

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	1
		ILLINOIS	CONTRACT NO. 61D26	

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

# PROPOSED HIGHWAY PLANS

FAP ROUTE 347 (ROOSEVELT ROAD)  
DES PLAINES AVENUE TO HARLEM AVENUE  
STREETSCAPE IMPROVEMENT  
SECTION 13-00112-00-LS  
VILLAGE OF FOREST PARK  
COOK COUNTY  
JOB NO. C-91-289-15

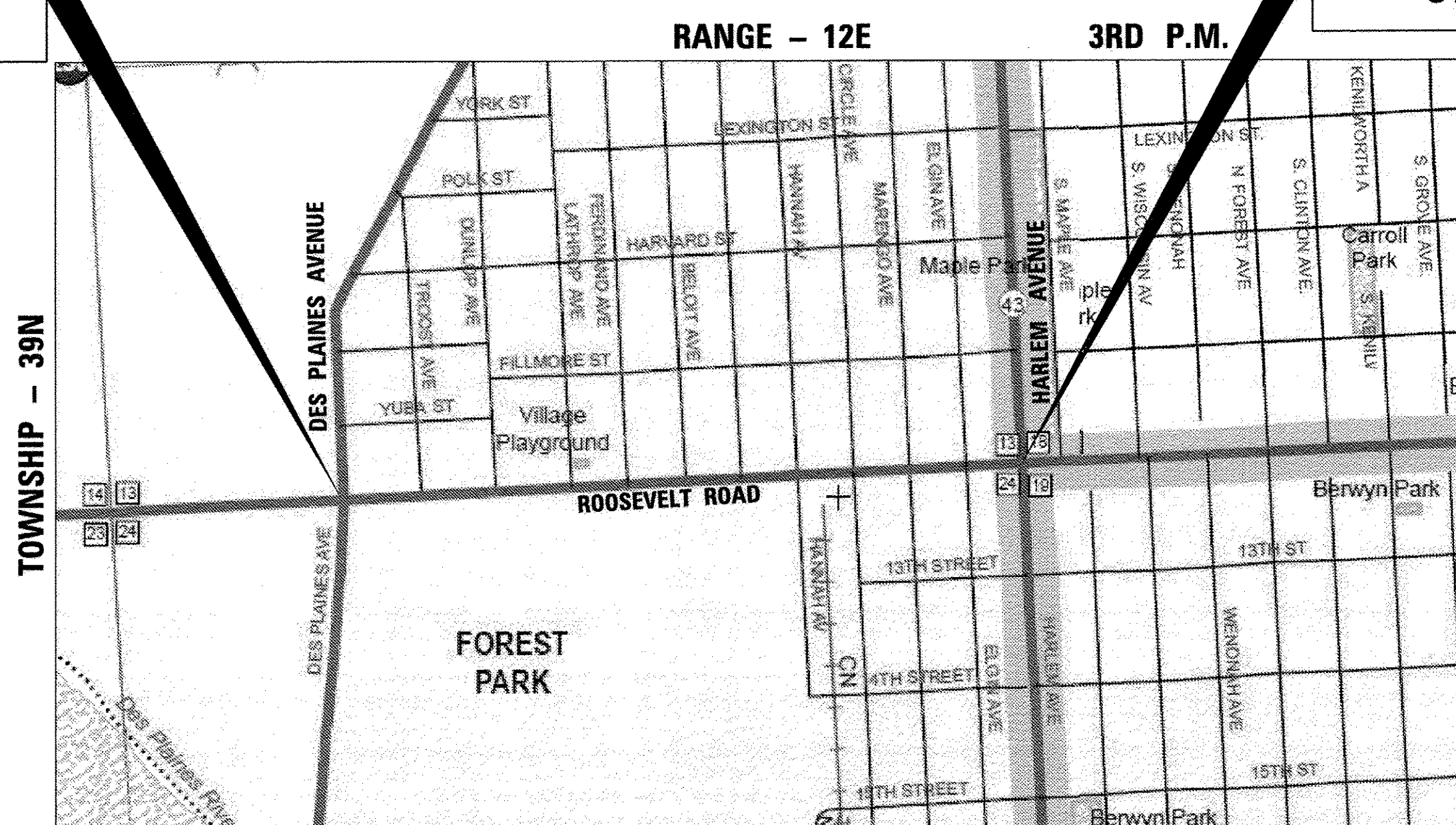


BEGIN IMPROVEMENT  
STA 10 + 30.51

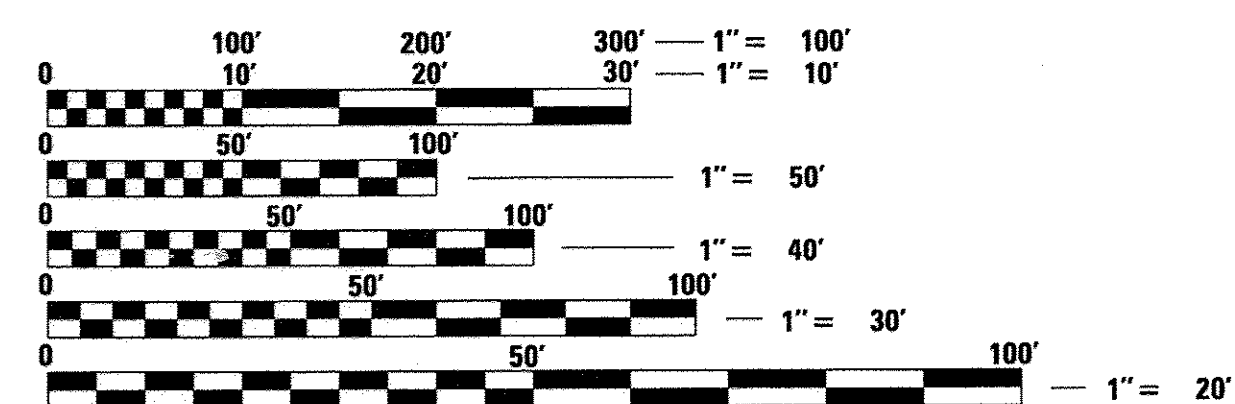
RANGE - 12E

3RD P.M.

END IMPROVEMENT  
STA 49 + 24.70



DESIGN DESIGNATION = URBAN MINOR ARTERIAL  
ADT = 27800 VPD (2015)  
POSTED SPEED LIMIT = 35 MPH



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

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

**STEPHEN N. SUGG**  
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS  
ILLINOIS REGISTRATION No. 062-044117  
EXPIRATION DATE: 11/30/2017

*Step N Sugg* 10/24/16  
DATE

GROSS LENGTH = 3,894.19 FT. = 0.738 MILE  
NET LENGTH = 3,894.19 FT. = 0.738 MILE

**CHRISTOPHER B. BURKE ENGINEERING, LTD.**  
9575 W. Higgins Road, Suite 600  
Rosemont, Illinois 60018  
(847) 823-0500  
PROFESSIONAL DESIGN FIRM NO. 184-001175  
EXPIRATION DATE: 04/30/17

LOCATION MAP  
NOT TO SCALE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

APPROVED *Anthony Calabrese* 10/26/2016  
MAYOR  
VILLAGE OF FOREST PARK

PASSED *Christopher Holt* OCTOBER 20 2016  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASED FOR BID BASED ON LIMITED REVIEW  
*John F. ...* November 17, 2016  
REGIONAL ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

**SHEET NO. DESCRIPTION**

1	COVER SHEET
2	INDEX OF SHEETS
3	GENERAL NOTES
4 - 5	SUMMARY OF QUANTITIES
6	EXISTING TYPICAL SECTIONS
7	PROPOSED TYPICAL SECTIONS
8 - 9	ALIGNMENT, TIES & BENCHMARKS
10 - 13	REMOVAL PLAN
14 - 20	ROADWAY PLAN AND PROFILE
21 - 30	SIDEWALK GRADING PLAN
31 - 43	MAINTENANCE OF TRAFFIC
44 - 50	PAVEMENT MARKING AND SIGNING PLAN
51 - 52	PAVEMENT MARKING AND SIGNING DETAILS
53 - 56	LANDSCAPING PLAN
57 - 58	LANDSCAPING DETAILS
59 - 78	TRAFFIC SIGNAL PLANS
79	LIGHTING GENERAL NOTES
80 - 83	LIGHTING REMOVAL PLAN
84 - 87	PROPOSED LIGHTING PLAN
88 - 92	PROPOSED ELECTRICAL DETAILS
93	ELECTRIC SERVICE COORDINATION
94 - 97	DETECTOR LOOP REPLACEMENT PLAN
98	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (BD-01)
99	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB < 15' (BD-02)
100	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
101	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
102	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
103	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
104	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
105	TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
106	DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13)
107	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TC-14)
108	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)
1096	ARTERIAL ROAD INFORMATION SIGN (TC-22)
110	DRIVEWAY ENTRANCE SIGNING (TC-26)
111 - 117	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)
118	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)
119 - 151	CROSS SECTIONS

**HIGHWAY STANDARDS**

**STD NO. DESCRIPTION**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-09	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-02	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-03	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424021-03	DEPRESSED CORNER FOR SIDEWALKS
424026-01	ENTRANCE / ALLEY PEDESTRIAN CROSSINGS
442201-03	CLASS C AND D PATCHES
602001-02	CATCH BASIN TYPE A
604001-04	FRAME AND LIDS TYPE 1
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
606306-04	CORRUGATED PC CONCRETE MEDIANS
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS ≤ 40 MPH TO 55 MPH
701602-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-06	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
878001-10	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

**GENERAL NOTES**

- 48 HOURS BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-1223 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES.
- ALL ELEVATIONS IN THE PLANS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND IDOT DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS OWN EXPENSE. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. PRIOR TO CONSTRUCTION AND COORDINATE HIS ACTIVITIES WITH THE ENGINEER.
- OFFSETS AND TOP OF FRAME ELEVATIONS FOR STRUCTURES WHICH ARE LOCATED IN THE GUTTER ARE GIVEN AT THE EDGE OF PAVEMENT. OFFSETS AND TOP OF FRAME OR LID ELEVATIONS FOR STRUCTURES NOT LOCATED IN THE GUTTER ARE GIVEN TO THE CENTER OF THE GRATE OR LID. STRUCTURES LOCATED IN THE GUTTER SHALL BE TURNED SO THAT THE FRAME IS CLOSEST TO THE CENTER LINE OF THE ROAD. ALL OTHER STRUCTURES SHALL BE TURNED SO THAT THE FRAME IS FURTHEST FROM THE CENTER LINE OF THE ROAD UNLESS OTHERWISE NOTED ON THE PLANS.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AS REQUIRED PRIOR TO COMMENCING WITH CONSTRUCTION.
- ANY IMPROVED PROPOSED WORK DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENT IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.
- 10 FOOT TRANSITIONS SHALL BE USED TO MATCH THE PROPOSED CURB & GUTTER TO THE EXISTING.
- THE RESIDENT ENGINEER SHALL NOTIFY CORY JUCIUS ARTERIAL TRAFFIC FIELD ENGINEER AT CORY.JUCIUS@ILLINOIS.GOV TWO WEEKS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.
- SAW CUT (FULL DEPTH) SHALL BE REQUIRED AT THE JOINT BETWEEN PAVEMENT, SIDEWALK, CURB & GUTTER, MEDIAN, DRIVEWAY PAVEMENT, HOT-MIX ASPHALT SURFACES TO BE REMOVED AND THAT LEFT IN PLACE OR AS DIRECTED BY THE ENGINEER.
- EXISTING REGULATORY, WARNING, AND/OR TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION AND/OR CONFLICT WITH CONSTRUCTION TRAFFIC PATTERNS DESCRIBED IN THE MAINTENANCE OF TRAFFIC PLANS OR DIRECTED BY THE ENGINEER.
- THE EXISTING GROUND COVER SHALL REMAIN IN ANY AREA WHERE THERE IS NO PROPOSED GRADING.
- CONTRACTOR SHALL LIMIT ALL CONSTRUCTION ACTIVITIES TO THE EXISTING AND PROPOSED RIGHT OF WAY.
- CONTRACTOR SHALL NOTIFY IDOT ROADSIDE DEVELOPMENT UNIT, AT (847) 705-4173, A WEEK PRIOR TO PLANTING FOR LAYOUT APPROVAL.
- DIMENSIONS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER.
- ANY EXISTING OR PROPOSED STORM SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED TO THE SATISFACTION OF THE ENGINEER.
- DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS.
- THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF ALL ROADWAYS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, AND CATCH BASINS. HE/SHE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE/SHE SHALL PROVIDE AND MAINTAIN A PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH THE SEWERS ARE BUILT AND IN SERVICE.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT AND PROVIDE ACCESS TO ADJUTING PROPERTY, UTILITIES, PEDESTRIANS, AND VEHICULAR TRAFFIC.
- ALL EXISTING PARKING METER POSTS (ONCE PARKING METERS HAVE BEEN REMOVED BY THE VILLAGE), BENCHES, TRASH RECEPTACLES, AND NEWSPAPER STANDS SHALL BE REMOVED, SALVAGED AND DELIVERED TO A SPECIFIC LOCATION, OR DISPOSED OF PER THE DIRECTION OF THE VILLAGE OF THE FOREST PARK ENGINEER.

**A. REFERENCED SPECIFICATIONS**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
  - \* STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
  - \* STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
  - \* VILLAGE OF FOREST PARK MUNICIPAL CODE;
  - \* THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
  - \* IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

**B. NOTIFICATIONS**

- THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
- THE VILLAGE OF FOREST PARK ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

**C. GENERAL NOTES**

- ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS 0 FT.
- MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
- THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

**D. SANITARY SEWER**

- THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
- DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
- ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

**PIPE MATERIAL PIPE SPECIFICATIONS JOINT SPECIFICATIONS**

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE	ASTM D-3034	ASTM D-3212
6-INCH TO 15-INCH DIAMETER SDR 26 18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-2241	ASTM D-3261, F-2620 (HEAT FUSION)
	AWWA C900	ASTM D-3212, F-477 (GASKETED)
	AWWA C905	ASTM D-3139
WATER MAIN QUALITY PVC	ASTM D-2241	ASTM D-3139
4-INCH TO 36-INCH	AWWA C900	ASTM D-3139
4-INCH TO 12-INCH	AWWA C905	ASTM D-3139
14-INCH TO 48-INCH		

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

**PIPE MATERIAL PIPE SPECIFICATIONS JOINT SPECIFICATIONS**

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

- ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE 3/4" TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
- ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
- WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
  - A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
  - REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
  - WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMANS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
- ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
- EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES / FIELD TILES / UNDERDRAINS / PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
- A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

**E. EROSION AND SEDIMENT CONTROL**

- THE CONTRACTOR SHALL INSTALL INLET FILTERS ON ALL EXISTING (AND PROPOSED) DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS.
- EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
- ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
  - UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
  - ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
- MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
- TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
- DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
- STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
- THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
- IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMANS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
- ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
- THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

FILE NAME =	USER NAME = jstrick	DESIGNED - LC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES ROOSEVELT ROAD</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\023\BG046\civil\NOT_0023\0046b-01.sht		DRAWN - LC	REVISED -		347	13-00112-00-LS	COOK	151	3			
Default	PLOT SCALE = 5'	CHECKED - AJP	REVISED -		CONTRACT NO. 61D26							
	PLOT DATE = 12/14/2016	DATE - 10/21/2016	REVISED -		ILLINOIS FED. AID PROJECT							

SHEET 1 OF 1 SHEETS STA. TO STA.

0005 0021 0042

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	TRAFFIC SIGNALS & LIGHTING	TRAINEES
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	15	15		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	28	28		
20200100	EARTH EXCAVATION	CU YD	525	525		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	153	153		
20400800	FURNISHED EXCAVATION	CU YD	340	340		
20800150	TRENCH BACKFILL	CU YD	173	73	100	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	275	275		
25200110	SODDING, SALT TOLERANT	SQ YD	275	275		
28000510	INLET FILTERS	EACH	28	28		
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	200	200		
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	1438	1438		
31101180	SUBBASE GRANULAR MATERIAL, TYPE B 2"	SQ YD	4540	4540		
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	1435	1435		
31101600	SUBBASE GRANULAR MATERIAL, TYPE B 8"	SQ YD	598	598		
35300300	PORTLAND CEMENT CONCRETE BASE COURSE 8"	SQ YD	14	14		
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	1255	1255		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	61182	61182		
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	45	45		
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1142	1142		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	385	385		
40603090	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	300	300		
40603565	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70	TON	2665	2665		
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	1078	1078		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	41535	41535		
42400800	DETECTABLE WARNINGS	SQ FT	1190	1190		
44000100	PAVEMENT REMOVAL	SQ YD	3407	3407		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	780	780		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	8796	8796		
44000600	SIDEWALK REMOVAL	SQ FT	48183	48183		
44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	75	75		
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	225	225		
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	400	400		
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	800	800		
550A0040	STORM SEWERS, CLASS A, TYPE 1 10"	FOOT	442	442		
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	96	96		
56109210	WATER VALVES TO BE ADJUSTED	EACH	9	9		
56500600	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	35	35		
60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	17	17		
60250200	CATCH BASINS TO BE ADJUSTED	EACH	37	37		

0005 0021 0042

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	TRAFFIC SIGNALS & LIGHTING	TRAINEES
60250400	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	1	1		
60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	10	10		
60255500	MANHOLES TO BE ADJUSTED	EACH	44	44		
60260300	INLETS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	20	20		
60260400	INLETS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1		
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	29	29		
60266600	VALVE BOXES TO BE ADJUSTED	EACH	15	15		
60603451	PRECAST CONCRETE CURB	FOOT	904	904		
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	459	459		
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1855	1855		
66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1	1		
66900530	SOIL DISPOSAL ANALYSIS	EACH	8	8		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9	9		
67100100	MOBILIZATION	LSUM	1	1		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	2886	2886		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	962	962		
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	510	510		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	15928	15928		
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2726	2726		
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	231	231		
72000100	SIGN PANEL - TYPE 1	SQ FT	400	400		
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	4	4		
72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	235	235		
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	3	3		
72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	11	11		
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	681	681		
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	9760	9760		
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	3997	3997		
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	406	406		
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	490	490		
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	348	348		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	456	456		
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1		1	
80400200	ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1		1	
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	1200		1200	
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	105		105	
81028250	UNDERGROUND CONDUIT, GALVANIZED STEEL, 5" DIA.	FOOT	80		80	
81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	120		120	
81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	8580		8580	

Δ INDICATES SPECIALTY ITEM

0005 0021 0042

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	TRAFFIC SIGNALS & LIGHTING	TRAINEES
81400100	HANDHOLE	EACH	1		1	
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	72600		72600	
81702200	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C 250MCM	FOOT	730		730	
82500370	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 200AMP	EACH	1		1	
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	500		500	
84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	4		4	
84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	42		42	
84200804	REMOVAL OF POLE FOUNDATION	EACH	46		46	
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1		1	
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1		1	
84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1		1	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4		4	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1918		1918	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1253		1253	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	53		53	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	280		280	
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	177		177	
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	4		4	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1		1	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	28		28	
87900200	DRILL EXISTING HANDHOLE	EACH	52		52	
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN	EACH	4		4	
88600100	DETECTOR LOOP, TYPE I	FOOT	1444		1444	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	16		16	
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	3		3	
89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	4		4	
89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	2		2	
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	2		2	
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2113		2113	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2		2	
89502376	REBUILD EXISTING HANDHOLE	EACH	23		23	
89502380	REMOVE EXISTING HANDHOLE	EACH	29		29	
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	2		2	
A2004824	TREE, GLEDITSIA TRIACANTHOS INERMIS SKYLINE (SKYLINE THORNLESS COMMON	EACH	5	5		
A2008124	TREE, TILIA CORDATA GREENSPIRE (GREENSPIRE LITTLE LEAF LINDEN), 3" CALIPER, BALLED AND BURLAPPED	EACH	13	13		
C2C058G3	SHRUB, RHUS AROMATICA GRO-LOW (GRO-LOW FRAGRANT SUMAC), CONTAINER GROWN, 3-GALLON	EACH	55	55		
C2C06724	SHRUB, ROSA PAVEMENT DWARF (DWARF PAVEMENT ROSE), 2' HEIGHT, CONTAINER	EACH	190	190		

0005 0021 0042

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	TRAFFIC SIGNALS & LIGHTING	TRAINEES
C2C07005	SHRUB, ROSA RADTKOPINK (PINK DOUBLE KNOCKOUT ROSE), 18" HEIGHT, CONTAINER	EACH	86	86		
K0012990	PERENNIAL PLANTS, ORNAMENTAL TYPE, GALLON POT	UNIT	4	4		
K1005481	SHREDDED BARK MULCH 3"	SQ YD	404	404		
X0322102	TEMPORARY SIDEWALK RAMP	EACH	25	25		
X0325942	CONCRETE LANDING SLAB	SQ FT	25309	25309		
X0326806	WASHOUT BASIN	LSUM	1	1		
X0326863	BRICK SIDEWALK	SQ FT	24408	24408		
X2110100	TOPSOIL FURNISH AND PLACE, SPECIAL	CU YD	148	148		
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	15	15		
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	12	12		
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	27192	27192		
X6064200	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	7406	7406		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1		
X8250500	LIGHTING UNIT COMPLETE, SPECIAL	EACH	50		50	
X8360215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	150		150	
X0300635	PLANTER	EACH	42	42		
X0326859	PAVEMENT IMPRINTING	SQ YD	482	482		
X0327018	DECORATIVE SIGN POST	EACH	27	27		
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	2316	2316		
X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	70	70		
X5010205	REMOVAL OF EXISTING STRUCTURE, SPECIAL	EACH	5	5		
X6060505	CONCRETE CURB (SPECIAL)	FOOT	710	710		
X7200105	SIGN PANEL - TYPE 1 (SPECIAL)	SQ FT	38	38		
XX008268	DECORATIVE GATEWAY ELEMENT	EACH	2	2		
XX007852	PEDESTRIAN BENCH, FURNISH AND INSTALL	EACH	3	3		
XX007857	TRASH RECEPTACLE, FURNISH & INSTALL	EACH	4	4		
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1		
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52		
Z0033024	MAINTAIN EXISTING LIGHTING SYSTEM	LSUM	1		1	
Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	2		2	
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	4		4	
Z0076600	TRAINEES	HOUR	500			500
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500			500
XX009057	RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH STOP BAR	EACH	1		1	

Δ INDICATES SPECIALTY ITEM

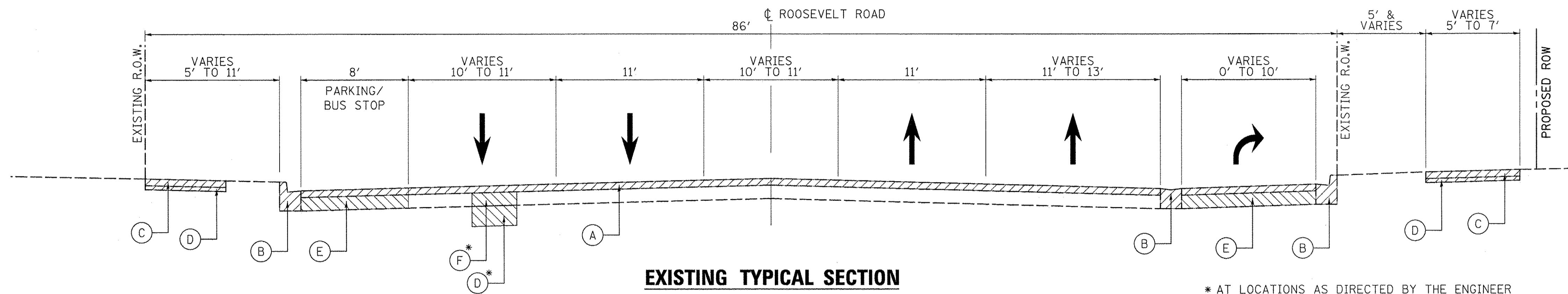
FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\0023\BG046\Civil\S00_0023\BG046b-02.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 20'	CHECKED -	REVISED -
	PLOT DATE = 11/14/2016	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
ROOSEVELT ROAD

SCALE: N.T.S. SHEET 2 OF 2 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	5
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



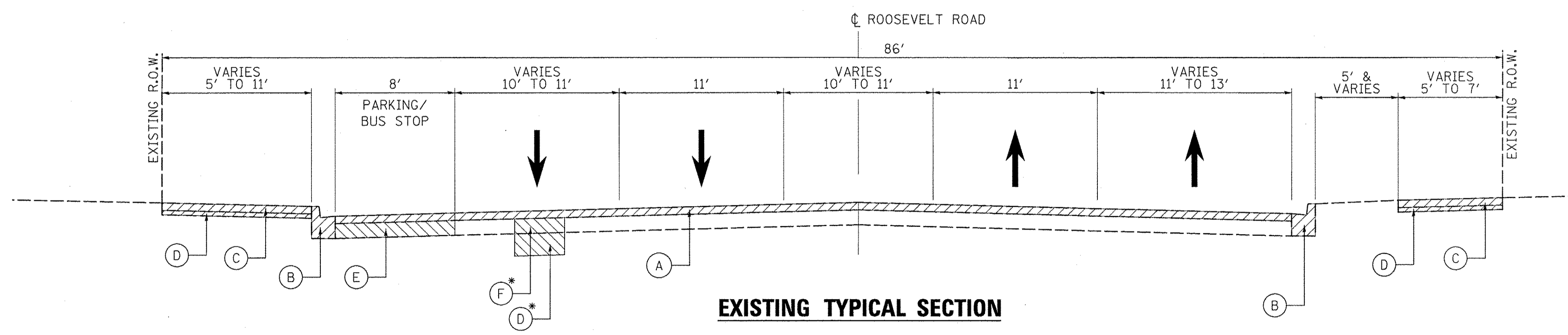
**EXISTING TYPICAL SECTION**

\* AT LOCATIONS AS DIRECTED BY THE ENGINEER

STA. 10+30.51 TO STA. 15+48.51, ROOSEVELT ROAD  
 STA. 20+08.69 TO STA. 23+35.82, ROOSEVELT ROAD  
 STA. 27+73.31 TO STA. 31+34.01, ROOSEVELT ROAD  
 STA. 46+53.96 TO STA. 49+24.70, ROOSEVELT ROAD

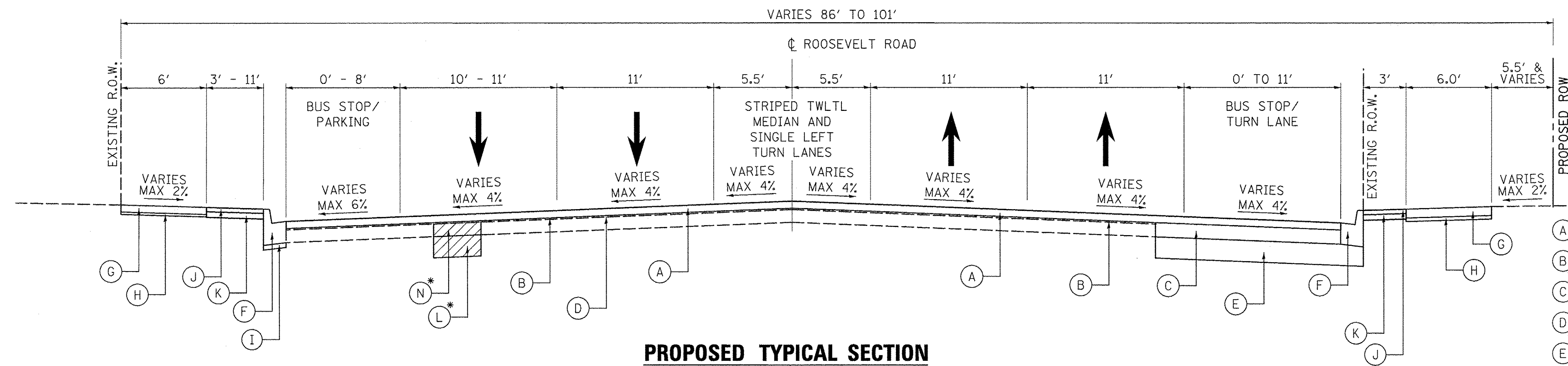
**EXISTING LEGEND**

- (A) HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (X4401198)
- (B) COMBINATION CURB AND GUTTER REMOVAL (44000500)
- (C) SIDEWALK REMOVAL (44000600)
- \* (D) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)
- (E) PAVEMENT REMOVAL (44000100)
- \* (F) CLASS D PATCHES, 8 INCH (TYPES I, II, III & IV) (442017XX)



**EXISTING TYPICAL SECTION**

STA. 15+48.51 TO STA. 20+08.69, ROOSEVELT ROAD  
 STA. 23+35.82 TO STA. 27+73.31, ROOSEVELT ROAD  
 STA. 31+34.01 TO STA. 46+53.96, ROOSEVELT ROAD



**PROPOSED TYPICAL SECTION**

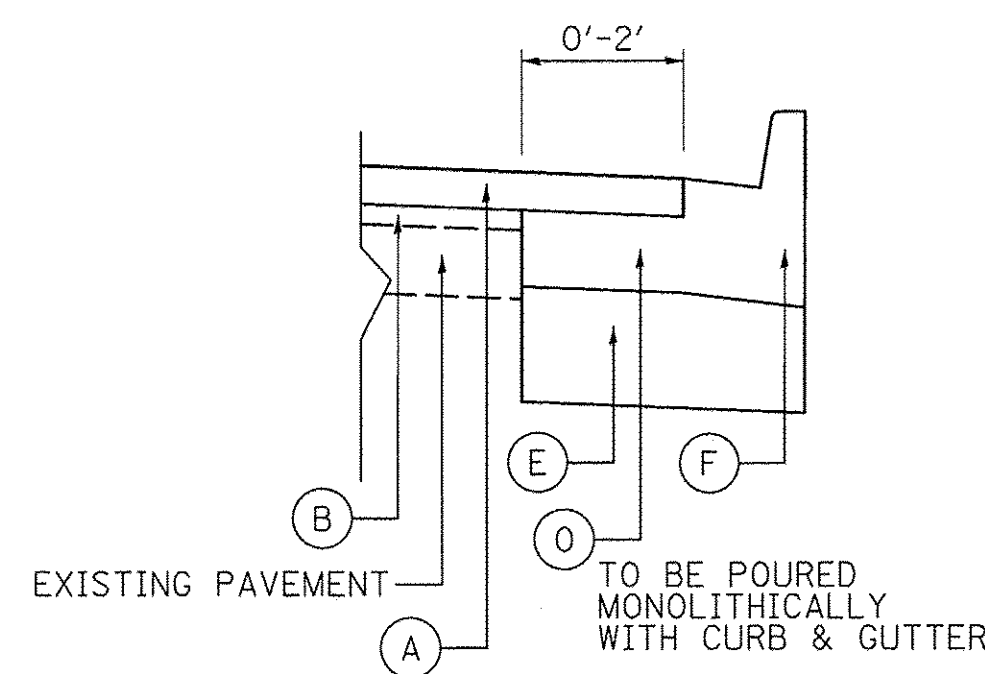
STA. 10+30.51 TO STA. 17+72.70, ROOSEVELT ROAD  
 STA. 20+58.88 TO STA. 35+00.34, ROOSEVELT ROAD  
 STA. 36+27.61 TO STA. 43+54.86, ROOSEVELT ROAD  
 STA. 46+19.65 TO STA. 49+24.70, ROOSEVELT ROAD

\* AT LOCATIONS AS DIRECTED BY THE ENGINEER

\*\*\* HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N90 TO BE USED AT LOCATIONS WHERE PAVEMENT CROSS-SLOPES CANNOT BE CORRECTED WITH LEVELING BINDER ALONE

**PROPOSED LEGEND**

- (A) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70; 1 3/4" (40603565)
- (B) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50; 3/4"-1" (40600827)
- (C) HOT-MIX ASPHALT BASE COURSE, 8" (35501316)
- (D) BITUMINOUS MATERIALS (TACK COAT) (40600290)
- (E) AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)
- (F) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL) (X6064200)
- (G) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (42400200)
- (H) SUBBASE GRANULAR MATERIAL, TYPE B 2" (31101180)
- (I) SUBBASE GRANULAR MATERIAL, TYPE B 4" (31101200)
- (J) BRICK SIDEWALK (X0326863)
- (K) CONCRETE LANDING SLAB (X0325942)
- \* (L) AGGREGATE SUBGRADE IMPROVEMENT (30300001)
- (M) TOPSOIL FURNISH AND PLACE, SPECIAL (X2110100)
- \* (N) CLASS D PATCHES, 8 INCH (TYPES I, II, III & IV) (442017XX)
- (O) PORTLAND CEMENT CONCRETE BASE COURSE 8" (35300300) (TO BE USED WHERE DISTANCE BETWEEN PROPOSED CURB & GUTTER AND EXISTING PAVEMENT IS 2' OR LESS)
- \*\*\* (P) HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N90; 2 1/4" MIN (4060390)



**PCC BASE COURSE DETAIL**

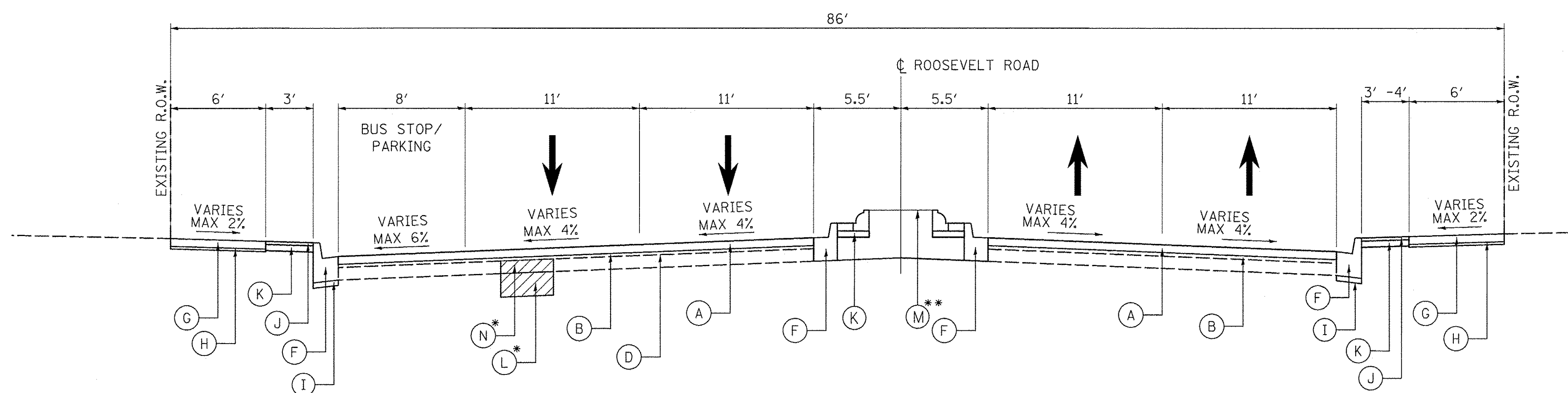
**NOTES:**

1. CONTRACTOR SHALL MILL PAVEMENT BEFORE PATCHING. \*
2. ANY PAVEMENT REMOVED FOR CONSTRUCTION OF COMBINATION CONCRETE CURB AND GUTTER SHALL BE REPLACED WITH P.C.C. (CLASS SI) AND SHALL BE VIBRATED IN PLACE. COST FOR PAVEMENT REMOVAL AND P.C.C. (CLASS SI) SHALL BE INCLUDED IN UNIT PRICE FOR COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24, CONCRETE CURB (SPECIAL), AND COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL).

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @Ndes
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N70	4% @ 70 Gyr.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE IL-19.0, N90	4.0% @ 90 Gyr.
CLASS D PATCHES, 8"	4% @ 70 Gyr.
CLASS D PATCHES (HMA BINDER, IL-19.0mm)	

**NOTES:**

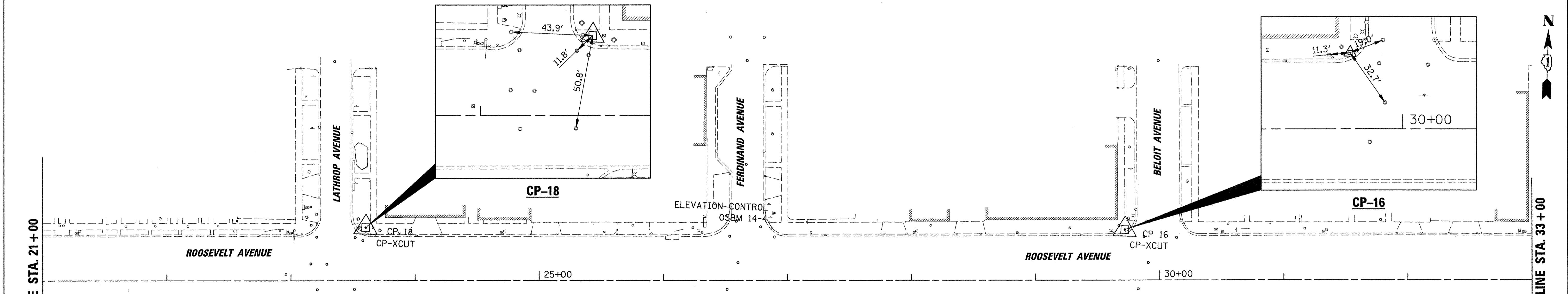
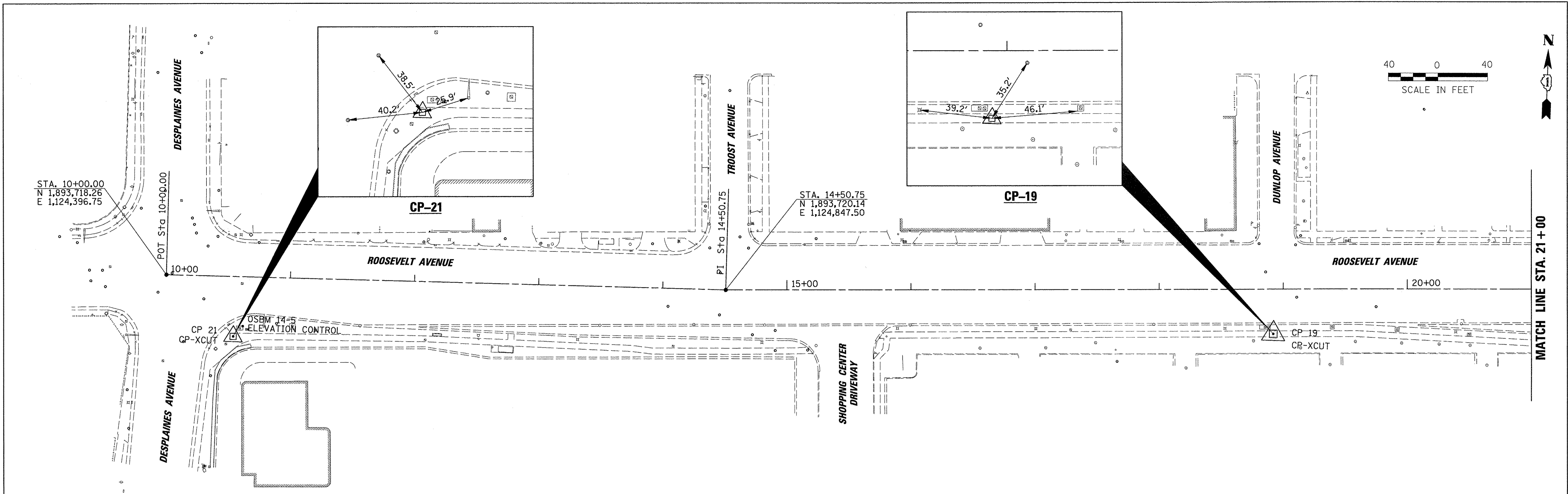
1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.
2. FOR USE OF RECYCLED MATERIAL SEE SPECIAL PROVISIONS.
3. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.



**PROPOSED TYPICAL SECTION**

STA. 17+72.70 TO STA. 20+58.88, ROOSEVELT ROAD  
 STA. 35+00.34 TO STA. 36+27.61, ROOSEVELT ROAD  
 STA. 43+54.86 TO STA. 46+19.65, ROOSEVELT ROAD

\*\* 18+26.01 TO 18+68.72  
 19+45.90 TO 20+51.39  
 35+07.89 TO 36+05.58  
 43+62.36 TO 45+59.20



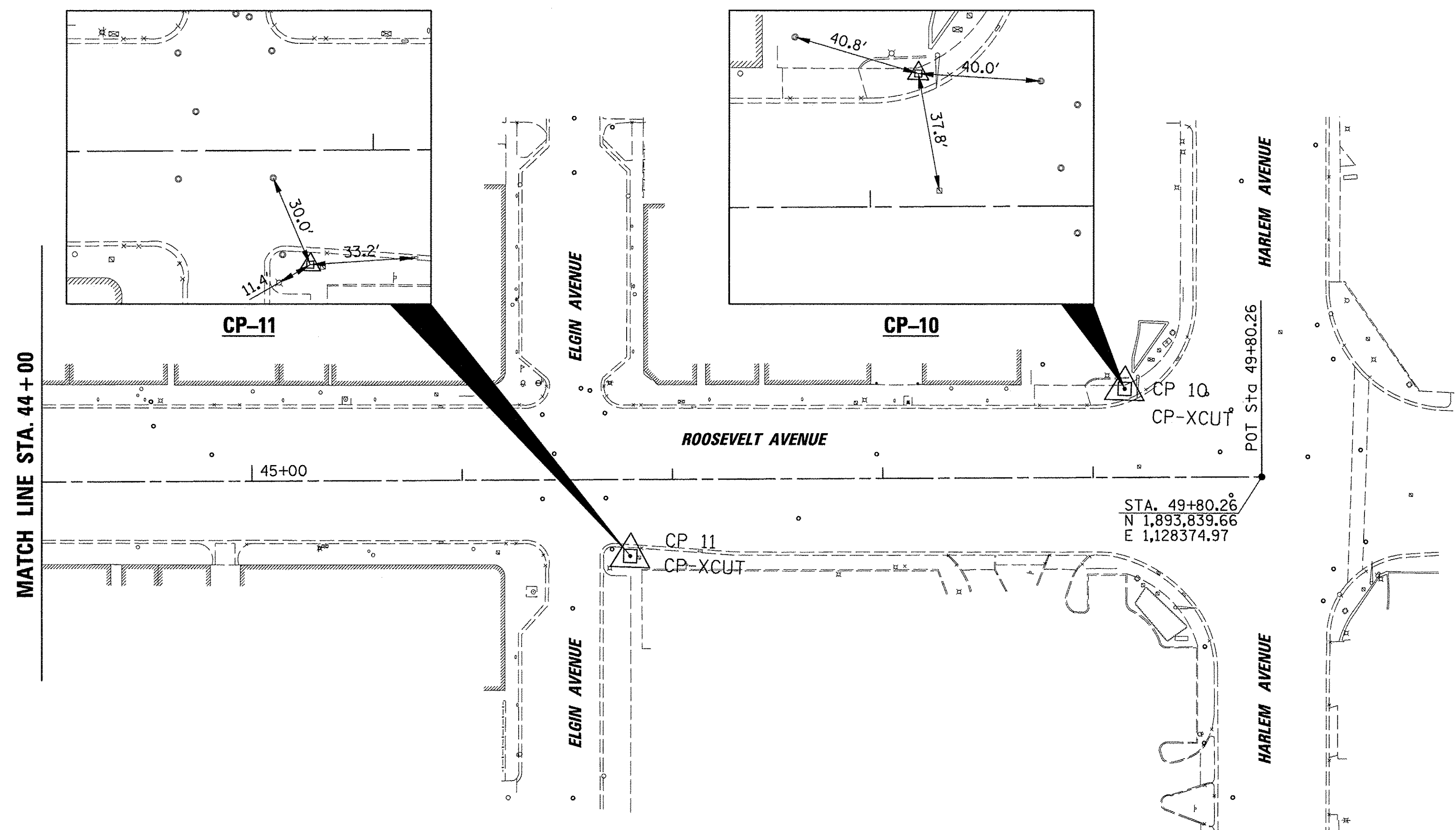
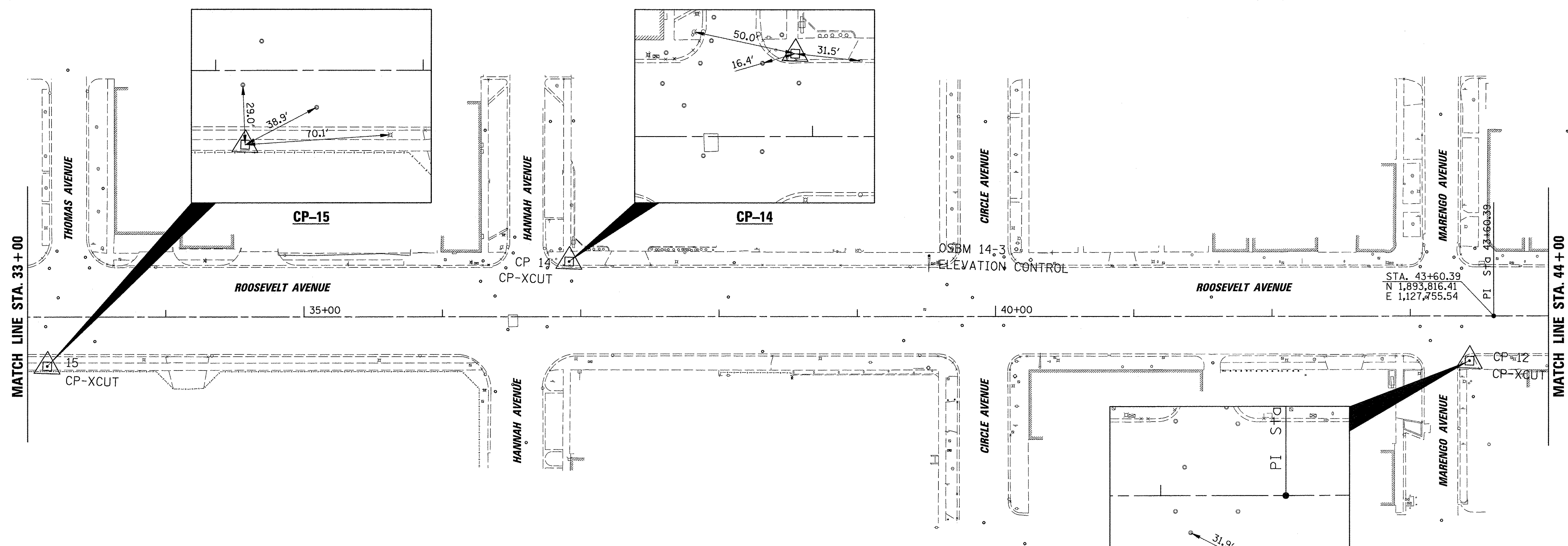
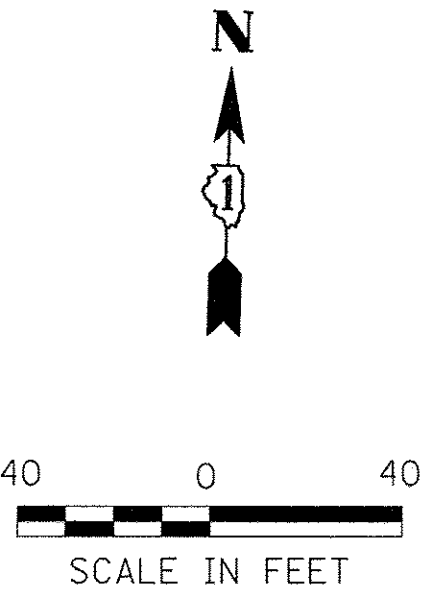
**HORIZONTAL CONTROL POINTS**

CONTROL POINTS	NORTHING	EASTING	DESCRIPTION	STATION	OFFSET
CP-16	1893811.20	1126366.48	CP-CUT	29+71.92	40.75 LT
CP-18	1893793.24	1125755.05	CP-CUT	23+60.23	43.03 LT
CP-19	1893698.44	1125289.70	CP-CUT	18+91.99	36.32 RT
CP-21	1893670.14	1124452.01	CP-CUT	10+55.06	48.36 RT

**ELEVATION BENCHMARKS**  
DATUM: NAVD 1988 (GPS OBSERVED)

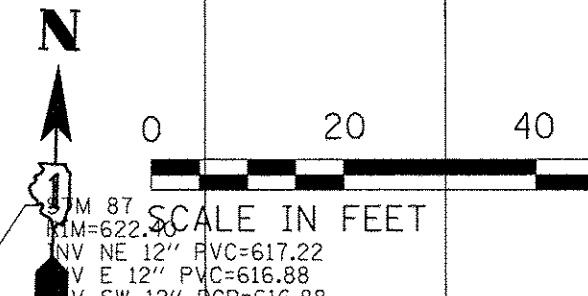
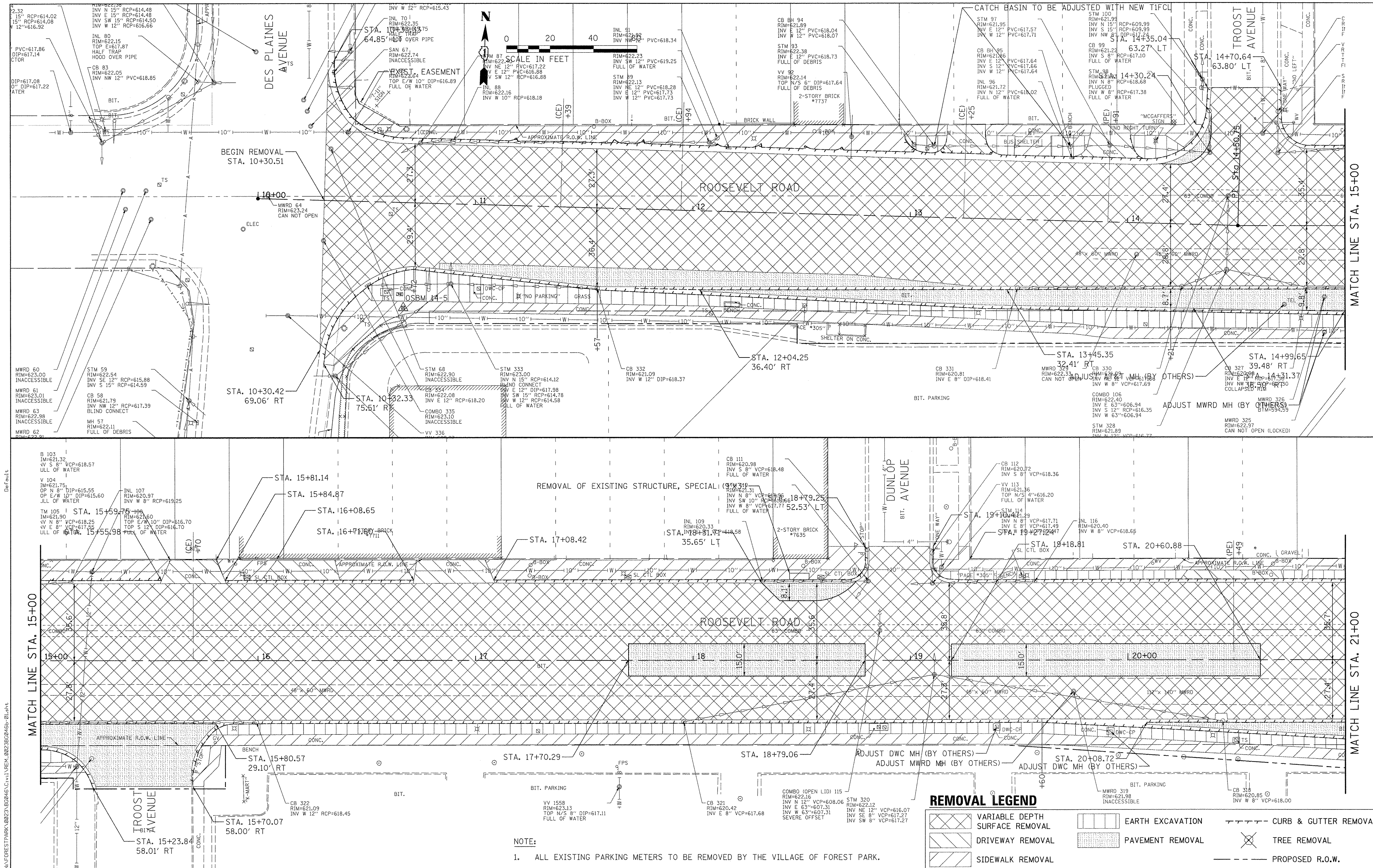
OSBM 14-4	X CUT ON NE BOLT (TAG BOLT) FIRE HYD LOCATED AT NORTHEAST CORNER FERDIAND AVENUE AND ROOSEVELT ROAD	623.28
OSBM 14-5	SQUARE CUT SET ON NE CORNER CONC. ENCASEMENT OF TRAFFIC SIGNAL H.H. LOCATED @ S.E. CORNER DESPLAINES AVENUE & ROOSEVELT ROAD.	622.46
OSBM 14-6	SQUARE FND ON NORTH SIDE OF CONC. FND. FOR TRAFFIC SIGNAL W/ MAST ARM ON SOUTHEAST CORNER OF ROOSEVELT ROAD AND LATHROP AVENUE.	622.03





**HORIZONTAL CONTROL POINTS**

CONTROL POINTS	NORTHING	EASTING	DESCRIPTION	STATION	OFFSET
CP-10	1893879.49	1128308.41	CP-CUT	49+15.23	42.29 LT
CP-11	1893792.12	1128076.05	CP-CUT	46+79.76	36.30 RT
CP-12	1893783.28	1127739.08	CP-CUT	43+42.84	32.57 RT
CP-14	1893834.27	1127085.86	CP-CUT	36+91.66	40.01 LT
CP-15	1893745.91	1126711.13	CP-CUT	33+14.22	35.90 RT

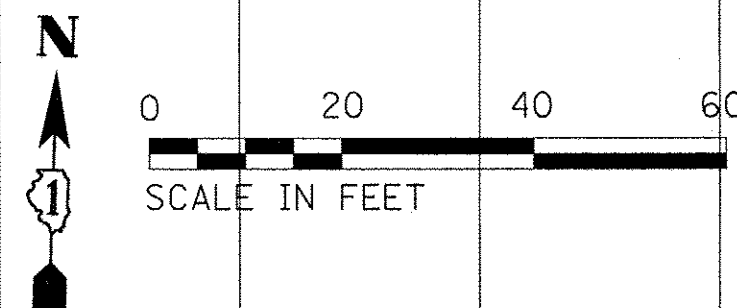


**REMOVAL LEGEND**

	VARIABLE DEPTH SURFACE REMOVAL		EARTH EXCAVATION		CURB & GUTTER REMOVAL
	DRIVEWAY REMOVAL		PAVEMENT REMOVAL		TREE REMOVAL
	SIDEWALK REMOVAL		PROPOSED R.O.W.		

**NOTE:**  
 1. ALL EXISTING PARKING METERS TO BE REMOVED BY THE VILLAGE OF FOREST PARK.

 <b>INFRASTRUCTURE ENGINEERING</b>   INCORPORATED 33 West Monroe   Suite 1540   Chicago, IL 60603 P 312.425.9560   F 312.425.9564   www.infrastructure-eng.com	USER NAME = mthomas PLOT SCALE = 20" PLOT DATE = 11/14/2016	DESIGNED - DC DRAWN - DC CHECKED - AJP DATE - 10/20/2016	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>REMOVAL PLAN</b> <b>ROOSEVELT ROAD</b>	SCALE: 20 SHEET 1 OF 4 SHEETS STA. 10+00.00 TO STA. 21+00.00	F.A.P. RTE. 347 SECTION 13-00112-00-LS COUNTY COOK TOTAL SHEETS 151 SHEET NO. 10 CONTRACT NO. 61D26 ILLINOIS FED. AID PROJECT
---	---	---	--	---	--	--	---

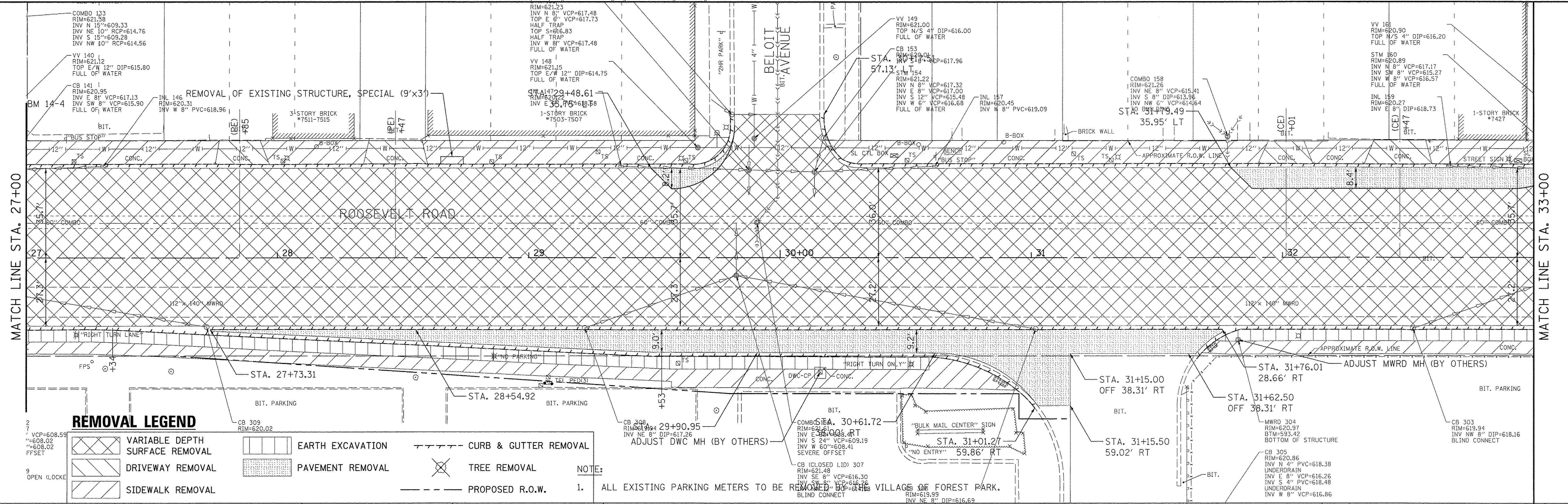
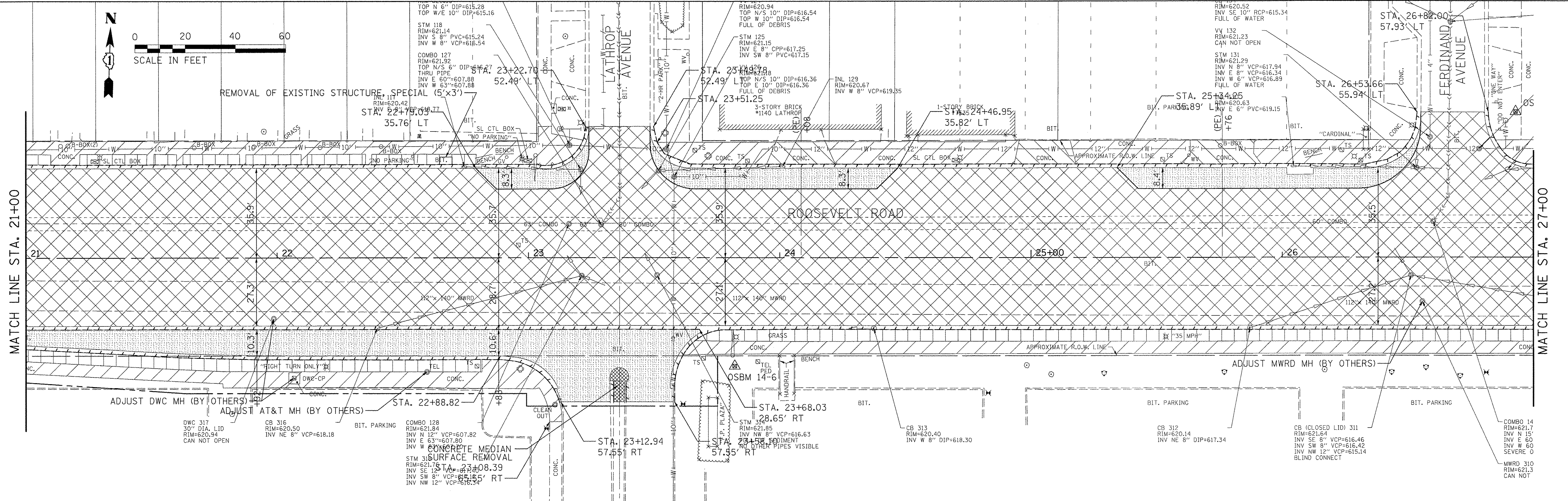


MATCH LINE STA. 21+00

MATCH LINE STA. 27+00

MATCH LINE STA. 27+00

MATCH LINE STA. 33+00



**REMOVAL LEGEND**

- VARIABLE DEPTH SURFACE REMOVAL
- DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- EARTH EXCAVATION
- PAVEMENT REMOVAL
- TREE REMOVAL
- PROPOSED R.O.W.
- CURB & GUTTER REMOVAL

NOTE:

1. ALL EXISTING PARKING METERS TO BE REMOVED AT VILLAGES OF FOREST PARK.

FILE NAME = N:\FORESTPARK\0023\B0046\Civil\REM\_0023B0046-02.dwg

**INFRASTRUCTURE ENGINEERING**  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9560 | F 312.425.9564 | www.infrastructure-eng.com

USER NAME = mthomas  
 PLOT SCALE = 20"  
 PLOT DATE = 11/14/2016

DESIGNED - DC  
 DRAWN - DC  
 CHECKED - AJP  
 DATE = 10/20/2016

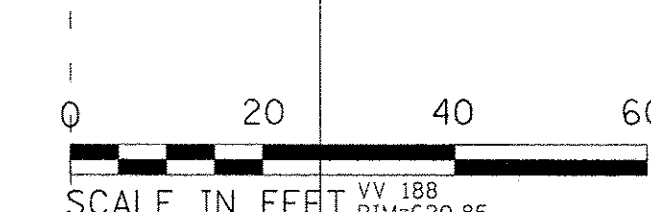
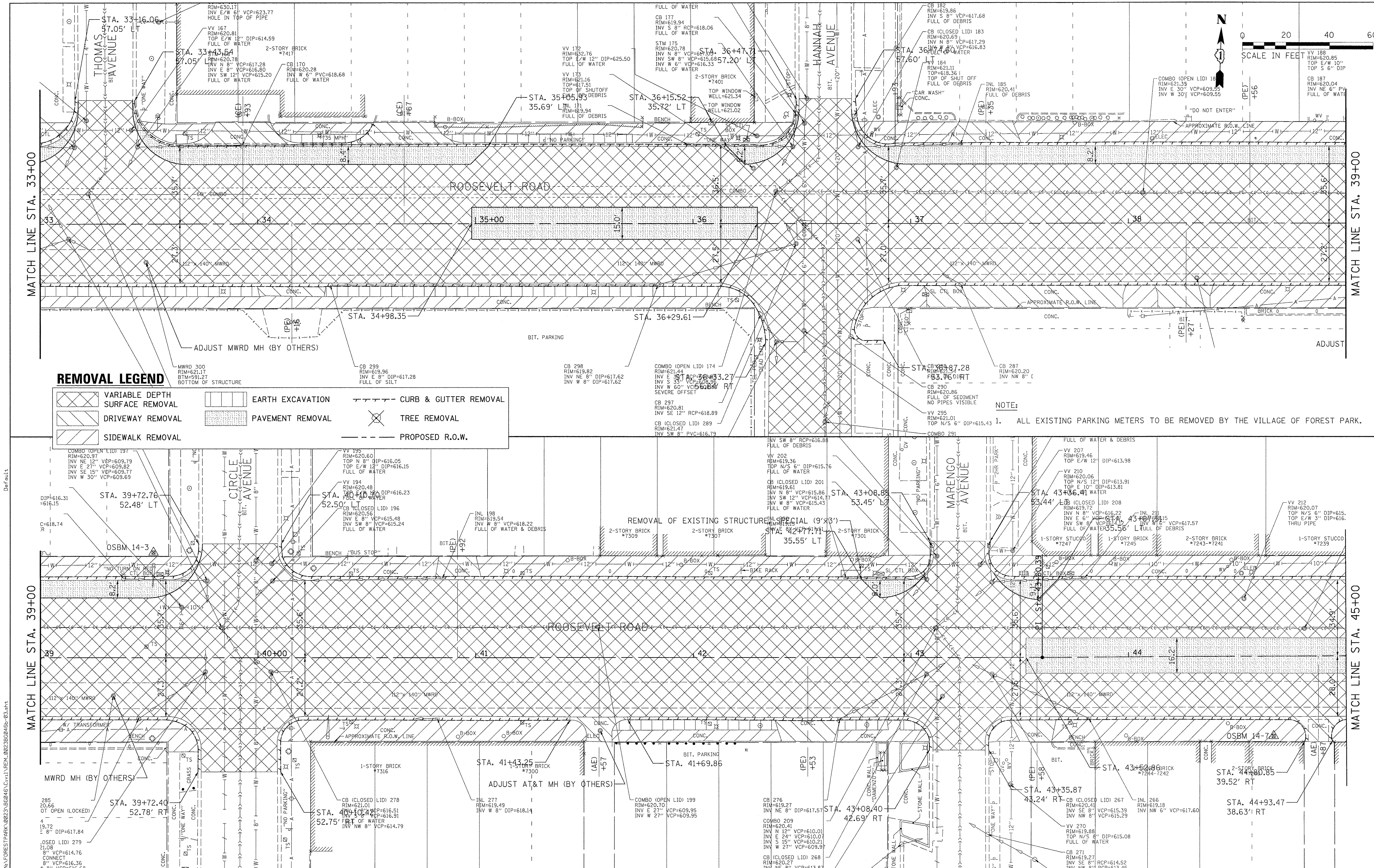
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SCALE: 20 SHEET 2 OF 4 SHEETS STA. 21+00.00 TO STA. 33+00.00

**REMOVAL PLAN  
 ROOSEVELT ROAD**

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 11
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



**REMOVAL LEGEND**

	VARIABLE DEPTH SURFACE REMOVAL		EARTH EXCAVATION		CURB & GUTTER REMOVAL
	DRIVEWAY REMOVAL		PAVEMENT REMOVAL		TREE REMOVAL
	SIDEWALK REMOVAL		PROPOSED R.O.W.		

**NOTE:**  
1. ALL EXISTING PARKING METERS TO BE REMOVED BY THE VILLAGE OF FOREST PARK.

FILE NAME = N:\FOREST PARK\0223\BG045\Civil\REM\_0223BG045-03.sht

**INFRASTRUCTURE ENGINEERING**  
33 West Monroe | Suite 1540 | Chicago, IL 60603  
P 312.425.9588 | F 312.425.3554 | www.infrastructure-eng.com

USER NAME = mthomas  
PLOT SCALE = 20"  
PLOT DATE = 11/14/2016

DESIGNED - DC  
DRAWN - DC  
CHECKED - AJP  
DATE - 10/20/2016

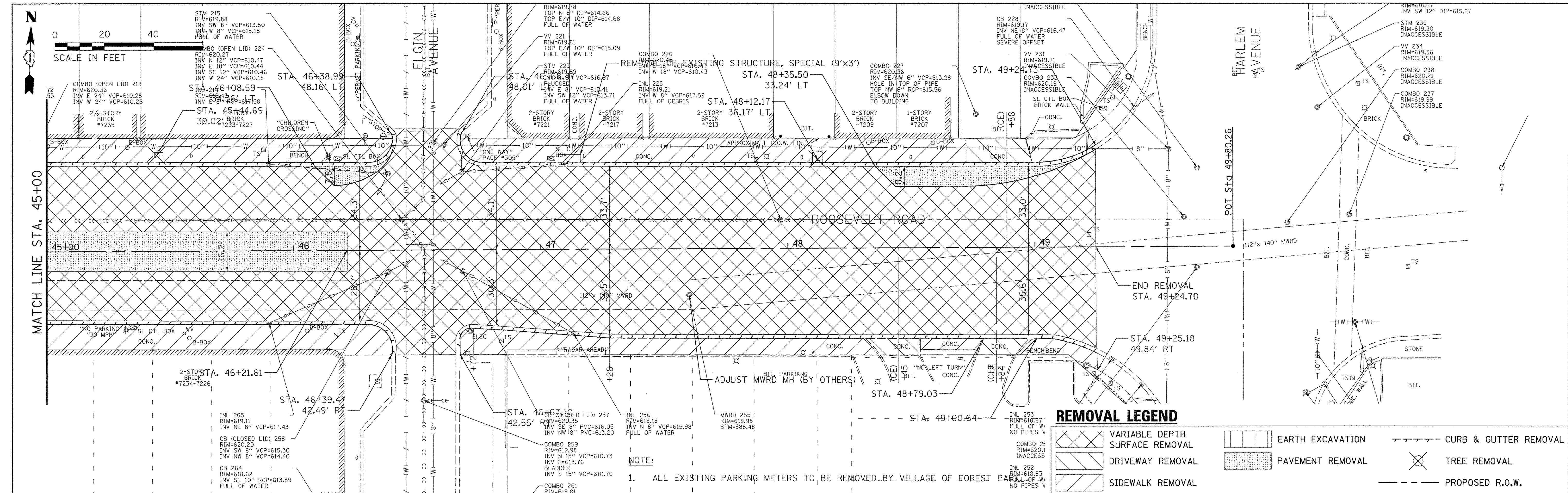
REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: 20 SHEET 3 OF 4 SHEETS STA. 33+00.00 TO STA. 45+00.00

**REMOVAL PLAN  
ROOSEVELT ROAD**

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 12
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



FILE NAME = N:\FORESTPARK\2023\BC046\CV\1\REM\_002306046b-04.dwg  
 Default

**INFRASTRUCTURE ENGINEERING** | INCORPORATED  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9980 | F 312.425.9994 | www.infrastructure-eng.com

USER NAME = mthomas	DESIGNED - DC	REVISED -
PLOT SCALE = 20'	DRAWN - DC	REVISED -
PLOT DATE = 11/14/2016	CHECKED - AJP	REVISED -
	DATE - 10/20/2016	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>REMOVAL PLAN</b>	
<b>ROOSEVELT ROAD</b>	
SCALE: 20	SHEET 4 OF 4 SHEETS
STA. 45+00.00 TO STA. 50+00.00	

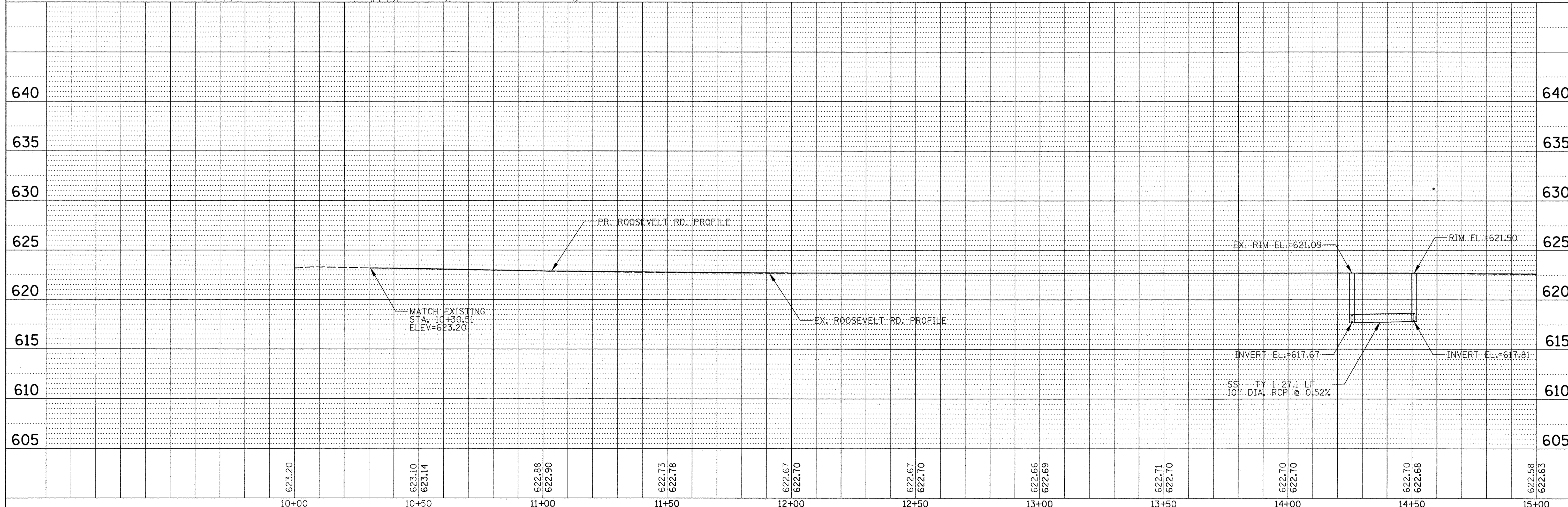
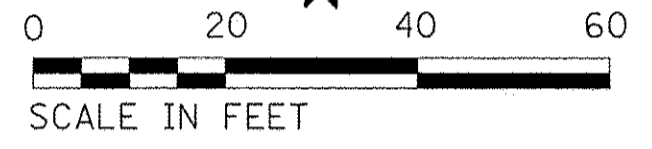
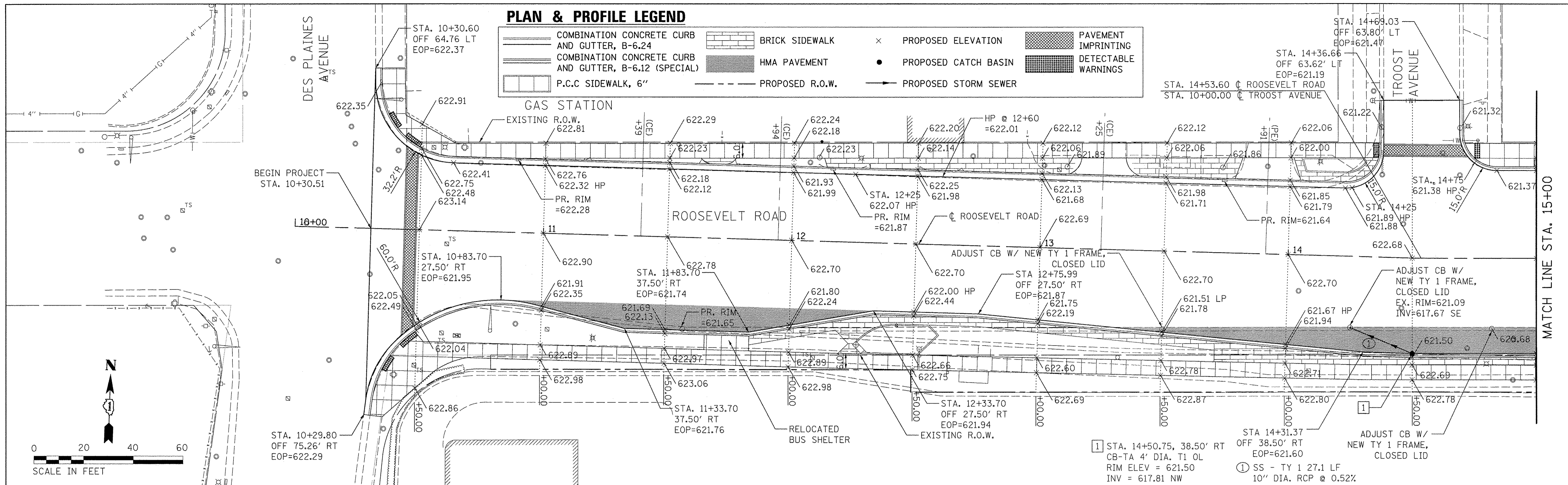
F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 13
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLANNED	
PLOTTED	
CHECKED	
BY	
DATE	
NO.	
NOTE BOOK	
NO.	
CADD FILE NAME	

DATE	
BY	
SURVEYED	
PLANNED	
PLOTTED	
CHECKED	
BY	
DATE	
NO.	
NOTE BOOK	
NO.	
STRUCTURE NOTATIONS	
CHKD	

**PLAN & PROFILE LEGEND**

	COMBINATION CONCRETE CURB AND GUTTER, B-6.24		BRICK SIDEWALK		PROPOSED ELEVATION		PAVEMENT IMPRINTING
	COMBINATION CONCRETE CURB AND GUTTER, B-6.12 (SPECIAL)		HMA PAVEMENT		PROPOSED CATCH BASIN		DETECTABLE WARNINGS
	P.C.C. SIDEWALK, 6"		PROPOSED R.O.W.		PROPOSED STORM SEWER		



623.20	623.10	623.14	622.88	622.90	622.73	622.78	622.67	622.70	622.67	622.70	622.66	622.69	622.71	622.70	622.70	622.70	622.68	622.68	622.58	622.63
10+00	10+50	11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+50	15+00										

**INFRASTRUCTURE ENGINEERING** | INCORPORATED  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9560 | F 312.425.9564 | www.infrastructure-eng.com

USER NAME = mthomas	DESIGNED - LC	REVISED -
PLLOT SCALE = 20"	DRAWN - LC	REVISED -
PLLOT DATE = 11/14/2016	CHECKED - AJP	REVISED -
	DATE - 10/20/2016	REVISED -

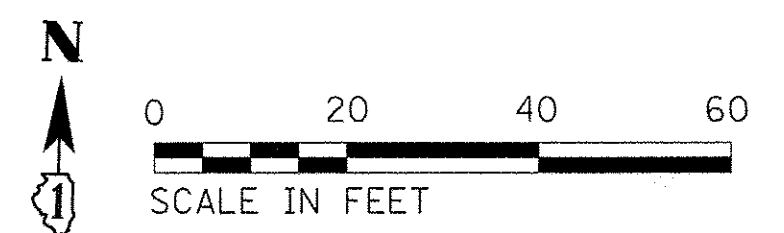
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE  
ROOSEVELT ROAD**

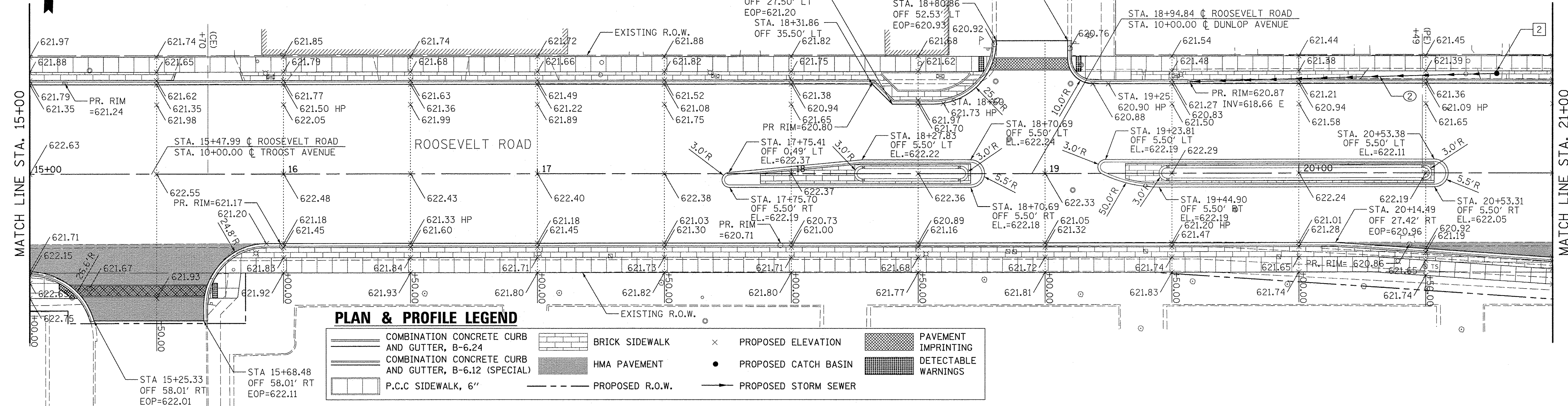
SCALE: 20 SHEET 1 OF 7 SHEETS STA. 10+00.00 TO STA. 15+00.00

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 14
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	

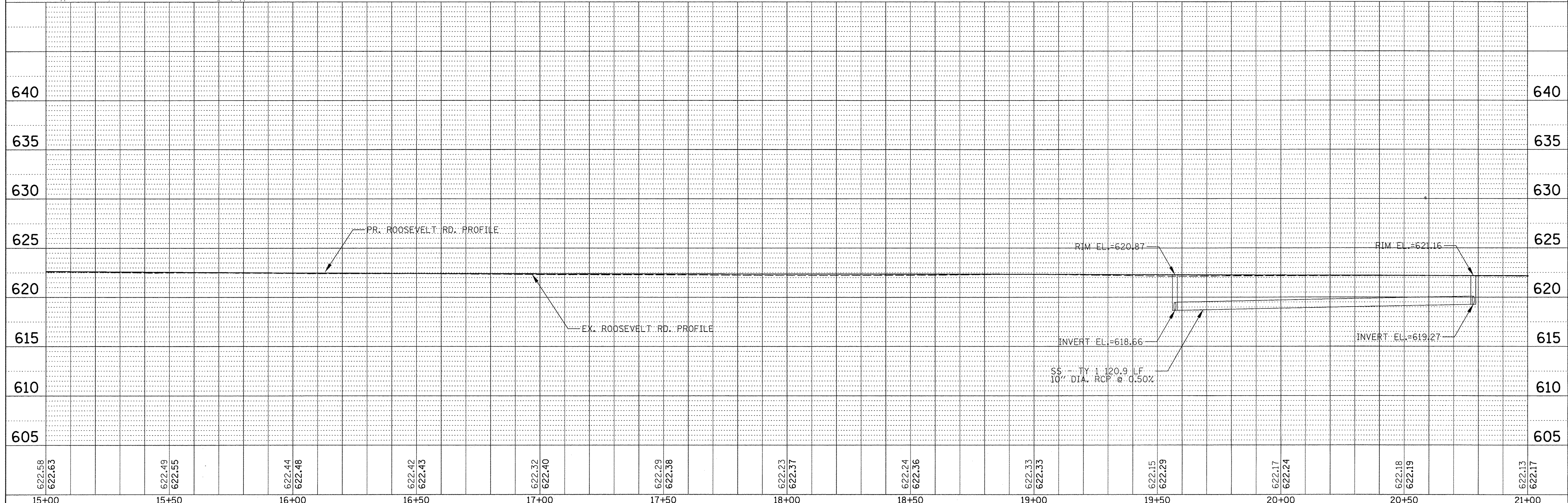
2 STA. 20+78.01, 39.39' LT 2 SS - TY 1 120.9 LF  
 CB-TA 4" DIA. T1 OL 10" DIA. RCP @ 0.50%  
 RIM ELEV = 621.16  
 INV = 619.27 W



DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	



DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	



622.58 622.63	622.49 622.55	622.44 622.48	622.42 622.43	622.32 622.40	622.29 622.36	622.23 622.37	622.24 622.36	622.33 622.33	622.15 622.29	622.17 622.24	622.18 622.19	622.13 622.17
15+00	15+50	16+00	16+50	17+00	17+50	18+00	18+50	19+00	19+50	20+00	20+50	21+00

**INFRASTRUCTURE ENGINEERING** INCORPORATED  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9590 | F 312.425.9591 | www.infrastructure-eng.com

USER NAME = mthomas  
 PLOT SCALE = 20'  
 PLOT DATE = 11/14/2016

DESIGNED - LC  
 DRAWN - LC  
 CHECKED - AJP  
 DATE - 10/20/2016

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

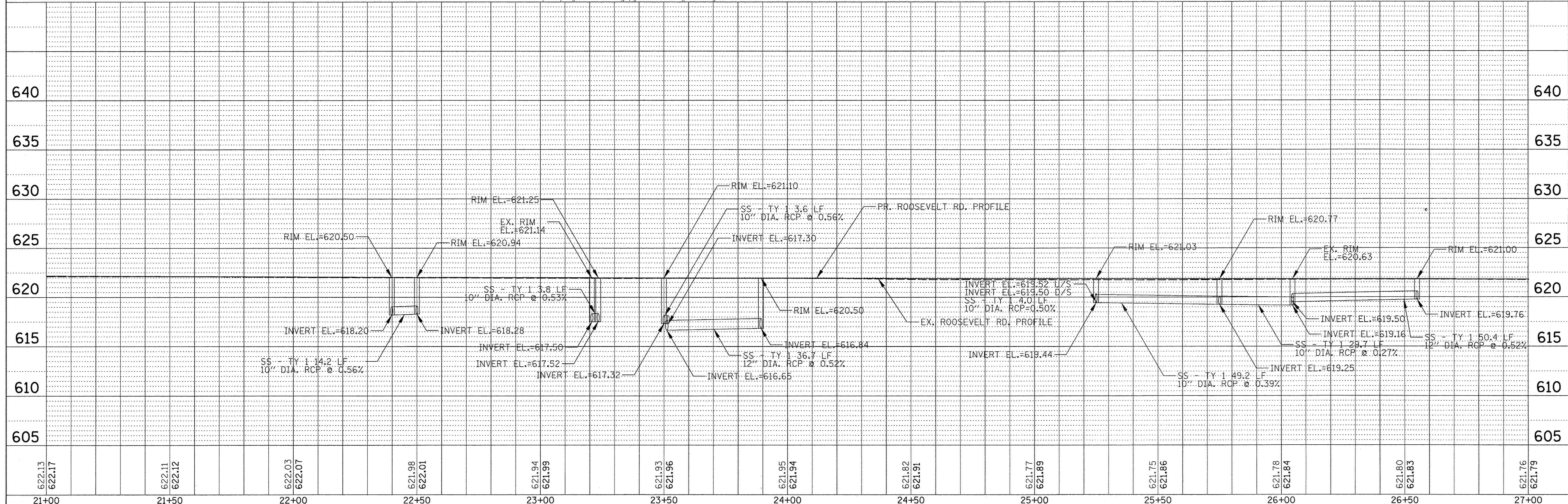
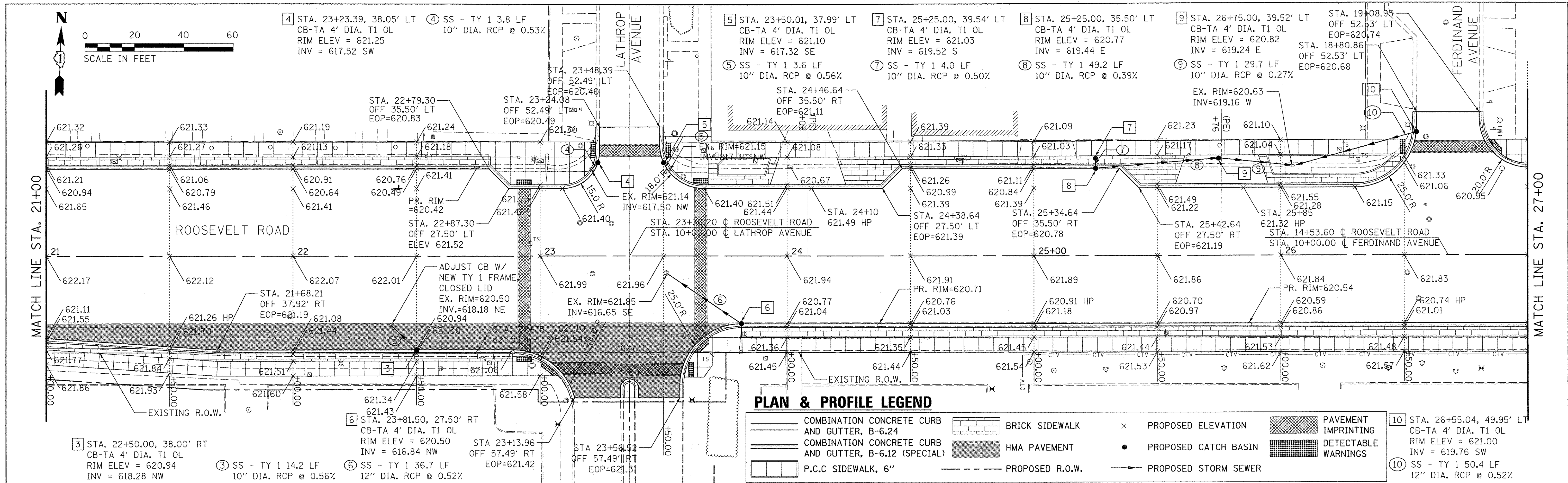
**PLAN AND PROFILE  
 ROOSEVELT ROAD**

SCALE: 20 SHEET 2 OF 7 SHEETS STA. 15+00.00 TO STA. 21+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	15
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
NO.	
NOTE BOOK	
NO.	
DATE	
BY	
PROFILE	
NO.	
NOTE BOOK	
NO.	

DATE	
BY	
PROFILE	
NO.	
NOTE BOOK	
NO.	
DATE	
BY	
PLAN	
NO.	
NOTE BOOK	
NO.	



622.13	622.17	622.11	622.12	622.03	622.07	621.98	622.01	621.94	621.99	621.93	621.96	621.95	621.94	621.82	621.91	621.77	621.89	621.75	621.86	621.78	621.84	621.80	621.83	621.76	621.79
21+00		21+50		22+00		22+50		23+00		23+50		24+00		24+50		25+00		25+50		26+00		26+50		27+00	

<b>INFRASTRUCTURE ENGINEERING</b> INCORPORATED 33 West Monroe   Suite 1540   Chicago, IL 60603 P 312.425.8580   F 312.425.8584   www.infrastructure-eng.com	USER NAME = mthomas PLOT SCALE = 28" PLOT DATE = 11/14/2016	DESIGNED - LC DRAWN - LC CHECKED - AJP DATE - 10/20/2016	REVISED - REVISED - REVISED - REVISED -
--	---	---	--

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

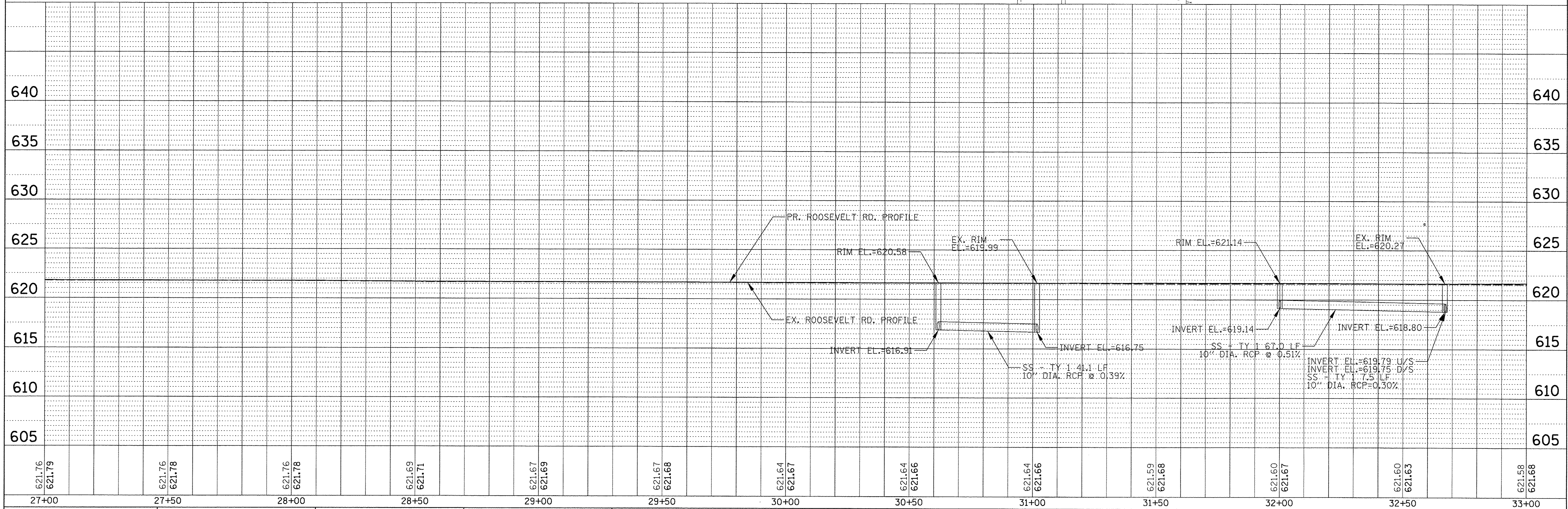
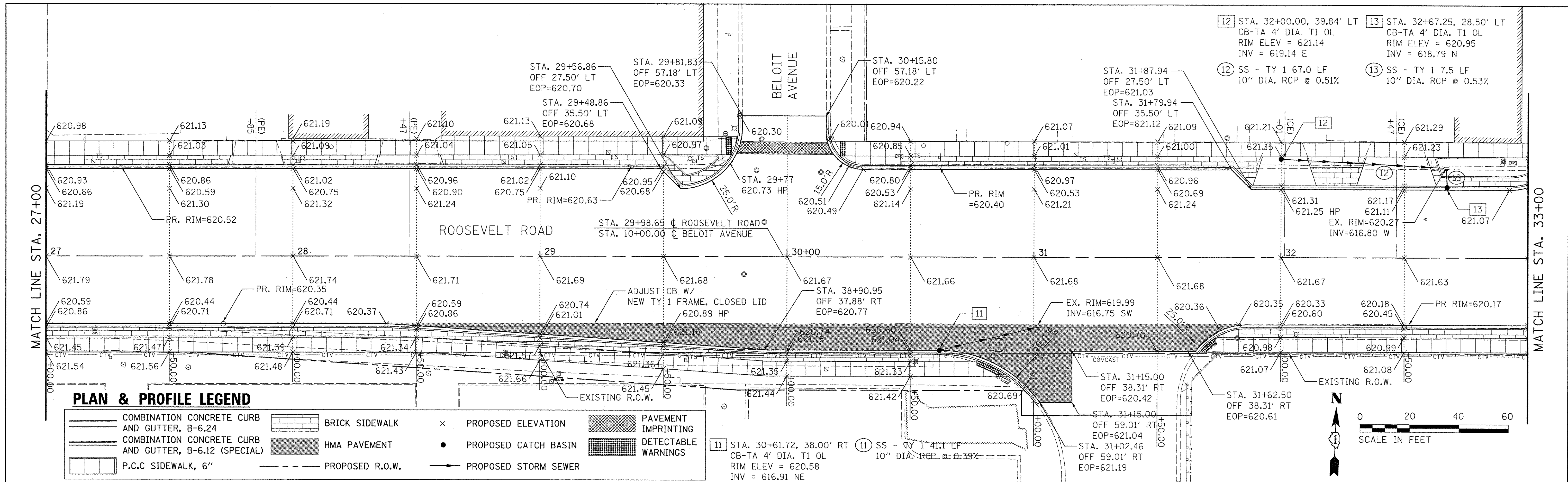
SCALE: 20	SHEET 3 OF 7 SHEETS	STA. 21+00.00 TO STA. 27+00.00
-----------	---------------------	--------------------------------

F.A.P. RTE. 347	SECTION 13-0012-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 16
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



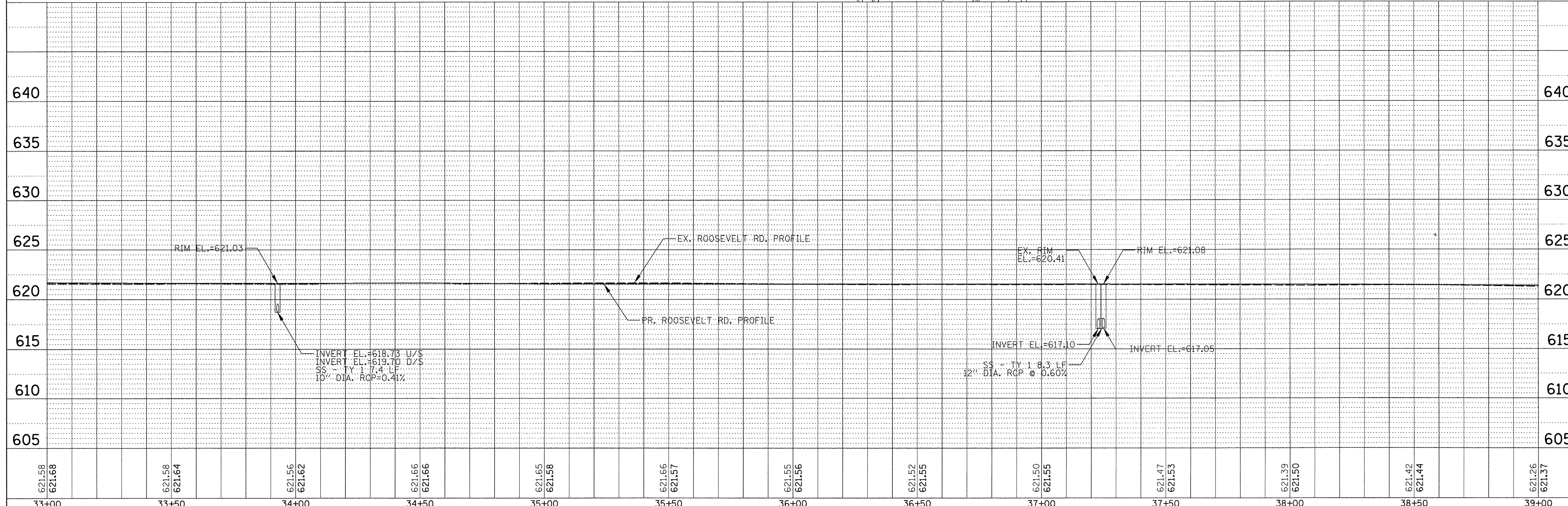
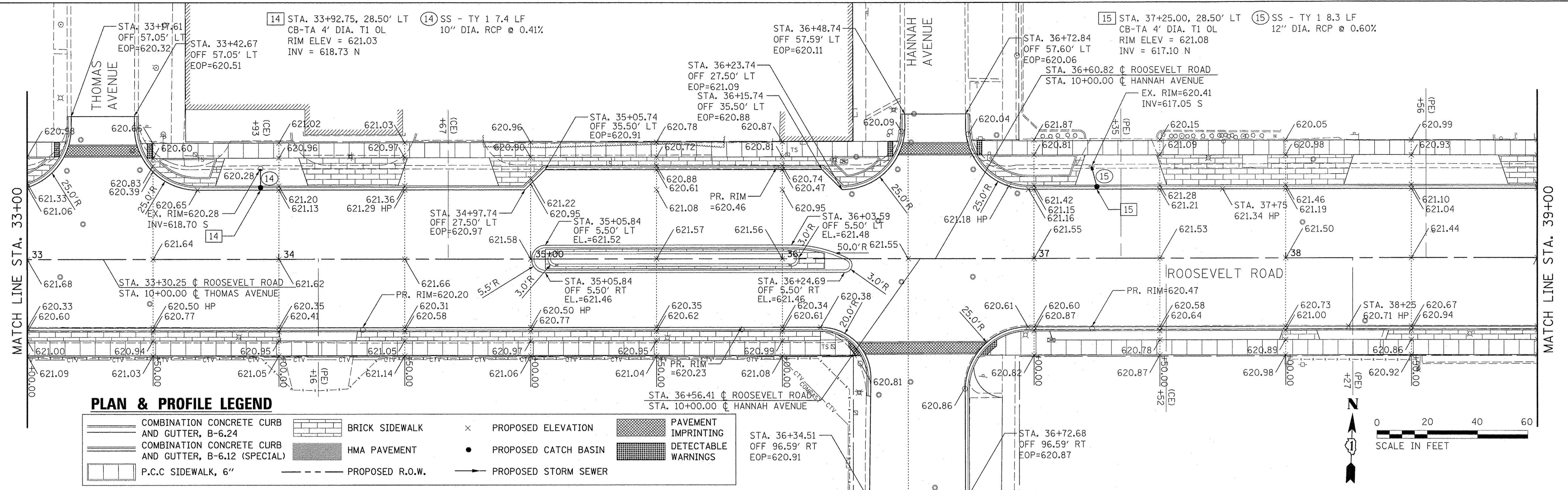
DATE	
BY	
PLAN	
NO.	
NO.	
NO.	
NO.	
NO.	

DATE	
BY	
PROFILE	
NO.	
NO.	
NO.	
NO.	
NO.	



DATE	
BY	
PLAN	SURVEYED
	PLOTTED
	CHECKED
	BY
	NO.
	FILE NAME

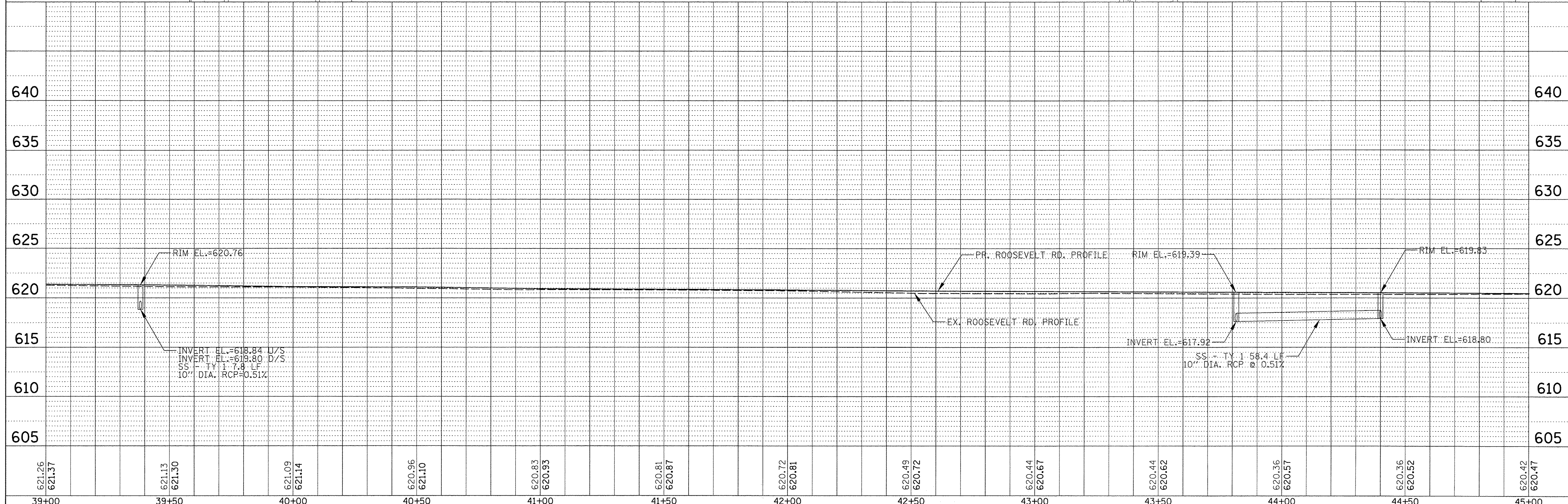
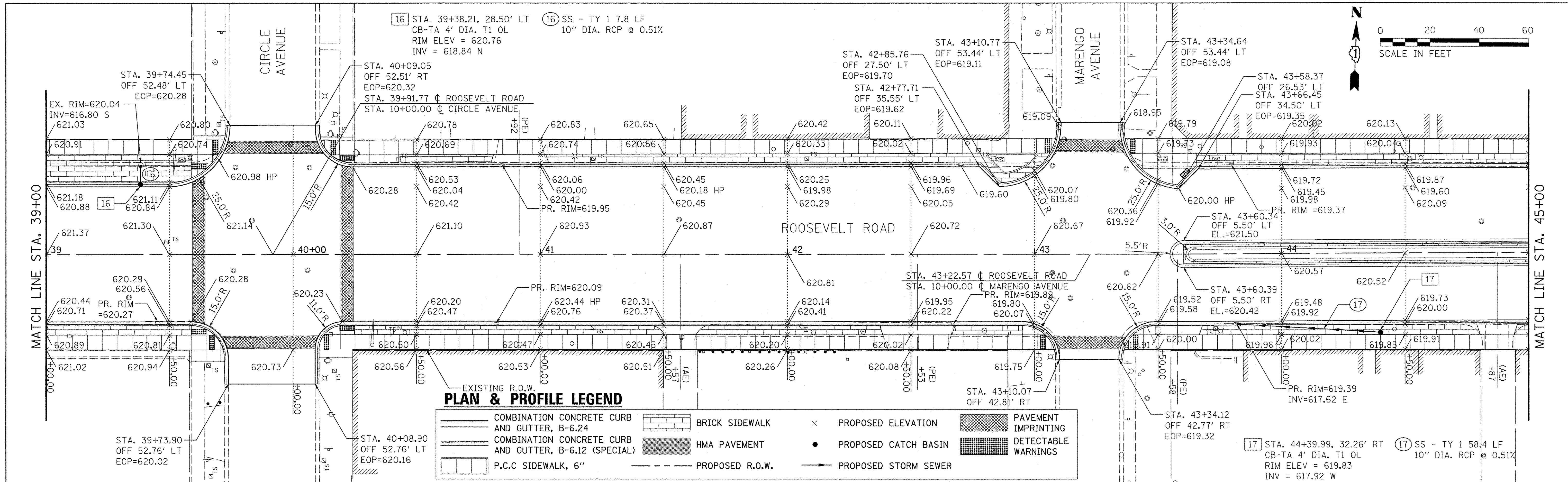
DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	CHECKED
	BY
	NO.
	FILE NAME



<b>INFRASTRUCTURE ENGINEERING</b> 33 West Monroe   Suite 1540   Chicago, IL 60603 P 312.425.9569   F 312.425.9564   www.infrastructure-eng.com	USER NAME = mthomas PLOT SCALE = 20" PLOT DATE = 11/14/2016	DESIGNED - LC DRAWN - LC CHECKED - AJP DATE - 10/20/2016	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PLAN AND PROFILE</b> <b>ROOSEVELT ROAD</b>	F.A.P. RTE. 347 SECTION 13-00112-00-LS COUNTY COOK CONTRACT NO. 61D26	TOTAL SHEETS 151 SHEET NO. 18
	SCALE: 20 SHEET 5 OF 7 SHEETS STA. 33+00.00 TO STA. 39+00.00		ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
CHECKED	
RT. OF WAY CHECKED	
NO. _____	
PAID FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
CHECKED	
B.M. NOTED	
STRUCTURE NOTATIONS CHKD	
NO. _____	



39+00	39+50	40+00	40+50	41+00	41+50	42+00	42+50	43+00	43+50	44+00	44+50	45+00
621.26 621.37	621.13 621.30	621.09 621.14	620.96 621.10	620.83 620.93	620.81 620.87	620.72 620.81	620.49 620.72	620.44 620.67	620.44 620.62	620.36 620.57	620.42 620.52	620.42 620.47

**INFRASTRUCTURE ENGINEERING** INCORPORATED  
33 West Monroe | Suite 1540 | Chicago, IL 60603  
P 312.425.9590 | F 312.425.9594 | www.infrastructure-eng.com

USER NAME = mthomas  
DESIGNED - LC  
DRAWN - LC  
CHECKED - AJP  
DATE - 10/20/2016

REVISIED -  
REVISIED -  
REVISIED -  
REVISIED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

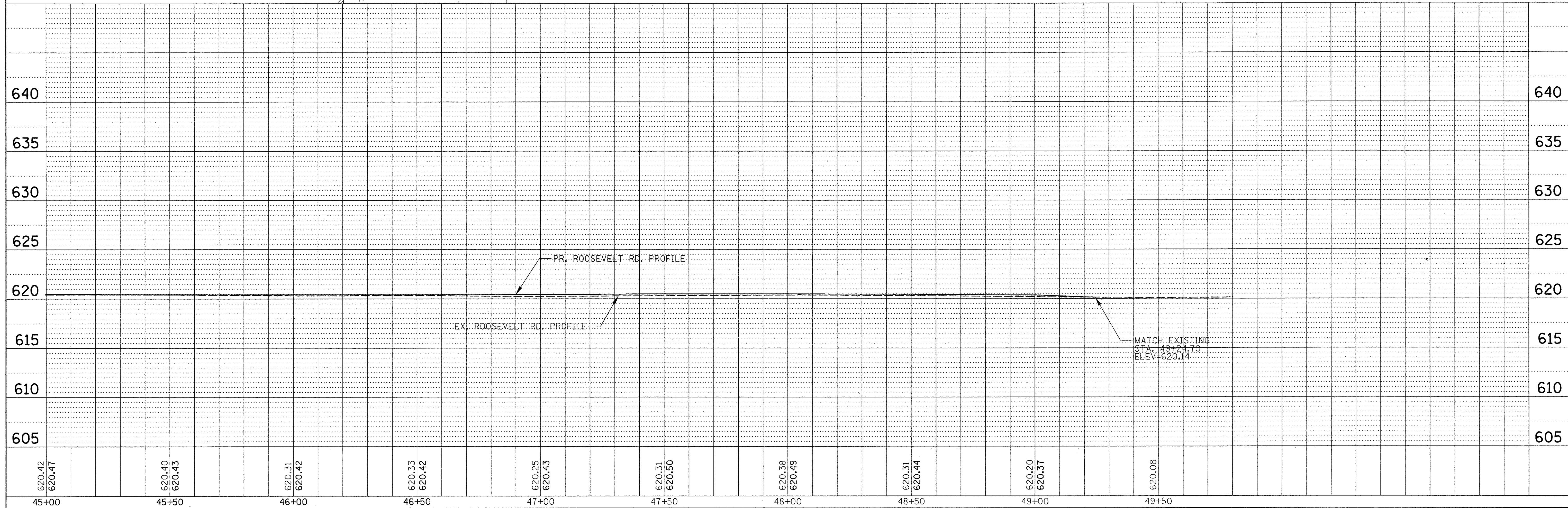
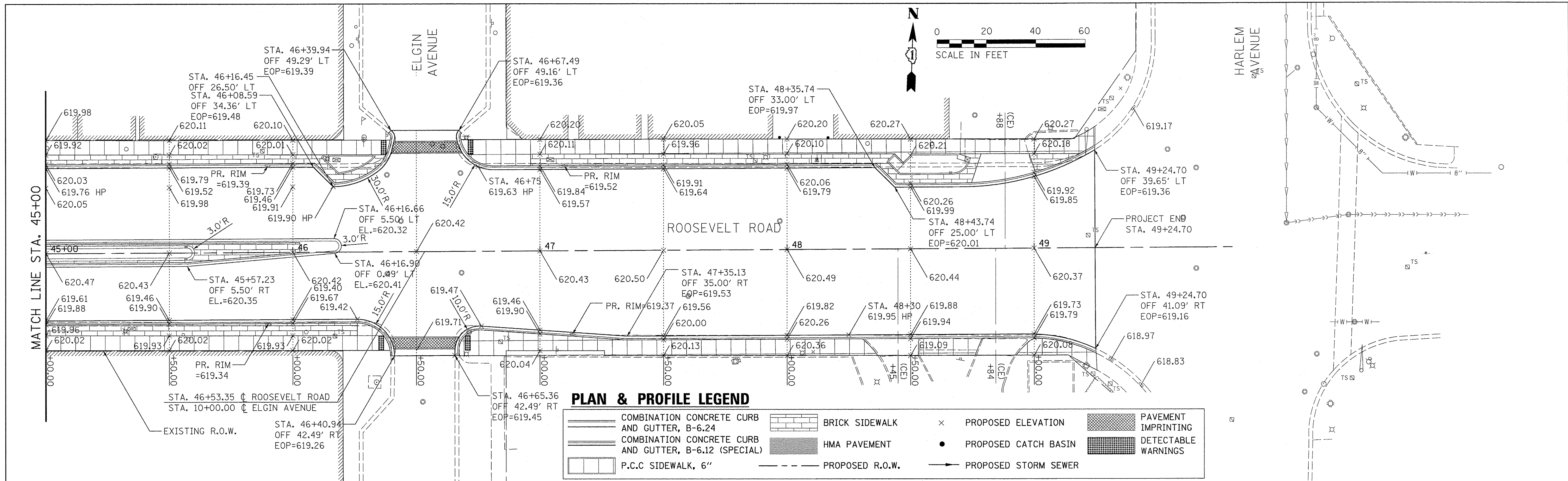
**PLAN AND PROFILE  
ROOSEVELT ROAD**

SCALE: 20 SHEET 6 OF 7 SHEETS STA. 39+00.00 TO STA. 45+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	19
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				

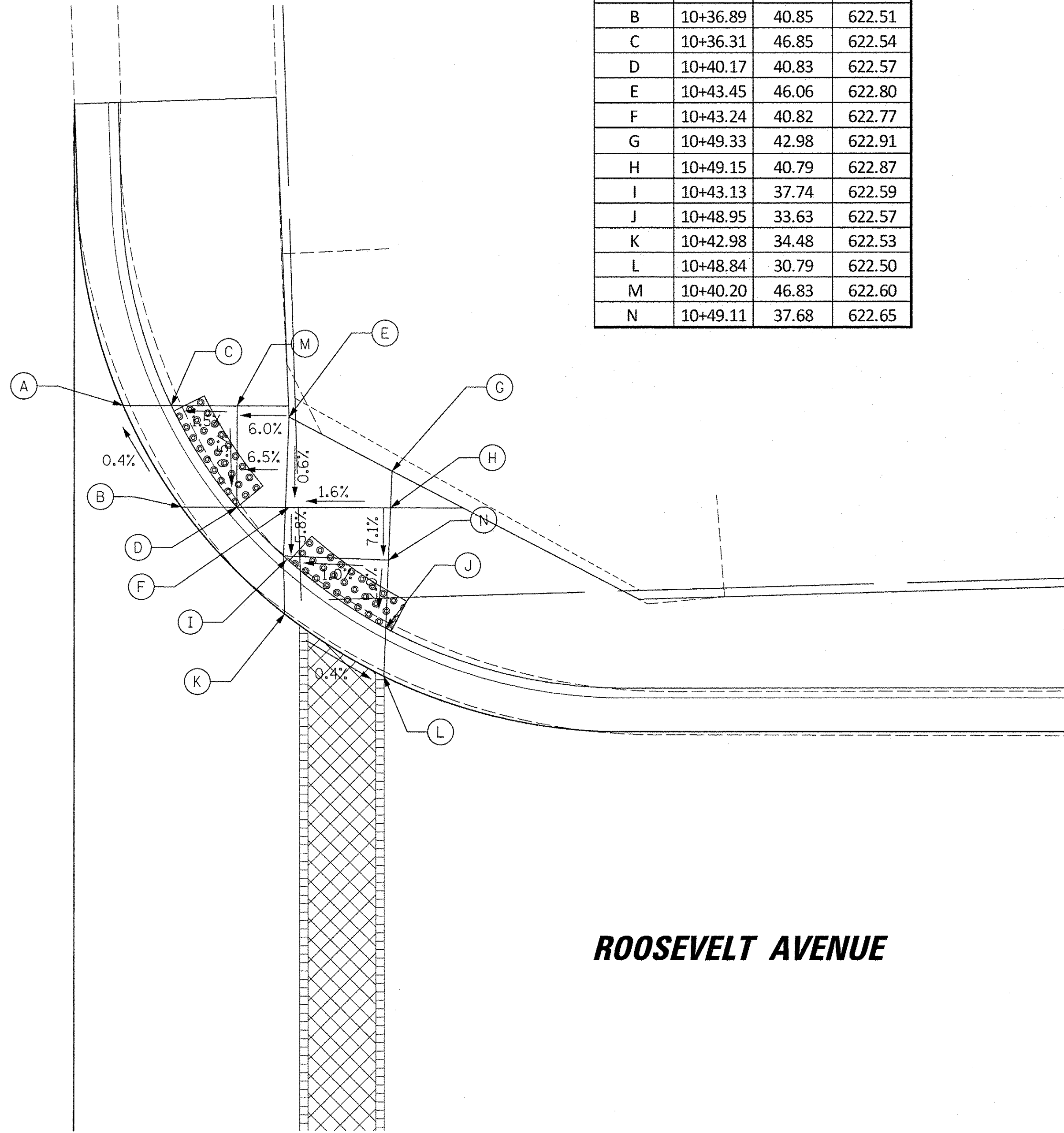
DATE	
BY	
PLAN	SURVEYED _____
	ALIGNED _____
	NOTED _____
	PLANNED _____
	FILED _____
	NO. _____

DATE	
BY	
PROFILE	SURVEYED _____
	PLANNED _____
	NOTED _____
	FILED _____
	NO. _____



<b>INFRASTRUCTURE ENGINEERING</b> 33 West Monroe   Suite 1540   Chicago, IL 60663 P 312.425.9500   F 312.425.9504   www.infrastructure-eng.com	USER NAME = mthomas PLOT SCALE = 28" PLOT DATE = 11/14/2016	DESIGNED - LC DRAWN - LC CHECKED - AJP DATE - 10/20/2016	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PLAN AND PROFILE</b> <b>ROOSEVELT ROAD</b>	F.A.P. RTE. 347 SECTION 13-00112-00-LS COUNTY COOK TOTAL SHEETS 151 SHEET NO. 20 CONTRACT NO. 61D26	ILLINOIS FED. AID PROJECT
	SCALE: 20 SHEET 7 OF 7 SHEETS STA. 45+00.00 TO STA. 50+00.00						

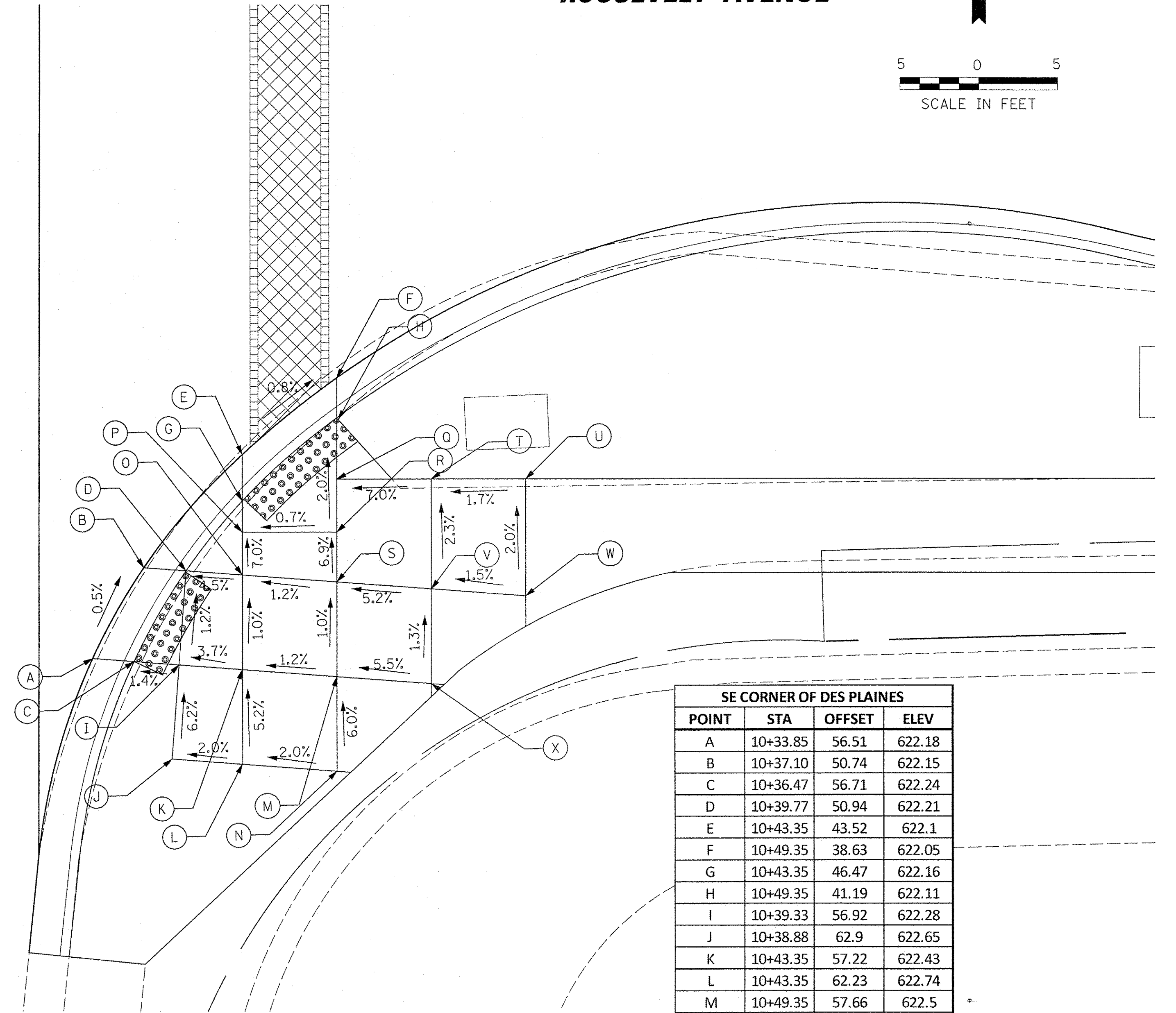
**DESPLAINES AVENUE**



NE Corner of Des Plaines			
POINT	STA	OFFSET	ELEV
A	10+33.46	46.86	622.48
B	10+36.89	40.85	622.51
C	10+36.31	46.85	622.54
D	10+40.17	40.83	622.57
E	10+43.45	46.06	622.80
F	10+43.24	40.82	622.77
G	10+49.33	42.98	622.91
H	10+49.15	40.79	622.87
I	10+43.13	37.74	622.59
J	10+48.95	33.63	622.57
K	10+42.98	34.48	622.53
L	10+48.84	30.79	622.50
M	10+40.20	46.83	622.60
N	10+49.11	37.68	622.65

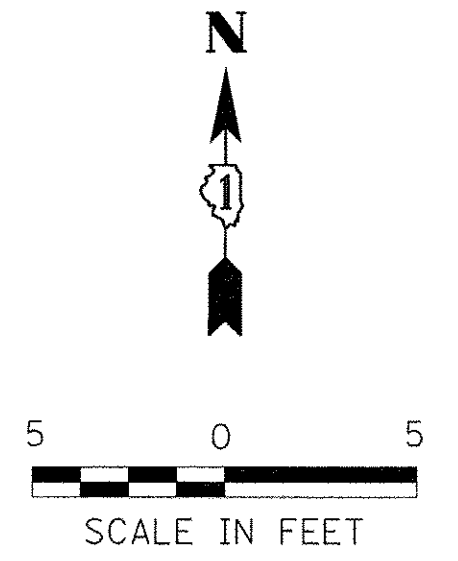
**ROOSEVELT AVENUE**

**DESPLAINES AVENUE**



SE CORNER OF DES PLAINES			
POINT	STA	OFFSET	ELEV
A	10+33.85	56.51	622.18
B	10+37.10	50.74	622.15
C	10+36.47	56.71	622.24
D	10+39.77	50.94	622.21
E	10+43.35	43.52	622.1
F	10+49.35	38.63	622.05
G	10+43.35	46.47	622.16
H	10+49.35	41.19	622.11
I	10+39.33	56.92	622.28
J	10+38.88	62.9	622.65
K	10+43.35	57.22	622.43
L	10+43.35	62.23	622.74
M	10+49.35	57.66	622.5
N	10+49.35	63.68	622.86
O	10+43.35	51.2	622.37
P	10+43.35	48.47	622.18
Q	10+49.35	45.08	622.17
R	10+49.35	48.47	622.22
S	10+49.35	51.65	622.44
T	10+55.35	45.08	622.59
U	10+61.35	45.08	622.69
V	10+55.35	52.09	622.75
W	10+61.35	52.54	622.84
X	10+55.35	58.11	622.83

**ROOSEVELT AVENUE**



FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\0023\BG046\C1v1\ADA_0023\G046b-01.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 5"	CHECKED -	REVISED -
	PLOT DATE = 11/14/2016	DATE -	REVISED -

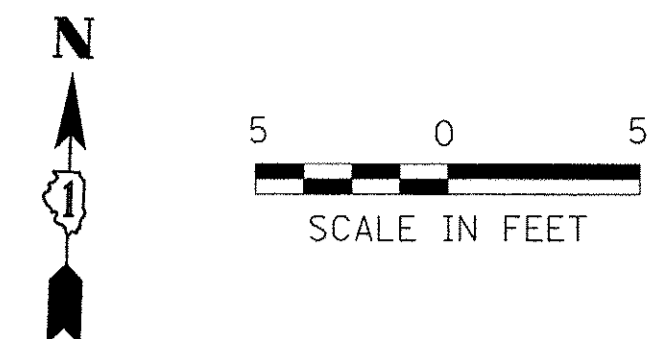
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SIDWALK GRADING PLAN  
ROOSEVELT ROAD**

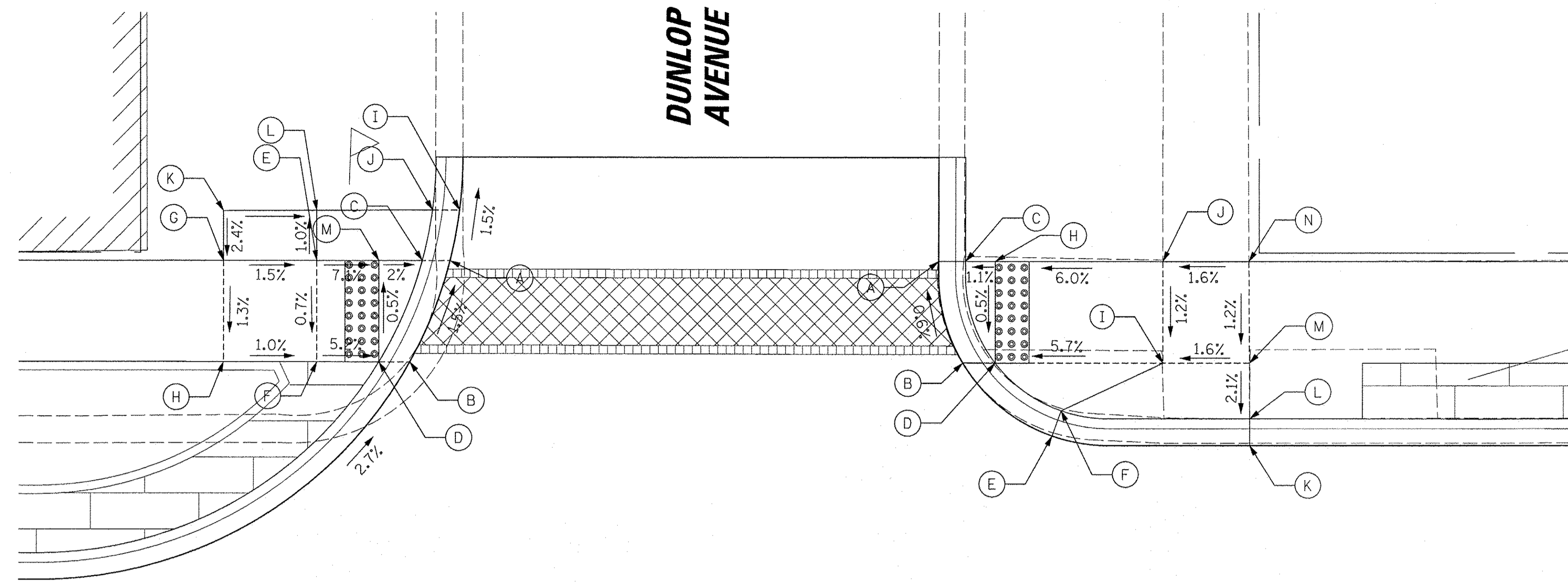
SCALE: 5 SHEET 1 OF 10 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	21
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



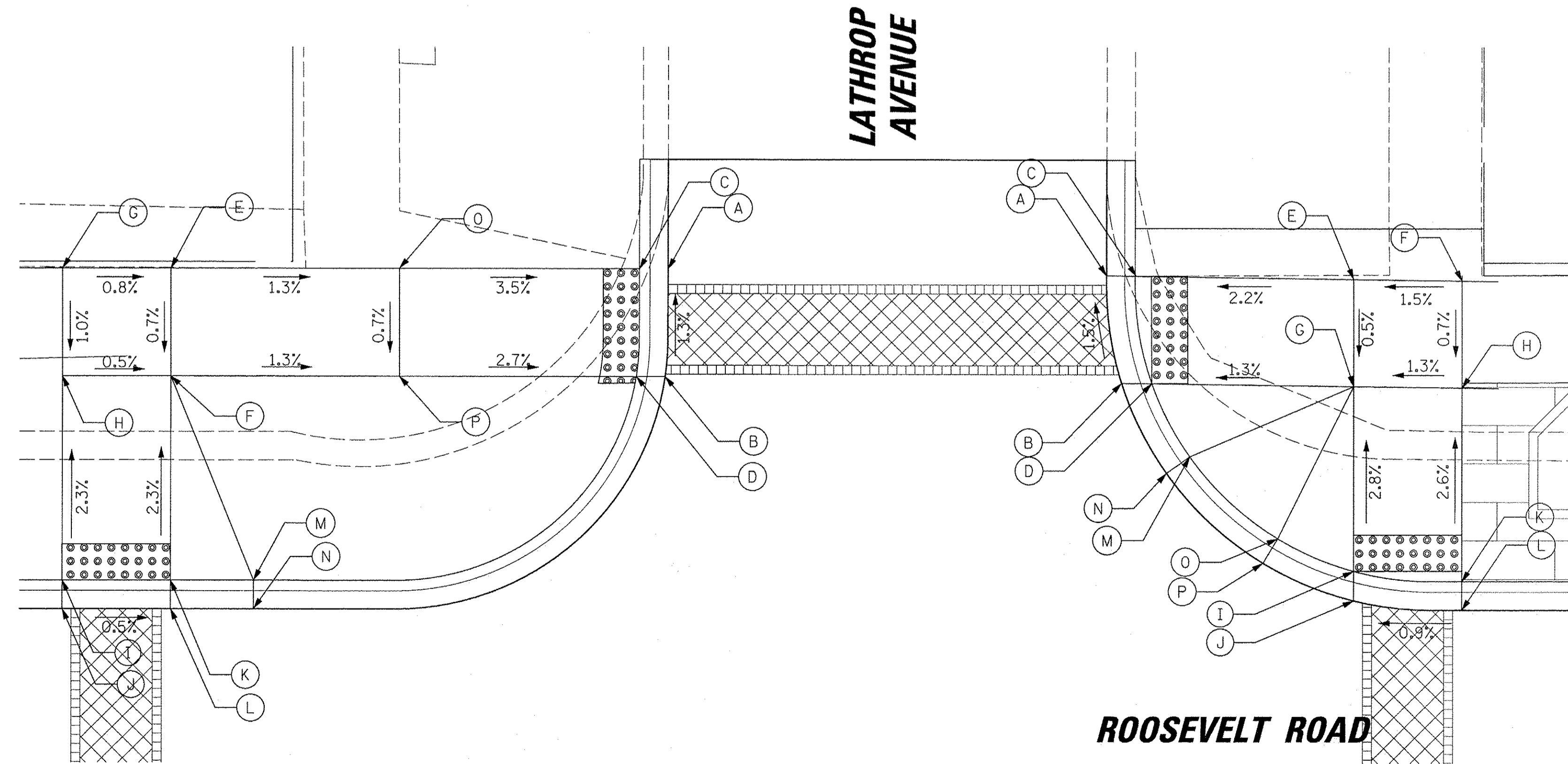


NW Corner of Dunlop			
POINT	STA	OFFSET	ELEV
A	18+80.10	46.39	621.01
B	18+77.73	40.39	621.12
C	18+78.47	46.39	621.08
D	18+75.90	40.39	621.18
E	18+72.25	46.39	621.49
F	18+72.25	40.39	621.40
G	18+66.74	46.39	621.55
H	18+66.74	40.39	621.46
I	18+80.67	49.39	620.91
J	18+79.07	49.39	621.35
K	18+66.74	49.35	621.62
L	18+72.25	49.37	621.36
M	18+75.90	46.39	621.13



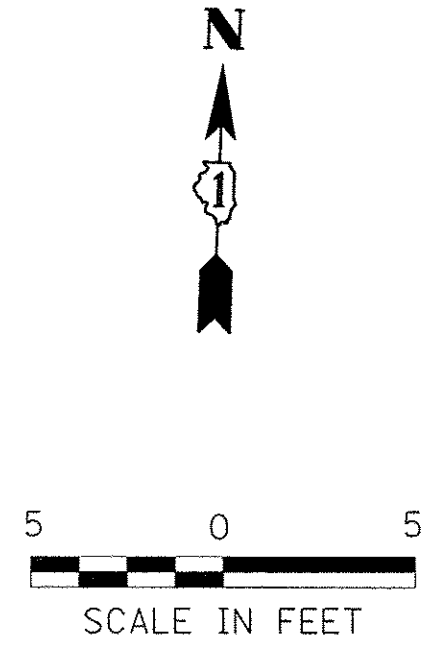
NE Corner of Dunlop			
POINT	STA	OFFSET	ELEV
A	19+08.90	46.36	620.79
B	19+10.33	40.36	620.83
C	19+10.52	46.36	620.85
D	19+12.26	40.36	620.84
E	19+15.64	36.06	620.90
F	19+16.16	37.55	621.34
H	19+12.26	46.36	620.87
I	19+22.16	40.36	621.40
J	19+22.20	46.41	621.47
K	19+27.28	35.5	620.97
L	19+27.28	37.06	621.41
M	19+27.30	40.36	621.48
N	19+27.24	46.36	621.55

NW Corner of Lathrop			
POINT	STA	OFFSET	ELEV
A	23+24.07	46.42	620.61
B	23+23.92	40.42	620.69
C	23+22.49	46.42	620.67
D	23+22.32	40.42	620.75
E	22+96.53	46.43	621.31
F	22+96.53	40.44	621.27
G	22+90.53	46.44	621.36
H	22+90.53	40.44	621.3
I	22+90.53	29.08	621.56
J	22+90.53	27.5	621.5
K	22+96.53	29.08	621.53
L	22+96.53	27.5	621.47
M	23+01.13	29.08	621.89
N	23+01.13	27.5	621.45
O	23+09.2	46.44	621.14
P	23+09.2	40.43	621.1

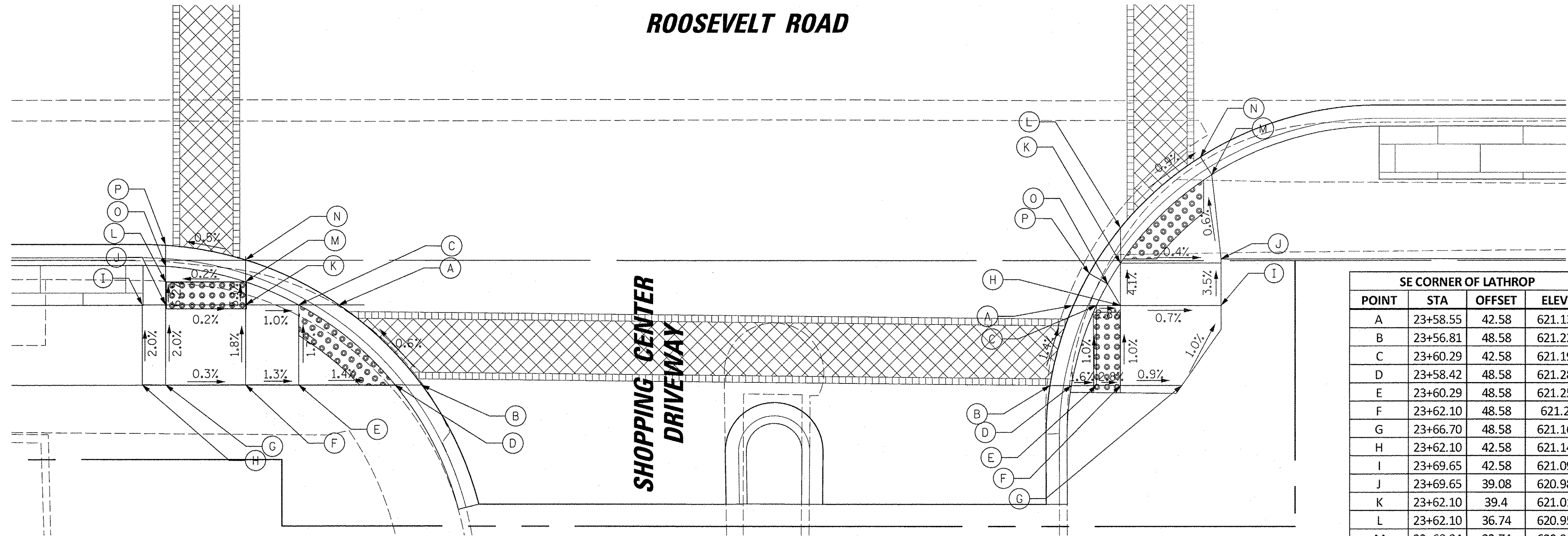


NE Corner of Lathrop			
POINT	STA	OFFSET	ELEV
A	23+48.37	46.05	620.75
B	23+49.21	40.08	620.84
C	23+49.96	46.06	620.81
D	23+50.88	40.06	620.9
E	23+62.07	45.88	621.08
F	23+68.07	45.8	621.17
G	23+62.07	39.91	621.05
H	23+68.07	39.83	621.13
I	23+62.07	29.66	621.34
J	23+62.07	28.02	621.28
K	23+68.07	29.08	621.41
L	23+68.07	27.5	621.35
M	23+52.99	35.99	621.41
N	23+51.70	35.07	620.97
O	23+57.87	31.46	621.59
P	23+57.05	30.1	621.15

**ROOSEVELT ROAD**

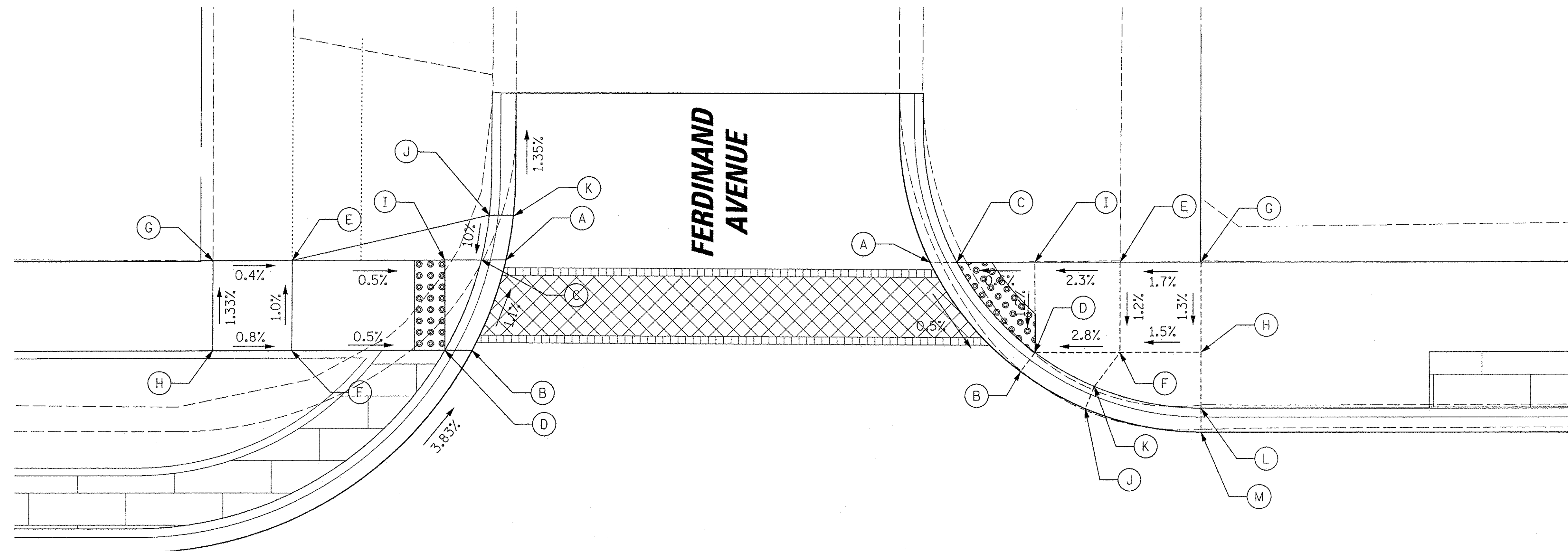


SW CORNER OF LATHROP			
POINT	STA	OFFSET	ELEV
A	23+03.52	42.58	621.29
B	23+09.72	48.58	621.34
C	23+00.51	42.58	621.35
D	23+07.72	48.58	621.40
E	23+00.51	48.58	621.45
F	22+96.53	48.58	621.50
G	22+90.53	48.58	621.52
H	22+88.78	48.58	621.53
I	22+88.78	42.58	621.41
J	22+90.53	42.58	621.40
K	22+96.53	42.58	621.39
L	22+90.53	40.85	621.29
M	22+96.53	40.85	621.30
N	22+96.53	39.18	621.24
O	22+90.53	39.65	621.27
P	22+90.53	38.06	621.21



SE CORNER OF LATHROP			
POINT	STA	OFFSET	ELEV
A	23+58.55	42.58	621.13
B	23+56.81	48.58	621.22
C	23+60.29	42.58	621.19
D	23+58.42	48.58	621.28
E	23+60.29	48.58	621.25
F	23+62.10	48.58	621.2
G	23+66.70	48.58	621.16
H	23+62.10	42.58	621.14
I	23+69.65	42.58	621.09
J	23+69.65	39.08	620.98
K	23+62.10	39.4	621.01
L	23+62.10	36.74	620.95
M	23+68.94	32.74	620.94
N	23+68.09	31.4	620.88
O	23+61.13	40.96	621.31
P	23+59.75	40.18	621.06

NW Corner of Ferdinand			
POINT	STA	OFFSET	ELEV
A	26+54.48	46.89	620.83
B	26+52.25	40.88	620.9
C	26+52.85	46.89	620.89
D	26+50.45	40.89	620.96
E	26+40.37	46.86	620.95
F	26+40.34	40.86	621.01
G	26+35.13	46.84	620.97
H	26+35.11	40.84	621.05
I	26+50.43	46.89	620.9
J	26+53.38	49.86	621.23
K	26+55.02	49.8	620.79



NE Corner of Ferdinand			
POINT	STA	OFFSET	ELEV
A	26+82.47	46.77	620.68
B	26+88.46	39.50	620.64
C	26+84.26	46.76	620.74
D	26+89.41	40.77	620.70
E	26+95.03	46.78	620.90
F	26+95.03	40.78	620.83
G	27+00.38	46.79	620.99
H	27+00.38	40.79	620.91
I	26+89.40	46.77	620.77
J	26+92.73	37.06	620.62
K	26+93.34	38.52	620.89
L	27+00.38	37.08	620.87
M	27+00.38	35.50	620.60

FILE NAME = N:\FORESTPARK\0223\BG046\Cv1\ADA\_0223\BG046b-04.sht  
 USER NAME = mthomas  
 PLOT SCALE = 5'  
 PLOT DATE = 11/14/2016

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SIDWALK GRADING PLAN  
 ROOSEVELT ROAD**

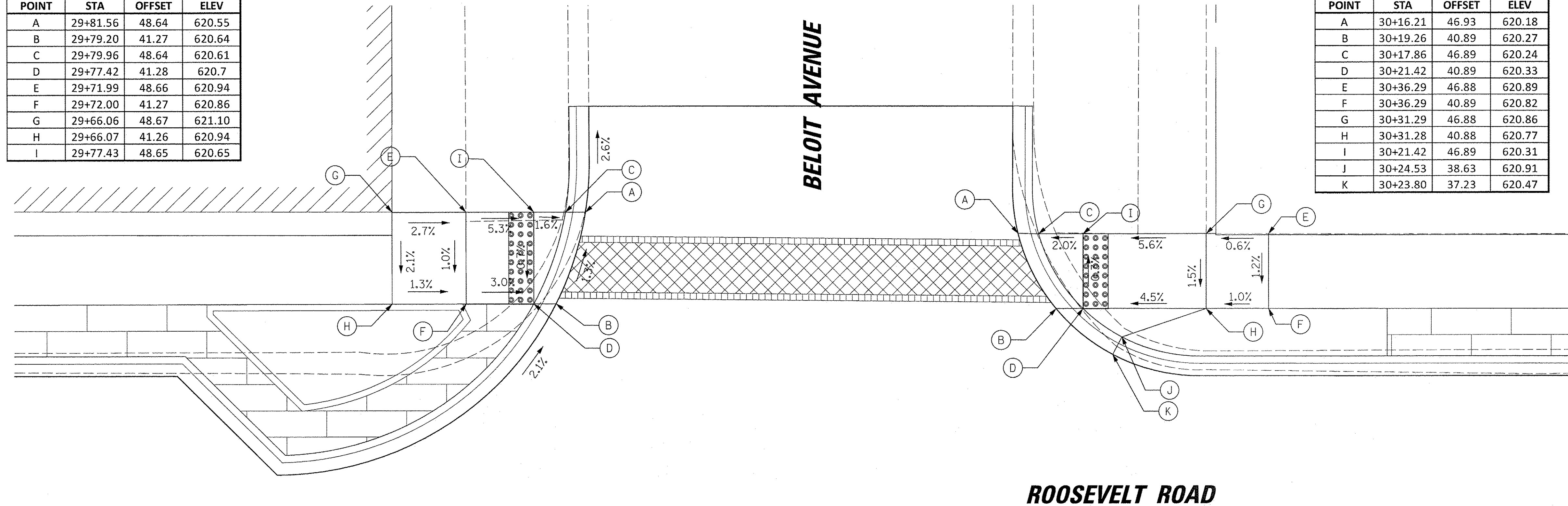
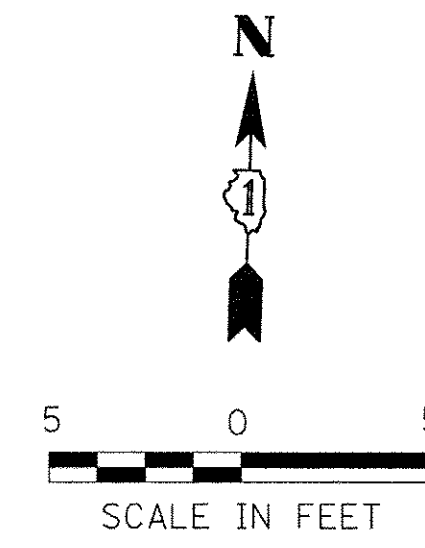
SCALE: 5 SHEET 4 OF 10 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	24
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



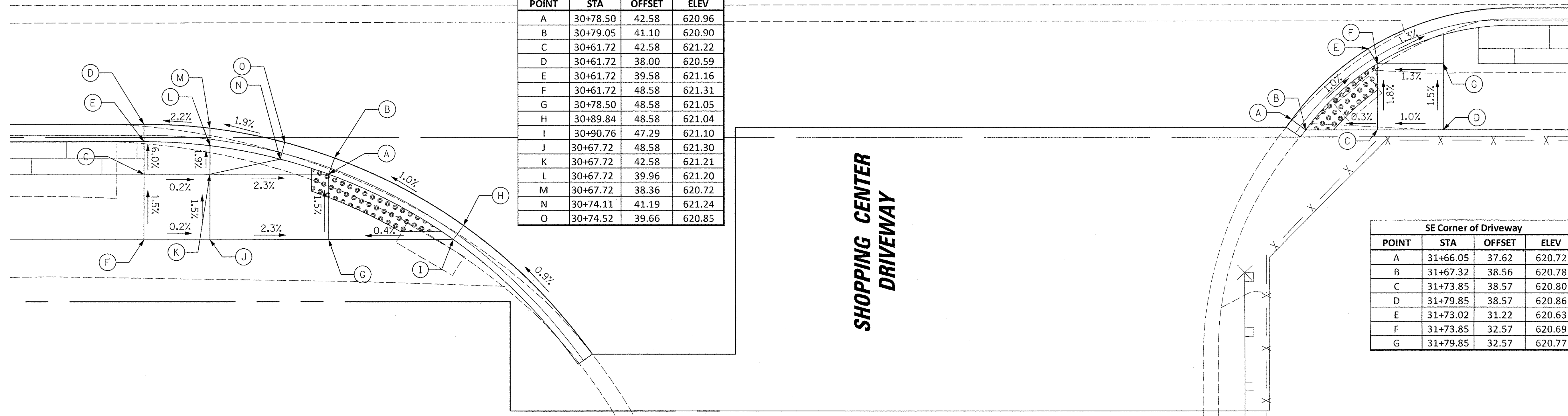
NW Corner of Beloit			
POINT	STA	OFFSET	ELEV
A	29+81.56	48.64	620.55
B	29+79.20	41.27	620.64
C	29+79.96	48.64	620.61
D	29+77.42	41.28	620.7
E	29+71.99	48.66	620.94
F	29+72.00	41.27	620.86
G	29+66.06	48.67	621.10
H	29+66.07	41.26	620.94
I	29+77.43	48.65	620.65

NE Corner of Beloit			
POINT	STA	OFFSET	ELEV
A	30+16.21	46.93	620.18
B	30+19.26	40.89	620.27
C	30+17.86	46.89	620.24
D	30+21.42	40.89	620.33
E	30+36.29	46.88	620.89
F	30+36.29	40.89	620.82
G	30+31.29	46.88	620.86
H	30+31.28	40.88	620.77
I	30+21.42	46.89	620.31
J	30+24.53	38.63	620.91
K	30+23.80	37.23	620.47

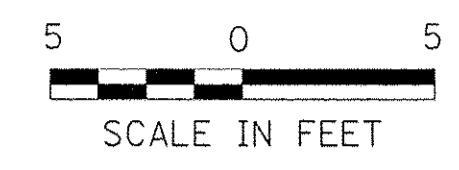
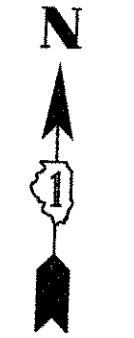


**ROOSEVELT ROAD**

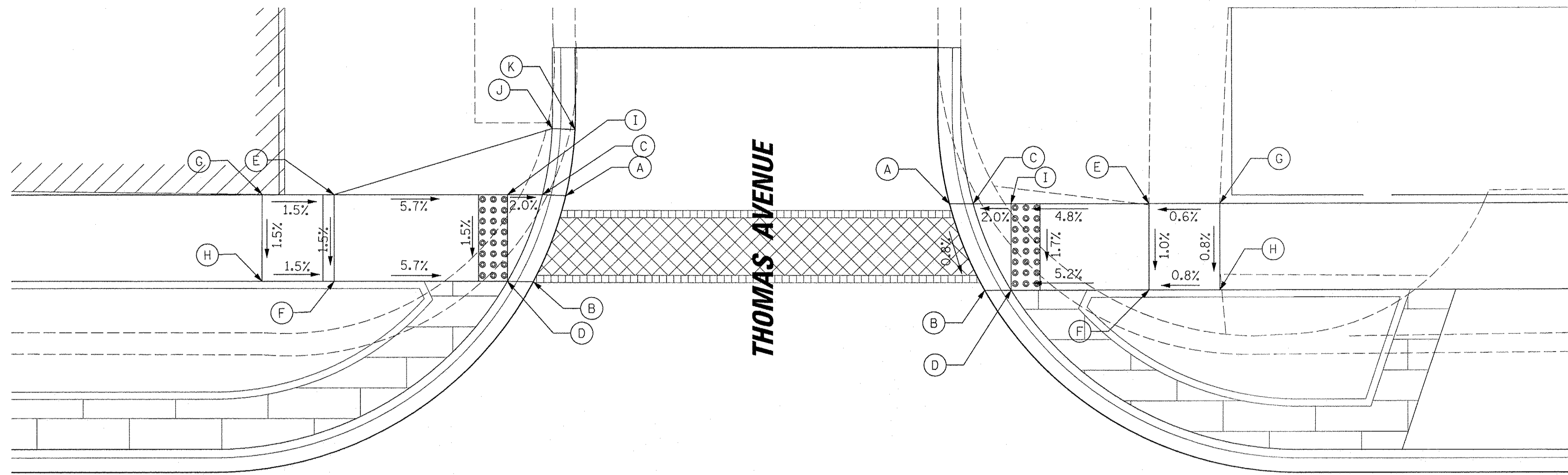
SW Corner of Driveway			
POINT	STA	OFFSET	ELEV
A	30+78.50	42.58	620.96
B	30+79.05	41.10	620.90
C	30+61.72	42.58	621.22
D	30+61.72	38.00	620.59
E	30+61.72	39.58	621.16
F	30+61.72	48.58	621.31
G	30+78.50	48.58	621.05
H	30+89.84	48.58	621.04
I	30+90.76	47.29	621.10
J	30+67.72	48.58	621.30
K	30+67.72	42.58	621.21
L	30+67.72	39.96	621.20
M	30+67.72	38.36	620.72
N	30+74.11	41.19	621.24
O	30+74.52	39.66	620.85



SE Corner of Driveway			
POINT	STA	OFFSET	ELEV
A	31+66.05	37.62	620.72
B	31+67.32	38.56	620.78
C	31+73.85	38.57	620.80
D	31+79.85	38.57	620.86
E	31+73.02	31.22	620.63
F	31+73.85	32.57	620.69
G	31+79.85	32.57	620.77



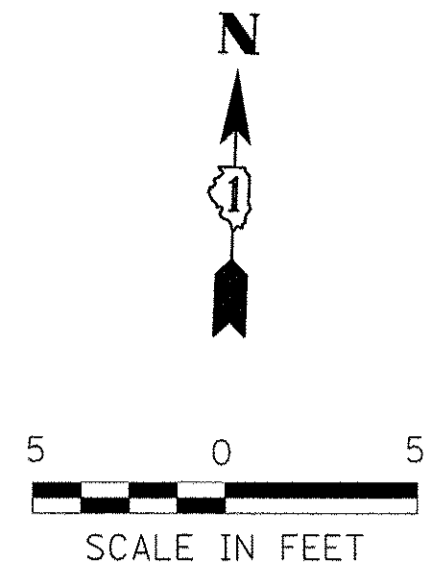
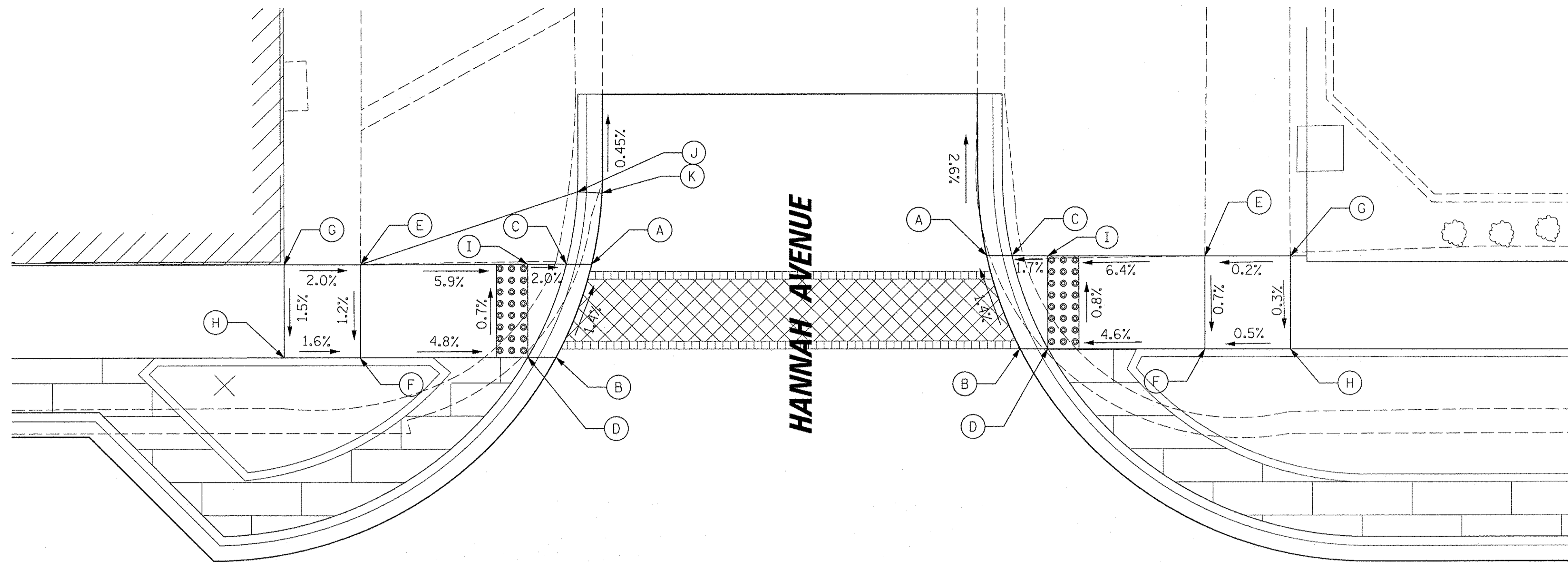
NW Corner of Thomas			
POINT	STA	OFFSET	ELEV
A	33+16.89	46.8	620.23
B	33+14.64	40.81	620.18
C	33+15.26	46.8	620.29
D	33+12.84	40.81	620.24
E	33+00.84	46.81	621.01
F	33+00.84	40.81	619.92
G	32+95.86	46.81	621.1
H	32+95.84	40.81	621.01
I	33+12.84	46.81	620.33
J	33+15.94	51.41	620.71
K	33+17.52	51.33	620.27



**ROOSEVELT ROAD**

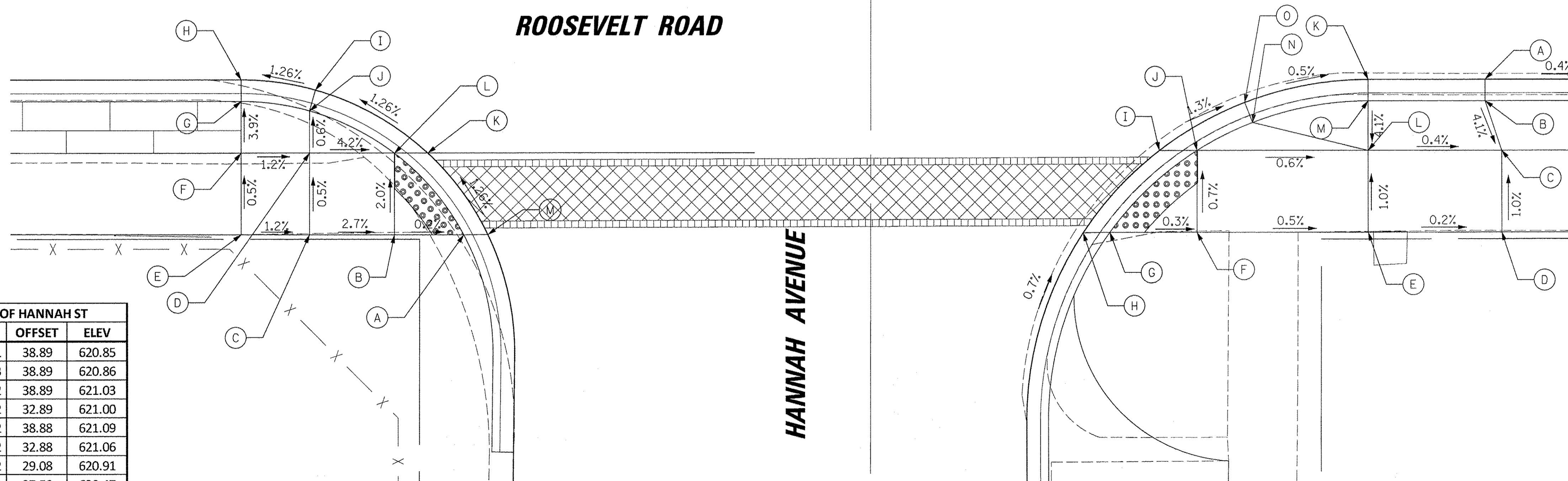
NE Corner of Thomas			
POINT	STA	OFFSET	ELEV
A	33+43.46	46.18	620.47
B	33+45.89	40.19	620.42
C	33+45.10	46.18	620.53
D	33+47.73	40.19	620.48
E	33+57.27	46.2	621.04
F	33+57.21	40.2	620.98
G	33+62.18	46.21	621.07
H	33+61.92	40.21	621.02
I	33+47.72	46.19	620.58

NW Corner of Hannah			
POINT	STA	OFFSET	ELEV
A	36+48.04	46.64	620.16
B	26+45.75	40.64	620.25
C	36+46.41	46.64	620.22
D	36+43.93	40.64	620.31
E	36+33.18	46.62	620.9
F	36+33.14	40.62	620.83
G	36+28.27	46.61	621
H	36+28.28	40.61	620.91
I	36+43.92	46.64	620.27
J	36+47.13	51.3	620.58
K	36+48.71	51.22	620.14



NE Corner of Hannah			
POINT	STA	OFFSET	ELEV
A	36+73.43	47.19	620.1
B	36+75.58	41.16	620.19
C	36+75.05	47.19	620.16
D	36+75.35	41.18	620.25
E	36+87.45	47.16	620.84
F	36+87.40	41.16	620.8
G	36+92.95	47.15	620.85
H	36+92.99	41.15	620.83
I	36+77.37	47.18	620.2

**ROOSEVELT ROAD**



SW CORNER OF HANNAH ST			
POINT	STA	OFFSET	ELEV
A	36+31.41	38.89	620.85
B	36+26.33	38.89	620.86
C	36+20.12	38.89	621.03
D	36+20.12	32.89	621.00
E	36+15.12	38.88	621.09
F	36+15.12	32.88	621.06
G	36+15.12	29.08	620.91
H	36+15.12	27.50	620.47
I	36+20.55	28.25	620.54
J	36+20.12	29.77	620.98
K	36+28.77	32.88	620.68
L	36+26.34	32.89	620.74
M	36+33.17	38.87	620.79

SE CORNER OF HANNAH ST			
POINT	STA	OFFSET	ELEV
A	37+06.16	27.50	620.57
B	37+06.16	29.08	620.84
C	37+07.37	32.73	620.68
D	37+07.37	38.73	620.76
E	36+97.60	38.72	620.78
F	36+85.06	38.71	620.84
G	36+78.68	38.71	620.86
H	36+76.73	38.74	620.80
I	36+82.31	32.72	620.74
J	36+85.07	32.72	620.80
K	36+97.60	27.50	620.60
L	36+97.60	32.72	620.72
M	36+97.60	29.08	620.87
N	36+89.14	30.67	620.92
O	36+88.57	29.19	620.65

FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\0223\B08046\Civil\ADA.0223\B08046b-07.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 5'	CHECKED -	REVISED -
	PLOT DATE = 11/14/2016	DATE -	REVISED -

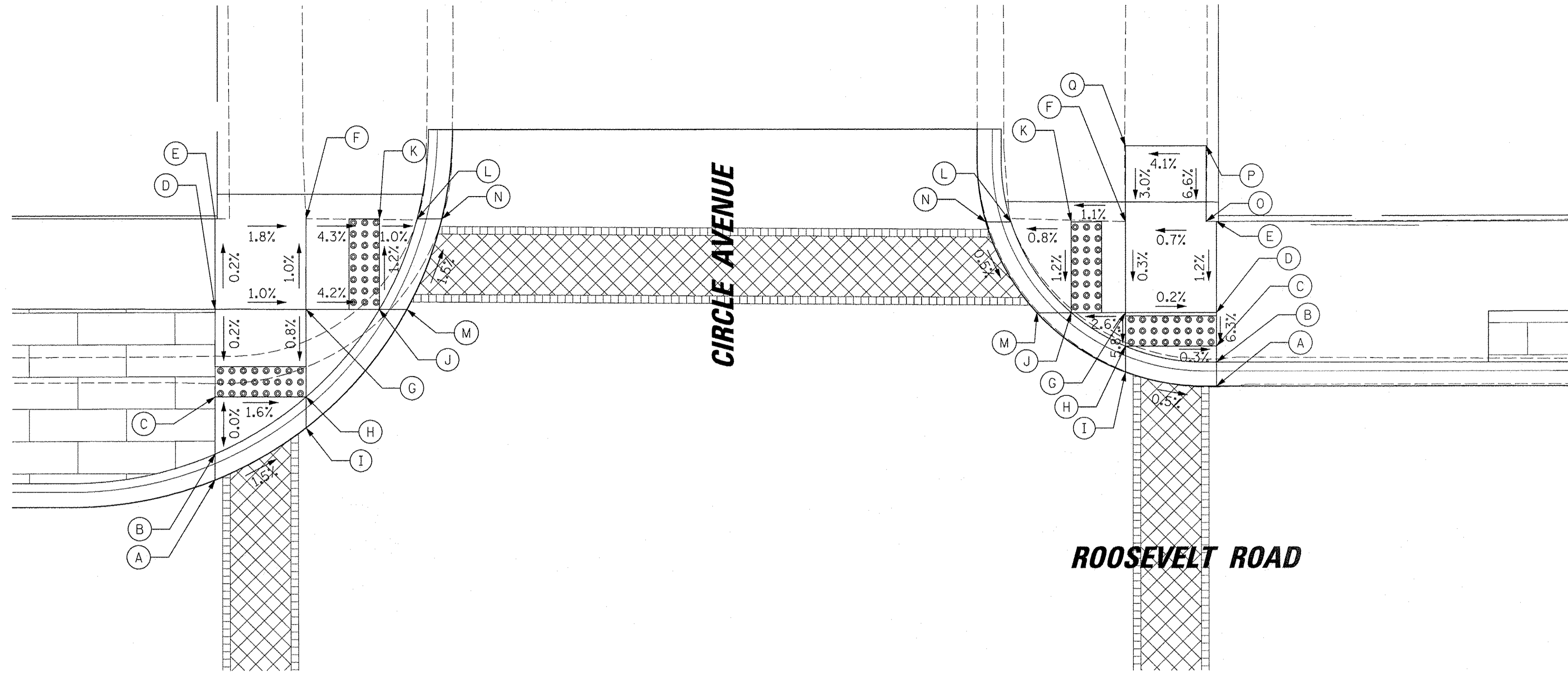
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SIDEWALK GRADING PLAN  
ROOSEVELT ROAD**

SCALE: 5 SHEET 7 OF 10 SHEETS STA. N/A TO STA. N/A

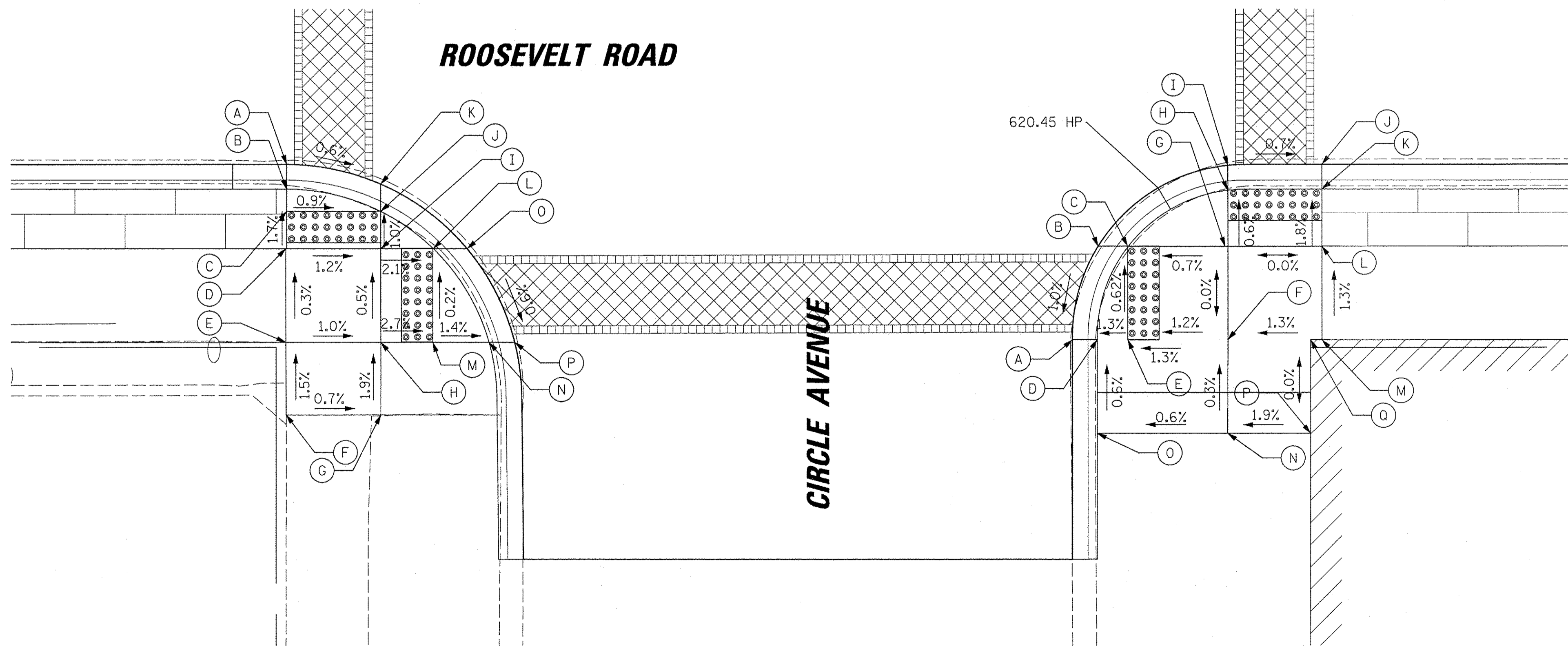
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	27
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	

NW Corner of Circle			
POINT	STA	OFFSET	ELEV
A	39+58.8	29.31	620.7094
B	39+58.8	31.02	620.7694
C	39+58.8	34.8	620.77
D	39+58.8	40.62	620.78
E	39+58.8	46.61	620.77
F	39+64.8	46.6	620.66
G	39+64.8	40.61	620.72
H	39+64.8	34.8	620.669
I	39+64.8	32.75	620.609
J	39+69.63	40.59	620.5192
K	39+69.64	46.6	620.45
L	39+72.13	46.59	620.4261
M	39+71.45	40.59	620.4592
N	39+73.76	46.58	620.3661



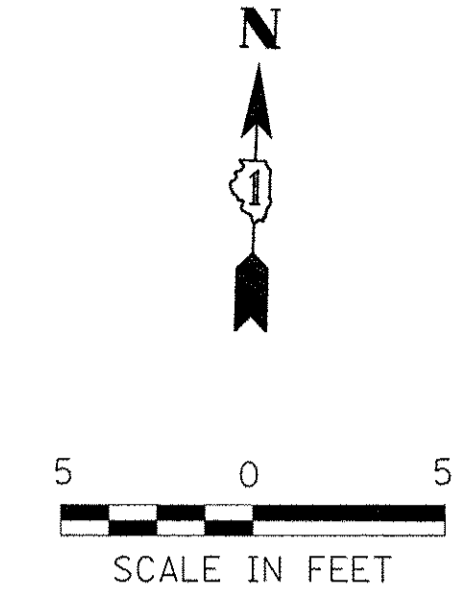
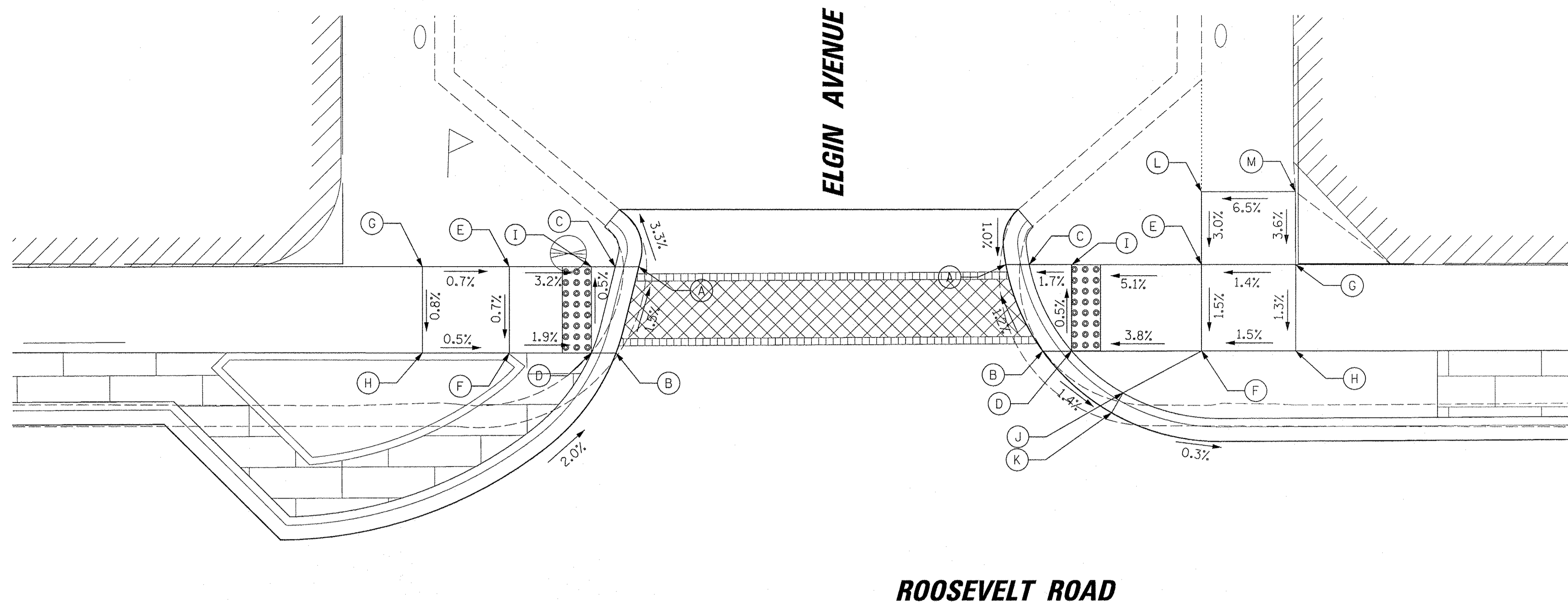
NE Corner of Circle			
POINT	STA	OFFSET	ELEV
A	40+24.83	35.5	620.18
B	40+24.83	37.08	620.24
C	40+24.83	38.14	620.25
D	40+24.83	40.37	620.39
E	40+24.83	46.41	620.46
F	40+18.83	46.4	620.42
G	40+18.83	40.37	620.40
H	40+18.83	38.14	620.27
I	40+18.83	36.44	620.21
J	40+15.25	40.37	620.31
K	40+15.25	46.39	620.38
L	40+11.27	46.38	620.35
M	40+12.99	40.37	620.25
N	40+09.63	46.38	620.29
O	40+24.15	46.4	620.46
P	40+24.15	51.4	620.79
Q	40+18.83	51.4	620.57

SW Corner of Circle			
POINT	STA	OFFSET	ELEV
A	39+58.8	27.5	620.23
B	39+58.8	29.08	620.29
C	39+58.8	30.51	620.31
D	39+58.74	32.9	620.35
E	39+58.74	38.9	620.37
F	39+58.76	43.53	620.44
G	39+64.8	43.54	620.40
H	39+64.8	38.9	620.31
I	39+64.8	32.9	620.28
J	39+64.8	30.51	620.26
K	39+64.8	28.76	620.20
L	39+68.15	32.9	620.21
M	39+68.12	38.9	620.22
N	39+71.71	38.9	620.17
O	39+70.31	32.9	620.15
P	39+73.34	38.9	620.11



SE Corner of Circle			
POINT	STA	OFFSET	ELEV
A	40+08.91	38.72	620.34
B	40+10.55	32.72	620.40
C	40+12.44	32.72	620.46
D	40+10.5	38.72	620.40
E	40+12.44	38.72	620.42
F	40+18.83	38.72	620.50
G	40+18.83	32.73	620.50
H	40+18.83	29.15	620.48
I	40+18.83	27.55	620.42
J	40+24.83	27.5	620.38
K	40+24.83	29.08	620.44
L	40+24.83	32.73	620.50
M	40+24.83	38.72	620.58
N	40+18.83	44.72	620.48
O	40+10.5	44.72	620.43
P	40+24.11	44.72	620.58
Q	40+24.11	38.72	620.58



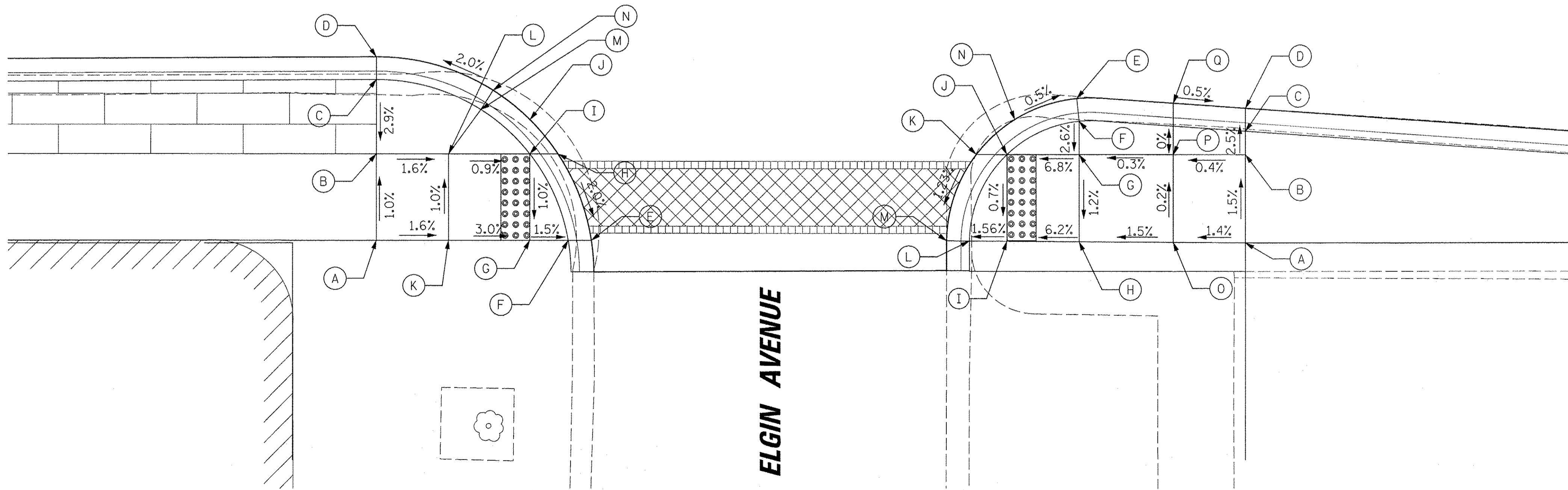


NW Corner of Elgin			
POINT	STA	OFFSET	ELEV
A	46+41.27	45.33	619.42
B	46+39.66	39.33	619.48
C	46+39.64	45.34	619.48
D	46+37.96	39.34	619.54
E	46+32.32	45.37	619.69
F	46+32.29	39.37	619.65
G	46+26.32	45.41	619.73
H	46+26.29	39.41	619.68
I	46+37.99	45.34	619.51

NE CORNER OF ELGIN			
POINT	STA	OFFSET	ELEV
A	46+66.62	45.37	619.4
B	46+69.13	39.36	619.48
C	46+68.23	45.36	619.46
D	46+71.13	39.35	619.54
E	46+80.13	45.3	619.97
F	46+80.13	39.3	619.88
G	46+86.63	45.27	620.06
H	46+86.61	39.27	619.98
I	46+71.18	45.35	619.51
J	46+74.66	36.39	620
K	46+73.87	35.02	619.56
L	46+80.15	50.33	619.82
M	46+86.64	50.3	620.24

**ROOSEVELT ROAD**

**ROOSEVELT ROAD**



SW CORNER OF ELGIN AVE			
POINT	STA	OFFSET	ELEV
A	46+25.88	40.22	619.67
B	46+25.91	34.22	619.61
C	46+25.94	29.08	619.76
D	49+25.94	27.50	619.49
E	46+40.77	40.29	619.32
F	46+39.17	40.29	619.38
G	46+36.50	40.27	619.42
H	46+38.49	34.28	619.42
I	46+36.54	34.27	619.48
J	46+36.55	31.90	619.54
K	46+30.88	40.24	619.59
L	46+30.91	34.24	619.53
M	46+33.16	31.19	619.83
N	46+34.01	29.86	619.56

SE CORNER OF ELGIN AVE			
POINT	STA	OFFSET	ELEV
A	46+86.07	40.65	620.06
B	46+86.10	34.53	620.00
C	46+86.11	32.91	619.96
D	46+86.11	31.32	619.52
E	46+74.44	30.59	619.58
F	46+74.59	32.16	620.02
G	46+74.58	34.47	619.96
H	46+74.55	40.52	619.89
I	46+69.55	40.47	619.54
J	46+69.58	34.44	619.62
K	46+67.46	34.43	619.56
L	46+66.96	40.44	619.54
M	46+65.38	40.42	619.48
N	46+70.14	32.03	619.60
O	46+81.07	40.60	619.99
P	46+81.10	34.50	619.98
Q	46+81.11	30.95	619.98

**MAINTENANCE OF TRAFFIC GENERAL NOTES**

1. THE CONTRACTOR SHALL CONTACT THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847-705-4470) A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS, FIELD ENTRANCES, AND SIDE ROADS AT ALL TIMES AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR AS TEMPORARY ACCESS. WARNING SIGNS ARE REQUIRED AT ALL THE DRIVEWAYS AND UNSIGNALIZED SIDE ROADS TO ALERT THE MOTORISTS OF THE NEW LANE CONFIGURATION FOR EACH STAGING CHANGE. THIS WORK SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)".
3. CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL CONFLICTING SIGNS, PAVEMENT MARKINGS, AND TRAFFIC CONTROL DEVICES HAVE BEEN REMOVED OR COVERED, AND TEMPORARY TRAFFIC CONTROL MEASURES HAVE BEEN PLACED AND INSTALLED TO THE SATISFACTION OF THE ENGINEER.
4. ALL TEMPORARY PAVEMENT MARKINGS SHOWING DETERIORATION AFTER SEVEN (7) DAYS SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. SUFFICIENT QUANTITIES FOR ONE PLACEMENT AND THREE REPLACEMENTS HAVE BEEN PROVIDED FOR EACH STAGE. ALL MARKINGS THAT REQUIRE REPLACEMENT PRIOR TO SEVEN (7) DAYS OF SERVICE OR REPLACEMENT AFTER THE THIRD REPLACEMENT SHALL BE REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
5. ALL TYPE II BARRICADES, DRUMS, AND VERTICAL PANELS SHALL BE EQUIPPED WITH MONO-DIRECTIONAL STEADY BURN LIGHTS ON MULTILANE ROADWAYS, WHILE BI-DIRECTION LIGHTS ARE REQUIRED ON ALL TWO- WAY ROADWAYS.
6. ALL TYPE II BARRICADES, DRUMS, AND VERTICAL PANELS SHALL BE SPACED AT 50-FOOT CENTER-TO-CENTER THROUGHOUT THE WORK ZONE, EXCEPT IN TAPER AREAS AND ALONG CORNER RADII, WHERE THEY SHALL BE SPACED AT 20-FOOT CENTER- TO-CENTER EXCEPT AS OTHERWISE INDICATED ON THE PLANS.
7. THE FURNISHING, INSTALLING, AND RELOCATION OF ALL THE TRAFFIC SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), ILLINOIS SUPPLEMENT TO THE MUTCD, IDOT HIGHWAY STANDARDS, IDOT STANDARD SPECIFICATIONS, CONTRACT SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).
8. THE CONTRACTOR SHALL PROVIDE ADVANCE NOTICE OF CONSTRUCTION SIGNING. SIGNS SHALL BE ERECTED ONE WEEK IN ADVANCE OF THE START OF CONSTRUCTION AND SHALL BE REMOVED OR COVERED WHEN PROTECTION IS NOT REQUIRED.
9. THE CONTRACTOR SHALL INSTALL AND COVER ALL TEMPORARY SIGNING BEFORE EXISTING SIGNS ARE BEING REMOVED. THE CONTRACTOR SHALL RELOCATE EXISTING SIGNS AS INDICATED ON THE PLANS.
10. THE CONTRACTOR SHALL INSTALL AND COVER ALL PERMANENT SIGNING BEFORE TEMPORARY SIGNS ARE REMOVED.
11. ALL EXISTING GUIDE SIGNS SHALL BE MAINTAINED AND VISIBLE TO TRAFFIC DURING CONSTRUCTION OR AS OTHERWISE SHOWN ON THE PLANS.
12. ALL EXISTING TRAFFIC SIGNS IN CONFLICT WITH STAGING SHALL BE REMOVED, RELOCATED OR COVERED AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).
13. ACCESS MUST BE MAINTAINED TO ALL BUSINESSES AND RESIDENCES. THIS WORK WILL BE PAID FOR AS "TEMPORARY SIDEWALK RAMP".

**MAINTENANCE OF TRAFFIC STAGING NOTES**

**STAGE 1**

*TRAFFIC*

1. INSTALL M.O.T. SIGNING AND CHANNELIZATION DRUMS. MAINTAIN ACCESS TO DRIVEWAYS AND SIDE STREETS.
2. CLOSE THE RIGHT OUTSIDE LANE THROUGH THE LENGTH OF THE PROJECT. CLOSE SIDEWALK IN INCREMENTS OF 2-3 BLOCKS AT A TIME. FULL PEDESTRIAN ACCESS AND PARKING SHALL BE RESTORED BEFORE CONTRACTOR CAN MOVE TO NEXT SECTION OF SIDEWALK.
3. ONE 11' MINIMUM LANE SHALL BE MAINTAINED FOR EASTBOUND TRAFFIC. ONE 11' MINIMUM LANE SHALL BE MAINTAINED FOR WESTBOUND TRAFFIC. EXISTING LEFT TURN LANES SHALL BE MAINTAINED. RIGHT TURN LANES ALONG ROOSEVELT MAY BE CLOSED DURING STAGE 1 CONSTRUCTION

*CONSTRUCTION*

1. MILL PAVEMENT SURFACE AND PATCH PAVEMENT. REMOVE PAVEMENT FULL-DEPTH AT LOCATIONS AS SHOWN IN THE PLANS.
2. REMOVE CURB & GUTTER, SIDEWALK AND OTHER EXISTING ITEMS AS SHOWN IN PLANS TO THE EXISTING R.O.W.
3. PERFORM ALL UNDERGROUND, STREET LIGHT FOUNDATIONS, TRAFFIC SIGNAL FOUNDATIONS AND UTILITY WORK.
4. CONSTRUCT CURB & GUTTER, SIDEWALK, STREET LIGHTING, TRAFFIC SIGNALS AND BRICK SIDEWALKS ACCORDING TO PLANS.
5. CONSTRUCT HMA BASE COURSE AND LEVELING BINDER.
6. MAINTAIN A PEDESTRIAN ROUTE ALONG ROOSEVELT ROAD IN CONSTRUCTION ZONES AT ALL TIMES.

**STAGE 2**

*TRAFFIC*

1. INSTALL M.O.T. SIGNING, CHANNELIZATION DRUMS, AND MAINTAIN ACCESS TO DRIVEWAYS.
2. CLOSE THE MEDIAN AND ADJACENT EASTBOUND AND WESTBOUND LANES ALONG ROOSEVELT ROAD ACCORDING TO PLANS.
3. ONE 11' MINIMUM LANE WILL BE MAINTAINED FOR EASTBOUND TRAFFIC. EASTBOUND RIGHT TURN LANES WILL BE MAINTAINED. ONE 11-FOOT LANE WILL BE MAINTAINED FOR WESTBOUND TRAFFIC, ALONG WITH 8-FOOT PARKING LANES.
4. LEFT TURN LANES SHALL REMAIN OPEN AT LOCATIONS SHOWN ON THE PLANS.

*CONSTRUCTION*

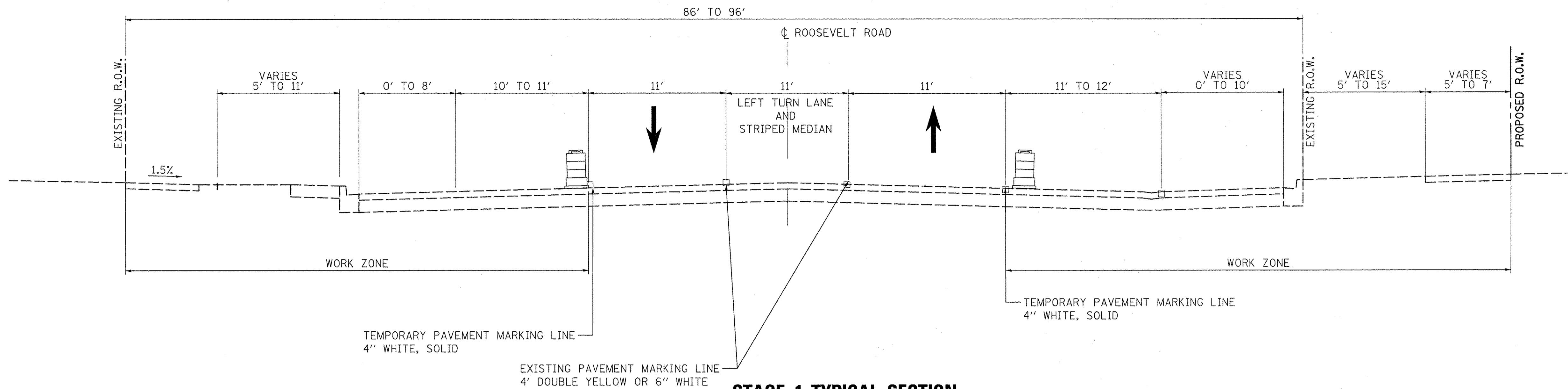
1. MILL PAVEMENT SURFACE AND PATCH PAVEMENT. REMOVE PAVEMENT FULL-DEPTH AT LOCATIONS AS SHOWN IN THE PLANS.
2. CONSTRUCT PAVEMENT, CURB & GUTTER, LANDSCAPE MEDIAN AND LANDSCAPING ACCORDING TO PLANS.
3. CONSTRUCT PROPOSED LEVELING BINDER

**STAGE 3**

*CONSTRUCTION*

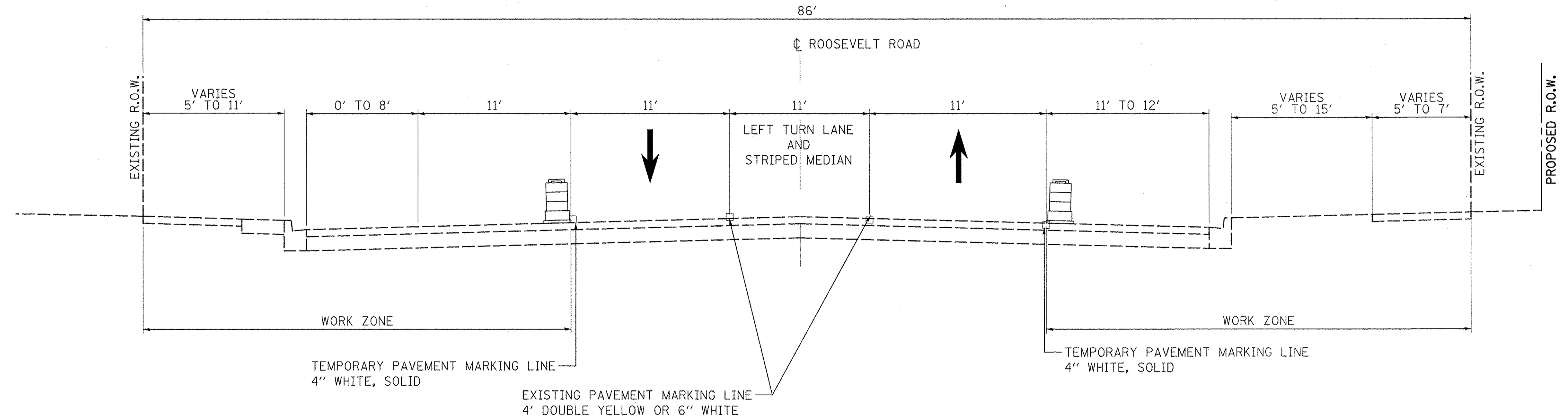
1. PROPOSED SURFACE, PAVEMENT MARKINGS, AND RAISED REFLECTOR PAVEMENT MARKINGS SHALL BE PLACED.

FILE NAME =	USER NAME = mthomas	DESIGNED - DC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC NOTES ROOSEVELT ROAD</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\FORESTPARK\023\BG046\Civ1\MOTTP.D	023BG046-01.sht	DRAWN - DC	REVISED -			347	13-00112-00-LS	COOK	151	31	
Default	PLOT SCALE = 1"	CHECKED - AJP	REVISED -			CONTRACT NO. 61D26		ILLINOIS FED. AID PROJECT			
	PLOT DATE = 11/14/2016	DATE - 10/20/2016	REVISED -			SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.		



**STAGE 1 TYPICAL SECTION**

STA. 10+30.51 TO STA. 17+72.70  
 STA. 20+58.88 TO STA. 35+00.34  
 STA. 36+27.61 TO STA. 43+54.86  
 STA. 46+19.65 TO STA. 49+24.71

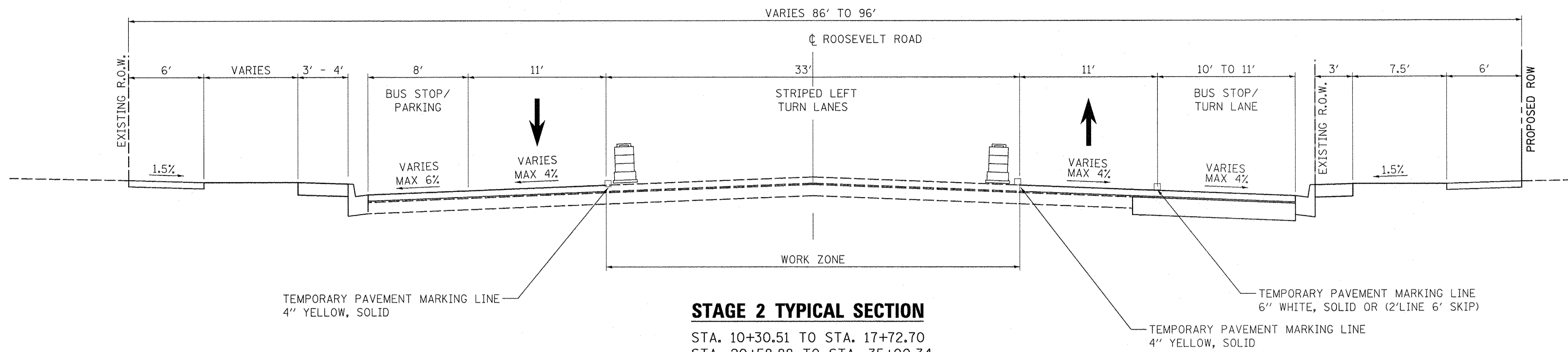


**STAGE 1 TYPICAL SECTION**

STA. 17+72.70 TO STA. 20+58.88  
 STA. 35+00.34 TO STA. 36+27.61  
 STA. 43+54.86 TO STA. 46+19.65

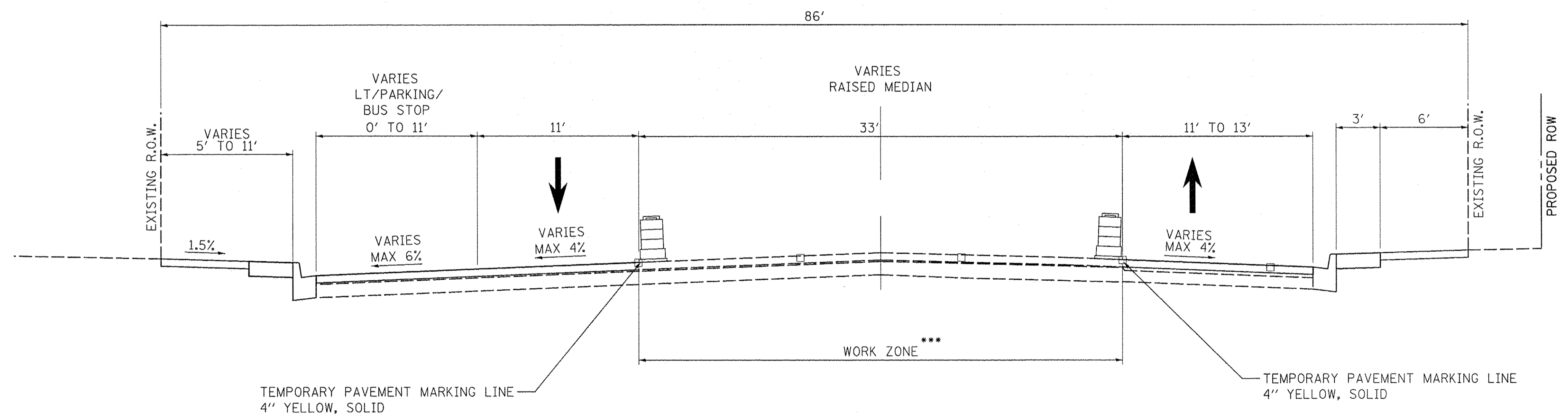
FILE NAME =	USER NAME = mthomas	DESIGNED - DC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC TYPICAL SECTIONS ROOSEVELT ROAD</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\0023\BG046\c1v1\MOT1YP_023BG046b-01.sht	PLOT SCALE = 1"	DRAWN - DC	REVISED -				347	13-00112-00-LS	COOK	151	32
Default	PLOT DATE = 11/14/2016	CHECKED - AJP	REVISED -		SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.		CONTRACT NO. 61D26				
		DATE - 10/20/2016	REVISED -		ILLINOIS FED. AID PROJECT						





**STAGE 2 TYPICAL SECTION**

STA. 10+30.51 TO STA. 17+72.70  
 STA. 20+58.88 TO STA. 35+00.34  
 STA. 36+27.61 TO STA. 43+54.86  
 STA. 46+19.65 TO STA. 49+24.71

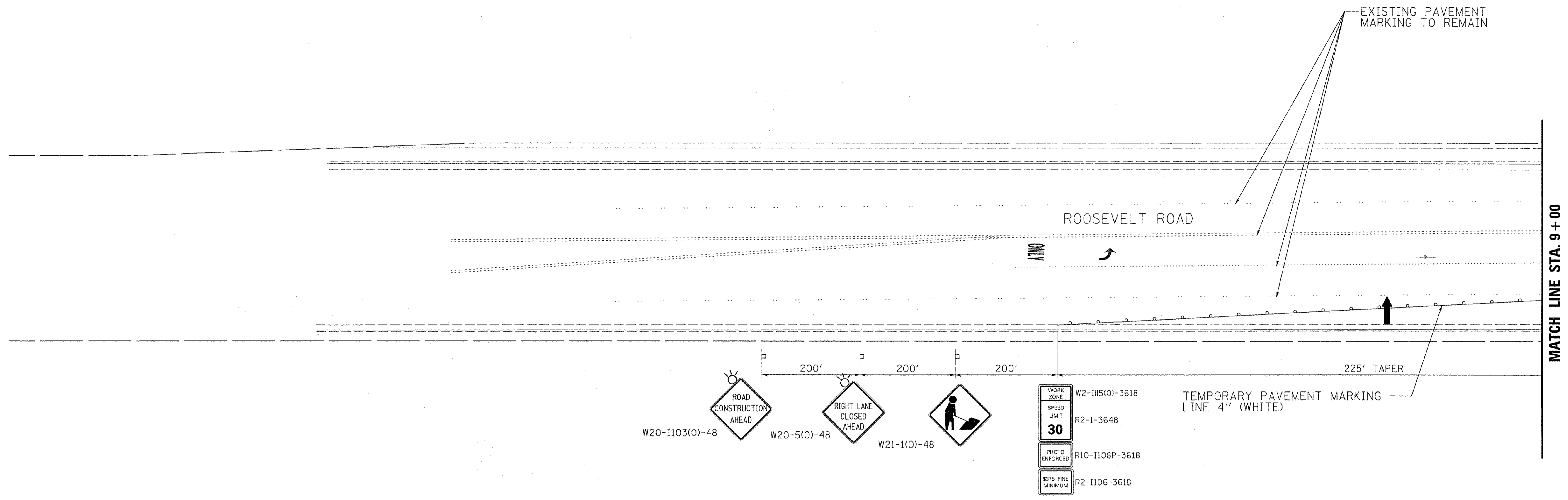
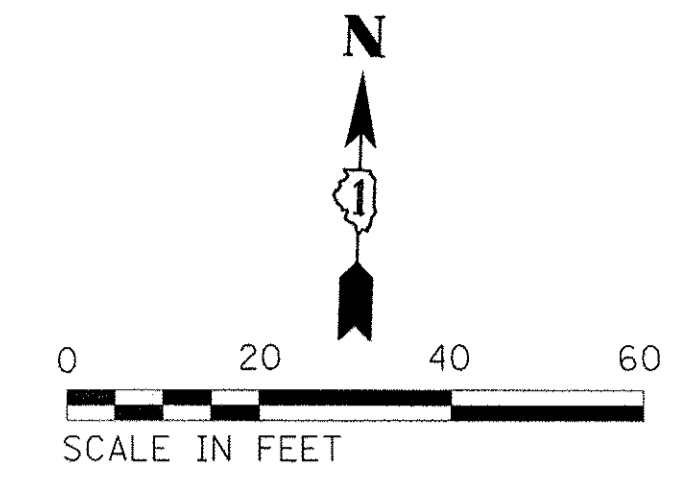


**STAGE 2 TYPICAL SECTION**

STA. 17+72.70 TO STA. 20+58.88  
 STA. 35+00.34 TO STA. 36+27.61  
 STA. 43+54.86 TO STA. 46+19.65

\*\*\*18+26.01 TO 18+68.72  
 19+45.90 TO 20+51.39  
 35+07.89 TO 36+05.58  
 43+62.36 TO 45+59.20

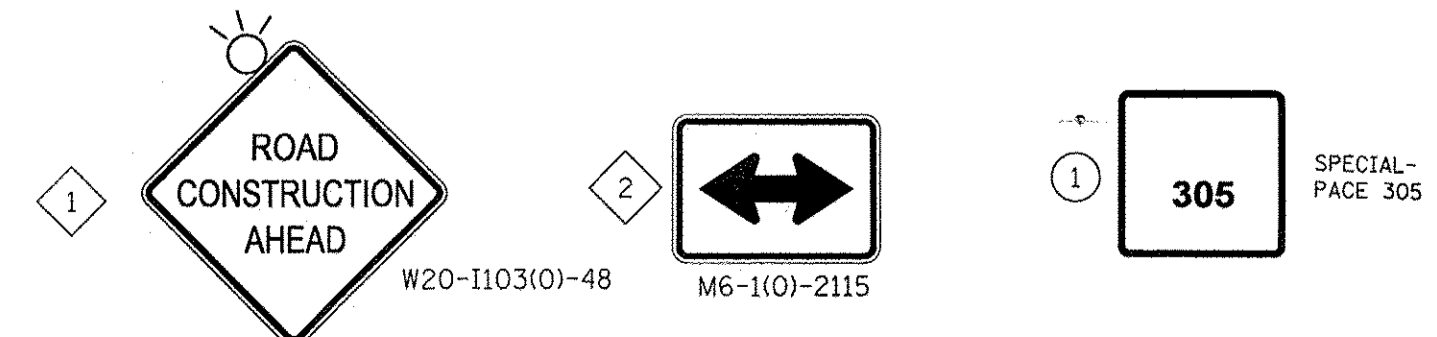
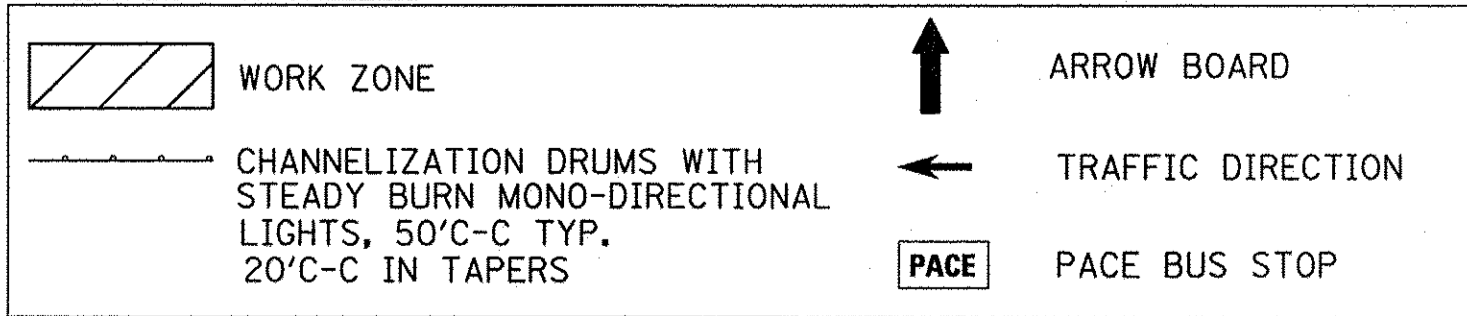
FILE NAME =	USER NAME = mthomas	DESIGNED - DC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC TYPICAL SECTIONS ROOSEVELT ROAD</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\0023\BG046\Civil\MOTTYP_023BG046b-01.sht	DRAWN - DC	REVISIED -	347				13-00112-00-LS	COOK	151	33	
Default	PLOT SCALE = 1"	CHECKED - AJP	REVISIED -		CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT			
	PLOT DATE = 11/14/2016	DATE - 10/20/2016	REVISIED -		SCALE:	SHEET 2 OF 2 SHEETS	STA.	TO STA.			



**MOT STAGING NOTES:**

1. WHEN PREPARING STAGING FOR THE SPECIFIC TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL TAKE INTO CONSIDERATION EXISTING BUS STOP LOCATIONS SO THAT TEMPORARY BUS STOPS MAY BE LOCATED AS CLOSE TO THE ORIGINAL BUS STOP LOCATION AS POSSIBLE.
2. MAINTAIN TEMPORARY ACCESS DURING CONSTRUCTION TO ALL ENTRANCES AND SIDE STREETS AS DIRECTED BY THE ENGINEER.

**MOT LEGEND**



FILE NAME = N:\FORESTPARK\0023\BC0246\_Cv11\MOT\ST1\_0023BC0246-01.dwg

**INFRASTRUCTURE ENGINEERING** | INCORPORATED  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9560 | F 312.425.9564 | www.infrastructure-eng.com

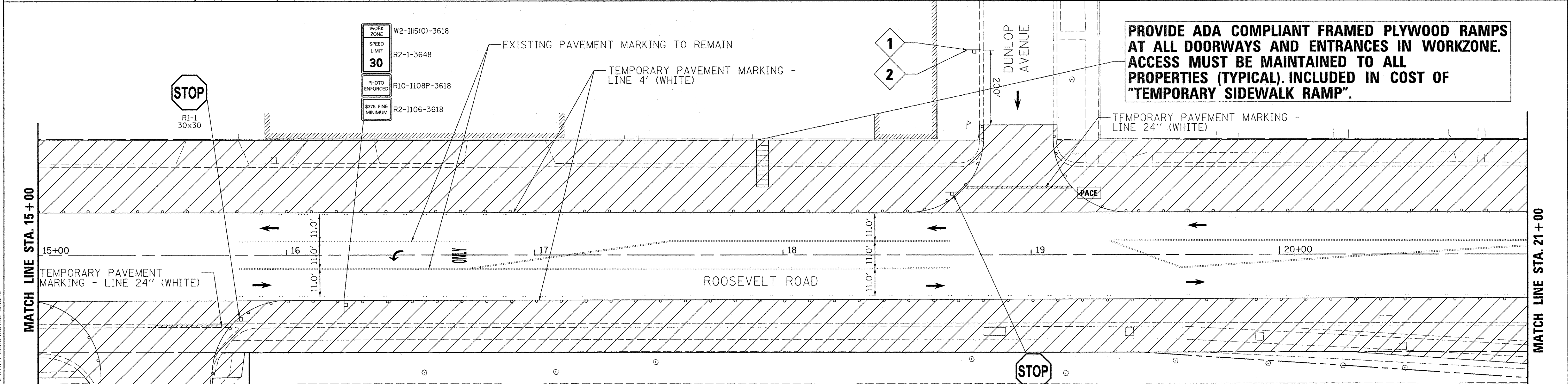
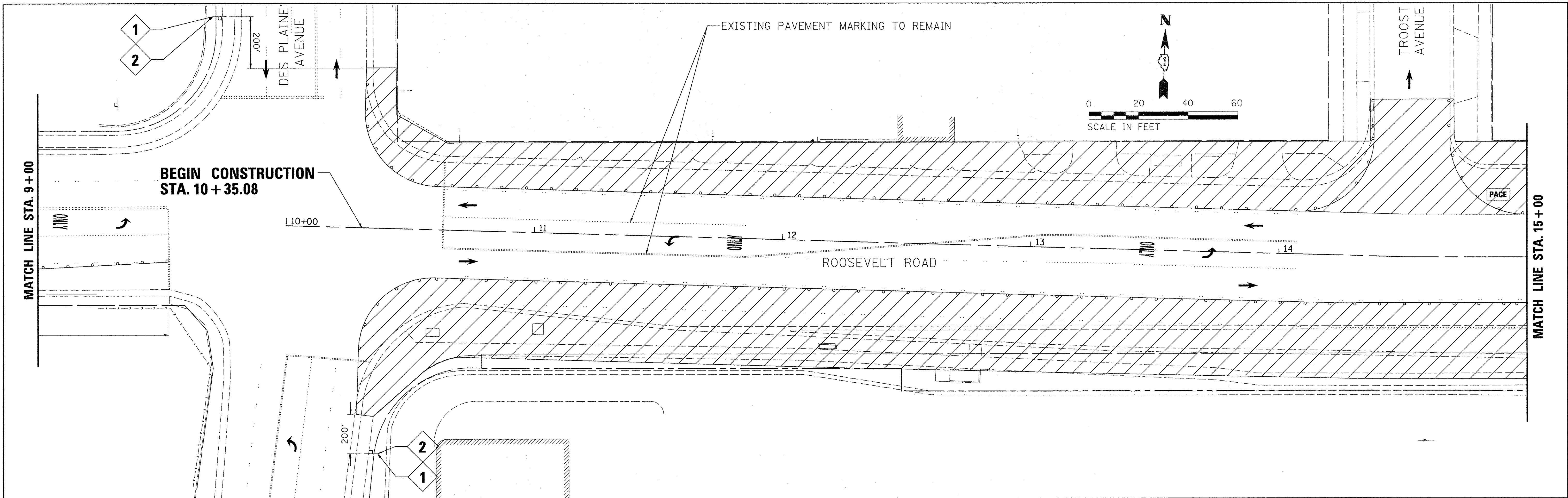
USER NAME = mthomas	DESIGNED - LC	REVISED -
PLOT SCALE = 20'	DRAWN - LC	REVISED -
PLOT DATE = 11/14/2016	CHECKED - AJP	REVISED -
	DATE - 10/20/2016	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 1  
ROOSEVELT ROAD**

SCALE: 20 SHEET 1 OF 5 SHEETS STA. 4+00.00 TO STA. 9+00.00

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 34
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	



**PROVIDE ADA COMPLIANT FRAMED PLYWOOD RAMP  
AT ALL DOORWAYS AND ENTRANCES IN WORKZONE.  
ACCESS MUST BE MAINTAINED TO ALL  
PROPERTIES (TYPICAL). INCLUDED IN COST OF  
"TEMPORARY SIDEWALK RAMP".**

- WORK ZONE W2-1115(0)-3618
- SPEED LIMIT 30 R2-1-3648
- PHOTO ENFORCED R10-1108P-3618
- \$375 FINE MINIMUM R2-1106-3618

- MOT STAGING NOTES:**
- WHEN PREPARING STAGING FOR THE SPECIFIC TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL TAKE INTO CONSIDERATION EXISTING BUS STOP LOCATIONS SO THAT TEMPORARY BUS STOPS MAY BE LOCATED AS CLOSE TO THE ORIGINAL BUS STOP LOCATION AS POSSIBLE.
  - MAINTAIN TEMPORARY ACCESS DURING CONSTRUCTION TO ALL ENTRANCES AND SIDE STREETS AS DIRECTED BY THE ENGINEER.

**MOT LEGEND**

WORK ZONE	ARROW BOARD
CHANNELIZATION DRUMS WITH STEADY BURN MONO-DIRECTIONAL LIGHTS, 50'C-C TYP. 20'C-C IN TAPERS	TRAFFIC DIRECTION
	PACE BUS STOP

ROAD CONSTRUCTION AHEAD

305 SPECIAL-PAGE 305

W20-1103(0)-48

M6-1(0)-2115

FILE NAME = N:\FORESTPARK\2023\B0045\Cv\1\DOT\ST1\_2023B0046b-02.dwg

**INFRASTRUCTURE ENGINEERING INCORPORATED**  
33 West Monroe | Suite 1540 | Chicago, IL 60603  
P 312.425.9580 | F 312.425.9584 | www.infrastructure-eng.com

USER NAME = mthomas  
DESIGNED - LC  
DRAWN - LC  
CHECKED - AJP  
DATE - 10/20/2016

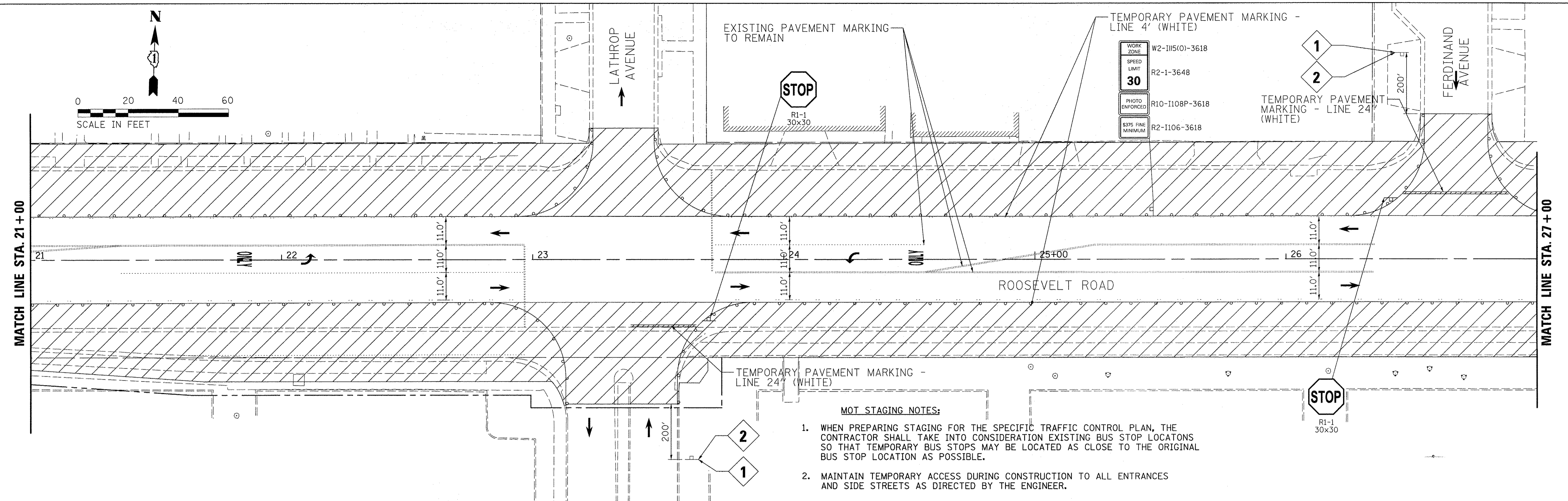
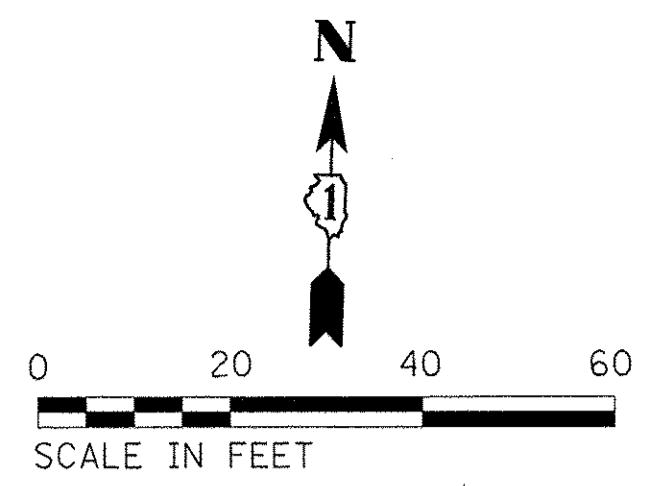
REVISI...  
REVISI...  
REVISI...  
REVISI...

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 1  
ROOSEVELT ROAD**

SCALE: 20 SHEET 2 OF 5 SHEETS STA. 9+00.00 TO STA. 21+00.00

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 35
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				

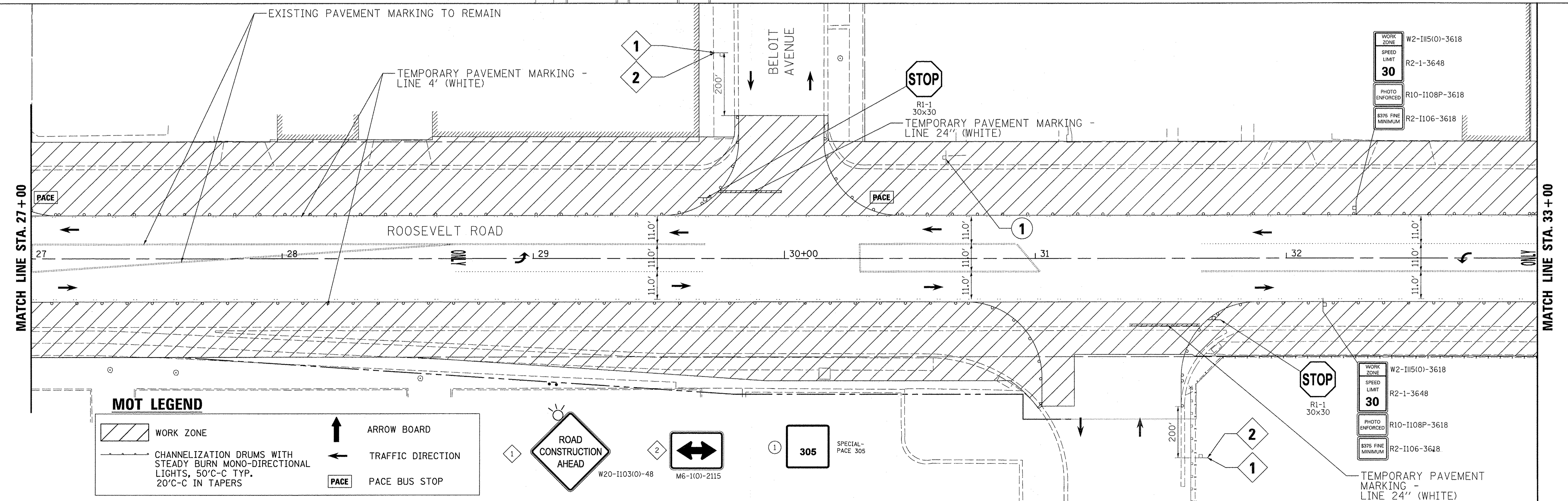


- MOT STAGING NOTES:**
1. WHEN PREPARING STAGING FOR THE SPECIFIC TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL TAKE INTO CONSIDERATION EXISTING BUS STOP LOCATIONS SO THAT TEMPORARY BUS STOPS MAY BE LOCATED AS CLOSE TO THE ORIGINAL BUS STOP LOCATION AS POSSIBLE.
  2. MAINTAIN TEMPORARY ACCESS DURING CONSTRUCTION TO ALL ENTRANCES AND SIDE STREETS AS DIRECTED BY THE ENGINEER.

WORK ZONE  
SPEED LIMIT  
**30**  
PHOTO ENFORCED  
R10-1108P-3618  
3375 FINE MINIMUM  
R2-1106-3618

WORK ZONE  
SPEED LIMIT  
**30**  
PHOTO ENFORCED  
R10-1108P-3618  
3375 FINE MINIMUM  
R2-1106-3618

WORK ZONE  
SPEED LIMIT  
**30**  
PHOTO ENFORCED  
R10-1108P-3618  
3375 FINE MINIMUM  
R2-1106-3618



**MOT LEGEND**

- WORK ZONE
- ARROW BOARD
- CHANNELIZATION DRUMS WITH STEADY BURN MONO-DIRECTIONAL LIGHTS, 50°C-C TYP. 20°C-C IN TAPERS
- TRAFFIC DIRECTION
- PACE BUS STOP
- ROAD CONSTRUCTION AHEAD W20-1103(10)-48
- TRAFFIC AHEAD M6-1(10)-2115
- SPECIAL- PACE 305

FILE NAME = N:\FORESTPARK\0223\B0246\G\1\NOTS\1\_0223B0246b-03.dwg

**INFRASTRUCTURE ENGINEERING** | INCORPORATED  
33 West Monroe | Suite 1540 | Chicago, IL 60603  
P 312.425.5500 | F 312.425.5564 | www.infrastructure-eng.com

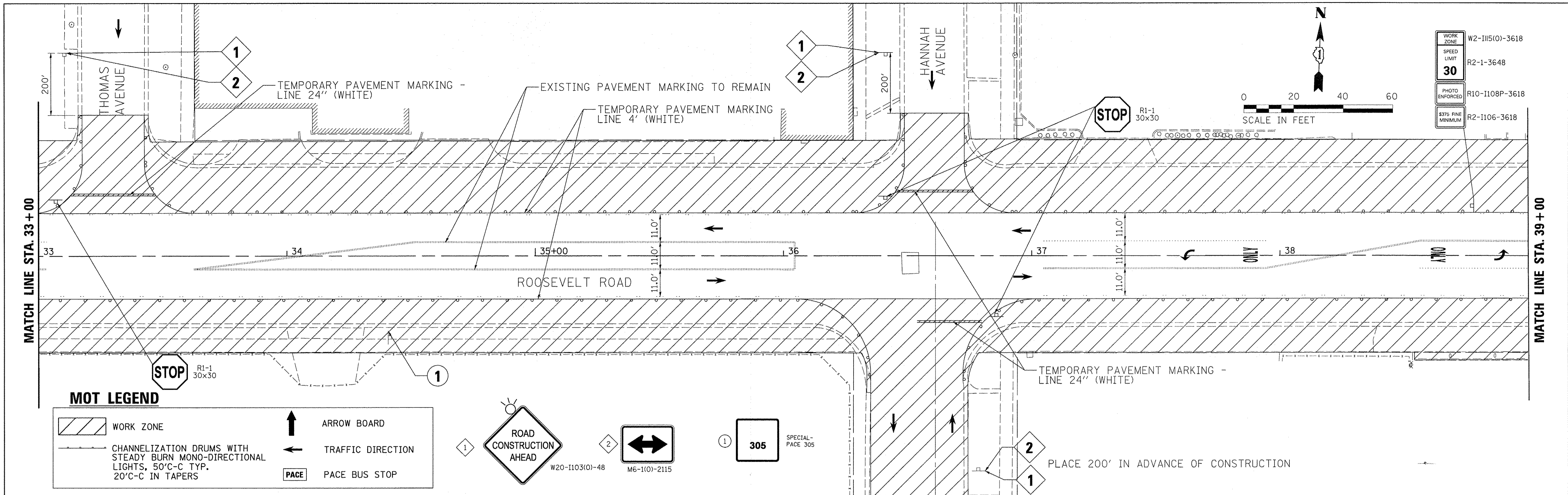
USER NAME = mthomas	DESIGNED - LC	REVISED -
PLOT SCALE = 28'	DRAWN - LC	REVISED -
PLOT DATE = 11/14/2016	CHECKED - AJP	REVISED -
	DATE - 10/20/2016	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 1  
ROOSEVELT ROAD**

SCALE: 20 SHEET 3 OF 5 SHEETS STA. 21+00.00 TO STA. 33+00.00

F.A.P. RTE. 347	SECTION 13-0012-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 36
CONTRACT NO. 61D26				ILLINOIS FED. AID PROJECT

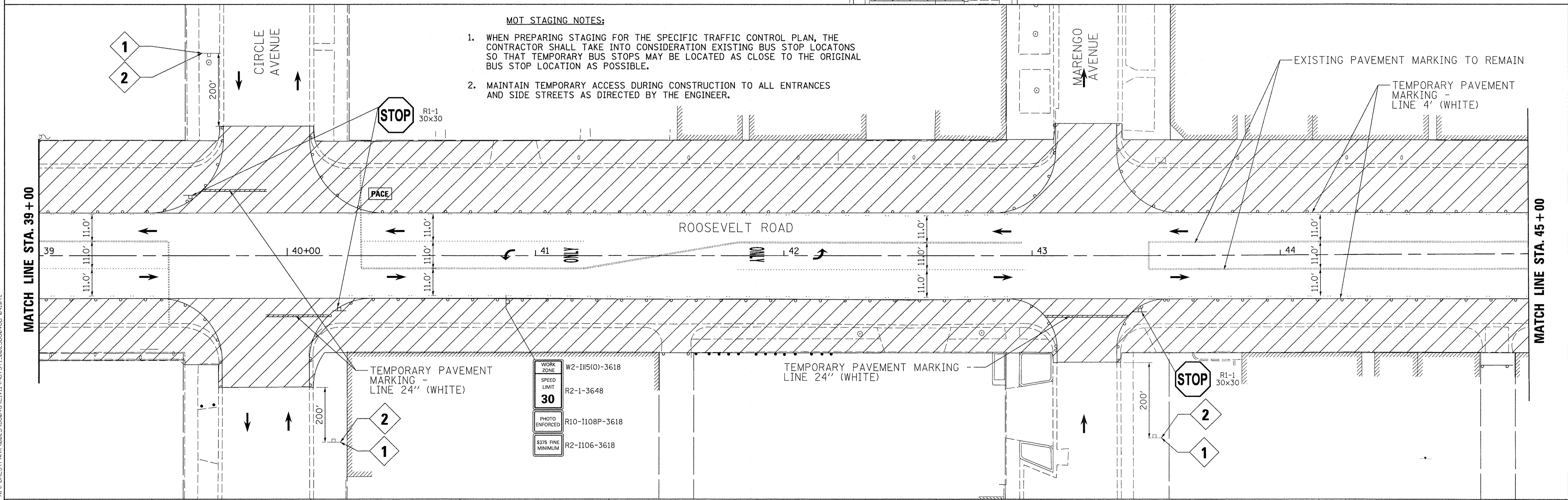


**MOT LEGEND**

WORK ZONE	ARROW BOARD
CHANNELIZATION DRUMS WITH STEADY BURN MONO-DIRECTIONAL LIGHTS, 50'C-C TYP. 20'C-C IN TAPERS	TRAFFIC DIRECTION
PACE	PACE BUS STOP

**MOT STAGING NOTES:**

- WHEN PREPARING STAGING FOR THE SPECIFIC TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL TAKE INTO CONSIDERATION EXISTING BUS STOP LOCATIONS SO THAT TEMPORARY BUS STOPS MAY BE LOCATED AS CLOSE TO THE ORIGINAL BUS STOP LOCATION AS POSSIBLE.
- MAINTAIN TEMPORARY ACCESS DURING CONSTRUCTION TO ALL ENTRANCES AND SIDE STREETS AS DIRECTED BY THE ENGINEER.



**WORK ZONE** W2-II15(0)-3618  
**SPEED LIMIT** R2-1-3648  
**PHOTO ENFORCED** R10-II08P-3618  
**S375 FINE MINIMUM** R2-II06-3618

FILE NAME = N:\FORESTPARK\0223\B0946\Civil\0223B0946b-04.sht

**INFRASTRUCTURE ENGINEERING** | INCORPORATED  
 33 West Monroe | Suite 1540 | Chicago, IL 60663  
 P 312.425.9500 | F 312.425.9564 | www.infrastructure-eng.com

USER NAME = mthomas  
 DESIGNED - LC  
 DRAWN - LC  
 CHECKED - AJP  
 DATE - 10/20/2016

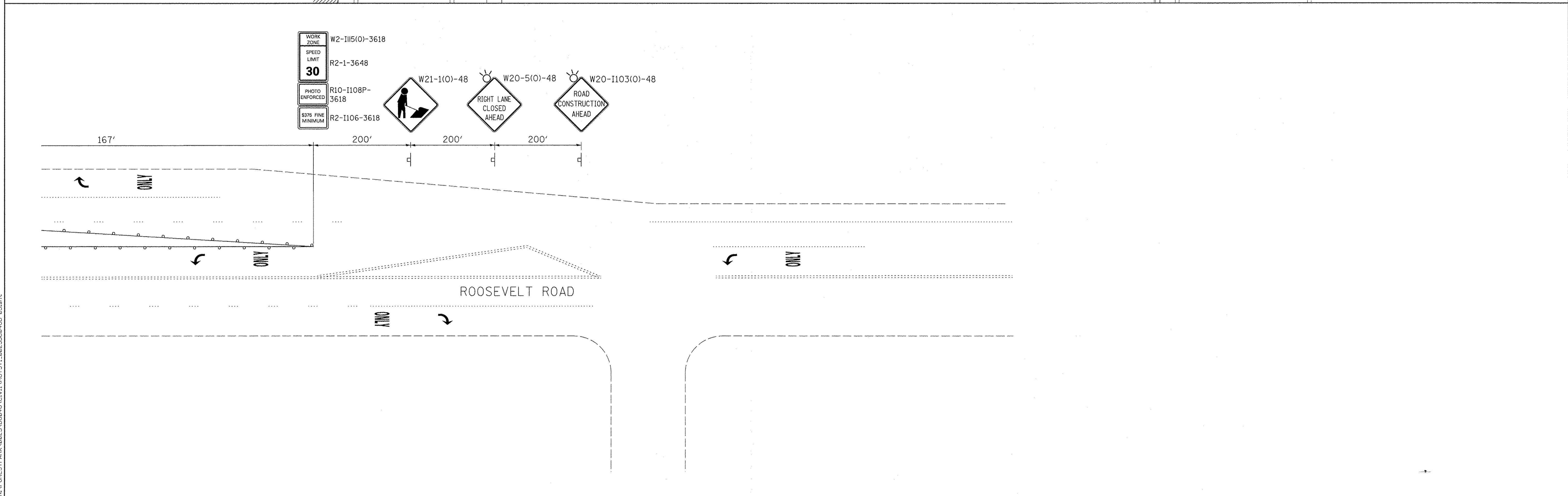
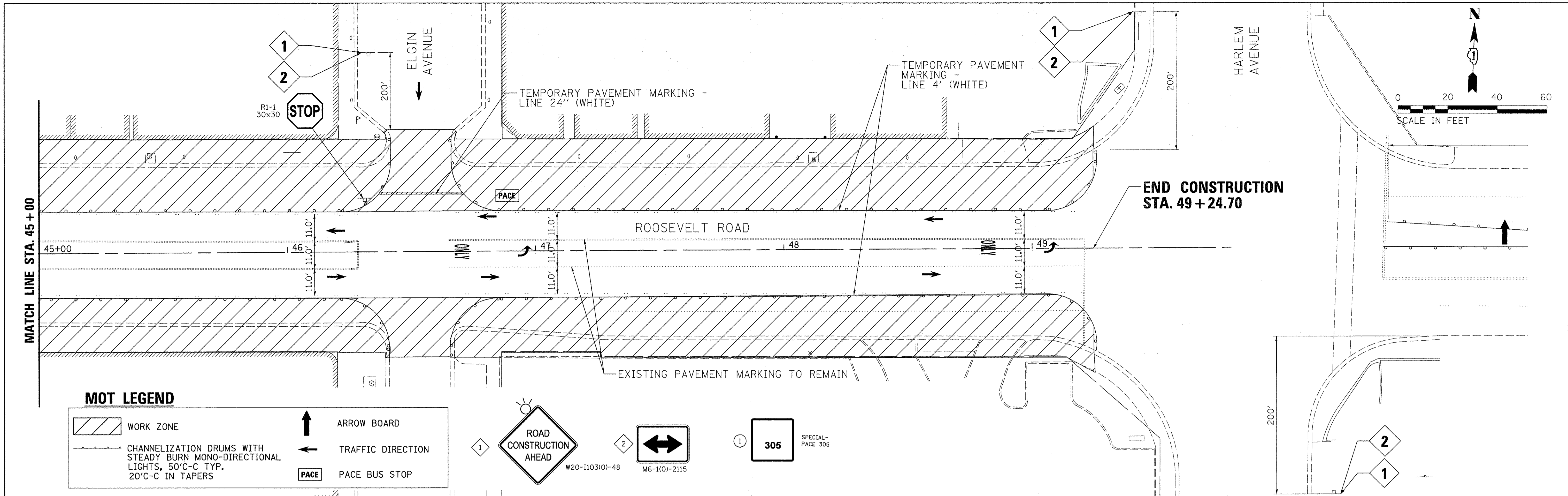
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 1**  
**ROOSEVELT ROAD**

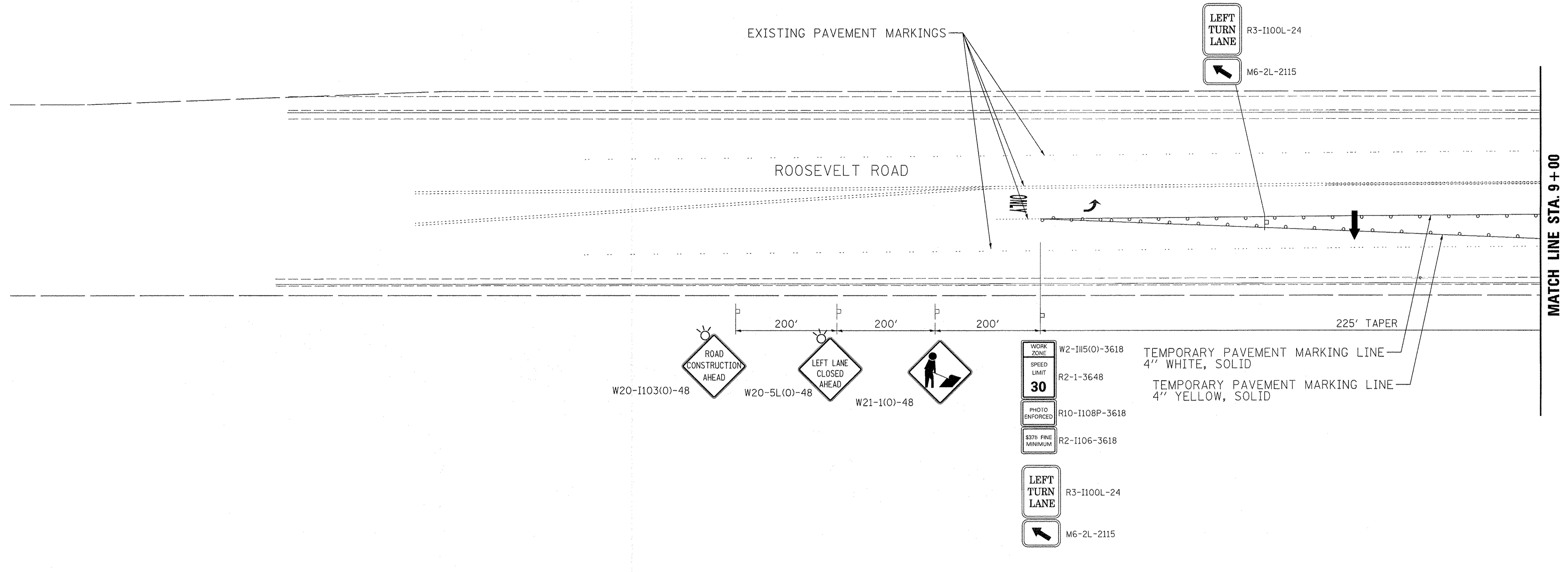
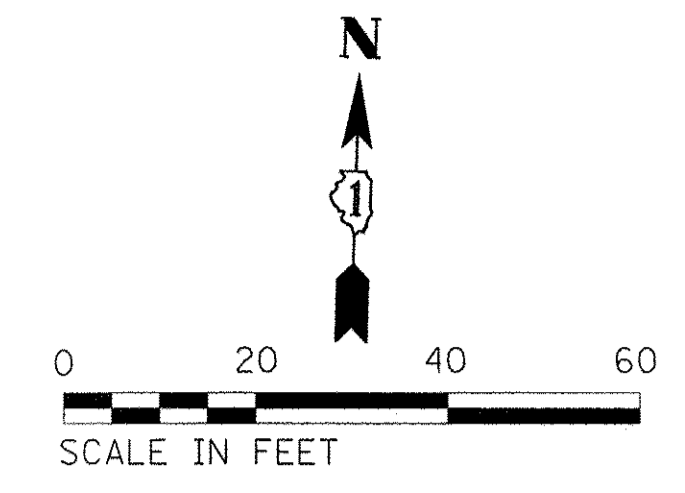
SCALE: 20 SHEET 4 OF 5 SHEETS STA. 33+00.00 TO STA. 45+00.00

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 37
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



FILE NAME = N:\FORESTPARK\00223\80046\Civil\1\NOTES\1\_002238046-95-.shx

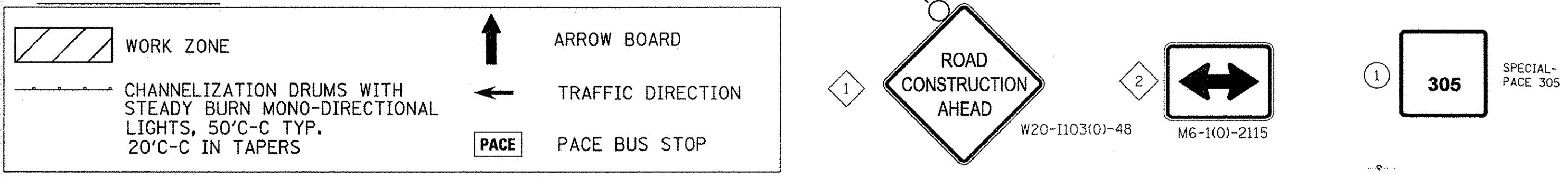
<b>INFRASTRUCTURE ENGINEERING</b> <small>33 West Monroe   Suite 1540   Chicago, IL 60603          P 312.425.9588   F 312.425.9564   www.infrastructure-eng.com</small>	USER NAME = mthomas PLOT SCALE = 28' PLOT DATE = 11/14/2016	DESIGNED - LC DRAWN - LC CHECKED - AJP DATE - 10/20/2016	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC STAGE 1</b> <b>ROOSEVELT ROAD</b>		F.A.P. RTE. 347 SECTION 13-00112-00-LS COUNTY COOK TOTAL SHEETS 151 SHEET NO. 38 CONTRACT NO. 61D26 ILLINOIS FED. AID PROJECT
	SCALE: 20 SHEET 5 OF 5 SHEETS STA. 45+00.00 TO STA. 55+00.00						



**MOT STAGING NOTES:**

1. WHEN PREPARING STAGING FOR THE SPECIFIC TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL TAKE INTO CONSIDERATION EXISTING BUS STOP LOCATIONS SO THAT TEMPORARY BUS STOPS MAY BE LOCATED AS CLOSE TO THE ORIGINAL BUS STOP LOCATION AS POSSIBLE.
2. MAINTAIN TEMPORARY ACCESS DURING CONSTRUCTION TO ALL ENTRANCES AND SIDE STREETS AS DIRECTED BY THE ENGINEER.

**MOT LEGEND**



FILE NAME = N:\FORESTPARK\0223\60646\Civil\WOT\ST2\_022360646b-01.dwg

**INFRASTRUCTURE ENGINEERING** | INCORPORATED  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9566 | F 312.425.9564 | www.infrastructure-eng.com

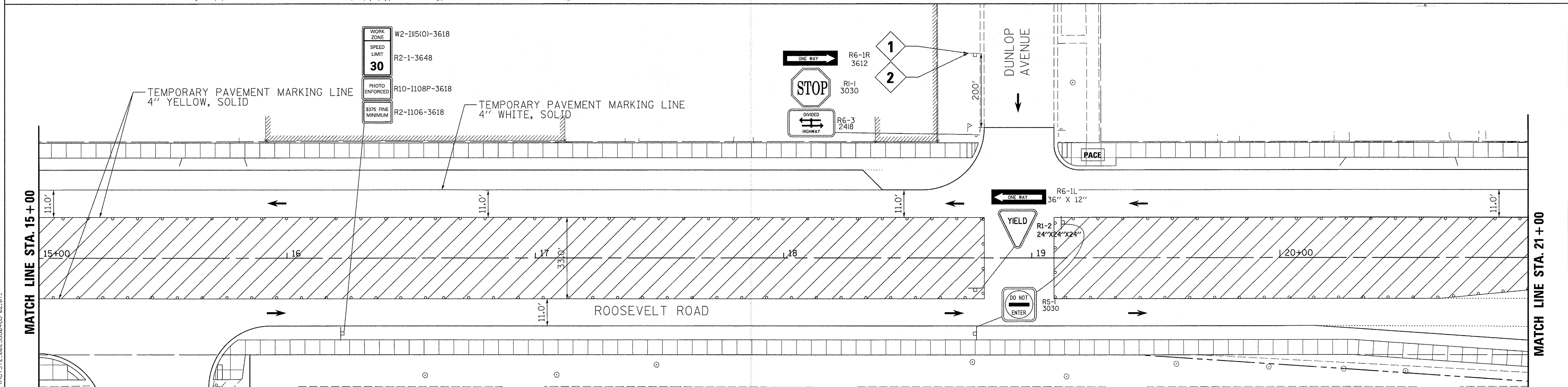
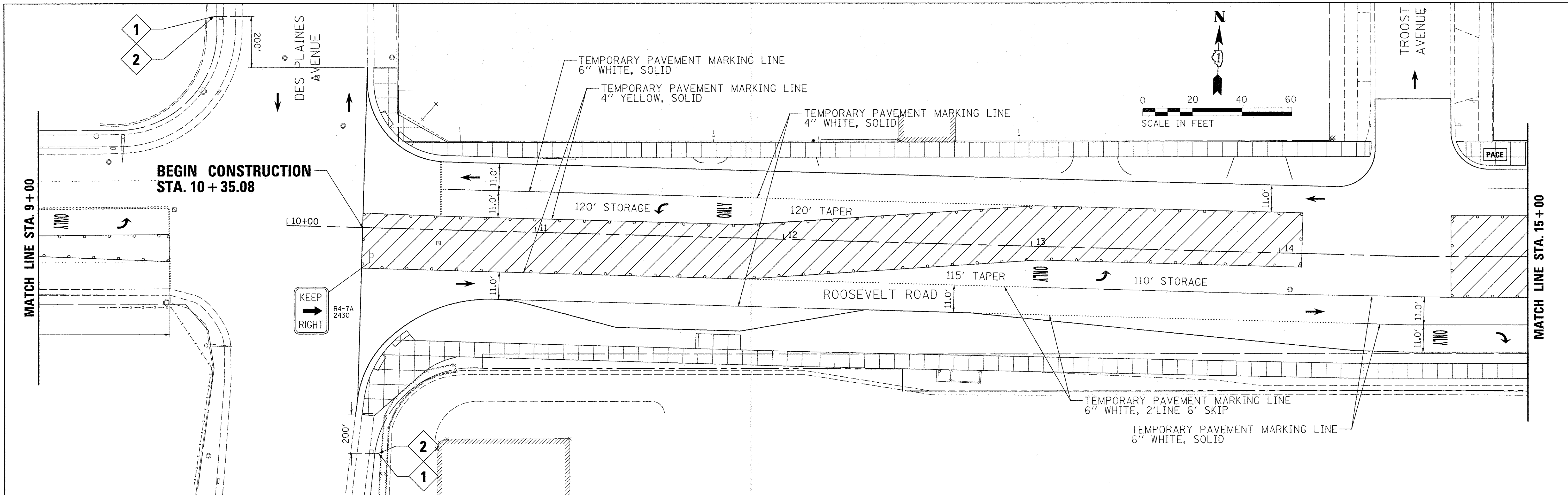
USER NAME = mthomas	DESIGNED - LC	REVISED -
PLOT SCALE = 20'	DRAWN - LC	REVISED -
PLOT DATE = 11/14/2016	CHECKED - AJP	REVISED -
	DATE - 10/20/2016	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 2  
ROOSEVELT ROAD**

SCALE: 20 SHEET 1 OF 5 SHEETS STA. 4+00.00 TO STA. 9+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	39
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



- MOT STAGING NOTES:**
1. WHEN PREPARING STAGING FOR THE SPECIFIC TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL TAKE INTO CONSIDERATION EXISTING BUS STOP LOCATIONS SO THAT TEMPORARY BUS STOPS MAY BE LOCATED AS CLOSE TO THE ORIGINAL BUS STOP LOCATION AS POSSIBLE.
  2. MAINTAIN TEMPORARY ACCESS DURING CONSTRUCTION TO ALL ENTRANCES AND SIDE STREETS AS DIRECTED BY THE ENGINEER.

**MOT LEGEND**

	WORK ZONE		ARROW BOARD
	CHANNELIZATION DRUMS WITH STEADY BURN MONO-DIRECTIONAL LIGHTS, 50'C-C TYP. 20'C-C IN TAPERS		TRAFFIC DIRECTION
			PACE BUS STOP

ROAD CONSTRUCTION AHEAD W20-1103(O)-48  
 M6-1(O)-2115  
 305 SPECIAL-PAGE 305

**INFRASTRUCTURE ENGINEERING** | INCORPORATED  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9560 | F 312.425.9564 | www.infrastructure-eng.com

USER NAME = mthomas  
 DESIGNED - LC  
 DRAWN - LC  
 CHECKED - AJP  
 DATE - 10/20/2016

REVISIED -  
 REVISIED -  
 REVISIED -  
 REVISIED -

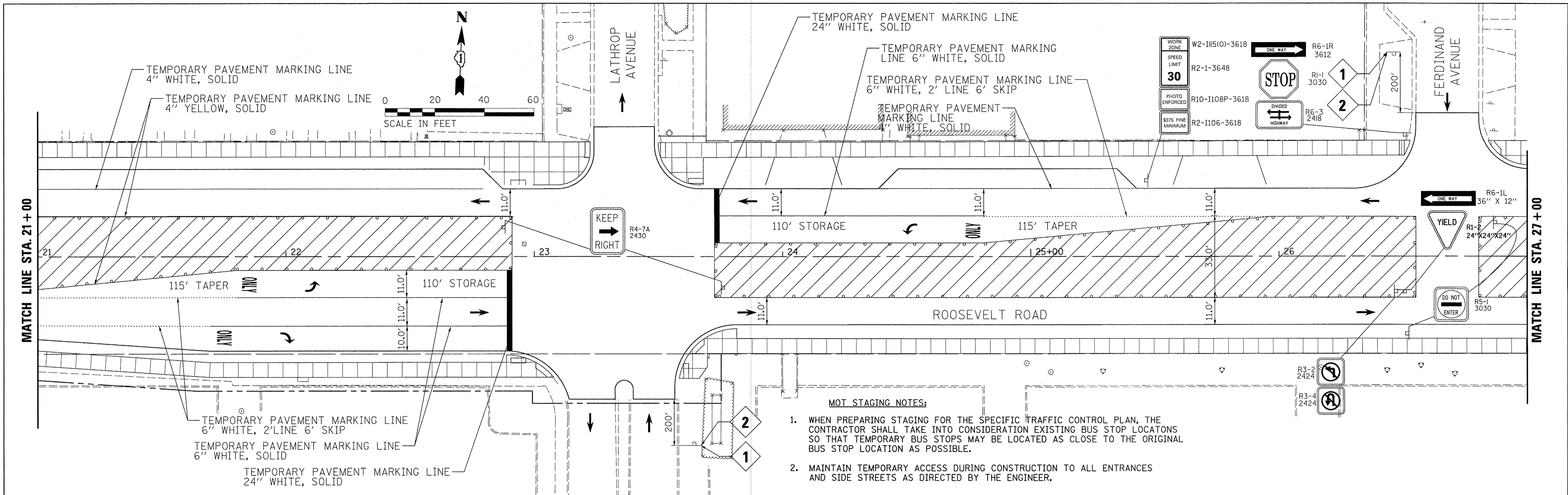
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 2 ROOSEVELT ROAD**  
 SCALE: 20 SHEET 2 OF 5 SHEETS STA. 9+00.00 TO STA. 21+00.00

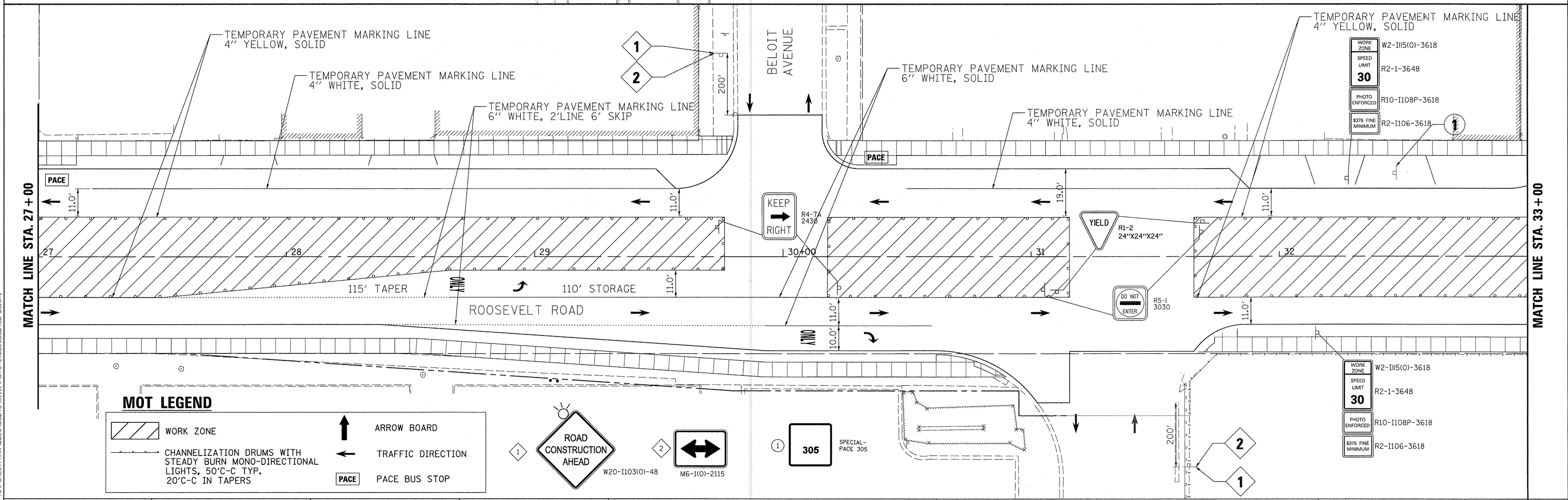
F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 40
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				

FILE NAME = N:\FORESTPARK\0223\BG045\Civil\MOT\ST2\_0023BG045-02.dwg



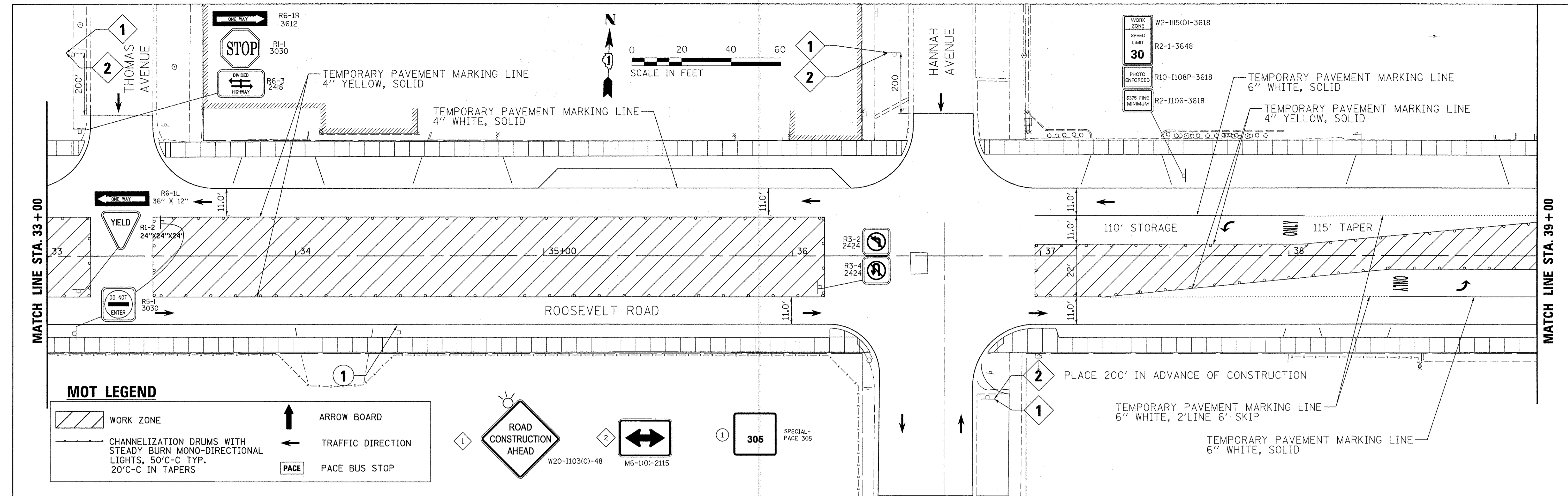


- MOT STAGING NOTES:**
1. WHEN PREPARING STAGING FOR THE SPECIFIC TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL TAKE INTO CONSIDERATION EXISTING BUS STOP LOCATIONS SO THAT TEMPORARY BUS STOPS MAY BE LOCATED AS CLOSE TO THE ORIGINAL BUS STOP LOCATION AS POSSIBLE.
  2. MAINTAIN TEMPORARY ACCESS DURING CONSTRUCTION TO ALL ENTRANCES AND SIDE STREETS AS DIRECTED BY THE ENGINEER.



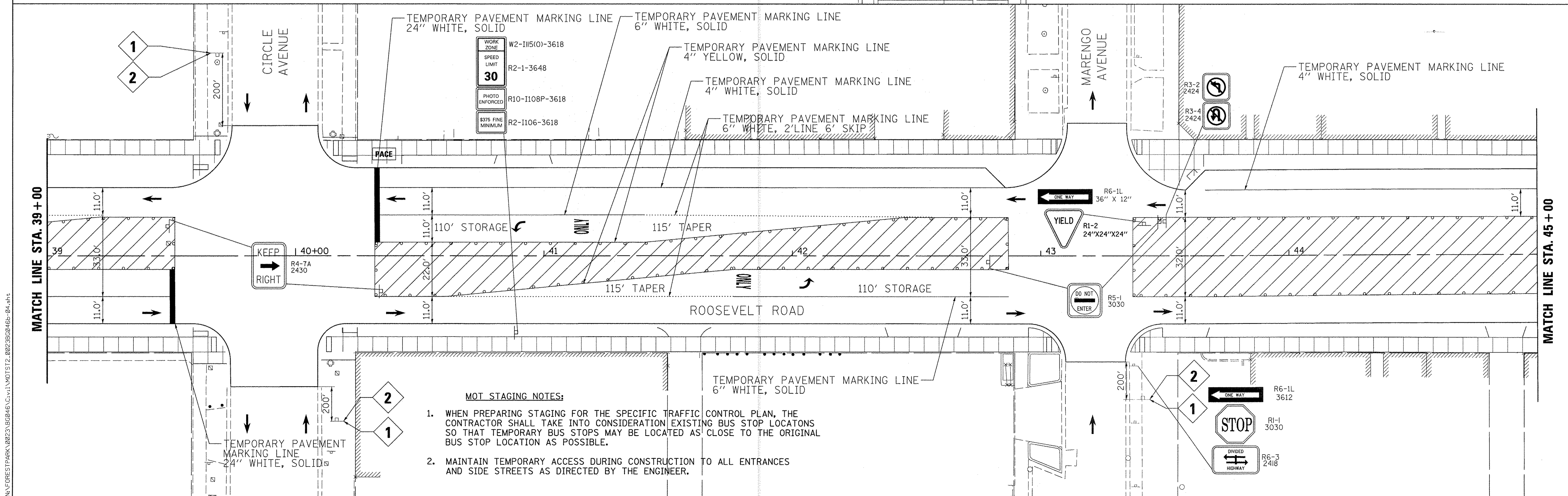
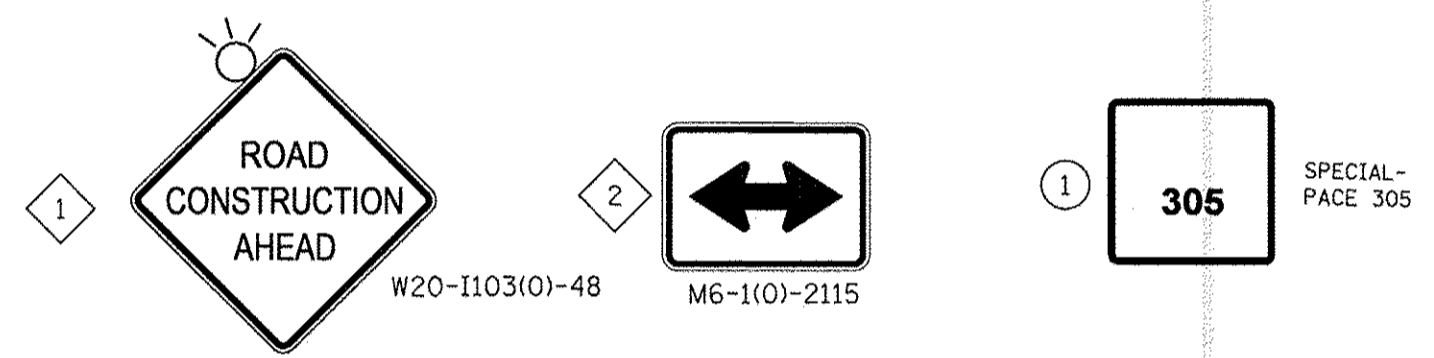
**MOT LEGEND**

	WORK ZONE		ARROW BOARD
	CHANNELIZATION DRUMS WITH STEADY BURN MONO-DIRECTIONAL LIGHTS, 50'C-C TYP. 20'C-C IN TAPERS		TRAFFIC DIRECTION
			PACE BUS STOP



**MOT LEGEND**

	WORK ZONE		ARROW BOARD
	CHANNELIZATION DRUMS WITH STEADY BURN MONO-DIRECTIONAL LIGHTS, 50°C-C TYP. 20°C-C IN TAPERS		TRAFFIC DIRECTION
	PACE		PACE BUS STOP



**MOT STAGING NOTES:**

1. WHEN PREPARING STAGING FOR THE SPECIFIC TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL TAKE INTO CONSIDERATION EXISTING BUS STOP LOCATIONS SO THAT TEMPORARY BUS STOPS MAY BE LOCATED AS CLOSE TO THE ORIGINAL BUS STOP LOCATION AS POSSIBLE.
2. MAINTAIN TEMPORARY ACCESS DURING CONSTRUCTION TO ALL ENTRANCES AND SIDE STREETS AS DIRECTED BY THE ENGINEER.

**INFRASTRUCTURE ENGINEERING INCORPORATED**  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.8569 | F 312.425.9564 | www.infrastructure-eng.com

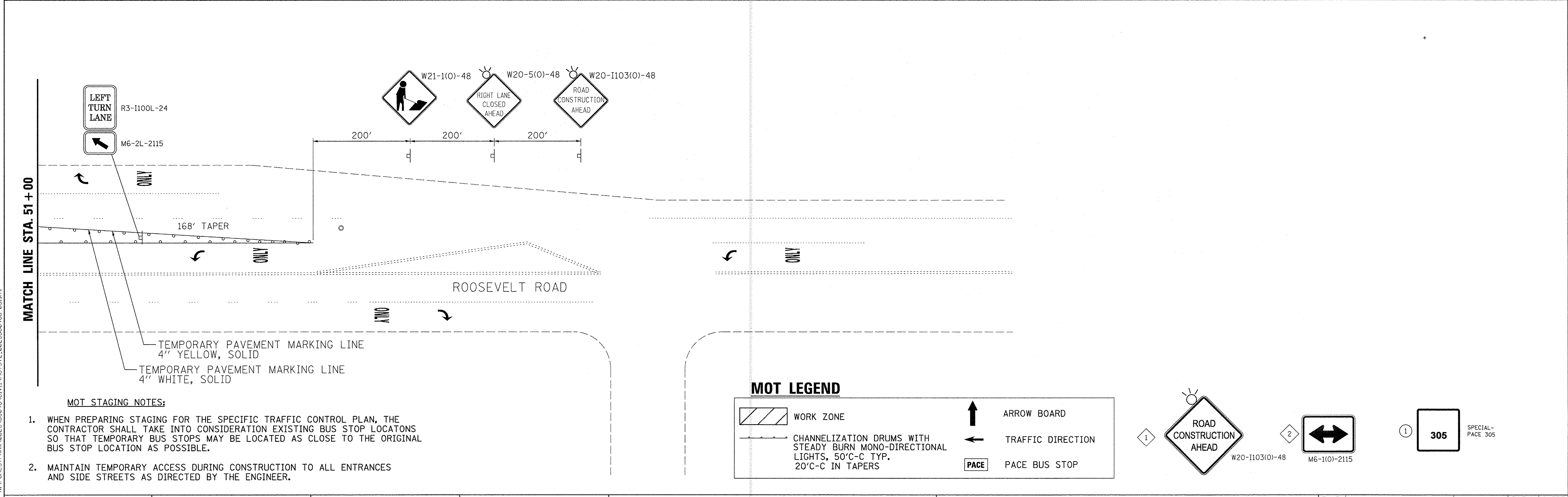
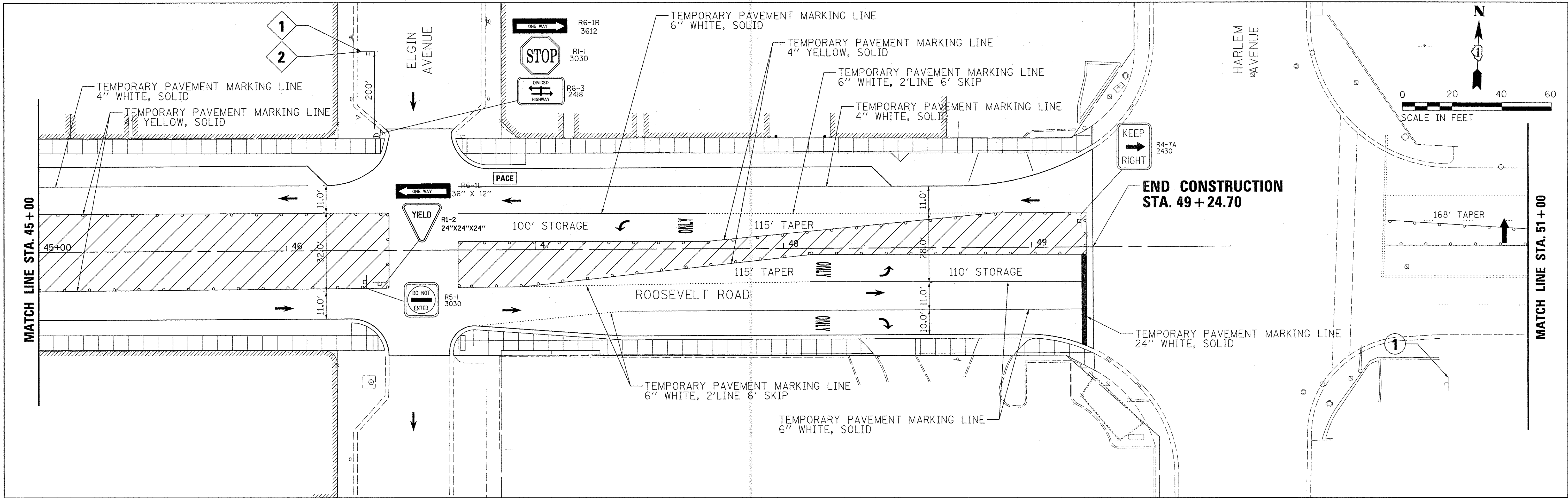
USER NAME = mthomas	DESIGNED - LC	REVISED -
PLOT SCALE = 20'	DRAWN - LC	REVISED -
PLOT DATE = 11/14/2016	CHECKED - AJP	REVISED -
	DATE - 10/20/2016	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 2 ROOSEVELT ROAD**

SCALE: 20 SHEET 4 OF 5 SHEETS STA. 33+00.00 TO STA. 45+00.00

F.A.P. RTE. 347	SECTION 13-00112-00-L5	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 42
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61D26	



FILE NAME = N:\FORESTPARK\2023\B0046\Gw1\W01512\_0223B0465-05.dwg

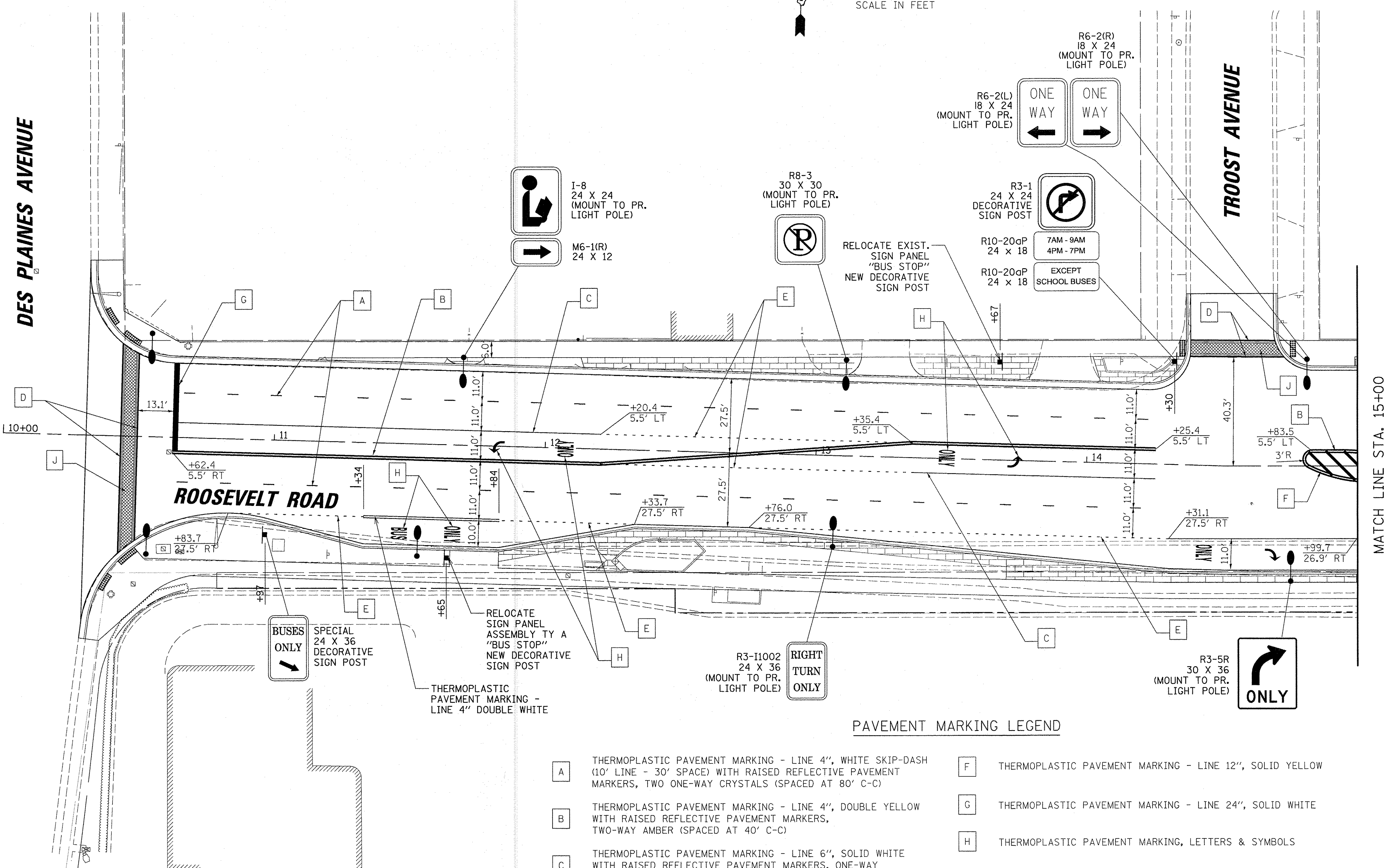
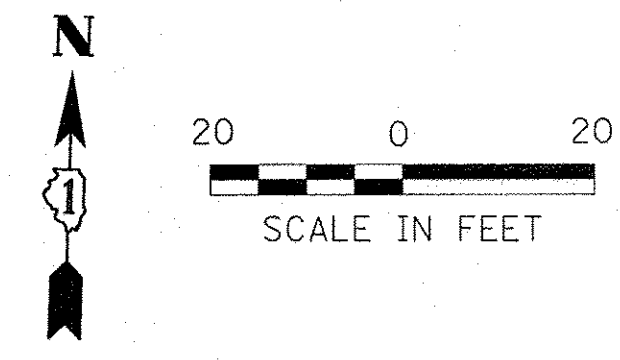
<b>INFRASTRUCTURE ENGINEERING</b>   INCORPORATED 33 West Monroe   Suite 1540   Chicago, IL 60603 P 312.435.9599   F 312.435.9594   www.infrastructure-eng.com	USER NAME = mthomas	DESIGNED - LC	REVISED -
	PLOT SCALE = 20'	DRAWN - LC	REVISED -
	PLOT DATE = 11/14/2016	CHECKED - AJP	REVISED -
		DATE - 10/20/2016	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 2**  
**ROOSEVELT ROAD**

SCALE: 20 SHEET 5 OF 5 SHEETS STA. 45+00.00 TO STA. 55+00.00

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 43
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



**PAVEMENT MARKING LEGEND**

- |  |  |
|--|--|
| <p><b>A</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE SKIP-DASH (10' LINE - 30' SPACE) WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO ONE-WAY CRYSTALS (SPACED AT 80' C-C)</p> <p><b>B</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", DOUBLE YELLOW WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER (SPACED AT 40' C-C)</p> <p><b>C</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE WITH RAISED REFLECTIVE PAVEMENT MARKERS, ONE-WAY CRYSTAL (SPACED AT 40' C-C)</p> <p><b>D</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE</p> <p><b>E</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", WHITE DOTTED (2' LINE - 6' SPACE, UNLESS OTHERWISE NOTED)</p> | <p><b>F</b> THERMOPLASTIC PAVEMENT MARKING - LINE 12", SOLID YELLOW</p> <p><b>G</b> THERMOPLASTIC PAVEMENT MARKING - LINE 24", SOLID WHITE</p> <p><b>H</b> THERMOPLASTIC PAVEMENT MARKING, LETTERS &amp; SYMBOLS</p> <p><b>I</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", SOLID YELLOW</p> <p><b>J</b> PAVEMENT IMPRINTING (SEE DETAIL ON SHEET 50)</p> <p><b>K</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW SKIP-DASH (10' LINE - 30' SPACE)</p> |
|--|--|

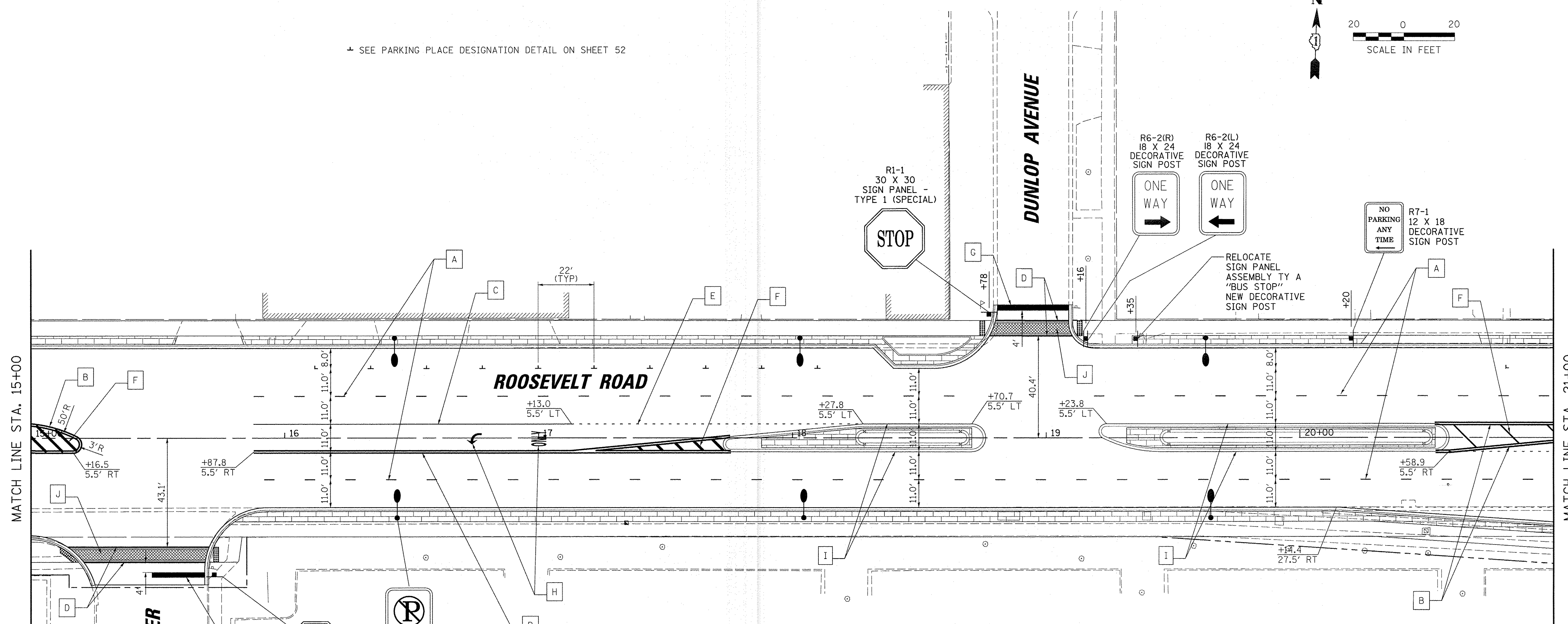
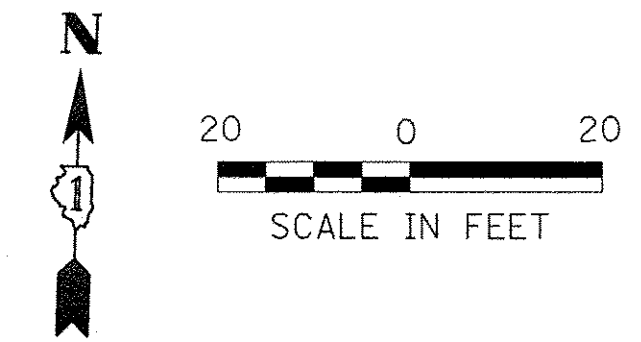
FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\0023\B0046\Civil\SIGN_0023B0046b-01.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 20'	CHECKED -	REVISED -
	PLOT DATE = 11/14/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING AND SIGNING PLAN			
ROOSEVELT ROAD			
SCALE: 20	SHEET 1 OF 7 SHEETS	STA. 10+00.00	TO STA. 15+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	44
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	

SEE PARKING PLACE DESIGNATION DETAIL ON SHEET 52



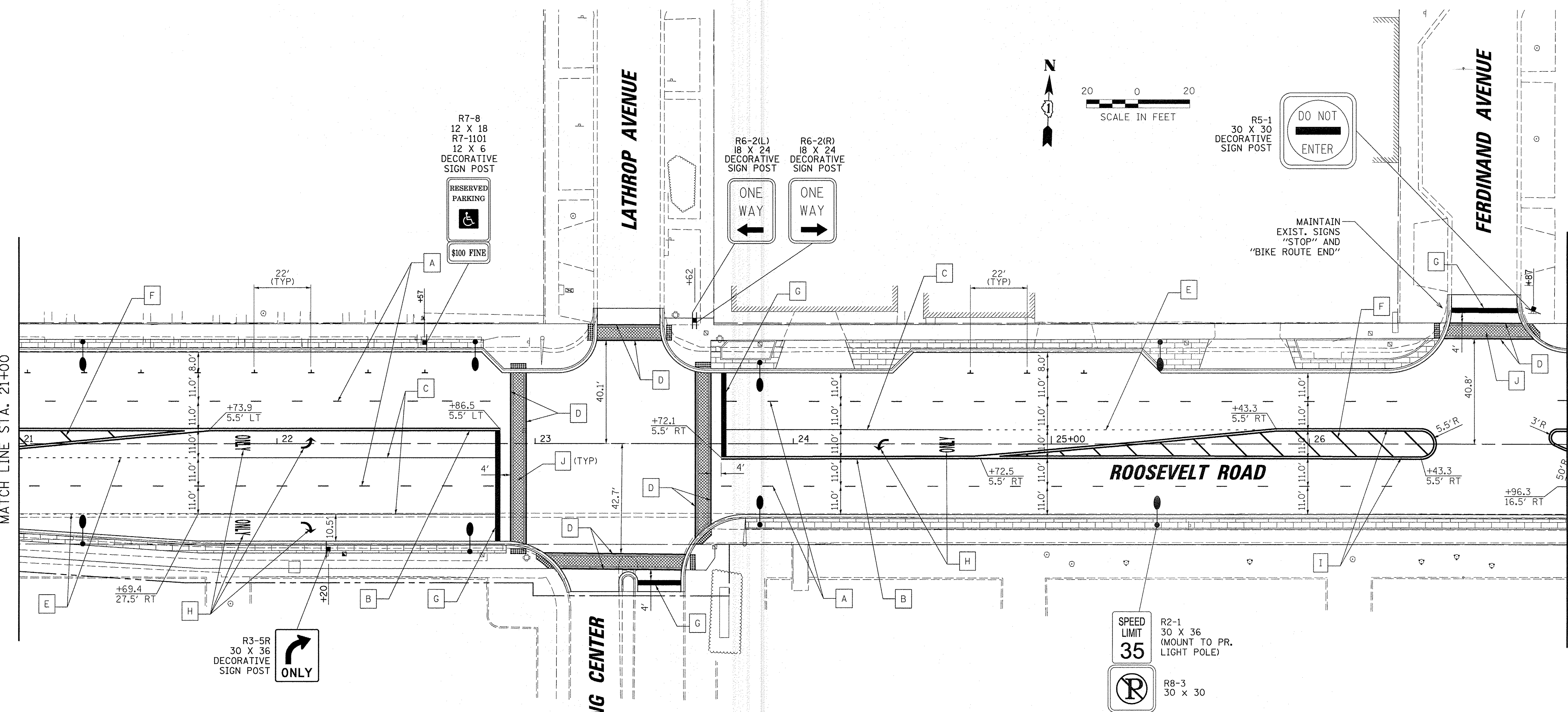
PAVEMENT MARKING LEGEND

- |  |  |
|--|--|
| <p><b>A</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE SKIP-DASH (10' LINE - 30' SPACE) WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO ONE-WAY CRYSTALS (SPACED AT 80' C-C)</p> <p><b>B</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", DOUBLE YELLOW WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER (SPACED AT 40' C-C)</p> <p><b>C</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE WITH RAISED REFLECTIVE PAVEMENT MARKERS. ONE-WAY CRYSTAL (SPACED AT 40' C-C)</p> <p><b>D</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE</p> <p><b>E</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", WHITE DOTTED (2' LINE - 6' SPACE, UNLESS OTHERWISE NOTED)</p> | <p><b>F</b> THERMOPLASTIC PAVEMENT MARKING - LINE 12", SOLID YELLOW</p> <p><b>G</b> THERMOPLASTIC PAVEMENT MARKING - LINE 24", SOLID WHITE</p> <p><b>H</b> THERMOPLASTIC PAVEMENT MARKING, LETTERS &amp; SYMBOLS</p> <p><b>I</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", SOLID YELLOW</p> <p><b>J</b> PAVEMENT IMPRINTING (SEE DETAIL ON SHEET 50)</p> <p><b>K</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW SKIP-DASH (10' LINE - 30' SPACE)</p> |
|--|--|

FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND SIGNING PLAN ROOSEVELT ROAD</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\0023\56046\Civi1\SIGN_002356046b-02.sht		DRAWN -	REVISED -		347	13-00112-00-LS	COOK	151	45			
PLOT SCALE = 20'		CHECKED -	REVISED -		CONTRACT NO. 61D26							
PLOT DATE = 11/14/2016		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							
Default				SCALE: 20	SHEET 2 OF 7 SHEETS	STA. 15+00.00	TO STA. 21+00.00					

MATCH LINE STA. 21+00

MATCH LINE STA. 27+00



+ SEE PARKING PLACE DESIGNATION DETAIL ON SHEET 52

PAVEMENT MARKING LEGEND

- A THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE SKIP-DASH (10' LINE - 30' SPACE) WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO ONE-WAY CRYSTALS (SPACED AT 80' C-C)
- B THERMOPLASTIC PAVEMENT MARKING - LINE 4", DOUBLE YELLOW WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER (SPACED AT 40' C-C)
- C THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE WITH RAISED REFLECTIVE PAVEMENT MARKERS. ONE-WAY CRYSTAL (SPACED AT 40' C-C)
- D THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE
- E THERMOPLASTIC PAVEMENT MARKING - LINE 6", WHITE DOTTED (2' LINE - 6' SPACE, UNLESS OTHERWISE NOTED)
- F THERMOPLASTIC PAVEMENT MARKING - LINE 12", SOLID YELLOW
- G THERMOPLASTIC PAVEMENT MARKING - LINE 24", SOLID WHITE
- H THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS
- I THERMOPLASTIC PAVEMENT MARKING - LINE 4", SOLID YELLOW
- J PAVEMENT IMPRINTING (SEE DETAIL ON SHEET 50)
- K THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW SKIP-DASH (10' LINE - 30' SPACE)

FILE NAME =	USER NAME = mthomas
N:\FORESTPARK\0223\BG046\Civil\SIGN_00288046b-03.sht	
PLOT SCALE = 20'	
PLOT DATE = 11/14/2016	

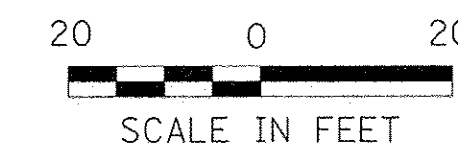
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN  
ROOSEVELT ROAD

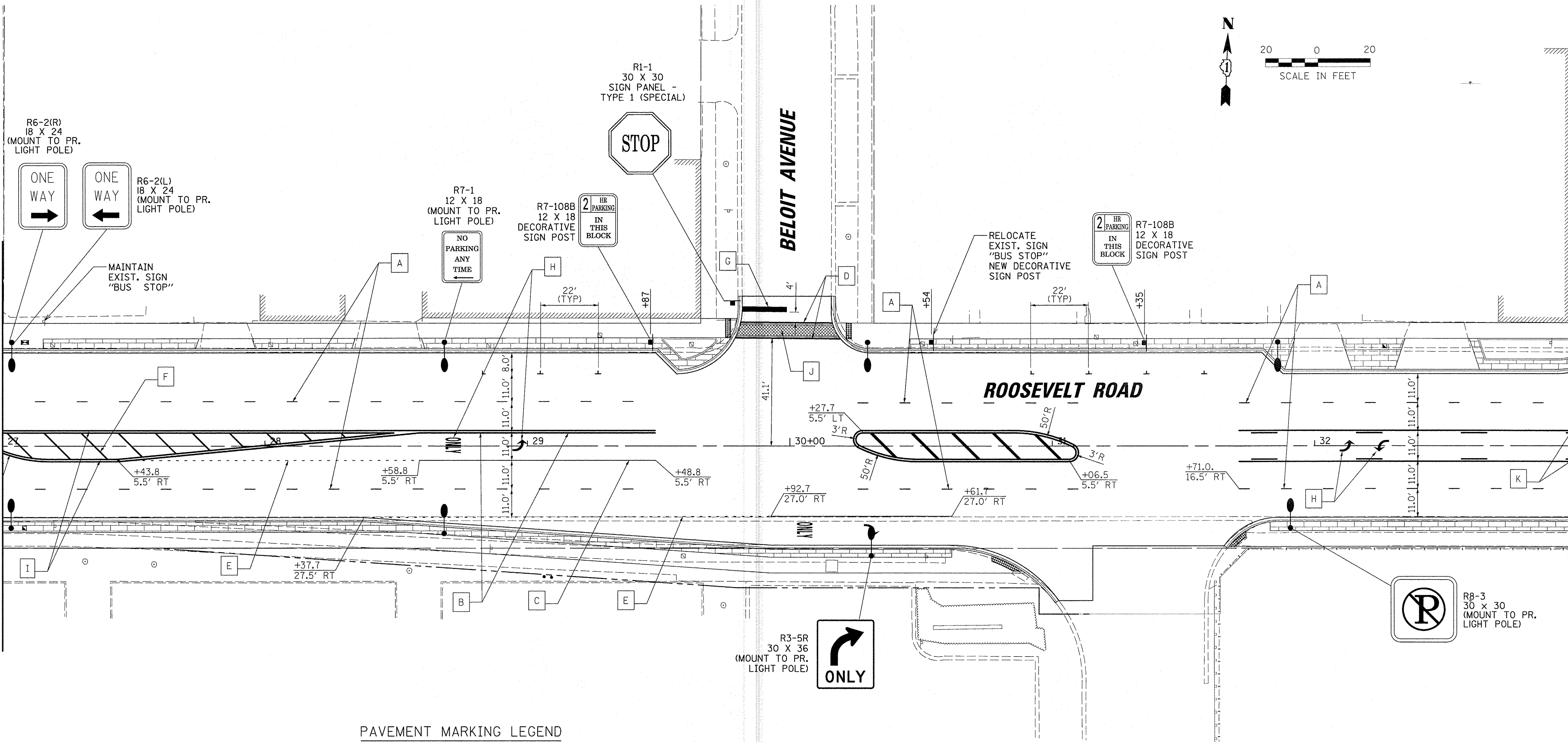
SCALE: 20 SHEET 3 OF 7 SHEETS STA. 21+00.00 TO STA. 27+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	46
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	



MATCH LINE STA. 27+00

MATCH LINE STA. 33+00



PAVEMENT MARKING LEGEND

- |   |  |
|---|--|
| <b>A</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE SKIP-DASH (10' LINE - 30' SPACE) WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO ONE-WAY CRYSTALS (SPACED AT 80' C-C) | <b>F</b> THERMOPLASTIC PAVEMENT MARKING - LINE 12", SOLID YELLOW                           |
| <b>B</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", DOUBLE YELLOW WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER (SPACED AT 40' C-C)                                 | <b>G</b> THERMOPLASTIC PAVEMENT MARKING - LINE 24", SOLID WHITE                            |
| <b>C</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE WITH RAISED REFLECTIVE PAVEMENT MARKERS. ONE-WAY CRYSTAL (SPACED AT 40' C-C)                                 | <b>H</b> THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS                                 |
| <b>D</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE  | <b>I</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", SOLID YELLOW                            |
| <b>E</b> THERMOPLASTIC PAVEMENT MARKING - LINE 6", WHITE DOTTED (2' LINE - 6' SPACE, UNLESS OTHERWISE NOTED)  | <b>J</b> PAVEMENT IMPRINTING (SEE DETAIL ON SHEET 50)                                      |
|   | <b>K</b> THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW SKIP-DASH (10' LINE - 30' SPACE) |

SEE PARKING PLACE DESIGNATION DETAIL ON SHEET 52

FILE NAME =	USER NAME = mthomas
N:\FORESTPARK\0023\BG046\Civil\SIGN_002BGG046b-04.sht	
PLOT SCALE = 20'	
PLOT DATE = 11/14/2016	

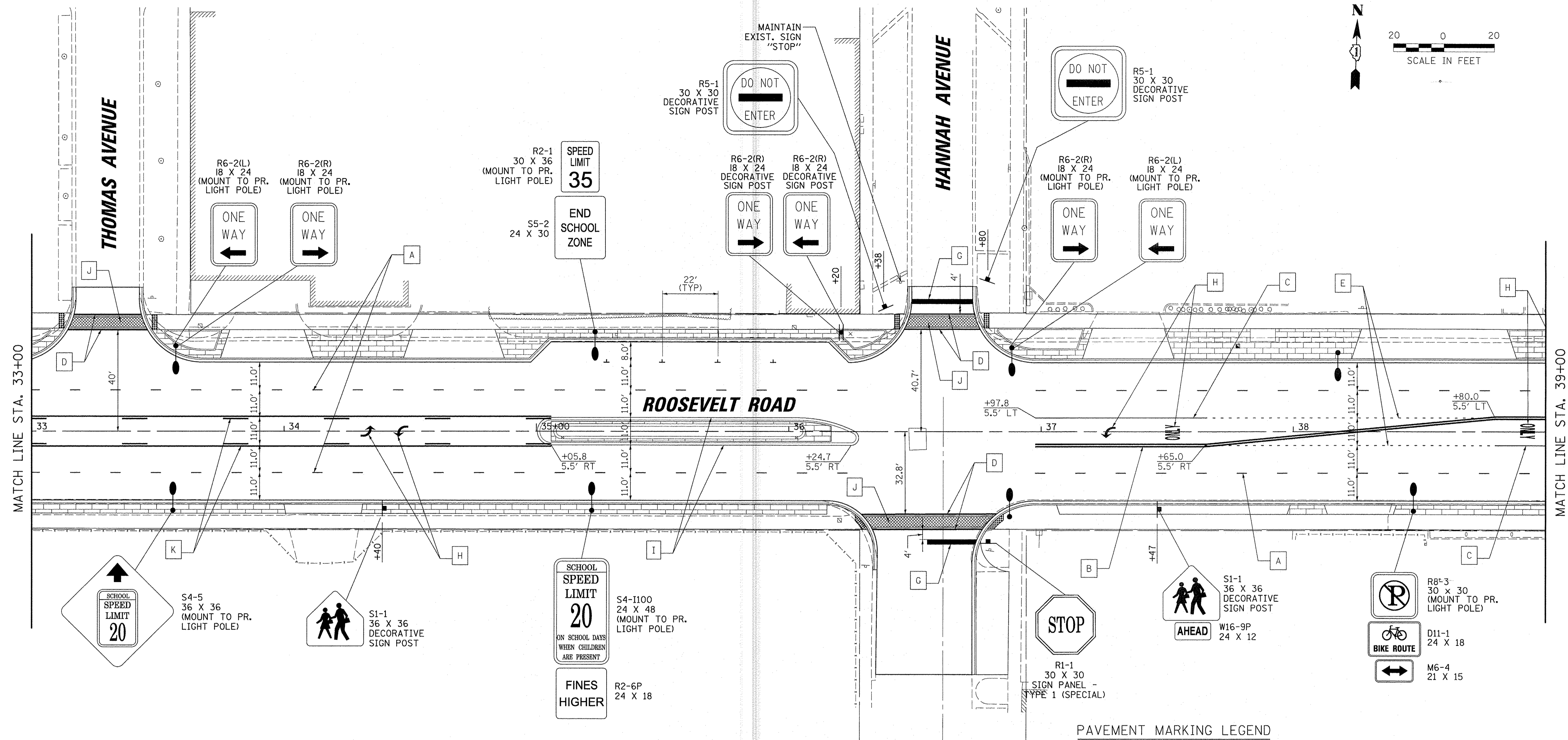
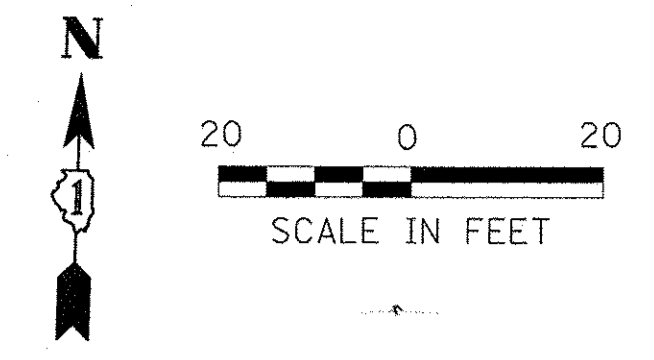
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN  
ROOSEVELT ROAD

SCALE: 20 SHEET 4 OF 7 SHEETS STA. 27+00.00 TO STA. 33+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	47
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	



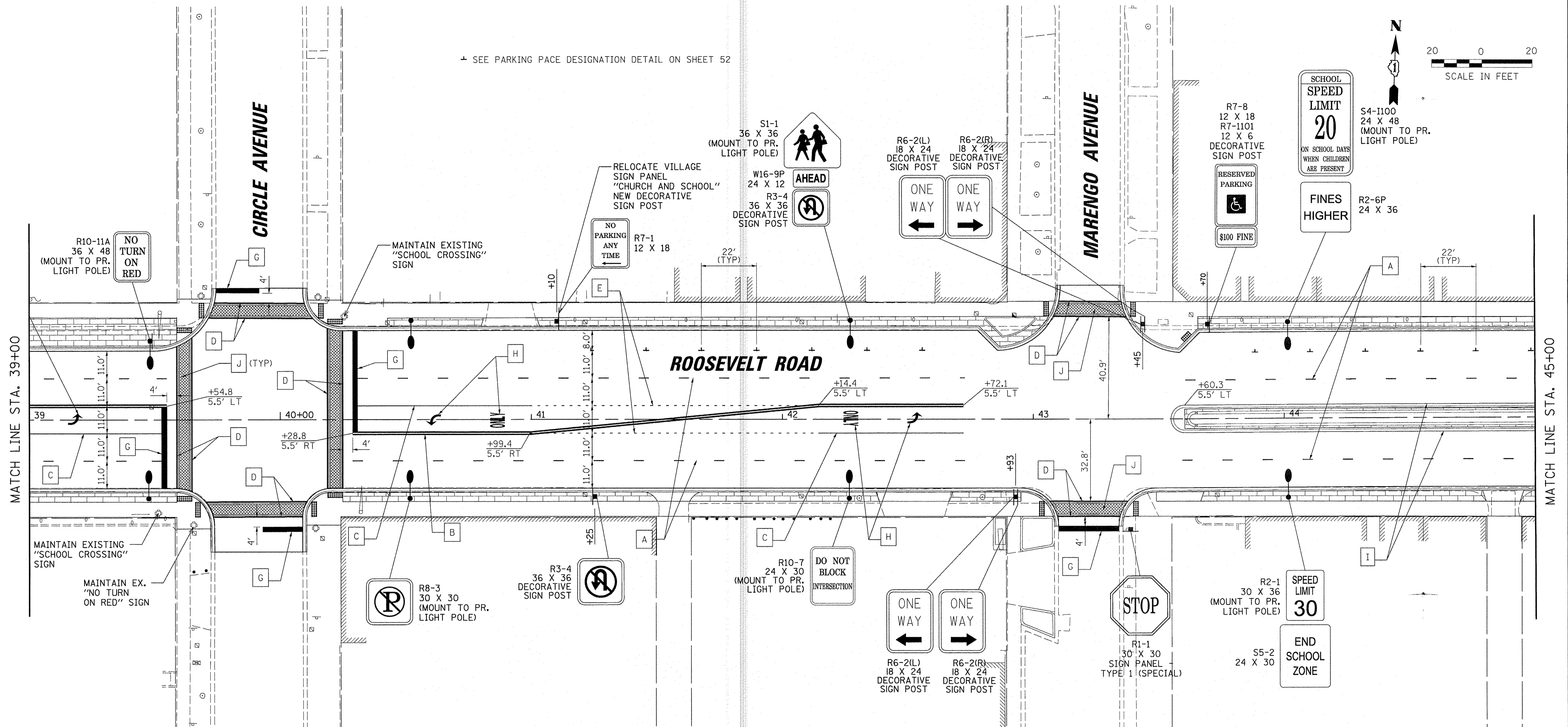
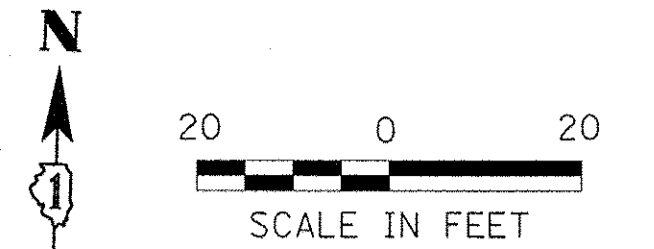
**PAVEMENT MARKING LEGEND**

- |          |  |          |   |
|----------|--|----------|---|
| <b>A</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE SKIP-DASH (10' LINE - 30' SPACE) WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO ONE-WAY CRYSTALS (SPACED AT 80' C-C) | <b>F</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 12", SOLID YELLOW                           |
| <b>B</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 4", DOUBLE YELLOW WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER (SPACED AT 40' C-C)                                 | <b>G</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 24", SOLID WHITE                            |
| <b>C</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE WITH RAISED REFLECTIVE PAVEMENT MARKERS, ONE-WAY CRYSTAL (SPACED AT 40' C-C)                                 | <b>H</b> | THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS                                 |
| <b>D</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE  | <b>I</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 4", SOLID YELLOW                            |
| <b>E</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 6", WHITE DOTTED (2' LINE - 6' SPACE, UNLESS OTHERWISE NOTED)  | <b>J</b> | PAVEMENT IMPRINTING (SEE DETAIL ON SHEET 50)                                      |
|          |  | <b>K</b> | THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW SKIP-DASH (10' LINE - 30' SPACE) |

SEE PARKING PLACE DESIGNATION DETAIL ON SHEET 52



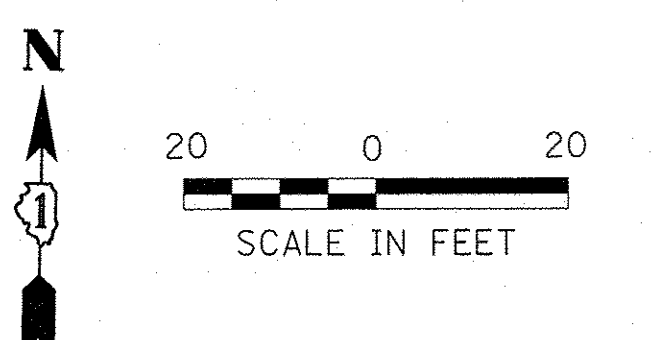
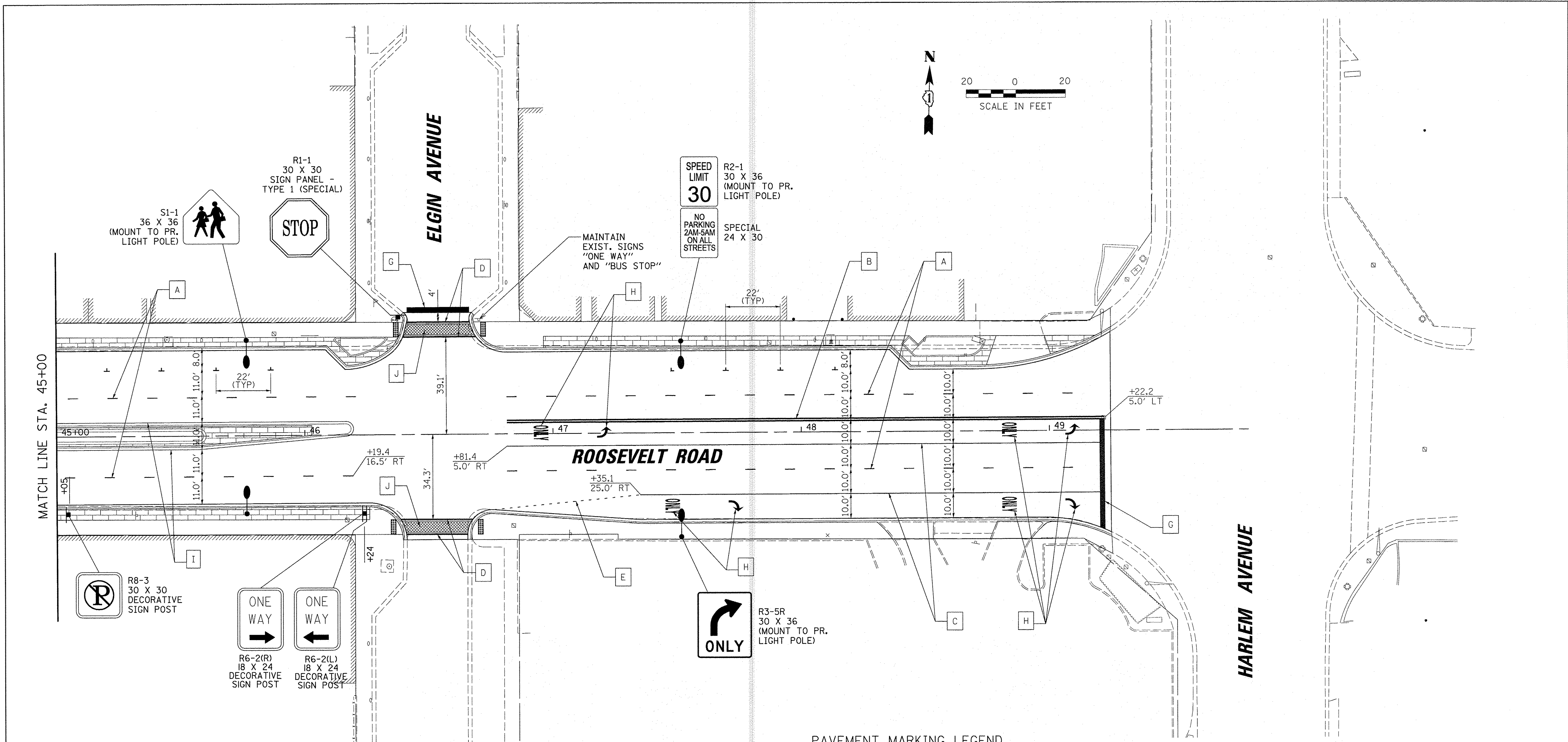
SEE PARKING PACE DESIGNATION DETAIL ON SHEET 52



PAVEMENT MARKING LEGEND

- A THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE SKIP-DASH (10' LINE - 30' SPACE) WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO ONE-WAY CRYSTALS (SPACED AT 80' C-C)
- B THERMOPLASTIC PAVEMENT MARKING - LINE 4", DOUBLE YELLOW WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER (SPACED AT 40' C-C)
- C THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE WITH RAISED REFLECTIVE PAVEMENT MARKERS, ONE-WAY CRYSTAL (SPACED AT 40' C-C)
- D THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE
- E THERMOPLASTIC PAVEMENT MARKING - LINE 6", WHITE DOTTED (2' LINE - 6' SPACE, UNLESS OTHERWISE NOTED)
- F THERMOPLASTIC PAVEMENT MARKING - LINE 12", SOLID YELLOW
- G THERMOPLASTIC PAVEMENT MARKING - LINE 24", SOLID WHITE
- H THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS
- I THERMOPLASTIC PAVEMENT MARKING - LINE 4", SOLID YELLOW
- J PAVEMENT IMPRINTING (SEE DETAIL ON SHEET 50)
- K THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW SKIP-DASH (10' LINE - 30' SPACE)

FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND SIGNING PLAN ROOSEVELT ROAD</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\0023\BG046\Civil\SIGN_0023\BG046b-06.sht		DRAWN -	REVISED -		SCALE: 20	SHEET 6 OF 7 SHEETS	STA. 39+00.00 TO STA. 45+00.00	347	13-00112-00-LS	COOK	151	49
Default	PLOT SCALE = 20"	CHECKED -	REVISED -		CONTRACT NO. 61D26							
	PLOT DATE = 11/14/2016	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



MATCH LINE STA. 45+00

SI-1  
36 X 36  
(MOUNT TO PR.  
LIGHT POLE)

R1-1  
30 X 30  
SIGN PANEL -  
TYPE 1 (SPECIAL)

SPEED  
LIMIT  
30  
R2-1  
30 X 36  
(MOUNT TO PR.  
LIGHT POLE)  
SPECIAL  
24 X 30  
NO  
PARKING  
2AM-5AM  
ON ALL  
STREETS

MAINTAIN  
EXIST. SIGNS  
"ONE WAY"  
AND "BUS STOP"

R8-3  
30 X 30  
DECORATIVE  
SIGN POST

R6-2(R)  
18 X 24  
DECORATIVE  
SIGN POST  
ONE  
WAY  
R6-2(L)  
18 X 24  
DECORATIVE  
SIGN POST  
ONE  
WAY

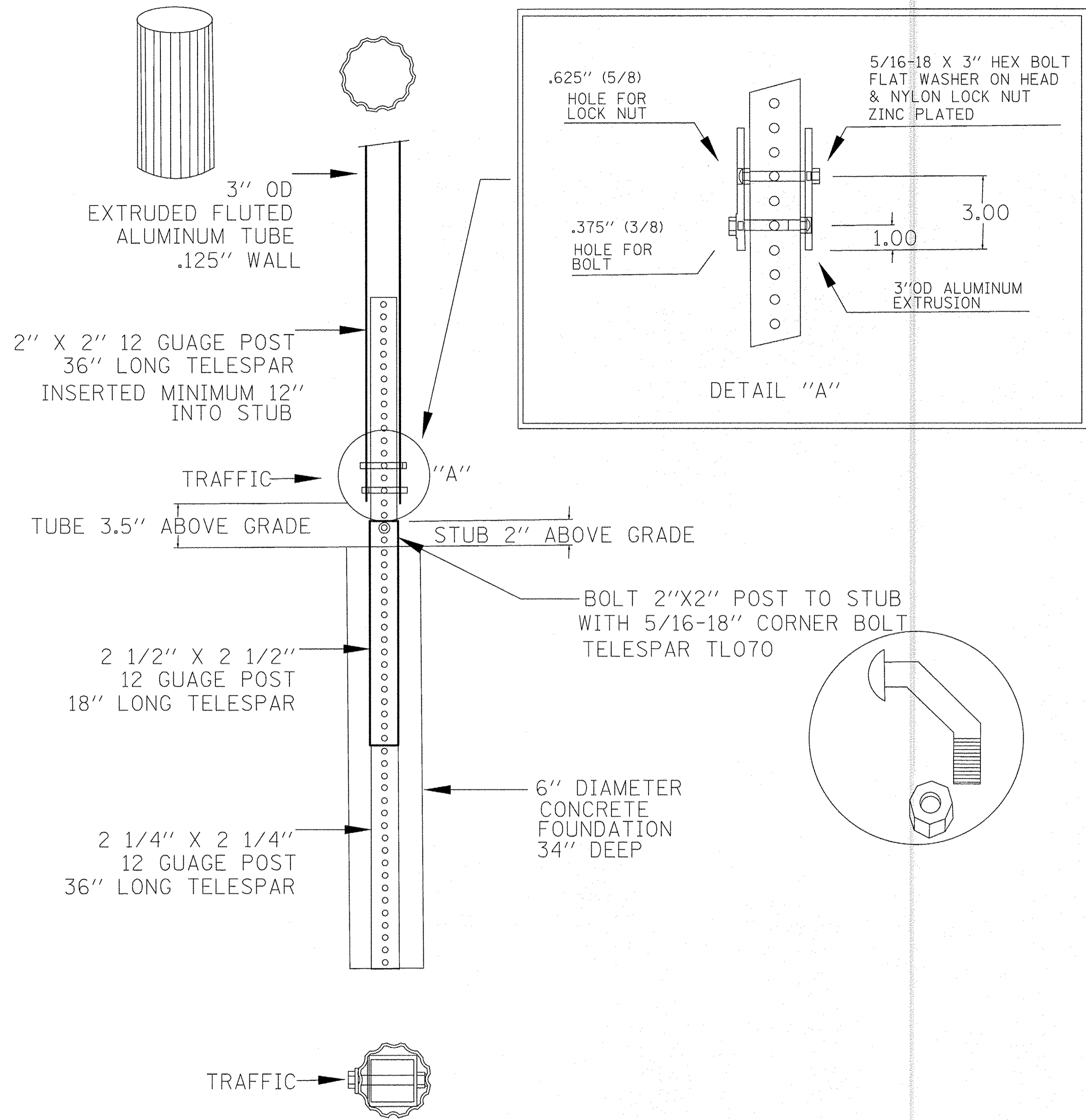
R3-5R  
30 X 36  
(MOUNT TO PR.  
LIGHT POLE)  
ONLY

PAVEMENT MARKING LEGEND

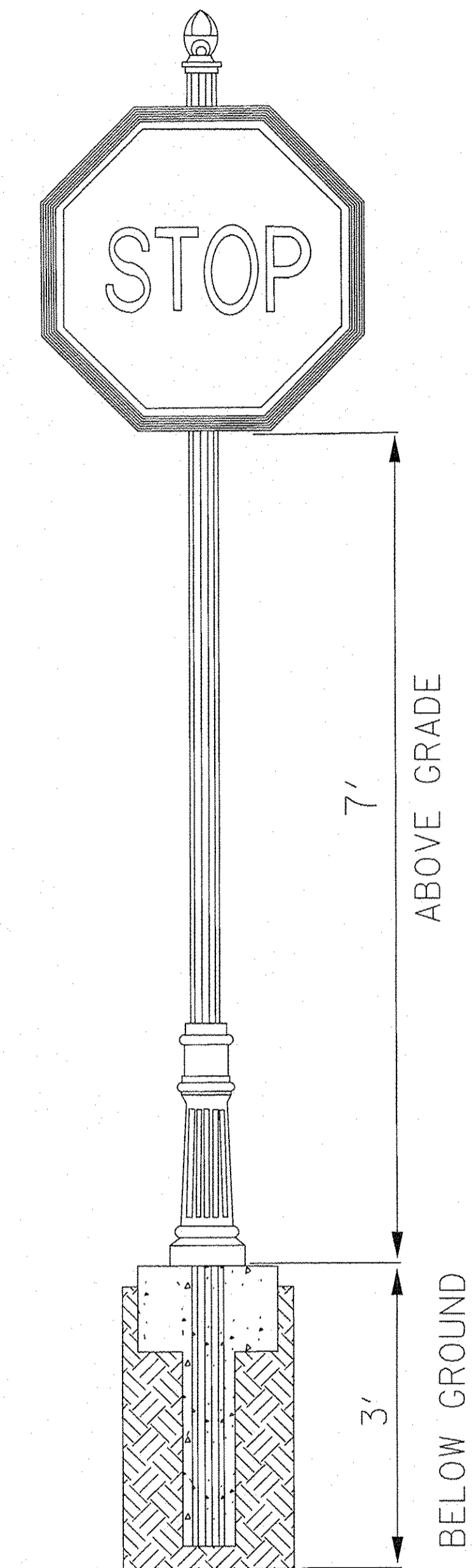
- A THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE SKIP-DASH (10' LINE - 30' SPACE) WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO ONE-WAY CRYSTALS (SPACED AT 80' C-C)
- B THERMOPLASTIC PAVEMENT MARKING - LINE 4", DOUBLE YELLOW WITH RAISED REFLECTIVE PAVEMENT MARKERS, TWO-WAY AMBER (SPACED AT 40' C-C)
- C THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE WITH RAISED REFLECTIVE PAVEMENT MARKERS. ONE-WAY CRYSTAL (SPACED AT 40' C-C)
- D THERMOPLASTIC PAVEMENT MARKING - LINE 6", SOLID WHITE
- E THERMOPLASTIC PAVEMENT MARKING - LINE 6", WHITE DOTTED (2' LINE - 6' SPACE, UNLESS OTHERWISE NOTED)
- F THERMOPLASTIC PAVEMENT MARKING - LINE 12", SOLID YELLOW
- G THERMOPLASTIC PAVEMENT MARKING - LINE 24", SOLID WHITE
- H THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS
- I THERMOPLASTIC PAVEMENT MARKING - LINE 4", SOLID YELLOW
- J PAVEMENT IMPRINTING (SEE DETAIL ON SHEET 50)
- K THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW SKIP-DASH (10' LINE - 30' SPACE)

→ SEE PARKING PACE DESIGNATION DETAIL ON SHEET 52

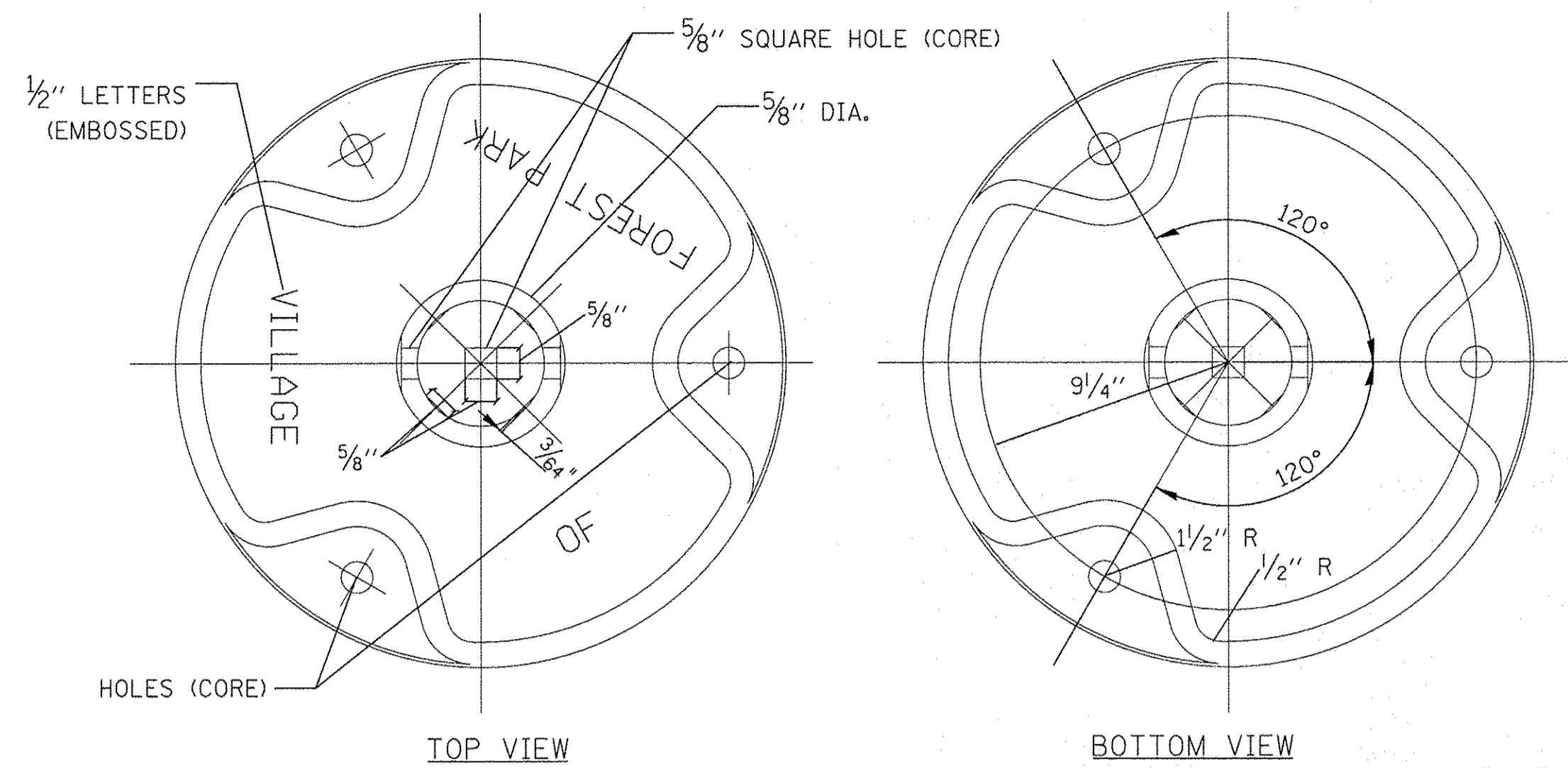
FILE NAME = N:\FORESTPARK\0023\BG046\Civs1\SIGN_0023\BG046-07.sht	USER NAME = mthomas	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND SIGNING PLAN ROOSEVELT ROAD</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20'	CHECKED -	REVISED -					347	13-00112-00-LS	COOK	151	50
Default	PLOT DATE = 11/14/2016	DATE -	REVISED -	SCALE: 20	SHEET 7 OF 7 SHEETS	STA. 45+00.00 TO STA. 49,80.26	CONTRACT NO. 61D26 ILLINOIS FED. AID PROJECT					



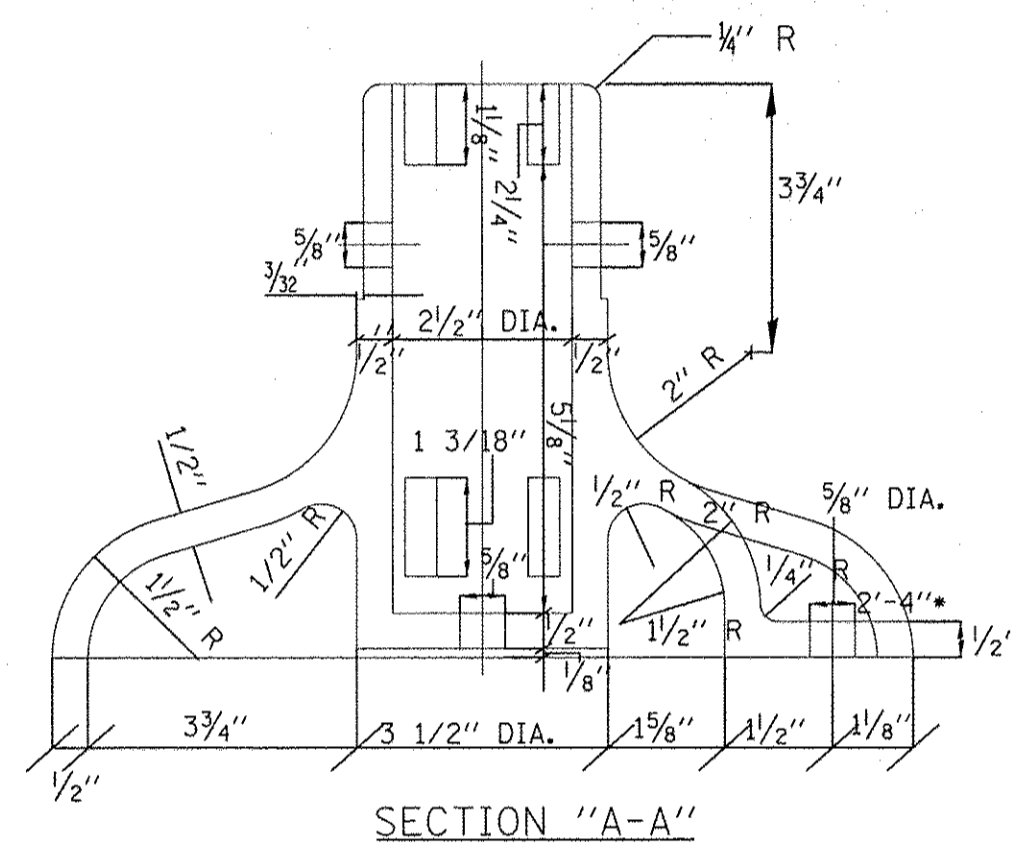
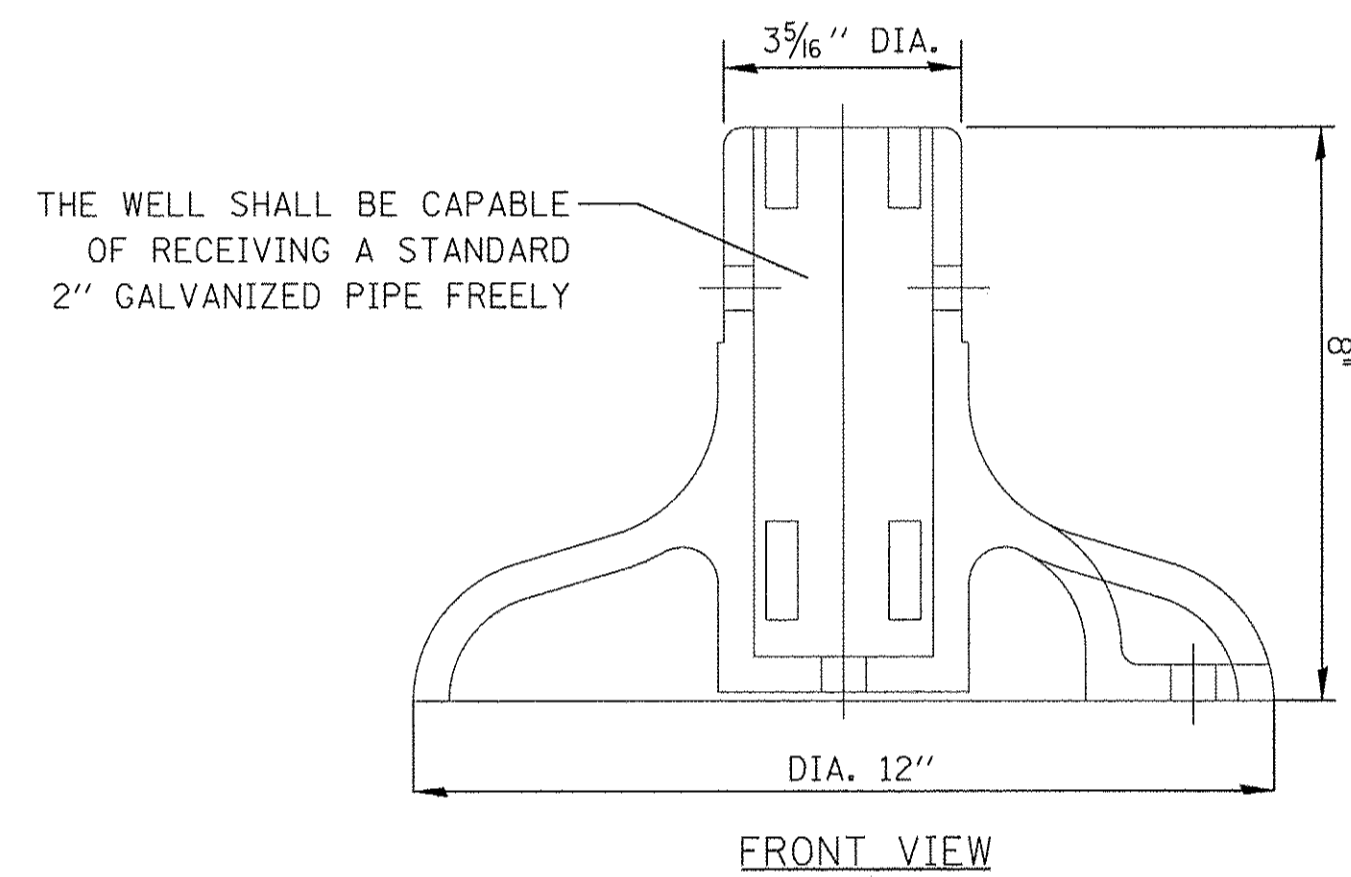
**SIGN PANEL – TYPE 1 (SPECIAL) DETAIL**



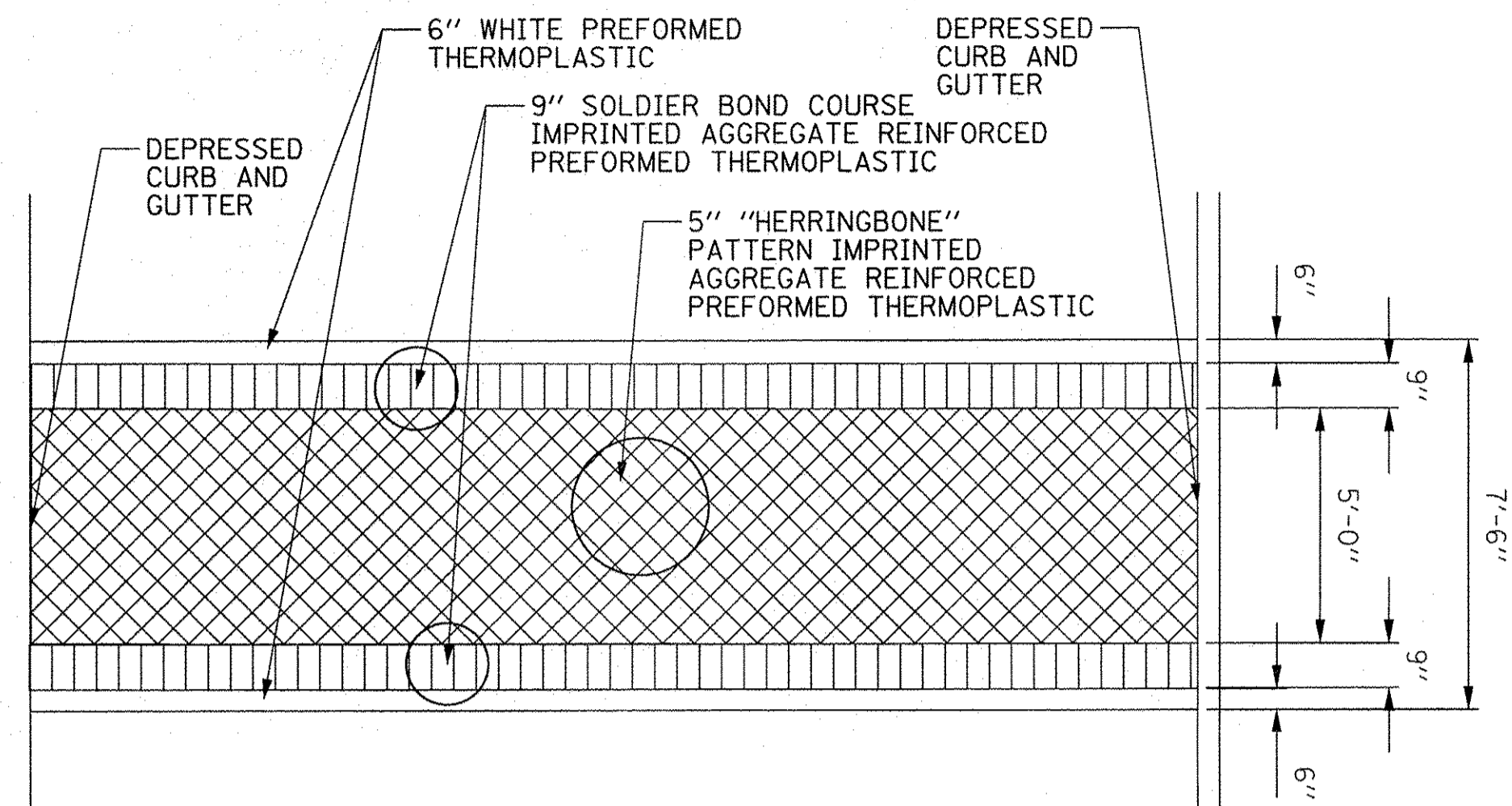
**SIGN PANEL – TYPE 1 (SPECIAL) DETAIL**



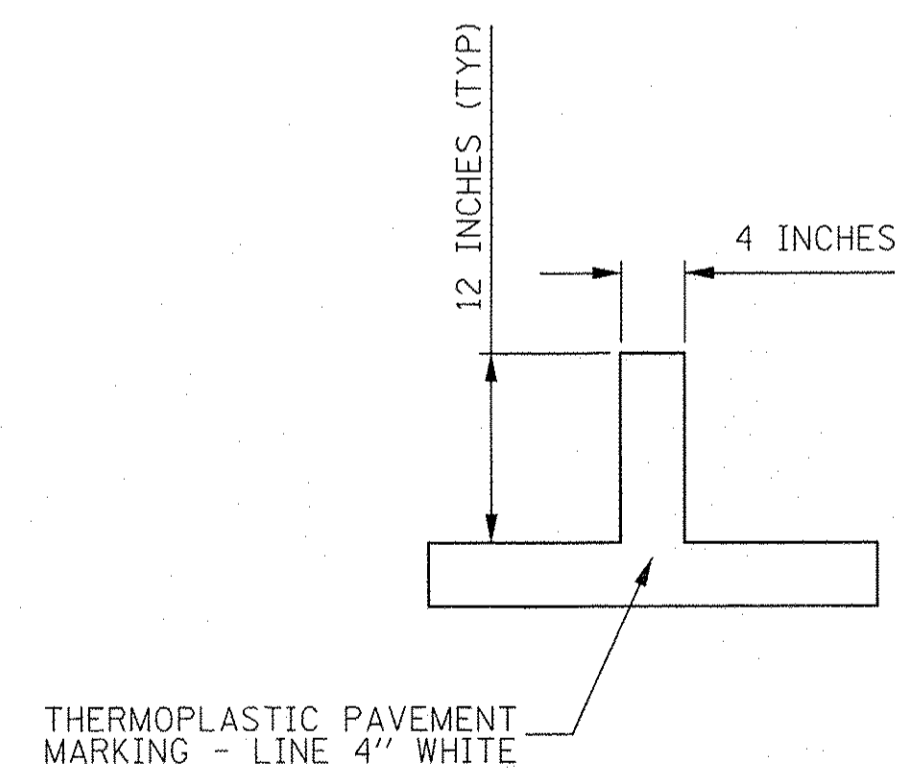
**TOP VIEW**  
**BOTTOM VIEW**  
 MATERIAL GRAY IRON A.S.T.M. A-126-LATEST, CLASS-B  
 APPROXIMATE WT: 82.75 POUNDS



**SIGN POLE BASE DETAIL**



**PAVEMENT IMPRINTING DETAIL**



**PARKING SPACE MARKING DETAIL**

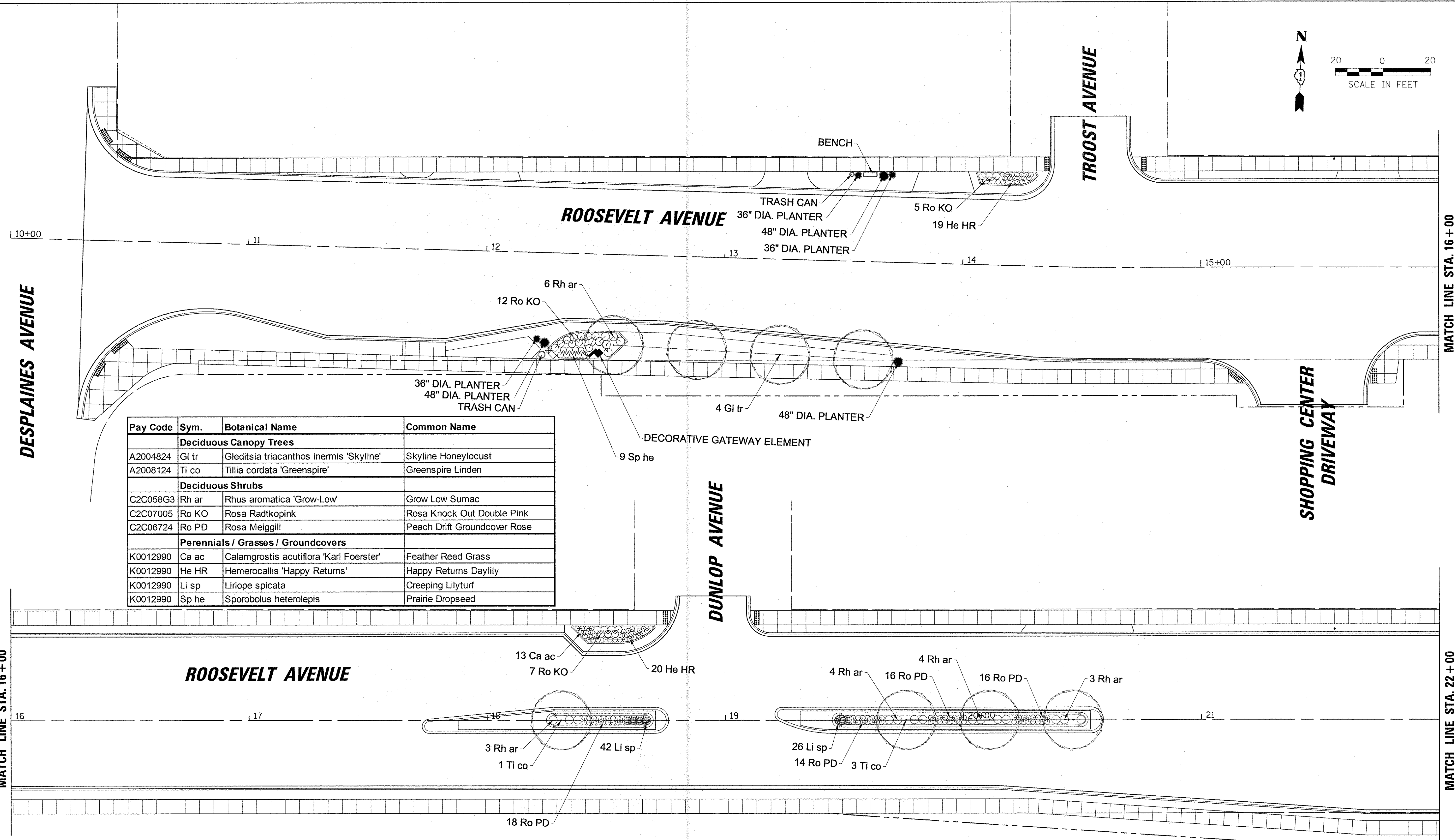
FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\0023\BG046\Civil\DET_0023\BG046b-02.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 20'	CHECKED -	REVISED -
	PLOT DATE = 11/14/2016	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING DETAILS**  
**ROOSEVELT ROAD**

SCALE: N.T.S. SHEET 2 OF 2 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	52
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61D26	



Pay Code	Sym.	Botanical Name	Common Name
<b>Deciduous Canopy Trees</b>			
A2004824	Gl tr	Gleditsia triacanthos inermis 'Skyline'	Skyline Honeylocust
A2008124	Ti co	Tillia cordata 'Greenspire'	Greenspire Linden
<b>Deciduous Shrubs</b>			
C2C058G3	Rh ar	Rhus aromatica 'Grow-Low'	Grow Low Sumac
C2C07005	Ro KO	Rosa Radtkopink	Rosa Knock Out Double Pink
C2C06724	Ro PD	Rosa Meiggili	Peach Drift Groundcover Rose
<b>Perennials / Grasses / Groundcovers</b>			
K0012990	Ca ac	Calamagrostis acutiflora 'Karl Foerster'	Feather Reed Grass
K0012990	He HR	Hemerocallis 'Happy Returns'	Happy Returns Daylily
K0012990	Li sp	Liriope spicata	Creeping Lilyturf
K0012990	Sp he	Sporobolus heterolepis	Prairie Dropseed

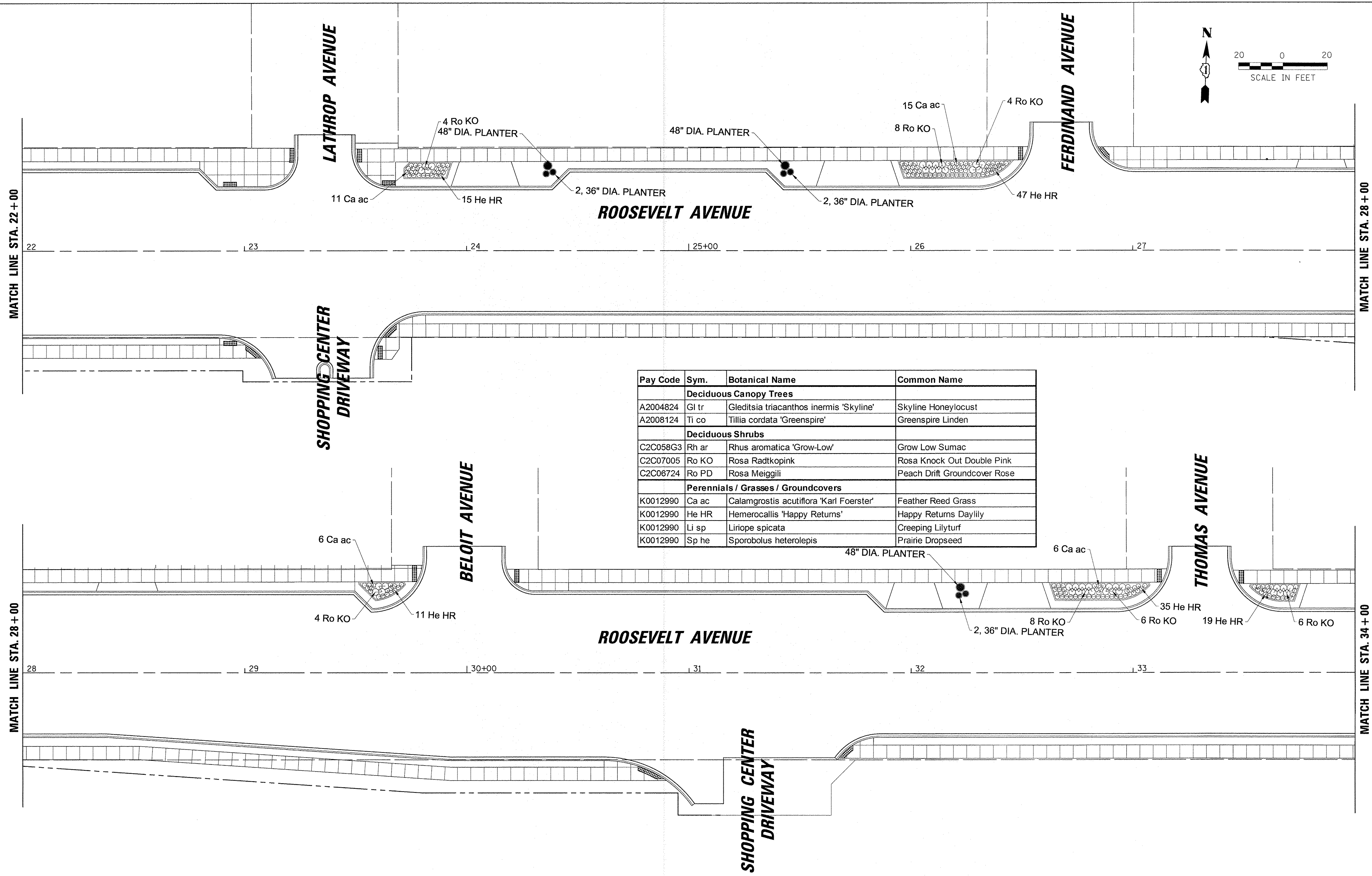
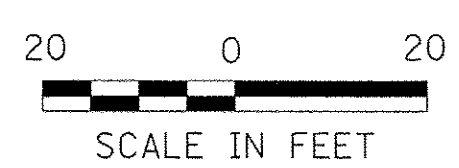
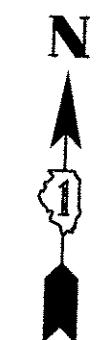
FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\0023\BG046\Civil\LANDSCAPE_0023BG046-01.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 20'	CHECKED -	REVISED -
	PLOT DATE = 11/14/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN  
ROOSEVELT ROAD**

SCALE: 20 SHEET 1 OF 4 SHEETS STA. 10+00.00 TO STA. 22+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	53
			CONTRACT NO. 61D26	
ILLINOIS FED. AID PROJECT				



Pay Code	Sym.	Botanical Name	Common Name
<b>Deciduous Canopy Trees</b>			
A2004824	Gl tr	Gleditsia triacanthos inermis 'Skyline'	Skyline Honeylocust
A2008124	Ti co	Tilia cordata 'Greenspire'	Greenspire Linden
<b>Deciduous Shrubs</b>			
C2C058G3	Rh ar	Rhus aromatica 'Grow-Low'	Grow Low Sumac
C2C07005	Ro KO	Rosa Radtkopink	Rosa Knock Out Double Pink
C2C06724	Ro PD	Rosa Meiggili	Peach Drift Groundcover Rose
<b>Perennials / Grasses / Groundcovers</b>			
K0012990	Ca ac	Calamagrostis acutiflora 'Karl Foerster'	Feather Reed Grass
K0012990	He HR	Hemerocallis 'Happy Returns'	Happy Returns Daylily
K0012990	Li sp	Liriope spicata	Creeping Lilyturf
K0012990	Sp he	Sporobolus heterolepis	Prairie Dropseed

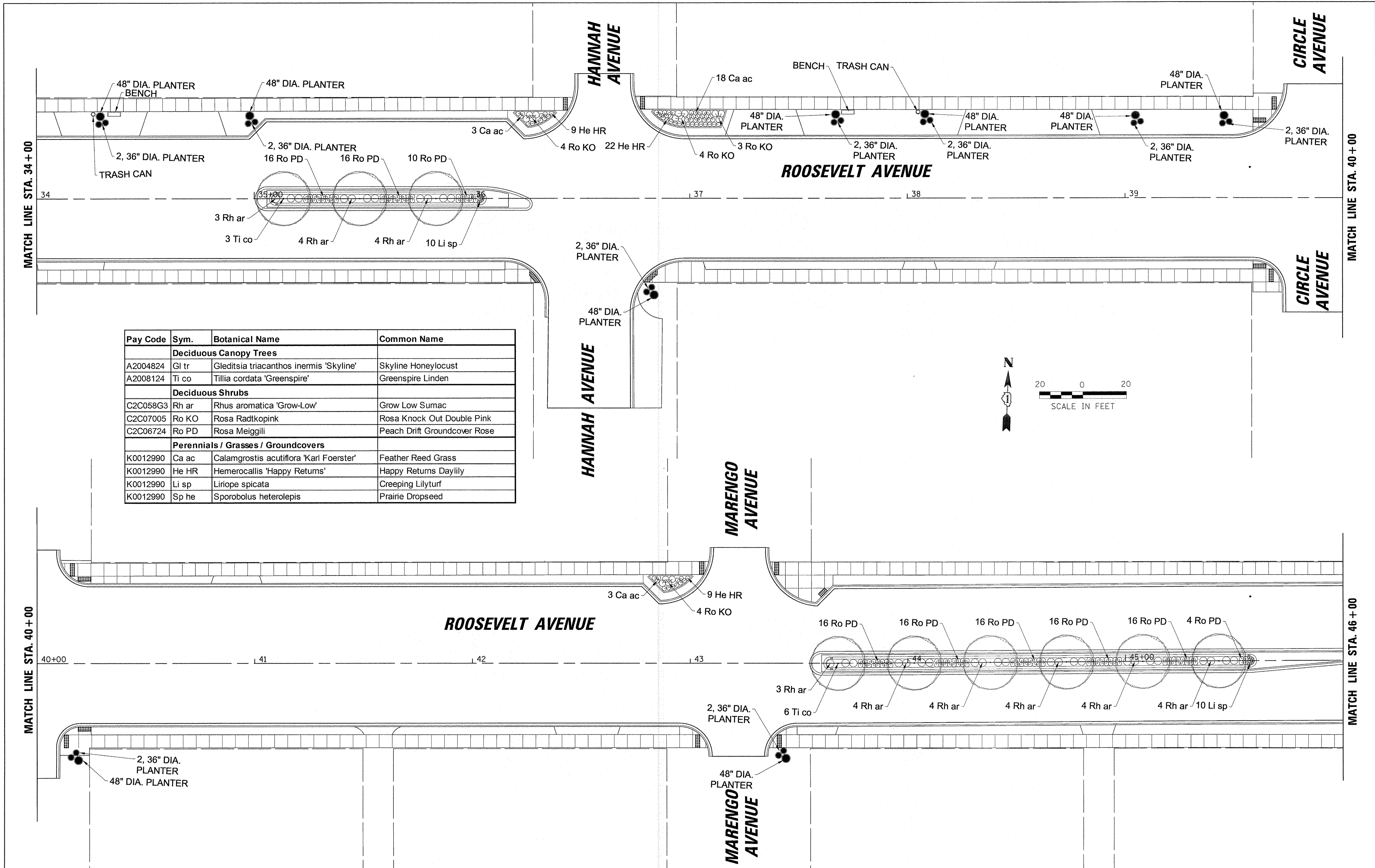
FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\0023\BG046\civil\LANDSCAPE_0023BG046b-02.aht		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
Default	PLOT DATE = 11/14/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

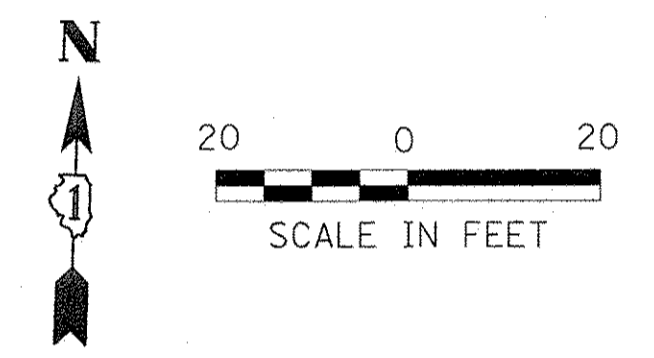
**LANDSCAPING PLAN  
ROOSEVELT ROAD**

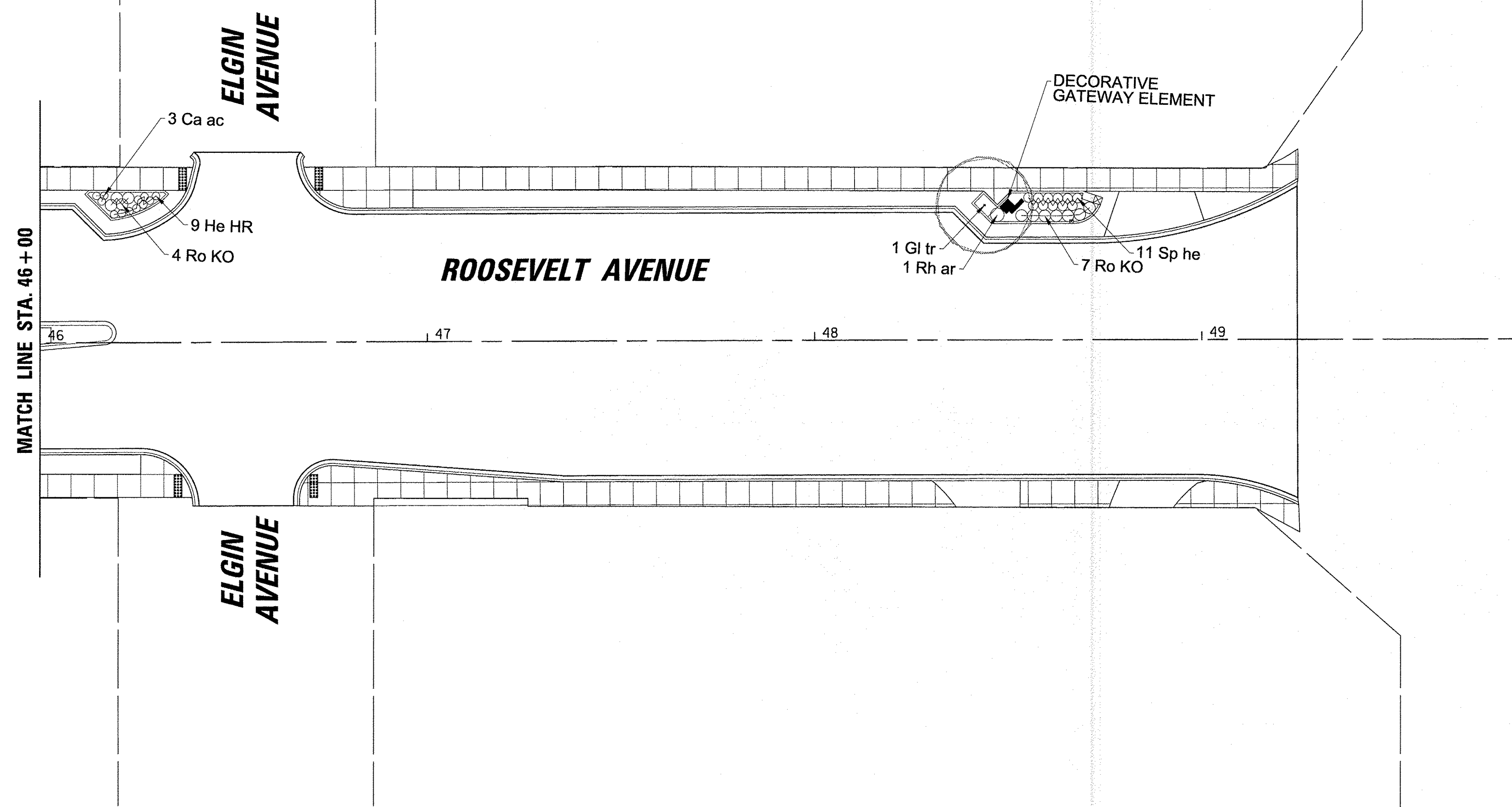
SCALE: 20 SHEET 2 OF 4 SHEETS STA. 22+00.00 TO STA. 34+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	54
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	



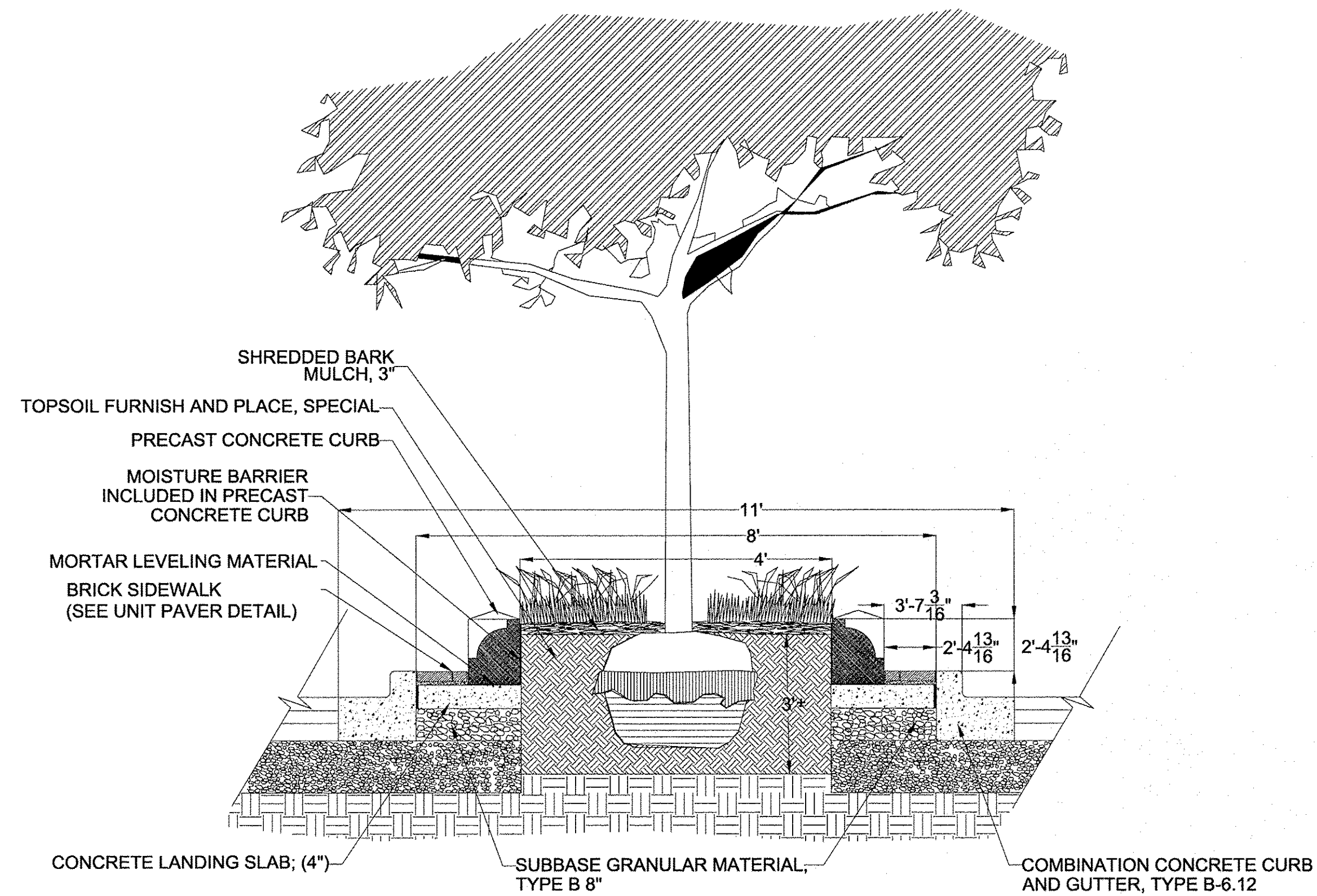
Pay Code	Sym.	Botanical Name	Common Name
<b>Deciduous Canopy Trees</b>			
A2004824	Gl tr	Gleditsia triacanthos inermis 'Skyline'	Skyline Honeylocust
A2008124	Ti co	Tillia cordata 'Greenspire'	Greenspire Linden
<b>Deciduous Shrubs</b>			
C2C058G3	Rh ar	Rhus aromatica 'Grow-Low'	Grow Low Sumac
C2C07005	Ro KO	Rosa Radtkopink	Rosa Knock Out Double Pink
C2C06724	Ro PD	Rosa Meiggili	Peach Drift Groundcover Rose
<b>Perennials / Grasses / Groundcovers</b>			
K0012990	Ca ac	Calamagrostis acutiflora 'Karl Foerster'	Feather Reed Grass
K0012990	He HR	Hemerocallis 'Happy Returns'	Happy Returns Daylily
K0012990	Li sp	Liriope spicata	Creeping Lilyturf
K0012990	Sp he	Sporobolus heterolepis	Prairie Dropseed





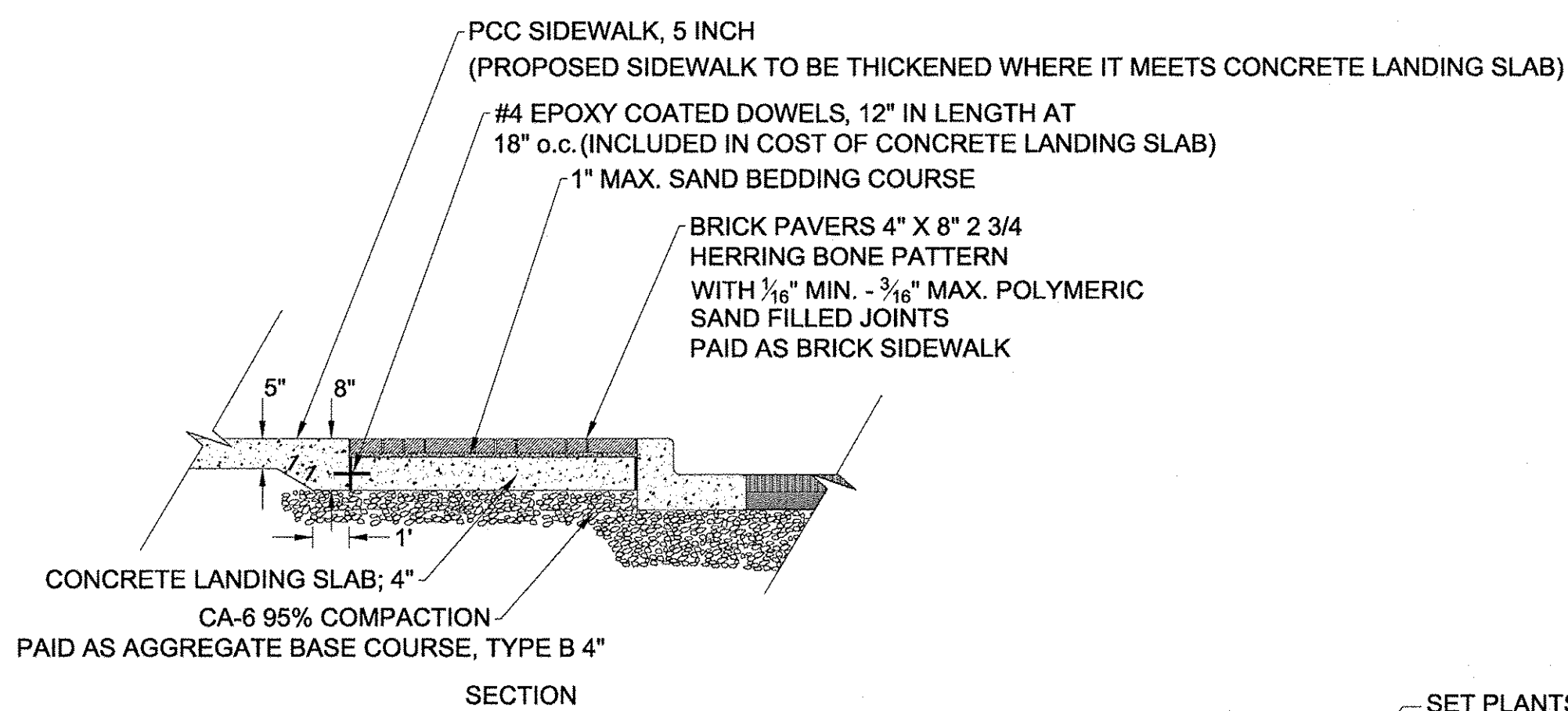
Pay Code	Sym.	Botanical Name	Common Name
<b>Deciduous Canopy Trees</b>			
A2004824	Gl tr	Gleditsia triacanthos inermis 'Skyline'	Skyline Honeylocust
A2008124	Ti co	Tilia cordata 'Greenspire'	Greenspire Linden
<b>Deciduous Shrubs</b>			
C2C058G3	Rh ar	Rhus aromatica 'Grow-Low'	Grow Low Sumac
C2C07005	Ro KO	Rosa Radtkopink	Rosa Knock Out Double Pink
C2C06724	Ro PD	Rosa Meiggili	Peach Drift Groundcover Rose
<b>Perennials / Grasses / Groundcovers</b>			
K0012990	Ca ac	Calamagrostis acutiflora 'Karl Foerster'	Feather Reed Grass
K0012990	He HR	Hemerocallis 'Happy Returns'	Happy Returns Daylily
K0012990	Li sp	Liriope spicata	Creeping Lilyturf
K0012990	Sp he	Sporobolus heterolepis	Prairie Dropseed





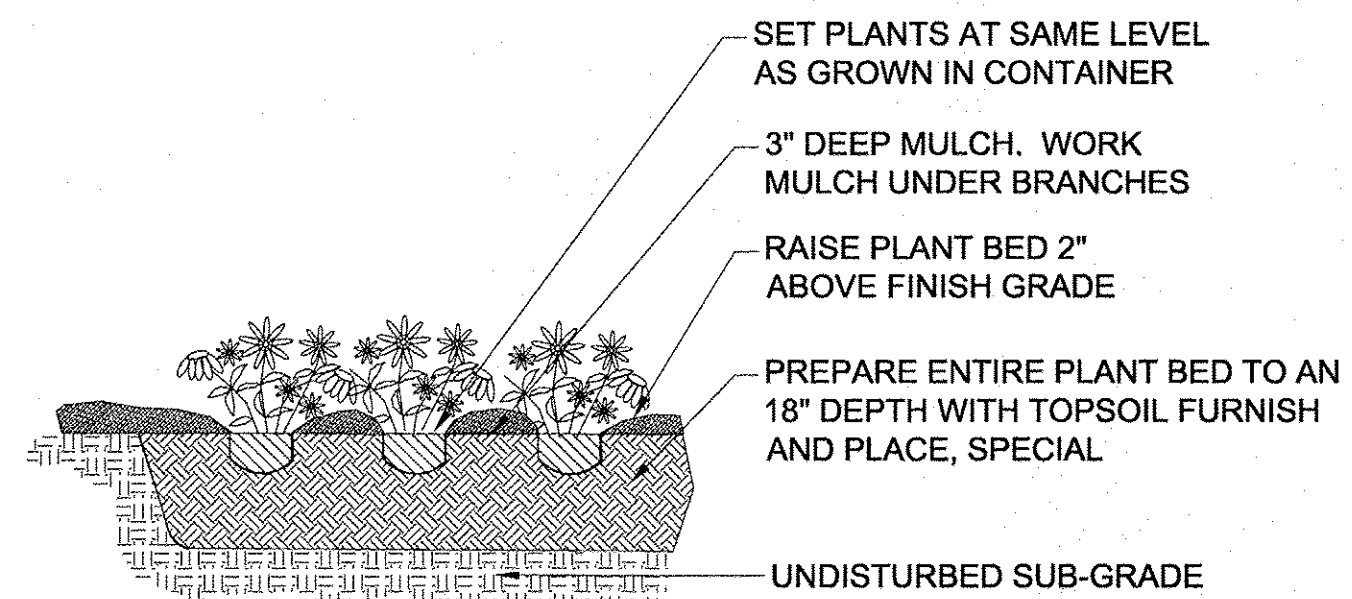
**TYPICAL MEDIAN CROSS SECTION**

NO SCALE



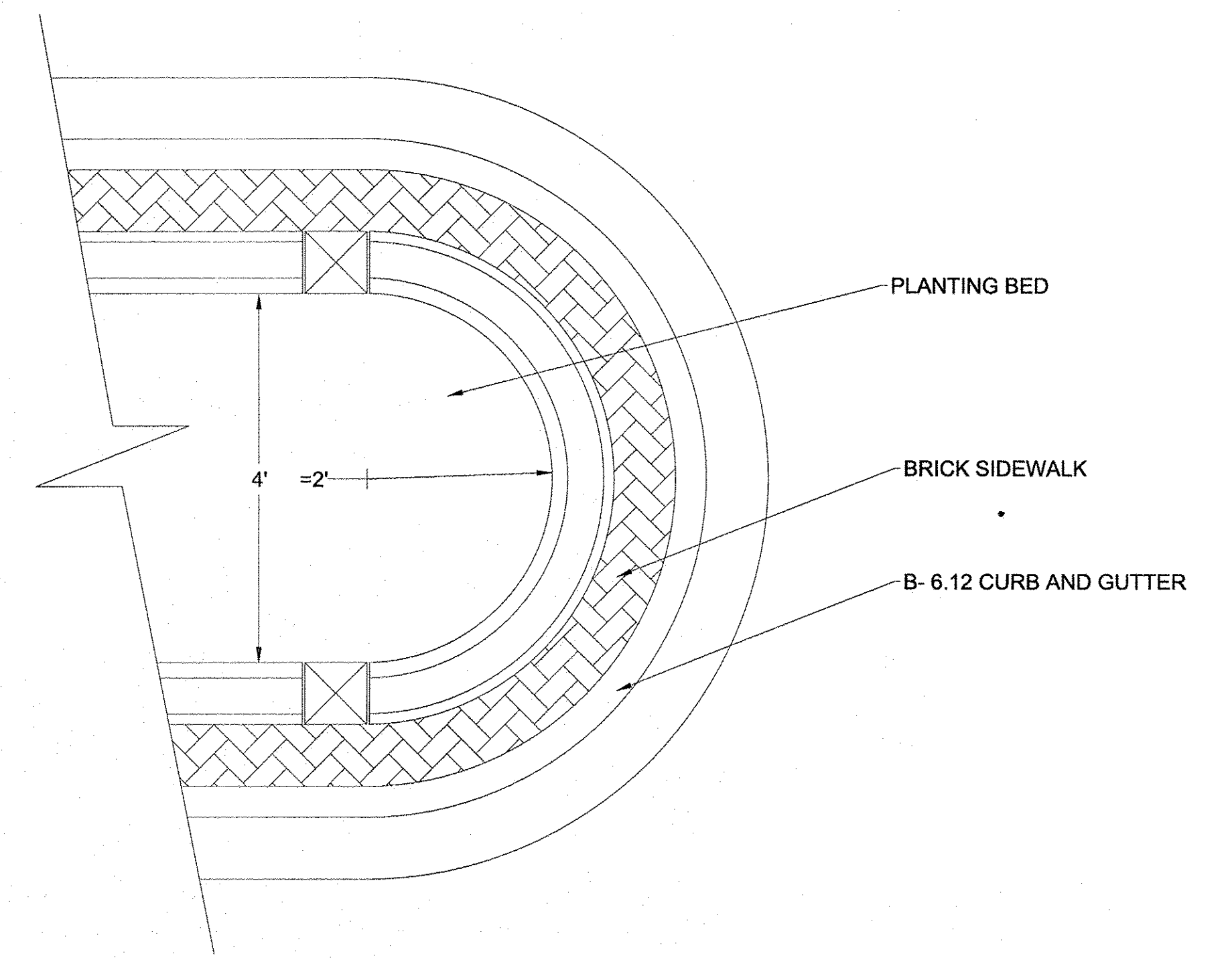
**UNIT PAVER DETAIL**

NO SCALE



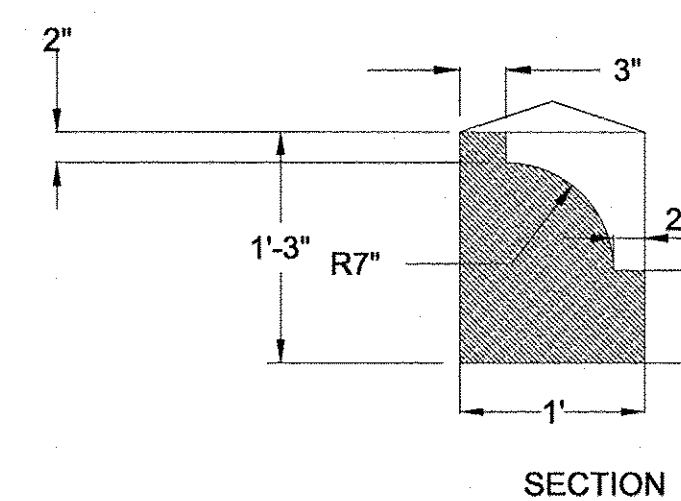
**PERENNIAL AND GROUNDCOVER DETAIL**

NO SCALE

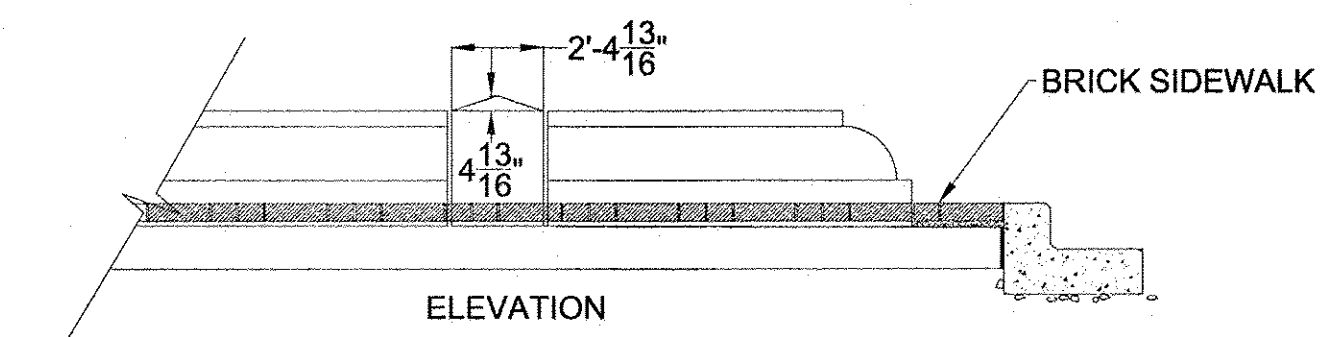


**MEDIAN PRECAST CONCRETE CURB PLAN VIEW**

NO SCALE



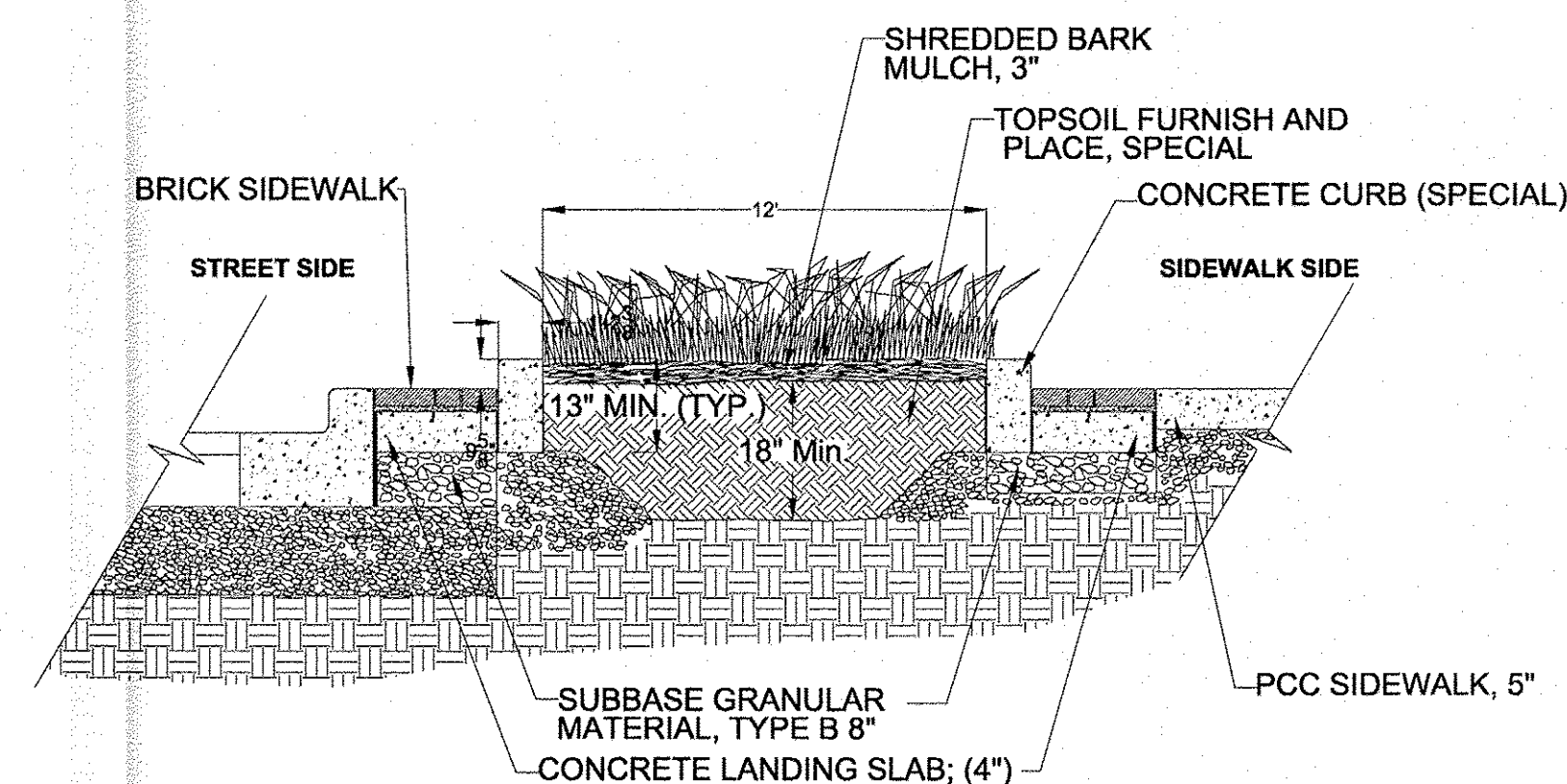
SECTION



ELEVATION

**PRECAST CONCRETE CURB**

NO SCALE



**TYPICAL CURBED PLANTER DETAIL**

NO SCALE

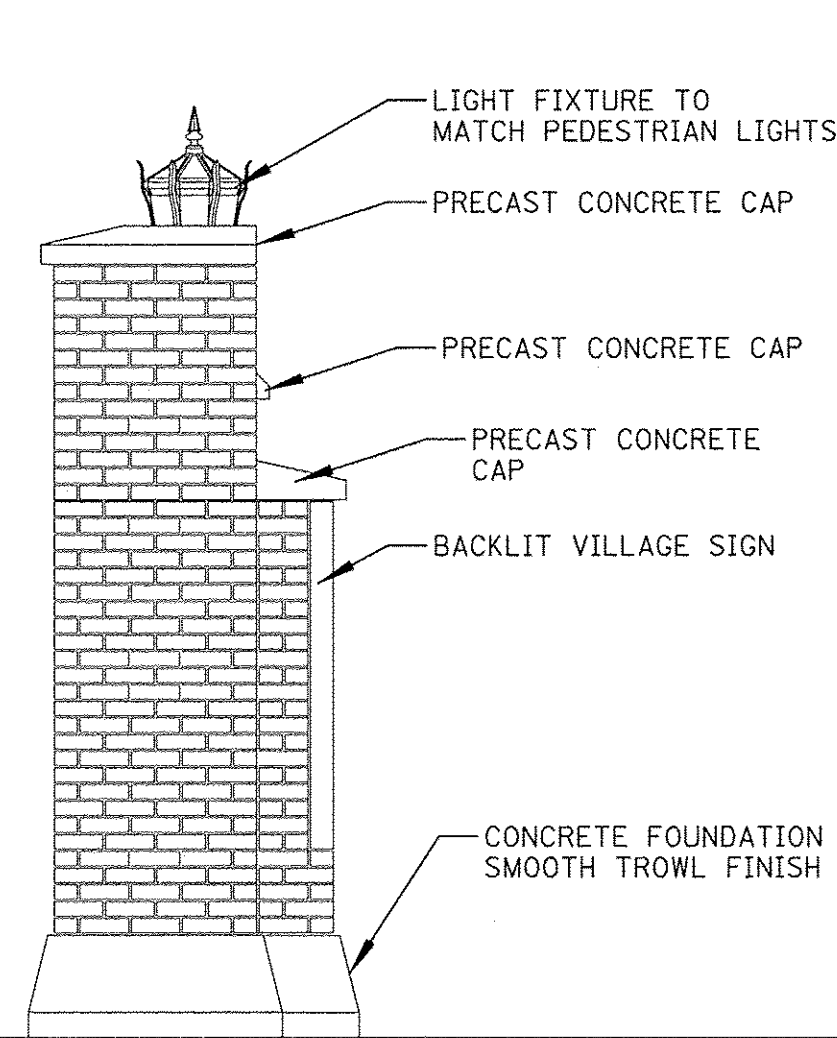
FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\023\B0046\Civi1\LANDSCAPE_DET_0023B0046b.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 5'	CHECKED -	REVISED -
	PLOT DATE = 11/14/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

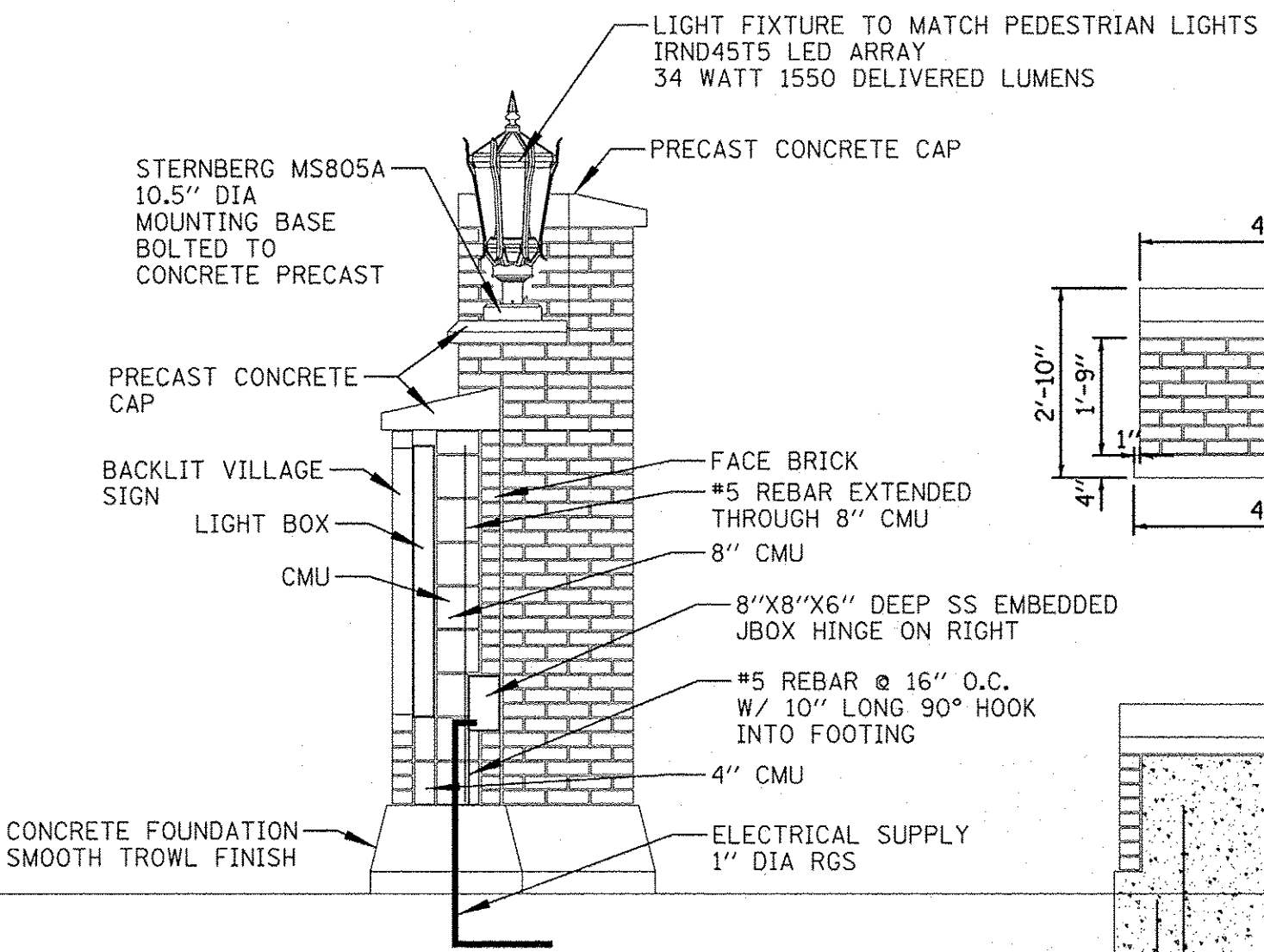
**LANDSCAPING DETAILS  
ROOSEVELT ROAD**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

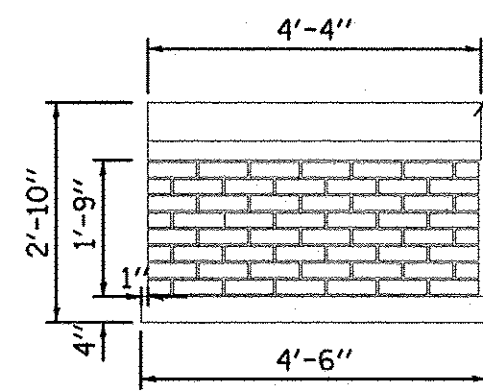
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	57
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



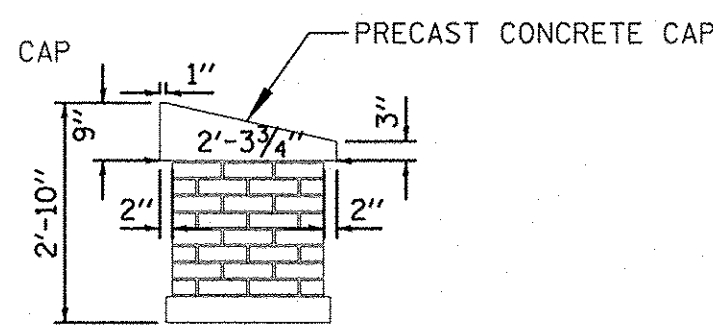
LEFT SIDE VIEW



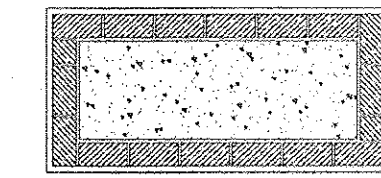
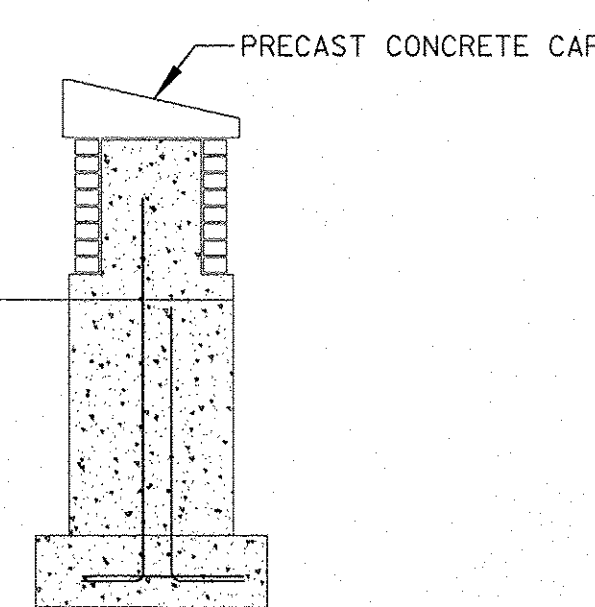
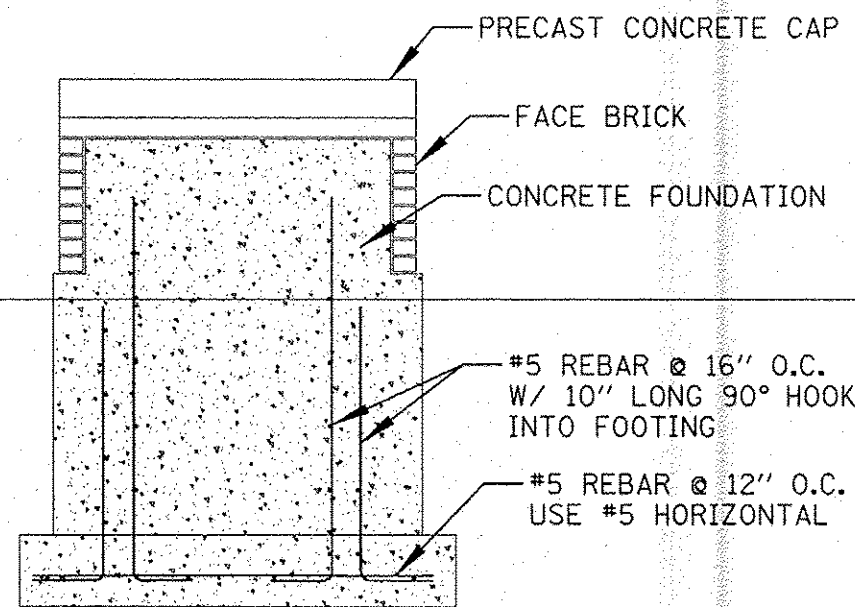
SECTION A THROUGH BACKLIT SIGN



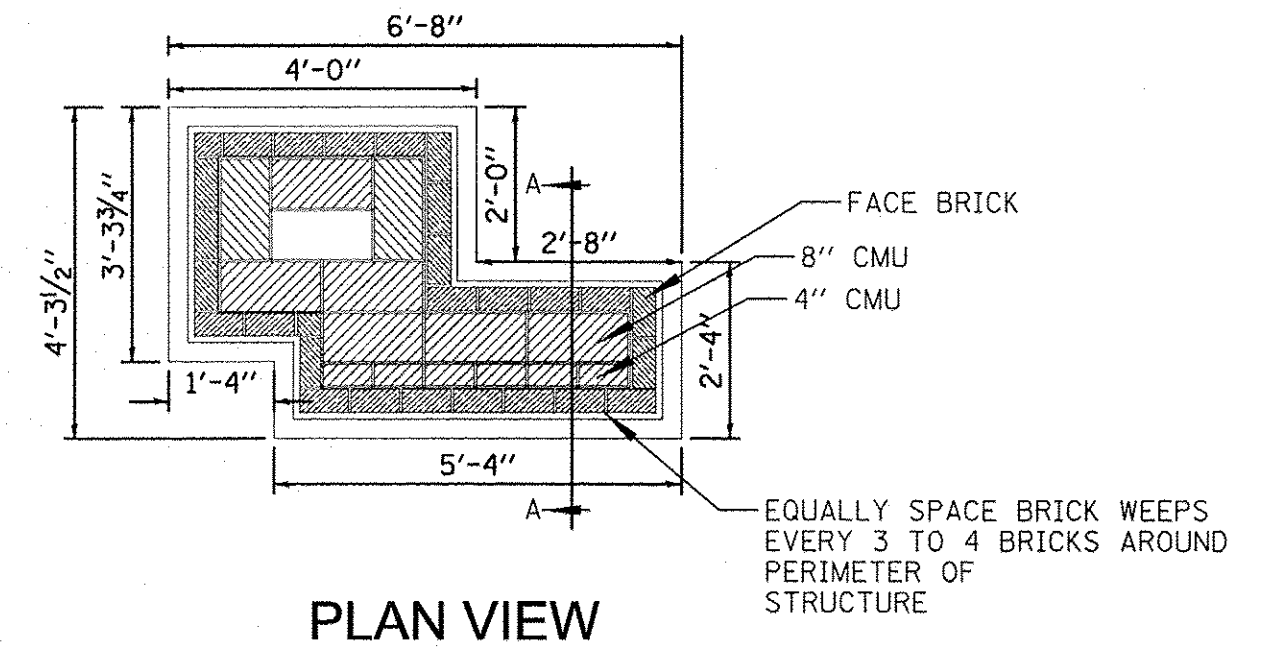
FRONT VIEW SLOPED CAP SEAT WALL



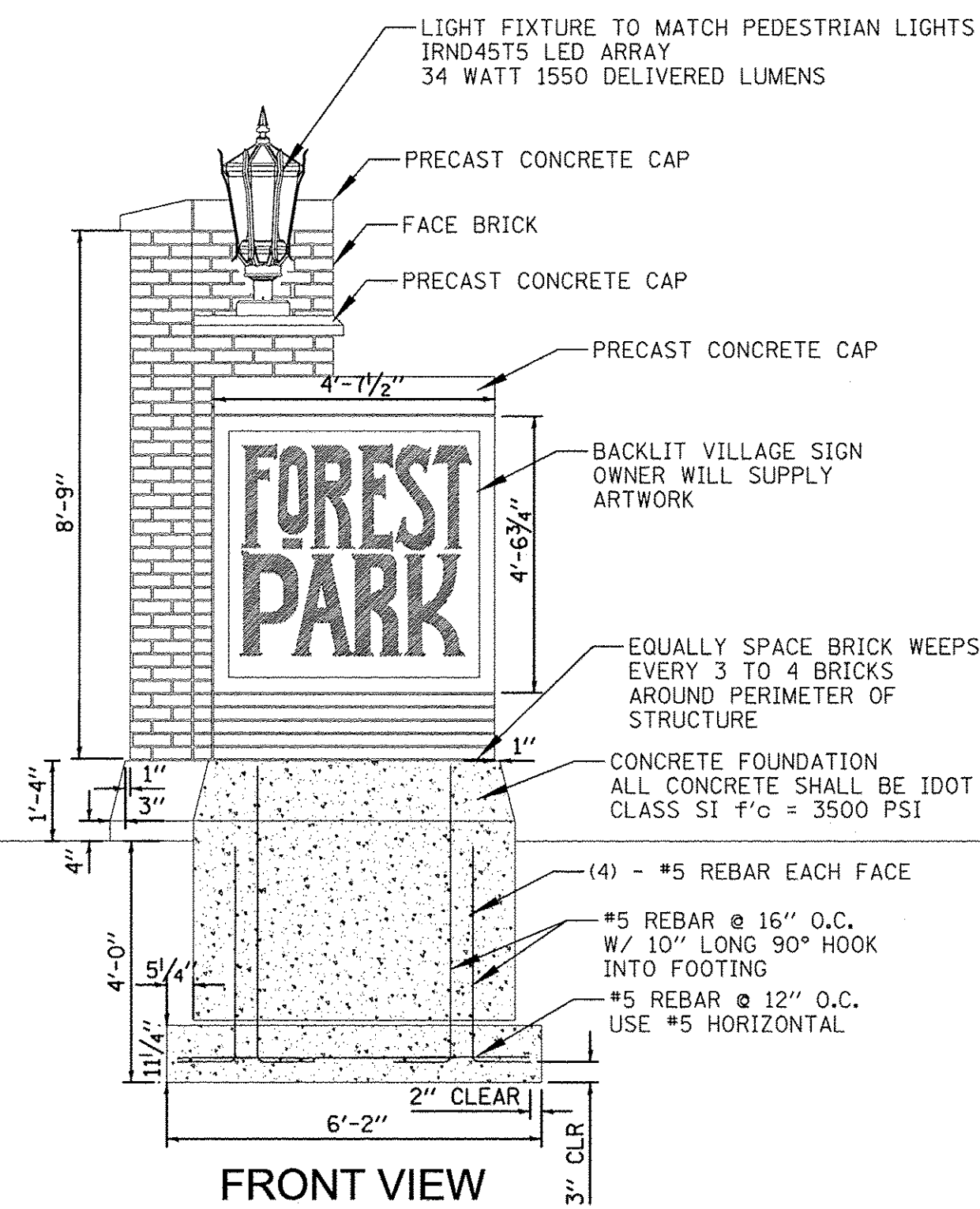
SIDE VIEW SLOPED CAP SEAT WALL



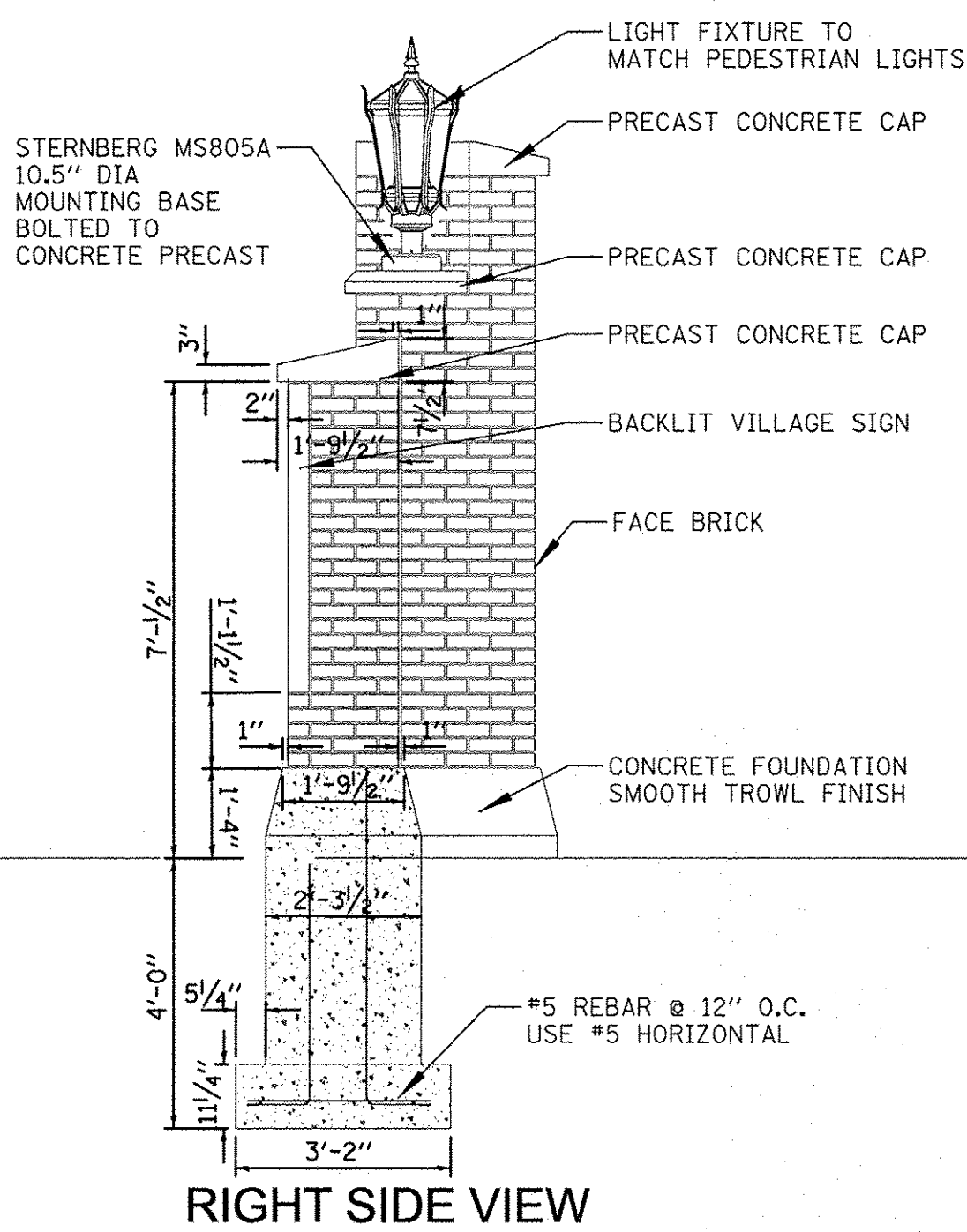
PLAN VIEW SLOPED CAP SEAT WALL



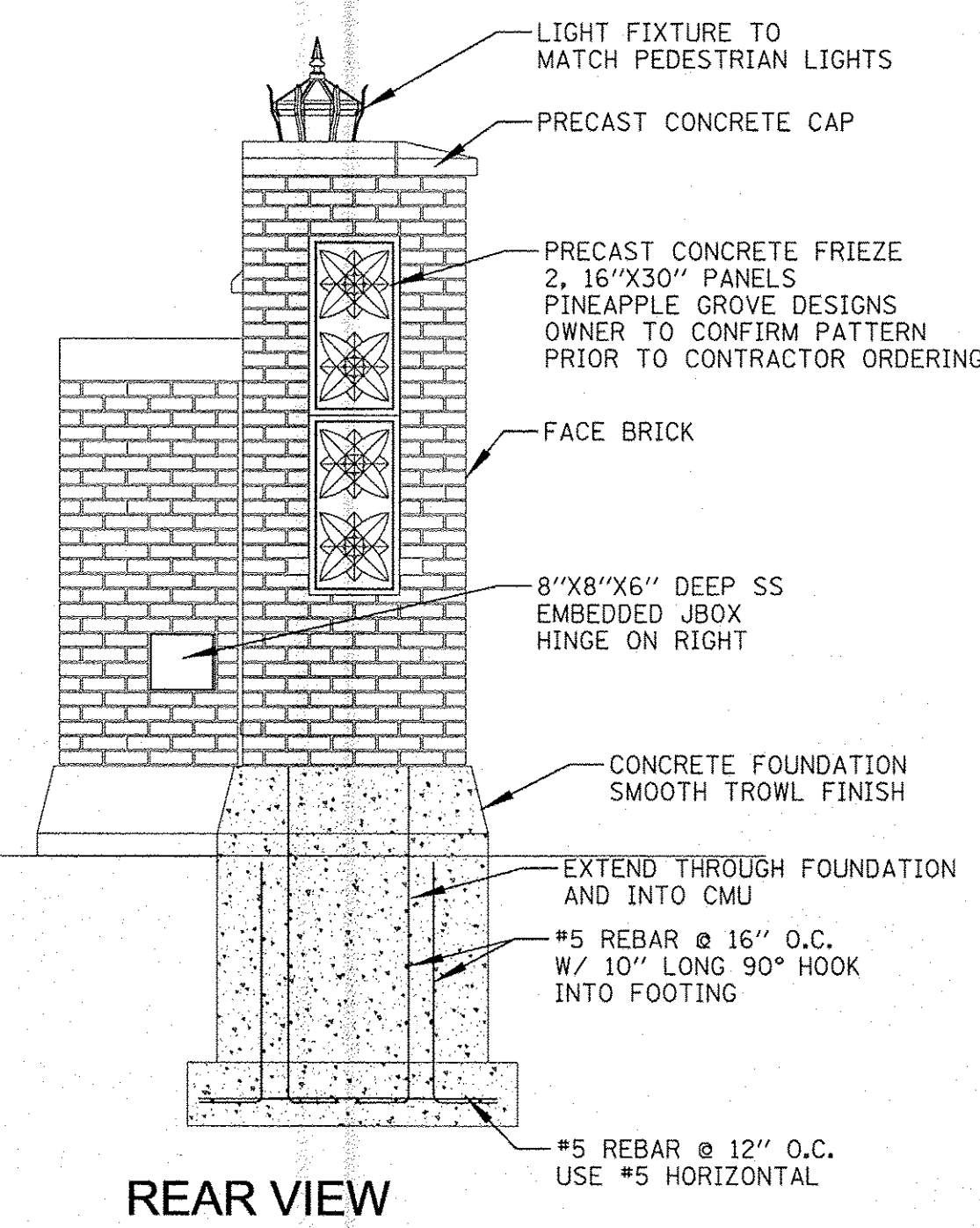
PLAN VIEW



FRONT VIEW

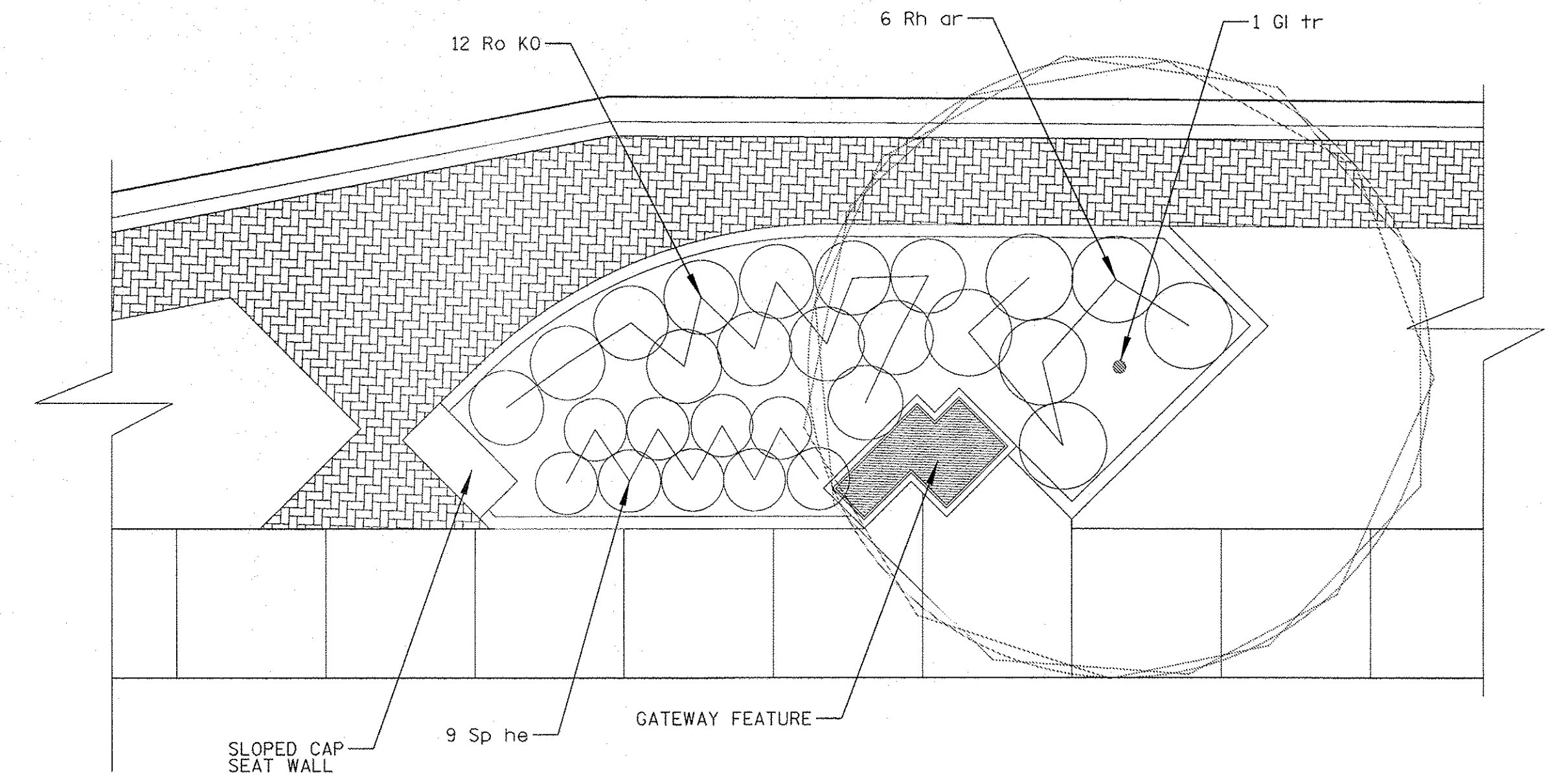


RIGHT SIDE VIEW

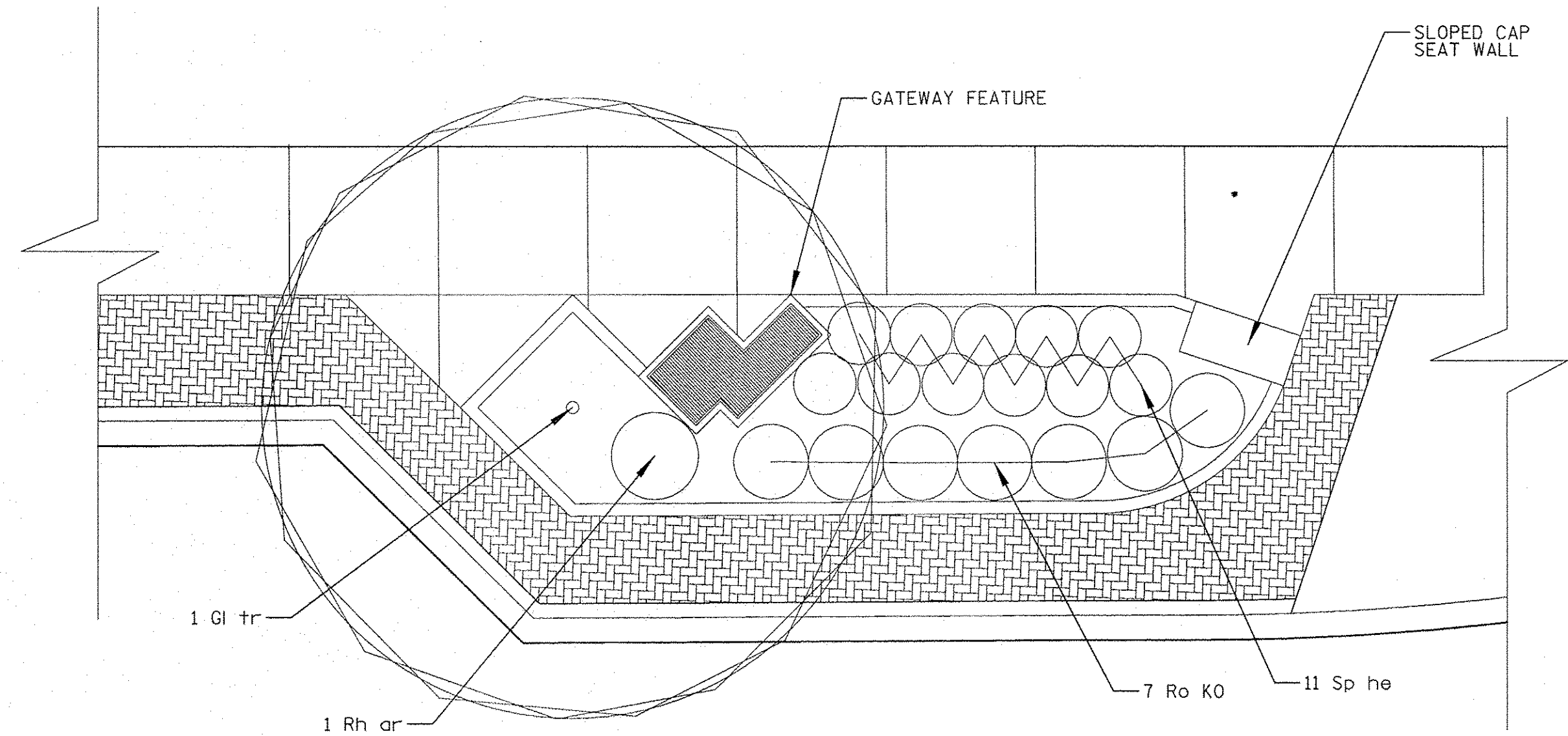


REAR VIEW

DECORATIVE GATEWAY ELEMENT



ROOSEVELT ROAD WEST DECORATIVE GATEWAY ELEMENT



ROOSEVELT ROAD EAST DECORATIVE GATEWAY ELEMENT

FILE NAME =	USER NAME = mthomas	DESIGNED -	REVISED -
N:\FORESTPARK\0223\BG046\Cv1\LANDSCAPE_DET_0023BG046b-02.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 3'	CHECKED -	REVISED -
	PLOT DATE = 11/14/2016	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LANDSCAPING DETAILS  
ROOSEVELT ROAD

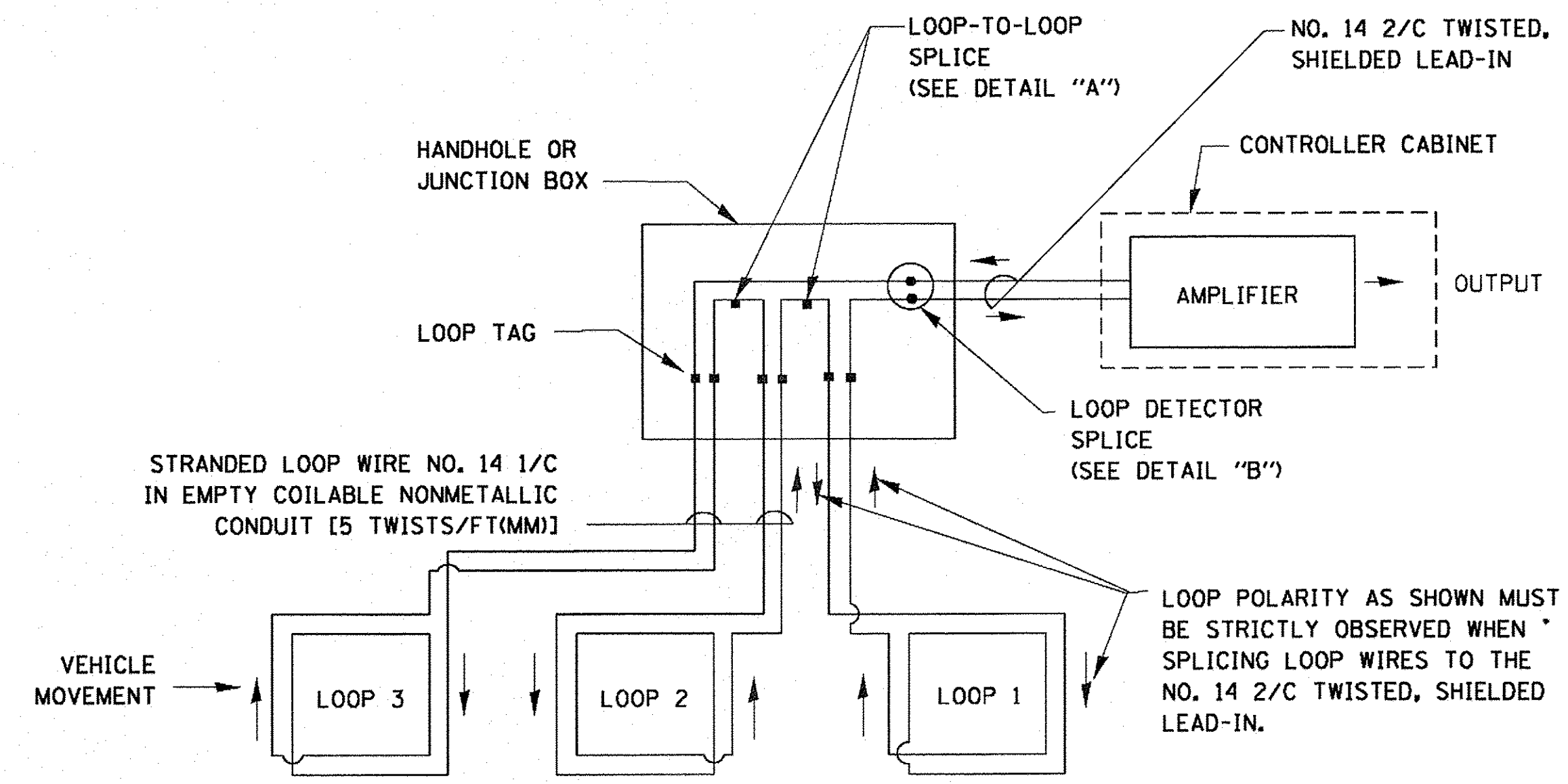
SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 58
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				



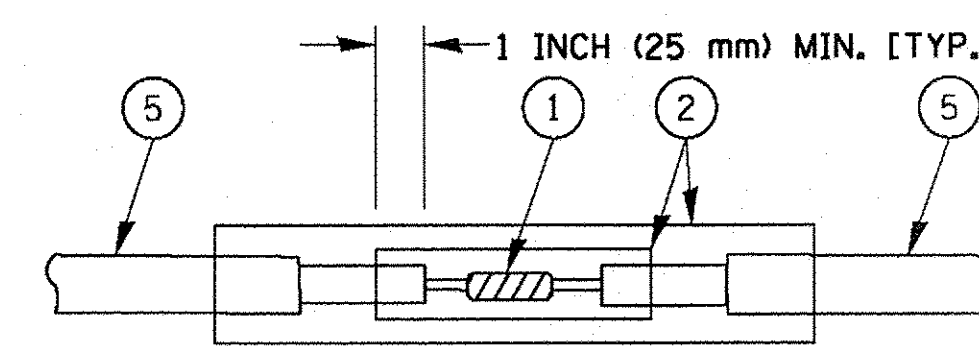
**LOOP DETECTOR NOTES**

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

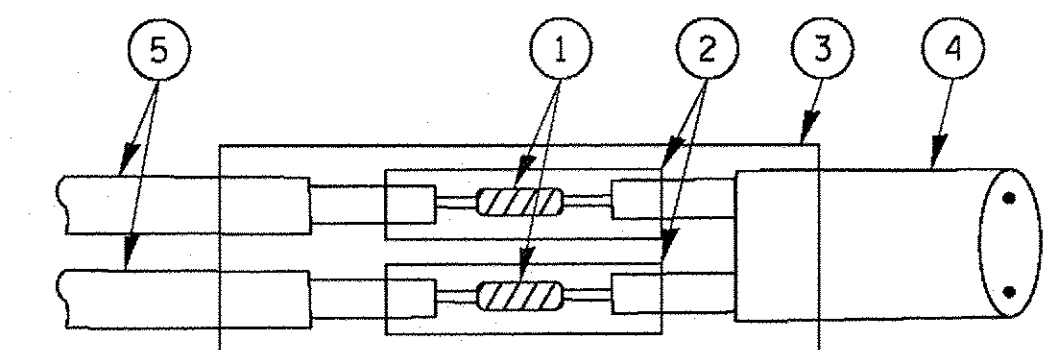


**DETECTOR LOOP WIRING SCHEMATIC**

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



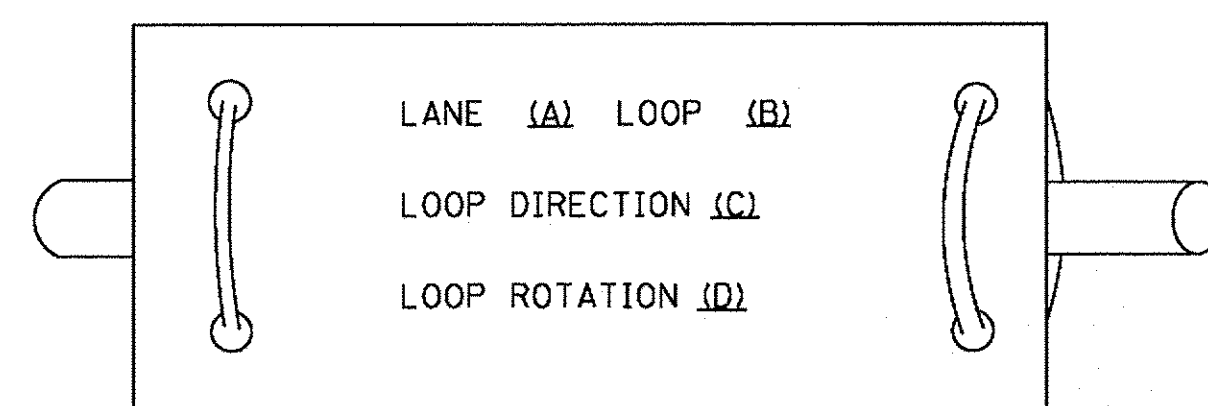
DETAIL "A"  
LOOP-TO-LOOP SPLICE



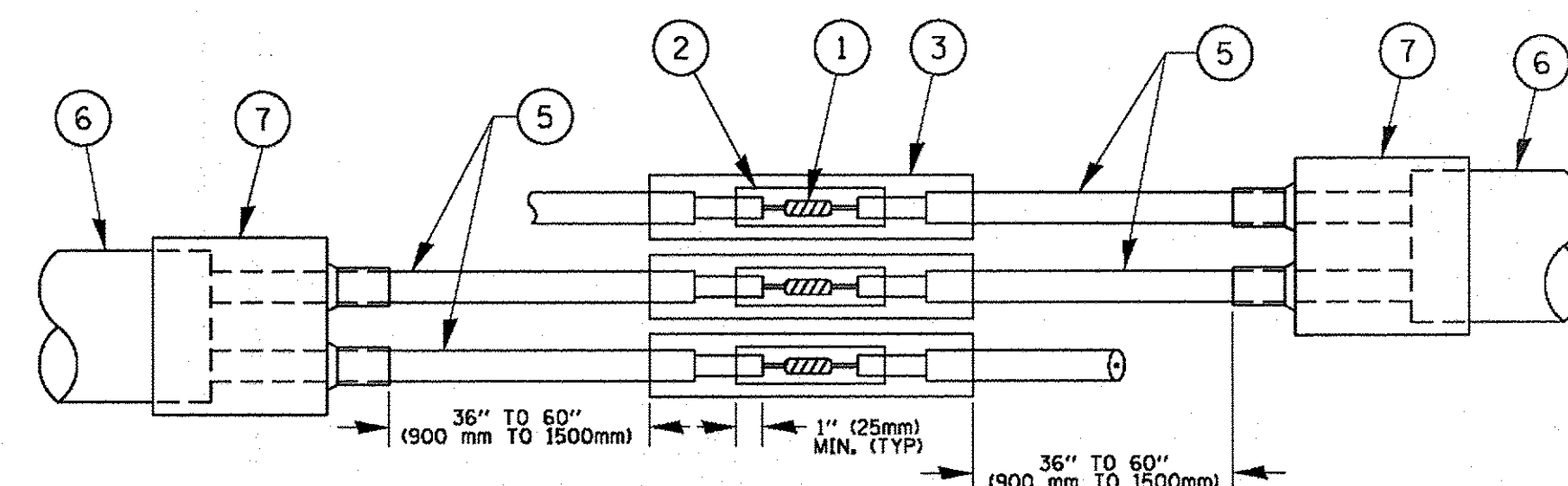
DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**

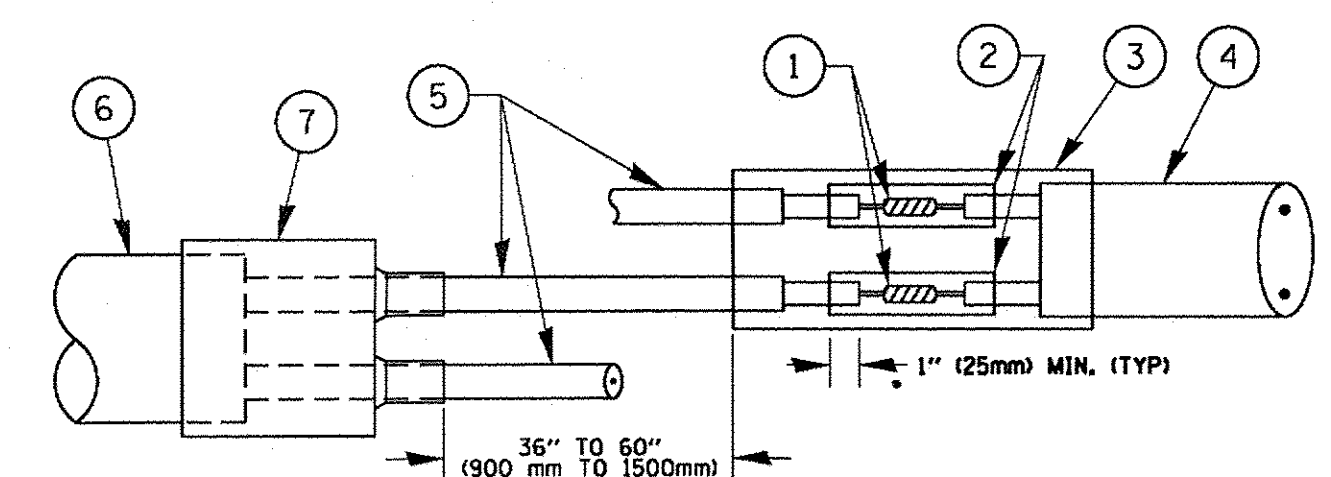
**LOOP LEAD-IN CABLE TAG**



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



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED LOOP**

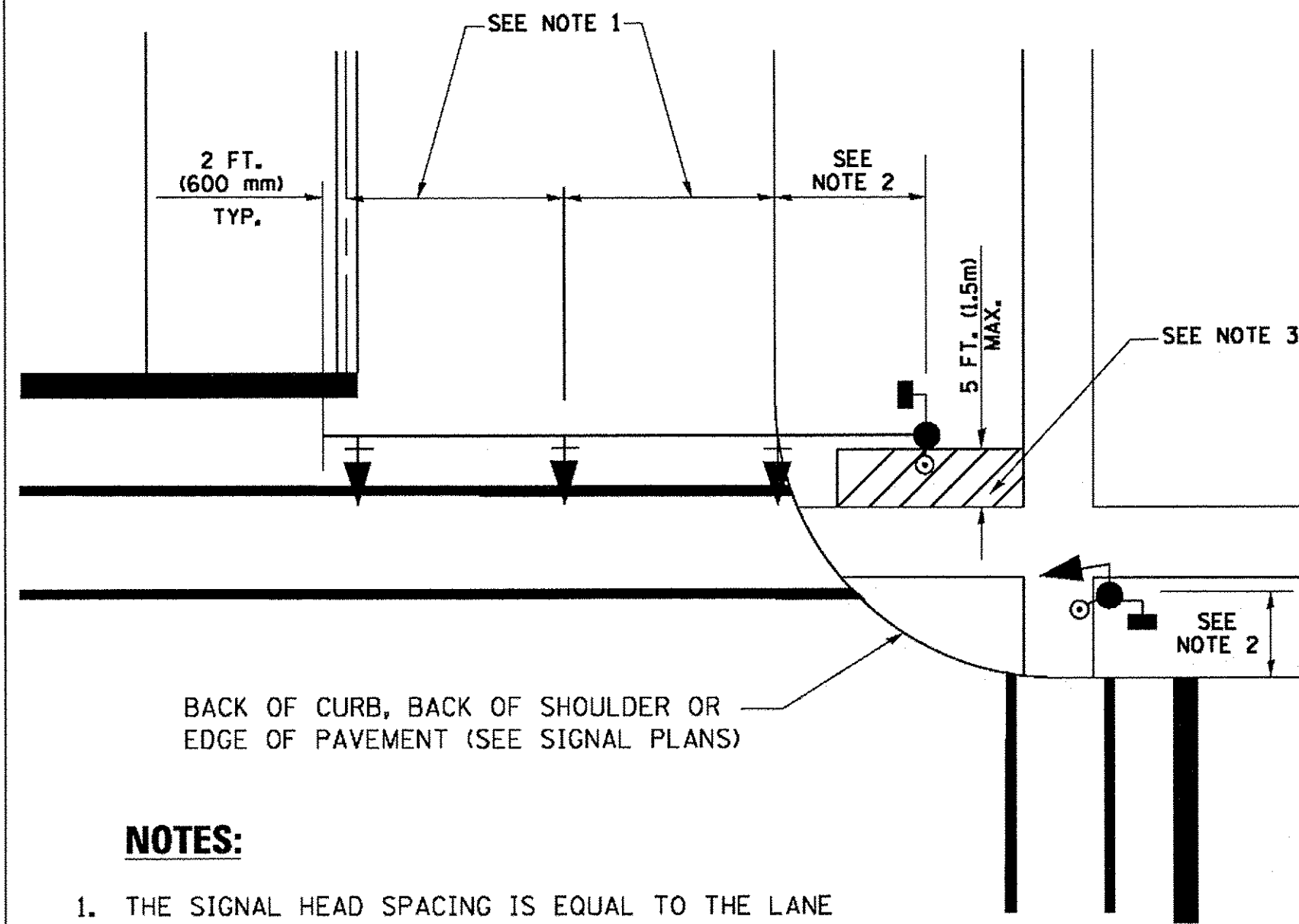
**LOOP DETECTOR SPLICE**

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

TS SHT NO. 2

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 60	
ci:\pw_work\p\dot\footemj\d01\08315\ts05.dgn		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.	<b>TS-05</b>		CONTRACT NO. 61D26			
		CHECKED - DAD	REVISED -										
		DATE - 10-28-09	REVISED -										
		PLOT SCALE = 50.0000 "/ 1m.											
		PLOT DATE = 1/13/2014											
												FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

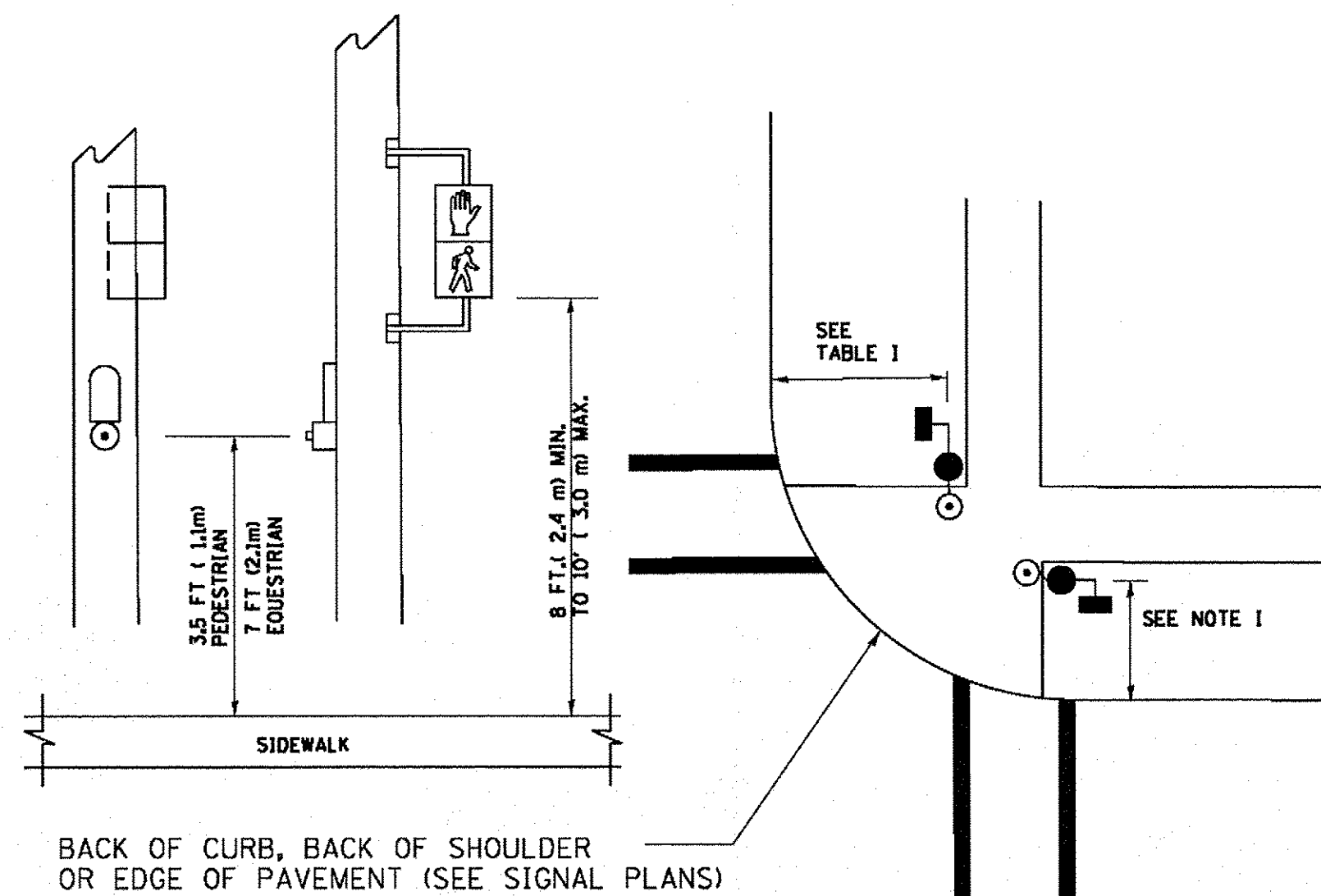
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

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

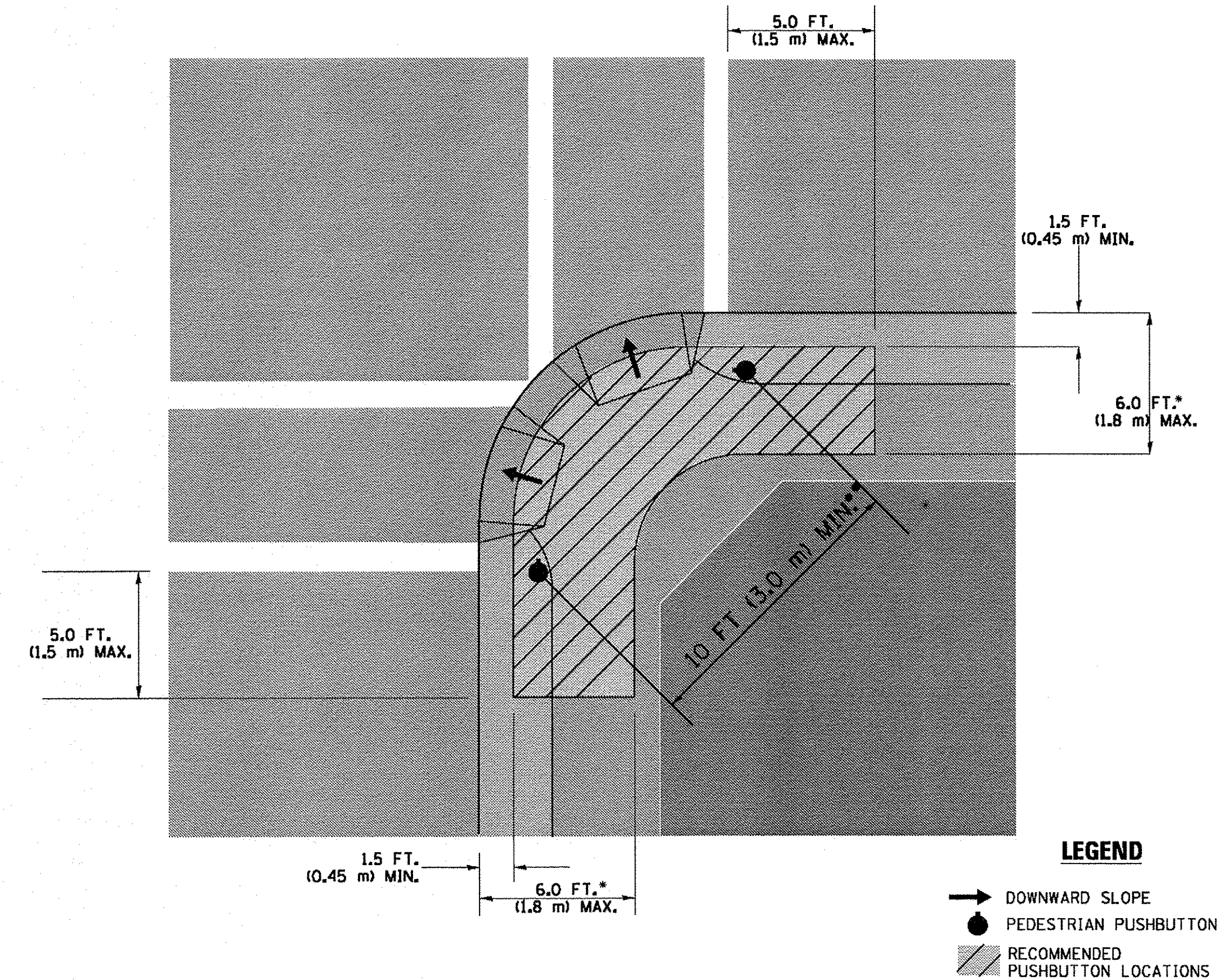
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

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

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

**NOTES:**

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

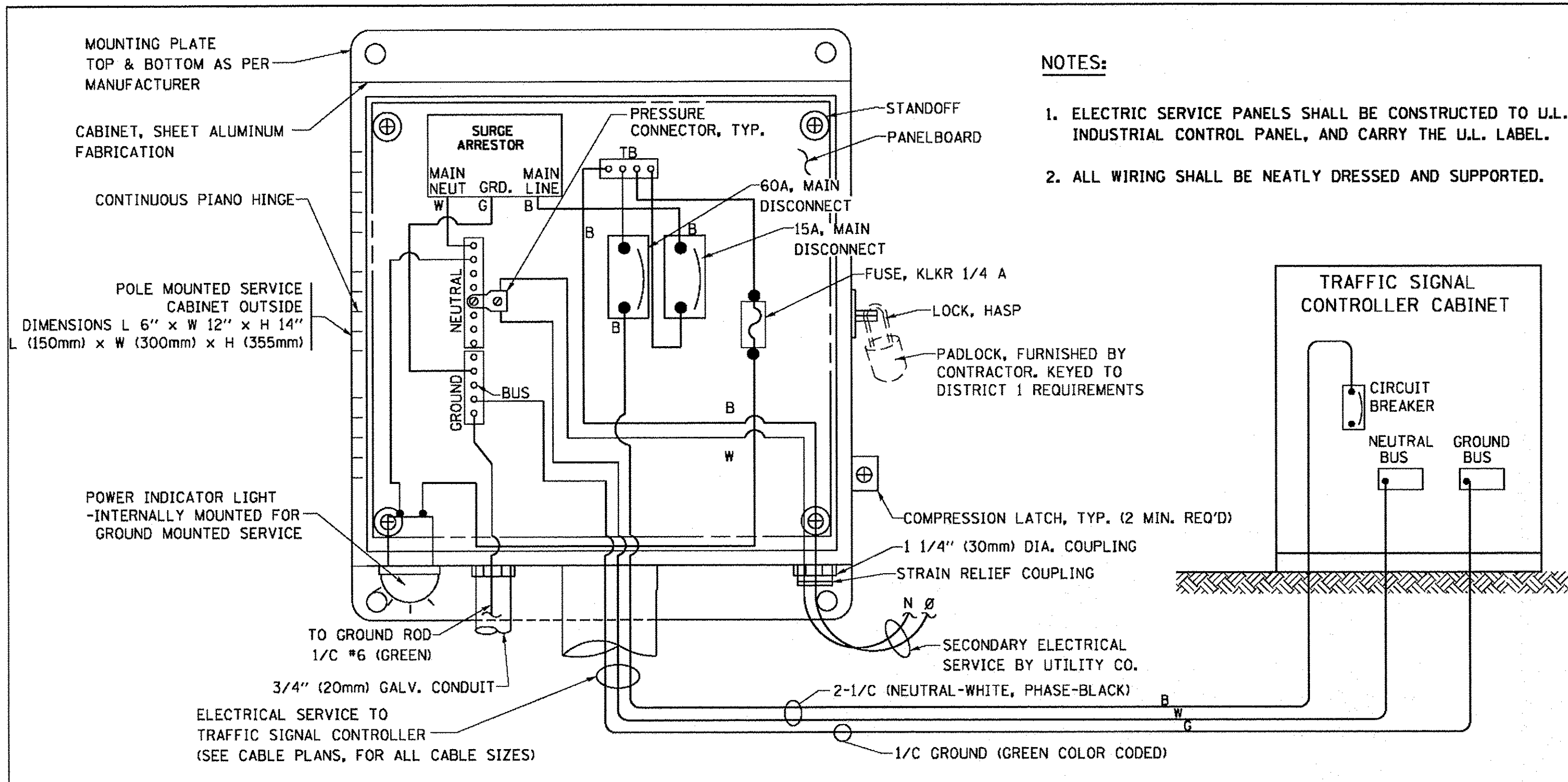
**TRAFFIC SIGNAL EQUIPMENT OFFSET**

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

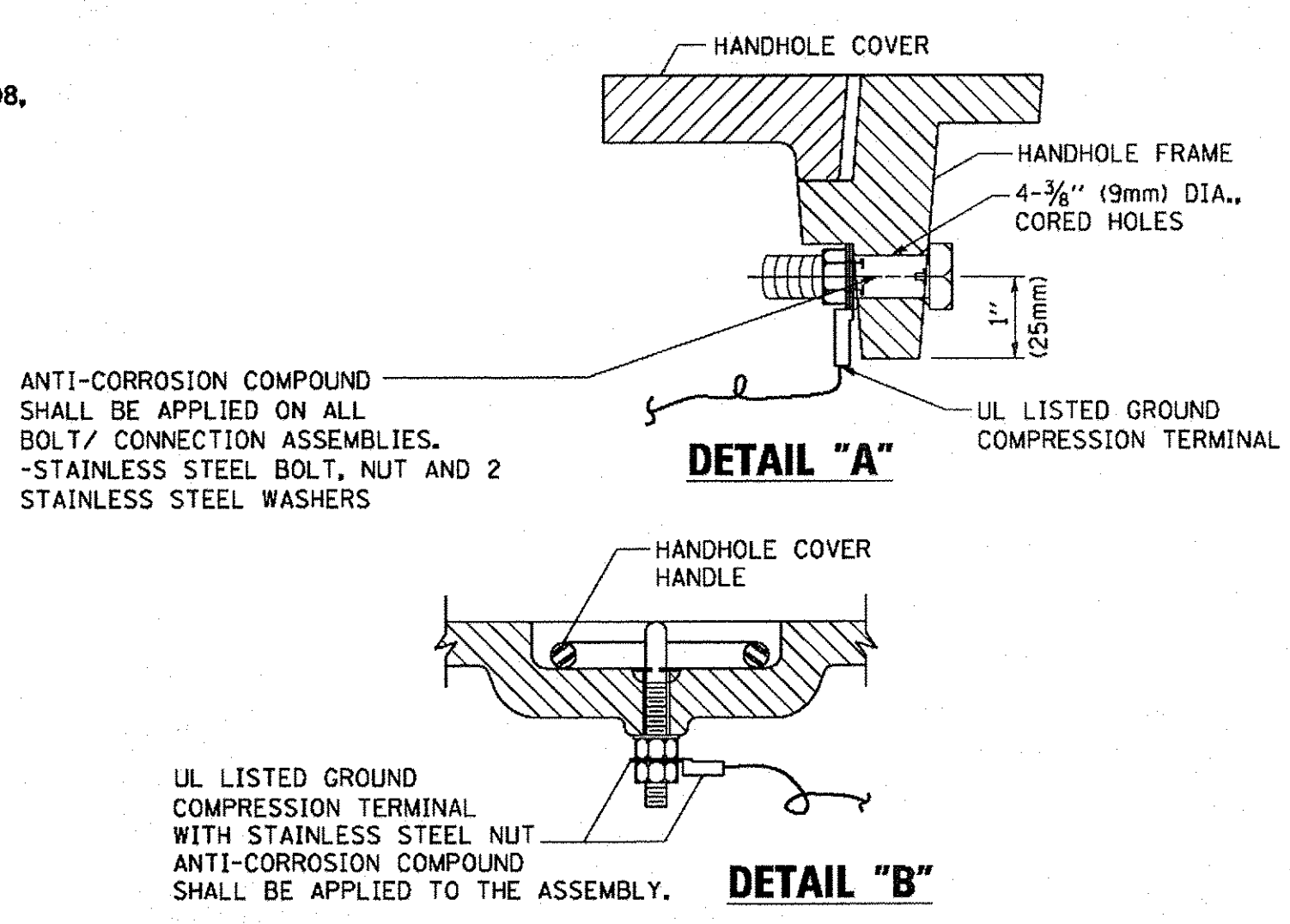
**NOTES:**

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

TS SHT NO. 3

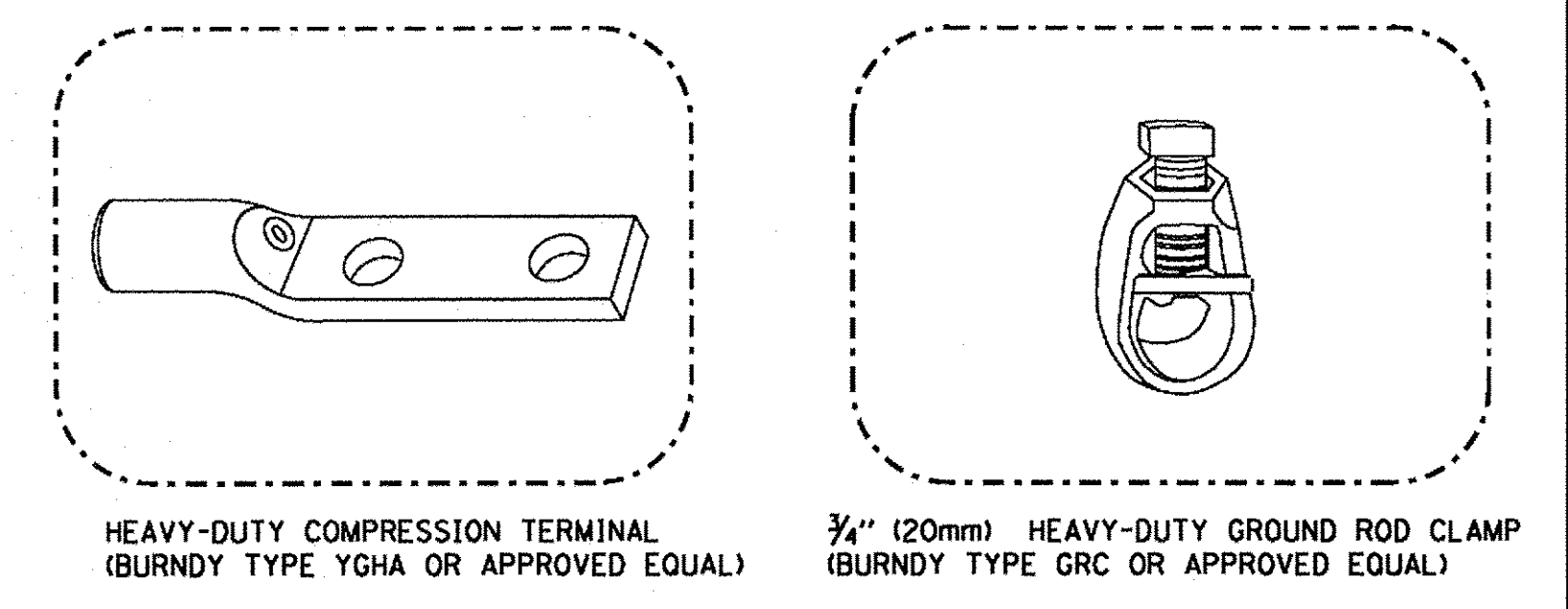
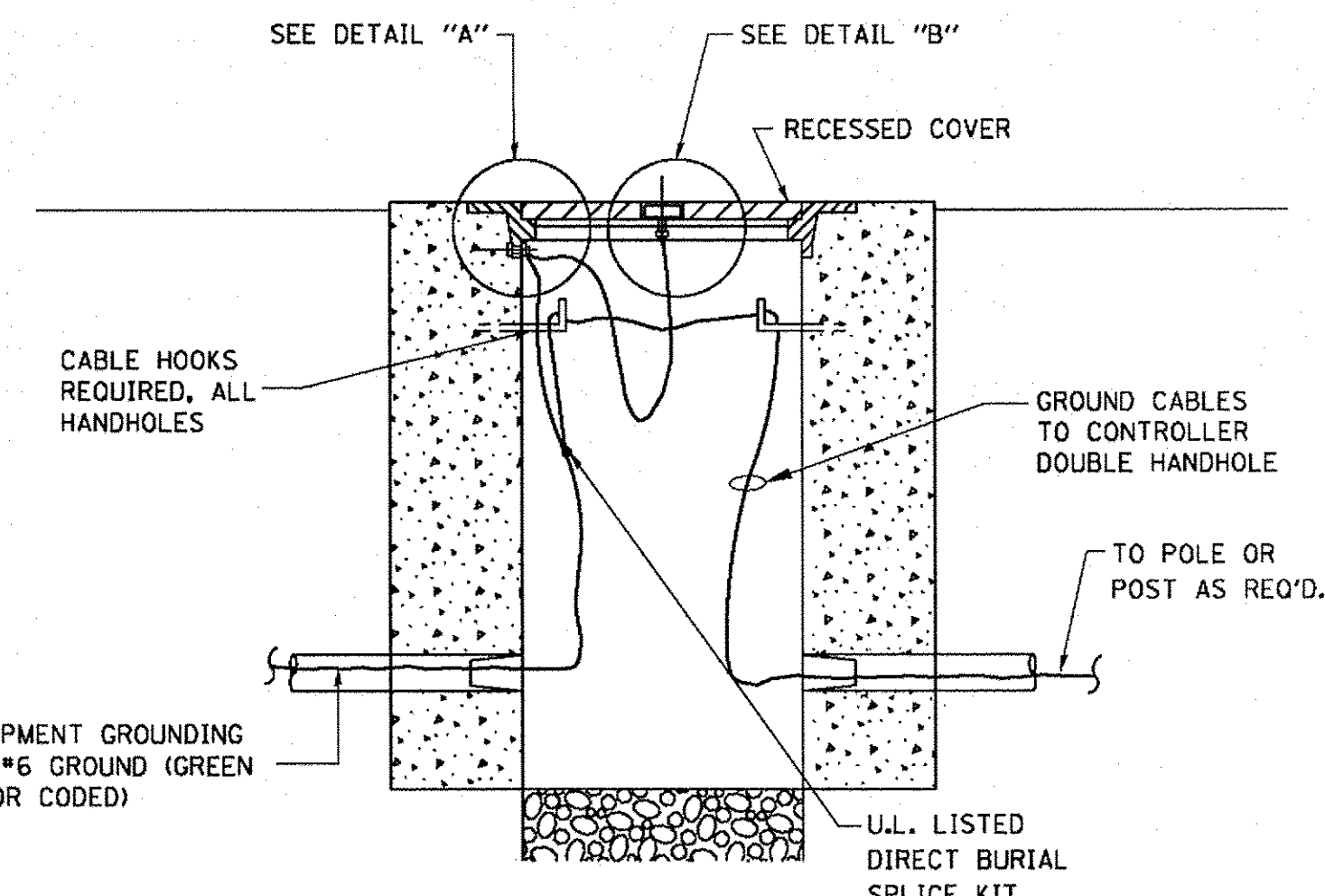


- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
  2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



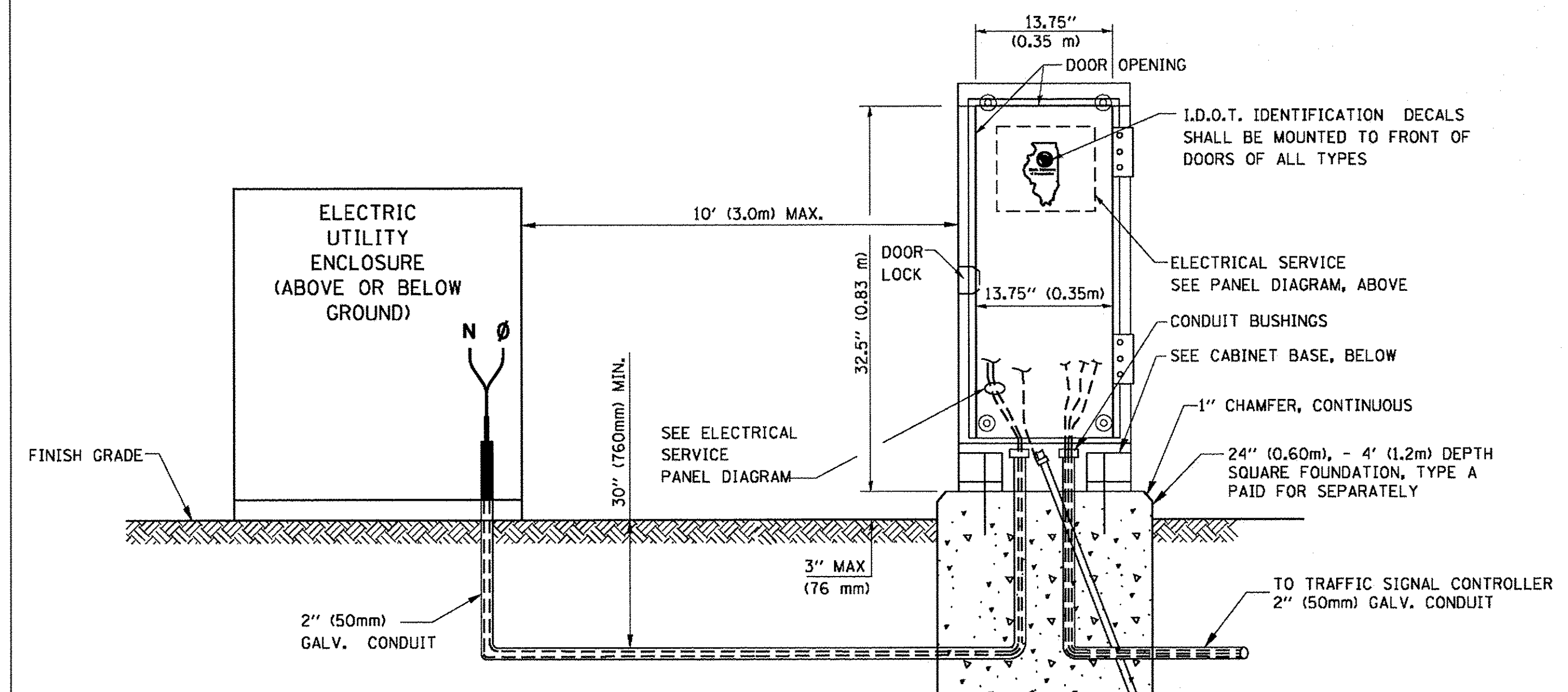
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED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

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

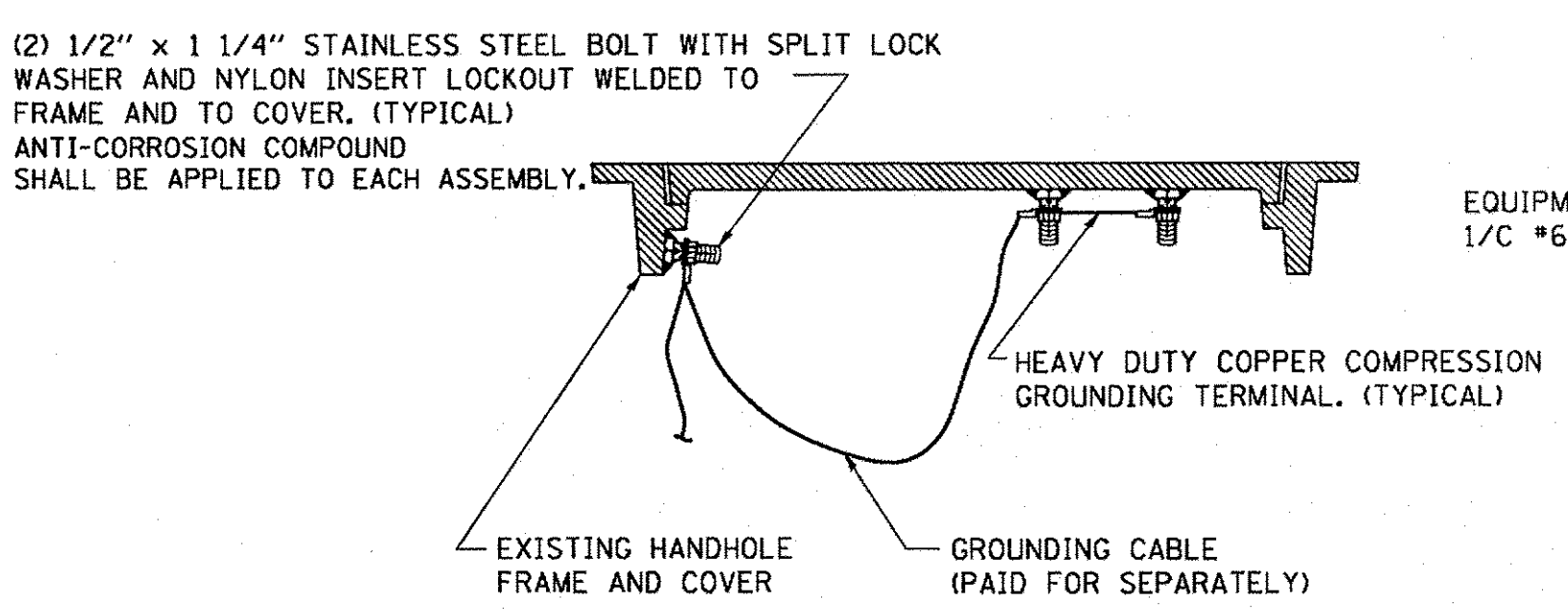


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, U.L. APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

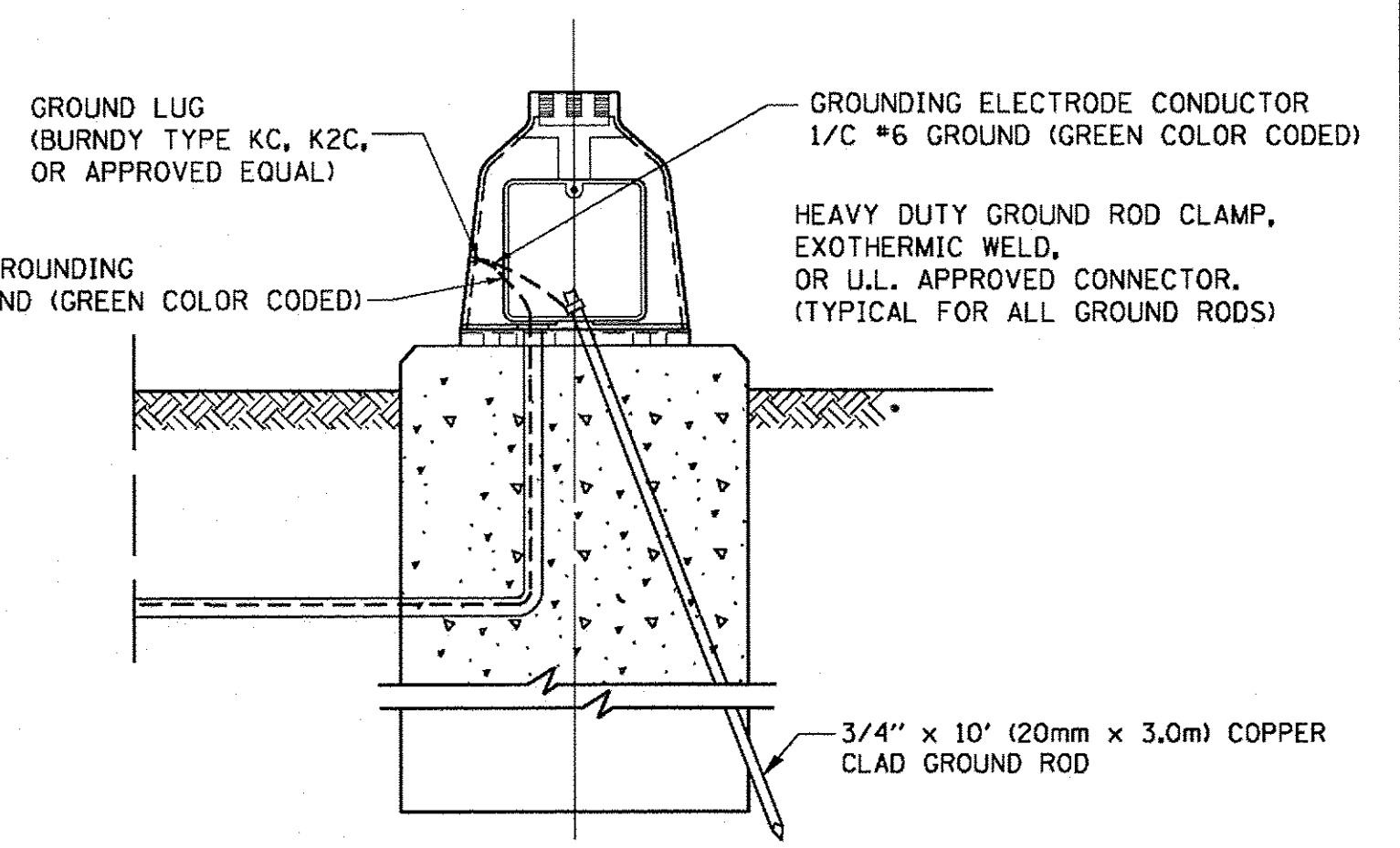
**HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**



**SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)**

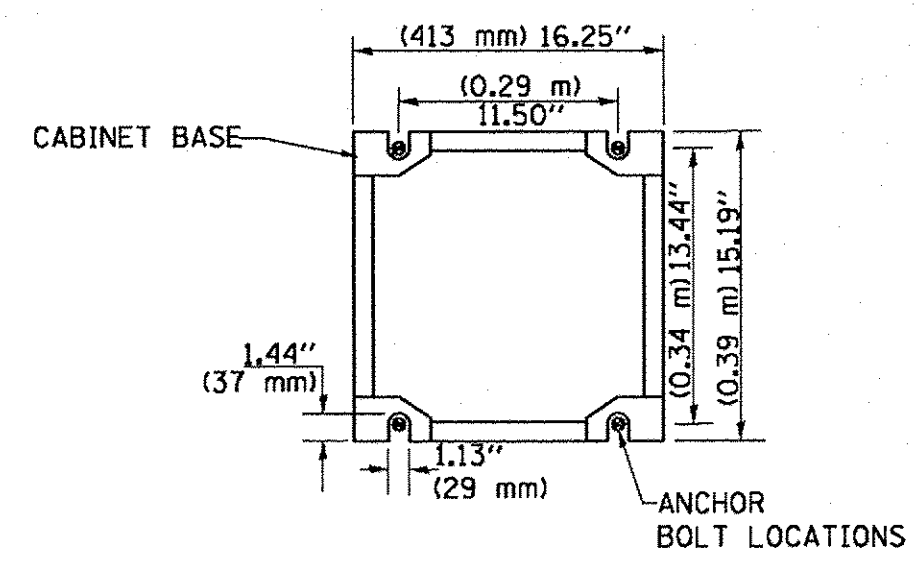


**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**



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

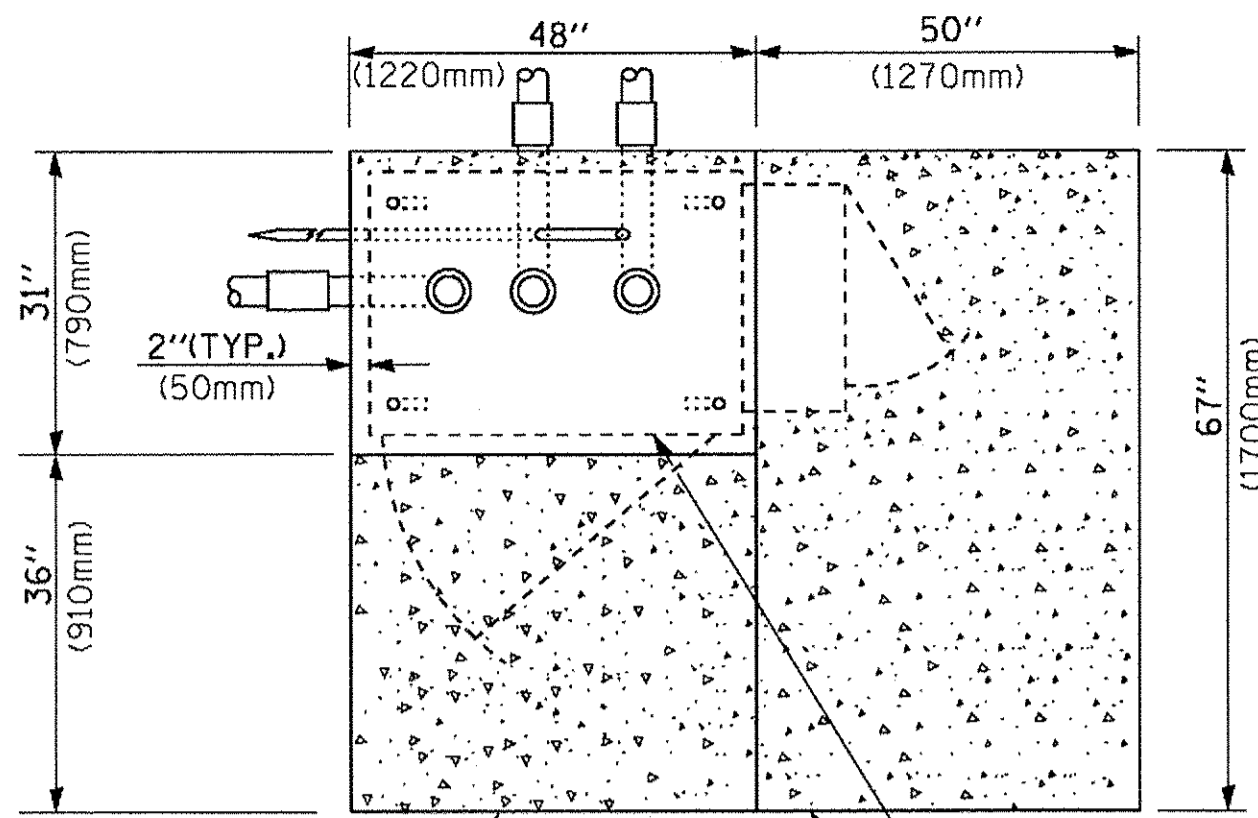
**SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)**



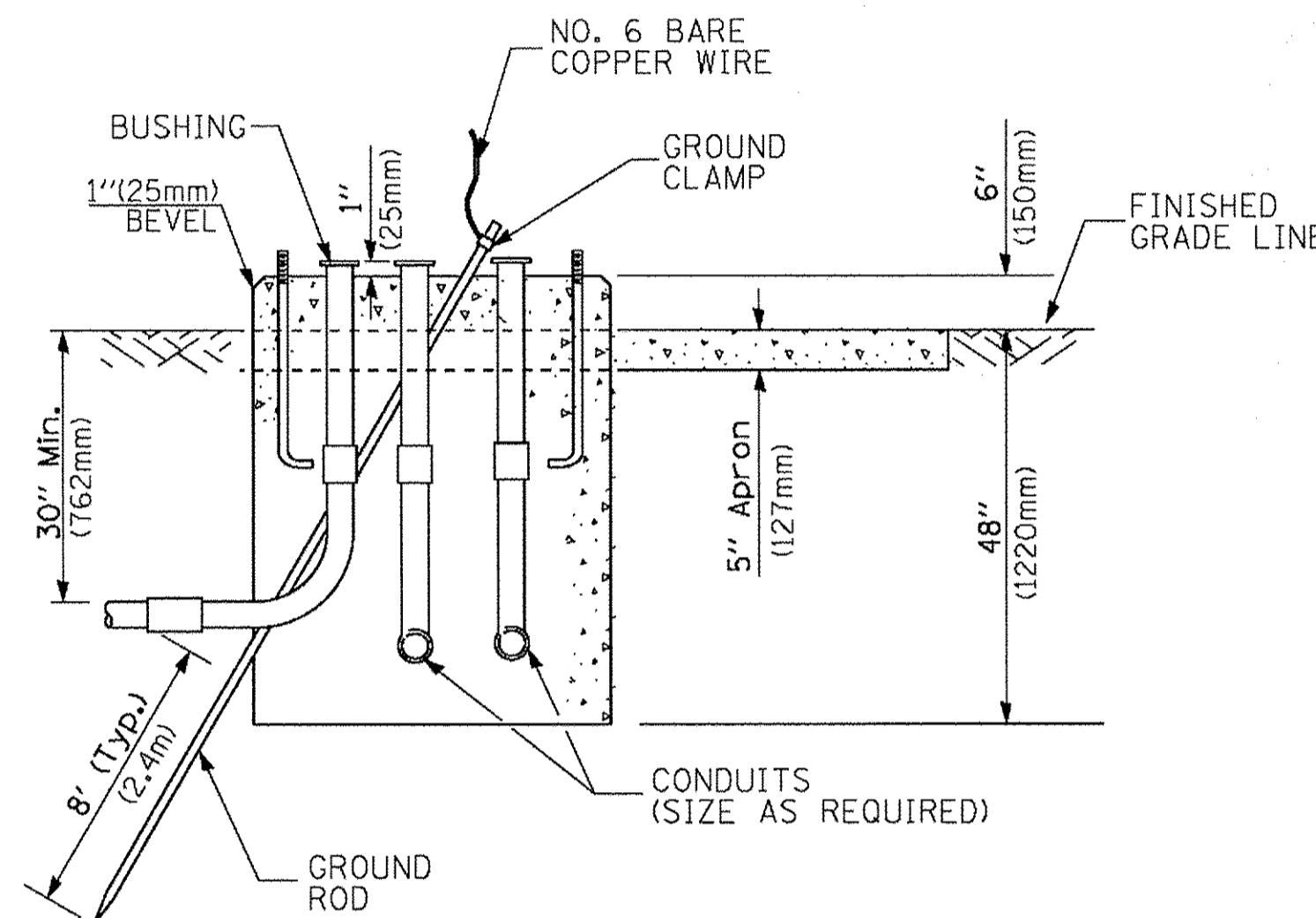
**CABINET - BASE BOLT PATTERN (NOT TO SCALE)**

TS SHT NO. 4

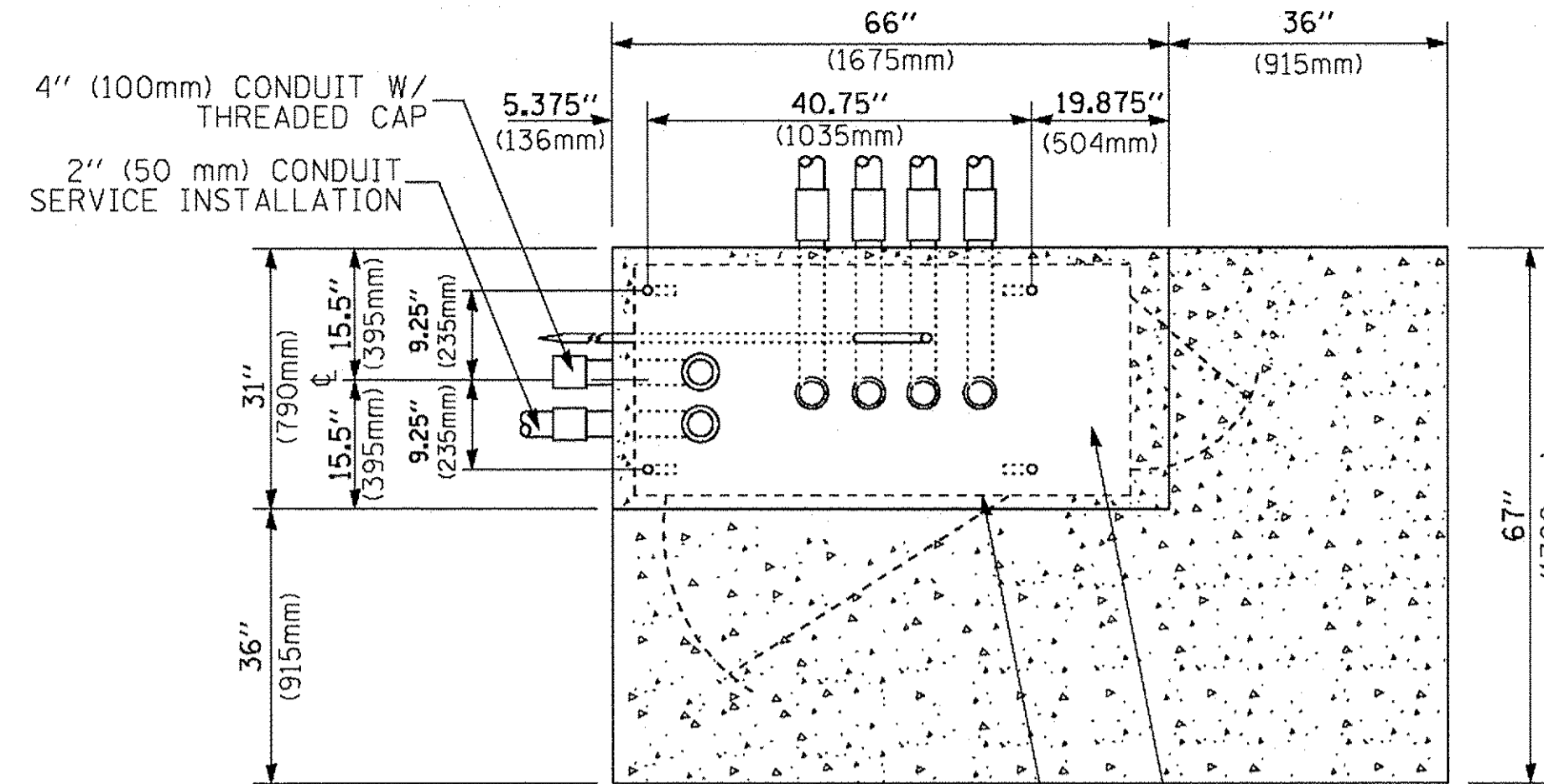
FILE NAME =	USER NAME = foatomj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 62
DRAWN - BCK	CHECKED - DAD	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 4 OF 7 SHEETS	STA. TO STA.	<b>TS-05</b>				
PLOT SCALE = 50,0000 / in.	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		CONTRACT NO. 61026							
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT												



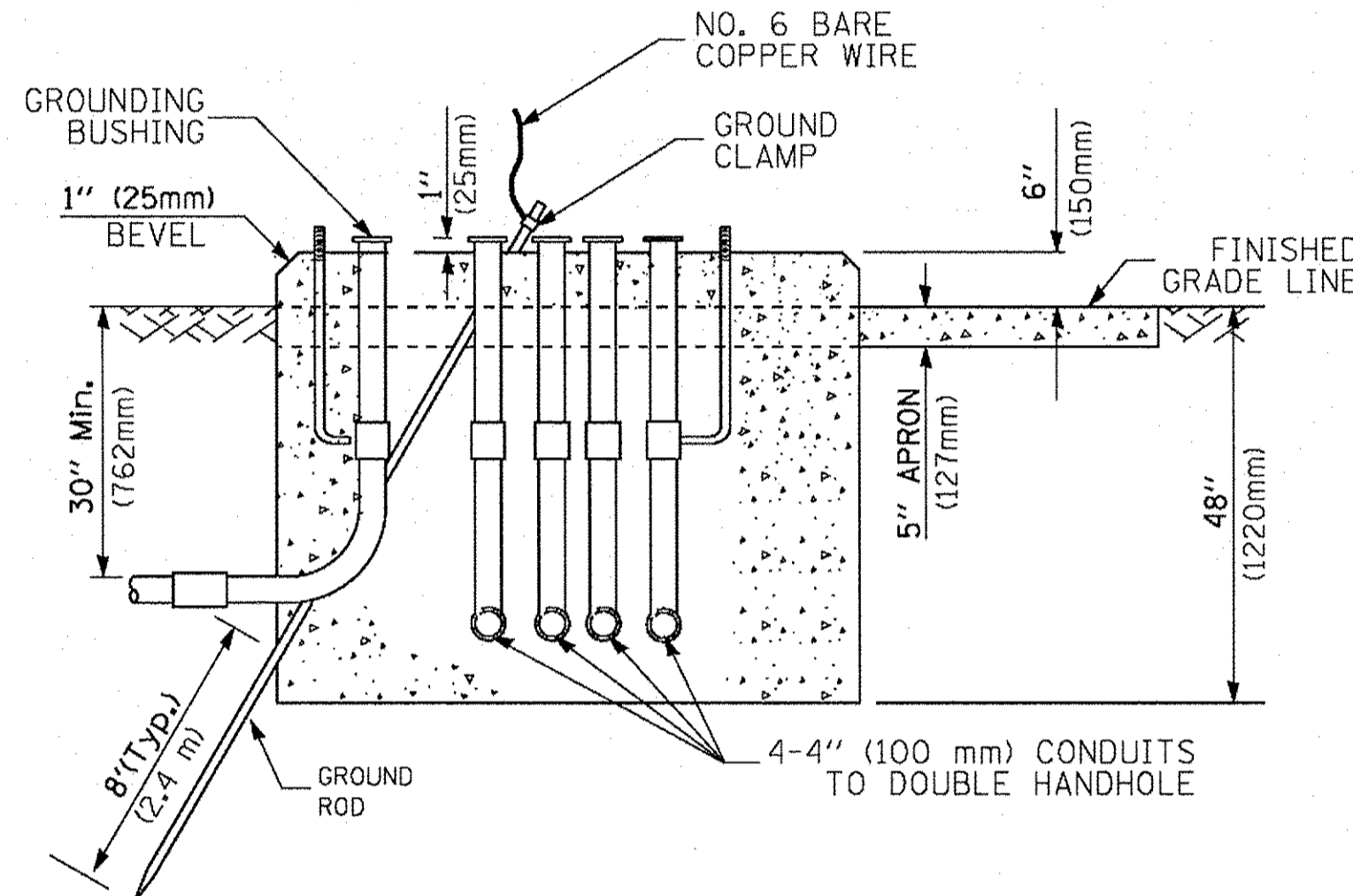
**TOP VIEW**



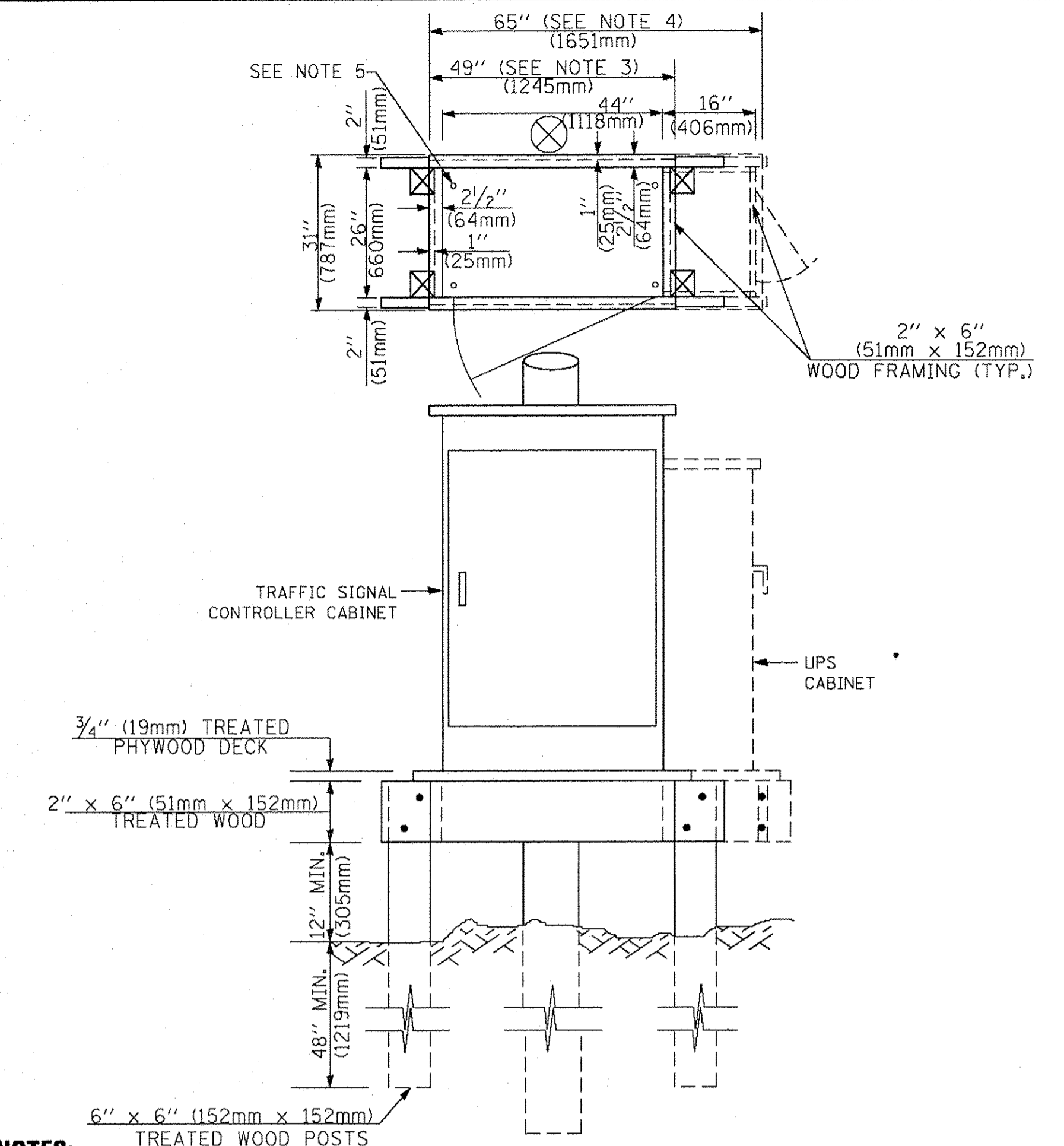
**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**



**TOP VIEW**



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

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

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

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

**DEPTH OF FOUNDATION**

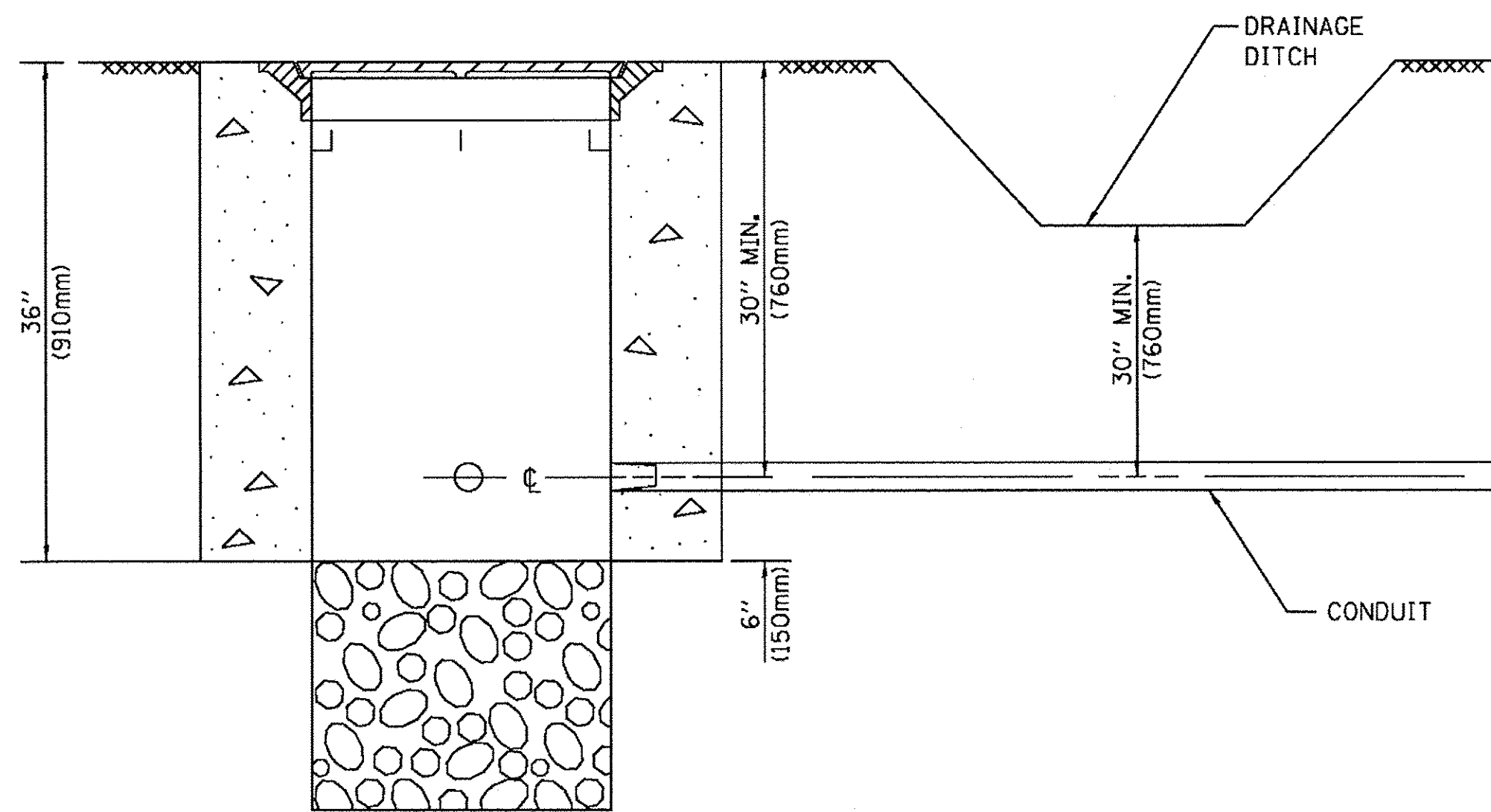
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

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

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

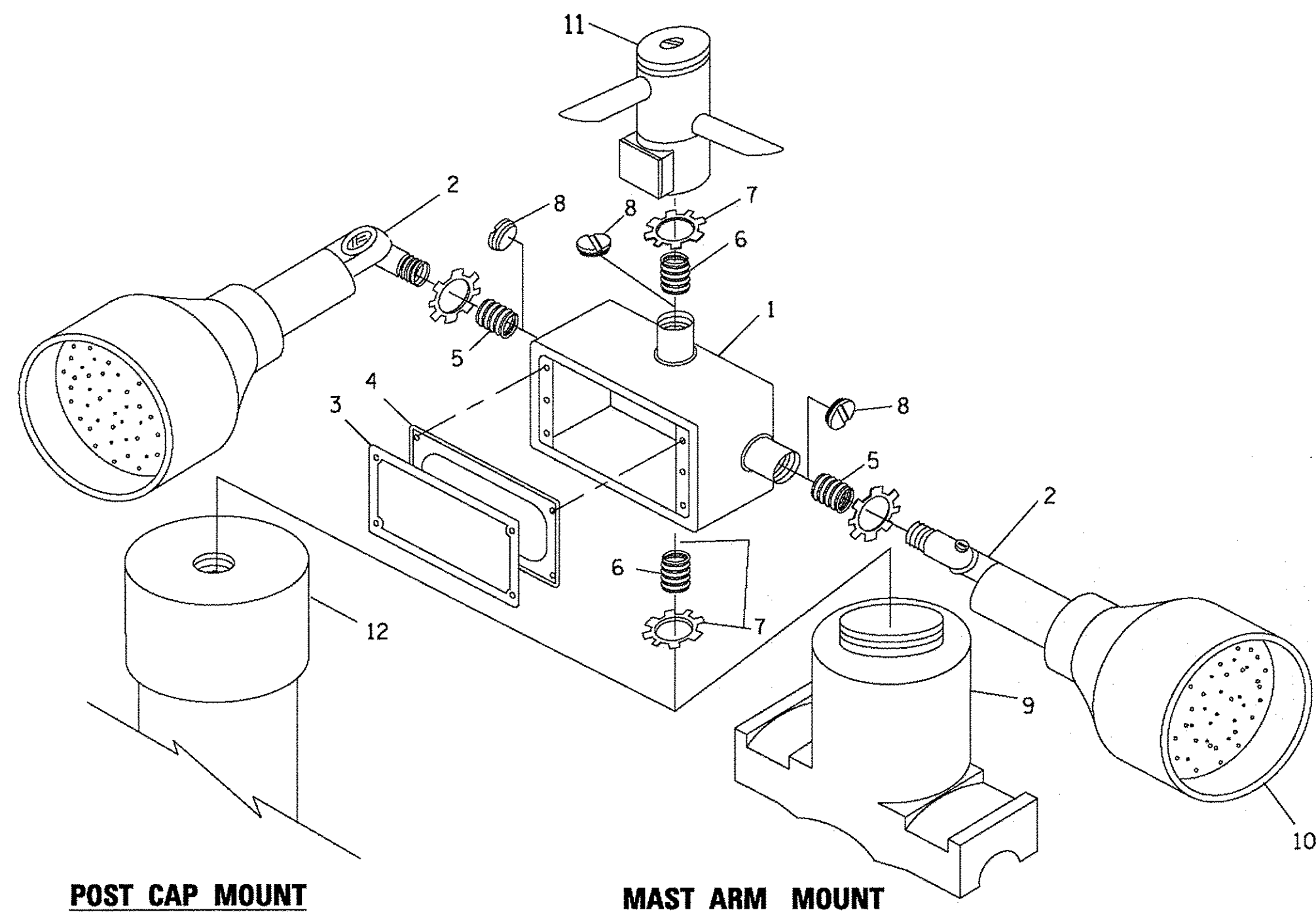
TS SHT NO. 5



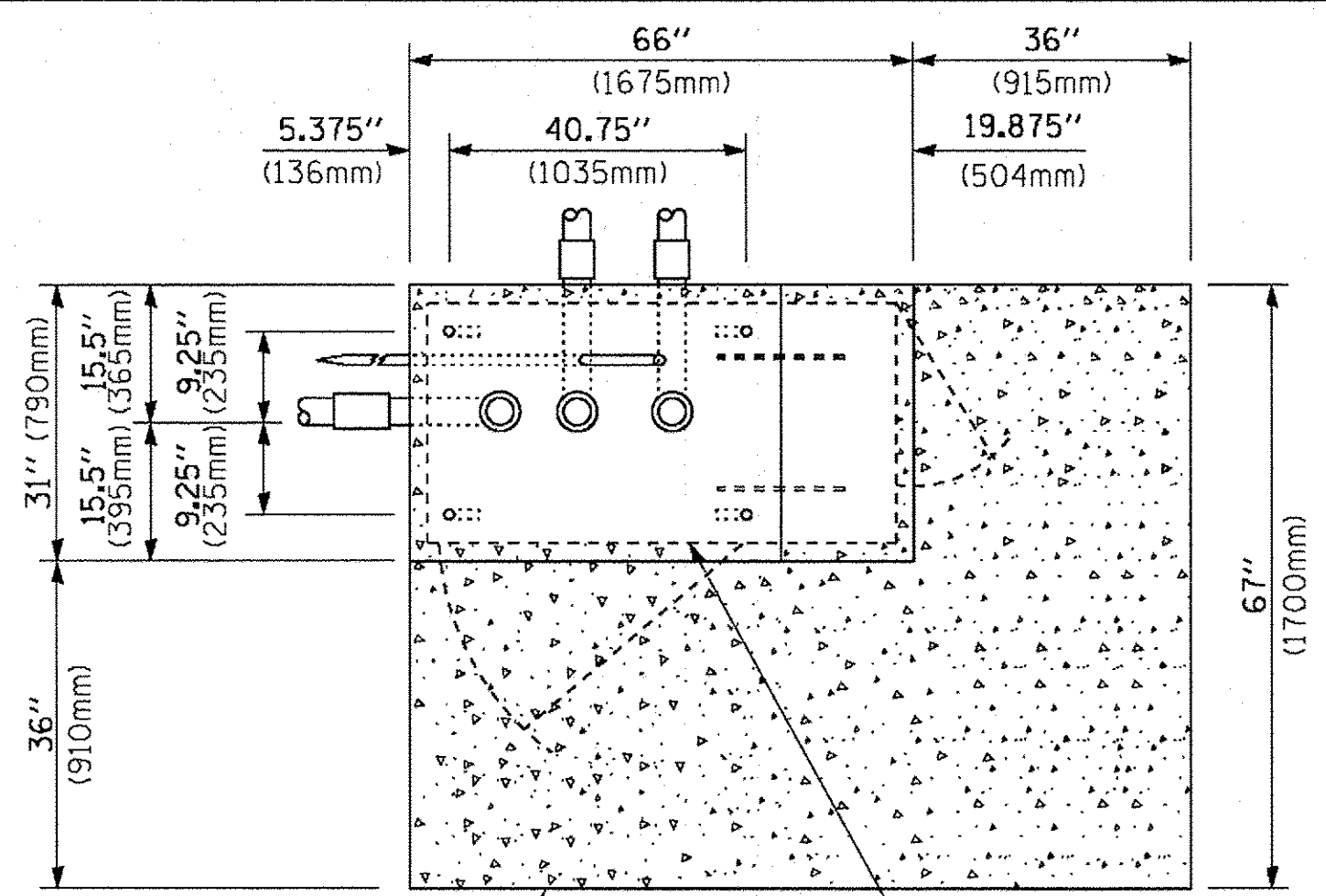
**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

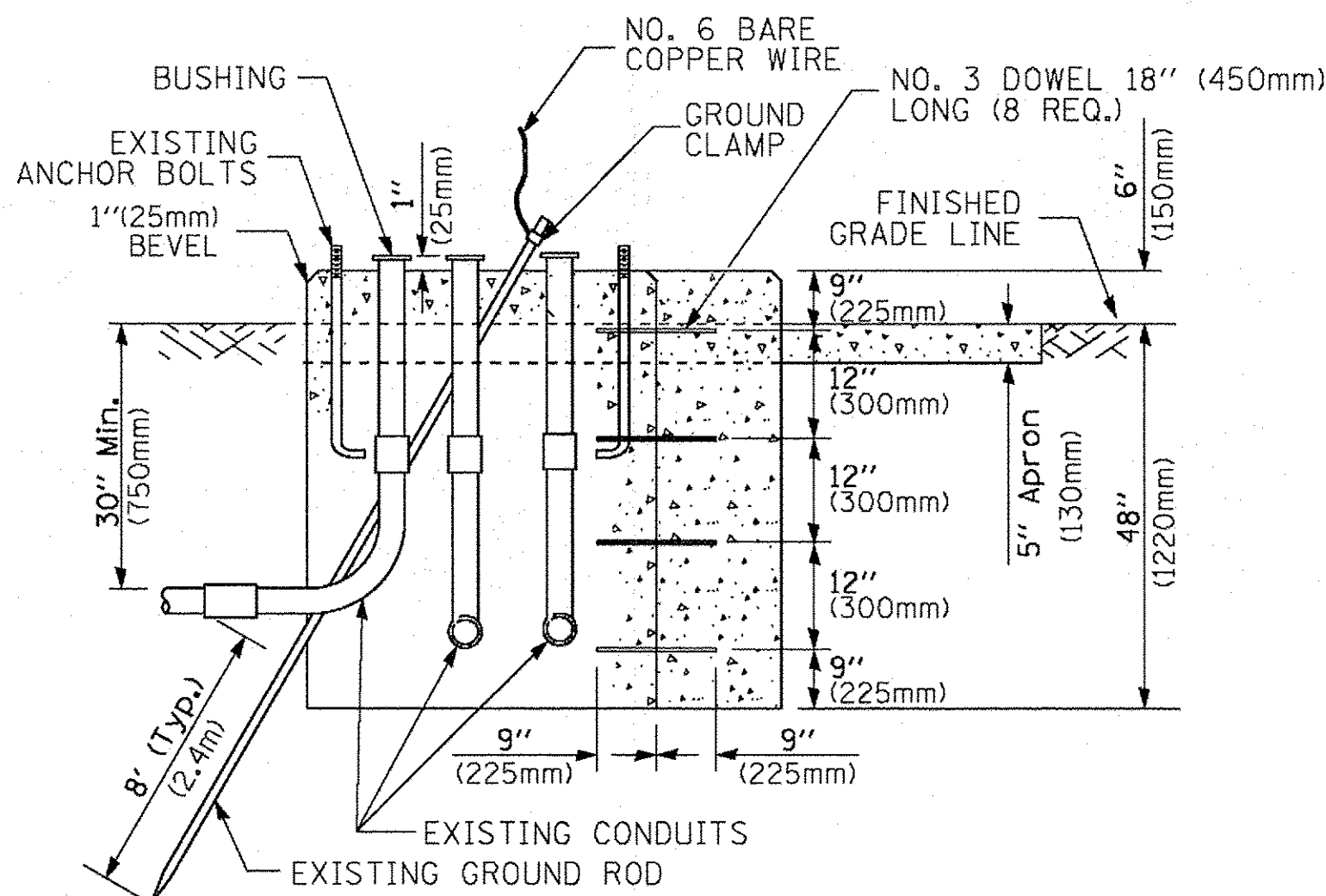
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



**TOP VIEW**  
(NOT TO SCALE)

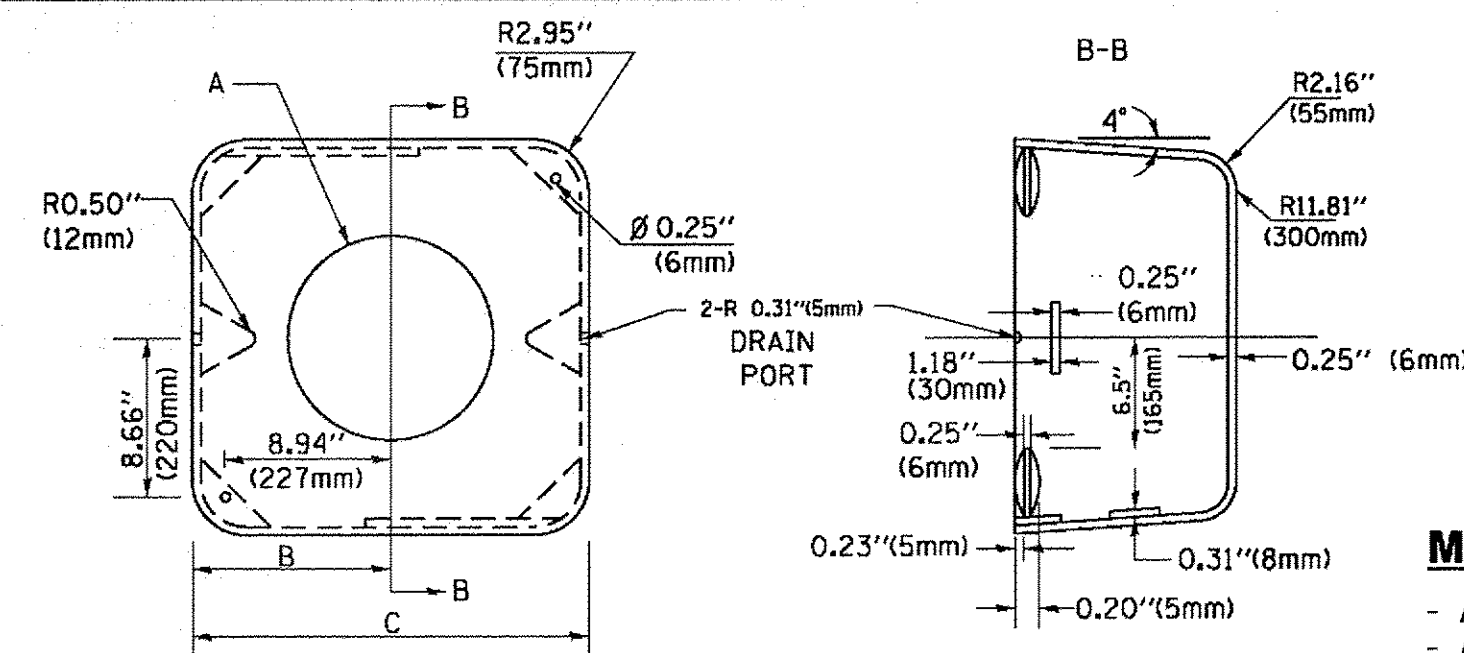


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

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

**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 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**MATERIAL:**

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

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

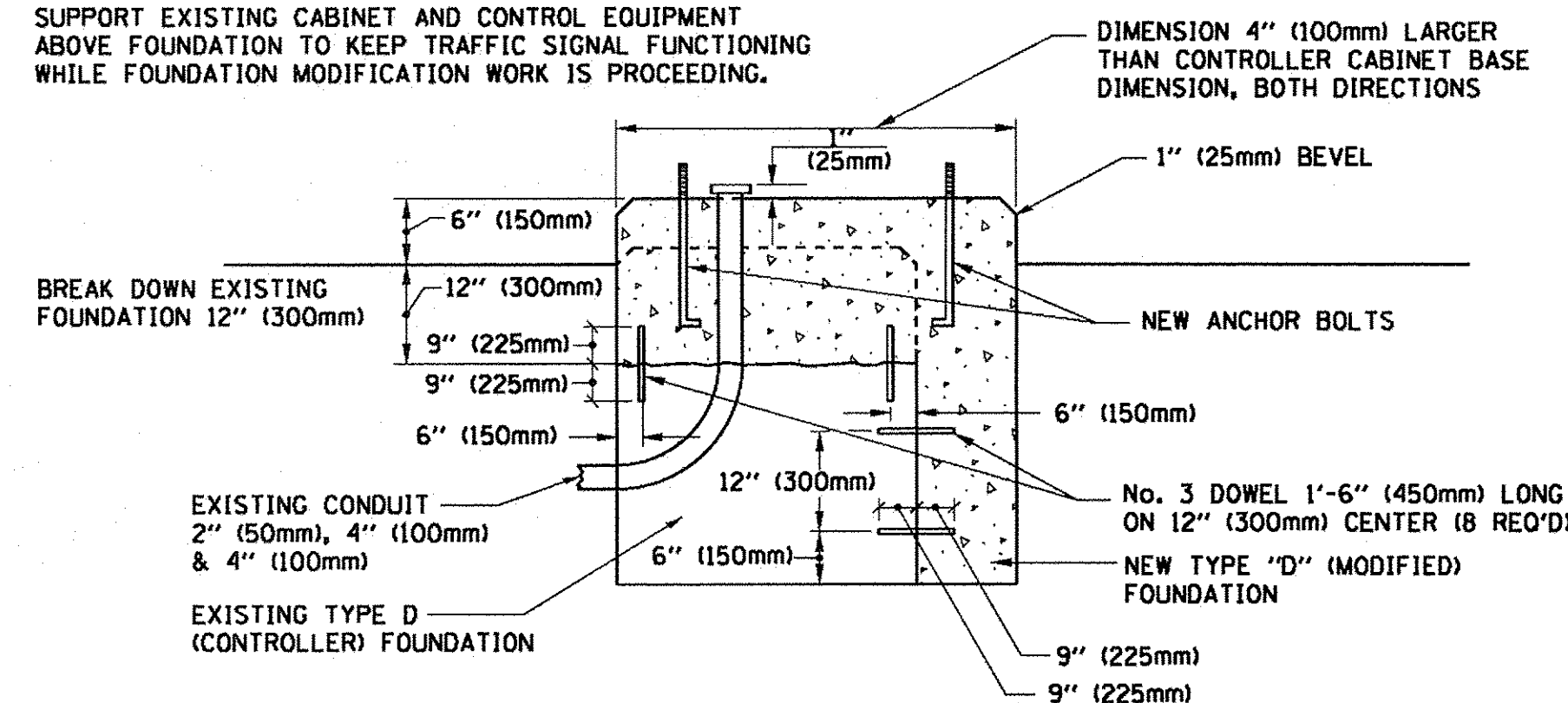
**SHROUD**

**NOTES:**

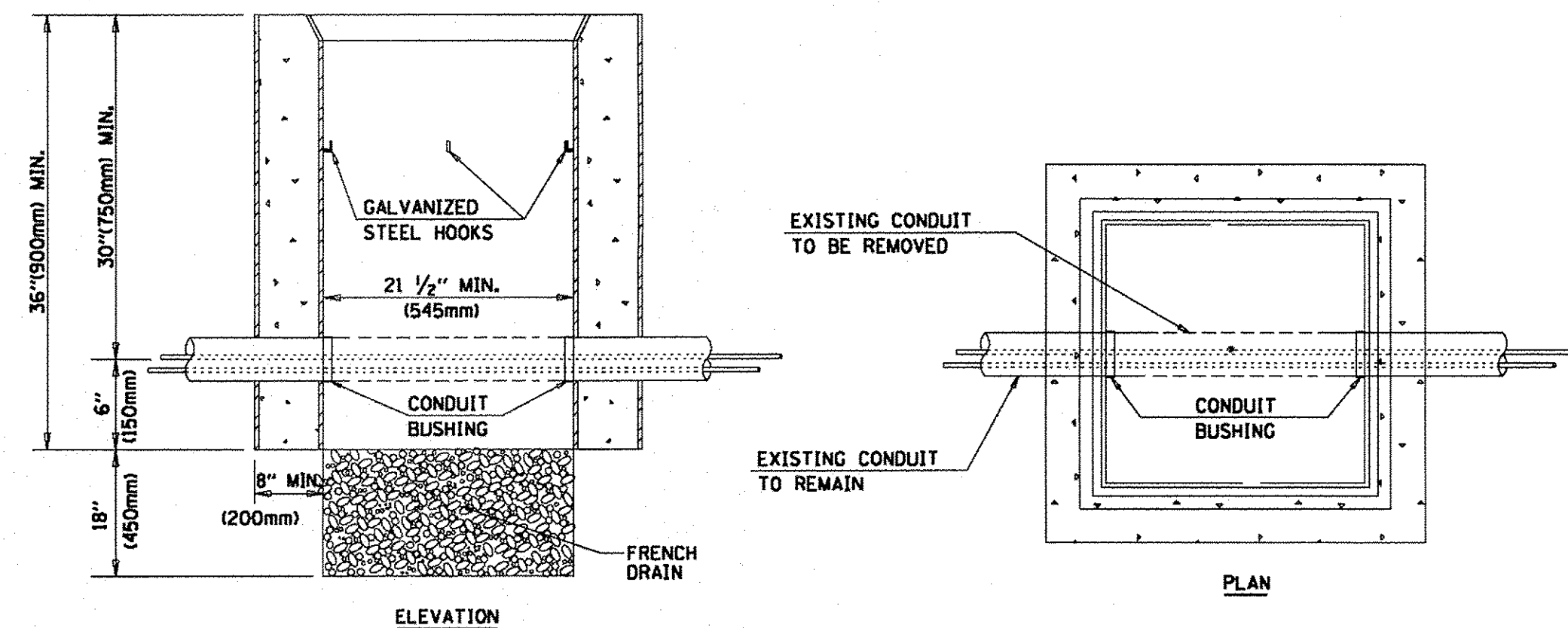
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

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



**MODIFY EXISTING TYPE "D" FOUNDATION**



**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

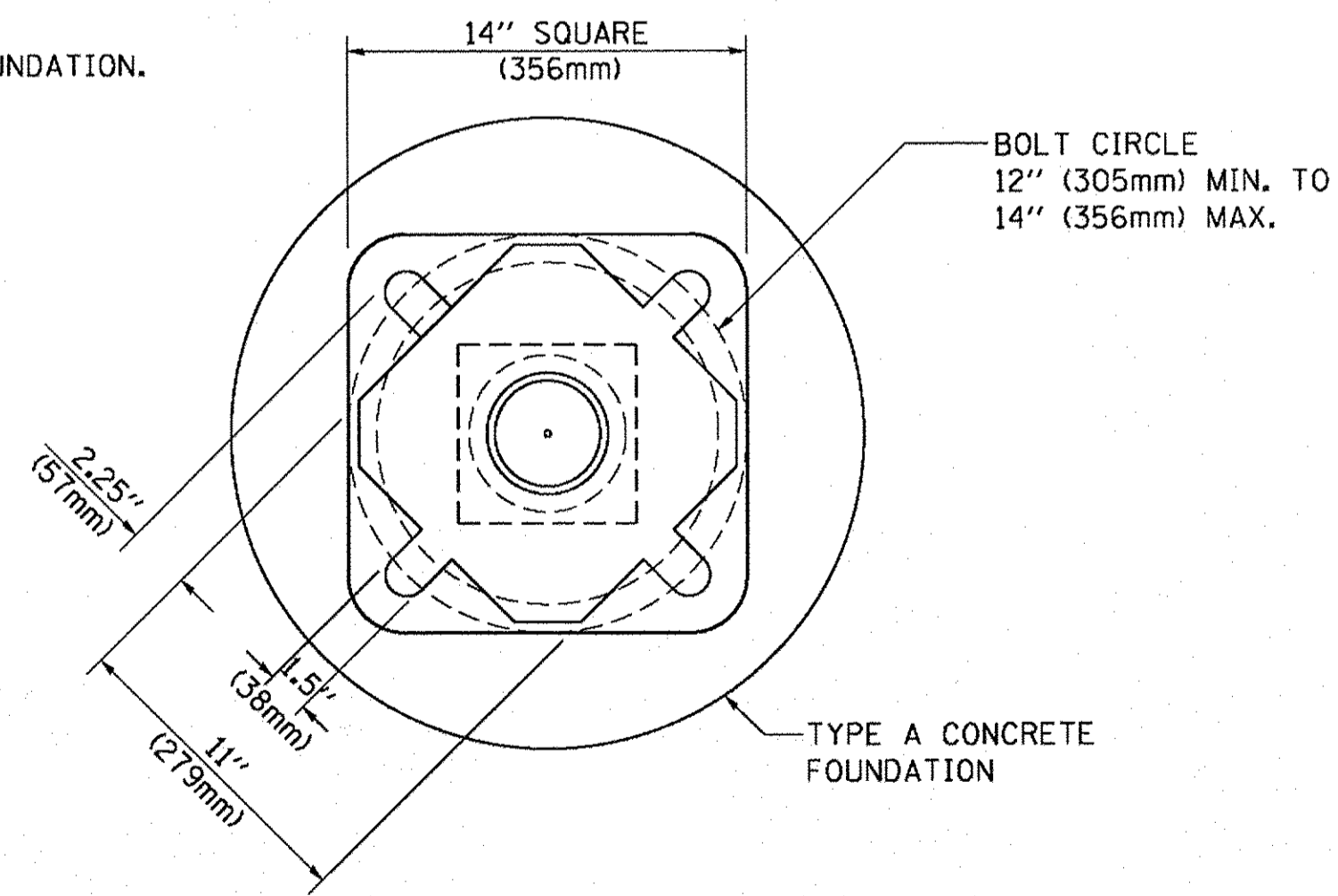
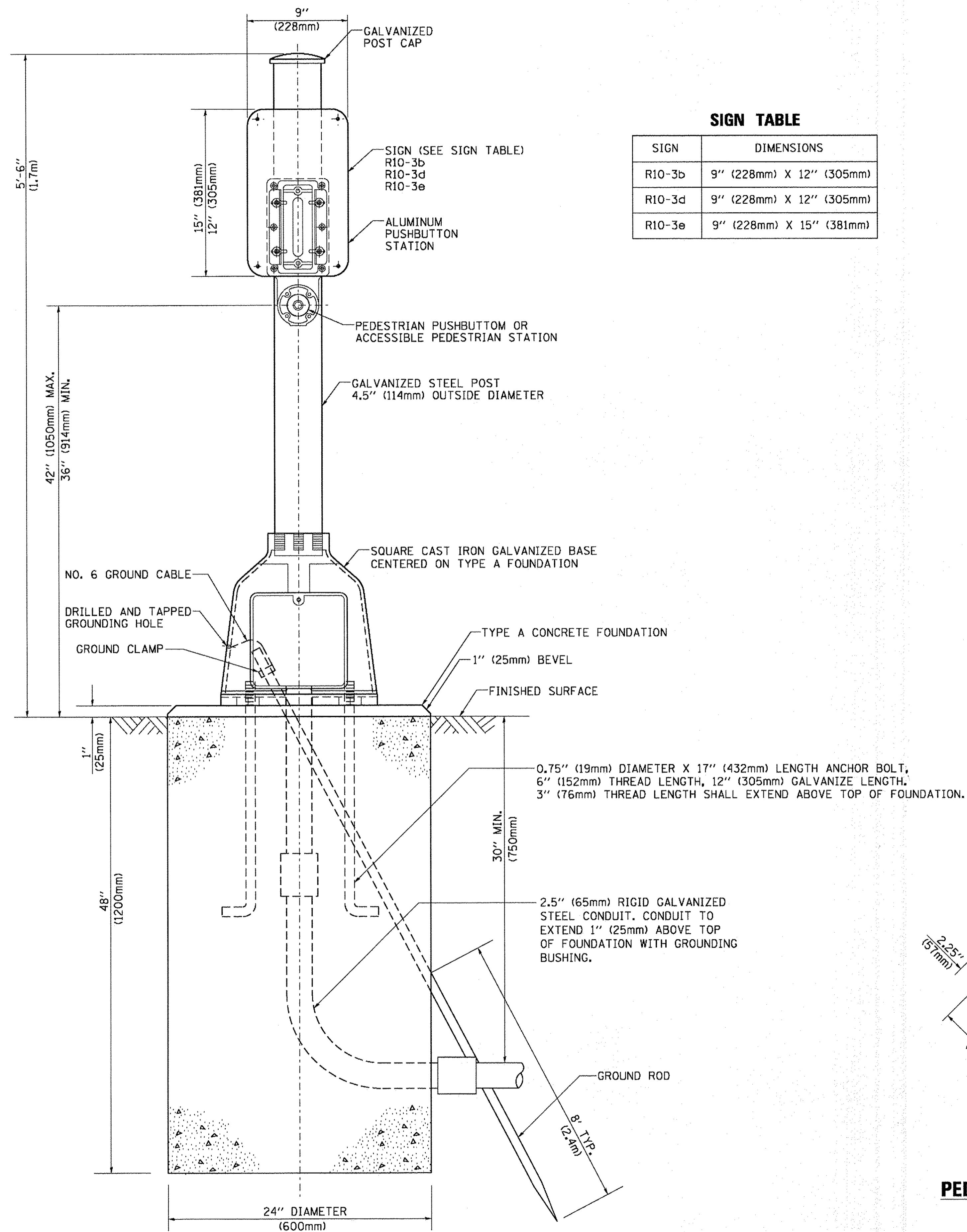
TS SHT NO. 6

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwrtdot\Footemj\d0108315\ts05.dgn	PLOT SCALE = 50.0000 " / in.	DRAWN - BCK	REVISED -			347	13-00112-00-LS	COOK	151	64
	PLOT DATE = 1/13/2014	CHECKED - DAD	REVISED -			<b>TS-05</b>		<b>CONTRACT NO. 61D26</b>		
		DATE - 10-28-09	REVISED -			SCALE: NONE		SHEET NO. 6 OF 7 SHEETS		STA. TO STA.
						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



**BOLT PATTERN**

**PEDESTRIAN PUSH BUTTON POST, TYPE A**

TS SHT NO. 7

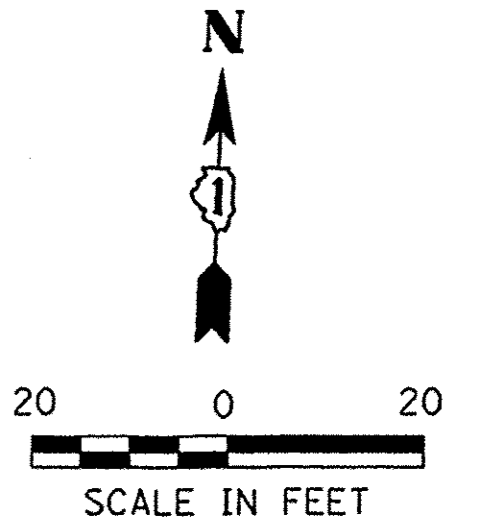
FILE NAME =	USER NAME = foatemj	DESIGNED - DAG	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pw_work\p1\p1dot\foatemj\d0208315\ts05.dgn	PLOT SCALE = 50.0000' / 1"	DRAWN - GND	REVISED -			347	13-00112-00-LS	COOK	151	65
PLOT DATE = 1/13/2014	DATE - 10/1/2012	CHECKED - DAD	REVISED -			<b>TS-05</b>		<b>CONTRACT NO. 61D26</b>		
		DATE - 10/1/2012	REVISED -			SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF FOREST PARK AND REDSPEED ILLINOIS, LLC PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF FOREST PARK  
517 DES PLAINES AVE.  
FOREST PARK, IL 60130

REDSPEED ILLINOIS, LLC  
400 EISENHOWER LANE NORTH  
LOMBARD, IL 60148  
(630) 317-5700

THE VILLAGE OF FOREST PARK OR REDSPEED ILLINOIS, LLC SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.



**NOTE:**

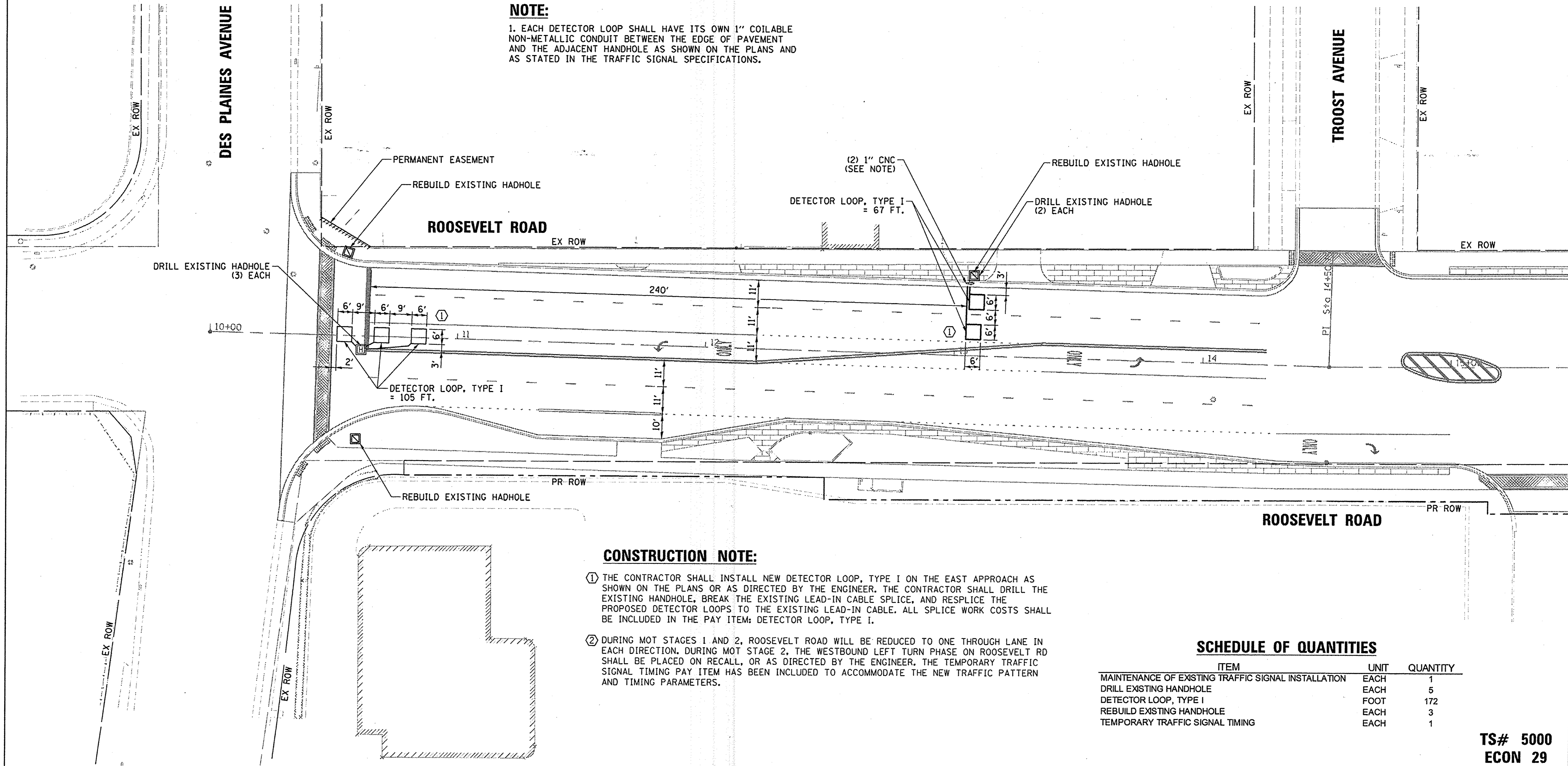
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

**CONSTRUCTION NOTE:**

- ① THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I ON THE EAST APPROACH AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I.
- ② DURING MOT STAGES 1 AND 2, ROOSEVELT ROAD WILL BE REDUCED TO ONE THROUGH LANE IN EACH DIRECTION. DURING MOT STAGE 2, THE WESTBOUND LEFT TURN PHASE ON ROOSEVELT RD SHALL BE PLACED ON RECALL, OR AS DIRECTED BY THE ENGINEER. THE TEMPORARY TRAFFIC SIGNAL TIMING PAY ITEM HAS BEEN INCLUDED TO ACCOMMODATE THE NEW TRAFFIC PATTERN AND TIMING PARAMETERS.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	5
DETECTOR LOOP, TYPE I	FOOT	172
REBUILD EXISTING HANDHOLE	EACH	3
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1



TS SHT NO. 8

TS# 5000  
ECON 29

FILE NAME =	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
N:\FORESTPARK\0223\BG046\Traffic\TS08.dgn	DET_DesPlaines.dgn	DRAWN -	REVISED -
default	PLOT SCALE = 20'	CHECKED - GMZ	REVISED -
	PLOT DATE = 12/14/2016	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT  
ROOSEVELT RD AT DES PLAINES AVENUE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	66
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	

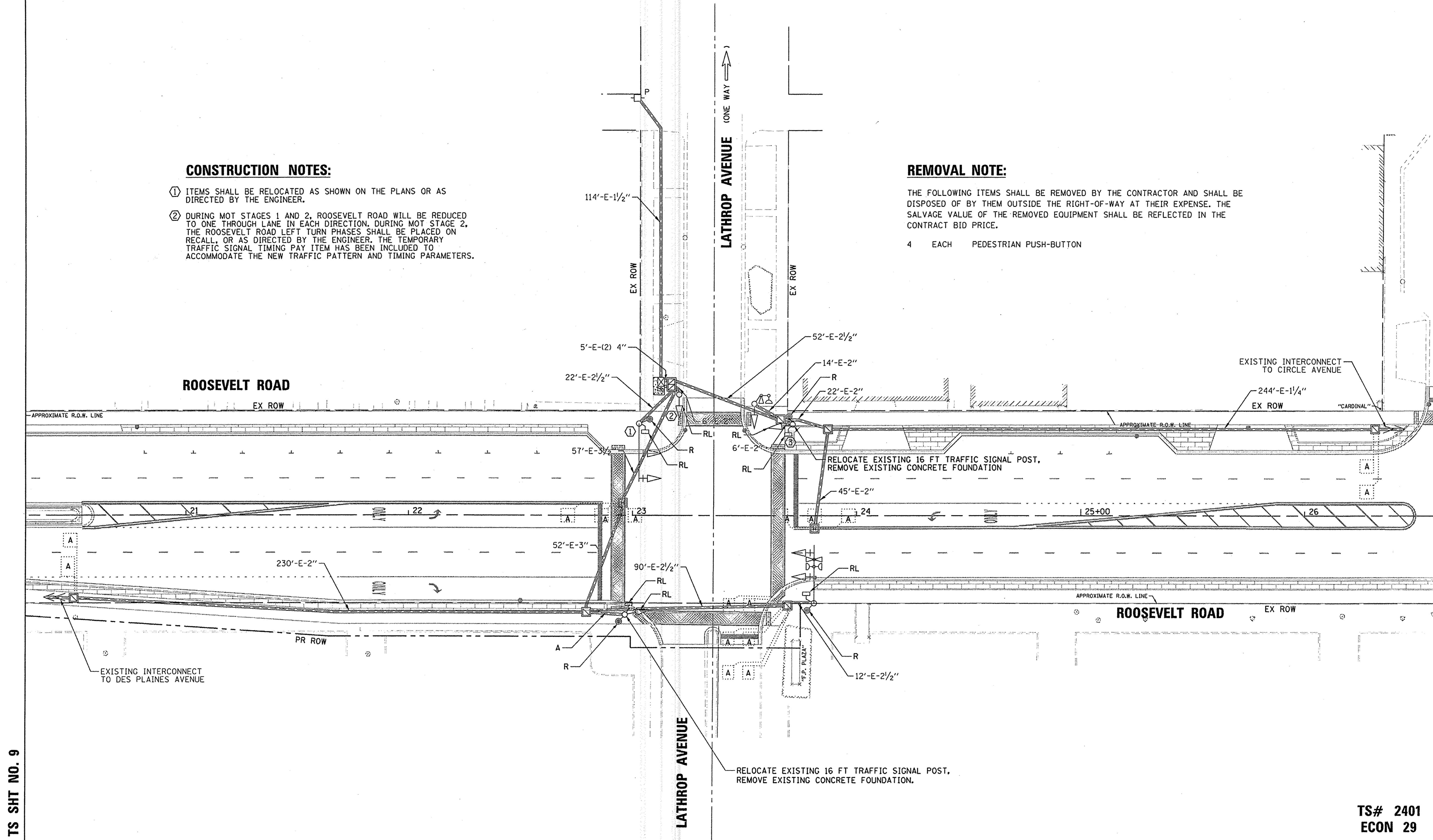
**CONSTRUCTION NOTES:**

- ① ITEMS SHALL BE RELOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ② DURING MOT STAGES 1 AND 2, ROOSEVELT ROAD WILL BE REDUCED TO ONE THROUGH LANE IN EACH DIRECTION. DURING MOT STAGE 2, THE ROOSEVELT ROAD LEFT TURN PHASES SHALL BE PLACED ON RECALL, OR AS DIRECTED BY THE ENGINEER. THE TEMPORARY TRAFFIC SIGNAL TIMING PAY ITEM HAS BEEN INCLUDED TO ACCOMMODATE THE NEW TRAFFIC PATTERN AND TIMING PARAMETERS.

**REMOVAL NOTE:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH PEDESTRIAN PUSH-BUTTON



TS SHT NO. 9

**TS# 2401  
ECON 29**

FILE NAME =	USER NAME = ejensen	DESIGNED - EAJ	REVISED -
N:\FORESTPARK\0023\BC046\Traffic\TS09.REM.Lathrop.dgn		DRAWN -	REVISED -
default	PLOT SCALE = 20'	CHECKED - GMZ	REVISED -
	PLOT DATE = 12/14/2016	DATE -	REVISED -

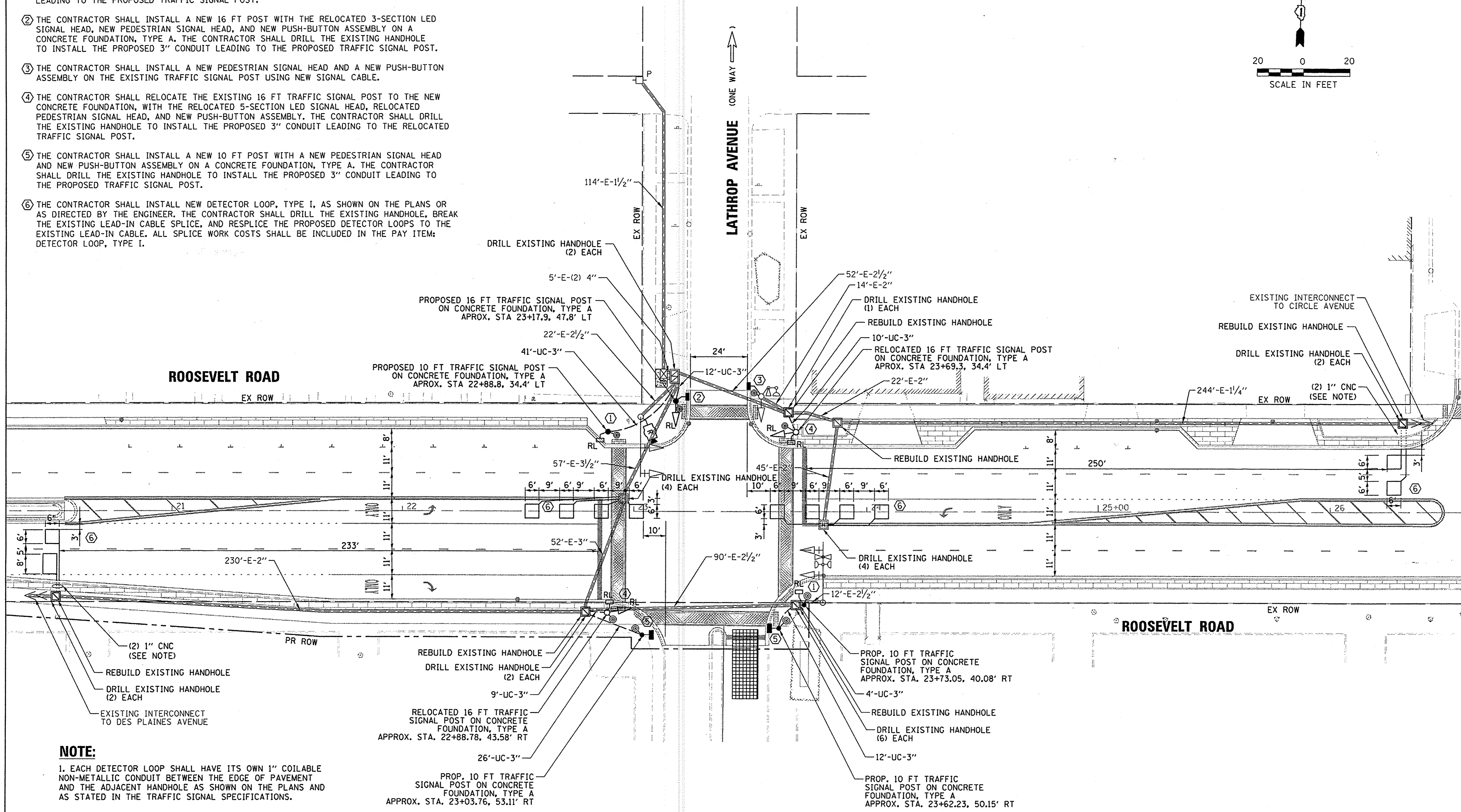
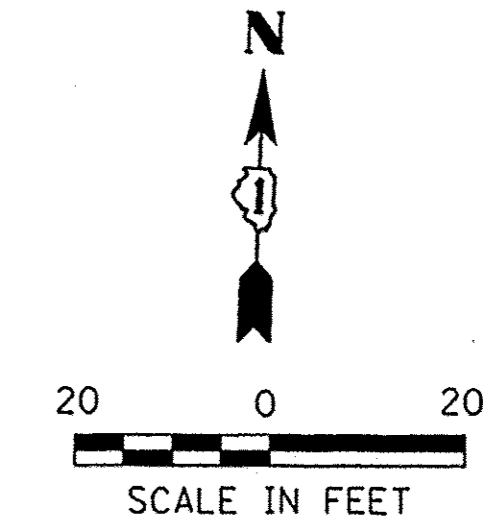
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REMOVAL AND RELOCATION PLAN  
ROOSEVELT RD AT LATHROP AVENUE**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	67
				CONTRACT NO. 61D26
[ILLINOIS] FED. AID PROJECT				

- ① THE CONTRACTOR SHALL INSTALL A NEW 10 FT POST WITH THE RELOCATED PEDESTRIAN SIGNAL HEAD AND NEW PUSH-BUTTON ASSEMBLY ON A CONCRETE FOUNDATION, TYPE A. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE TO INSTALL THE PROPOSED 3" CONDUIT LEADING TO THE PROPOSED TRAFFIC SIGNAL POST.
- ② THE CONTRACTOR SHALL INSTALL A NEW 16 FT POST WITH THE RELOCATED 3-SECTION LED SIGNAL HEAD, NEW PEDESTRIAN SIGNAL HEAD, AND NEW PUSH-BUTTON ASSEMBLY ON A CONCRETE FOUNDATION, TYPE A. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE TO INSTALL THE PROPOSED 3" CONDUIT LEADING TO THE PROPOSED TRAFFIC SIGNAL POST.
- ③ THE CONTRACTOR SHALL INSTALL A NEW PEDESTRIAN SIGNAL HEAD AND A NEW PUSH-BUTTON ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL POST USING NEW SIGNAL CABLE.
- ④ THE CONTRACTOR SHALL RELOCATE THE EXISTING 16 FT TRAFFIC SIGNAL POST TO THE NEW CONCRETE FOUNDATION, WITH THE RELOCATED 5-SECTION LED SIGNAL HEAD, RELOCATED PEDESTRIAN SIGNAL HEAD, AND NEW PUSH-BUTTON ASSEMBLY. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE TO INSTALL THE PROPOSED 3" CONDUIT LEADING TO THE RELOCATED TRAFFIC SIGNAL POST.
- ⑤ THE CONTRACTOR SHALL INSTALL A NEW 10 FT POST WITH A NEW PEDESTRIAN SIGNAL HEAD AND NEW PUSH-BUTTON ASSEMBLY ON A CONCRETE FOUNDATION, TYPE A. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE TO INSTALL THE PROPOSED 3" CONDUIT LEADING TO THE PROPOSED TRAFFIC SIGNAL POST.
- ⑥ THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I.



**NOTE:**

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

TS SHT NO. 10

**TS# 2401  
ECON 29**

FILE NAME =	USER NAME = ejansen	DESIGNED - EAJ	REVISED -
N:\FORESTPARK\0223\BG046\Traffic\TS10.dgn	DD.Lathrop.dgn	DRAWN -	REVISED -
default	PLOT SCALE = 28'	CHECKED - GMZ	REVISED -
	PLOT DATE = 12/14/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

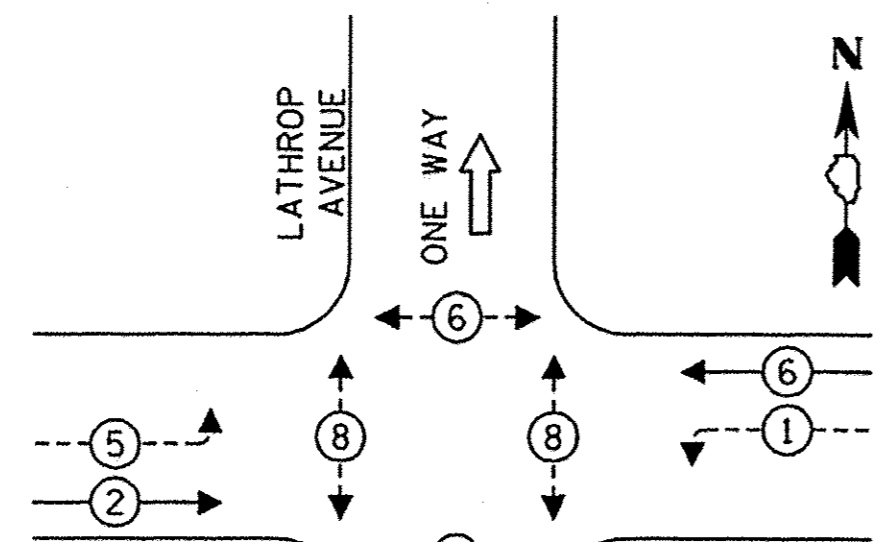
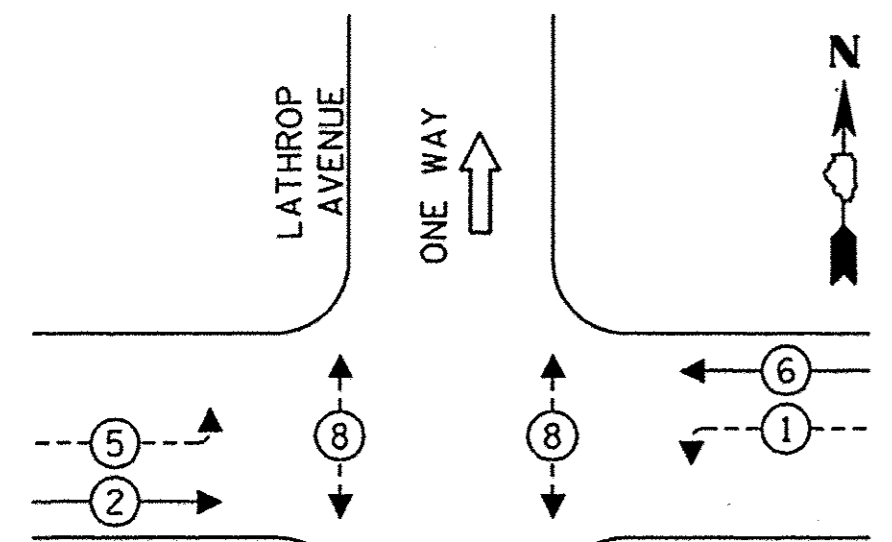
**TRAFFIC SIGNAL MODIFICATION PLAN  
ROOSEVELT RD AT LATHROP AVENUE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	68
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	

**EXISTING CONTROLLER SEQUENCE**

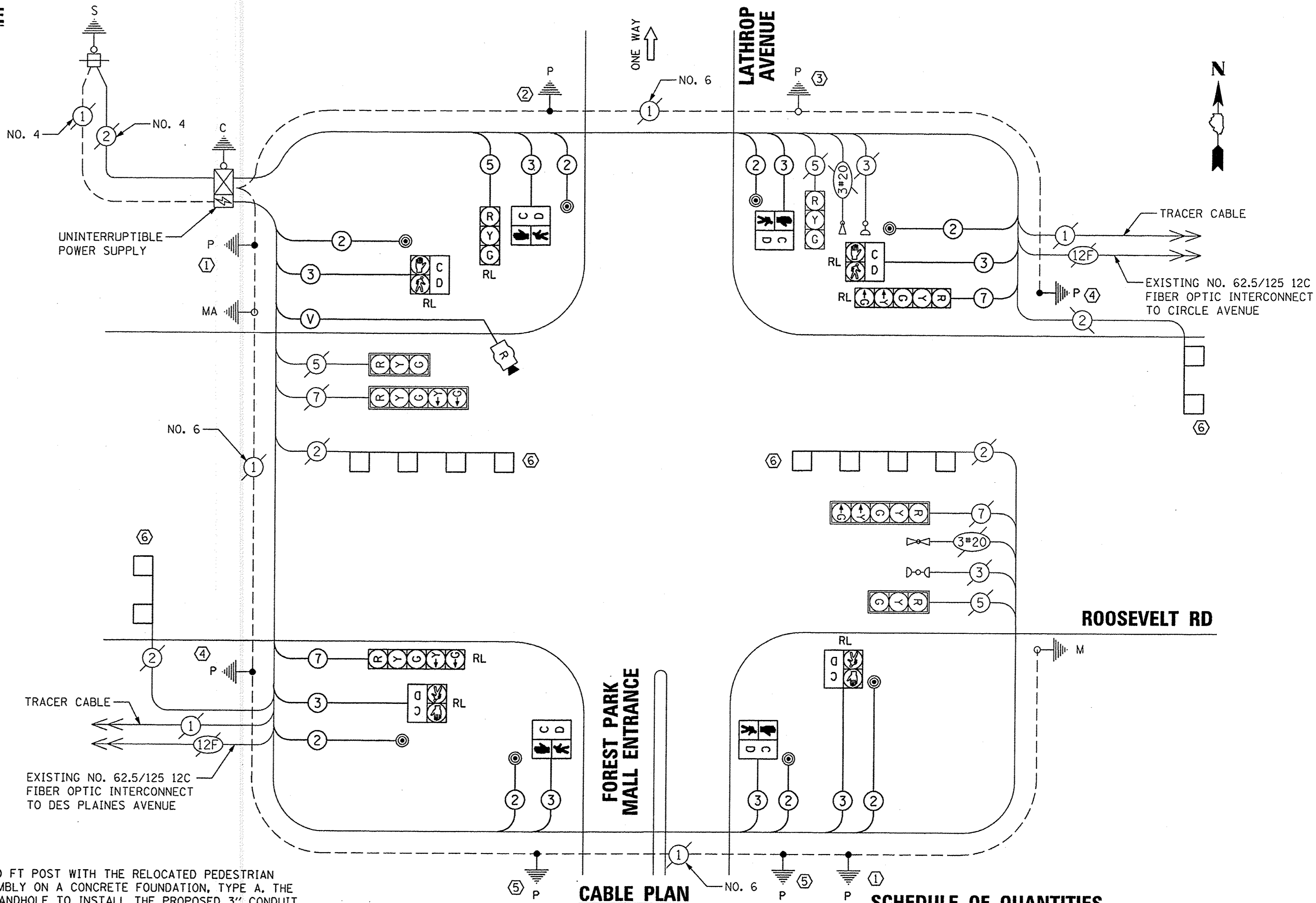
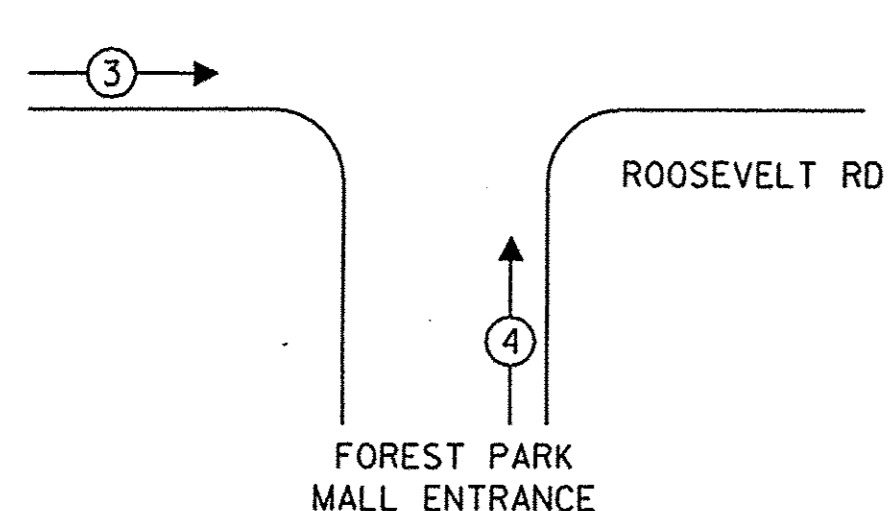
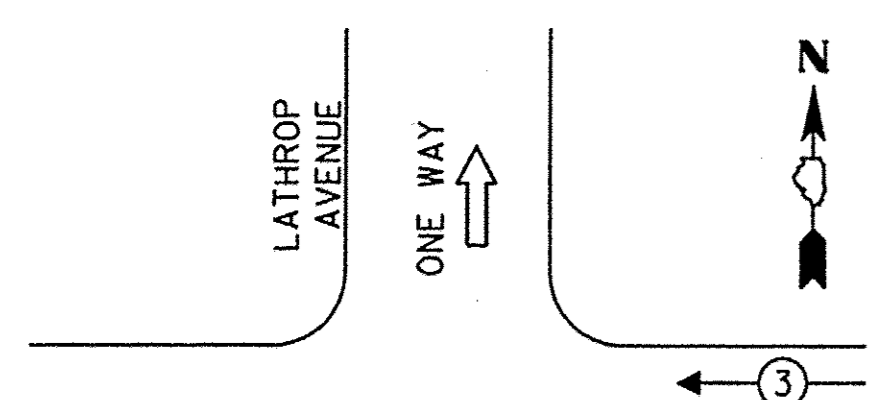
**PROPOSED CONTROLLER SEQUENCE**



**LEGEND:**

- ←\*→ PROTECTED PHASE
- ←\*---\*→ PROTECTED/PERMITTED PHASE
- ←\*→ PEDESTRIAN PHASE
- ←\*OL→ OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**CABLE PLAN**  
(NOT TO SCALE)

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	105
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1197
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1253
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	53
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	280
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	177
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	4
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	28
DRILL EXISTING HANDHOLE	EACH	23
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
DETECTOR LOOP, TYPE I	FOOT	408
PEDESTRIAN PUSH-BUTTON	EACH	8
RELOCATE EXISTING SIGNAL HEAD	EACH	3
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	4
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1783
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, STOP BAR	EACH	1

**CONSTRUCTION NOTE:**

- 1 THE CONTRACTOR SHALL INSTALL A NEW 10 FT POST WITH THE RELOCATED PEDESTRIAN SIGNAL HEAD AND NEW PUSH-BUTTON ASSEMBLY ON A CONCRETE FOUNDATION, TYPE A. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE TO INSTALL THE PROPOSED 3" CONDUIT LEADING TO THE PROPOSED TRAFFIC SIGNAL POST.
- 2 THE CONTRACTOR SHALL INSTALL A NEW 16 FT POST WITH THE RELOCATED 3-SECTION LED SIGNAL HEAD, NEW PEDESTRIAN SIGNAL HEAD, AND NEW PUSH-BUTTON ASSEMBLY ON A CONCRETE FOUNDATION, TYPE A. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE TO INSTALL THE PROPOSED 3" CONDUIT LEADING TO THE PROPOSED TRAFFIC SIGNAL POST.
- 3 THE CONTRACTOR SHALL INSTALL A NEW PEDESTRIAN SIGNAL HEAD AND A NEW PUSH-BUTTON ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL POST USING NEW SIGNAL CABLE.
- 4 THE CONTRACTOR SHALL RELOCATE THE EXISTING 16 FT TRAFFIC SIGNAL POST TO THE NEW CONCRETE FOUNDATION, WITH THE RELOCATED 5-SECTION LED SIGNAL HEAD, RELOCATED PEDESTRIAN SIGNAL HEAD, AND NEW PUSH-BUTTON ASSEMBLY. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE TO INSTALL THE PROPOSED 3" CONDUIT LEADING TO THE RELOCATED TRAFFIC SIGNAL POST.
- 5 THE CONTRACTOR SHALL INSTALL A NEW 10 FT POST WITH A NEW PEDESTRIAN SIGNAL HEAD AND NEW PUSH-BUTTON ASSEMBLY ON A CONCRETE FOUNDATION, TYPE A. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE TO INSTALL THE PROPOSED 3" CONDUIT LEADING TO THE PROPOSED TRAFFIC SIGNAL POST.
- 6 THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I.

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	8	11	50	44.0
(YELLOW)	8	20	5	8.0
(GREEN)	8	12	45	43.2
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
TOTAL =				388.2

ENERGY COSTS TO:  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 W CENTER COURT  
SCHAUMBURG, IL 60196  
ENERGY SUPPLY: CONTACT: NEW BUSINESS  
PHONE: 866-639-3532  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: ---

TS SHT NO. 11

FILE NAME =	USER NAME = ejanson	DESIGNED - EAJ	REVISED -
N:\FORESTPARK\0223\B0246\TraffSig\TS11.dgn	BL.Lathrop.dgn	DRAWN -	REVISED -
default	PLOT SCALE = 20'	CHECKED - GMZ	REVISED -
	PLOT DATE = 12/14/2016	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION  
DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE  
ROOSEVELT ROAD AT LATHROP AVENUE**

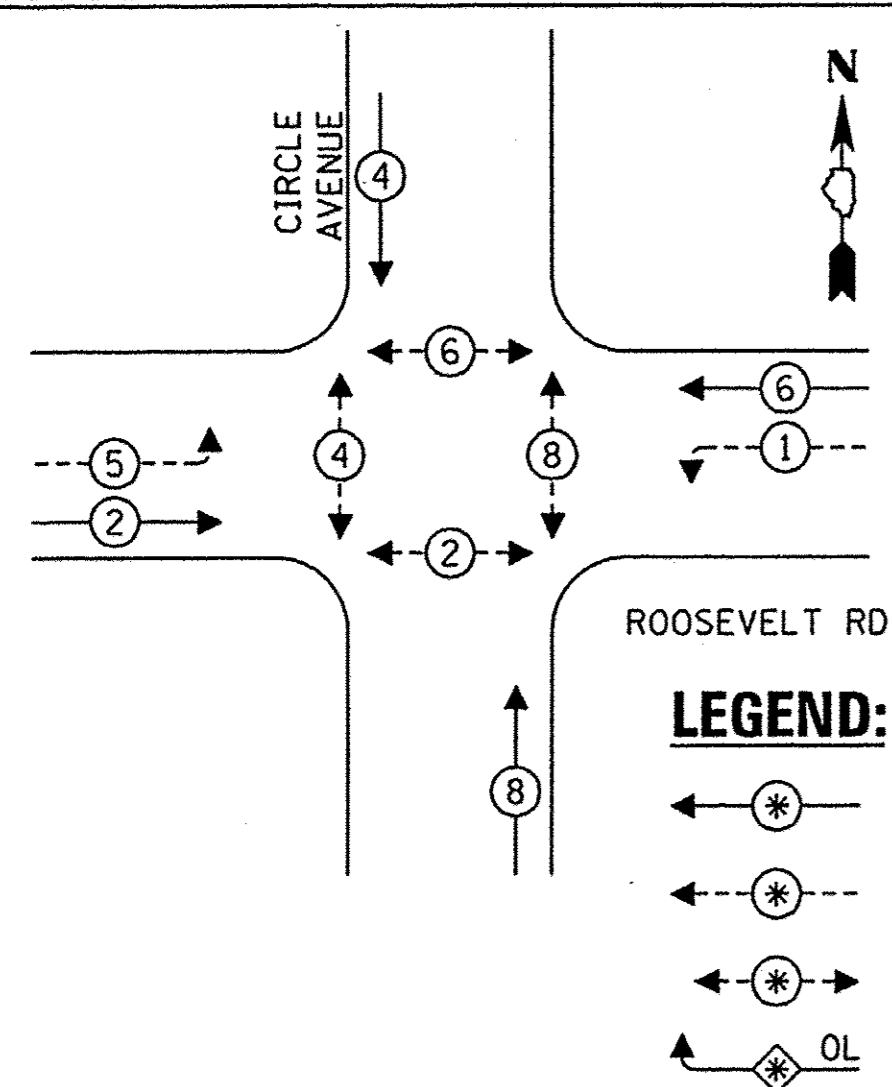
SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 347	SECTION 13-0012-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 69
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				

**TS# 2401  
ECON 29**



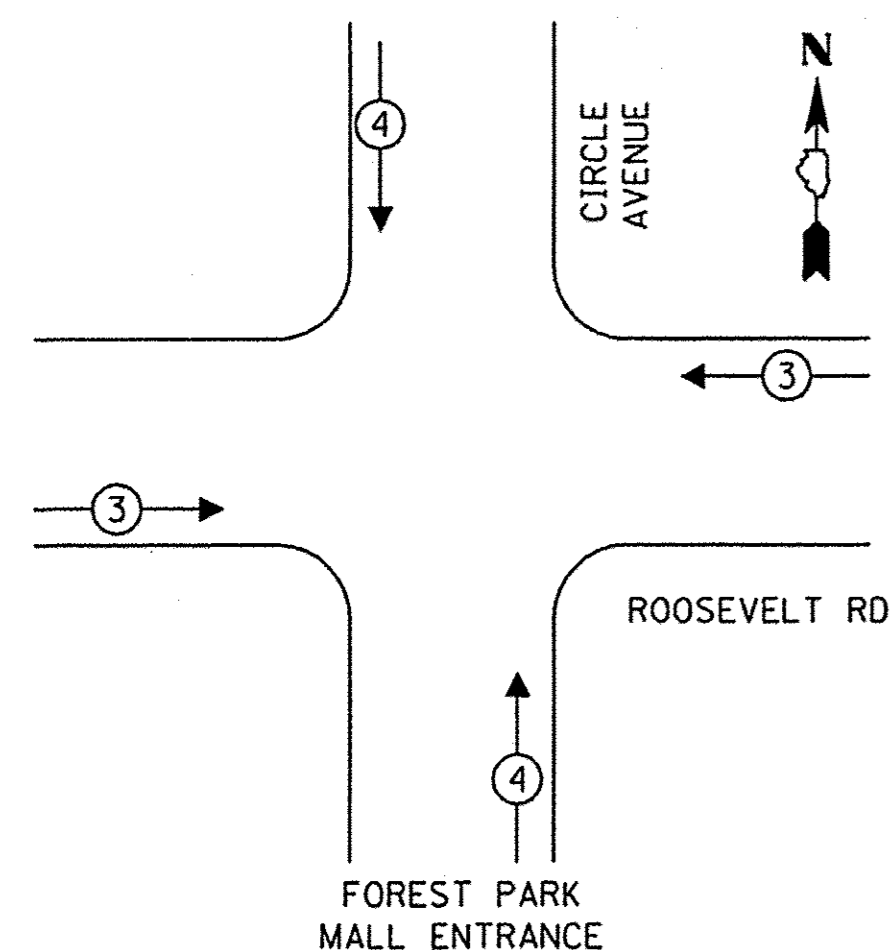
**EXISTING CONTROLLER SEQUENCE**



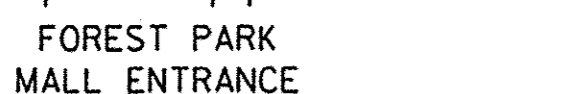
**LEGEND:**

- ←\*→ PROTECTED PHASE
- ←\*--- PROTECTED/PERMITTED PHASE
- ←\*→ PEDESTRIAN PHASE
- OL OVERLAP

**EXISTING PHASE DESIGNATION DIAGRAM**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



SEE INTERCONNECT PLAN FOR MORE DETAILS

TRACER CABLE

EXISTING NO. 62.5/125 12C FIBER OPTIC INTERCONNECT TO LATHROP AVENUE

UNINTERRUPTIBLE POWER SUPPLY

**CABLE PLAN**  
(NOT TO SCALE)

**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL INSTALL A NEW PUSH-BUTTON ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL POST USING PROPOSED SIGNAL CABLE.
- ② THE CONTRACTOR SHALL INSTALL A NEW PUSH-BUTTON ASSEMBLY ON THE EXISTING MAST ARM POLE USING PROPOSED SIGNAL CABLE.
- ③ THE EXISTING PUSH-BUTTON SHALL BE REMOVED AND REPLACED WITH A NEW PUSH-BUTTON ASSEMBLY, UTILIZING THE EXISTING SIGNAL CABLE. THE CONTRACTOR SHALL PROGRAM THE PROPOSED PUSH-BUTTONS TO CALL INDIVIDUAL PEDESTRIAN PHASES, ELIMINATING THE EXISTING DUAL CALL CONFIGURATION. THE COST TO ELIMINATE THE EXISTING DUAL CALL CONFIGURATION SHALL BE PAID FOR WITH THE PAY ITEM: MODIFY EXISTING CONTROLLER CABINET.
- ④ THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I.
- ⑤ DURING MOT STAGES 1 AND 2, ROOSEVELT ROAD WILL BE REDUCED TO ONE THROUGH LANE IN EACH DIRECTION. DURING MOT STAGE 2, THE ROOSEVELT ROAD LEFT TURN PHASES SHALL BE PLACED ON RECALL, OR AS DIRECTED BY THE ENGINEER. THE TEMPORARY TRAFFIC SIGNAL TIMING PAY ITEM HAS BEEN INCLUDED TO ACCOMMODATE THE NEW TRAFFIC PATTERN AND TIMING PARAMETERS.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	721
DRILL EXISTING HANDHOLE	EACH	13
DETECTOR LOOP, TYPE I	FOOT	461
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	2
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

**TS# 13700**  
**ECON 29**

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	11	50	55.0
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
TOTAL =				412.0

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 W CENTER COURT  
SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: NEW BUSINESS  
PHONE: (866) 639-3532  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: ---

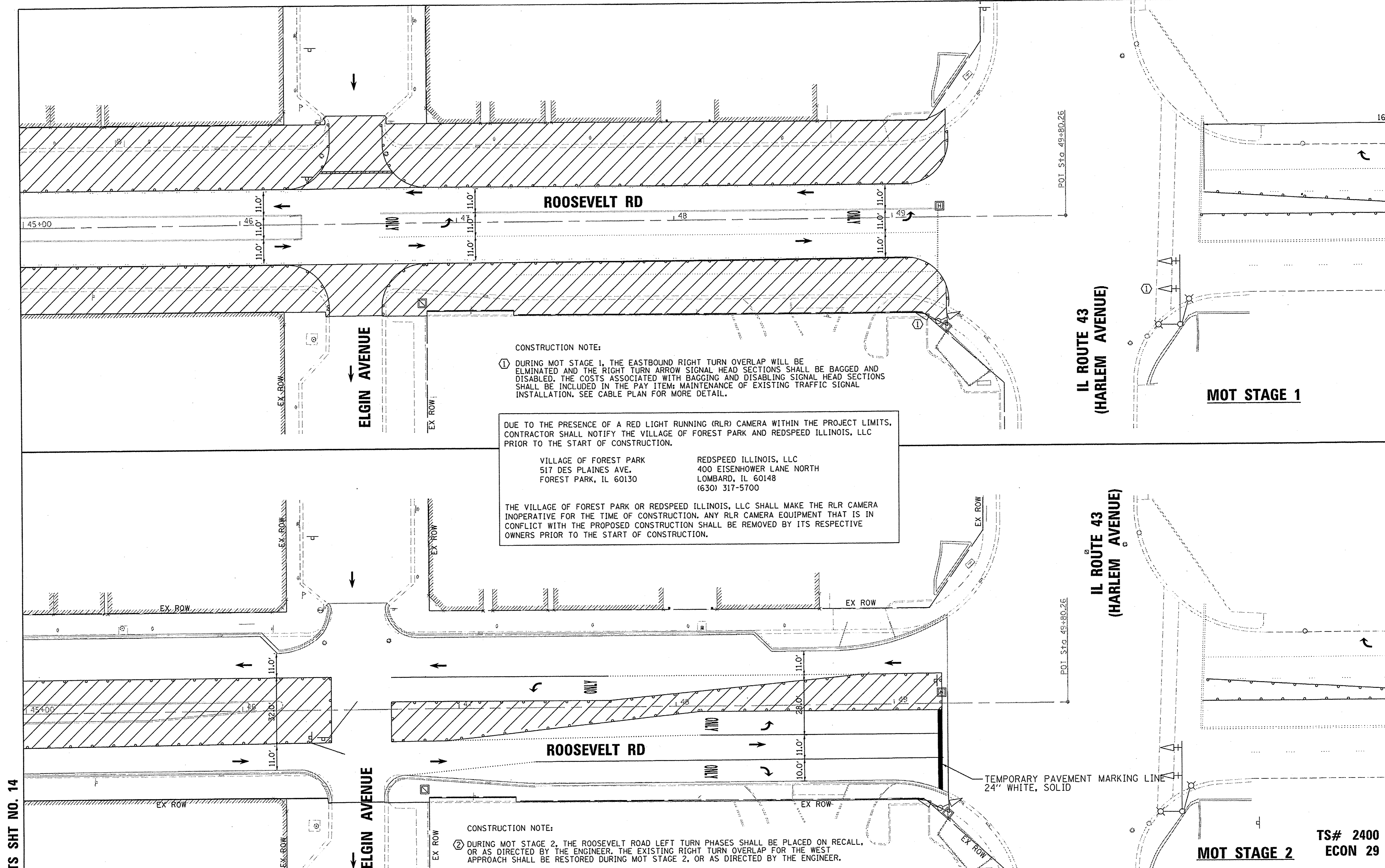
FILE NAME =	USER NAME = ojonson	DESIGNED - EAJ	REVISED -
N:\FORESTPARK\0223\B0046\Traffic\TS13_048_Circle.dgn		DRAWN -	REVISED -
		CHECKED - GMZ	REVISED -
default		DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE**  
**ROOSEVELT ROAD AT CIRCLE AVENUE**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	71
CONTRACT NO. 61D26				
ILLINOIS FED. AID PROJECT				

TS SHT NO. 13



POI Sta. 49+80.26

POI Sta. 45+80.26

**CONSTRUCTION NOTE:**  
 ① DURING MOT STAGE 1, THE EASTBOUND RIGHT TURN OVERLAP WILL BE ELIMINATED AND THE RIGHT TURN ARROW SIGNAL HEAD SECTIONS SHALL BE BAGGED AND DISABLED. THE COSTS ASSOCIATED WITH BAGGING AND DISABLING SIGNAL HEAD SECTIONS SHALL BE INCLUDED IN THE PAY ITEM: MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION. SEE CABLE PLAN FOR MORE DETAIL.

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF FOREST PARK AND REDSPEED ILLINOIS, LLC PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF FOREST PARK  
 517 DES PLAINES AVE.  
 FOREST PARK, IL 60130

REDSPEED ILLINOIS, LLC  
 400 EISENHOWER LANE NORTH  
 LOMBARD, IL 60148  
 (630) 317-5700

THE VILLAGE OF FOREST PARK OR REDSPEED ILLINOIS, LLC SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

**CONSTRUCTION NOTE:**  
 ② DURING MOT STAGE 2, THE ROOSEVELT ROAD LEFT TURN PHASES SHALL BE PLACED ON RECALL, OR AS DIRECTED BY THE ENGINEER. THE EXISTING RIGHT TURN OVERLAP FOR THE WEST APPROACH SHALL BE RESTORED DURING MOT STAGE 2, OR AS DIRECTED BY THE ENGINEER.

IL ROUTE 43  
(HARLEM AVENUE)

IL ROUTE 43  
(HARLEM AVENUE)

**MOT STAGE 1**

**MOT STAGE 2**

TEMPORARY PAVEMENT MARKING LINE  
 24" WHITE, SOLID

TS SHT NO. 14

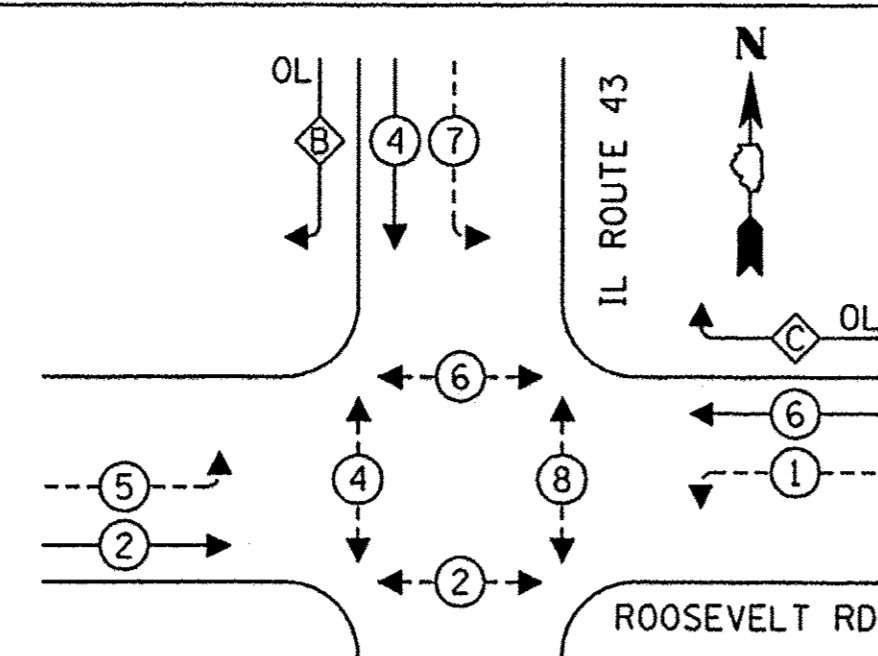
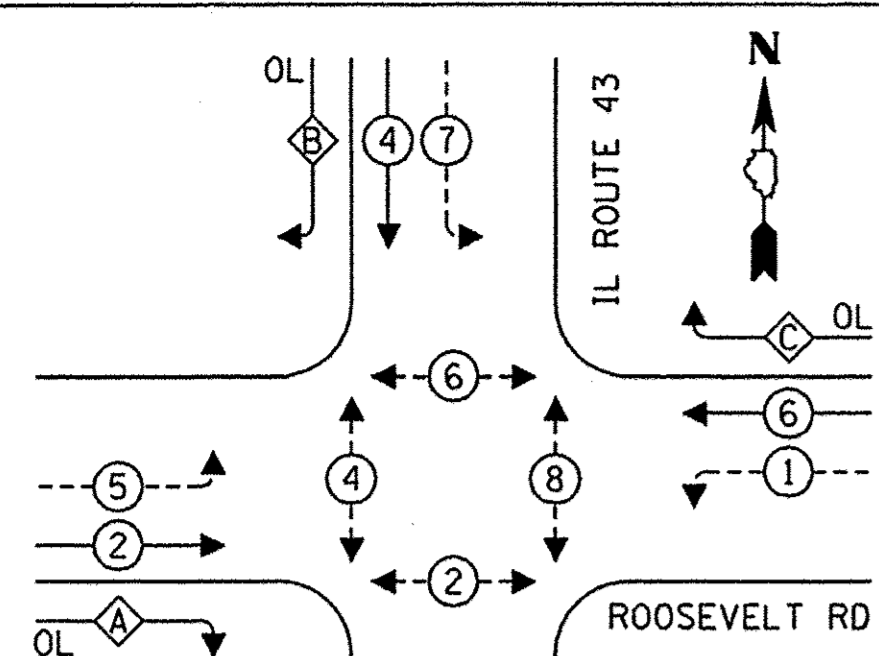
TS# 2400  
 ECON 29

FILE NAME =	USER NAME = ejensen	DESIGNED - EAJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MOT STAGES 1 AND 2 ROOSEVELT ROAD AND IL ROUTE 43 (HARLEM AVENUE)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\FORESTPARK\0823\80846\Traffic\TS14_NOT_Harlem.dgn	NOT_Harlem.dgn	DRAWN -	REVISED -			347	13-00112-00-LS	COOK	151	72	
PLOT SCALE = 28'		CHECKED - GMZ	REVISED -			CONTRACT NO. 61D26					
PLOT DATE = 12/14/2016		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
default				SCALE: 1" = 20'	SHEET OF SHEETS	STA. TO STA.					



**EXISTING CONTROLLER SEQUENCE**

**TEMPORARY CONTROLLER SEQUENCE**



**LEGEND:**  
 \* - PROTECTED PHASE  
 \* - PROTECTED/PERMITTED PHASE  
 \* - PEDESTRIAN PHASE  
 OL - OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

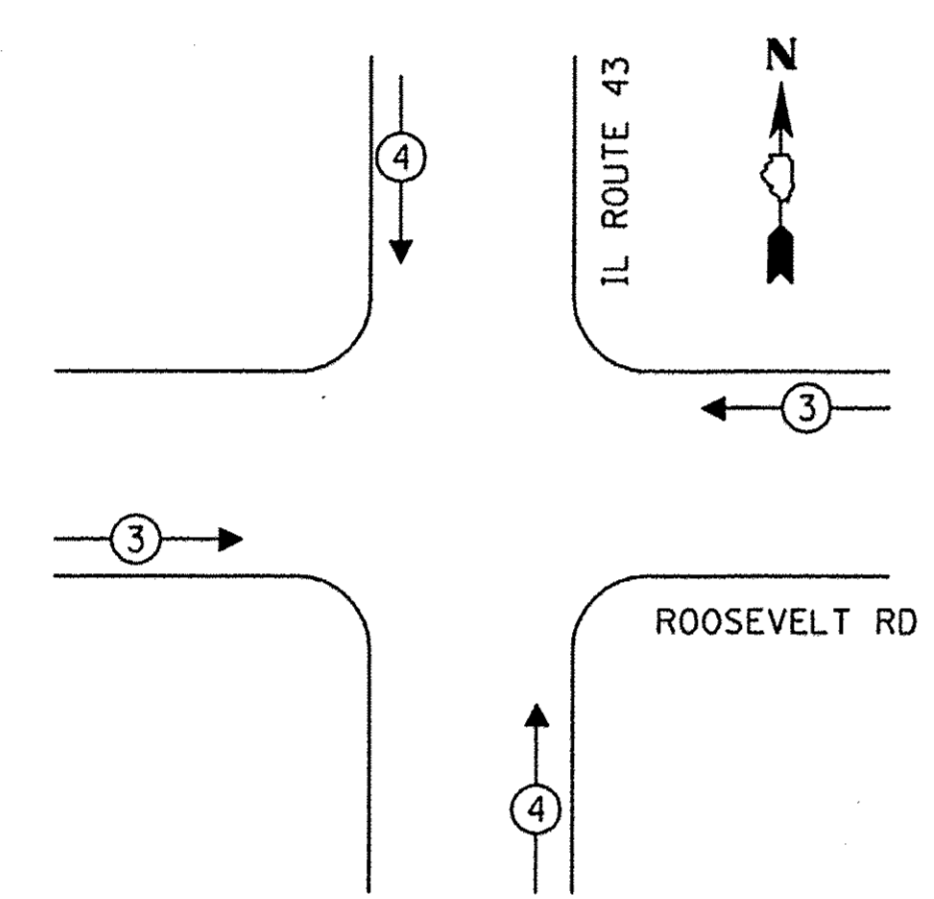
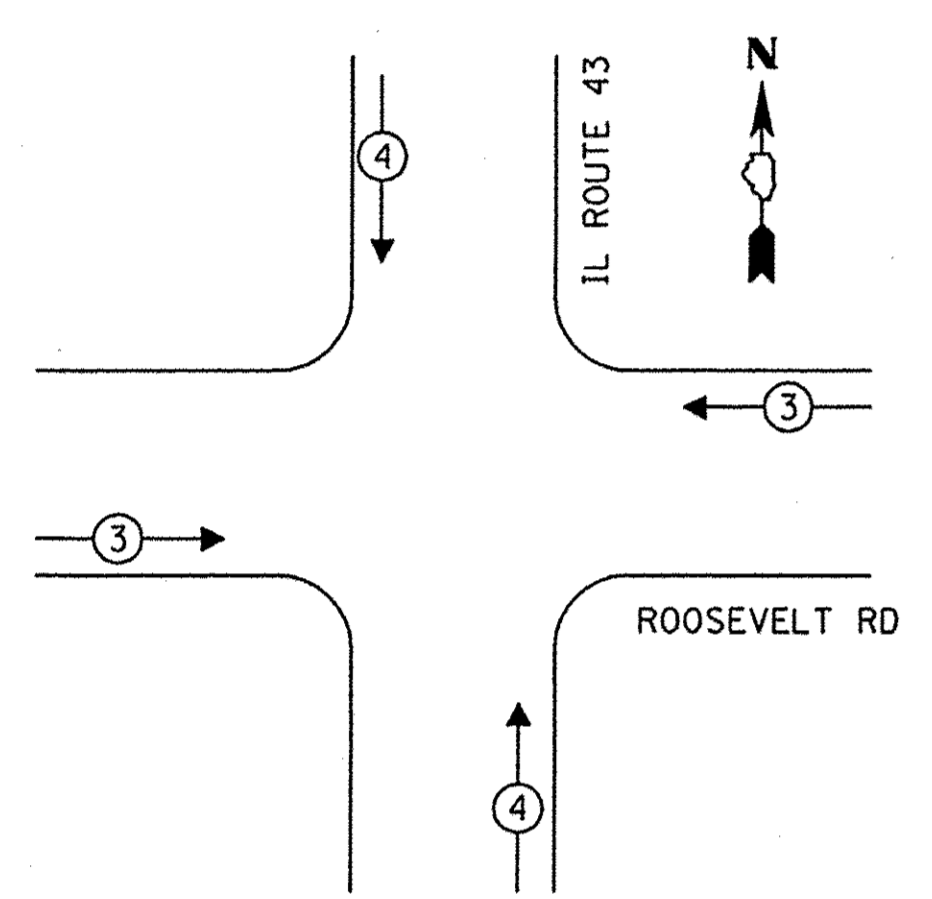
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
C	= 6	+ 7

**EXISTING PHASE DESIGNATION DIAGRAM**

**TEMPORARY PHASE DESIGNATION DIAGRAM**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**

**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	24	10	10	24.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	8	250	50	1000
<b>TOTAL =</b>				<b>1499.4</b>

ENERGY COSTS TO:  
 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 W CENTER COURT  
 SCHAUMBURG, IL 60196  
 ENERGY SUPPLY: CONTACT: NEW BUSINESS  
 PHONE: (866) 639-3532  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: ---

**CONSTRUCTION NOTE:**

- DURING MOT STAGE 1, THE EASTBOUND RIGHT TURN OVERLAP WILL BE ELIMINATED AND THE RIGHT TURN ARROW SIGNAL HEAD SECTIONS SHALL BE BAGGED AND DISABLED. THE COSTS ASSOCIATED WITH BAGGING AND DISABLING SIGNAL HEAD SECTIONS SHALL BE INCLUDED IN THE PAY ITEM: MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.
- DURING MOT STAGE 2, THE ROOSEVELT ROAD LEFT TURN PHASES SHALL BE PLACED ON RECALL, OR AS DIRECTED BY THE ENGINEER. THE EXISTING RIGHT TURN OVERLAP FOR THE WEST APPROACH SHALL BE RESTORED DURING MOT STAGE 2, OR AS DIRECTED BY THE ENGINEER.

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF FOREST PARK AND REDSPEED ILLINOIS, LLC PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF FOREST PARK  
 517 DES PLAINES AVE.  
 FOREST PARK, IL 60130

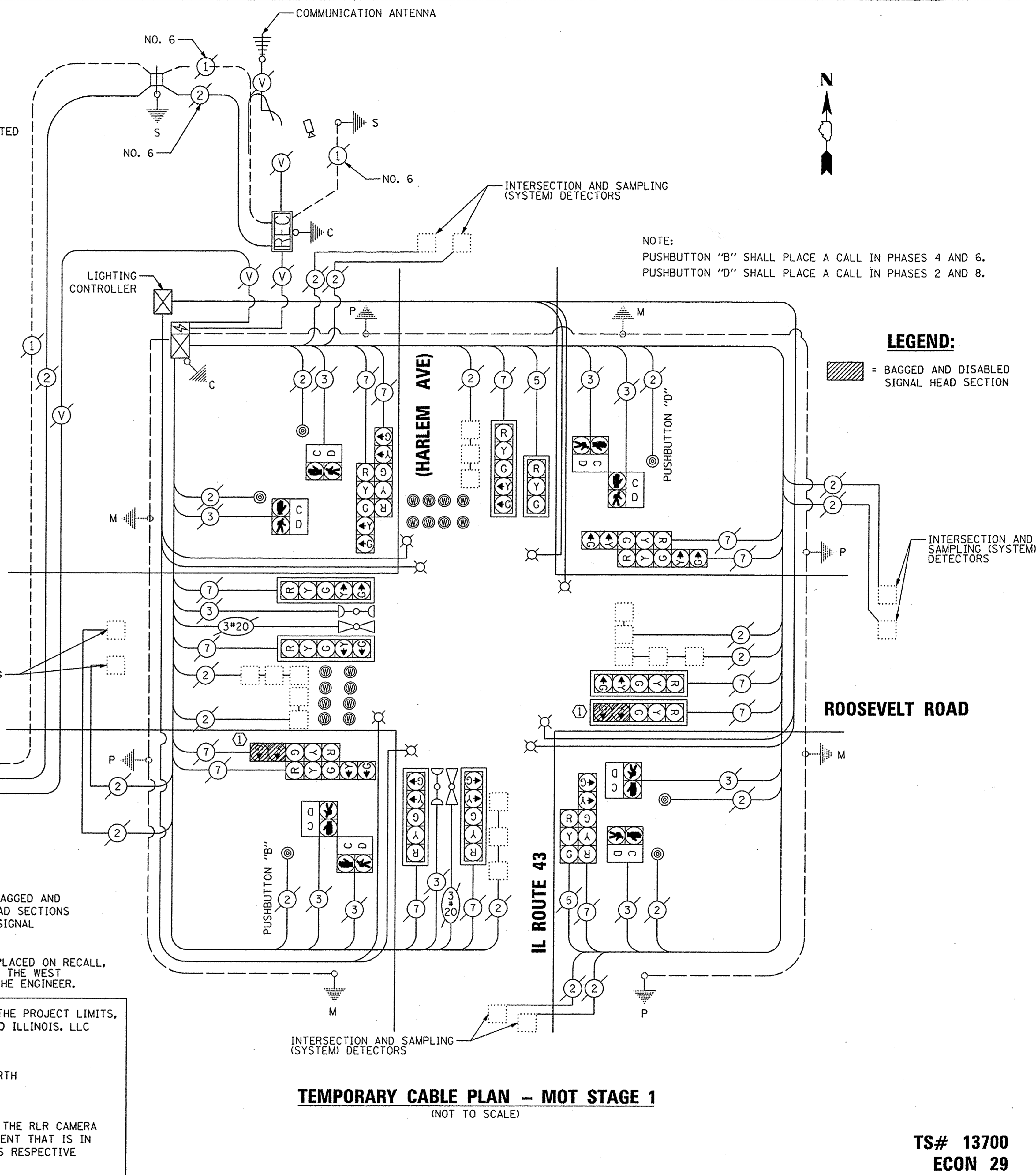
REDSPEED ILLINOIS, LLC  
 400 EISENHOWER LANE NORTH  
 LOMBARD, IL 60148  
 (630) 317-5700

THE VILLAGE OF FOREST PARK OR REDSPEED ILLINOIS, LLC SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

TS SHT NO. 15

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**TEMPORARY CABLE PLAN - MOT STAGE 1**  
 (NOT TO SCALE)

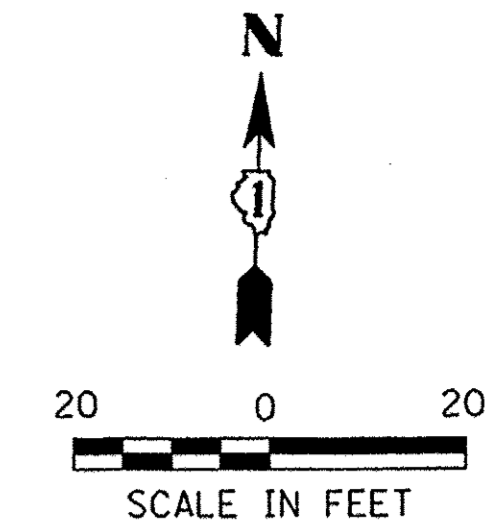


NOTE:  
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

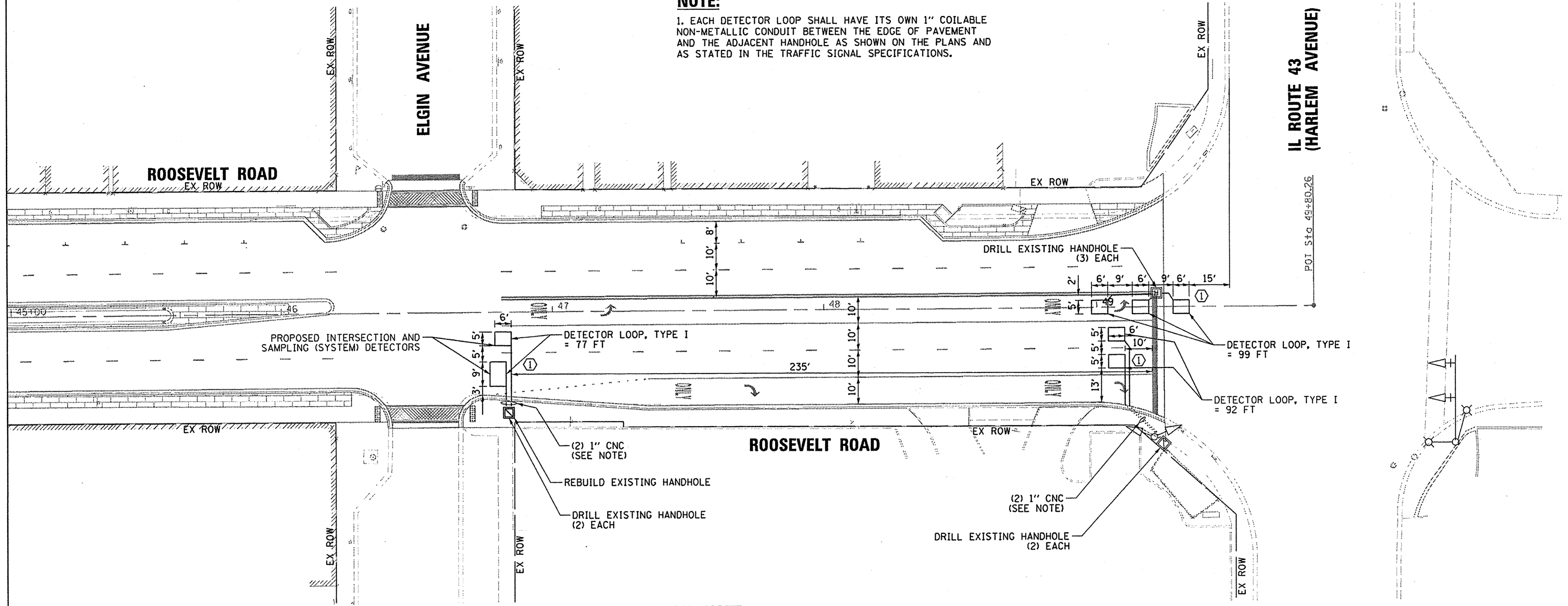
**LEGEND:**  
 [Hatched Box] = BAGGED AND DISABLED SIGNAL HEAD SECTION

FILE NAME =	USER NAME = ejanson	DESIGNED - EAJ	REVISED -
N:\FORESTPARK\0223\BG046\Traffic\TS15.dgn	AB-mot1_Harlem.dgn	DRAWN -	REVISED -
default	PLOT SCALE = 20'	CHECKED - GMZ	REVISED -
	PLOT DATE = 12/14/2016	DATE -	REVISED -

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 73
CONTRACT NO. 61D26				ILLINOIS FED. AID PROJECT



**NOTE:**  
 1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.



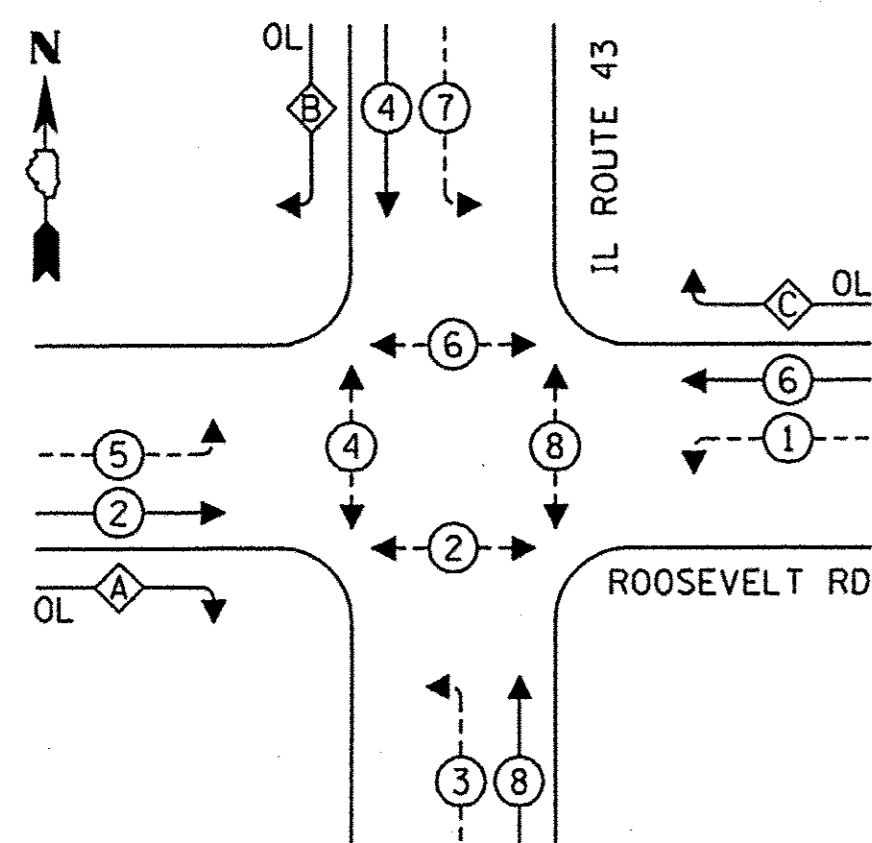
**CONSTRUCTION NOTE:**  
 ① THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I ON THE WEST APPROACH AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I.

TS SHT NO. 16

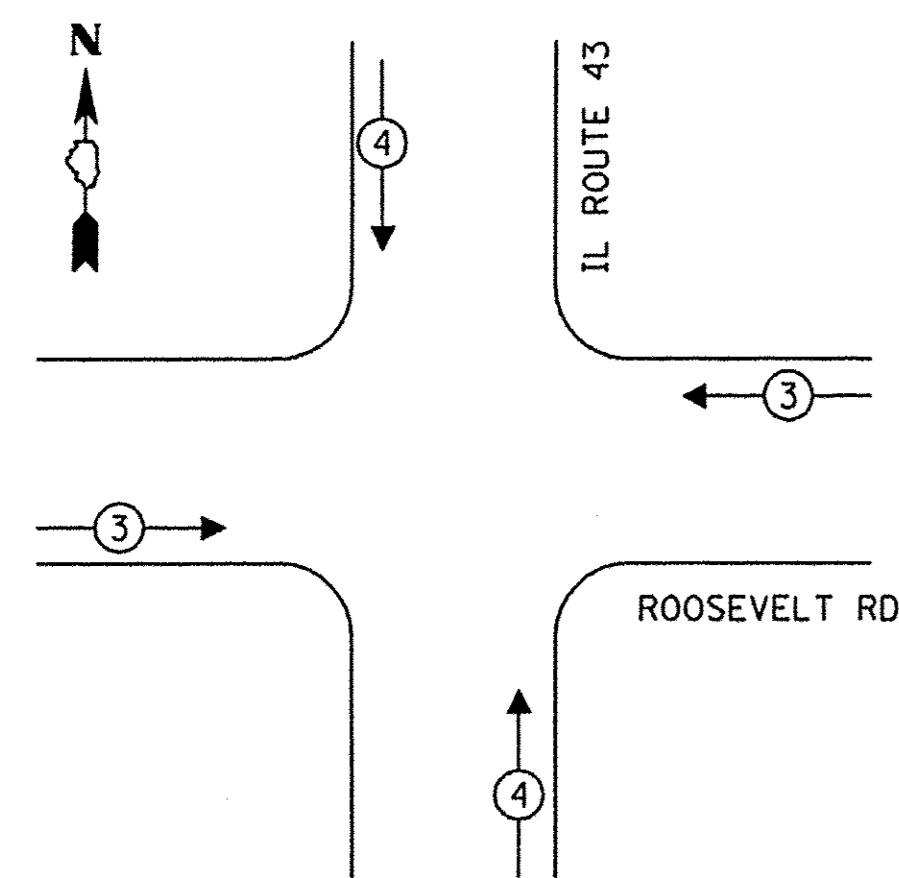
TS# 2400  
 ECON 29

FILE NAME = N:\FORESTPARK\022\BG046\Traffic\TS16.DET_Harlem.dgn	USER NAME = e.jensen	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT ROOSEVELT ROAD AND IL ROUTE 43 (HARLEM AVENUE)</b>		F.A.P. RTE. = 347	SECTION = 13-00112-00-LS	COUNTY = COOK	TOTAL SHEETS = 151	SHEET NO. = 74
	PLOT SCALE = 20'	CHECKED - GMZ	REVISED -		SCALE: 1" = 20'	SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 61D26 ILLINOIS FED. AID PROJECT			
default	PLOT DATE = 12/14/2016	DATE -	REVISED -								

**EXISTING CONTROLLER SEQUENCE**



**EXISTING PHASE DESIGNATION DIAGRAM**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**

**LEGEND:**

- ←\*→ PROTECTED PHASE
- ←\*---\*→ PROTECTED/PERMITTED PHASE
- ←\*→ PEDESTRIAN PHASE
- ←\* OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	28	10	10	28.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	8	250	50	1000
<b>TOTAL =</b>				<b>1503.4</b>

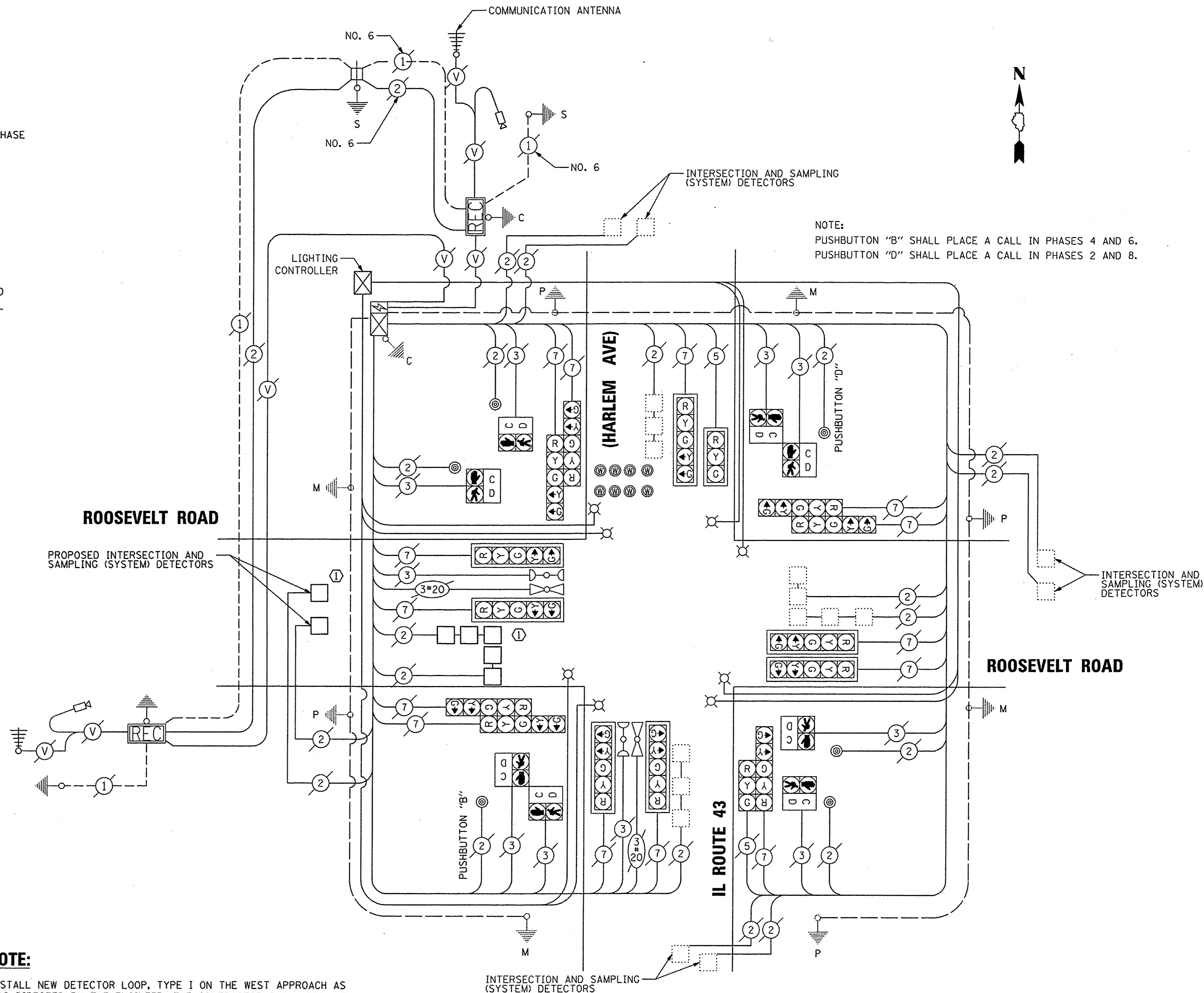
ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 W CENTER COURT  
SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: NEW BUSINESS  
PHONE: (866) 639-3532  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: ---

**CONSTRUCTION NOTE:**

- ① THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I ON THE WEST APPROACH AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I.



**EXISTING CABLE PLAN**  
(NOT TO SCALE)

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	7
DETECTOR LOOP, TYPE I	FOOT	268
REBUILD EXISTING HANDHOLE	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

**TS# 13700  
ECON 29**

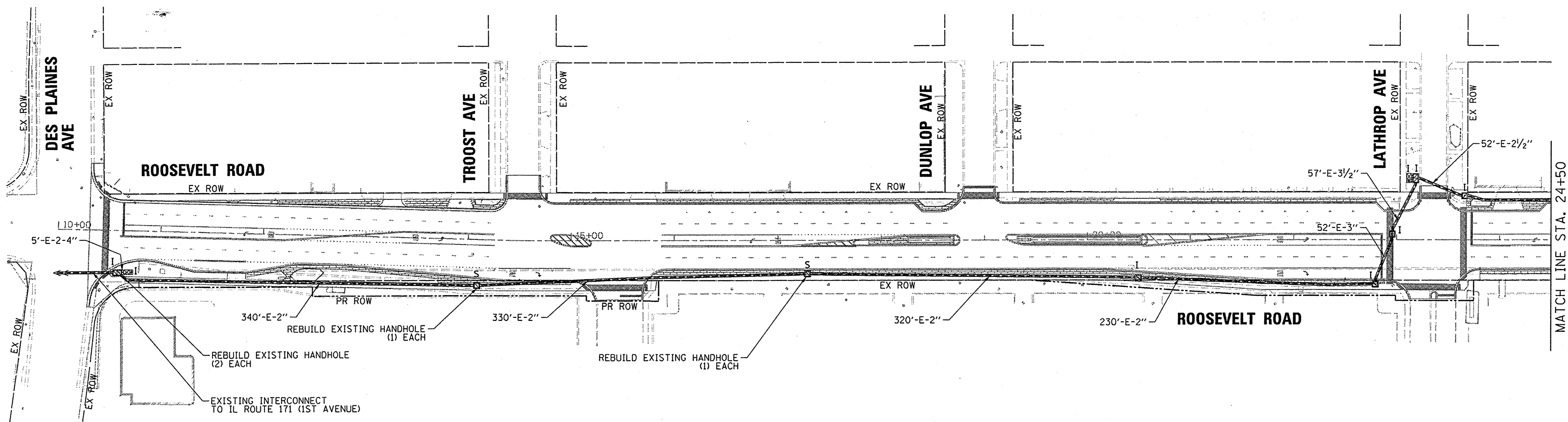
TS SHT NO. 17

FILE NAME =	USER NAME = ejansen	DESIGNED - EAJ	REVISED -
N:\FORESTPARK\0223\BG048\Traffic\TS17.dwg	AB_Harlem.dgn	DRAWN -	REVISED -
		CHECKED - GMZ	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, EXISTING CABLE PLAN, PHASE DESIGNATION  
DIAGRAM & EMERGENCY VEHICLE PREEMPTION SEQUENCE  
ROOSEVELT ROAD AND IL ROUTE 43 (HARLEM AVENUE)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	75
				CONTRACT NO. 61D26
ILLINOIS FED. AID PROJECT				

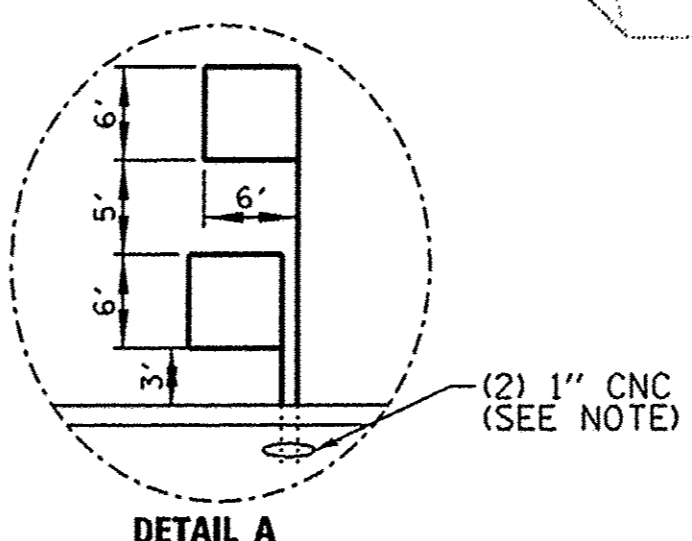
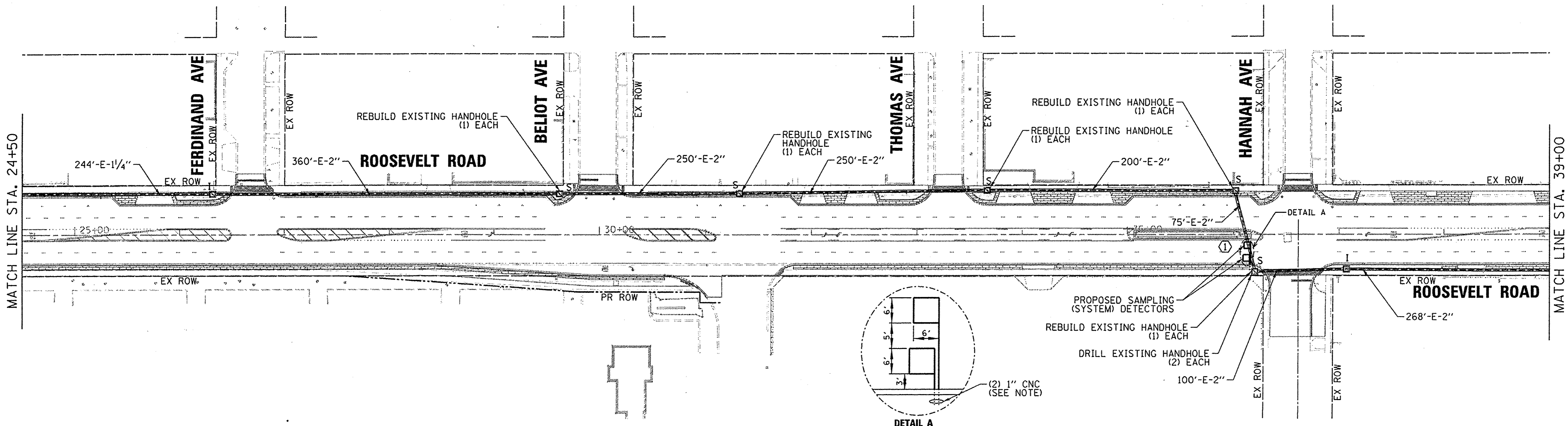
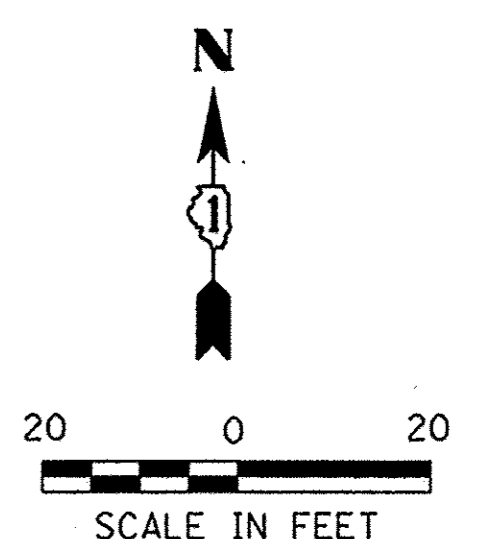


**NOTE:**

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

**CONSTRUCTION NOTE:**

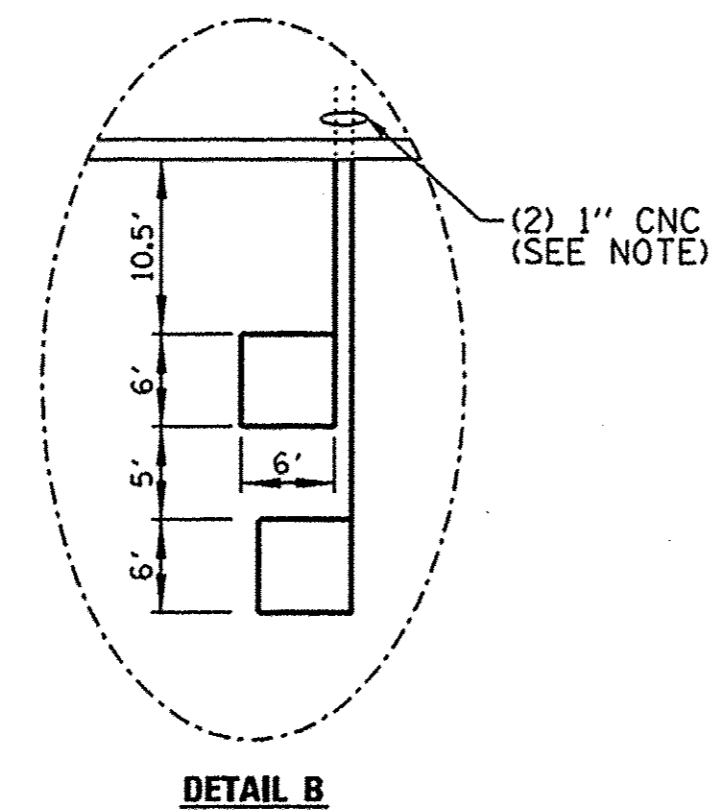
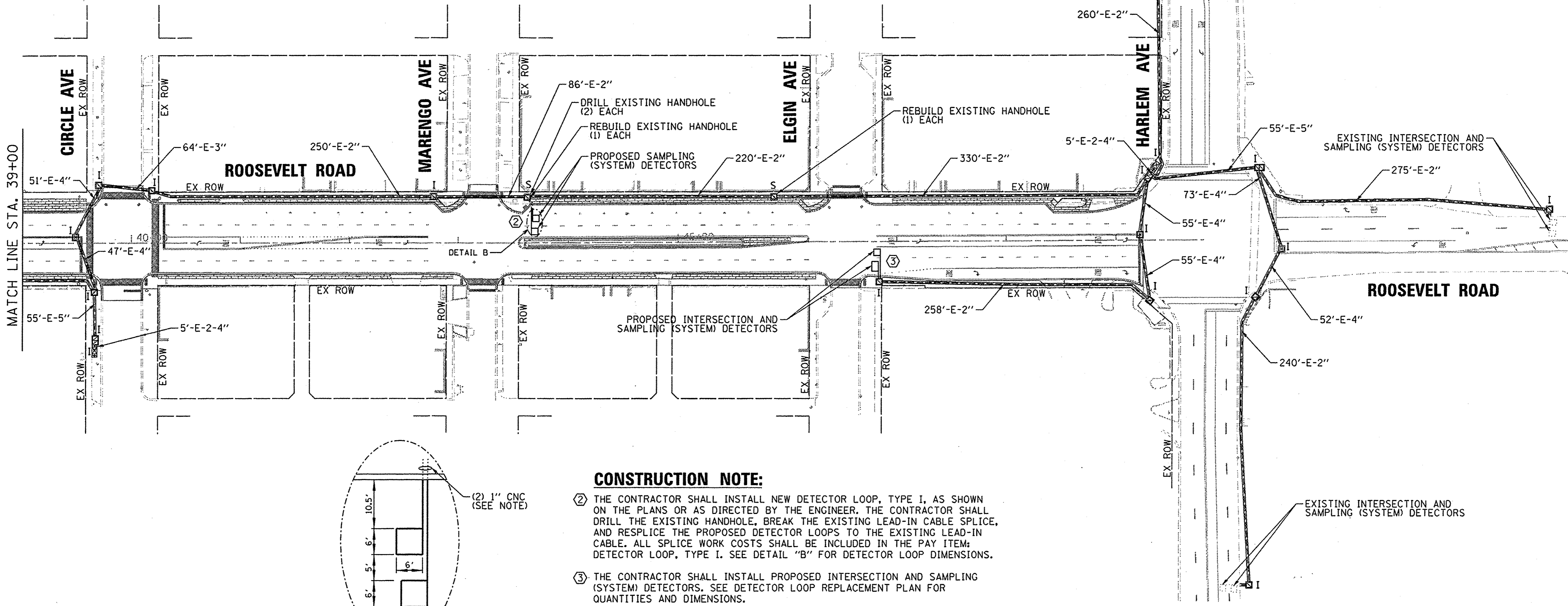
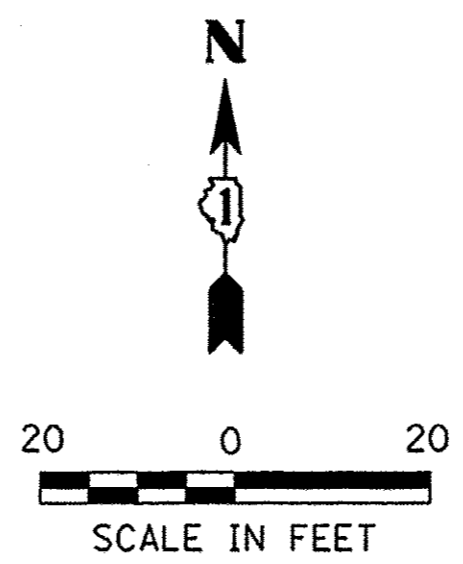
① THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I. SEE DETAIL "A" FOR DETECTOR LOOP DIMENSIONS.



TS SHT NO. 18

ECON 29

FILE NAME = N:\FORESTPARK\023\BG046\T-offic\TS18\NT-01_Roosevelt.dgn	USER NAME = ejensen	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT PLAN - SHEET 1 OF 2 ROOSEVELT ROAD FROM DES PLAINES AVENUE TO HARLEM AVENUE</b>				F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 76
PLOT SCALE = 5/8"	PLOT DATE = 12/14/2016	CHECKED - GMZ	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 61D26		
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								
default													



**CONSTRUCTION NOTE:**

- ② THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I. SEE DETAIL "B" FOR DETECTOR LOOP DIMENSIONS.
- ③ THE CONTRACTOR SHALL INSTALL PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. SEE DETECTOR LOOP REPLACEMENT PLAN FOR QUANTITIES AND DIMENSIONS.

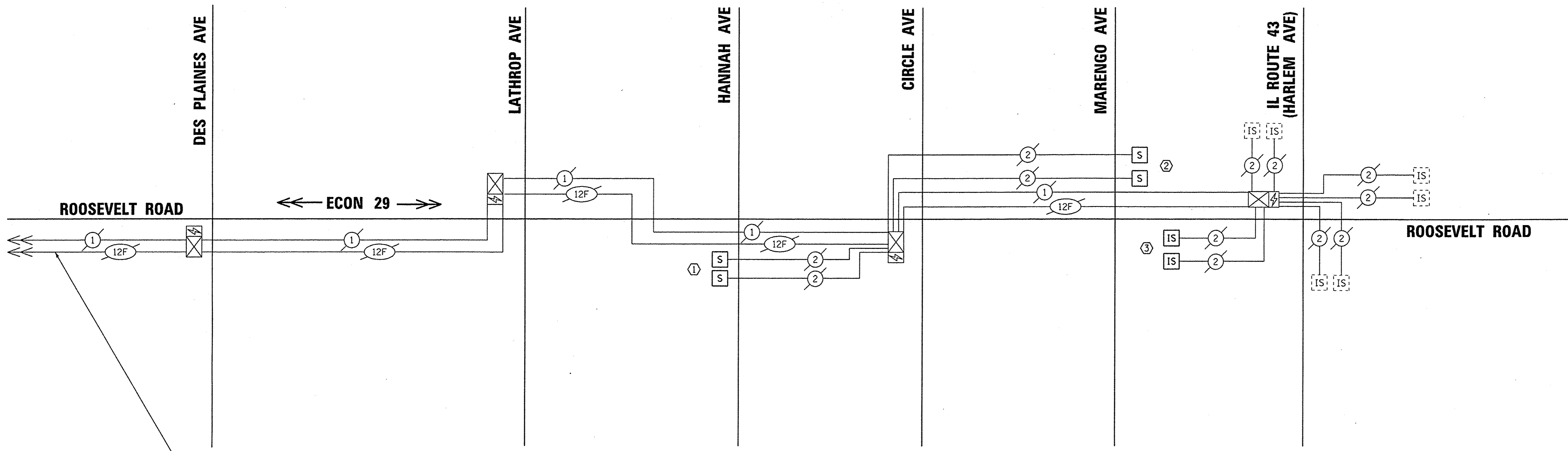
**NOTE:**

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

TS SHT NO. 19

**ECON 29**

FILE NAME =	USER NAME = ejansen	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT PLAN - SHEET 2 OF 2 ROOSEVELT ROAD FROM DES PLAINES AVENUE TO HARLEM AVENUE</b>				F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 77
N:\FORESTPARK\0223\BG046\Traffic\TS19	NT-02_Roosevelt.dgn	DRAWN -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	CONTRACT NO. 61026	
default	PLOT SCALE = 5/8"	CHECKED - GMZ	REVISED -		ILLINOIS FED. AID PROJECT								
	PLOT DATE = 12/14/2016	DATE -	REVISED -										



**CONSTRUCTION NOTE:**

- ① THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I. SEE DETAIL "A" ON INTERCONNECT PLANS FOR DETECTOR LOOP DIMENSIONS.
- ② THE CONTRACTOR SHALL INSTALL NEW DETECTOR LOOP, TYPE I, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE, BREAK THE EXISTING LEAD-IN CABLE SPLICE, AND RESPLICE THE PROPOSED DETECTOR LOOPS TO THE EXISTING LEAD-IN CABLE. ALL SPLICE WORK COSTS SHALL BE INCLUDED IN THE PAY ITEM: DETECTOR LOOP, TYPE I. SEE DETAIL "B" ON INTERCONNECT PLANS FOR DETECTOR LOOP DIMENSIONS.
- ③ THE CONTRACTOR SHALL INSTALL PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. SEE DETECTOR LOOP REPLACEMENT PLAN FOR QUANTITIES AND DIMENSIONS.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
DRILL EXISTING HANDHOLE	EACH	4
DETECTOR LOOP, TYPE I	FOOT	135
REBUILD EXISTING HANDHOLE	EACH	11
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	2

TS SHT NO. 20

**ECON 29**

FILE NAME =	USER NAME = ejansen	DESIGNED - EAJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT SCHEMATIC ROOSEVELT ROAD FROM DES PLAINES AVENUE TO HARLEM AVENUE</b>				F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 78
N:\FORESTPARK\0223\BG046\Traffic\TS20.CH-Roosevelt.dgn		DRAWN -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.				CONTRACT NO. 61026				
default		CHECKED - GMZ	REVISED -		ILLINOIS FED. AID PROJECT								
		DATE - 12/14/2016	REVISED -										

## LIGHTING GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE VILLAGE OF FOREST PARK BEFORE THE START OF WORK, ANY COST FOR PERMIT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
2. BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD AND UNDERGROUND ELECTRIC UTILITIES SHALL CALL COM ED FOR LOCATION APPROVAL AND MINIMUM CLEARANCE REQUIREMENTS.
3. THE WORK PERFORMED UNDER THIS CONTRACT SHALL IN NO WAY INTERFERE WITH THE NORMAL OPERATION OF ANY EXISTING UTILITY SERVICE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ITEMS OF EQUIPMENT REQUIRED TO MAINTAIN SUCH NORMAL OPERATION AT NO ADDITIONAL COST TO THE OWNER. THE COST ASSOCIATED FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION SHALL BE AWARDED.
4. ALL REMOVAL OR EXCAVATION ITEMS BEING DISPOSED OF AT AN UNCONTAMINATED SOIL FILL OPERATION OR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) FILL SITE SHALL MEET THE REQUIREMENTS OF PUBLIC ACT 96-1416. ALL COSTS ASSOCIATED WITH MEETING THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE ASSOCIATED REMOVAL OR EXCAVATION ITEMS IN THE CONTRACT. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION BY A LICENSED PROFESSIONAL OWNER'S REPRESENTATIVE, AND STATE AND LOCAL TIPPING FEE.
5. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/ DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
6. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
  - A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AS PREPARED BY IDOT.
  - B. "THE NATIONAL ELECTRICAL CODE".
  - C. MUNICIPAL CODES & STANDARDS.
7. NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL ALL PERTINENT EQUIPMENT SUBMITTALS HAVE BEEN REVIEWED BY THE OWNER'S REPRESENTATIVE.
8. CAST A GROUND ROD INSIDE EVERY CONCRETE POLE FOUNDATION AND CONNECT TO THE POLE GROUNDING LUG VIA A #6 SOLID COPPER WIRE WITH A MECHANICAL CONNECTION AT THE GROUND ROD AND PIGTAIL SPLICE INSIDE THE POLE HANDHOLE.
9. ALL UNDERGROUND WIRING SHALL BE COPPER (OR SIZE AS SHOWN ON THE PLANS) XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, INSTALLED IN SCH 40 HDPE CONDUIT A MINIMUM 30 INCHES BELOW FINISHED GRADE, FOLLOWING THE ROADWAY OR SIDEWALK EDGE.
10. LUMINAIRES SHALL BE LEVEL & HAVE A TIGHT FIT ON POLE/LUMINAIRE ARMS TO THE VILLAGE'S SATISFACTION. LUMINAIRE HOUSE SIDE SHIELDS SHALL BE PROVIDED AT LOCATIONS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. FIELD ADJUSTING OF THE LUMINAIRE SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE LUMINAIRE.
11. TO MAINTAIN THE STRUCTURAL INTEGRITY OF LIGHT POLES WITH LUMINAIRE ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES.
12. ALL POLE HANDHOLES SHALL FACE AWAY FROM TRAFFIC.
13. THE ELECTRICAL CONTRACTOR SHALL FURNISH TWO SETS OF FULL SIZE RECORD DRAWINGS TO THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE LIGHTING AND ELECTRICAL IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATIONS OF ALL LIGHT POLES, UNDERGROUND CONDUITS/ WIRING, HANDHOLES, JUNCTION BOXES & CONTROLLER CABINETS. THE DRAWINGS WILL BE REVIEWED BY THE OWNER'S REPRESENTATIVE.
14. UPON COMPLETION OF THE PROPOSED LIGHTING IMPROVEMENTS, THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING AND VERIFY THAT THE INSTALLATION COMPLIES WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS. ALL ELECTRICAL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND THE VILLAGE.
15. CONTRACTOR SHALL USE A STANDARD CONCRETE FOUNDATION WHEREVER POSSIBLE. IF UTILITY CONFLICTS PROHIBIT THE USE OF A STANDARD CONCRETE FOUNDATION, THE CONTRACTOR SHALL CONSULT WITH OWNER'S REPRESENTATIVE PRIOR TO THE USE OF AN OFFSET FOUNDATION.

16. CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS, DETECTORS AND EQUIPMENT, IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST.
17. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHT AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
19. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, (IF APPLICABLE) AND HAVE BEEN REVIEWED BY THE ENGINEER.
20. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
21. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
22. CONDUIT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES AND LANDSCAPING.
23. THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT 1-800-892-0123. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND CONDUITS.
24. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND LIGHTING CONTROLLERS FOR EXAMINATION AND CONFIRMATION WITH THE RESIDENT ENGINEER AT THE PRECONSTRUCTION INSPECTION. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO AUGERING FOR LIGHT POLE FOUNDATIONS. THE EXACT LOCATIONS OF ALL ITEMS SHALL BE CONFIRMED WITH THE RESIDENT ENGINEER PRIOR TO STARTING WORK.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMELY NOTIFICATION AND ALL COORDINATION WITH COM ED FOR NEW ELECTRIC SERVICE TO THE PROPOSED LIGHTING CONTROLLERS. THE ELECTRIC SERVICE COORDINATION PERFORMED BY THE ENGINEER DURING DESIGN IS INCLUDED IN THE PLANS FOR THE CONTRACTORS INFORMATION.
26. THE LIGHT POLE LOCATIONS SHALL COMPLY WITH THE MINIMUM CLEAR WIDTH FOR AN ACCESSIBLE ROUTE FOR SIDEWALKS PER CURRENT AMERICAN WITH DISABILITIES ACT (ADA) REQUIREMENTS.

## ROADWAY LIGHTING BILL OF MATERIALS

CODE NUMBER	DESCRIPTION	UNIT	QUANTITY
20800150	TRENCH BACKFILL	CU YD	100
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
*80400200	ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	740
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	460
81028250	UNDERGROUND CONDUIT, GALVANIZED STEEL, 5" DIA.	FOOT	80
81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	4250
81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	8580
81400100	HANDHOLE	EACH	6
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	85255
81702200	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 250	FOOT	730
82500370	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 200AMP	EACH	1
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	500
84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	4
84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	42
84200804	REMOVAL OF POLE FOUNDATION	EACH	46
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	330
* 89502380	REMOVE EXISTING HANDHOLE	EACH	29
* X8250500	LIGHTING UNIT COMPLETE, SPECIAL	EACH	50
* X8360215	LIGHT POLE FOUNDATION 24" DIA., OFFSET	FOOT	150
*Z0033024	MAINTAIN EXISTING LIGHTING SYSTEM	LSUM	1

• SEE SPECIAL PROVISION

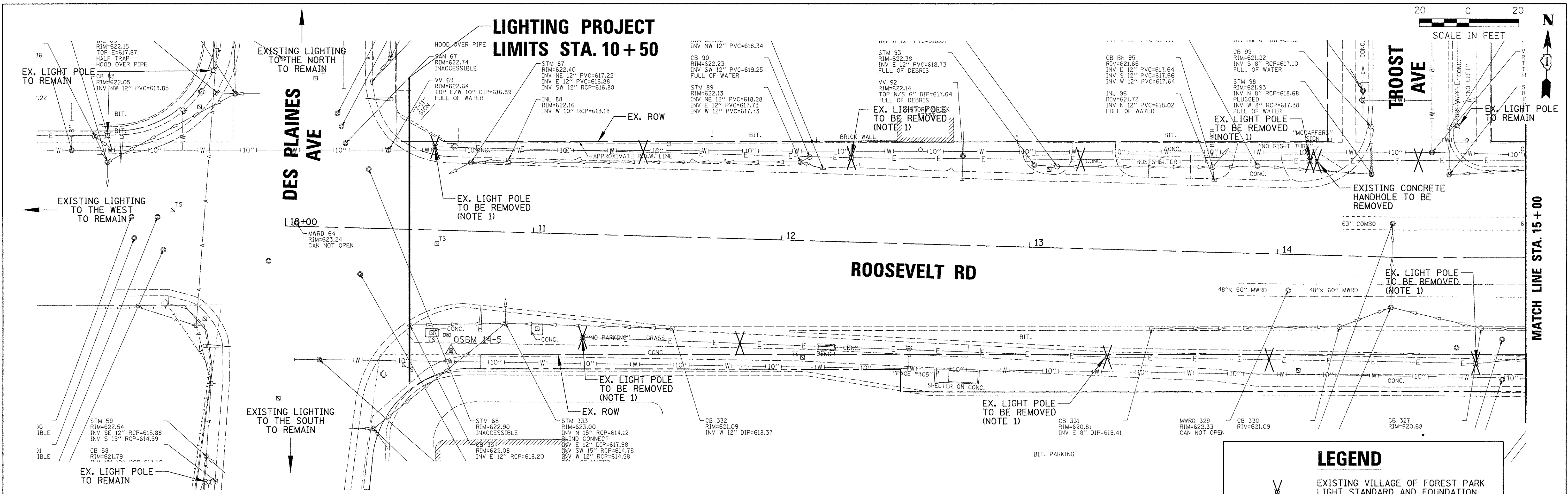
## LIGHTING REMOVAL NOTES

1. EXISTING ELECTRICAL CABLE AND CONDUIT ROUTING IS BASED ON INFORMATION RECEIVED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES AND WAIT FOR WRITTEN DIRECTION PRIOR TO PROCEEDING WITH ANY WORK.
2. ALL EXISTING LIGHTING SYSTEMS SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION. NOT UNTIL ALL PROPOSED LIGHTING SYSTEMS HAVE BEEN PUT INTO SUCCESSFUL OPERATION FOR SEVEN DAYS WILL THE CONTRACTOR BE ALLOWED TO REMOVE ANY EXISTING LIGHTING UNITS. WHEN INSTRUCTED TO DO SO THE CONTRACTOR SHALL REMOVE EXISTING LIGHT POLES, FOUNDATIONS AND CABLES, AT LOCATIONS INDICATED ON THE PLANS, AND RETURN 4 LIGHT POLES AND LUMINAIRES TO THE VILLAGE OF FOREST PARK PUBLIC WORKS. REMOVED LUMINAIRES SHALL BE BOXED PRIOR TO TRANSPORTING THEM TO THE PUBLIC WORKS. ANY DAMAGE RESULTING FROM THE REMOVAL AND/OR TRANSPORTATION OF THE LIGHT POLES AND LUMINAIRES SHALL BE REPAIRED OR REPLACED IN KIND AT THE CONTRACTOR'S OWN EXPENSE. THE REMAINING REMOVED POLES & LUMINAIRES SHALL BE DISPOSED OF.
3. EXISTING ELECTRICAL CONDUIT SHALL BE CUT DOWN TO A MINIMUM OF 1 FOOT BELOW GRADE & ABANDONED.
4. CONTRACTOR SHALL REMOVE EXISTING LIGHT POLE CONCRETE FOUNDATIONS A MINIMUM OF 2 FT. BELOW GRADE. ALL REMOVED MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS, AND VOIDS CAUSED BY REMOVAL SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 842.01 OF THE STANDARD SPECIFICATIONS.
5. THE CONTRACTOR SHALL KEEP EXISTING LIGHTING IN PLACE AND OPERATIONAL DURING CONSTRUCTION UNTIL PROPOSED LIGHTING IS INSTALLED AND OPERATIONAL. MAINTAINING EXISTING LIGHTING SHALL BE PAID FOR UNDER "MAINTAIN EXISTING LIGHTING SYSTEM".

## ABBREVIATIONS

A	AMPS
CKT	CIRCUIT
CNC	COILABLE NON-METALLIC CONDUIT
DIA	DIAMETER
FT	FOOT
FOC	FACE OF CURB
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HDPE	HIGH DENSITY POLYETHYLENE
HH	HAND HOLE
HPS	HIGH PRESSURE SODIUM
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL CONDUIT
ROW	RIGHT OF WAY
SS	STAINLESS STEEL
STA	STATION
V	VOLTS
W	WATTS
WR	WEATHER RESISTANT

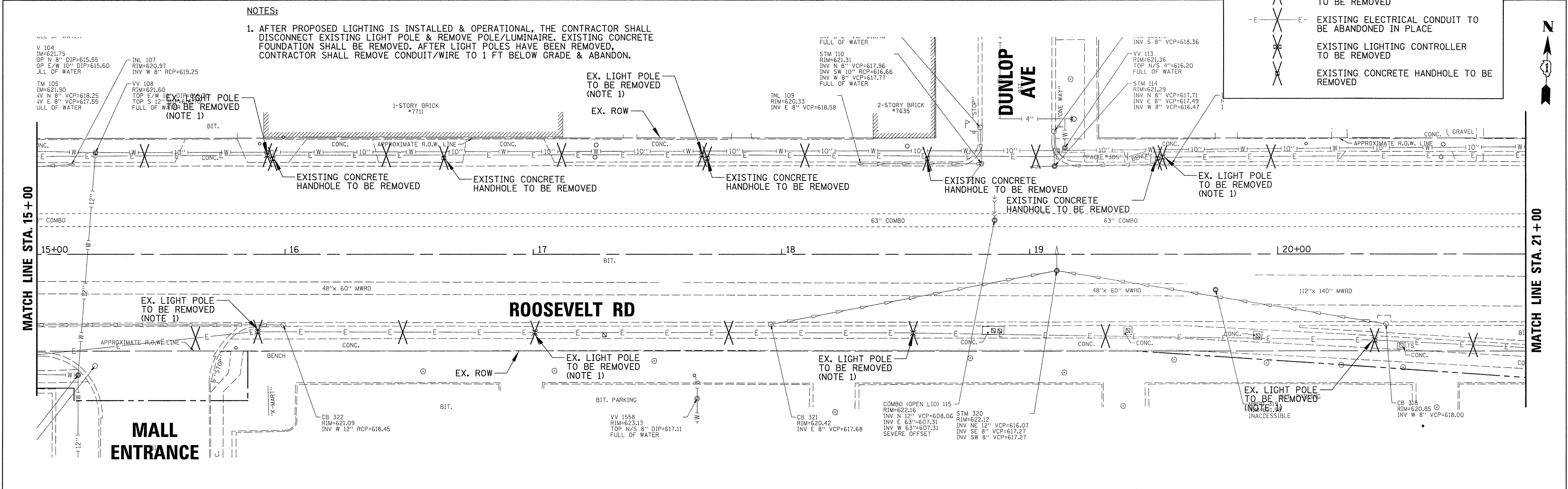
FILE NAME =	USER NAME = mthomas	DESIGNED -	AJD	REVISED -		<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>LIGHTING NOTES &amp; BILL OF MATERIALS</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\0223\B0846\Mech\NOT_0023	G046b-01.shx	DRAWN -	LRR	REVISED -			347	13-00112-00-LS	COOK	151	79				
Default	PLOT SCALE = 1'	CHECKED -	AJD	REVISED -									CONTRACT NO.	61D26	
	PLOT DATE = 11/14/2016	DATE -	3/10/2016	REVISED -			SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	STA. N/A	TO STA. N/A	ILLINOIS FED. AID PROJECT				



**NOTES:**  
 1. AFTER PROPOSED LIGHTING IS INSTALLED & OPERATIONAL, THE CONTRACTOR SHALL DISCONNECT EXISTING LIGHT POLE & REMOVE POLE/LUMINAIRE. EXISTING CONCRETE FOUNDATION SHALL BE REMOVED. AFTER LIGHT POLES HAVE BEEN REMOVED, CONTRACTOR SHALL REMOVE CONDUIT/WIRE TO 1 FT BELOW GRADE & ABANDON.

**LEGEND**

- EXISTING VILLAGE OF FOREST PARK LIGHT STANDARD AND FOUNDATION TO BE REMOVED
- EXISTING ELECTRICAL CONDUIT TO BE ABANDONED IN PLACE
- EXISTING LIGHTING CONTROLLER TO BE REMOVED
- EXISTING CONCRETE HANDHOLE TO BE REMOVED

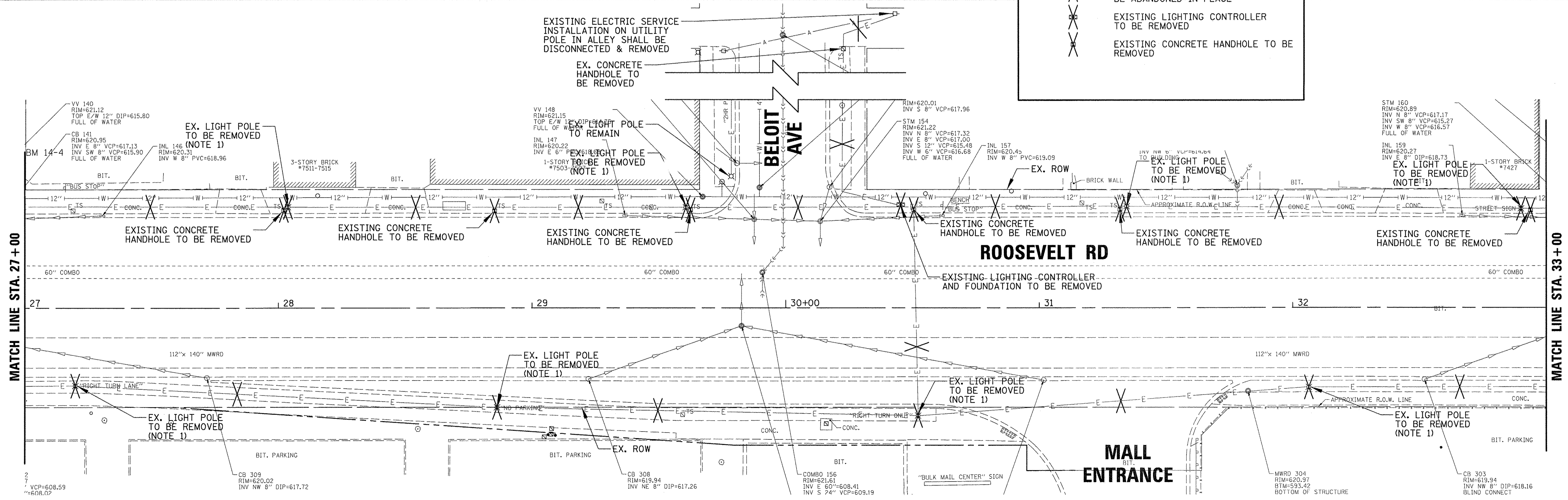
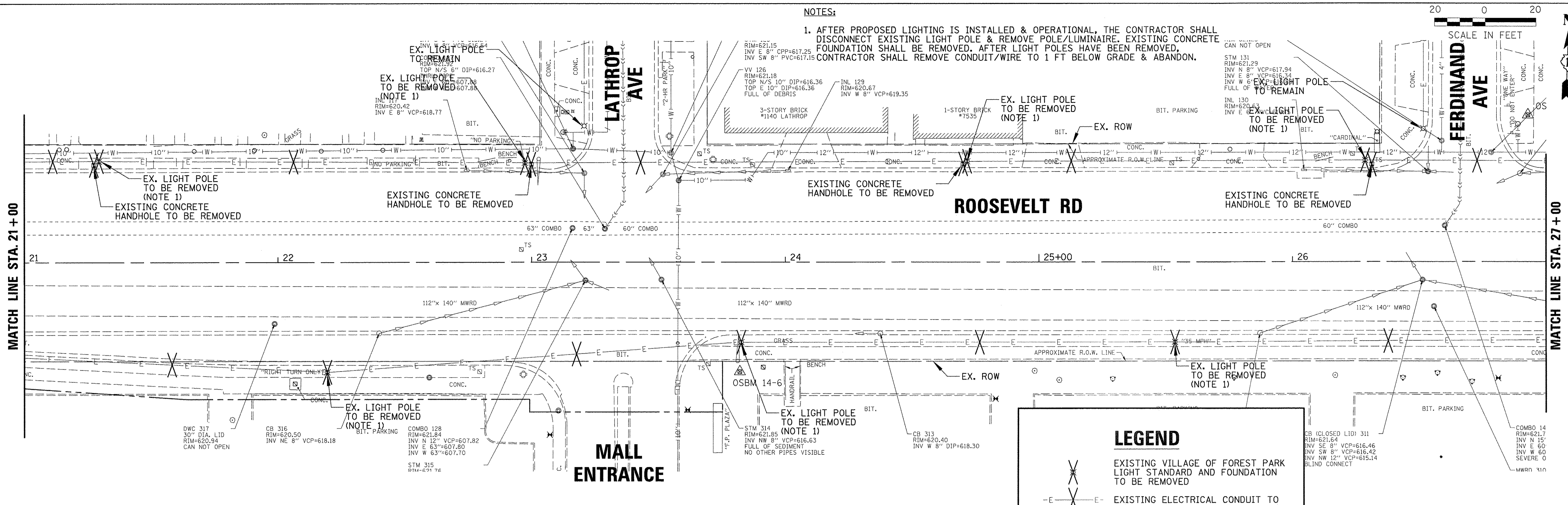
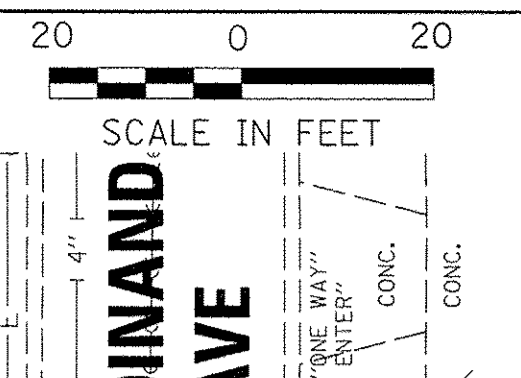


FILE NAME =	USER NAME = mthomas	DESIGNED - AJD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING CONDITIONS AND LIGHTING REMOVAL PLAN (1 OF 4)</b>	F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 80	
N:\FORESTPARK\0023\80046\Mech\REM_0023\0046b-01.sht	PLOT SCALE = 20'	DRAWN - LRR	REVISED -			SCALE: 20'	SHEET 1 OF 4 SHEETS	STA. 10+00 TO STA. 21+00	CONTRACT NO. 61D26		ILLINOIS FED. AID PROJECT
Default	PLOT DATE = 11/14/2016	CHECKED - AJD	REVISED -								
		DATE - 3/10/2016	REVISED -								



**NOTES:**

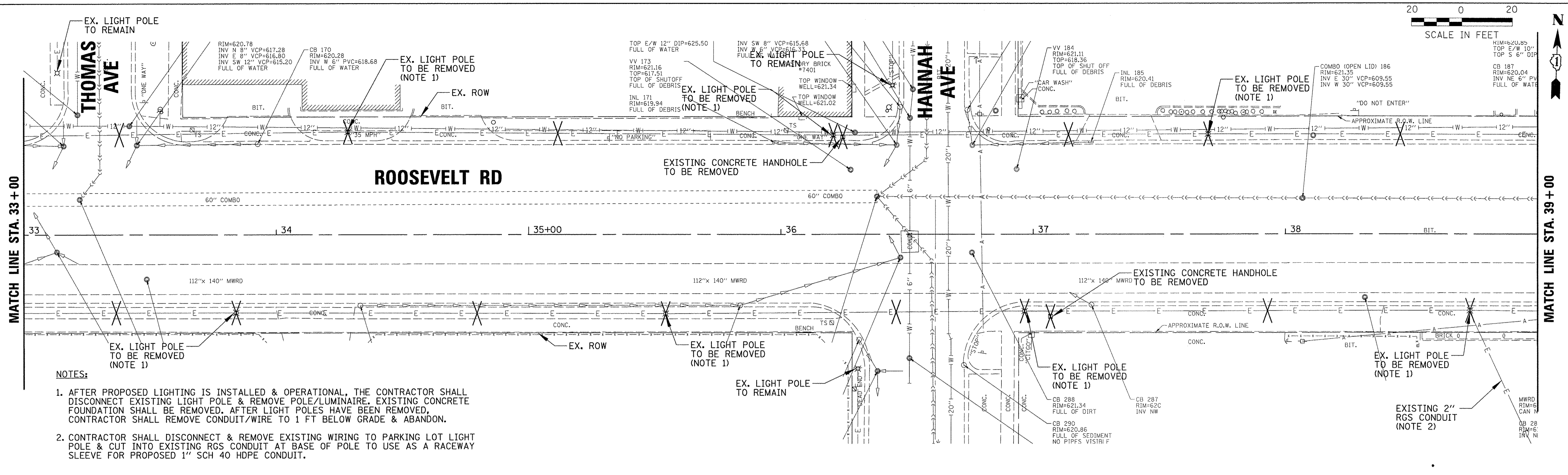
1. AFTER PROPOSED LIGHTING IS INSTALLED & OPERATIONAL, THE CONTRACTOR SHALL DISCONNECT EXISTING LIGHT POLE & REMOVE POLE/LUMINAIRE. EXISTING CONCRETE FOUNDATION SHALL BE REMOVED. AFTER LIGHT POLES HAVE BEEN REMOVED, CONTRACTOR SHALL REMOVE CONDUIT/WIRE TO 1 FT BELOW GRADE & ABANDON.



**LEGEND**

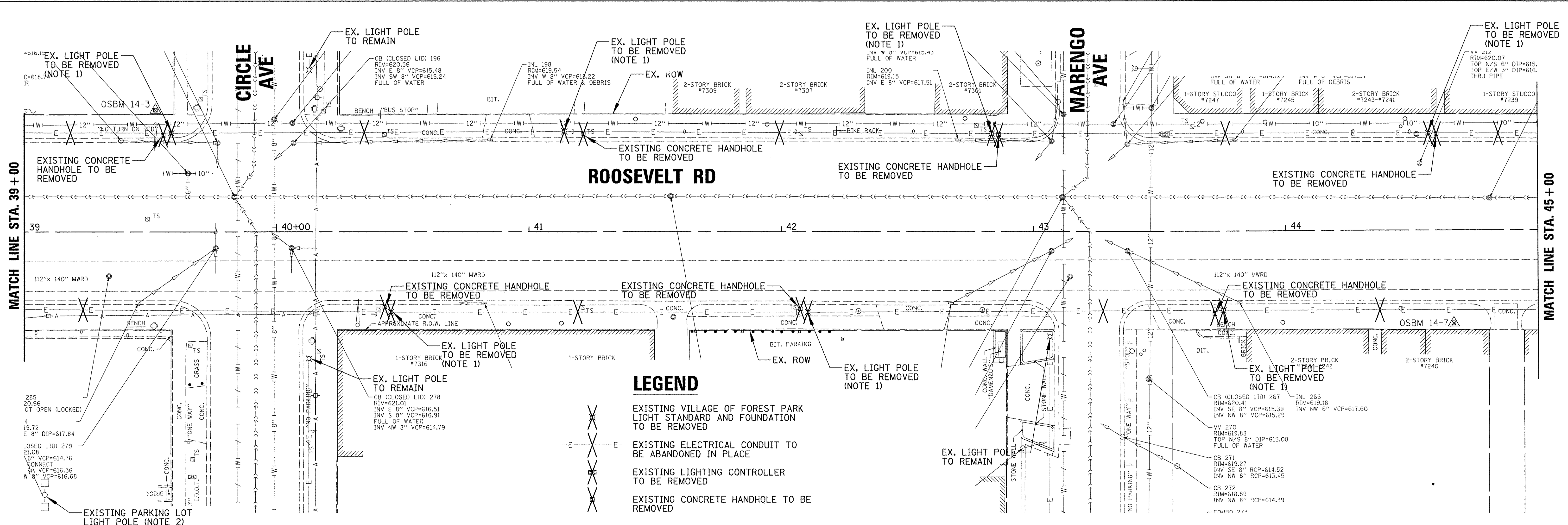
- EXISTING VILLAGE OF FOREST PARK LIGHT STANDARD AND FOUNDATION TO BE REMOVED
- EXISTING ELECTRICAL CONDUIT TO BE ABANDONED IN PLACE
- EXISTING LIGHTING CONTROLLER TO BE REMOVED
- EXISTING CONCRETE HANDHOLE TO BE REMOVED

FILE NAME =	USER NAME = mthomas	DESIGNED - AJD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING CONDITIONS AND LIGHTING REMOVAL PLAN (2 OF 4)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\023\BG046\Mech\REM_023\BG046b-02.sht		DRAWN - LRR	REVISED -			347	13-00112-00-LS	COOK	151	81
PLOT SCALE = 20'		CHECKED - AJD	REVISED -			CONTRACT NO. 61D26				
PLOT DATE = 11/14/2016		DATE - 3/10/2016	REVISED -			ILLINOIS FED. AID PROJECT				



**NOTES:**

1. AFTER PROPOSED LIGHTING IS INSTALLED & OPERATIONAL, THE CONTRACTOR SHALL DISCONNECT EXISTING LIGHT POLE & REMOVE POLE/LUMINAIRE. EXISTING CONCRETE FOUNDATION SHALL BE REMOVED. AFTER LIGHT POLES HAVE BEEN REMOVED, CONTRACTOR SHALL REMOVE CONDUIT/WIRE TO 1 FT BELOW GRADE & ABANDON.
2. CONTRACTOR SHALL DISCONNECT & REMOVE EXISTING WIRING TO PARKING LOT LIGHT POLE & CUT INTO EXISTING RGS CONDUIT AT BASE OF POLE TO USE AS A RACEWAY SLEEVE FOR PROPOSED 1" SCH 40 HDPE CONDUIT.



**LEGEND**

- EXISTING VILLAGE OF FOREST PARK LIGHT STANDARD AND FOUNDATION TO BE REMOVED
- EXISTING ELECTRICAL CONDUIT TO BE ABANDONED IN PLACE
- EXISTING LIGHTING CONTROLLER TO BE REMOVED
- EXISTING CONCRETE HANDHOLE TO BE REMOVED

FILE NAME =	USER NAME = mthomas
N:\FORESTPARK\0023\BG046\Mech\REM_0023\BG046b-03.sht	
PLOT SCALE = 20'	
PLOT DATE = 11/14/2016	

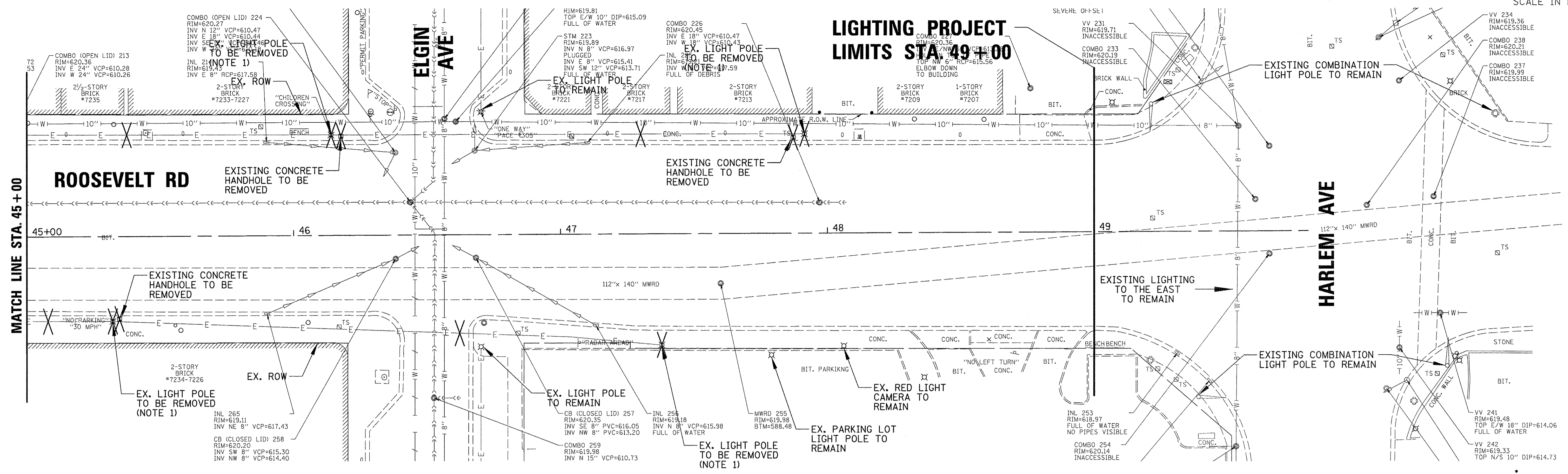
DESIGNED - AJD	REVISED -
DRAWN - LRR	REVISED -
CHECKED - AJD	REVISED -
DATE - 3/10/2016	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING CONDITIONS AND LIGHTING REMOVAL PLAN (3 OF 4)**

SCALE: 20' SHEET 3 OF 4 SHEETS STA. 33+00 TO STA. 45+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	82
CONTRACT NO. 61D26			ILLINOIS FED. AID PROJECT	



**NOTES:**

1. AFTER PROPOSED LIGHTING IS INSTALLED & OPERATIONAL, THE CONTRACTOR SHALL DISCONNECT EXISTING LIGHT POLE & REMOVE POLE/LUMINAIRE. EXISTING CONCRETE FOUNDATION SHALL BE REMOVED. AFTER LIGHT POLES HAVE BEEN REMOVED, CONTRACTOR SHALL REMOVE CONDUIT/WIRE TO 1 FT BELOW GRADE & ABANDON.

**LEGEND**

- EXISTING VILLAGE OF FOREST PARK LIGHT STANDARD AND FOUNDATION TO BE REMOVED
- EXISTING ELECTRICAL CONDUIT TO BE ABANDONED IN PLACE
- EXISTING LIGHTING CONTROLLER TO BE REMOVED
- EXISTING CONCRETE HANDHOLE TO BE REMOVED

FILE NAME = N:\FORESTPARK\0223\BG046\Mech\REM_0023\BG046-04.sht	USER NAME = mthomas	DESIGNED - AJD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING CONDITIONS AND LIGHTING REMOVAL PLAN (4 OF 4)</b>			F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 83
PLOT SCALE = 20'	CHECKED - AJD	REVISED -	REVISED -		SCALE: 20'	SHEET 4 OF 4 SHEETS	STA. 45+00 TO STA. 49+00	CONTRACT NO. 61D26				
PLOT DATE = 11/14/2016	DATE - 3/10/2016	REVISED -	REVISED -		ILLINOIS FED. AID PROJECT							
Default												



### CONDUCTOR SCHEDULE

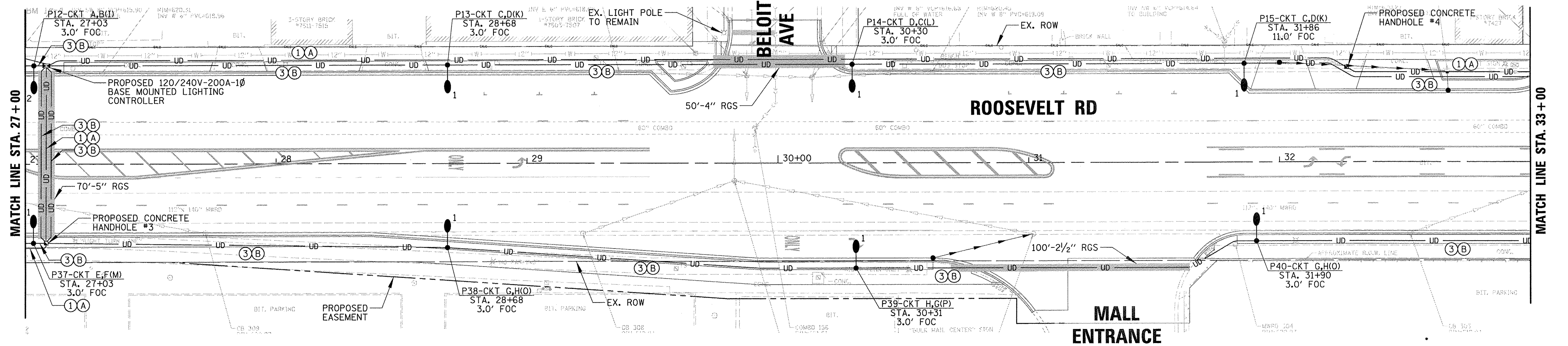
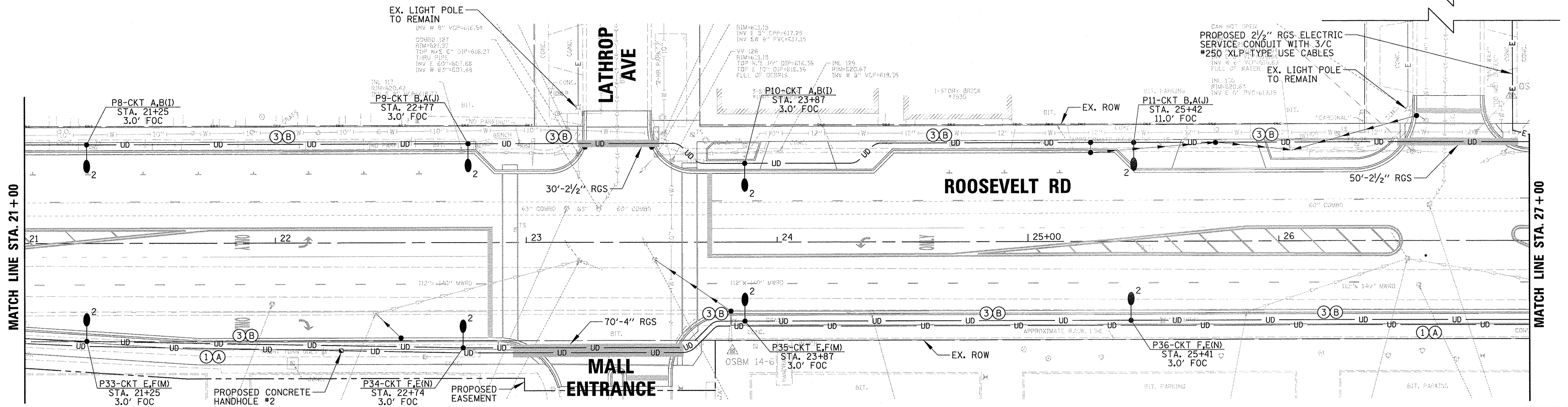
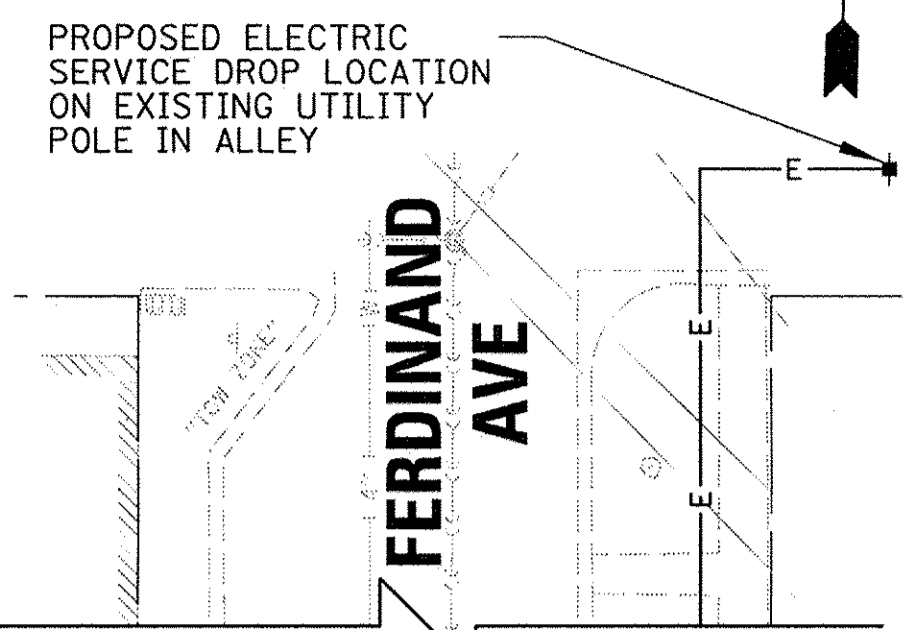
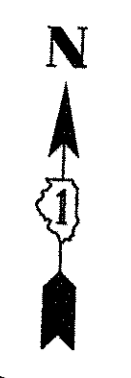
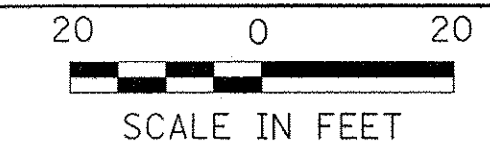
- ① 1/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
  - ② 5/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
  - ③ 6/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
- USE BLACK & RED FOR LIGHTING CIRCUITS, BLUE, ORANGE & WHITE FOR RECEPTACLE CIRCUITS

### CONDUIT SCHEDULE

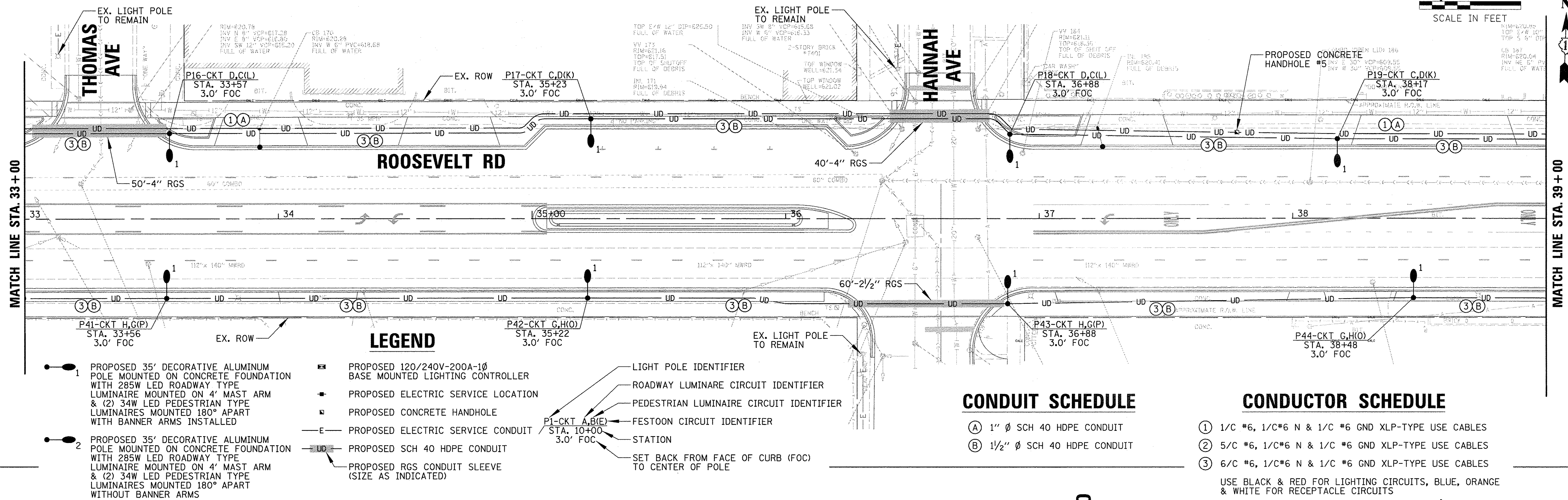
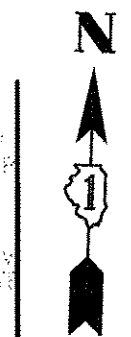
- (A) 1" Ø SCH 40 HDPE CONDUIT
- (B) 1 1/2" Ø SCH 40 HDPE CONDUIT

### LEGEND

- ⊠ PROPOSED 35' DECORATIVE ALUMINUM POLE MOUNTED ON CONCRETE FOUNDATION WITH 285W LED ROADWAY TYPE LUMINAIRE MOUNTED ON 4' MAST ARM & (2) 34W LED PEDESTRIAN TYPE LUMINAIRES MOUNTED 180° APART WITH BANNER ARMS INSTALLED
- ⊠ PROPOSED 35' DECORATIVE ALUMINUM POLE MOUNTED ON CONCRETE FOUNDATION WITH 285W LED ROADWAY TYPE LUMINAIRE MOUNTED ON 4' MAST ARM & (2) 34W LED PEDESTRIAN TYPE LUMINAIRES MOUNTED 180° APART WITHOUT BANNER ARMS
- ⊠ PROPOSED 120/240V-200A-1Ø BASE MOUNTED LIGHTING CONTROLLER
- ⊠ PROPOSED ELECTRIC SERVICE LOCATION
- ⊠ PROPOSED CONCRETE HANDHOLE
- ⊠ PROPOSED ELECTRIC SERVICE CONDUIT
- ⊠ PROPOSED SCH 40 HDPE CONDUIT
- ⊠ PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- ⊠ LIGHT POLE IDENTIFIER
- ⊠ ROADWAY LUMINAIRE CIRCUIT IDENTIFIER
- ⊠ PEDESTRIAN LUMINAIRE CIRCUIT IDENTIFIER
- ⊠ FESTOON CIRCUIT IDENTIFIER
- ⊠ STATION
- ⊠ SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE



FILE NAME =	USER NAME = mthomas	DESIGNED - AJD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED LIGHT POLE LOCATIONS (2 OF 4)</b>	F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 85	
N:\FORESTPARK\0223\B0046\Mech\LG1_00230046b-02.sht	PLOT SCALE = 20'	DRAWN - LRR	REVISED -			SCALE: 20'	SHEET 2 OF 4 SHEETS	STA. 21+00 TO STA. 33+00	CONTRACT NO. 61D26		ILLINOIS FED. AID PROJECT
Default	PLOT DATE = 11/14/2016	CHECKED - AJD	REVISED -								
		DATE - 3/10/2016	REVISED -								



**LEGEND**

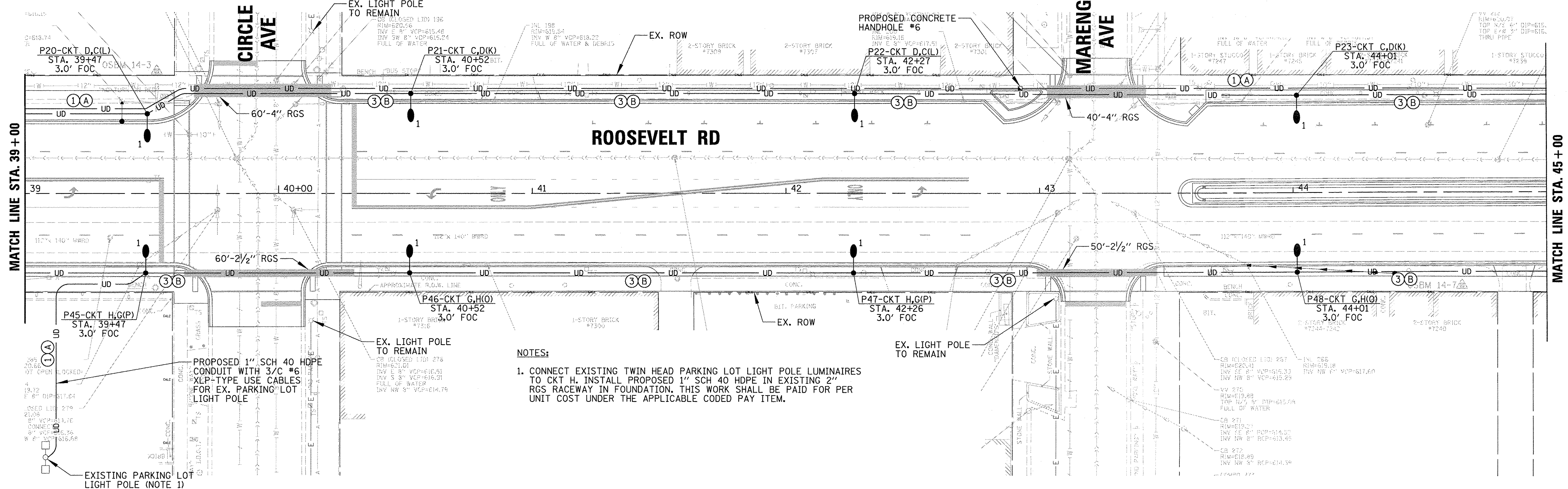
- 1 PROPOSED 35' DECORATIVE ALUMINUM POLE MOUNTED ON CONCRETE FOUNDATION WITH 285W LED ROADWAY TYPE LUMINAIRE MOUNTED ON 4' MAST ARM & (2) 34W LED PEDESTRIAN TYPE LUMINAIRES MOUNTED 180° APART WITH BANNER ARMS INSTALLED
- 2 PROPOSED 35' DECORATIVE ALUMINUM POLE MOUNTED ON CONCRETE FOUNDATION WITH 285W LED ROADWAY TYPE LUMINAIRE MOUNTED ON 4' MAST ARM & (2) 34W LED PEDESTRIAN TYPE LUMINAIRES MOUNTED 180° APART WITHOUT BANNER ARMS
- ⊠ PROPOSED 120/240V-200A-1Ø BASE MOUNTED LIGHTING CONTROLLER
- ⊕ PROPOSED ELECTRIC SERVICE LOCATION
- ⊓ PROPOSED CONCRETE HANDHOLE
- E— PROPOSED ELECTRIC SERVICE CONDUIT
- UD— PROPOSED SCH 40 HDPE CONDUIT
- RGS— PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- ⊠ LIGHT POLE IDENTIFIER
- ⊕ ROADWAY LUMINAIRE CIRCUIT IDENTIFIER
- ⊓ PEDESTRIAN LUMINAIRE CIRCUIT IDENTIFIER
- F— FESTOON CIRCUIT IDENTIFIER
- ⊠ STATION
- S— SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE

**CONDUIT SCHEDULE**

- (A) 1" Ø SCH 40 HDPE CONDUIT
- (B) 1 1/2" Ø SCH 40 HDPE CONDUIT

**CONDUCTOR SCHEDULE**

- (1) 1/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
  - (2) 5/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
  - (3) 6/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
- USE BLACK & RED FOR LIGHTING CIRCUITS, BLUE, ORANGE & WHITE FOR RECEPTACLE CIRCUITS

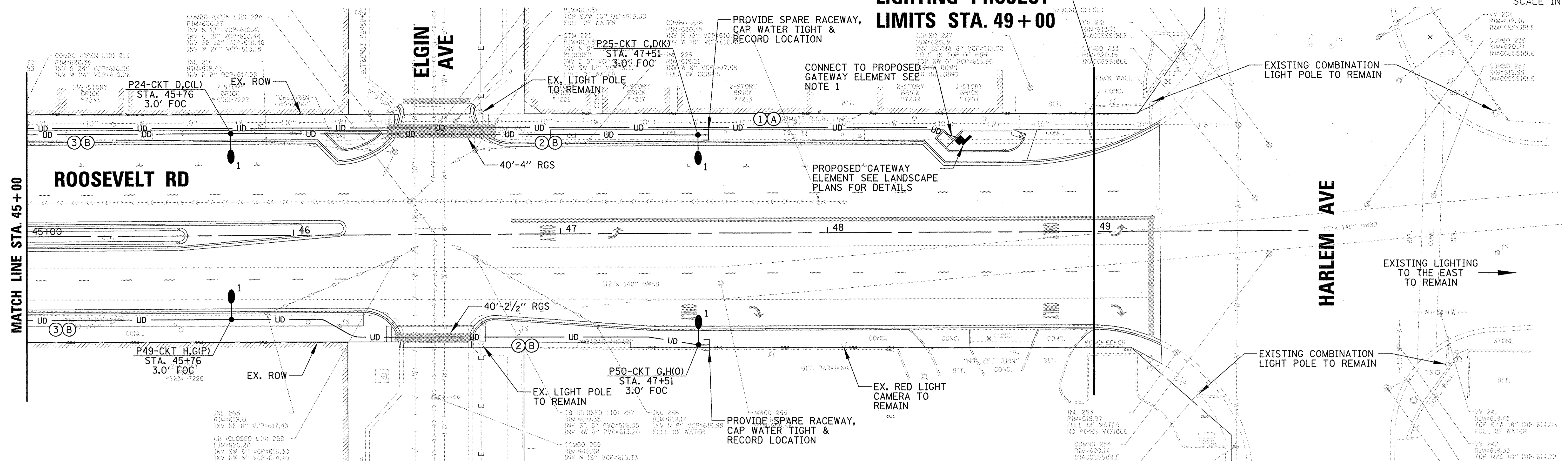


- NOTES:**
- CONNECT EXISTING TWIN HEAD PARKING LOT LIGHT POLE LUMINAIRES TO CKT H. INSTALL PROPOSED 1" SCH 40 HDPE IN EXISTING 2" RGS RACEWAY IN FOUNDATION. THIS WORK SHALL BE PAID FOR PER UNIT COST UNDER THE APPLICABLE CODED PAY ITEM.

FILE NAME = N:\FORESTPARK\0023\BG046\Mech\LG1_0023\BG046-03.sht	USER NAME = mthomas	DESIGNED - AJD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED LIGHT POLE LOCATIONS (3 OF 4)</b>			F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 86
Default	PLOT SCALE = 20'	DRAWN - LRR	REVISED -		SCALE: 20'	SHEET 3 OF 4 SHEETS	STA. 33+00 TO STA. 45+00	CONTRACT NO. 61D26		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 11/14/2016	CHECKED - AJD	REVISED -									
		DATE - 3/10/2016	REVISED -									



**LIGHTING PROJECT  
LIMITS STA. 49+00**



**CONDUCTOR SCHEDULE**

- ① 1/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
  - ② 5/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
  - ③ 6/C #6, 1/C#6 N & 1/C #6 GND XLP-TYPE USE CABLES
- USE BLACK & RED FOR LIGHTING CIRCUITS, BLUE, ORANGE & WHITE FOR RECEPTACLE CIRCUITS

**CONDUIT SCHEDULE**

- (A) 1" Ø SCH 40 HDPE CONDUIT
- (B) 1/2" Ø SCH 40 HDPE CONDUIT

**LEGEND**

- ① PROPOSED 35' DECORATIVE ALUMINUM POLE MOUNTED ON CONCRETE FOUNDATION WITH 285W LED ROADWAY TYPE LUMINAIRE MOUNTED ON 4' MAST ARM & (2) 34W LED PEDESTRIAN TYPE LUMINAIRES MOUNTED 180° APART WITH BANNER ARMS INSTALLED
- ② PROPOSED 35' DECORATIVE ALUMINUM POLE MOUNTED ON CONCRETE FOUNDATION WITH 285W LED ROADWAY TYPE LUMINAIRE MOUNTED ON 4' MAST ARM & (2) 34W LED PEDESTRIAN TYPE LUMINAIRES MOUNTED 180° APART WITHOUT BANNER ARMS
- ⊠ PROPOSED 120/240V-200A-1Ø BASE MOUNTED LIGHTING CONTROLLER
- ⊕ PROPOSED ELECTRIC SERVICE LOCATION
- ⊞ PROPOSED CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE CONDUIT
- PROPOSED SCH 40 HDPE CONDUIT
- PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- LIGHT POLE IDENTIFIER
- ROADWAY LUMINAIRE CIRCUIT IDENTIFIER
- PEDESTRIAN LUMINAIRE CIRCUIT IDENTIFIER
- FESTOON CIRCUIT IDENTIFIER
- STATION
- SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE

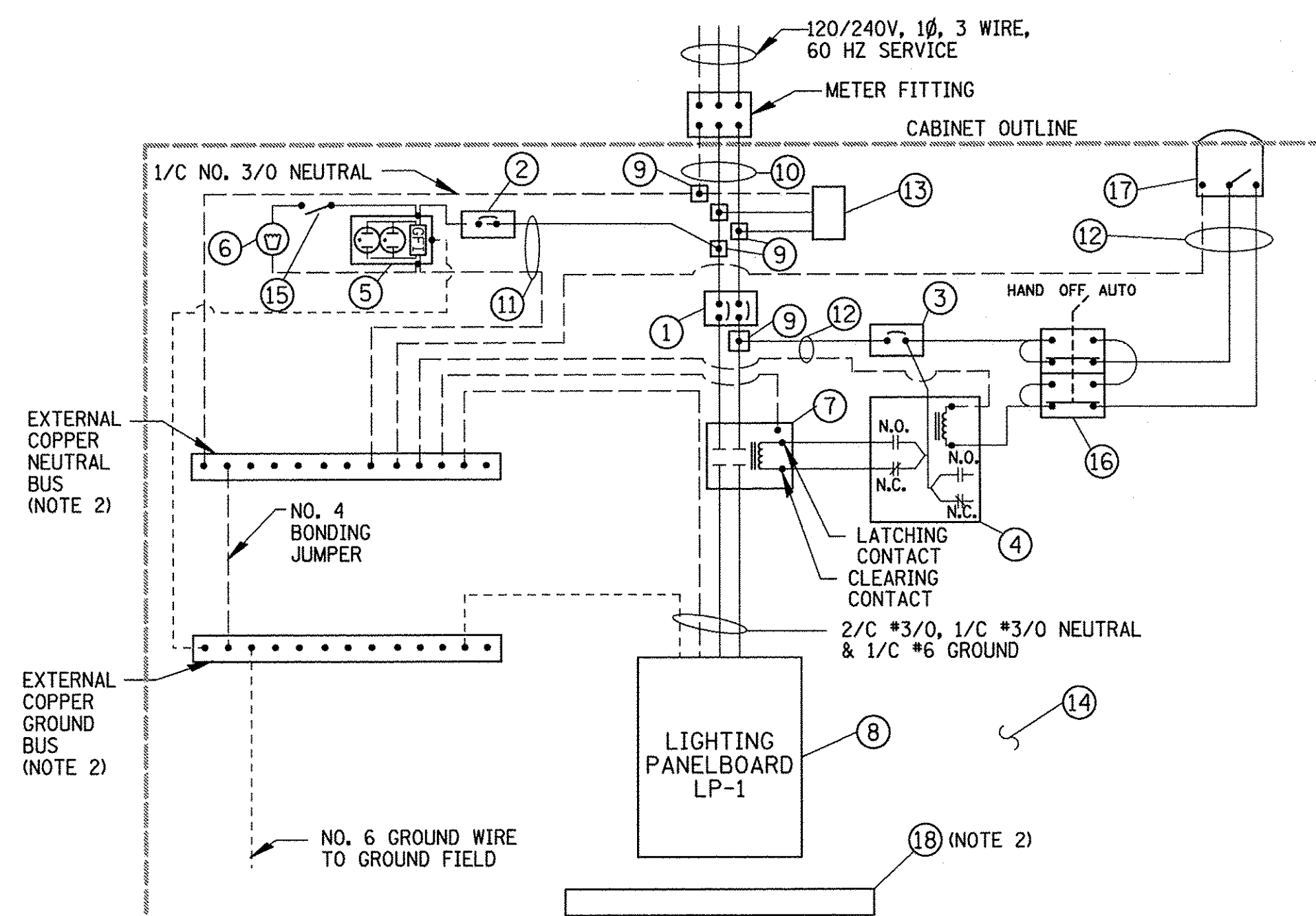
**NOTES:**

1. CONTRACTOR SHALL COUPLE 1" HDPE CONDUIT TO 1" RGS CONDUIT IN GATEWAY ELEMENT WITH A LISTED COUPLING.

ITEM	SPECIFICATION
① MAIN CIRCUIT BREAKER (NOTE 3 & 4)	200 AMPERE, 2P, 240V RATING, 10KAIC, THERMAL MAGNETIC MOLDED CASE
② CABINET RECEPTACLE/LIGHT CIRCUIT BREAKER (NOTE 3 & 4)	20 AMPERE, 1P, 120V RATING, 10KAIC, THERMAL MAGNETIC MOLDED CASE
③ CONTROL CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 10KAIC, THERMAL MAGNETIC MOLDED CASE
④ AUXILIARY RELAY	30 AMPERE, 120 V OPERATED DPDT 60 HZ COIL, 2 NO & 2 NC CONTACTS PLUG-IN TYPE, PANEL MOUNTED
⑤ CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF DIE CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF FLAPPER TYPE COVER
⑥ CABINET LIGHT AND BOX	5 WATT LED STRIP LIGHT, 60K HOUR RATING, 65K COLOR TEMPERATURE, DOOR SWITCH CONTROL, FASTENED TO TOP OF CABINET
⑦ LIGHTING CONTACTOR	200 AMPERE, 2 POLE, 120 VOLT COIL, MECH HELD
⑧ LIGHTING PANELBOARD LP-1	120/240V-1Ø-200A MAIN LUG ONLY, 30 SPACE, 10KAIC, INTERIOR ONLY, BOLT ON BREAKERS (SEE PANELBOARD SCHEDULE)
⑨ POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQUIRED
⑩ SERVICE CABLES	3-600V (XLP-TYPE USE) NO. 3/0
⑪ LAMPHOLDER WIRE	600V XLP NO. 12
⑫ CONTROL WIRE	600V XLP NO. 12
⑬ SURGE ARRESTOR	36 K AMPERE PEAK SURGE RATING PER PHASE
⑭ BACKBOARD	1/2" THICK, SOLID PHENOLIC LAMINATE
⑮ DOOR SWITCH	20 AMPERE, 120 VOLT, MOUNTED IN DOOR, SNAP ACTION TYPE, PLUNGER SWITCH,
⑯ HAND-AUTO-OFF CONTROL SWITCH	20A, 3 POS. SELECTOR TYPE, MTD IN SQUARE DIE CAST ALUMINUM BOX
⑰ PHOTOCCELL	120V, MTD. ON CABINET, 30 SEC DELAY, SPST-NC, 1-4FC ON, 3-12FC OFF
⑱ TERMINAL BLOCKS	30 AMPERE, 240V, 36 CKTS, *14-*4AWG, INSULATED, CKTS LABELED

- NOTES: 1. ALL ITEMS LISTED IN LIGHTING CONTROLLER COMPONENT SCHEDULE SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR THE LIGHTING CONTROLLER INCLUDING CABINET AND FOUNDATION.
2. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
3. ALL SWITCHES AND CONTROLS SHALL BE IDENTIFIED USING TWO COLOR ENGRAVED NAMEPLATES.
4. IN ADDITION TO REQUIRED LABELING, THIS CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT", INSTALL RED WARNING PLATE NEXT TO MAIN BREAKER INDICATING "CAUTION - LIVE CIRCUITS EVEN WHEN MAIN CIRCUIT BREAKER IS IN THE OFF POSITION".
5. THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.

### LIGHTING CONTROLLER COMPONENT SCHEDULE



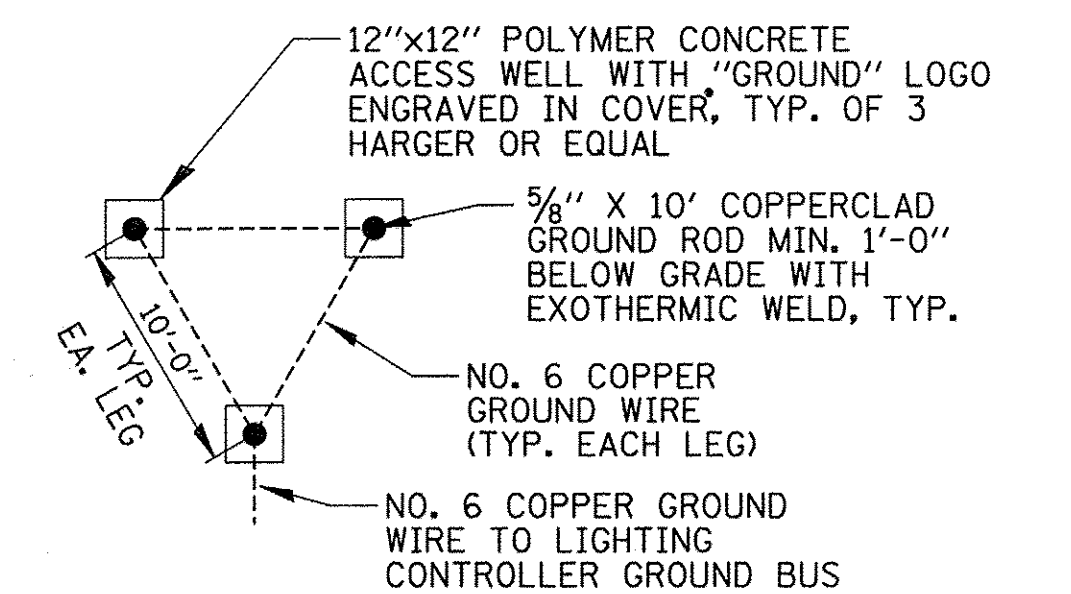
- NOTES: 1. ALL BRANCH CIRCUIT NEUTRAL AND GROUND WIRES SHALL TERMINATE ON EXTERNAL BUSES (NOT IN PANELBOARD).
2. LOCATE EQUIPMENT AT BOTTOM OF CABINET. EACH BUS SHALL ACCOMMODATE 8 CONNECTIONS FOR BRANCH CIRCUIT CABLES (\*14-\*4 AWG)
- PHASE CONDUCTOR  
- - - NEUTRAL CONDUCTOR  
... GROUND CONDUCTOR

### LIGHTING CONTROLLER WIRING DETAIL

N.T.S.

PANELBOARD SCHEDULE LP-1											
WIRE COLORS	CKT #	CB/ POLES	DESCRIPTION	A PH VA	B PH VA	A PH VA	B PH VA	DESCRIPTION	CB/ POLES	CKT #	WIRE COLORS
B	1	20A-2P	A - NORTHWEST LIGHTING	1152	1152	1152		E - SOUTHWEST LIGHTING	20A-2P	2	B
B	3				1152		1152	F - SOUTHWEST LIGHTING	20A-2P	4	B
R	5	20A-2P	B - NORTHWEST LIGHTING	1152		1152		G - SOUTHWEST LIGHTING	20A-2P	6	R
R	7				1152		1152	H - SOUTHWEST LIGHTING	20A-2P	8	R
B	9	20A-2P	C - NORTHEAST LIGHTING	1296		1296		I - SOUTHWEST LIGHTING	20A-2P	10	B
B	11				1296		1296	J - SOUTHWEST LIGHTING	20A-2P	12	B
R	13	20A-2P	D - NORTHEAST LIGHTING	1200		1200		K - SOUTHWEST LIGHTING	20A-2P	14	R
R	15				1200		1200	L - SOUTHWEST LIGHTING	20A-2P	16	R
BL	17	20A-2P	I - NORTHWEST FESTOON	1080		1080		M - SOUTHWEST FESTOON	20A-2P	18	BL
O	19		J - NORTHWEST FESTOON		1080		1080	N - SOUTHWEST FESTOON	20A-2P	20	O
BL	21	20A-2P	K - NORTHEAST FESTOON	1260		1260		O - SOUTHWEST FESTOON	20A-2P	22	BL
O	23		L - NORTHEAST FESTOON		1080		1080	P - SOUTHWEST FESTOON	20A-2P	24	O
B	25	20A-1P	Q - NORTHEAST SIGN	250				SPARE	20A-2P	26	B
B	27	20A-1P	R - SOUTHWEST SIGN		250			SPARE	20A-2P	28	B
	29		SPACE					SPARE	20A-1P	30	
SUBTOTALS:				7390	7210	7140	6960				

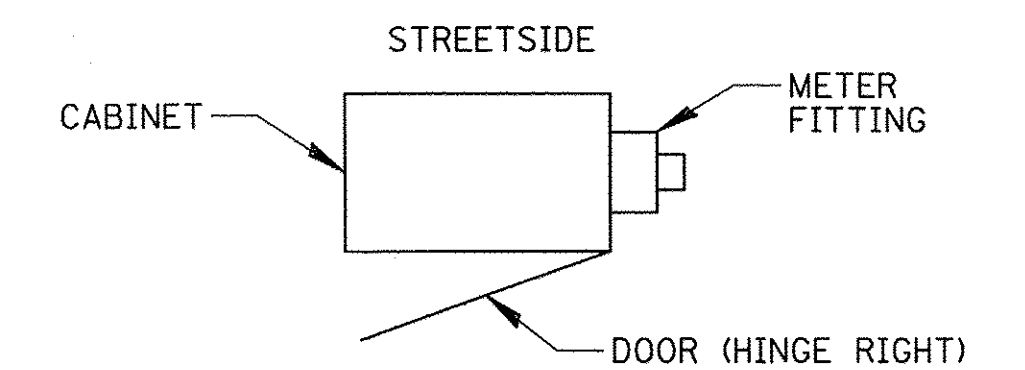
- NOTES: 1. ALL CIRCUIT BREAKERS SHALL BE BOLT ON TYPE.
2. BRANCH CIRCUIT WIRING COLORS: (B) BLACK, (R) RED, (BL) BLUE, & (O) ORANGE.



- NOTES: 1. ACCESS WELLS SHALL BE INCLUDED IN THE LIGHTING CONTROLLER PAY ITEM.

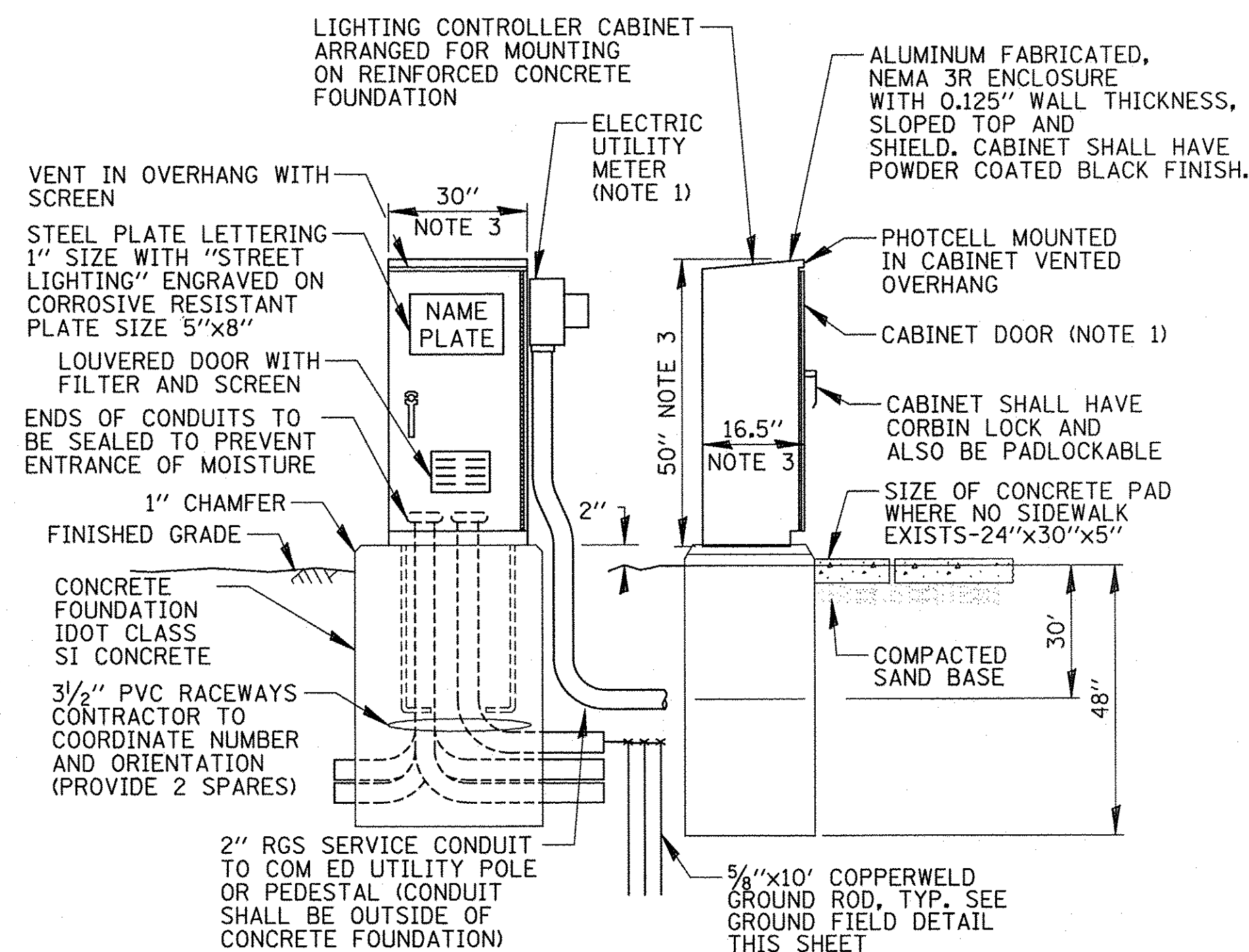
### GROUND FIELD DETAIL (TYP.)

N.T.S.



### CABINET METER FITTING & DOOR ORIENTATION

N.T.S.

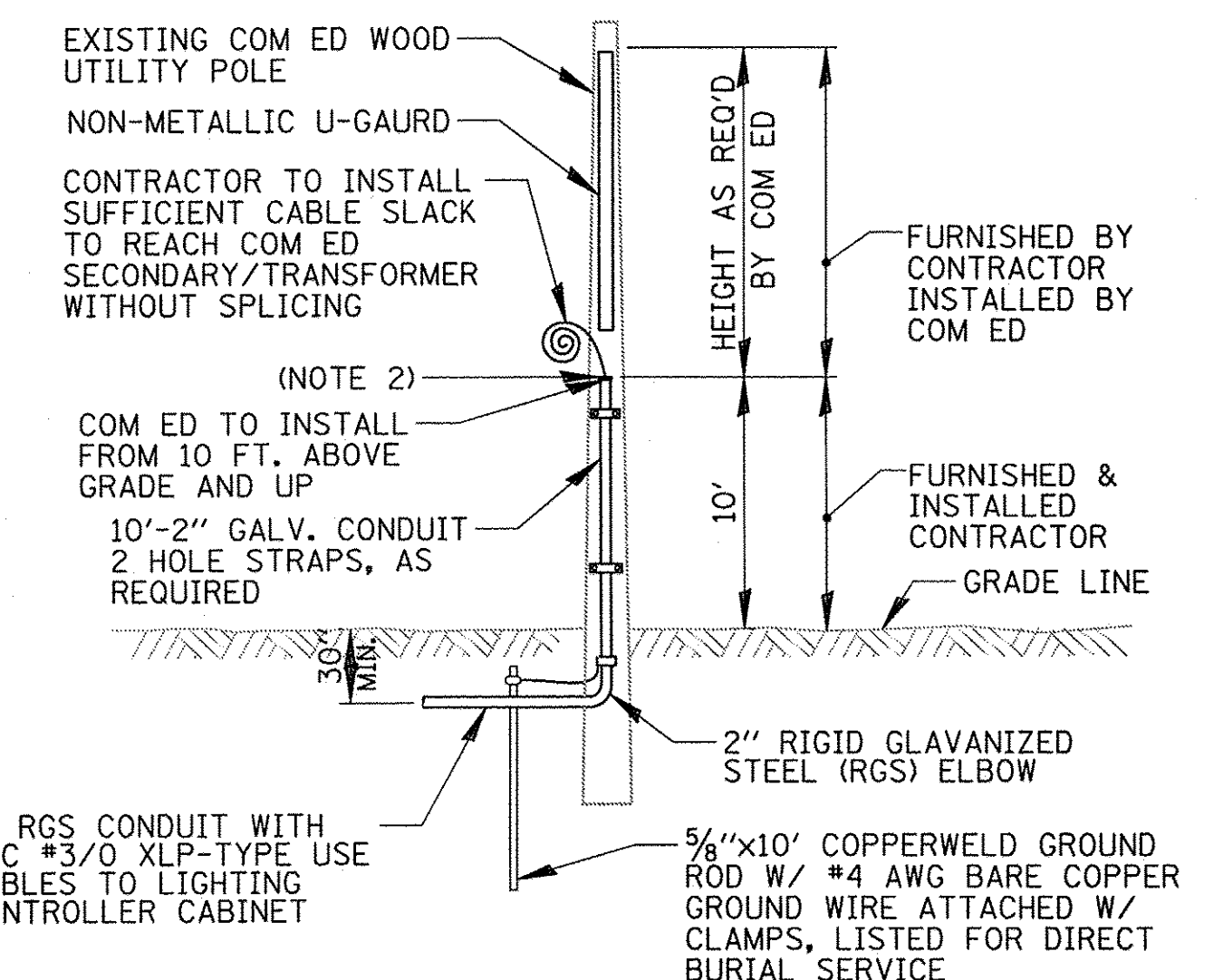


#### NOTES:

1. SEE DETAIL THIS SHEET FOR CABINET METER FITTING & DOOR ORIENTATION. METER AND DISCONNECT SHALL BE CECHA APPROVED.
2. ALL ITEMS SHOWN ABOVE (INCLUDING FOUNDATION, ELECTRIC METER & GROUND FIELD) SHALL BE INCLUDED IN THE PRICE BID FOR "LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 100 AMP", EXCEPT FOR THE SERVICE CONDUIT/WIRE WHICH WILL BE PAID FOR SEPARATELY.
3. CABINET DIMENSIONS SHOWN ARE APPROXIMATE, CABINET SHALL BE AS COMPACT AS POSSIBLE, CONTRACTOR TO COORDINATE.
4. UTILITY METER & ABOVE GRADE SERVICE CONDUIT SHALL BE PAINTED BLACK TO MATCH CABINET.

### LIGHTING CONTROLLER CABINET & FOUNDATION

N.T.S.



#### NOTES:

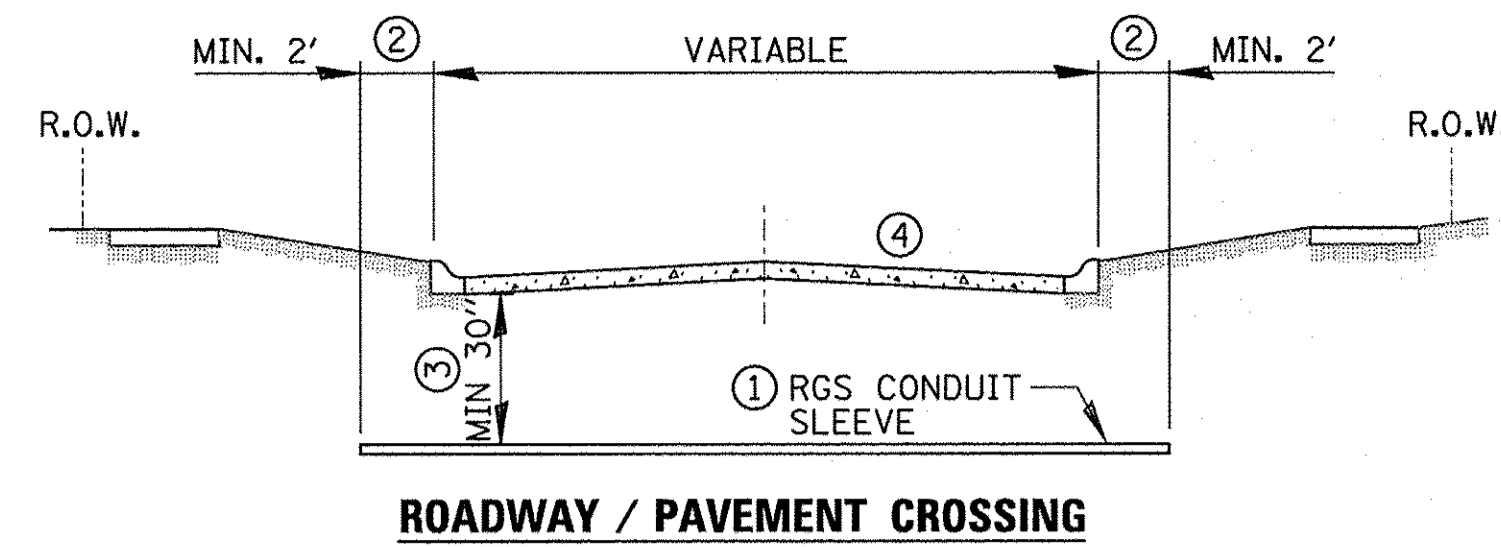
1. ALL WORK SHALL CONFORM TO COM ED'S BOOK OF "INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."
2. CONTRACTOR SHALL PROVIDE CONDUIT BUSHING AND SEALING COMPOUND AT TOP OF RISER.
3. ALL MATERIAL ABOVE (EXCEPT FOR POLE) SHALL BE INCLUDED IN THE PRICE BID FOR "ELECTRIC SERVICE INSTALLATION". THE HORIZONTAL SERVICE CONDUIT AND WIRING FROM POLE TO CONTROLLER SHALL BE PAID FOR SEPARATELY.

### COM ED OVERHEAD CONNECTION POLE

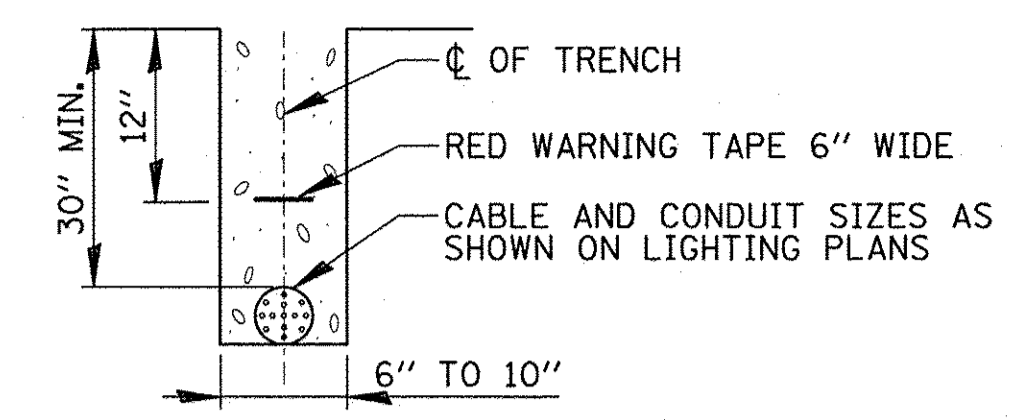
N.T.S.

FILE NAME =	USER NAME = mthomas	DESIGNED - AJD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		PROPOSED ELECTRICAL DETAILS - 1		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\0223\BG046\Mech\LDI_0023\BG046b-01.sht	DRAWN - LRR	REVISIONS -	REVISIONS -			347	13-00112-00-L5	COOK	151	88		
Default	PLOT SCALE = 1'	CHECKED - AJD	REVISIONS -	SCALE: N.T.S.	SHEET 1 OF 5 SHEETS	STA. N/A TO STA. N/A	ILLINOIS FED. AID PROJECT		CONTRACT NO. 61D26			
	PLOT DATE = 11/14/2016	DATE - 3/10/2016	REVISIONS -									





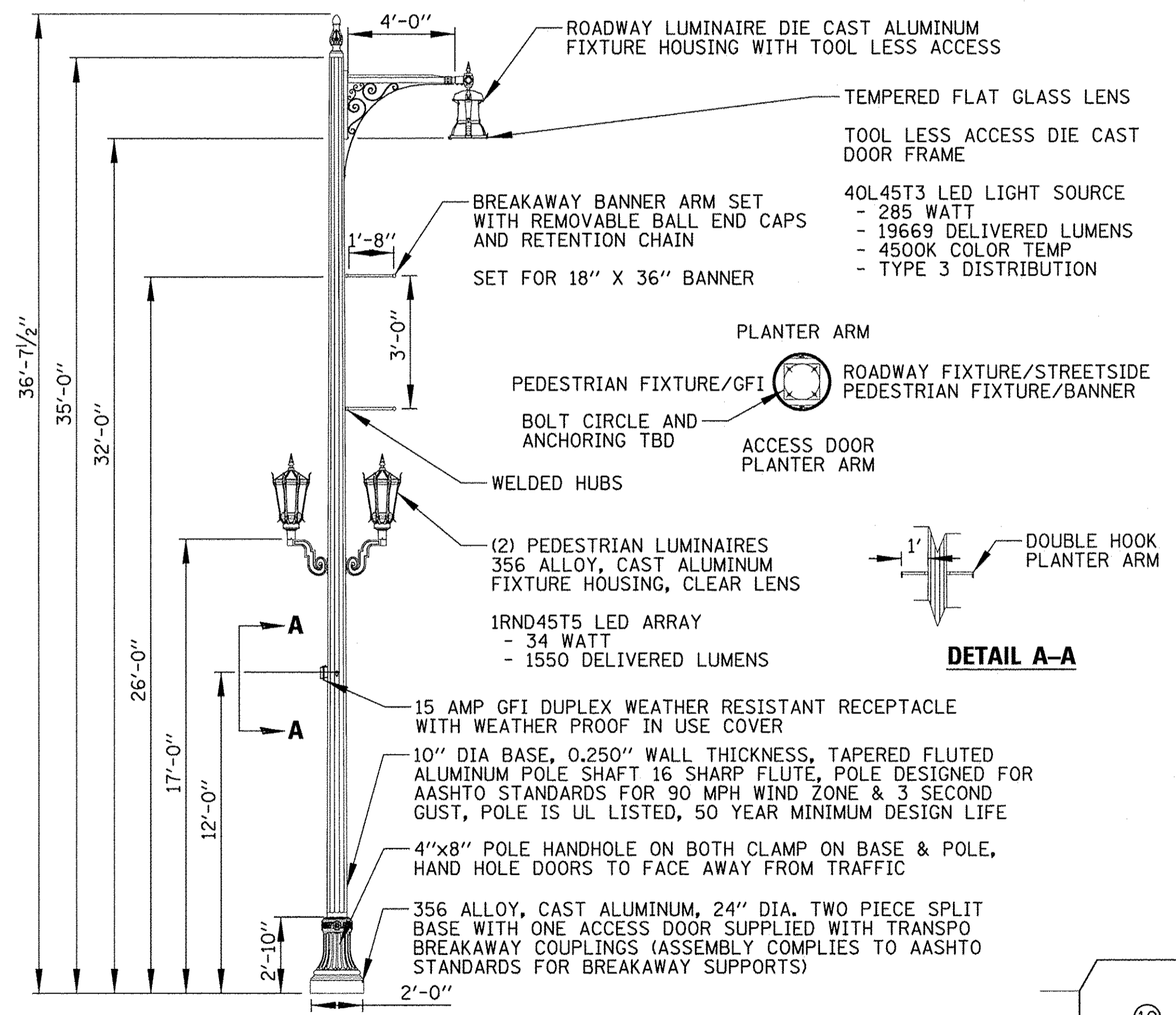
**ROADWAY / PAVEMENT CROSSING**



**TRENCH CROSS SECTION**

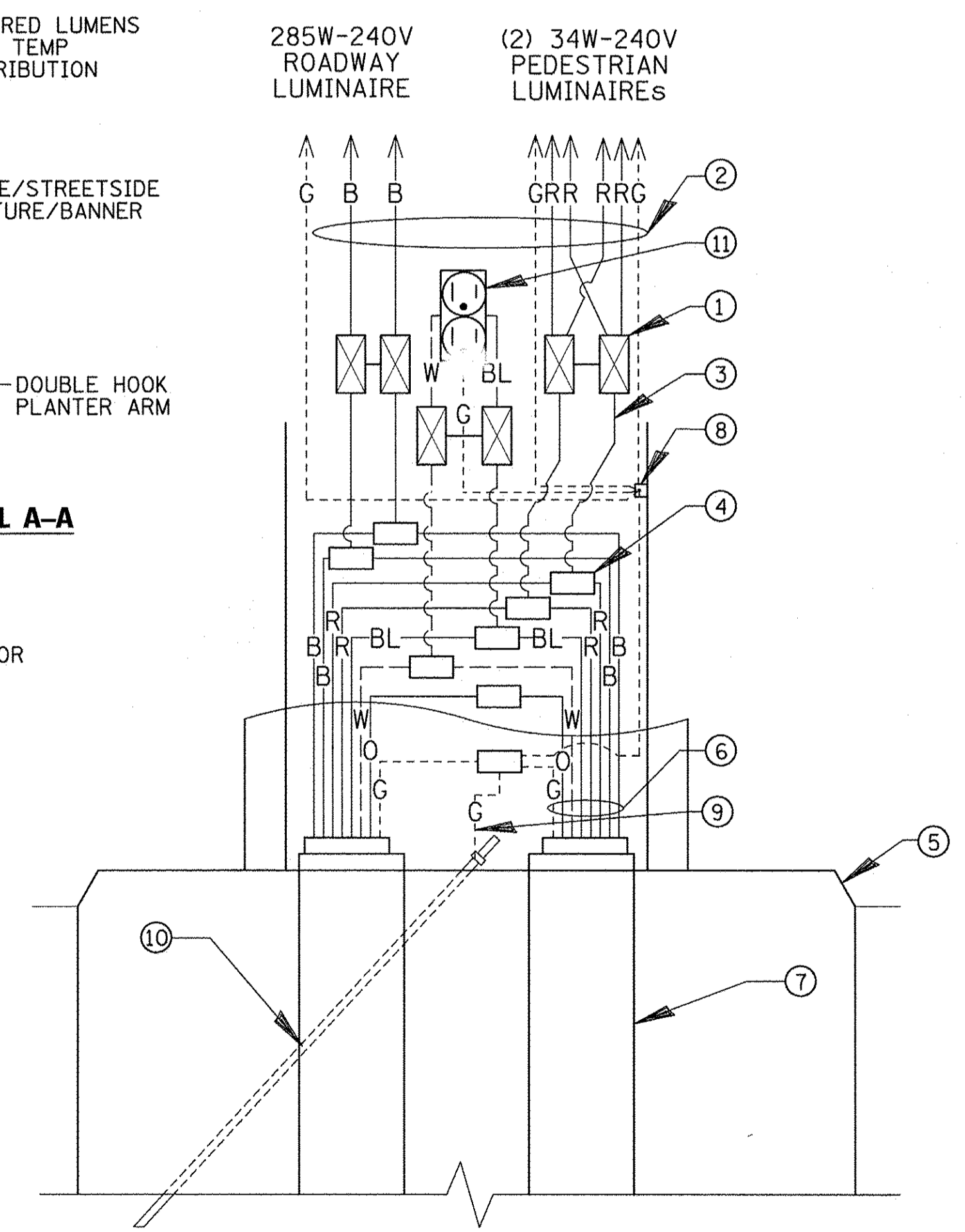
- ① SLEEVE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) CONDUIT.
- ② SLEEVE SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.
- ③ SLEEVE SHALL BE A MINIMUM OF 30" BELOW ROADWAY OR CURB BOTTOM.
- ④ CONTRACTOR SHALL PERFORM EXPLORATORY POTHoles IN PAVEMENT IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER.

**ELECTRIC CONDUIT INSTALLATION**  
N.T.S.

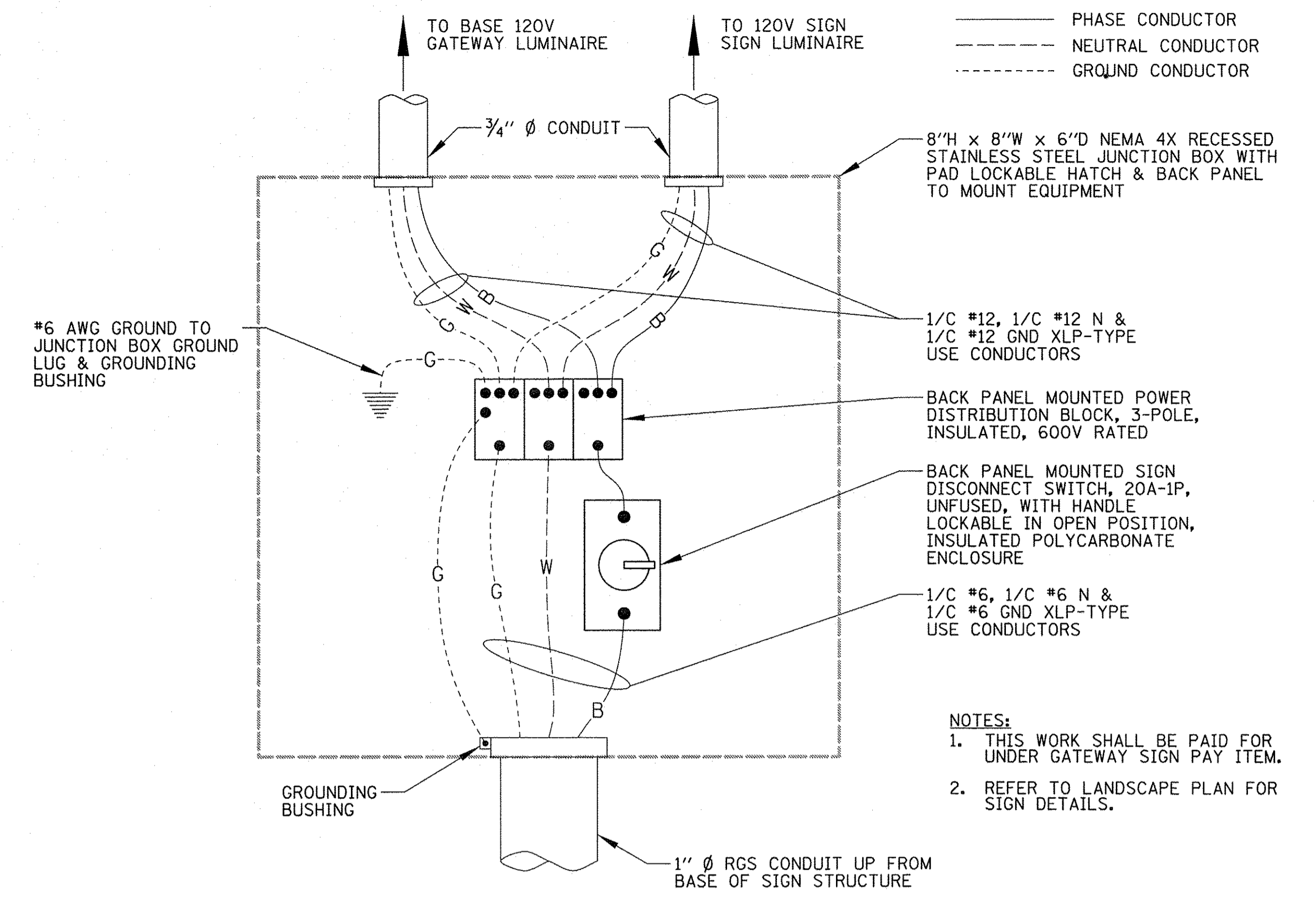


- NOTES:**
1. ROADWAY LUMINAIRE: 1-1914FLED/FG/SMA4/40L45T3-MDL21  
PEDESTRIAN LUMINAIRE: 2-MS805ALED/579PM/1RND45T5/ML/CA  
POLE: H24AC35ARTF-16SF/BDBA6/GFI-IUC/DHPA/BK
  2. LIGHT POLE, LUMINAIRE, ARMS, BASE, BANNER ARMS & RECEPTACLE COVERS SHALL BE PAINTED BLACK.
  3. TYPE 1 LIGHT POLE SHALL HAVE BANNER ARMS INSTALLED.
  4. TYPE 2 LIGHT POLE SHALL HAVE WELDED HUB FOR BANNER ARMS BUT WILL NOT HAVE BANNER ARMS. HUBS SHALL HAVE COLOR MATCHING PROTECTIVE/CAPTIVE CAPS.

**LIGHT POLE ASSEMBLY DETAIL**  
N.T.S.



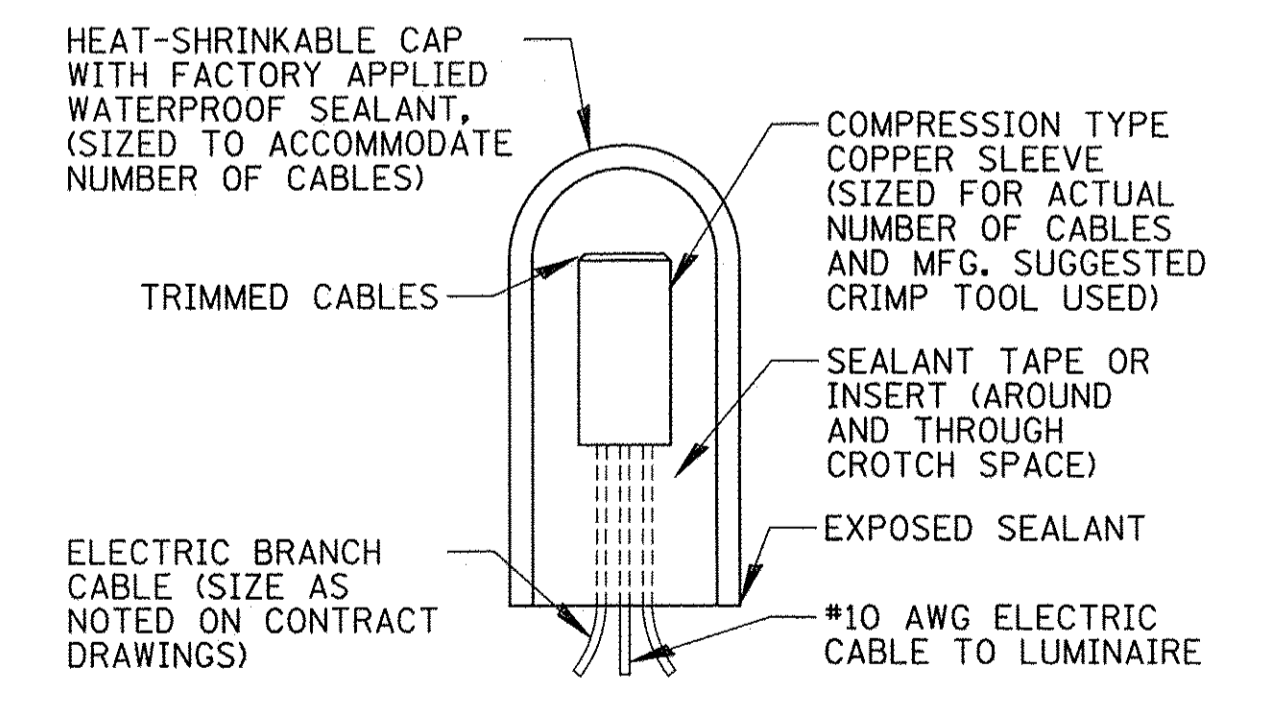
**HANDHOLE WIRING DIAGRAM**  
N.T.S.



**GATEWAY ELEMENT SIGN WIRING DIAGRAM**  
N.T.S.

- ① 2.5A FUSE FOR ROADWAY LUMINAIRE, 1A FUSE FOR PEDESTRIAN LUMINAIRE & 2A FUSE FOR FESTOON RECEPTACLE (NEUTRAL SHALL BE NON-FUSED)  
2-POLE BREAKAWAY FUSE HOLDER & INSULATING BOOTS
- ② NO. 10 XLP-TYPE USE POLE WIRES TO LUMINAIRE & RECEPTACLE, SEE NOTE
- ③ NO. 10 GROUND WIRE CONNECTED TO GROUND LUG IN LUMINAIRE
- ④ MULTIPLE COMPRESSION FITTINGS (SPlice), TYP.
- ⑤ CONCRETE FOUNDATION
- ⑥ WIRES AS SHOWN ON PLANS
- ⑦ PROPOSED LIGHTING CONDUIT PULLED THROUGH PVC RACEWAY
- ⑧ POLE GROUND LUG, 1/4, 20 THREADED BOLT
- ⑨ NO. 6 SOLID GROUND WIRE MECHANICALLY CLAMPED TO GROUND ROD
- ⑩ GROUND ROD
- ⑪ 20A-120V GFCI RECEPTACLE

NOTE: POLE WIRING INSULATION COLORING TO MATCH BRANCH CIRCUIT WIRING  
B=BLACK, R=RED, BL=BLUE, O=ORANGE  
W=WHITE, G=GREEN

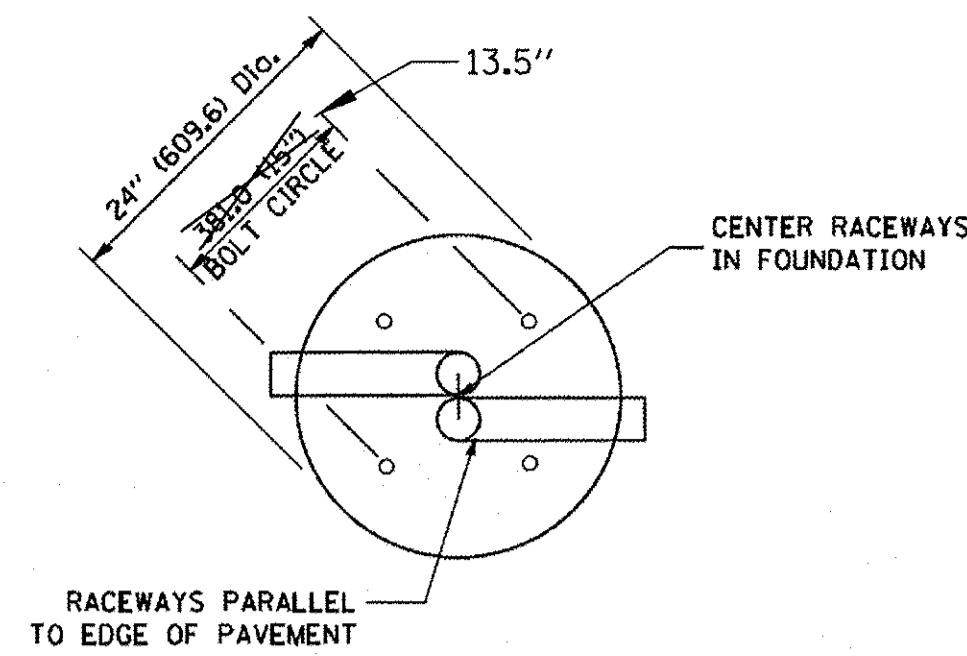


**SPlicing ELECTRIC CABLE**  
N.T.S.

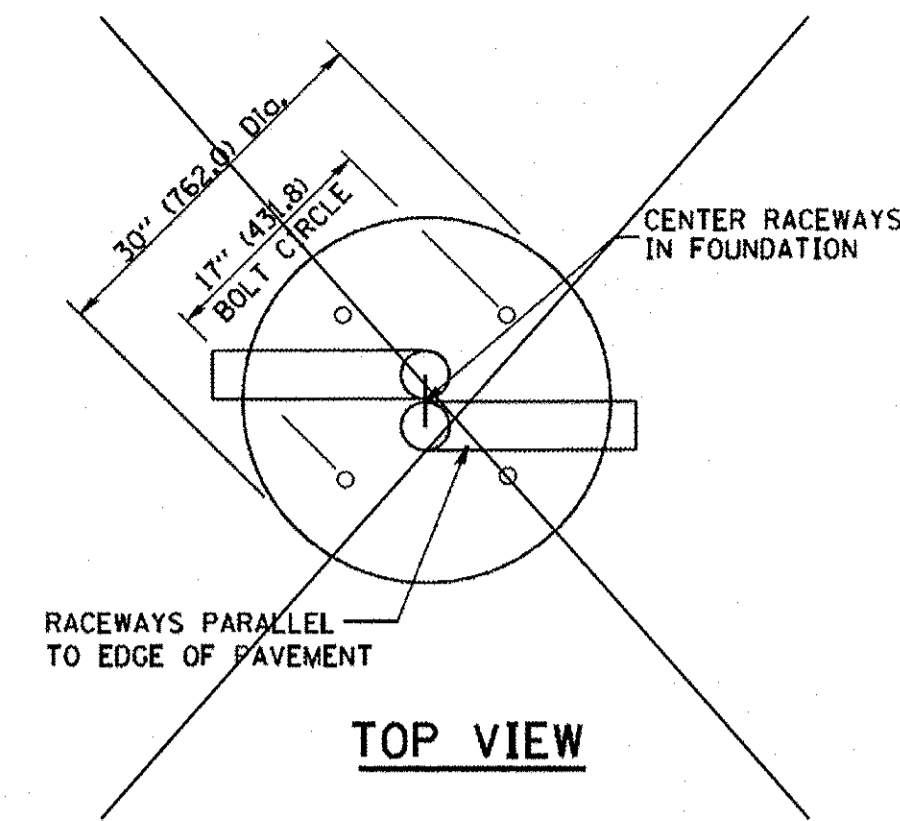
FILE NAME = N:\FORESTPARK\0023\BG046\Mech\LDT_0023\BG046-02.sht	USER NAME = mthomas	DESIGNED - AJD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED ELECTRICAL DETAILS - 2</b>			F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 89
Default	PLOT SCALE = 1"	CHECKED - AJD	REVISED -		SCALE: N.T.S.	SHEET 2 OF 5 SHEETS	STA. N/A TO STA. N/A	CONTRACT NO. 61D26				
	PLOT DATE = 11/14/2016	DATE - 3/10/2016	REVISED -		ILLINOIS FED. AID PROJECT							

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

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



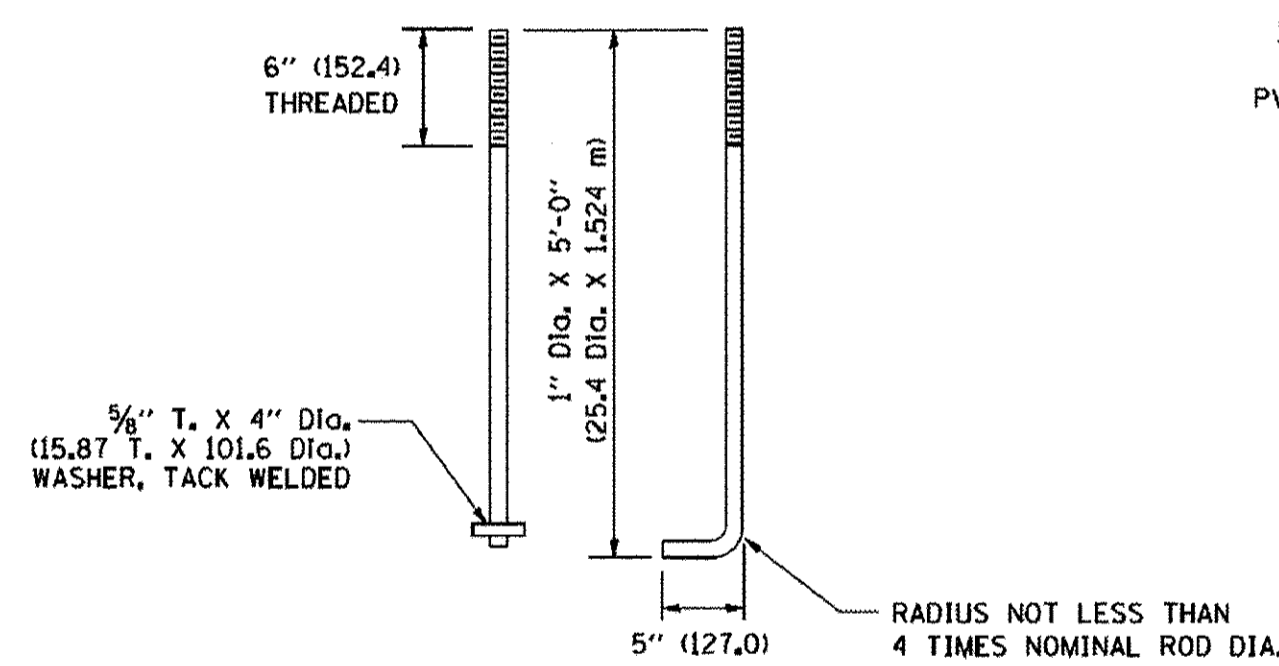
**TOP VIEW**



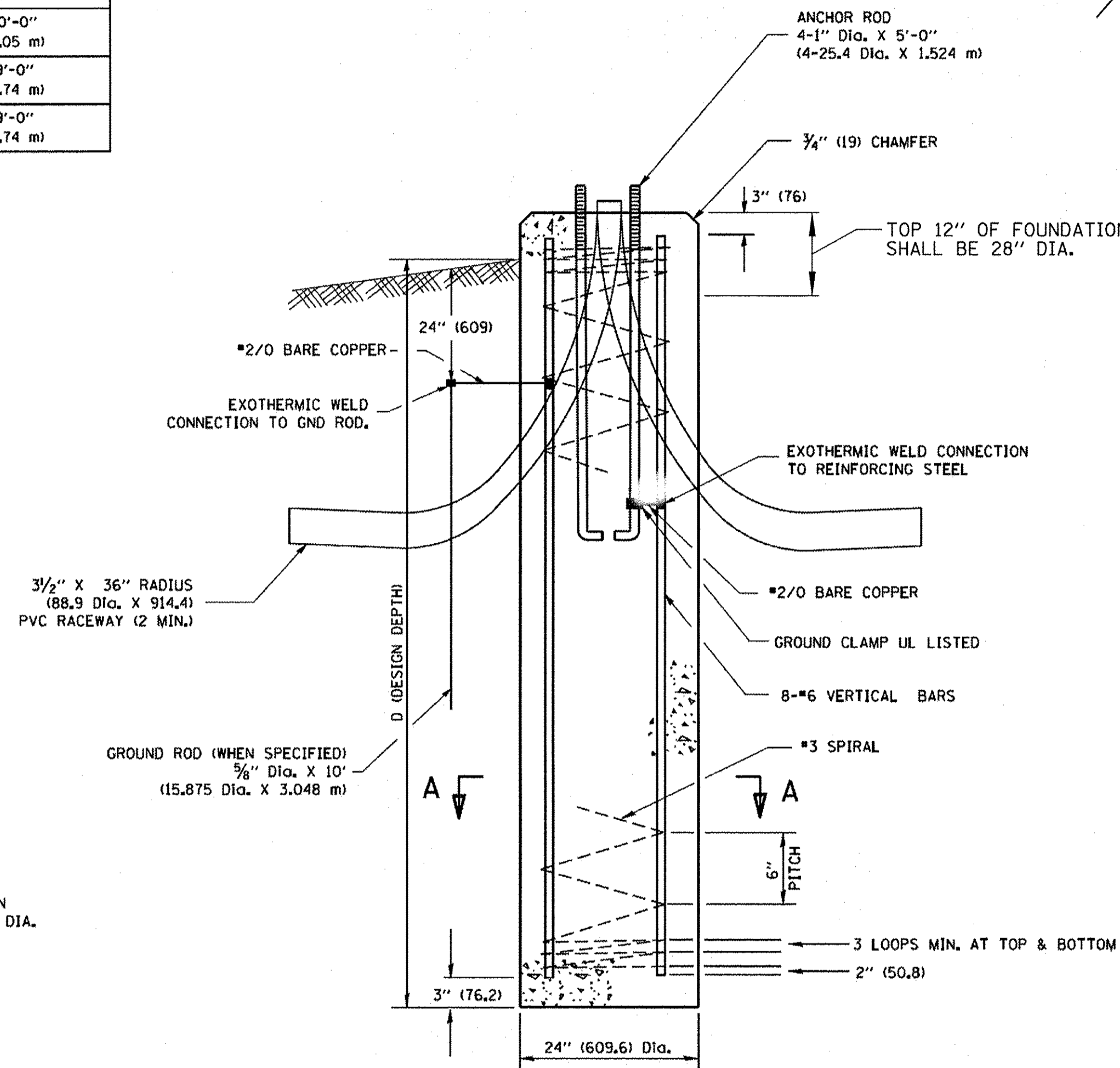
**TOP VIEW**

**NOTES**

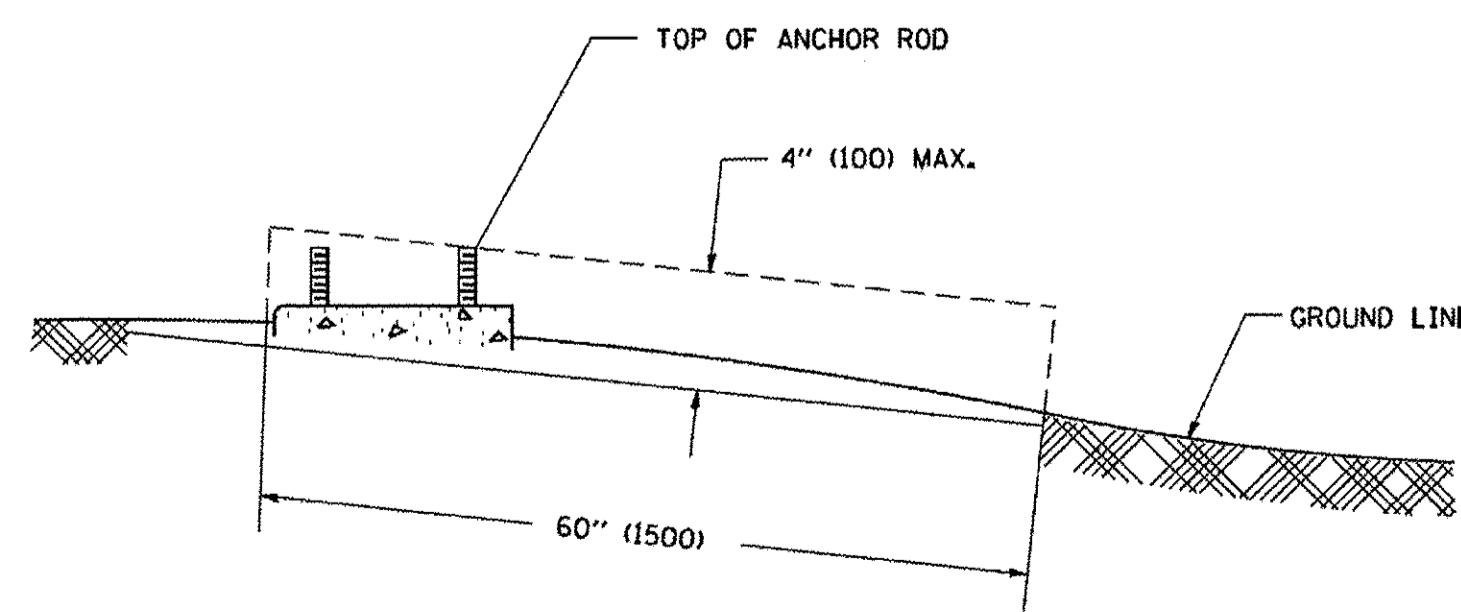
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION,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



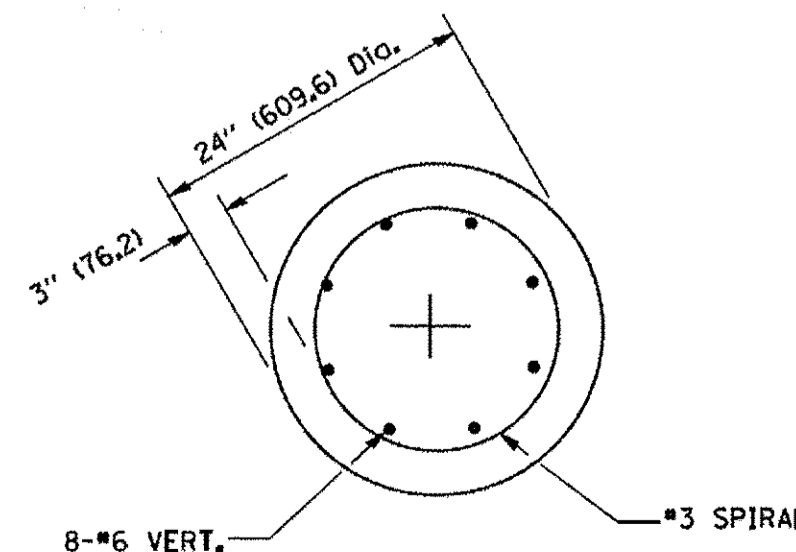
**ANCHOR ROD DETAIL**



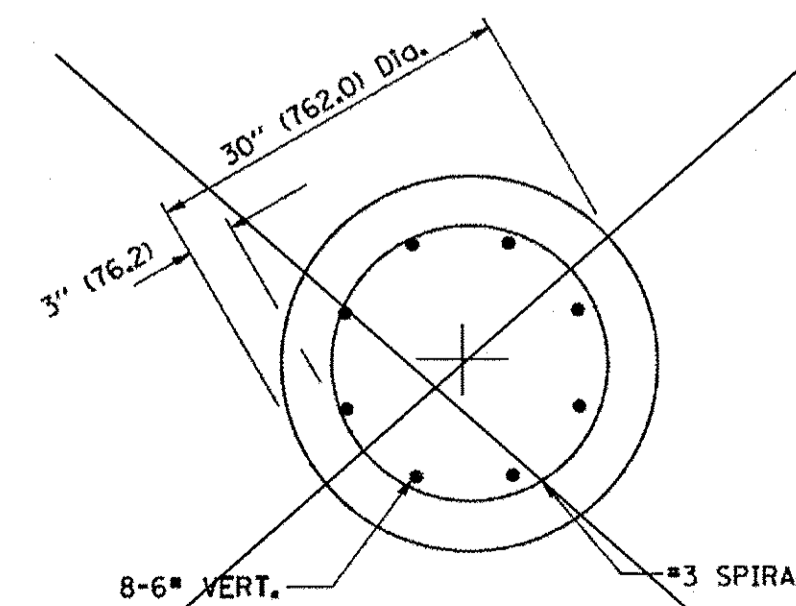
**FOUNDATION DETAIL**



**FOUNDATION EXTENSION DETAIL**



**SECTION A-A**



**SECTION A-A**

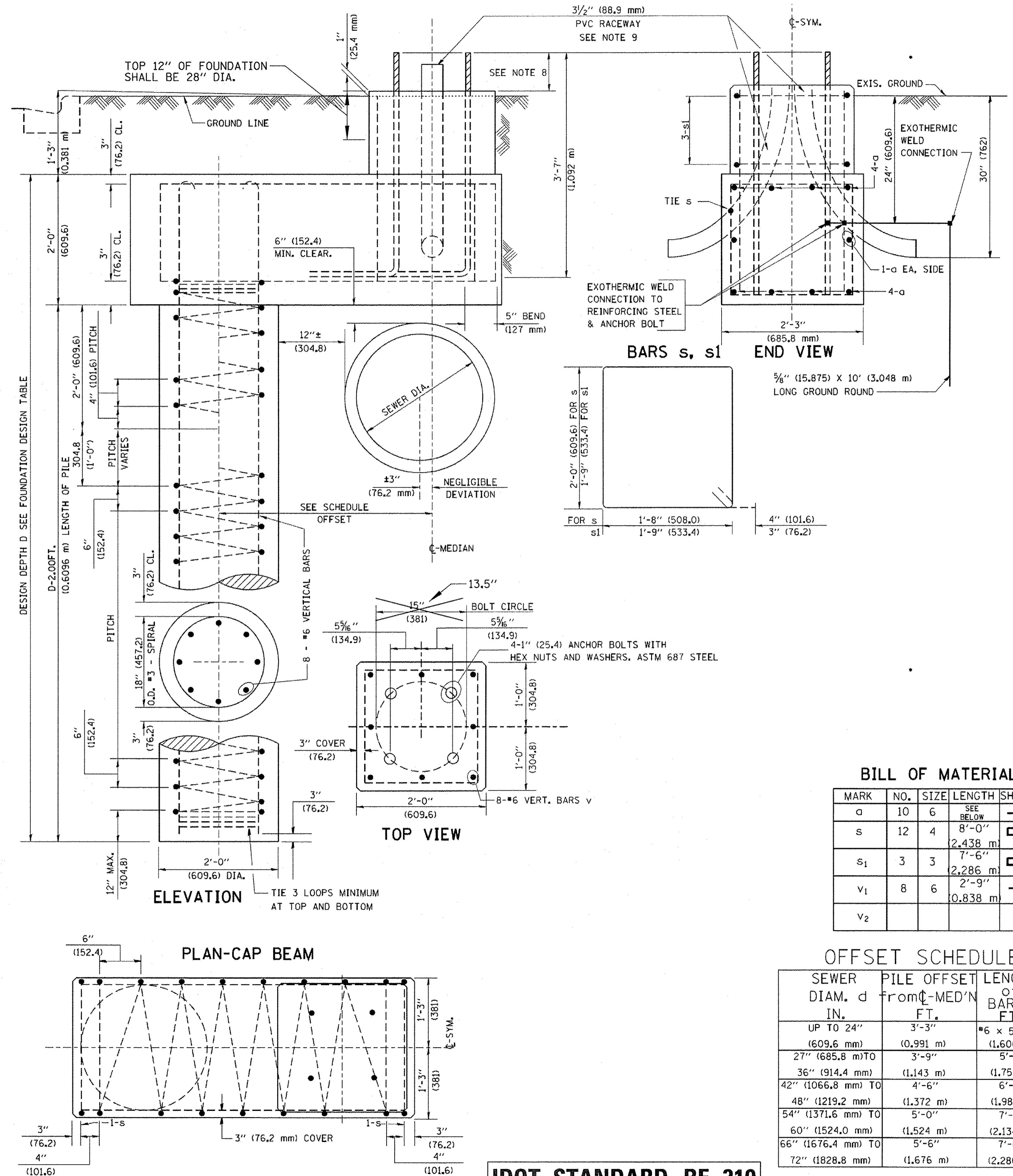
**IDOT STANDARD BE-301**

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13'-0" (3.962 m)	15'-0" (4.572 m)	8-#6X12'-6" (3.810 m)	*3X122' (37.186 m)	8-#6X14'-3" (4.343 m)	*3X141' (42.977 m)
MEDIUM CLAY	9'-6" (2.896 m)	10'-9" (3.277 m)	8-#6X9'-0" (2.743 m)	*3X90' (27.432 m)	8-#6X10'-0" (3.048 m)	*3X100' (30.480 m)
STIFF CLAY	7'-0" (2.134 m)	8'-0" (2.438 m)	8-#6X6'-6" (1.981 m)	*3X66' (20.112 m)	8-#6X7'-6" (2.286 m)	*3X76' (23.165 m)
LOOSE SAND	9'-0" (2.743 m)	10'-0" (3.048 m)	8-#6X8'-6" (2.591 m)	*3X85' (25.908 m)	8-#6X9'-6" (2.896 m)	*3X94' (28.651 m)
MEDIUM SAND	8'-3" (2.515 m)	9'-0" (2.743 m)	8-#6X8'-0" (2.438 m)	*3X78' (23.774 m)	8-#6X8'-6" (2.591 m)	*3X85' (25.908 m)
DENSE SAND	7'-9" (2.362 m)	9'-0" (2.743 m)	8-#6X7'-6" (2.286 m)	*3X73' (22.250 m)	8-#6X8'-6" (2.591 m)	*3X85' (25.908 m)
ROCK OR SOLIDIFIED SLAG	5'-0" (1.524 m)	5'-0" (1.524 m)	NONE	NONE	NONE	NONE

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.



BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8'-0" (2,438 m)	□
s <sub>1</sub>	3	3	7'-6" (2,286 m)	□
v <sub>1</sub>	8	6	2'-9" (0,838 m)	—
v <sub>2</sub>				

OFFSET SCHEDULE

SEWER DIAM. d	PILE OFFSET from C-MEDIAN	LENGTH of BAR a
UP TO 24" (609.6 mm)	3'-3" (0,991 m)	*6 x 5'-3" (1,600 m)
27" (685.8 mm) TO	3'-9" (1,143 m)	5'-9" (1,753 m)
36" (914.4 mm)	(1,143 m)	(1,753 m)
42" (1066.8 mm) TO	4'-6" (1,372 m)	6'-6" (1,981 m)
48" (1219.2 mm)	(1,372 m)	(1,981 m)
54" (1371.6 mm) TO	5'-0" (1,524 m)	7'-0" (2,134 m)
60" (1524.0 mm)	(1,524 m)	(2,134 m)
66" (1676.4 mm) TO	5'-6" (1,676 m)	7'-6" (2,286 m)
72" (1828.8 mm)	(1,676 m)	(2,286 m)

IDOT STANDARD BE-310

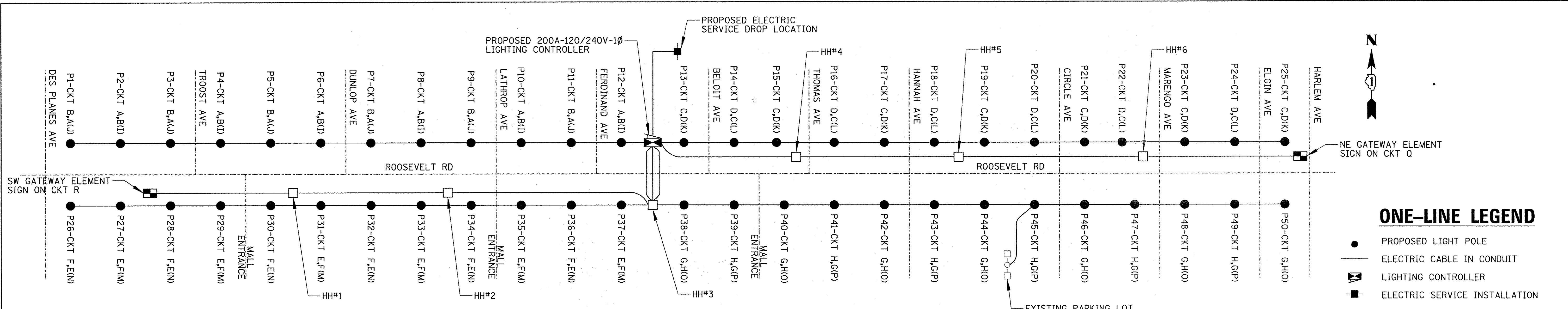
FILE NAME =	USER NAME = mthomas	DESIGNED - AJD	REVISED -
N:\FORESTPARK\0023\BG046\Mech\LD1_0023\BG046B-04.sht		DRAWN - LRR	REVISED -
	PLOT SCALE = 1'	CHECKED - AJD	REVISED -
Default	PLOT DATE = 11/14/2016	DATE - 3/10/2016	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

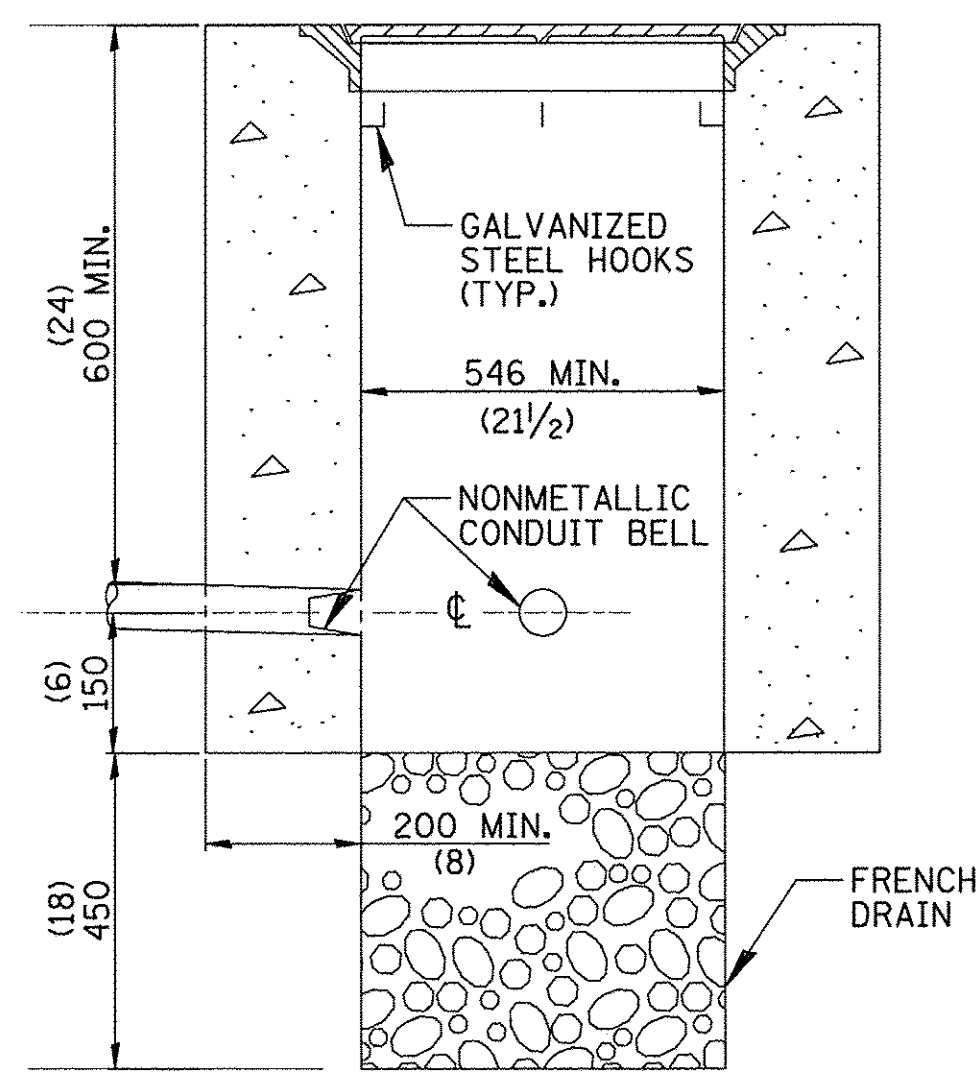
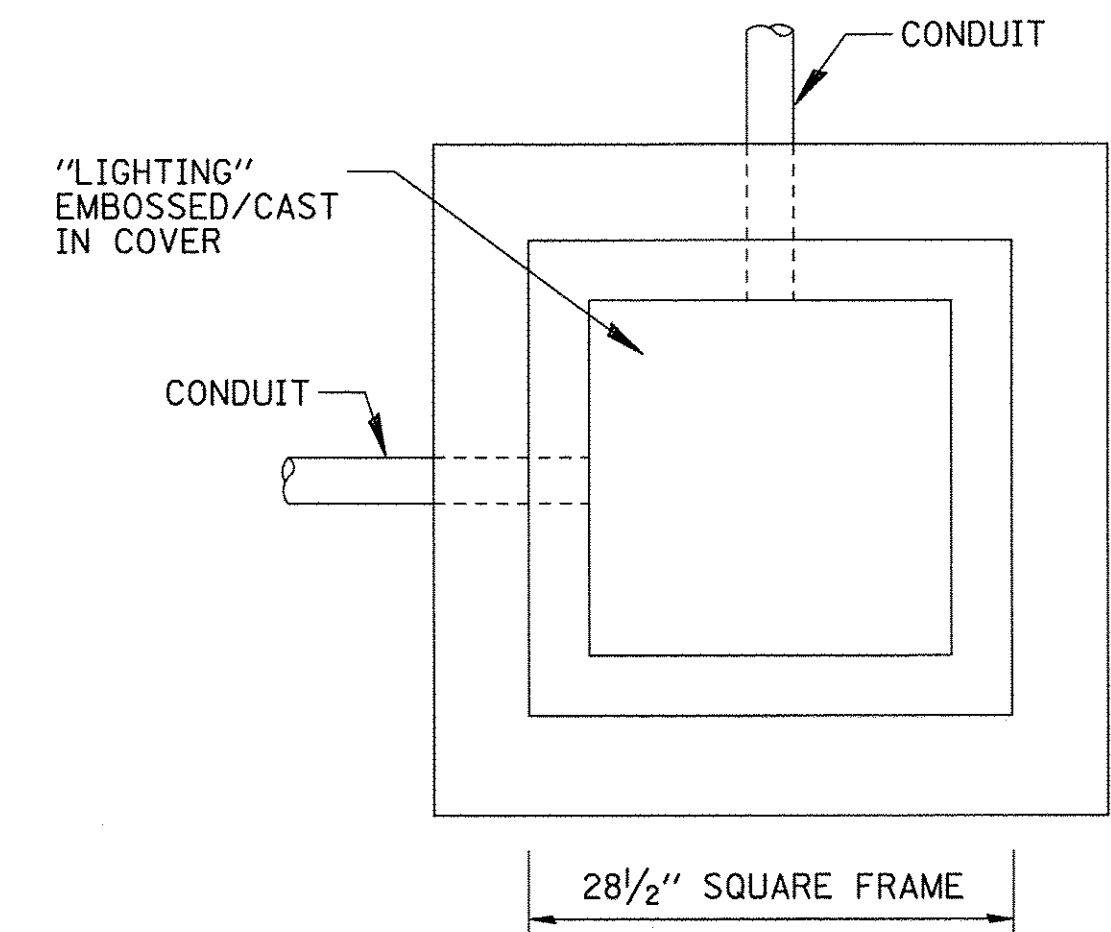
PROPOSED ELECTRICAL DETAILS - 3

SCALE: N.T.S. SHEET 4 OF 5 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	91
			CONTRACT NO. 61D26	
ILLINOIS FED. AID PROJECT				

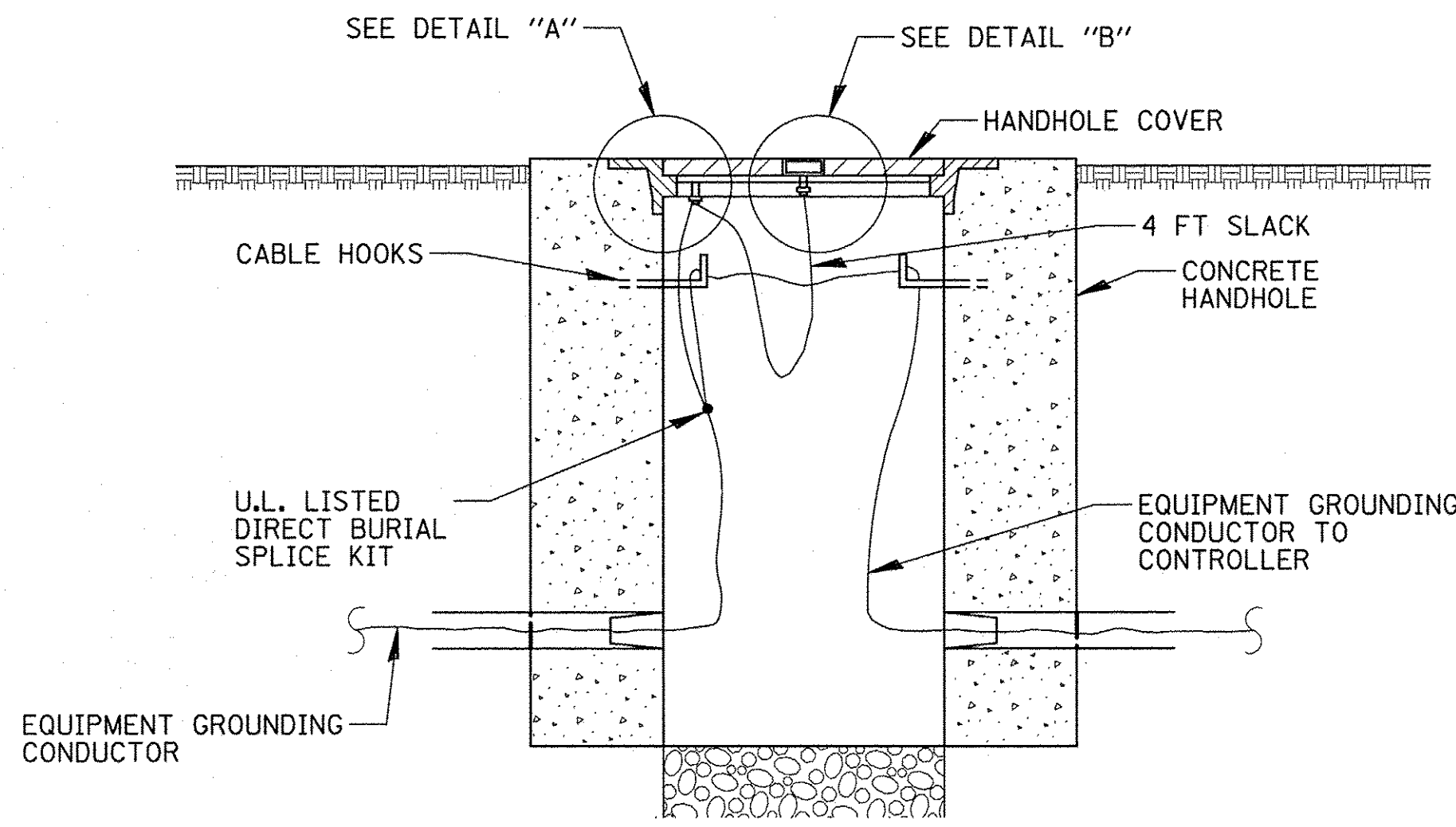


**ONE-LINE DIAGRAM**  
N.T.S.



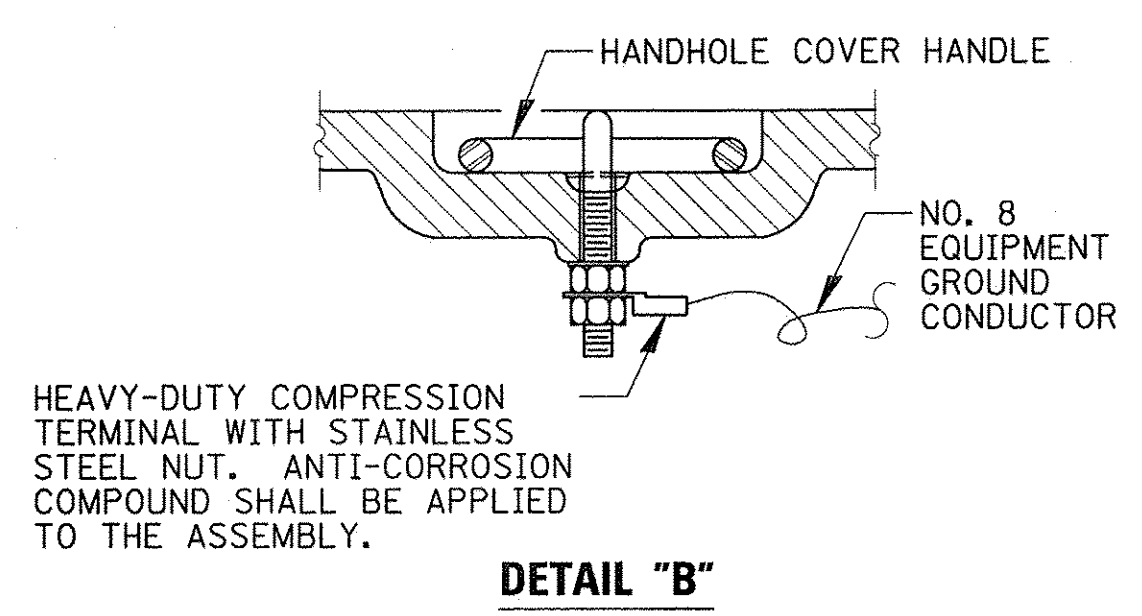
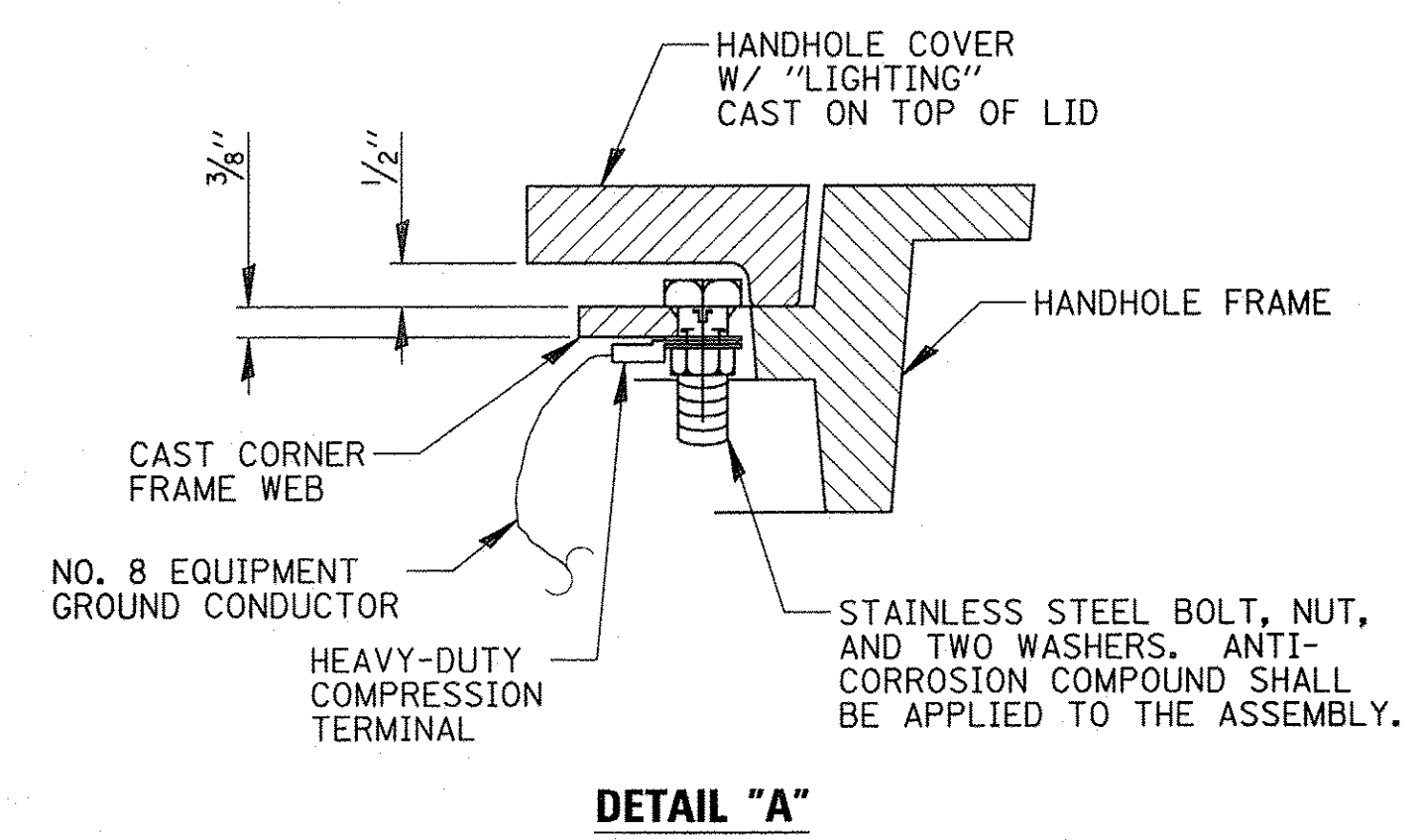
**NOTES:**  
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.  
2. FRAME AND COVER CAN BARE 64 KG (140 LBS.) MIN. LOAD

**HANDHOLE**  
N.T.S.



**NOTES:**  
1. LIGHTING AND FESTOON RECEPTACLE CONDUCTORS NOT SHOWN FOR CLARITY.  
2. BONDING COVER AND FRAME SHALL BE INCIDENTAL TO HANDHOLE PAY ITEM.  
3. EQUIPMENT GROUNDING CONDUCTOR SHALL NOT BE CUT.

**BONDING CONCRETE HANDHOLE COVER & FRAME**  
N.T.S.



FILE NAME =	USER NAME = mthomas	DESIGNED - AJD	REVISED -
N:\FORESTPARK\023\BG046\Mech\LDT_0023\BG046-05.sht		DRAWN - LRR	REVISED -
Default	PLOT SCALE = 1'	CHECKED - AJD	REVISED -
	PLOT DATE = 11/14/2016	DATE - 3/10/2016	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>PROPOSED ELECTRICAL DETAILS - 4</b>			
SCALE: N.T.S.	SHEET 5 OF 5 SHEETS	STA. N/A	TO STA. N/A

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 92
ILLINOIS FED. AID PROJECT				

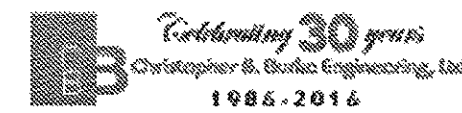
**Lewis Reynolds**

From: Lewis Reynolds  
 Sent: Friday, June 17, 2016 11:37 AM  
 To: 'fernando.flores@comed.com'  
 Cc: Anthony Dericco  
 Subject: Acct. # 2564102005 Lighting Controller at 7445 W. Roosevelt Rd

Fernando,

Just wanted to recap what we discussed at our site meeting today 6/17/16. The existing Com Ed pole in alley behind the NE corner of Roosevelt Rd/Ferdinand Ave that we would like to connect to has a marker indicating that the pole is to be replaced. The proposed lighting system will not be energized until July of 2017 and you believe between now and then that Com Ed will replace the pole and we will be able to bring our proposed service conduit to that pole. Thank you again for meeting with me today, please let me know if you need any additional information.

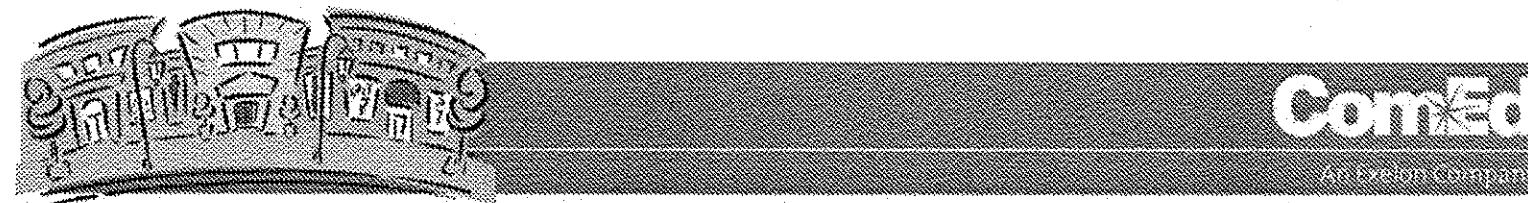
Lewis R. Reynolds  
 Mechanical Engineer  
 Christopher B. Burke Engineering, Ltd.  
 9575 W. Higgins Road, Suite 600 Rosemont, IL 60018  
 Phone: (847) 823-0500 Fax: (847) 939-5214  
 E-Mail: [fernando@cbbel.com](mailto:fernando@cbbel.com)  
[www.cbbel.com](http://www.cbbel.com)



The information contained in this e-mail is intended only for the individual or entity to whom it is addressed and should not be opened, read or utilized by any other party. This message shall not be construed as official project information or its disclosure except as expressly provided in the contract document. Its contents (including any attachments) may contain confidential and/or privileged information. If you are not an intended recipient you must not take, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message.

COMED CONTACT: FERNANDO FLORES  
 708-410-5313  
 FERNANDO.FLORES@COMED.COM

**COM ED CORRESPONDENCE**



**Service and Meter Application  
 Switch and Load Information Sheet**

Please complete a separate sheet for each switch – existing or new:

Project Name: Roosevelt Rd. Streetscape Lighting  
 Site Address: 7445 W. Roosevelt Rd.  
 Switch Name and Location: Lighting Controller, NE Corner Roosevelt/Ferdinand

**Service Voltage (check one):**

- 120/240V 1-phase, 3-wire
- 120/240V 3-phase, 4-wire
- 120/208V 3-phase, 4-wire
- Other:
- 4kV  12kV  34kV 3-phase, 3-wire
- 4kV  12kV  3-phase, 4-wire
- 277/480V 3-phase, 4-wire
- 480V 3-phase 3-wire (B-phase Grounded)
- 480V 3-phase 3-wire (Ungrounded – requires ground detection equip.)

**Other Items (check all that apply):**

- New Construction Sq. Ft.
- Building Addition Sq. Ft.
- Relocating Existing Service Entrance
- Hi-Rise/ Vault Service
- Underground Service
- Overhead Service
- Commercial – No. of units Sq. Ft.
- Residential – No. of units Sq. Ft.

Date of Ground Breaking (est.): \_\_\_\_\_ Date to Final Grade (est.): \_\_\_\_\_  
 Date to Energize: July 2017 Hours of Operation Per Day:  8  12  16  24

Switch Size (amps): 200 (If switchgear is 1,200 Amps or larger, customer must submit drawings for ComEd approval)

Switch Rating (percentage): 80

Secondary Conductors: 1 Sets of 3 /C #250  CU or  AL  
(Number) (No. of conductors) (Size) (Type)

**Total Connected Load Information:**

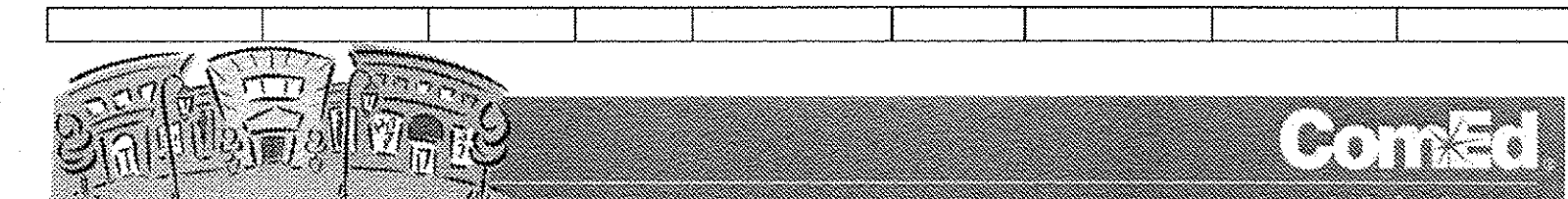
( KW or HP )	Description:	Connected Load:	
		1-phase	3-phase
Lighting:	Roadway Lighting	28.2 KW	
VAC:			
Receptacle:			
Process Heat:			
Water Heat:			
Space Heat:			
Motors**:			
Welders**:			
<b>TOTAL LOAD:</b>		28.2 KW	

**\*Motor Load Detail included above:**

Description	Quantity	Size (HP)	Efficiency Rating	Phase / Voltage	Nema Code	Starts Per Hr. or Day	Starting Amps	Use

**\*\*Welder Detail included above:**

Description	Quantity	Size (kVA)	Type	Max. Inst. Demand	P.F. at Peak	Welds Per Minute	Cycles Per Weld	Hours Per Day Use



**Service and Meter Application  
 Project Information Sheet**

Project Name: Roosevelt Rd. Streetscape Lighting  
 Site Address: 7445 W. Roosevelt Rd City: Forest Park Zip: 60130

Total Number of Service Entrance Locations (meters/switches) Requested: 1

Legal Name of Entity (Electric Consumer): Village of Forest Park  
 Corporation  Partnership  Sole Proprietor  Other: Municipality  
 Tax I.D.: \_\_\_\_\_ Existing Account Number: 2564102005

**Principle(s) to Sign Contracts For Service, Easements, Etc.:**

Property Owner: Village of Forest Park Phone: 7086156200  
 Building Owner: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Building Manager: Tim Gillan Phone: \_\_\_\_\_

**Mailing Address For Contracts:**

Company: Christopher B. Burke Engineering Phone: 847-823-0500 Fax: 847-939-5214  
 Address: 9575 W. Higgins Rd. City: Rosemont Zip: 60018

**Mailing Address For Electric Bills:**

Company: Village of Forest Park Phone: 708-615-6200 Fax: \_\_\_\_\_  
 Address: 517 Des Plaines Ave. City: Forest Park Zip: 60130

**Project Contacts:**

Consulting Engineer: Anthony DeRicco E-mail: [adericco@cbbel.com](mailto:adericco@cbbel.com)  
 Firm Name: Christopher B. Burke Engineering Phone: 847-823-0500 Fax: 847-939-5214  
 Address: 9575 W. Higgins Rd. City: Rosemont Zip: 60018

**Electrical Contractor:**

Consulting Engineer: \_\_\_\_\_ E-mail: \_\_\_\_\_  
 Firm Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

**Other:**

Consulting Engineer: \_\_\_\_\_ E-mail: \_\_\_\_\_  
 Firm Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

**The Following Documents May Be Required:**

1. Plat of Survey with legal description of property (for easement, if required)
2. Site Plan showing building relative to property lines – mark service entrance location(s)
3. Civil drawings (showing water, sewer, gas, phone, electric, pavement, grading, etc.)
4. Complete electrical drawings and/or load detail sheets

**Information Provided By:**

Print Name: Anthony DeRicco  
 Signature: \_\_\_\_\_  
 Date: 05/31/16

**LIGHTING CONTROLLER SERVICE APPLICATION**

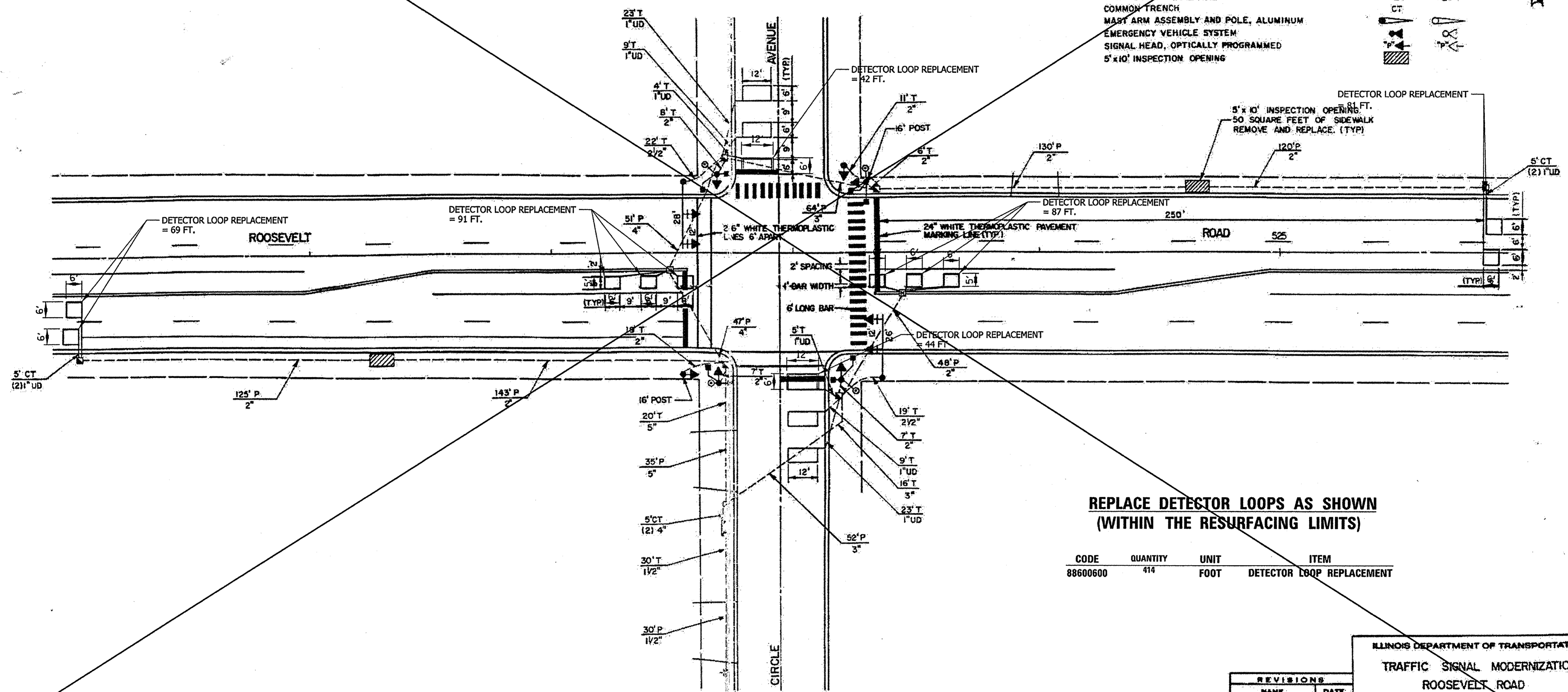
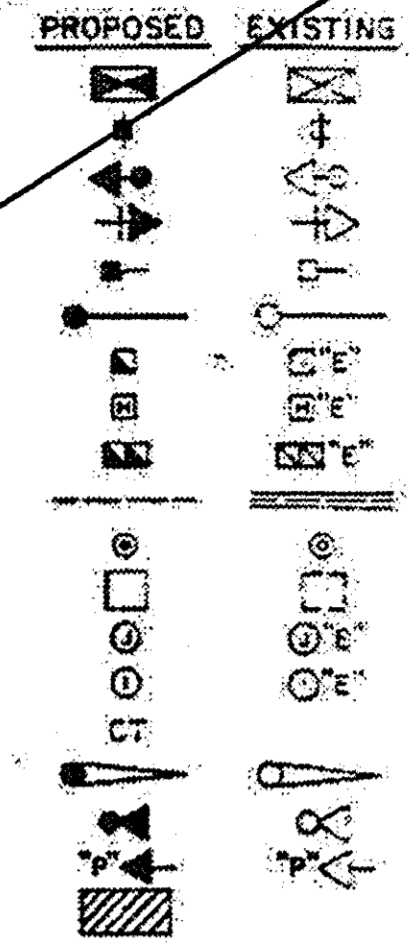
FILE NAME =	USER NAME = mthomas	DESIGNED - AJD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ELECTRIC SERVICE COORDINATION "FOR INFORMATION ONLY"</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\FORESTPARK\0023\BG046\Mech\LDT_0023\BG046b-06.sht	PLOT SCALE = 1"	DRAWN - LRR	REVISED -			347	13-00112-00-LS	COOK	151	93	
Default	PLOT DATE = 11/14/2016	CHECKED - AJD	REVISED -			SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A		CONTRACT NO. 61D26			
		DATE - 3/10/2016	REVISED -			ILLINOIS FED. AID PROJECT					

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1440	COOK	68	33
STA.	TO STA.	14 OF 26	
* 1990-133TS		* 1990-133TS	

**SEE SHEET 70 FOR  
DETECTOR LOOP LOCATIONS**

**TRAFFIC SIGNAL LEGEND**

- 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
- SIGNAL HEAD, OPTICALLY PROGRAMMED
- 5'x10' INSPECTION OPENING



**REPLACE DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	QUANTITY	UNIT	ITEM
88600600	414	FOOT	DETECTOR LOOP REPLACEMENT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
TRAFFIC SIGNAL MODERNIZATION  
ROOSEVELT ROAD  
AT CIRCLE AVENUE

SCALE: 1" = 20'  
DATE: SEPTEMBER 25, 1991  
DRAWN BY: 5TH  
CHECKED BY: PKZAPC

FILE NAME =	USER NAME = esidorozuk	DESIGNED -	REVISED -
N:\FORESTPARK\0023\BG046\Civil\TSC.0023\BG046b-01.aht		DRAWN -	REVISED -
	PLOT SCALE = 20"	CHECKED -	REVISED -
Default	PLOT DATE = 12/14/2016	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN  
ROOSEVELT ROAD

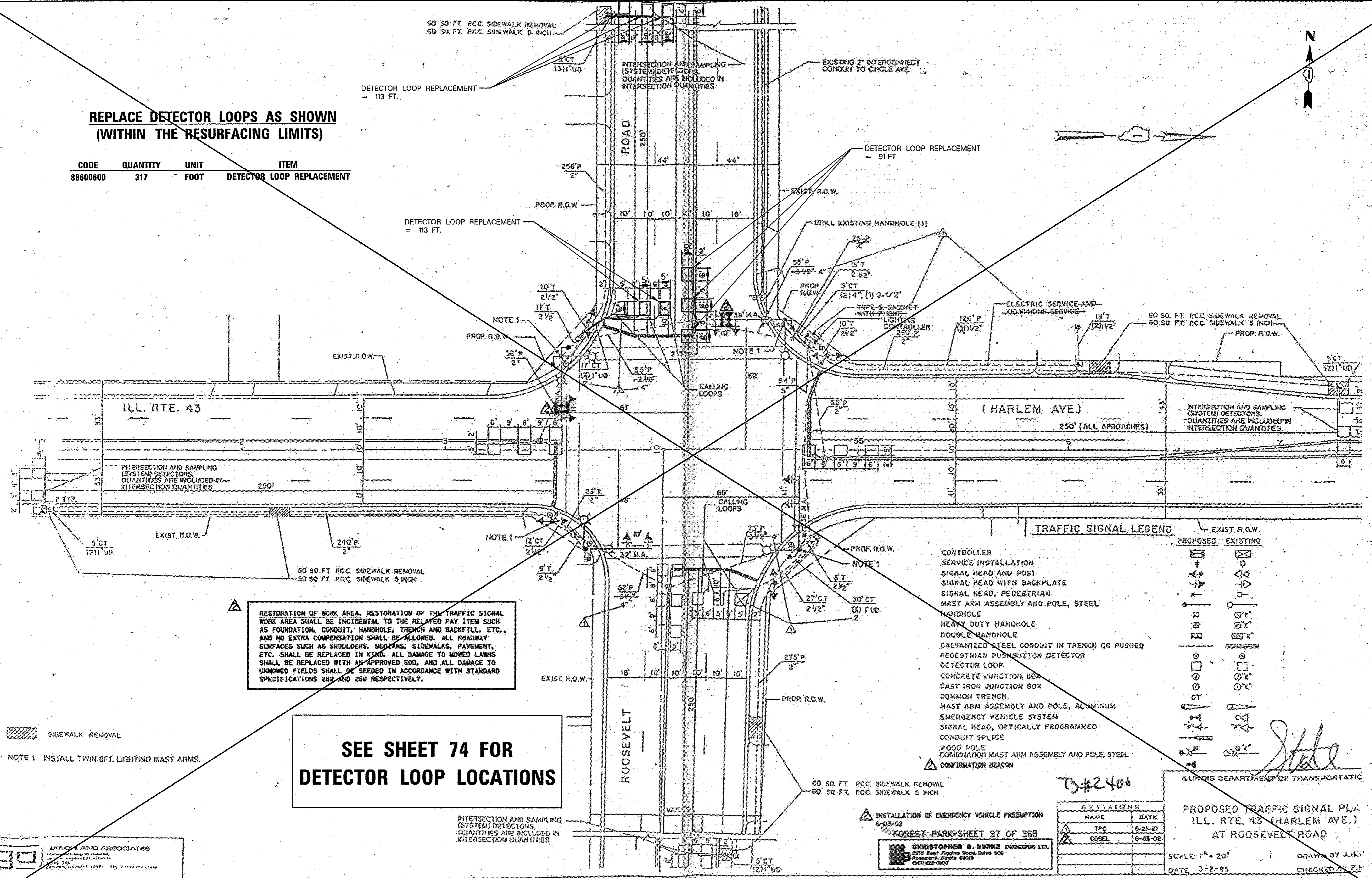
SCALE: N.T.S. SHEET 1 OF 4 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	94
				CONTRACT NO. 61D26
ILLINOIS FED. AID PROJECT				



**REPLACE DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	QUANTITY	UNIT	ITEM
88600600	317	FOOT	DETECTOR LOOP REPLACEMENT



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

**SEE SHEET 74 FOR  
DETECTOR LOOP LOCATIONS**

NOTE 1. INSTALL TWIN 8FT. LIGHTING MAST ARMS.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
CONTROLLER SERVICE INSTALLATION	[Symbol]	[Symbol]
SIGNAL HEAD AND POST	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
CONCRETE JUNCTION BOX	[Symbol]	[Symbol]
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM	[Symbol]	[Symbol]
SIGNAL HEAD, OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
CONDUIT SPLICE	[Symbol]	[Symbol]
WOOD POLE	[Symbol]	[Symbol]
CONFIRMATION MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]

**GO** **AND ASSOCIATES**  
1000 N. LAUREL STREET  
CHICAGO, IL 60610  
TEL: 312.281.1100

INSTALLATION OF EMERGENCY VEHICLE PREEMPTION  
6-03-02  
FOREST PARK-SHEET 97 OF 365  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
635 East Madison Road, Suite 900  
Rossmore, Illinois 60018  
(847) 823-0600

TS#2408

REVISIONS	
NAME	DATE
TPC	6-27-97
CBREL	6-03-02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**PROPOSED TRAFFIC SIGNAL PLAN  
ILL. RTE. 43 (HARLEM AVE.)  
AT ROOSEVELT ROAD**  
SCALE: 1" = 20'  
DATE: 3-2-95  
DRAWN BY J.H.E.  
CHECKED BY P.P.

FILE NAME =	USER NAME = esidorczuk	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN ROOSEVELT ROAD</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\FORESTPARK\0023\B0046\civil\TSH_0023\B0046b-01.sht		DRAWN -	REVISED -			347	13-00112-00-LS	COOK	151	96
PLOT SCALE = 20'		CHECKED -	REVISED -			CONTRACT NO. 61D26				
PLOT DATE = 12/14/2016		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

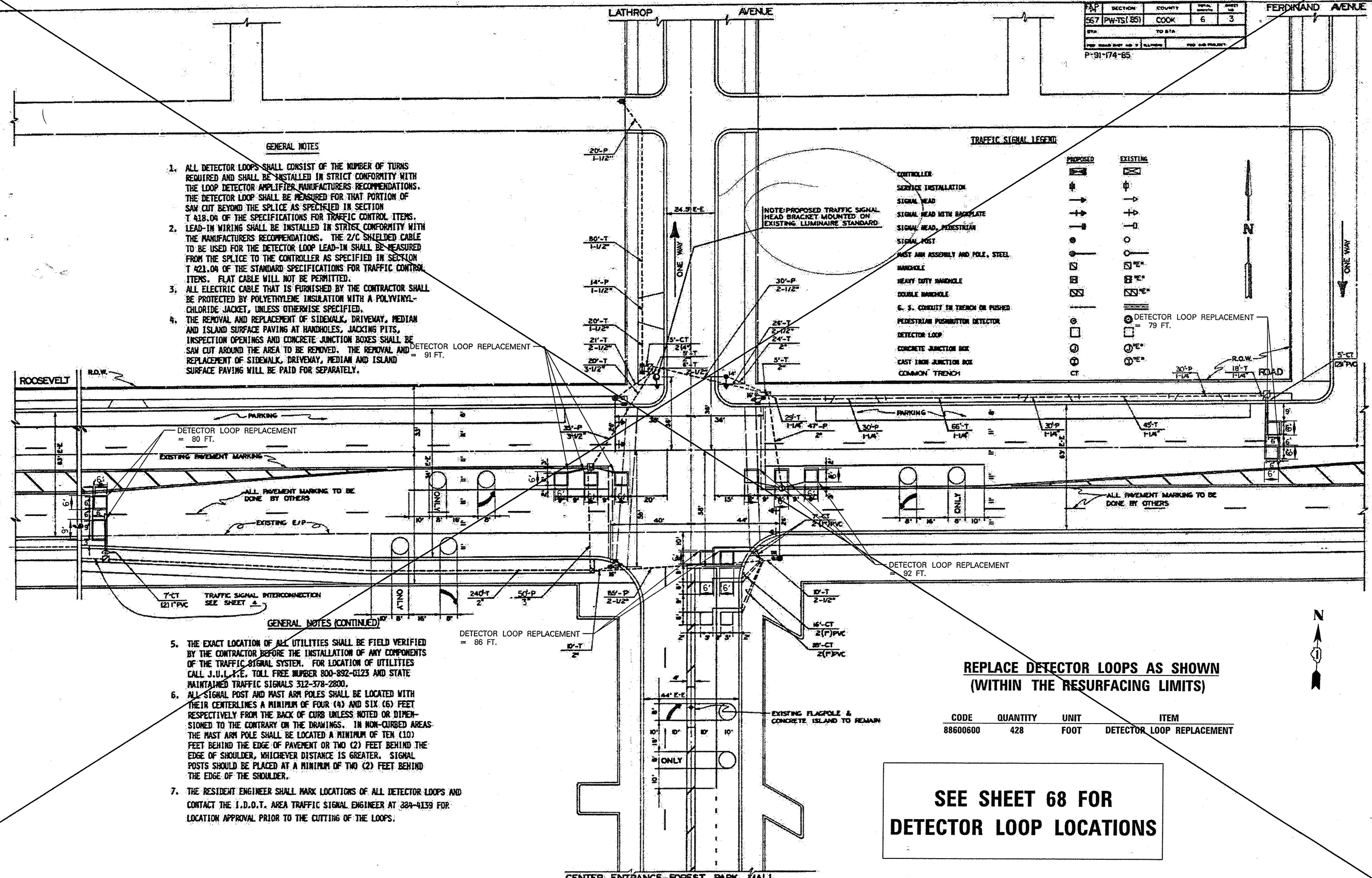


PAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567 (PW-TS) (85)		COOK	6	3
BY:	TO STA.			
DATE:	PROJECT:			
P-91-174-85				

- 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 MANUFACTURERS 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 MANUFACTURERS 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 ELECTRIC CABLE THAT IS FURNISHED BY THE CONTRACTOR SHALL BE PROTECTED BY POLYETHYLENE INSULATION WITH A POLYVINYL-CHLORIDE JACKET, UNLESS OTHERWISE SPECIFIED.
  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.

**TRAFFIC SIGNAL LEGEND:**

- |  |                                   |  |          |
|--|-----------------------------------|--|----------|
|  | CONTROLLER                        |  | EXISTING |
|  | 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                   |  |          |
|  | S. S. CONDUIT IN TRENCH OR PIPED  |  |          |
|  | PEDESTRIAN PUSHBUTTON DETECTOR    |  |          |
|  | DETECTOR LOOP                     |  |          |
|  | CONCRETE JUNCTION BOX             |  |          |
|  | CAST IRON JUNCTION BOX            |  |          |
|  | COMMON TRENCH                     |  |          |

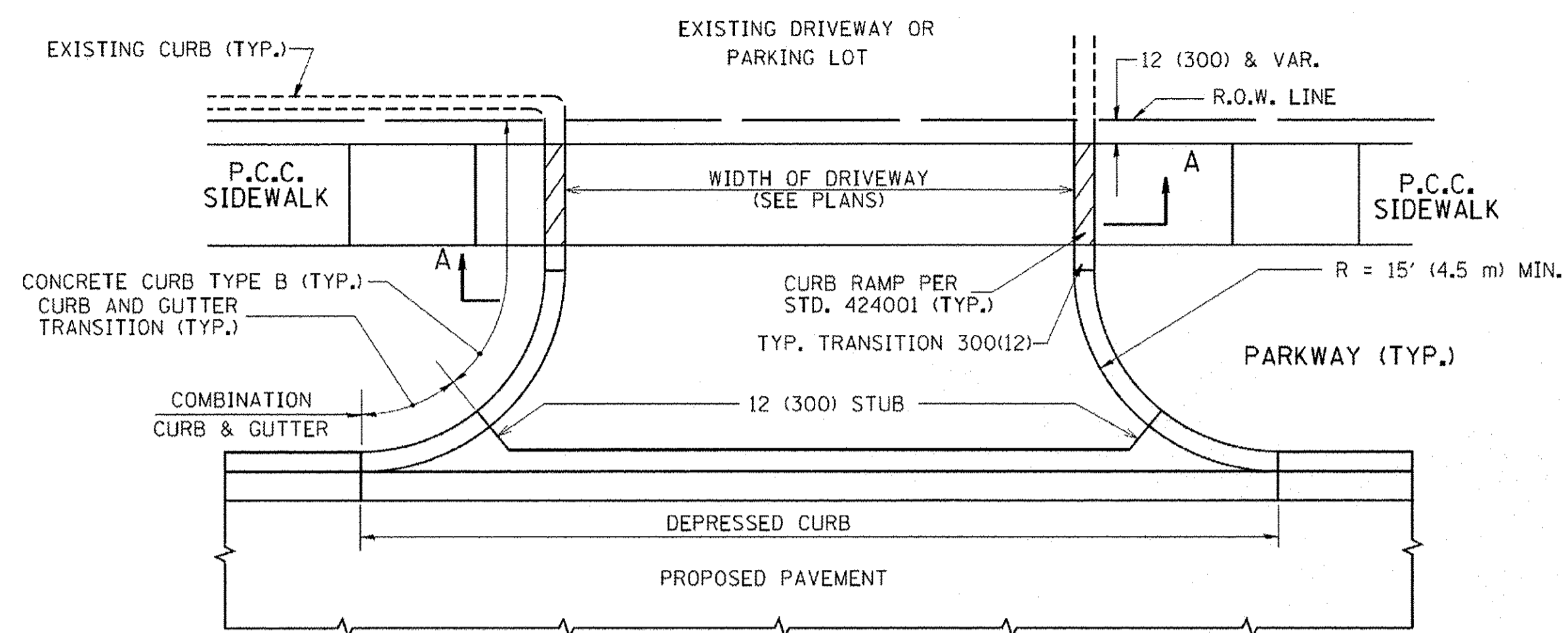


- GENERAL NOTES (CONTINUED)**
5. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES CALL J.U.L.T.E., TOLL FREE NUMBER 800-892-0123 AND STATE MAINTAINED TRAFFIC SIGNALS 312-378-2800.
  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. THE RESIDENT ENGINEER SHALL MARK LOCATIONS OF ALL DETECTOR LOOPS AND CONTACT THE I.D.O.T. AREA TRAFFIC SIGNAL ENGINEER AT 282-4139 FOR LOCATION APPROVAL PRIOR TO THE CUTTING OF THE LOOPS.

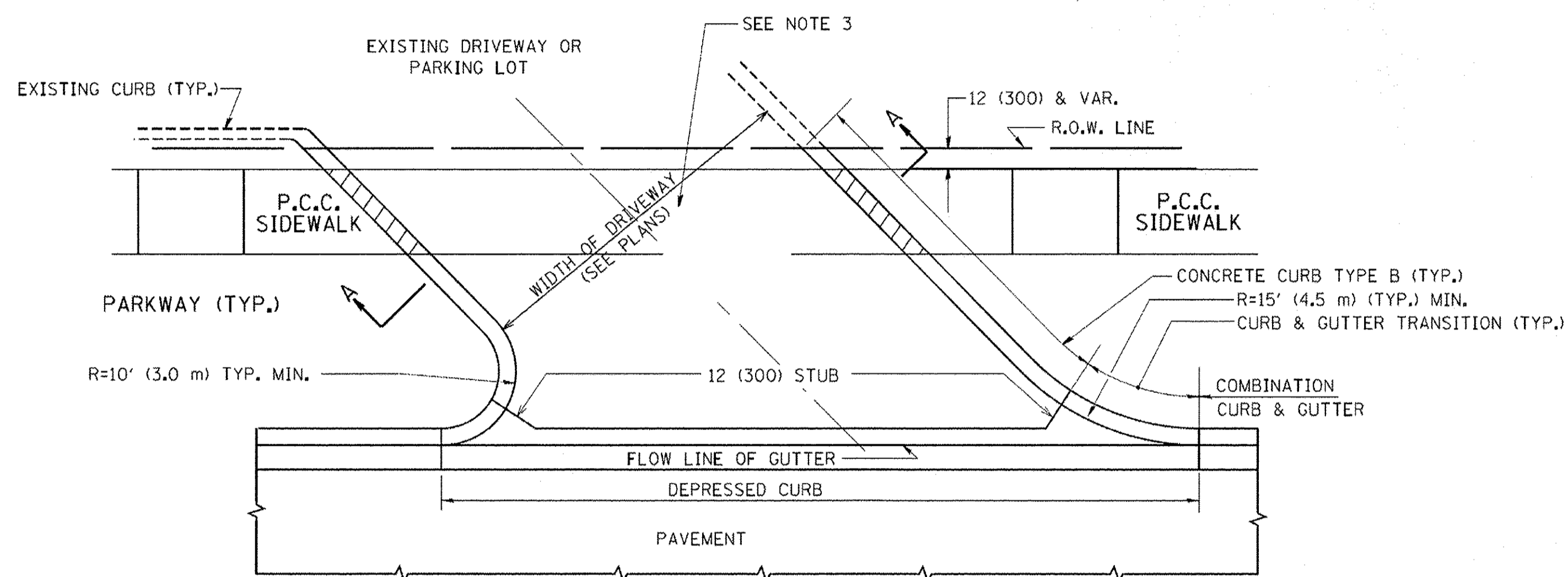
**REPLACE DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	QUANTITY	UNIT	ITEM
88600600	428	FOOT	DETECTOR LOOP REPLACEMENT

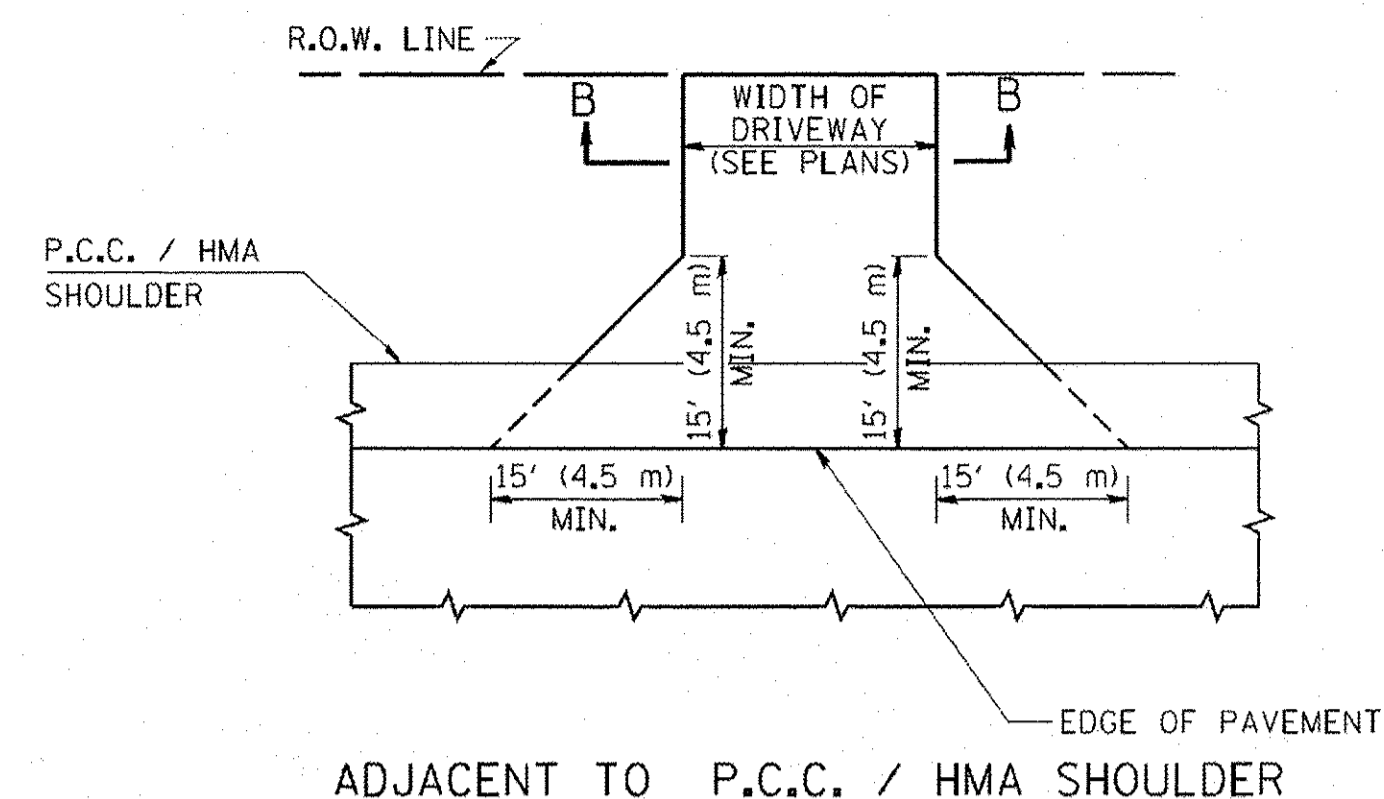
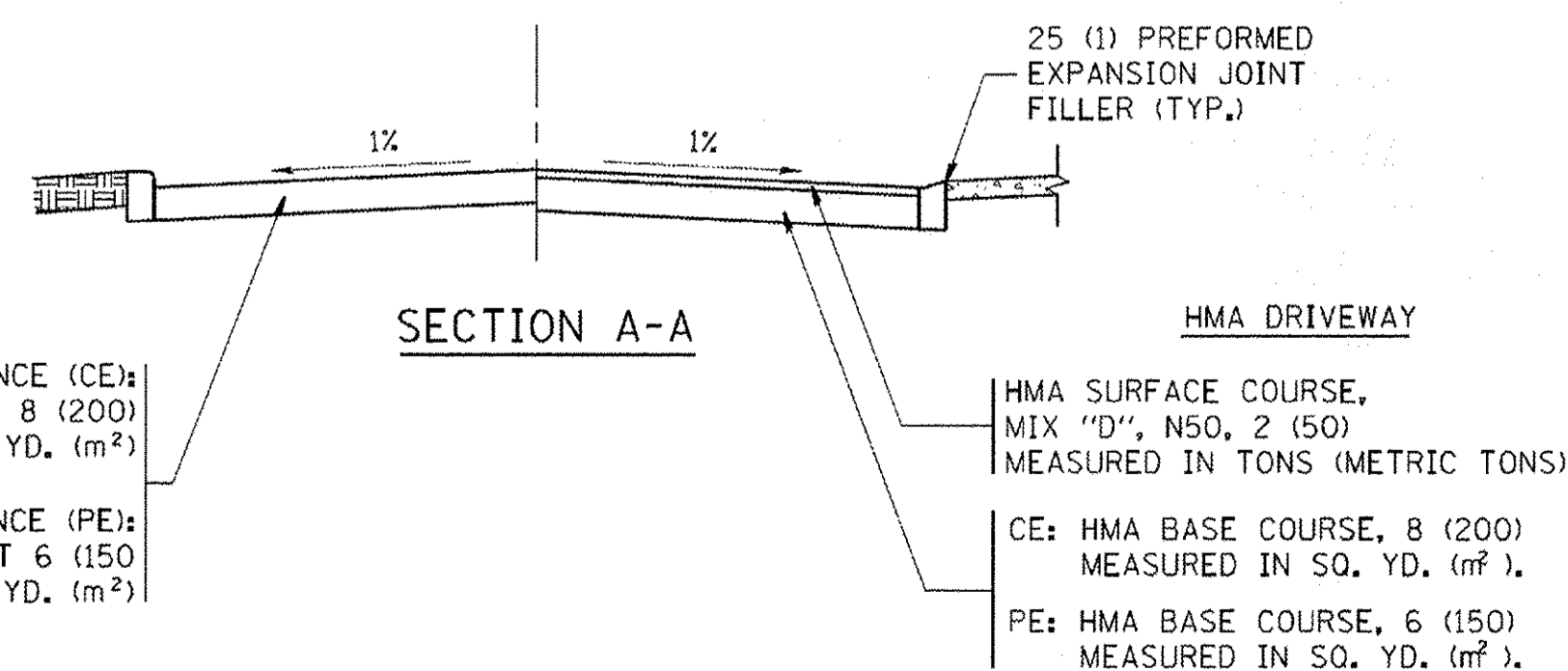
**SEE SHEET 68 FOR  
DETECTOR LOOP LOCATIONS**



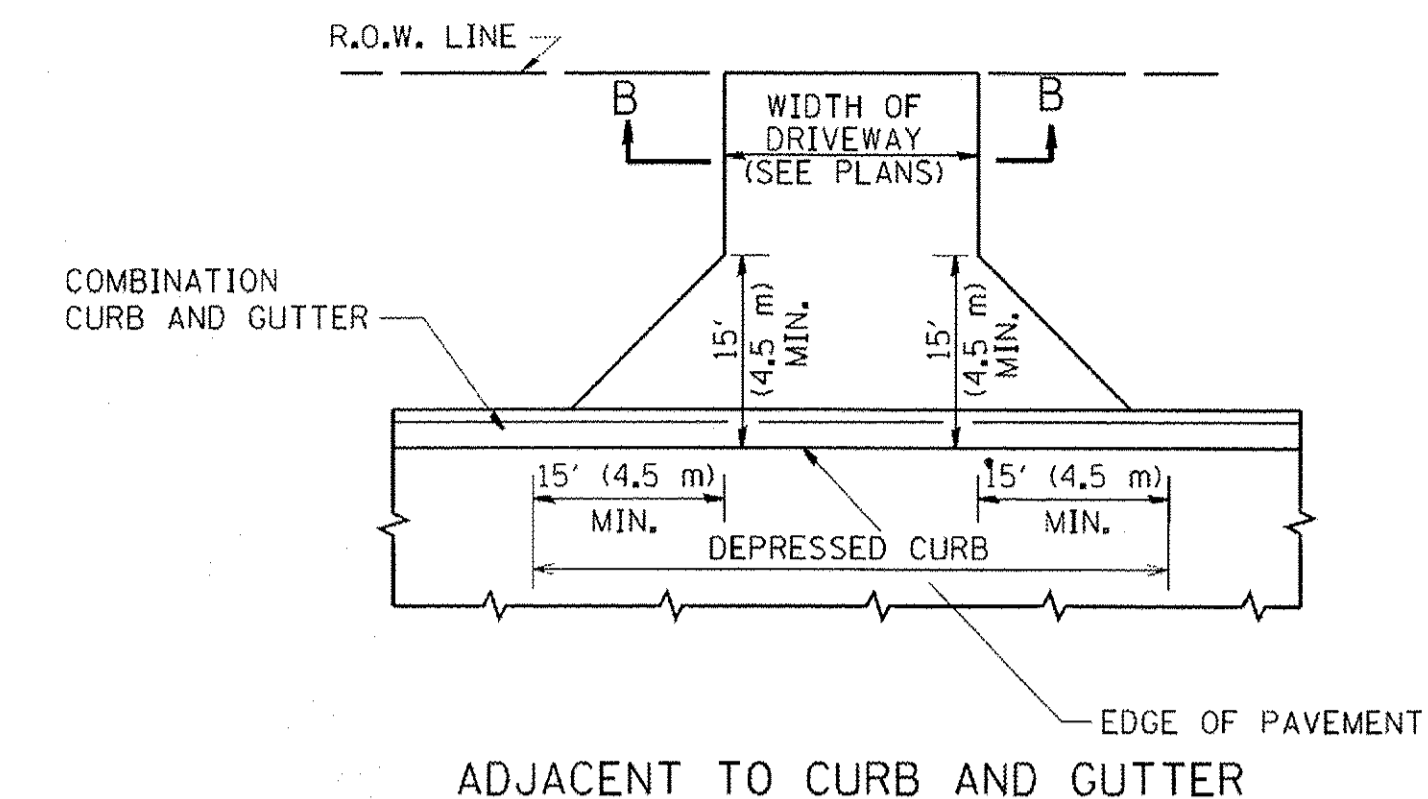
WITH CONCRETE CURB, TYPE B



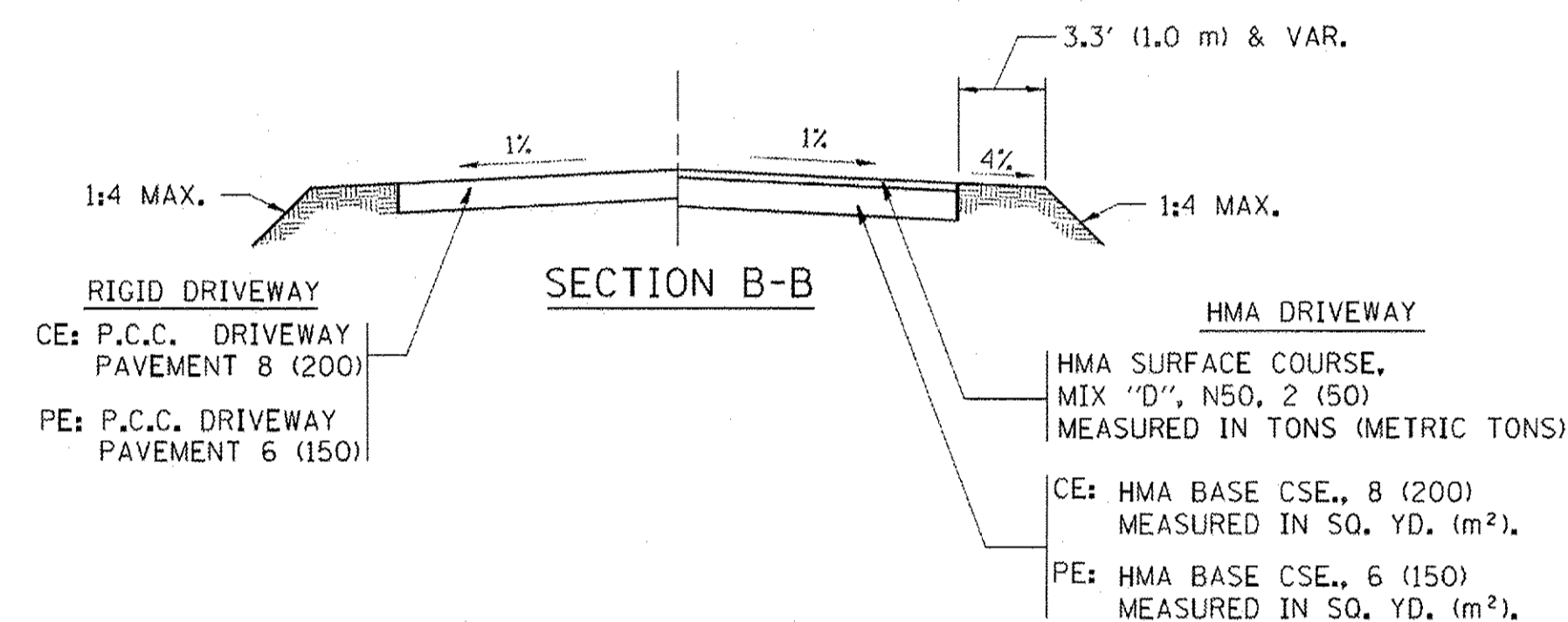
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



**GENERAL NOTES:**

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

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

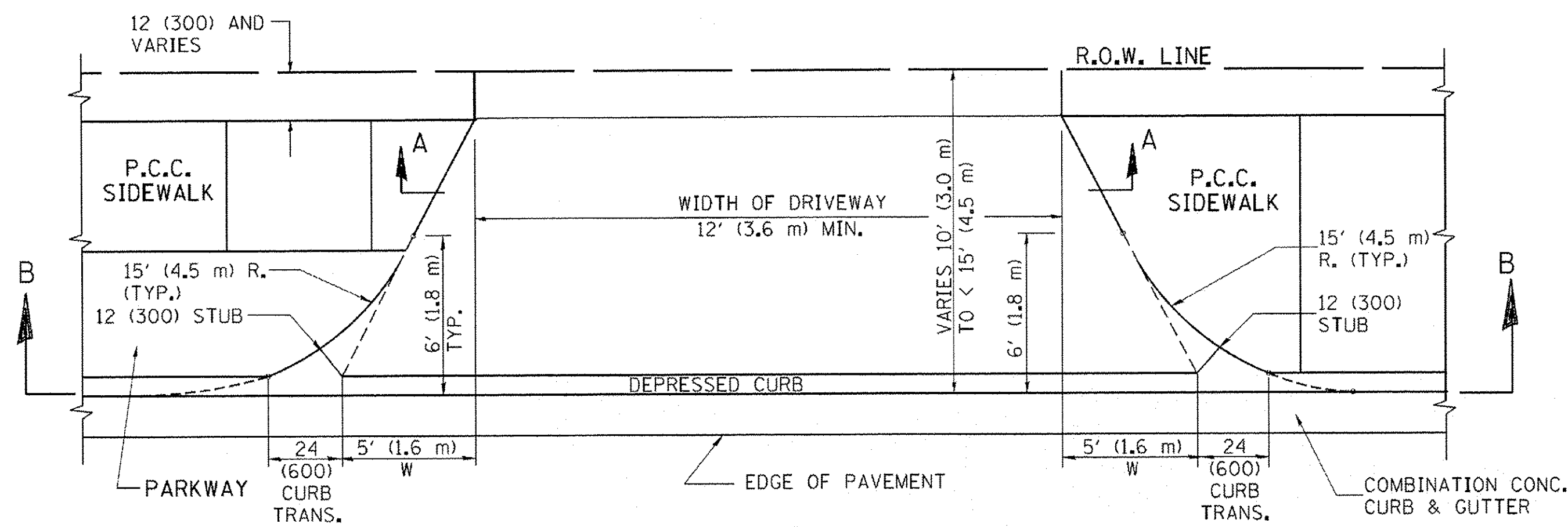
THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

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

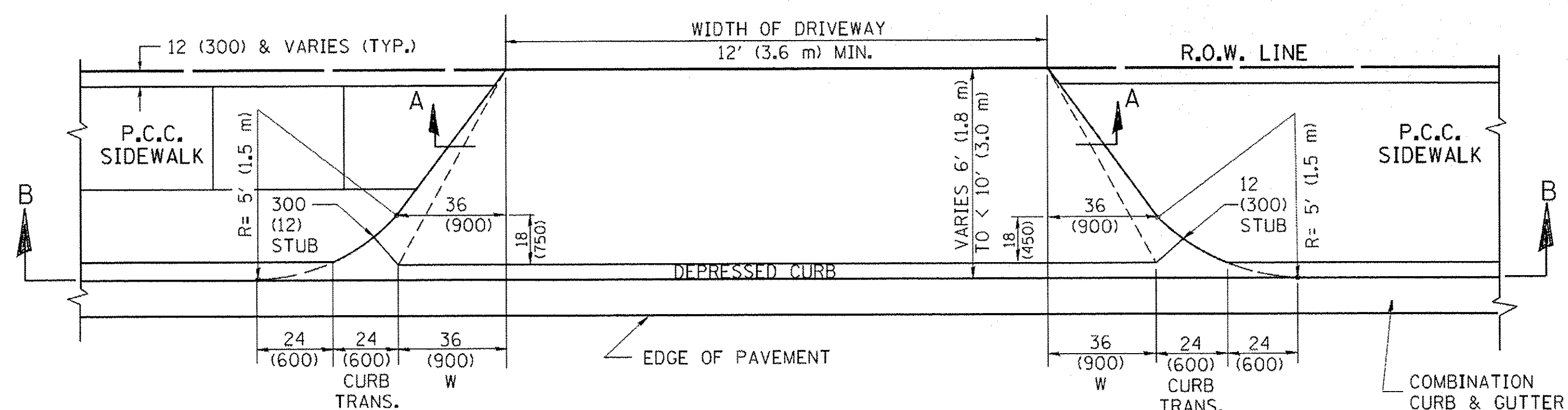
1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

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

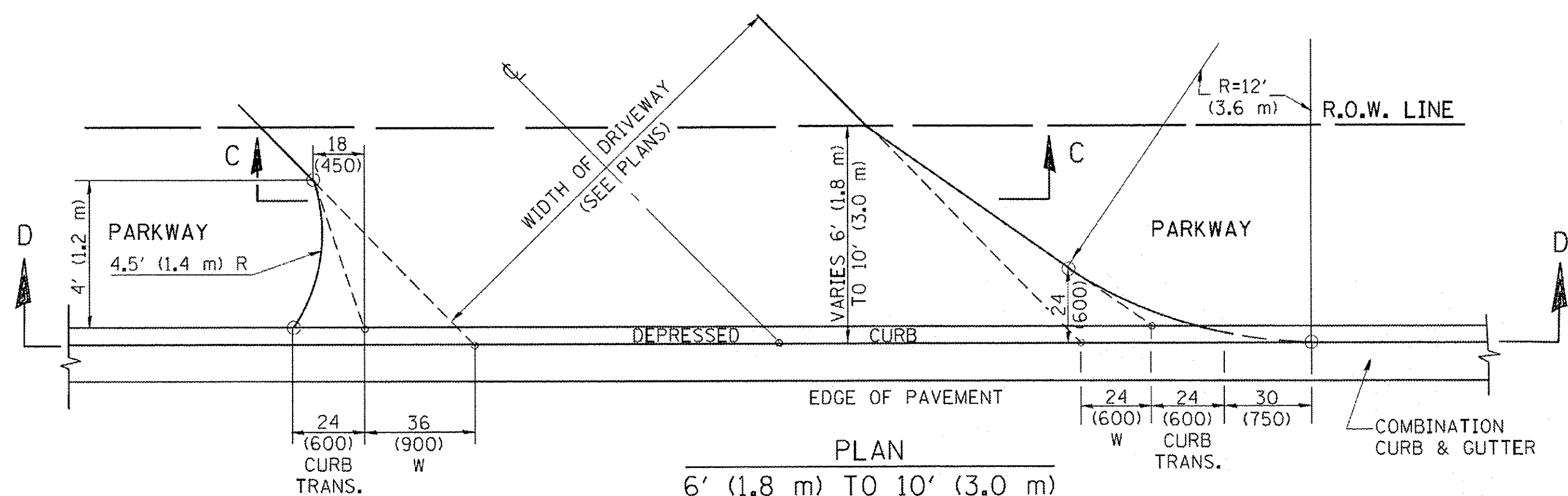
FILE NAME = N:\PROJECTS\11\STANDARD\BDS\_0023802465-01.dwg



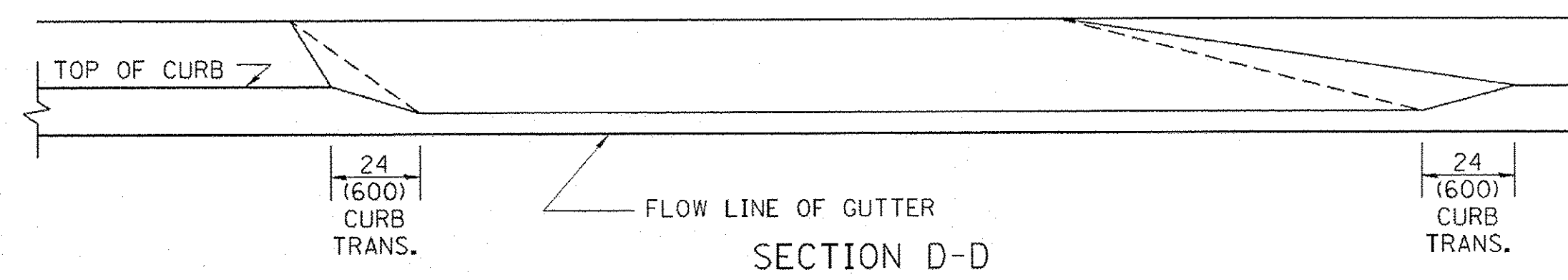
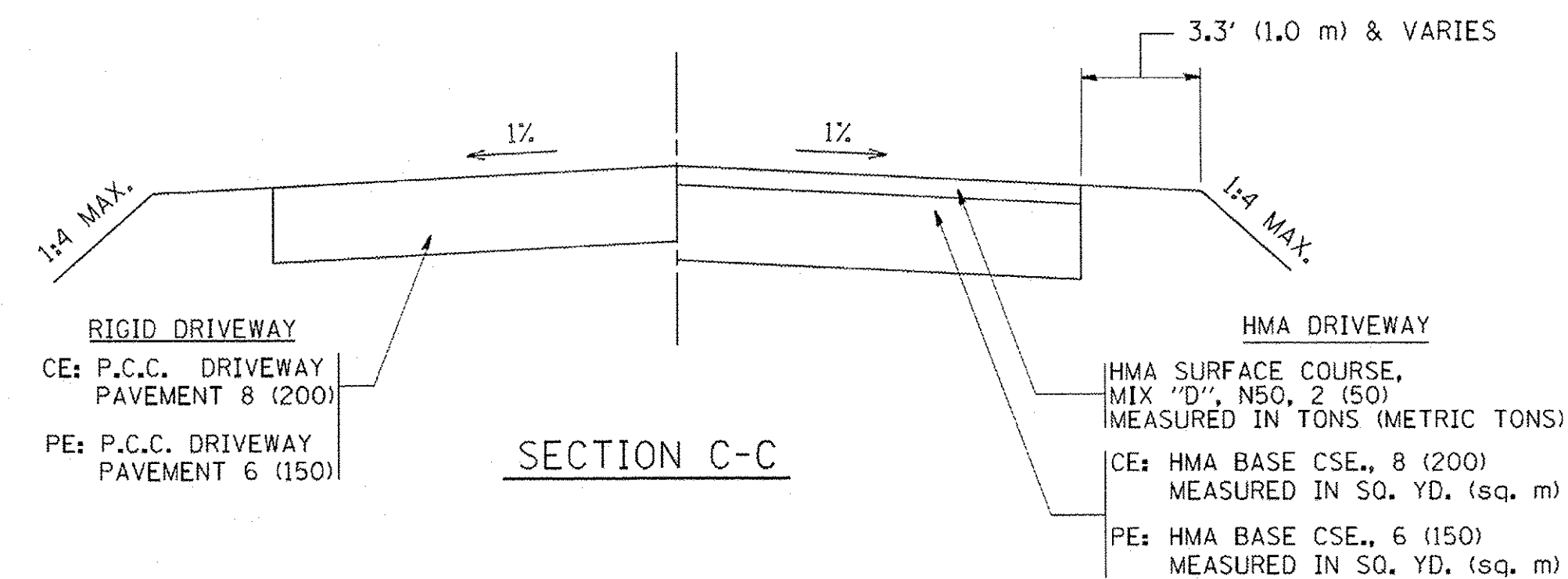
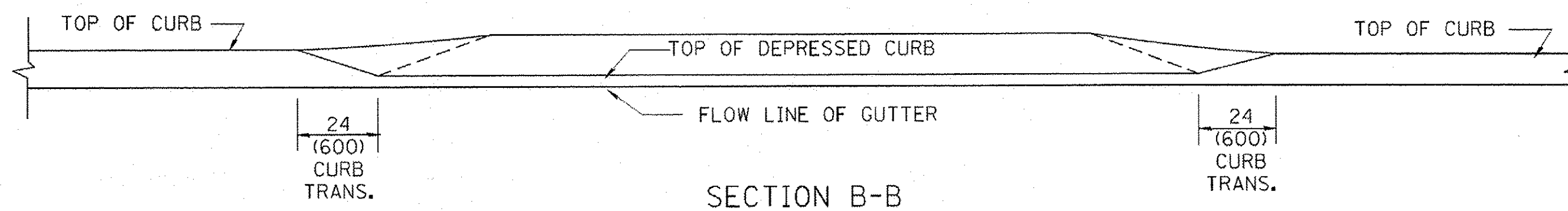
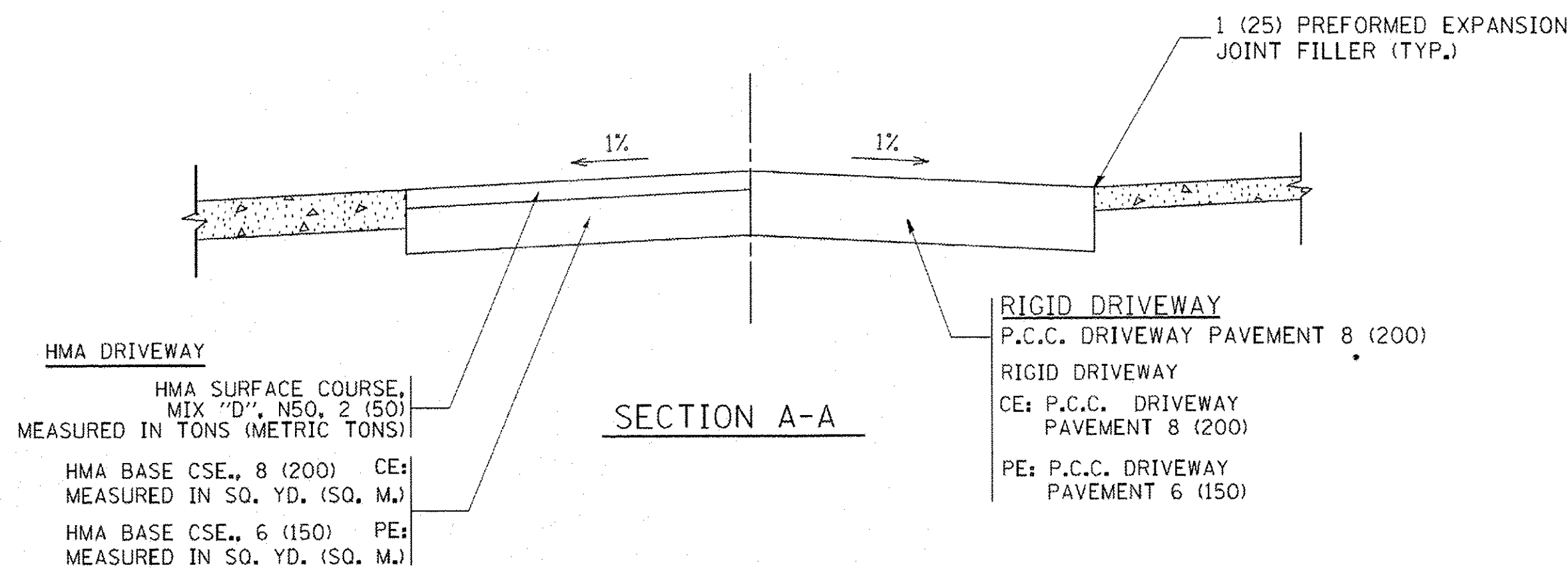
PLAN  
10' (3.0 m) TO < 15' (4.5 m)



PLAN  
6' (1.8 m) TO < 10' (3.0 m)



PLAN  
6' (1.8 m) TO 10' (3.0 m)



GENERAL NOTES

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

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

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

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

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

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

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

FILE NAME = N:\PROJECTS\PARK\0223\BDR45.C\11\STANDARD\0223BDR45-01.dwg

INFRASTRUCTURE ENGINEERING INCORPORATED  
33 West Monroe | Suite 1540 | Chicago, IL 60603  
P 312.425.9568 | F 312.425.9564 | www.infrastructure-eng.com

USER NAME = mthomas  
DESIGNED - R. SHAH  
DRAWN - P. LQFLEUR  
CHECKED - R. BORO  
DATE - 11-06-95

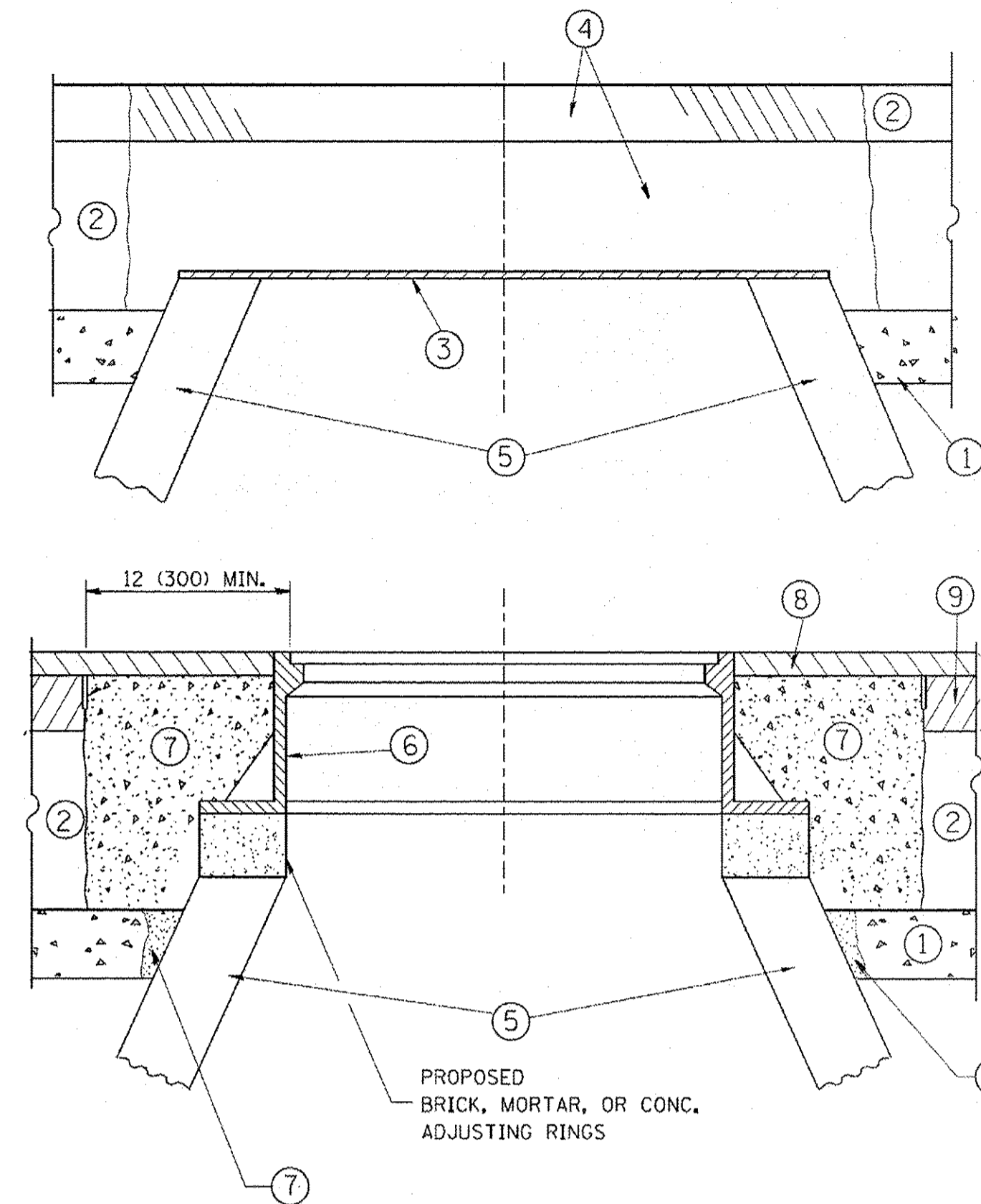
DESIGNED - R. SHAH  
DRAWN - P. LQFLEUR  
CHECKED - R. BORO  
DATE - 11-06-95

REVISED - M. GOMEZ 04-06-01  
REVISED - P. LQFLEUR 04-15-03  
REVISED - R. BORO 01-01-07  
REVISED - R. BORO 09-06-11

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS  
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)  
SCALE: NONE SHEET 2 OF 21 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	99
BD400-02 (BD-02)			CONTRACT NO. 61D26	
ILLINOIS FED. AID PROJECT				



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

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

**STAGE 2 (AFTER PAVEMENT MILLING)**

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

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

**LEGEND**

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

**LOCATION OF STRUCTURES:**

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

**BASIS OF PAYMENT:**

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

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

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

**NOTES:**

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

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

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

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

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

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = N:\FORESTPARK\00223\B0045\Civil\STANDARDS\_0023B0045-01.dwg

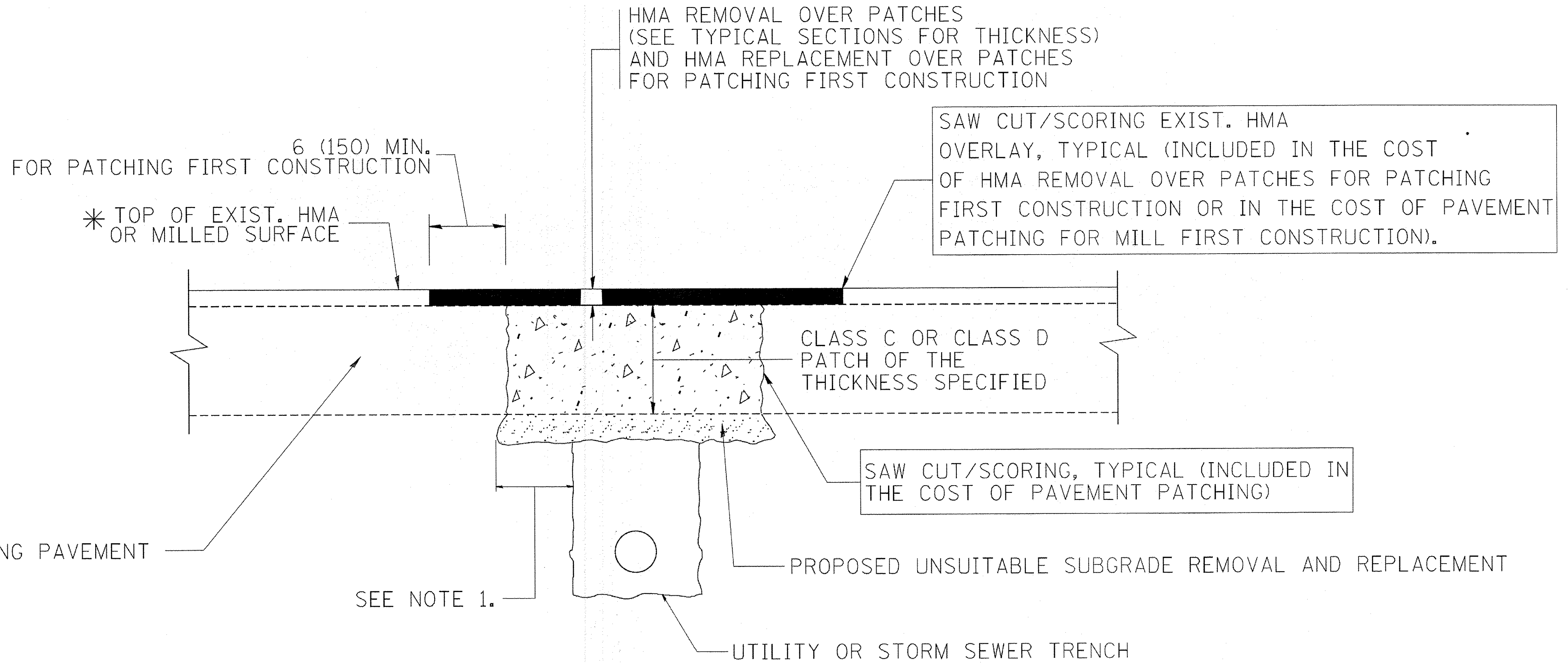
**INFRASTRUCTURE ENGINEERING** | INCORPORATED  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9588 | F 312.425.9564 | www.infrastructure-eng.com

USER NAME = mthomas	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
PLOT SCALE = 1"	DRAWN -	REVISED - R. BORO 01-01-07
PLOT DATE = 11/14/2016	CHECKED -	REVISED - R. BORO 03-09-11
	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>	
SCALE: NONE	SHEET 3 OF 21 SHEETS
STA.	TO STA.

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 100
<b>BD600-03 (BD-8)</b>		CONTRACT NO. 61D26		
ILLINOIS FED. AID PROJECT				



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

FILE NAME = N:\FORESTPARK\0023\BDD46\Civil\STANDARD\0023BDD46-01.dwg

<p><b>INFRASTRUCTURE ENGINEERING</b> INCORPORATED 33 West Monroe   Suite 1540   Chicago, IL 60603 P 312.425.9560   F 312.425.9561   www.infrastructure-eng.com</p>	USER NAME = mthomas	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
	PLOT SCALE = 1"	DRAWN -	REVISED - R. BORO 01-01-07
	PLOT DATE = 11/14/2016	CHECKED -	REVISED - R. BORO 09-04-07
		DATE - 10-25-94	REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT**

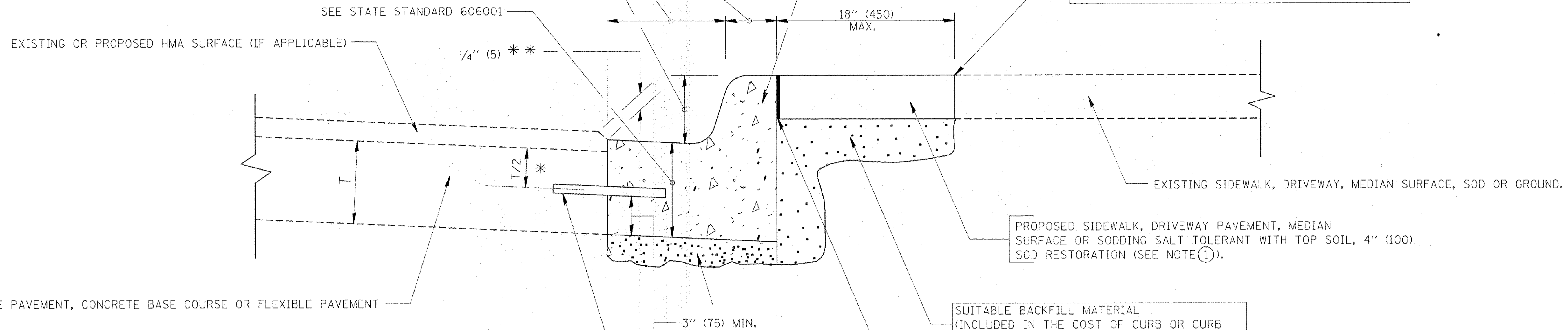
SCALE: NONE SHEET 4 OF 21 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	101
<b>BD400-04 (BD-22)</b>			CONTRACT NO. 61D26	
ILLINOIS FED. AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.



- \* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- \*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

- NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
- SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,
- ② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED
  - ③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
  - ④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
  - ⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
  - ⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
  - ⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
  - ⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:  
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME = N:\FOREST PARK\0223\B0646\Cv\1\STANDARD\05\_0223B0646-01.dwg

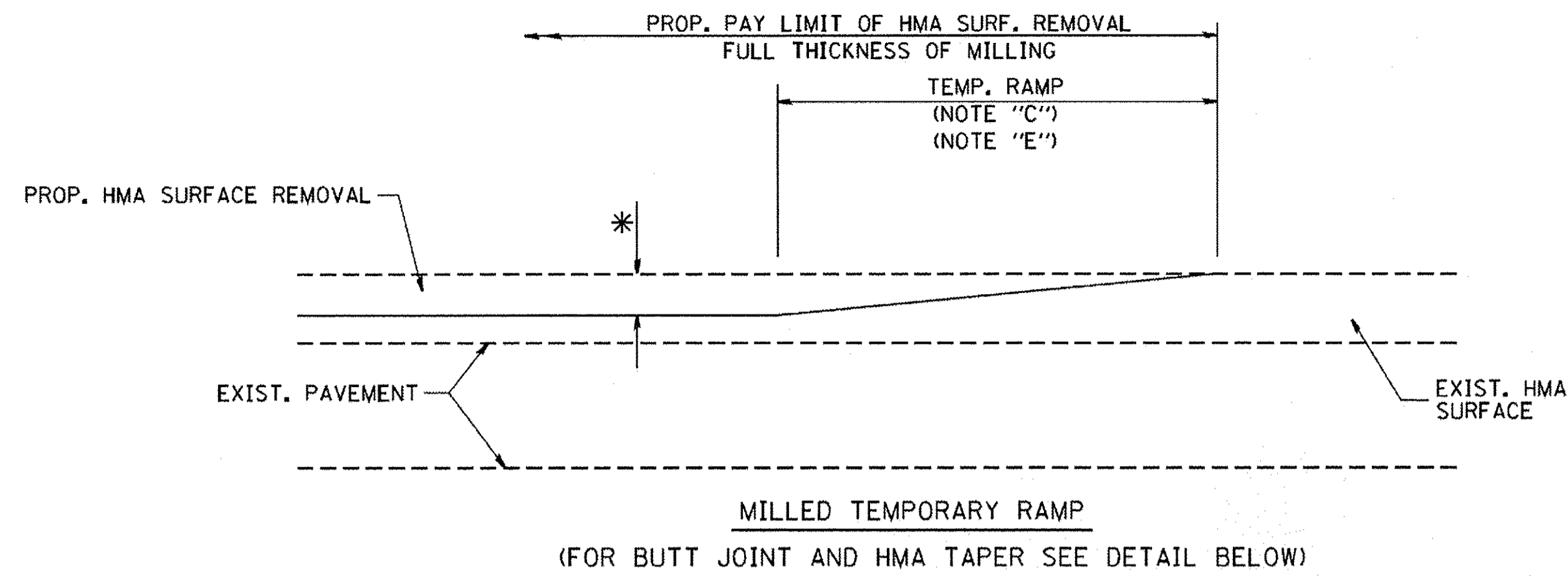
**INFRASTRUCTURE ENGINEERING** INCORPORATED  
33 West Monroe | Suite 1540 | Chicago, IL 60603  
P 312.425.9500 | F 312.425.9504 | www.infrastructure-eng.com

USER NAME = mthomas	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96
PLOT SCALE = 1"	DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT DATE = 11/14/2016	CHECKED -	REVISED - M. GOMEZ 01-22-01
	DATE - 03-11-94	REVISED - R. BORO 12-15-09

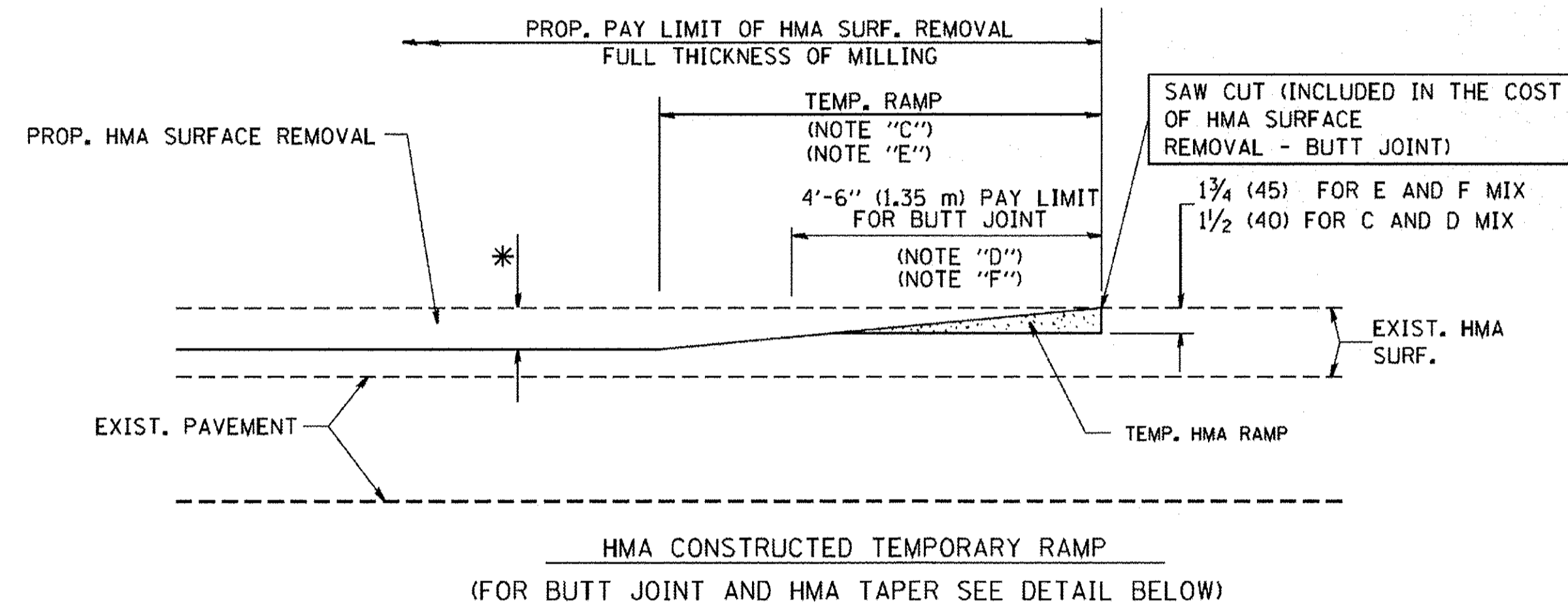
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>CURB OR CURB AND GUTTER</b>	
<b>REMOVAL AND REPLACEMENT</b>	
SCALE: NONE	SHEET 5 OF 21 SHEETS
STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	102
<b>BD600-06 (BD-24)</b>			CONTRACT NO. 61D26	
ILLINOIS FED. AID PROJECT				

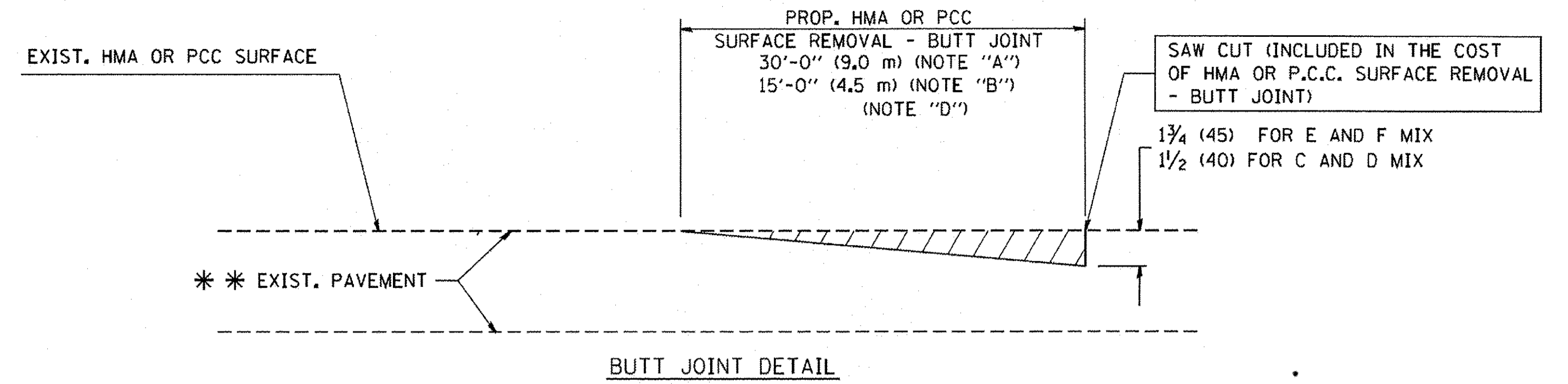


**OPTION 1**

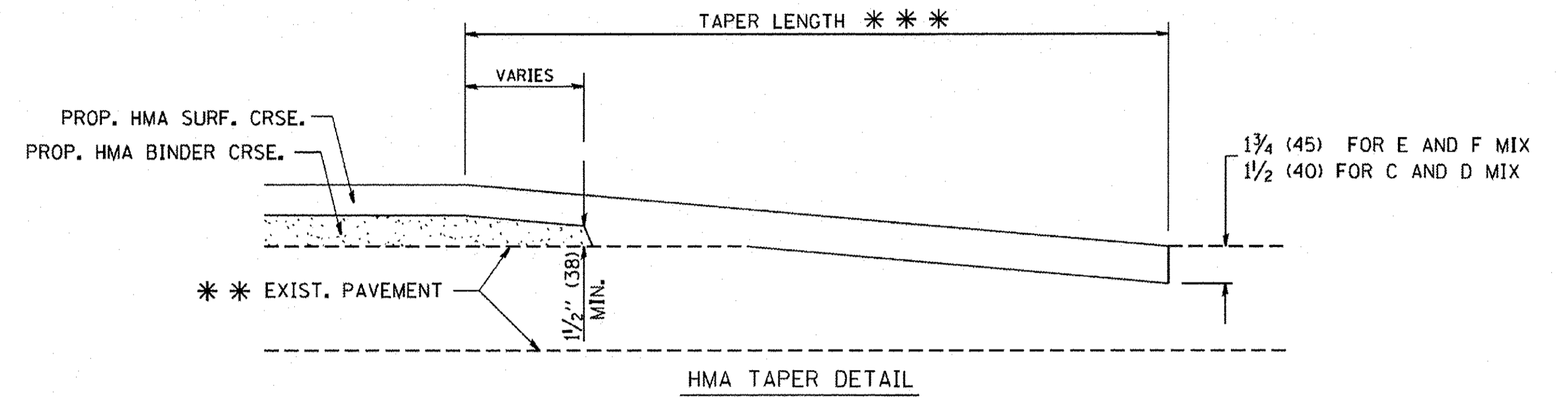


**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

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

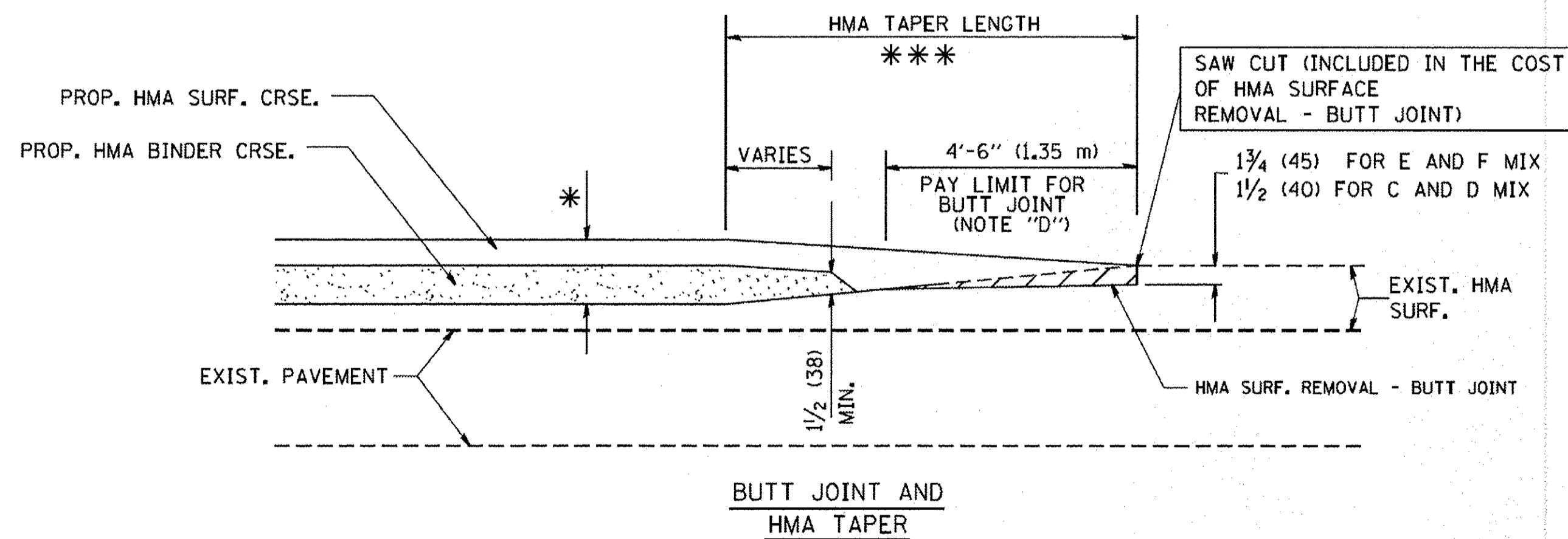
**NOTES**

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

**BASIS OF PAYMENT:**

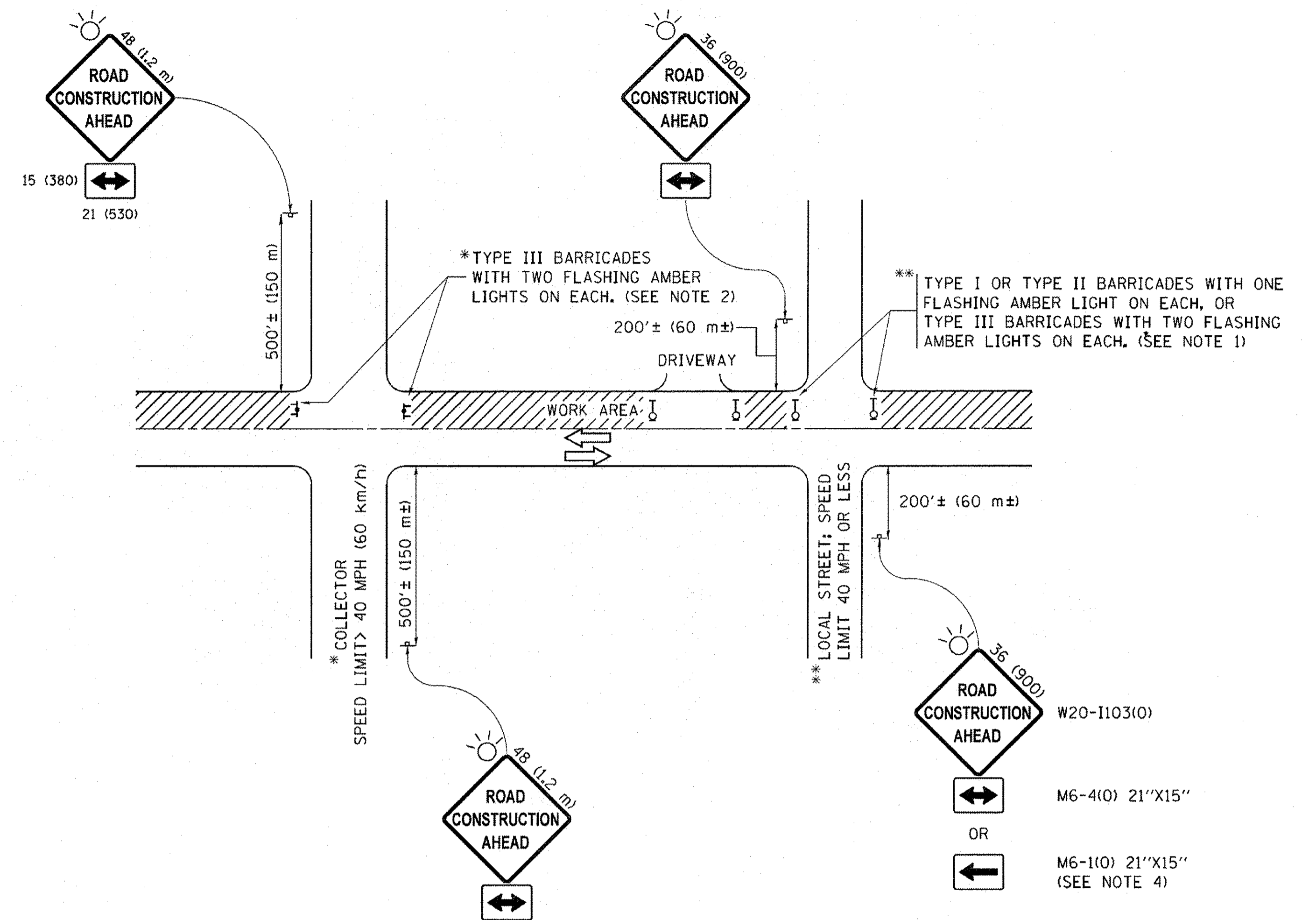
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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



**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

FILE NAME = N:\VEORESTPARK\0023\00046\C\1\1\STANDARD\002300046\01.dwg



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = N:\FOREST PARK\0223\80246\Civil\STANDARDS\022380246B-01.dwg

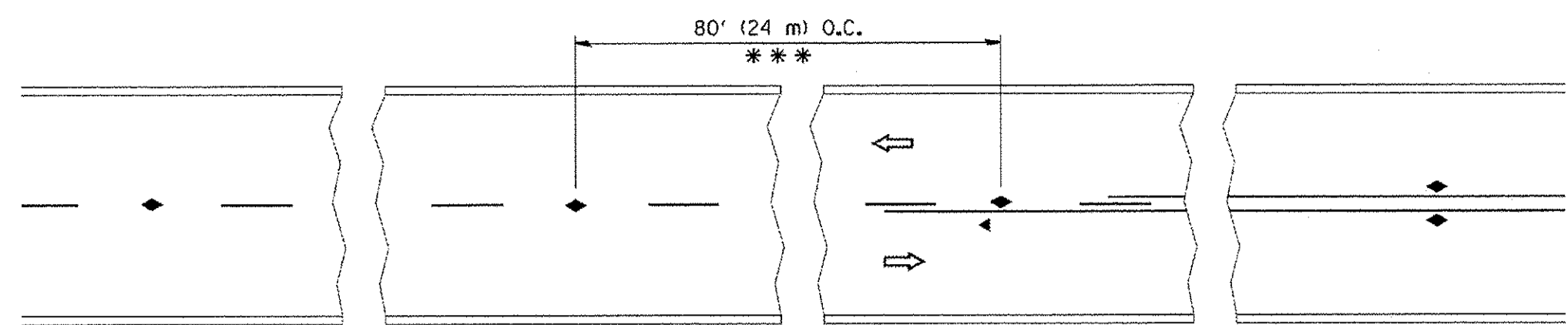
<b>INFRASTRUCTURE ENGINEERING</b>   INCORPORATED 33 West Monroe   Suite 1540   Chicago, IL 60603 P 312.415.9588   F 312.415.9584   www.infrastructure-eng.com	USER NAME = mthomas	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	PLOT SCALE = 1"	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 11/14/2016	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
			REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS</b>	
SCALE: NONE	SHEET 7 OF 21 SHEETS
STA.	TO STA.

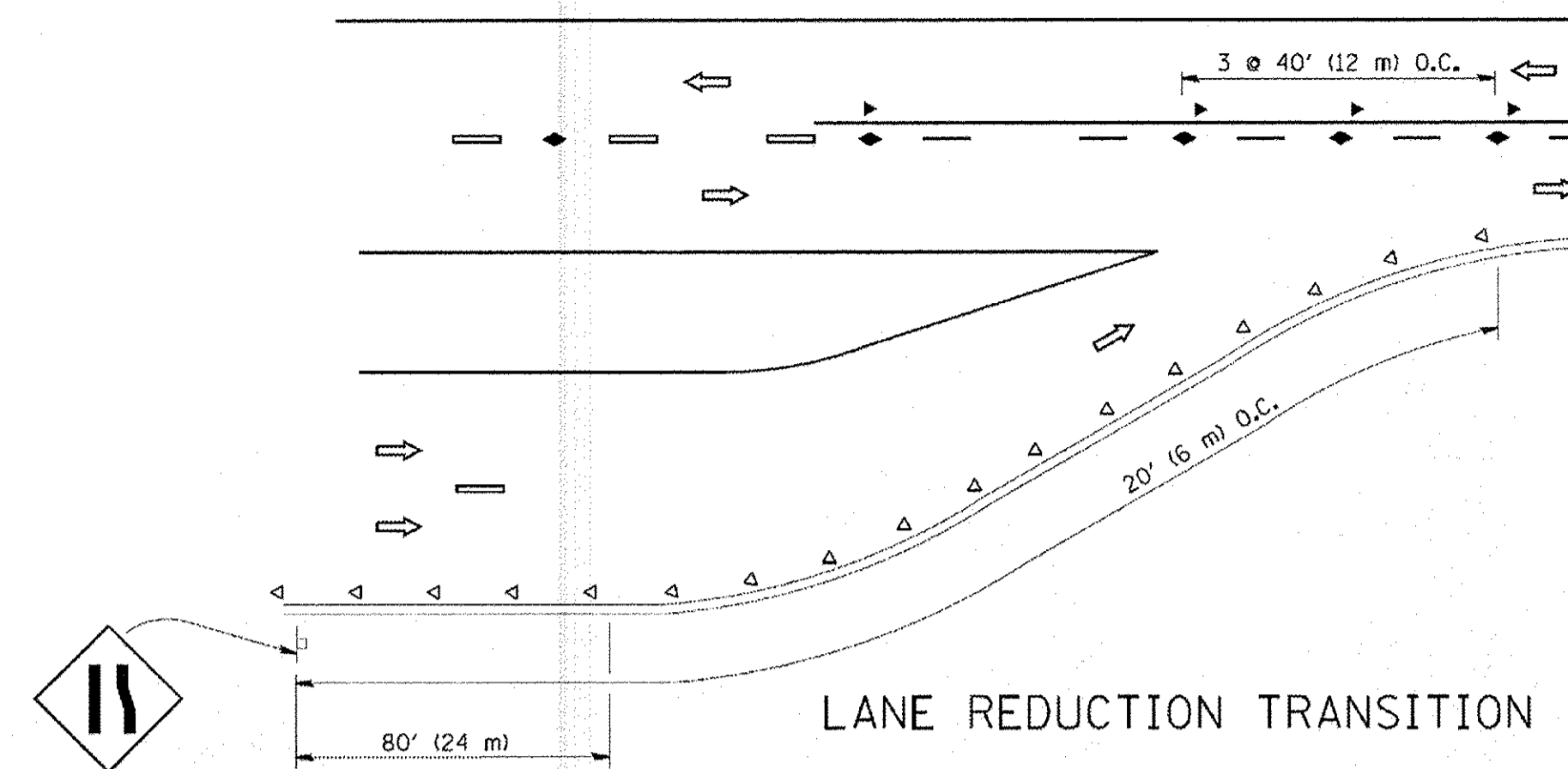
F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 104
TC-10			CONTRACT NO. 61D26	
ILLINOIS FED. AID PROJECT				



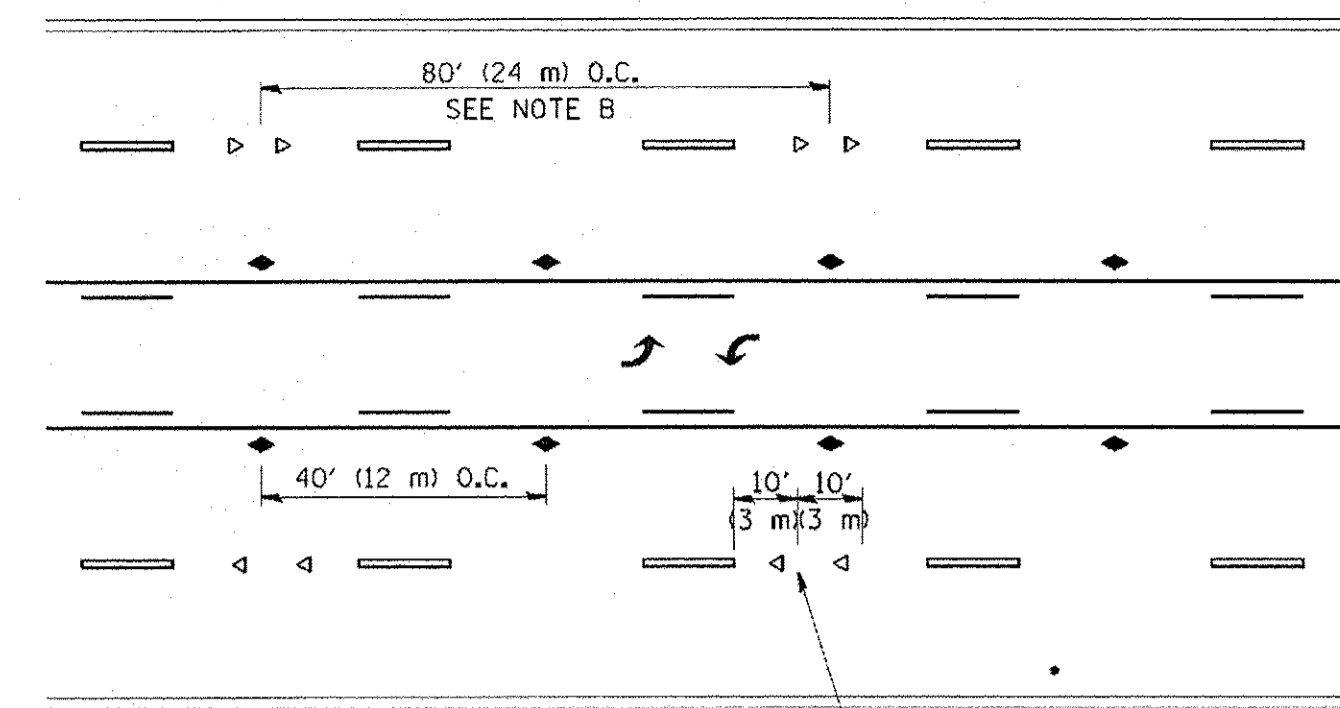


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

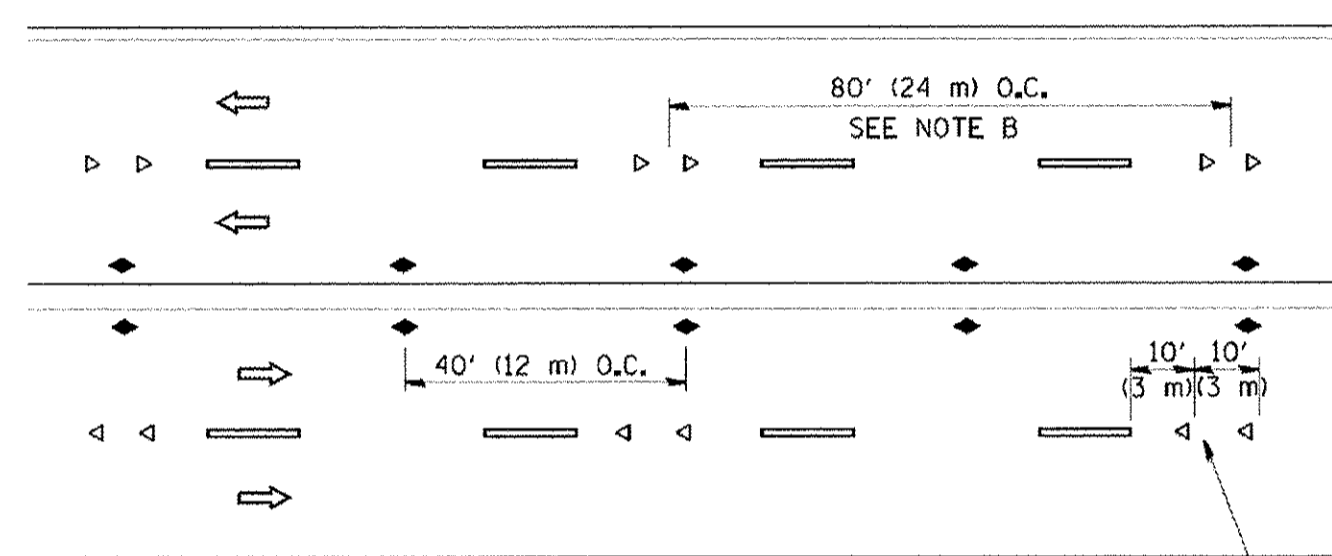
TWO-LANE/TWO-WAY



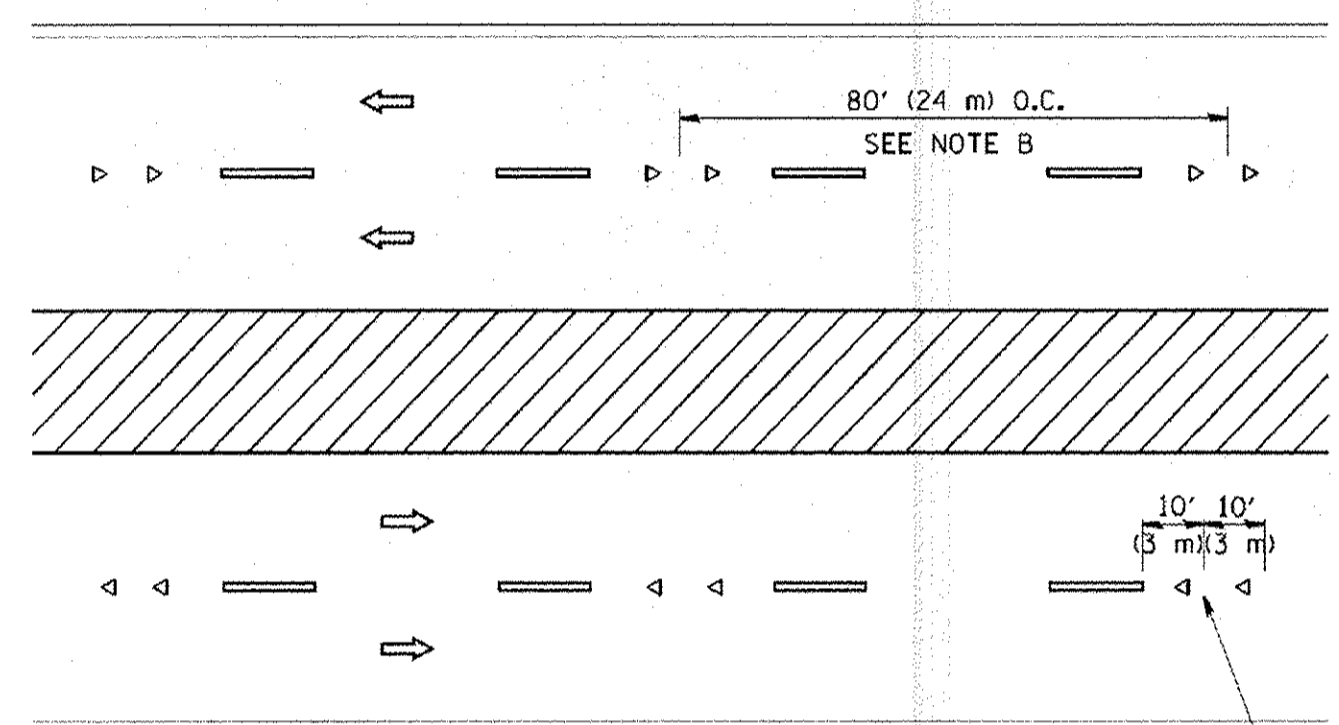
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

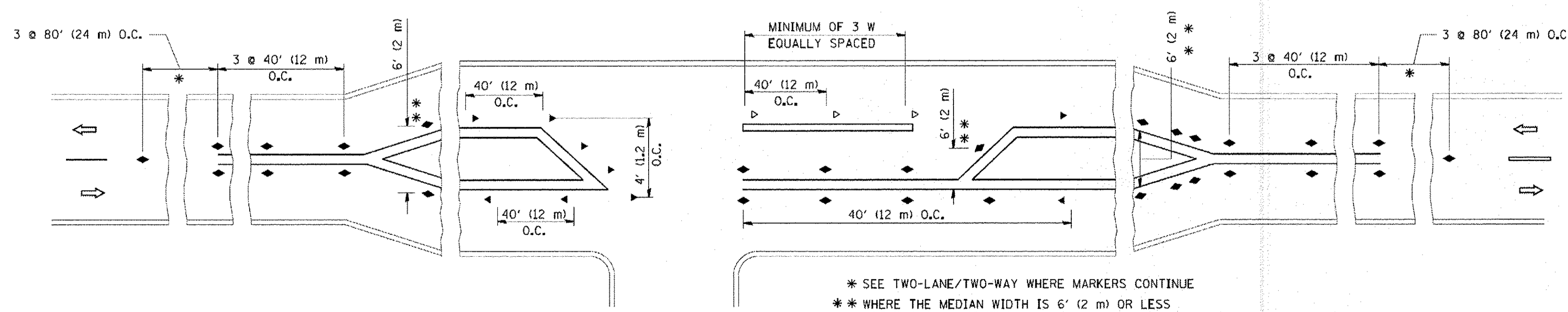
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



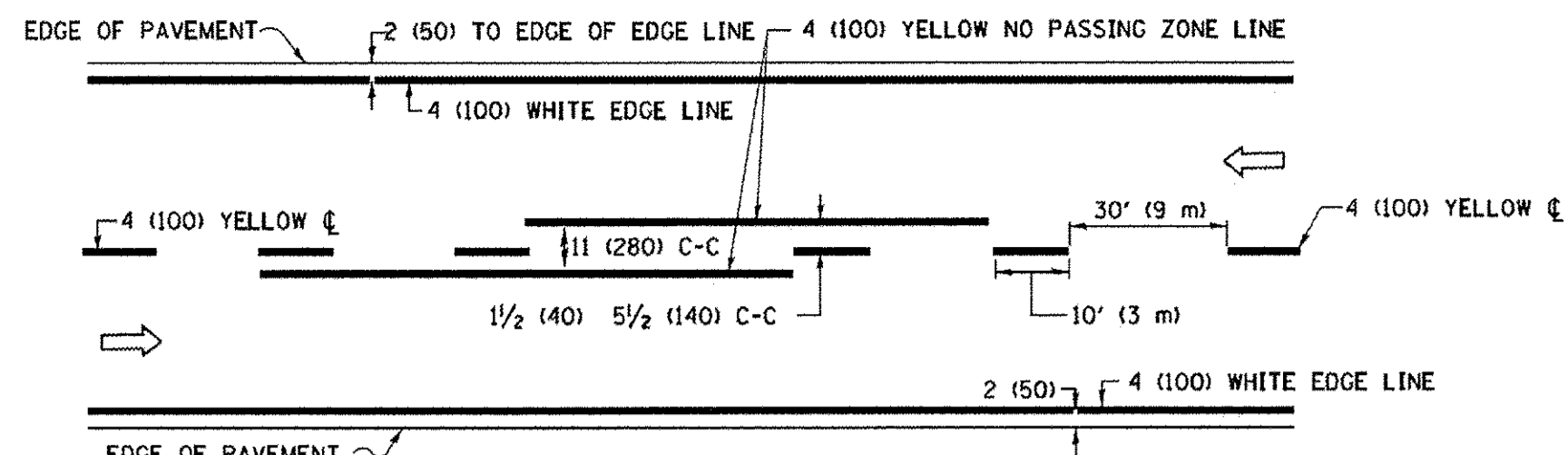
LEFT TURN

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

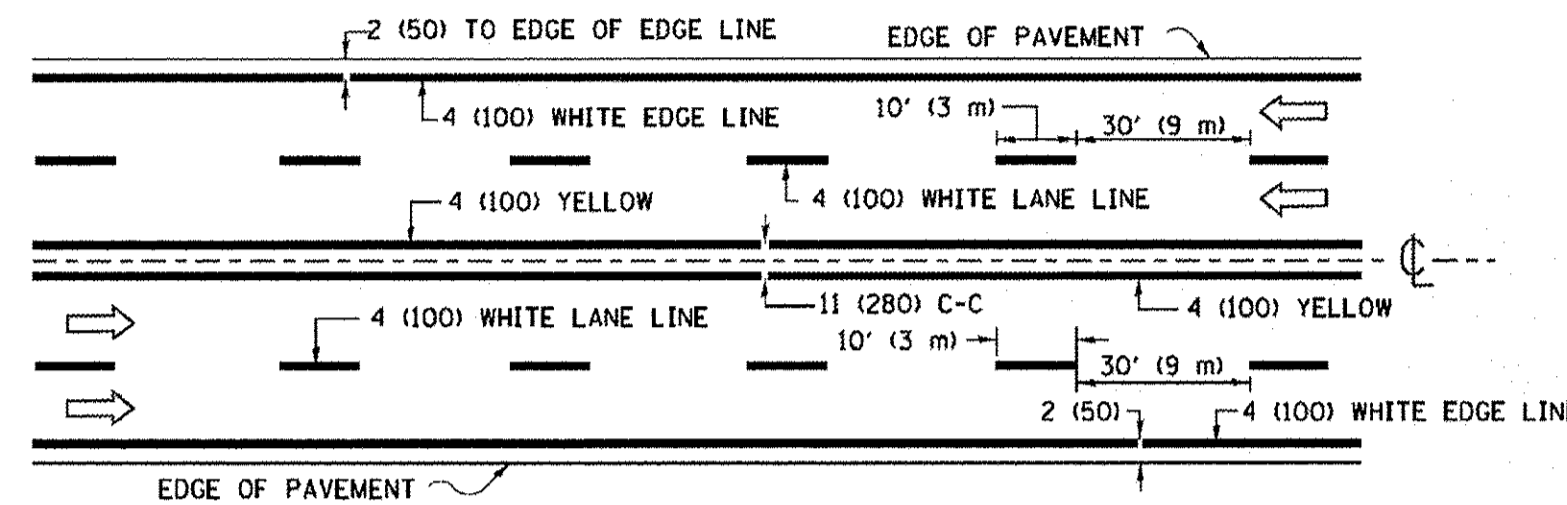
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = N:\F08ESTPARK\0223\06945\11\STANDARDS\_082306945-01.dwg  
 Default

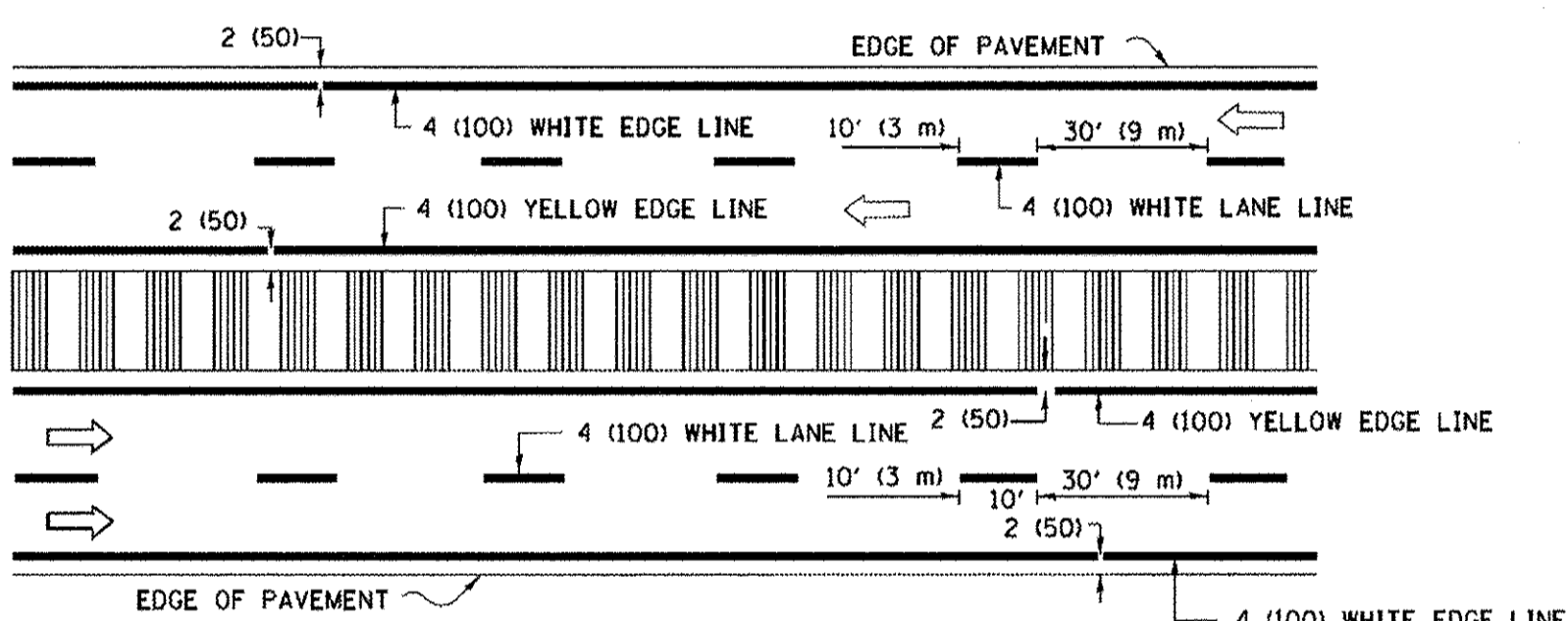
<b>INFRASTRUCTURE ENGINEERING</b> 33 West Monroe   Suite 1540   Chicago, IL 60603 P 312.425.9500   F 312.425.9564   www.infrastructure-eng.com	USER NAME = mthomas	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS</b> <b>RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>		F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 105
	PLOT SCALE = 1"	DRAWN -	REVISED - T. RAMMACHER 03-12-99		SCALE: NONE	SHEET 8 OF 21 SHEETS	STA. TO STA.	<b>TC-11</b> ILLINOIS FED. AID PROJECT		CONTRACT NO. 61D26	
PLOT DATE = 11/14/2016	CHECKED -	DATE -	REVISED - T. RAMMACHER 01-06-00								
			REVISED - C. JUCIUS 09-09-09								



**2-LANE ROADWAY**

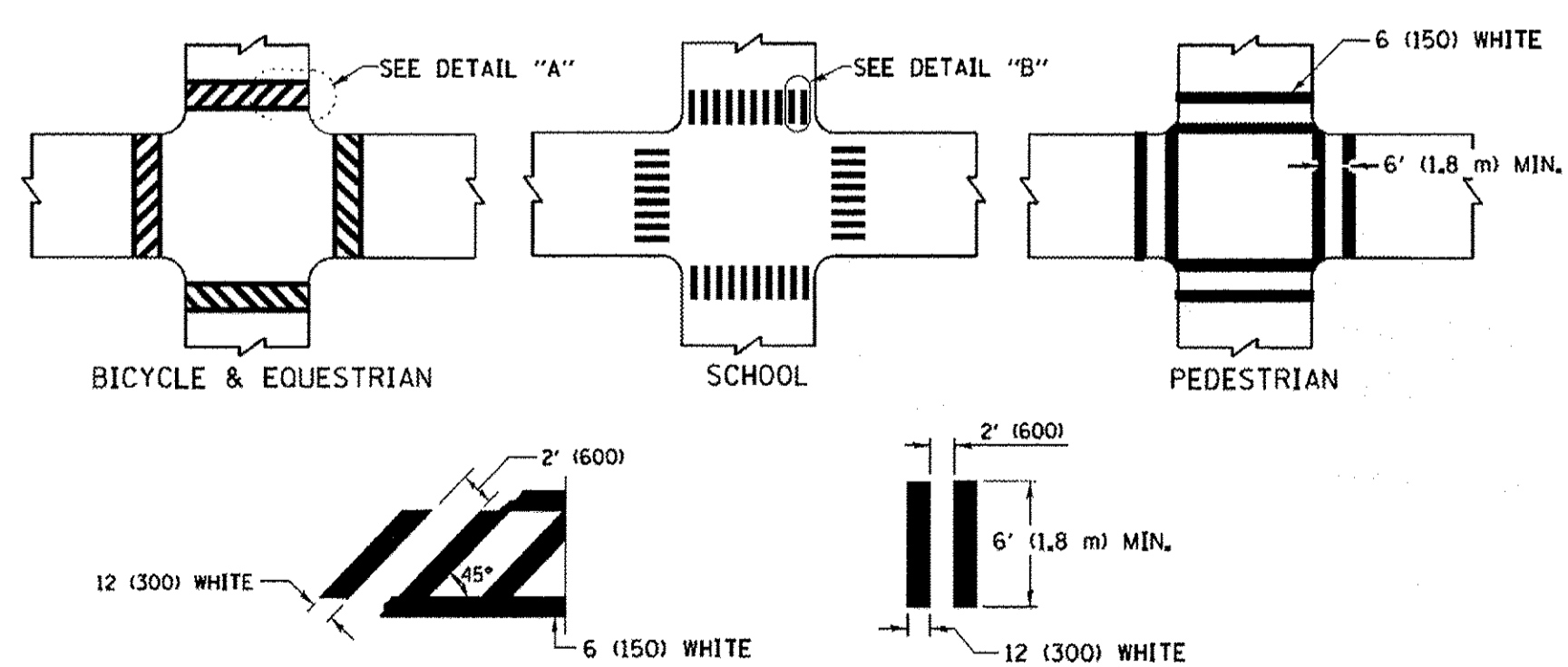


**MULTI-LANE UNDIVIDED**



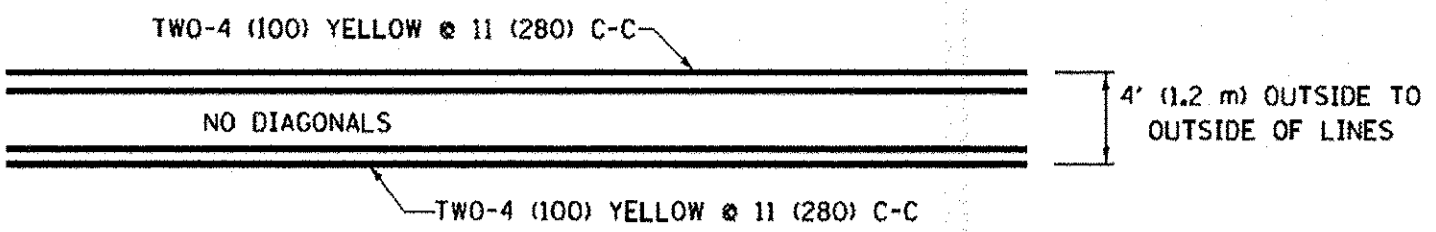
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

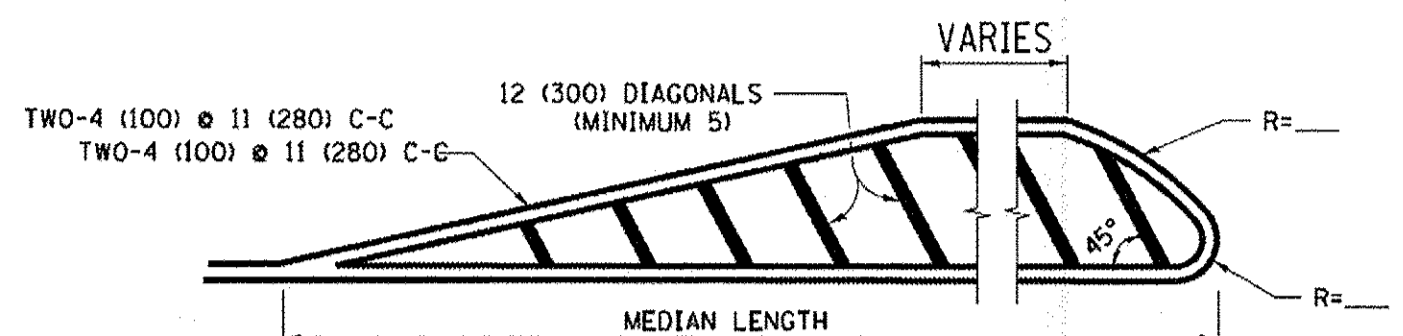


**TYPICAL CROSSWALK MARKING**

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

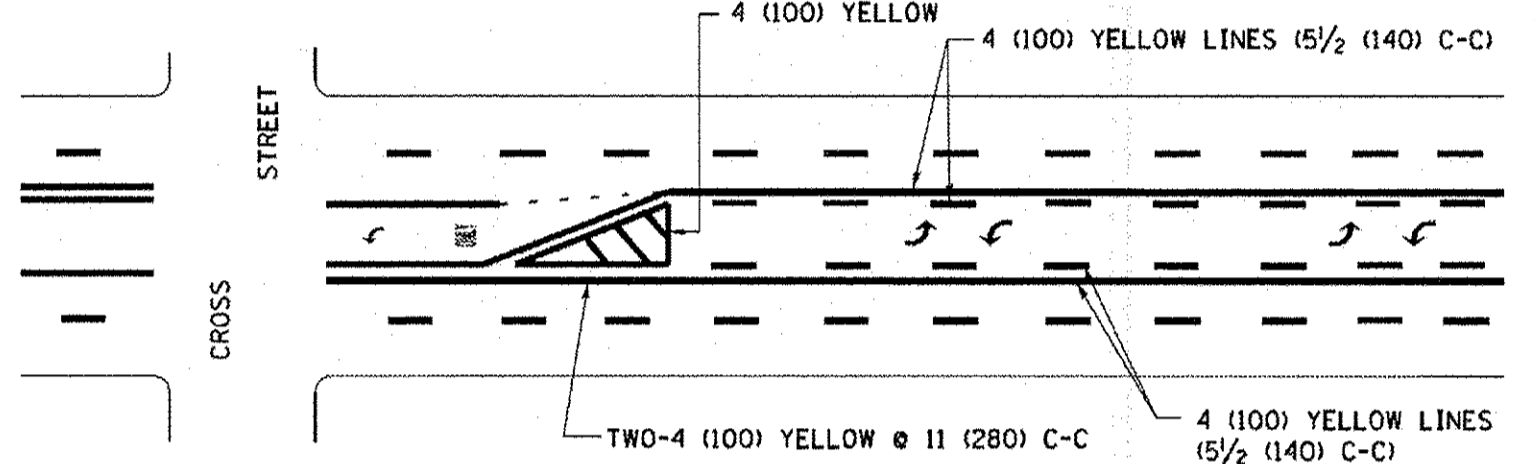


**4' (1.2 m) WIDE MEDIANS ONLY**



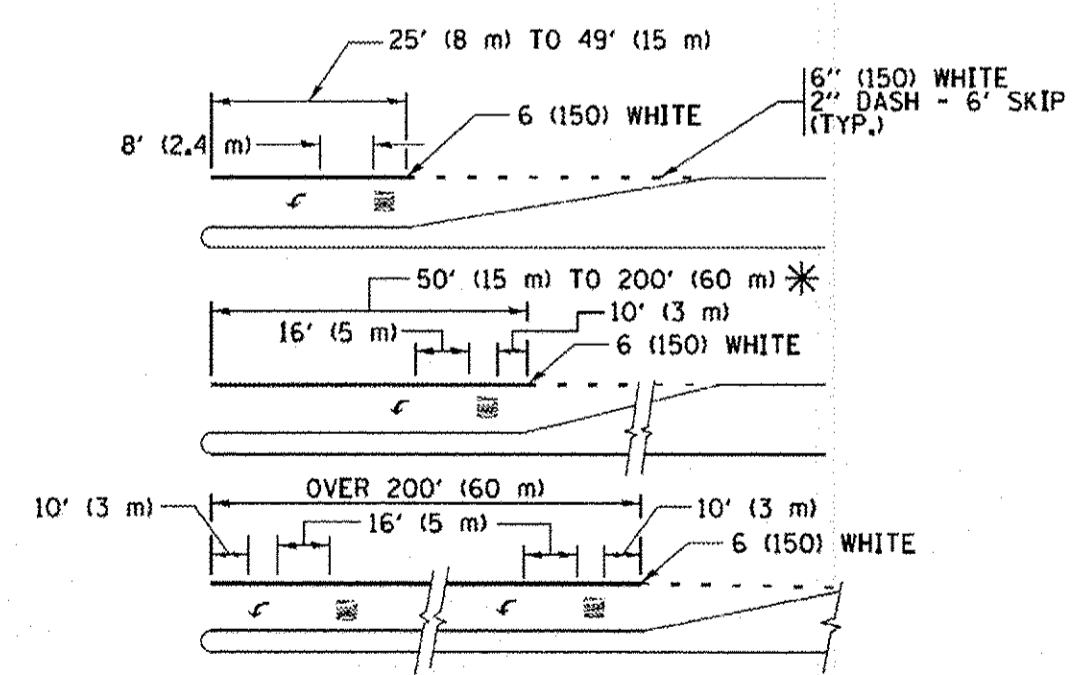
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

**MEDIANS OVER 4' (1.2 m) WIDE**



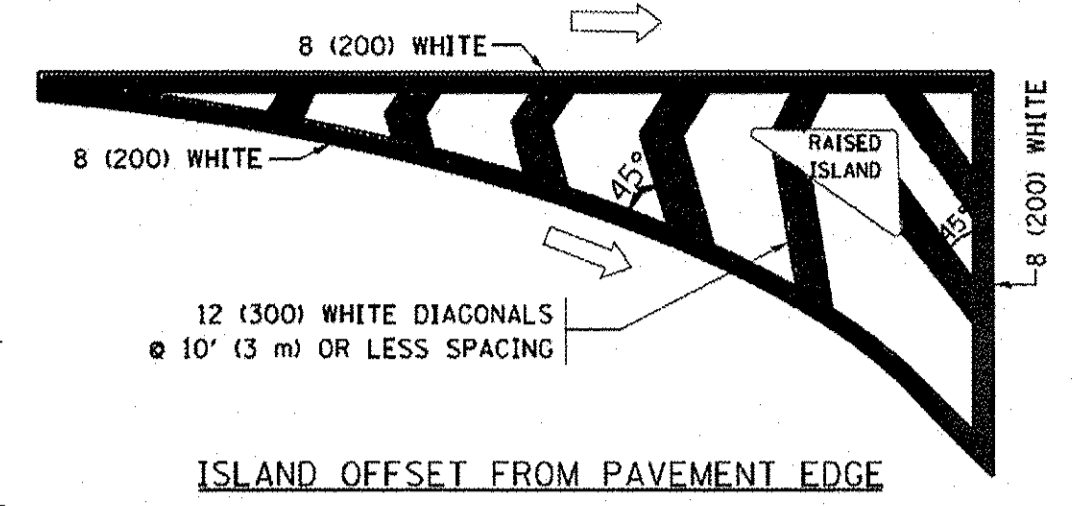
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**

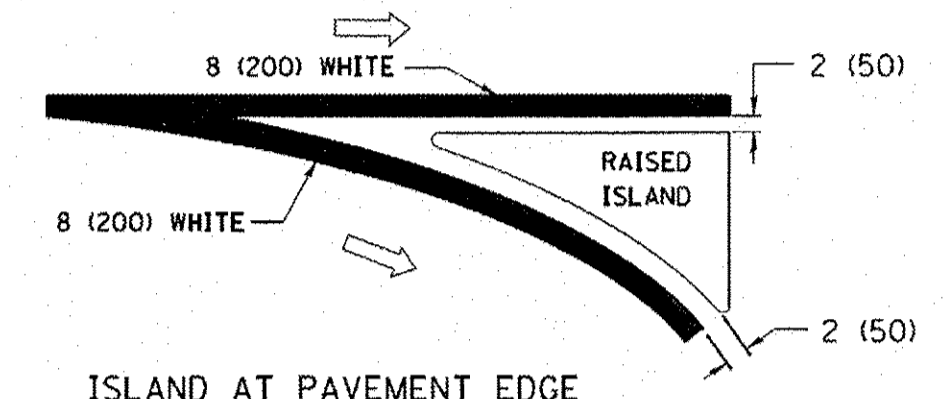


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ; ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

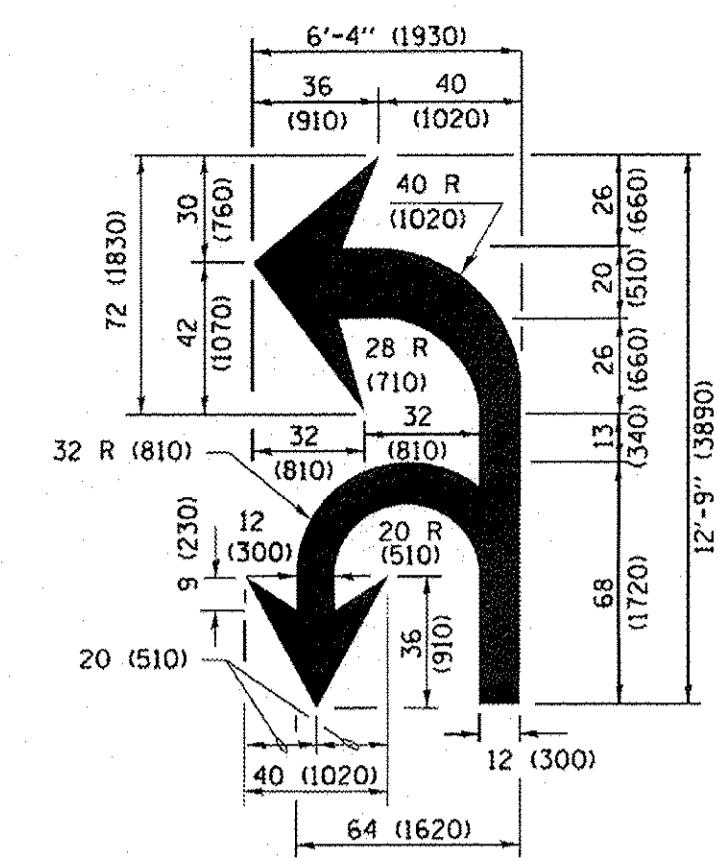
**TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING**



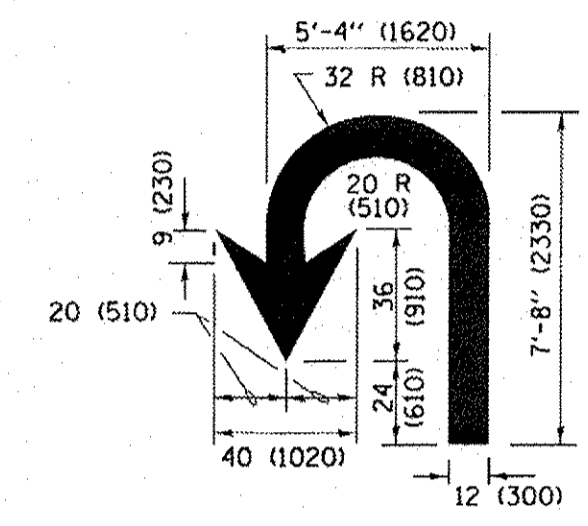
**ISLAND OFFSET FROM PAVEMENT EDGE**



**ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 2' (600) @ 45° 2' (600) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15' 6" (4.8 m) LETTERS; 16' (4.9 m) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

FILE NAME = N:\VEDRESTPARK\0223\B0246\Civil\STANDARDS\_0023B0246-01.dwg

**INFRASTRUCTURE ENGINEERING** INCORPORATED  
33 West Monroe | Suite 1540 | Chicago, IL 60603  
P 312.415.9590 | F 312.415.3554 | www.infrastructure-eng.com

USER NAME = mthomas  
DESIGNED - EVERS  
DRAWN - CADData\CAD\shasta\lcl3.dgn  
CHECKED -  
PLOT SCALE = 1'  
PLOT DATE = 11/14/2016

DESIGNED - EVERS  
REVISED - C. JUCIUS 09-09-09  
REVISED - C. JUCIUS 07-01-13  
CHECKED -  
REVISED - C. JUCIUS 12-21-15  
DATE - 03-19-90  
REVISED - C. JUCIUS 04-12-16

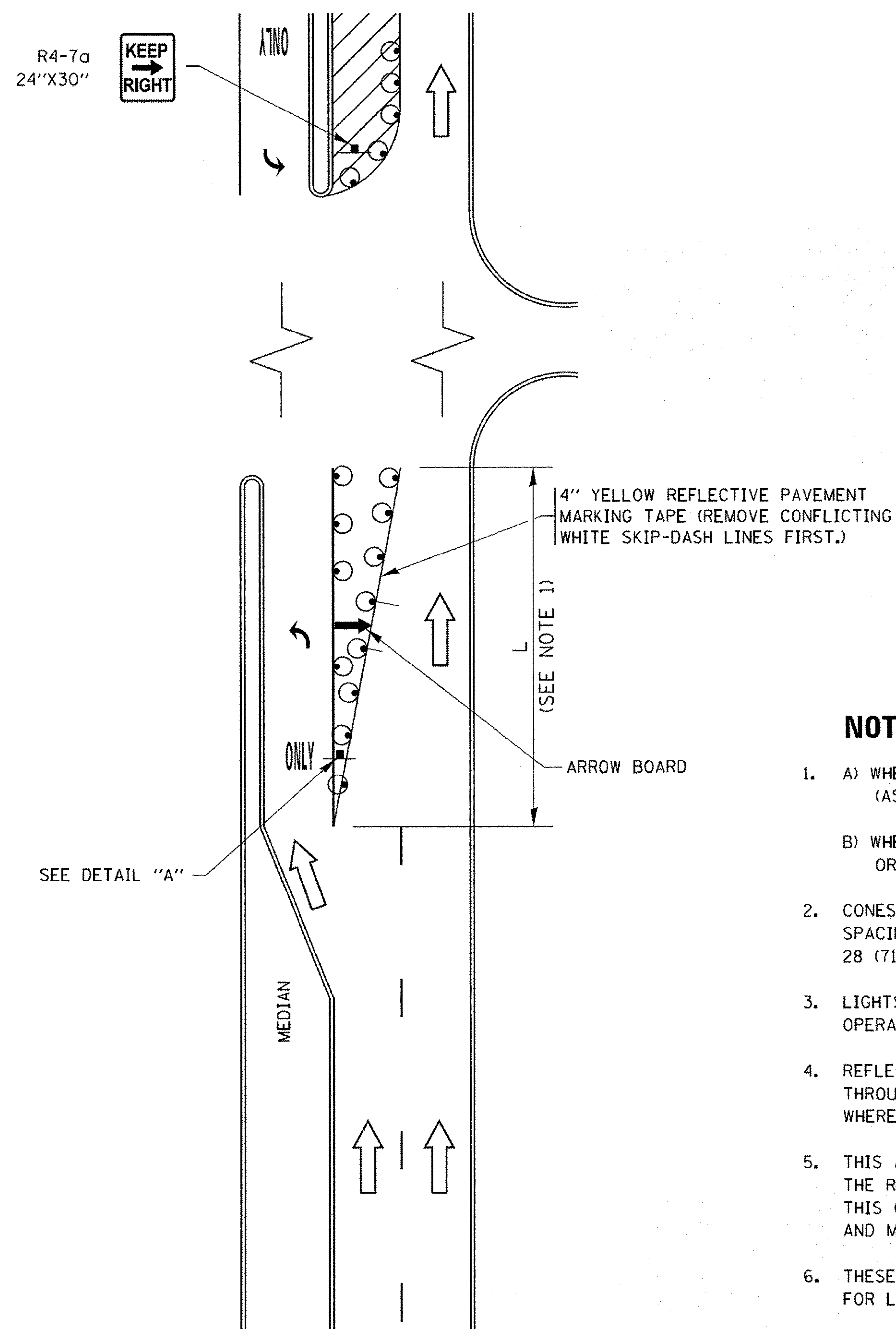
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE TYPICAL PAVEMENT MARKINGS**

SCALE: NONE SHEET 9 OF 21 SHEETS STA. TO STA.

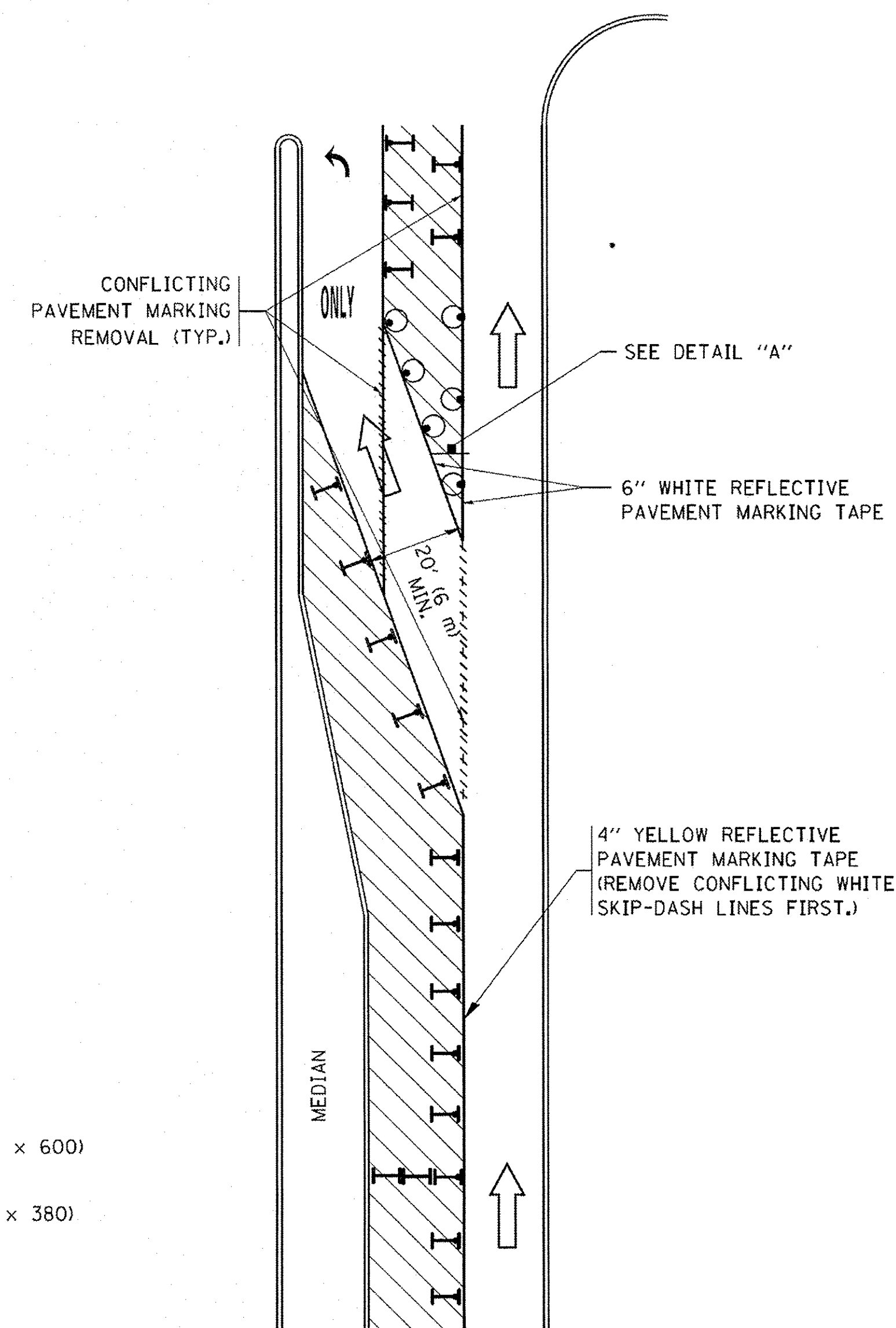
F.A.P. RT.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	13-00112-00-LS	COOK	151	106
TC-13			CONTRACT NO. 61D26	
[ILLINOIS] FED. AID PROJECT				

## TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



**FIGURE 1**

## TURN BAY ENTRANCE WITHIN A LANE CLOSURE



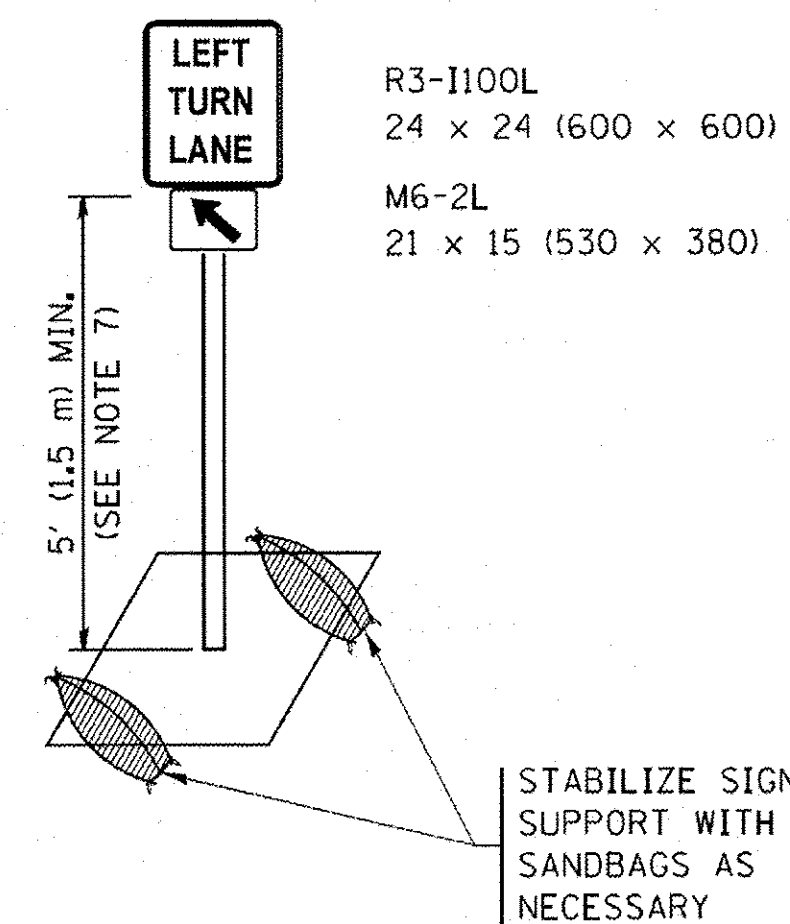
**FIGURE 2**

### LEGEND

	WORK AREA
	LANE OPEN TO TRAFFIC
	ARROW BOARD
	TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
	DRUM WITH STEADY BURN LIGHT
	SIGN ASSEMBLY
	TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

### NOTES:

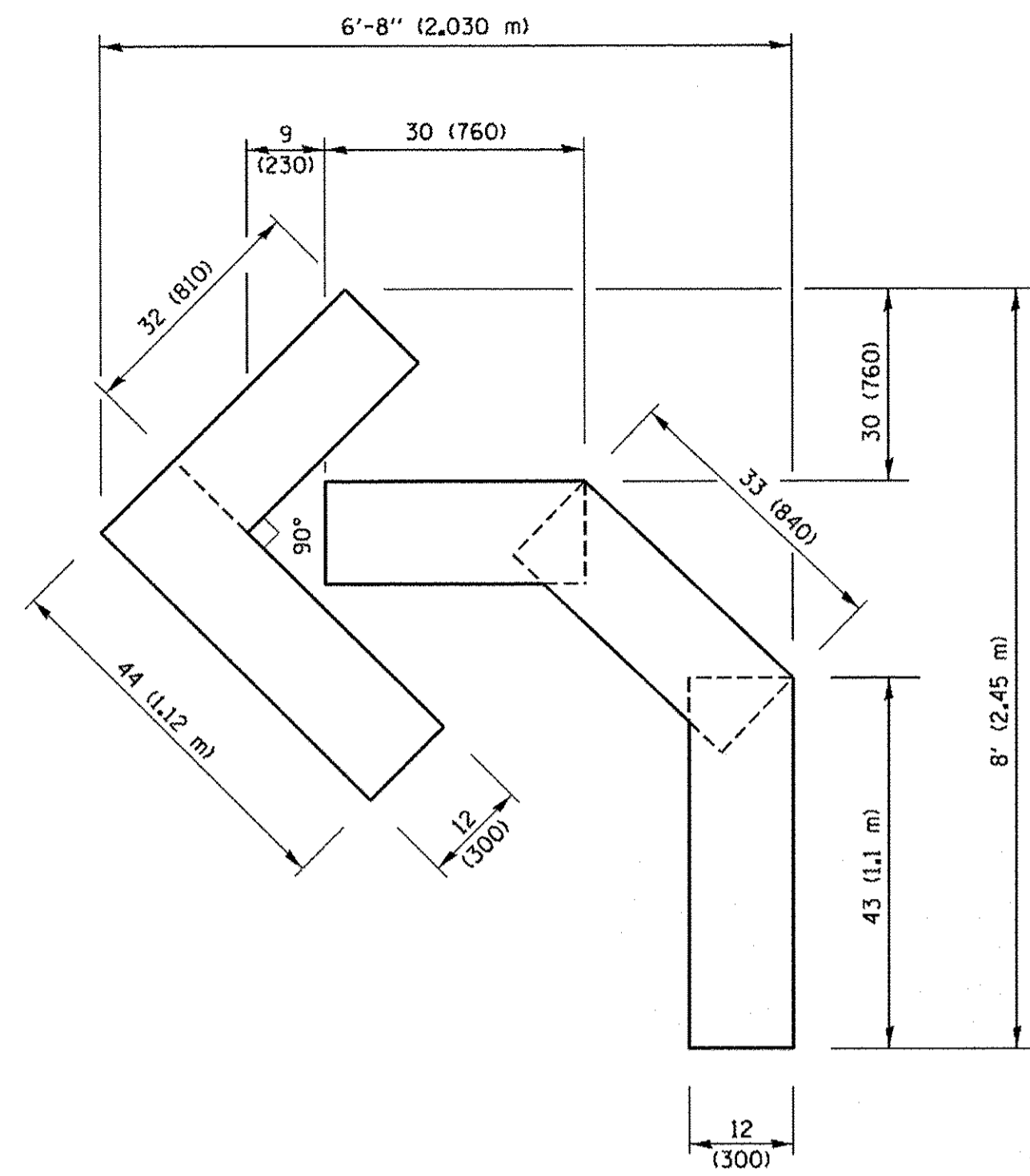
1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



**DETAIL A**

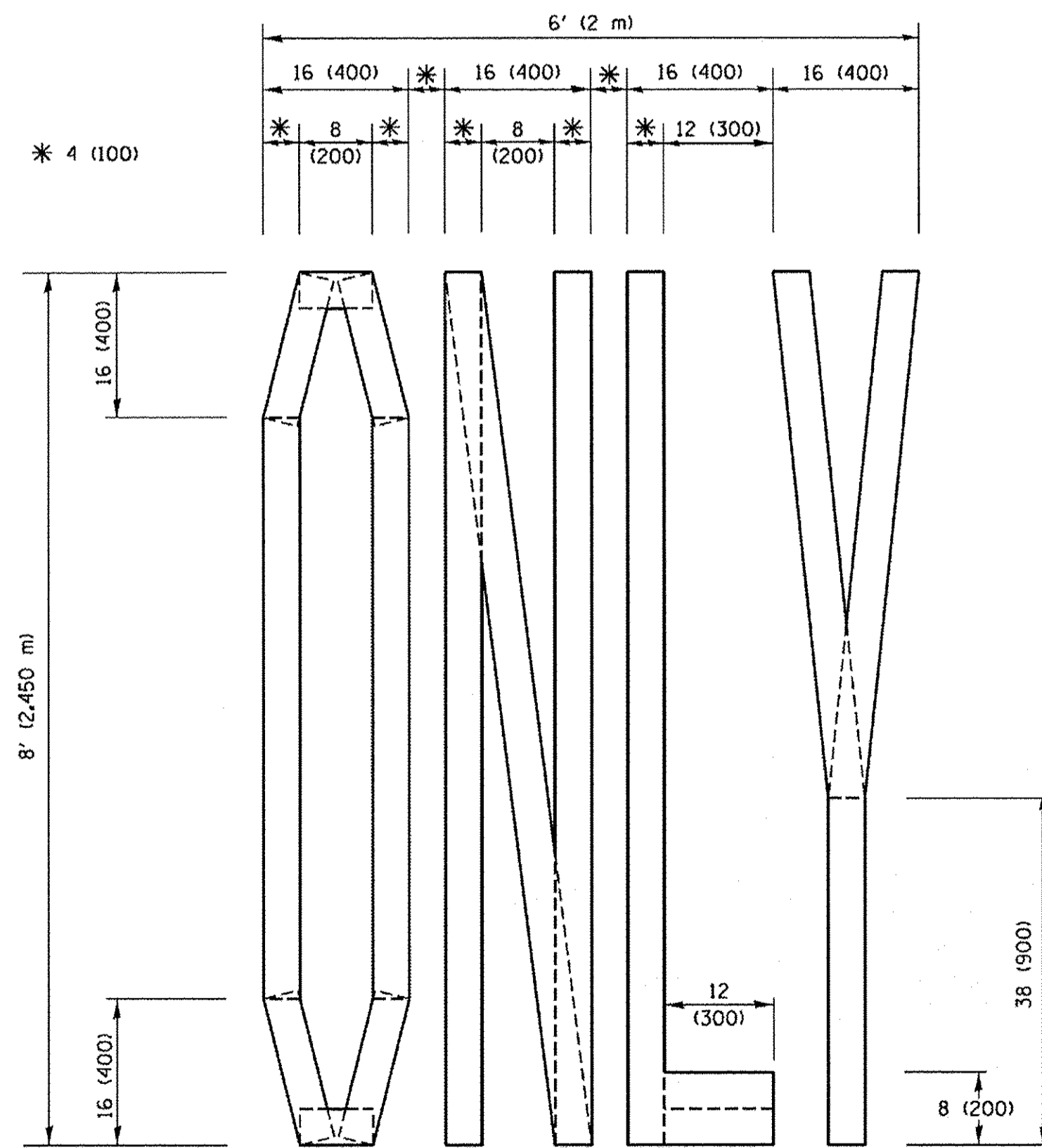
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = N:\PROJECTS\11\11\STANDARD\023\BC045\Civil\STANDARD\_023\BC045-01.dwg



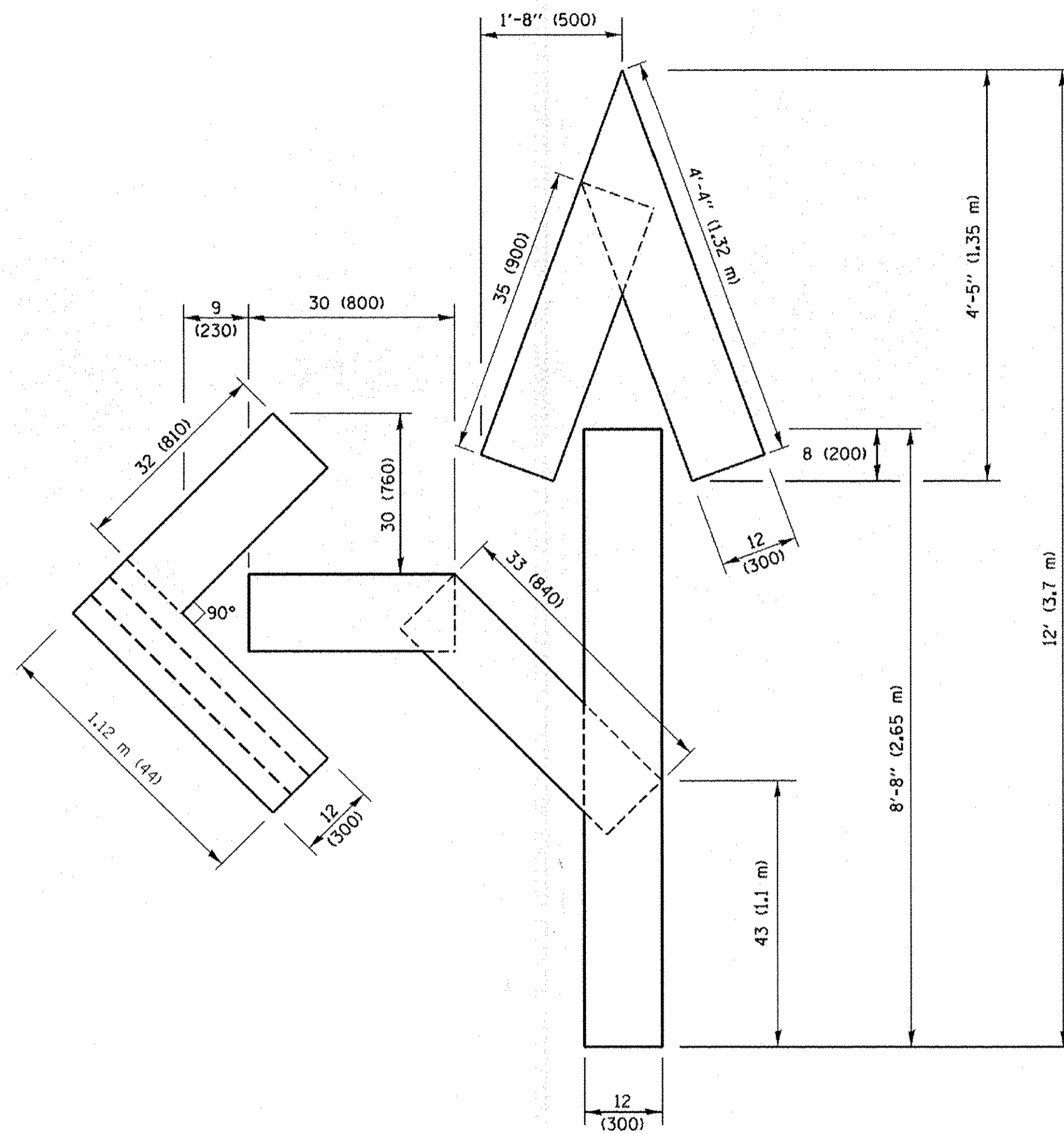
**QUANTITY**

4 (100) LINE = 45.5 ft. (13.9 m)  
15.2 sq. ft. (1.41 sq. m)



**QUANTITY**

4 (100) LINE = 64.1 ft. (19.5 m)  
21.4 sq. ft. (1.99 sq. m)

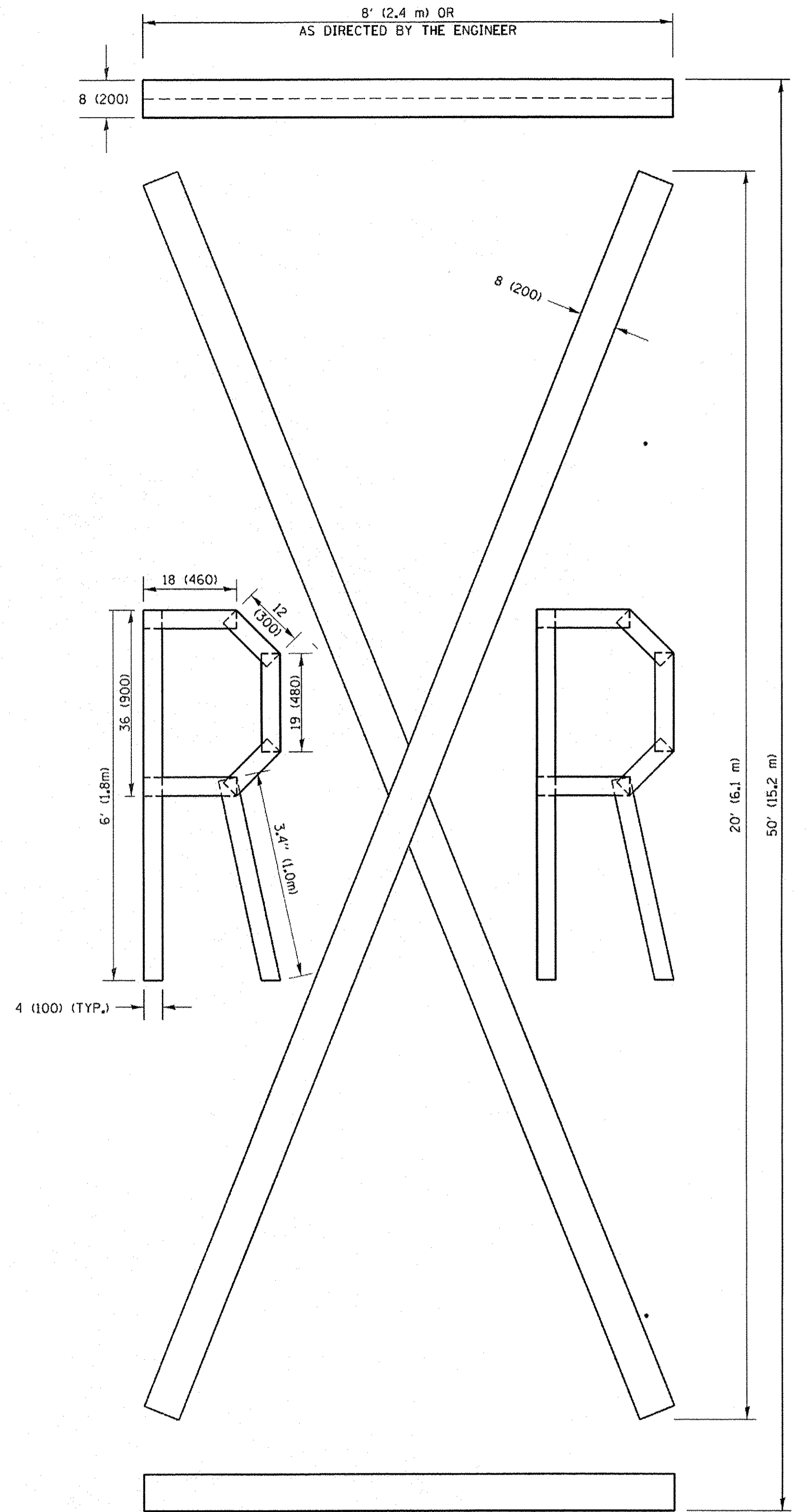


**QUANTITY**

4 (100) LINE = 82.5 ft. (25.1 m)  
27.5 sq. ft. (2.53 sq. m)

**NOTE:**

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



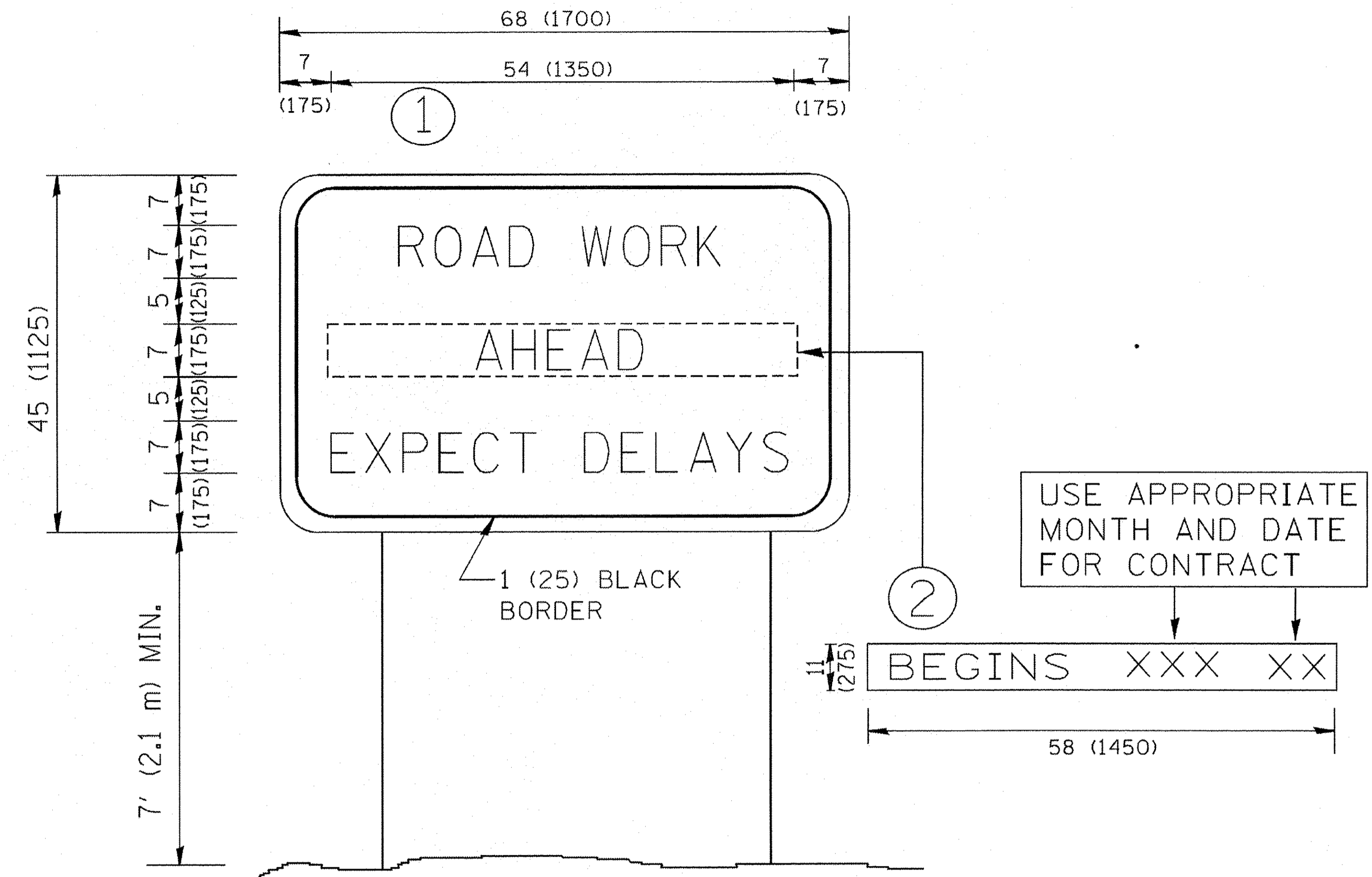
**QUANTITY**

4 (100) LINE = 225.9 ft. (68.9 m)  
75.3 sq. ft. (6.99 sq. m)

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

FILE NAME = N:\PROJECTS\PARA\_0023\BGP\45\STANDARDS\_0023\BGP\45\01.dwg

FILE NAME = N:\FORESTPARK\0223\BGP\45 CIVIL\STANDARDS\_0223BGP45-01.dwg  
 De fault

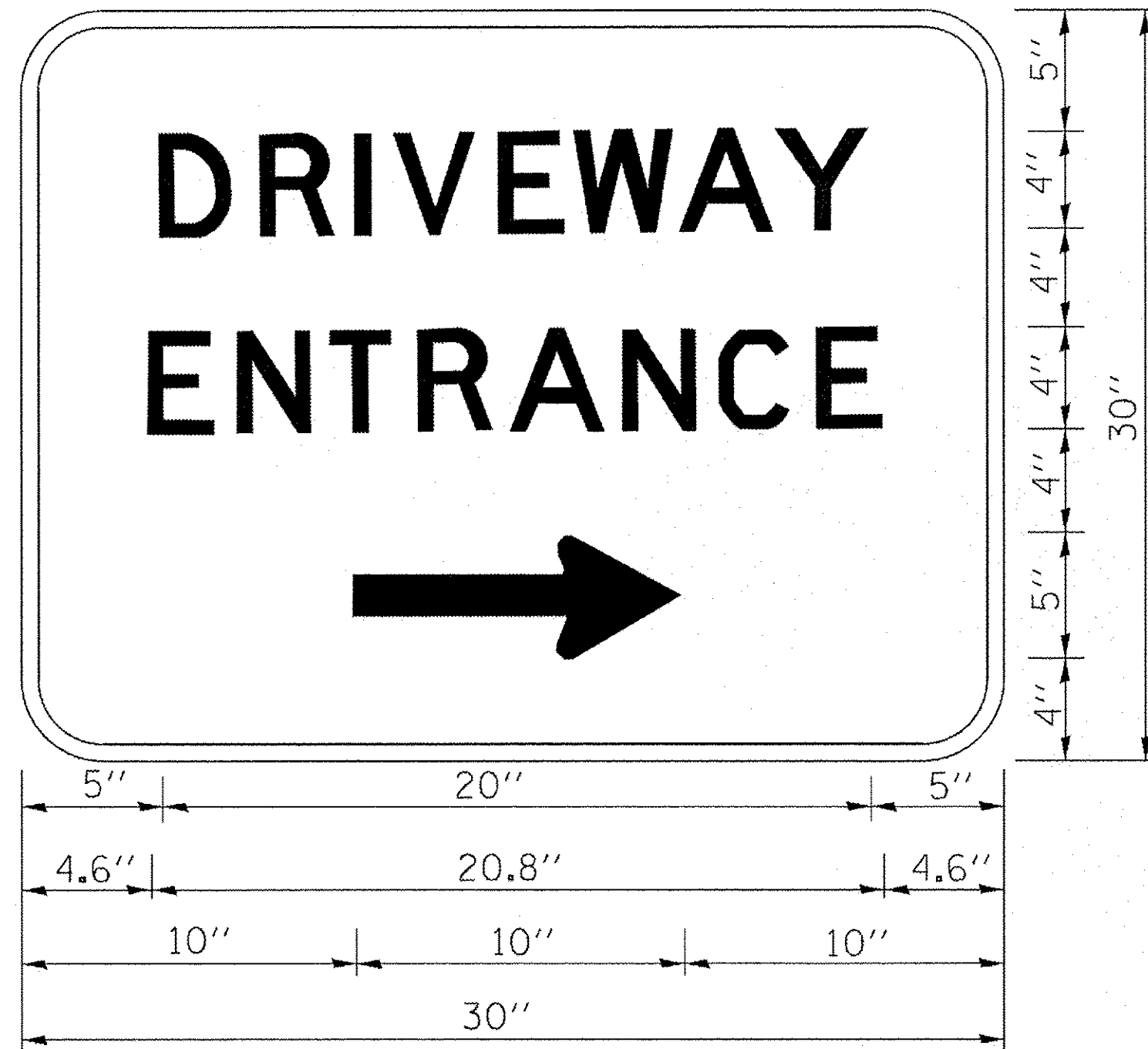


**NOTES:**

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

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

	<b>INFRASTRUCTURE ENGINEERING</b> INCORPORATED <small>33 West Monroe   Suite 1540   Chicago, IL 60603          P 312.425.9560   F 312.425.9564   www.infrastructure-eng.com</small>	USER NAME = mthomas PLOT SCALE = 1" PLOT DATE = 11/14/2016	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - R. MIRS 09-15-97 REVISED - R. MIRS 12-11-97 REVISED - T. RAMMACHER 02-02-99 REVISED - C. JUCLIS 01-31-07	<b>STATE OF ILLINOIS          DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD          INFORMATION SIGN</b>	F.A.P. RTE. 347	SECTION 13-00112-00-LS <b>TC-22</b>	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 109	CONTRACT NO. 61D26 <small>ILLINOIS FED. AID PROJECT</small>
	SCALE: NONE		SHEET 12 OF 21 SHEETS		STA. TO STA.							



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

**NOTES:**

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME = N:\FORESTPARK\0023\0023\0023\STANDARDS\_0023\0046-01.dwg  
 Default

<b>INFRASTRUCTURE ENGINEERING</b>   INCORPORATED 33 West Monroe   Suite 1540   Chicago, IL 60603 P 312.425.9588   F 312.425.9584   www.infrastructure-eng.com	USER NAME = mthomas	DESIGNED -	REVISED - C. JUCIUS 02-15-07	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>DRIVEWAY ENTRANCE SIGNING</b>		F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 110
	PLOT SCALE = 1"	DRAWN -	REVISED -		SCALE: NONE	SHEET 13 OF 21 SHEETS	STA. TO STA.	<b>TC-26</b>		ILLINOIS FED. AID PROJECT CONTRACT NO. 61D26	
	PLOT DATE = 11/14/2016	CHECKED -	REVISED -								

# TRAFFIC SIGNAL LEGEND

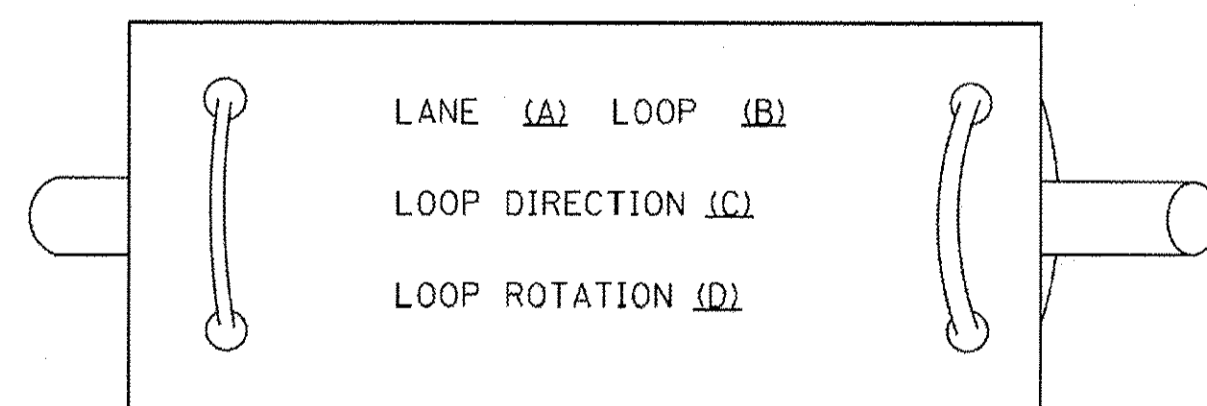
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED												
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE															
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE															
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA															
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED															
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F															
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F															
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F															
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F															
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE															
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED															
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED															
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED															
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED															
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED															
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR															
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR															
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR															
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR															
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR															
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR															
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">EXISTING</th> <th style="width: 50%;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>				EXISTING	PROPOSED										
EXISTING	PROPOSED																						
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED																			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID																			
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER																			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT																			
DETECTOR LOOP, TYPE I				RADIO REPEATER																			
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																			
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																			
VIDEO DETECTION CAMERA																							
VIDEO DETECTION ZONE																							
PAN, TILT, ZOOM CAMERA																							
WIRELESS DETECTOR SENSOR																							
WIRELESS ACCESS POINT																							

FILE NAME = I:\INFRASTRUCTURE\STANDARDS\002306046\01\11\STANDARDS\_002306046B-01.dwg  
 DeFault  
 I:\INFRASTRUCTURE\STANDARDS\002306046\01\11\STANDARDS\_002306046B-01.dwg

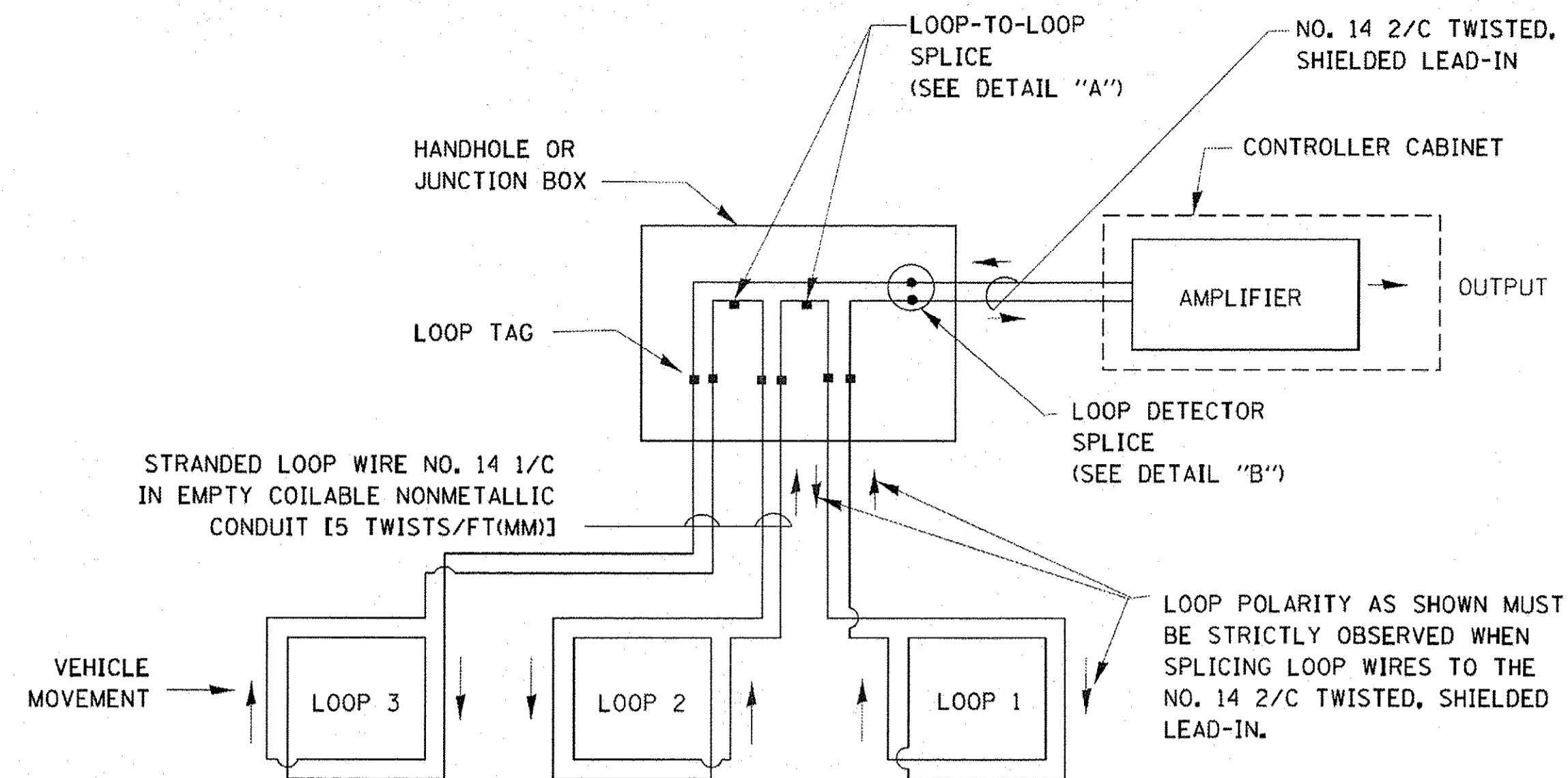
**LOOP DETECTOR NOTES**

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

**LOOP LEAD-IN CABLE TAG**

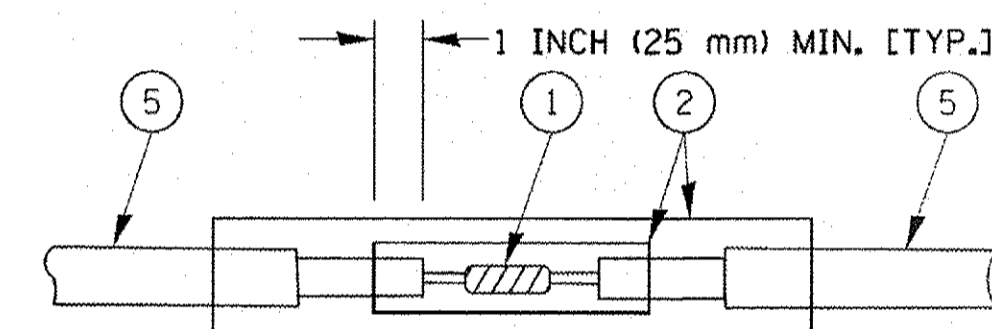


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

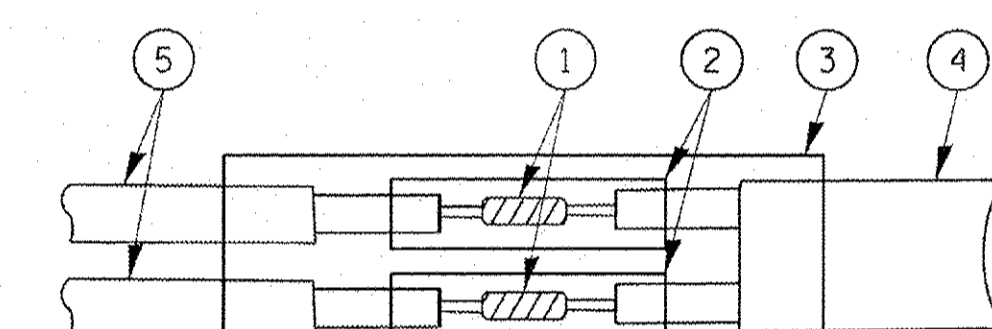


**DETECTOR LOOP WIRING SCHEMATIC**

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

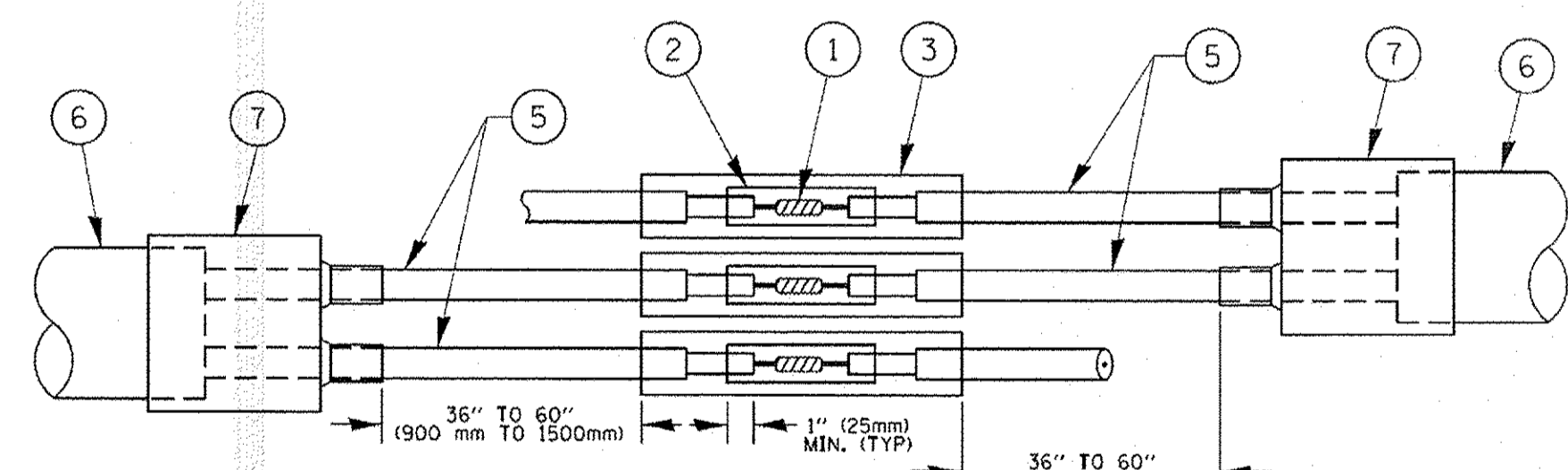


DETAIL "A"  
LOOP-TO-LOOP SPLICE

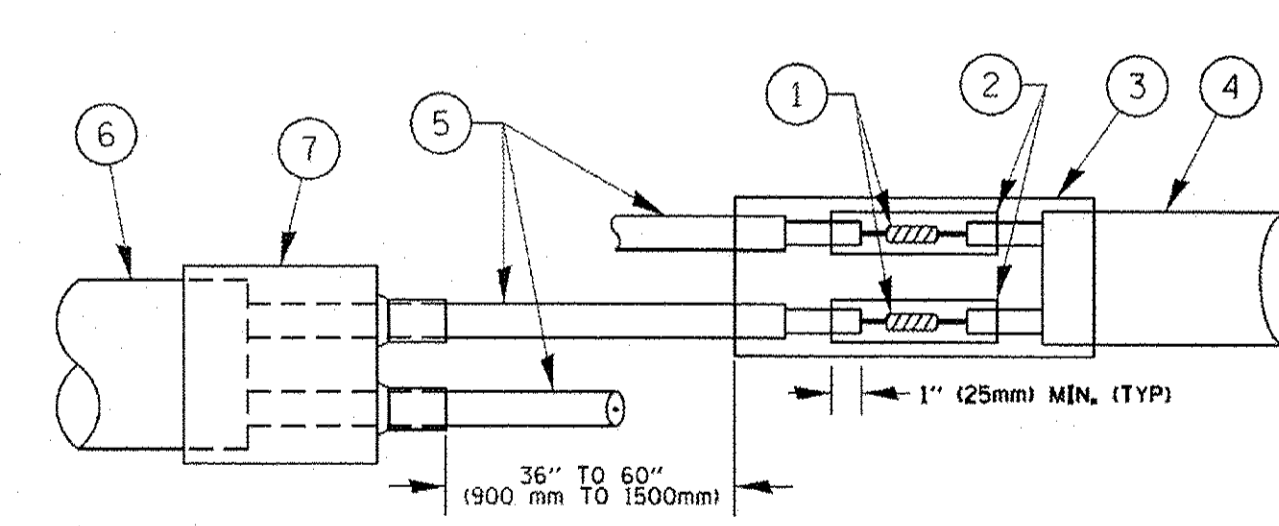


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**LOOP DETECTOR SPLICE**

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

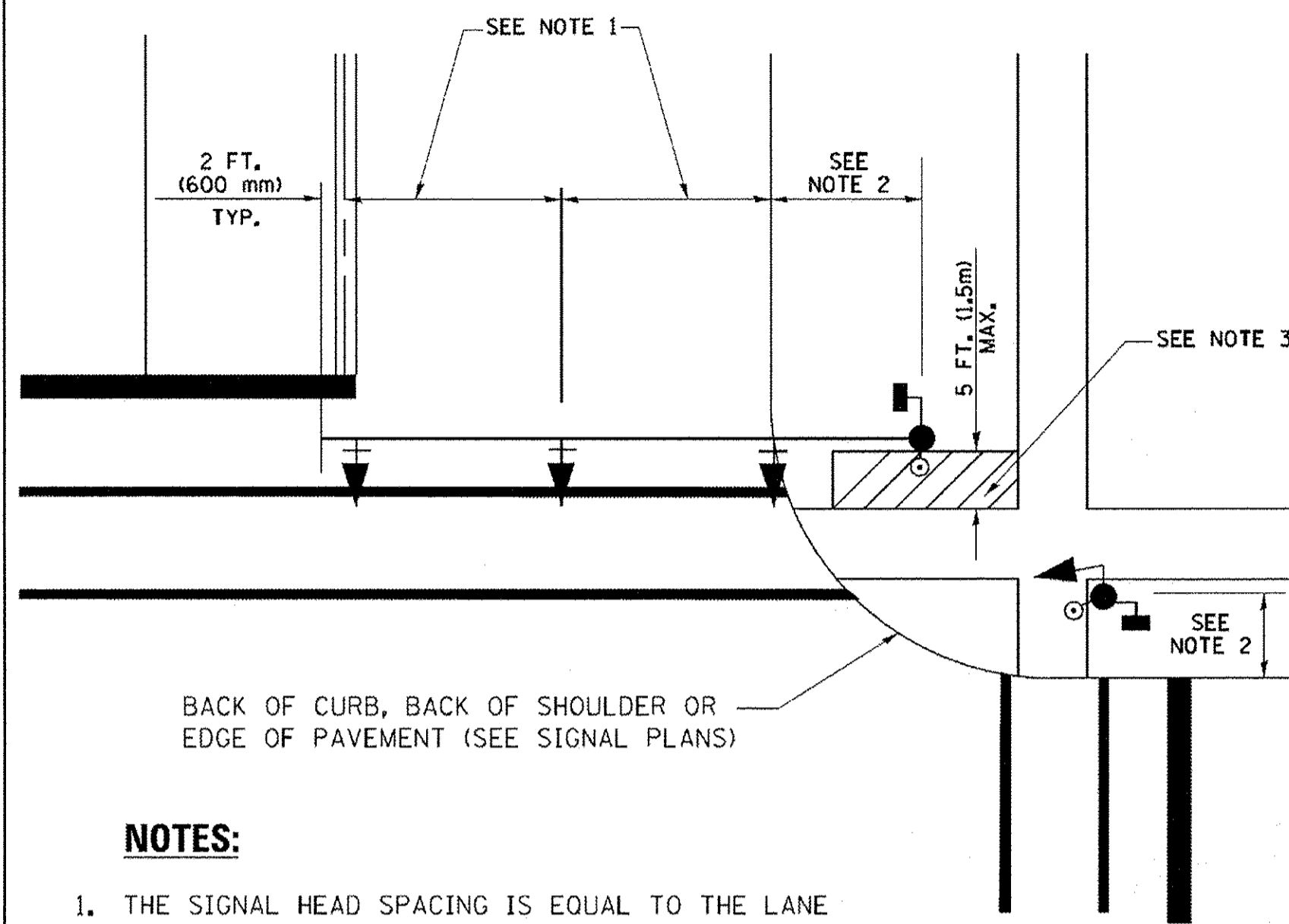
FILE NAME = N:\VFORESTPARK\0023\03046\Civil\STANDARD\00230046b-01.dwg

USER NAME = mthomas	DESIGNED - DAD	REVISED - DAG 1-1-14
PLOT SCALE = 1"	DRAWN - BCK	REVISED -
PLOT DATE = 11/14/2016	CHECKED - DAD	REVISED -
	DATE - 10-28-09	REVISED -

F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 112
TS-05		CONTRACT NO. 61D26		
ILLINOIS FED. AID PROJECT				



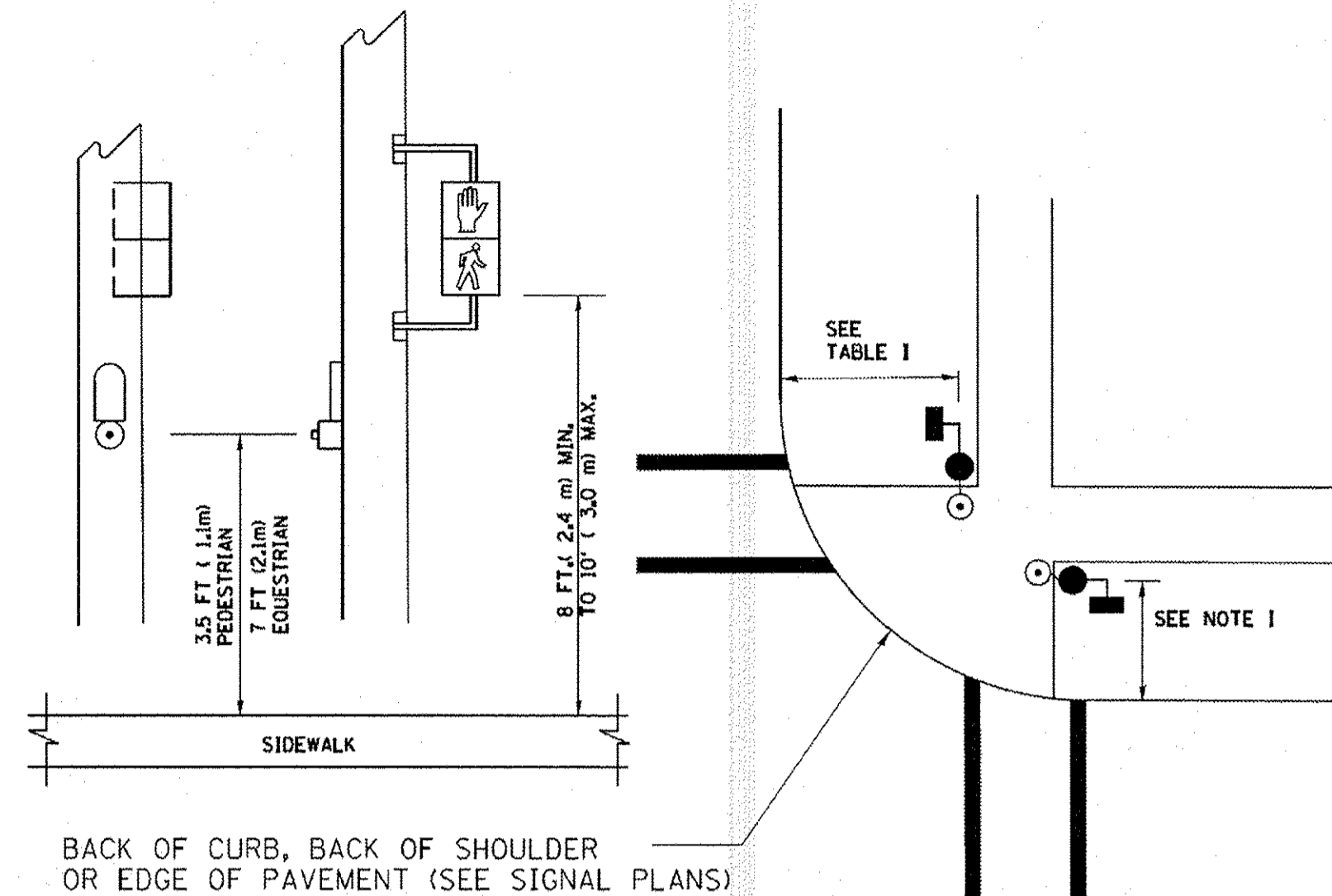
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

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

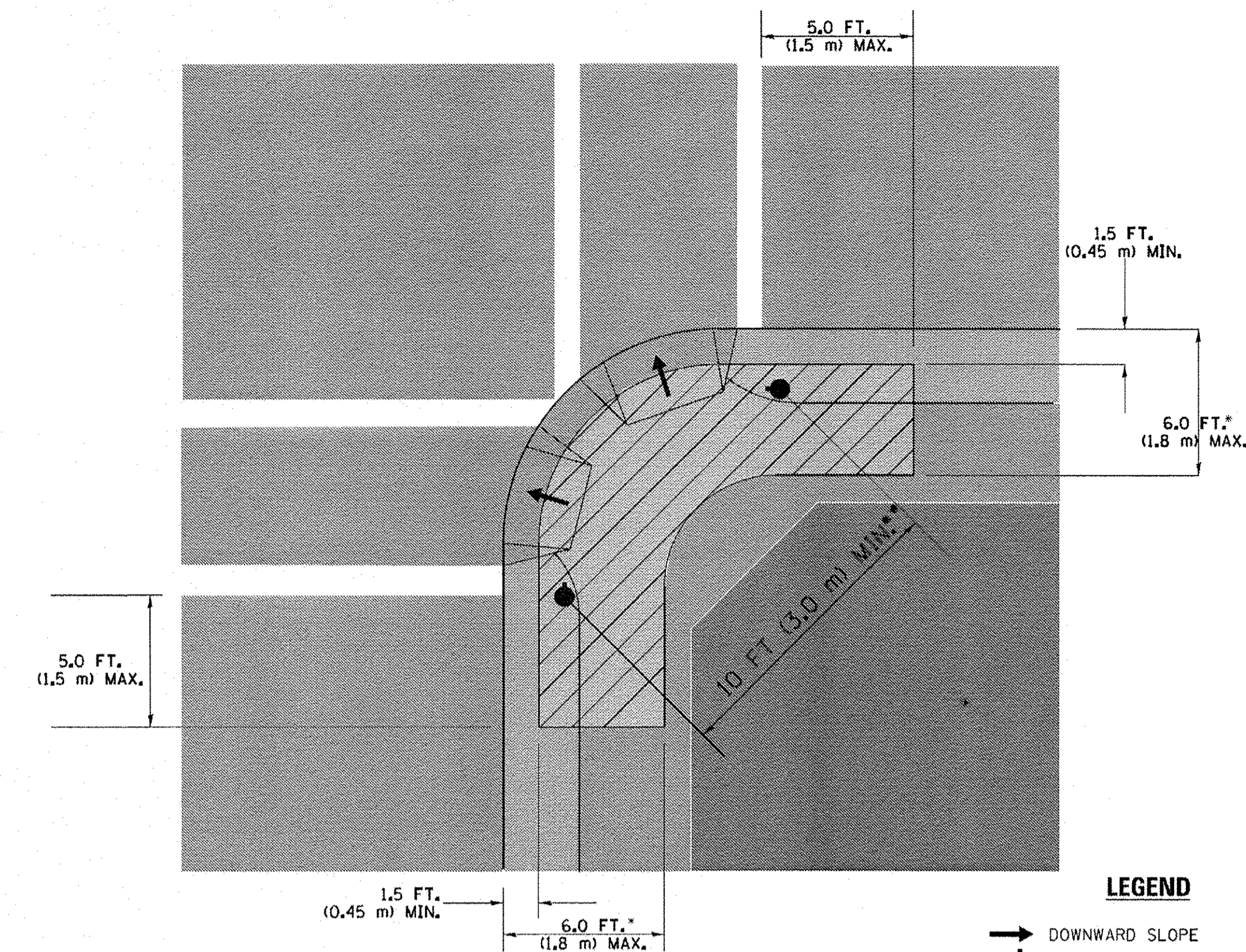
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

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

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

**NOTES:**

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

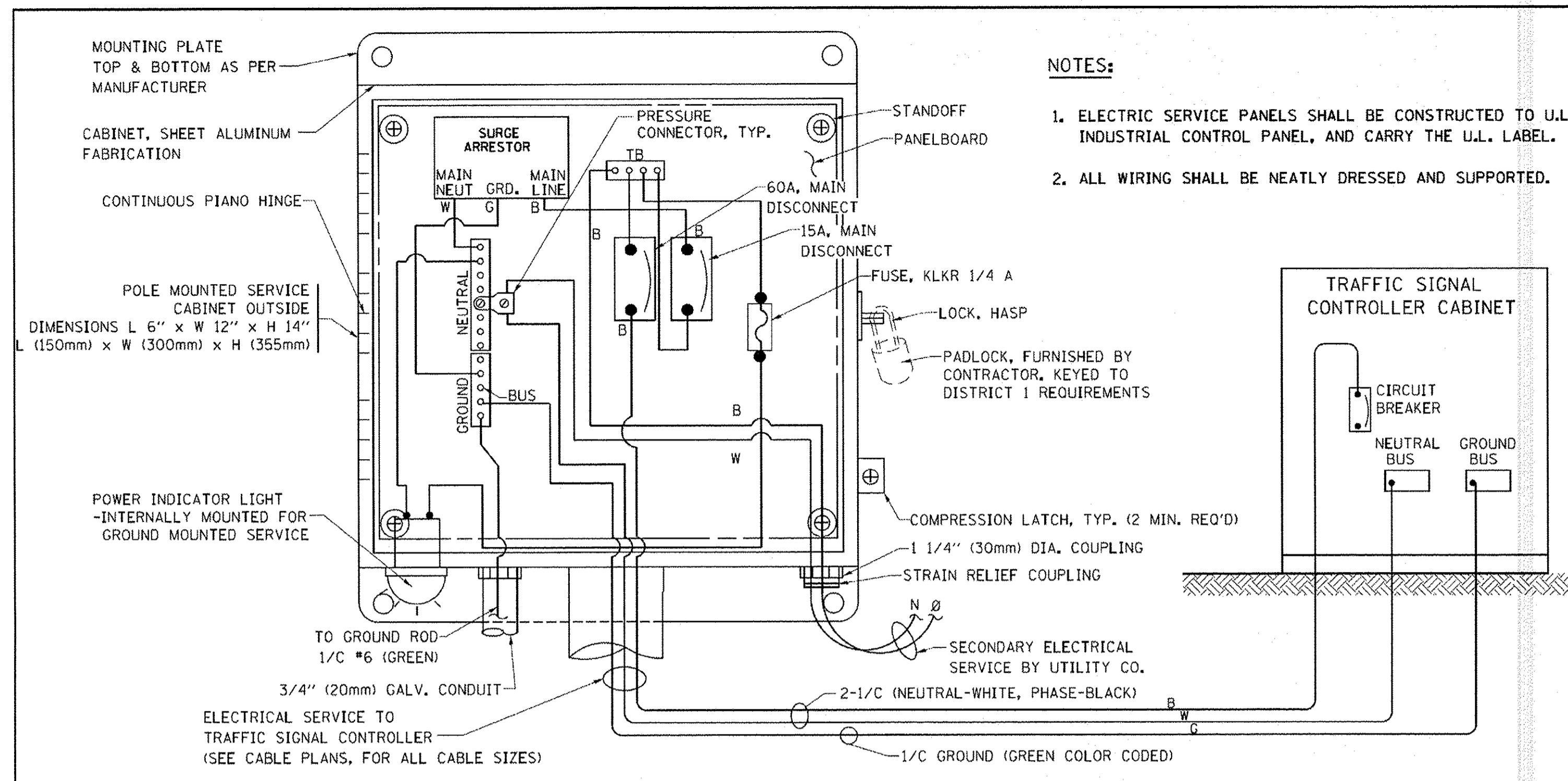
**TRAFFIC SIGNAL EQUIPMENT OFFSET**

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

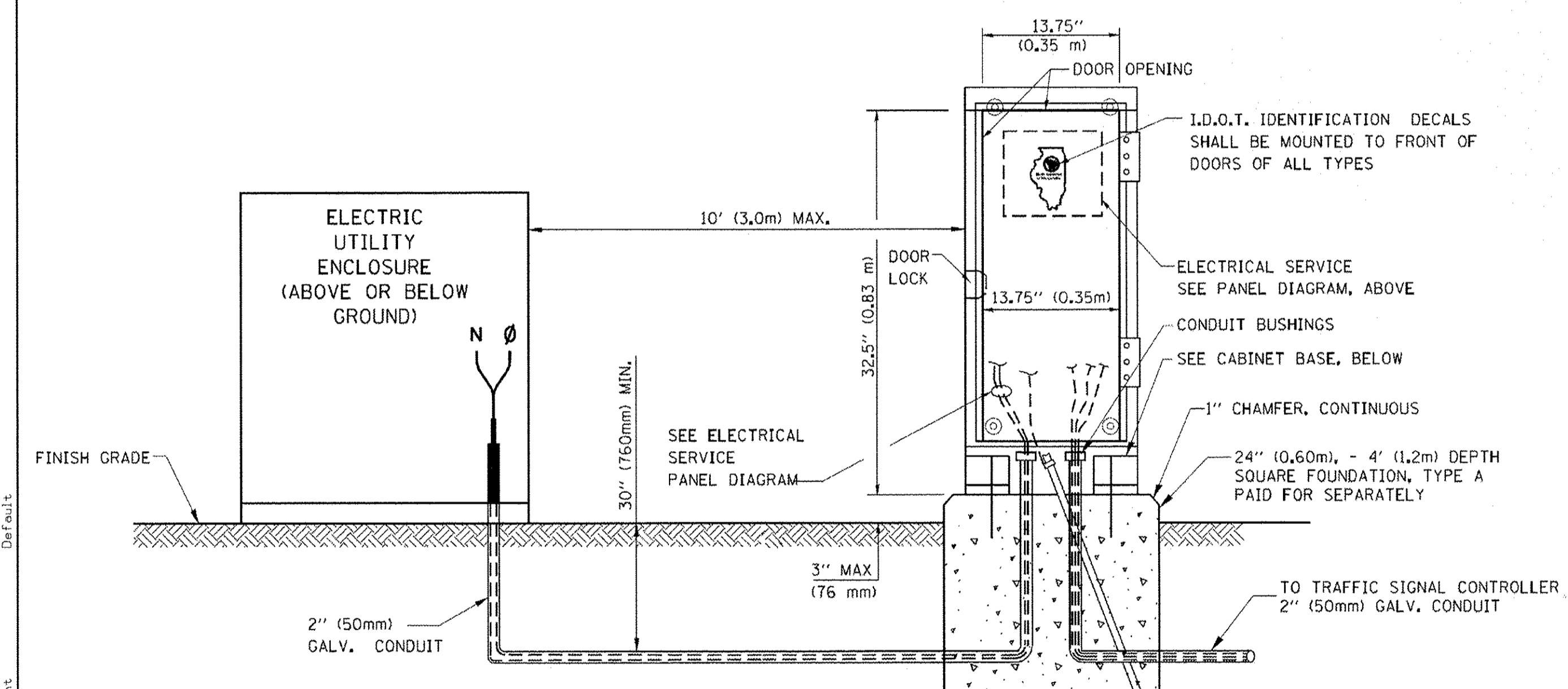
**NOTES:**

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

FILE NAME = N:\FORESTPARK\0023\B0046\Cv\151\STANDARD\05\_0023B0046.dwg - 01.dwg  
 Default  
 33 West Monroe | Suite 1540 | Chicago, IL 60603  
 P 312.425.9550 | F 312.425.9554 | www.infrastructure-eng.com

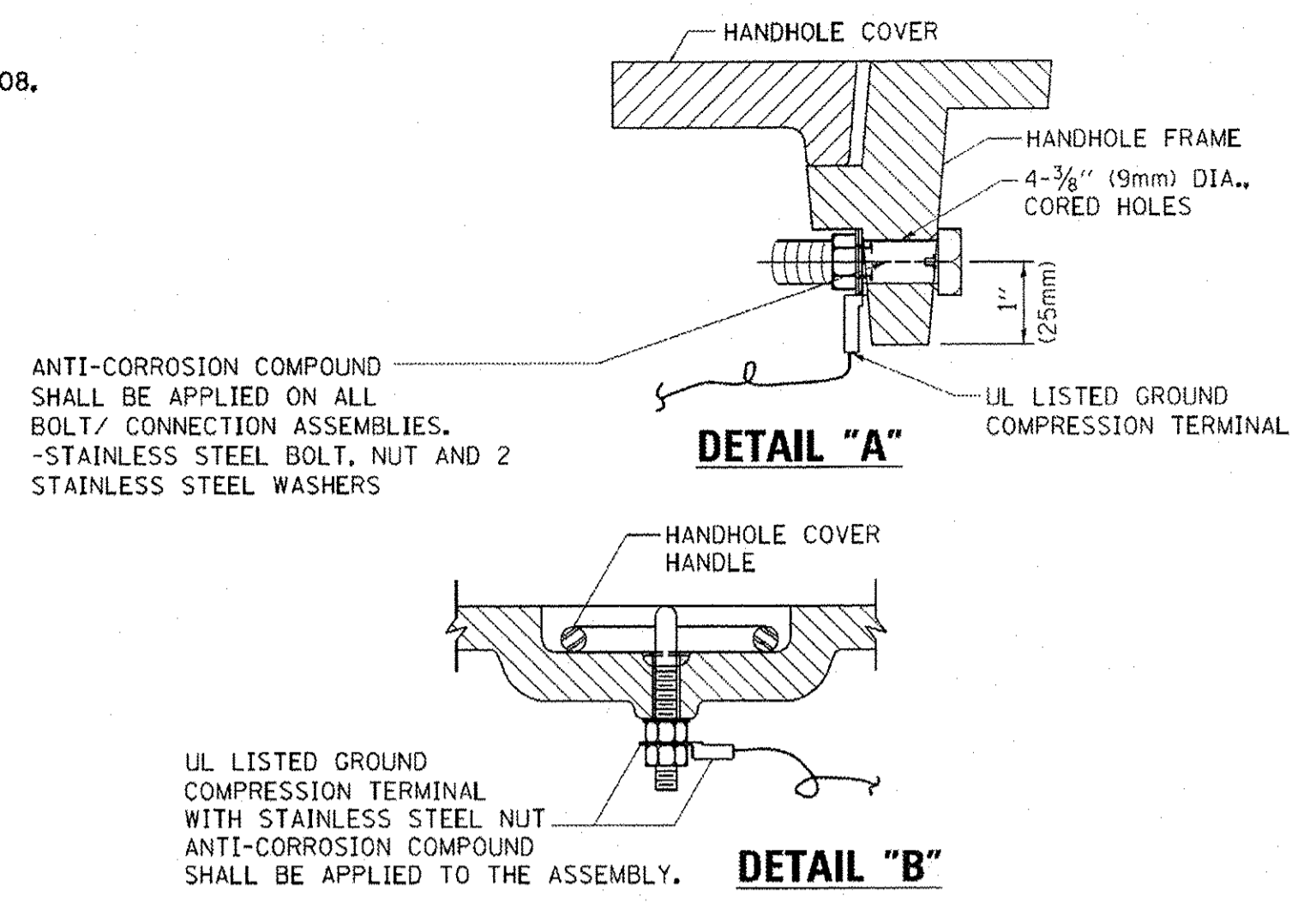
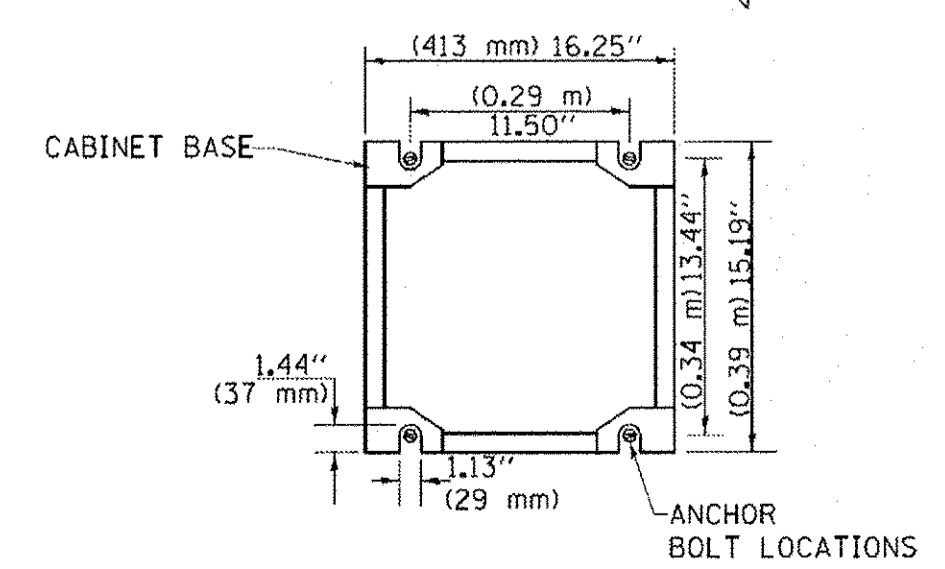


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



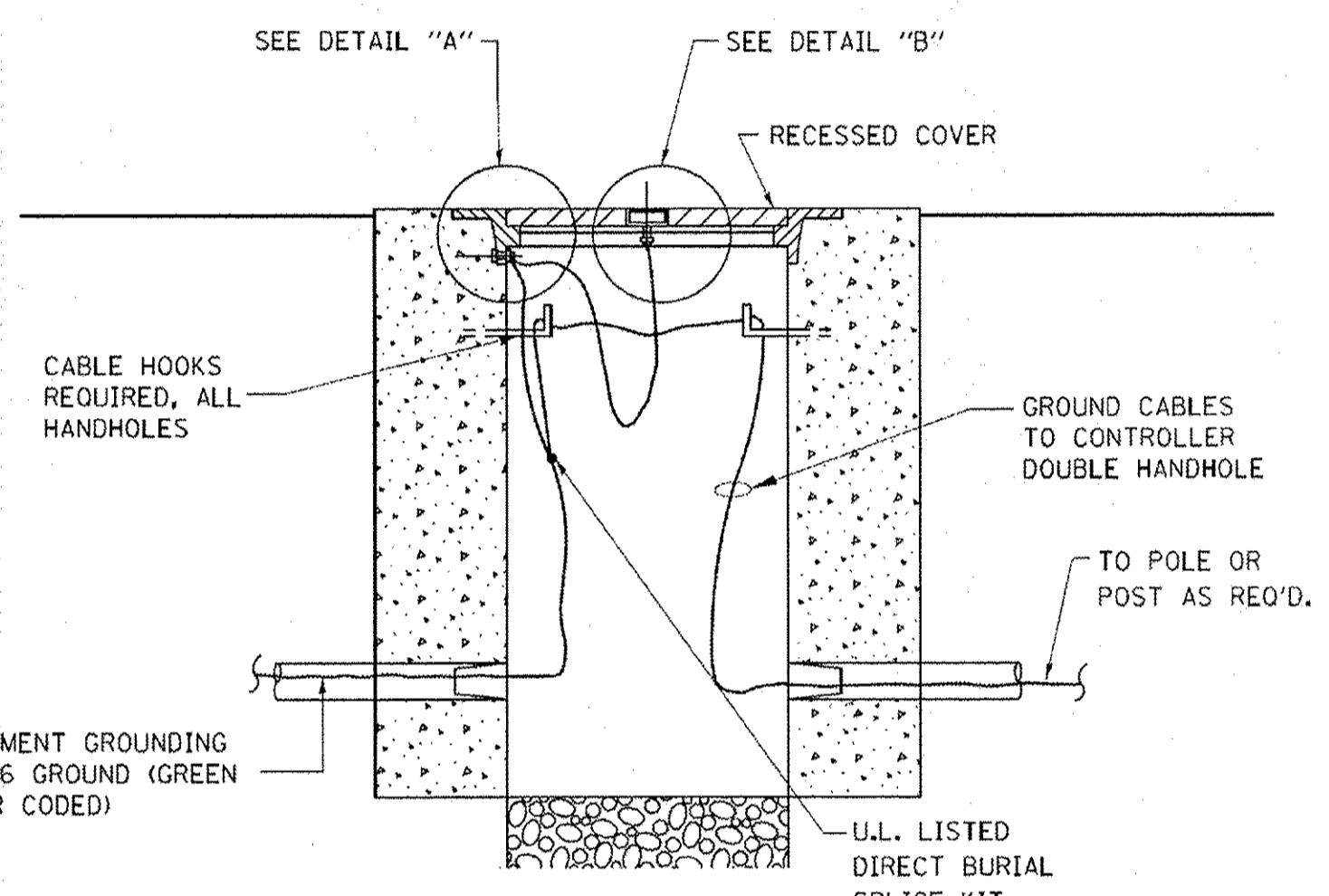
**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

**CABINET - BASE BOLT PATTERN**  
 (NOT TO SCALE)

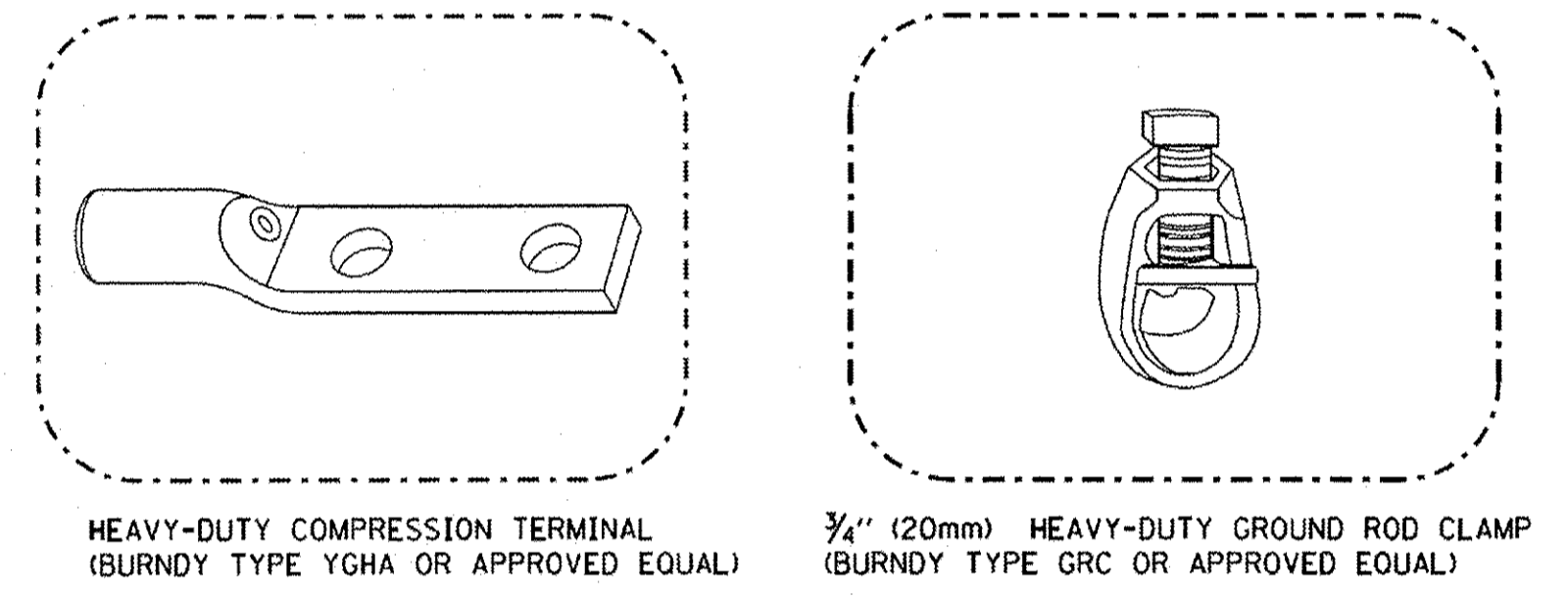


**NOTES:**  
**GROUNDING SYSTEM**

- 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

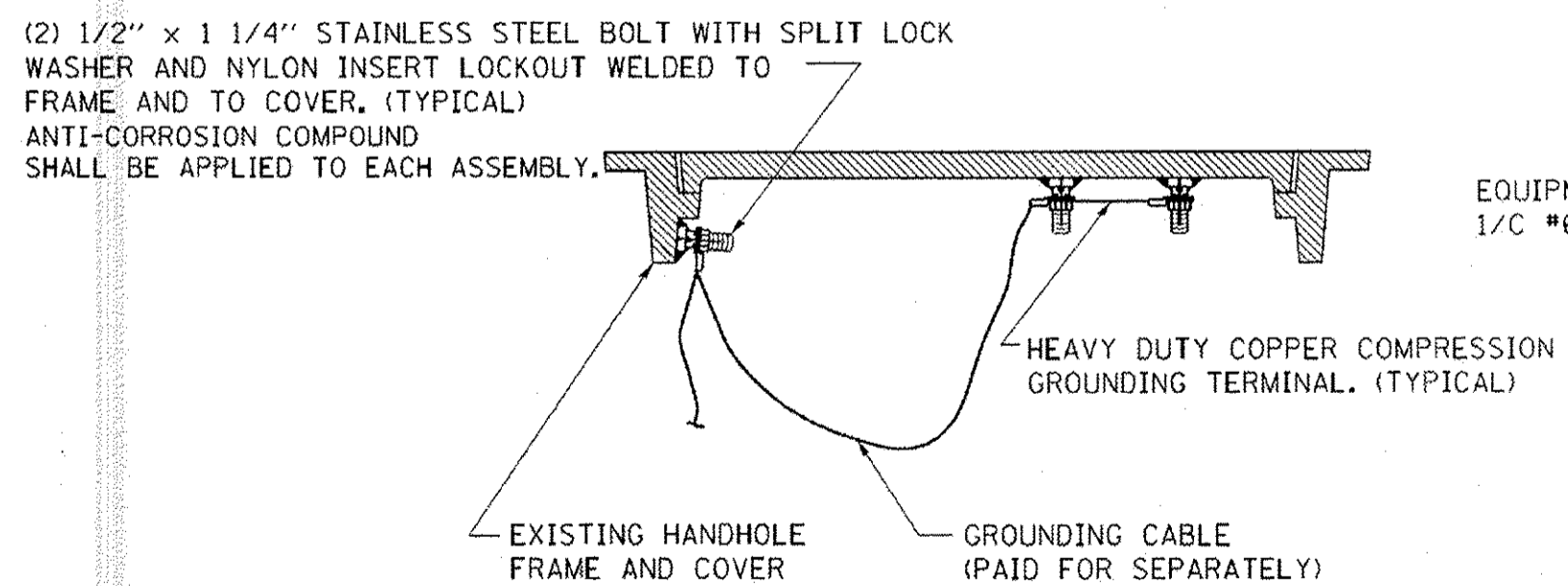


**HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)

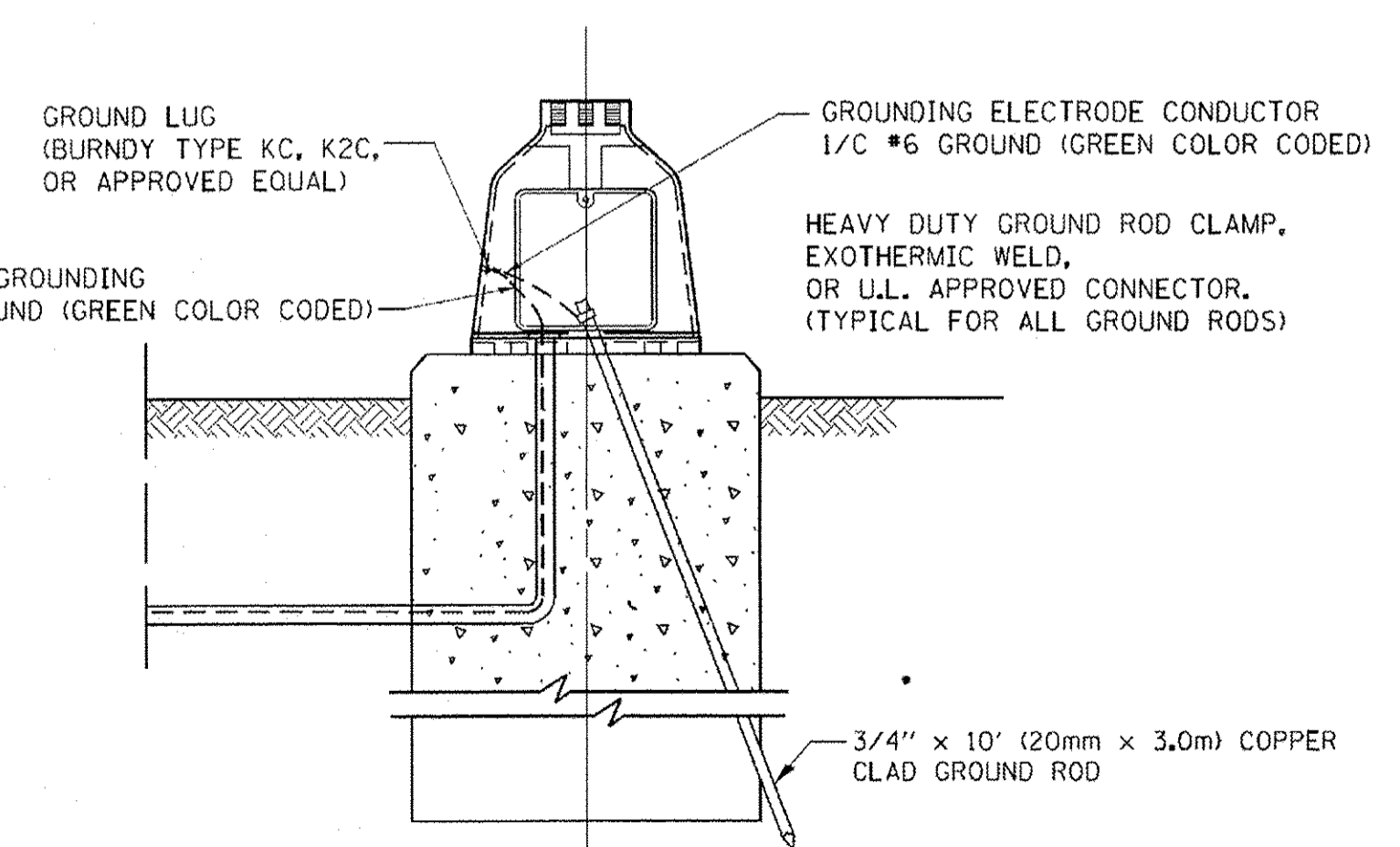


**NOTES:**

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



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

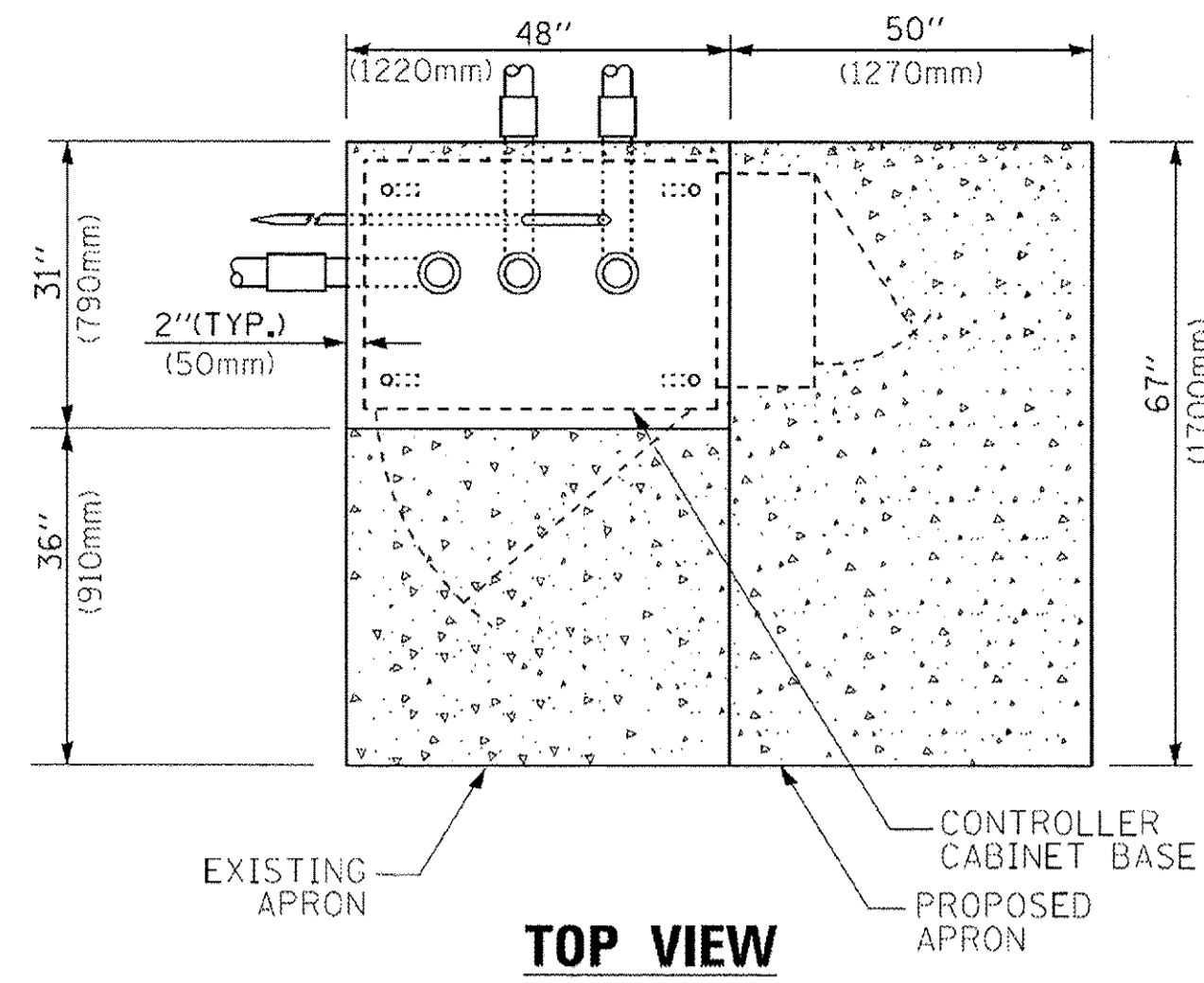


**MAST ARM POLE / POST-GROUNDING DETAIL**  
 (NOT TO SCALE)

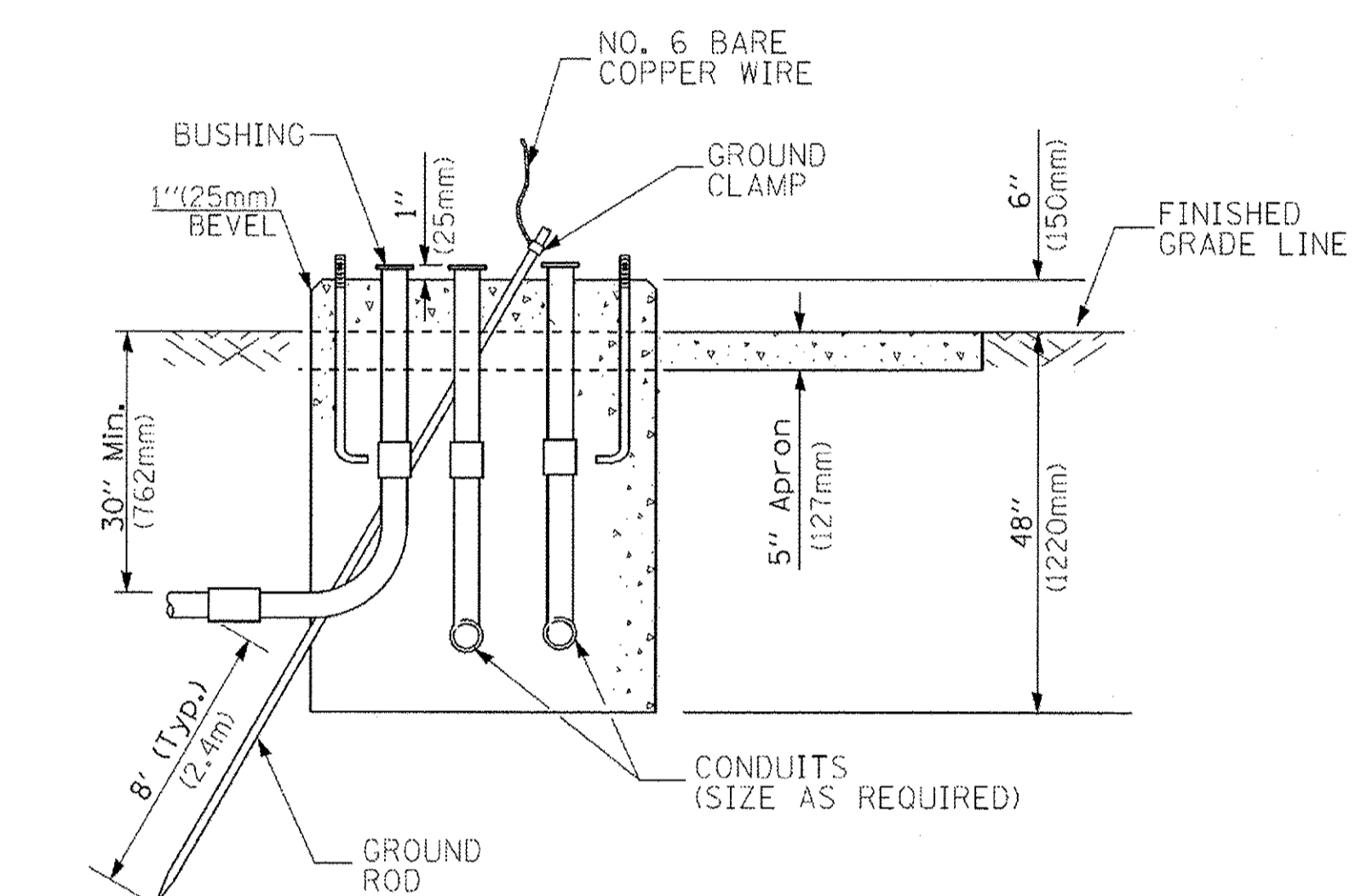
FILE NAME = N:\FORESTPARK\0023\00046\Civil\1\STANDARD\05\_002300046B-01.dwg  
 Default

USER NAME = mthomas	DESIGNED - DAD	REVISED - DAG 1-1-14
PLOT SCALE = 1"	DRAWN - BCK	REVISED -
PLOT DATE = 11/14/2016	CHECKED - DAD	REVISED -
	DATE - 10-28-09	REVISED -

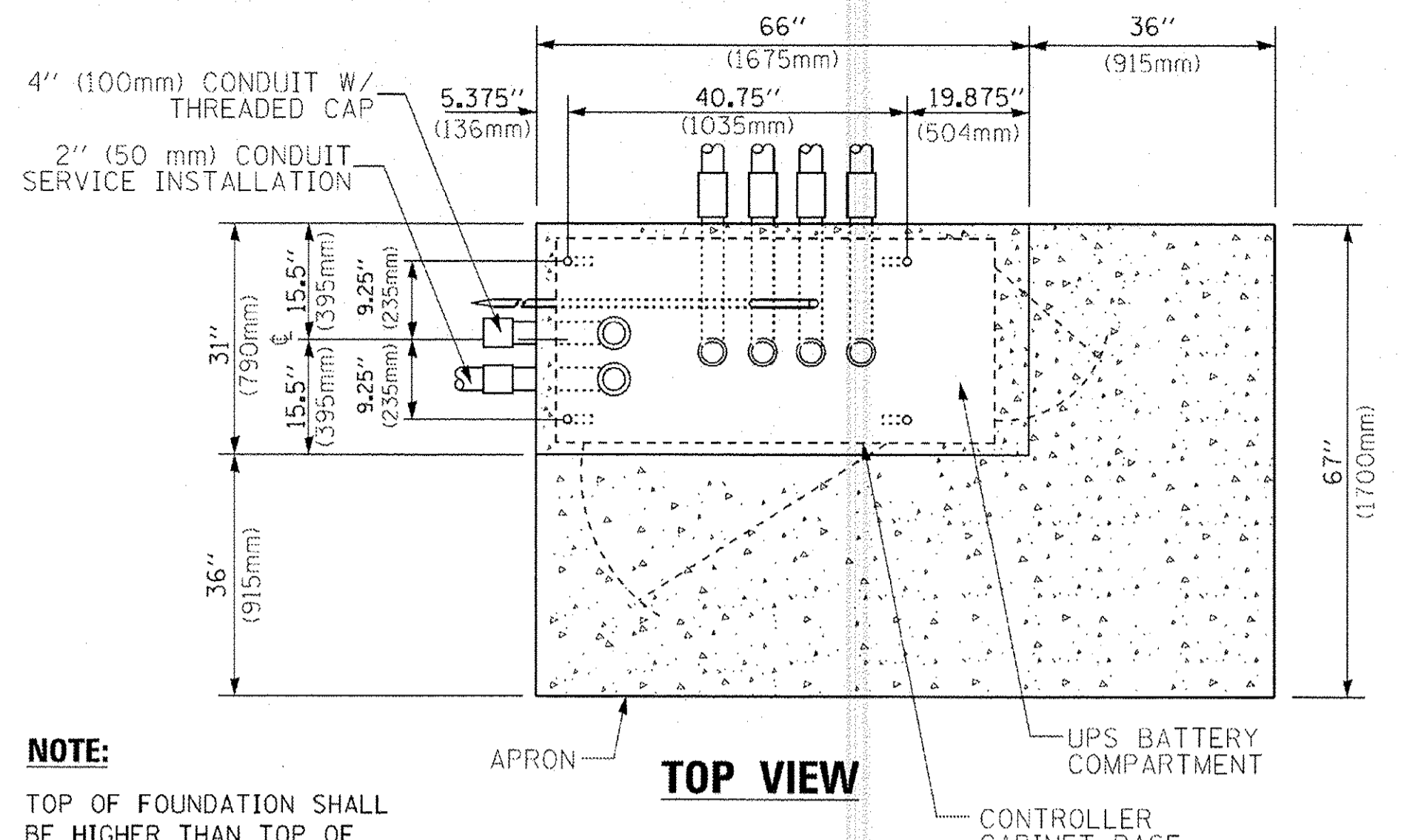
F.A.P. RTE. 347	SECTION 13-00112-00-LS	COUNTY COOK	TOTAL SHEETS 151	SHEET NO. 114
TS-05			CONTRACT NO. 61D26	
ILLINOIS FED. AID PROJECT				



**TOP VIEW**

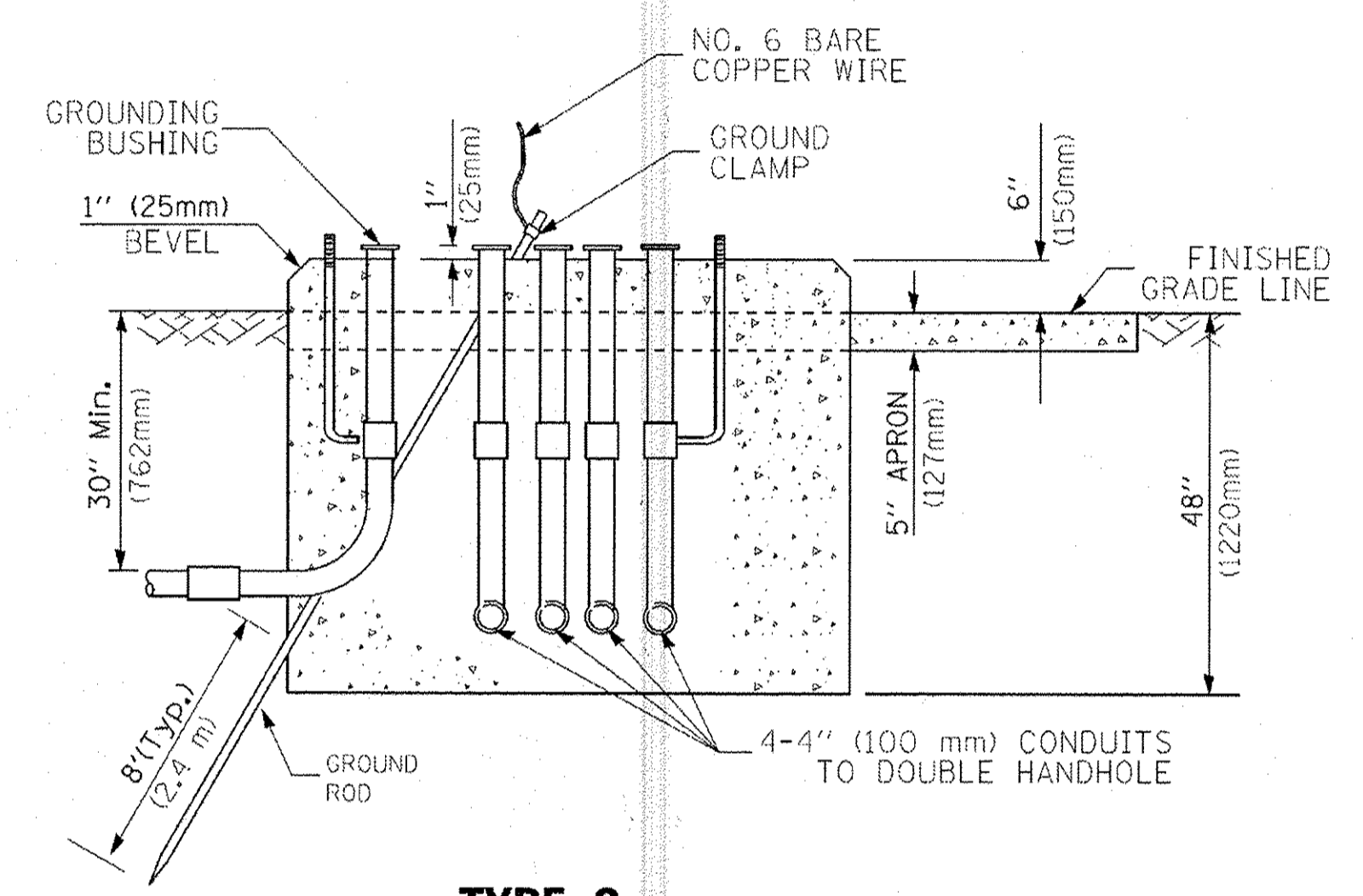


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

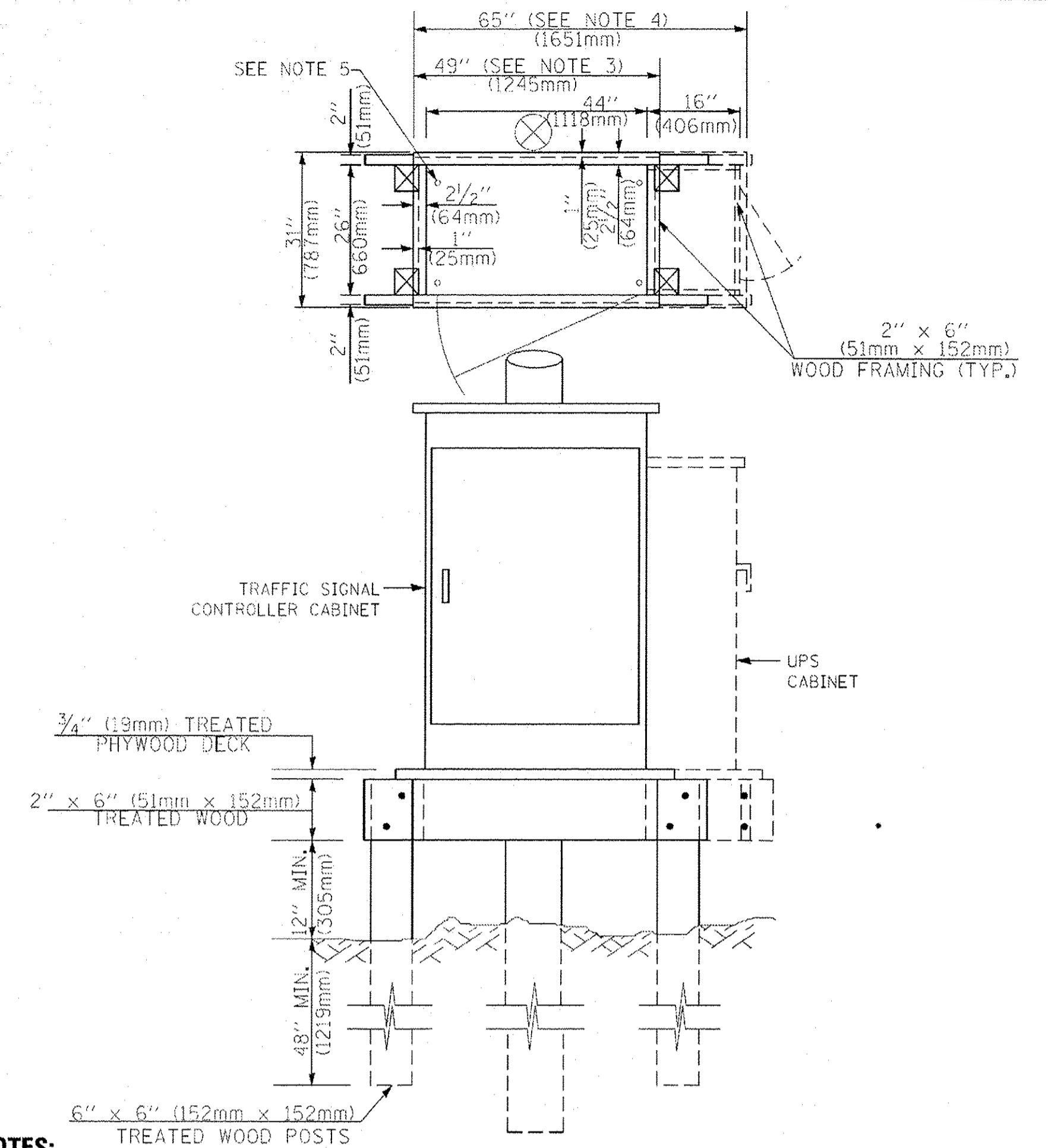


**TOP VIEW**

**NOTE:**  
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

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

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

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

**DEPTH OF FOUNDATION**

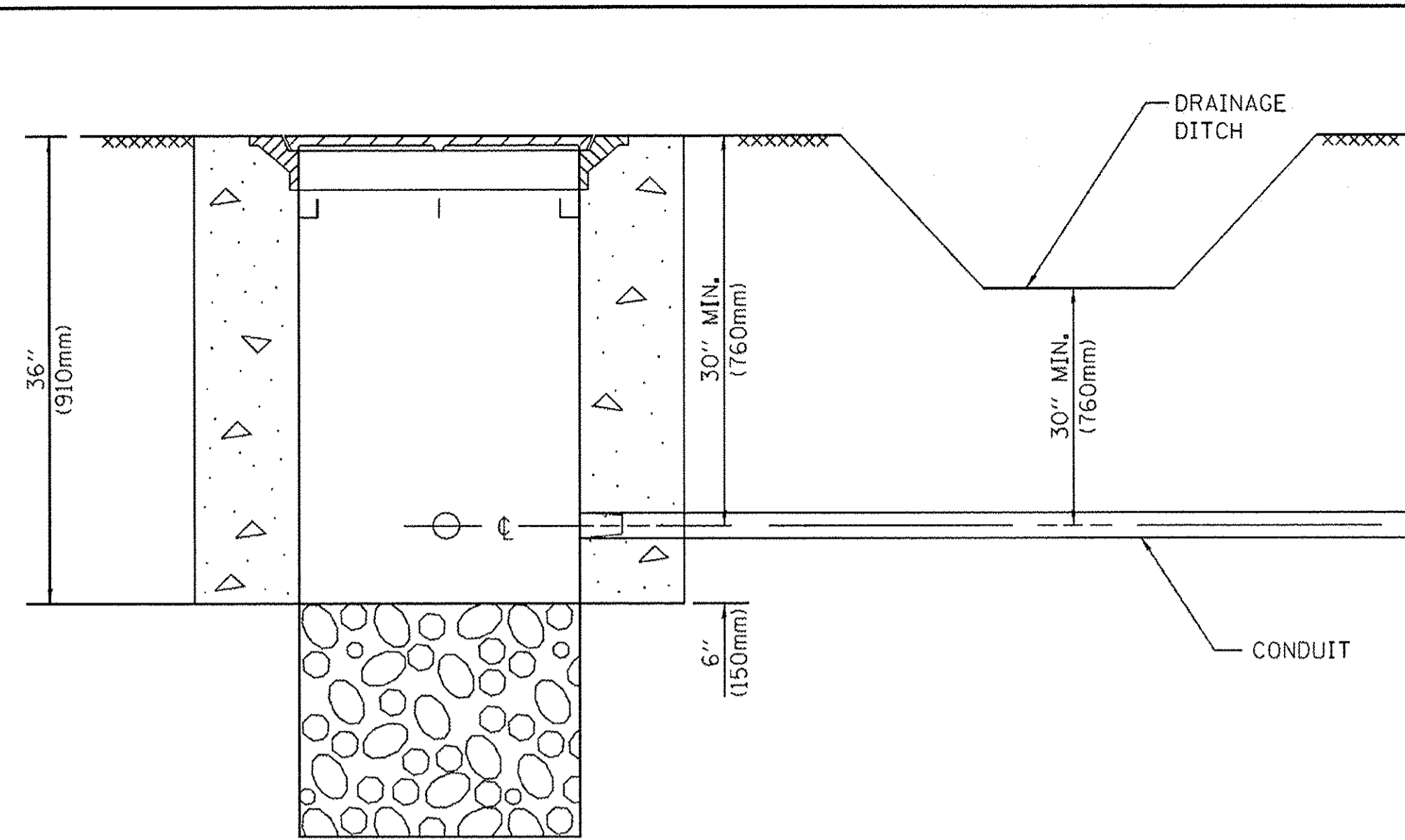
MAST ARM LENGTH	Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 75' (22.9 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

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

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

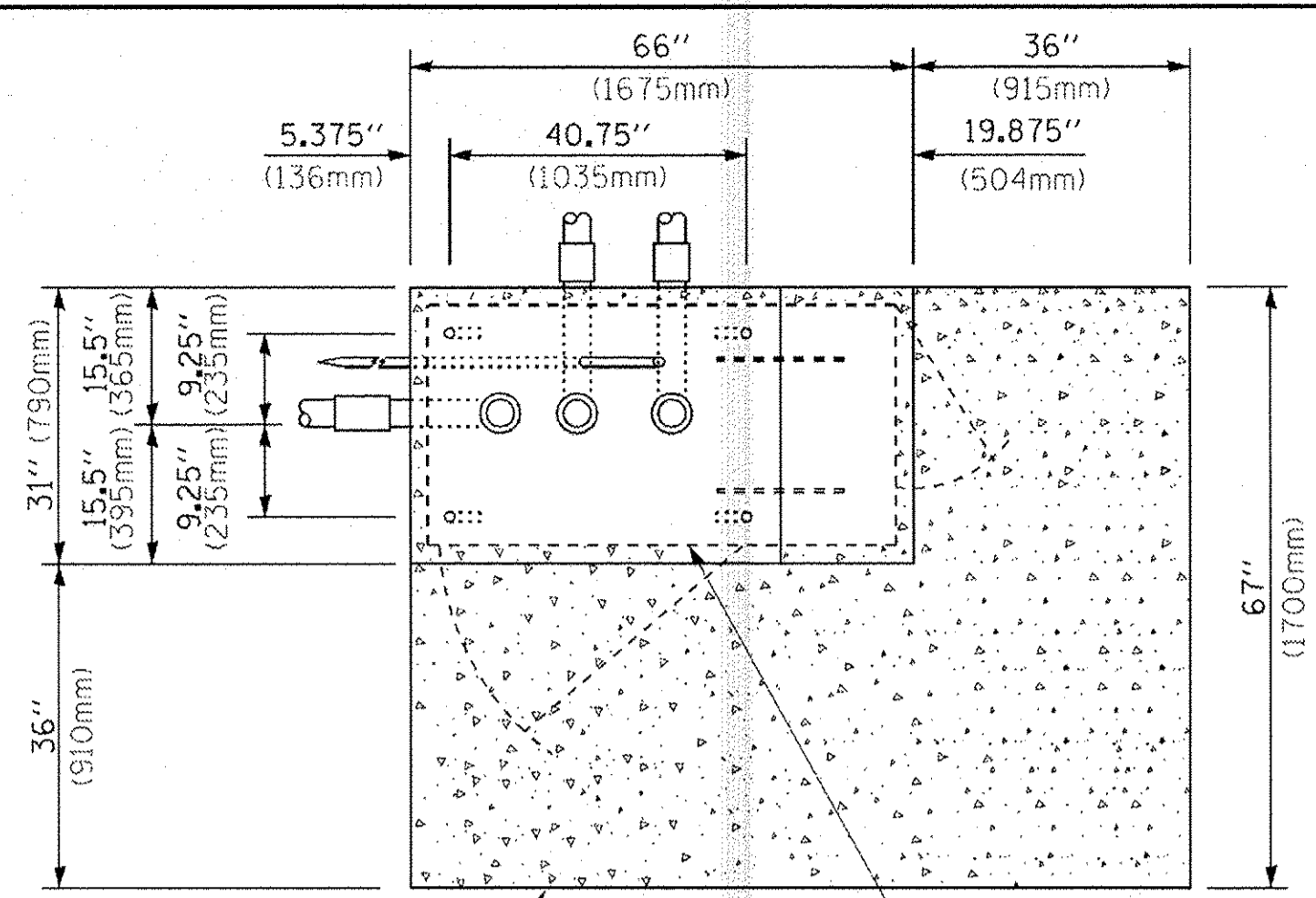
FILE NAME = N:\FORESTPARK\0223\050445\CL\1\STANDARDS\_02230246b-01.dwg



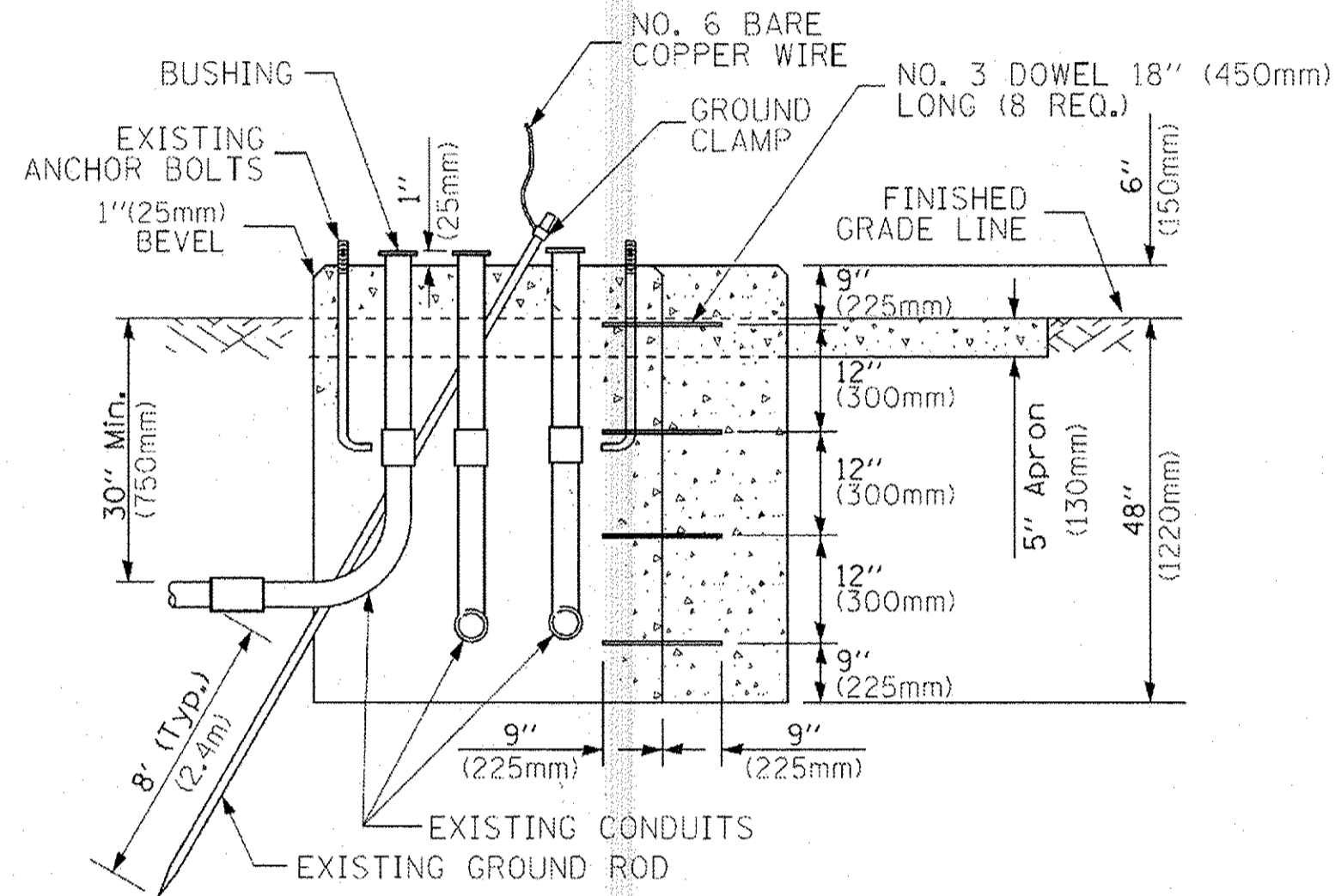
**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



**TOP VIEW**  
(NOT TO SCALE)

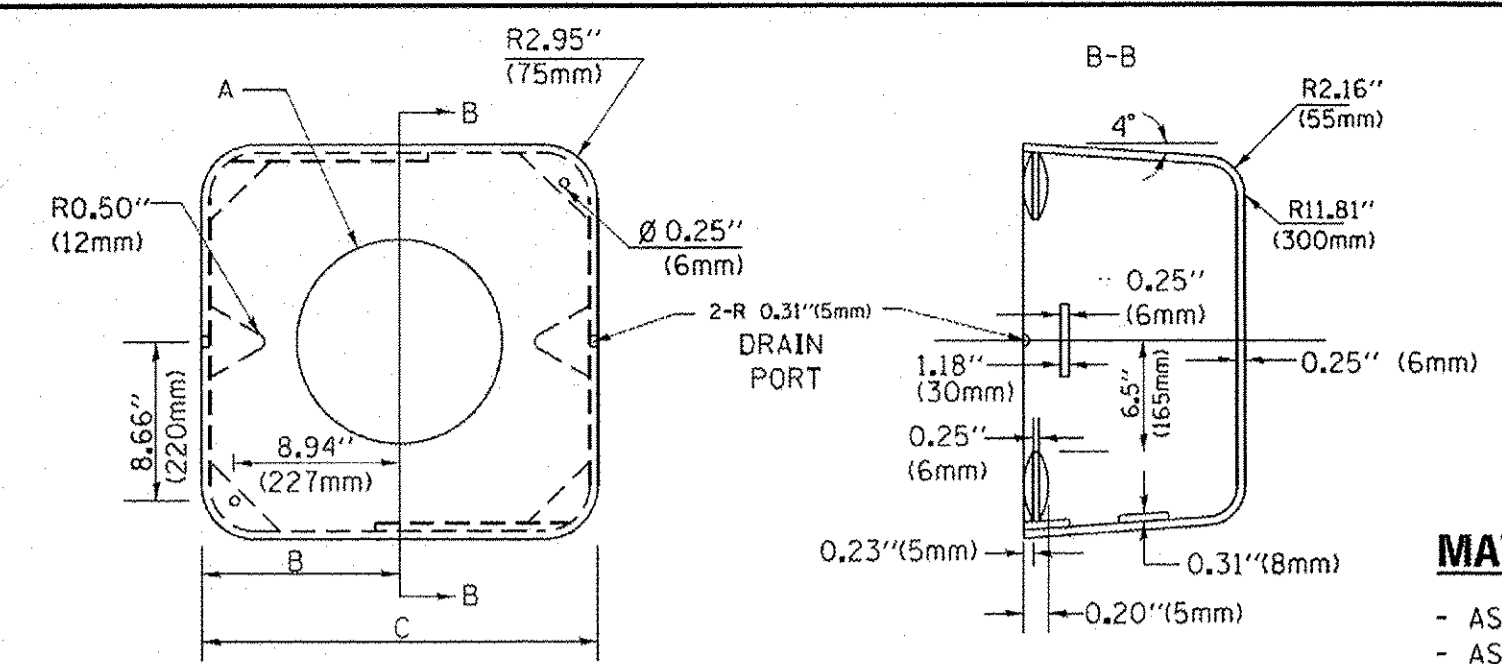


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

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

**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 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



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

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

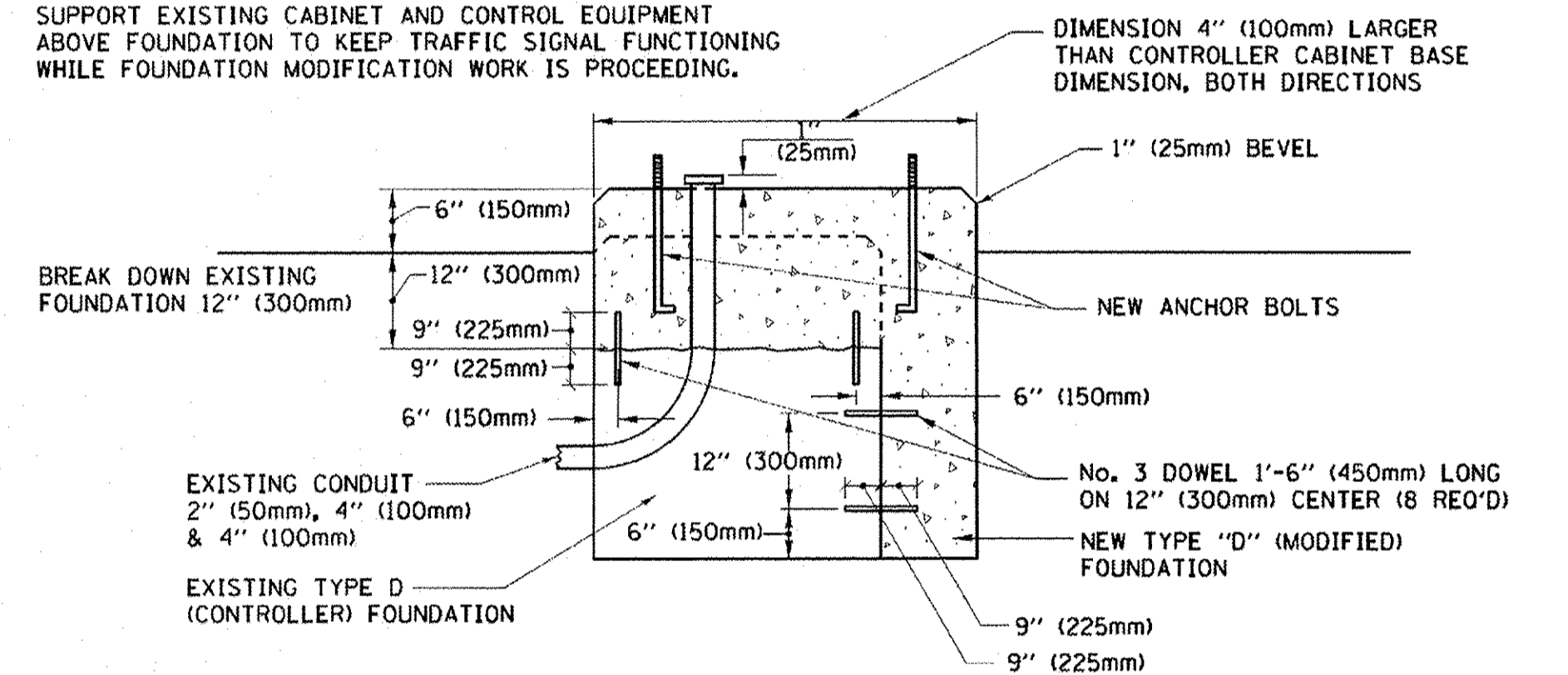
**SHROUD**

**NOTES:**

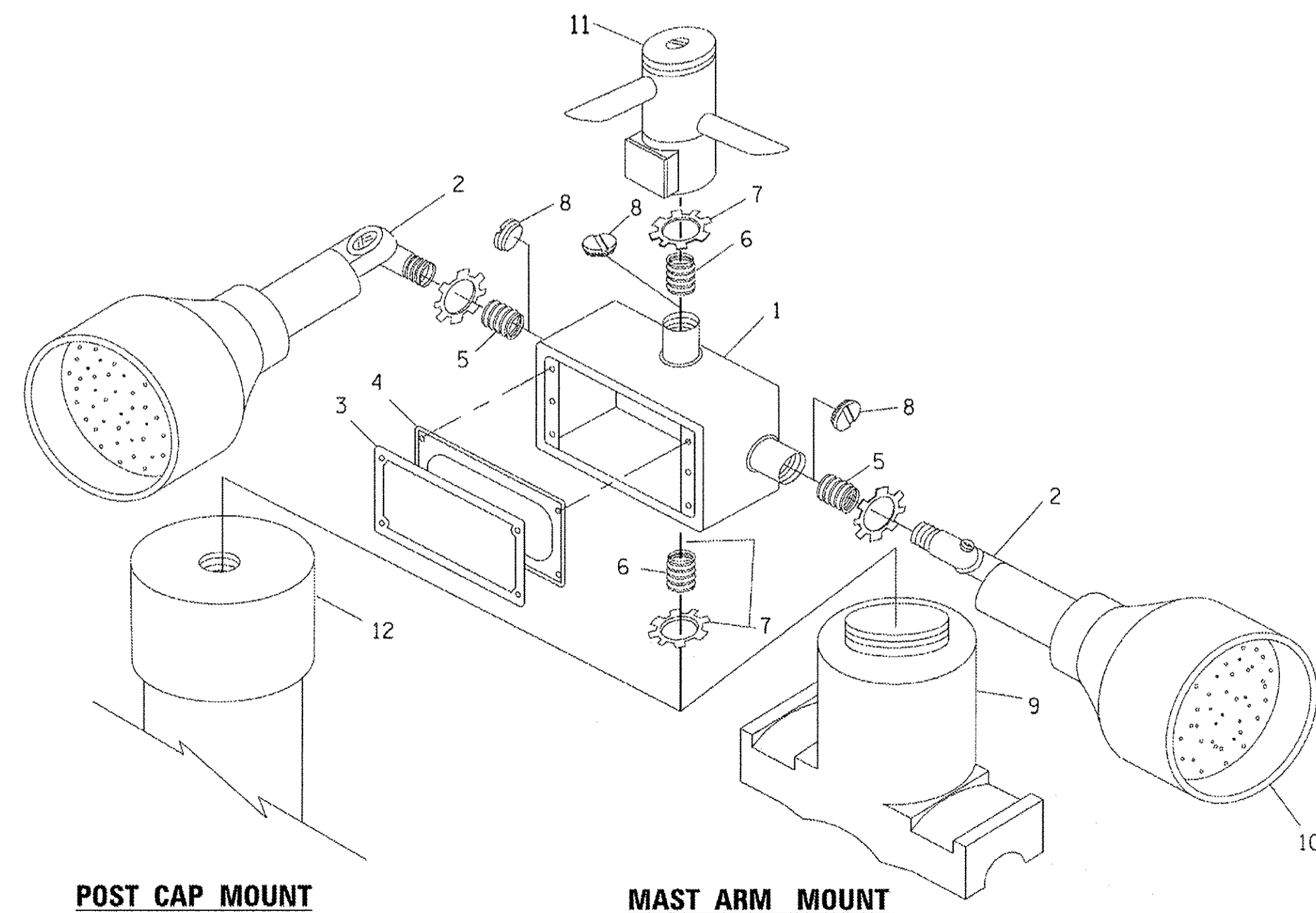
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

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



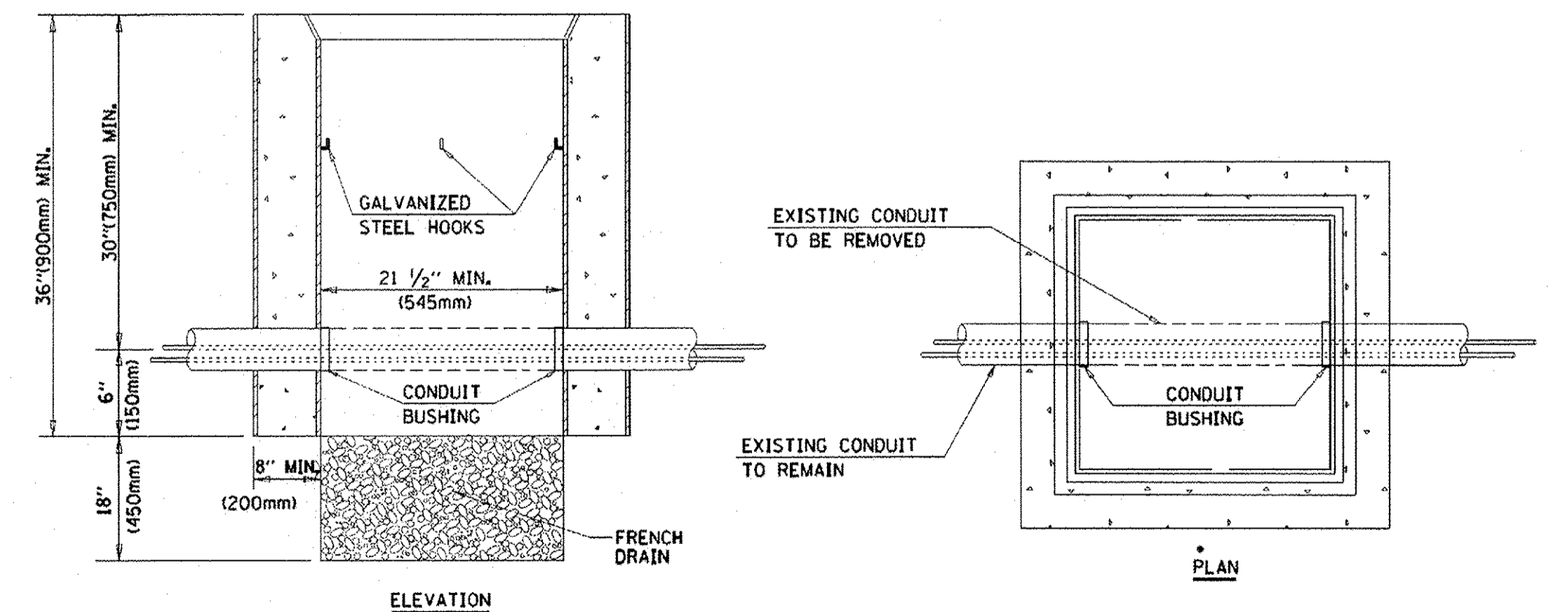
**MODIFY EXISTING TYPE "D" FOUNDATION**



**POST CAP MOUNT**

**MAST ARM MOUNT**

**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**

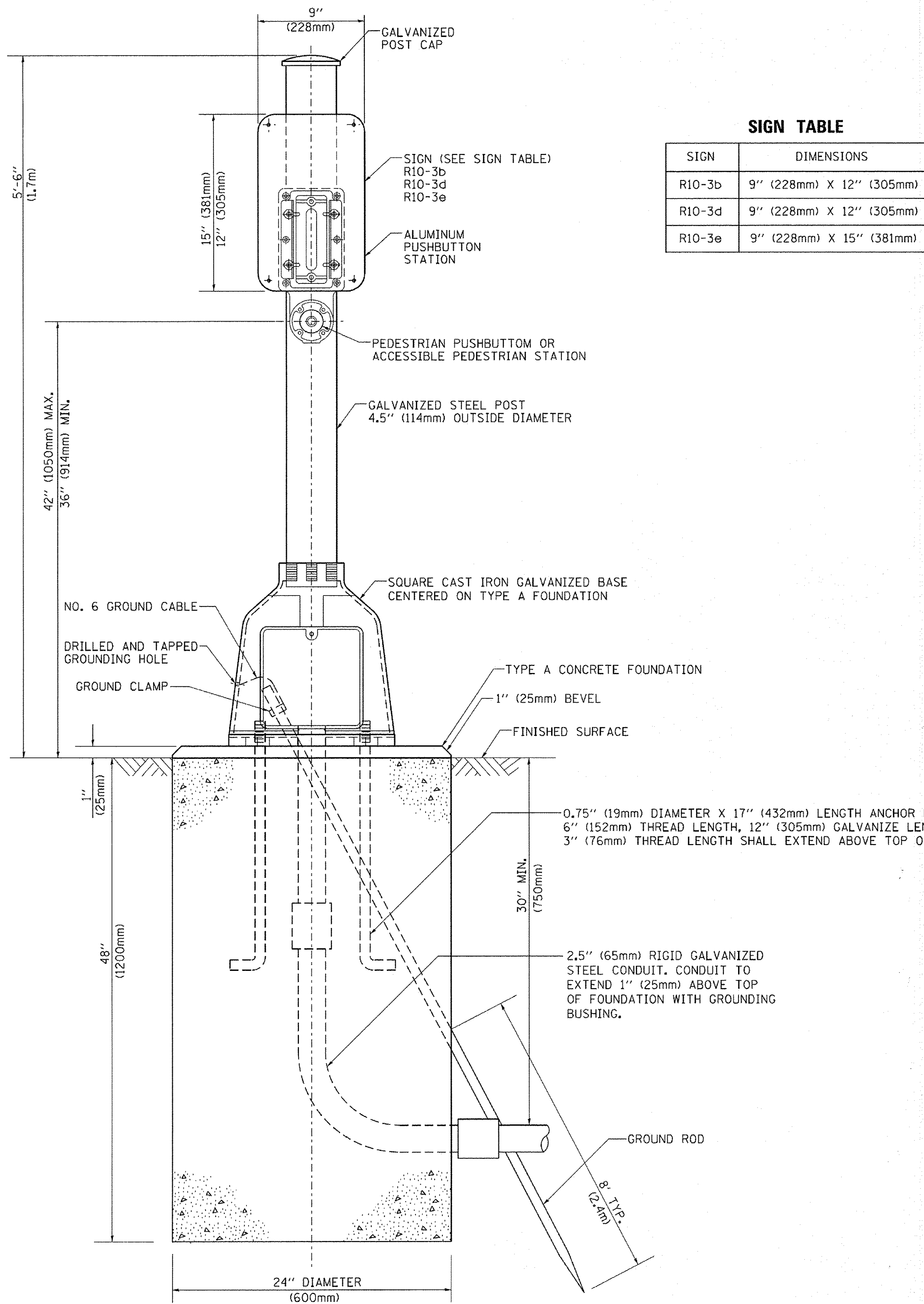


**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

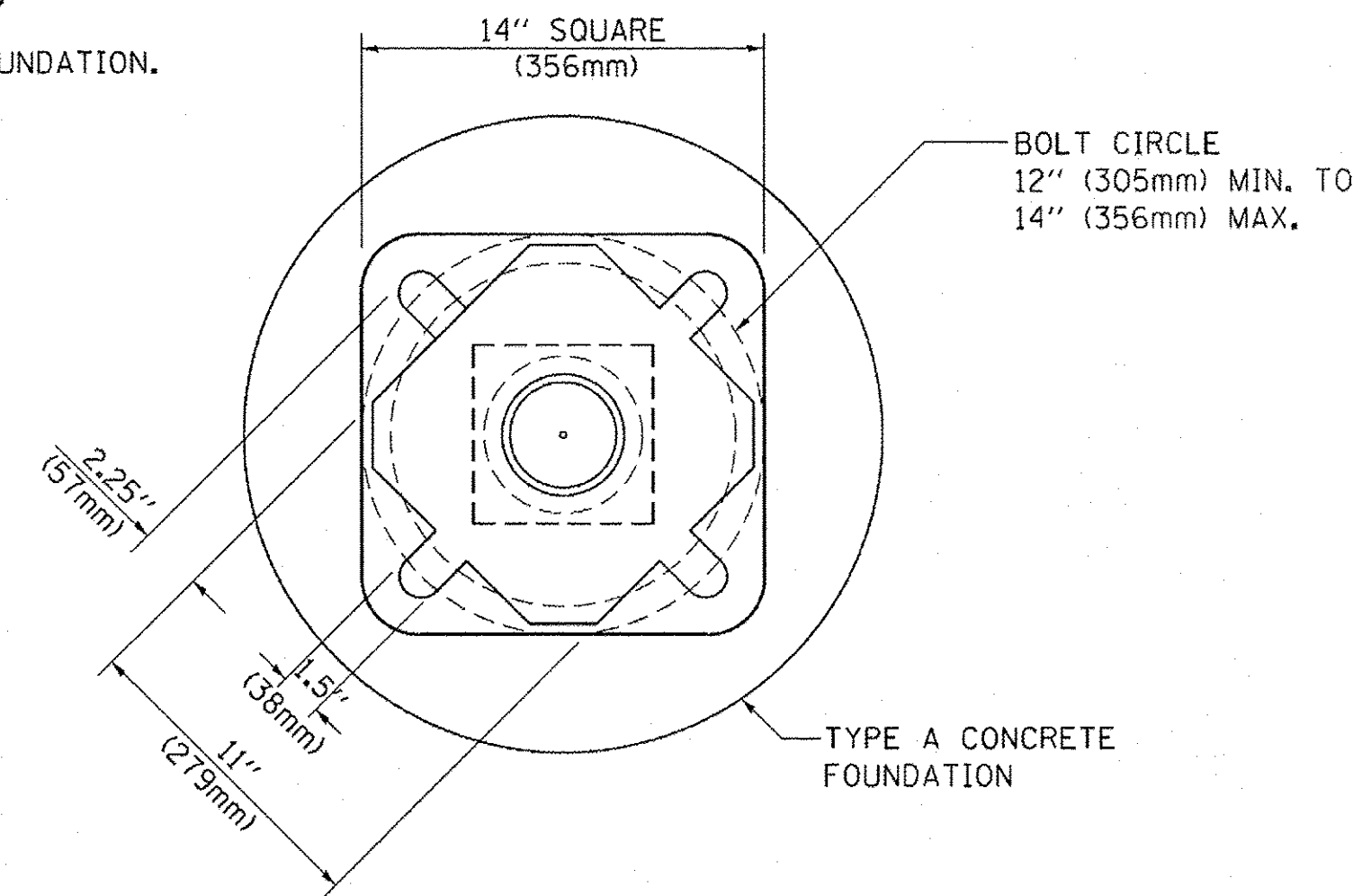
**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

FILE NAME = \\NFV08ESTPARK\0023\B0846.C\11\STANDARD\B05\_0023B0846B-01.dwg



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



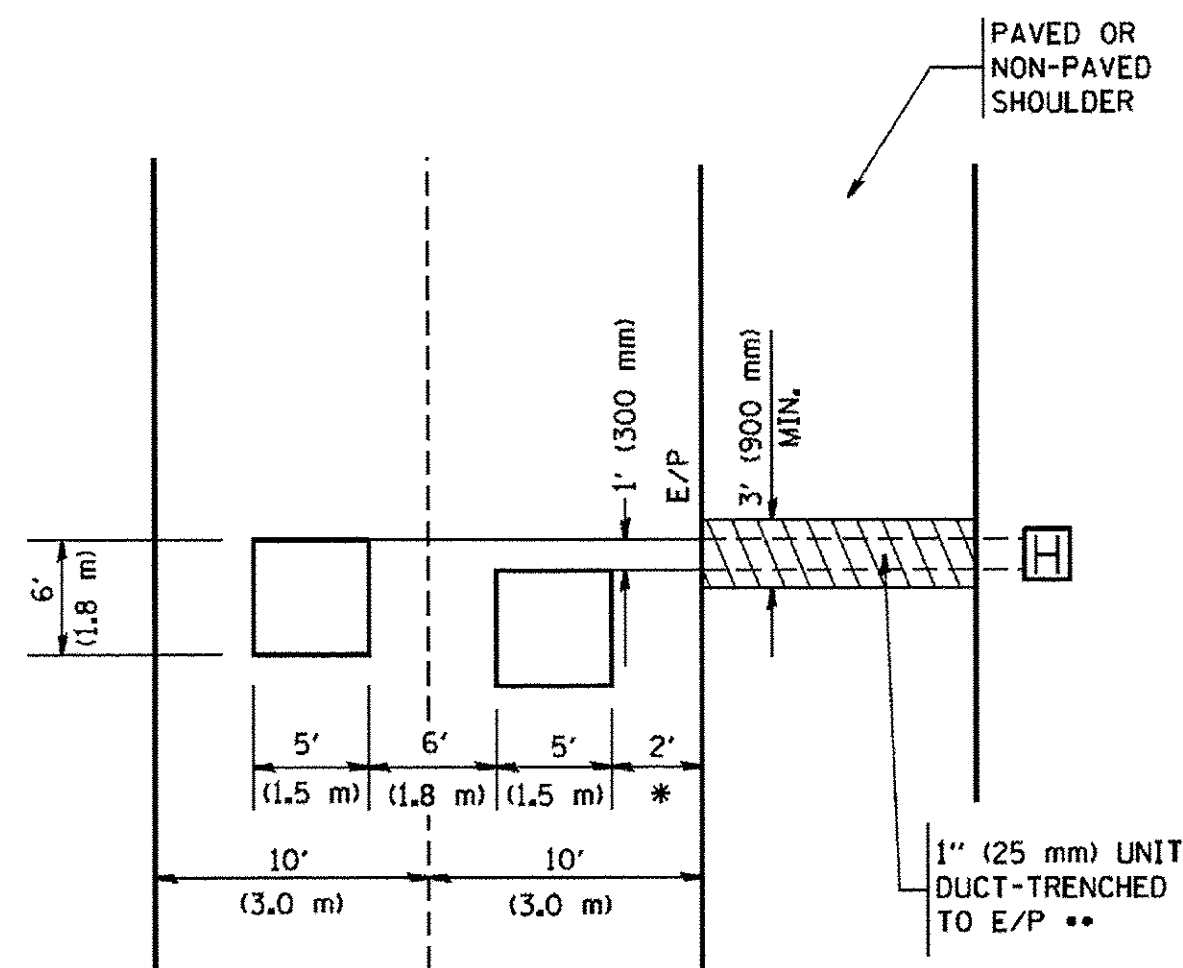
**BOLT PATTERN**

**PEDESTRIAN PUSH BUTTON POST, TYPE A**

FILE NAME = N:\FORESTPARK\0023\BGR45\Civil\STANDARDS\_0023BGR45-01.dwg  
 Default

**LOOPS NEXT TO SHOULDERS**

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



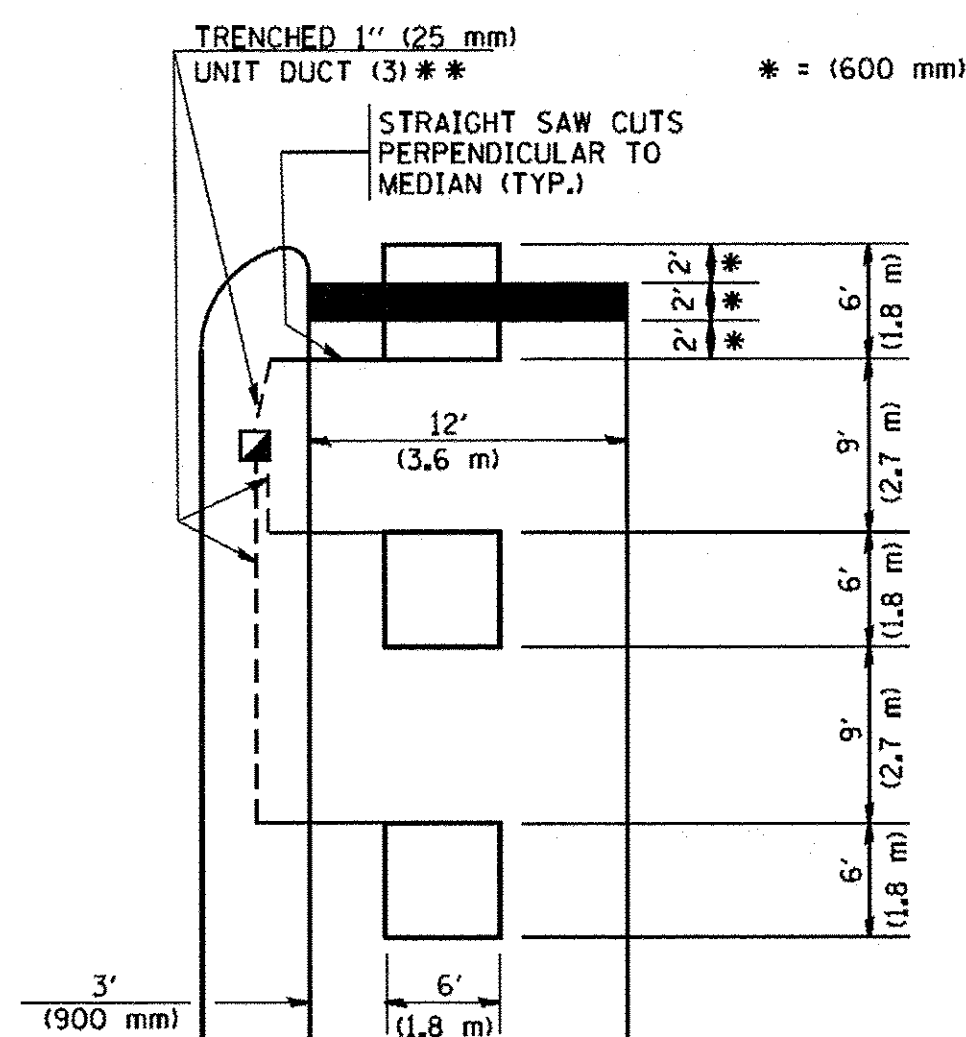
\* = (600 mm)

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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



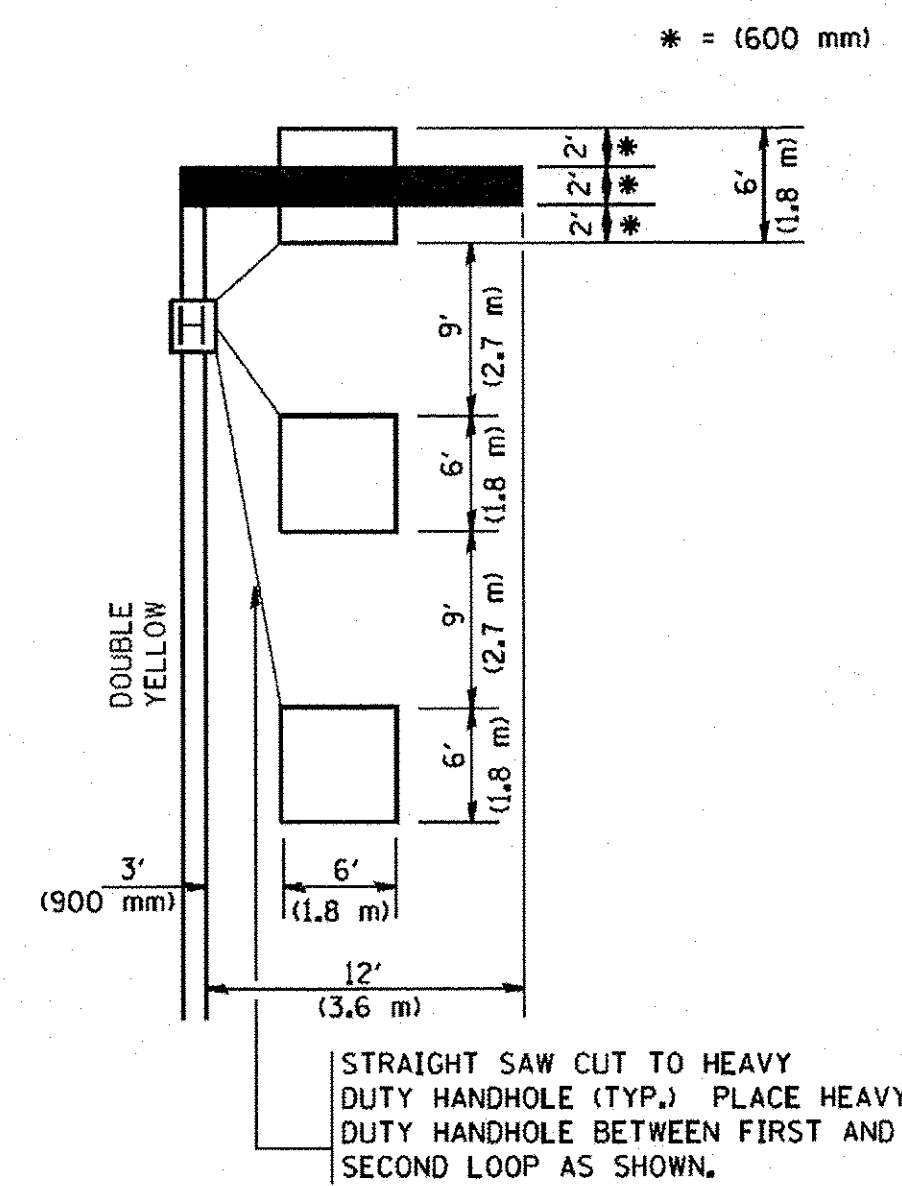
\* = (600 mm)

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

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

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

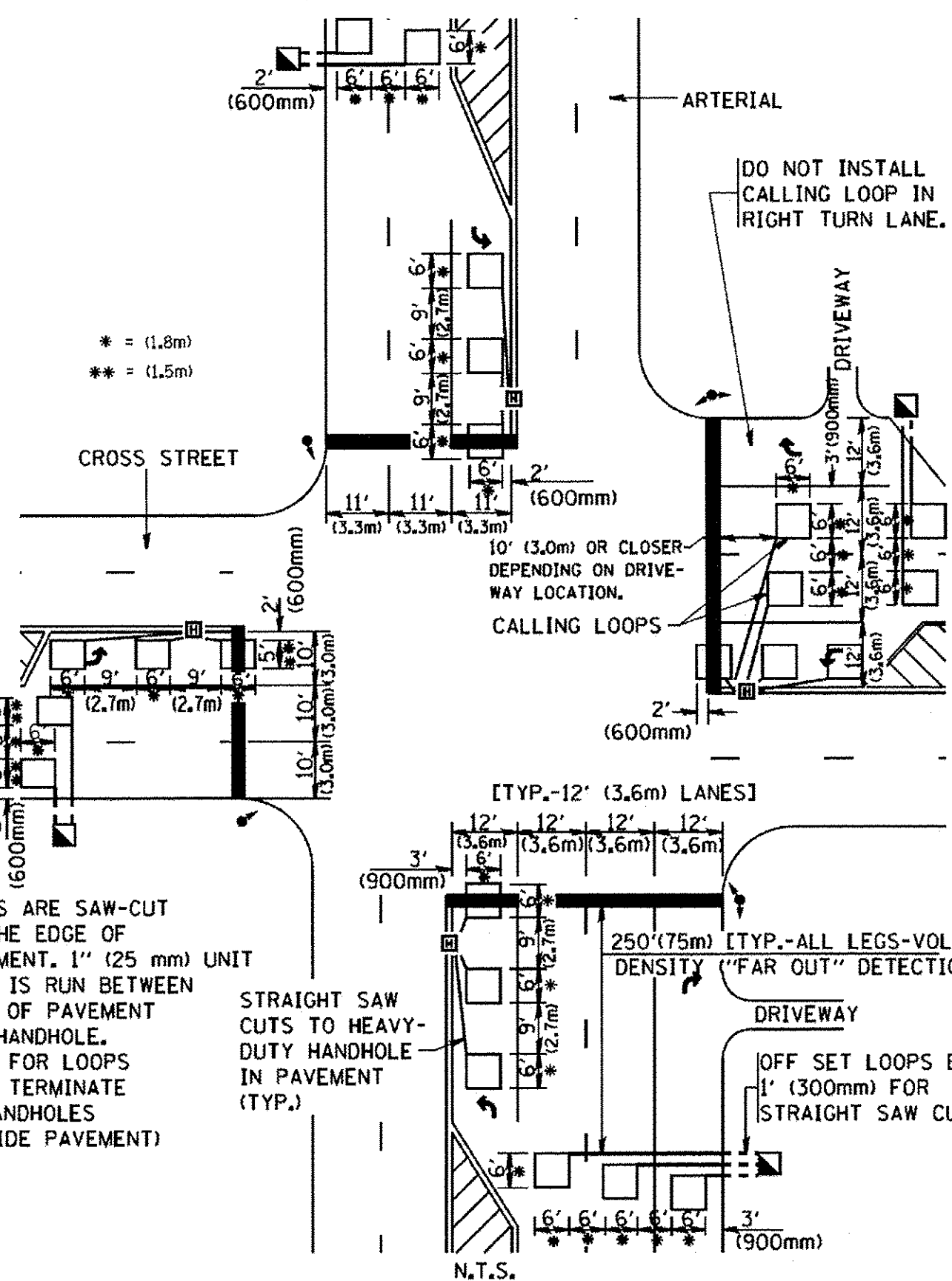
(PROTECTED / PERMITTED LEFT TURN PHASING)



\* = (600 mm)

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

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

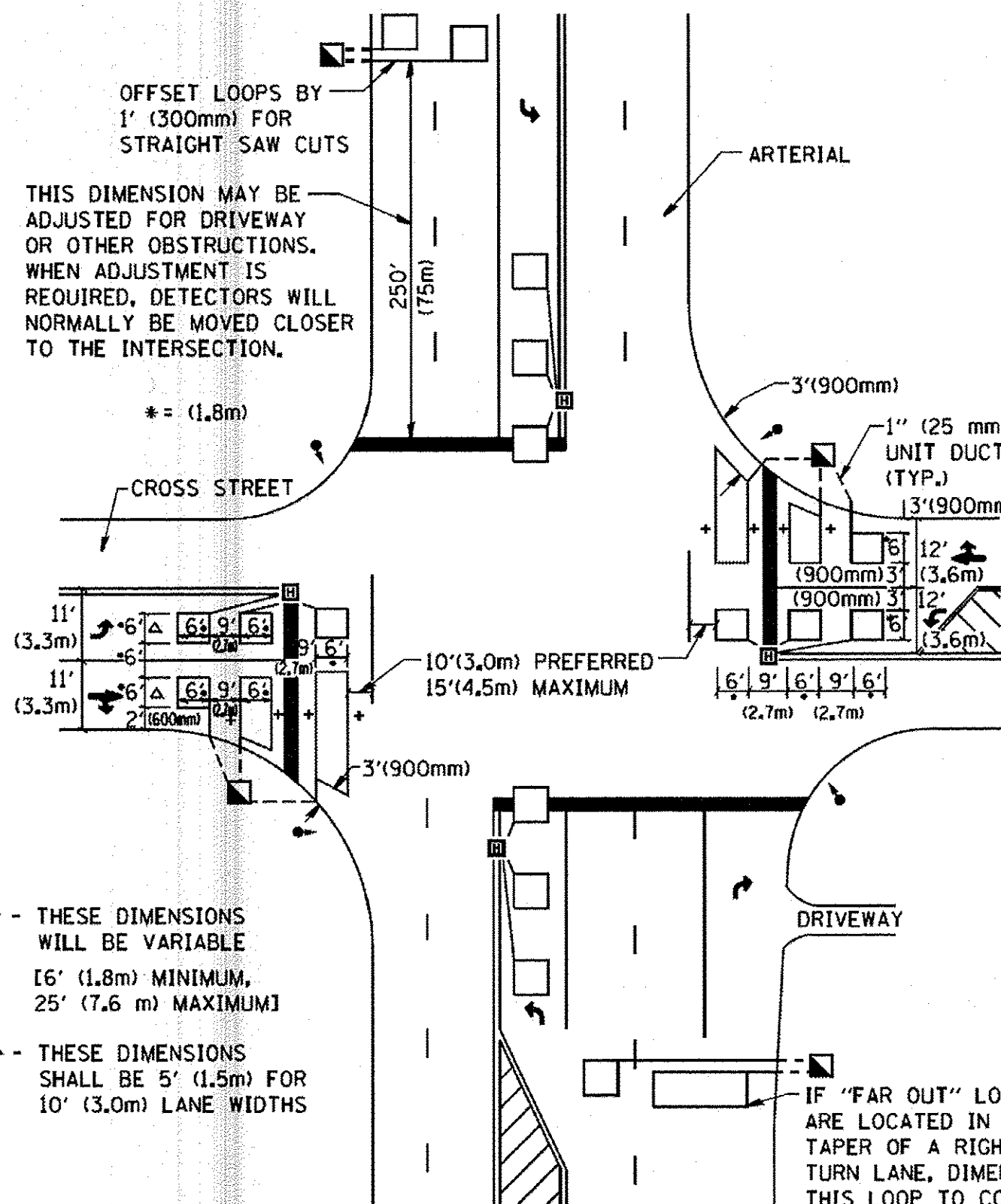


LOOPS ARE SAW-CUT TO THE EDGE OF PAVEMENT. 1" (25 mm) UNIT DUCT IS RUN BETWEEN EDGE OF PAVEMENT AND HANDHOLE. (TYP. FOR LOOPS THAT TERMINATE IN HANDHOLES OUTSIDE PAVEMENT)

STRAIGHT SAW CUTS TO HEAVY-DUTY HANDHOLE IN PAVEMENT (TYP.)

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

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



+ - THESE DIMENSIONS WILL BE VARIABLE  
6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM

△ - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS

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

**NOTES:**

**VEHICLES LOOP DETECTORS**

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

**PLACEMENT OF DETECTORS**

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

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

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

**NOTE:**

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

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

FILE NAME = N:\FORDS PARK\0023180046\Civil\STANDARD\002380046S-01.dwg