 42"
25' @ 0.28%
TBF=27 CY

310
STORM SEWERS,
CLASS A, TYPE 2, 24"
150' @ 0.30%
TBF=67 CY

315
STORM SEWERS,
CLASS A, TYPE 2, 42"
5' @ 1.00%
TBF=5 CY

315A
STORM SEWERS
JACKED IN PLACE, 42"
77' @ 1.00%

315B
STORM SEWERS
JACKED IN PLACE, 42"
11' @ 1.00%

315C
STORM SEWERS
JACKED IN PLACE, 42"
11' @ 1.00%

315D
STORM SEWERS
JACKED IN PLACE, 42"
8' @ 0.87%

314-MH
STA. 902+00/1.5' LT
MANHOLES, TYPE A, 6'-DIA
WITH TYPE 20 FRAME AND GRATE
R=687.42
INV.= 678.33 (E)(S)
INV.= 679.91 (W)

314A-MH
STA. 902+25/1.5' LT
MANHOLES, TYPE A, 6'-DIA
WITH TYPE 20 FRAME & GRATE
RESTRICTOR PLATE
ORIFICE SIZE = 23"
OVERFLOW = 681.75
R=687.51
INV.=678.40 (W)(E)

315-MH
STA. 902+00/1.5' RT
MANHOLES, TYPE A, 5'-DIA
WITH TYPE 20 FRAME AND GRATE
R=687.39
INV.=678.28 (N)
INV.=675.35 (S)

315A-MH
STA. 902+00/85.7' RT
MANHOLES, TYPE A, 5'-DIA
WITH TYPE 1 FRAME, CLOSED LID
T/F=680.24
INV.= 667.58 (S)
INV.= 674.58 (N)

315B-MH
STA. 902+00/101.1' RT
MANHOLES, TYPE A, 5'-DIA
WITH TYPE 1 FRAME, CLOSED LID
T/F=673.13
INV.= 660.47 (S)
INV.= 667.47 (N)

315C-MH
STA. 902+00/116.5' RT
MANHOLES, TYPE A, 5'-DIA
WITH TYPE 1 FRAME, CLOSED LID
T/F=666.01
INV.= 655.91 (S)
INV.= 660.36 (N)

105-HW
STA. 902+00/126.2' RT
CAST-IN-PLACE REINFORCED
CONCRETE END SECTIONS, 42"
INV.=655.84

N:\PROJ\33984\3_East\Design\Details\33984E-Detail_Drain05.dgn

ENGINEERING CONSULTANT
Clorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
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Email chicago@clorba.com

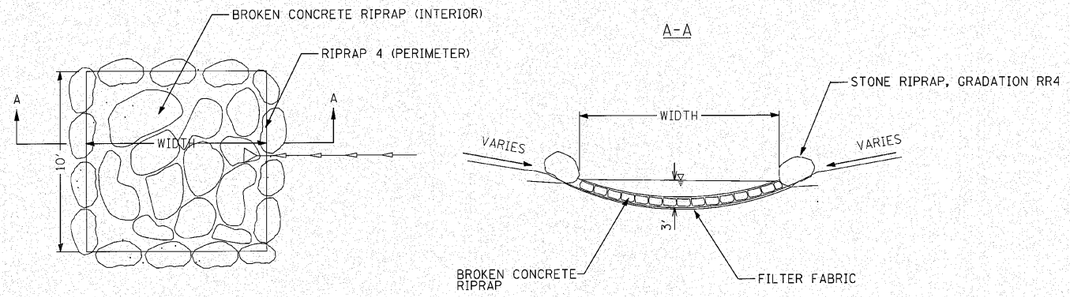
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	DRAWN - JMK	REVISED -	
PLOT SCALE = 20.0000 ' / IN.	CHECKED - MRJ	REVISED -	
PLOT DATE = 12/28/2010	DATE - 10/27/2010	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. 80 FROM NS RAILROAD TO US 45
STATION 902+00 OUTFALL DETAIL

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	220
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			



SEDIMENT BASIN DETAIL

DIMENSIONS SHOWN ON PLANS

N:\PROJ\3384\3.Fasx\Design\Details\3384E-Detail-Eros01.dgn

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CONSULTING ENGINEERS
5007 North Cumberland Avenue, Suite 402
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Email chicago@ciorba.com

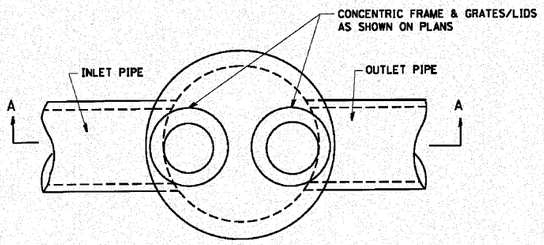
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	DRAWN - JMK	REVISED -
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

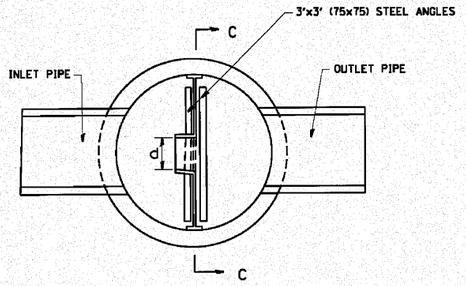
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SEDIMENT BASIN DETAIL

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

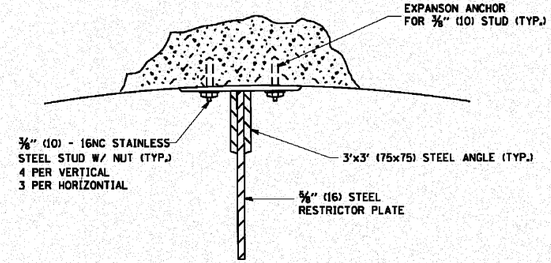
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80	99(5&5-1) Y-1	WILL	309	221
		CONTRACT NO. 60M59		
	ILLINOIS FED. AID PROJECT			



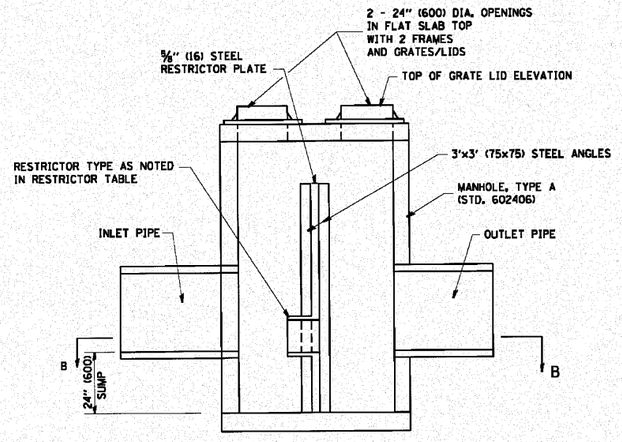
PLAN



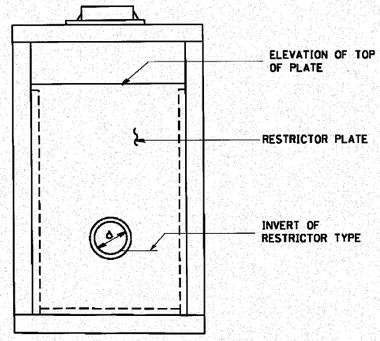
SECTION B-B



ANGLE FASTENER DETAIL



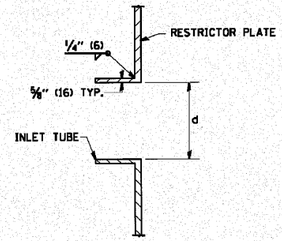
SECTION A-A



SECTION C-C

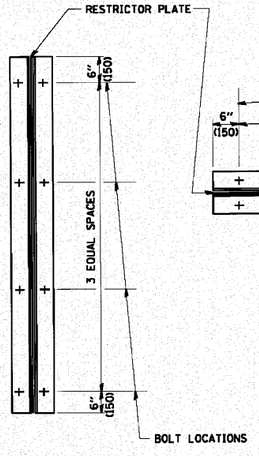
NOTES:

1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.
2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.
3. BASIS OF PAYMENT: "MANHOLES, TYPE A, 6 FT. (1.8 m)-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE" EACH

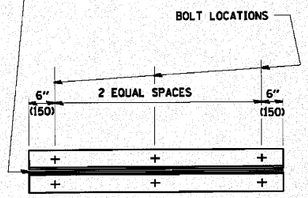


INLET TUBE DETAIL

STATION	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER In. (mm) (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW
889+15	6'	T20	1	13	678.19	681.23
889+65	6'	T20	1	14	677.42	680.00
902+25	6'	T20	1	23	678.79	681.75
1003+70	6'	T20	1	19	721.49	724.28
1014+75	6'	T20	1	16	717.38	720.05
1029+20	6'	T20	1	15.5	710.60	713.75
1066+50	6'	T20	1	23.5	688.45	691.43



TYPICAL VERTICAL ANGLES LOOKING TOWARD MANHOLE WALL



TYPICAL HORIZONTIAL ANGLES LOOKING TOWARD BOTTOM OF MANHOLE

TOTAL BOLTS REQUIRED: 22

NOTE:

1. ANGLES SHOULD BE 3x3x3/8 (75x75x75)
2. VERTICAL ANGLES SHOULD EXTEND FROM THE BOTTOM OF THE RESTRICTOR PLATE TO THE TOP.
3. HORIZONTIAL ANGLES SHOULD EXTEND FROM VERTICAL ANGLE TO VERTICAL ANGLE.

STEEL ANGLE BOLTING DETAILS

RESTRICTOR TYPE					
1	2	3	4	5	6
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED
LENGTH: 1/2 TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-1/2 DIA.	LENGTH: 2-1/2 DIA.	
C=.52	C=.61	C=.61	C=.73	C=.82	C=.98

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

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

N:\PROJ\338K\3.East\Design\Details\338KE-Details02 (Standard).dgn

ENGINEERING CONSULTANT

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Email: chicago@clarke.com

USER NAME = gaglianabt
PLOT SCALE = 50.000 ' / IN.
PLOT DATE = 1/4/2008

DESIGNED - R. SHAH
DRAWN -
CHECKED -
DATE - 09-09-94

REVISED - R. SHAH 10-25-94
REVISED - E. GOMEZ 08-28-00
REVISED - M. GOMEZ 01-08-01
REVISED -

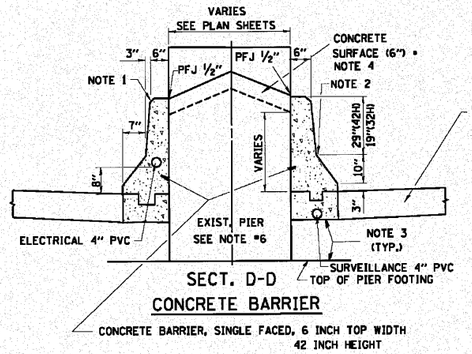
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MANHOLE WITH RESTRICTOR PLATE

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

F.A.I.-RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	222
	BD800-04 (BD-12)	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

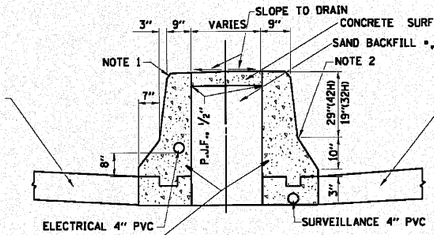
TANGENT CONDITION



SECT. D-D
CONCRETE BARRIER

CONCRETE BARRIER, SINGLE FACED, 6 INCH TOP WIDTH
42 INCH HEIGHT

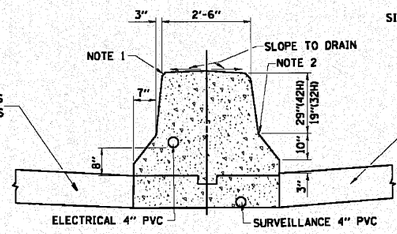
FOR SHOULDER DETAILS
SEE TYPICAL SECTIONS



SECT. C-C
CONCRETE BARRIER

CONCRETE BARRIER, SINGLE FACED, 9 INCH TOP WIDTH, 42 INCH HEIGHT

FOR SHOULDER DETAILS
SEE TYPICAL SECTIONS

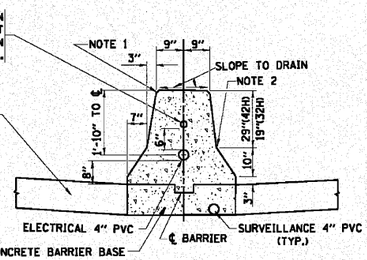


SECT. B-B
CONCRETE BARRIER

CONCRETE BARRIER, DOUBLE FACED
18 INCH VARIABLE TOP WIDTH
42 INCH HEIGHT

FOR SHOULDER DETAILS
SEE TYPICAL SECTIONS

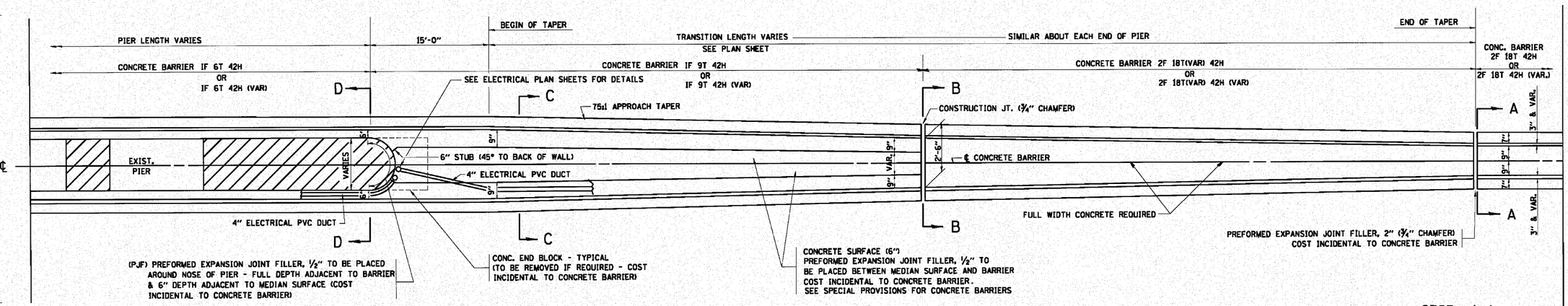
2" PVC TO BE INSTALLED BETWEEN SIGN FOUNDATION AND NEAREST LIGHT POLE FOUNDATION WHERE SHOWN ON THE PLANS.



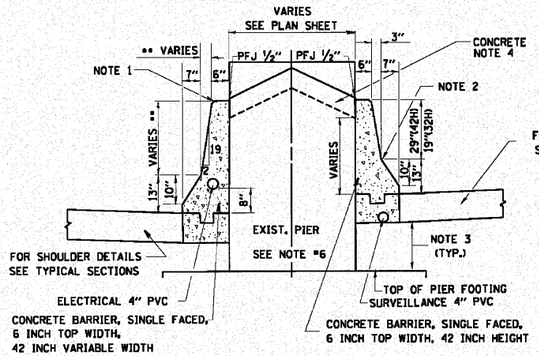
SECT. A-A
CONCRETE BARRIER

CONCRETE BARRIER, DOUBLE FACE,
18 INCH TOP WIDTH,
42 INCH HEIGHT

PLAN VIEW OF CONCRETE BARRIER TRANSITION



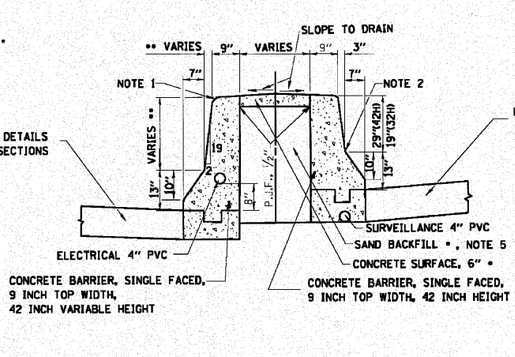
SECT. D-D
CONCRETE BARRIER



CONCRETE BARRIER, SINGLE FACED,
6 INCH TOP WIDTH,
42 INCH VARIABLE WIDTH

CONCRETE BARRIER, SINGLE FACED,
6 INCH TOP WIDTH, 42 INCH HEIGHT

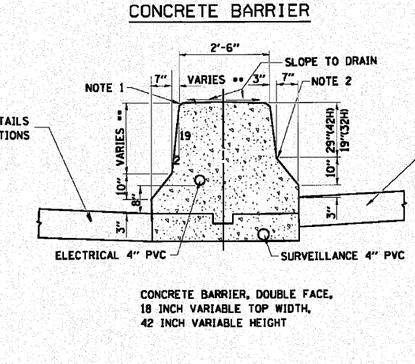
SECT.C-C
CONCRETE BARRIER



CONCRETE BARRIER, SINGLE FACED,
9 INCH TOP WIDTH,
42 INCH VARIABLE HEIGHT

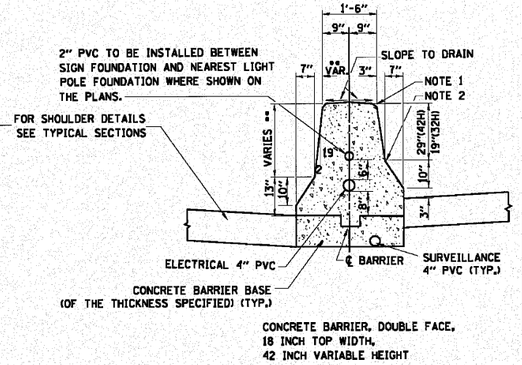
CONCRETE BARRIER, SINGLE FACED,
9 INCH TOP WIDTH, 42 INCH HEIGHT

SECT. B-B
CONCRETE BARRIER



CONCRETE BARRIER, DOUBLE FACE,
18 INCH VARIABLE TOP WIDTH,
42 INCH VARIABLE HEIGHT

SECT. A-A
CONCRETE BARRIER



CONCRETE BARRIER, DOUBLE FACE,
18 INCH TOP WIDTH,
42 INCH VARIABLE HEIGHT

(SUPER ELEVATION CONDITION)

GENERAL NOTES - FOR UNDERDRAIN DETAILS SEE TYPICAL SECTIONS
- PREFORMED JOINT FILLER SHALL BE INCIDENTAL TO THE CONCRETE BARRIER OF THE TYPE INVOLVED.
- FOR KEYWAY (F) DIMENSIONS, SEE TYPICAL SECTIONS
- CONCRETE BARRIER BASE PAY ITEM IS TO BE INCLUDED IF THE BARRIER IS CONSTRUCTED MONOLITHIC OR JOINTED TO BASE. IF JOINTED CONTRACTORS WILL HAVE THE OPTION OF USING A KEYWAY OR •__ TIE BARS AT _____O.C.

NOTE 1 - ¾" CHAMFER OR 1" RADIUS (OPTIONAL)

NOTE 2 - 10" RADIUS (OPTIONAL)

NOTE 3 - EXTEND BOTTOM OF BARRIER TO FOOTING ONLY WHEN DEPTH IS 6" OR LESS, OTHERWISE MAINTAIN SAME DEPTH AS BOTTOM OF SHOULDER

NOTE 4 - PIER FILLER MATERIAL TO BE CONCRETE IF MINIMUM 6" THICKNESS WILL BE MAINTAINED. IF 6" THICKNESS CANNOT BE MAINTAINED USE ASPHALT FILLER MATERIAL AS DIRECTED BY THE ENGINEER.

NOTE 5 - SAND BACKFILL AND CONCRETE SURFACE WILL BE REQUIRED. FILLING WITH CONCRETE WILL NOT BE ALLOWED.

NOTE 6 - IF PIER IS NEW CONSTRUCTION BARRIER WALL MAY BE MONOLITHIC

•• MAINTAIN SLOPE OF FACE AS SHOWN ON DETAIL. HEIGHT AND WIDTH OF BARRIER INCREASE WHERE A DIFFERENCE IN MEDIAN EDGE-OF-PAVEMENT GRADE ELEVATION EXISTS.

• COST OF SAND BACKFILL, CONCRETE SURFACE (6"), AND PIER FILLER MATERIAL WILL NOT BE INCIDENTAL.

N:\PROJ\338413_East\Design\Details\338ME-Details03 (Standard).dgn

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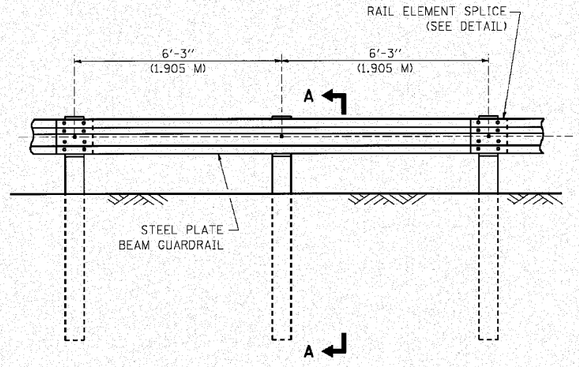
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PLOT DATE = 1/4/2008	DATE - 09-09-88	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE BARRIER TRANSITION &
GENERAL DETAILS, CONCRETE BARRIER BASE

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

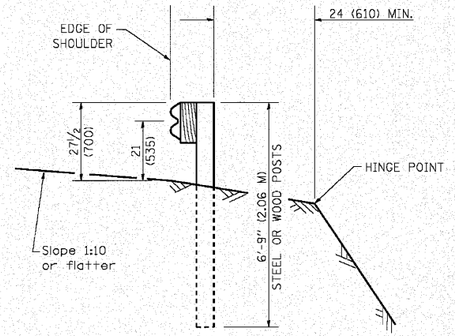
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	223
	BD-27	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



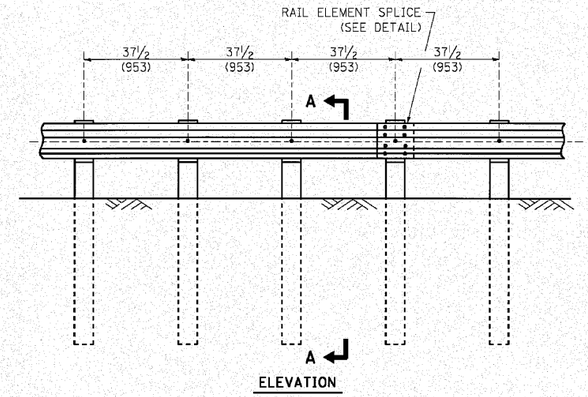
ELEVATION

TYPE A

6'-3" (1.905 M) TYPICAL POST SPACING



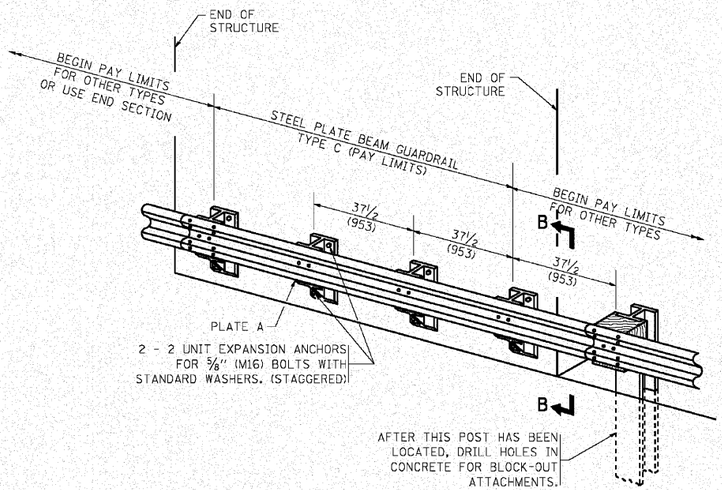
SECTION A-A



ELEVATION

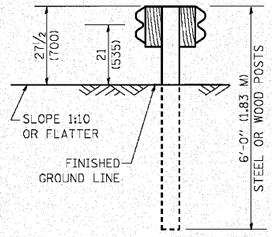
TYPE A

37½ (953) CLOSED POST SPACING

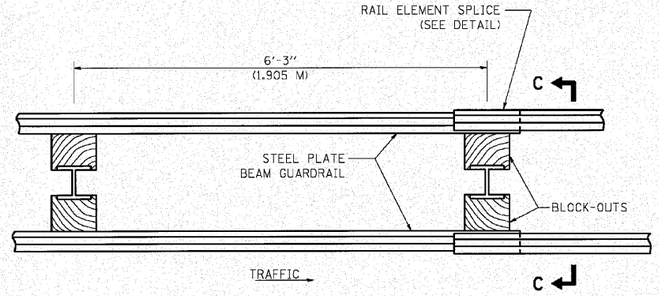


TYPE C

37½ (953) BLOCK-OUT SPACING



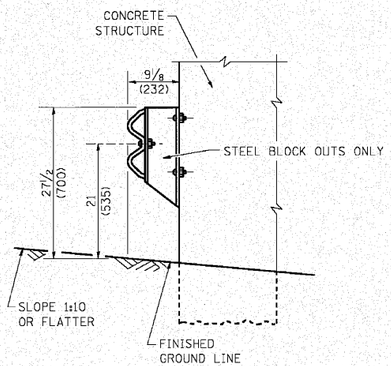
SECTION C-C



PLAN

TYPE D

DOUBLE STEEL PLATE BEAM GUARDRAIL
6'-3" (1.905 M) TYPICAL POST SPACING



SECTION B-B

GENERAL NOTES

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

N:\PROJ\33841\3_Eest\Design\Details\3384E-Detail846 (Standard).dgn

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Email: info@cierba.com

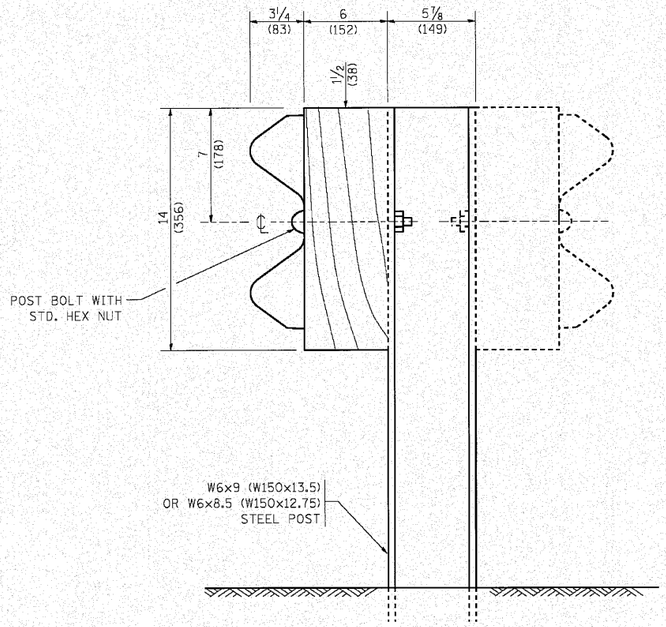
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	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -	
PLOT DATE = 1/4/2008	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

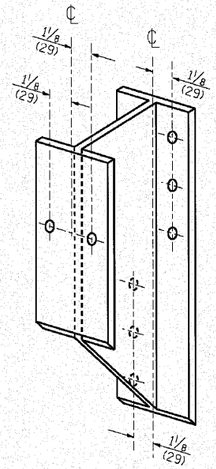
REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

SCALE: NONE | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

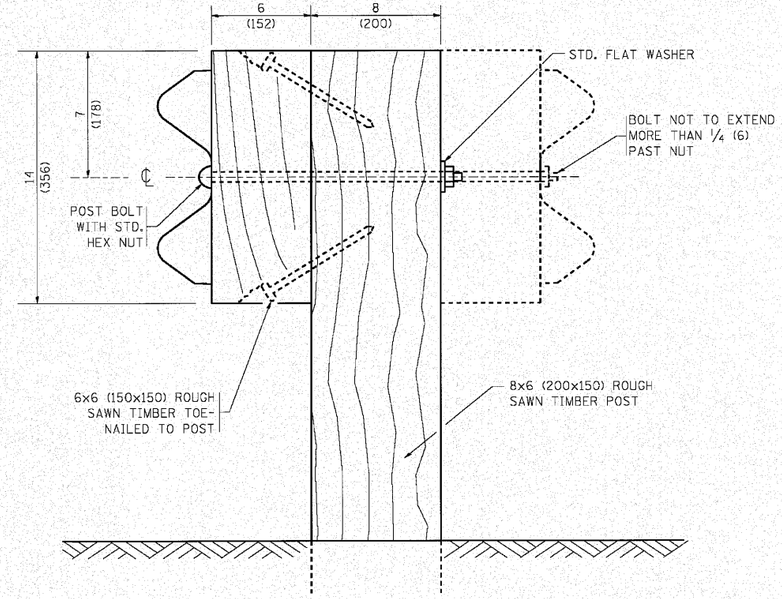
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	224
	BM-21	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



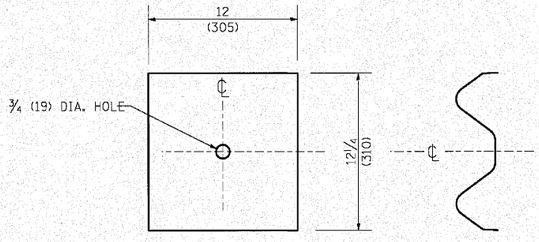
STEEL POST CONSTRUCTION



STEEL BLOCK-OUT DETAIL



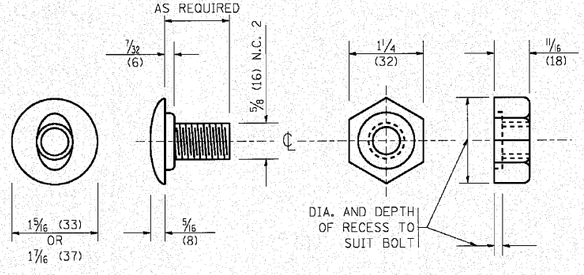
WOOD POST CONSTRUCTION



NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

PLATE A



POST OR SPLICE BOLT & NUT

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Email chicago@cierba.com

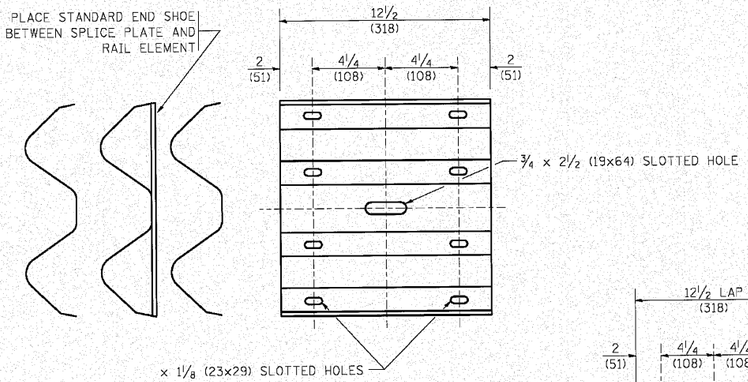
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

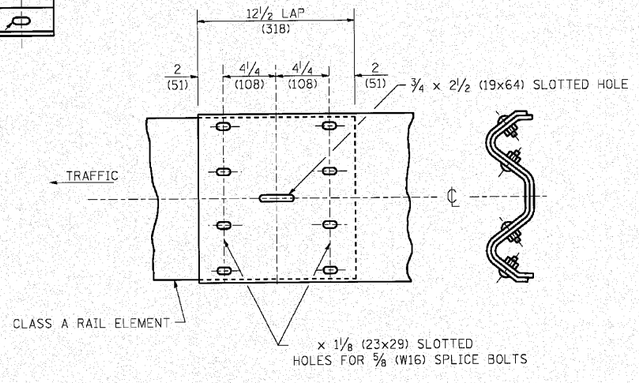
REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

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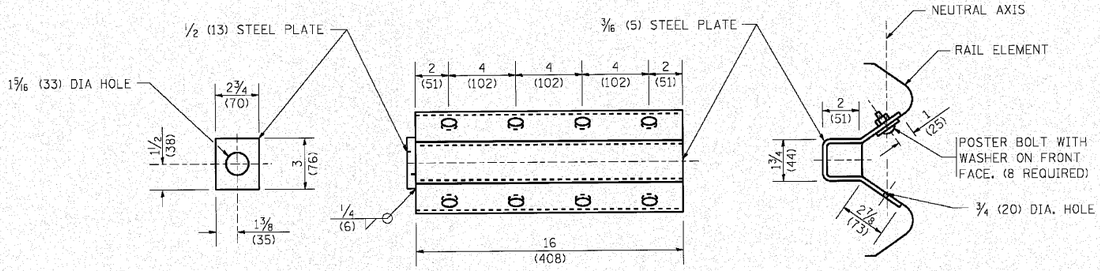
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	225
	BM-21	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SPLICE PLATE



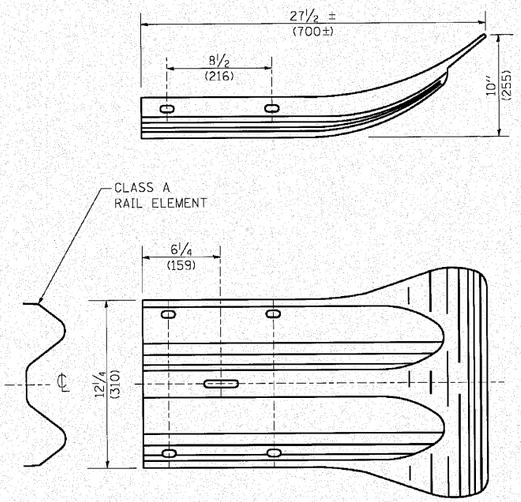
RAIL ELEMENT SPLICE



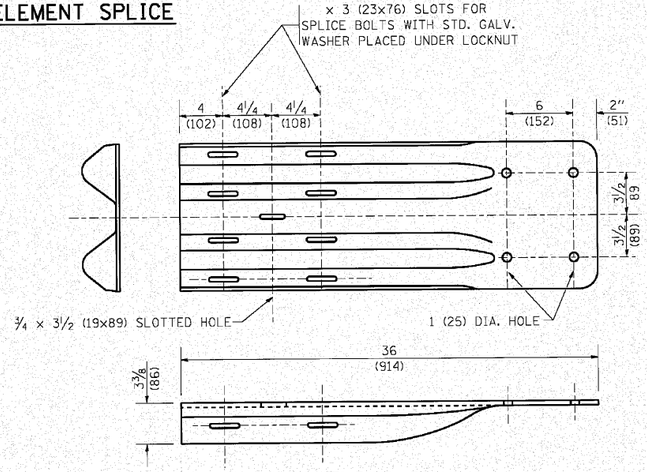
NOTE:

ANCHOR PLATE T SHALL BE USED TO ATTACH CABLE ASSEMBLY TO GUARDRAIL WHEN REQUIRED ON TRAFFIC BARRIER TERMINALS.

ANCHORE PLATE T DETAILS



END SECTION



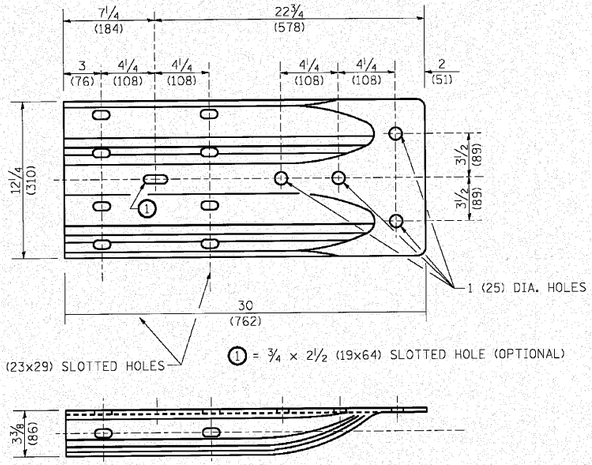
END SHOE

NOTE:

WHEN END SHOE IS ATTACHED TO A BRIDGE PARAPET WHICH HAS AN EXPANSION JOINT, THE BOLTS SHALL BE PROVIDED WITH A LOCKNUT OR DOUBLE NUT AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW GUARDRAIL MOVEMENT.

THE STANDARD END SHOE SHALL BE ATTACHED TO THE CONCRETE WITH PRE-DRILLED OR SELF-DRILLING ANCHOR BOLTS. THE ANCHOR CONE SHALL BE SET FLUSH WITH THE SURFACE OF THE CONCRETE.

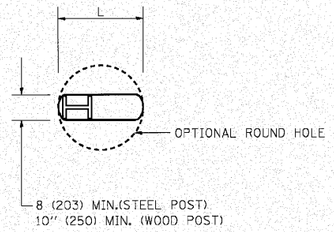
EXTERNALLY THREADED STUDS PROTRUDING FROM THE SURFACE OF THE CONCRETE WILL NOT BE PERMITTED.



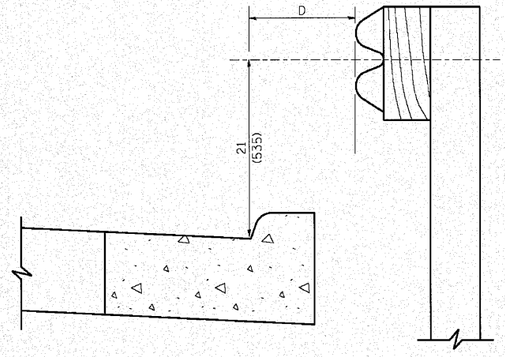
ALTERNATE END SHOE

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ENGINEERING CONSULTANT Clarke Group, Inc. CONSULTING ENGINEERS 2307 North Cumberland Avenue, Suite 400 Chicago, Illinois 60614 Tel 773.775.4200 Fax 773.775.4014 Email cmoore@clarke.com	USER NAME = gaglianobt PLOT SCALE = 50.0000 ' / IN. PLOT DATE = 1/4/2008	DESIGNED -	REVISED - 10-31-06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			80	99(5&5-1) Y-1	WILL	309	226
		CHECKED -	REVISED -				BM-21	CONTRACT NO. 60M59		
		DATE -	REVISED -		SCALE: NONE SHEET NO. 3 OF 4 SHEETS STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT		



PLAN

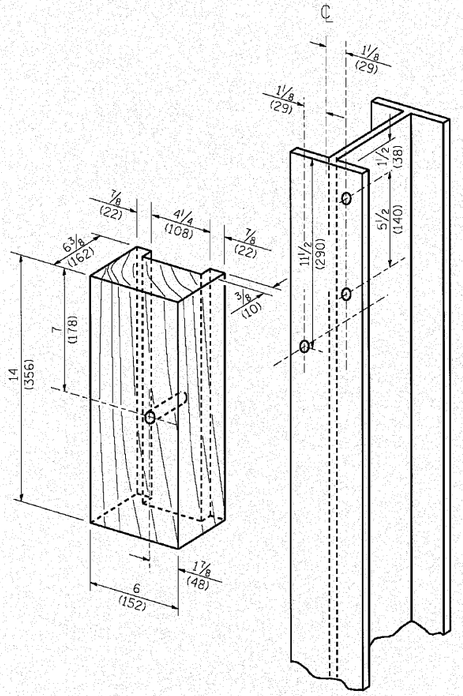


NOTE:

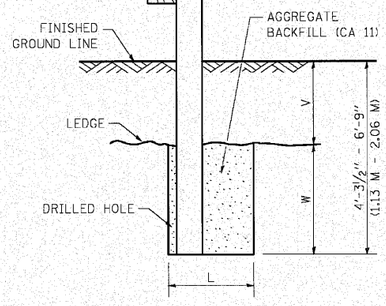
IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

GUARDRAIL PLACED BEHIND CURB

(D = 0 DESIRABLE TO 12 (300) MAXIMUM)



WOOD BLOCK-OUT AND STEEL POST DETAILS



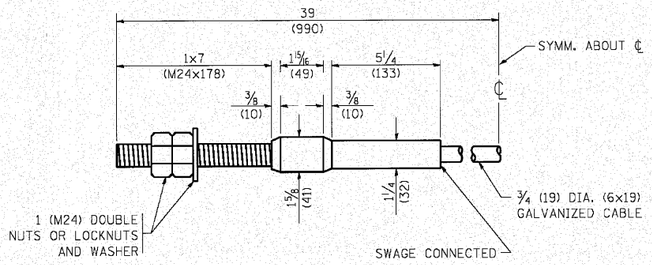
NOTE:

LEDGE LINE IS TOP OF ROCK LEDGE OR HARD SLAG FILL.

ELEVATION

V	W	L	
		STEEL POST	WOOD POST
0 - 18 (0 - 460)	24 (610)	21 (530)	23 (580)
>18 - 41.5 (> 460 - 825)	12 (305)	8 (203)	10 (250)
>41.5 - 53.5 (> 825 - 1.13 M)	12 - 0 (350 - 0)	8 (203)	10 (250)

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



CABLE ASSEMBLY

(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

N:\PROJ\338413.Eas\Design\Details\338ME-Det01240 (Sondra-dv).dgn

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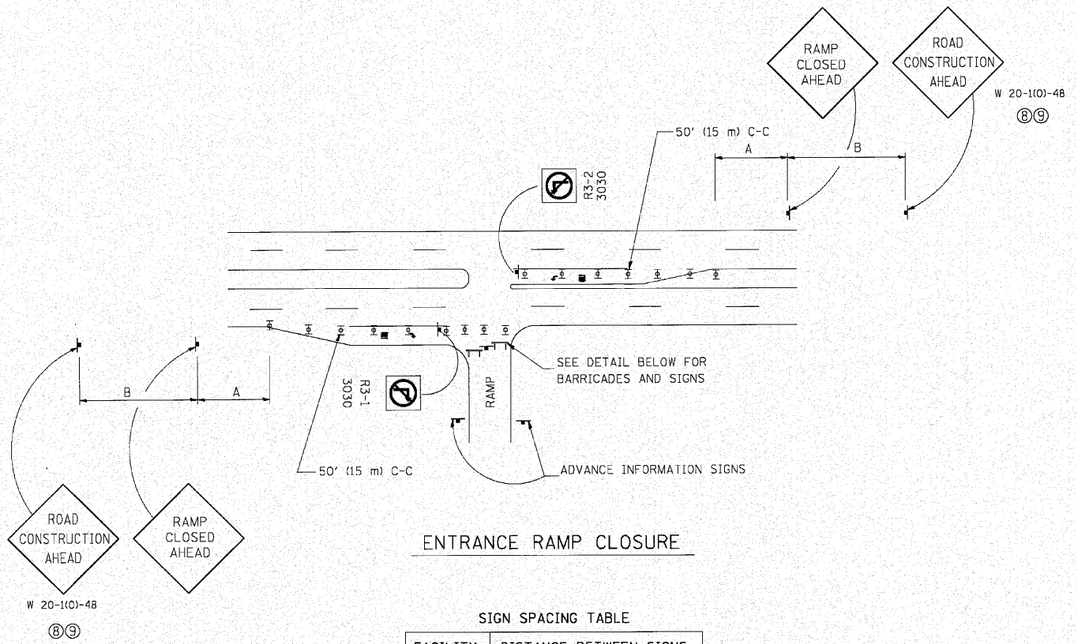
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	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -	
PLOT DATE = 1/4/2008	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

SCALE: NONE | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	BM-21	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

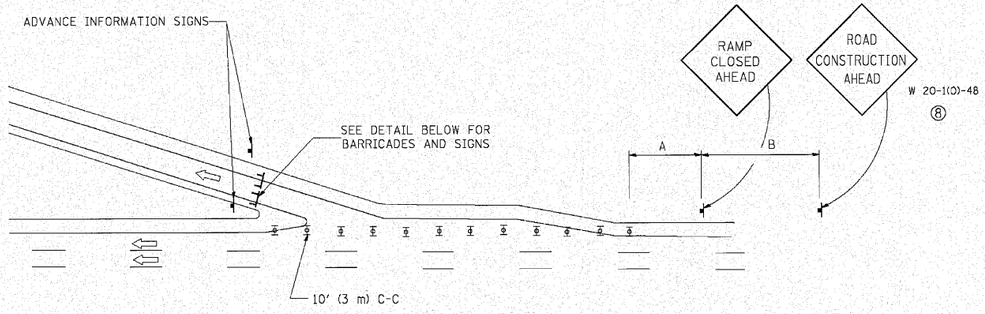


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL ≥45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	150' (45 m)	150' (45 m)

DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.

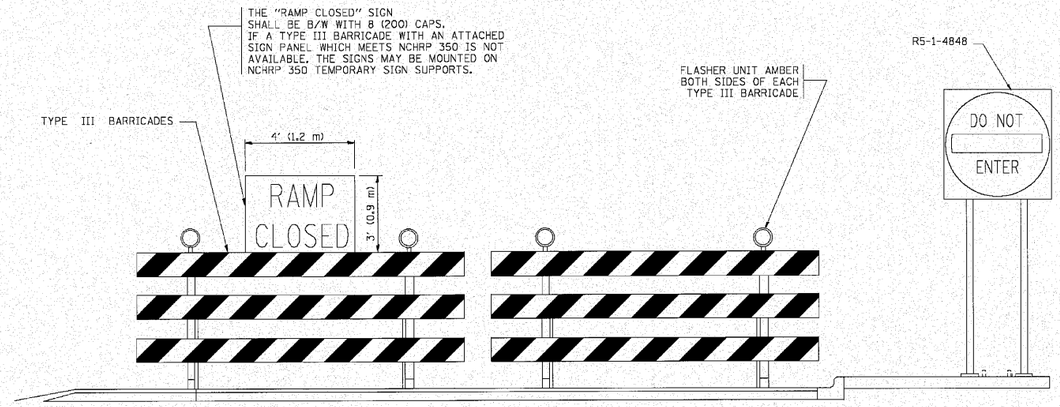


EXIT RAMP CLOSURE

SYMBOLS

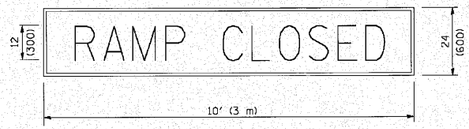
TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT

TYPE III BARRICADE WITH FLASHING LIGHT



DETAIL FOR REQUIRED BARRICADES & SIGNS

RAMP CLOSURE ADVANCE WARNING SIGN

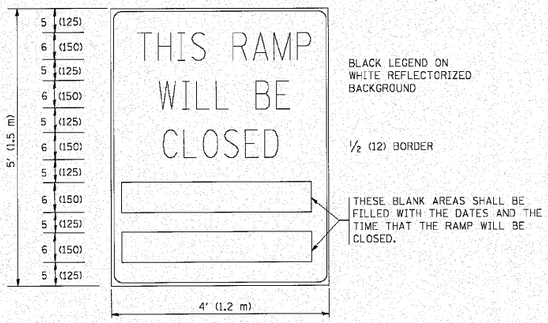


BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND

1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMPS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

GENERAL NOTES:

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

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

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USER NAME = layse	DESIGNED - DWS	REVISED - DWS/JAF 12-02	
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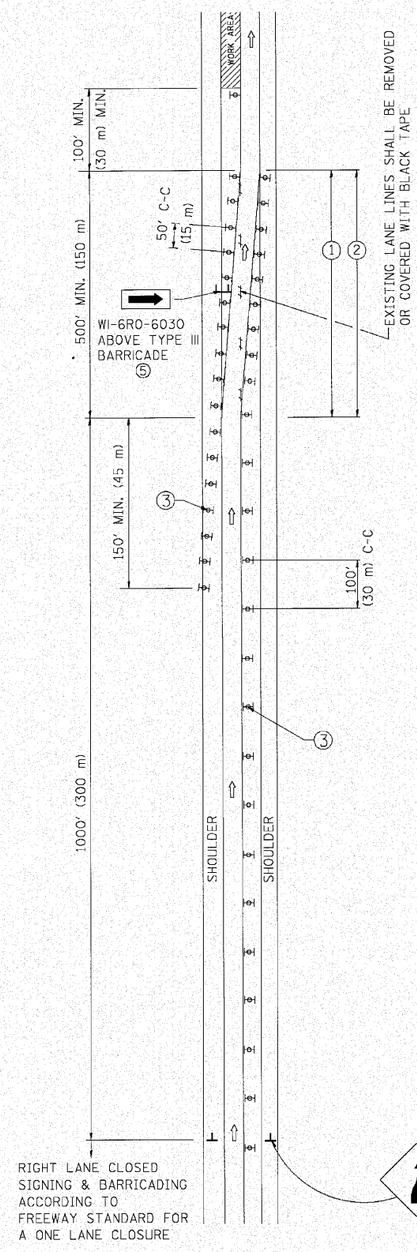
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FREEWAY ENTRANCE AND EXIST RAMP CLOSURE DETAILS

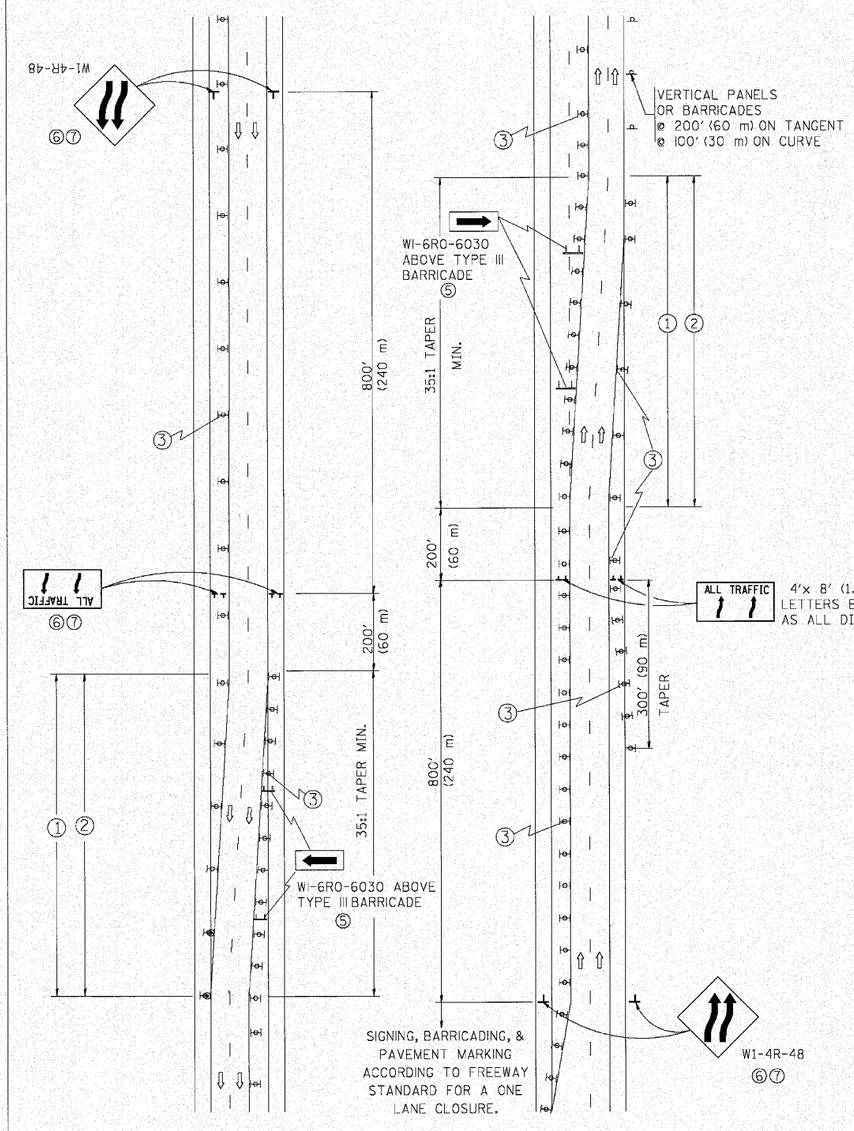
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	228
	TC-08	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SINGLE LANE WEAVE



MULTI-LANE WEAVE



ALL TRAFFIC ⑥⑦ — 4'x 8' (1.2 m x 2.4 m); 1 (25) BORDER; 10 (250) CAPITAL LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS.

GENERAL NOTES

① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 24 HOURS IN DURATION.

② CONTINOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.

③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.

④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.

⑤ IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS. TYPE III BARRICADES MAY BE OMMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.

⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

W24-1-48 ⑦

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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Email cleba@cleba.com

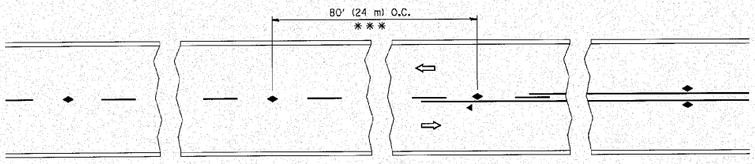
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PLOT DATE = 1/26/2010	DATE - 02-87	REVISED - SPB 12-09	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE

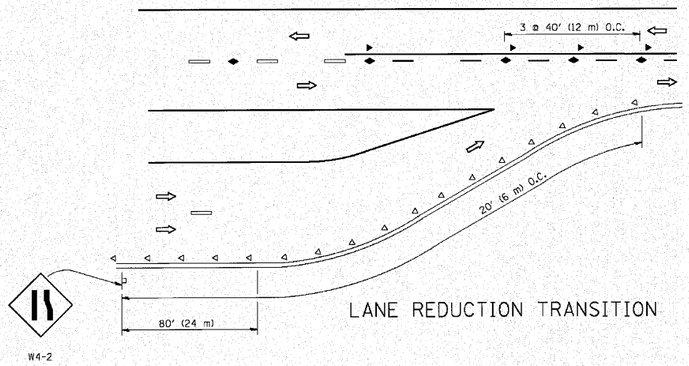
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	229
	TC-09	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

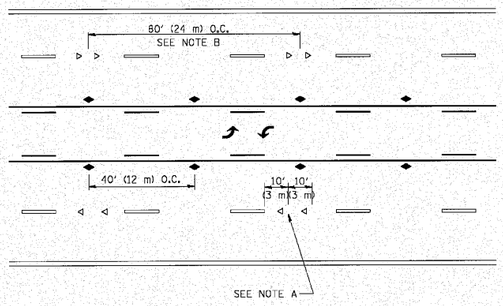


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

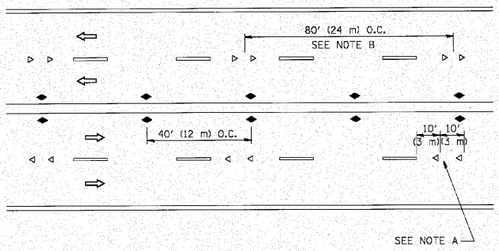
TWO-LANE/TWO-WAY



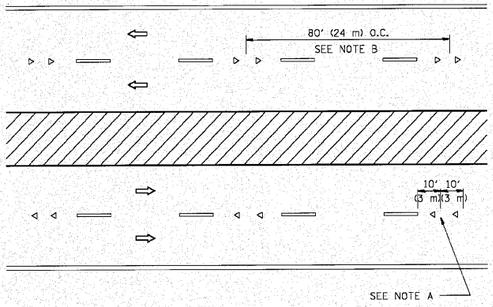
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

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

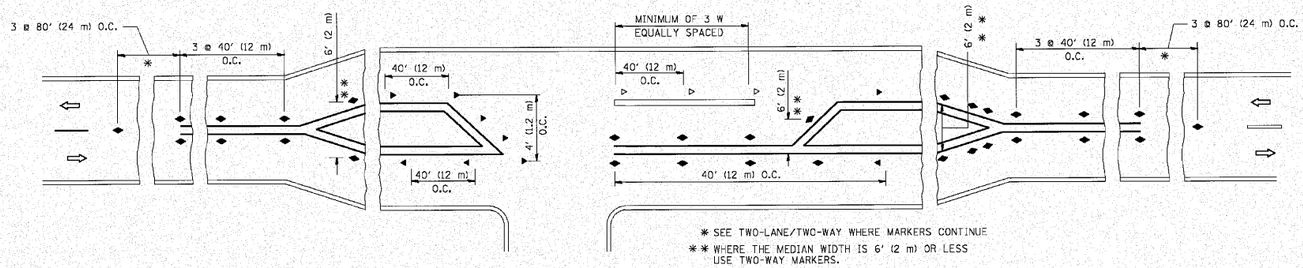
LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

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



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

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

LEFT TURN

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

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Email cibrea@cibrea.com

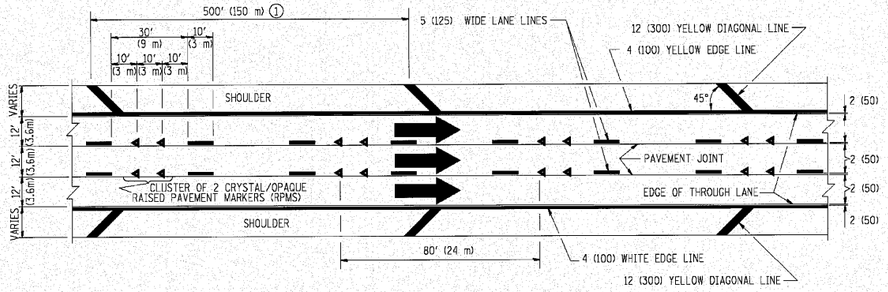
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PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	
PLOT DATE = 9/9/2009	DATE -	REVISED - C. JUCIUS 09-09-09	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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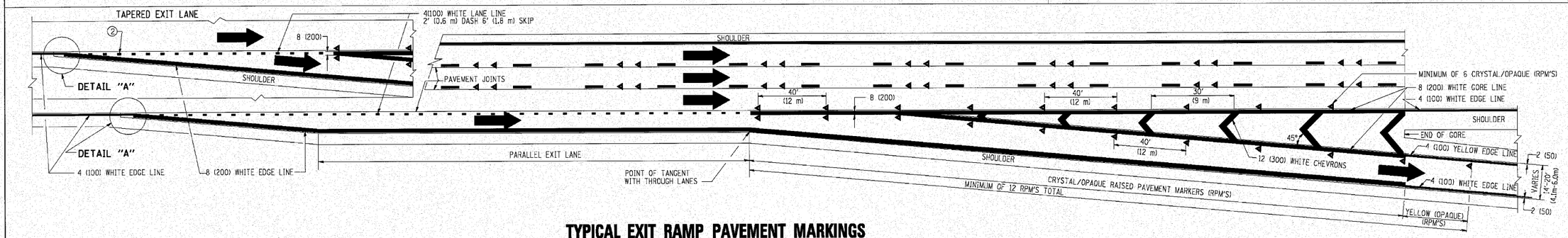
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	TC-11	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



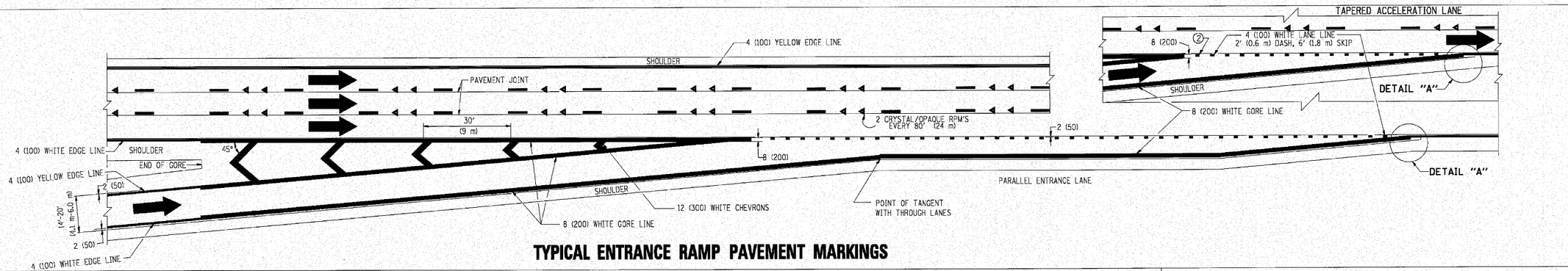
TYPICAL EDGE LINES & LANE LINES

PAVEMENT MARKING MATERIALS

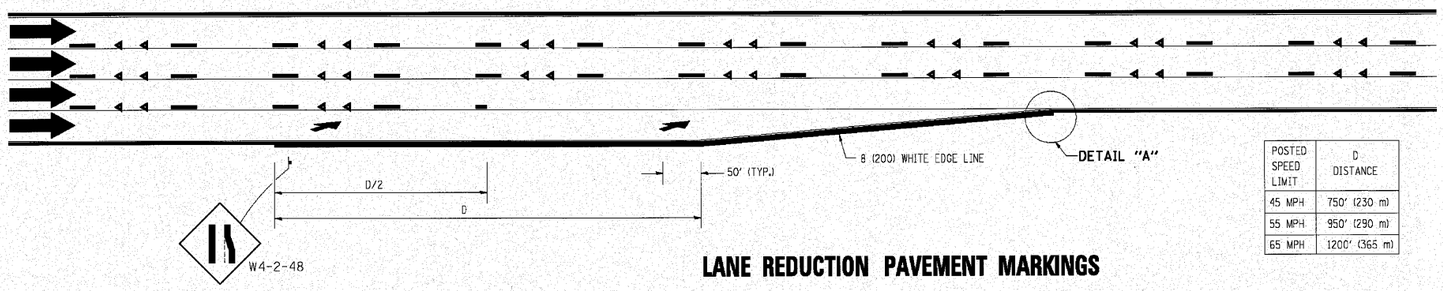
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT.
3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS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



TYPICAL EXIT RAMP PAVEMENT MARKINGS

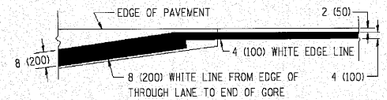


TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS



LANE REDUCTION PAVEMENT MARKINGS

POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)



DETAIL "A"

NOTES:

① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.

② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.

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USER NAME = leyso	DESIGNED - D.W.S.	REVISED - D.W.S. 07-96	
	DRAWN -	REVISED - J.A.F. 02-06	
PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - S.P.B. 01-07	
PLOT DATE = 1/22/2010	DATE - 01-90	REVISED - S.P.B. 01-10	

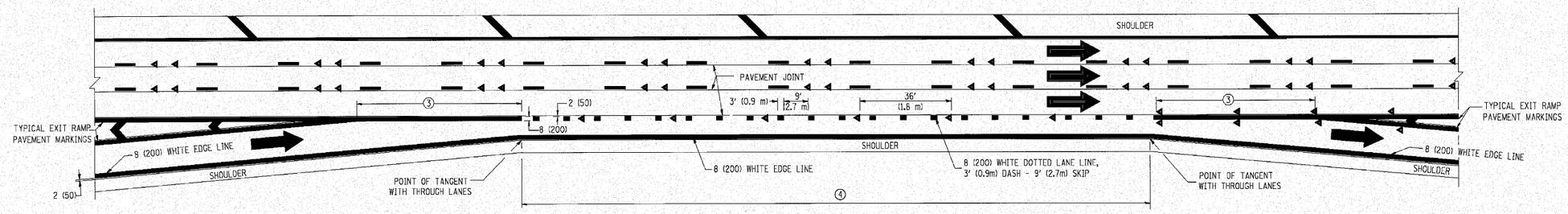
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY
PAVEMENT MARKING DETAILS

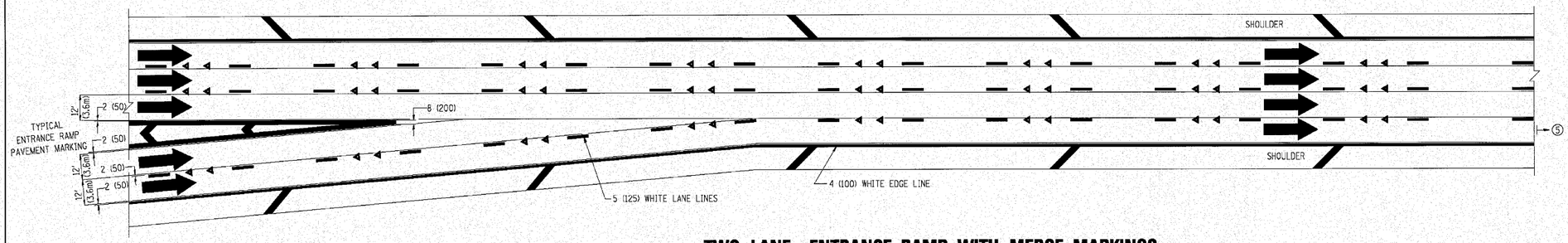
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	TC-12	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

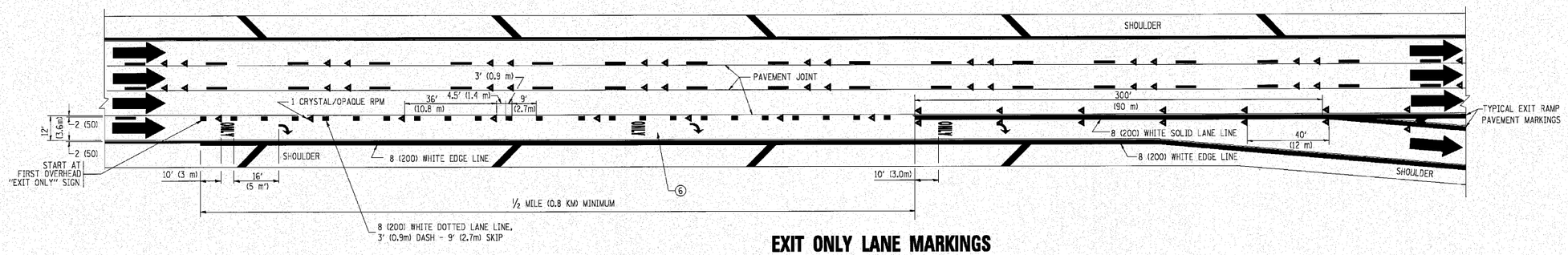
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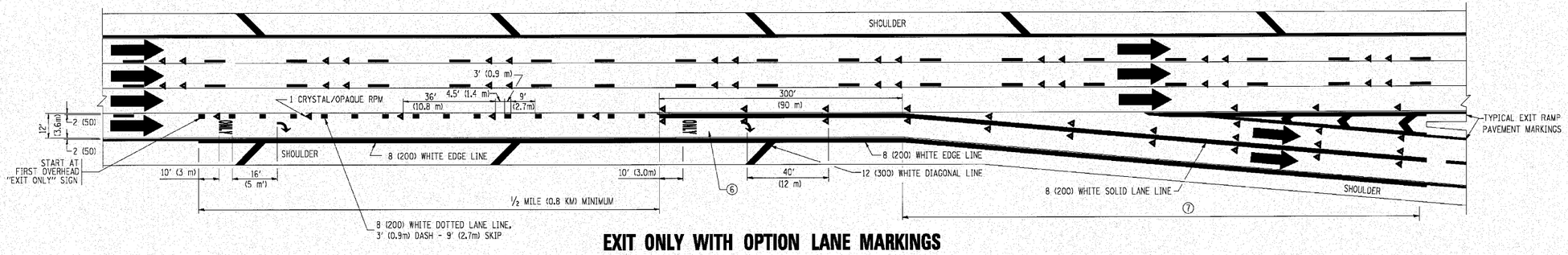
AUXILIARY LANE MARKINGS



TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS



EXIT ONLY LANE MARKINGS



EXIT ONLY WITH OPTION LANE MARKINGS

NOTES

③ OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).

④ 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.

⑤ FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.

⑥ ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED.

⑦ CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

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USER NAME = leyse	DESIGNED - D.W.S.	REVISED - D.W.S. 07-96	
	DRAWN -	REVISED - J.A.F. 02-06	
PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - S.P.B. 01-07	
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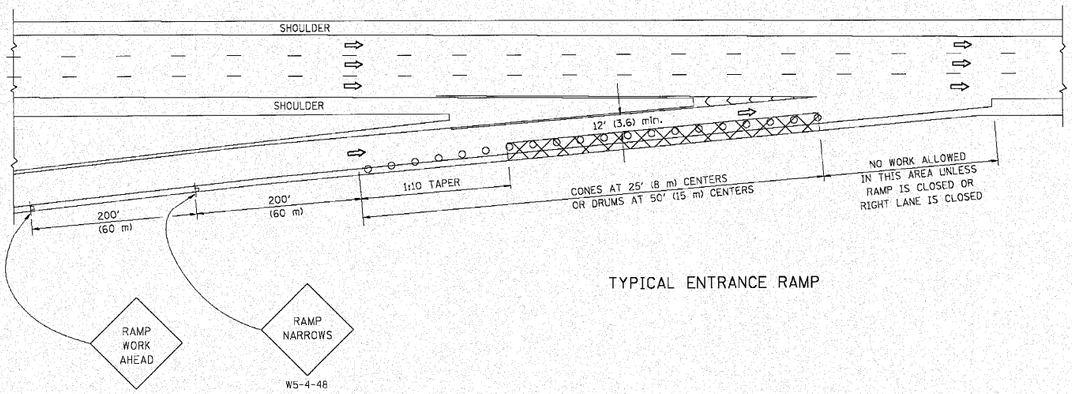
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY
PAVEMENT MARKING DETAILS

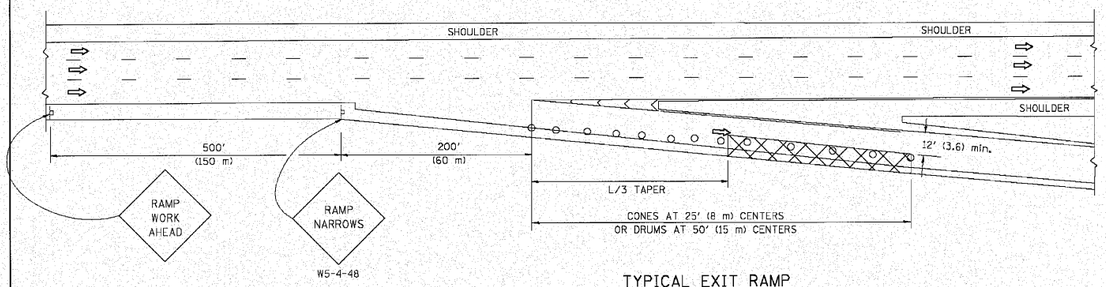
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	TC-12	CONTRACT NO. 60M59		
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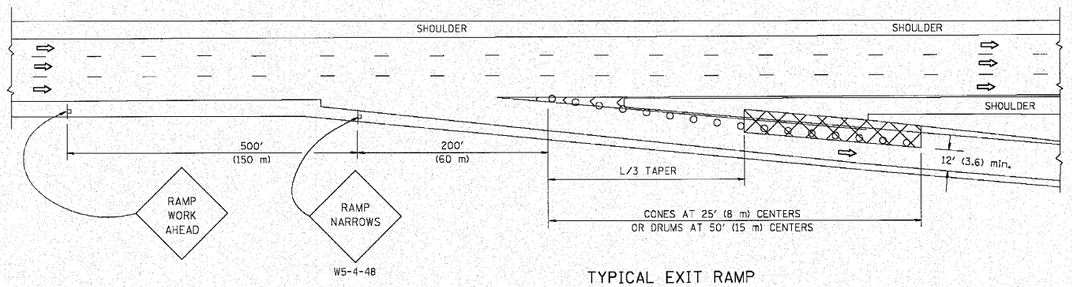
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP

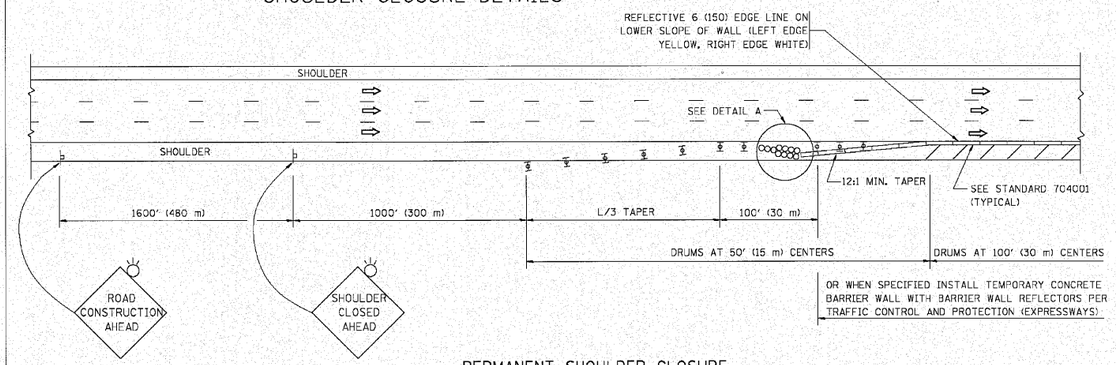


TYPICAL EXIT RAMP

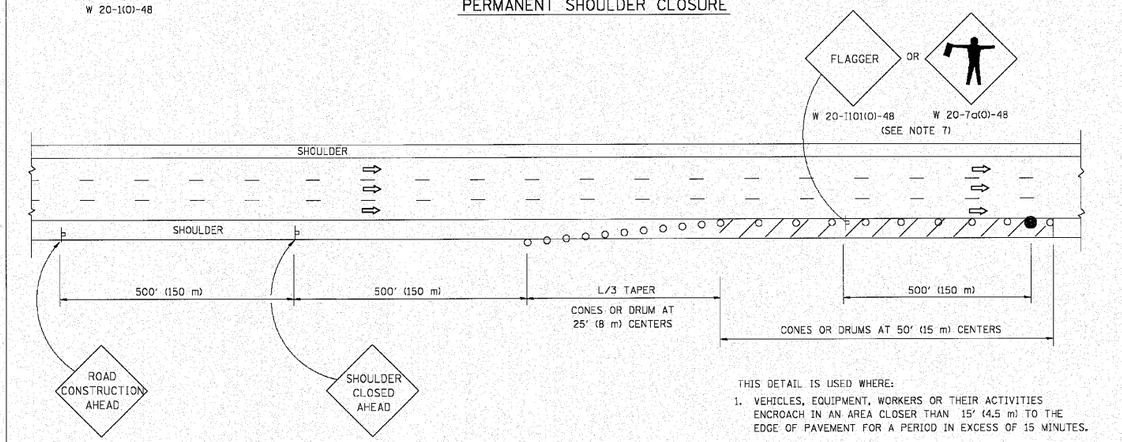


TYPICAL EXIT RAMP

SHOULDER CLOSURE DETAILS



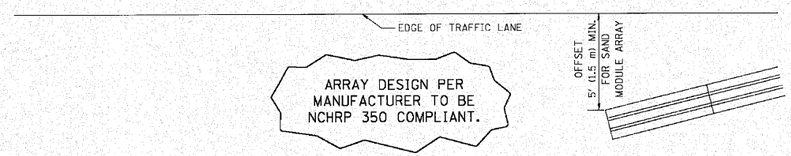
PERMANENT SHOULDER CLOSURE



THIS DETAIL IS USED WHERE:

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

DAYTIME SHOULDER CLOSURE



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

SYMBOLS

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

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS	
	METRIC	ENGLISH
45 mph (80 km/h) OR GREATER:	L=0.65(W)(S)	L=(W)(S)

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)

2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENTUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
   a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
   b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.

   THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

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

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USER NAME = lwyse	DESIGNED -	REVISED -	04-03
	DRAWN - D.W.S.	REVISED -	J.A.F. 12-06
PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	S.P.B. 01-07
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

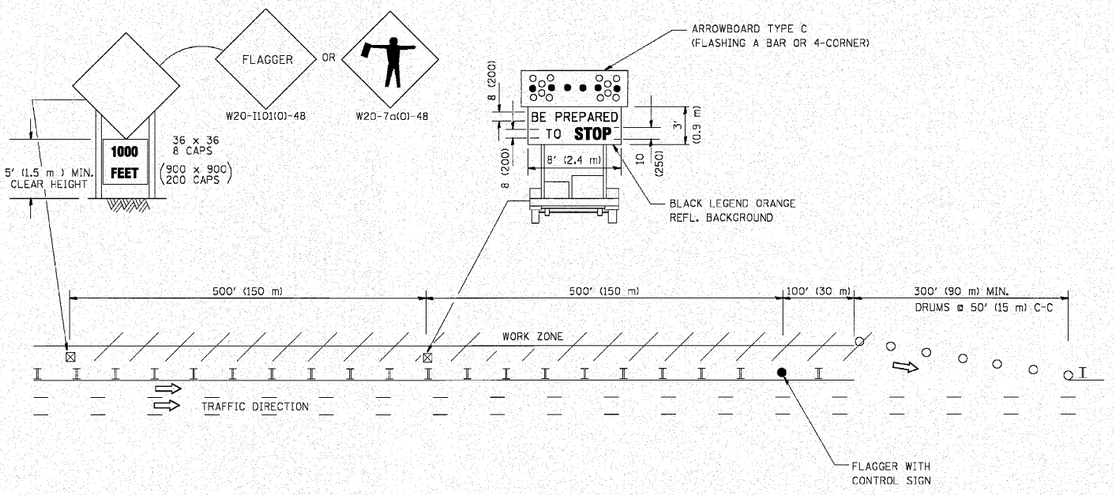
TRAFFIC CONTROL DETAILS FOR FREEWAY
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

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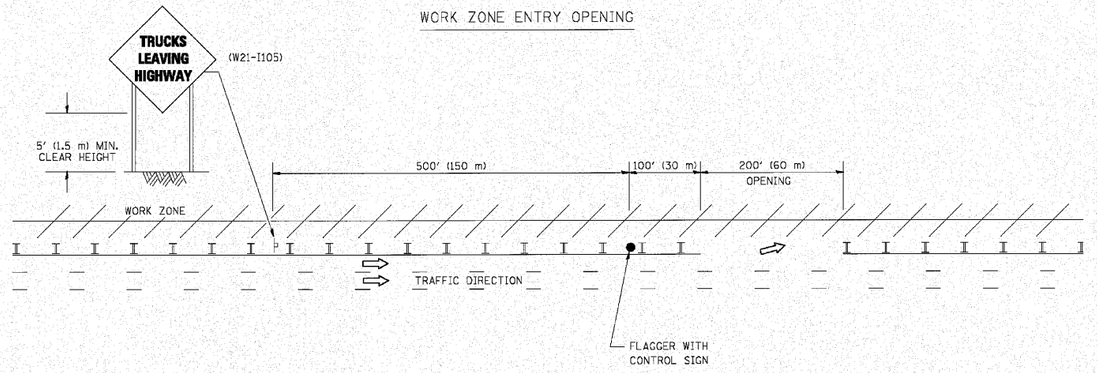
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80	99(5&5-1) Y-1	WILL	309	233
	TC-17	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. THE ARROWBOARD, THE FLAGGER AHEAD SIGN AND THE TRUCKS LEAVING HIGHWAY SIGN SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE EXIT OPENINGS SHOULD BE A MINIMUM OF ONE HALF MILE APART.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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USER NAME = leysa	DESIGNED -	REVISED - J.A.F. 04-03
	DRAWN -	REVISED - J.A.F. 02-06
PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - S.P.B. 01-07
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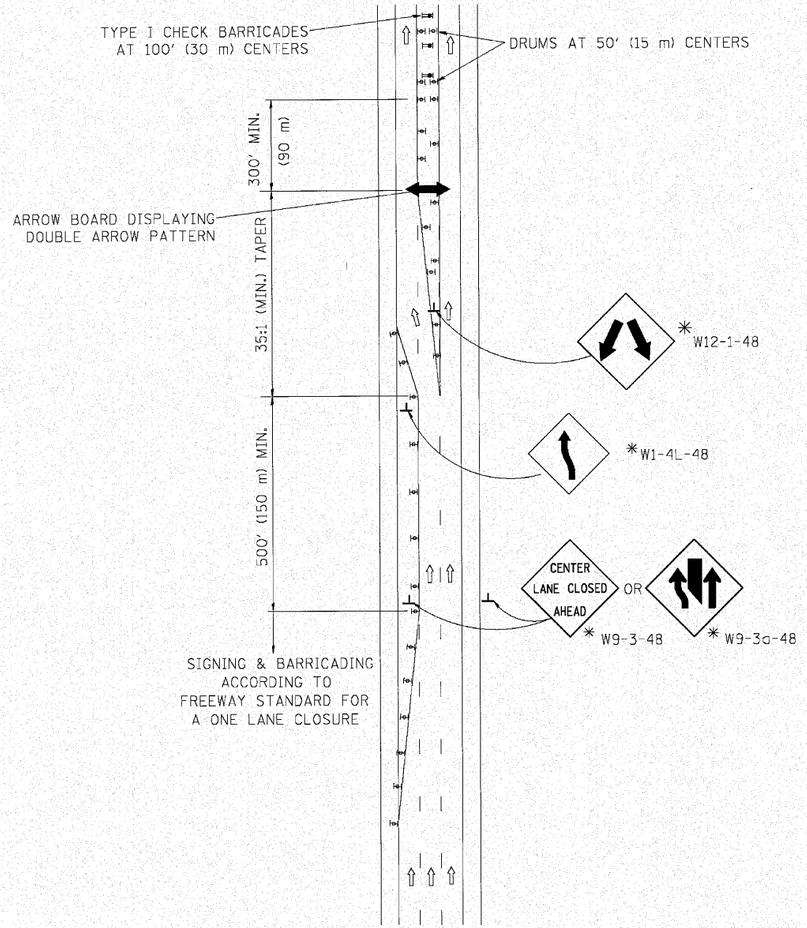
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

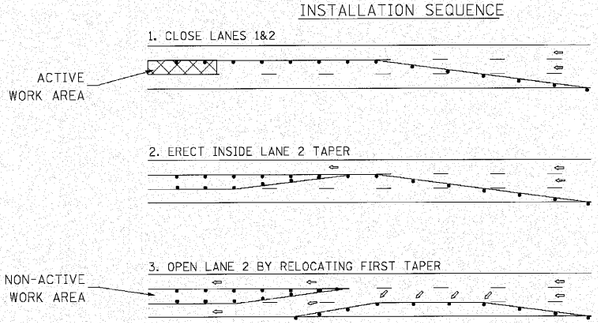
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FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CENTER LANE CLOSURE



INSTALLATION SEQUENCE

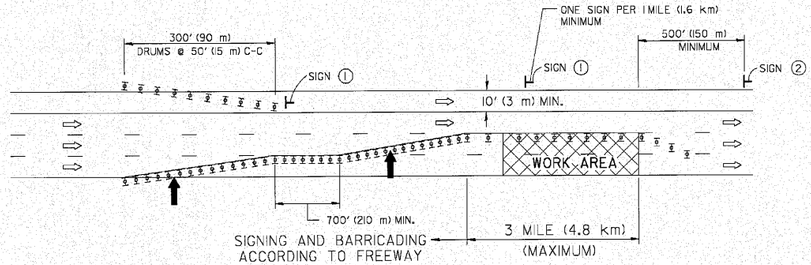


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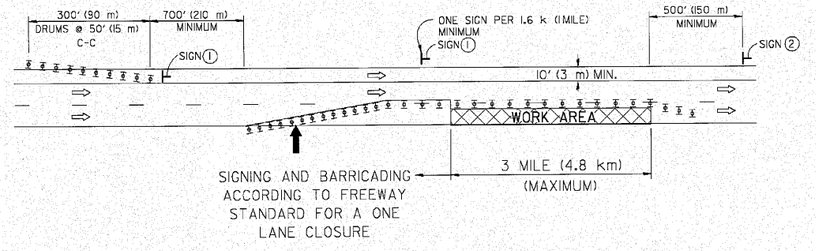
1. DRUMS WITH STEADY BURN LIGHTS SHALL BE USED AT 50' (15 m) CENTERS ON ALL TAPERS AND TANGENTS IN ADVANCE OF WORK AREA.
2. CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS OR LESS.
3. CENTER LANE CLOSURE CONFIGURATION IS NOT TO BE USED WITH WORKERS PRESENT.

SHOULDER LANE

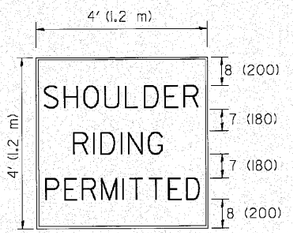
NOTE: CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS OR LESS.



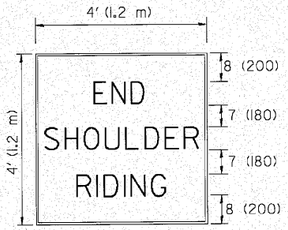
SIGNING AND BARRICADING ACCORDING TO FREEWAY STANDARD FOR A TWO LANE CLOSURE



SIGNING AND BARRICADING ACCORDING TO FREEWAY STANDARD FOR A ONE LANE CLOSURE



SIGN (1)



SIGN (2)

6 (150) SERIES 'C' LEGEND
BLACK LEGEND
WHITE REFLECT. BACKGROUND
1 (25) BORDER

SYMBOLS

- DIRECTION OF TRAFFIC
- ARROWBOARD
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT *
- TYPE II BARRICADE, OR DRUM WITH MONO-DIRECTIONAL STEADY BURN LIGHT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

* ALL SIGNS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).

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USER NAME = layse	DESIGNED -	REVISED - J.A.F. 04-03	
	DRAWN -	REVISED - S.P.B. 01-07	
PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - S.P.B. 12-09	
PLOT DATE = 1/26/2010	DATE -	REVISED -	

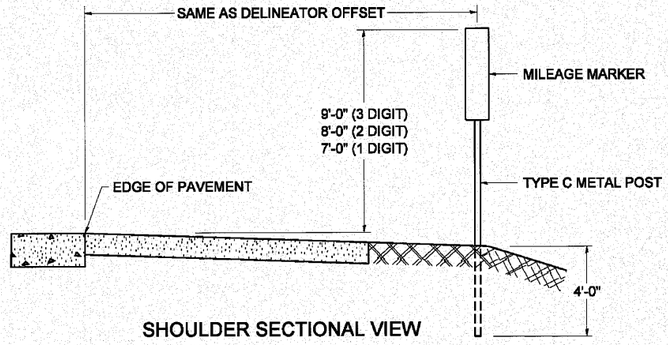
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY
CENTER LANE CLOSURE SHOULDER LANE

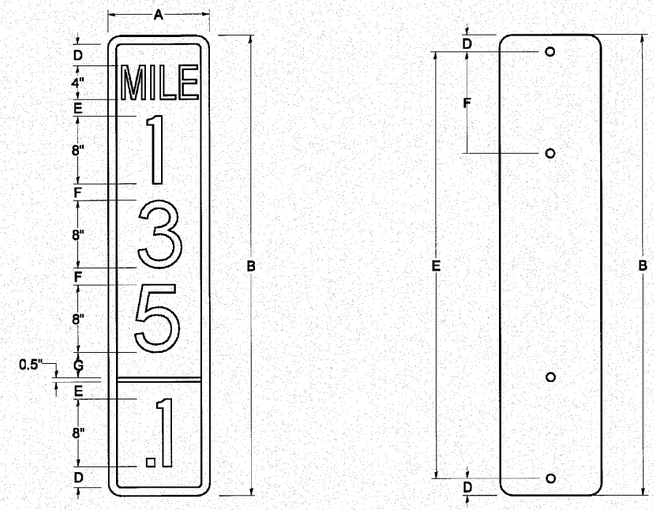
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	235
	TC-25	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

STANDARD DESIGN FOR MILE POST



SHOULDER SECTIONAL VIEW

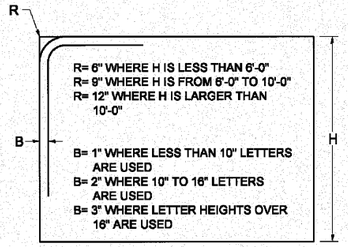


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12 x 36	12.0	36.0	1.5	2.0	2.0	2.0	1.5	2
12 x 48	12.0	48.0	1.5	2.5	2.0	2.0	2.5	3

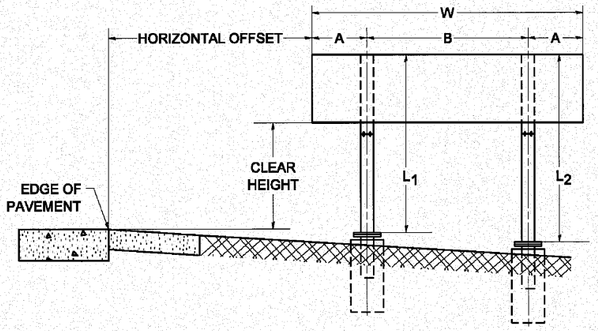
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12 x 36	4C	8D	8D	4C	N/A	0.5	B9-1236
12 x 48	4C	8D	8D	8D	4C	0.5	B9-1248

BLANK	A	B	C	D	E	F
B9-1224	12.0	24.0	1.5	2.0	20.0	N/A
B9-1236	12.0	36.0	1.5	2.0	32.0	12.0
B9-1248	12.0	48.0	1.5	2.0	44.0	12.0

BORDER AND RADIUS LAYOUT



MAJOR GUIDE SIGN LAYOUT

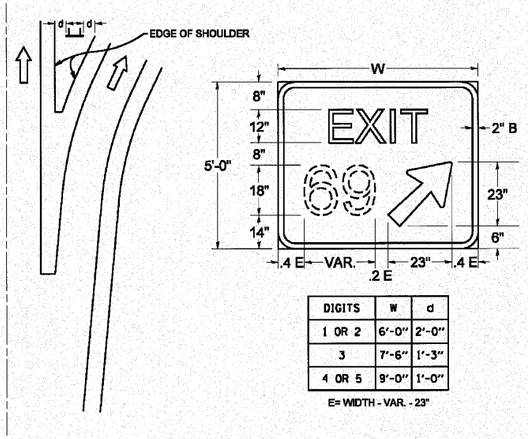


NUMBER OF STEEL SUPPORTS	A	B
2	.2 W	.6 W
3	.15 W	.35 W
4	.125 W	.25 W
5	.1 W	.2 W

"L_1" IS THE LENGTH OF SUPPORT, NOT INCLUDING THE STUB PROJECTION, CLOSEST TO THE EDGE OF THE PAVEMENT.

"A" IS THE DISTANCE FROM THE SIGN EDGE TO THE CENTERLINE OF THE NEAREST SUPPORT. "B" IS THE DISTANCE BETWEEN CENTERLINES OF SUPPORTS.

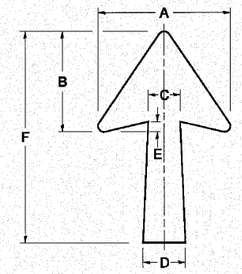
GORE SIGNS



DIGITS	W	d
1 OR 2	6'-0"	2'-0"
3	7'-6"	1'-3"
4 OR 5	9'-0"	1'-0"

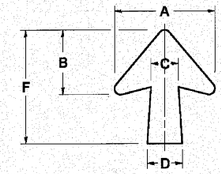
E= WIDTH - VAR. - 23"

STANDARD ARROWS FOR INTERSTATE GUIDE SIGNS



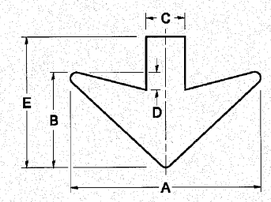
ARROW SYMBOL	A	B	C	D	E	F	R
24¼ x 15⅛	15⅛	11⅝	3¾	5	1⅝	24¼	⅝
29¼ x 18¼	18¼	14	4½	6	1½	29¼	¾
35⅝ x 22¼	22¼	17	5⅜	7⅛	1¾	35⅝	1
18¼ x 11¼	11¼	8¾	3⅛	3⅞		18¼	

NOTE: D & F ARE RECOMMENDED DIMENSIONS. TAPER SHOULD BE HELD CONSTANT FOR LONGER OR SHORTER SHAFT LENGTHS



ARROW SYMBOL	A	B	C	D	E	F	R
17¼ x 14¼	14¼	9⅝	3⅜	4½	⅝	17¼	¾
20¼ x 17¼	17¼	11¾	4⅜	5⅝	1½	20¼	
25 x 21⅞	21⅞	14¼	5	6¾	1¾	25	1
9⅝ x 8⅛	8⅛	5⅛	2⅝	2⅝		9⅝	½

DOWN ARROWS



ARROW SYMBOL	A	B	C	D	E	R
16½ x 24	24	12	5	1½	16½	¾
22 x 32	32	16	6½	3	22	1

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Email: info@cierba.com

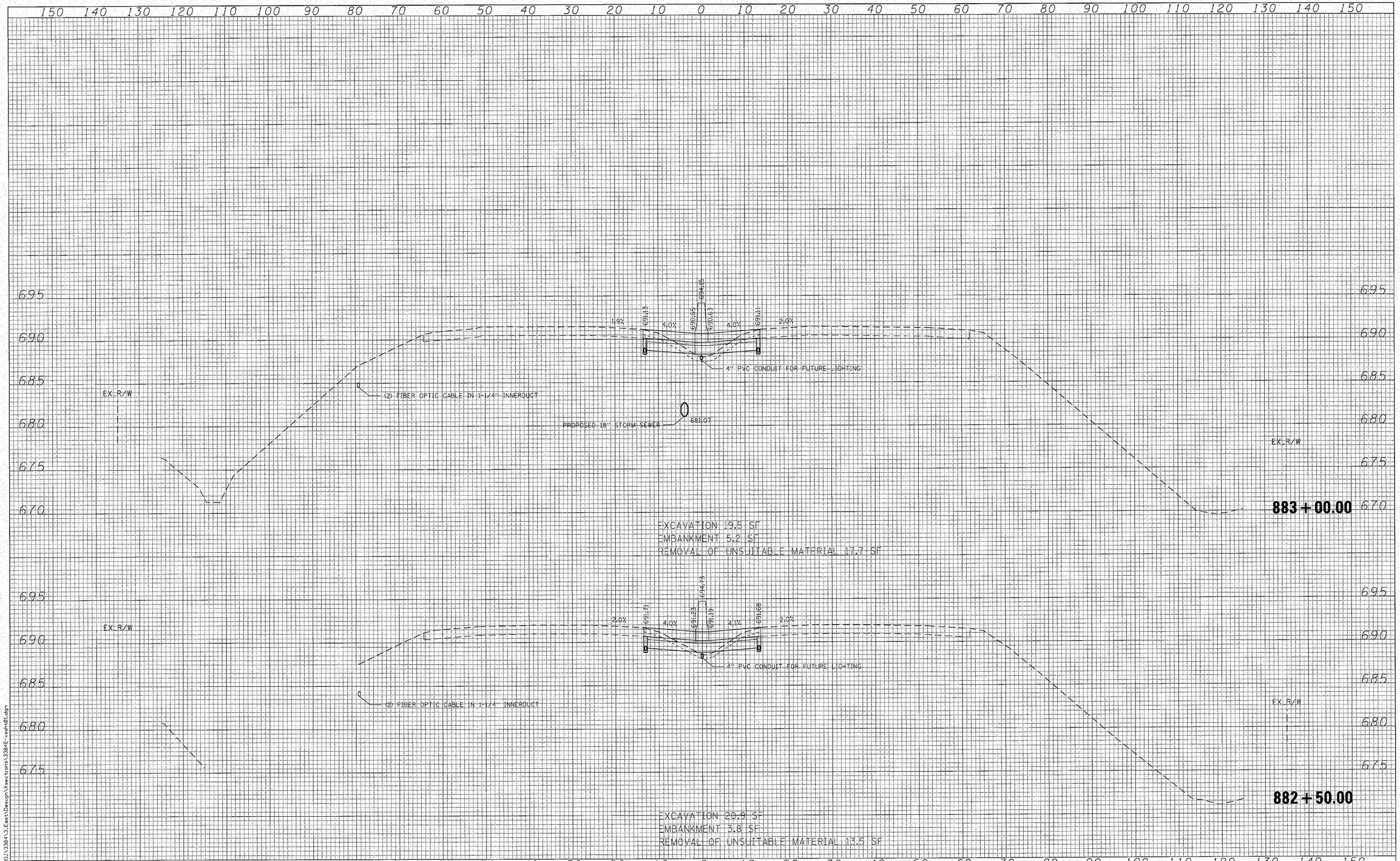
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MILE POST MARKERS – GORE SIGNS
MAJOR GUIDE SIGN LAYOUT – ARROWS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(S&S-1) Y-1	WILL	309	236
	TC-27 (TS-2341-1)	CONTRACT NO. 60M59		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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	DRAWN - WBL	REVISED -	
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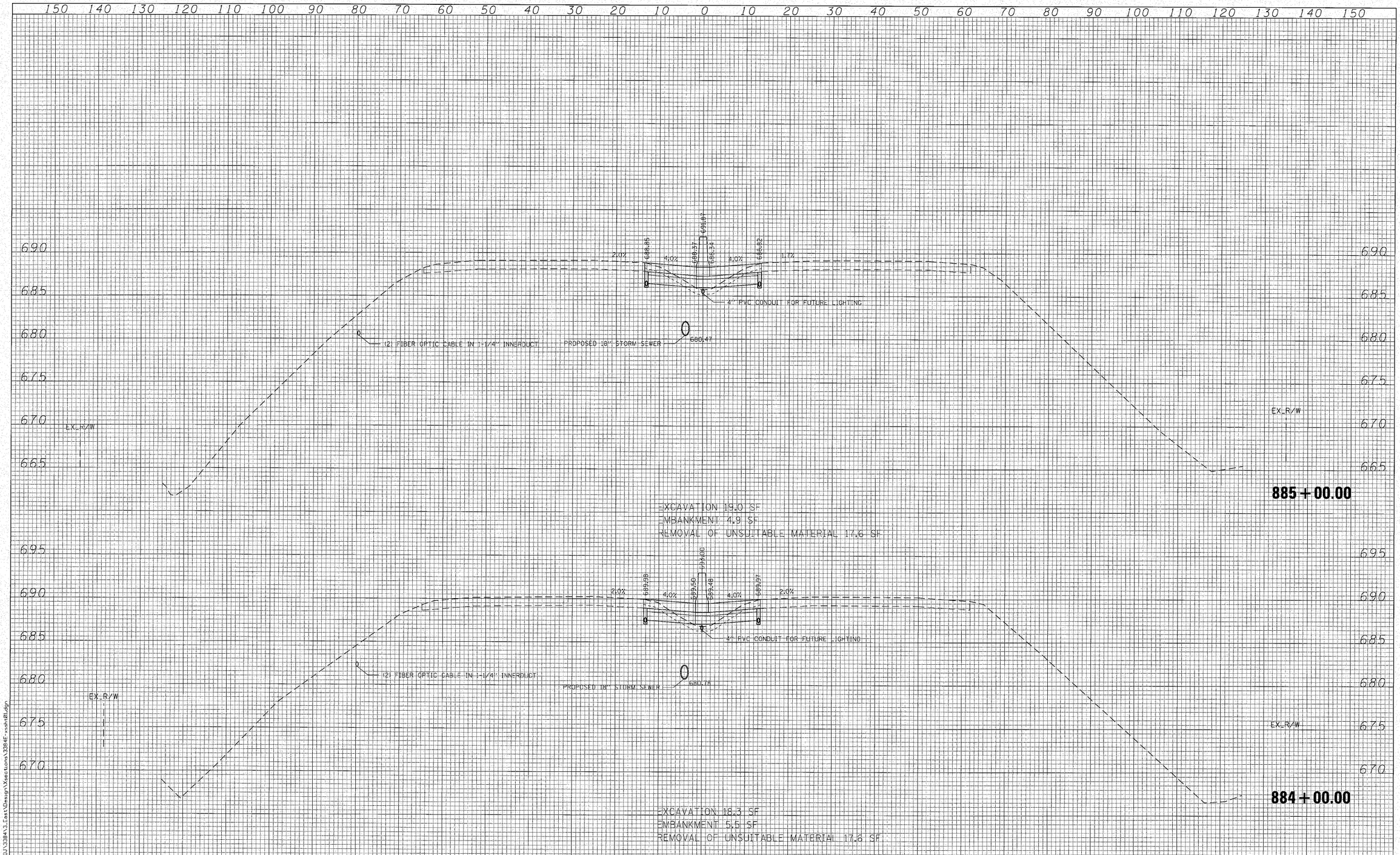
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 882+50.00 TO STA. 883+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	237
		CONTRACT NO. 60M59		

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



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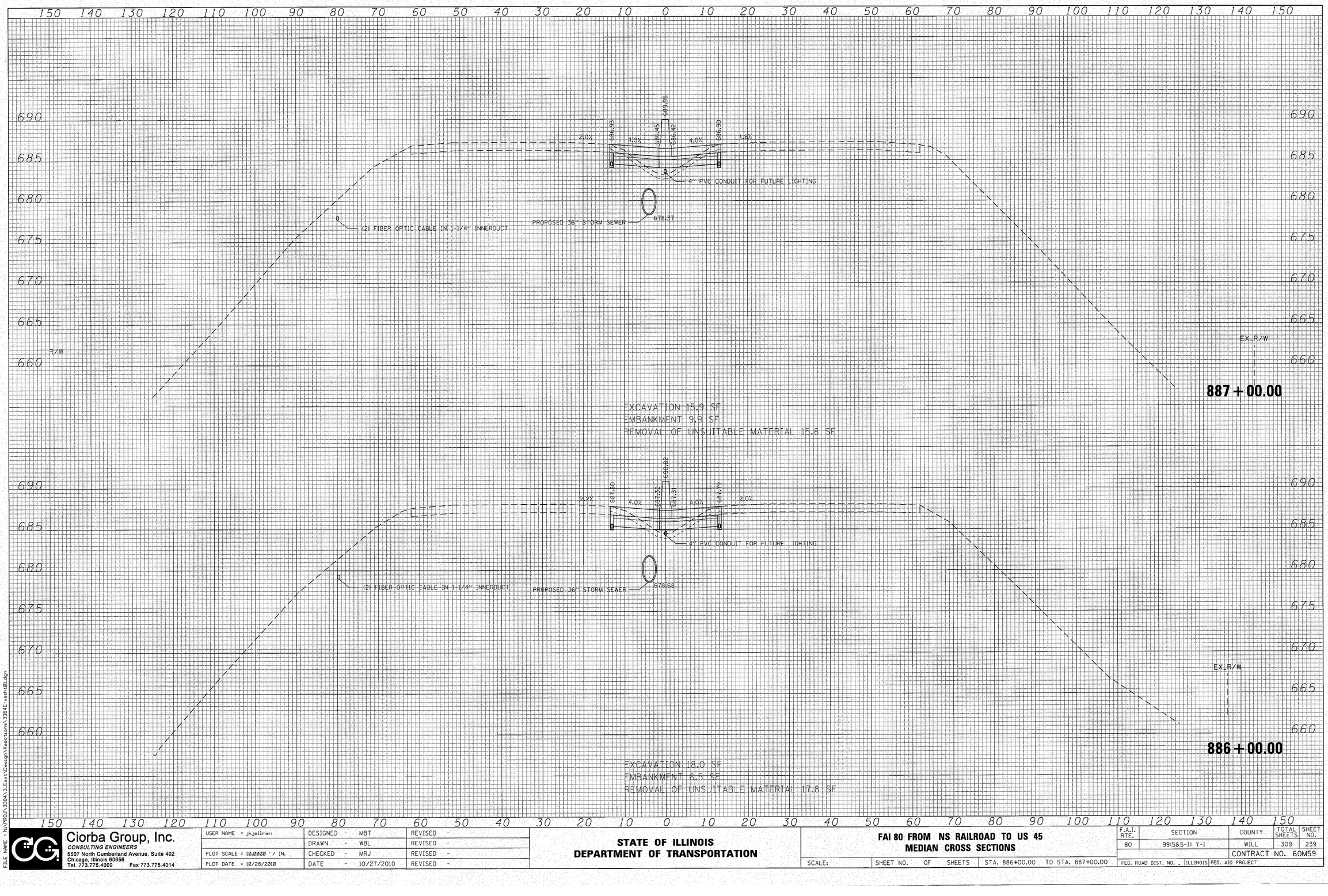
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 884+00.00 TO STA. 885+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	238
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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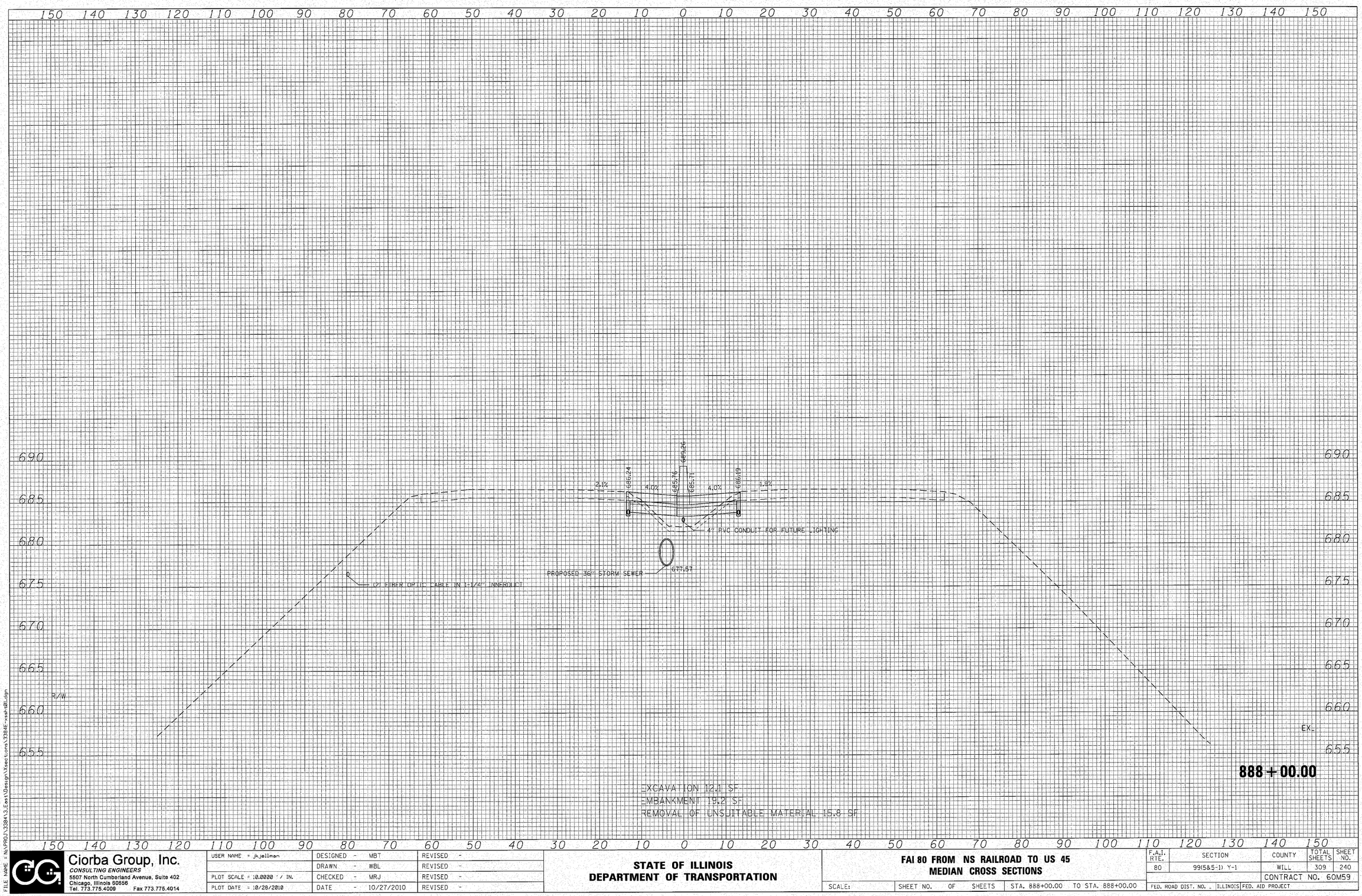
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PLOT DATE = 12/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 886+00.00 TO STA. 887+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	239
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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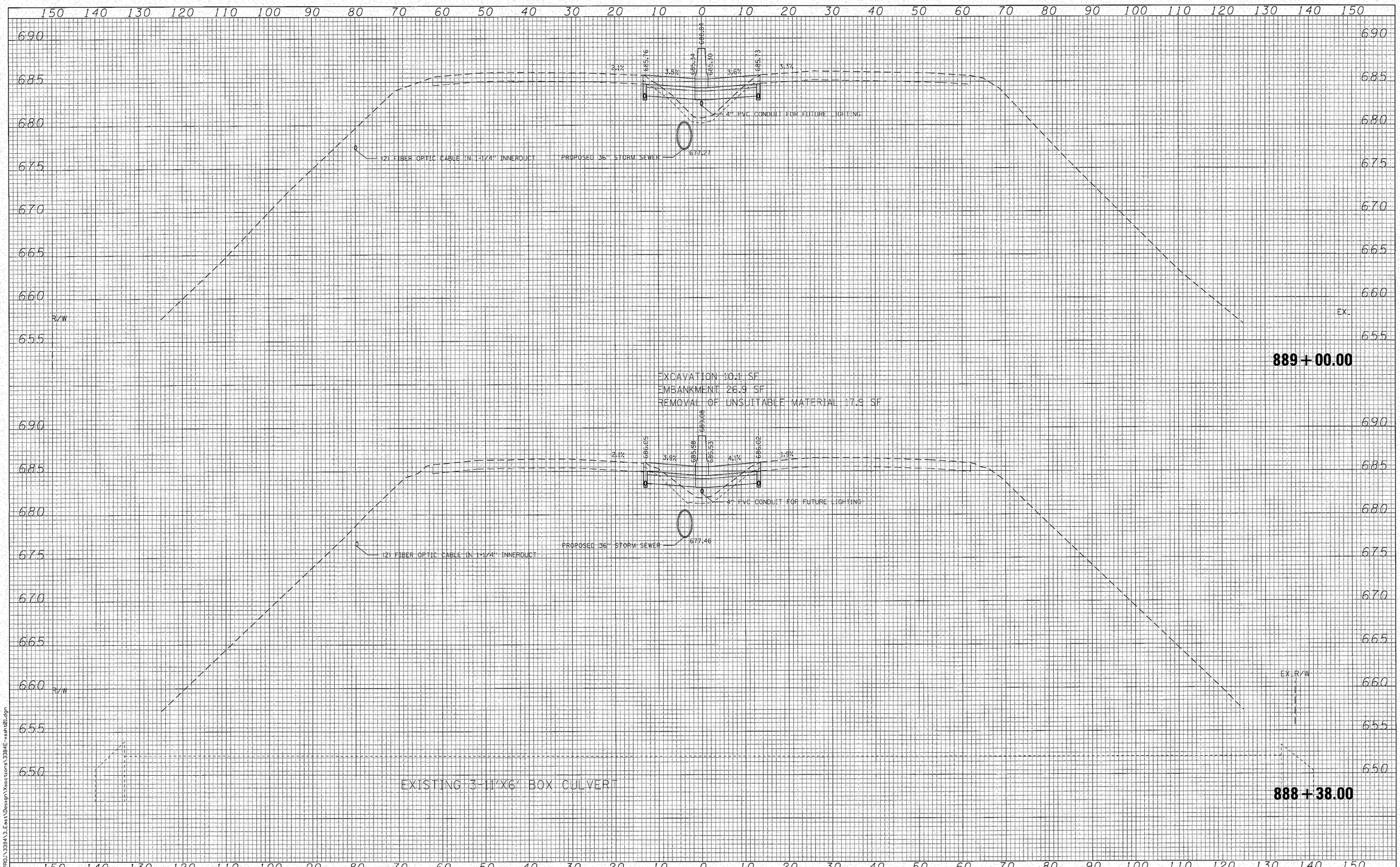
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 888+00.00 TO STA. 888+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	240
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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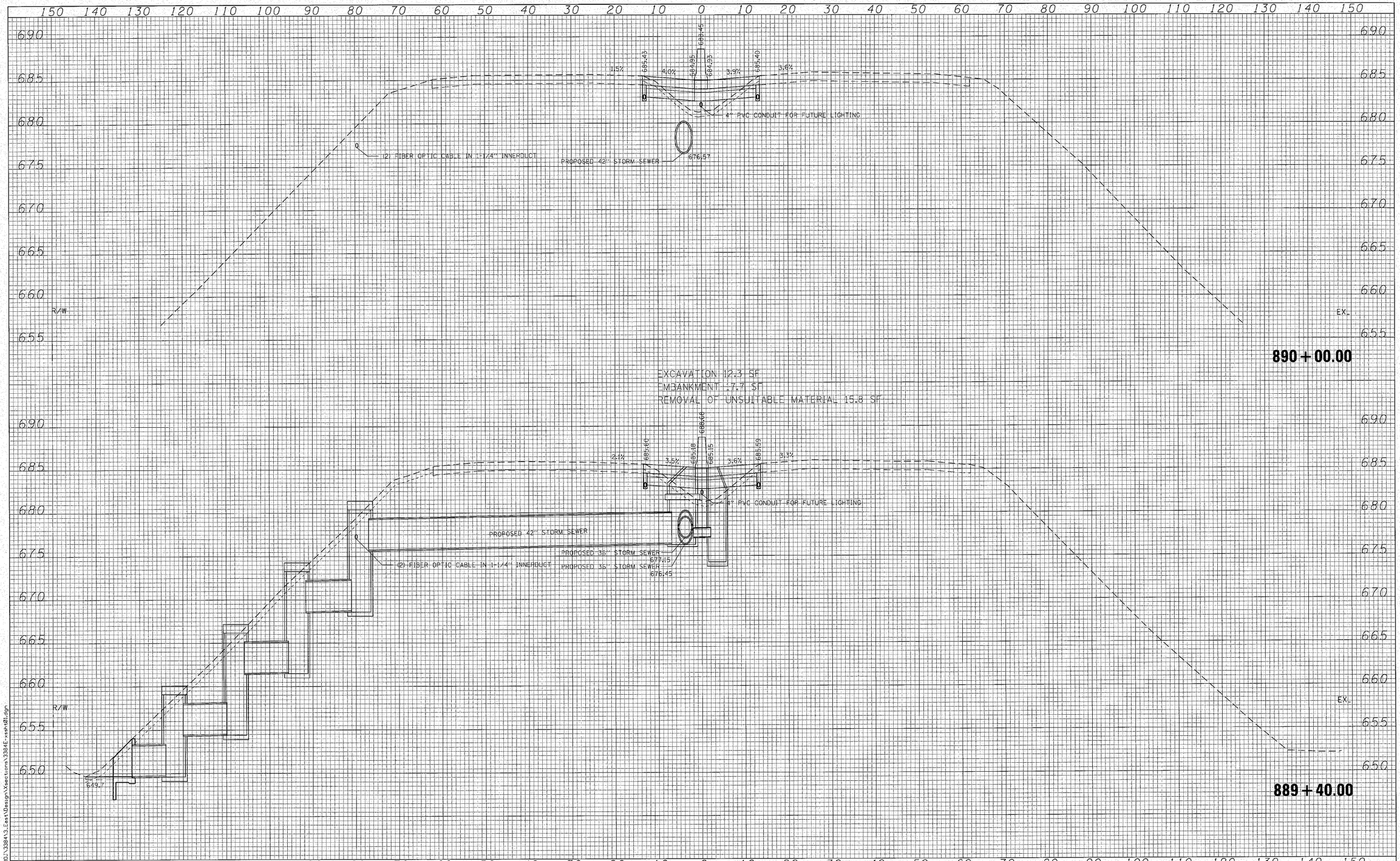
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 888+38.00 TO STA. 889+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	241
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

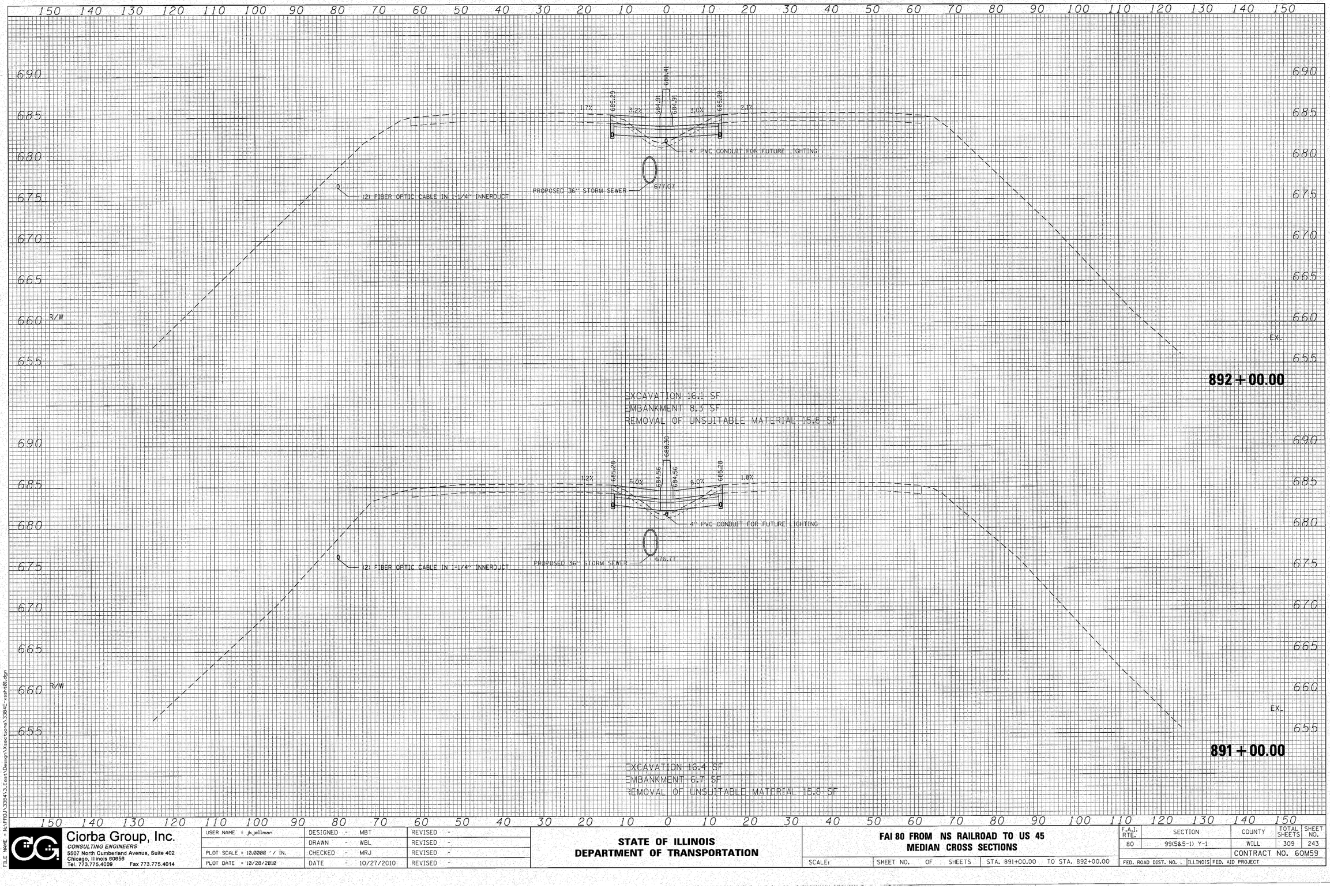
FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 889+40.00 TO STA. 890+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	242

CONTRACT NO. 60M59

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



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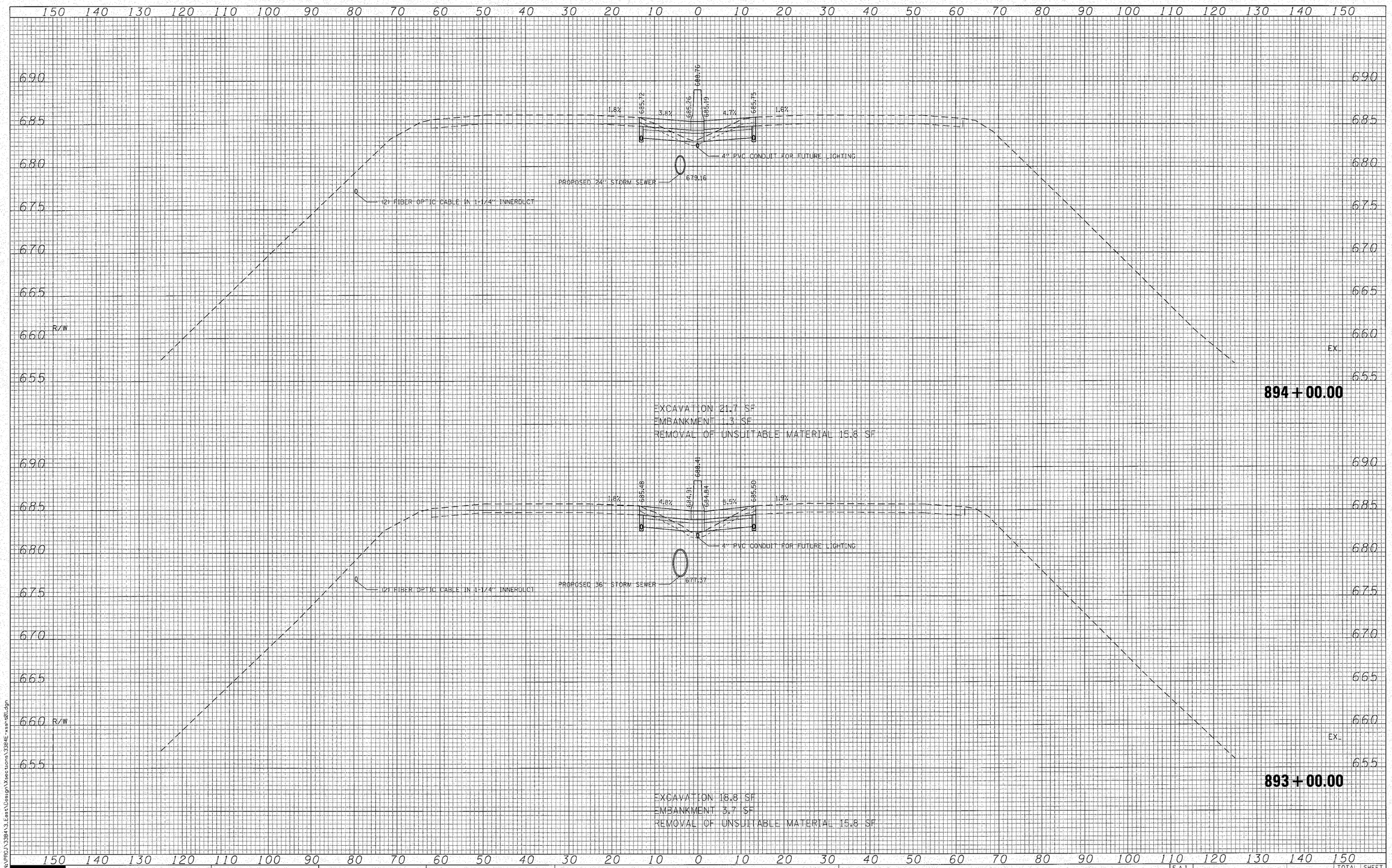
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 891+00.00 TO STA. 892+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	243
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 893+00.00 TO STA. 894+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	244
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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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

690 685 680 675 670 665 660 655

R/W

EX.

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

PROPOSED 18" STORM SEWER

4" PVC CONDUIT FOR FUTURE LIGHTING

680.27

686.28 685.97 685.89 686.23 691.47

1.8% 2.6% 2.8% 1.6%

896 + 00.00

EXCAVATION 27.9 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

690 685 680 675 670 665 660 655

R/W

EX.

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

PROPOSED 24" STORM SEWER

4" PVC CONDUIT FOR FUTURE LIGHTING

679.47

685.96 685.62 685.54 686.00 689.12

1.9% 2.6% 3.8% 1.4%

895 + 00.00

EXCAVATION 24.8 SF
EMBANKMENT 0.1 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

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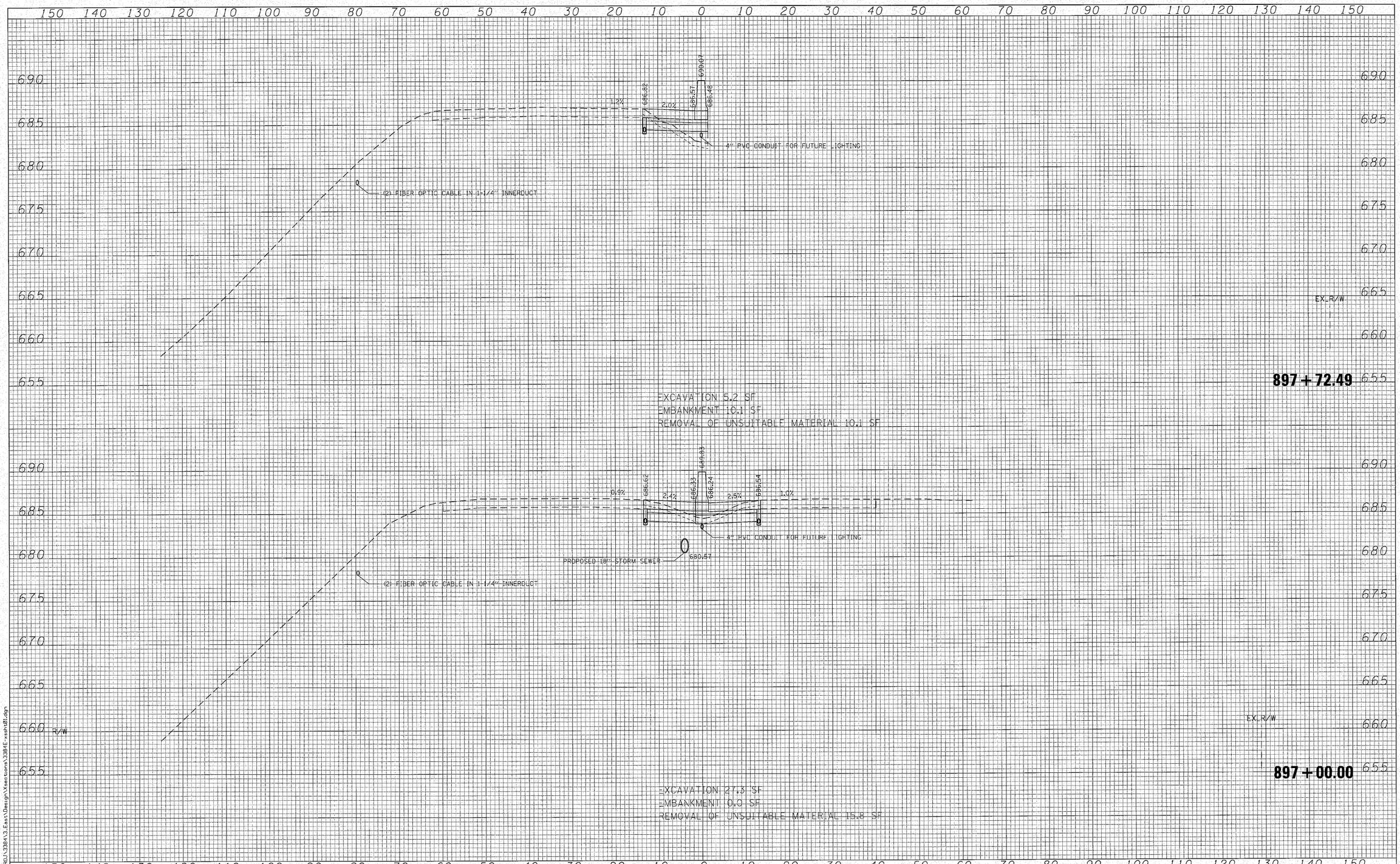
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 895+00.00 TO STA. 896+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	245
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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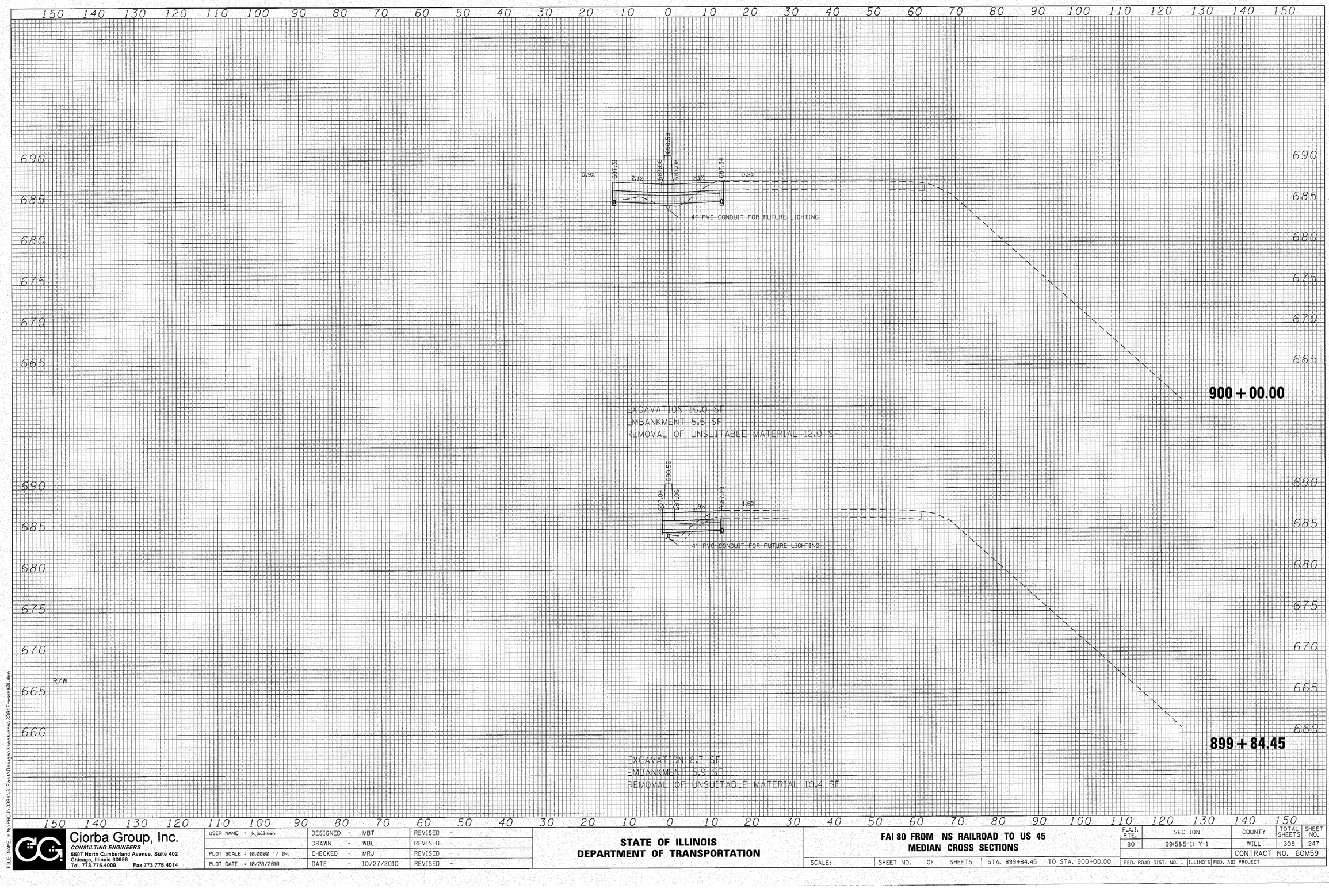
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 897+00.00 TO STA. 897+72.49

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	246
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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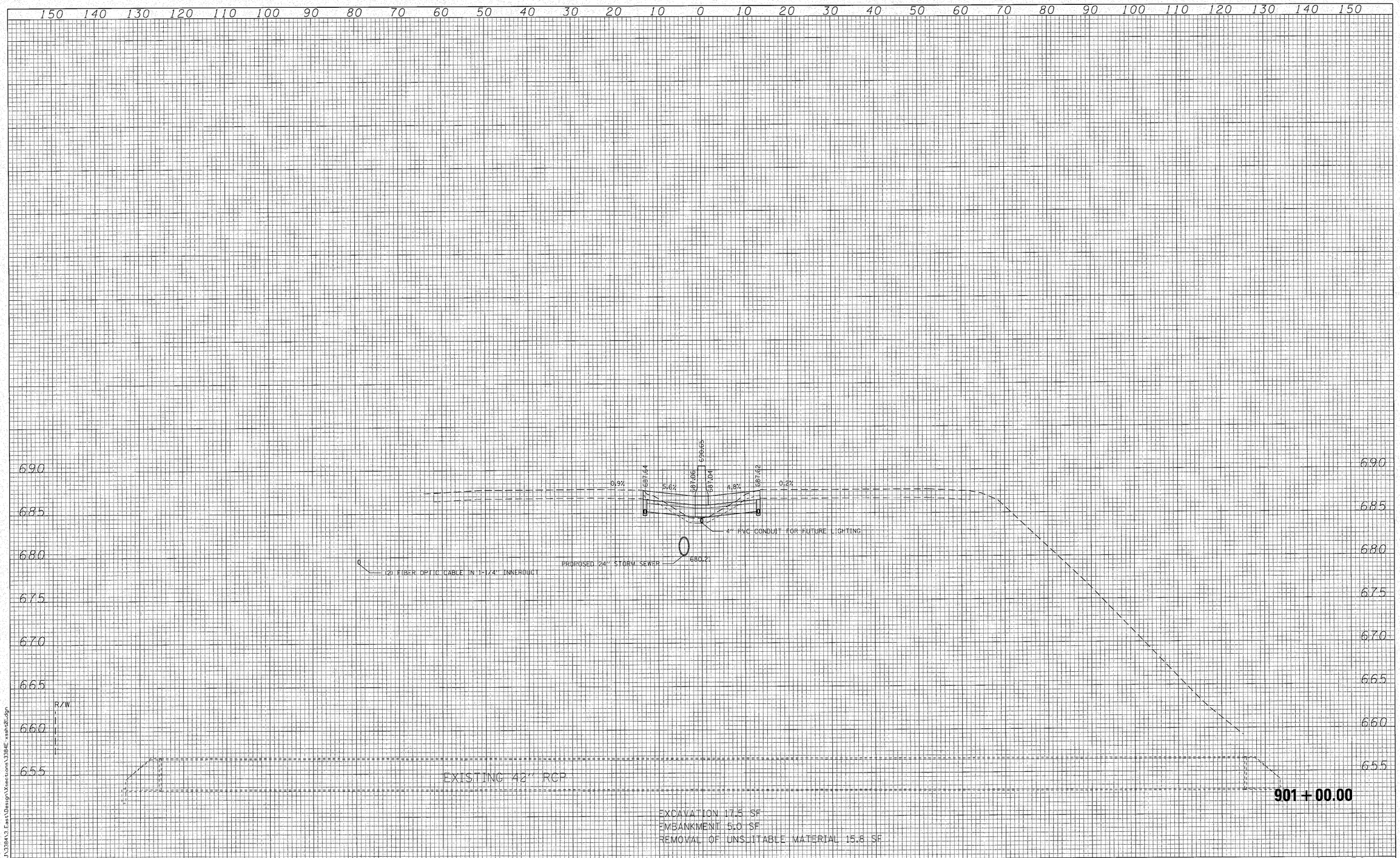
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 899+84.45 TO STA. 900+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	247
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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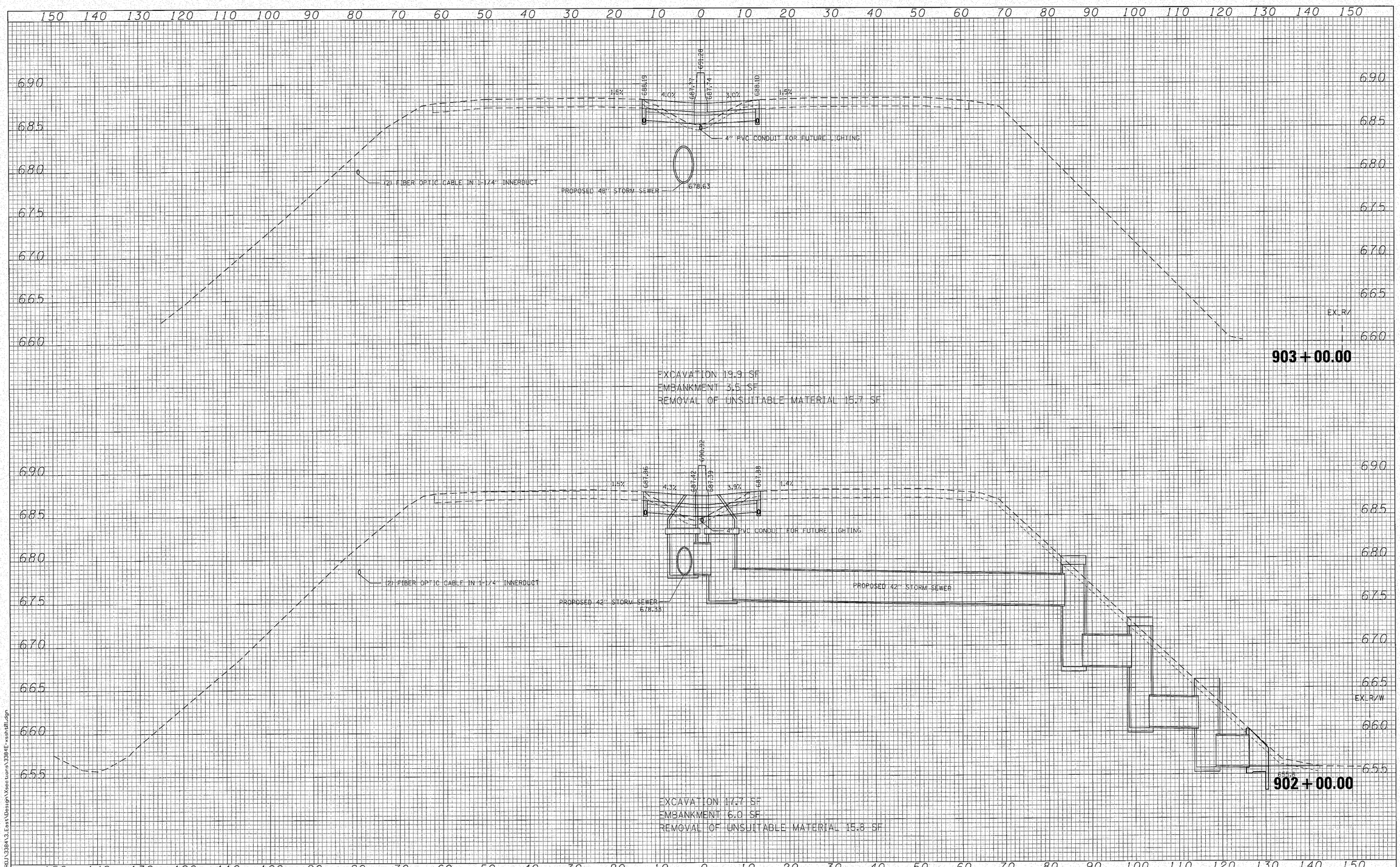
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 901+00.00 TO STA. 901+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	248
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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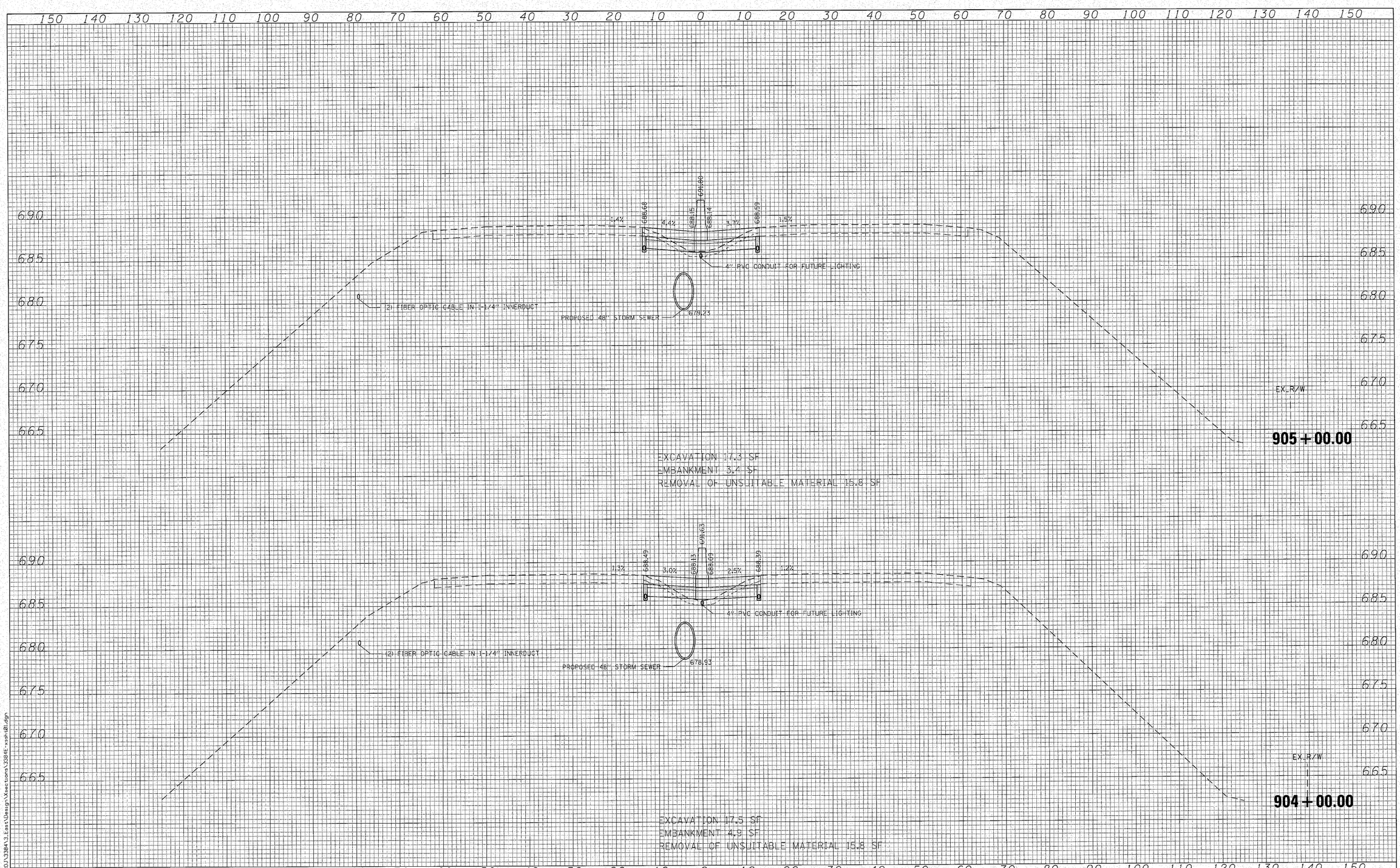
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 902+00.00 TO STA. 903+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	249
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.776.4009 Fax 773.775.4014

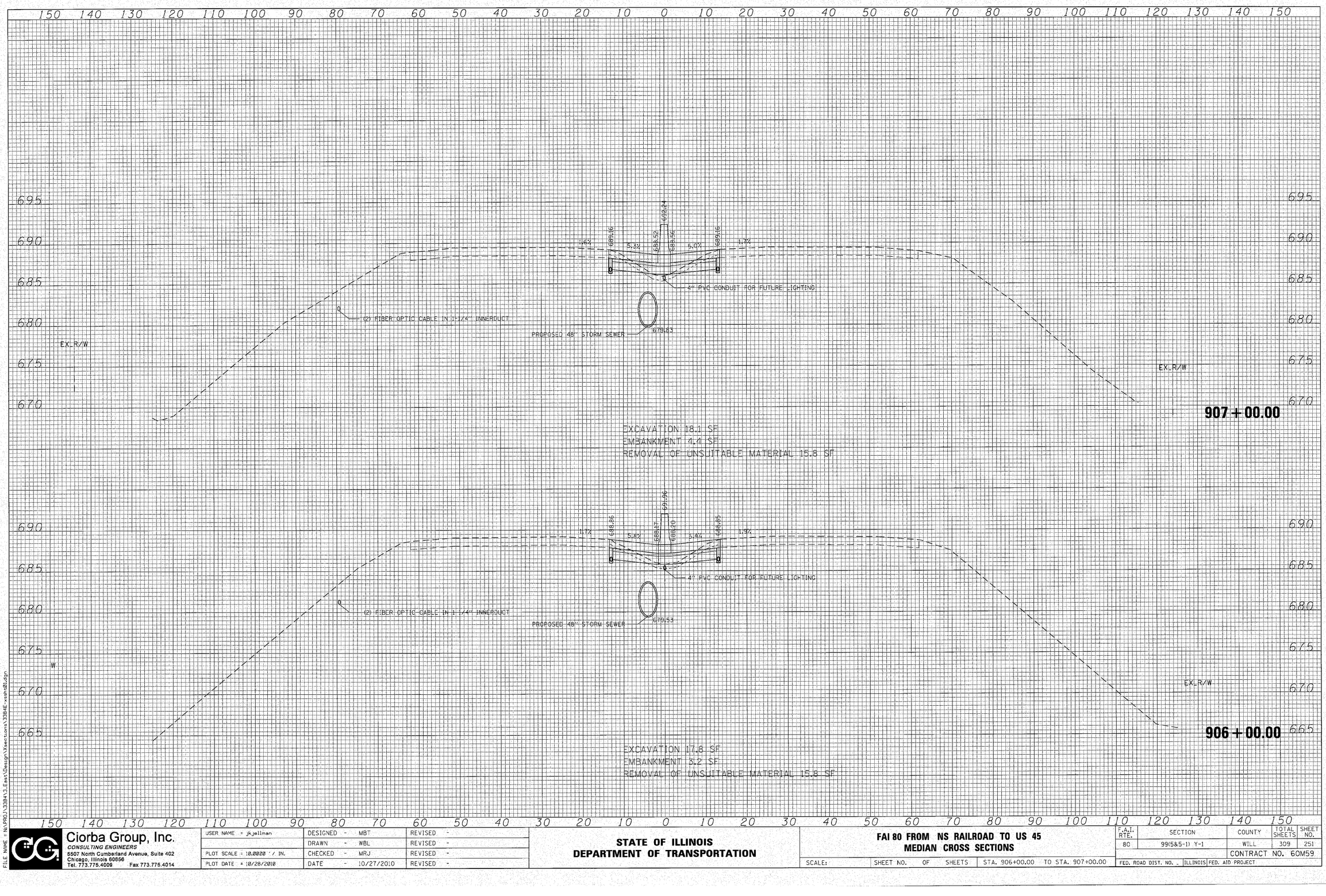
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 904+00.00 TO STA. 905+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	250
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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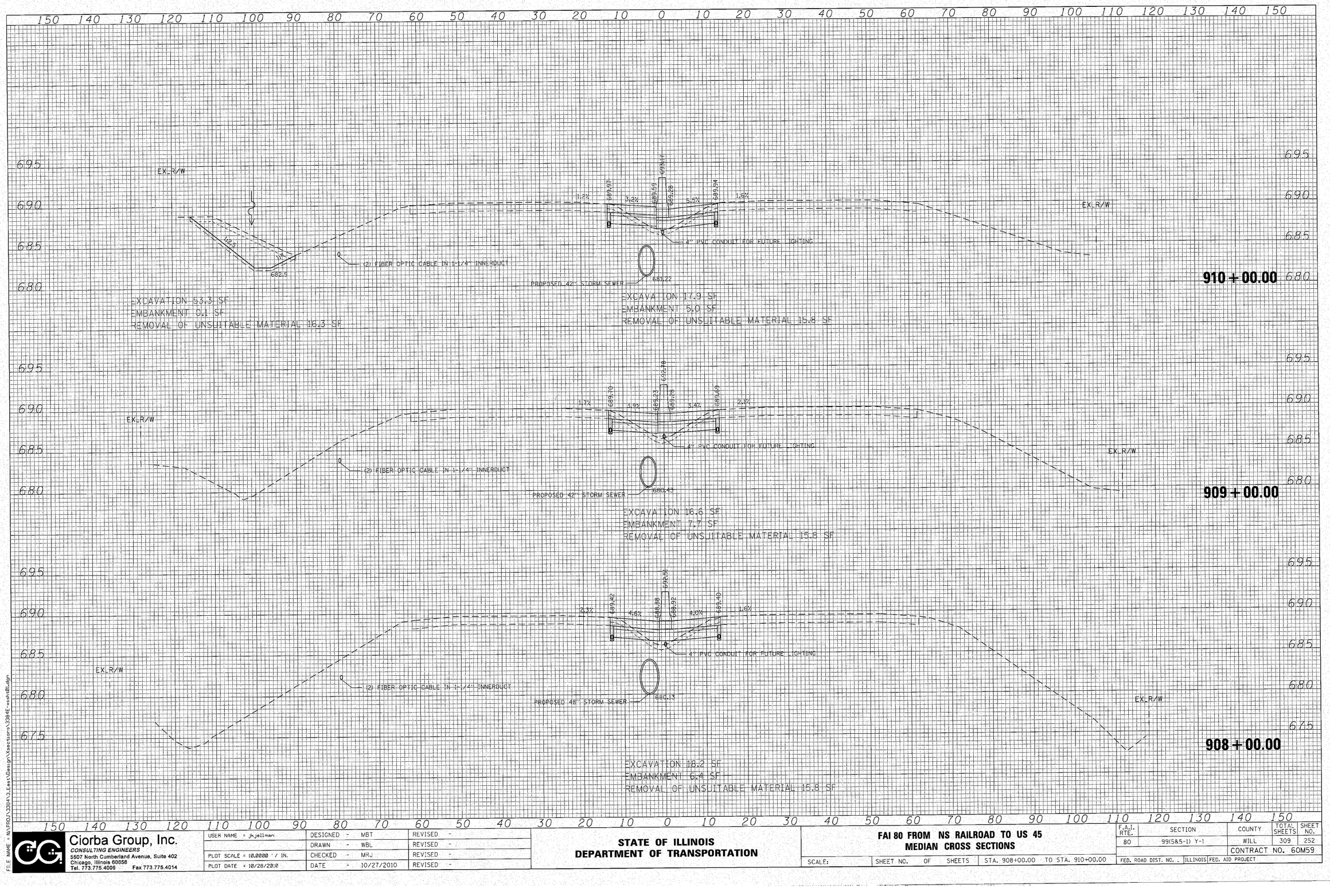
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 906+00.00 TO STA. 907+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	251
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 908+00.00 TO STA. 910+00.00

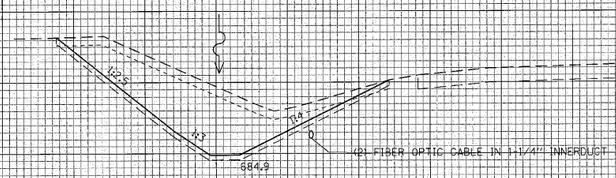
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	252
		CONTRACT NO. 60M59		

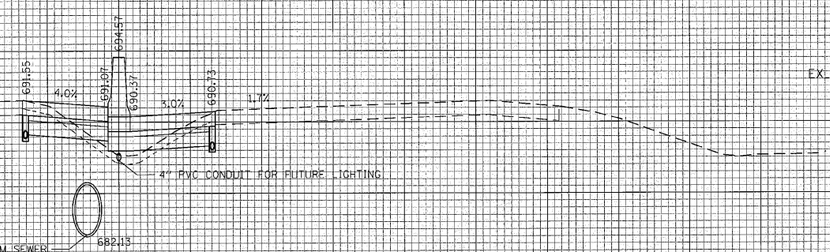
FED. ROAD DIST. NO. _ | ILLINOIS | FED. AID PROJECT

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695
690
685

EX. R/W



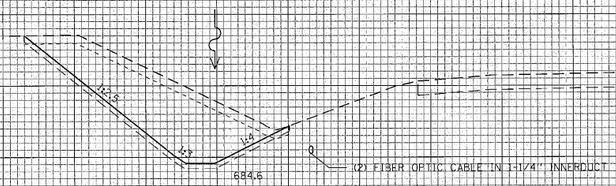


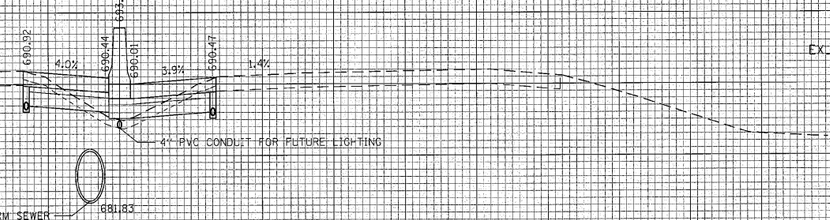
EXCAVATION 105.7 SF
EMBANKMENT 0.3 SF
REMOVAL OF UNSUITABLE MATERIAL 28.9 SF

EXCAVATION 17.6 SF
EMBANKMENT 6.7 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

913 + 00.00

EX. R/W



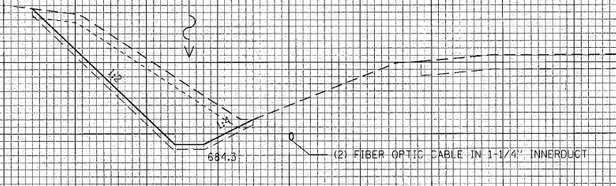


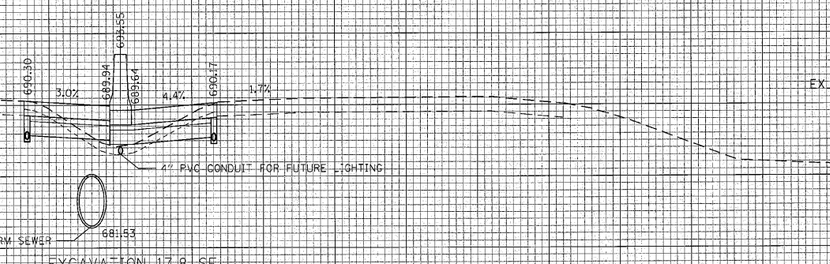
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EMBANKMENT 0.3 SF
REMOVAL OF UNSUITABLE MATERIAL 23.5 SF

EXCAVATION 17.9 SF
EMBANKMENT 4.3 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

912 + 00.00

EX. R/W





EXCAVATION 78.5 SF
EMBANKMENT 0.1 SF
REMOVAL OF UNSUITABLE MATERIAL 20.6 SF

EXCAVATION 17.8 SF
EMBANKMENT 5.1 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

911 + 00.00

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

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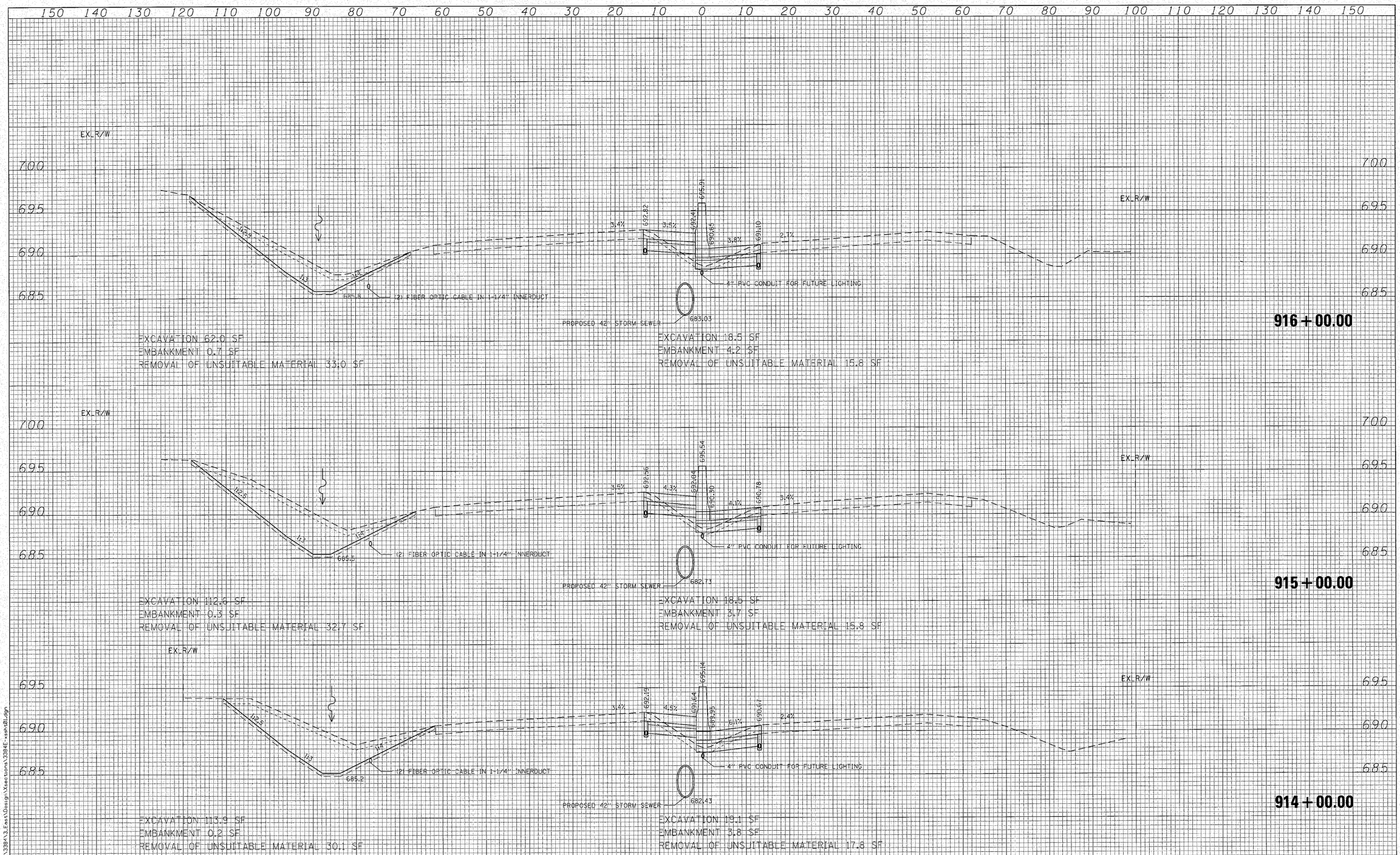
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 911+00.00 TO STA. 913+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	253
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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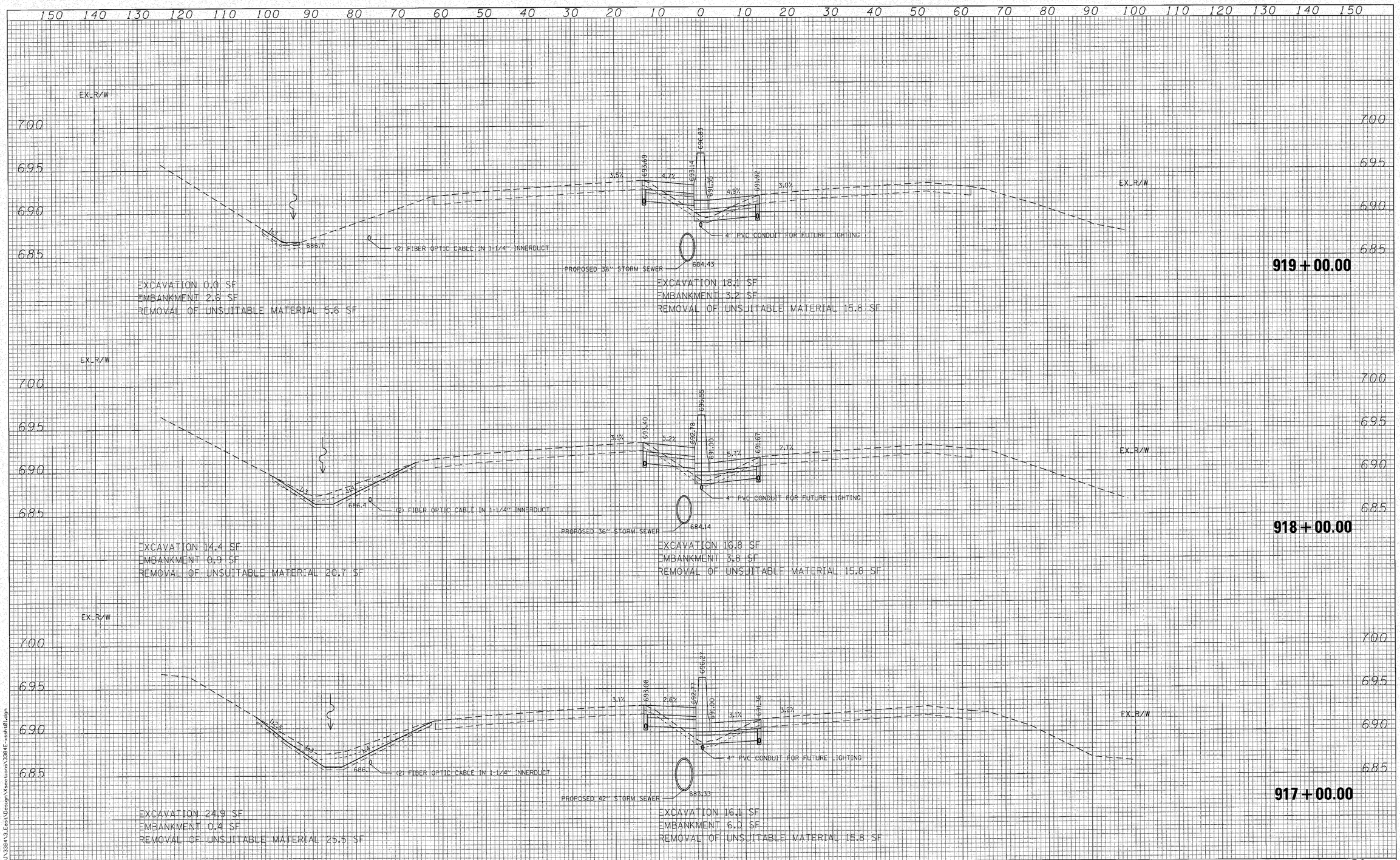
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 914+00.00 TO STA. 916+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	254
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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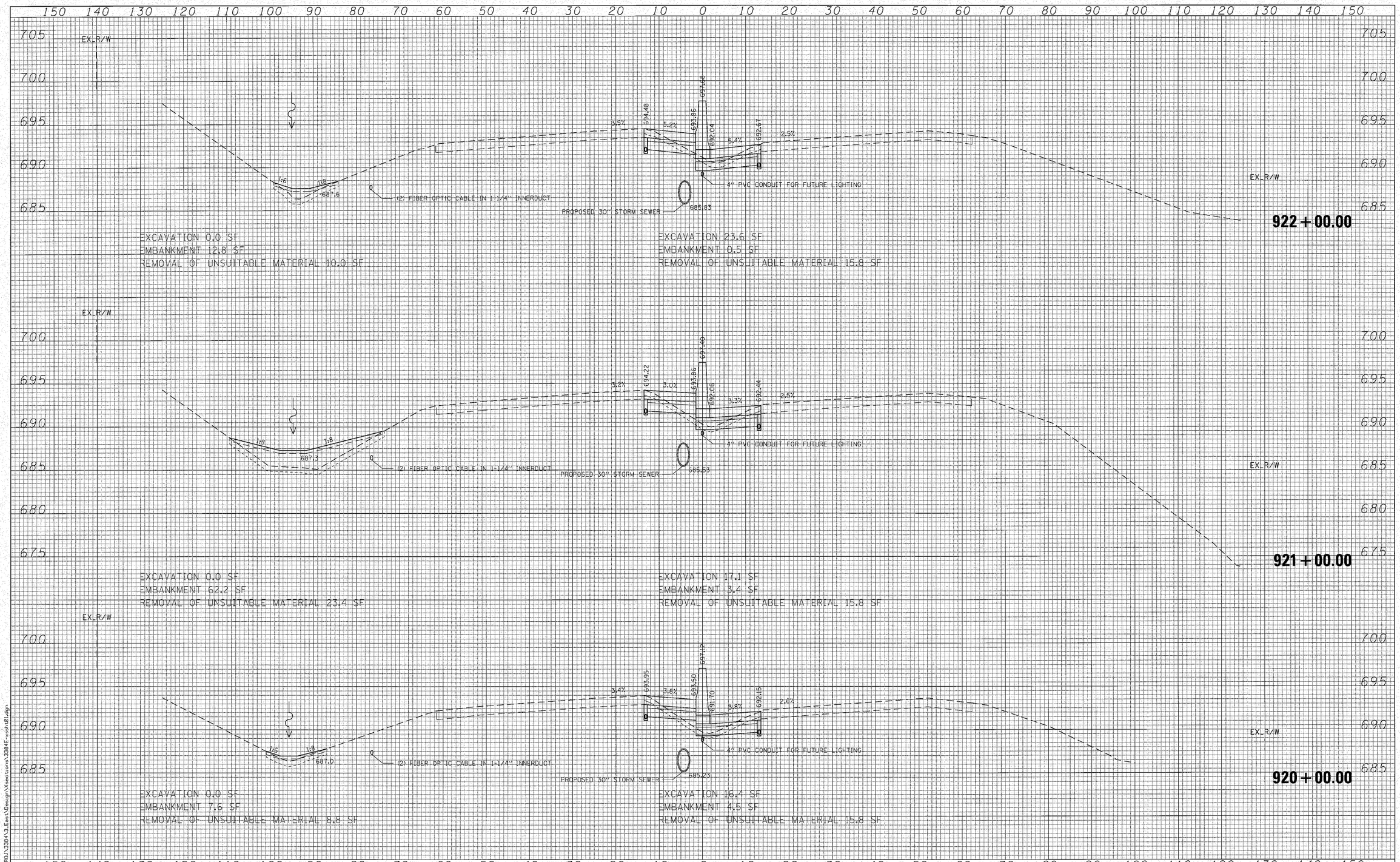
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 917+00.00 TO STA. 919+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	255
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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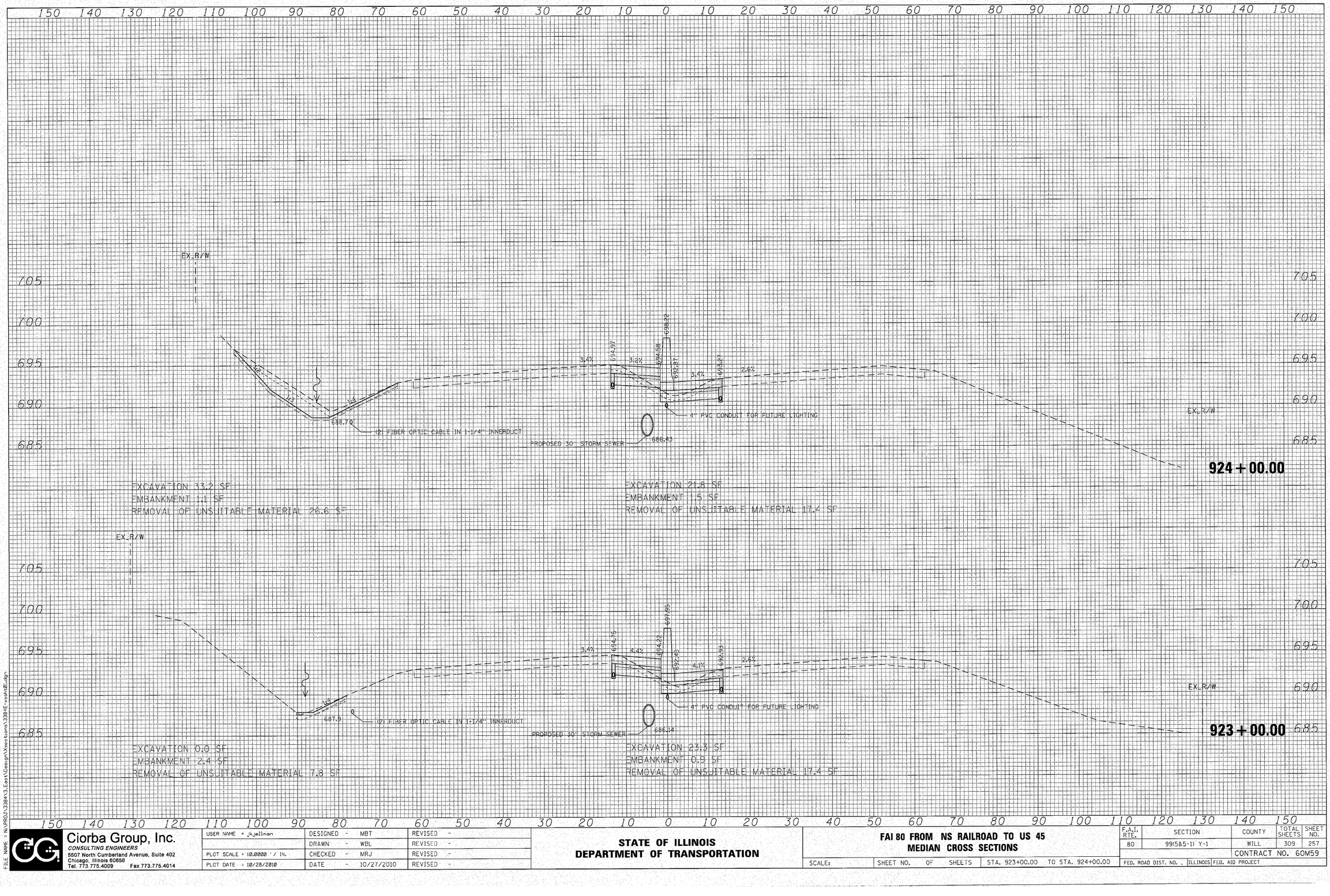
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 920+00.00 TO STA. 922+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	256
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

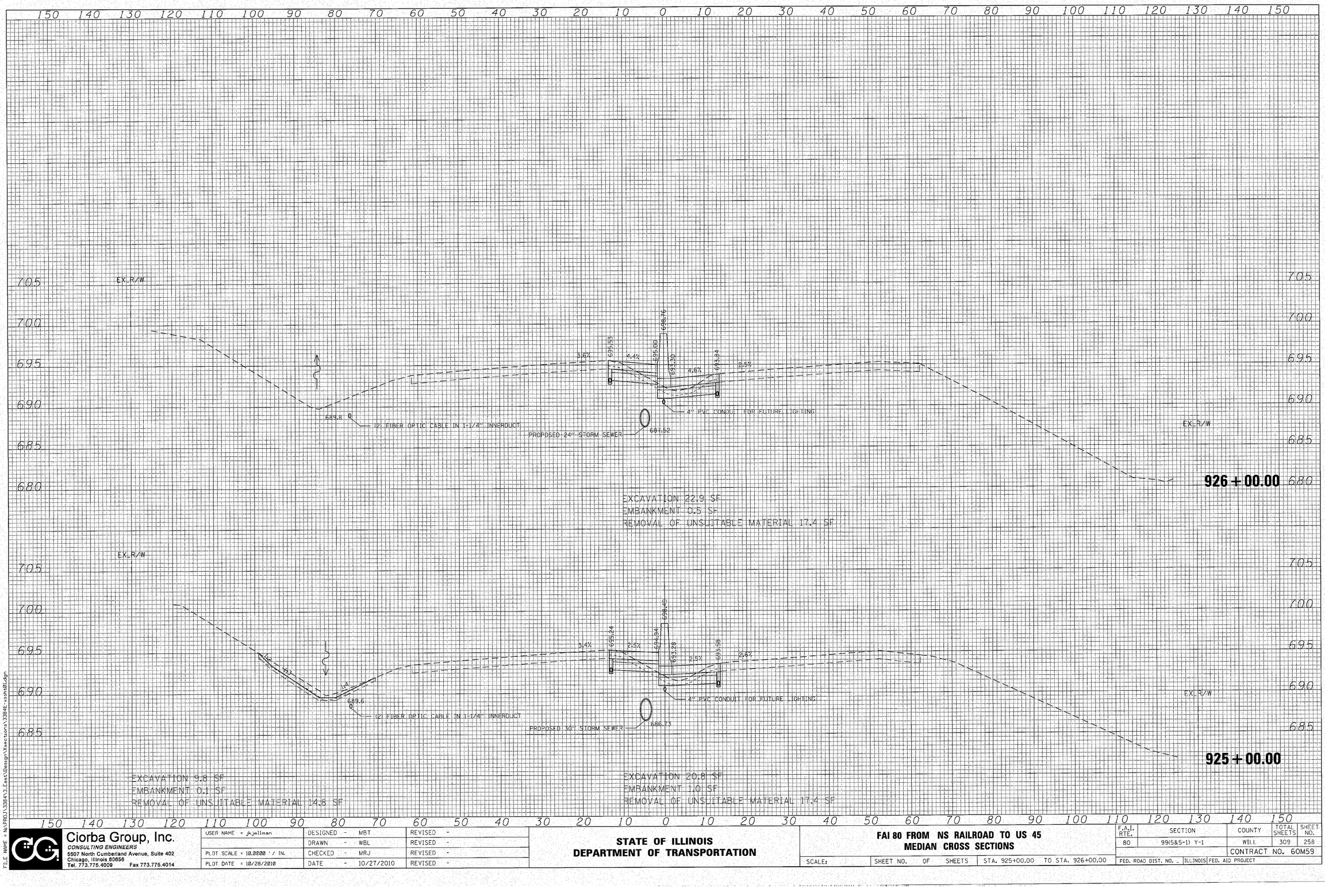
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 923+00.00 TO STA. 924+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	257
		CONTRACT NO. 60M59		

FED. ROAD DIST. NO. - | ILLINOIS | FED. AID PROJECT



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

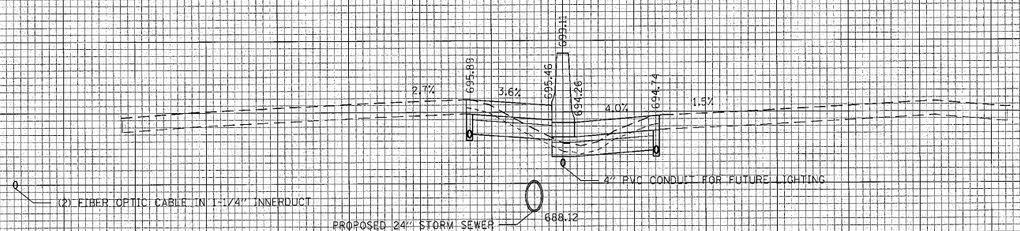
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	258
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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710
705
700
695
690
685

EX. R/W

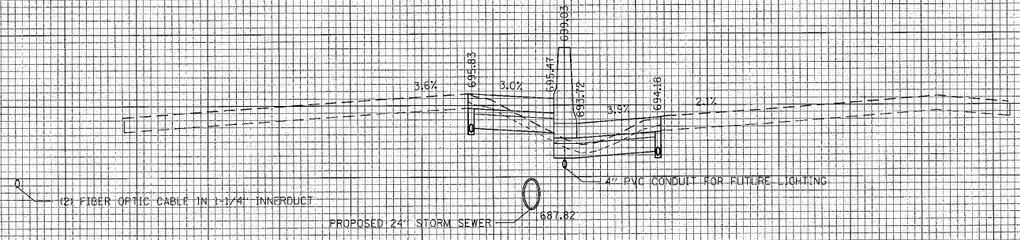


EX. R/W

928 + 00.00

EXCAVATION 23.5 SF
EMBANKMENT 8.5 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

EX. R/W



EX. R/W

927 + 00.00

EXCAVATION 23.6 SF
EMBANKMENT 0.8 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

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

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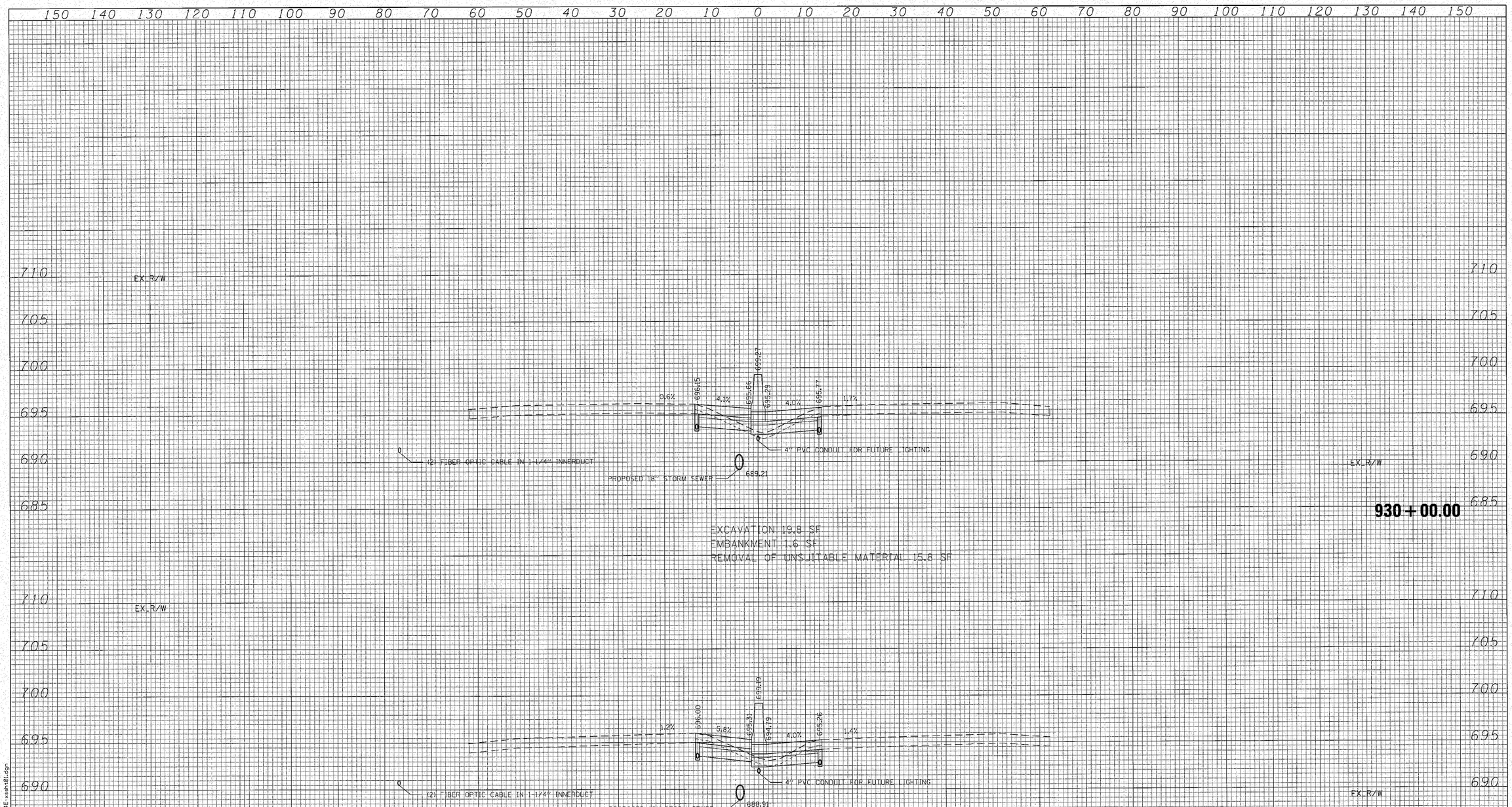
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 927+00.00 TO STA. 928+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	259
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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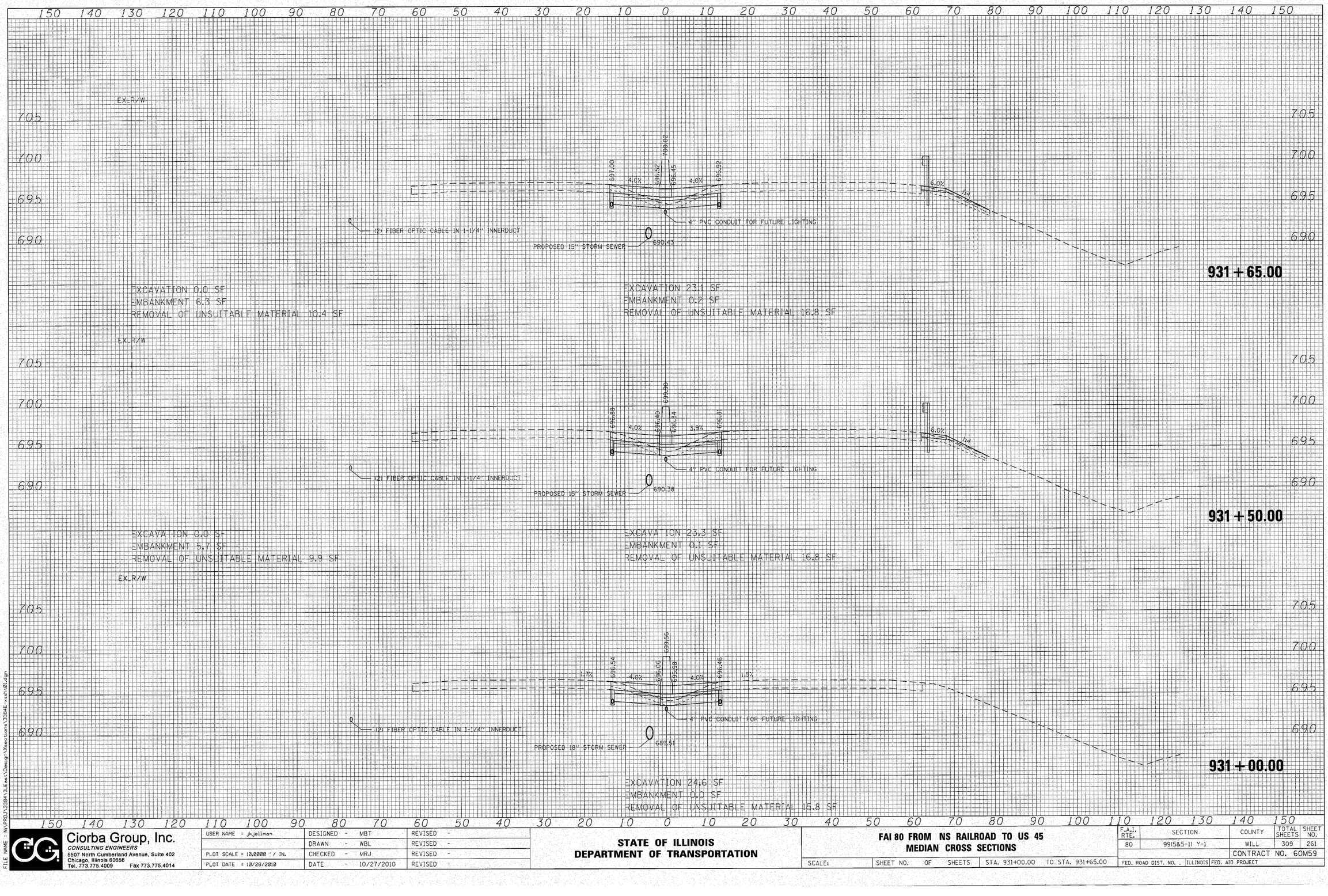
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 929+00.00 TO STA. 930+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	260
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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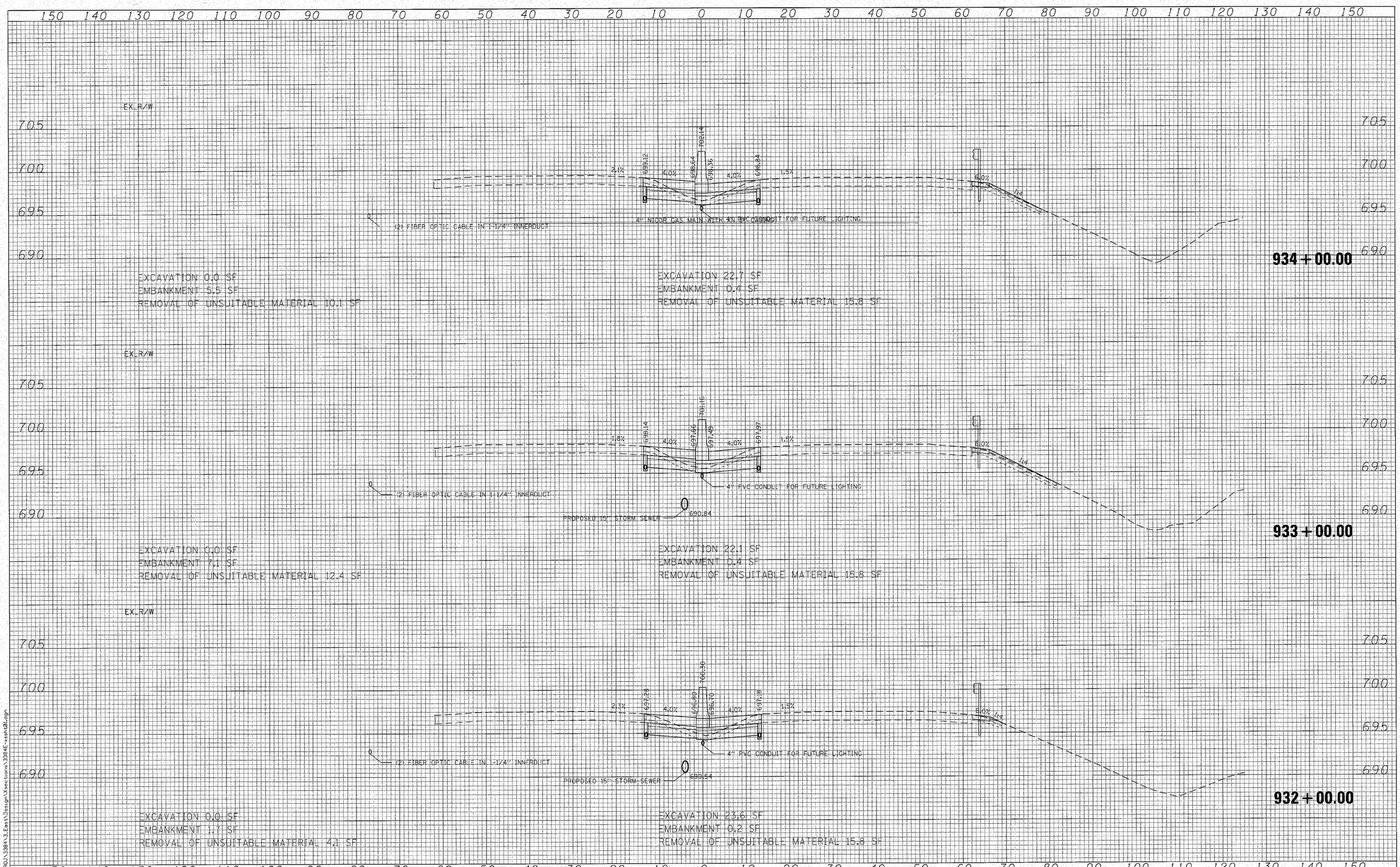
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 931+00.00 TO STA. 931+65.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	261
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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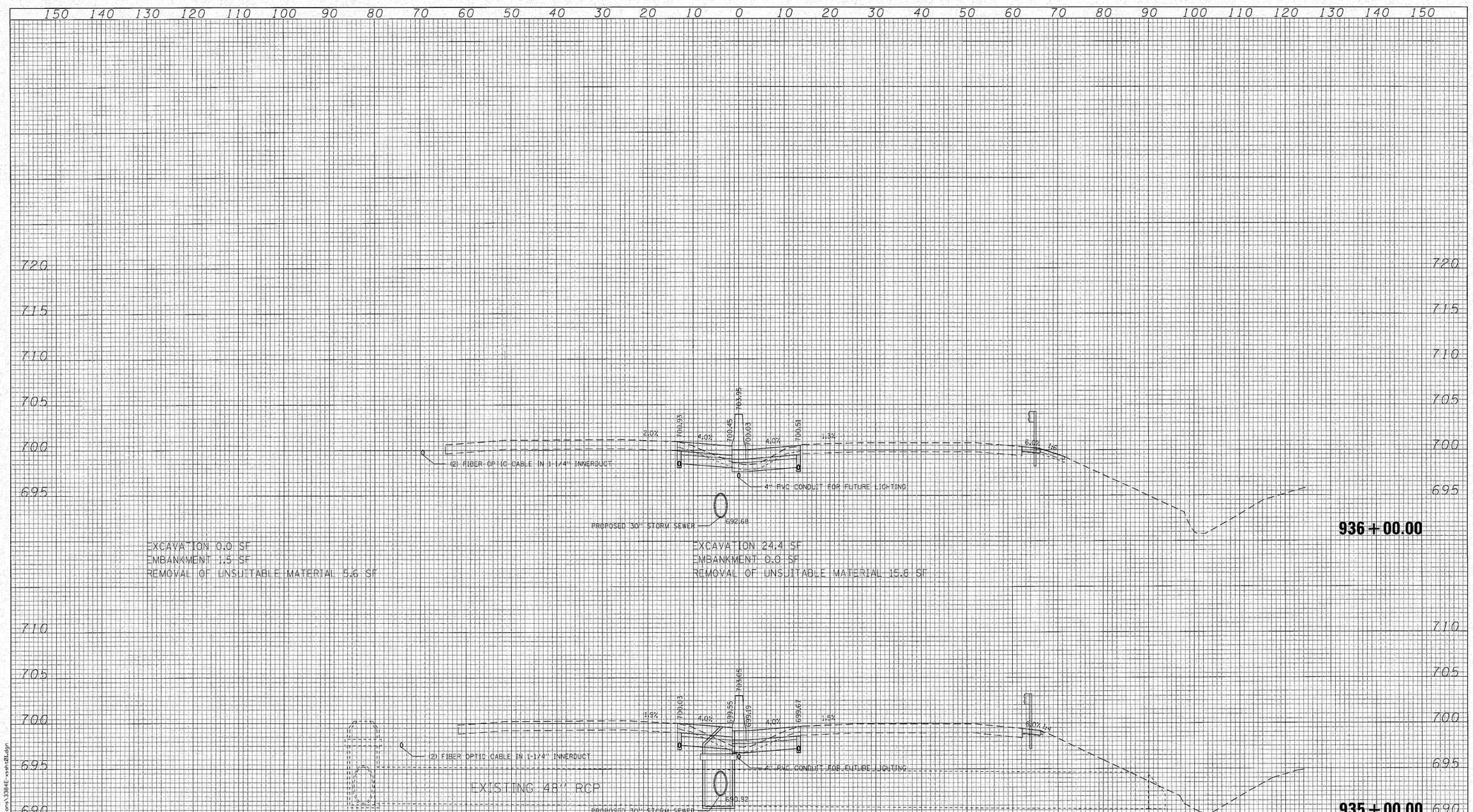
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 932+00.00 TO STA. 934+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	262
		CONTRACT NO. 60M59		

FED. ROAD DIST. NO. - | ILLINOIS | FED. AID PROJECT



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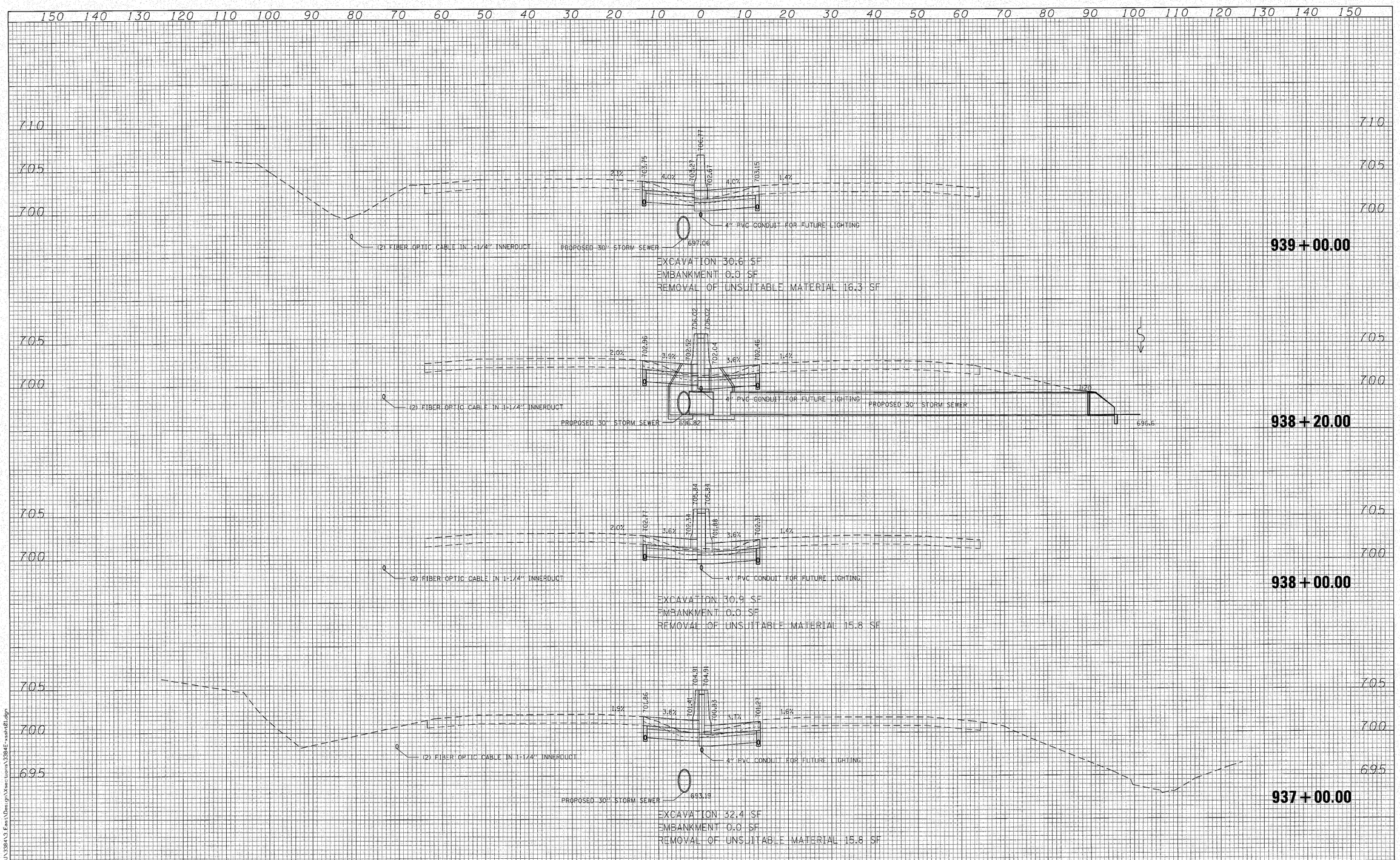
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 935+00.00 TO STA. 936+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	263
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. .	ILLINOIS	FED. AID PROJECT		



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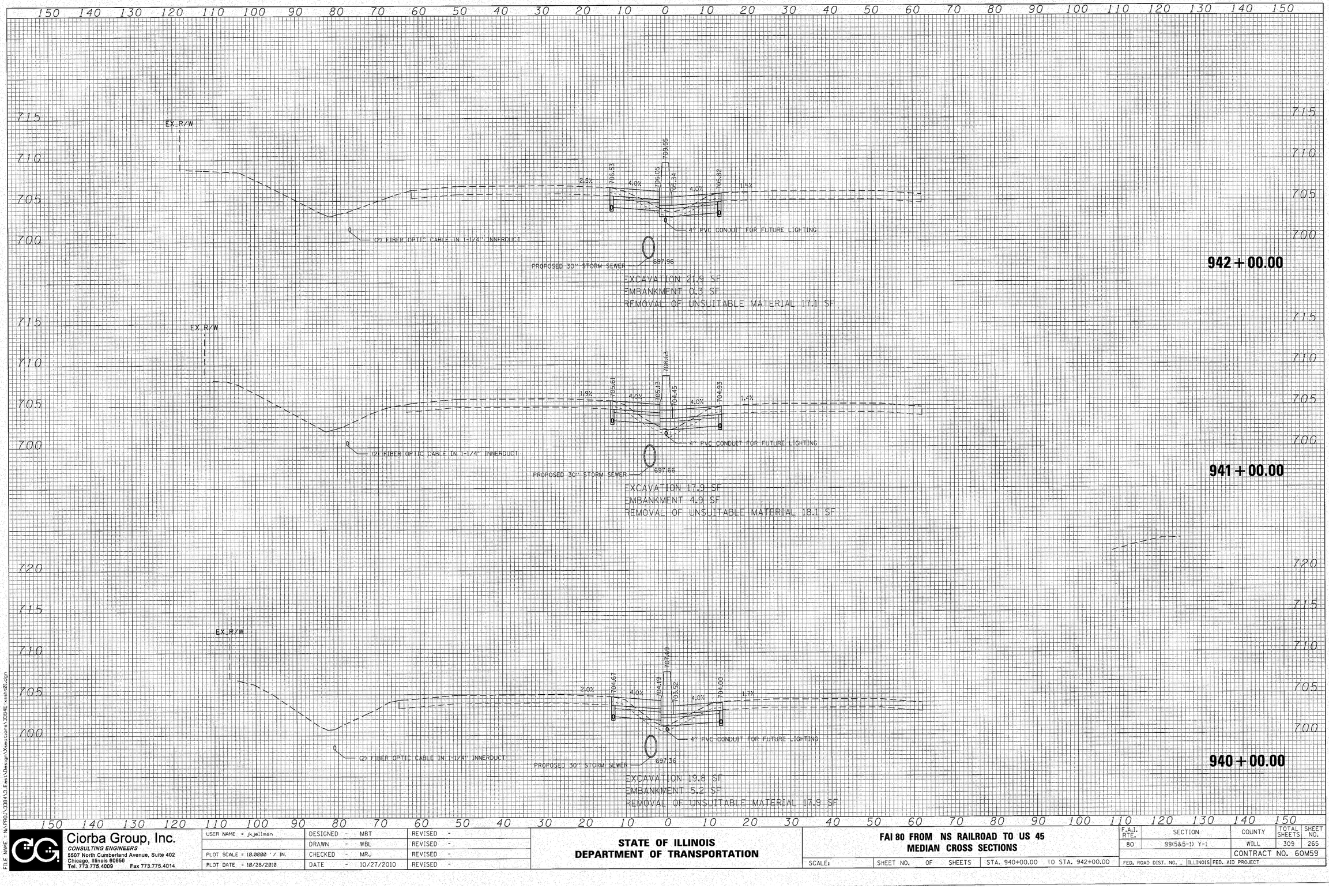
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PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 937+00.00 TO STA. 939+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	264
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = jkjellman	DESIGNED - MBT	REVISED -
	DRAWN - WBL	REVISED -
PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 940+00.00 TO STA. 942+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	265
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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EX.R/W

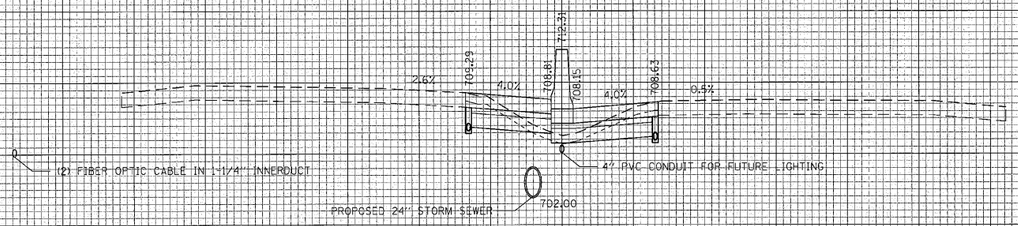
720

715

710

705

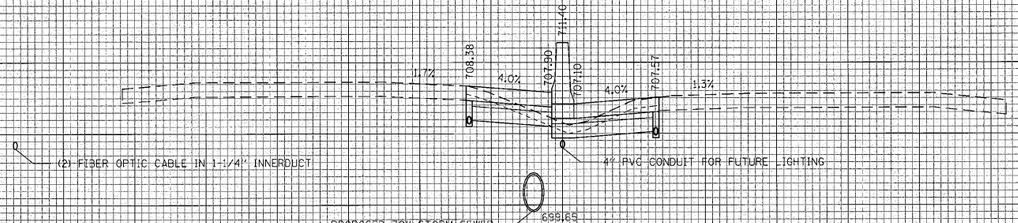
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EXCAVATION 23.2 SF
EMBANKMENT 0.7 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

945+00.00

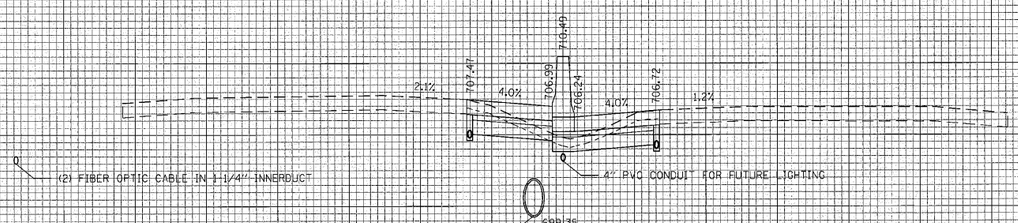
EX.R/W



EXCAVATION 28.0 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.7 SF

944+00.00

EX.R/W



EXCAVATION 27.3 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

943+00.00

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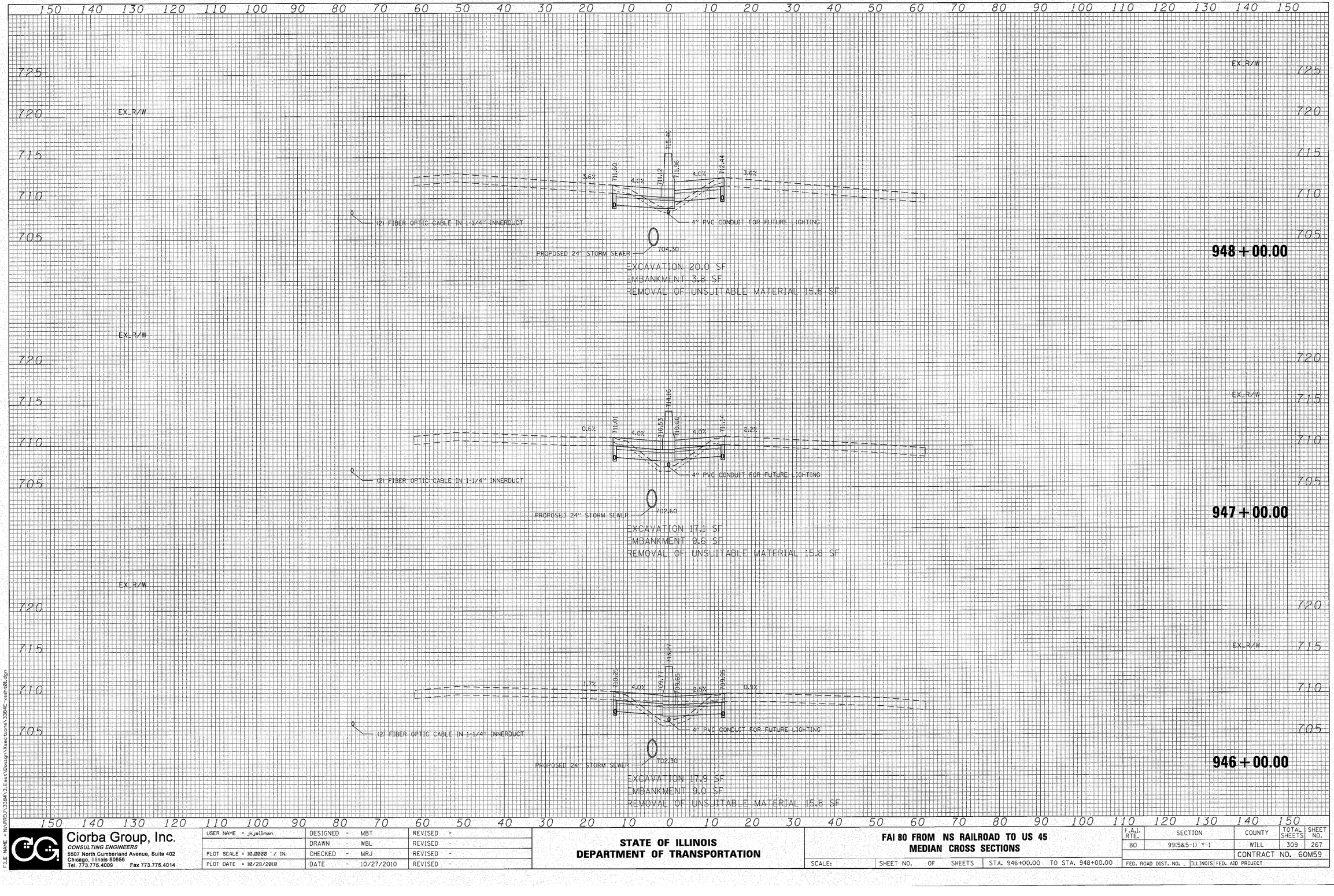
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 943+00.00 TO STA. 945+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	266
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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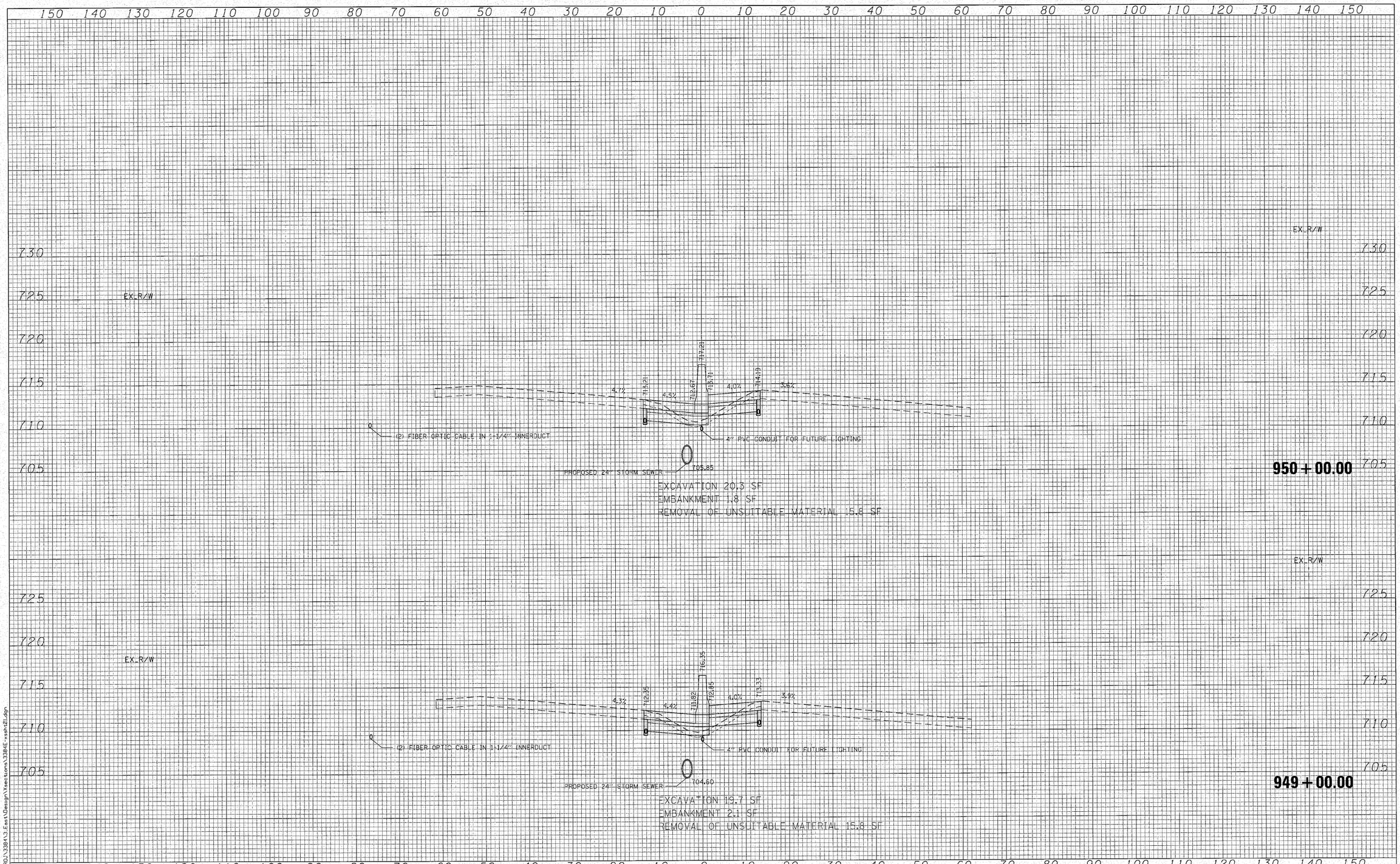
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PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 946+00.00 TO STA. 948+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	267
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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USER NAME = jkjellman	DESIGNED - MBT	REVISED -
	DRAWN - WBL	REVISED -
PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 949+00.00 TO STA. 950+00.00

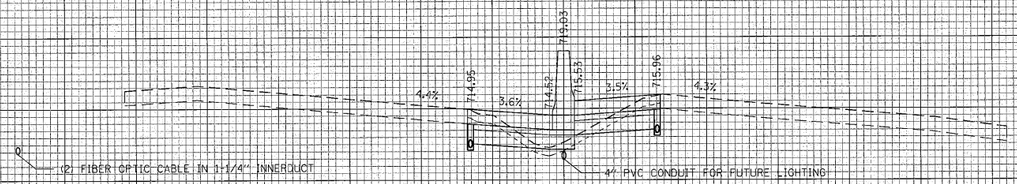
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	268
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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730 725 720 715 710 705

EX. R/W

EX. R/W



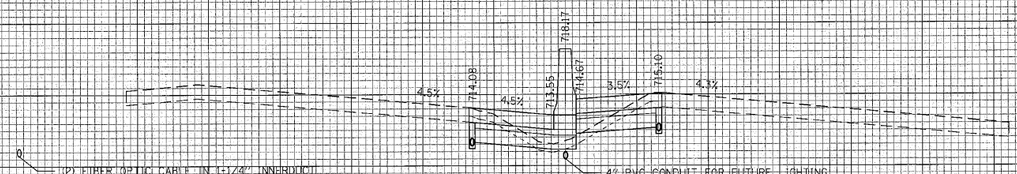
PROPOSED 24" STORM SEWER — 706.45

EXCAVATION 19.4 SF
EMBANKMENT 2.4 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

952 + 00.00

EX. R/W

EX. R/W



PROPOSED 24" STORM SEWER — 706.35

EXCAVATION 20.1 SF
EMBANKMENT 1.8 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

951 + 00.00

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

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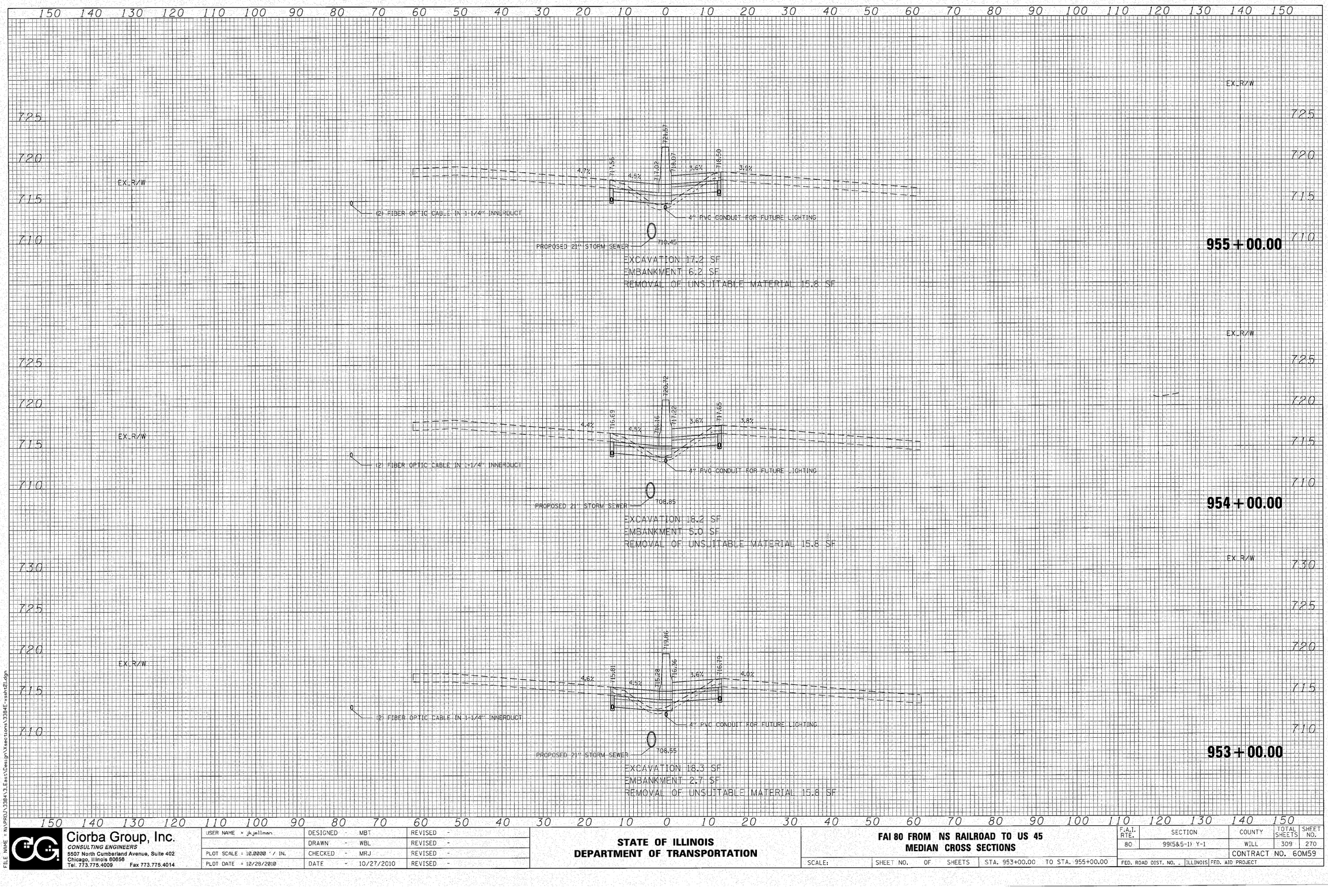
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 951+00.00 TO STA. 952+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	269
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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USER NAME = jkjellman	DESIGNED - MBT	REVISED -
	DRAWN - WBL	REVISED -
PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 12/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

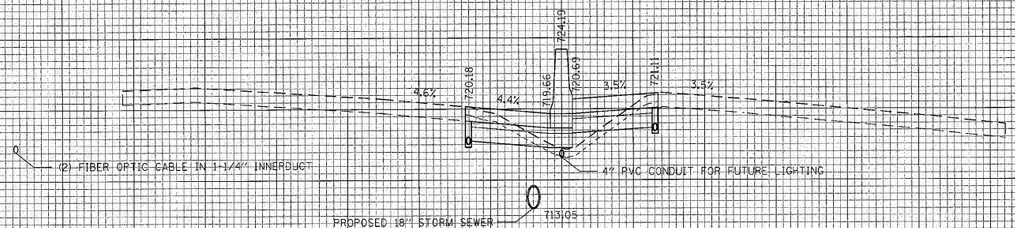
SCALE: | SHEET NO. OF SHEETS | STA. 953+00.00 TO STA. 955+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	270
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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730
725
720
715
710

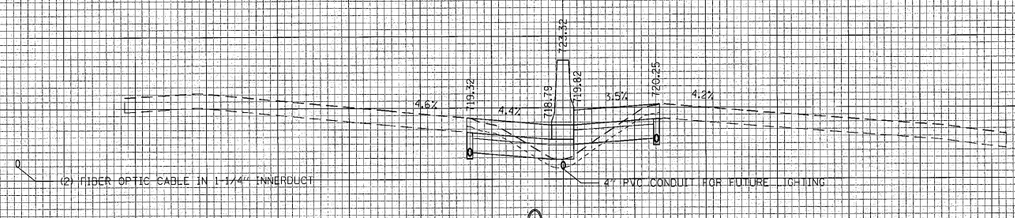
EX. R/W



EXCAVATION 18.8 SF
EMBANKMENT 6.4 SF
REMOVAL OF UNSUITABLE MATERIAL 16.8 SF

958 + 00.00

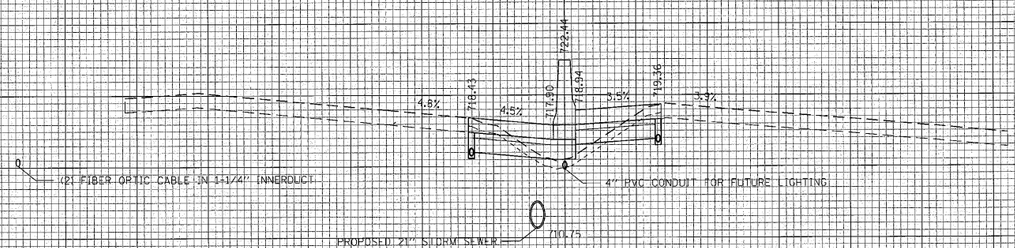
EX. R/W



EXCAVATION 19.2 SF
EMBANKMENT 5.1 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

957 + 00.00

EX. R/W



EXCAVATION 17.7 SF
EMBANKMENT 5.8 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

956 + 00.00

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USER NAME = jkjellman	DESIGNED - MBT	REVISED -
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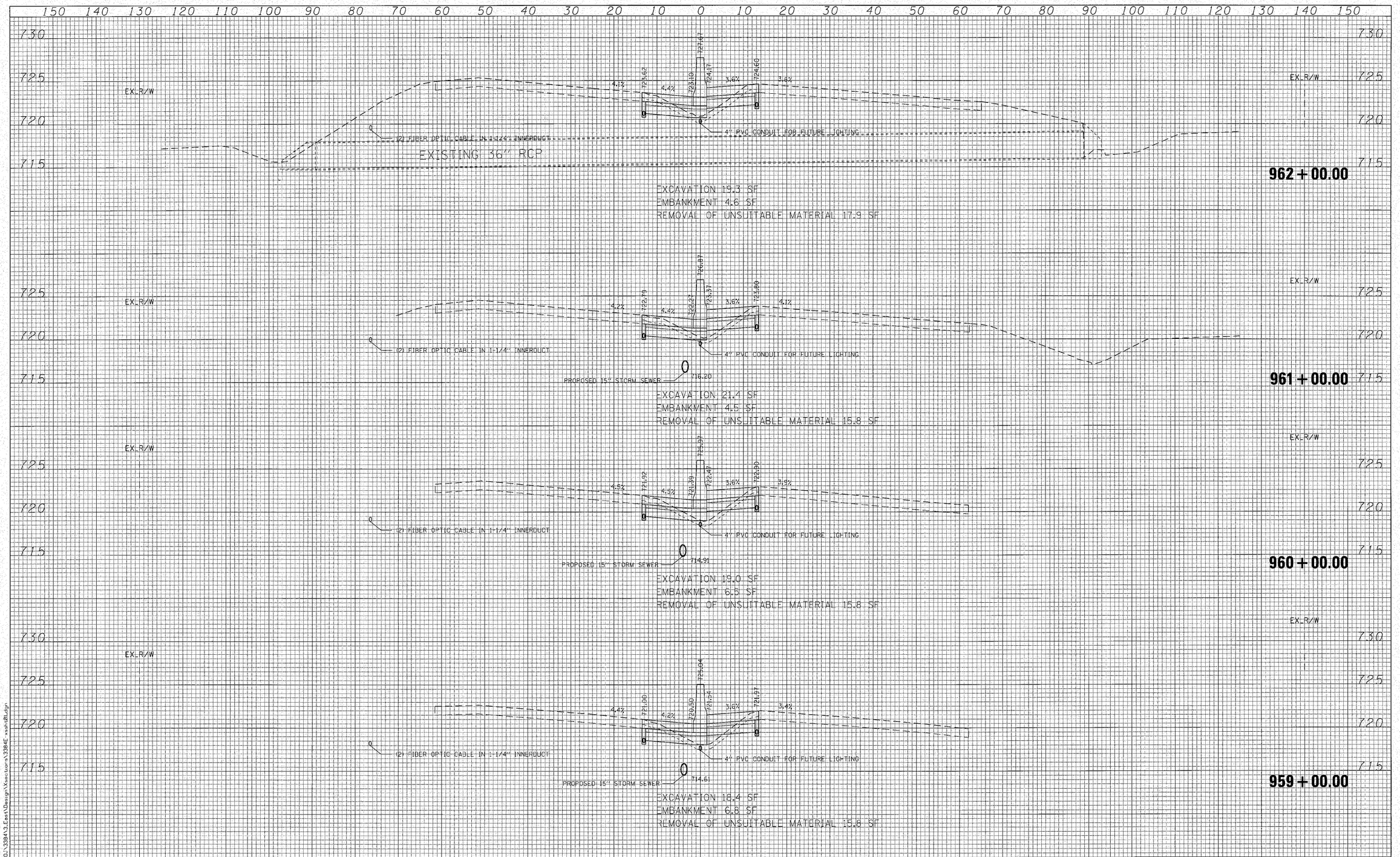
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 956+00.00 TO STA. 958+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	271
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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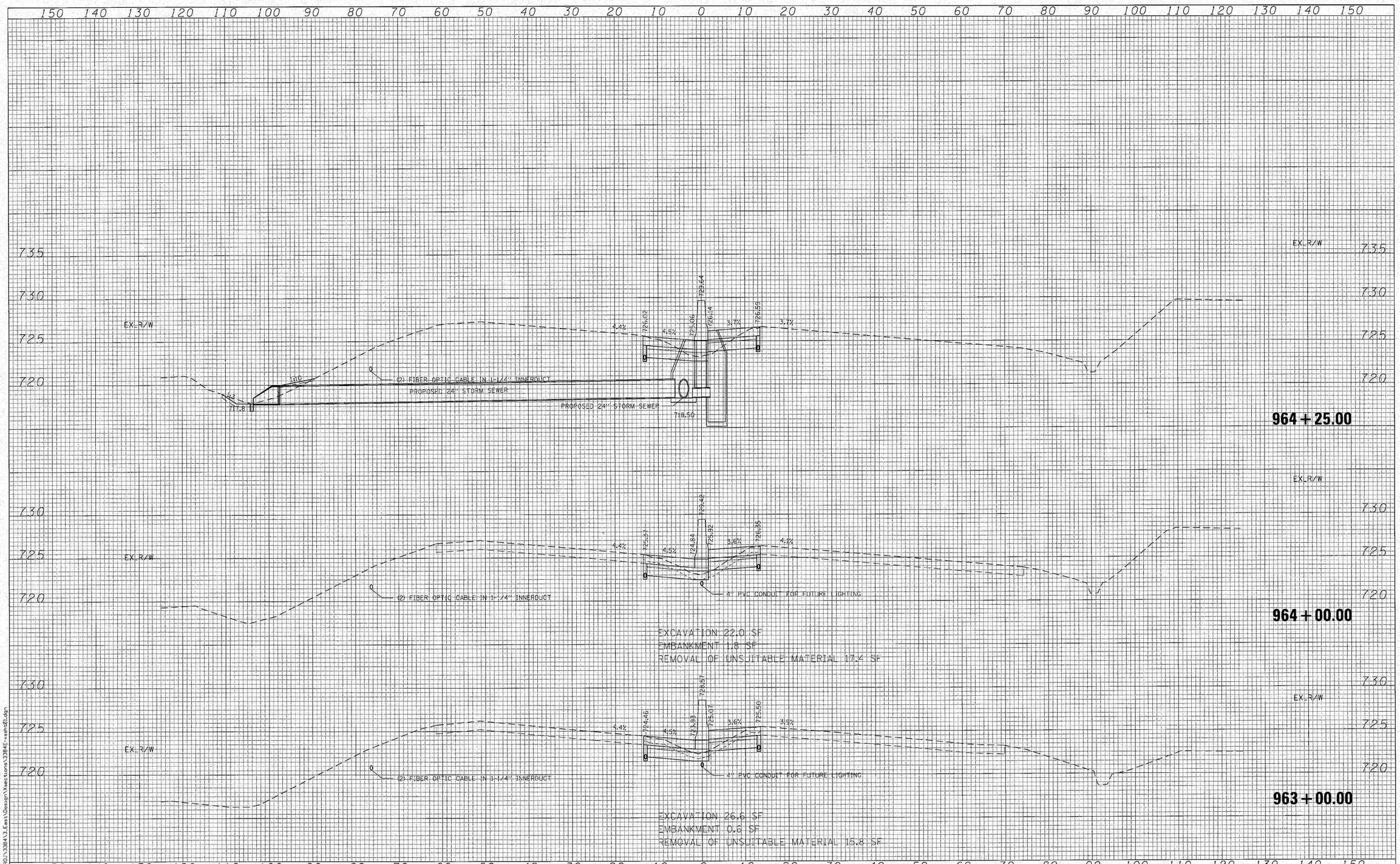
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 959+00.00 TO STA. 962+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	272
		CONTRACT NO. 60M59		

FED. ROAD DIST. NO. - | ILLINOIS | FED. AID PROJECT



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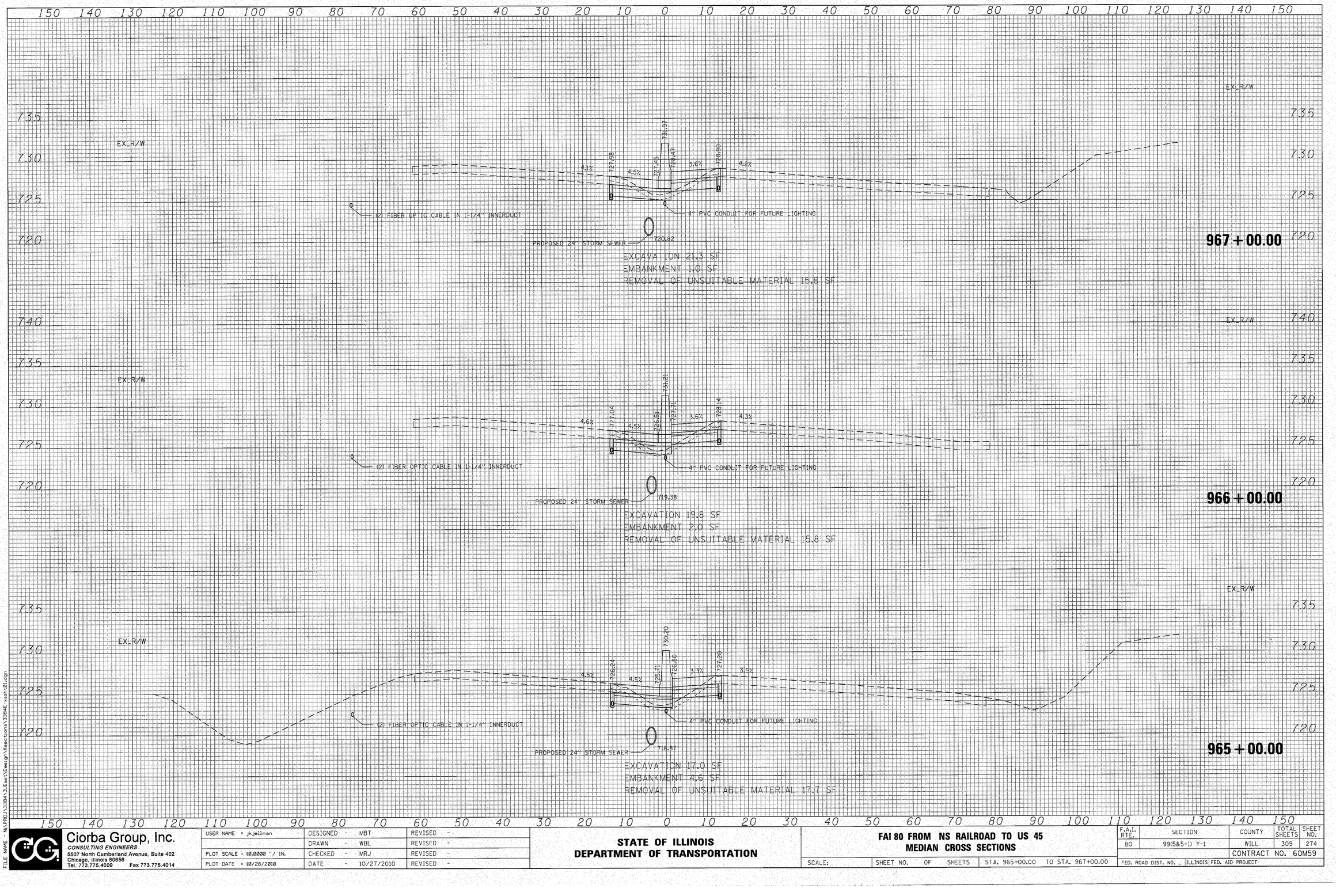
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 963+00.00 TO STA. 964+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	273
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 965+00.00 TO STA. 967+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	274
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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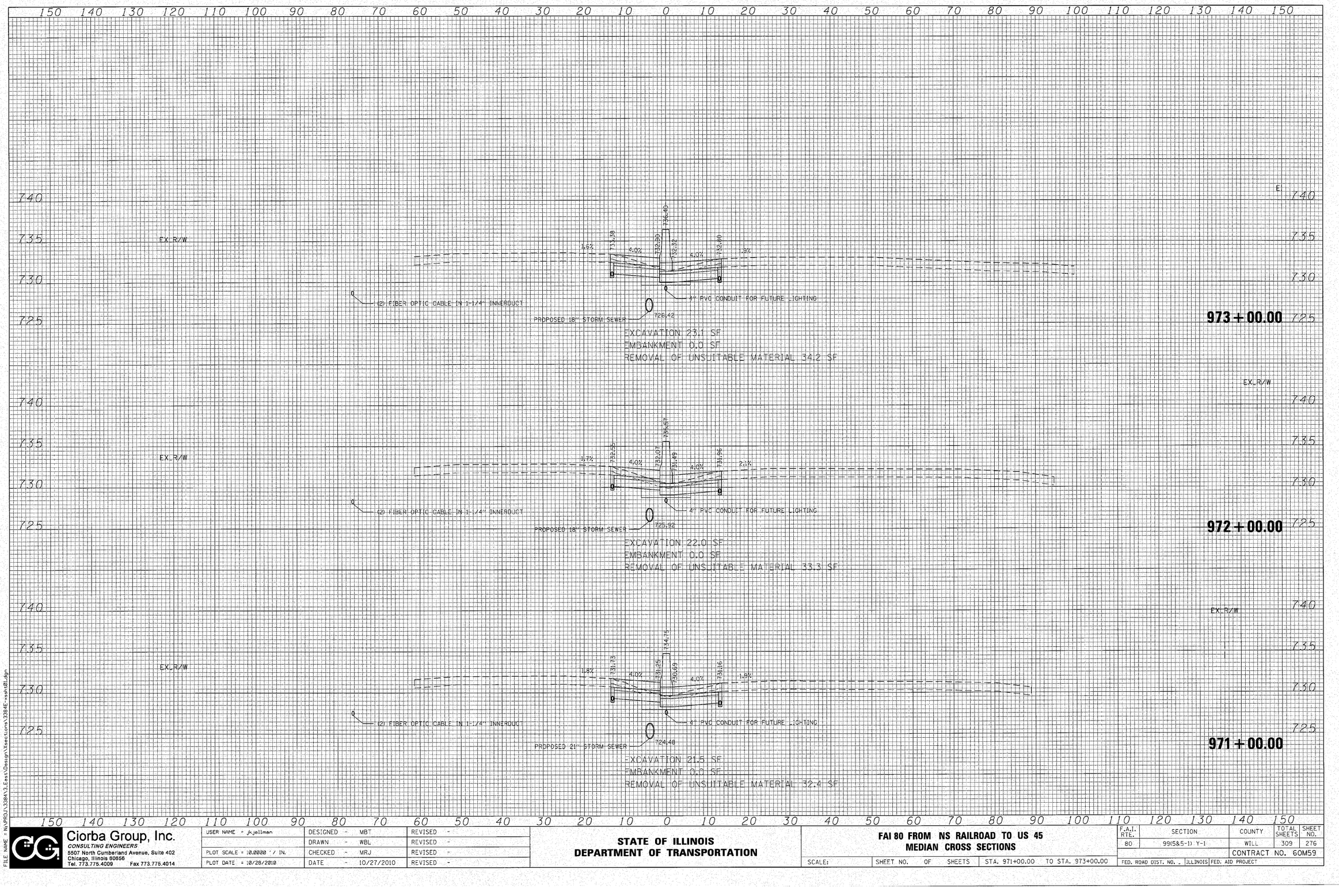
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 968+00.00 TO STA. 970+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	275
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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USER NAME = jkjellman	DESIGNED - MBT	REVISED -
	DRAWN - WBL	REVISED -
PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 971+00.00 TO STA. 973+00.00

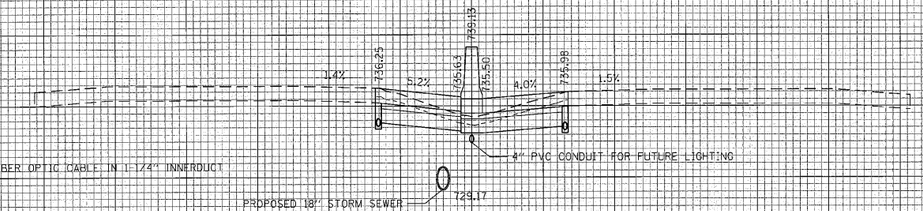
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	276
		CONTRACT NO. 60M59		

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

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740
735
730

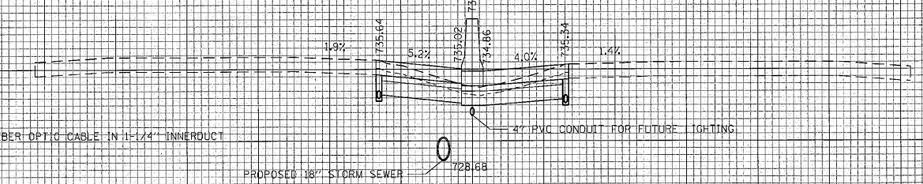
EX. R/W



977 + 00.00

EXCAVATION 31.4 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

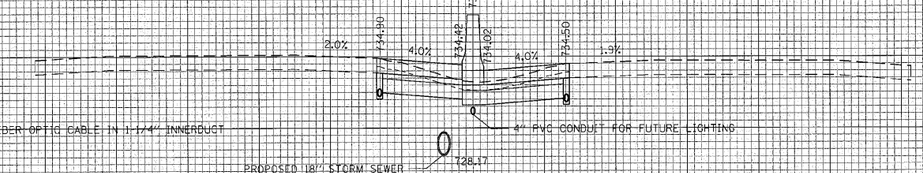
EX. R/W



976 + 00.00

EXCAVATION 32.8 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

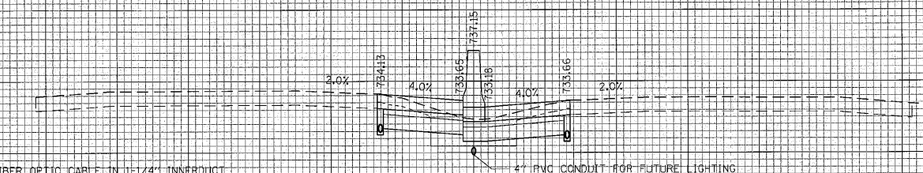
EX. R/W



975 + 00.00

EXCAVATION 36.3 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

EX. R/W



974 + 00.00

EXCAVATION 23.5 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 34.5 SF

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

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USER NAME = jkjellman	DESIGNED - MBT	REVISED -
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

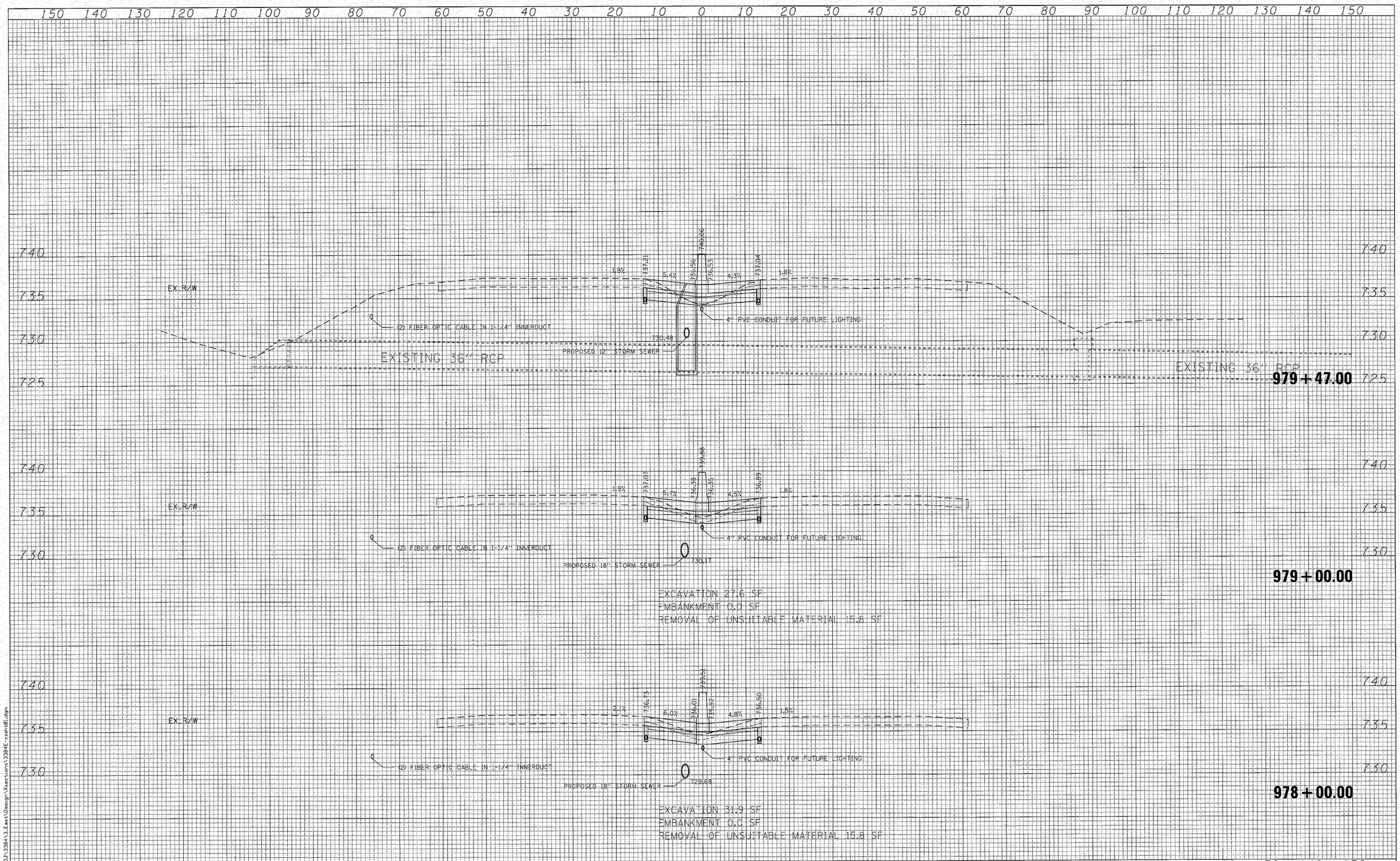
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 974+00.00 TO STA. 977+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	277
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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6507 North Cumberland Avenue, Suite 402
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USER NAME = jkjellman	DESIGNED - MBT	REVISED -	
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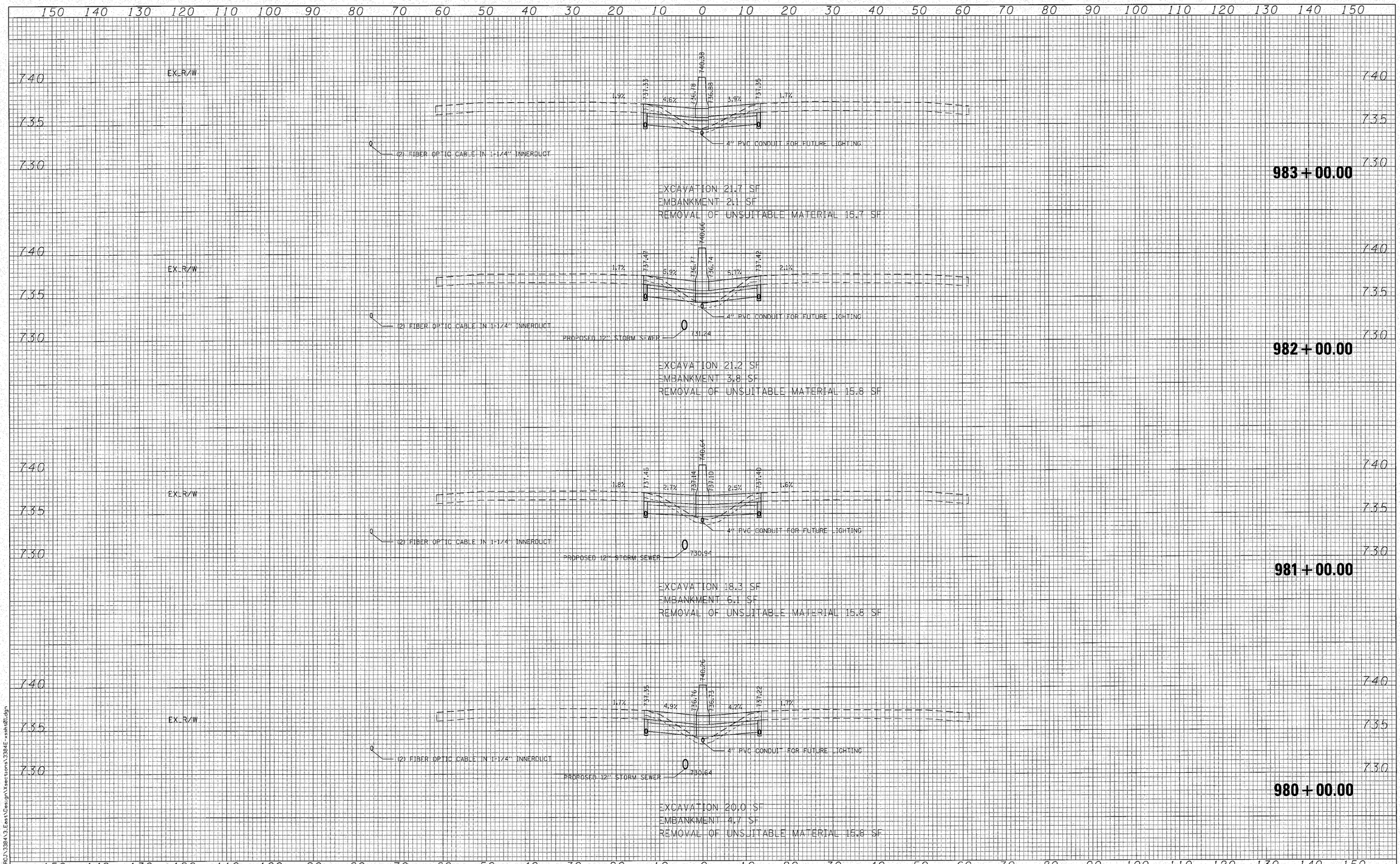
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 978+00.00 TO STA. 979+47.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	278
		CONTRACT NO. 60M59		

FED. ROAD DIST. NO. _ | ILLINOIS | FED. AID PROJECT



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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

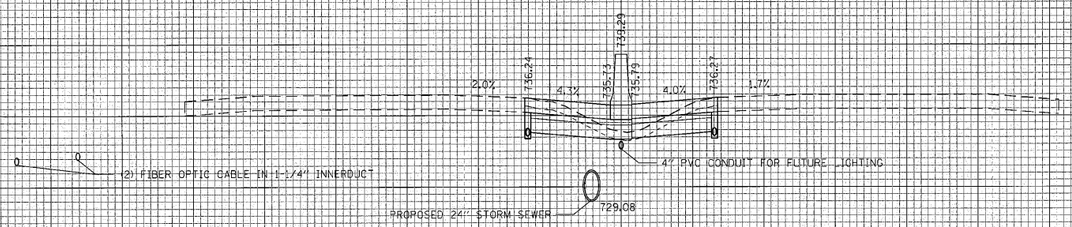
SCALE: | SHEET NO. OF SHEETS | STA. 980+00.00 TO STA. 983+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	279
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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740
735
730

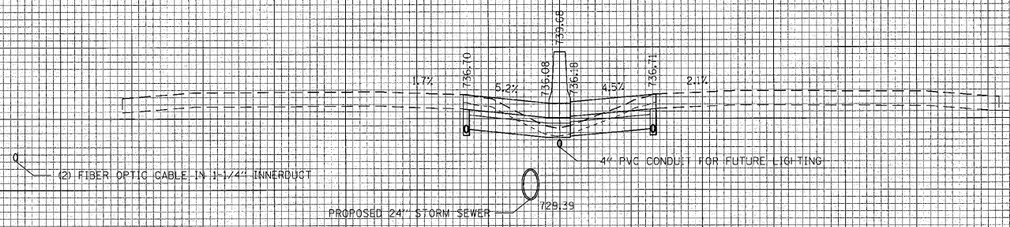
EX. R/W



986+00.00

EXCAVATION 26.1 SF
EMBANKMENT 0.2 SF
REMOVAL OF UNSUITABLE MATERIAL 15.7 SF

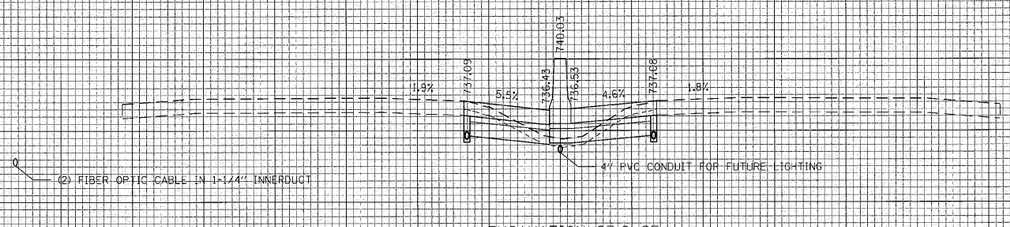
EX. R/W



985+00.00

EXCAVATION 27.1 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

EX. R/W



984+00.00

EXCAVATION 23.2 SF
EMBANKMENT 1.1 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

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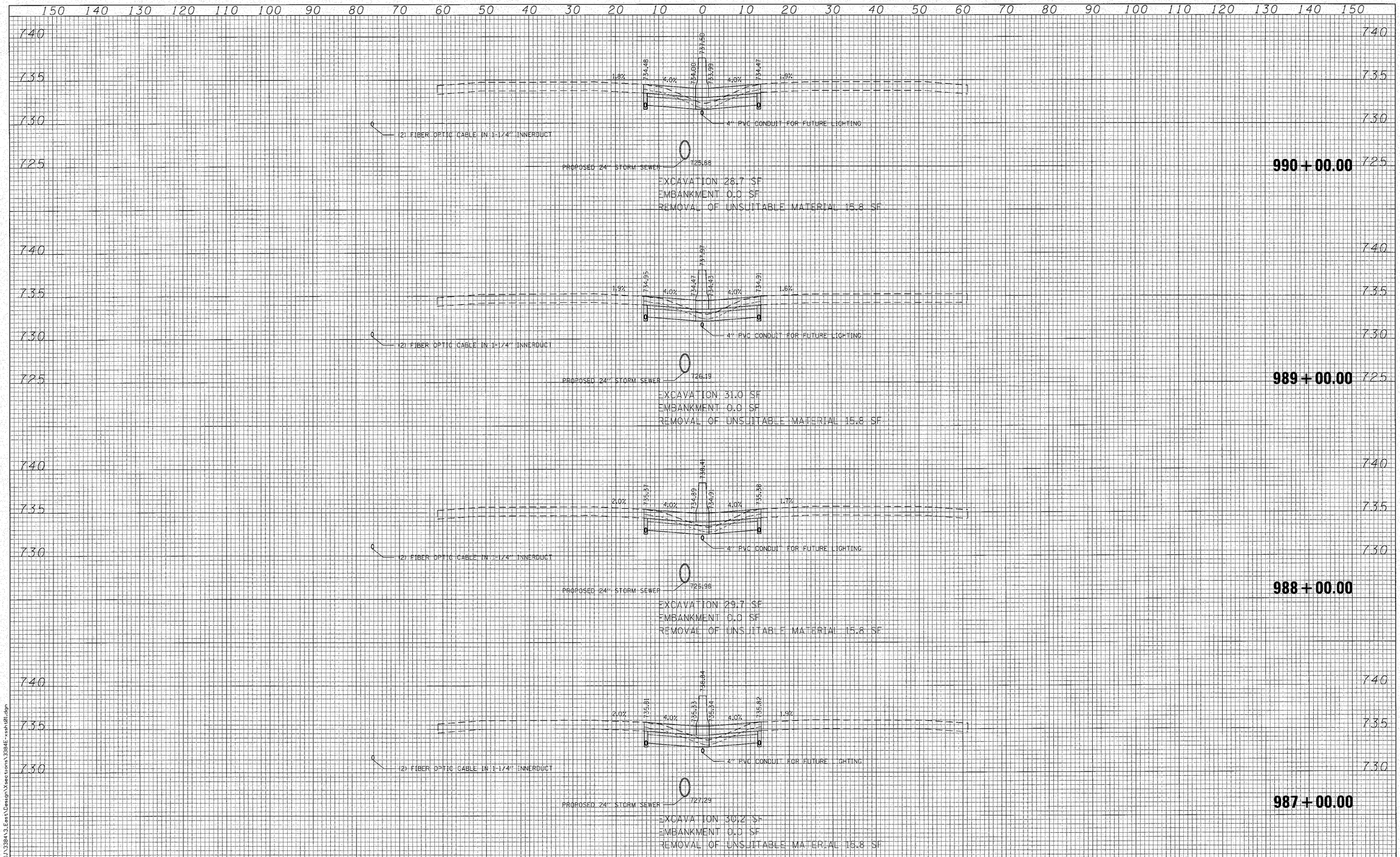
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 984+00.00 TO STA. 986+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	280
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 987+00.00 TO STA. 990+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	281
		CONTRACT NO. 60M59		

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

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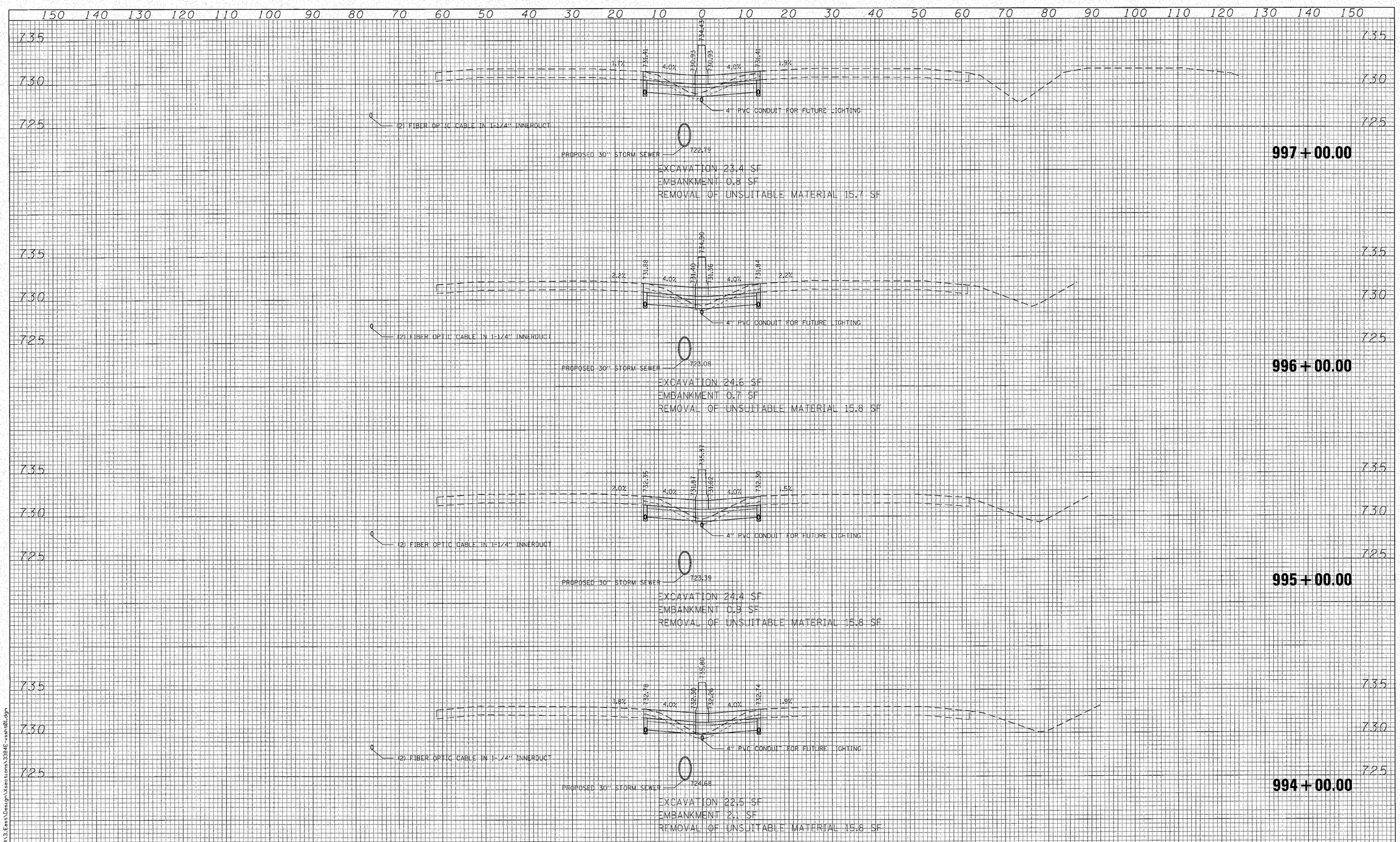
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 991+00.00 TO STA. 993+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	282
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

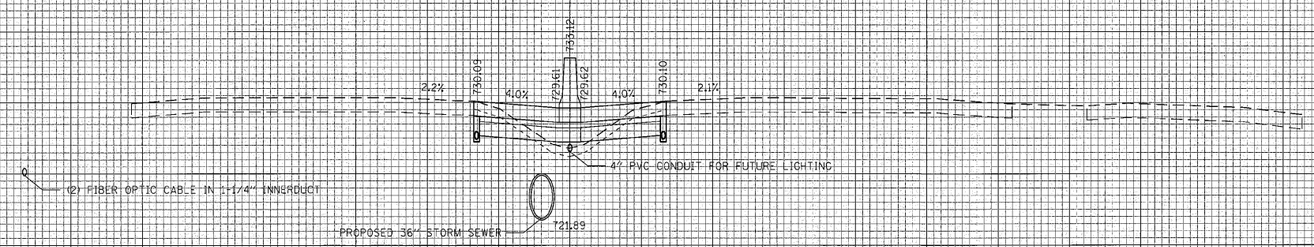
FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 994+00.00 TO STA. 997+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	283
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

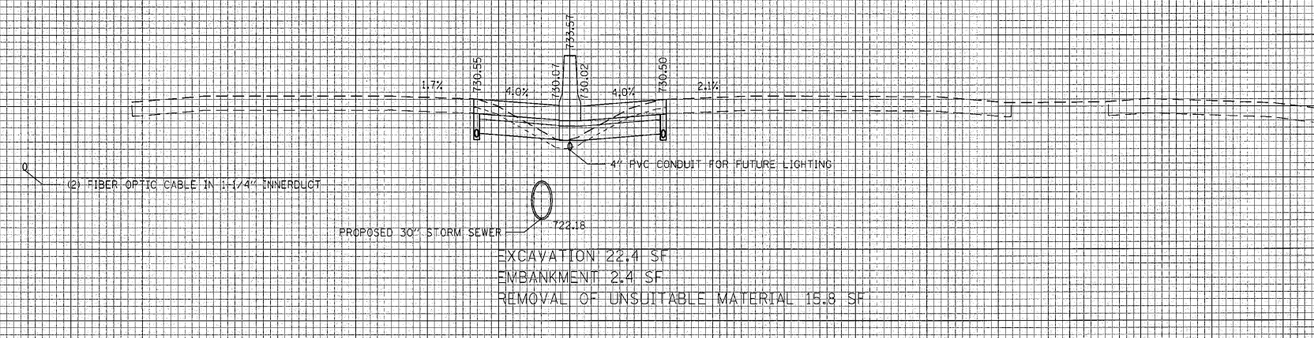
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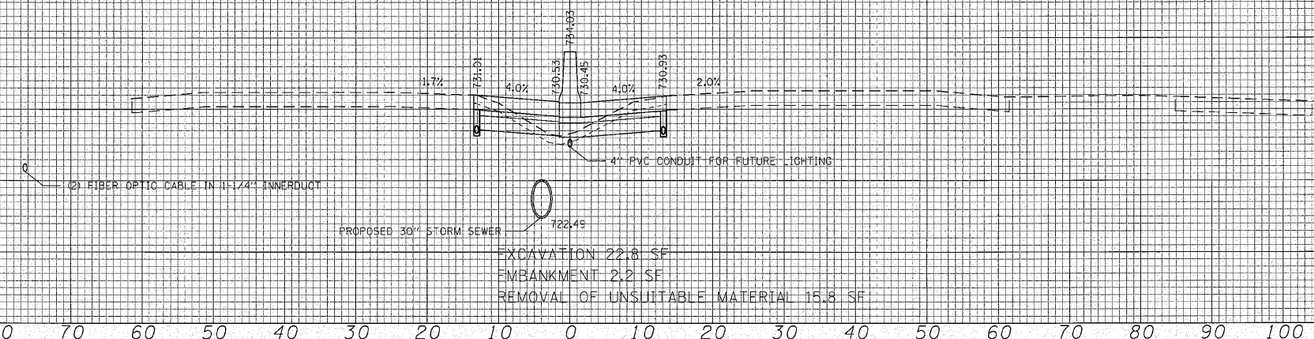
EXCAVATION 19.8 SF
EMBANKMENT 6.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

1000+00.00



EXCAVATION 22.4 SF
EMBANKMENT 2.4 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

999+00.00



EXCAVATION 22.8 SF
EMBANKMENT 2.2 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

998+00.00

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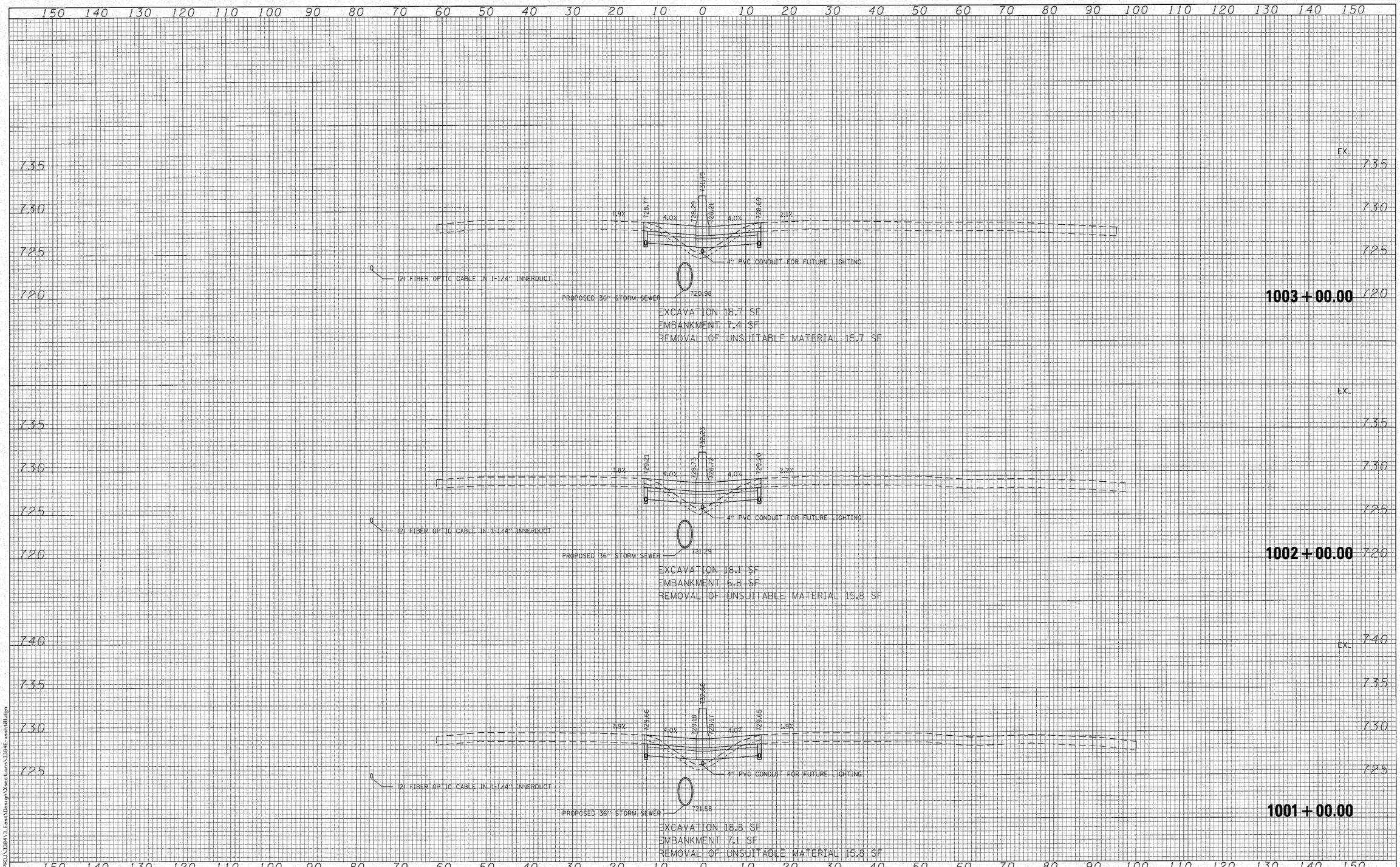
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 998+00.00 TO STA. 1000+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	284
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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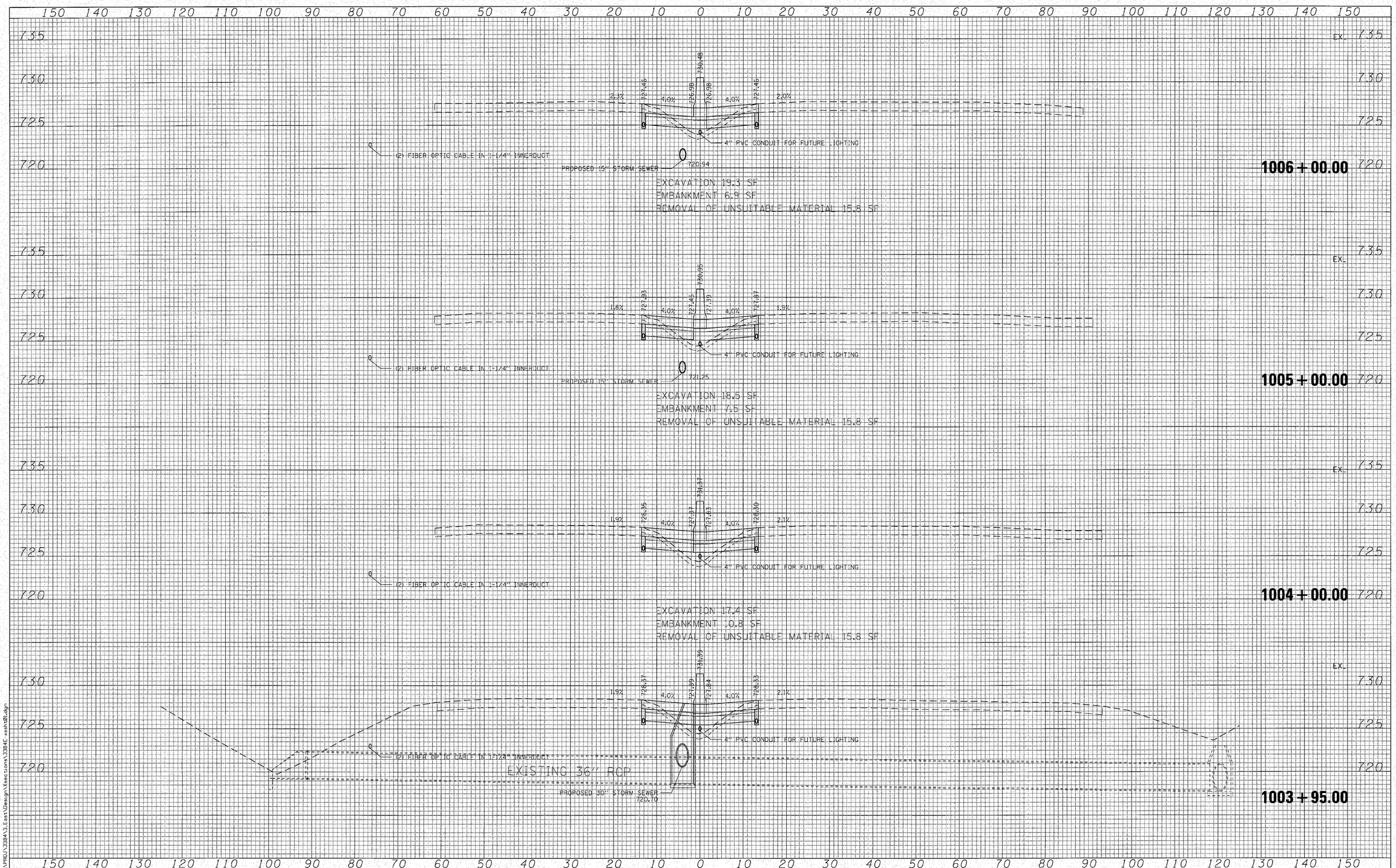
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1001+00.00 TO STA. 1003+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	285
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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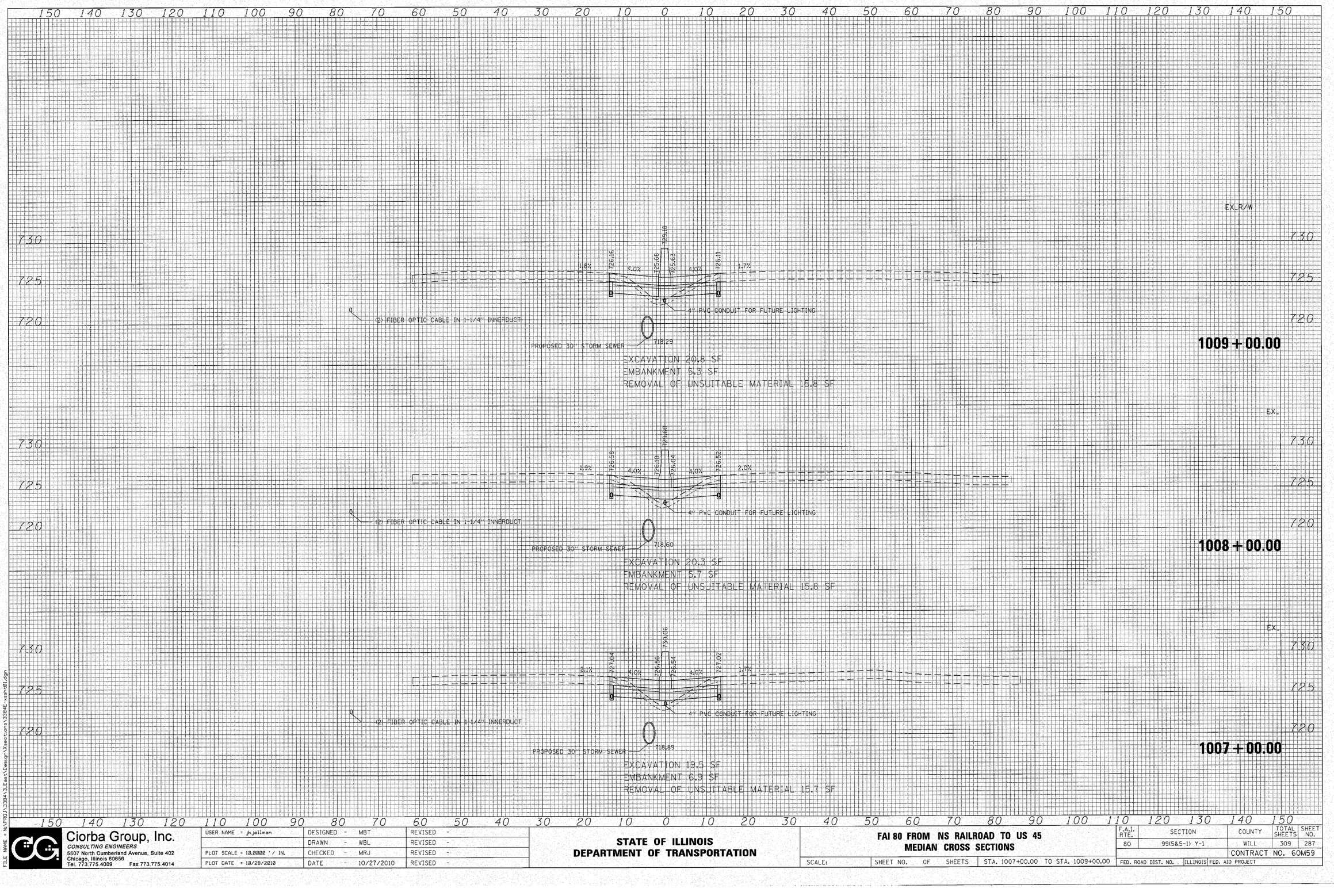
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1003+95.00 TO STA. 1006+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	286
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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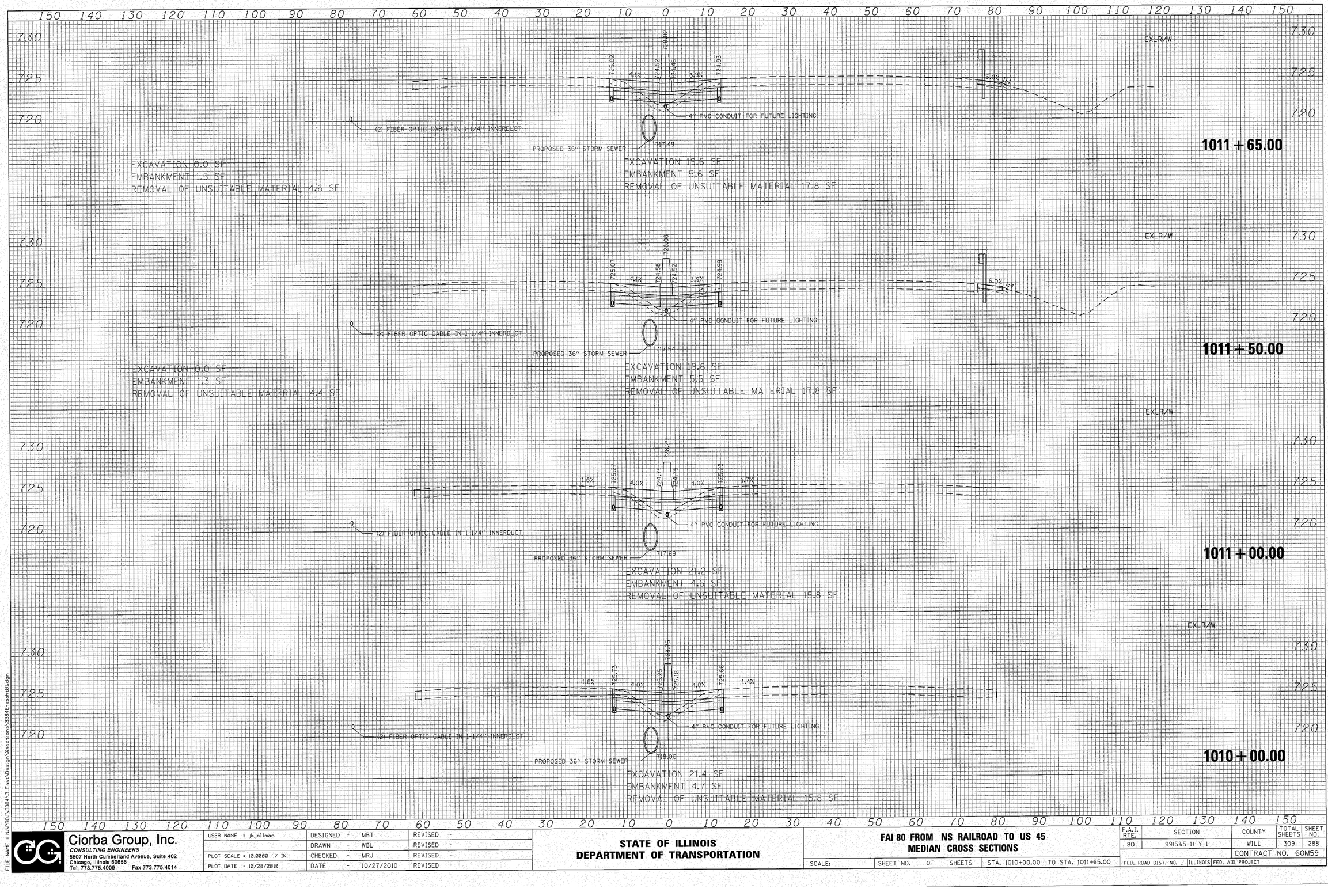
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1007+00.00 TO STA. 1009+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	287
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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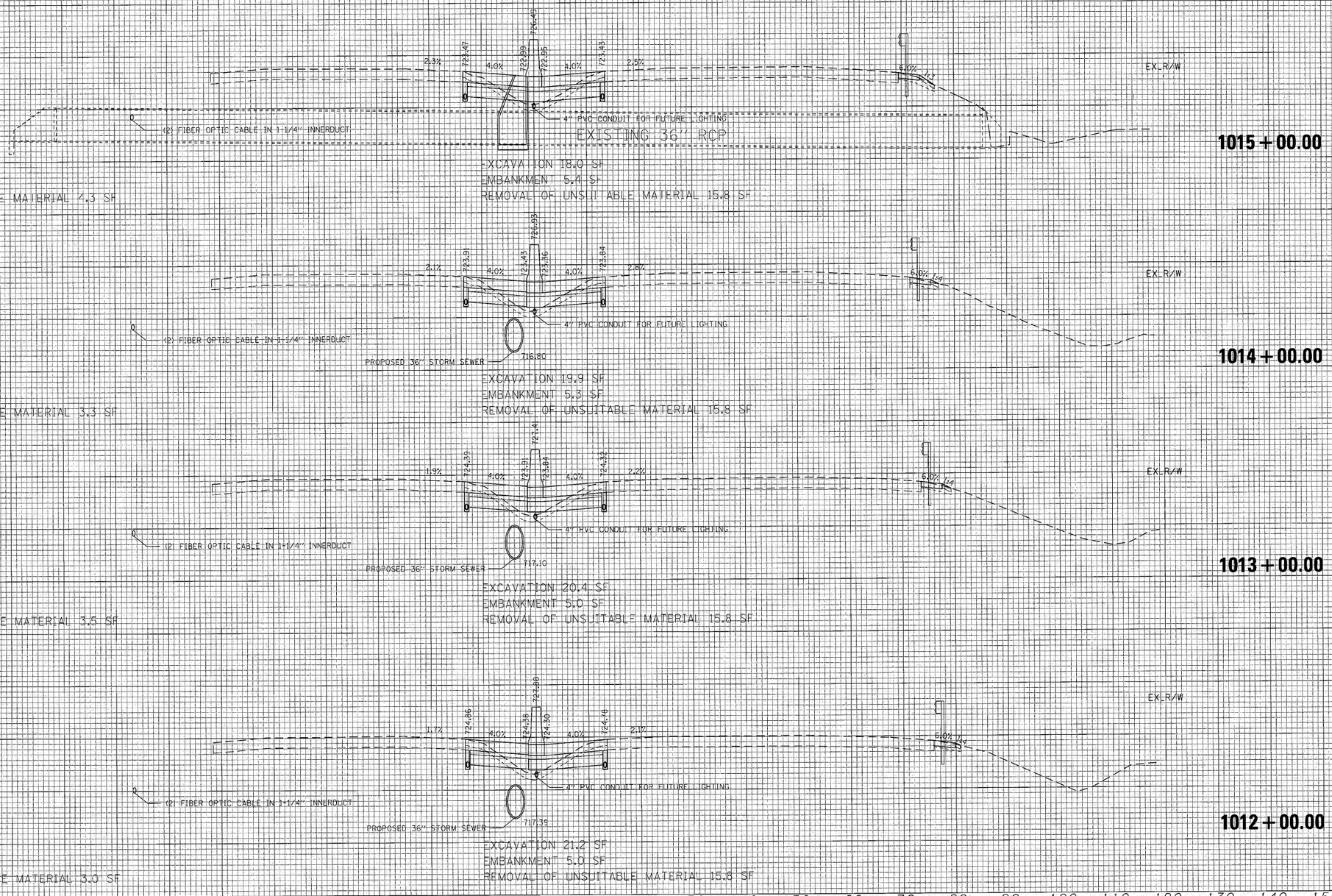
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1010+00.00 TO STA. 1011+65.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	288
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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

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DEPARTMENT OF TRANSPORTATION

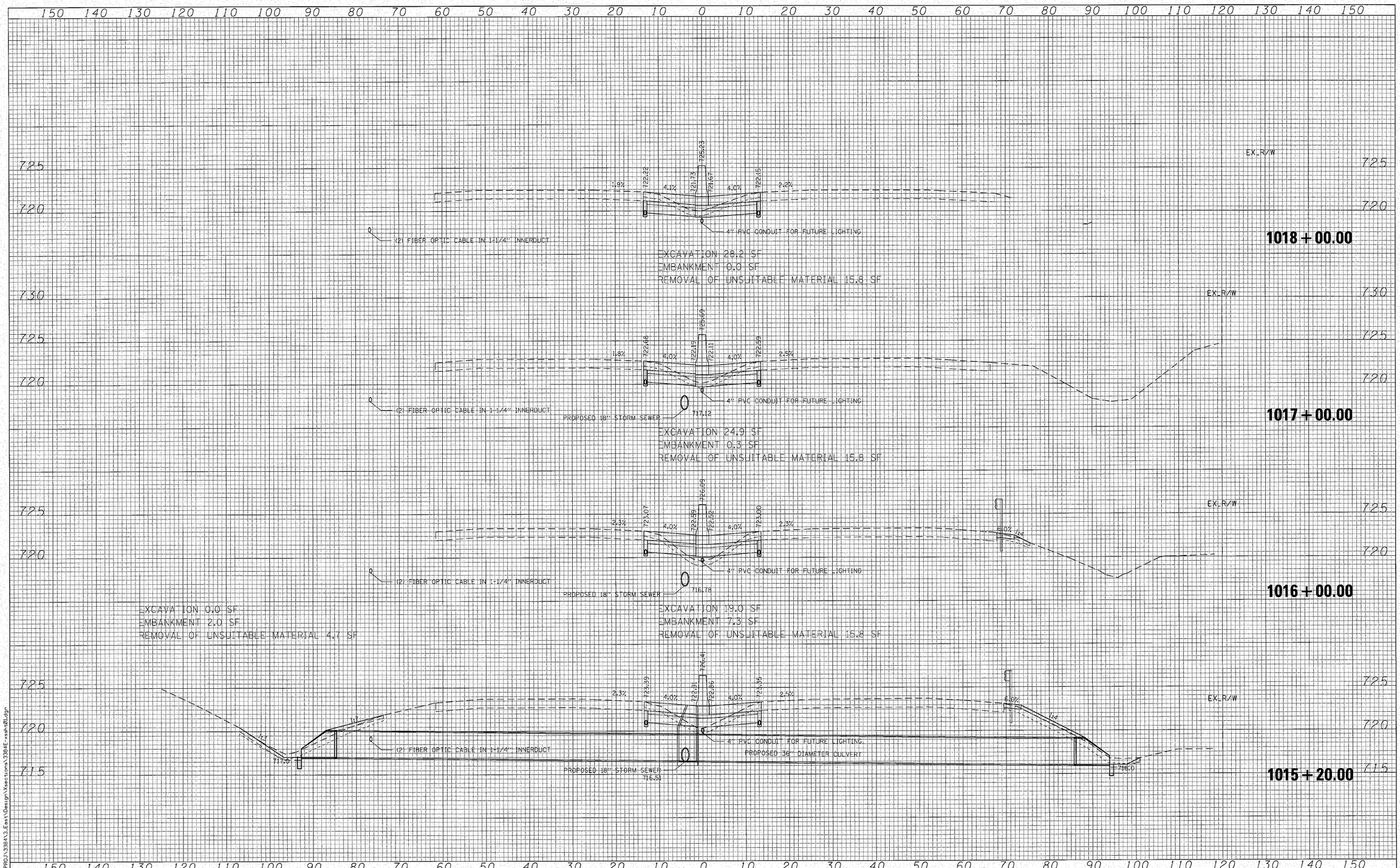
FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1012+00.00 TO STA. 1015+00.00

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80	99(5&5-1) Y-1	WILL	309	289
		CONTRACT NO. 60M59		

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

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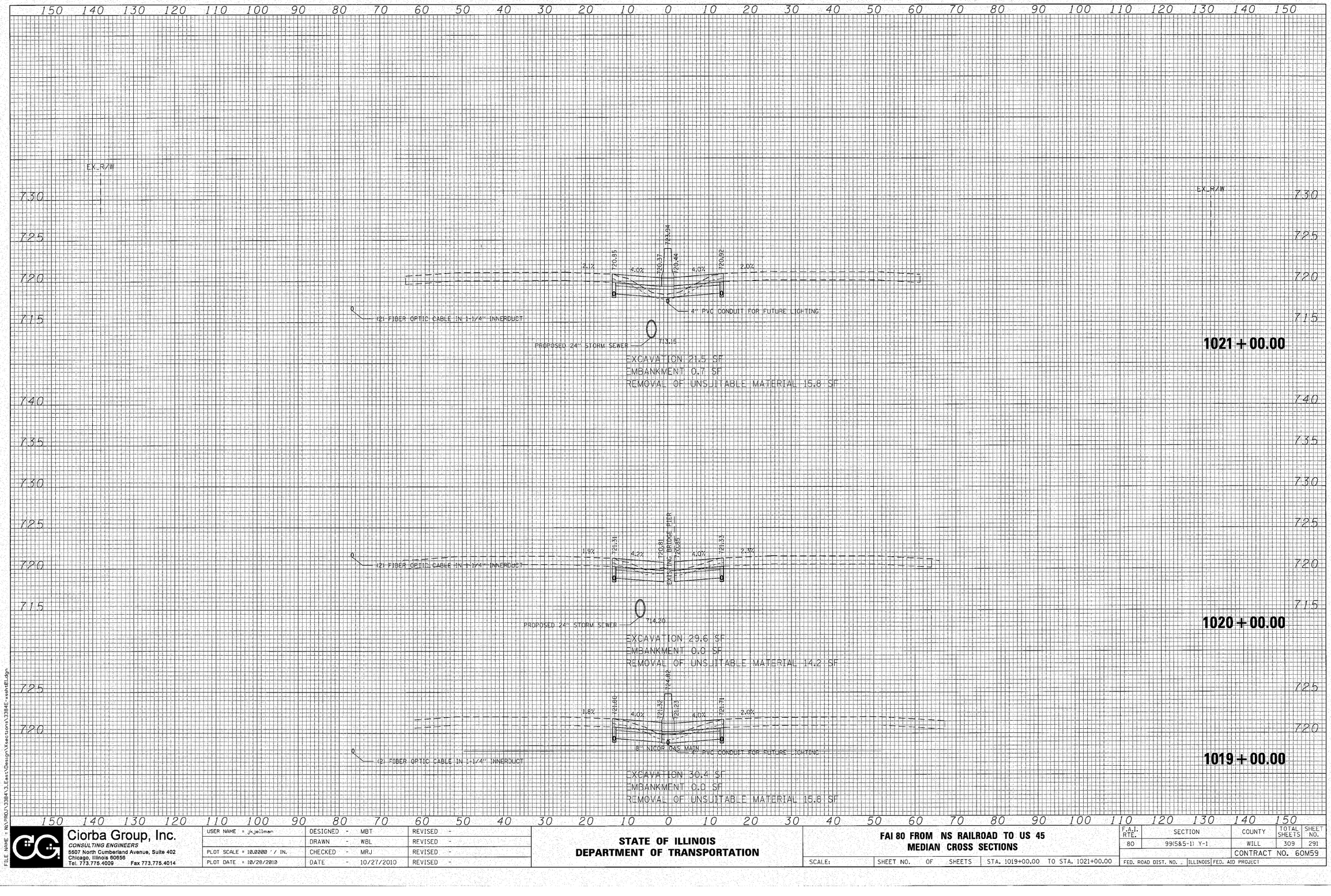
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1015+20.00 TO STA. 1018+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	290
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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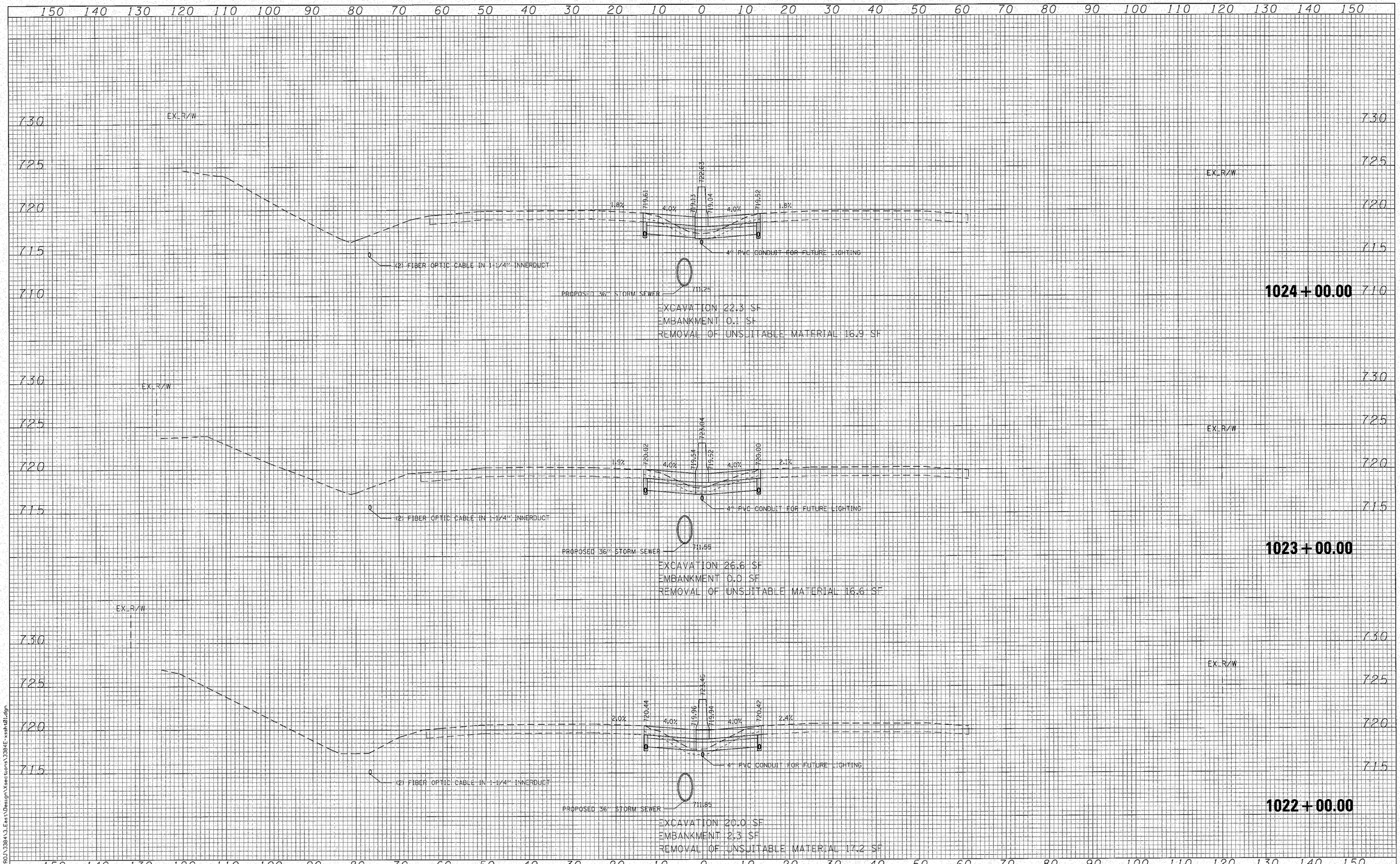
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1019+00.00 TO STA. 1021+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	291
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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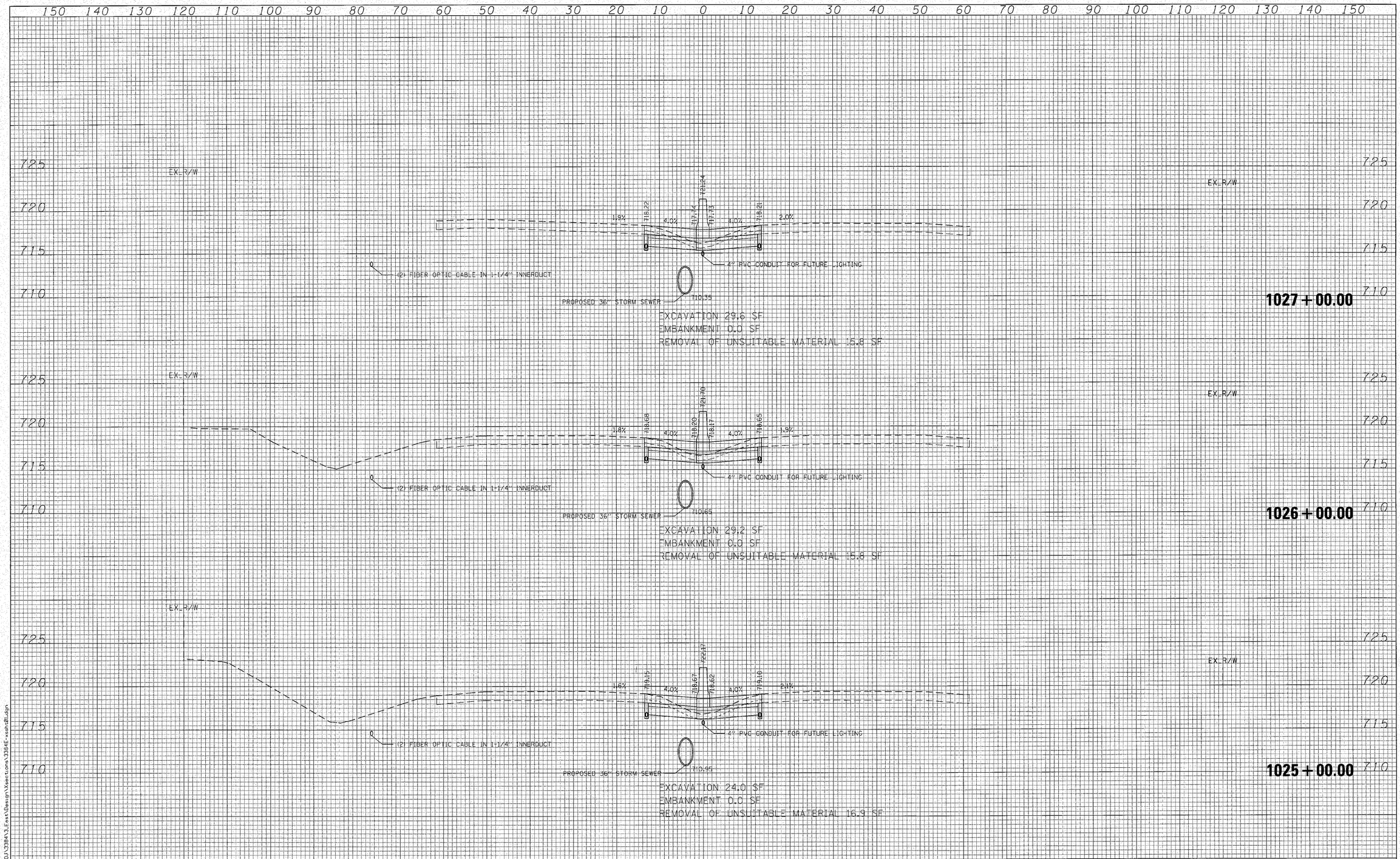
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1022+00.00 TO STA. 1024+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	292
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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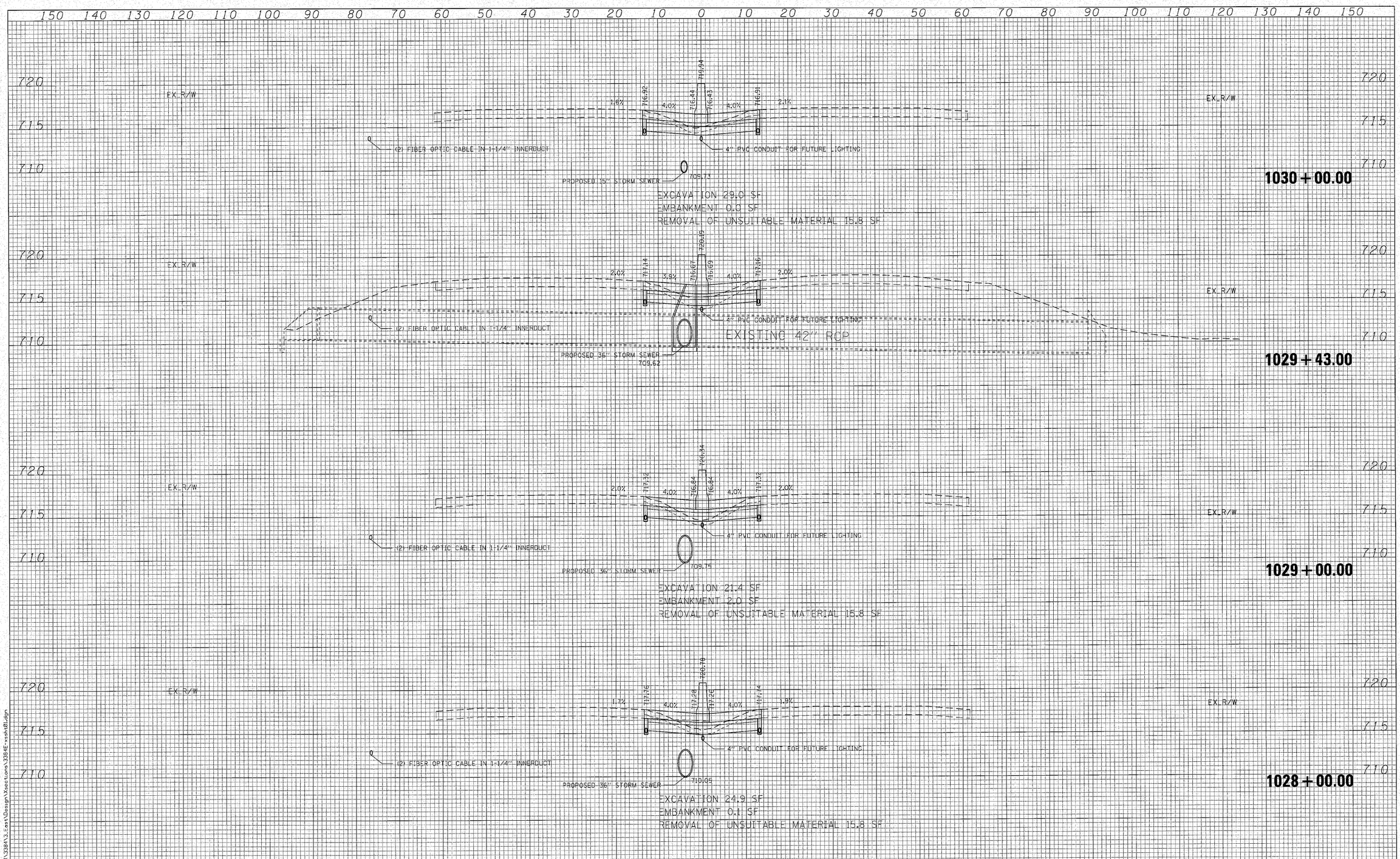
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PLOT DATE = 12/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1025+00.00 TO STA. 1027+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	293
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
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USER NAME = jkjellman	DESIGNED - MBT	REVISED -
	DRAWN - WBL	REVISED -
PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1028+00.00 TO STA. 1030+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	294
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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

720
715
710

EX. R/W

1.8%
715.09
4.0%
714.62
716.16
714.66
4.0%
715.14
2.2%

EX. R/W

4" PVC CONDUIT FOR FUTURE LIGHTING

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

PROPOSED 18" STORM SEWER
708.28

EXCAVATION 26.5 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

1034 + 00.00

EX. R/W

1.9%
715.5
4.0%
715.03
716.60
715.40
4.0%
715.63
1.5%

EX. R/W

4" PVC CONDUIT FOR FUTURE LIGHTING

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

PROPOSED 18" STORM SEWER
708.58

EXCAVATION 23.6 SF
EMBANKMENT 0.1 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

1033 + 00.00

EX. R/W

1.7%
715.99
4.0%
715.51
716.06
715.56
4.0%
716.04
1.7%

EX. R/W

4" PVC CONDUIT FOR FUTURE LIGHTING

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

PROPOSED 18" STORM SEWER
708.88

EXCAVATION 21.3 SF
EMBANKMENT 1.5 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

1032 + 00.00

EX. R/W

1.9%
716.45
4.0%
715.97
715.46
715.98
4.0%
716.46
1.7%

EX. R/W

4" PVC CONDUIT FOR FUTURE LIGHTING

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

PROPOSED 15" STORM SEWER
709.43

EXCAVATION 25.5 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

1031 + 00.00

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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1031+00.00 TO STA. 1034+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	295
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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PLOT SCALE = 10.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

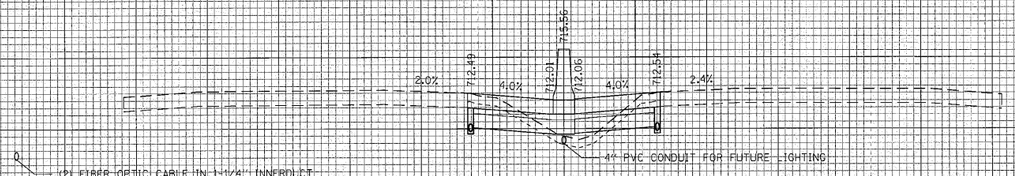
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	296
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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720
715
710
705

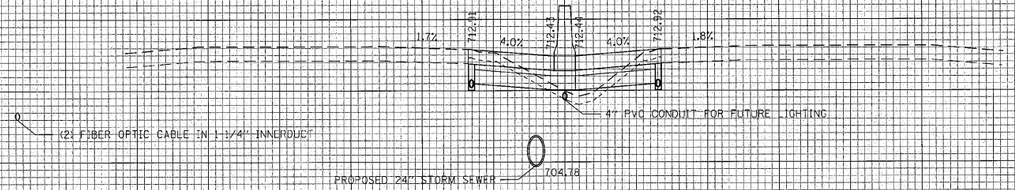
EX. R/W



EXCAVATION 20.9 SF
EMBANKMENT 5.8 SF
REMOVAL OF UNSUITABLE MATERIAL 16.8 SF

1040 + 00.00

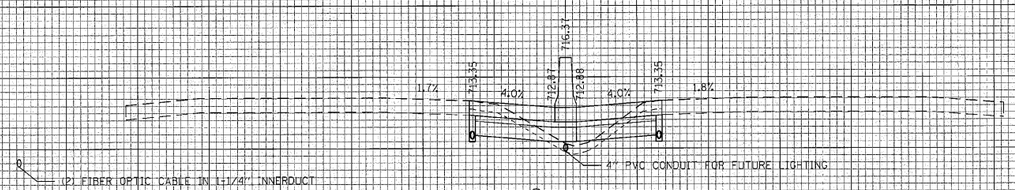
EX. R/W



EXCAVATION 21.0 SF
EMBANKMENT 5.3 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

1039 + 00.00

EX. R/W



EXCAVATION 22.3 SF
EMBANKMENT 4.4 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

1038 + 00.00

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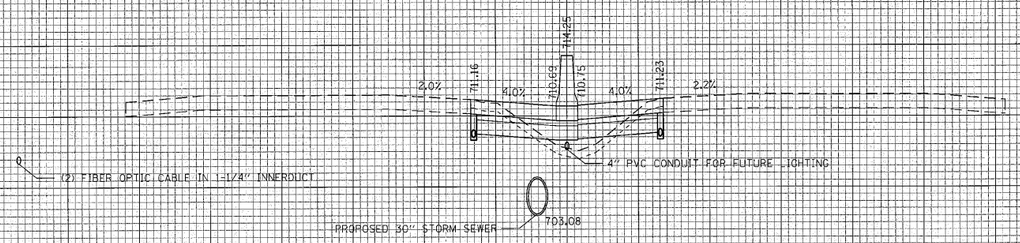
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1038+00.00 TO STA. 1040+00.00

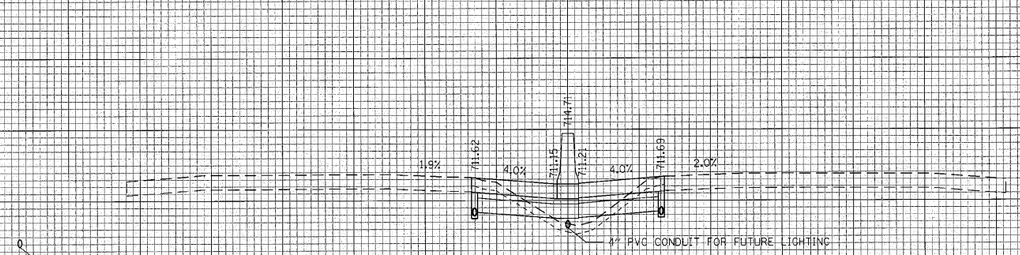
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	297
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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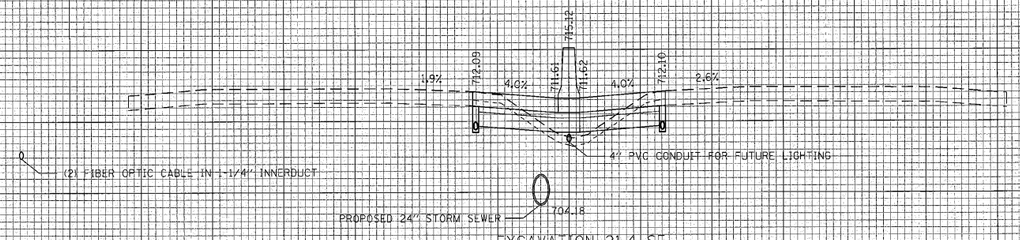
1043 + 00.00

EXCAVATION 18.3 SF
EMBANKMENT 9.5 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF



1042 + 00.00

EXCAVATION 18.8 SF
EMBANKMENT 7.2 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF



1041 + 00.00

EXCAVATION 21.4 SF
EMBANKMENT 5.4 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

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

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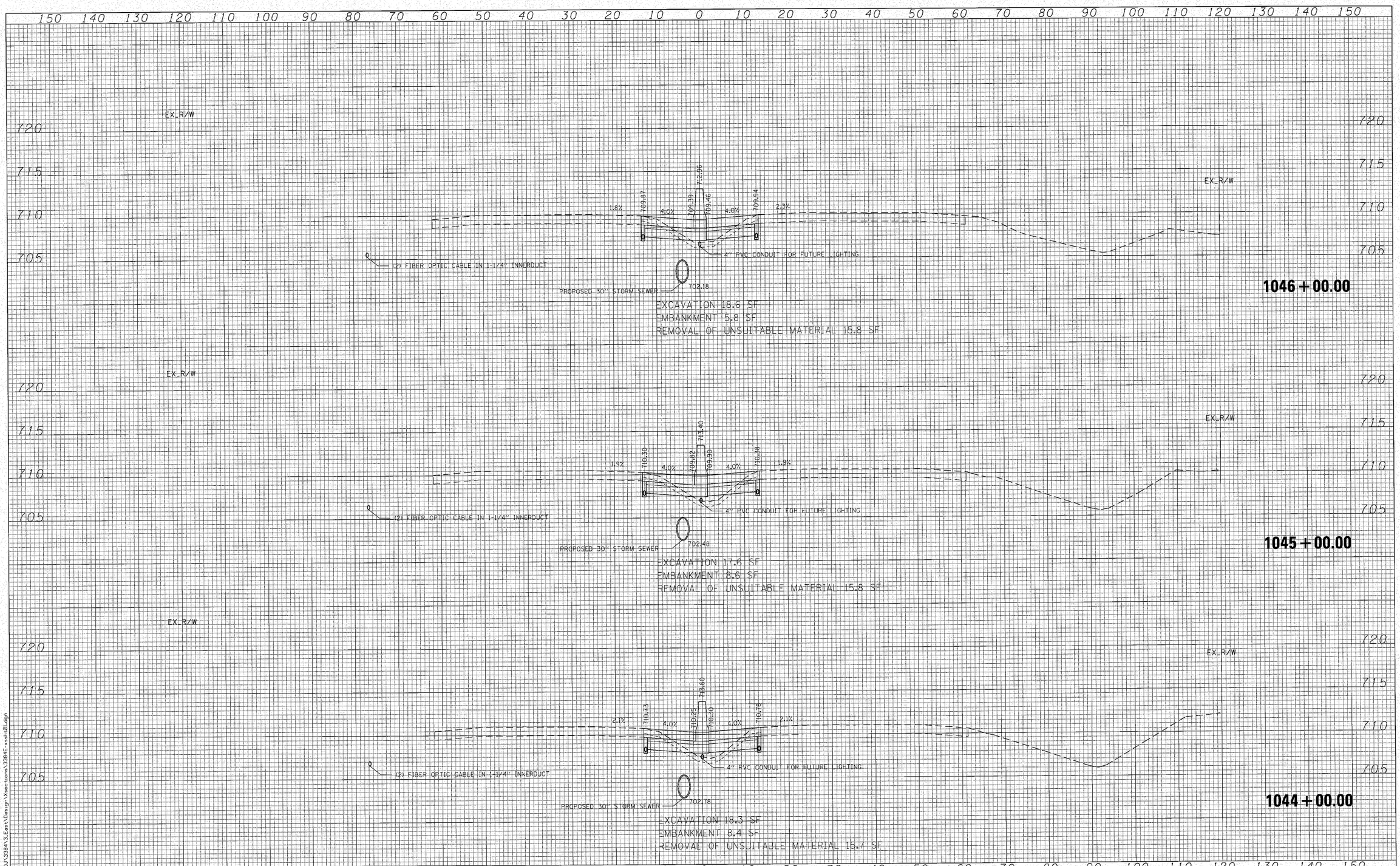
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1041+00.00 TO STA. 1043+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	298
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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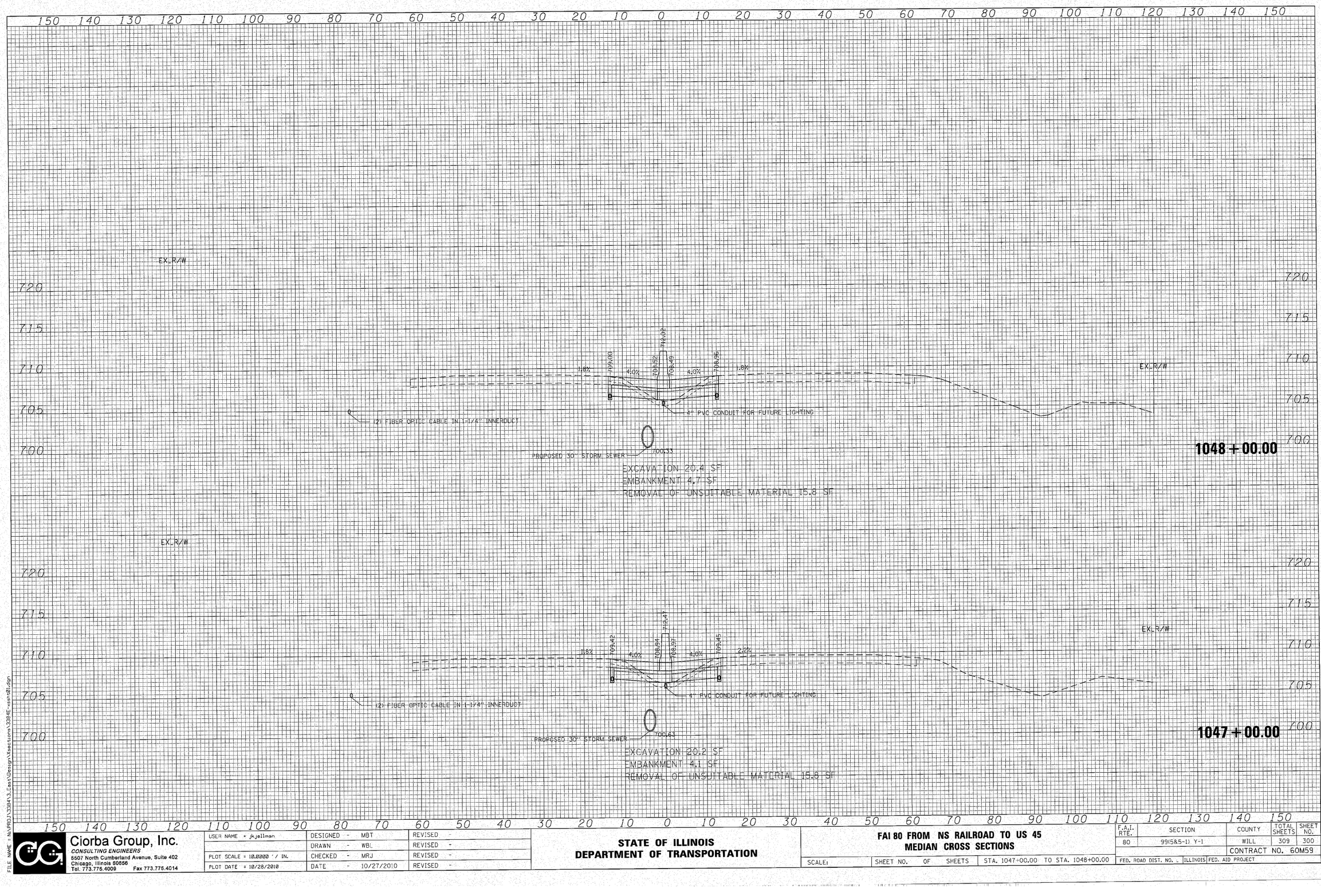
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PLOT DATE = 10/20/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1044+00.00 TO STA. 1046+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	299
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1047+00.00 TO STA. 1048+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	300
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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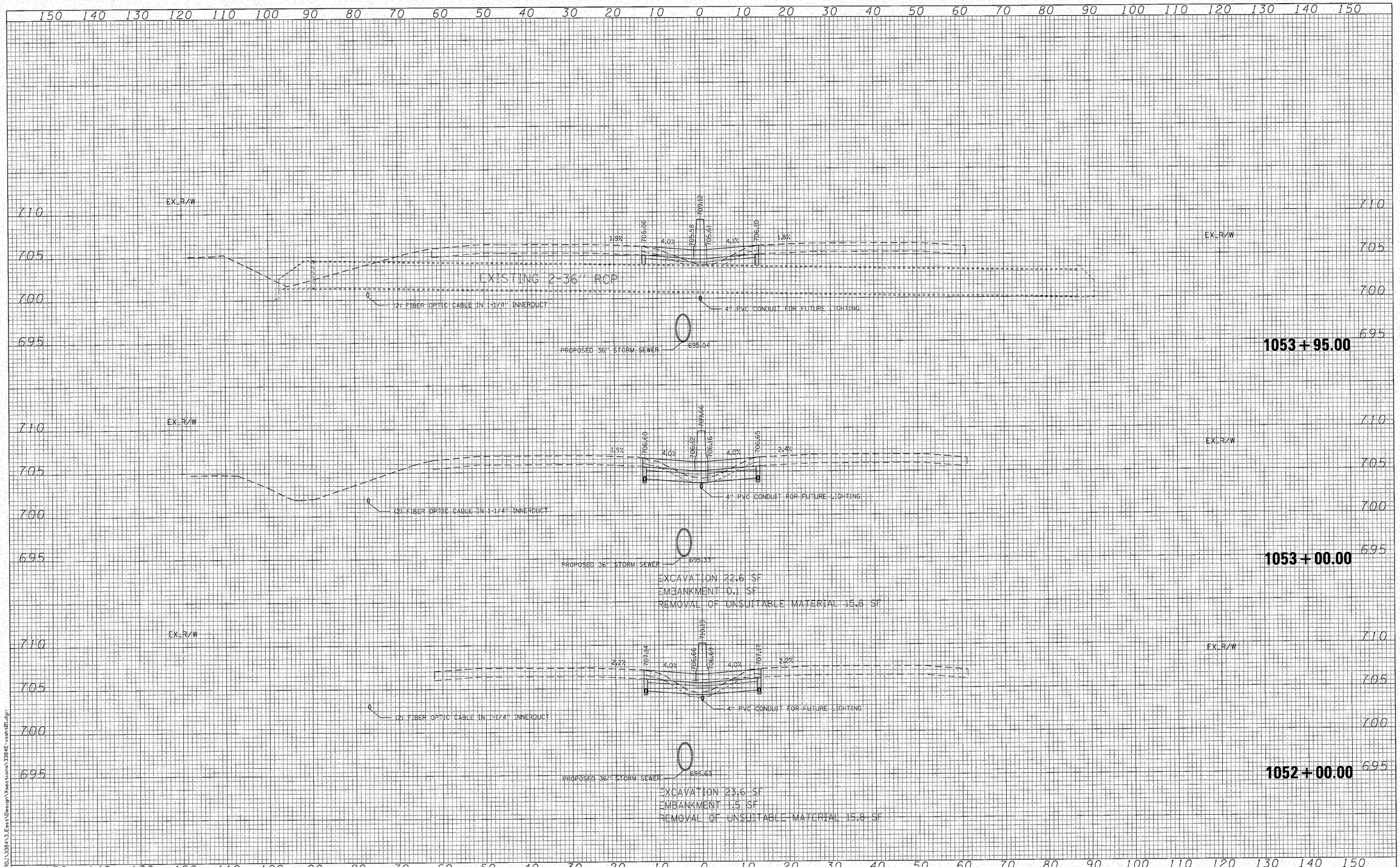
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1049+00.00 TO STA. 1051+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	301
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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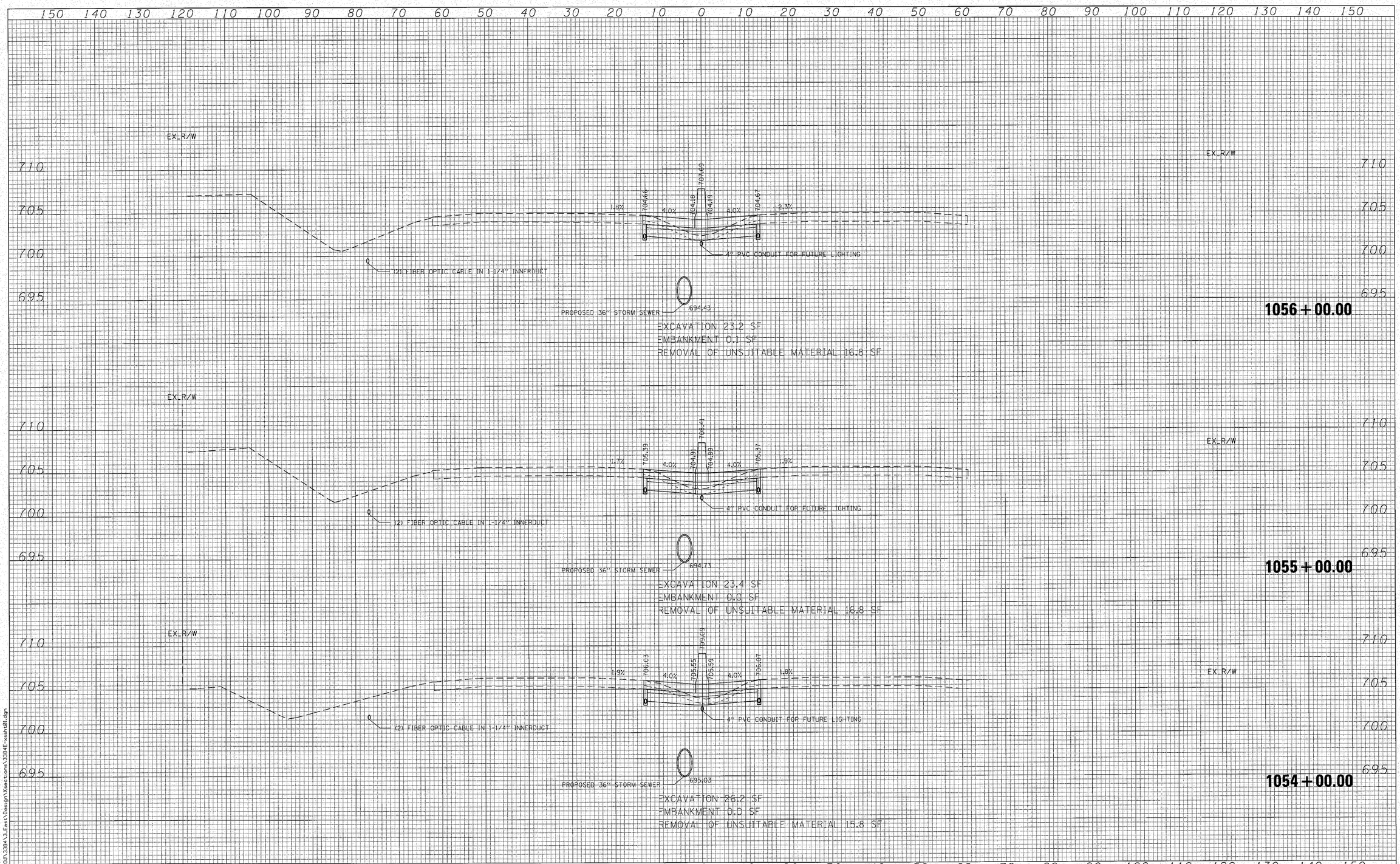
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1052+00.00 TO STA. 1053+95.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	302
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 12/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

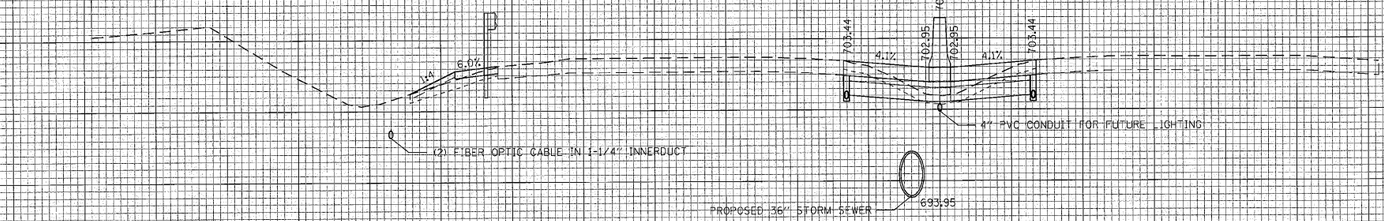
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	303
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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710
705
700
695

EX R/W

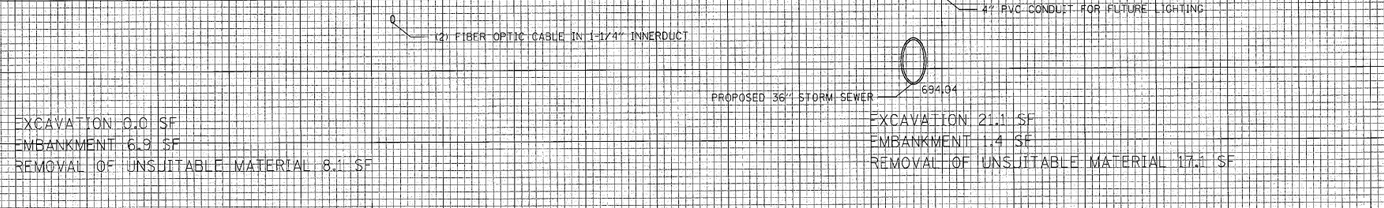


EXCAVATION 0.0 SF
EMBANKMENT 5.8 SF
REMOVAL OF UNSUITABLE MATERIAL 7.5 SF

EXCAVATION 22.2 SF
EMBANKMENT 0.7 SF
REMOVAL OF UNSUITABLE MATERIAL 17.0 SF

1057+60.00

EX R/W

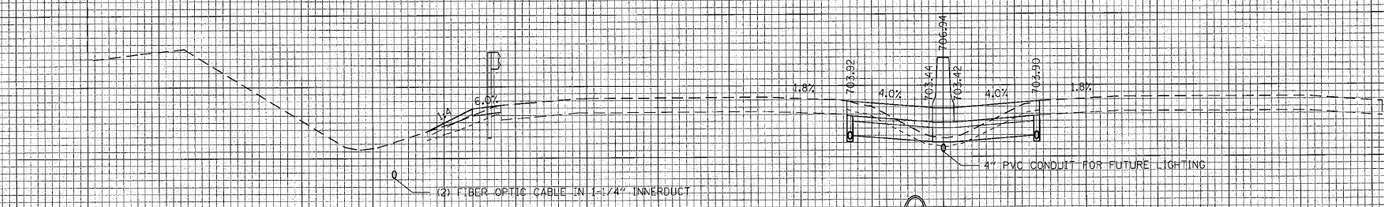


EXCAVATION 0.0 SF
EMBANKMENT 6.9 SF
REMOVAL OF UNSUITABLE MATERIAL 8.1 SF

EXCAVATION 21.1 SF
EMBANKMENT 1.4 SF
REMOVAL OF UNSUITABLE MATERIAL 17.5 SF

1057+30.00

EX R/W



EXCAVATION 0.0 SF
EMBANKMENT 4.4 SF
REMOVAL OF UNSUITABLE MATERIAL 6.4 SF

EXCAVATION 20.6 SF
EMBANKMENT 1.3 SF
REMOVAL OF UNSUITABLE MATERIAL 17.1 SF

1057+00.00

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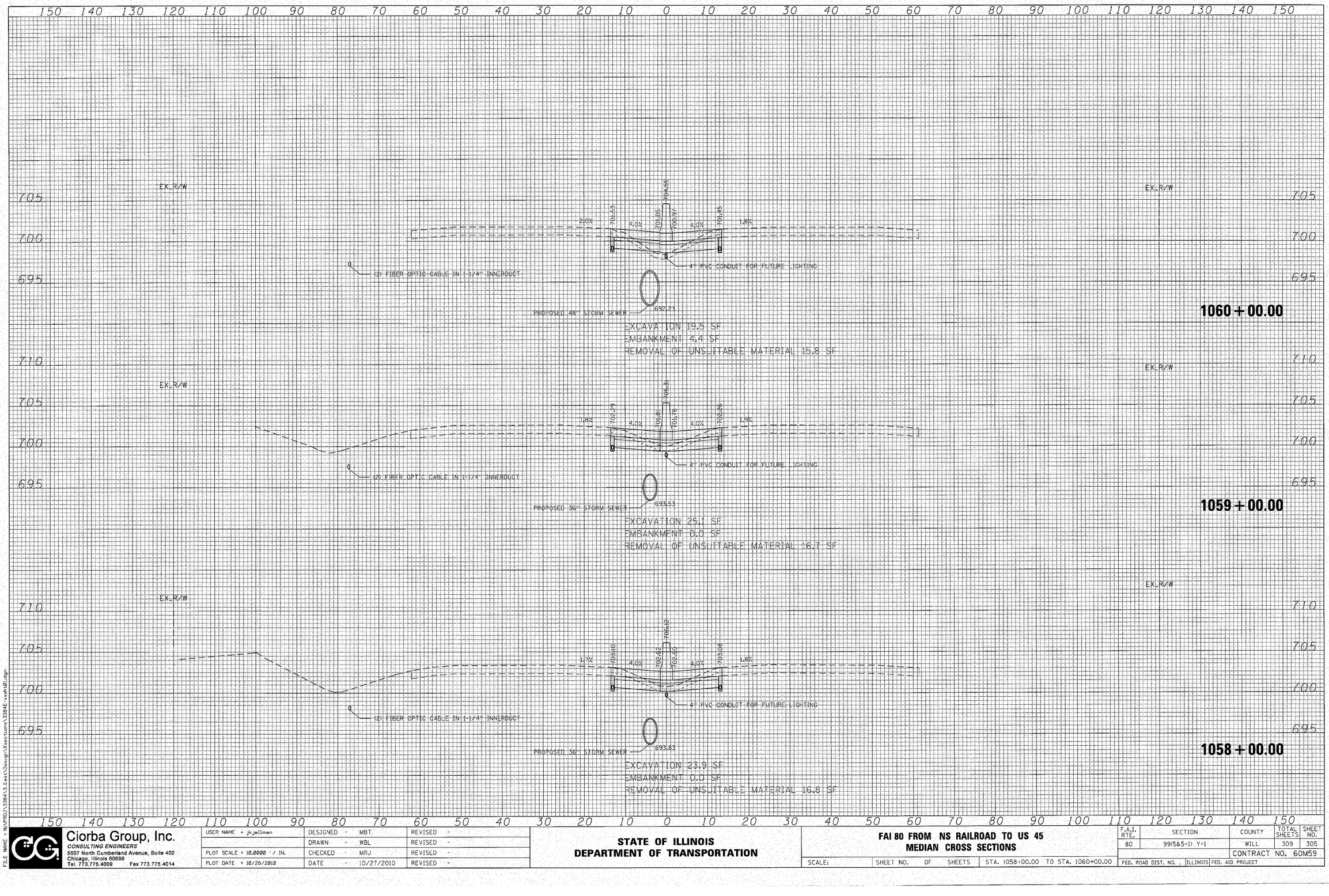
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1057+00.00 TO STA. 1057+60.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	304
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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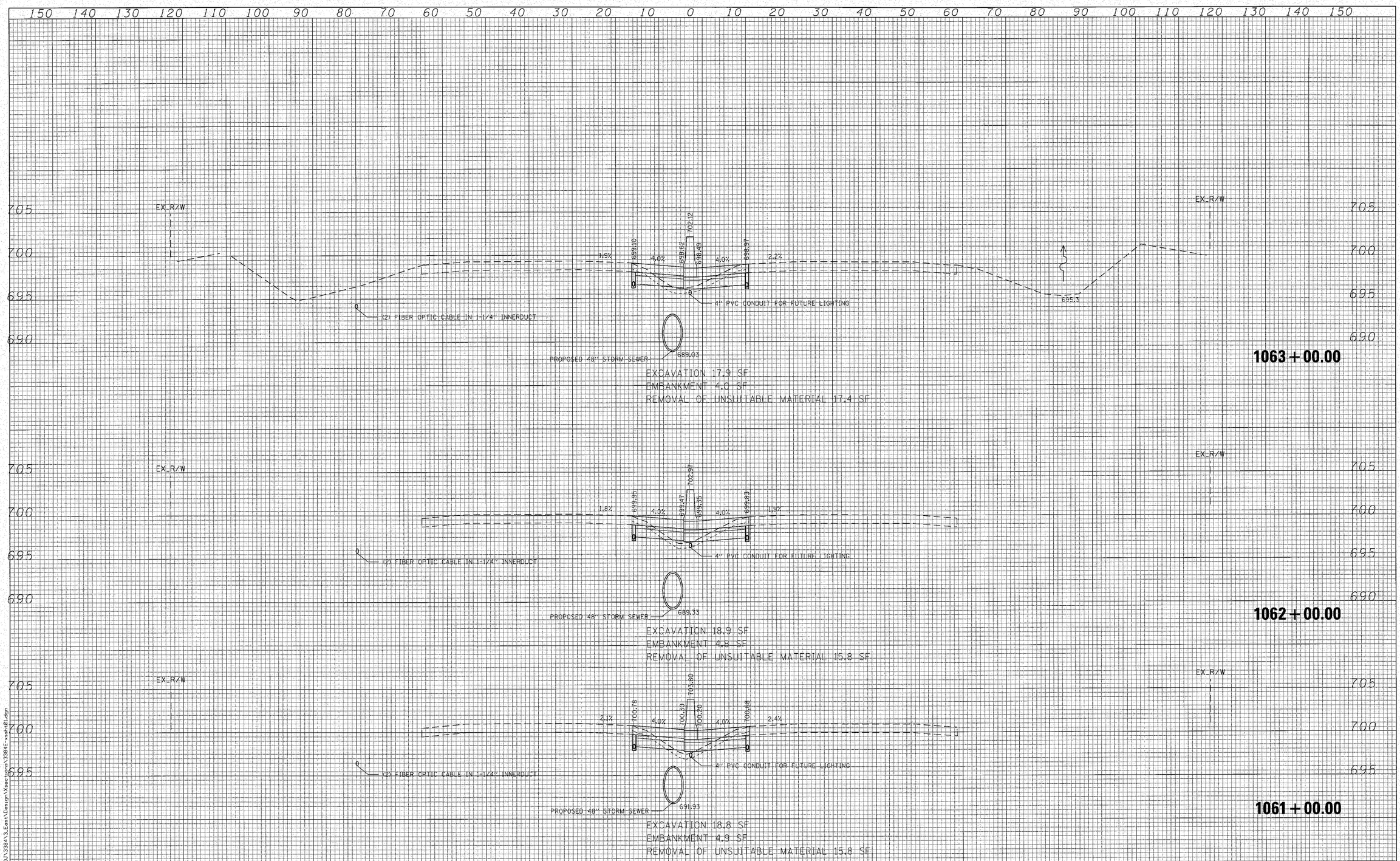
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 1058+00.00 TO STA. 1060+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	305
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



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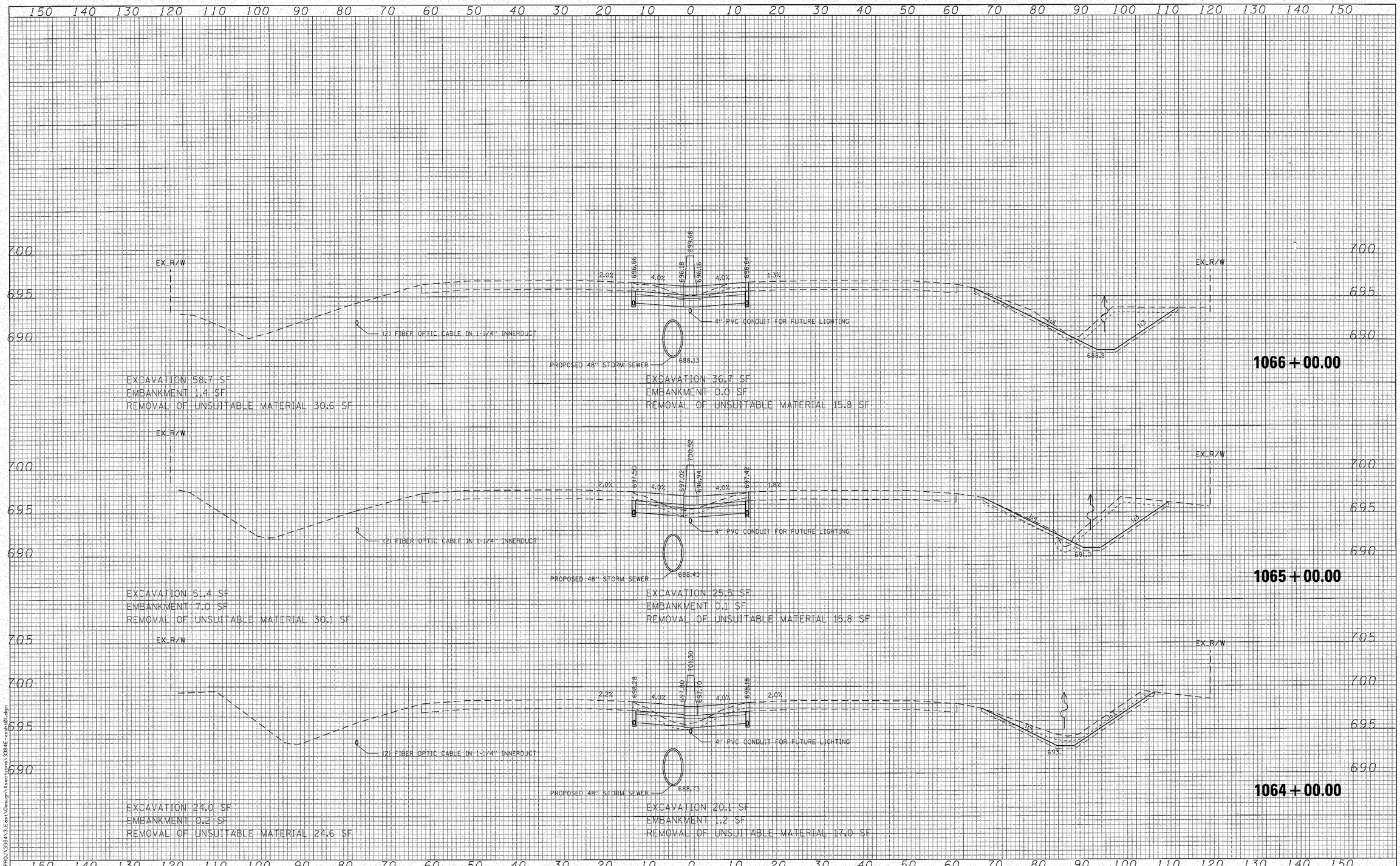
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PLOT DATE = 12/28/2010	DATE - 10/27/2010	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA 1061+00.00 TO STA 1063+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	306
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



FILE NAME = N:\PROJ\33843\East\Design\Xsections\3384E-xsmn01.dgn

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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = jkjellman	DESIGNED - MBT	REVISED -
	DRAWN - WBL	REVISED -
PLOT SCALE = 12.0000 ' / IN.	CHECKED - MRJ	REVISED -
PLOT DATE = 12/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA 1064+00.00 TO STA 1066+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	307
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

700 695 690

EX_R/W

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

EXCAVATION 41.0 SF
EMBANKMENT 0.7 SF
REMOVAL OF UNSUITABLE MATERIAL 27.3 SF

EX_R/W

1:3

688.12

1067 + 00.00

EX_R/W

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

EXCAVATION 65.5 SF
EMBANKMENT 3.1 SF
REMOVAL OF UNSUITABLE MATERIAL 20.1 SF

696.15 695.67 699.20 695.70 696.10

4.0% 3.3%

4" PVC CONDUIT FOR FUTURE LIGHTING

EX_R/W

1:3

1:2

687.6

1066 + 60.00

EXCAVATION 48.8 SF
EMBANKMENT 0.0 SF
REMOVAL OF UNSUITABLE MATERIAL 15.8 SF

EX_R/W

(2) FIBER OPTIC CABLE IN 1-1/4" INNERDUCT

696.24 695.75 699.28 695.78 696.18

4.0% 3.4%

4" PVC CONDUIT FOR FUTURE LIGHTING

PROPOSED 42" STORM SEWER

PROPOSED 48" STORM SEWER
687.98

RESTRICTOR PLATE

EX_R/W

1:20

1:3

687.7

1066 + 50.00

FILE NAME = N:\PROJ\33804\3_East\Design\Xsections\33804E-xsht01.dgn

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

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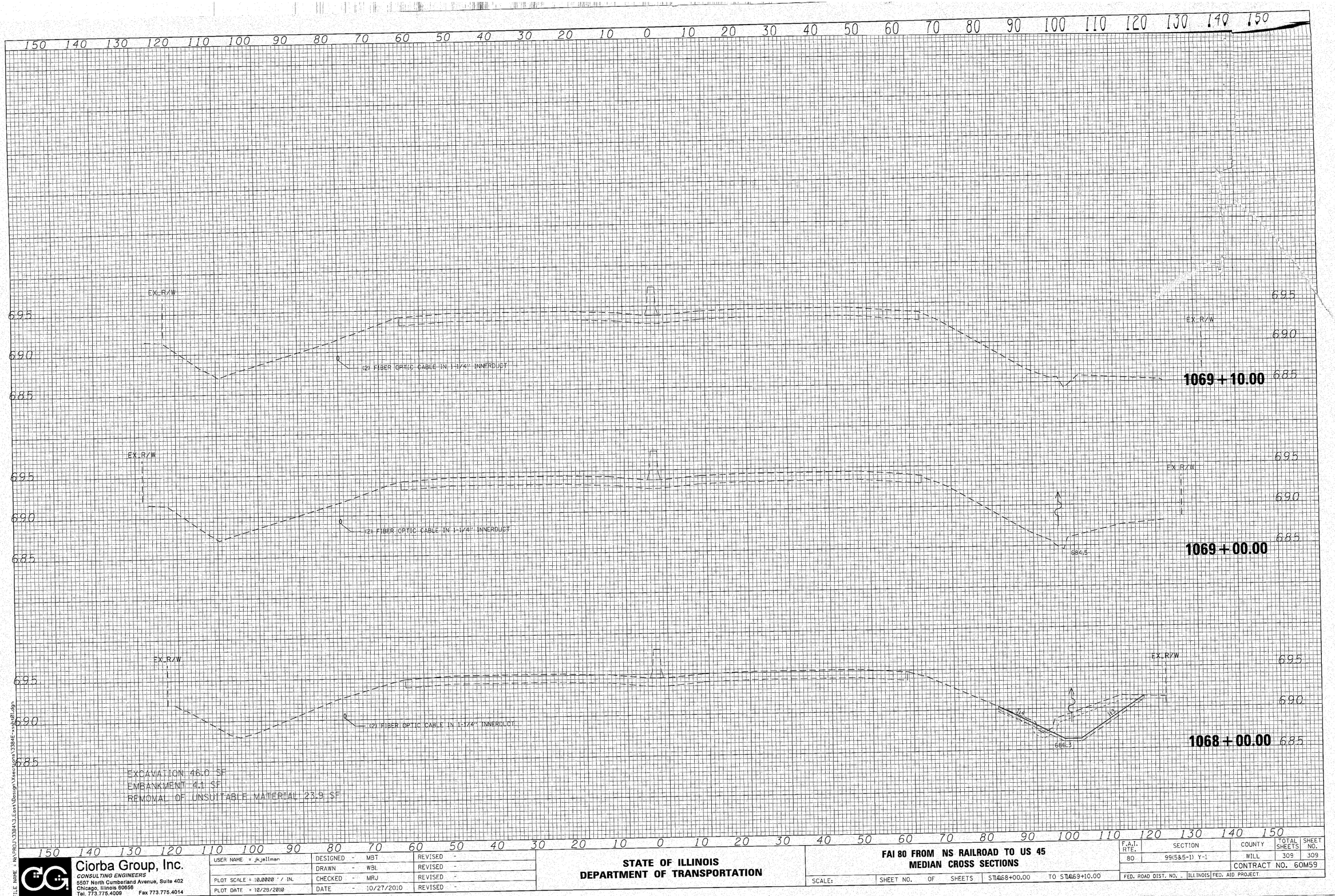
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PLOT DATE = 10/28/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA 1066+50.00 TO STA 1067+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	308
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 10/29/2010	DATE - 10/27/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAI 80 FROM NS RAILROAD TO US 45
MEDIAN CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA 1068+00.00 TO STA 1069+10.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	99(5&5-1) Y-1	WILL	309	309
		CONTRACT NO. 60M59		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT		

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