F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	•	COOK	283	2
STA. 9+713.000		TO STA. 10+151.000		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• 70D-Y-B-R & 70HB-R-1				62897

INDEX OF SHEETS

1	COVER SHEET
2-3	INDEX OF SHEETS, STATE STANDARDS, DISTRICT STANDARDS, GENERAL NOTES.
4-9	SUMMARY OF QUANTITIES
10-16	SCHEDULE OF QUANTITIES
17-21	TYPICAL SECTIONS
22	ALIGNMENT TIES AND BENCHMARKS
23-26	EXISTING PLAN AND REMOVALS
27-33	PROPOSED PLAN AND PROFILE
34	ACCESS DRIVE
35	STAGE CONSTRUCTION GENERAL NOTES
36	MAINTENANCE OF TRAFFIC DETOUR ROUTE
37-38	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
39	MAINTENANCE OF TRAFFIC - SIGN DETAILS
40	DELETED (2)
41-64	MAINTENANCE OF TRAFFIC - PLANS
65-76	TEMPORARY EROSION CONTROL PLANS
77-84	PROPOSED DRAINAGE PLANS
85-88	PLATS OF HIGHWAYS
89	SUPERELEVATION TRANSITION DETAIL
90-91	INTERSECTION LAYOUT DETAILS
92-93	INTERSECTION ELEVATION DETAILS
94-95	TERMINAL ELEVATION DETAILS
96	BUTT JOINT DETAILS
97-98	OUTLET TYPE I (MODIFIED) FOR TYPE B GUTTER
99	TYPE B GUTTER INLET (MODIFIED)
100	JUNCTION CHAMBER (SPECIAL)
101-106	BRIDGE APPROACH PAVEMENT DETAILS
107-112	PAVEMENT MARKING AND LANDSCAPING PLANS
113-125	TRAFFIC SIGNAL PLANS
126-144	ROADWAY LIGHTING PLANS
145-154	NOT USED
155-185C	STRUCTURAL PLANS BRIDGE #016-2732 IL ROUTE 68 OVER UPRR
186-212	STRUCTURAL PLANS BRIDGE #016-2861 IL ROUTE 68 OVER US ROUTE 14
213-220	STRUCTURAL PLANS - RAMP D RETAINING WALL PLANS
221-224X	DISTRICT DETAILS (1)
224Y.	TRAFFIC BARRIER TERMINAL, TYPE 2 DETAIL
~~225~~	~~CROSS SECTIONS KEY PLAN~~
226-283	CROSS SECTIONS

STATE STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
280001-03	TEMPORARY EROSION CONTROL SYSTEM
420001-06	PAVEMENT JOINTS
420111-01	PCC PAVEMENT ROUNDOUTS
420201-06	ENTRANCE RAMP TERMINAL
420301-05	EXIT RAMP TERMINAL
420401-05	BRIDGE APPROACH PAVEMENT
482006-02	BITUMINOUS SHOULDER ADJACENT TO RIGID PAVEMENT
483001-03	PCC SHOULDER
515001-02	NAME PLATE FOR BRIDGES
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
542311	GRATING FOR CONCRETE FLARED END SECTION
542546	FLUSH INLET BOX FOR MEDIAN
542606	REINFORCED CONCRETE PIPE TEE
602001	CATCH BASIN, TYPE A
602011	CATCH BASIN, TYPE C
602301-03	INLET, TYPE A
602401-01	MANHOLE, TYPE A
602701-01	CAST IRON STEPS
604001-02	FRAME AND LIDS, TYPE I
604036-01	GRATE, TYPE 8
604091-01	FRAME AND GRATE, TYPE 24
606001-03	CONCRETE CURB, TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606006-01	OUTLET FOR CONCRETE CURB AND GUTTER, TYPE B-15.60 (B-6.24)
606201-01	TYPE B GUTTER (INLET, OUTLET & ENTRANCE)
606301-03	PC CONCRETE ISLANDS AND MEDIANS
606306-02	CORRUGATED PC CONCRETE MEDIANS
630001-07	STEEL PLATE BEAM GUARDRAIL
630201-04	PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARD RAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMIAL
631011-03	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-06	TRAFFIC BARRIER TERMINAL TYPE 6
635001	DELINEATOR
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
664001-01	CHAIN LINK FENCE
701001-01	OFF-ROAD OPERATIONS, 2L 2W, MORE THAN 4.5 M (15') AWAY
701006-02	OFF-ROAD OPERATIONS, 2L 2W, 4.5 M (15') TO 600 MM (24") FROM PAVEMENT EDGE
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 4.5 M (15' TO 600 MM (24") FROM PAVEMENT EDGE
701106-01	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 4.5 M (15') AWAY
701201-02	LANE CLOSURE, 2L 2W, DAY ONLY, FOR SPEEDS > OR = 45 MPH
701301-02	LANE CLOSURE, 2L 2W, SHORT TIME OPERATIONS,
701306-01	LANE CLOSURE, 2L 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > OR = 45 MPH
701311-02	LANE CLOSURE, 2L 2W, MOVING OPERATIONS DAY ONLY
701326-02	LANE CLOSURE, 2L 2W, PAVEMENT WIDENING, FOR SPEEDS > OR = 45 MPH
701606-04	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-04	URBAN LANE CLOSURE, MULTILANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
704001-03	TEMPORARY CONCRETE BARRIER
720001	SIGN PANEL MOUNTING DETAILS
720006-01	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
720016-01	MAST ARM MOUNTED STREET NAME SIGNS
729001	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
805001	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-01	CONCRETE HANDHOLES
814006-01	DOUBLE HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
877001-02	STEEL MAST ARM ASSEMBLY AND POLE
877011-02	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
878001-05	CONCRETE FOUNDATION DETAILS
880001	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUTS FOR DETECTOR LOOPS

(2) Rev. 2-21-07
(1) Rev. 1-8-07

REVISIONS	
NAME	DATE
Rev.	

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

INDEX OF SHEETS
STATE STANDARDS

SCALE NTS — DRAWN BY GRH
DATE OCTOBER, 2006 — CHECKED BY PK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	3
STA. 9+713.000 TO STA. 10+151.000				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 70D-Y-B-R & 70HB-R-1 62897

DISTRICT ONE DETAILS

BD-01	DRIVEWAY DETAILS - DISTANCE BETWEEN ROW AND FACE OF CURB
BD-02	DRIVEWAY DETAILS - DISTANCE BETWEEN ROW AND FACE OF CURB
BD-07	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER
BD-22	PAVEMENT PATCHING FOR BITUMINOUS TAPER DETAILS
BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BD-32	BUTT JOINT AND BITUMINOUS TAPER DETAILS
BD-34	DETAILS FOR STEEL PLATE BEAM GUARDRAIL ADJACENT TO CURB AND GUTTER AND STABILIZATION AT TBT TY. 1 SPL.
BD-36	FIRE HYDRANTS TO BE MOVED
BD-51	BENCHING CONSTRUCTION DETAIL
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC-18	SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS
TC-22	TEMPORARY INFORMATION SIGNING
TS-05	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (SHEET 1)
TS-07	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
BE-215	LIGHTING CONTROLLER SINGLE DOOR
BE-220	ELECTRIC SERVICE INSTALLATION, AERIAL REMOTE DISCONNECT
BE-301	LIGHT POLE FOUNDATION 12.192M (40') TO 14.478M (47'6") M.H. 381 (15") BOLT CIRCLE
BE-330	LIGHT POLE MOUNTED ON CONCRETE PARAPET WALL
BE-400	ALUMINUM LIGHT POLE 14.478M (47'6") MOUNTING HEIGHT
BE-701	LUMINAIRE SAFETY CABLE ASSEMBLY
BE-702	MISC. ELECTRICAL DETAILS SHEET A
BE-800	TEMPORARY LIGHT POLE DETAILS
BE-801	TEMPORARY AERIAL CABLE INSTALLATION
BE-900	SUSPENDED MOUNT UNDERPASS LUMINAIRE INSTALLATION DETAILS

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. IN ADDITION, THE CONTRACTOR SHALL CONTACT THE VILLAGE OF PALATINE, VILLAGE OF INVERNESS AND COOK COUNTY HIGHWAY DEPARTMENT FOR FIELD LOCATIONS OF WATER MAIN, SANITARY SEWER, ELECTRIC, AND ALL MUNICIPAL UTILITIES. (48 HOURS NOTIFICATION IS REQUIRED.)

2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE VILLAGE OF PALATINE, VILLAGE OF INVERNESS AND FOREST PRESERVE DISTRICT OF COOK COUNTY.

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

4. 3 METER (10 FOOT) TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO THE EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.

5. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR II BARRICADE USED. (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.) TYPE III BARRICADES SHALL HAVE FOUR (4) WEIGHTED SANDBAGS.

6. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

7. ALL STORM SEWER CONNECTIONS WITH PIPES 675 mm (27") DIAMETER AND SMALLER SHALL BE MADE WITH PRECAST "TEE" OR "WYE" PIPES. FOR PROPOSED STORM SEWER PIPES LARGER THAN 675 mm (27") DIAMETER, OPENINGS OF THE SPECIFIED DIAMETER SHALL BE MADE IN THE PIPE AT THE TIME IT IS MANUFACTURED. PRECAST TEE AND WYE CONNECTIONS FOR PROPOSED STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF STORM SEWER.

8 ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

9. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO HIRE AN ENVIRONMENTAL FIRM THAT IS PREQUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT. THE PREQUALIFIED CONSULTANT MUST CONTINUOUSLY MONITOR ALL SOIL EXCAVATION AT SEVERAL LOCATIONS DURING EXECUTION OF THIS CONTRACT.

10. ALL TEMPORARY SHEET PILING NECESSARY FOR THE PLACEMENT OF STORM SEWER, SANITARY SEWER, AND WATERMAIN SHALL BE INCLUDED IN THE COST OF THE ITEM BEING INSTALLED.

11. APPROXIMATELY 1,305 METERS OF FULL-DEPTH SAWING IS REQUIRED TO SATISFACTORILY REMOVE THE EXISTING PAVEMENT AND DRIVEWAYS. THE COST OF THE FULL-DEPTH SAWING SHALL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

12. PAVEMENT ROUND-OUTS FOR DRAINAGE AND UTILITY STRUCTURES LOCATED WITHIN THE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS SHOWN ON HIGHWAY STANDARD 420111. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED) OF THE THICKNESS SPECIFIED.

13. THE ADDITIONAL THICKNESS OF AGGREGATE SUBGRADE, 300MM UNDER THE SHOULDER SHALL BE INCLUDED IN THE COST FOR AGGREGATE SUBGRADE, 300MM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

14. ESTIMATED VOLUME OF CONCRETE TO BE REMOVED FROM EXISTING IL 68 OVER US 14 STRUCTURE = 551 CU M AND WEIGHT OF STRUCTURAL STEEL TO BE REMOVED = 196490 KG.

15. ESTIMATED VOLUME OF CONCRETE TO BE REMOVED FROM EXISTING IL 68 OVER UPRR STRUCTURE = 698 CU M AND 985 SQ M OF PPC DECK BEAMS.

16. TWO WEEKS BEFORE STARTING PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE CONTRACTOR SHALL CONTACT WALTER CZARNY, TRAFFIC F.E., AT (773) 685-8386.

17. BEFORE STARTING THE CONSTRUCTION, THE CONTRACTOR SHALL CONTACT IDOT BUREAU OF MAINTENANCE, ROADSIDE DEVELOPMENT UNIT, MELISSA DEL ROSARIO AT (847) 705-4171 FOR THE PROTECTION OF THE EXISTING LANDSCAPING.

16.

HMA MIXTURE REQUIREMENTS CHART

Rev.	MIXTURE USE	AC Type	VOIDS
	IL RTE 68 & RAMPS		
	STABILIZED SUB-BASE, 115mm	PG 58-22	2% @ 30 GYR
	SHOULDERS		
2	~~HMA SHOULDERS 260MM~~	~~PG 58-22~~	~~2% @ 30 GYR~~
	HMA SHOULDERS 150mm	PG 58-22	2% @ 30 GYR
	TEMPORARY PAVEMENT		
1	HMA BASE COURSE 200mm	PG 58-22	2% @ 50 GYR
	HMA SURFACE MIX "D", N50	PG 64-22	4% @ 50 GYR
	ACCESS ROAD		
	HMA SURFACE MIX "D", N70	PG 64-22	4% @ 70 GYR
1	HMA BASE COURSE 200mm	PG 58-22	2% @ 50 GYR
	IL RTE 68 BUTT JOINTS & DRIVEWAY		
	HMA SURFACE MIX "D", N70	PG 64-22	4% @ 70 GYR
	DRIVEWAY		
1	HMA BASE COURSE 150mm	PG 58-22	2% @ 50 GYR

THE UNIT WEIGHT USED TO CALCULATE HMA BITUMINOUS MIXTURES IS 2.4Kg/SqM/mm.

NO COMMITMENTS FOR THIS PROJECT

NOTE: BOXED ITEMS INDICATE WORK NOT PAID FOR SEPARATELY, BUT INCLUDED AS PART OF ANOTHER PAY ITEM OR COST ASSOCIATED WITH THE CONTRACT.

2 REV. 2-15-07

1 REV. 1-9-07

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

DISTRICT ONE DETAILS, GENERAL NOTES AND COMMITMENTS

SCALE NTS DRAWN BY GRH
DATE OCTOBER, 2006 CHECKED BY PK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	•	COOK	283	4
STA. 9+713.000		TO STA. 10+151.000		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• 70D-Y-B-R & 70HB-R-1			62897	

SUMMARY OF QUANTITIES

IL ROUTE 68 @ US 14
IDOT PROJECT # D-91-097-05

ITEM #	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY 80% FED. 20% STATE (URBAN)	ROADWAY J000-2A (F)	STRUCTURE IL 68 OVER US 14 X271-2A (F)	STRUCTURE IL 68 OVER UPRR X171-5B (BRF)	TRAFFIC SIGNALS Y031-1F (F)	MSE AND RETAINING WALLS Y007 (F)	HIGHWAY LIGHTING Y030-1E (F)	100% VILLAGE OF PALATINE Y031-3D
M2010210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	165	165						
20101100	TREE TRUNK PROTECTION	EACH	10	10						
M2011000	TEMPORARY FENCE	METER	1,117	1117						
M2020010	EARTH EXCAVATION	CU M	5,055	5,055						
M2020045	EARTH EXCAVATION (SPECIAL)	CU M	1,085	1,085						
M2021200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU M	2,751	2,240		511				
M2040800	FURNISHED EXCAVATION	CU M	4,590	4,590						
M2070420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU M	584	73		511				
M2080150	TRENCH BACKFILL	CU M	70	70						
M2113100	TOPSOIL FURNISH AND PLACE, 100MM	SQ M	13,833	13,833						
M2113300	TOPSOIL FURNISH AND PLACE, 300MM	SQ M	424	424						
M2500210	SEEDING, CLASS 2A	HA	0.5	0.5						
M2500310	SEEDING, CLASS 4	HA	0.5	0.5						
M2500400	NITROGEN FERTILIZER NUTRIENT	KG	130	130						
M2500500	PHOSPHORUS FERTILIZER NUTRIENT	KG	130	130						
M2500600	POTASSIUM FERTILIZER NUTRIENT	KG	130	130						
M2510105	MULCH, METHOD 1	HA	0.5	0.5						
M2510630	EROSION CONTROL BLANKET	SQ M	5,000	5,000						
M2520110	SODDING, SALT TOLERANT	SQ M	4,258	4,258						
M2520200	SUPPLEMENTAL WATERING	UNIT	553.5	553.5						
28000300	TEMPORARY DITCH CHECKS	EACH	76	76						
M2800250	TEMPORARY EROSION CONTROL SEEDING	KG	140	140						
M2800400	PERIMETER EROSION BARRIER	METER	913	913						
28000500	INLET AND PIPE PROTECTION	EACH	59	59						
M2810125	STONE RIPRAP, CLASS B3	SQ M	17.4	17.4						
M2820200	FILTER FABRIC	SQ M	4.2	4.2						
1 M3120502	STABILIZED SUBBASE-HOT-MIX ASPHALT, 115MM	SQ M	14,662	14,662						
M3510300	AGGREGATE BASE COURSE, TYPE A 300MM	SQ M	55	55						
2 M3550450	HOT-MIX ASPHALT BASE COURSE, 150MM	SQ M	44	44						
3 M3550500	HOT-MIX ASPHALT BASE COURSE, 200MM	SQ M	328	328						
M4060100	BITUMINOUS MATERIALS (PRIME COAT)	LITER	1,071	1,071						
M4060300	AGGREGATE (PRIME COAT)	M TON	1.8	1.8						
4 M4060982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ M	343	343						
~~M4061095~~	~~HOT-MIX ASPHALT REPLACEMENT OVER PATCHES~~	~~M TON~~	~~31~~							
5 M4063340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	M TON	91.1	91.1						
M4202265	PORTLAND CEMENT CONCRETE PAVEMENT 260MM (JOINTED)	SQ M	11,986	11,986						
M4205050	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ M	~~795~~ 995	~~795~~ 995						
M4205200	PROTECTIVE COAT	SQ M	~~17,895~~ 17,895	~~17,895~~ 17,895						
M4402000	PAVEMENT REMOVAL	SQ M	10,622	10,622						
M4402010	DRIVEWAY PAVEMENT REMOVAL	SQ M	730	730						
M4402040	COMBINATION CURB AND GUTTER REMOVAL	METER	202	202						
M4402060	APPROACH SLAB REMOVAL	SQ M	925	925						
M4402420	MEDIAN REMOVAL	SQ M	652	652						
M4402530	PAVED SHOULDER REMOVAL	SQ M	5,637	5,637						
M4810150	AGGREGATE SHOULDERS, TYPE A 150MM	SQ M	71	71						
6 M4820550	HOT-MIX ASPHALT SHOULDERS, 150MM	SQ M	840	840						
~~7 M4820660~~	~~HOT-MIX ASPHALT SHOULDERS, 260MM~~	~~SQ M~~	~~975~~	~~975~~						

LISTED ITEMS ARE SHOWN ON THE PLANS AS FOLLOWS:

1 - STABILIZED SUB-BASE 115 mm
2 - BITUMINOUS BASE COURSE SUPERPAVE 150 mm
3 - BITUMINOUS BASE COURSE SUPERPAVE 200 mm
4 - BITUMINOUS SURFACE REMOVAL - BUTT JOINT
5 - BITUMINOUS CONCRETE SURFACE COURSE, MIX "D", N70
6 - BITUMINOUS SHOULDERS SUPERPAVE 150 mm
~~7 - BITUMINOUS SHOULDERS SUPERPAVE 260 mm~~

2 Rev. 2-21-07

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

SUMMARY OF QUANTITIES - 1

SCALE NTS — DRAWN BY RDT
DATE OCTOBER, 2006 — CHECKED BY PK

10/13/2006 5:02:24 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	5
STA. 9+713.000		TO STA. 10+151.000		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-B-R & 70HB-R-1			62897	

SUMMARY OF QUANTITIES

IL ROUTE 68 @ US 14
IDOT PROJECT * D-91-097-05

ITEM *	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY 80% FED 20% STATE URBAN	ROADWAY J000-2A F	STRUCTURE IL 68 OVER US 14 X271-2A F	STRUCTURE IL 68 OVER UPRR X171-58 BRF	TRAFFIC SIGNALS Y031-1F F	MSE AND RETAINING WALLS Y007 F	HIGHWAY LIGHTING Y030-1E F	100% VILLAGE OF PALATINE Y031-30
M4830260	PORTLAND CEMENT CONCRETE SHOULDERS - 260MM	SQ M	4,826	4,826						
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	2		1	1				
M5010570	PROTECTIVE SHEILD	SQ M	1399		1399					
M5020100	STRUCTURE EXCAVATION	CU M	6,030.1		701	5,279		50.1		
M5030350	CONCRETE STRUCTURES	CU M	391.9		111.2	183.6		97.1		
M5030360	CONCRETE SUPERSTRUCTURE	CU M	648.8		345	303.3				
M5030390	BRIDGE DECK GROOVING	SQ M	1,830		1083	747				
M5030450	PROTECTIVE COAT	SQ M	2,711		1,237	1,074		400		
50500305	ERECTING STRUCTURAL STEEL	L SUM	1		0.55	0.45				
50500505	STUD SHEAR CONNECTORS	EACH	5,311		2,409	2,550		352		
* M5070209	UNTREATED TIMBER LAGGING	SQ M	219.2					219.2		
* M5120270	FURNISHING SOLDIER PILES (W SECTION)	METER	383					383		
M5080205	REINFORCEMENT BARS, EPOXY COATED	KG	113,140		53,660	53,140		6340		
50800515	BAR SPLICERS	EACH	1,483		708	775				
M5110100	SLOPE WALL 100 MM	SQ M	638		638					
M5120107	FURNISHING METAL SHELL PILES 305MM	METER	2,672		1,276	1,396				
M5210022	AHCHOR BOLTS M 24	EACH	64		44	20				
M5210024	AHCHOR BOLTS M 36	EACH	20			20				
M5120335	DRIVING PILES	METER	2,672		1,276	1,396				
51203200	TEST PILE METAL SHELLS	EACH	4		2	2				
M5120900	TEMPORARY SHEET PILING	SQ M	11.9		11.9					
51500100	NAME PLATES	EACH	2		1	1				
M5200225	PREFORMED JOINT STRIP SEAL	METER	65.8			65.8				
52100210	ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	21		11	10				
M542E112	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 300MM	EACH	2	2						
M542E116	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 375MM	EACH	4	4						
M542E120	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 450MM	EACH	4	4						
M542E144	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 900MM	EACH	1	1						
M542G055	GRATING FOR CONCRETE FLARED END SECTION 900MM	EACH	1	1						
M5421210	PIPE CULVERTS, TYPE 1 RCCP 375MM	METER	12.3	12.3						
M5421215	PIPE CULVERTS, TYPE 1 RCCP 450MM	METER	23.2	23.2						
M5421240	PIPE CULVERTS, TYPE 1 RCCP 900MM	METER	10.5	10.5						
M5500030	STORM SEWERS, CLASS A, TYPE 1 300MM	METER	15.6	15.6						
M5500040	STORM SEWERS, CLASS A, TYPE 1 375MM	METER	29.2	29.2						
M5500050	STORM SEWERS, CLASS A, TYPE 1 450MM	METER	7.8	7.8						
M5500430	STORM SEWERS, CLASS A, TYPE 2 300MM	METER	39.3	39.3						
M5500440	STORM SEWERS, CLASS A, TYPE 2 375MM	METER	35.5	35.5						
M5500450	STORM SEWERS, CLASS A, TYPE 2 450MM	METER	6.0	6.0						
M5500495	STORM SEWERS, CLASS A, TYPE 2 1050MM	METER	1.6	1.6						
M5500830	STORM SEWERS, CLASS A, TYPE 3 300MM	METER	9.7	9.7						
M5501240	STORM SEWERS, CLASS A, TYPE 4 375MM	METER	3.3	3.3						
⊙ M5504800	STORM SEWERS TO BE CLEANED	METER	312	312						
M5510025	STORM SEWER REMOVAL 300MM	METER	35.4	35.4						

⊙ NON-PARTICIPATING

* SPECIALTY ITEMS

△2 Rev. 2-21-07

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

SUMMARY OF QUANTITIES - 2

SCALE NTS DRAWN BY RDT
DATE OCTOBER, 2006 CHECKED BY PK

...\civil\sheets\45sum01.dgn 10/13/2006 5:02:24 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	7
STA. 9+713.000	TO STA. 10+151.000			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-B-R & 70HB-R-1				62897

SUMMARY OF QUANTITIES

IL ROUTE 68 @ US 14
IDOT PROJECT # D-91-097-05

ITEM #	ITEM DESCRIPTION	UNIT	URBAN 80% FED. 20% STATE QUANTITY	F ROADWAY J000-2A	F STRUCTURE IL 68 OVER US 14 X271-2A	BRF STRUCTURE IL 68 OVER UPRR X171-5B	F TRAFFIC SIGNALS Y031-1F	F MSE AND RETAINING WALLS Y007	F HIGHWAY LIGHTING Y030-1E	100% VILLAGE OF PALATINE Y031-3D
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	224	224						
M7030220	TEMPORARY PAVEMENT MARKING - LINE 100MM	METER	3,047	3,047						
M7030520	PAVEMENT MARKING TAPE, TYPE III 100MM	METER	12,103	12,103						
M7030580	PAVEMENT MARKING TAPE, TYPE III 600MM	METER	17	17						
M7031000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ M	1,216.0	1,216.0						
M7040300	RELOCATE TEMPORARY CONCRETE BARRIER (STATE OWNED)	METER	315.4	315.4						
M7040400	TEMPORARY CONCRETE BARRIER (STATE OWNED)	METER	562.4	562.4						
* M7200200	SIGN PANEL - TYPE 2	SQ M	4.64				4.64			
* M7800100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ M	6.8	6.8						
* M7800105	THERMOPLASTIC PAVEMENT MARKING - LINE 100MM	METER	481	481						
* M7800115	THERMOPLASTIC PAVEMENT MARKING - LINE 150MM	METER	49	49						
* M7800125	THERMOPLASTIC PAVEMENT MARKING - LINE 300MM	METER	16	16						
* M7800600	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ M	21	21						
* M7800605	EPOXY PAVEMENT MARKING - LINE 100MM	METER	3,023	3,023						
* M7800615	EPOXY PAVEMENT MARKING - LINE 150MM	METER	196	196						
* M7800620	EPOXY PAVEMENT MARKING - LINE 200MM	METER	1,382	1,382						
* M7800625	EPOXY PAVEMENT MARKING - LINE 300MM	METER	273	273						
* M7800640	EPOXY PAVEMENT MARKING - LINE 600MM	METER	65	65						
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	163	163						
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	25	25						
* 78200305	PRISMATIC BARRIER REFLECTOR	EACH	19	19						
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	54	54						
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	5	5						
M7830100	PAVEMENT MARKING REMOVAL	SQ M	40	40						
(Rev. 2) * ~~M8030010~~	~~LOCATING UNDERGROUND CABLE~~	~~METER~~	~~1490~~						~~1490~~ (Rev. 2)	
(Rev. 2) * MX033724	GROUND ROD 16MM DIA. x 3.0M	EACH	27						27 (Rev. 2)	
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1						1	
* M8100060	CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	936.1				936.1			
* M8100070	CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL	METER	110.8				110.8			
* M8100080	CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	23.1				13.1		10 (Rev. 2)	
* M8100100	CONDUIT IN TRENCH, 100MM DIA., GALVANIZED STEEL	METER	14.0				14.0			
* M8101050	CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	44.1				44.1			
* M8101070	CONDUIT PUSHED, 75MM DIA., GALVANIZED STEEL	METER	512 (Rev. 2)						512	
* M8101090	CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL	METER	217				217			
* M8101100	CONDUIT PUSHED, 125MM DIA. GALVANIZED STEEL	METER	18.3				18.3			
* M8120230	CONDUIT EMBEDDED IN STRUCTURE, 50 MM DIA. PVC	METER	89						89	
* M8120240	CONDUIT EMBEDDED IN STRUCTURE, 65 MM DIA. PVC	METER	98.3				98.3			
* M8130120	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 150MM x 150MM x 100MM	METER	12						12	
* M8130185	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 300MM X 250MM X 150MM	EACH	8						8	
(Rev. 1) * M8130255	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 450MM X 450MM x 200MM	EACH	2 (Rev. 2)						2 (Rev. 2)	
* M8130401	JUNCTION BOX, STAINLESS STEEL, EMBEDDED IN STRUCTURE, 300MM X 300MM X 150MM	EACH	8				4		4	
* 81400100	HANDHOLE	EACH	8 (Rev. 2)				8 (Rev. 2)			
* 81400200	HEAVY-DUTY HANDHOLE	EACH	9				9			
* 81400300	DOUBLE HANDHOLE	EACH	2				2			
* MX032073	AERIAL CABLE WITH MESSENGER WIRE 3-1/C NO.2 ALUMINUM	METER	1505 (Rev. 2)						(Rev. 2) 1505	
* M8160400	UNIT DUCT, WITH 3-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW), 30MM DIA., POLYETHYLENE	METER	2442 (Rev. 2)						2442 (Rev. 2)	
* M8170742	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE USE) 1/C NO. 10	METER	600						600	
* M8170425	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 10	METER	660						660	
* M8170730	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE USE) 1/C NO. 3/0	METER	19						19	
* M8170410	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 4	METER	405						405	
* ~~M8180120~~	~~AERIAL CABLE WITH MESSENGER WIRE, 3-1/C NO. 2 ALUMINUM~~	~~METER~~	1,075						1,075	
* M8170415	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 6	METER	153						153	
* M8190200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	2451				1076		1375 (Rev. 2)	
* ~~M8180120~~	~~AERIAL CABLE, 3 1/C NO. 2 WITH MESSENGER WIRE~~	~~METER~~	~~1505~~						~~1505~~	

*SPECIALTY ITEMS

(Rev. 2) Rev. 2-21-07
(Rev. 1) Rev. 1-8-07

REVISIONS	
NAME	DATE
Rev.	

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

SUMMARY OF QUANTITIES - 4

SCALE NTS — DRAWN BY RDT
DATE OCTOBER, 2006 — CHECKED BY PK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	•	COOK	283	8
STA. 9+713.000		TO STA. 10+151.000		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
• 70D-Y-B-R & 70HB-R-1				62897

SUMMARY OF QUANTITIES

IL ROUTE 68 @ US 14
IDOT PROJECT * D-91-097-05

ITEM *	ITEM DESCRIPTION	UNIT	URBAN 80% FED. 20% STATE QUANTITY	F ROADWAY J000-2A	F STRUCTURE IL 68 OVER US 14 X271-2A	BRF STRUCTURE IL 68 OVER UPRR X171-5B	F TRAFFIC SIGNALS Y031-1F	F MSE AND RETAINING WALLS Y007	F HIGHWAY LIGHTING Y030-1E	100% VILLAGE VILLAGE OF PALATINE Y031-3D
82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	4						4	
~~MX033125~~	~~GROUND ROD 16MM DIA. X 3.0M~~	~~EACH~~	~~35~~						~~65~~	
82107100	UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	8						8	
82107400	UNDERPASS LUMINAIRE, 100 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	4						4	
88300340	LIGHTING CONTROLLER TYPE IMSA 39-2 600 AMP 480VOLT	EACH	1						1	
M8301125	LIGHT POLE, ALUMINUM, 15.2M M.H., 2.5M MAST ARM	EACH	1						1	
M8307670	LIGHT POLE, WOOD, 9.14 METER, CLASS 4	EACH	2						2	
M8307780	LIGHT POLE, WOOD, 12.19 METER, CLASS 4	EACH	2						2	
M8307590	LIGHT POLE, WOOD, 18.30 METER, CLASS H	EACH	7						7	
M8307420	LIGHT POLE, WOOD, 18.30 METER, CLASS 4, 4.5 METER MAST ARM	EACH	12						12	
M8360200	LIGHT POLE FOUNDATION, 750MM DIAMETER	METER	26						26	
84200500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	4						4	
~~84200780~~	~~LIGHTING FOUNDATION, REMOVAL~~	~~EACH~~	~~4~~						~~4~~	
~~84200800~~	~~POLE FOUNDATION, REMOVED~~	~~EACH~~	~~1~~						~~1~~	
84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	26						26	
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1						1	
84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1						1	
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1				1			
85700300	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1				1			
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2				2			
86000100	MASTER CONTROLLER	EACH	1				1			
~~86300100~~	~~CONTROLLER CABINET TYPE IV~~	~~EACH~~	~~2~~				~~2~~			
86400100	TRANSCEIVER - FIBER OPTIC	EACH	4				4			
M8730800	ELECTRIC CABLE IN TRENCH, SERVICE, NO. 6 2 C	METER	34.4				34.4			
M8731220	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3 C	METER	1124.16				374.72			749.44
M8731240	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	1.637				1.637			
MX973031	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3/C TWISTED SHIELDED	METER	1125.24				375.08			750.16
M8731250	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	412.5				412.5			
M8731300	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	METER	1,056.77				1056.77			
M8750400	TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.25 METER	EACH	4				4			
M8750810	TRAFFIC SIGNAL POST GALVANIZED STEEL 4.85 METER	EACH	2				2			
~~M8770060~~	~~STEEL MAST ARM ASSEMBLY AND POLE 15.85 METER~~	~~EACH~~	~~1~~				~~1~~			
M8770700	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 7.35M	EACH	2				2			
~~M8770040~~	~~STEEL MAST ARM ASSEMBLY AND POLE 9.00 METER~~	~~EACH~~	~~2~~				~~2~~			
M8770045	STEEL MAST ARM ASSEMBLY AND POLE, 9.14 METER	EACH	1				1			
~~M8770055~~	~~STEEL MAST ARM ASSEMBLY AND POLE, 10.36 METER~~	~~EACH~~	~~1~~				~~1~~			
~~M8770075~~	~~STEEL MAST ARM ASSEMBLY AND POLE, 12.80 METER~~	~~EACH~~	~~1~~				~~1~~			
M8770100	STEEL MAST ARM ASSEMBLY AND POLE, 16.46 METER	EACH	1				1			
M8770770	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 12.80 METER	EACH	1				1			
M8770565	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 10.97 METER AND 6.09 METER	EACH	1				1			
M8770750	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 10.36 METER	EACH	2				2			
M8770566	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 8.53 METER AND 16.46 METER	EACH	1				1			
M8780100	CONCRETE FOUNDATION, TYPE A	METER	7.2				7.2			
~~M8780200~~	~~CONCRETE FOUNDATION, TYPE B~~	~~METER~~	~~2.4~~				~~2.4~~			
M8780150	CONCRETE FOUNDATION, TYPE C	METER	2.4				2.4			
M8780400	CONCRETE FOUNDATION, TYPE E 750MM DIAMETER	METER	24.3				24.3			
M8860000	DETECTOR LOOP, PREFORMED	METER	391				391			
87900200	DRILL EXISTING HANDHOLE	EACH	2				2			
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	18				18			
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	10				10			
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 BRACKET MOUNTED	EACH	2				2			
~~88030100~~	~~SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED~~	~~EACH~~	~~2~~				~~2~~			
88700200	LIGHT DETECTOR	EACH	20				20		10	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2				2			
88700300	LIGHT DETECTOR AMPLIFIER	EACH	2						2	
88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	20				20			
88500100	INDUCTIVE LOOP DETECTOR	EACH	14				14			
89502380	REMOVE EXISTING HANDHOLE	EACH	1						1	
MX030199	TEMPORARY PAVEMENT	SQ M	1,522	1,522						
MX033380	CONDUIT ATTACHED TO STRUCTURE, 25MM DIA. GALVANIZED STEEL, PVC COATED (RIGID)	METER	92						92	
MX032178	TEMPORARY INFORMATION SIGNING	SQ M	24	24						
82106480	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT (INSTALL ONLY)	EACH	14						14	
~~MX033124~~	~~GROUND ROD 16MM DIA. X 3.0M~~	~~EACH~~	~~27~~						~~27~~	
MX030208	CONDUIT ATTACHED TO STRUCTURE 65MM DIA. GALVANIZED STEEL, PVC COATED	METER	28						28	
MX030243	CONDUIT ATTACHED TO STRUCTURE 75MM DIA. GALVANIZED STEEL, PVC COATED	METER	22						22	
89503751	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2						2	

*SPECIALTY ITEMS

2 Rev. 2-21-07
1 Rev. 1-8-07 Rev.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

SUMMARY OF QUANTITIES - 5

SCALE NTS DRAWN BY RDT
DATE OCTOBER, 2006 CHECKED BY PK

...\civil\sheets\454sum01.dgn 10/13/2006 5:02:25 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	•	COOK	283	9
STA. 9+713.000	TO STA. 10+151.000			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• 70D-Y-B-R & 70HB-R-1				62897

SUMMARY OF QUANTITIES

IL ROUTE 68 @ US 14
IDOT PROJECT # D-91-097-05

ITEM #	ITEM DESCRIPTION	UNIT	URBAN 80% FED. 20% STATE QUANTITY	F ROADWAY J0C0-2A	F STRUCTURE IL 68 OVER US 14 X271-2A	BRF STRUCTURE IL 68 OVER UPRR X171-5B	F TRAFFIC SIGNALS Y031-1F	F MSE AND RETAINING WALLS Y007	F HIGHWAY LIGHTING Y030-1E	Y031-3D VILLAGE OF PALATINE 100% VILLAGE
~~MX032761~~	~~ELECTRICAL HANDHOLE, 900MM DIAMETER WITH 600MM FRAME AND LID~~	~~EACH~~	~~1~~						~~1~~	
* MX032819	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	METER	1,027				1,027			
* MX033276	TEMPORARY SOIL RETENTION SYSTEM	SQ M	218			218				
* MX033305	EMERGENCY VEHICLE PRIORITY SYSTEM LINE BEACON CABLE, NO. 20 3/C	METER	374.72							374.72
* MX033306	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	METER	375.08							375.08
* MX033445	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU M	249.6					249.6		
* MX843010	REMOVE EXISTING CONDUIT ATTACHED TO STRUCTURE	METER	110						110	
* MX871055	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	METER	1,027				1,027			
* MX873027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	METER	447.4				447.4			
* MX878030	CONCRETE FOUNDATION, TYPE E 900MM DIAMETER	METER	13.2				13.2			
MZ001050	AGGREGATE SUBGRADE 300MM	SQ M	17,912	17,912						
MZ022800	FENCE REMOVAL	METER	76	76						
MZ031105	MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ M	1013		287	726				
MZ031106	TEMPORARY MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ M	316		61	255				
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	1			1				
Z0007601	BUILDING REMOVAL NO. 1	L SUM	1	1						
Z0007602	BUILDING REMOVAL NO. 2	L SUM	1	1						
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1						
⊙ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	22	22						
Z0018801	DRAINAGE SYSTEM NO. 1	EACH	1		1					
Z0018802	DRAINAGE SYSTEM NO. 2	EACH	1			1				
Z0018900	DRILL AND GROUT DOWEL BARS	EACH	128	128						
△ Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	12	12						
△ Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	5	5						
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1						
~~Z0049801~~	~~REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1~~	~~L SUM~~	~~1~~	~~1~~						
~~Z0049802~~	~~REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 2~~	~~L SUM~~	~~1~~	~~1~~						
~~Z0049901~~	~~REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1~~	~~L SUM~~	~~1~~	~~1~~						
~~Z0049902~~	~~REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 2~~	~~L SUM~~	~~1~~	~~1~~						
△ Z0050000	REMOVAL AND REINSTALLATION OF EXISTING IMPACT ATTENUATORS	EACH	2	2						
● Z0076600	TRAINEES	HOUR	1000	1000						
* X0301023	CONFIRMATION BEACON	EACH	4							4
* X0322424	TEMPORARY UNDERPASS LIGHTING INSTALLATION AND REMOVAL	L SUM	1						1	
* X0323157	REMOVE LUMINAIRE FROM UNDERPASS	EACH	4						4	
* X0323412	REMOVE EXISTING SERVICE INSTALLATION	EACH	1						1	
* X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	9						9	
X0323082	DRAINAGE SCUPPERS, DS-33	EACH	1			1				
X0324387	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	44						44	
X0323830	DRAINAGE SCUPPERS, DS-11	EACH	[illegible]		3	4				
~~X0324252~~	~~SERVICE INSTALLATION 100 AMP 120/240V ELECTRIC~~	~~EACH~~	~~1~~				~~1~~			
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	1						
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1						
X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	10	10						
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	16	16						
* X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	2				2			
~~8X400110~~	~~REMOVE TEMPORARY LIGHTING UNITS~~	~~EACH~~	~~1~~						~~1~~	
~~X8410118~~	~~MAINTENANCE OF TEMPORARY LIGHTING SYSTEM~~	~~L SUM~~	~~1~~						~~1~~	
* X8780110	MODIFY EXISTING TYPE "D" FOUNDATION	EACH	2				2			
XX001017	REMOVE RIGHT-OF-WAY MARKERS	EACH	6	6						
~~XX002856~~	~~RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM~~	~~L SUM~~	~~1~~				~~1~~			
* XX003162	EMERGENCY VEHICLE PRIORITY SYSTEM DETECTOR UNIT	EACH	4							4
~~XX003503~~	~~FLARED END SECTION REMOVAL~~	~~EACH~~	~~1~~	~~1~~						
X0325096	OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1				1			
~~MX033723~~	~~ERECTING PRECAST PRESTRESSED CONCRETE DECK BEAM, (686MM DEPTH)~~	~~SQ M~~	~~12.58~~			~~12.58~~				

WEIGHT OF STEEL= 348580KG

● Y080
⊙ NON-PARTICIPATING
△ SFTY - 3N
* SPECIALTY ITEMS

△2 Rev. 2-21-07
△1 Rev. 1-8-07

REVISIONS	
NAME	DATE
Rev.	

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

SUMMARY OF QUANTITIES - 6

SCALE NTS — DRAWN BY RDT
DATE OCTOBER, 2006 — CHECKED BY PK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	10
STA. 9+713.000 TO STA. 10+151.000				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 70D-Y-B-R & 70HB-R-1 62897

TREE TRUNK PROTECTION

LOCATION			EACH
RAMP C			
0+193.8	13.0	RT	1
0+193.9	13.5	RT	1
0+198.2	15.4	RT	1
0+215.2	21.1	RT	1
0+216.2	24.8	RT	1
RAMP D			
0+053.7	19.6	LT	1
0+070.3	27.5	LT	1
0+073.2	22.0	LT	1
0+088.0	25.2	LT	1
0+100.5	26.3	LT	1

TREE TRUNK PROTECTION, TOTAL = 10 EACH

STABILIZED SUB-BASE, 115MM

LOCATION			AREA (SQ. M.)
IL ROUTE 68			
9+713.000	TO	9+872.278	3,213
9+928.719	TO	9+972.926	1,060
10+031.217	TO	10+151.000	3,131
RAMP A			
0+125.000	TO	0+311.578	1,424
RAMP B			
0+015.301	TO	0+300.612	1,900
RAMP C			
0+060.910	TO	0+288.562	1,960
PROPOSED			
0+013.029	TO	0+308.501	1,974

STABILIZED SUB-BASE, 115MM, TOTAL= 14,662 SQ. M.

AGGREGATE SUBGRADE, 300MM

LOCATION			AREA (SQ. M.)
IL ROUTE 68			
9+713.000	TO	9+872.278	3,261
9+928.719	TO	9+972.926	1,064
10+031.217	TO	10+151.000	3,151
RAMP A			
0+125.000	TO	0+311.578	2,053
RAMP B			
0+015.301	TO	0+300.612	2,812
RAMP C			
0+060.910	TO	0+288.562	2,756
RAMP D			
0+013.029	TO	0+308.501	2,815

AGGREGATE SUBGRADE, 300MM, TOTAL= 17,912 SQ. M.

AGGREGATE (PRIME COAT)
BITUMINOUS MATERIALS (PRIME COAT)

TYPE			SQ M	KG	AGGREGATE M TON	BITUMINOUS LITER
IL ROUTE 68						
9+698.000	TO	9+713.000	168	336	0.3	252
10+151.000	TO	10+165.000	219	438	0.4	328.5
ACCESS DRIVE & DRIVEWAY			327	981	1.0	490.5
				TOTAL =	1.8 M TON	1071 LITER

TYPE	AGGREGATE RATE
ACCESS DRIVE & DRIVEWAY	AREA (SQ M) x 3 (KG/SQ M)
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	AREA (SQ M) x 2 (KG/SQ M)

TYPE	BITUMINOUS RATE
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	AREA (SQ M) x 1.5 (Liters/SQ M)

PORTLAND CEMENT CONCRETE PAVEMENT, 260MM (JOINTED)

LOCATION			AREA (SQ. M.)
IL ROUTE 68			
9+713.000	TO	9+872.278	2,418
9+928.719	TO	9+972.926	873
10+031.217	TO	10+151.000	2,272
RAMP A			
0+125.000	TO	0+311.578	1,232
RAMP B			
0+015.301	TO	0+300.612	1,690
RAMP C			
0+060.910	TO	0+288.562	1,726
RAMP D			
0+013.029	TO	0+308.501	1,775

PORTLAND CEMENT CONCRETE PAVEMENT 260MM (JOINTED), TOTAL= 11,986 SQ. M.

PROTECTIVE COAT

SURFACE TYPE	AREA (SQ. M.)
PCC PAVEMENT 260MM	11,986
PCC SHOULDERS	4,826
COMBINATION CONC. CURB AND GUTTER TYPE B-15.30	45
COMBINATION CONC. CURB AND GUTTER TYPE B-15.45 (MODIFIED)	131
COMBINATION CONC. CURB AND GUTTER TYPE B-15.60	382
COMBINATION CONC. CURB AND GUTTER TYPE M-15.15	9
CONCRETE GUTTER TYPE B	92
CONCRETE MEDIAN, TYPE SB-15.30 (MODIFIED)	5
CONCRETE MEDIAN, TYPE SB-15.45 (MODIFIED)	110
CONCRETE MEDIAN SURFACE 100MM	55
CORRUGATED MEDIAN	255

2

PROTECTIVE COAT, TOTAL= 17,895 SQ. M. 2

AGGREGATE SHOULDERS, TYPE A, 150MM

LOCATION				AREA (SQ. M.)
IL ROUTE 68				
9+698.000	TO	9+713.000	LT	40.4
9+698.000	TO	9+713.000	RT	30.8

AGGREGATE SHOULDERS, TYPE A, 150MM, TOTAL= 71 SQ. M.

PORTLAND CEMENT CONCRETE SHOULDERS, 260MM

LOCATION				AREA (SQ. M.)
IL ROUTE 68				
9+713.000	TO	9+866.213	LT	384.9
9+713.000	TO	9+749.431	LT	26.3
9+713.000	TO	9+881.366	RT	412.3
9+817.864	TO	9+886.801	RT	42.4
9+819.025	TO	9+868.975	LT	33.9
9+948.991	TO	9+966.923	LT	49
9+948.975	TO	9+973.774	LT	14.0
9+608.102	TO	9+979.101	RT	28
9+969.626	TO	9+989.474	RT	10.8
10+013.978	TO	10+041.258	LT	15.2
10+031.214	TO	10+057.874	RT	14.7
10+024.219	TO	10+041.258	LT	45
10+038.424	TO	10+057.874	RT	44
10+096.937	TO	10+151.000	RT	129.7
10+119.235	TO	10+151.000	LT	47.7
RAMP A				
0+125.000	TO	0+305.615	RT	457
0+125.000	TO	0+314.366	LT	268
RAMP B				
0+005.296	TO	0+300.612	RT	707
0+029.660	TO	0+193.739	LT	308
RAMP C				
0+060.910	TO	0+278.310	RT	558
0+145.217	TO	0+290.929	LT	268
RAMP D				
0+026.015	TO	0+308.501	RT	658
0+022.425	TO	0+186.676	LT	304

2

PORTLAND CEMENT CONCRETE SHOULDERS, 260MM, TOTAL= 4,826 SQ. M.

FURNISHING AND ERECTING ROW MARKERS

LOCATION		UNIT EACH
IL ROUTE 68		
9+749.125	15.5 LT	1
9+834.792	19.0 LT	1
9+859.066	20.0 RT	1
RAMP A		
0+282.443	4.8 RT	1
0+291.529	7.7 RT	1
RAMP C		
0+241.558	9.0 RT	1
0+254.764	15.1 RT	1

FURNISHING AND ERECTING ROW MARKERS, TOTAL= 7 EACH

CONCRETE GUTTER, TYPE B

LOCATION					LENGTH (METER)
RAMP D					
0+079.859	RT	TO	0+159.738	RT	79.8
0+085.131	RT	TO	0+179.500	RT	94.4

CONCRETE GUTTER, TYPE B, TOTAL= 174.2 METER

COMBINATION CONC. CURB AND GUTTER TYPE B-15.60

LOCATION				LENGTH (METER)
IL ROUTE 68				
10+056.820	TO	10+134.235	LT	75.1
US 14				
13+665.009	TO	13+684.059	LT	19.6
13+911.114	TO	13+954.593	RT	43.5
13+935.110	TO	13+985.970	LT	51.0
RAMP A				
0+299.895	TO	0+307.773		17.0
RAMP B				
0+250.000	TO	0+300.612	RT	50.6
RAMP C				
0+060.910	TO	0+176.329	RT	115.4
0+087.440	TO	0+117.262	RT	29.8
0+273.139	TO	0+282.617		22.0

COMBINATION CONCRETE CURB AND GUTTER TYPE B-15.60, TOTAL= 424.0 METER

COMBINATION CONC. CURB AND GUTTER TYPE B-15.30

LOCATION				LENGTH (METER)
ACCESS DRIVE (RAMP C STA.)				
0+117.262	TO	0+192.852	RT	75.2

COMBINATION CONCRETE CURB AND GUTTER TYPE B-15.30, TOTAL= 75.2 METER

COMBINATION CONC. CURB AND GUTTER TYPE B-15.45 (MODIFIED)

LOCATION				LENGTH (METER)
IL ROUTE 68				
10+062.216	TO	10+135.000	MEDIAN	153.6

COMBINATION CONCRETE CURB AND GUTTER TYPE B-15.45 (MODIFIED), TOTAL= 153.6 METER

COMBINATION CONC. CURB AND GUTTER TYPE M-15.15

LOCATION				LENGTH (METER)
RAMP A				
0+299.895	TO	0+306.615	RT	8.6
RAMP C				
0+273.220	TO	0+281.488	RT	11.1

COMBINATION CONCRETE CURB AND GUTTER TYPE M-15.15, TOTAL= 19.7 METER

CONCRETE MEDIAN SURFACE 100MM
AGGREGATE BASE COURSE, TYPE A ,300MM

LOCATION			AREA (SQ. M.)
RAMP A			
0+299.895	TO	0+309.100	19
RAMP C			
0+273.184	TO	0+285.734	36

CONCRETE MEDIAN SURFACE 100MM, TOTAL= 55 SQ. M.

AGGREGATE BASE COURSE, TYPE A, 300MM, TOTAL= 55 SQ. M.

CONCRETE MEDIAN, TYPE SB-15.30 (MODIFIED)

LOCATION			AREA (SQ. M.)
IL ROUTE 68			
10+030.800	TO	10+034.454	5

CONCRETE MEDIAN, TYPE SB-15.30 (MODIFIED), TOTAL= 5 SQ. M.

CONCRETE MEDIAN, TYPE SB-15.45 (MODIFIED)

LOCATION			AREA (SQ. M.)
IL ROUTE 68			
9+928.719	TO	9+944.212	110

CONCRETE MEDIAN, TYPE SB-15.45 (MODIFIED), TOTAL= 110 SQ. M.

2 REV. 2-15-07

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

SCHEDULE OF QUANTITIES
ROADWAY - 1

SCALE NTS — DRAWN BY RDT

DATE OCTOBER, 2006 — CHECKED BY PK

CORRUGATED MEDIAN

LOCATION	AREA (SQ. M.)
IL ROUTE 68	
10+135.000 TO 10+203.000	255

CORRUGATED MEDIAN, TOTAL= 255 SQ. M

STEEL PLATE BEAM GUARDRAIL, TYPE A

LOCATION	LENGTH (METER)	GUARDRAIL MARKERS, TYPE A (EACH)
IL ROUTE 68		
9+701.810 TO 9+732.010 LT	30.4	2
9+845.011 TO 9+859.411 LT	15.2	2
9+845.011 TO 9+882.711 RT	34.2	2
TO 9+964.286 LT	22.8	2
TO 9+963.475 LT	15.8	1
TO 9+980.806 RT	26.6	2
10+023.463 TO RAMP D LT	45.6	3
10+039.644 TO RAMP C RT	18.1	2
RAMP A		
0+201.550 TO 0+311.682 RT	113.4	4
RAMP C		
0+145.000 TO 0+288.100 LT	194.7	9
0+194.403 TO 0+268.152 RT	76.0	6
RAMP B		
0+37.535 TO 0+303.535 RT	266	13

STEEL PLATE BEAM GUARDRAIL,TYPE A, TOTAL= 858.8 METER

GUARDRAIL MARKERS, TYPE A, TOTAL= 48 EACH

STEEL PLATE BEAM GUARDRAIL, TYPE D

LOCATION	LENGTH (METER)	GUARDRAIL MARKERS, TYPE A (EACH)
RAMP A		
0+123.550 TO 0+201.550 RT	79.8	6

STEEL PLATE BEAM GUARDRAIL,TYPE D, TOTAL= 79.8 METER

GUARDRAIL MARKERS, TYPE A, TOTAL= 6 EACH

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

LOCATION	EACH	TERMINAL MARKER - DIRECT APPLIED (EACH)
IL ROUTE 68		
9+732.010 LT	1	1
9+829.811 LT	1	1
9+829.811 RT	1	1
RAMP A		
0+270.478 LT	1	1
RAMP C		
0+195.444 RT	1	1

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT), TOTAL= 5 EACH

TERMINAL MARKER - DIRECT APPLIED, TOTAL= 5 EACH

TRAFFIC BARRIER TERMINAL TYPE 2

LOCATION	EACH
RAMP B	
0+045.490 LT	1
RAMP C	
0+269.750 RT	1
RAMP D	
0+050.370 LT	1

3 EACH

TRAFFIC BARRIER TERMINAL TYPE 6

LOCATION	EACH
IL ROUTE 68	
9+868.966 LT	1
9+886.487 RT	1
9+913.770 LT	1
9+973.811 LT	1
9+990.331 RT	1
10+013.938 LT	1
10+030.119 RT	1
RAMP B	
0+028.010 RT	1

8 EACH

CHAIN LINK FENCE, 1.2M

LOCATION	LENGTH (METER)
IL ROUTE 68	
RT	71

CHAIN LINK FENCE, 1.2M, TOTAL= 71 METER

CONCRETE BARRIER SINGLE FACE 815MM HEIGHT

LOCATION	LENGTH (METER)
RAMP B	
0+008.312 TO 0+028.010 RT	22.8

CONCRETE BARRIER SINGL FACE 815MM HEIGHT, TOTAL= 22.8 METER

BITUMINOUS BASE COURSE SUPERPAVE, 150MM

LOCATION	AREA (SQ. M.)
IL ROUTE 68	
9+747.596 LT	44

BITUMINOUS BASE COURSE SUPERPAVE, 150MM, TOTAL = 44 SQ. M.

BITUMINOUS BASE COURSE SUPERPAVE, 200MM

LOCATION	AREA (SQ. M.)
ACCESS DRIVE (RAMP C)	
0+146.323 TO 0+231.177 RT	328

BITUMINOUS BASE COURSE SUPERPAVE, 200MM, TOTAL = 328 SQ. M.

BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70

LOCATION	AREA (SQ.M.)	AVG DEPTH (MM)	QUANTITY (M TON)
IL ROUTE 68			
9+698.000 TO 9+713.000	168	50	20.2
10+151.000 TO 10+165.000	219	50	26.3
ACCESS DRIVE	327.5	50	39.3
DRIVEWAY AT 9+747.596 LT	44.3	50	5.3

BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, TOTAL = 91.1 M TONS

HOT-MIX ASPHALT SHOULDERS, 150MM

LOCATION	AREA (SQ. M.)
RAMP A	
0+123.463 TO 0+311.624 LT	343.0
0+259.900 TO 0+302.640 RT	37.1
RAMP B	
0+029.426 TO 0+046.000 LT	10.8
0+028.001 TO 0+300.615 RT	149.3
RAMP C	
0+145.092 TO 0+288.654 LT	227.3
0+176.329 TO 0+271.427 RT	55.8
RAMP D	
0+024.555 TO 0+051.982 LT	16.7

HOT-MIX ASPHALT SHOULDERS, 150MM, TOTAL= 840 SQ. M.

2

SEEDING AND SODDING QUANTITIES

LOCATION	SODDING, SALT TOLERANT AREA (SQ. M.)	SEEDING, CLASS 2A (WITH MULCH, METHOD 1) AREA (HECTARE)	SEEDING, CLASS 4 (WITH EROSION CONTROL BLANKET) AREA (HECTARE)
IL ROUTE 68			
9+713.000 TO 9+900.000 LT	849	0.00	0.00
9+713.000 TO 9+900.000 RT	707	0.00	0.00
9+900.000 TO 10+151.000 LT	70	0.02	0.00
9+900.000 TO 10+151.000 RT	83	0.00	0.00
10+063.000 TO 10+134.000 MEDIAN	424	0.00	0.00
RAMP A			
0+125.000 TO 0+275.000 LT	0	0.00	0.08
0+125.000 TO 0+275.000 RT	0	0.04	0.00
0+275.000 TO 0+311.000 LT	0	0.00	0.04
0+275.000 TO 0+305.000 RT	0	0.03	0.00
RAMP B			
0+001.500 TO 0+100.000 RT	0	0.00	0.08
0+030.000 TO 0+100.000 LT	0	0.04	0.00
0+100.000 TO 0+300.600 RT	0	0.00	0.28
0+100.000 TO 0+193.900 LT	0	0.06	0.00
RAMP C			
0+061.100 TO 0+250.000 RT	176	0.07	0.00
0+175.000 TO 0+250.000 LT	0	0.05	0.00
0+250.000 TO 0+275.000 RT	80	0.02	0.00
0+250.000 TO 0+295.000 LT	0	0.04	0.00
RAMP D			
0+050.000 TO 0+187.000 LT	577	0.06	0.00
0+050.000 TO 0+308.500 RT	1292	0.00	0.00
SUBTOTAL	4258	0.5	0.5
		1.0	

SODDING, TOTAL= 4,258 SQ. M.

SEEDING, TOTAL= 1.0 HECTARE

SUPPLEMENTAL WATERING, TOTAL= 553.5 UNITS

M2500400 NITROGEN FERTILIZER NUTRIENT	130	KILOGRAM
M2500500 PHOSPHORUS FERTILIZER NUTRIENT	130	KILOGRAM
M2500600 POTASSIUM FERTILIZER NUTRIENT	130	KILOGRAM
M2113100 TOPSOIL FURNISH AND PLACE, 100MM	13,833	SQ M
M2113300 TOPSOIL FURNISH AND PLACE, 300MM	424	SQ M

FERTILIZER IS APPLIED AT RATE OF 100KG/HECTARE OF SEEDING AND 70KG/HECTARE OF SODDING

SUPPLEMENTAL WATERING IS APPLIED AT RATE 25 LITERS PLUS 7*15 LITERS PER SQM OF SODDING

DRILL AND GROUT DOWEL BARS

LOCATION	UNIT (EACH)
IL ROUTE 68	
10+135.000 TO 10+203.000 LT	64
10+135.000 TO 10+203.000 RT	64

DRILL AND GROUT DOWEL BARS, TOTAL= 128 EACH

2 REV. 2-15-07

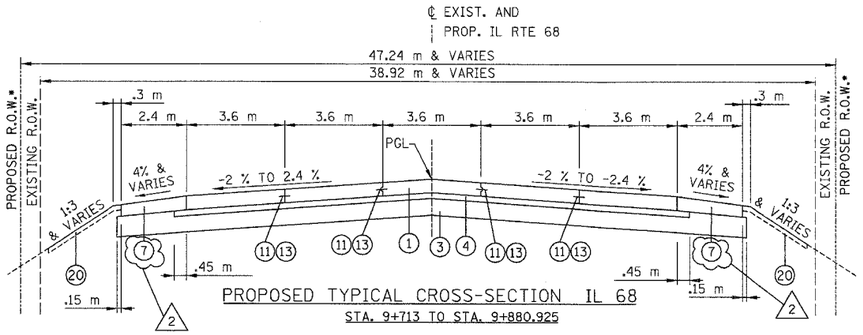
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

SCHEDULE OF QUANTITIES
ROADWAY - 2

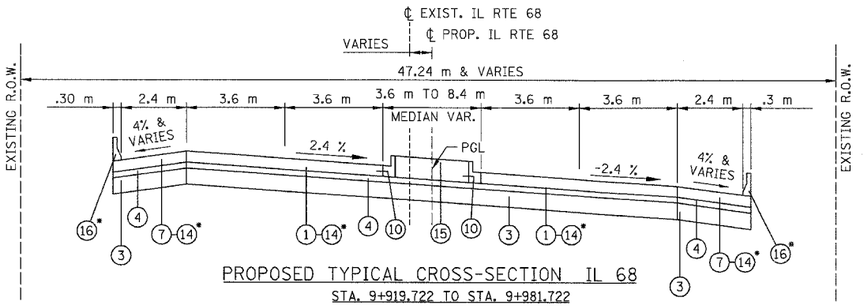
SCALE NTS DRAWN BY RDT
DATE OCTOBER, 2006 CHECKED BY PK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	19
STA. 9+713.000		TO STA. 10+151.000		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-B-R & 70HB-R-1				62897



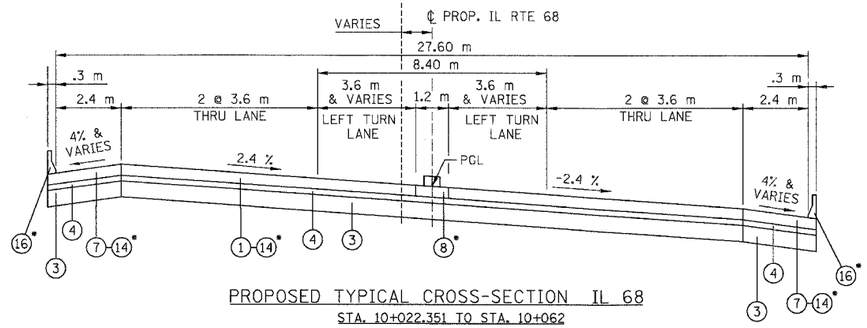
PROPOSED TYPICAL CROSS-SECTION IL 68

STA. 9+713 TO STA. 9+880.925



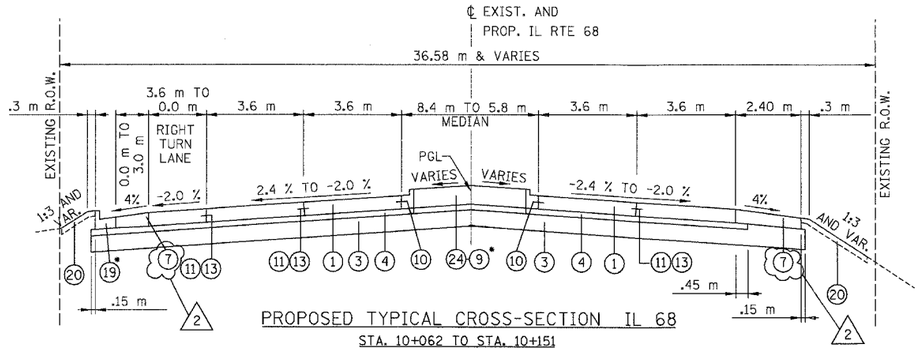
PROPOSED TYPICAL CROSS-SECTION IL 68

STA. 9+919.722 TO STA. 9+981.722



PROPOSED TYPICAL CROSS-SECTION IL 68

STA. 10+022.351 TO STA. 10+062



PROPOSED TYPICAL CROSS-SECTION IL 68

STA. 10+062 TO STA. 10+151

NOTE:

THE FOLLOWING KEY ITEMS IN THE LEGEND ARE INTERPRETED AS FOLLOWS:

- (4) STABILIZED SUBBASE-HOT-MIX ASPHALT, 115 mm
- (5) NOT USED
- (17) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70
- (18) HOT-MIX ASPHALT BASE COURSE, 200 mm

LEGEND:

1. PORTLAND CEMENT CONCRETE PAVEMENT, 260 mm (JOINTED)
2. NOT USED
3. AGGREGATE SUBGRADE 300 mm
4. STABILIZED SUB-BASE 115 mm
5. NOT USED
6. NOT USED
7. PCC SHOULDER, 260 mm
8. CONCRETE MEDIAN, TYPE SB-15.30 (MODIFIED), (SEE BRIDGE PLANS AND STD. 606301)
9. CORRUGATED PC CONCRETE MEDIAN (STD 606306)
10. #6 TIE BARS, 600mm LONG @ 600mm O.C. INCIDENTAL TO P.C.C. PAVEMENT (JOINTED)
11. LONGITUDINAL CONSTRUCTION JOINT GROUTED-IN-PLACE TIE BAR NO. 8x500mm LONG DEFORMED TIE BARS (EPOXY COATED) @ 600mm O.C. (STANDARD 420001) INCLUDED IN THE COST OF PAVEMENT.
12. LONGITUDINAL SAWED JOINT NO. 6x750mm LONG DEFORMED TIE BAR (EPOXY COATED) @ 750mm O.C. (STD. 420001 INCLUDED IN THE COST OF PAVEMENT)
13. AT THE CONTRACTORS OPTION A LONGITUDINAL SAWED JOINT (12) MAY BE USED
14. P.C.C. CONCRETE DECK 195 mm (SEE BRIDGE PLANS)
15. CONCRETE MEDIAN, TYPE SB-15.45 (MODIFIED), (SEE BRIDGE PLANS AND STD.606301)
16. CONCRETE PARAPET "F" SHAPE (SEE BRIDGE PLANS)
17. BITUMINOUS CONCRETE SURFACE, SUPERPAVE, MIX "D", N70.
18. BITUMINOUS BASE COURSE, SUPERPAVE 200 mm
19. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.60
20. TOPSOIL FURNISH AND PLACE 100 mm. SODDING, SALT TOLERANT OR SEEDING (SEE LANDSCAPING PLANS)
21. RETAINING WALL (SEE STRUCTURAL PLANS)
22. TYPE B GUTTER
23. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.30
24. LANDSCAPED MEDIAN (SEE PLANS FOR DETAILS)

* SEE PLANS FOR LOCATION

STRUCTURAL PAVEMENT DESIGN INFORMATION

STRUCTURAL DESIGN TRAFFIC: YEAR 2017
PV= 20,871 SU= 1,158 MU= 949

ROAD/STREET CLASSIFICATION: Class 1

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P= 50% S= 50% M= 50%

TRAFFIC FACTOR: Actual TF= 8.31 AC Type= N/A
Minimum TF= 6.7

PG GRADE: Binder= N/A Surface= N/A

SUBGRADE SUPPORT RATING:
SSR= POOR

2 REV. 2-15-07

BOXED ITEMS ARE INCIDENTAL TO OTHER PAY ITEMS.

REVISIONS	
NAME	DATE

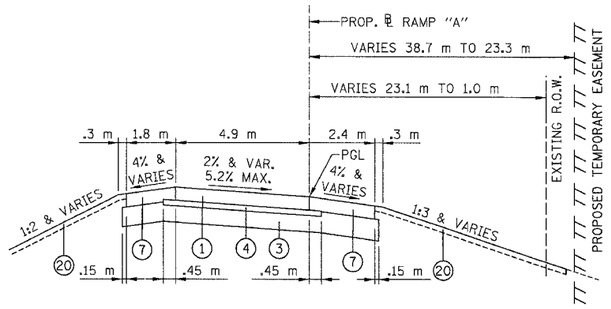
ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

PROPOSED TYPICAL SECTIONS
ILLINOIS ROUTE 68

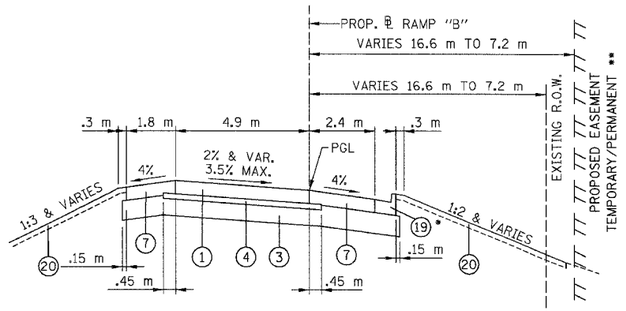
SCALE NTS DRAWN BY GRH
DATE OCTOBER, 2006 CHECKED BY PK

...\Cross\typ sections 01_02.dgn 2/15/2007 3:11:13 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	20
STA. 9+713.000		TO STA. 10+151.000		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-B-R & 70HB-R-1			62897	

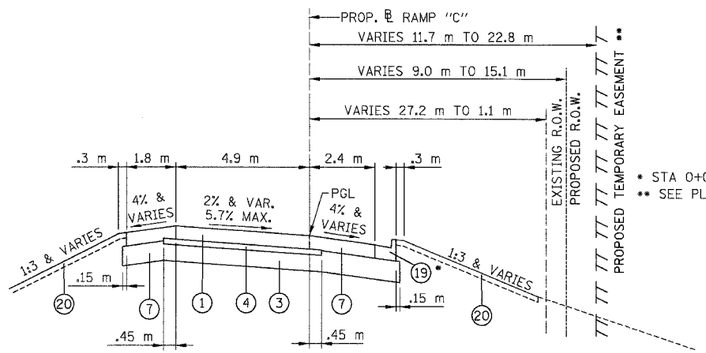


PROPOSED TYPICAL CROSS-SECTION
RAMP "A"



* STA 0+250.000 TO STA 0+300.612
** SEE PLANS FOR LOCATION

PROPOSED TYPICAL CROSS-SECTION
RAMP "B"



* STA 0+061.043 TO STA 0+176.329
** SEE PLANS FOR LOCATION

PROPOSED TYPICAL CROSS-SECTION
RAMP "C"

NOTE:

THE FOLLOWING KEY ITEMS IN THE LEGEND ARE INTERPRETED AS FOLLOWS:

(4) STABILIZED SUBBASE-HOT-MIX ASPHALT, 115 mm
(5) NOT USED
(17) HOT-MIX ASPHALT SURFACE COUSE, MIX "D", N70
(18) HOT-MIX ASPHALT BASE COURSE, 200 mm

LEGEND:

(1) PORTLAND CEMENT CONCRETE PAVEMENT, 260 mm (JOINTED)
(2) NOT USED
(3) AGGREGATE SUBGRADE 300 mm
(4) STABILIZED SUB-BASE 115 mm
(5) NOT USED
(6) NOT USED
(7) PCC SHOULDER, 260 mm
(8) CONCRETE MEDIAN, TYPE SB-15.30 (MODIFIED), (SEE BRIDGE PLANS AND STD. 606301)
(9) CORRUGATED PC CONCRETE MEDIAN (STD 606306)
(10) #6 TIE BARS, 600mm LONG @ 600mm O.C. INCIDENTAL TO P.C.C. PAVEMENT (JOINTED)
(11) LONGITUDINAL CONSTRUCTION JOINT GROUTED-IN-PLACE TIE BAR NO. 8x500mm LONG DEFORMED TIE BARS (EPOXY COATED) @ 600mm O.C. (STANDARD 420001) INCLUDED IN THE COST OF PAVEMENT.
(12) LONGITUDINAL SAWED JOINT NO. 6x750mm LONG DEFORMED TIE BAR (EPOXY COATED) @ 750mm O.C. (STD. 420001 INCLUDED IN THE COST OF PAVEMENT)
(13) AT THE CONTRACTORS OPTION A LONGITUDINAL SAWED JOINT (12) MAY BE USED
(14) P.C.C. CONCRETE DECK 195 mm (SEE BRIDGE PLANS)
(15) CONCRETE MEDIAN, TYPE SB-15.45 (MODIFIED), (SEE BRIDGE PLANS AND STD.606301)
(16) CONCRETE PARAPET "F" SHAPE (SEE BRIDGE PLANS)
(17) BITUMINOUS CONCRETE SURFACE, SUPERPAVE, MIX "D", N70.
(18) BITUMINOUS BASE COURSE, SUPERPAVE 200 mm
(19) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.60
(20) TOPSOIL FURHISH AND PLACE, 100 mm. SODDING, SALT TOLERANT OR SEEDING (SEE LANDSCAPING PLANS)
(21) RETAINING WALL (SEE STRUCTURAL PLANS)
(22) TYPE B GUTTER
(23) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.30
(24) LANDSCAPED MEDIAN (SEE PLANS FOR DETAILS)

BOXED ITEMS ARE INCIDENTAL TO OTHER PAY ITEMS.

2 REV. 2-15-07

REVISIONS	
NAME	DATE

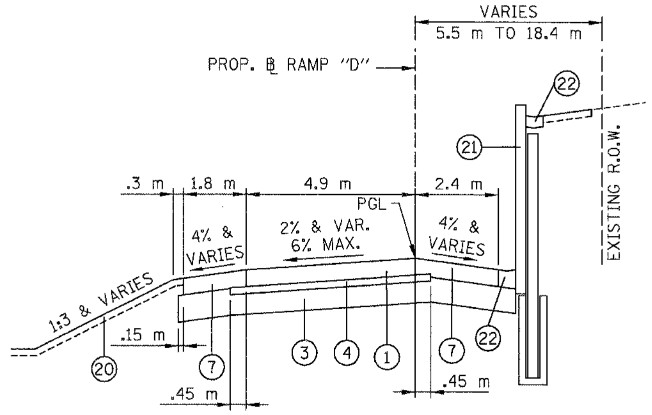
ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

PROPOSED TYPICAL SECTIONS
RAMPS

SCALE NTS — DRAWN BY GRH
DATE OCTOBER, 2006 — CHECKED BY PK

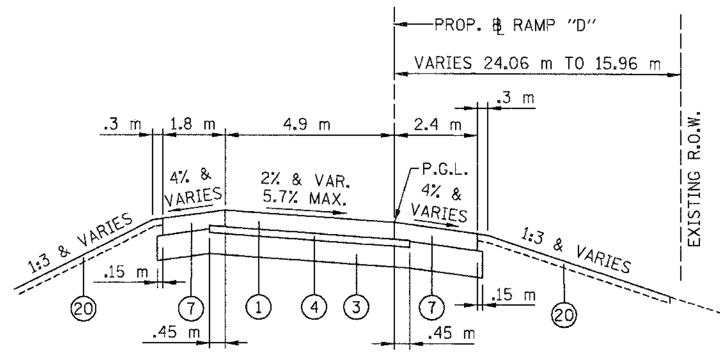
...\sheets\typ sections 68_pt.dgn 2/15/2007 2:12:14 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	21
STA. 9+713.000 TO STA. 10+151.000				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-B-R & 70HB-R-1		62897		



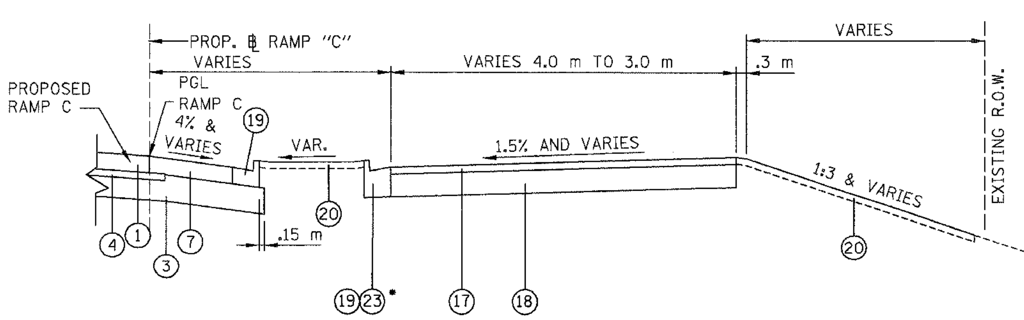
PROPOSED TYPICAL CROSS-SECTION
RAMP "D"

STA. 0+072 TO STA. 0+179



PROPOSED TYPICAL CROSS-SECTION
RAMP "D"

STA. 0+000 TO STA. 0+072
STA. 0+179 TO STA. 0+308



PROPOSED TYPICAL CROSS-SECTION
ACCESS DRIVE

* SEE PLANS FOR LOCATION

NOTE:

THE FOLLOWING KEY ITEMS IN THE LEGEND ARE INTERPRETED AS FOLLOWS:

(4) STABILIZED SUBBASE-HOT-MIX ASPHALT, 115 mm
(5) NOT USED (2)
(17) HOT-MIX ASPHALT SURFACE COUSE, MIX "D", N70
(18) HOT-MIX ASPHALT BASE COURSE, 200 mm

LEGEND:

(1) PORTLAND CEMENT CONCRETE PAVEMENT, 260 mm (JOINTED)
(2) NOT USED
(3) AGGREGATE SUBGRADE 300 mm
(4) STABILIZED SUB-BASE 115 mm
(5) NOT USED (2)
(6) NOT USED
(7) PCC SHOULDER, 260 mm
(8) CONCRETE MEDIAN, TYPE SB-15.30 (MODIFIED), (SEE BRIDGE PLANS AND STD. 606301)
(9) CORRUGATED PC CONCRETE MEDIAN (STD 606306)
(10) #6 TIE BARS, 600mm LONG @ 600mm O.C. INCIDENTAL TO P.C.C. PAVEMENT (JOINTED)
(11) LONGITUDINAL CONSTRUCTION JOINT GROUTED-IN-PLACE TIE BAR NO. 8x500mm LONG DEFORMED TIE BARS (EPOXY COATED) @ 600mm O.C. (STANDARD 420001) INCLUDED IN THE COST OF PAVEMENT.
(12) LONGITUDINAL SAWED JOINT NO. 6x750mm LONG DEFORMED TIE BAR (EPOXY COATED) @ 750mm O.C. (STD. 420001 INCLUDED IN THE COST OF PAVEMENT)
(13) AT THE CONTRACTORS OPTION A LONGITUDINAL SAWED JOINT (12) MAY BE USED
(14) P.C.C. CONCRETE DECK 195 mm (SEE BRIDGE PLANS)
(15) CONCRETE MEDIAN, TYPE SB-15.45 (MODIFIED), (SEE BRIDGE PLANS AND STD.606301)
(16) CONCRETE PARAPET "F" SHAPE (SEE BRIDGE PLANS)
(17) BITUMINOUS CONCRETE SURFACE, SUPERPAVE, MIX "D", N70.
(18) BITUMINOUS BASE COURSE, SUPERPAVE 200 mm
(19) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.60
(20) TOPSOIL FURNISH AND PLACE, 100 mm. SODDING, SALT TOLERANT OR SEEDING (SEE LANDSCAPING PLANS)
(21) RETAINING WALL (SEE STRUCTURAL PLANS)
(22) TYPE B GUTTER
(23) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.30
(24) LANDSCAPED MEDIAN (SEE PLANS FOR DETAILS)

BOXED ITEMS ARE INCIDENTAL TO OTHER PAY ITEMS.

(2) REV. 2-15-07

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68

PROPOSED TYPICAL SECTIONS
RAMPS AND ACCESS ROAD

SCALE NTS | DRAWN BY GRH
DATE OCTOBER, 2006 | CHECKED BY PK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	27
STA. 9+713.000	TO STA. 10+151.000			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-B-R & 70HB-R-1		62897		

NOTES:

1. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED
2. FOR BRIDGE INFORMATION SEE STRUCTURAL PLANS
3. FOR TRANSITION OF THE RIGHT SIDE OF ROADWAY FROM SUPERELEVATED EXISTING CONDITION TO NORMAL CROWN PROPOSED CONDITION, AT THE BEGINNING OF THE PROJECT, SEE TABLE THIS SHEET
4. FOR PROPOSED GUARDRAIL LOCATIONS SEE PAVEMENT MARKING AND LANDSCAPING PLANS
5. FOR PROPOSED FENCE SEE PAVEMENT MARKING AND LANDSCAPING PLANS
6. FOR MORE SUPERELEVATION INFORMATION SEE SUPERELEVATION TRANSITION DETAIL
7. FOR MORE BUTT JOINT INFORMATION SEE BUTT JOINT DETAILS.

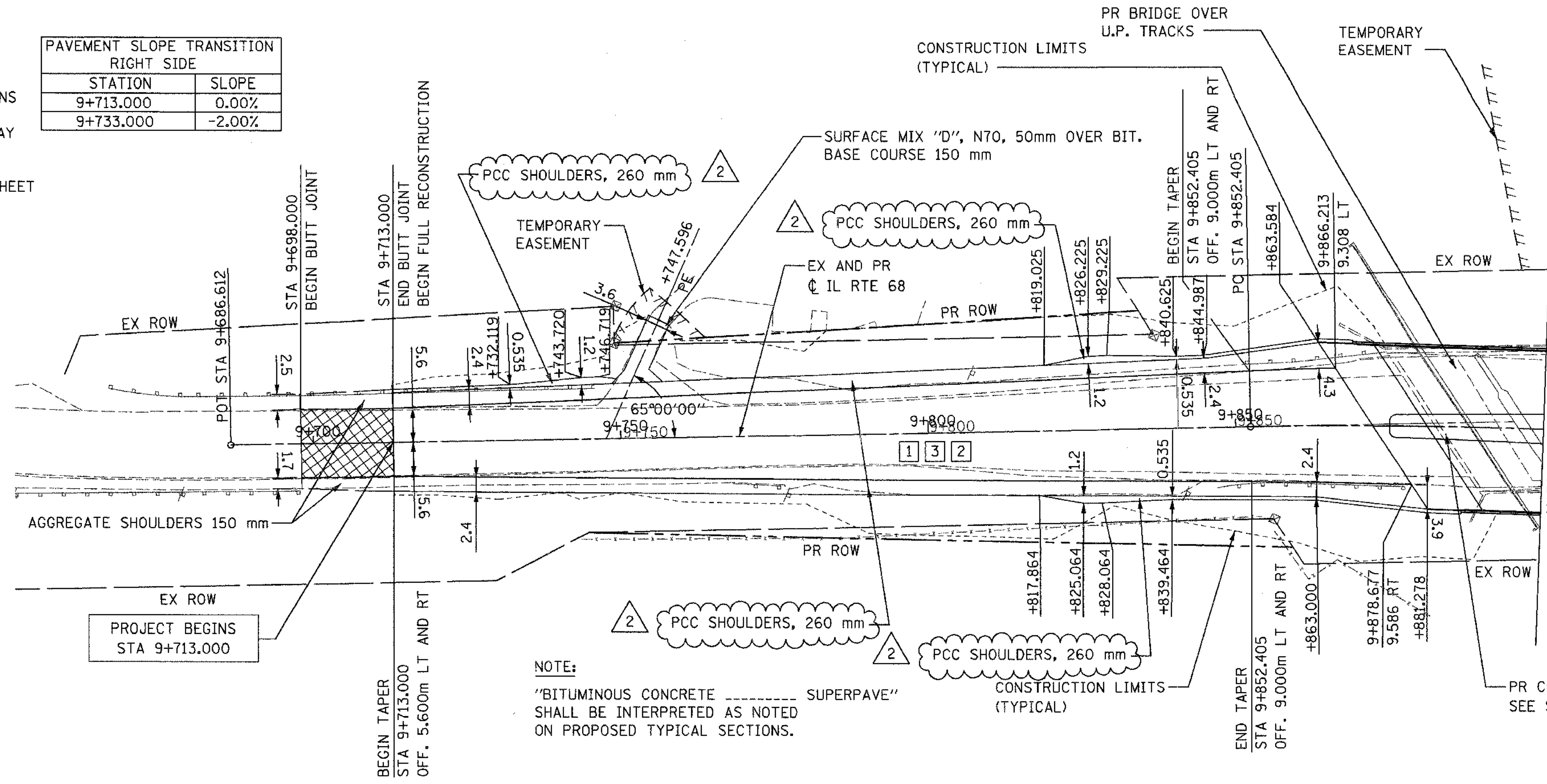
PAVEMENT SLOPE TRANSITION RIGHT SIDE	
STATION	SLOPE
9+713.000	0.00%
9+733.000	-2.00%

LEGEND:

1 PCC PAVEMENT, 260 mm (JOINTED)

2 AGGREGATE SUBGRADE 300 mm

3 STABILIZED SUB-BASE 115 mm



NOTE:

"BITUMINOUS CONCRETE ________ SUPERPAVE" SHALL BE INTERPRETED AS NOTED ON PROPOSED TYPICAL SECTIONS.

PROP. CURVE 68_CURVE_1
PI STA = 9+966.854
Δ = 14° 54' 14" (RT)
R = 875.000 m
T = 114.450 m
L = 227.607 m
E = 7.453 m
e = 2.4%
T.R. = 27.500 m
S.E. RUN. = 33.000 m
P.C. STA = 9+852.405
P.T. STA = 10+080.012

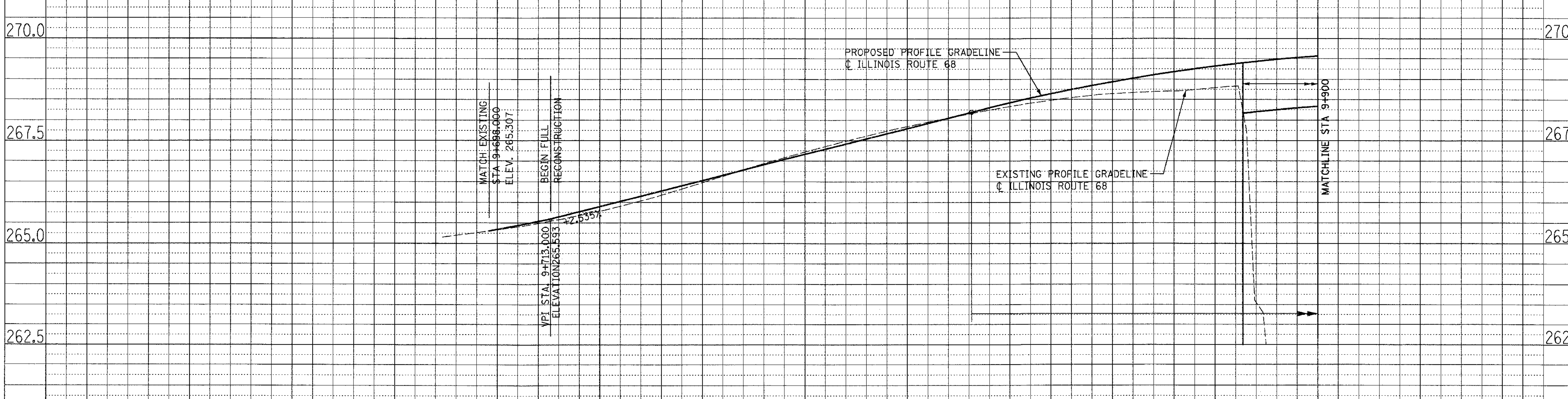
2 REV 2-15-07

BENCHMARK #2018

SET MAG NAIL IN WEST GUARDRAIL POST SOUTH SIDE OF DUNDEE EAST OF DUNDEE & ELA RD INTERSECTION ELEV. 265.839.

BENCHMARK #2017

CHISELED SQUARE NW ABUTMENT DUNDEE BRIDGE OVER UNION PACIFIC RAILROAD +/- 100m WEST OF RTE 14 ELEV. 269.746.



	9+700	9+725	9+750	9+775	9+800	9+825	9+850	9+875	9+900
EXIST.	265.336	265.786	266.481	267.221	267.850	268.331	268.647	268.794	260.806
PROP.	265.345	265.897	266.531	267.165	267.798	268.423	268.938	269.320	269.566

PLAN	SURVEYED	PLOTTED	ALIGNMENT CHECKED	RT. OF WAY CHECKED	CADD FILE NAME
NOTE BOOK NO.					

PROFILE	SURVEYED	PLOTTED	GRADES CHECKED	B.M. NOTED	STRUCTURE NOTAT'NS CHK'D
NOTE BOOK NO.					

SCALE: H= 1:500, V=1:50 IL ROUTE 68-PROPOSED PLAN AND PROFILE -1

LEGEND:

1. PCC PAVEMENT, 260 mm (JOINTED)
2. AGGREGATE SUBGRADE 300 mm
3. STABILIZED SUB-BASE 115 mm

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	28
STA. 9+713.000		TO STA. 10+151.000		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
* 70D-Y-B-R & 70HB-R-1			62897	

SCALE IN METERS

PLAN	DATE
SURVEYED	BY
PLOTTED	
NOTE BOOK ALIGNMENT CHECKED	
NO.____ RT. OF WAY CHECKED	
CADD FILE NAME	

REV. 2-15-07

BENCHMARK *2004
CHISELED SQUARE NW CORNER OF BASE OF NW PIER OF DUNDEE RD BRIDGE OVER RTE 14 AT STA 13+772.9, 10.5m RIGHT ELEV. 263.215.

BENCHMARK *2003
CHISELED SQUARE SE CORNER SE ABUTMENT OF DUNDEE RD BRIDGE OVER RTE 14 AT STA 13+827.9, 23.0m LEFT ELEV. 269.205.

NOTE:
"BITUMINOUS CONCRETE ---------- SUPERPAVE" SHALL BE INTERPRETED AS NOTED ON PROPOSED TYPICAL SECTIONS.

NOTES:

1. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED
2. FOR MORE INTERSECTION INFORMATION SEE INTERSECTION LAYOUT DETAILS
3. FOR MORE INTERSECTION INFORMATION SEE INTERSECTION ELEVATION DETAILS
4. FOR BRIDGE INFORMATION SEE STRUCTURAL PLANS
5. FOR PROPOSED GUARDRAIL LOCATIONS SEE PAVEMENT MARKING AND LANDSCAPING PLANS
6. FOR MORE SUPERELEVATION INFORMATION SEE SUPERELEVATION DETAIL
7. FOR MORE BUTT JOINT INFORMATION SEE BUTT JOINT DETAILS.
8. CONTRACTOR SHALL PROVIDE A LEVEL AREA AROUND CONTROLLER CABINETS AS DERECTED BY THE ENGINEER.

PROFILE	DATE
SURVEYED	BY
PLOTTED	
NOTE BOOK FIELD CHECKED	
NO.____ E.M. NOTED	
STRUCTURE NO.____ CHKD	

SCALE: H= 1:500, V=1:50

IL ROUTE 68-PROPOSED PLAN AND PROFILE -2

TRAFFIC SIGNALS QUANTITIES

NOTE	ITEM	UNIT	GRAND TOTAL	ELA RD & IL 68	IL 68 RAMP A&B	IL 68 RAMP C&D	ELA RD & US 14	INTERCONNECT
	SIGN PANEL - TYPE 2	SQ METER	9.28		4.64	4.64		
	HANDHOLE	EACH	8		4	4		
	HEAVY-DUTY HANDHOLE	EACH	9		3	3		3
	DOUBLE HANDHOLE	EACH	2		1	1		
	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	3	1	1		1	
	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1			1		
	MASTER CONTROLLER	EACH	1					1
	TRANSCEIVER - FIBER OPTIC	EACH	4	1	1	1	1	
	DRILL EXISTING HANDHOLE	EACH	2					2
	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	20		10	10		
	INDUCTIVE LOOP DETECTOR	EACH	14		7	7		
	CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	936.10		141.6	202.8		591.7
	CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL	METER	110.80		43.2	67.6		
	CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	15.10		3.6	11.5		
	CONDUIT IN TRENCH, 125MM DIA., GALVANIZED STEEL	METER	14.00		7	7		
	CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	44.10			44.1		
	CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL	METER	217.10		120.8	96.3		
	CONDUIT PUSHED, 125MM DIA., GALVANIZED STEEL	METER	18.50			18.5		
	CONDUIT EMBEDDED IN STRUCTURE, 65MM DIA., PVC	METER	98.30		74.5	23.8		
	TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	1076.00		195.4	288.9		591.7
	ELECTRIC CABLE IN TRENCH, SERVICE, NO. 6 2 C	METER	34.40		13	21.4		
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	1637.00		925	712		
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	412.50		189	223.5		
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	METER	1056.77		526	530.77		
	TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.25 METER	EACH	4		2	2		
	TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.85 METER	EACH	2		1	1		
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 8.53 METER	EACH	2		1	1		
	STEEL MAST ARM ASSEMBLY AND POLE 9.14 METER	EACH	1			1		
	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 8.53 METER AND 16.46	EACH	1			1		
	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 10.97 METER AND 6.09	EACH	1		1			
	STEEL MAST ARM ASSEMBLY AND POLE 16.46 METER	EACH	1		1			
	CONCRETE FOUNDATION, TYPE A	METER	7.20		3.6	3.6		
	CONCRETE FOUNDATION, TYPE C	METER	2.40		1.2	1.2		
	CONCRETE FOUNDATION, TYPE E 750MM DIAMETER	METER	24.30		10.1	14.2		
	DETECTOR LOOP, PREFORMED	METER	391.00		201	190		
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	METER	1027.00					1027
1	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C	METER	374.72		150.3	224.42		
1	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3/C TWISTED SHIELDED	METER	375.08		150.6	224.48		
	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	METER	1027.00					1027
	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	METER	447.40		195	252.4		
	CONCRETE FOUNDATION, TYPE E 900MM DIAMETER	METER	13.20		8.6	4.6		
	SERVICE INSTALLATION, POLE MOUNTED	EACH	2		1	1		
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1					1
	SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	18		9	9		
	SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8		4	4		
	SIGNAL HEAD ,LED, 2-FACE 1 3-SECTION ,1 5-SECTION, BRACKET MOUNTED	EACH	2		1	1		
	SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		1	1		
1	LIGHT DETECTOR	EACH	6		3	3		
1	LIGHT DETECTOR AMPLIFIER	EACH	2		1	1		
	~~JUNCTION BOX, NON-METALIC, EMBEDDED IN STRUCTURE, 300MM X 300MM X 150MM~~	EACH	0		0	0		
	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	1			1	
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 12.80 METER	EACH	1		1			
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 10.36 METER	EACH	1			1		
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2	1			1	

NOTES

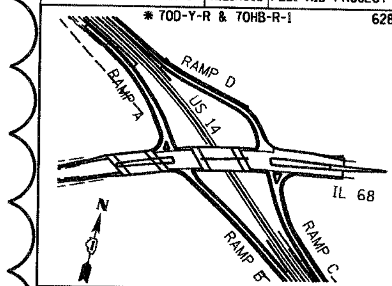
1. 100% COST TO VILLAGE OF PALATINE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	113

STA. TO STA.

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

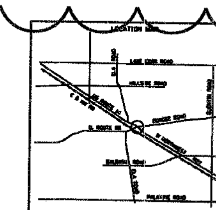
* 70D-Y-R & 70HB-R-1 62897



KEY PLAN

2

TS-01 OF 13



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS QUANTITIES

SCALE NONE
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\E-TS-01 - Summary of Quantities.dgn
2/15/2007 1:57:41 PM 1.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	114
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

* 70D-Y-R & 70HB-R-1 62897

LOOP DETECTOR NOTES

1. 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.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

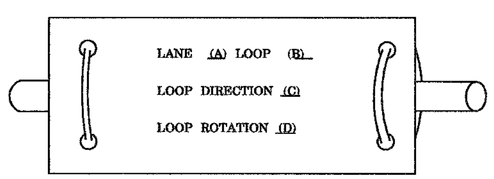
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

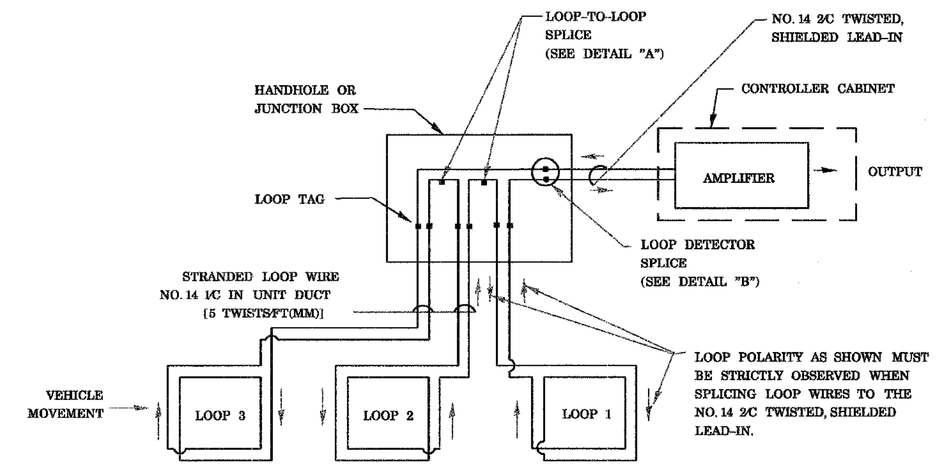


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

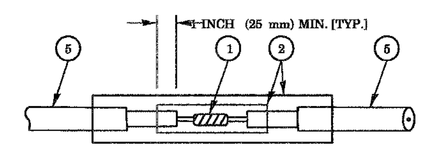
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

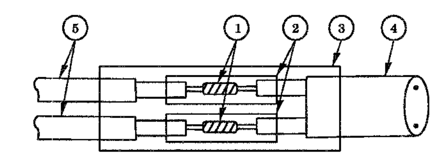


DETECTOR LOOP WIRING SCHEMATIC

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



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(2) REV 2-15-07

TS-02 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE NONE
DATE 1-01-02
(2)

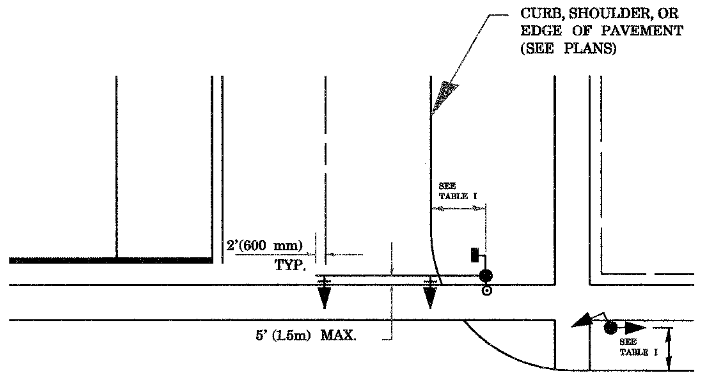
DRAWN BY RWP
DESIGNED BY DAD
CHECKED BY DAZ
SHEET 1 OF 4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	115
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

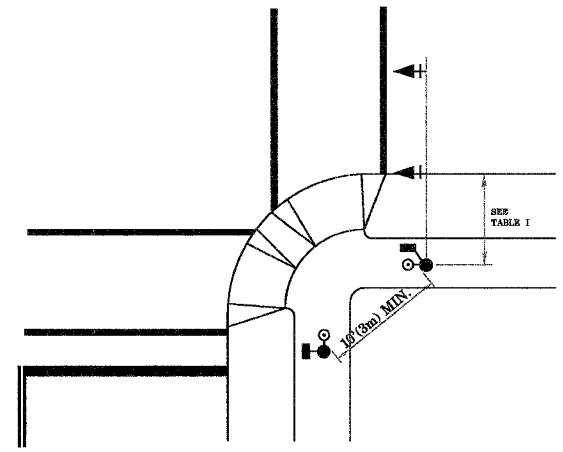
* 70D-Y-R & 70HB-R-1 62897

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:

1. 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

2. 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.

3. 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.

4. 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

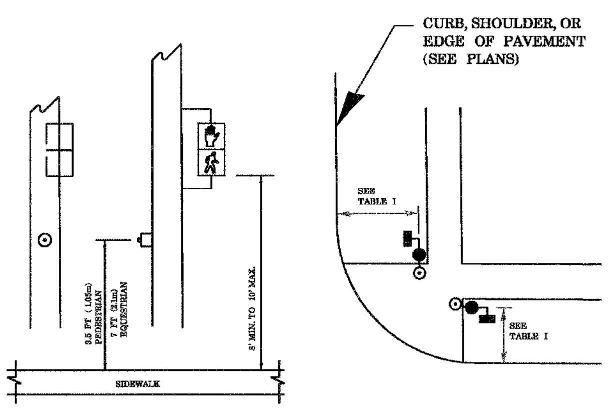


TABLE I

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

2 REV 2-15-07

TS-03 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

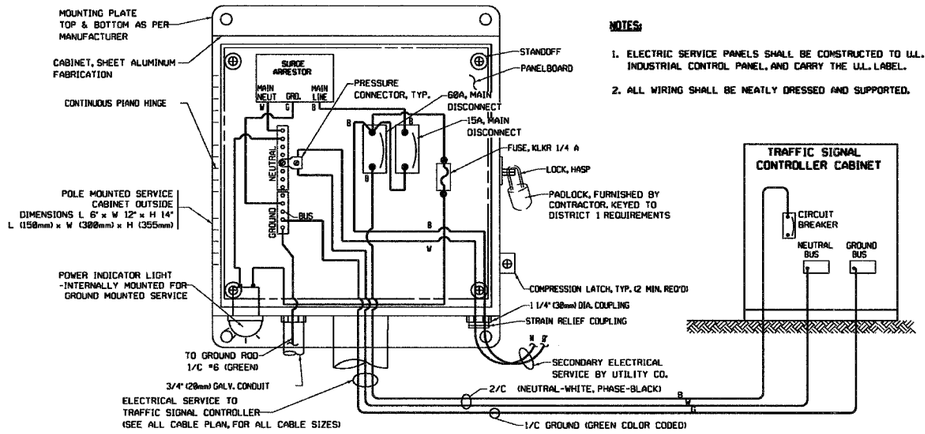
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE NONE
DATE 1-01-02 2

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	116
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

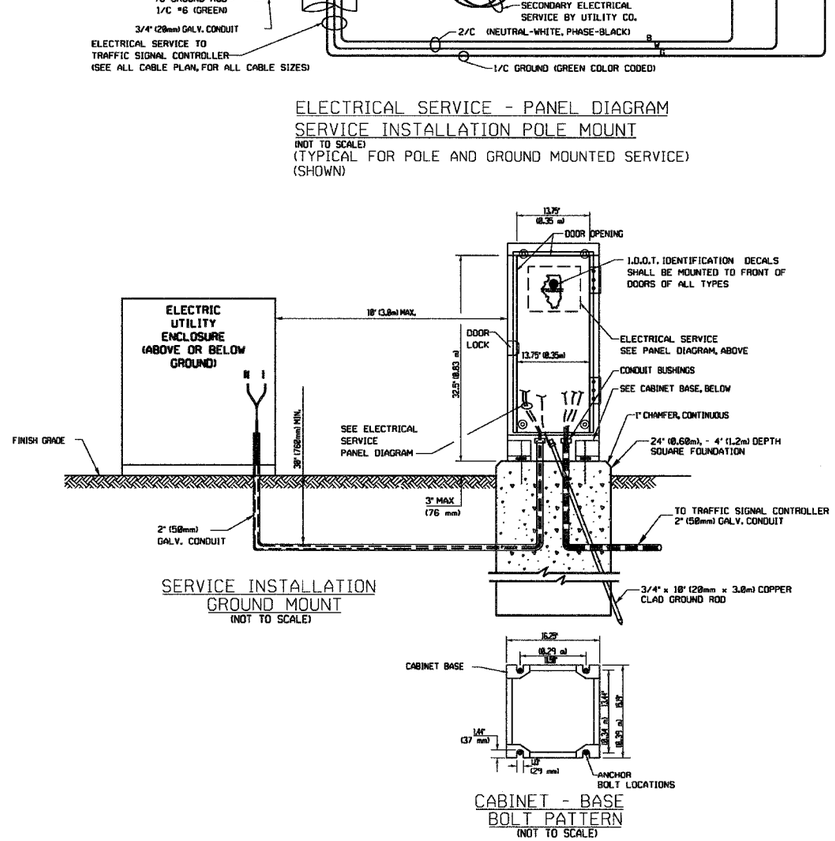
* 70D-Y-R & 70HB-R-1 62897



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

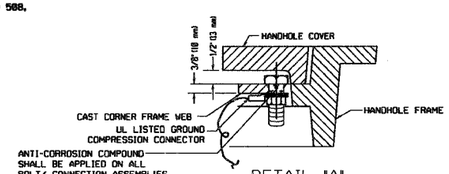
NOTES:

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.

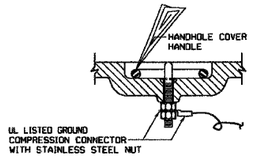


SERVICE INSTALLATION
GROUND MOUNT
(NOT TO SCALE)

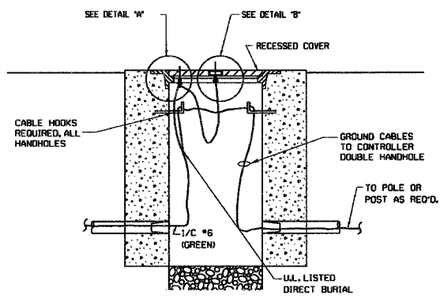
CABINET - BASE
BOLT PATTERN
(NOT TO SCALE)



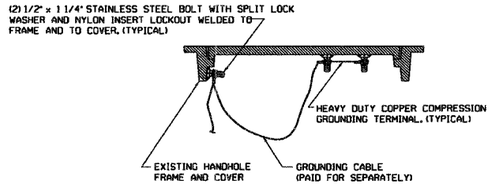
DETAIL "A"



DETAIL "B"



HANDHOLE COVER & FRAME GROUNDING DETAIL
(NOT TO SCALE)

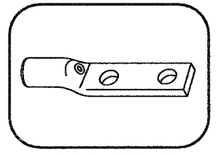


EXISTING HANDHOLE COVER &
FRAME GROUNDING DETAIL
(NOT TO SCALE)

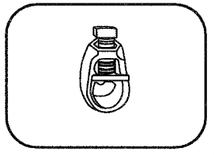
NOTES:

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.



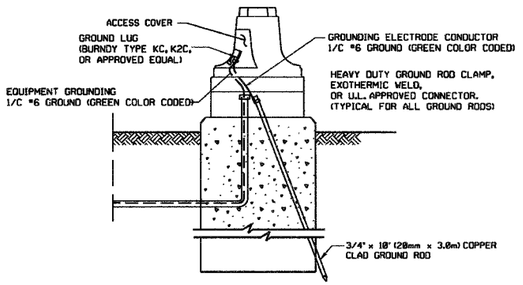
HEAVY-DUTY COMPRESSION TERMINAL
(BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP
(BURNDY TYPE GRC OR APPROVED EUAL)

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.



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

2 REV 2-15-07

TS-04 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

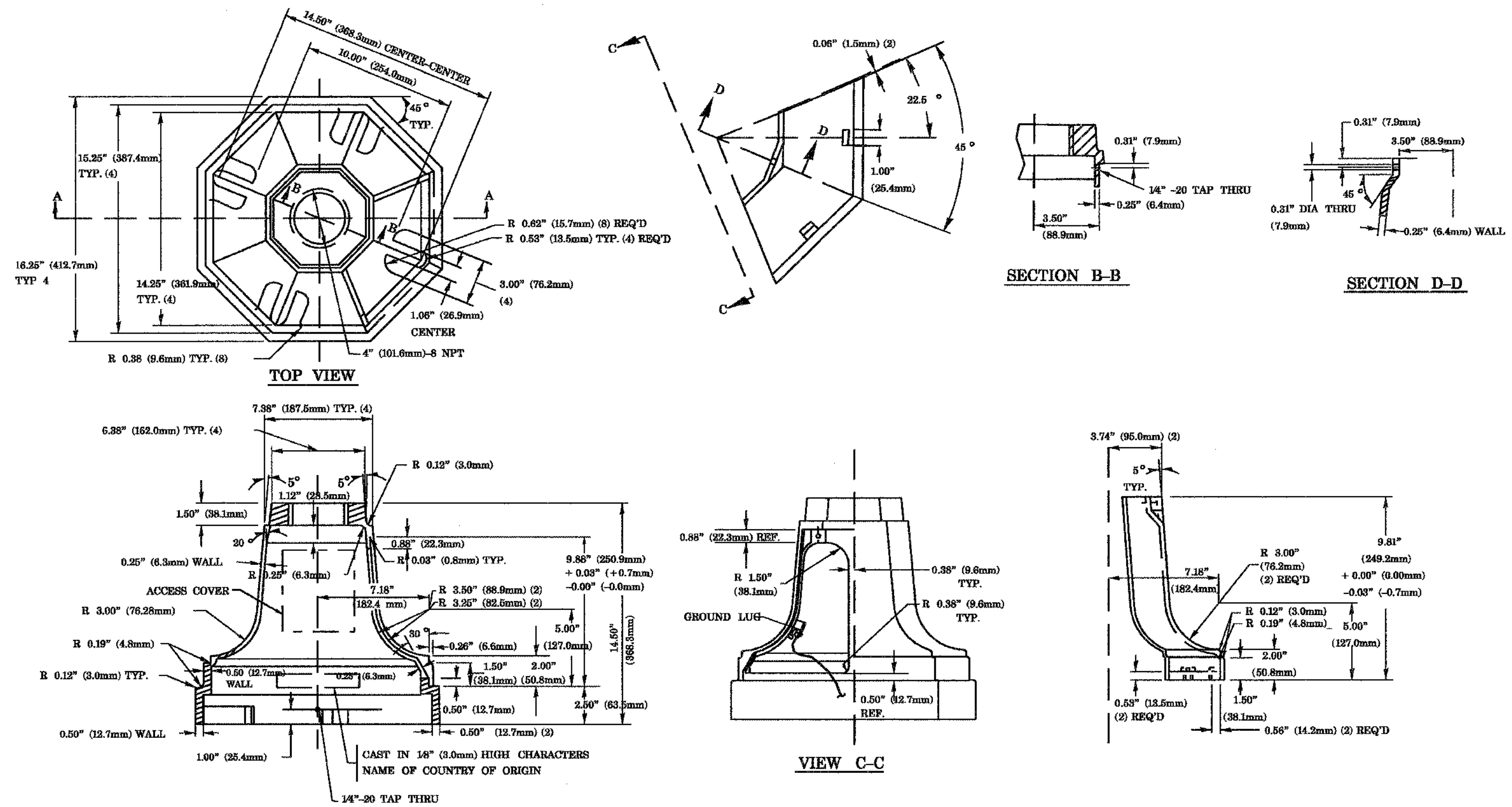
SCALE NONE
DATE 1-01-02
2

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

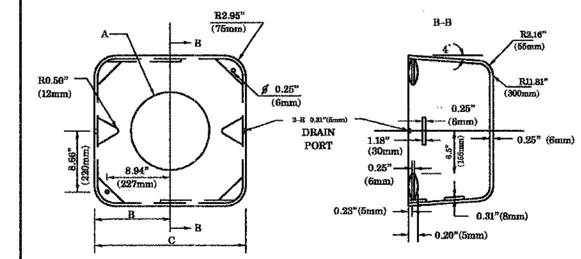
Rick Johns
IDOT - District 01
D6119.000 - IL 68 over US 14
D6119.000 - IL 68 over US 14
2/15/2007 11:33:45 AM
Working Files\Drawing Files\Sht#E-TS-04 - IDOT Dist 1 Stand Details.dgn
1.0000 W / W.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	117
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 70D-Y-R & 70HB-R-1 62897



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

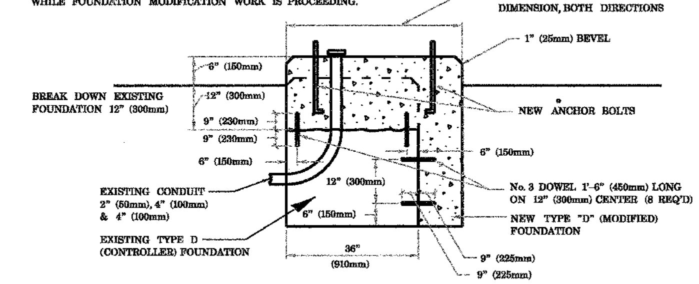


MATERIAL:
- ASTM A48 CLASS 30 GREY IRON
- ASTM A123 HOT DIPPED GALVANIZED

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

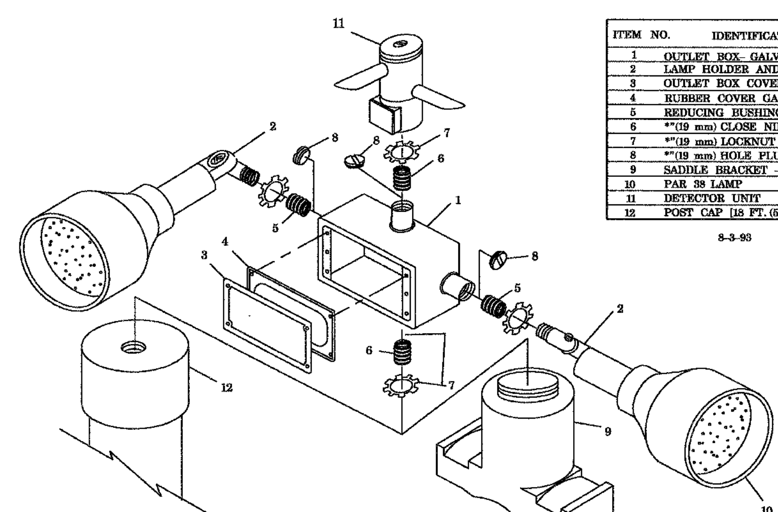
SHROUD DETAIL

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



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)



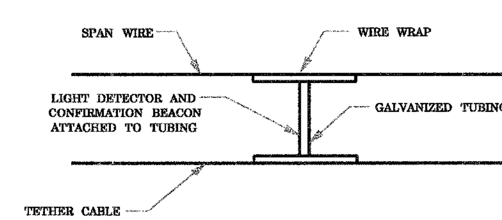
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	*"(19 mm) CLOSE NIPPLE
7	*"(19 mm) LOCKNUT
8	*"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4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

8-3-93

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

NOTES:

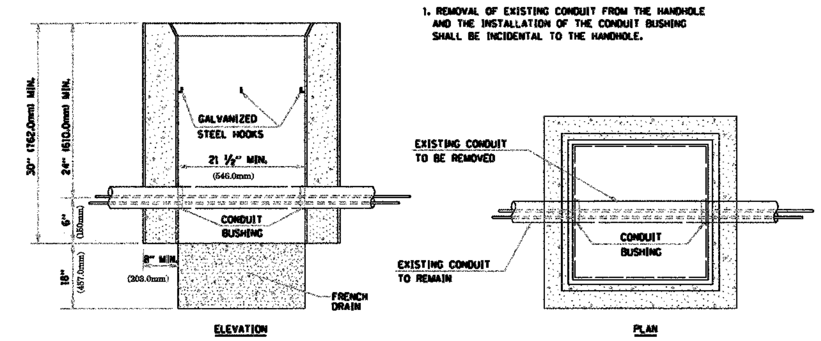
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ¾"(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)

NOTES:
1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.



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

2 REV 2-15-07

TS-05 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

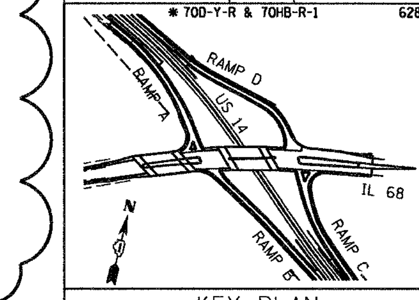
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE NONE
DATE 1-01-02

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

Rick Johns
IDOT District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-TS-05 - IDOT Dist 1 Stand Details.dgn
2/15/2007 11:34:24 AM 1.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	118
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-R & 70HB-R-1				62897

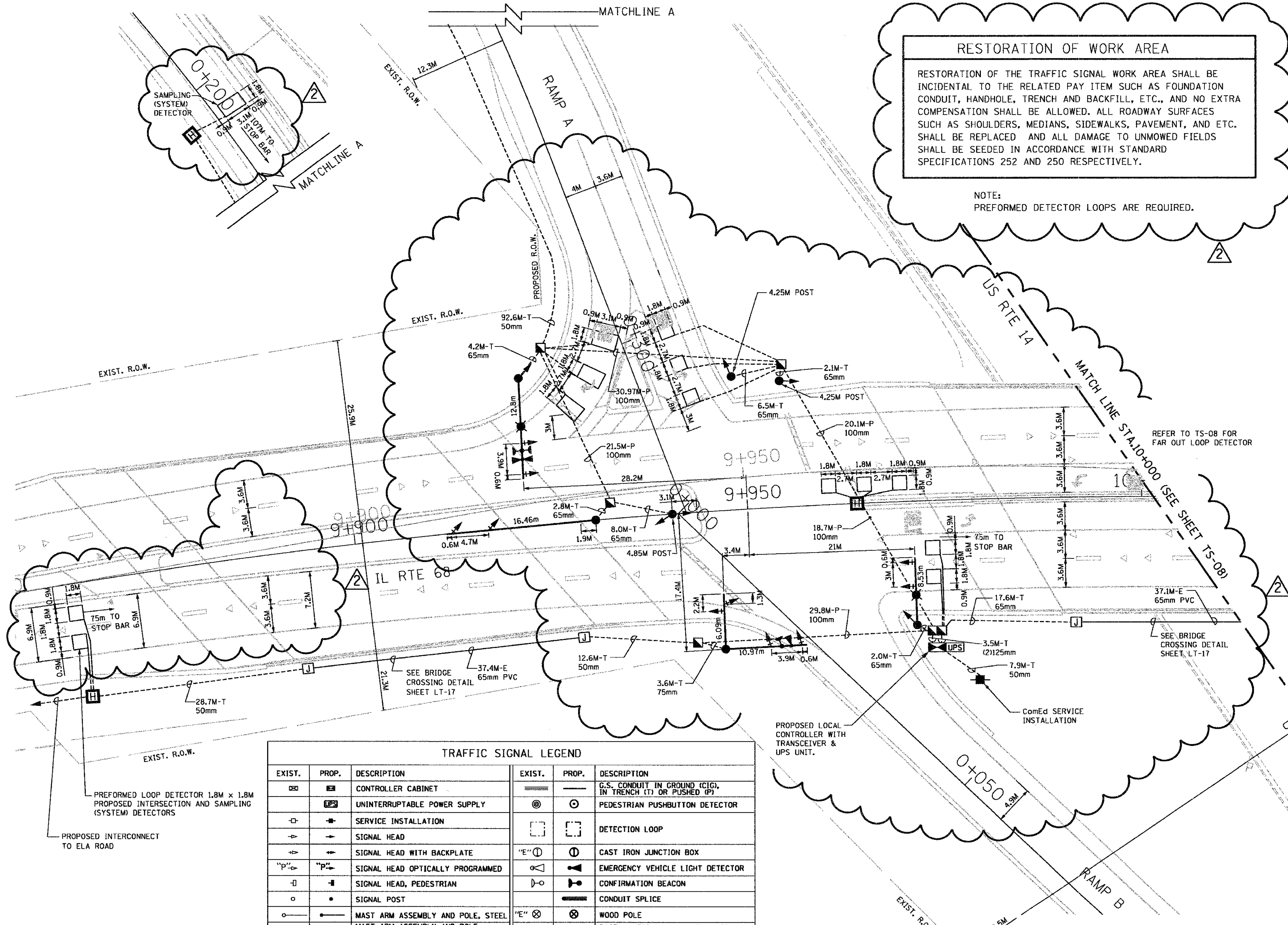


KEY PLAN

RESTORATION OF WORK AREA

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

NOTE:
PREFORMED DETECTOR LOOPS ARE REQUIRED.

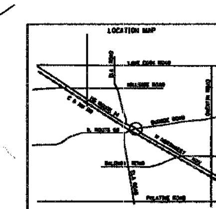


TRAFFIC SIGNAL LEGEND

EXIST.	PROP.	DESCRIPTION	EXIST.	PROP.	DESCRIPTION
		CONTROLLER CABINET			G.S. CONDUIT IN GROUND (CIG), IN TRENCH (T) OR PUSHED (P)
	UPS	UNINTERRUPTABLE POWER SUPPLY			PEDESTRIAN PUSHBUTTON DETECTOR
		SERVICE INSTALLATION			DETECTION LOOP
		SIGNAL HEAD			
		SIGNAL HEAD WITH BACKPLATE	"E"		CAST IRON JUNCTION BOX
"P"	"P"	SIGNAL HEAD OPTICALLY PROGRAMMED			EMERGENCY VEHICLE LIGHT DETECTOR
		SIGNAL HEAD, PEDESTRIAN			CONFIRMATION BEACON
		SIGNAL POST			CONDUIT SPLICE
		MAST ARM ASSEMBLY AND POLE, STEEL	"E"		WOOD POLE
		MAST ARM ASSEMBLY AND POLE, ALUMINUM	"E"		RACEWAY FOR MAGNETIC DETECTOR, TYPE I/TYPE II
		COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE
	UD	UNIT DUCT			RAILROAD CONTROL CABINET
	CT	COMMON TRENCH			TELEPHONE INSTALLATION
		HANDHOLE	"E"		ILLUMINATED SIGN "NO LEFT TURN"
		DOUBLE HANDHOLE	"E"		ILLUMINATED SIGN "NO RIGHT TURN"
		HEAVY DUTY HANDHOLE			

SCALE IN METERS 2.5 0 2.5 5 7.5 10 12.5

TS-06 OF 13



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
RAMPS A & B
PROPOSED TRAFFIC SIGNAL PLAN

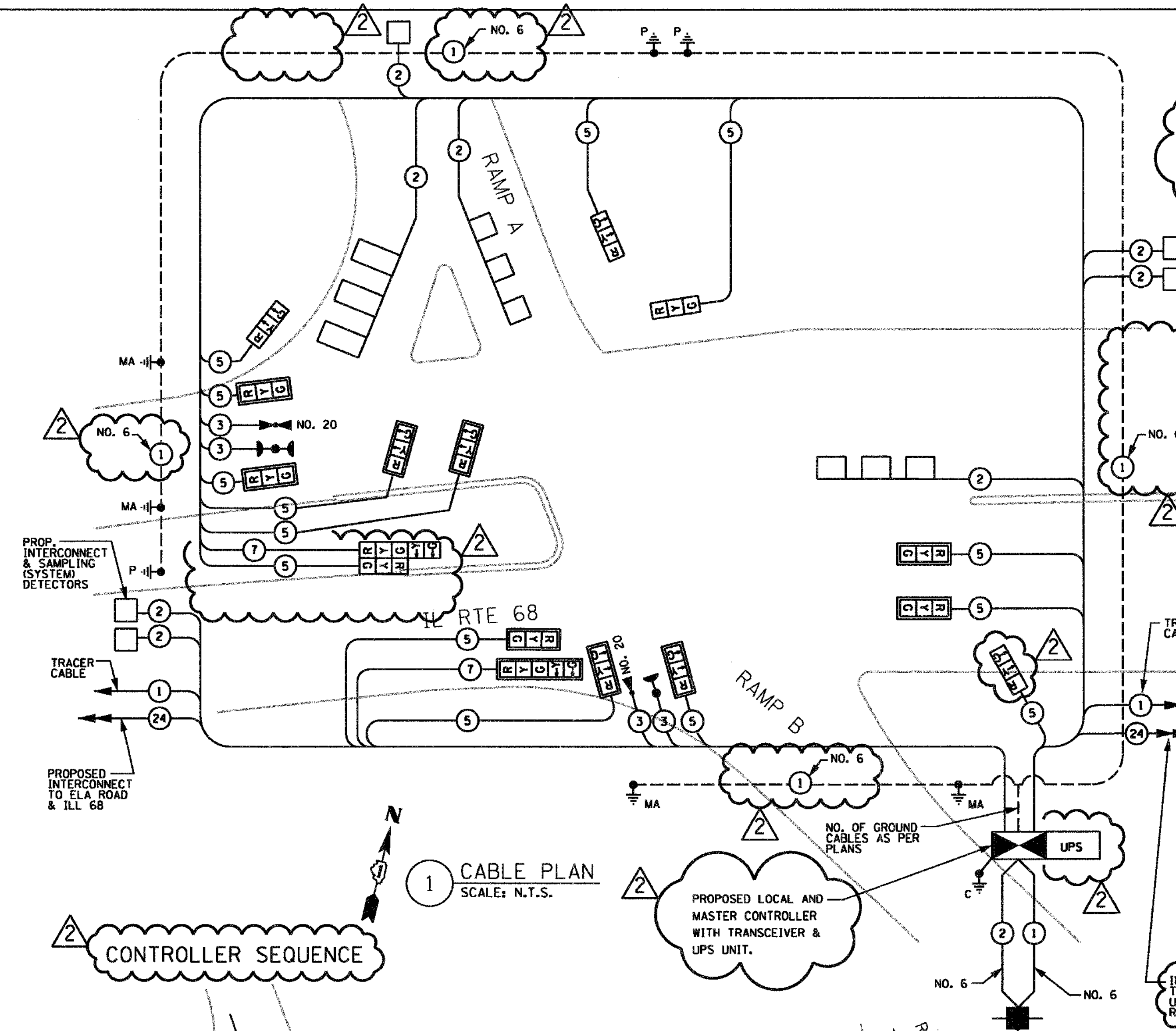
SCALE 1:250
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\EE-TS-06 - Plan - West.dgn
2/15/2007 1:10:37 PM 250.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	119
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

* 70D-Y-R & 70HB-R-1 62897

CABLE PLAN LEGEND		
EXIST.	PROP.	DESCRIPTION
G	G	8"(200mm)TRAFFIC SIGNAL SECTION
R	R	12"(300mm)TRAFFIC SIGNAL SECTION
W	W	12"(300mm)PEDESTRIAN SIGNAL SECTION
		12"(300mm)PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		VEHICLE DETECTOR, MAGNETIC
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS ALL CABLES NO. 14 AND SHIELDED EXCEPT AS INDICATED
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
"P" R Y G ←Y ←G	"P" R Y G ←Y ←G	SIGNAL FACE WITH BACKPLATE: RED YELLOW GREEN YELLOW LEFT GREEN LEFT "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H) OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
	UPS	UNINTERRUPTABLE POWER SUPPLY

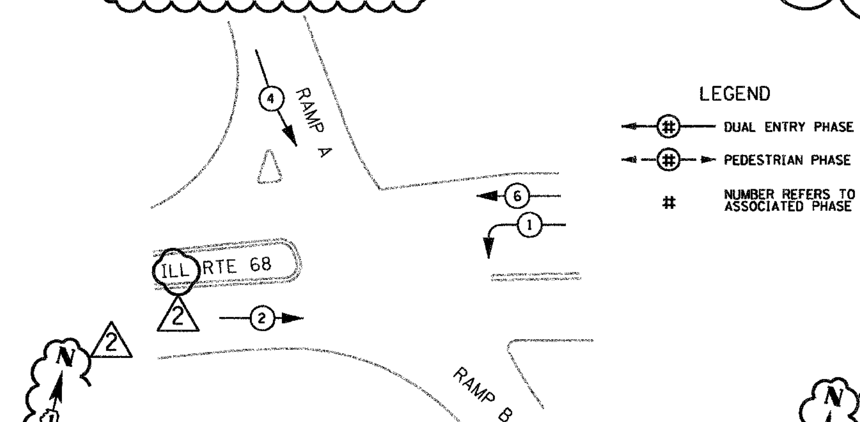


THE END OF THE TRACER CABLE SHALL BE CONTINUOUS & EXTENDED INTO THE CONTROLLER CABINETS.

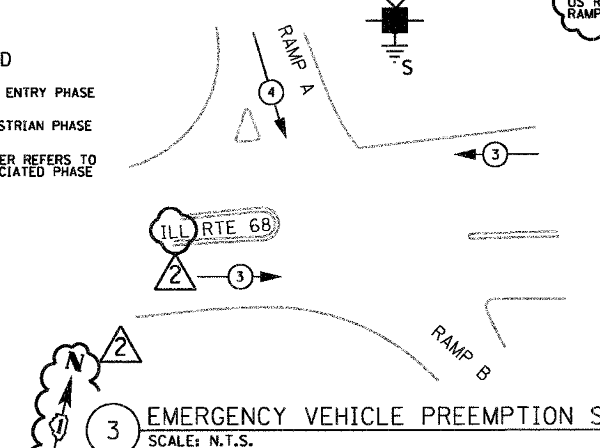
TRAFFIC SIGNALS QUANTITIES		
ITEM	UNIT	IL 68 RAMP A&B
SIGN PANEL - TYPE 2	SQ METER	4.64
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	7
CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	141.6
CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL	METER	43.2
CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	3.6
CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL	METER	120.8
CONDUIT EMBEDDED IN STRUCTURE, 65MM DIA., PVC	METER	74.5
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	195.4
ELECTRIC CABLE IN TRENCH, SERVICE, NO. 6 2 C	METER	13
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	925
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	189
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	METER	526
TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.25 METER	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.85 METER	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 8.53 METER	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 10.97 METER AND 6.09 METER	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 16.46 METER	EACH	1
CONCRETE FOUNDATION, TYPE A	METER	3.6
CONCRETE FOUNDATION, TYPE C	METER	1.2
CONCRETE FOUNDATION, TYPE E 750MM DIAMETER	METER	10.1
DETECTOR LOOP, PREFORMED	METER	201
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C	METER	150.3
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3/C TWISTED SHIELDED	METER	150.6
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	METER	195
CONCRETE FOUNDATION, TYPE E 900MM DIAMETER	METER	8.6
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD ,LED, 2-FACE 1 3-SECTION ,1 5-SECTION, BRACKET	EACH	1
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 12.80 METER	EACH	1

1 CABLE PLAN
SCALE: N.T.S.

CONTROLLER SEQUENCE



2 PHASE DESIGNATION DIAGRAM
SCALE: N.T.S.



3 EMERGENCY VEHICLE PREEMPTION SEQUENCE
SCALE: N.T.S.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	% OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER				0.50	
				TOTAL	400.8

ENERGY COST TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG,
ILLINOIS 60196-1096

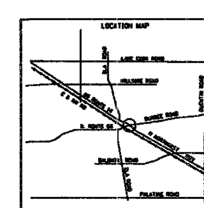
ENERGY SUPPLY:

CONTACT: JOHN STRTZAK
PHONE: 630-491-4363
COMPANY: ComEd

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - 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)		
30" (750MM)	15 (4.6)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
36" (900MM)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRICAL SERVICE	1 (0.5)	ELECTRICAL SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

2 REV 2-15-07

TS- 07 OF 13

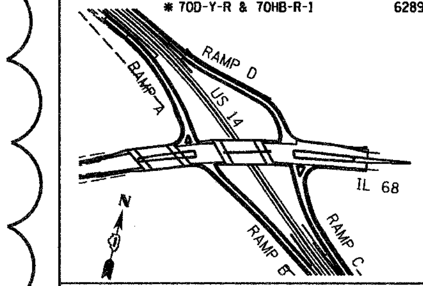


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
RAMPS A & B
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM

SCALE N.T.S.
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	120
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-R & 70HB-R-1		62897		

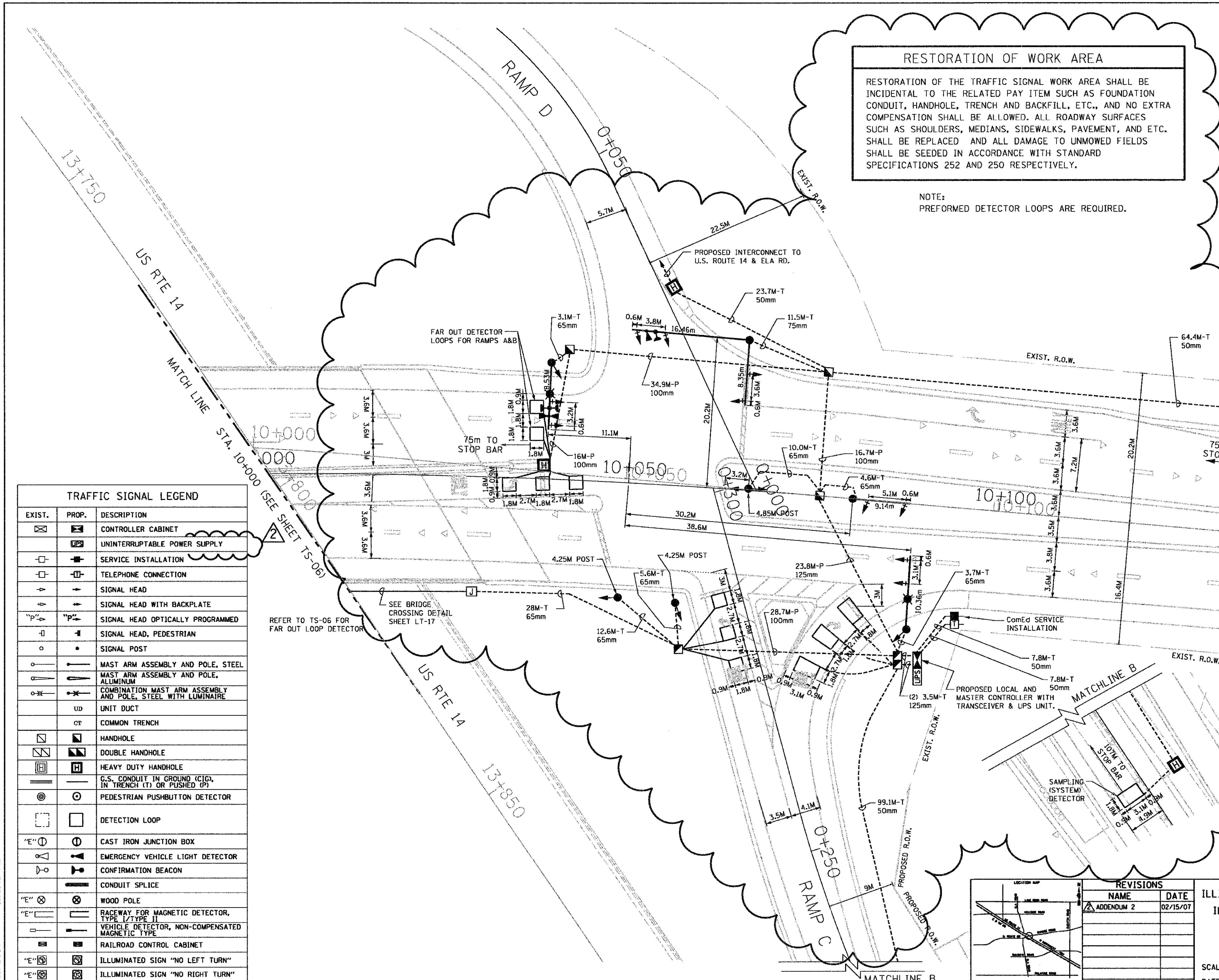


KEY PLAN

RESTORATION OF WORK AREA

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

NOTE:
PREFORMED DETECTOR LOOPS ARE REQUIRED.



TS-08 OF 13

TRAFFIC SIGNAL LEGEND		
EXIST.	PROP.	DESCRIPTION
		CONTROLLER CABINET
	UPS	UNINTERRUPTABLE POWER SUPPLY
		SERVICE INSTALLATION
	T	TELEPHONE CONNECTION
		SIGNAL HEAD
		SIGNAL HEAD WITH BACKPLATE
"P"	"P"	SIGNAL HEAD OPTICALLY PROGRAMMED
		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
	UD	UNIT DUCT
	CT	COMMON TRENCH
		HANDHOLE
		DOUBLE HANDHOLE
H	H	HEAVY DUTY HANDHOLE
		G.S. CONDUIT IN GROUND (CIG), IN TRENCH (T) OR PUSHED (P)
		PEDESTRIAN PUSHBUTTON DETECTOR
		DETECTION LOOP
"E"		CAST IRON JUNCTION BOX
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		CONDUIT SPLICE
"E"		WOOD POLE
"E"		RACEWAY FOR MAGNETIC DETECTOR, TYPE I/TYPE II
		VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE
		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"

REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
RAMPS C & D
PROPOSED TRAFFIC SIGNAL PLAN

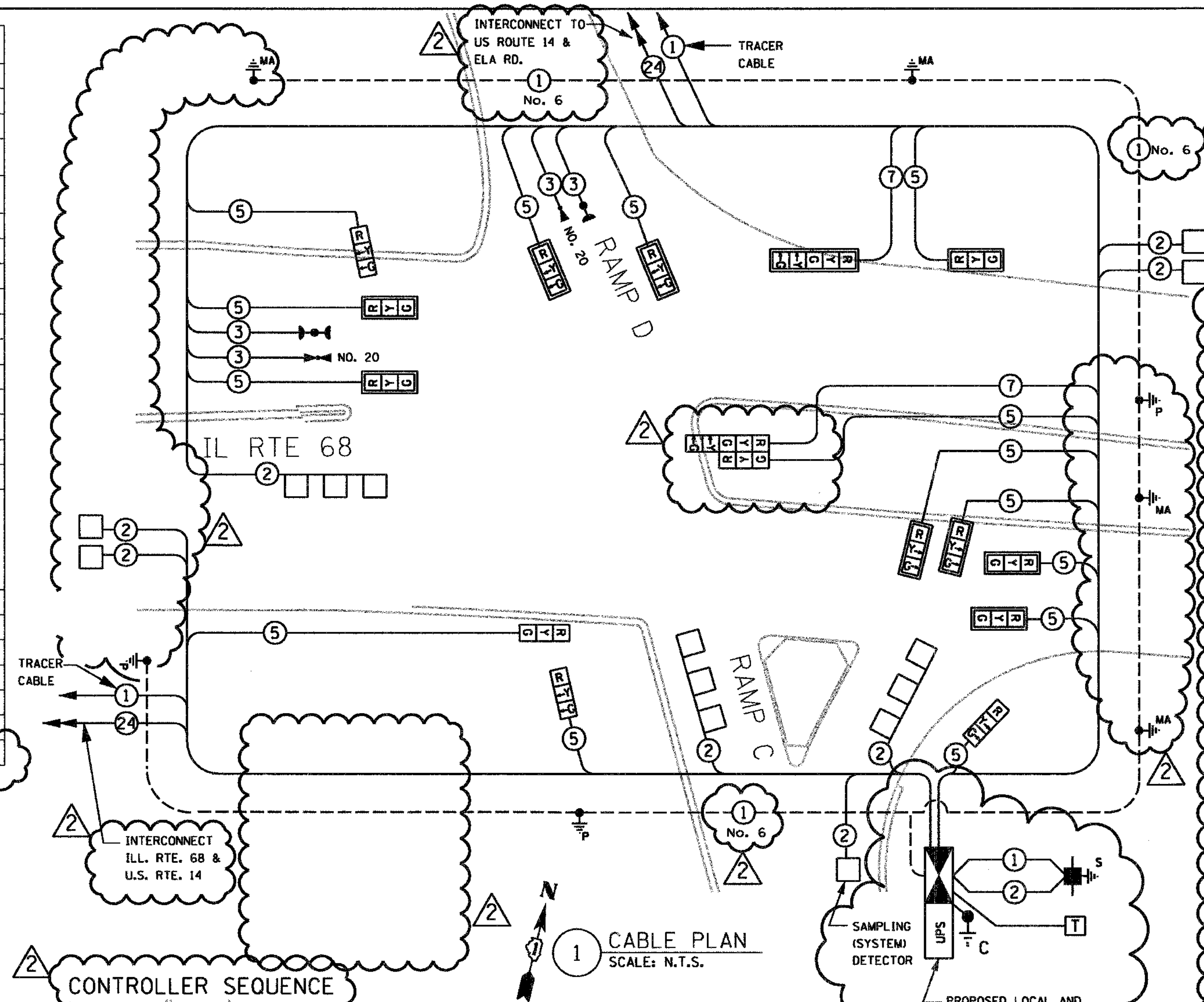
SCALE 1:250
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT District 01
0619.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-TS-08 - Plan - East.dgn
2/15/2007 1:10:49 PM 250.0000 M / M.

* 70D-Y-R & 70HB-R-1 62897

CABLE PLAN LEGEND

EXIST.	PROP.	DESCRIPTION
G	G	8"(200mm)TRAFFIC SIGNAL SECTION
R	R	12"(300mm)TRAFFIC SIGNAL SECTION
W	W	12"(300mm)PEDESTRIAN SIGNAL SECTION
		12"(300mm)PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		VEHICLE DETECTOR, MAGNETIC
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS ALL CABLES NO. 14 AND SHIELDED EXCEPT AS INDICATED
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
"P"	"P"	SIGNAL FACE WITH BACKPLATE: RED YELLOW GREEN YELLOW LEFT GREEN LEFT "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H) OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
	UPS	UNINTERRUPTABLE POWER SUPPLY



1 CABLE PLAN
SCALE: N.T.S.

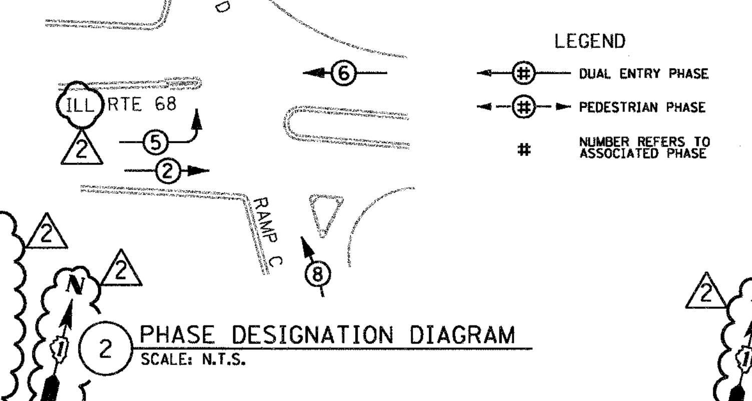
TRAFFIC SIGNALS QUANTITIES

ITEM	UNIT	IL 68 RAMP C&D
SIGN PANEL - TYPE 2	SQ METER	4.64
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	7
CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	202.8
CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL	METER	67.6
CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	11.5
CONDUIT IN TRENCH, 125MM DIA., GALVANIZED STEEL	METER	7
CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	44.1
CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL	METER	96.3
CONDUIT PUSHED, 125MM DIA., GALVANIZED STEEL	METER	18.5
CONDUIT EMBEDDED IN STRUCTURE, 65MM DIA., PVC	METER	23.8
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	288.9
ELECTRIC CABLE IN TRENCH, SERVICE, NO. 6 2 C	METER	21.4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	712
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	223.5
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	METER	530.77
TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.25 METER	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.85 METER	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 8.53 METER	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 9.14 METER	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 8.53 METER AND 16.46 METER	EACH	1
CONCRETE FOUNDATION, TYPE A	METER	3.6
CONCRETE FOUNDATION, TYPE C	METER	1.2
CONCRETE FOUNDATION, TYPE E 750MM DIAMETER	METER	14.2
DETECTOR LOOP, PREFORMED	METER	190
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	METER	224.42
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3C TWISTED SHIELDED	METER	224.48
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	METER	252.4
CONCRETE FOUNDATION, TYPE E 900MM DIAMETER	METER	4.6
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD ,LED, 2-FACE 1 3-SECTION ,1 5-SECTION, BRACKET	EACH	1
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 10.36 METER	EACH	1

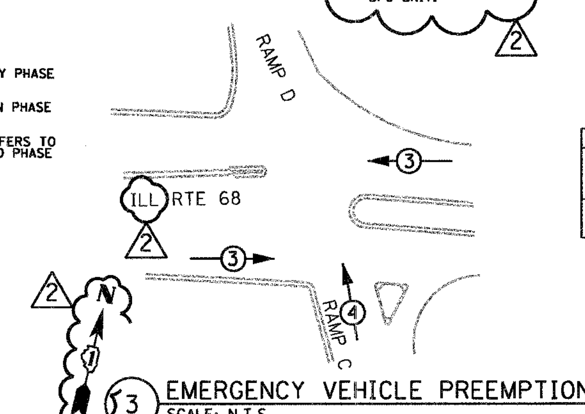
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑

LEGEND

- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- \# NUMBER REFERS TO ASSOCIATED PHASE



2 PHASE DESIGNATION DIAGRAM
SCALE: N.T.S.



3 EMERGENCY VEHICLE PREEMPTION SEQUENCE
SCALE: N.T.S.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	% OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	36
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		252		0.05	
FLASHER				0.50	
				TOTAL	400.8

ENERGY COST TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG,
ILLINOIS 60196-1096

ENERGY SUPPLY:

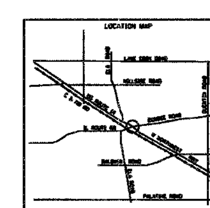
CONTACT: JOHN STRTZAK
PHONE: 630-491-4363
COMPANY: ComEd

FOUNDATION (DEPTH)	FT. (m)
TYPE A - POST	4 (1.2)
C - CONTROLLER	4 (1.2)
E - M. ARM POLE	
30" (750MM)	15 (4.6)
36" (900MM)	15 (4.6)

CABLE SLACK	FT. (m)
HANDHOLE	6.5 (2.0)
DOUBLE HANDHOLE	13 (4.0)
SIGNAL POST	2 (1.0)
CONTROLLER CAB.	1 (0.5)
FIBER OPTIC	13 (4.0)
ELECTRICAL SERVICE	1 (0.5)
GROUND CABLE	1 (0.5)

VERTICAL	FT. (m)
ALL FOUNDATIONS	3.5 (1.0)
MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)
BRACKET MOUNTED	13 (4.0)
PED. PUSHBUTTON	4 (1.2)
ELECTRICAL SERVICE	13.5 (4.1)
SERVICE TO GROUND	13.5 (4.1)
POST MOUNTED	6 (1.8)

2 REV 2-15-07



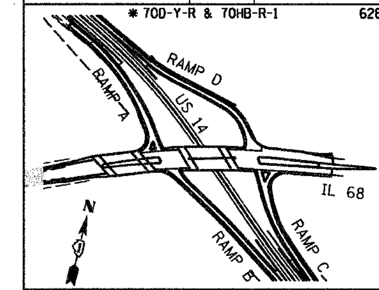
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
RAMPS C & D
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM

SCALE N.T.S.
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	121A
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

* 70D-Y-R & 70HB-R-1 62897



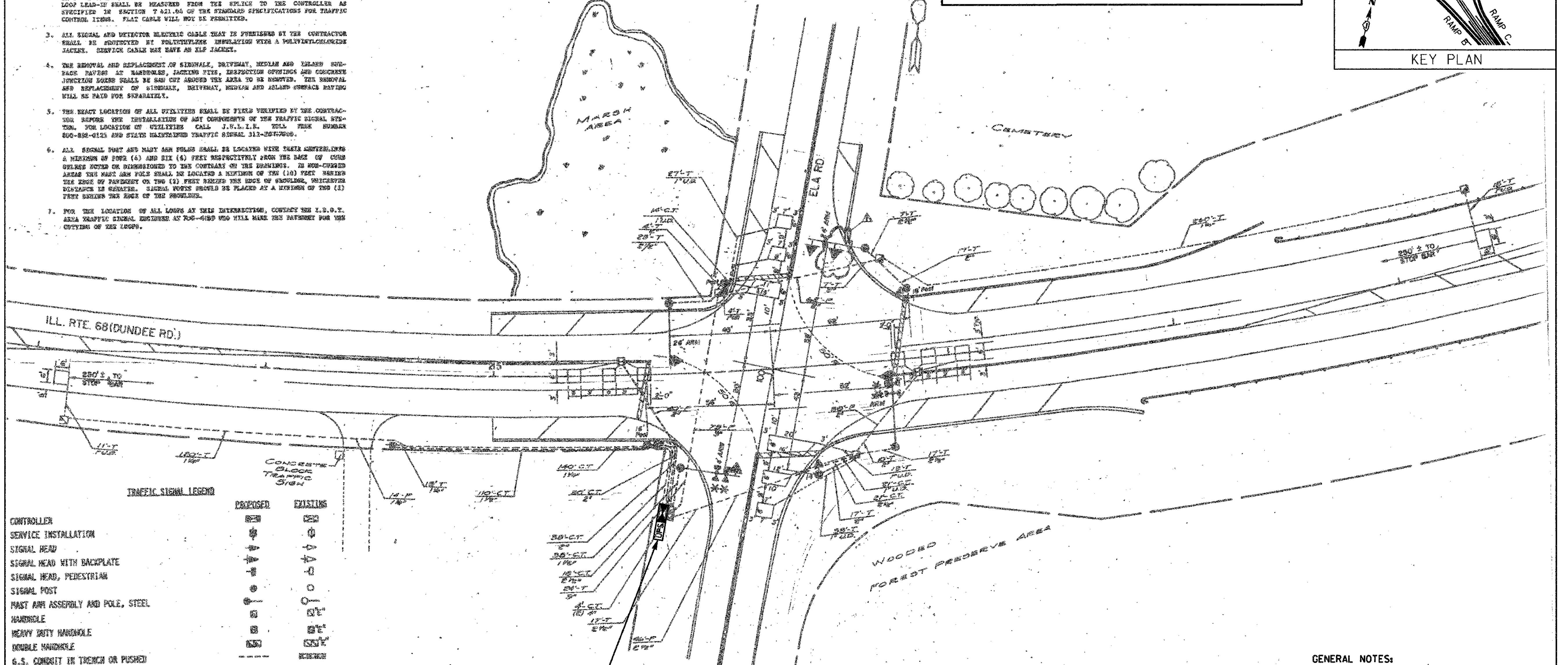
KEY PLAN

RESTORATION OF WORK AREA

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

GENERAL NOTES

1. ALL DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TURNS REQUIRED AND SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE LOOP DETECTOR AMPLIFIER MANUFACTURER'S RECOMMENDATIONS. THE DETECTOR LOOP SHALL BE MEASURED FOR THAT PORTION OF SAW CUT BEYOND THE SPLICE AS SPECIFIED IN SECTION T 418.04 OF THE SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
2. LEAD-IN WIRING SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE MANUFACTURER'S RECOMMENDATIONS. THE 2/C SHIELDED CABLE TO BE USED FOR THE DETECTOR LOOP LEAD-IN SHALL BE MEASURED FROM THE SPLICE TO THE CONTROLLER AS SPECIFIED IN SECTION T 421.04 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. FLAT CABLE WILL NOT BE PERMITTED.
3. ALL SIGNAL AND DETECTOR ELECTRIC CABLE THAT IS FURNISHED BY THE CONTRACTOR SHALL BE PROTECTED BY POLYETHYLENE INSULATION WITH A POLYVINYLCHLORIDE JACKET. SERVICE CABLE MAY HAVE AN XLP JACKET.
4. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING AT HANDHOLES, JACKING PITS, INSPECTION OPENINGS AND CONCRETE JUNCTION BOXES SHALL BE SAW CUT AROUND THE AREA TO BE REMOVED. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING WILL BE PAID FOR SEPARATELY.
5. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES CALL J.U.L.I.E. TOLL FREE NUMBER 800-892-0123 AND STATE MAINTAINED TRAFFIC SIGNAL 312-[illegible].
6. ALL SIGNAL POST AND MAST ARM POLES SHALL BE LOCATED WITH THEIR CENTERLINES A MINIMUM OF FOUR (4) AND SIX (6) FEET RESPECTIVELY FROM THE BACK OF CURB UNLESS NOTED OR DIMENSIONED TO THE CONTRARY ON THE DRAWINGS. IN NON-CURBED AREAS THE MAST ARM POLE SHALL BE LOCATED A MINIMUM OF TEN (10) FEET BEHIND THE EDGE OF PAVEMENT OR TWO (2) FEET BEHIND THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. SIGNAL POSTS SHOULD BE PLACED AT A MINIMUM OF TWO (2) FEET BEHIND THE EDGE OF THE SHOULDER.
7. FOR THE LOCATION OF ALL LOOPS AT THIS INTERSECTION, CONTACT THE I.D.O.T. AREA TRAFFIC SIGNAL ENGINEER AT [illegible] WHO WILL MARK THE PAVEMENT FOR THE CUTTING OF THE LOOPS.



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		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CONCRETE JUNCTION BOX		
CAST IRON JUNCTION BOX		
COMMON TRENCH	CT	
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
EMERGENCY VEHICLE SYSTEM DETECTOR		
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 CONFIRMATION BEACON		

REMOVE EXISTING CONTROLLER & INSTALL NEW CONTROLLER WITH TRANSCEIVER & UPS UNIT. RECONNECT ALL EXISTING CONNECTIONS COMPLETE AND OPERATIONAL. REUSE EXISTING FOUNDATION.

* THESE ITEMS INCLUDED IN CONTRACT FOR INSTALLATION OF EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT

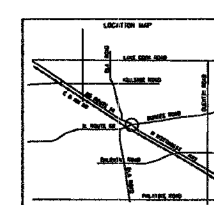
* Plans Revised by JAMES J. BENES AND ASSOCIATES, INC.

△-Note:
Add 3 section head
SB Mast 10 feet from end.

GENERAL NOTES:
1. NEW WORK IS SHOWN AS BOLD.

2 NEW DRAWING

TS-09A OF 13



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 68 & ELA ROAD
PROPOSED TRAFFIC SIGNAL PLAN

SCALE NONE
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

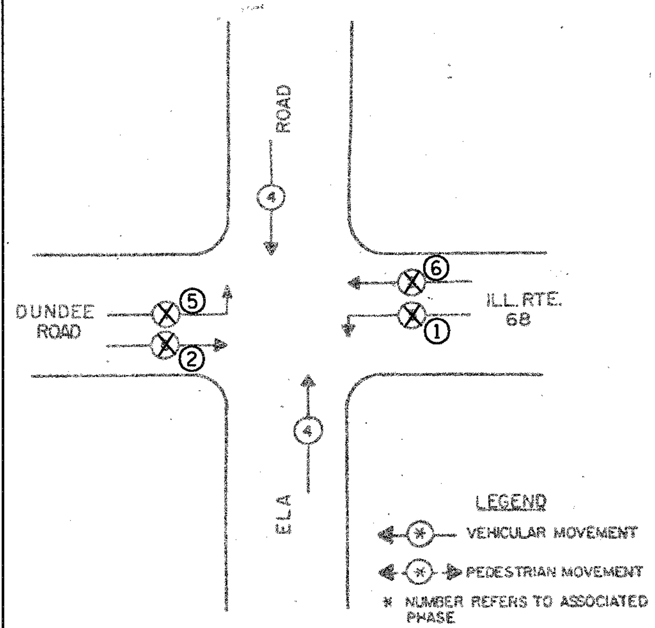
Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-TS-09-A - IL Rte 68 & Ela Road.dgn
2/15/2007 12:37:02 PM 1.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	121B
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

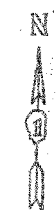
* 70D-Y-R & 70HB-R-1   62897

CONTROLLER SEQUENCE

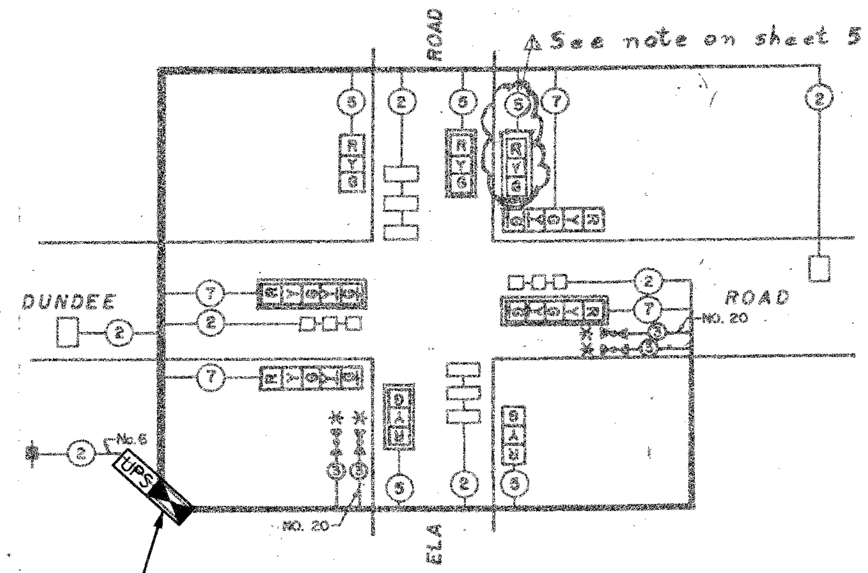
REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.



PHASE DESIGNATION DIAGRAM



CABLE PLAN

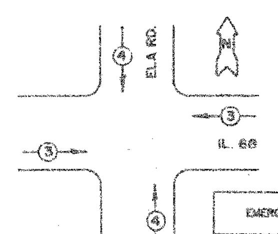


REMOVE EXISTING CONTROLLER & INSTALL NEW CONTROLLER WITH TRANSCEIVER & UPS UNIT. RECONNECT ALL EXISTING CONNECTIONS COMPLETE AND OPERATIONAL. REUSE EXISTING FOUNDATION.

CABLE PLAN LEGEND

- 8" TRAFFIC SIGNAL SECTION
- 12" TRAFFIC SIGNAL SECTION
- CONTROLLER CABINET
- SERVICE INSTALLATION
- VEHICLE DETECTOR, INDUCTION LOOP
- DENOTES NUMBER OF CONDUCTORS (NEW) ALL LOOP DETECTOR CABLE TO BE SHIELDED. ALL CABLE NO. 14 EXCEPT AS INDICATED.
- INDICATES EXISTING CABLE
- MAGNETIC DETECTOR
- * EMERGENCY VEHICLE SYSTEM DETECTOR
- 'P' SIGNAL FACE WITH BACKPLATE 'P' INDICATES PROGRAMMED
- * CONFIRMATION BEACON

* EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION - ALL LEGS



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

NOTES:

1. ONCE PREEMPTION HAS BEEN CALLED, TERMINATION OF A PHASE(S) SHALL BE IDENTICAL TO THE NORMAL SEQUENCE OF OPERATION'S TERMINATION OF A PHASE(S) AS DESCRIBED IN STANDARD 857001.
2. CONTINUATION OR TERMINATION OF ALL RIGHT TURN OVERLAPS SHALL BE IDENTICAL TO THE NORMAL SEQUENCE OF OPERATION'S CONTINUATION OR TERMINATION OF RIGHT TURN OVERLAPS AS DESCRIBED IN THE CLEARANCE NOTES FOR RIGHT TURN OVERLAPS.
3. TERMINATION OF ALL PEDESTRIAN PHASES SHALL INCLUDE A FULL FLASHING "DON'T WALK" INTERVAL.
4. IF ALL RED CLEARANCE IS USED IN THE NORMAL SEQUENCE OF OPERATION, IT MUST BE DISPLAYED AFTER THE YELLOW CLEARANCE INTERVAL WHEN ENTERING OR LEAVING THE PREEMPTION SEQUENCE.

SCHEDULE OF QUANTITIES * IL ROUTE 68 (DUNDEE RD.)/ELA ROAD		
1	L SUM	TRAFFIC CONTROL AND PROTECTION
253	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C
253	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

* EXISTING CONTROL EQUIPMENT AT THIS LOCATION IS TRACONEX TMP390

* NOTE:
THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION" APPEARS IN THE SCHEDULE OF QUANTITIES FOR EACH INTERSECTION INCLUDED IN THIS PROJECT. IT SHALL BE PAID FOR AS A LUMP SUM ONCE, FOR THE ENTIRE PROJECT.

TRAFFIC SIGNALS QUANTITIES

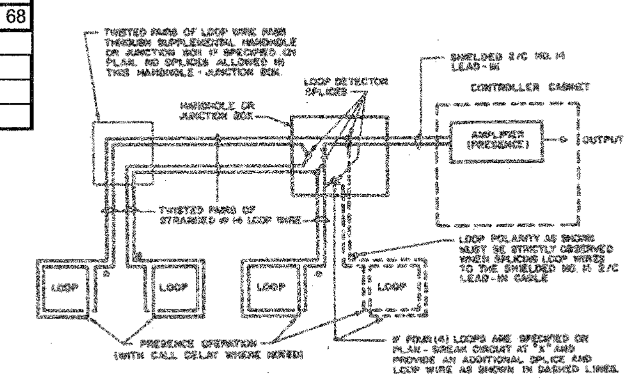
ITEM	UNIT	ELA RD & IL 68
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1 EACH CONTROLLER AND CABINET (COMPLETE)

* THESE ITEMS INCLUDED IN CONTRACT FOR INSTALLATION OF EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT

1. EACH LOOP LEAD-IN SHALL BE PLACED IN A SEPARATE CONDUIT FROM EDGE OF PAVEMENT TO HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6".
2. EACH LOOP DETECTOR SPLICE SHALL BE AN INDIVIDUAL TYPE II OR TYPE III SPLICE.
3. LOOP TURNS AS RECOMMENDED BY THE MANUFACTURER.



LOOP DETECTOR SCHEMATIC

SCHEDULE OF SIGNAL HEADS

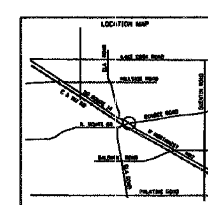
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION WITH 12" LENSES, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION WITH 12" LENSES, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION WITH 12" LENSES, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION WITH 12" LENSES, BRACKET MOUNTED

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	% OPERATION	
SIGNAL (RED)	9	135	17	0.50	76.5
(YELLOW)	9	135	25	0.25	56.25
(GREEN)	9	135	15	0.25	33.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	-	252		0.05	-
FLASHER	-			0.50	-
				TOTAL	276.1

GENERAL NOTES:
1. NEW WORK IS SHOWN AS BOLD.

2 NEW DRAWING

TS-09B OF 13



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 68 & ELA ROAD
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM

SCALE NONE
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\TS-09-B - IL Rte 68 & Ela Road.dgn
2/15/2007 1:59:43 PM 1.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	121C
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 70D-Y-R & 70HB-R-1 62897

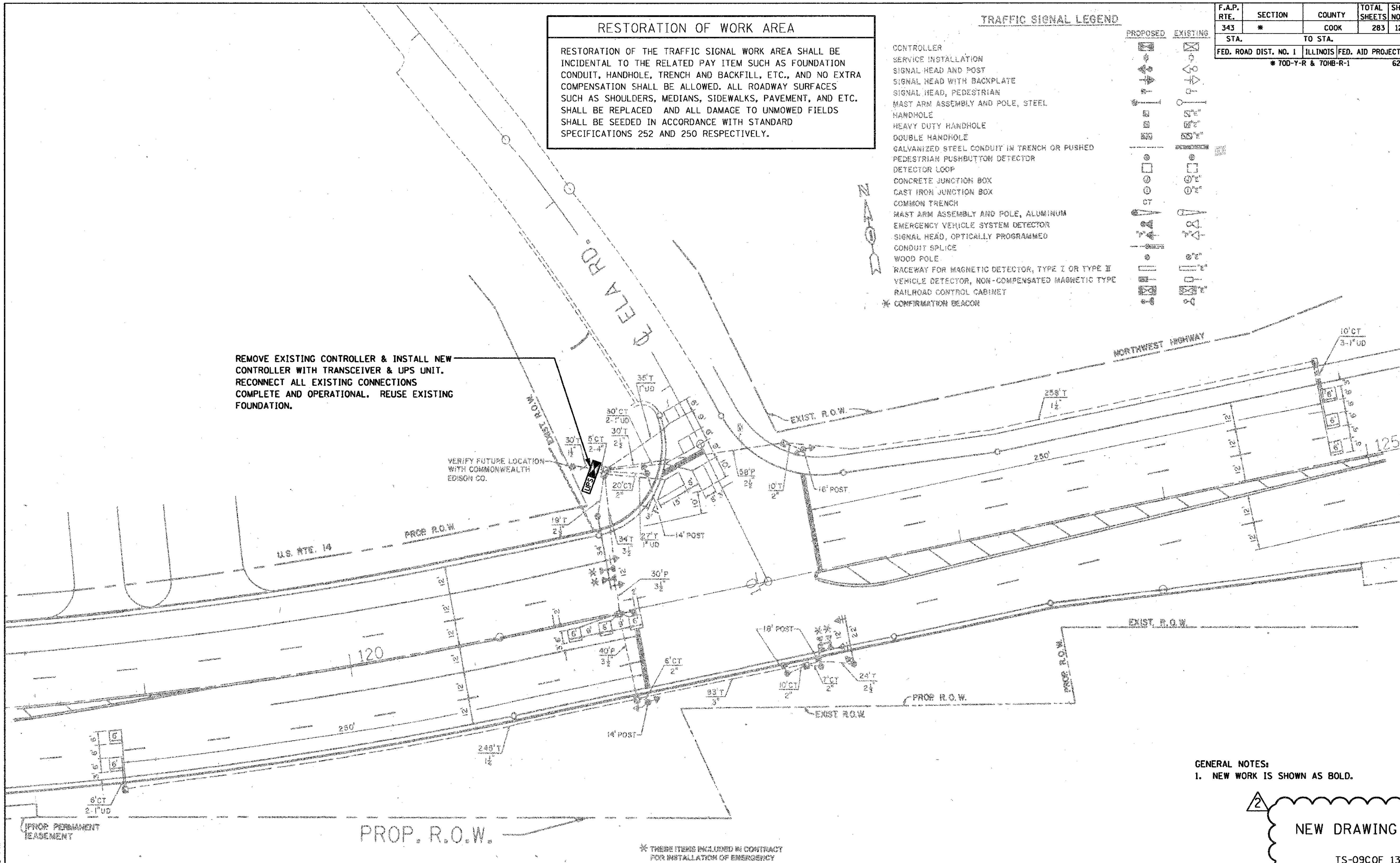
RESTORATION OF WORK AREA

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

TRAFFIC SIGNAL LEGEND

PROPOSED / EXISTING

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD AND POST
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- MAST ARM ASSEMBLY AND POLE, STEEL
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CONCRETE JUNCTION BOX
- CAST IRON JUNCTION BOX
- COMMON TRENCH
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- EMERGENCY VEHICLE SYSTEM DETECTOR
- 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
- * CONFIRMATION BEACON



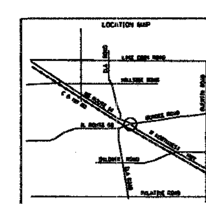
* THESE ITEMS INCLUDED IN CONTRACT FOR INSTALLATION OF EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT

* Plans Revised by JAMES J. BENES AND ASSOCIATES, INC.

GENERAL NOTES:
1. NEW WORK IS SHOWN AS BOLD.

2 NEW DRAWING

TS-09COF 13



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

NORTHWEST HIGHWAY & ELA ROAD
PROPOSED TRAFFIC SIGNAL PLAN

SCALE NONE
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-TS-09-C - NW HWY & Ela Road.dgn
2/15/2007 12:44:08 PM 1.0000 M / M.

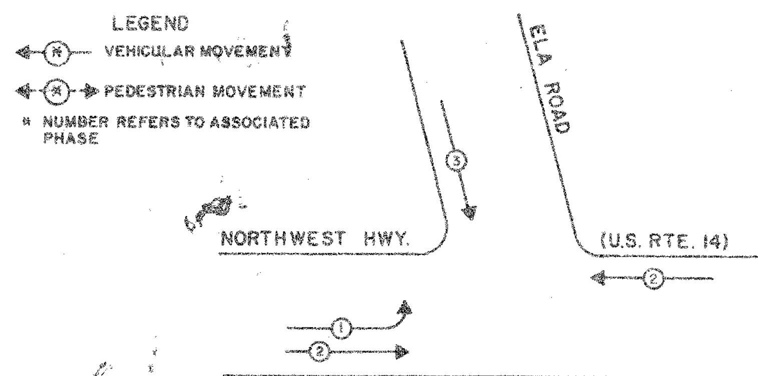
REMOVE EXISTING CONTROLLER & INSTALL NEW CONTROLLER WITH TRANSCEIVER & UPS UNIT. RECONNECT ALL EXISTING CONNECTIONS COMPLETE AND OPERATIONAL. REUSE EXISTING FOUNDATION.

CONTROLLER SEQUENCE

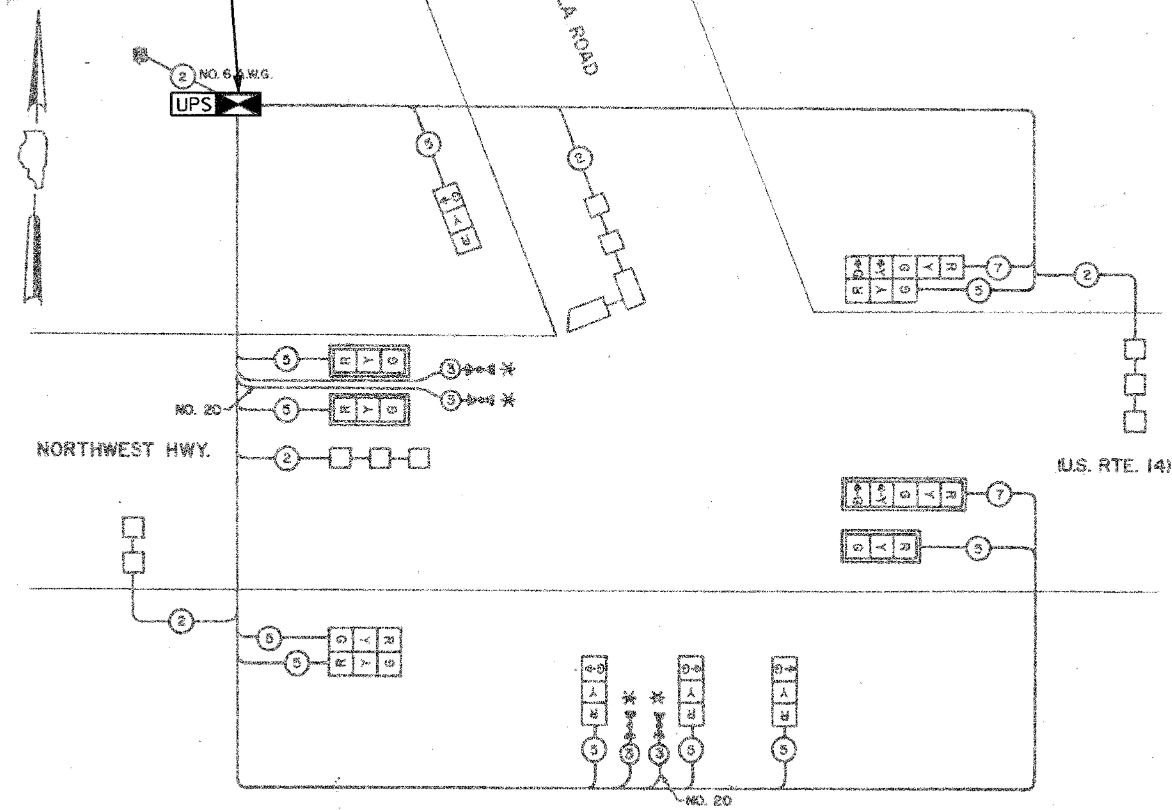
REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.

LEGEND

- VEHICULAR MOVEMENT
- PEDESTRIAN MOVEMENT
- \# NUMBER REFERS TO ASSOCIATED PHASE



PHASE DESIGNATION DIAGRAM



CABLE DIAGRAM

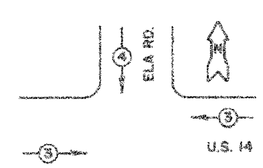
CABLE PLAN LEGEND

- 8" TRAFFIC SIGNAL SECTION
- 12" TRAFFIC SIGNAL SECTION
- 12" PEDESTRIAN SIGNAL SECTION
- CONTROLLER CABINET
- SERVICE INSTALLATION
- VEHICLE DETECTOR, INDUCTION LOOP
- PUSHBUTTON DETECTOR
- DENOTES NUMBER OF CONDUCTORS (NEW) ALL LOOP DETECTOR CABLE TO BE SHIELDED. ALL CABLE NO. 14 EXCEPT AS INDICATED.
- INDICATES EXISTING CABLE
- SIGNAL FACE WITH BACKPLATE "P" INDICATES OPTICAL PROGRAMMING
- EXISTING SIGNAL SECTION
- MAGNETIC DETECTOR
- ✳ EMERGENCY VEHICLE SYSTEM DETECTOR
- ✳ CONFIRMATION BEACON

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
11	SQ FT	SIGN PANEL - TYPE 1
4	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, ALUMINUM, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, ALUMINUM, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED
1	EACH	TRAFFIC SIGNAL POST, FERROUS 14 FT.
1	EACH	TRAFFIC SIGNAL POST, FERROUS 16 FT.
2	EACH	TRAFFIC SIGNAL POST, FERROUS 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.
1	EACH	FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE II, 3 PHASES, IN TYPE IV CABINET
4	EACH	INDUCTION LOOP DETECTOR AMPLIFIER
429	LIN FT	DETECTOR LOOP
503	LIN FT	GALVANIZED STEEL CONDUIT IN TRENCH 1 1/4"
30	LIN FT	GALVANIZED STEEL CONDUIT IN TRENCH 1 1/2"
53	LIN FT	GALVANIZED STEEL CONDUIT IN TRENCH 2"
73	LIN FT	GALVANIZED STEEL CONDUIT IN TRENCH 2 1/2"
83	LIN FT	GALVANIZED STEEL CONDUIT IN TRENCH 3"
34	LIN FT	GALVANIZED STEEL CONDUIT IN TRENCH 3 1/2"
10	LIN FT	GALVANIZED STEEL CONDUIT IN TRENCH 4"
58	LIN FT	GALVANIZED STEEL CONDUIT, PUSHED 2 1/2"
70	LIN FT	GALVANIZED STEEL CONDUIT, PUSHED 3 1/2"
164	LIN FT	UNIT DUCT, WITHOUT CABLE, IN TRENCH 1"
31	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 6 2/C
1561	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 14 5/C
393	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 14 7/C
867	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 14 2/C TWISTED, SHIELDED
1	EACH	SERVICE INSTALLATION, TYPE C
15	LIN FT	CONCRETE FOUNDATION, TYPE A
3.5	LIN FT	CONCRETE FOUNDATION, TYPE D
10	LIN FT	CONCRETE FOUNDATION, TYPE E 24-INCH DIAMETER
15	LIN FT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
5	EACH	CONCRETE HANDHOLE
1	EACH	CONCRETE HEAVY-DUTY HANDHOLE
1	EACH	CONCRETE DOUBLE HANDHOLE
852	LIN FT	TRENCH AND BACKFILL

✳ EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION - ALL LEGS



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

NOTES:

1. ONCE PREEMPTION HAS BEEN CALLED, TERMINATION OF A PHASE(S) SHALL BE IDENTICAL TO THE NORMAL SEQUENCE OF OPERATION'S TERMINATION OF A PHASE(S) AS DESCRIBED IN STANDARD 857001.
2. CONTINUATION OR TERMINATION OF ALL RIGHT TURN OVERLAPS SHALL BE IDENTICAL TO THE NORMAL SEQUENCE OF OPERATION'S CONTINUATION OR TERMINATION OF RIGHT TURN OVERLAPS AS DESCRIBED IN THE CLEARANCE NOTES FOR RIGHT TURN OVERLAPS.
3. TERMINATION OF ALL PEDESTRIAN PHASES SHALL INCLUDE A FULL FLASHING "DON'T WALK" INTERVAL.
4. IF ALL RED CLEARANCE IS USED IN THE NORMAL SEQUENCE OF OPERATION, IT MUST BE DISPLAYED AFTER THE YELLOW CLEARANCE INTERVAL WHEN ENTERING OR LEAVING THE PREEMPTION SEQUENCE.

TRAFFIC SIGNALS QUANTITIES

ITEM	UNIT	ELA RD & US 14
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1 EACH CONTROLLER AND CABINET (COMPLETE)

✳ SCHEDULE OF QUANTITIES U.S. ROUTE 14/ELA ROAD		
1	L SUM	TRAFFIC CONTROL AND PROTECTION
348	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C
348	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

✳ EXISTING CONTROL EQUIPMENT AT THIS LOCATION IS ECONOLITE ASC8000

✳ NOTE:
THIS PAY ITEM "TRAFFIC CONTROL AND PROTECTION" APPEARS IN THE SCHEDULE OF QUANTITIES FOR EACH INTERSECTION INCLUDED IN THIS PROJECT. IT SHALL BE PAID FOR AS A LUMP SUM ONCE, FOR THE ENTIRE PROJECT.

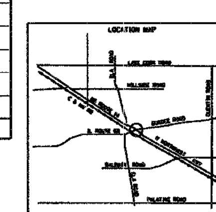
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	% OPERATION	
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW	11	135	12	0.10	4.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	-	252		0.05	-
FLASHER	-			0.50	-
				TOTAL	308.3

✳ THESE ITEMS INCLUDED IN CONTRACT FOR INSTALLATION OF EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT

GENERAL NOTES:
1. NEW WORK IS SHOWN AS BOLD.

2 NEW DRAWING

TS-09D OF 13



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

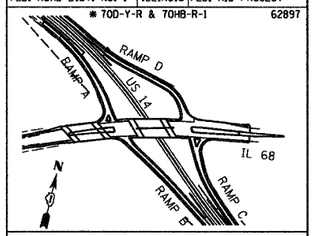
NORTHWEST HIGHWAY & ELA ROAD
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM

SCALE NONE
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	122
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 70D-Y-R & 70HB-R-1 62897



KEY PLAN

RESTORATION OF WORK AREA

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

MATCH LINE STA. 13+875 (SEE SHEET TS-11)

MATCH LINE STA. 9+860 (SEE SHEET TS-11)

91.2M-T 50mm
92.6M-T 50mm
30.97M-P 100mm
20.1M-P 100mm
18.7M-P 100mm
17.6M-T 65mm
3.5M-T (2) 125mm
7.9M-T 50mm
37.1M-E 65mm PVC
28M-T 65mm
29.8M-P 100mm
PROPOSED LOCAL CONTROLLER WITH TRANSCEIVER & UPS UNIT.
ComEd SERVICE INSTALLATION
37.4M-E 65mm PVC
12.6M-T 50mm
28.7M-T 50mm
US RTE 14
IL RTE 68
RAMP A
RAMP B
RAMP C
RAMP D
57.3M-T 50mm
23.7M-T 50mm
34.9M-P 100mm
16M-P 100mm
16.7M-P 100mm
64.4M-T 50mm
PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS
28.7M-P 100mm
23.8M-P 125mm
7.8M-T 50mm
PROPOSED LOCAL AND MASTER CONTROLLER WITH TRANSCEIVER & UPS UNIT.
3.5M-T (2) 125mm
99.1M-T 50mm
PROPOSED SAMPLING (SYSTEM) DETECTOR

INTERCONNECT PLAN LEGEND

EXIST.	PROP.	DESCRIPTION
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
H	H	HEAVY DUTY HANDHOLE
		G.S. CONDUIT IN GROUND (CIG), IN TRENCH (T) OR PUSHED (P)
		VEHICLE DETECTION LOOP
	UD	UNIT DUCT
	S	SYSTEM
I	IP	INTERSECTION
J	J	JUNCTION BOX

N

5 0 5 10 15 20 25

SCALE IN METERS

TS-10 OF 13

REVISIONS		
	NAME	DATE
2	ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

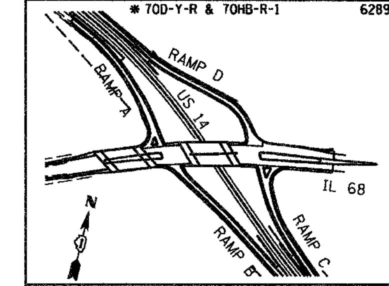
ILL. RTE. 68 FROM ELA ROAD TO U.S. RTE. 14 RAMPS C & D INTERCONNECT PLAN

SCALE 1:500
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
Design Group: IL 68 over US 14
Project Name: IL 68 over US 14
2/15/2007 12:45:38 PM

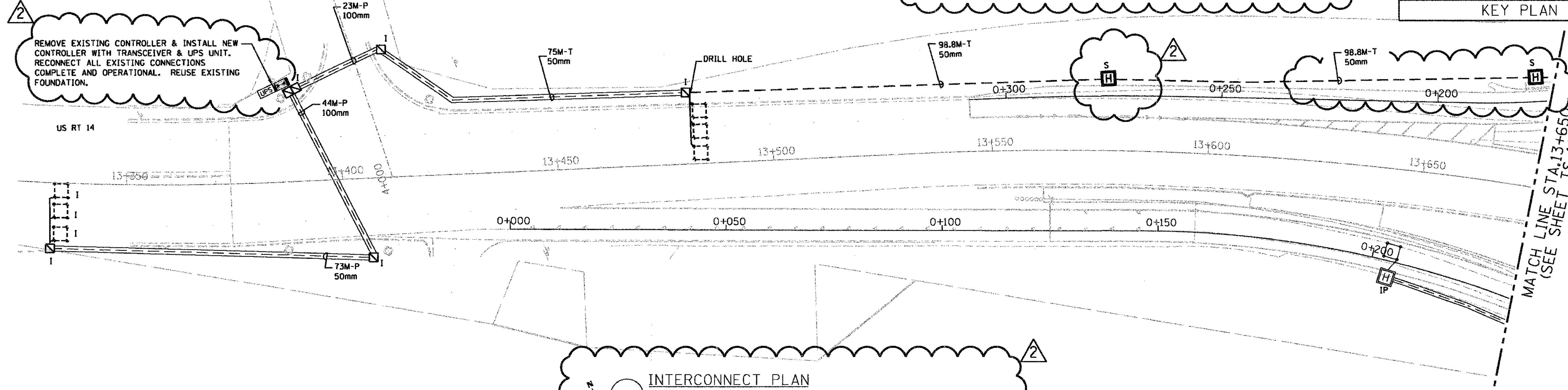
Working Files\Drawing Files\Sht\E-TS-10 - Cable Interconnect Plan.dgn
500.0000 M / M.



KEY PLAN

RESTORATION OF WORK AREA

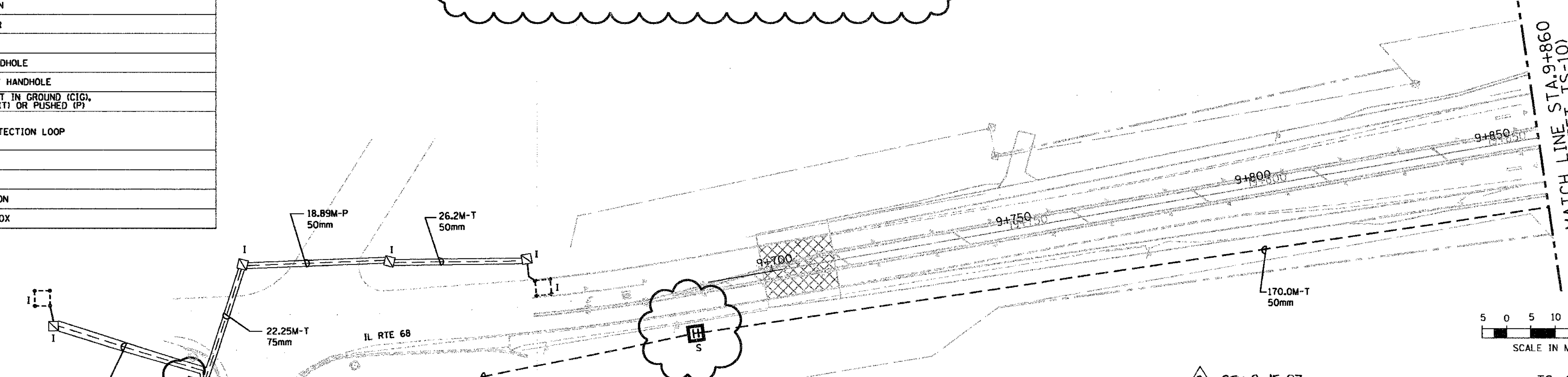
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, AND ETC. SHALL BE REPLACED AND ALL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



① INTERCONNECT PLAN
ELA ROAD AT U.S. RTE. 14

SCALE: 1 : 500

INTERCONNECT PLAN LEGEND		
EXIST.	PROP.	DESCRIPTION
⊠	⧓	CONTROLLER
⧄	◪	HANDHOLE
⧄⧄	◪◪	DOUBLE HANDHOLE
H	H	HEAVY DUTY HANDHOLE
═══	– – –	G.S. CONDUIT IN GROUND (CIG), IN TRENCH (T) OR PUSHED (P)
[ ]	□	VEHICLE DETECTION LOOP
	UD	UNIT DUCT
	S	SYSTEM
I	IP	INTERSECTION
J	J	JUNCTION BOX



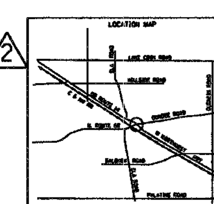
② INTERCONNECT PLAN
ELA ROAD AT ILL RTE. 68

SCALE: 1 : 500

5 0 5 10 15 20 25
SCALE IN METERS

TS- 11 OF 13

REV 2-15-07



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILL. RTE. 68 FROM ELA ROAD
TO U.S. RTE. 14 RAMPS C & D
INTERCONNECT PLAN

SCALE 1:500 | DRAWN BY R.P.J.
DATE NOVEMBER 2006 | DESIGNED BY I.B. | CHECKED BY A.D.O.

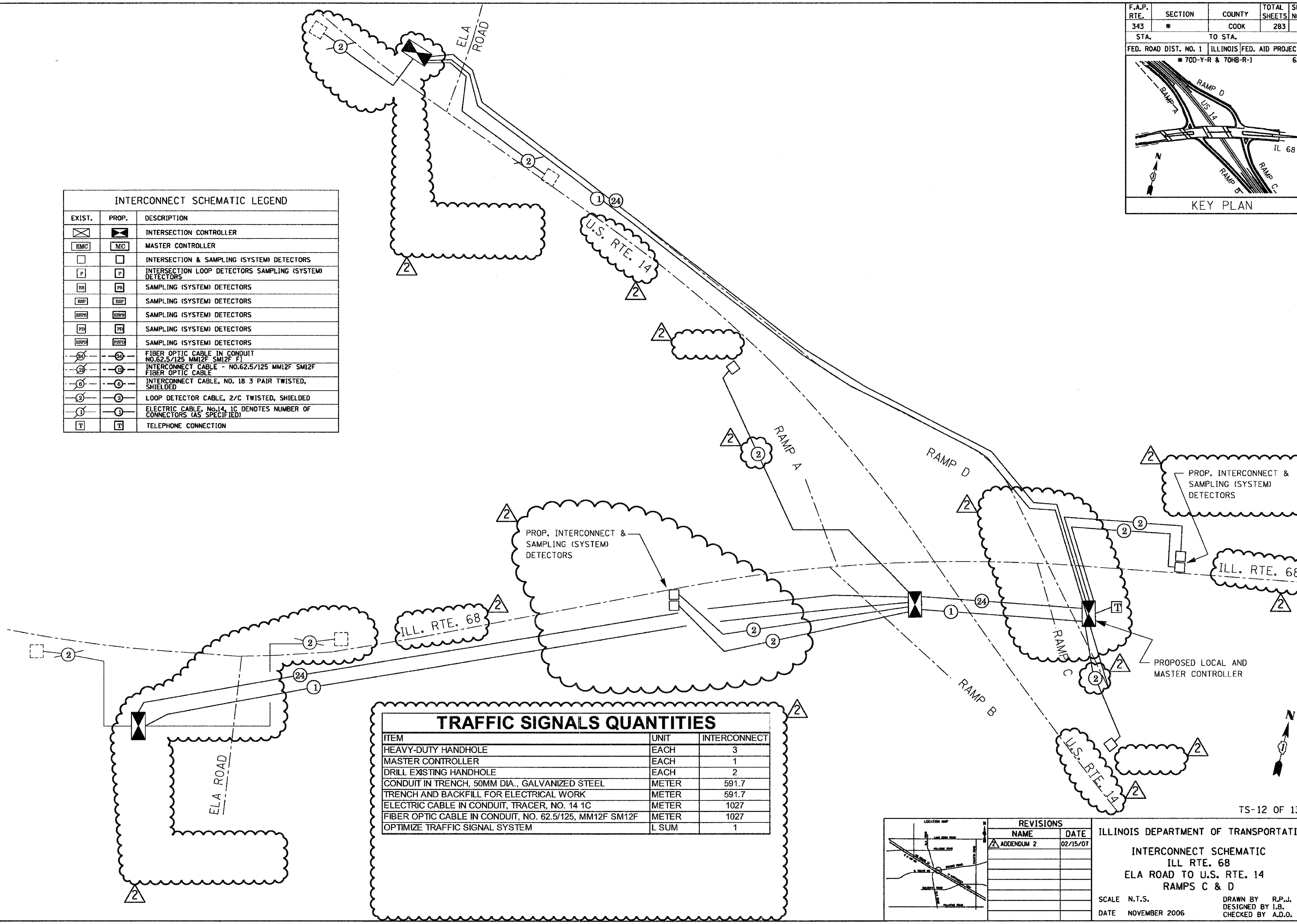
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	124

STA. TO STA.

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

* 70D-Y-R & 70HB-R-1 62897

KEY PLAN



INTERCONNECT SCHEMATIC LEGEND

EXIST.	PROP.	DESCRIPTION
		INTERSECTION CONTROLLER
EMC	MC	MASTER CONTROLLER
		INTERSECTION & SAMPLING (SYSTEM) DETECTORS
P	P	INTERSECTION LOOP DETECTORS SAMPLING (SYSTEM) DETECTORS
ES	PS	SAMPLING (SYSTEM) DETECTORS
ESP	SSP	SAMPLING (SYSTEM) DETECTORS
ESPS	ESPS	SAMPLING (SYSTEM) DETECTORS
PD	PD	SAMPLING (SYSTEM) DETECTORS
ESPD	PSPD	SAMPLING (SYSTEM) DETECTORS
24	24	FIBER OPTIC CABLE IN CONDUIT NO.62.5/125 MM12F SM12F FI
12	12	INTERCONNECT CABLE - NO.62.5/125 MM12F SM12F FIBER OPTIC CABLE
6	6	INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED
2	2	LOOP DETECTOR CABLE, 2/C TWISTED, SHIELDED
1	1	ELECTRIC CABLE, No.14, 1C DENOTES NUMBER OF CONNECTORS (AS SPECIFIED)
T	T	TELEPHONE CONNECTION

TRAFFIC SIGNALS QUANTITIES

ITEM	UNIT	INTERCONNECT
HEAVY-DUTY HANDHOLE	EACH	3
MASTER CONTROLLER	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	591.7
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	591.7
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	METER	1027
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	METER	1027
OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1

TS-12 OF 13

REVISIONS

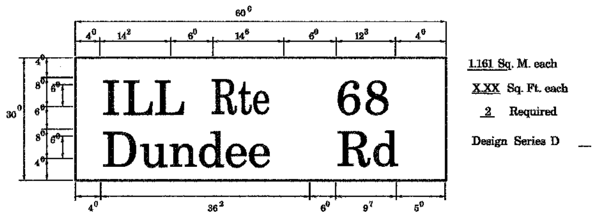
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

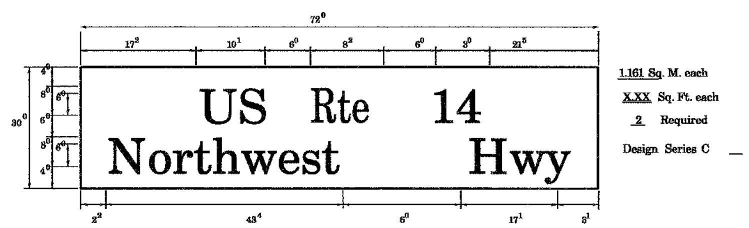
INTERCONNECT SCHEMATIC
ILL RTE. 68
ELA ROAD TO U.S. RTE. 14
RAMPS C & D

SCALE N.T.S.
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-TS-12 - Cable Interconnect Schematic.dgn
2/15/2007 12:47:36 PM 1000.0000 M / M.

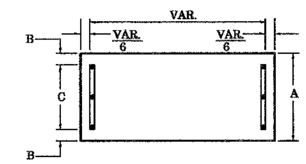


PANEL SIGN DESIGN TYPE 2

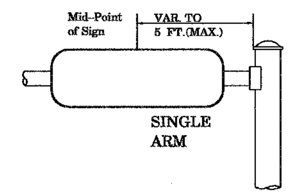


PANEL SIGN DESIGN TYPE 2

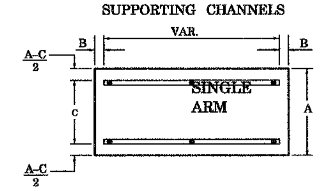
SUPPORTING CHANNELS



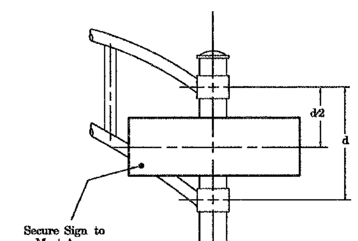
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



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



DUAL ARM

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

GENERAL NOTES

1. 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.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
4. ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
5. 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 1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
BRACKETS 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/BRACKET OF THE ABOVE PRODUCT.

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

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
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: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	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
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	
SERIES	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	1^5	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	1^5	0^5	0^6	1^2	1^4	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4
8	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^4	1^5

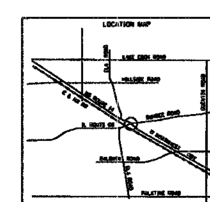
UPPER AND LOWER CASE
LETTER WIDTHS

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

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

EXAMPLE, 2 (3) DENOTES $2\frac{3"}{8}$

NOTE:
ALL DIMENSIONS ARE IN ENGLISH SYSTEM.
CONTRACTOR
TO USE PROPER CONVERSION TO METRIC SYSTEM.



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED
STREET NAME SIGNS

SCALE NONE
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

ROADWAY LIGHTING LEGEND

DESCRIPTION	PROPOSED	EXISTING	DEMOLITION	TEMPORARY
LIGHT UNIT E - EXISTING FIXTURE TO REMAIN R - EXISTING FIXTURE TO BE REMOVED RR - EXISTING FIXTURE TO BE REMOVED AND RELOCATED ER - RELOCATED EXISTING FIXTURE T - TEMPORARY FIXTURE	ER	E	R RR	T
LIGHT UNIT COMBINATION TRAFFIC SIGNAL				
UNDERPASS LUMINAIRE R - EXISTING FIXTURE TO BE REMOVED			R	
LIGHTING CONTROLLER			R	
UNIT DUCT		E		
CONDUIT, EMBEDDED				
UNIT DUCT TO BE ABANDONED		R A		
CONCEALED RIGID GALVANIZED STEEL CONDUIT, PUSHED CONTAINING PULLED-IN UNIT DUCT		E		
RIGID GALVANIZED STEEL CONDUIT, ATTACHED TO STRUCTURE				
AERIAL CABLE				AC
WOOD POLE				
JUNCTION BOX	J	J E		
JUNCTION BOX; STAINLESS STEEL				
HANDHOLE	H	H E	H R	
GROUND ROD				
ELEC UTILITY POLE				

ABBREVIATIONS

	DESCRIPTION
A	AMPS
DIA.	DIAMETER
EB	EMBEDDED IN CONCRETE
GND	GROUND
HPS	HIGH PRESSURE SODIUM
IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION
LED	LIGHT EMITTING DIODE
M.V.	MERCURY VAPOR
P	PUSHED
PH	PHASE
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL CONDUIT
STA	STATION
SW	DISCONNECT SWITCH
TR	TRANSFORMER
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLTS
W	WIRE

ROADWAY LIGHTING INDEX OF SHEETS

IDOT DISTRICT 1 DETAILS

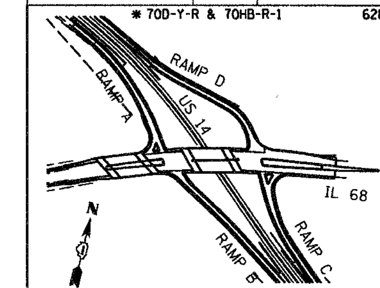
2

2

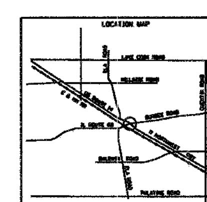
*STANDARD DETAIL BE-215 MODIFIED, AS SHEET LT-19, FOR THIS PROJECT.
REFER TO NOTE 35, SHEET LT-02.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	126
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

* 70D-Y-R & 70HB-R-1 62897



KEY PLAN



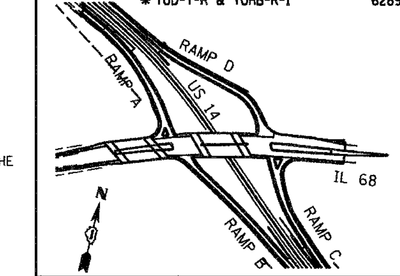
REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
ROADWAY LIGHTING
LEGENDS & SHEET INDEX

SCALE NONE
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	127
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
* 70D-Y-R & 70HB-R-1				62897



KEY PLAN

GENERAL NOTES - ROADWAY LIGHTING

1. SPLICING OF CONDUCTORS SHALL BE IN POLE BASES OR WEATHER TIGHT JUNCTION BOXES ONLY. SPLICES BELOW GRADE WILL NOT BE PERMITTED.

2. LIGHTING CIRCUITS SHALL BE WIRED IN ACCORDANCE WITH THE WIRING DIAGRAMS SHOWN IN THE PLANS. DEVIATIONS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

3. THE COST OF NUTS AND WASHERS FOR MOUNTING LIGHT POLES ON NEW OR EXISTING CONCRETE FOUNDATIONS SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICE FOR THE LIGHT POLES.

4. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING (DECORATIVE ROCKS, PLANTS, ETC).

5. EACH LIGHT POLE AND SHALL BE WIRED AS SHOWN IN THE SINGLE LINE DIAGRAM (SHEET LT-16).

6. NEW LIGHT POLE FOUNDATIONS SHALL BE SETBACK AS INDICATED ON THE ROADWAY PLANS. SETBACK SHALL BE MEASURED FROM THE EDGE OF THE TRAVELED PAVEMENT OR BACK OF BARRIER CURB TO THE NEAR FACE OF THE TRANSFORMER BASE.

7. ALL LIGHT POLE FOUNDATIONS TO BE CONSTRUCTED BY THIS CONTRACT SHALL BE CONCRETE.

8. BURIED UTILITY LOCATIONS SHOWN ON THE PLAN SHEETS ARE APPROXIMATE ONLY.

9. NOT USED.

10. ALL LUMINARIES FOR ROADWAY LIGHTING SHALL HAVE M-C-III DISTRIBUTION.

11. ABANDON EXISTING UNIT DUCTS IN PLACE, AND REMOVE CABLES AS SHOWN ON PLANS.

12. TRENCH CABLE RUNS SHALL BE IN A STRAIGHT LINE BETWEEN TERMINAL POINTS WHERE FEASIBLE. TO PREVENT EROSION OF EMBANKMENTS INVOLVING HIGH FILLS AND STEEP SIDE SLOPES, THE CONTRACTOR SHALL NOT TRENCH DIRECTLY FROM POLE TO POLE, RATHER, AS DIRECTED BE THE ENGINEER, THE TRENCH SHALL EXTEND FROM THE POLE STRAIGHT DOWN THE SIDE SLOPE, RUN ALONG THE TOE OF THE SLOPE, AND THEN STRAIGHT UP THE SIDE SLOPE TO THE NEXT POLE. THE CONTRACTOR WILL BE COMPENSATED FOR THIS ADDITIONAL UNIT DUCT AT ITS AGREED CONTRACT UNIT PRICE.

13. IN ACCORDANCE WITH SPECIFICATION M8030010 THE CONTRACTOR WILL BE PAID TO LOCATE APPLICABLE CABLE RUNS OF THE EXISTING LIGHTING SYSTEM THAT WILL REMAIN IN SERVICE DURING CONSTRUCTION AND UPON THE COMPLETION OF THIS PROJECT. THE CONTRACTOR SHALL NOT LOCATE ANY CABLE RUNS THAT ARE TO BE ABANDONED UPON THE COMPLETION OF THIS PROJECT. IN THE EVENT THE CONTRACTOR DISRUPTS A CABLE THAT IS TO BE ABANDONED BUT IS CURRENTLY SERVICING AN EXISTING LUMINAIRE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPLICING THE CABLE. IN THIS CASE PROPER WATERPROOF SPLICES BELOW GRADE WILL BE PERMITTED.

14. ALL NEW UNIT DUCT AND UNDERGROUND CONDUIT SHALL BE PLACED A MINIMUM OF MINIMUM OF 760MM (30") BENEATH THE GROUND SURFACE.

15. THE CONTRACTOR SHALL REQUEST A FORMAL MAINTENANCE TRANSFER BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL CONTACT THE ELECTRICAL MAINTENANCE OFFICE AT (847) 221-3079.

16. ALL WORK SHALL CONFORM TO THE LATEST IDOT AND IDOT DISTRICT 1 STANDARDS, SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE.

176. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK.

18. ALL ELECTRICAL EQUIPMENT SHALL BE UL LISTED AND LABELED.

19. ALL CONDUITS SHALL BE SEALED.

20. ALL CIRCUIT WIRES SHALL BE LABELED WITH CIRCUIT IDENTIFICATION.

21. CIRCUITS SHALL BE TESTED PER SPECIFICATION.

22. ALL LAMPS SHALL BE FURNISHED AS PART OF THE CONTRACT.

23. THE LOCATIONS OF ALL PROPOSED EQUIPMENT ARE ILLUSTRATED DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.

24. ALL MEASUREMENTS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY MEASUREMENTS IN THE FIELD.

25. THE LIGHTING SYSTEM VOLTAGE IS 240/480V, 1-PHASE, 3-WIRE. LUMINAIRE VOLTAGE IS 240V.

26. THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY COMPANY TO COORDINATE THE ELECTRICAL SERVICE WORK.

27. TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE LIGHT POLES, THE LIGHT POLES SHALL NOT BE ERECTED AND/OR LEFT TO STAND WITHOUT LUMINAIRES.

28. INDEPENDENT TESTING OF LUMINAIRES IS REQUIRED WHEN THE QUANTITY INDICATED IN THE SUMMARY OF QUANTITIES IS 50 OR MORE FOR A GIVEN PAY ITEM. TESTING SHALL BE IN ACCORDANCE WITH ARTICLE 1067.01.A.7 OF THE STANDARD SPECIFICATIONS.

29. THE EXISTING LIGHTING CONTROLLER SHALL BE REPLACED IN APPROXIMATELY THE SAME LOCATION. THE NEW SERVICE CONDUCTORS SHALL BE 3-1/C, #3/0 RHH/RHW/EPR-USE MINIMUM IN 3" GALVANIZED STEEL CONDUIT.

30. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING INSTALLATIONS AND DATA PRIOR TO BIDDING. THE NEW CONTROLLER SHALL BE INSTALLED DURING CONSTRUCTION ON PHASE 2.

31. DURING STAGE IA EXISTING AND TEMPORARY LIGHTING SHALL BE CONNECTED TO THE EXISTING CONTROLLER AG UNTIL THE NEW CONTROLLER AG IS OPERATIONAL.

32. TEMPORARY LIGHTING SHALL REMAIN IN SERVICE UNTIL THE NEW PERMANENT LIGHTING SYSTEM IS OPERATIONAL.

33. THE CONTRACTOR SHALL RELABEL POLE NUMBERS ON RELOCATED POLES AND EXISTING POLES REMAINING IN PLACE INCIDENTAL TO THE RELOCATION ITEM IN ACCORDANCE WITH SHEET NO. LT-16.

34. CONTRACTOR MUST MAINTAIN SAFE EQUIPMENT AND WORKING CLEARANCES FROM THE EXISTING COMED LINES. CONTRACTOR SHALL PLAN HIS WORK CONSIDERING ComEd'S LINES TO BE IN SERVICE AND ENERGIZED THROUGHOUT THE CONSTRUCTION PERIOD.

35. PROPOSED LIGHTING CONTROLLER "AG" SHALL BE PER ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) DISTRICT 1 STANDARD BE-215, DATED 2/15/2006. EXCEPT, AS PART OF THIS PAY ITEM, MAIN BREAKER SHALL BE 125A TRIP, 25,000 AMP INTERRUPTING RATING, CONTACTOR SHALL BE RATED AT 200A., AND SURGE ARRESTER SHALL BE PROVIDED. SURGE ARRESTER SHALL BE GE "TRANQUELL" CAT #9L15ECB001.

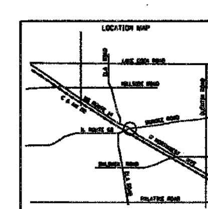
36. ALL GROUND MOUNTED LIGHT POLE FOUNDATIONS SHALL BE 750MM DIAMETER.

2

37. CONTRACTOR SHALL OBTAIN 400W HPS LUMINAIRES FOR TEMPORARY WOOD POLES FROM IDOT STOCK. LUMINAIRES SHALL BE RETURNED TO IDOT AFTER COMPLETION OF THE PROJECT.

38. ALL NEW ROADWAY LUMINAIRES SHALL BE HUBBELL PHOTOMETRIC FILE No. 33429 OR GE PHOTOMETRIC FILE No. GE451002.

LT-02 OF 19



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY LIGHTING
GENERAL NOTES

SCALE NONE
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

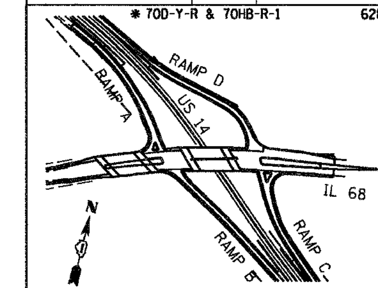
Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\E-LT-02 - General Notes.dgn
2/13/2007 3:13:56 PM 1.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	128

STA. TO STA.

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

* 70D-Y-R & 70HB-R-1 62897



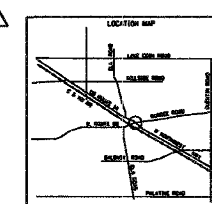
KEY PLAN

ROADWAY LIGHTING SCHEDULE OF QUANTITIES

ITEM	UNIT	QTY 100% IDOT		TOTAL QUANTITIES
MOBILIZATION	L SUM	1		1
ELECTRIC SERVICE INSTALLATION	EACH	1		1
LUMINAIRE, SODIUM VAPOR,HORIZONTAL MOUNT, 400 WATT	EACH	4		4
LUMINAIRE, SODIUM VAPOR,HORIZONTAL MOUNT, 400 WATT, INSTALL ONLY	EACH	14		14
UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	8		8
UNDERPASS LUMINAIRE, 100 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	4		4
LIGHTING CONTROLLER, CONSOLE, TYPE CB-RS	EACH	1		1
~~REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE~~	~~EACH~~			
~~LIGHTING FOUNDATION REMOVAL~~	~~EACH~~			
RELOCATE EXISTING LIGHTING UNIT	EACH	26		26
REMOVAL OF LIGHTING CONTROLLER	EACH	1		1
REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1		1
REMOVE EXISTING HANDHOLE	EACH	1		1
~~LOCATING UNDERGROUND CABLE~~	~~METER~~			
GROUND ROD, 16MM DIA. X 3.0M	EACH	27		27
LIGHT POLE, WOOD, 9.14 METER, CLASS 4	EACH	2		2
LIGHT POLE, WOOD, 12.19 METER, CLASS 4	EACH	4		4
LIGHT POLE, WOOD, 18.30 METER, CLASS 4	EACH	7		7
LIGHT POLE, WOOD, 18.30 METER, CLASS 4, 4.5 METER MAST ARM	EACH	12		12
CONDUIT IN TRENCH, RIGID GALVANIZED STEEL, 75MM DIA.	METER	10		10
CONDUIT PUSHED, RIGID GALVANIZED STEEL, 75MM DIA.	METER	512		512
CONDUIT EMBEDDED IN STRUCTURE, PVC, 50 MM DIA.	METER	89		89
CONDUIT EMBEDDED IN STRUCTURE, PVC, 65 MM DIA.	METER	98		98
JUNCTION BOX, ATTACHED TO STRUCTURE, STAINLESS STEEL, 150MM X 150MM X 100MM	EACH	12		12
JUNCTION BOX, ATTACHED TO STRUCTURE, STAINLESS STEEL, 300MM X 250MM X 150MM	EACH	8		8
JUNCTION BOX, ATTACHED TO STRUCTURE, STAINLESS STEEL, 450MM X 450MM X 200MM	EACH	2		2
JUNCTION BOX, EMBEDDED IN STRUCTURE, NON-METALLIC, 300MM X 300MM X 150MM	EACH	8		8
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 10	METER	660		660
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 4	METER	405		405
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 6	METER	153		153
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE USE) 1/C NO. 3/0	METER	19		19
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	1375		1375
UNIT DUCT, 600V, WITH 3-1/C NO. 4 AND 1/C NO. 6 GROUND (EPR-TYPE RHW), 30MM DIA., POLYETHYLENE, SCH 40	METER	2442		2442
AERIAL CABLE WITH MESSENGER WIRE, 3-1/C NO. 2 ALUMINUM	METER	1505		1505
~~LIGHT POLE, ALUMINUM, 15.2M M.H., 3.5M MAST ARM~~	~~EACH~~			
LIGHT POLE FOUNDATION, 750MM DIAMETER	METER	26		26
CONDUIT ATTACHED TO STRUCTURE, 25MM DIA. RIGID GALVANIZED STEEL, PVC COATED	METER	92		92
CONDUIT ATTACHED TO STRUCTURE, 65MM DIA. RIGID GALVANIZED STEEL, PVC COATED	METER	28		28
CONDUIT ATTACHED TO STRUCTURE, 75MM DIA. RIGID GALVANIZED STEEL, PVC COATED	METER	22		22
REMOVE EXISTING CONDUIT ATTACHED TO STRUCTURE	METER	110		110
TEMPORARY UNDERPASS LIGHTING INSTALLATION AND REMOVAL	L SUM	1		1
REMOVE LUMINAIRE FROM UNDERPASS	EACH	4		4
REMOVE EXISTING SERVICE INSTALLATION	EACH	1		1
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	9		9
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	44		44
REMOVE TEMPORARY LIGHTING UNITS	LSUM	1		1
~~MAINTENANCE OF TEMPORARY LIGHTING SYSTEM~~	~~LSUM~~			

Rick Johns
IDOT District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-LT-03 - Schedule of Quantities.dgn
2/14/2007 10:31:43 AM 1.0000 M / M.

LT-03 OF 19



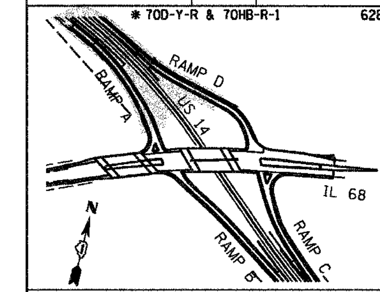
REVISIONS	
NAME	DATE
ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
ROADWAY LIGHTING
SCHEDULE OF QUANTITIES

SCALE NONE
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

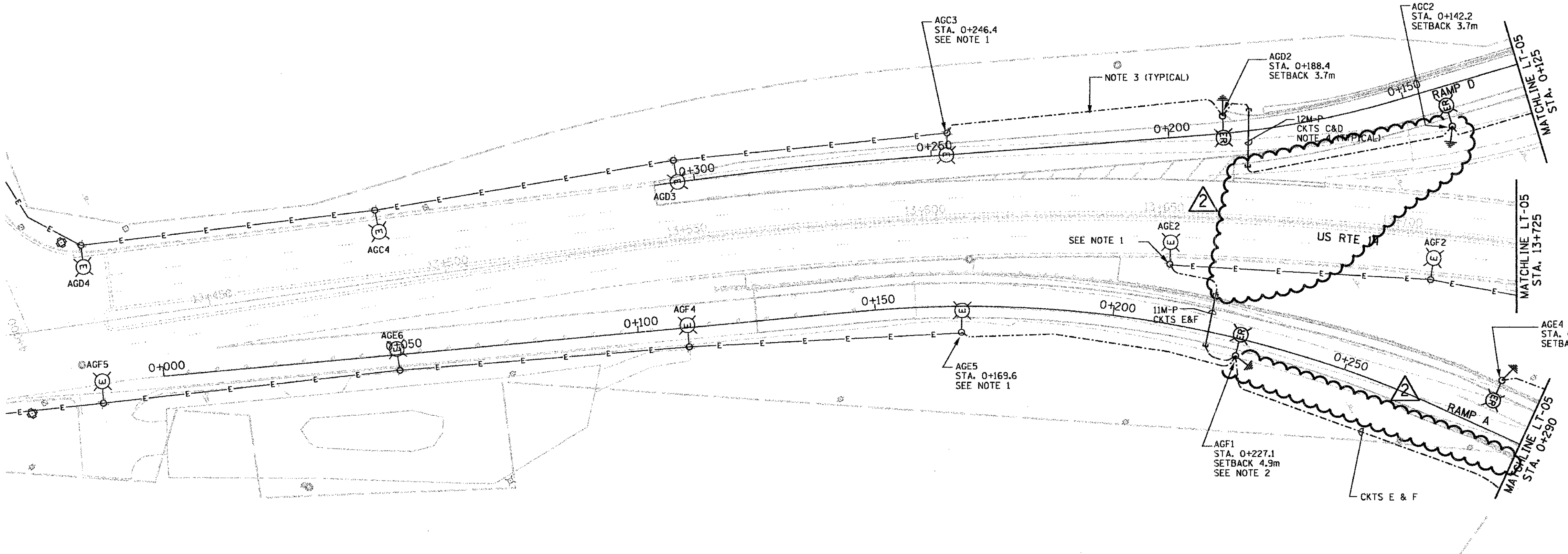
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	129
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-R & 70HB-R-1				62897



KEY PLAN

NOTES:

1. CONNECT EXISTING CIRCUITS TO NEW CONDUCTORS AT BASE OF POLE THROUGH EXISTING RACEWAY.
2. FOUNDATION REQUIRES THREE (3) CONDUITS FOR UNIT DUCTS.
3. ALL PROPOSED UNIT DUCTS ARE 30MM DIA. POLYETHYLENE WITH (3) 1/C #4 & (1) 1/C #6 GND (EPR-TYPE RHW).
4. ALL PROPOSED PUSHED CONDUITS ARE 75MM DIA. RGS.



1 PROPOSED ROADWAY LIGHTING PLAN

SCALE: 1 : 500

SCALE IN METERS

LT-04 OF 19

REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY LIGHTING PROPOSED PLAN

US 14 STA. 13+400 TO STA. 13+725

SCALE 1:500
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-LT-04 - Proposed Plan.dgn
2/13/2007 3:16:23 PM 500.0000 M / M.

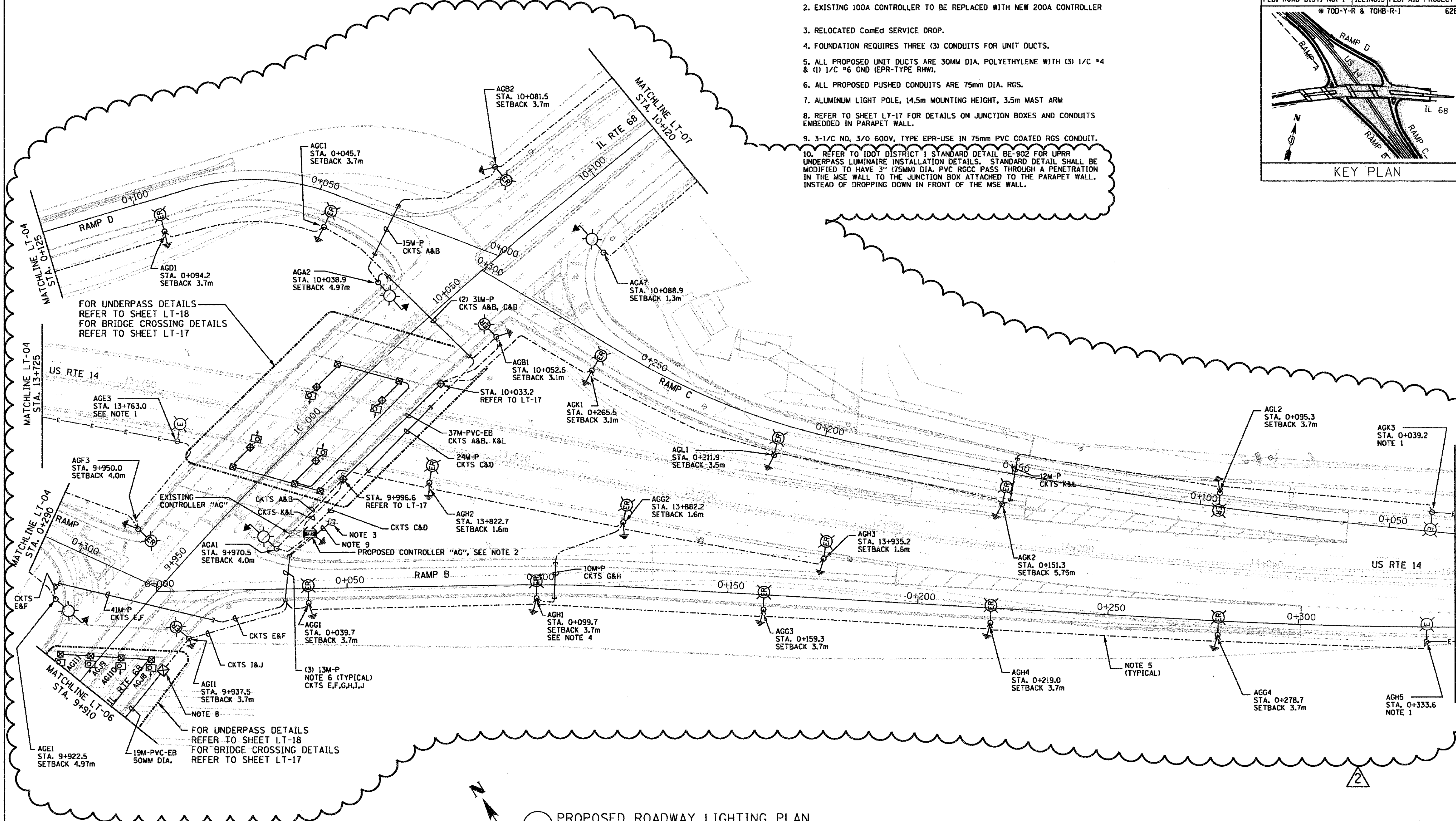
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	130
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 700-Y-R & 70HB-R-1 62897

KEY PLAN

NOTES:

1. CONNECT EXISTING CIRCUITS TO NEW CONDUCTORS AT BASE OF POLE.
2. EXISTING 100A CONTROLLER TO BE REPLACED WITH NEW 200A CONTROLLER
3. RELOCATED ComEd SERVICE DROP.
4. FOUNDATION REQUIRES THREE (3) CONDUITS FOR UNIT DUCTS.
5. ALL PROPOSED UNIT DUCTS ARE 30MM DIA. POLYETHYLENE WITH (3) 1/C *4 & (1) 1/C *6 GND (EPR-TYPE RHW).
6. ALL PROPOSED PUSHED CONDUITS ARE 75mm DIA. RGS.
7. ALUMINUM LIGHT POLE, 14.5m MOUNTING HEIGHT, 3.5m MAST ARM
8. REFER TO SHEET LT-17 FOR DETAILS ON JUNCTION BOXES AND CONDUITS EMBEDDED IN PARAPET WALL.
9. 3-1/C NO, 3/0 600V, TYPE EPR-USE IN 75mm PVC COATED RGS CONDUIT.
10. REFER TO IDOT DISTRICT 1 STANDARD DETAIL BE-902 FOR UPRR UNDERPASS LUMINAIRE INSTALLATION DETAILS. STANDARD DETAIL SHALL BE MODIFIED TO HAVE 3" (75MM) DIA. PVC RGCC PASS THROUGH A PENETRATION IN THE MSE WALL TO THE JUNCTION BOX ATTACHED TO THE PARAPET WALL, INSTEAD OF DROPPING DOWN IN FRONT OF THE MSE WALL.



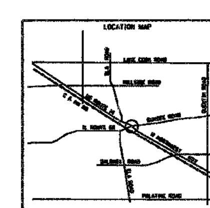
N

1 PROPOSED ROADWAY LIGHTING PLAN

SCALE: 1 : 500

5 0 5 10 15 20 25

SCALE IN METERS



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY LIGHTING PROPOSED PLAN

IL 68 STA. 9+910 TO STA. 10+120

US 14 STA. 13+725 TO STA. 14+100

SCALE 1:500

DATE NOVEMBER 2006

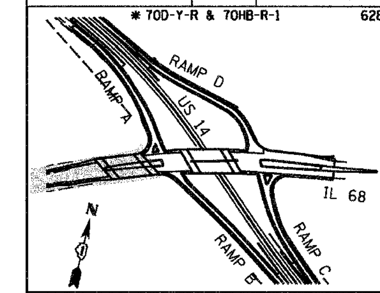
DRAWN BY R.P.J.

DESIGNED BY I.B.

CHECKED BY A.D.O.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	131
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

* 70D-Y-R & 70HB-R-1 62897



KEY PLAN

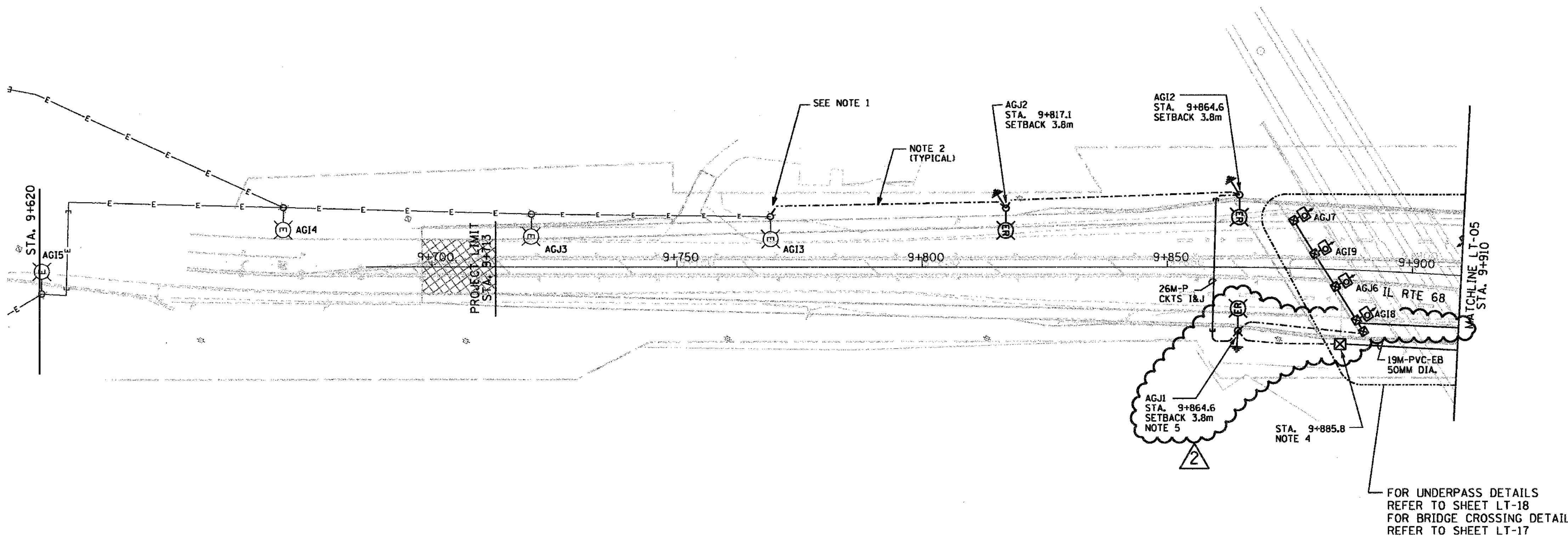
NOTE
1. CONNECT EXISTING CIRCUITS TO NEW CONDUCTORS AT BASE OF POLE.

2. ALL PROPOSED UNIT DUCTS ARE 30MM DIA. POLYETHYLENE WITH (3) 1/C *4 & (1) 1/C *6 GND (EPR-TYPE RHW).

3. ALL PROPOSED PUSHED CONDUITS ARE 75MM DIA. RGS.

4. REFER TO IDOT DISTRICT 1 STANDARD DETAIL BE-902 FOR UPRR UNDERPASS LUMINAIRE INSTALLATION DETAILS. STANDARD DETAIL SHALL BE MODIFIED TO HAVE 3" (75MM) DIA. PVC RGCC PASS THROUGH A PENETRATION IN THE MSE WALL TO THE JUNCTION BOX EMBEDDED IN THE PARAPET WALL, INSTEAD OF DROPPING DOWN IN FRONT OF THE MSE WALL.

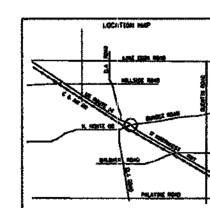
5. FOUNDATION REQUIRES THREE (3) CONDUITS FOR UNIT DUCTS.



1 PROPOSED ROADWAY LIGHTING PLAN
SCALE: 1 : 500

5 0 5 10 15 20 25
SCALE IN METERS

LT-06 OF 19



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
ROADWAY LIGHTING PROPOSED PLAN
IL 68 STA. 9+620 TO STA. 9+910

SCALE 1:500
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\E-LT-06 - Proposed Plan.dgn
2/13/2007 3:17:05 PM 500.0000 M / M.

NOTE
1. CONNECT EXISTING CIRCUITS TO NEW CONDUCTORS AT BASE OF POLE.

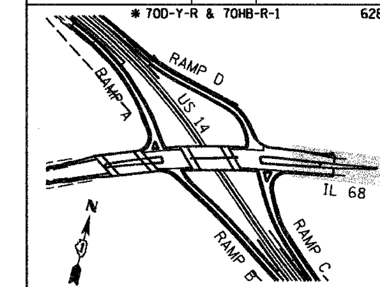
2. ALL PROPOSED UNIT DUCTS ARE 30MM DIA. POLYETHYLENE WITH (3) 1/C #4 & (1) 1/C #6 GND (EPR-TYPE RHW).

3. ALL PROPOSED PUSHED CONDUITS ARE 75mm DIA. RGS.

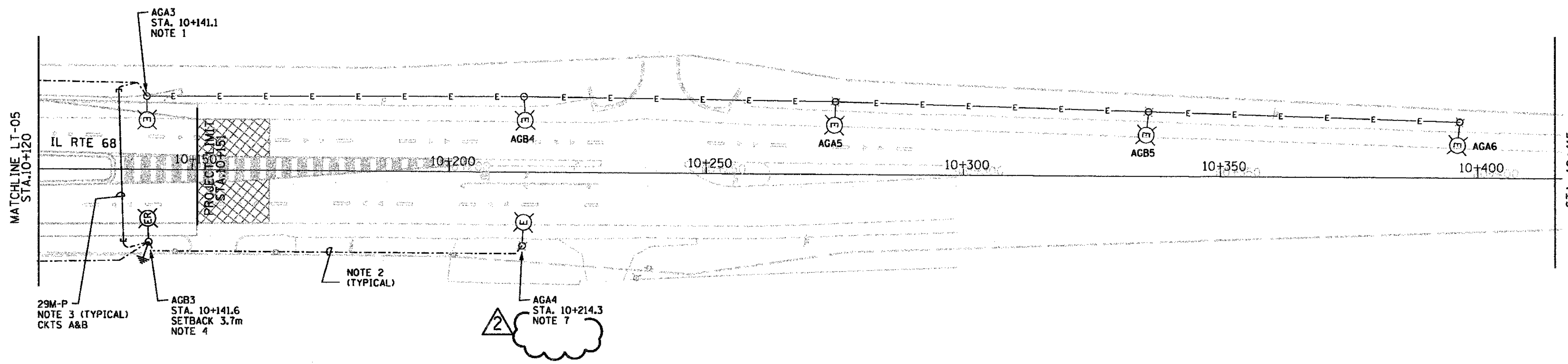
4. FOUNDATION REQUIRES THREE (3) CONDUITS FOR UNIT DUCTS.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	132
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

* 70D-Y-R & 70HB-R-1 62897



KEY PLAN



1 PROPOSED ROADWAY LIGHTING PLAN
SCALE: 1 : 500

5 0 5 10 15 20 25
SCALE IN METERS

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\E-LT-07 - Proposed Plan.dgn
2/13/2007 3:17:21 PM 500.0000 M / M.

LT-07 OF 19

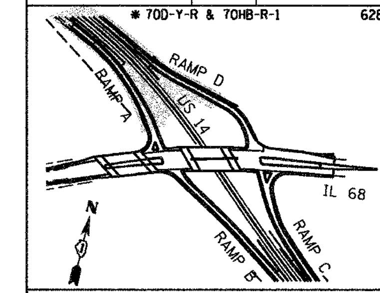
REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
ROADWAY LIGHTING PROPOSED PLAN
IL 68 STA. 10+120 TO STA. 10+415

SCALE 1:500
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

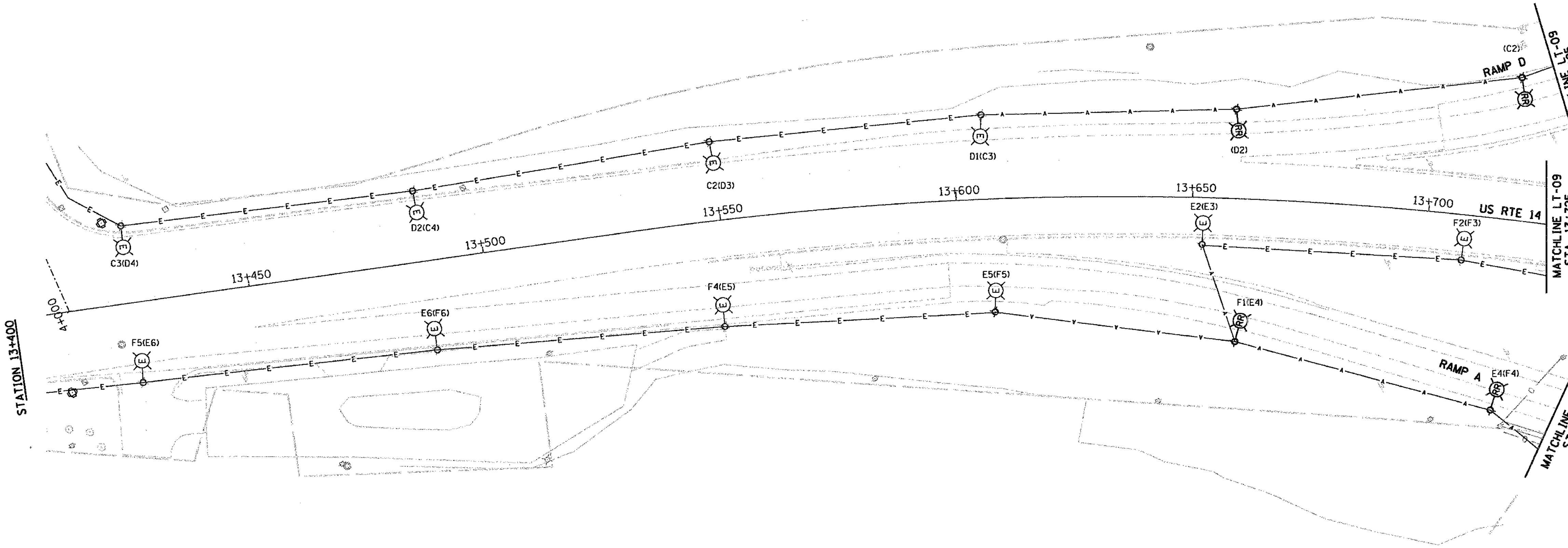
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	133
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

* 70D-Y-R & 70HB-R-1 62897



KEY PLAN

NOTES:
1. CIRCUIT/POLE NUMBERS OUTSIDE OF PRENTHESES ARE PROPOSED. CIRCUIT/POLE NUMBERS IN PRENTHESES ARE EXISTING NUMBERS AND SHALL BE REPLACED IN ACCORDANCE WITH GENERAL NOTE *34, SHEET LT-02.



(1) ROADWAY LIGHTING DEMOLITION PLAN

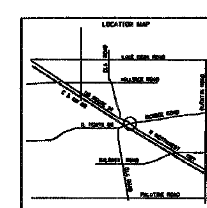
SCALE: 1 : 500

5 0 5 10 15 20 25

SCALE IN METERS

Rick Johns
IDOT District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\E-LT-08 - Demolition Plan.dgn
2/13/2007 3:17:42 PM 500.0000 M / M.

LT-08 OF 19



REVISIONS	
NAME	DATE
(2) ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY LIGHTING DEMOLITION PLAN

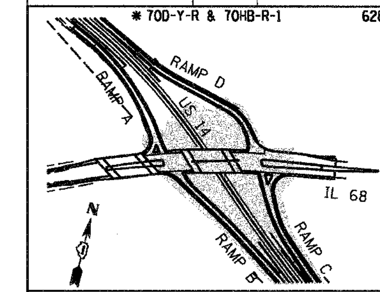
US 14 STA. 13+400 TO STA. 13+725

SCALE 1:500

DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

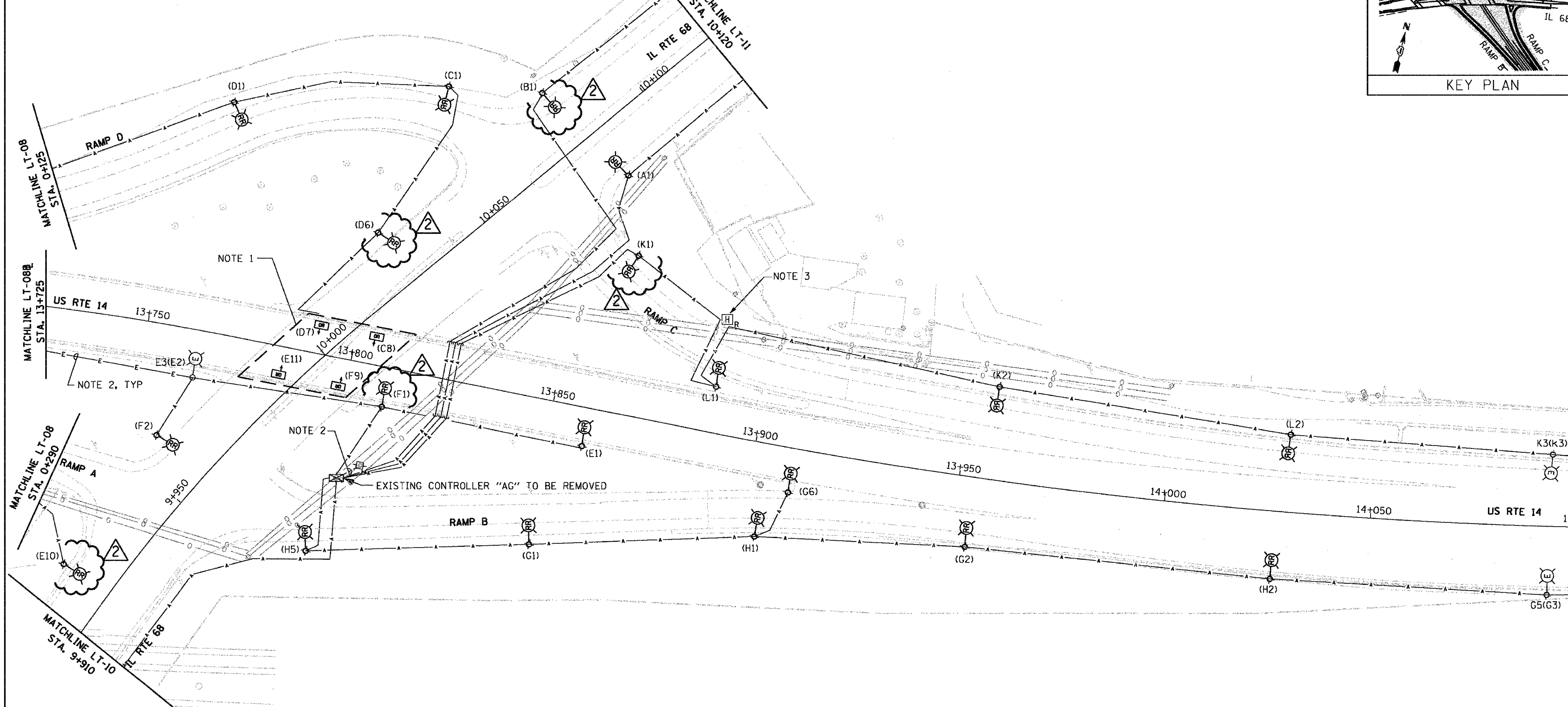
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	134
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
* 70D-Y-R & 70HB-R-1				62897



KEY PLAN

NOTES:

1. REMOVE ALL EXISTING UNDERPASS LUMINARIES & ASSOCIATED JUNCTION BOXES. EXISTING UNDERPASS LUMINAIRES ON NORTH SIDE OF US-14 BRIDGE SHALL BE MAINTAINED IN SERVICE THROUGH CONSTRUCTION STAGE 1.
2. REMOVE EXISTING ELECTRICAL SERVICE.
3. REMOVE EXISTING HANDHOLE.
4. CIRCUIT/POLE NUMBERS OUTSIDE OF PRENTHESES ARE PROPOSED, CIRCUIT/POLE NUMBERS IN PRENTHESES ARE EXISTING NUMBERS AND SHALL BE REPLACED IN ACCORDANCE WITH GENERAL NOTE #34, SHEET LT-02.



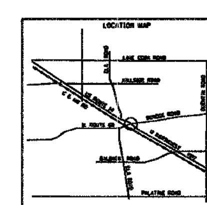
1 ROADWAY LIGHTING DEMOLITION PLAN

SCALE: 1 : 500

5 0 5 10 15 20 25

SCALE IN METERS

LT-09 OF 19



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY LIGHTING DEMOLITION PLAN

IL 68 STA. 9+910 TO STA. 10+120

US 14 STA. 13+725 TO STA. 14+100

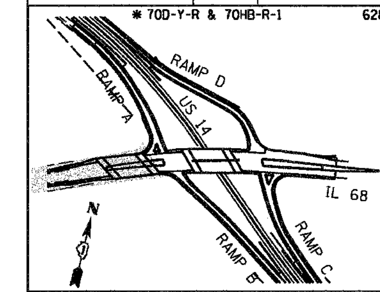
SCALE 1:500

DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

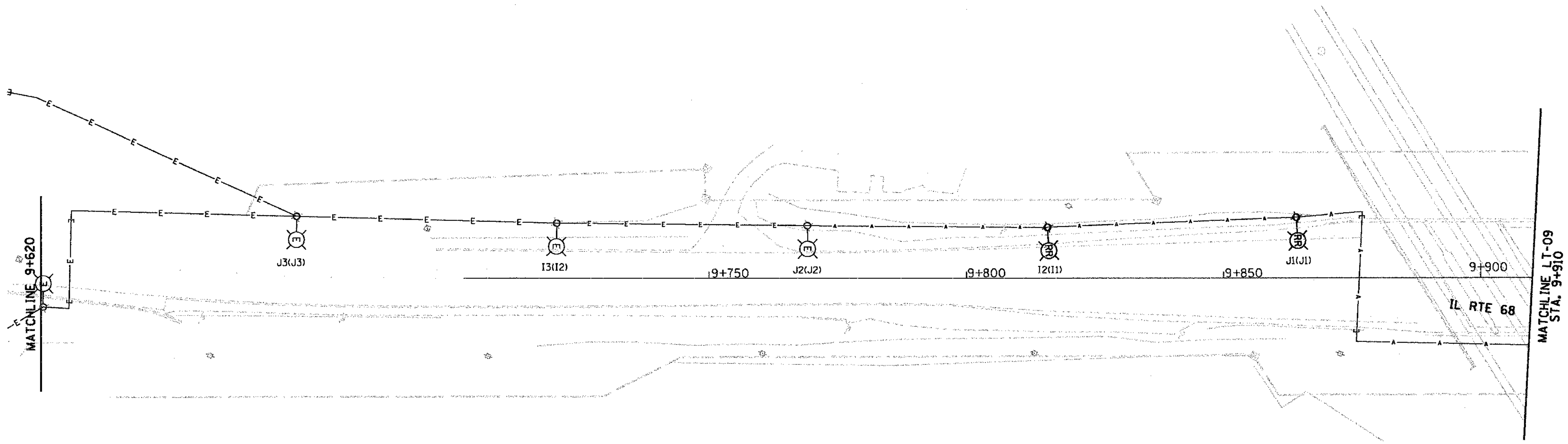
Rick Johns
IDOT District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\E-LT-09 - Demolition Plan.dgn
2/13/2007 3:17:58 PM 500.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	135
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
	* 70D-Y-R & 70HB-R-1			62897



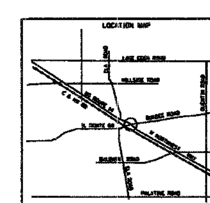
KEY PLAN

NOTES:
1. CIRCUIT/POLE NUMBERS OUTSIDE OF PRENTHESES ARE PROPOSED. CIRCUIT/POLE NUMBERS IN PRENTHESES ARE EXISTING NUMBERS AND SHALL BE REPLACED IN ACCORDANCE WITH GENERAL NOTE #34, SHEET LT-02.



1 ROADWAY LIGHTING DEMOLITION PLAN
SCALE: 1 : 500
5 0 5 10 15 20 25
SCALE IN METERS

LT-10 OF 19



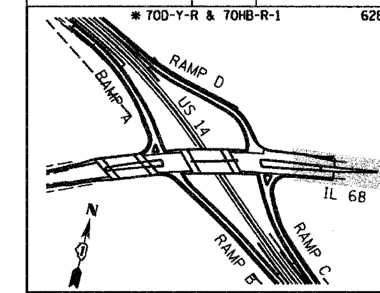
REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
ROADWAY LIGHTING DEMOLITION PLAN
IL 68 STA. 9+620 TO STA. 9+910

SCALE 1:500
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

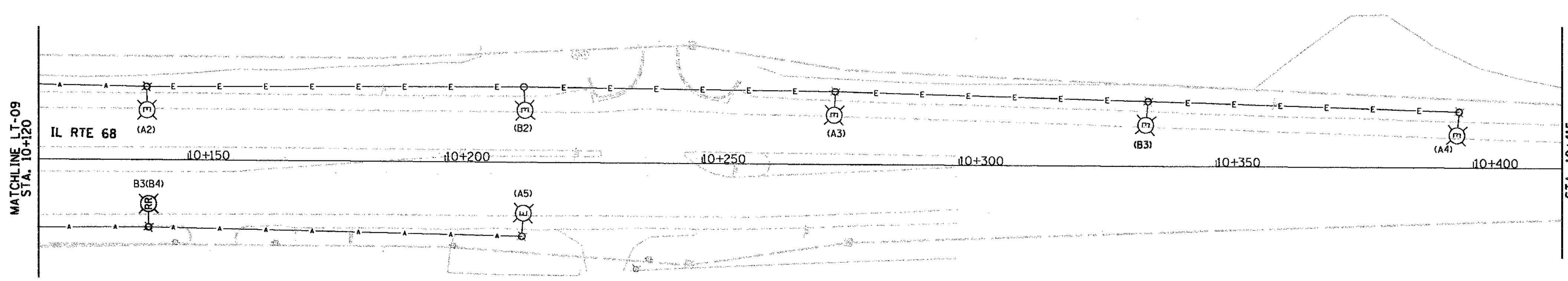
Rick Johns
IDOT District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\E-LT-10 - Demolition Plan.dgn
2/13/2007 3:18:18 PM 500.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	136
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
	* 70D-Y-R & 70HB-R-1			62897



KEY PLAN

NOTES:
1. CIRCUIT/POLE NUMBERS OUTSIDE OF PRENTHESES ARE PROPOSED. CIRCUIT/POLE NUMBERS IN PRENTHESES ARE EXISTING NUMBERS AND SHALL BE REPLACED IN ACCORDANCE WITH GENERAL NOTE *34, SHEET LT-02.



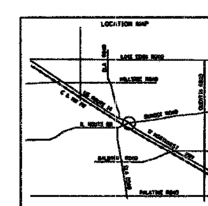
N

1 ROADWAY LIGHTING DEMOLITION PLAN

SCALE: 1 : 500

5 0 5 10 15 20 25

SCALE IN METERS



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY LIGHTING DEMOLITION PLAN

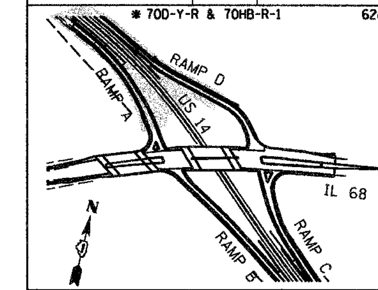
IL 68 STA. 10+120 TO STA. 10+415

SCALE 1:500

DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	137
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-R & 70HB-R-1				62897



KEY PLAN

NOTES:

1. SECURE AERIAL CABLE ATTACHMENT TO POLE WITH A POLE BAND. INSERT CONDUCTORS THROUGH THE 38mm GROMMETED HOLE IN THE TOP PORTION OF THE SHAFT.

2. WITH 4.5 MAST ARM, MOUNT TEMPORARY LUMINAIRE AT 14.5M ABOVE ROADWAY.

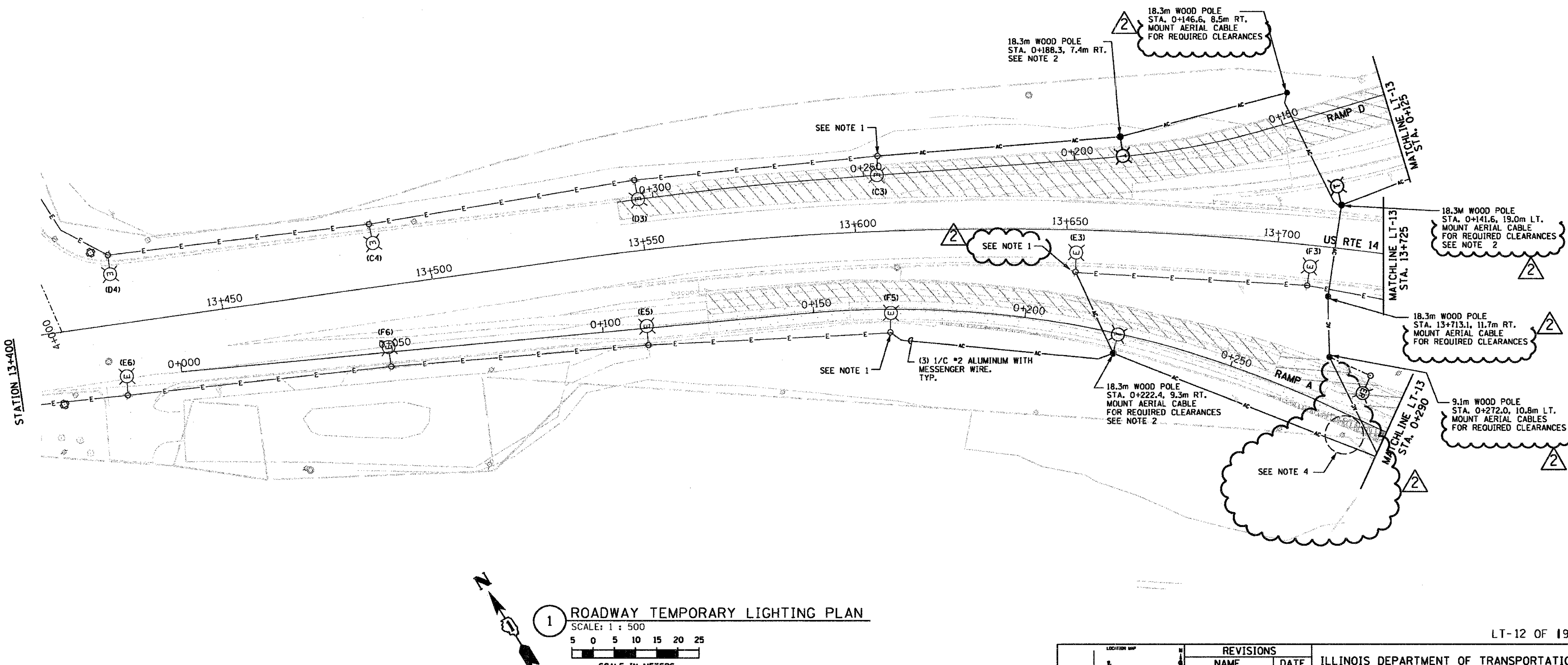
3. ALL TEMPORARY AERIAL CABLE SHALL BE (3) 1/C #2 ALUMINUM WITH MESSENGER WIRE.

4. ComEd WILL REMOVE THE NEUTRAL FOR THE CONSTRUCTION PERIOD TO ALLOW FOR TEMPORARY AERIAL CABLES TO CROSS UNDER THE DISTRIBUTION LINES.

5. CIRCUIT/POLE NUMBERS OUTSIDE OF PRENTHESES ARE PROPOSED. CIRCUIT/POLE NUMBERS IN PRENTHESES ARE EXISTING NUMBERS AND SHALL BE REPLACED IN ACCORDANCE WITH GENERAL NOTE #34, SHEET LT-02.

6. PROVIDE TEMPORARY IMPACT ATTENUATOR AT TEMPORARY WOOD POLE. COST OF THE TEMPORARY IMPACT ATTENUATOR SHALL BE INCIDENTAL TO THE PAY ITEM FOR THE WOOD POLE.

7. MAINTAIN A MINIMUM FROM GROUND PER NEC SECTION 225.18 FOR ALL AERIAL CABLES AND MAINTAIN CLEARANCES REQUIRED BY ComEd STANDARDS.



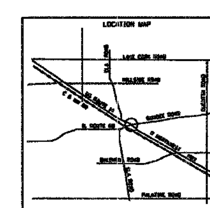
1 ROADWAY TEMPORARY LIGHTING PLAN

SCALE: 1 : 500

5 0 5 10 15 20 25

SCALE IN METERS

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\E-LT-12 - Temporary LTG.dgn
2/13/2007 3:18:54 PM 500.0000 M / M.



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY TEMPORARY LIGHTING PLAN

US 14 STA. 13+400 TO STA. 13+725

SCALE 1:500

DATE NOVEMBER 2006

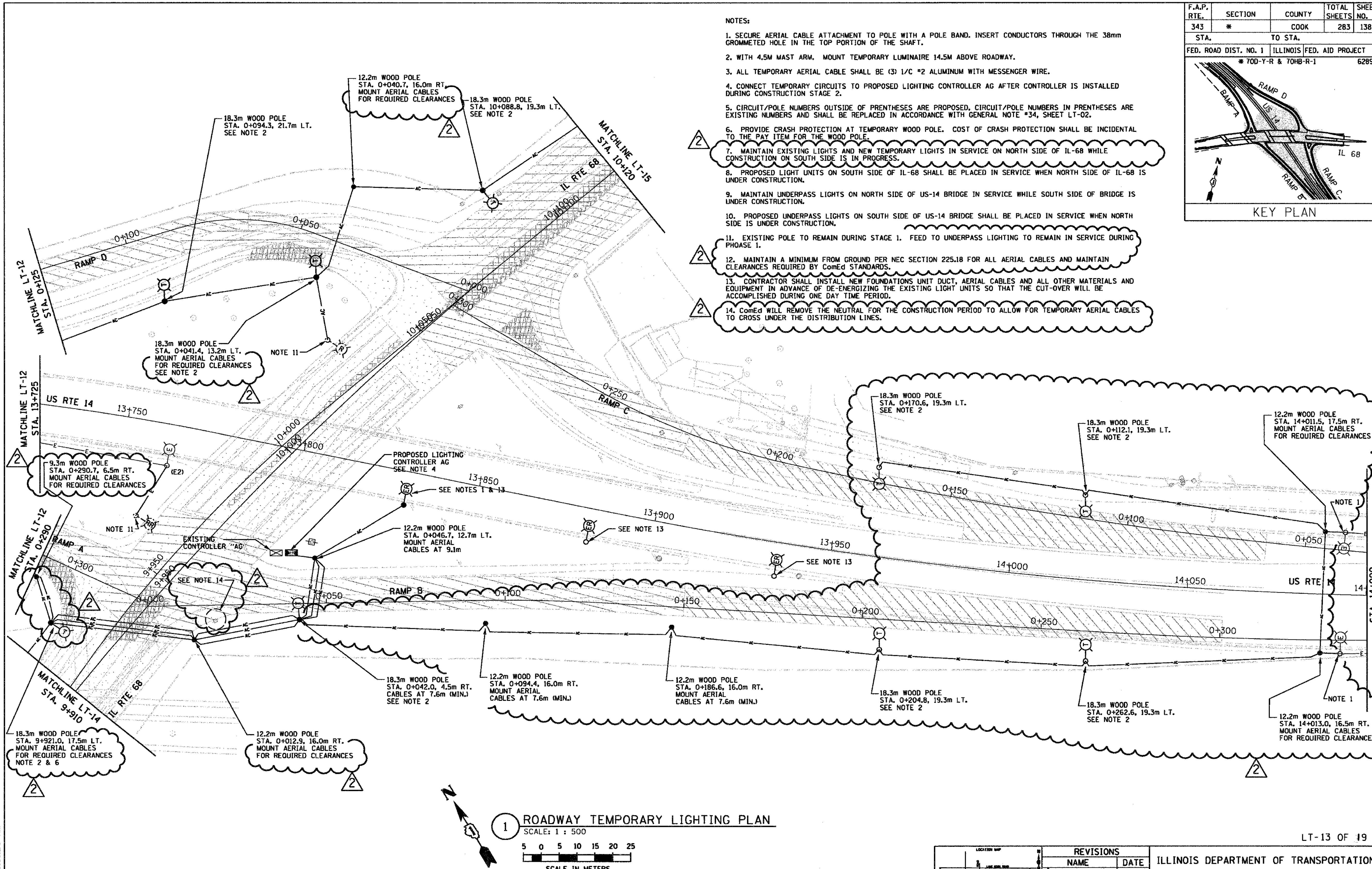
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	138
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-R & 70HB-R-1				62897

KEY PLAN

NOTES:

1. SECURE AERIAL CABLE ATTACHMENT TO POLE WITH A POLE BAND. INSERT CONDUCTORS THROUGH THE 38mm GROMMETED HOLE IN THE TOP PORTION OF THE SHAFT.
2. WITH 4.5M MAST ARM. MOUNT TEMPORARY LUMINAIRE 14.5M ABOVE ROADWAY.
3. ALL TEMPORARY AERIAL CABLE SHALL BE (3) 1/C #2 ALUMINUM WITH MESSENGER WIRE.
4. CONNECT TEMPORARY CIRCUITS TO PROPOSED LIGHTING CONTROLLER AG AFTER CONTROLLER IS INSTALLED DURING CONSTRUCTION STAGE 2.
5. CIRCUIT/POLE NUMBERS OUTSIDE OF PRENTHESES ARE PROPOSED. CIRCUIT/POLE NUMBERS IN PRENTHESES ARE EXISTING NUMBERS AND SHALL BE REPLACED IN ACCORDANCE WITH GENERAL NOTE #34, SHEET LT-02.
6. PROVIDE CRASH PROTECTION AT TEMPORARY WOOD POLE. COST OF CRASH PROTECTION SHALL BE INCIDENTAL TO THE PAY ITEM FOR THE WOOD POLE.
7. MAINTAIN EXISTING LIGHTS AND NEW TEMPORARY LIGHTS IN SERVICE ON NORTH SIDE OF IL-68 WHILE CONSTRUCTION ON SOUTH SIDE IS IN PROGRESS.
8. PROPOSED LIGHT UNITS ON SOUTH SIDE OF IL-68 SHALL BE PLACED IN SERVICE WHEN NORTH SIDE OF IL-68 IS UNDER CONSTRUCTION.
9. MAINTAIN UNDERPASS LIGHTS ON NORTH SIDE OF US-14 BRIDGE IN SERVICE WHILE SOUTH SIDE OF BRIDGE IS UNDER CONSTRUCTION.
10. PROPOSED UNDERPASS LIGHTS ON SOUTH SIDE OF US-14 BRIDGE SHALL BE PLACED IN SERVICE WHEN NORTH SIDE IS UNDER CONSTRUCTION.
11. EXISTING POLE TO REMAIN DURING STAGE 1. FEED TO UNDERPASS LIGHTING TO REMAIN IN SERVICE DURING PHOASE 1.
12. MAINTAIN A MINIMUM FROM GROUND PER NEC SECTION 225.18 FOR ALL AERIAL CABLES AND MAINTAIN CLEARANCES REQUIRED BY ComEd STANDARDS.
13. CONTRACTOR SHALL INSTALL NEW FOUNDATIONS UNIT DUCT, AERIAL CABLES AND ALL OTHER MATERIALS AND EQUIPMENT IN ADVANCE OF DE-ENERGIZING THE EXISTING LIGHT UNITS SO THAT THE CUT-OVER WILL BE ACCOMPLISHED DURING ONE DAY TIME PERIOD.
14. ComEd WILL REMOVE THE NEUTRAL FOR THE CONSTRUCTION PERIOD TO ALLOW FOR TEMPORARY AERIAL CABLES TO CROSS UNDER THE DISTRIBUTION LINES.



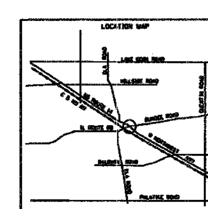
(1) ROADWAY TEMPORARY LIGHTING PLAN

SCALE: 1 : 500

5 0 5 10 15 20 25

SCALE IN METERS

LT-13 OF 19



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY TEMPORARY LIGHTING PLAN

IL 68 STA. 9+910 TO STA. 10+120

US 14 STA. 13+725 TO STA. 14+100

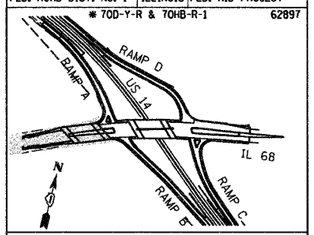
SCALE 1:500 DRAWN BY R.P.J.

DESIGNED BY I.B.

DATE NOVEMBER 2006 CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-LT-13 - Temporary LTG.dgn
2/14/2007 9:31:26 AM 500.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	139
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-R & 70HB-R-1				62897



KEY PLAN

NOTES:

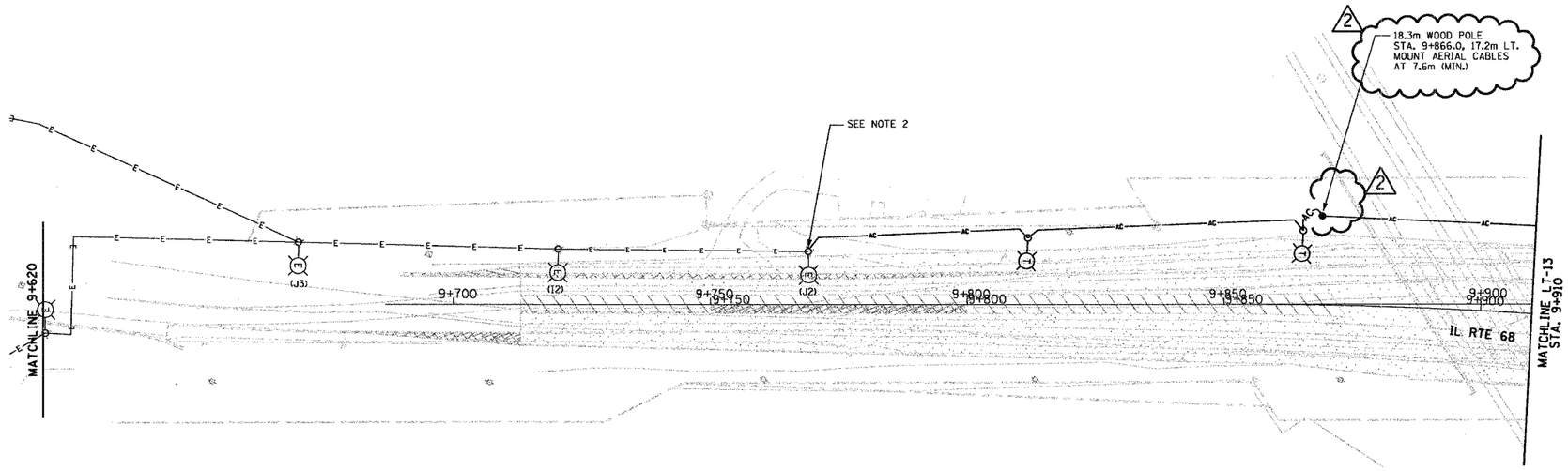
1. ALL TEMPORARY AERIAL CABLE SHALL BE (3) 1/C #2 ALUMINUM WITH MESSENGER WIRE.

2. SECURE AERIAL CABLE ATTACHMENT TO POLE WITH A POLE BAND. INSERT CONDUCTORS THROUGH THE 38mm GROMMETED HOLE IN THE TOP PORTION OF THE SHAFT.

3. CIRCUIT/POLE NUMBERS OUTSIDE OF PRENTHESES ARE PROPOSED,CIRCUIT/POLE NUMBERS IN PRENTHESES ARE EXISTING NUMBERS AND SHALL BE REPLACED IN ACCORDANCE WITH GENERAL NOTE #34, SHEET LT-02.

4. MAINTAIN EXISTING LIGHTS IN SERVICE ON NORTH SIDE OF IL-68 WHILE CONSTRUCTION ON SOUTH SIDE IS IN PROGRESS.

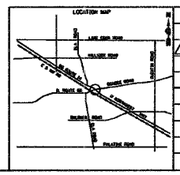
5. MAINTAIN A MINIMUM FROM GROUND PER NEC SECTION 225.18 FOR ALL AERIAL CABLES AND MAINTAIN CLEARANCES REQUIRED BY ComEd STANDARDS.



1 ROADWAY TEMPORARY LIGHTING PLAN
SCALE: 1 : 500

5 0 5 10 15 20 25
SCALE IN METERS

LT-14 OF 19



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
ROADWAY TEMPORARY LIGHTING PLAN
IL 68 STA. 9+620 TO STA. 9+910

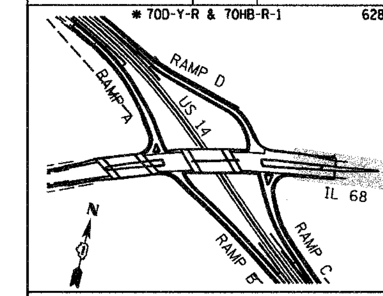
SCALE 1:500
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
D615000 - IL 68 over US 14
P615000 - IL 68 over US 14
2/13/2007 3:26:55 PM

Working Files\Drawing Files\Sht-TE-LT-14 - Temporary LTG.dgn
500.0000 W / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	140
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 70D-Y-R & 70HB-R-1				62897



KEY PLAN

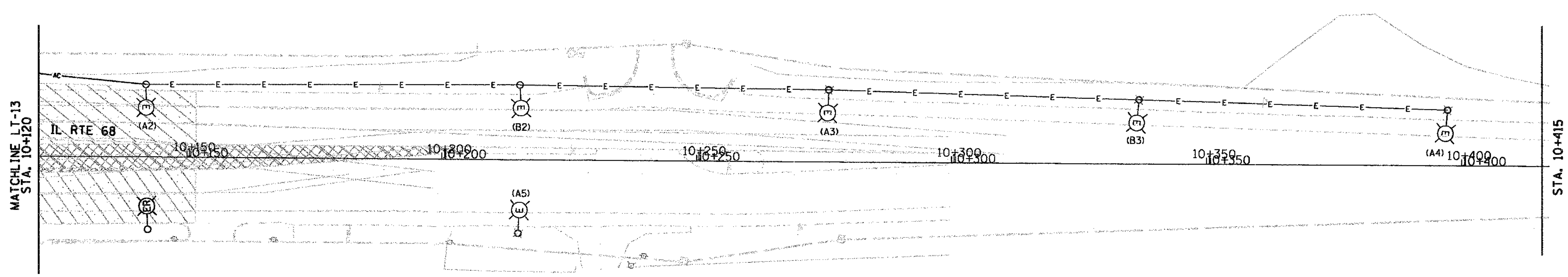
NOTES:

1. ALL TEMPORARY AERIAL CABLE SHALL BE (3) 1/C #2 ALUMINUM WITH MESSENGER WIRE.

2. CIRCUIT/POLE NUMBERS OUTSIDE OF PRENTHESES ARE PROPOSED. CIRCUIT/POLE NUMBERS IN PRENTHESES ARE EXISTING NUMBERS AND SHALL BE REPLACED IN ACCORDANCE WITH GENERAL NOTE #34, SHEET LT-02.

3. MAINTAIN EXISTING LIGHTS IN SERVICE ON NORTH SIDE OF IL-68 WHILE CONSTRUCTION ON SOUTH SIDE IS IN PROGRESS.

4. MAINTAIN A MINIMUM FROM GROUND PER NEC SECTION 225.18 FOR ALL AERIAL CABLES AND MAINTAIN CLEARANCES REQUIRED BY ComEd STANDARDS.



N

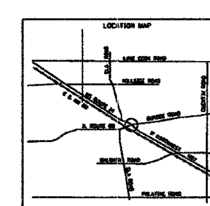
1 ROADWAY TEMPORARY LIGHTING PLAN

SCALE: 1 : 500

5 0 5 10 15 20 25

SCALE IN METERS

LT-15 OF 19



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

ROADWAY TEMPORARY LIGHTING PLAN

IL 68 STA. 10+120 TO STA. 10+415

SCALE 1:500

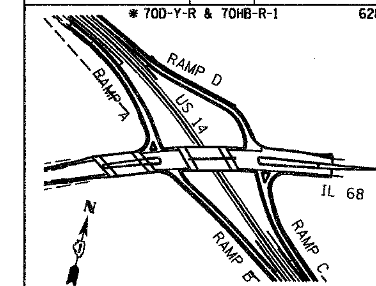
DATE NOVEMBER 2006

DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

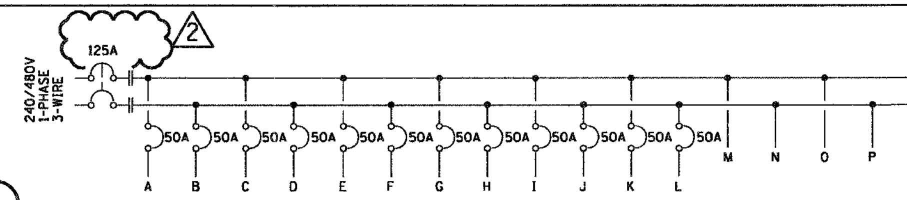
Rick Johns
IDOT- District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sheets\E-LT-15 - Temporary LTG.dgn
2/13/2007 3:27:17 PM 500.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	141
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 70D-Y-R & 70HB-R-1 62897

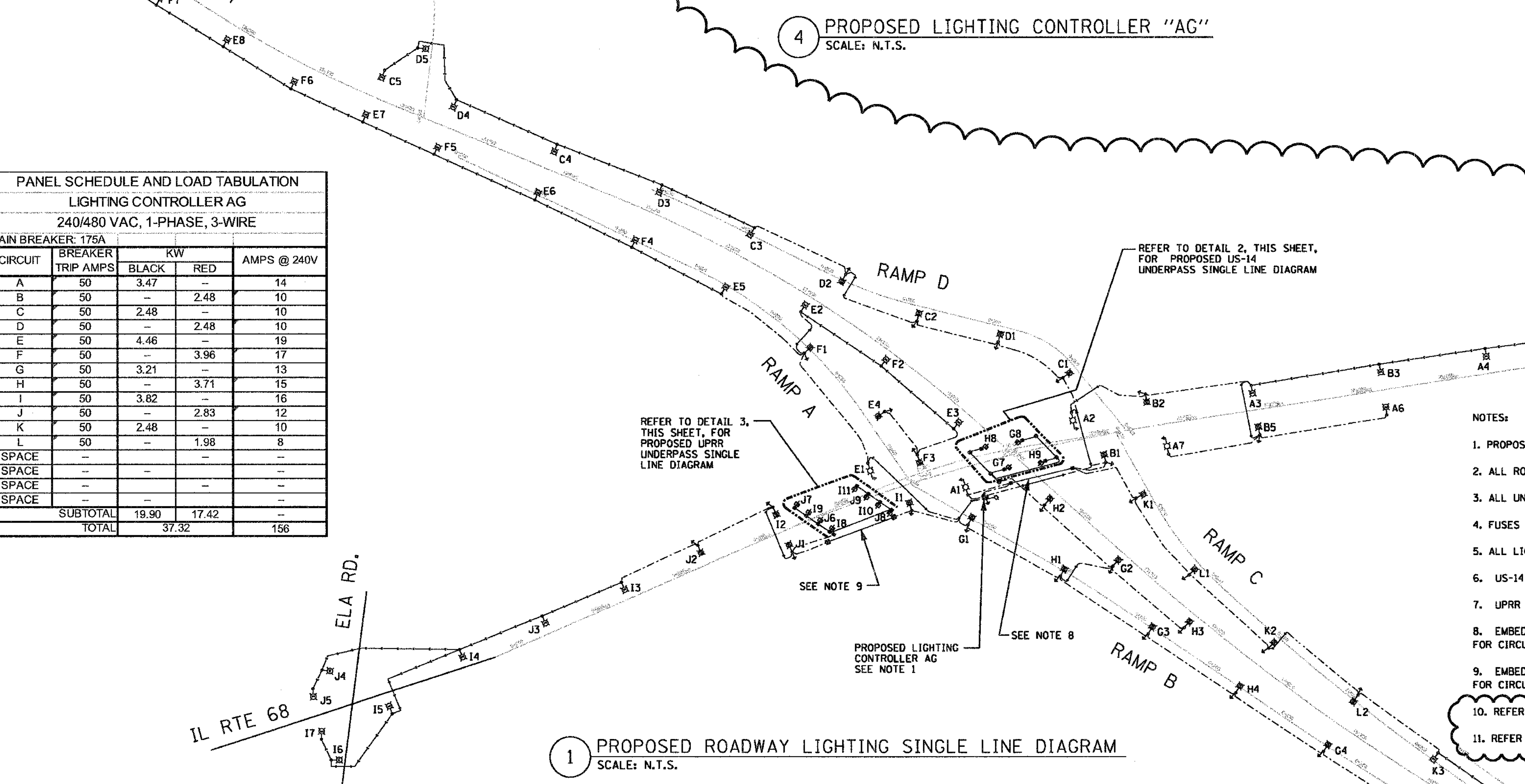


KEY PLAN



4 PROPOSED LIGHTING CONTROLLER "AG"
SCALE: N.T.S.

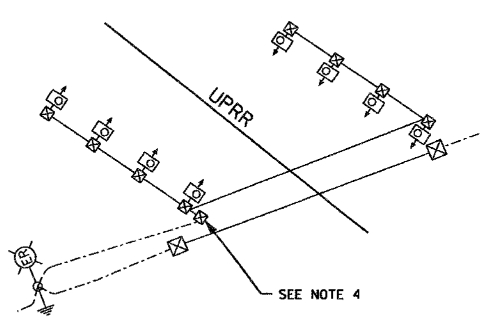
PANEL SCHEDULE AND LOAD TABULATION				
LIGHTING CONTROLLER AG				
240/480 VAC, 1-PHASE, 3-WIRE				
MAIN BREAKER: 175A				
CIRCUIT	BREAKER TRIP AMPS	KW		AMPS @ 240V
		BLACK	RED	
A	50	3.47	--	14
B	50	--	2.48	10
C	50	2.48	--	10
D	50	--	2.48	10
E	50	4.46	--	19
F	50	--	3.96	17
G	50	3.21	--	13
H	50	--	3.71	15
I	50	3.82	--	16
J	50	--	2.83	12
K	50	2.48	--	10
L	50	--	1.98	8
SPACE	--		--	--
SPACE	--	--		--
SPACE	--		--	--
SPACE	--	--		--
	SUBTOTAL	19.90	17.42	--
	TOTAL	37.32		156



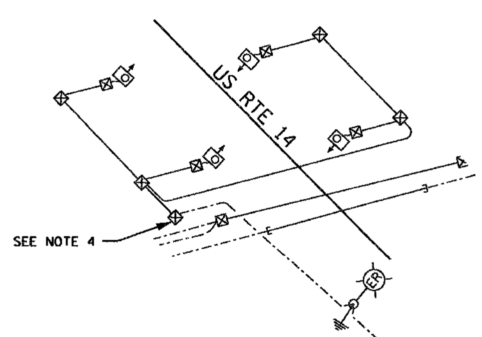
1 PROPOSED ROADWAY LIGHTING SINGLE LINE DIAGRAM
SCALE: N.T.S.

NOTES:

1. PROPOSED CONTROLLER "AG", 480/240V, 1 PHASE, 3 WIRE, 200A.
2. ALL ROADWAY LIGHTING CONDUCTORS ARE #4 COPPER, 600V RHH/RHW/EPR AND #6 GROUND.
3. ALL UNDERPASS LIGHTING CONDUCTORS ARE #10 COPPER, 600V, INCLUDING GROUND WIRE.
4. FUSES FOR UNDERPASS CIRCUITS A AND B ARE LOCATED IN JUNCTION BOX.
5. ALL LIGHT POLES ARE FUSED AT BASE.
6. US-14 UNDERPASS LUMINAIRES ARE 100W HPS.
7. UPRR UNDERPASS LUMINAIRES ARE 70W HPS.
8. EMBEDDED CONDUIT CONTAINS 6-1/C #4 AND 1-1/C #6 600V GROUND TYPE RHH/RHW/EPR FOR CIRCUITS A&B AND L&M.
9. EMBEDDED CONDUIT CONTAINS 3-1/C #4 AND 1-1/C #6 600V GROUND TYPE RHH/RHW/EPR FOR CIRCUITS I&J.
10. REFER TO SHEET LT-17 FOR BRIDGE CROSSING DETAILS.
11. REFER TO SHEET LT-18 FOR UNDERPASS DETAILS.



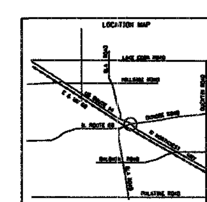
3 PROPOSED UPRR UNDERPASS SINGLE LINE DIAGRAM
SCALE: N.T.S.



2 PROPOSED US-14 UNDERPASS SINGLE LINE DIAGRAM
SCALE: N.T.S.

ROADWAY LIGHTING LEGEND

- EXISTING ROADWAY LUMINAIRE TO BE RELABELED
- RELOCATED EXISTING ROADWAY LUMINAIRE
- PROPOSED ROADWAY LUMINAIRE COMBINATION TRAFFIC SIGNAL
- PROPOSED UNDERPASS LUMINAIRE
- PROPOSED JUNCTION BOX
- PROPOSED LIGHTING CONTROLLER



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

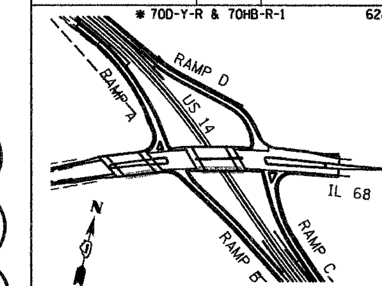
ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
ROADWAY LIGHTING
SINGLE LINE DIAGRAM

SCALE NONE
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

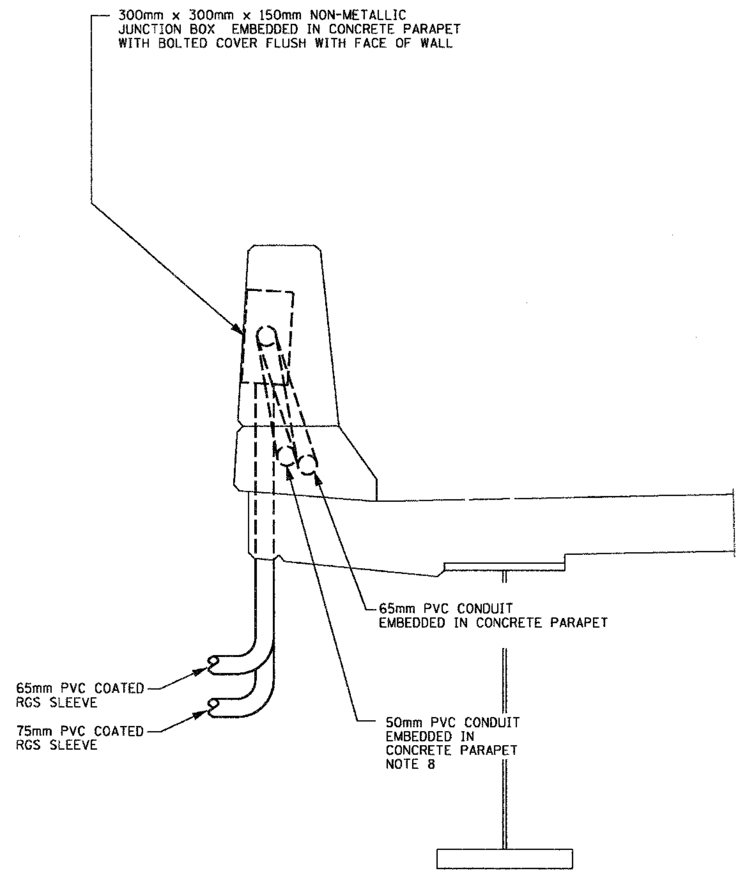
Rick Johns
IDOT District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-LT-16 - Single Line Diagram.dgn
2/14/2007 9:32:12 AM 1500.0000 M / M.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	*	COOK	283	142
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 70D-Y-R & 70HB-R-1 62897



KEY PLAN



1 SECTION A-A THRU PARAPET
SCALE: N.T.S.

NOTES

1. 50mm EMBEDDED PVC CONDUITS SHALL BE PLACED IN THE LOWER CURBED PORTION OF THE PARAPET.

2. COORDINATE WITH OTHER TRADES TO MAINTAIN 5mm CLEARANCE FROM ALL REINFORCEMENTS.

3. FOR US RTE 14 BRIDGE; 2-UNIT DUCTS EACH WITH 3-1/C NO. 4 AND 1-1/C NO. 6 GRD. 600V TYPE RHH/RHW/EPR LIGHTING CONDUCTORS.
FOR UPRR BRIDGE; 1-UNIT DUCTS WITH 3-1/C NO. 4 AND 1-1/C NO. 6 GRD. 600V TYPE RHH/RHW/EPR LIGHTING CONDUCTORS.

4. UNIT DUCT WITH TRAFFIC SIGNAL FIBER OPTIC CABLES. REFER TO SHEETS TS-12 AND TS-13.

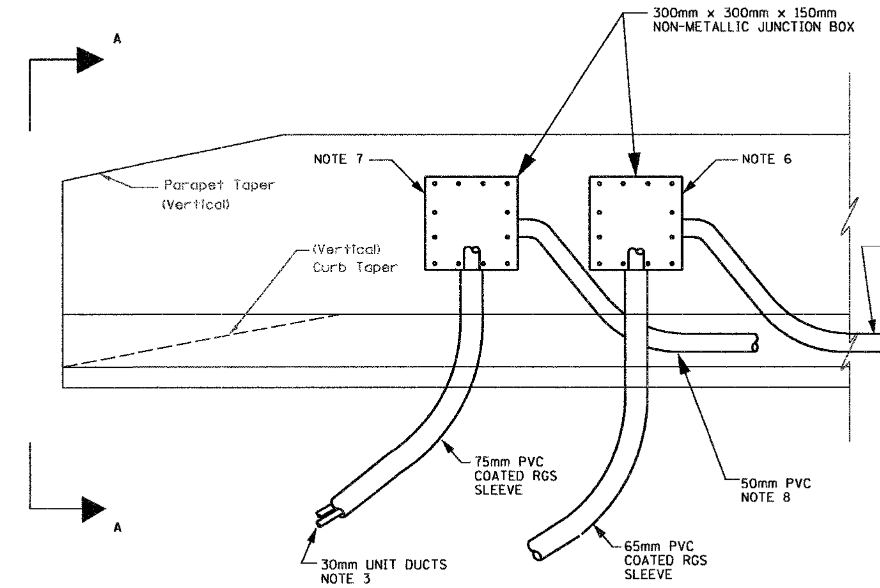
5. PROVIDE EXPANTION / DEFLECTION CONDUIT COUPLINGS AT EACH PARAPET EXPANTION JOINT.

6. JUNCTION BOX FOR TRAFFIC SIGNALS EMBEDDED IN PARAPET WALL.

7. JUNCTION BOX FOR ELECTRIC EMBEDDED IN PARAPET WALL.

8. 50 nmm WITH 6-1/C*4 AND 2-1/C*6 GROUNDS.

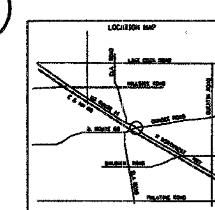
9. REFER TO STRUCTURAL PLANS FOR LOCATION OF JUNCTION BOXES.



2 BRIDGE END ELEVATION
SCALE: N.T.S.

2

LT-17 OF 19

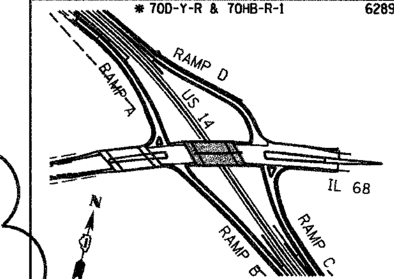


REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

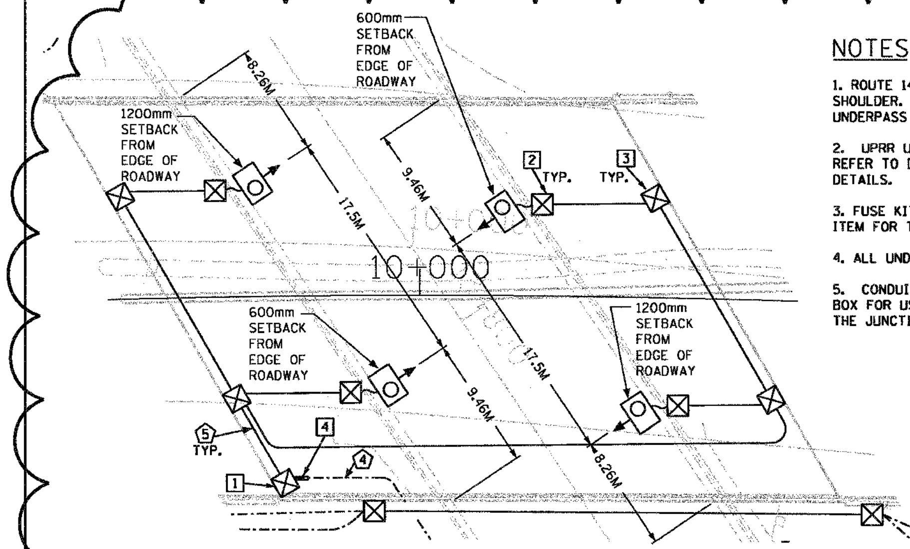
ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14
ROADWAY LIGHTING
BRIDGE CROSSING DETAILS

SCALE NONE
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

Rick Johns
IDOT - District 01
06119.000 - IL 68 over US 14
P:\06119.000 - IL 68 over US 14\Working Files\Drawing Files\Sht\E-LT-17 - Bridge Details.dgn
2/14/2007 9:31:48 AM 1.0000 M / M.



KEY PLAN



① UNDERPASS LUMINAIRE WIRING DETAIL
US ROUTE 14 UNDER IL RTE 68
N.T.S.

NOTES

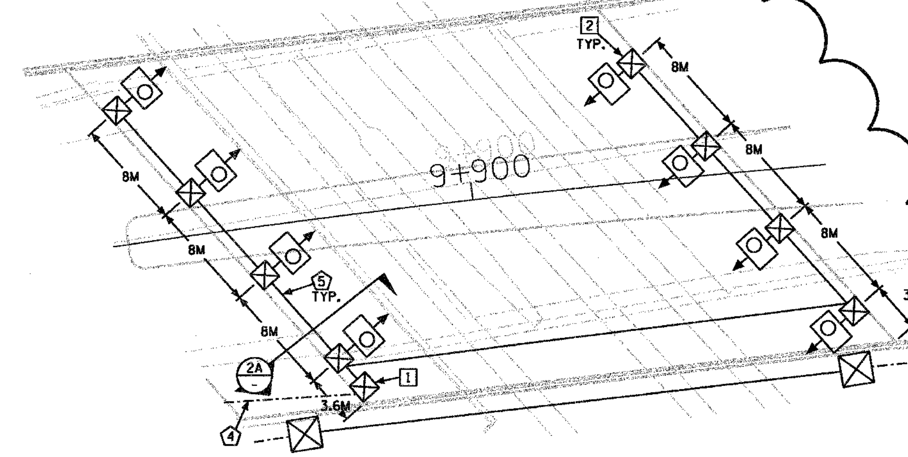
1. ROUTE 14 UNDERPASS LUMINAIRES SHALL BE MOUNTED 4.9m ABOVE THE SHOULDER. REFER TO DRAWING BE-900 FOR SUSPENDED MOUNT UNDERPASS LUMINAIRE DETAILS.

2. UPRR UNDERPASS LUMINAIRES SHALL BE MOUNTED 7.0M ABOVE GRADE. REFER TO DRAWING BE-902 FOR WALL MOUNT UNDERPASS LUMINAIRE DETAILS.

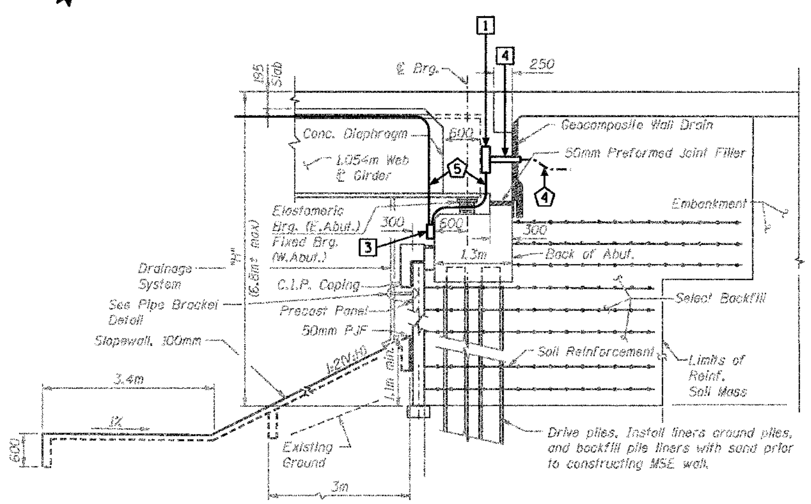
3. FUSE KITS AND GROUND WIRE SPLICE SHALL BE INCLUDED IN THE PAY ITEM FOR THE JUNCTION BOX.

4. ALL UNDERPASS LIGHTING CONDUITS ARE ATTACHED TO STRUCTURE.

5. CONDUIT SLEEVE ENTERS THROUGH THE BOTTOM OF THE JUNCTION BOX FOR US ROUTE 14, CONDUIT SLEEVE ENTERS THROUGH THE BACK OF THE JUNCTION BOX FOR UPRR.



② UNDERPASS LUMINAIRE WIRING DETAIL
UPRR UNDER IL RTE 68
N.T.S.



1A SECTION THRU SEMI-INTEGRAL ABUT.
US ROUTE 14 UNDER IL RTE 68
N.T.S.

TAG NOTES

1. 450mm x 450mm x 200mm STAINLESS STEEL JUNCTION BOX
2. MECHAINCAL SPLICE
3. 75mm PVC COATED RGS SLEEVE
4. 30mm UNIT DUCT
5. 25mm PVC COATED RGS
6. QUICK DISCONNECT FUSE KIT WITH 30A FUSE
7. QUICK DISCONNECT FUSE KIT WITH SOLID NEUTRAL ASSEMBLY
8. *10 COPPER, 600V
9. *4 COPPER, 600V
10. *6 COPPER GROUND
11. 300mm x 300mm x 150mm NON-METALLIC JUNCTION BOX
12. 50mm PVC COATED RGS CONDUIT
13. 65 mm EMBEDDED PVC CONDUIT

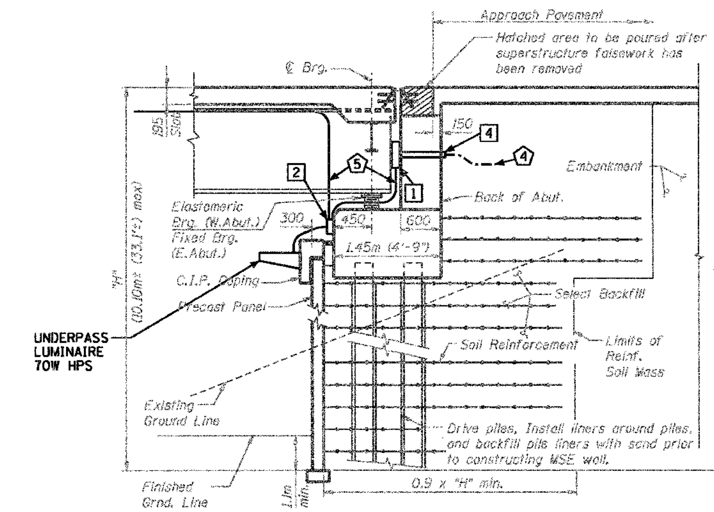
EQUIPMENT LIST

[1] 450mm x 450mm x 200mm STAINLESS STEEL JUNCTION BOX
ATTACHED TO BACKWALL OR WINGWALL.

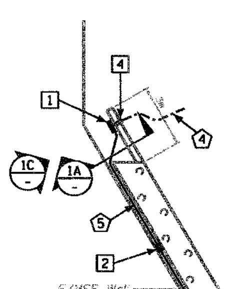
[2] 150mm x 150mm x 100mm STAINLESS STEEL JUNCTION BOX
ATTACHED TO UNDERSIDE OF BRIDGE DECK OR FACE OF ABUTMENT.

[3] 300mm x 250mm x 150mm STAINLESS STEEL JUNCTION BOX
ATTACHED TO FACE OF ABUTMENT.

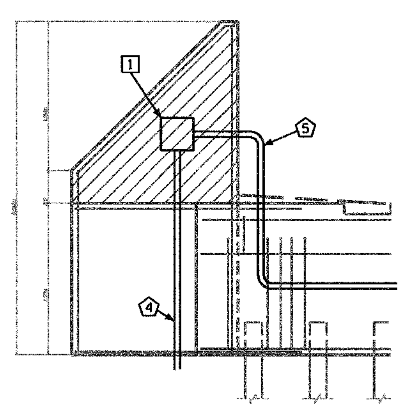
[4] 75mm PVC COATED RGS SLEEVE WITH 30mm UNIT DUCT
AND 3*4 & 1*6 GND CONDUCTORS



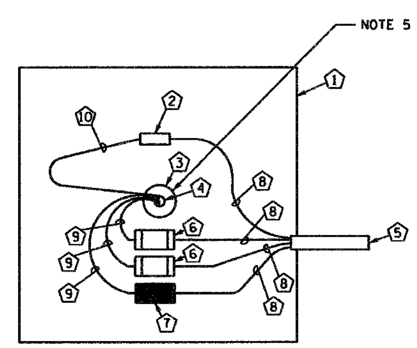
2A SECTION THRU ABUT.
UPRR UNDER IL RTE 68
N.T.S.



1B PARTIAL PLAN DETAIL
US ROUTE 14 UNDER IL RTE 68
N.T.S.

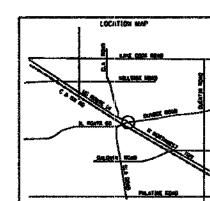


1C PARTIAL ELEVATION DETAIL
US ROUTE 14 UNDER IL RTE 68
N.T.S.



3 MAIN JUNCTION BOX WIRING DETAIL
TYPICAL FOR US ROUTE 14 & UPRR
N.T.S.

LT-18 OF 19



REVISIONS	
NAME	DATE
2 ADDENDUM 2	02/15/07

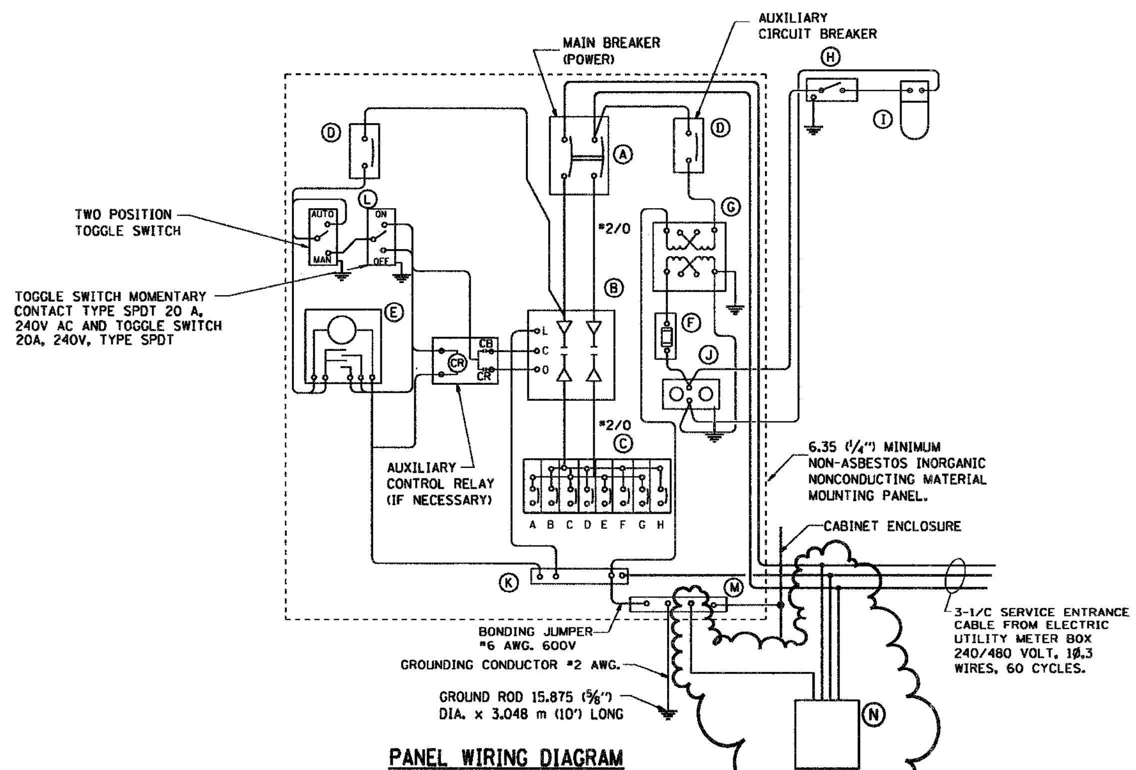
ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 68 AT U.S. ROUTE 14

UNDERPASS LIGHTING DETAILS

SCALE N.T.S.
DATE NOVEMBER 2006

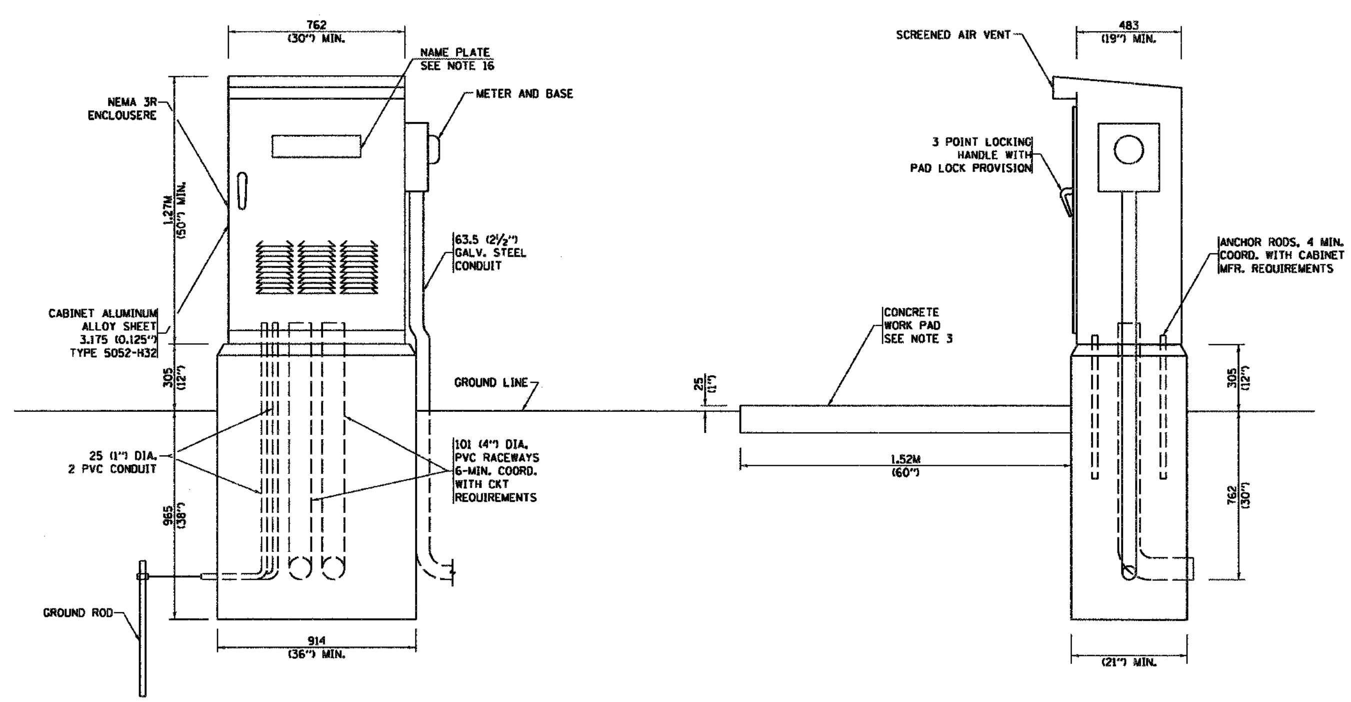
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.



PANEL WIRING DIAGRAM

PANEL EQUIPMENT

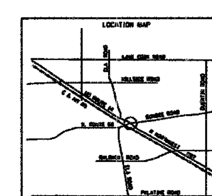
BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 125AMP. FRAME, 100AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 200 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
C	8	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME , 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100AMP. FRAME, 15AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH].
F	1	20 A., 120 V. FUSE.
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 Hz.
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN.
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 6.35 (1/4") X 25.4 (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 101.6 (4") X 101.6 mm (4") BOX.
M	1	COPPER GROUND BUS 6.35 (1/4") X 25.4 (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS
N	1	BRACKET MOUNTED SURGE ARRESTER FOR 480/240V, 3W, SERVICE GE "TRANQUEL" CAT# 9L15ECB001



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 50.8 mm (2") TOP SOIL, LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 914.4 mm (36") x 18.288 m (60") x 101 mm (4") MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
5. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
6. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 6.35 mm (1/4") DIA. STAINLESS STEEL HINGE PIN.
7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
8. CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
9. METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED
11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS
12. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
    R = RED BL = BLUE W = WHITE
    B = BLACK Y = YELLOW G = GREEN
13. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
14. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL"
16. 304.8 (12") X 406.4 mm (16") STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED

MODIFIED BE-215



REVISIONS	
NAME	DATE
1 MODIFIED	09/27/06
2 ADDENDUM 2	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 68 AT U.S. ROUTE 14

LIGHTING CONTROLLER
SINGLE DOOR

SCALE NONE
DATE NOVEMBER 2006
DRAWN BY R.P.J.
DESIGNED BY I.B.
CHECKED BY A.D.O.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	155
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897

BENCH MARK

Chiseled '□' NW Corner of West Abutment of IL-68 bridge over UPRR
Elev. 269.746

EXISTING STRUCTURE

S.N. 016-0523 was built in 1931. The structure was widened, raised, and the superstructure replaced in 1967. In 1994, bituminous overlay was added. The three span structure rests on spread footings at the closed abutments and spread footings at the multi-column piers. The superstructure consists of 690mm deep concrete deck beams with 75mm of overlay. The concrete parapets have steel railings with a fence on the northside. The back to back abutment length is 42.52m and the deck is 23.16m out to out.

During construction of the new structure, staged construction will be utilized to maintain one lane of traffic in each direction.

No salvage.

NOTES:

1. All dimensions in millimeters (mm) except as noted.
2. No free fall deck drains will be permitted in the span over the tracks or within 3m of cross arms of a railroad pole line.
3. The width between the guardrails shall be the width between the bridge rails or parapets which will require approach shoulder widening.

STATION 9+900.324
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 343 SEC 70D-Y-B-R
COOK COUNTY
LOADING HS20
STR. NO. 016-2732

NAME PLATE

See Std. 515001

LOADING HS20-44

Allow 2.4 kN/m² future wearing surface

DESIGN SPECIFICATION

2002 AASHTO Std. Spec. 17th edition

DESIGN STRESSES

NEW CONSTRUCTION

FIELD UNITS

f'c = 24 MPa (concrete)
Fy = 345 MPa (M270M, Gr. 345 Struc. Steel)
fy = 400 MPa (reinforcement)

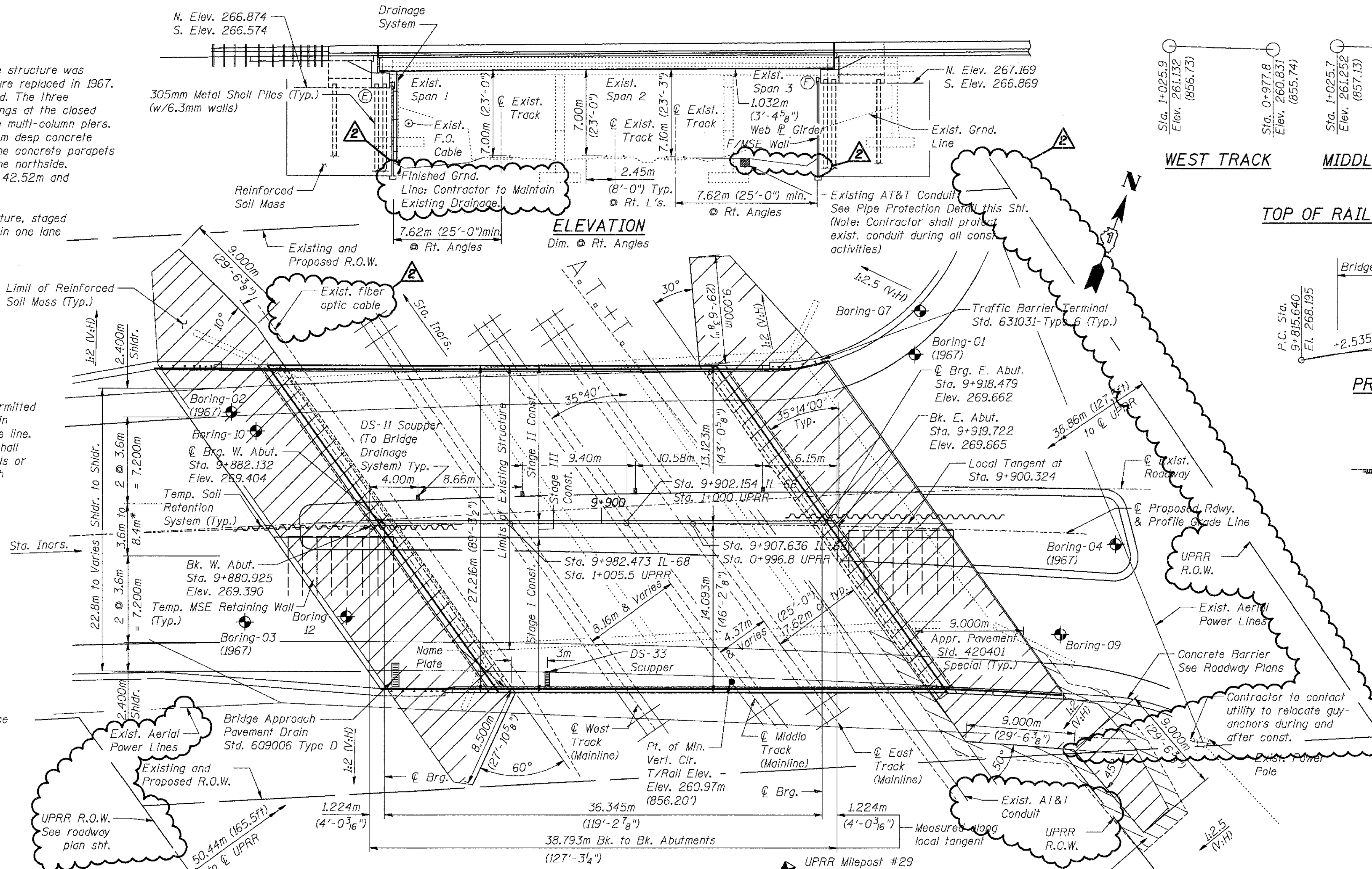
SEISMIC DATA

Seismic Performance Category (SPC)= A
Bedrock Acceleration Coefficient (A)= 0.035g
Site Coefficient (S) = 1.0

HORIZONTAL CURVE DATA

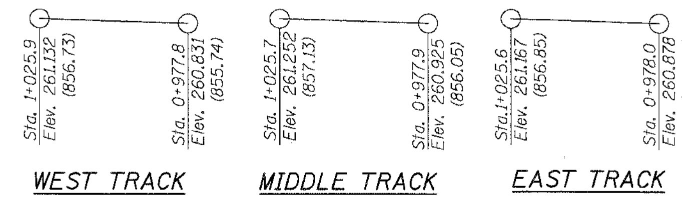
Curve 68-1

PI Sta. = 9+966.854	E = 7.453m
Δ = 14°54'14" RT.	S.E. = 2.4%
R = 875.000m	P.C. Sta. = 9+852.405
T = 114.450m	P.T. Sta. = 10+080.012
L = 227.607m	

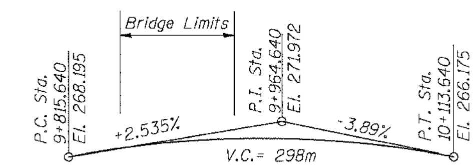


* See roadway plans for taper locations

There is no additional discharge to railroad ditches from the proposed structure.

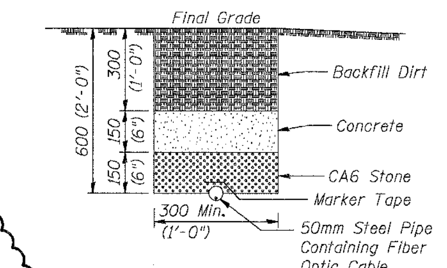


TOP OF RAIL ELEVATIONS UPRR

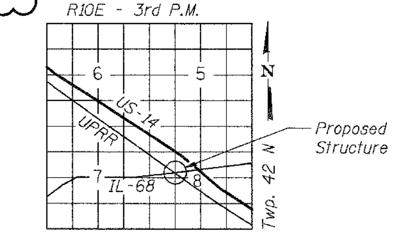


PROFILE GRADE LINE

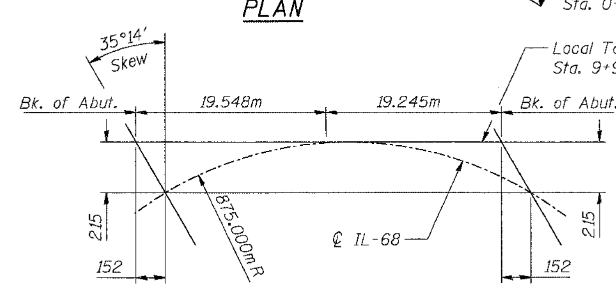
IL Route 68
(NTS)



50MM STEEL PIPE PROTECTION DETAIL



LOCATION SKETCH



OFFSET SKETCH

Addendum #2 2/15/07

SHT. S-01 OF S-34

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

GENERAL PLAN

DATE: 02/07 DESIGNED: BTO CHECKED: JAN DRAWN: BTO CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	156

STA. TO STA.

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

CONTRACT NO. 62897

GENERAL NOTES

1. Fasteners shall be high strength bolts. Bolts M22, open holes 24 mm ⌀, unless otherwise noted.
2. Calculated weight of Structural Steel:
   AASHTO (M270M GR 345) = 149,100 kg (Erection Only-Included in Beam Fabrication Contract)
   AASHTO (M270M GR 250) = 15,950 kg (Erection Only-Included in Beam Fabrication Contract)
3. Field welding of construction accessories will not be permitted to girders.
4. Anchor bolts shall be set before bolting diaphragms over supports.
5. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges and webs of the plate girders.
6. Reinforcement bars shall conform to the requirements of AASHTO M31M, M322M Grade 400.
7. Metal Shell Piles at east abutment shall be driven in holes precored through the embankment according to Article 512.09(c) of the Standard Specifications.
8. The contractor shall drive 2-305 mm metal shell test piles in a permanent location, one for each abutment as directed by the Engineer before ordering the remainder of the piles.
9. All dimensions are in millimeters (mm) except as noted.
10. Concrete Sealer shall be applied to the seat area of the Abutments.
11. All construction joints shall be bonded.
12. The organic zinc rich primer/epoxy/urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5HB 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures."
13. Slipforming of parapets containing conduit is not allowed.

UPRR NOTES

1. Railroad review and approval of shoring, demolition, erection, and falsework is required.
2. All shoring systems that impacts the Railroad's operations and/or supports the Railroad's embankment shall be designed and constructed per current Union Pacific Railroad Guidelines for Temporary Shoring.
3. All demolitions within the Railroad's right-of-way and/or demolition that may impact the Railroad's tracks or operations shall be in compliance with the Railroad's Demolition Guidelines.
4. Erection over the Railroad's right-of-way shall be designed to cause no interruption to Railroad's operations. Erection over the Railroad's track shall be developed such that it enables the tracks to remain open to train traffic per Railroad's requirements.
5. Minimum Construction Clearance Envelope of 21 feet vertical above the plane of top-of-rail and 12 feet horizontal at right angle from centerline of track shall be maintained at all time during construction.
6. Falsework clearance shall comply with the Railroad's Minimum Construction Clearance Envelope.
7. For Railroad coordination please refer to the Railroad Minimum Requirements as part of special provisions.
8. The contractor must submit a proposed method of erosion and sediment control and have the method approved by the railroad.
9. The proposed grade separation project shall not change the quantity and/or characteristics of the flow in the Railroad ditches and/or drainage structures.
10. The elevation of the existing top-of-rail profile shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Railroad prior to construction.

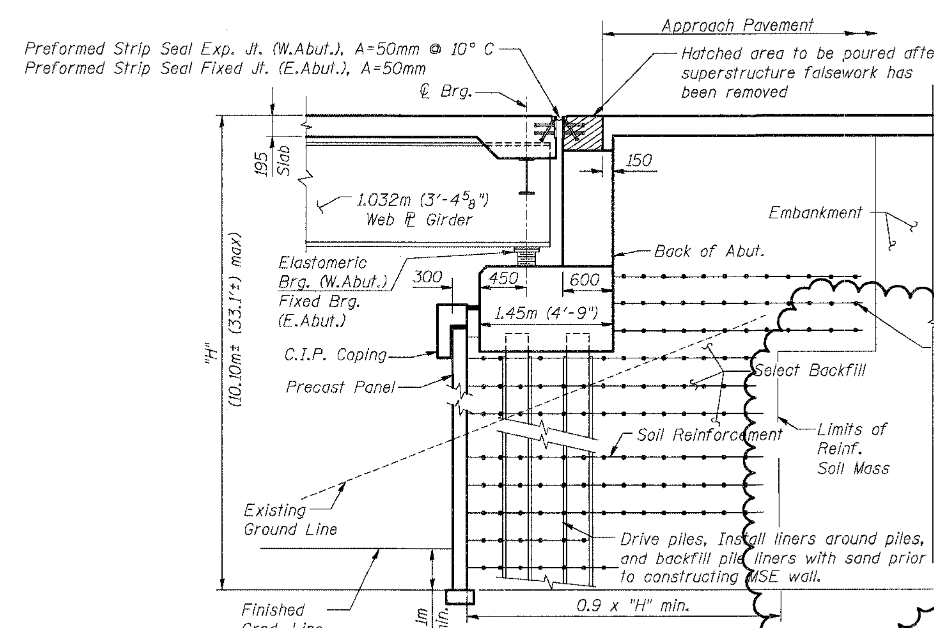
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUB-STRUCT.	SUPER-STRUCT.	TOTAL
Removal and Disposal of Unsuitable Material	CU M	511		511
Porous Granular Embankment, Subgrade	CU M	511		511
Removal of Existing Structures*	EACH			1
Structure Excavation	CU M	5279		5279
Concrete Structures	CU M	183.6		183.6
Concrete Superstructure	CU M		303.3	303.3
Bridge Deck Grooving	SQ M		747	747
Protective Coat	SQ M		1074	1074
Erecting Elastomeric Bearing Assembly, Type I	EACH		10	10
Erecting Structural Steel	L.S.		0.45	0.45
Stud Shear Connectors	EACH		2550	2550
Reinforcement Bars, Epoxy Coated	KG	10750	42390	53140
Furnishing Metal Shell Piles 305mm	METER	1396		1396
Driving Piles	METER	1396		1396
Anchor Bolts, M24	EACH	20		20
Anchor Bolts, M36	EACH	20		20
Test Pile Metal Shells	EACH	2		2
Temporary Soil Retention System	SQ M	218		218
Name Plates	EACH	1		1
Concrete Sealer	SQ M	57		57
Temporary Mechanically Stabilized Earth Retaining Wall	SQ M	255		255
Drainage Scuppers, DS-11	EACH		4	4
Drainage Scuppers, DS-33	EACH		1	1
Drainage System No. 2	EACH		1	1
Bar Splicers	EACH	256	519	775
Preformed Joint Strip Seal	METER		65.8	65.8
Mechanically Stabilized Earth Retaining Wall	SQ M	726		726
~~Erecting Precast Prestressed Concrete Deck Beam, (686 MM Depth)~~	~~SQ M~~		~~12.58~~	~~12.58~~
~~Hot-Mix Asphalt Replacement Over Patches~~	~~M TON~~		~~3.1~~	~~3.1~~
Asbestos Bearing Pad Removal	EACH		100	100

* Removal of Crib Wall in Front of Existing West Abutment and Track Shield are Included in "Removal of Existing Structures".

NOTE: 'Protective Shield' Quantity Removed

INDEX OF SHEETS



MSE wall supplier to design the abutment Soil Reinforcement to resist a horizontal force of 6.47 kN/m.

Cost of Select Backfill behind abutment and abutment Soil Reinforcement is included in the cost of MSE wall

SECTION THRU ABUT.

Dimensions at Right Angles

Bearing Capacity of soil below MSE Wall is 215 kPa with a corresponding Factor of Safety of 2.5.

2 **Addendum #2 2/15/07**

SHT. S-02 OF S-34

REVISIONS	
NAME	DATE

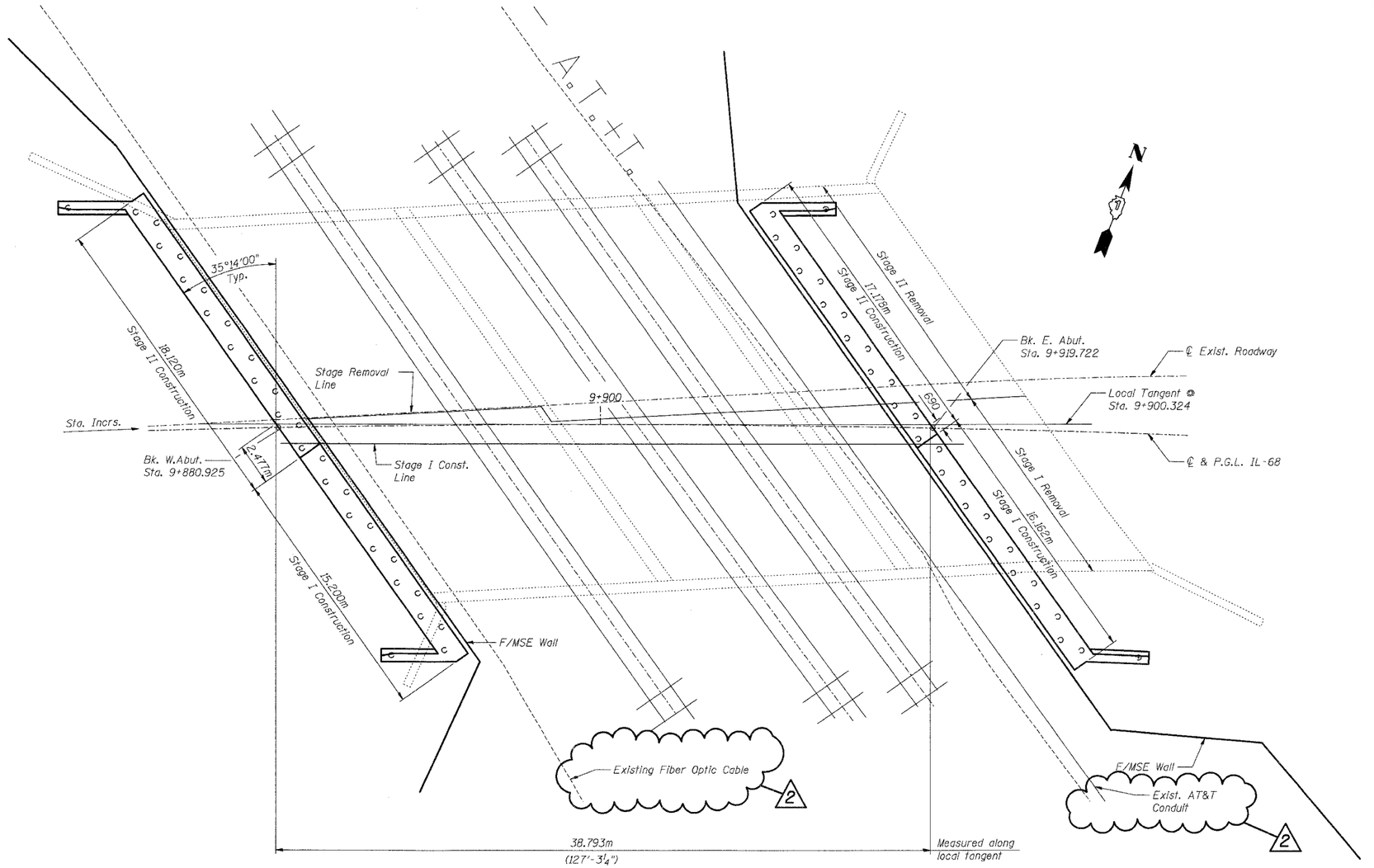
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

GENERAL NOTES, B.O.M., & INDEX OF SHEETS

DATE: 02/07 DESIGNED: BTO CHECKED: JAN DRAWN: BTO CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	157
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897



PLAN

NOTE:

For Abutment pile layout, see shts. S-23 & S-26 of S-34.

SHT. S-03 OF S-34

REVISIONS	
NAME	DATE

2 Addendum #2 2/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

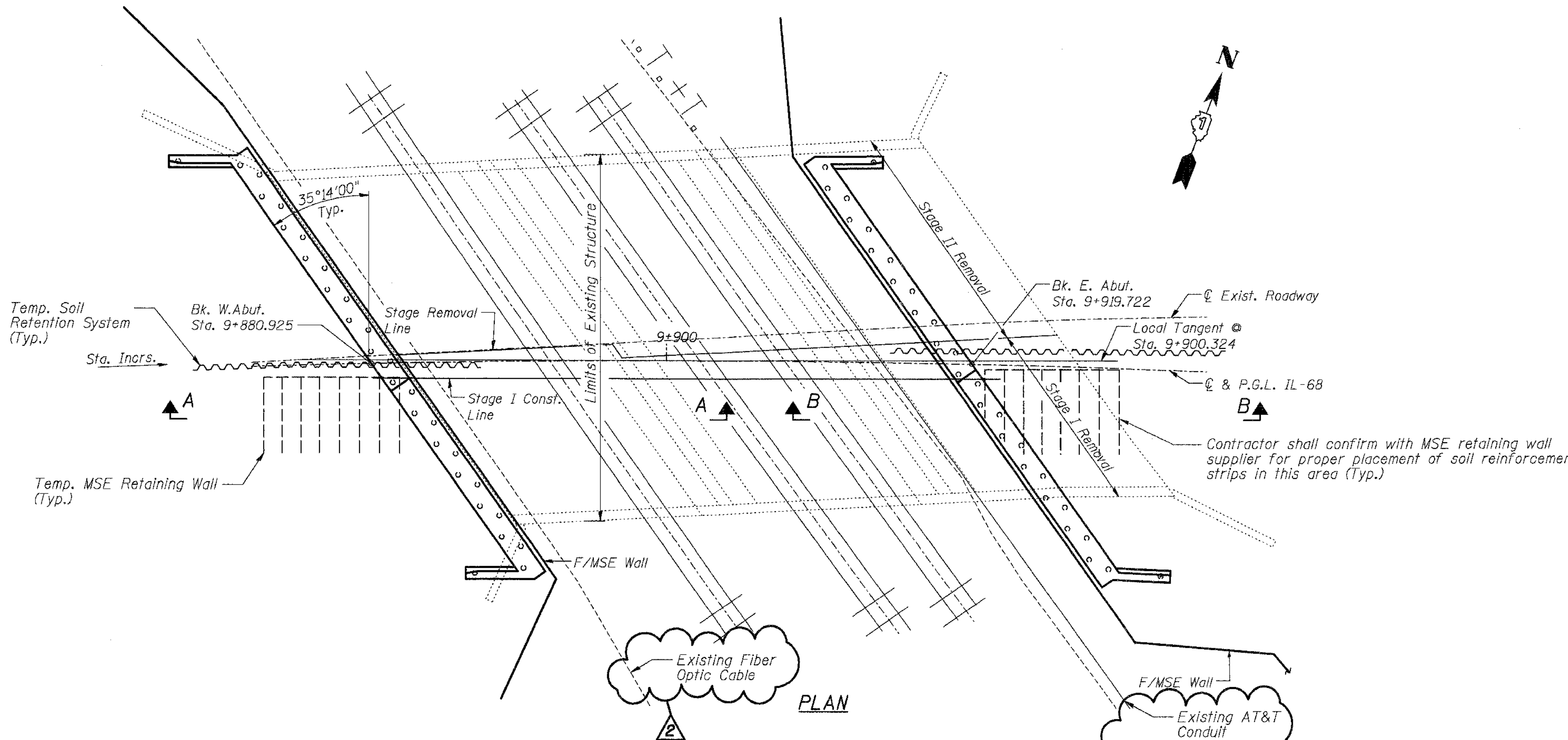
FOUNDATION PLAN

DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

...\454.dgn 933p sheet2.dgn 2/15/2007 3:11:34 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	158
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897

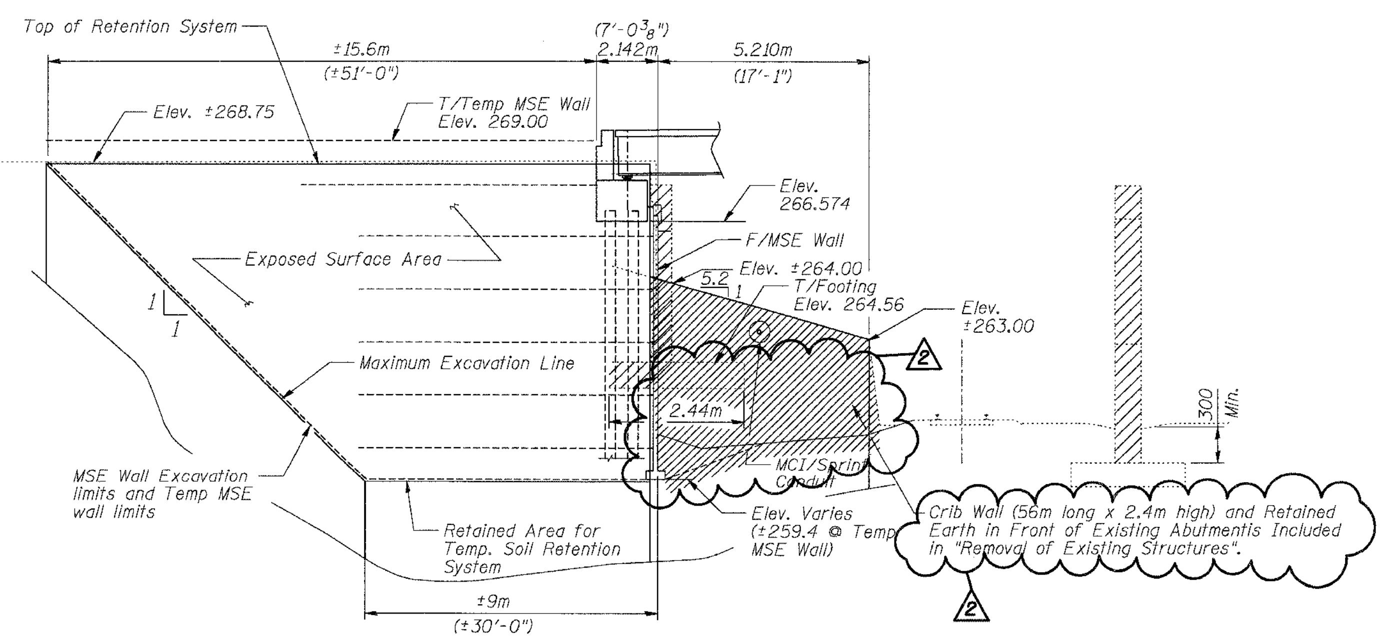


BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System	SQ M	218
Temporary Mechanically Stabilized Earth Retaining Wall	SQ M	255

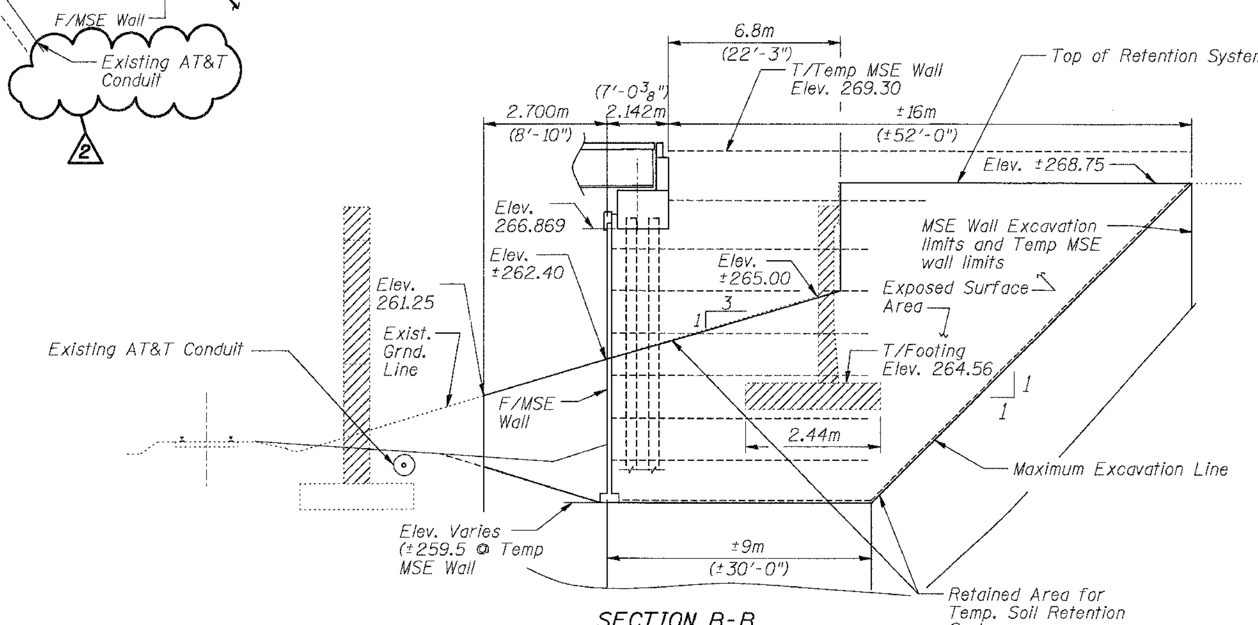
NOTE:

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



SECTION A-A

Distances shown along alignment of sheeting



SECTION B-B

Distances shown along alignment of sheeting

SHT. S-04 OF S-34

LEGEND

Structure Removal

Addendum #2 2/15/07

REVISIONS NAME	DATE

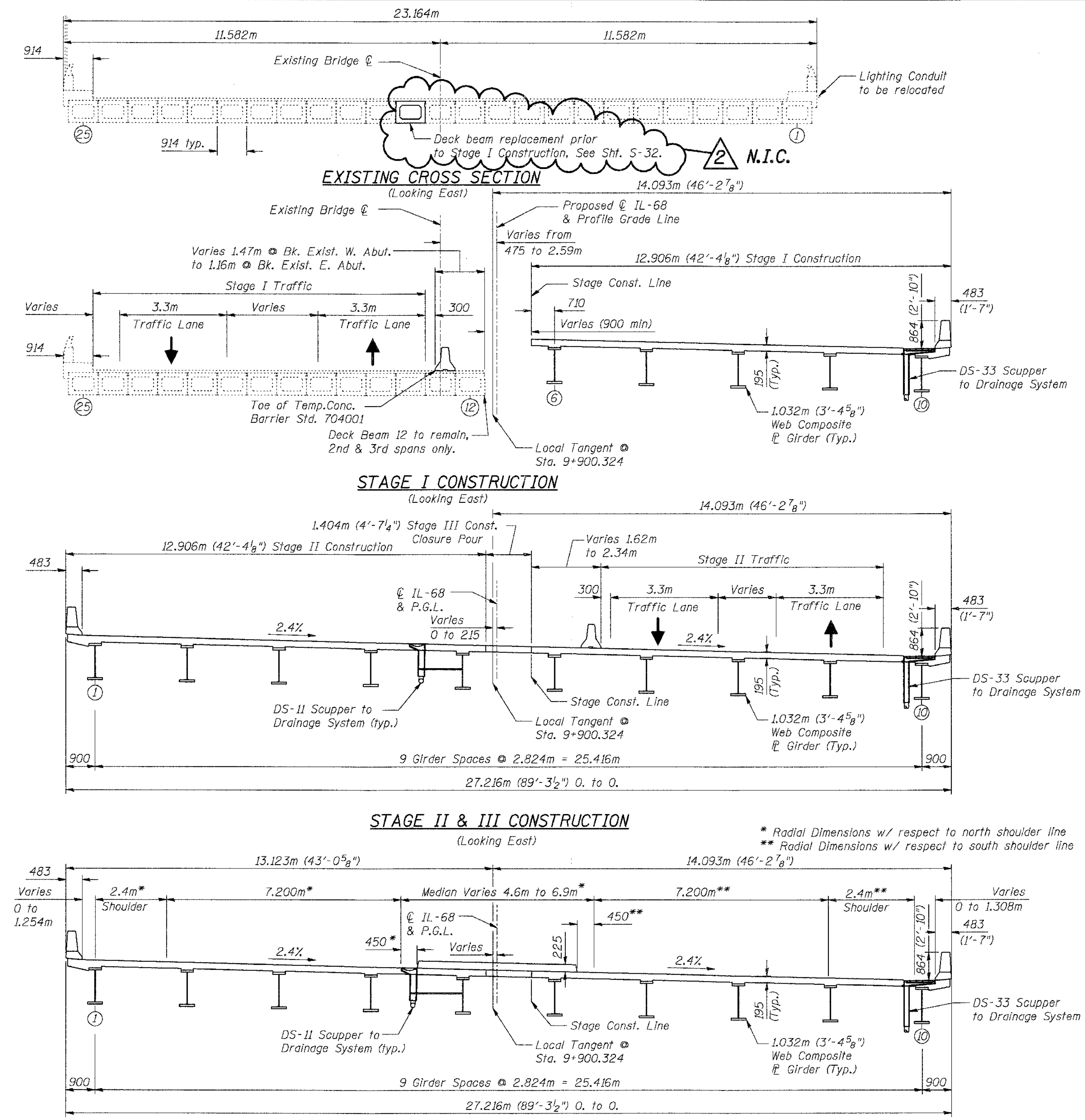
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

TEMPORARY SOIL RETENTION SYSTEM AND TEMPORARY MSE WALL

DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	160
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897



TYPICAL SECTION THRU BRIDGE DECK
(Looking East)
(Horizontal Dimensions @ Rt. L's to Local Tangent unless noted otherwise.)

NOTES:

1. See Sht. S-07 of S-34 for Temporary Concrete Barrier.
2. See Roadway Plans for quantity of Temporary Concrete Barrier.

2 Addendum #2 2/15/07

SHT. S-06 OF S-34

REVISIONS	
NAME	DATE

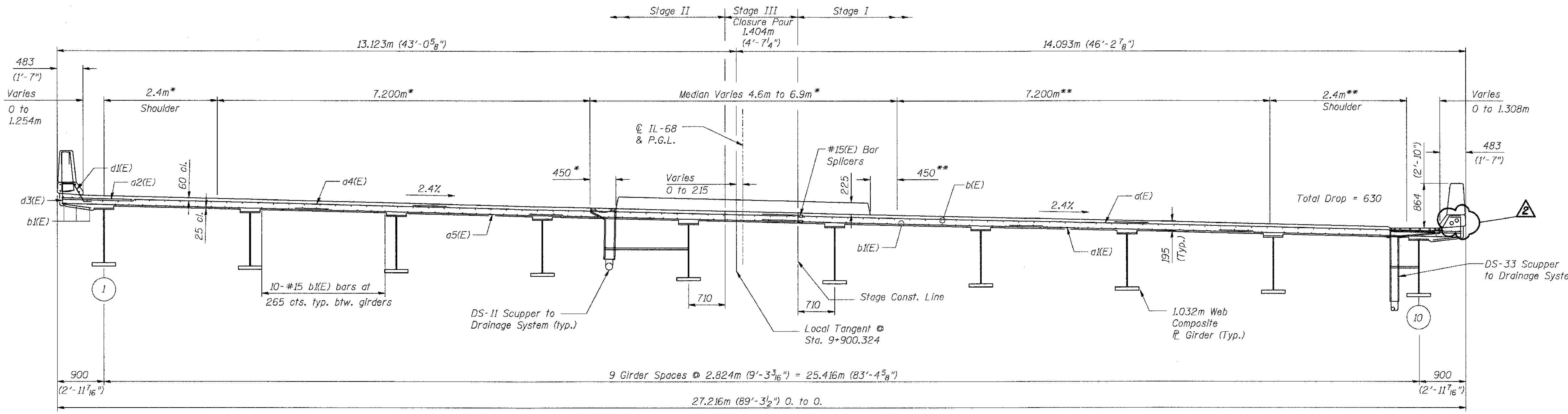
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

STAGE CONSTRUCTION DECK SECTIONS

DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	165
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897



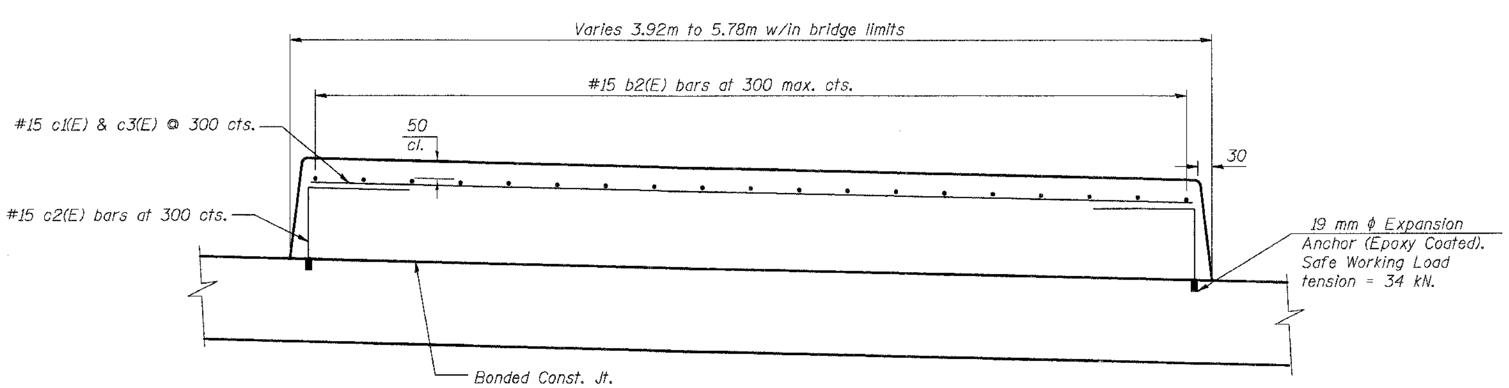
DECK CROSS SECTION

(Looking East)

(Horizontal Dimensions @ Rt. ∠'s to Local Tangent unless noted otherwise.)

* Radial Dimensions w/ respect to north shoulder line

** Radial Dimensions w/ respect to south shoulder line



SUPERIMPOSED MEDIAN

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. See Sht. S-12 of S-34 for superstructure details.
3. See Sht. S-13 of S-34 for parapet reinforcement and bill of material.

△2 Addendum #2 2/15/07

SHT. S-11 OF S-34

REVISIONS NAME	DATE

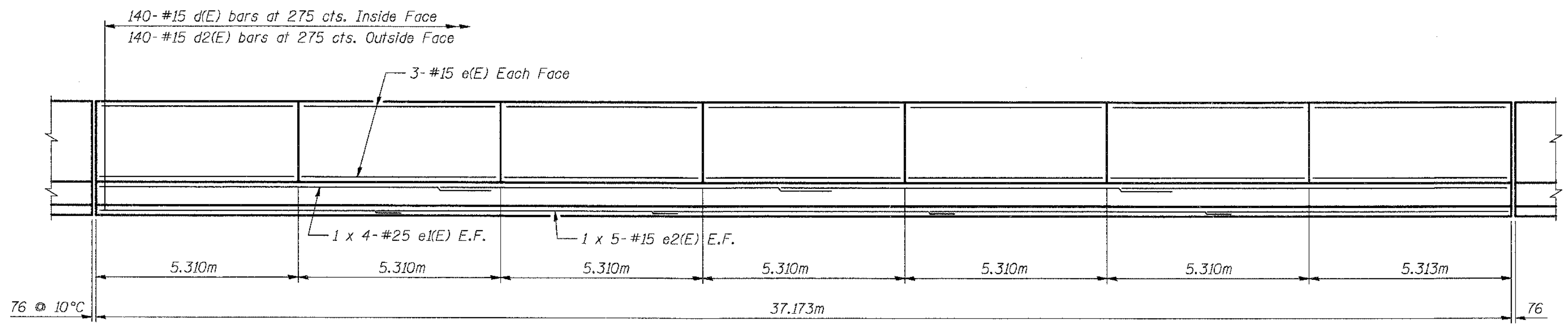
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

DECK CROSS SECTION

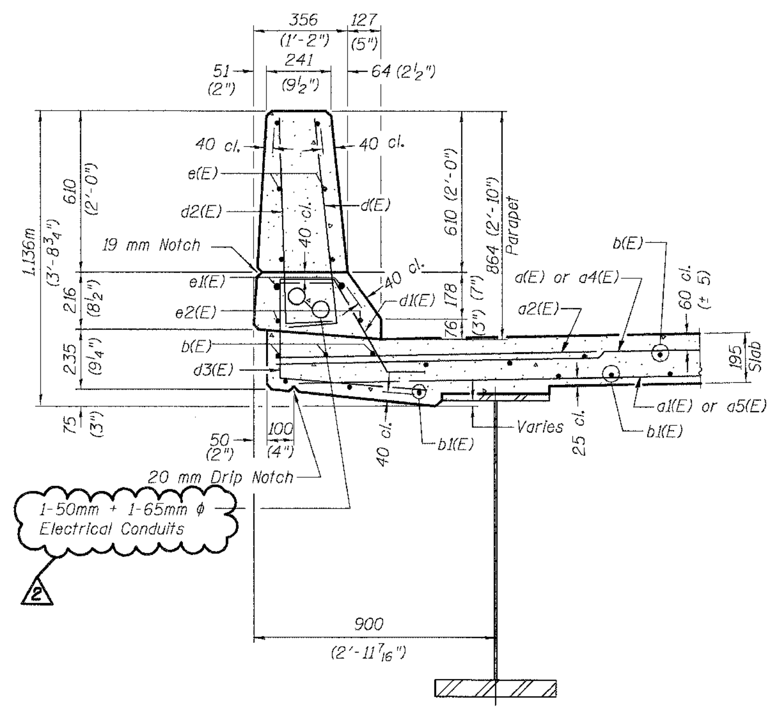
DATE: 02/07 DESIGNED: BTO CHECKED: JAN DRAWN: BTO CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	167
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

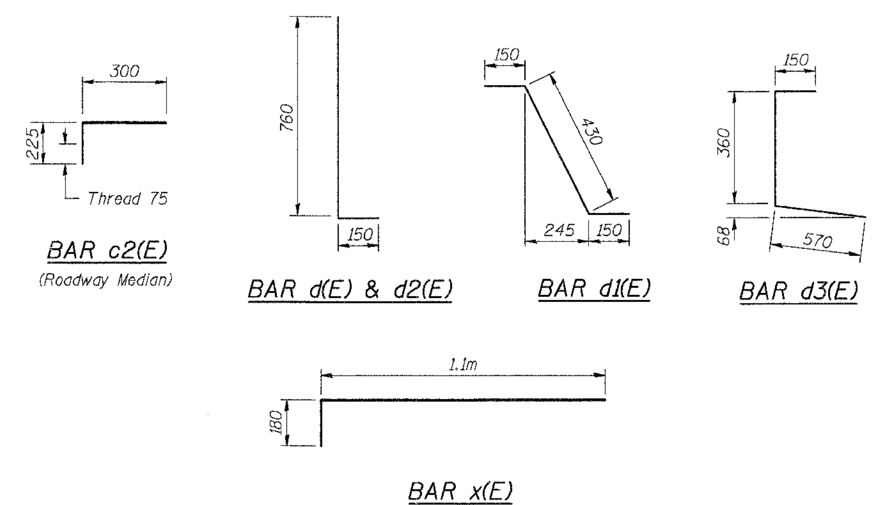
CONTRACT NO. 62897



INSIDE ELEVATION OF PARAPET

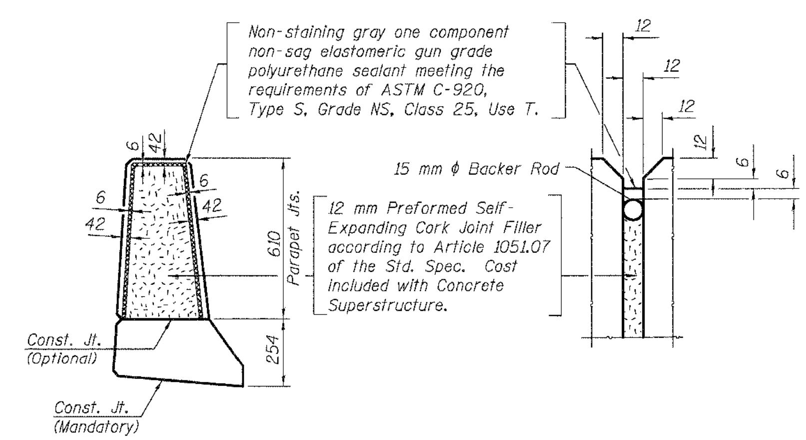


SECTION THRU PARAPET



SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
a(E)	618	15	6.700	——
a1(E)	618	15	4.680	——
a2(E)	310	20	1.400	——
a3(E)	8	15	8.160	——
a4(E)	618	15	7.420	——
a5(E)	618	15	5.160	——
a6(E)	8	15	9.010	——
a7(E)	32	15	0.450	——
a8(E)	8	15	0.600	——
b(E)	376	15	9.750	——
b1(E)	480	15	7.930	——
b2(E)	76	15	9.920	——
c1(E)	66	15	4.620	——
c2(E)	248	15	0.525	——┘
c3(E)	69	15	5.350	——
d(E)	280	15	0.910	┌—
d1(E)	272	15	0.730	⌐_
d2(E)	280	15	0.910	┌—
d3(E)	272	15	1.080	[_
e(E)	84	15	5.230	——
e1(E)	16	25	10.260	——
e2(E)	20	15	8.080	——
x(E)	176	20	1.280	——┐
Reinforcement Bars, Epoxy Coated			Kg	42.390
Concrete Superstructure			Cu M	303.3



PARAPET JOINT DETAILS

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. All Expansion Anchors shall be Epoxy Coated and included in the cost of "Reinforcement Bars, Epoxy Coated".

MIN. BAR LAP

#15 bar = 640
#25 bar = 1.320m

SHT. S-13 OF S-34

2 **Addendum #2 2/15/07**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

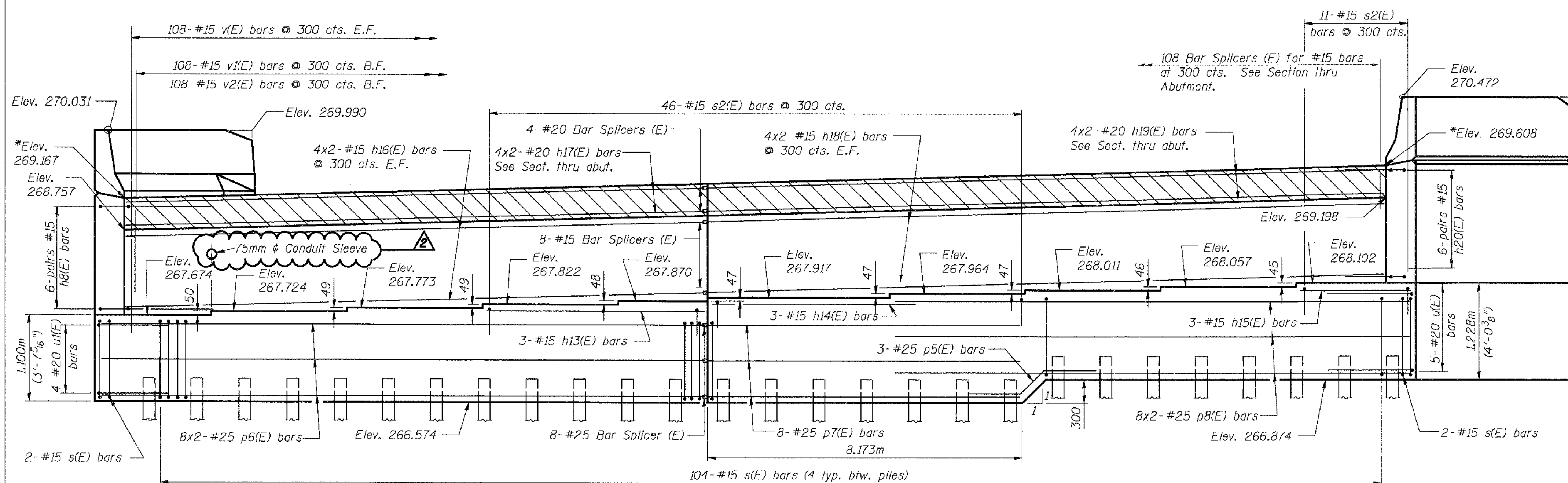
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

PARAPET ELEVATION, DECK DETAILS, & B.O.M.

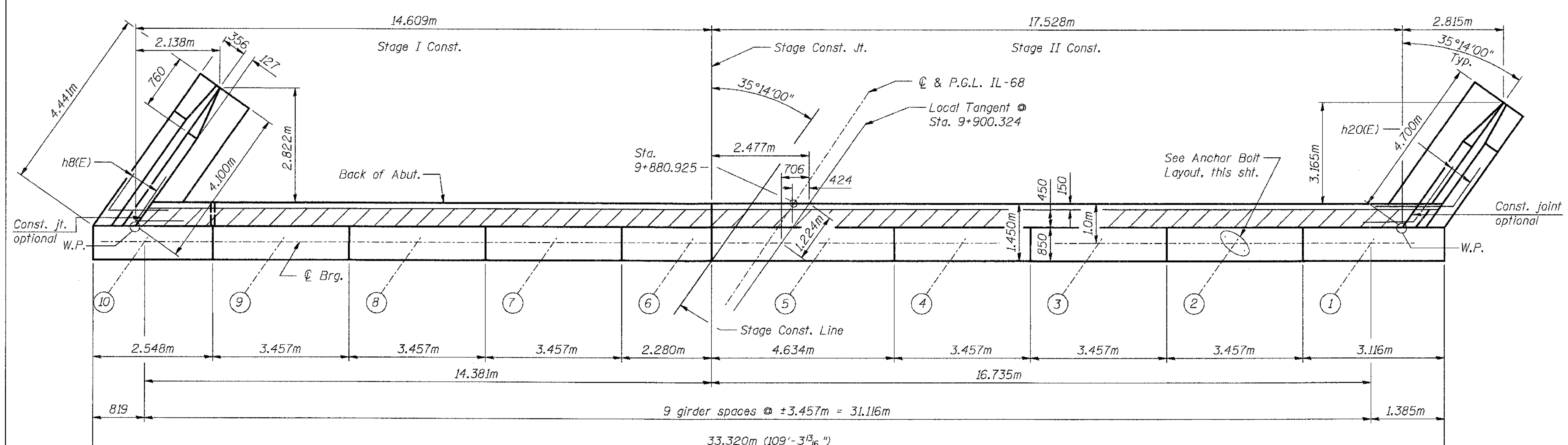
DATE: 02/07 | DESIGNED: BTO | CHECKED: JAN | DRAWN: BTO | CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	179
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897

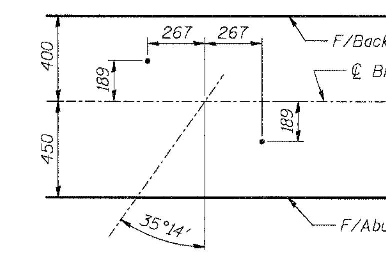


ELEVATION



TOP VIEW

*At Front Face of hatch block



ANCHOR BOLT LAYOUT

MIN. BAR LAP

#15 Bars = 640
#20 Bars = 790
#25 Bars = 1.320m

NOTES:

1. Hatched area to be poured after superstructure forms have been removed.
2. Space reinforcement in cap to miss anchor bolts.
3. Pour steps monolithically with cap.
4. Reinforcement bars designated (E) shall be epoxy coated.
5. Bars indicated thus 4x2-#15 etc. indicates 4 lines of bars with 2 lengths per line.
6. For anchor bolt details, see sht. S-21 of S-34.

2 Addendum #2 2/15/07

SHT. S-25 OF S-34

REVISIONS	
NAME	DATE

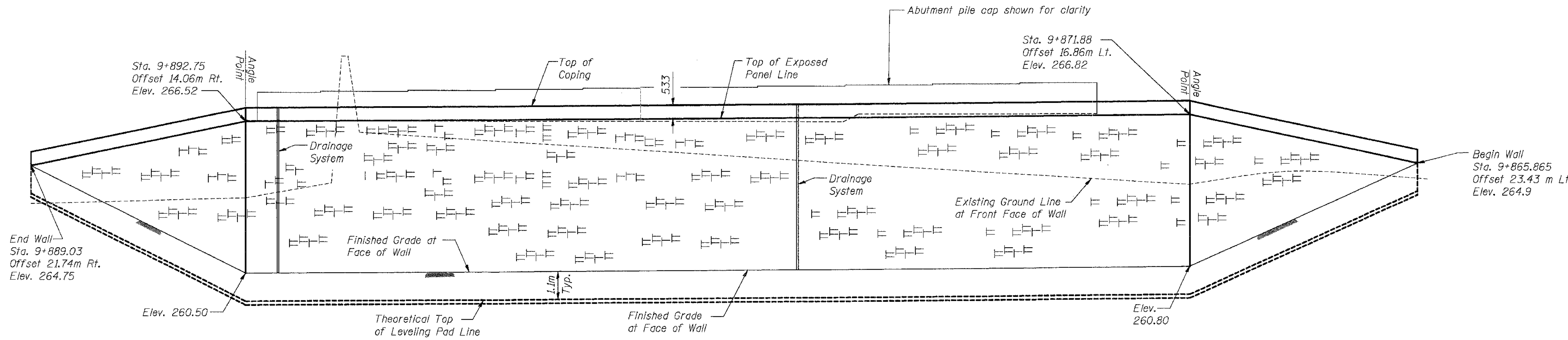
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

WEST ABUTMENT PLAN & ELEVATION

DESIGNED: BTO | DRAWN: BTO
DATE: 02/07 | CHECKED: JAN | CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	263	182
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

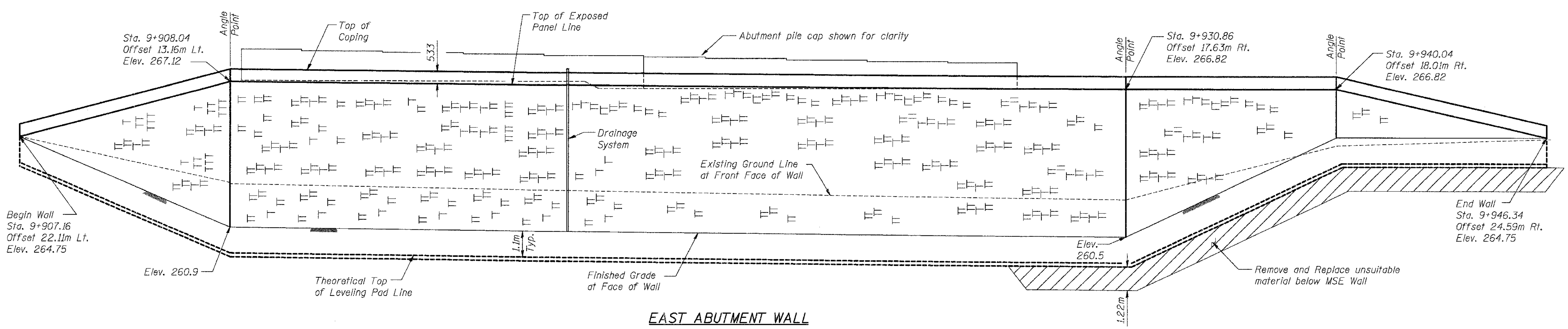
CONTRACT NO. 62897



WEST ABUTMENT WALL

(Unfolded Elevation View)

Stationing and Offsets from ℄ IL-68.



EAST ABUTMENT WALL

(Unfolded Elevation View)

BILL OF MATERIAL

Item	Unit	Total
Mechanically Stabilized Earth Retaining Wall	SQ M	726

NOTES:

Stationing and Offsets from ℄ IL-68.

For Plan of Mechanically Stabilized Earth Retaining Walls see sheet S-01 of S-34.

For Section Through MSE Retaining Walls see sheet S-02 of S-34.

Bearing Capacity of soil below MSE Wall is 215 kPa with a corresponding Factor of Safety of 2.5.

2 Addendum #2 2/15/07

SHT. S-28 OF S-34

REVISIONS NAME	DATE

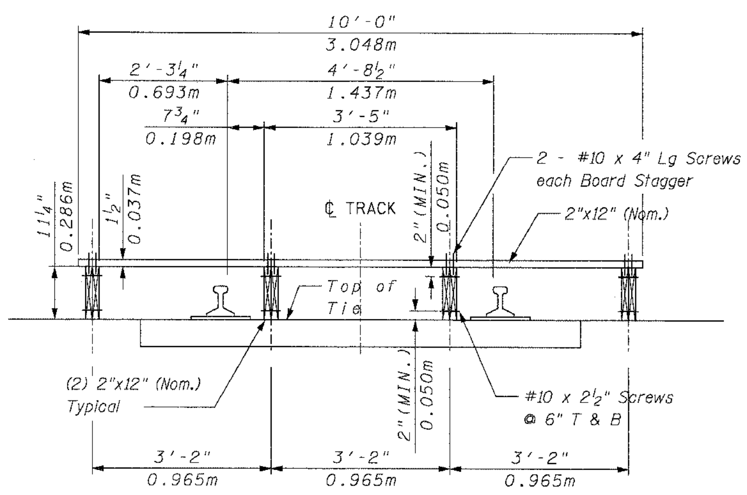
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

MECHANICALLY STABILIZED EARTH RETAINING WALLS

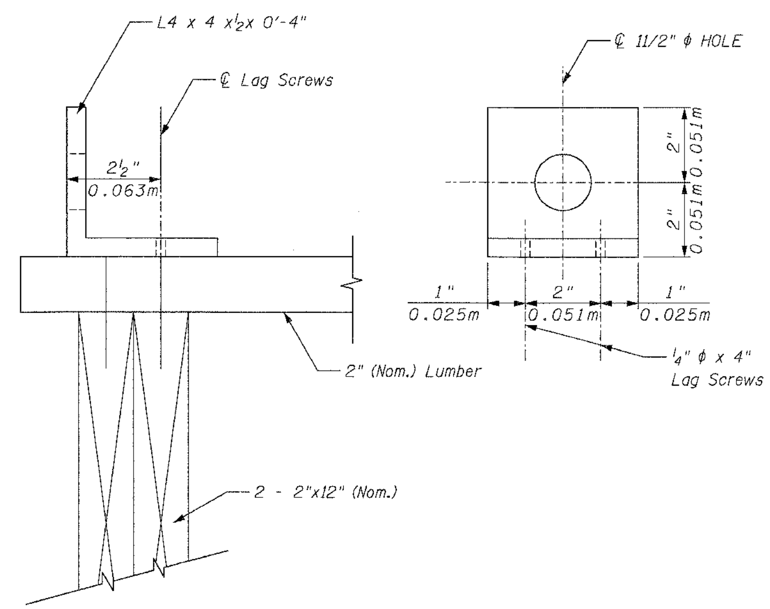
DATE: 02/07 DESIGNED: BTO CHECKED: JAN DRAWN: BTO CHECKED: JAN

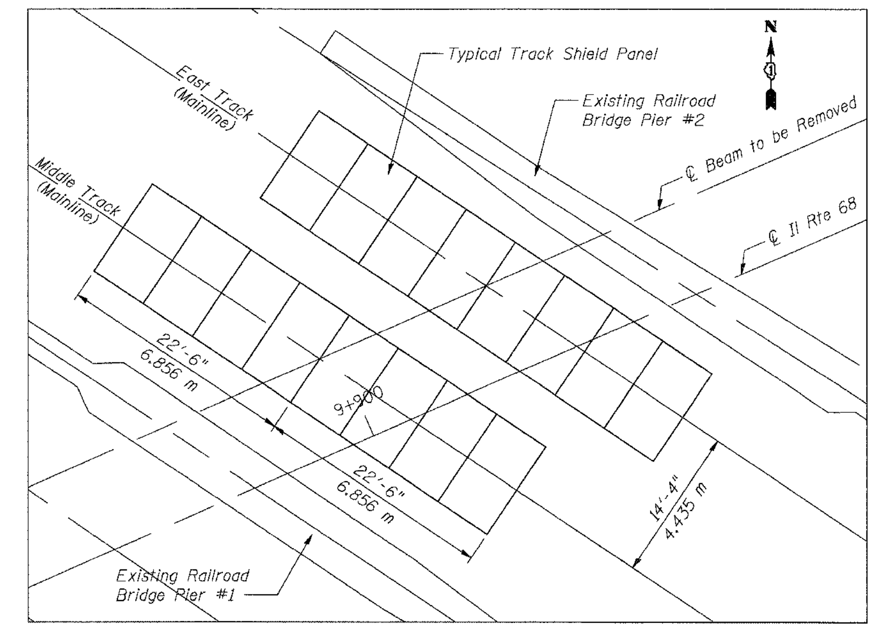
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	185A
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897

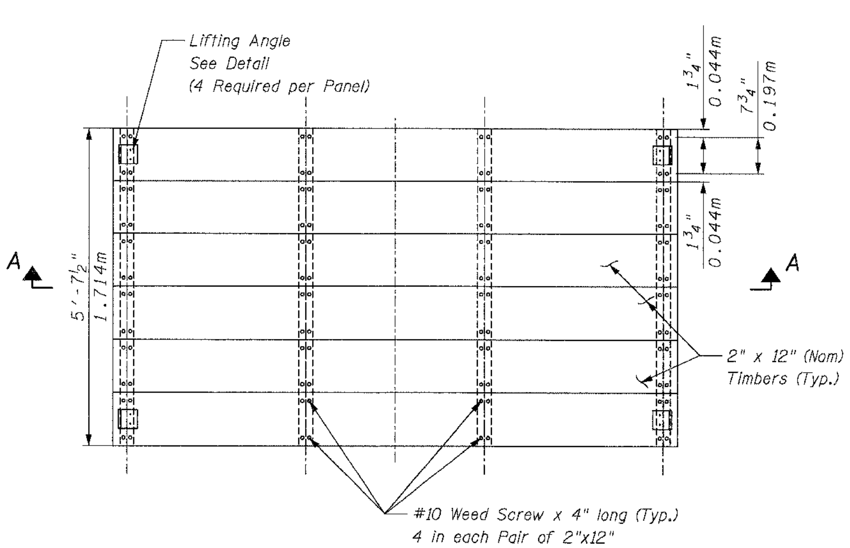


SECTION A-A





PLAN



TRACK SHIELD PANEL

16 Required

WT. OF TRACK SHIELD

2x12x5'-7½"x8' = 3.52 PDF x 5.63' x 8	= 158.4 Lb.
2x12x10'-0"x6' = 3.52 PDF x 10.0' x 6	= 211.2 Lb.
L4x4x1/2x4"x4=12.8 PDF x 0.25 x 4	= 12.8 Lb.
48 Wood Screws x 2½"	= 4.0 Lb.
48 Wood Screws x 4"	= 8.0 Lb.
Approx.	394.4 Lb.
Use	400.0 Lb.

NOTES:

1. A flagman is required at all times during the use of a Track Shield.
2. Before removal, the shield shall be cleaned of all debris and fine material.
3. The track shield shall extend at least 20 feet beyond the limits of demolition transverse to the edge of the bridge.
4. Longitudinal support members for the shield shall not extend above the top of rail when the shield is removed. blocking from the top of rail to the bottom of the shield may be attached to the shield. Remaining timbers shall be anchored.
5. For train passage. The rubble shall be removed to a minimum of 8' 6" from the nearest rail and to an elevation no higher than the top of rail.
6. At the end of the day, the rubble shall be removed completely to a minimum of 10' 0" from the nearest rail and down to the original grade.
7. Care shall be taken not to place metal accross the track rails. Railroad connections are sent through the rails and will be disrupted by a short between the rails.
8. Lumber shall be Southern Pine, No. 1 or equivalent.

SHT. S-32 OF S-34

2 Addendum #2 2/15/07

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

TRACK SHIELD DETAILS

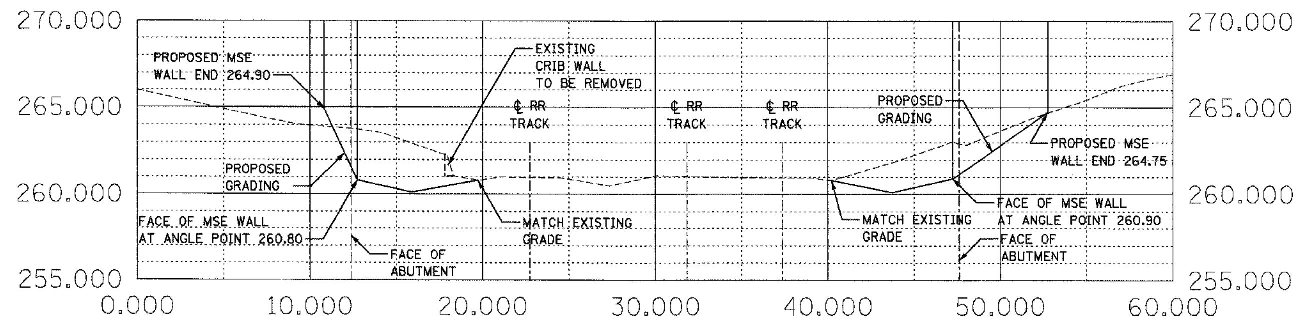
DESIGNED: RLC DRAWN: GH
DATE: 02/07 CHECKED: JAN CHECKED: RLC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70D-Y-B-R	COOK	283	185C
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

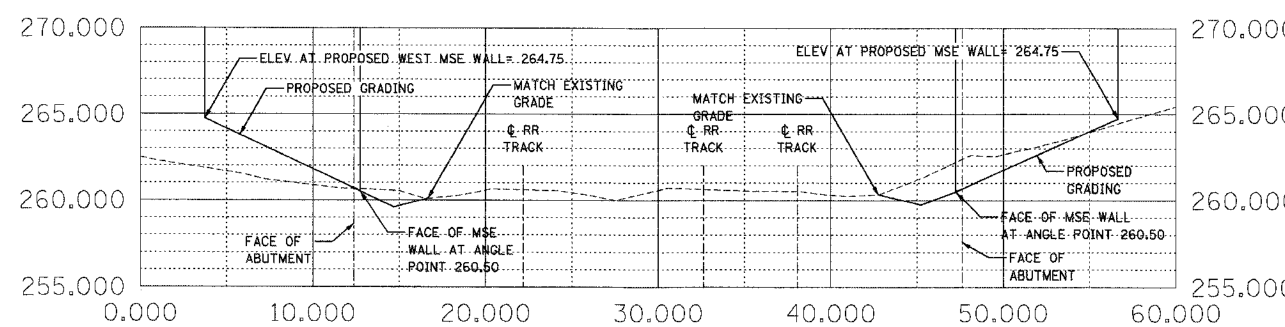
CONTRACT NO. 62897

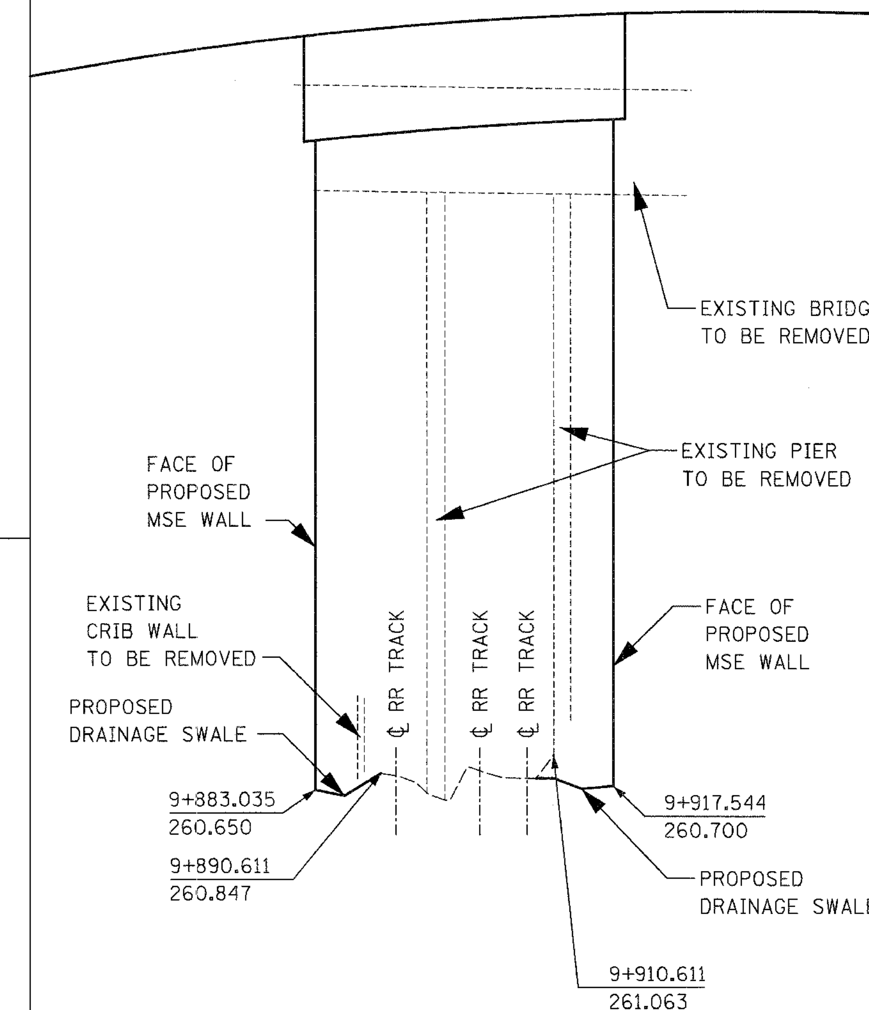
2

NORTHERLY PROFILE
PROPOSED WEST MSE WALL TO PROPOSED EAST MSE WALL



SOUTHERLY PROFILE
PROPOSED WEST MSE WALL TO PROPOSED EAST MSE WALL





@ BRIDGE ℄ LOOKING NORTHWEST

SHT. S-34 OF S-34

2 **Addendum #2 2/15/07**

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER UPRR
F.A.P. ROUTE 343 SECTION 70D-Y-B-R
COOK COUNTY STATION 9+900.324
STRUCTURE NO. 016-2732

UPRR CROSS SECTION & DRAINAGE

DESIGNED: DRAWN: GRH
DATE: 02/07 CHECKED: CHECKED: LLK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70HB-R-1	COOK	283	186
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897

BENCH MARK

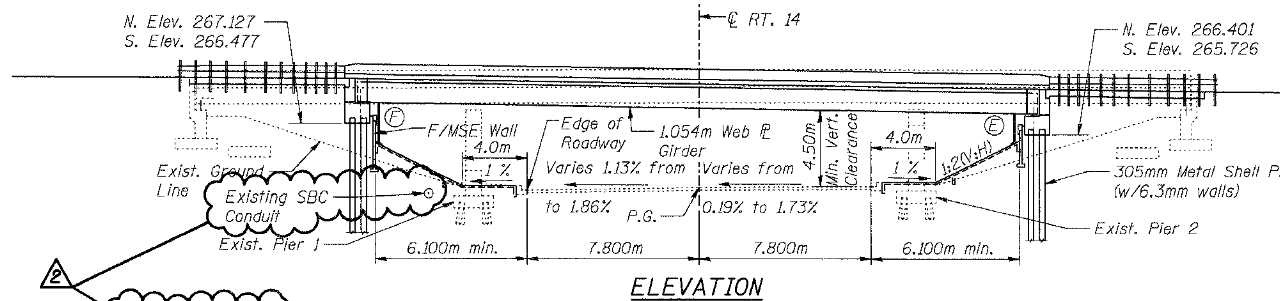
Chiseled '☐' SE corner of East abutment of IL-68 bridge over US 14
Elev. 269.205

EXISTING STRUCTURE

S.N. 016-2410 was built in 1974. The bearings were cleaned and painted in 1992. The three span structure rests on concrete spread footings at the abutments and treated timber piles at the concrete multi-column piers. The composite reinforced concrete deck is supported by 920mm deep continuous steel beams. The back to back abutment length is 62.76m and the deck is 23.16m out to out.

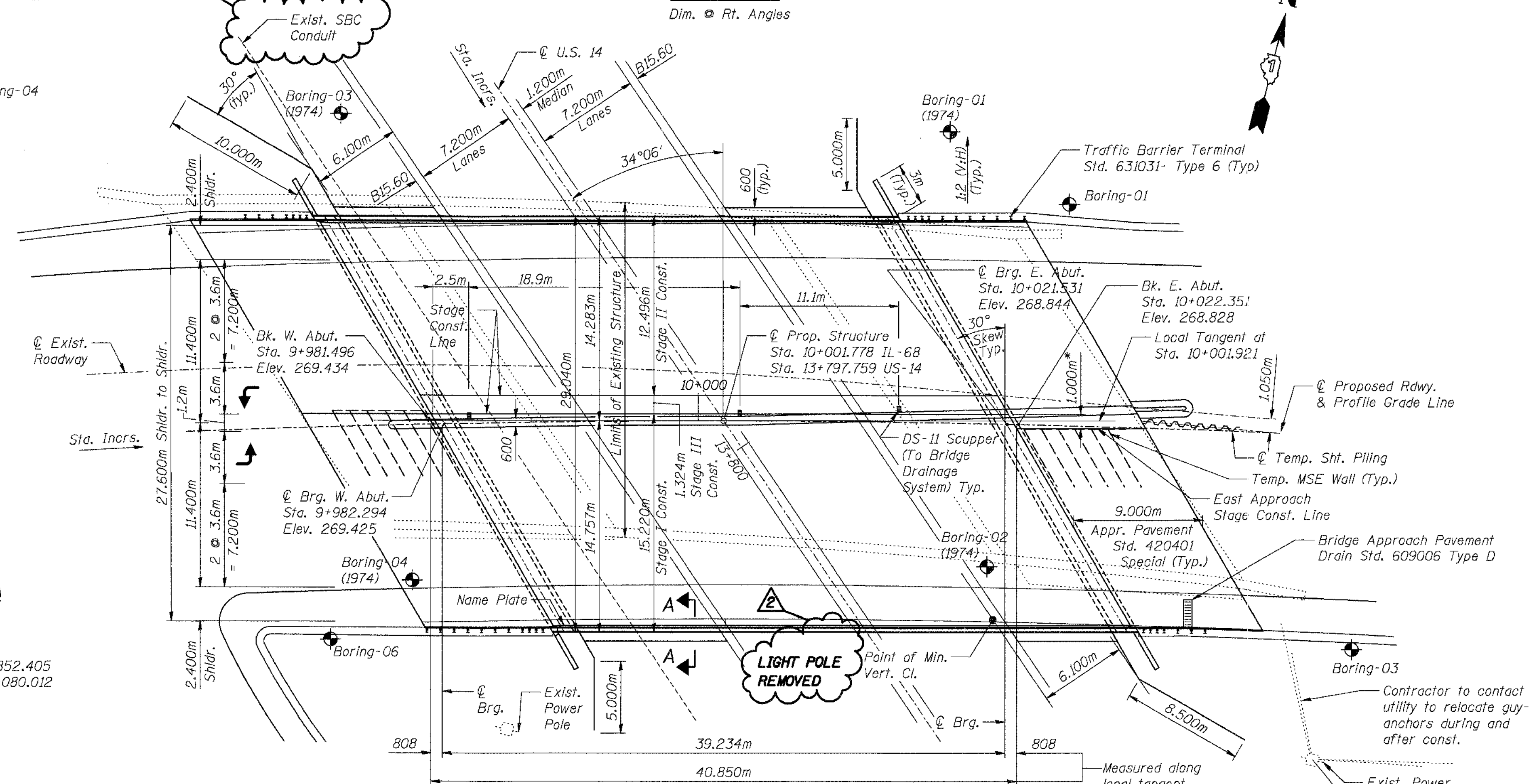
During construction of the new structure, staged construction will be utilized to maintain one lane of traffic in each direction.

No salvage.

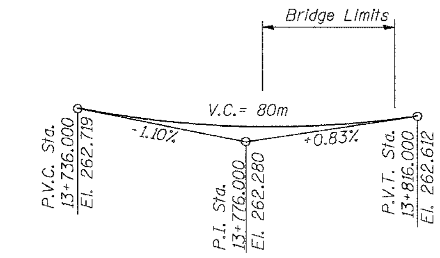


ELEVATION

Dim. @ Rt. Angles

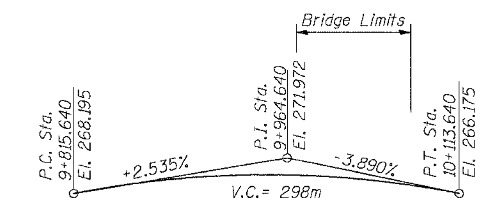


PLAN



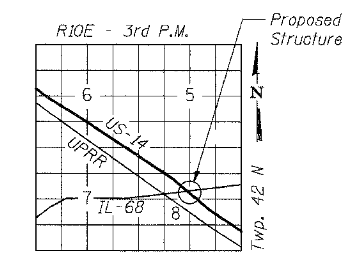
PROFILE GRADE LINE

US Route 14



PROFILE GRADE LINE

IL Route 68



LOCATION SKETCH

STATION 10+001.778
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 343 SEC 70HB-R-1
COOK COUNTY
LOADING HS20
STR. NO. 016-2861

NAME PLATE

See Std. 515001

HORIZONTAL CURVE DATA

Curve 68-1

PI Sta. = 9+966.854	E = 7.453m
Δ = 14°54'14" RT.	S.E. = 2.4%
R = 875.000m	P.C. Sta. = 9+852.405
T = 114.450m	P.T. Sta. = 10+080.012
L = 227.607m	

LOADING HS20-44

Allow 2.4 kN/m² future wearing surface

DESIGN SPECIFICATION

2002 AASHTO Std. Spec. 17th edition

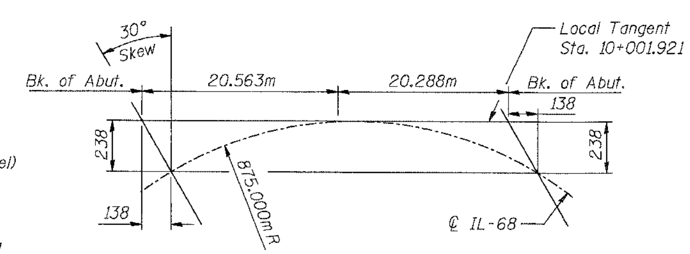
DESIGN STRESSES

NEW CONSTRUCTION

f'c = 24 MPa (concrete)
fy = 400 MPa (reinforcement)
fy = 345 MPa (AASHTO M 270M, Gr. 345 struc. steel)

SEISMIC DATA

Seismic Performance Category (SPC)= A
Bedrock Acceleration Coefficient (A)= 0.04g
Site Coefficient (S) = 1.0



OFFSET SKETCH

* Offset East Approach Stage Const. Line to avoid interference with existing beams.

NOTES:

1. All dimensions in millimeters (mm) except as noted.
2. For section A-A, see Sht. S-02 of S-27.

Addendum #2 2/15/07

SHT. S-01 OF S-27

REVISIONS NAME	DATE

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe Street, Suite 1650
Chicago, IL 60606-5015
312/553-0655, FAX 312/553-0661

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 70HB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

GENERAL PLAN

DATE: 02/07 DESIGNED: BTO CHECKED: JAN DRAWN: BTO CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70HB-R-1	COOK	283	187
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897

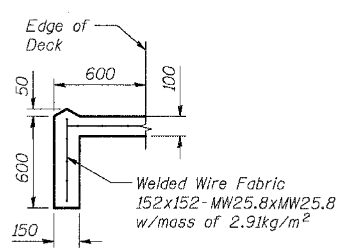
GENERAL NOTES

1. Fasteners shall be high strength bolts. Bolts M22, open holes 24 mm ϕ, unless otherwise noted.
2. Calculated weight of Structural Steel:
   AASHTO (M270M GR 345) = 185,270 kg (Erection Only-Included in Beam Fabrication Contract)
   AASHTO (M270M GR 250) = 11,850 kg (Erection Only- Included in Beam Fabrication Contract)
3. Field welding of construction accessories will not be permitted to girders.
4. Anchor bolts shall be set before bolting diaphragms over supports.
5. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges and webs of the plate girders.
6. Reinforcement bars shall conform to the requirements of AASHTO M31M, M322M, Grade 400.
7. Slope wall shall be reinforced with welded wire fabric, 152x152-MW25.8xMW25.8, w/mass of 2.91kg/m.
8. The contractor shall drive 2-305 mm metal shell test piles in a permanent location, one for each abutment as directed by the Engineer before ordering the remainder of the piles.
9. All dimensions are in millimeters (mm) except as noted.
10. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
11. All construction joints shall be bonded.
12. The organic zinc rich primer/epoxy/urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5HB 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures."
13. Slipforming of parapets containing conduit is not allowed.

TOTAL BILL OF MATERIAL

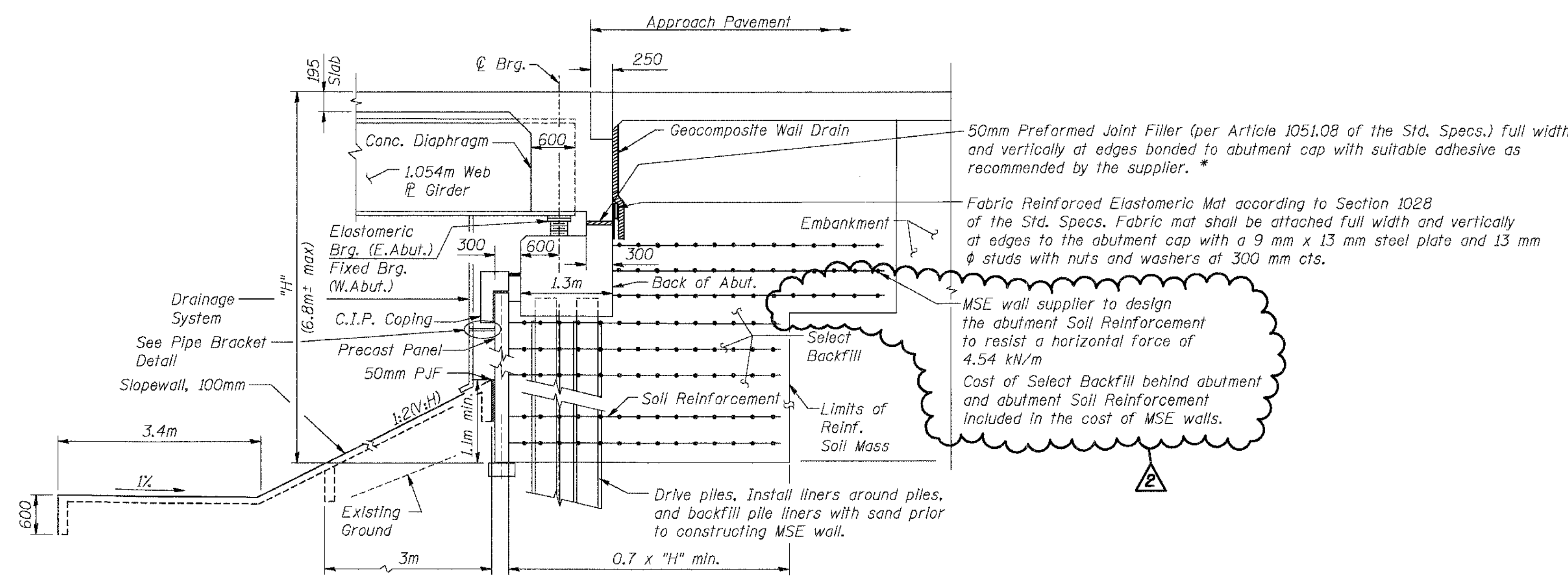
ITEM	UNIT	SUB-STRUCT.	SUPER-STRUCT.	TOTAL
Removal of Existing Structures	EACH			1
Structure Excavation	CU M	701		701
Concrete Structures	CU M	111.2		111.2
Concrete Superstructure	CU M		345.0	345.0
Bridge Deck Grooving	SQ M		1083	1083
Protective Coat	SQ. M		1237	1237
Erecting Elastomeric Bearing Assembly, Type I	EACH		11	11
Erecting Structural Steel	L.S.		0.55	0.55
Stud Shear Connectors	EACH		2409	2409
Reinforcement Bars, Epoxy Coated	KG	6110	47550	53660
Furnishing Metal Shell Piles 305mm	METER	1276		1276
Driving Piles	METER	1276		1276
Test Pile Metal Shells	EACH	2		2
Temporary Sheet Piling	SQ M	11.9		11.9
Geocomposite Wall Drain	SQ M		75	75
Name Plates	EACH	1		1
Anchor Bolts, M24	EACH	44		44
Slopewall, 100MM	SQ M	638		638
Temporary Mechanically Stabilized Earth Retaining Wall	SQ M	61		61
Drainage Scuppers, DS-11	EACH		3	3
Drainage System No. 1	EACH		1	1
Bar Splicers	EACH	186	522	708
Mechanically Stabilized Earth Retaining Wall	SQ M	287		287
Protective Shield	SQ M		1399	1399

INDEX OF SHEETS



SECTION A-A

(See Sht. S-01 for location)



SECTION THRU SEMI-INTEGRAL ABUT.

Dimensions at Right Angles

*Cost Included with Concrete Superstructure

Allowable bearing pressure below MSE wall is 215 KPa with a Factor of Safety of 2.5

Addendum #2 2/15/07

STV Incorporated

REVISIONS	
NAME	DATE

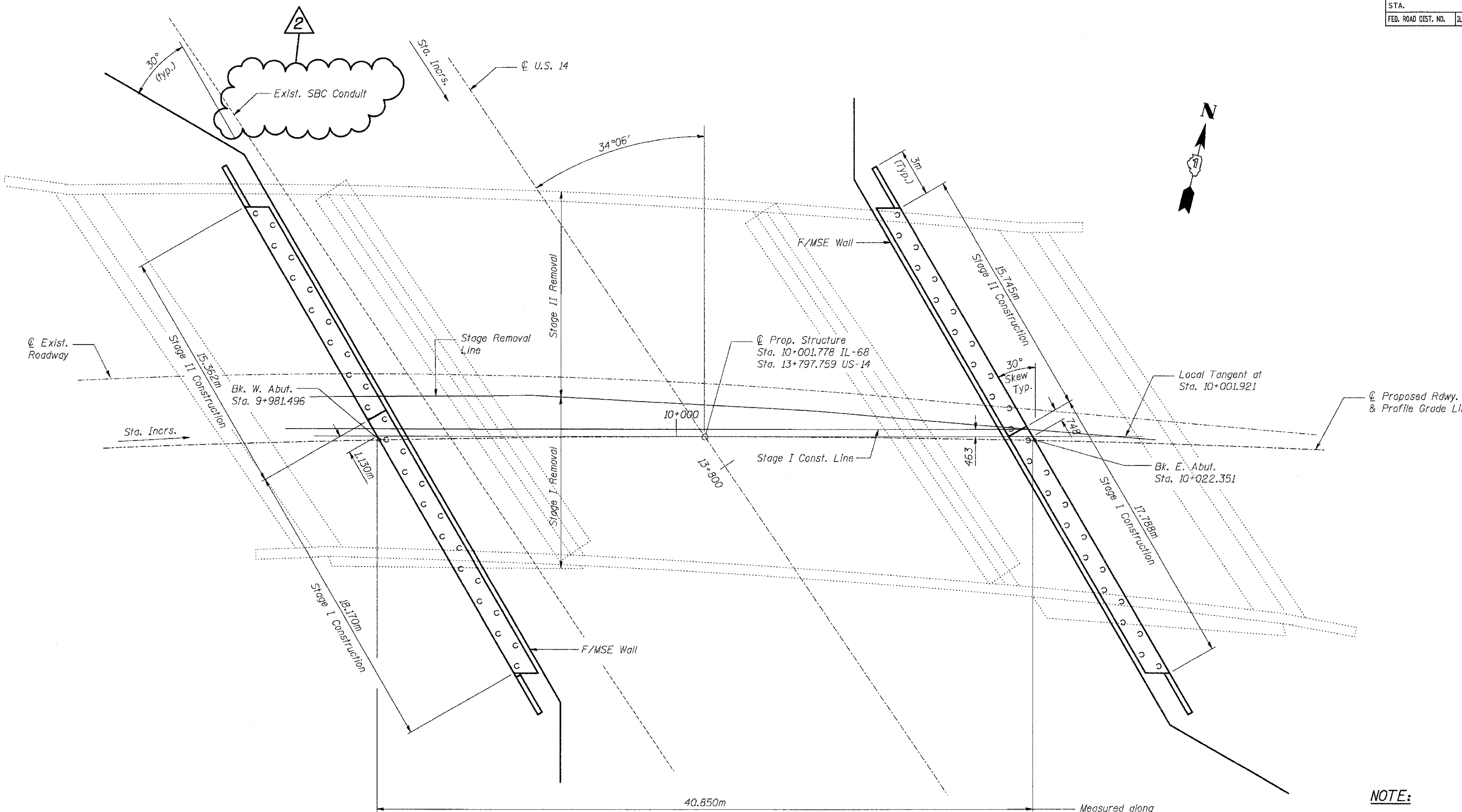
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 70HB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

GENERAL NOTES, B.O.M., & INDEX OF SHEETS

DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	7OHB-R-1	COOK	283	188
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897



PLAN

NOTE:

For Abutment pile layout, see Shts. S-20 and S-22 of S-27.

SHT. S-03 OF S-27

2 Addendum #2 2/15/07

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe Street, Suite 1650
Chicago, IL 60606-5015
312/553-0655, FAX 312/553-0661

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

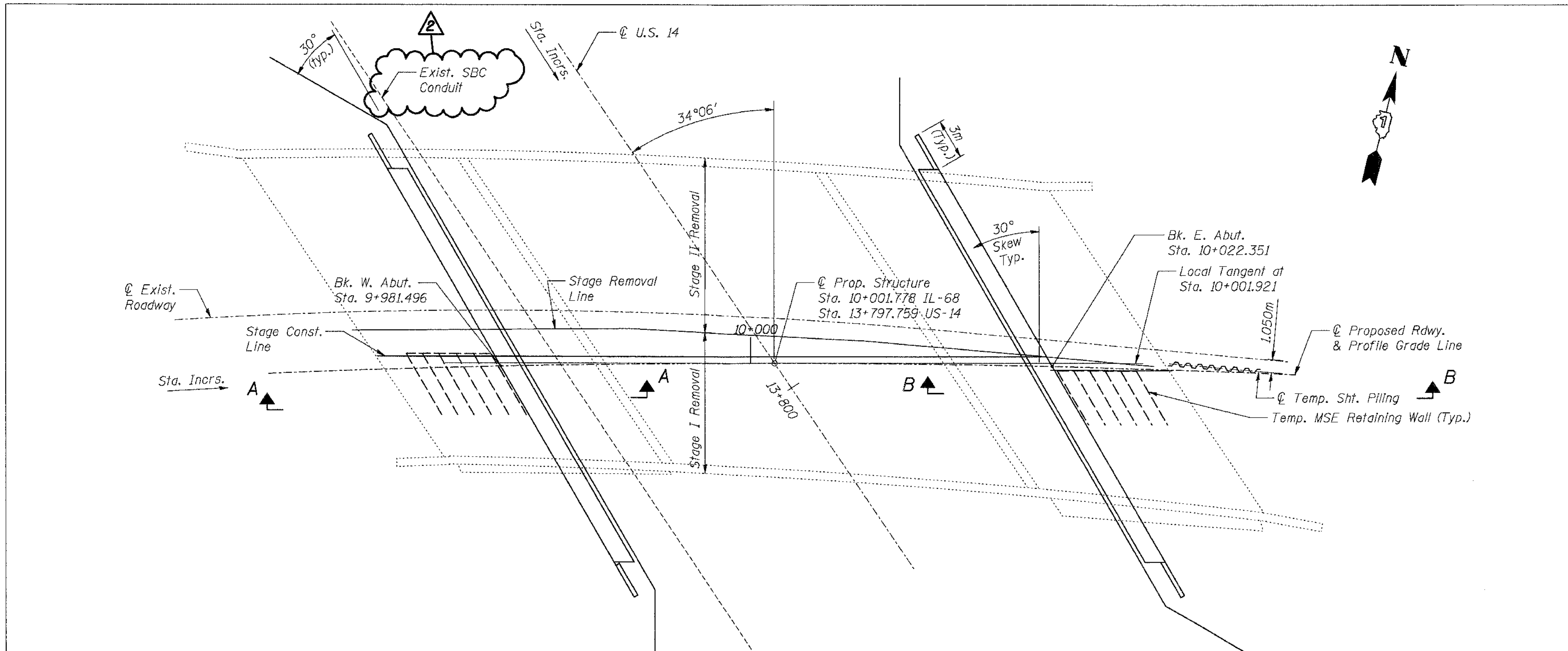
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 7OHB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

FOUNDATION PLAN

DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70HB-R-1	COOK	283	189
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897



PLAN

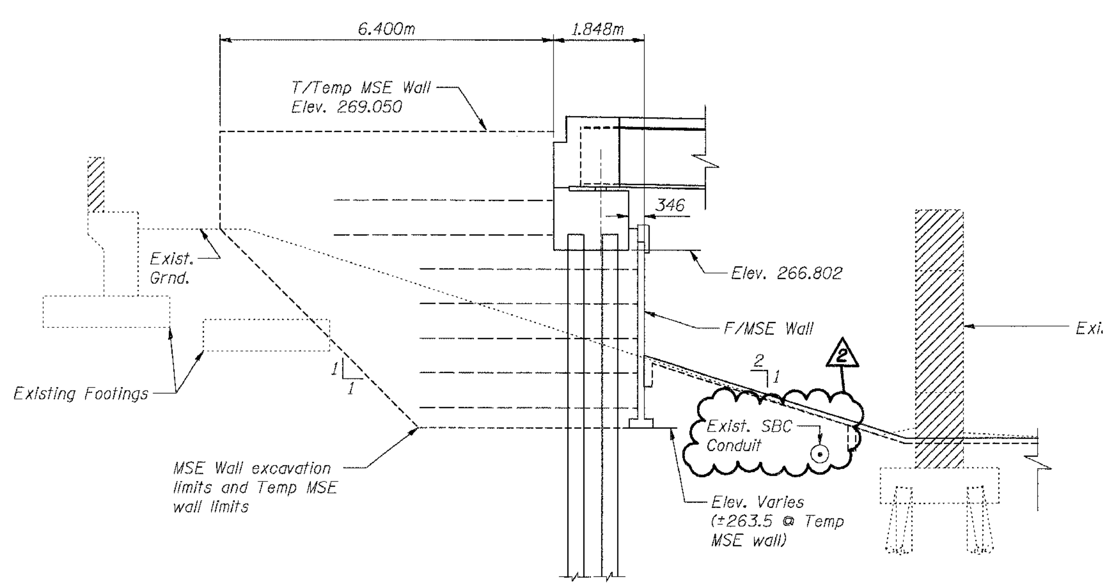
BILL OF MATERIAL

Item	Unit	Total
Temporary Sheet Piling	SQ M	11.9
Temporary Mechanically Stabilized Earth Retaining Wall	SQ M	61.0

NOTE:

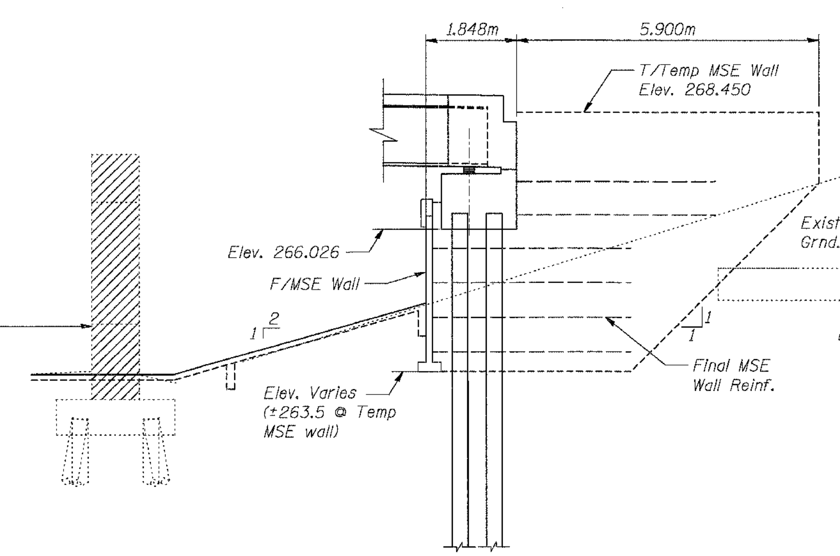
1. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

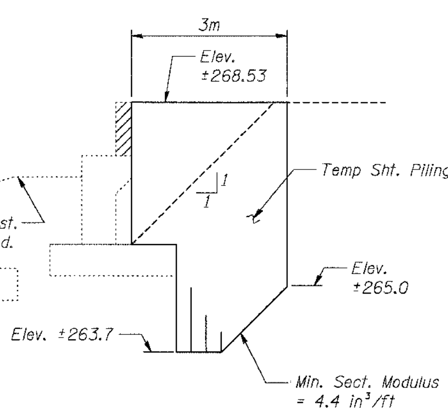
2. See roadway drawings for roadway soil retainage requirements.



SECTION A-A

Distances shown along alignment of sheeting





SECTION B-B

Distances shown along alignment of sheeting

LEGEND

▨ Structure Removal

⚠2 Addendum #2 2/15/07

SHT. S-04 OF S-27

REVISIONS	
NAME	DATE

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe Street, Suite 1650
Chicago, IL 60606-5015
312/553-0655, FAX 312/553-0661

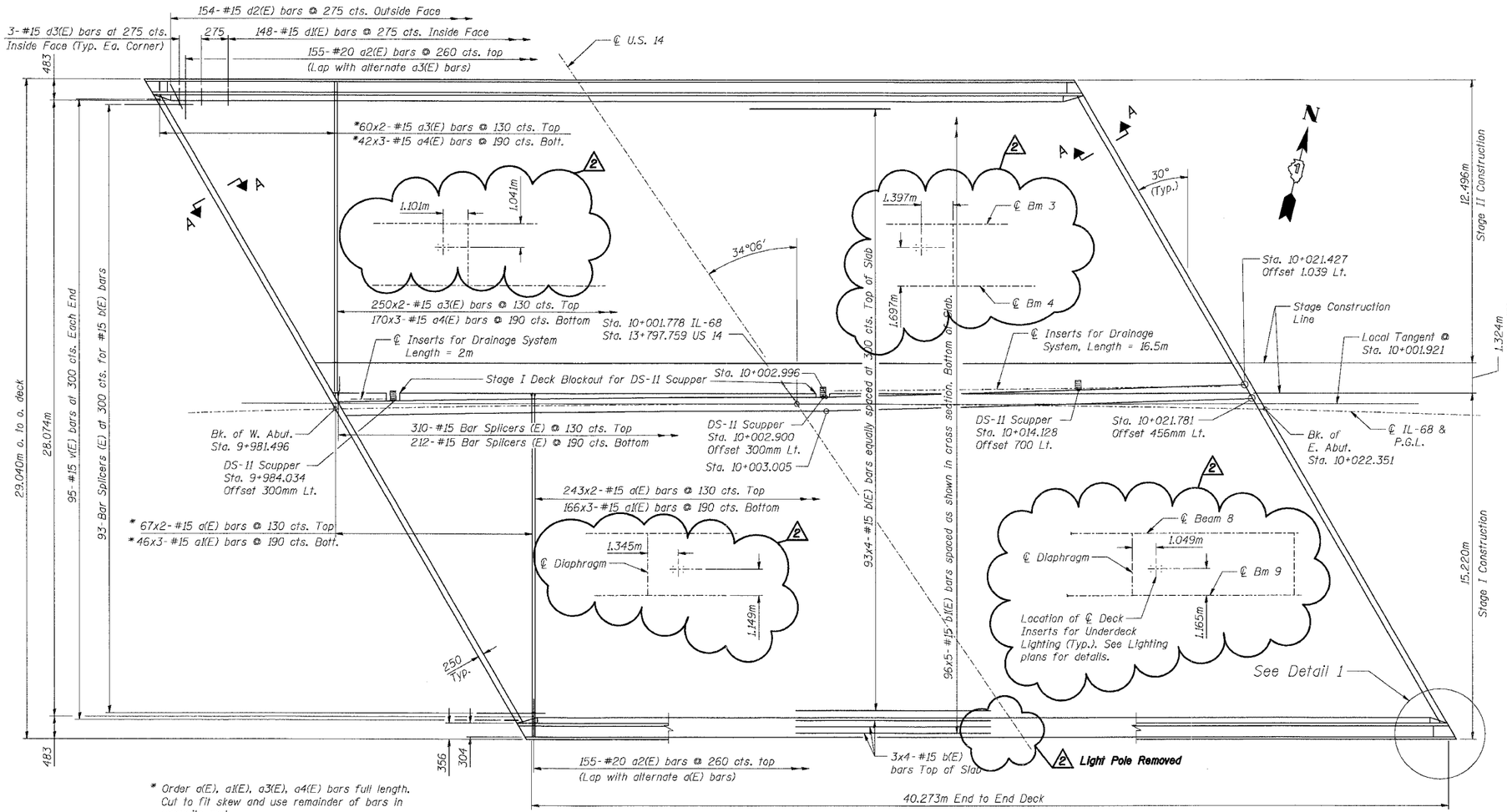
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 70HB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

TEMPORARY SHEET PILING AND MSE WALL

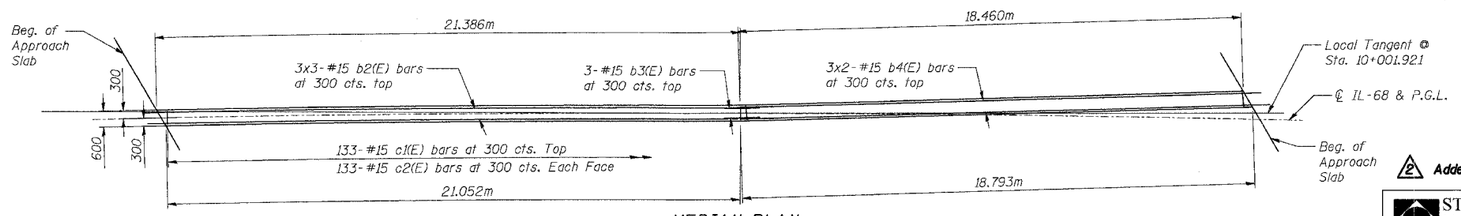
DESIGNED: BTO — DRAWN: BTO
DATE: 02/07 — CHECKED: JAN — CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70HB-R-1	COOK	283	195
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

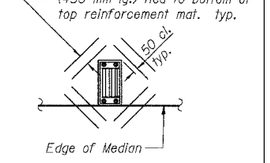
CONTRACT NO. 62897



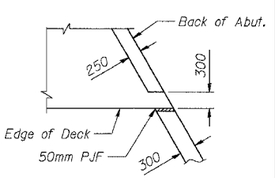
DECK PLAN



MEDIAN PLAN



DS-11 SCUPPER PLAN



DETAIL 1

(Parapet and approach not included)

NOTES:

1. Bars Indicated thus 93x4-#15 etc. indicates 93 lines of bars with 4 lengths per line.
2. Reinforcing Bar designated (E) Shall be Epoxy Coated.
3. Expansion Anchors Required at Medians See Sht. S-11 of S-27 for Superimposed Median Details.
4. For Sections A-A, see Sht. S-12 of S-27.

Minimum Lap
#15 Bars - 640
#20 Bars - 790

SHT. S-10 OF S-27

REVISIONS NAME	DATE

2 Addendum #2 2/15/07

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe Street, Suite 1650
Chicago, IL 60606-5015
312/553-0055, FAX 312/553-0661

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 70HB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

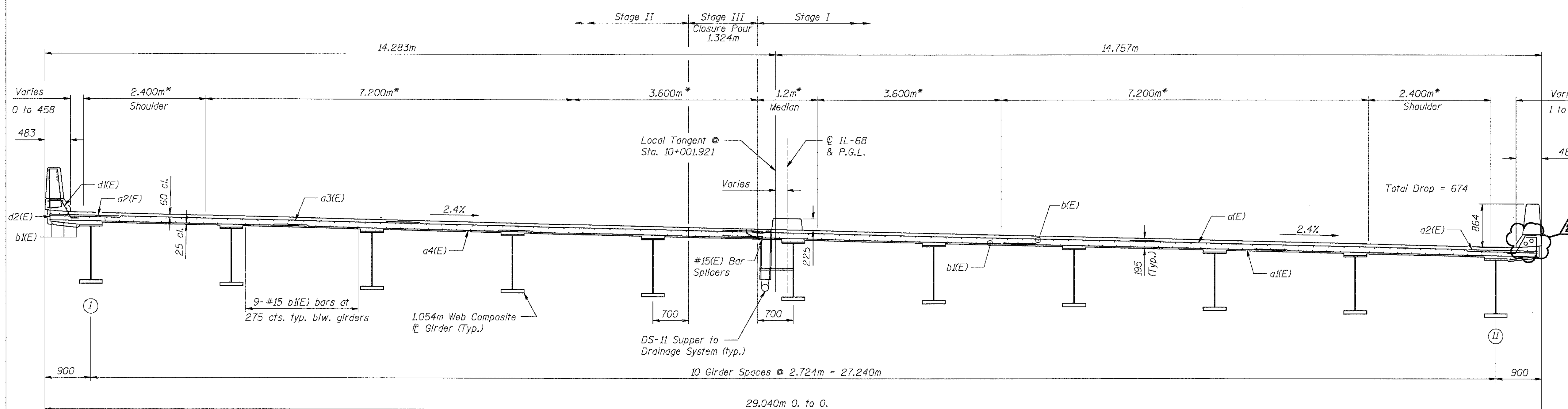
DECK PLAN

DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

...\454_s10dp_Addend2.dgn 2/15/2007 3:11:24 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70HB-R-1	COOK	283	196
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

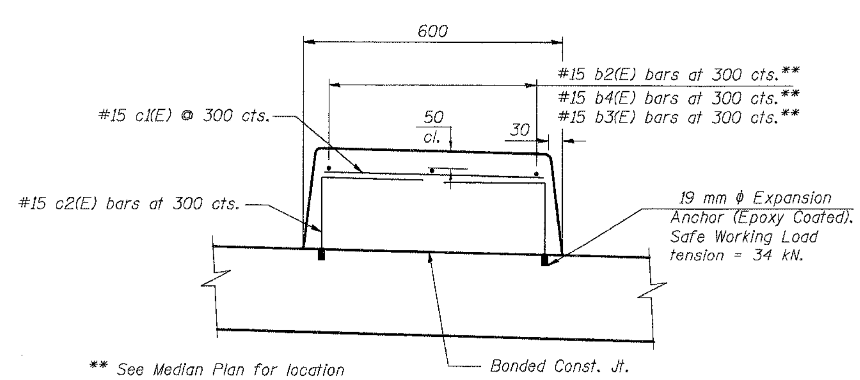
CONTRACT NO. 62897



DECK CROSS SECTION

(Looking East)

* Radial Dimensions



** See Median Plan for location

SUPERIMPOSED MEDIAN

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. See Sht. S-12 of S-27 for superstructure details.
3. See Sht. S-13 of S-27 for parapet reinforcement and bill of material.

SHT. S-11 OF S-27

2 Addendum #2 2/15/07

STV Incorporated

REVISIONS NAME	DATE

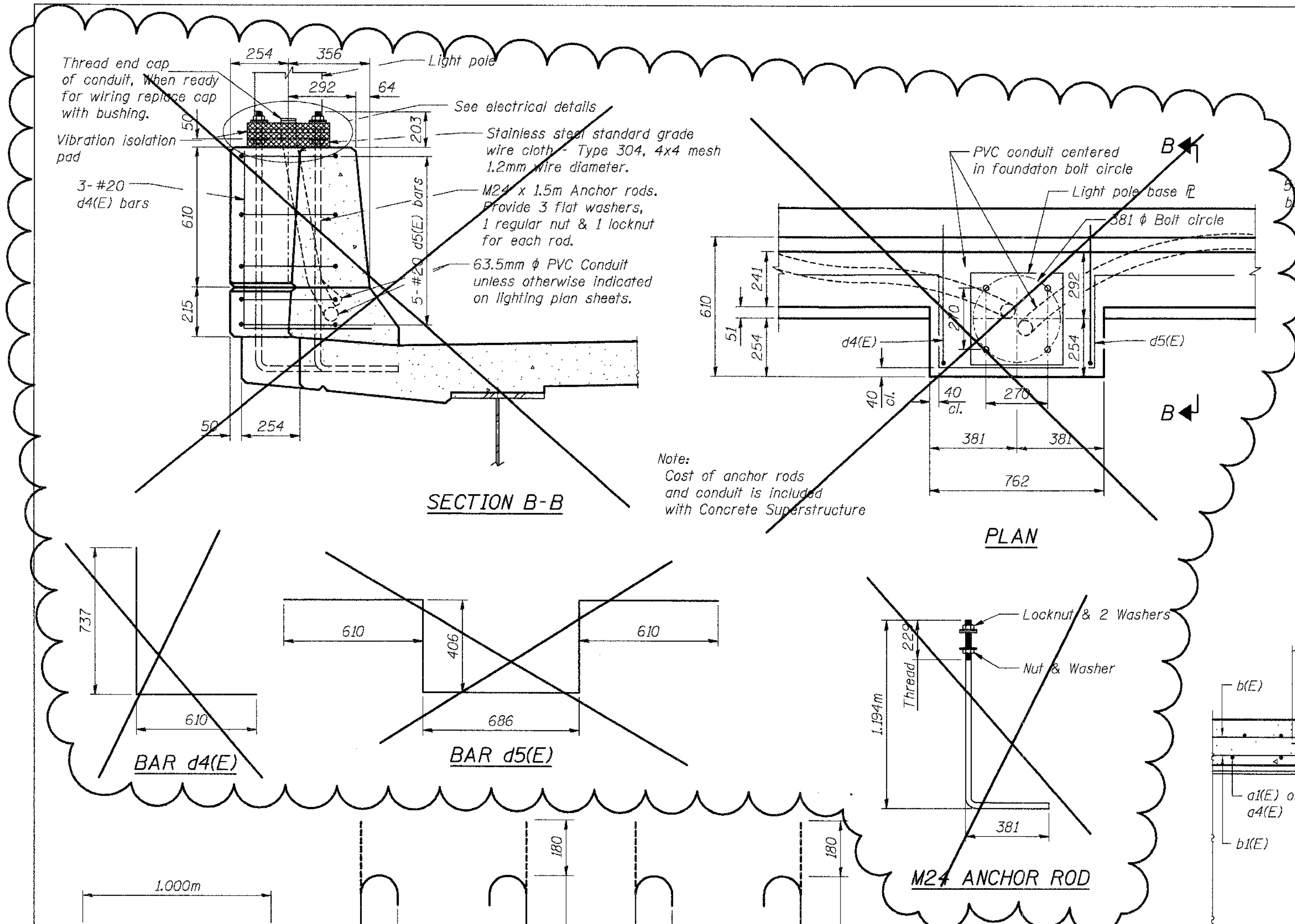
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 70HB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

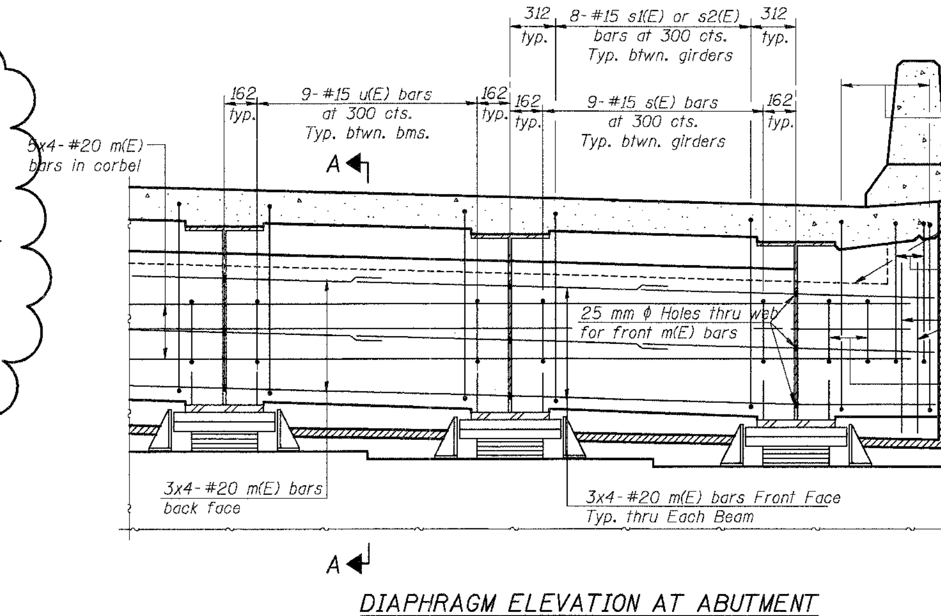
DECK CROSS SECTION

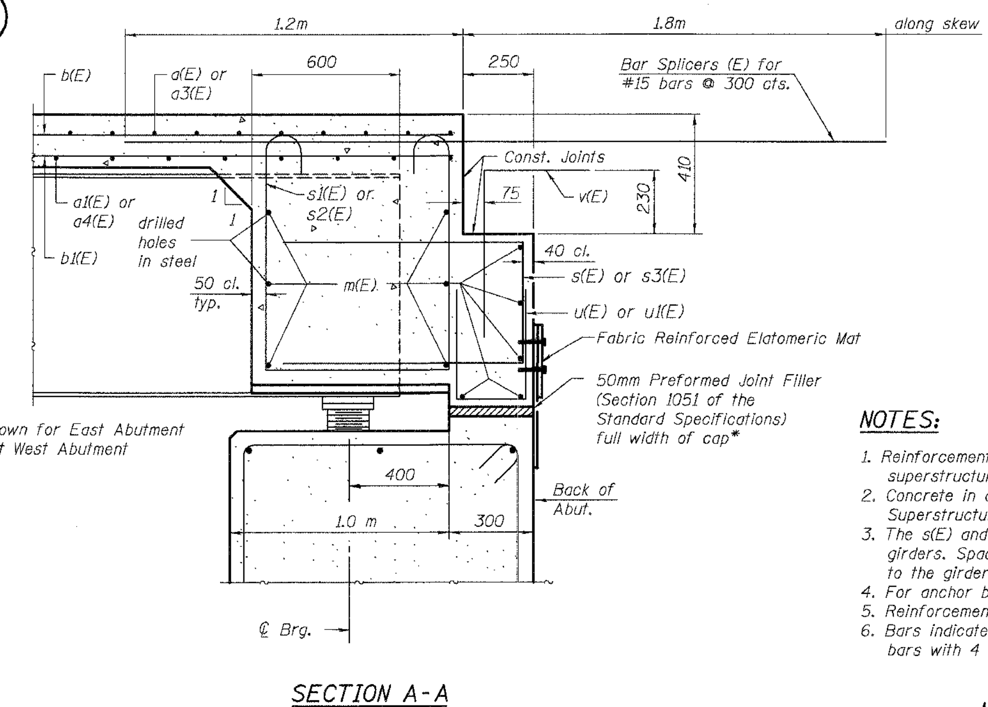
DATE: 02/07 DESIGNED: BTO CHECKED: JAN DRAWN: BTO CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70HB-R-1	COOK	283	197
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

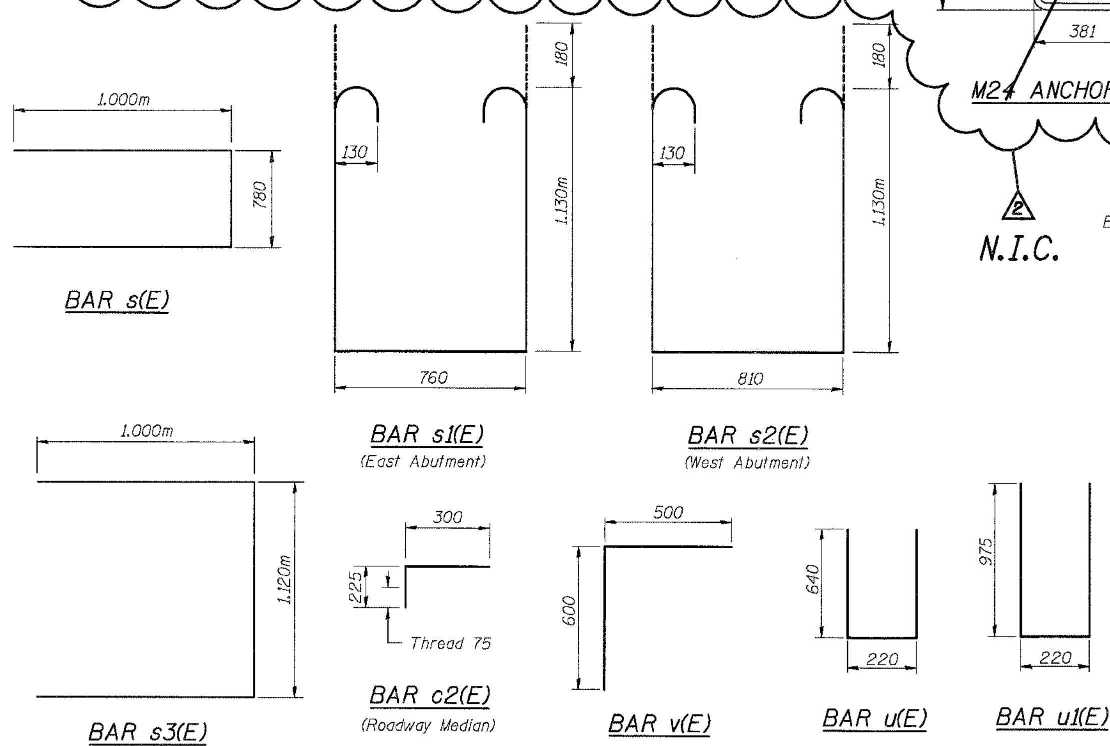
CONTRACT NO. 62897







Dimensions at right angles to abutment, except as shown.
* Cost included with Concrete Superstructure.



NOTES:

1. Reinforcement bars in diaphragm are billed with superstructure on sheet S-13 of S-27.
2. Concrete in diaphragm is included with Concrete Superstructure on sheet of S-13 of S-27.
3. The s(E) and s1(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
4. For anchor bolt details see sheet of S-19 of S-27.
5. Reinforcement bars designated (E) shall be epoxy coated.
6. Bars indicated thus 5x4 -#20 etc. indicates 5 lines of bars with 4 lengths per line.

MIN. BAR LAP

#20 bar = 790

SHT. S-12 OF S-27

Addendum #2 2/15/07

REVISIONS	
NAME	DATE

STV Incorporated

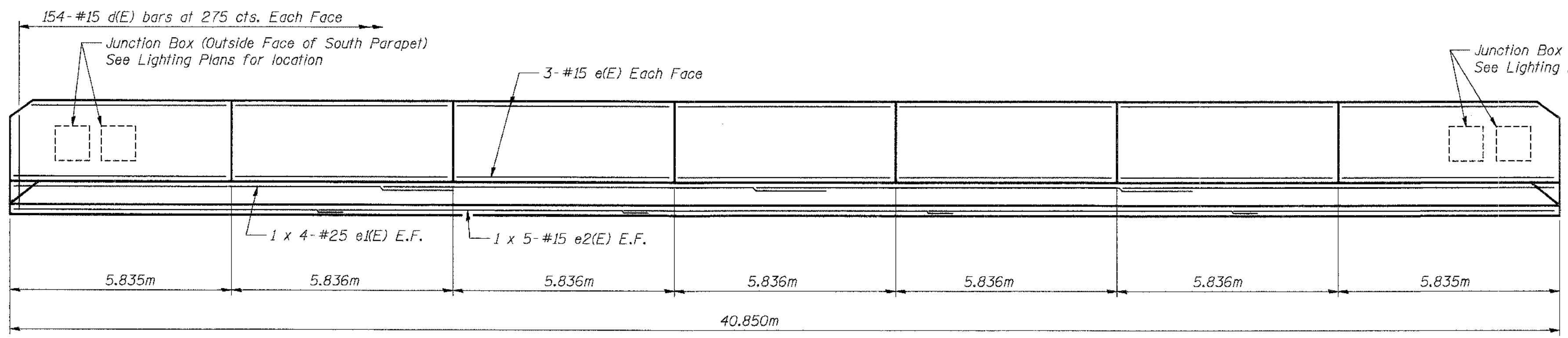
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 70HB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

SUPERSTRUCTURE DETAILS

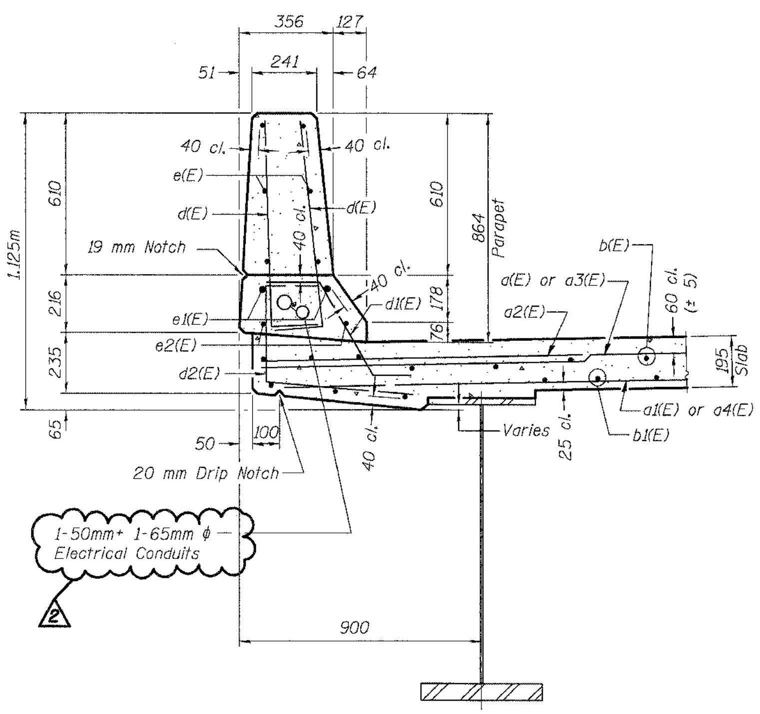
DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70HB-R-1	COOK	283	198
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

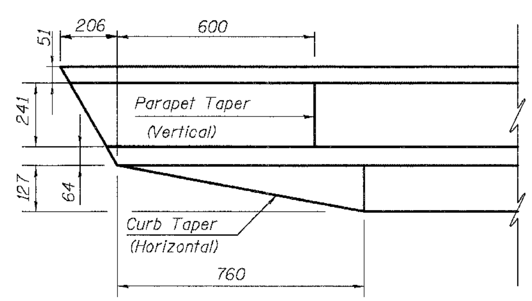
CONTRACT NO. 62897



INSIDE ELEVATION OF PARAPET

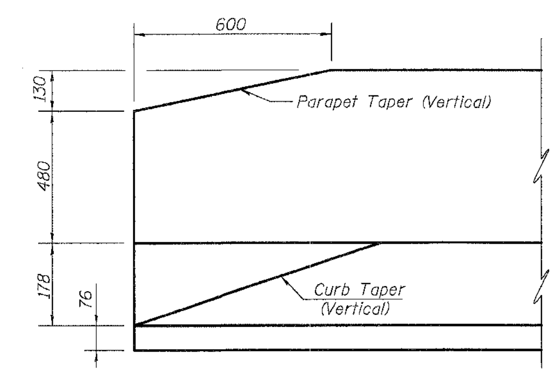


SECTION THRU PARAPET



END PLAN @ APPROACH

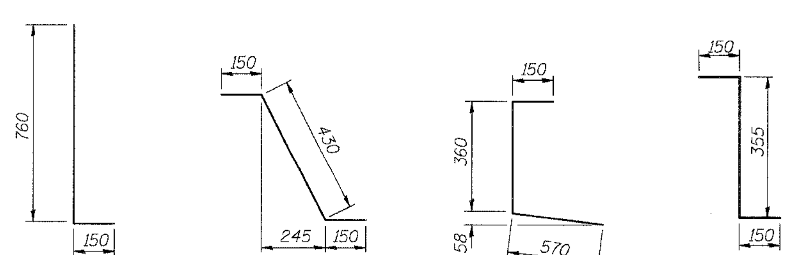
(West End Shown, East End Similar)



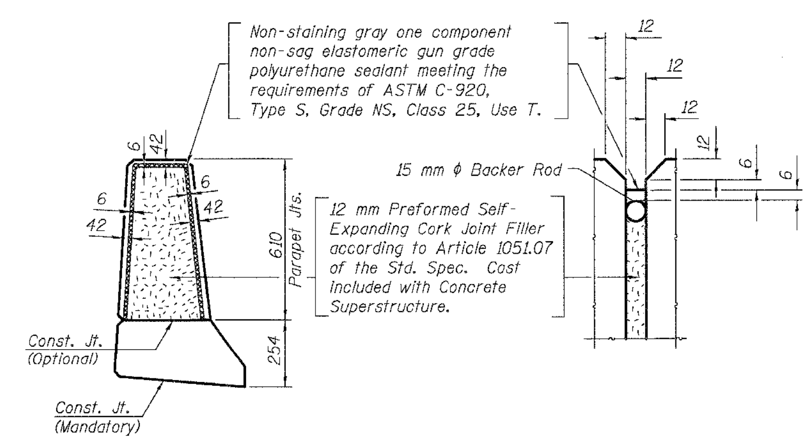
END ELEVATION (Along I.F. Parapet)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
a(E)	620	15	7.880	
a1(E)	636	15	5.470	
a2(E)	310	20	1.400	
a3(E)	620	15	7.155	
a4(E)	636	15	4.990	
a5(E)	24	15	0.450	
b(E)	396	15	10.540	
b1(E)	480	15	8.550	
b2(E)	9	15	7.770	
b3(E)	3	15	1.300	
b4(E)	6	15	10.020	
c1(E)	133	15	0.440	
c2(E)	266	15	0.525	
d(E)	616	15	0.910	
d1(E)	296	15	0.730	
d2(E)	308	15	1.080	
d3(E)	12	15	0.655	
e(E)	84	15	5.760	
e1(E)	16	25	11.180	
e2(E)	20	15	8.670	
m(E)	88	20	8.930	
s(E)	192	15	2.780	
s1(E)	86	15	3.380	
s2(E)	86	15	3.430	
s3(E)	8	15	3.120	
u(E)	180	15	1.500	
u1(E)	8	15	1.950	
v(E)	190	15	1.100	
Reinforcement Bars, Epoxy Coated			Kg	47,550
Concrete Superstructure			Cu M	345.0



BAR d(E) BAR d1(E) BAR d2(E) BAR d3(E)



PARAPET JOINT DETAILS

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. All Expansion Anchors shall be Epoxy Coated and included in the cost of "Reinforcement Bars, Epoxy Coated".

MIN. BAR LAP

#15 bar = 640
#25 bar = 1.320m

SHT. S-13 OF S-27

Addendum #2 2/15/07

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe Street, Suite 1650
Chicago, IL 60606-5015
312/553-0555, FAX 312/553-0661

REVISIONS	
NAME	DATE

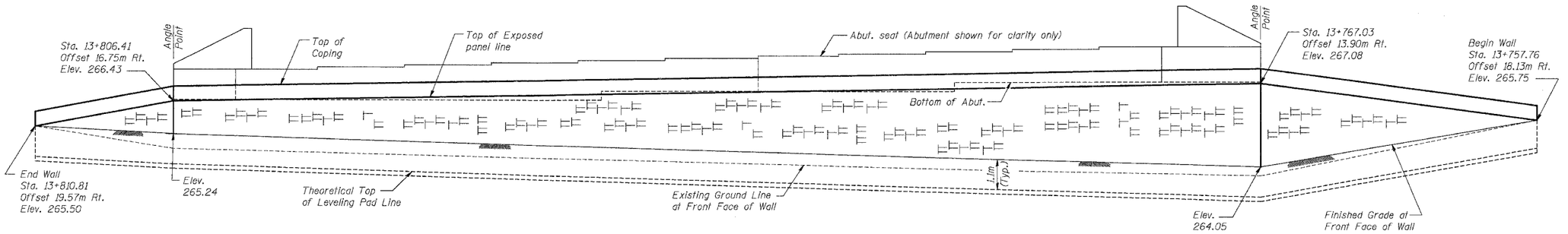
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 70HB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

PARAPET ELEVATION, DECK DETAILS, & B.O.M.

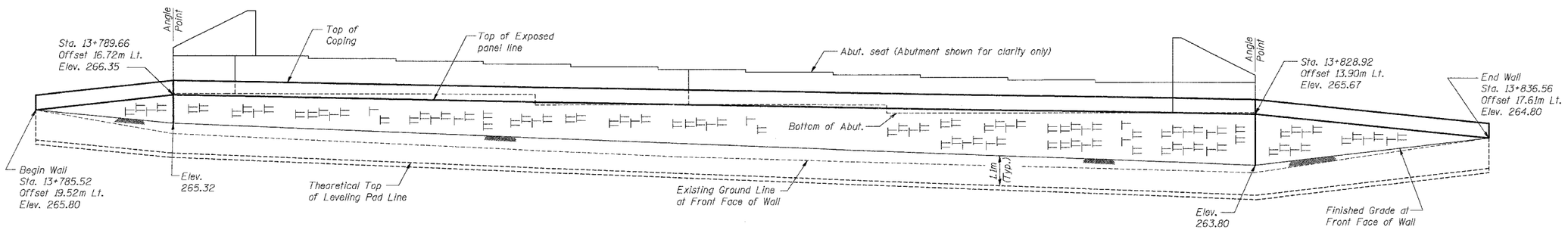
DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
343	70HB-R-1	COOK	283	209
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62897



WEST ABUTMENT WALL
(Unfolded Elevation View)



EAST ABUTMENT WALL
(Unfolded Elevation View)

NOTES:

Stationing and Offsets from ℄ US 14.

For Plan of Mechanically Stabilized Earth Retaining Wall see sheet S-01 of S-27.

For Section Through MSE Retaining Wall see sheet S-02 of S-27.

Bearing Capacity of soil below MSE wall is 215 kPa with a corresponding factor of Safety of 2.5.

BILL OF MATERIAL

Item	Unit	Total
Mechanically Stabilized Earth Retaining Wall	SQ M	287

2

2 Addendum #2 2/15/07

SHT. S-24 OF S-27

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 68 OVER US ROUTE 14
F.A.P. ROUTE 343 SECTION 70HB-R-1
COOK COUNTY STATION 10+001.778
STRUCTURE NO. 016-2861

MECHANICALLY STABILZED EARTH RETAINING WALLS

DESIGNED: BTO DRAWN: BTO
DATE: 02/07 CHECKED: JAN CHECKED: JAN

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe Street, Suite 1650
Chicago, IL 60606-5013
312/553-0655, FAX 312/553-0661