

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	1
		ILLINOIS	CONTRACT NO. 60K20	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

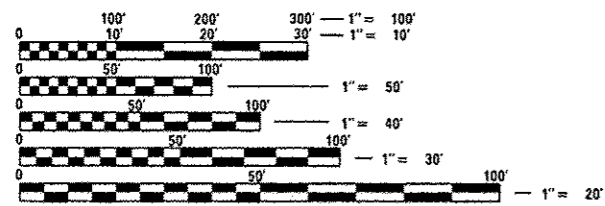
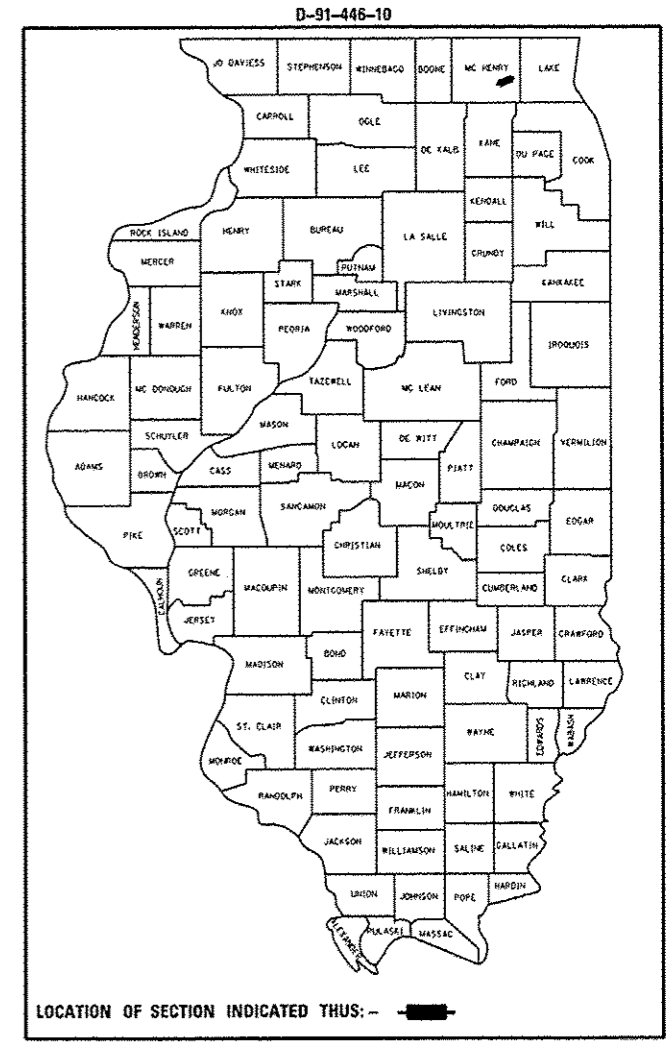
**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 335 / ILL 176
AT SMITH ROAD

SECTION: 146N-2
PROJECT: ACF-0335 (010)

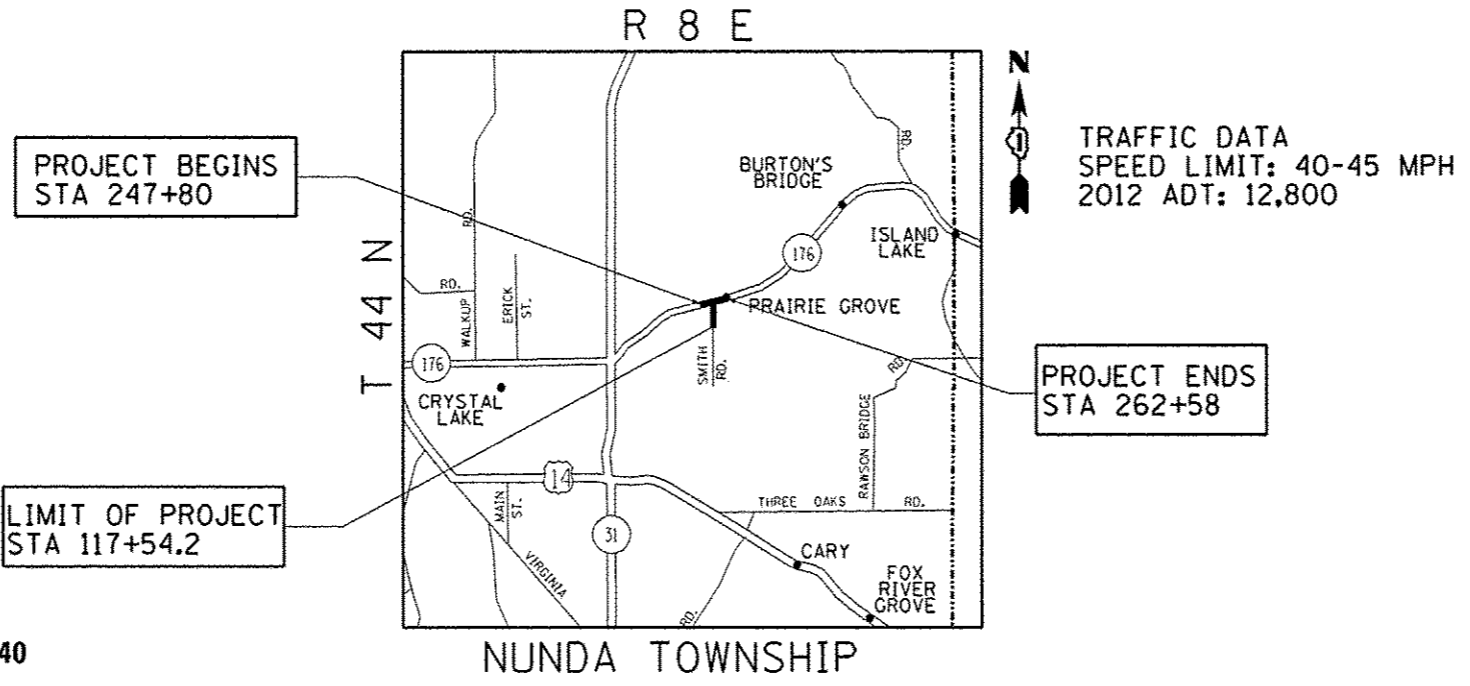
TRAFFIC SIGNAL INSTALLATION & CHANNELIZATION
MCHENRY COUNTY
C-91-446-10

PROJECT IS LOCATED IN
UNINCORPORATED NUNDA TOWNSHIP



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

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



PROJECT ENGINEER: DAN WILGREEN (847) 705-4240
PROJECT MANAGER: KEN ENG

CONTRACT NO. 60K20

GROSS AND NET LENGTH OF PROJECT = 1,478 FEET (0.28 MILES)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *October 8 2013*
John Furman
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 6 2013
John D. Baranzelli PE, PE
ENGINEER OF DESIGN AND ENVIRONMENT

Dec 6 2013
Omer Osman PE, PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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442201-03	CLASS C AND D PATCHES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
542001-04	CONCRETE END SECTION FOR PIPE CULVERTS 15" (375MM) THRU 84" (2100MM) DIA.
601001-04	SUB-SURFACE DRAINS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
602001-02	CATCH BASIN TYPE A
602301-04	INLET, TYPE A
602401-03	MANHOLE TYPE A
604001-03	FRAME AND LIDS TYPE 1
604036-02	GRATE TYPE B
604091-02	FRAME AND GRATE, TYPE 24
606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	STEEL PLATE BEAM, PCC/HMA STABILIZATION
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKERS AND MOUNTING DETAILS
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701306-03	LANE CLOSURE, 2L,2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS- DAY ONLY FOR SPEEDS ≥ 45 MPH
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701501-06	URBAN LANE CLOSURE 2L, 2W, UNDIVIDED
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
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720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
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UTILITY NOTES

COMED COMPANY WIRES ARE NOT INSULATED AND EXTRA CAUTION AND VIGILANCE MUST BE ADHERED TO WHEN WORKING AROUND THEM. CONTRACTORS SHOULD ALWAYS USE CAUTION IN OPERATING CRANES AND OR OTHER EQUIPMENT NEAR OVERHEAD ELECTRICAL FACILITIES. THE OCCUPATIONAL HEALTH AND SAFETY ORGANIZATION (OSHA) RULES REQUIRE THAT WORKERS AND EQUIPMENT SHALL NOT APPROACH WITHIN TEN (10) FEET AWAY OF OVERHEAD ELECTRICAL EQUIPMENT WITHOUT APPROPRIATE SUPPLEMENTAL PROTECTION. PLEASE BE CERTAIN THAT ALL WORKERS ON THIS PROJECT HAVE BEEN FULLY TRAINED AND CONFORM TO OSHA RULES AND OTHER APPLICABLE GUIDELINES REGARDING WORKING SAFELY AROUND ELECTRICAL POWER LINES.

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND MCHENRY COUNTY.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

THIS PROJECT WILL REQUIRE AUTHORIZATION UNDER NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) SWPPP PERMIT.

THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 45 MPH (80KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H), WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING OR RESURFACING.

ALL PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.

THE RESIDENT ENGINEER SHALL CONTACT MS. DEBBIE HANLON, AREA TRAFFIC FIELD ENGINEER AT (847) 438-2300 (OFFICE) OR (847) 715-8414 (CELL), A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE DISTRICT STANDARDS AS NOTED IN THE DETAIL.

PRIOR TO EMBANKMENT PLACEMENT, ALL VEGETATION, LOOSE MATERIAL, AND UNSTABLE MATERIAL SHOULD BE REMOVED TO DEPTH ENCOUNTERED AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL. ANY EMBANKMENT WIDENING ON EXISTING SLOPES SHOULD BE BENCHED IN ACCORDANCE WITH ARTICLE 205.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE UNIT WEIGHT (CONVERSION FACTOR) QUOTED IS FOR THE ESTIMATING PLAN QUANTITIES ONLY. ACTUAL QUANTITIES TO FULFILL CONTRACT REQUIREMENTS WILL BE DETERMINED BASED ON UNIT WEIGHT OF APPROVED MIX DESIGN, PLAN DIMENSIONS, AND DENSITY LIMITATIONS. MAXIMUM PAYMENT WILL BE COMPUTED BASED ON WEIGHT AVERAGE DENSITIES OF THE IN-PLACE MIXTURE.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK.

NO COMMITMENTS HAVE BEEN MADE ON THIS PROJECT.

FOR STORM SEWER CONSTRUCTED UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE AUTHORIZED UNDER THE PROVISIONS OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED.

FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EXPOXY COATED, UNLESS NOTED ON THE PLAN.

POROUS GRANULAR EMBANKMENT, SUBGRADE AND GEOTECHNICAL FABRIC FOR GROUND STABILIZATION HAS BEEN PROVIDED TO REPLACE SOILS WHICH TEND TO BE UNSTABLE WHEN WET. THE ACTUAL NED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER, IF UNSUITABLE SOILS ARE ENCOUNTERED THE SOILS SHALL BE REMOVED AND REPLACED WITH PGES. THESE LIMITS MAY BE ALTERED BY THE ENGINEER IF FIELD CONDITIONS SO WARRANT, REMOVAL OF THESE UNSUITABLE SOILS SHALL BE PAID FOR AS "REMOVABLE AND DISPOSAL OF UNSUITABLE MATERIAL".

FILE NAME :	USER NAME : abrcuah	DESIGNED -	REVISED - AHA 01/25/13	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ILL 176 AT SMITH ROAD INDEX OF SHEETS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\p114205\abrcuah\dms99287\PI14205-DESIGN.dgn		DRAWN -	REVISED -		335	146N-2	MCHENRY	65	2			
		CHECKED -	REVISED -		CONTRACT NO. 60K20							
		DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FEO. AID PROJECT	

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN					
				80% FED 20% STATE ROADWAY 0004	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE T.S. SIGNAL 0021	100% CRYSTAL LAKE FIRE DEPT. EVP 0021			
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	217	217					
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	190.5	190.5					
20101000	TEMPORARY FENCE	FOOT	1657	1657					
20101700	SUPPLEMENTAL WATERING	UNIT	2	2					
20200100	EARTH EXCAVATION	CU YD	3795	3795					
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1981	1981					
20800150	TRENCH BACKFILL	CU YD	78.5	78.5					
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SO YD	4934	4934					
21101625	TOPSOIL FURNISH AND PLACE, 6"	SO YD	7175	7175					
21101805	COMPOST FURNISH AND PLACE, 2"	SO YD	758	758					
25000210	SEEDING, CLASS 2A	ACRE	1.33	1.33					
25000312	SEEDING, CLASS 4A	ACRE	0.16	0.16					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	120	120					
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	120	120					

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN					
				80% FED 20% STATE ROADWAY 0004	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE T.S. SIGNAL 0021	100% CRYSTAL LAKE FIRE DEPT. EVP 0021			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	120	120					
25100630	EROSION CONTROL BLANKET	SO YD	7175	7175					
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	148	148					
28000305	TEMPORARY DITCH CHECKS	FOOT	660	660					
28000400	PERIMETER EROSION BARRIER	FOOT	1887	1887					
28000500	INLET AND PIPE PROTECTION	EACH	2	2					
28000510	INLET FILTERS	EACH	17	17					
28100105	STONE RIPRAP, CLASS A3	SO YD	26.4	26.4					
28200200	FILTER FABRIC	SO YD	26.4	26.4					
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	184	184					
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SO YD	4934	4934					
31101195	SUBBASE GRANULAR MATERIAL, TYPE B 3 1/2"	SO YD	1801	1801					
35501302	HOT-MIX ASPHALT BASE COURSE, 4 1/2"	SO YD	188	188					
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SO YD	350	350					

SPECIALTY ITEMS

FILE NAME : c:\p\work\p14205\road\road\14205-DESIGN.dgn	USER NAME : abrsuah	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				IL. RTE. 176 AT SMITH ROAD SUMMARY OF QUANTITIES				F.A.P. RTE. 335	SECTION 146N-2	COUNTY MCHENRY	TOTAL SHEETS 65	SHEET NO. 3
PLOT SCALE : 100000' = 1" IN		CHECKED -	REVISED -									SCALE:	SHEET NO.	OF	SHEETS	STA.

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE								
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN			ROADWAY 0004	80% FED 20% STATE	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE	100% CRYSTAL LAKE FIRE DEPT.	T.S. SIGNAL 0021	EVP 0021
				ROADWAY 0004	T.S. SIGNAL 0021	EVP 0021						
35501320	HOT-MIX ASPHALT BASE COURSE, 9"	SO YD	2246	2246								
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	4.1	4.1								
40600300	AGGREGATE (PRIME COAT)	TON	20.5	20.5								
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	8	8								
40600895	CONSTRUCTING TEST STRIP	EACH	2	2								
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	53	53								
40603090	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	574	574								
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	40	40								
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	1365	1365								
42001300	PROTECTIVE COAT	SO YD	545	545								
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	4200	4200								
44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SO YD	415	415								

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE								
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN			ROADWAY 0004	80% FED 20% STATE	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE	100% CRYSTAL LAKE FIRE DEPT.	T.S. SIGNAL 0021	EVP 0021
				ROADWAY 0004	T.S. SIGNAL 0021	EVP 0021						
44000165	HOT-MIX ASPHALT SURFACE REMOVAL, 4"	SO YD	693	693								
44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	450	450								
44201721	CLASS D PATCHES, TYPE III, 6 INCH	SO YD	23	23								
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	3893	3893								
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SO YD	279	279								
48203015	HOT-MIX ASPHALT SHOULDERS, 4 1/2"	SO YD	208	208								
48203019	HOT-MIX ASPHALT SHOULDERS, 5 1/2"	SO YD	1801	1801								
50104400	CONCRETE HEADWALL REMOVAL	EACH	2	2								
50105220	PIPE CULVERT REMOVAL	FOOT	73.5	73.5								
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2								
54002020	EXPANSION BOLTS 3/4 INCH	EACH	16	16								
54010303	PRECAST CONCRETE BOX CULVERTS 3' x 3'	FOOT	10	10								
54261618	CONCRETE END SECTION, STANDARD 542001, 18", 116	EACH	2	2								
542A1063	PIPE CULVERTS, CLASS A, TYPE 2 18"	FOOT	79.2	79.2								

* SPECIALTY ITEMS

FILE NAME *	USER NAME * abrcuah	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL RTE. 176 AT SMITH ROAD SUMMARY OF QUANTITIES	F.A.P. RTE. 335	SECTION 146N-2	COUNTY MCHENRY	TOTAL SHEETS 65	SHEET NO. 4		
CONTRACT NO. 60K20	PLOT SCALE * 100000' / 1" = 1000'	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
	PLOT DATE * 11/1/2013	CHECKED -	REVISED -									
		DATE -	REVISED -									

SUMMARY OF QUANTITIES					CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN					
				80% FED 20% STATE ROADWAY 0004	80% FED 15.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE T.S. SIGNAL 0021	100% CRYSTAL LAKE FIRE DEPT. EVP 0021			
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	1370	1370					
55101300	STORM SEWER REMOVAL 27"	FOOT	79	79					
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	3	3					
60107600	PIPE UNDERDRAINS 4"	FOOT	467	467					
60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	47	47					
60200805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE B GRATE	EACH	8	8					
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	10	10					
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	9	9					
60500060	REMOVING INLETS	EACH	2	2					
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	8.1	8.1					
60600605	CONCRETE CURB, TYPE B	FOOT	100	100					
60608582	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4, 24	FOOT	1712	1712					
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	75	75					

SUMMARY OF QUANTITIES					CONSTRUCTION TYPE CODE				
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				80% FED 20% STATE ROADWAY 0004	80% FED 15.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE T.S. SIGNAL 0021	100% CRYSTAL LAKE FIRE DEPT. EVP 0021			
63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	25	25					
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	3					
63200310	GUARDRAIL REMOVAL	FOOT	226	226					
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	7740	7740					
66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1					
66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					
67100100	MOBILIZATION	L SUM	1	1					
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1					
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1					
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1					
* SPECIALTY ITEMS									

FILE NAME: c:\p\work\114205\114205.dgn	USER NAME: abrouah	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL. RTE. 176 AT SMITH ROAD SUMMARY OF QUANTITIES	F.A.P. RTE. 335	SECTION 146N-2	COUNTY MCHENRY	TOTAL SHEETS 65	SHEET NO. 5	
PLOT SCALE: 100,000' = 1"	CHECKED: -	REVISED: -	SCALE:			SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
PLOT DATE: 11/1/2013	DATE: -	REVISED: -	CONTRACT NO. 60K20								

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
				URBAN			80% FED 20% STATE	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE	100% CRYSTAL LAKE FIRE DEPT.
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 0004	T. S. SIGNAL 0021	EVP 0021			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1		1				
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1464	1464					
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	218.4	218.4					
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	8867	8867					
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	934	934					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	81	81					
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	90	90					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	163	163					
* 72000100	SIGN PANEL - TYPE 1	SO FT	21.8		21.8				
* 72000200	SIGN PANEL - TYPE 2	SO FT	32	32					
* 72400310	REMOVE SIGN PANEL - TYPE 1	SO FT	24.2	24.2					
* 73700100	REMOVE GROUND MOUNTED SIGN SUPPORT	EACH	1	1					

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
				URBAN			80% FED 20% STATE	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE	100% CRYSTAL LAKE FIRE DEPT.
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 0004	T. S. SIGNAL 0021	EVP 0021			
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	218.4	218.4					
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	8867	8867					
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	934	934					
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	81	81					
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	90	90					
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	117	117					
* 78200420	GUARDRAIL MARKERS, TYPE B	EACH	6	6					
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3					
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	95	95					
* 80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1		1				
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1701		1701				
* SPECIALTY ITEMS									

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PLOT SCALE : 100000' = 1"		CHECKED -	REVISED -									SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
PLOT DATE : 11/1/2013		DATE -	REVISED -																			
												CONTRACT NO. 60K20										

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN					
				80% FED 20% STATE ROADWAY 0004	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE T.S. SIGNAL 0021	100% CRYSTAL LAKE FIRE DEPT. EVP 0021			
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	18		18				
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	135		135				
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	229		229				
81400100	HANDHOLE	EACH	5		5				
81400200	HEAVY-DUTY HANDHOLE	EACH	3		3				
81400300	DOUBLE HANDHOLE	EACH	1		1				
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1		1				
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	274			274			
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1234		1234				
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	738		738				
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	932		932				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN					
				80% FED 20% STATE ROADWAY 0004	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE T.S. SIGNAL 0021	100% CRYSTAL LAKE FIRE DEPT. EVP 0021			
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	30		30				
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	415		415				
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1		1				
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1		1				
87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1		1				
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1		1				
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1		1				
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8		8				
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4				
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30		30				
Z0064800	SELECTIVE CLEARING	UNIT	7.1	7.1					

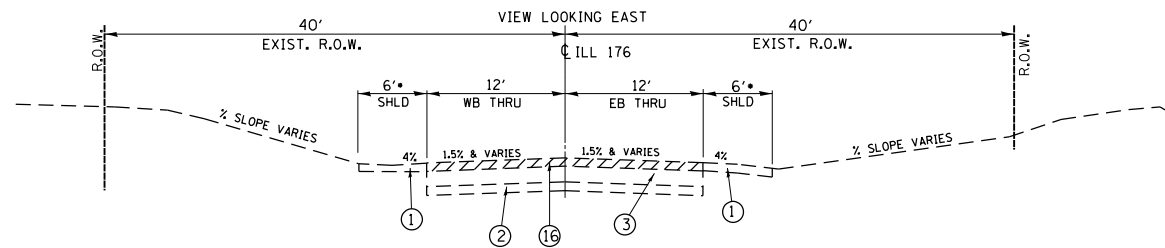
* SPECIALTY ITEMS

FILE NAME =	USER NAME = abrouh	DESIGNED -	REVISOR -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				IL RTE. 176 AT SMITH ROAD SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISOR -									335	146N-2	MCHENRY	65	7
		CHECKED -	REVISOR -									CONTRACT NO. 60K20				
		DATE -	REVISOR -									FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

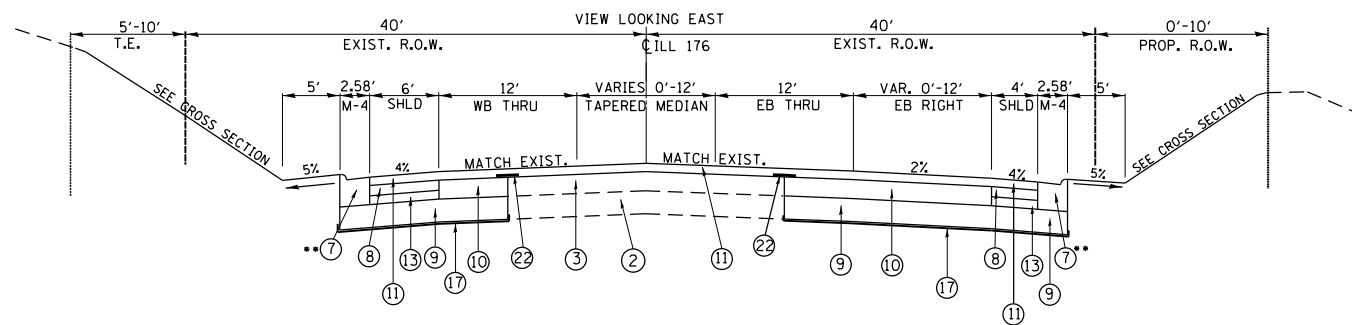
SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE									
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN			ROADWAY 0004	80% FED 20% STATE	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE	100% CRYSTAL LAKE FIRE DEPT. EVP 0021			
				URBAN	TOTAL QUANTITIES	ROADWAY 0004							
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4					4					
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2					2					
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2					2					
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1					1					
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1					1					
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6					6					
88500100	INDUCTIVE LOOP DETECTOR	EACH	5					5					
88600100	DETECTOR LOOP, TYPE I	FOOT	476					476					
88700200	LIGHT DETECTOR	EACH	2						2				
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1						1				
A2001820	TREE, ACER SACCHARUM GREEN MOUNTAIN (GREEN MOUNTAIN SUGAR MAPLE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	6	6									

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE												
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN			ROADWAY 0004	80% FED 20% STATE	80% FED 13.3% STATE 6.7% VILLAGE OF PRAIRIE GROVE	100% CRYSTAL LAKE FIRE DEPT. EVP 0021						
				URBAN	TOTAL QUANTITIES	ROADWAY 0004										
A2002820	TREE, CATALPA SPECIOSA (NORTHERN CATALPA), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	3				3									
A2002916	TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 2" CALIPER, BALLED AND BURLAPPED	EACH	4				4									
A2005020	TREE, GYMNOCLADUS DIOICUS (KENTUCKY COFFEETREE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	2				2									
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	2				2									
X7240505	RELOCATE SIGN PANEL AND POST	EACH	4				4									
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1						1							
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1						1							
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	274							274						
Z0005305	BOX CULVERTS TO BE CLEANED	FOOT	50				50									
Z0076600	TRAINEES	HOUR	1000				1000									
Z0013798	CONSTRUCTION LAYOUT	L SUM	1				1									
Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	1000				1000									
Z0030850	TEMPORARY INFORMATION SIGNING	/50 FT	77.1				77.1									
* SPECIALTY ITEMS													Δ NON-PARTICIPATING (100% STATE)		Ø 00412	

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PLOT SCALE: 1/8" = 1'-0"	PLOT DATE: 11/1/2013	DRAWN: -	REVISED: -	SCALE: 1" = 100'				SHEET NO. OF SHEETS STA. TO STA.				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



EXISTING TYPICAL SECTION
ILL 176-WEST LEG
STA. 247+80 TO STA. 250+25



PROPOSED TYPICAL SECTION
ILL 176-WEST LEG
STA. 247+80 TO STA. 250+25

*SEE CROSS SECTIONS FOR SLOPE

LEGEND:

- ① EXISTING AGGREGATE SHOULDER
- ② EXISTING AGGREGATE SUBGRADE
- ③ EXISTING HMA BINDER COURSE 18"- 19.5" (BASED ON PHASE I CORES)
- ④ EXISTING HMA BINDER COURSE 6.5"-8"
- ⑤ EXISTING PCC PAVEMENT 7.5"-8.5"
- ⑥ EXISTING HMA BINDER 5.5"-6.75" (SMITH RD.)
- ⑦ PROPOSED M-4.24 MOUNTABLE CURB & GUTTER (SEE PLAN FOR LOCATION)
- ⑧ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 5 1/2"
- ⑨ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
- ⑩ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19 mm, N90), 9"
- ⑪ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F" N90 (IL 9.5 mm), 2 1/2"
- ⑫ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm, N90), 4 1/2" (SMITH RD. FROM STA. 117+54 TO STA. 119+88)
- ⑬ PROPOSED SUBBASE GRANULAR MATERIAL TYPE B, 3 1/2"
- ⑭ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- ⑮ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"
- ⑯ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 4"
- ⑰ PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ⑱ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 2 1/4"
- ⑲ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 4"
- ⑳ PROPOSED AGGREGATE SHOULDERS, TYPE B 6"
- ㉑ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 4 1/2"
- ㉒ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT

PROPOSED GUARDRAIL (NOT SHOWN-SEE PLAN AND CROSS SECTIONS)

NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOID @ N _{DES}
RESURFACING	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm); 2 1/2"	4% @ 90 GYR
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90; 2 1/4", 4"	4% @ 90 GYR
PAVEMENT WIDENING (ILL 176)	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm); 2 1/2"	4% @ 90 GYR
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19 mm, N90); 9"	4% @ 90 GYR
PAVEMENT WIDENING (SMITH RD.)	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm); 2 1/2"	4% @ 90 GYR
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19 mm, N90); 4 1/2"	4% @ 90 GYR
DRIVEWAYS	
HMA SURFACE COURSE, MIX D, N50 (IL 9.5 mm); 2"	4% @ 50 GYR
HMA BASE COURSE (HMA BINDER IL-19 mm); CE 8"	4% @ 50 GYR
SHOULDERS	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm); 2 1/2"	4% @ 90 GYR
HOT-MIX ASPHALT SHOULDER (HMA BINDER IL-19 mm), 5 1/2", 4 1/2"	4% @ 50 GYR
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/ SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

PROPOSED UNDERCUTS	
BORING & STATION & OFFSET	REMEDIAL TREATMENT
176-1 247+80 TO 252+00 RIGHT WIDENING	6" ASI
176-3 254+00 TO 256+50 RIGHT WIDENING	12" ASI

NOTE: ASI IS AGGREGATE SUBGRADE IMPROVEMENT

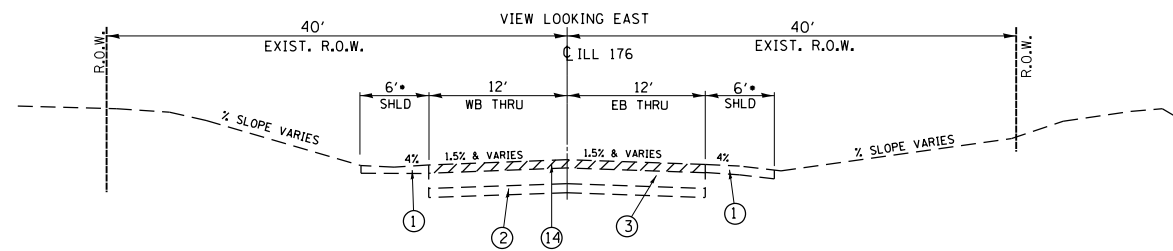
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

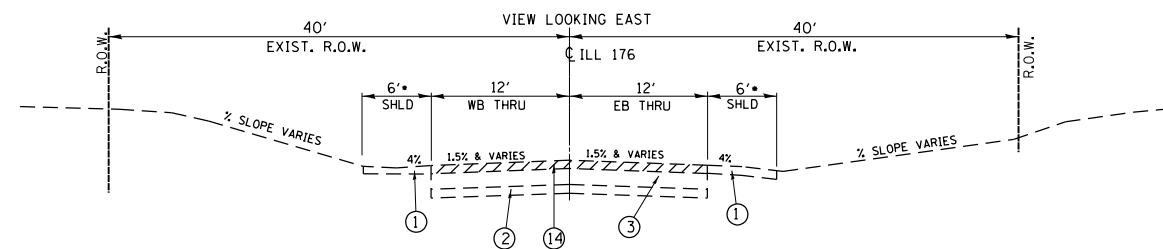
ILL 176 AT SMITH ROAD
TYPICAL SECTIONS

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

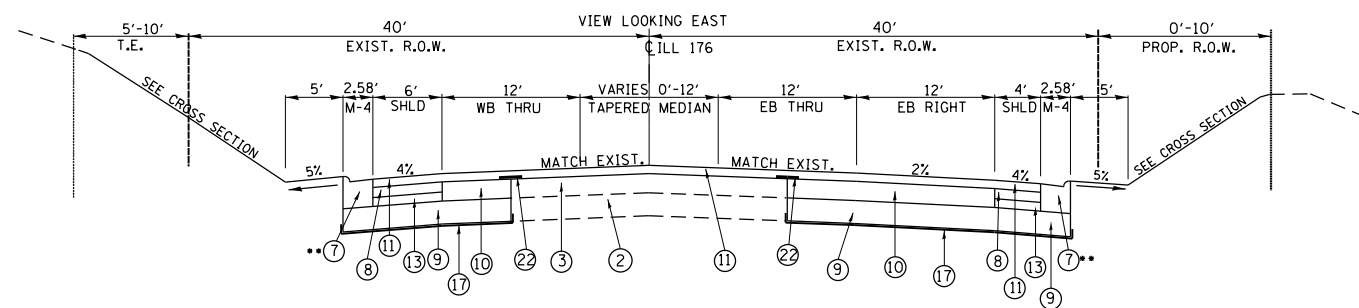
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	9
CONTRACT NO. 60K20				
ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION
ILL 176-WEST LEG
STA. 250+25 TO STA. 251+25
STA. 253+75 TO STA. 254+40

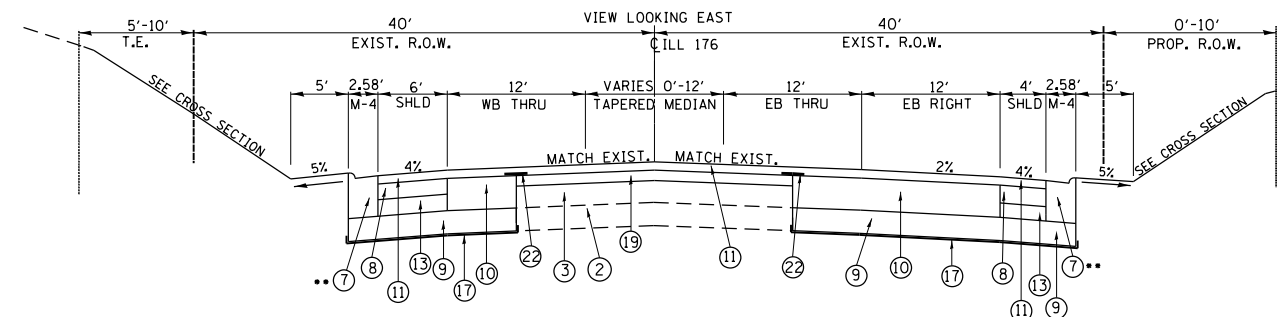


EXISTING TYPICAL SECTION
ILL 176-WEST LEG
STA. 251+25 TO STA. 253+75



PROPOSED TYPICAL SECTION
ILL 176-WEST LEG
STA. 250+25 TO STA. 251+25
STA. 253+75 TO STA. 254+40

*SEE CROSS SECTIONS FOR SLOPE



PROPOSED TYPICAL SECTION
ILL 176-WEST LEG
STA. 251+25 TO STA. 253+75

LEGEND:

- ① EXISTING AGGREGATE SHOULDER
 - ② EXISTING AGGREGATE SUBGRADE
 - ③ EXISTING HMA BINDER COURSE 18"- 19.5" (BASED ON PHASE I CORES)
 - ④ EXISTING HMA BINDER COURSE 6.5"-8"
 - ⑤ EXISTING PCC PAVEMENT 7.5"-8.5"
 - ⑥ EXISTING HMA BINDER 5.5"-6.75" (SMITH RD.)
 - ⑦ PROPOSED M-4.24 MOUNTABLE CURB & GUTTER (SEE PLAN FOR LOCATION)
 - ⑧ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 5 1/2"
 - ⑨ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
 - ⑩ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19 mm, N90), 9"
 - ⑪ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F" N90 (IL 9.5 mm), 2 1/2"
 - ⑫ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm, N90), 4 1/2" (SMITH RD. FROM STA. 117+54 TO STA. 119+88)
 - ⑬ PROPOSED SUBBASE GRANULAR MATERIAL TYPE B, 3 1/2"
 - ⑭ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 - ⑮ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"
 - ⑯ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 4"
 - ⑰ PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
 - ⑱ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 2 1/4"
 - ⑲ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 4"
 - ⑳ PROPOSED AGGREGATE SHOULDERS, TYPE B 6"
 - ㉑ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 4 1/2"
 - ㉒ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- PROPOSED GUARDRAIL (NOT SHOWN-SEE PLAN AND CROSS SECTIONS)

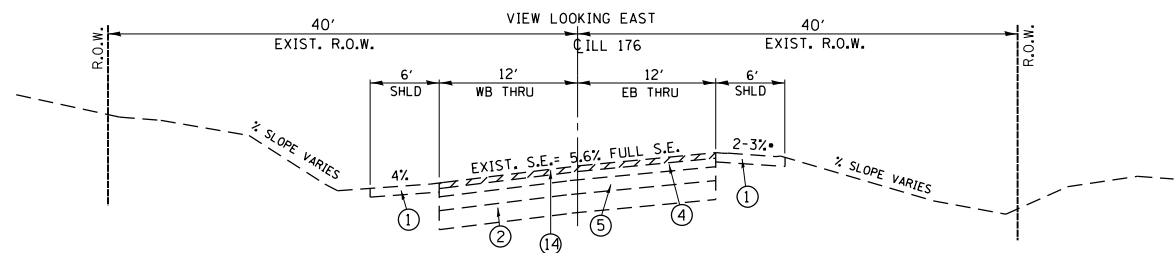
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	PLOT DATE = 12/12/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

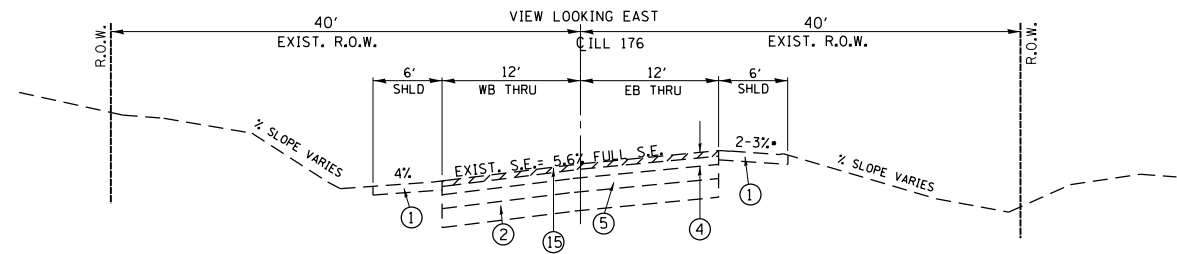
ILL 176 AT SMITH ROAD
TYPICAL SECTIONS

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

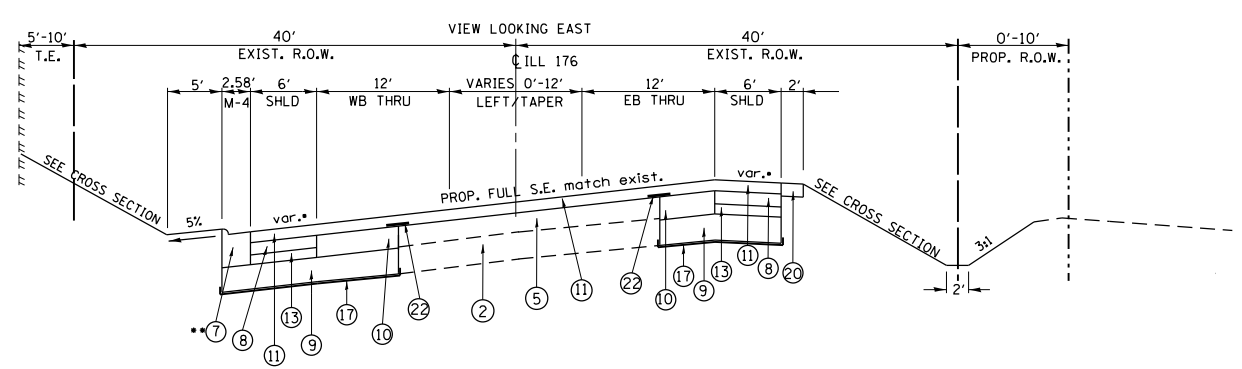
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	10
CONTRACT NO. 60K20				
ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION
ILL 176-EAST LEG
STA. 254+40 TO STA. 254+75
STA. 256+25 TO STA. 256+75

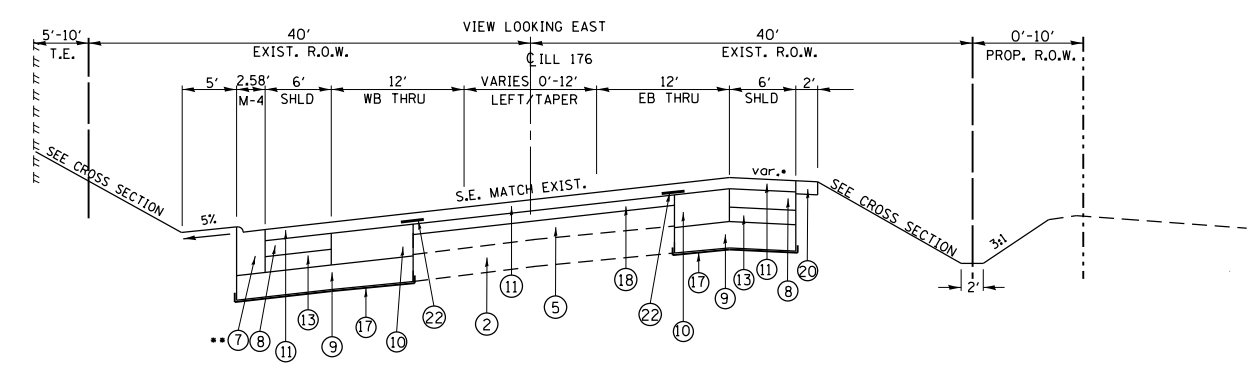


EXISTING TYPICAL SECTION
ILL 176-EAST LEG
STA. 254+75 TO STA. 256+25



PROPOSED TYPICAL SECTION
ILL 176-EAST LEG
STA. 254+40 TO STA. 254+75
STA. 256+25 TO STA. 256+75**

*SEE CROSS SECTIONS FOR SLOPE

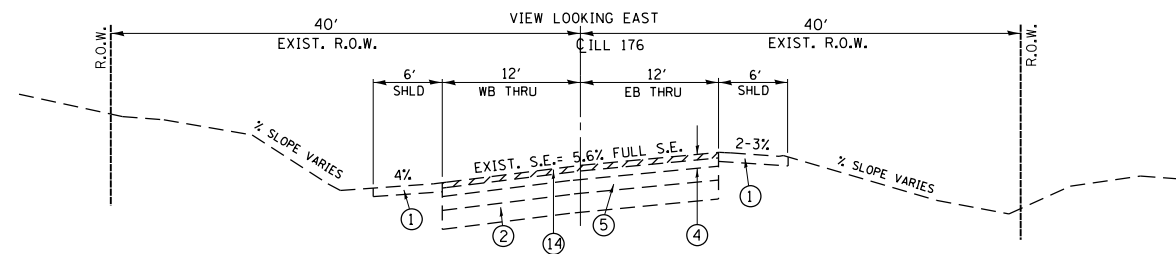


PROPOSED TYPICAL SECTION
ILL 176-EAST LEG
STA. 254+75 TO STA. 256+25

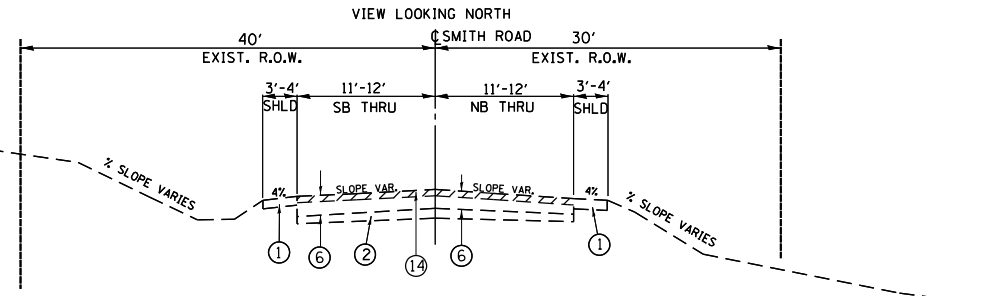
LEGEND:

- ① EXISTING AGGREGATE SHOULDER
 - ② EXISTING AGGREGATE SUBGRADE
 - ③ EXISTING HMA BINDER COURSE 18"- 19.5" (BASED ON PHASE I CORES)
 - ④ EXISTING HMA BINDER COURSE 6.5"-8"
 - ⑤ EXISTING PCC PAVEMENT 7.5"-8.5"
 - ⑥ EXISTING HMA BINDER 5.5"-6.75" (SMITH RD.)
 - ⑦ PROPOSED M-4.24 MOUNTABLE CURB & GUTTER (SEE PLAN FOR LOCATION)
 - ⑧ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 5 1/2"
 - ⑨ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
 - ⑩ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19 mm, N90), 9"
 - ⑪ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F" N90 (IL 9.5 mm), 2 1/2"
 - ⑫ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm, N90), 4 1/2" (SMITH RD. FROM STA. 117+54 TO STA. 119+88)
 - ⑬ PROPOSED SUBBASE GRANULAR MATERIAL TYPE B, 3 1/2"
 - ⑭ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 - ⑮ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"
 - ⑯ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 4"
 - ⑰ PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
 - ⑱ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 2 1/4"
 - ⑲ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 4"
 - ⑳ PROPOSED AGGREGATE SHOULDERS, TYPE B 6"
 - ㉑ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 4 1/2"
 - ㉒ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- PROPOSED GUARDRAIL (NOT SHOWN-SEE PLAN AND CROSS SECTIONS)

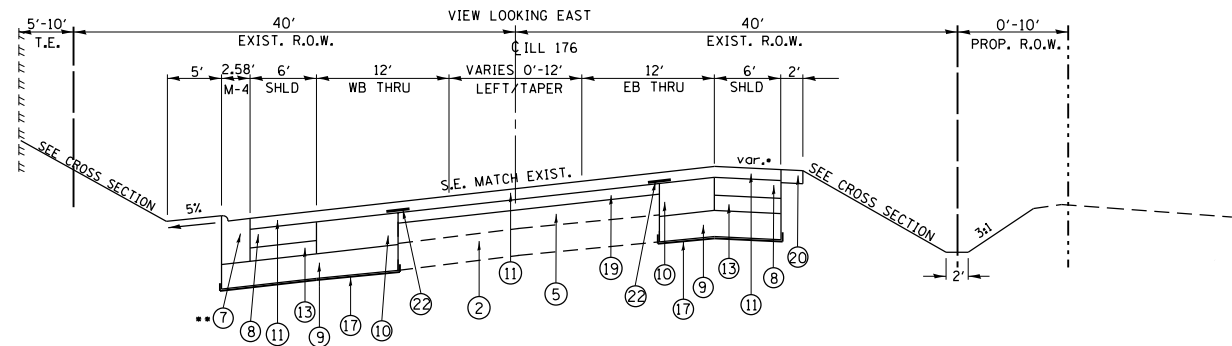
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PLOT DATE = 12/12/2012	DATE -	CHECKED -	REVISED -			CONTRACT NO. 60K20				
		SCALE:	SHEET NO. OF SHEETS			STA. TO STA.	ILLINOIS FED. AID PROJECT			



EXISTING TYPICAL SECTION
ILL 176-EAST LEG
STA. 256+75 TO STA. 262+58

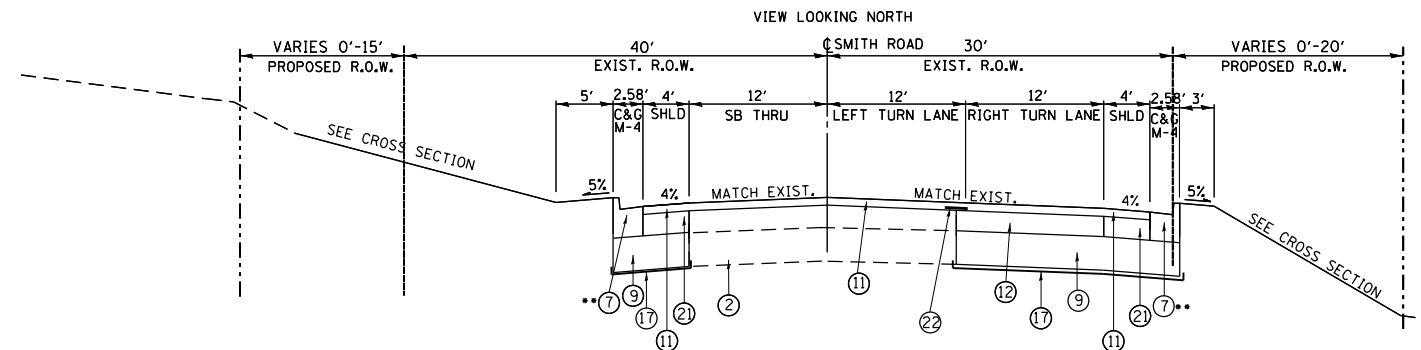


EXISTING TYPICAL SECTION
SMITH ROAD
STA. 117+54.2 TO STA. 119+88



PROPOSED TYPICAL SECTION
ILL 176-EAST LEG
STA. 256+75 TO STA. 262+58

•SEE CROSS SECTIONS FOR SLOPE



PROPOSED TYPICAL SECTION
SMITH ROAD
STA. 117+54.2 TO STA. 119+88

LEGEND:

- ① EXISTING AGGREGATE SHOULDER
 - ② EXISTING AGGREGATE SUBGRADE
 - ③ EXISTING HMA BINDER COURSE 18"- 19.5" (BASED ON PHASE I CORES)
 - ④ EXISTING HMA BINDER COURSE 6.5"-8"
 - ⑤ EXISTING PCC PAVEMENT 7.5"-8.5"
 - ⑥ EXISTING HMA BINDER 5.5"-6.75" (SMITH RD.)
 - ⑦ PROPOSED M-4.24 MOUNTABLE CURB & GUTTER (SEE PLAN FOR LOCATION)
 - ⑧ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 5 1/2"
 - ⑨ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
 - ⑩ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19 mm, N90), 9"
 - ⑪ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F" N90 (IL 9.5 mm), 2 1/2"
 - ⑫ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm, N90), 4 1/2" (SMITH RD. FROM STA. 117+54 TO STA. 119+88)
 - ⑬ PROPOSED SUBBASE GRANULAR MATERIAL TYPE B, 3 1/2"
 - ⑭ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 - ⑮ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"
 - ⑯ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 4"
 - ⑰ PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
 - ⑱ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 2 1/4"
 - ⑲ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 4"
 - ⑳ PROPOSED AGGREGATE SHOULDERS, TYPE B 6"
 - ㉑ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 4 1/2"
 - ㉒ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- PROPOSED GUARDRAIL (NOT SHOWN-SEE PLAN AND CROSS SECTIONS)

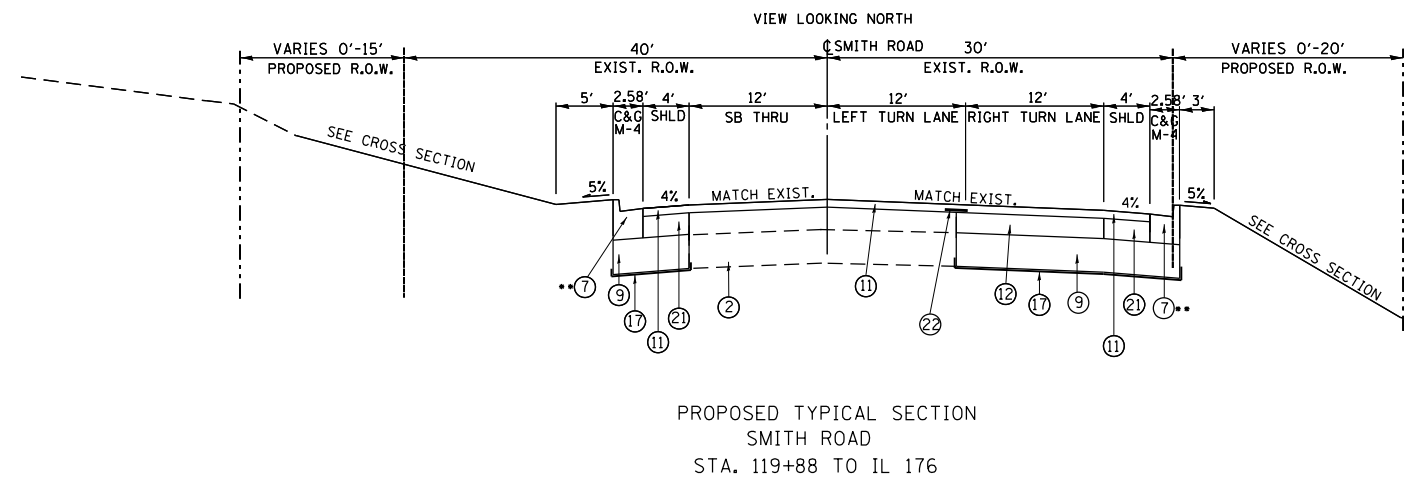
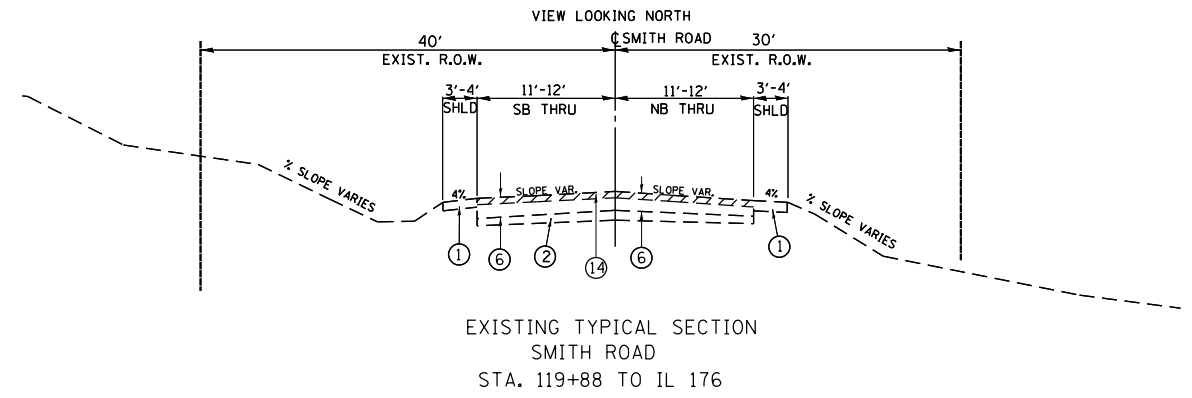
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	PLOT DATE = 12/12/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILL 176 AT SMITH ROAD
TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	12
CONTRACT NO. 60K20				
ILLINOIS FED. AID PROJECT				



*SEE CROSS SECTIONS FOR SLOPE

LEGEND:

- ① EXISTING AGGREGATE SHOULDER
- ② EXISTING AGGREGATE SUBGRADE
- ③ EXISTING HMA BINDER COURSE 18"- 19.5" (BASED ON PHASE I CORES)
- ④ EXISTING HMA BINDER COURSE 6.5"-8"
- ⑤ EXISTING PCC PAVEMENT 7.5"-8.5"
- ⑥ EXISTING HMA BINDER 5.5"-6.75" (SMITH RD.)
- ⑦ PROPOSED M-4.24 MOUNTABLE CURB & GUTTER (SEE PLAN FOR LOCATION)
- ⑧ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 5 1/2"
- ⑨ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
- ⑩ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL 19 mm, N90), 9"
- ⑪ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F" N90 (IL 9.5 mm), 2 1/2"
- ⑫ PROPOSED HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm, N90), 4 1/2" (SMITH RD. FROM STA. 117+54 TO STA. 119+88)
- ⑬ PROPOSED SUBBASE GRANULAR MATERIAL TYPE B, 3 1/2"
- ⑭ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- ⑮ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"
- ⑯ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 4"
- ⑰ PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ⑱ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 2 1/4"
- ⑲ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N90, 4"
- ⑳ PROPOSED AGGREGATE SHOULDERS, TYPE B 6"
- ㉑ PROPOSED HMA SHOULDER (HMA BINDER IL-19 mm), 4 1/2"
- ㉒ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- PROPOSED GUARDRAIL (NOT SHOWN-SEE PLAN AND CROSS SECTIONS)

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	PLOT SCALE = 100.000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/12/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ILL 176 AT SMITH ROAD
TYPICAL SECTIONS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	13
CONTRACT NO. 60K20				
ILLINOIS FED. AID PROJECT				

EARTHWORK												
1	2		3		4		5		6		7	
ILL 176 AT SMITH ROAD	CUT EARTH EXCAVATION		UNSUITABLE MATERIAL		FILL EMBANKMENT		ADJUSTMENT FOR SHRINKAGE		EARTHWORK BALANCE WASTE (+) SHORTAGE (-)		TOPSOIL FURNISH & PLACE	
	(CU YD)		(CU YD)		(CU YD)		(CU YD)		(CU YD)		(SQ YD)	
	LEFT STAGE I	RIGHT STAGE II	LEFT STAGE I	RIGHT STAGE II	LEFT STAGE I	RIGHT STAGE II	LEFT STAGE I	RIGHT STAGE II	LEFT STAGE I	RIGHT STAGE II	LEFT STAGE I	RIGHT STAGE II
ILL 176 (STA. 247+80 TO STA. 248+00)	17	6	9	11	0	16	14.5	5.1	14.5	-10.9		
ILL 176 (STA. 248+00 TO STA. 248+60.73)	18	22	13	29	8	31	15.3	18.7	7.3	-12.3		
ILL 176 (STA. 248+60.73 TO STA. 249+00)	14	20	11	15	6	5	11.9	17.0	5.9	12.0		
ILL 176 (STA. 249+00 TO STA. 250+00)	71	163	48	53	2	1	60.4	138.6	58.4	137.6		
ILL 176 (STA. 250+00 TO STA. 250+67.57)	25	144	14	46	2	0	21.3	122.4	19.3	122.4		
ILL 176 (STA. 250+67.57 TO STA. 250+87)	1	30	0	13	2	0	0.9	25.5	-1.2	25.5		
ILL 176 (STA. 250+87 TO STA. 251+00)	1	17	0	8	1	0	0.9	14.5	-0.2	14.5		
ILL 176 (STA. 251+00 TO STA. 252+00)	46	168	27	59	0	0	39.1	142.8	39.1	142.8		
ILL 176 (STA. 252+00 TO STA. 253+00)	166	243	66	71	0	0	141.1	206.6	141.1	206.6		
ILL 176 (STA. 253+00 TO STA. 254+00)	214	216	70	81	0	0	181.9	183.6	181.9	183.6		
ILL 176 (STA. 254+00 TO STA. 254+41.94)	75	34	26	19	0	0	63.8	28.9	63.8	28.9		
ILL 176 (STA. 254+41.94 TO 255+00)	79	8	34	20	0	36	67.2	6.8	67.2	-29.2		
ILL 176 (STA. 255+00 TO STA. 256+00)	138	44	56	59	0	70	117.3	37.4	117.3	-32.6		
ILL 176 (STA. 256+00 TO STA. 257+00)	199	46	59	41	0	18	169.2	39.1	169.2	21.1		
ILL 176 (STA. 257+00 TO STA. 258+00)	188	29	60	39	0	30	159.8	24.7	159.8	-5.4		
ILL 176 (STA. 258+00 TO STA. 259+00)	127	26	55	48	0	64	108.0	22.1	108.0	-41.9		
ILL 176 (STA. 259+00 TO STA. 260+00)	72	24	51	52	19	100	61.2	20.4	42.2	-79.6		
ILL 176 (STA. 260+00 TO STA. 261+00)	40	23	48	54	52	98	34.0	19.6	-18.0	-78.5		
ILL 176 (STA. 261+00 TO STA. 262+00)	28	27	45	55	43	69	23.8	23.0	-19.2	-46.1		
ILL 176 (STA. 262+00 TO STA. 262+58.14)	17	19	20	31	6	16	14.5	16.2	8.5	0.1		
							0.0	0.0	0.0	0.0		
							0.0	0.0	0.0	0.0		
							0.0	0.0	0.0	0.0		
							0.0	0.0	0.0	0.0		
SUB-TOTAL	1536	1309	712	804	141	554	1305.6	1112.7	1164.6	558.7	2640.4	2640.7

COLUMN 1: LOCATION FROM PLANS
COLUMN 2: CUT QUANTITIES FROM CROSS SECTIONS, WHICH DOES NOT INCLUDE UNSUITABLE MATERIAL
COLUMN 3: CUT MATERIAL THAT IS DETERMINED TO BE EITHER UNSTABLE OR UNSUITABLE FOR USE IN EMBANKMENT, ASSUME 6" OF UNSUITABLE MATERIAL
COLUMN 4: QUANTITIES FROM CROSS SECTIONS (FILL)

COLUMN 5: EARTH EXCAVATION THAT IS TO BE USED AS FILL MATERIAL IN THE EMBANKMENT, SHRINKAGE FACTOR WAS DETERMINED TO BE 15%
COLUMN 6: COLUMN 5 - COLUMN 4, POSITIVE QUANTITY= EXTRA EXCAVATION, NEGATIVE QUANTITY= FURNISHED EXCAVATION NEEDED
COLUMN 7: TOPSOIL FURNISH AND PLACE= AREA OF SEEDING AND

TREE REMOVAL (6 TO 15 UNITS DIAMETER)			
STATION	OFFSET (FT)		UNITS
ILL 176			
250+50.4	48.5	RT	9
250+74.5	50.4	RT	9.5
251+86.9	44.2	RT	10
251+86.9	44.2	RT	9
251+86.9	44.2	RT	9
251+86.9	44.2	RT	9
252+23	44.9	RT	13
252+29.8	41.0	RT	6.5 MS
252+60.3	39.1	RT	8.0
252+60.3	39.1	RT	7.5
255+08	35	RT	14.0
255+37.1	37.1	RT	7
255+40	40.0	LT	6.5
255+58	34.0	LT	9.5 MS
255+58	34.0	LT	9 MS
255+70	35.0	LT	7.0
255+80	35.0	LT	12.0 MS
255+80	35.0	LT	9.0 MS
255+90	37.0	LT	11
255+90	37.0	LT	11
256+97	34.0	LT	7.0
257+13	30.0	LT	9.0
257+35	32.0	LT	14.5
SUB-TOTAL			217.0

TREE REMOVAL (OVER 15 UNITS DIAMETER)			
STATION	OFFSET (FT)		UNITS
ILL 176			
251+49.5	44.4	RT	28
255+0.7	40.1	RT	20 MS
255+0.7	40.1	RT	16 MS
255+35.4	35.4	RT	18
255+21.8	37.6	RT	20.5
256+01.5	37.9	RT	48
259+29	37.0	LT	20 MS
259+29	37.0	LT	20 MS
SUB-TOTAL			190.5

(MS) MULTI-STEMMED TREE

NOTE: TREES ON PRIVATE PROPERTY SHALL NOT BE REMOVED.

EROSION AND SEDIMENT CONTROL SCHEDULE				
LOCATION	INLET FILTERS (EACH)	INLET & PIPE PROTECTION (EACH)	PERIMETER EROSION BARRIER (FOOT)	TEMP. CONSTR. FENCE (FOOT)
STA. 250+10--25.6 LT	1.0			
STA. 250+16.5--18.0 LT	1.0			
STA. 251+03--19.6 LT	1.0			
STA. 252+25--22.1 LT	1.0			
STA. 252+15--28.4 LT	1.0			
STA. 253+39.4--30.8 LT	1.0			
STA. 253+48--24.0 LT	1.0			
STA. 255+90--31.5 LT	1.0			
STA. 256+00--23.9 LT	1.0			
STA. 257+12--31.5 LT	1.0			
STA. 257+22.5--23.9 LT	1.0			
STA. 250+84.5--35.4 RT	1.0			
STA. 251+00--29.3 RT	1.0			
STA. 252+27.8--37.7 RT	1.0			
STA. 252+27.8--32.0 RT	1.0			
STA. 253+38.8--40.0 RT	1.0			
STA. 253+51.7--34.9 RT	1.0			
STA. 255+45--33.1 RT		1.0		
STA. 258+48--36.3 LT		1.0		
STA. 247+80--50.0 RT TO STA. 249+00--50.0 RT			120.0	
STA. 257+00--45.0 LT TO STA. 262+58--40.0 LT			547.0	
STA. 117+54.2--30.0 RT TO STA. 121+56--50 RT			404.0	
STA. 254+67.0--50 RT TO STA. 262+58--40 RT			816	
STA. 247+80--40.0 LT TO STA. 248+42--40.0 LT				62.4
STA. 248+75--40.0 LT TO STA. 250+46--40.0 LT				172.6
STA. 250+87--50.0 LT TO STA. 253+99--50.0 LT				312.0
STA. 253+99--45.0 LT TO STA. 257+00--45.0 LT				291.9
STA. 249+00--50.0 RT TO STA. 253+57--50.0 RT				459.0
STA. 117+54.2--40.0 LT TO STA. 118+50--40.0 LT				96.0
STA. 118+50--40.0 LT TO STA. 119+75--55.0 LT				125.9
STA. 119+75--55.0 LT TO STA. 121+12--55.0 LT				137.2
TOTAL	17.0	2.0	1887.0	1657.0

SIGN PANEL SCHEDULE

SIGN NAME/DESCRIPTION	MUTCD CODE	SIZE W X H (INCHES)	SQFT	EACH	PAY ITEM	PAY ITEM
CROSS ROAD	W2-2R	36" X 36"	9.0		REMOVE SIGN PANEL TYPE 1	72400310
CROSS ROAD	W2-2L	36" X 36"	9.0		REMOVE SIGN PANEL TYPE 1	72400310
STOP SIGN	R1-1	30" X 30"	6.2		REMOVE SIGN PANEL TYPE 1	72400310
STOP SIGN SUPPORT				1.00	REMOVE GROUND MOUNT & SIGN SUPPORT	73700100
REVERSE CURVE	W1-4L			1.00	RELOCATE SIGN PANEL AND POST	X7240505
TWO DIRECTION ARROW	W1-7			1.00	RELOCATE SIGN PANEL AND POST	X7240505
SIGNAL AHEAD	W3-3	48"X48"	16.0		SIGN PANEL TYPE 2	72000200
SIGNAL AHEAD	W3-3	48"X48"	16.0		SIGN PANEL TYPE 2	72000200
CROSS ROAD/STREET NAME	W2-2R			1.00	RELOCATE SIGN PANEL AND POST	X7240505
CROSS ROAD/STREET NAME	W2-2R			1.00	RELOCATE SIGN PANEL AND POST	X7240505

NOTES

ALL SIGNS THAT ARE REMOVED SHALL REMAIN THE PROPERTY OF THE STATE, THE RESIDENT ENGINEER SHALL CONTACT MS. DEBBIE HANLON AREA TRAFFIC FIELD ENGINEER AT (847) 438-2300 (OFFICE), OR (847) 715-8414 (CELL) TO NOTIFY HER THAT THE SIGNS HAVE BEEN TAKEN DOWN AND ARE READY TO BE PICKED UP.

THE RESIDENT ENGINEER SHALL CONTACT MS. DEBBIE HANLON, AREA TRAFFIC FIELD ENGINEER AT (847) 438-2300 (OFFICE) OR (847) 715-8414 (CELL), AT LEAST 2 WEEKS PRIOR TO PLACING FINAL SIGN PANELS.

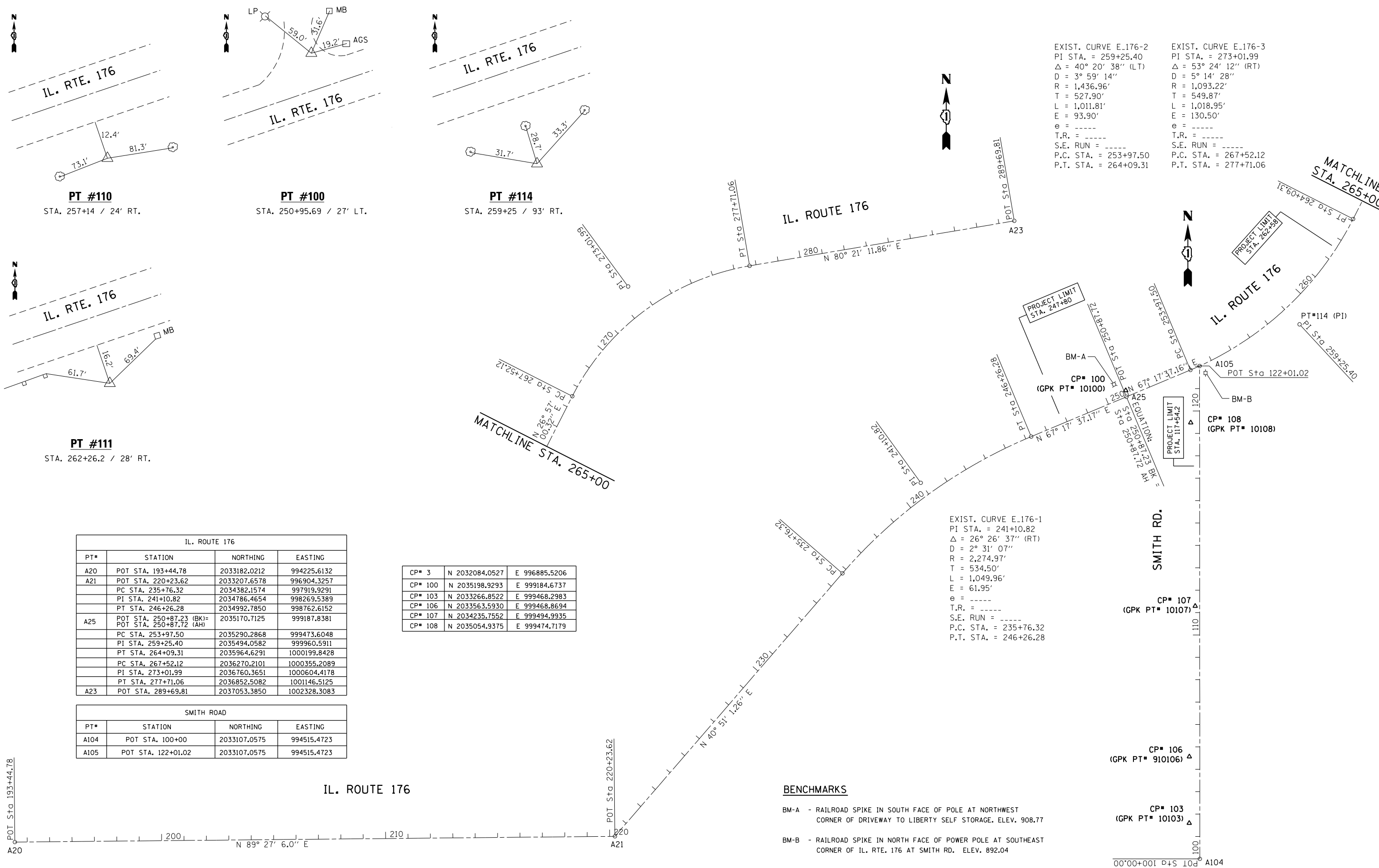
ALL SIGN PANELS TYPES, SIZES AND LOCATIONS ARE TO BE VERIFIED IN THE FIELD PRIOR TO ORDERING.

THE CROSS ROAD SIGN WILL BE REPLACED BY THE "SIGNAL AHEAD" SIGN ON THE EXISTING RELOCATED POST.

THE STOP SIGN SHALL NOT BE REMOVED UNTIL THE TRAFFIC SIGNAL HAS BEEN TURNED ON.

THE "SIGNAL AHEAD" SIGN SHALL BE COVERED UNTIL THE PROPOSED SIGNAL HAS BEEN TURNED ON.

FILE NAME =	USER NAME = obreueh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ILL 176 AT SMITH ROAD SIGN PANEL SCHEDULE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pwork\pwork\obreueh\dms99207\p114205-DESIGN.dgn	DRAWN -	REVISED -	335			146N-2	MCHENRY	65	17	
PLOT SCALE = 100.000' / in.	CHECKED -	REVISED -	CONTRACT NO. 60K20							
PLOT DATE = 12/12/2012	DATE -	REVISED -	SCALE:			SHEET NO.	OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT



EXIST. CURVE E.176-2
 PI STA. = 259+25.40
 Δ = 40° 20' 38" (LT)
 D = 3° 59' 14"
 R = 1,436.96'
 T = 527.90'
 L = 1,011.81'
 E = 93.90'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 253+97.50
 P.T. STA. = 264+09.31

EXIST. CURVE E.176-3
 PI STA. = 273+01.99
 Δ = 53° 24' 12" (RT)
 D = 5° 14' 28"
 R = 1,093.22'
 T = 549.87'
 L = 1,018.95'
 E = 130.50'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 267+52.12
 P.T. STA. = 277+71.06

EXIST. CURVE E.176-1
 PI STA. = 241+10.82
 Δ = 26° 26' 37" (RT)
 D = 2° 31' 07"
 R = 2,274.97'
 T = 534.50'
 L = 1,049.96'
 E = 61.95'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 235+76.32
 P.T. STA. = 246+26.28

IL. ROUTE 176			
PT#	STATION	NORTHING	EASTING
A20	POT STA. 193+44.78	2033182.0212	994225.6132
A21	POT STA. 220+23.62	2033207.6578	996904.3257
	PC STA. 235+76.32	2034382.1574	997919.9291
	PI STA. 241+10.82	2034786.4654	998269.5389
	PT STA. 246+26.28	2034992.7850	998762.6152
A25	POT STA. 250+87.23 (BK)= POT STA. 250+87.72 (AH)	2035170.7125	999187.8381
	PC STA. 253+97.50	2035290.2868	999473.6048
	PI STA. 259+25.40	2035494.0582	999960.5911
	PT STA. 264+09.31	2035964.6291	1000199.8428
	PC STA. 267+52.12	2036270.2101	1000355.2089
	PI STA. 273+01.99	2036760.3651	1000604.4178
	PT STA. 277+71.06	2036852.5082	1001146.5125
A23	POT STA. 289+69.81	2037053.3850	1002328.3083

CP# 3	N	2032084.0527	E	996885.5206
CP# 100	N	2035198.9293	E	999184.6737
CP# 103	N	2033266.8522	E	999468.2983
CP# 106	N	2033563.5930	E	999468.8694
CP# 107	N	2034235.7552	E	999494.9935
CP# 108	N	2035054.9375	E	999474.7179

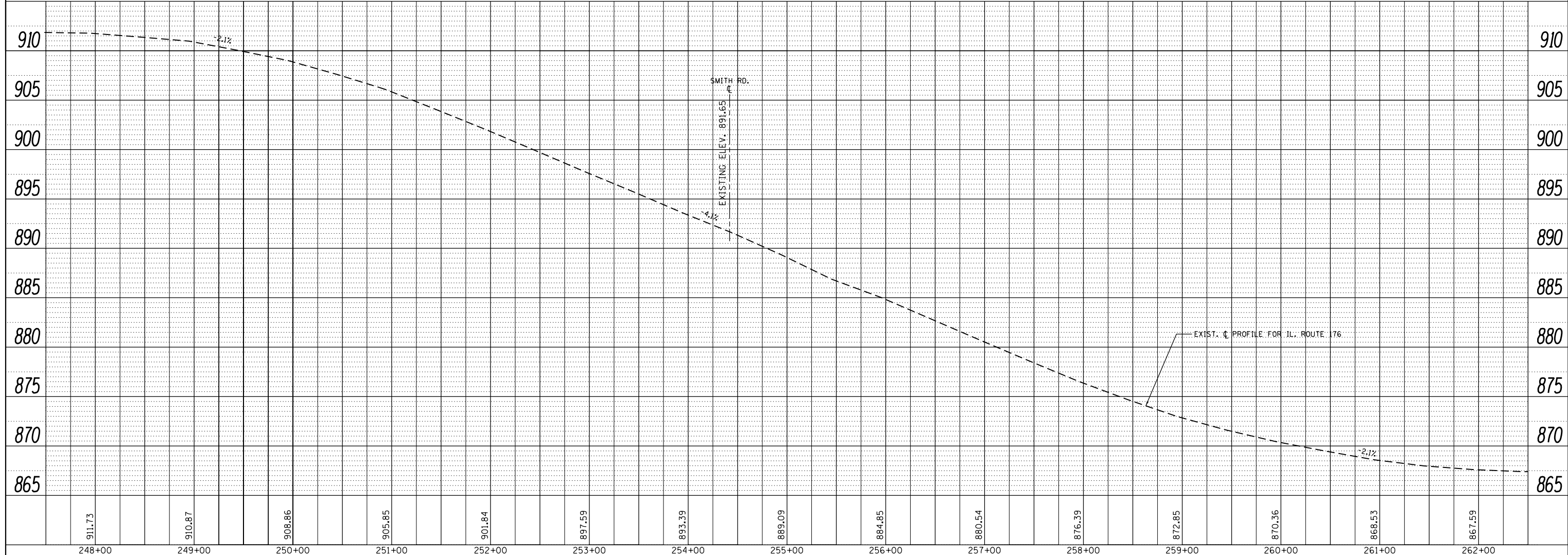
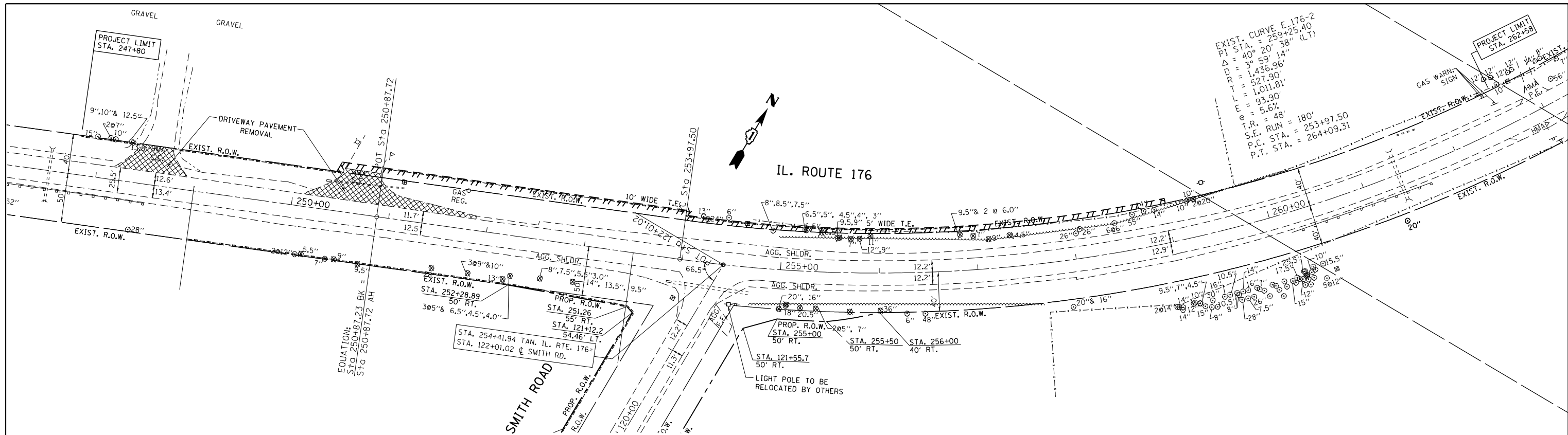
SMITH ROAD			
PT#	STATION	NORTHING	EASTING
A104	POT STA. 100+00	2033107.0575	994515.4723
A105	POT STA. 122+01.02	2033107.0575	994515.4723

BENCHMARKS

- BM-A - RAILROAD SPIKE IN SOUTH FACE OF POLE AT NORTHWEST CORNER OF DRIVEWAY TO LIBERTY SELF STORAGE. ELEV. 908.77
- BM-B - RAILROAD SPIKE IN NORTH FACE OF POWER POLE AT SOUTHEAST CORNER OF IL. RTE. 176 AT SMITH RD. ELEV. 892.04

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES		
	CHECKED		
	STRUCTURE		
	NOTATIONS		
	CHKD		
	NO.		

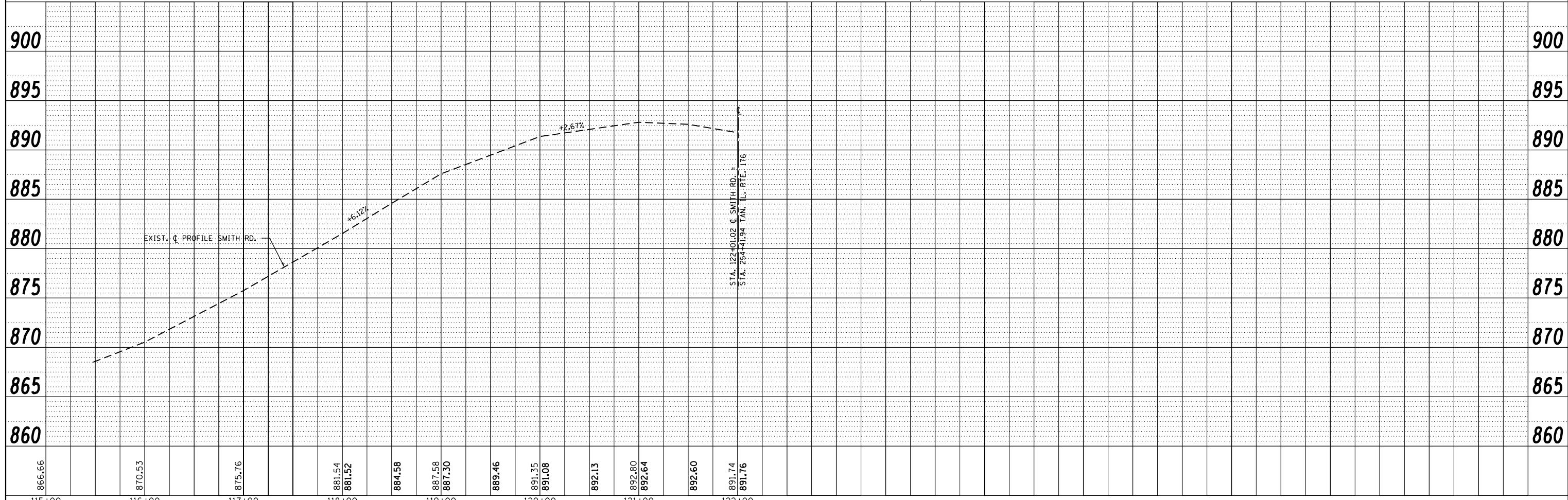
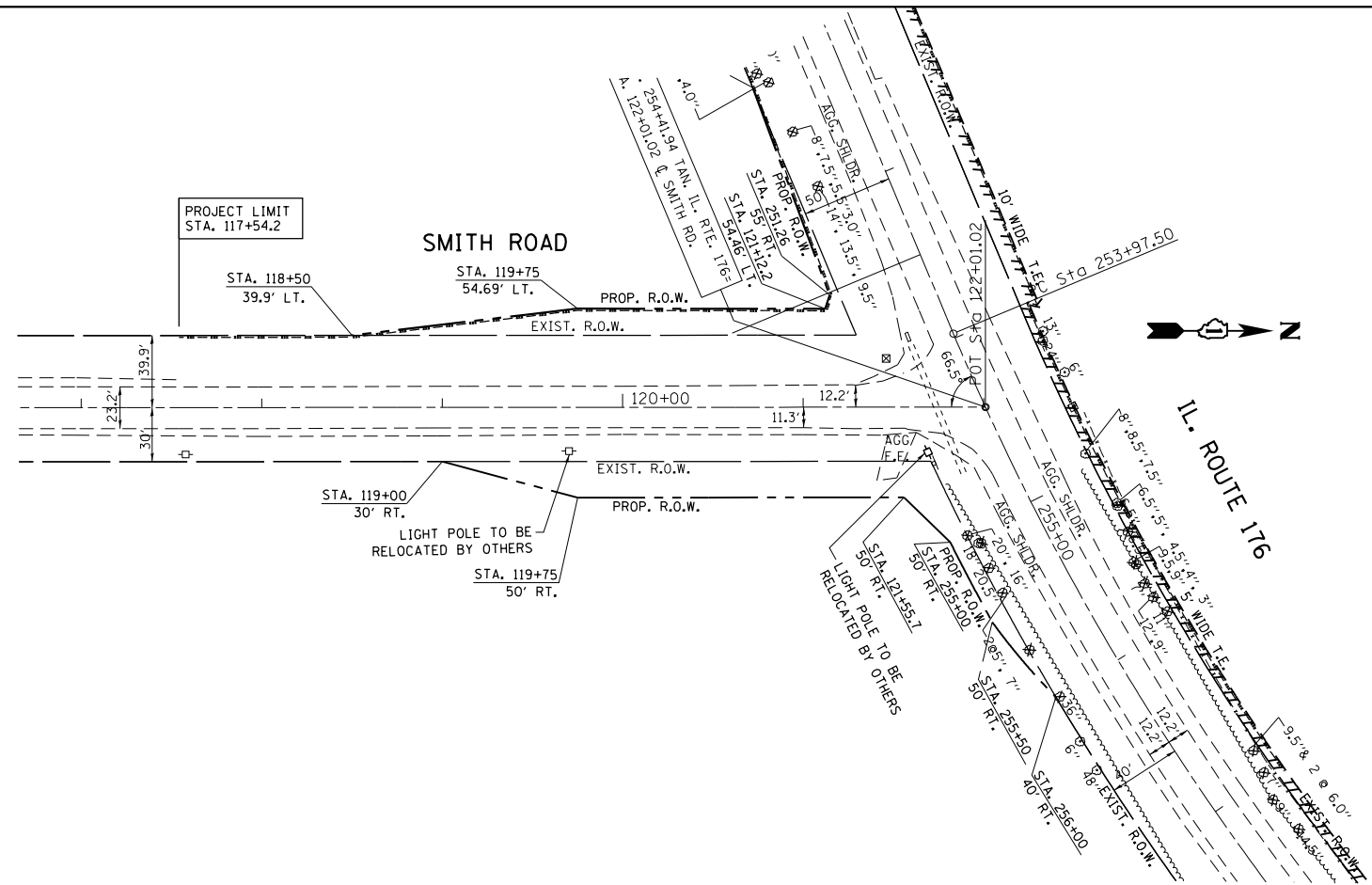


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PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -		CONTRACT NO. 60K20								
PLOT DATE = 12/12/2012		DATE -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES		
	CHECKED		
	STRUCTURE		
	NOTATIONS		
	NO.		

*REF: p16r02
*REF: p16r02



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	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 12/12/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

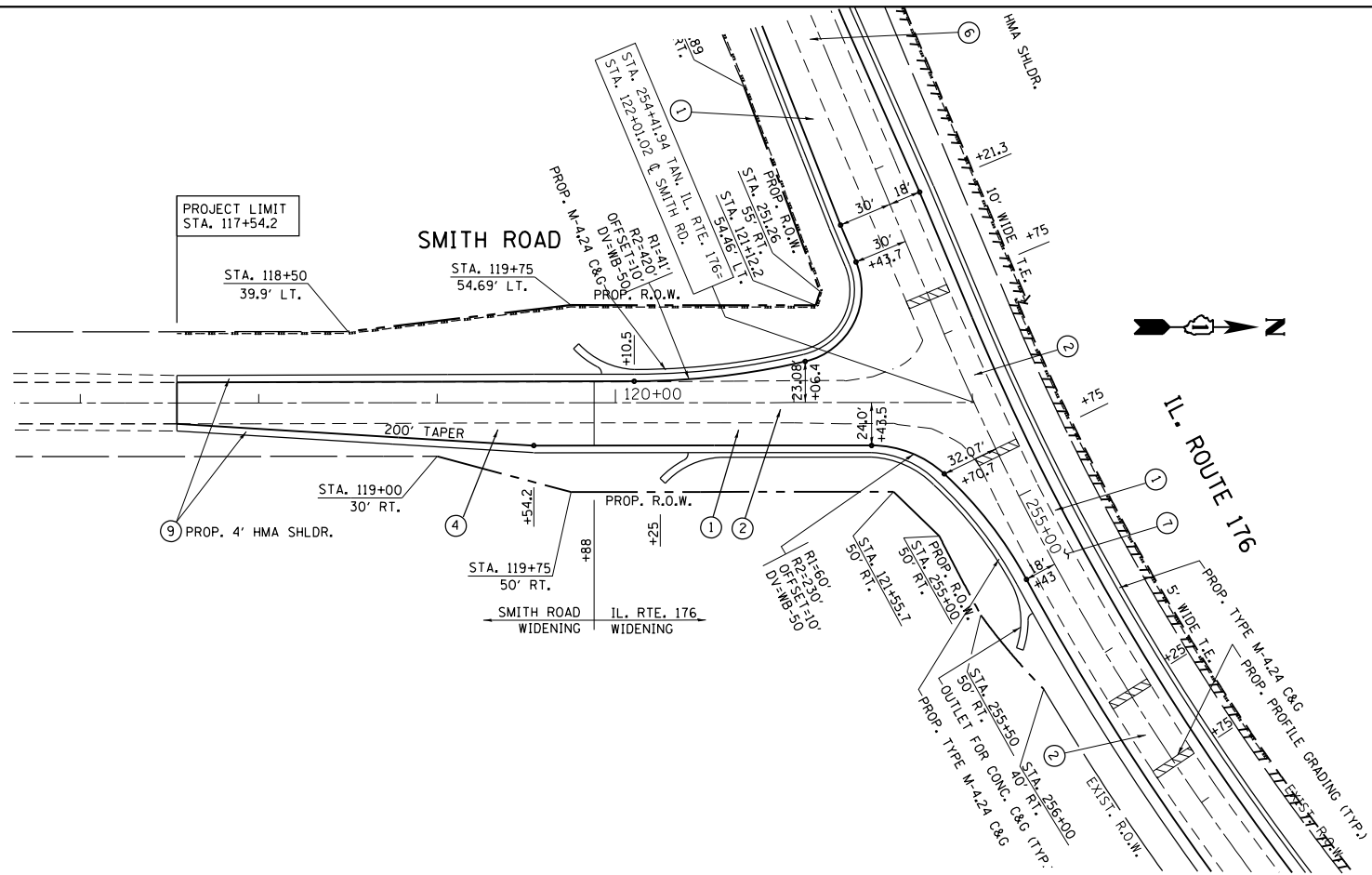
EXISTING ROADWAY PLAN & PROFILE
SMITH RD. AT IL. RTE. 176
SCALE: 1"=50' SHEET NO. OF SHEETS STA. 115+00 TO STA. 122+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	20
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60K20	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILED	
	FILE NAME	
	NO.	

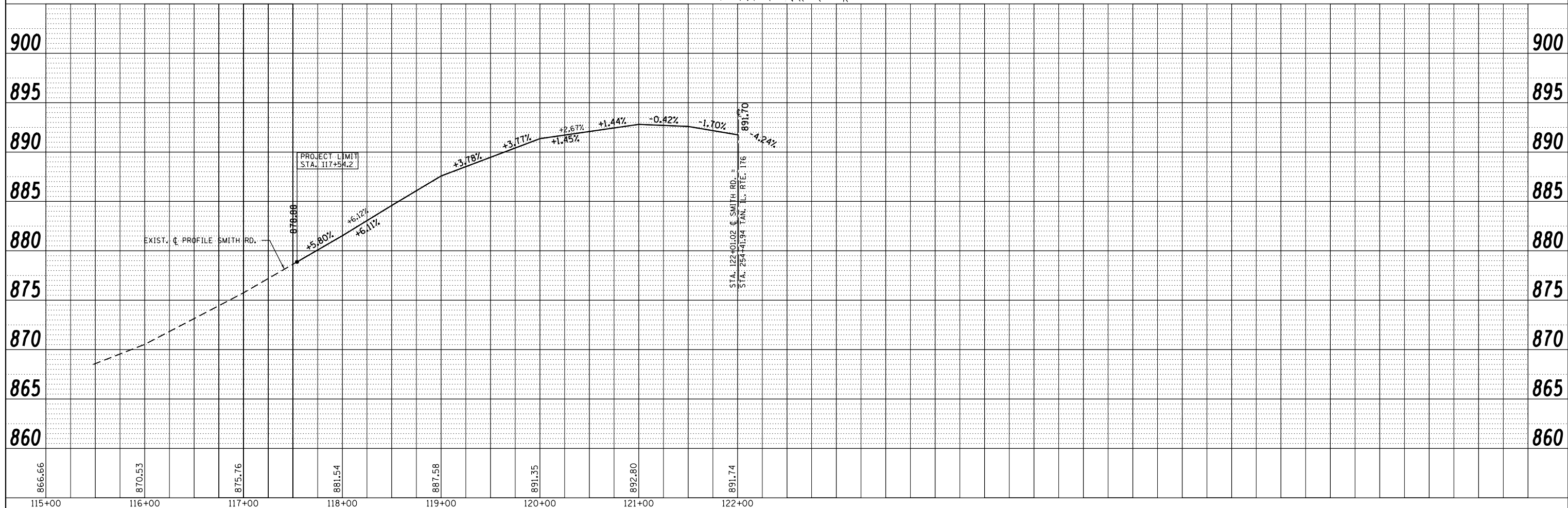
PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHFD	
	NO.	

*REF: plan02
*REF: prof02



LEGEND:

- ① IL. RTE. 176 (WIDENING)
 - PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
 - PROPOSED HOT-MIX ASPHALT BASE COURSE, (HMA BINDER IL 19 mm, N90), 9"
 - PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2 1/2"
- ② (RESURFACING)
 - PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2 1/2"
 - PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2 1/2"
- ③ (HMA CE)
 - PROPOSED HOT-MIX ASPHALT BASE COURSE, (HMA BINDER, IL 19 mm), 8"
 - PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL 9.5 mm), 2"
- ④ SMITH ROAD (WIDENING)
 - PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
 - PROPOSED HOT-MIX ASPHALT BASE COURSE, (HMA BINDER IL 19 mm, N90), 4 1/2 "
 - PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2 1/2"
- ⑤ (RESURFACING)
 - PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 4"
 - PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2 1/2"
- ⑥ - PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2 1/2"
- PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2 1/2"
- PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 4"
- ⑦ - PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2 3/4"
- PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2 1/2"
- PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 1/4"
- ⑧ - (SHOULDER ALONG IL 176)
 - PROPOSED HOT-MIX ASPHALT SHOULDER (HMA BINDER IL 19 mm), 5 1/2 "
 - PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, IL 9.5 mm), 2 1/2 "
- ⑨ - (SHOULDER ALONG SMITH RD.)
 - PROPOSED HOT-MIX ASPHALT SHOULDER (HMA BINDER IL 19 mm), 4 1/2 "
 - PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, IL 9.5 mm), 2 1/2 "



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	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 12/12/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED ROADWAY PLAN & PROFILE
SMITH RD. AT IL. RTE. 176**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 115+00 TO STA. 122+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	22
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60K20	

THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN EROSION CONTROL MEASURES IMMEDIATELY AFTER STRIPPING OF EXISTING VEGETATION.

NO RUNOFF FROM STRIPPED AREAS WILL LEAVE THE SITE OTHER THAN THROUGH A SERIES OF TEMP DITCH CHECKS. THE CONTRACTOR WILL ADJUST HIS OPERATIONS AND IMPLEMENT EROSION CONTROL MEASURES ACCORDINGLY.

THE QUANTITIES SHOWN FOR TEMPORARY DITCH CHECKS ARE MEASURED PER FOOT, REGARDLESS OF TYPE OR CONFIGURATION USED.

THE CONTRACTOR SHALL SURROUND ALL EARTH STOCKPILES WITH SILT FENCE, THIS SHALL BE PAID FOR AS PERIMETER EROSION BARRIER. EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE CONTRACTOR AND ENGINEER AFTER ANY STORM EXCEEDING 0.5 INCH OR GREATER IN A 24 HOUR PERIOD, OR EQUIVALENT SNOWFALL. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED AFTER EACH SIGNIFICANT SNOWMELT.

STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING WITHIN 7 DAYS.

ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORM WATER PERMIT.

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT POLLUTION OF STORM WATER AND SHALL FOLLOW IEPA & IDOT CONSTRUCTION MEMORANDUM NO. 95-60.

EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH SEQUENCE OF STAGE CONSTRUCTION.

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE EXCEED 7 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED ON ALL DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR A PERIOD OF 14 OR MORE CALENDER DAYS.

THE CONTRACTOR SHALL APPLY TEMPORARY EROSION CONTROL SEEDING TO ALL ERODIBLE BARE EARTH AREAS WITHIN THE CONTRACT LIMITS EACH WEEK, REGARDLESS OF WEATHER CONDITIONS OR PROGRESS OF THE WORK. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, ERODIBLE EMBANKMENT AND EXCAVATION AREAS WHERE WORK IS IN PROGRESS SHALL BE INCLUDED ON THE AREAS TO BE SEEDED. SEE SPECIAL PROVISION FOR TEMPORARY EROSION CONTROL SEEDING.

ALL PERIMETER EROSION BARRIER SHALL BE PLACED IN STAGE I, IF REQUIRED IN STAGE II IT SHALL BE LEFT IN PLACE. IT SHALL ONLY BR REPLACED IF DAMAGED, AT THE DIRECTION OF THE ENGINEER.

REFER TO LANDSCAPING PLAN FOR AREAS TO BE SEEDED

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL REVISED FEBRUARY 2012.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

DEWATERING SHALL BE CONDUCTED IN ACCORDANCE WITH IUM STANDARD 813 (UPDATED 06/2010). DEWATERING INTO DRAIN TILES IS STRICTLY PROHIBITED. COMPROMISED DRAIN TILES SHOULD BE IMMEDIATELY REPAIRED OR INCORPORATED INTO STORM WATER FACILITIES.

ALL DROP INLETS ON AND ADJACENT TO THE SITE MUST HAVE A SEDIMENT TRAPPING OR CONTAINMENT DEVICE INSTALLED DURING CONSTRUCTION ACTIVITIES.

ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY AND CLEANED WHEN NECESSARY.

ALL EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND AFTER EACH 1/2" RAIN EVENT OR GREATER IN A 24 HOUR PERIOD, OR EQUIVALENT SNOWFALL. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED AFTER EACH SIGNIFICANT SNOWMELT.

EROSION CONTROL BLANKET AND/OR STRAW MULCH WITH NETTING (DEPENDING ON SLOPE, SLOPE LENGTH, AND FLOW RATES) SHALL BE INSTALLED ON ALL SLOPES AND IN CRITICAL AREAS IMMEDIATELY UPON FINAL GRADING.

THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.

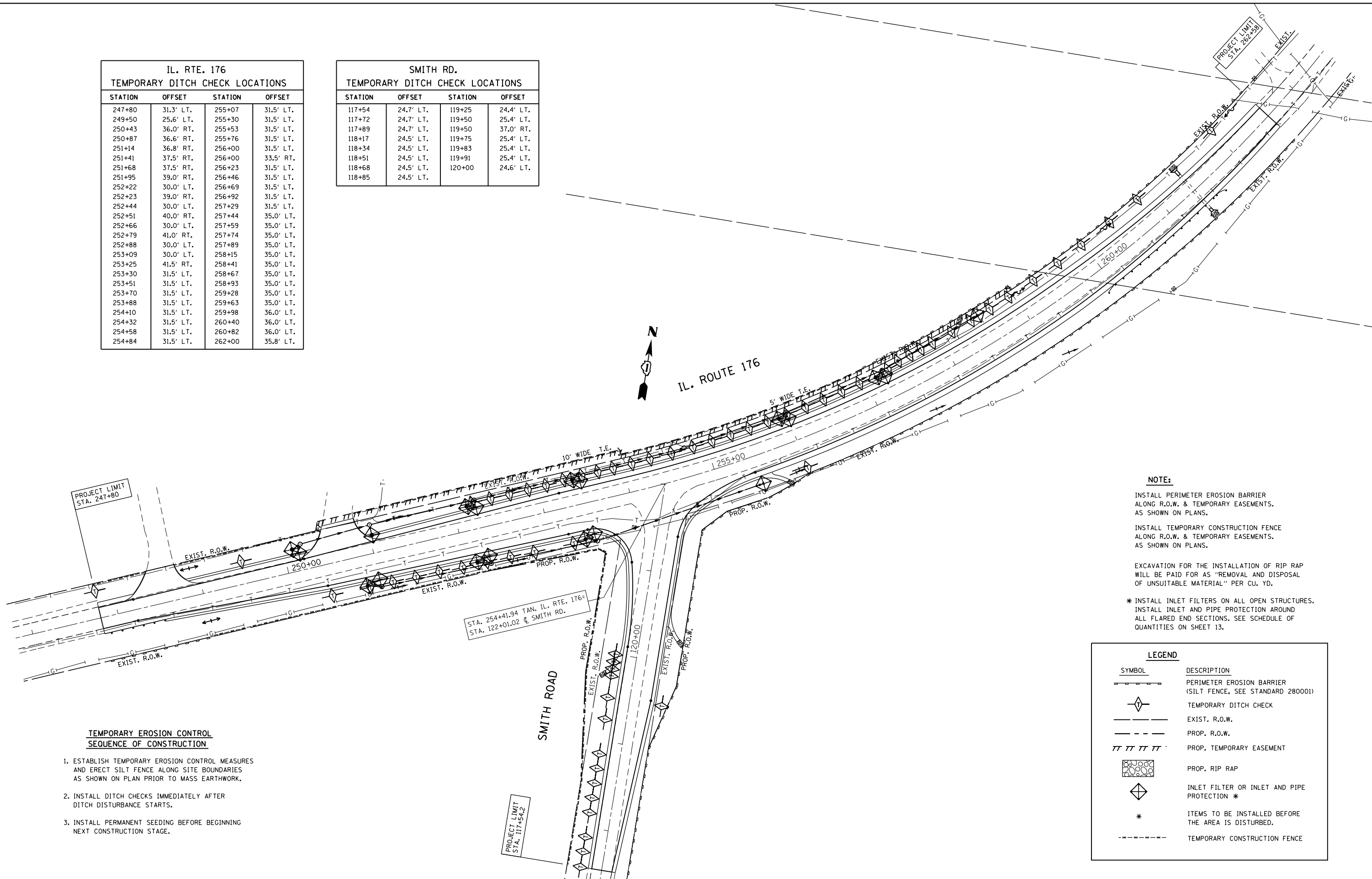
IN AREAS WHERE WORK IS COMPLETE, PERMANENT STABILIZATION SHALL OCCUR WITHIN 7 DAYS OF COMPLETION, AND IN AREAS WHERE WORK HAS TEMPORARILY CEASED FOR 14 DAYS OR MORE, TEMPORARY STABILIZATION SHALL OCCUR BY THE 7TH DAY AFTER WORK HAS CEASED.

COMPLETED SLOPES SHALL BE SEEDED AND MULCHED (OR BLANKETED, IF APPLICABLE) AS THE EXCAVATION PROCEEDS TO THE EXTENT CONSIDERED DESIRABLE AND PRACTICAL. PERMANENT SEEDING SHALL BE USED WHENEVER POSSIBLE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME. NO WORK SHALL BE PERFORMED IN FLOWING WATER. WATER IN AND NEAR THE CRITICAL AREAS SHOULD BE ISOLATED FROM CONCENTRATED FLOWS OR STREAM FLOW. THE STREAM BANKS SHOULD BE STABILIZED AT THE END OF EACH DAY. ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS.

FILE NAME =	USER NAME = obreueh	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ILL 176 AT SMITH ROAD EROSION CONTROL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\p1dot\obreueh\dms99207\P114	05-DESIGN.dgn	DRAWN -	REVISED -			335	146N-2	MCHENRY	65	23	
	PLOT SCALE = 100.000' / 1" =	CHECKED -	REVISED -			CONTRACT NO. 60K20					
	PLOT DATE = 12/12/2012	DATE -	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA.	TO
ILLINOIS FED. AID PROJECT											

IL. RTE. 176 TEMPORARY DITCH CHECK LOCATIONS			
STATION	OFFSET	STATION	OFFSET
247+80	31.3' LT.	255+07	31.5' LT.
249+50	25.6' LT.	255+30	31.5' LT.
250+43	36.0' RT.	255+53	31.5' LT.
250+87	36.6' RT.	255+76	31.5' LT.
251+14	36.8' RT.	256+00	31.5' LT.
251+41	37.5' RT.	256+00	33.5' RT.
251+68	37.5' RT.	256+23	31.5' LT.
251+95	39.0' RT.	256+46	31.5' LT.
252+22	30.0' LT.	256+69	31.5' LT.
252+23	39.0' RT.	256+92	31.5' LT.
252+44	30.0' LT.	257+29	31.5' LT.
252+51	40.0' RT.	257+44	35.0' LT.
252+66	30.0' LT.	257+59	35.0' LT.
252+79	41.0' RT.	257+74	35.0' LT.
252+88	30.0' LT.	257+89	35.0' LT.
253+09	30.0' LT.	258+15	35.0' LT.
253+25	41.5' RT.	258+41	35.0' LT.
253+30	31.5' LT.	258+67	35.0' LT.
253+51	31.5' LT.	258+93	35.0' LT.
253+70	31.5' LT.	259+28	35.0' LT.
253+88	31.5' LT.	259+63	35.0' LT.
254+10	31.5' LT.	259+98	36.0' LT.
254+32	31.5' LT.	260+40	36.0' LT.
254+58	31.5' LT.	260+82	36.0' LT.
254+84	31.5' LT.	262+00	35.8' LT.

SMITH RD. TEMPORARY DITCH CHECK LOCATIONS			
STATION	OFFSET	STATION	OFFSET
117+54	24.7' LT.	119+25	24.4' LT.
117+72	24.7' LT.	119+50	25.4' LT.
117+89	24.7' LT.	119+50	37.0' RT.
118+17	24.5' LT.	119+75	25.4' LT.
118+34	24.5' LT.	119+83	25.4' LT.
118+51	24.5' LT.	119+91	25.4' LT.
118+68	24.5' LT.	120+00	24.6' LT.
118+85	24.5' LT.		



NOTE:

INSTALL PERIMETER EROSION BARRIER ALONG R.O.W. & TEMPORARY EASEMENTS, AS SHOWN ON PLANS.

INSTALL TEMPORARY CONSTRUCTION FENCE ALONG R.O.W. & TEMPORARY EASEMENTS, AS SHOWN ON PLANS.

EXCAVATION FOR THE INSTALLATION OF RIP RAP WILL BE PAID FOR AS "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL" PER CU. YD.

* INSTALL INLET FILTERS ON ALL OPEN STRUCTURES. INSTALL INLET AND PIPE PROTECTION AROUND ALL FLARED END SECTIONS. SEE SCHEDULE OF QUANTITIES ON SHEET 13.

LEGEND	
SYMBOL	DESCRIPTION
	PERIMETER EROSION BARRIER (SILT FENCE, SEE STANDARD 280001)
	TEMPORARY DITCH CHECK
	EXIST. R.O.W.
	PROP. R.O.W.
	PROP. TEMPORARY EASEMENT
	PROP. RIP RAP
	INLET FILTER OR INLET AND PIPE PROTECTION *
*	ITEMS TO BE INSTALLED BEFORE THE AREA IS DISTURBED.
	TEMPORARY CONSTRUCTION FENCE

**TEMPORARY EROSION CONTROL
SEQUENCE OF CONSTRUCTION**

1. ESTABLISH TEMPORARY EROSION CONTROL MEASURES AND ERECT SILT FENCE ALONG SITE BOUNDARIES AS SHOWN ON PLAN PRIOR TO MASS EARTHWORK.
2. INSTALL DITCH CHECKS IMMEDIATELY AFTER DITCH DISTURBANCE STARTS.
3. INSTALL PERMANENT SEEDING BEFORE BEGINNING NEXT CONSTRUCTION STAGE.

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PLOT DATE = 12/12/2012		DATE - 07/24/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

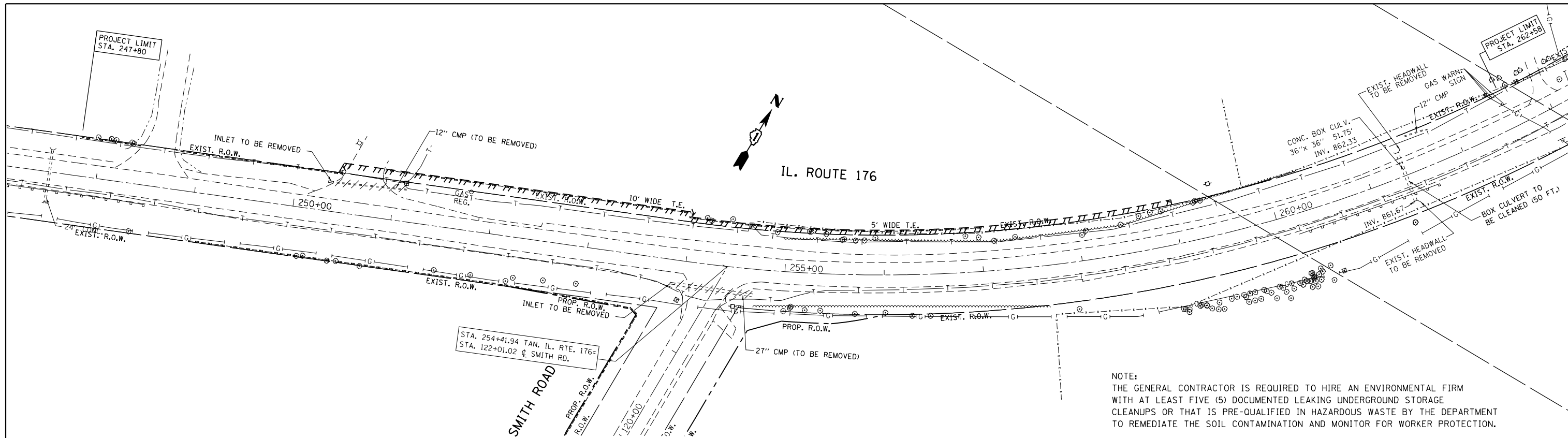
**EROSION CONTROL PLAN
PLAN IL. RTE 176 AT SMITH RD.**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 247+80 TO STA. 262+58

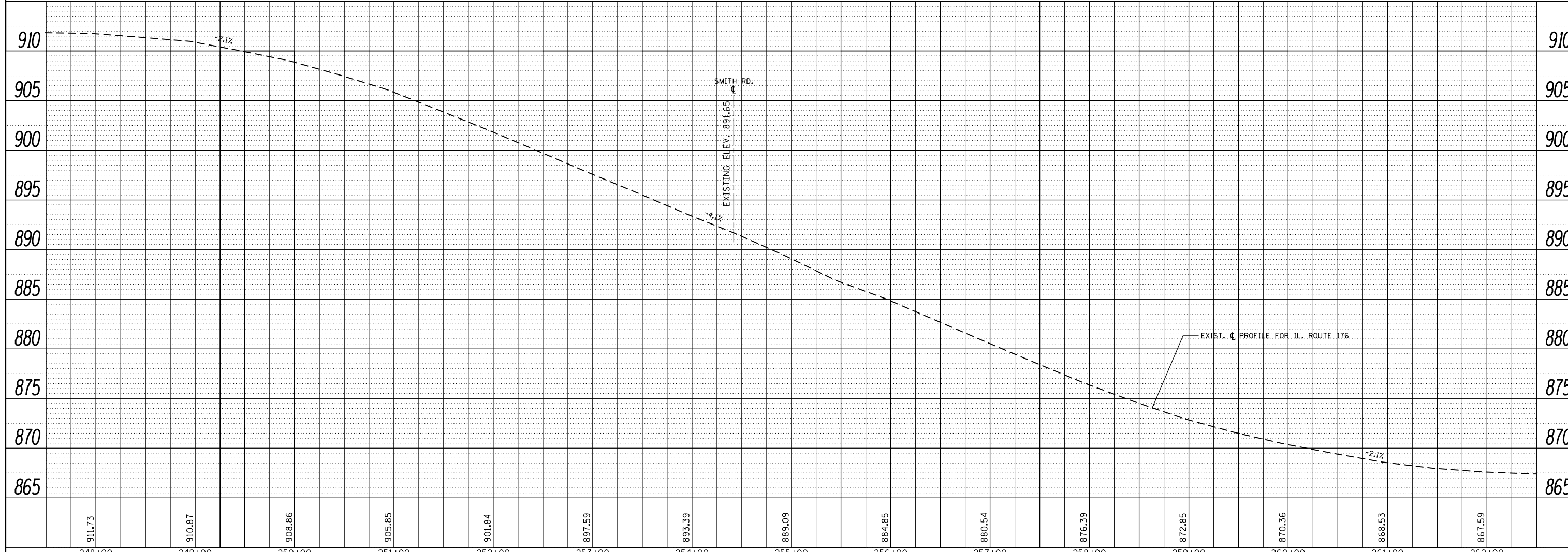
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146 N-2	MCHENRY	65	24
CONTRACT NO. 60K20				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	CHECKED		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK		
	CHECKED		
	FILE NAME		



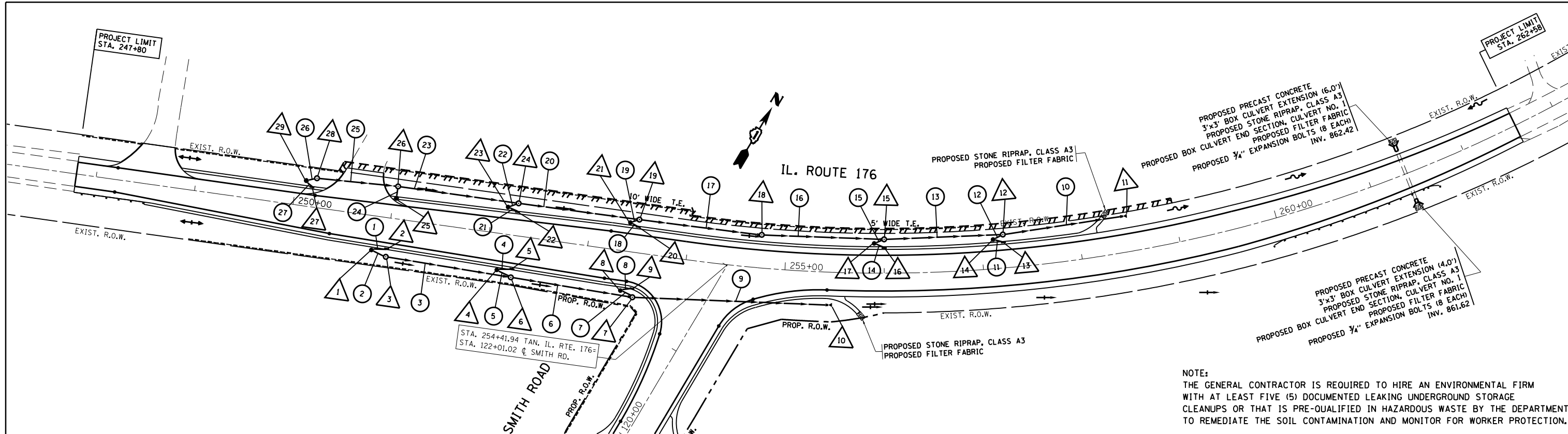
NOTE:
THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.



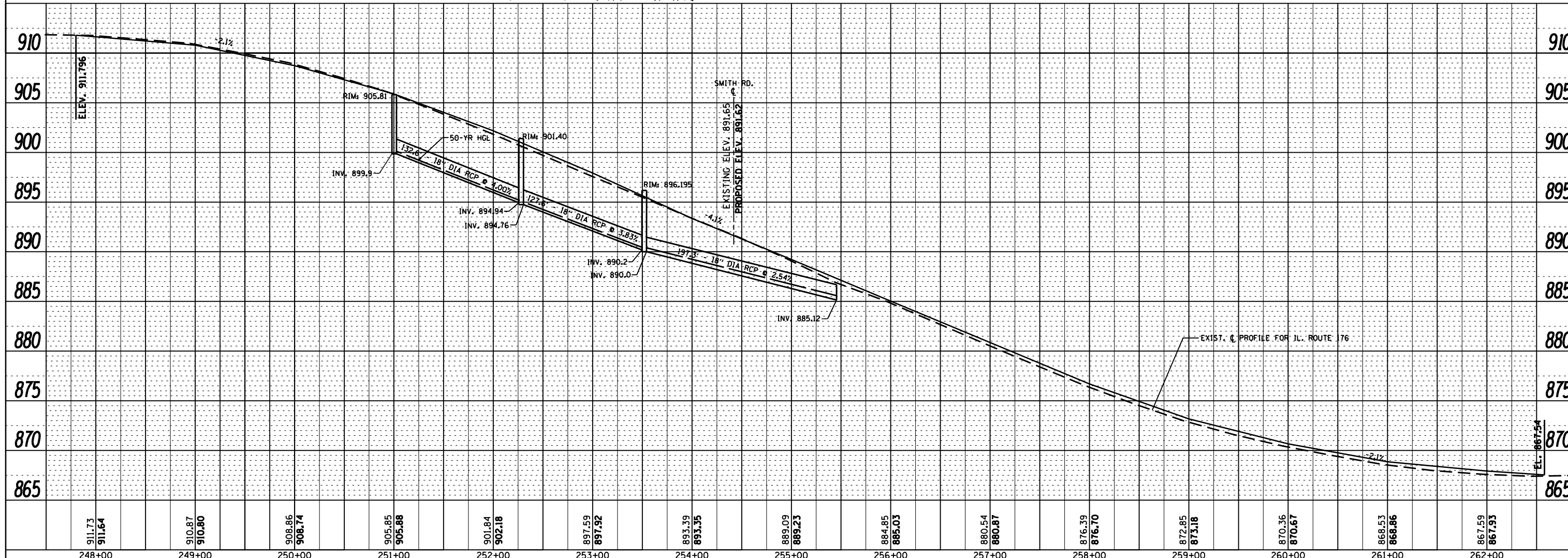
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	PLOT DATE = 12/12/2012	CHECKED -	REVISED -							ILLINOIS FED. AID PROJECT
		DATE -	REVISED -							

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.	



NOTE:
 THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.



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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

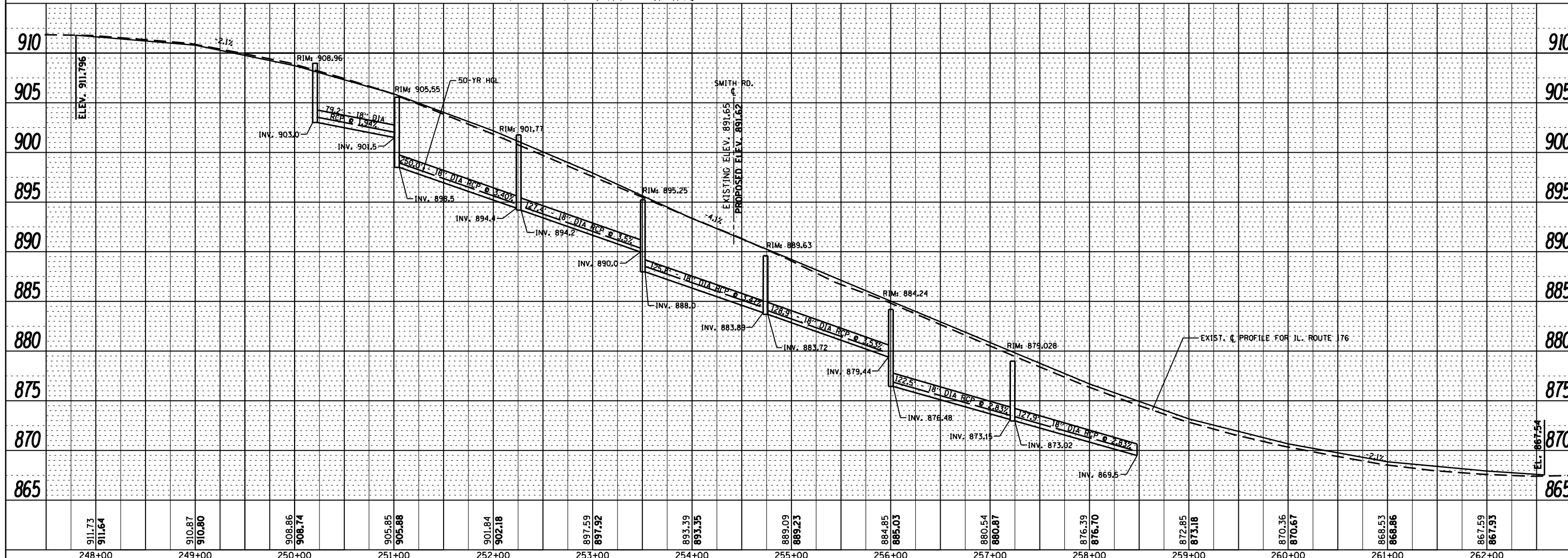
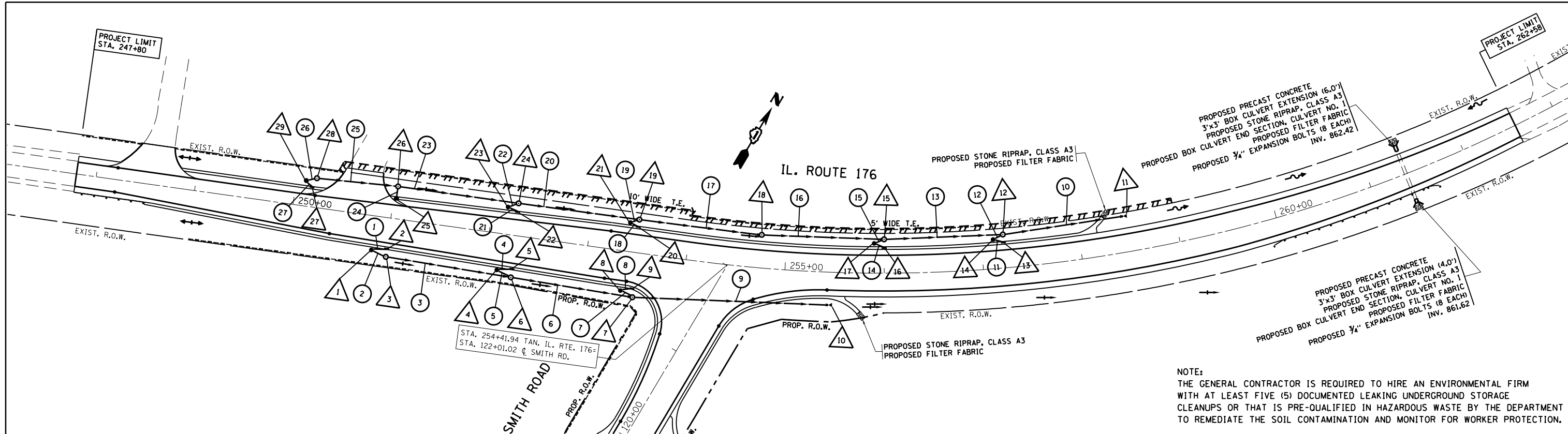
**PROPOSED DRAINAGE & UTILITIES PLAN & RIGHT SIDE PROFILE
 IL. RTE. 176 AT SMITH RD.**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	26
CONTRACT NO. 60K20			ILLINOIS FED. AID PROJECT	

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

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.	



FILE NAME =	USER NAME = abreuah	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED DRAINAGE & UTILITIES PLAN & LEFT SIDE PROFILE IL. RTE. 176 AT SMITH RD.				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 60K20				
PLOT DATE = 11/1/2013		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								

STORM SEWER TABLE							
NO.	STATION - STATION	CLASS	TYPE	DIAMETER (IN)	LENGTH (FT)	SLOPE (%)	TBF (CU.YD.)
1	250+86.5-250+99.5	A	2	18	13.7	1.00	0.41
2	250+86.7-250+97.6	A	2	18	12.4	1.00	
3	251+02.7-252+25.5	A	2	18	132.6	4.00	
4	252+14.9-252+27.8	A	2	18	13.5'	1.50	0.41
5	252+14.9-252+26.1	A	2	18	12.2'	0.50	
6	252+30-253+49.2	A	2	18	127.6'	3.83	
7	253+41.2-253+50	A	2	18	10.1'	1.00	
8	253+40.8-253+50.3	A	2	18	10.5'	1.00	0.41
9	253+54.2-255+45	A	2	18	197.3'	2.54	52.9
10	257+24.9-258+48	A	2	18	127.9'	2.83	
11	257+14.4-257+22.3	A	2	18	8.9'	1.00	0.41
12	257+14.3-257+20.3	A	2	18	7.0'	1.00	
13	256+02.6-257+20.1	A	2	18	122.5'	2.83	
14	255+92-256+00	A	2	18	9.3'	1.00	0.41
15	255+92-255+98	A	2	18	6.8'	1.47	
16	254+76.4-255+97.4	A	2	18	128.9'	3.53	
17	253+50-254+71	A	2	18	125.8'	3.47	
18	253+42-253+48	A	2	18	7.35'	1.00	0.41
19	253+41-253+46	A	2	18	5.31'	1.00	
20	252+27.6-253+45.6	A	2	18	125.8'	3.47	
21	252+17.5-252+25.3	A	2	18	8.63'	1.00	0.41
22	252+17.4-252+23.2	A	2	18	7.3'	1.00	
23	251+05.1-252+22.9	A	2	18	127.4'	3.50	
24	251+02.8-251+02.8	A	2	18	7.87'	1.00	0.41
26	250+12.3-250+17.9	A	2	18	6.65'	1.05	
27	250+11.6-250+16.5	A	2	18	6.43'	1.00	0.41

PIPE CULVERT TABLE							
NO.	STATION - STATION	CLASS	TYPE	DIAMETER (IN)	LENGTH (FT)	SLOPE (%)	TBF (CU.YD.)
25	250+22.6-251+00.4	A	2	18	79.2'	1.94	17.7

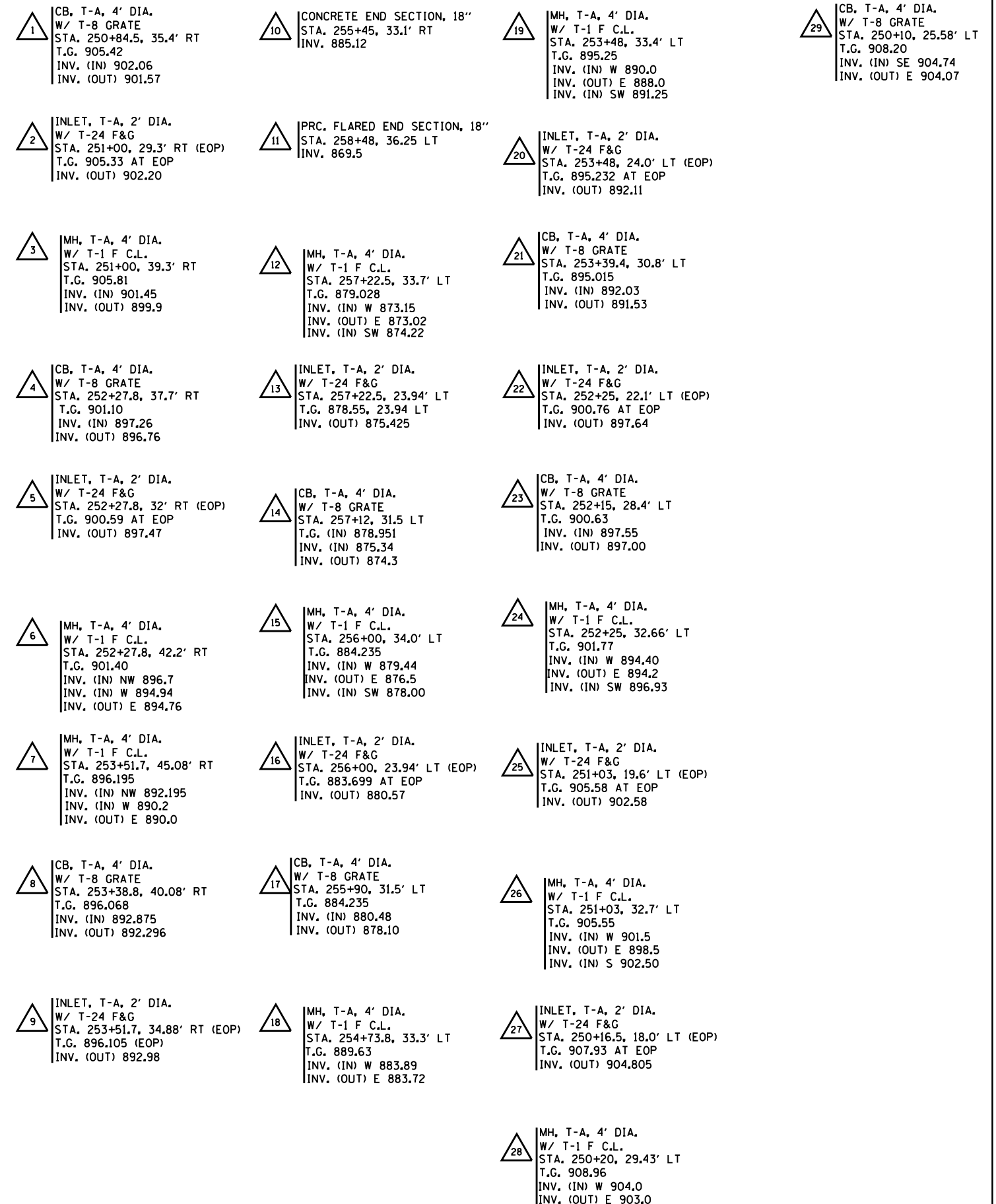
LONGITUDINAL PIPE UNDERDRAIN TABLE								
LOCATION	STATION - STATION	O/S (FT)	DIAMETER (IN)	LENGTH (FT)	WEST OUTLET	EAST OUTLET	NORTH OUTLET	SOUTH OUTLET
IL 176	252+27.8 - 253+51.7	29.0 RT	4	132	△5	△9		
IL 176	256+00 - 257+22.5	18.0 LT	4	134.5	△16	△13		
IL 176	259+00 - 260+00	18.0 RT	4	100.0	DITCH	DITCH		
SMITH RD.	118+00 - 119+00	RT	4	100.0			NONE	DITCH

PIPE UNDERDRAIN NOTES:

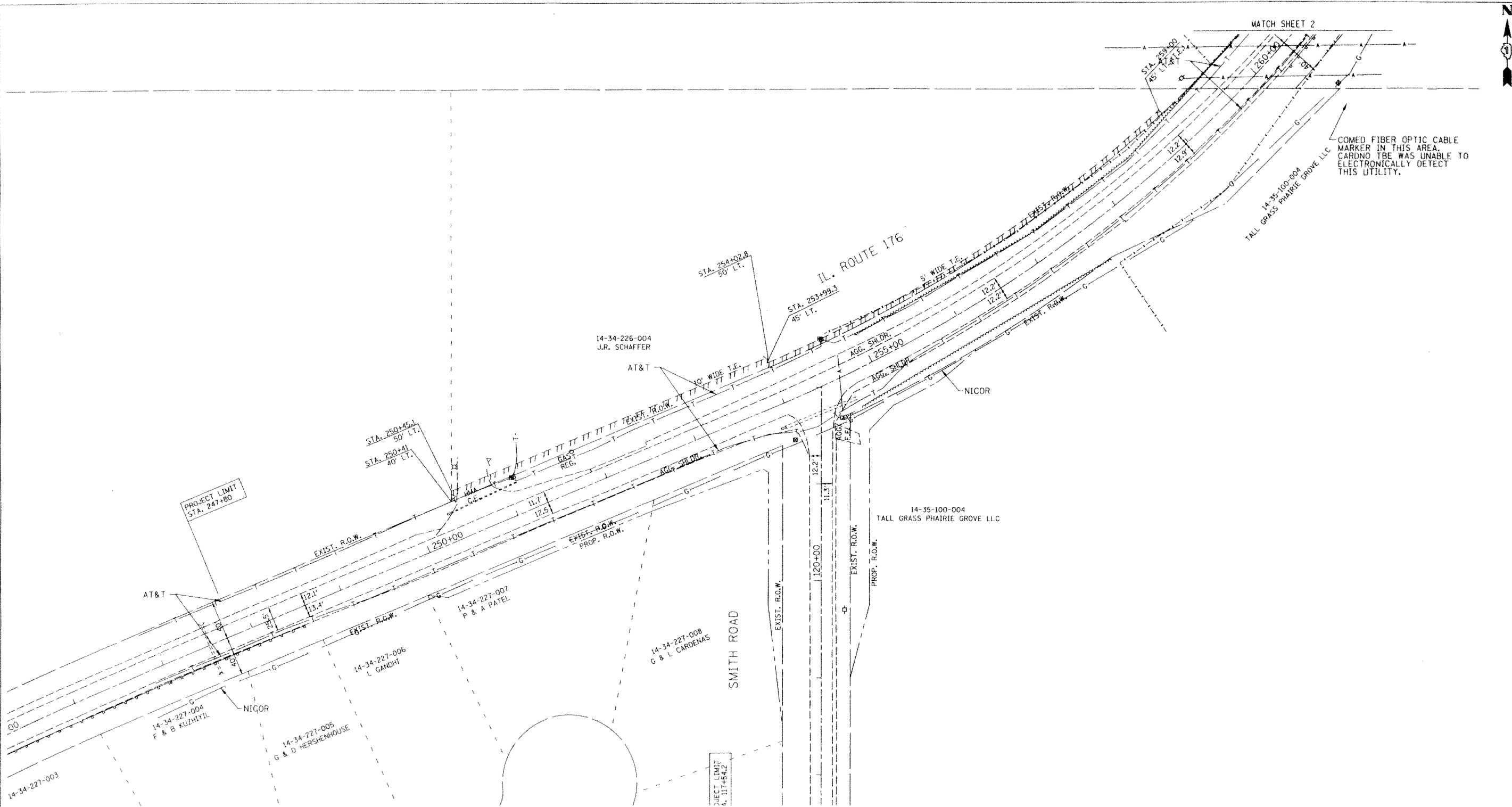
LONGITUDINAL UNDERDRAINS MUST BE PLACED ALONG THE OUTSIDE EDGES OF THE PROPOSED WIDENING AT APPROXIMATELY THESE LOCATIONS.

LONGITUDINAL UNDERDRAINS SHOULD BE PLACED WITHIN AREAS OF AGGREGATE SUBGRADE IMPROVEMENT 12" OR UNDERCUTS REPLACED WITH AGGREGATE SUBGRADE IMPROVEMENT.

UNDERDRAINS SHALL BE PLACED AT A DEPTH OF 30 INCHES BELOW THE TOP OF THE PROPOSED PAVEMENT.



FILE NAME =	USER NAME = abreuah	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE STRUCTURES AND PIPE TABLE IL 176 AT SMITH ROAD			F.A.P. RTE. 335	SECTION 146N-2	COUNTY MCHENRY	TOTAL SHEETS 65	SHEET NO. 28
et:\pw\work\p14\dot\abreuah\dms99207\P114205-DESIGN.dgn		DRAWN -	REVISED -		SCALE: N.T.S.	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS			
		PLOT SCALE = 100.000' / in.	REVISED -		CONTRACT NO. 60K20							
		CHECKED -	REVISED -									
		DATE - 11/1/2013	REVISED -									

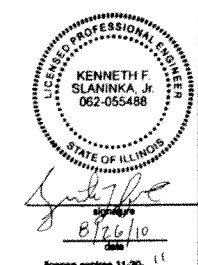


COMED FIBER OPTIC CABLE MARKER IN THIS AREA. CARDNO TBE WAS UNABLE TO ELECTRONICALLY DETECT THIS UTILITY.

- A — A — AERIAL UTILITY
- CTV — CTV — CABLE TV
- T — T — TELEPHONE
- G — G — GAS
- E — E — ELECTRIC
- W — W — WATER
- FO — FO — FIBER OPTIC
- S — S — SEWER
- ⊕ TBE TEST HOLE

Utilities shown in color on these plans as depicted in the legend have been investigated by Cardno TBE in accordance with SUE Industry Standards. All other information shown has been provided to Cardno TBE by others. TBE's SUE field investigation was finished on 7/29/10. Changes to utilities after this date may have been made and therefore may result in variances from this plan. Consideration should be given to updating this plan if deemed advisable prior to final design and construction.

ALL UTILITIES SHOWN IN COLOR QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



TBE Job No. IL09510414
SUE Plan Page: 1 of 2

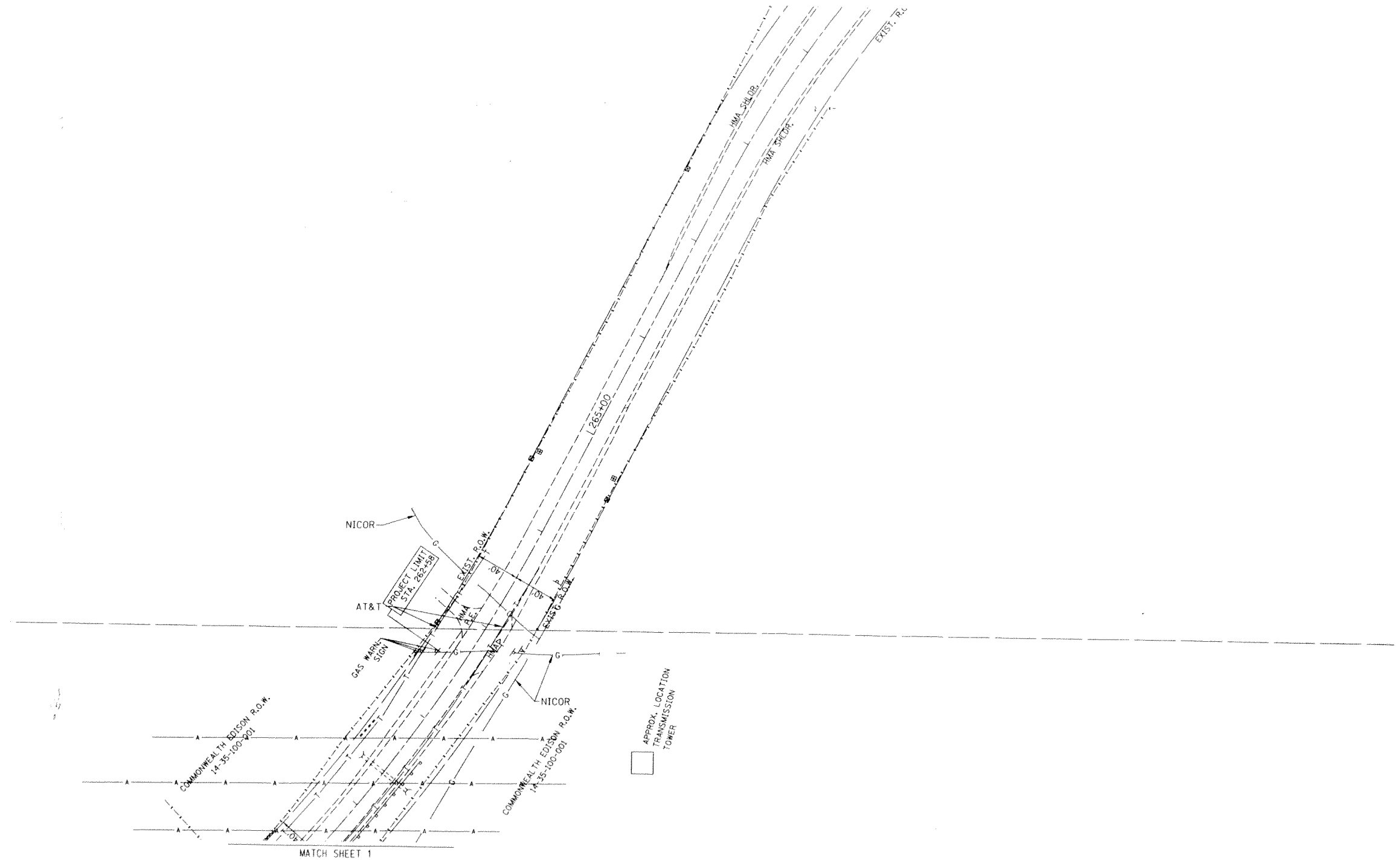
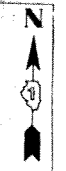
Utility Quality Level "A" : Test Hole
Utility Quality Level "B" : Designating
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

DESIGNED	EG	REVISED
DRAWN	KLC	REVISED
CHECKED		REVISED
DATE	7/20/10	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RT. 176 at Smith Road
Crystal Lake, IL

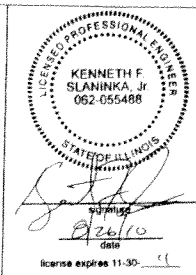
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	146 N-2	McHenry	65	29
FED. ROAD DIST. NO. [ILLINOIS] IDOT Project No.			Contract No. 60K20	



— A — A —	AERIAL UTILITY
- - - - -	UNKNOWN
— CTV — CTV —	CABLE TV
— T — T —	TELEPHONE
— G — G —	GAS
— E — E —	ELECTRIC
— W — W —	WATER
— FO — FO —	FIBER OPTIC
-> -> ->	SEWER
+	TBE TEST HOLE

Utilities shown in color on these plans as depicted in the legend have been investigated by Cardno TBE in accordance with SUE Industry Standards. All other information shown has been provided to Cardno TBE by others. TBE's SUE field investigation was finished on 7/29/10. Changes to utilities after this date may have been made and therefore may result in variances from this plan. Consideration should be given to updating this plan if deemed advisable prior to final design and construction.

ALL UTILITIES SHOWN IN COLOR
QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



TBE Job No. IL09510414
SUE Plan Page: 2 of 2

Utility Quality Level "A" : Test Hole
Utility Quality Level "B" : Designating
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

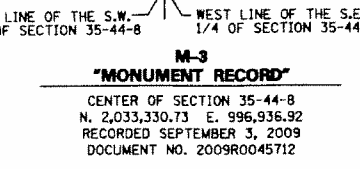
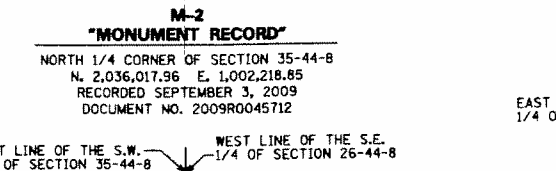
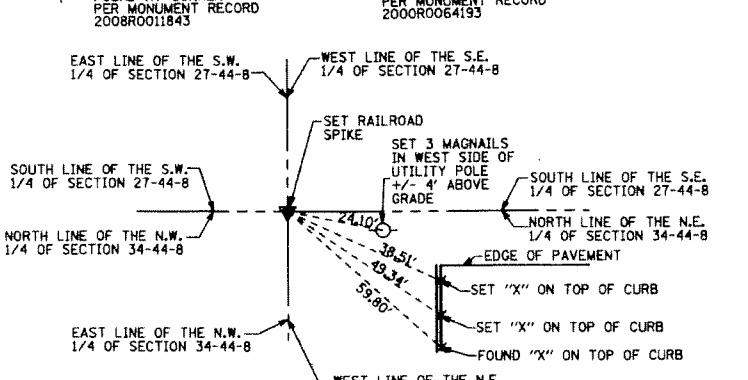
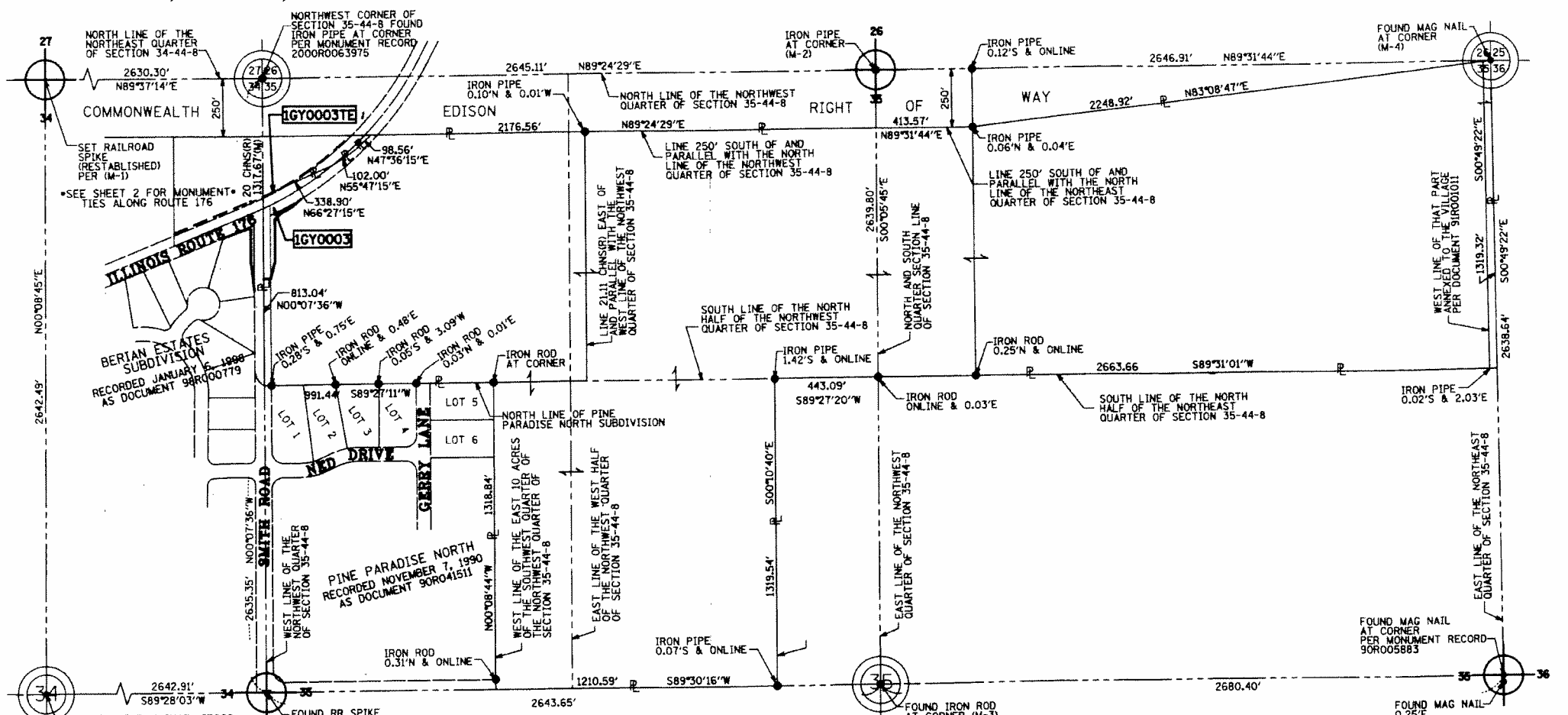
DESIGNED	EG	REVISED	
DRAWN	KLC	REVISED	
CHECKED		REVISED	
DATE	7/20/10	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RT. 176 at Smith Road
Crystal Lake, IL

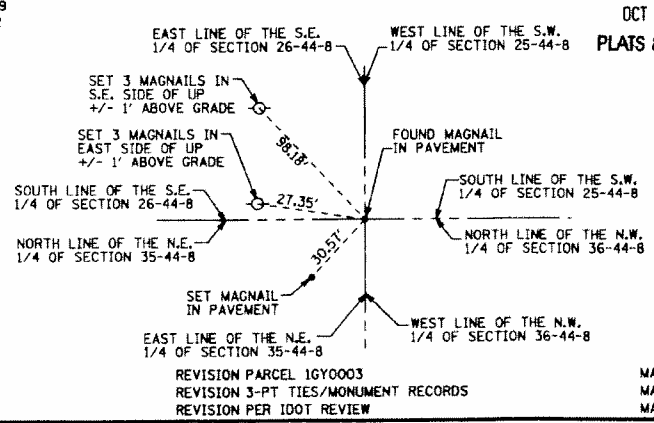
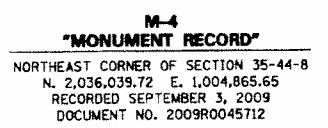
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	146 N-2	McHenry	65	30
FED. ROAD DIST. NO.			ILLINOIS IDOT Project No.	
			Contract No. 60K20	

PART OF THE NORTHEAST QUARTER OF SECTION 34 AND THE NORTHWEST QUARTER OF SECTION 35, TWP. 44 N., R. 8 E. OF THE 3RD. P.M., IN McHENRY COUNTY, ILLINOIS.



POINT TABLE

POINT	NORTHING	EASTING
8000	2,035,305.41	999,401.97
8001	2,035,348.19	999,516.72
8002	2,035,344.06	999,520.85
8003	2,035,206.86	999,520.93
8004	2,035,081.89	999,536.00
8005	2,035,131.98	999,575.79
8006	2,035,132.05	999,605.79
8007	2,035,207.09	999,625.62
8008	2,035,387.79	999,625.22
8009	2,035,415.26	999,653.66
8010	2,035,439.46	999,699.40
8011	2,035,473.82	999,739.13



LEGEND

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (ORIED) LINE
- APL
- APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- EXISTING BUILDING

Bearings are referenced to the Illinois State Plane Coordinate Grid System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

GRAPHIC SCALE
 FEET
 SCALE: 1" = 300'

- IRON PIPE OR ROD FOUND ○ REPLACED AFTER CONSTRUCTION
- + CUT CROSS FOUND OR SET
- MAGNAIL FOUND
- ▼ RAILROAD SPIKE FOUND
- T1
T2
T3 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1
BT2
BT3 THESE STAKES IN CULTIVATED AREAS REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET

STATE OF ILLINOIS)
 COUNTY OF COOK)

THIS IS TO CERTIFY THAT WE, SPACECO, INC. AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 184-001157, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 34&35, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED THIS 26TH DAY OF SEPT 20 12 A.D. AT ROSEMONT, ILLINOIS

Rebecca Y. Popeck
 REBECCA Y. POPECK
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-003642
 LICENSE EXPIRATION DATE: NOVEMBER 30, 2012

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

RECEIVED
 OCT 01 2012
 PLATS & LEGALS

CONSULTING ENGINEERS
 SITE DEVELOPMENT ENGINEERS
 LAND SURVEYORS

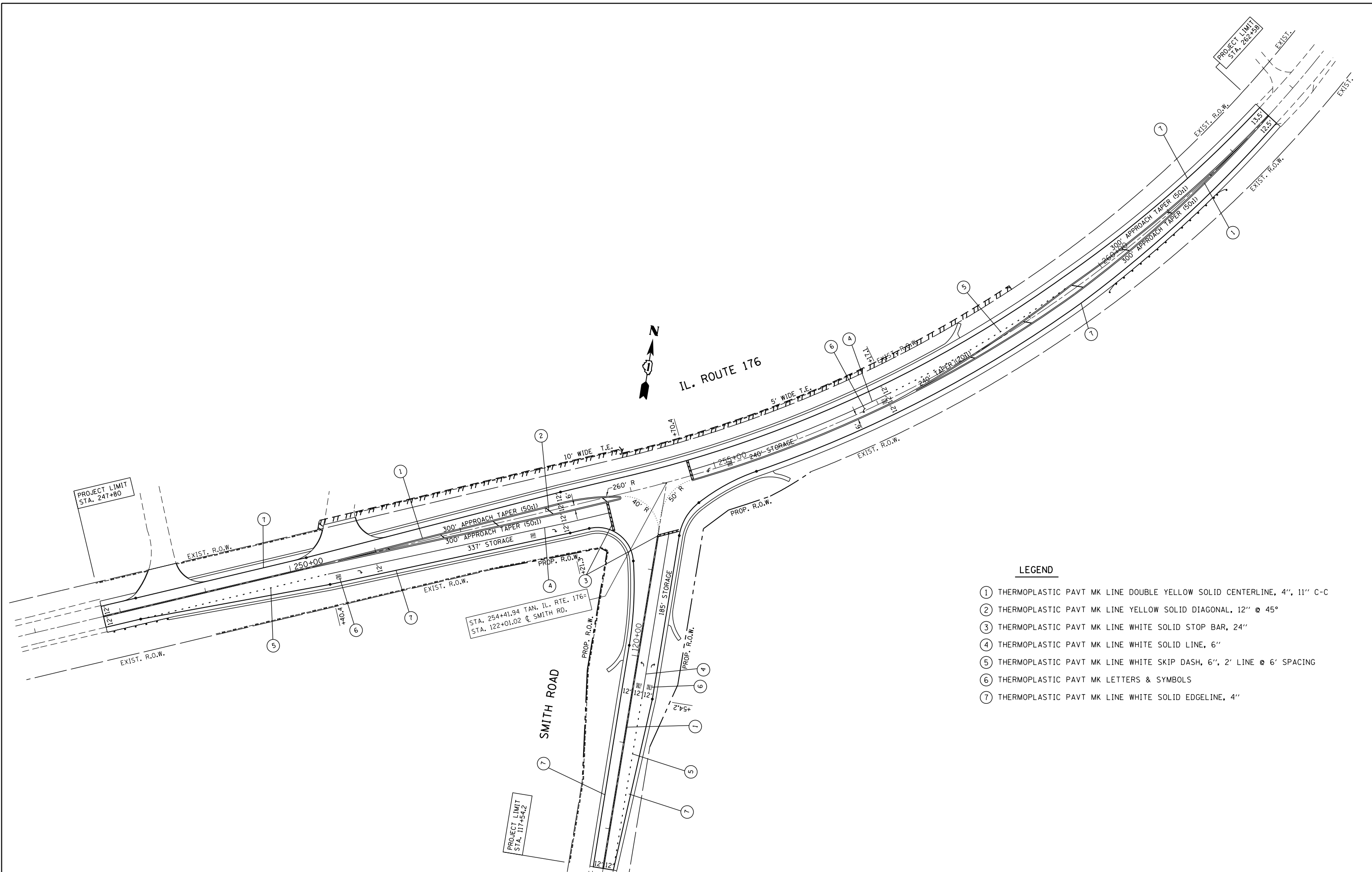
9575 W. Higgins Road, Suite 700,
 Rosemont, Illinois 60018
 Phone: (847) 696-4060 Fax: (847) 696-4065

PLAT OF HIGHWAYS
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 176 (FAP 335)

SECTION: COUNTY: McHENRY
 PROJECT: JOB NO.: R-91-028-09
 STATION 250+21 TO STATION 260+19
 SCALE: SHEET 3 OF 3

BUREAU OF LAND ACQUISITION
 201 WEST CENTER COURT
 SCHAUMBURG, ILLINOIS 60196

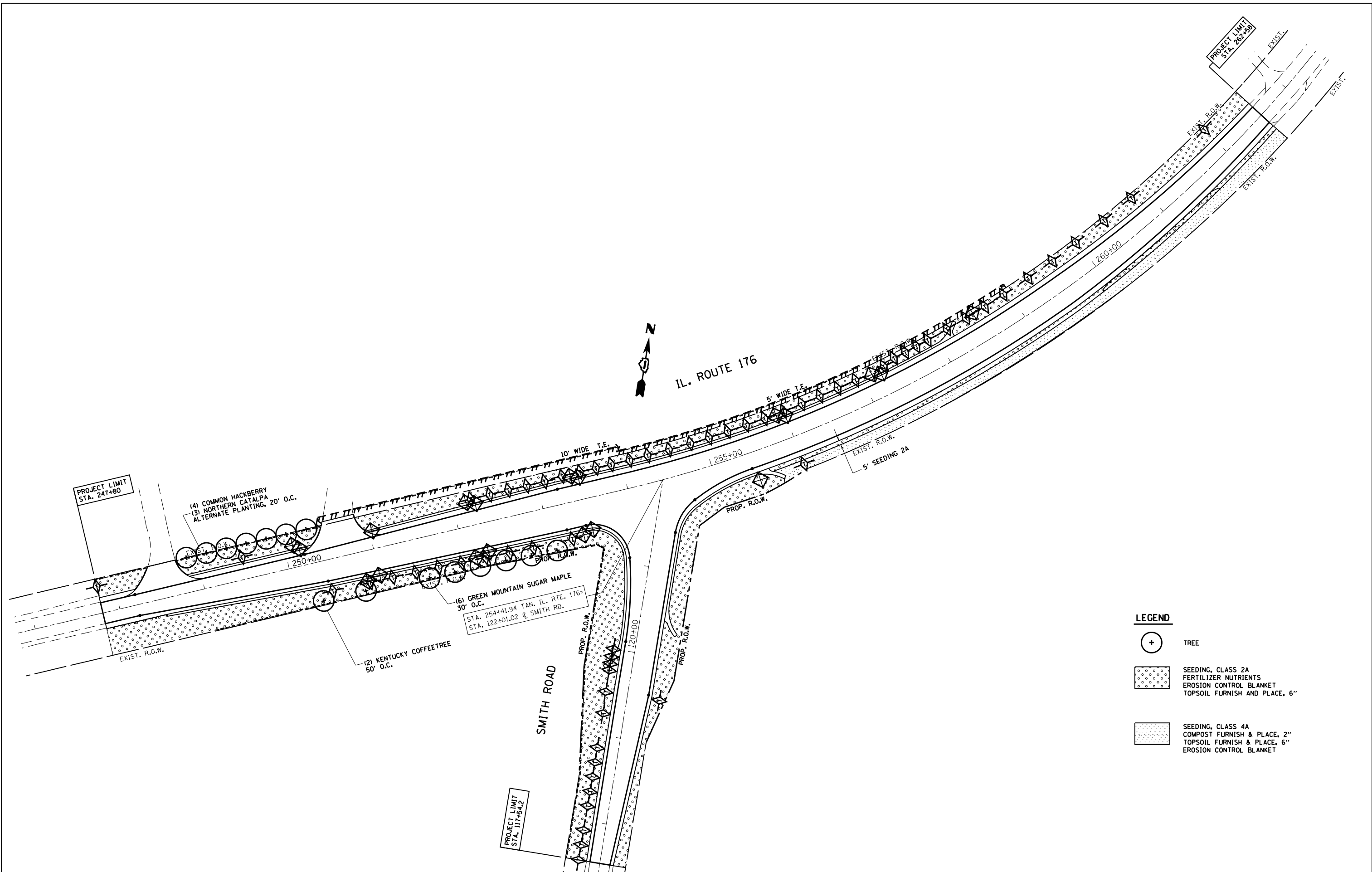
MADE BY RYP
 MADE BY RYP
 MADE BY RYP



LEGEND

- ① THERMOPLASTIC PAVT MK LINE DOUBLE YELLOW SOLID CENTERLINE, 4", 11" C-C
- ② THERMOPLASTIC PAVT MK LINE YELLOW SOLID DIAGONAL, 12" @ 45°
- ③ THERMOPLASTIC PAVT MK LINE WHITE SOLID STOP BAR, 24"
- ④ THERMOPLASTIC PAVT MK LINE WHITE SOLID LINE, 6"
- ⑤ THERMOPLASTIC PAVT MK LINE WHITE SKIP DASH, 6", 2' LINE @ 6' SPACING
- ⑥ THERMOPLASTIC PAVT MK LETTERS & SYMBOLS
- ⑦ THERMOPLASTIC PAVT MK LINE WHITE SOLID EDGELINE, 4"

FILE NAME = c:\pwork\pwork\dot\obreueh\dms99205\p114205-sh1-pmk.dgn	USER NAME = obreueh	DESIGNED - J. ERNY	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING PLAN IL. RTE 176 AT SMITH RD.			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / 1".	CHECKED - G. FEENY	REVISED -					335	146N-2	MCHEMRY	65	33
PLOT DATE = 12/12/2012	DATE - 07/24/09	REVISED -	REVISED -	SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA. 247+80	TO STA. 262+58	CONTRACT NO. 60K20			
								FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



LEGEND

⊕	TREE
[Stippled Box]	SEEDING, CLASS 2A FERTILIZER NUTRIENTS EROSION CONTROL BLANKET TOPSOIL FURNISH AND PLACE, 6"
[Dotted Box]	SEEDING, CLASS 4A COMPOST FURNISH & PLACE, 2" TOPSOIL FURNISH & PLACE, 6" EROSION CONTROL BLANKET

FILE NAME =	USER NAME = abreuah	DESIGNED - J. ERNY	REVISED -
et:\pwork\pwork\abreuah\dms99205\p114405-sht-landscp.dgn		DRAWN - J. ERNY	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED - G. FEENY	REVISED -
	PLOT DATE = 12/12/2012	DATE - 07/24/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN
PLAN IL. RTE 176 SMITH RD.**

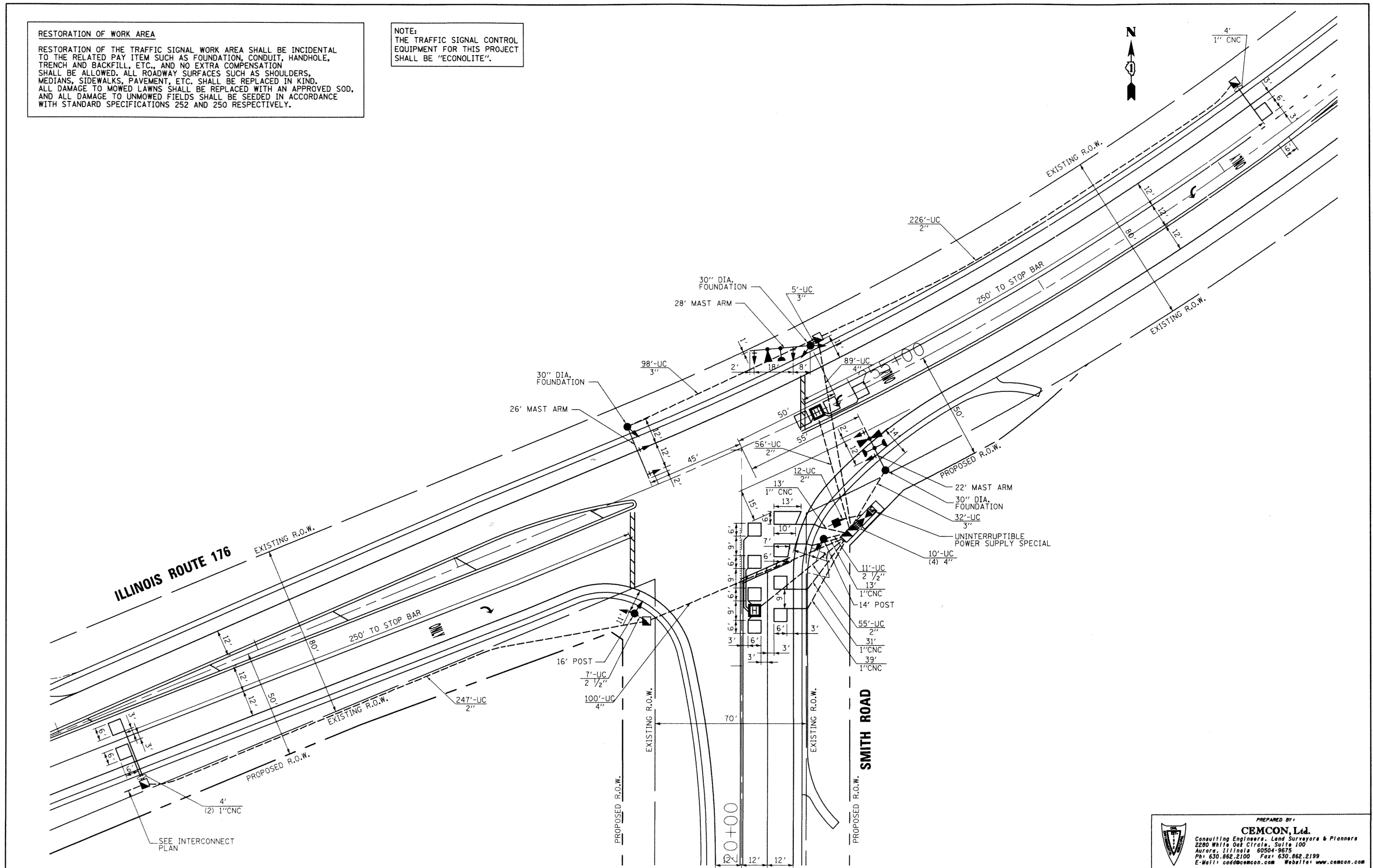
SCALE: 1"=50' SHEET NO. OF SHEETS STA. 247+80 TO STA. 262+58

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	34
CONTRACT NO. 60K20				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".



FILE NAME = \MICROST\352995\ RTE 176 SIG.DGN
 USER NAME = ROS
 PLOT SCALE = 1"=28'
 PLOT DATE = 02-27-12

DESIGNED - KK	REVISED -
DRAWN - JGC	REVISED -
CHECKED - BPT	REVISED -
DATE - 02-27-12	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL INSTALLATION PLAN
ILLINOIS ROUTE 176 AT SMITH ROAD**

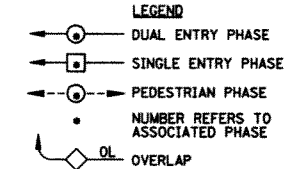
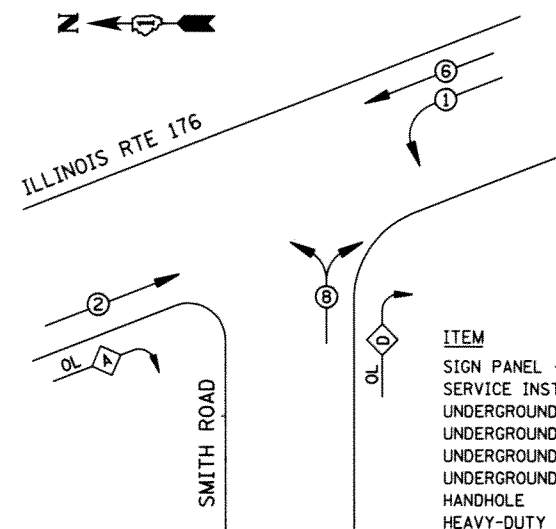
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
355	146 N-2	McHENRY	65	35

CONTRACT NO. 60K20
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONTROLLER SEQUENCE



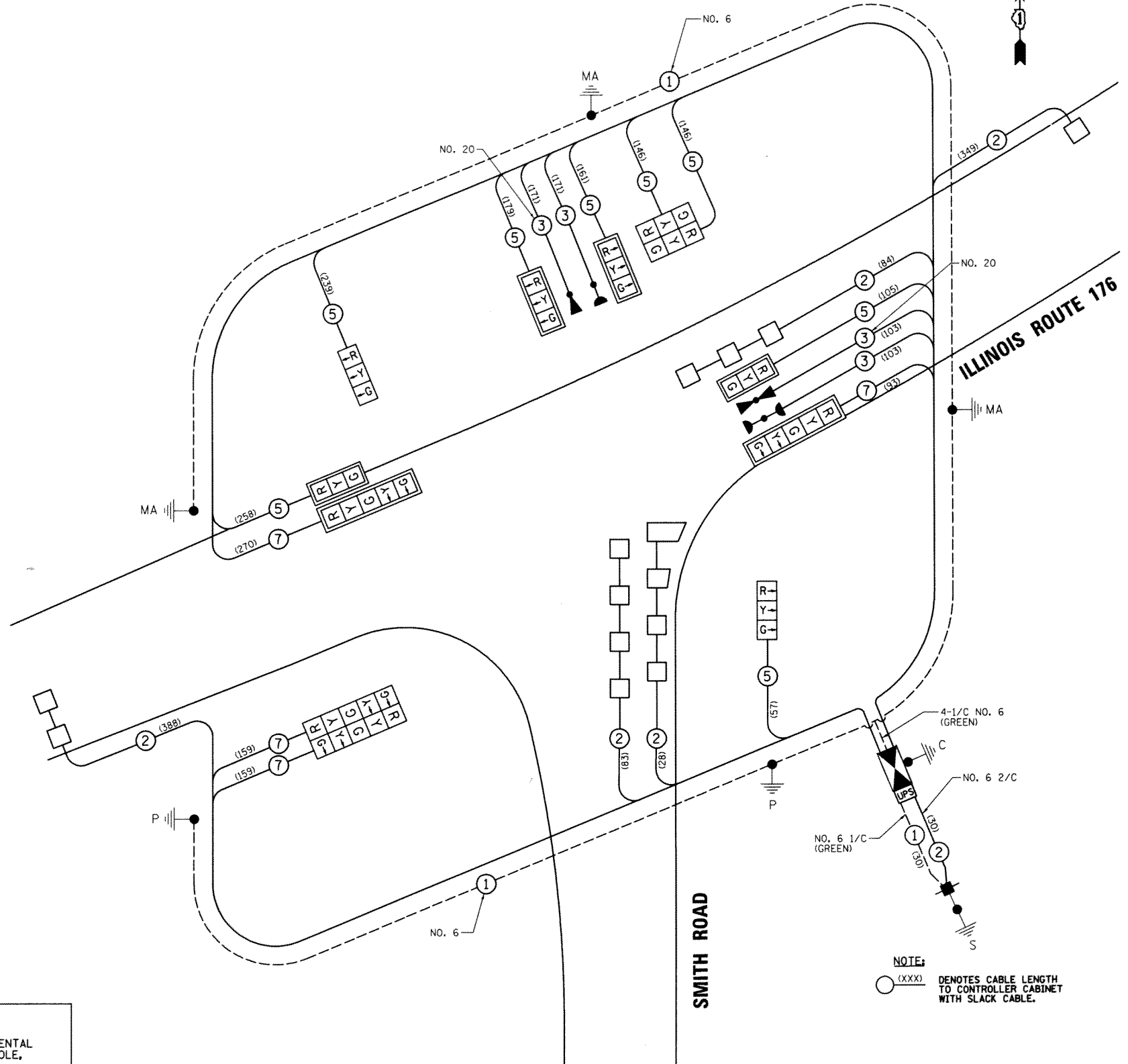
PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 8
D	= 8	+ 1

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ. FT	21.8
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	596
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	18
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	135
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	229
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	274
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1234
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	738
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	932
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	30
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	415
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 2-FACE, 5 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	476
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	274
TEMPORARY INFORMATION SIGNING	SQ FT	54.4
• 100% COST TO THE CRYSTAL LAKE FIRE DEPARTMENT		



NOTE:
 (XXX) DENOTES CABLE LENGTH TO CONTROLLER CABINET WITH SLACK CABLE.

RESTORATION OF WORK AREA
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
 THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	

FLASHER 0.50

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 W. CENTER COURT
 SCHAUMBURG, IL 60196

ENERGY SUPPLY CONTACT: _____
 PHONE: _____
 COMPANY: COMED

TOTAL = 331.6

FILE NAME = \MICROST\35209\176 CAB.DGN	USER NAME = RDS	DESIGNED - KK	REVISED -
		DRAWN - JGC	REVISED -
		CHECKED - BPT	REVISED -
		DATE - 02-27-12	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
 ILLINOIS ROUTE 176 AT SMITH ROAD**

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

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9875
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: codd@cemcon.com Website: www.cemcon.com

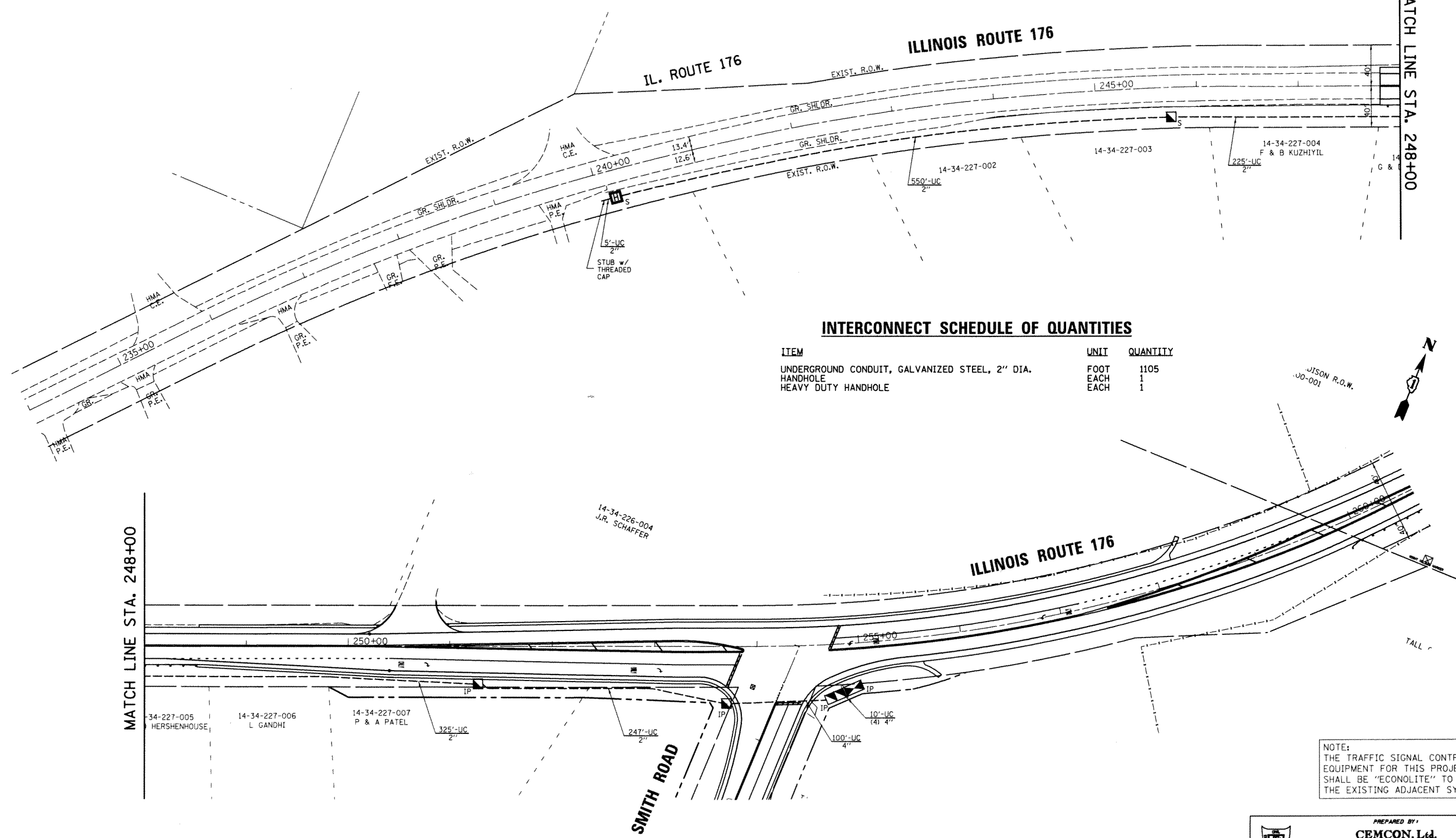
F.A.P. RTE. 355	SECTION 146 N-2	COUNTY McHENRY	TOTAL SHEETS 65	SHEET NO. 36
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60K20	

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



MATCH LINE STA. 248+00



INTERCONNECT SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1105
HANDHOLE	EACH	1
HEAVY DUTY HANDHOLE	EACH	1

JASON R.O.W.
00-001



MATCH LINE STA. 248+00

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =
\\MICROST\352096\
RTE 176 INTERCONNECT.DGN

USER NAME = RDS
DESIGNED - KK
DRAWN - JGC
CHECKED - BPT
DATE - 02-27-12

REVISIED -
REVISIED -
REVISIED -
REVISIED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ILLINOIS ROUTE 176 AT SMITH ROAD

SCALE: 1"=50'
SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

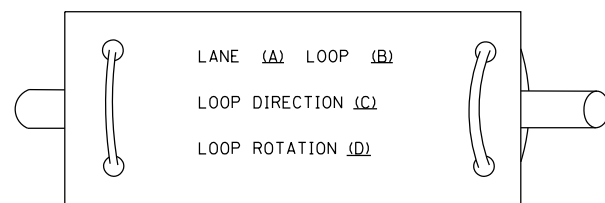
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
355	146 N-2	McHENRY	65	37
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

CONTRACT NO. 60K20

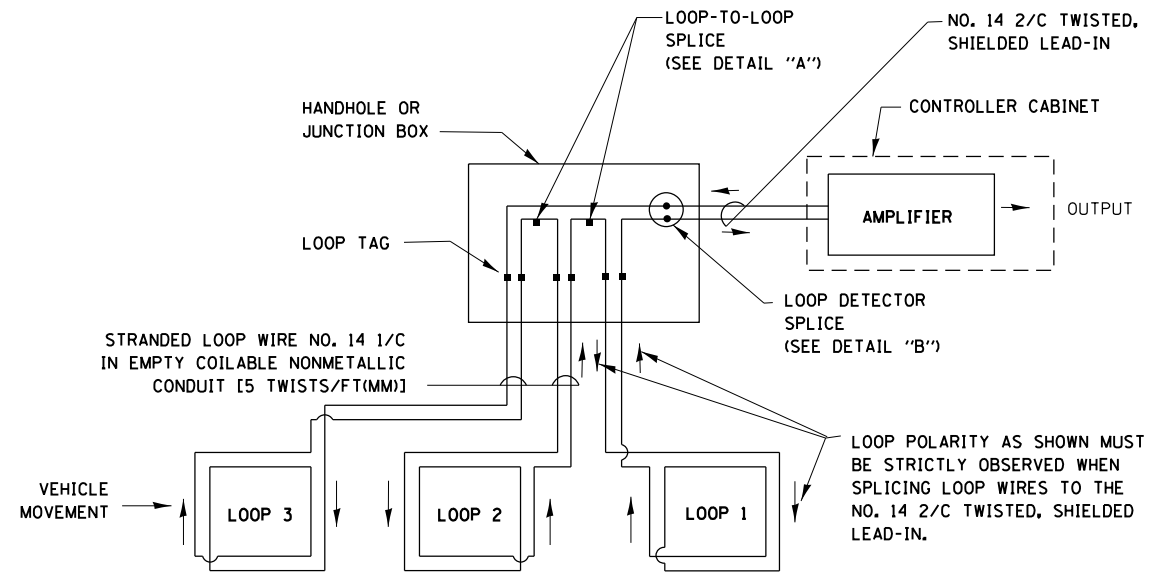
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

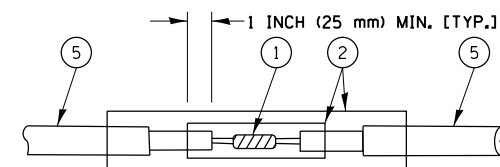


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

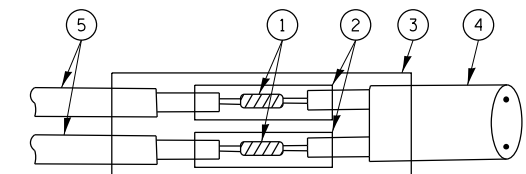


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

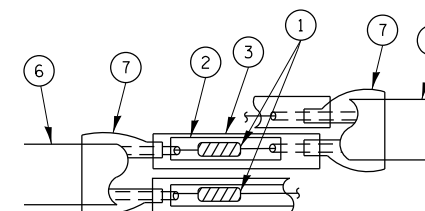


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

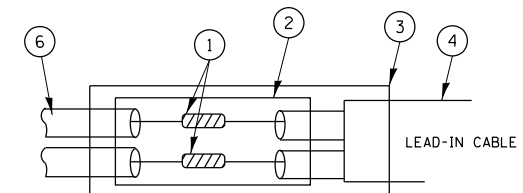


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = obreueh	DESIGNED - DAD	REVISED -
et:\pw\work\p1dot\obreueh\dms99207\Dist3\td.dgn		DRAWN - BCK	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 12/12/2012	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

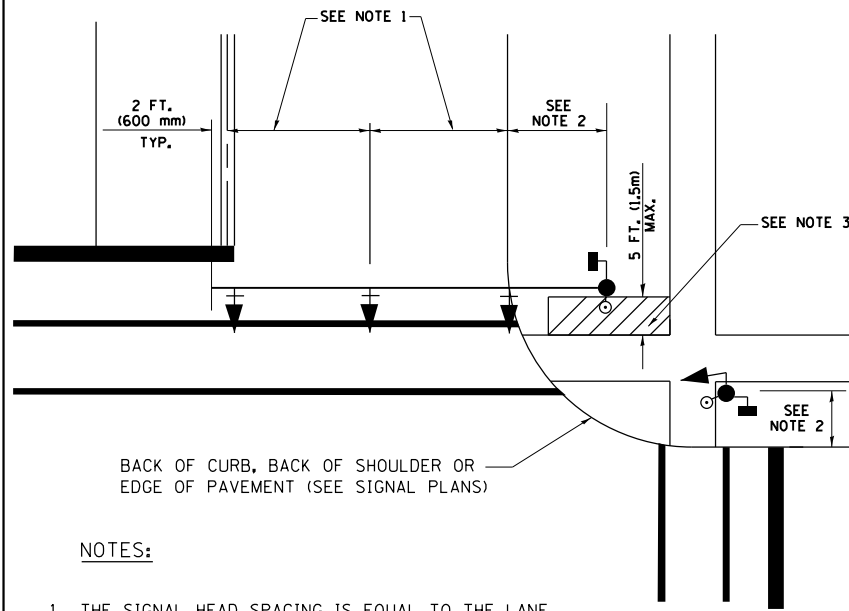
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	39
TS-05			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

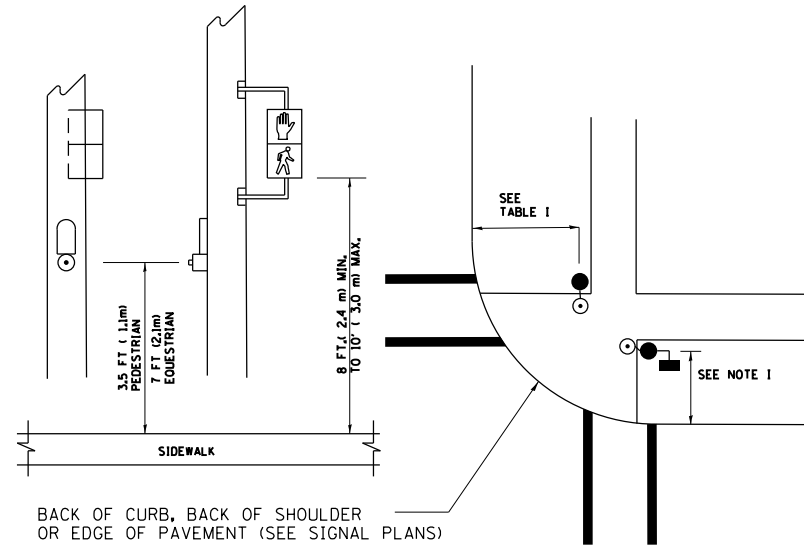
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

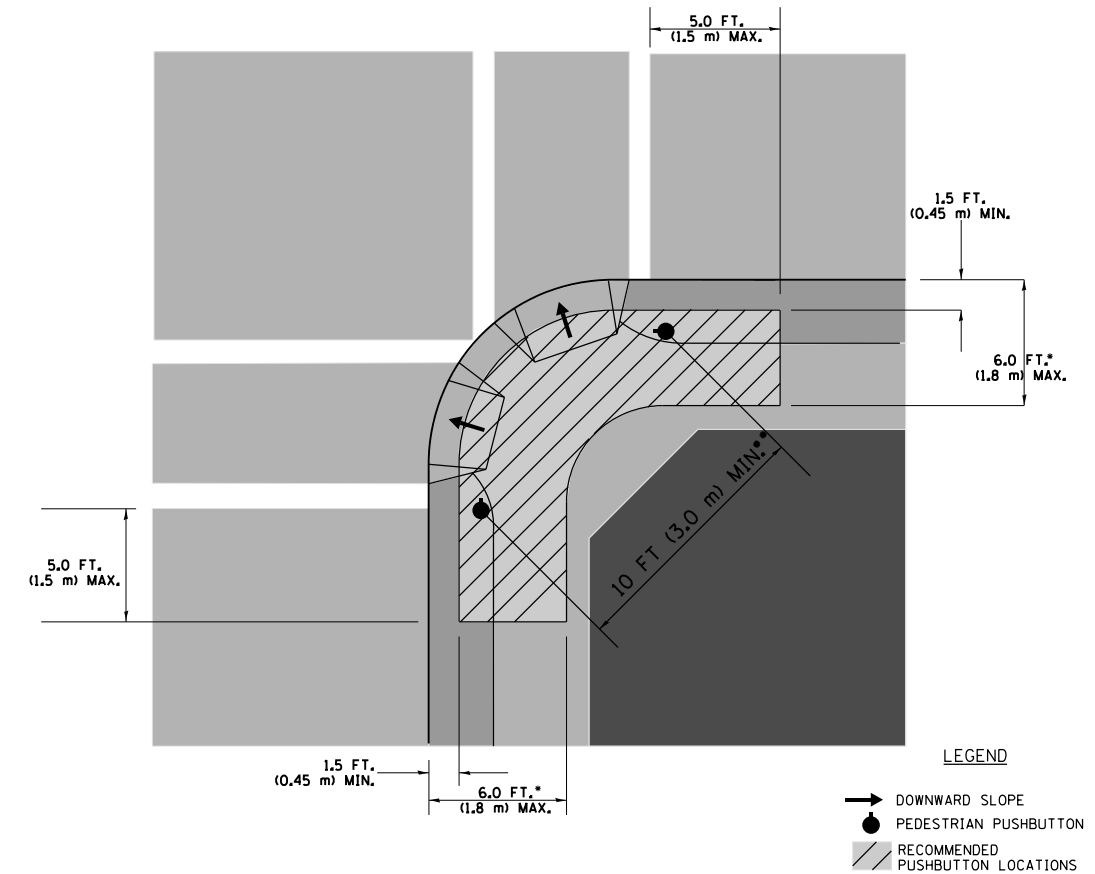
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

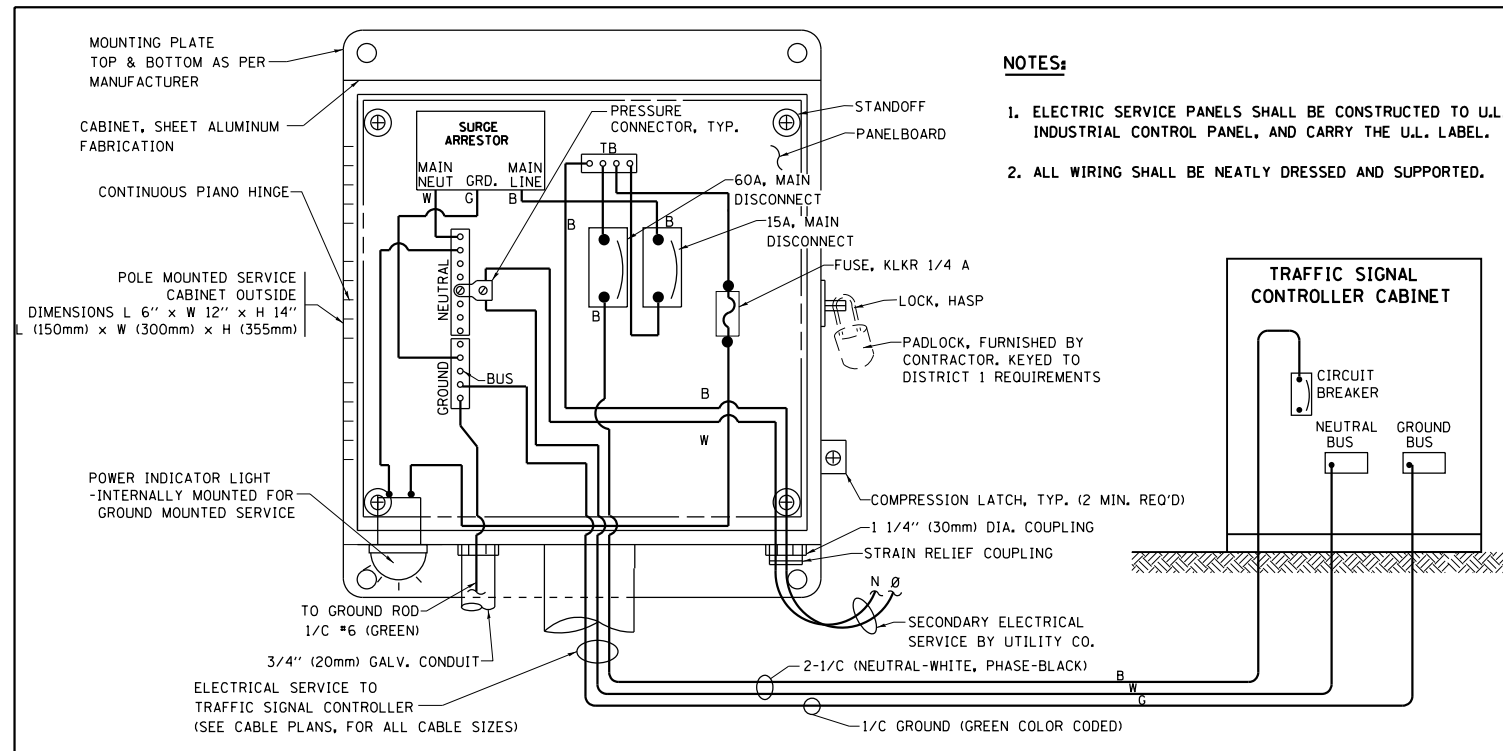
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

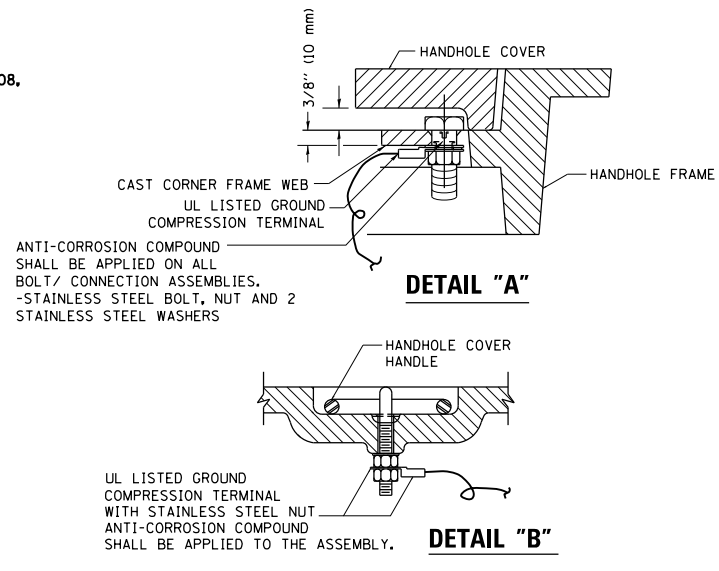
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

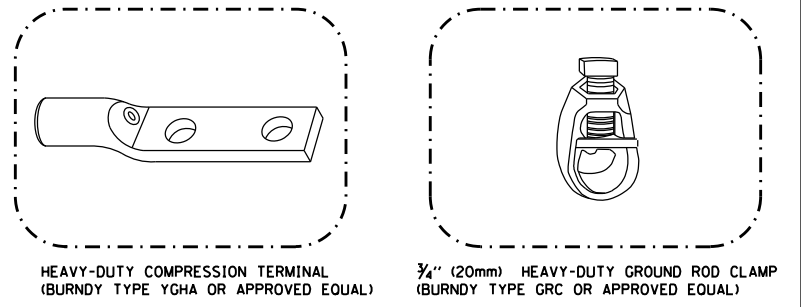
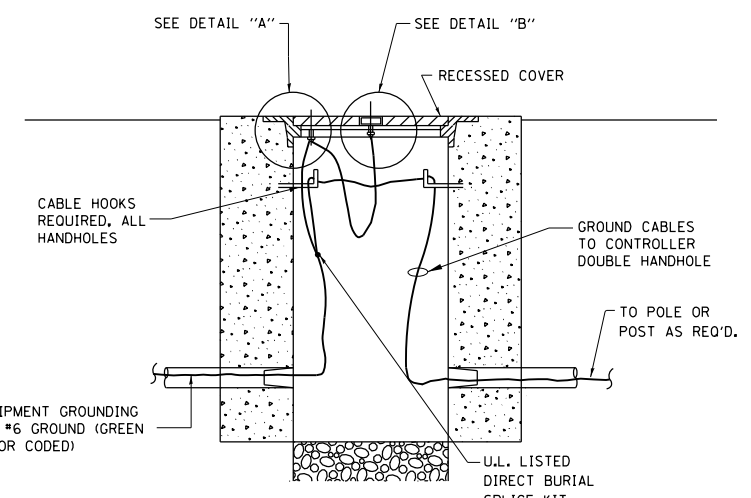


- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



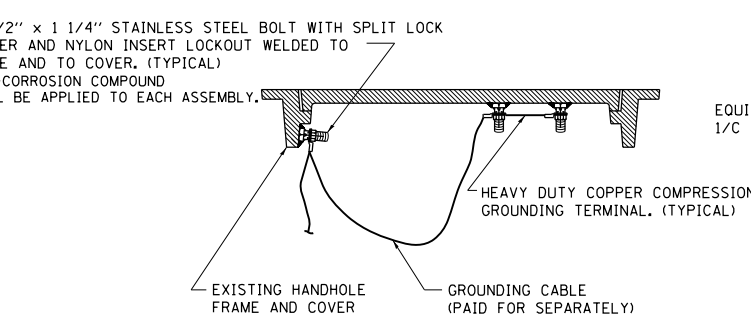
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)

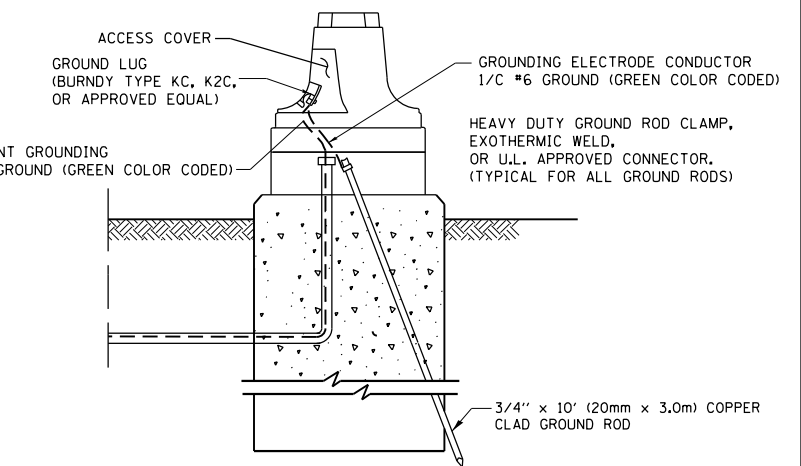


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

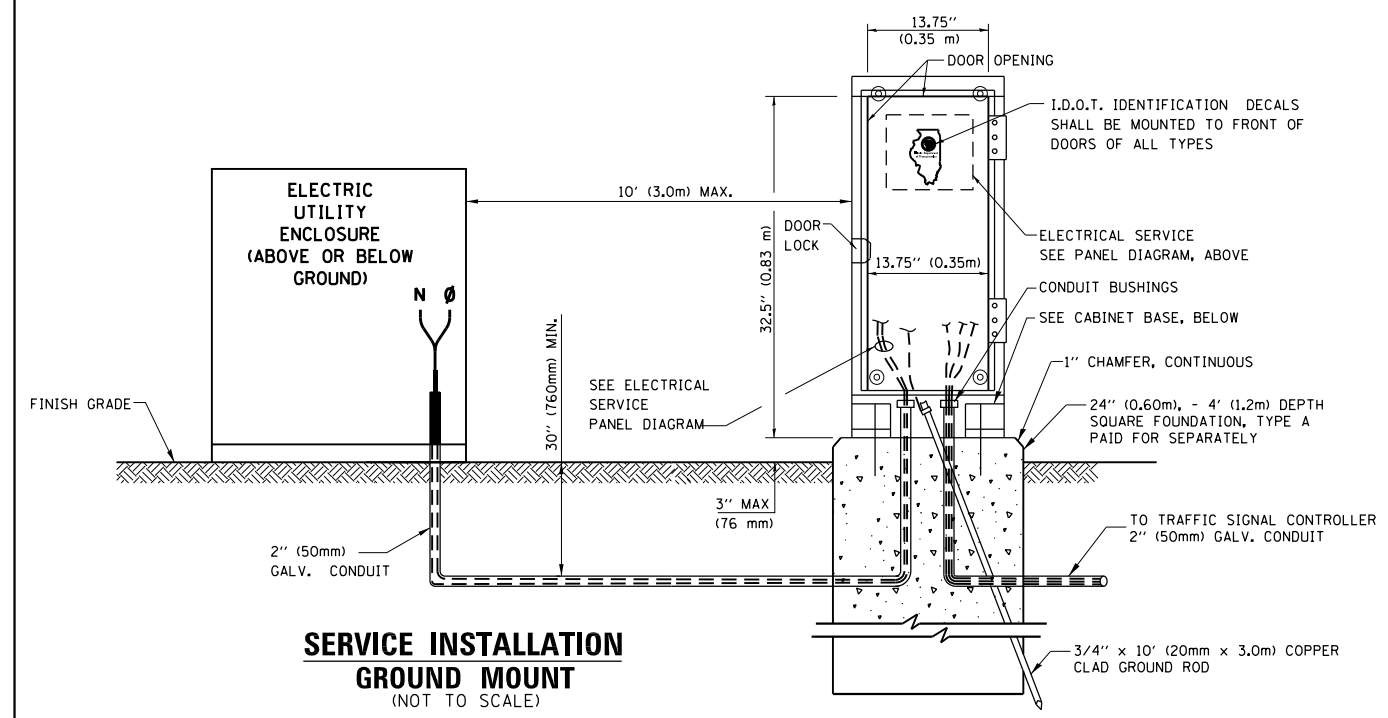
HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



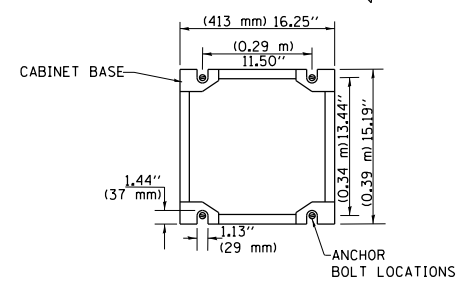
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)

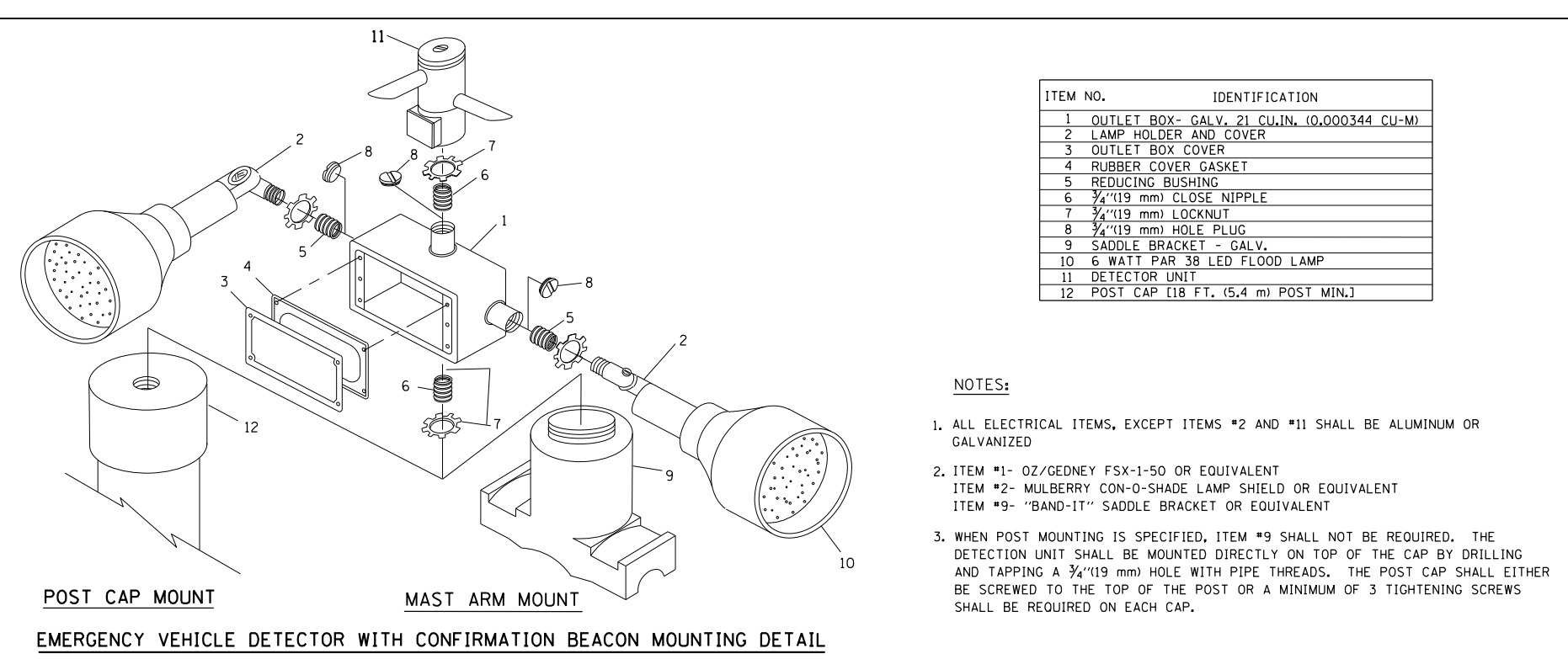
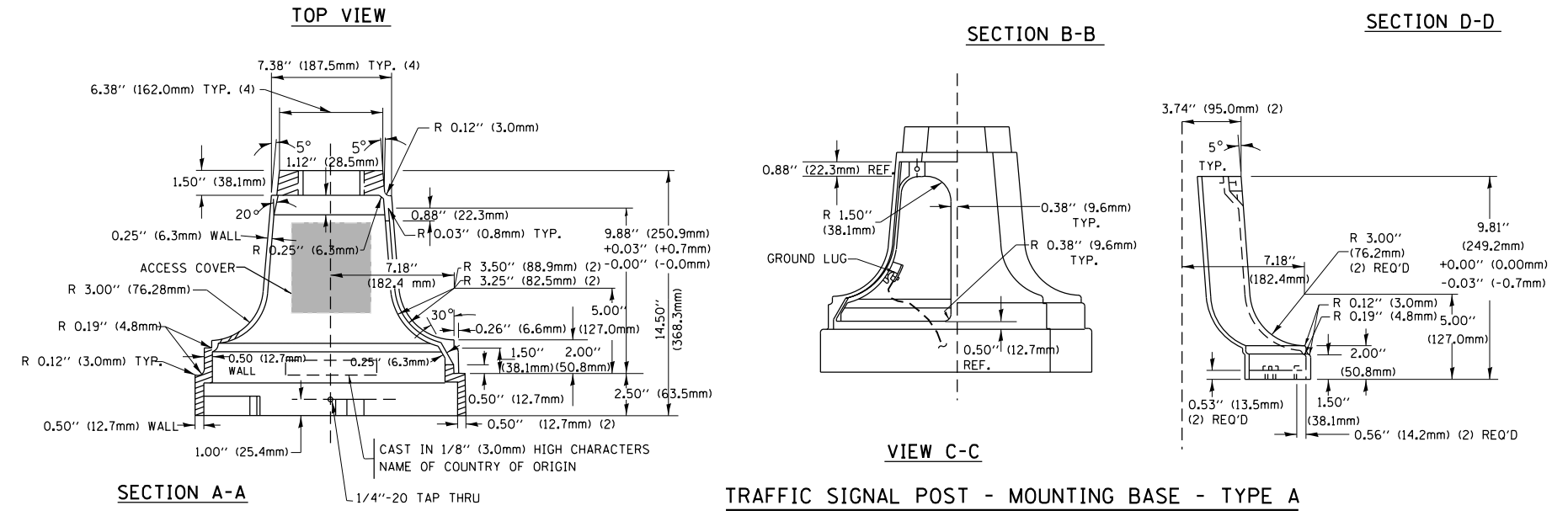
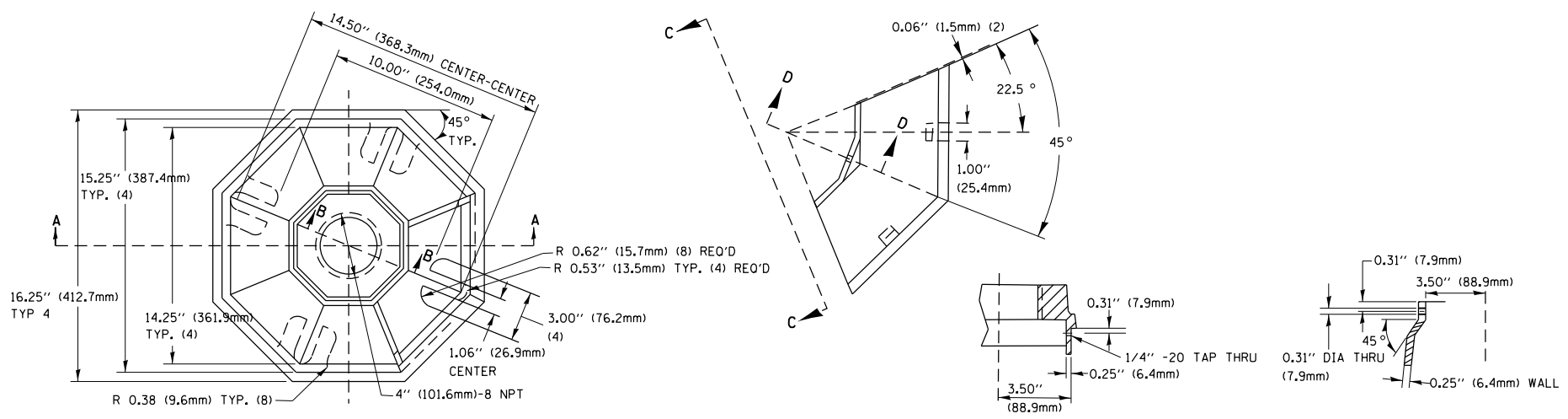


SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)



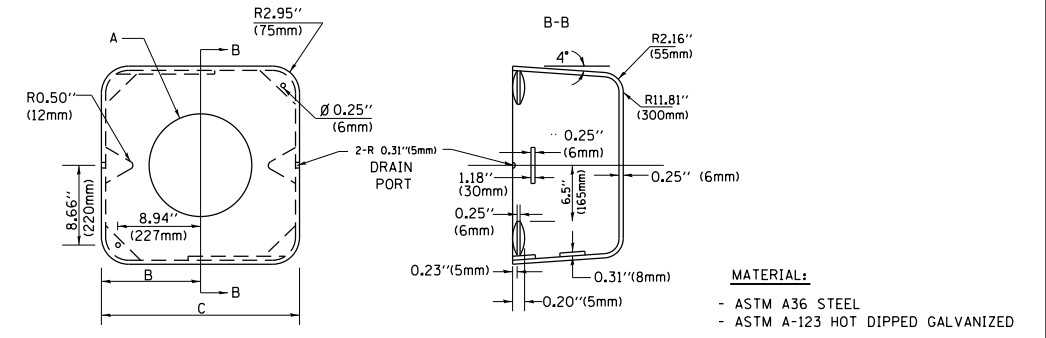
CABINET - BASE BOLT PATTERN (NOT TO SCALE)

FILE NAME =	USER NAME = abraueh	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.P. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p1dot\abraueh\dms99207\Dist1	DRAWN - BCK	REVISED -	335			146N-2	MCHENRY	65	41	
PLOT SCALE = 100.0000' / 1"	CHECKED - DAD	REVISED -	TS-05			CONTRACT NO. 60K20				
PLOT DATE = 12/12/2012	DATE - 10-28-09	REVISED -	SCALE: NONE			SHEET NO. 3 OF 6 SHEETS STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



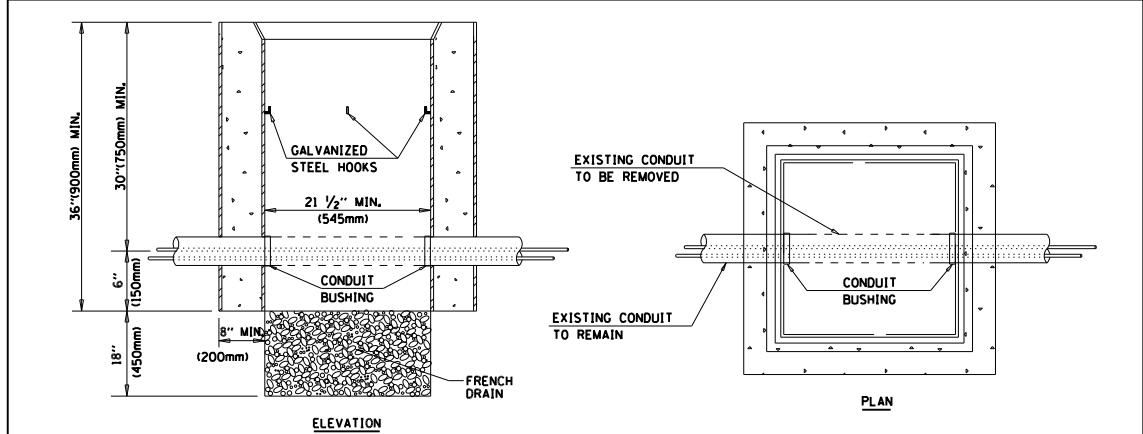
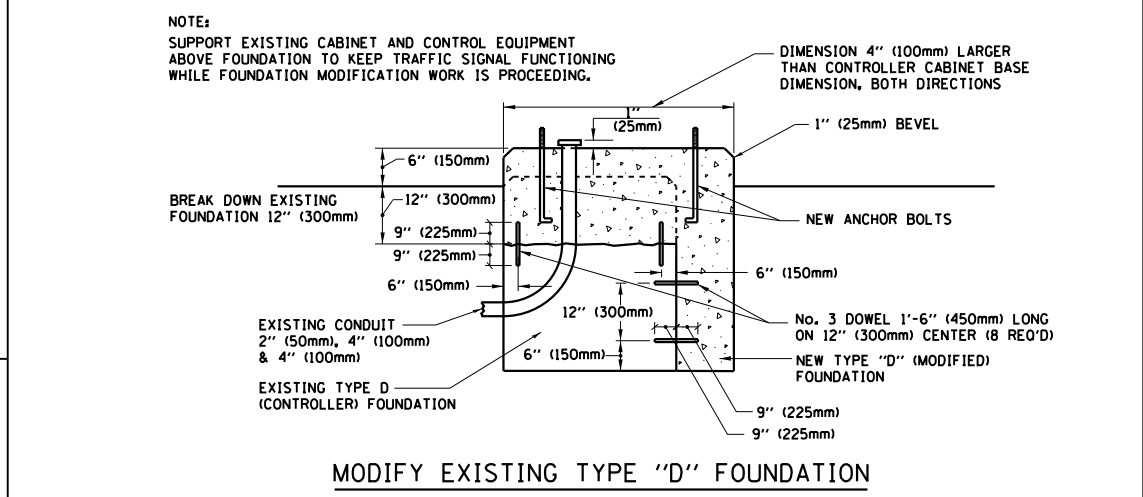
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
 - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
 - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

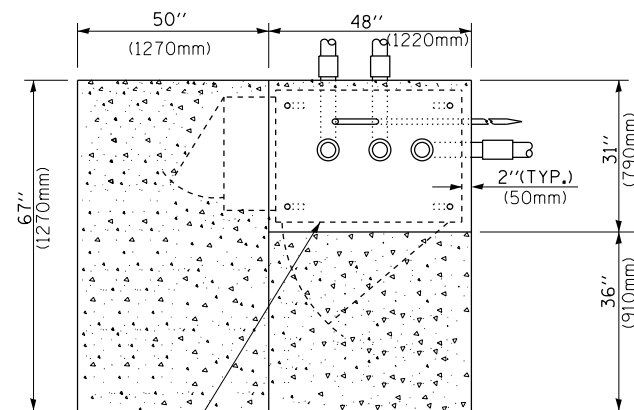


A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\"(241mm)	19\"(483mm)	7\"(178mm) - 12\"(300mm)	53 lbs (24kg)
VARIABLES	10.75\"(273mm)	21.5\"(546mm)	7\"(178mm) - 12\"(300mm)	68 lbs (31 kg)
VARIABLES	13.0\"(330mm)	26\"(660mm)	7\"(178mm) - 12\"(300mm)	81 lbs (37 kg)
VARIABLES	18.5\"(470mm)	37\"(940mm)	7\"(178mm) - 12\"(300mm)	126 lbs (57 kg)

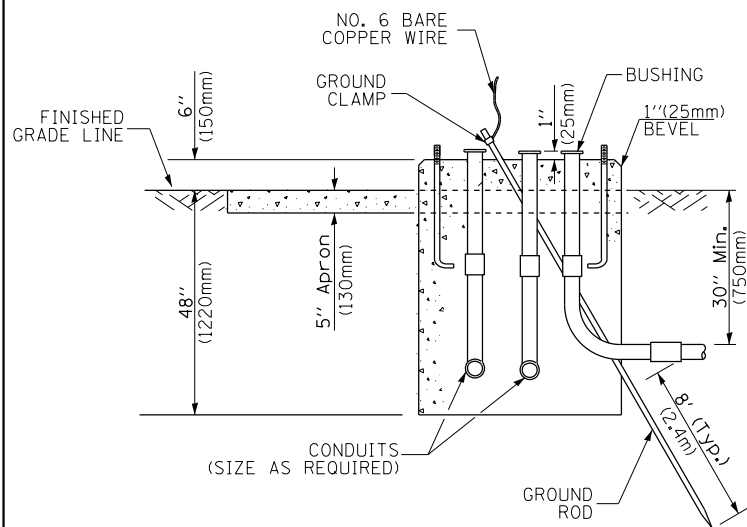
- NOTES:**
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
 - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



- NOTES:**
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

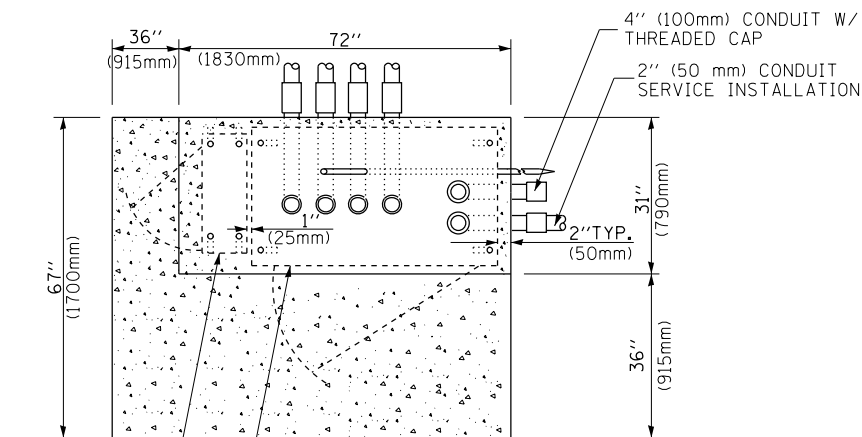


CONTROLLER CABINET BASE
EXISTING APRON
PROPOSED APRON
TOP VIEW

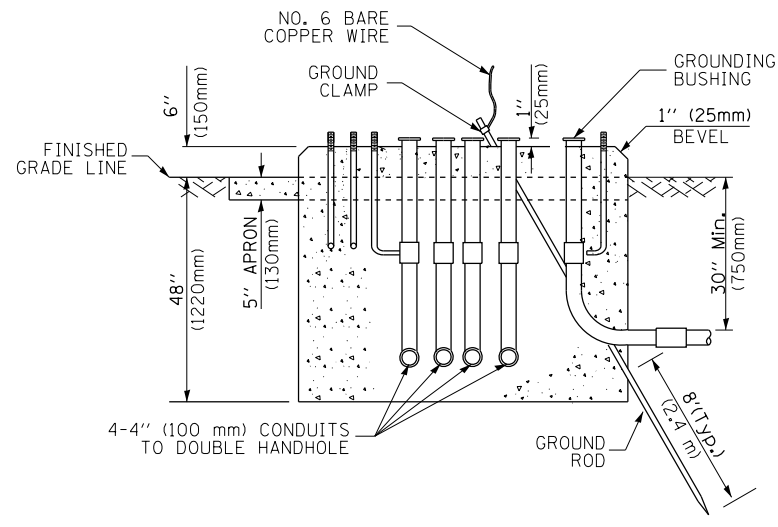


NO. 6 BARE COPPER WIRE
GROUND CLAMP
BUSHING
FINISHED GRADE LINE
6" (150mm)
5" APRON (130mm)
1" (25mm) BEVEL
30" MIN. (750mm)
8" (TYP.) (203mm)
CONDUITS (SIZE AS REQUIRED)
GROUND ROD

**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

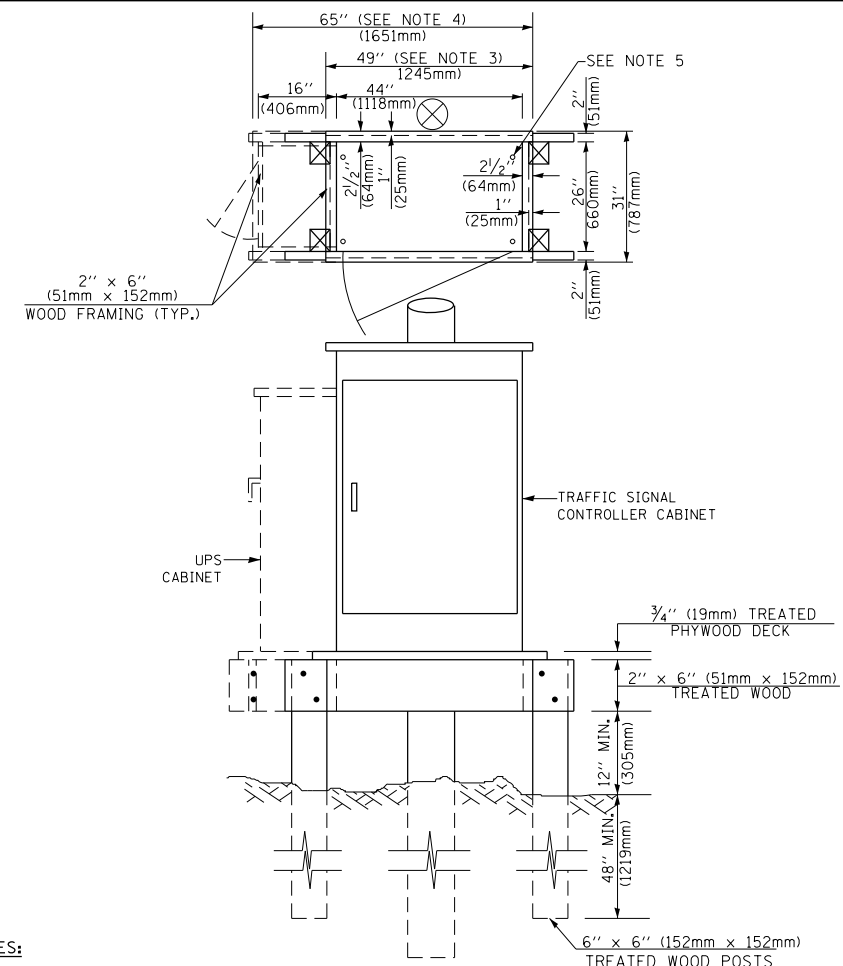


4" (100mm) CONDUIT W/
THREADED CAP
2" (50 mm) CONDUIT
SERVICE INSTALLATION
CONTROLLER CABINET BASE
UPS CABINET BASE
APRON
TOP VIEW



NO. 6 BARE COPPER WIRE
GROUND CLAMP
GROUNDING BUSHING
FINISHED GRADE LINE
6" (150mm)
5" APRON (130mm)
1" (25mm) BEVEL
30" MIN. (750mm)
8" (TYP.) (203mm)
4-4" (100 mm) CONDUITS
TO DOUBLE HANDHOLE
GROUND ROD

**TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = obreueh	DESIGNED - DAG	REVISED -
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		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.

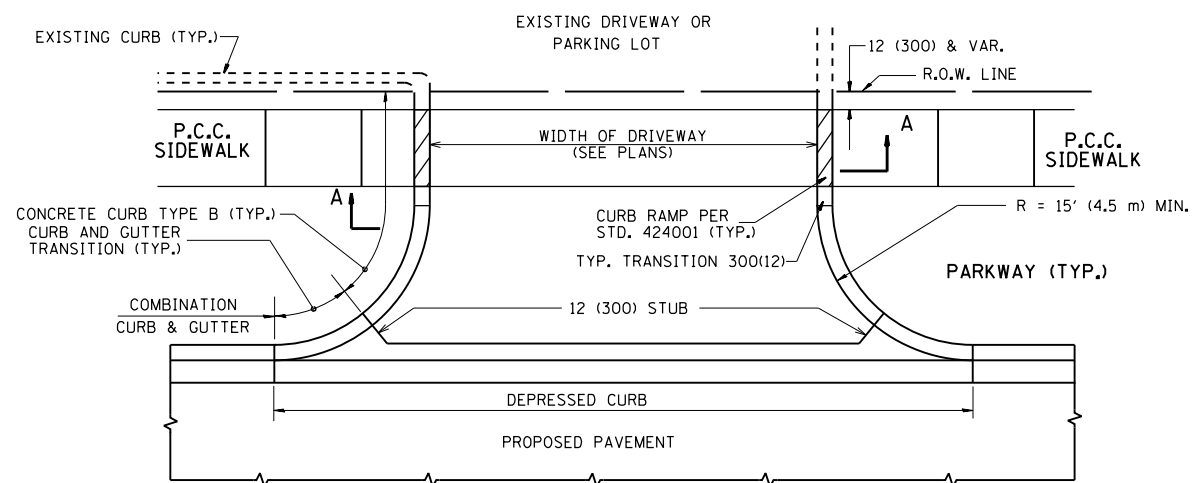
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	43
TS-05			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

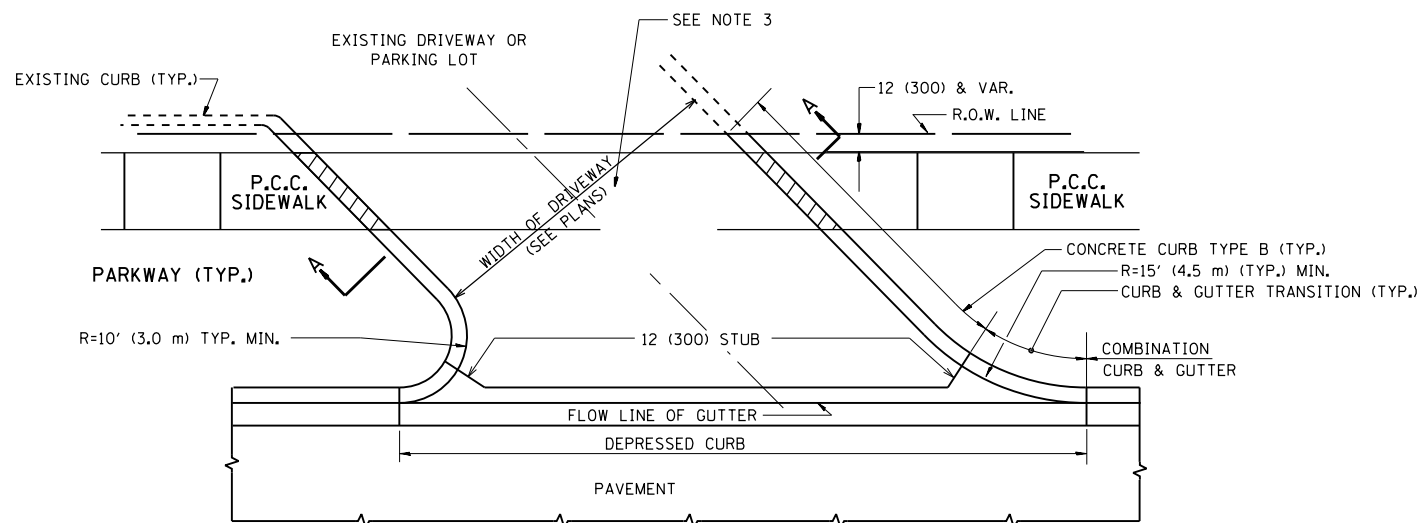
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM21F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER							
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

RAILROAD SYMBOLS

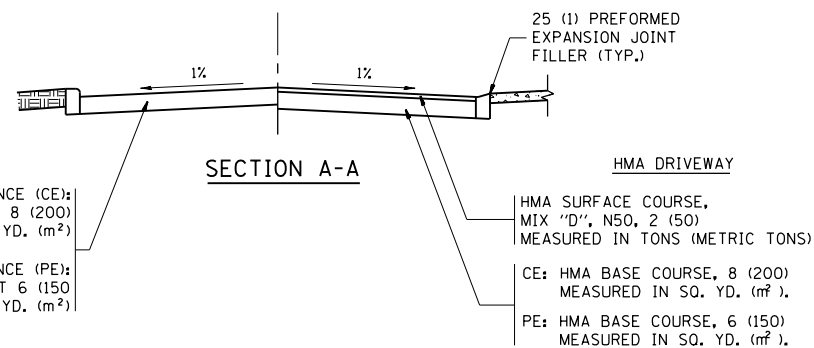
	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		



WITH CONCRETE CURB, TYPE B

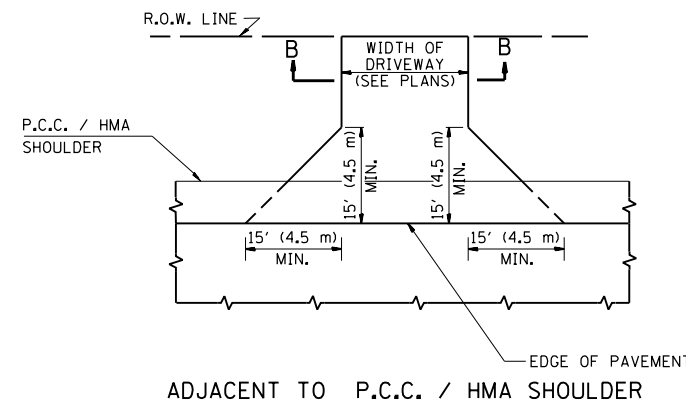


WITH CONCRETE CURB, TYPE B

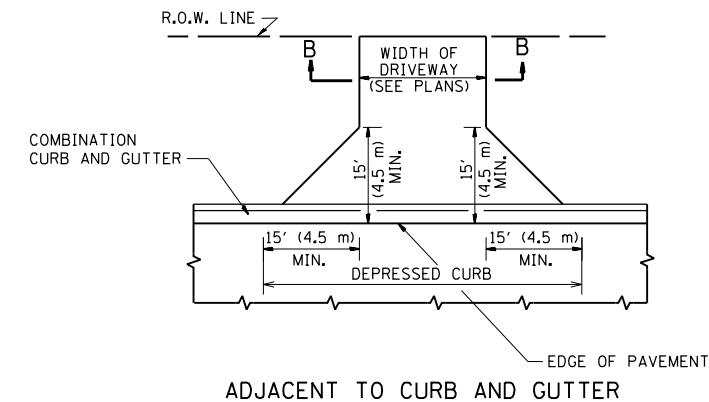


RIGID DRIVEWAY
 COMMERCIAL ENTRANCE (CE):
 P.C.C. DRIVEWAY PAVEMENT 8 (200)
 MEASURED IN SQ. YD. (m²)
 NON-COMMERCIAL ENTRANCE (PE):
 P.C.C. DRIVEWAY PAVEMENT 6 (150)
 MEASURED IN SQ. YD. (m²)

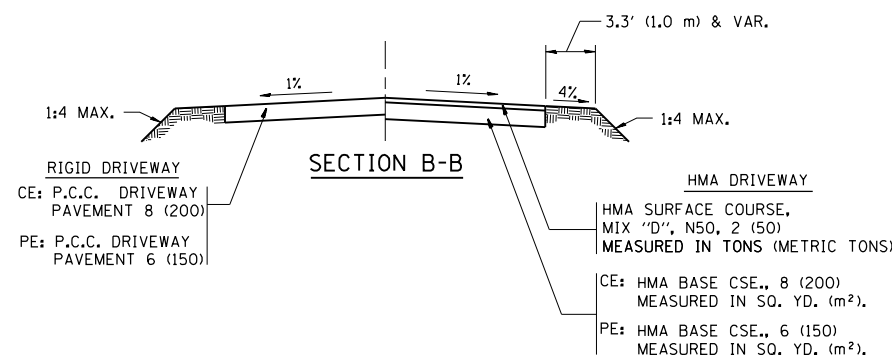
HMA DRIVEWAY
 HMA SURFACE COURSE,
 MIX "D", N50, 2 (50)
 MEASURED IN TONS (METRIC TONS)
 CE: HMA BASE COURSE, 8 (200)
 MEASURED IN SQ. YD. (m²),
 PE: HMA BASE COURSE, 6 (150)
 MEASURED IN SQ. YD. (m²).



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



GENERAL NOTES:

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

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

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

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

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

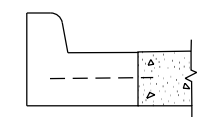
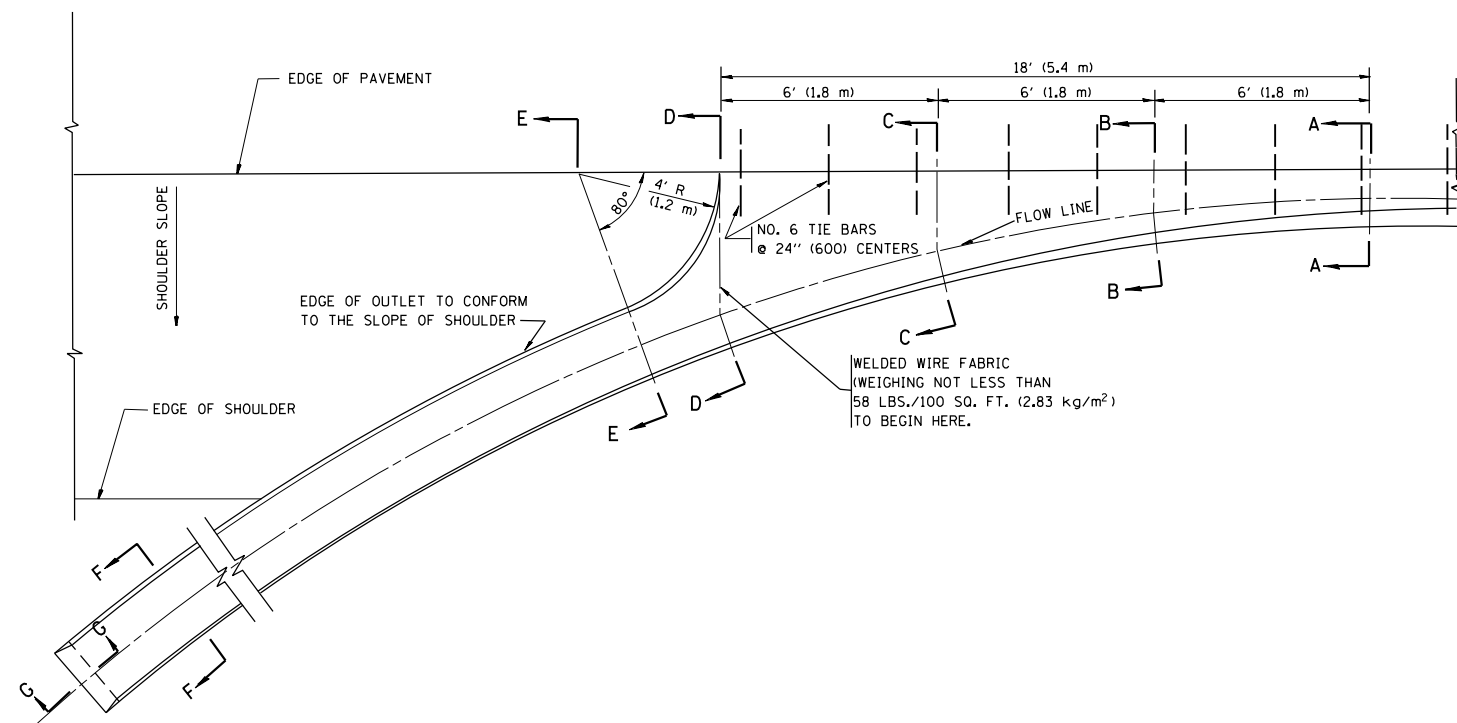
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

FILE NAME =	USER NAME = abreuah	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
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	PLOT SCALE = 100.0002' / in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 12/12/2012	DATE - 11-04-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

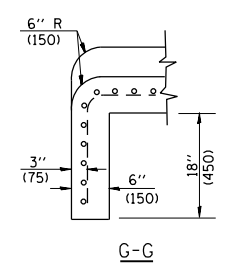
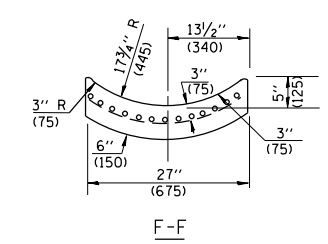
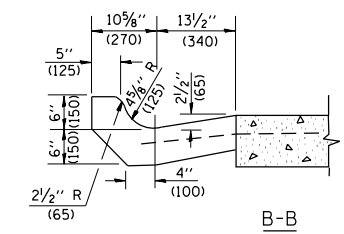
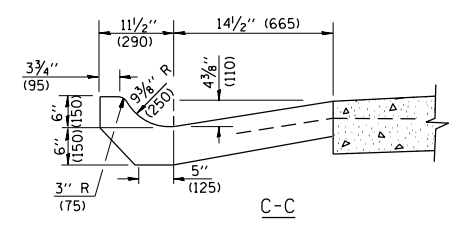
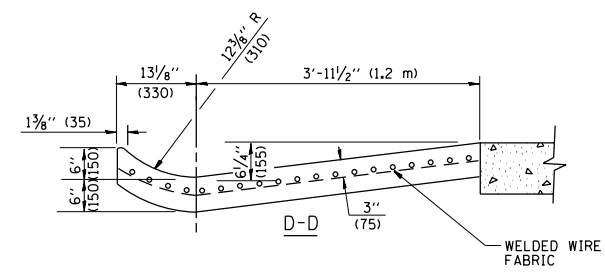
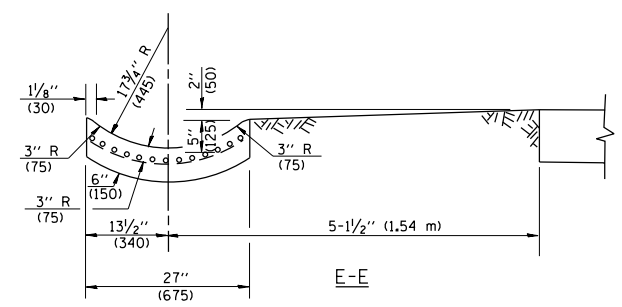
DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	45
BD0156-07 (BD-01)			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



A-A *

* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24\"/>

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL =
 1.25 CU. YDS. (0.96 m³) CLASS S1 CONCRETE (OUTLET) FOR 9\"/>

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

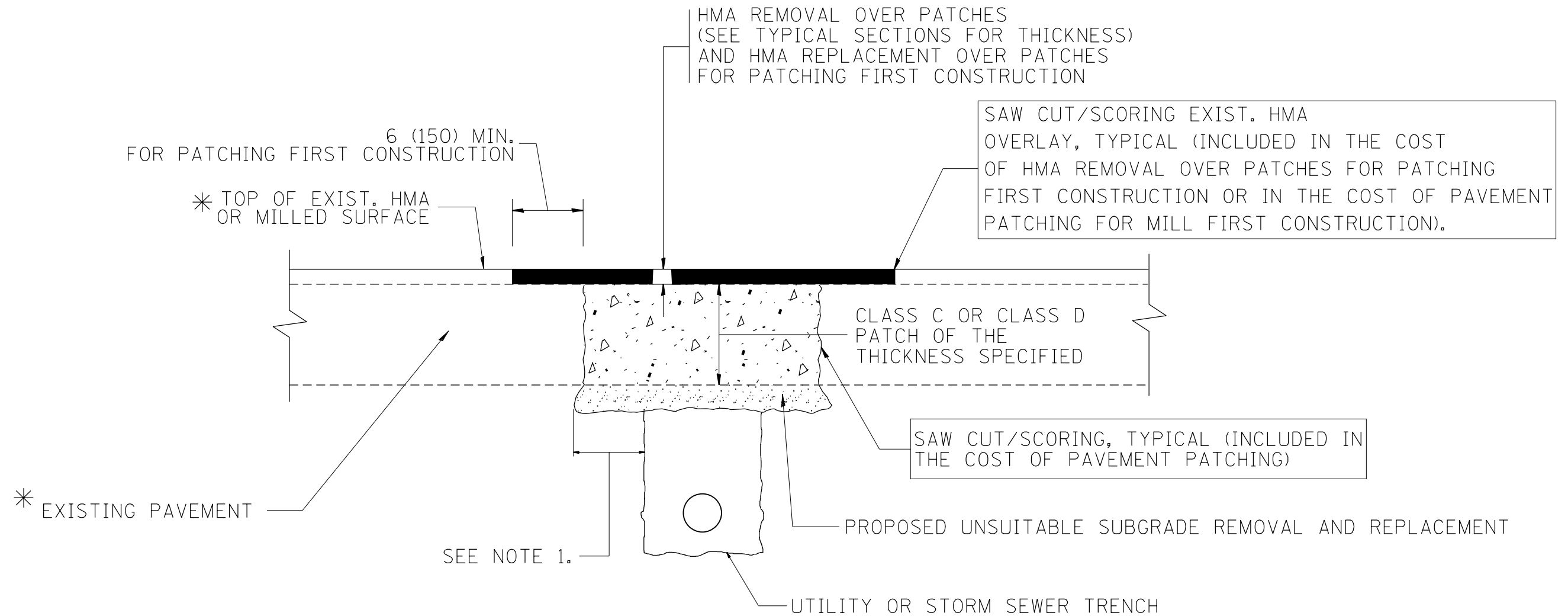
FILE NAME =	USER NAME = abreueh	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - E. GOMEZ 12-21-00
	PLOT DATE = 12/12/2012	DATE - 08-04-86	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OUTLET FOR CONCRETE
CURB AND GUTTER**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	46
BD600-01 (BD-03)		CONTRACT NO.	60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

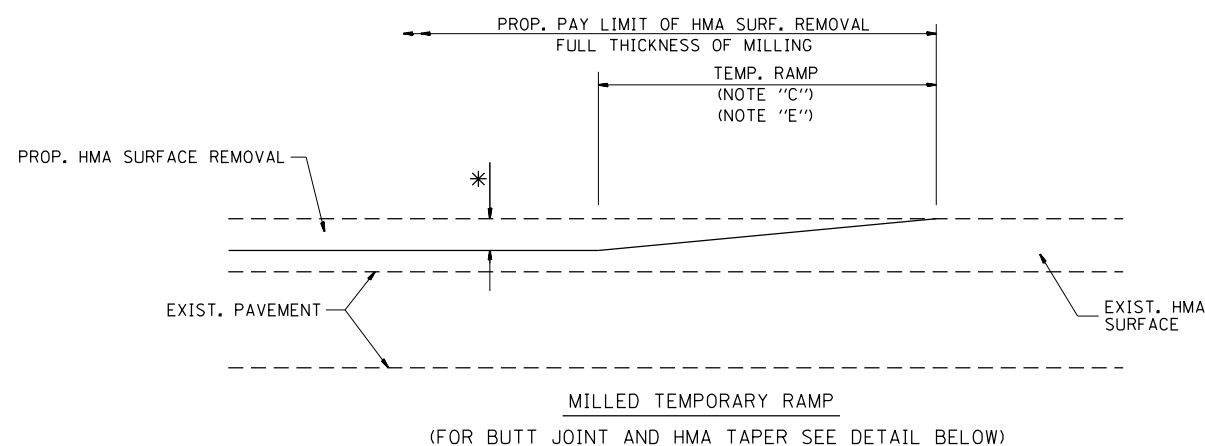
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = obreueh	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
et:\pw\work\p1dot\obreueh\dms99207\Dist\td.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 12/12/2012	DATE - 10-25-94	REVISED - K. ENG 10-27-08

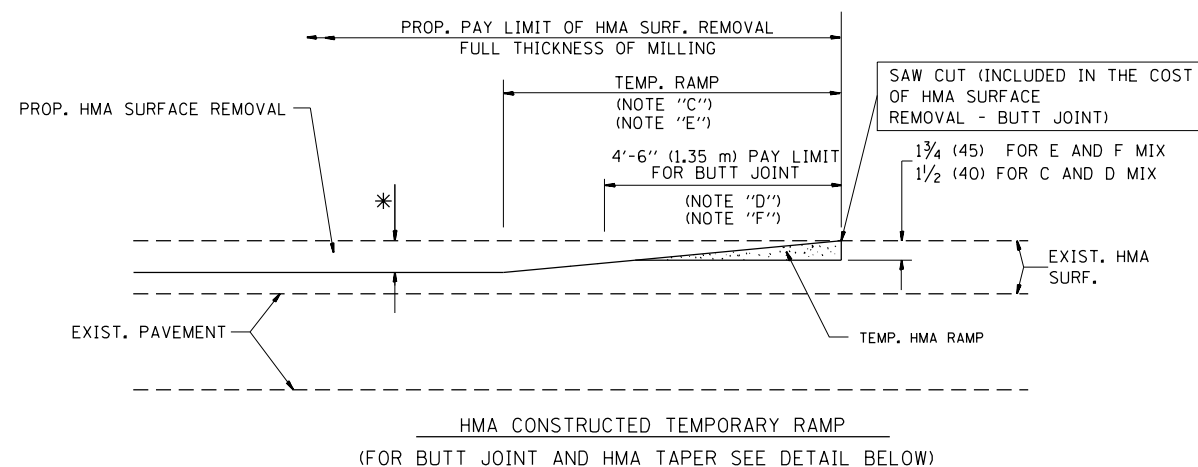
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	47
BD400-04 (BD-22)			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

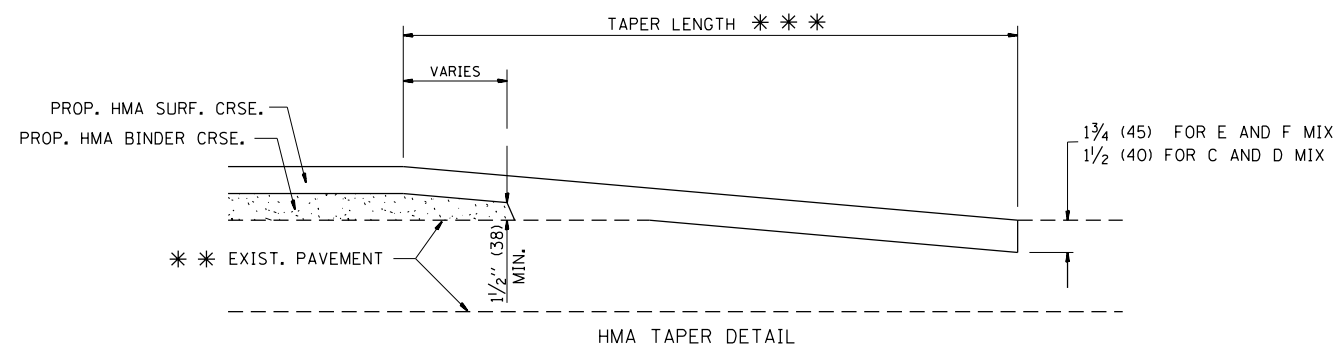
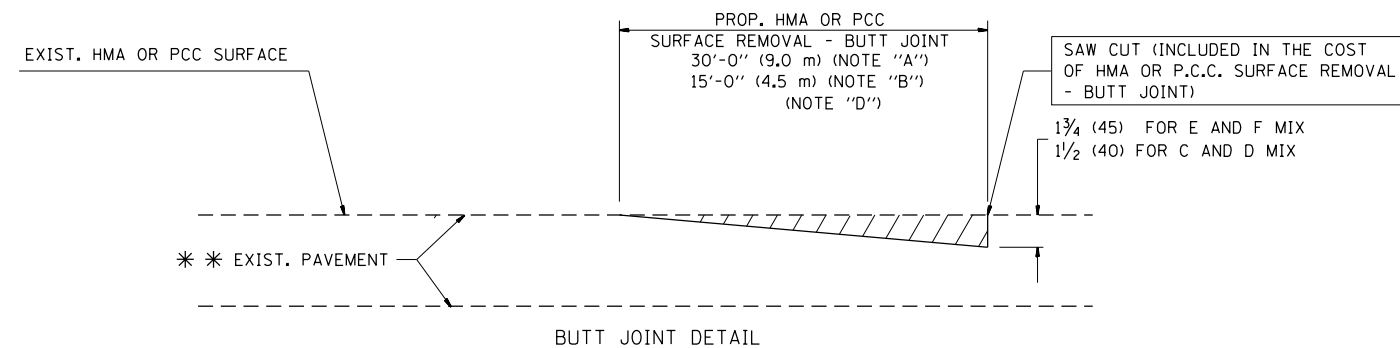


OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

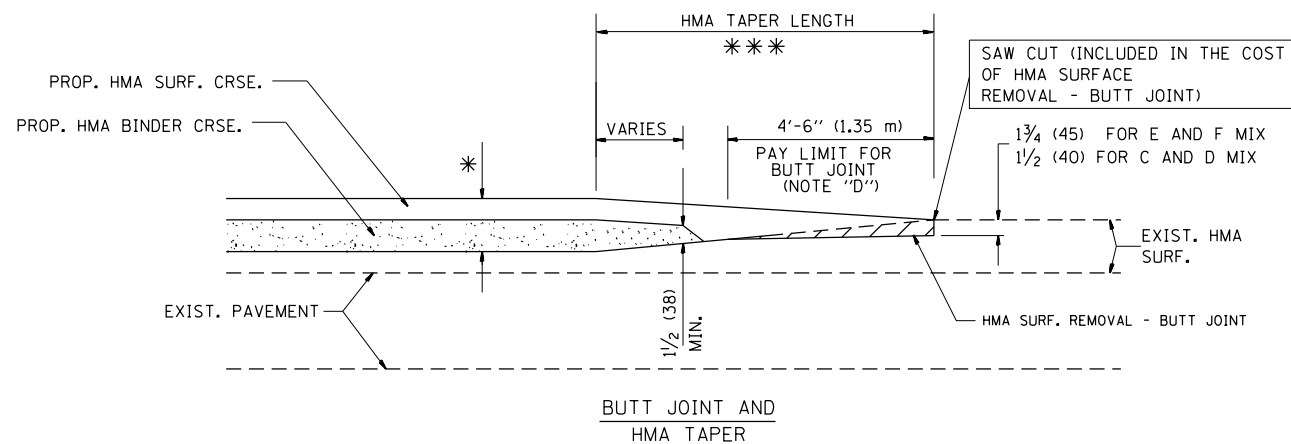
NOTES

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

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

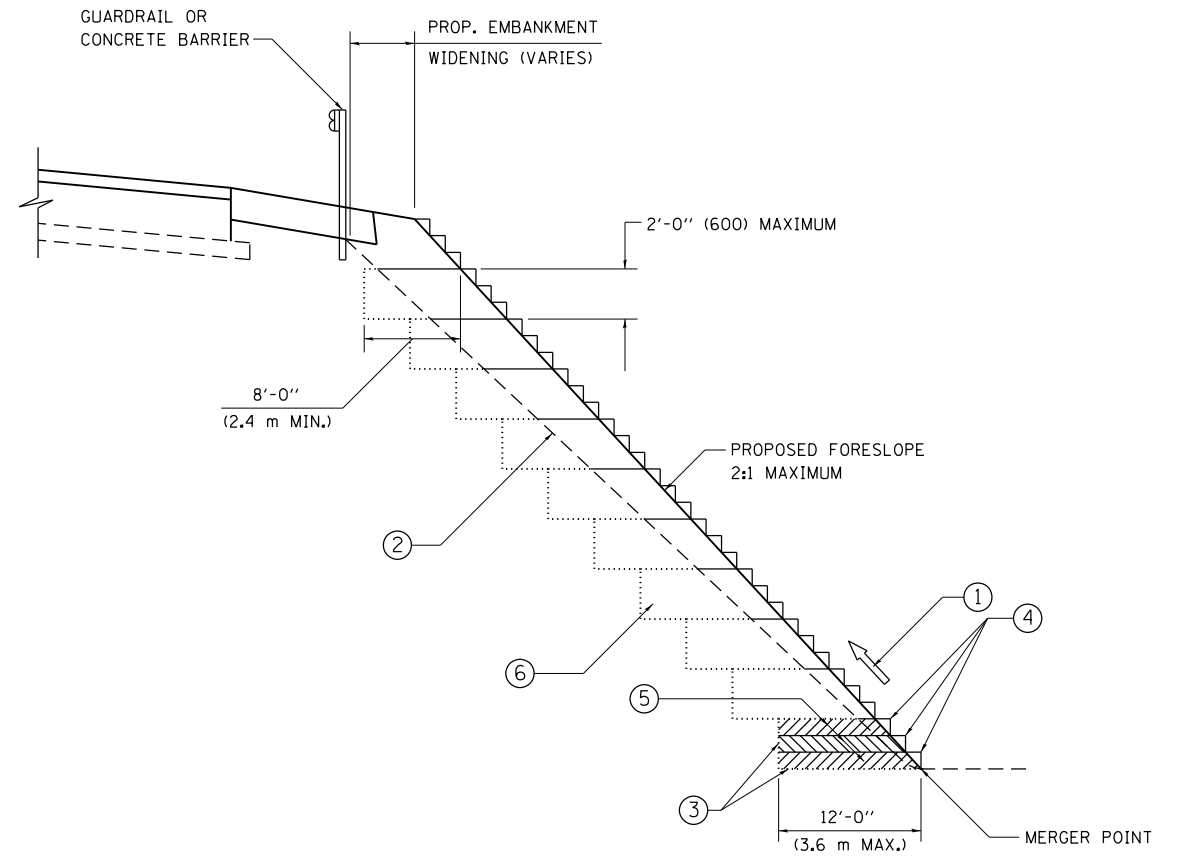
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	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 12/12/2012	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	48
BD400-05 BD32		CONTRACT NO. 60K20		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

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

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

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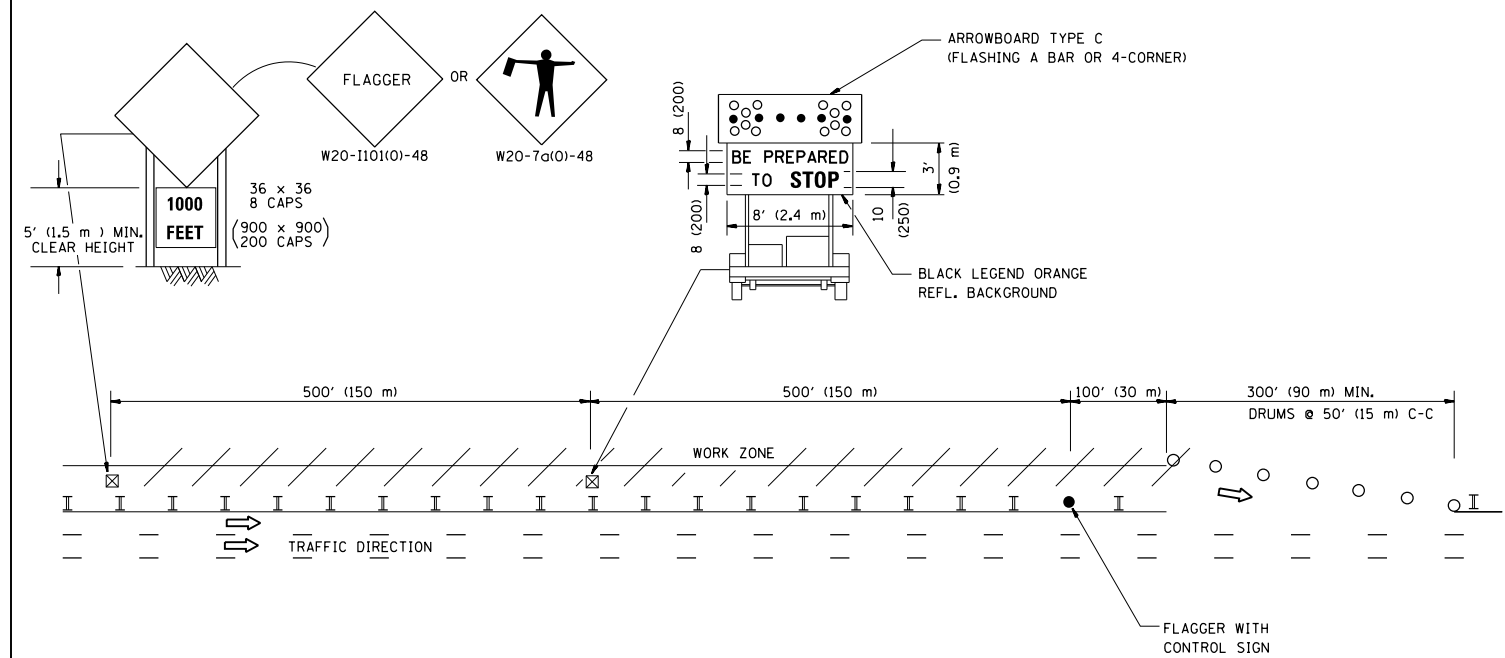
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BENCHING DETAIL FOR EMBANKMENT WIDENING			
SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA. TO STA.

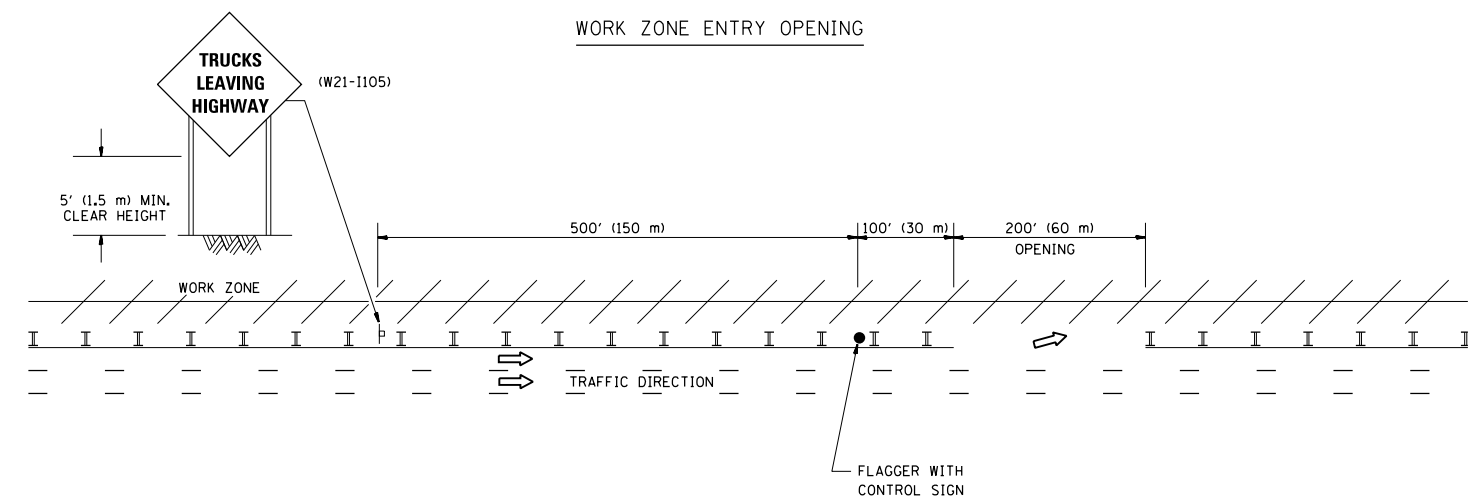
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	49
BD-51			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

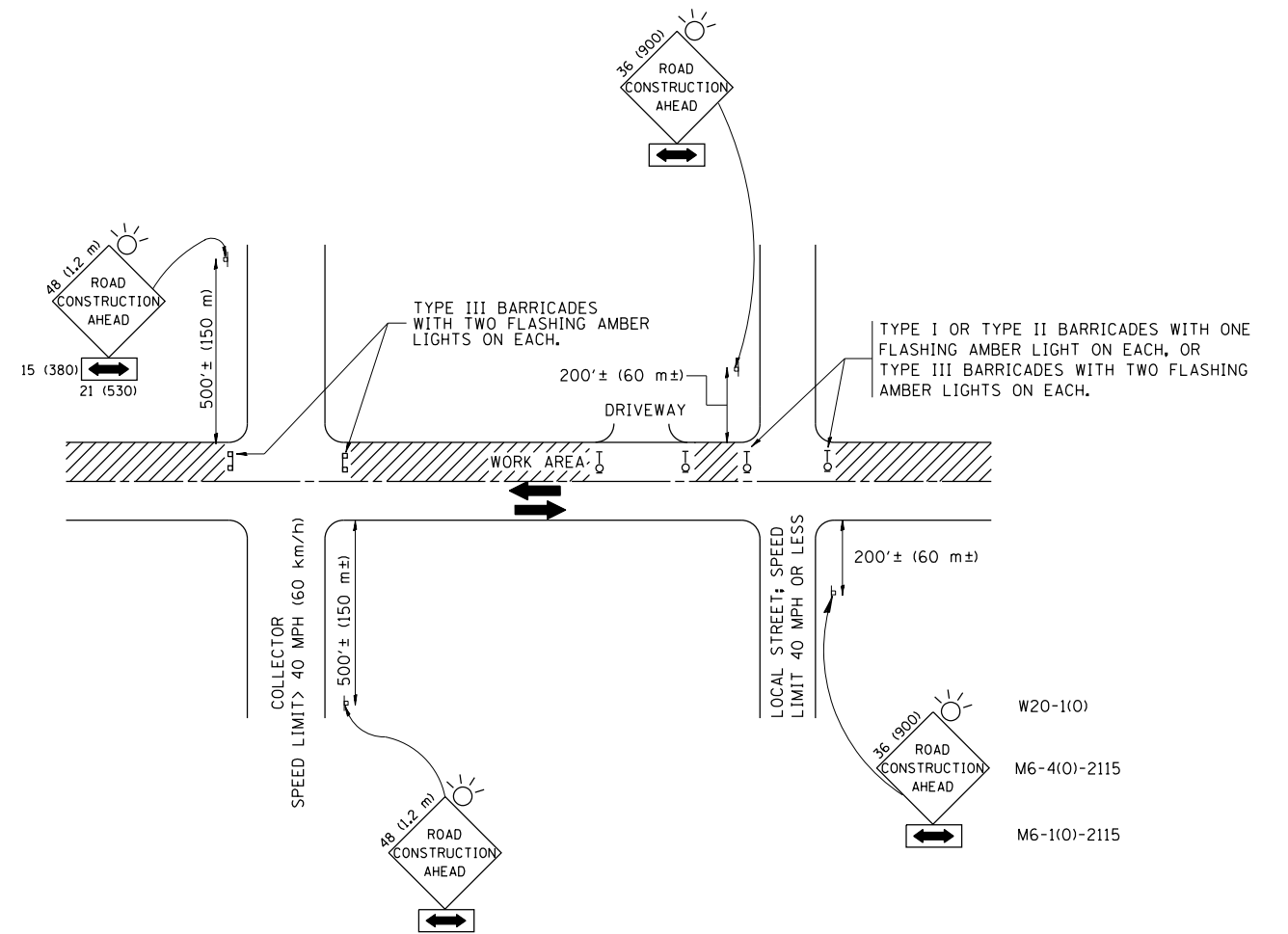
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	PLOT DATE = 12/12/2012	DATE -	REVISED - S.P.B. 12-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	50
TC-18			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

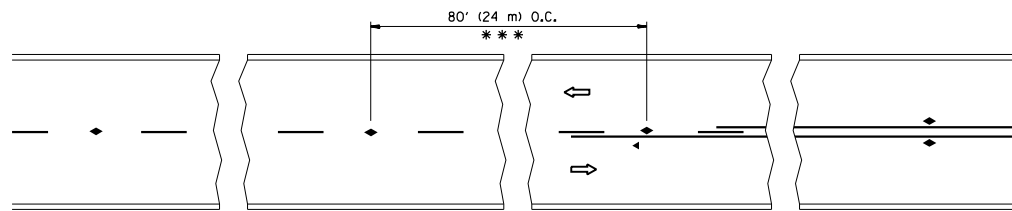
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 12/12/2012	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

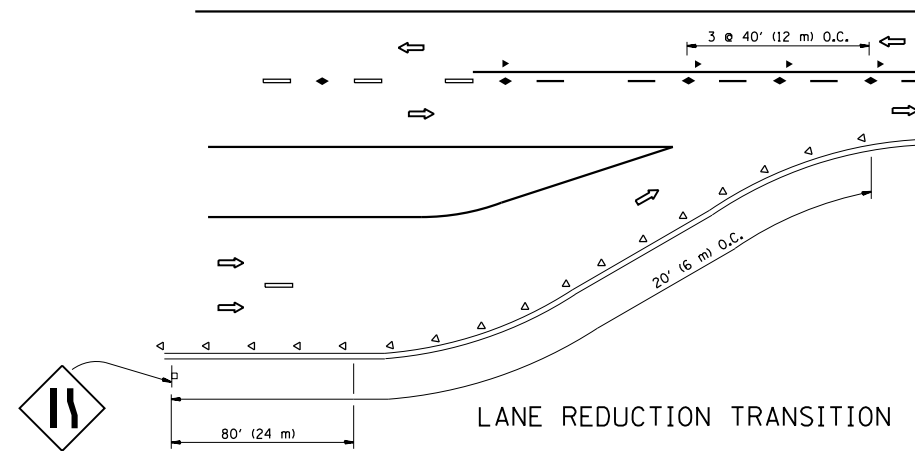
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TC-10			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

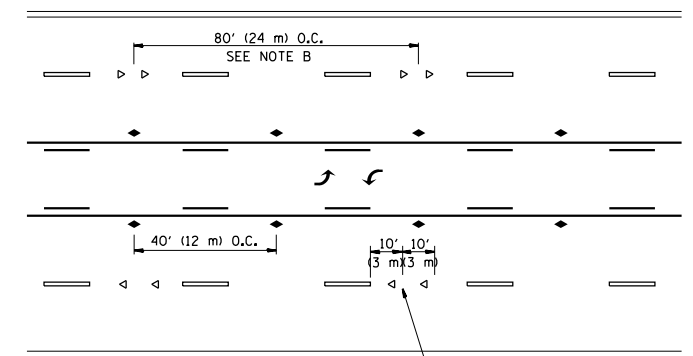


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

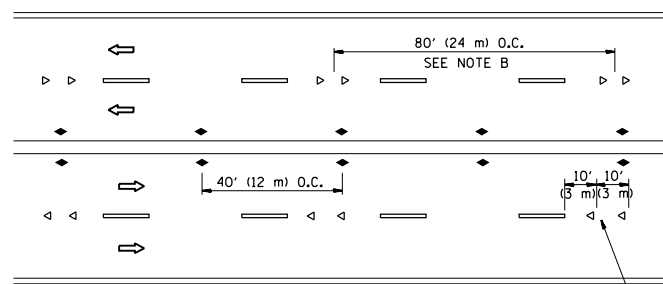
TWO-LANE/TWO-WAY



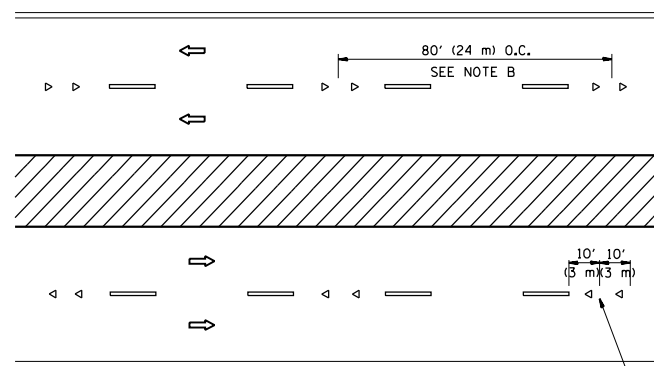
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

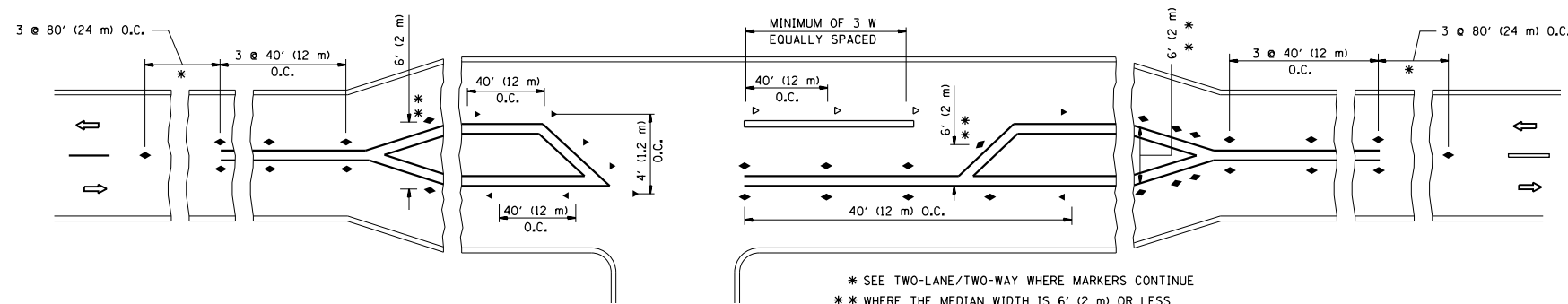
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

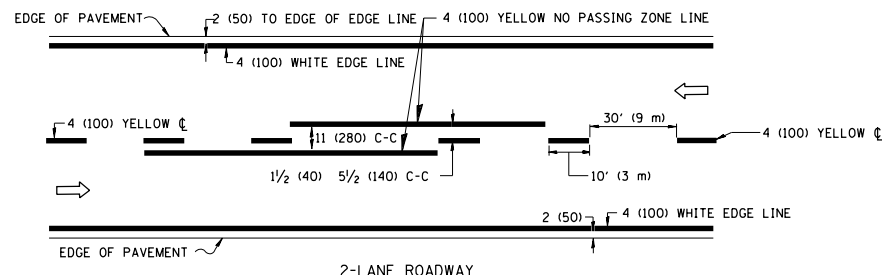
All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT DATE = 12/12/2012	DATE -	REVISED - C. JUCIUS 09-09-09

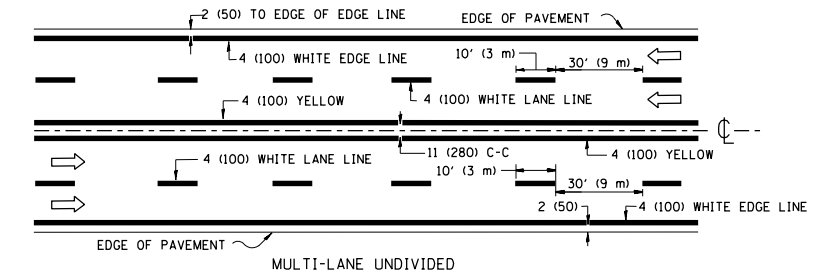
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

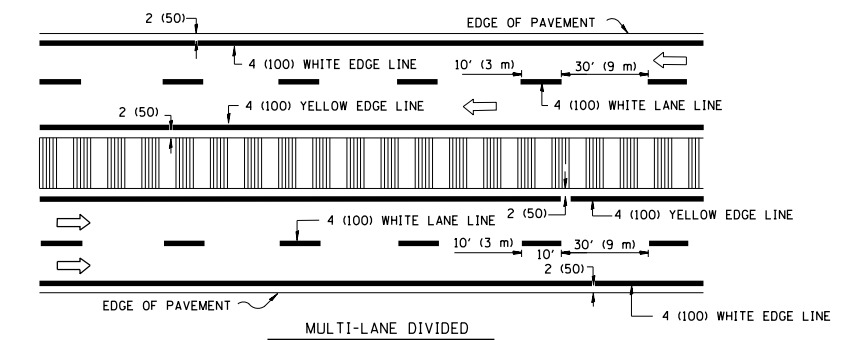
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	52
TC-11			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY



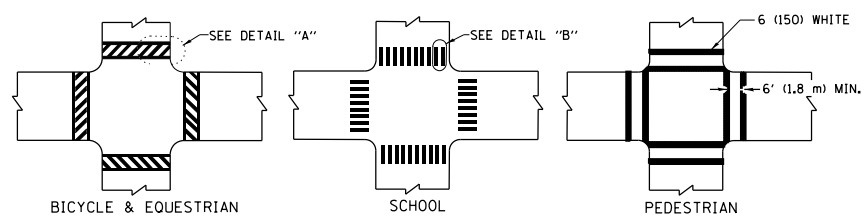
MULTI-LANE UNDIVIDED



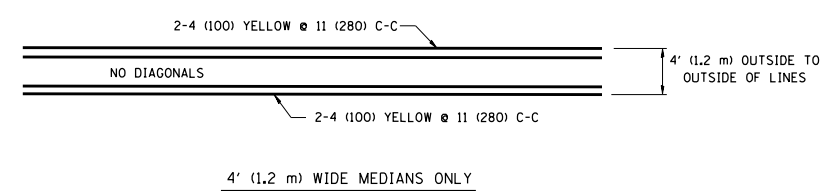
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

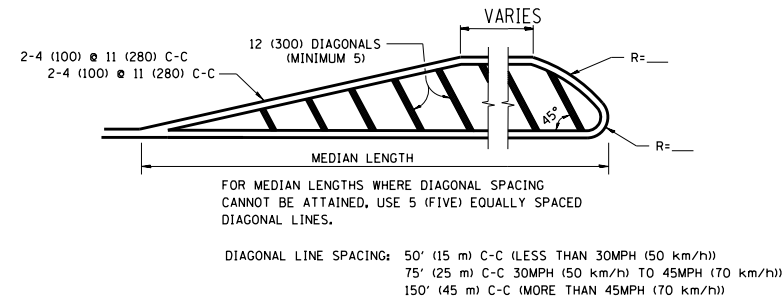
TYPICAL LANE AND EDGE LINE MARKING



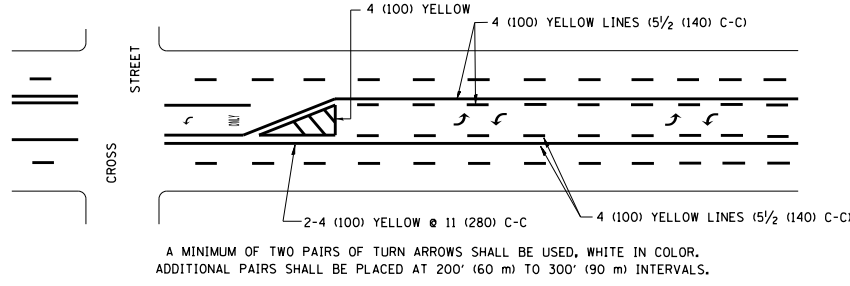
TYPICAL CROSSWALK MARKING



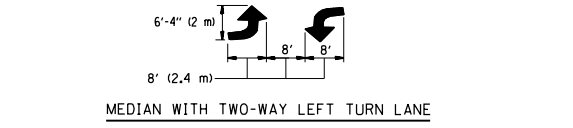
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE



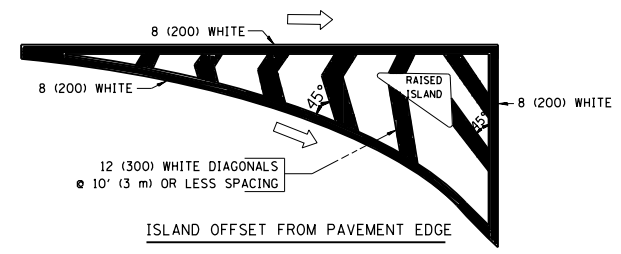
TYPICAL PAINTED MEDIAN MARKING



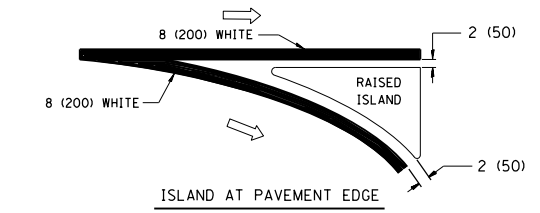
TYPICAL LEFT (OR RIGHT) TURN LANE

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

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE. SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15' (4.5 m) MIN. LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²) EACH
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

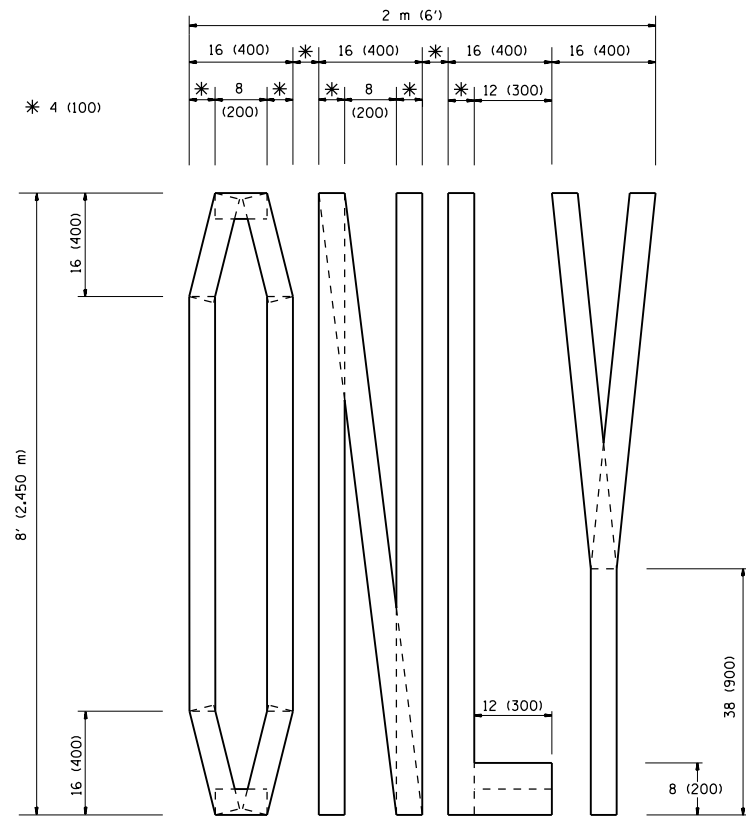
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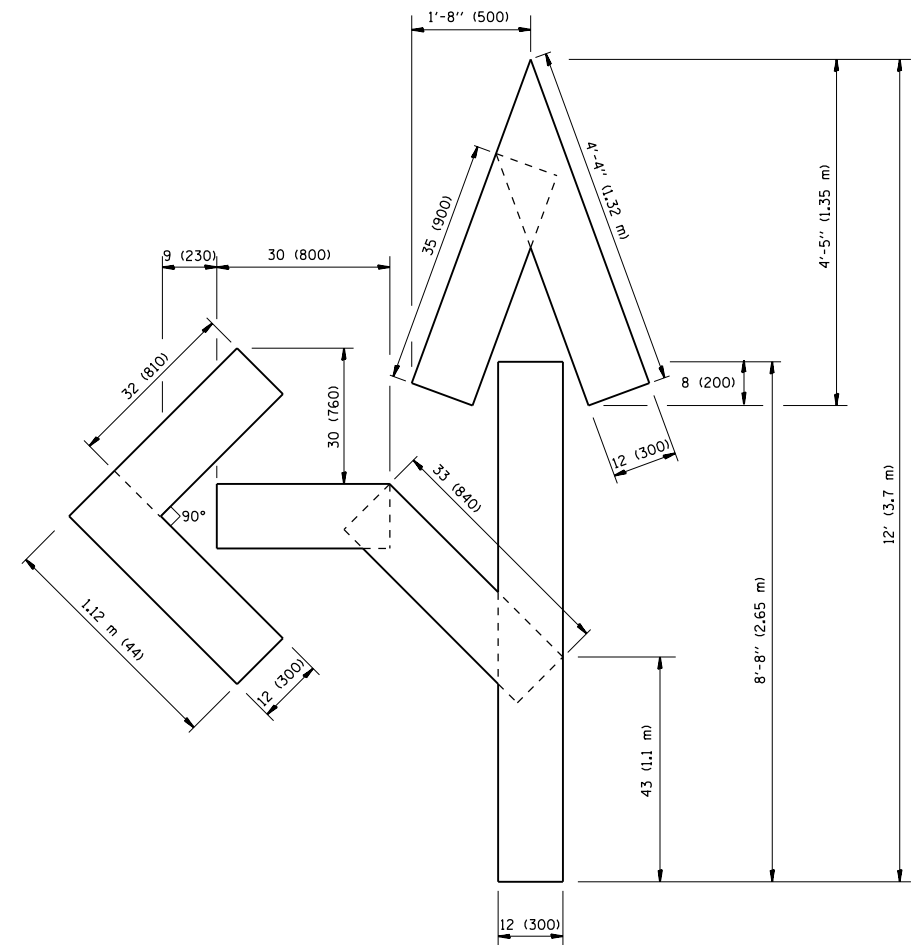
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

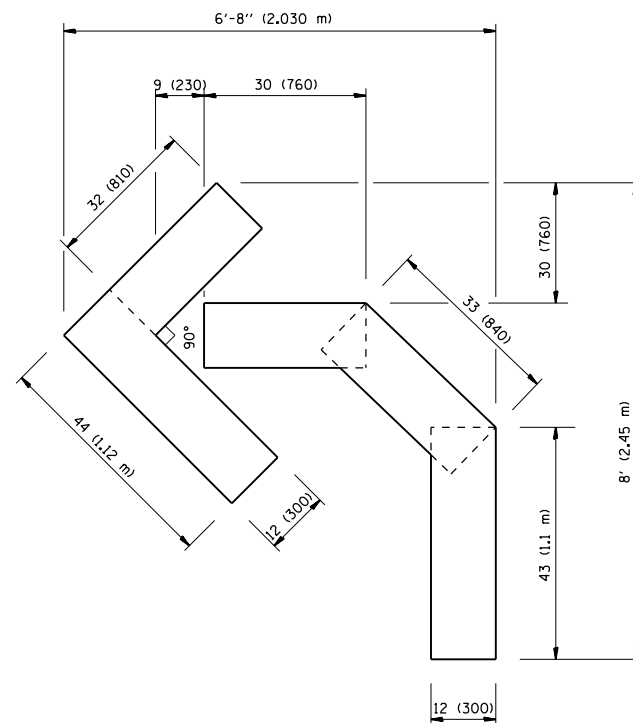
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	146N-2	MCHENRY	65	53
TC-13		CONTRACT NO. 60K20		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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



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

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

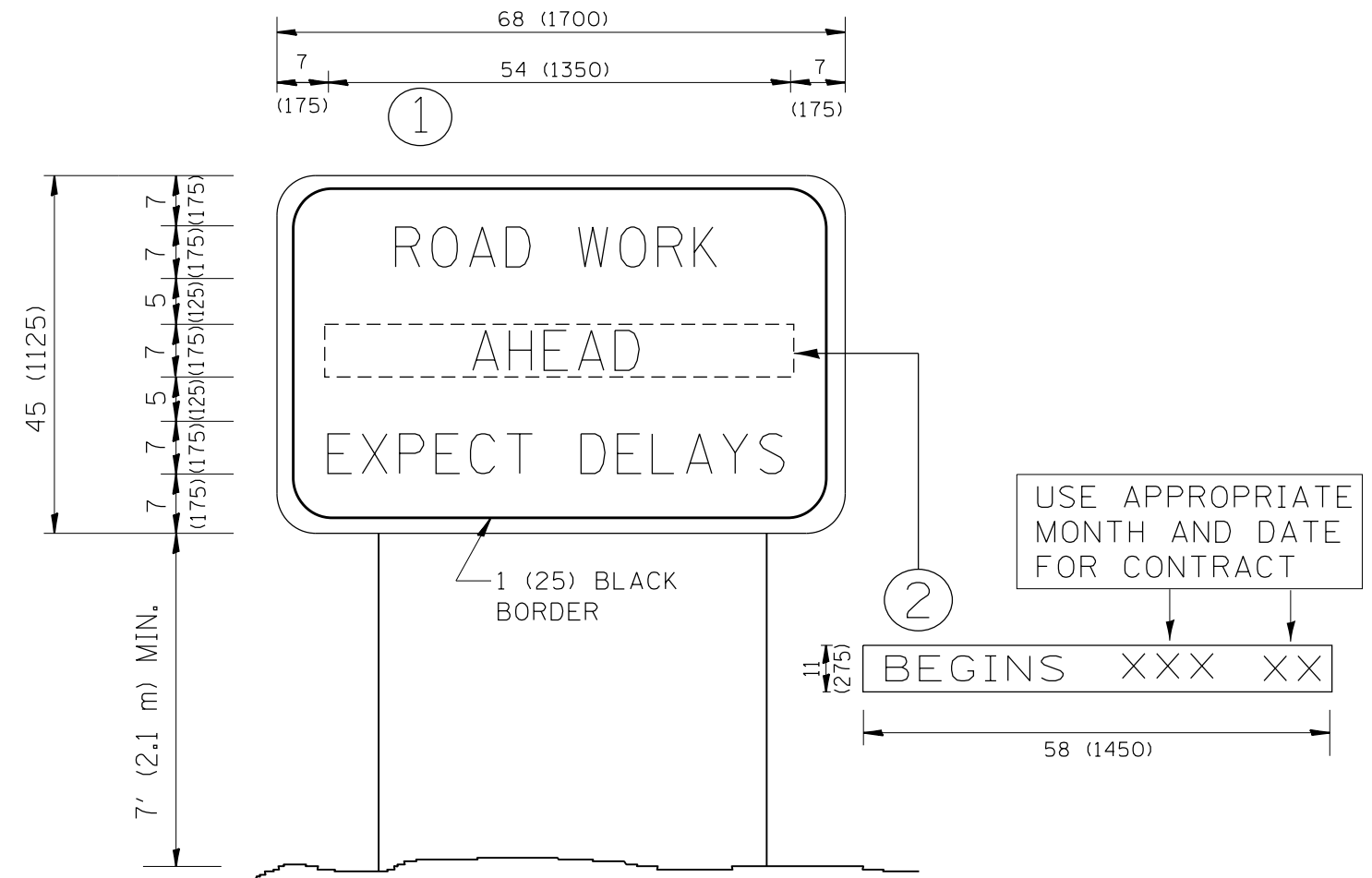
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 12/12/2012	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-16			CONTRACT NO. 60K20	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

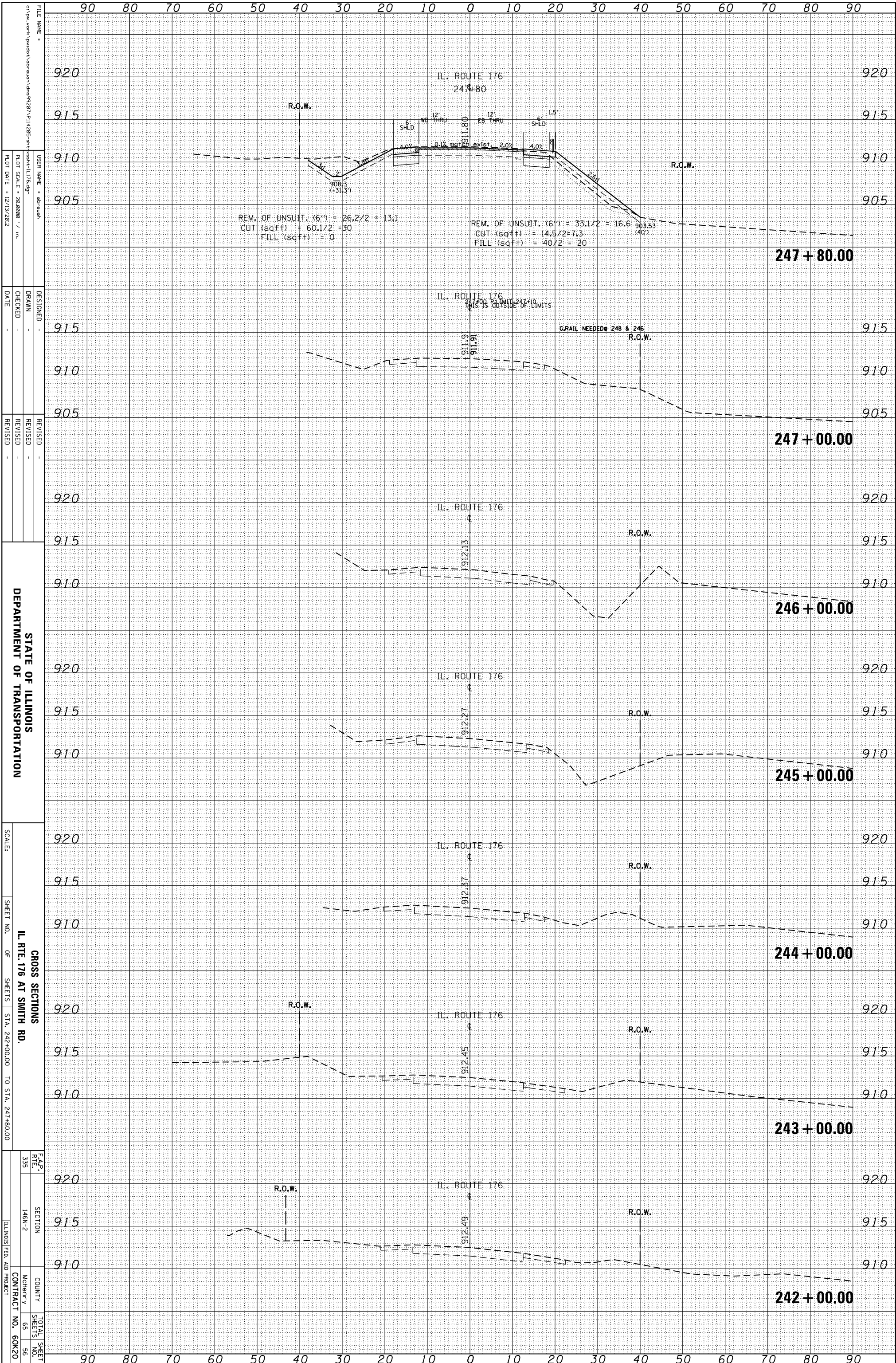
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME =	USER NAME = obreueh	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 12/12/2012	DATE -	REVISED - C. JUCIUS 01-31-07	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		



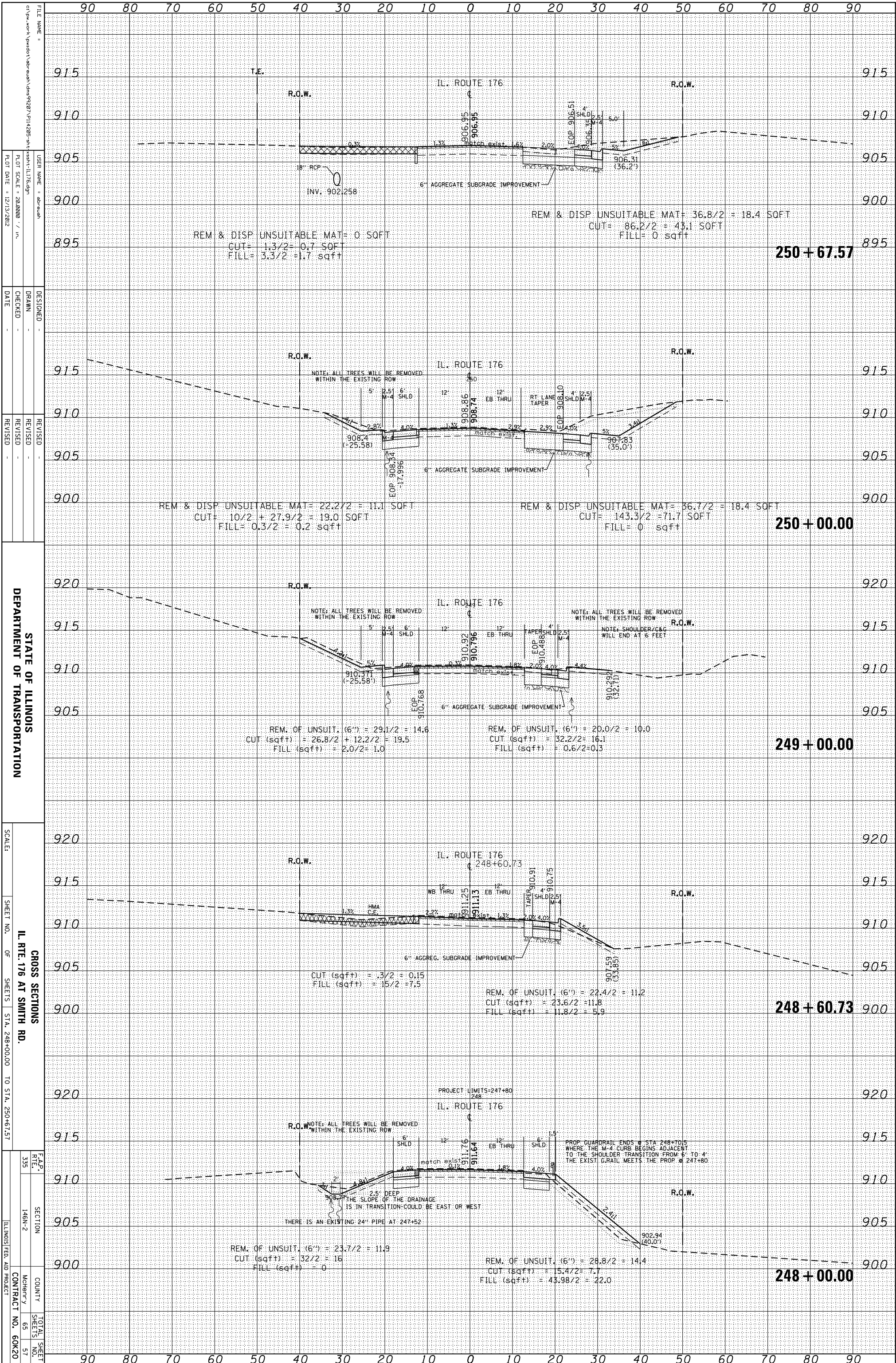
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROSS SECTIONS
IL. RTE. 176 AT SMITH RD.
SCALE: _____
SHEET NO. _____ OF _____ SHEETS
STA. 242+00.00 TO STA. 247+80.00

F.A.P. _____
R.T.E. _____
SECTION _____
COUNTY _____
CONTRACT NO. _____
TOTAL SHEET NO. _____
SHEETS NO. _____

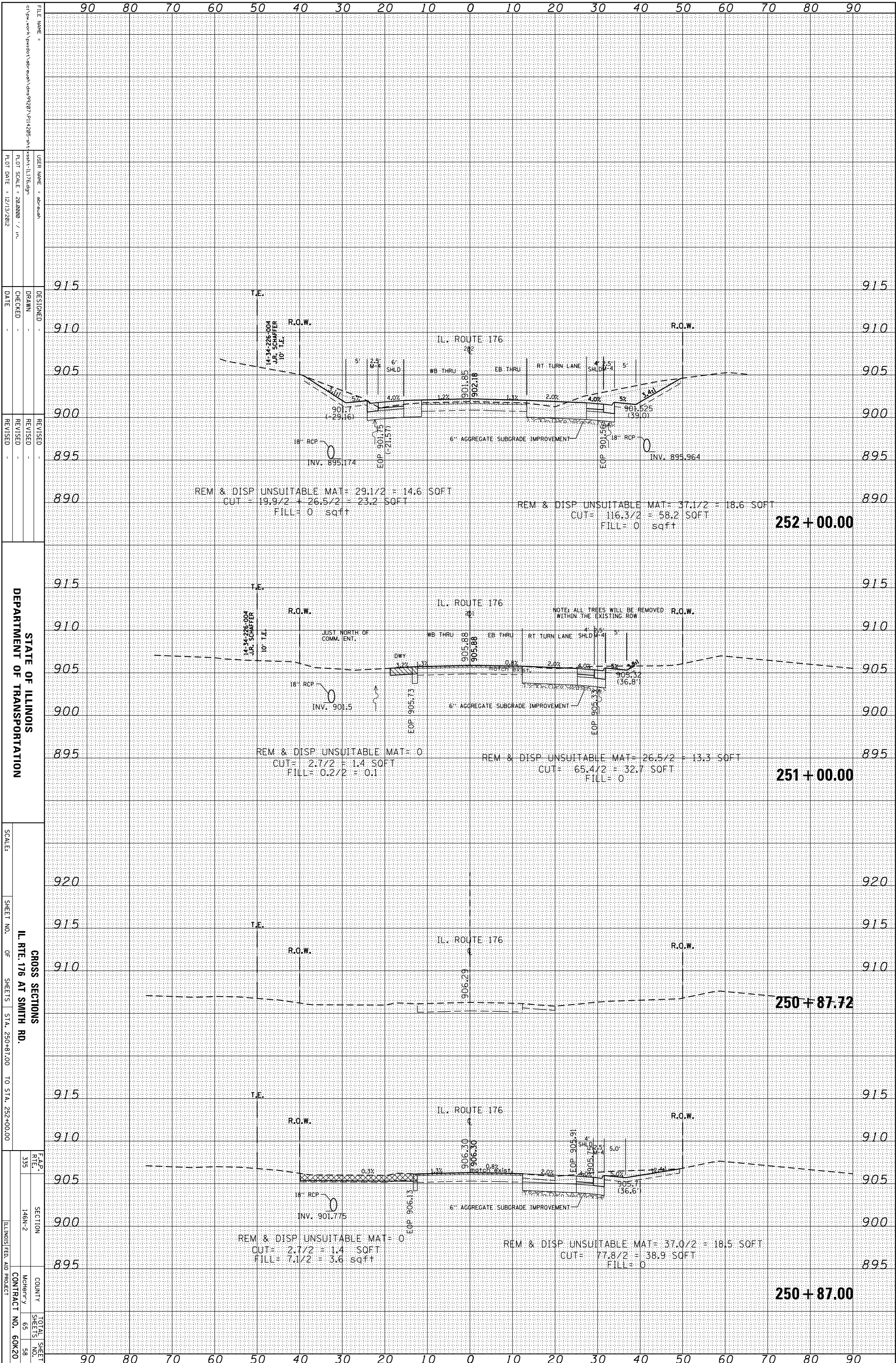
ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROSS SECTIONS
IL RTE. 176 AT SMITH RD.

SCALE: SHEET NO. OF SHEETS STA. 250+87.00 TO STA. 252+00.00

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEET NO.
335	146N-2	McHenry	65
			58

ILLINOIS FED. AID PROJECT CONTRACT NO. 60K20

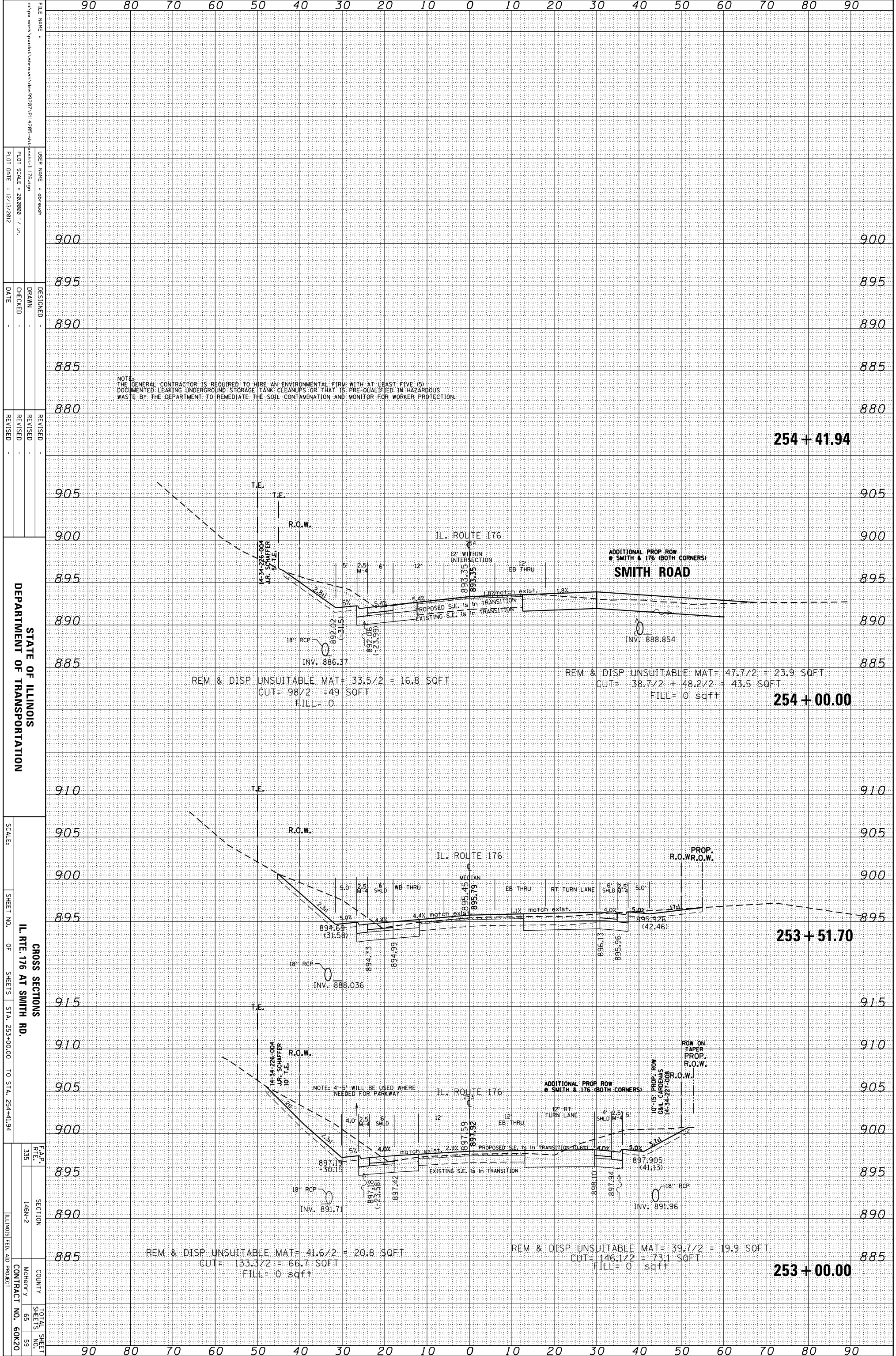
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USER NAME: abraham
PLOT SCALE: 28,000 / in.
PLOT DATE: 12/13/2012

DESIGNED: DRAWN: CHECKED: DATE:

REVISED: REVISED: REVISED: REVISED: DATE:

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



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DESIGNED -

DRAWN -

CHECKED -

DATE -

REVISIONS

REVISION NO. 1

REVISION DESCRIPTION

DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

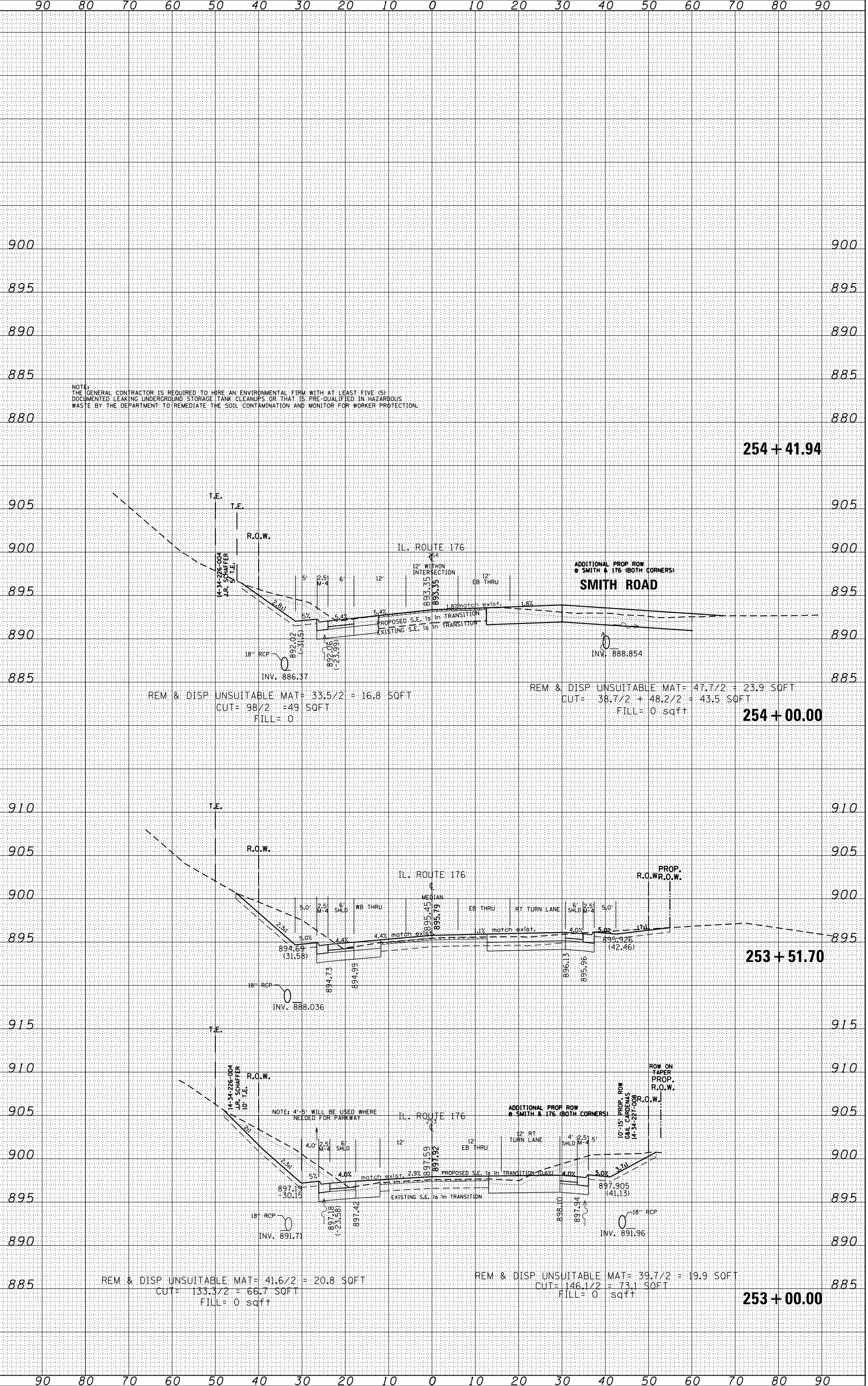
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SHEET NO. 335 OF 335 SHEETS STA. 253+00.00 TO STA. 254+41.94

CROSS SECTIONS
IL. RTE. 176 AT SMITH RD.

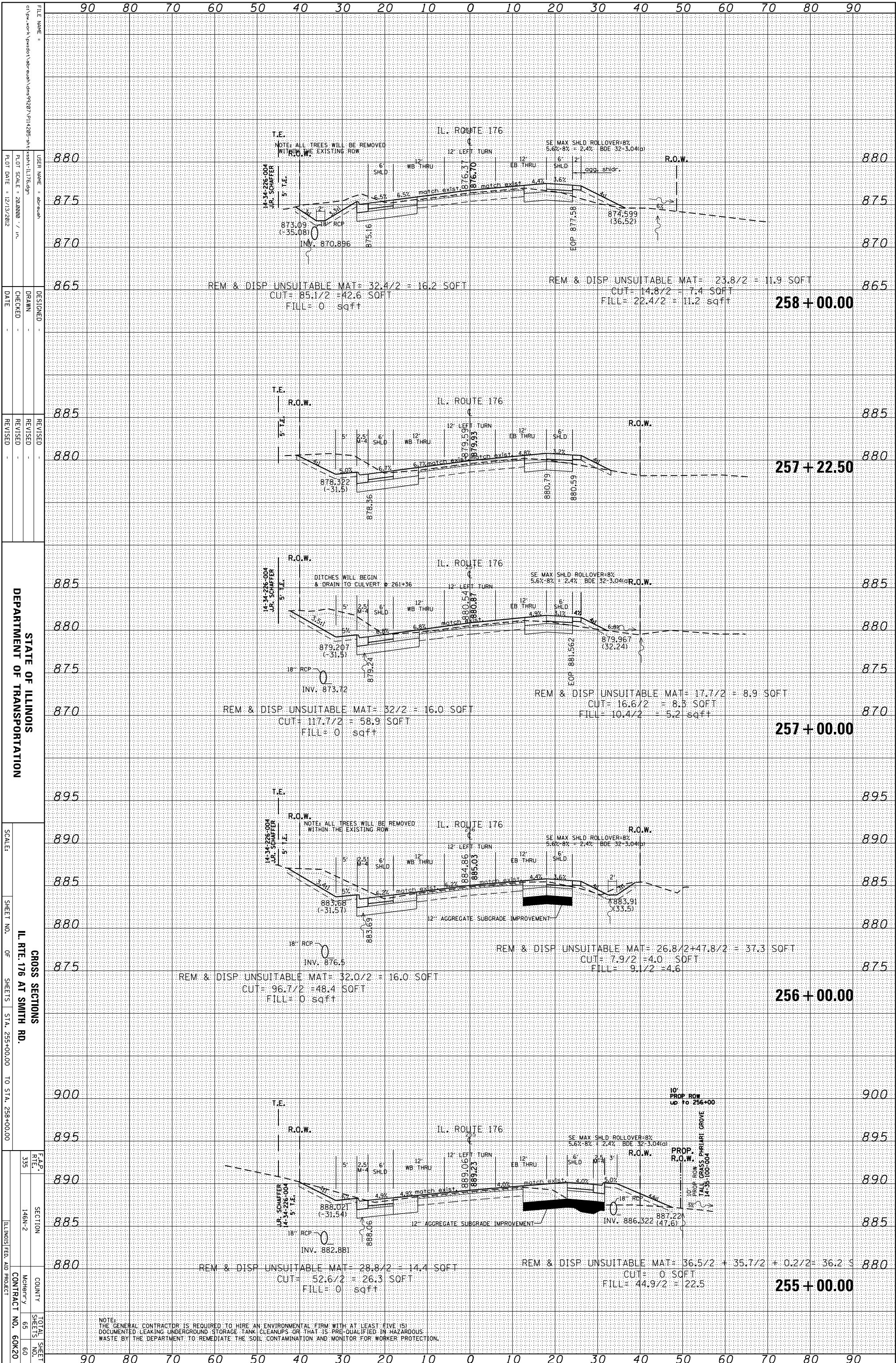
F.A.P. SECTION TOTAL SHEET NO. 335 146N-2 59

CONTRACT NO. 60K20



ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROSS SECTIONS
IL RTE. 176 AT SMITH RD.

SCALE: SHEET NO. OF SHEETS STA. 255+00.00 TO STA. 258+00.00

F.A.P. R.T.E. SECTION COUNTY CONTRACT NO. 60K20

335 146N-2 MCHENRY 65 60

ILLINOIS FED. AID PROJECT

FILE NAME: c:\pwworkspace\pwworkspace\dm99207\p11+285-sh1-rsht-1176.dgn

USER NAME: ab-mach

PLOT SCALE: 28.0000 / in.

PLOT DATE: 12/13/2012

DESIGNED: DRAWN: CHECKED: DATE:

REVISED: REVISED: REVISED: DATE:

SCALE:

SHEET NO.

OF

SHEETS

STA. 255+00.00

TO STA. 258+00.00

F.A.P.

R.T.E.

SECTION

COUNTY

CONTRACT NO.

60K20

335

146N-2

MCHENRY

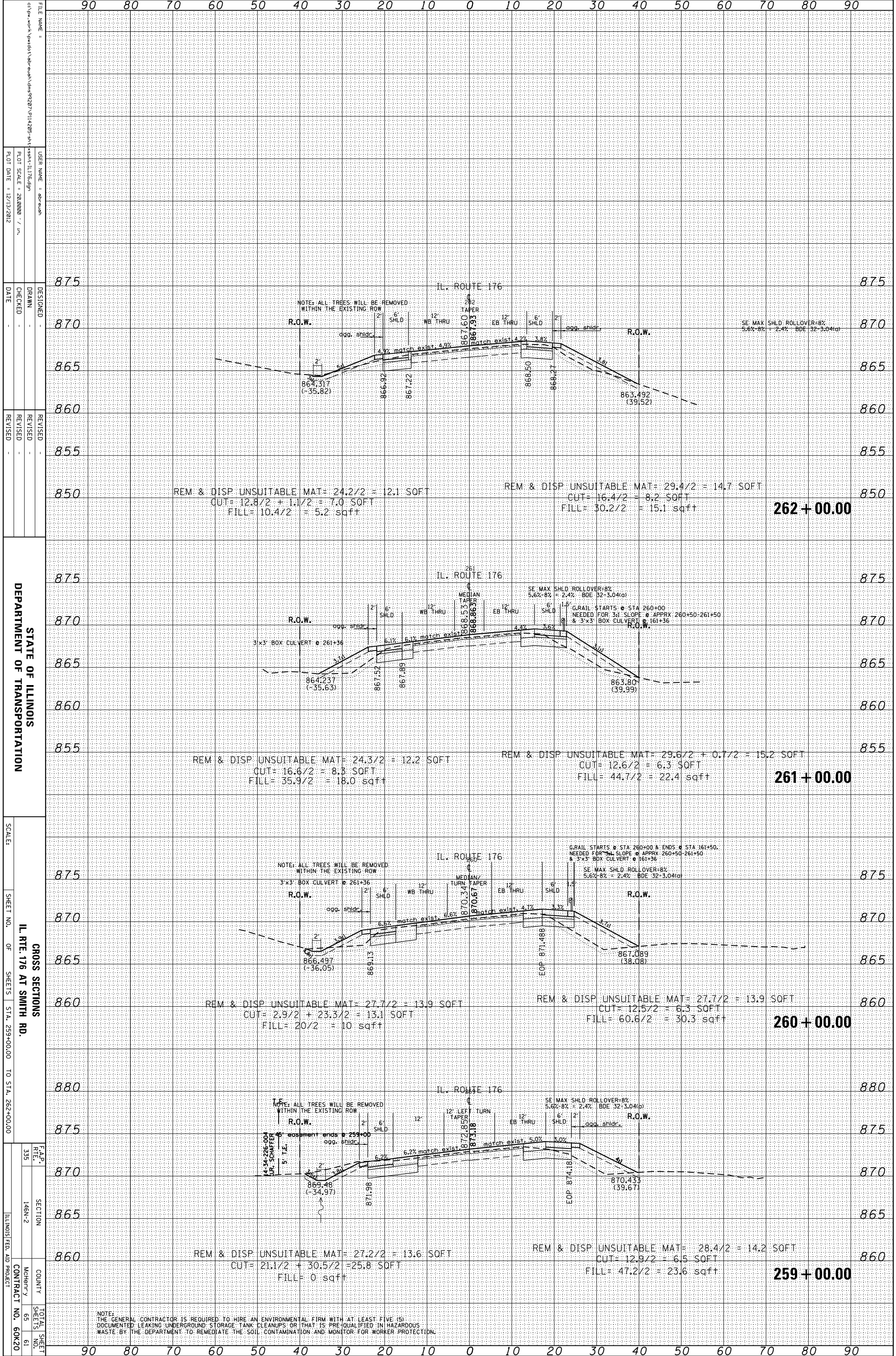
65

60

ILLINOIS FED. AID PROJECT

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

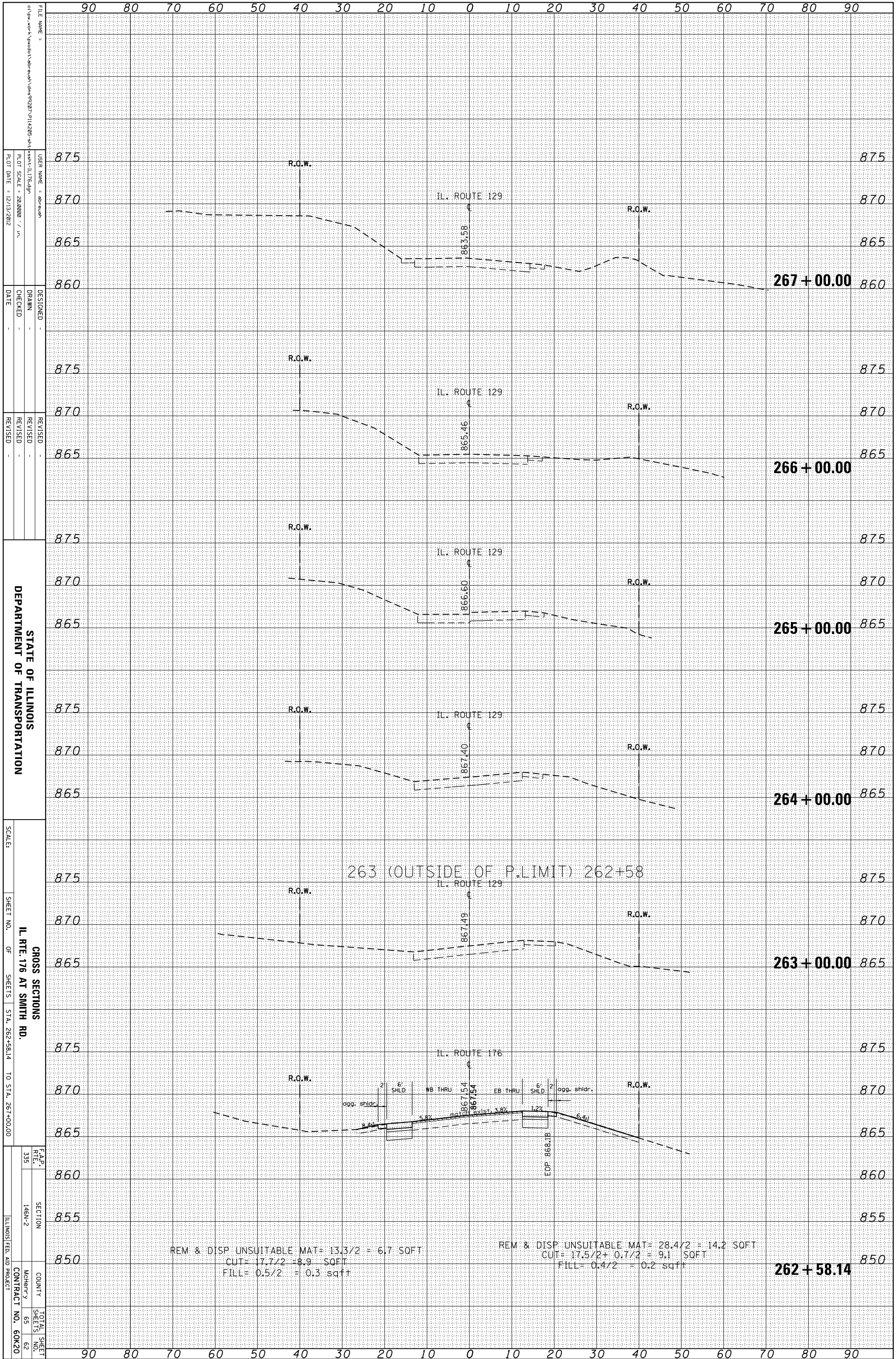
GROSS SECTIONS
IL RTE. 176 AT SMITH RD.

SCALE: SHEET NO. OF SHEETS STA. 259+00.00 TO STA. 262+00.00

NOTE: THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

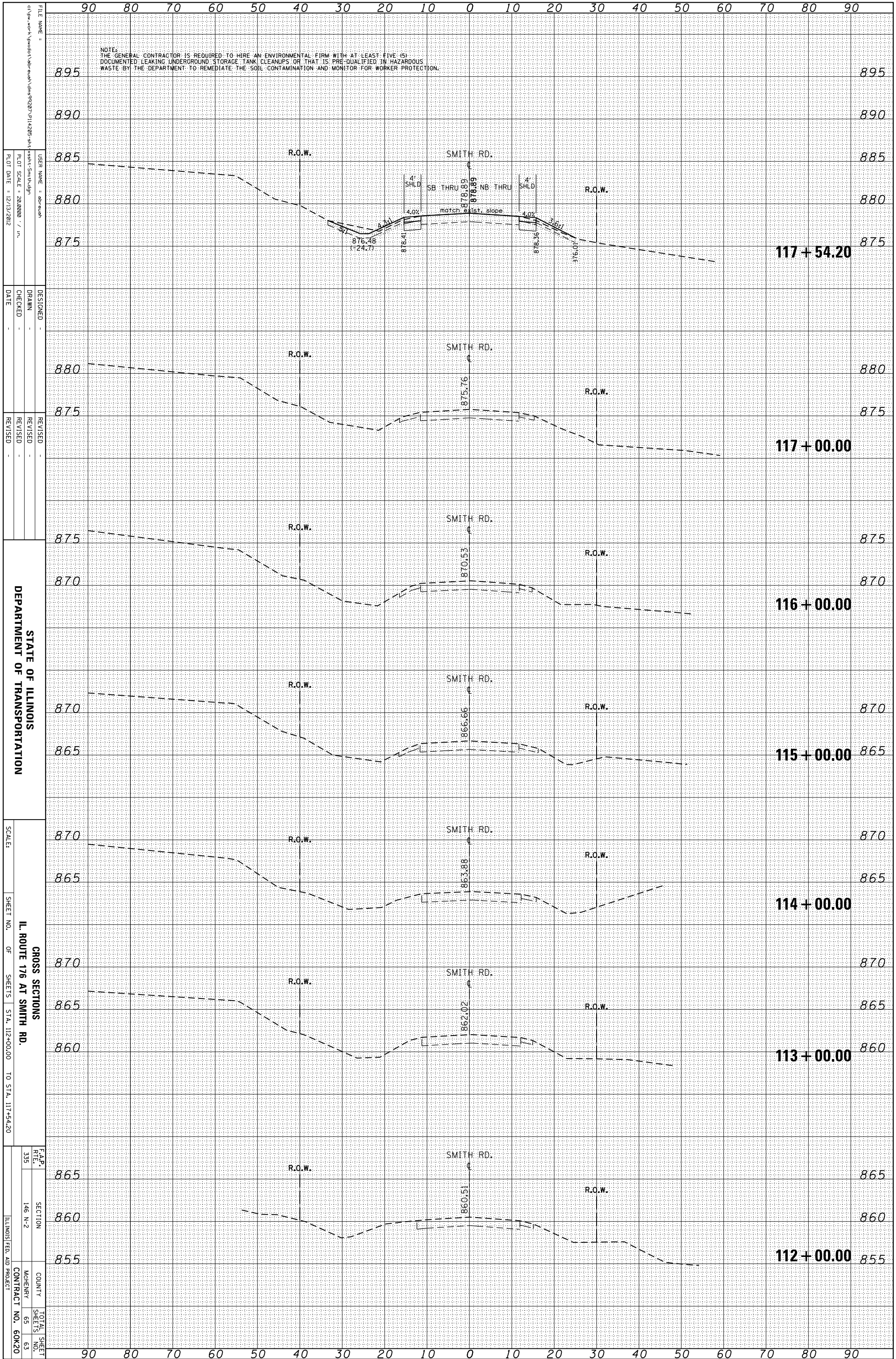


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 DRAWN =
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 DATE =
 REVISED =
 REVISED =
 REVISED =
 REVISED =
 DEPARTMENT OF TRANSPORTATION
 STATE OF ILLINOIS
 GROSS SECTIONS
 IL RTE. 176 AT SMITH RD.
 SCALE: STA. 262+58.14 TO STA. 267+00.00
 SHEET NO. OF SHEETS
 F.A.P. R.T.E. 335
 SECTION 146N-2
 COUNTY McHenry
 CONTRACT NO. 60K20
 ILLINOIS FED. AID PROJECT

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90
 875
 870
 865
 860
 267 + 00.00
 875
 870
 865
 860
 266 + 00.00
 875
 870
 865
 860
 265 + 00.00
 875
 870
 865
 860
 264 + 00.00
 875
 870
 865
 860
 263 + 00.00
 263 (OUTSIDE OF P.LIMIT) 262+58
 875
 870
 865
 860
 855
 850
 262 + 58.14
 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROSS SECTIONS
IL ROUTE 176 AT SMITH RD.
SCALE: _____
SHEET NO. OF SHEETS STA. 112+00.00 TO STA. 117+54.20

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEET NO.
335	146 N-2	MCHENNY	65
		CONTRACT NO.	60K20
		ILLINOIS FED. AID PROJECT	

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DESIGNED -
DRAWN -
CHECKED -
DATE -

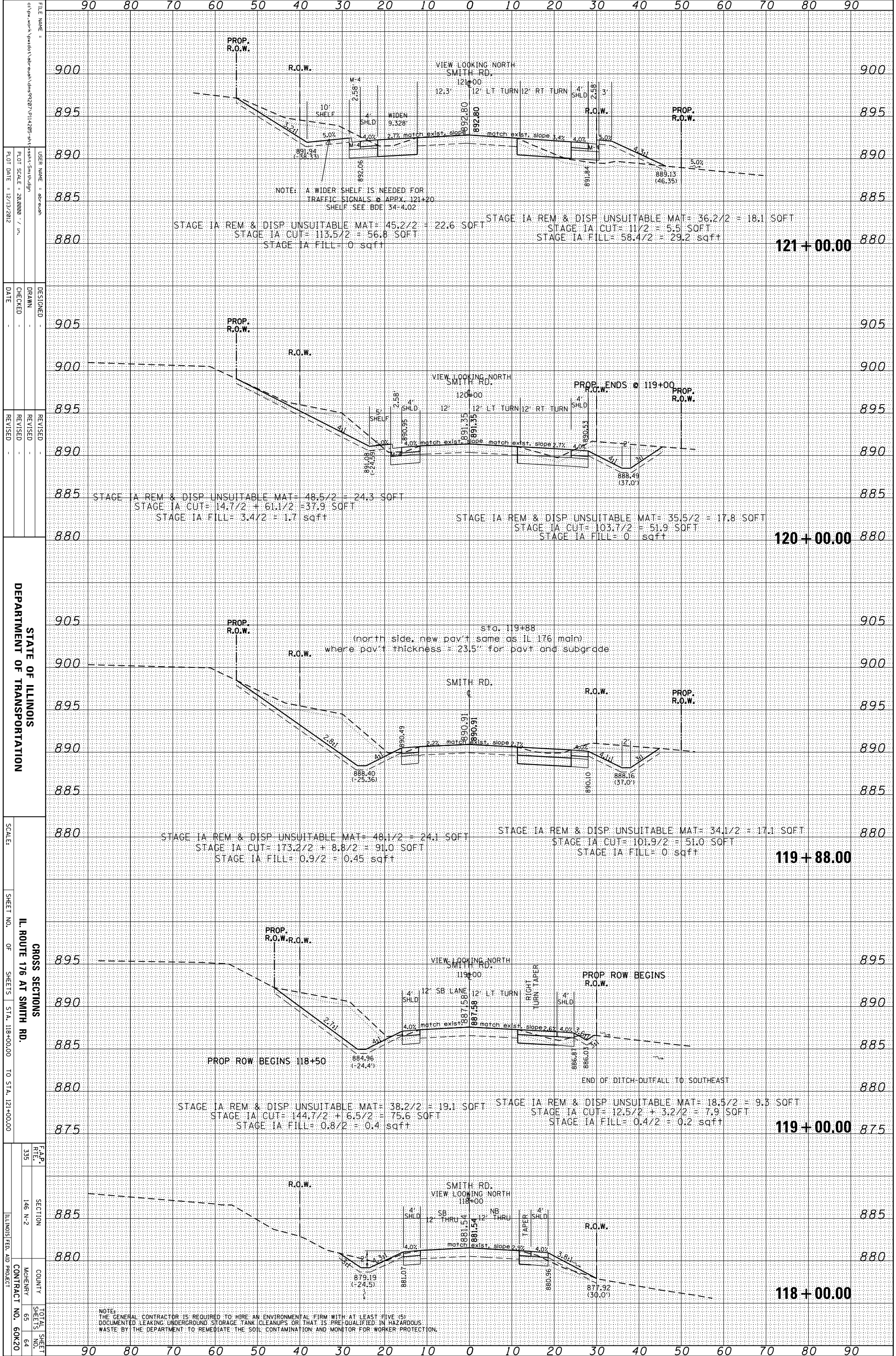
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REVISOR -
REVISION -
DATE -

REVISOR -
REVISION -
DATE -

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

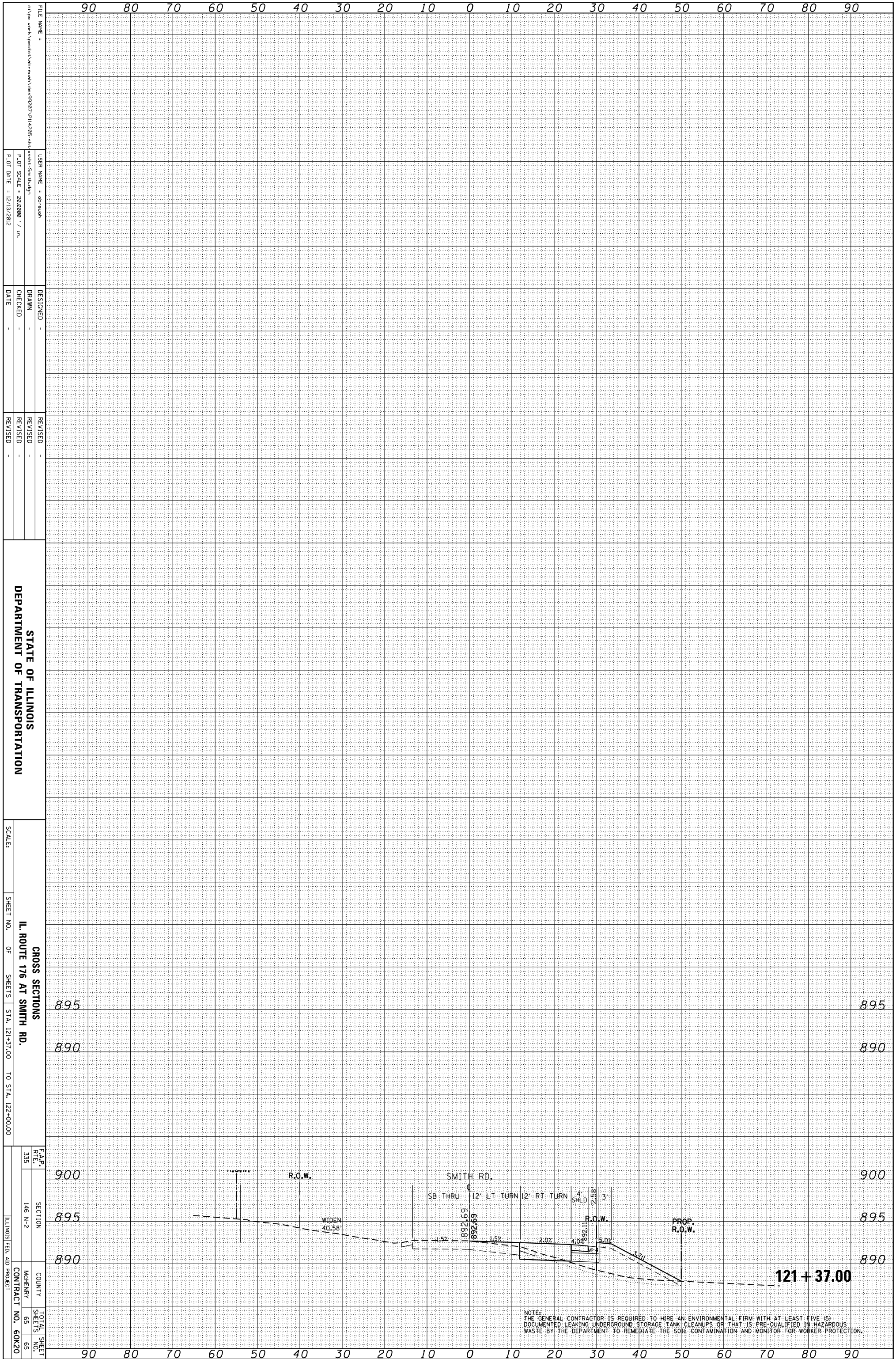
CROSS SECTIONS
IL ROUTE 176 AT SMITH RD.
SHEET NO. OF SHEETS STA. 118+00.00 TO STA. 121+00.00

F.A.P. R.T.E. SECTION COUNTY CONTRACT NO. 60K20
335 146 N-2 MCHENRY 65 64

NOTE: THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



NOTE:
 THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5)
 DOCUMENTED LEAKING UNDERGROUND STORAGE TANK CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS
 WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GROSS SECTIONS
 IL ROUTE 176 AT SMITH RD.
 SCALE: SHEET NO. OF SHEETS STA. 121+37.00 TO STA. 122+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
335	146 N-2	MCHENNY	65
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60K20

FILE NAME =
 USER NAME =
 DESIGNER =
 DRAWN =
 CHECKED =
 DATE =
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 DATE =
 REVISED =