

FOR UTILITY LOCATION PURPOSES, THIS PROJECT IS LOCATED IN THE N.E. AND S.E. QUARTERS OF SECTION 13, TOWNSHIP 5 NORTH, RANGE 10 WEST OF THE THIRD PRINCIPAL MERIDIAN.

AGENCIES KNOWN TO HAVE UNDERGROUND FACILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT ARE SHOWN BELOW (MEMBERS OF JULIE, PHONE (800) 892-0123, ARE INDICATED BY *).

* CHARTER COMMUNICATIONS
508 NIAGARA
EAST ALTON, IL 62024
(618) 251-2660

CITY OF ALTON
PUBLIC WORKS DEPARTMENT
#2 EMMA L. KAUS LANE
ALTON, IL 62002
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203 GOETHE
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4436 INDUSTRIAL DRIVE
P.O. BOX 186
ALTON, IL 62002
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
FEDERAL AID HIGHWAY

CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY

(FORMERLY KNOWN AS INDIANA AVE. EXTENSION - PHASE III)

SECTION 06-00208-02-RP

FAU ROUTE 8966

PROJECT HPD-0387 (005)

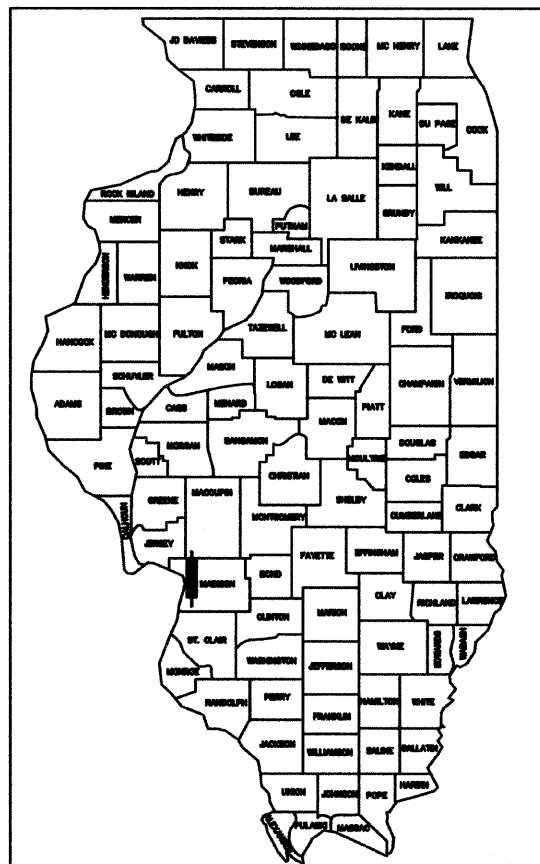
CITY OF ALTON

MADISON COUNTY

JOB C-98-382-06

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	MADISON	61	1

FEDERAL AID PROJECT
* 06-00208-02-RP
CONTRACT NO. 97291



LOCATION OF SECTION INDICATED THUS:—

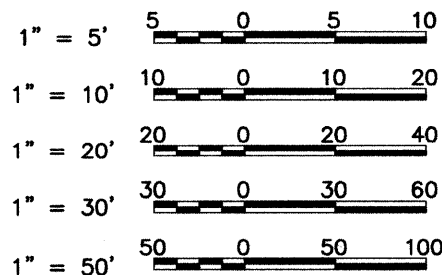
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HIGHWAY STANDARDS

SEE SHEET NO. 2

SCALES

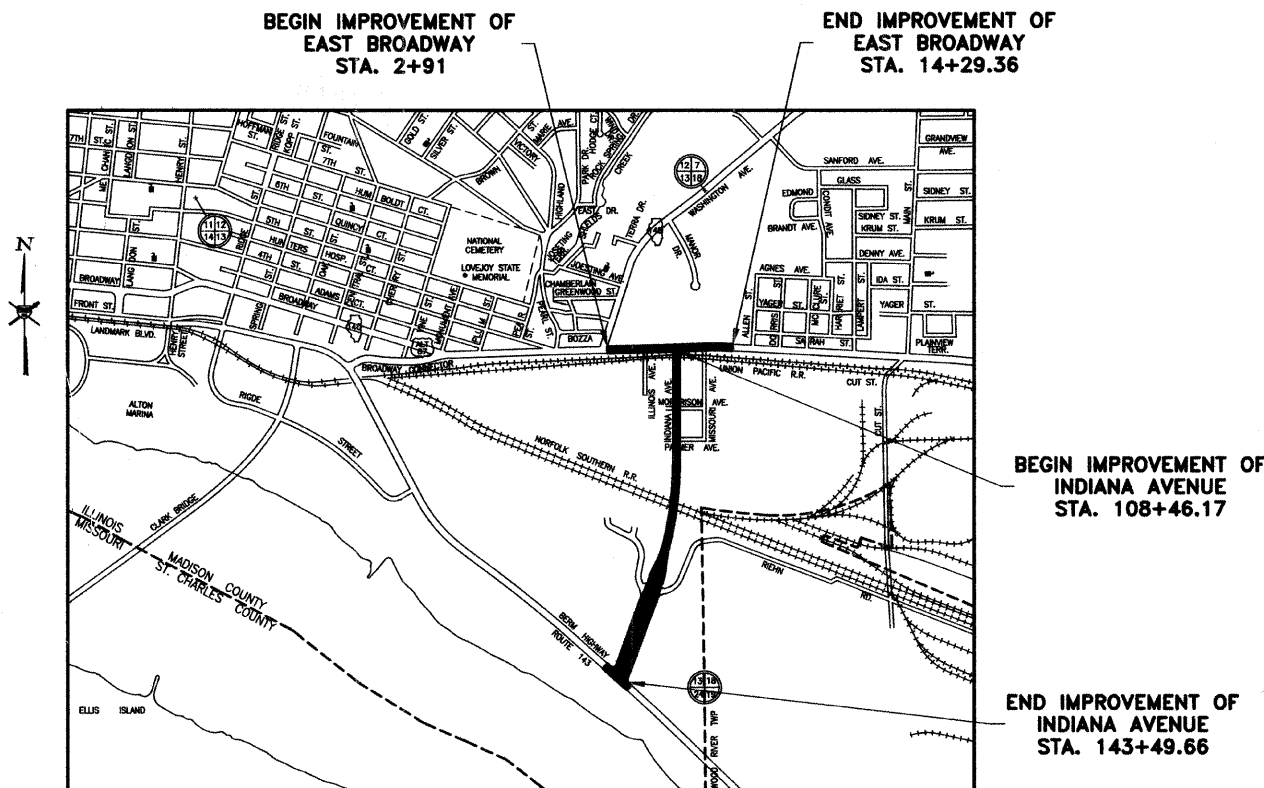


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS THE ABOVE SCALES MAY BE USED.

DESIGN DESIGNATION - 1,420 (2027) URBAN COLLECTOR 8.856 (PCC-20)

DESIGN SPEED = 40 M.P.H.

CONTRACT NO. 97291



LOCATION MAP



NET LENGTH OF EAST BROADWAY IMPROVEMENT = 1,138.36 FEET = 0.216 MILES
NET LENGTH OF INDIANA AVENUE IMPROVEMENT = 3,503.49 FEET = 0.664 MILES
TOTAL NET LENGTH OF PROJECT = 4641.85 FEET = 0.879 MILES



Sheppard Morgan & Schwaab, Inc.

CONSULTING ENGINEERS & LAND SURVEYORS

215 Market Street
Alton, Illinois 62002
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618/462-9755

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Northgate Center
Granite City, IL 62040
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ILLINOIS DEPARTMENT OF TRANSPORTATION	
Approved	3-15-2007 <i>David E. Godar</i> City of Alton, Mayor
Passed	March 21, 2007 <i>Janice Oberlin</i> District #8 Engineer of Local Roads & Streets
Releasing for Bid Based on Limited Review	3-21-07 <i>Mary C. Lammie</i> Deputy Director of Highways, Region #5 Engineer



David E. Godar

DATE SIGNED 3-15-07
EXPIRATION DATE 11-30-07

GENERAL NOTES

- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 AND THE SPECIAL PROVISIONS OF THE PROJECT CONTRACT.
- EXCEPT WHERE DESIGNATED OTHERWISE, THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM OFFICE RECORD INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE.
- ALL ELEVATIONS REFER TO NATIONAL GEODETIC SURVEY (N.G.S.) DATUM.
- ANY REFERENCES TO "STANDARDS" THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARD OF THE DEPARTMENT AS SHOWN BELOW.
- WHERE PERMANENT SURVEY MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED, THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THE LOCATIONS.
- THE CONTRACTOR SHALL USE EXTREME CAUTION NEAR THE EXISTING PIPELINES CROSSING THE ROADWAY NEAR STATION 127+35. THE CONTRACTOR WILL BE REQUIRED TO NOTIFY THE PIPELINE COMPANIES IN ADVANCE OF WORKING NEAR THE PIPELINES. TELEPHONE NUMBERS FOR THE PIPELINE COMPANIES ARE SHOWN ON THE COVER SHEET OF THESE PLANS.
- PROPOSED ELEVATIONS SHOWN ON THE PLANS AS ± ARE APPROXIMATE, EXACT ELEVATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. IF APPLICABLE, ELEVATIONS SHALL BE DETERMINED PRIOR TO FABRICATION OF THE DRAINAGE STRUCTURES.
- FOR SIMPLICITY, STORM SEWER LENGTHS SHOWN ON THE PLANS ARE FROM CENTER TO CENTER OF STRUCTURES. ACTUAL PIPE REQUIRED WILL BE LESS. MEASUREMENT FOR PAYMENT PURPOSES SHALL BE IN ACCORDANCE WITH ARTICLE 550.09 OF THE STANDARD SPECIFICATIONS.
- IF A PROTECTIVE COAT IS APPLIED TO THE PAVEMENT, IT SHALL ALSO BE APPLIED TO ALL GUTTER FLAGS, FACE OF CURB, AND MEDIAN SURFACES.
- WITHIN THE CLEARING LIMITS, THE PLANS DO NOT INDICATE REMOVAL OF INDIVIDUAL ITEMS. THE CONTRACTOR SHALL ASSUME THAT ALL EXISTING ITEMS ARE TO BE REMOVED UNLESS INDICATED OTHERWISE.
- DUE TO THE NATURE OF THE PROJECT SITE, THE PLANS DO NOT THOROUGHLY SHOW ALL EXISTING ITEMS AND TOPOGRAPHIC FEATURES. THEREFORE, THE CONTRACTOR SHALL PERFORM A THOROUGH INSPECTION OF THE PROJECT SITE DURING THE BIDDING PROCESS TO FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS THAT WILL BE ENCOUNTERED IN PERFORMING THE WORK. FAILURE TO DO SO WILL NOT BE CONSIDERED AS GROUNDS FOR ADDITIONAL COMPENSATION FOR UNFORESEEN ADVERSE CONDITIONS ENCOUNTERED DURING THE PROGRESS OF THE WORK.
- THE CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY WAS FORMERLY KNOWN AS THE INDIANA AVE. EXTENSION. ANY REFERENCES IN THE PLANS AND SPECIAL PROVISIONS TO "INDIANA AVENUE" SHOULD BE INTERPRETED TO MEAN "CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY".
- PLAN QUANTITIES FOR HOT-MIX ASPHALT ITEMS WERE CALCULATED BASED ON USING 112 LBS. / SQ. YD. / IN.

SURVEY CONTROL POINTS

CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP #1	13,405.0850	5526.8325	436.92	P.K. NAIL C/L STA. 109+00
CP #2	13,515.1725	5,441.2219	438.00	CUT CROSS IN CONCRETE
CP #3	13,237.3694	5,463.6410	427.15	REBAR w/ SMS CAP
CP #4	12,806.7572	5,465.3397	423.50	REBAR w/ SMS CAP
CP #5	12,348.8778	5,395.1509	421.66	REBAR w/ SMS CAP
CP #6	11,902.4376	5,391.8770	428.40	REBAR w/ SMS CAP
CP #7	11,750.6163	5,431.8890	427.04	REBAR w/ SMS CAP
CP #8	11,247.4976	5,271.4705	416.97	REBAR w/ SMS CAP
CP #9	10,741.4153	5,273.0256	423.96	CUT CROSS STA. 136+00
CP #10	10,968.0412	5,542.8988	417.64	REBAR w/ SMS CAP
CP #11	11,280.1857	5,643.0904	422.26	REBAR w/ SMS CAP
CP #12	11,666.3125	5,665.1887	428.42	REBAR w/ SMS CAP
CP #13	11,815.6473	5,654.8986	427.83	REBAR w/ SMS CAP
CP #14	12,104.9731	5,725.2098	419.45	REBAR w/ SMS CAP
CP #15	12,485.5552	5,641.2682	420.88	REBAR w/ SMS CAP
CP #16	12,855.2705	5,539.4297	422.03	REBAR w/ SMS CAP C/L STA. 114+50
CP #17	13,438.9006	5,277.4716	437.87	REBAR w/ SMS CAP
CP #18	13,464.9347	5,819.4917	438.20	REBAR FOUND
CP #19	13,535.5975	5,767.1600	437.95	CUT CROSS
CP #20	13,512.8894	5,243.1642	438.28	REBAR w/ SMS CAP
CP #21	13,499.5811	4,922.5595	437.79	REBAR w/ SMS CAP
CP #22	13,483.2606	4,566.4098	435.73	P.K. NAIL IN PARKING LOT
CP #23	13,395.6266	4,533.8885	434.88	REBAR w/ SMS CAP
CP #24	13,421.6497	4,918.7652	437.06	REBAR w/ SMS CAP
CP #27	10,476.6780	5,121.6222	423.85	REBAR w/ SMS CAP
CP #28	10,426.4129	5,204.6720	424.43	REBAR w/ SMS CAP
CP #29	9,954.8282	4,949.7103	428.07	REBAR w/ SMS CAP

BENCHMARKS

B.M. #	ELEVATION	DESCRIPTION
B.M. #1	436.36	N. RIM SAN. M.H. E. SIDE OF INDIANA AVE. @ BROADWAY
B.M. #2	438.51	R.R. SPIKE IN P.P. E. SIDE OF ALTON PLAZA ENTRANCE @ BROADWAY
B.M. #3	424.13	P.K. NAIL IN P.P. 113+80 - 125± RT.
B.M. #4	421.59	CHISELED SQUARE TOP OF SOUTH WINGWALL FOR 84" CULVERT, APPROX. STA. 121+58, 281± RT.
B.M. #5	429.04	R.R. SPIKE IN P.P., APPROX. STA. 124+20, 90' RT.
B.M. #6	427.92	CHISELED SQUARE ON CONC. @ BASE OF N.E. CORNER FENCE @ TANK FARM
B.M. #7	415.72	R.R. SPIKE IN P.P. @ WELL PUMP, APPROX. STA. 132+20, 200' RT.
B.M. #8	416.09	R.R. SPIKE IN P.P. w/ UNDERGROUND ELECT., APPROX. STA. 131+30, 115' LT.

HIGHWAY STANDARDS

280001-03	604056-02	814001-01
353001-03	604066-01	814006-01
420001-06	606001-03	857001
420101-03	606301-03	857006
420106-03	630001-07	873001-01
420401-05	630301-04	877001-02
420501-03	631011-03	878001-05
420701-01	631031-06	880006
424001-04	635006-02	886001
442101-06	635011-01	886006
442201-02	701006-02	BLR 17-3
482006-02	701011-01	
542301-01	701421-01	
542311	701802-02	
542401	701606-04	
602301-01	701701-04	
602308-01	701801-03	
602401-01	702001-06	
602406-02	720001	
602411	720006-01	
602416	720016-01	
602601-01	728001	
602701-01	780001-01	
604001-02	781001-02	
604011-02	805001	

GENERAL LEGEND

	CENTERLINE OF PROPOSED IMPROVEMENT		EXISTING INLET
	EXISTING RIGHT-OF-WAY LINE		EXISTING PIPE CULVERT
	PROPOSED RIGHT-OF-WAY LINE		EXISTING SANITARY SEWER
	TEMPORARY CONSTRUCTION EASEMENT		EXISTING STORM SEWER
	PROPERTY LINE		EXISTING WATER LINE
	SECTION LINE		EXISTING GAS LINE
	1/2 SECTION LINE		EXISTING TELEPHONE LINE
	IRON PIPE FOUND		EXISTING FIBER OPTIC CABLE
	IRON PIPE SET		EXISTING ELECTRIC CABLE
	MONUMENT FOUND		EXISTING PIPE LINE
	PROPOSED R.O.W. MONUMENT		SURFACE TO BE REMOVED
	FENCE		18" TREE
	EDGE OF EXISTING FEATURES		SOIL BORING LOCATION
	CONSTRUCTION LIMITS		PROPOSED DITCH
	UTILITY POLE		PROPOSED MANHOLE
	UTILITY POLE W/ DOWN GUY		PROPOSED INLET
	LIGHT POLE		PROPOSED STORM SEWER
	GAS METER		PROPOSED END SECTION
	WATER METER		PROPOSED RIP RAP
	FIRE HYDRANT		SETTLEMENT PLATFORM
	WATER OR GAS VALVE		INCLINOMETER
	TELEPHONE PEDESTAL		PIEZOMETER
	EXISTING SIGN		EXISTING SPOT ELEVATION
	PROPOSED SIGN		PROPOSED SPOT ELEVATION
	MAIL BOX		PROPOSED DEPRESSED CURB
	EXISTING MANHOLE		PROPOSED INCIDENTAL BITUMINOUS SURFACING
	CONTROL POINT		

ABBREVIATIONS

T.C.	- TOP OF CURB
E.P.	- EDGE OF PAVEMENT
F.L.	- FLOW LINE
RDMH	- RESTRICTED DEPTH MANHOLE
PRCF	- PRECAST REINFORCED CONCRETE FLARED
F. & G.	- FRAME AND GRATE
O.L.	- OPEN LID
C.L.	- CLOSED LID
SS1	- STORM SEWER TYPE 1
SS1WMQ	- STORM SEWER TYPE 1, WATER MAIN QUALITY PIPE
PC1	- PIPE CULVERT TYPE 1
T.B.	- TRENCH BACKFILL
C.L.S.M.	- CONTROLLED LOW-STRENGTH MATERIAL
CUT	- EARTH EXCAVATION QUANTITY SHOWN ON CROSS SECTIONS
FILL	- EMBANKMENT QUANTITY SHOWN ON CROSS SECTIONS

REVISIONS

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CONSULTING ENGINEERS & LAND SURVEYORS
 10 Central Industrial Dr
 Northgate Center
 Alton, Illinois 62002
 618/897-8700



CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 GENERAL NOTES, LEGEND & CONTROL POINTS

DWG. NO. PH III GENERAL NOTES & LEGEND DWG
 REF. BK INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: AS SHOWN
 SHEET 2 OF 61

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
				ROADWAY	
				60% ICC 40% LOCAL + FED J000-5B	100% LOCAL + FED J000-2A
20200100	EARTH EXCAVATION	CU YD	2074	630	1444
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	100	45	55
20400800	FURNISHED EXCAVATION	CU YD	24079	3510	20569
20800150	TRENCH BACKFILL	CU YD	382	113	269
25000200	SEEDING, CLASS 2	ACRE	8.4	1.6	6.8
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	756	144	612
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	756	144	612
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	756	144	612
25000700	AGRICULTURAL GROUND LIMESTONE	TON	16.8	3.2	13.6
25000750	MOWING	ACRE	6.25	4.25	2
25003200	INTERSEEDING, CLASS 2	ACRE	5	3	2
25100115	MULCH, METHOD 2	ACRE	8.4	1.6	6.8
25100630	EROSION CONTROL BLANKET	SQ YD	1000	1000	0
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	154	99	55
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	4200	800	3400
28000300	TEMPORARY DITCH CHECKS	EACH	24	14	10
28000400	PERIMETER EROSION BARRIER	FOOT	4992	2459	2533
28000500	INLET AND PIPE PROTECTION	EACH	58	29	29
28000720	MULCH, METHOD 2	ACRE	42	8	34
28100207	STONE RIPRAP, CLASS A4	TON	563	484	79
28200200	FILTER FABRIC	SQ YD	937	839	98
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	19023	10424	8599
31101000	SUB-BASE GRANULAR MATERIAL, TYPE B	TON	189	104	85
31101900	SUB-BASE GRANULAR MATERIAL, TYPE C	TON	1186	688	498
35300300	PORTLAND CEMENT CONCRETE BASE COURSE 8"	SQ YD	632	0	632
35800100	PREPARATION OF BASE	SQ YD	6397	0	6397
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	186	0	186
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	838	0	838
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1451	0	1451
40600300	AGGREGATE (PRIME COAT)	TON	28	0	28
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	3	0	3
40600802	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	461	0	461
40600830	TEMPORARY RAMP	SQ YD	237	0	237
40603350	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	77	0	77
40603545	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	1159	0	1159
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	164	0	164
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	406	406	0
42001200	PAVEMENT FABRIC	SQ YD	183	0	183
42001300	PROTECTIVE COAT	SQ YD	20415	11782	8633
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	183	0	183
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	61	0	61
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	249	0	249
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	1609	0	1609
42400800	DETECTABLE WARNINGS	SQ FT	24	0	24
44000100	PAVEMENT REMOVAL	SQ YD	237	0	237
44000196	HOT MIX ASPHALT SURFACE REMOVAL, SPECIAL	SQ YD	325	0	325
44000198	HOT-MIX ASPHALT SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	6089	0	6089
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	101	0	101
44000300	CURB REMOVAL	FOOT	1326	0	1326
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	189	0	189
44000600	SIDEWALK REMOVAL	SQ FT	2314	0	2314
44003800	MEDIAN SURFACE REMOVAL	SQ FT	778	0	778
44200116	PAVEMENT PATCHING, TYPE I, 10 INCH	SQ YD	17	0	17
44200120	PAVEMENT PATCHING, TYPE II, 10 INCH	SQ YD	322	0	322
44200124	PAVEMENT PATCHING, TYPE III, 10 INCH	SQ YD	19	0	19
44200126	PAVEMENT PATCHING, TYPE IV, 10 INCH	SQ YD	546	0	546
44201823	CLASS D PATCHES, TYPE I, 15 INCH	SQ YD	3	0	3
44201831	CLASS D PATCHES, TYPE III, 15 INCH	SQ YD	86	0	86
44201833	CLASS D PATCHES, TYPE IV, 15 INCH	SQ YD	166	0	166
44213200	SAW CUTS	FOOT	1972	0	1972
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	3831	0	3831
48101200	AGGREGATE SHOULDERS, TYPE B	TON	15	0	15
48203003	HOT-MIX ASPHALT SHOULDERS, 1 1/2"	SQ YD	1989	0	1989
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	20	0	20
50102400	CONCRETE REMOVAL	CU YD	9	0	9
50105220	PIPE CULVERT REMOVAL	FOOT	25	0	25
50300260	BRIDGE DECK GROOVING	SQ YD	1722	0	1722
50800105	REINFORCEMENT BARS	POUND	948	0	948
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	0	1
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2	0	2
54213672	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 27"	EACH	1	0	1
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	1	0	1
54213705	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 60"	EACH	1	0	1
54215547	METAL END SECTIONS 12"	EACH	14	9	5
54247140	GRATING FOR CONCRETE FLARED END SECTION 27"	EACH	1	0	1
54247150	GRATING FOR CONCRETE FLARED END SECTION 30"	EACH	1	0	1
55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	872	572	300
55019600	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	45	0	45
55019700	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 18"	FOOT	45	0	45
55019800	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 21"	FOOT	50	0	50
55020100	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 30"	FOOT	19	0	19
55021600	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 12"	FOOT	122	80	42
55021800	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 18"	FOOT	101	0	101
55022100	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 27"	FOOT	64	0	64
55022600	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 48"	FOOT	448	0	448
55022800	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS II 60"	FOOT	423	256	167
55100500	STORM SEWER REMOVAL 12"	FOOT	145	0	145
55100700	STORM SEWER REMOVAL 15"	FOOT	125	0	125
55101200	STORM SEWER REMOVAL 24"	FOOT	14	0	14
55101400	STORM SEWER REMOVAL 30"	FOOT	3	0	3
55101600	STORM SEWER REMOVAL 36"	FOOT	15	0	15
552A1600	STORM SEWERS JACKED IN PLACE, CLASS A 48"	FOOT	55	0	55
55300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	285	0	285
60100945	PIPE DRAINS 12"	FOOT	900	756	144
60228100	RESTRICTED DEPTH MANHOLES, 6" DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	0	1
60237000	INLETS, TYPE A, TYPE 15 FRAME, AND LID	EACH	2	0	2
60240210	INLETS, TYPE B, TYPE 1 FRAME, OPEN LID	EACH	1	0	1
60240320	INLETS, TYPE B, TYPE 15 FRAME AND LID	EACH	5	0	5
60246541	INLET BOX SPECIAL, NO. 1	EACH	2	0	2
60246542	INLET BOX SPECIAL, NO. 2	EACH	5	0	5
60255500	MANHOLES TO BE ADJUSTED	EACH	1	0	1
60255600	MANHOLES TO BE ADJUSTED (SPECIAL)	EACH	1	0	1
60500060	REMOVING INLETS	EACH	4	0	4
60600605	CONCRETE CURB, TYPE B	FOOT	528	0	528
60603500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06	FOOT	198	0	198
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	4387	3178	1209
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	5815	3174	2441
60605500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (VARIABLE WIDTH GUTTER FLAG)	FOOT	134	0	134
60608600	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.06	FOOT	72	0	72

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
				ROADWAY	
				60% ICC 40% LOCAL + FED J000-5B	100% LOCAL + FED J000-2A
60610400	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.24	FOOT	119	0	119
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	14648	8482	6166
60623714	CONCRETE MEDIAN (SPECIAL)	SQ FT	300	0	300
60625900	P.C.C. RAMPED MEDIAN TERMINAL	EACH	6	0	6
60900515	CONCRETE THRUST BLOCKS	EACH	14	9	5
63000005	STEEL PLATE BEAM GUARD RAIL, TYPE B	FOOT	600	600	0
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1	0
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	3	3	0
63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	2	2	0
63400105	GUARD POSTS	EACH	5	0	5
63400205	GUARD POSTS REMOVAL	EACH	2	0	2
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	15	8	7
67100100	MOBILIZATION	L SUM	1	0.55	0.45
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1	0	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	828	0	828
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	622	0	622
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	22211	8597	13614
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	838	0	838
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	551	0	551
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	510	0	510
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	10262	2866	7426
72000100	SIGN PANEL - TYPE 1	SQ FT	174	0	174
72000200	SIGN PANEL - TYPE 2	SQ FT	93	0	93
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	297	0	297
73000100	WOOD SIGN SUPPORT	FOOT	18	0	18
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	250	0	250
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	8765	0	8765
78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	361	0	361
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	301	0	301
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	319	0	319
78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS & SYMBOLS	SQ FT	372	0	372
78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	7715	4774	2941
78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	980	0	980
78008240	POLYUREA PAVEMENT MARKING TYPE I - LINE 8"	FOOT	694	0	694
78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	275	0	275
78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	171	0	171
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	203	7	196
78200300	PRISMATIC CURB REFLECTOR	EACH	280	96	184
78200410	GUARDRAIL MARKERS, TYPE A	EACH	17	0	17
78200530	BARRIER WALL MARKERS, TYPE C	EACH	6	0	6
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	0	3
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	86	0	86
78300400	THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	73	0	73
78300500	PAINT PAVEMENT MARKING REMOVAL	SQ FT	28	0	28
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1	0
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1	0
80500100	SERVICE INSTALLATION, TYPE A	EACH	2	0	2
81000500	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	75	75	0
81012300	CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	320	0	320
81012400	CONDUIT IN TRENCH, 1 1/4" DIA., PVC	FOOT	1804	0	1804
81012500	CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	30	0	30
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	50	0	50
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	32	0	32
81012800	CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	147	0	147
81012900	CONDUIT IN TRENCH, 3 1/2" DIA., PVC	FOOT	68	0	68
81013000	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	83	0	83

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO.	ITEM	UNIT		ROADWAY	
			60% ICC 40% LOCAL + FED J000-5B	100% LOCAL + FED J000-2A	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	2	0	2
89100400	ILLUMINATED SIGN, LED	EACH	4	0	4
89502380	REMOVE EXISTING HANDHOLE	EACH	2	0	2
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	5	0	5
Z0018900	DRILL AND GROUT DOWEL BARS	EACH	40	40	0
Z0036200	PAINT CURB	FOOT	488	0	488
Z0048400	RAILROAD CROSSING REMOVAL	EACH	1	0	1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	0	1
LR420033	PORTLAND CEMENT CONCRETE PAVEMENT 9" (SPECIAL)	SQ YD	14308	8398	5910
LR420037	PORTLAND CEMENT CONCRETE PAVEMENT 10" (SPECIAL)	SQ YD	707	0	707
X0300019	REMOVE AND REINSTALL PARKING BLOCKS	EACH	21	0	21
X0321905	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"	FOOT	62	0	62
X0322050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	2	0	2
X0322208	TEMPORARY STORM SEWER PLUGS	EACH	1	0	1
X0323093	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 24"	FOOT	45	0	45
X0323153	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	2895	0	2895
X0323412	REMOVE EXISTING SERVICE INSTALLATION	EACH	1	0	1
X0323437	CONDUIT, FLEXIBLE METALLIC, WEATHERPROOF 2"	EACH	2	2	0
X0323954	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 18"	FOOT	36	0	36
X0324021	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 30"	FOOT	56	0	56
X0696100	PARKING BLOCKS	EACH	5	0	5
X012610	CONCRETE HEADWALL REMOVAL PARTIAL	EACH	1	1	0
X015005	CHANGEABLE MESSAGE SIGN	CAL DA	24	0	24
X0240205	REMOVE SIGN COMPLETE	EACH	2	0	2
X8011010	TELEPHONE SERVICE INSTALLATION	L SUM	1	0	1
X0006983	CLEARING	ACRE	10	2.37	7.63
X0003332	REMOVAL OF EXISTING LIGHT STANDARD	EACH	1	0	1
X0006025	INTERSECTION MONITOR MODULE	EACH	1	0	1
X0006971	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 18"	FOOT	75	0	75
X0006972	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 48"	FOOT	112	0	112
X0006973	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 60"	FOOT	60	0	60
X6020019	INLETS, TYPE B, TYPE 3V FRAME AND GRATE, SPECIAL	EACH	7	5	2
X0006975	INTERSEEDING, CLASS 3 (MODIFIED)	ACRE	1.25	1.25	0
X0006976	INLETS, TYPE A, TYPE 3V FRAME AND GRATE, SPECIAL	EACH	12	6	6
X0006977	INLETS, TYPE B, TYPE 1V FRAME AND GRATE, SPECIAL	EACH	15	15	0
X0006978	RESTRICTED DEPTH MANHOLES, 5-DIAMETER, TYPE 3V FRAME AND GRATE, SPECIAL	EACH	1	0	1
X0006979	RESTRICTED DEPTH MANHOLES, 7-DIAMETER, TYPE 3V FRAME AND GRATE, SPECIAL	EACH	2	0	2
X0006979	MANHOLES, TYPE A, 8-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	0	1
X0006980	CAP EXISTING SETTLEMENT PLATFORMS	EACH	11	11	0
X0006981	CAP EXISTING INCLINOMETERS	EACH	5	5	0
X0006982	REMOVE EXISTING PIEZOMETER READOUT STATION	L SUM	1	1	0

* Denotes Specialty Items

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION (CUT) (CU. YD.)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE * (CU. YD.)	EMBANKMENT (FILL) (CU. YD.)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU. YD.)	FURNISHED EXCAVATION (CU. YD.)
108+46.17 TO 112+00	524	393	7980	-7587	
112+00 TO 116+00	209	157	10894	-10737	
116+00 TO 120+00	185	139	3438	-3299	
120+00 TO 124+00	136	102	148	-46	
126+40.87 TO 131+00	103	77	193	-115	
131+00 TO 135+00	206	154	196	-42	
Service Road - East Side	0	0	535	-535	
Service Road - West Side	0	0	150	-150	
Morrison Avenue - East Side	208	156	961	-805	
Morrison Avenue - West Side	71	53	1044	-991	
Broadway - South Side	433	324	80	245	
Broadway - North Side	0	0	15	-15	
Total	2074	1555	25634	-24079	24079

* ASSUME SHRINKAGE FACTOR = 25%

STATION	PAVEMENT PATCHING SCHEDULE			
	PAVEMENT PATCHING, 10 INCH (SQ. YD.)			
	TYPE I	TYPE II	TYPE III	TYPE IV
135+30 LT				45
135+69 LT	5			
135+76 RT		8		
135+77 RT		8		
135+97 LT		8		
135+97 LT		8		
135+97 CL		11		
135+97 RT	4			
136+03 LT				25
136+39 LT		8		
136+41 LT		8		
136+64 LT		8		
136+64 LT		8		
136+82 RT		8		
136+82 RT		8		
136+97 RT	4			
137+15 LT		8		
137+94 RT	4			
137+97 LT		9		
138+24 LT		8		
138+24 LT		8		
138+46 LT		8		
138+46 LT		8		
138+15 RT				35
138+94 LT		8		
138+94 LT		8		
138+94 RT		9		
139+33 RT		13		
139+39 LT		8		
139+39 LT		8		
139+50 RT				31
139+97 LT		8		
139+97 LT		8		
139+97 RT		7		
140+20 RT		9		
140+27 RT				47
140+97 LT		8		
140+97 LT		8		
140+97 RT		8		
140+97 RT		8		
141+98 RT		8		
141+98 RT		8		
141+98 RT		8		
141+98 LT		8		
141+98 LT		8		
142+03 RT				65
142+66 RT		8		
142+66 RT		7		
142+72 RT			19	
142+85 LT				26
143+00 LT				76
143+00 LT				72
143+00 RT				64
143+00 RT				60
143+39 CL		9		
TOTALS:	17	322	19	546

NOTE: SAW CUTTING FOR PAVEMENT PATCHING AS REQUIRED BY ARTICLE 442.05 (C) SHALL BE INCLUDED IN THE COST OF PAVEMENT PATCHING.

REVISIONS

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CONSULTING ENGINEERS LAND SURVEYORS
215 Market Street
P.O. BOX E
Alton, Illinois 62012
618/462-9786



CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
SUMMARY OF QUANTITIES

DWG. NO.
PH II SUMMARY OF QUANTITIES.DWG
REF. BK. INDIANA AVE.
JOB NO. 406365.1
DSN. BY: DEG
DSN. BY: CAD
CHK. BY: DEG
DATE: OCTOBER, 2006
SCALE: NO SCALE
SHEET 4 OF 61

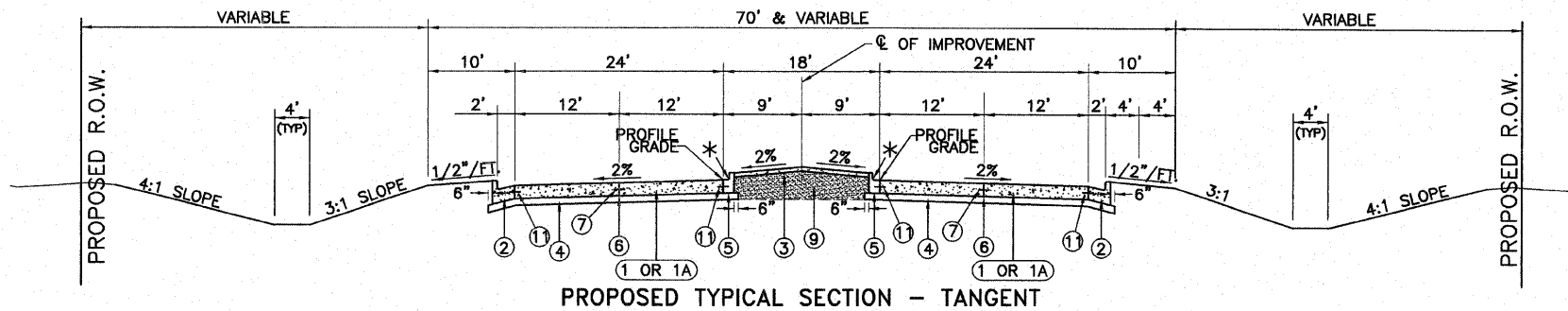
STRUCTURAL DESIGN DATA

INDIANA AVENUE EXTENSION

PAVEMENT TYPE: RIGID, NON-REINFORCED JOINTED
 CLASS OF STREET: CLASS I
 DESIGN PERIOD: 20 YEARS
 TRAFFIC DATA: 2007 ADT = 9,200
 2017 ADT = 11,700 (SDT)
 2027 ADT = 14,200
 STRUCTURAL DESIGN TRAFFIC: 80% P.V. = 9,360
 10% S.U. = 1,170
 10% M.U. = 1,170
 TRAFFIC FACTOR : 8.856 (80,000 LB. TRUCK DESIGN)
 SHOULDER TYPE: TIED CURB AND GUTTER
 SUBGRADE SUPPORT RATING: POOR (ASSUMED)
 OVERLOADS: N/A (T.F. > 2.0)
 DESIGN SPECIFIED: SLAB THICKNESS - 9"
 JOINT SPACING - 15'
 DOWEL BARS - 1.5" DIAMETER
 SUBBASE - GRANULAR, 4"

LEGEND

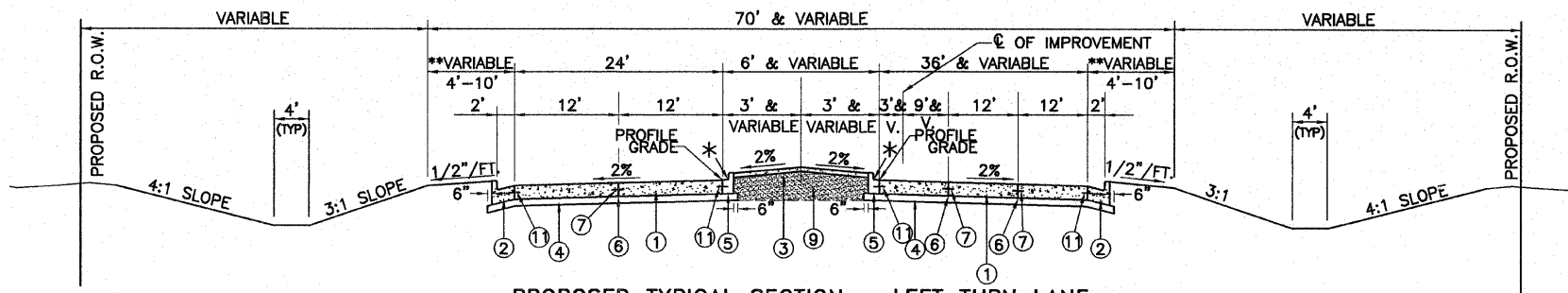
- ① PORTLAND CEMENT CONCRETE PAVEMENT 9" (SPECIAL), PAVEMENT SHALL BE JOINTED PER STANDARD 420101 AND 420106 15' JOINT SPACING, 1-1/2" DIAMETER DOWEL BARS AT ALL TRANSVERSE JOINTS
- ①A FROM STA. 108+46.17 TO STA. 109+25 ALL PAVEMENT SHALL BE 10" THICK PORTLAND CEMENT CONCRETE PAVEMENT 10" (SPECIAL), PAVEMENT SHALL BE JOINTED PER STANDARD 420101 AND 420106 15' JOINT SPACING, 1-1/2" DIAMETER DOWEL BARS AT ALL TRANSVERSE JOINTS
- ①B FROM STA. 123+31.29 TO STA. 123+57.36 RIGHT
 FROM STA. 123+46.28 TO STA. 123+57.36 LEFT
 FROM STA. 126+80.36 TO STA. 126+88.57 RIGHT
 FROM STA. 126+80.36 TO STA. 127+03.52 LEFT
 BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) (SEE HIGHWAY STANDARD 420401)
- ② COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ③ CONCRETE MEDIAN SURFACE, 4"
- ④ SUB-BASE GRANULAR MATERIAL TYPE A (4")
- ⑤ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
- ⑥ SAWED OR KEYED LONGITUDINAL JOINT
- ⑦ #6 TIE BARS 30" LONG @ 30" CENTERS
- ⑧ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.06
- ⑨ SUB-BASE GRANULAR MATERIAL, TYPE C
- ⑩ NOT USED
- ⑪ #6 TIE BARS 24" LONG @ 24" CENTERS
- * REVERSE GUTTER PAN SLOPE
- ** STA. 110+60 TO STA. 116+00 = 10'
 STA. 116+00 TO STA. 117+00 = TRANSITION 10' TO 4'
 STA. 117+00 TO STA. 119+00 = 4'
- ⑫ BRIDGE APPROACH PAVEMENT PER HIGHWAY STANDARD 420401
- ⑬ CURB ON BRIDGE APPROACH PAVEMENT TO MATCH CROSS-SECTION OF TYPE B CURB
- ⑭ CONCRETE MEDIAN (SPECIAL) (SEE DETAIL)
- ⑮ EXISTING EMBANKMENT
- ⑯ SAWED JOINT PER DETAIL B OR OPTIONAL LONGITUDINAL CONSTRUCTION JOINT (SEE HIGHWAY STANDARD 420401)



PROPOSED TYPICAL SECTION - TANGENT

INDIANA AVENUE
(NO SCALE)

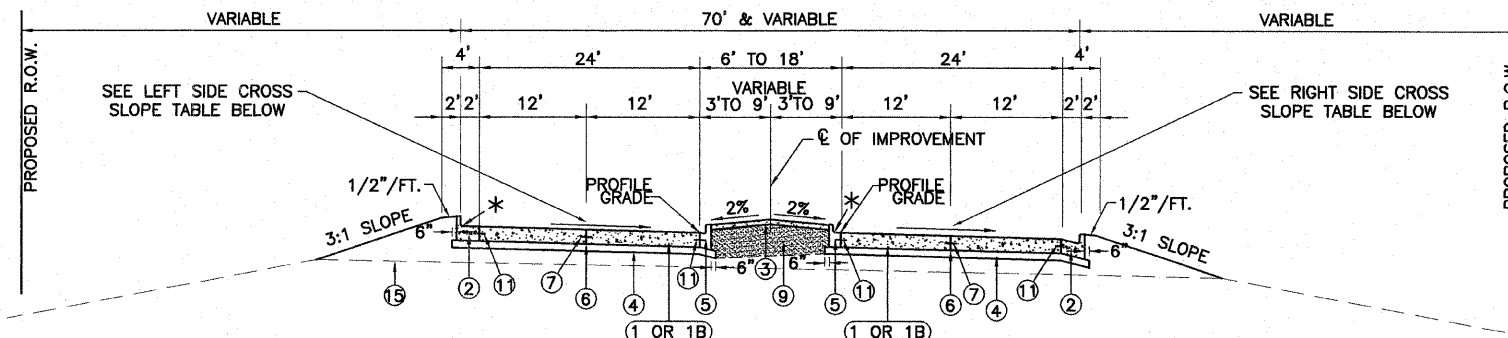
STA. 108+46.17 TO STA. 110+60



PROPOSED TYPICAL SECTION - LEFT TURN LANE

INDIANA AVENUE
(NO SCALE)

STA. 110+60 TO STA. 114+04.60
 STA. 114+04.60 TO STA. 119+00 (REVERSE IMAGE)



PROPOSED TYPICAL SECTION - SUPERELEVATION

INDIANA AVENUE
(NO SCALE)

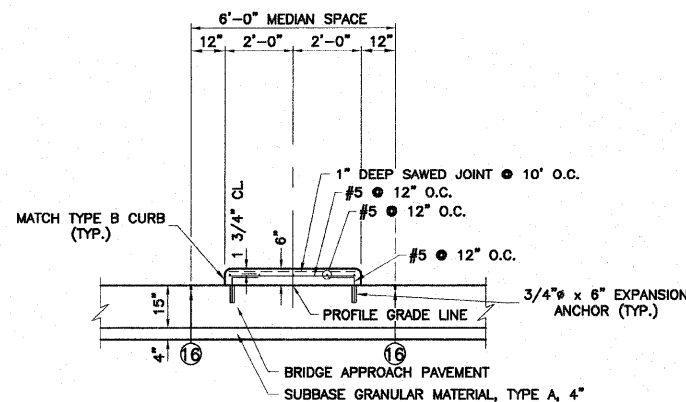
STA. 119+00 TO STA. 123+57.22
 STA. 126+80.36 TO STA. 135+00

RIGHT SIDE CROSS SLOPE TABLE

LOCATION	CROSS SLOPE
119+00 TO 122+50	2%
122+50 TO 123+00	TRANSITION
123+00 TO 127+00	3/16"/FT.
127+00 TO 127+50	TRANSITION
127+50 TO 134+75	2%
134+75 TO 135+00	INSIDE LANE TRANSITION
135+00	INSIDE LANE = 3/16"/FT. OUTSIDE LANE = 2%

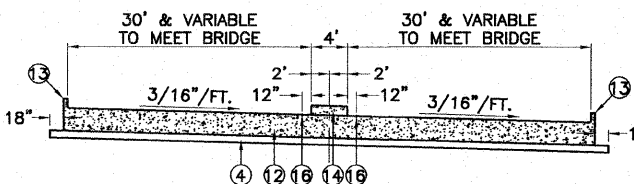
LEFT SIDE CROSS SLOPE TABLE

LOCATION	CROSS SLOPE
119+00 TO 121+00	TRANSITION TO S.E.
121+00 TO 133+00	S.E. = 3/16"/FT.
133+00 TO 134+75	TRANSITION TO 3/16"/FT.
134+75 TO 135+00	INSIDE LANE = 3/16"/FT.
134+75 TO 135+00	OUTSIDE LANE TRANSITION
135+00	INSIDE LANE = 3/16"/FT. OUTSIDE LANE = 2%



DETAIL - CONCRETE MEDIAN (SPECIAL)

NOT TO SCALE



TYPICAL SECTION - BRIDGE APPROACH PAVEMENT

INDIANA AVENUE
(NO SCALE)

STA. 123+57.22 TO STA. 123+87.66
 STA. 126+50.73 TO STA. 126+80.36

NOTE: REINFORCEMENT NOT SHOWN. SEE HIGHWAY STANDARD 420401.

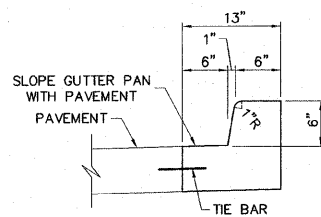
REVISIONS

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 215 Market Street
 P.O. BOX E
 Alton, Illinois 62012
 618/468-8700

SMS ENGINEERS

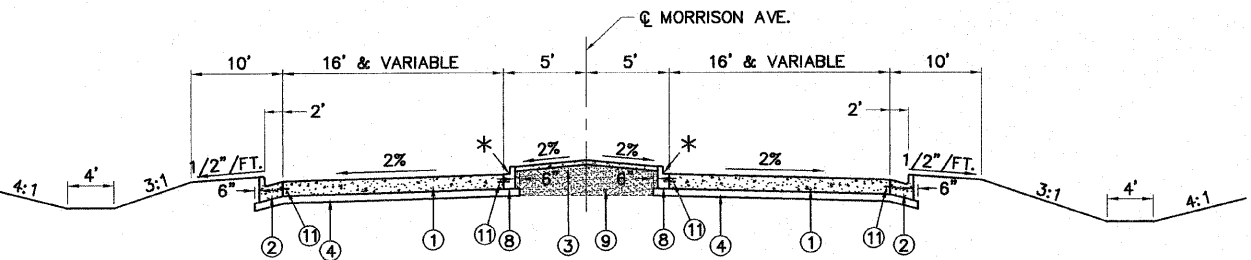
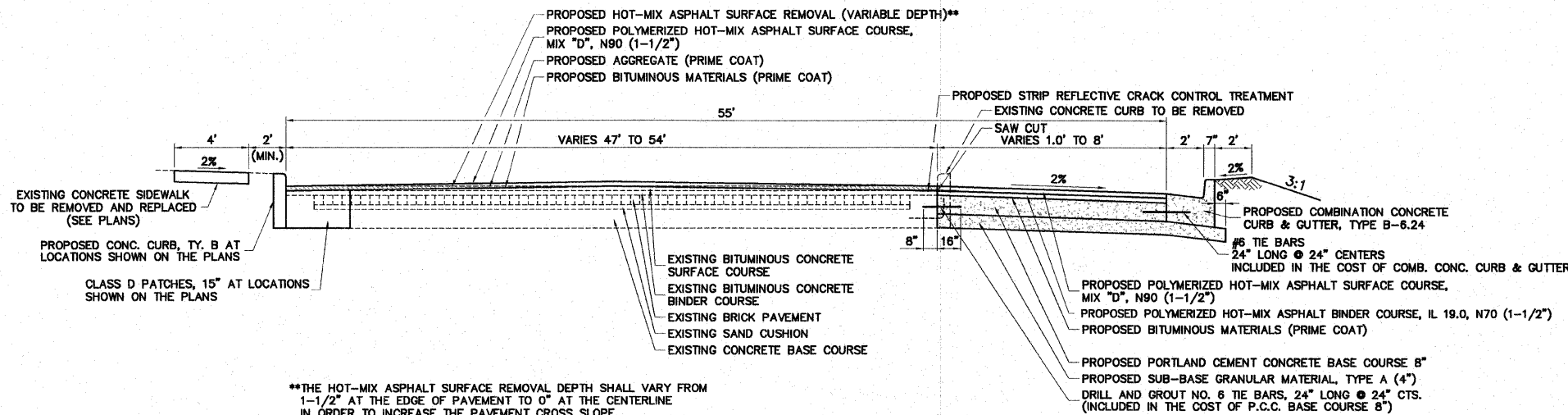
CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 TYPICAL SECTIONS

DWG. NO.
 PH # TYPICAL SECTIONS 1.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DESN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: NO SCALE
 SHEET 5 OF 61



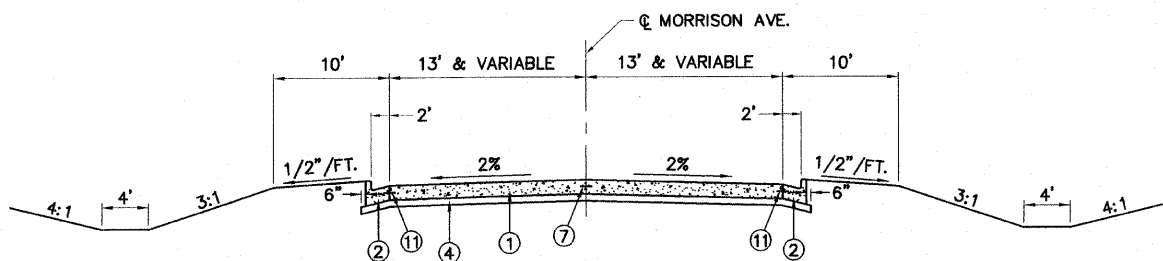
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06 - DETAIL

SCALE: 1" = 1'

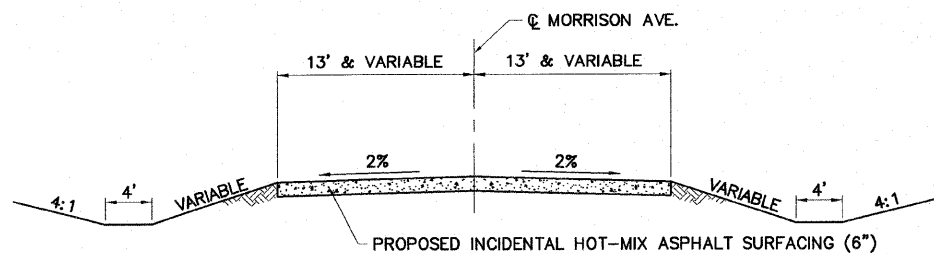


PROPOSED TYPICAL SECTION
MORRISON AVENUE
(NO SCALE)
STA. 8+50.00 TO STA. 9+66.84

NOTE: SAWED OR LONGITUDINAL JOINTS SHALL NOT EXCEED 16' SPACINGS.



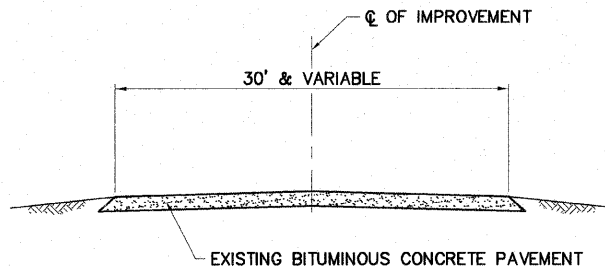
PROPOSED TYPICAL SECTION
MORRISON AVENUE
(NO SCALE)
STA. 10+33.16 TO STA. 11+58



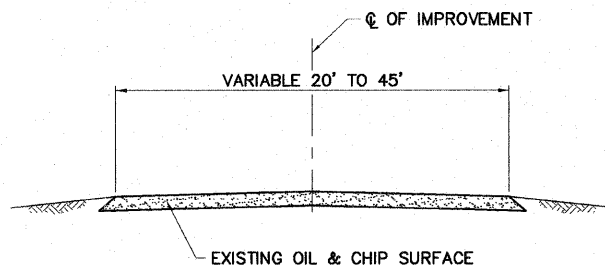
PROPOSED TYPICAL SECTION
MORRISON AVENUE
(NO SCALE)
STA. 11+58 TO STA. 12+58

PROPOSED TYPICAL SECTION
EAST BROADWAY

(NO SCALE)
STA. 2+91 TO STA. 14+29.36



EXISTING TYPICAL SECTION
INDIANA AVENUE
(NO SCALE)
STA. 108+46.17 TO STA. 109+27±



EXISTING TYPICAL SECTION
INDIANA AVENUE
(NO SCALE)
STA. 109+27± TO STA. 114+25

MIXTURE USE	SURFACE	BINDER CSE.	INCIDENTAL
AC/PG	SBS PG 70-22	PG 70-22	PG 64-22
RAP %	10%	15%	15%
DESIGN AIR VOIDS	4.0% @ Ndes = 90	4.0% @ Ndes = 70	4.0% @ Ndes = 70
MIX COMPOSITION (GRADATION MIXTURE)		IL - 19.0	IL - 19.0
FRICITION AGG	MIXTURE D		MIXTURE C

LEGEND

- ① PORTLAND CEMENT CONCRETE PAVEMENT 9" (SPECIAL), PAVEMENT SHALL BE JOINTED PER STANDARD 420101 AND 420106 15' JOINT SPACING, 1-1/2" DIAMETER DOWEL BARS AT ALL TRANSVERSE JOINTS
- ② COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ③ CONCRETE MEDIAN SURFACE, 4"
- ④ SUB-BASE GRANULAR MATERIAL TYPE A (4")
- ⑤ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
- ⑦ #6 TIE BARS 30" LONG @ 30" CENTERS
- ⑧ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.06
- ⑨ SUB-BASE GRANULAR MATERIAL, TYPE C
- ⑩ #6 TIE BARS 24" LONG @ 24" CENTERS
- * REVERSE GUTTER PAN SLOPE

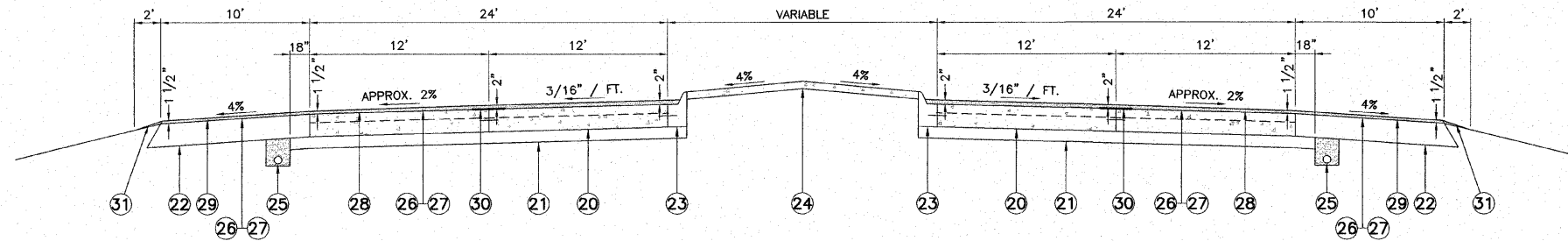
REVISIONS

SMS ENGINEERS
Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS
213 Market Street
Alton, Illinois 62002
618/462-9755

CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
TYPICAL SECTIONS

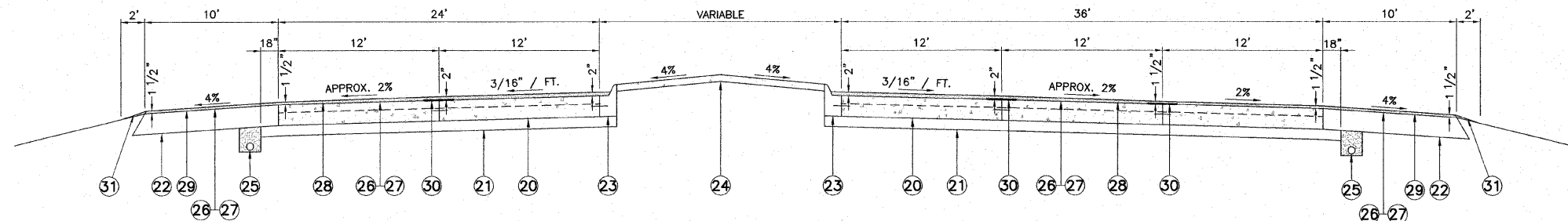
DWG. NO. PH III TYPICAL SECTIONS 2.DWG
REF. BK. INDIANA AVE.
JOB NO. 408365.1
DSN. BY: DEG
DWN. BY: CAD
CHK. BY: DEG
DATE: OCTOBER, 2006
SCALE: NO SCALE
SHEET 6 OF 61

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PROPOSED TYPICAL SECTION - TANGENT

INDIANA AVENUE
(NO SCALE)
STA. 135+00 TO STA. 138+15

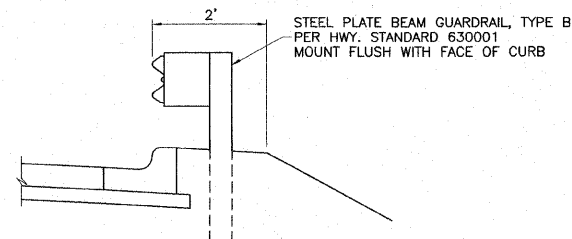


PROPOSED TYPICAL SECTION - RIGHT TURN LANE

INDIANA AVENUE
(NO SCALE)
STA. 138+15 TO STA. 143+49.66

LEGEND

- 20 EXISTING P.C.C. PAVEMENT 10"
- 21 EXISTING STABILIZED SUB-BASE 4"
- 22 EXISTING STABILIZED SHOULDER 10"
- 23 EXISTING COMBINATION CONCRETE CURB AND GUTTER TYPE M-6.06
- 24 EXISTING CONCRETE MEDIAN SURFACE (4")
- 25 EXISTING SUB-SURFACE DRAINS FOR SHOULDER
- 26 PROPOSED BITUMINOUS MATERIALS (PRIME COAT)
- 27 PROPOSED AGGREGATE (PRIME COAT)
- 28 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90
- 29 PROPOSED HOT-MIX ASPHALT SHOULDERS 1 1/2"
- 30 STRIP REFLECTIVE CRACK CONTROL TREATMENT
- 31 PROPOSED AGGREGATE SHOULDERS, TYPE B (AS DIRECTED BY THE ENGINEER)



GUARD RAIL DETAIL
NOT TO SCALE

MIXTURE USE	SURFACE
AC/PC	SBS PG 70-22
RAP % (MAX)	10%
DESIGN AIR VOIDS	4% @ N _{des} = 90
MIX COMPOSITION (GRADATION MIXTURE)	
FRICITION AGG	MIXTURE D

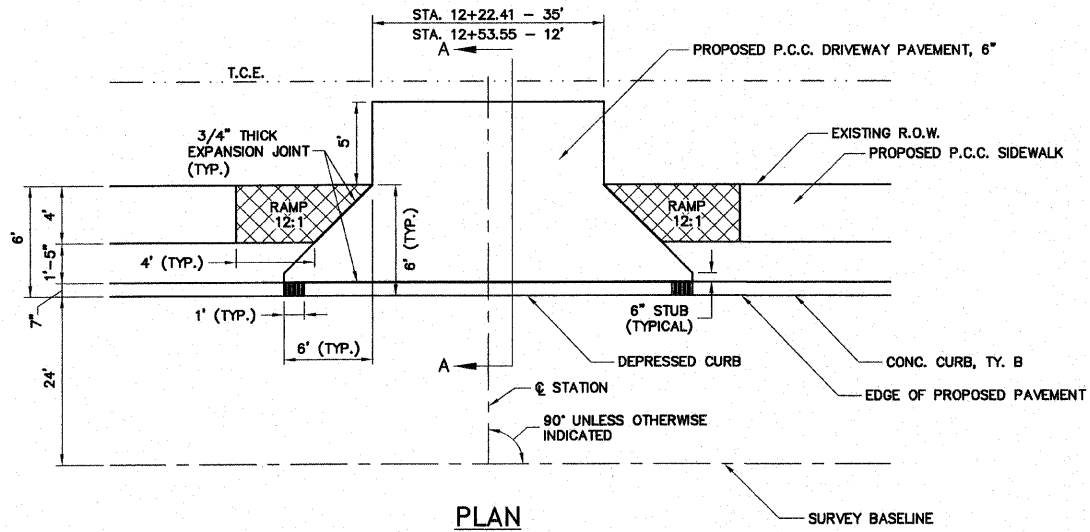
NO.	DESCRIPTION

SMS ENGINEERS
SHEPPARD MORGAN & SCHWAAB, INC.
CONSULTING ENGINEERS LAND SURVEYORS
215 Market Street
P.O. BOX E
Northgate Center
Alton, IL 62012
618/462-9765

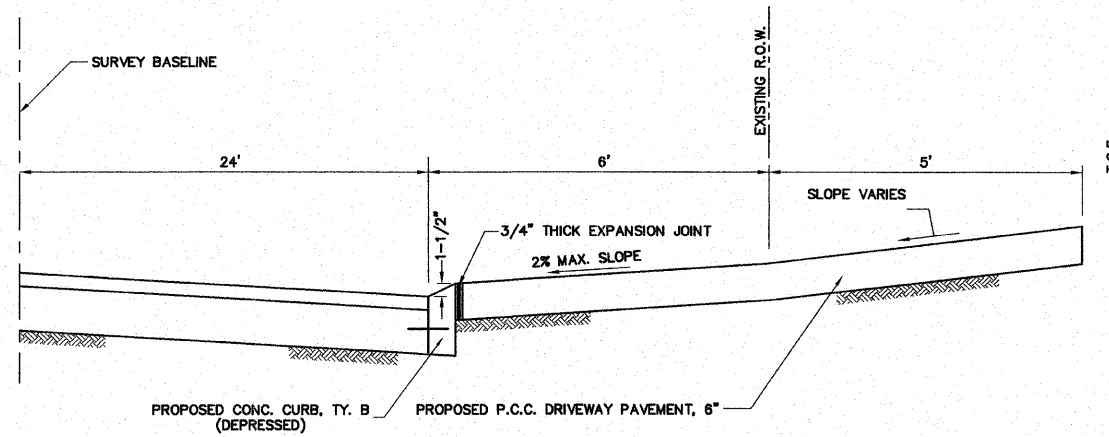
CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
TYPICAL SECTIONS

DWG. NO.	PH III TYPICAL SECTIONS 3.DWG
REF. BK.	INDIANA AVE.
JOB NO.	406365.1
DSN. BY:	DEG
DWN. BY:	CAD
CHK. BY:	DEG
DATE:	OCTOBER, 2006
SCALE:	NO SCALE
SHEET	7 OF 61

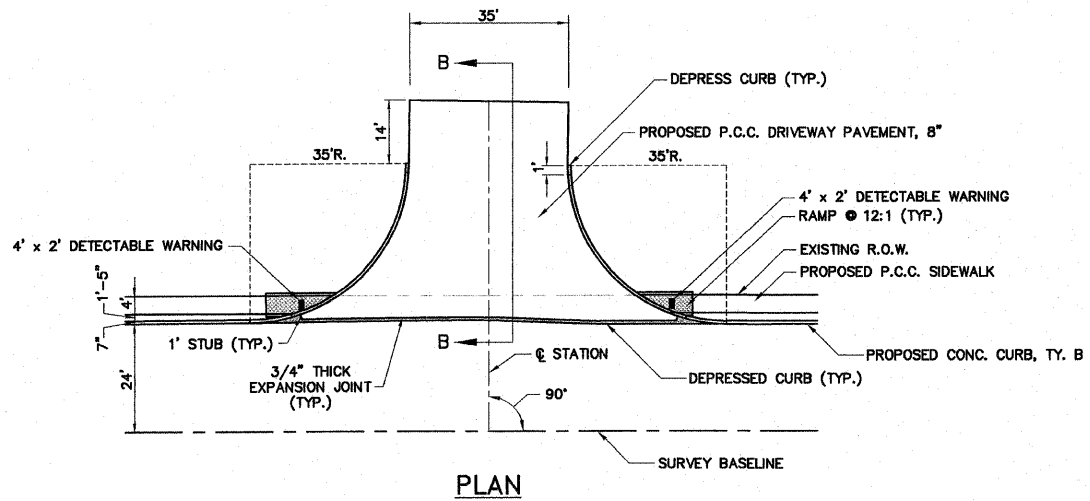
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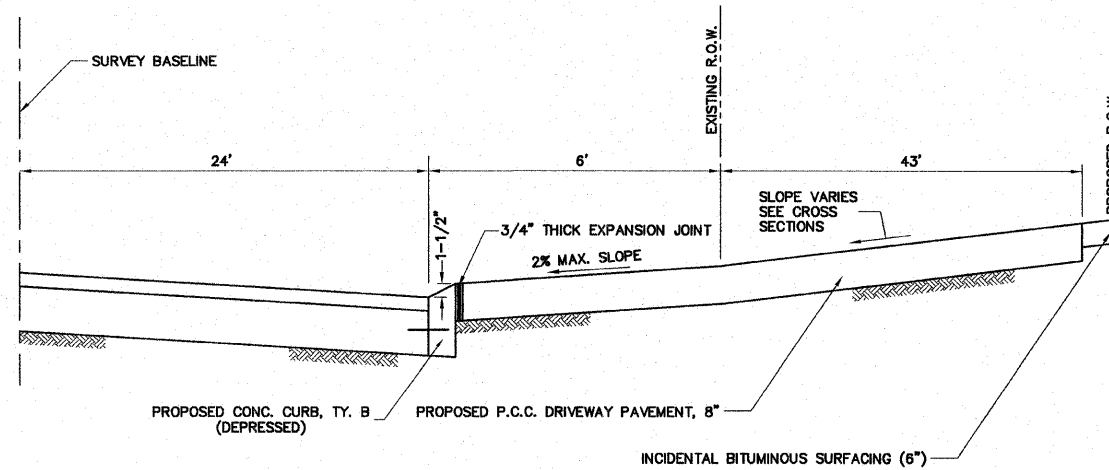
TYPICAL ENTRANCE DETAIL
NOT TO SCALE
EAST BROADWAY STA. 12+22.41 AND STA. 12+53.55



SECTION A-A



ALTON PLAZA COMMERCIAL ENTRANCE
NOT TO SCALE
EAST BROADWAY STA. 10+00



SECTION B-B

REVISIONS

Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS

10 Central Industrial Dr
Northgate Center
Alton, Illinois 62002
618/462-9705
618/877-8700

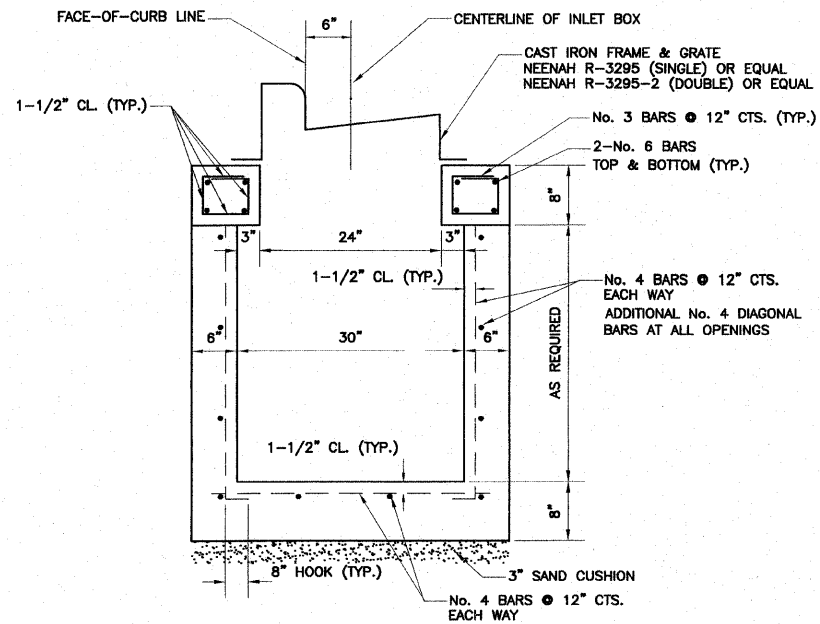


CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
ENTRANCE DETAILS

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REF. BK. INDIANA AVE.
JOB NO. 406365.1
DSN. BY: DEG
DWN. BY: CAD
CHK. BY: DEG
DATE: OCTOBER, 2006

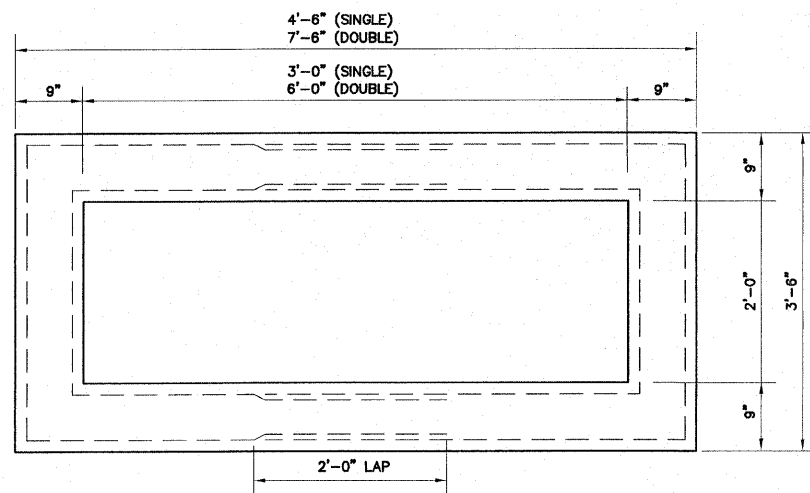
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SHEET 8 OF 61

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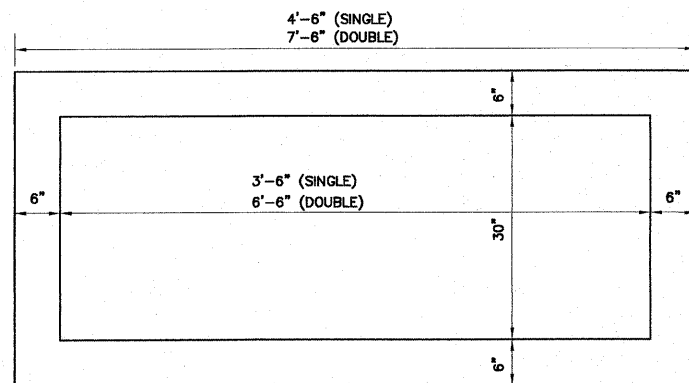
TYPICAL SECTION

INLET BOX, SPECIAL, No. 1 (SINGLE)
INLET BOX, SPECIAL, No. 2 (DOUBLE)



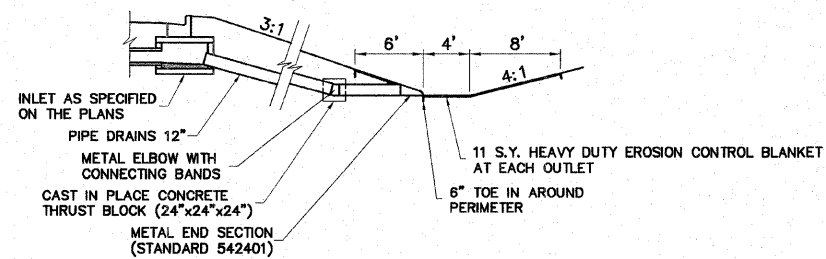
PLAN OF INLET TOP

INLET BOX, SPECIAL, No. 1 (SINGLE)
INLET BOX, SPECIAL, No. 2 (DOUBLE)



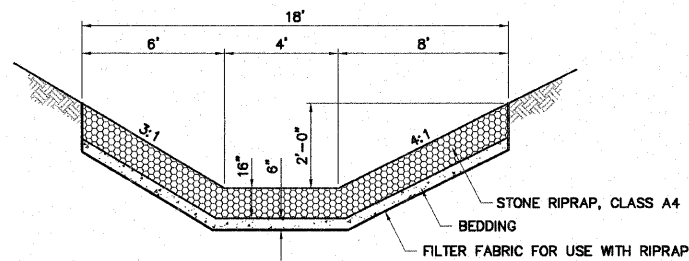
PLAN OF INLET BASE

INLET BOX, SPECIAL, No. 1 (SINGLE)
INLET BOX, SPECIAL, No. 2 (DOUBLE)



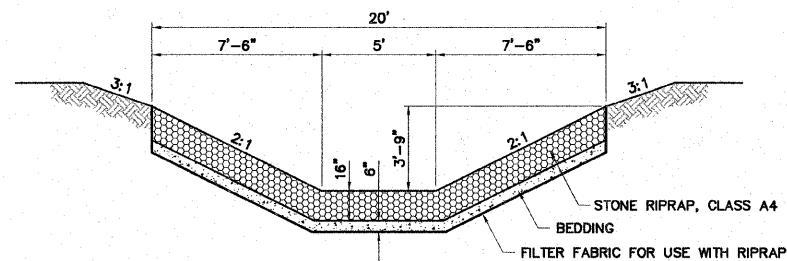
TYPICAL PIPE DRAIN DETAIL

(NO SCALE)



TYPICAL SECTION

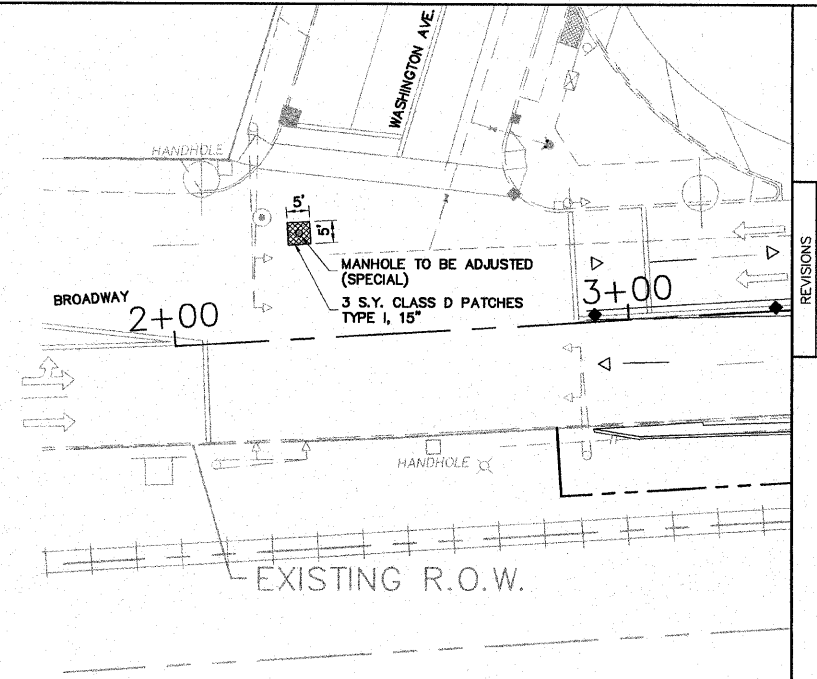
RIPRAP DITCHES STA. 117+80 TO STA. 118+47



NOTE: THE CONTRACTOR SHALL EXCAVATE, GRADE AND SHAPE
THE OUTLET DITCH AS SHOWN ABOVE. THIS WORK SHALL
BE INCLUDED IN THE COST OF PIPE CULVERT REMOVAL, 30"

SECTION B-B

EAST BROADWAY STORM SEWER OUTLET
SEE SHEET NO. 17



MANHOLE TO BE ADJUSTED (SPECIAL)

SCALE: 1" = 20'

REVISIONS
















Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS

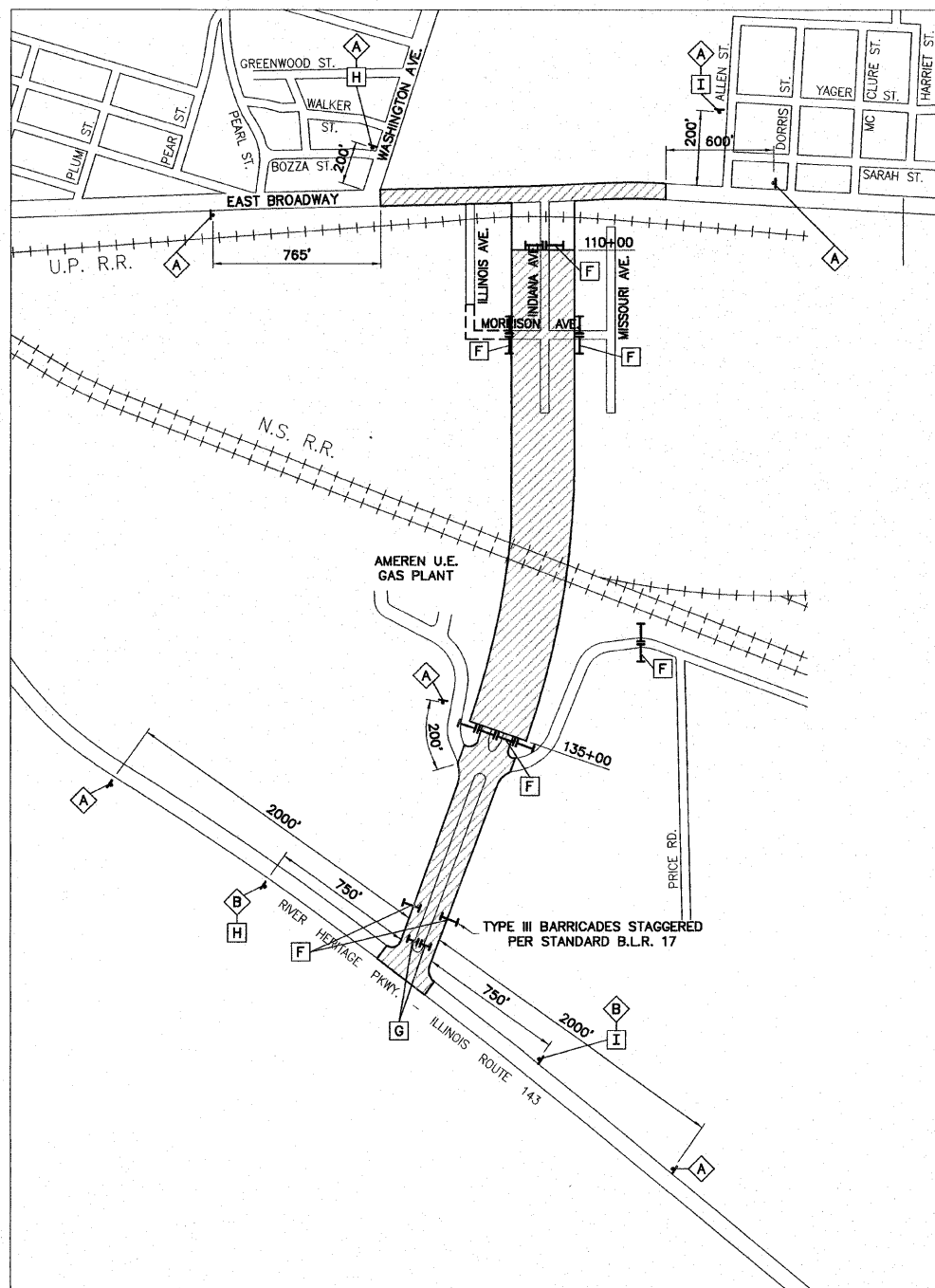


CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
DETAILS OF CONSTRUCTION

DWG. NO.
R11 # DETAILS OF CONSTRUCTION/DWG
REF. BK. INDIANA AVE.
JOB NO. 406365.1
DSN. BY: DEG
DWN. BY: CAD
CHK. BY: DEG
DATE: OCTOBER, 2006
SCALE: NO SCALE
SHEET 9 OF 61

TRAFFIC CONTROL LEGEND

-  WORK AREA
-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  SIGN "ROAD CONSTRUCTION AHEAD" W20-1(0) - 48"
-  SIGN "CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY CLOSED AHEAD" - BLACK LETTERS ON FLUORESCENT ORANGE BACKGROUND - 48"x48"
-  SIGN "CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY" - BLACK LETTERS ON FLUORESCENT ORANGE BACKGROUND - 24"x24"
-  SIGN M4-9R - 30"x24"  DETOUR
-  SIGN M4-9R - 30"x24"  DETOUR
-  SIGN "ROAD CLOSED" R11-2 - 48"x30"
-  SIGN "ROAD CLOSED TO THROUGH TRAFFIC" R11-4 - 48"x30"
-  SIGN BLACK ARROW ON FLUORESCENT ORANGE BACKGROUND - 30"x24" 
-  SIGN BLACK ARROW ON FLUORESCENT ORANGE BACKGROUND - 30"x24" 



GENERAL TRAFFIC CONTROL PLAN - PHASE 1

GENERAL NOTES

1. THE ABOVE GENERAL TRAFFIC CONTROL PLAN SHOWS REQUIRED SIGNING AND TRAFFIC CONTROL DEVICES. ADDITIONAL TRAFFIC CONTROL SHALL BE PROVIDED AS SPECIFIED BELOW AND IN ACCORDANCE WITH THE SPECIFIED HIGHWAY STANDARDS AND THE TRAFFIC CONTROL PLAN IN THE SPECIAL PROVISIONS.
2. DURING PHASE I, INDIANA AVE. SHALL REMAIN OPEN TO TWO WAY TRAFFIC FROM EAST BROADWAY TO STA. 110+00. ACCESS TO MISSOURI AVENUE SHALL BE PROVIDED VIA A TEMPORARY ACCESS ROAD AS SHOWN ON THE PLANS.
3. DURING PHASE I, INDIANA AVE. SHALL BE CLOSED TO ALL TRAFFIC FROM STA. 110+00 TO STA. 135+00.
4. DURING PHASE I, ACCESS SHALL BE PROVIDED TO THE AMEREN U.E. GAS PLANT, THEREFORE INDIANA AVENUE SHALL REMAIN OPEN TO LOCAL TRAFFIC ONLY FROM STA. 135+00 TO ILLINOIS ROUTE 143.
5. EAST BROADWAY SHALL REMAIN OPEN TO TWO-WAY TRAFFIC AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT, EXCEPT DURING THE CONSTRUCTION OF THE THREE STORM SEWER CROSSINGS AND PATCHING OPERATIONS DURING WHICH TRAFFIC MAY BE REDUCED TO ONE LANE, TWO-WAY OPERATION IF NECESSARY. TRAFFIC CONTROL SHALL BE PROVIDED FOR EAST BROADWAY, AS FOLLOWS:
 - A. ALL WORK ZONES, DROP OFFS AND HAZARDS ADJACENT TO A TRAFFIC LANE SHALL BE PROTECTED WITH CONES, DRUMS OR BARRICADES AT 25' CENTERS. HOWEVER, NO CONES SHALL BE USED AT NIGHT. DRUMS OR BARRICADES WITH STEADY BURNING LIGHTS SHALL BE USED AT NIGHT.
 - B. STANDARD 701011 - WORKERS PRESENT WITHIN 0 TO 15 FEET OF THE EDGE OF PAVEMENT
 - C. STANDARD 701008 - WORKERS PRESENT WITHIN 2 TO 15 FEET OF THE EDGE OF PAVEMENT.
 - D. STANDARD 701606 - ONE OUTER LANE CLOSED FOR ONE DIRECTION.
 - E. STANDARD 701606 - ONE OUTER LANE CLOSED FOR BOTH DIRECTIONS.
 - F. STANDARD 701606 - TWO OUTER LANES CLOSED FOR ONE DIRECTION MAINTAINING TWO-WAY TWO-LANE TRAFFIC.
 - G. STANDARD 701602 - TWO CENTER LANES CLOSED.
 - H. STANDARD 701606 MODIFIED TO REPLACE SIGNS W21-1106(o)-48 AND W20-5(o)-48 WITH W20-4(o)-48 "ONE LANE ROAD AHEAD" AND REQUIRE FLAGGERS WITH TRAFFIC CONTROL SIGNS - THREE LANES CLOSED.
6. ILLINOIS ROUTE 143 SHALL REMAIN OPEN TO TWO-WAY TRAFFIC AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT. TRAFFIC CONTROL SHALL BE PROVIDED FOR ILLINOIS ROUTE 143 AS FOLLOWS:
 - A. ALL WORK ZONES, DROP OFFS AND HAZARDS ADJACENT TO A TRAFFIC LANE SHALL BE PROTECTED WITH CONES, DRUMS OR BARRICADES AT 25' CENTERS. HOWEVER, NO CONES SHALL BE USED AT NIGHT. DRUMS OR BARRICADES WITH STEADY BURNING LIGHTS SHALL BE USED AT NIGHT.
 - B. STANDARD 701011 - WORKERS PRESENT WITHIN 0 TO 15 FEET OF THE EDGE OF PAVEMENT
 - C. STANDARD 701421 - THROUGH LANE CLOSURE
 - D. STANDARD 701701 - LEFT TURN LANE CLOSURE
7. ALL HAZARDS WITHIN WORK ZONES OPEN TO TRAFFIC SHALL BE PROTECTED WITH TYPE I BARRICADES WITH FLASHING LIGHTS IF LESS THAN 100' IN LENGTH. IF GREATER THAN 100' IN LENGTH, LIGHTS SHALL BE STEADY BURN.
8. ALL CONSTRUCTION SIGNS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".

REVISIONS

Sheppard Morgan & Schwaab, Inc.
















CONSULTING ENGINEERS & LAND SURVEYORS
 215 Market Street
 Alton, Illinois 62002
 618/466-9755

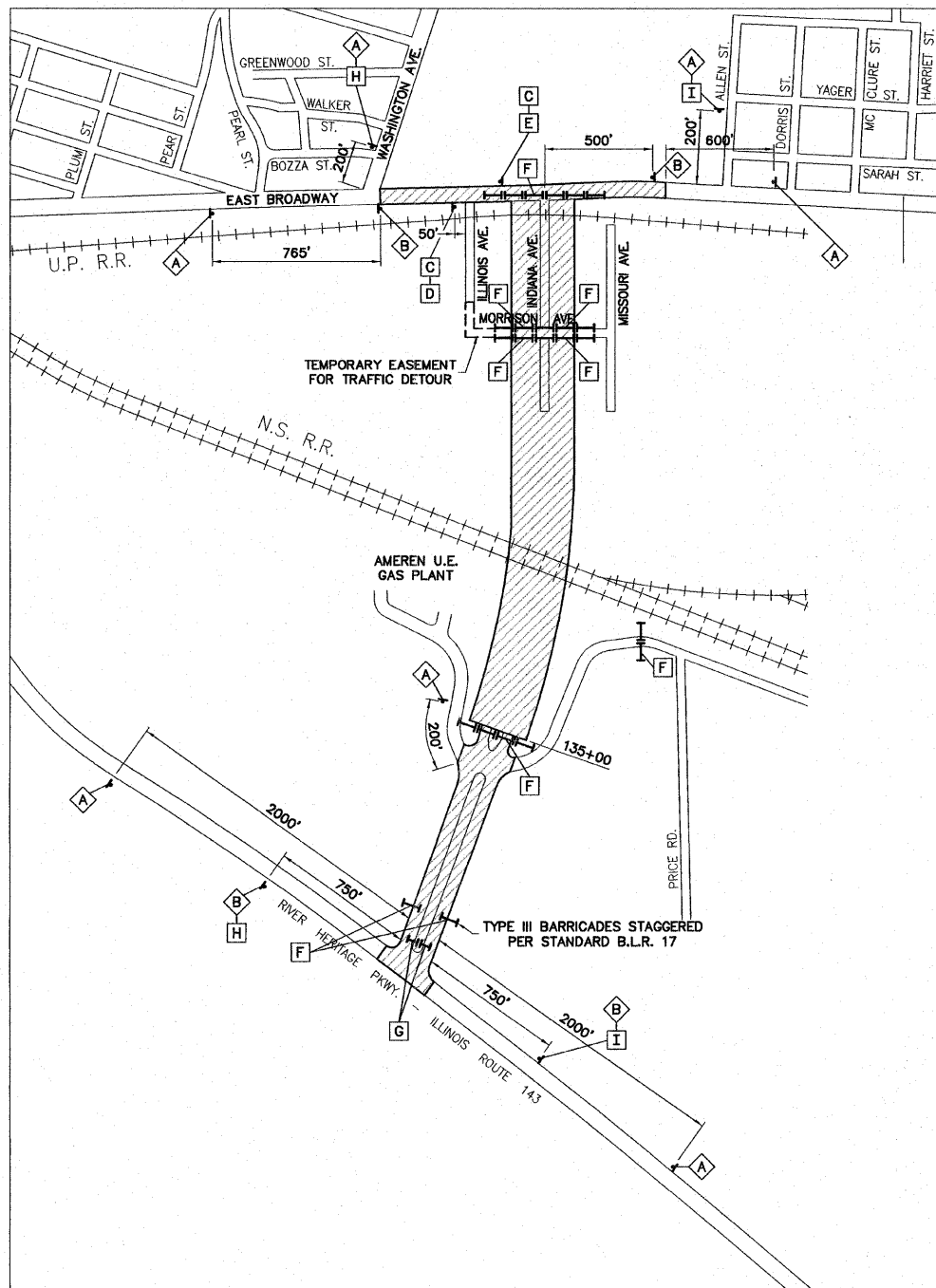


CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 TRAFFIC CONTROL PLAN

DWG. NO.
 PH # TRAFFIC CONTROL PLAN/DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: NOT TO SCALE
 SHEET 10 OF 61

TRAFFIC CONTROL LEGEND

-  WORK AREA
-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  SIGN "ROAD CONSTRUCTION AHEAD" W20-1(0) - 48
-  SIGN "CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY CLOSED AHEAD" - BLACK LETTERS ON FLUORESCENT ORANGE BACKGROUND - 48"x48"
-  SIGN "CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY" - BLACK LETTERS ON FLUORESCENT ORANGE BACKGROUND - 24"x24"
-  SIGN M4-9R - 30"x24"  DETOUR
-  SIGN M4-9R - 30"x24"  DETOUR
-  SIGN "ROAD CLOSED" R11-2 - 48"x30"
-  SIGN "ROAD CLOSED TO THROUGH TRAFFIC" R11-4 - 48"x30"
-  SIGN BLACK ARROW ON FLUORESCENT ORANGE BACKGROUND - 30"x24" 
-  SIGN BLACK ARROW ON FLUORESCENT ORANGE BACKGROUND - 30"x24" 



GENERAL TRAFFIC CONTROL PLAN - PHASE 2

GENERAL NOTES

1. THE ABOVE GENERAL TRAFFIC CONTROL PLAN SHOWS REQUIRED SIGNING AND TRAFFIC CONTROL DEVICES. ADDITIONAL TRAFFIC CONTROL SHALL BE PROVIDED AS SPECIFIED BELOW AND IN ACCORDANCE WITH THE SPECIFIED HIGHWAY STANDARDS AND THE TRAFFIC CONTROL PLAN IN THE SPECIAL PROVISIONS.
2. DURING PHASE II, INDIANA AVE. SHALL BE CLOSED TO ALL TRAFFIC FROM EAST BROADWAY TO STA. 135+00 EXCEPT THAT A CROSS OVER AT MORRISON AVENUE SHALL BE PROVIDED AT ALL TIMES TO MAINTAIN ACCESS TO MISSOURI AVENUE VIA THE ILLINOIS AVENUE DETOUR ROUTE.
3. DURING PHASE I, ACCESS SHALL BE PROVIDED TO THE AMEREN U.E. GAS PLANT, THEREFORE INDIANA AVENUE SHALL REMAIN OPEN TO LOCAL TRAFFIC ONLY FROM STA. 135+00 TO ILLINOIS ROUTE 143.
4. EAST BROADWAY SHALL REMAIN OPEN TO TWO-WAY TRAFFIC AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT, EXCEPT DURING THE CONSTRUCTION OF THE THREE STORM SEWER CROSSINGS AND PATCHING OPERATIONS DURING WHICH TRAFFIC MAY BE REDUCED TO ONE LANE, TWO-WAY OPERATION IF NECESSARY. TRAFFIC CONTROL SHALL BE PROVIDED FOR EAST BROADWAY, AS FOLLOWS:
 - A. ALL WORK ZONES, DROP OFFS AND HAZARDS ADJACENT TO A TRAFFIC LANE SHALL BE PROTECTED WITH CONES, DRUMS OR BARRICADES AT 25' CENTERS. HOWEVER, NO CONES SHALL BE USED AT NIGHT. DRUMS OR BARRICADES WITH STEADY BURNING LIGHTS SHALL BE USED AT NIGHT.
 - B. STANDARD 701011 - WORKERS PRESENT WITHIN 0 TO 15 FEET OF THE EDGE OF PAVEMENT
 - C. STANDARD 701006 - WORKERS PRESENT WITHIN 2 TO 15 FEET OF THE EDGE OF PAVEMENT.
 - D. STANDARD 701606 - ONE OUTER LANE CLOSED FOR ONE DIRECTION.
 - E. STANDARD 701606 - ONE OUTER LANE CLOSED FOR BOTH DIRECTIONS.
 - F. STANDARD 701606 - TWO OUTER LANES CLOSED FOR ONE DIRECTION MAINTAINING TWO-WAY TWO-LANE TRAFFIC.
 - G. STANDARD 701602 - TWO CENTER LANES CLOSED.
 - H. STANDARD 701606 MODIFIED TO REPLACE SIGNS W21-1106(o)-48 AND W20-5(o)-48 WITH W20-4(o)-48 "ONE LANE ROAD AHEAD" AND REQUIRE FLAGGERS WITH TRAFFIC CONTROL SIGNS - THREE LANES CLOSED.
 - I. THE CONTRACTOR SHALL PROVIDE PEDESTRIAN TRAFFIC CONTROL IN ACCORDANCE WITH STANDARD 701801 WHERE AT ANY TIME PEDESTRIAN TRAFFIC MUST BE REROUTED DUE TO WORK BEING PERFORMED. SIGN "SIDEWALK CLOSED USE OTHER SIDE" SPECIFIED IN STANDARD 701801 WILL NOT BE REQUIRED.
5. ILLINOIS ROUTE 143 SHALL REMAIN OPEN TO TWO-WAY TRAFFIC AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT. TRAFFIC CONTROL SHALL BE PROVIDED FOR ILLINOIS ROUTE 143 AS FOLLOWS:
 - A. ALL WORK ZONES, DROP OFFS AND HAZARDS ADJACENT TO A TRAFFIC LANE SHALL BE PROTECTED WITH CONES, DRUMS OR BARRICADES AT 25' CENTERS. HOWEVER, NO CONES SHALL BE USED AT NIGHT. DRUMS OR BARRICADES WITH STEADY BURNING LIGHTS SHALL BE USED AT NIGHT.
 - B. STANDARD 701011 - WORKERS PRESENT WITHIN 0 TO 15 FEET OF THE EDGE OF PAVEMENT
 - C. STANDARD 701421 - THROUGH LANE CLOSURE
 - D. STANDARD 701701 - LEFT TURN LANE CLOSURE
6. ALL HAZARDS WITHIN WORK ZONES OPEN TO TRAFFIC SHALL BE PROTECTED WITH TYPE I BARRICADES WITH FLASHING LIGHTS IF LESS THAN 100' IN LENGTH. IF GREATER THAN 100' IN LENGTH, LIGHTS SHALL BE STEADY BURN.
7. ALL CONSTRUCTION SIGNS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".

REVISIONS

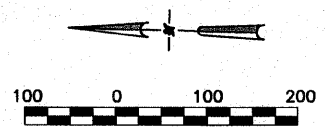
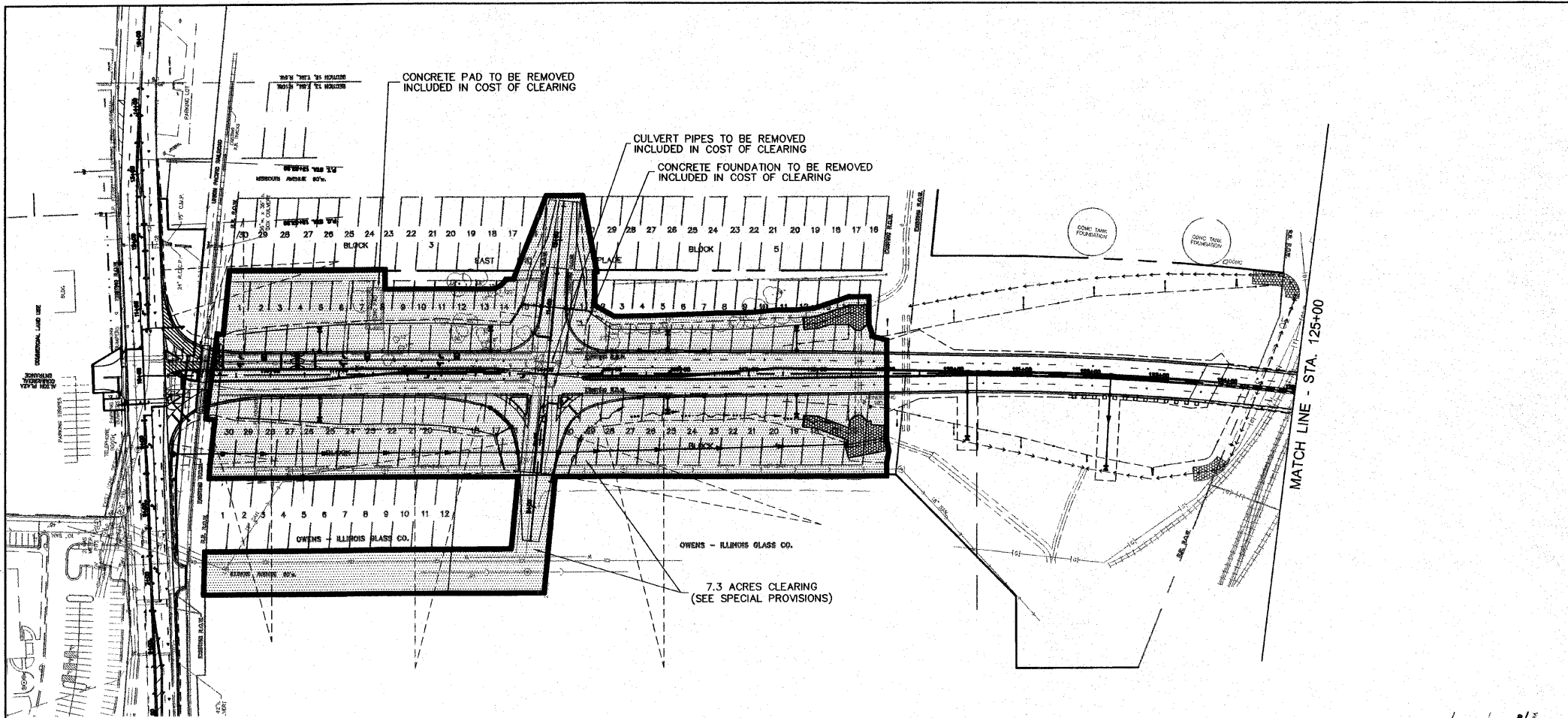
Sheppard Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS & LAND SURVEYORS
 216 Market Street
 Alton, Illinois 62002
 618/482-9755

10 Central Industrial Dr.
 Northgate Center
 Granite City, IL 62040
 618/787-8700

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 TRAFFIC CONTROL PLAN

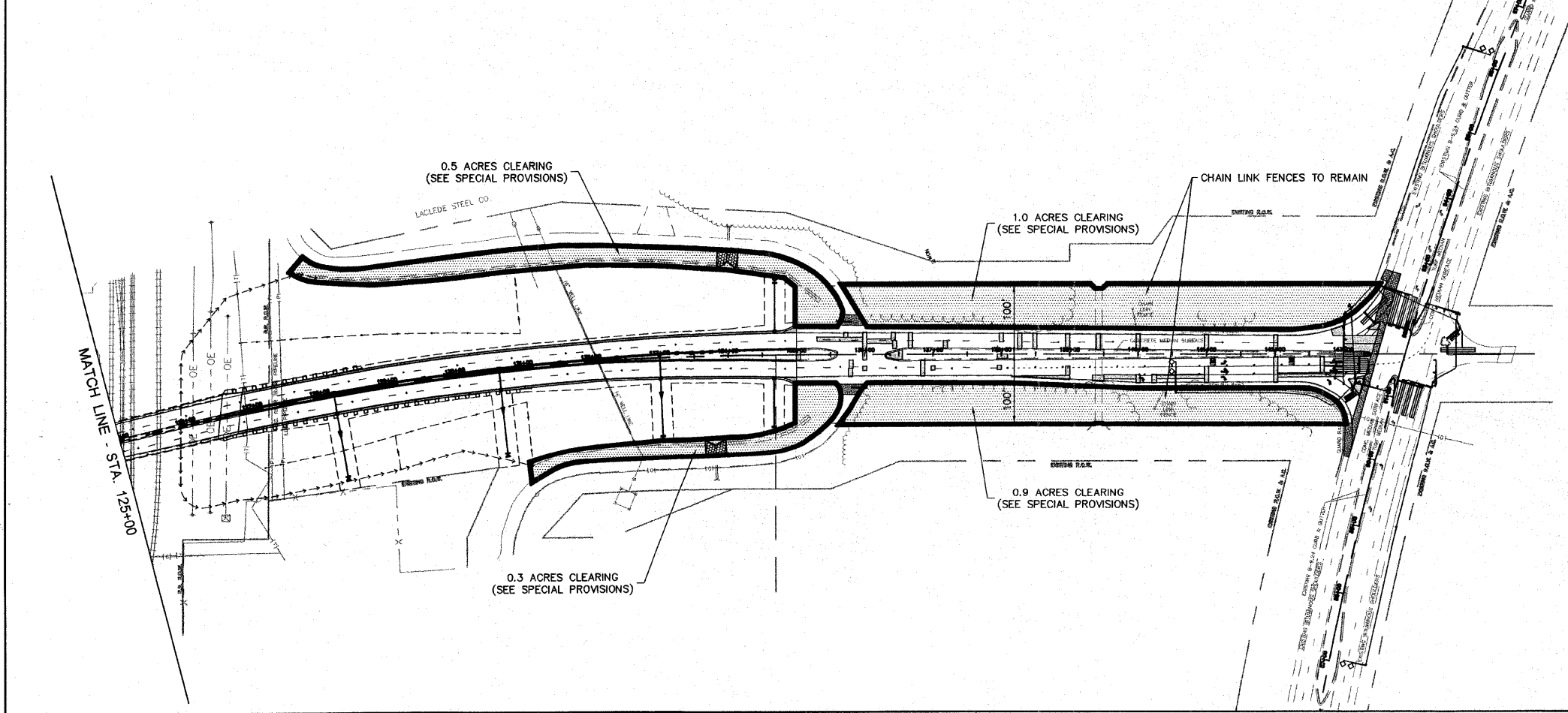
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REF. BK. INDIANA AVE.	JOB NO. 406365.1
DSN. BY: DEG	DWN. BY: CAD
CHK. BY: DEG	DATE: OCTOBER, 2006
SCALE: NOT TO SCALE	SHEET 11 OF 61

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NOTES

1. WITHIN THE CLEARING LIMITS, THE PLANS DO NOT INDICATE REMOVAL OF INDIVIDUAL ITEMS. THE CONTRACTOR SHALL ASSUME THAT ALL EXISTING ITEMS ARE TO BE REMOVED UNLESS INDICATED OTHERWISE.
2. DUE TO THE NATURE OF THE PROJECT SITE, THE PLANS DO NOT THOROUGHLY SHOW ALL EXISTING ITEMS AND TOPOGRAPHIC FEATURES. THEREFORE, THE CONTRACTOR SHALL PERFORM A THOROUGH INSPECTION OF THE PROJECT SITE DURING THE BIDDING PROCESS TO FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS THAT WILL BE ENCOUNTERED IN PERFORMING THE WORK. FAILURE TO DO SO WILL NOT BE CONSIDERED AS GROUNDS FOR ADDITIONAL COMPENSATION FOR UNFORESEEN ADVERSE CONDITIONS ENCOUNTERED DURING THE PROGRESS OF THE WORK.
3. FROM STA. 136+00 TO STA. 143+00, AFTER CLEARING, THE CONTRACTOR SHALL GRADE THE EXISTING EMBANKMENT TO SMOOTH OUT IRREGULARITIES, PROVIDE POSITIVE DRAINAGE AWAY FROM THE SHOULDERS, AND REPAIR EROSION AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE COST OF CLEARING.
4. THE RESIDENT ENGINEER SHALL DOCUMENT THE NUMBER OF TREES REMOVED DURING THIS PROJECT FOR TREE REPLACEMENT PURPOSES.



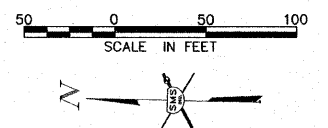
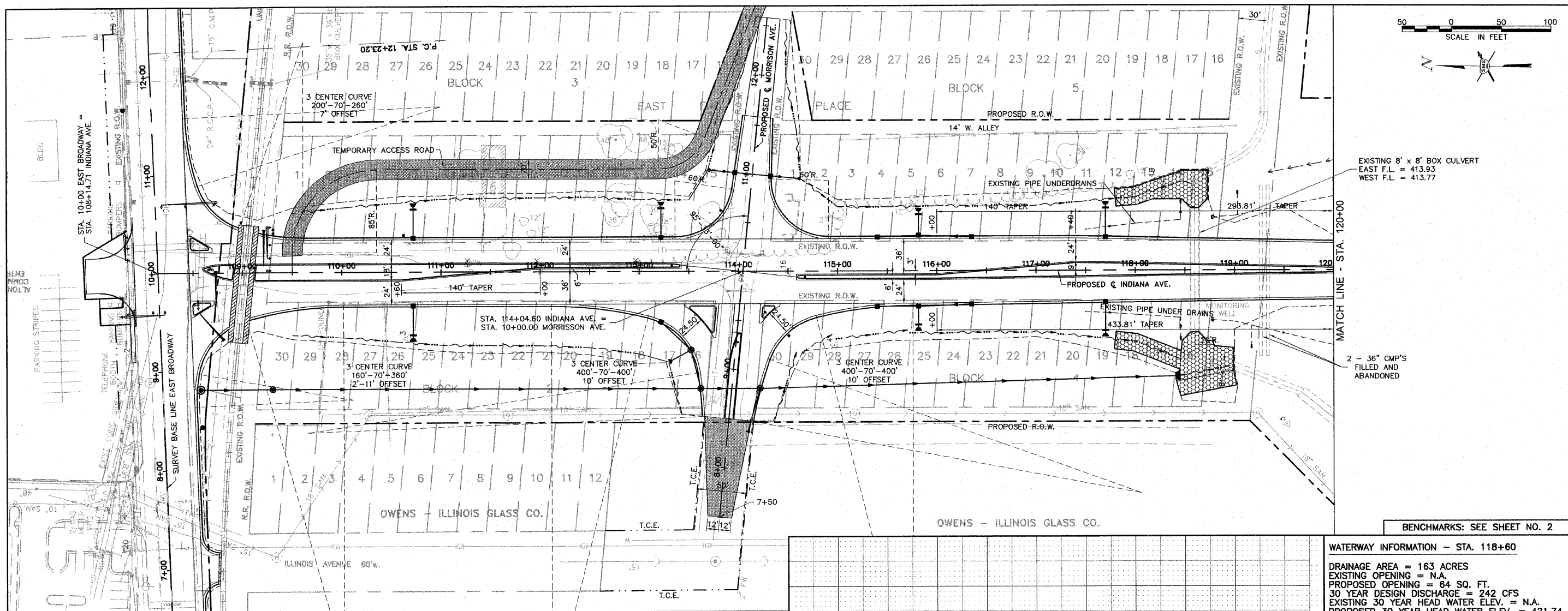
NO.	REVISIONS

Sheppard Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS & LAND SURVEYORS
 10 Central Industrial Dr
 Northgate Center
 Alton, Illinois 62002
 618/462-9766
 618/977-9766



CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 CLEARING PLAN

DWG. NO.	PH III CLEARING PLAN.DWG
REF. BK.	INDIANA AVE.
JOB NO.	406365.1
DSN. BY:	DEG
DWN. BY:	CAD
CHK. BY:	DEG
DATE:	OCTOBER, 2006
SCALE:	1" = 100'
SHEET	12 OF 61



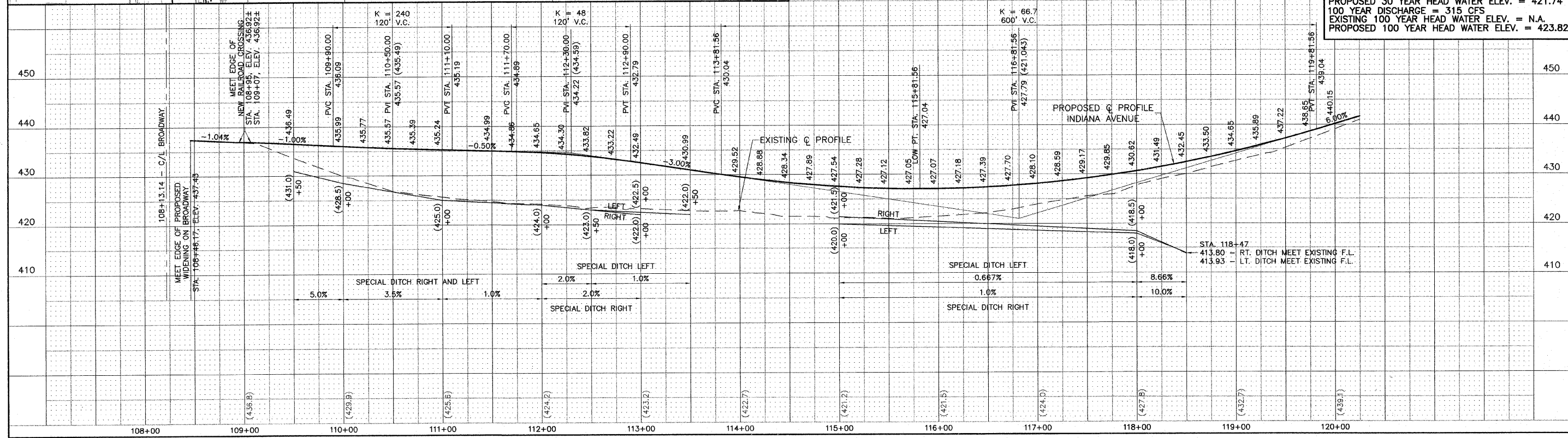
EXISTING 8' x 8' BOX CULVERT
EAST F.L. = 413.93
WEST F.L. = 413.77

2 - 36" CMP'S
FILLED AND
ABANDONED

BENCHMARKS: SEE SHEET NO. 2

WATERWAY INFORMATION - STA. 118+60

DRAINAGE AREA = 163 ACRES
 EXISTING OPENING = N.A.
 PROPOSED OPENING = 64 SQ. FT.
 30 YEAR DESIGN DISCHARGE = 242 CFS
 EXISTING 30 YEAR HEAD WATER ELEV. = N.A.
 PROPOSED 30 YEAR HEAD WATER ELEV. = 421.74
 100 YEAR DISCHARGE = 315 CFS
 EXISTING 100 YEAR HEAD WATER ELEV. = N.A.
 PROPOSED 100 YEAR HEAD WATER ELEV. = 423.82



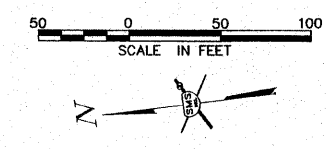
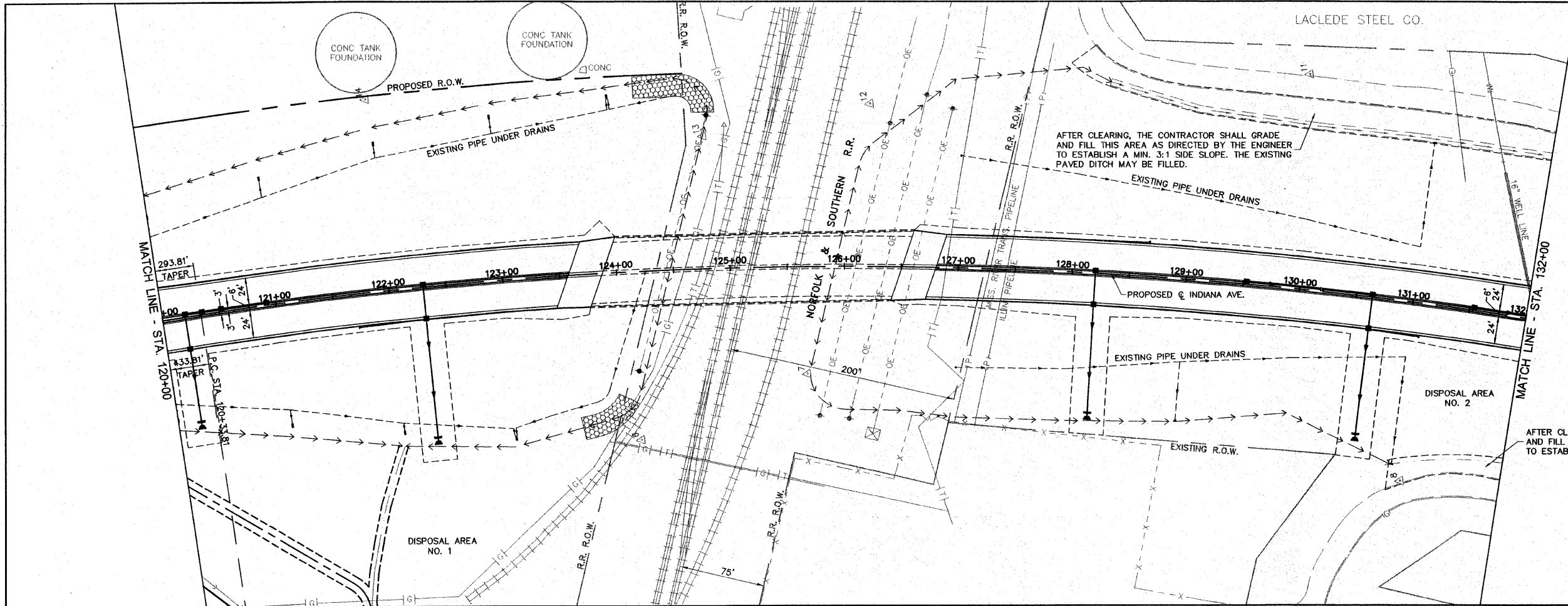
REVISIONS

SMS Sheppard, Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 ENGINEERS
 215 Market Street, P.O. Box E, Alton, IL 62002 618-462-9755 E-mail: mail@smsengineers.com
 10 Central Industrial Drive, Granite City, IL 62040 618-877-5700 E-mail: mail@smsengineers.com
 DESIGN FIRM # 184-000992

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 PLAN AND PROFILE

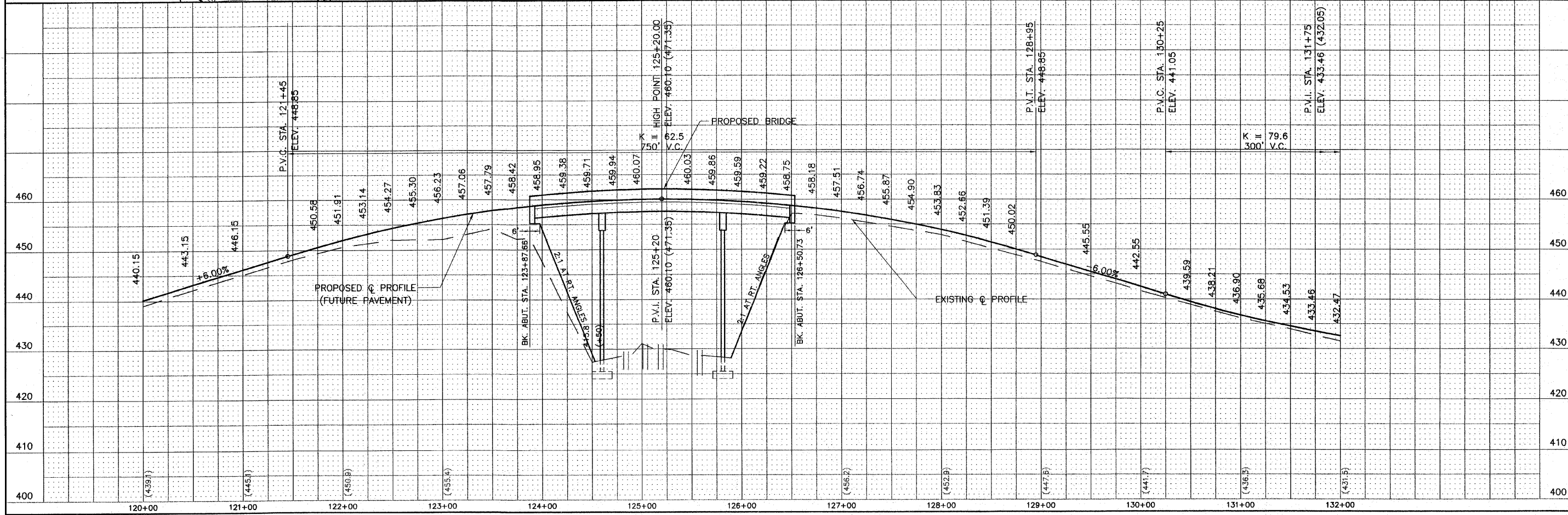
DWG. NO.
 PH III BWAY-120 PP.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: 1" = 50' H.
 1" = 10' V.
 SHEET 13 OF 61

S:\Land Projects\Alton Indiana Ph III-406365-1.dwg\PH III Bway-120 PP.dwg, 2/12/2007 10:37 PM, jma, 150



CENTERLINE CURVE DATA
 P.I. STA. = 127+60.32
 $\Delta = 21^\circ-32'-17''$
 $D = 1^\circ-30'-00''$
 $R = 3819.72'$
 $T = 726.51'$
 $L = 1435.87'$
 $E = 68.48'$
 $S.E. = 3/16"/FT.$
 S.A. = STA. 119+00 TO STA. 121+00
 S.R. = STA. 133+00 TO 135+00

NO.	DESCRIPTION



BENCHMARKS: SEE SHEET NO. 2

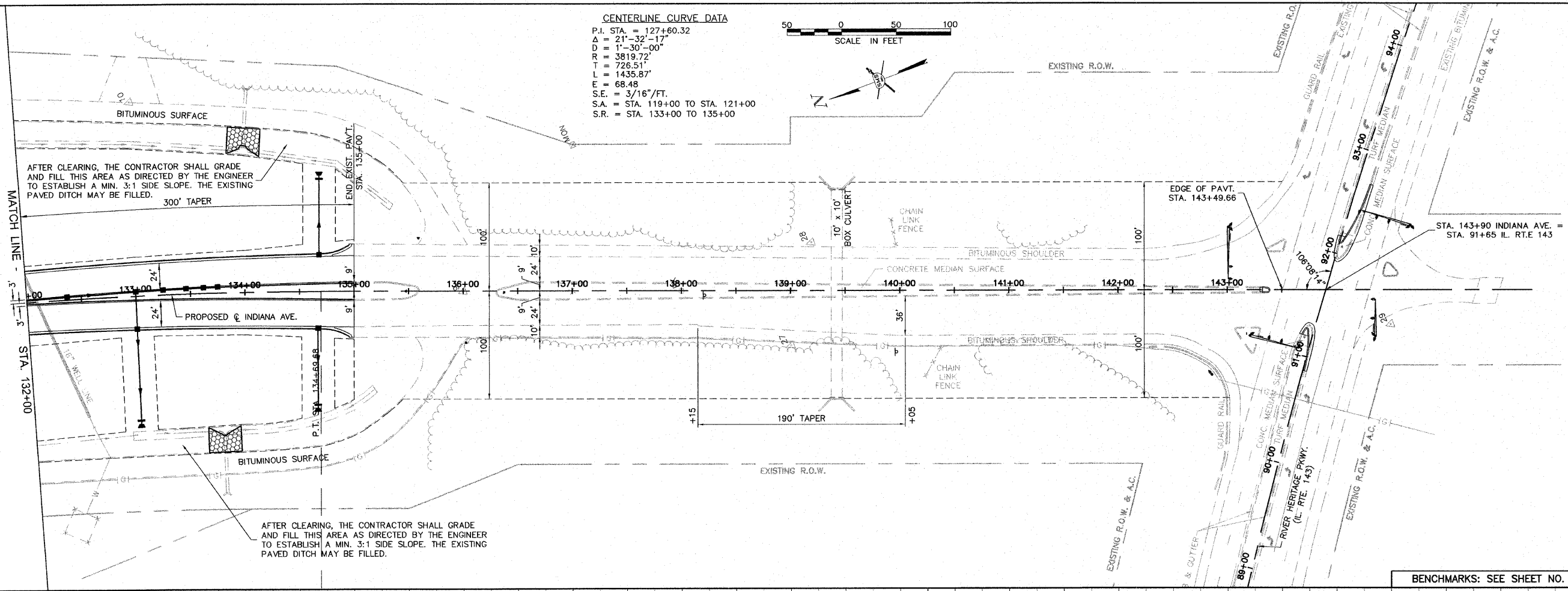
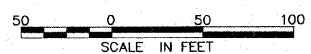
SMS ENGINEERS
 Sheppard, Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 215 Market Street, P.O. Box E. Alton, IL 62002 618/462-9795 E-mail: mat@smsengineers.com
 10 Central Industrial Drive, Granite City, IL 62040 618/877-4700 E-mail: mat@smsengineers.com
 DESIGN FIRM # 184-000992

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 PLAN AND PROFILE

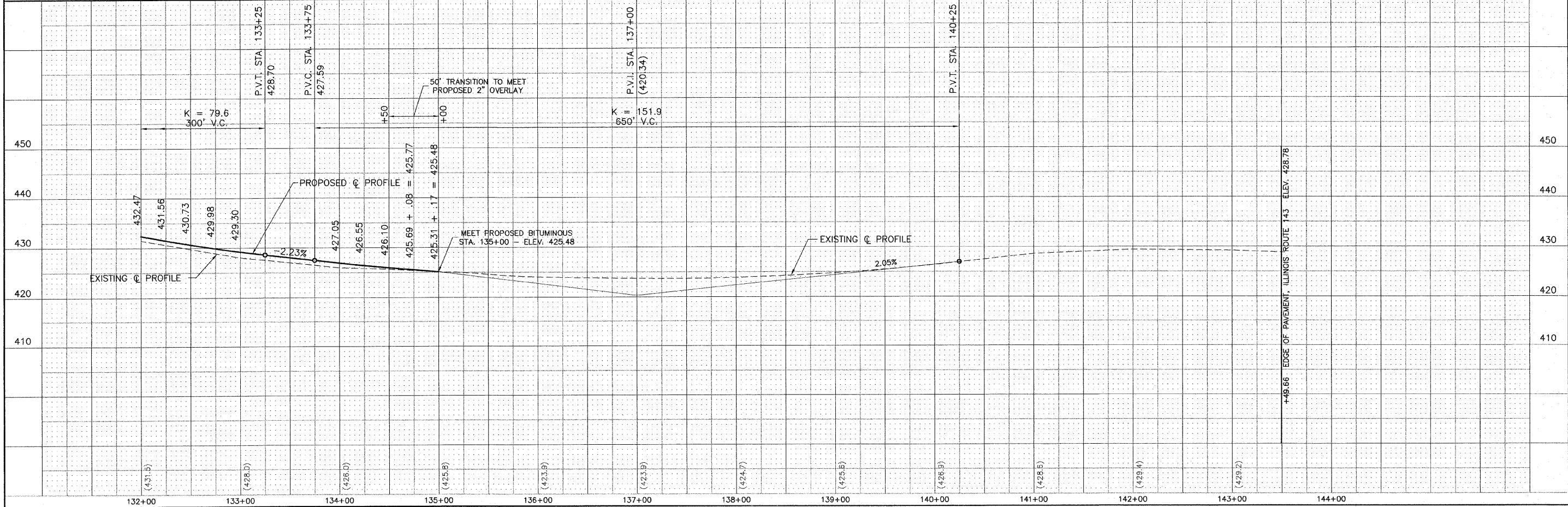
DWG. NO.	PH III 120-132 PP.DWG
REF. BK. INDIANA AVE.	
JOB NO.	406365.1
DSN. BY:	DEC
DWN. BY:	DEC
CHK. BY:	DEC
DATE:	OCTOBER, 2006
SCALE:	1" = 50' H. 1" = 10' V.
SHEET	14 OF 61

S:\Land Projects\Alton Indiana Ph III 406365.dwg\PH III 120-132 PP.DWG, 10/11/2006 7:41:47 AM, jlrman, 1:50

CENTERLINE CURVE DATA
 P.I. STA. = 127+60.32
 Δ = 21°-32'-17"
 D = 1°-30'-00"
 R = 3819.72'
 L = 726.51'
 T = 1435.87'
 E = 68.48'
 S.E. = 3/16"/FT.
 S.A. = STA. 119+00 TO STA. 121+00
 S.R. = STA. 133+00 TO 135+00



BENCHMARKS: SEE SHEET NO. 2



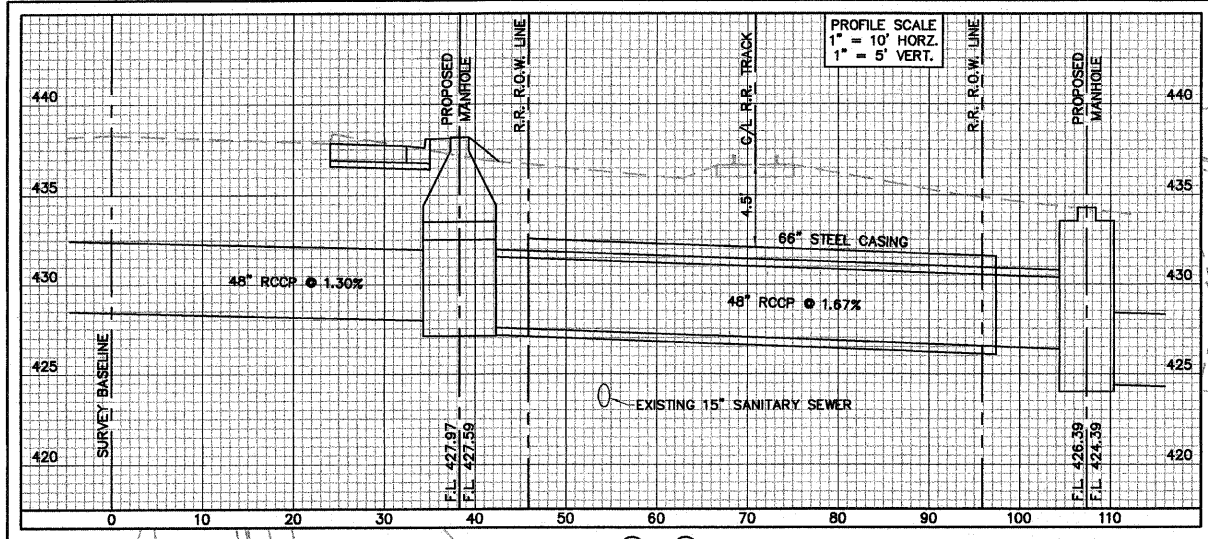
NO.	DESCRIPTION

SMS ENGINEERS
 Sheppard, Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 215 Market Street, P.O. Box E, Alton, IL 62002 618462-2755 E-mail: mail@smsengineers.com
 10 Central Industrial Drive, Granite City, IL 62040 618877-2700 E-mail: mail@smsengineers.com
 DESIGN FIRM # 184-000992

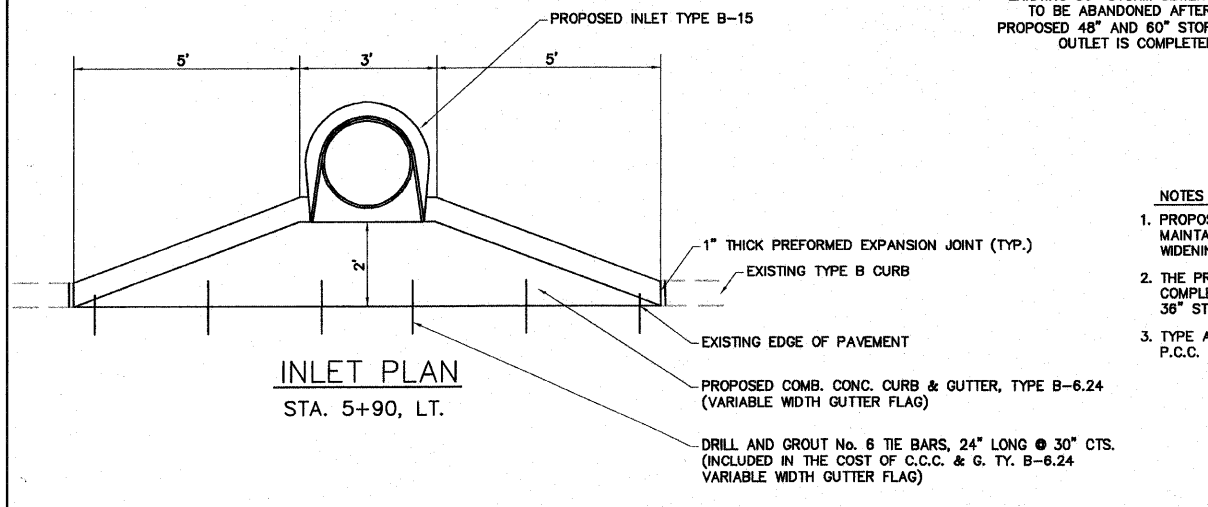
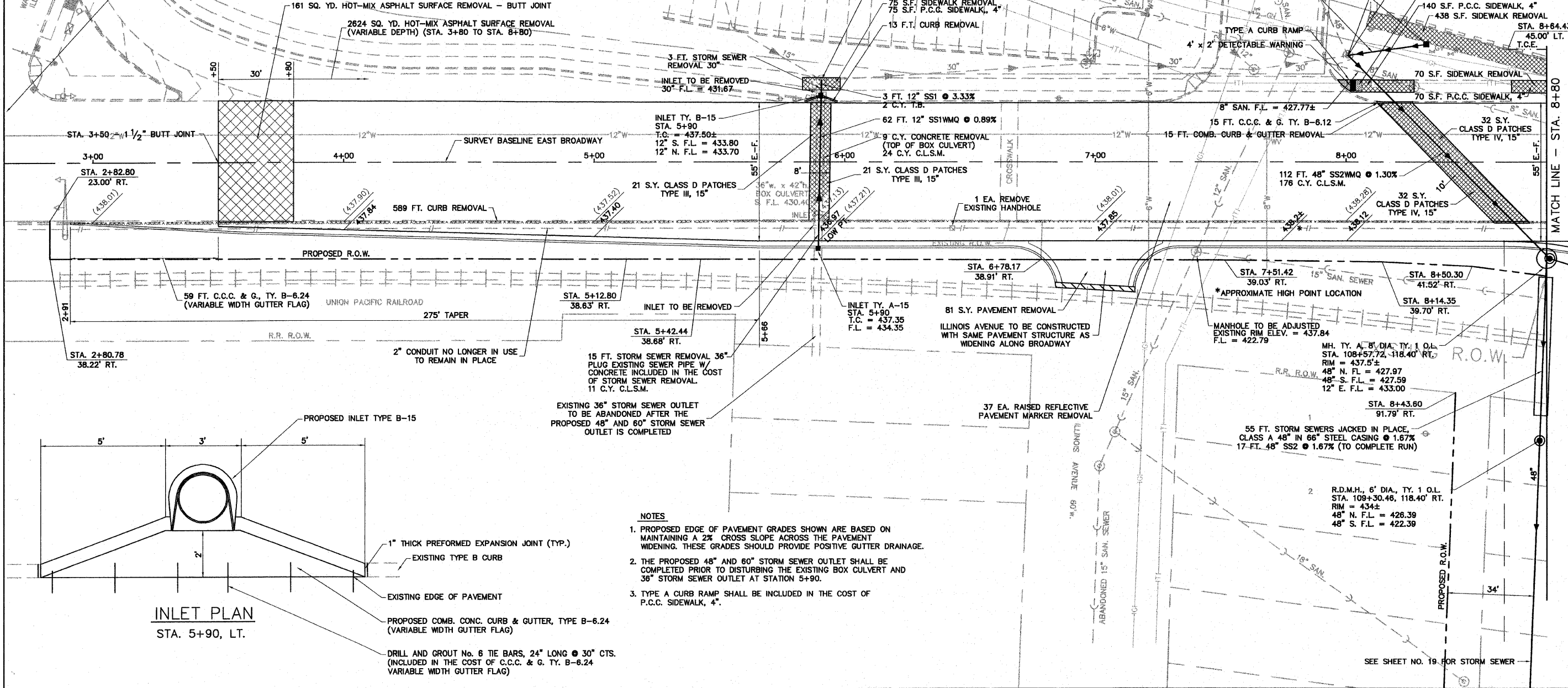
CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 PLAN AND PROFILE

DWG. NO. PH III 132-BERM PP.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: 1" = 50' H.
 1" = 10' V.
 SHEET 15 OF 61

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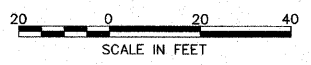


SECTION A - A
 SCALES: PROFILE HORIZ. 1" = 10' SCALE IN FEET
 PROFILE VERT. 1" = 5' SCALE IN FEET



- NOTES
1. PROPOSED EDGE OF PAVEMENT GRADES SHOWN ARE BASED ON MAINTAINING A 2% CROSS SLOPE ACROSS THE PAVEMENT WIDENING. THESE GRADES SHOULD PROVIDE POSITIVE GUTTER DRAINAGE.
 2. THE PROPOSED 48" AND 60" STORM SEWER OUTLET SHALL BE COMPLETED PRIOR TO DISTURBING THE EXISTING BOX CULVERT AND 36" STORM SEWER OUTLET AT STATION 5+90.
 3. TYPE A CURB RAMP SHALL BE INCLUDED IN THE COST OF P.C.C. SIDEWALK, 4".

CITY OF ALTON LAW ENFORCEMENT CENTER



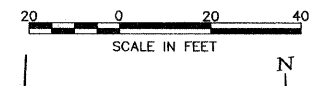
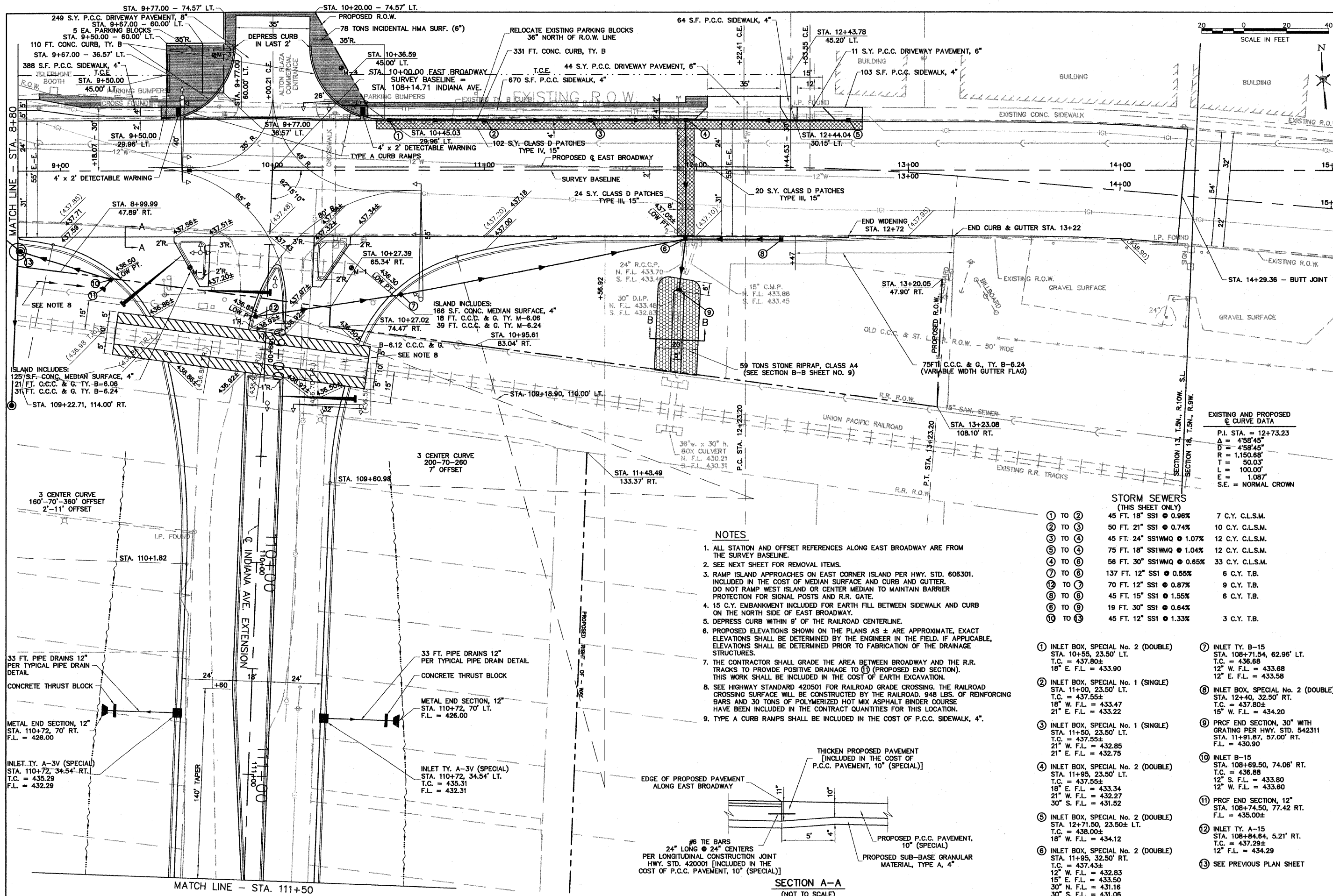
REVISIONS

SMS ENGINEERS
 Sheppard Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS & LAND SURVEYORS
 215 Market Street
 Alton, Illinois 62002
 618/462-9725

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 PLAN EAST BROADWAY

DWG. NO. PH II PLAN EAST BROADWAY 1.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: 1" = 20'
 SHEET 16 OF 61

S:\Land Projects\Alton Indiana Ph II 002085\1.dwg Ph II Plan East Broadway 1.dwg, 22/10/2007 4:18:12 PM, csmahle, 1:20



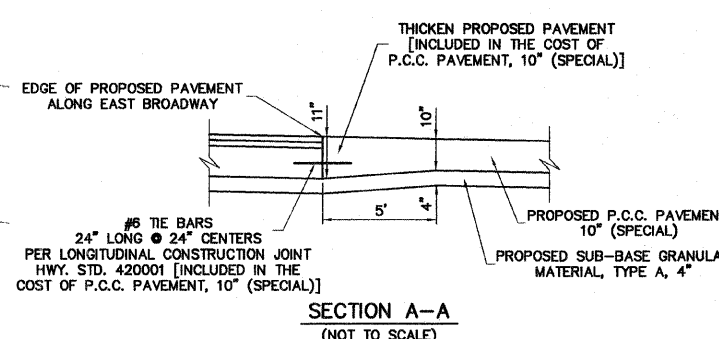
EXISTING AND PROPOSED CURVE DATA

P.I. STA.	= 12+73.23
Δ	= 45°45'
D	= 458.45'
R	= 1,150.68'
T	= 50.03'
L	= 100.00'
E	= 1.087'
S.E.	= NORMAL CROWN

STORM SEWERS (THIS SHEET ONLY)

① TO ②	45 FT. 18" SS1 @ 0.96%	7 C.Y. C.L.S.M.
② TO ③	50 FT. 21" SS1 @ 0.74%	10 C.Y. C.L.S.M.
③ TO ④	45 FT. 24" SS1WQ @ 1.07%	12 C.Y. C.L.S.M.
④ TO ⑤	75 FT. 18" SS1WQ @ 1.04%	12 C.Y. C.L.S.M.
⑤ TO ⑥	56 FT. 30" SS1WQ @ 0.65%	33 C.Y. C.L.S.M.
⑥ TO ⑦	137 FT. 12" SS1 @ 0.55%	6 C.Y. T.B.
⑦ TO ⑧	70 FT. 12" SS1 @ 0.87%	9 C.Y. T.B.
⑧ TO ⑨	45 FT. 15" SS1 @ 1.55%	6 C.Y. T.B.
⑨ TO ⑩	19 FT. 30" SS1 @ 0.64%	
⑩ TO ⑪	45 FT. 12" SS1 @ 1.33%	3 C.Y. T.B.

- NOTES**
- ALL STATION AND OFFSET REFERENCES ALONG EAST BROADWAY ARE FROM THE SURVEY BASELINE.
 - SEE NEXT SHEET FOR REMOVAL ITEMS.
 - RAMP ISLAND APPROACHES ON EAST CORNER ISLAND PER HWY. STD. 606301. INCLUDED IN THE COST OF MEDIAN SURFACE AND CURB AND GUTTER. DO NOT RAMP WEST ISLAND OR CENTER MEDIAN TO MAINTAIN BARRIER PROTECTION FOR SIGNAL POSTS AND R.R. GATE.
 - 15 C.Y. EMBANKMENT INCLUDED FOR EARTH FILL BETWEEN SIDEWALK AND CURB ON THE NORTH SIDE OF EAST BROADWAY.
 - DEPRESS CURB WITHIN 9' OF THE RAILROAD CENTERLINE.
 - PROPOSED ELEVATIONS SHOWN ON THE PLANS AS ± ARE APPROXIMATE, EXACT ELEVATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. IF APPLICABLE, ELEVATIONS SHALL BE DETERMINED PRIOR TO FABRICATION OF THE DRAINAGE STRUCTURES.
 - THE CONTRACTOR SHALL GRADE THE AREA BETWEEN BROADWAY AND THE R.R. TRACKS TO PROVIDE POSITIVE DRAINAGE TO (1) (PROPOSED END SECTION). THIS WORK SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
 - SEE HIGHWAY STANDARD 420501 FOR RAILROAD GRADE CROSSING. THE RAILROAD CROSSING SURFACE WILL BE CONSTRUCTED BY THE RAILROAD. 948 LBS. OF REINFORCING BARS AND 30 TONS OF POLYMERIZED HOT MIX ASPHALT BINDER COURSE HAVE BEEN INCLUDED IN THE CONTRACT QUANTITIES FOR THIS LOCATION.
 - TYPE A CURB RAMPS SHALL BE INCLUDED IN THE COST OF P.C.C. SIDEWALK, 4".



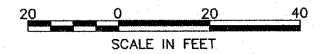
REVISIONS

Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS
10 Central Industrial Dr.
Northbrook, Illinois 60062
619/482-9755
619/677-8700

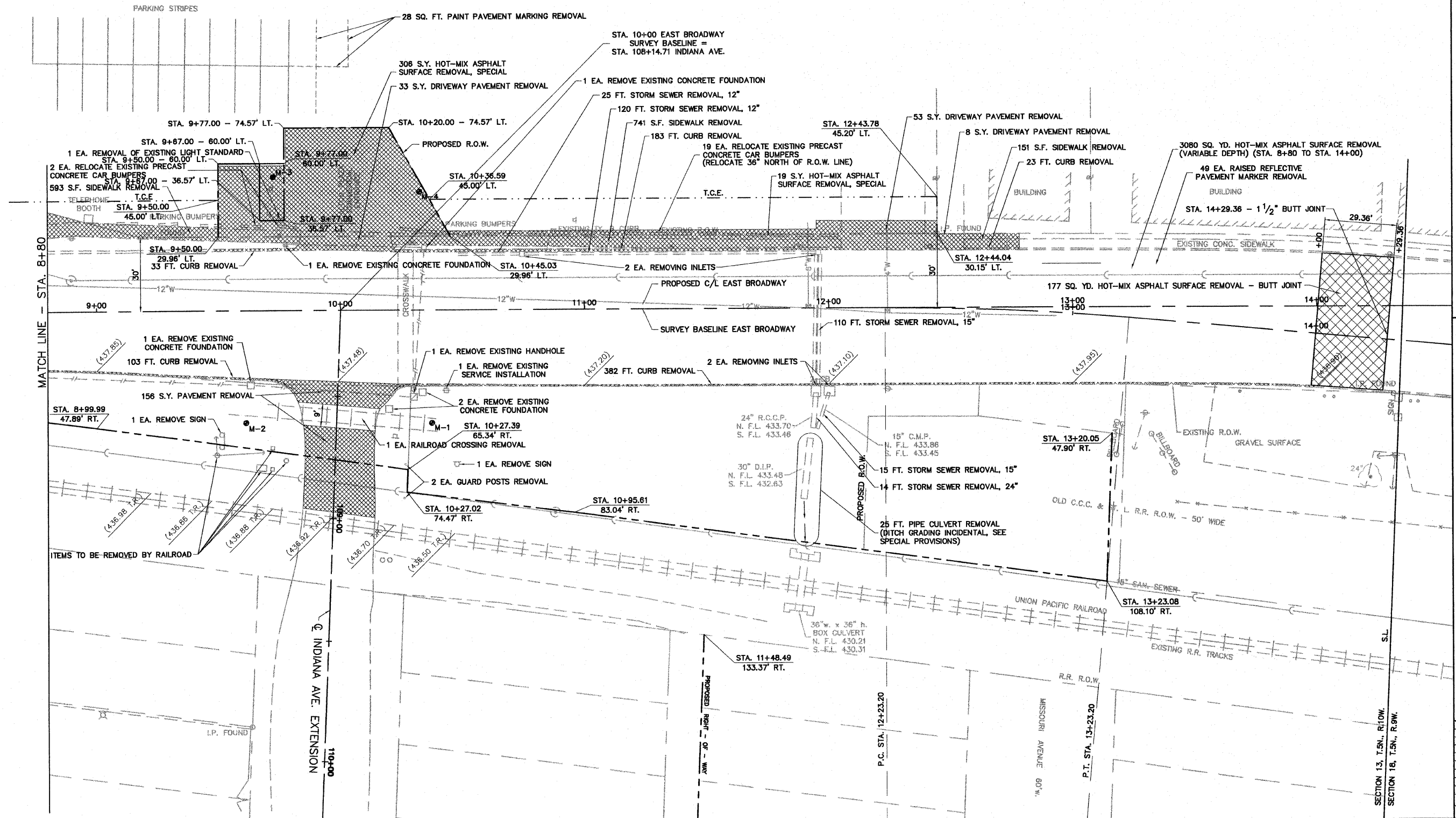
SMS ENGINEERS

CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
PLAN EAST BROADWAY

DWG. NO. PH II PLAN EAST BROADWAY 2.DWG
REF. BK. INDIANA AVE.
JOB NO. 406365.1
DSN. BY: DEG
DWN. BY: CAD
CHK. BY: DEG
DATE: OCTOBER, 2006
SCALE: 1" = 20'
SHEET 17 OF 61



- NOTES:**
1. ABANDON EXISTING CONDUITS IN PLACE.
 2. ALL REMOVAL ITEMS SOUTH OF THE U.P. RAILROAD ARE INCLUDED IN THE COST OF CLEARING. SEE SPECIAL PROVISIONS.



S:\Land Projects\Alton Indiana Ph II 406365_10.dwg, Ph II Plan East Broadway (Removal Items).dwg, 5/7/2007 11:04:46 AM, jman, 1:20

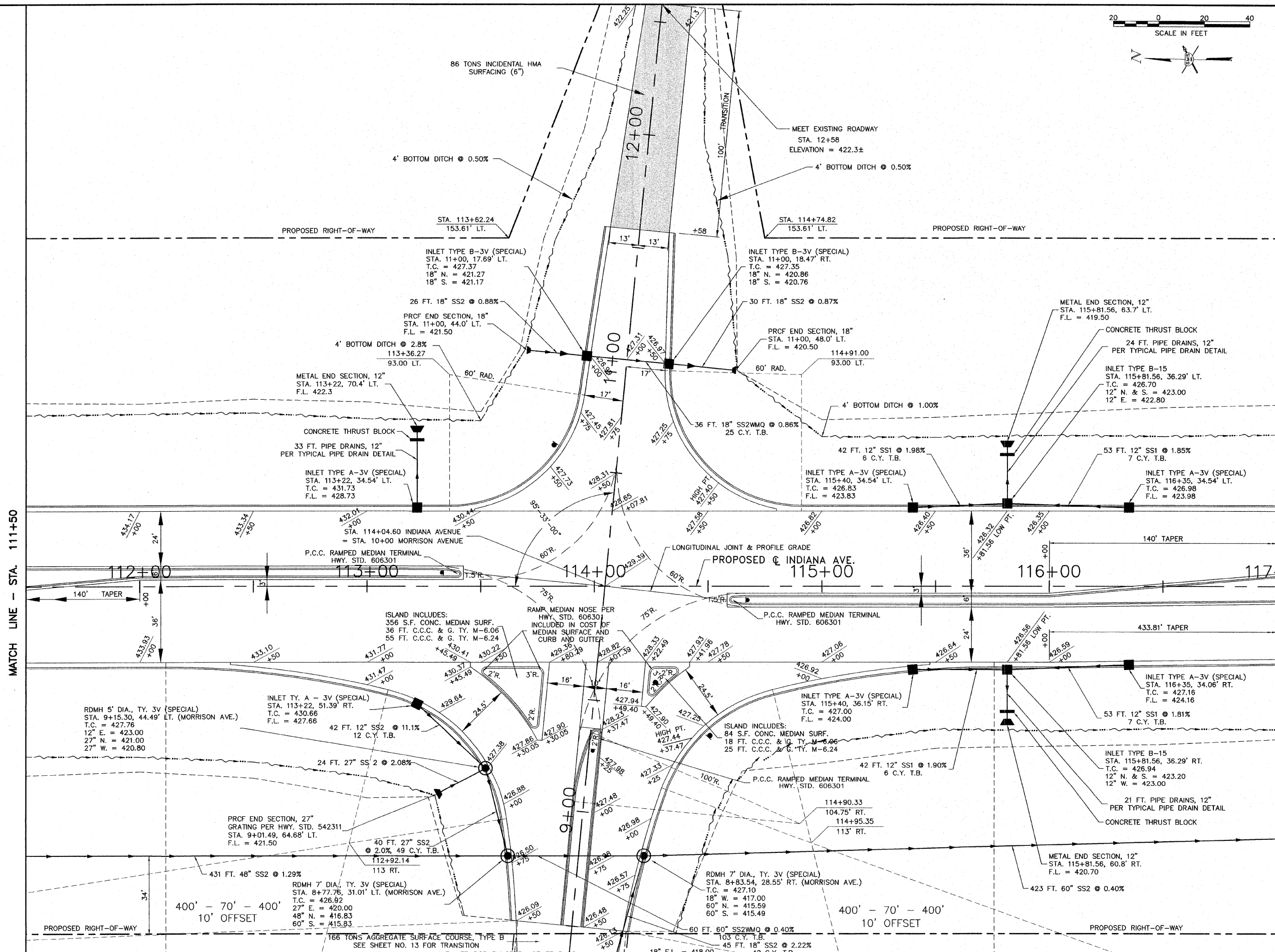
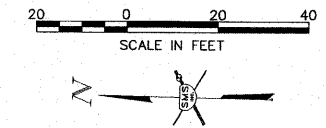
REVISIONS

Sheppard Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS & LAND SURVEYORS
 215 Market Street
 Alton, Illinois 62002
 618/482-9755

10 Central Industrial Dr
 Granite City, IL 62040
 618/977-8700

CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
PLAN EAST BROADWAY (REMOVAL ITEMS)

DWG. NO.	PH II PLAN EAST BROADWAY (REMOVAL ITEMS).DWG
REF. BK.	INDIANA AVE.
JOB NO.	406365.1
DSN. BY:	DEG
DWN. BY:	CAD
CHK. BY:	DEG
DATE:	OCTOBER, 2006
SCALE:	1" = 20'
SHEET	18 OF 61



MATCH LINE - STA. 111+50

MATCH LINE - STA. 117+00

NO.	DESCRIPTION

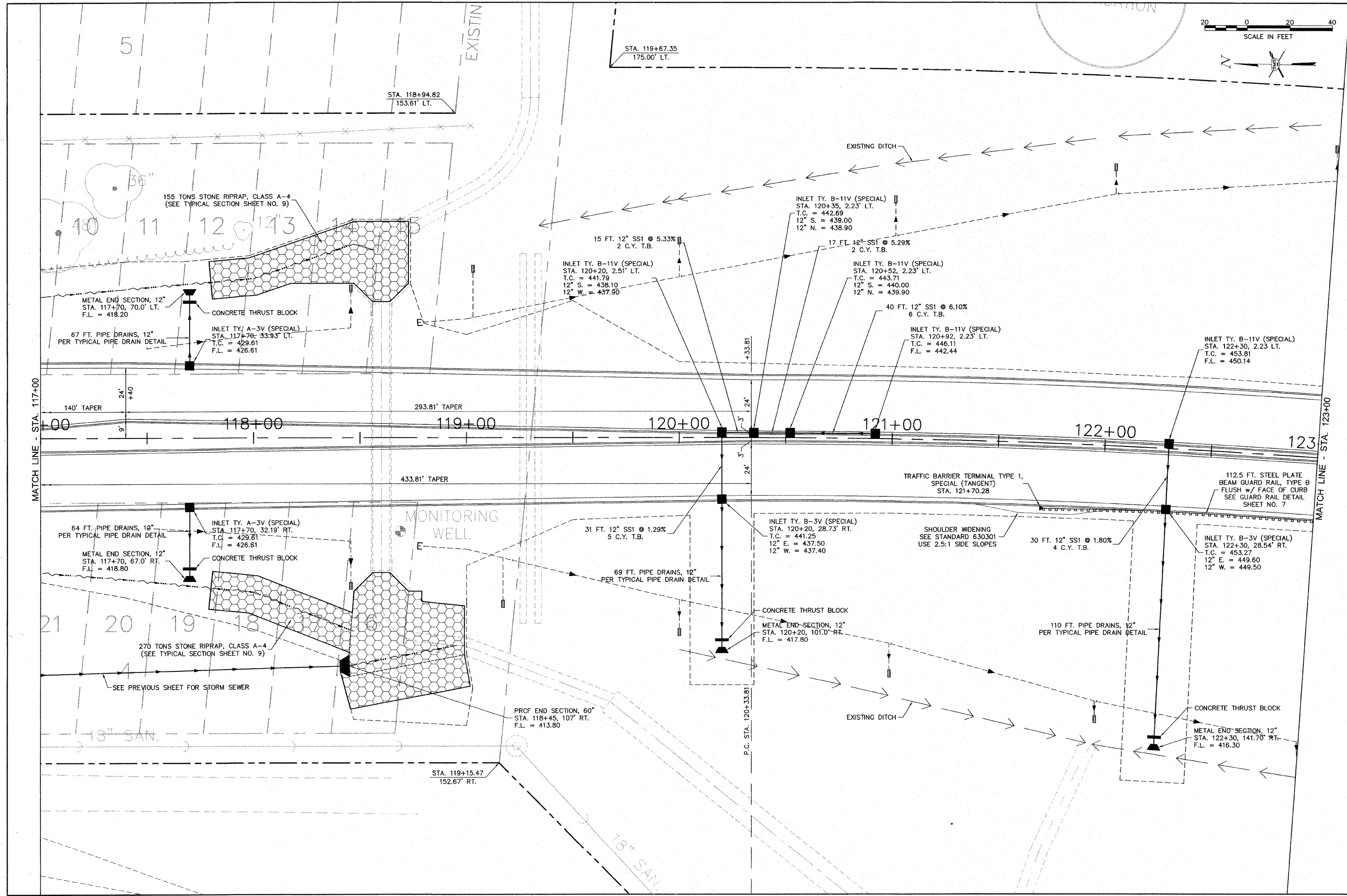
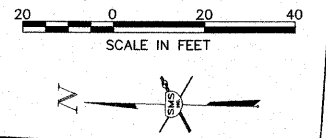
SMS ENGINEERS
 CONSULTING ENGINEERS LAND SURVEYORS
 215 Market Street
 P.O. BOX E
 Northgate Center
 Granite City, IL 62040
 618/977-9765

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 MORRISON AVENUE INTERSECTION

DWG. NO. PH III MORRISON AVE INTERSECTION.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006

SCALE: 1" = 20'
 SHEET 19 OF 61

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NO.	REVISIONS

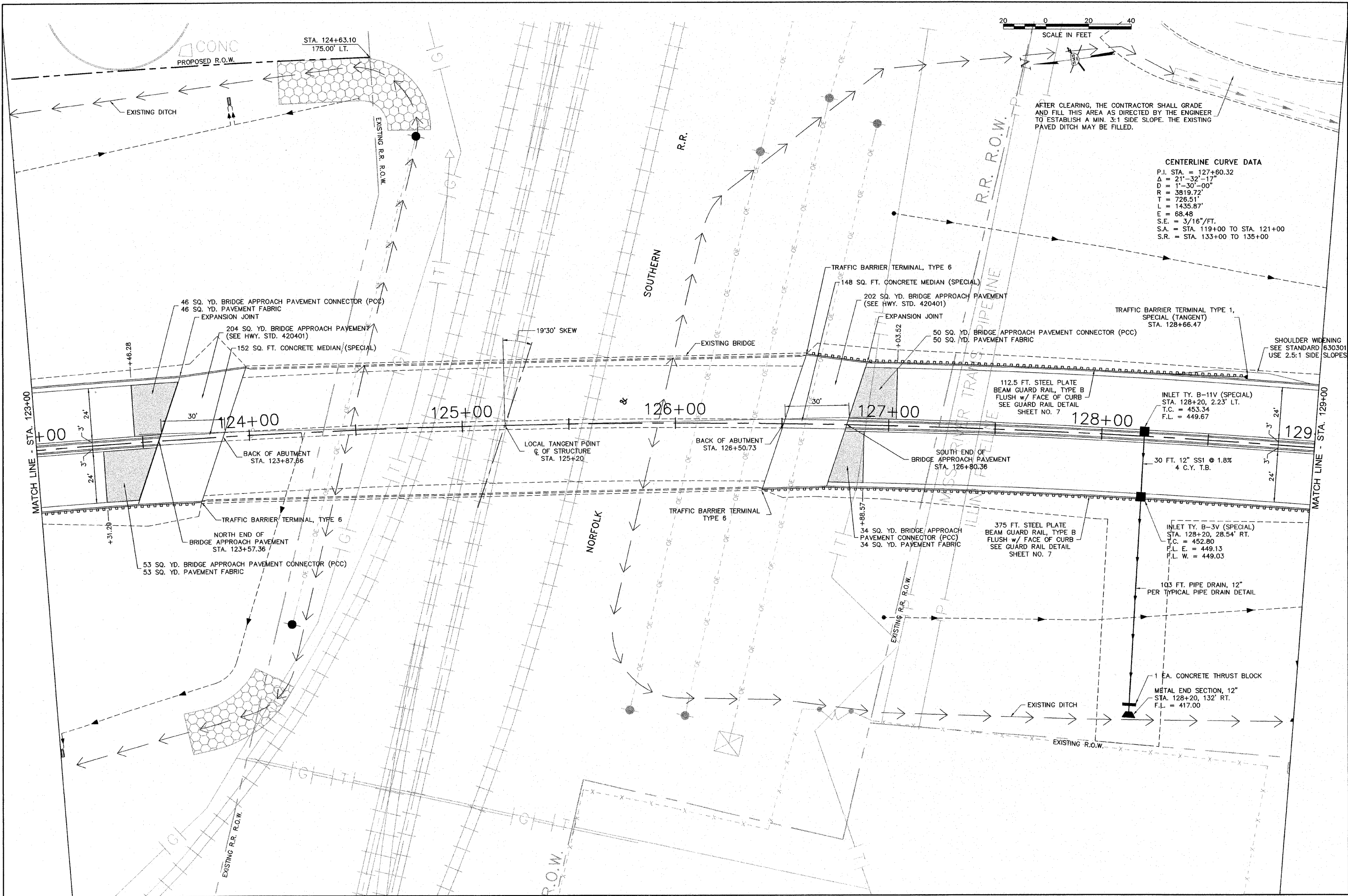
SMS ENGINEERS
 Sheppard, Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 215 Market Street, P.O. Box E, Alton, IL 62002, 618/462-9755 E-mail: mail@smsengineers.com
 10 Central Industrial Drive, Granite City, IL 62040, 618/877-9700 E-mail: mail@smsengineers.com
 DESIGN FIRM # 184-000992

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 DETAILED PLANS

DWG. NO. PH III STORM 117-123.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DESN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006

SCALE: 1" = 20'
 SHEET 20 OF 61

S:\Land Projects\Alton Indiana Ph III 406365.1.dwg\PH III Storm 117-123.dwg, 2/19/2007 2:08:24 PM, jman, 120



AFTER CLEARING, THE CONTRACTOR SHALL GRADE AND FILL THIS AREA AS DIRECTED BY THE ENGINEER TO ESTABLISH A MIN. 3:1 SIDE SLOPE. THE EXISTING PAVED DITCH MAY BE FILLED.

CENTERLINE CURVE DATA
 P.I. STA. = 127+60.32
 Δ = 21°-32'-17"
 D = 1°-30'-00"
 R = 3819.72'
 T = 726.51'
 L = 1435.87'
 E = 68.48'
 S.E. = 3/16"/FT.
 S.A. = STA. 119+00 TO STA. 121+00
 S.R. = STA. 133+00 TO 135+00

NO.	DESCRIPTION

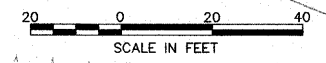
SMS ENGINEERS
 Sheppard, Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 215 Market Street, P.O. Box E, Alton, IL 62002, 618462-9725, E-mail: mal@smsengineers.com
 10 Central Industrial Drive, Granite City, IL 62040, 618877-5709, E-mail: mal@smsengineers.com
 DESIGN FIRM # 184-000992

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 DETAILED PLANS

DWG. NO.
 PH III STORM 123-129.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006

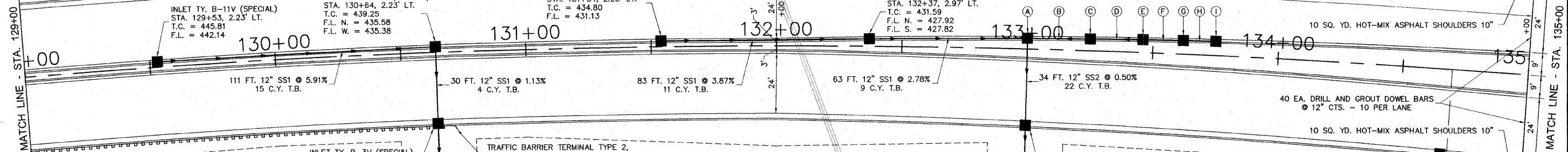
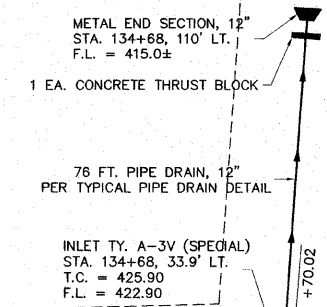
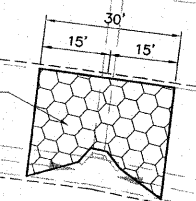
SCALE: 1" = 20'
 SHEET 21 OF 61

S:\Lana Projects\Alton Indiana Ph III 406365_1\dwg\Ph III Storm 123-129.dwg, 2/19/2007, 12:08:30 PM, jman, 120



AFTER CLEARING, THE CONTRACTOR SHALL GRADE AND FILL THIS AREA AS DIRECTED BY THE ENGINEER TO ESTABLISH A MIN. 3:1 SIDE SLOPE. THE EXISTING PAVED DITCH MAY BE FILLED.

- (A) INLET TY. B-11V (SPECIAL)
STA. 133+00, 4.23' LT.
T.C. = 429.74
F.L. N. = 426.07
F.L. S. = 424.34
F.L. W. = 424.14
- (B) 25 FT. 12" SS2 @ 0.50%
7 C.Y. T.B.
- (C) INLET TY. B-11V (SPECIAL)
STA. 133+25, 4.73' LT.
T.C. = 429.15
F.L. N. = 424.47
F.L. S. = 424.57
- (D) 21 FT. 12" SS2 @ 0.50%
4 C.Y. T.B.
- (E) INLET TY. B-11V (SPECIAL)
STA. 133+46, 5.15' LT.
T.C. = 428.67
F.L. N. = 424.68
F.L. S. = 424.78
- (F) 16 FT. 12" SS1 @ 0.50%
2 C.Y. T.B.
- (G) INLET TY. B-11V (SPECIAL)
STA. 133+62, 5.47' LT.
T.C. = 428.31
F.L. N. = 424.86
F.L. S. = 424.96
- (H) 13 FT. 12" SS1 @ 0.50%
2 C.Y. T.B.
- (I) INLET TY. B-11V (SPECIAL)
STA. 133+75, 5.73' LT.
T.C. = 428.03
F.L. N. = 425.03



INLET TY. B-11V (SPECIAL)
STA. 129+53, 2.23' LT.
T.C. = 445.81
F.L. = 442.14

INLET TY. B-11V (SPECIAL)
STA. 130+64, 2.23' LT.
T.C. = 439.25
F.L. N. = 435.58
F.L. W. = 435.38

INLET TY. B-11V (SPECIAL)
STA. 132+37, 2.97' LT.
T.C. = 431.59
F.L. N. = 427.92
F.L. S. = 427.82

INLET TY. B-3V (SPECIAL)
STA. 130+64, 28.54' RT.
T.C. = 438.71
F.L. E. = 435.04
F.L. W. = 434.94

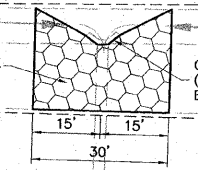
TRAFFIC BARRIER TERMINAL TYPE 2,
SPECIAL (TANGENT)
STA. 130+71.71

INLET TY. B-3V (SPECIAL)
STA. 133+00, 30.54' RT.
T.C. = 429.20
F.L. E. = 423.97
F.L. W. = 423.87

INLET TY. A-3V (SPECIAL)
STA. 134+67, 33.88' RT.
T.C. = 425.77
F.L. = 422.77

EXISTING R.O.W.

AFTER CLEARING, THE CONTRACTOR SHALL GRADE AND FILL THIS AREA AS DIRECTED BY THE ENGINEER TO ESTABLISH A MIN. 3:1 SIDE SLOPE. THE EXISTING PAVED DITCH MAY BE FILLED.



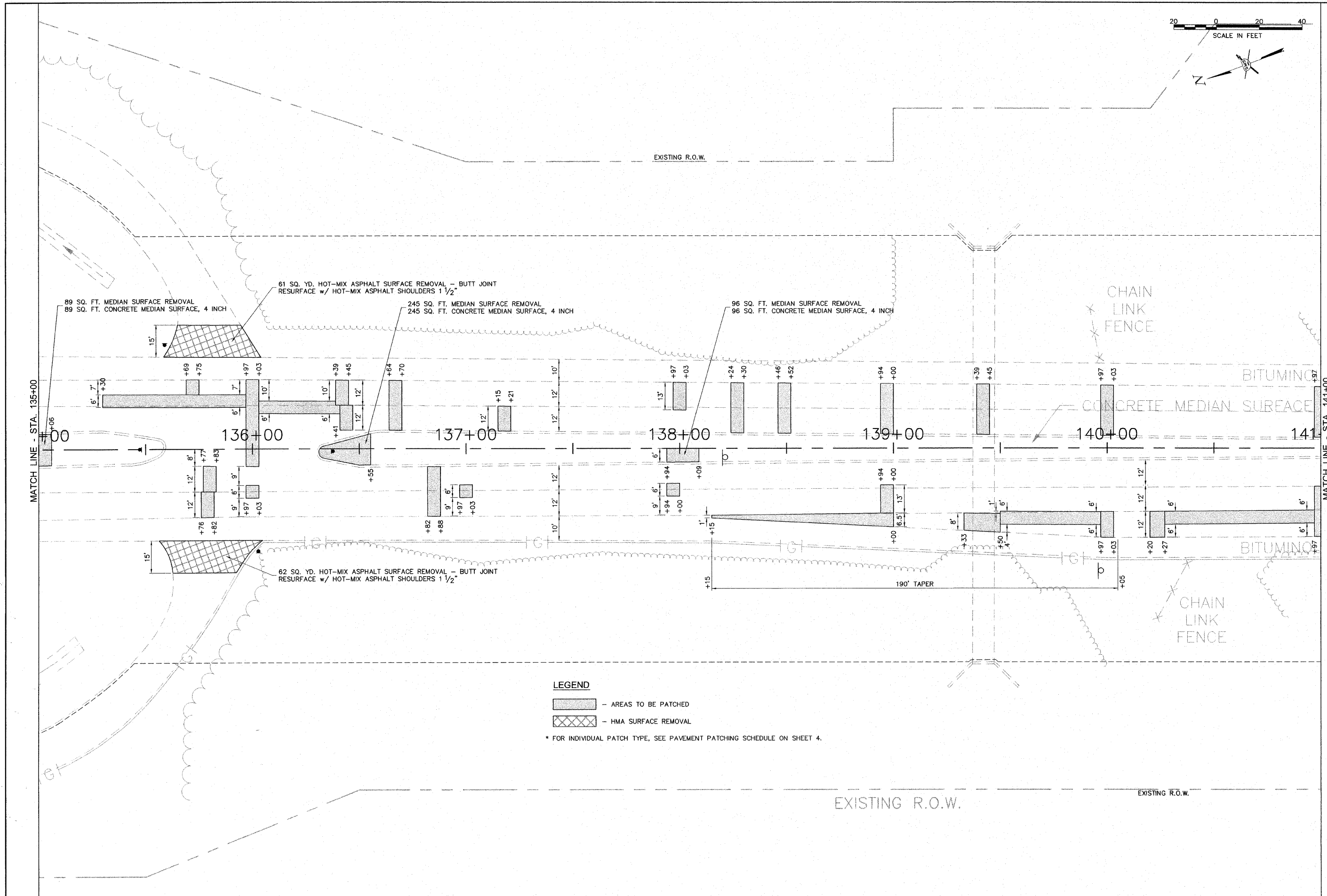
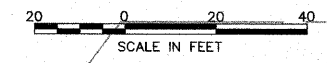
CONCRETE HEADWALL REMOVAL PARTIAL
(REMOVE BROKEN SECTIONS AS DIRECTED BY THE ENGINEER)

NO.	REVISIONS

SMS ENGINEERS
Sheppard, Morgan & Schwaab, Inc.
CONSULTING ENGINEERS AND LAND SURVEYORS
215 Market Street, P.O. Box E, Alton, IL 62002 618/462-3755 E-mail: ms@smsengineers.com
10 Central Industrial Drive, Geneseo, IL 62040 618/717-5700 E-mail: ms@smsengineers.com
DESIGN FIRM # 184-000992

CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
DETAILED PLANS

DWG. NO. PH III STORM 129-135.DWG
REF. BK. INDIANA AVE.
JOB NO. 406365.1
DSN. BY: DEG
DWN. BY: CAD
CHK. BY: DEG
DATE: OCTOBER, 2006
SCALE: 1" = 20'
SHEET 22 OF 61



LEGEND

- AREAS TO BE PATCHED
 - HMA SURFACE REMOVAL

* FOR INDIVIDUAL PATCH TYPE, SEE PAVEMENT PATCHING SCHEDULE ON SHEET 4.

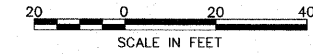
NO.	DESCRIPTION

SMS ENGINEERS
 Sheppard, Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 215 Market Street, P.O. Box E, Alton, IL 62002 618/462-9755 E-mail: mail@smsengineers.com
 10 Central Industrial Drive, Granite City, IL 62040 618/877-5700 E-mail: mail@smsengineers.com
 DESIGN FIRM # 184-000992

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 DETAILED PLANS

DWG. NO.
 PH III PATCHING 135-141.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DSN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: 1" = 20'
 SHEET 23 OF 61

EXISTING R.O.W.



MATCH LINE - STA. 141+00

SHOULDER

SHOULDER

LEGEND

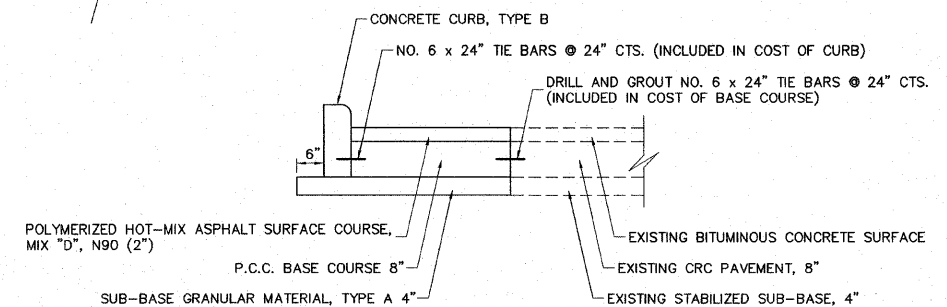
- AREAS TO BE PATCHED
- HMA SURFACE REMOVAL
- * FOR INDIVIDUAL PATCH TYPE, SEE PAVEMENT PATCHING SCHEDULE ON SHEET 4.

- 385 SQ. YD. HOT-MIX ASPHALT SURFACE REMOVAL (VARIABLE DEPTH)
- 1 EA. P.C.C. RAMPED MEDIAN TERMINAL
- 17 FT. COMB. CURB AND GUTTER REMOVAL (INCLUDES MEDIAN NOSE)
- 20 SQ. FT. MEDIAN SURFACE REMOVAL
- 10 SQ. FT. CONCRETE MEDIAN SURFACE, 4 INCH

- 54 FT. CONCRETE CURB, TYPE B
- 100 FT. COMB. CURB AND GUTTER REMOVAL (INCLUDES MEDIAN NOSE)
- 179 SQ. FT. MEDIAN SURFACE REMOVAL
- 1 EA. P.C.C. RAMPED MEDIAN TERMINAL
- 67 SQ. YD. SUB-BASE GRANULAR MATERIAL, TYPE A 4"
- 55 SQ. YD. P.C.C. BASE COURSE 8"
- 6 TONS POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE MIX "D", N90 (2")

- STA. 143+90 INDIANA AVE. = STA. 91+65 ILLINOIS RTE. 143
- 30 SQ. YD. SUB-BASE GRANULAR MATERIAL, TYPE A 4"
- 22 SQ. YD. P.C.C. BASE COURSE 8"
- 2 TONS POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE MIX "D", N90 (2")

- 1 EA. P.C.C. RAMPED MEDIAN TERMINAL
- 57 FT. COMB. CURB AND GUTTER REMOVAL (INCLUDES MEDIAN NOSE)
- 149 SQ. FT. MEDIAN SURFACE REMOVAL
- 33 FT. CONCRETE CURB, TYPE B



SECTION A-A

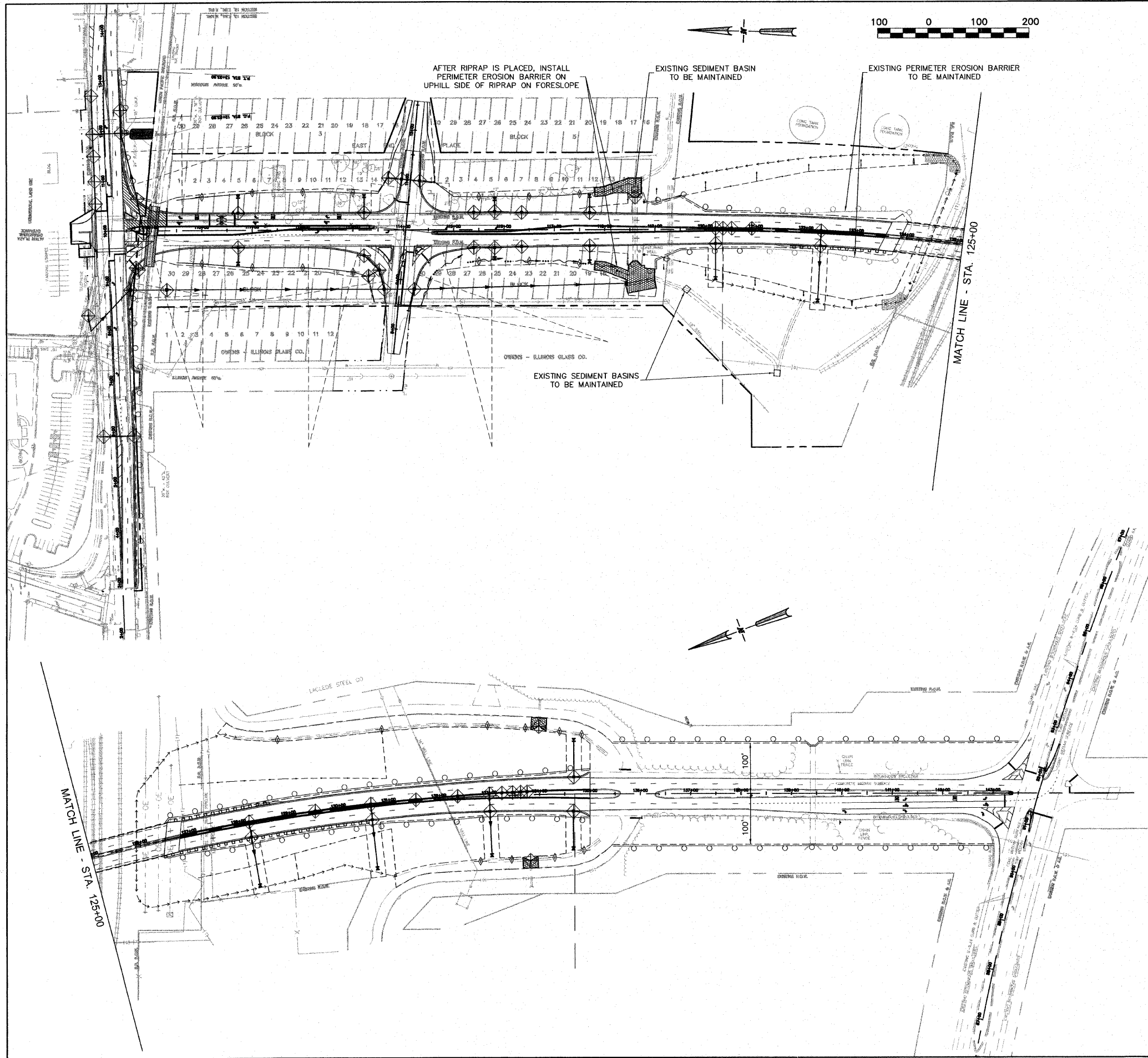
NO.	DESCRIPTION

SMS ENGINEERS
 Sheppard, Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 215 Market Street, P.O. Box E, Alton, IL 62002 618/462-9755 E-mail: ms@smsengr.com
 10 Central Industrial Drive, Granite City, IL 62040 618/877-5700 E-mail: msa@smsengr.com
 DESIGN FIRM # 184-000992

CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 DETAILED PLANS

DWG. NO.	PH III PATCHING 141-BERM.DWG
REF. BK.	INDIANA AVE.
JOB NO.	406365.1
DSN. BY:	DEC
DWN. BY:	CAD
CHK. BY:	DEC
DATE:	OCTOBER, 2006
SCALE:	1" = 20'
SHEET	24 OF 61

S:\Land Projects\Alton Indiana Ph III 406365.dwg\PH III Patching 141-Berm.dwg, 2/19/2007 12:35:16 PM, jman, 1:20



EROSION CONTROL NOTES

1. THIS EROSION CONTROL PLAN SUPPLEMENTS THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) CONTAINED IN THE SPECIAL PROVISIONS.
2. THE CONTRACTOR IS REQUIRED TO RETAIN A COPY OF THE SWPPP ON SITE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
3. CONSTRUCTION ENTRANCES SHALL BE STABILIZED WITH CRUSHED STONE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC ROADWAYS.
4. ALL AREAS DISTURBED FOR ANY REASON SHALL BE RESTORED WITH CLASS 2 SEEDING IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS. ALL SEEDING AREAS SHALL BE MULCHED IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS FOR METHOD 2.
5. TEMPORARY SEEDING AND MULCH SHALL BE COMPLETED ON A WEEKLY BASIS ON EXPOSED GROUND AND SHALL BE IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS. TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS/ACRE. THIS WORK WILL BE PAID FOR AS "TEMPORARY EROSION CONTROL SEEDING". TEMPORARY MULCH WILL BE PAID FOR AS "MULCH, METHOD 2".
6. STRAW BALES, HAY BALES, PERIMETER EROSION BARRIER AND SILT FENCES WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS. DITCH CHECKS SHALL BE COMPOSED OF AGGREGATE, SILT PANELS, ROLLED EXCELSIOR, URETHANE FOAM/GEOTEXTILE (SILT WEDGES), EARTH MEDIAN AND/OR OTHER MATERIAL APPROVED BY THE EROSION AND SEDIMENT CONTROL COORDINATOR.
7. TEMPORARY DITCH CHECKS, GEOTEXTILES, ROLLED EXCELSIOR, SILT WEDGES, PANELS SHALL BE LOCATED AT EVERY 1.5 FT. FALL/RISE IN DITCH GRADE.
8. ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.
9. INLET AND PIPE PROTECTION IN PAVED DITCH LOCATIONS NEAR STATION 134+00 WHERE EMBEDMENT IS NOT POSSIBLE, AGGREGATE SHALL BE USED TO CONSTRUCT A TEMPORARY PERIMETER DIKE A MINIMUM OF 18" HIGH.

HEAVY DUTY EROSION CONTROL BLANKET SCHEDULE

LOCATION	HEAVY DUTY EROSION CONTROL BLANKET (SQ. YD.)
110+72 RT.	11
110+72 LT.	11
113+22 LT.	11
115+81.56 RT.	11
115+81.56 LT.	11
117+70 RT.	11
117+70 LT.	11
120+20 RT.	11
122+30 RT.	11
128+20 RT.	11
130+64 RT.	11
133+00 RT.	11
134+67 RT.	11
134+68 LT.	11
TOTAL	154

EROSION CONTROL BLANKET SCHEDULE

LOCATION	EROSION CONTROL BLANKET (SQ. YD.)
128+20 RT.	350
OTHER AREAS AS NEEDED & DIRECTED BY THE ENGINEER	650
TOTAL	1,000

LEGEND

- TEMPORARY DITCH CHECK
- SEDIMENT BASIN
- PERIMETER EROSION BARRIER - SILT FILTER FENCE OR OTHER AS APPROVED BY ENGINEER
- INLET AND PIPE PROTECTION

REVISIONS

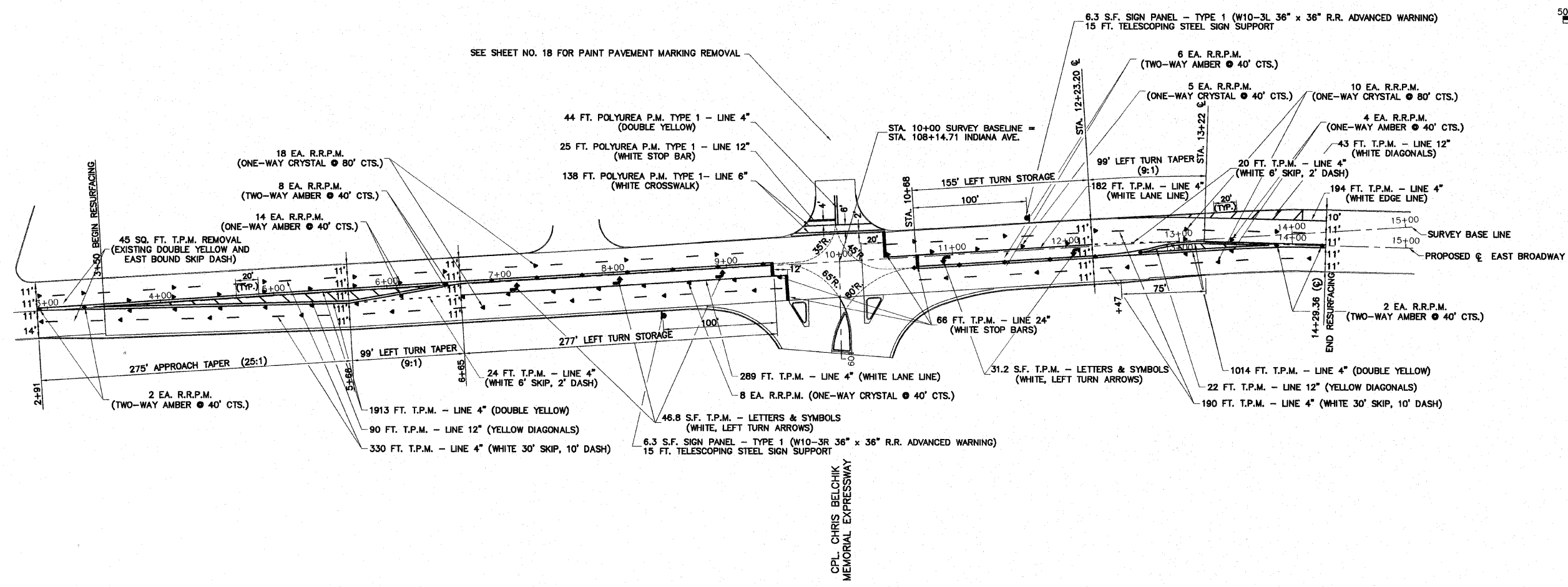
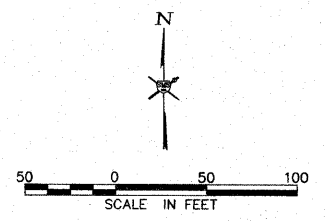
Sheppard Morgan & Schwaab, Inc.
 CONSULTING ENGINEERS & LAND SURVEYORS
 10 Caskal Industrial Dr
 Northbrook, Illinois 60062
 616/482-9765
 616/877-8700



CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 EROSION CONTROL PLAN

DWG. NO. PH III EROSION CONTROL.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: 1" = 100'
 SHEET 25 OF 61

S:\Land Projects\Alton Indiana Ph III 406365.1.dwg\PH III Erosion Control.dwg, 2/21/2007 4:27:59 PM, cdeanes, 1:100



NO.	REVISIONS

SMS
ENGINEERS

Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS
215 Market Street
Alton, Illinois 62002
618/462-9700

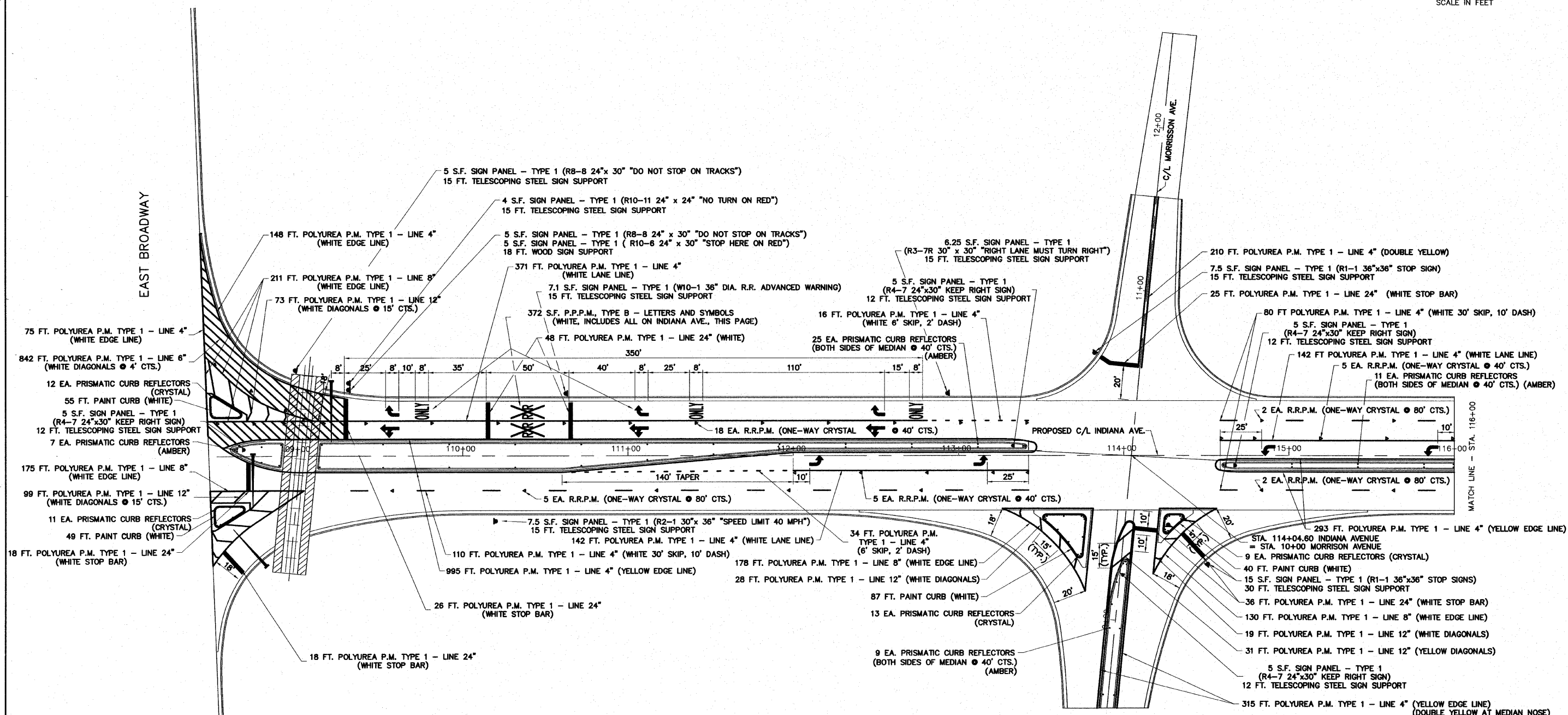
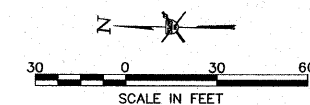
10 Central Industrial Dr.
Northlake Center
Alton, Illinois 62040
618/377-0700

CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
PAVEMENT MARKING & SIGNING PLAN - EAST BROADWAY

NOTES

1. ALL LETTERS AND SYMBOLS SHALL BE LARGE SIZE (8 FT. LONG)
2. THERMOPLASTIC PAVEMENT MARKING IS ABBREVIATED AS T.P.M.
3. RAISED REFLECTIVE PAVEMENT MARKER IS ABBREVIATED AS R.R.P.M.
4. POLYUREA PAVEMENT MARKING TYPE 1 IS ABBREVIATED AS POLYUREA P.M. TYPE 1

DWG. NO.	PH III PAVEMENT MARKING
REF. BK.	EAST BROADWAY.DWG
JOB NO.	406365.1
DSN. BY:	DEG
DWN. BY:	CAD
CHK. BY:	DEG
DATE:	OCTOBER, 2006
SCALE:	1" = 50'
SHEET	26 OF 61



- NOTES**
1. ALL LETTERS AND SYMBOLS SHALL BE LARGE SIZE (8 FT. LONG)
 2. THERMOPLASTIC PAVEMENT MARKING IS ABBREVIATED AS T.P.M.
 3. RAISED REFLECTIVE PAVEMENT MARKER IS ABBREVIATED AS R.R.P.M.
 4. POLYUREA PAVEMENT MARKING TYPE 1 IS ABBREVIATED AS POLYUREA P.M. TYPE 1

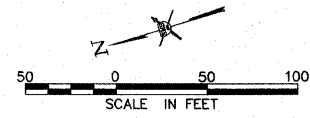
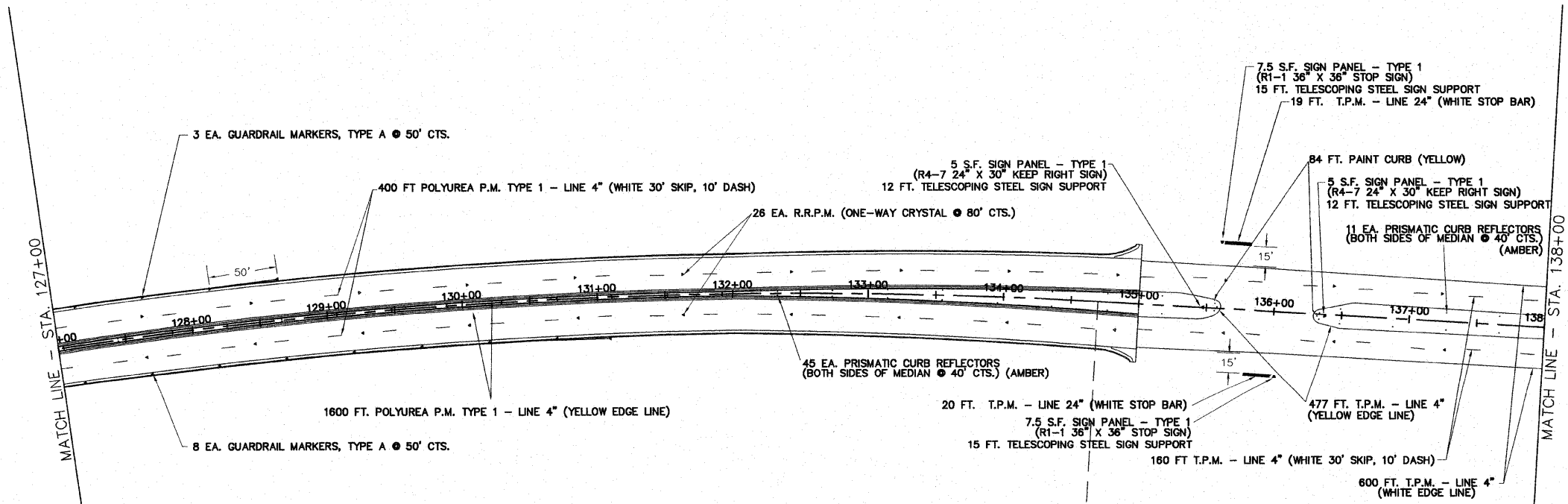
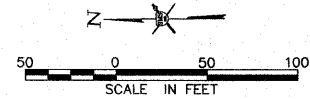
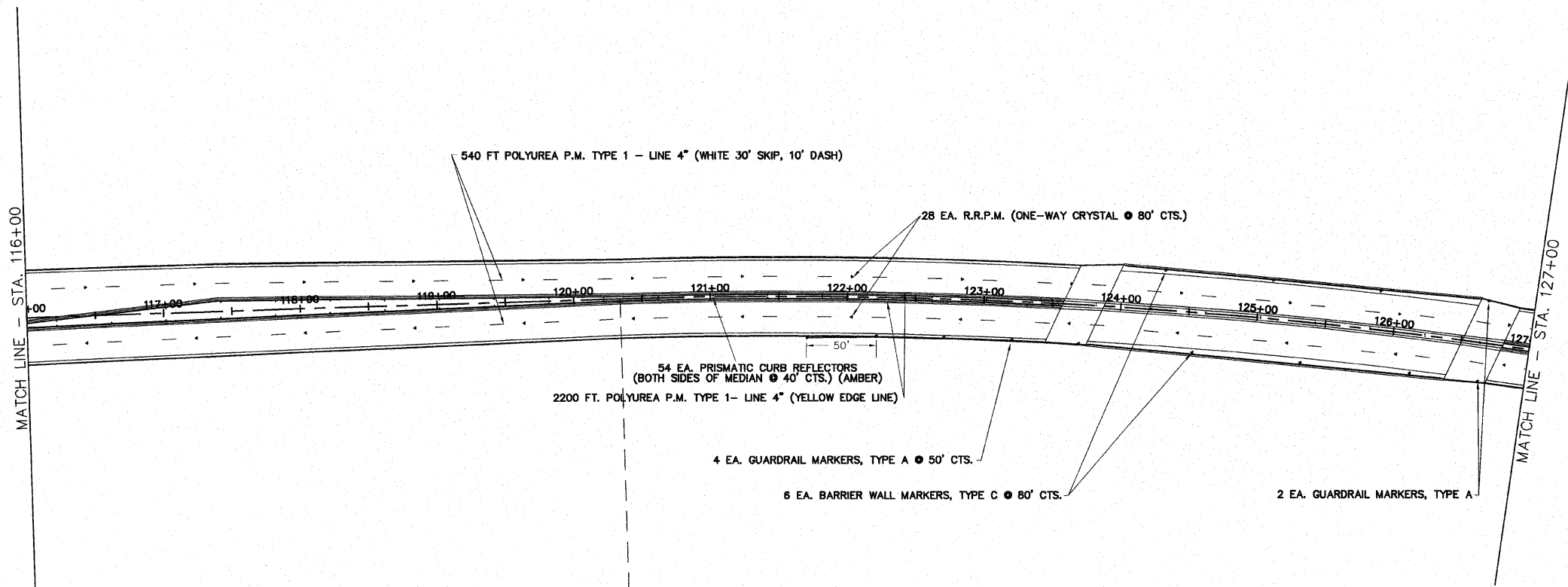
NO.	REVISIONS

Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS
10 Central Industrial Dr.
Northgate Center
Granite City, IL 62040
618/677-9700

SMS ENGINEERS

CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
PAVEMENT MARKING & SIGNING PLAN

DWG. NO. PH III PAVEMENT MARKING INDIANA AVENUE.DWG
REF. BK. INDIANA AVE.
JOB NO. 406365.1
DSN. BY: DEG
DWN. BY: CAD
CHK. BY: DEG
DATE: OCTOBER, 2006
SCALE: 1" = 30'
SHEET 27 OF 61



NOTES

1. ALL LETTERS AND SYMBOLS SHALL BE LARGE SIZE (8 FT. LONG)
2. THERMOPLASTIC PAVEMENT MARKING IS ABBREVIATED AS T.P.M.
3. RAISED REFLECTIVE PAVEMENT MARKER IS ABBREVIATED AS R.R.P.M.
4. POLYUREA PAVEMENT MARKING TYPE 1 IS ABBREVIATED AS POLYUREA P.M. TYPE 1

NO.	REVISIONS

SMS ENGINEERS

Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS

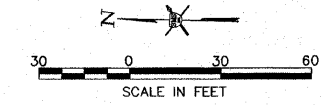
215 Market Street
Chicago, IL 60602
618/482-8755

10 Central Industrial Dr
Granite City, IL 62040
618/877-8700

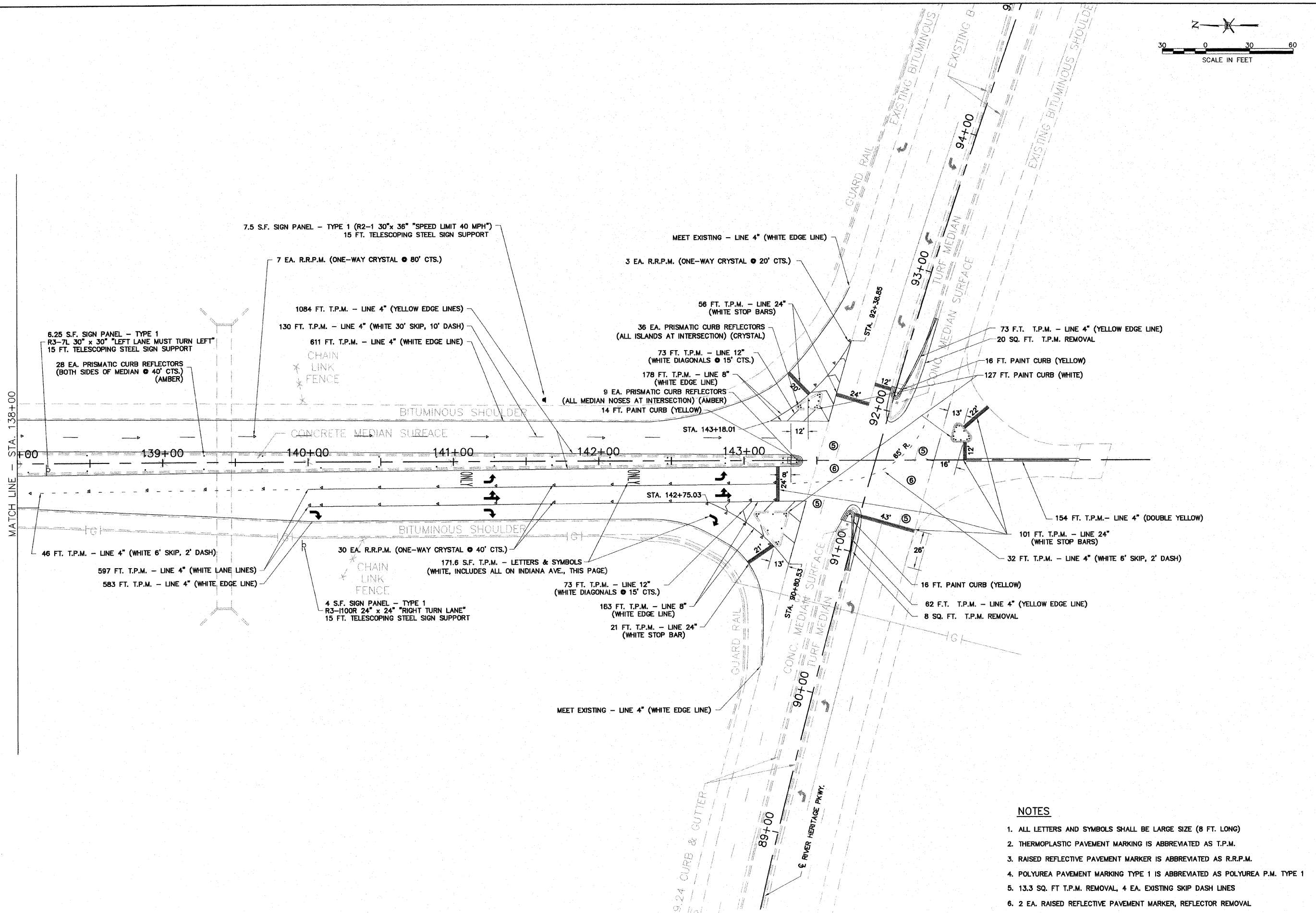
CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
PAVEMENT MARKING & SIGNING PLAN

DWG. NO.	PH III PAVEMENT MARKING
STA.	116-138.DWG
JOB NO.	406365.1
DSN. BY:	DEG, CDD
DWN. BY:	CAD, CDD
CHK. BY:	DEG
DATE:	OCTOBER, 2006
SCALE:	1" = 50'
SHEET	28 OF 61

S:\Land Projects\Alton, Indiana Ph III\406365\Drawings\PH III Pavement Marking Sta 116-138.dwg, 2/12/2007 3:04:38 PM, jman, 1:50



MATCH LINE - STA. 138+00



NOTES

1. ALL LETTERS AND SYMBOLS SHALL BE LARGE SIZE (8 FT. LONG)
2. THERMOPLASTIC PAVEMENT MARKING IS ABBREVIATED AS T.P.M.
3. RAISED REFLECTIVE PAVEMENT MARKER IS ABBREVIATED AS R.R.P.M.
4. POLYUREA PAVEMENT MARKING TYPE 1 IS ABBREVIATED AS POLYUREA P.M. TYPE 1
5. 13.3 SQ. FT. T.P.M. REMOVAL, 4 EA. EXISTING SKIP DASH LINES
6. 2 EA. RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

NO.	REVISIONS

SMS ENGINEERS

Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS & LAND SURVEYORS

10 Central Industrial Dr
Morton, Illinois 62450
Granite City, IL 62040
618/482-9755
618/977-9700

CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
PAVEMENT MARKING & SIGNING PLAN

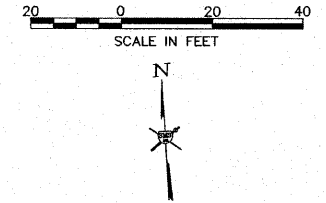
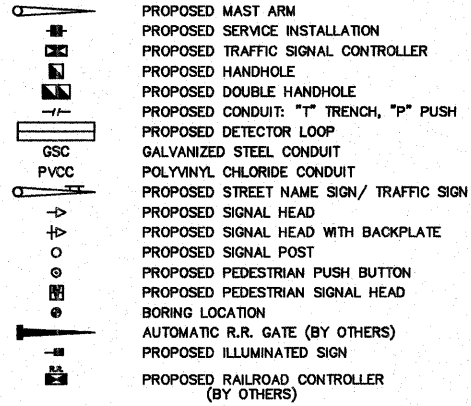
DWG. NO.	PH III PAVEMENT MARKING
ROUTE	ROUTE 143.DWG
REF. BK.	INDIANA AVE.
JOB NO.	406365.1
DSN. BY:	DEG
DSN. BY:	CAD
CHK. BY:	DEG
DATE:	OCTOBER, 2006
SCALE:	1" = 30'
SHEET	29 OF 61

S:\Land Projects\Alton Indiana Ph III 406365 10wyg\PH III Pavement Marking Route 143.dwg, 2/19/2007, 1:34:31 PM, jman, 130

ELECTRICAL GENERAL NOTES

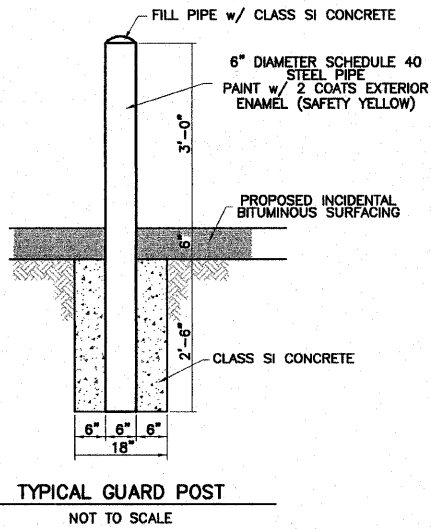
1. THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWS IN THE PAVEMENT THE NUMBER OF TURNS OF WIRE FOR INDUCTIVE LOOP DETECTOR INSTALLATION SHALL BE AS SHOWN ON THE PLANS. DETECTOR LOOPS SHALL BE PLACED IN THE PAVEMENT AFTER ROTOMILLING AND PRIOR TO INSTALLING THE BITUMINOUS SURFACE COURSE.
2. CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
3. CALL CARRY-OVER SHALL FUNCTION ONLY WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
4. ALL INDUCTION LOOP DETECTOR AMPLIFIERS SUPPLIED FOR THIS PROJECT SHALL BE RACK MOUNTED AND SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED.
5. SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS.
6. ALL TRAFFIC SIGNAL CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON RING TONGUE CONNECTORS. NO TERMINAL ENDS FOR DETECTOR LOOP LEAD-INS.
7. ALL PRESENCE LOOPS SHALL BE QUADRUPOLE LOOP WITH CALL DELAY.
8. ALL SIGNAL HEADS SHALL HAVE 12" SECTIONS. MOUNTING HARDWARE SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-SEIZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
9. BACKPLATES SHALL BE ABS PLASTIC.
10. SIGNAL POSTS AND BASES AND CONTROLLER CABINET SHALL BE UNPAINTED ALUMINUM.
11. THE LOCATION OF THE MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE FACE OF THE CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE.
12. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONENT OF THIS TRAFFIC SIGNAL SYSTEM.
13. ESTIMATED DEPTHS OF CONCRETE FOUNDATIONS FOR THE MAST ARM SUPPORT POLES ARE AS FOLLOWS:
 N-E CORNER MAST ARM LENGTH = 26' (30" DIA.) : 10 FT. DEEP
 N-W CORNER MAST ARM LENGTH = 40' (36" DIA.) : 13 FT. DEEP
 S-E CORNER MAST ARM LENGTH = 55' (36" DIA.) : 15 FT. DEEP
 SOUTH OF RAILROAD MAST ARM LENGTH = 32' (36" DIA.) : 11 FT. DEEP
 ACTUAL DEPTHS WILL BE SPECIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.
14. THE SOIL BORINGS ARE INCLUDED IN THE SPECIAL PROVISIONS.
15. CONTRACTOR IS REQUIRED TO OBTAIN A 9-1-1 ADDRESS FROM MADISON COUNTY PRIOR TO INSTALLING ELECTRICAL SERVICES.
16. ALL WORK ON/OR NEAR THE RAILROAD PROPERTY WILL BE COORDINATED WITH THE SIGNAL DEPARTMENT OF THE RAILROAD.
17. PRESENCE DETECTOR LOOPS LOCATED AT RAILROAD TRACK SHALL BE INSTALLED NO CLOSER THAN 10 FEET FROM THE NEAREST RAIL.
18. THE CONTRACTOR SHALL INSTALL FOUR (4) GROUND RODS (3/4" x 12' LONG) AND #6 AWG BARE COPPER CONDUCTORS IN THE CONTROLLER FOUNDATION AS PER SPECIAL PROVISIONS, "CONCRETE FOUNDATION, TYPE D".
19. THE CONTROLLER SHALL BE AN ECONOLITE ASC/2-2100 TO BE COMPATIBLE WITH THE EXISTING SYSTEM.
20. TRAFFIC SIGNALS SHALL BE PLACED SO AS NOT TO OBSTRUCT THE VIEW OF THE PROPOSED RAILROAD SIGNALS.
21. THE ILLINOIS COMMERCE COMMISSION MUST BE CONTACTED TO SCHEDULE THE REQUIRED JOINT EQUIPMENT INSPECTION AT THE VENDOR'S FACILITY.
22. THE ILLINOIS COMMERCE COMMISSION MUST BE CONTACTED TO SCHEDULE A FIELD INSPECTION OF THE SIGNALS AS THEY ARE ENERGIZED.
23. ONLY ONE CONDUCTOR FROM EACH PAIR SHALL BE UTILIZED FOR THE CONNECTION OF THE RAILROAD INTERCONNECT CABLE.

TRAFFIC SIGNALS LEGEND

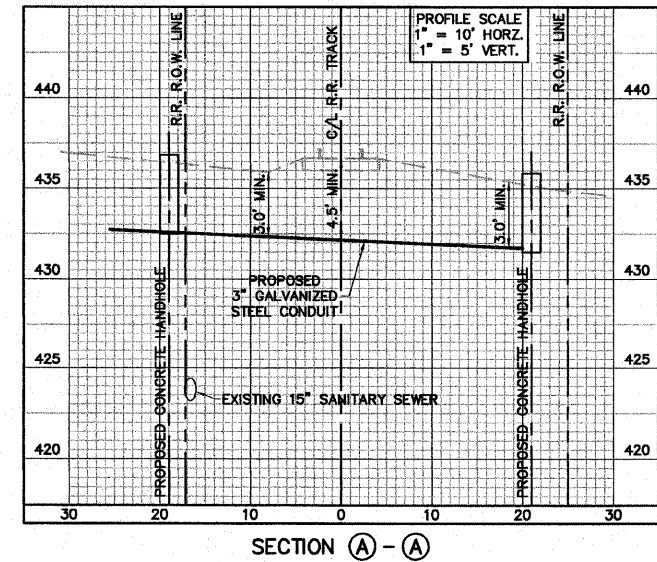


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS							
LOOP	PHASE	LOOP SIZE (FT.)	REQUIRED NO. OF TURNS	LEAD-IN LENGTH (FT.)	CALCULATED INDUCTANCE MICROHENRIES (-μH)	CALCULATED RESISTANCE OHMS (Ω)	
1. N.B. THRU CCO	3	6x6	7	580.5	493.7	3.3	
2. N.B. RIGHT CCO	3	6x6	6	568.5	360.0	3.2	
3. N.B. THRU CD	3	6x50	3-6-3	306	853.3	3.1	
4. N.B. RIGHT CD	3	6x50	3-6-3	293	850.5	3.1	
5. N.B. THRU CD	3	6x40	3-6-3	270.5	695.5	2.6	
6. N.B. RIGHT CD	3	9x40	3-6-3	245.5	708.0	2.6	
7. E.B. THRU CD	2	6x50	3-6-3	133.5	815.4	2.3	
8. E.B. THRU CD	2	6x50	3-6-3	145.5	818.0	2.3	
9. E.B. LEFT CD	5	6x50	3-6-3	172.5	824.0	2.5	
10. E.B. THRU CCO	2	6x6	5	322	239.6	1.9	
11. E.B. THRU CCO	2	6x6	5	334	242.2	2.0	
12. S.B. THRU CD	4	9x40	3-6-3	59	667.0	1.6	
13. W.B. THRU CD	6	6x50	3-6-3	133.5	815.4	2.3	
14. W.B. THRU CD	6	6x50	3-6-3	143.5	817.6	2.3	
15. W.B. LEFT CD	1	6x50	3-6-3	157.5	820.7	2.4	
16. W.B. THRU CCO	6	6x6	5	319	236.9	1.9	
17. W.B. THRU CCO	6	6x6	5	311	237.2	1.9	

NOTE: THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.



TYPICAL GUARD POST
NOT TO SCALE



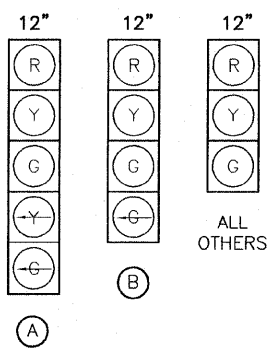
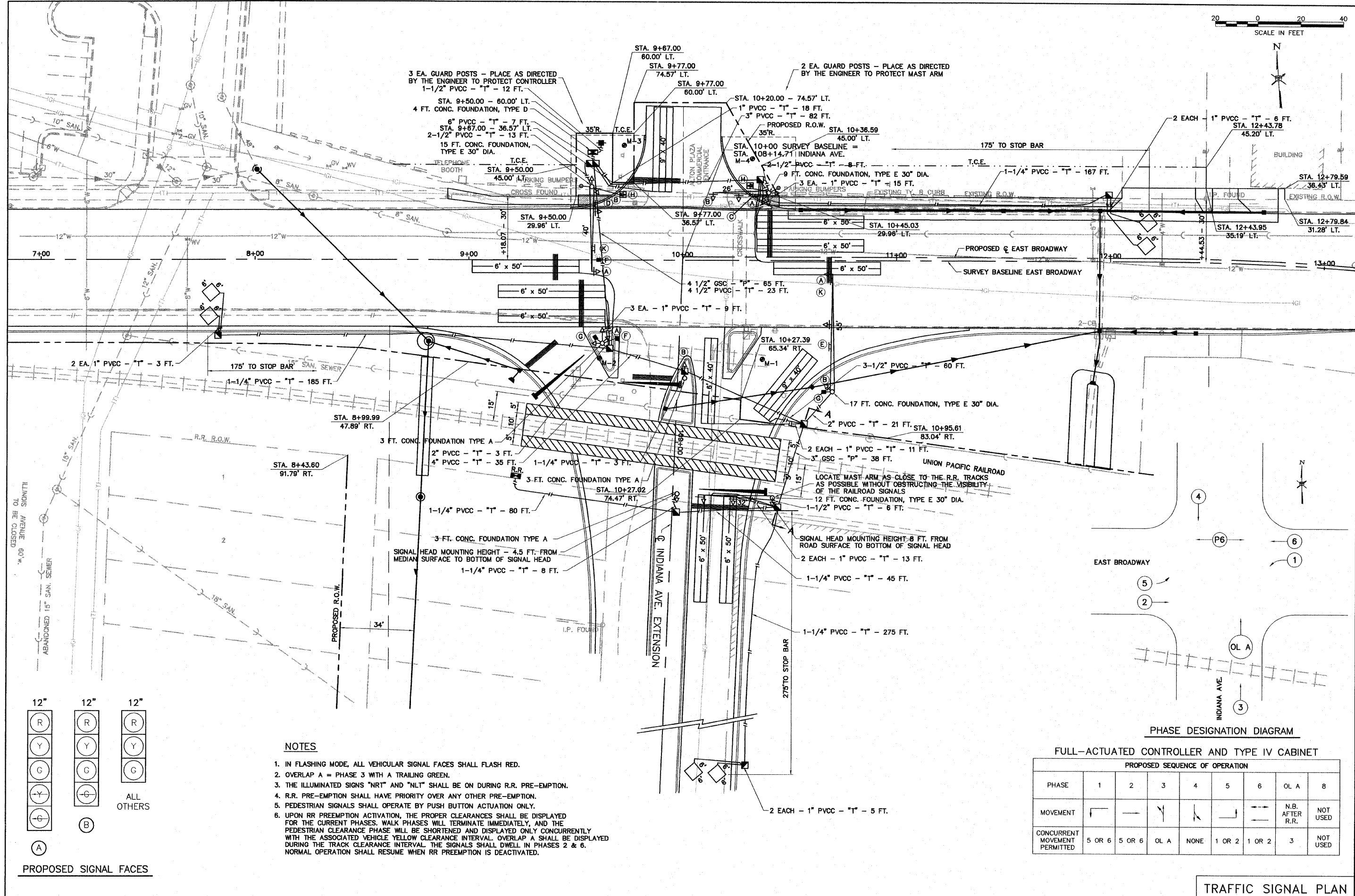
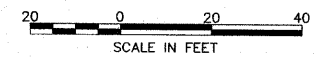
REVISIONS

SMS ENGINEERS
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 216 Market Street
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CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 TRAFFIC SIGNAL PLANS - AT EAST BROADWAY

DWG. NO. PH III ELECTRICAL GENERAL NOTES.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006



PROPOSED SIGNAL FACES

NOTES

1. IN FLASHING MODE, ALL VEHICULAR SIGNAL FACES SHALL FLASH RED.
2. OVERLAP A = PHASE 3 WITH A TRAILING GREEN.
3. THE ILLUMINATED SIGNS "NRT" AND "NLT" SHALL BE ON DURING R.R. PRE-EMPTION.
4. R.R. PRE-EMPTION SHALL HAVE PRIORITY OVER ANY OTHER PRE-EMPTION.
5. PEDESTRIAN SIGNALS SHALL OPERATE BY PUSH BUTTON ACTUATION ONLY.
6. UPON RR PREEMPTION ACTIVATION, THE PROPER CLEARANCES SHALL BE DISPLAYED FOR THE CURRENT PHASES. WALK PHASES WILL TERMINATE IMMEDIATELY, AND THE PEDESTRIAN CLEARANCE PHASE WILL BE SHORTENED AND DISPLAYED ONLY CONCURRENTLY WITH THE ASSOCIATED VEHICLE YELLOW CLEARANCE INTERVAL. OVERLAP A SHALL BE DISPLAYED DURING THE TRACK CLEARANCE INTERVAL. THE SIGNALS SHALL DWELL IN PHASES 2 & 6. NORMAL OPERATION SHALL RESUME WHEN RR PREEMPTION IS DEACTIVATED.

PHASE DESIGNATION DIAGRAM

FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

PHASE	PROPOSED SEQUENCE OF OPERATION							
	1	2	3	4	5	6	OL A	8
MOVEMENT	←	→	↘	↙	↔	↔	N.B. AFTER R.R.	NOT USED
CONCURRENT MOVEMENT PERMITTED	5 OR 6	5 OR 6	OL A	NONE	1 OR 2	1 OR 2	3	NOT USED

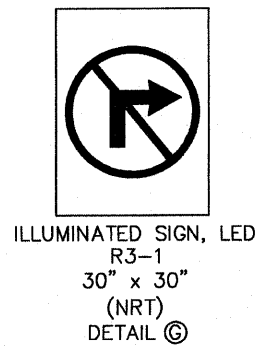
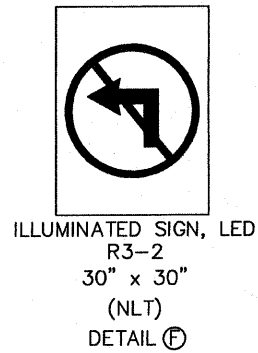
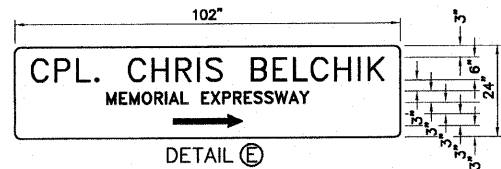
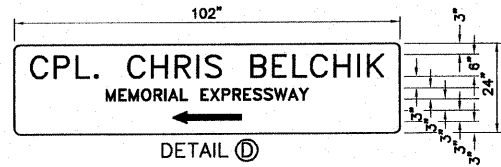
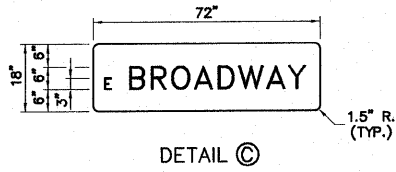
TRAFFIC SIGNAL PLAN

REVISIONS

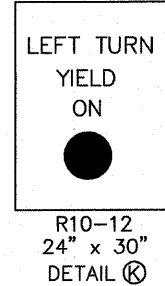
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CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 TRAFFIC SIGNAL PLANS - AT EAST BROADWAY

DWG. NO. PH III TRAFFIC SIGNAL PLAN/DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG, ODD
 DWG. BY: CAD, ODD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: 1" = 20'
 SHEET 31 OF 61

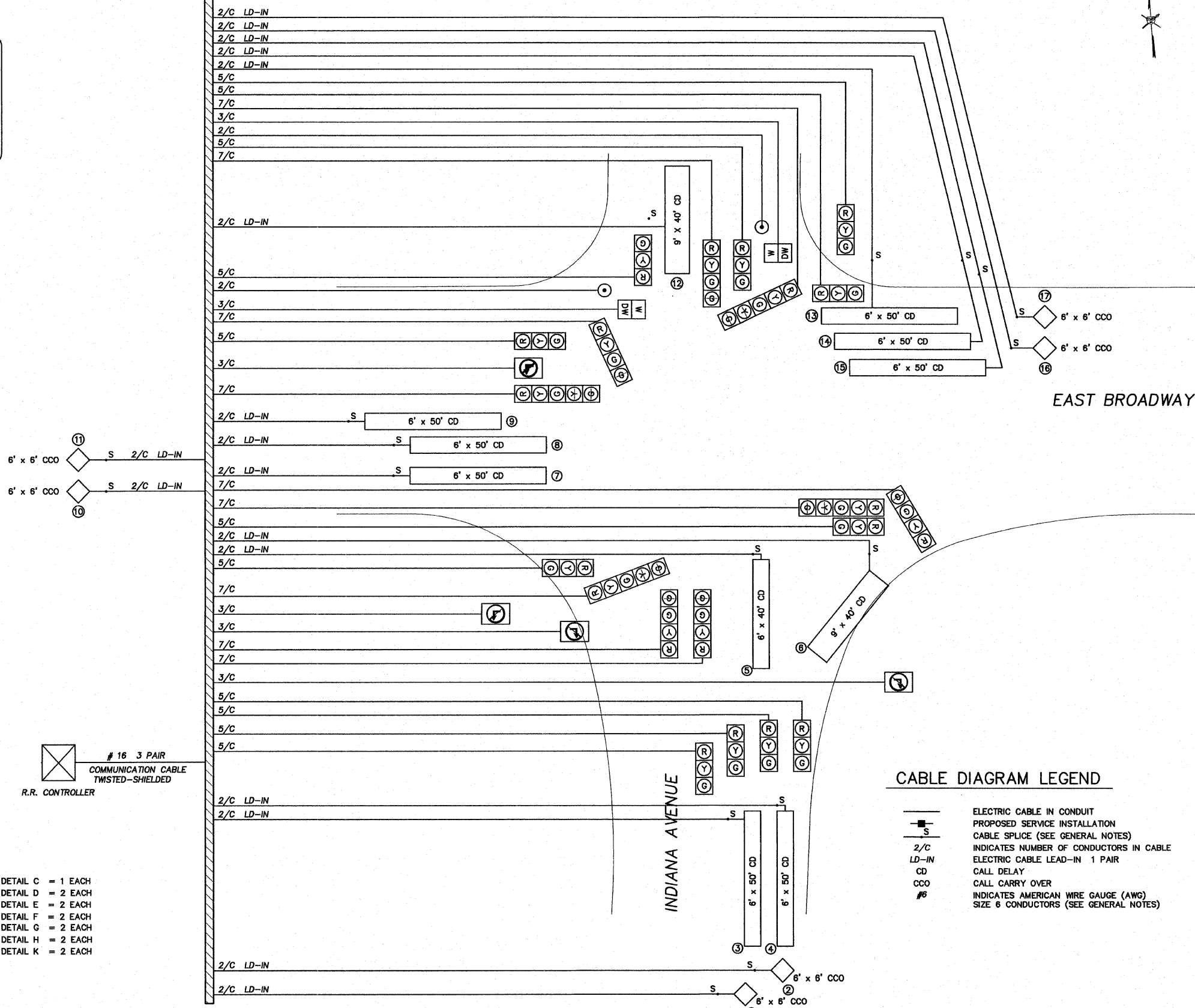


SIGN DETAILS



NOTE: TOTAL SIGNS REQUIRED -
 DETAIL C = 1 EACH
 DETAIL D = 2 EACH
 DETAIL E = 2 EACH
 DETAIL F = 2 EACH
 DETAIL G = 2 EACH
 DETAIL H = 2 EACH
 DETAIL K = 2 EACH

TELEPHONE SERVICE INSTALLATION # 16 3 PAIR COMMUNICATION CABLE TWISTED-SHIELDED CONTROLLER 2/C #6 SERVICE



CABLE DIAGRAM LEGEND

- ELECTRIC CABLE IN CONDUIT
- PROPOSED SERVICE INSTALLATION
- CABLE SPLICE (SEE GENERAL NOTES)
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- LD-IN ELECTRIC CABLE LEAD-IN 1 PAIR
- CD CALL DELAY
- CCO CALL CARRY OVER
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)

CABLE DIAGRAM

CABLE DIAGRAM & SIGNS

REVISIONS

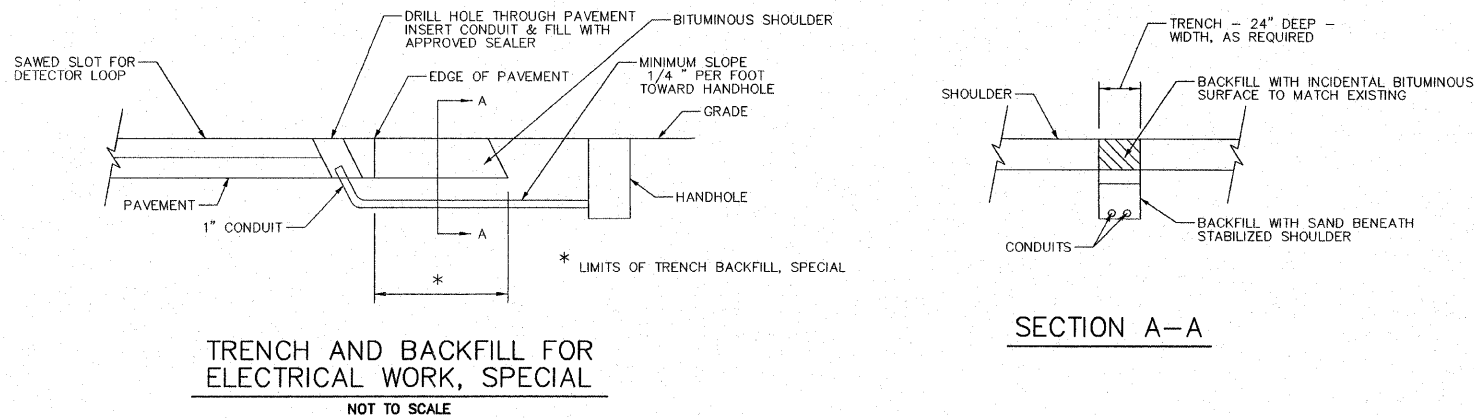
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CITY OF ALTON, ILLINOIS
 SECTION 06 - 00208 - 02 - RP
 CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
 TRAFFIC SIGNAL PLANS - AT EAST BROADWAY

DWG. NO. PH III CABLE DIAGRAM.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: NOT TO SCALE
 SHEET 32 OF 61

ELECTRICAL GENERAL NOTES

- THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWS IN THE PAVEMENT. THE NUMBER OF TURNS OF WIRE FOR INDUCTIVE LOOP DETECTOR INSTALLATION SHALL BE AS SHOWN ON THE PLANS. THE DETECTOR LOOPS SHALL BE PLACED IN THE PAVEMENT AFTER PATCHING AND PRIOR TO CONSTRUCTION OF THE BITUMINOUS SURFACE COURSE.
- CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
- CALL CARRY-OVER SHALL FUNCTION ONLY WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
- ALL INDUCTION LOOP DETECTOR AMPLIFIERS SUPPLIED FOR THIS PROJECT SHALL BE RACK MOUNTED AND SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED.
- SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS.
- ALL TRAFFIC SIGNAL CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON RING TONGUE CONNECTORS. NO TERMINAL ENDS FOR DETECTOR LOOP LEAD-INS.
- ALL VEHICLE SIGNAL HEADS SHALL HAVE 12" SECTIONS. MOUNTING HARDWARE SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-SIEZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
- BACKPLATES SHALL BE ABS PLASTIC.
- THE CONTROLLER CABINET SHALL BE UNPAINTED ALUMINUM.
- THE LOCATION OF THE MAST ARM SUPPORTS SHALL BE APPROVED BY THE DEPARTMENT'S ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF SHOULDER, WHICHEVER IS GREATER, IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE FACE OF THE CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE.
- ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONENT OF THIS TRAFFIC SIGNAL SYSTEM.
- THE CONTRACTOR SHALL INSTALL FOUR (4) GROUND RODS (3/4" x 12' LONG) AND #6 AWG BARE COPPER GROUND CONNECTORS IN THE CONTROLLER FOUNDATION AS PER THE SPECIAL PROVISION, "CONCRETE FOUNDATION, TYPE D".
- ESTIMATED DEPTHS OF CONCRETE FOUNDATIONS FOR THE MAST ARM SUPPORT POLES ARE AS FOLLOWS:
 N-E CORNER MAST ARM LENGTH = 48' (36" DIA.) : 13 FT. DEEP
 N-W CORNER MAST ARM LENGTH = 46' (36" DIA.) : 13 FT. DEEP
 S-W CORNER MAST ARM LENGTH = 34' (36" DIA.) : 11 FT. DEEP
 S-E CORNER MAST ARM LENGTH = 48' (36" DIA.) : 13 FT. DEEP
 ACTUAL DEPTHS WILL BE SPECIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- THE SOIL BORINGS ARE INCLUDED IN THE SPECIAL PROVISIONS.
- CONTRACTOR IS REQUIRED TO OBTAIN A 9-1-1 ADDRESS FROM MADISON COUNTY PRIOR TO INSTALLING ELECTRICAL SERVICES.

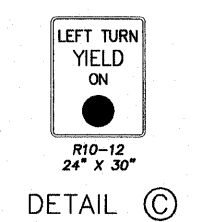
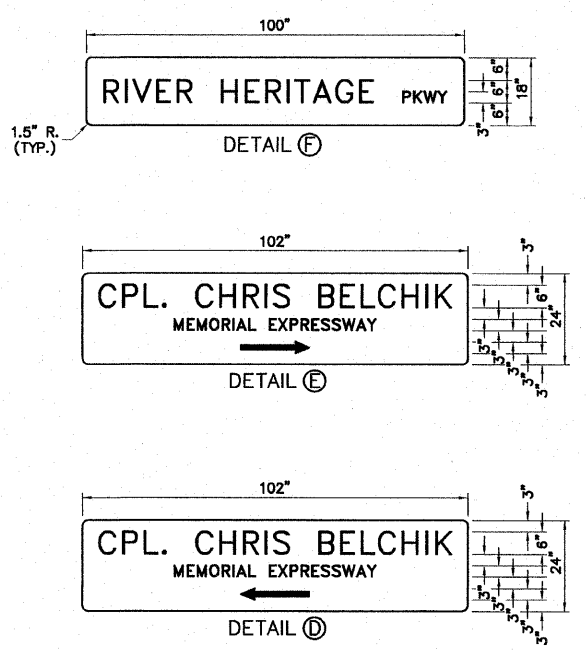
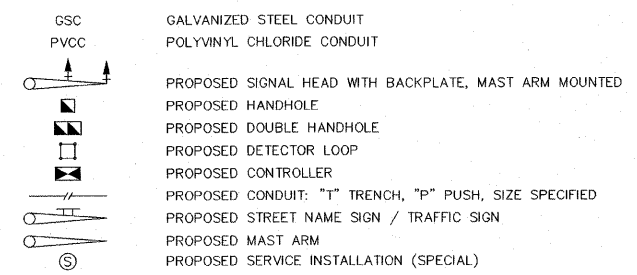


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS

NO.	LOOP	PHASE	LOOP SIZE (FT.)	REQUIRED NO. OF TURNS	LEAD-IN LENGTH (FT.)	CALCULATED INDUCTANCE MICROHENRIES (-μH)	CALCULATED RESISTANCE OHMS (Ω)
1.	S.B. RIGHT CD	4	4x15	3-6-3	154.5	283.0	1.3
2.	S.B. THRU CD	4	6x50	3-6-3	162.5	821.8	2.4
3.	S.B. LEFT CD	4	6x50	3-6-3	185.5	826.8	2.5
4.	S.B. THRU CCO	4	6x6	6	464	357.0	2.7
5.	S.B. LEFT CCO	4	6x6	6	479	360.3	2.8
6.	W.B. RIGHT CD	6	6x50	3-6-3	104.5	809.0	2.1
7.	W.B. THRU CD	6	6x50	3-6-3	116.5	811.6	2.2
8.	W.B. THRU CD	6	6x50	3-6-3	128.5	814.3	2.2
9.	W.B. LEFT CD	1	6x50	3-6-3	140.5	816.9	2.3
10.	W.B. THRU CCO	6	6x6	6	490	362.7	2.8
11.	W.B. THRU CCO	6	6x6	6	504	365.8	2.9
12.	N.B. RIGHT CD	3	4x15	3-6-3	240	301.8	1.7
13.	N.B. THRU CD	3	6x50	3-6-3	264	844.1	2.9
14.	E.B. LEFT CD	5	6x50	3-6-3	384.5	870.6	3.5
15.	E.B. THRU CD	2	6x50	3-6-3	372.5	868.0	3.5
16.	E.B. THRU CD	2	6x50	3-6-3	360.5	865.3	3.4
17.	E.B. THRU CCO	2	6x6	7	818.5	546.1	4.5
18.	E.B. THRU CCO	2	6x6	7	806.5	543.5	4.5

NOTE: THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

TRAFFIC SIGNALS LEGEND



SIGN DETAILS
NOT TO SCALE

TRAFFIC SIGNALS LEGEND, ELECTRICAL GENERAL NOTES, & DETAILS

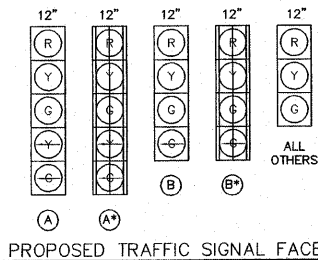
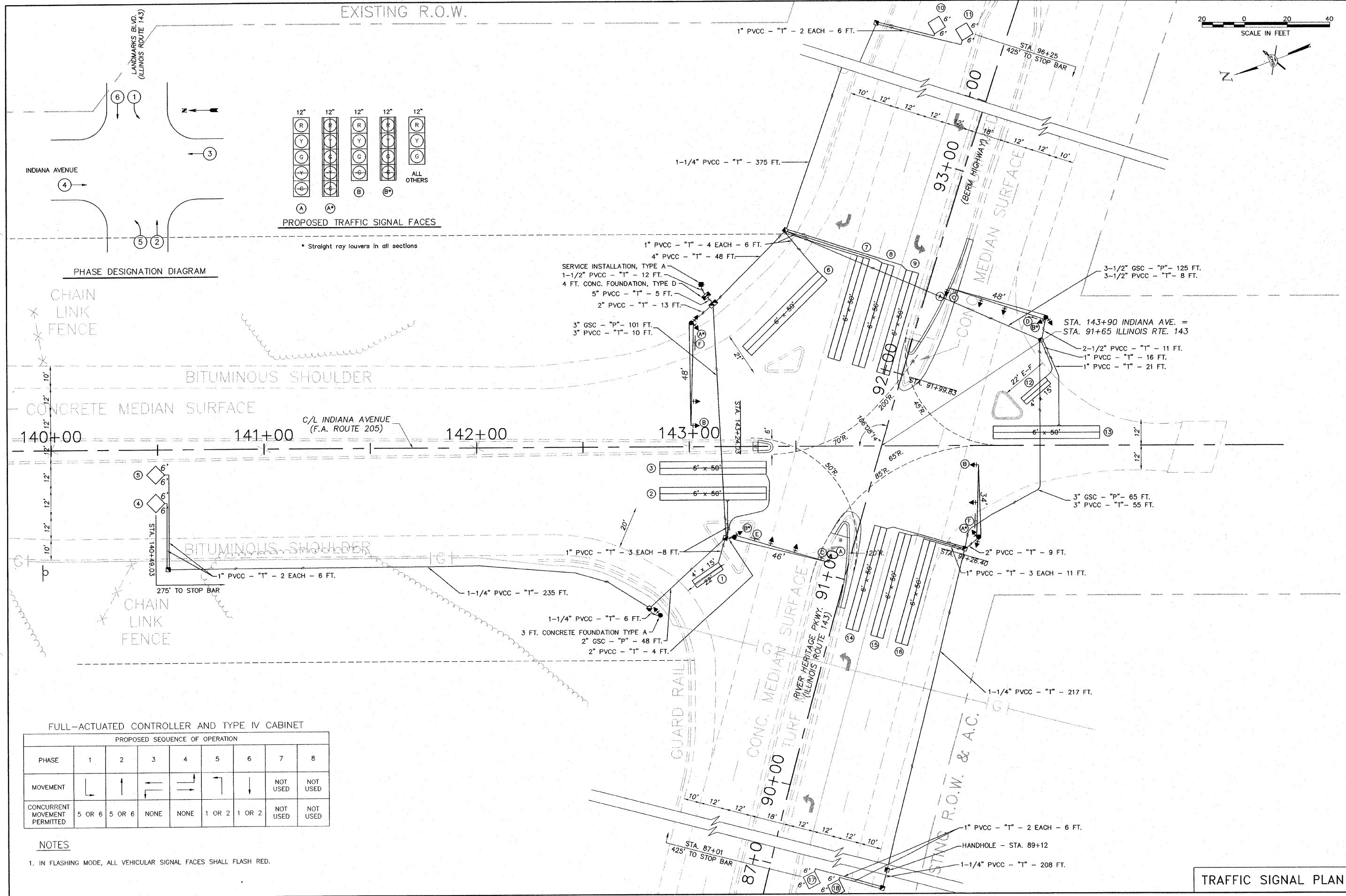
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SMS ENGINEERS
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CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
TRAFFIC SIGNAL PLANS - AT RIVER HERITAGE PKWY.

DWG. NO.	
CABLE DIAGRAM AT IL 143.DWG	
REF. BK. INDIANA AVE.	
JOB NO. 406365.1	
DSN. BY: DEG	
DWN. BY: CAD	
CHK. BY: DEG	
DATE: OCTOBER, 2006	
SCALE: NOT TO SCALE	
SHEET 33 OF 61	

S:\Land Projects\Alton Indiana Ph II 406365 - Vong Cable diagram at L 143.dwg, 2/22/2007 8:08:26 AM, cadanis, 1/20



- SERVICE INSTALLATION, TYPE A
- 1-1/2" PVCC - "T" - 12 FT.
- 4 FT. CONC. FOUNDATION, TYPE D
- 5" PVCC - "T" - 5 FT.
- 2" PVCC - "T" - 13 FT.
- 1" PVCC - "T" - 4 EACH - 6 FT.
- 4" PVCC - "T" - 48 FT.
- 3" GSC - "P" - 101 FT.
- 3" PVCC - "T" - 10 FT.

- 3-1/2" GSC - "P" - 125 FT.
- 3-1/2" PVCC - "T" - 8 FT.
- 2-1/2" PVCC - "T" - 11 FT.
- 1" PVCC - "T" - 16 FT.
- 1" PVCC - "T" - 21 FT.

- 1" PVCC - "T" - 3 EACH - 8 FT.
- 1-1/4" PVCC - "T" - 235 FT.
- 1-1/4" PVCC - "T" - 6 FT.
- 3 FT. CONCRETE FOUNDATION TYPE A
- 2" GSC - "P" - 48 FT.
- 2" PVCC - "T" - 4 FT.

- 3" GSC - "P" - 65 FT.
- 3" PVCC - "T" - 55 FT.
- 2" PVCC - "T" - 9 FT.
- 1" PVCC - "T" - 3 EACH - 11 FT.
- 1-1/4" PVCC - "T" - 217 FT.

FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

PROPOSED SEQUENCE OF OPERATION

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	↙	↑	↘	↔	↗	↓	NOT USED	NOT USED
CONCURRENT MOVEMENT PERMITTED	5 OR 6	5 OR 6	NONE	NONE	1 OR 2	1 OR 2	NOT USED	NOT USED

NOTES

1. IN FLASHING MODE, ALL VEHICULAR SIGNAL FACES SHALL FLASH RED.

REVISIONS

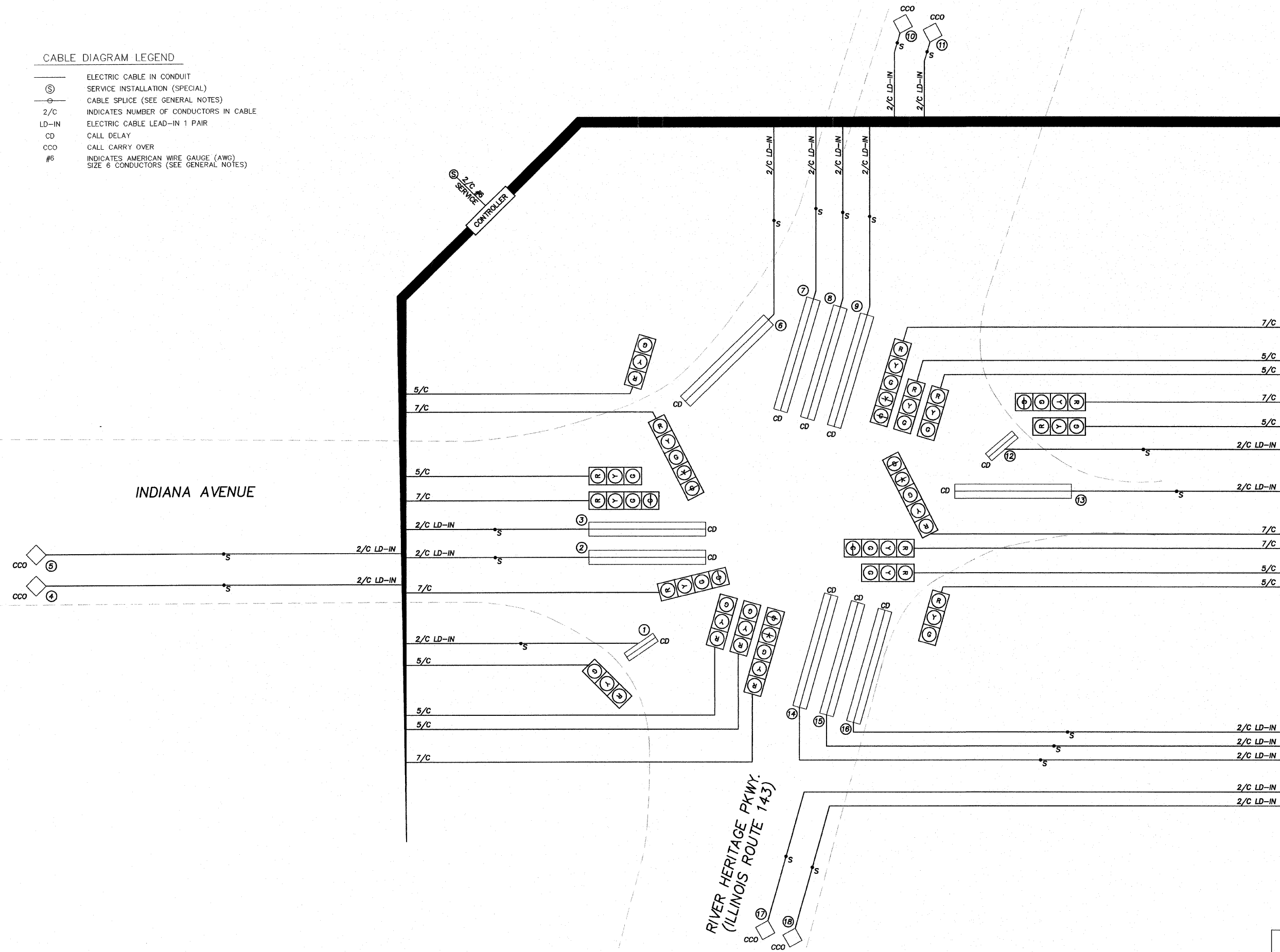
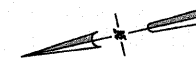
CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
TRAFFIC SIGNAL PLANS - AT RIVER HERITAGE PKWY.

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DESIGN FIRM # 184-000992

DWG. NO. PH III BERM TRAFFIC.DWG
REF. BK. INDIANA AVE.
JOB NO. 406365.1
DSN. BY: CDD
DWN. BY: CAD/CDD
CHK. BY: DEC
DATE: OCTOBER, 2006
SCALE: 1" = 20'
SHEET 34 OF 61

CABLE DIAGRAM LEGEND

- ELECTRIC CABLE IN CONDUIT
- Ⓢ SERVICE INSTALLATION (SPECIAL)
- ⊕ CABLE SPLICE (SEE GENERAL NOTES)
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- LD-IN ELECTRIC CABLE LEAD-IN 1 PAIR
- CD CALL DELAY
- CCO CALL CARRY OVER
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)



NO.	REVISIONS

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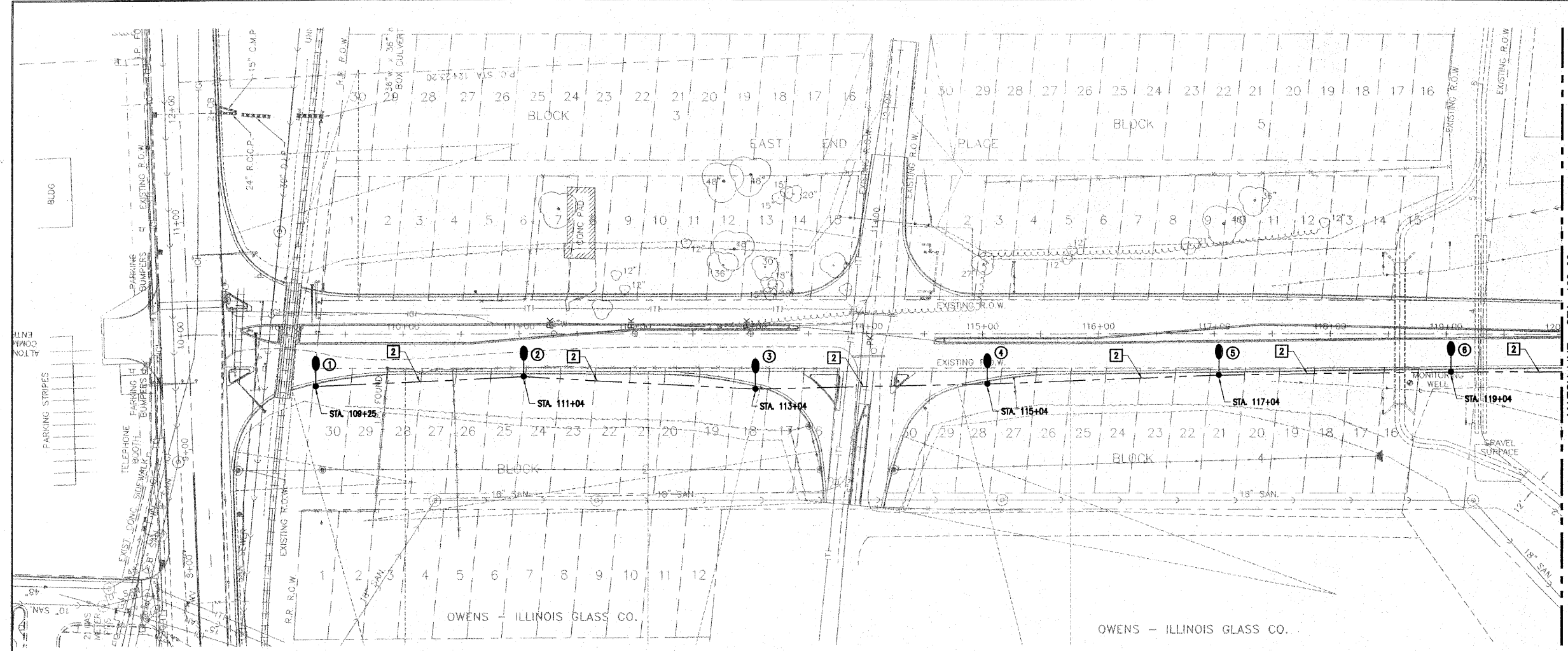
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DWG. NO.
 CABLE DIAGRAM AT IL 143.DWG
 REF. BK. INDIANA AVE.
 JOB NO. 406365.1
 DSN. BY: DEG
 DWN. BY: CAD
 CHK. BY: DEG
 DATE: OCTOBER, 2006
 SCALE: NOT TO SCALE
 SHEET 35 OF 61

CABLE DIAGRAM

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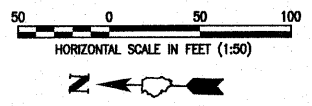
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU-8986	06-00208-02-BR	MADISON	61	36
FED. ROAD DIST. NO.	PROJECT			



- ELECTRICAL KEYED NOTES:**
- 1 UNIT DUCT, 2#4 XLP, 1#6G. XLP, 1\"/>

- LIGHTING GENERAL NOTES:**
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND THE LIGHTING CONTROLLER FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER AT THE PRECONSTRUCTION INSPECTION. THE EXACT LOCATIONS OF ALL ITEMS SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.
 2. THE CONTRACTOR SHALL NOTE THE REQUIREMENTS FOR THE ELECTRICAL SERVICE FOR THE PROPOSED ROADWAY LIGHTING. IT IS THE CONTRACTOR'S RESPONSIBILITY FOR TIMELY NOTIFICATION AND COORDINATION WITH THE ELECTRIC UTILITY COMPANY.
 3. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE SPECIFIED REQUIREMENTS FOR BURIED WARNING TAPE, SPECIFIED AS PART OF THE "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED BY THE ENGINEER PRIOR TO BACKFILLING OR DURING FLOWING OPERATIONS, AS APPLICABLE.

LIGHTING PLAN



LIGHTING LEGEND:

- 50 FT. ALUMINUM POLE WITH 6 FT. DAVIT ARM WITH 400 WATT HPS LUMINAIRE WITH MSJ DISTRIBUTION PATTERN
- PROPOSED UNIT DUCT
- CONTROL INSTALLATION
- CONDUIT BORE OR PUSH BELOW ROADWAY
- PROPOSED ELECTRIC SERVICE INSTALLATION WITH 20 FT., CLASS 5 WOOD POLE
- EXISTING SERVICE INSTALLATION
- EXISTING HANDHOLE
- PROPOSED HANDHOLE
- EXISTING DOUBLE HANDHOLE
- EXISTING TRAFFIC SIGNAL CONTROLLER
- EXISTING TRAFFIC SIGNAL MAST ARM
- EXISTING SIGNAL POST

SUMMARY OF QUANTITIES - INDIANA AVENUE EXTENSION

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L. SUM	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	LIN. FT.	75
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	LIN. FT.	50
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	2
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 6"	EACH	2
CONCRETE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	LIN. FT.	3054
UNIT DUCT, 2 #6 XLP, 1 #6 XLP GROUND, 1" POLYETHYLENE	LIN. FT.	2355
UNIT DUCT, 2 #4 XLP, 1 #4 XLP GROUND, 1" POLYETHYLENE	LIN. FT.	1049
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	LIN. FT.	843
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400W	EACH	18
LIGHTING CONTROLLER, TYPE CB-RCS, 60 AMP - 480 VOLT	EACH	1
LIGHT POLE, ALUMINUM, 45 FT. M.H., 6 FT. DAVIT ARM	EACH	1
LIGHT POLE, ALUMINUM, 50 FT. M.H., 6 FT. DAVIT ARM	EACH	17
LIGHT POLE FOUNDATION	EACH	17
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	68
CONDUIT, FLEXIBLE METALLIC, WEATHERPROOF, 2"	EACH	2

ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

GIVEN CONDITIONS		
ROADWAY DATA:	PAVEMENT WIDTHS	66 FT
	NUMBER OF LANES	4
	MEDIAN WIDTH	6 FT
	IES SURFACE CLASSIFICATION	R1
	Q-ZERO VALUE	0.10
LIGHT POLE DATA:	MOUNTING HEIGHT	50 FT
	MAST ARM LENGTH	6 FT
	POLE SET-BACK FROM EDGE OF PAVEMENT	1.5 FT
LUMINAIRE DATA:	LAMP TYPE	400W CLEAR HPS
	LAMP LUMENS	51,000
	IES VERTICAL DISTRIBUTION	MEDIUM
	IES CONTROL OF DISTRIBUTION	CUTOFF
	IES LATERAL DISTRIBUTION	TYPE III
	TOTAL LIGHT LOSS FACTOR	0.684
LAYOUT DATA:	SPACING	200 FT
	CONFIGURATION	SINGLE HEAD POLE MOUNT
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LINE	4.5 FT

NOTE: VARIATIONS FROM THE ABOVE SPECIFIED IES DISTRIBUTION PATTERN MAY BE REQUESTED AND ACCEPTANCE OF VARIATIONS WILL BE SUBJECT TO REVIEW BY THE ENGINEER BASED ON HOW WELL THE PERFORMANCE REQUIREMENTS ARE MET.

PERFORMANCE REQUIREMENTS		
NOTE: THESE PERFORMANCE REQUIREMENTS SHALL BE THE MINIMUM ACCEPTABLE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED ABOVE.		
ILLUMINATION:	AVERAGE HORIZONTAL ILLUMINATION, (EAVE)	0.8 FC
	UNIFORMITY RATIO, (EAVE/EMIN)	2.0
LUMINANCE:	AVERAGE LUMINANCE: (LAVE)	0.8 Cd/m ²
	UNIFORMITY RATIOS: (LAVE/LMIN)	1.6
	(LMAX/LMIN)	2.2
	MAXIMUM VEILING LUMINANCE RATIO: (LV/LAVE)	0.1

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING THE SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

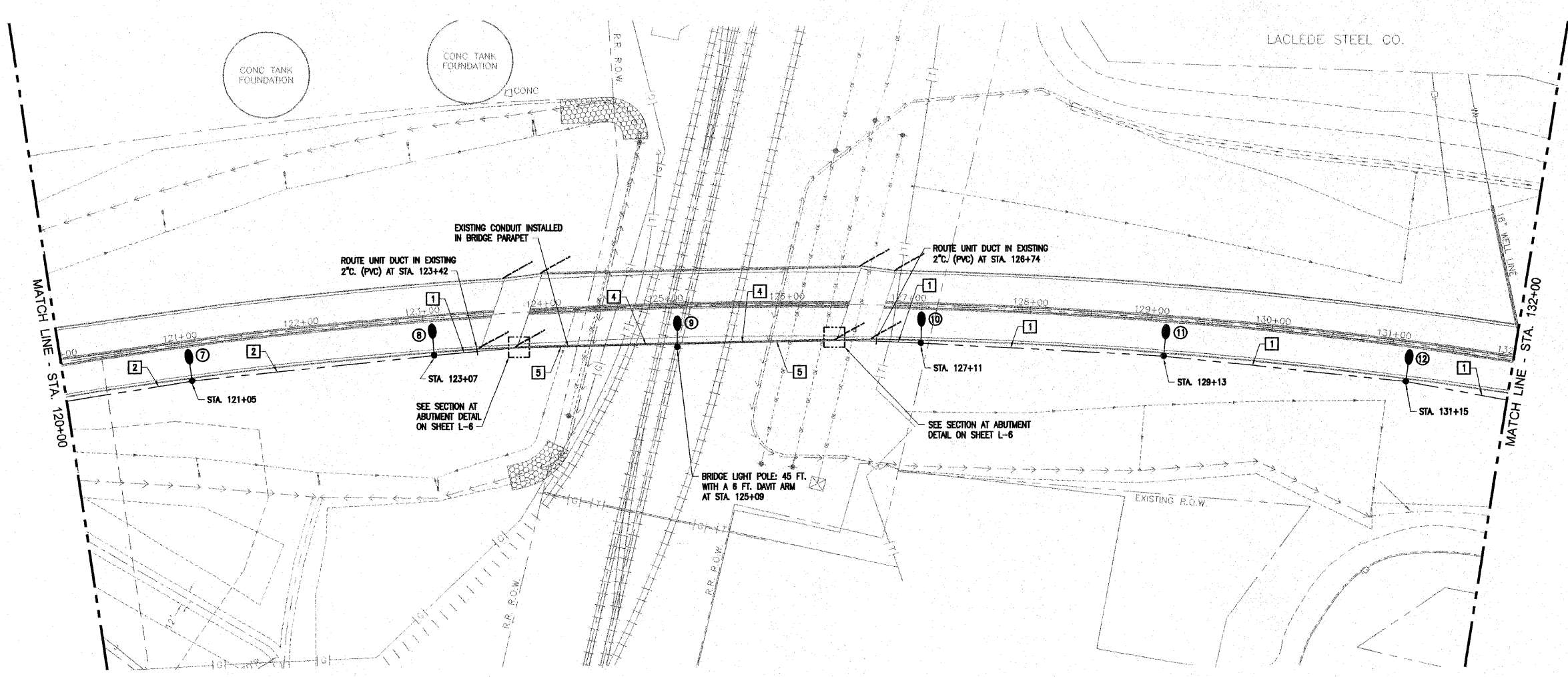
INDIANA AVENUE EXTENSION
CITY OF ALTON, IL
ROADWAY LIGHTING
PLAN

LAYOUT	PJT		JOB NO.
DRAWN	ANC		95510081
REVIEWED	PJT		DATE
L-1		Hanson Professional Services Inc. 1525 South Sixth Street Springfield, Illinois 62703-2886 ILLINOIS LICENSED PROFESSIONAL SERVICES CORPORATION #184-001084	08-16-06

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU-8086	06-00208-02-BR	MADISON	61	37
FED. ROAD DIST. NO.		PROJECT		



- ELECTRICAL KEYED NOTES:**
- 1 UNIT DUCT, 2#4 XLP, 1#4G. XLP, 1" C. IN TRENCH.
 - 2 UNIT DUCT, 2#6 XLP, 1#8G. XLP, 1" C. IN TRENCH.
 - 3 NOT USED.
 - 4 EXISTING CONDUIT EMBEDDED IN STRUCTURE, 2" C.
 - 5 2#4 XLP, 1#4G. XLP, EXISTING CONDUIT

LIGHTING PLAN



THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING THE SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MANS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

LIGHTING FIXTURE SCHEDULE						
FIXT. TYPE	DESCRIPTION	MANUFACTURER & CAT. NO.	LAMPS/WATTS	VOLTS	MOUNTING	REMARKS
F1	POLE MOUNTED HPS COBRA HEAD ROADWAY LUMINAIRE, HEAVY GAUGE EXTRUDED ALUMINUM HOUSING, FULLY GASKETED FOR WEATHER AND BUG TIGHTNESS, BAKED ON GRAY POLYESTER POWDER COAT FINISH, ANODIZED ALUMINUM TYPE III CUTOFF OPTICS, TEMPERED GLASS PRISMATIC REFRACTOR, HORIZONTALLY MOUNTED MEDIUM BASE PORCELAIN SOCKET, HPF CWA TYPE BALLAST	GE-MSCL-40-S-3-P-1-F-MC3-X OR APPROVED EQUAL	1-400W HPS ANSI CODE NO. S81 465 TOTAL INPUT WATTS	480	MOUNTED ON TOP OF A 50'-0" POLE WITH A 6'-0" DAVIT ARM	SUPPLY A 100 MPH RATED POLE AT 200% OF THE RATED EPA OF THE FIXTURE AND MAST ARM PROVIDED. SPECIFIED FIXTURE EPA RATING EQUALS 1.1 SQ FT EACH

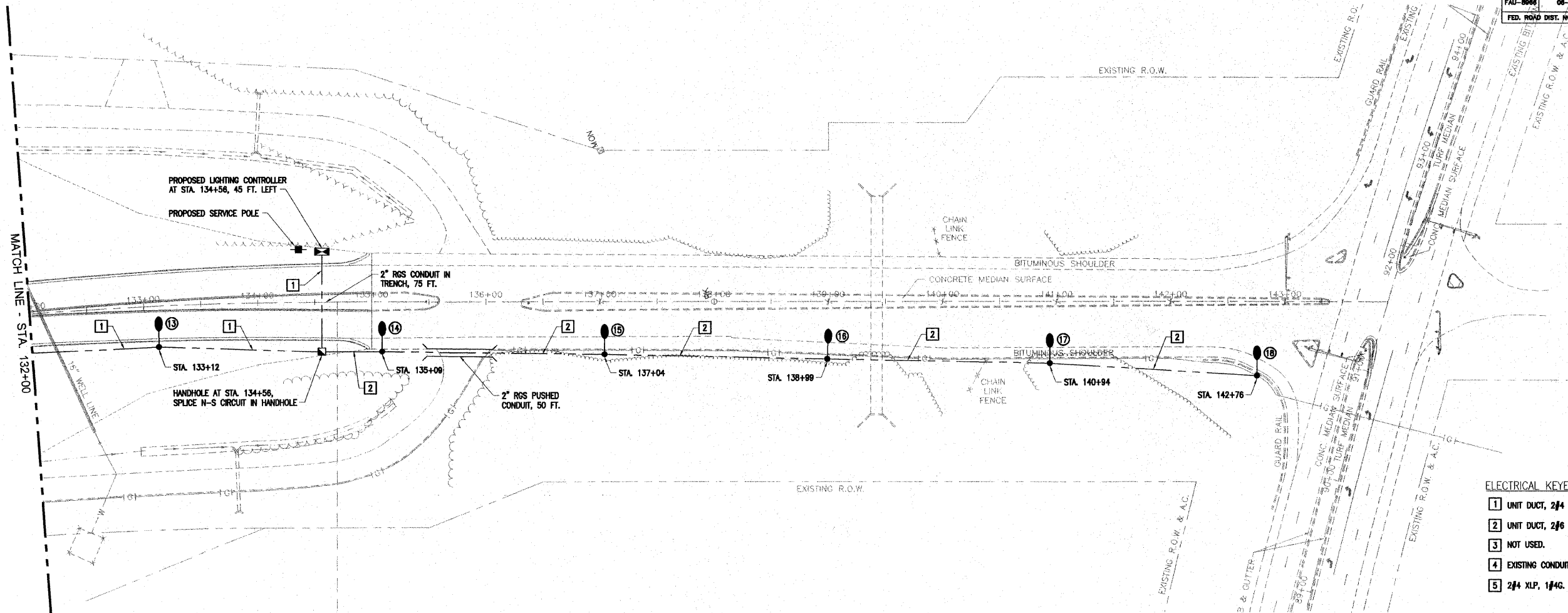
INDIANA AVENUE EXTENSION
CITY OF ALTON, IL
ROADWAY LIGHTING
PLAN

LAYOUT FJT	FJT	HANSON	JOB NO. 95510081
DESIGN ANC	ANC	<small>Copyright Hanson Professional Services Inc. 2005 Hanson Professional Services Inc. 1525 South Sixth Street Springfield, Illinois 62703-2886 ILLINOIS LICENSED PROFESSIONAL SERVICES CORPORATION #184-001084</small>	DATE 08-16-06
REVIEWED FJT	FJT		
L-2			

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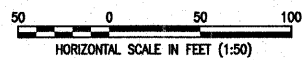
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU-8906	08-00208-02-BR	MADISON	61	38
FED. ROAD DIST. NO.	PROJECT			



- ELECTRICAL KEYED NOTES:**
- 1 UNIT DUCT, 2#4 XLP, 1#4G. XLP, 1" IN TRENCH.
 - 2 UNIT DUCT, 2#6 XLP, 1#6G. XLP, 1" IN TRENCH.
 - 3 NOT USED.
 - 4 EXISTING CONDUIT EMBEDDED IN STRUCTURE, 2".
 - 5 2#4 XLP, 1#4G. XLP, EXISTING CONDUIT

LIGHTING PLAN



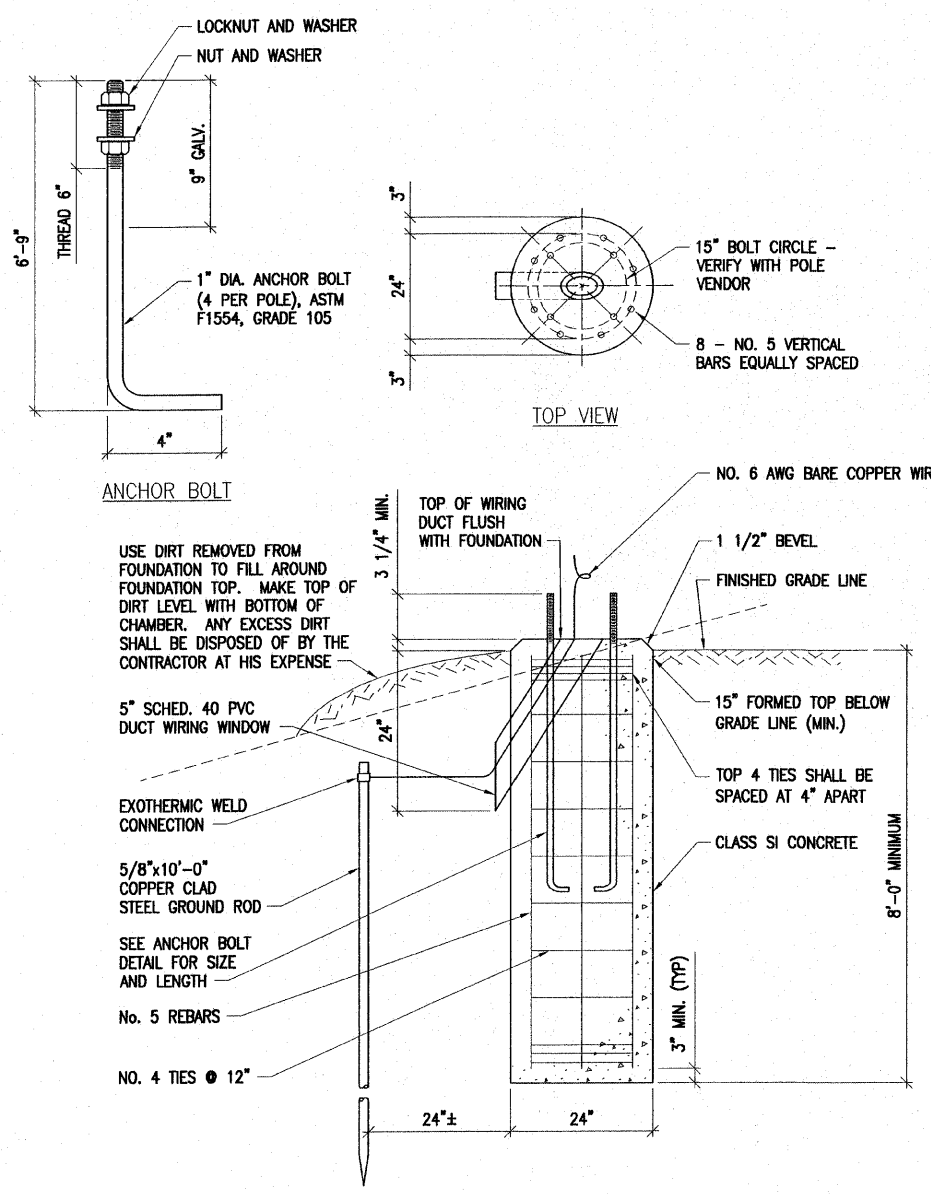
THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING THE SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

*INDIANA AVENUE EXTENSION
CITY OF ALTON, IL
ROADWAY LIGHTING
PLAN*

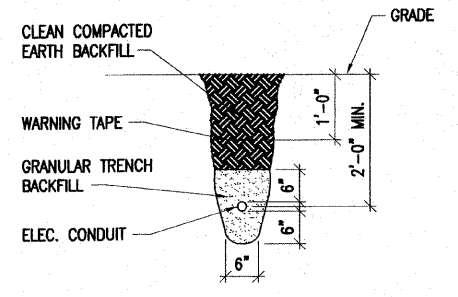
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DRAWN	ANC		DATE	08-16-06
REVIEWED	PJT			

L-3

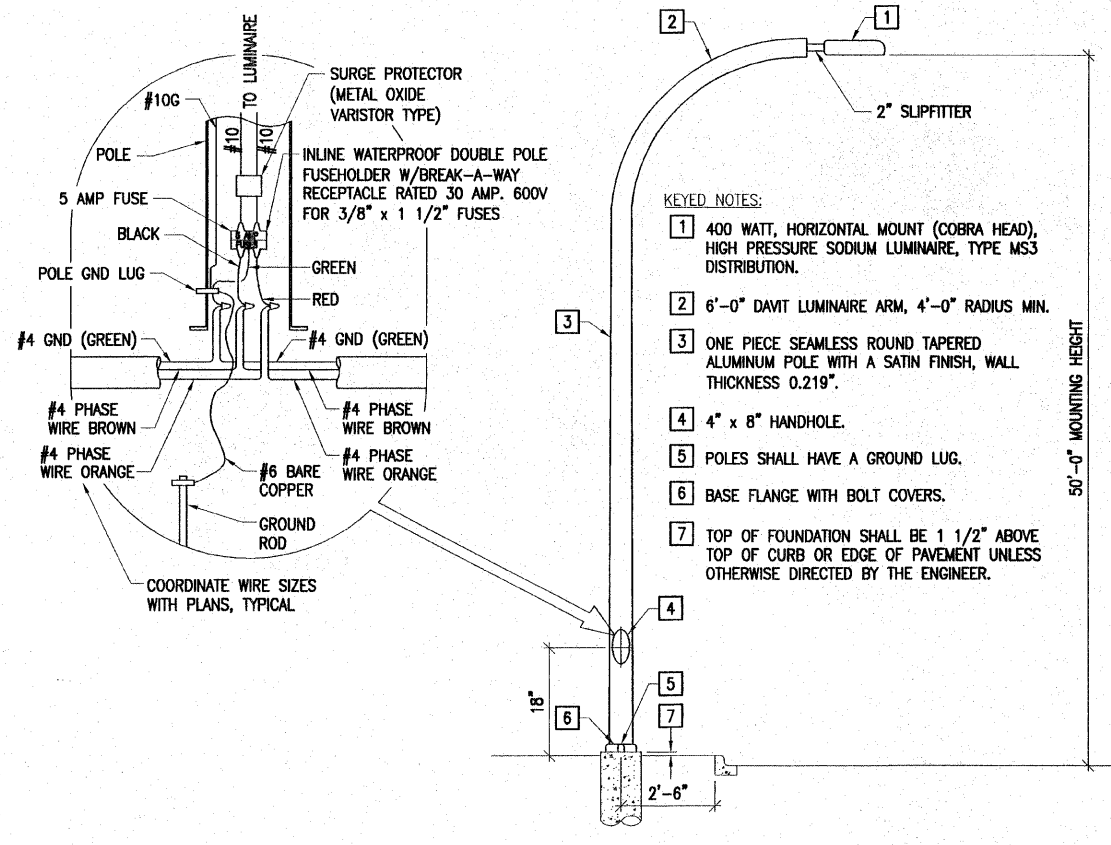
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FED. ROAD DIST. NO.	PROJECT			



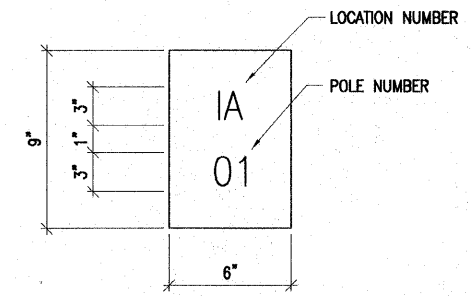
POLE FOUNDATION DETAIL
SCALE: NONE



TRENCH DETAIL
SCALE: NONE



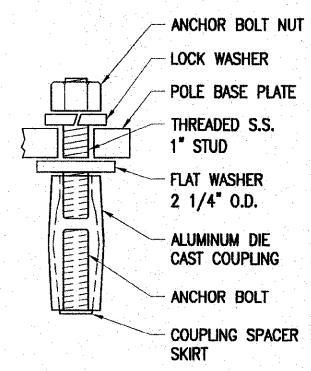
LIGHTING UNIT DETAIL
SCALE: NONE



THE CONTRACTOR SHALL FURNISH AND INSTALL A LIGHT POLE IDENTIFICATION ON EACH NEW LIGHT POLE, AS SHOWN ABOVE, COST INCLUDED IN THE RESPECTIVE LIGHT POLE PAY ITEM. THE NUMERALS SHALL BE 3 IN. SERIES "D", BLACK, SCREENED ON SILVER-WHITE TYPE B PRESSURE SENSITIVE REFLECTIVE SHEETING CONFORMING TO THE REQUIREMENTS OF SECTION 1602.01 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. THE NUMERALS SHALL CONFORM TO THE FHWA "STANDARD ALPHABETS FOR HIGHWAY SIGNS".

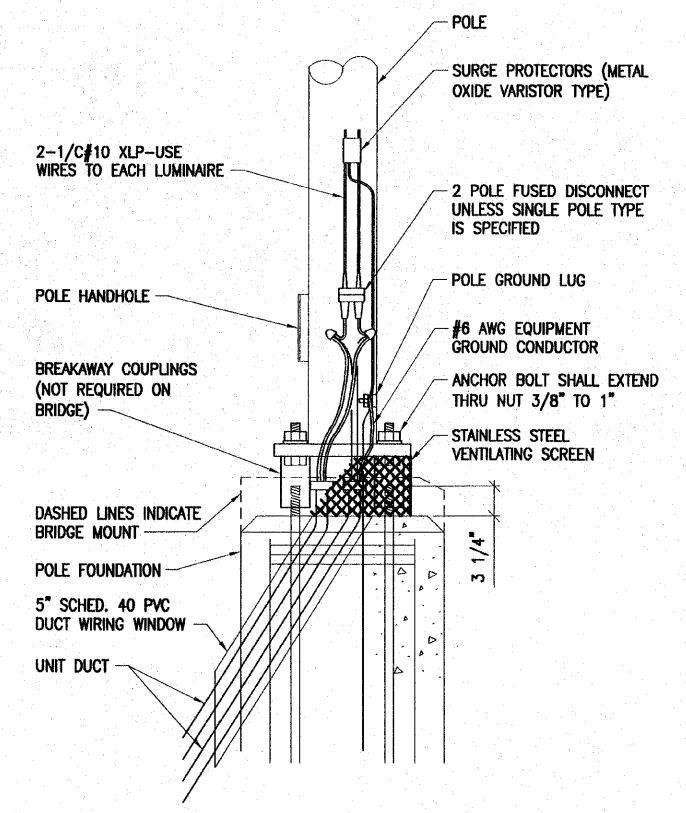
THE LIGHT POLE IDENTIFICATION SHALL BE APPLIED TO SIGN BASE MATERIAL AS SPECIFIED IN SECTION 1069.02 OF THE STANDARD SPECIFICATIONS, APPROXIMATELY 7 FT. ABOVE THE ADJACENT PAVEMENT GRADE VISIBLE TO APPROACHING TRAFFIC IN ACCORDANCE WITH HIGHWAY STANDARD 720001.

LIGHT POLE IDENTIFICATION DETAIL
SCALE: NONE

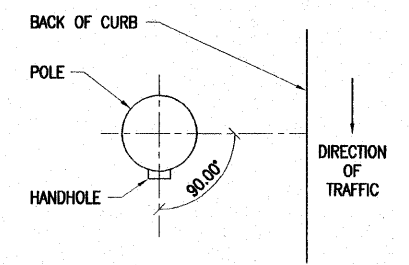


COUPLING INSTALLATION:
SCREW COUPLINGS ON TO ANCHOR BOLTS TO END OF THREADS, LEVEL COUPLINGS, (VERY IMPORTANT), AS COUPLINGS WILL BECOME OVER STRESSED AND EITHER CRACK OR STRIP THREADS INSIDE COUPLING.

COUPLING DETAIL
SCALE: NONE



POLE BASE MOUNTING & WIRING DETAIL
SCALE: NONE



HANDHOLE ORIENTATION
SCALE: NONE

INDIANA AVENUE EXTENSION
CITY OF ALTON, IL
ROADWAY LIGHTING
POLE DETAILS

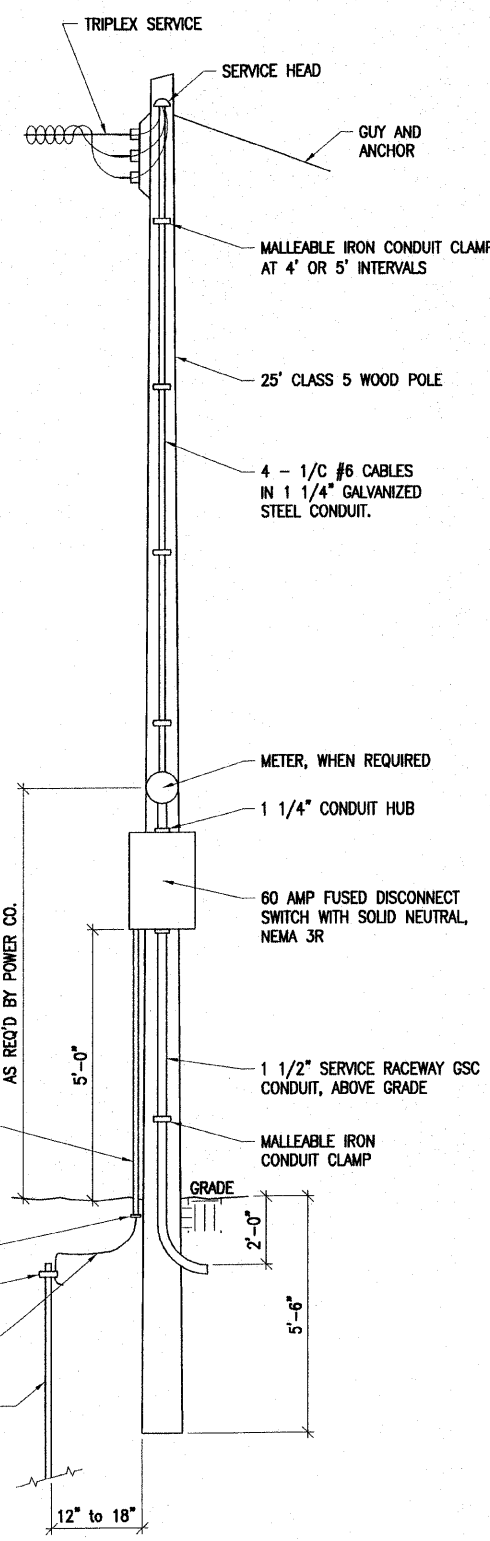
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DRAWN	ANC		DATE	08-16-06
REVIEWED	PJT			

L-4

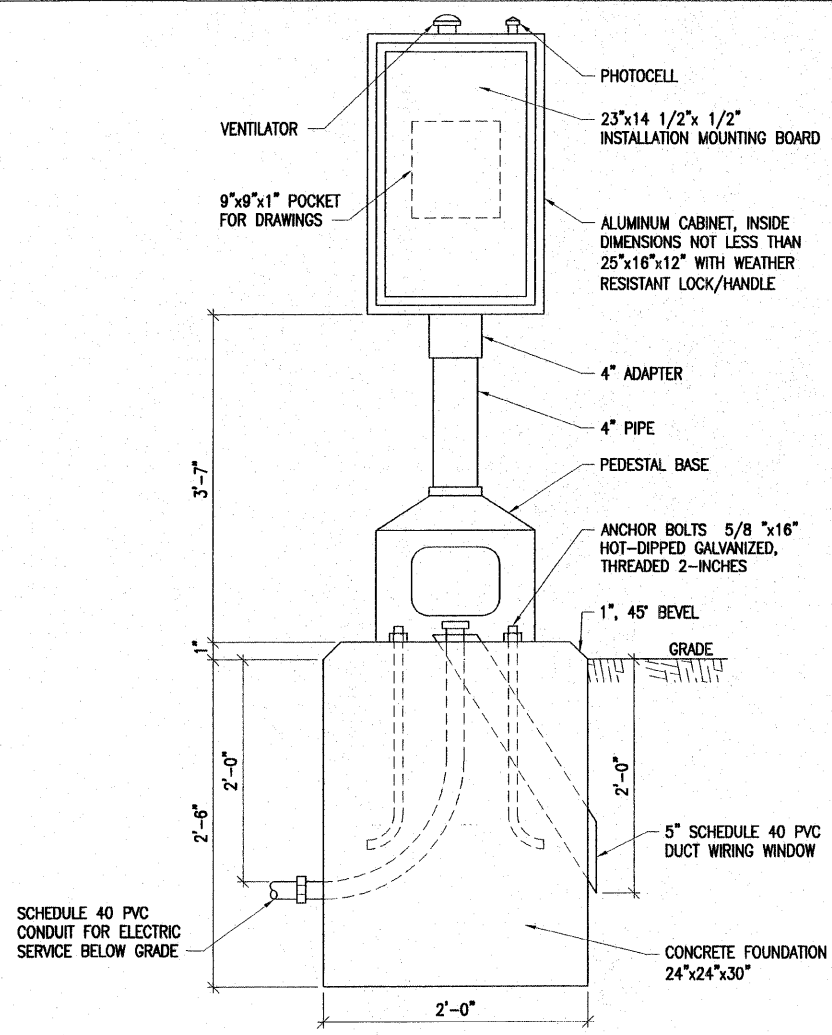
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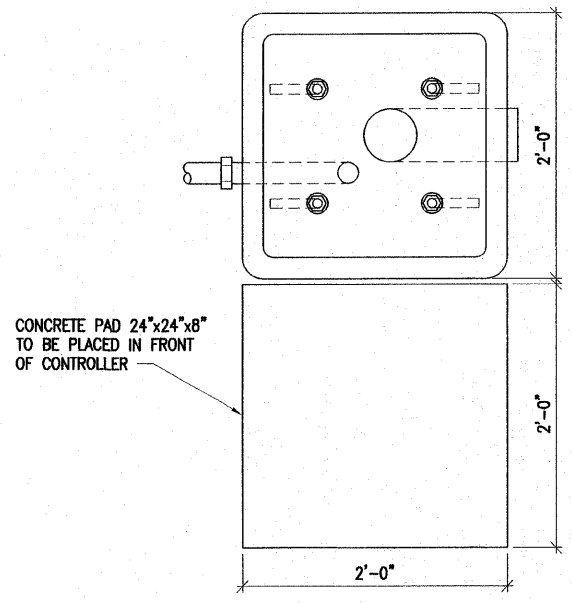
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FAU-8988	08-00208-02-BR	MADISON	61	40
FED. ROAD DIST. NO.	PROJECT			



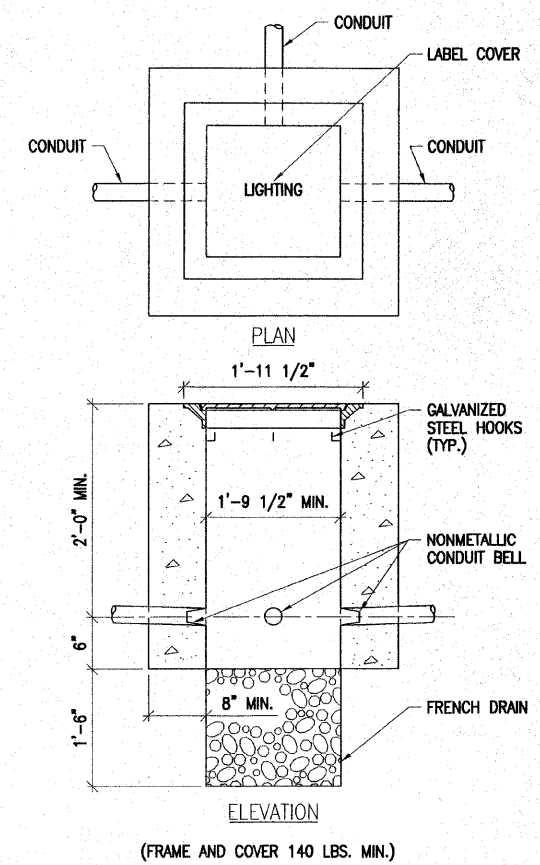
SERVICE POLE DETAIL
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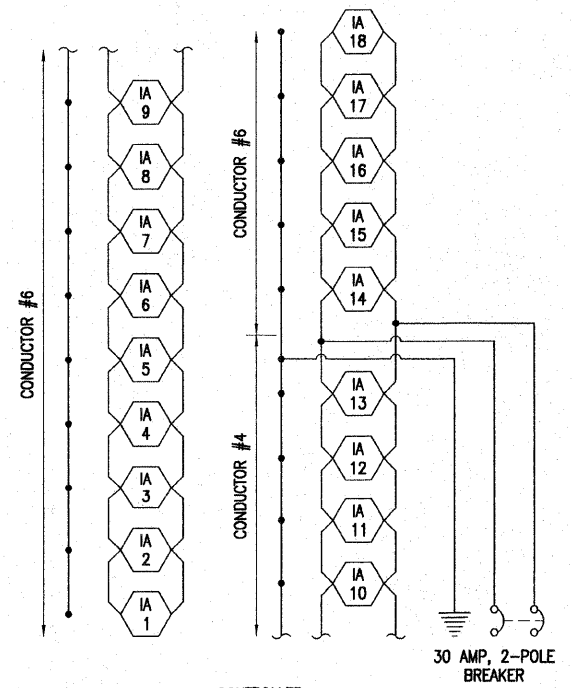
CONTROL INSTALLATION DETAIL
SCALE: NONE



FOUNDATION DETAIL
SCALE: NONE

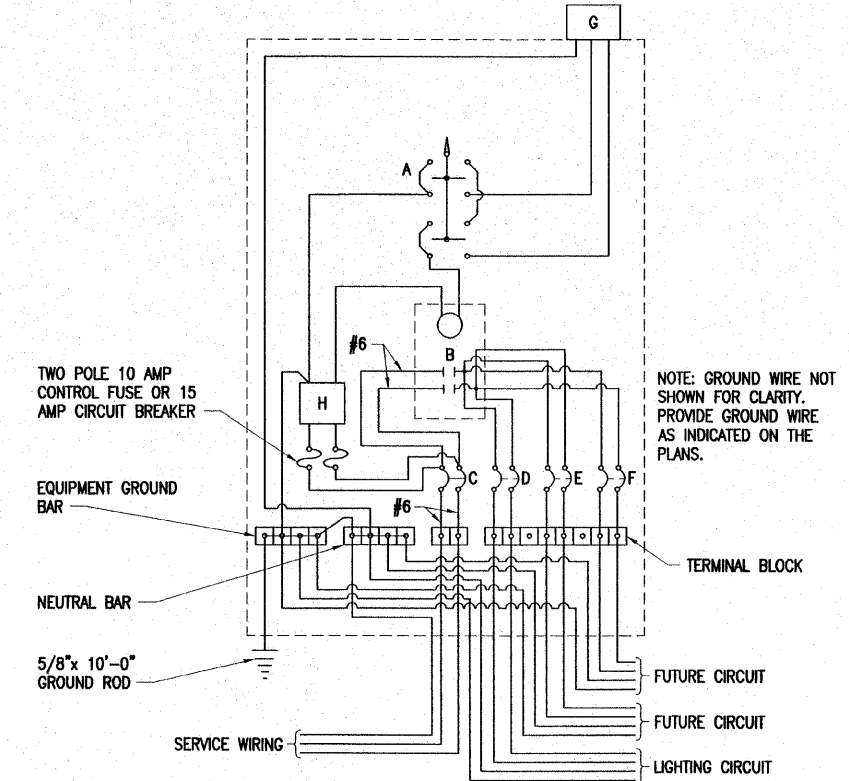


CONCRETE HANDHOLE
SCALE: NONE



CIRCUIT DIAGRAM
SCALE: NONE

- A SELECTOR SWITCH - HAND/OFF/AUTO
- B 2 POLE, 60 AMP CONTACTOR, ELEC. OPER., ELEC. HELD
- C 2 POLE, 60 AMP SERVICE DISCONNECT
- D,E,F 2 POLE, 30 AMP CIRCUIT BREAKERS
- G PHOTOCELL WITH INTEGRAL SURGE ARRESTOR
- H CONTROL TRANSFORMER 480-120V



NOTE: GROUND WIRE NOT SHOWN FOR CLARITY. PROVIDE GROUND WIRE AS INDICATED ON THE PLANS.

LOCATE SERVICE POLE AND CONTROL INSTALLATION ADJACENT TO R.O.W. LINE WITH A MINIMUM DISTANCE OF 30' FROM THE EDGE OF PAVEMENT. EXACT LOCATION SHALL BE ESTABLISHED BY THE ENGINEER.

THE UNDERGROUND SERVICE ENTRANCE WIRING SHALL NOT EXCEED 150'. TOTAL AERIAL AND UNDERGROUND SERVICE BETWEEN THE CONTROL INSTALLATION AND PRIMARY TRANSFORMER SHALL NOT EXCEED 250'.

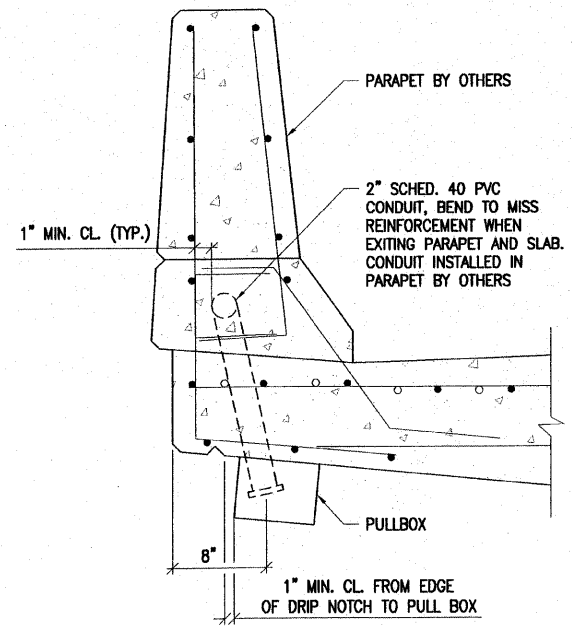
480V SERVICE WIRING DIAGRAM
SCALE: NONE

INDIANA AVENUE EXTENSION
CITY OF ALTON, IL
ROADWAY LIGHTING
CONTROLLER DETAILS

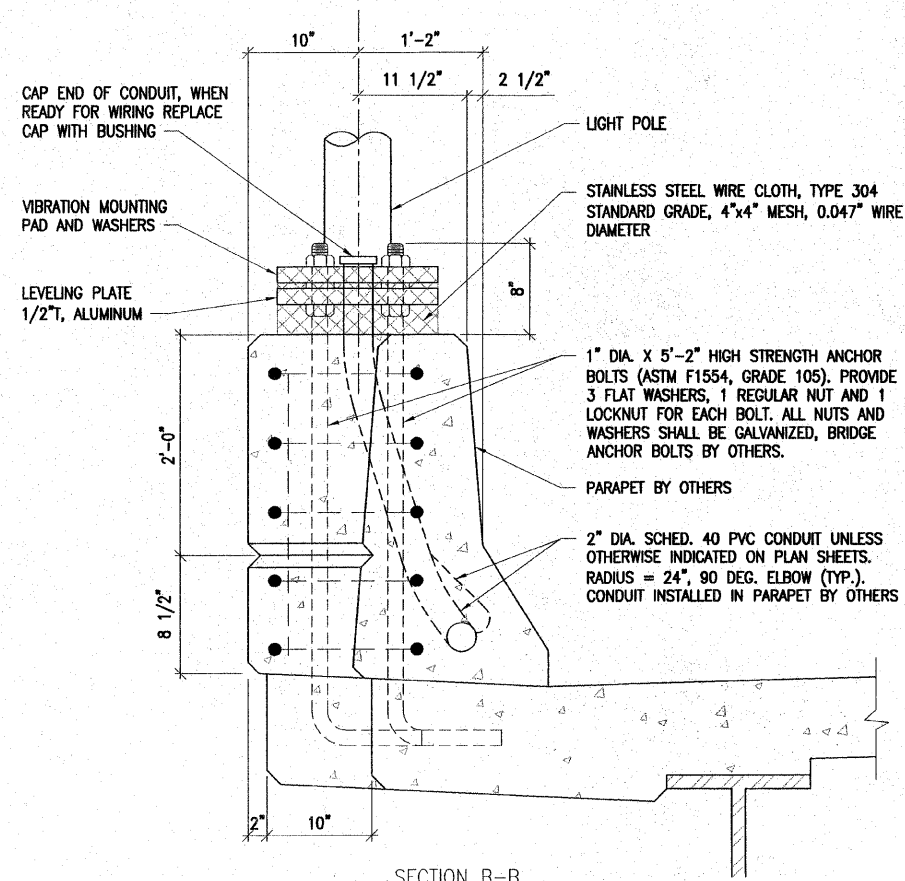
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L-5			DATE 08-16-06

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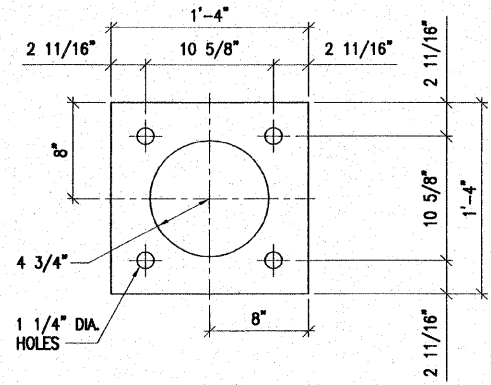
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FAU-8888	08-00208-02-BR	MADISON	61	41
FED. ROAD DIST. NO.	PROJECT			



SECTION A-A

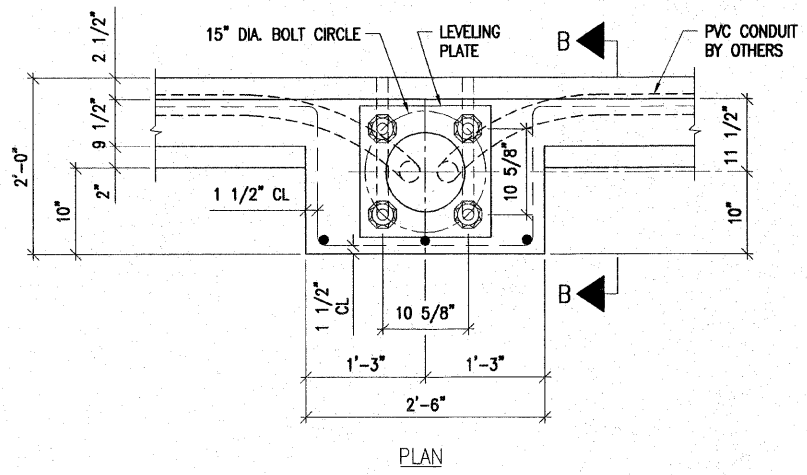


SECTION B-B



LEVELING PLATE DETAIL

SCALE: NONE



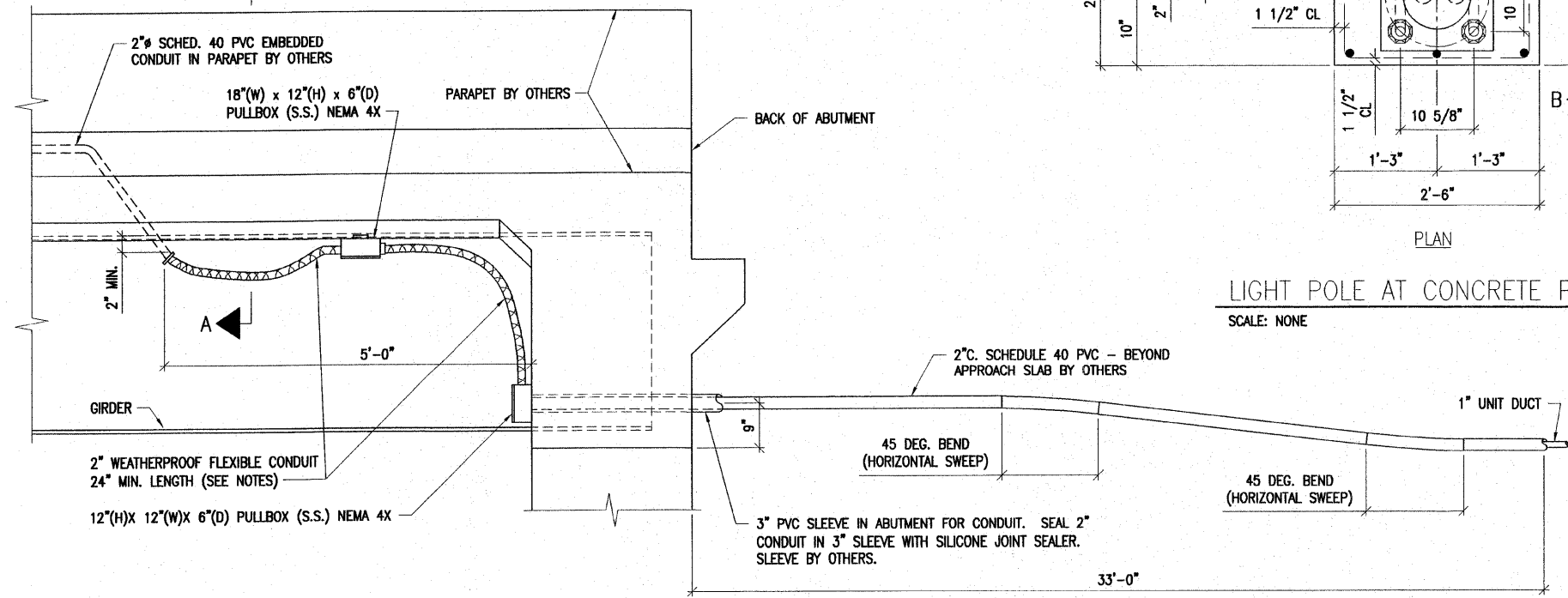
PLAN

LIGHT POLE AT CONCRETE PARAPET

SCALE: NONE

GENERAL NOTES:

1. LEVEL LIGHT POLE PLATES USING THE FLANGE NUTS, PRIOR TO POURING THE PARAPET WALL. THE BOTTOM OF THE PLATE SHALL BE AT THE SAME ELEVATION AS THE FINISHED CONCRETE PARAPET.
2. THE COST OF BRIDGE LIGHTING FOUNDATION ANCHOR BOLTS, CONDUIT AND FOUNDATION IS INCLUDED WITH BRIDGE SUPERSTRUCTURE.
3. 2" FLEXIBLE CONDUIT SHALL BE 24" (MIN.) IN LENGTH. IT SHALL HAVE SUFFICIENT SLACK TO ALLOW DEFLECTION AND EXPANSION.
4. ALL JUNCTION BOXES AND PULL BOXES ATTACHED TO THE STRUCTURE SHALL BE STAINLESS STEEL NEMA 4X (PER ARTICLE 1088.04), SIZE AS SPECIFIED. THE DOOR SHALL HAVE A STAINLESS STEEL CONTINUOUS HINGE PIN AND CLAMP ASSEMBLY.
5. THE CONTRACTOR SHALL NOT DRILL ANY HOLES IN THE BEAM, DECK OR SUPERSTRUCTURE OF THE BRIDGE OR WELD TO THE STRUCTURE UNLESS OTHERWISE SPECIFIED.
6. CONDUIT SHALL EXIT PARAPET IN LONGITUDINAL STRAIGHT LINE.
7. ALL JUNCTION BOXES SHALL HAVE A 1/8" WIRE MESH DRAIN IN THE BOTTOM.



SECTION AT ABUTMENTS DETAIL

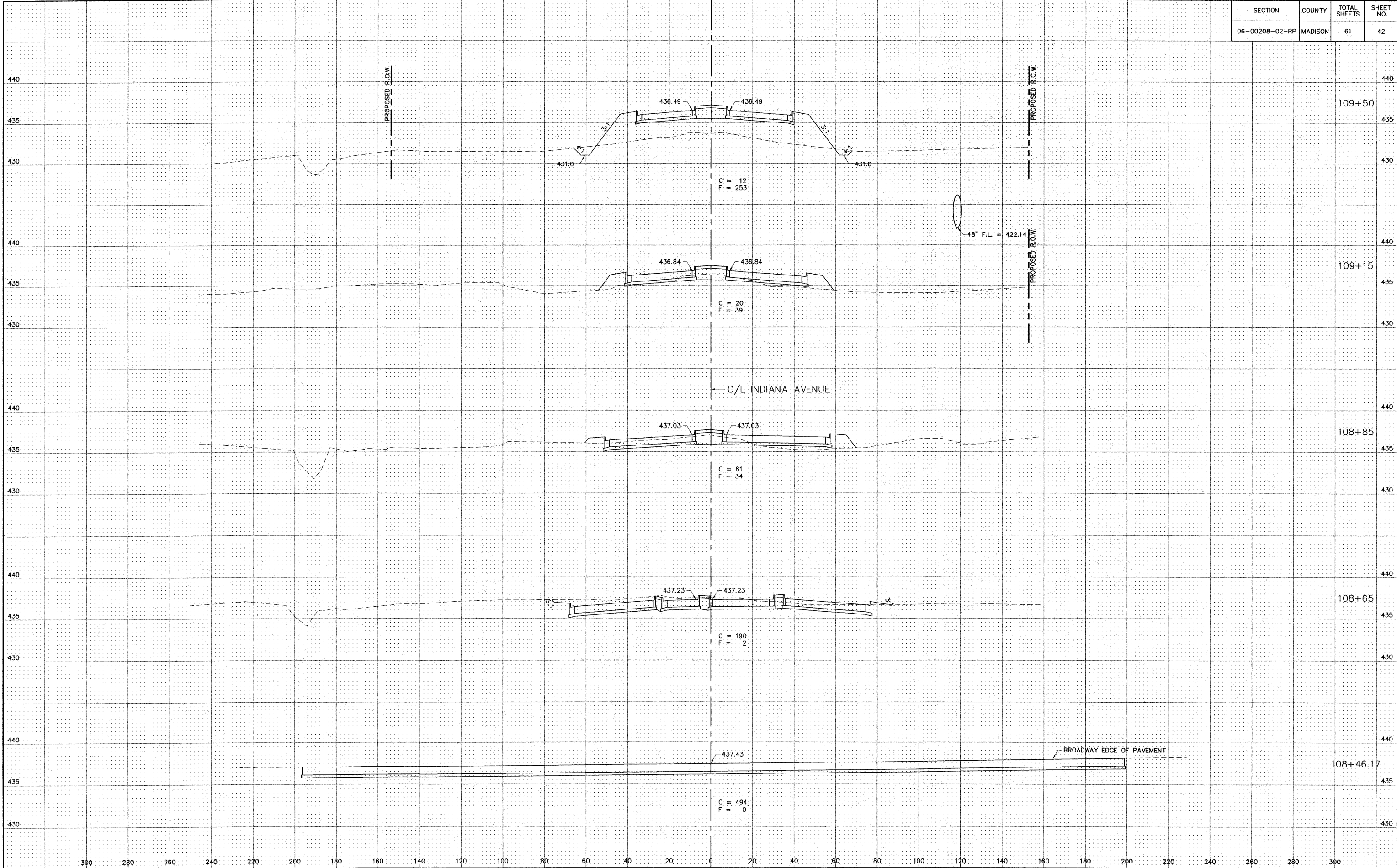
SCALE: NONE

INDIANA AVENUE EXTENSION CITY OF ALTON, IL ROADWAY LIGHTING BRIDGE DETAILS		JOB NO. 95S10081
LAYOUT DRAWN REVIEWED	PJT ANC PJT	DATE 08-16-06
<p>Hanson Professional Services Inc. 1625 South Sixth Street Springfield, Illinois 62703-2886 ILLINOIS LICENSED PROFESSIONAL SERVICES CORPORATION #184-001084</p>		

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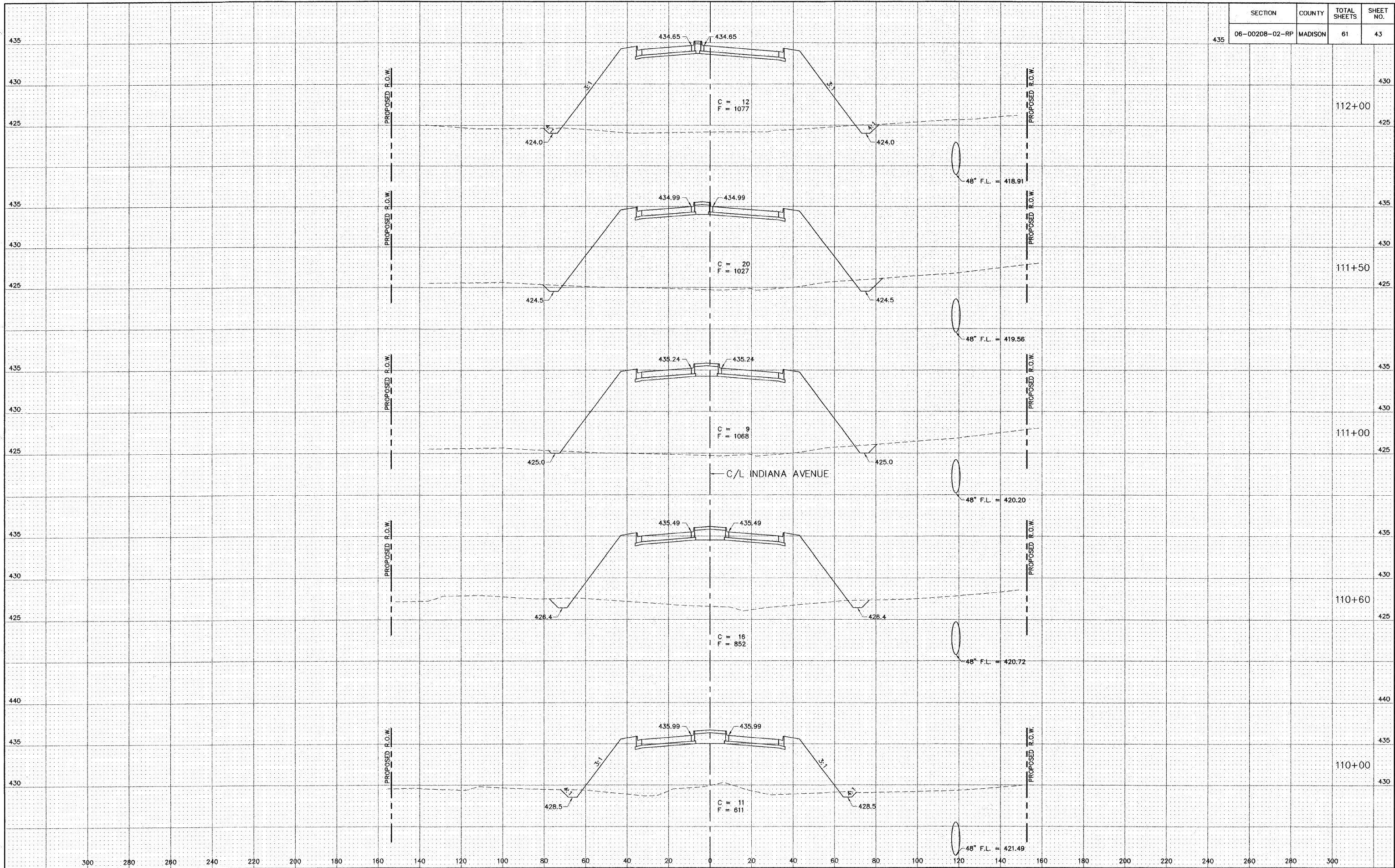
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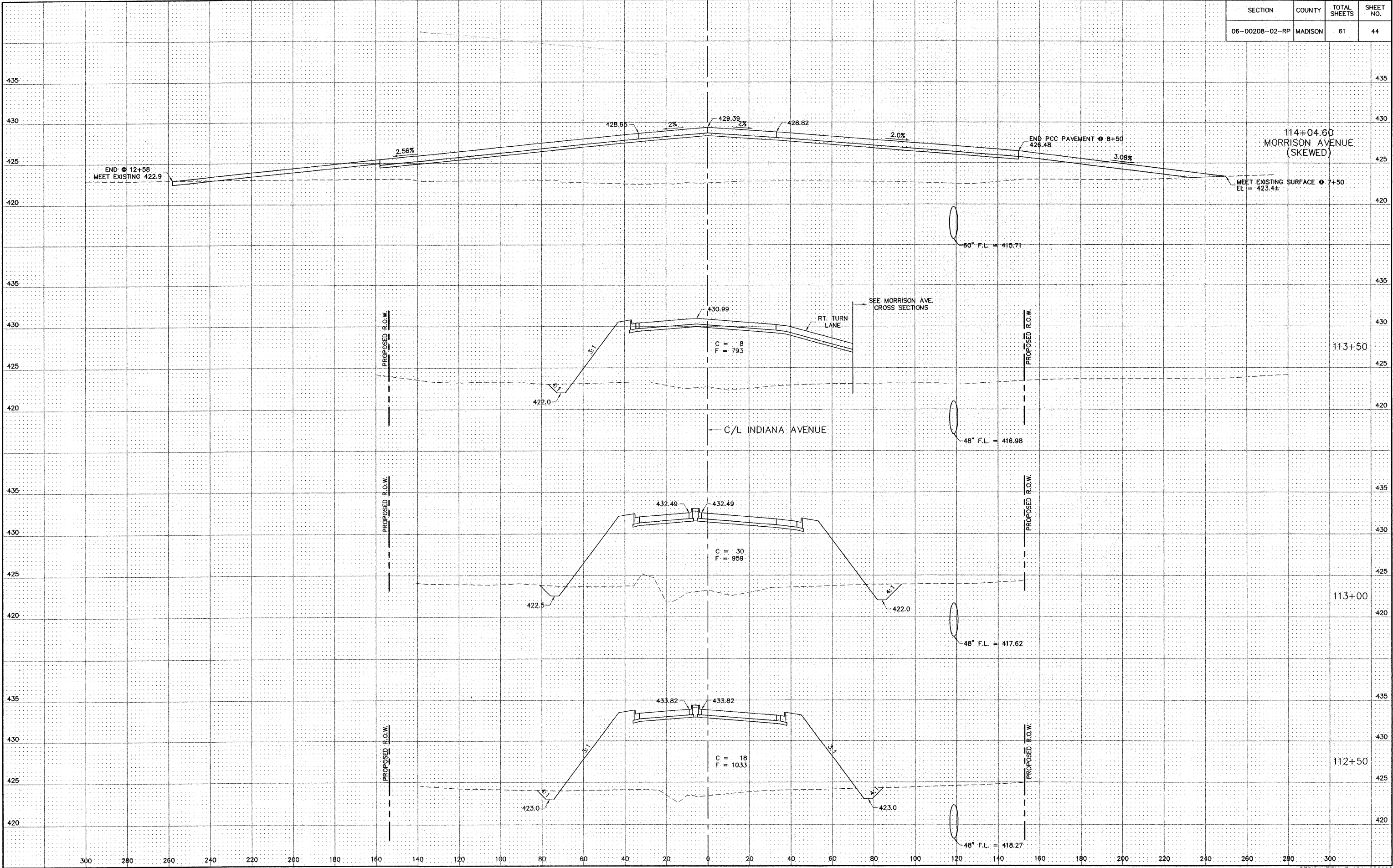


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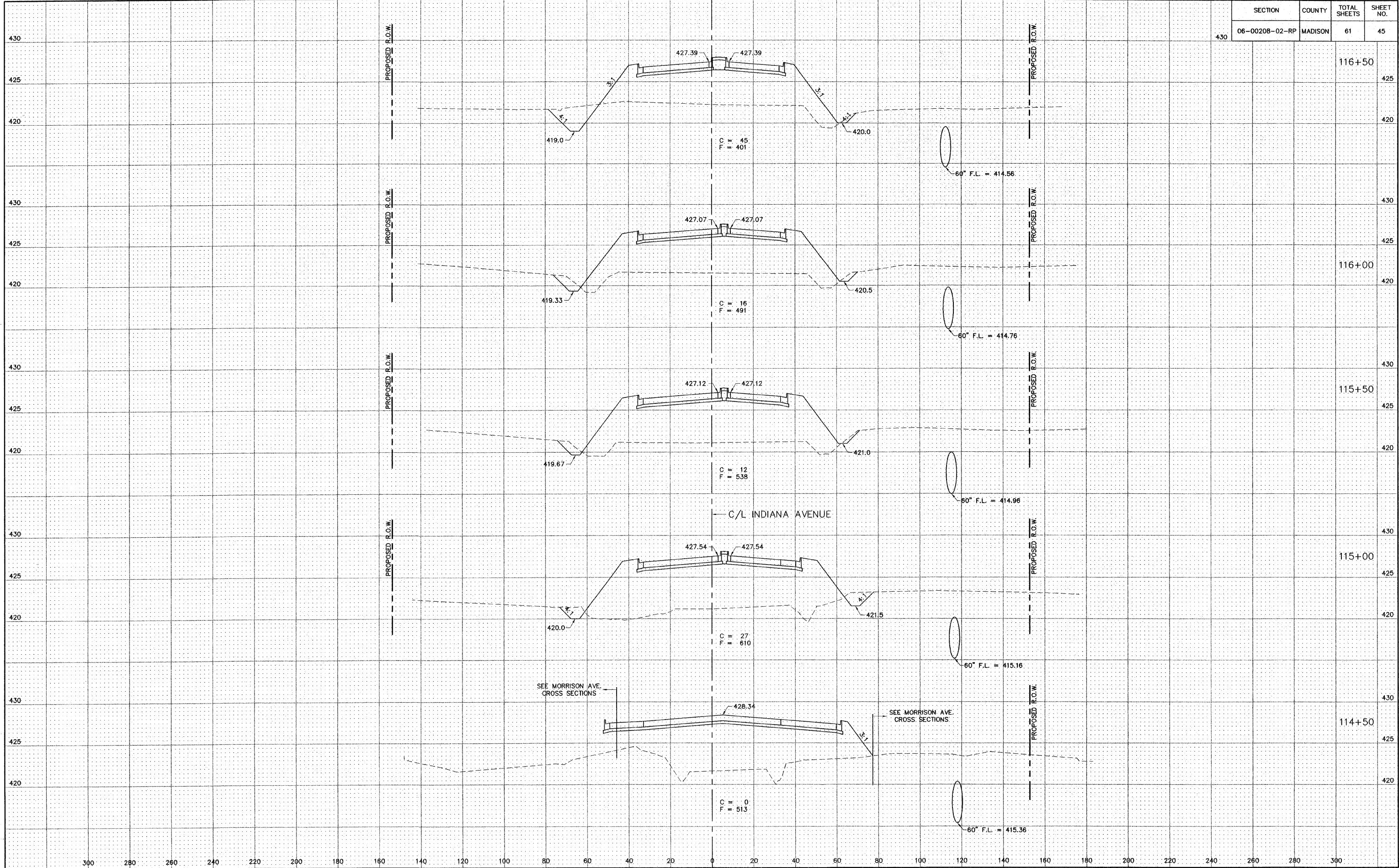


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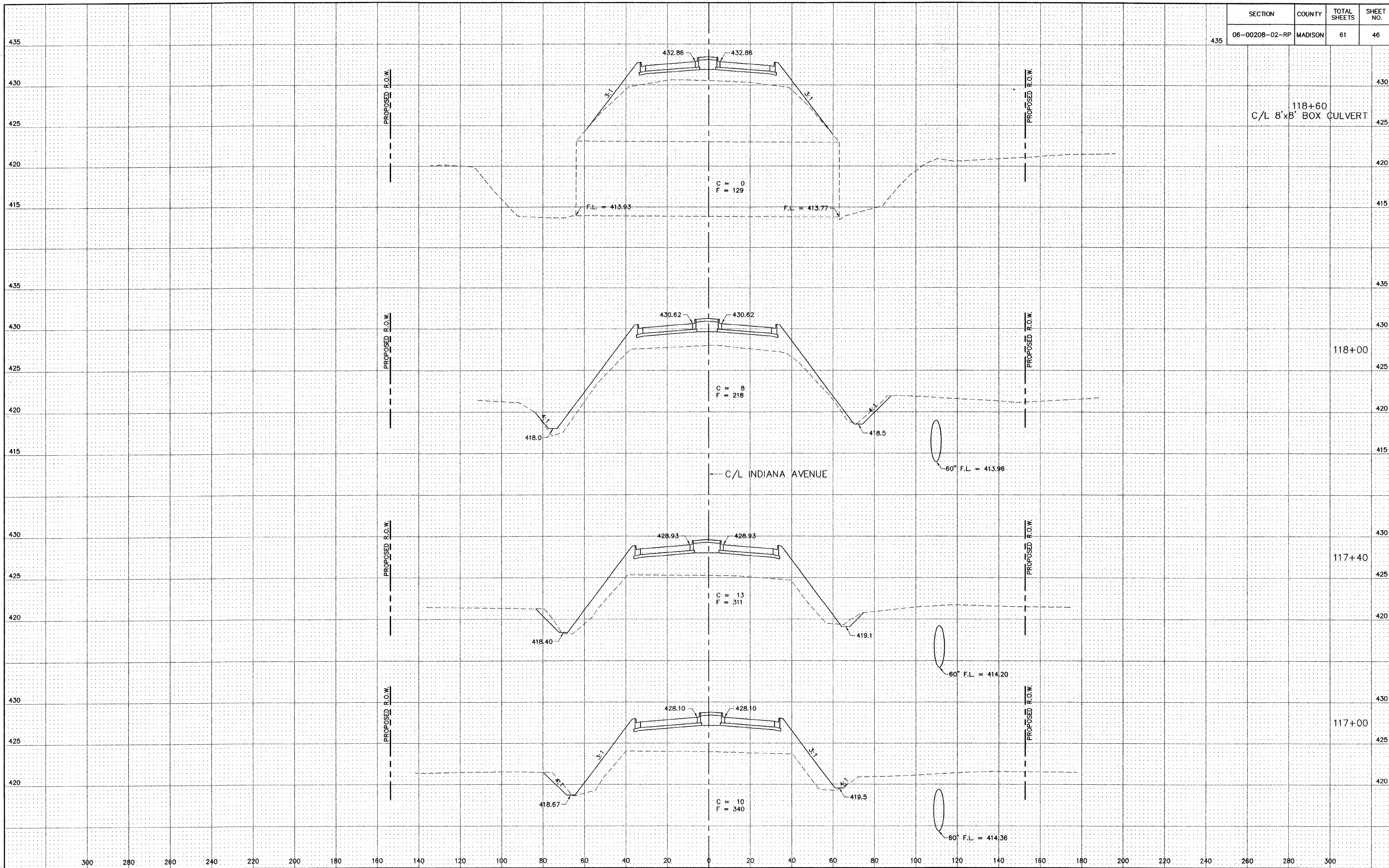


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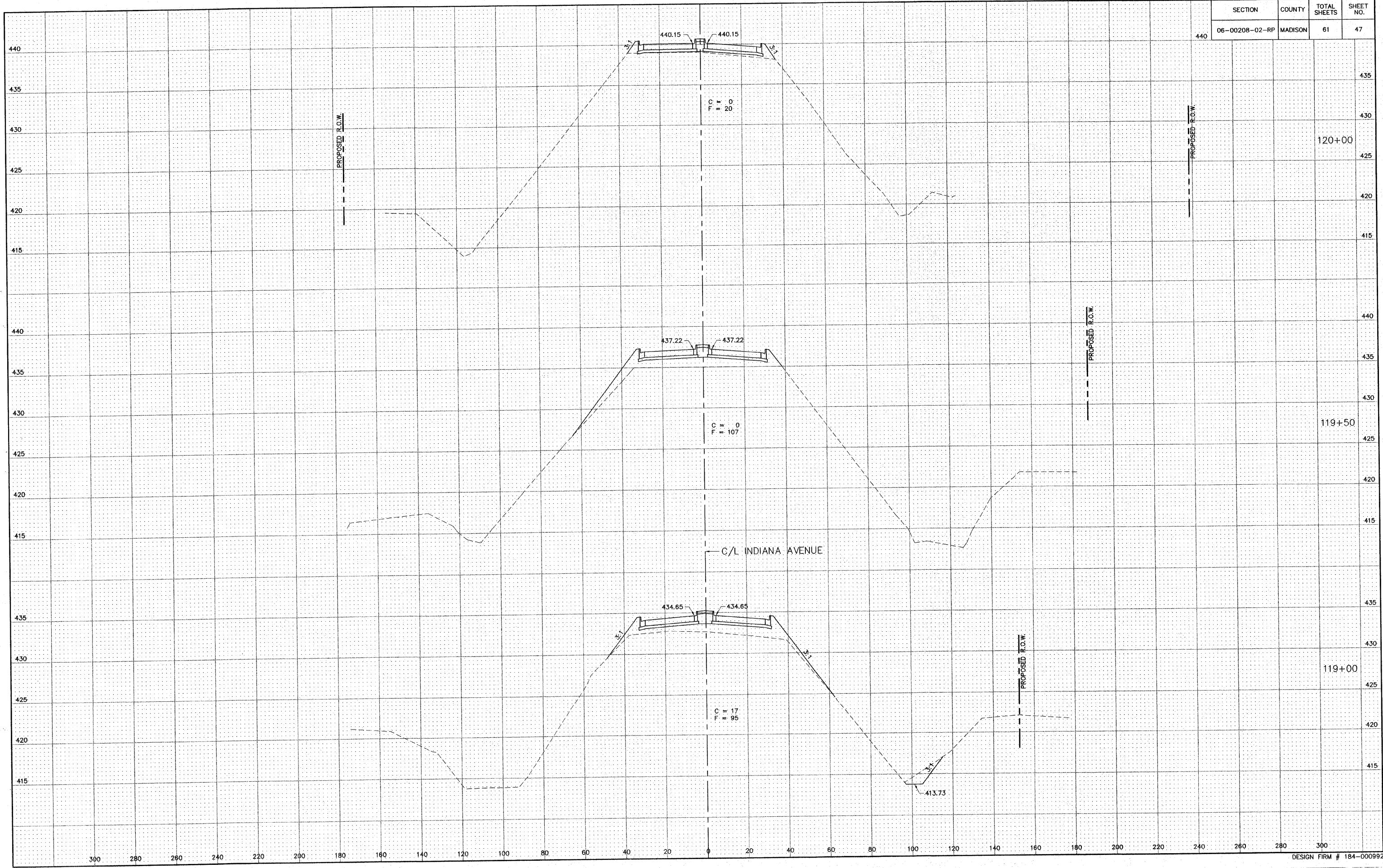


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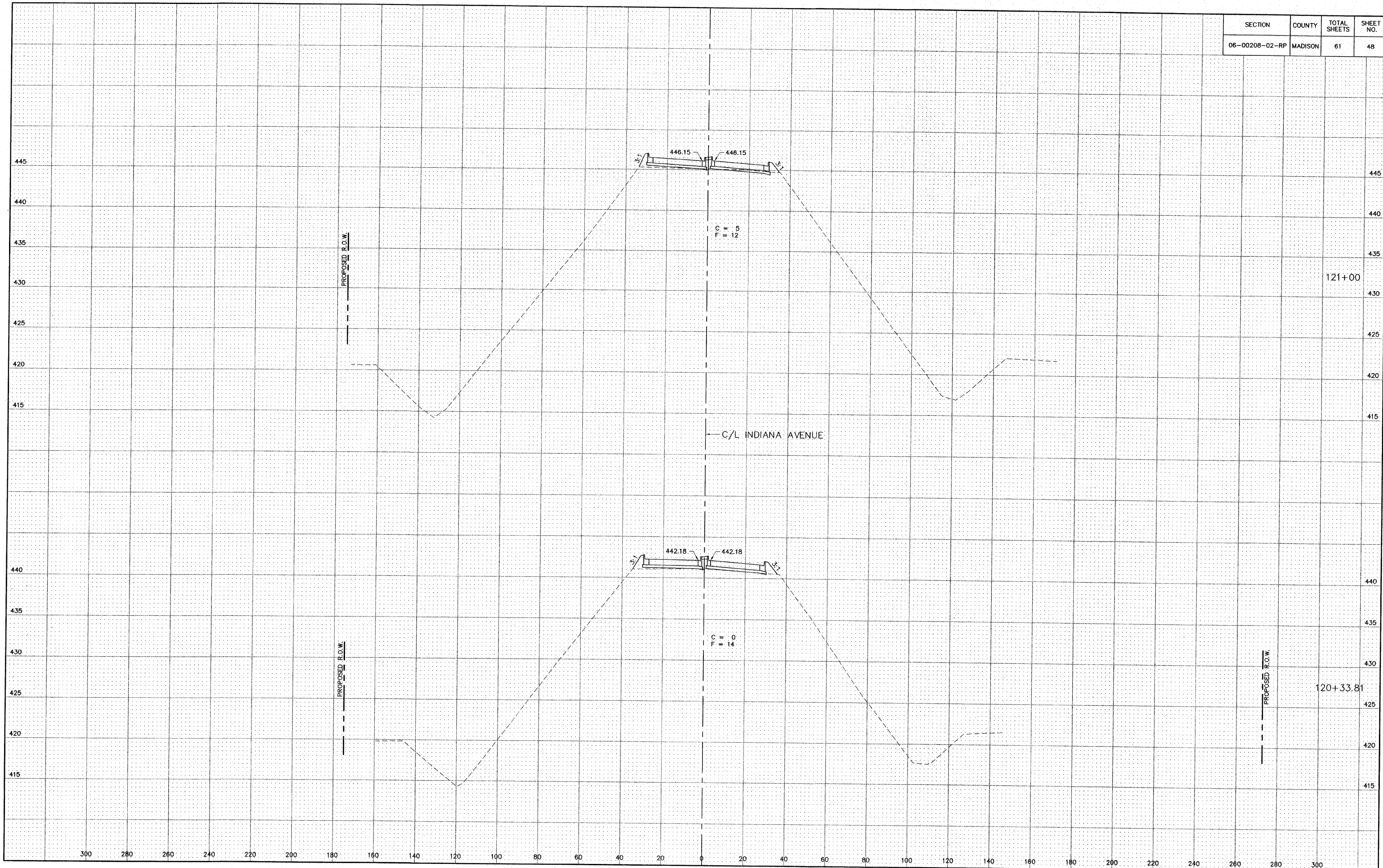


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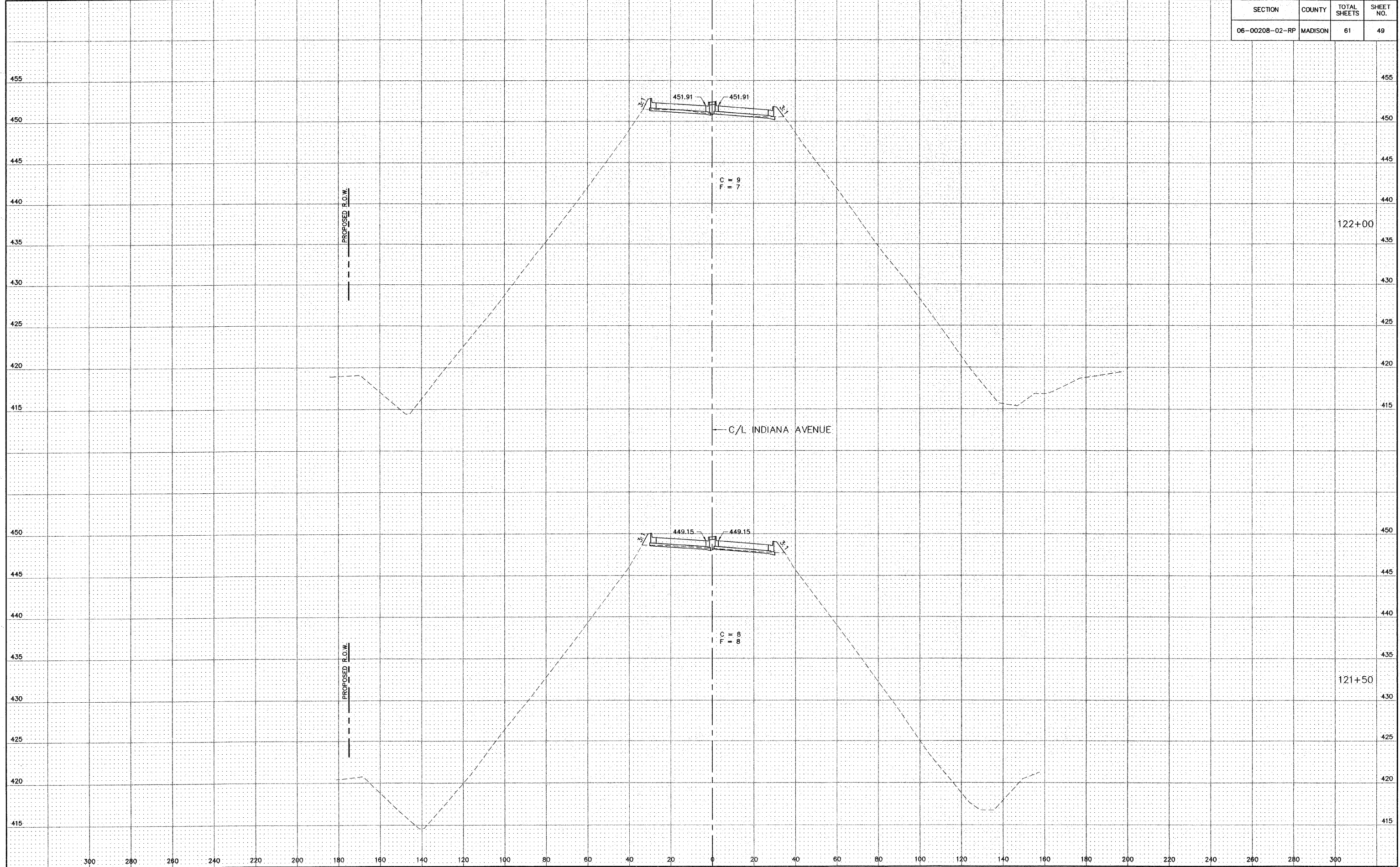


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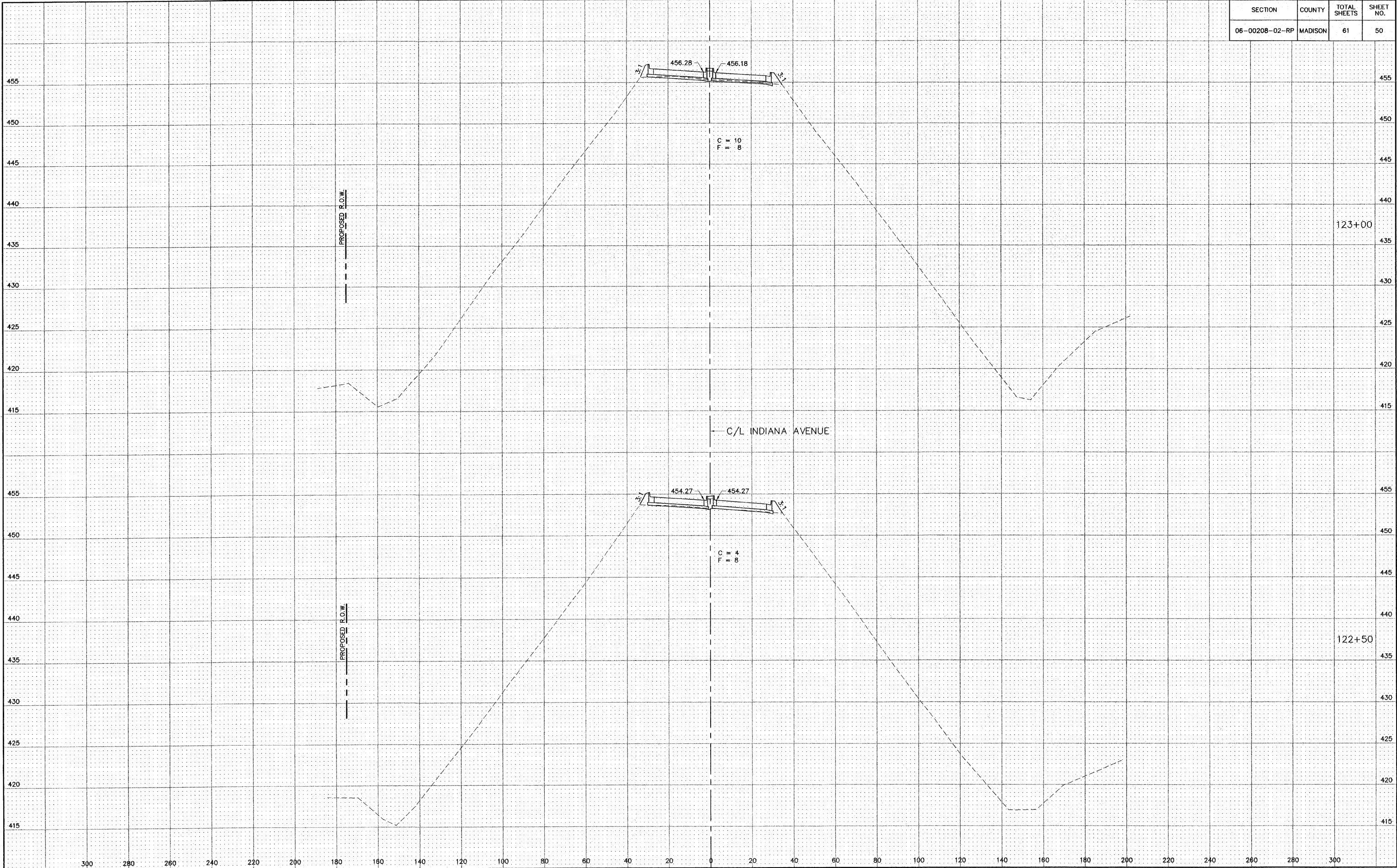
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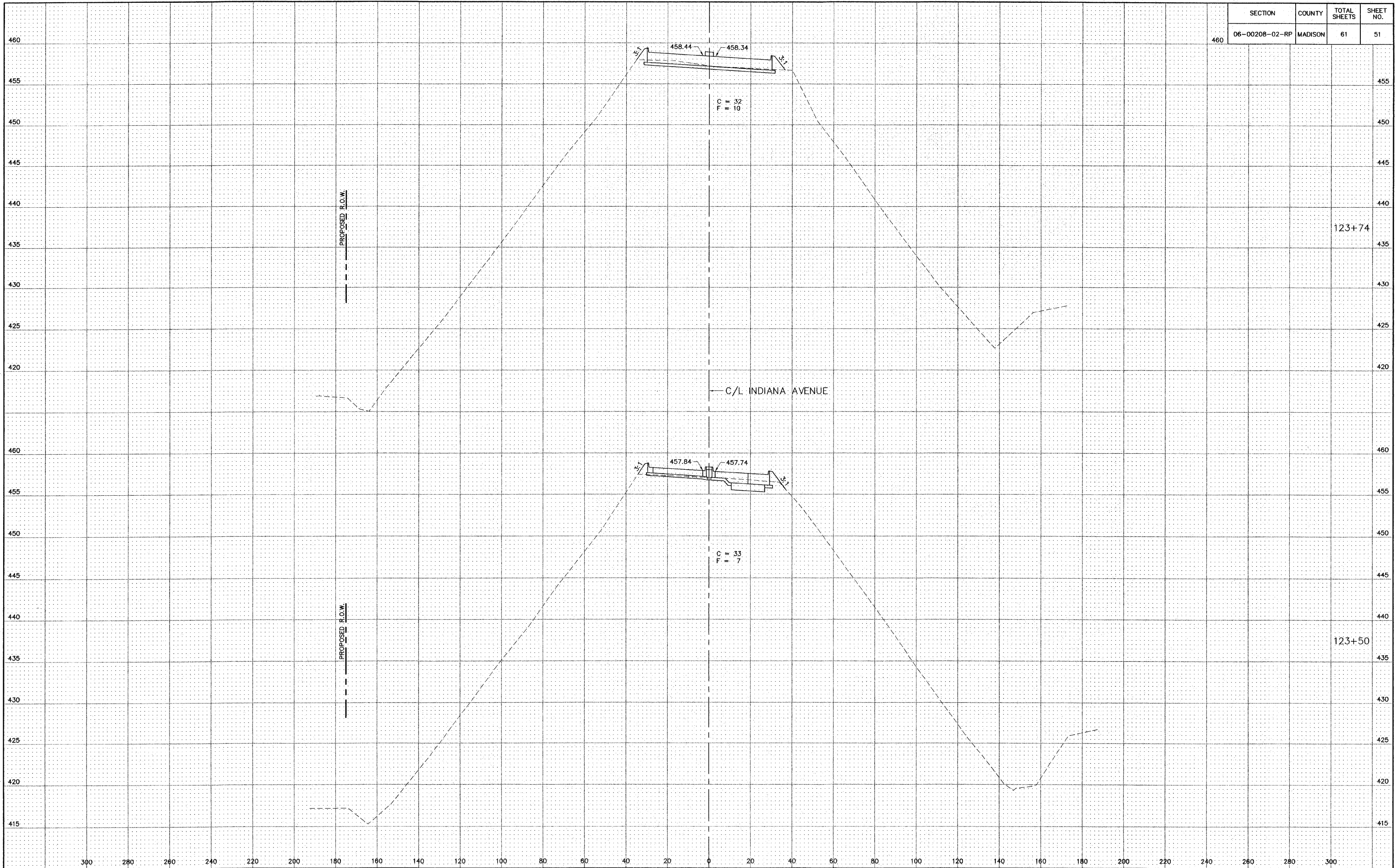


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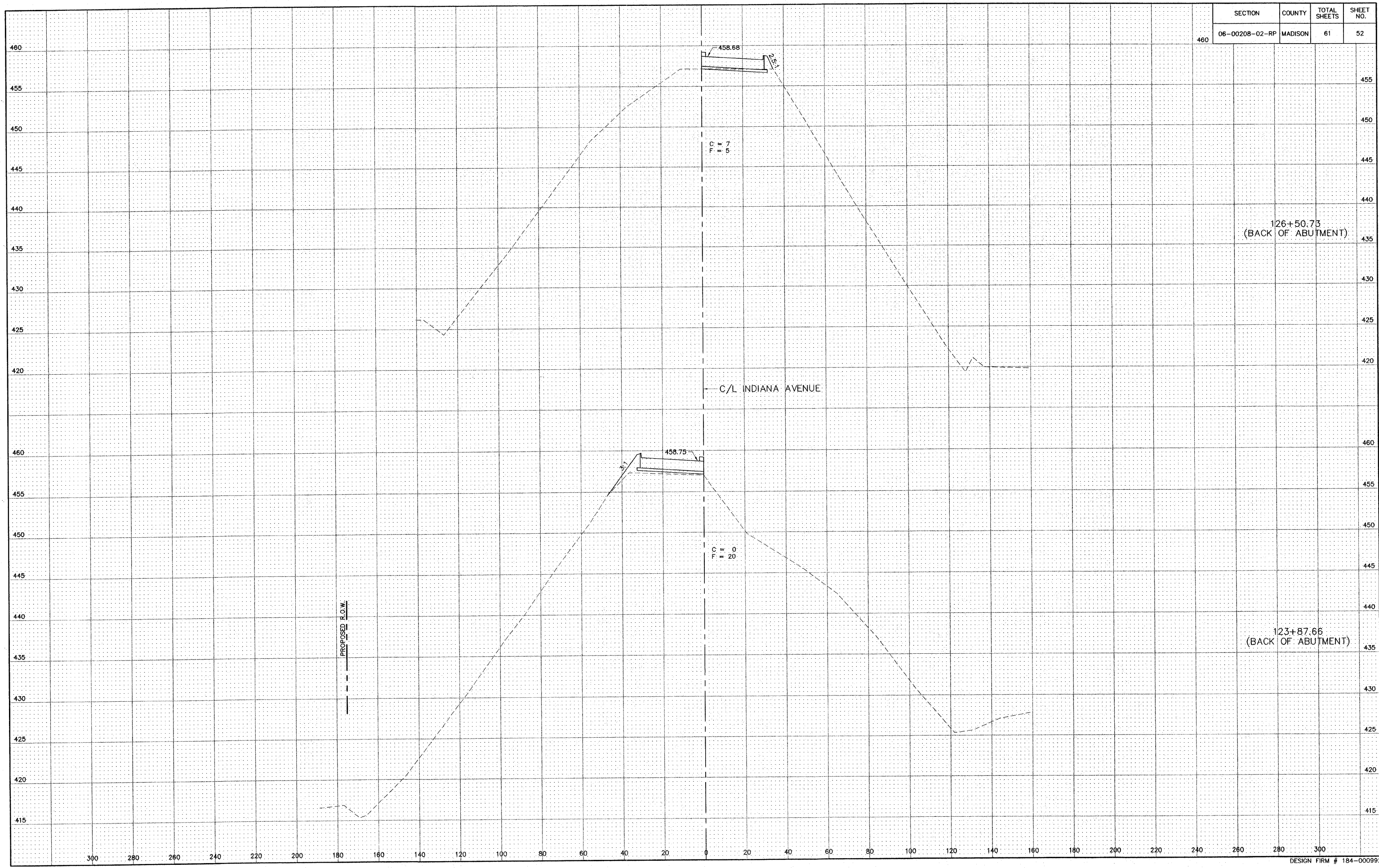


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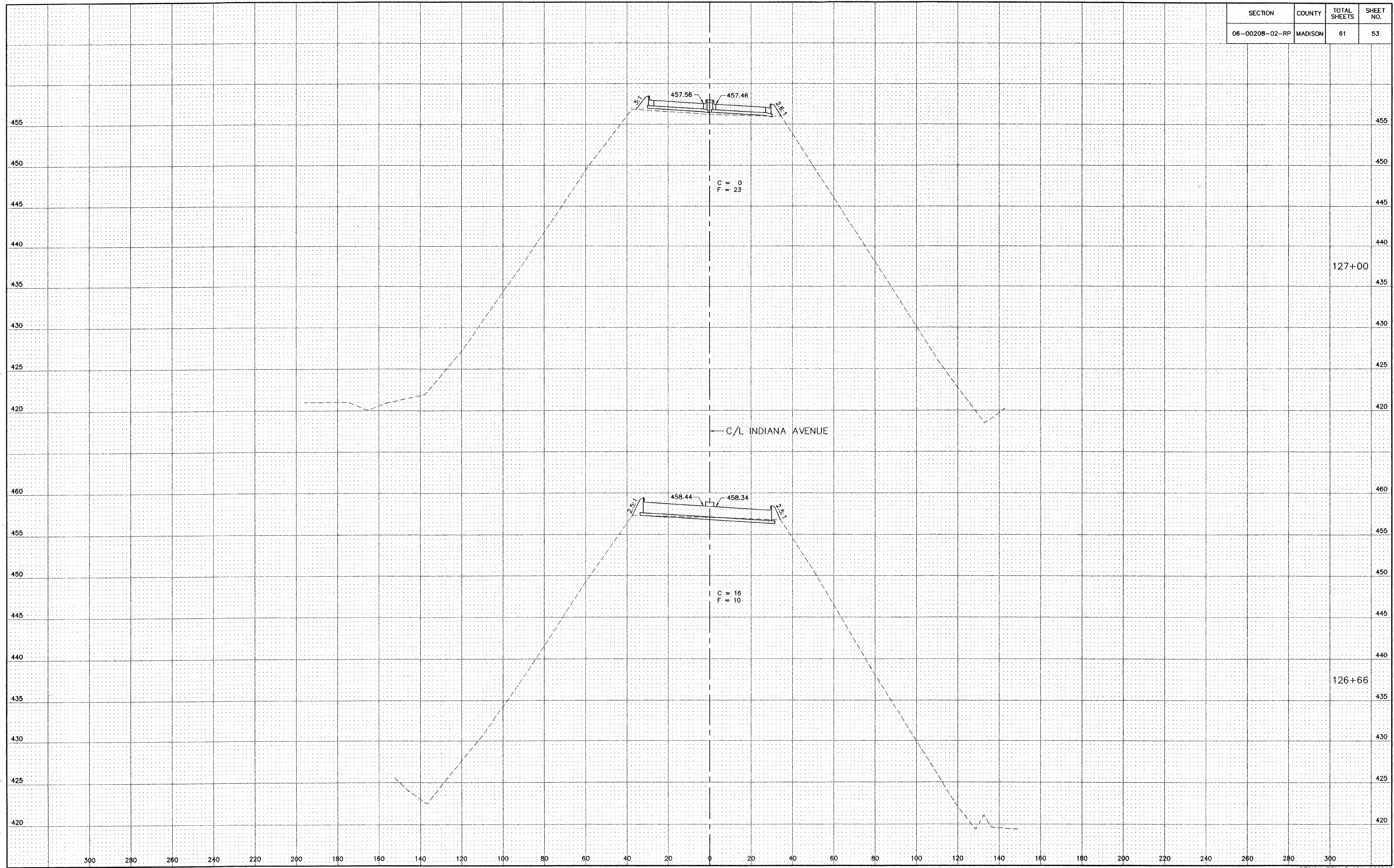
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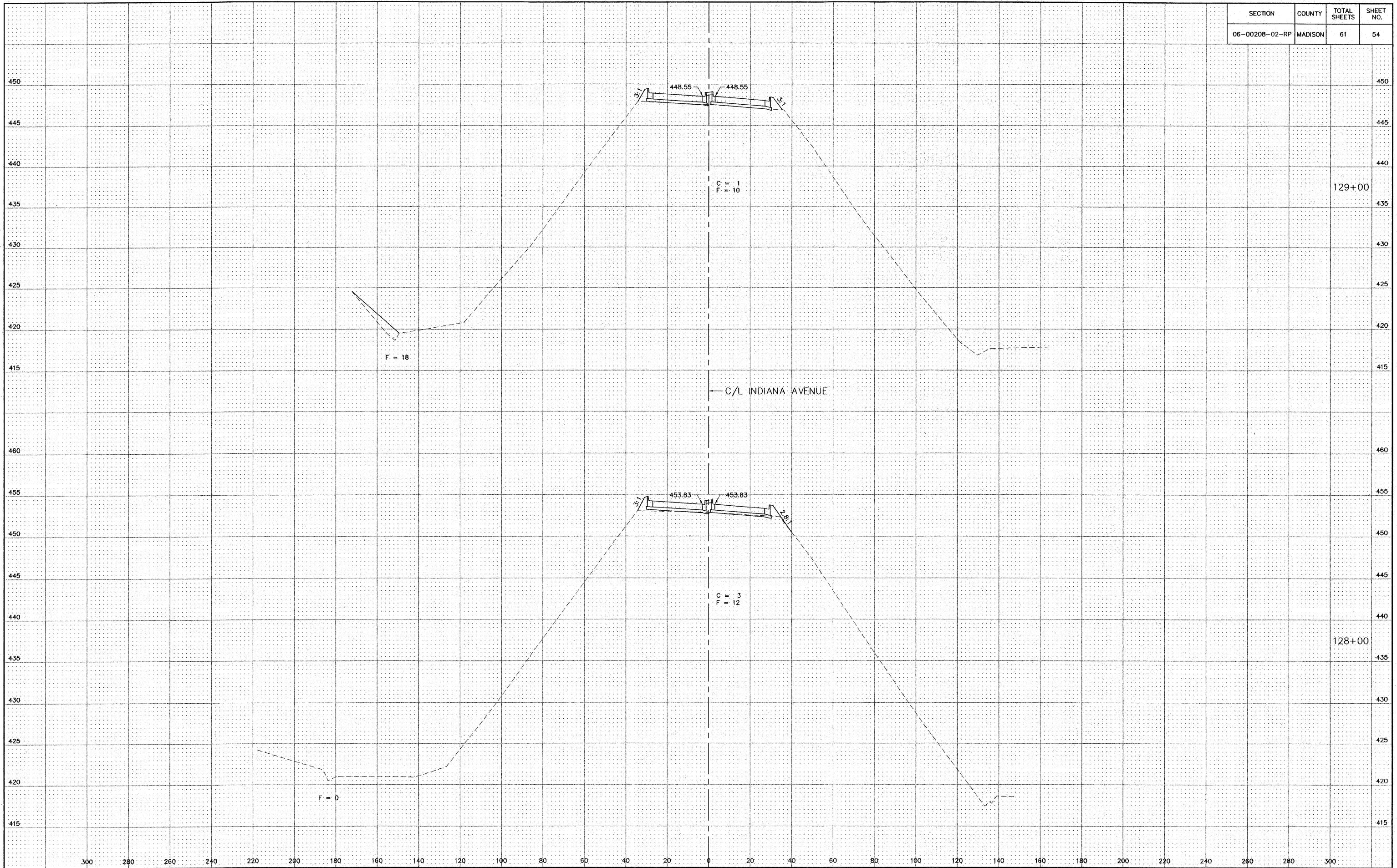
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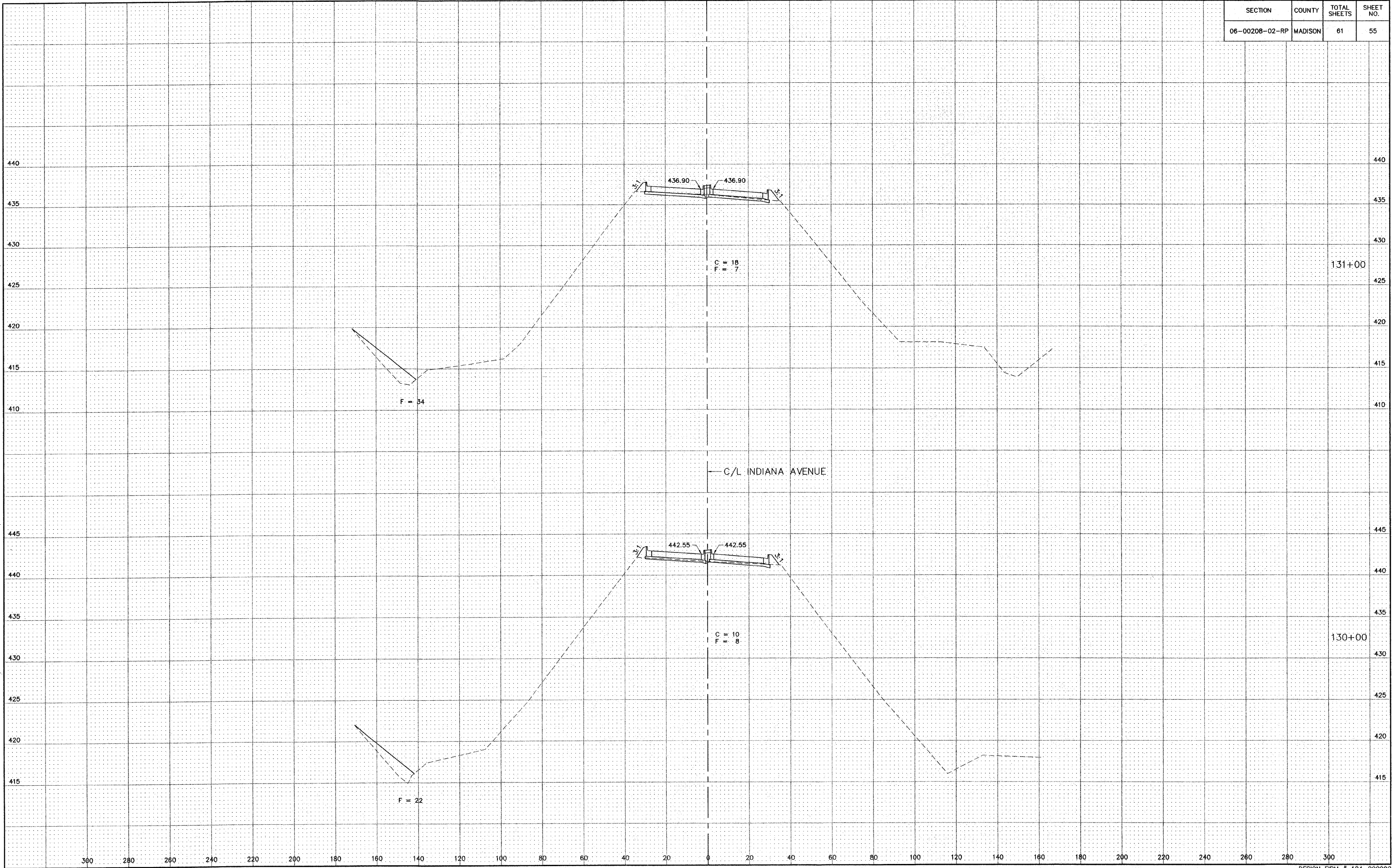
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00208-02-RP	MADISON	61	54

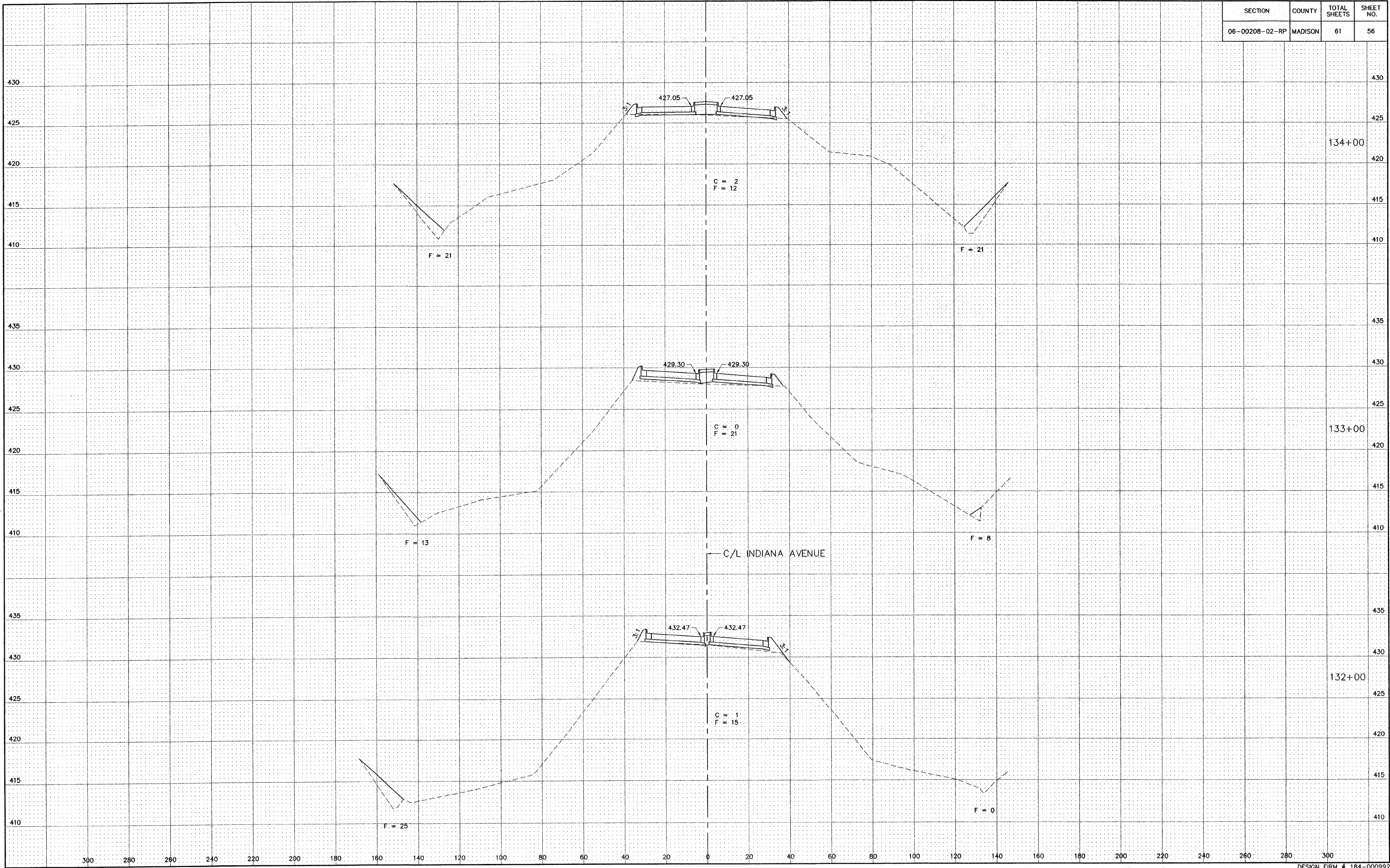


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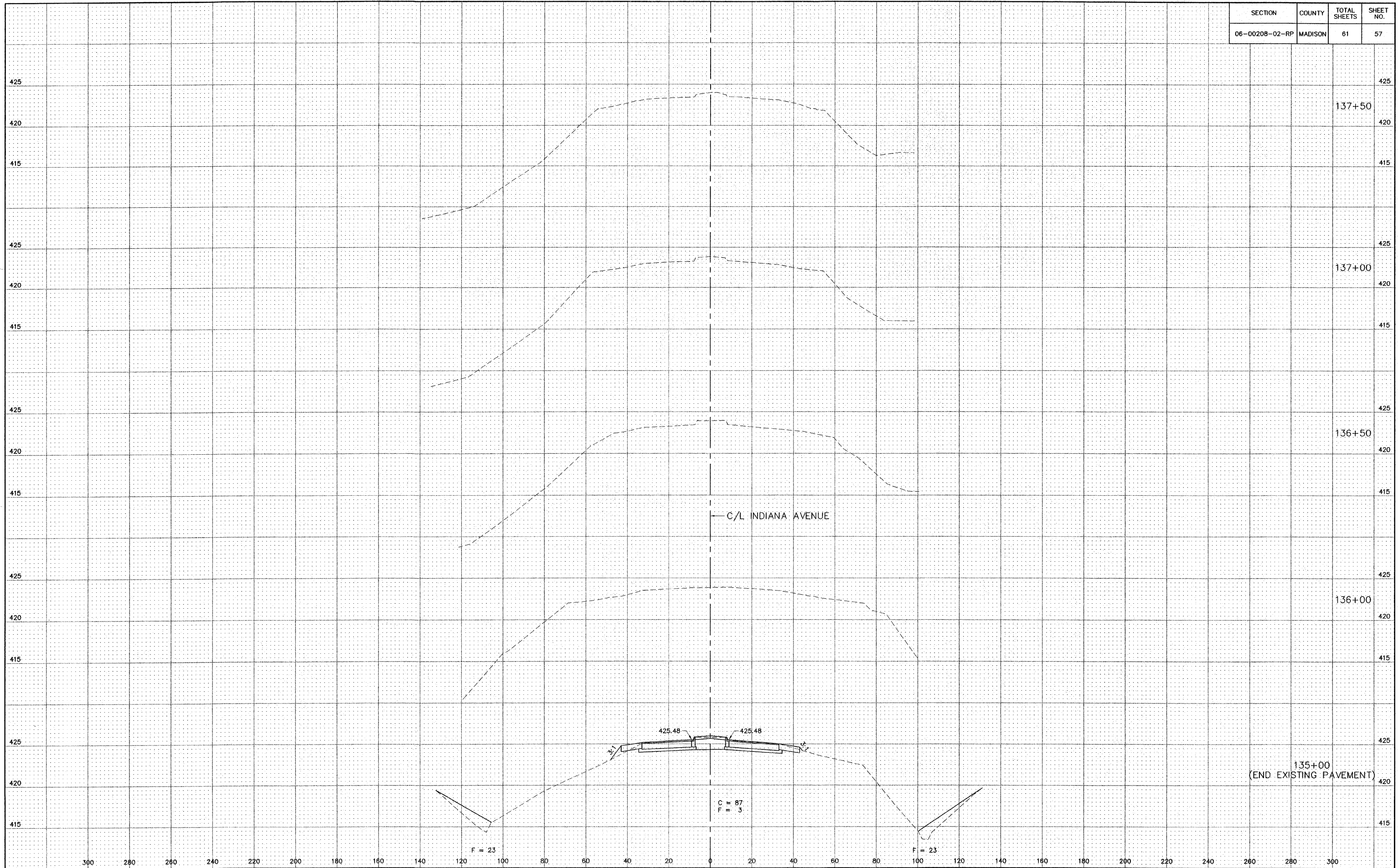
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00208-02-RP	MADISON	61	55



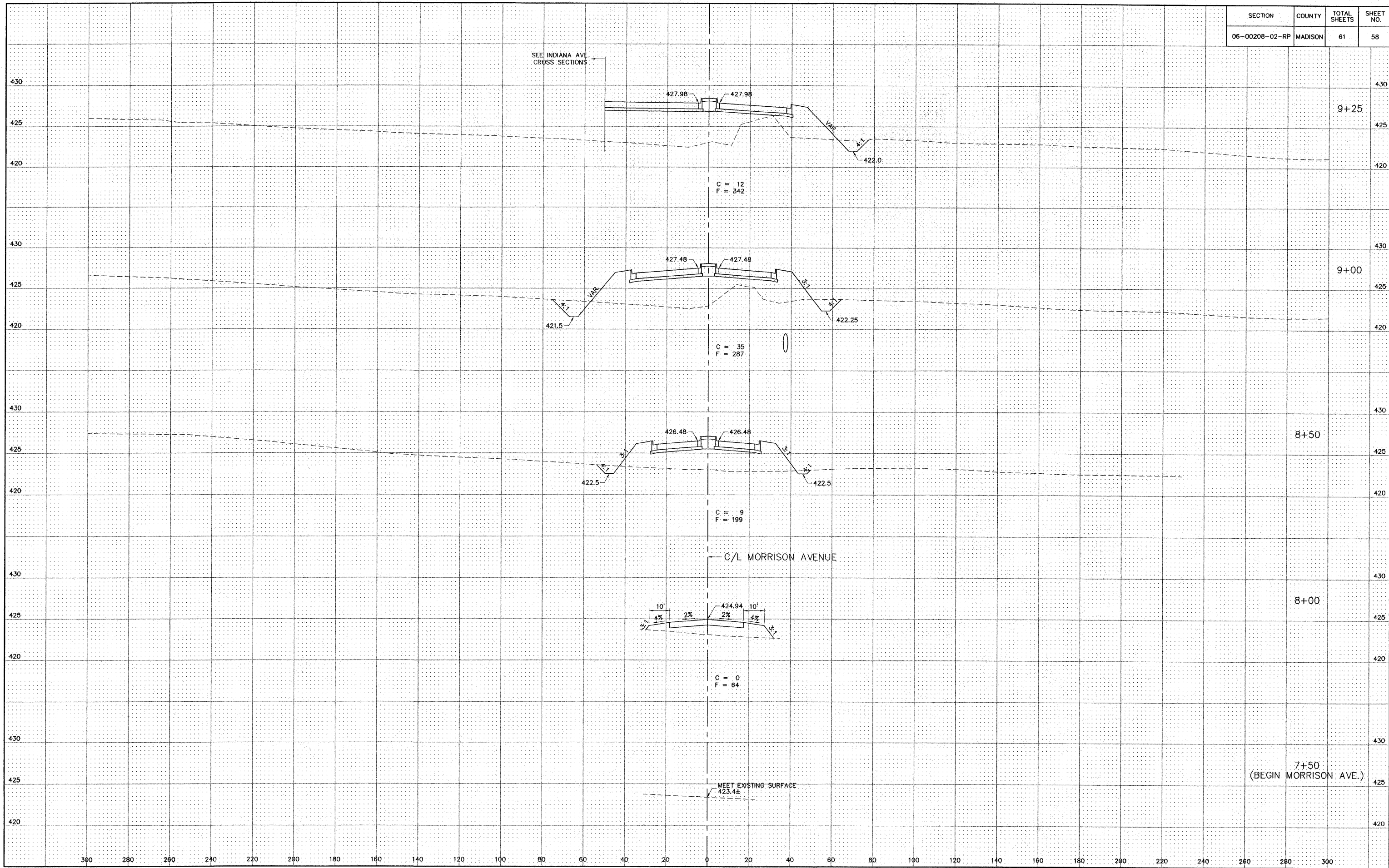
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00208-02-RP	MADISON	61	56



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00208-02-RP	MADISON	61	57

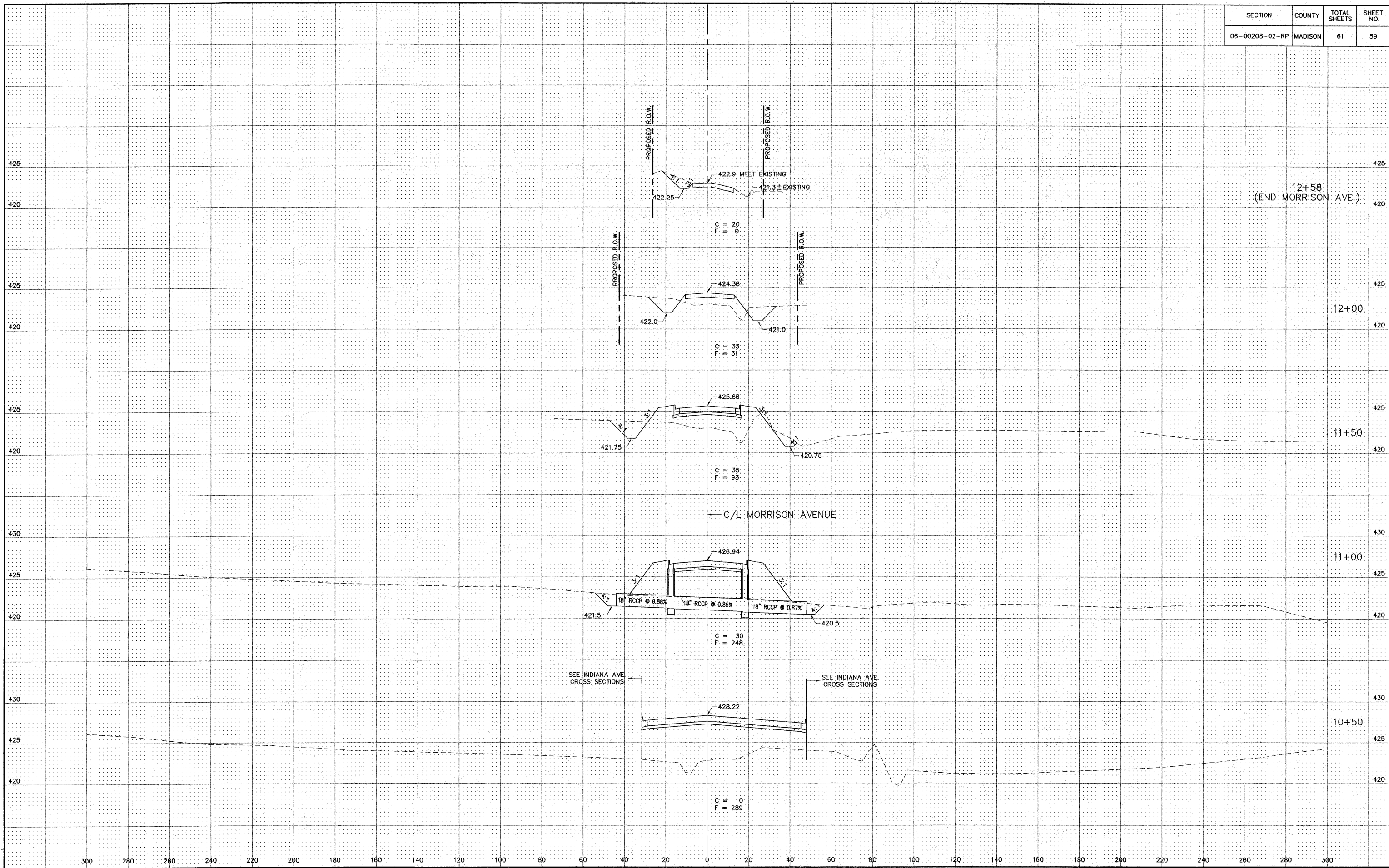


SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00208-02-RP	MADISON	61	58



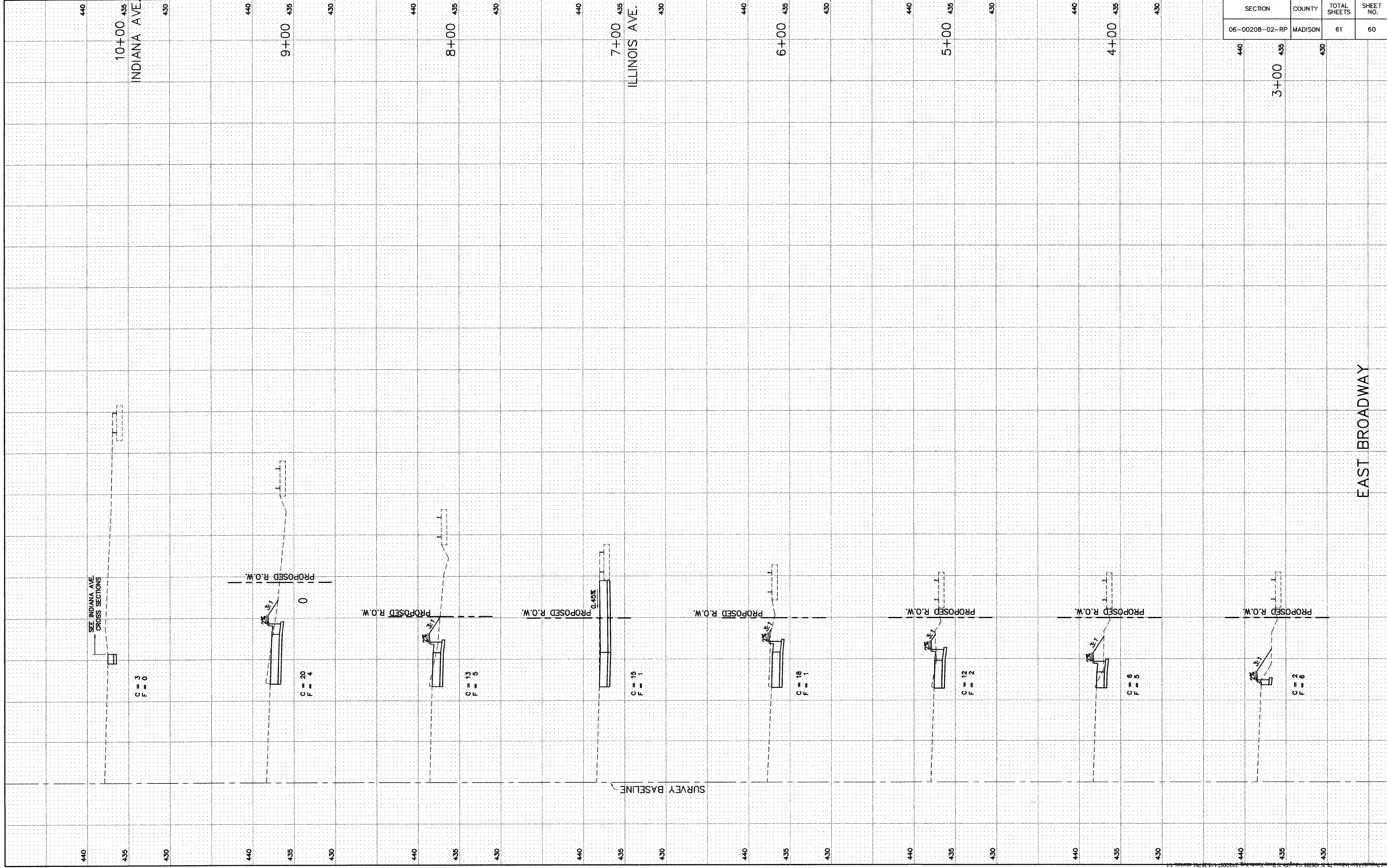
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SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00208-02-RP	MADISON	61	59



SEE INDIANA AVE. CROSS SECTIONS

SEE INDIANA AVE. CROSS SECTIONS



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00208-02-RP	MADISON	61	60

EAST BROADWAY

SEE INDIANA AVE
CROSS SECTIONS

C = 3
F = 0

C = 20
F = 4

C = 13
F = 6

C = 15
F = 1

C = 18
F = 1

C = 12
F = 2

C = 8
F = 5

C = 2
F = 6

SURVEY BASELINE

PROPOSED R.O.W.

PROPOSED R.O.W.

PROPOSED R.O.W.

PROPOSED R.O.W.

PROPOSED R.O.W.

PROPOSED R.O.W.

PROPOSED R.O.W.

10+00
INDIANA AVE.

9+00

8+00

7+00
ILLINOIS AVE.

6+00

5+00

4+00

3+00

440

435

430

440

435

430

440

435

430

440

435

430

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435

430

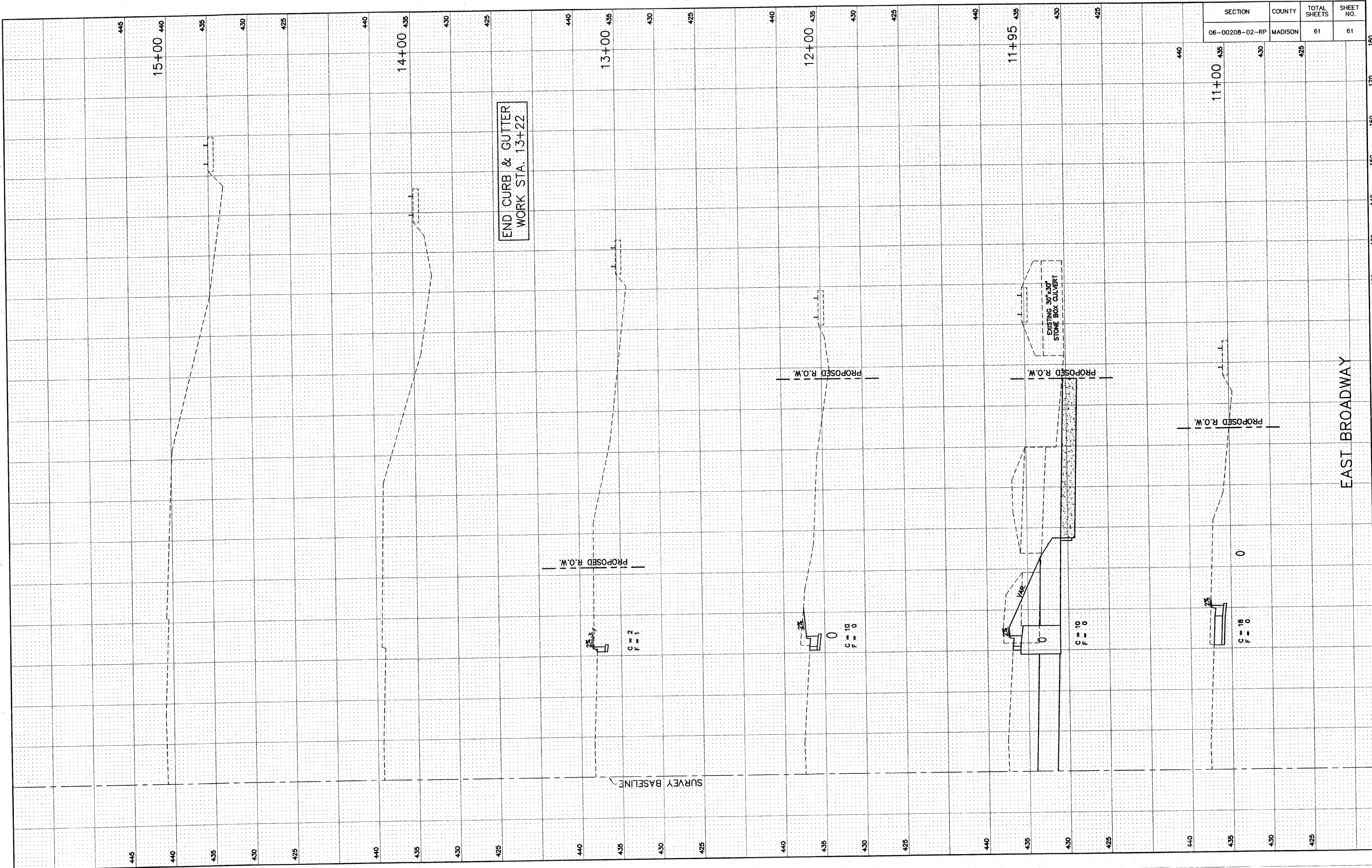
440

435

430

180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-00208-02-RP	MADISON	61	61



EAST BROADWAY