

11-9-12 LETTING ITEM 074

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAU ROUTE 1320: IL. RTE. 58 (SUMMIT STREET)
AT SHALES PARKWAY / COUNTRYFIELD LANE
SECTION: 581-N-1
PROJECT: HSIP-1320(004)
INTERSECTION IMPROVEMENT
COOK COUNTY
C-91-697-10

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED IN THE
CITY OF ELGIN

TRAFFIC DATA:
IL RTE 58 2009 ADT = 10,800
POSTED SPEED LIMIT = 45 MPH

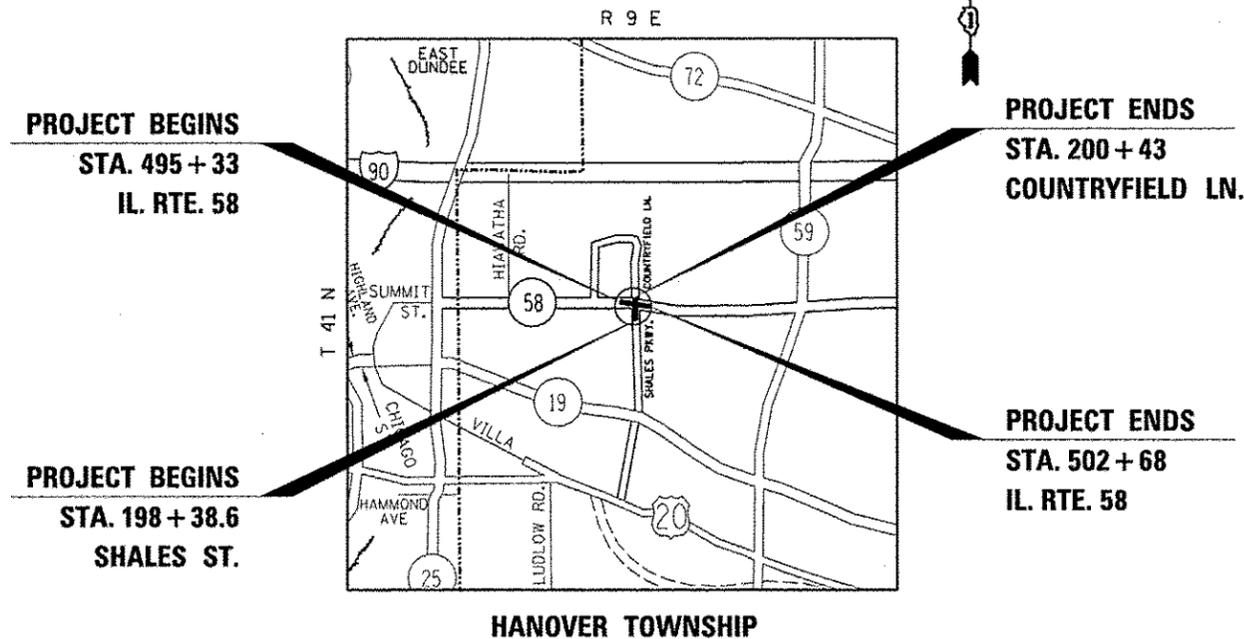
SHALES PKWY 2009 ADT = 9,200
POSTED SPEED LIMIT = 30 MPH

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 KARI SMITH (847) 705-4437
PROJECT MANAGER KEN ENG (847) 705-4247

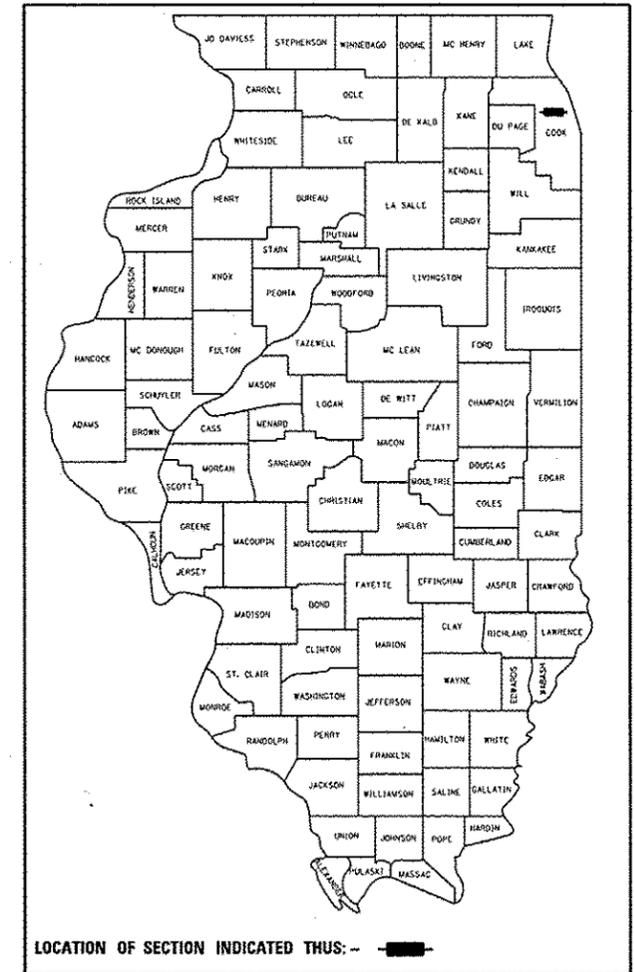
CONTRACT NO. 60L43



IL. RTE. 58 - GROSS AND NET LENGTH = 735.00 FT. = 0.139 MILE
SHALES PKWY./CONTRYPFIELD LN. - GROSS AND NET LENGTH = 204.4 FT. = 0.039 MILE
TOTAL GROSS AND NET LENGTH = 939.4 FT. = 0.178 MILE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	1
ILLINOIS			CONTRACT NO. 60L43	

D-91-697-10



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JANUARY 31, 2012
Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11, 2012
John D. Baranzelli, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 2012
William B. Frey
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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44	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING (TS-07)
45 - 50	CROSS SECTIONS

HIGHWAY STANDARDS

STD. NO.	TITLE
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006-00	DECIMAL OF AN INCH AND OF A FOOT
280001-06	TEMPORARY EROSION CONTROL SYSTEMS
424001-06	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006	DIAGONAL CURB RAMPS FOR SIDEWALKS
424021	DEPRESSED CORNER FOR SIDEWALKS
424026	ENTRANCE / ALLEY PEDESTRIAN CROSSINGS
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542306-02	PRECAST REINFORCED CONCRETE ELLIPTICAL FLARED END SECTION
542311-03	GRATING FOR CONCRETE FLARED END SECTION (FOR 24" (600 MM) THRU 54" (1300 MM) PIPE)
602001-02	CATCH BASIN, TYPE A
602011-02	CATCH BASIN, TYPE C
602301-03	INLET, TYPE A
602401-03	MANHOLE, TYPE A
602406-05	MANHOLE, TYPE A, 6' (1.8 M) DIAMETER
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS, TYPE 1
604036-02	GRATE, TYPE B
604091-02	FRAME AND GRATE, TYPE 24
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606006-02	OUTLET FOR CONCRETE CURB AND GUTTER, TYPE B-6.24 (B-15.60)
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701011-02	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
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
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-02	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-03	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
729001-01	APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-05	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-09	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE CITY OF ELGIN.

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

ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE RESIDENT ENGINEER SHALL CONTACT MR. WALLY CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (847) 715-8419 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.

WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1/2 INCHES (40 mm) WHERE THE SPEED LIMIT IS 40 MPH (80 km/h) OR LESS AND 1 INCH (25 mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 km/h). WITH WRITTEN APPROVAL OF 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).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

ANY SIGNAGE AFFECTED DURING CONSTRUCTION SHALL BE REPLACED TO ITS ORIGINAL LOCATION AND CONDITION (OR NEW).

FILE NAME :	USER NAME : paray-001	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES IL. RTE. 58 AT SHALES PKWY.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ci:\pwork\p101\paray-001\08273284\1	2209-Design.dgn	DRAWN -	REVISED -			1320	581-N-1	COOK	50	2	
	PLOT SCALE : 1/8"=1'-0"	CHECKED -	REVISED -			CONTRACT NO. 60L43					
	PLOT DATE : 8/29/2012	DATE -	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES				URBAN CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				URBAN CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0004 90% FED 10% STATE ROADWAY	0021 90% FED 5% STATE 5% ELGIN T. SIGNALS	0021 100% ELGIN EVP	0021 80% STATE 20% ELGIN SIDEWALK			CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0004 90% FED 10% STATE ROADWAY	0021 90% FED 5% STATE 5% ELGIN T. SIGNALS	0021 100% ELGIN EVP	0021 80% STATE 20% ELGIN SIDEWALK			
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	19	19						48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	6	6						
20100500	TREE REMOVAL, ACRES	ACRE	0.03	0.03						54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1						
20200100	EARTH EXCAVATION	CU YD	463	463						54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1	1						
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	550	550						54214515	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, EQUIVALENT ROUND-SIZE 30"	EACH	1	1						
20800150	TRENCH BACKFILL	CU YD	82	82						54248150	GRATING FOR CONCRETE FLARED END SECTION EQUIVALENT ROUND-SIZE 30"	EACH	1	1						
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SO YD	656	656						550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	48	48						
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	2607	2607						550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	50	50						
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	33	33						550A4000	STORM SEWERS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 18"	FOOT	110	110						
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	33	33						550A4100	STORM SEWERS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 24"	FOOT	96	96						
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	33	33						550A4300	STORM SEWERS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 30"	FOOT	300	300						
* 25100630	EROSION CONTROL BLANKET	SO YD	2607	2607						55100500	STORM SEWER REMOVAL 12"	FOOT	20	20						
* 25200110	SODDING, SALT TOLERANT	SO YD	2607	2607						55100700	STORM SEWER REMOVAL 15"	FOOT	5	5						
* 25200200	SUPPLEMENTAL WATERING	UNIT	131	131						55100900	STORM SEWER REMOVAL 18"	FOOT	115	115						
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	54	54						55101200	STORM SEWER REMOVAL 24"	FOOT	100	100						
28000400	PERIMETER EROSION BARRIER	FOOT	646	646						60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	4	4						
28000510	INLET FILTERS	EACH	11	11						60205040	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	3	3						
35600704	HOT-MIX ASPHALT BASE COURSE WIDENING, 7"	SO YD	347	347						60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	1	1						
30300112	AGGREGATE SUBGRADE IMPROVEMENT, 12"	SO YD	656	656						60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2						
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	2	2						60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1						
40600300	AGGREGATE (PRIME COAT)	TON	9	9						60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	1	1						
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	7	7						60255500	MANHOLES TO BE ADJUSTED	EACH	1	1						
40600895	CONSTRUCTING TEST STRIP	EACH	1	1						60260400	INLETS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1						
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	98	98						60500040	REMOVING MANHOLES	EACH	1	1						
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	492	492						60500050	REMOVING CATCH BASINS	EACH	1	1						
42001300	PROTECTIVE COAT	SO YD	711	711						60500060	REMOVING INLETS	EACH	7	7						
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	4005				4005			60600095	CLASS SI CONCRETE (OUTLET)	CU YD	3	3						
42400800	DETECTABLE WARNINGS	SO FT	189				189			60600605	CONCRETE CURB, TYPE B	FOOT	6	6						
44000100	PAVEMENT REMOVAL	SO YD	166	166						60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	22	22						
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SO YD	4111	4111																
44000300	CURB REMOVAL	FOOT	6	6																
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	740	740																
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	400	400																

* SPECIALTY ITEMS

FILE NAME : G:\p\work\p1010\p1010\021320\F142209.Dwg	USER NAME : permyr	DESIGNED : -	REVISD : -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES IL. RTE. 58 AT SHALES PKWY.			F.A.U. RTE. 1320	SECTION 581-N-1	COUNTY COOK	TOTAL SHEETS 50	SHEET NO. 3
PLOT SCALE : 1/8" = 1'-0"	CHECKED : -	REVISD : -	REVISD : -		SCALE : NONE	SHEET NO. : 1 OF 3 SHEETS	STA. : -	TO STA. : -	CONTRACT NO. : 60L43			
PLOT DATE : 2/7/2012	DATE : -	REVISD : -	REVISD : -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

DT100L DT100L

SUMMARY OF QUANTITIES			URBAN	CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES			URBAN	CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0004 90% FED 10% STATE ROADWAY	0021 90% FED 5% STATE 5% ELGIN T. SIGNALS	0021 100% ELGIN EVP	0021 80% STATE 20% ELGIN SIDEWALK			CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0004 90% FED 10% STATE ROADWAY	0021 90% FED 5% STATE 5% ELGIN T. SIGNALS	0021 100% ELGIN EVP	0021 80% STATE 20% ELGIN SIDEWALK			
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4		4															
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4		4															
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4		4															
* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8		8															
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8		8															
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	9		9															
* 88600100	DETECTOR LOOP, TYPE I	FOOT	885		885															
* 88700200	LIGHT DETECTOR	EACH	2			2														
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	1			1														
* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	8		8															
* A2003220	TREE, CORYLUS COLURNA (TURKISH FILBERT), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	2	2																
X0322936	REMOVE EXISTING FLARED END SECTION	EACH	1	1																
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	4	4																
Δ X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	44	44																
Δ X5537900	STORM SEWERS TO BE CLEANED 15"	FOOT	80	80																
Δ X5538000	STORM SEWERS TO BE CLEANED 18"	FOOT	120	120																
X6020094	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE	EACH	1	1																
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	3	3																
* X8620200	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1		1															
* X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	510			510														
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1																
Δ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5																
Z0022800	FENCE REMOVAL	FOOT	70	70																
Z0030850	TEMPORARY INFORMATION SIGNING	50 FT	128.5	128.5																
55103030	STORM SEWER REMOVAL EQUIVALENT ROUND-SIZE 30"	FOOT	300	300																

* SPECIALTY ITEMS
 Δ NON-PARTICIPATING ITEMS (100% STATE)

Rev.

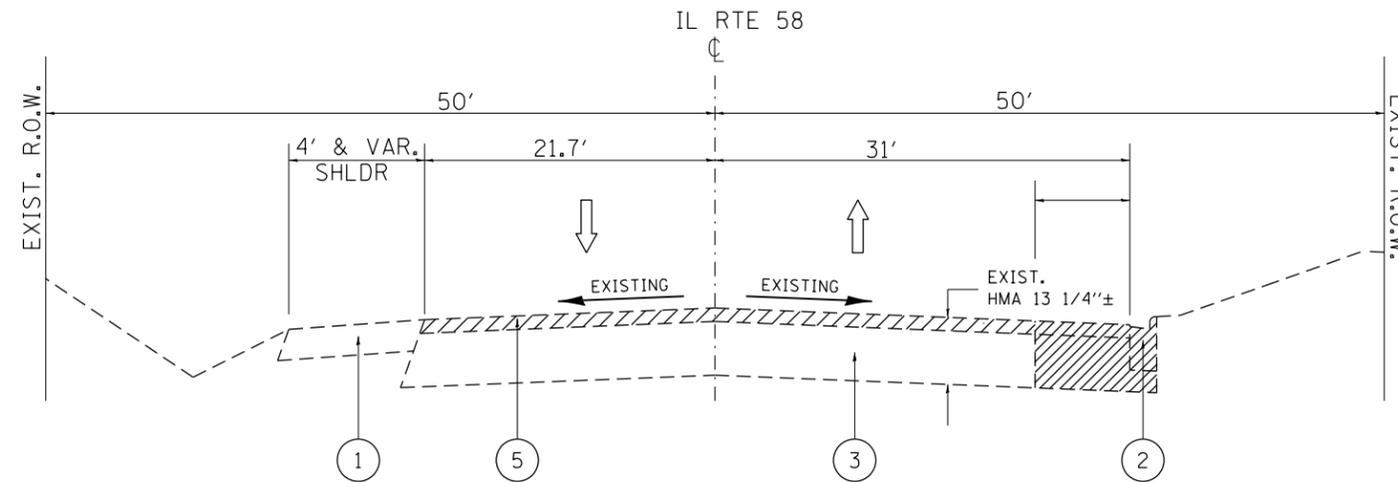
FILE NAME =	USER NAME = parayna	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES IL. RTE. 58 AT SHALES PKWY.			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
WORK PROJECT NUMBER = 0273204-PH2209-Design	DRAWN -	REVISED -	1320					581-N-1	COOK	50	5	
PLOT SCALE = 100,0000' = 1" = 100'	CHECKED -	REVISED -	CONTRACT NO. 60L43									
PLOT DATE = 2/7/2012	DATE -	REVISED -	SCALE: NONE					SHEET NO. 3 OF 3 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					TOTAL QUANTITIES	SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		0004 90% FED 10% STATE ROADWAY	0021 90% FED 5% STATE 5% ELGIN T. SIGNALS	0021 100% ELGIN EVP	0021 80% STATE 20% ELGIN SIDEWALK				CODE NO	ITEM		UNIT	0004 90% FED 10% STATE ROADWAY	0021 90% FED 5% STATE 5% ELGIN T. SIGNALS	0021 100% ELGIN EVP	0021 80% STATE 20% ELGIN SIDEWALK	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	102	102					*	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	58		58				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	1941	1941					*	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	103		103				
* 72000100	SIGN PANEL - TYPE 1	SO FT	18		18				*	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	414		414				
* 72000200	SIGN PANEL - TYPE 2	SO FT	50		50				*	81400100	HANDHOLE	EACH	3		3				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	146	146					*	81400200	HEAVY-DUTY HANDHOLE	EACH	4		4				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2093	2093					*	81400300	DOUBLE HANDHOLE	EACH	2		2				
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1111	1111					*	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	1	1					
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	79	79					*	84200804	REMOVAL OF POLE FOUNDATION	EACH	1		1				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	96	96					*	85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1		1				
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	102	102					*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1245		1245				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	52	52					*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1810		1810				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	42	42					*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	781		781				
* 80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1		1					* SPECIALTY ITEMS									
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	851		851				*										

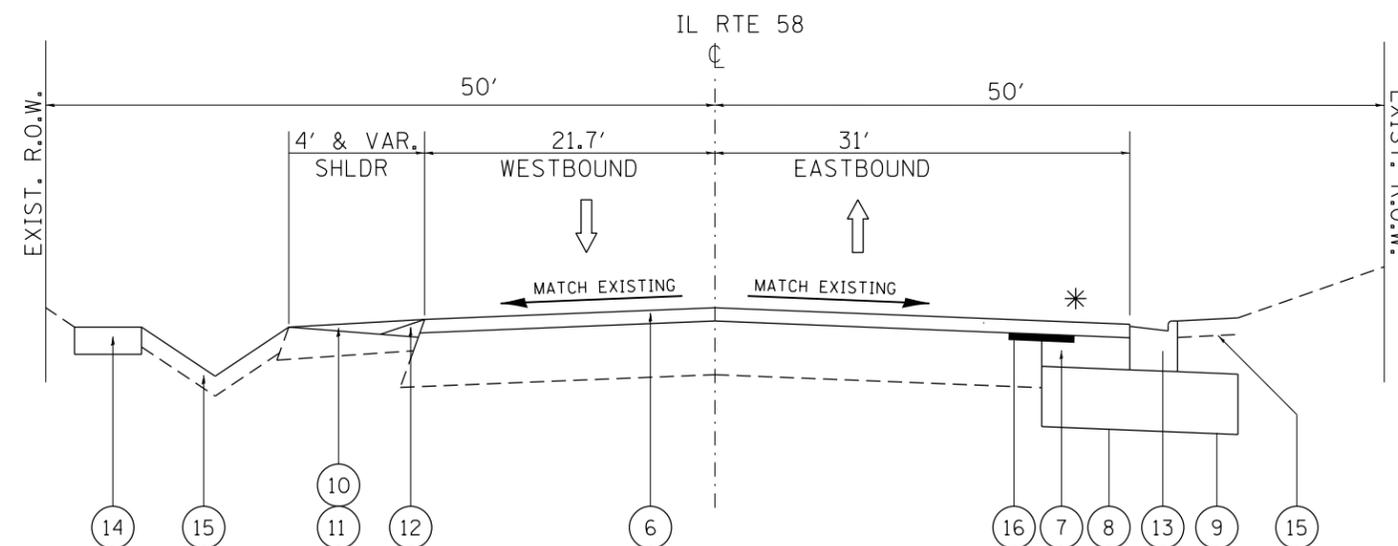
SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		0004 90% FED 10% STATE ROADWAY	0021 90% FED 5% STATE 5% ELGIN T. SIGNALS	0021 100% ELGIN EVP	0021 80% STATE 20% ELGIN SIDEWALK			CODE NO	ITEM		UNIT	0004 90% FED 10% STATE ROADWAY	0021 90% FED 5% STATE 5% ELGIN T. SIGNALS	0021 100% ELGIN EVP	0021 80% STATE 20% ELGIN SIDEWALK	
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1463	1463					* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	37	37					
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1860	1860					* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4	4					
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	132	132					* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4	4					
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	829	829					* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4	4					
* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4	4					* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8	8					
* 87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1	1					* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8	8					
* 87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1	1					* 88500100	INDUCTIVE LOOP DETECTOR	EACH	9	9					
* 87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1	1					* 88600100	DETECTOR LOOP, TYPE I	FOOT	885	885					
* 87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1	1					* 88700200	LIGHT DETECTOR	EACH	2			2			
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16	16					* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	1			1			
* 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	4					* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	8	8					
* 87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10	10														
* SPECIALTY ITEMS																		

LEGEND

- ① EXISTING AGGREGATE SHOULDER
- ② EXISTING CURB & GUTTER, B-6.18
- ③ EXISTING HMA AFTER MILLING, ± 11 1/4"
- ④ EXISTING HMA AFTER MILLING, ± 8 1/4"
- ⑤ PROPOSED HMA SURFACE REMOVAL, 2"
- ⑥ PROPOSED HMA SURFACE COURSE, MIX "D", N70, 2"
- ⑦ PROPOSED HMA BASE COURSE WIDENING, 7" (IN TWO LIFTS)
- ⑧ PROPOSED AGGREGATE SUBGRADE, 12"
- ⑨ PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ⑩ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- ⑪ PROPOSED GRADING AND SHAPING OF SHOULDERS
- ⑫ PROPOSED SAFETY EDGE
- ⑬ PROPOSED COMBINATION CONCRETE CURB AND GUTTER B-6.24
- ⑭ PROPOSED P.C.C. SIDEWALK, 5"
- ⑮ TOPSOIL FURNISH AND PLACE, 4", AND SODDING, SALT TOLERANT
- ⑯ PROPOSED STRIP REFLECTIVE CRACKING CONTROL SYSTEM

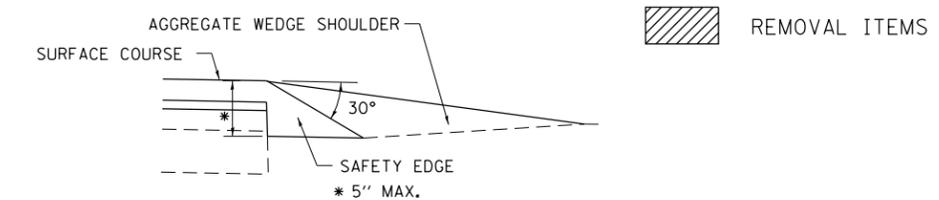


EXISTING TYPICAL SECTION
STA. 495+33 TO STA. 500+00



PROPOSED TYPICAL SECTION
STA. 495+33 TO STA. 500+00

* SEE PLAN AND PROFILE SHEETS FOR LOCATIONS



SAFETY EDGE DETAIL

SAFETY EDGE TREATMENT SHALL BE APPLIED TO PAVED SHOULDER OF 1 FT OR LESS THAT IS ADJACENT TO AGGREGATE / EARTH SHOULDER.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes
PAVEMENT WIDENING AND RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5 mm)	4% @ 70 GYR.
HOT-MIX ASPHALT BASE COURSE WIDENING (HMA BINDER IL-19 mm)	4% @ 70 GYR.

NOTES:

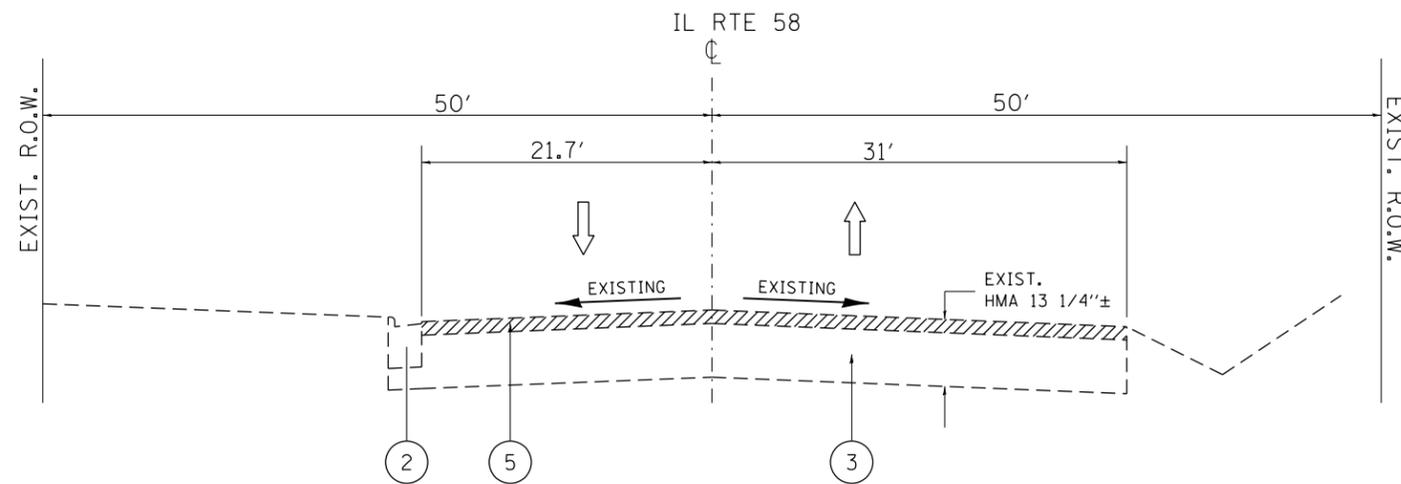
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

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" SPECIAL PROVISIONS.

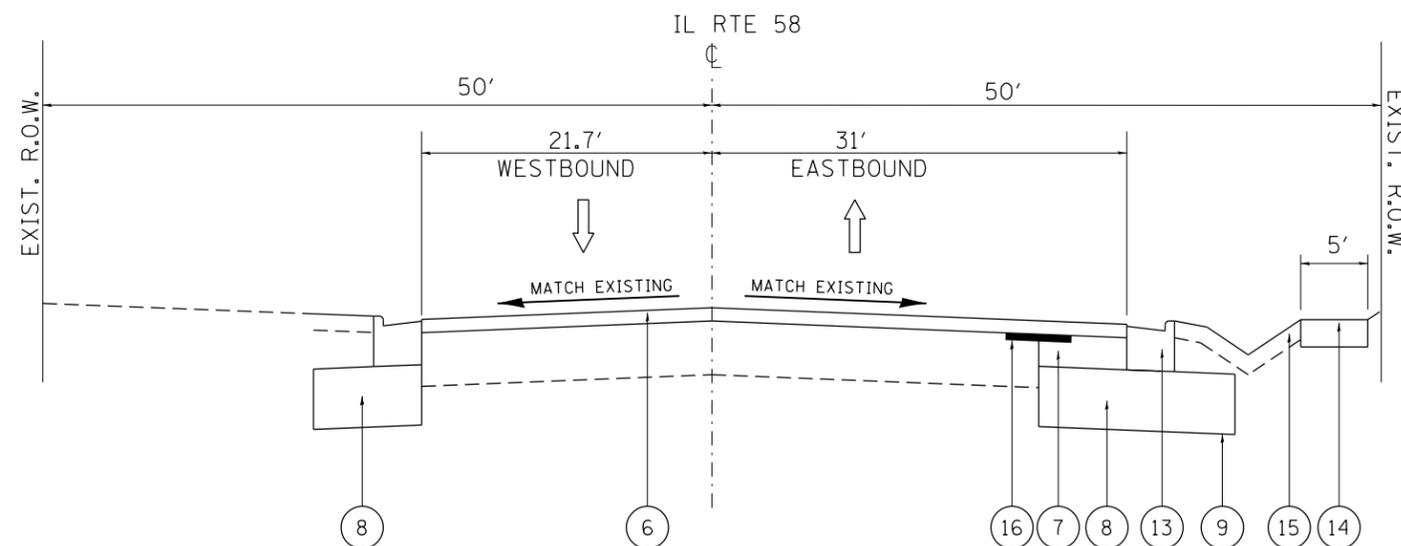
LEGEND

- ① EXISTING AGGREGATE SHOULDER
- ② EXISTING CURB & GUTTER, B-6.18
- ③ EXISTING HMA AFTER MILLING, ± 11 1/4"
- ④ EXISTING HMA AFTER MILLING, ± 8 1/4"
- ⑤ PROPOSED HMA SURFACE REMOVAL, 2"
- ⑥ PROPOSED HMA SURFACE COURSE, MIX "D", N70, 2"
- ⑦ PROPOSED HMA BASE COURSE WIDENING, 7" (IN TWO LIFTS)
- ⑧ PROPOSED AGGREGATE SUBGRADE, 12"
- ⑨ PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ⑩ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- ⑪ PROPOSED GRADING AND SHAPING OF SHOULDERS
- ⑫ PROPOSED SAFETY EDGE
- ⑬ PROPOSED COMBINATION CONCRETE CURB AND GUTTER B-6.24
- ⑭ PROPOSED P.C.C. SIDEWALK, 5"
- ⑮ TOPSOIL FURNISH AND PLACE, 4", AND SODDING, SALT TOLERANT
- ⑯ PROPOSED STRIP REFLECTIVE CRACKING CONTROL SYSTEM

REMOVAL ITEMS



EXISTING TYPICAL SECTION
STA. 500+00 TO STA. 502+68



PROPOSED TYPICAL SECTION
STA. 500+00 TO STA. 502+68

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	PLOT DATE = 8/23/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

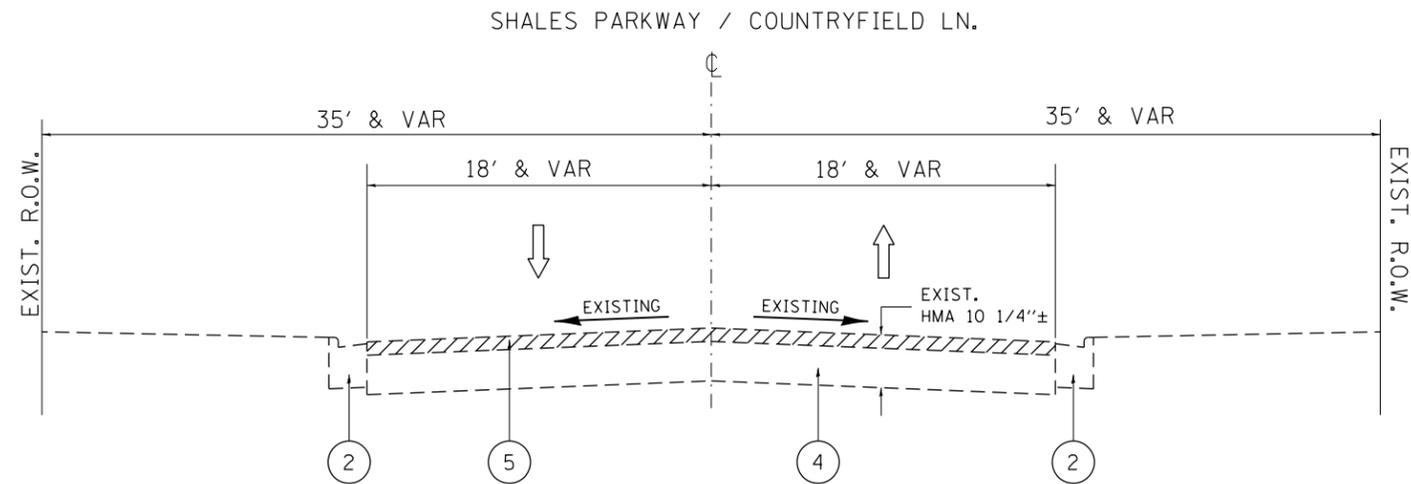
EXISTING AND PROPOSED TYPICAL SECTIONS
IL RTE 58 AT SHALES PKWY / COUNTRYFIELD LANE

SCALE: NTS SHEET NO. 1 OF 2 SHEETS STA. TO STA.

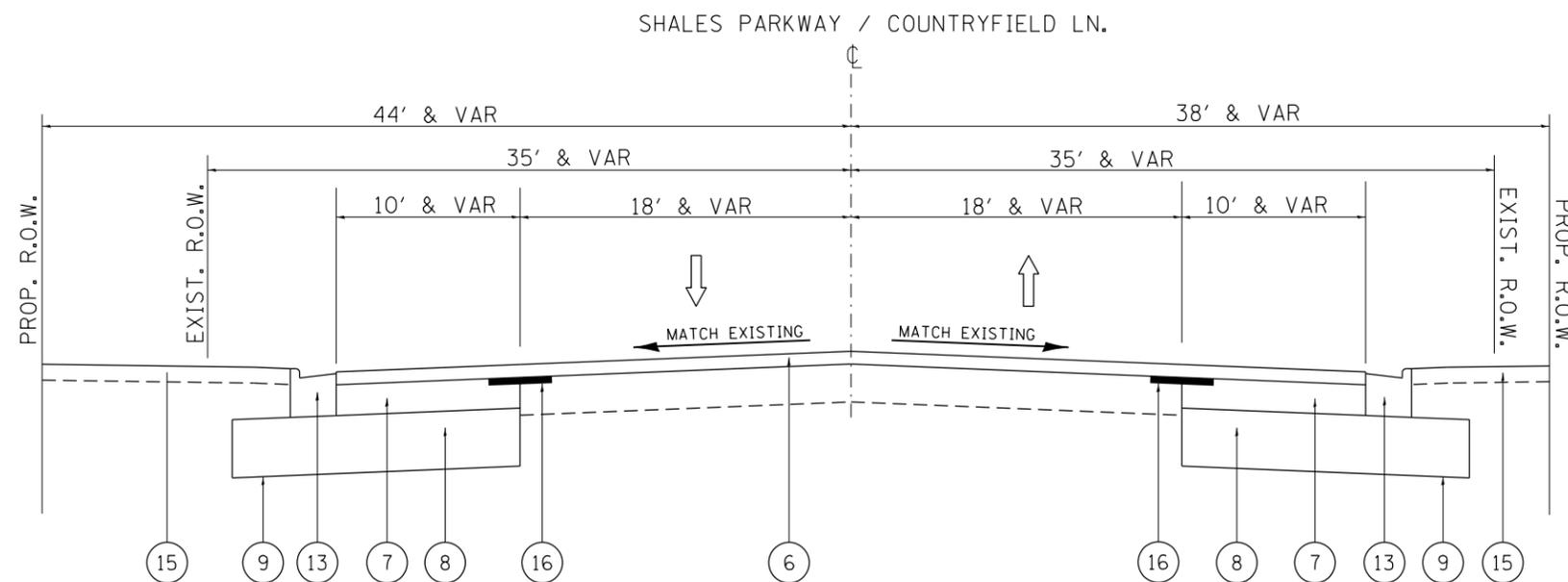
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	10
CONTRACT NO. 60L43				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND

- ① EXISTING AGGREGATE SHOULDER
- ② EXISTING CURB & GUTTER, B-6.18
- ③ EXISTING HMA AFTER MILLING, ± 11 1/4"
- ④ EXISTING HMA AFTER MILLING, ± 8 1/4"
- ⑤ PROPOSED HMA SURFACE REMOVAL, 2"
- ⑥ PROPOSED HMA SURFACE COURSE, MIX "D", N70, 2"
- ⑦ PROPOSED HMA BASE COURSE WIDENING, 7" (IN TWO LIFTS)
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- ⑨ PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ⑩ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- ⑪ PROPOSED GRADING AND SHAPING OF SHOULDERS
- ⑫ PROPOSED SAFETY EDGE
- ⑬ PROPOSED COMBINATION CONCRETE CURB AND GUTTER B-6.24
- ⑭ PROPOSED P.C.C. SIDEWALK, 5"
- ⑮ TOPSOIL FURNISH AND PLACE, 4", AND SODDING, SALT TOLERANT
- ⑯ PROPOSED STRIP REFLECTIVE CRACKING CONTROL SYSTEM



EXISTING TYPICAL SECTION
STA. 198+38.6 TO STA. 200+43



PROPOSED TYPICAL SECTION
STA. 198+38.6 TO STA. 200+43

FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED -
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	PLOT DATE = 8/23/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING AND PROPOSED TYPICAL SECTIONS IL RTE 58 AT SHALES PKWY / COUNTRYFIELD LANE			
SCALE: NTS	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	11
CONTRACT NO. 60L43				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

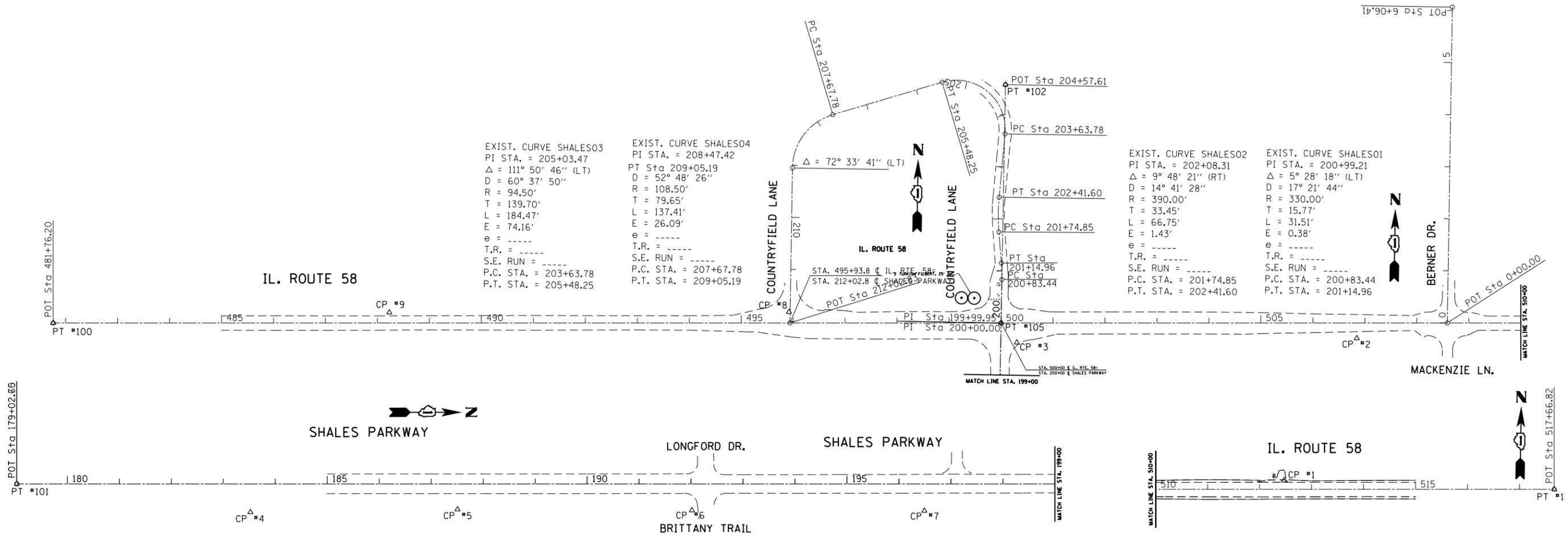
EARTHWORK SCHEDULE

1 LOCATION	2 EARTH EXCAVATION CUBIC YARD	3 EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CUBIC YARD	4 EMBANKMENT CUBIC YARD	5 EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) CUBIC YARD
IL. RTE. 58	247	210	236	-26
SHALES PKWY.	216	183	13	170
TOTAL	463	393	249	144

COLUMNS 1, 2, & 4 LOCATION AND QUANTITIES FROM CROSS SECTIONS:
 CUT = EARTH EXCAVATION, FILL = EMBANKMENT

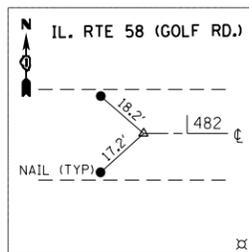
COLUMN 3 QUANTITY OF EARTH EXCAVATION (CUT) ADJUSTED FOR SHRINKAGE FACTOR OF 15%.

COLUMN 5 EARTHWORK REQUIRED:
 (-) = QUANTITY OF FILL OR EMBANKMENT NEEDED (FURNISHED OR BORROW EXCAVATION)
 (+) = QUANTITY TO BE WASTED.



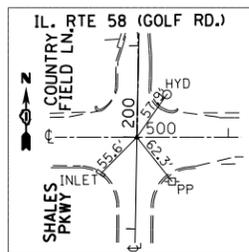
CONTROL POINT #100

NAIL
 STA. 481+76.20
 N=1959567.3417
 E=1008199.8611



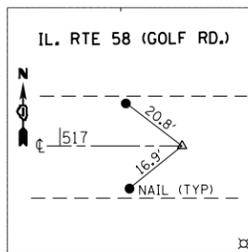
CONTROL POINT #105

NAIL
 STA. 500+00
 N=1959596.5105
 E=1010023.4236



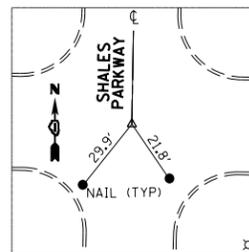
CONTROL POINT #101

NAIL
 STA. 517+66.82
 N=1959624.8707
 E=1011790.0165



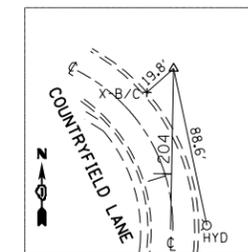
CONTROL POINT #104

NAIL
 STA. 179+02.70
 N=1957499.2118
 E=1010020.7444



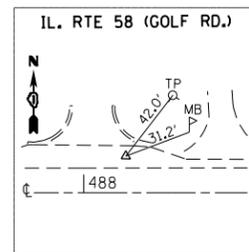
CONTROL POINT #102

NAIL
 STA. 204+57.61
 N=1960054.1210
 E=1010024.6051



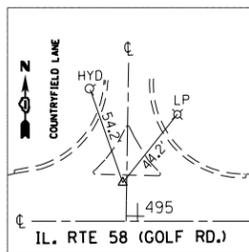
CONTROL POINT #9

NAIL
 STA. 488+23/20' (L)
 N=1959597.7371
 E=1008846.2762



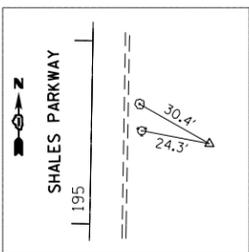
CONTROL POINT #8

NAIL
 STA. 495+92/21' (L)
 N=1959611.1534
 E=1009615.0883



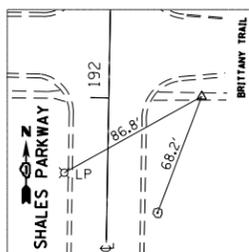
CONTROL POINT #7

NAIL
 STA. 196+48/51.7' (R)
 N=1959245.4021
 E=1010074.6484



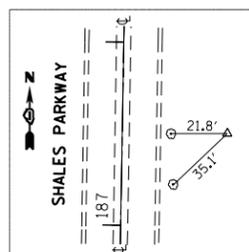
CONTROL POINT #6

NAIL
 STA. 192+01/50.8' (R)
 N=1958798.1422
 E=1010073.2642



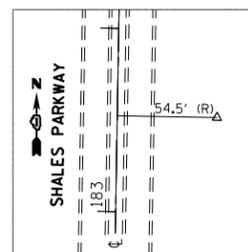
CONTROL POINT #5

NAIL
 STA. 187+50/49' (R)
 N=1958347.0880
 E=1010070.7673



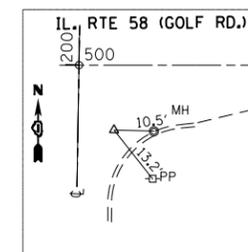
CONTROL POINT #4

NAIL
 STA. 183+52/54.5' (R)
 N=1957948.7116
 E=1010075.8748



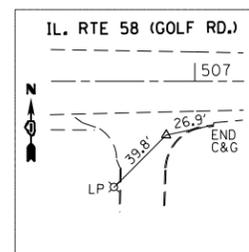
CONTROL POINT #3

NAIL
 STA. 500+30/37.6' (R)
 N=1959559.4012
 E=1010054.2996



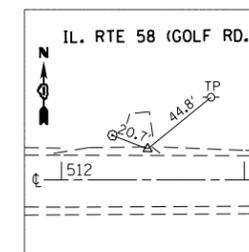
CONTROL POINT #2

NAIL
 STA. 506+84/29.5' (R)
 N=1959578.0729
 E=1010708.1753



CONTROL POINT #1

NAIL
 STA. 512+47.0/16.9' (L)
 N=1959633.4919
 E=1011270.0236



BENCHMARK #1

ELEV. 795.27
 TOP OF ROW MARKER N. SIDE
 IL. 58 STA. 488±50

BENCHMARK #3

ELEV. 797.52
 IN CONC. BASE L.P. IN
 N. E. CORNER IL. 58 & SHALES

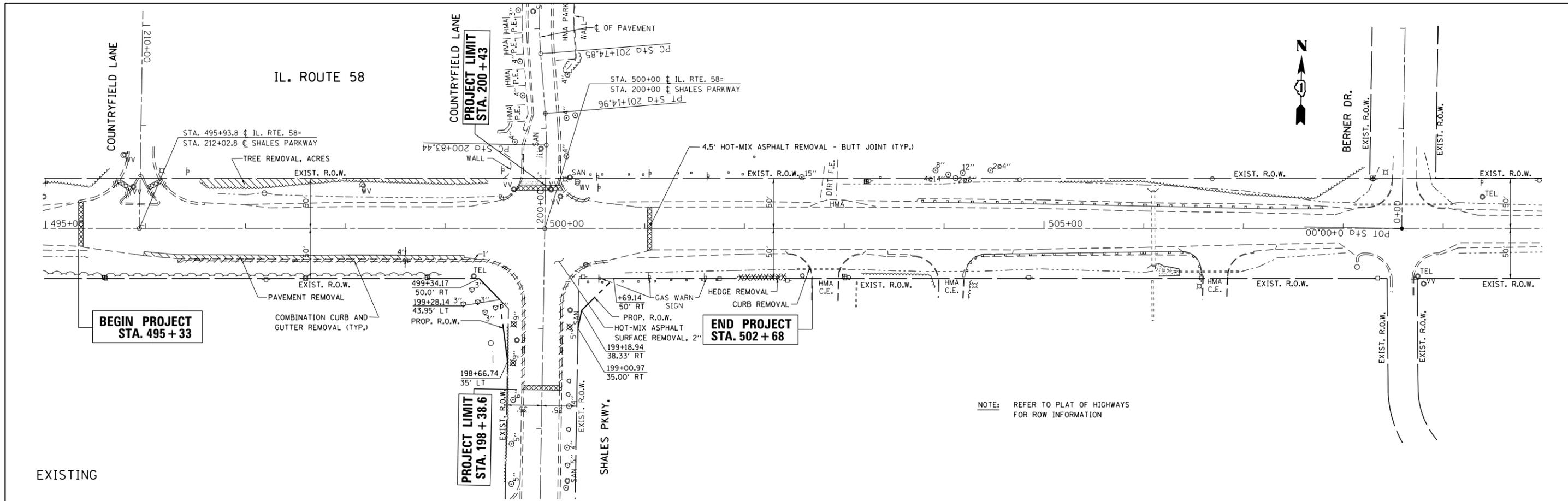
BENCHMARK #2

ELEV. 798.23
 IN CONC. BASE OF LP
 IN ENT. TO LITTLE ANGELS
 S. SIDE IL. 58 ±800' E. OF SHALES

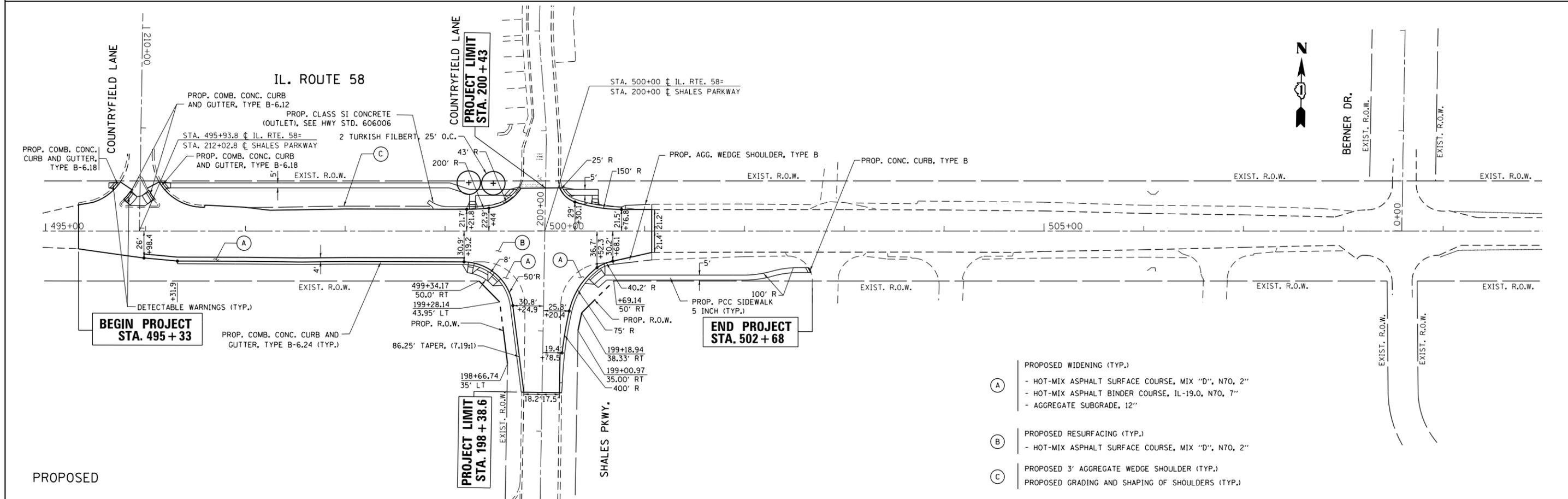
BENCHMARK #4

ELEV. 806.99
 IN CONC. BASE L.P. W. SIDE
 SHALES PKWY STA 185±50

FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, TIES AND BENCHMARKS IL. RTE. 58 AT SHALES PKWY.			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pwork\p\pidot\paraynoal\0150569\PI2209-shr-ATB.dgn		DRAWN -	REVISED -					1320	581-N-1	COOK	50	13
PLOT SCALE = 200.0000' / in.		CHECKED -	REVISED -					CONTRACT NO. 60L43				
PLOT DATE = 8/23/2012		DATE -	REVISED -					ILLINOIS FED. AID PROJECT				



EXISTING



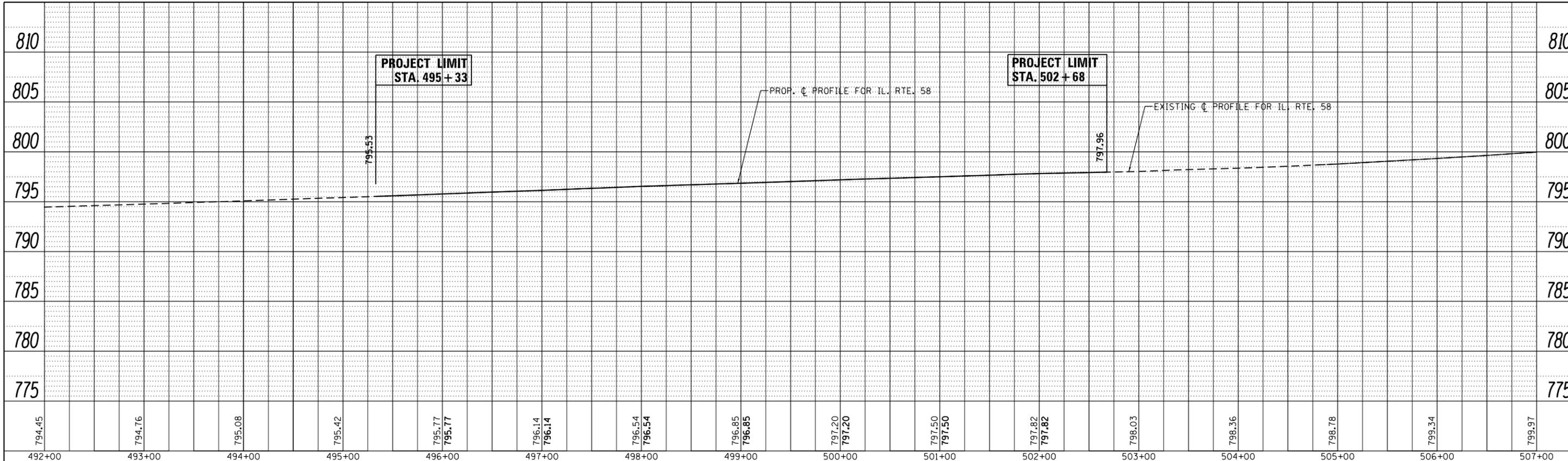
PROPOSED

NOTE: REFER TO PLAT OF HIGHWAYS FOR ROW INFORMATION

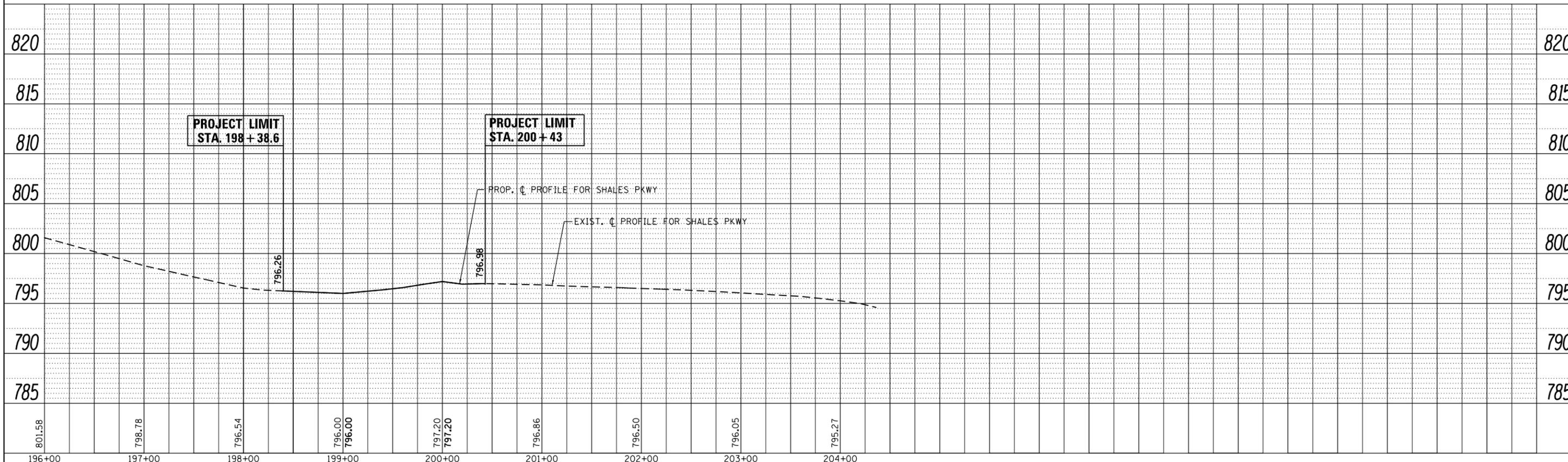
- (A) PROPOSED WIDENING (TYP.)
 - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
 - HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 7"
 - AGGREGATE SUBGRADE, 12"
- (B) PROPOSED RESURFACING (TYP.)
 - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- (C) PROPOSED 3' AGGREGATE WEDGE SHOULDER (TYP.)
 - PROPOSED GRADING AND SHAPING OF SHOULDERS (TYP.)

FILE NAME =	USER NAME = parayno1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN IL. RTE. 58 AT SHALES PKWY.			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -		CONTRACT NO. 60L43							
PLOT DATE = 8/23/2012		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							
				SCALE: 1"=50'	SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.					

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO.		
	CHECKED		
	FILE NAME		



PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	NO.		
	STRUCTURE		
	NOTATIONS		

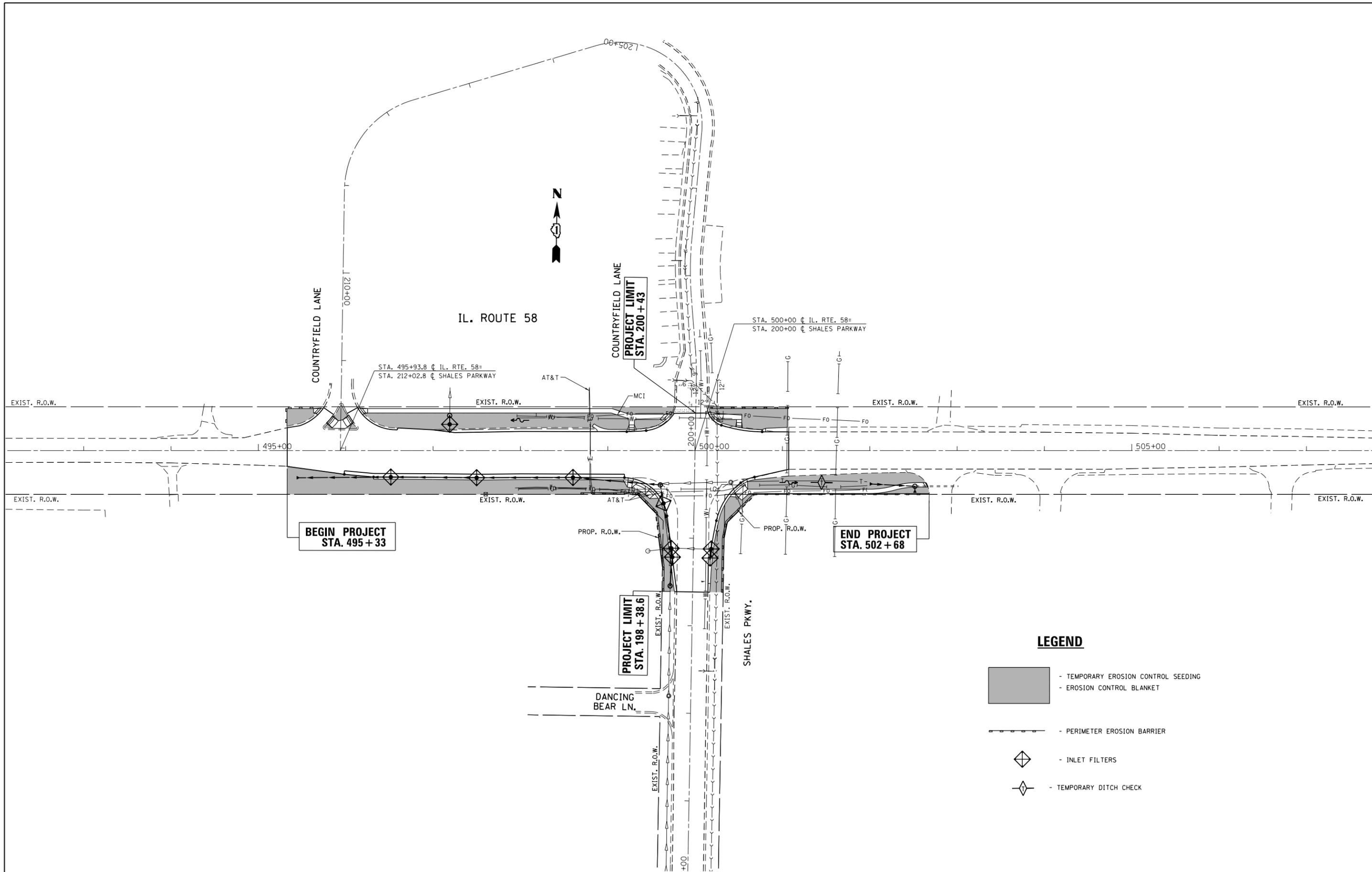


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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXIST. AND PROP. ROADWAY PROFILE	
IL. RTE. 58 AT SHALES PKWY.	
SCALE: 1"=50'	SHEET NO. 2 OF 2 SHEETS
STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	15
CONTRACT NO. 60L43				
ILLINOIS FED. AID PROJECT				



LEGEND

-  - TEMPORARY EROSION CONTROL SEEDING
- EROSION CONTROL BLANKET
-  - PERIMETER EROSION BARRIER
-  - INLET FILTERS
-  - TEMPORARY DITCH CHECK

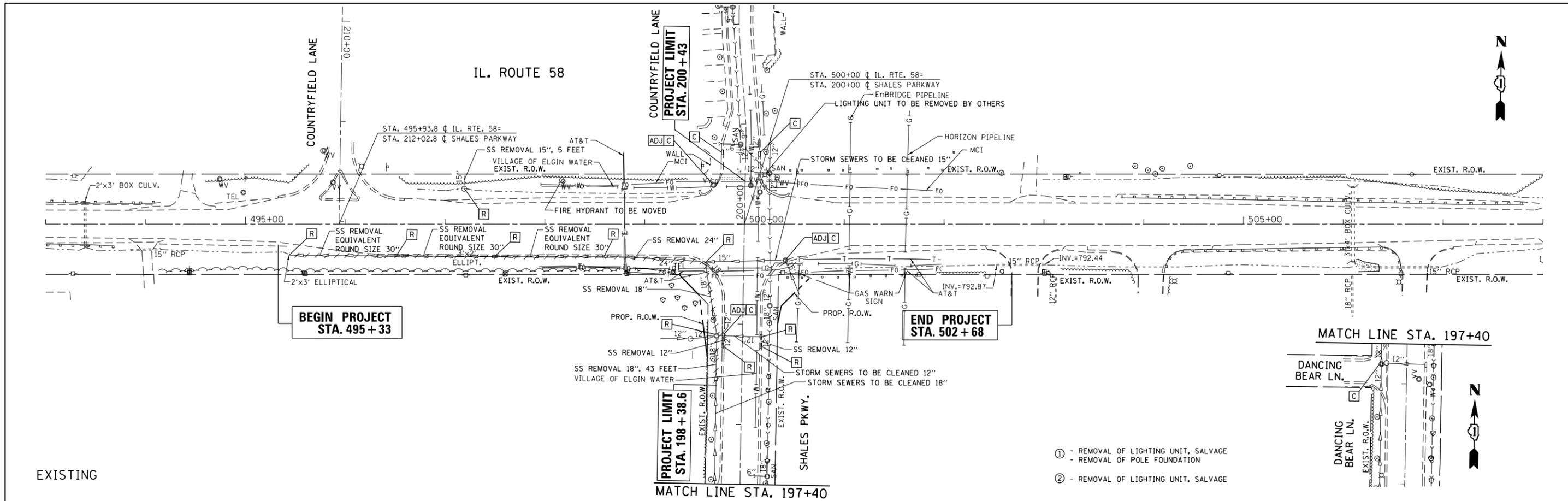
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	PLOT DATE = 8/23/2012	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

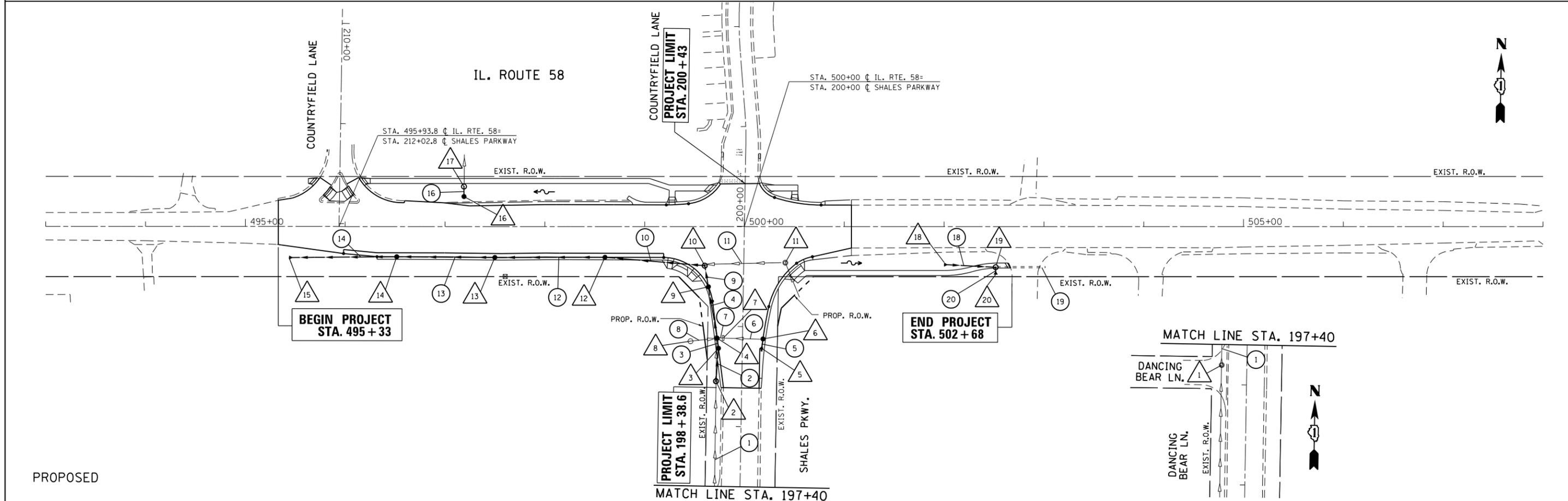
**EROSION AND SEDIMENT CONTROL PLAN
IL. RTE. 58 AT SHALES PKWY.**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	16
CONTRACT NO. 60L43			ILLINOIS FED. AID PROJECT	



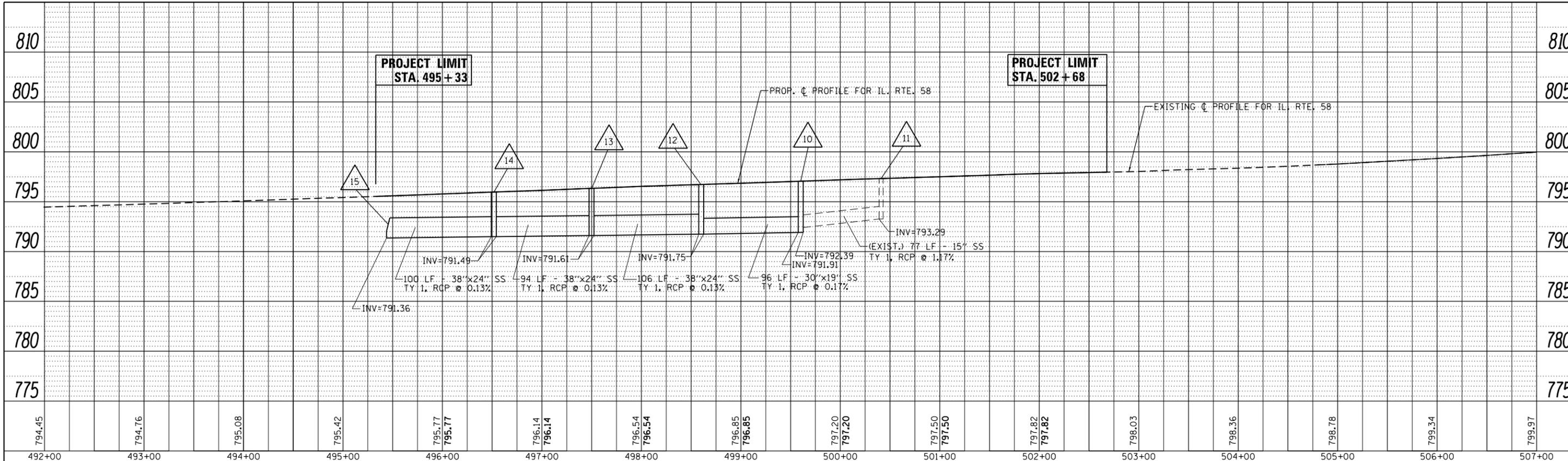
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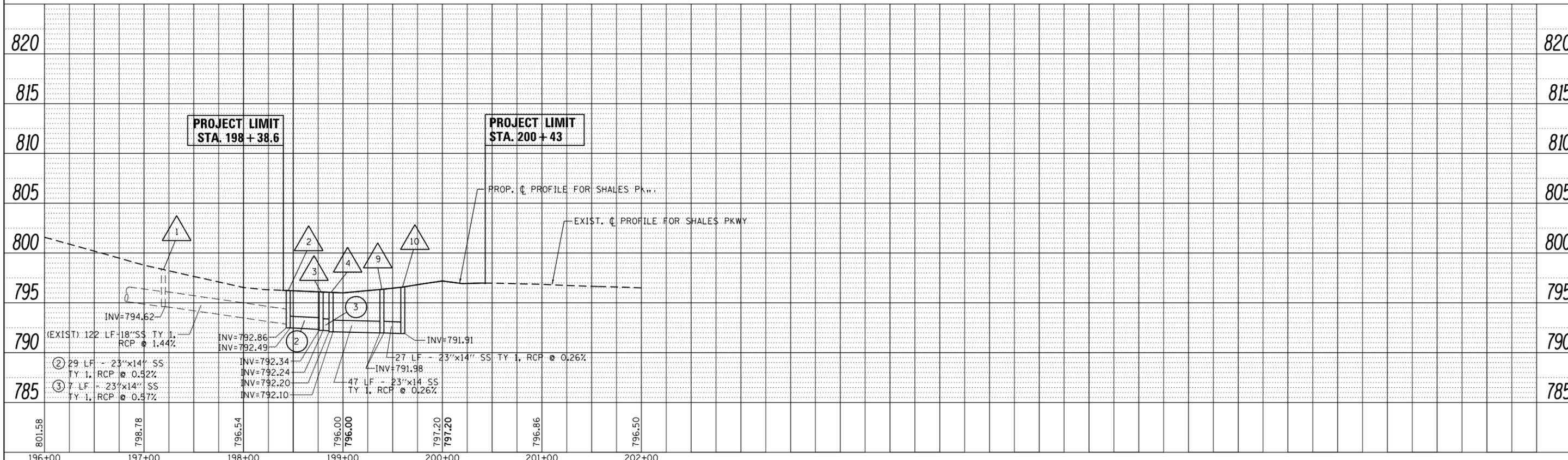
PROPOSED

FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE AND UTILITIES PLAN IL. RTE. 58 AT SHALES PKWY.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\idot\paraynoal\0150569\PI2209-shr-drain.dgn		DRAWN -	REVISED -			1320	581-N-1	COOK	50	17
PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -			CONTRACT NO. 60L43				
PLOT DATE = 8/23/2012		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	



PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	



FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED -
c:\pwork\pwork\paraynoal\0150569\PI42209-sh1-drain.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXIST. AND PROP. DRAINAGE PROFILE
IL. RTE. 58 AT SHALES PKWY.**

SCALE: 1"=50' SHEET NO. 2 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	18
CONTRACT NO. 60L43				
ILLINOIS FED. AID PROJECT				

DRAINAGE STRUCTURES TABLE

STR. NO.	STA.	OFFSET (FT)	STRUCTURE TYPE				DIA. (FT)	F&G TYPE	INVERT ELEV. (FT)					RIM ELEV.
			MH	CB	IN	OTHER			N	S	E	W	OTHER	
1	197+19.46	25.24 LT				EXIST.		1 CL	794.62	794.62	794.72			798.12
2	198+45.00	25.81 LT	A					1 CL	792.49	792.86				796.50
3	198+78.00	23.92 LT		A				24	792.24	792.34				795.36
4	198+88.00	25.38 LT		A				24	792.10	792.20	792.10	792.20		795.31
5	198+78.00	19.38 RT			A			24	792.75					795.34
6	198+88.00	20.45 RT		A				24		792.71		792.61		795.40
* 7	198+88.36	19.30 LT				EXIST.				792.25	792.35	792.35		795.45
8	198+84.59	52.20 LT				EXIST.					792.62	792.72		798.92
9	199+39.15	35.06 LT		A				24	791.98	791.98				795.94
10	499+60.26	39.12 RT	A					1 CL	791.91	792.39	791.91			796.29
11	500+40.96	36.11 RT				EXIST.		1 CL				793.29	793.29 (SE)	796.59
12	498+60.24	30.71 RT		A				24			791.75	791.75		796.25
13	497+49.93	30.91 RT		A				24			791.61	791.61		795.82
14	496+51.65	30.19 RT		A				24			791.49	791.49		795.49
15	495+43.83	31.01 RT				RCP FES 38"x24" W/GRATE							791.36	
16	497+19.00	30.00 LT		C				8	792.30					794.23
17	497+19.00	40.00 LT	A			WITH 8" RESTRICTOR		1 CL	792.24	792.24				797.23
18	502+00.00	38.00 RT				RCP FES 15"							793.14	
19	502+51.71	40.68 RT	A					1 CL		794.10	792.87	792.87		796.56
20	502+51.71	48.00 RT				RCP FES 12"				794.40				

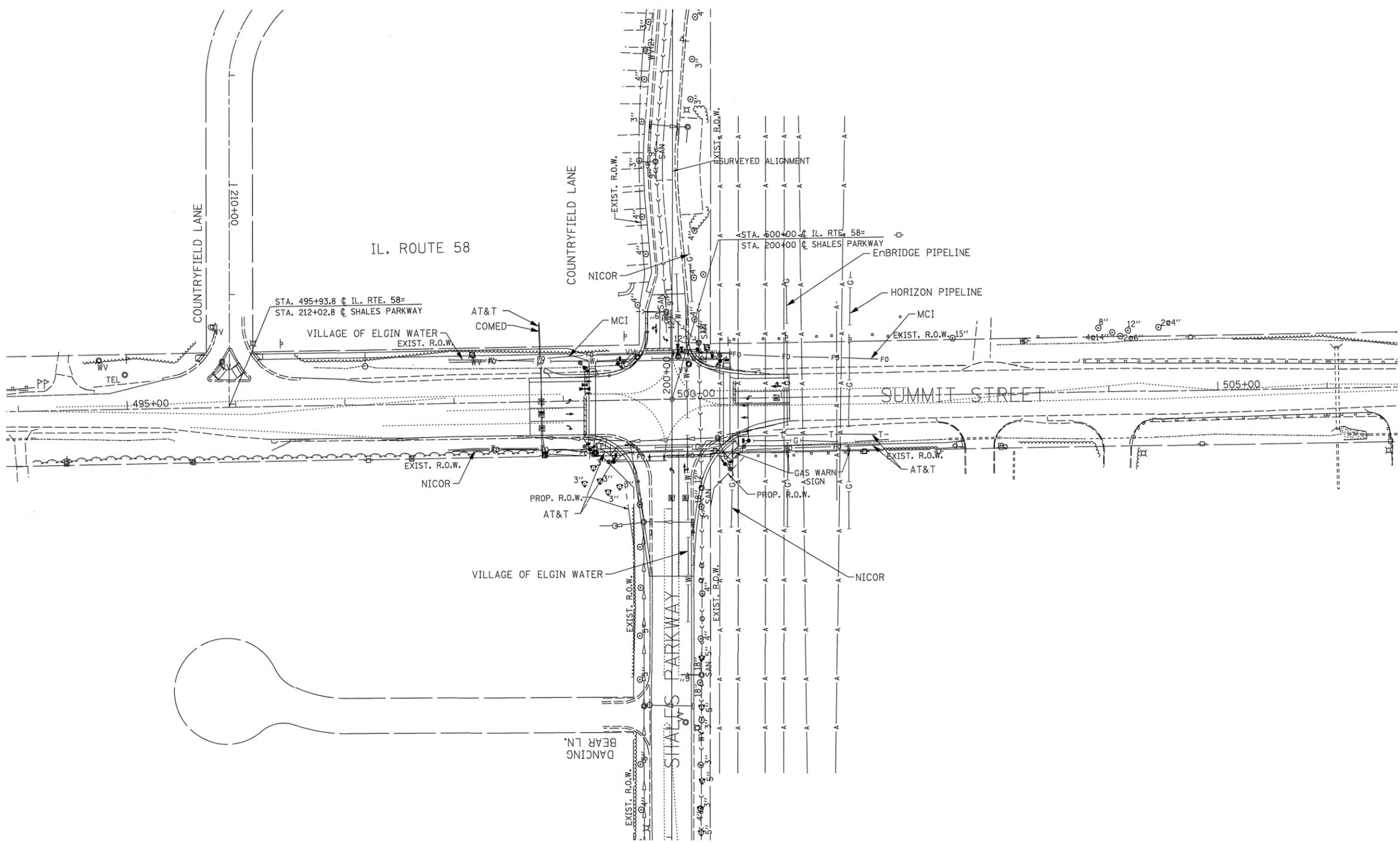
* INLETS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID
ALL OF THE ABOVE LISTED DRAINAGE STRUCTURES SHOULD INCLUDE FLAT SLAB TOP.

STORM WATER STRUCTURE OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS ARE TO THE FOLLOWING POINTS:

- A) FOR STRUCTURES FALLING IN THE CURB LINE - TO THE EDGE OF THE PAVEMENT.
- B) FOR ALL OTHER STRUCTURE LOCATIONS - TO THE CENTER OF THE STRUCTURE.

DRAINAGE PIPES TABLE

PIPE NO.	PIPE LOCATION		DESCRIPTION / COMMENTS	DIA. (IN)	LENGTH (FT)	SLOPE (%)	TRENCH BACKFILL (CY)
	FROM STR.	TO STR.					
1	1	2	EXIST.	18	122	1.44	-
2	2	3	SS, CLASS A, TYPE 1, EQUIV. ROUND-SIZE 18"	23x14	29	0.52	1
3	3	4	SS, CLASS A, TYPE 1, EQUIV. ROUND-SIZE 18"	23x14	7	0.57	1
4	4	9	SS, CLASS A, TYPE 1, EQUIV. ROUND-SIZE 18"	23x14	47	0.26	1
5	5	6	SS, CLASS A, TYPE 1	12	7	0.57	1
6	6	7	SS, CLASS A, TYPE 1, EXTEND EX. PIPE EAST BY 3'	12	37	0.70	-
7	7	4	SS, CLASS A, TYPE 1	12	3	8.33	1
8	8	4	EXIST.	12	23	1.83	-
9	9	10	SS, CLASS A, TYPE 1, EQUIV. ROUND-SIZE 18"	23x14	27	0.26	4.9
10	10	12	SS, CLASS A, TYPE 1, EQUIV. ROUND-SIZE 24"	30x19	96	0.17	20.5
11	11	10	EXIST.	15	77	1.17	-
12	12	13	SS, CLASS A, TYPE 1, EQUIV. ROUND-SIZE 30"	38x24	106	0.13	21.4
13	13	14	SS, CLASS A, TYPE 1, EQUIV. ROUND-SIZE 30"	38x24	94	0.13	15.7
14	14	15	SS, CLASS A, TYPE 1, EQUIV. ROUND-SIZE 30"	38x24	100	0.13	6.7
16	16	17	SS, CLASS A, TYPE 1	15	6	1.00	-
18	18	19	SS, CLASS A, TYPE 1	15	44	0.54	7.8
19	19	-	EXIST.	15	48.5	0.89	-
20	20	19	SS, CLASS A, TYPE 1	12	1	5.00	-

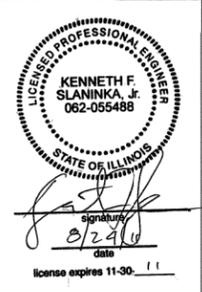


— A —	A	AERIAL UTILITY
— CTV —	CTV	CABLE TV
— T —	T	TELEPHONE
— G —	G	GAS
— E —	E	ELECTRIC
— W —	W	WATER
— FO —	FO	FIBER OPTIC
— S —	S	SEWER
— T —	T	TBE TEST HOLE

UTILITY OWNERS	
COMED	= ELECTRIC
A+T	= TELEPHONE
AT&T	= FIBER OPTIC
MCI	= FIBER OPTIC
NICOR	= GAS
EnBRIDGE	= GAS PIPELINE
HORIZON	= GAS PIPELINE
VILLAGE OF ELGIN	= WATER

Utilities shown 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. Cardno TBE's SUE field investigation was performed 8/16/11. Changes to utilities after 8/16/11 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 QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.



Cardno TBE
CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL * PLANNING * UTILITY ENGINEERING/LOCATING

TBE Job No. IL09510448
SUE Plan Page: 1 of 1

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	KFS	REVISED
DATE	8/23/11	REVISED

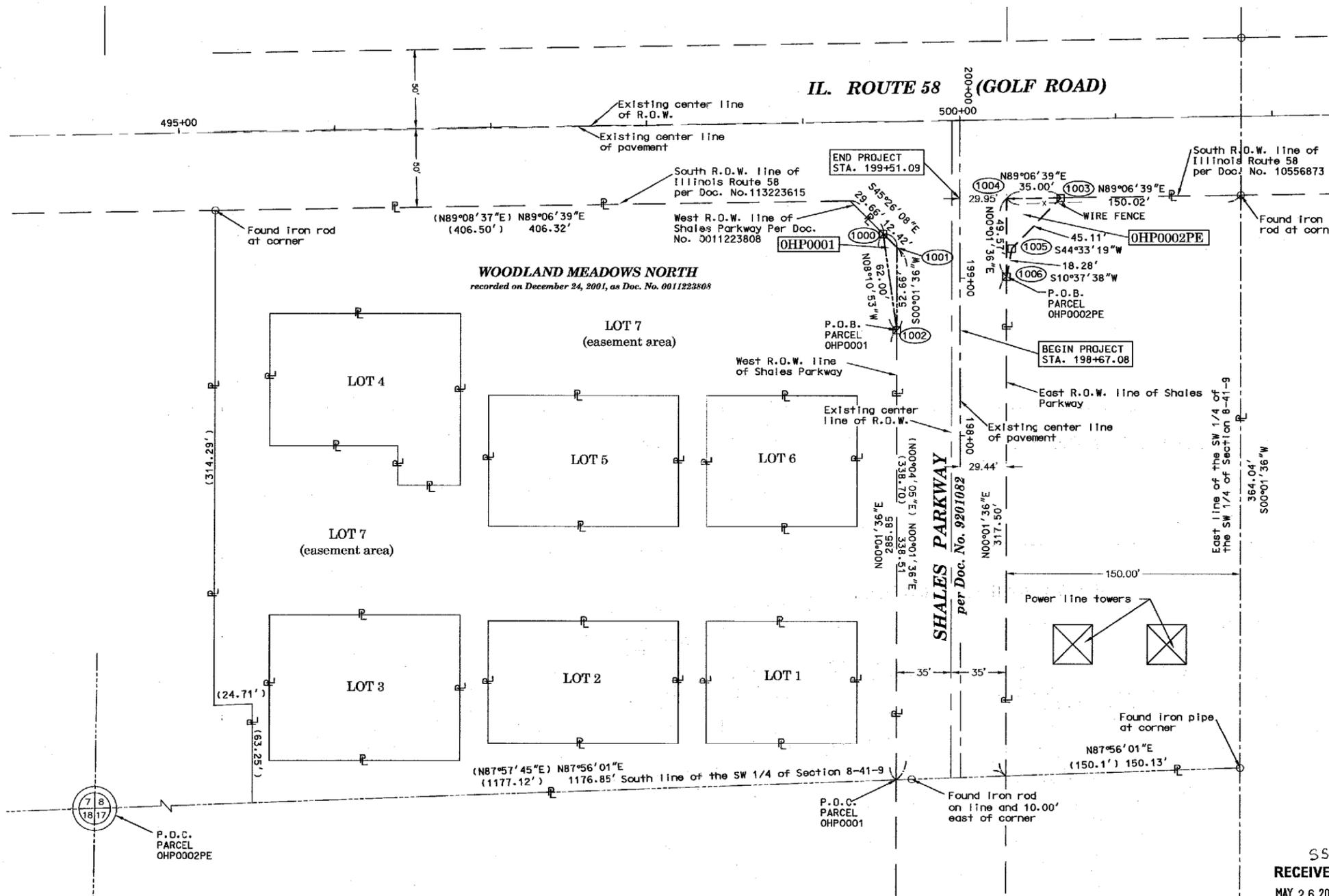
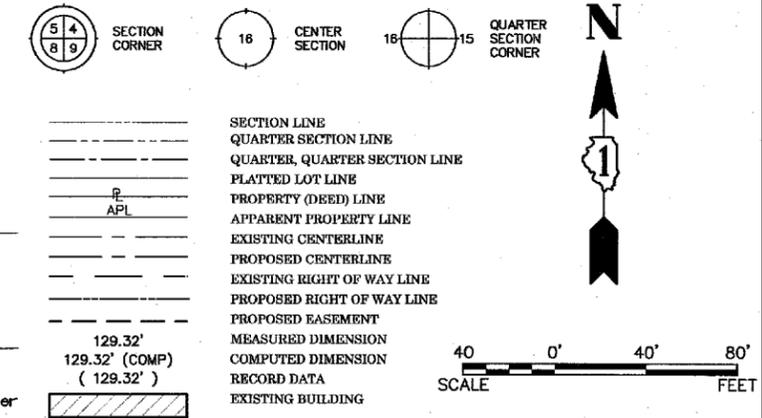
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUE
IL. RTE. 58 AT SHALES PKWY.**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	Cook	50	20

FED. ROAD DIST. NO.	ILLINOIS IDOT Project No.
	Contract No. 60L43

PART OF THE SW 1/4 OF SECTION 8, TWP. 41 NORTH, RANGE 9 EAST OF THE 3RD. P.M. COOK COUNTY, ILLINOIS



- IRON PIPE OR ROD FOUND
- CUT CROSS FOUND OR SET
- T1 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 SURVEYOR'S REGISTRATION NUMBER
- T2
- T3
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH STEEL REBAR 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.
- BT2
- BT3
- STAKING OF PROPOSED RIGHT OF WAY. SET 5/8" STEEL REBAR WITH ORANGE PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8" STEEL REBAR 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.
- ⊙ PERMANENT SURVEY MARKER I.D.O.T. STD 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET

STATE OF ILLINOIS
COUNTY OF KANE

THIS IS TO CERTIFY THAT I, MARK G. SCHELLER, AN ILLINOIS PROFESSIONAL SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 8, TOWNSHIP 41 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND CORRECT 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 ILLINOIS DEPARTMENT OF TRANSPORTATION.

DATED AT SUGAR GROVE, ILLINOIS THIS ____ DAY OF APRIL, 2011

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-003581
LICENSE EXPIRATION DATE NOVEMBER 30, 2012

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

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83. COORDINATES ARE ON THE GROUND.

RECEIVED
MAY 26 2011
PLATS & LEGALS

Engineering Enterprises, Inc.
CIVIL ENGINEERS & LAND SURVEYORS
52 Wheeler Road
Sugar Grove, Illinois 60554
630.466.6700 / www.eeiweb.com

POINT	STATION	OFFSET	NORTHING	EASTING
1000	199+28.47	48.97 RT	1959524.408	1009974.156
1001	199+19.73	40.15 RT	1959515.894	1009883.003
1002	198+67.08	40.30 RT	1959463.039	1009882.979
1003	199+51.09	64.94 LT	1959547.318	1010088.013
1004	199+50.63	29.95 LT	1959546.775	1010053.017
1005	199+19.03	33.21 LT	1959515.175	1010056.365
1006	199+01.07	29.80 LT	1959497.209	1010052.994

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN		AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA		EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
			ACRES	SQ FEET			ACRES	SQ FEET			
OHP0001	Leo M. Flanagan, Jr. as Trustee of the Woodland Meadows North Trust No.1 dated Nov. 15, 2001	2.368	0.005	233	0.00	2.363	N/A	N/A	N/A	06-08-302-021	
OHP0002PE	Commonwealth Edison Company	1.259	N/A	N/A	0.00	1.259	0.015 PE	637 PE	N/A	06-08-301-002	

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
IL ROUTE 58 (GOLF RD.)

LIMITS: at Shales Parkway COUNTY: COOK
PROJECT: JOB NO R-90-010-10
STATION 198+67.08 TO STATION 199+51.09
SCALE: 1"=40' SHEET 2 OF 2

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

FILE NAME	USER NAME	DESIGNED	REVISED
ct:\pw_work\p\midot\paraynoal\d0273204\PL2209-Design.dgn	paraynoal	-	-
		DRAWN	REVISED
		CHECKED	REVISED
		DATE	REVISED

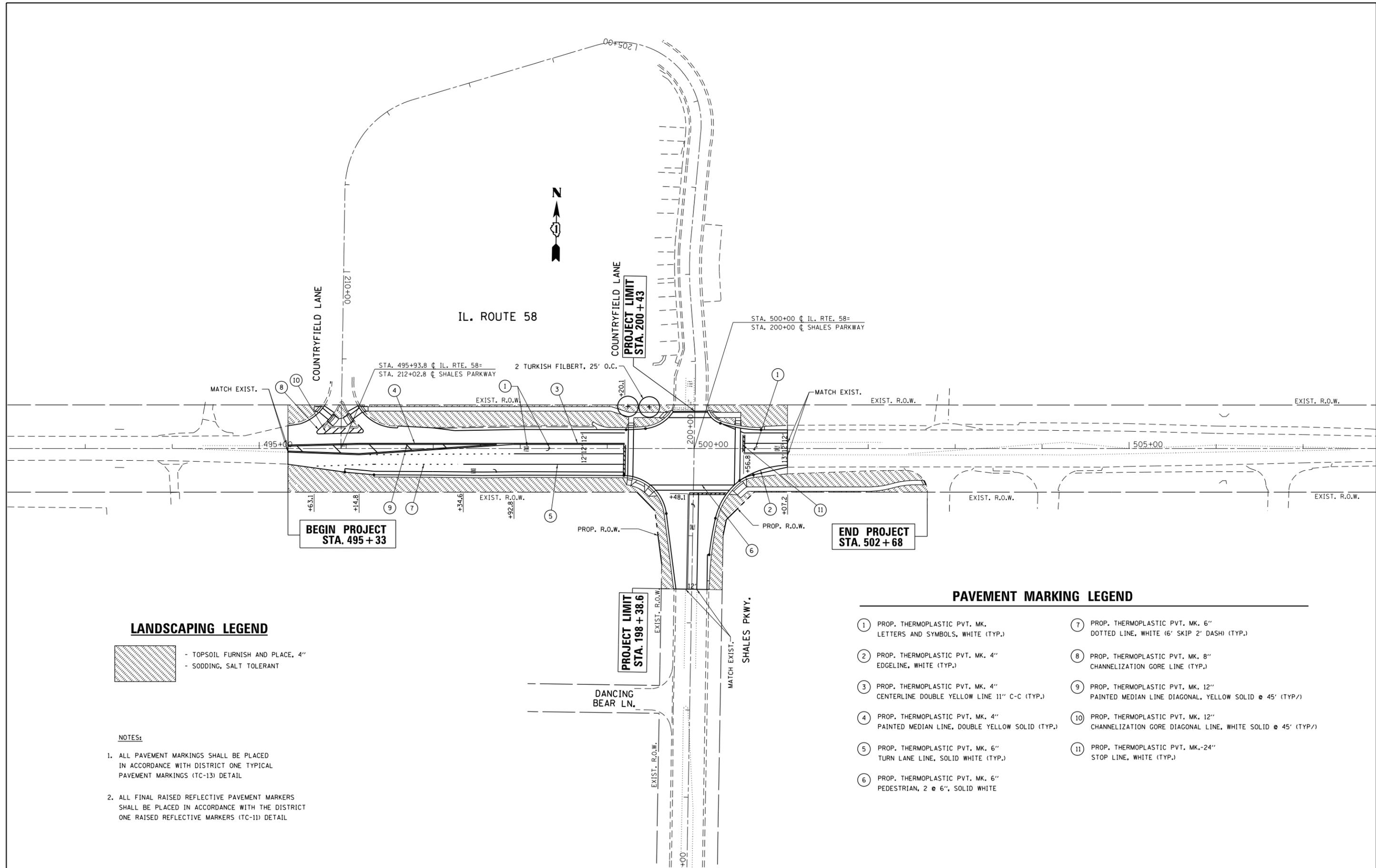
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAT OF HIGHWAYS
IL. RTE. 58 AT SHALES PKWY.
SCALE: NTS SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	21

CONTRACT NO. 60L43
ILLINOIS FED. AID PROJECT

REVISION DATE: MAY 26, 2011 REVISION MADE BY: MGS



LANDSCAPING LEGEND

- TOPSOIL FURNISH AND PLACE, 4"
- SODDING, SALT TOLERANT

NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) DETAIL
2. ALL FINAL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH THE DISTRICT ONE RAISED REFLECTIVE MARKERS (TC-11) DETAIL

PAVEMENT MARKING LEGEND

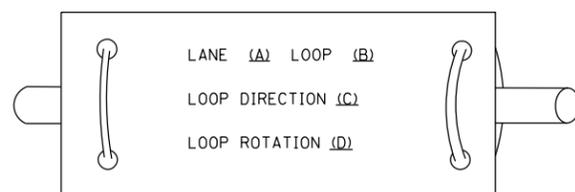
- | | |
|--|---|
| <ul style="list-style-type: none"> ① PROP. THERMOPLASTIC PVT. MK. LETTERS AND SYMBOLS, WHITE (TYP.) ② PROP. THERMOPLASTIC PVT. MK. 4" EDGELINE, WHITE (TYP.) ③ PROP. THERMOPLASTIC PVT. MK. 4" CENTERLINE DOUBLE YELLOW LINE 11" C-C (TYP.) ④ PROP. THERMOPLASTIC PVT. MK. 4" PAINTED MEDIAN LINE, DOUBLE YELLOW SOLID (TYP.) ⑤ PROP. THERMOPLASTIC PVT. MK. 6" TURN LANE LINE, SOLID WHITE (TYP.) ⑥ PROP. THERMOPLASTIC PVT. MK. 6" PEDESTRIAN, 2 @ 6", SOLID WHITE | <ul style="list-style-type: none"> ⑦ PROP. THERMOPLASTIC PVT. MK. 6" DOTTED LINE, WHITE (6' SKIP 2' DASH) (TYP.) ⑧ PROP. THERMOPLASTIC PVT. MK. 8" CHANNELIZATION GORE LINE (TYP.) ⑨ PROP. THERMOPLASTIC PVT. MK. 12" PAINTED MEDIAN LINE DIAGONAL, YELLOW SOLID @ 45° (TYP.) ⑩ PROP. THERMOPLASTIC PVT. MK. 12" CHANNELIZATION GORE DIAGONAL LINE, WHITE SOLID @ 45° (TYP.) ⑪ PROP. THERMOPLASTIC PVT. MK. -24" STOP LINE, WHITE (TYP.) |
|--|---|

FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING AND LANDSCAPING PLAN IL. RTE. 58 AT SHALES PKWY.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\p\dot\paraynoal\0150569\PI	2209-shr-pmk.dgn	DRAWN -	REVISED -			1320	581-N-1	COOK	50	22	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60L43					
	PLOT DATE = 8/23/2012	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

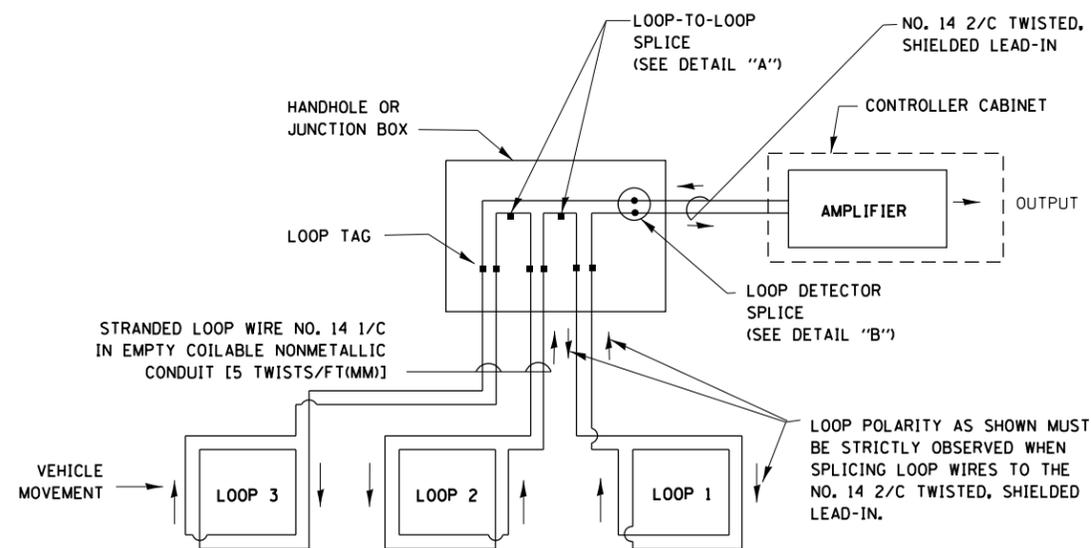
LOOP DETECTOR NOTES

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 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.
- 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.
- PERFORMED 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

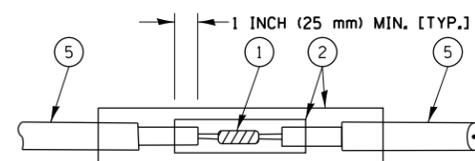


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

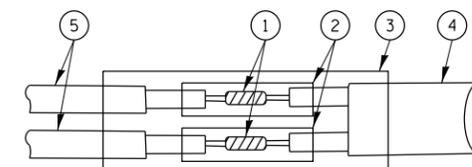


DETECTOR LOOP WIRING SCHEMATIC

- 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.

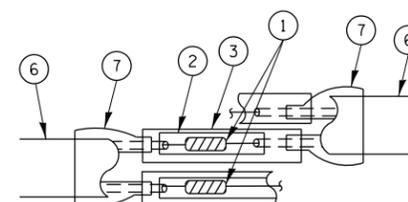


DETAIL "A"
LOOP-TO-LOOP SPLICE

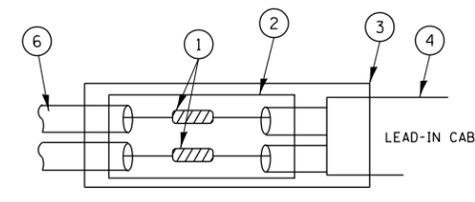


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

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

FILE NAME =	USER NAME = paraynoal	DESIGNED - DAD	REVISED -
ct:\pw\work\p1dot\paraynoal\0273204\PI	2209-Design.dgn	DRAWN - BCK	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 8/23/2012	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

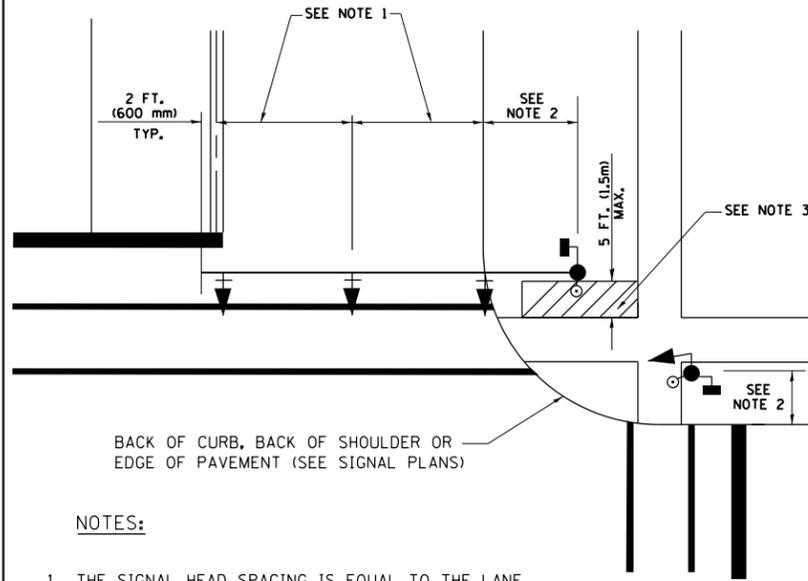
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	23
TS-05			CONTRACT NO. 60L43	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

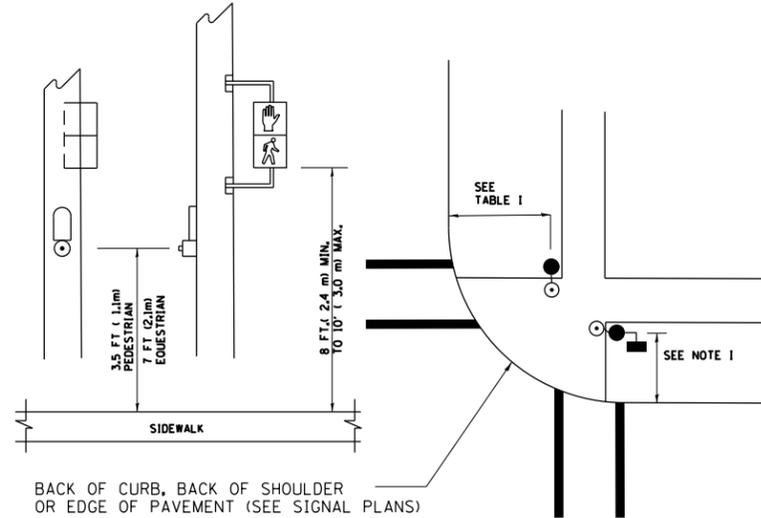
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

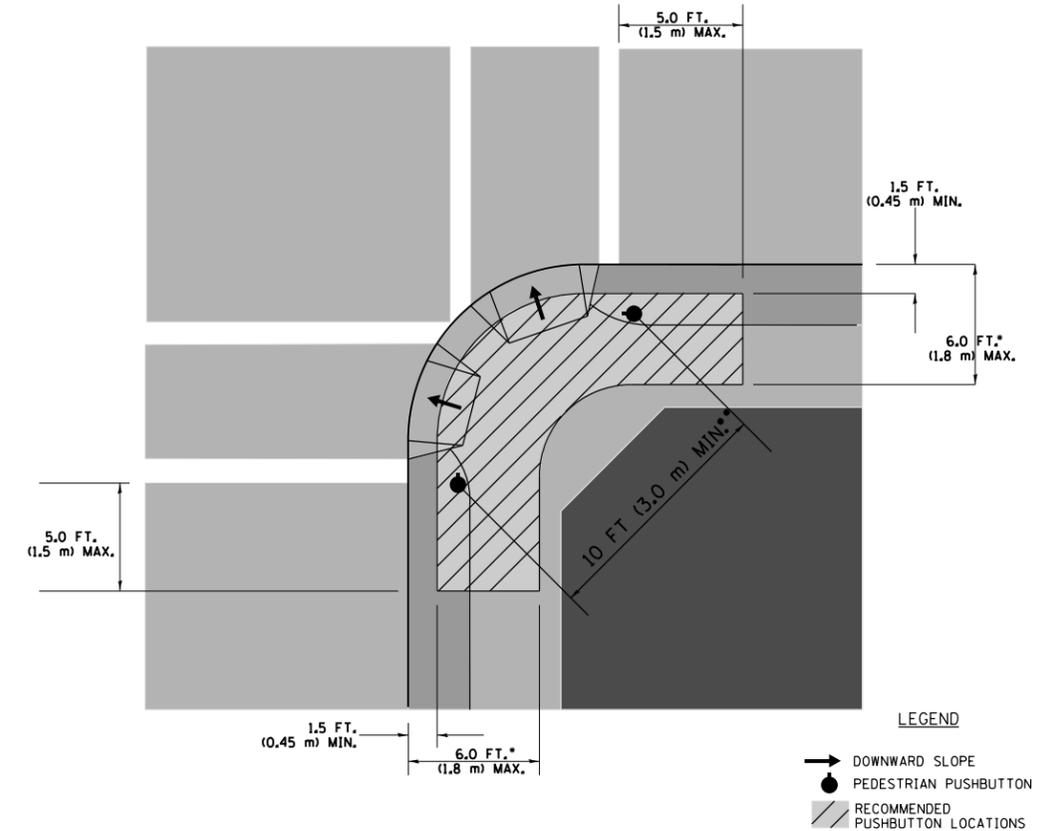
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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:

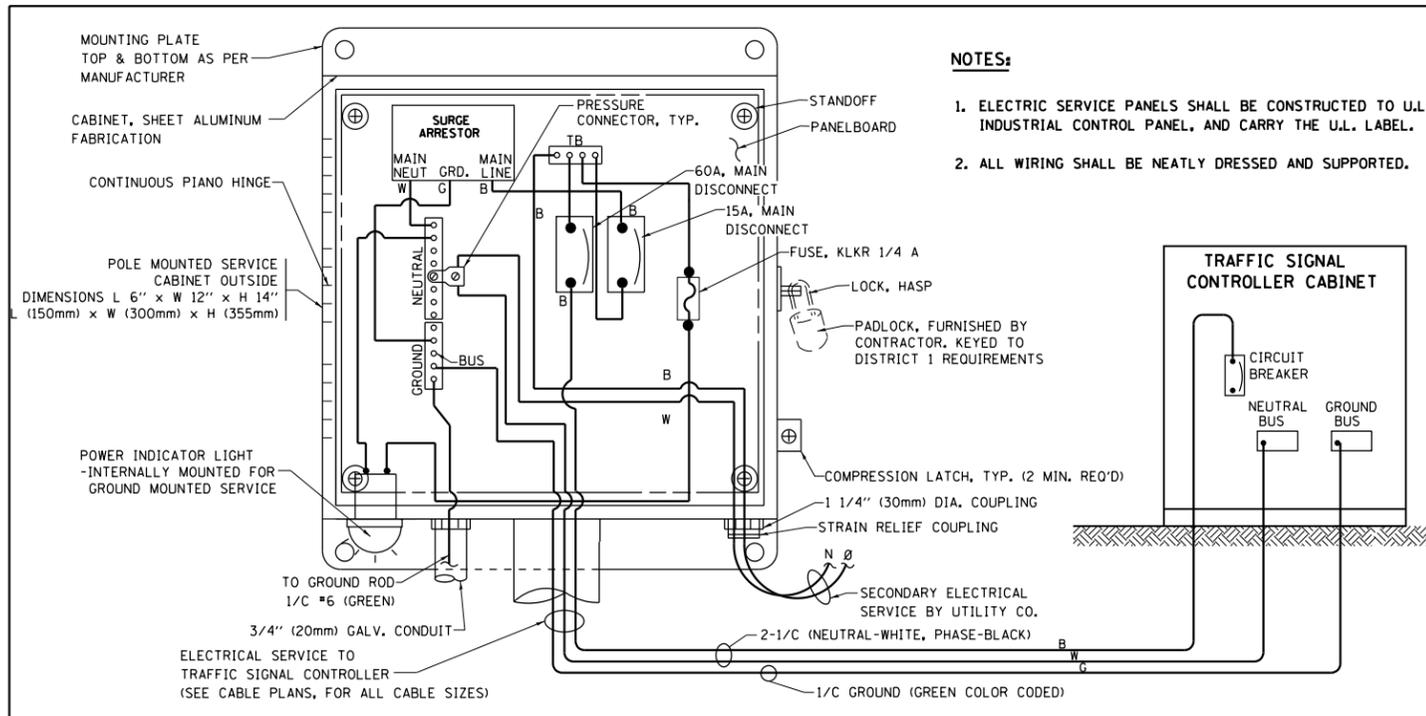
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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

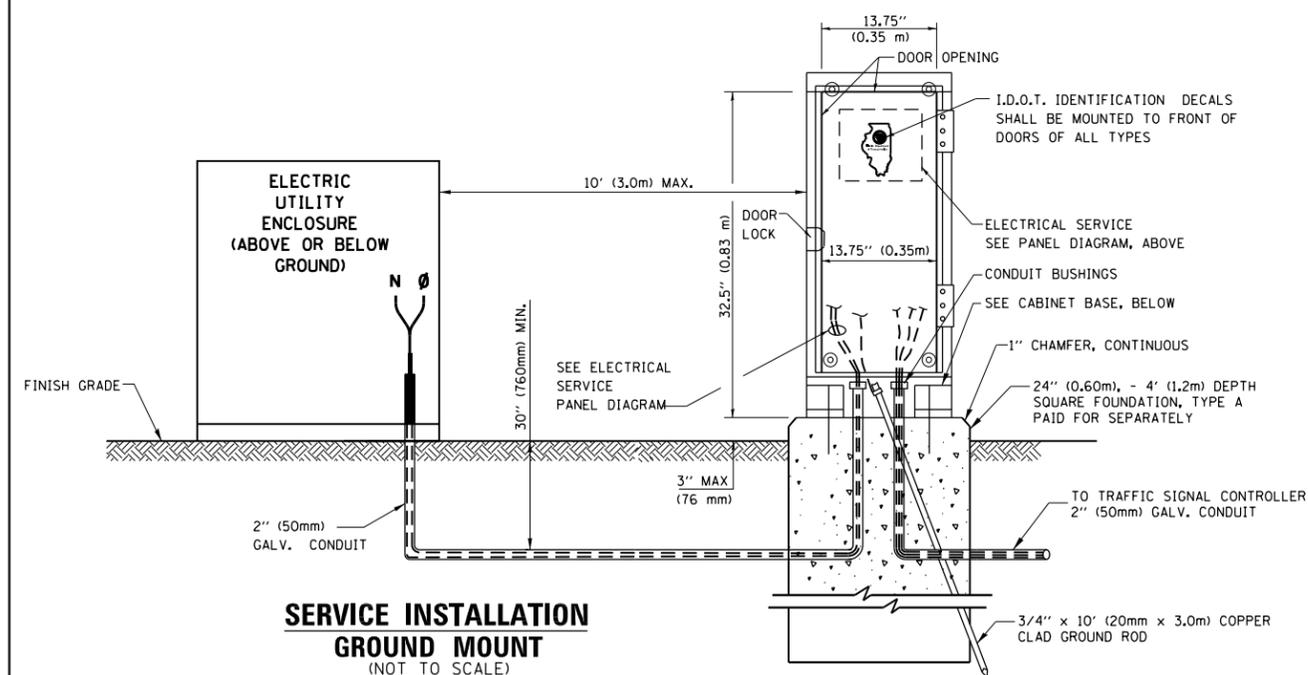
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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.

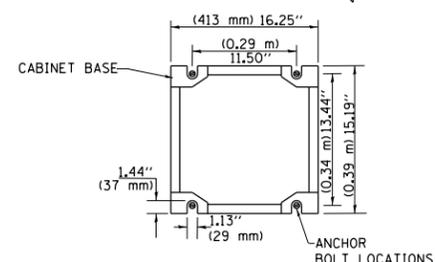


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)

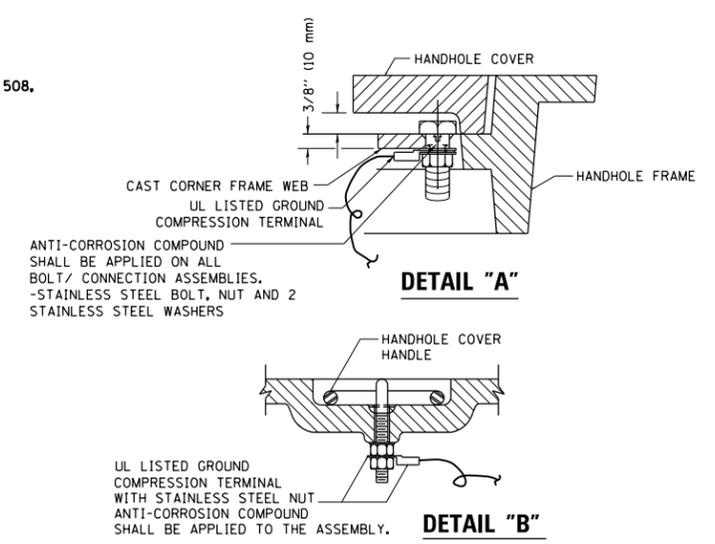


SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

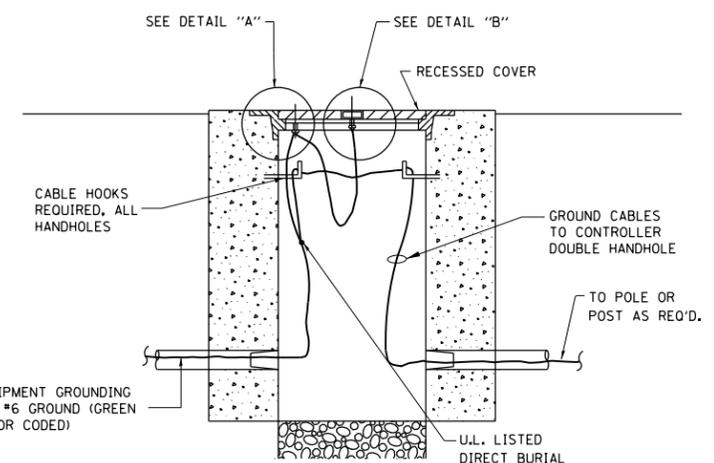
CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)



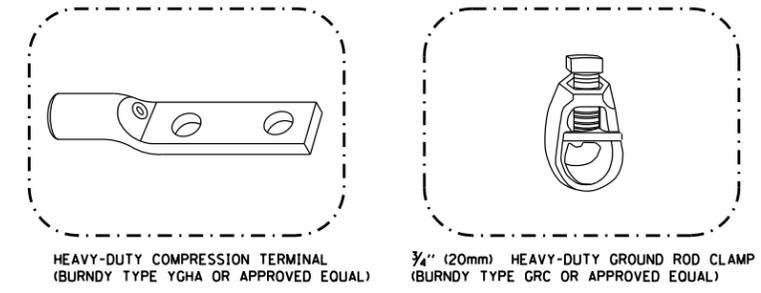
- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



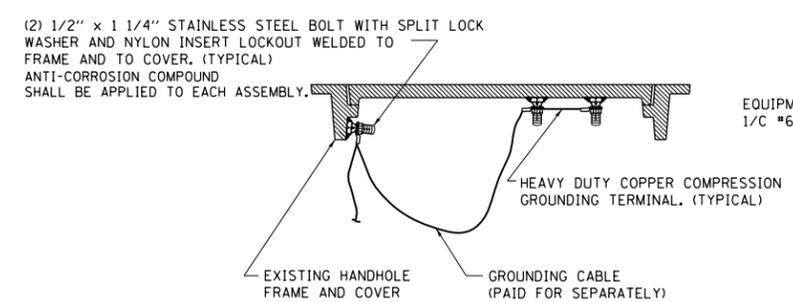
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED 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.



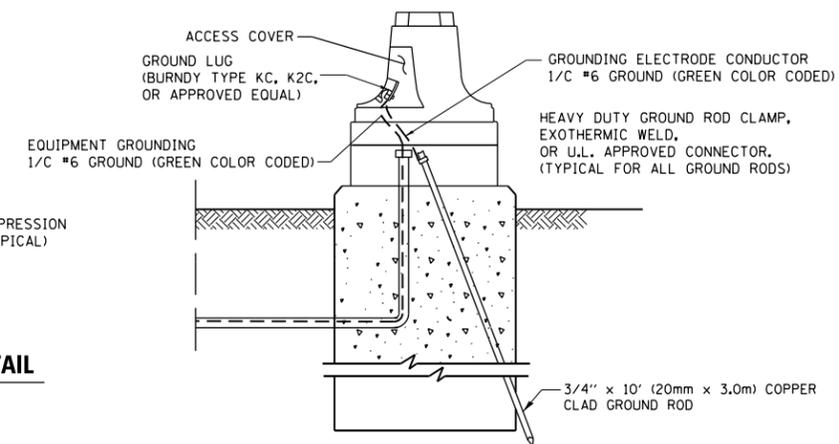
HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



- 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.

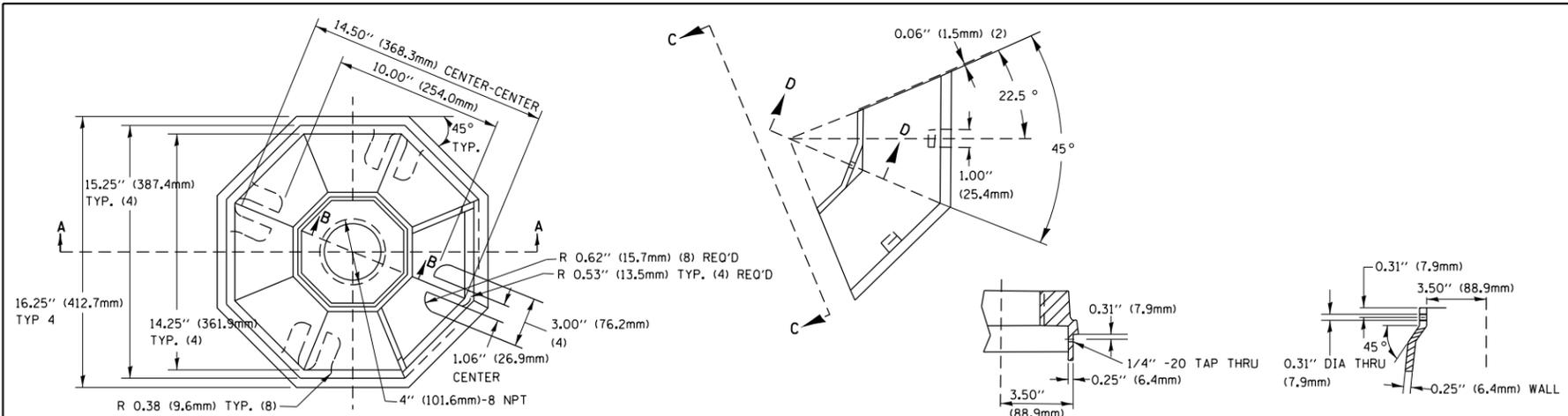


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



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

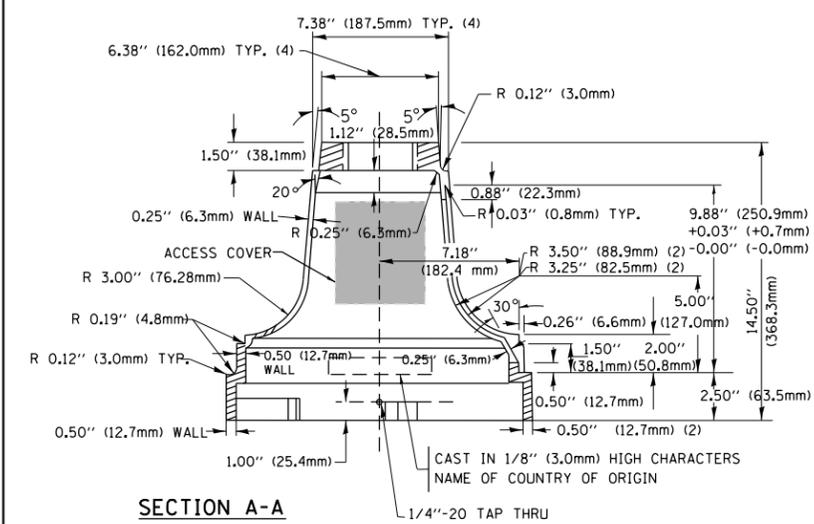
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et:\pw\work\p1dot\parayno1\d0273204\PI	2209-Design.dgn	DRAWN - BCK	REVISED -			1320	581-N-1	COOK	50	25
	PLOT SCALE = 100.0000' / 1in.	CHECKED - DAD	REVISED -			TS-05		CONTRACT NO. 60L43		
	PLOT DATE = 8/23/2012	DATE - 10-28-09	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



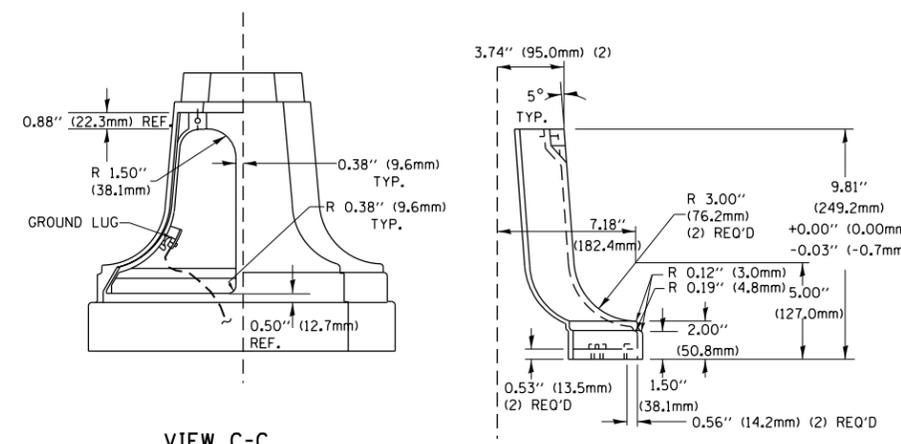
TOP VIEW

SECTION B-B

SECTION D-D

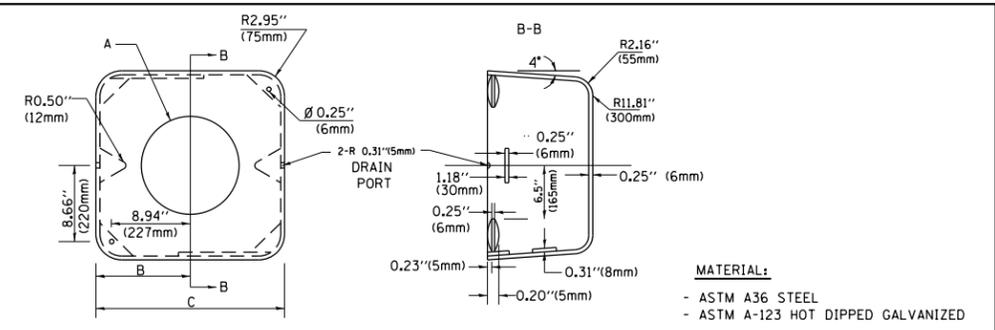


SECTION A-A



VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



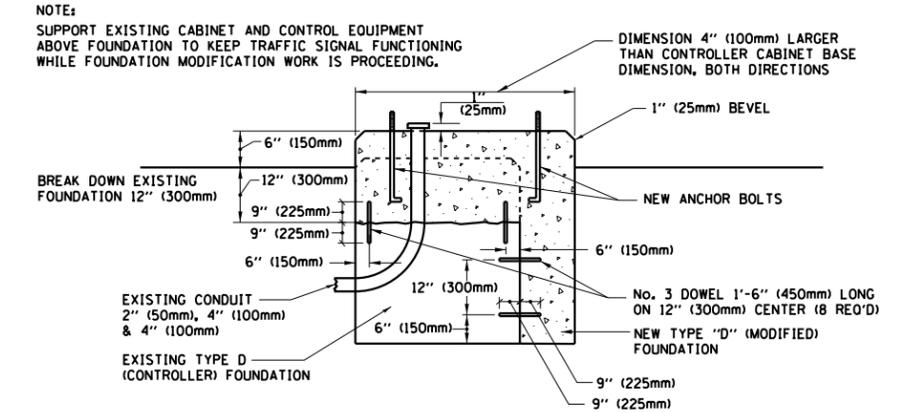
MATERIAL:
 - ASTM A36 STEEL
 - ASTM A-123 HOT DIPPED GALVANIZED

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)

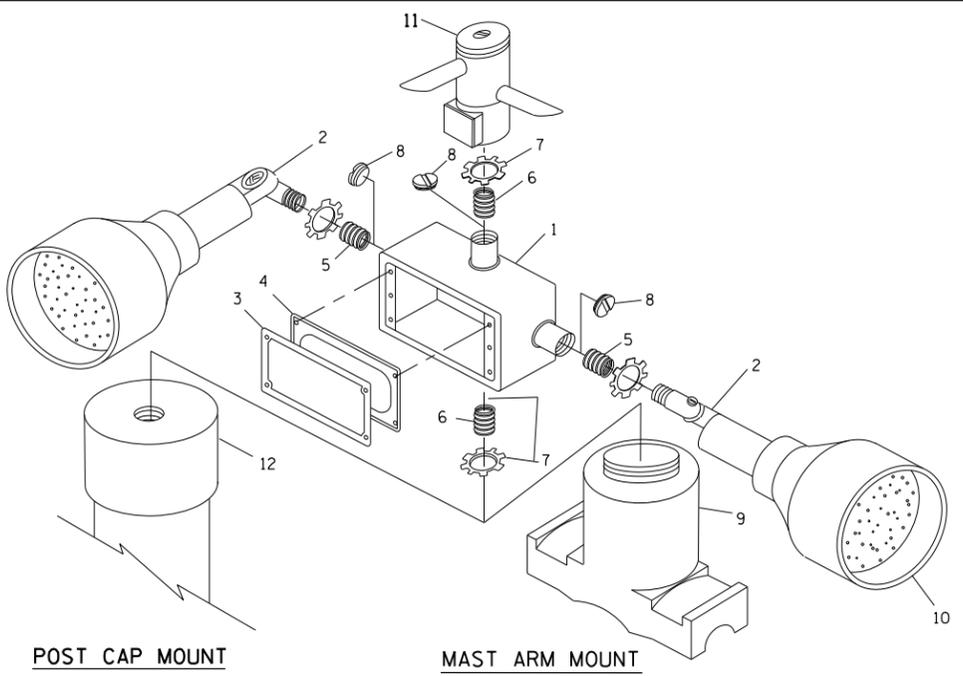
SHROUD

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.



MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT

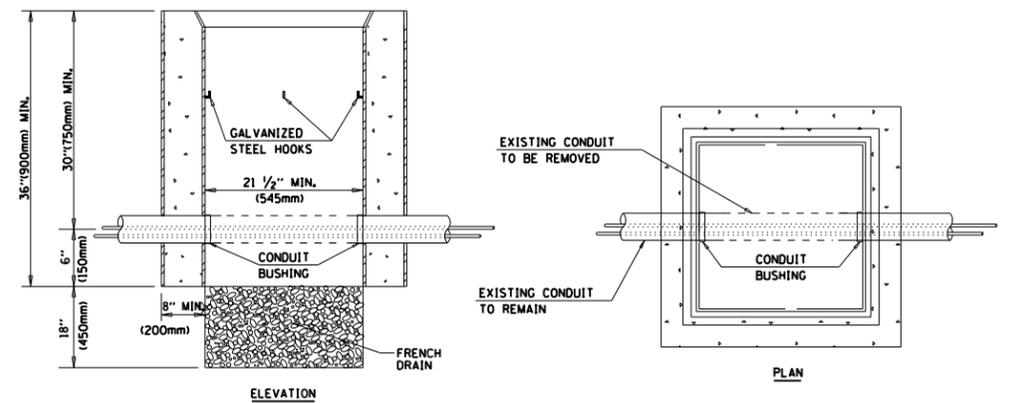
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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:

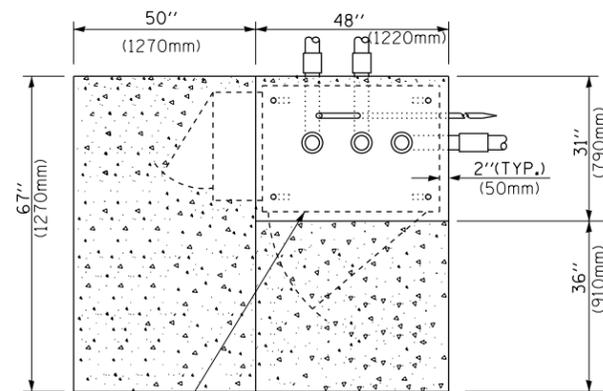
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION 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.



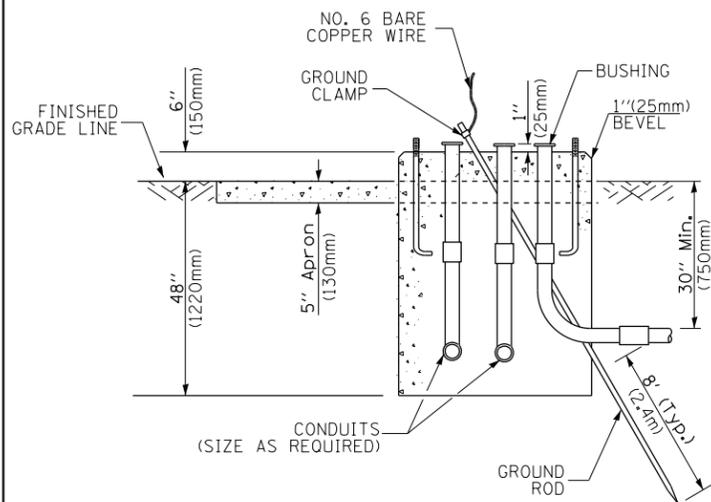
NOTES:

- 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.

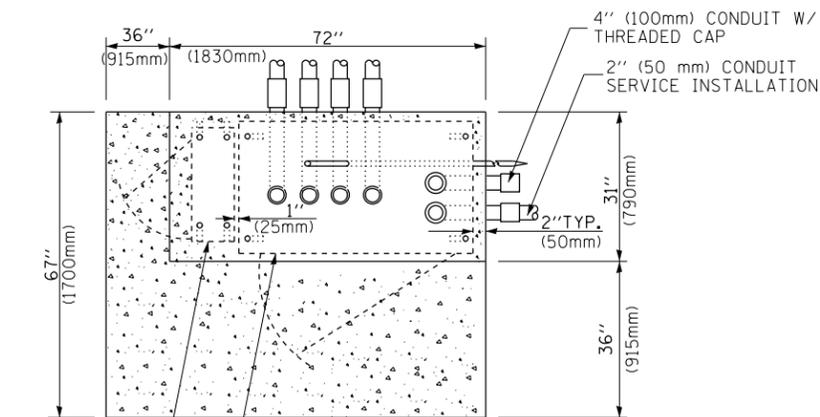
HANDHOLE TO INTERCEPT EXISTING CONDUIT



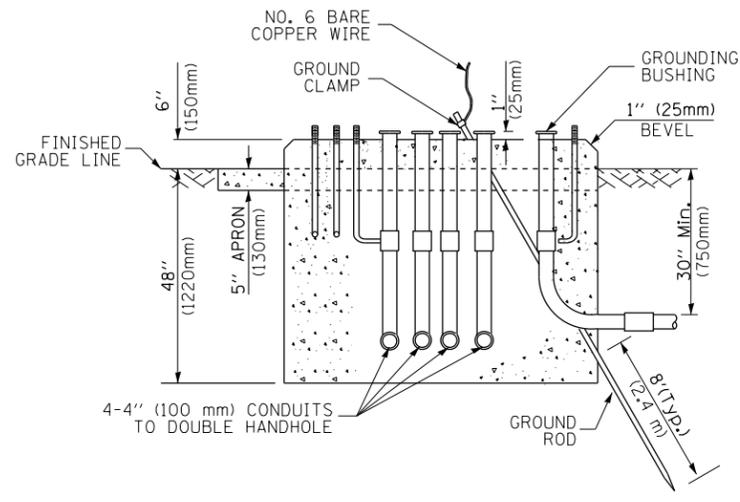
CONTROLLER CABINET BASE
EXISTING APRON
PROPOSED APRON
TOP VIEW



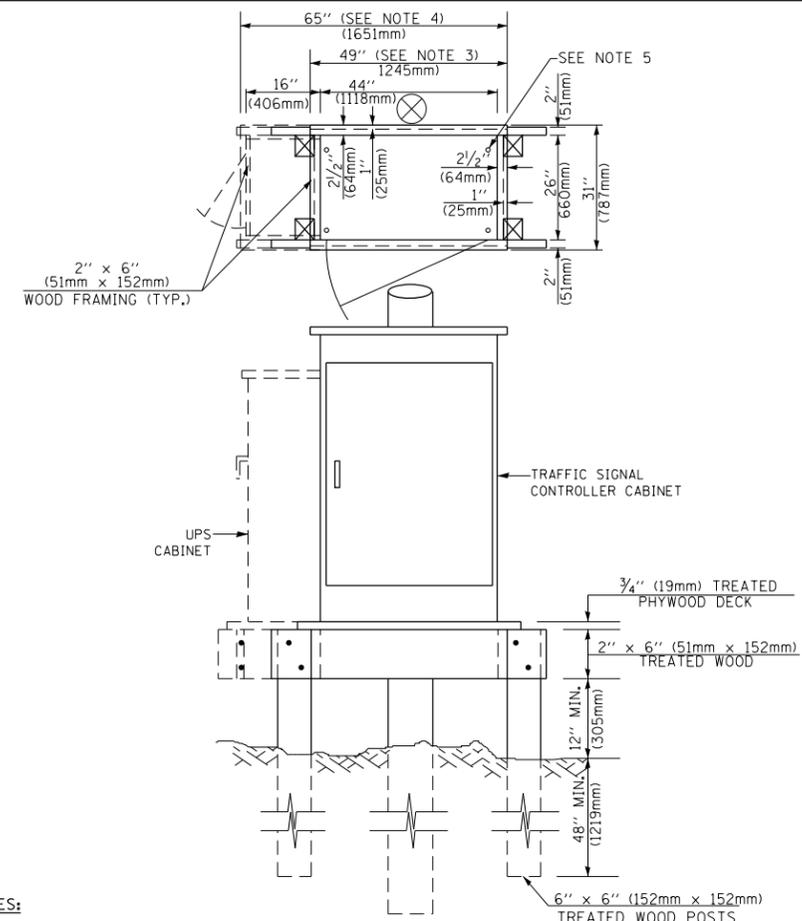
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



UPS CABINET BASE
CONTROLLER CABINET BASE
APRON
TOP VIEW



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 55' (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 less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	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 = parayno1	DESIGNED - DAG	REVISED -
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	PLOT SCALE = 100.0000' / 1in.	CHECKED - DAD	REVISED -
	PLOT DATE = 8/23/2012	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

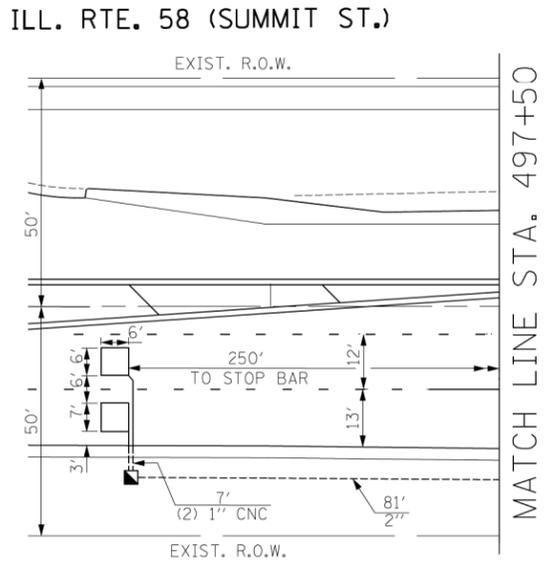
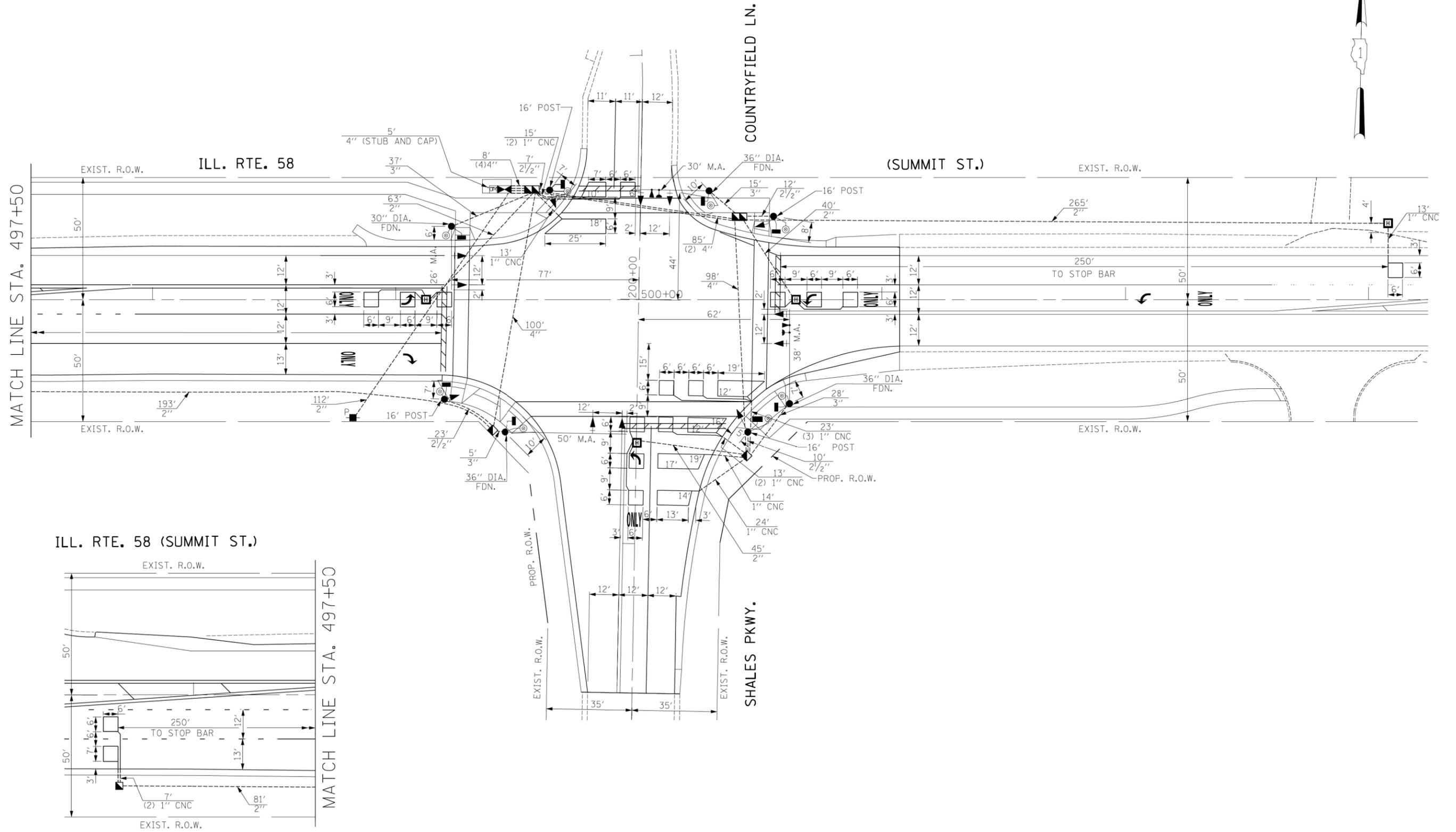
DISTRICT ONE		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		1320	581-N-1	COOK	50	27
SCALE: NONE	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.	TS-05 CONTRACT NO. 60L43		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						

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		



FILE NAME =	USER NAME = plascencia	DESIGNED - EA, PKG	REVISED - IP 01/19/12
		DRAWN - EA	REVISED -
		CHECKED - PKG	REVISED -
		DATE - 08/31/2011	REVISED -

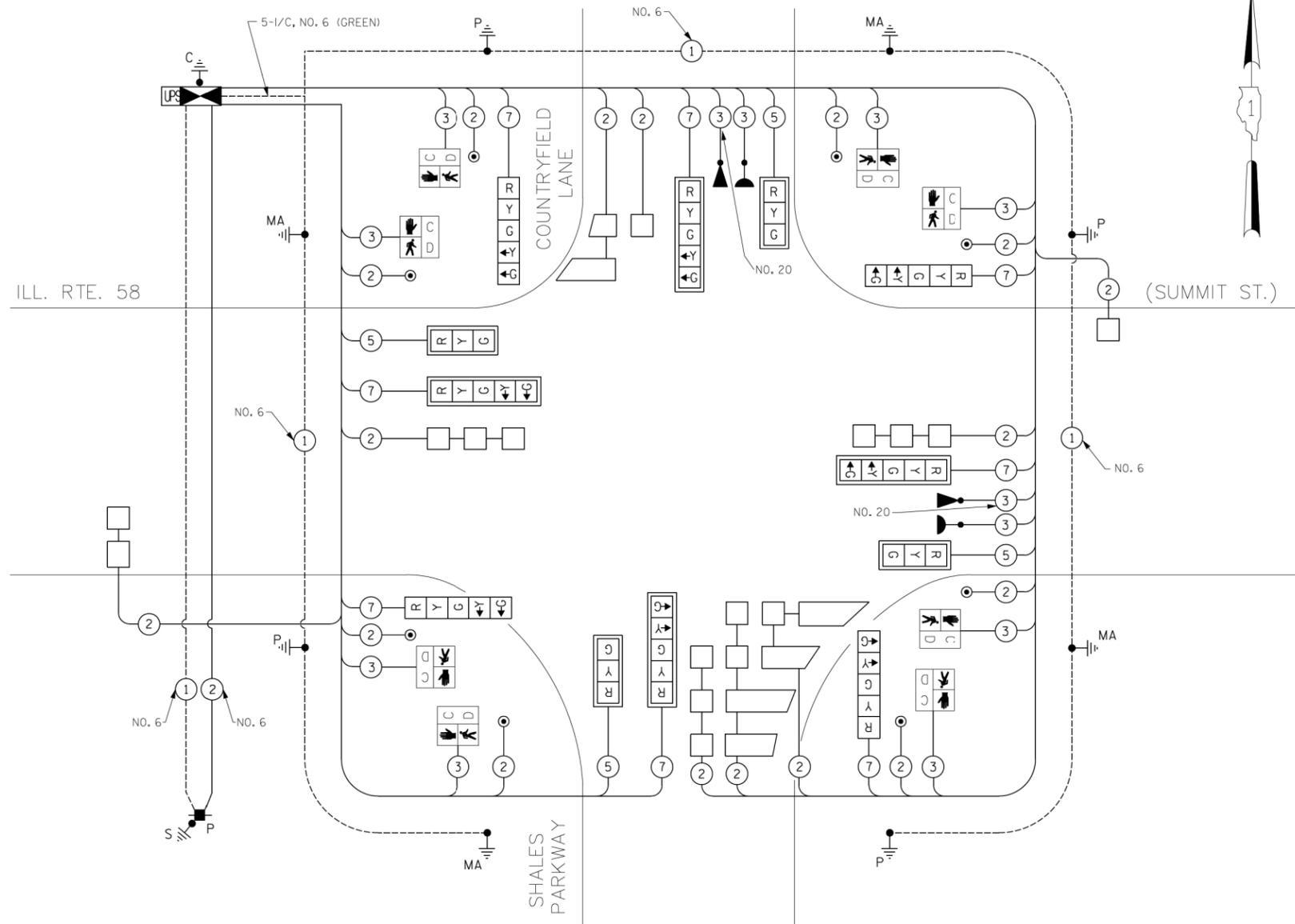
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL INSTALLATION PLAN			
ILLINOIS ROUTE 58 AT SHALES PARKWAY /COUNTRYFIELD LANE			
SCALE: 1" = 20'	SHEET NO.	OF SHEETS	STA. TO STA.

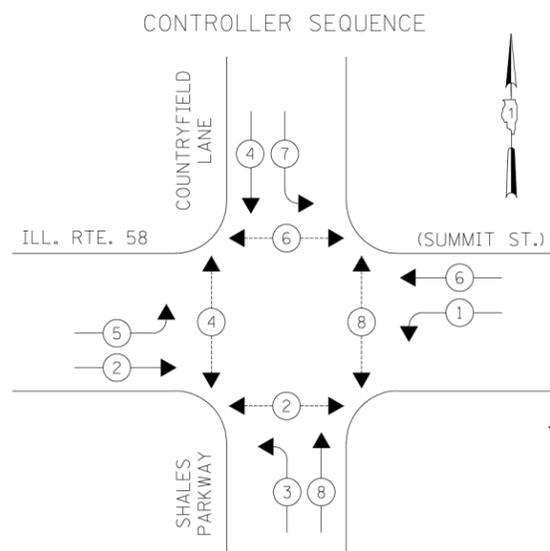
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	29
CONTRACT NO. 60L43				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES		
QUANTITY	UNIT	ITEM
18	SQ FT	SIGN PANEL-TYPE 1
50	SQ FT	SIGN PANEL-TYPE 2
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
851	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
58	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
103	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
414	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
3	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
1245	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1810	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
781	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1463	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1860	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
132	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
829	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
16	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
10	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
37	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
8	EACH	PEDESTRIAN SIGNAL HEAD, LED 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
9	EACH	INDUCTIVE LOOP DETECTOR
885	FOOT	DETECTOR LOOP, TYPE I
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
8	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
510	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

* 100% COST TO CITY OF ELGIN

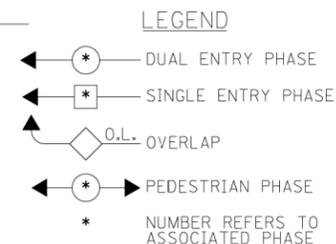
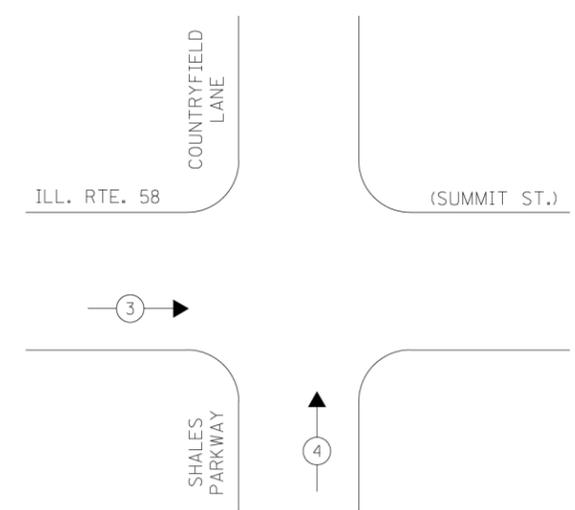


CABLE PLAN



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	→	↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	%OPERATION		
SIGNAL (RED)	12	17	0.50		102.0
(YELLOW)	12	25	0.25		75.0
(GREEN)	12	15	0.25		45.0
ARROW	16	12	0.10		19.2
PED. SIGNAL	8	25	1.00		200.0
CONTROLLER	1	100	1.00		100.0
ILLUM. SIGN	-	25	0.05		-
FLASHER				0.50	-
ENERGY COSTS TO:				TOTAL =	541.2

ENERGY COSTS TO:
CITY OF ELGIN
 150 DEXTER COURT
 ELGIN, ILLINOIS 60120-5570

ENERGY SUPPLY CONTACT: **KATHY NYSTROM**
 PHONE: (847) 608-2331
 COMPANY: COMMONWEALTH EDISON

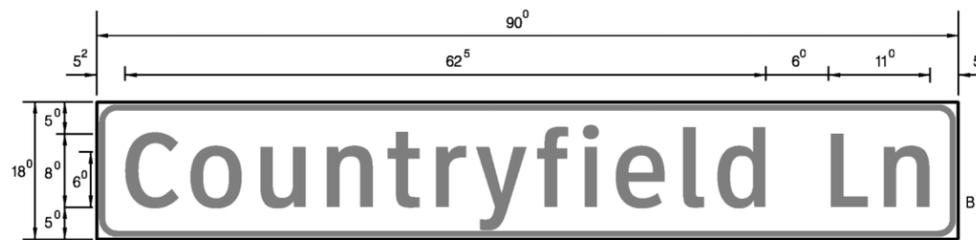
FILE NAME =	USER NAME = plascencia	DESIGNED - EA, PKG	REVISED - IP 01/19/12
		DRAWN - EA	REVISED -
		CHECKED - PKG	REVISED -
		DATE - 08/31/2011	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION, EMERGENCY VEHICLE PREEMPTION SEQUENCE, AND SCHEDULE OF QUANTITIES
 ILLINOIS ROUTE 58 (SUMMIT STREET) AT SHALES PARKWAY/COUNTRYFIELD LANE

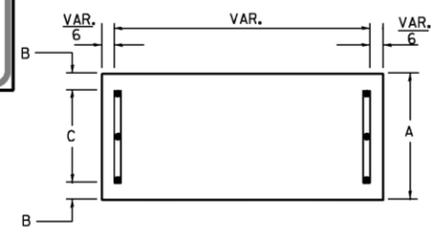
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	30
FED. ROAD DIST. NO. ... ILLINOIS FED. AID PROJECT			CONTRACT NO. 60L43	

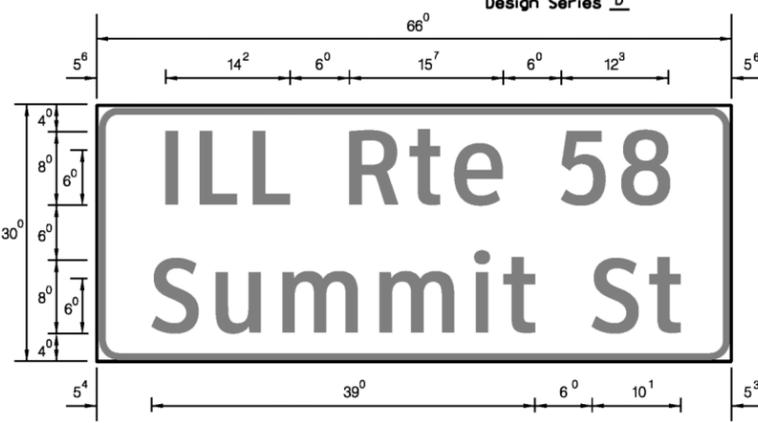


- Sq. M. each
11.25 Sq. Ft. each
2 Required
Design Series D

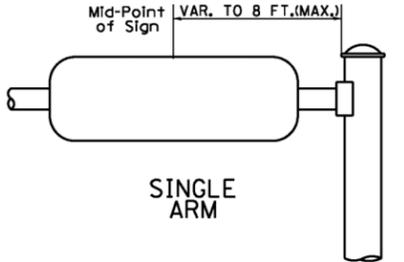
SUPPORTING CHANNELS



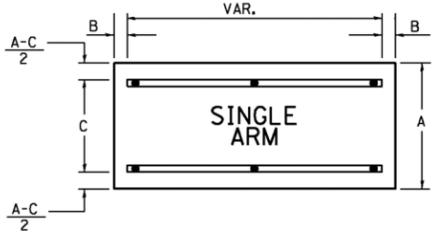
A	B	C
18"	2"	14"



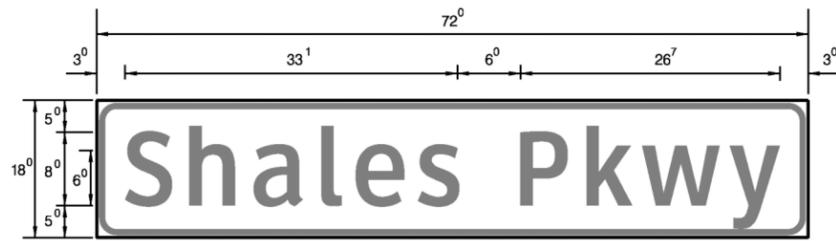
- Sq. M. each
13.75 Sq. Ft. each
2 Required
Design Series D



SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



- Sq. M. each
9.0 Sq. Ft. each
2 Required
Design Series D

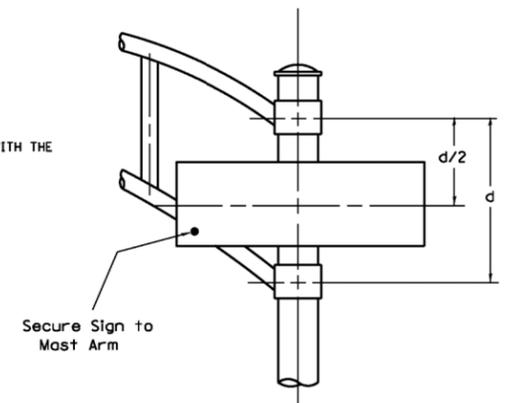
NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

* J.O. HERBERT CO. MIDLOTHIAN, VA. * WESTERN REMAC INC. WOODRIDGE, IL.

PARTS LISTING:
SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER PART #HPN034 (UNIVERSAL)
BRACKETS CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.



DUAL ARM
SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM
Shall be used. See Note #5.

Upper Case To Lower Case
Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2³ DENOTES 3/8

FIRST LETTER	SECOND LETTER															
	acde		bhikl		fw		j		st		vy		x		z	
	g	o	q	m	n	p	r	u								
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ²	1 ⁴
B	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁶	1 ⁷
C E G	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
D O O R	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
F	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²
H I M N	2 ⁰	2 ¹	2 ²	2 ⁴	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	2 ⁰	2 ¹
J U	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹
K L	1 ¹	1 ²	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
P	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁴
S	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴						
T	1 ¹	1 ²	1 ⁶	1 ⁷	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
V	0 ⁶	1 ⁰	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁶	1 ⁰	1 ²	1 ⁴						
Y	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁵	0 ⁷	0 ⁵	0 ⁶	0 ⁶	1 ⁰	1 ¹	1 ²
Z	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹

Lower Case To Lower Case
Spacing Chart 6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER															
	acde		bhikl		fw		j		st		vy		x		z	
	g	o	q	m	n	p	r	u								
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
adhgi j	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷
lmnqu																
bfkops	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁴
c e	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴						
r	0 ⁶	1 ⁰	1 ²	1 ⁴	0 ⁶	1 ⁰	0 ³	0 ³	0 ⁵	0 ⁶	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰
t z	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁴
v y	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²
w	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
x	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴

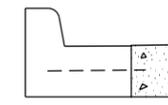
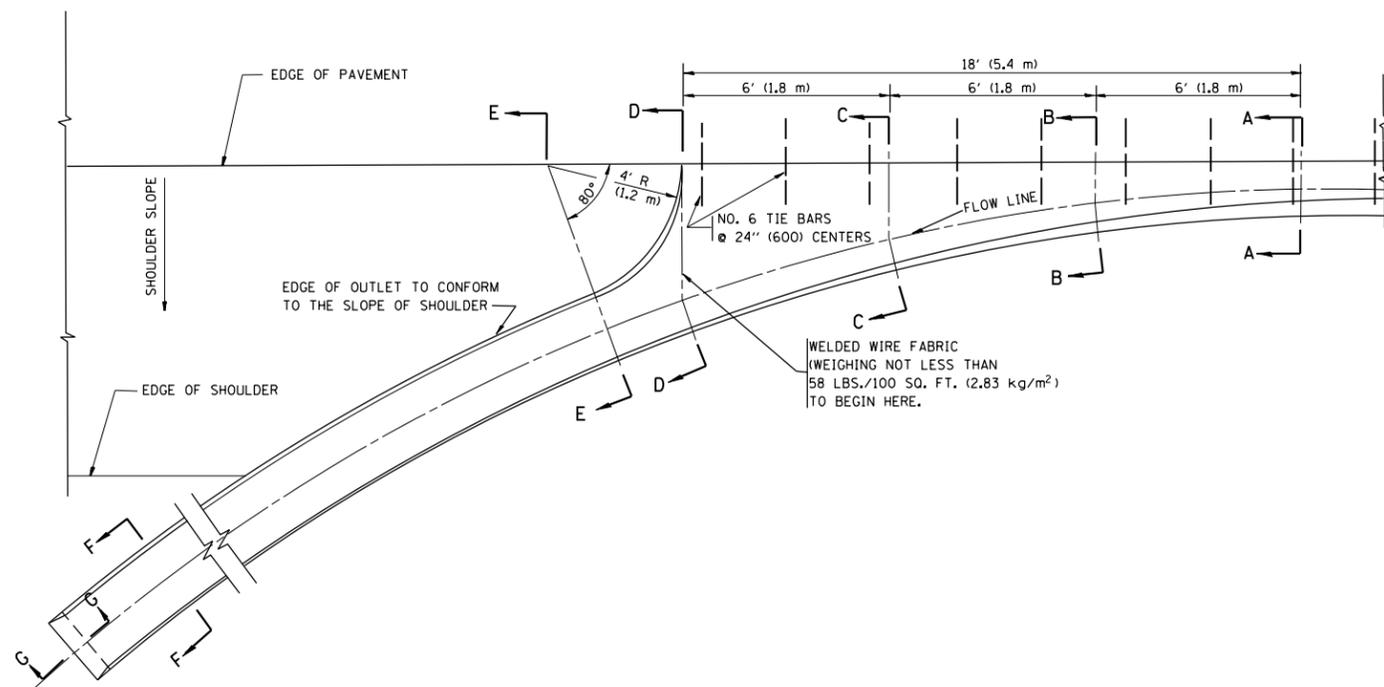
Number To Number
Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER	SECOND NUMBER																				
	0		1		2		3		4		5		6		7		8		9		
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	
2 3 4	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	
5	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	
6	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	
7	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁵	0 ⁵	0 ⁶	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴
8	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁶	1 ⁷	

UPPER AND LOWER CASE LETTER WIDTHS

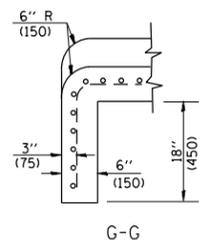
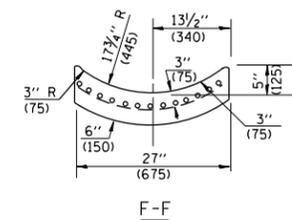
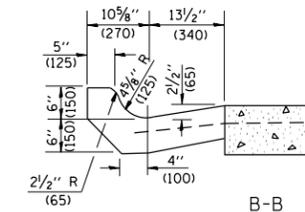
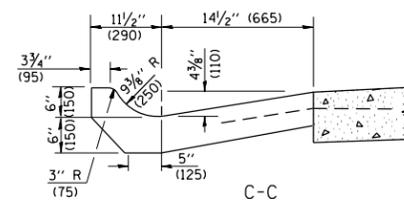
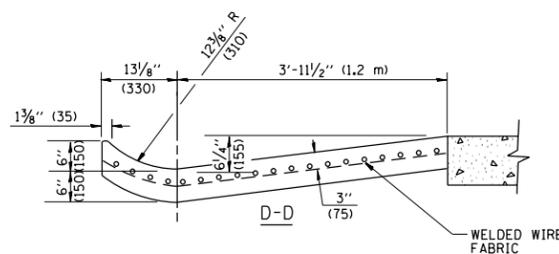
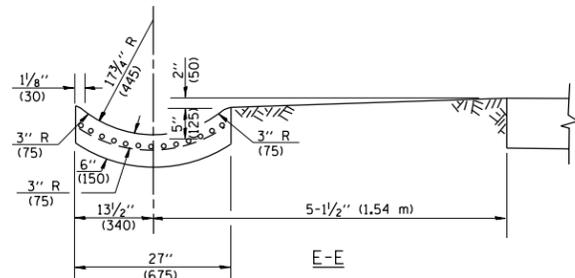
LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 ⁶	5 ⁰	5 ⁰	6 ⁵	a	3 ⁵	4 ²
B	3 ²	4 ⁰	4 ³	5 ³	b	3 ⁵	4 ²
C	3 ²	4 ⁰	4 ³	5 ³	c	3 ⁵	4 ¹
D	3 ²	4 ⁰	4 ³	5 ³	d	3 ⁵	4 ²
E	3 ⁰	3 ⁵	4 ⁰	4 ⁷	e	3 ⁵	4 ²
F	3 ⁰	3 ⁵	4 ⁰	4 ⁷	f	2 ³	2 ⁶
G	3 ²	4 ⁰	4 ³	5 ³	g	3 ⁵	4 ²
H	3 ²	4 ⁰	4 ³	5 ³	h	3 ⁵	4 ²
I	0 ⁷	0 ⁷	1 ¹	1 ²	i	1 ¹	1 ¹
J	3 ⁰	3 ⁶	4 ⁰	5 ⁰	j	2 ⁰	2 ²
K	3 ²	4 ¹	4 ³	5 ⁴	k	3 ⁵	4 ²
L	3 ⁰	3 ⁵	4 ⁰	4 ⁷	l	1 ¹	1 ¹
M	3 ⁷	4 ⁵	5 ¹	6 ¹	m	6 ⁰	7 ⁰
N	3 ²	4 ⁰	4 ³	5 ³	n	3 ⁵	4 ²
O	3 ⁴	4 ²	4 ⁵	5 ⁵	o	3 ⁶	4 ³
P	3 ²	4 ⁰	4 ³	5 ³	p	3 ⁵	4 ²
Q	3 ⁴	4 ²	4 ⁵	5 ⁵	q	3 ⁵	4 ²
R	3 ²	4 ⁰	4 ³	5 ³	r	2 ⁶	3 ²
S	3 ²	4 ⁰	4 ³	5 ³	s	3 ⁶	4 ²
T	3 ⁰	3 ⁵	4 ⁰	4 ⁷	t	2 ⁷	3 ²
U	3 ²	4 ⁰	4 ³	5 ³	u	3 ⁵	4 ²
V	3 ⁵	4 ⁴	4 ⁷	6 ⁰	v	4 ²	4 ⁷
W	4 ⁴	5 ²	6 ⁰	7 ⁰	w	5 ⁵	6 ⁴
X	3 ⁴	4 ⁰	4 ⁵	5 ³	x	4 ⁴	5 ¹
Y	3 ⁶	5 ⁰	5 ⁰	6 ⁶	y	4 ⁶	5 ³
Z	3 ²	4 ⁰	4 ³	5 ³	z	3 ⁶	4 ³

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 ²	1 ⁴	1 ⁵	2 ⁰
2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰		



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\" (600) CENTERS UNLESS OTHERWISE SHOWN.

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\" (225) PAV'T.
 1.27 CU. YDS. (0.96 m³) CLASS S1 CONCRETE (OUTLET) FOR 10\" (250) PAV'T.
 FOR SECTION F-F =
 0.045 CU. YDS. (0.03 m³) CLASS S1 CONCRETE PER FT. (m).

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

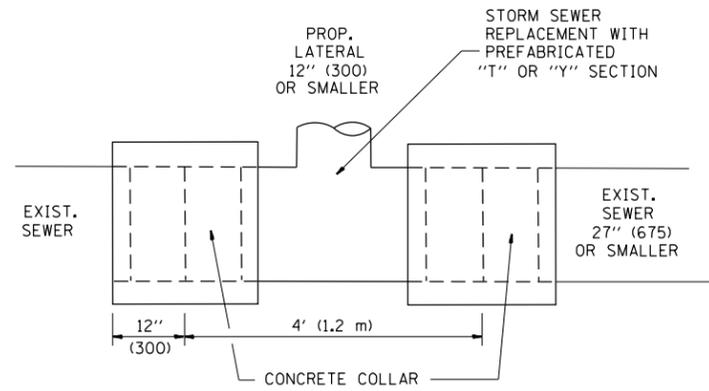
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	PLOT DATE = 8/23/2012	CHECKED -	REVISED - E. GOMEZ 12-21-00
		DATE - 08-04-86	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OUTLET FOR CONCRETE
CURB AND GUTTER**

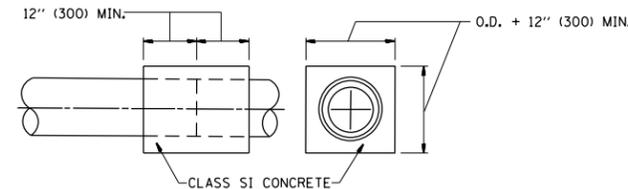
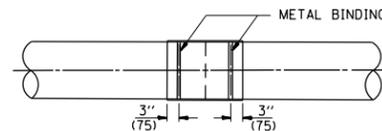
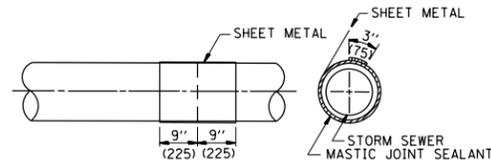
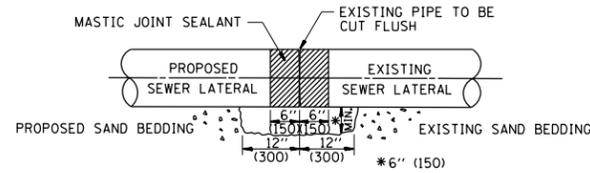
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	32
BD600-01 (BD-03)		CONTRACT NO. 60L43		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



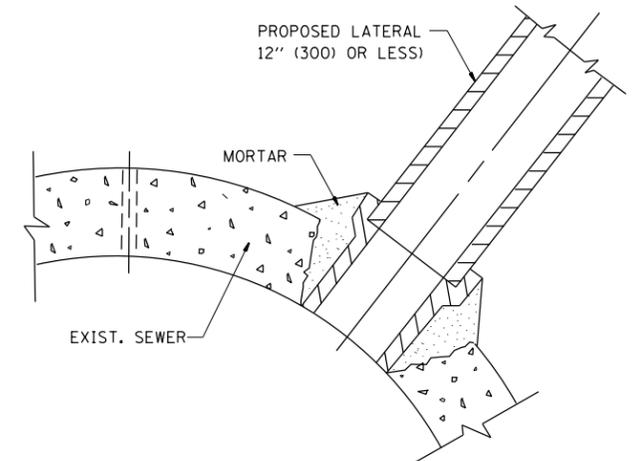
DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12" x 6" (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

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



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

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

CONSTRUCTION METHODS

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

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

GENERAL

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

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

BASIS OF PAYMENT

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

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

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

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

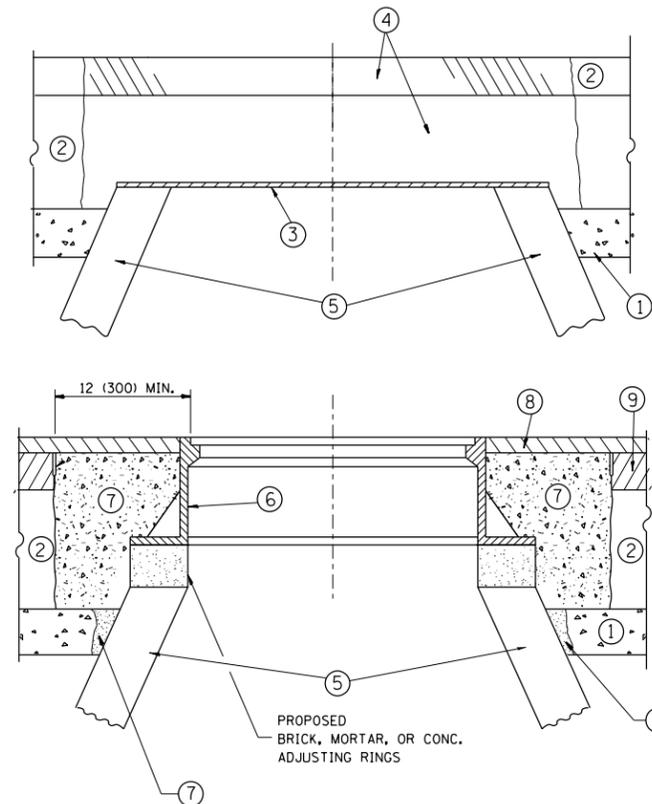
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	PLOT DATE = 8/23/2012	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF STORM SEWER
CONNECTION TO EXISTING SEWER**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	33
BD500-01 (BD-7)			CONTRACT NO. 60L43	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

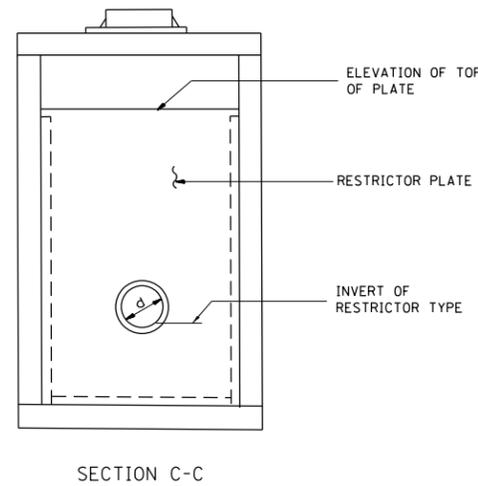
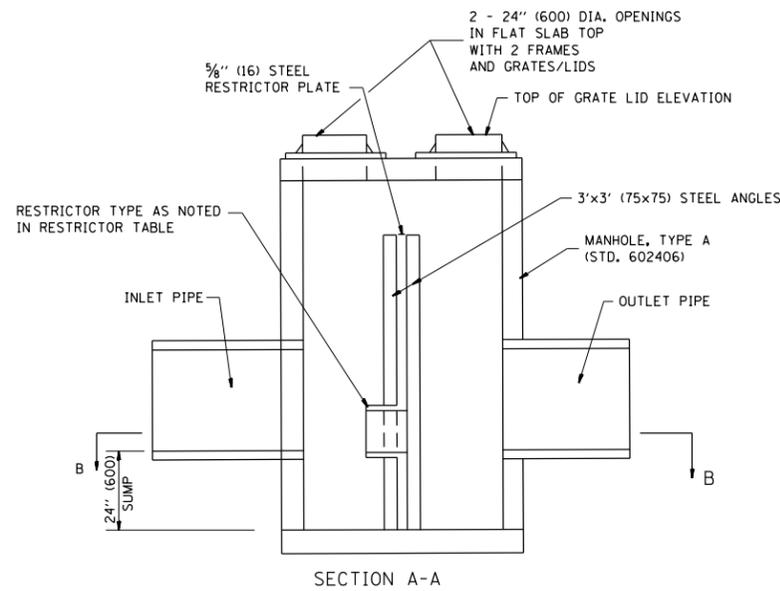
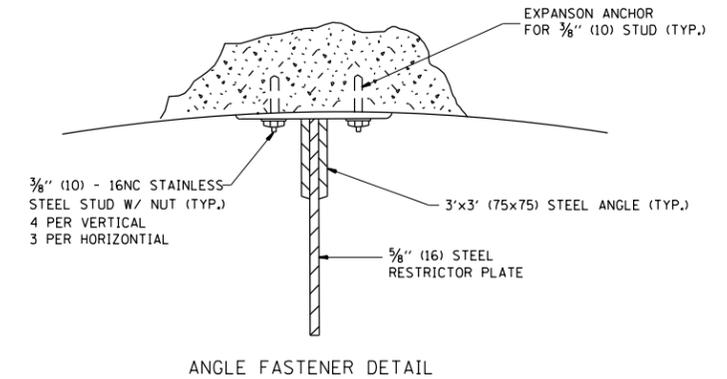
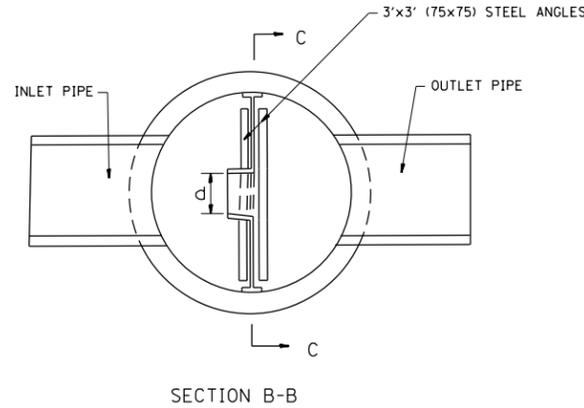
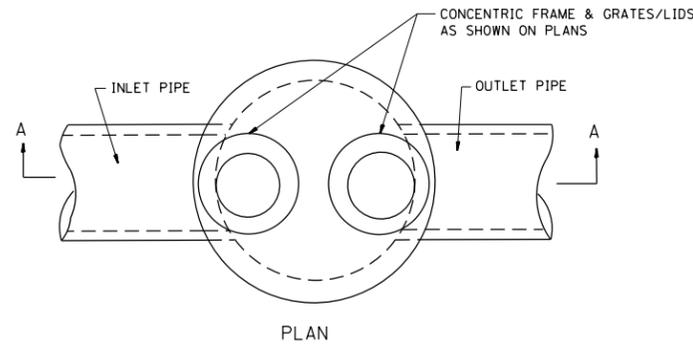
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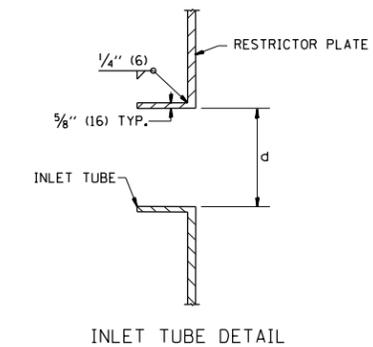
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			
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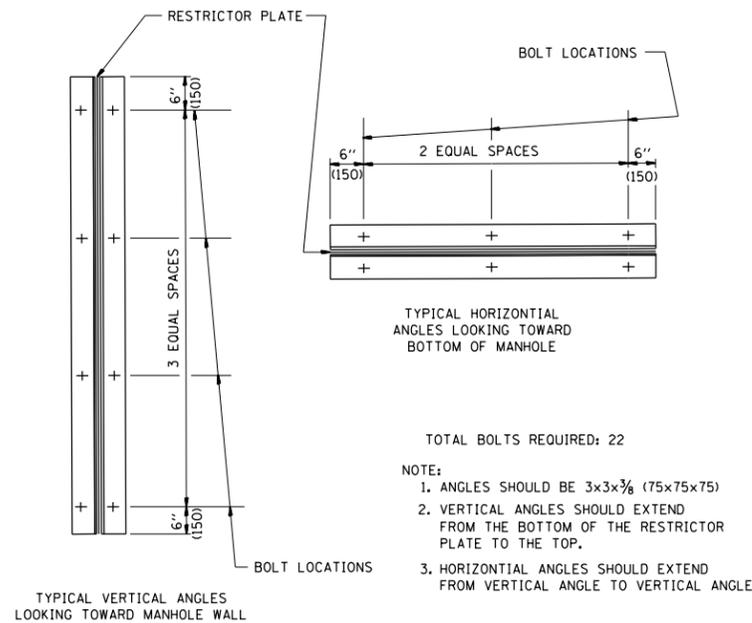
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1320	581-N-1	COOK	50	34
BD600-03 (BD-8)		CONTRACT NO. 60L43		
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				



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



STATION	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER in. (mm) (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW
497+19.00	6'	1 CL	TYPE 3	8"	792.24	795.23



- TOTAL BOLTS REQUIRED: 22
- NOTE:
1. ANGLES SHOULD BE 3x3x3/8 (75x75x75)
 2. VERTICAL ANGLES SHOULD EXTEND FROM THE BOTTOM OF THE RESTRICTOR PLATE TO THE TOP.
 3. HORIZONTAL ANGLES SHOULD EXTEND FROM VERTICAL ANGLE TO VERTICAL ANGLE.

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

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

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

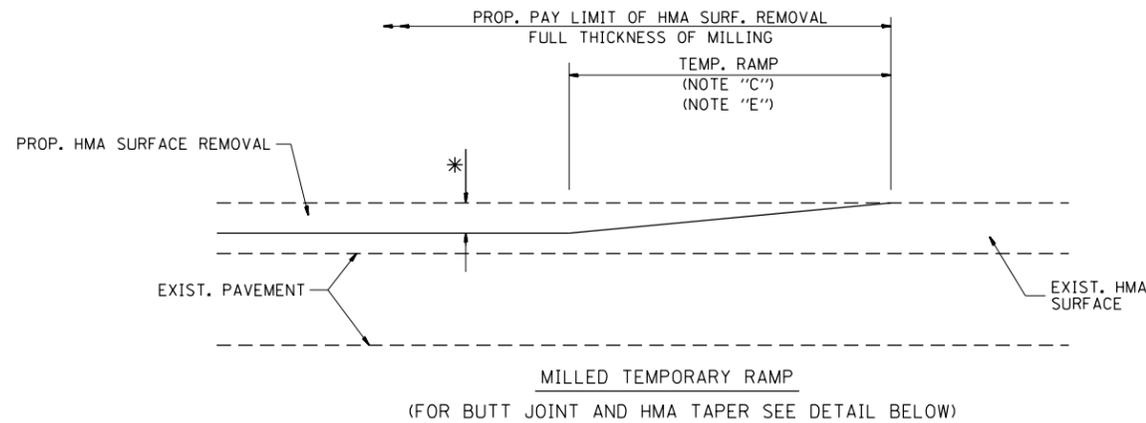
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 01-08-01
	PLOT DATE = 8/23/2012	DATE - 09-09-94	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

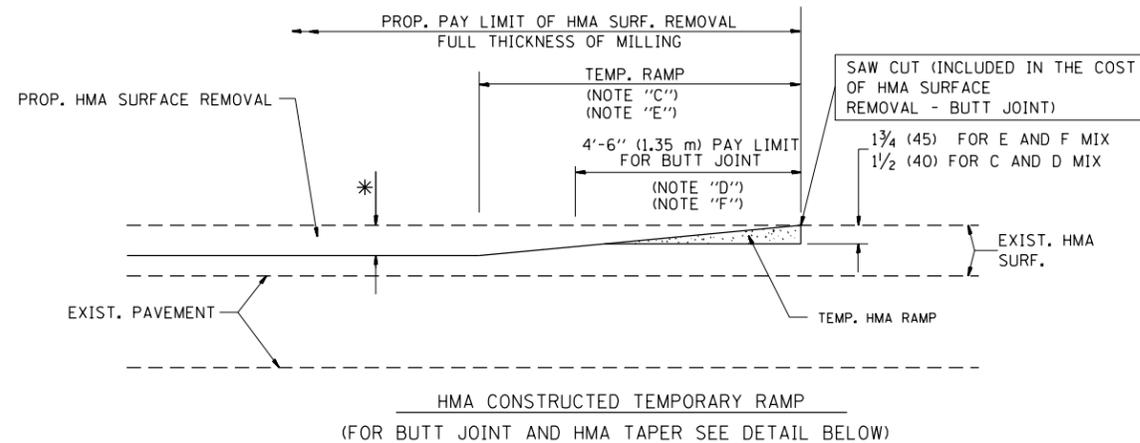
MANHOLE WITH
RESTRICTOR PLATE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	35
BD600-04 (BD-12)		CONTRACT NO. 60L43		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

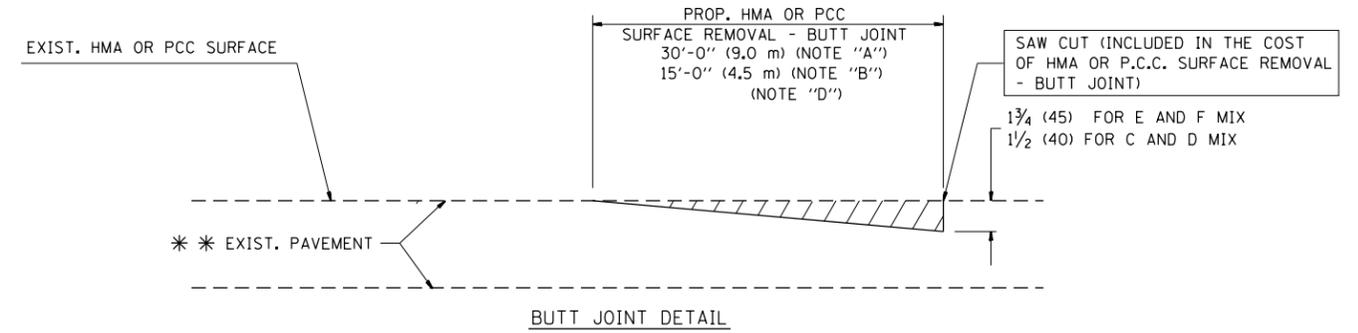


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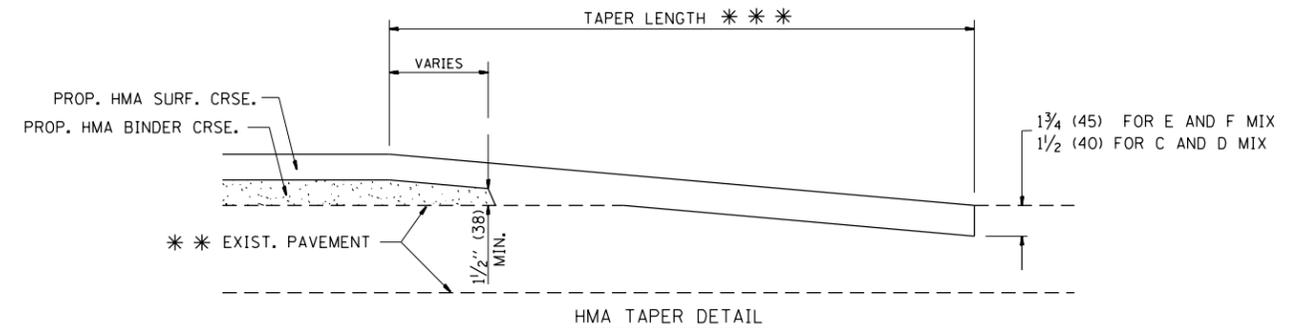


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

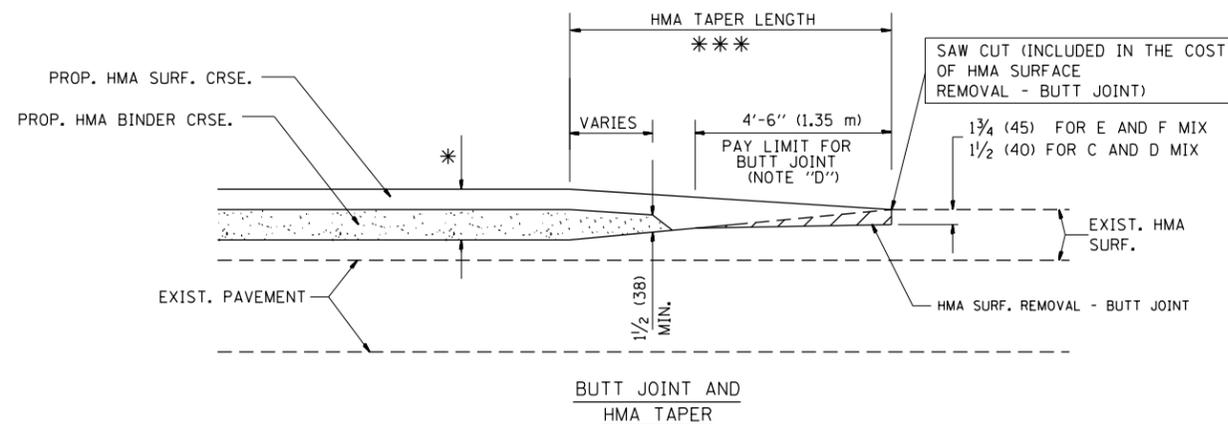
NOTES

- 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.



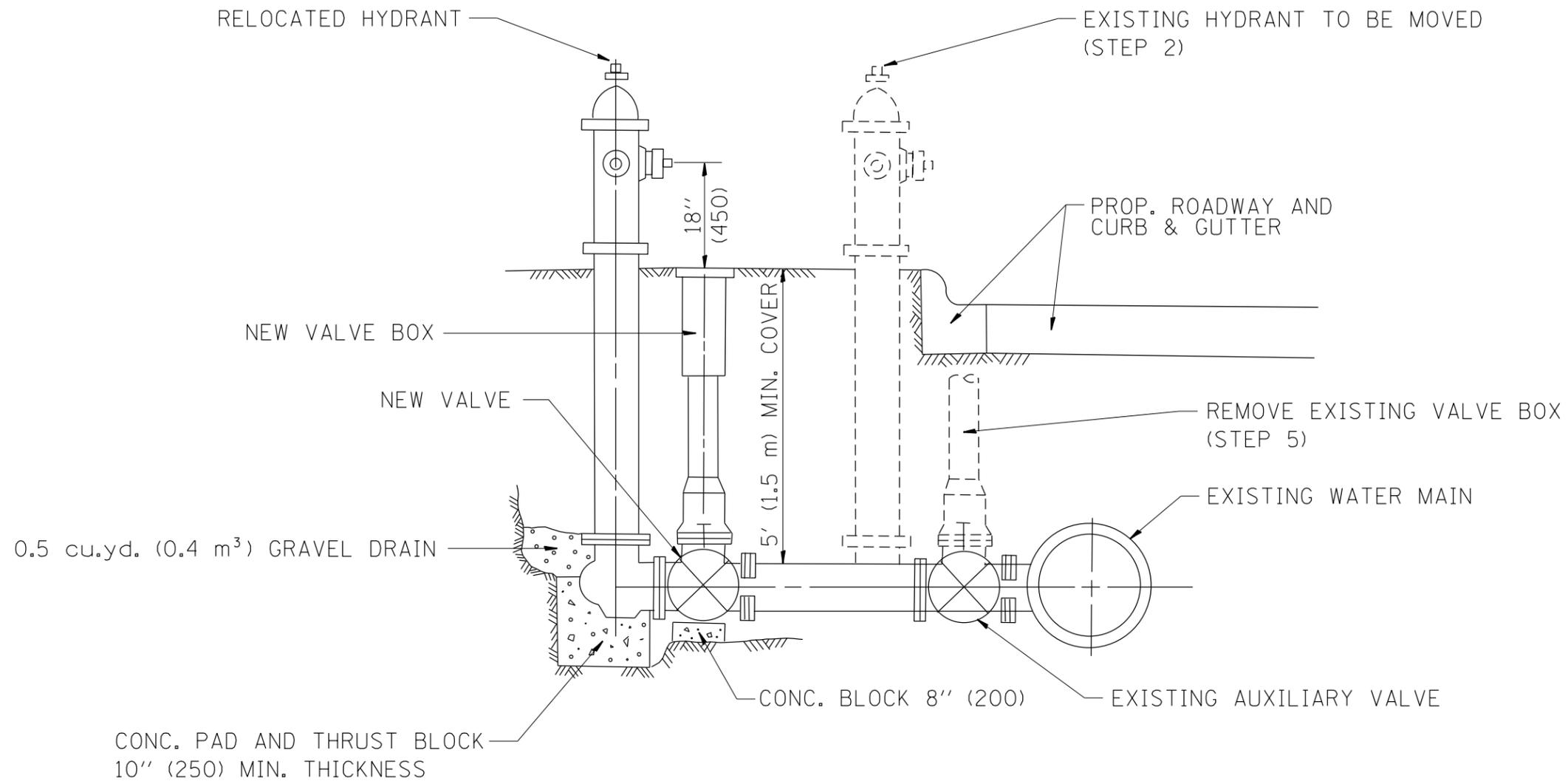
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

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	PLOT DATE = 8/23/2012	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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	36
BD400-05 BD32		CONTRACT NO. 60L43		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEQUENCE OF CONSTRUCTION:

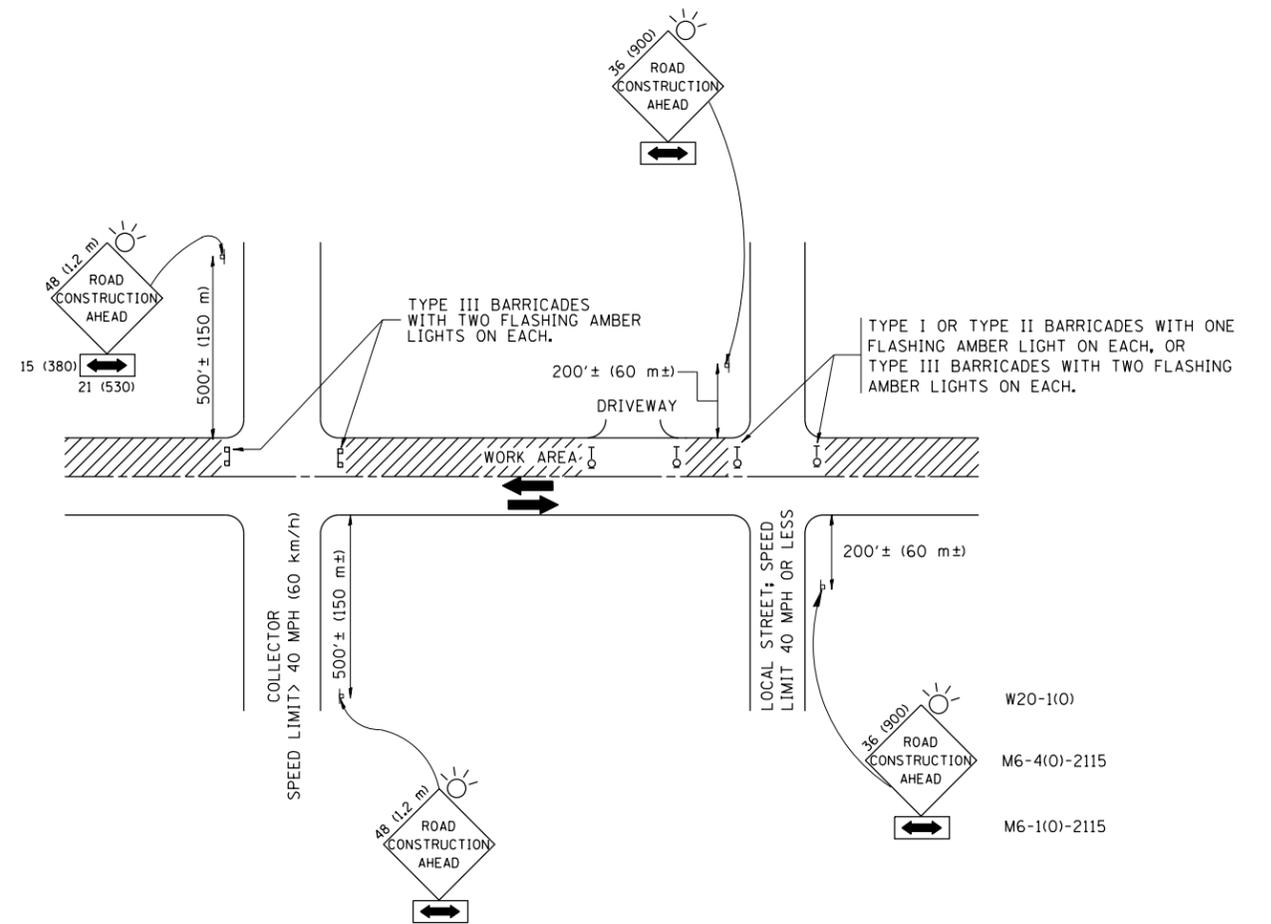
1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

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

FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIRE HYDRANT TO BE MOVED			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = 8/23/2012	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	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
- 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:
 - 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.
 - 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.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
 - 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.

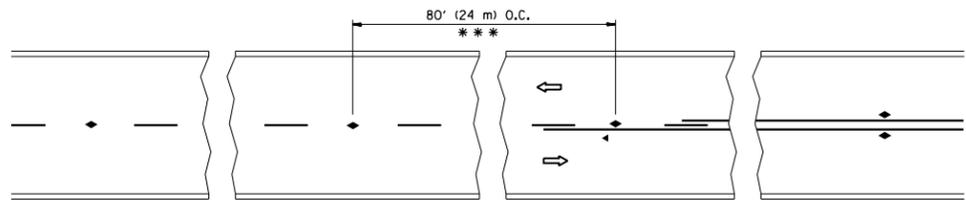
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 8/23/2012	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

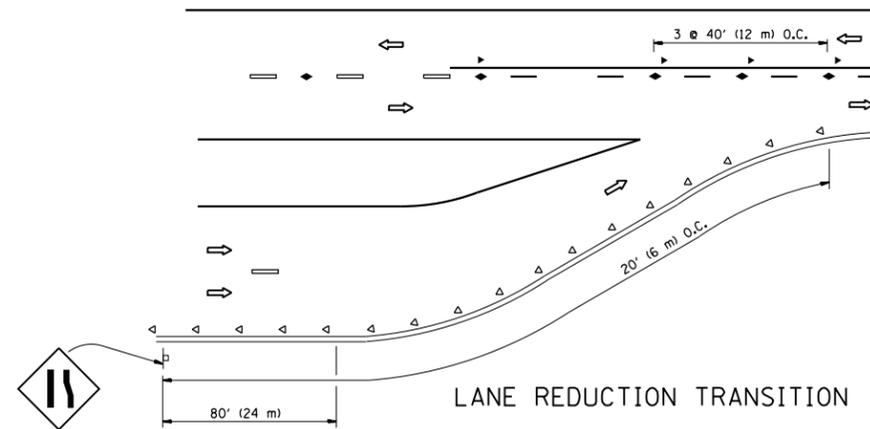
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	38
TC-10			CONTRACT NO. 60L43	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

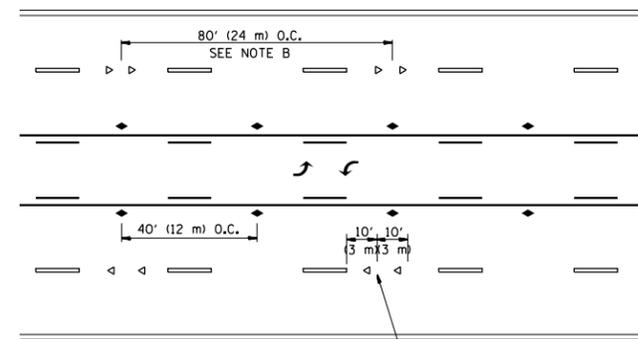


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

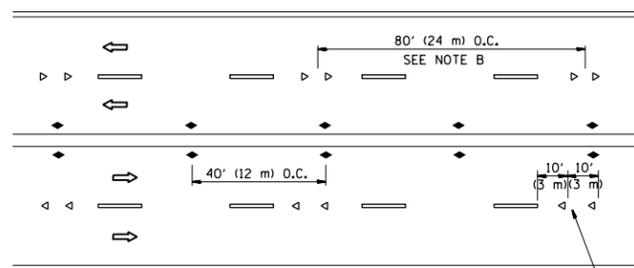
TWO-LANE/TWO-WAY



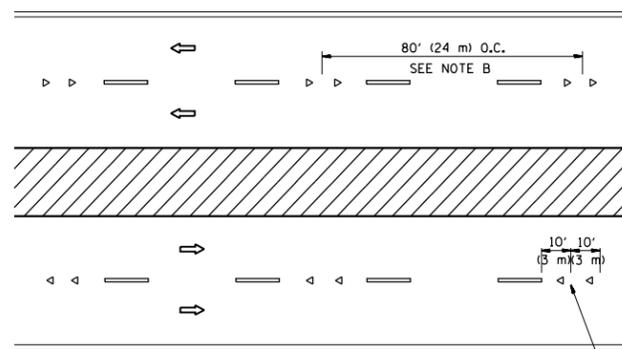
LANE REDUCTION TRANSITION



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

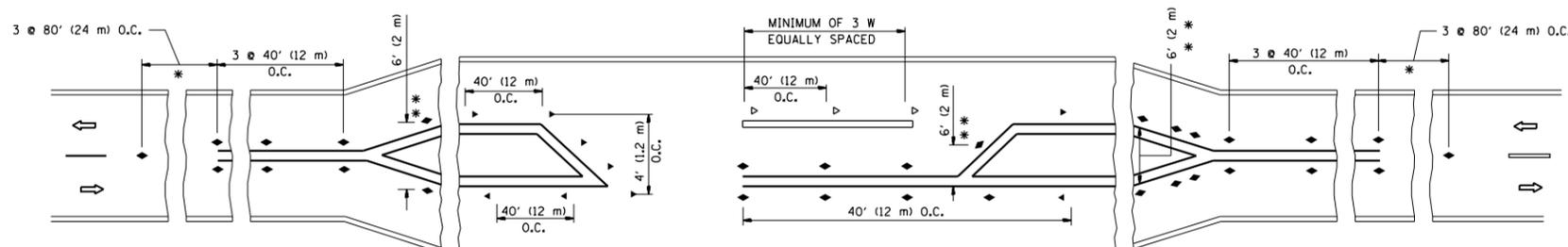
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.



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

LEFT TURN

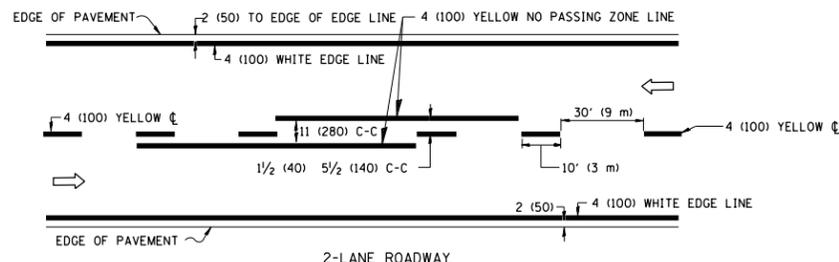
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
et:\pw\work\p\idot\paraynoal\0273204\PI	2209-Design.dgn	DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 8/23/2012	DATE -	REVISED - C. JUCIUS 09-09-09

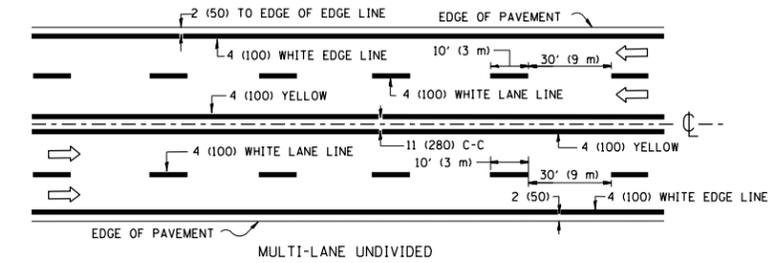
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

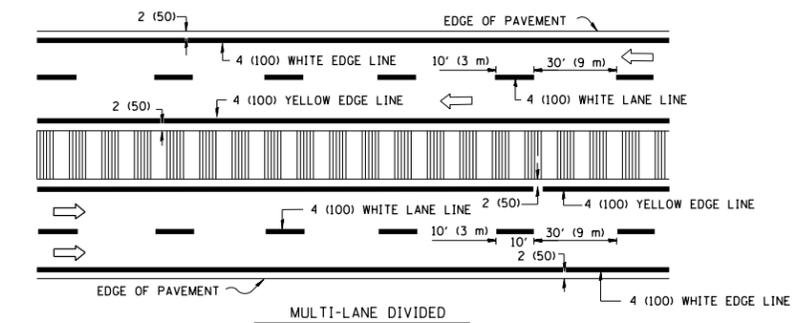
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	39
TC-11			CONTRACT NO. 60L43	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY



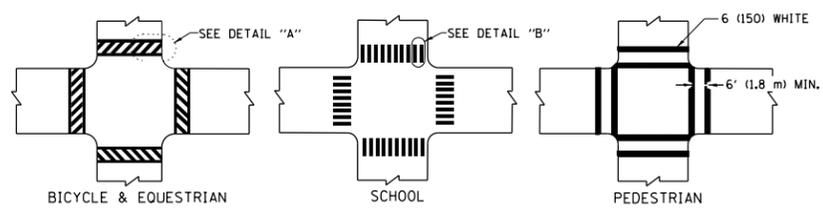
MULTI-LANE UNDIVIDED



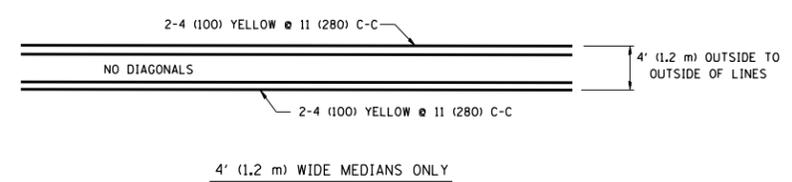
MULTI-LANE DIVIDED WITH MOUNTABLE MEdIAN

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

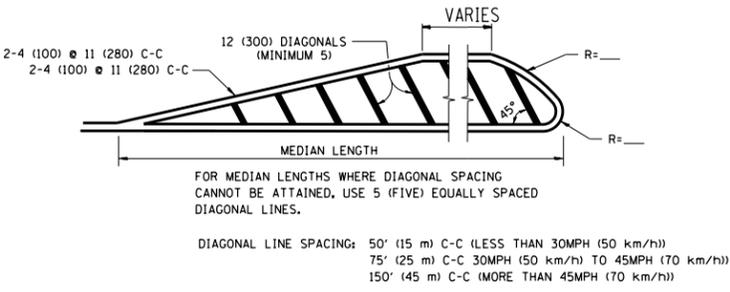
TYPICAL LANE AND EDGE LINE MARKING



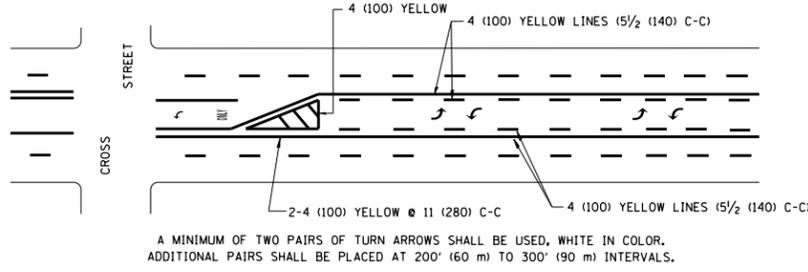
TYPICAL CROSSWALK MARKING



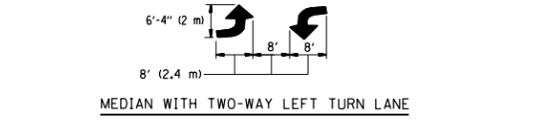
4' (1.2 m) WIDE MEDIANS ONLY



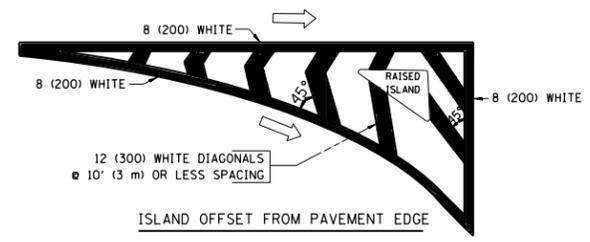
MEDIANS OVER 4' (1.2 m) WIDE



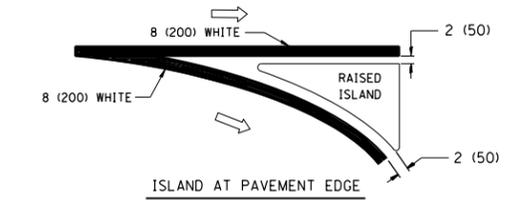
TYPICAL PAINTED MEDIAN MARKING



TYPICAL LEFT (OR RIGHT) TURN LANE



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 (30MPH (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 6' (1.8 m) 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))

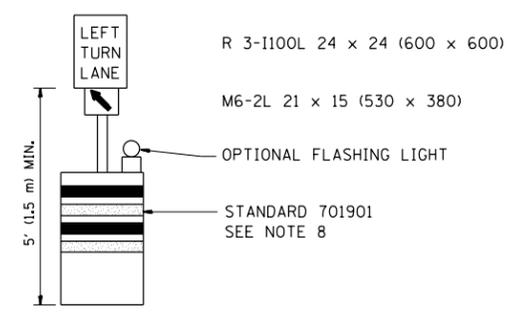
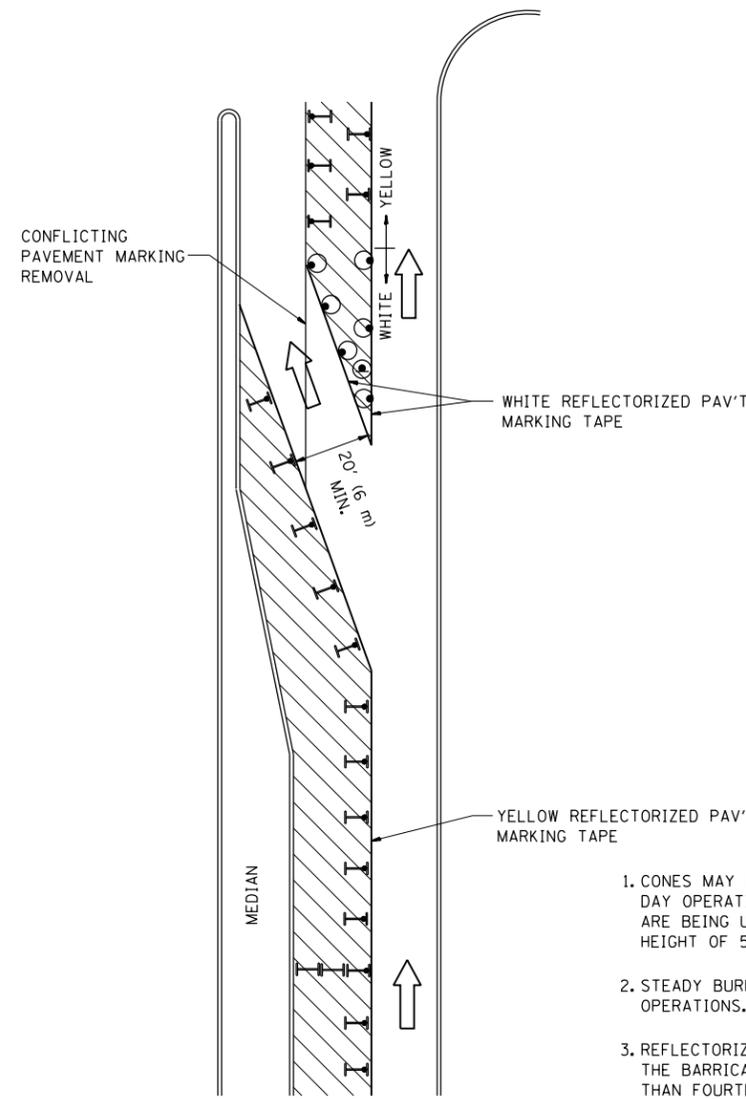
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = paraynoal	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
et:\pw\work\p\midot\paraynoal\0273204\PI	2209-Design.dgn	DRAWN -	REVISED - C. JUCIUS 09-09-09
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/23/2012	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

U DISTRICT ONE		F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1720 TYPICAL PAVEMENT MARKINGS		COOK	581-N-1	COOK	50	40
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	TC-13	CONTRACT NO. 60L43	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

LEGEND

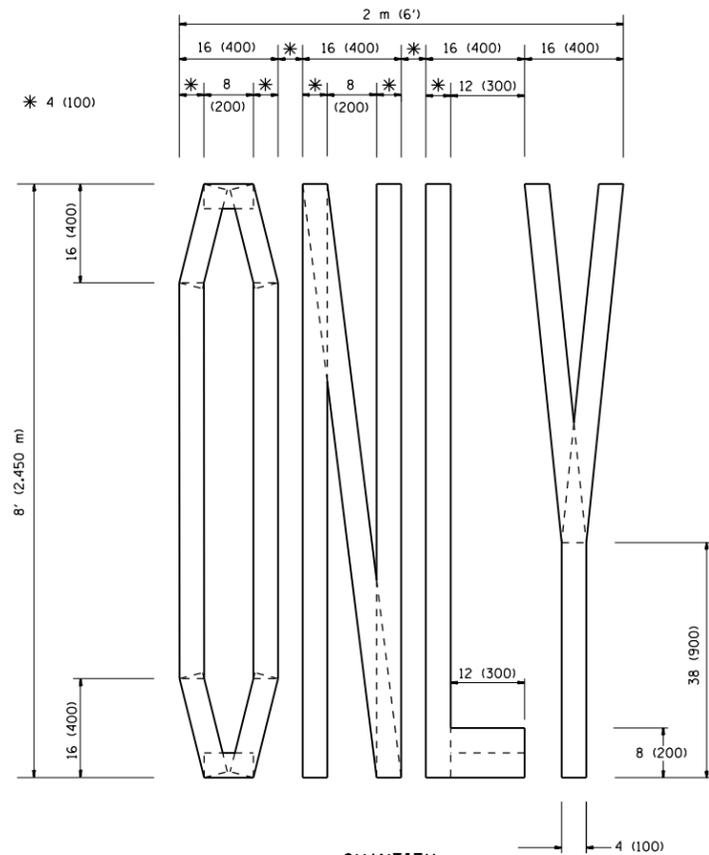
-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

FILE NAME =	USER NAME = paraynoal	REVISED -T, RAMMACHER 09-08-94	REVISED - R, BORO 09-14-09
et:\pw\work\p1dot\paraynoal\0273204\PI	2209-Design.dgn	REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 100.0000' / 1in.	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 8/23/2012	REVISED -T, RAMMACHER 01-06-00	REVISED -

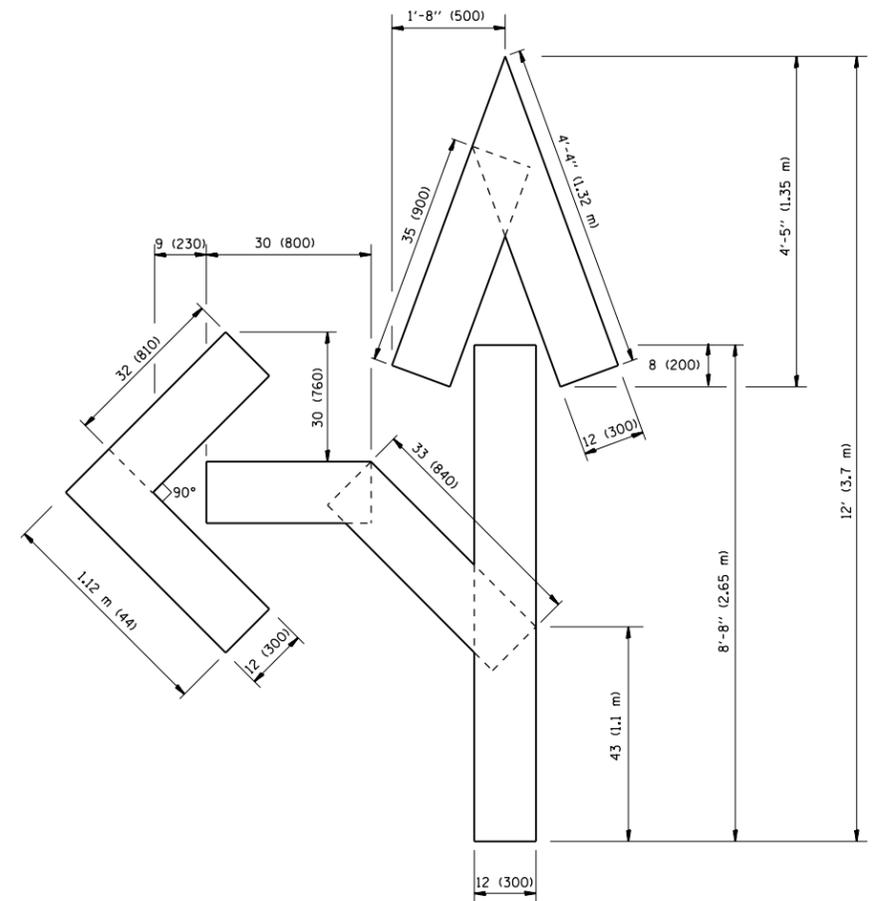
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

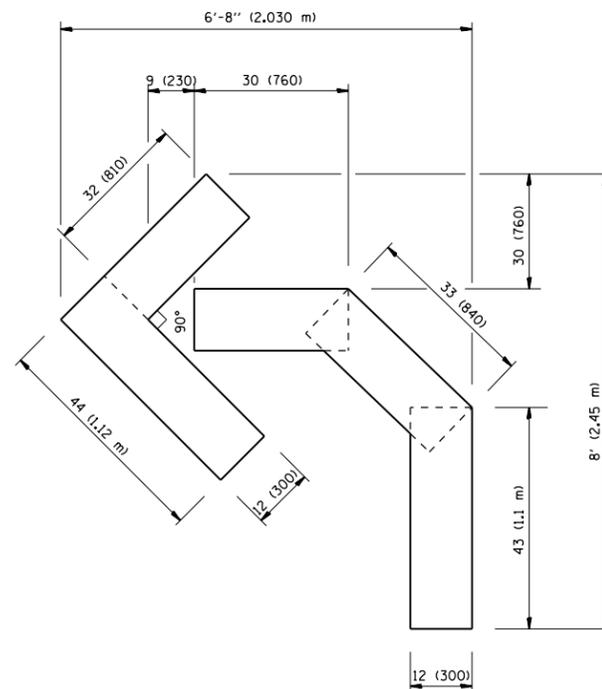
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	41
TC-14			CONTRACT NO. 60L43	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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.

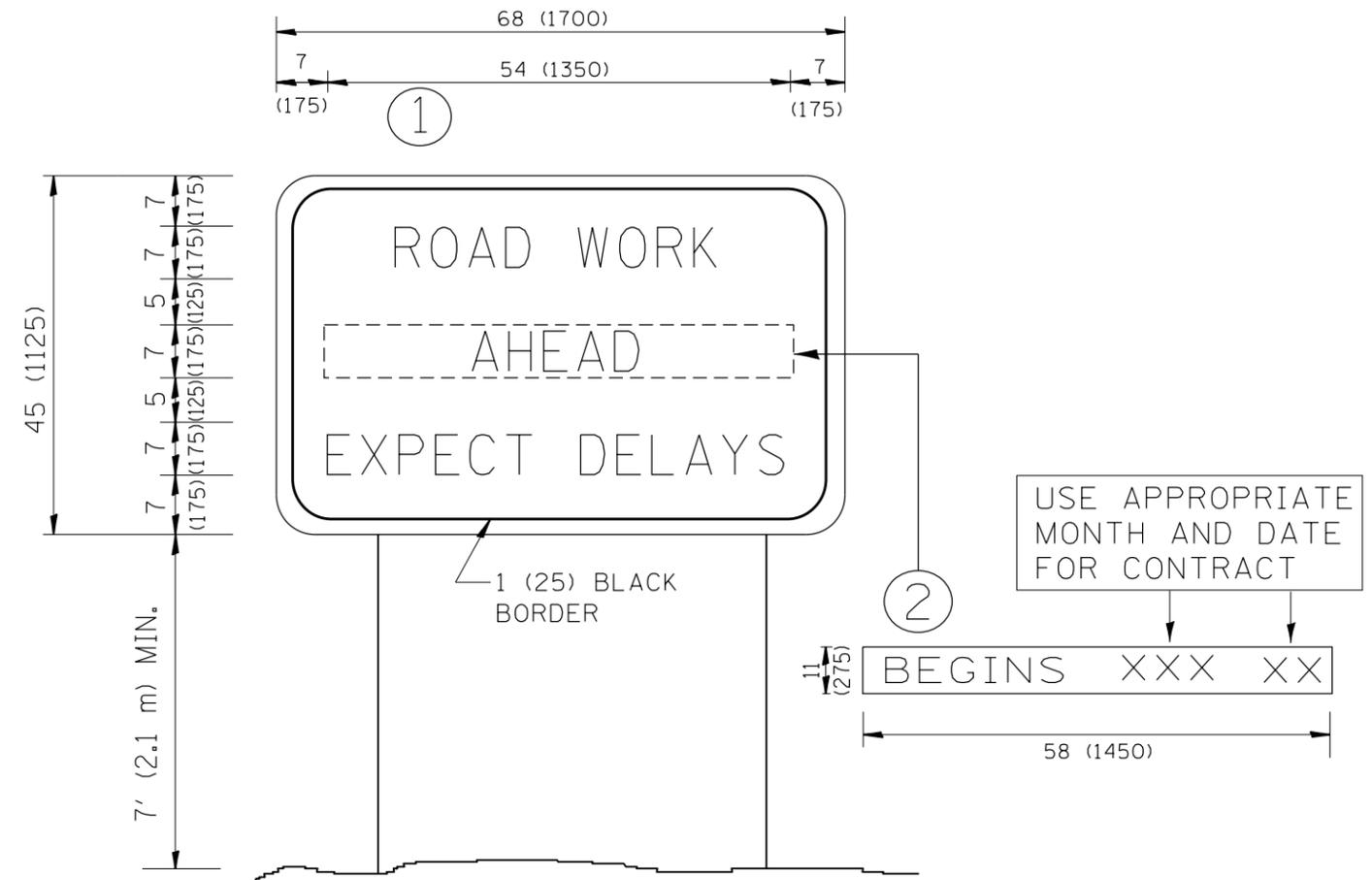
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ct:\pw\work\p\dot\paraynoal\0273204\PI	2209-Design.dgn	DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 8/23/2012	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	42
TC-16			CONTRACT NO. 60L43	
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 = paraynoal	DESIGNED -	REVISED - R. MIRS 09-15-97
ct:\pw\work\pwidot\paraynoal\d0273204\PI	2209-Design.dgn	DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 8/23/2012	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

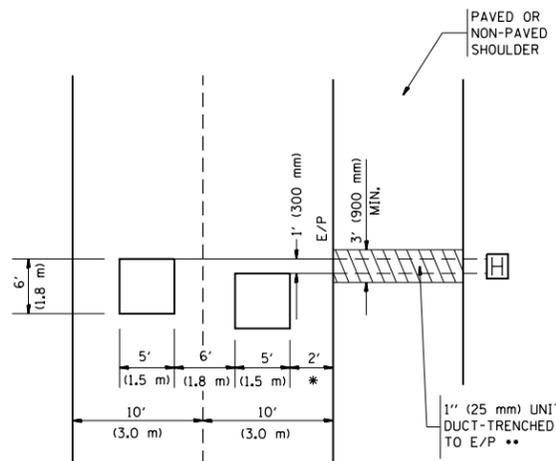
**ARTERIAL ROAD
INFORMATION SIGN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	43
TC-22			CONTRACT NO. 60L43	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

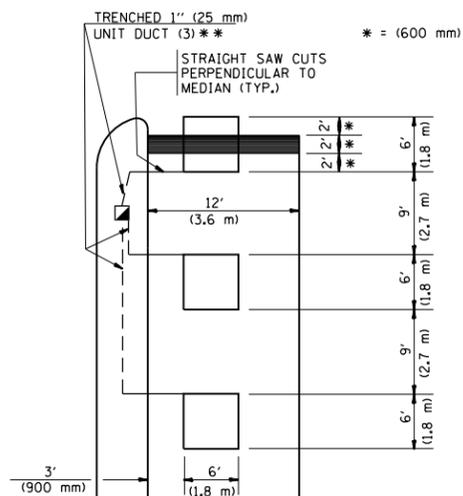


* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**

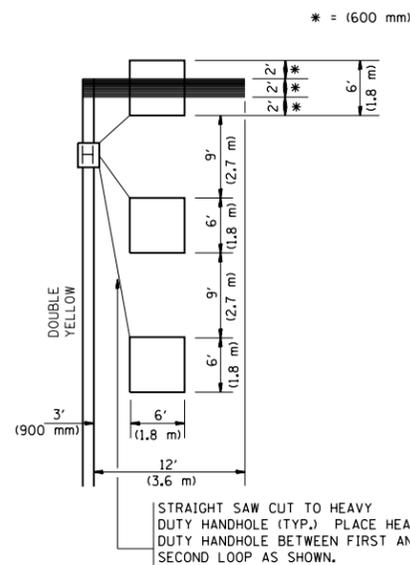
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

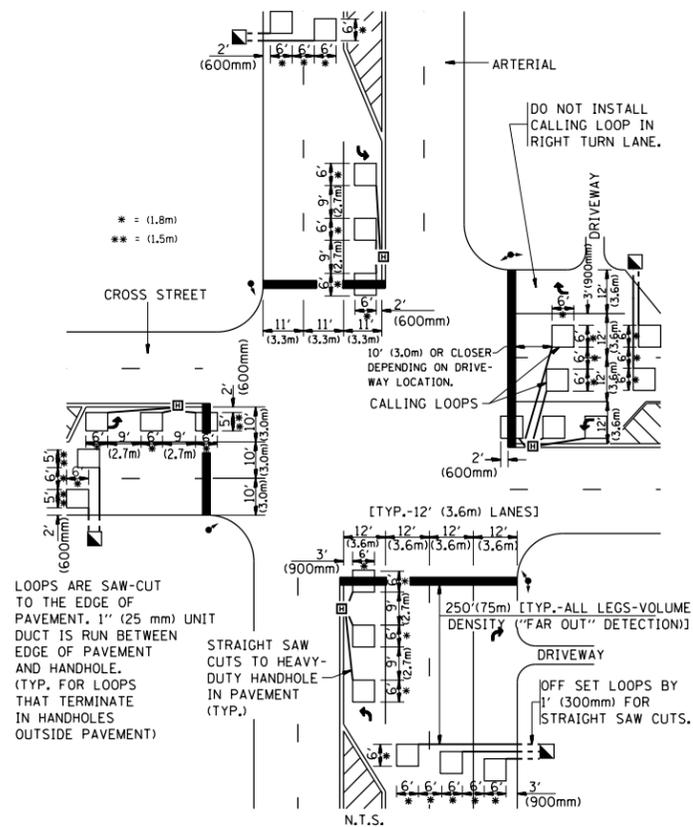
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**



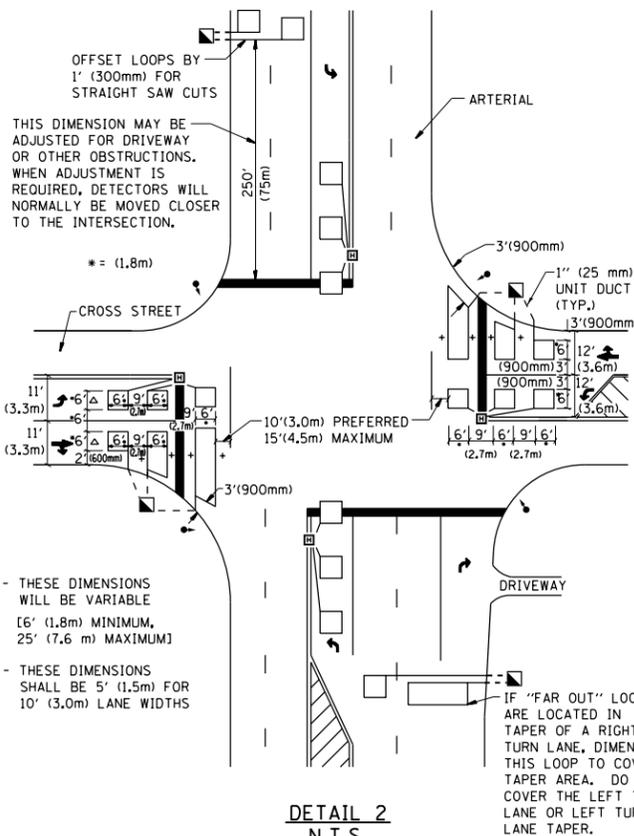
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



**DETAIL 1
N.T.S.**

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



**DETAIL 2
N.T.S.**

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

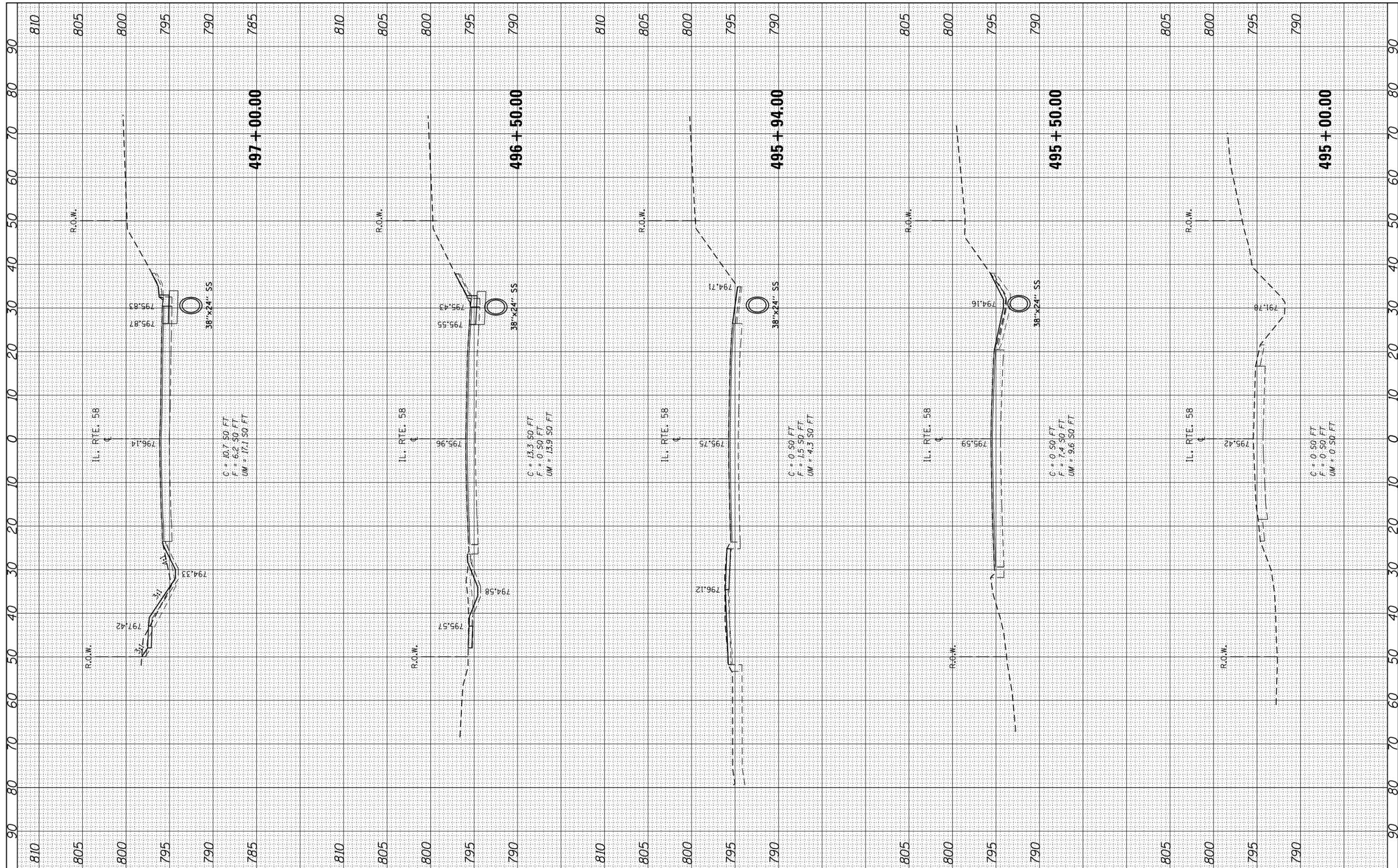
**DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	44
TS-07		CONTRACT NO. 60L43		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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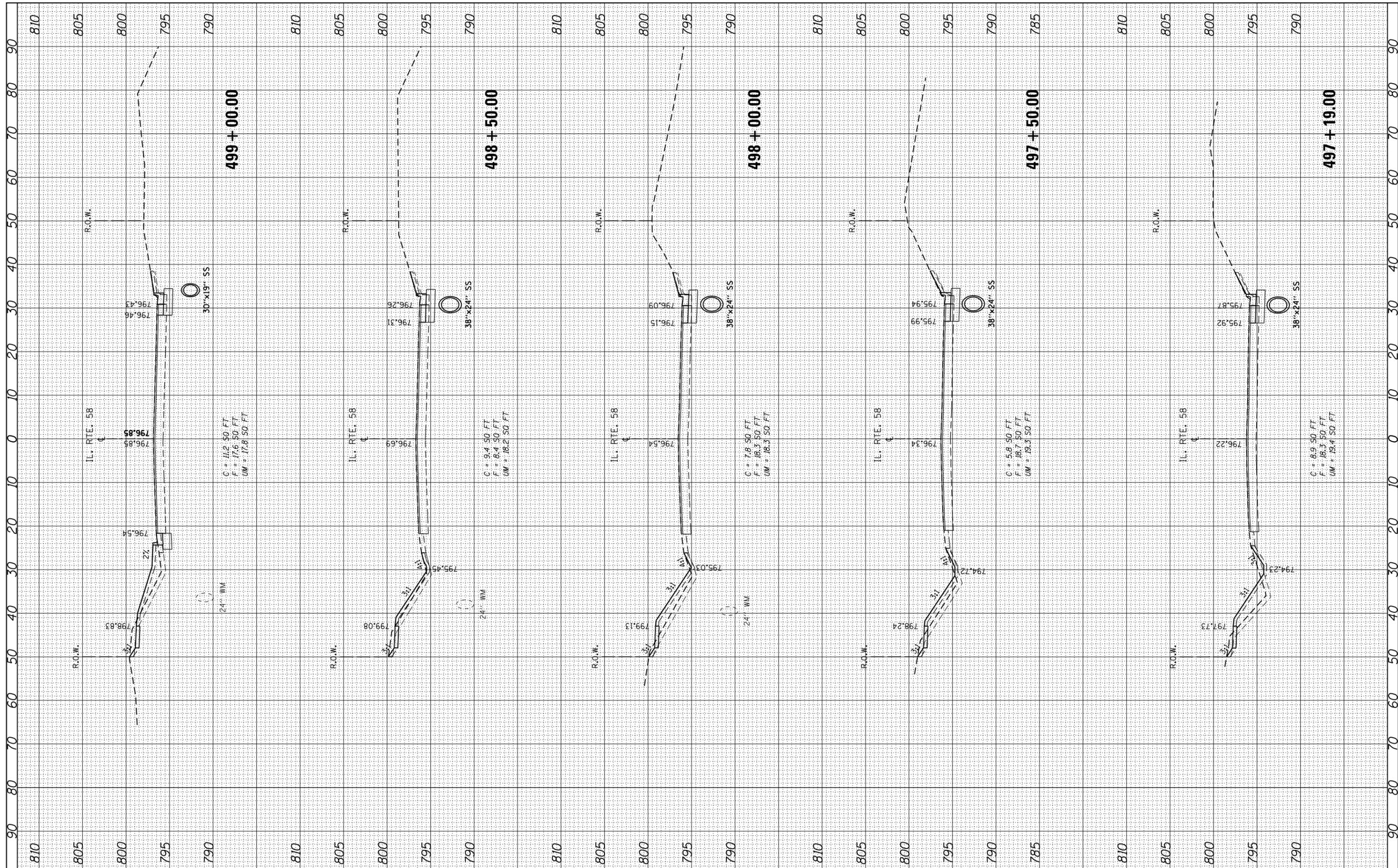
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 IL. RTE. 58 AT SHALES PKWY.**
 H: 1"=10'
 SCALE: V: 1"=5' SHEET 1 OF 6 SHEETS STA. 495+00.00 TO STA. 497+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	45
CONTRACT NO. 60L43				ILLINOIS FED. AID PROJECT

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

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



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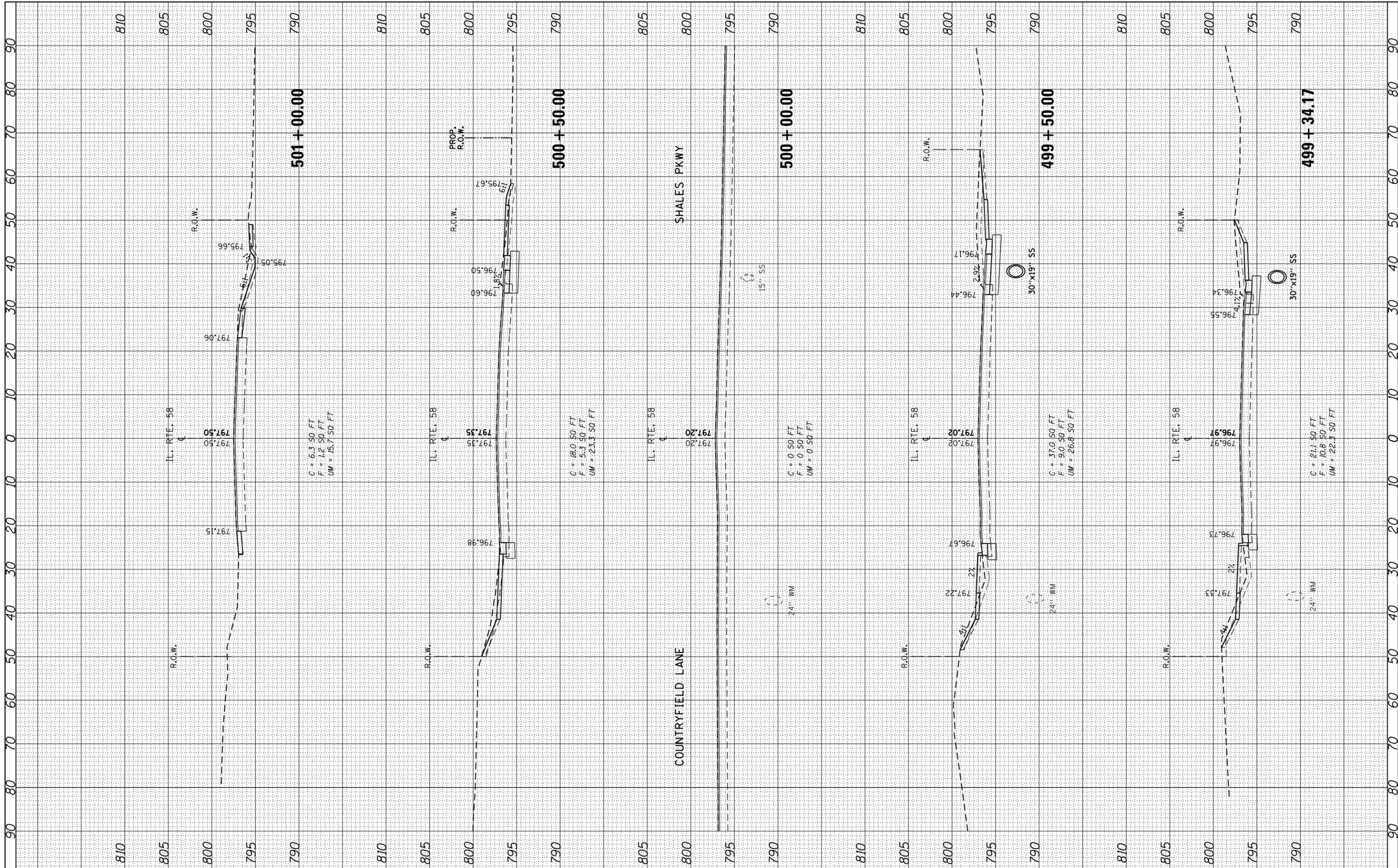
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 IL. RTE. 58 AT SHALES PKWY.**
 H: 1"=10'
 SCALE: V: 1"=5' SHEET 2 OF 6 SHEETS STA. 497+19.00 TO STA. 499+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	46
CONTRACT NO. 60L43			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	DATE



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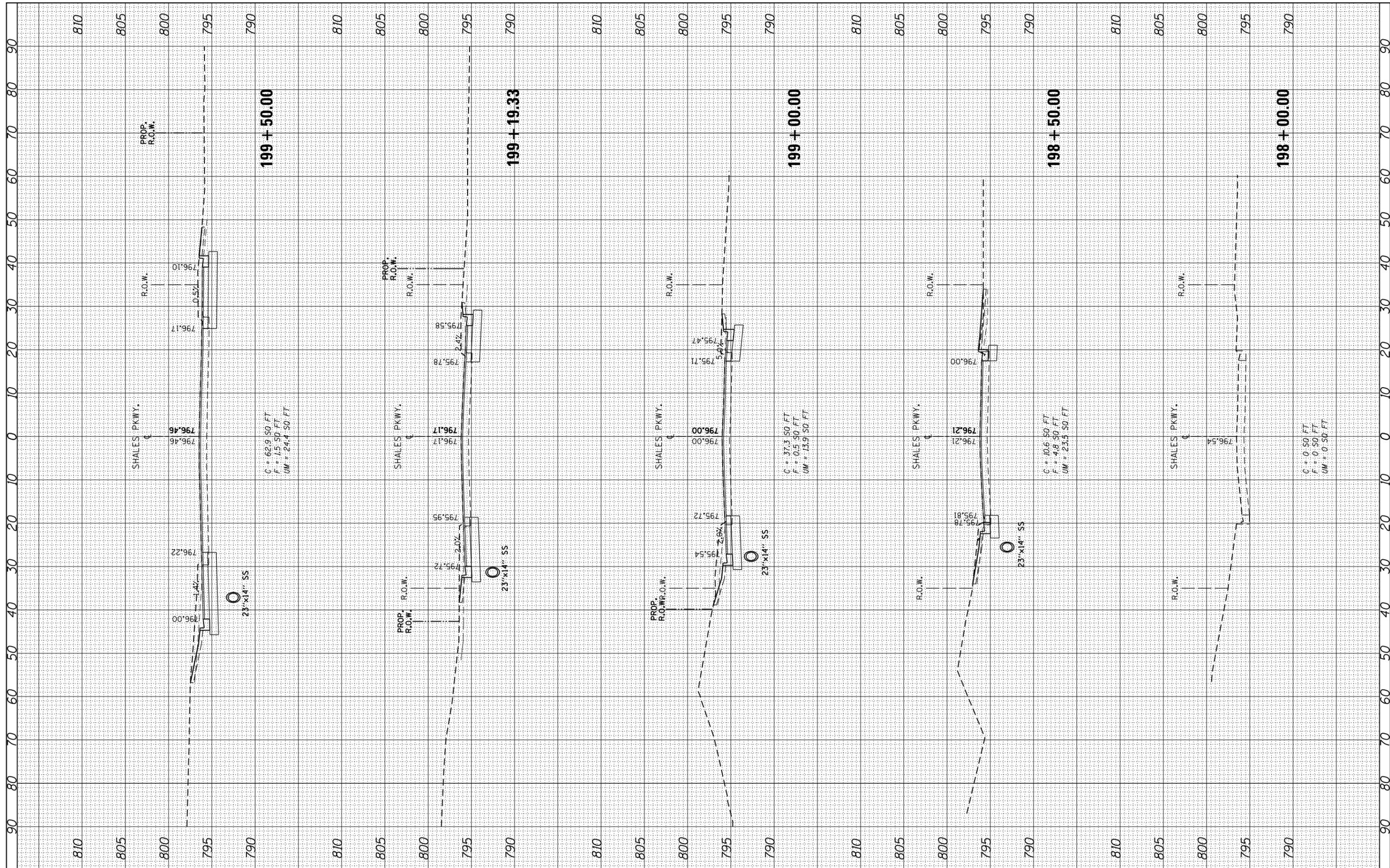
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 IL. RTE. 58 AT SHALES PKWY.**
 H: 1"=10'
 SCALE: V: 1"=5' SHEET 3 OF 6 SHEETS STA. 499+34.17 TO STA. 501+00.00

F.A.U. RTE. 1320	SECTION 581-N-1	COUNTY COOK	TOTAL SHEETS 50	SHEET NO. 47
CONTRACT NO. 60L43				ILLINOIS FED. AID PROJECT

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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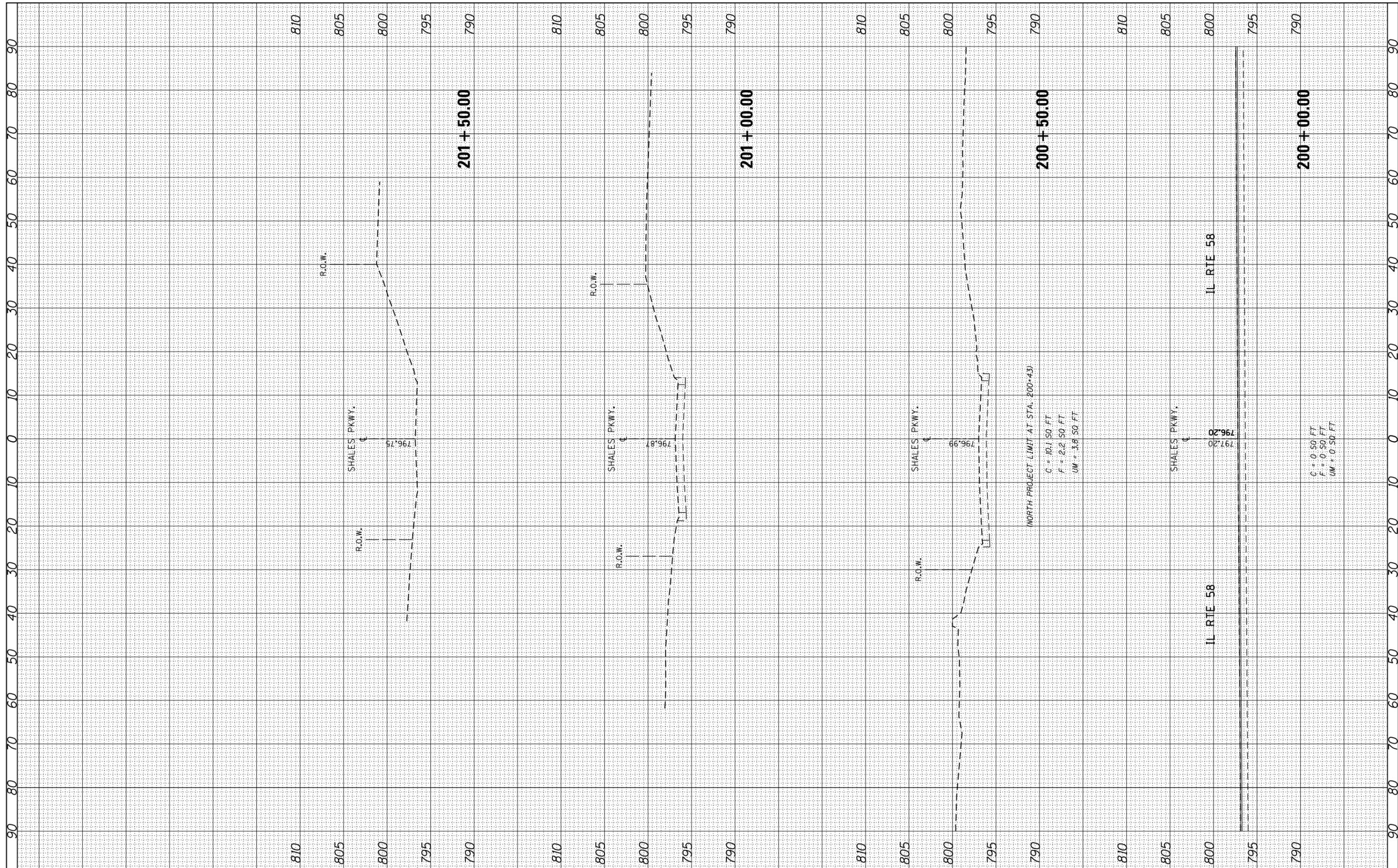
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
 IL. RTE. 58 AT SHALES PKWY.
 H: 1"=10'
 SCALE: V: 1"=5'
 SHEET 5 OF 6 SHEETS STA. 198+00.00 TO STA. 199+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	49
CONTRACT NO. 60L43				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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 CHECKED -
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REVISED -
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 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 IL RTE 58 AT SHAILES PKWY.**
 H: 1"=10'
 SCALE: V: 1"=5' SHEET 6 OF 6 SHEETS STA. 200+00.00 TO STA. 201+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	581-N-1	COOK	50	50
CONTRACT NO. 60L43			ILLINOIS FED. AID PROJECT	