

F. A. U. SHE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	001
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

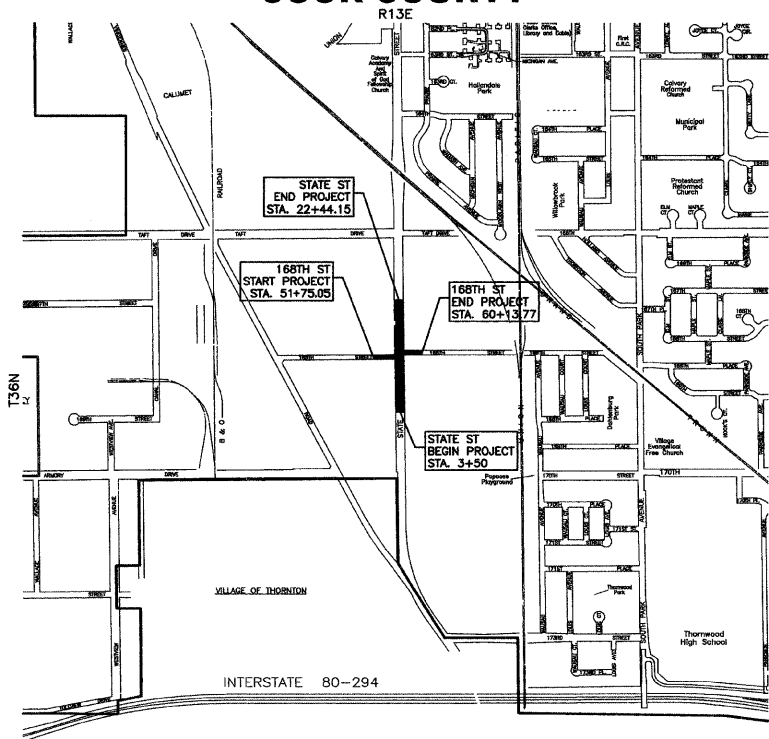
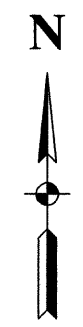
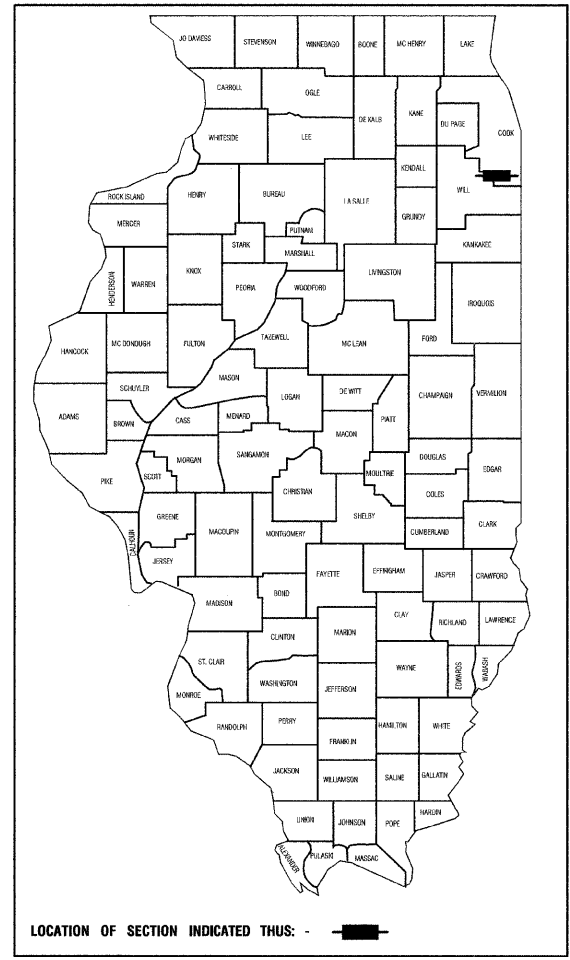
INDEX OF SHEETS
SEE SHEET NO. 2

STATE STANDARDS
SEE SHEET NO. 2

SCALES
 PLAN - 1"=50'
 PROFILE HORIZ. - 1"=50'
 PROFILE VERT. - 1"=5'
 CROSS SECTIONS HORIZ. - 1"=10'
 CROSS SECTIONS VERT. - 1"=5'

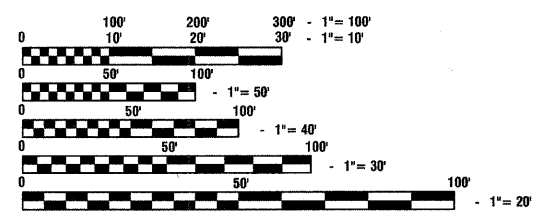
FAU ROUTE 2906 (STATE STREET) AND 168TH STREET INTERSECTION IMPROVEMENT PROJECT NO. M-8003(596) SECTION NO.: 02-00077-00-WR JOB NO.: C-91-239-06 VILLAGE OF SOUTH HOLLAND COOK COUNTY

DESIGN DESIGNATION - STATE ST. ADT=14,800 (2020) - ARTERIAL-2.96 PV=12284 SU=2072 MU=444 % DESIGN TRAFFIC IN DESIGN LANE P=83% S=14% M=3% SSS=FAIR																						
DESIGN DESIGNATION - 168TH ST. ADT=9400 (2020) - LOCAL ROAD-1.34 PV=8131 SU=1175 MU=94 % DESIGN TRAFFIC IN DESIGN LANE P=86.5% S=12.5% M=1.0% SSS=FAIR																						
	<table border="1"> <tr> <td></td> <td style="text-align: center;">STATE STREET</td> <td style="text-align: center;">168TH STREET</td> </tr> <tr> <td>2001 ADT -</td> <td style="text-align: center;">9670</td> <td style="text-align: center;">7800</td> </tr> <tr> <td>2020 ADT -</td> <td style="text-align: center;">14800</td> <td style="text-align: center;">9400</td> </tr> <tr> <td>POSTED SPEED LIMIT -</td> <td style="text-align: center;">40 MPH</td> <td style="text-align: center;">30 MPH</td> </tr> <tr> <td>DESIGN PERIOD -</td> <td style="text-align: center;">20 YEARS</td> <td style="text-align: center;">20 YEARS</td> </tr> <tr> <td>DESIGN SPEED LIMIT -</td> <td style="text-align: center;">45 MPH</td> <td style="text-align: center;">30 MPH</td> </tr> <tr> <td>STREET CLASSIFICATION -</td> <td style="text-align: center;">CLASS 1</td> <td style="text-align: center;">CLASS 1</td> </tr> </table>		STATE STREET	168TH STREET	2001 ADT -	9670	7800	2020 ADT -	14800	9400	POSTED SPEED LIMIT -	40 MPH	30 MPH	DESIGN PERIOD -	20 YEARS	20 YEARS	DESIGN SPEED LIMIT -	45 MPH	30 MPH	STREET CLASSIFICATION -	CLASS 1	CLASS 1
	STATE STREET	168TH STREET																				
2001 ADT -	9670	7800																				
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POSTED SPEED LIMIT -	40 MPH	30 MPH																				
DESIGN PERIOD -	20 YEARS	20 YEARS																				
DESIGN SPEED LIMIT -	45 MPH	30 MPH																				
STREET CLASSIFICATION -	CLASS 1	CLASS 1																				



PROJECT LOCATION

GROSS LENGTH= 2733 FEET = 0.52 MILES
NET LENGTH=2733 FEET = 0.52 MILES



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

CONTRACT NO. 63061

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

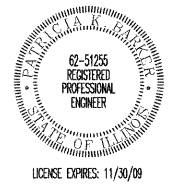
Approved July 1, 2008
Wm. A. Buff
President, Village of South Holland

Passed AUGUST 6, 2008
CH **CHRISTOPHER HOLT**
District 1 Engineer of Local Roads & Streets

Released for Bid Based on Limited Review
August 7, 08
Dina Okla
Deputy Director of Highways, Region 1 Engineer

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THE STATE OF ILLINOIS

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:
John K. Baker
7-1-08



LICENSE EXPIRES: 11/30/09

I.D.O.T. FIELD ENGINEER: MELCHOR MANGOBA 847-705-4408
CONSULTANTS: ROBINSON ENGINEERING, LTD. 708-331-6700

F. A. U. SHEET	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	002
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(598)	

CONTRACT #63061

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- 7. TYPICAL CROSS SECTIONS
- 8.-12. TRAFFIC CONTROL AND PROTECTION
- 13. DETOUR PLAN
- 14.-16. PLAN AND PROFILE
- 17.-19. DRAINAGE AND UTILITIES
- 20.-21. PAVEMENT MARKING PLAN AND SIGNING PLAN
- 22.-23. LANDSCAPING AND EROSION CONTROL PLAN
- 24.-30. STREET LIGHTING PLANS
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- 280001-04 TEMPORARY EROSION CONTROL SYSTEMS
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- 602001 CATCH BASIN, TYPE A
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- 602401-01 MANHOLE, TYPE A
- 602701-01 MANHOLE STEPS
- 604001-02 FRAME AND LIDS, TYPE 1
- 604036-01 GRATE, TYPE 8
- 604091-01 FRAME AND GRATE, TYPE 24
- 606001-03 CONCRETE CURB TYPE B & COMBINATION CONCRETE CURB & GUTTER OFF-RD OPERATIONS, MULTILANE, 4.5M (15') TO 600mm (24") FROM PAVEMENT EDGE
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- 701501-04 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701606-05 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-05 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901 TRAFFIC CONTROL DEVICES
- 720006-01 SIGN PANEL ERECTION DETAILS
- 729001 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS AND MARKERS)
- 805001 ELECTRICAL SERVICE INSTALLATION DETAILS
- 814001-01 HANDHOLES
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- 857001 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 877001-03 STEEL MAST ARM ASSEMBLY AND POLE 16' THRU 55'
- 878001-06 CONCRETE FOUNDATION DETAILS
- 880006 TRAFFIC SIGNAL MOUNTING DETAILS
- 886001 DETECTOR LOOP INSTALLATIONS
- 886006 TYPICAL LAYOUTS FOR DETECTION LOOPS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
INDEX OF SHEETS
AND STATE STANDARDS**

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

DRAWN BY RG
CHECKED BY EA/PKB

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2906	02-00077-00-WR	COOK	073	003
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GENERAL NOTES

- 1 ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
- 2 ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES WHICH ARE NOT SPECIFICALLY INDICATED IN THE PLANS SHALL BE PERFORMED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3 DRAINAGE STRUCTURE ELEVATIONS: GRADES OF SEWER LINES WERE DETERMINED FROM AVAILABLE PLANS AND SURVEYS. ACCORDINGLY, AS DIRECTED BY THE ENGINEER, THE INVERTS OF THE PROPOSED DRAINAGE WILL BE REVISED TO MEET EXISTING FIELD CONDITIONS.
- 4 THE TOP OF ALL STRUCTURES SHALL BE FLUSH WITH THE ADJACENT SURFACE OR AT THE INDICATED ELEVATIONS SHOWN ON THE PLANS.
- 5 FRAME ELEVATIONS ARE GIVEN ONLY TO ASSIST IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL NEW STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE COST.
- 6 WHEN, IN THE CONSTRUCTION OPERATION, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR OTHER DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH DAY BY THE CONTRACTOR AT HIS EXPENSE. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 7 WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS & SEWERS AND DISCHARGE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY SEWER CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 8 THE APPROXIMATE LOCATION OF KNOWN PUBLIC UTILITIES ARE SHOWN ON THE PLANS. HOWEVER, THE DEPARTMENT DOES NOT GUARANTEE ITS ACCURACY. PRIOR TO COMMENCING OPERATIONS ON THE PROJECT WHICH MAY IN ANY WAY CREATE THE POSSIBILITY OF INVOLVEMENT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY INVOLVED. ADJUSTMENT OF ALL PUBLIC UTILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT WILL BE DONE BY THE RESPECTIVE OWNERS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCE CAUSED BY THESE ADJUSTMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATION BEFORE STARTING CONSTRUCTION OPERATIONS.
- 9 ALL TRENCHES PLACED IN STATE OR LOCAL RIGHT-OF-WAY SHALL BE BACKFILLED WITHIN 2 FEET OF PROPOSED PAVEMENT, DRIVEWAYS, AND SIDEWALKS WITH TRENCH BACKFILL ONLY ACCORDING TO SECTION 208 OF THE STANDARD SPECIFICATIONS.
- 10 ALL PAVEMENT STUBS SHALL BE ONE (1') FOOT UNLESS OTHERWISE NOTED.
- 11 THE CONTRACTOR SHALL PROTECT ALL TREES WITHIN AND ADJACENT TO THE CONSTRUCTION SITE DURING THE CLEARING AND SUBSEQUENT CONSTRUCTION OPERATIONS IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS. THOSE TREES TO BE REMOVED AS SHOWN IN THE PLANS SHALL BE DONE IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS.
- 12 BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).
- 13 THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 14 WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 15 ALL STORM SEWERS FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED WITH RUBBER GASKETS IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR STORM SEWERS AS SPECIFIED.
- 16 ALL PIPE CONNECTIONS BETWEEN THE LATERAL SEWER LINES SHALL BE MADE BY MEANS OF A PRECAST WYE OR TEE SECTION. THIS SHALL NOT BE PAID FOR INDEPENDENTLY BUT SHALL BE CONSIDERED INCIDENTAL TO THE MAIN DRAIN STORM SEWER CONSTRUCTION.
- 17 THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 5 WORKING DAYS IN ADVANCE OF BEGINNING WORK. THE CONTRACTOR SHALL ALSO CONTACT ROBINSON ENGINEERING (708) 331-6700, AND THE VILLAGE OF SOUTH HOLLAND (708) 210-2915, A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 18 ALL BITUMINOUS PAVING SHALL FOLLOW DESIGNATED DRIVING LANES AS SHOWN IN STRIPING DETAILS. NO LONGITUDINAL PAVING JOINT OR SEAMS ARE ALLOWED WITHIN THE DRIVING LANES. ALL LONGITUDINAL PAVING JOINTS OR SEAMS WILL BE BETWEEN THE DRIVING LANES.
- 19 POROUS GRANULAR EMBANKMENT SUBGRADE (PGES) HAS BEEN PROVIDED FOR LOCATIONS WHERE SOILS TEND TO BE UNSTABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGE WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER (BY USE OF A CONE PENETROMETER IN CONJUNCTION WITH THE IDOT SUBGRADE STABILITY MANUAL). IF UNSTABLE AND/OR UNSUITABLE MATERIALS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
- 20 ALL PAVEMENT, CURB AND SIDEWALK REMOVALS SHALL BE MADE BY MEANS OF STRAIGHT SAW CUT JOINT. THE COST FOR SAW CUTTING SHALL BE INCIDENTAL TO THE CONTRACT.
- 21 CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR TRAFFIC CONTROL AND PROTECTION IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS ADOPTED JANUARY 1, 2007, THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
- 22 10' TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER OR TO TAPER FROM 6" TO 0", UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
- 23 ALL STORM SEWERS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STATE SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAIN AND SEWER PIPE A.A.S.H.T.O. DESIGNATION M170 (A.S.T.M. DESIGNATION C76), WITH A MINIMUM OF CLASS III.
- 24 CHERT AGGREGATE SHALL NOT BE ALLOWED IN THE MANUFACTURE OF STORM SEWERS, END SECTIONS, OR PRECAST DRAINAGE STRUCTURES.
- 25 IN COMPLIANCE WITH THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (I.E.P.A.) FOR CONSTRUCTION PROJECT WHICH DISTURBS ONE ACRE OR MORE TOTAL LAND AREA, THE RESIDENT ENGINEER AND THE CONTRACTOR SHALL COOPERATIVELY DEVELOP A STORM WATER POLLUTION PREVENTION PLAN AS SPECIFIED IN THE SPECIAL PROVISION FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONTAINED IN THE CONTRACT DOCUMENT.
- 26 THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

NOTE: ALL BOXED ITEMS ARE INCIDENTAL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
GENERAL NOTES

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08
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CHECKED BY EA/PKB

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	004
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FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

SUMMARY OF QUANTITIES					PAVEMENT	MARKINGS	SIGNS	LANDSCAPE	LIGHTS	SIGNALS	TRAINING
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	CONSTRUCTION TYPE CODE						
					1000-2A	SFTY-1D	Y002-1C	Y003	Y030-1E	Y031-1F	Y080
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	20	20						
	20101200	TREE ROOT PRUNING	EACH	9	9						
	20200100	EARTH EXCAVATION	CU YD	7854	7854						
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1107	1107						
	20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	407	407						
	20800150	TRENCH BACKFILL	CU YD	257	257						
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	8450	8450						
	21300010	EXPLORATION TRENCH, SPECIAL	FOOT	100	100						
	25000210	SEEDING, CLASS 2A	ACRE	1.74	1.74						
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	158	158						
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	158	158						
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	158	158						
	25100630	EROSION CONTROL BLANKET	SQ YD	8450	8450						
	28000300	TEMPORARY DITCH CHECKS	EACH	1	1						
	28000400	PERIMETER EROSION BARRIER	FOOT	3800	3800						
	28000510	INLET FILTERS	EACH	34	34						
	35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	1000	1000						
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1390	1390						
	40600300	AGGREGATE (PRIME COAT)	TON	29	29						
	40600895	CONSTRUCTING TEST STRIP	EACH	2	2						
	40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	7775	7775						
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	110	110						
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1805	1805						
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	410	410						
	44000100	PAVEMENT REMOVAL	SQ YD	11800	11800						
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	2079	2079						
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1502	1502						
	44000600	SIDEWALK REMOVAL	SQ FT	105	105						
	48101498	AGGREGATE SHOULDERS, TYPE B 4"	SQ YD	275	275						
	50104400	CONCRETE HEADWALL REMOVAL	EACH	2	2						
	54200427	PIPE CULVERTS, TYPE 1 RCCP 12"	FOOT	37	37						
	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	2	2						
	550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	651	651						
	55100400	STORM SEWER REMOVAL 10"	FOOT	18	18						
	55100500	STORM SEWER REMOVAL 12"	FOOT	21	21						
	55100700	STORM SEWER REMOVAL 15"	FOOT	165	165						
	55101100	STORM SEWER REMOVAL 21"	FOOT	113	113						
	55101600	STORM SEWER REMOVAL 36"	FOOT	30	30						
	55101800	STORM SEWER REMOVAL 42"	FOOT	20	20						
	55102000	STORM SEWER REMOVAL 54"	FOOT	40	40						
*	56106300	ADJUSTING WATER MAIN 6"	FOOT	25	25						
*	56106700	ADJUSTING WATER MAIN 16"	FOOT	250	250						
*	56400100	FIRE HYDRANTS TO BE MOVED	EACH	9	9						
*	56400600	FIRE HYDRANTS	EACH	2	2						
	60107600	PIPE UNDERDRAINS 4"	FOOT	515	515						
	60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	6	6						
	60205040	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2	2						
	60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	6	6						
	60208240	CATCH BASINS, TYPE C, TYPE 24 FRAME AND GRATE	EACH	6	6						
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1						
	60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1						
	60224039	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1						
	60224460	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2	2						
	XX007122	MANHOLES, TYPE A, 8'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	3	3						

* - INDICATES SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
SUMMARY OF QUANTITIES**

SCALE: VERT. NA
 HORIZ. NA
 DATE 7/22/08

DRAWN BY RG
 CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
 1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
 (708) 331-6700 FAX (708) 331-3888
 ILLINOIS DESIGN FIRM REGISTRATION NO. 154001158 07345-QUAN-01

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CONTRACT #63061

SUMMARY OF QUANTITIES				PAVEMENT	MARKINGS	SIGNS	LANDSCAPE	LIGHTS	SIGNALS	TRAINING	
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	CONSTRUCTION TYPE CODE						
					1000-2A	SFTY-1D	Y002-1C	Y003	Y030-1E	Y031-1F	Y080
	60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	6	6						
	60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2						
	60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	4	4						
	60251200	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 8 GRATE	EACH	1	1						
	60255500	MANHOLES TO BE ADJUSTED	EACH	8	8						
	60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	2	2						
	60265700	VALVE VAULTS TO BE ADJUSTED	EACH	5	5						
	60500050	REMOVING CATCH BASINS	EACH	3	3						
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	5164	5164						
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	280	280						
*	66900450	SPECIAL WASTE PLANS AND REPORT	L SUM	1	1						
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1						
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8						
	67100100	MOBILIZATION	L SUM	1	1						
	70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1						
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1						
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1						
	70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	37	37						
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	22000	22000						
	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	150	150						
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	66	66						
	72000100	SIGN PANEL - TYPE 1	SQ FT	30							
	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	9							30
	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	3							9
	72900100	METAL POST - TYPE A	FOOT	13							3
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	240							13
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	7945							240
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	555							7945
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	250							555
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	136							250
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	200							136
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	2000							200
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	20							2000
*	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1							20
*	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1							1
*	X006937	GROUND ROD, 5/8" DIA. X 10 FT.	EACH	8							1
*	81000500	CONDUIT IN TRENCH, 1 1/2" DIA., GALVANIZED STEEL	FOOT	100							8
*	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	2271							100
*	81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	138							2271
*	81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	312							138
*	81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	24							312
*	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	531							24
*	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	285							531
*	81400100	HANDHOLE	EACH	10							285
*	81400200	HEAVY-DUTY HANDHOLE	EACH	4							10
*	81400300	DOUBLE HANDHOLE	EACH	1							4
*	81702440	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1/0	FOOT	70							1
*	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	4365							70
*	82102310	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	8							1550
*	82500520	LIGHTING CONTROLLER TYPE CB-RCS 60AMP - 480VOLT	EACH	1							2815
*	83008300	LIGHT POLE, ALUMINUM, 40 FT. M.H., 8 FT. MAST ARM	EACH	8							8
*	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	70							8
*	83600215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	14							70
*	83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	8							14

* - INDICATES SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
SUMMARY OF QUANTITIES

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

DRAWN BY RG
CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
(708) 391-8700 FAX (708) 391-8828
ILLINOIS DESIGN FIRM REGISTRATION NO. 146001206

07345-QUAN-01

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	006
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(598)	

CONTRACT #63061

SUMMARY OF QUANTITIES					PAVEMENT	MARKINGS	SIGNS	LANDSCAPE	LIGHTS	SIGNALS	TRAINING
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	CONSTRUCTION TYPE CODE						
					1000-2A	SFTY-1D	Y002-1C	Y003	Y030-1E	Y031-1F	Y080
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2						2	
*	85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1						1	
*	85700305	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1						1	
*	86000100	MASTER CONTROLLER	EACH	1						1	
*	86400100	TRANSCEIVER - FIBER OPTIC	EACH	3						3	
*	87300305	ELECTRIC CABLE IN TRENCH, LEAD-IN, NO. 14 1 PAIR	FOOT	1170						1170	
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C	FOOT	400						400	
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C	FOOT	1680						1680	
*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C	FOOT	1730						1730	
*	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.14 1 PAIR	FOOT	3025						3025	
*	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	125						125	
*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4						4	
*	87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1						1	
*	87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1						1	
*	87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1						1	
*	87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1						1	
*	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16						16	
*	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4						4	
*	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	50						50	
*	87900200	DRILL EXISTING HANDHOLE	EACH	3						3	
*	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8						8	
*	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4						4	
*	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2						2	
*	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4						4	
*	88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2						2	
*	88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	12						12	
*	88500100	INDUCTIVE LOOP DETECTOR	EACH	16						16	
*	88600100	DETECTOR LOOP, TYPE I	FOOT	940						940	
*	88700200	LIGHT DETECTOR	EACH	2						2	
*	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1						1	
*	89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1						1	
*	89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1						1	
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1						1	
	Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	16700	16700						
	Z0041700	PLUG EXISTING STORM SEWERS	EACH	2	2						
	XX005656	INLET FILTER CLEANING	EACH	68	68						
	X0321556	SANITARY MANHOLES TO BE ADJUSTED	EACH	14	14						
*	X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	3140						3140	
	X0322936	REMOVE EXISTING FLARED END SECTION	EACH	6	6						
	X0323863	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 2, 12"	FOOT	175	175						
*	X0324007	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1						1	
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	2	2						
	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	23	23						
	X0712400	TEMPORARY PAVEMENT	SQ YD	2215	2215						
*	X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	2						2	
*	X8160350	UNIT DUCT, WITH 3-1/C NO. 6 AND 1/C NO. 8 GROUND, 600V (EPR-TYPE RHW), 1 1/4" DIA., POLYETHYLENE	FOOT	1640				1640			
*	X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	2						2	
*	X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	3140						3140	
*	X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	725						725	
*	X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	370						370	
*	XX007720	RESIDENTIAL WATER WELL CUT AND CAP	LSUM	1	1						
*	XX007721	MWRD STORM WATER MONITORING WELL CUT AND CAP	LSUM	1	1						

* - INDICATES SPECIALTY ITEMS

REVISIONS	
NAME	DATE

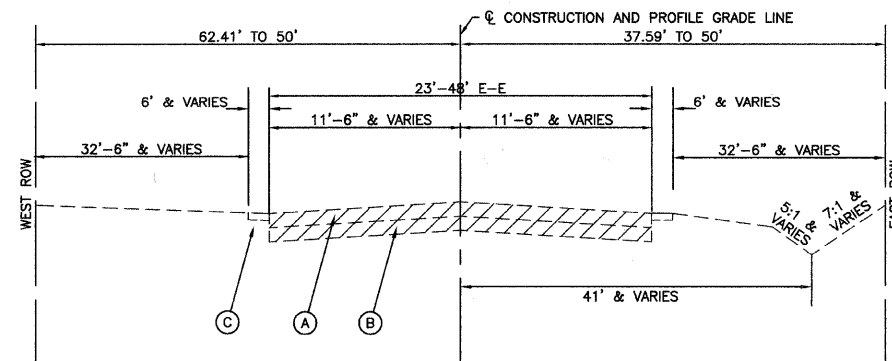
ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
SUMMARY OF QUANTITIES**

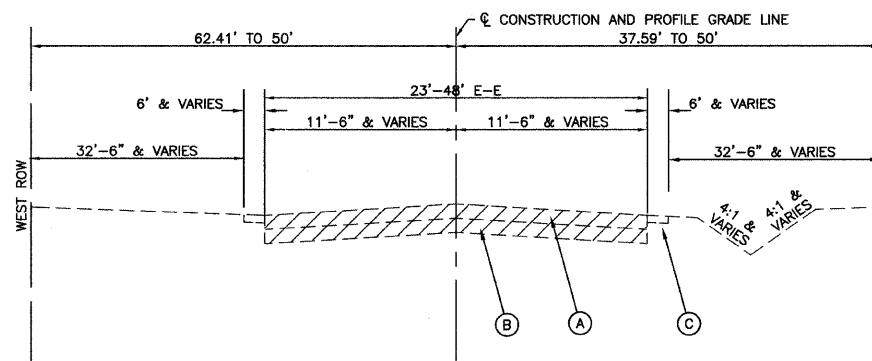
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HORIZ. NA
DATE 7/22/08

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CHECKED BY EA/PKB

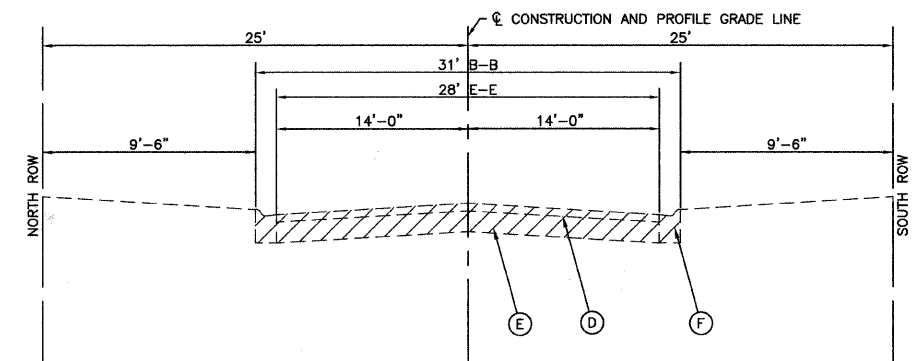
CONTRACT #63061



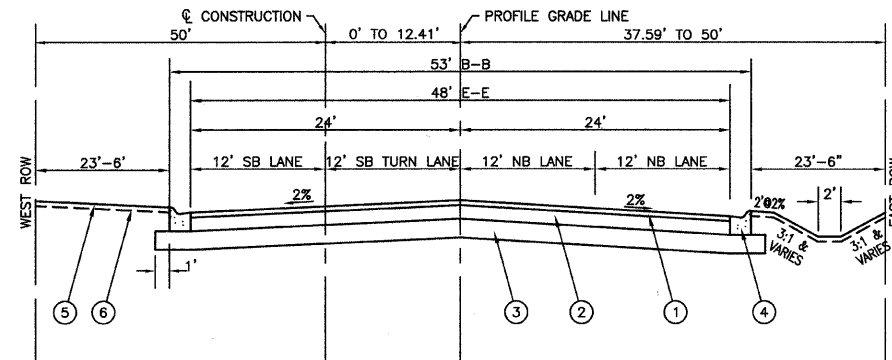
EXISTING TYPICAL CROSS SECTION
STATE STREET
STA 3+50 TO STA 7+15



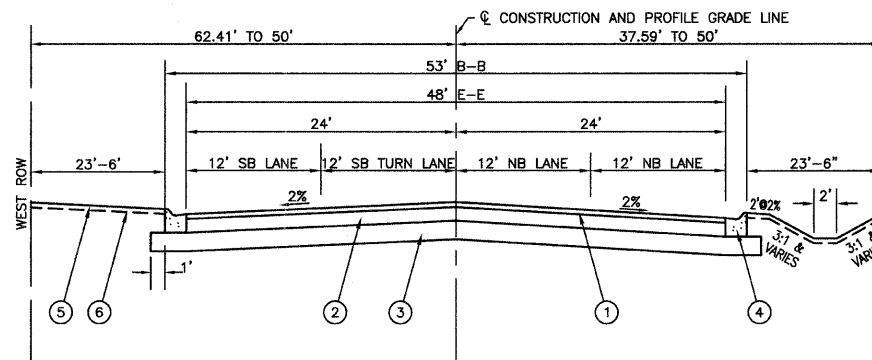
EXISTING TYPICAL CROSS SECTION
STATE STREET
STA 7+15 TO STA 22+44.15



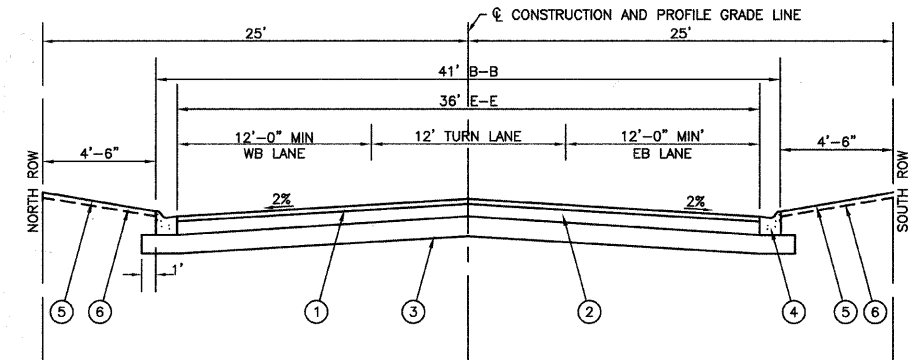
EXISTING TYPICAL CROSS SECTION
168TH STREET



PROPOSED TYPICAL CROSS SECTION
STATE STREET
STA 3+50 TO STA 7+15



PROPOSED TYPICAL CROSS SECTION
STATE STREET
STA 7+15 TO STA 22+44.15



PROPOSED TYPICAL CROSS SECTION
168TH STREET

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AC TYPE	AIR VOIDS
FULL DEPTH PAVEMENT		
HOT MIX ASPHALT SURFACE COURSE, MIX "D", N70(IL-9.5mm); 2"	PG 64-22	4% @ 70 Gyr.
HOT MIX ASPHALT BINDER COURSE, IL-19.0, N70, 10"	PG 64-22 *	4% @ 70 Gyr.
DRIVEWAYS		
HOT MIX ASPHALT SURFACE COURSE, MIX "C", N50(IL-9.5mm); 2"	PG 64-22	4% @ 50 Gyr.
HOT MIX ASPHALT BASE COURSE, (HMA BINDER IL-19.0mm); 8"	PG 64-22 *	4% @ 50 Gyr.
TEMPORARY PAVEMENT		
HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50(IL-9.5mm); 2"	PG 64-22	4% @ 50 Gyr.
TEMP PAVEMENT (HMA BINDER, IL-19.0mm), 6"	PG 64-22 *	4% @ 50 Gyr.

NOTE:
1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.
2. *WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

EARTHWORK QUANTITIES

TOTAL CUT = 8450 CY
TOTAL TOPSOIL (ESTIMATED) = 700 CY
TOTAL AVAILABLE CUT TO FILL = 7750 CY
TOTAL FILL = 547 CY
CUT TO FILL (15% SHRINKAGE) = 629 CY

LEGEND

- | | |
|---|--|
| ① HMA SURFACE COURSE, MIX "D", N70-2" | Ⓐ 6" HMA PAVEMENT & VARIES |
| ② HMA BINDER COURSE, IL-19.0, N70, 10" | Ⓑ 6" PORTLAND CEMENT CONCRETE BASE COURSE & VARIES |
| ③ AGGREGATE SUB-GRADE 12" | Ⓒ 7" SAND & GRAVEL SHOULDER & VARIES |
| ④ PROP. B-6.24 COMBINATION CONCRETE CURB & GUTTER | Ⓓ 4" HMA PAVEMENT & VARIES |
| ⑤ SEEDING, CLASS 2A | Ⓔ 9" SAND & GRAVEL BASE COURSE & VARIES |
| ⑥ TOPSOIL FURNISH AND PLACE, 4" | Ⓕ CONCRETE CURB & GUTTER |

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
TYPICAL CROSS SECTIONS

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

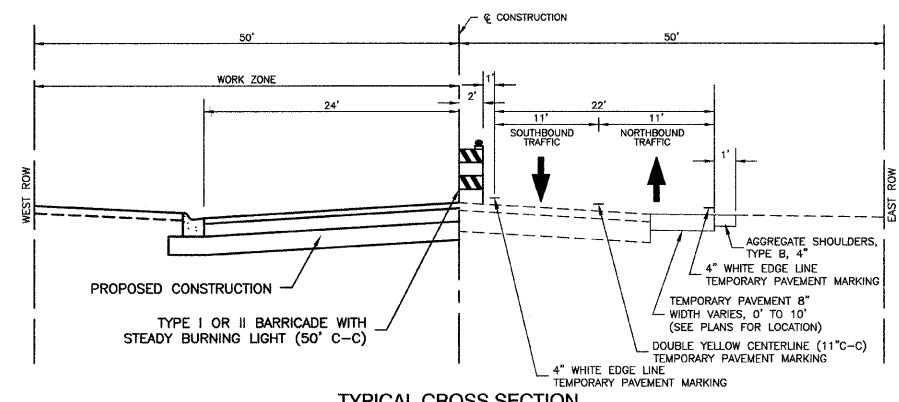
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ROBINSON ENGINEERING, LTD.
17000 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473
(708) 381-6700 FAX (708) 381-3626
ILLINOIS DESIGN FIRM REGISTRATION NO. 184001202

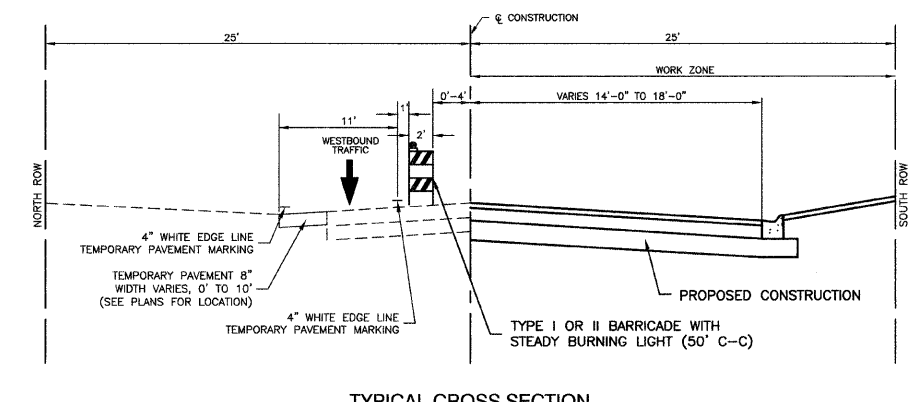
07345-TYPK-01

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	008
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

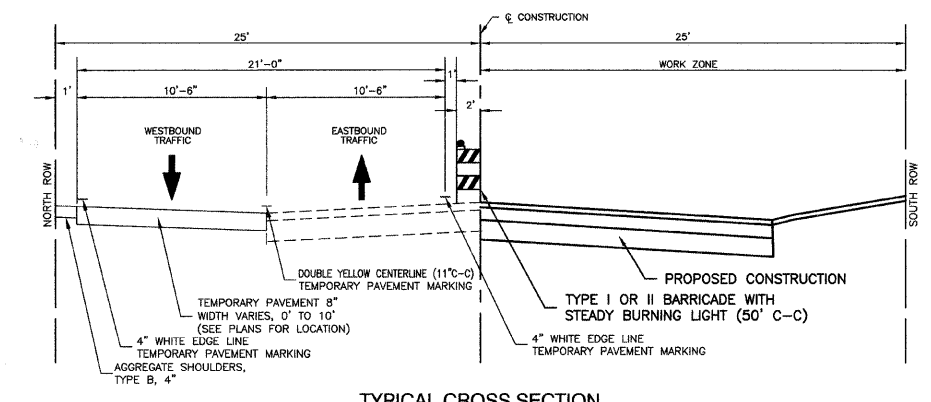
CONTRACT #63061



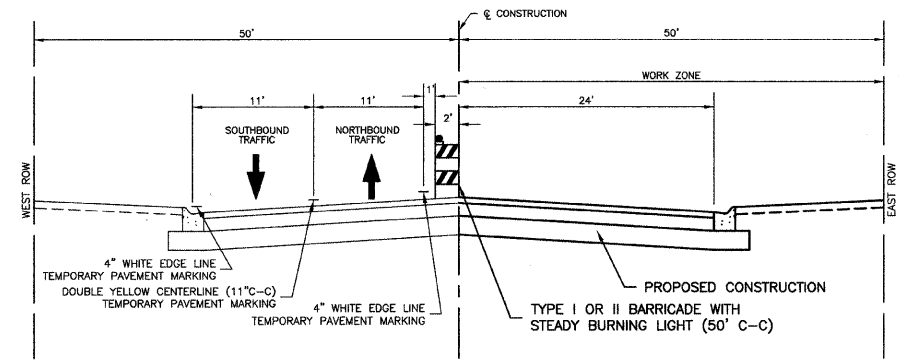
TYPICAL CROSS SECTION
STATE STREET
STAGE 1 CONSTRUCTION



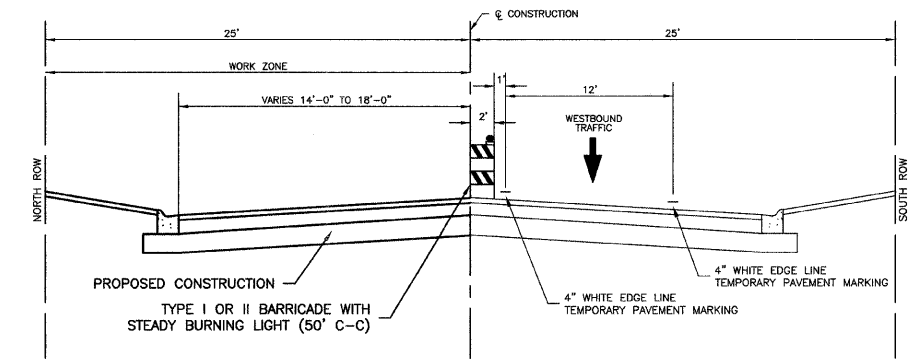
TYPICAL CROSS SECTION
168TH STREET - WEST OF STATE STREET
STAGE 1 CONSTRUCTION



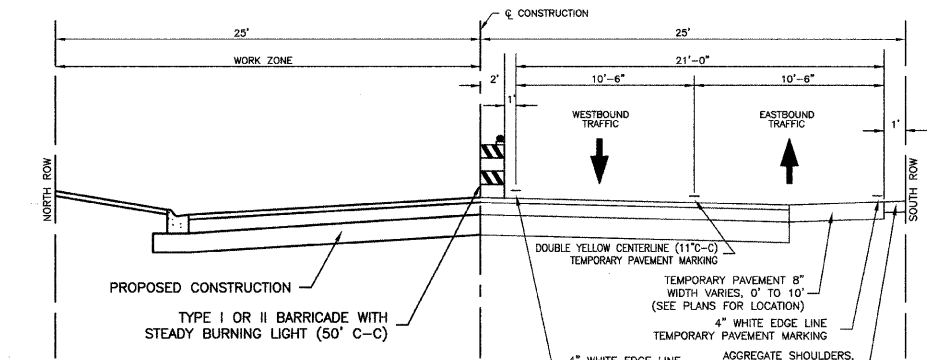
TYPICAL CROSS SECTION
168TH STREET - EAST OF STATE STREET
STAGE 1 CONSTRUCTION



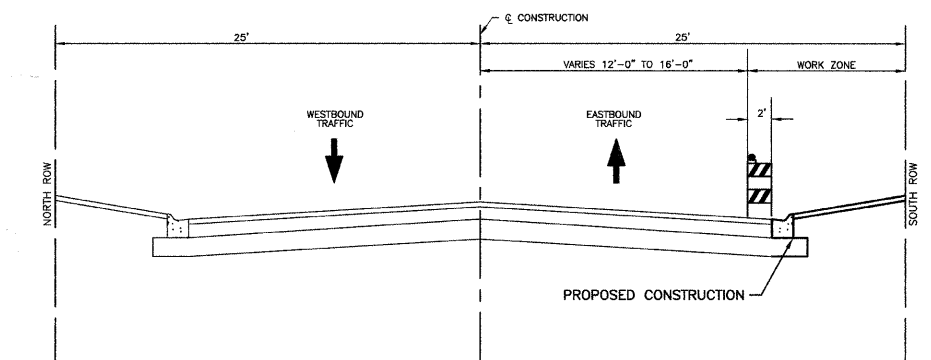
TYPICAL CROSS SECTION
STATE STREET
STAGE 2 CONSTRUCTION



TYPICAL CROSS SECTION
168TH STREET - WEST OF STATE STREET
STAGE 2 CONSTRUCTION



TYPICAL CROSS SECTION
168TH STREET - EAST OF STATE STREET
STAGE 2 CONSTRUCTION



TYPICAL CROSS SECTION
168TH STREET - EAST OF STATE STREET
STAGE 3 CONSTRUCTION

PRESTAGE CONSTRUCTION GENERAL NOTES

PRE-STAGE
ESTABLISH THE DETOUR ROUTE TO ARMORY DRIVE

STAGE 1 CONSTRUCTION GENERAL NOTES

STATE STREET
STAGE 1 CONSTRUCTION
CONSTRUCT TEMPORARY WIDENING STATION 7+75 TO STATION 22+10, EAST SIDE OF STATE STREET
WIDEN EAST DITCH AND CONSTRUCT CULVERTS AT DRIVEWAYS AS NECESSARY TO MAINTAIN FLOW
PROPOSED CONSTRUCTION WEST HALF OF STATE STREET

STAGE 1 TRAFFIC
ONE 11' NORTHBOUND LANE, ONE 11' SOUTHBOUND LANE, EAST HALF OF STATE STREET

168TH STREET (WEST OF STATE STREET)
STAGE 1 CONSTRUCTION
CONSTRUCT TEMPORARY PAVEMENT WIDENING, STATION 54+25 TO STATION 55+80, NORTH SIDE OF 168TH STREET
PROPOSED CONSTRUCTION, SOUTH HALF OF 168TH STREET

STAGE 1 TRAFFIC
ONE 11' WESTBOUND LANE, NORTH SIDE OF 168TH STREET
EASTBOUND TRAFFIC DETOUR SOUTH TO VINCENNES ROAD, THEN EAST TO ARMORY DRIVE

168TH STREET (EAST OF STATE STREET)
STAGE 1 CONSTRUCTION
CONSTRUCT TEMPORARY PAVEMENT WIDENING, NORTH SIDE OF 168TH STREET, STATION 57+00 TO STATION 60+80
PROPOSED CONSTRUCTION, SOUTH HALF OF 168TH STREET

STAGE 1 TRAFFIC
ONE 10.5' EASTBOUND LANE, ONE 10.5' WESTBOUND LANE, NORTH HALF OF 168TH STREET

STAGE 2 CONSTRUCTION GENERAL NOTES

STATE STREET
STAGE 2 CONSTRUCTION
REMOVE TEMPORARY PAVEMENT WIDENING EAST SIDE OF STATE STREET
PROPOSED CONSTRUCTION, EAST HALF OF STATE STREET

STAGE 2 TRAFFIC
ONE 11' NORTHBOUND LANE, ONE 11' SOUTHBOUND LANE, WEST HALF OF STATE STREET

168TH STREET (WEST OF STATE STREET)
STAGE 2 CONSTRUCTION
REMOVE TEMPORARY PAVEMENT WIDENING, NORTH SIDE OF 168TH STREET
PROPOSED CONSTRUCTION, NORTH HALF OF 168TH STREET

STAGE 2 TRAFFIC
WESTBOUND TRAFFIC ON SOUTH HALF OF 168TH STREET, 12' LANE
EASTBOUND TRAFFIC DETOUR SOUTH TO VINCENNES ROAD, THEN EAST TO ARMORY DRIVE

168TH STREET (EAST OF STATE STREET)
STAGE 2 CONSTRUCTION
CONSTRUCT TEMPORARY PAVEMENT WIDENING, SOUTH SIDE OF 168TH STREET, STATION 56+80 TO STATION 60+70
REMOVE TEMPORARY PAVEMENT WIDENING, NORTH SIDE OF 168TH STREET
CONSTRUCT PROPOSED PAVEMENT, NORTH HALF OF 168TH STREET

STAGE 2 TRAFFIC
ONE 10.5' EASTBOUND LANE, ONE 10.5' WESTBOUND LANE, SOUTH HALF OF 168TH STREET

STAGE 3 CONSTRUCTION GENERAL NOTES

168TH STREET (WEST OF STATE STREET)
STAGE 3 CONSTRUCTION
REMOVE TEMPORARY WIDENING, SOUTH HALF OF 168TH STREET, AND CONSTRUCT PROPOSED CURB AND GUTTER

STAGE 3 TRAFFIC
ONE 14' EASTBOUND LANE, ONE 14' WESTBOUND LANE IN PROPOSED TRAFFIC PATTERNS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT TRAFFIC CONTROL AND PROTECTION TYPICAL CROSS SECTIONS AND NOTES

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

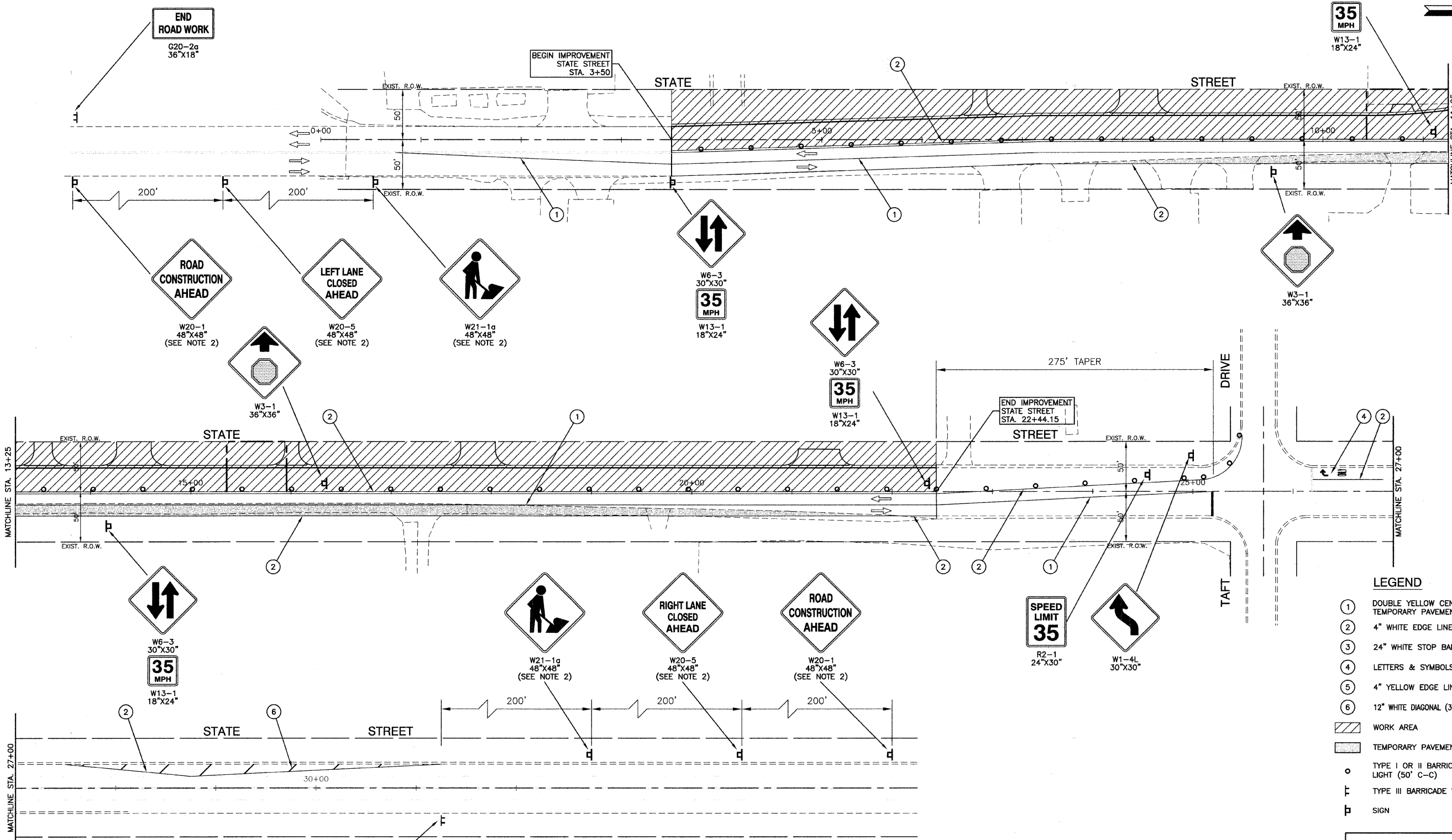
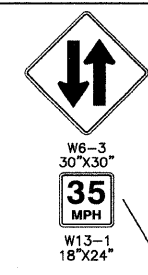
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CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473
(708) 581-8700 FAX (708) 581-3628
ILLINOIS DESIGN FIRM REGISTRATION NO. 184001518

07345-TC00N-02

F. A. U. R. E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	009
STA. 3+50		TO STA. 22+44.15		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(996)	

CONTRACT #63061



LEGEND

- ① DOUBLE YELLOW CENTERLINE (11" C-C) - TEMPORARY PAVEMENT MARKINGS
- ② 4" WHITE EDGE LINE - TEMPORARY PAVEMENT MARKINGS
- ③ 24" WHITE STOP BAR - TEMPORARY PAVEMENT MARKINGS
- ④ LETTERS & SYMBOLS - TEMPORARY PAVEMENT MARKINGS
- ⑤ 4" YELLOW EDGE LINE - TEMPORARY PAVEMENT MARKINGS
- ⑥ 12" WHITE DIAGONAL (30" C/C) - TEMPORARY PAVEMENT MARKINGS
- WORK AREA
- TEMPORARY PAVEMENT TO BE CONSTRUCTED
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURNING LIGHT (50' C-C)
- TYPE III BARRICADE WITH STEADY BURNING LIGHT
- SIGN

NOTE:
 1. THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.
 2. ADVANCED WARNING SIGNS SHALL BE PLACED ACCORDING TO HIGHWAY STANDARD 701606-05

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

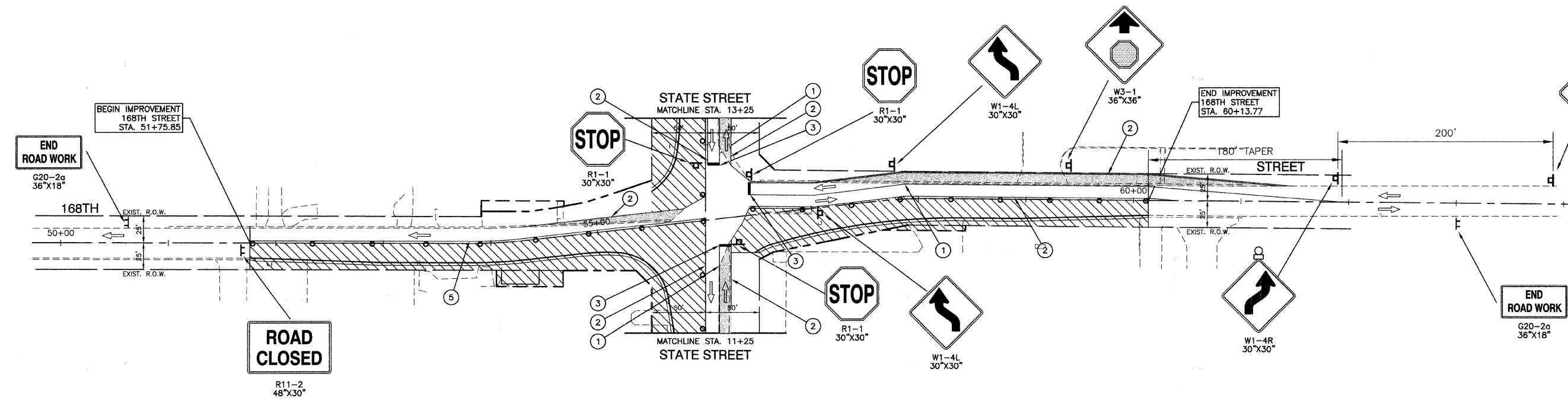
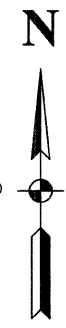
STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT TRAFFIC CONTROL AND PROTECTION STATE STREET STAGE 1

SCALE: VERT. NA
 HORIZ. 1"=50'
 DATE 7/22/08

DRAWN BY RG
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F. A. U. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	010
STA. 51+75.85		TO STA. 60+13.77		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



- ① DOUBLE YELLOW CENTERLINE (11" C-C) - TEMPORARY PAVEMENT MARKINGS
- ② 4" WHITE EDGE LINE - TEMPORARY PAVEMENT MARKINGS
- ③ 24" WHITE STOP BAR - TEMPORARY PAVEMENT MARKINGS
- ④ LETTERS & SYMBOLS - TEMPORARY PAVEMENT MARKINGS
- ⑤ 4" YELLOW EDGE LINE - TEMPORARY PAVEMENT MARKINGS
- ⑥ 12" WHITE DIAGONAL (30' C/C) - TEMPORARY PAVEMENT MARKINGS
- ▨ WORK AREA
- ▭ TEMPORARY PAVEMENT TO BE CONSTRUCTED
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURNING LIGHT (50' C-C)
- ⊥ TYPE III BARRICADE WITH STEADY BURNING LIGHT
- ⊠ SIGN

NOTE:
 THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

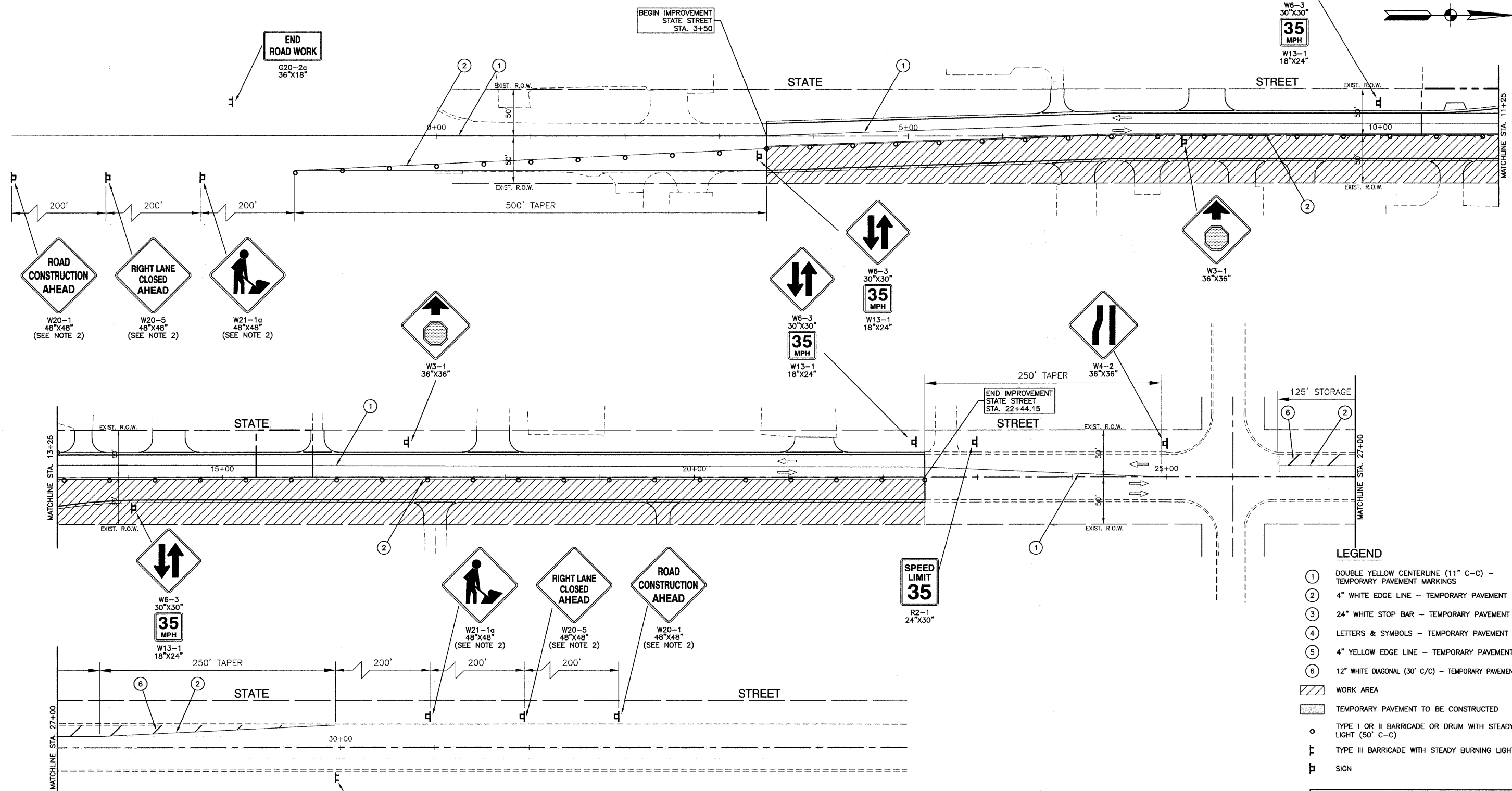
**STATE STREET AND 168TH STREET
 INTERSECTION IMPROVEMENT
 TRAFFIC CONTROL AND PROTECTION
 168TH STREET STAGE 1**

SCALE: VERT. NA
 HORIZ. 1"=50'
 DATE 7/22/08

DRAWN BY RG
 CHECKED BY EA/PKB

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	011
STA. 3+50	TO STA. 22+44.15			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(998)	

CONTRACT #63061



LEGEND

- ① DOUBLE YELLOW CENTERLINE (11" C-C) - TEMPORARY PAVEMENT MARKINGS
- ② 4" WHITE EDGE LINE - TEMPORARY PAVEMENT MARKINGS
- ③ 24" WHITE STOP BAR - TEMPORARY PAVEMENT MARKINGS
- ④ LETTERS & SYMBOLS - TEMPORARY PAVEMENT MARKINGS
- ⑤ 4" YELLOW EDGE LINE - TEMPORARY PAVEMENT MARKINGS
- ⑥ 12" WHITE DIAGONAL (30" C/C) - TEMPORARY PAVEMENT MARKINGS
- WORK AREA
- TEMPORARY PAVEMENT TO BE CONSTRUCTED
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURNING LIGHT (50' C-C)
- TYPE III BARRICADE WITH STEADY BURNING LIGHT
- SIGN

NOTE:

1. THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.
2. ADVANCED WARNING SIGNS SHALL BE PLACED ACCORDING TO HIGHWAY STANDARD 701606-05

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
TRAFFIC CONTROL AND PROTECTION
STATE STREET STAGE 2**

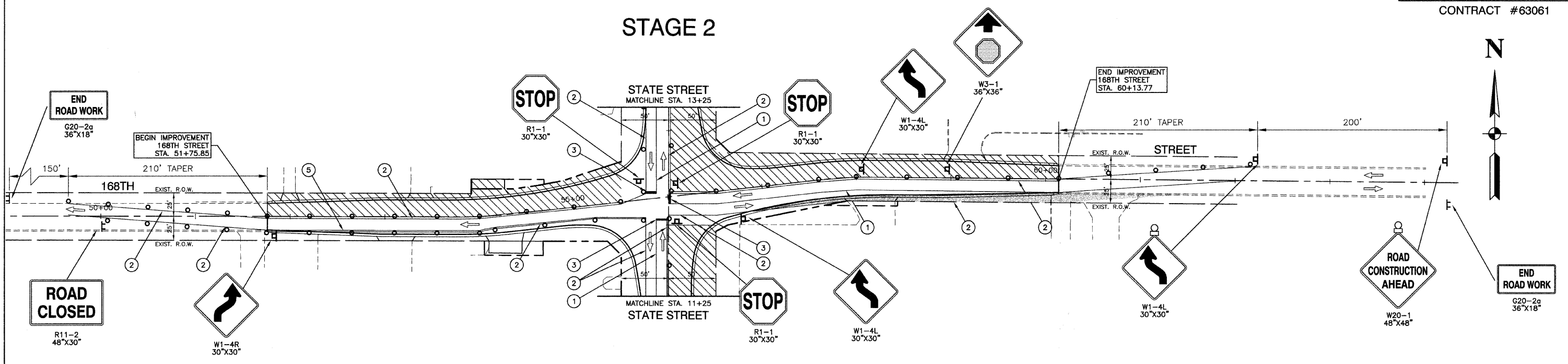
SCALE: VERT. NA
HORIZ. 1"=50'
DATE 7/22/08

DRAWN BY RG
CHECKED BY EA/PKB

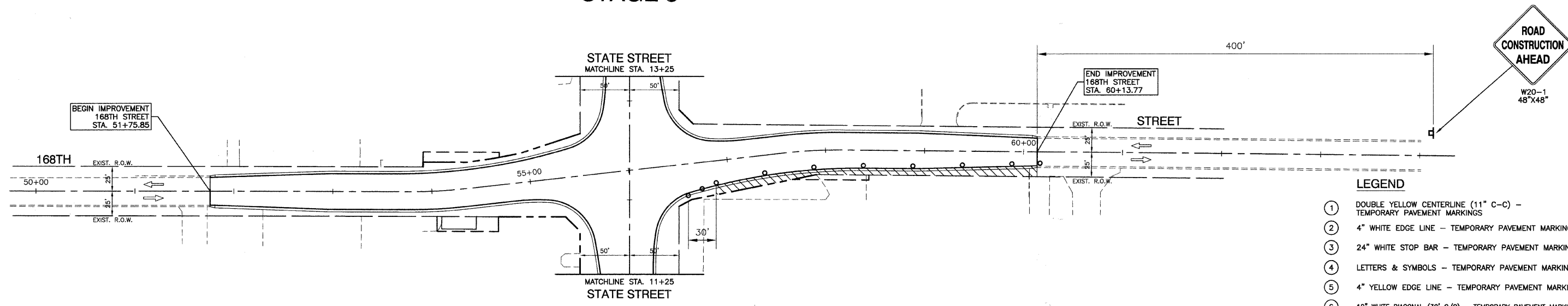
F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	012
STA. 51+75.85		TO STA. 60+13.77		
FED. ROAD DIST. NO. 1	ALIAS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

STAGE 2



STAGE 3



- LEGEND**
- ① DOUBLE YELLOW CENTERLINE (11" C-C) - TEMPORARY PAVEMENT MARKINGS
 - ② 4" WHITE EDGE LINE - TEMPORARY PAVEMENT MARKINGS
 - ③ 24" WHITE STOP BAR - TEMPORARY PAVEMENT MARKINGS
 - ④ LETTERS & SYMBOLS - TEMPORARY PAVEMENT MARKINGS
 - ⑤ 4" YELLOW EDGE LINE - TEMPORARY PAVEMENT MARKINGS
 - ⑥ 12" WHITE DIAGONAL (30' C/C) - TEMPORARY PAVEMENT MARKINGS
 - ▨ WORK AREA
 - ▩ TEMPORARY PAVEMENT TO BE CONSTRUCTED
 - TYPE I OR II BARRICADE OR DRUM WITH STEADY BURNING LIGHT (50' C-C)
 - ⊥ TYPE III BARRICADE WITH STEADY BURNING LIGHT
 - ⊞ SIGN

NOTE:
THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

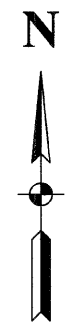
**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
TRAFFIC CONTROL AND PROTECTION
168TH STREET STAGE 2 AND STAGE 3**

SCALE: VERT. NA
HORIZ. 1"=50'
DATE 7/22/08

DRAWN BY RG
CHECKED BY EA/PKB

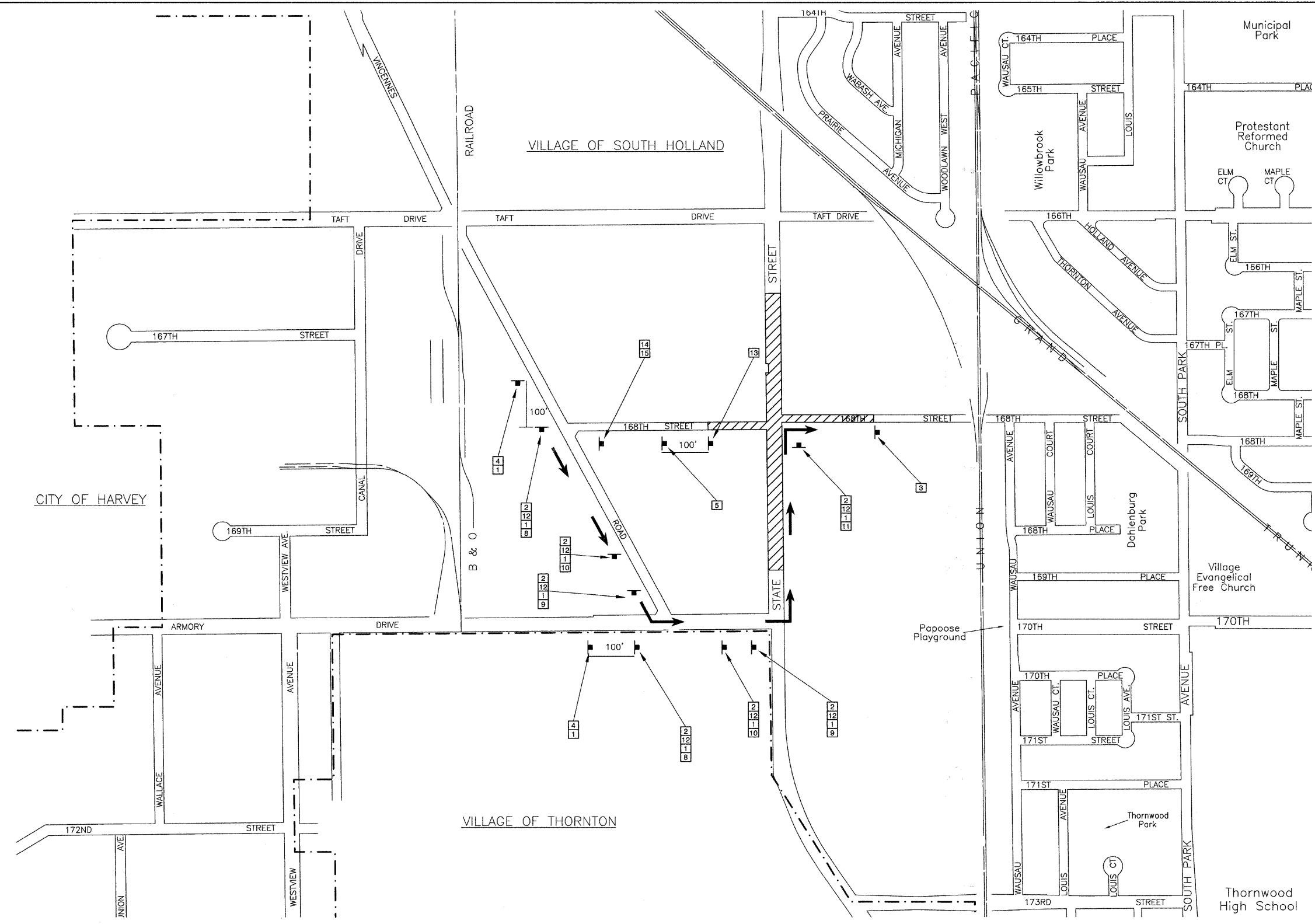
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2908	02-00077-00-WR	COOK	073	013
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(996)	

CONTRACT #63061



LEGEND

- ← THRU TRAFFIC DETOUR
- WORK ZONE
- 1 168TH STREET
D3-1
30"x6"
- 2 DETOUR
M4-8
24"x12"
- 3 END DETOUR
M4-8a
24"x18"
- 4 DETOUR AHEAD
W20-2
48"x48"
- 5 ROAD CLOSED AHEAD
C24-14
48"x48"
- 6 ROAD CLOSED 500FT
C24-12
48"x48"
- 7 ROAD CLOSED 1000FT
C24-12
48"x48"
- 8 ↑
M6-3
21"x15"
- 9 ←
M6-1L
21"x15"
- 10 ↙
M5-1
21"x15"
- 11 →
M6-1
21"x15"
- 12 EAST
M3-2
24"x12"
- 13 ROAD CLOSED
48"x30"
R11-2
TYPE III BARRICADE
- 14 ROAD CLOSED TO THRU TRAFFIC
R11-4
60"x30"
TYPE III BARRICADE
- 15 DETOUR
M4-10R
48"x18"



* NOTE: WESTBOUND 168TH STREET SHALL REMAIN OPEN TO TRAFFIC THROUGHOUT ALL CONSTRUCTION STAGES.

ILLINOIS DEPARTMENT OF TRANSPORTATION

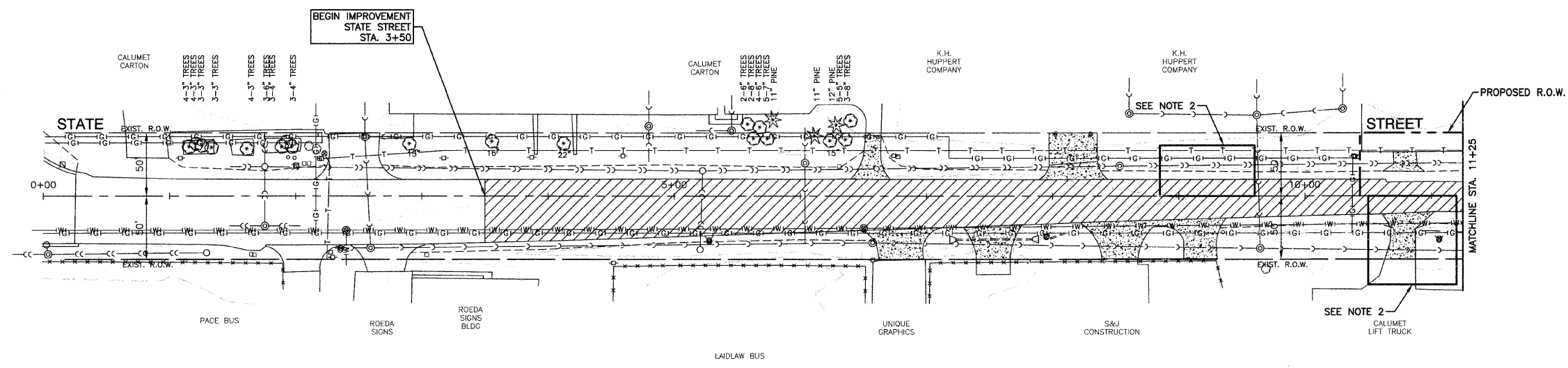
STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT DETOUR PLAN EASTBOUND 168TH STREET

SCALE: VERT. NA
HORIZ. 1"=300'
DATE 7/22/08
DRAWN BY RG
CHECKED BY EA/PKB

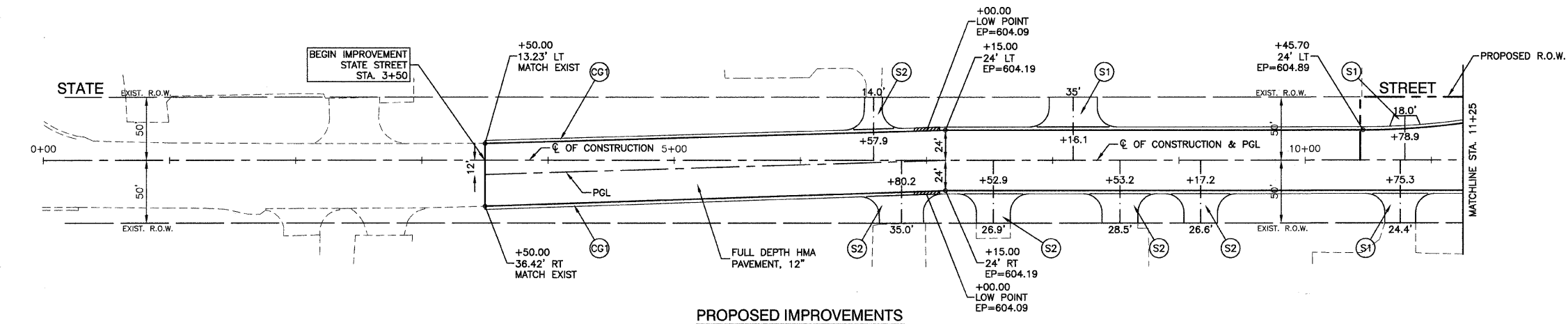
REVISIONS	
NAME	DATE

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	014
STA. 3+50		TO STA. 11+25		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



EXISTING CONDITIONS

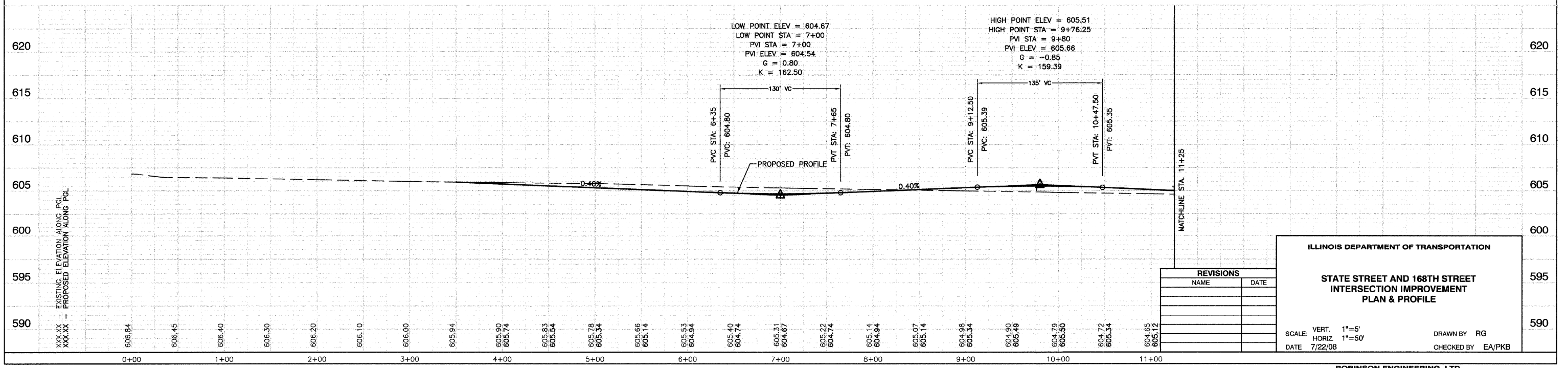


PROPOSED IMPROVEMENTS

- LEGEND**
- HMA PAVEMENT REMOVAL
 - DRIVEWAY PAVEMENT REMOVAL
 - COMB. CURB & GUTTER REMOVAL
 - SIDEWALK REMOVAL
 - CONTAMINATION SITE
 - CURB & GUTTER TYPE B-6.24
 - 10' TRANSITION FROM C & G TYPE B-6.12 TO B-6.24
 - HMA DRIVEWAY, 8" HMA BASE COURSE, 2" HMA SURFACE COURSE, MIX "C", N50
 - P.C.C DRIVEWAY PAVEMENT, 8"
 - CURB AND GUTTER FORMED BY HAND FOR PROPER DRAINAGE
 - TREE REMOVAL
 - TREE ROOT PRUNING

- NOTE:**
1. SEE PAVEMENT MARKING SHEETS FOR TAPERS AND STORAGE LENGTHS
 - * 2. REFER TO SPECIAL PROVISION DURING SOIL EXCAVATION AT CONTAMINATION SITES
 3. ALL STATIONS AND OFFSETS REFERENCE STATE STREET C.L. OF CONSTRUCTION
 4. THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

BENCH MARK: #38
 SQUARE CUT IN SOUTH EDGE OF CONC. BASE OF R.R. SIGNAL, THE WEST OF THE TWO. N.E. CORNER VINCENNES RD. AND TAFT DR.
 ELEVATION = 606.50



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
PLAN & PROFILE**

SCALE: VERT. 1"=5'
 HORIZ. 1"=50'
 DATE 7/22/08

DRAWN BY RG
 CHECKED BY EA/PKB

F. A. U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	015
STA. 13+25		TO STA. 22+44.15		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

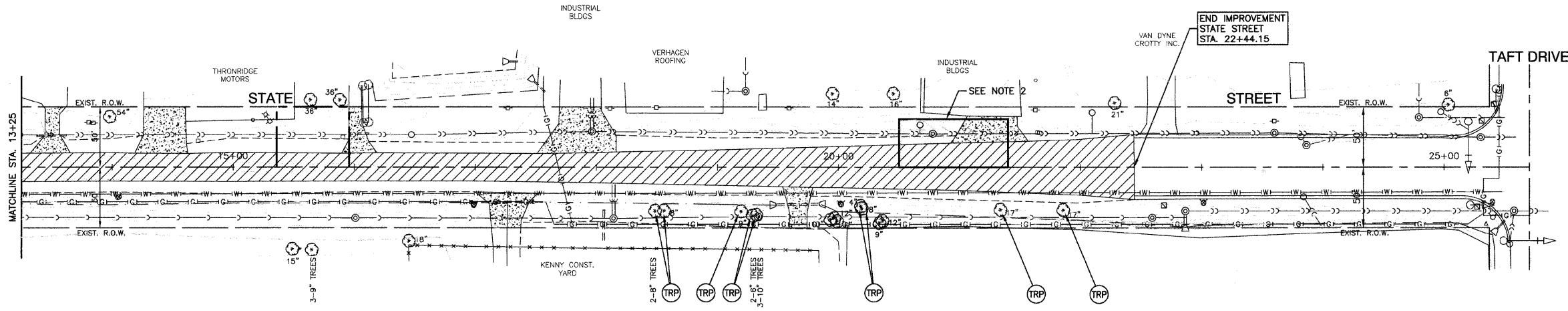


LEGEND

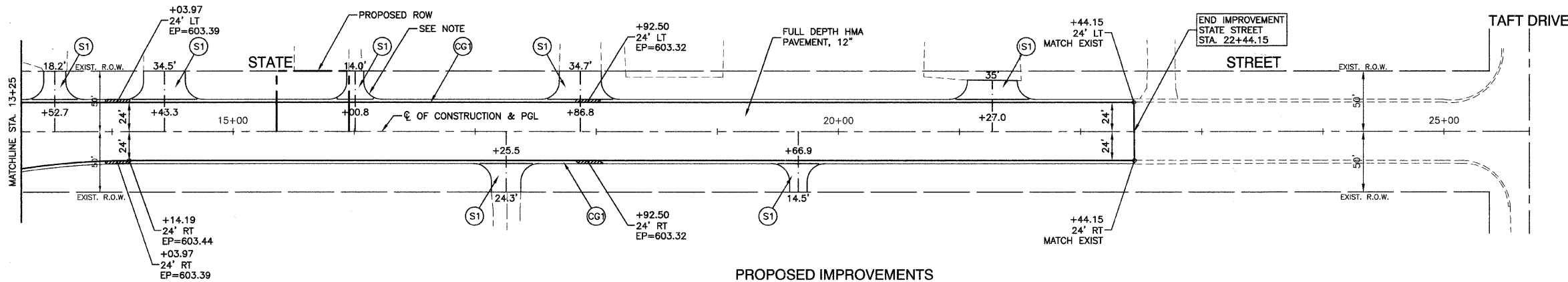
- HMA PAVEMENT REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- COMB. CURB & GUTTER REMOVAL
- SIDEWALK REMOVAL
- * CONTAMINATION SITE
- CURB & GUTTER TYPE B-6.24
- 10' TRANSITION FROM C & G TYPE B-6.12 TO B-6.24
- HMA DRIVEWAY, 8" HMA BASE COURSE, 2" HMA SURFACE COURSE, MIX "C", N50
- P.C.C DRIVEWAY PAVEMENT, 8"
- CURB AND GUTTER FORMED BY HAND FOR PROPER DRAINAGE
- TREE REMOVAL
- TREE ROOT PRUNING

- NOTE:**
1. SEE PAVEMENT MARKING SHEETS FOR TAPERS AND STORAGE LENGTHS
 - * 2. REFER TO SPECIAL PROVISION DURING SOIL EXCAVATION AT CONTAMINATION SITES
 3. ALL STATIONS AND OFFSETS REFERENCE STATE STREET ϕ OF CONSTRUCTION
 4. THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

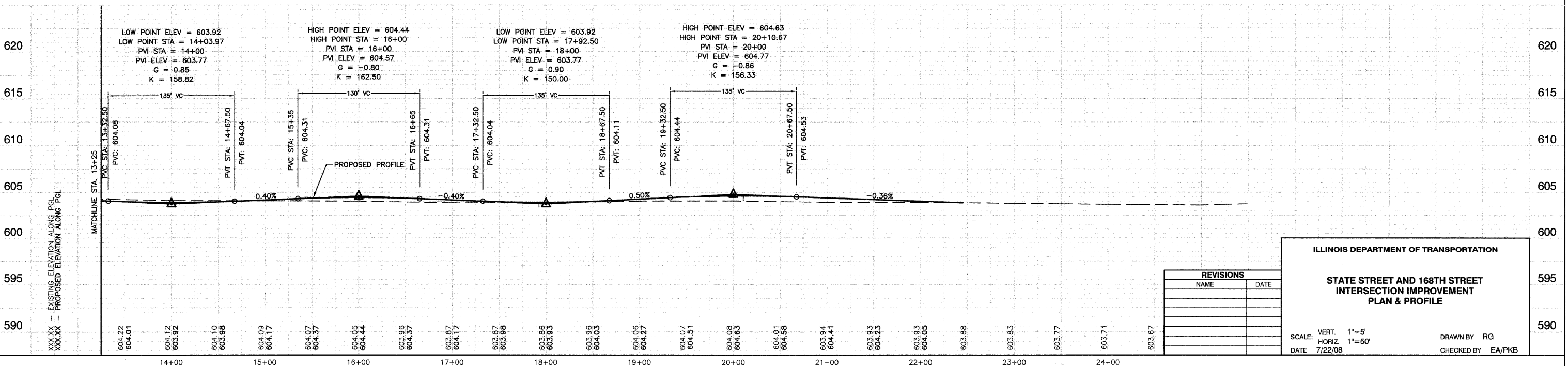
BENCH MARK: #38
 SQUARE CUT IN SOUTH EDGE OF CONC. BASE OF R.R. SIGNAL, THE WEST OF THE TWO. N.E. CORNER VINCENNES RD. AND TAFT DR. ELEVATION = 606.50



EXISTING CONDITIONS



PROPOSED IMPROVEMENTS



REVISIONS	
NAME	DATE

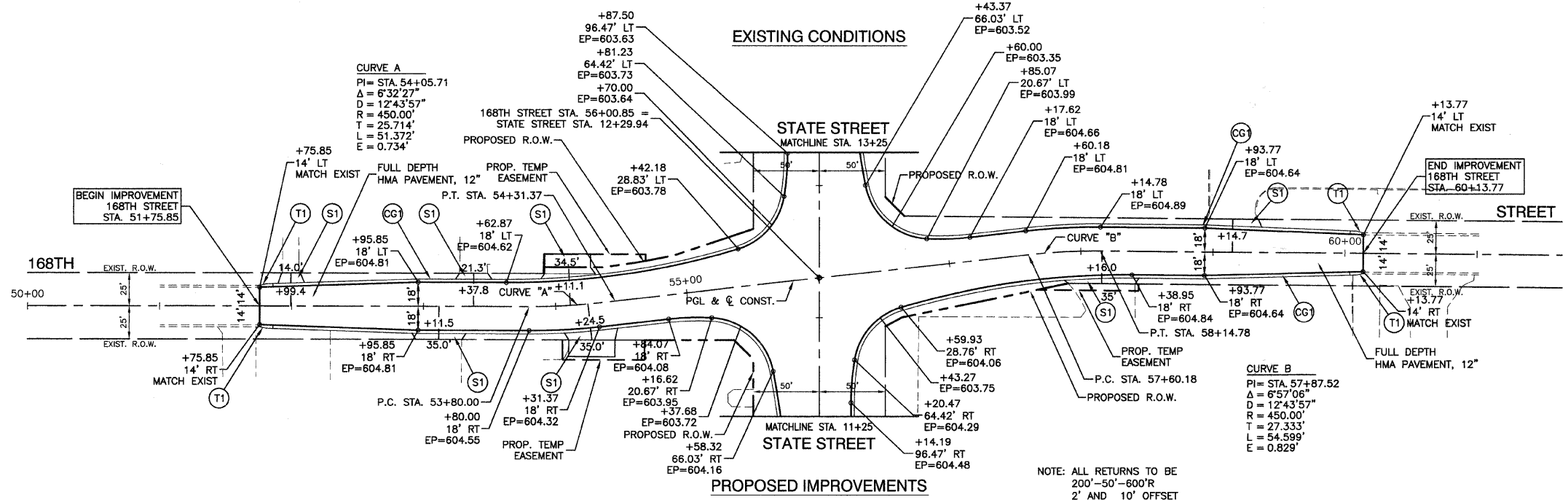
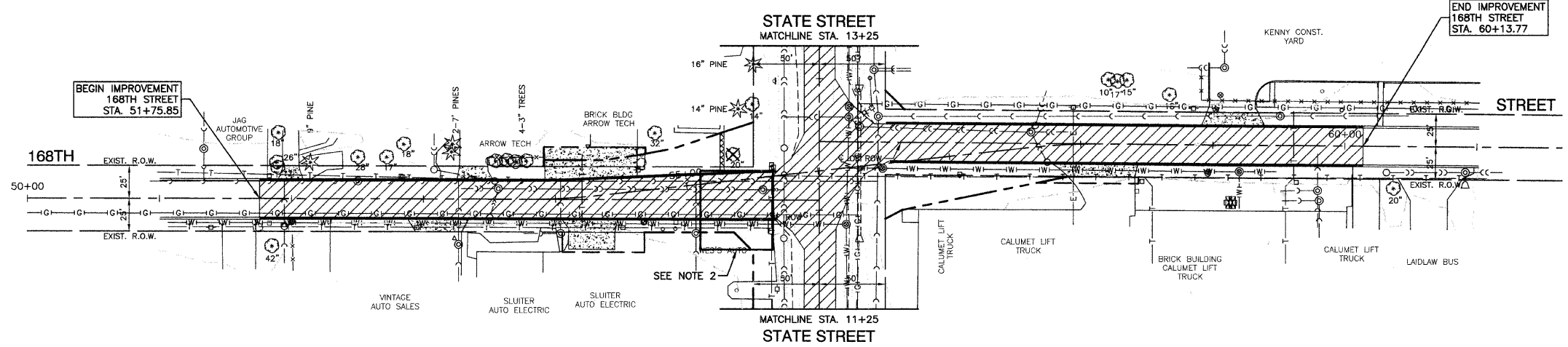
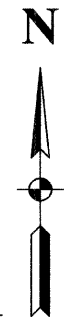
ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT PLAN & PROFILE

SCALE: VERT. 1"=5'
 HORIZ. 1"=50'
 DATE 7/22/08

DRAWN BY RG
 CHECKED BY EA/PKB

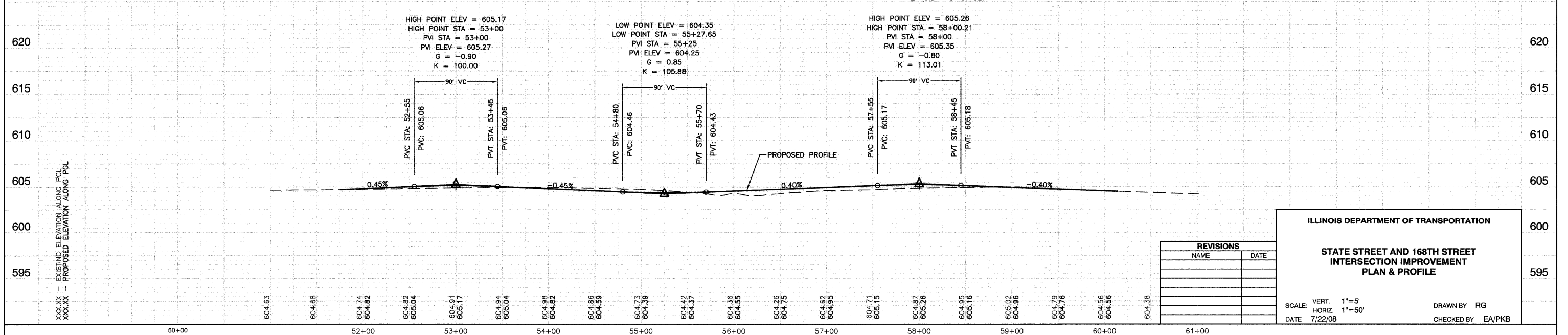
CONTRACT #63061



- LEGEND**
- HMA PAVEMENT REMOVAL
 - DRIVEWAY PAVEMENT REMOVAL
 - COMB. CURB & GUTTER REMOVAL
 - SIDEWALK REMOVAL
 - CONTAMINATION SITE
 - CURB & GUTTER TYPE B-6.24
 - 10' TRANSITION FROM C. & G TYPE B-6.12 TO B-6.24
 - HMA DRIVEWAY, 8" HMA BASE COURSE, 2" HMA SURFACE COURSE, MIX "C", N50
 - P.C.C DRIVEWAY PAVEMENT, 8"
 - CURB AND GUTTER FORMED BY HAND FOR PROPER DRAINAGE
 - TREE REMOVAL
 - TREE ROOT PRUNING

- NOTE:**
1. SEE PAVEMENT MARKING SHEETS FOR TAPERS AND STORAGE LENGTHS
 2. REFER TO SPECIAL PROVISION DURING SOIL EXCAVATION AT CONTAMINATION SITES
 3. ALL STATIONS AND OFFSETS REFERENCE STATE STREET C/L OF CONSTRUCTION
 4. THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

BENCH MARK: #38
 SQUARE CUT IN SOUTH EDGE OF CONC. BASE OF R.R. SIGNAL, THE WEST OF THE TWO. N.E. CORNER VINCENNES RD. AND TAFT DR.
 ELEVATION = 606.50



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT PLAN & PROFILE

SCALE: VERT. 1"=5'
 HORIZ. 1"=50'

DATE 7/22/08

DRAWN BY RG
 CHECKED BY EA/PKB

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2908	02-00077-00-WR	COOK	073	017
STA. 3+50		TO STA. 11+25		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	M-8003(596)

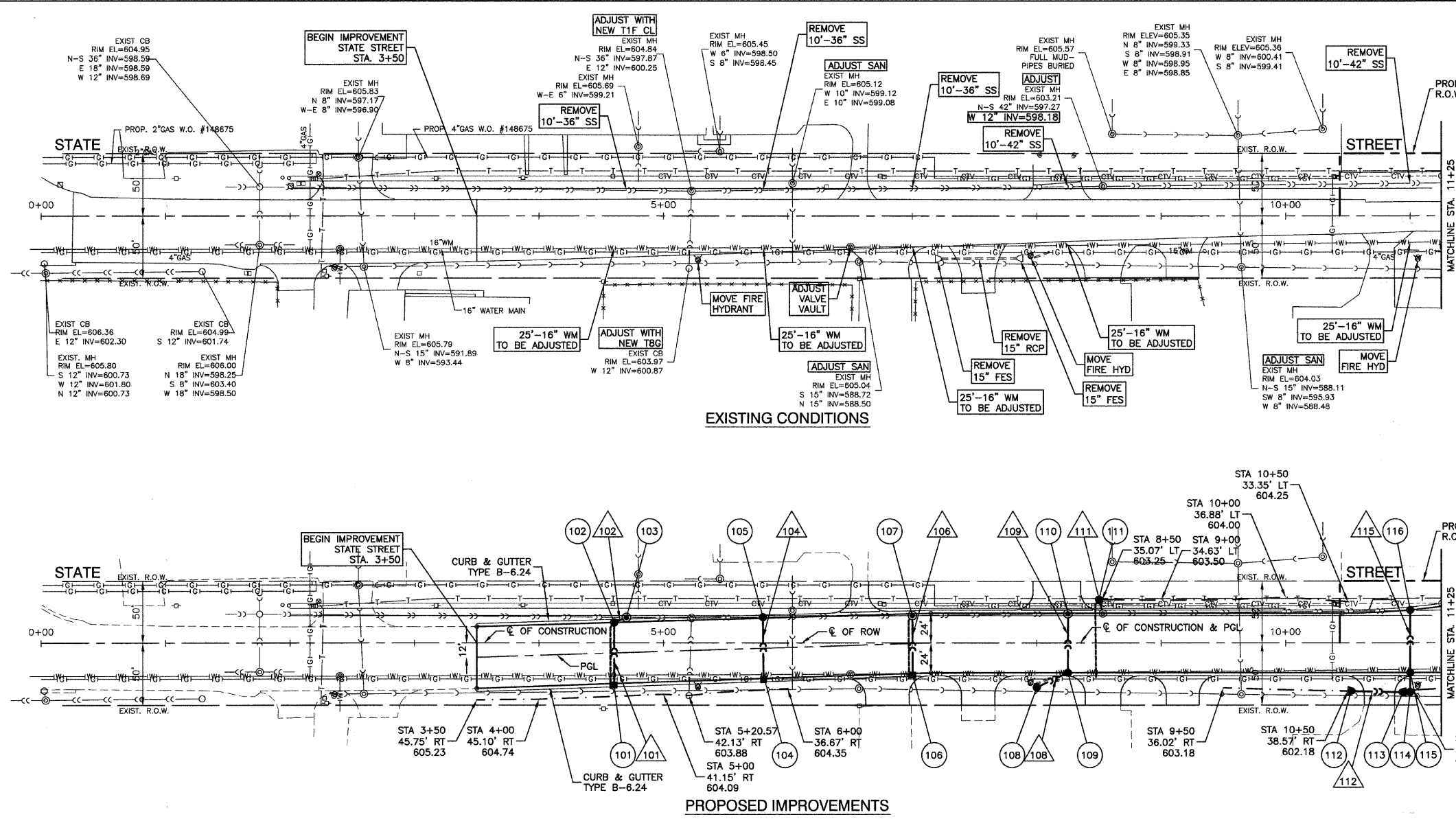
CONTRACT #63061



- 101 29' - 12" SST2 @ 1.29% (8.30) [19' WMR]
- 102 10' - 12" SST2 @ 0.50% (3.10)
- 104 33' - 12" SST2 @ 1.50% (10.62) [15' WMR]
- 106 32' - 12" SST2 @ 1.64% (6.69) [12' WMR]
- 108 23' - 12" SST2 @ 0.50% (5.07)
- 109 27' - 12" SST2 @ 0.50% (11.05) [16' WMR]
- 111 5' - 12" SST2 @ 2.00% (3.48)
- 112 37' - 12" ROCP CULVERT PIPE TYPE 1 @ 1.00% (4.88)
- 114 10' - 12" SST2 @ 0.50% (1.87)
- 115 33.5' - 12" SST2 @ 0.50% (32.87) [16' WMR]

- NOTES:**
- ALL RIM ELEVATIONS OF STRUCTURES IN THE PROPOSED CURB LINE ARE GIVEN TO THE EDGE OF PAVEMENT. ALL OTHER RIM ELEVATIONS ARE GIVEN TO THE CENTER OF STRUCTURES. ALL CALL-OUTS REFERENCE THE CENTERLINE OF CONSTRUCTION.
 - (XX.X) DENOTES CUBIC YARDS OF TRENCH BACKFILL.
 - [XX' WMR] DENOTES WATER MAIN REQUIREMENT STORM SEWER PIPE, AS DESCRIBED IN THE SPECIAL PROVISIONS.
 - THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR OVERHEAD FACILITIES.

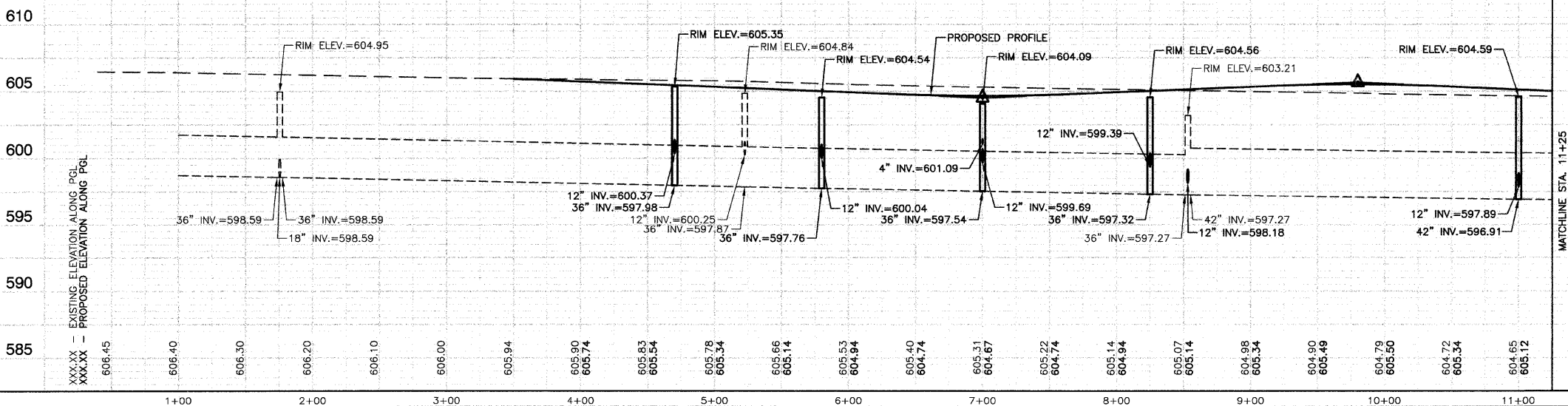
BENCH MARK: #38
 SQUARE CUT IN SOUTH EDGE OF CONC. BASE OF R.R. SIGNAL, THE WEST OF THE TWO. N.E. CORNER VINCENNES RD. AND TAFT DR. ELEVATION = 606.50



NO.	DESCRIPTION	ELEVATION
101	STA 4+60, 33.66' RT INLET TA, T24 F&G	605.01
102	STA 4+60, 16.49' LT CB TA, 4" DIA, T24 F&G	605.01
103	STA 4+70.22, 20.56' LT MH TA, 5' DIA, TIF CL	605.35
104	STA 5+80, 29.60' RT INLET TA, T24 F&G	604.54
105	STA 5+80, 20.73' LT CB TA, 5' DIA, T24 F&G	604.54
106	STA 7+00, 25.51' RT INLET TA, T24 F&G	604.09
107	STA 7+00, 22.09' LT MH TA, 8' DIA, T24 F&G	604.09
108	STA 8+00, 35.61' RT CB TC, T8G	603.32
109	STA 8+25, 24' RT CB TA, 4" DIA, T24 F&G	604.56
110	STA 8+25, 23.51' LT MH TA, 6' DIA, T24 F&G	604.56
111	STA 8+50, 35.07' LT CB TC, T8G	603.25
112	STA 10+53.15, 38.57' RT CONCRETE FES, 12" FL ELEV = 602.15	
113	STA 10+93.51, 39.54' RT CONCRETE FES, 12" FL ELEV = 601.74'	
114	STA 11+00, 39.40' RT CB TC T8G	601.68
115	STA 11+00, 24' RT CB TA, 4" DIA, T24 F&G	604.64
116	STA 11+00, 26.46' LT CB TA, 5' DIA, T24 F&G	604.59

LEGEND

[ADJUST]	ADJUST STORM SEWER STRUCTURE FRAME AND LID
[ADJUST SAN]	ADJUST SANITARY SEWER STRUCTURE FRAME AND LID
[PPR]	POWER POLE TO BE RELOCATED BY OTHERS
[TPR]	TELEPHONE POLE TO BE RELOCATED BY OTHERS
---	4" PIPE UNDERDRAIN



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT DRAINAGE & UTILITIES

SCALE: VERT. 1"=5'
 HORIZ. 1"=50'
 DATE 7/22/08

DRAWN BY RG
 CHECKED BY EA/PKB

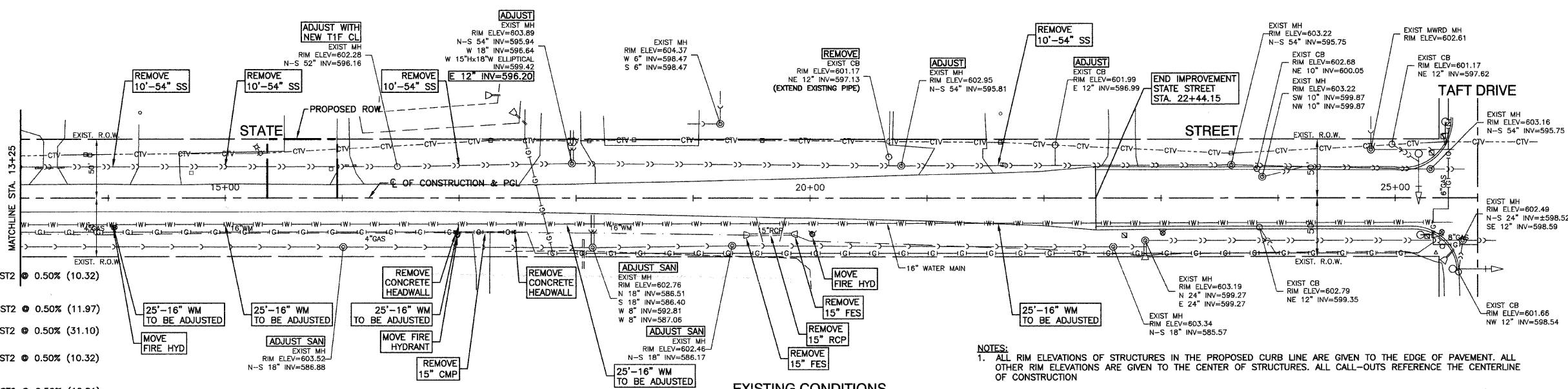
F.A.L. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	018
STA. 13+25		TO STA. 22+44.15		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	M-8003(596)

CONTRACT #63061



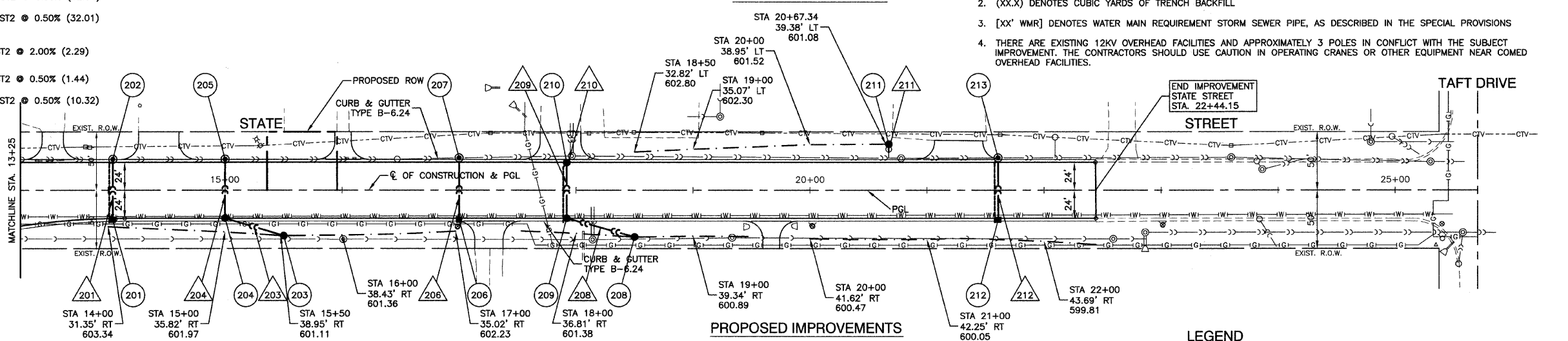
201	STA 14+03.97, 25' RT INLET TA, T24 F&G RIM ELEV = 603.39 W 12" INV = 598.89	208	STA 18+50, 40' RT CB TC, T8G RIM ELEV = 600.45 SW 12" INV = 596.95
202	STA 14+03.97, 26.61' LT MH TA, 7" DIA, T24 F&G RIM EL = 603.39 N-S 54" INV = 596.48 E 4" INV = 600.31 E 12" INV = 598.65	209	STA 17+92.50, 23.5' RT CB TA, 4" DIA, T24 F&G RIM ELEV = 603.32 W 12" INV = 596.57 NE 12" INV = 596.67
203	STA 15+50, 38.95' RT CB TA, 4" DIA, T24 F&G RIM ELEV = 601.11 SW 12" INV = 597.61	210	STA 17+92.50, 23.50' LT CB TA, 4" DIA, T24 F&G RIM ELEV = 601.08 E 12" INV = 597.58 (EXTENSION OF EXISTING PIPE)
204	STA 15+00, 23.5' RT CB TA, 4" DIA, T24 F&G RIM ELEV = 603.69 NE 12" INV = 597.37 W 12" INV = 597.27	211	STA 20+67.34, 39.38' LT CB TC, T8G RIM ELEV = 601.08 E 12" INV = 597.58
205	STA 15+00, 26.66' LT MH TA, 7" DIA, T24 F&G RIM ELEV = 603.69 N-S 54" INV = 596.36 E 12" INV = 597.03	212	STA 21+60.67, 25' RT INLET TA, T24 F&G RIM ELEV = 603.71 W 12" INV = 599.21
206	STA 17+00, 25' RT INLET TA, T24 F&G RIM ELEV = 603.69 W 12" INV = 599.19	213	STA 21+60.67, 27.78' LT MH TA, 8" DIA, T24 F&G RIM ELEV = 603.71 N-S 54" INV = 595.78 E 4" INV = 600.71 E 12" INV = 598.97
207	STA 17+00, 27.75' LT MH TA, 8" DIA, T24 F&G RIM ELEV = 603.69 N-S 54" INV = 596.08 E 12" INV = 598.95		

BENCH MARK: #38
 SQUARE CUT IN SOUTH EDGE OF CONC. BASE OF R.R. SIGNAL, THE WEST OF THE TWO. N.E. CORNER VINCENNES RD. AND TAFT DR. ELEVATION = 606.50



EXISTING CONDITIONS

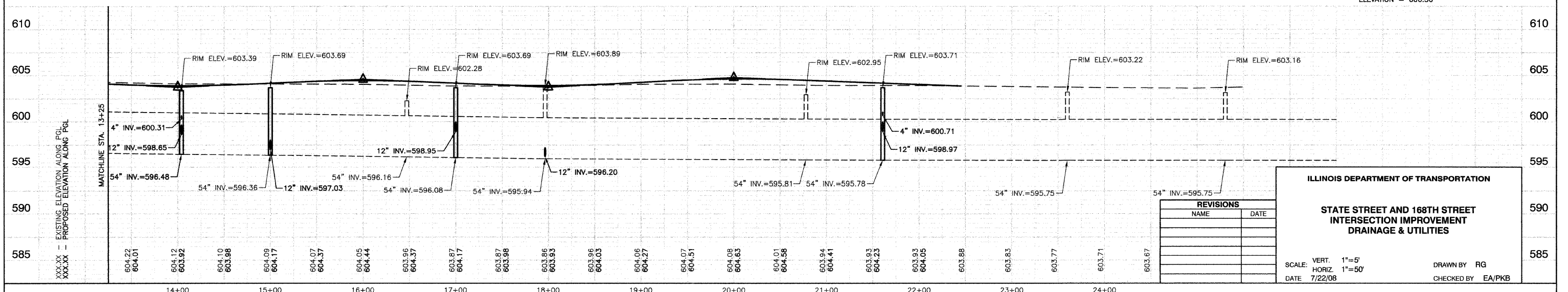
- NOTES:**
1. ALL RIM ELEVATIONS OF STRUCTURES IN THE PROPOSED CURB LINE ARE GIVEN TO THE EDGE OF PAVEMENT. ALL OTHER RIM ELEVATIONS ARE GIVEN TO THE CENTER OF STRUCTURES. ALL CALL-OUTS REFERENCE THE CENTERLINE OF CONSTRUCTION
 2. (XX.X) DENOTES CUBIC YARDS OF TRENCH BACKFILL
 3. [XX' WMR] DENOTES WATER MAIN REQUIREMENT STORM SEWER PIPE, AS DESCRIBED IN THE SPECIAL PROVISIONS
 4. THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.



PROPOSED IMPROVEMENTS

- LEGEND**
- [ADJUST] ADJUST STORM SEWER STRUCTURE FRAME AND LID
 - [ADJUST SAN] ADJUST SANITARY SEWER STRUCTURE FRAME AND LID
 - [PPR] POWER POLE TO BE RELOCATED BY OTHERS
 - [TPR] TELEPHONE POLE TO BE RELOCATED BY OTHERS
 - 4" PIPE UNDERDRAIN

- 201 34' - 12" SST2 @ 0.50% (10.32) [14' WMR]
- 203 48' - 12" SST2 @ 0.50% (11.97)
- 204 32' - 12" SST2 @ 0.50% (31.10) [16' WMR]
- 206 34' - 12" SST2 @ 0.50% (10.32) [14' WMR]
- 208 56' - 12" SST2 @ 0.50% (12.81)
- 209 30' - 12" SST2 @ 0.50% (32.01) [16' WMR]
- 210 2' - 12" SST2 @ 2.00% (2.29)
- 211 5' - 12" SST2 @ 0.50% (1.44)
- 212 33' - 12" SST2 @ 0.50% (10.32) [15' WMR]



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

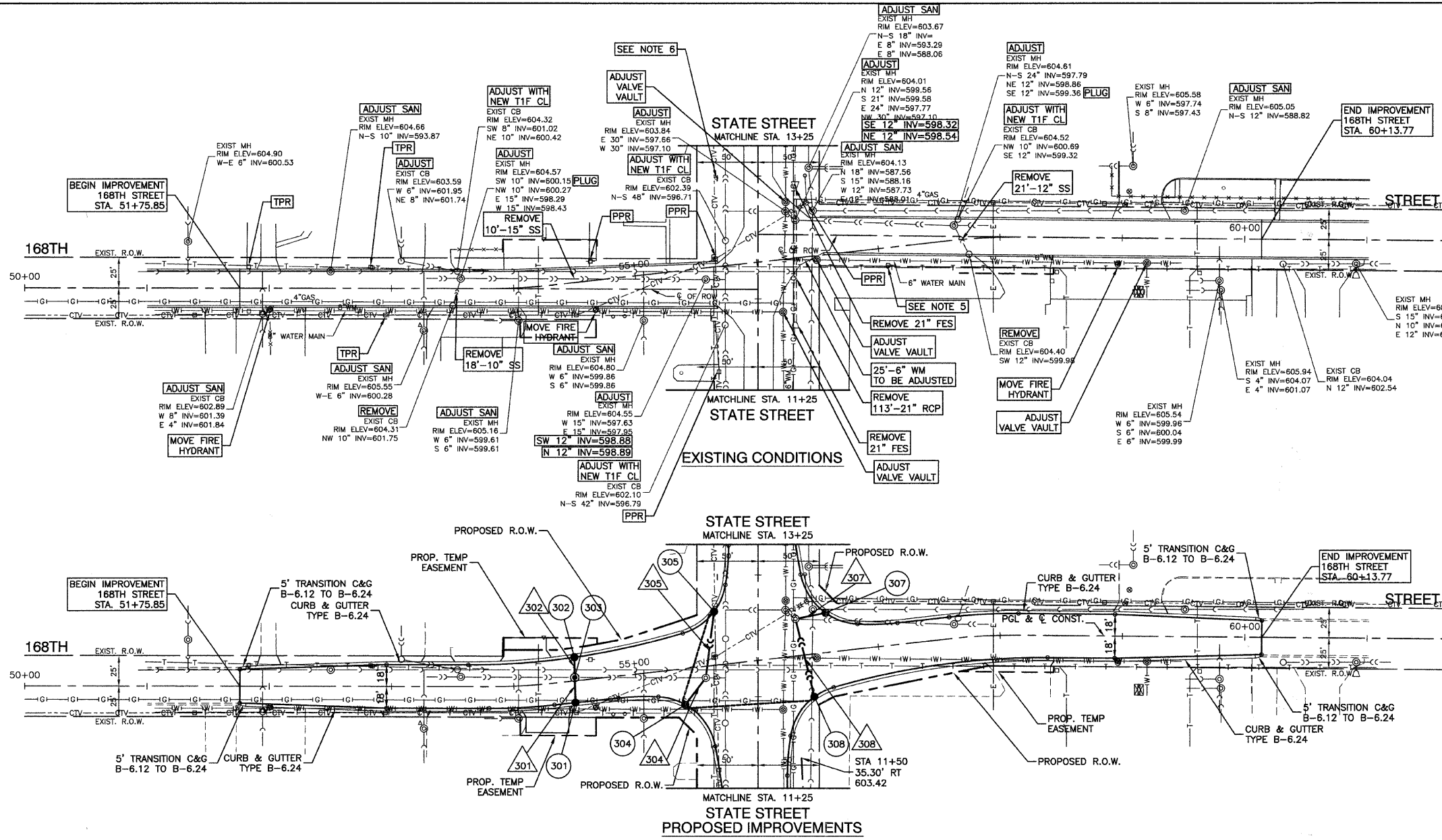
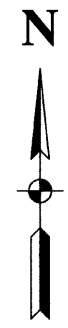
STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT DRAINAGE & UTILITIES

SCALE: VERT. 1"=5'
 HORIZ. 1"=50'
 DATE 7/22/08

DRAWN BY RG
 CHECKED BY EA/PKB

F.A.U. #	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	019
STA. 51+75.85		TO STA. 60+13.77		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



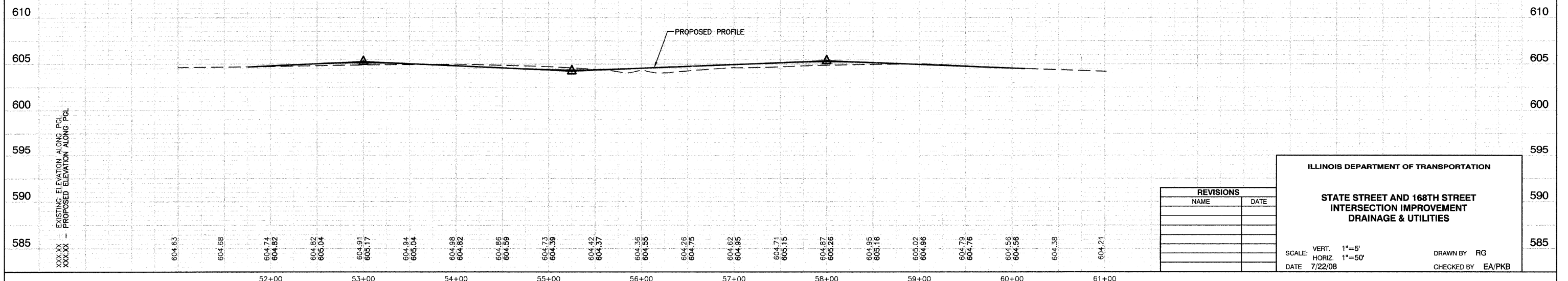
301	STA 54+50, 19.07' RT CB TC, T24 F&G RIM ELEV = 604.23 N 12" INV = 599.73	19' - 12" SST2 @ 1.40% (4.09)
302	STA 54+50, 20.23' LT CB TC, T24 F&G RIM ELEV = 604.21 S 12" INV = 599.71	15' - 12" SST2 @ 1.90% (3.23)
303	STA 54+50 2.95' LT MH TA, 4' DIA TIF CL RIM ELEV = 604.53 E-W 15" INV = 597.95 N 12" INV = 599.42 S 12" INV = 599.46	24' - 12" SST2 @ 1.40% (5.64)
304	STA 55+37.68, 30.41' RT CB TC, T24 F&G RIM ELEV = 603.72 N 4" INV = 600.72 NE 12" INV = 599.22	51' - 12" SST2 @ 0.50% (12.33)
305	STA 12+70 (STATE ST), 36.94' LT CB TC, T24 F&G RIM ELEV = 603.64 S 4" INV = 600.64 E 12" INV = 599.14	24' - 12" SST2 @ 1.30% (5.66)
307	STA 56+60, 33.62' LT CB TC, T24 F&G RIM ELEV = 603.35 SW 12" INV = 598.85	41' - 12" SST2 @ 1.50% (15.33) [22' WMR]
308	STA 12+00 (STATE ST), 47.04' RT CB TC, T24 F&G RIM ELEV = 603.75 W 4" INV = 600.75 NW 12" INV = 599.25	

- NOTES:
- ALL RIM ELEVATIONS OF STRUCTURES IN THE PROPOSED CURB LINE ARE GIVEN TO THE EDGE OF PAVEMENT. ALL OTHER RIM ELEVATIONS ARE GIVEN TO THE CENTER OF STRUCTURES. ALL CALL-OUTS REFERENCE THE CENTERLINE OF CONSTRUCTION
 - (XX.X) DENOTES CUBIC YARDS OF TRENCH BACKFILL
 - [XX' WMR] DENOTES WATER MAIN REQUIREMENT STORM SEWER PIPE, AS DESCRIBED IN THE SPECIAL PROVISIONS
 - THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.
 - EXISTING MWRD MONITORING WELL TO BE CAPPED AND ABANDONED. SEE SPECIAL PROVISION.
 - EXISTING WATER WELL TO BE CAPPED AND ABANDONED. SEE SPECIAL PROVISION.

LEGEND

- ADJUST ADJUST STORM SEWER STRUCTURE FRAME AND LID
- ADJUST SAN ADJUST SANITARY SEWER STRUCTURE FRAME AND LID
- PPR POWER POLE TO BE RELOCATED BY OTHERS
- TPR TELEPHONE POLE TO BE RELOCATED BY OTHERS
- 4" PIPE UNDERDRAIN

BENCH MARK: #38
 SQUARE CUT IN SOUTH EDGE OF CONC. BASE OF R.R. SIGNAL, THE WEST OF THE TWO, N.E. CORNER VINCENNES RD. AND TAFT DR.
 ELEVATION = 606.50

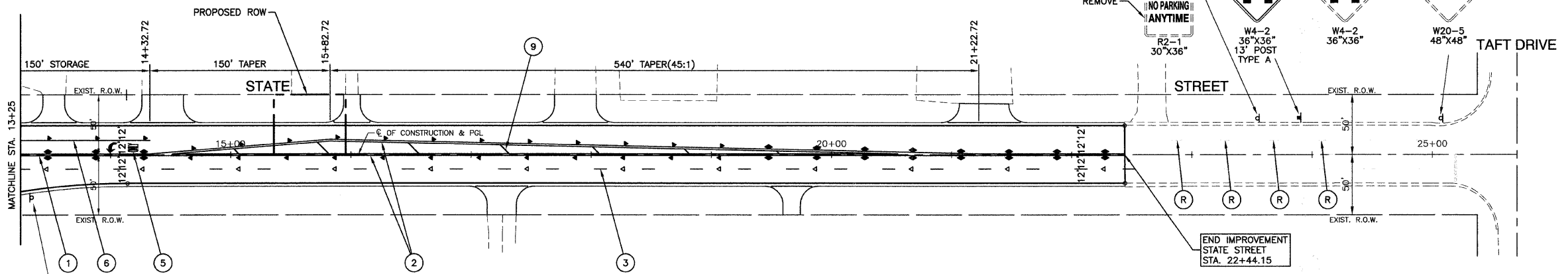
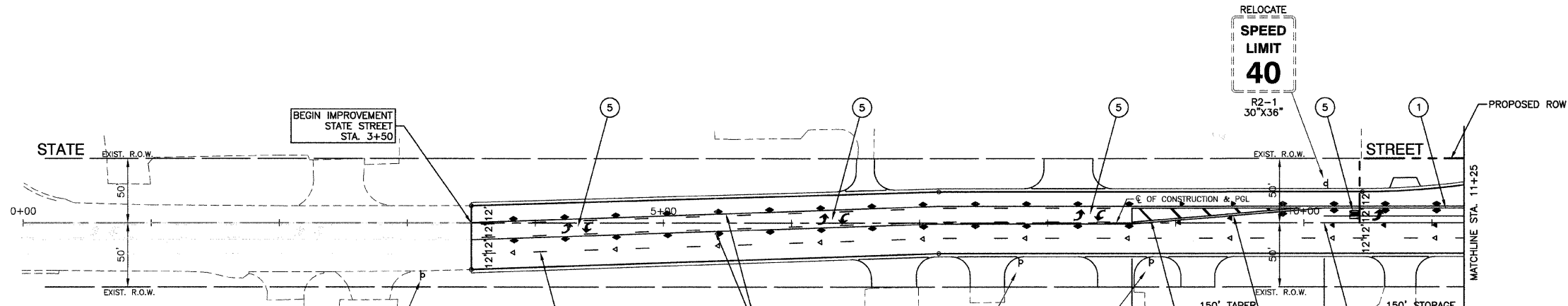


REVISIONS	
NAME	DATE

SCALE: VERT. 1"=5'
 HORIZ. 1"=50'
 DATE 7/22/08
 DRAWN BY RG
 CHECKED BY EA/PKB

F. A. U. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	020
STA. 3+50		TO STA. 22+44.15		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



PAVEMENT MARKING LEGEND

- ① 4" DOUBLE YELLOW CENTERLINE (11" C/C)
- ② 4" DOUBLE YELLOW MEDIAN OUTLINE (11" C/C)
- ③ 4" WHITE SKIP DASH (10' LINE, 30' SPACE)
- ④ 12" YELLOW DIAGONAL (30' C/C)
- ⑤ WHITE LETTERS & SYMBOLS - LARGE
- ⑥ 6" WHITE LANE LINE
- ⑦ 4" YELLOW LINES 5-1/2" C/C WITH SKIP DASH LINE (10' LINE, 30' SPACE)
- ⑧ 24" WHITE STOP BAR
- ⑨ 12" YELLOW DIAGONAL (75' C/C)
- Ⓜ EXISTING PAVEMENT MARKING TO BE REMOVED
- ◀ ONE-WAY AMBER MARKER 40' C/C UNLESS OTHERWISE INDICATED
- ◄ ONE-WAY CRYSTAL MARKER 80' C/C UNLESS OTHERWISE INDICATED
- ◄ TWO-WAY AMBER MARKER 40' C/C UNLESS OTHERWISE INDICATED

SIGN LEGEND

- ◻ EXISTING SIGN
- ◻ PROPOSED SIGN

NOTE:
ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION SHALL BE REMOVED AND STORED OFFSITE. ALL EXISTING SIGNS SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER, VILLAGE PUBLIC WORKS, AND PROPERTY OWNERS (WHERE NOTED). ANY SIGNS OR POSTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE COST OF THE CONTRACTOR.

THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

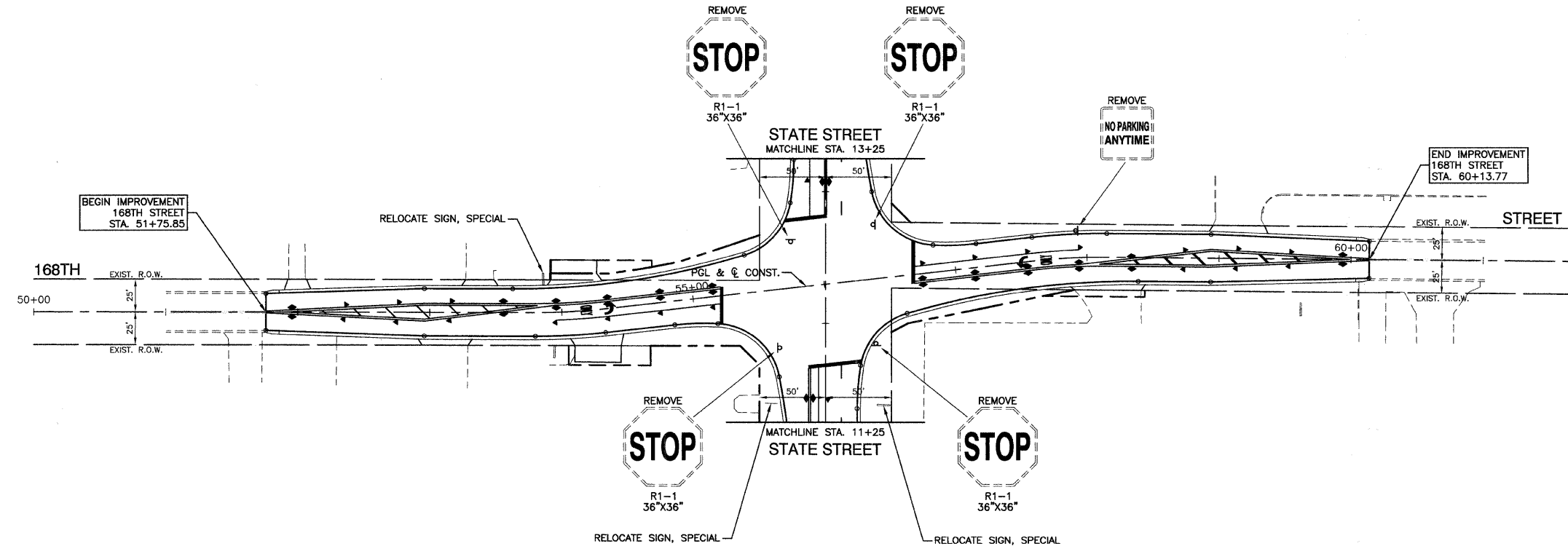
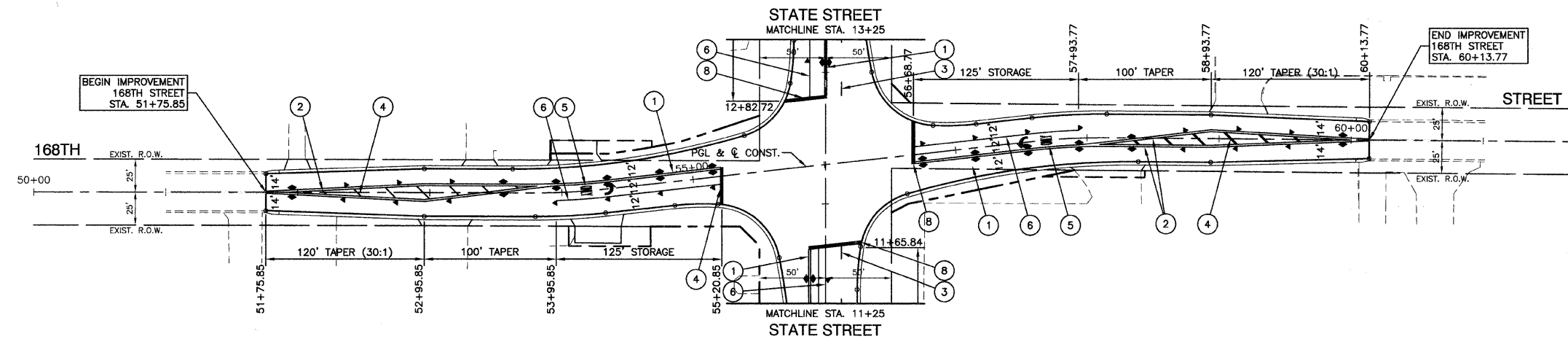
**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
PAVEMENT MARKING & SIGNING**

SCALE: VERT. NA
HORIZ. 1"=50'
DATE 7/22/08

DRAWN BY RG
CHECKED BY EA/PKB

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	021
STA. 51+75.85		TO STA. 60+13.77		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(598)	

CONTRACT #63061



PAVEMENT MARKING LEGEND

- ① 4" DOUBLE YELLOW CENTERLINE (11" C/C)
- ② 4" DOUBLE YELLOW MEDIAN OUTLINE (11" C/C)
- ③ 4" WHITE SKIP DASH (10' LINE, 30' SPACE)
- ④ 12" YELLOW DIAGONAL (30' C/C)
- ⑤ WHITE LETTERS & SYMBOLS - LARGE
- ⑥ 6" WHITE LANE LINE
- ⑦ 4" YELLOW LINES 5-1/2" C/C WITH SKIP DASH LINE (10' LINE, 50' SPACE)
- ⑧ 24" WHITE STOP BAR
- ⑨ 12" YELLOW DIAGONAL (75' C/C)
- Ⓜ EXISTING PAVEMENT MARKING TO BE REMOVED
- ◀ ONE-WAY AMBER MARKER 40' C/C UNLESS OTHERWISE INDICATED
- ◁ ONE-WAY CRYSTAL MARKER 80' C/C UNLESS OTHERWISE INDICATED
- ◆ TWO-WAY AMBER MARKER 40' C/C UNLESS OTHERWISE INDICATED

SIGN LEGEND

- ◻ EXISTING SIGN
- ◼ PROPOSED SIGN

NOTE:
ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION SHALL BE REMOVED AND STORED OFFSITE. ALL EXISTING SIGNS SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER, VILLAGE PUBLIC WORKS, AND PROPERTY OWNERS (WHERE NOTED). ANY SIGNS OR POSTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE COST OF THE CONTRACTOR.

THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
PAVEMENT MARKING & SIGNING**

SCALE: VERT. NA
HORIZ. 1"=50'
DATE 7/22/08

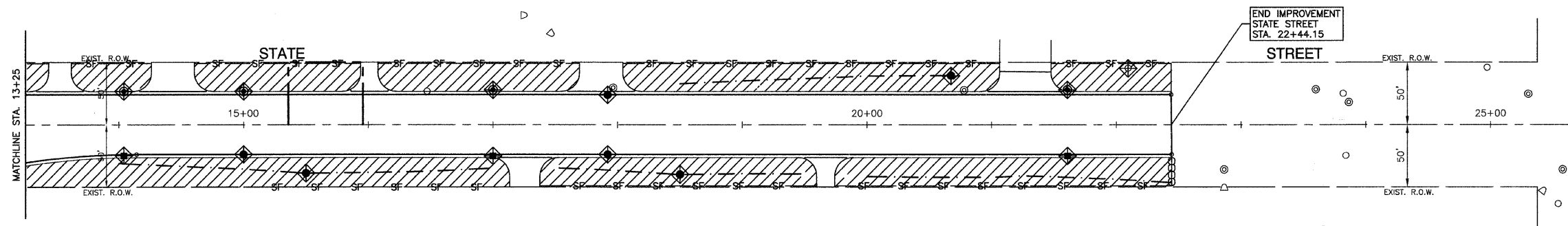
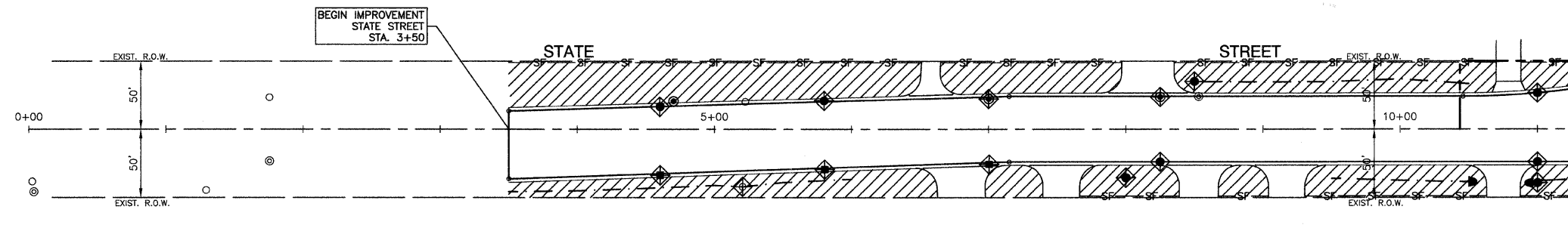
DRAWN BY RG
CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473
708.381-6700 FAX 708.381-5828
ILLINOIS DESIGN FIRM REGISTRATION NO. 18401128

07345-PMKG-01

F. A. U. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	022
STA. 3+50		TO STA. 22+44.15		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(996)	

CONTRACT #63061



LEGEND

- SF— PERIMETER EROSION BARRIER (TO BE PLACED 1' FROM ROW)
- TOPSOIL, FURNISH AND PLACE, 4" SEEDING, CLASS 2A WITH EROSION CONTROL BLANKET
- INLET FILTER
- TEMPORARY DITCH CHECKS

NOTES

AREAS TO BE SEEDDED AS SHOWN ON PLAN SHALL BE FERTILIZED AS SPECIFIED PER SECTION 250.04 OF THE STANDARD SPECIFICATIONS

NOTE:
THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

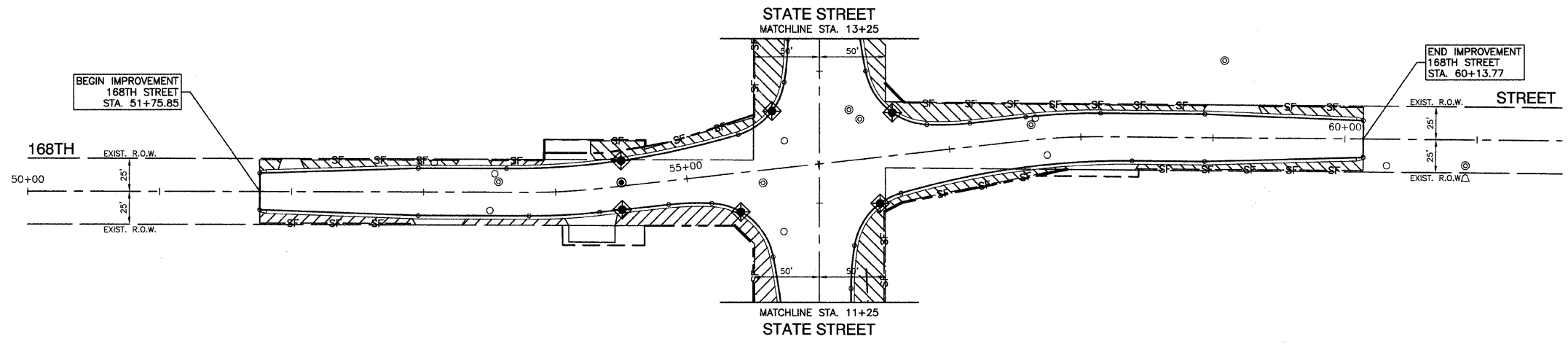
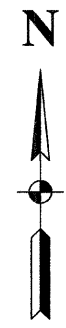
STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT LANDSCAPING & EROSION CONTROL

SCALE: VERT. NA
HORIZ. 1"=50'
DATE 7/22/08

DRAWN BY RG
CHECKED BY EA/PKB

F. A. U. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	023
STA. 51+75.85		TO STA. 60+13.77		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



LEGEND

- SF — PERIMETER EROSION BARRIER (TO BE PLACED 1' FROM ROW)
- TOPSOIL, FURNISH AND PLACE, 4" SEEDING, CLASS 2A WITH EROSION CONTROL BLANKET
- INLET FILTER

NOTES

AREAS TO BE SEEDDED AS SHOWN ON PLAN SHALL BE FERTILIZED AS SPECIFIED PER SECTION 250.04 OF THE STANDARD SPECIFICATIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT LANDSCAPING & EROSION CONTROL

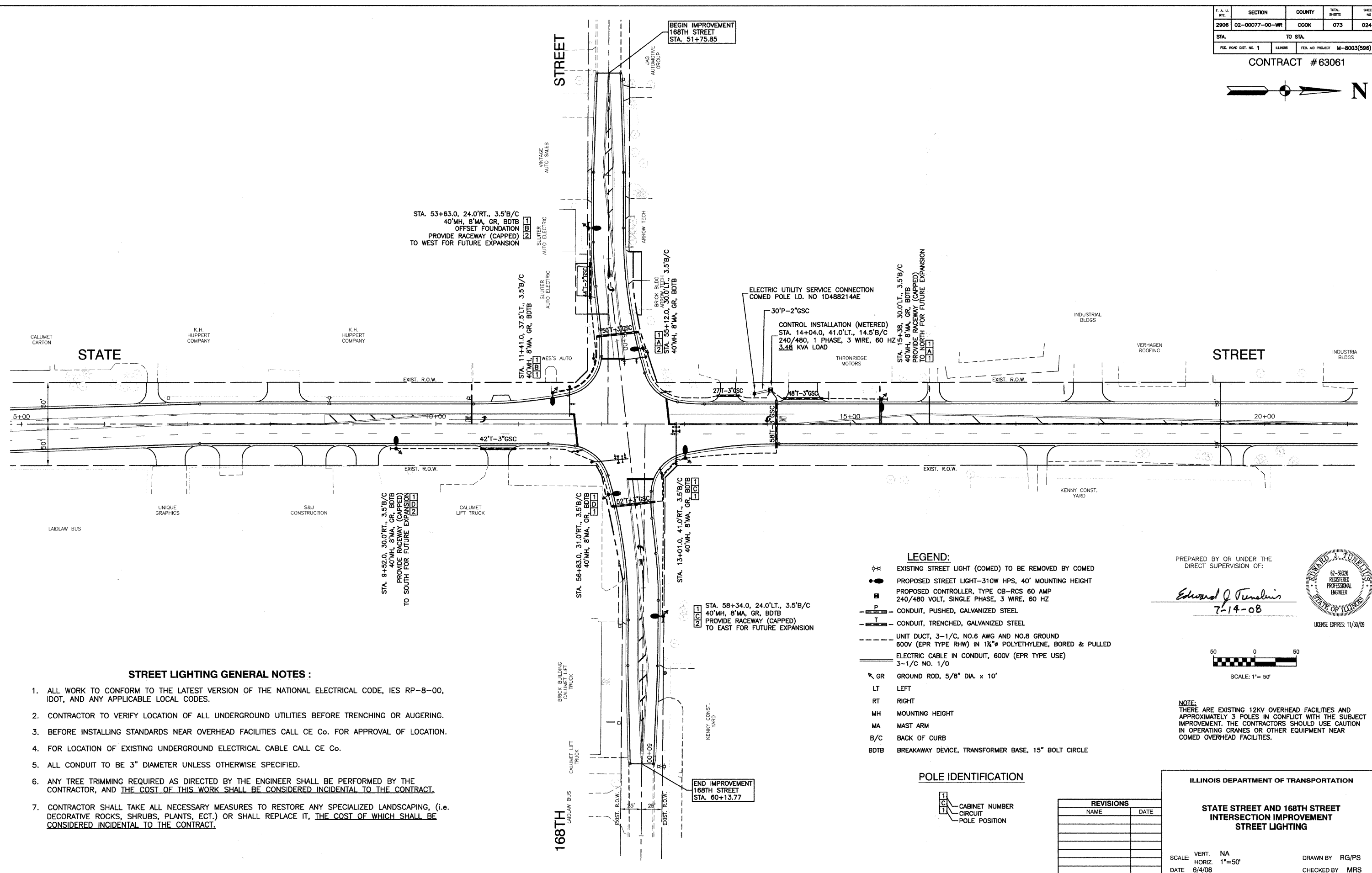
SCALE: VERT. NA
 HORIZ. 1" = 50'
 DATE 7/22/08
 DRAWN BY RG
 CHECKED BY EA/PKB

REVISIONS	
NAME	DATE

NOTE:
 THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

F. A. U. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-0077-00-WR	COOK	073	024
STA.	TO STA.			
FED. ROAD DIST. NO. 1	SLIPRIP	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



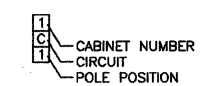
STREET LIGHTING GENERAL NOTES :

1. ALL WORK TO CONFORM TO THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE, IES RP-8-00, IDOT, AND ANY APPLICABLE LOCAL CODES.
2. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING OR AUGERING.
3. BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES CALL CE Co. FOR APPROVAL OF LOCATION.
4. FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL CABLE CALL CE Co.
5. ALL CONDUIT TO BE 3" DIAMETER UNLESS OTHERWISE SPECIFIED.
6. ANY TREE TRIMMING REQUIRED AS DIRECTED BY THE ENGINEER SHALL BE PERFORMED BY THE CONTRACTOR, AND THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
7. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING, (i.e. DECORATIVE ROCKS, SHRUBS, PLANTS, ECT.) OR SHALL REPLACE IT, THE COST OF WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

LEGEND:

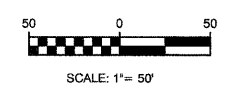
- ⊕ Existing Street Light (COMED) TO BE REMOVED BY COMED
- Proposed Street Light—310W HPS, 40' MOUNTING HEIGHT
- Proposed Controller, TYPE CB-RCS 60 AMP 240/480 VOLT, SINGLE PHASE, 3 WIRE, 60 HZ
- P— CONDUIT, PUSHED, GALVANIZED STEEL
- T— CONDUIT, TRENCHED, GALVANIZED STEEL
- UNIT DUCT, 3-1/C, NO.6 AWG AND NO.8 GROUND 600V (EPR TYPE RHW) IN 1 1/2" POLYETHYLENE, BORED & PULLED
- E— ELECTRIC CABLE IN CONDUIT, 600V (EPR TYPE USE) 3-1/C NO. 1/0
- GR GROUND ROD, 5/8" DIA. x 10'
- LT LEFT
- RT RIGHT
- MH MOUNTING HEIGHT
- MA MAST ARM
- B/C BACK OF CURB
- BDTB BREAKAWAY DEVICE, TRANSFORMER BASE, 15" BOLT CIRCLE

POLE IDENTIFICATION



PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

Edward J. Funelin
7-14-08



NOTE:
THERE ARE EXISTING 12KV OVERHEAD FACILITIES AND APPROXIMATELY 3 POLES IN CONFLICT WITH THE SUBJECT IMPROVEMENT. THE CONTRACTORS SHOULD USE CAUTION IN OPERATING CRANES OR OTHER EQUIPMENT NEAR COMED OVERHEAD FACILITIES.

REVISIONS	
NAME	DATE

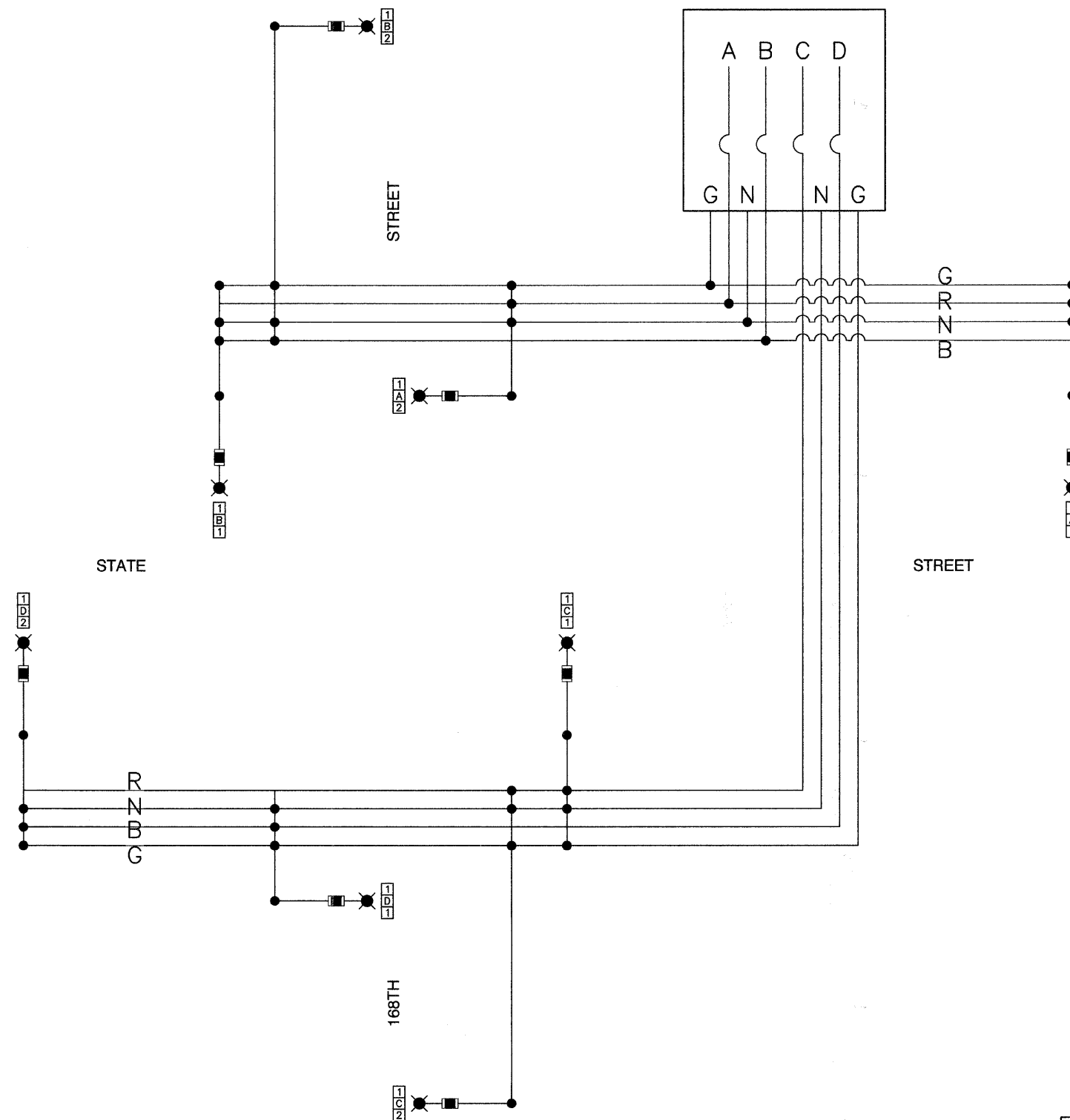
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HORIZ. 1"=50'
DATE: 6/4/08
DRAWN BY: RG/PS
CHECKED BY: MRS

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	025
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

CIRCUIT	WATTS	AMPS
A	620	3.0
B	620	3.0
C	620	3.0
D	620	3.0
TOTAL LOAD	2480	12.0

CONTROLLER #1
240/480 V, 1 PHASE, 3 WIRE, 60 HERTZ



- LEGEND**
- LUMINAIRE, 310W HPS
 - FUSE, 4.0 AMP
 - A1 LUMINAIRE CIRCUIT
 - CIRCUIT BREAKER, SINGLE POLE
 - CONNECTION

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
STREET LIGHTING
WIRING DIAGRAM**

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

DRAWN BY RG/PS
CHECKED BY PAP

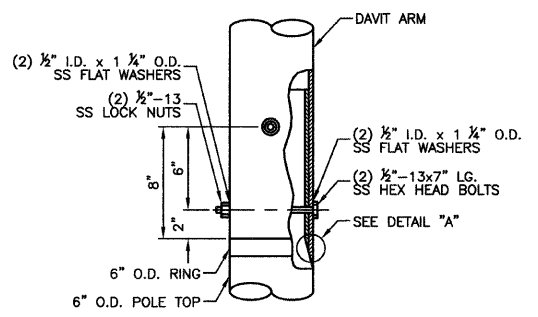
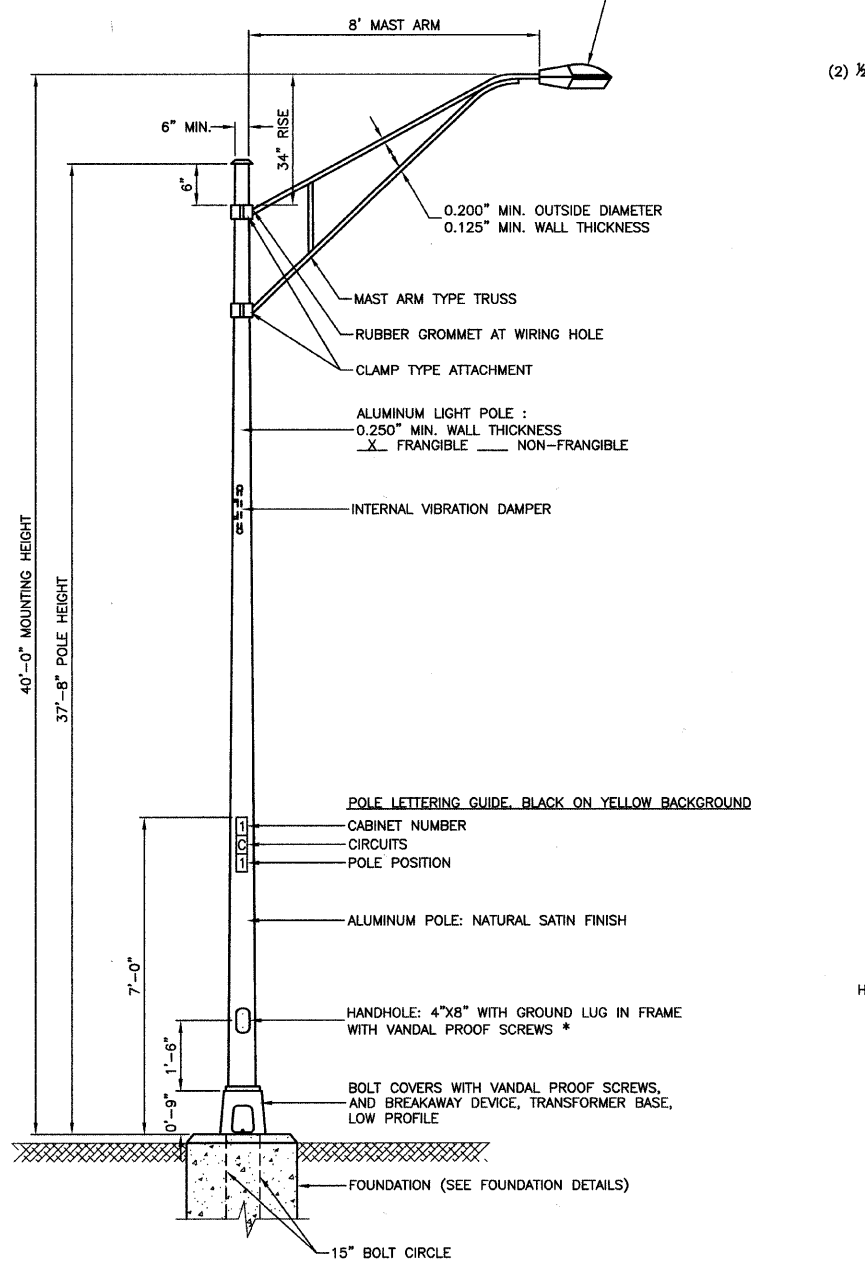
ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
708/331-6700 FAX 708/331-5828
ILLINOIS DESIGN FIRM REGISTRATION NO. 1840120.

07345-LGHT-02

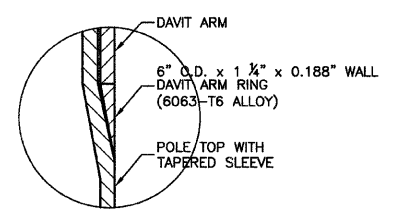
F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	026
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(598)	

CONTRACT #63061

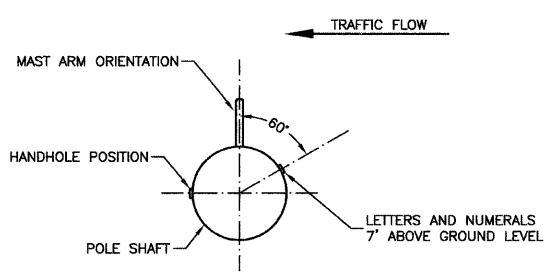
LUMINAIRE:
 310 WATT HIGH PRESSURE SODIUM LAMP
 240 VOLT BALLAST
 I.E.S. TYPE: MC III LIGHT DISTRIBUTION
 LENS TYPE: FLAT
 INITIAL LAMP LUMENS: 37,000
 LAMP LIFE: 24,000 HOURS



CONNECTION DETAIL

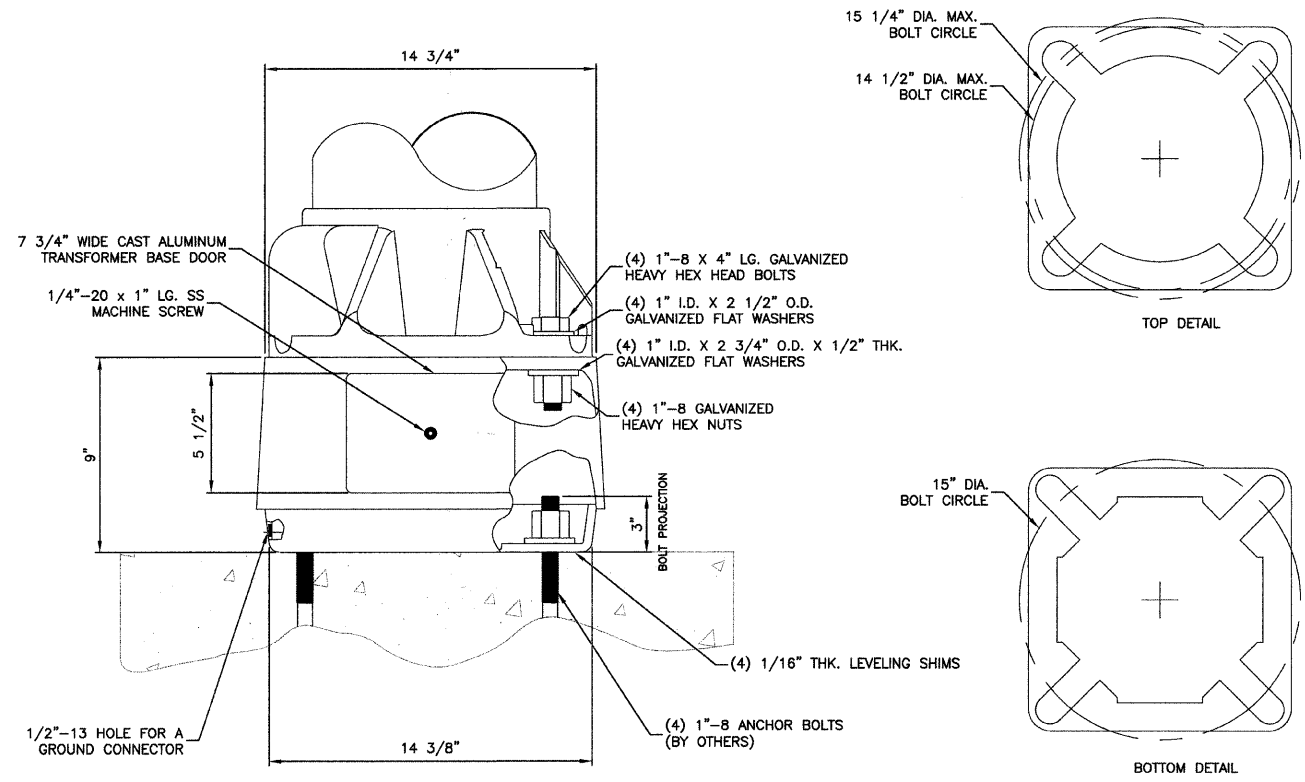


DETAIL "A"

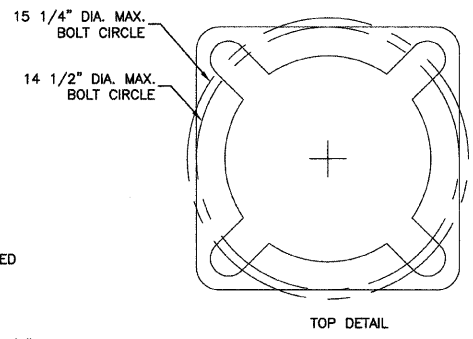


POSITION OF HANDHOLE AND NUMERALS ON POLE

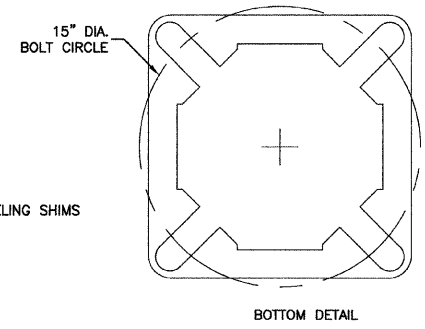
IMPORTANT NOTE:
 TRANSFORMER BASE AND LIGHTPOLE TO BE LEVELED AS ONE UNIT, USING LEVELING SHIMS IF REQUIRED.



BREAKAWAY TRANSFORMER BASE DETAIL



TOP DETAIL



BOTTOM DETAIL

- NOTES:**
- THE LIGHTING UNITS SHALL MEET MASHTO DESIGN CRITERIA. DESIGN FOR 90 M.P.H. WIND WITH 30% GUST AND 75 POUND LUMINAIRE HAVING AN E.P.A. OF 1.6 SQ. FT. AND PROPER ICE LOADING.
 - ALUMINUM ALLOY 6063-T6 SHALL BE USED.

* - BUTTON HEAD SOCKET SET SCREW TYPE OF SCREWS PREFERRED FOR THIS APPLICATION

TYPICAL POLE INSTALLATION (40' MH)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT STREET LIGHTING DETAILS

SCALE: VERT. NA
 HORIZ. NA
 DATE 7/22/08

DRAWN BY PS
 CHECKED BY PAP

ROBINSON ENGINEERING, LTD.
 1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
 (708) 381-6100 FAX (708) 381-9826
 ILLINOIS DESIGN FIRM REGISTRATION NO. 18401121

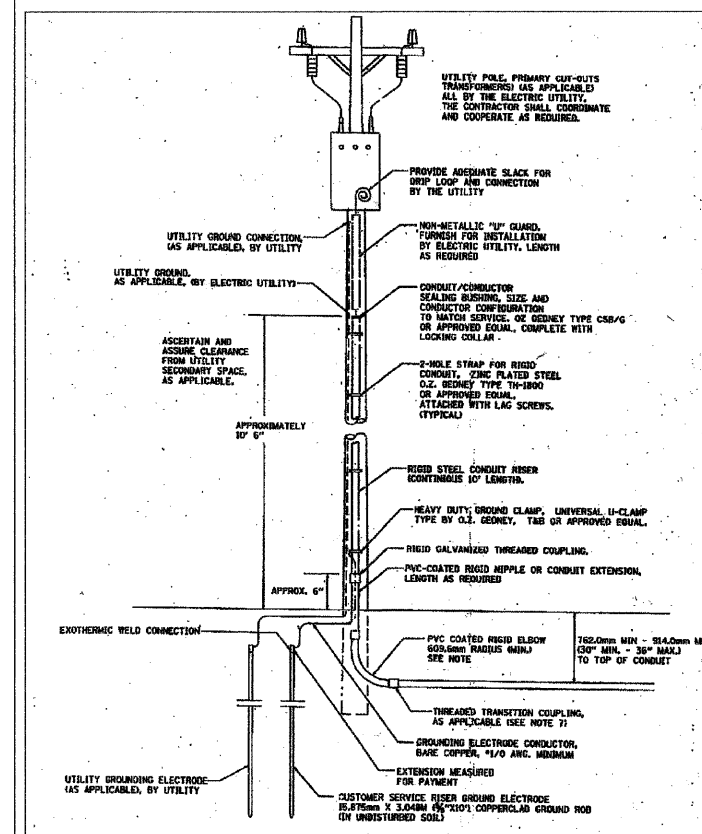
07345-LIGHT-03

F. A. U. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2908	02-00077-00-WR	COOK	073	027
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

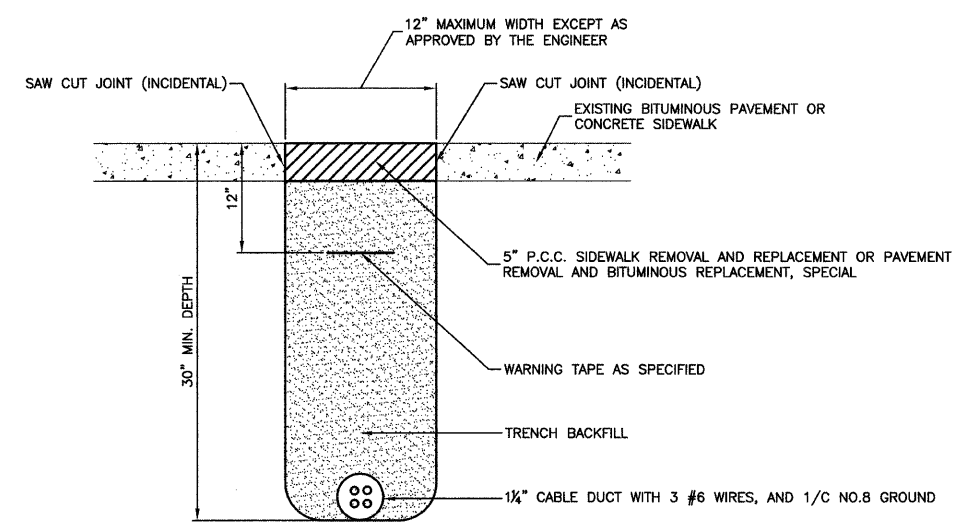
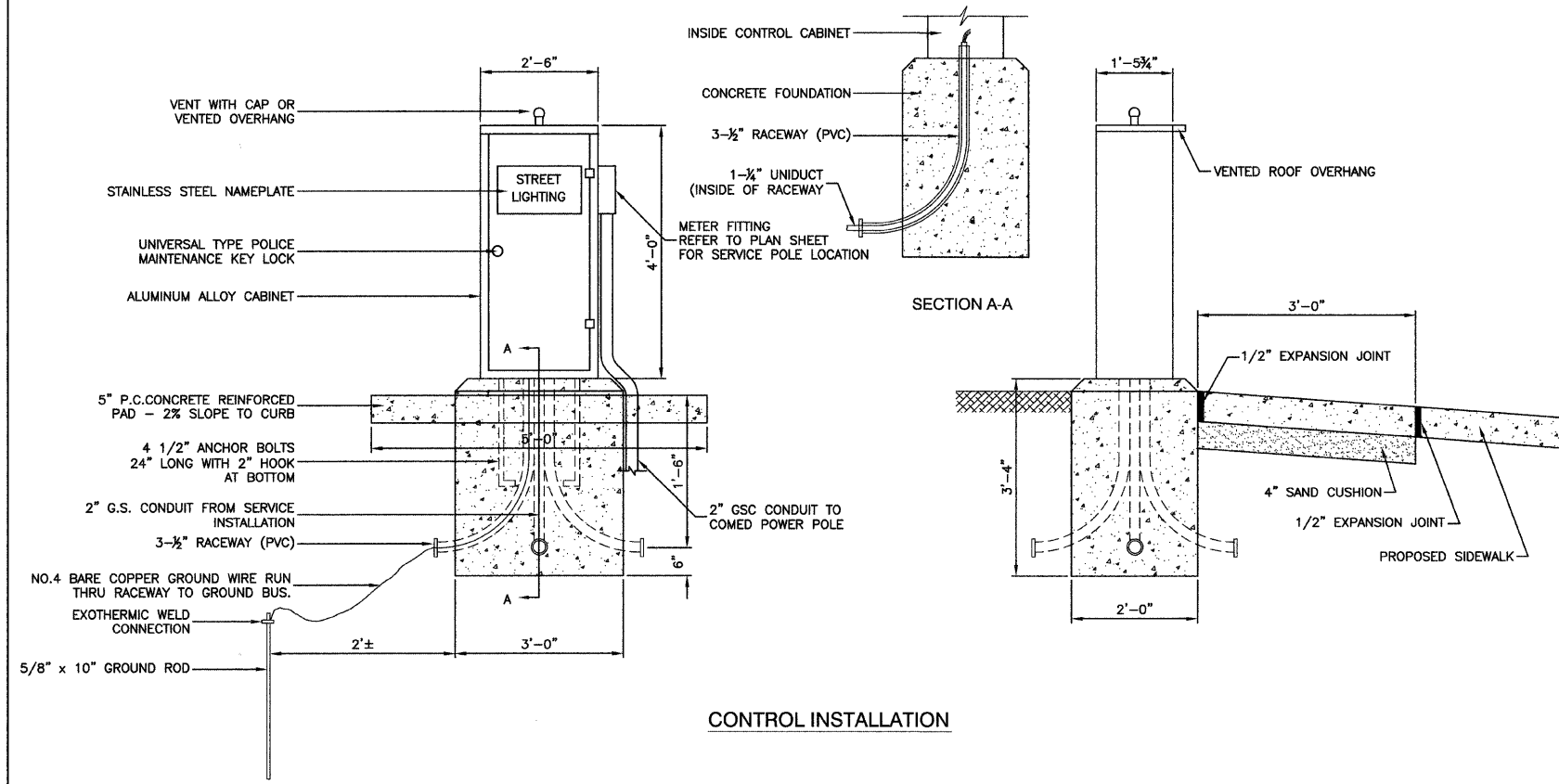
CONTRACT #63061

240/480 VOLT, 1Ø, 3 WIRE, 60HZ SERVICE
3.48 KVA LOAD, CONTROLLER #1

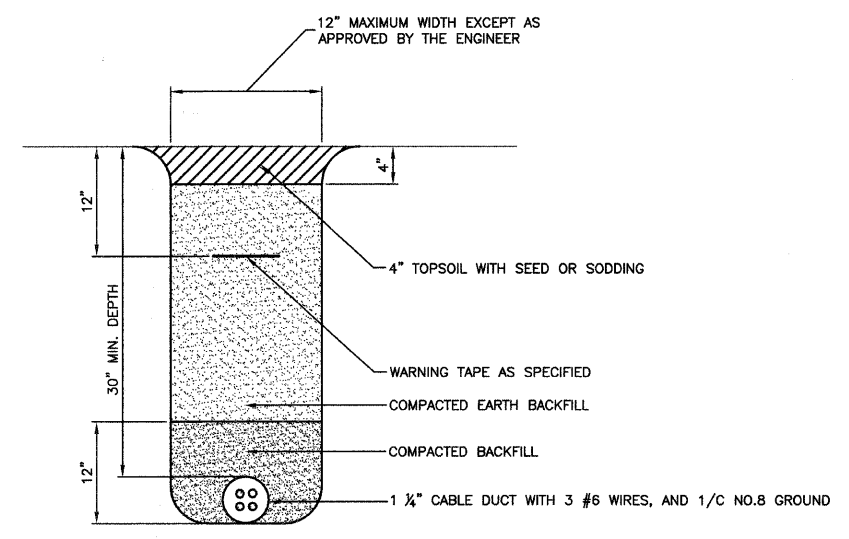
- NOTES**
- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
 - UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF ELECTRIC UTILITY SERVICE INSTALLATION.
 - CONDUIT AND CONDUCTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED.
 - PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MP RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
 - THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, RISER AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
 - THE SERVICE METER SOCKET, AS APPLICABLE, MOUNTED ELSEWHERE AS INDICATED SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRICAL UTILITY SERVICE INSTALLATION PAY ITEM.
 - THE SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT OR CONCRETE, THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS EMBEDDED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
 - PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY. FURNISH ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A CORRECT SERVICE INSTALLATION.



SERVICE CONNECTION FOR ALL CONTROLLERS



BITUMINOUS PAVEMENT OR CONCRETE SIDEWALK REMOVAL AND REPLACEMENT



TRENCH DETAIL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT STREET LIGHTING DETAILS

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

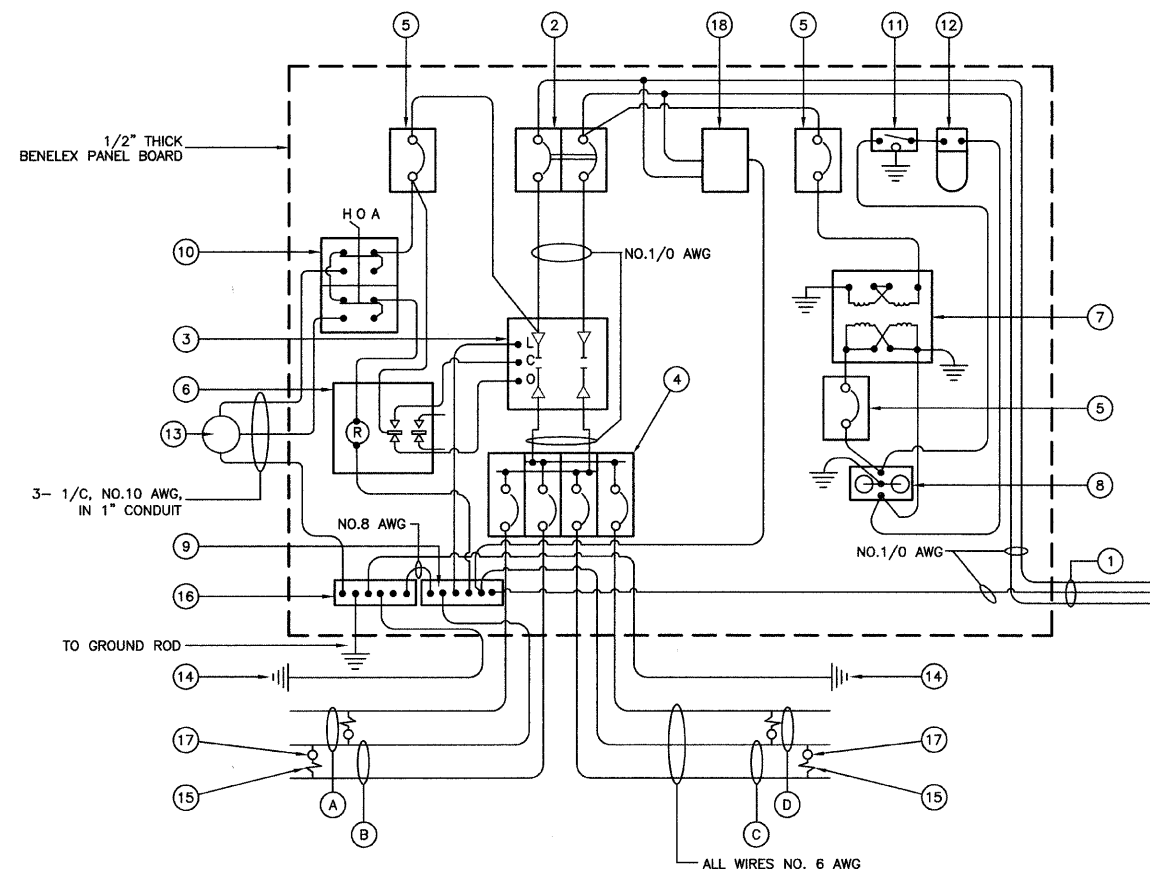
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CHECKED BY PAP

ROBINSON ENGINEERING, LTD.
17000 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
708 391-6700 FAX 708 391-3626
ILLINOIS DESIGN FIRM REGISTRATION NO. 146001102

07345-LIGHT-03

F. A. U. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2908	02-00077-00-WR	COOK	073	028
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

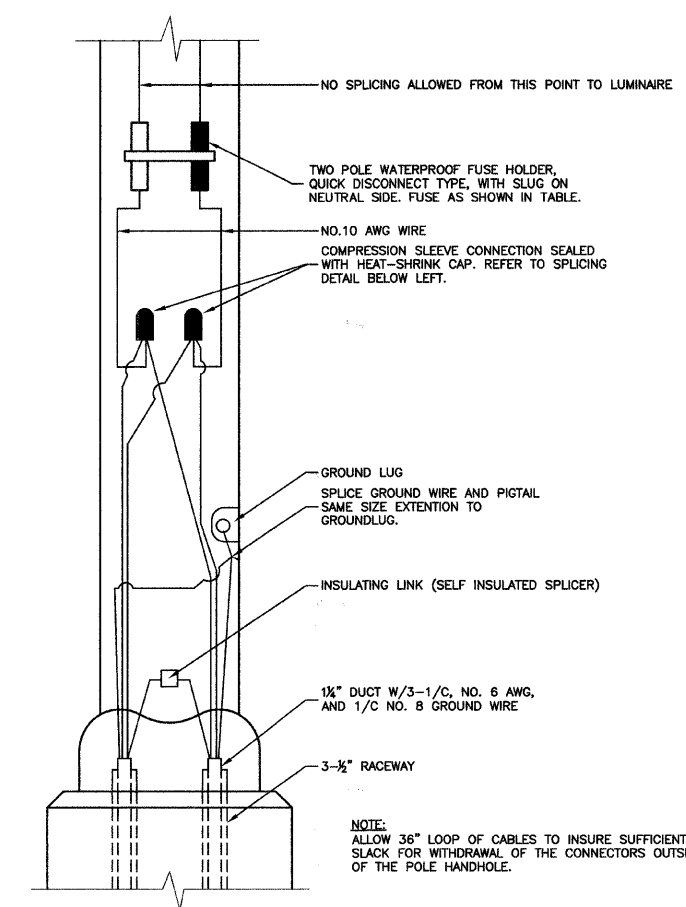
CONTRACT #63061



CONTROLLER WIRING DIAGRAM

GENERAL NOTES FOR CONTROL CABINET

- ENTIRE CONTROL CABINET SHALL BE GROUNDED.
- ALL WIRING SHALL BE TAGGED WITH SELF-STICKING WIRE MARKERS.
- GROUND BUS TO BE COLOR CODED GREEN, NEUTRAL BUS WHITE, AND BONDED TO CABINET ENCLOSURE BY LISTED PRESSURE CONNECTORS OR LISTED CLAMPS.
- ALL INTERNAL CONTROLLER WIRING TO BE NO.12 AWG UNLESS OTHERWISE SPECIFIED.
- CABINET WIRING INSULATION TO BE TYPE XHHW OR APPROVED EQUAL.



POLE HANDHOLE WIRING DIAGRAM
(TYPICAL FOR SINGLE LUMINAIRE INSTALLATION)

CONTROLLER WIRING DIAGRAM LEGEND

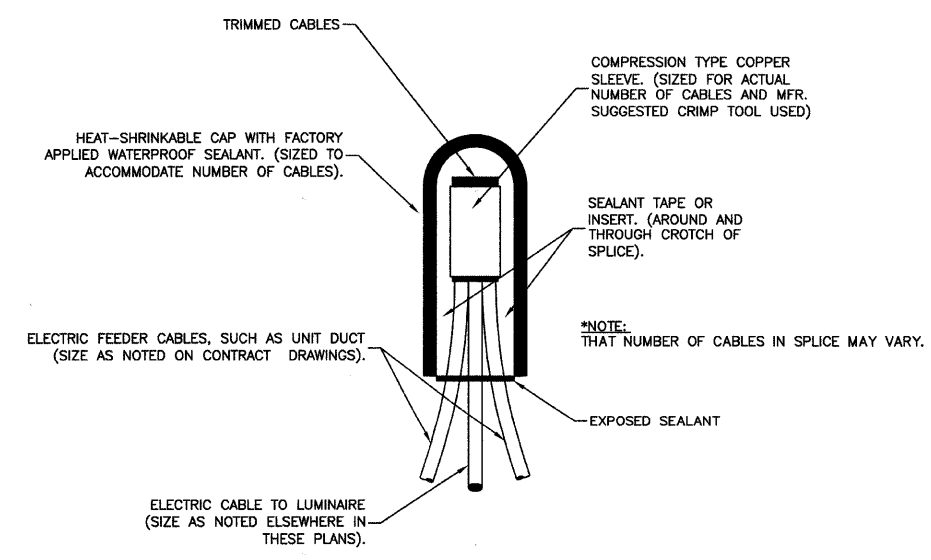
- ① 3-1/C, NO. 1/0, 600V SERVICE WIRE IN 2" DIA. GALVANIZED STEEL CONDUIT FOR 240/480 VOLT, 1Ø, 3 WIRE, 60HZ. SERVICE.
- ② (1) 60 AMP MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 480 V. PROVIDE WARNING NAMEPLATE: "CAUTION: INCOMING POWER IS ON WHEN MAIN BREAKER IS OFF."
- ③ (1) 60 AMP REMOTE CONTROL CONTACTOR SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, MINIMUM 60 AMP, 600 VOLT
- ④ (4) 30 AMP CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP RATING NEMA - 14000 AMP AT 240 VOLTS.
- ⑤ (3) 20 AMP CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA 14000 AMP AT 240 V.
- ⑥ (1) 20 AMP, 1 POLE DOUBLE THROW, 240 VOLT RELAY
- ⑦ (1) 1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240x480/120x240 VOLT, 60 HZ.
- ⑧ (1) 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE.
- ⑨ NEUTRAL BUS BAR, 1/4"x1"x12" LONG MOUNTED ON PANEL WITH TAPS.
- ⑩ 3 POSITION SELECTOR SWITCH
- ⑪ SWITCH FOR LIGHTING FIXTURE MOUNTED IN BOX.
- ⑫ WEATHER-PROOF INCANDESCENT LIGHTING FIXTURE WITH 60 WATT, 120 V LAMP.
- ⑬ PHOTOCCELL MOUNTED TO TOP OF NEAREST LIGHT POLE, 240 V.
- ⑭ NO. 8 AWG INSULATED GROUND WIRE
- ⑮ IN-LINE TWO POLE FUSEHOLDER WITH FUSE AS NOTED IN FUSE TABLE
- ⑯ GROUND BUS BAR 1/4"x1"x12" LONG MOUNTED ON PANEL WITH TAPS.
- ⑰ LUMINAIRE, 310W HPS
- ⑱ SURGE SUPPRESSOR
- A CIRCUIT
- B CIRCUIT
- C CIRCUIT
- D CIRCUIT

LIGHTING GENERAL NOTES

- ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
- CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING OR AUGERING.
- BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES CALL C.E. Co. FOR APPROVAL OF LOCATION.
- FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL CABLE CALL C.E. Co.
- SIZE ALL CONDUIT AS SPECIFIED ON DRAWINGS.
- CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING, (I.E. DECORATIVE ROCKS, SHRUBS, PLANTS, ECT.) OR SHALL REPLACE IT, THE COST OF WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

NOMINAL WATTAGE	FUSE SIZE
310	4.0 AMP

LUMINAIRE FUSE SIZE TABLE



SPLICING ELECTRIC CABLES
BASIC MATERIALS AND METHODS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
STREET LIGHTING DETAILS

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

DRAWN BY PS
CHECKED BY PAP

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60476
(708) 331-8700 FAX (708) 331-3828
ILLINOIS DESIGN FIRM REGISTRATION NO. 164001128

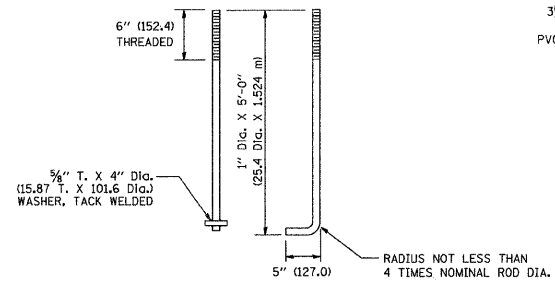
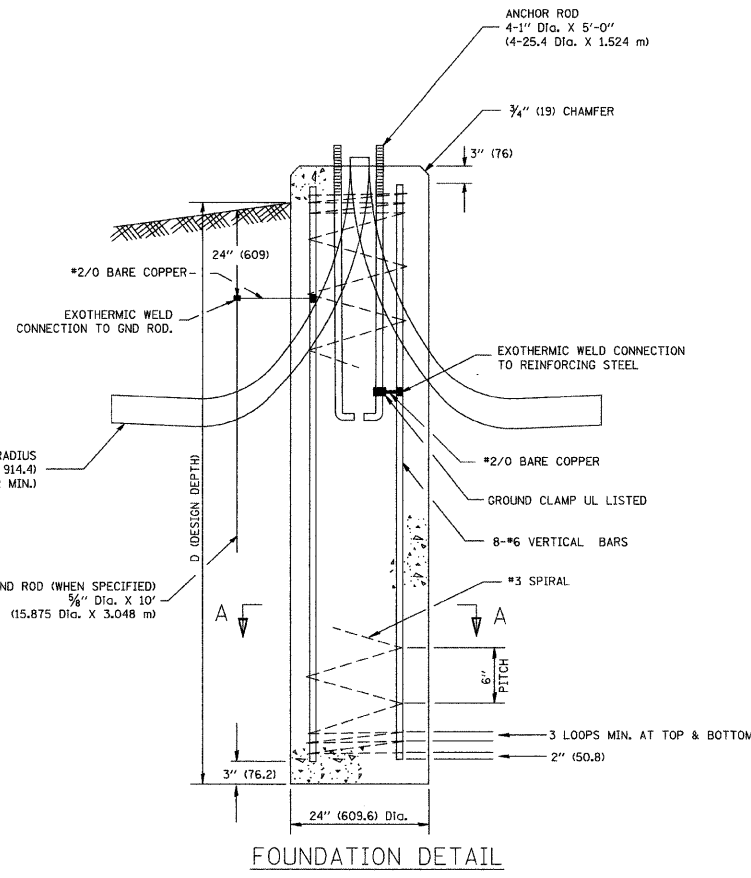
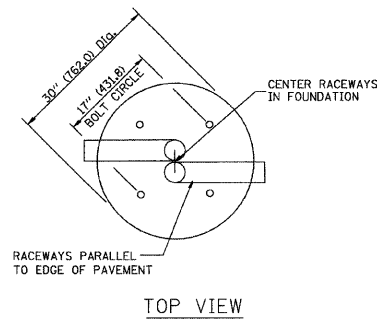
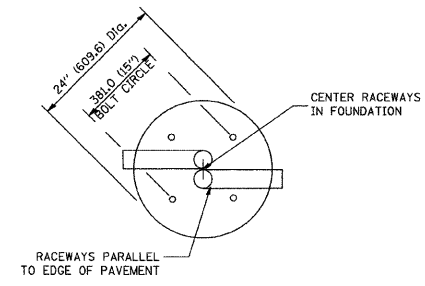
07345-LIGHT-03

F. A. U. RILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2808	02-00077-00-WR	COOK	073	029
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

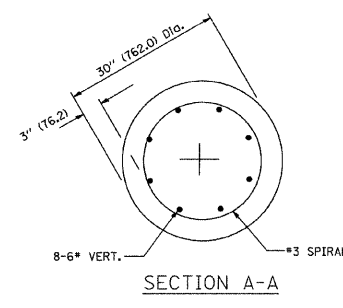
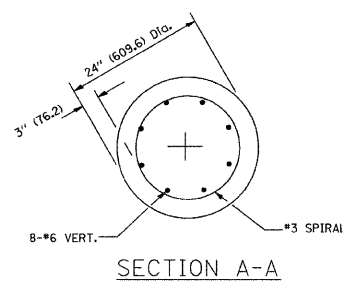
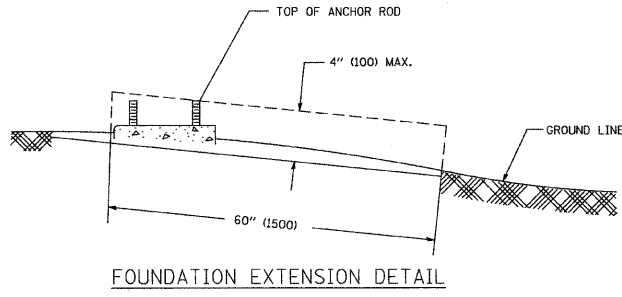
LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SQ. FT.	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4 IN. (20 mm).
- THE CONCRETE SHALL BE CLASS S1. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 0H, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



REVISIONS	
NAME	DATE
	04/22/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

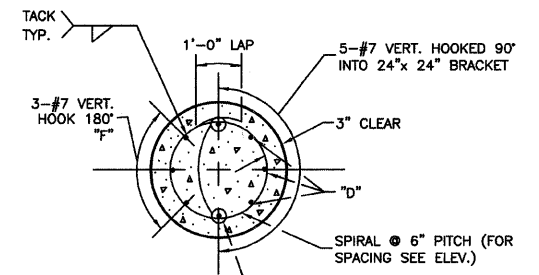
LIGHT POLE FOUNDATION
40' (12.192 m) TO 47 1/2' (14.478 m) M.H.
15' (381) BOLT CIRCLE

SCALE: VERT. NONE
HORIZ. NONE

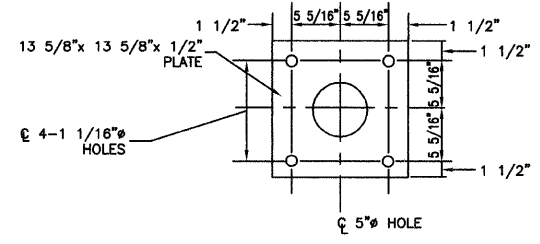
DATE: _____ DRAWN BY: _____
CHECKED BY: _____

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

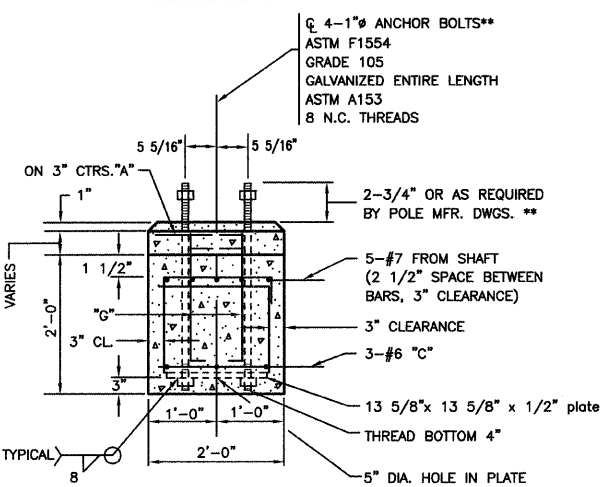
CONTRACT #63061



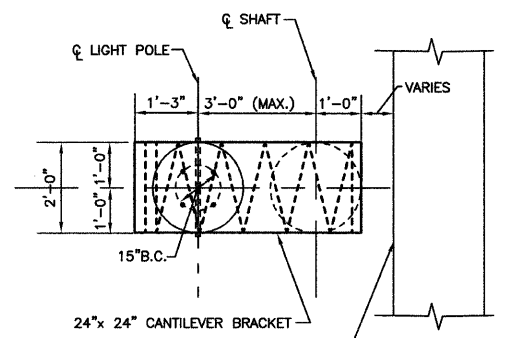
SECTION A-A



ANCHOR BOLT PLATE



SECTION B-B

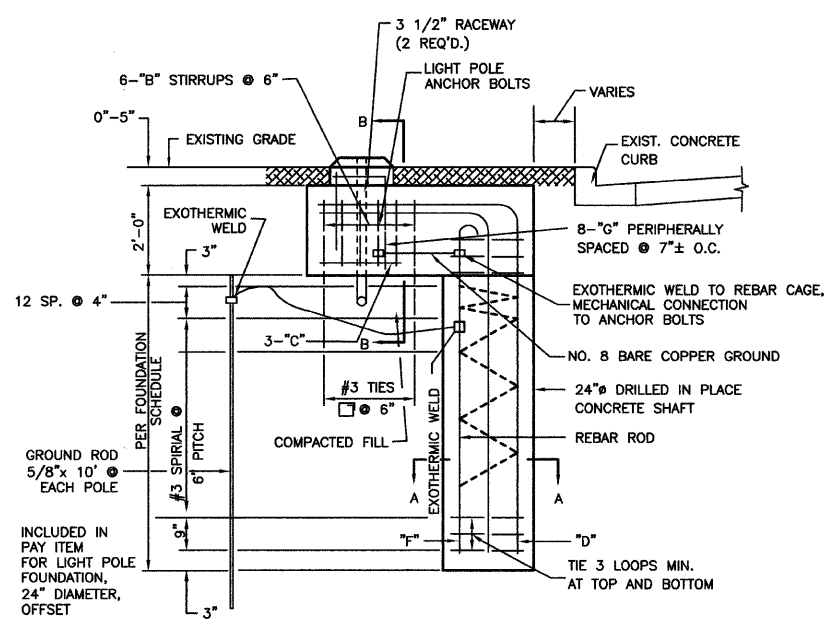


PLAN - CANTILEVERED BRACKET

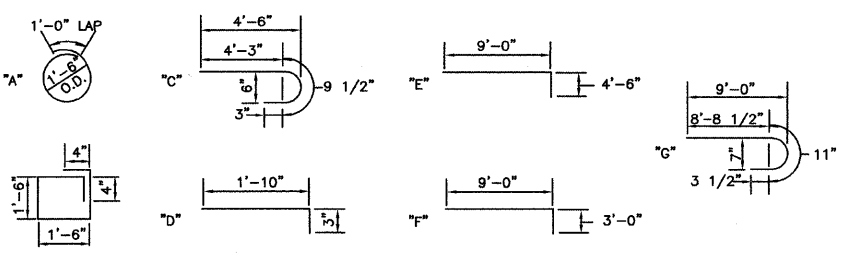
****NOTE:**
THE TOP OF THE ANCHOR BOLTS SHOULD NOT PROJECT MORE THAN 4" ABOVE A 60" CHORD ALIGNED RADIALLY TO THE CENTERLINE OF THE HIGHWAY AND CONNECTING ANY POINT WITH- IN THE LENGTH OF THE CHORD, ON THE GROUND SURFACE ON ONE SIDE OF THE SUPPORT TO A POINT ON THE GROUND SURFACE ON THE OTHER SIDE.

- NOTE:**
1. CONCRETE SHALL BE 3500 PSI AT 14 DAYS. (CLASS SI)
 2. REINFORCING BARS SHALL BE OF NEW BILLET STEEL ASTM M42M (M42) AND DEFORMED
 3. HOLE FOR THE FOUNDATION (SHAFT) SHALL BE AUGERED
 4. POLE FOUNDATION, OFFSET FOR THIS APPLICATION IS EQUIVALENT TO 13.5 LIN.FT. PER FOUNDATION.
 5. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" PITCH OR MAY SUBSTITUTE #3 TIES 12" O.C. WITH THE APPROVAL OF THE ENGINEER

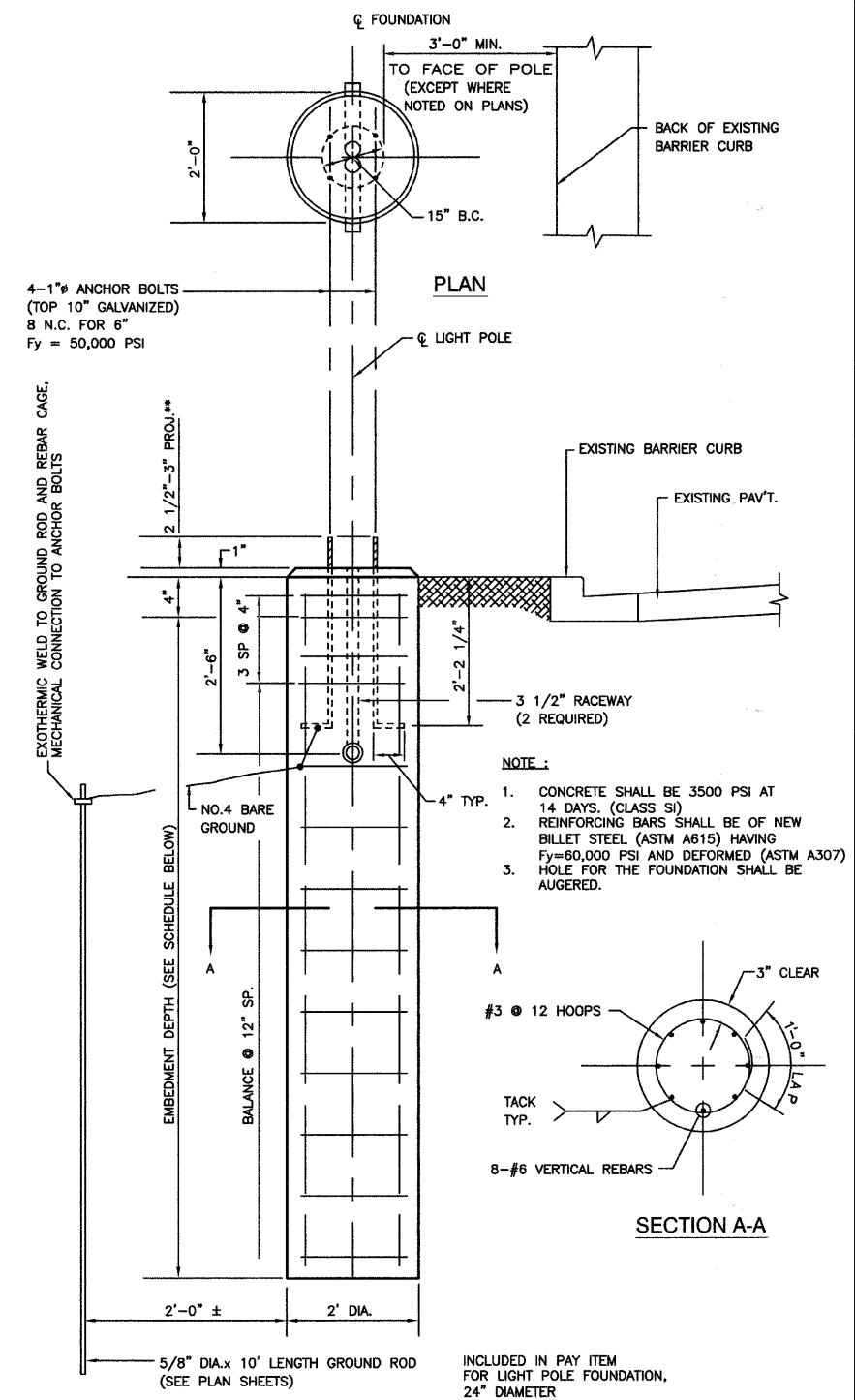
BILL OF MATERIALS				
QUAN.	MARK	SIZE	LENGTH	SHAPE
11	A	NO.3	5'-9"	○
6	B	NO.3	6'-8"	□
3	C	NO.6	5'-31/2"	○
8	G	NO.6	2'-1"	□
3	D	NO.7	13'-6"	○
2	E	NO.7	12'-0"	○
3	F	NO.7	9'-11"	○
REINFORCING BARS			LBS.	285
CLASS X CONCRETE			CU.YDS.	1.7
ANCHOR BOLTS			NO.	4
ANCHOR BOLT PLATE NO.				1



ELEVATION POLE FOUNDATION, OFFSET - DETAILS



SECTION A-A



ELEVATION LIGHT POLE FOUNDATION (TYPICAL)

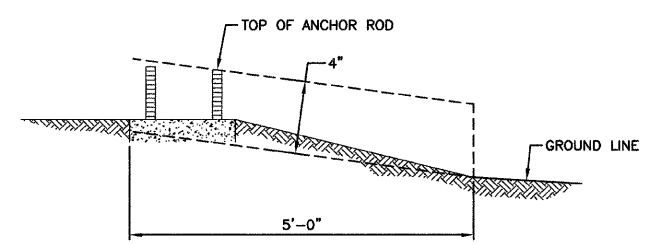
****NOTE:**
ACTUAL FOUNDATION DEPTH IS EMBEDMENT DEPTH (FROM SCHEDULE) PLUS 6" EQUALS TOTAL DEPTH.
7'-6"+6"= 8'-0" FOR 40' MH
10'-0"+6"=10'-6" FOR 47.5' MH

- NOTE:**
1. CONCRETE SHALL BE 3500 PSI AT 14 DAYS. (CLASS SI)
 2. REINFORCING BARS SHALL BE OF NEW BILLET STEEL (ASTM A615) HAVING Fy=60,000 PSI AND DEFORMED (ASTM A307)
 3. HOLE FOR THE FOUNDATION SHALL BE AUGERED.

EXOTHERMIC WELD TO GROUND ROD AND REBAR CAGE. MECHANICAL CONNECTION TO ANCHOR BOLTS

FOUNDATION SCHEDULE

DESCRIPTION	STANDARDS	EMBEDMENT			
		MOUNTING HEIGHT			
		30 FT.	35 FT.	40 FT.	47.5 FT.
SOFT CLAY	Qu = .25-.50 T/FT. 2	9'-0"	9'-8"	10'-6"	14'-0"
MEDIUM CLAY	Qu = .50-1.0 T/FT. 2	6'-6"	7'-0"	7'-6"	10'-0"
DENSE CLAY	Qu = 1.0-2.0 T/FT. 2	5'-6"	6'-0"	6'-6"	8'-6"
LOOSE SAND	N = 4-10	7'-0"	7'-8"	8'-4"	11'-0"
MEDIUM SAND	N = 10-30	6'-0"	6'-6"	7'-3"	9'-6"
DENSE SAND	N = 30-50	5'-6"	6'-0"	6'-6"	8'-6"



FOUNDATION EXTENSION DETAIL

****NOTE:**
THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4") ABOVE THE FINISHED GRADE WITHIN A 1.5M (60") CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED. IN ACCORDANCE WITH AASHTO GUIDELINES, IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. SEE FOUNDATION EXTENSION DETAIL.

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

Christopher J. King
Exp. 11/30/08



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT STREET LIGHTING DETAILS

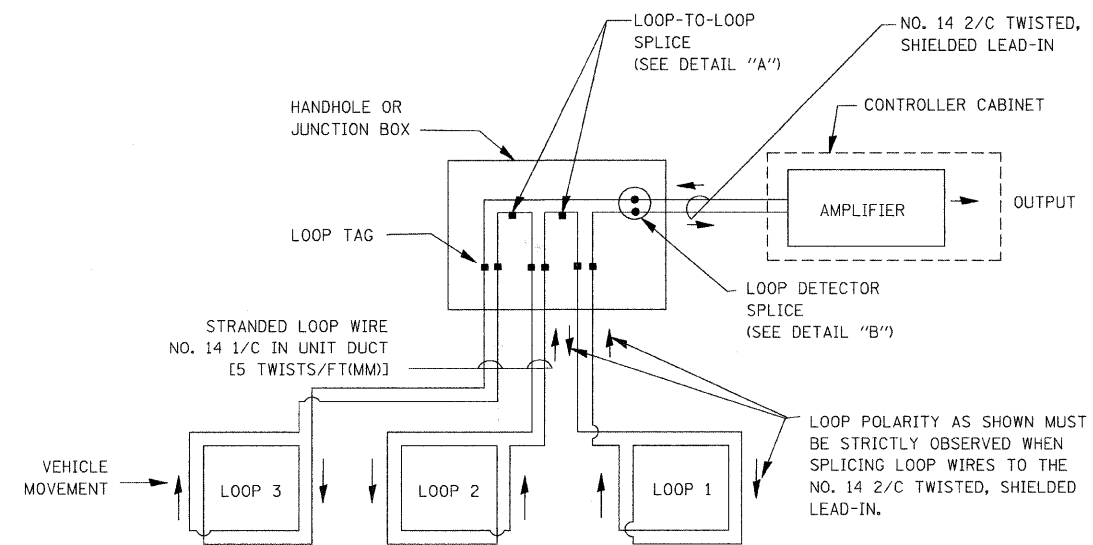
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HORIZ. 1"=50'
DATE 6/4/08
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CHECKED BY MRS

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	031
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

LOOP DETECTOR NOTES

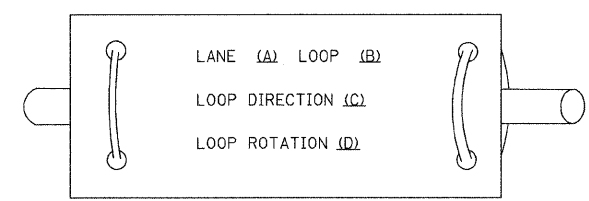
- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED 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.
- PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



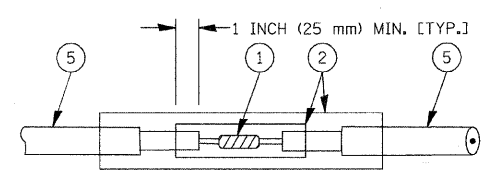
DETECTOR LOOP WIRING SCHEMATIC

- 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.

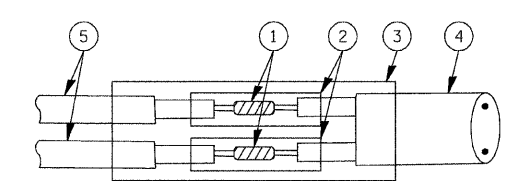
LOOP LEAD-IN CABLE TAG



- 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.



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.

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

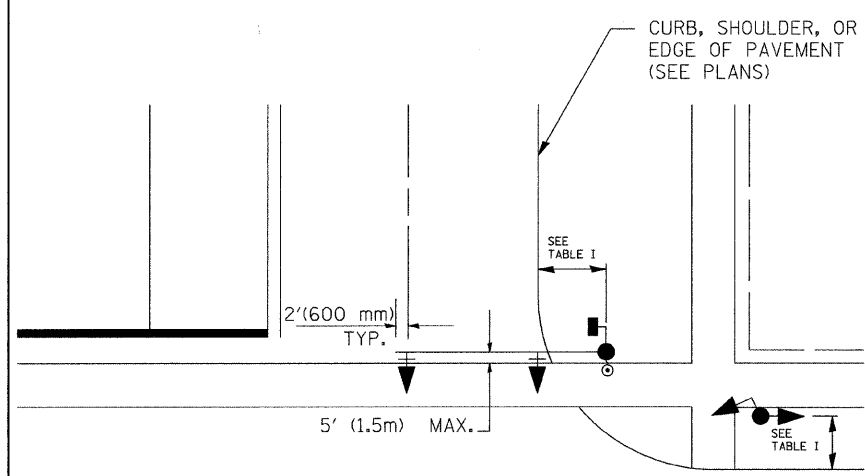
SCALE: NONE

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

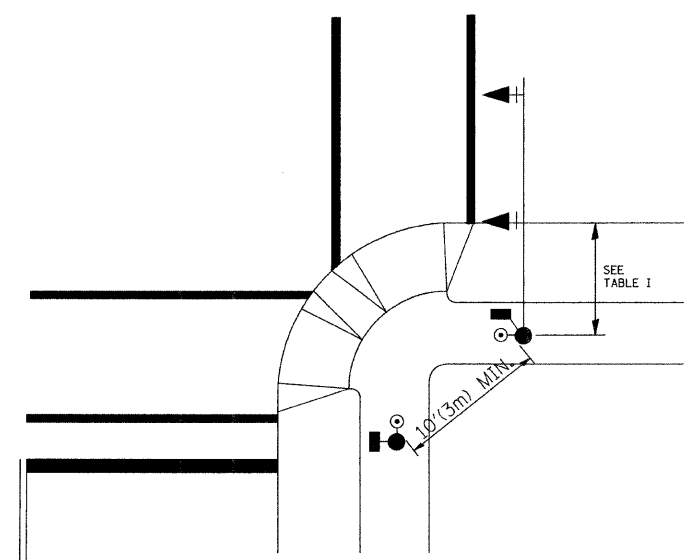
CONTRACT #63061

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 - A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 - B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 - C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 - D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 - E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

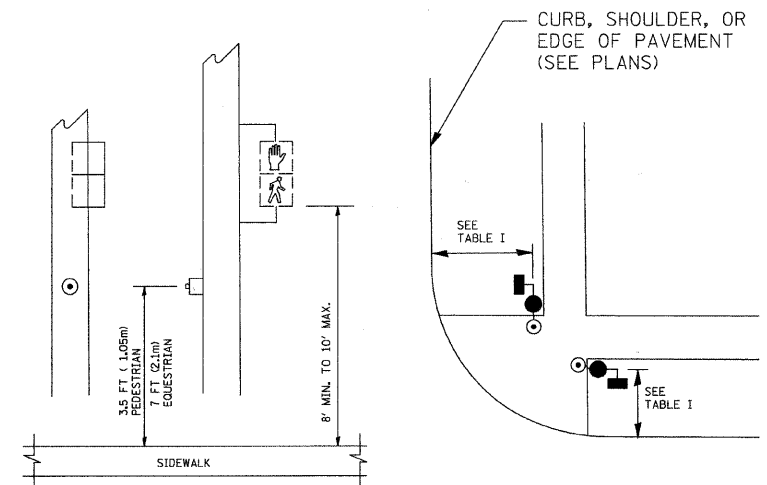


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

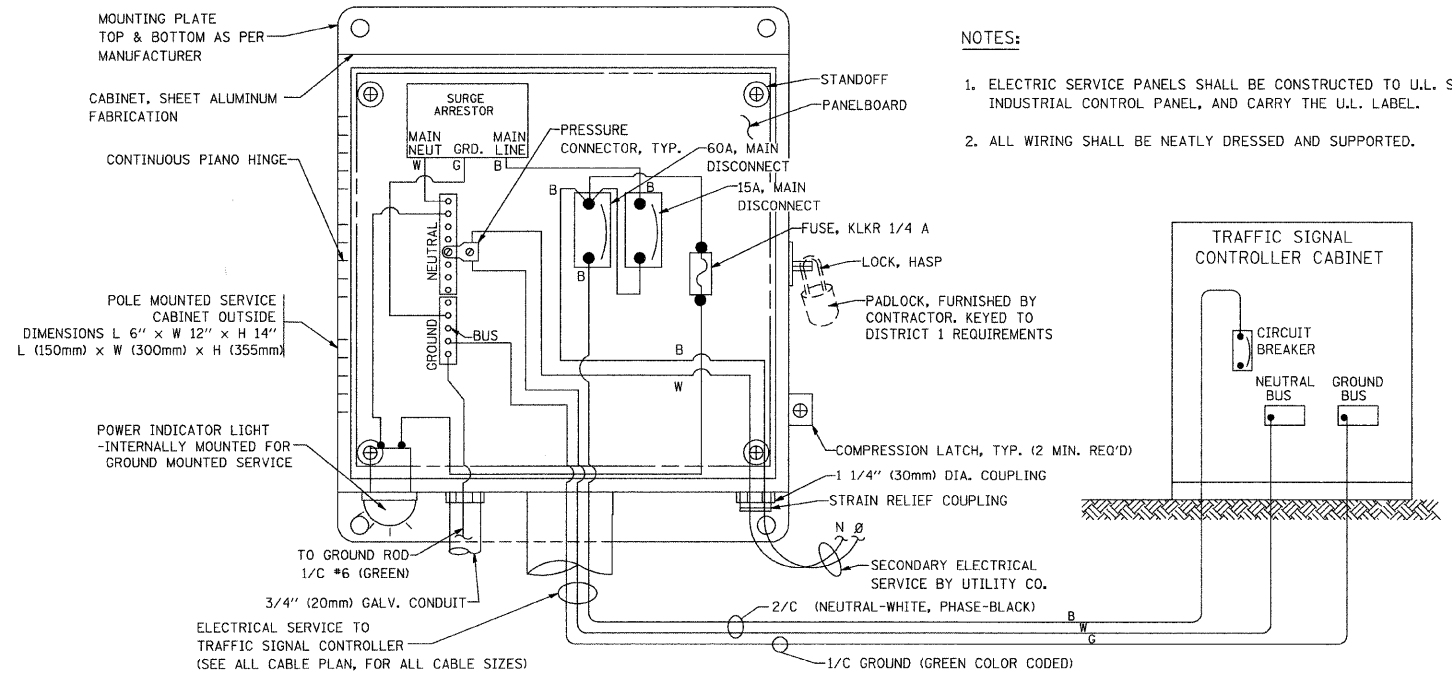
SCALE: NONE

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 2 OF 4

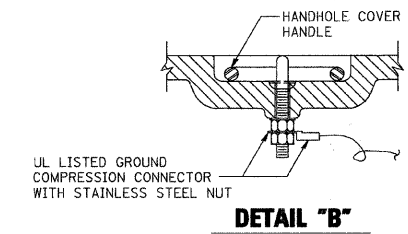
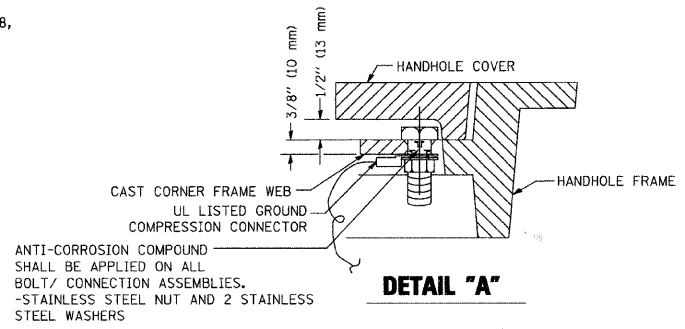
F. A. U. R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	033
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ALJMS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

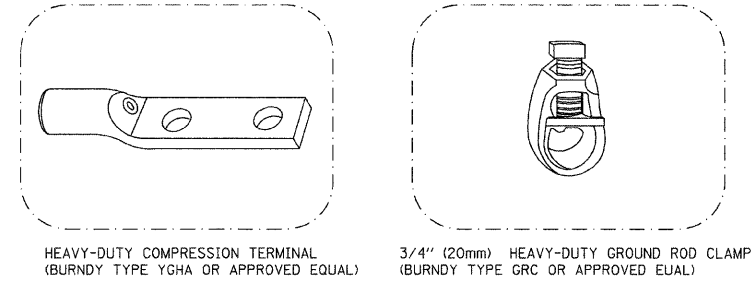
- NOTES:
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



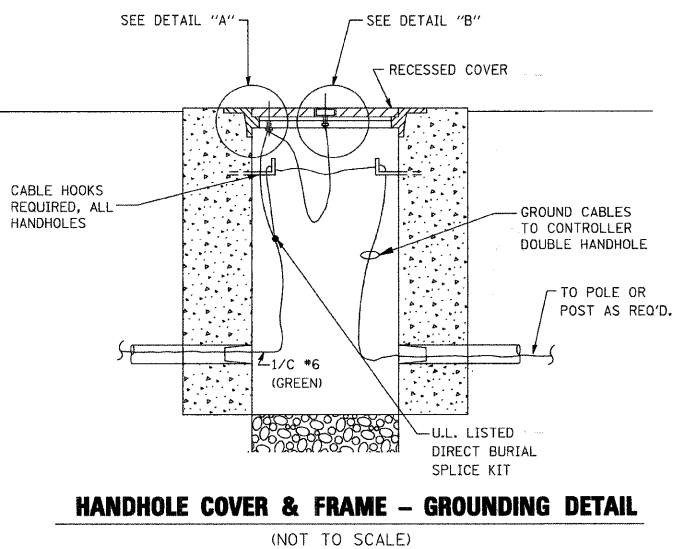
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



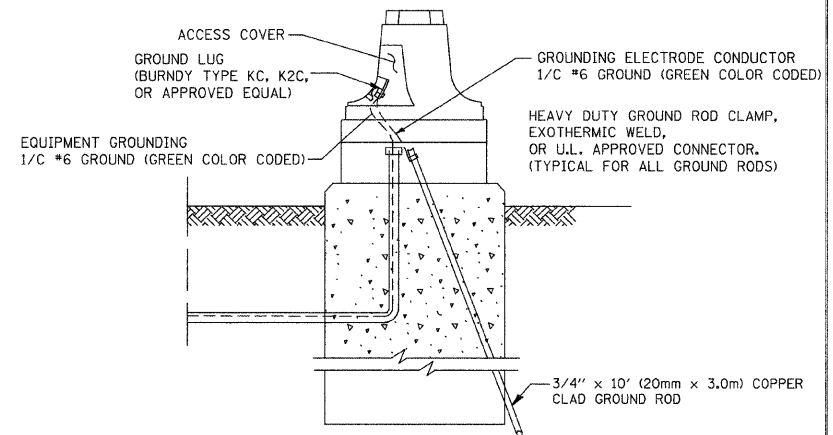
- NOTES:
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED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



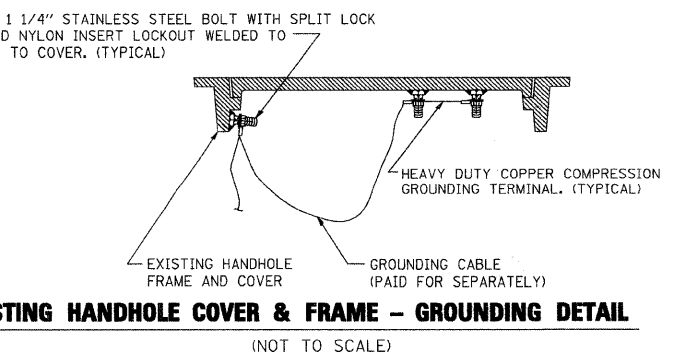
- NOTES:
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



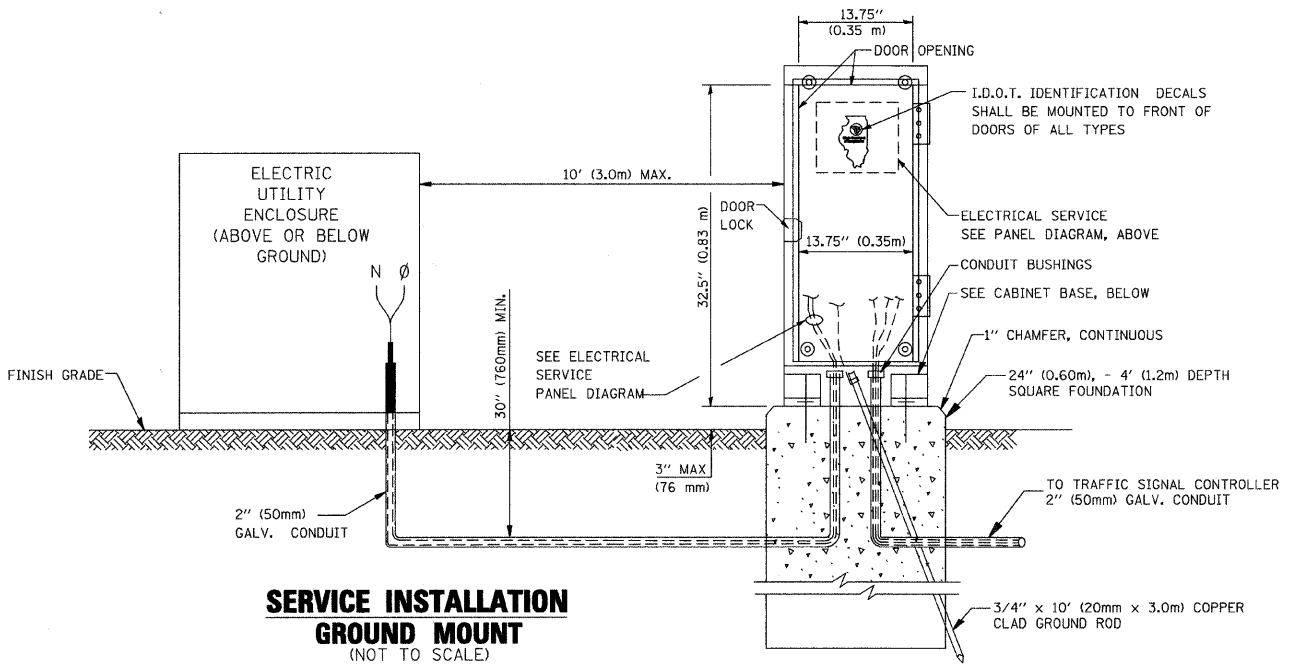
HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



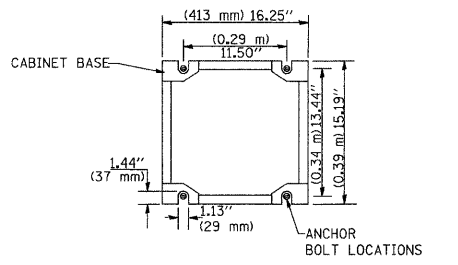
MAST ARM POLE / POST-GROUNDING DETAIL
 (NOT TO SCALE)



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



SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)



CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)

REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: NONE

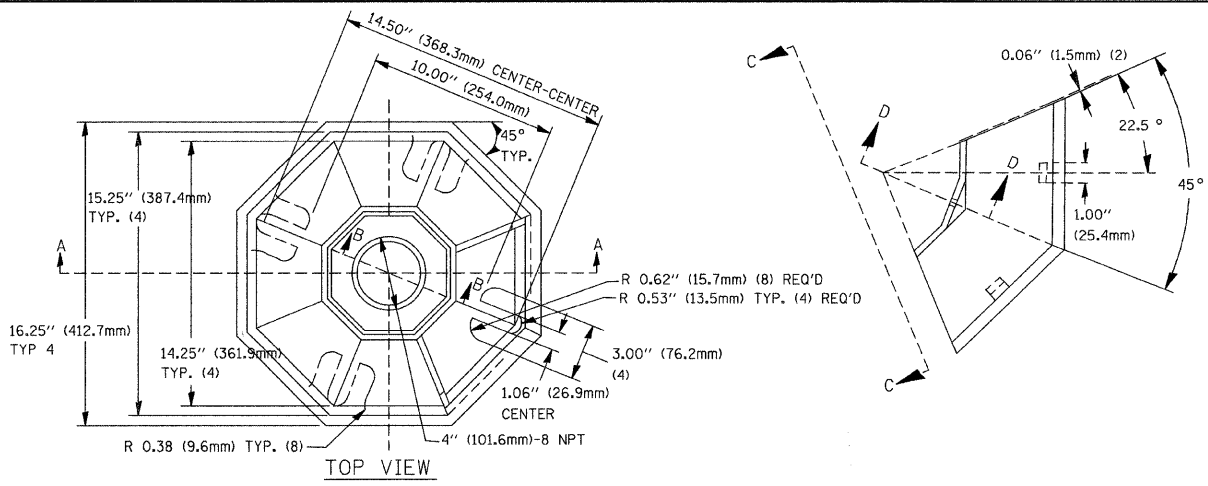
DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

TS05

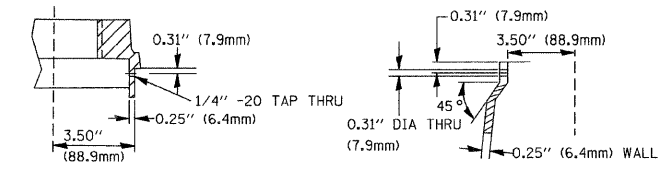
F. A. U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	034
STA.	TO STA.		FED. AID PROJECT	
FED. ROAD DIST. NO. 1	ALMOS	M-8003(598)		

CONTRACT #63061

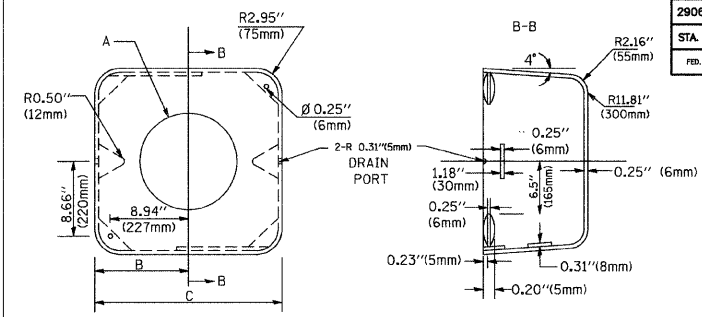
MATERIAL:
 - ASTM A48 CLASS 30 GREY IRON
 - ASTM A123 HOT DIPPED GALVANIZED



SECTION B-B

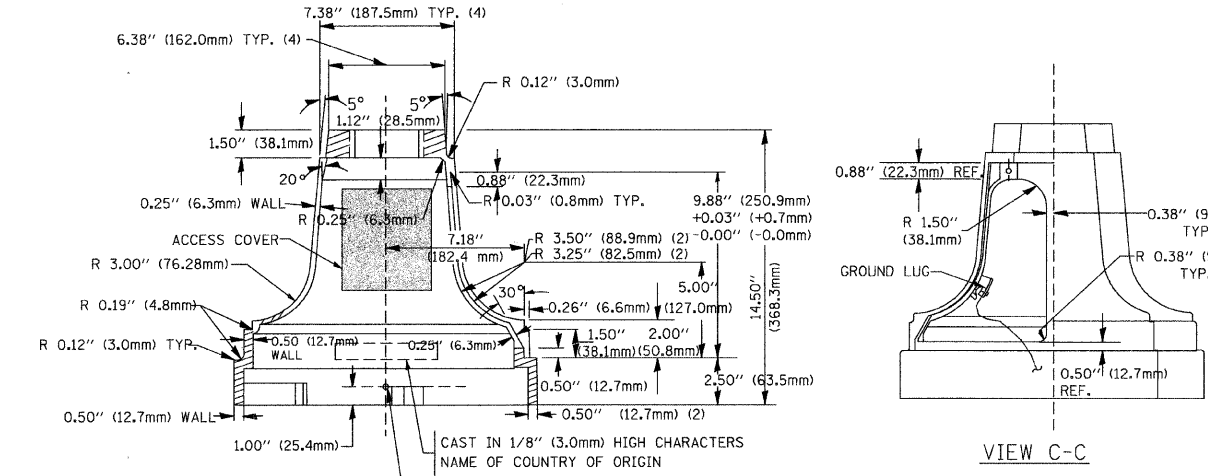


SECTION D-D



TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125\"(257mm)	9.5\"(241mm)	19\"(483mm)	12\"(300mm)	24kg
II	∅ 11.125\"(283mm)	10.75\"(273mm)	21.5\"(546mm)	12\"(300mm)	26kg

SHROUD DETAIL

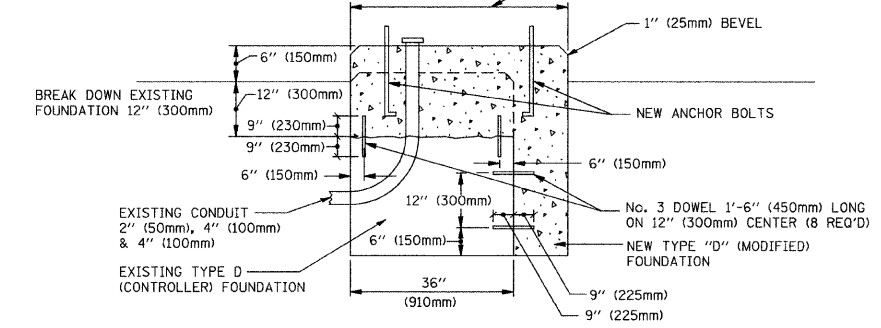


SECTION A-A

VIEW C-C

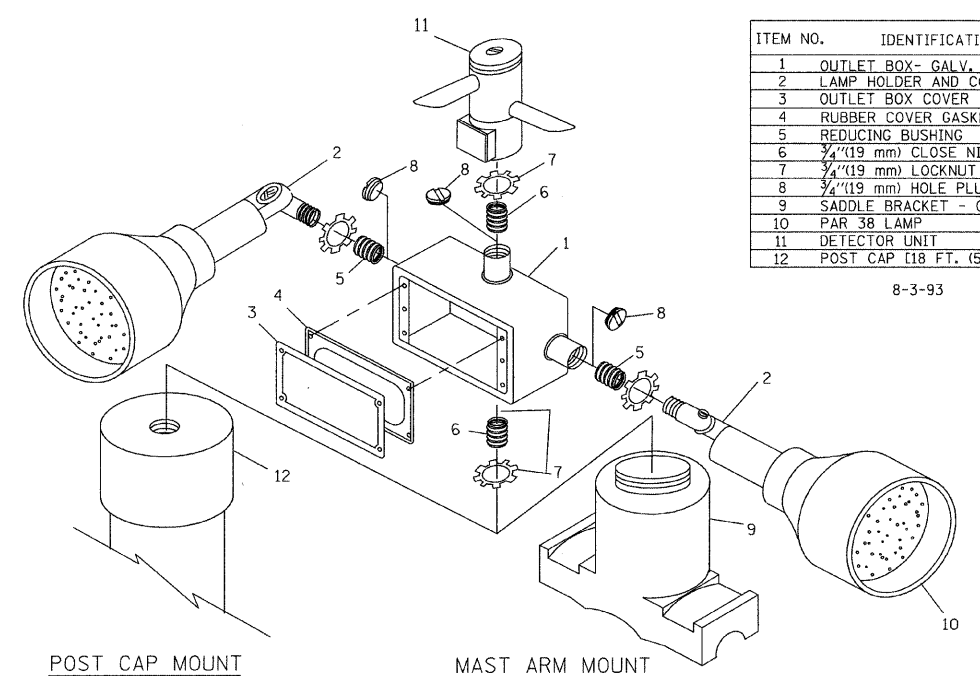
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

NOTE:
 SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)

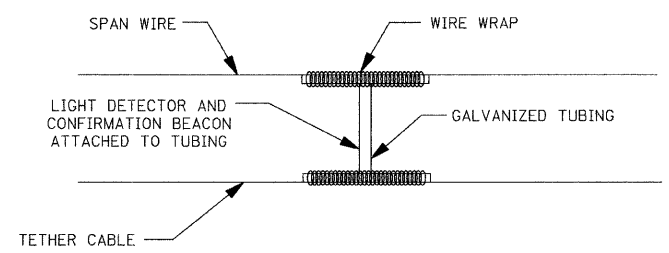


ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18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

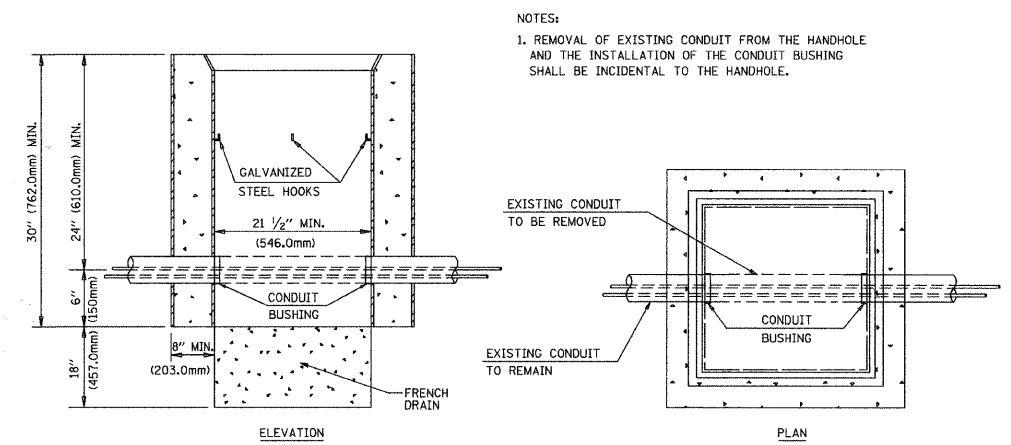
8-3-93

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.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS (NOT TO SCALE)



DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT N.T.S.

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

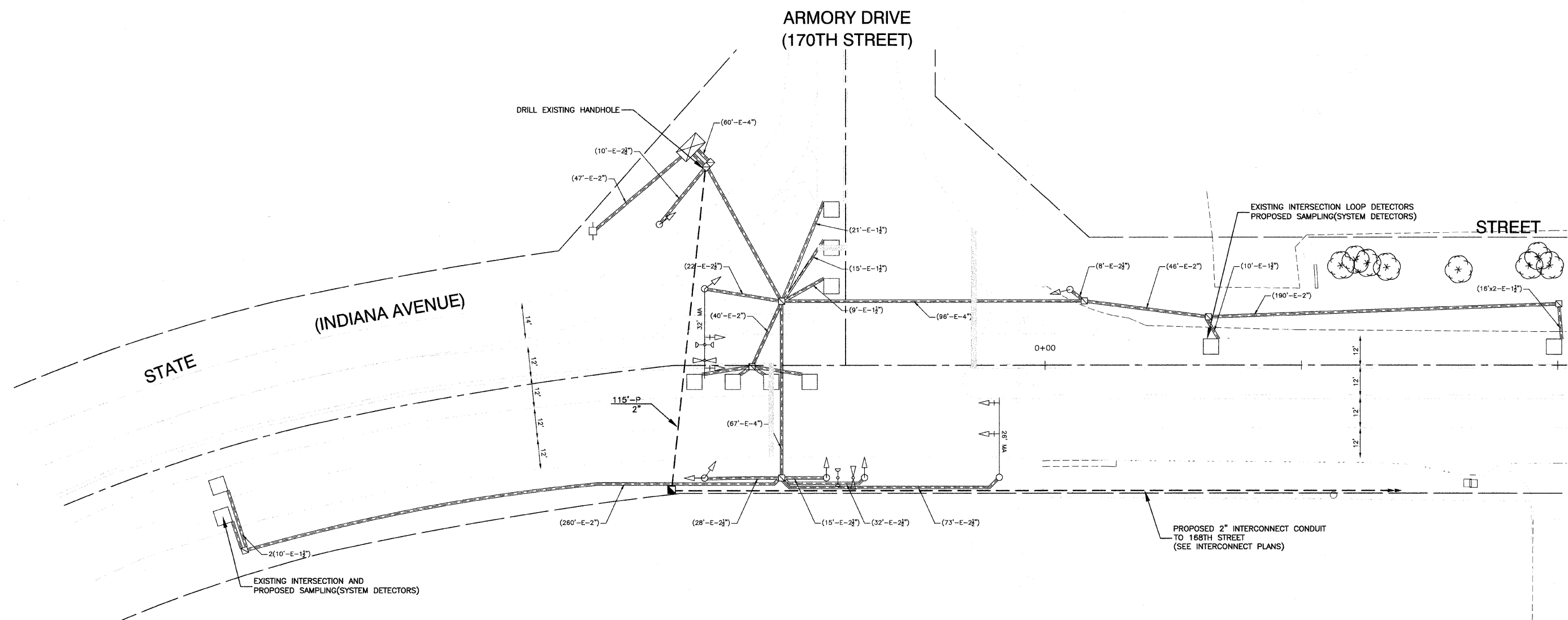
SCALE: NONE

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 4 OF 4

TS05

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	035
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



TRAFFIC SIGNAL LEGEND

<p>PROPOSED</p> <p>CONTROLLER</p> <p>SERVICE INSTALLATION</p> <p>SIGNAL HEAD</p> <p>SIGNAL HEAD WITH BACKPLATE</p> <p>SIGNAL HEAD, PEDESTRIAN</p> <p>SIGNAL POST</p> <p>MAST ARM ASSEMBLY AND POLE, STEEL</p> <p>MAST ARM ASSEMBLY AND POLE, ALUMINUM</p> <p>COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE</p> <p>UNIT DUCT</p>	<p>EXISTING</p> <p>COMMON TRENCH</p> <p>HANDHOLE</p> <p>HEAVY DUTY HANDHOLE</p> <p>DOUBLE HANDHOLE</p> <p>G.S. CONDUIT IN GROUND</p> <p>PEDESTRIAN PUSHBUTTON DETECTOR</p> <p>DETECTOR LOOP</p> <p>CAST IRON JUNCTION BOX</p> <p>EMERGENCY VEHICLE SYSTEM DETECTOR</p> <p>CONFIRMATION BEACON</p> <p>UNINTERRUPTIBLE POWER SUPPLY</p>	<p>PROPOSED</p> <p>CT</p> <p>SIGNAL HEAD OPTICALLY PROGRAMMED</p> <p>CONDUIT SPLICE</p> <p>WOOD POLE</p> <p>RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II</p> <p>VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE</p> <p>RAILROAD CONTROL CABINET</p> <p>TELEPHONE CONNECTION</p> <p>ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"</p> <p>ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"</p>	<p>EXISTING</p> <p>SIGNAL HEAD OPTICALLY PROGRAMMED</p> <p>CONDUIT SPLICE</p> <p>WOOD POLE</p> <p>RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II</p> <p>VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE</p> <p>RAILROAD CONTROL CABINET</p> <p>TELEPHONE CONNECTION</p> <p>ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"</p> <p>ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"</p>
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET @ ARMORY DRIVE (170TH STREET)

INTERSECTION IMPROVEMENT

TRAFFIC SIGNAL MODIFICATION PLAN

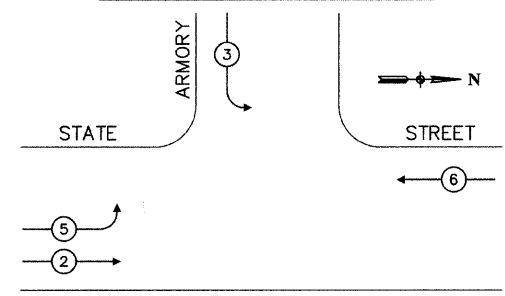
SCALE: VERT. NA
 HORIZ. 1"=20'

DATE 7/22/08

DRAWN BY RG
 CHECKED BY MRS

CONTRACT #63061

CONTROLLER SEQUENCE



LEGEND

- ← (1) → DUAL ENTRY PHASE
- ← (1) → PEDESTRIAN MOVEMENT
- * NUMBER REFERS TO ASSOCIATED PHASE

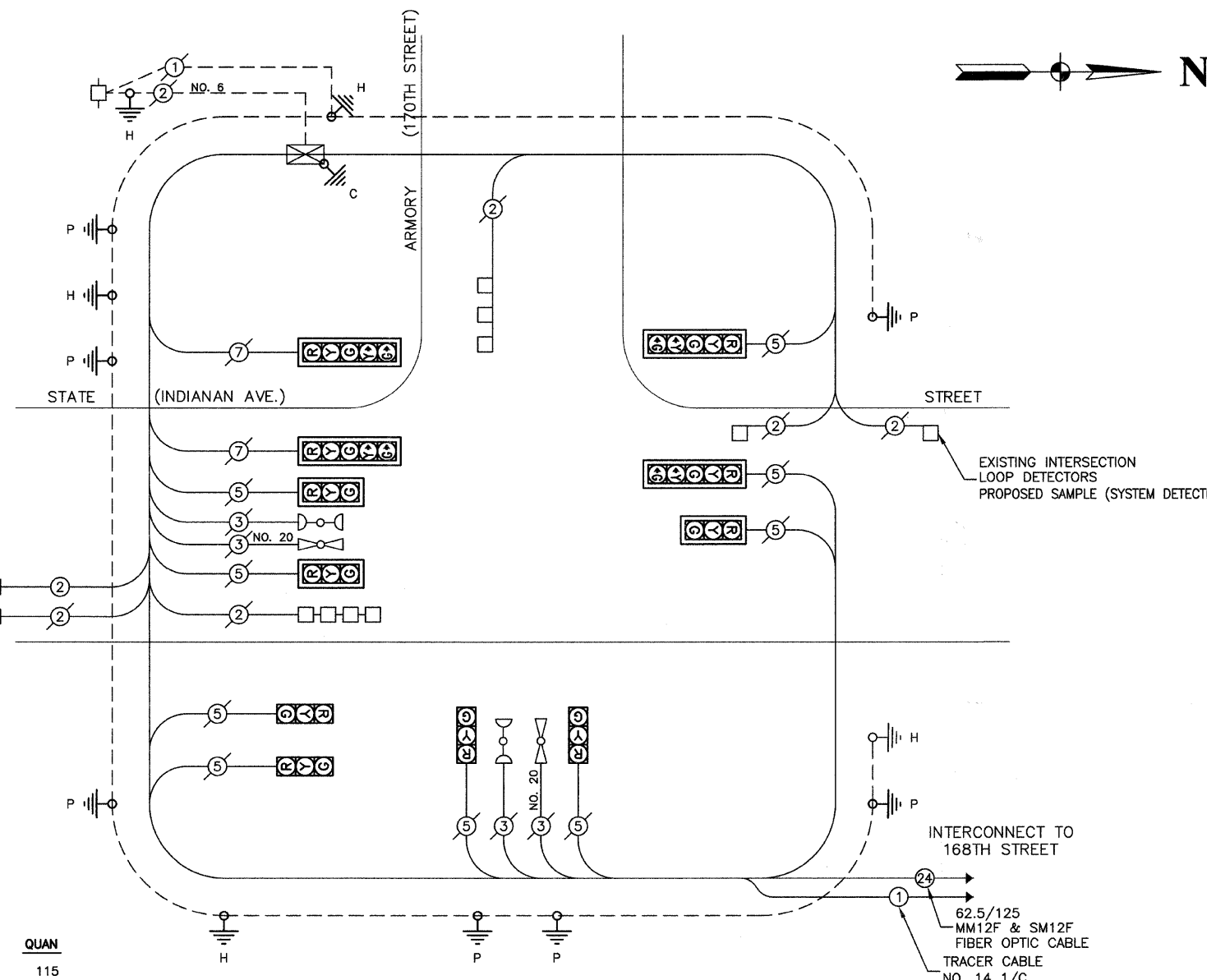
CABLE PLAN LEGEND

- | EXISTING | PROPOSED | |
|----------|----------|--|
| | | 8" TRAFFIC SIGNAL SECTION |
| | | 12" TRAFFIC SIGNAL SECTION |
| | | 12" PEDESTRIAN SIGNAL SECTION |
| | | 12" PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | TELEPHONE CONNECTION |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | <p>DENOTES NUMBER OF CONDUCTORS.</p> <p>ALL CABLE NO. 14 EXCEPT AS INDICATED.</p> <p>ALL LOOP DETECTOR CABLE TO BE SHIELDED.</p> |
| | | SIGNAL FACE WITH BACKPLATE |
| | | "P" INDICATES PROGRAMMED HEAD |
| | | "E" RAILROAD CONTROL CABINET |
| | | "E" ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN" |
| | | "E" ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN" |
| | | C GROUND ROD AT CONTROLLER |
| | | P GROUND ROD AT POST |
| | | MA GROUND ROD AT MAST ARM POLE |
| | | S GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | H/C GROUND ROD |
| | | 1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | 24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F |

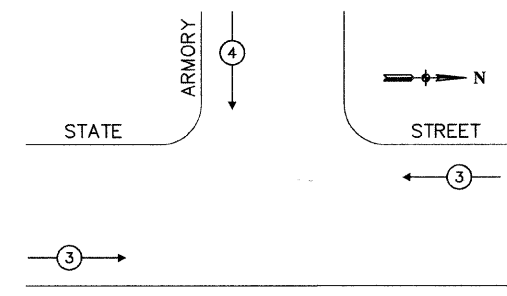
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUAN
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	115
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN TRENCH, LEAD-IN, NO. 14 1 PAIR	FOOT	429
DRILL EXISTING HANDHOLE	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

PROPOSED CABLE PLAN



EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	— ↓

REVISIONS	
NAME	DATE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATION		
SIGNAL (RED)	11	135	17	0.50	742.5
SIGNAL (YELLOW)	11	135	25	0.25	371.25
SIGNAL (GREEN)	11	135	15	0.25	371.25
ARROW	8	135	12	0.10	108
PED. SIGNAL	0	90	25	1.00	0
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	0	84		0.05	0
FLASHER				0.50	
ENERGY COSTS TO: VILLAGE OF SOUTH HOLLAND				TOTAL =	1693

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICLE	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2' (6m+L-0.6m)
E - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET @ ARMORY DRIVE (170TH STREET) INTERSECTION IMPROVEMENT TRAFFIC SIGNAL CABLE PLAN

SCALE: VERT. NA
 HORIZ. NA
 DATE 7/22/08

DRAWN BY RG
 CHECKED BY MRS

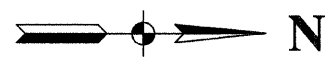
ROBINSON ENGINEERING, LTD.
 1700 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60473
 (708) 391-8700 FAX (708) 391-8828
 ILLINOIS DESIGN FIRM REGISTRATION NO. 184907158 07345-CBE-PLAN-01

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2908	02-00077-00-WR	COOK	073	038
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061

SCHEDULE OF QUANTITIES

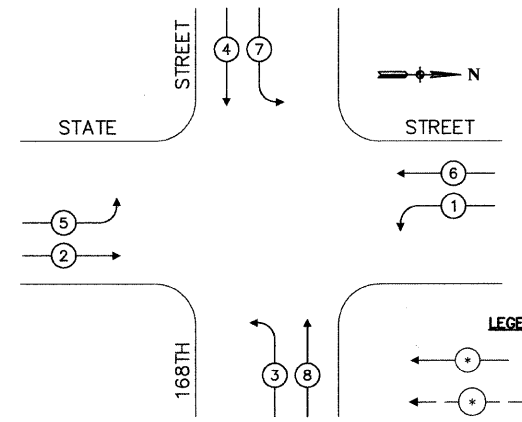
ITEM	UNIT	QUAN
SIGN PANEL, TYPE 1	SQ FT	25.5
CONDUIT IN TRENCH, 1 1/2" DIA., GALVANIZED STEEL	FOOT	100
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	444
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	138
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	24
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	253
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	285
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	970
FULL-ACTUATED CONTROLLER AND TYPE V CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	400
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1680
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1730
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3025
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	125
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	50
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE 1	FOOT	940
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20, 3C, TWISTED, SHIELDED	FOOT	370
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	725



CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	8" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	UNINTERRUPTIBLE POWER SUPPLY
[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	PUSHBUTTON DETECTOR
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	2 DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	SIGNAL FACE WITH BACKPLATE
[Symbol]	[Symbol]	"P" INDICATES PROGRAMMED HEAD
[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
[Symbol]	[Symbol]	GROUND ROD AT CONTROLLER
[Symbol]	[Symbol]	GROUND ROD AT POST
[Symbol]	[Symbol]	GROUND ROD AT MAST ARM POLE
[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
[Symbol]	[Symbol]	GROUND ROD
[Symbol]	[Symbol]	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F

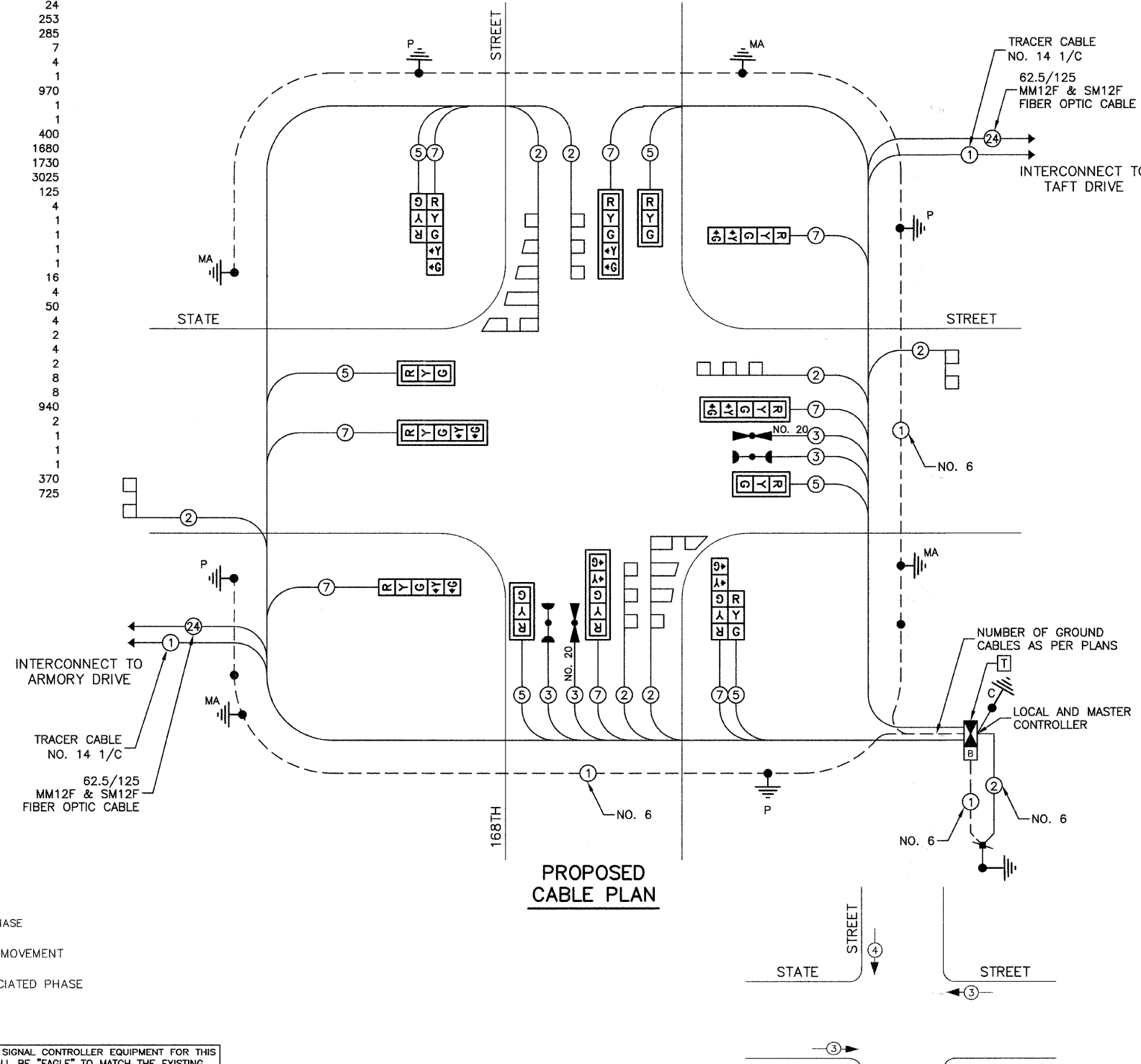
PROPOSED CONTROLLER SEQUENCE



INTERCONNECT TO ARMORY DRIVE

TRACER CABLE NO. 14 1/C
62.5/125 MM12F & SM12F FIBER OPTIC CABLE

PROPOSED CABLE PLAN



EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	—

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	14	135	12	0.10	67
PED. SIGNAL	0	90	25	1.00	0
CONTROLLER	2	100	100	1.00	200
ILLUM. SIGN	0	84		0.05	0
FLASHER					0.50
ENERGY COSTS TO: VILLAGE OF SOUTH HOLLAND					TOTAL = 526

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICLE	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+1-2= (6m+1-0.6m)=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
		CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
		24" (600mm)	10 (3.0)	ELECTRIC SERVICE	13.5 (4.1)
		30" (750mm)	15 (4.6)	GROUND CABLE	13.5 (4.1)
		FIBER OPTIC	13 (4.0)	SERVICE TO GROUND	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	POST MOUNTED	8 (1.8)
		GROUND CABLE	1 (0.5)		

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT TRAFFIC SIGNAL CABLE PLAN

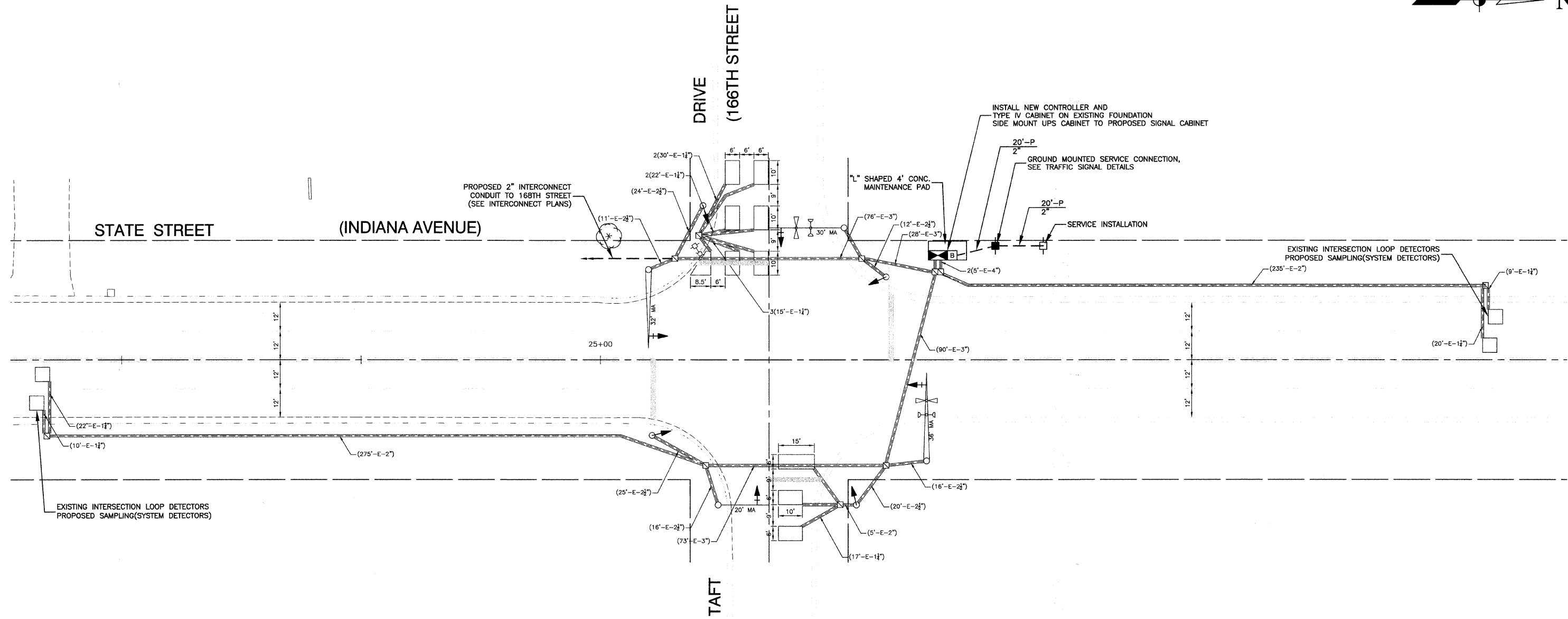
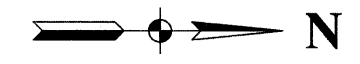
SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

DRAWN BY RG
CHECKED BY MRS

REVISIONS	
NAME	DATE

F. A. U. R. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	039
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



NOTES

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE FOLLOWING EQUIPMENT SHALL BE RELOCATED FROM THE EXISTING CONTROLLER CABINET TO THE PROPOSED CONTROLLER CABINET

- 1 EACH LIGHT DETECTOR AMPLIFIER
- 1 EACH CONTROLLER AND CABINET (COMPLETE)

TRAFFIC SIGNAL LEGEND

- | | | |
|--|-----------------|--|
| PROPOSED | EXISTING | |
| CONTROLLER | | |
| SERVICE INSTALLATION | | |
| SIGNAL HEAD | | |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD, PEDESTRIAN | | |
| SIGNAL POST | | |
| MAST ARM ASSEMBLY AND POLE, STEEL | | |
| MAST ARM ASSEMBLY AND POLE, ALUMINUM | | |
| COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE | | |
| UNIT DUCT | | |

- | | | |
|-----------------------------------|-----------------|--|
| PROPOSED | EXISTING | |
| COMMON TRENCH | | |
| HANDHOLE | | |
| HEAVY DUTY HANDHOLE | | |
| DOUBLE HANDHOLE | | |
| G.S. CONDUIT IN GROUND | | |
| PEDESTRIAN PUSHBUTTON DETECTOR | | |
| DETECTOR LOOP | | |
| CAST IRON JUNCTION BOX | | |
| EMERGENCY VEHICLE SYSTEM DETECTOR | | |
| CONFIRMATION BEACON | | |
| UNINTERRUPTIBLE POWER SUPPLY | | |

- | | | |
|--|-----------------|--|
| PROPOSED | EXISTING | |
| SIGNAL HEAD OPTICALLY PROGRAMMED | | |
| CONDUIT SPLICE | | |
| WOOD POLE | | |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II | | |
| VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE | | |
| RAILROAD CONTROL CABINET | | |
| TELEPHONE CONNECTION | | |
| ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN" | | |
| ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN" | | |

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET @ TAFT DRIVE (166TH STREET)
INTERSECTION IMPROVEMENT
TRAFFIC SIGNAL MODIFICATION PLAN

SCALE: VERT. NA
 HORIZ. 1"=20'
 DATE 7/22/08

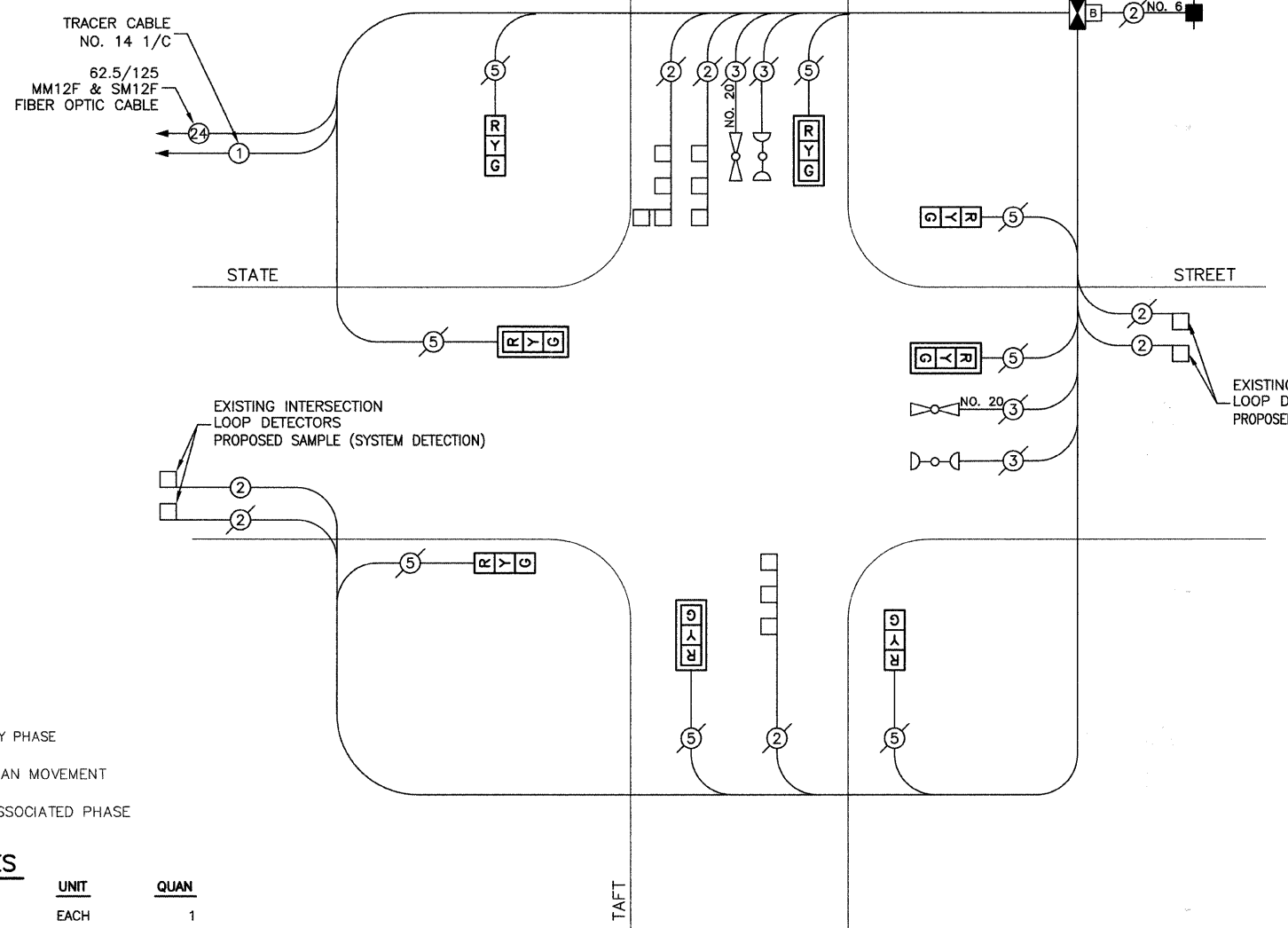
DRAWN BY RG
 CHECKED BY MRS

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	040
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	M-8003(596)

CONTRACT #63061



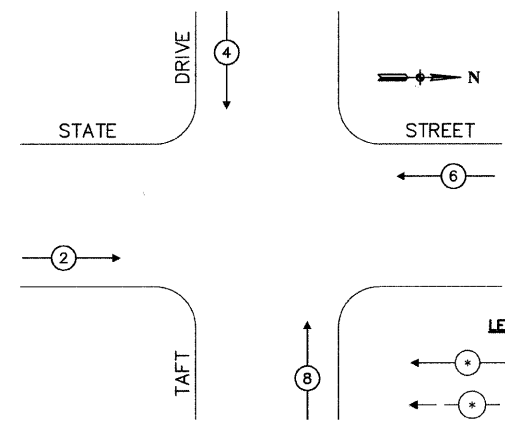
TRACER CABLE
NO. 14 1/C
62.5/125
MM12F & SM12F
FIBER OPTIC CABLE



CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	8" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	UNINTERRUPTIBLE POWER SUPPLY
[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	PUSHBUTTON DETECTOR
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	2 DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD
[Symbol]	[Symbol]	"E" RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	"E" ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
[Symbol]	[Symbol]	"E" ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
C	C	GROUND ROD AT CONTROLLER
P	P	GROUND ROD AT POST
MA	MA	GROUND ROD AT MAST ARM POLE
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
H/C	C	GROUND ROD
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F

PROPOSED PHASE DESIGNATION DIAGRAM



LEGEND

← * → DUAL ENTRY PHASE
← * → PEDESTRIAN MOVEMENT

* NUMBER REFERS TO ASSOCIATED PHASE

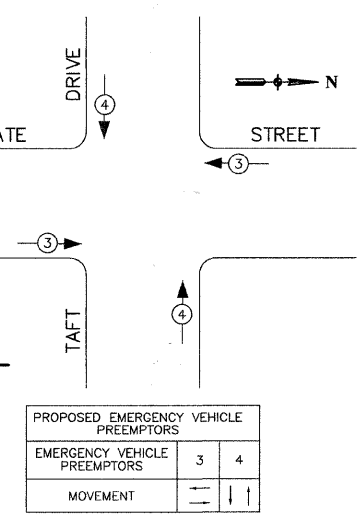
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUAN
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN TRENCH, LEAD-IN, NO. 14 1 PAIR	FOOT	741
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	7
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PROPOSED CABLE PLAN

EMERGENCY VEHICLE PREEMPTION SEQUENCE



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	8	135	17	0.50	540
(YELLOW)	8	135	25	0.25	270
(GREEN)	8	135	15	0.25	270
ARROW	0	135	12	0.10	0
PED. SIGNAL	0	90	25	1.00	0
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	0	84		0.05	0
FLASHER				0.50	
ENERGY COSTS TO: VILLAGE OF SOUTH HOLLAND					TOTAL = 1180

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICLE	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
0 - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m+L-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		FIBER OPTIC	13 (4.0)	SERVICE TO GROUND	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	POST MOUNTED	6 (1.8)
		GROUND CABLE	1 (0.5)		

REVISIONS	
NAME	DATE

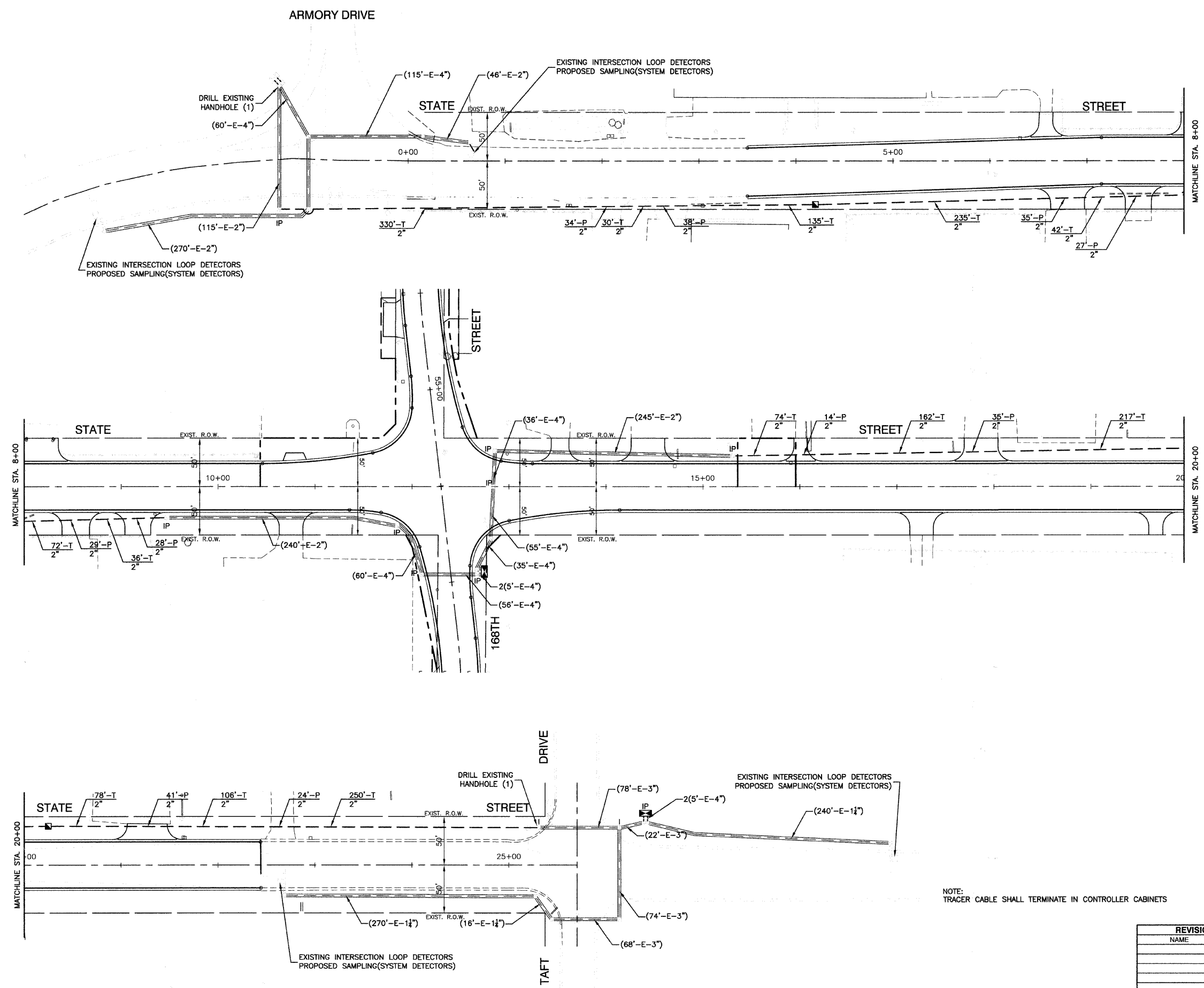
ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET @ TAFT DRIVE (166TH STREET) INTERSECTION IMPROVEMENT TRAFFIC SIGNAL CABLE PLAN

SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08
DRAWN BY RG
CHECKED BY MRS

F. A. U. REL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	041
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	M-8003(596)

CONTRACT #63061



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
MASTER CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY DUTY HANDHOLE		
G.S. CONDUIT IN GROUND		
DETECTOR LOOP		
TELEPHONE CONNECTION		
COMMON TRENCH		
UNIT DUCT		
SYSTEM		
INTERSECTION		

NOTE: TRACER CABLE SHALL TERMINATE IN CONTROLLER CABINETS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET INTERSECTION IMPROVEMENT INTERCONNECT PLAN

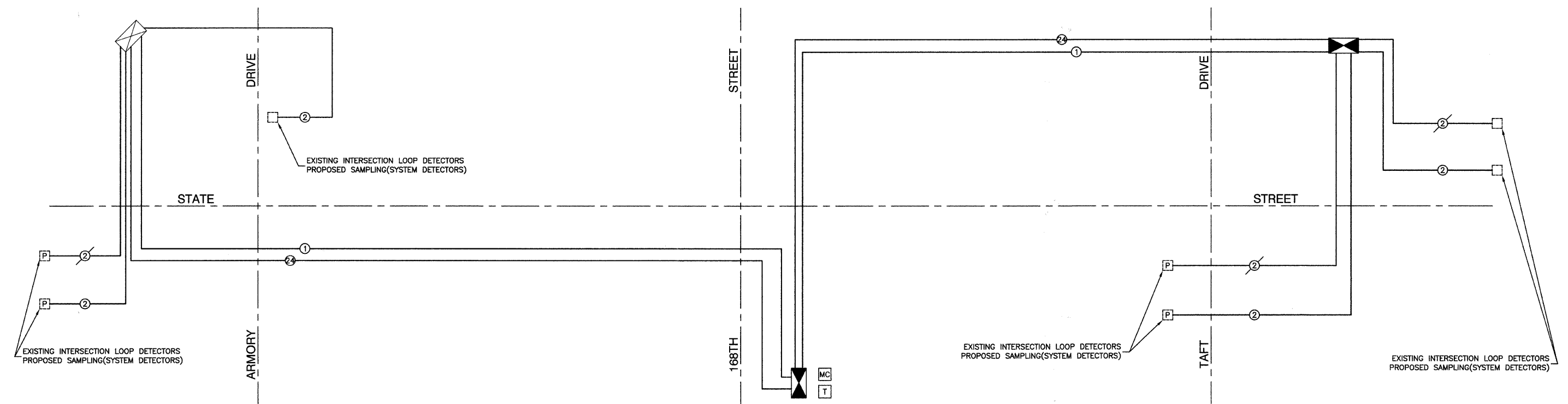
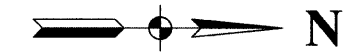
SCALE: VERT. NA
 HORIZ. 1"=50'
 DATE 7/22/08

DRAWN BY RG
 CHECKED BY MRS

ROBINSON ENGINEERING, LTD.
 1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
 (708) 231-6100 FAX (708) 231-9529
 ILLINOIS DESIGN FIRM REGISTRATION NO. 184001228

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	042
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	M-8003(596)

CONTRACT #63061



INTERCONNECT SCHEMATIC LEGEND

- INTERSECTION CONTROLLER
- EXISTING INTERSECTION CONTROLLER
- MASTER CONTROLLER
- EXISTING MASTER CONTROLLER
- MASTER MASTER CONTROLLER
- PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- EXISTING INTERSECTION & PROPOSED SAMPLING (SYSTEM) DETECTORS
- PROPOSED FIBER OPTIC CABLE - NO. 62.5/125 2-MM12F & SM12F
- INTERCONNECT CABLE NO. 18, 3 PAIR TWISTED, SHIELDED
- LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
- EXISTING FIBER OPTIC CABLE - NO. 62.5/125 2-MM12F & SM12F
- EXISTING INTERCONNECT CABLE NO. 18, 3 PAIR TWISTED, SHIELDED
- EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
- TELEPHONE CONNECTION
- PROPOSED TRACER CABLE NO. 14 1C
- EXISTING INTERCONNECT CABLE NO. 18, 3 PAIR TWISTED, SHIELDED
- EXISTING TELEPHONE CONNECTION
- EXISTING TRACER CABLE 1/C (AS SPECIFIED)
- EXISTING SAMPLING (SYSTEM) DETECTORS
- PROPOSED SAMPLING (SYSTEM) DETECTORS
- EXISTING SAMPLING (SYSTEM) DETECTORS
- PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS
- EXISTING INTERCONNECT CABLE-NO. 62.5/125 12F FIBER OPTIC CABLE

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUAN
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	1827
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	163
HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1845
MASTER CONTROLLER	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	3140
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	3140

REVISIONS	
NAME	DATE

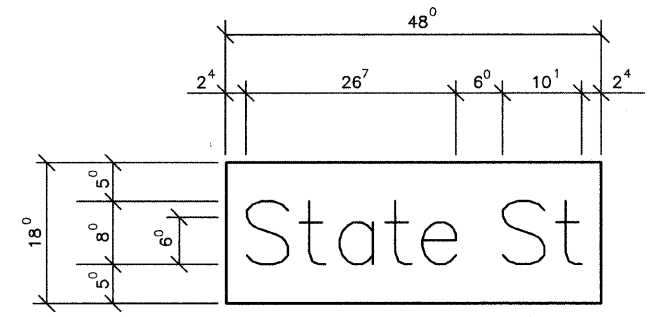
ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
INTERCONNECT SCHEMATIC**

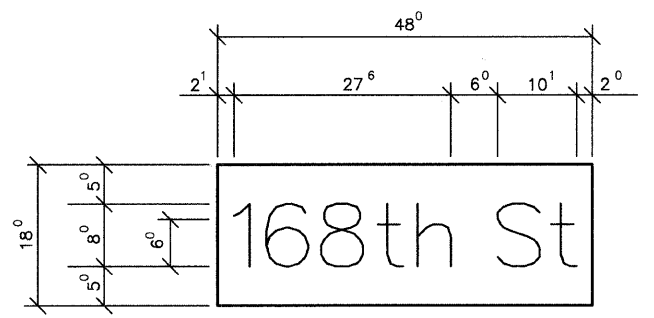
SCALE: VERT. NA
HORIZ. NA
DATE 7/22/08

DRAWN BY RG
CHECKED BY MRS

EXAMPLE, 2³ DENOTES $\frac{3''}{8}$



0.56 Sq. M. each
 6.0 Sq. Ft. each
 2 Required
 Design Series D



0.56 Sq. M. each
 6.0 Sq. Ft. each
 2 Required
 Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

PANEL SIGN DESIGN TYPE 2

GENERAL NOTES

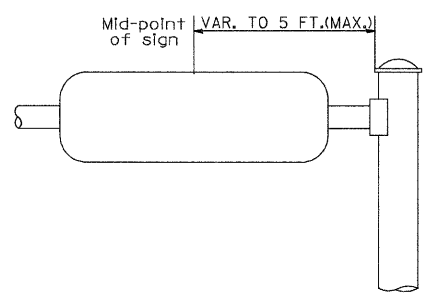
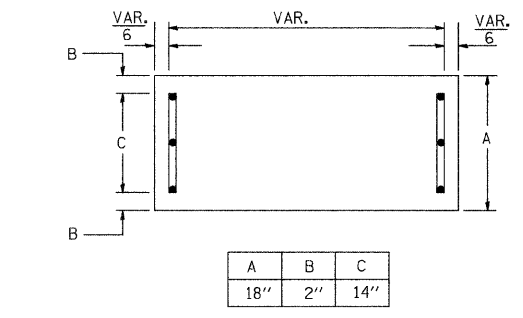
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS 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 6'-0".
- ALL BORDERS SHALL BE $\frac{3}{4}$ " WIDE AND CORNER RADIUS SHALL BE 2- $\frac{1}{4}$ ".
- 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:
 - * A.K.T. CORPORATION, SCHAUMBURG, IL
 - * AMERICAN FABRICATION CO., CHICAGO HEIGHTS, IL
 - * TUCKER COMPANY, INC., WAUWATOSA, WI
 - * WESTERN TRAFFIC CONTROL INC., CICERO, IL

PARTS LISTING

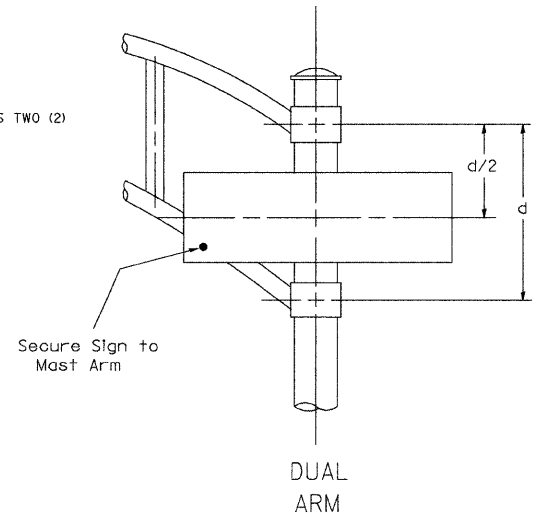
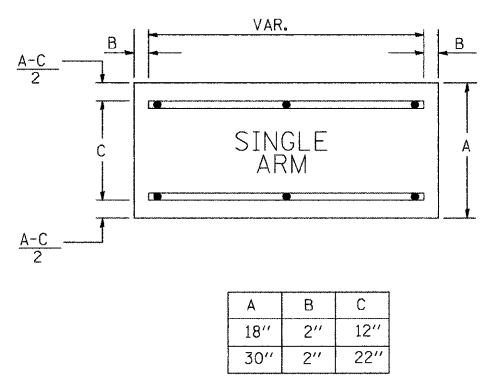
SIGN CHANNEL	PART *HPN053 (MED. CHANNEL)
SIGN SCREWS	$\frac{1}{4}$ " x 14 x 1" H.W.H. #3
BRACKETS	SELF TAPPING WITH NEOPRENE WASHER
	PART *HPN034 (UNIVERSAL)
	CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

SUPPORTING CHANNELS



SUPPORTING CHANNELS



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

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

FIRST LETTER	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	goq	mnpru														
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 Q 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 ²	1 ⁴	1 ²	1 ⁴
S	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	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	1 ²	1 ⁴	1 ²	1 ⁴	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		f w		j		s t		v y		x		z	
	goq	mnpru														
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g l 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
l m n q u																
b f k o p s	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 ²	1 ⁴	1 ²	1 ⁴
c e	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	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 ²	1 ⁴	1 ²	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"

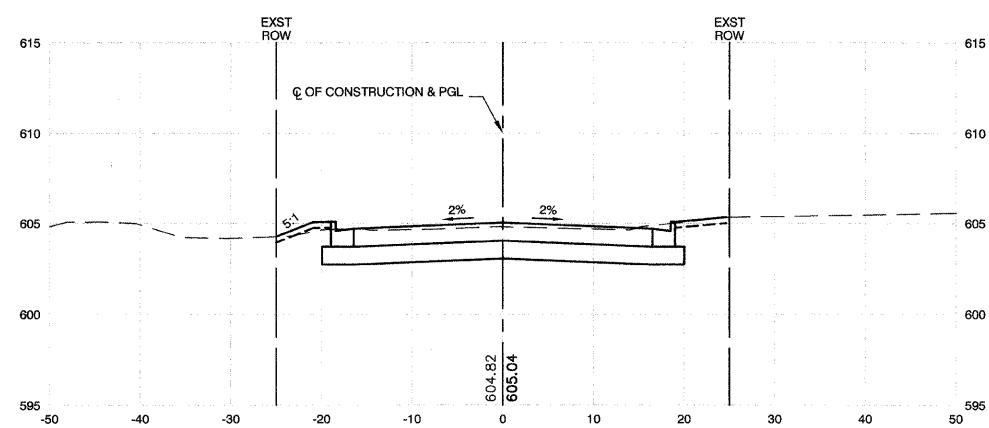
FIRST NUMBER	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹
2 3 4	1 ⁴	1 ⁵	1 ⁴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

UPPER AND LOWER CASE CONTRACT #63061
 LETTER WIDTHS

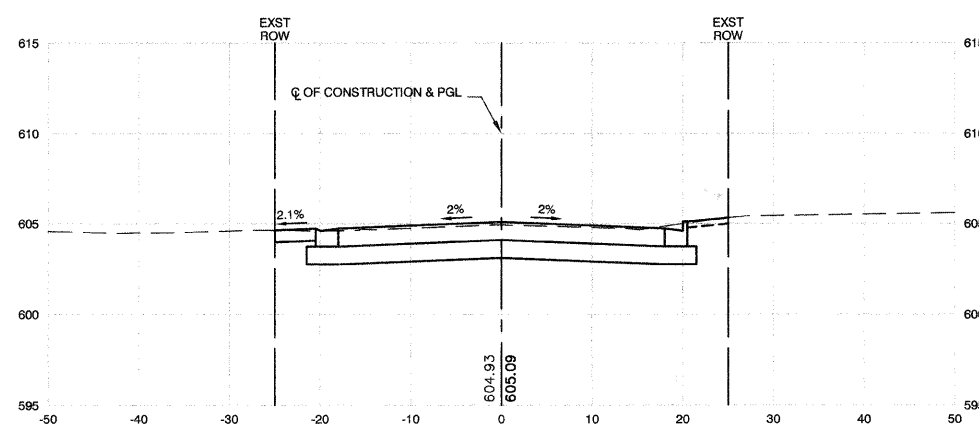
LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 ⁶	5 ⁰	5 ⁰	6 ⁵	a	3 ⁵	4 ²
B	3 ²	4 ⁰	4 ³	5 ³	b	3 ⁵	4 ²
C	3 ²	4 ⁰	4 ³	5 ³	c	3 ⁵	4 ¹
D	3 ²	4 ⁰	4 ³	5 ³	d	3 ⁵	4 ²
E	3 ⁰	3 ⁵	4 ⁰	4 ⁷	e	3 ⁵	4 ²
F	3 ⁰	3 ⁵	4 ⁰	4 ⁷	f	2 ³	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	

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	044
STA. 51+75.85		TO STA. 53+37.80		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

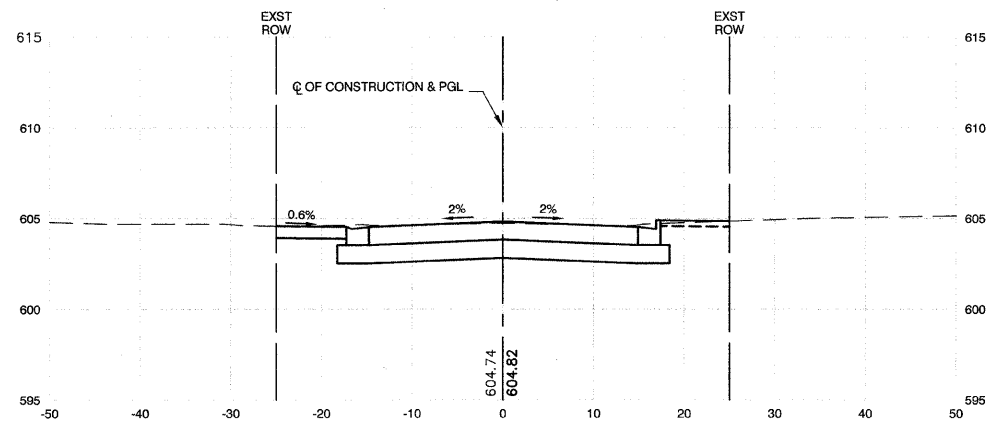
CONTRACT #63061



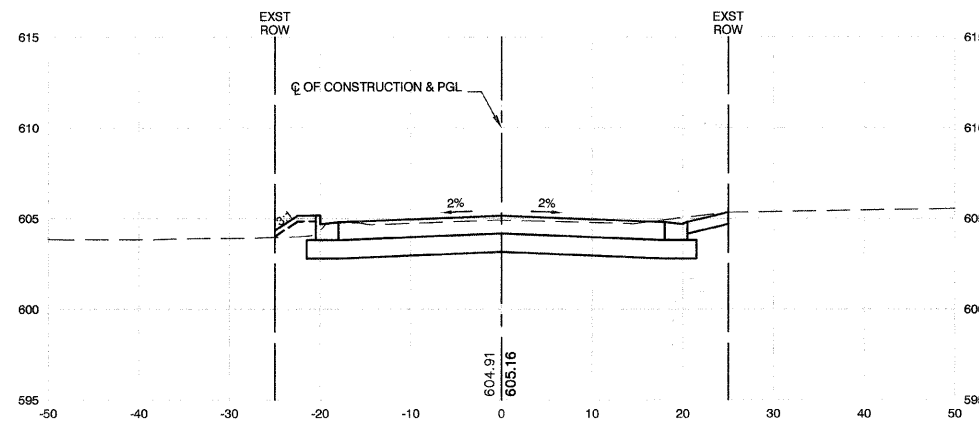
52+50
CUT=42 FILL=0



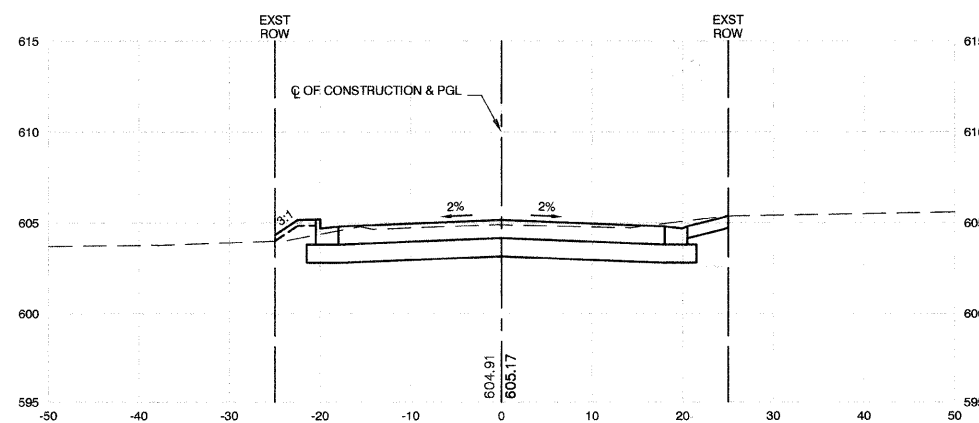
53+37.80
CUT=51 FILL=0



52+00
CUT=46 FILL=0



53+11.50
CUT=57 FILL=3



53+00
CUT=57 FILL=2

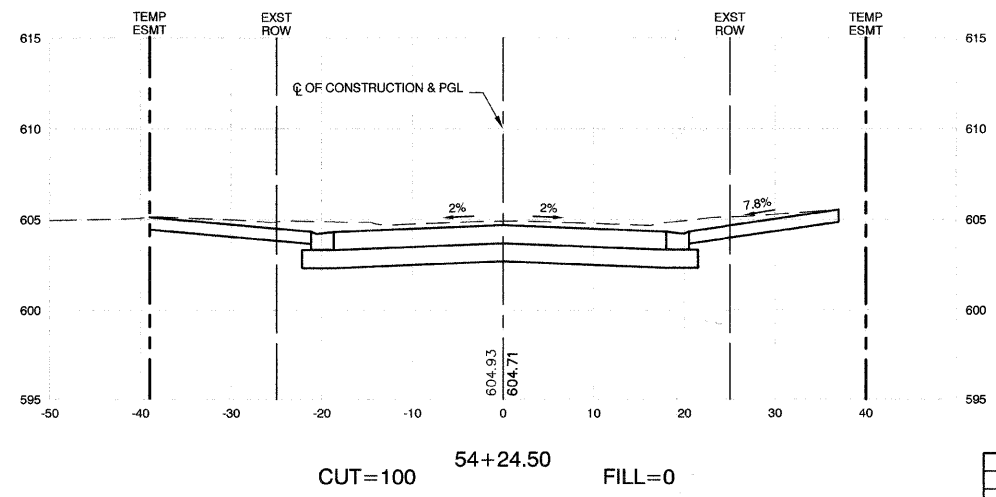
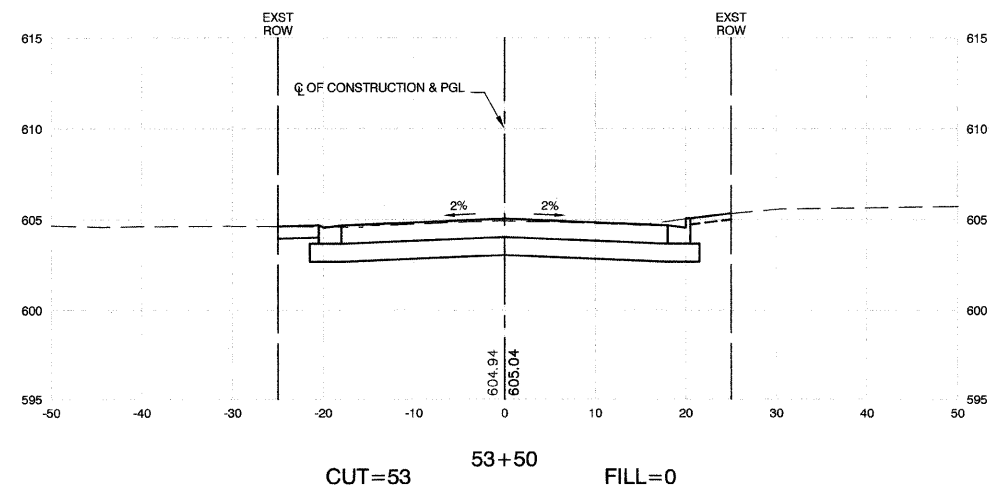
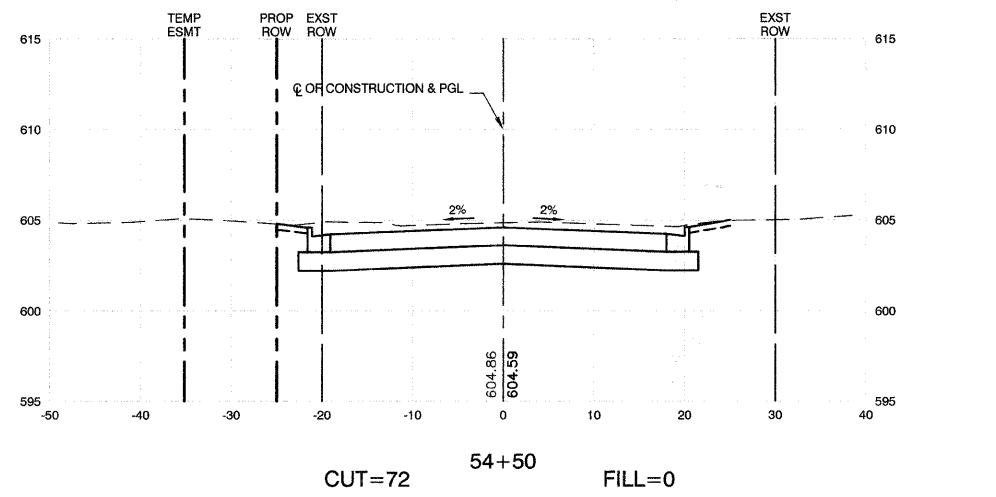
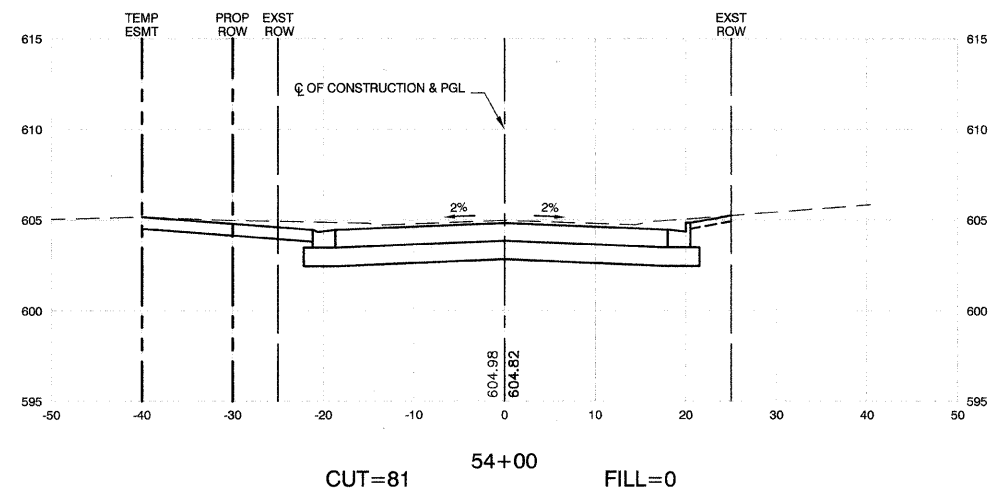
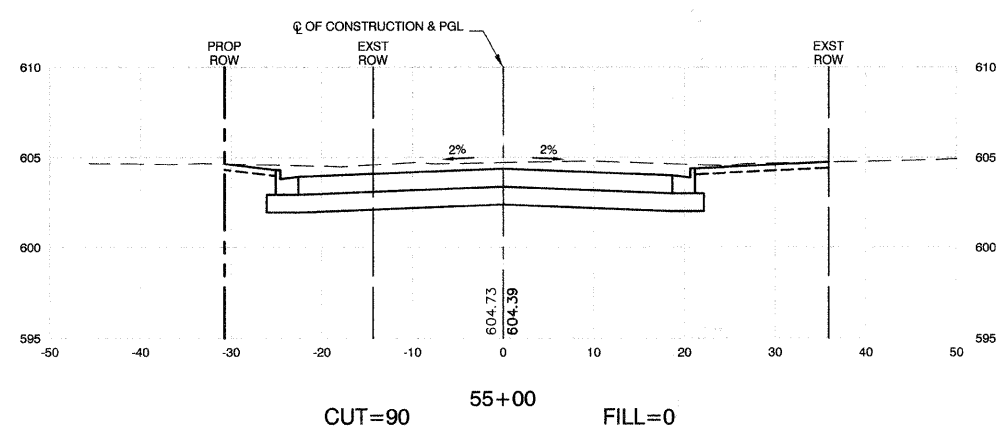
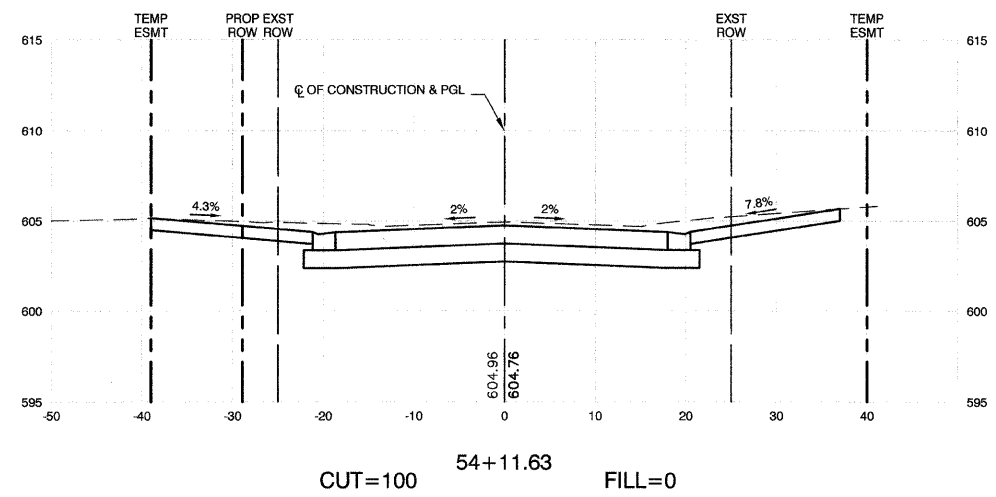
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
168TH STREET

SCALE: VERT. 1"=5'
HORIZ. 1"=10'
DATE 7/22/08
DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	045
STA. 53+50		TO STA. 55		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
168TH STREET

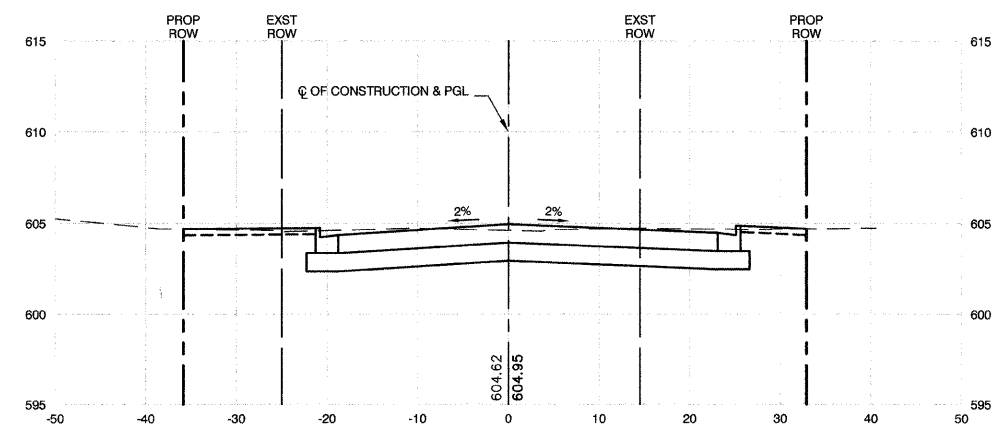
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HORIZ. 1"=10'

DATE 7/22/08

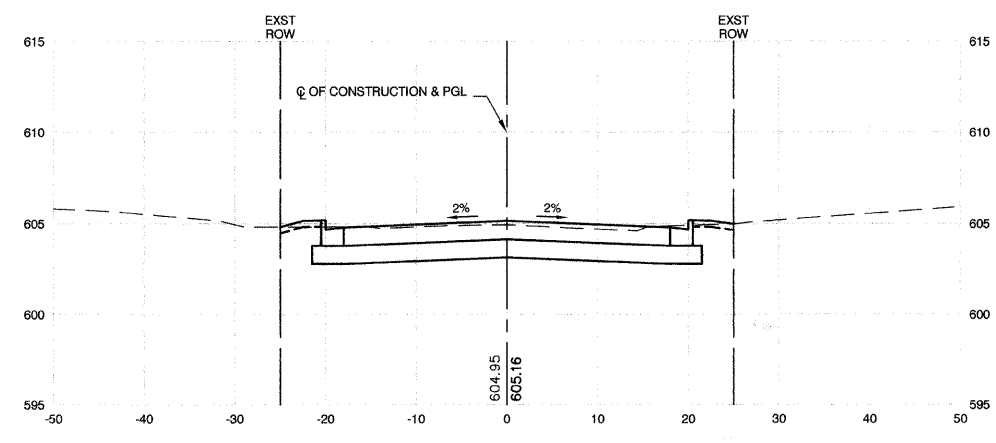
DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. R/E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	046
STA. 55+50		TO STA. 58+50		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(996)	

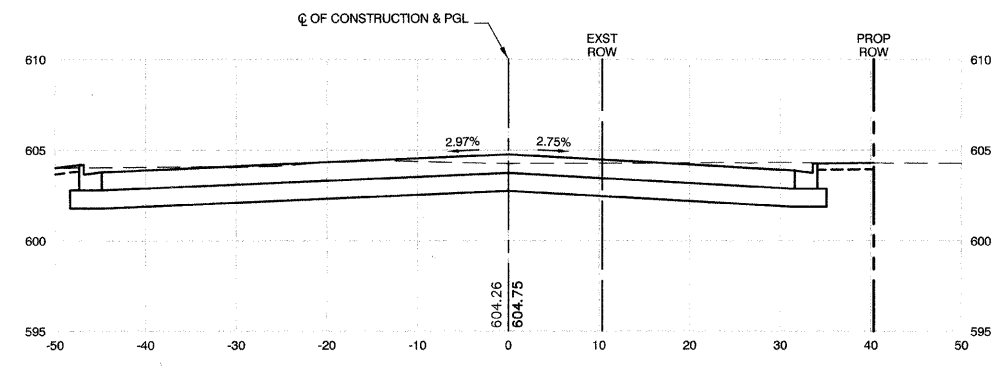
CONTRACT #63061



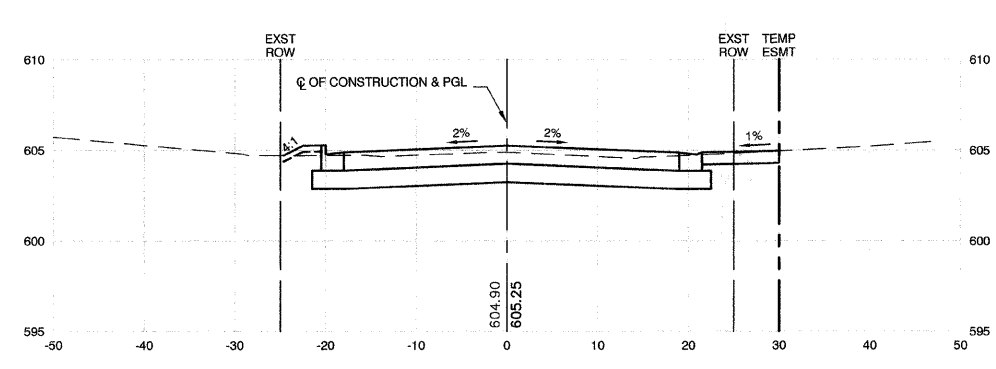
57+00
CUT=68 FILL=0



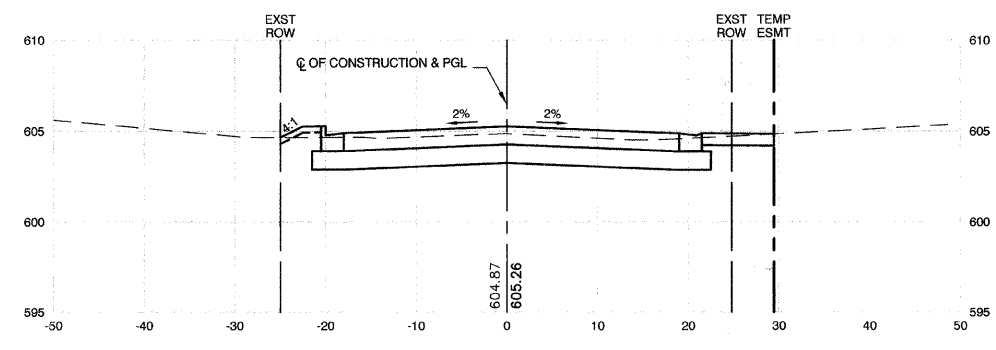
58+50
CUT=46 FILL=0



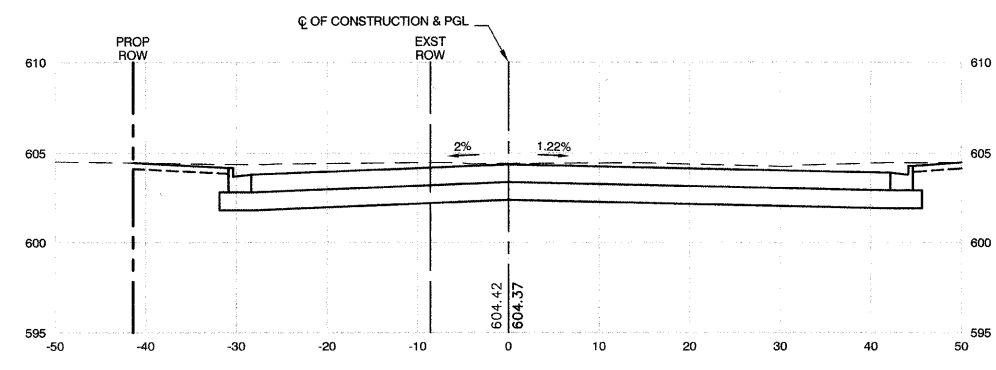
56+50
CUT=77 FILL=1



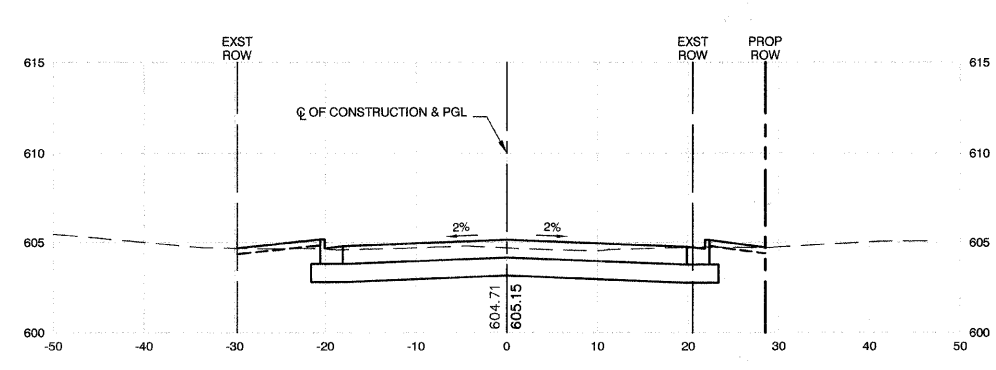
58+16
CUT=42 FILL=1



58+00
CUT=42 FILL=1



55+50
CUT=143 FILL=0



57+50
CUT=45 FILL=1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
168TH STREET

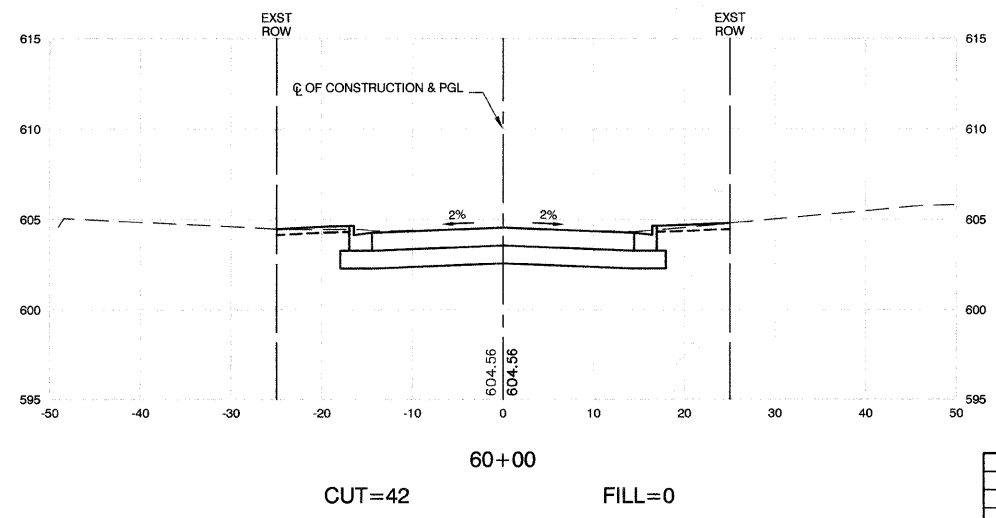
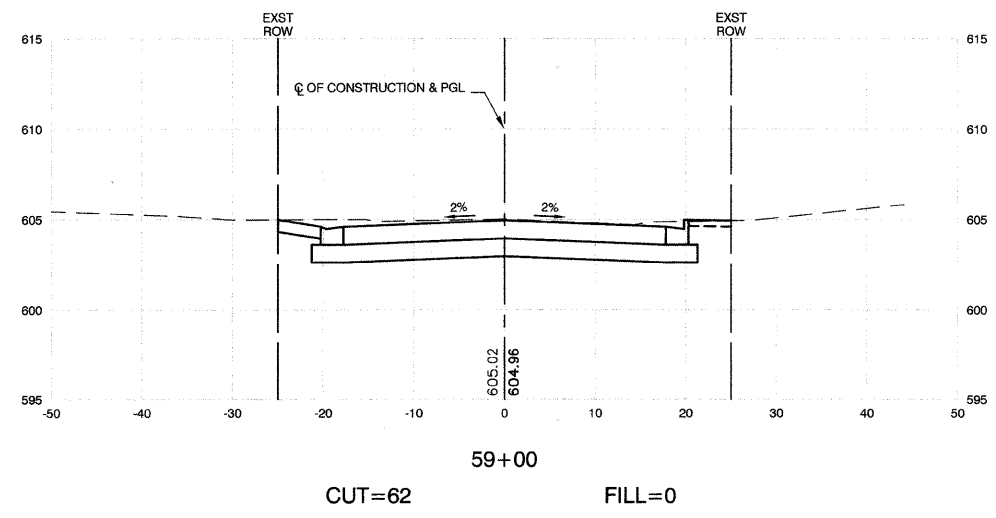
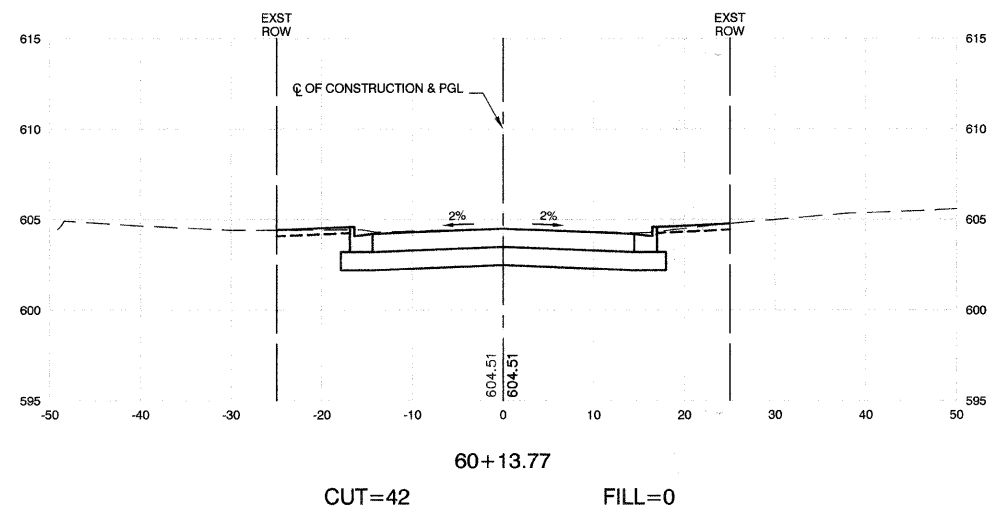
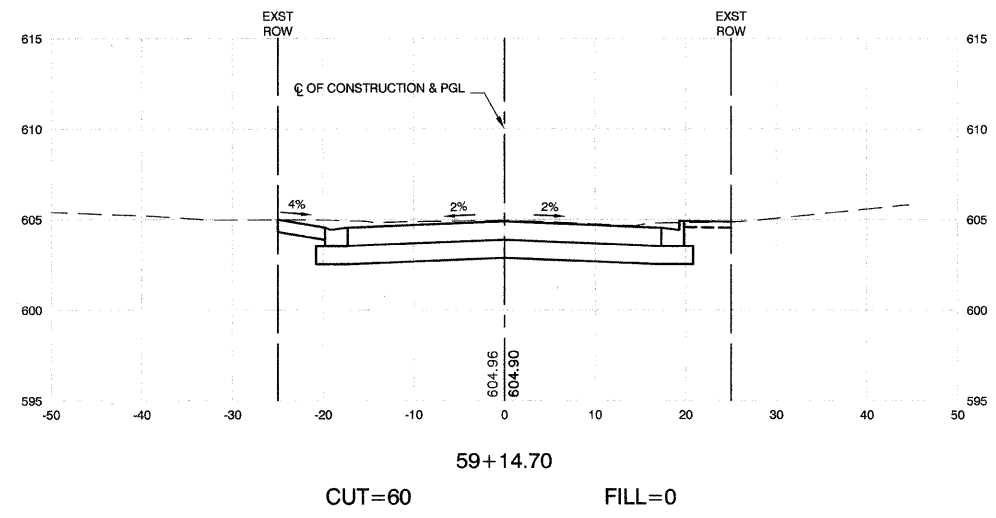
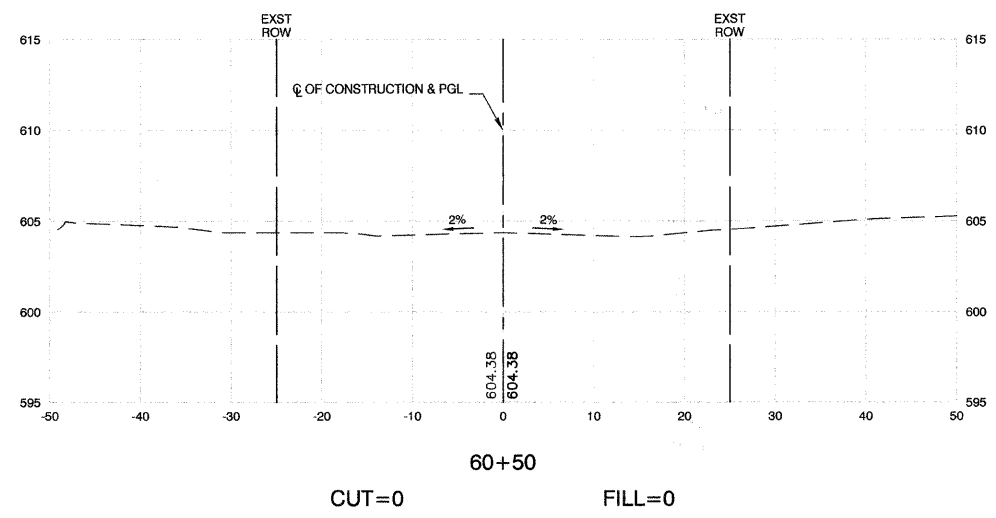
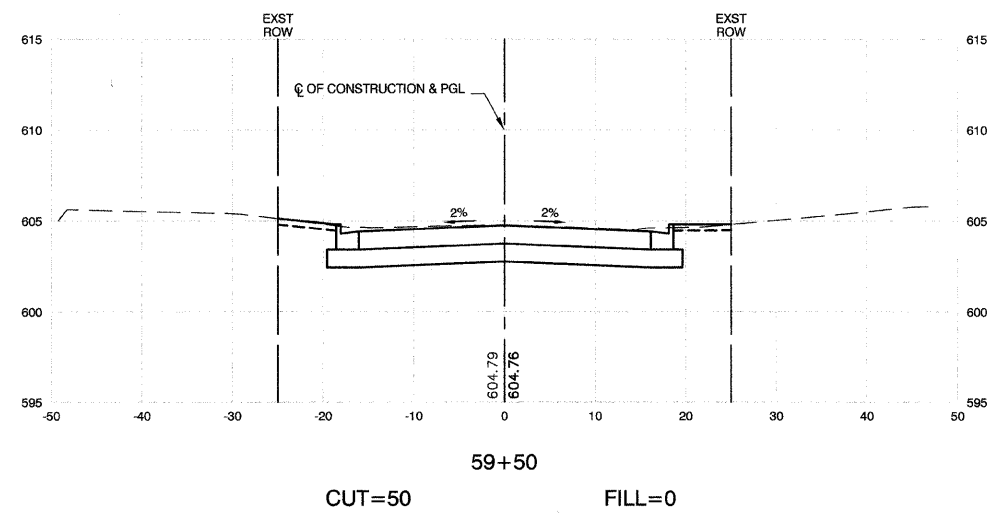
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

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CHECKED BY EA/PKB

F. A. U. RILEY	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	047
STA. 59+00		TO STA. 60+50		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
168TH STREET

SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

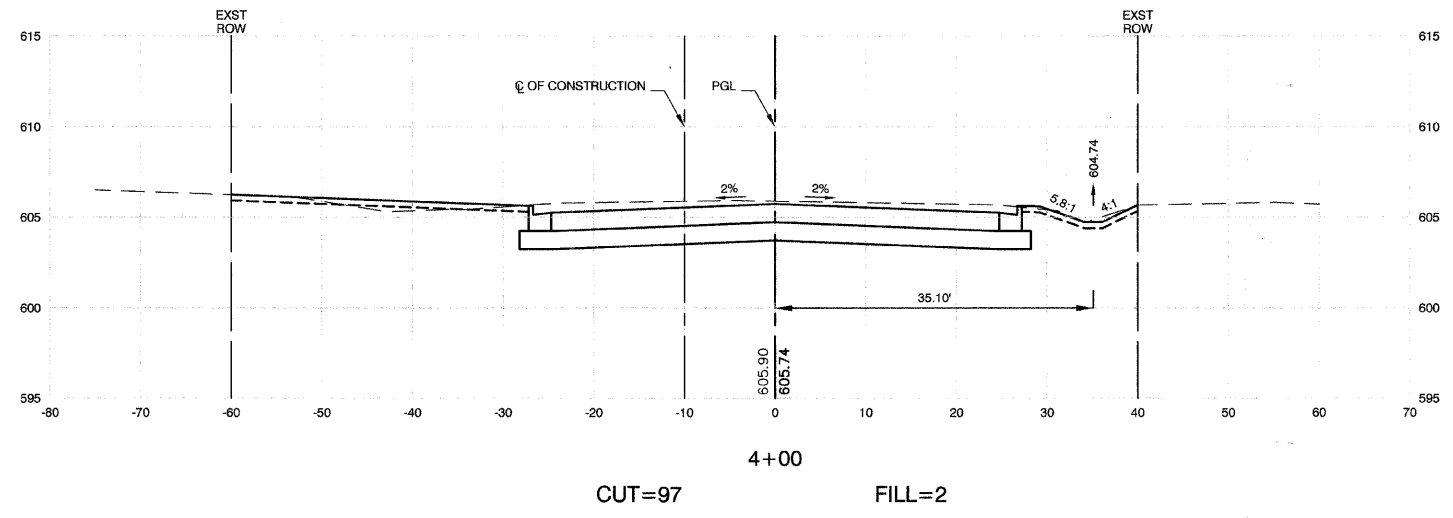
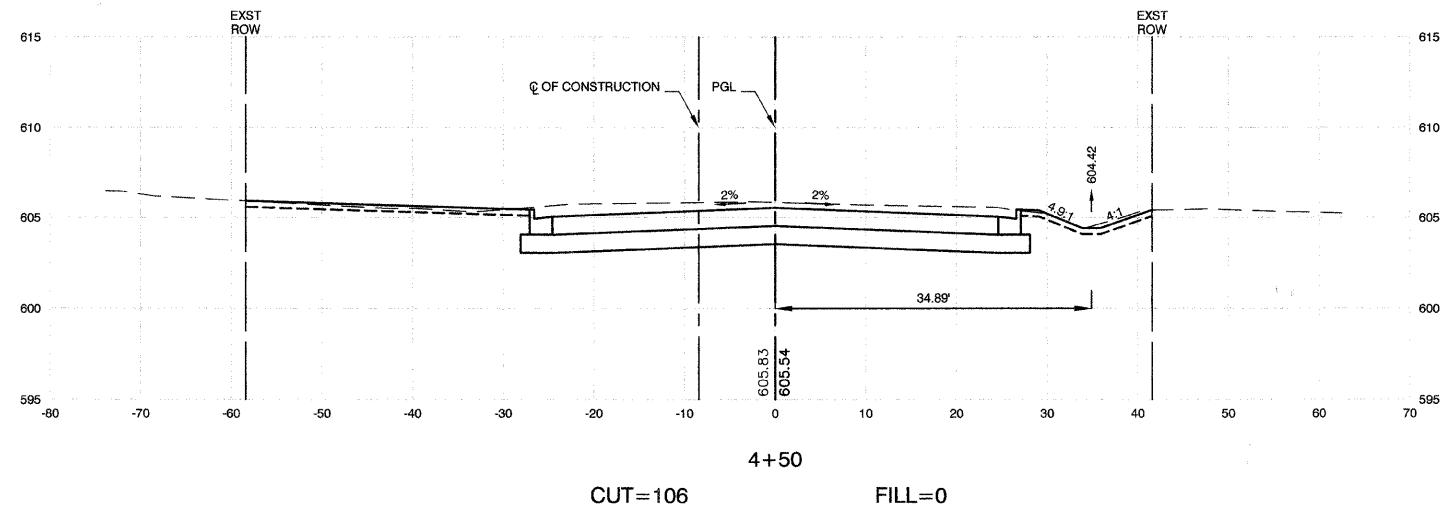
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CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
708/891-6700 FAX 708/351-3626
ILLINOIS DESIGN FIRM REGISTRATION NO. 116001516

07345-XSCT-01

F. A. U. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2808	02-00077-00-WR	COOK	073	048
STA. 3+50		TO STA. 4+50		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET**

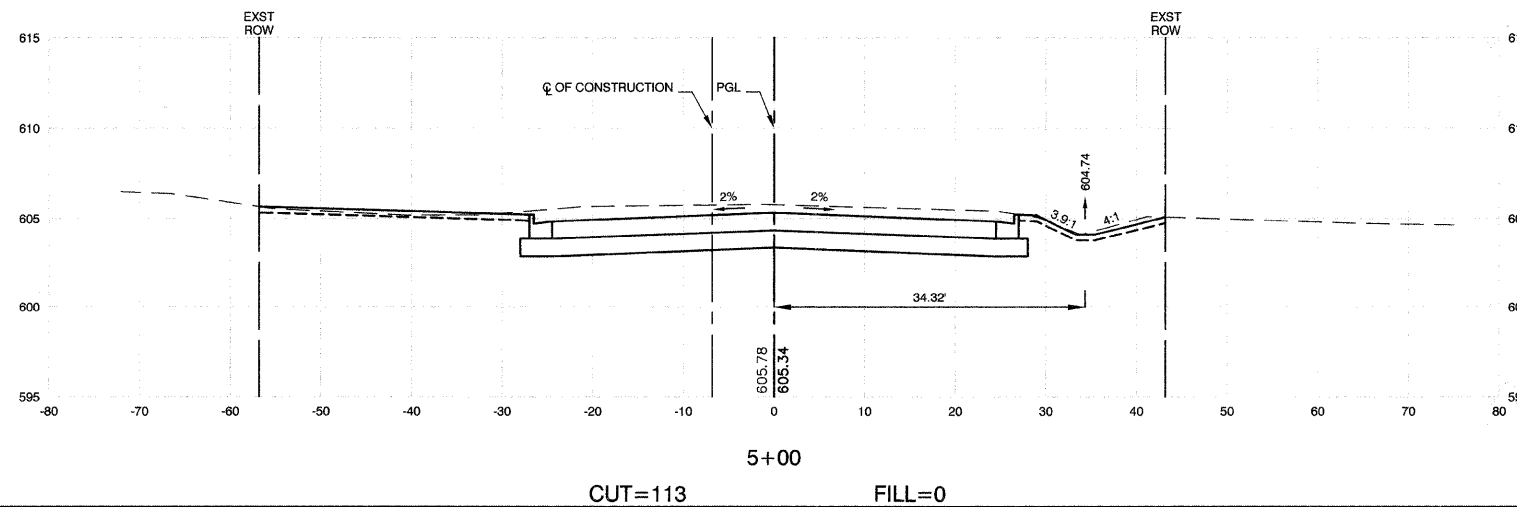
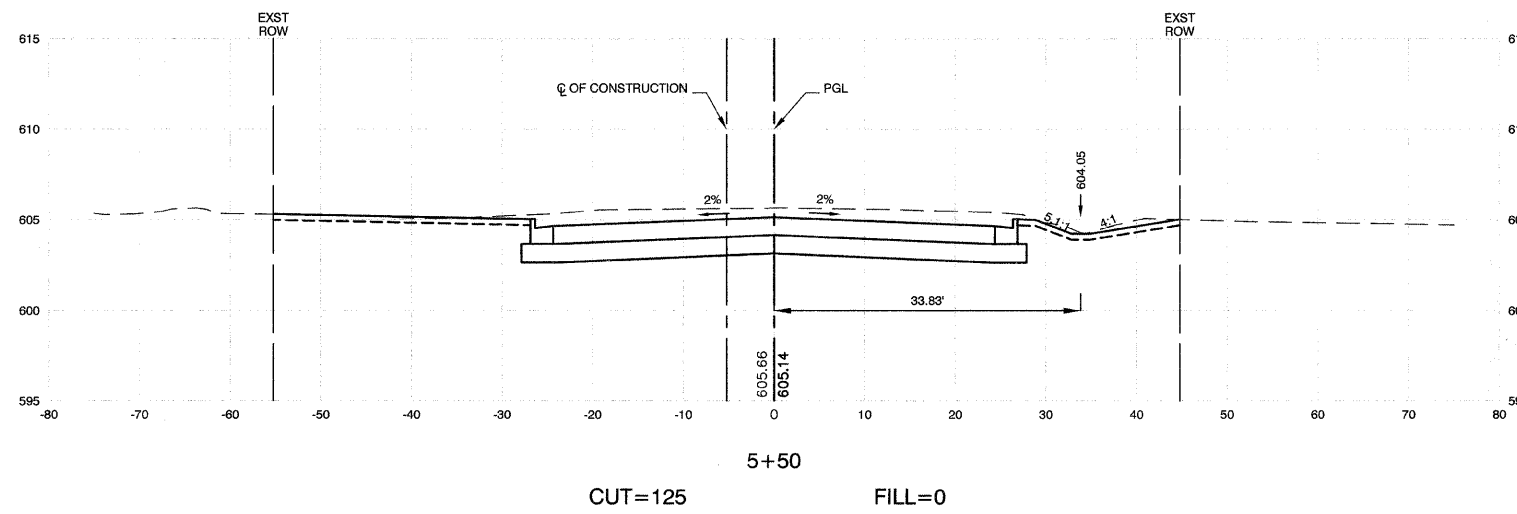
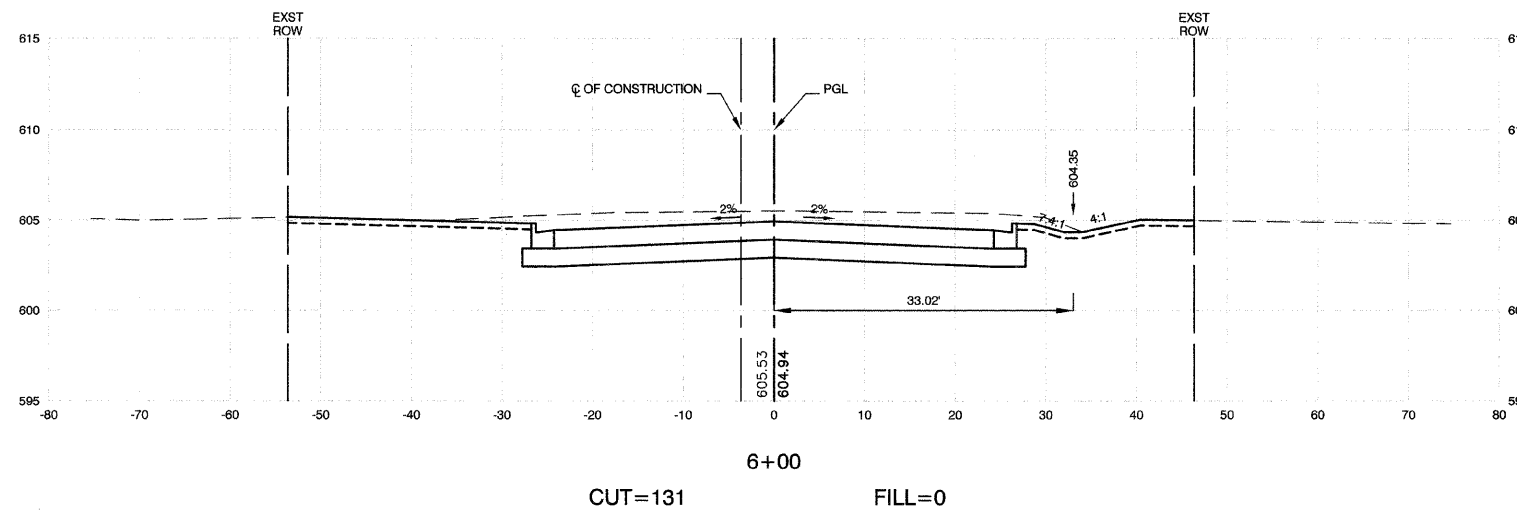
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	049
STA. 5		TO STA. 6+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

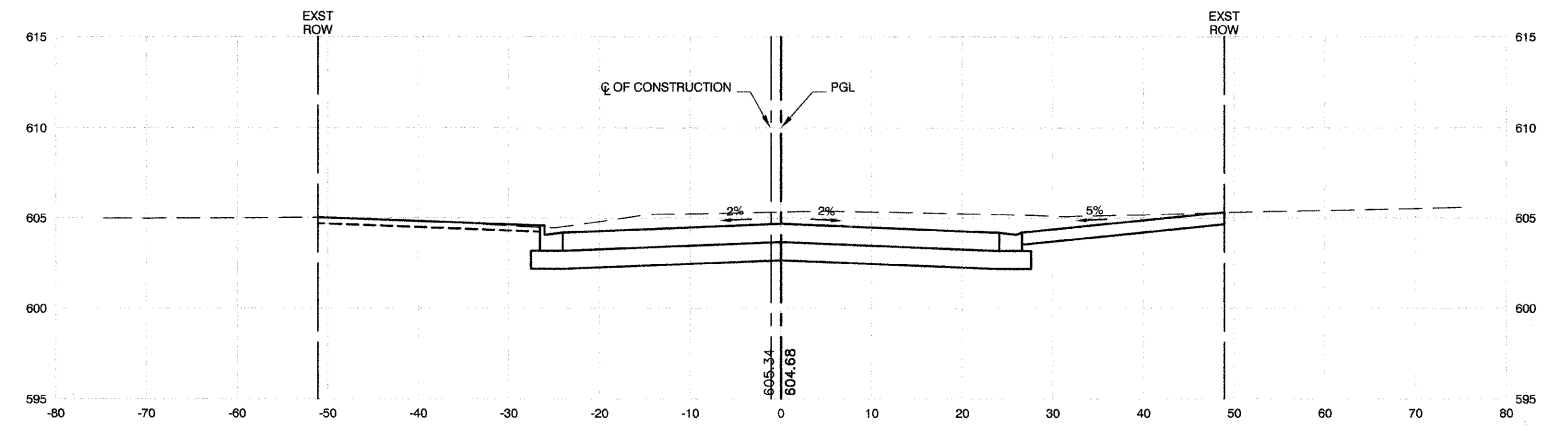
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CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
(708) 591-4700 FAX (708) 591-5828
ILLINOIS DESIGN FIRM REGISTRATION NO. 184011281

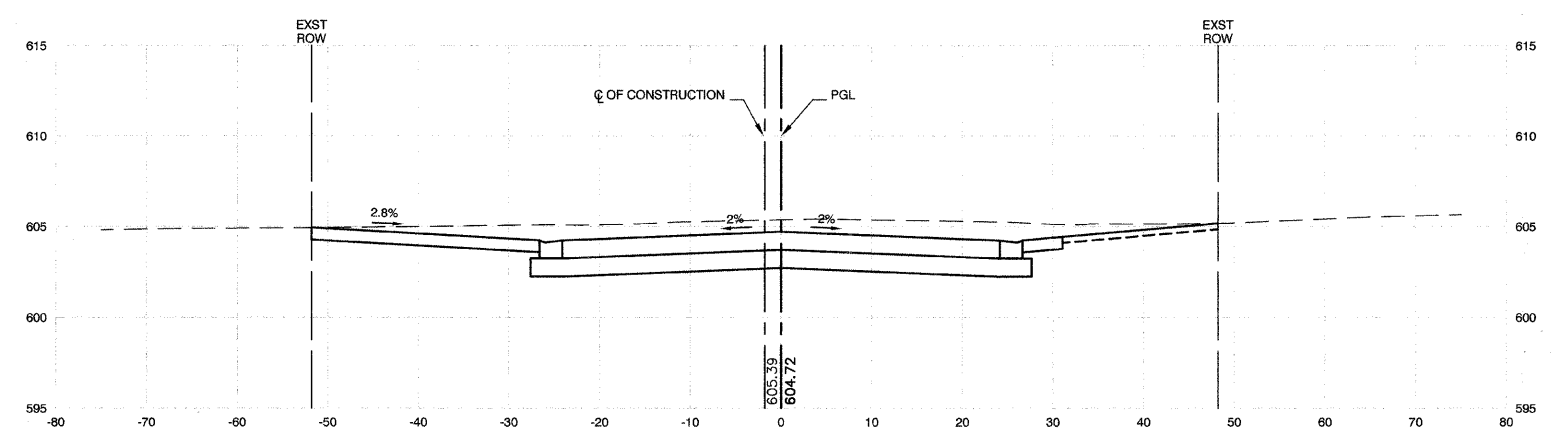
07345-XSCT-01

F. A. U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2906	02-00077-00-WR	COOK	073	050
STA. 6+50		TO STA. 6+80.20		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

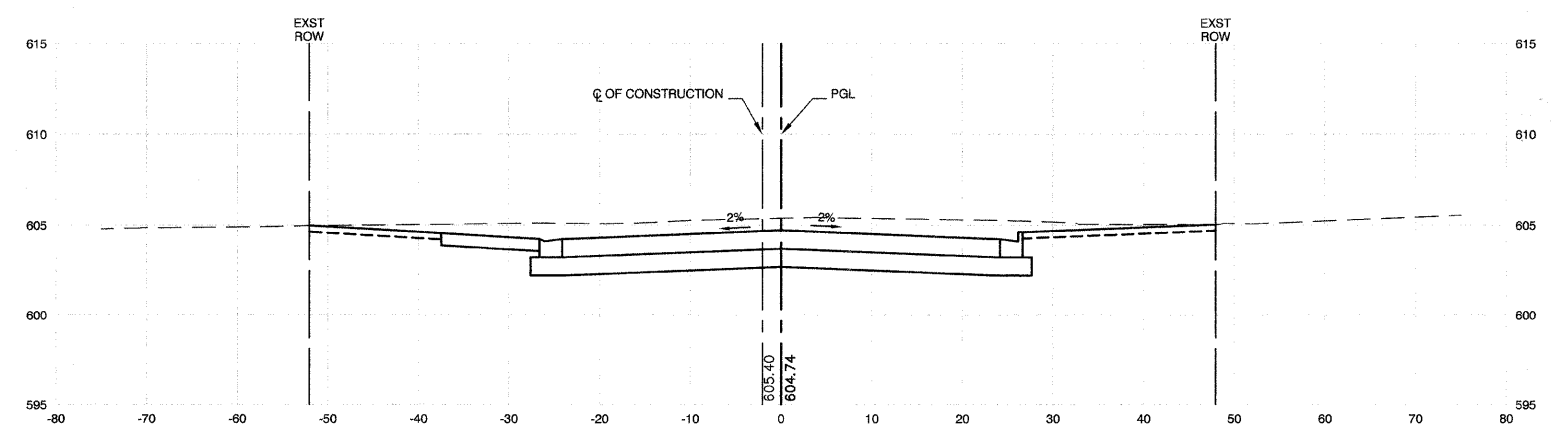
CONTRACT #63061



6+80.20
CUT=142 FILL=0



6+57.90
CUT=154 FILL=0



6+50
CUT=149 FILL=0

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET**

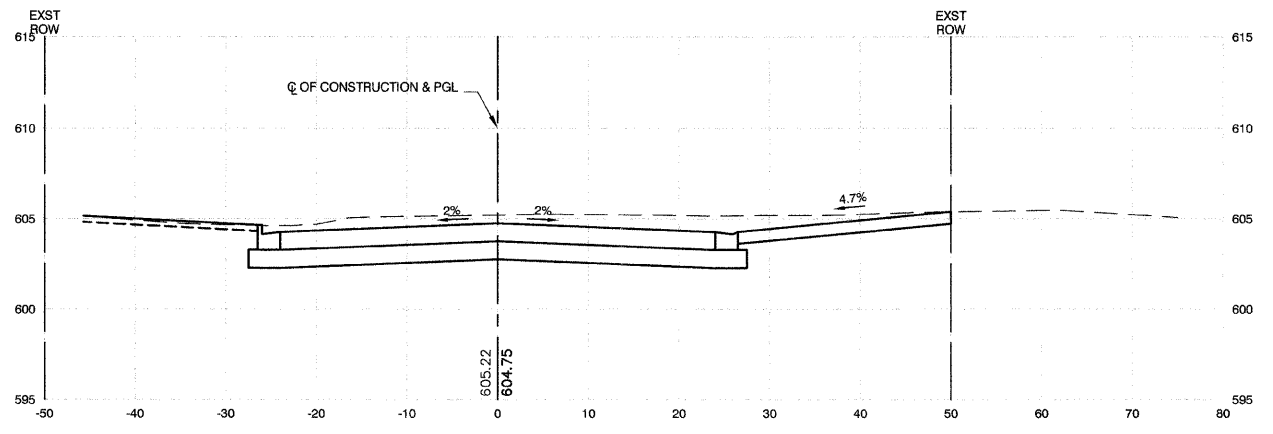
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HORIZ. 1"=10'

DATE 7/22/08

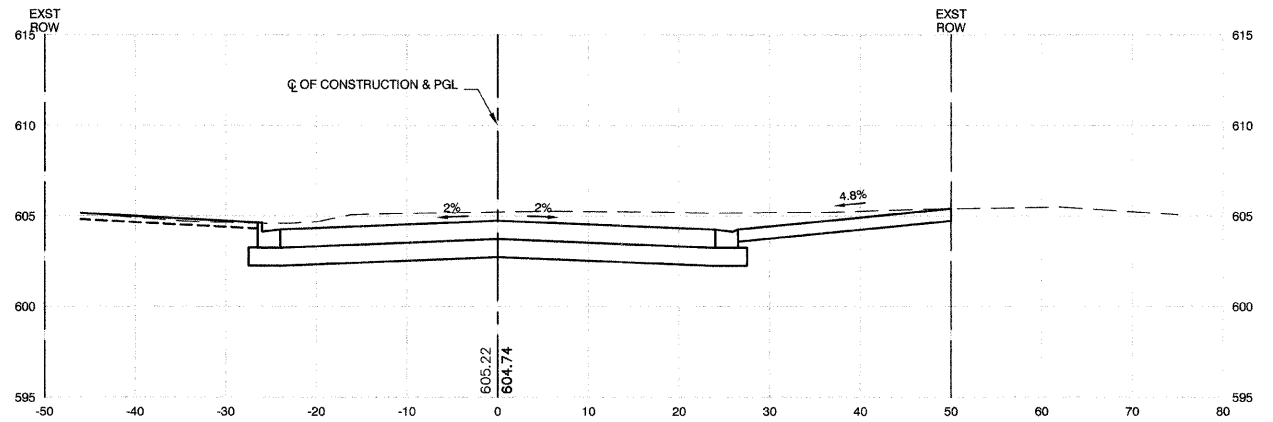
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CHECKED BY EA/PKB

F. A. U. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	051
STA. 7+00		TO STA. 7+52.90		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

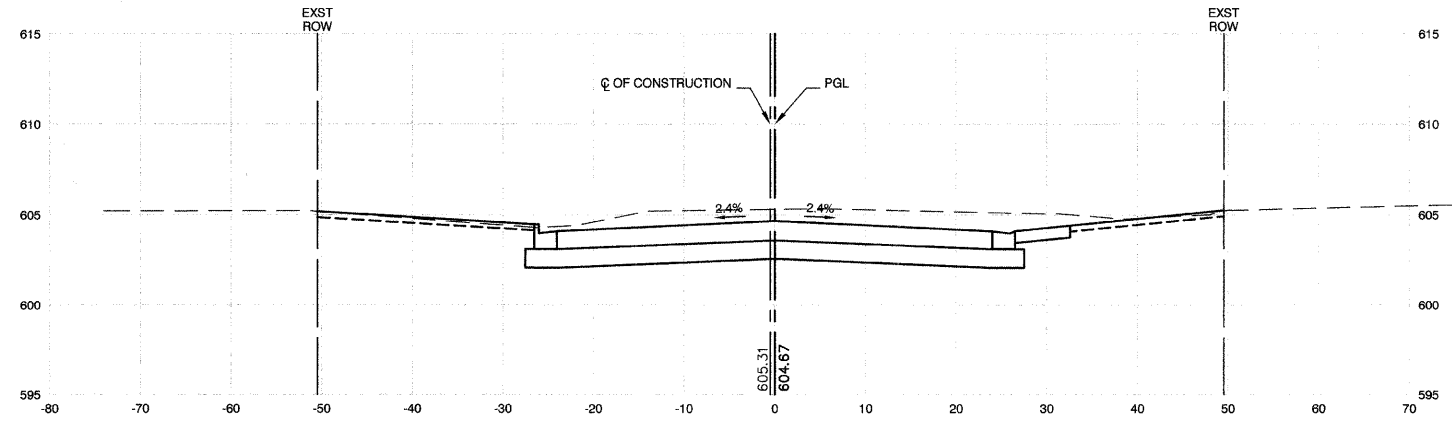
CONTRACT #63061



7+52.90
CUT=135 FILL=0



7+50
CUT=136 FILL=0



7+00
CUT=135 FILL=0

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

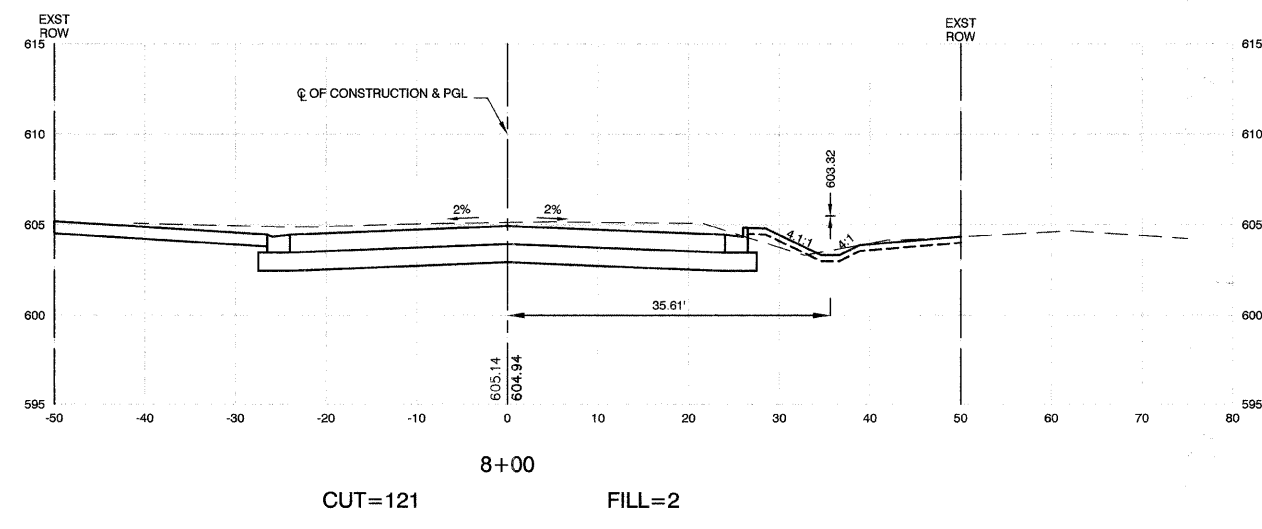
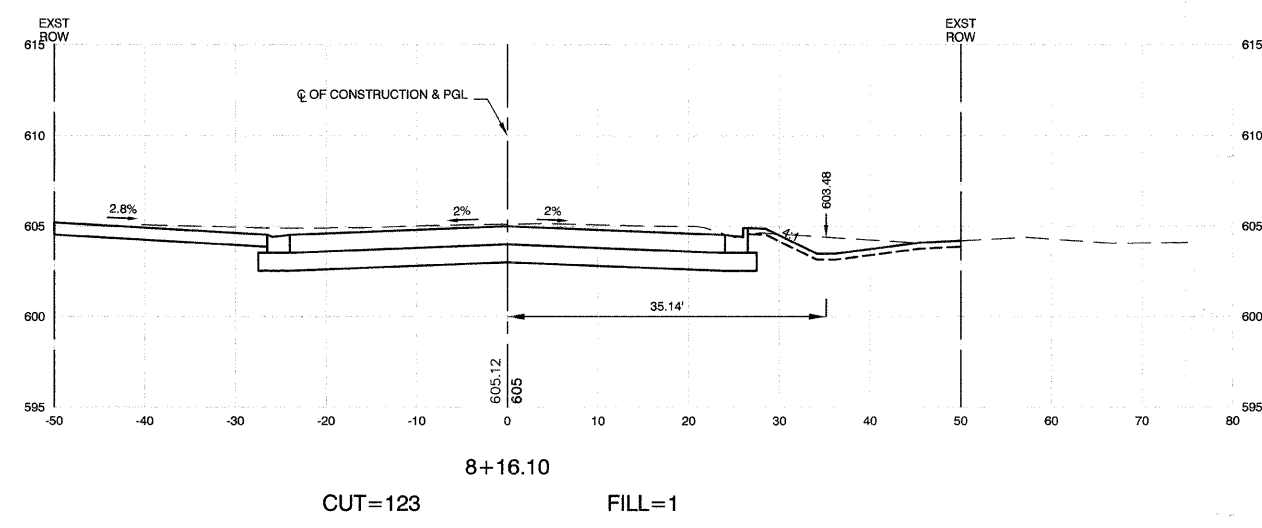
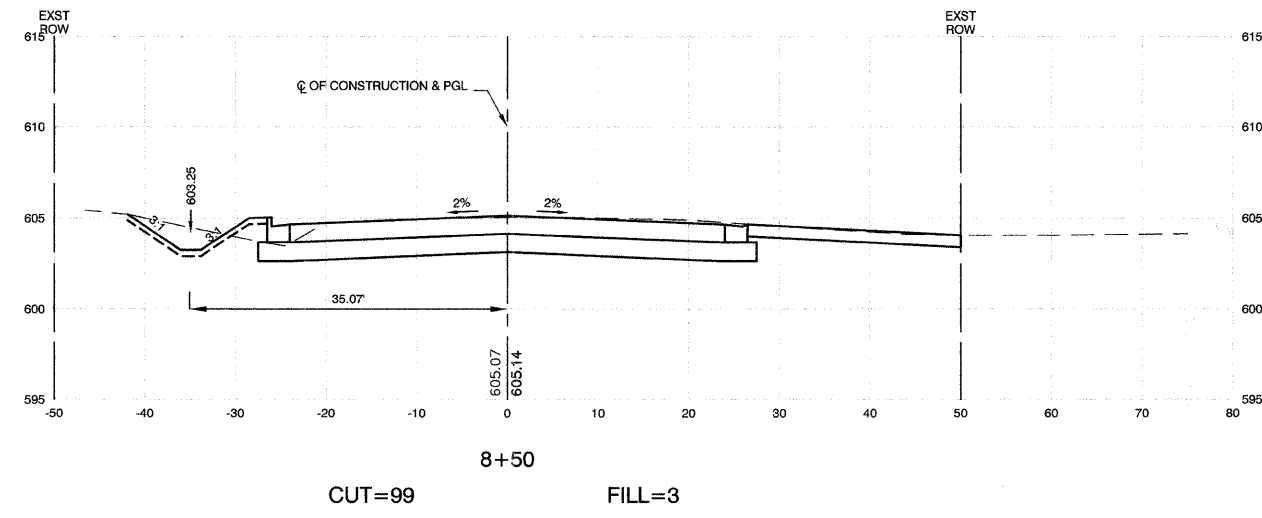
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	052
STA. 8+00		TO STA. 8+50		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

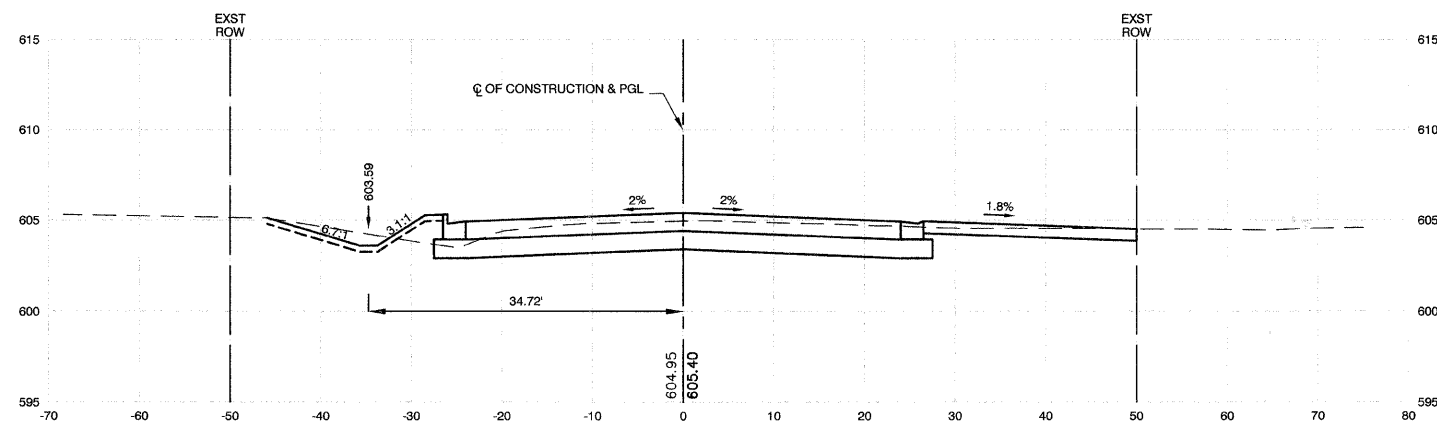
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

DRAWN BY RG/TR
CHECKED BY EA/PKB

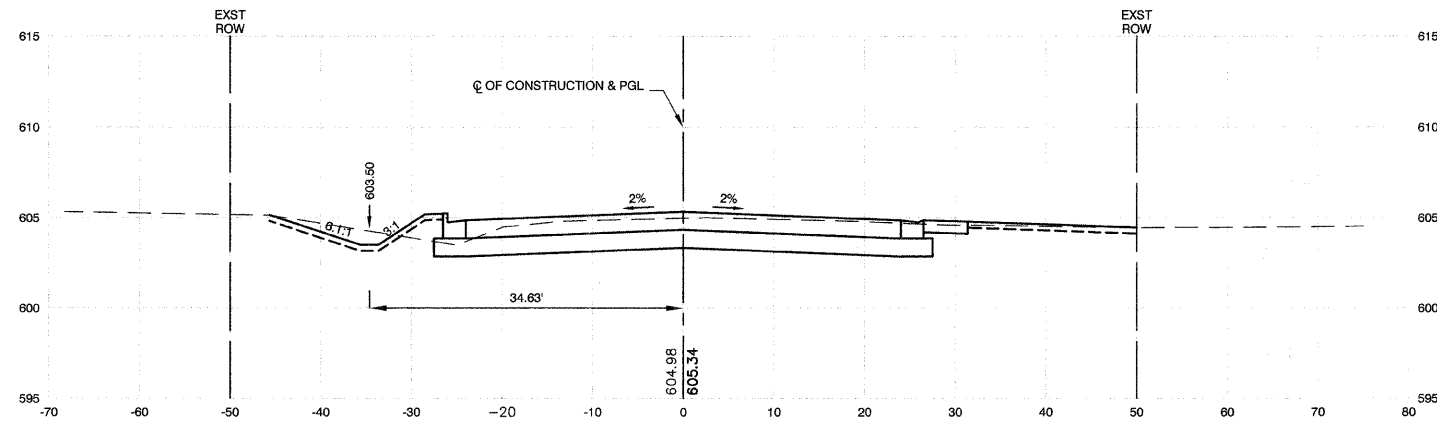
F. A. U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	053
STA. 8+53.20		TO STA. 9+17.20		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



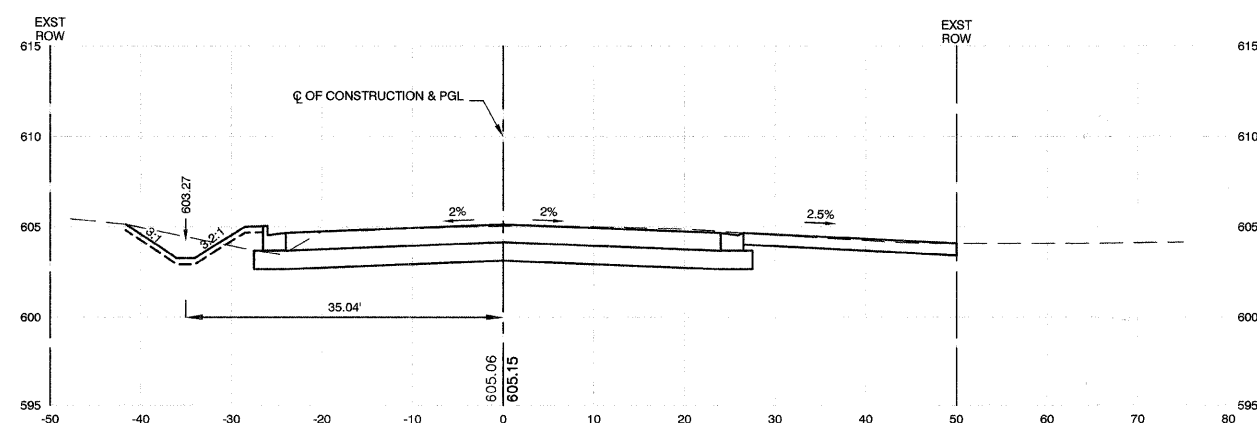
9+17.20

CUT=74 FILL=4



9+00

CUT=76 FILL=4



8+53.20

CUT=97 FILL=3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

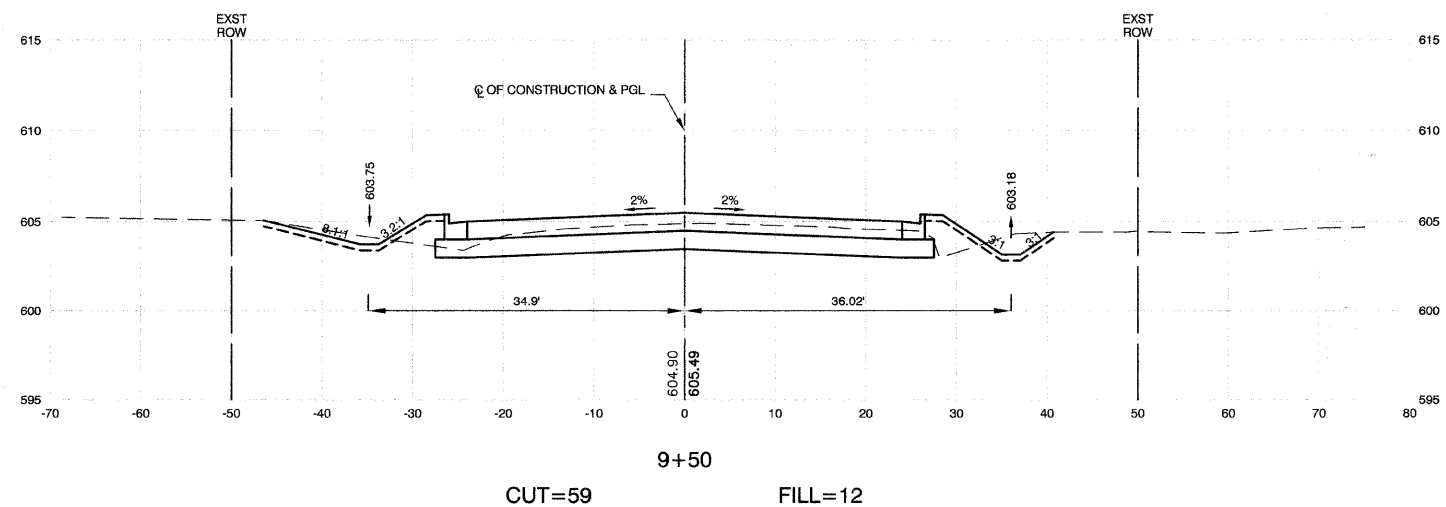
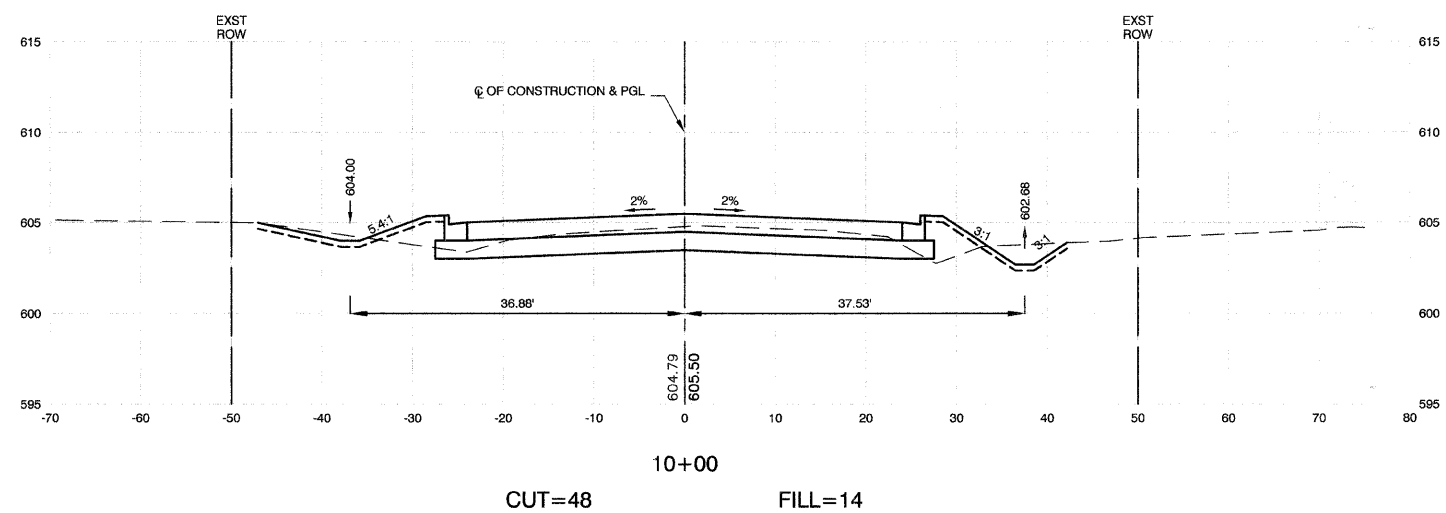
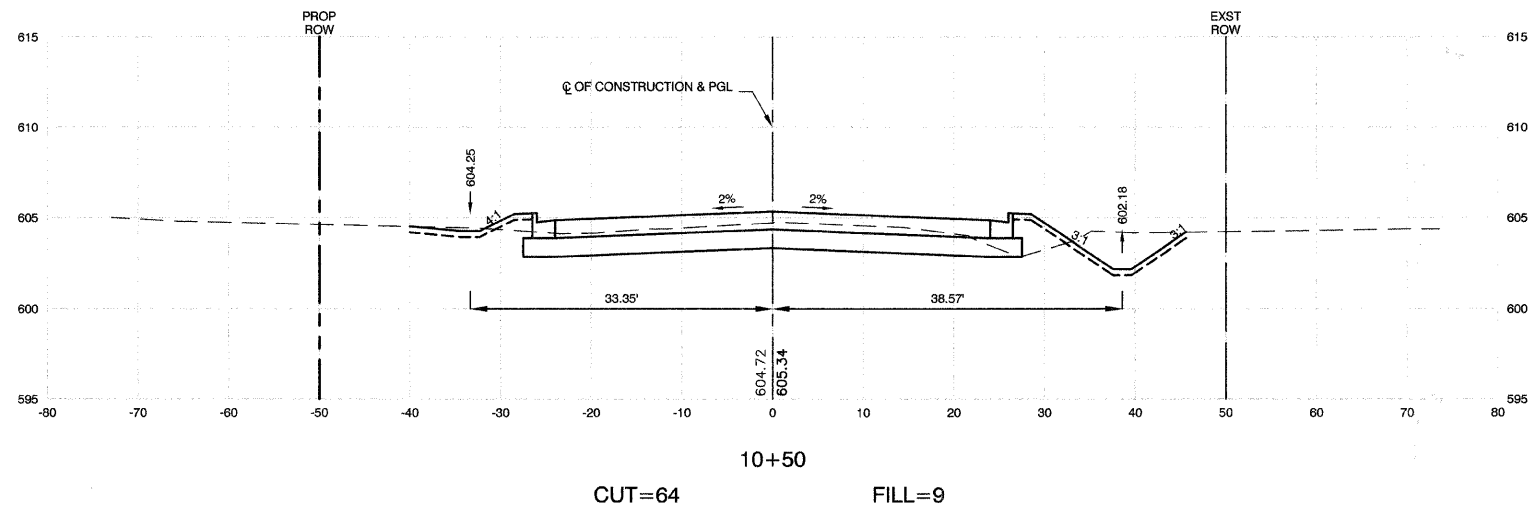
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	054
STA. 9+50		TO STA. 10+50		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET**

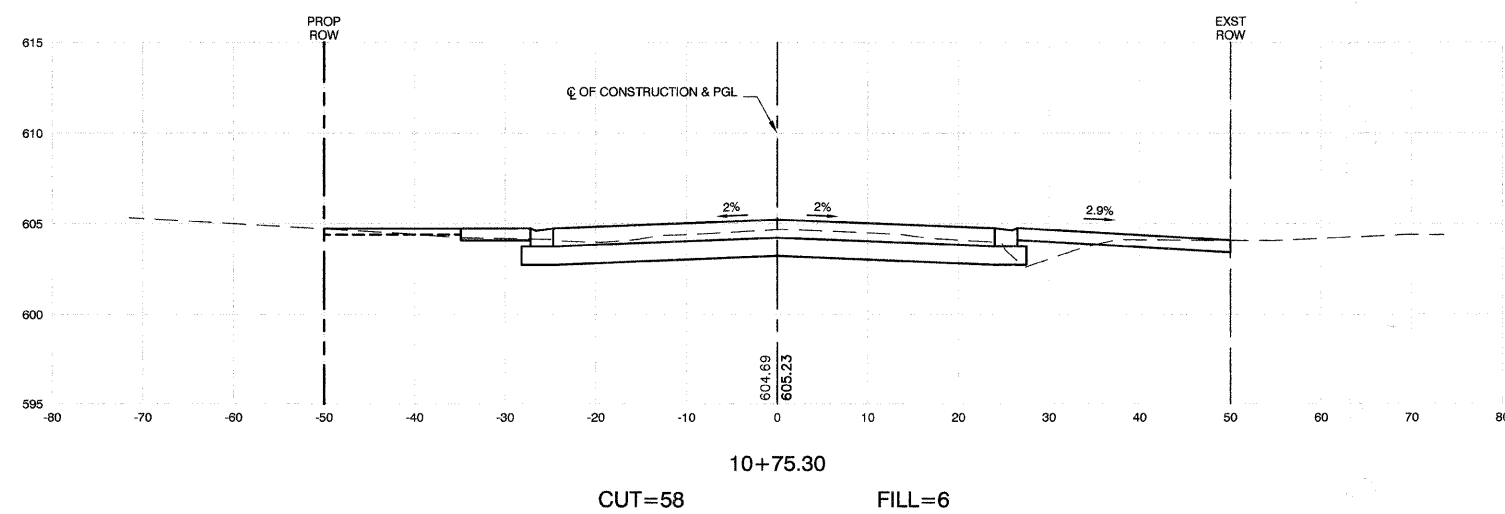
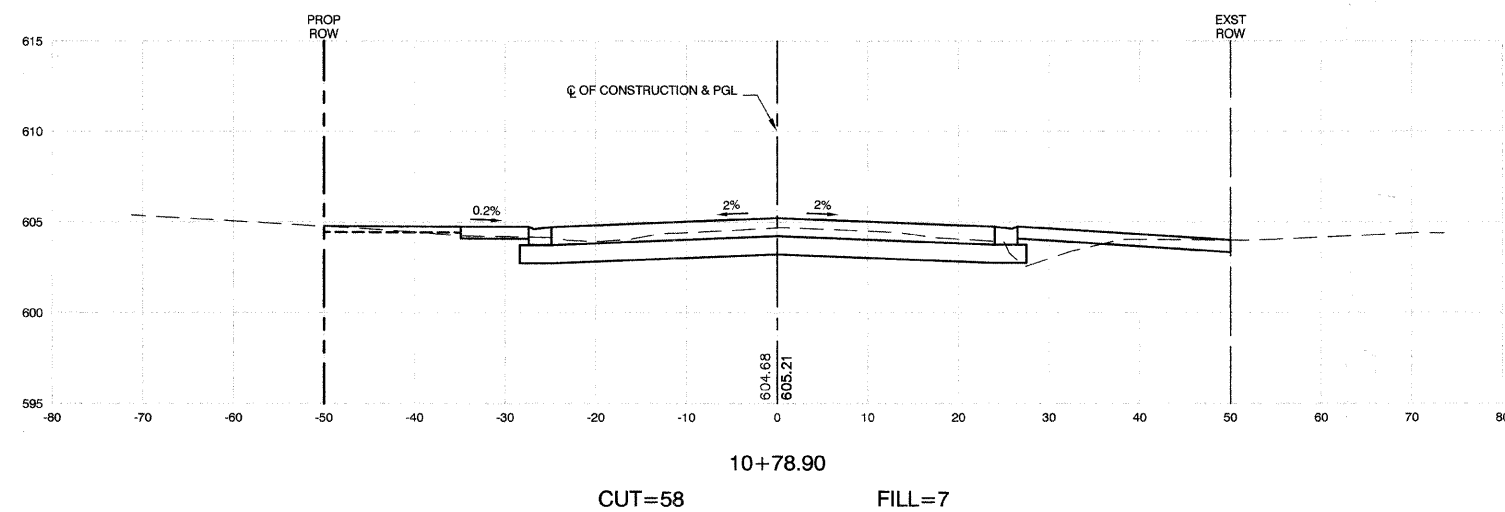
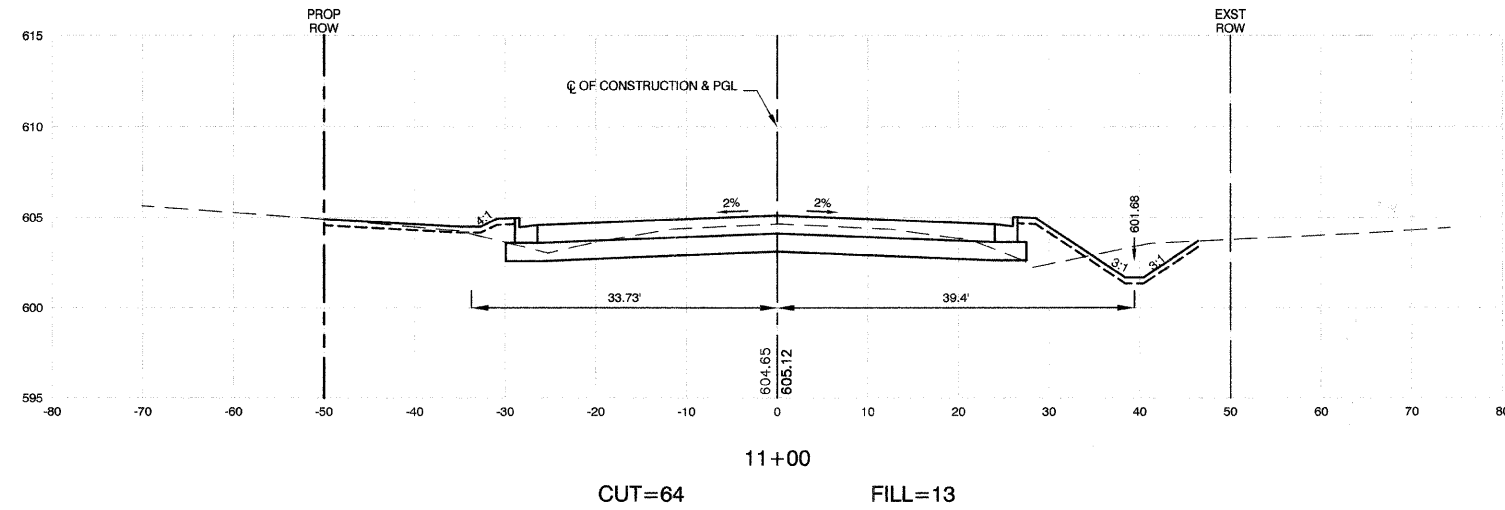
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	055
STA. 10+75.30		TO STA. 11+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



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NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET**

SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

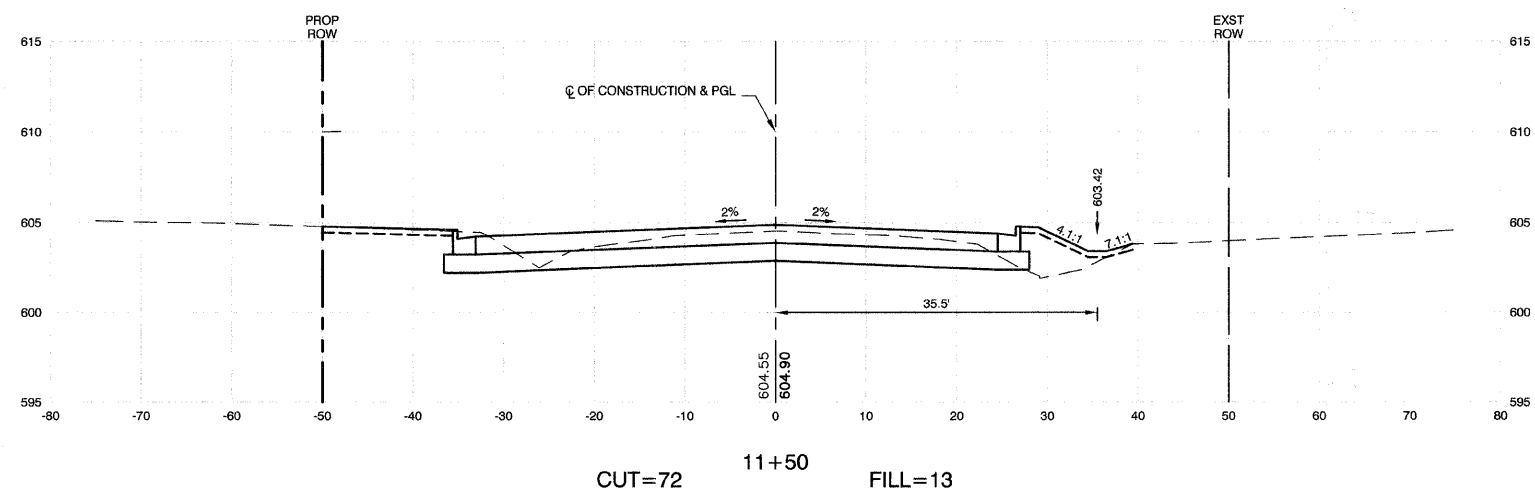
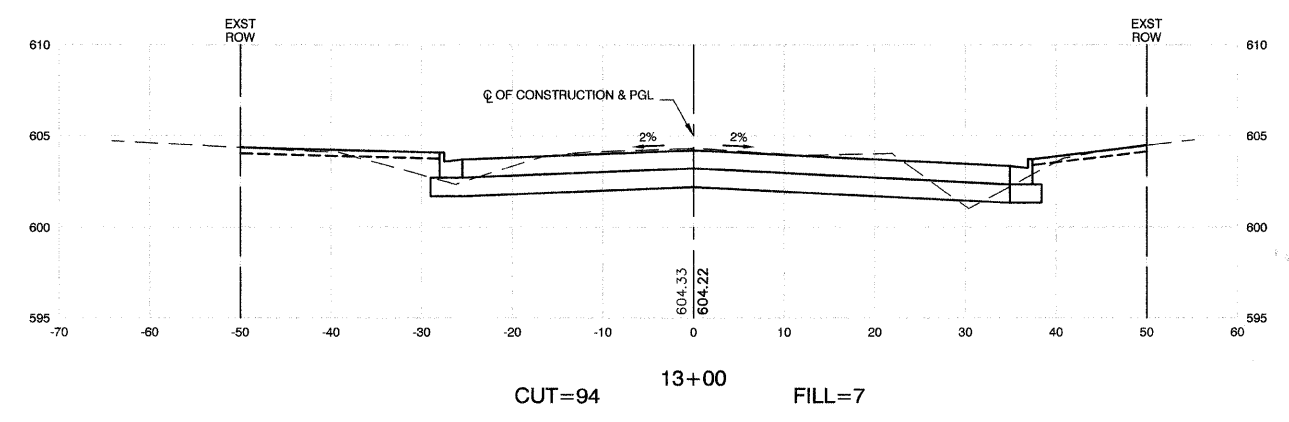
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CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
(708) 381-8700 FAX (708) 381-9229
ILLINOIS DESIGN FIRM REGISTRATION NO. 14601126

07345-XSCT-01

F. A. U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2808	02-00077-00-WR	COOK	073	056
STA. 11+50		TO STA. 13+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

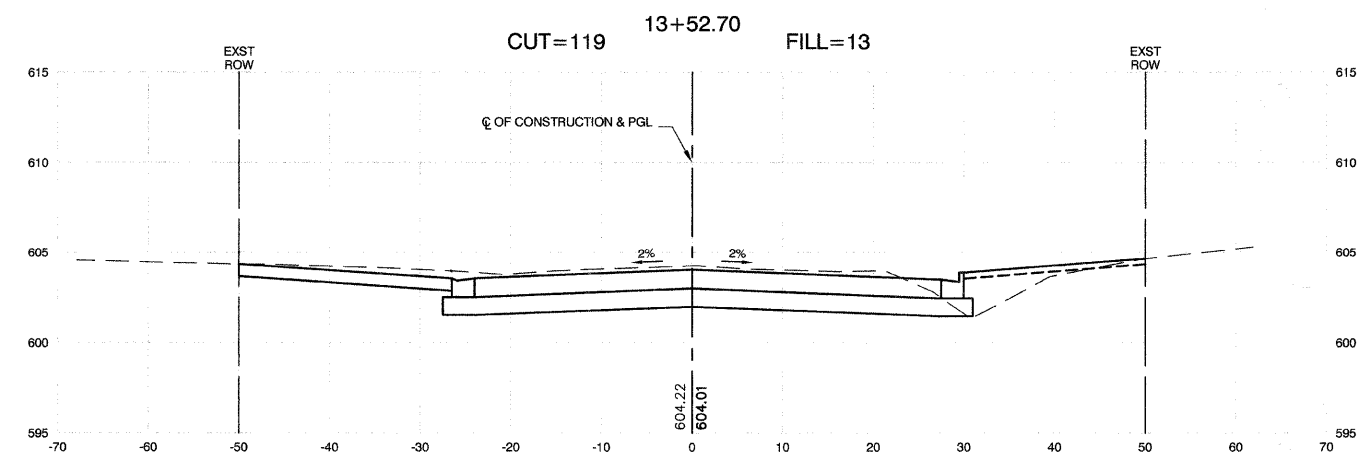
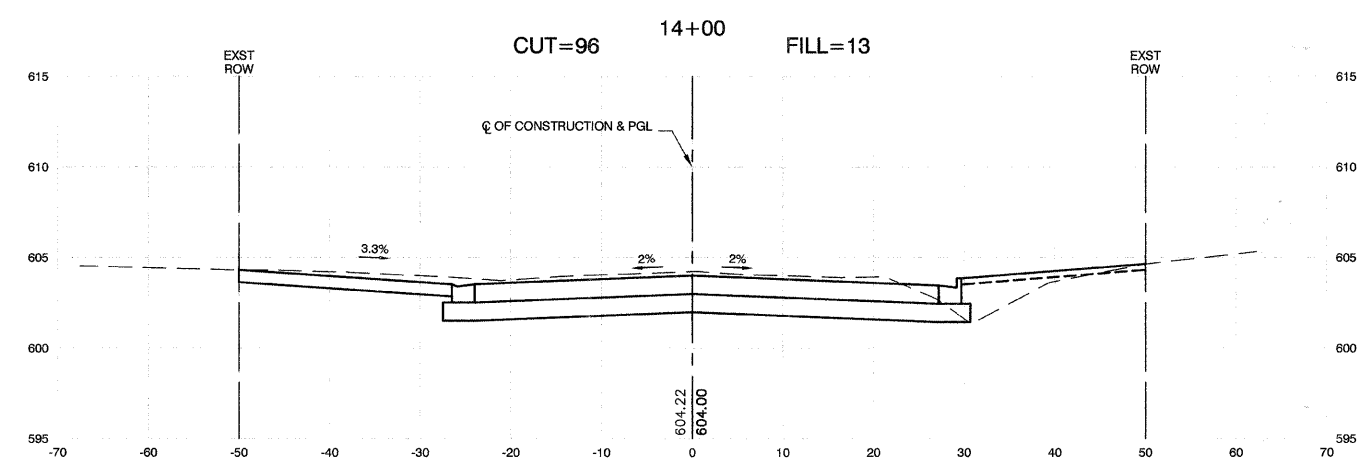
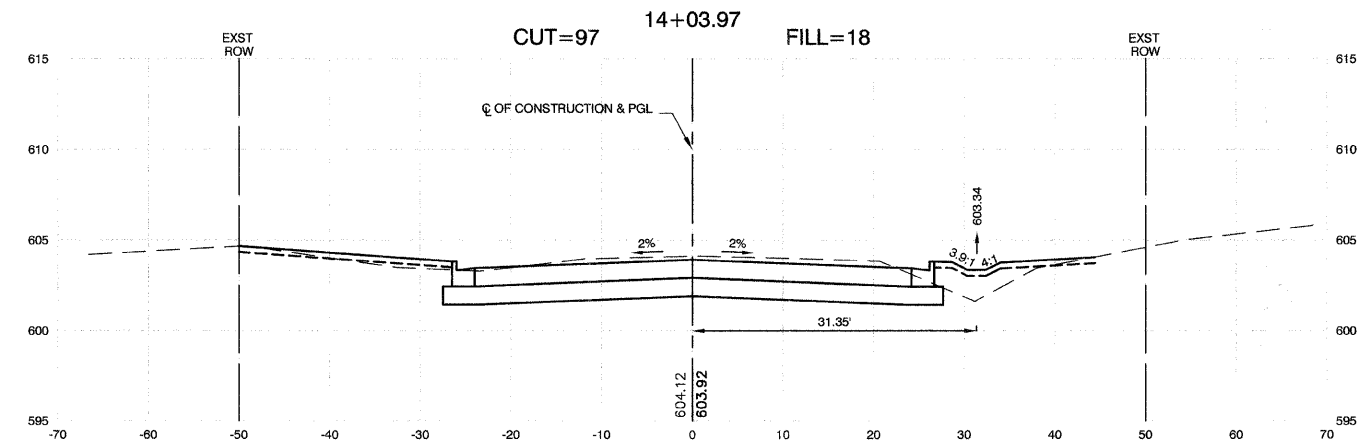
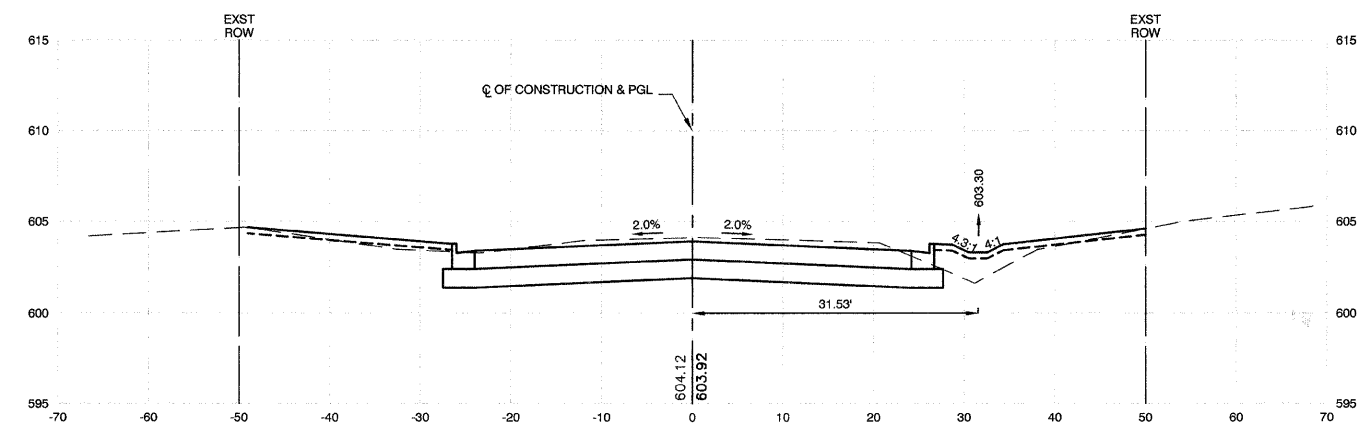
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	057
STA. 13+50		TO STA. 14+03.97		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

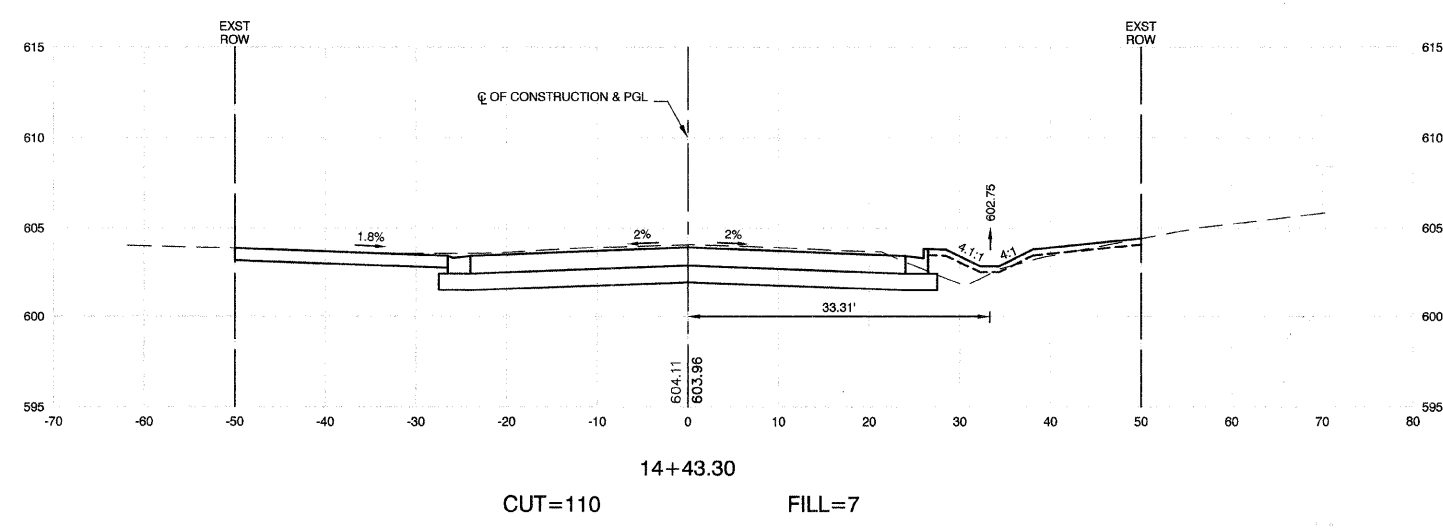
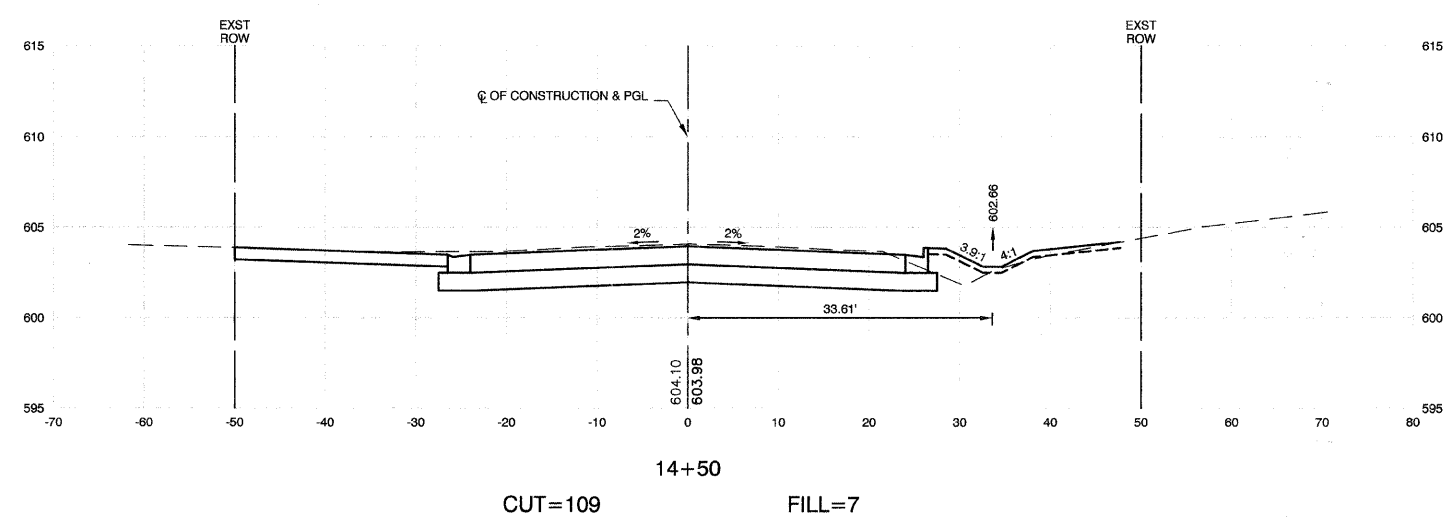
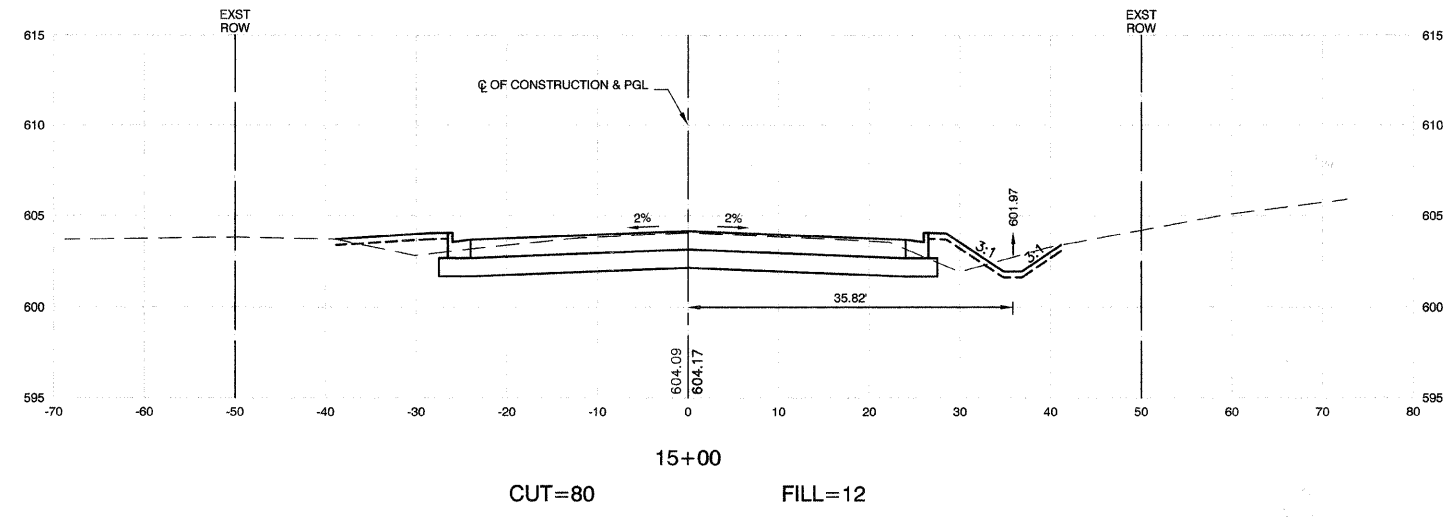
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	058
STA. 14+43.30		TO STA. 15		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



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NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

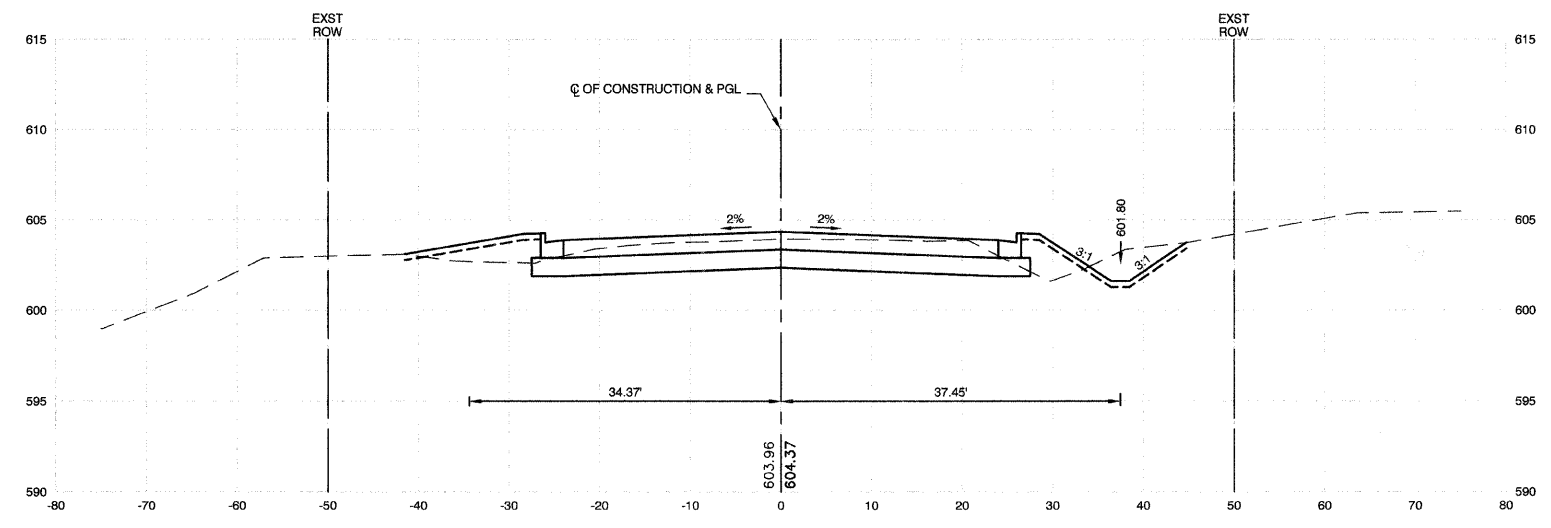
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HORIZ. 1"=10'

DATE 7/22/08

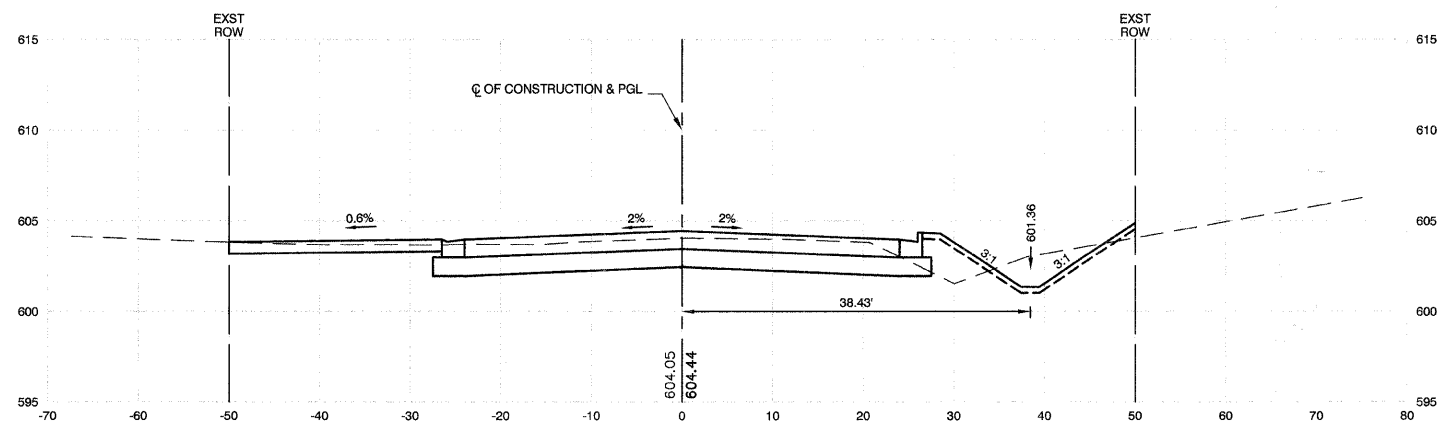
DRAWN BY RG/TR
CHECKED BY EA/PKB

F. A. U. SHEET	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2908	02-00077-00-WR	COOK	073	059
STA. 15+50		TO STA. 16+50		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

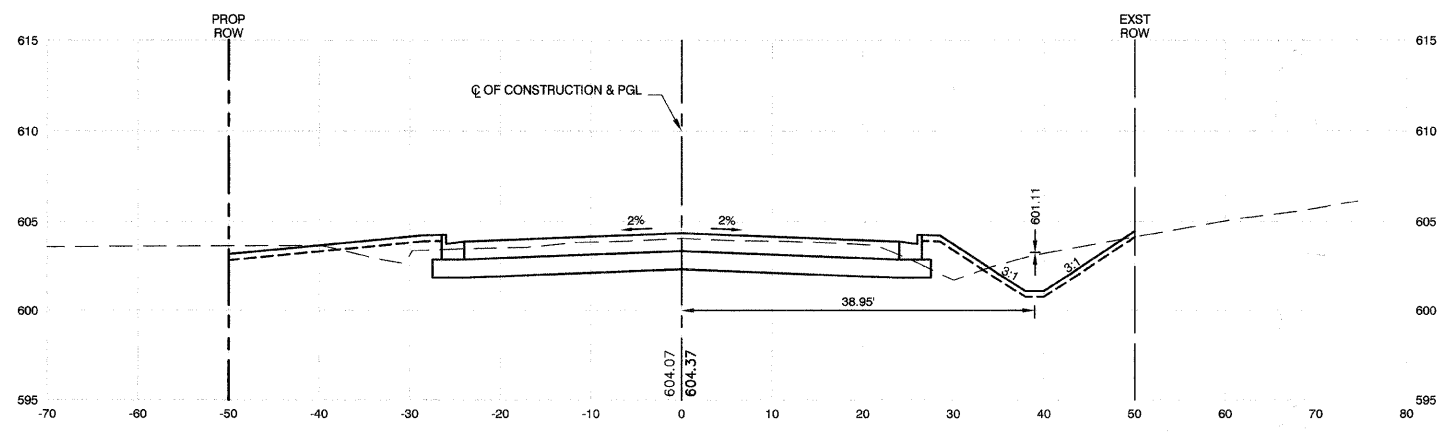
CONTRACT #63061



16+50
CUT=78 FILL=14



16+00
CUT=92 FILL=10



15+50
CUT=95 FILL=15

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

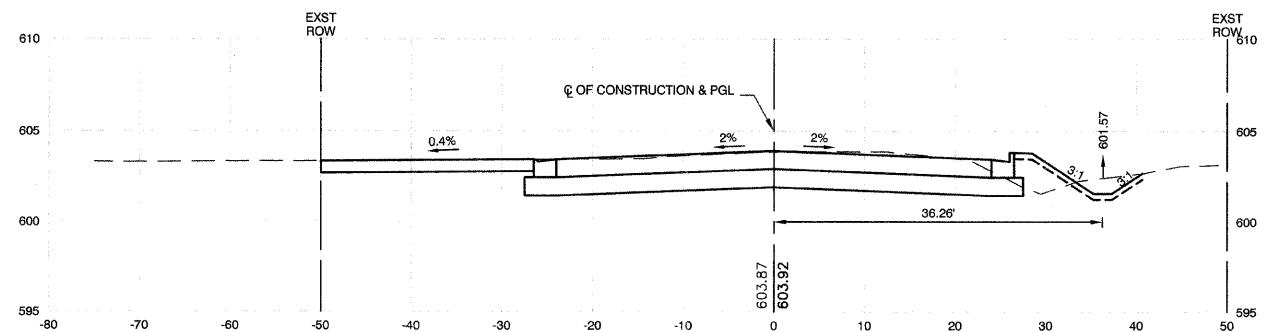
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HORIZ. 1"=10'

DATE 7/22/08

DRAWN BY RG/TR
CHECKED BY EA/PKB

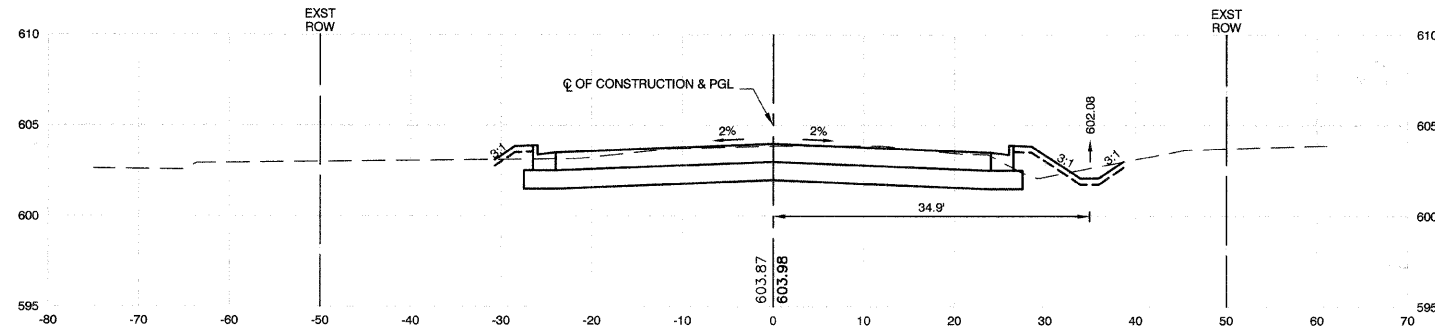
F. A. U. R/E	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2806	02-00077-00-WR	COOK	073	080
STA. 17+00		TO STA. 17+86.80		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



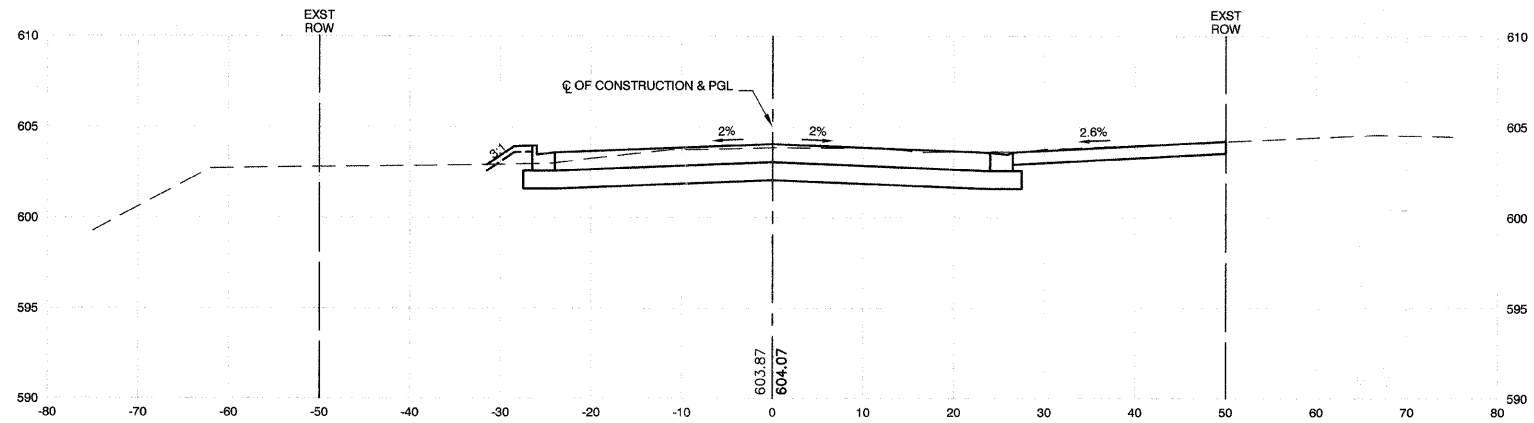
17+86.80

CUT=102 FILL=7



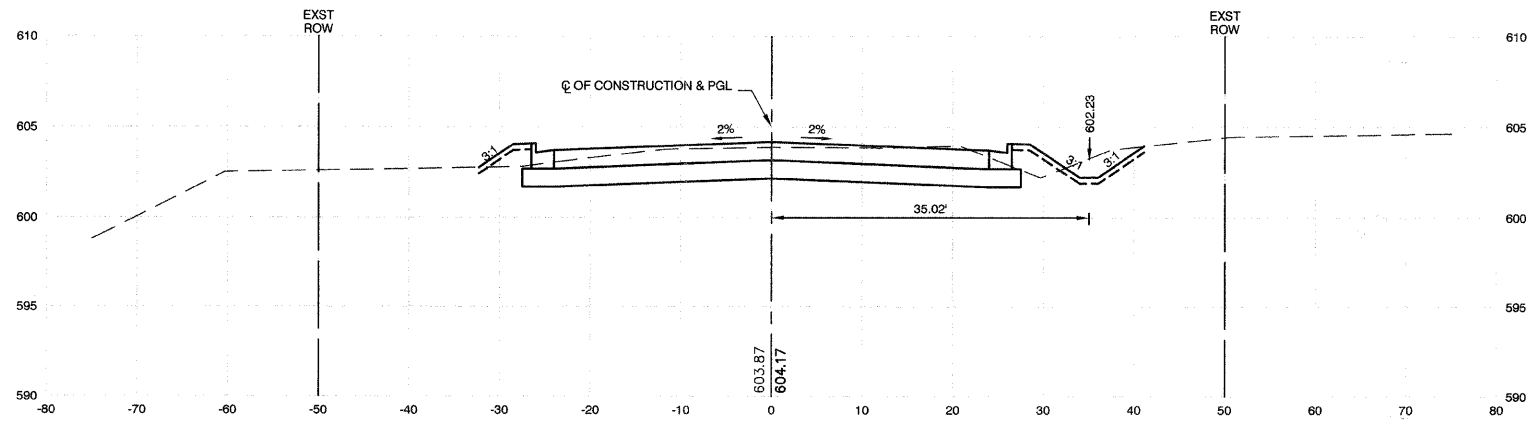
17+50

CUT=83 FILL=6



17+25.50

CUT=95 FILL=2



17+00

CUT=82 FILL=8

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

SCALE: VERT. 1"=5'
HORIZ. 1"=10'
DATE 7/22/08

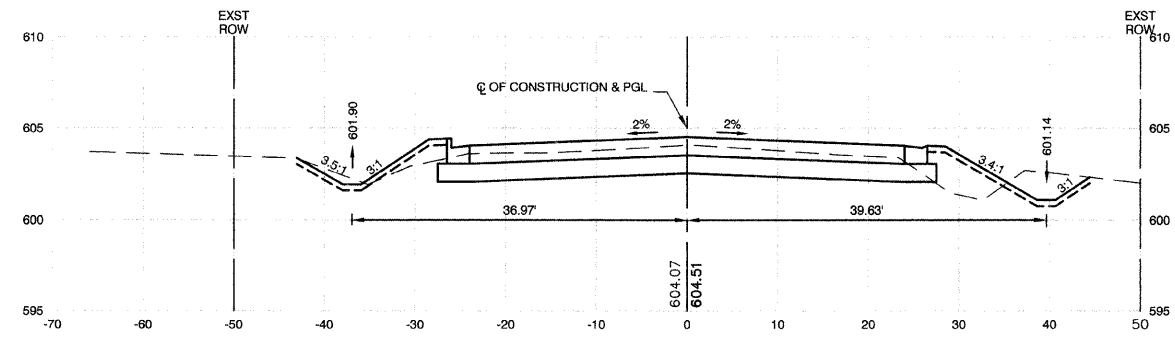
DRAWN BY RG/TR
CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE, SOUTH HOLLAND, ILLINOIS 60478
(708) 331-8700 FAX (708) 331-3628
ILLINOIS DESIGN FIRM REGISTRATION NO. 104001128

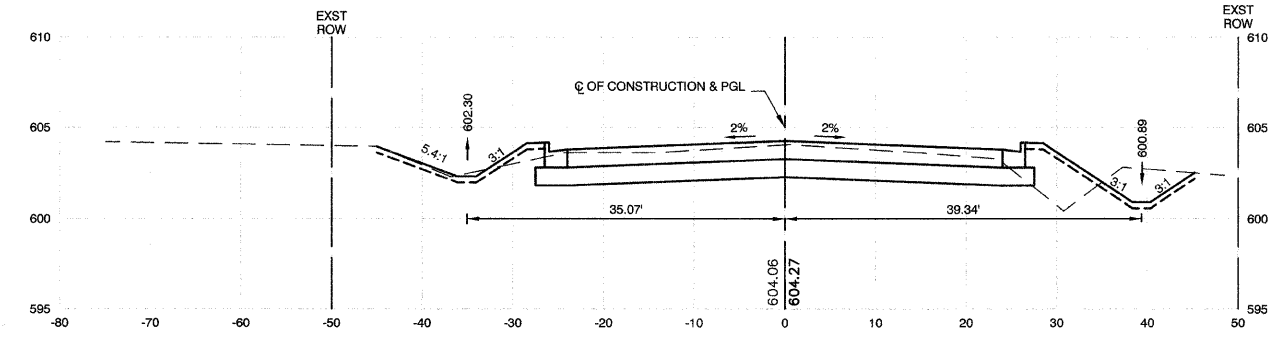
07345-XSCT-01

F. A. U. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2908	02-00077-00-WR	COOK	073	061
STA. 18+00		TO STA. 19+50		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(598)	

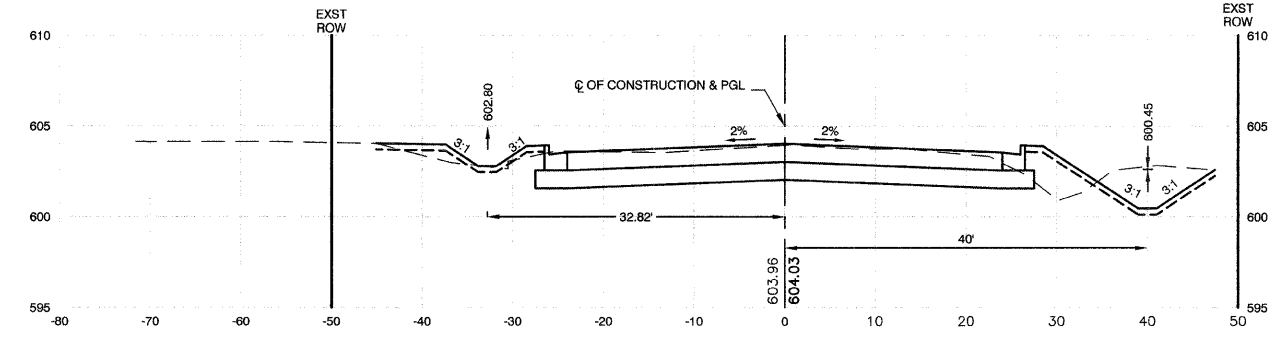
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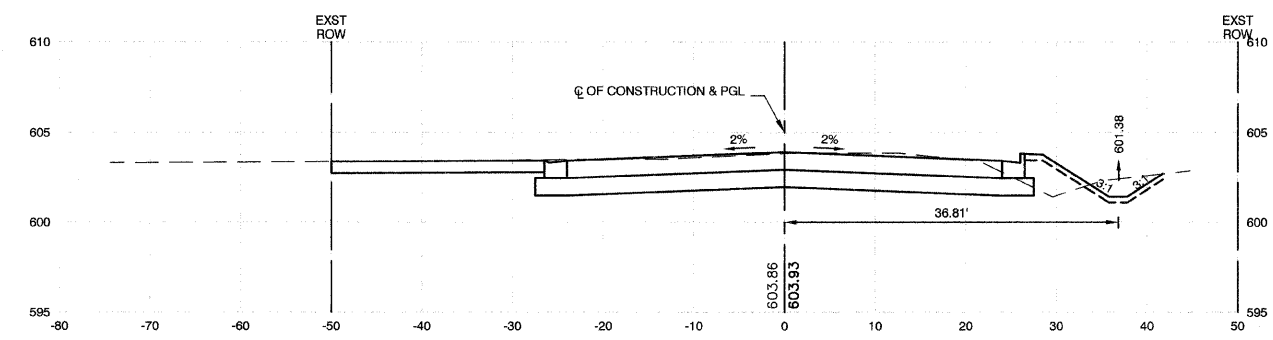
19+50
CUT=62 FILL=16



19+00
CUT=79 FILL=17



18+50
CUT=97 FILL=14



18+00
CUT=104 FILL=8

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

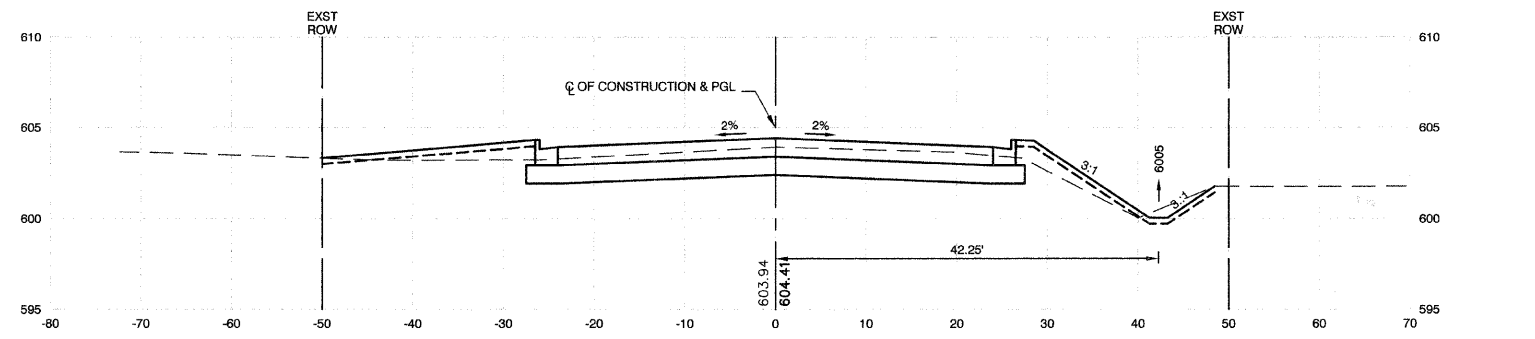
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CHECKED BY EA/PKB

ROBINSON ENGINEERING, LTD.
1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473
(708) 331-6700 FAX (708) 331-5828
ILLINOIS DESIGN FIRM REGISTRATION NO. 1640122

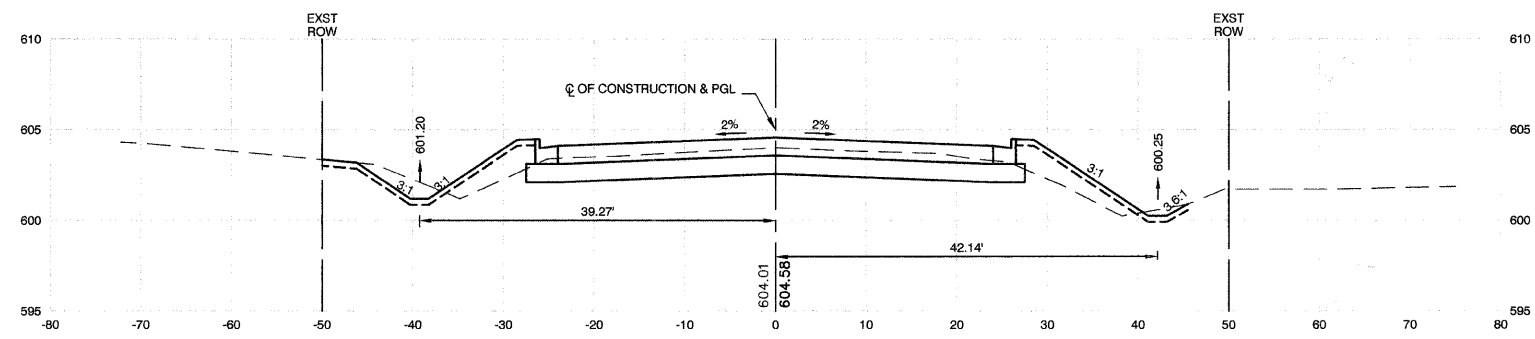
07345-XSCT-01

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	062
STA. 19+66.90		TO STA. 21+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(996)	

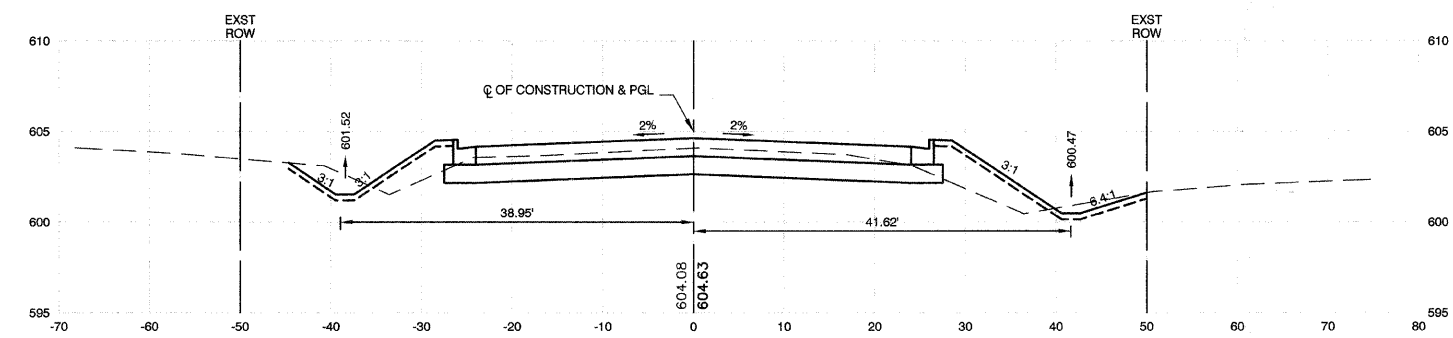
CONTRACT #63061



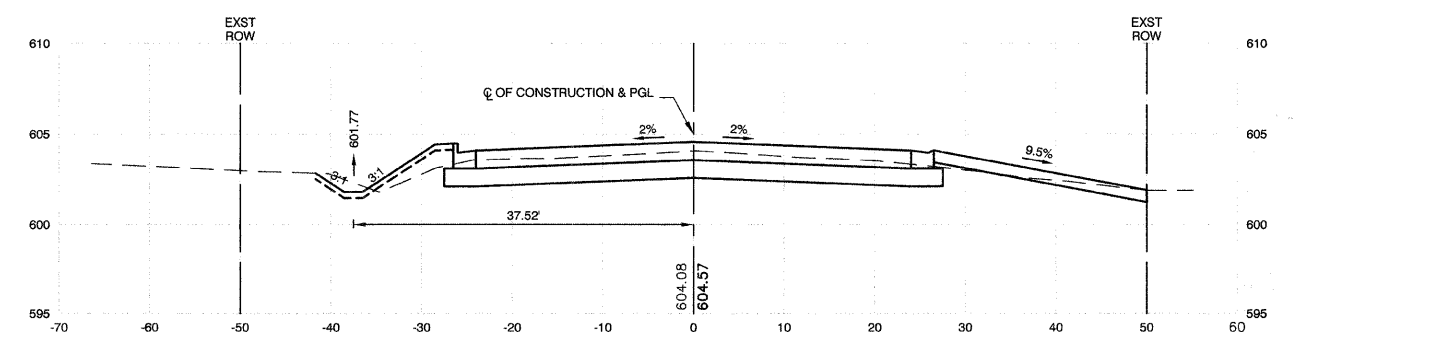
21+00
CUT=48 FILL=15



20+50
CUT=51 FILL=24



20+00
CUT=55 FILL=26



19+66.90
CUT=55 FILL=6

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

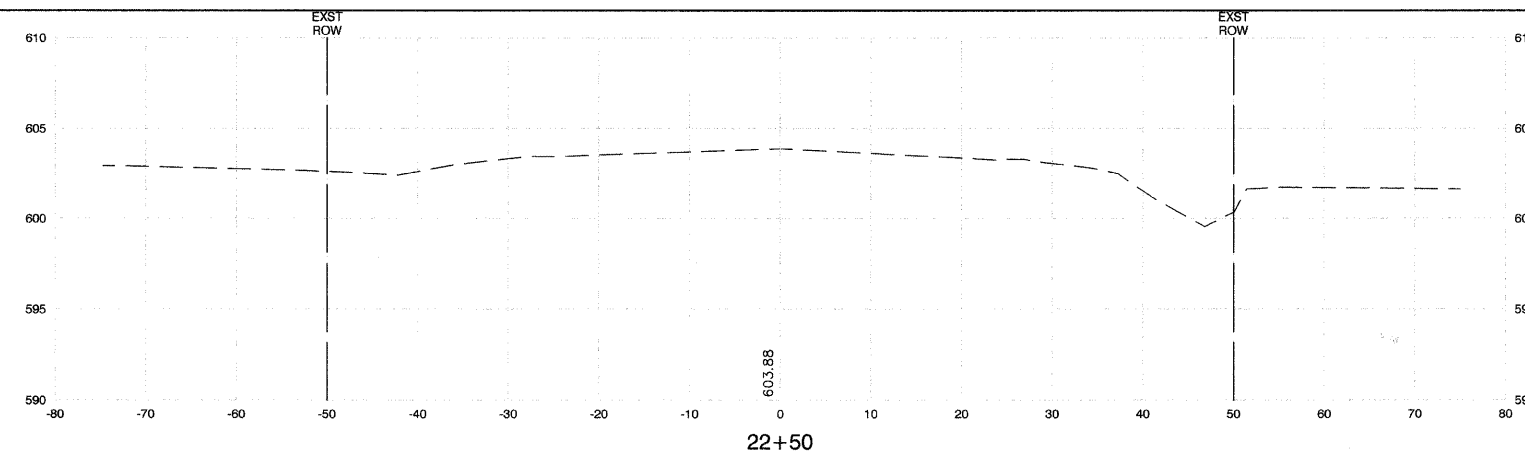
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

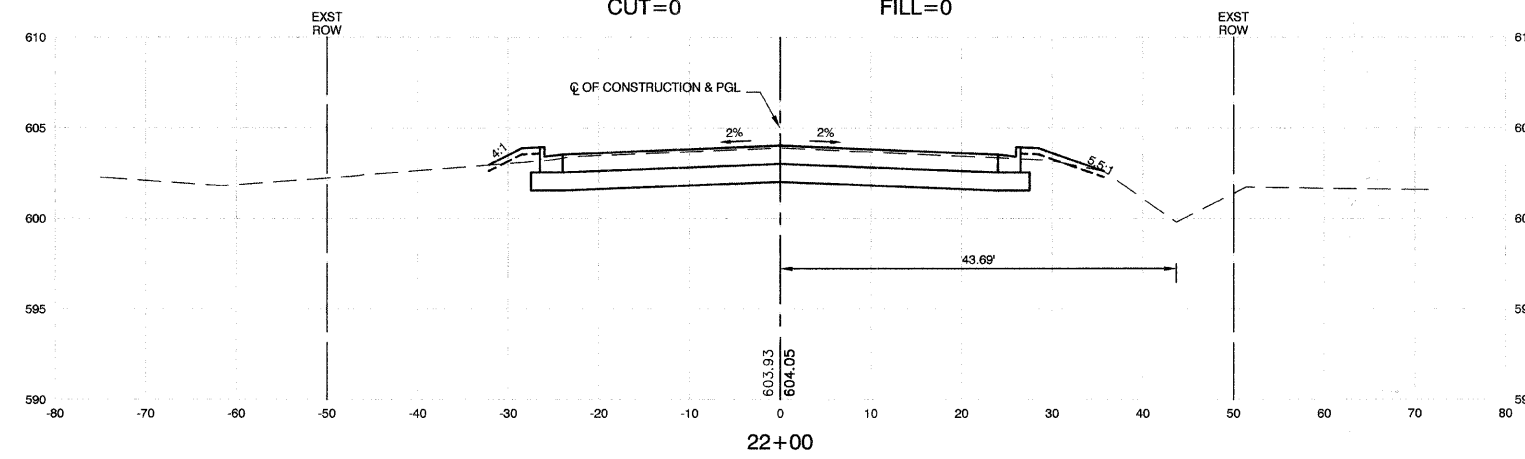
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CHECKED BY EA/PKB

F. A. U. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	063
STA. 21+27		TO STA. 22+50		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

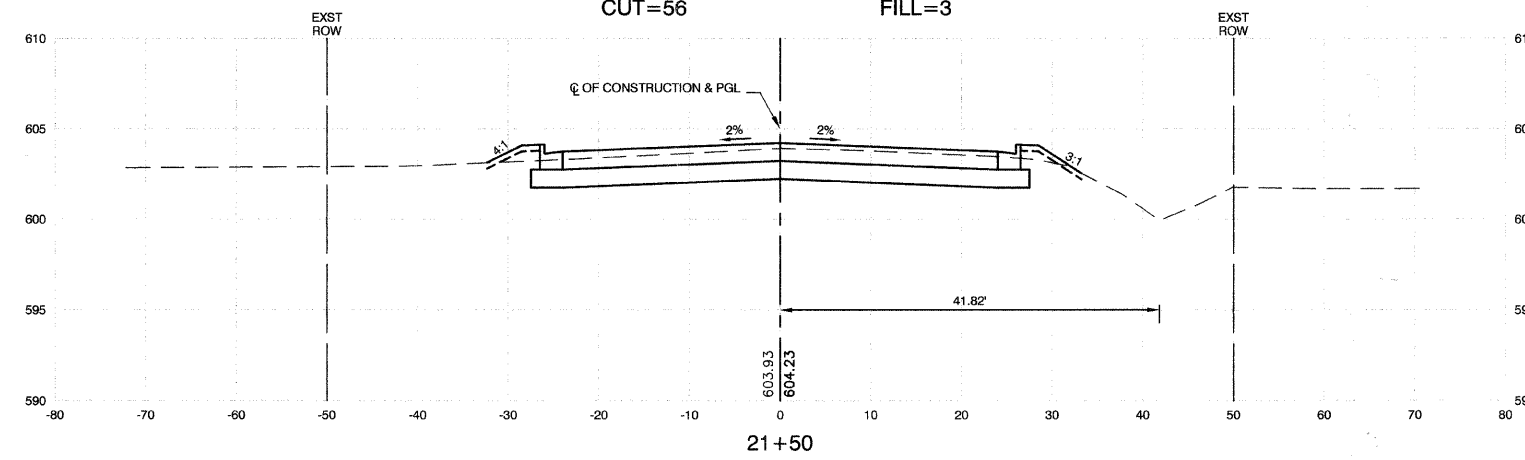
CONTRACT #63061



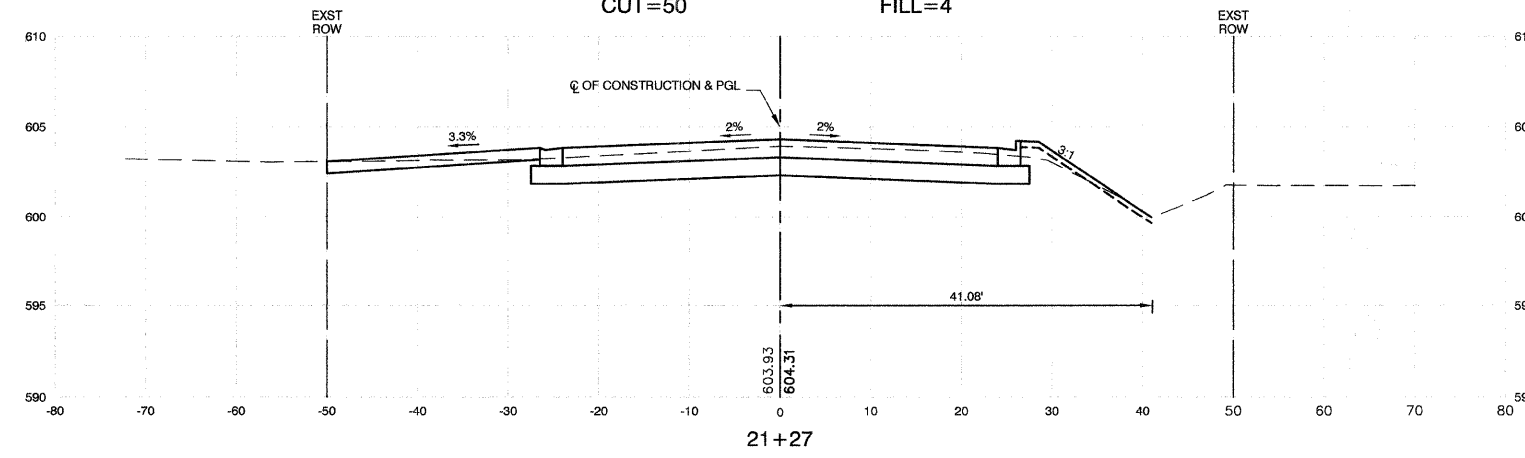
CUT=0 FILL=0



CUT=56 FILL=3



CUT=50 FILL=4



CUT=56 FILL=3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATE STREET AND 168TH STREET
INTERSECTION IMPROVEMENT
CROSS SECTIONS
STATE STREET

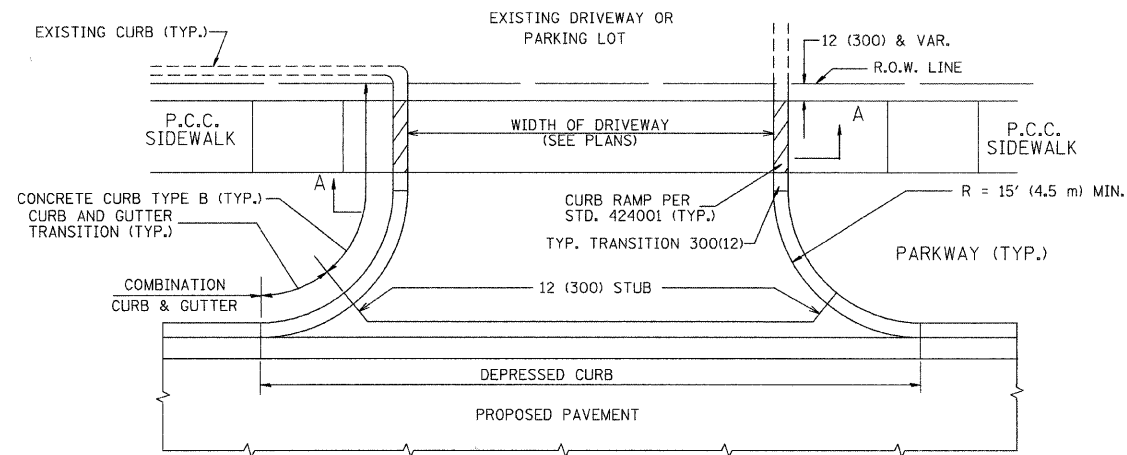
SCALE: VERT. 1"=5'
HORIZ. 1"=10'

DATE 7/22/08

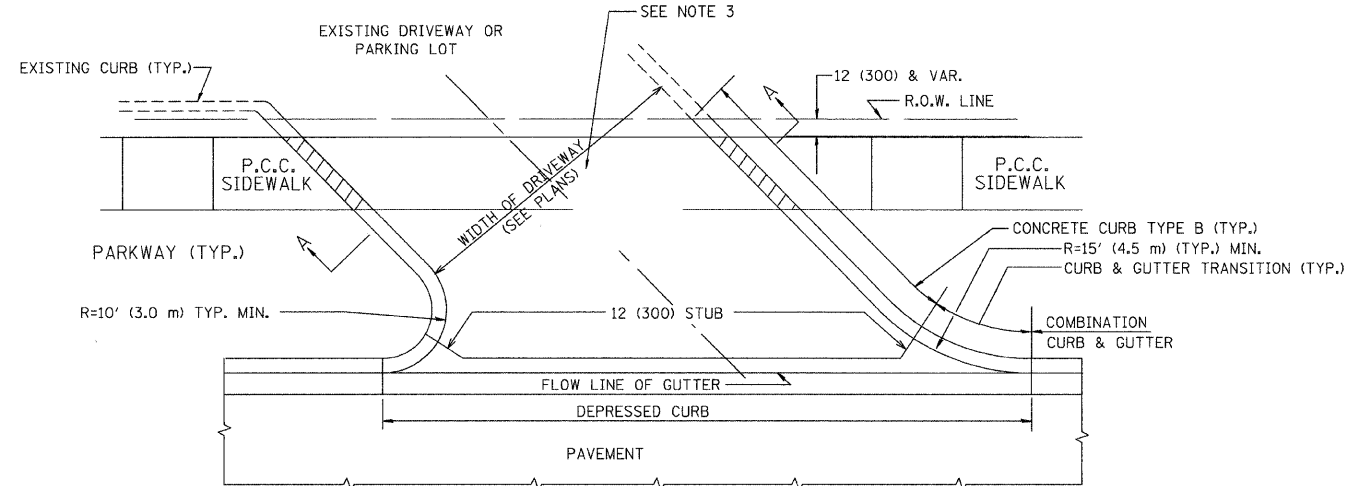
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CHECKED BY EA/PKB

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	064
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(996)	

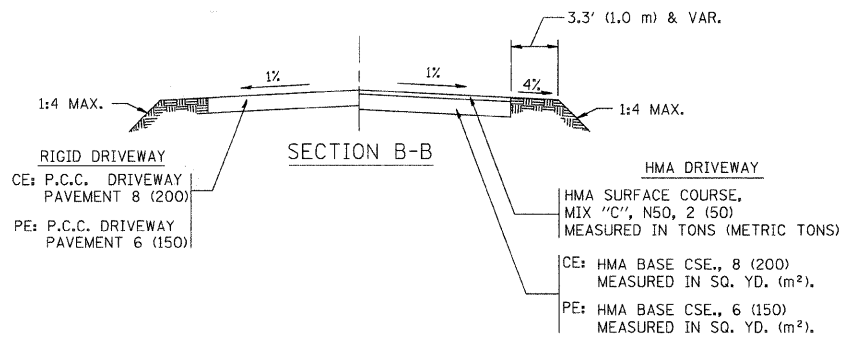
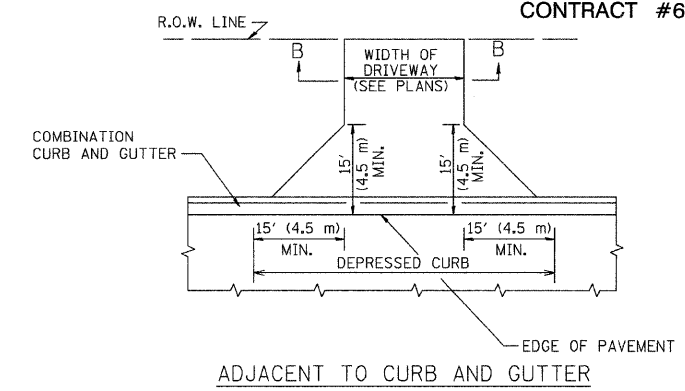
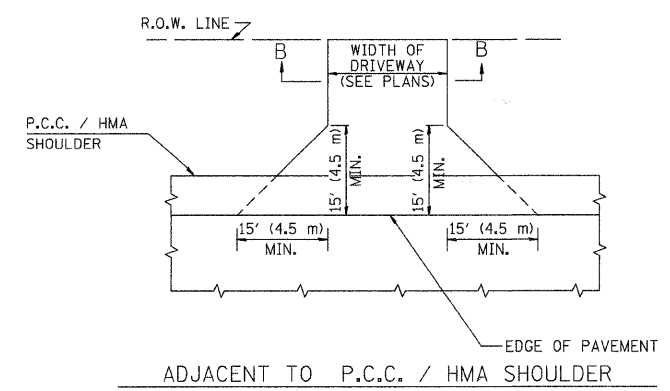
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WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)
HMA SURFACE COURSE,
MIX "C", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)
AGGREGATE BASE CSE., TYPE A 8 (200)
MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

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

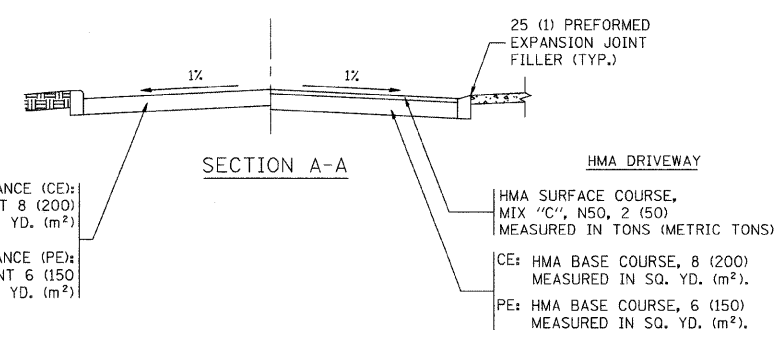
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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

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

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

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



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

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

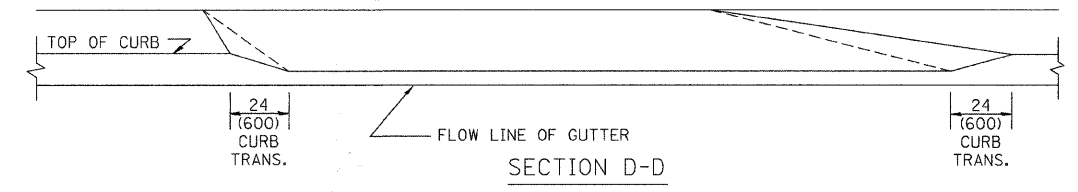
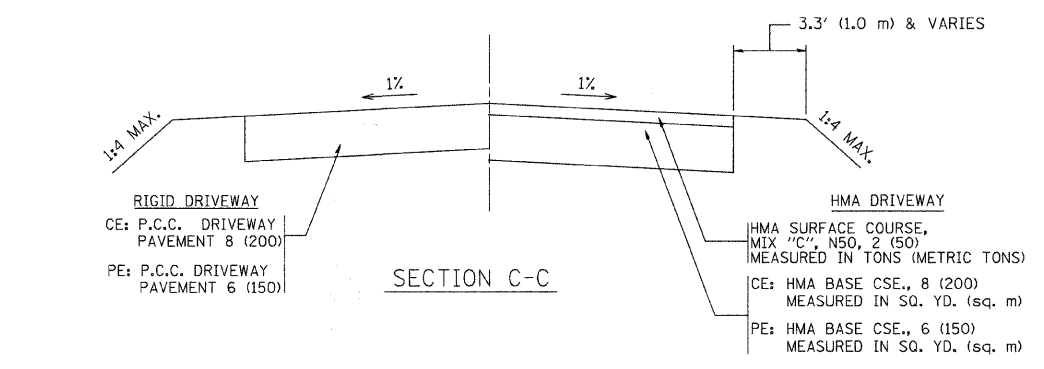
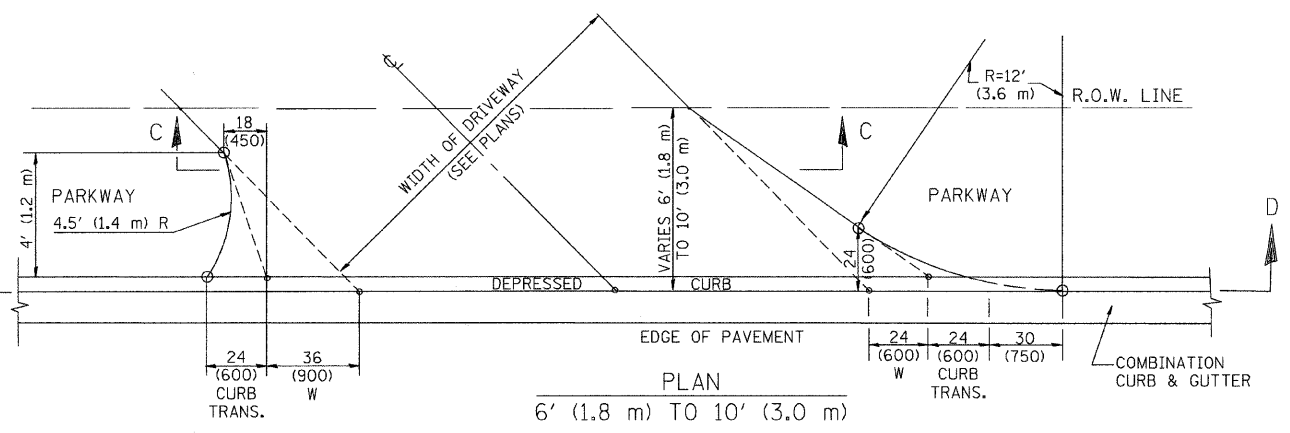
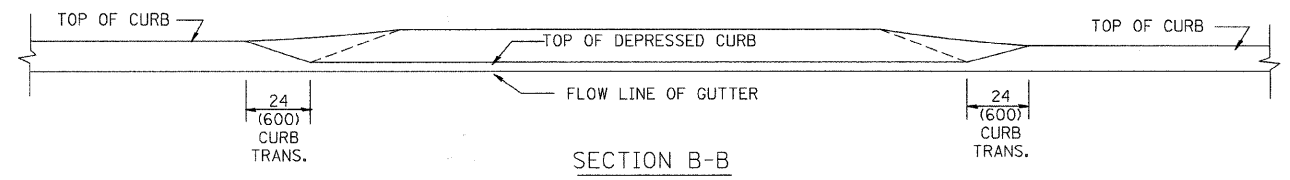
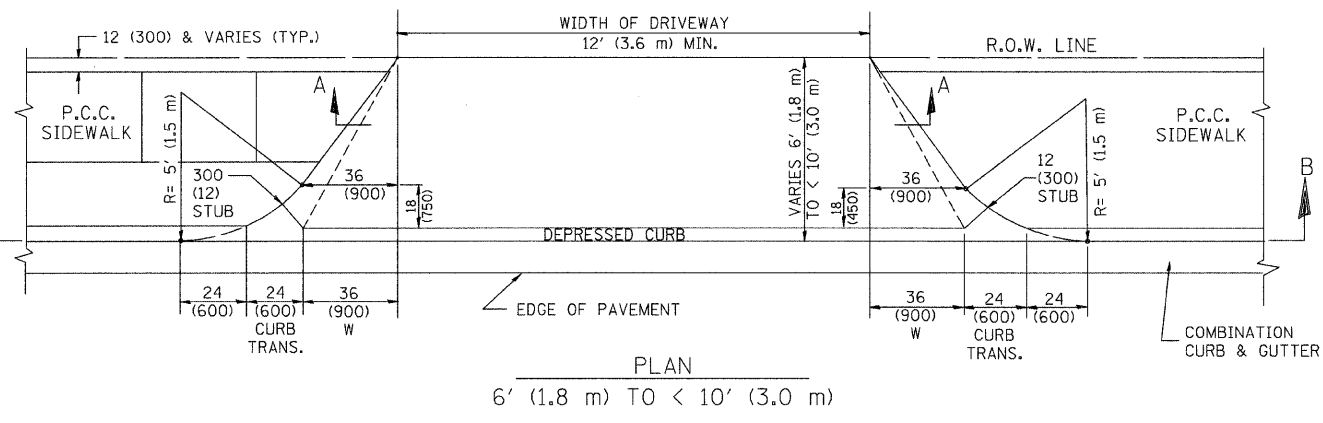
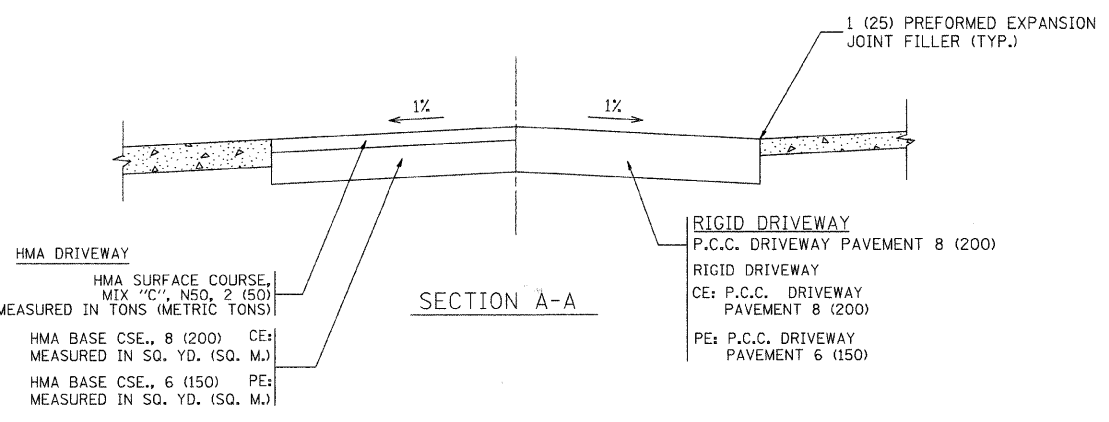
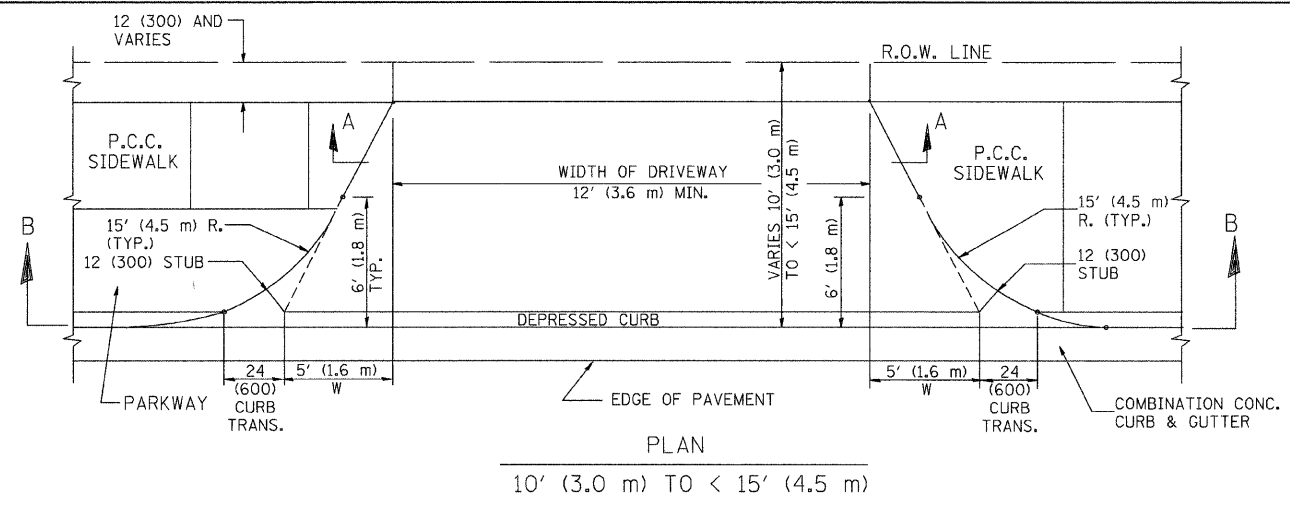
REVISIONS	
NAME	DATE
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01
P. LAFLEUR	04-15-03
R. BORO	01-01-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
DRIVEWAY DETAILS
DISTANCE BETWEEN R.O.W. AND
FACE OF CURB & EDGE OF
SHOULDER >= 15' (4.5 m)

SCALE: VERT. NONE
HORIZ.
DRAWN BY
CHECKED BY

F.A. U. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	065
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(996)	

CONTRACT #63061



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

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

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

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

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

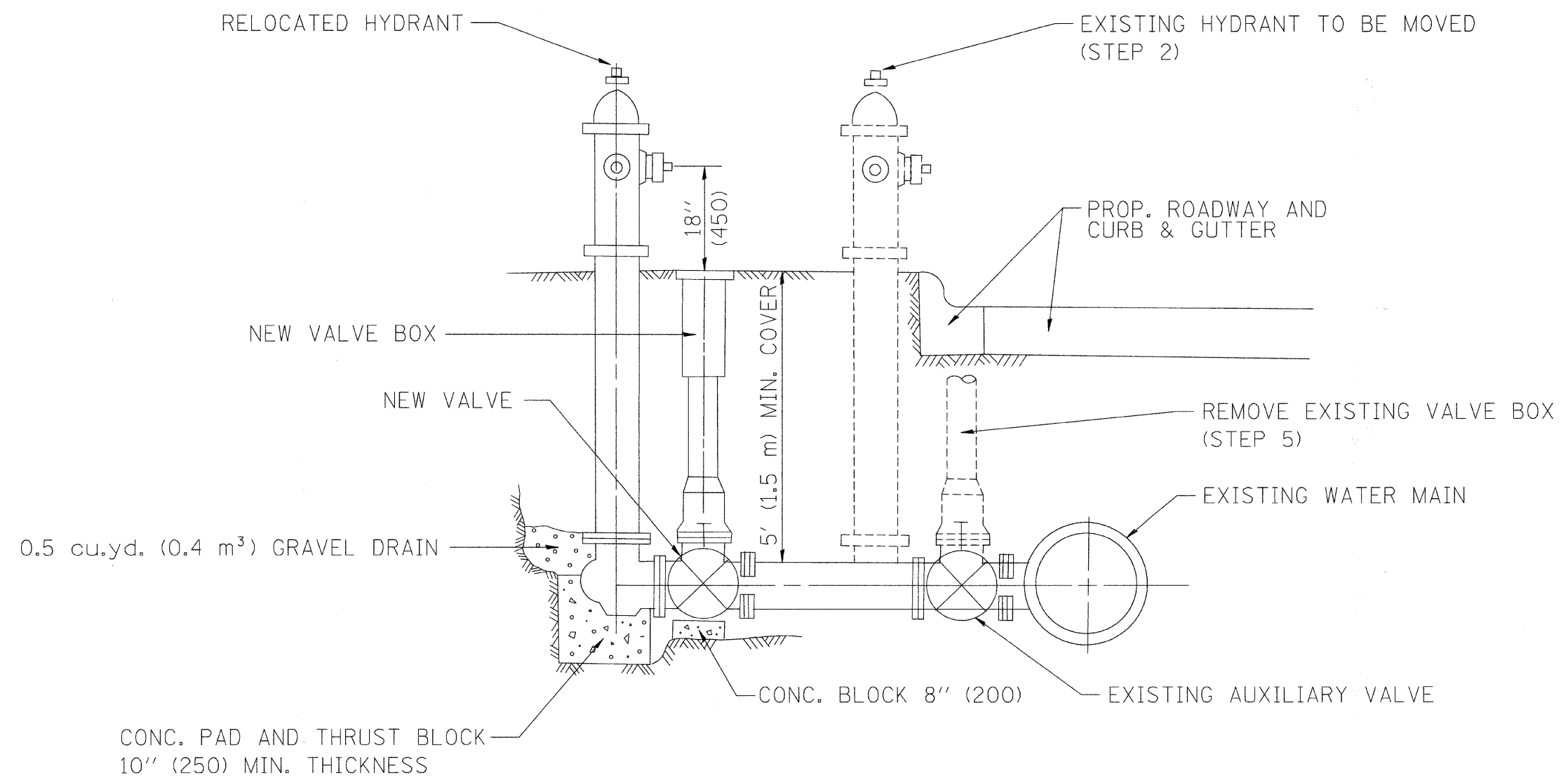
REVISIONS	
NAME	DATE
R. SHAH	11/06/95
J. POLLASTRINI	08/12/96
J. POLLASTRINI	12/14/96
A. ABBAS	03/21/97
T. HOLTZ	04/08/97
M. GOMEZ	04/06/01
P. LOFLEUR	04/15/03
R. BORO	01/01/07

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

F. A. U. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	066
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ALMOS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



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.

REVISIONS	
NAME	DATE
R. SHAH	09/09/94
R. SHAH	10/25/94

ILLINOIS DEPARTMENT OF TRANSPORTATION

FIRE HYDRANT TO BE MOVED

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	067
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(998)	

GENERAL NOTES

CONTRACT #63061

ALTERNATE MATERIAL FOR THE WALLS MAY BE CONCRETE MASONRY UNITS, PRECAST REINFORCED CONCRETE SECTIONS OR CAST-IN-PLACE CONCRETE. THE CAST IRON STEPS AS DETAILED HEREON ARE TYPICAL. STEPS OF OTHER DESIGN AND MATERIAL THAT CONFORM TO THE MINIMUM REQUIREMENTS OF THE STEPS SHOWN MAY BE USED WHEN APPROVED BY THE ENGINEER.

CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 1006.14 OF THE STANDARD SPECIFICATIONS.

STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF THREE (3) INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.

STEPS SHALL BE OMITTED FOR WORK IN COOK COUNTY WHEN THE DEPTH OF THE MANHOLE IS TEN (10') OR LESS.

IN ADDITION TO THE REQUIREMENTS OF ARTICLE 612.13 OF THE STANDARD SPECIFICATIONS, THE CONTRACT UNIT PRICE FOR MANHOLES, TYPE A, 7'-DIAMETER SHALL INCLUDE THE SAND CUSHION WHEN REQUIRED, FURNISHING AND INSTALLING STEPS WHEN REQUIRED, FURNISHING AND COMPACTING THE SPECIFIED BACKFILL MATERIAL, AND FURNISHING AND INSTALLING FLAT SLAB TOP.

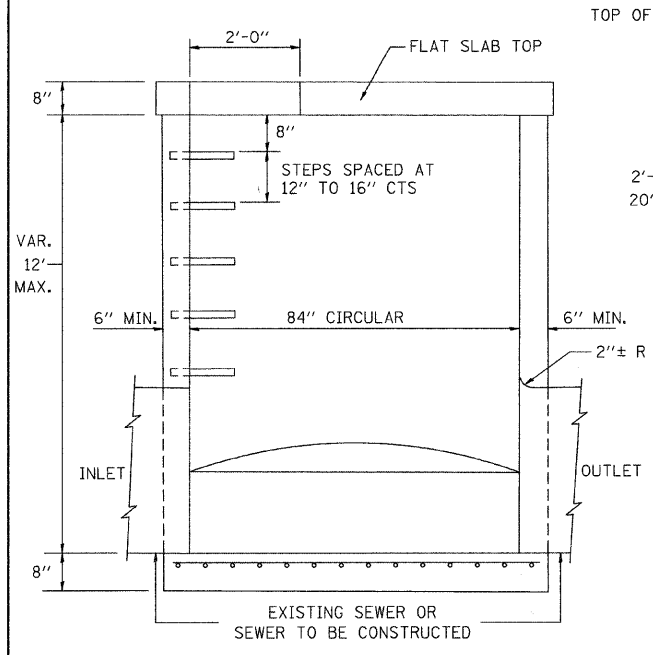
PRECAST FLAT SLAB TOP SHALL CONFORM TO ARTICLES 505.01 THRU 505.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE CONCRETE STRENGTH SHALL BE 4,000 PSI AFTER 28 DAYS. REINFORCEMENT BARS AND WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.10. ONLY GRADE 60 REINFORCEMENT BARS WILL BE PERMITTED.

BOTTOM SLAB SHALL BE REINFORCED BY EITHER REINFORCEMENT BARS OR WELDED WIRE FABRIC. THE MINIMUM REINFORCEMENT SHALL BE 0.46 SQUARE INCH PER LINEAR FOOT IN BOTH DIRECTIONS.

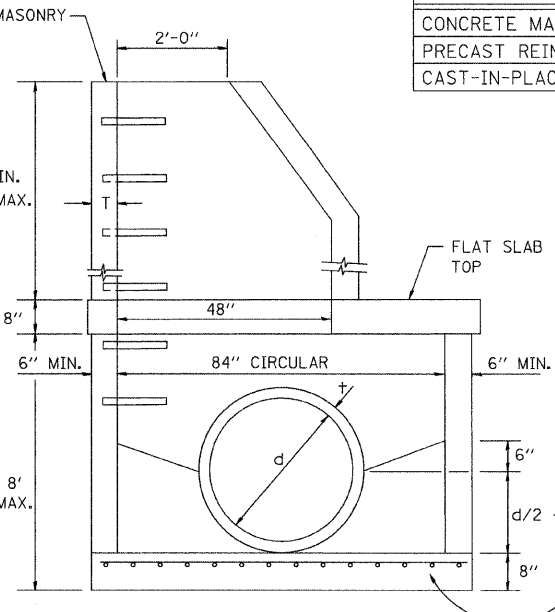
JOINT CONFIGURATION AND DIMENSIONS OF FLAT SLAB TOP SHALL MATCH AND FIT THE RISER JOINT DETAIL.

LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.

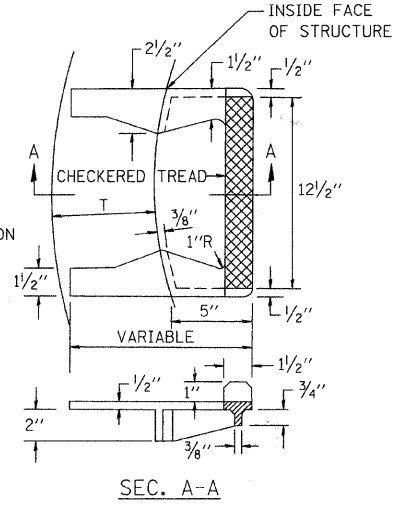
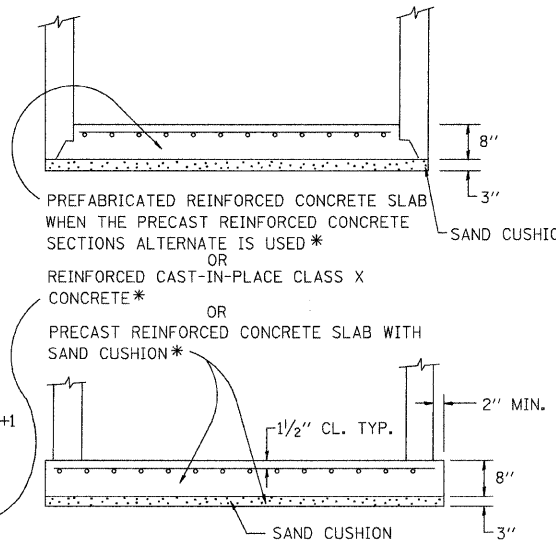
ALTERNATE MATERIALS FOR RISERS	T (MIN.)
CONCRETE MASONRY UNITS	5"
PRECAST REINFORCED CONCRETE SECTIONS	4"
CAST-IN-PLACE CONCRETE	6"



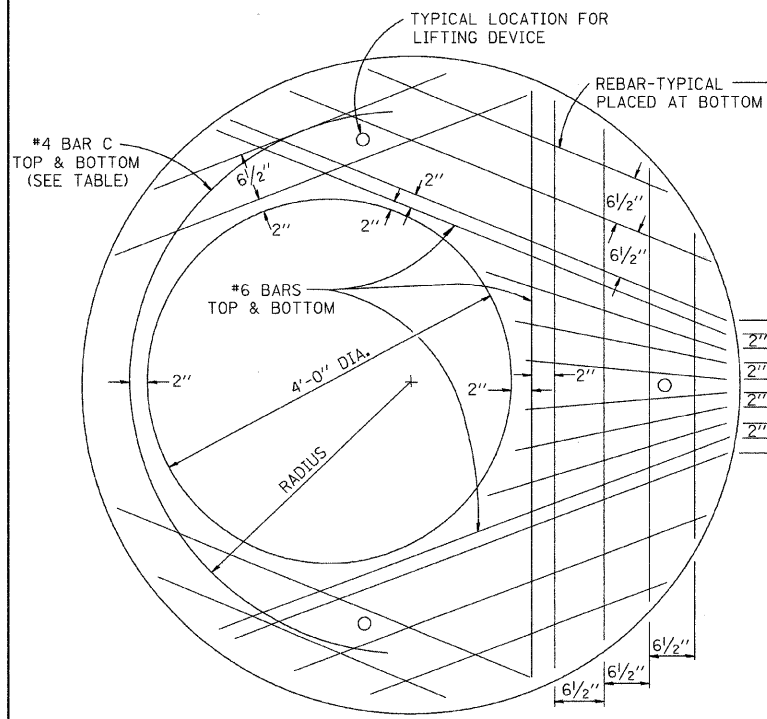
ELEVATION



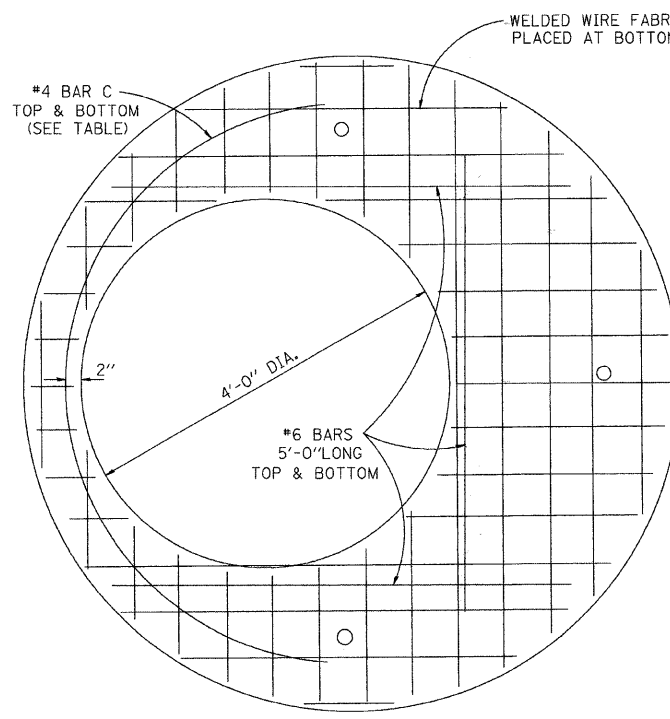
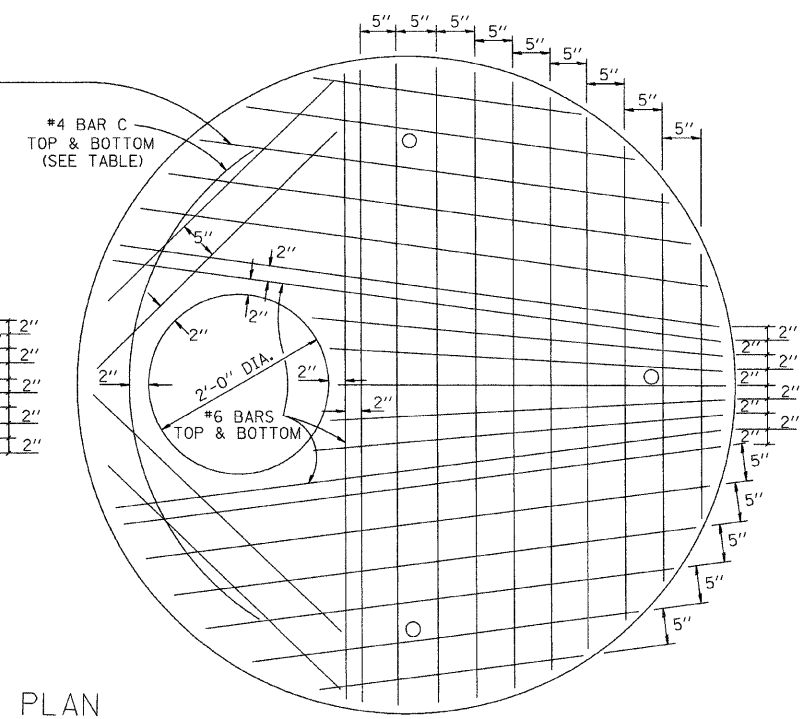
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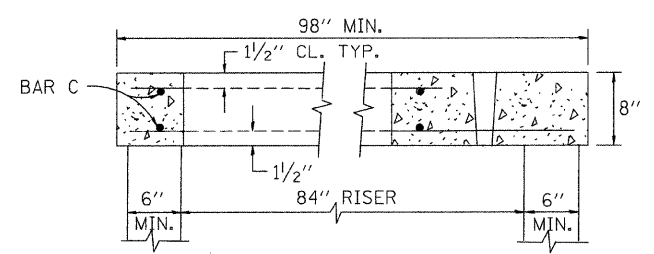
CAST IRON STEPS



PLAN
SHOWING REBAR REINFORCEMENT



PLAN
SHOWING WELDED WIRE FABRIC REINFORCEMENT



SECTION B-B

DIAMETER OF OPENING	REINFORCEMENT "A" WWF OR BAR SIZE	OR BAR SIZE	BAR C		
			SIZE	LENGTH	RADIUS
2'-0"	1.06 SQ.IN./LIN.FT.	#6	#4	6'-0"	38"
4'-0"	0.82 SQ.IN./LIN.FT.	#6	#4	9'-0"	38"

NOTE: THIS STRUCTURE SHOULD BE USED WITH PIPES SIZE 54" DIA. OR SMALLER.

NAME	DATE
	10/18/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

MANHOLE TYPE A
7 FOOT DIAMETER

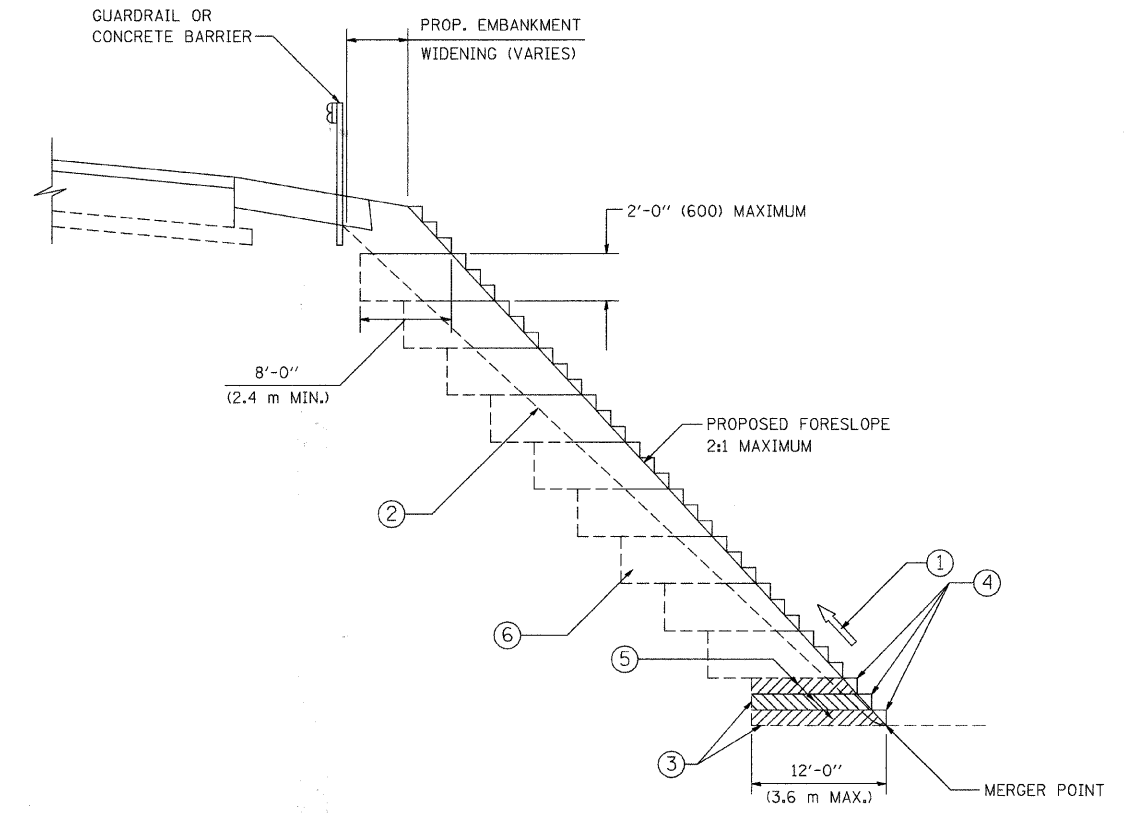
SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

BD600-11 (BD-37)

F. A. U. SHEET	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2908	02-00077-00-WR	COOK	073	068
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ALINOS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

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

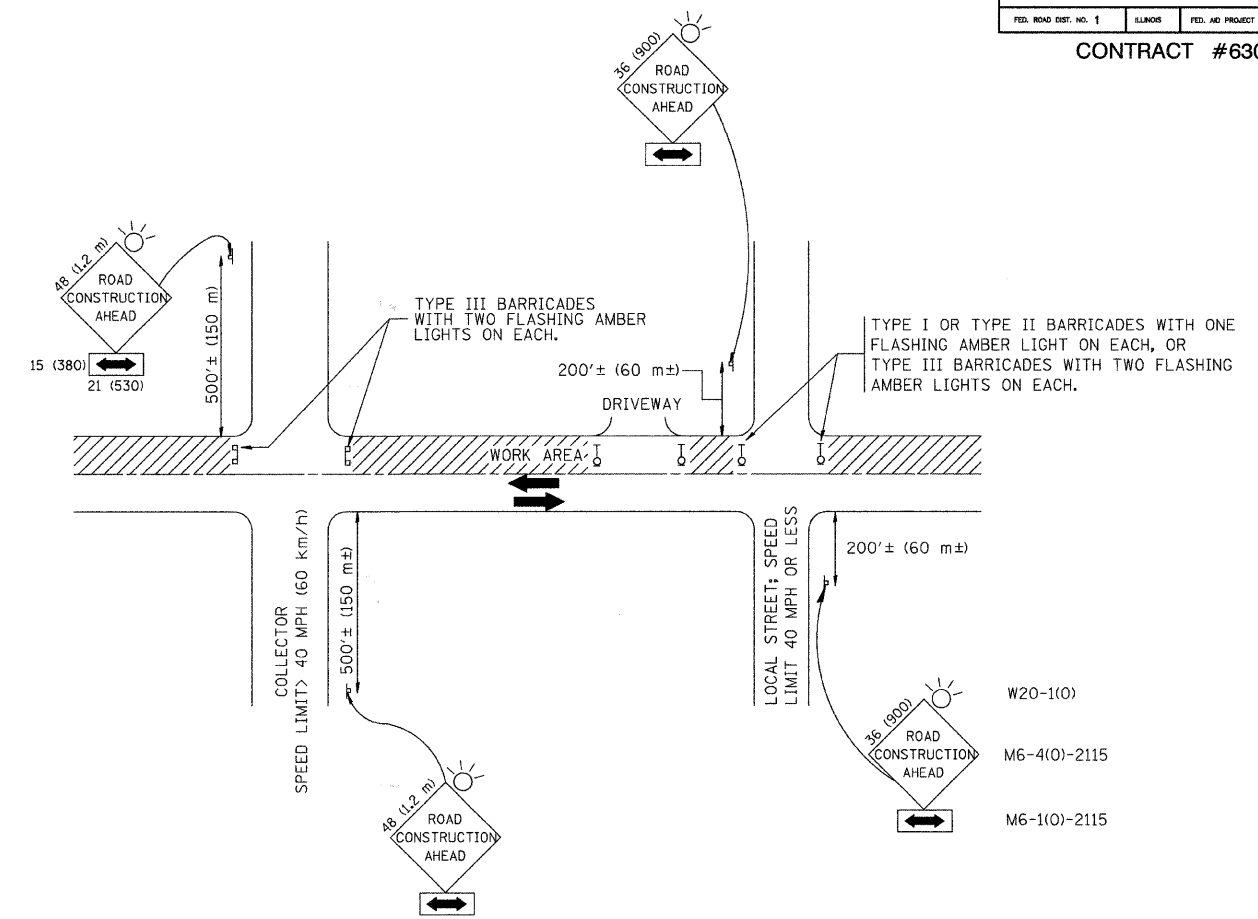
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
	06/16/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BENCHING DETAIL FOR EMBANKMENT WIDENING
 SCALE: VERT. NONE
 HORIZ.
 DRAWN BY: CADD
 CHECKED BY: S.E.B.
 BD-51

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	069
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



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.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE: NONE

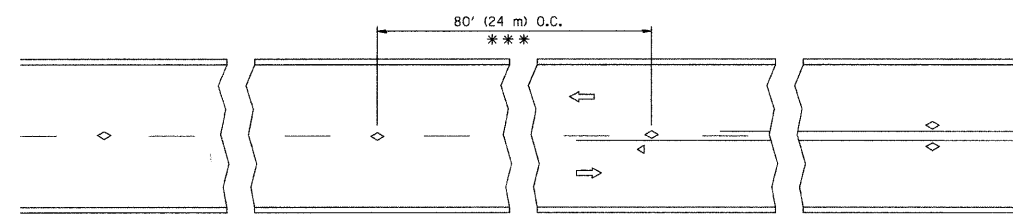
DRAWN BY

CHECKED BY

TC-10

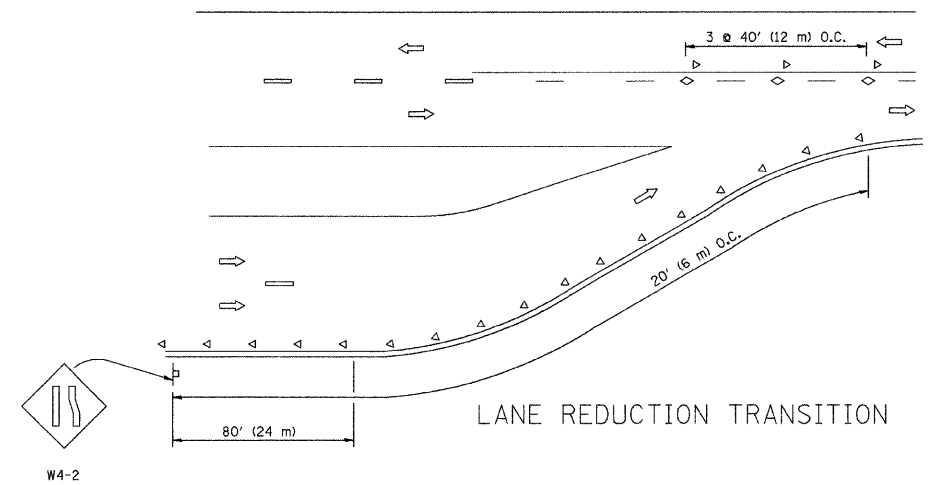
F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2906	02-00077-00-WR	COOK	073	070
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(598)	

CONTRACT #63061

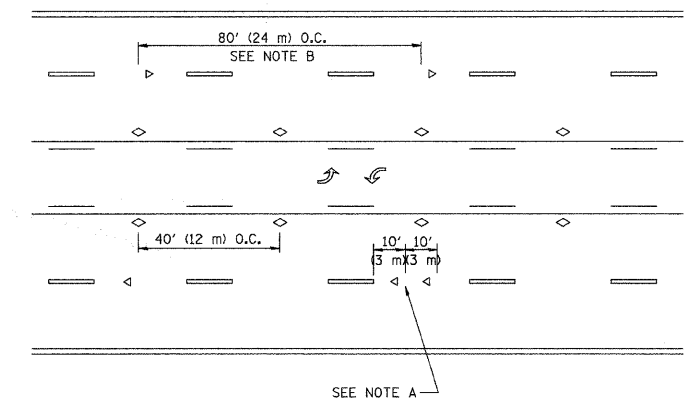


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

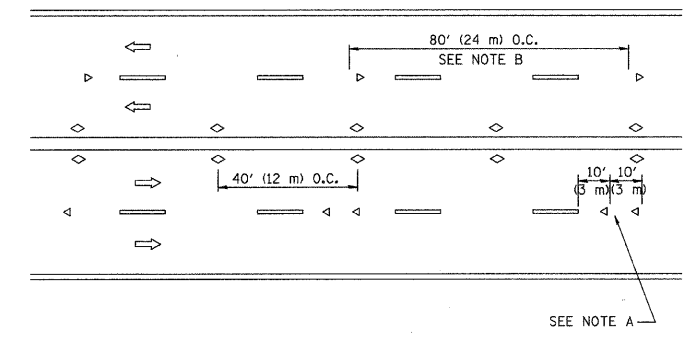
TWO-LANE/TWO-WAY



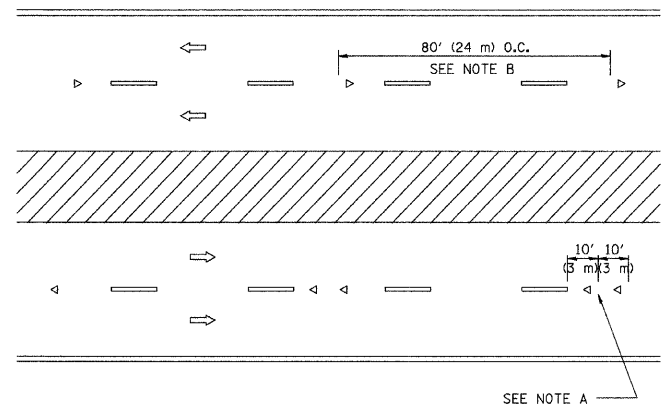
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

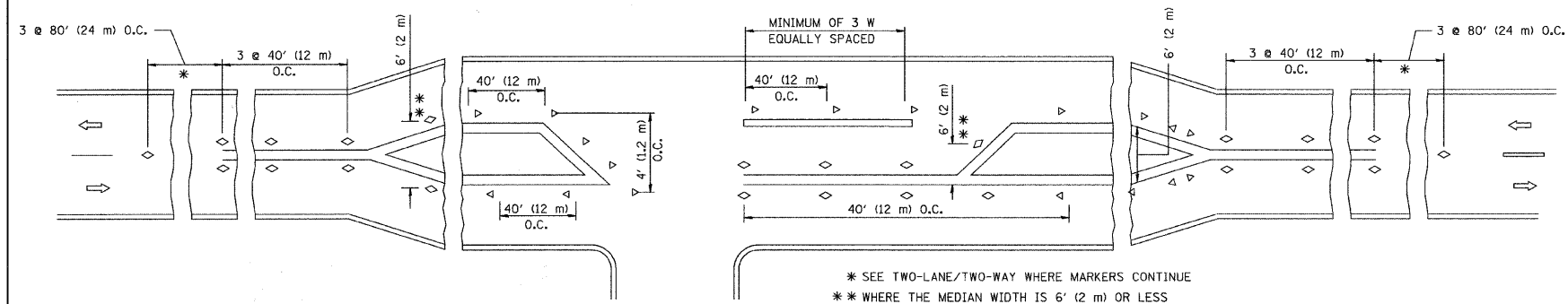
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◊ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



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

LEFT TURN

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

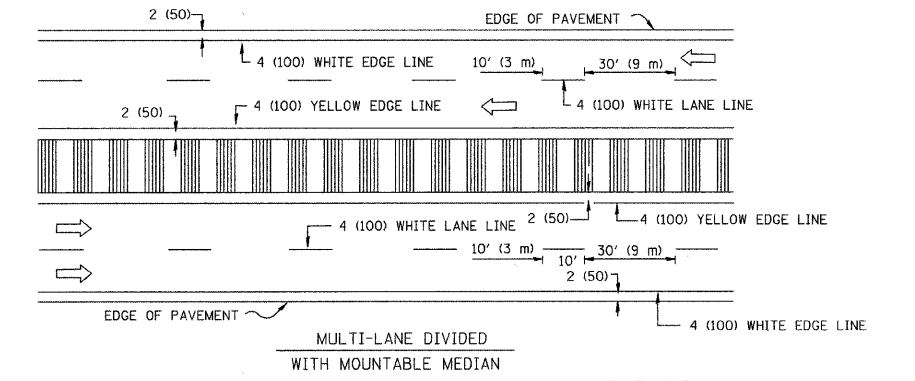
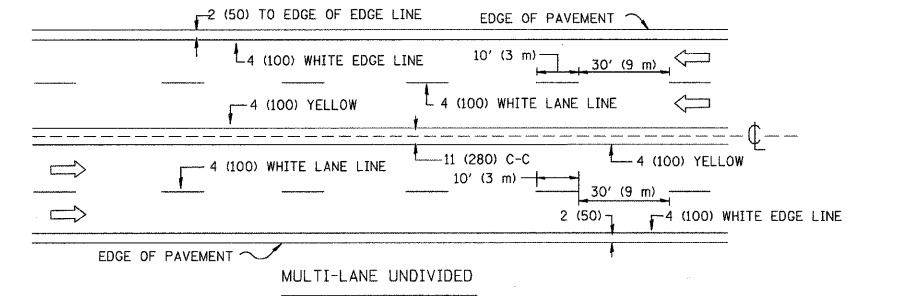
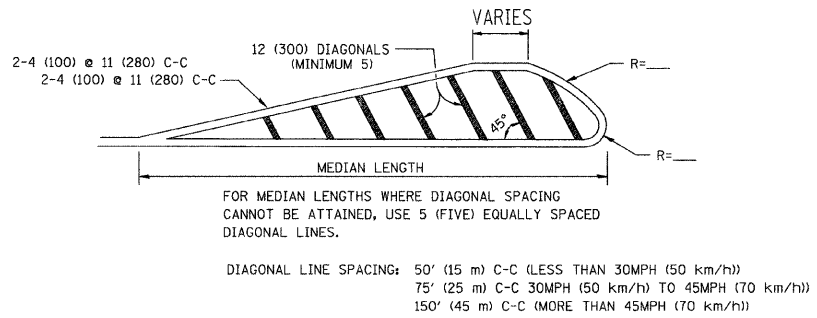
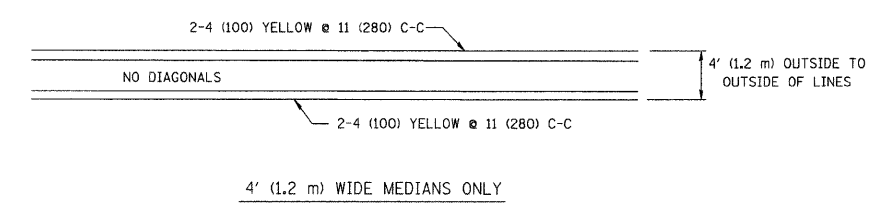
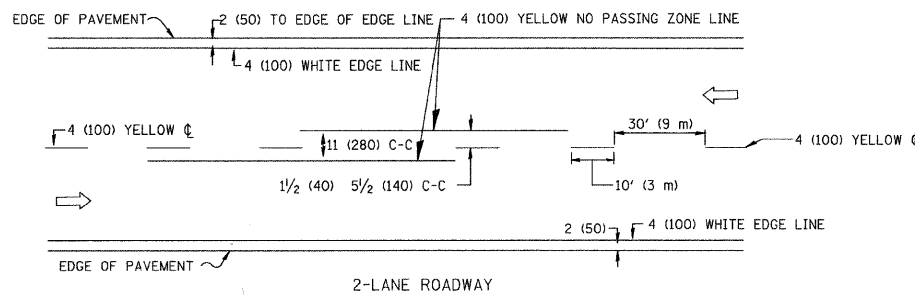
REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT
 MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE

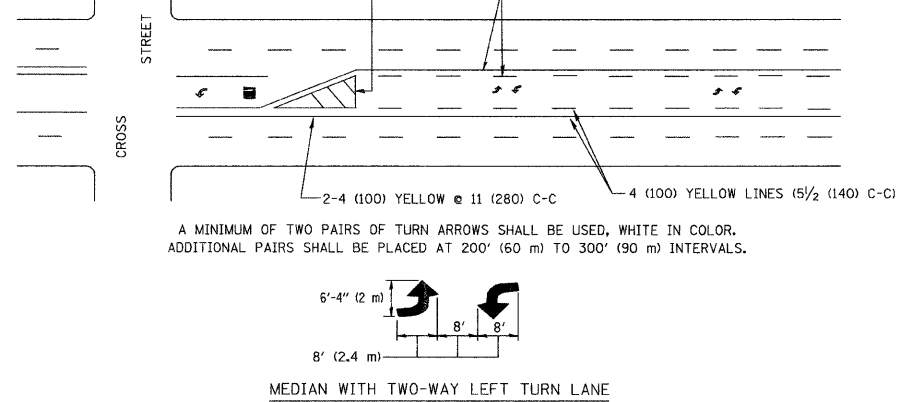
DRAWN BY CADD
 CHECKED BY
 TC-11

CONTRACT #63061

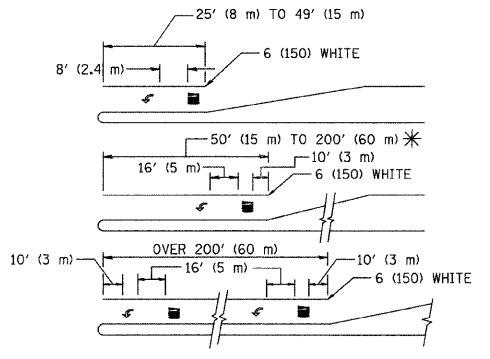


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



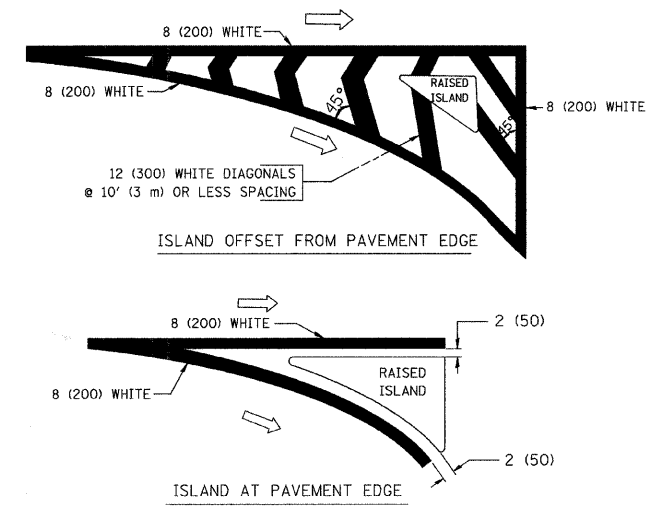
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE MARKING

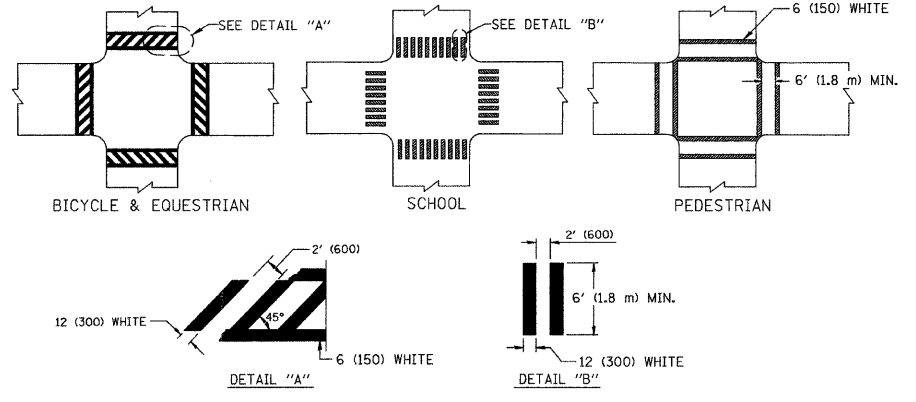


TYPICAL ISLAND MARKING

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 FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 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; 5/2 (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" IS 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)
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.



TYPICAL CROSSWALK MARKING

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE

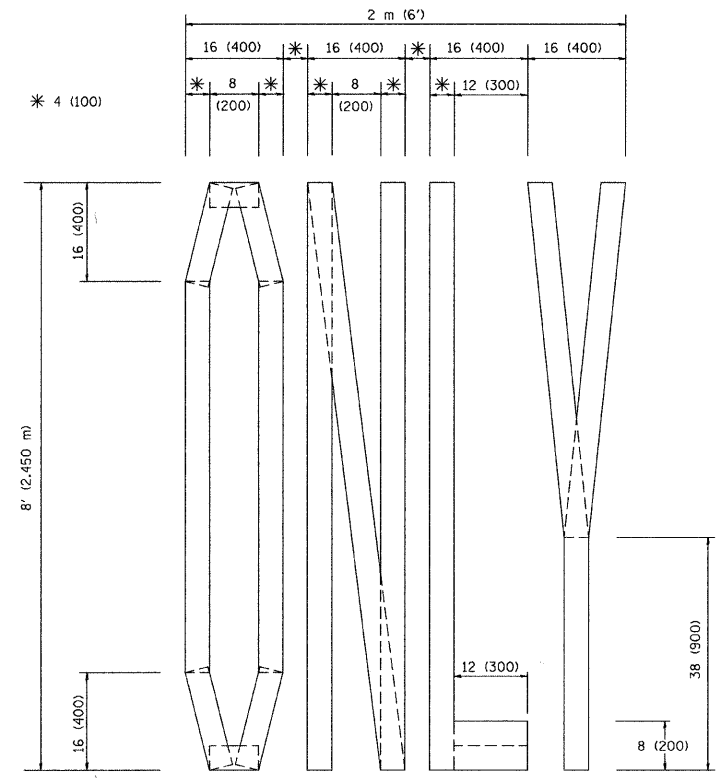
TYPICAL PAVEMENT MARKINGS

SCALE: NONE

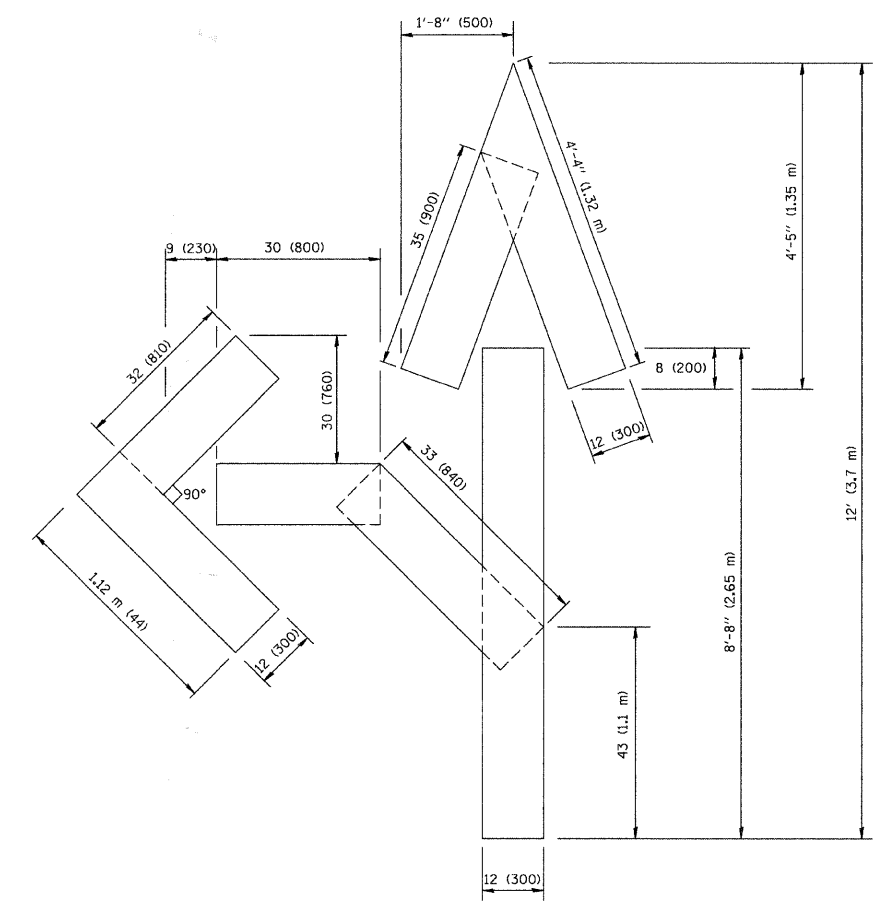
DRAWN BY CADD
CHECKED BY
TC-13

F. A. U. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	072
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-8003(596)	

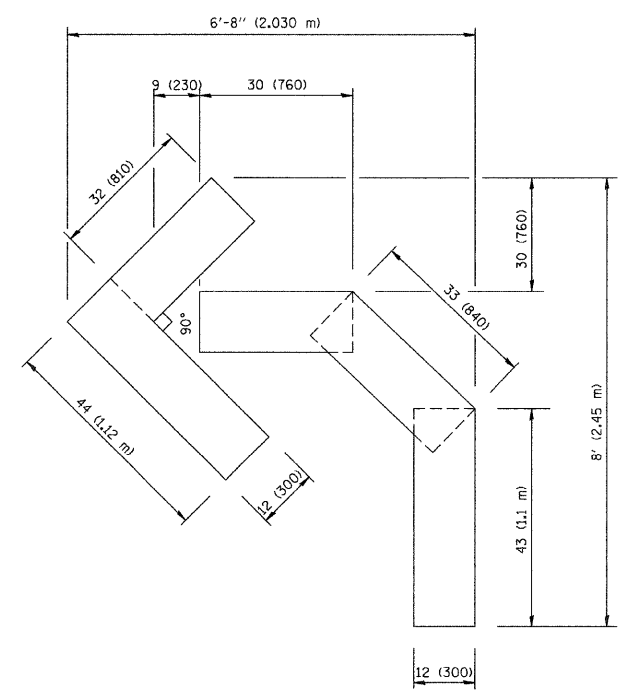
CONTRACT #63061



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.

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

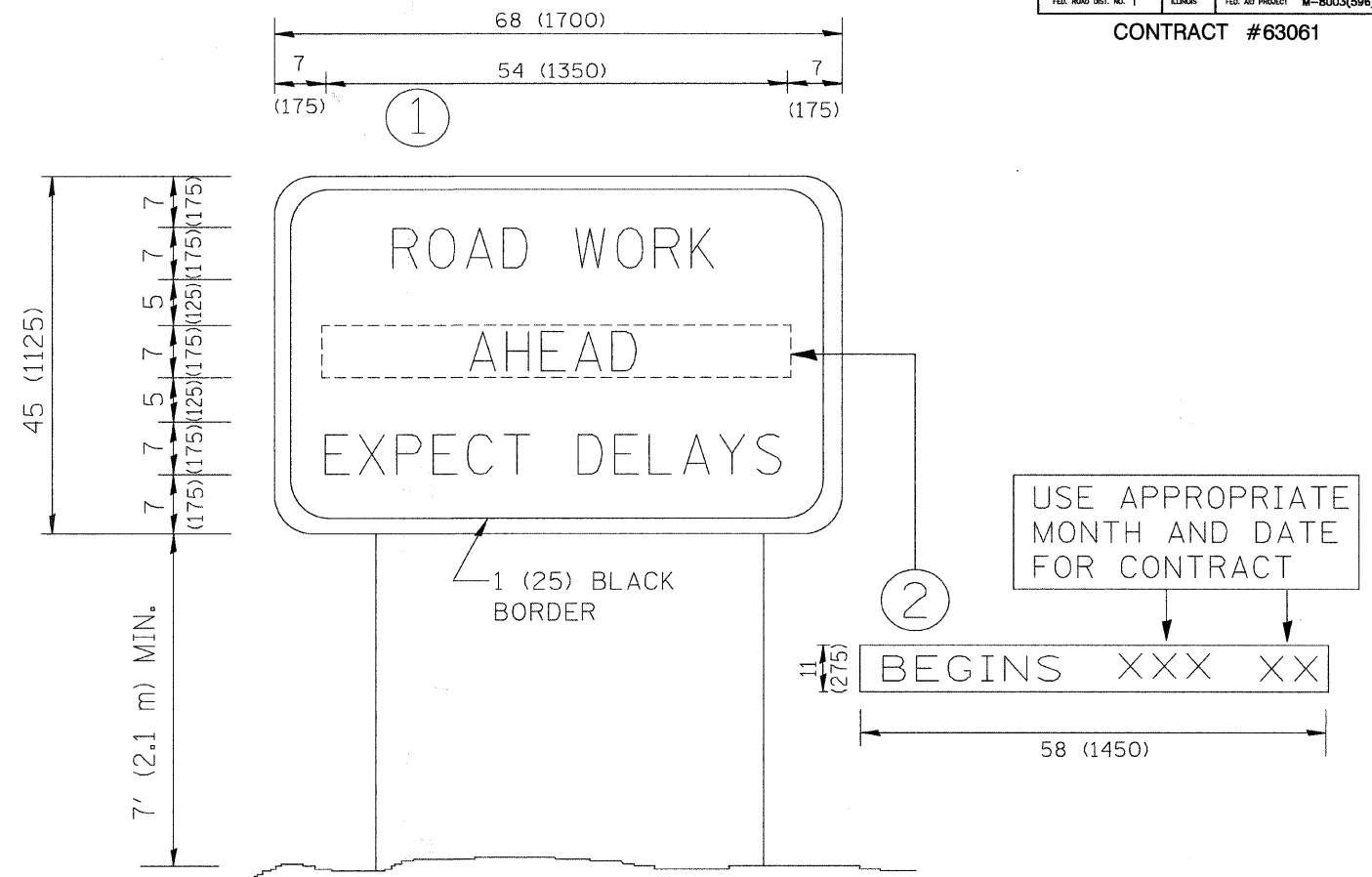
PAVEMENT MARKING
LETTERS AND SYMBOLS
FOR TRAFFIC STAGING

SCALE: NONE

DRAWN BY CADD
CHECKED BY
TC-16

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2806	02-00077-00-WR	COOK	073	073
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ALMOSE	FED. AID PROJECT	M-8003(596)	

CONTRACT #63061



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.

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ARTERIAL ROAD
INFORMATION SIGN

SCALE: NONE

DRAWN BY DESIGN
CHECKED BY

TC22