SECTION 22, TOWNSHIP 35, RANGE 13

03-03-2017 LETTING ITEM 134

INDEX OF SHEETS SEE SHEET NO. 2

HIGHWAY STANDARDS SEE SHEET NO. 2

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP 353 US 30 (LINCOLN HIGHWAY) AT KOSTNER AVENUE

INTERSECTION IMPROVEMENTS

SECTION NO.: 13-00063-00-CH

FEDERAL PROJECT NO.: M-4003(216)

JOB NO.: C-91-392-13 VILLAGE of MATTESON **COOK COUNTY**

DESIGN DESIGNATION - US ROUTE 30 (LINCOLN HIGHWAY) ADT 40,000 (2040) - SRA PV=38,800 SU=600 MU=600 % DESIGN TRAFFIC IN DESIGN LANE P=97% S=1.5% M=1.5%

DESIGN DESIGNATION - KOSTNER AVENUE ADT 6,000 (2040) - MINOR COLLECTOR PV=5,910 SU=60 MU=30 % DESIGN TRAFFIC IN DESIGN LANE P=95.0% S=3.0% M=2.0%

30 mph

SSS=FAIR

US ROUTE 30 (LINCOLN HIGHWAY) KOSTNER AVENUE 4,200 6,000 2013 ADT -2040 ADT -POSTED SPEED LIMIT -25 mph 20 YEARS 20 YEARS

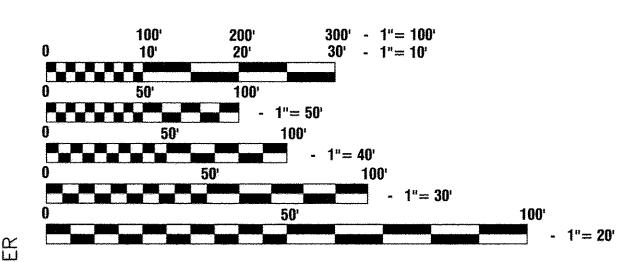
45 mph

URBAN ARTERIAL

DESIGN PERIOD -DESIGN SPEED LIMIT -STREET CLASSIFICATION -

PROFILE HORIZ. - 1"=50"

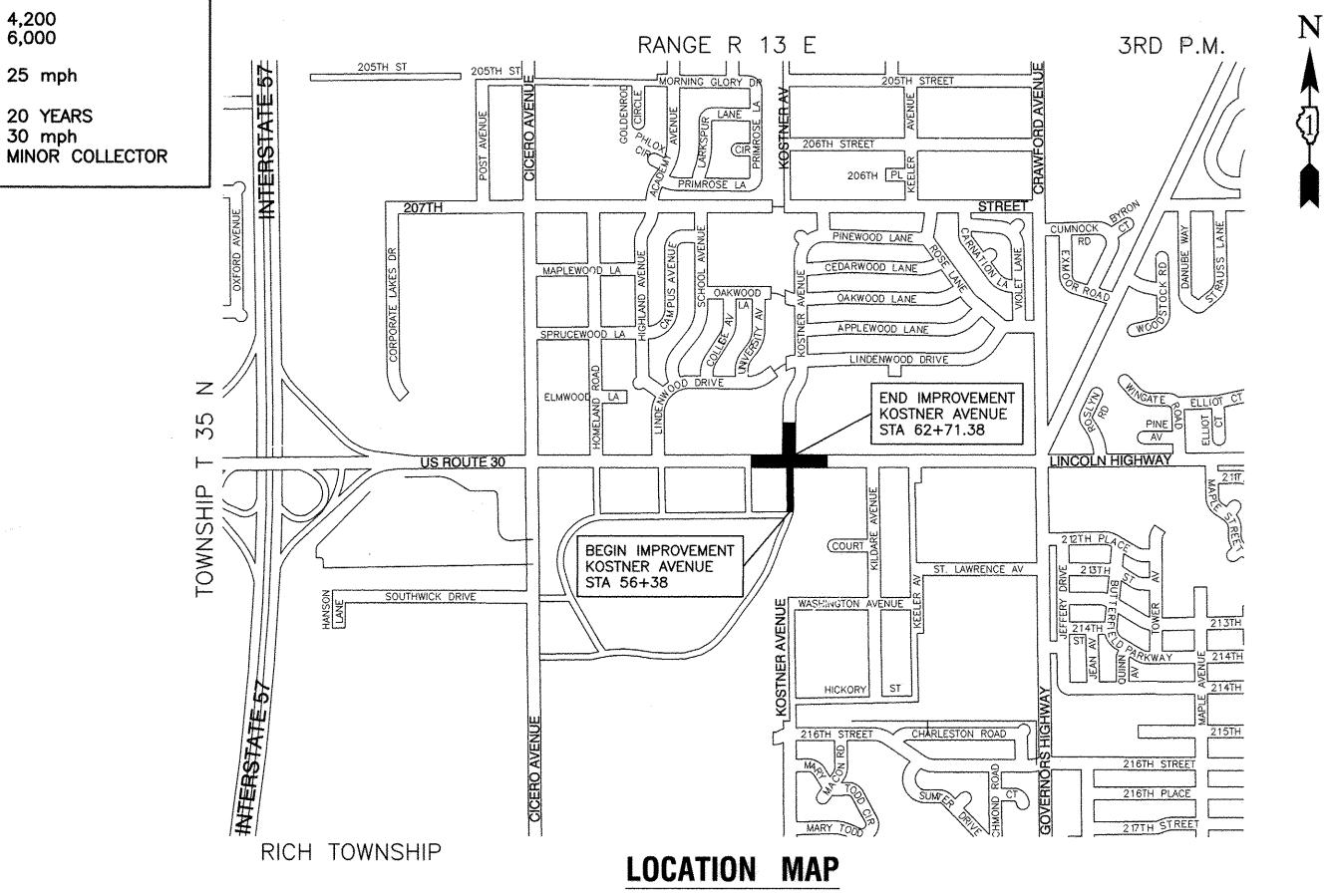
CROSS SECTIONS - 1"=10"



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

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

CONTRACT NO. 61C11

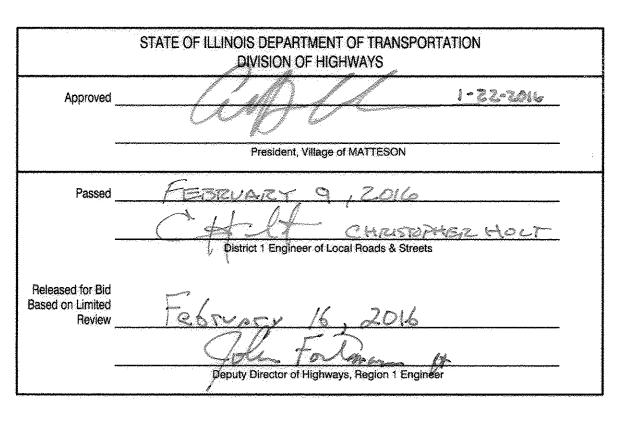


GROSS LENGTH=633 FEET=0.12 MILES NET LENGTH=633 FEET=0.12 MILES

353 13-00063-00-CH COOK 63 ILLINOIS FED. AID PROJECT M-4003(216)

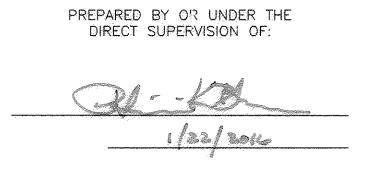
CONTRACT #61C11

(63+3=60



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

LOCATION OF SECTION INDICATED THUS: -





13375_02-COVR-01 - IDOT C01

ENGINEER:

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- 442101-07 CLASS B PATCHES
- 442201-03 CLASS C & D PATCHES
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- 602001-02 CATCH BASIN, TYPE A
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GENERAL NOTES

- 1. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND ALL AMENDMENTS THERETO, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE SPECIFICATIONS FOR CONSTRUCTION IN THE VILLAGE OF MATTESON AND IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
- 2. ALL STORM SEWER, SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL CONFORM TO THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", PUBLISHED JUNE 2014, AND IN ACCORDANCE WITH THE SPECIFICATIONS FOR CONSTRUCTION IN THE VILLAGE OF MATTESON UNLESS OTHERWISE NOTED ON THE PLANS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 800-892-0123 AND THE VILLAGE OF MATTESON FOR UTILITY LOCATIONS.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NATURE AND STATUS OF ALL UTILITY RELOCATION WORK PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ENSURE THAT CONSTRUCTION OPERATIONS DO NOT INTERFERE WITH UTILITY FACILITIES AND RELOCATION WORK. THE SCHEDULE SHOULD REFLECT CONSTRUCTION SEQUENCING, WHICH COORDINATES WITH ALL UTILITY RELOCATION WORK. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST THE ORDER OF ITS WORK FROM TIME TO TIME, TO COORDINATE SAME WITH UTILITY RELOCATION WORK, AND SHALL PREPARE REVISED SCHEDULE (S) IN COMPLIANCE THEREWITH AS DIRECTED BY THE OWNER. THE OWNER AND THE ENGINEER SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY OPERATION REQUIRED COOPERATION WITH OTHERS. ALL OTHER AGENCIES, UNLESS OTHERWISE NOTED, WILL BE NOTIFIED IN WRITING BY THE CONTRACTOR TEN (10) DAYS PRIOR TO THE START OF ANY SUCH OPERATION. THE UTILITY COMPANIES HAVE BEEN CONTACTED IN REFERENCE TO UTILITIES THEY OWN AND OPERATE WITHIN THE LIMITS FOR THIS PROJECT. ALL KNOWN DATA FROM THESE AGENCIES HAS BEEN INCORPORATED INTO THE PLANS. IT IS HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM OR ESTABLISH THE EXISTENCE OF ALL UTILITY FACILITIES AND THEIR EXACT LOCATIONS, WHETHER CONTAINED IN THE DATA SUBMITTED BY THESE AGENCIES OR NOT, AND TO SAFELY SCHEDULE ALL UTILITY RELOCATIONS.
- 5. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL TYPES OF TRAFFIC AS DIRECTED BY THE ENGINEER.
- 6. COMMENCING CONSTRUCTION
 - A. THE CONTRACTOR SHALL TAKE PHOTOS AND VIDEO RECORD WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS. SEE THE SPECIAL PROVISIONS FOR "DVD VIDEO RECORDING OF THE CONSTRUCTION ROUTE" FOR DETAILS. THIS WORK SHALL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS ITEMS IN THE CONTRACT,
- 7. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- 8. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC. SHALL BE DISPOSED OF OFF—SITE BY THE CONTRACTOR AT THE CONTRACTORS OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMITS REQUIRED FOR SUCH DISPOSAL. THE REMOVAL SHALL BE ACCOMPLISHED BY MEANS OF A SAW CUT JOINT, AT THE DIRECTION OF THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS REMOVAL ITEMS.
- 9. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEAN—UP AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.
- 10. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FORM DIRT AND DEBRIS.
- 11. TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED UNDER THE PROVISIONS OF ARTICLE 201.05 OF THE STANDARD SPECIFICATIONS.
- 12. THE TRENCHES FOR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY TRENCH SHALL BE PROVIDED BY THE CONTRACTOR AND THE COST OF SUCH SHALL BE INCLUDED IN THE UNIT PRICE BID AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION UNLESS APPROVED IN WRITING BY THE OWNER.
- 13. TRENCH BACKFILL WILL BE REQUIRED TO THE FULL DEPTH ABOVE SEWERS AND WATER MAIN WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENT.
- 14. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.
- 15. THE THICKNESS OF HMA MIXTURE STATED IN THE SPECIFICATIONS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS FROM THE NOMINAL THICKNESS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA SURFACE IS PLACED.
- 16. ACCESS TO DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES BY LIMITING CURB AND GUTTER REPAIR TO ONE—HALF THE DRIVEWAY WIDTH AT ONE TIME AS WELL AS TEMPORARY AGGREGATE WHICH SHALL BE INCLUDED IN THE COST OF DRIVEWAY REPLACEMENT.

18. THE ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD TECHNICIAN, PATRICE HARRIS, AT PATRICE.HARRIS@ILLINOIS.GOV

- 17. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON VILLAGE RIGHT OF WAY WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
- TWO (2) WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS,

 19. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470, ROBINSON ENGINEERING (708)331-6700 AND THE VILLAGE OF MATTESON (708)748-1411 A MINIMUM OF 72 HOURS IN ADVANCE OF

STORM SEWER NOTES

BEGINNING WORK.

- 1. ON ALL IMPROVEMENTS THE FRAMES AND LIDS OF EXISTING CATCH BASINS, INLETS, MANHOLES AND VALVE VAULTS WHICH ARE TO BE ABANDONED DUE TO CONSTRUCTION OF THIS IMPROVEMENT ARE TO REMAIN THE PROPERTY OF THE VILLAGE OF MATTESON AND BE SALVAGED. THE OWNER SHALL BE NOTIFIED AS TO AVAILABILITY FOR PICK—UP.
- 2. THE TOP OF ALL STRUCTURES SHALL BE FLUSH WITH THE ADJACENT SURFACE OR AT THE INDICATED ELEVATIONS SHOWN ON THE PLANS.
- . FRAME ELEVATIONS ARE GIVEN ONLY TO ASSIST IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL NEW STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE COST.

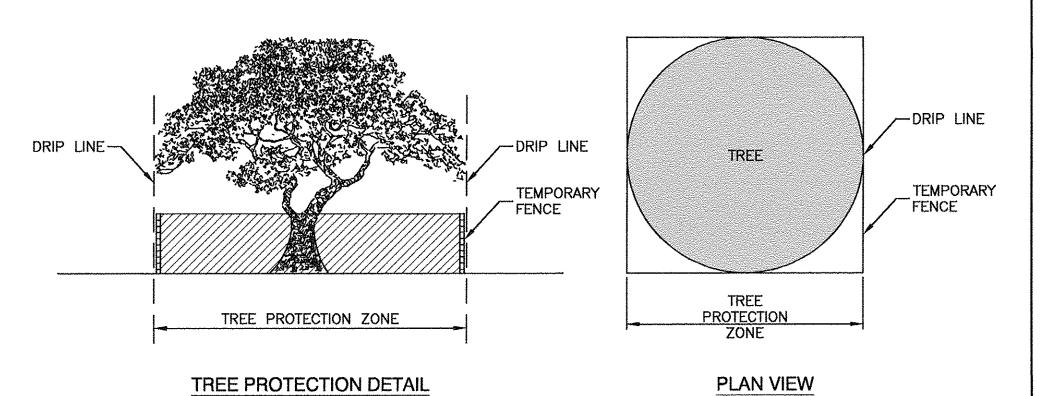
EARTHWORK NOTES

GENERAL

- A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.
- ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTORS USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRAISE HIMSELF OF ALL SITE CONDITIONS.
- C. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE AND SUBGRADE ELEVATIONS (AS NOTED) AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC. MUST BE ACCOUNTED FOR.
- THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION, AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION AND TRAFFIC.
- E. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED AND APPROVED PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION.
- F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES". THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC. TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC. SHALL OCCUR BEFORE GRADING REGINS
- G. ALL STORM INLETS SHALL BE PROTECTED BY INLET FILTERS. PLACEMENTS AND MAINTENANCE OR SILT BARRIER SHALL BE AS DIRECTED BY THE ENGINEER, BASED ON ACTUAL GRADING. GRADE THE AREA WITHIN FOUR (4) FEET AROUND STRUCTURES ONE (1) FOOT BELOW RIM TO SERVE AS A SEDIMENTATION BASIN DURING CONSTRUCTION.
- H. FINAL LOCATION OF SILT FENCE SHALL BE ADJUSTED BASED ON ACTUAL SITE GRADING CONDITIONS. ADDITIONAL MEASURES SHALL BE ADDED AS DIRECTED BY THE ENGINEER.
- I. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESEEDED AS SOON AS PRACTICAL

LANDSCAPING NOTES

- 1. THE CONTRACTORS ATTENTION IS CALLED TO THE FACT THAT THE PRESERVATION OF EXISTING TREES IS OF UTMOST IMPORTANCE TO THE VILLAGE OF MATTESON. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE TREE PROTECTION WITH THE IDOT ROADSIDE DEVELOPMENT UNIT (847.705.4171) PRIOR TO SCHEDULING TREE REMOVAL. ALL TREE PROTECTION, TREE REMOVAL, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL INSTALL TEMPORARY FENCE AROUND ALL TREES WITHIN THE CONSTRUCTION AREA TO ESTABLISH A "TREE PROTECTION ZONE" BEFORE ANY WORK BEGINS OR ANY MATERIAL IS DELIVERED TO THE JOBSITE. NO WORK IS TO BE PERFORMED (OTHER THAN ROOT PRUNING), MATERIALS STORED OR VEHICLES DRIVEN OR PARKED WITHIN THE "TREE PROTECTION ZONE". REMOVE PROTECTIVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TREE PROTECTION UNTIL CONSTRUCTION IS COMPLETED.
- 3. EXISTING VEGETATED AREAS (TREES, SHRUBS, VEGETATIVE BUFFERS, TURF AREAS, ETC.) WHERE DISTURBANCE IS NOT OCCURRING (INCLUDING AREAS OUTSIDE THE PROJECT LIMITS) SHALL NOT BE DISTURBED TO ENSURE THAT EXISTING VEGETATION IS PRESERVED TO MINIMIZE SOIL EROSION AND TO ELIMINATE SOIL COMPACTION. NO MATERIAL ARE TO BE STORED OR VEHICLES DRIVEN OR PARKED WITHIN THESE UNDISTURBED AREAS AT ANY TIME.
- 4. THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. ROOTS OF A TREE THAT ARE TO REMAIN IN PLACE EXTENDING INTO THE EXCAVATION AREAS AT AN ELEVATION THAT WOULD INTERFERE WITH ANY PORTION OF THE PLANNED CONSTRUCTION SHALL BE SEVERED AT A POINT IMMEDIATELY OUTSIDE OF THE EXCAVATION AREA IN A MANNER THAT WILL CAUSE THE LEAST AMOUNT OF SYSTEMIC DAMAGE TO THE REMAINING TREE STRUCTURE. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
- 5. PRUNE TREE LIMBS THAT MIGHT BE DAMAGED BY EQUIPMENT OPERATIONS AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION BY A CERTIFIED ARBORIST. ANY TREE LIMBS THAT ARE BROKEN BY CONSTRUCTION EQUIPMENT AFTER THE INITIAL PRUNING MUST BE PRUNED CORRECTLY WITHIN 72 HOURS.
- 6. SUPPLEMENTAL WATERING IS SPECIFIED FOR TREES AND SHRUBS THAT WILL BE DISTURBED BY CONSTRUCTION BUT SHALL REMAIN. NOTE THAT WATERING SHOULD BEGIN IMMEDIATELY AFTER ROOT PRUNING, TOP PRUNING OR OTHER CONSTRUCTION DISTURBANCE.



| FILE NAME = 13375_02-INDX-01 - P01 | USER NAME = | DESIGNED — EMA | REVISED | | INTERSECTION IMPROVEMENTS | F.A.P RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--|----------------------|----------------|-----------|------------------------------|---|---------------|-----------------------|---------------------|-----------------|--------------|
| | | CHECKED — PKB | REVISED — | STATE OF ILLINOIS | US 30 (LINCOLN HIGHWAY) AT KOSTNER AVENUE | 353 | 13-00063-00-CH | соок | 63 | 2 |
| | PLOT SCALE = | DRAWN RG | REVISED | DEPARTMENT OF TRANSPORTATION | INDEX OF SHEETS & STATE STANDARDS & GENERAL NOTES | | | CONTRACT | NO. 610 | ;11 |
| LAST DAVED BY, SOCIOSK ON AROAS PLOTESS BY SKELASO BONDER ON SIBAS | PLOT DATE = 05-19-16 | CHECKED — AG | REVISED — | | SCALE: NONE SHEET NO. 2 OF 63 SHEETS STA. TO STA. | FED. ROAD DIS | ST. NO. 1 ILLINOIS FE | D. AID PROJECT M-40 | 03(216) | |

| | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | SUMMARY OF QUANTITIES | | TOTAL | ROAD | SAFETY | LNSC | TRAINEES | UCTION T | Abe CODE | - | |
|---|--|--|-------|----------|--------------|--------------|--------------|--------------|----------|----------|---|--|
| | ODE NO. | PAYITEM | UNIT | QUANTITY | 0 004 | 0 021 | O 031 | 0 042 | | | | |
| | 20100110 | TREE REMOVAL (6 TO 15 UNITS DIAMETER) | UNIT | 38 | | | 38 | | | | | |
| *************************************** | 20101000 | TEMPORARY FENCE | FOOT | 700 | | | 700 | | | | 1 | |
| | 20101100 | TREE TRUNK PROTECTION | EACH | 8 | | | | | | | | |
| * | 20101200 | TREE-ROOT PRUNING | EACH | 8 | | | | | | | | |
| * | 20101300 | TREE PRUNING (1 TO 10 INCH DIAMETER) | EACH | 6 | | | (| | | | | |
| * | 20101350 | TREE PRUNING (OVER 10 INCH DIAMETER) | FACH | 2 | | 1. | 2 | | | | | |
| * | 20101700 | SUPPLEMENTAL WATERING | UNIT | 5 | | | | | | | | |
| | 20200100 | EARTH EXCA VATION | CU YO | 1342 | 1342 | | | | | | | |
| | | | | | | | | | | | | |
| | | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL | GU YD | 100 | | | | | | | | |
| | 20800150 | TRENCH BACKFILL | CU YD | 149 | 119 | 1 | | | 199 | | | |
| | 21101505 | TOPSOIL EXCAVATION AND PLACEMENT | CU YD | 142 | | | 142 | | | | | |
| | 21101615 | TOPSOIL FURNISH AND PLACE, 4" | SQ YD | 1075 | | | 1075 | | | | | |
| | 21301084 | EXPLORATION TRENCH 84" DEPTH | FOOT | 100 | 100 | | | | | | | |
| * | 25000210 | SEEDING, CLASS 2A | ACRE | 1 | | | | | | | | |
| * | 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 45 | | | 45 | | | | | |
| * | 25000500 | PHOSPHORUS FERTILIZER NUTRIENT | POUND | 45 | | | 45 | | | | | |
| | | POTASSIUM FERFILIZER NUTRIENT | POUND | 45 | | | | | | | | |
| | | | | | | | 45 | | | | | |
| | 28000305 | TEMPORARY DITCH CHECKS | FOOT | 66 | | | 66 | | | | | |
| | 28000400 | PERIMETER EROSION BARRIER | FOOT | 595 | | | 595 | | | | | |
| | 28000500 | INLET AND PIPE PROTECTION | EACH | 4 | | | 4 | | | | | |
| | 28000510 | INLET FILTERS | EACH | 12 | | | 12 | | | | | |
| | 28001100 | TEMPORARY EROSION CONTROL BLANKET | SQ YĐ | 2328 | | | 2328 | | | | | |
| | 28100101 | STONE RIPRAP, CLASS A1 | SQ YD | 43 | | | 43 | | | | | |
| | 28100107 | STONE RIPRAP, CLASS A4 | SQ YD | 45 | | | 43 | | | | | |
| | 28200200 | FILTER FABRIC | SQ YD | 43 | | | 43 | | | | | |
| | | AGGREGATE SUBGRADE IMPROVEMENT | CU YD | 100 | | | | | | | | |
| | | | | | | | | | | | | |
| | 30300112 | AGGREGATE SUBGRADE IMPROVEMENT 12" | SQ YD | 2524 | 2524 | | | | | | | |
| | 31101200 | SUBBASE GRANULAR MATERIAL, TYPE B 4" | SQ YD | 102 | 102 | | | | | | | |
| | 35101800 | AGGREGATE BASE COURSE, TYPE B 6" | SQ YD | 761 | 761 | | | | | | | |
| | 35501316 | HOT-MIX ASPHALT BASE COURSE, 8" | SQ YO | .215 | 215 | | | | | | | |
| | 40600275 | BITUMINOUS MATERIALS (PRIME COAT) | POUND | 5680 | 5680 | | | | | | | |
| | 40600290 | BITUMINOUS MATERIALS (TACK COAT) | POUND | 1430 | 1430 | | | | | | | |
| | 40600625 | LEVELING BINDER (MACHINE METHOD), N50 | TON | 48 | 48 | | | | | | | |
| | 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 29 | 29 | | | | | | | |
| | | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 | TON | | | | | | | | | |
| | | | | 611 | 611 | | | | | | | |
| | | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 | TON | 522 | 522 | | | | | | | |
| | 42000500 | PORTLAND CEMENT CONCRETE PA VEMENT 10" | SQ YD | 349 | 349 | | | | | | | |
| | 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH | SQFT | 910 | 910 | | | | | | | |
| | 12400800 | DETECTABLE WARNINGS | SQFT | 190 | | 190 | | | | | | |
| | 14000100 | PA VEMENT REMOVAL | SQ YD | 810 | 810 | | | | | | | |
| | 44000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" | SQ YD | 1215 | 1215 | | | | | | | |
| | 14000200 | DRIVEW A Y PA VEMENT REMOVAL | SQ YD | 426 | 426 | | | | | | | |
| | | | 1 | | | <u> I</u> | | | <u> </u> | | 1 | |

* - INDICATES SPECIALTY ITEMS

| FILE NAME = 13375_02-QUAN-01 - IDOT P01 | USER NAME = | DESIGNED EMA | REVISED — 08-26-16 IDOT |
|--|----------------------|---------------|-------------------------|
| | | CHECKED — PKB | REVISED — |
| | PLOT SCALE = | DRAWN — RG | REVISED — |
| a e constant de la co | PLOT DATE = 05-19-16 | CHECKED — AG | REVISED — |

| | | N HIGHWAY RSECTION IM MMARY OF (| PROVEMEN | TS | |
|-------------|-------------|--|----------|---------|--|
| SCALE: NONE | SHEET NO. 3 | OF 63 SHEETS | STA. | TO STA. | |

| FED. RO | AD DIST. NO. 1 ILLINOIS FE | D. AID PROJECT M-40 | 03(216) | |
|---------------|----------------------------|---------------------|---------|-------------|
| | | CONTRACT | NO. 61C | 11 |
| 353 | 13-00063-00-CH | соок | 63 | 3 |
| F.A.P RTE. | SECTION | COUNTY | SHEETS | SHEE NO. |

| | | SUMMARY OF QUANTITIES | 1 | T month. | ROAD | SAFETY | LNSC | TRAINEES | ************************************* | WE CODE | | | |
|---|-------------|---|-------|---------------------------------------|-----------|--------|----------|--|---|---------|---|--|---|
| .I. | CODE NO. | PAYITEM | UNIT | TOTAL QUANTITY | 004 | 021 | 031 | 042 | UCTION TY | TE CODE | | | |
| | 44000300 | CURB REMOVAL | FOOT | 100 | 100 | | | A 100 100 100 100 100 100 100 100 100 10 | | | | | area herea |
| | 44000500 | COMBINATION CURB AND GUTTER REMOVAL | FOOT | 1132 | 1132 | | | | | | | | |
| | 44000600 | SIDEWALK REMOVAL | SQFT | 1187 | 1187 | | | | | | | | <u> </u> |
| _ | 44003100 | MEDIAN REMOVAL | SQFT | 3362 | 3362 | | | | | | | | _ |
| | 44201713 | CLASS D PATCHES, TYPE I, 6 INCH | SQ YD | 10 | 10 | | | | | | | | |
| | 44201717 | CLASS D PATCHES, TYPE II, 6 INCH | SQ YD | 10 | 10 | | | | | | | | |
| | 54261318 | CONCRETE END SECTION, STANDARD 542001, 18", 1:3 | EACH | 1 | A | | | | | | | | |
| 1 | | | | 100 | 106 | | | | | | | | |
| | | STORM SEWERS, CLASS A, TYPE 1 12" | FOOT | 186 | 186 | | | | | | | | |
| | 550A 0070 | STORM SEWERS, CLASS A, TYPE 1 15" | FOOT | 263 | 263 | | | | | | | | |
| | 550A0090 | STORM SEWERS, CLASS A, TYPE 1 18" | FOOT | 210 | 210 | | | | | | | | |
| | 542A 0223 | PIPE CULVERTS, CLASS A, TYPE 1 18" | FOOT | 32 | 32 | | | | | | | <u> </u> | |
| | 55100900 | STORM SEWER REMOVAL 18" | FOOT | 118 | 118 | | | | | | | | |
| c | 56109210 | WATER VALVES TO BE ADJUSTED | EACH | 7 | 7 | | | | | | | | |
| 8 | 56400100 | FIRE HYDRANTS TO BE MOVED | EACH | 1 | 1 | | | | | | | | |
| *************************************** | | | | , , , , , , , , , , , , , , , , , , , | <u>\$</u> | | | | | | | | |
| 1 | | CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE H FRAME AND GRATE | EACH | 6 | 6 | | | | | | | | |
| | 60218400 | MANHOLES, TYPE A, 4'-DIAMETER, TYPE I FRAME, CLOSED LID | EACH | 3 | 3 | | | | | | | | |
| *************************************** | 60221100 | MANHOLES, TYPE A, 5'-DIAMETER, TYPE I FRAME, CLOSED LID | EACH | 1 | 1 | | | | | | | | |
| | 60236800 | INLETS, TYPE A, TYPE H FRAME AND GRATE | EACH | 5 | 5 | | | | | | | | |
| - | 60255500 | MANHOLES TO BE A DJUSTED | EACH | 2 | 2 | | | | | | | | |
| | 60265700 | VALVE VAULTS TO BE ADJUSTED | EACH | arr. | 1 | | | | | | | | |
| | 60500050 | REMOVING CATCH BASINS | EACH | 2 | 2 | | | | | | | *************************************** | |
| | 60603800 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 | FOOT | 1774 | 1774 | | | | | | | | |
| | 60605000 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 | FOOT | 150 | 150 | | | | | | | | |
| | | | | | | | | | To a contract of the contract | | | | |
| | | CONCRETE MEDIAN, TYPE M-2.12 | SQFT | 2874 | 2874 | | | | | | | | |
| <u> </u> | 66900200 | NON-SPECIAL WASTE DISPOSAL | CU YD | 320 | 320 | | | | | | | | *************************************** |
| ٤ | 66900450 | SPECIAL WASTE PLANS AND REPORTS | LSUM | 1 | 1 | | | | | | | | |
| \$ | 66900530 | SOIL DISPOSAL ANALYSIS | EACH | 11 | 1 | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | |
| _ | 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CALMO | 6 | 6 | | | | | | | | |
| | 67100100 | MOBILIZATION | LSUM | 1 | 1 | | | | | | | Manager and the second | |
| | 70300100 | SHORT TERM PA VEMENT MARKING | FOOT | 732 | | 732 | | | - | | | | |
| | 70300210 | TEMPORARY PA VEMENT MARKING LETTERS AND SYMBOLS | SQFT | 73 | | 73 | | | - | | | | |
| 1 | | | | 7.3 | | | | | | | | | |
| | <i>></i> | | | | | | <u>}</u> | | | | | | |
| + | 72000100 | SIGN PANEL - TYPE 1 | SQFT | 46 | | 46 | | | | | | - | |
| | 72400100 | REMOVE SIGN PANEL ASSEMBLY - TYPE A | EACH | 8 | | 8 | | | | | | | |
| | 72400500 | RELOCATE SIGN PANEL ASSEMBLY - TYPE A | EACH | 2 | | 2 | | | | | | The state of the s | |
| 1 | 72900100 | METAL POST - TYPE A | FOOT | 73 | | 73 | | | | | | | |
| 1 | 72900200 | METAL POST - TYPE B | FOOT | 81 | | 81 | | | | | | Train and Annual | |
| c | 78000100 | THERMOPLASTIC PA VEMENT MARKING - LETTERS AND SYMBOLS | SQFT | 358 | | 358 | | | | | | Territory de la constantina del constantina de la constantina de la constantina de la constantina del constantina de la | |
| 5 | | THERMOPLASTIC PA VEMENT MARKING - LINE 4" | FOOT | 1947 | | | | | | - | | | |
| | | | | | | 1947 | | | | | : | | |
| K | 78000400 | THERMOPLA STIC PA VEMENT MARKING-LINE 6" | FOOT | 772 | | 772 | | | | | | | |
| k | 78000600 | THERMOPLASTIC PA VEMENT MARKING - LINE 12" | FOOT | 970 | | 970 | | | | | | | - |

* - INDICATES SPECIALIT HEMS

| FILE NAME = 13375_02-QUAN-01 - IDOT P02 | USER NAME = | DESIGNED — EMA | REVISED — | | U | S 30 (LINCOLN HIGHWAY) AT KOSTNER AVENUE | FAP | SECTION | COUNTY | TOTAL SHEET NO. | T |
|---|----------------------|----------------|-----------|------------------------------|---|--|---------|-------------------------------|----------|-----------------|---|
| | | CHECKED — PKB | REVISED — | STATE OF ILLINOIS | INTERSECTION IMPROVEMENTS SUMMARY OF QUANTITIES | | 353 | 13-00063-00-CH | соок | 63 4 | 1 |
| | PLOT SCALE = | DRAWN — RG | REVISED — | DEPARTMENT OF TRANSPORTATION | | | | | CONTRACT | NO. 61C11 | 1 |
| | PLOT DATE = 05-19-16 | CHECKED — AG | REVISED — | | SCALE: NONE | SHEET NO. 4 OF 63 SHEETS STA. TO STA. | FED. RO | AD DIST NO. 1 ILLINOIS FED. A | A | | 1 |

| S.I. | CODE NO | PAYITEM | UNIT | TOTAL | | SAFETY | LNSC | | UCTION TY | YPE CODE | | 1 | 4 |
|------|----------|---|------|-------------|--|--|---|-------------|---|--|--|---|---|
| * | 78000650 | THERMOPLA STIC PA VEMENT MARKING - LINE 24" | FOOT | QUANTITY 40 | 004 | 021 | 031 | 042 | | | 1 | | |
| * | 78009000 | MODIFIED URETHANE PA VEMENT MARKING - LETTERS AND SYMBOLS | SQFT | 37 | | 37 | | | | | | | |
| * | 78009006 | MODIFIED URETHANE PA VEMENT MARKING - LINE 6" | FOOT | 310 | | | | | | | | | |
| | | | | | | 310 | | | | | | | |
| * | | MODIFIED URETHANE PAVEMENT MARKING - LINE 12" | FOOT | 590 | | 590 | | | | | 1 | | |
| * | 78009024 | MODIFIED URETHANE PA VEMENT MARKING - LINE 24" | FOOT | 130 | | 130 | | | | | | | |
| * | 80400100 | ELECTRIC SERVICE INSTALLATION | EACH | 1 | | 1 | | | | | | | |
| * | 80400200 | ELECTRIC UTILITY SERVICE CONNECTION | LSUM |] | | 1 | | | | | | | |
| * | 80500020 | SERVICE INSTALLATION - POLE MOUNTED | EACH | 1 | | J | | | | | | | |
| * | 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 719 | | 719 | | | | | | | |
| * | 81028210 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA. | FOOT | 178 | | 178 | | | | | | | |
| 水 | 81028220 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. | FOOT | 92 | | 92 | | | | | | | |
| * | 81028240 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA. | FOOT | 491 | | 491 | | | | | | | |
| * | 81400100 | HANDHOLE | EACH | | | 72. | | | | | | | |
| ** | | | | 3 | | 3 | | | | | | | |
| | | HEAVY-DUTY HANDHOLE | EACH | 2 | | 2 | | | | | | | |
| \$ | 81400300 | DOUBLE HANDHOLE | EACH | 2 | | 2 | | | | | | | |
| * | 81603051 | UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE | FOOT | 1287 | | 1287 | | | | And the second s | | | |
| * | 81702440 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1/0 | FOOT | 65 | | 65 | | | | | The second secon | | |
| * | 82500350 | LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 100AMP | EACH | l | | 1 | | | | | | | |
| * | 83600200 | LIGHT POLE FOUNDATION, 24" DIAMETER | FOOT | 70 | | 70 | | | | | | | |
| 撤 | 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 2 | | 2 | | | | | | | |
| * | 86400100 | TRANSCEIVER - FIBER OPTIC | EACH | 1 | T T T T T T T T T T T T T T T T T T T | a de la companya de l | | | | | | | |
| * | 87300925 | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C | FOOT | 3506 | | 3506 | *************************************** | | | | | | |
| * | 87301215 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C | FOOT | 1085 | | 1085 | | | | | | | |
| * | | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FOOT | | | | | | | ************************************** | | | |
| | | | | 1424 | | 1424 | | | | | | | |
| ж | | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 2352 | | 2352 | - | | | | | | |
| * | 87301255 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 1528 | | 1528 | · | | ar a table of the state of the | | | | |
| * | 87301305 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 1656 | | 1656 | | | | | | | |
| * | 87301805 | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C | FOOT | 97 | | 97 | | | | | | | |
| * | 87301900 | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 IC | FOOT | 623 | | 623 | | | · · · · · · · · · · · · · · · · · · · | | | | |
| * | 87502440 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT. | EACH | 1 | | 1 | | | | | | | |
| * | 87502500 | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EACH | 4 | | 4 | | | | | | | |
| * | 87700180 | STEEL MAST ARM ASSEMBLY AND POLE, 28 FT. | EACH | The second | | 1 | | | | | | | |
| * | 87700190 | STEEL MAST ARM ASSEMBLY AND POLE, 30 FT. | EACH | 1 | | 1 | | | | | | | |
| 冰 | | STEEL MAST ARM ASSEMBLY AND POLE, 46 FT. | EACH | *** | | 1 | · · · · · · · · · · · · · · · · · · · | | | | | | |
| * | | | | | | 1 | | | | | | | |
| | | STEEL MAST ARM ASSEMBLY AND POLE, 48 FT. | EACH | | | 1 | | | *************************************** | | | | |
| * | | CONCRETE FOUNDATION, TYPE A | FOOT | 20 | | 20 | | | | | | | |
| * | 87800150 | CONCRETE FOUNDATION, TYPE C | FOOT | 4 | and the second s | 4 | | | | | | | |
| * | 87800400 | CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER | FOOT | 24 | | 24 | | | <u> </u> | | | | |
| * | 87800415 | CONCRETE FOUNDATION, TYPE E 36-INCH DIA METER | FOOT | 26 | | 26 | | | | | | | |
| * | 88030020 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 6 | W. = 1 | 6 | | | | | | | |
| * | 88030050 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED | EACH | 2 | | 2 | | | | | | | |
| | | | | | | | | | | . : | | | |

| USER NAME = | DESIGNED - | _ | EMA | REVISED | |
|----------------------|------------|---|-----|---------|---|
| | CHECKED - | | PKB | REVISED | |
| PLOT SCALE = | DRAWN - | | RG | REVISED | |
| PLOT DATE = 05-19-16 | CHECKED - | | AG | REVISED | *************************************** |

FILE NAME = 13375_02-QUAN-01 - IDOT P03

| | | RSECT | ION IMPE | AT KOSTN ROVEMEN JANTITIES | ITS | |
|-----------------|-------------|-------|----------|----------------------------------|---------|--|
| SCALE: NONE | SHEET NO. 5 | OF 63 | SHEETS | STA. | TO STA. | |

and the state of t

| F.A.P PTE. | SE | CTION | | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------|------------|--|---------|----------------|-----------------|--|
| 353 | 13-000 |)63-00-CH | | соок | 63 | 5 |
| | | ************************************** | | CONTRACT | NO. 61C | 11 |
| FED. ROAD D | IST. NO. 1 | ILLINOIS | FED. Al | D PROJECT M-40 | 003(216) | ************************************** |

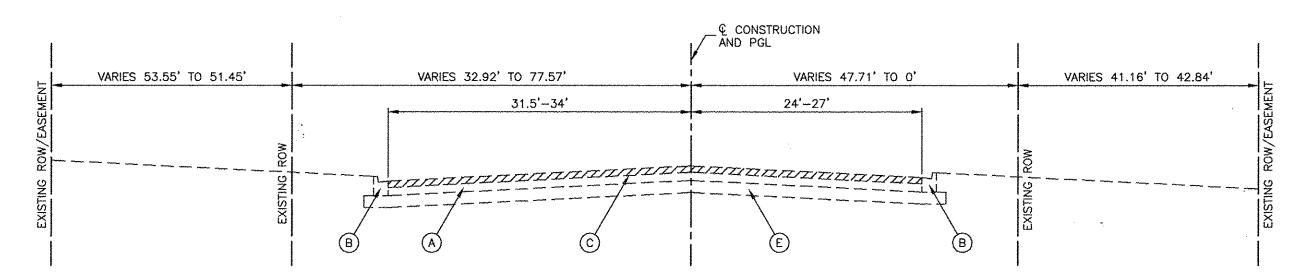
| | SUMMARY OF QUANTITIES | | | ROAD | SAFETY | LNSC | TRAINEES | | | | |
|------------------------------|---|--------------|----------------|--|--------|------|--|---|----------|--|--|
| S.I. CODE NO | PAYITEM | UNIT | TOTAL QUANTITY | 004 | 021 | 031 | CONSTR | UCTION TY | YPE CODE | | |
| * 88030100 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED | EACH | 2 | | 2 | | | | | | |
| * 88030116 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED | EACH | 2 | | 2 | | | | | | |
| * 8810271 | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH | 4 | | 4 | | | | | | |
| * 88200410 | TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC | EACH | 12 | | 12 | | THE STATE OF THE S | | | | |
| * 88500100 | INDUCTIVE LOOP DETECTOR | EACH | 8 | | 8 | | | | | | |
| * 88600100 | DETECTOR LOOP, TYPE I | FOOT | 870 | | 870 | | | | | | |
| * 88700200 | LIGHT DETECTOR | EACH | 2 | | 2 | | | | | | |
| * 88700300 | LIGHT DETECTOR AMPLIFIER | EACH | *** | ······································ | 1 | | | | | | |
| | PEDESTRIAN PUSH-BUTTON | EACH | A | | A | | | | | | |
| | TEMPORARY TRAFFIC SIGNAL INSTALLATION | EACH | 1 | - | 1 | | | | | | |
| | | | 1 | | | | | | | | |
| * 89500100 | RELOCATE EXISTING SIGNAL HEAD | EACH | 8 | | 8 | | | | | | |
| * 89500200 | RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD | EACH | 2 | · · · · · · · · · · · · · · · · · · · | 2 | | | | | The second secon | |
| * 89500400 | RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON | EACH | 2 | | 2 | | | | | | |
| * 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 6845 | | 6845 | | | - | | | |
| * 89502373 | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 | | 1 | | | | | | |
| * 89502380 | REMOVE EXISTING HANDHOLE | EACH | 7 | | 7 | | | | | | |
| * 89502382 | REMOVE EXISTING DOUBLE HANDHOLE | EACH | 1 | | 1 | | | | | | |
| * 8950238: | REMOVE EXISTING CONCRETE FOUNDATION | EACH | 7 | | 7 | | | | | | |
| * A200653 | TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 4" CALIPER, BALLED AND BURLAPPED | EACH | 3 | | | 3 | | | | | |
| * X140008 | FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL) | EACH | | | 1 | | | | | | |
| * X032408. | 5 EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C | FOOT | 303 | | 303 | | | | | | |
| * X032459 | ROD AND CLEAN EXISTING CONDUIT | FOOT | 100 | | 100 | | | - | | | |
| * X032689 | SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE) | EACH | 2 | | 2 | | | | | | |
| * X032769 | LED INTERNALLY ILLUMINATED STREET NAME SIGN | EACH | 4 | | 4 | | | | | | |
| X032797 | PA VEMENT MARKING REMOVAL - GRINDING | SQFT | | | | X | | Simulation of the state of the | | | |
| ×5 × X602605 | SANITARY MANHOLES TO BE ADJUSTED | EACH | 3 | 3 | | | | | | | |
| X701021 | TRAFFIC CONTROL AND PROTECTION, (SPECIAL) | LSUM | *** | | 1 | | | | | | |
| * X836021 | LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET | FOOT | 8 | | 8 | | | | | | |
| * X862020 | UNINTERRUPTABLE POWER SUPPLY, SPECIAL | EACH | , y | | 1 | | | | | | |
| * X871002 | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F | FOOT | 3506 | | 3506 | | 7 | | | | |
| * Z003304 | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2 | EACH | | | I | | | | | | |
| * Z007351 | TEMPORARY TRAFFIC SIGNAL TIMING | EACH | 1 | | 1 | | | | | | |
| Z007660 |) TRAINEES | HOUR | 500 | | | | 500 | | | | |
| | 4 TRAINEES TRAINING PROGRAM GRADUATE 1 LIGHT POLE, SPECIAL 20 FT. MH | HOUR EACH | 500 | | | | 500 | | | | |
| | | | U | | | | | | | | |
| * XX <i>0</i> 09 <i>14</i> . | LIGHT POLE, SPECIAL 30 FT. MH | EACH | 4 | | 4 | | | | | | |
| | | | | | | | | VIDIO V | | | |

* - INDICATES SPECIALTY ITEMS

| FILE NAME = 13375_02-QUAN-01 - IDOT P04 | USER NAME = | DESIGNED — EMA | HEVISED — |
|---|----------------------|----------------|--|
| 4. | | CHECKED — PKB | REVISED — |
| | PLOT SCALE = | DRAWN — RG | REVISED — |
| | PLOT DATE = 05-19-16 | CHECKED — AG | REVISED — |
| | | | The state of the s |

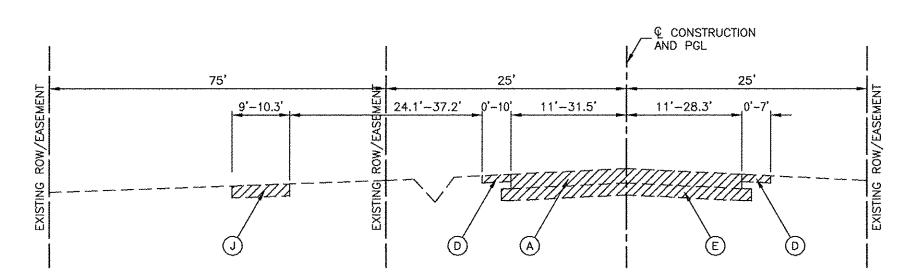
| | U | | RSECT | ION IMPF | IT KOSTNE ROVEMENT IANTITIES | | |
|---|-------------|-------------|-------|----------|------------------------------------|---------|--|
| : | SCALE: NONE | SHEET NO. 6 | OF 63 | SHEETS | STA. | TO STA. | |

| LP E. | | SEC | TION | | COUNTY | SHEETS | SHEET NO. |
|--|--------------|------|----------|--------|----------------|---------|--------------|
| 53 | 13- | 0006 | 3-00-CH | | COOK | 63 | 6 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | CONTRACT | NO. 61C | 11 |
| o. Ro | AD DIST. NO. | 1 | ILLINOIS | FED. A | D PROJECT M-40 | 03(216) | |



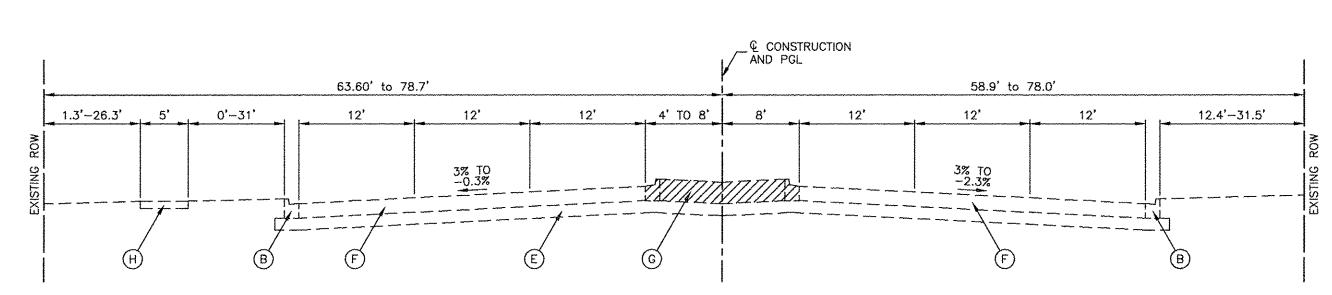
EXISTING TYPICAL SECTION

KOSTNER AVENUE STA 56+38 TO STA 57+84.19



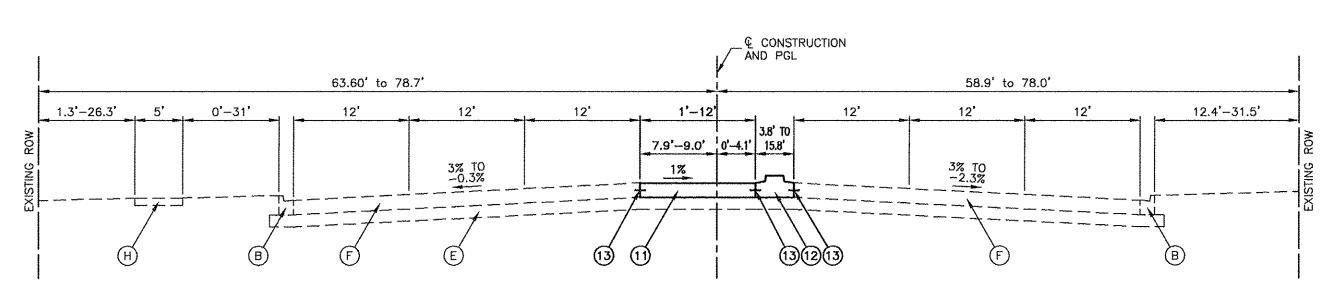
EXISTING TYPICAL SECTION

KOSTNER AVENUE STA 57+84.19 TO STA 62+71.38



EXISTING TYPICAL SECTION

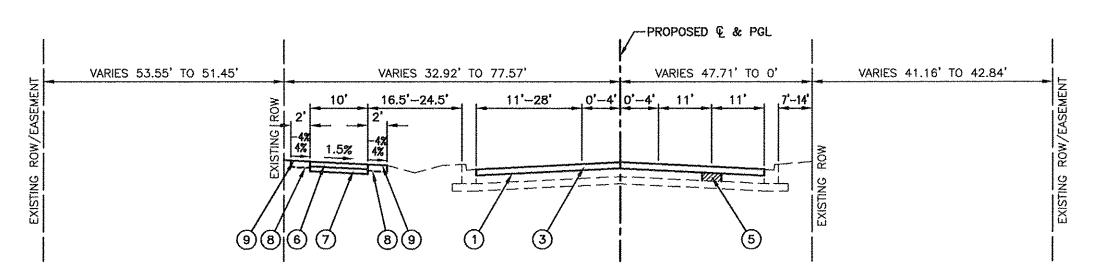
LINCOLN HIGHWAY
STA 17+85.30 TO STA 21+35



PROPOSED TYPICAL SECTION

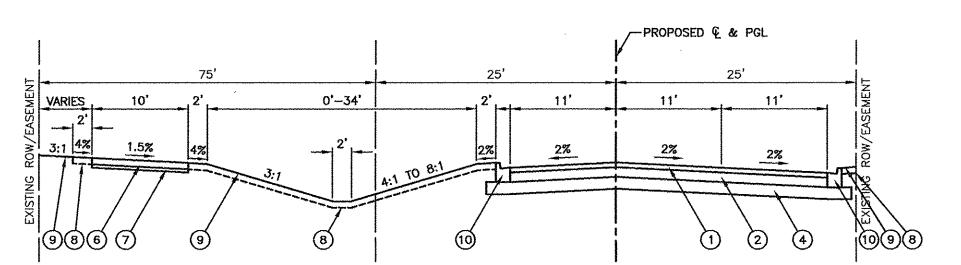
LINCOLN HIGHWAY
STA 17+85.30 TO STA 21+35

*TRANSVERSE CONTRACTION JOINTS SHALL BE CONSTRUCTED USING 1½" DIA DOWEL BARS, 18" LONG AT 12" C-C SPACING ACCORDING TO HIGHWAY STANDARD 42001 AND SPACED TO ALIGN WITH THE JOINTS IN EXISTING PAVEMENT.



PROPOSED TYPICAL SECTION

KOSTNER AVENUE STA 56+38 TO STA 57+84.19



PROPOSED TYPICAL SECTION

KOSTNER AVENUE STA 57+84.19 TO STA 62+71.38

| HOT-MIX ASPHALT MIXTURE REQUIREMENTS | | | | | | |
|---|---------------------|--|--|--|--|--|
| MIXTURE TYPE | AIR VOIDS @ Ndes | | | | | |
| PAVEMENT RESURFACING | | | | | | |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL-9.5mm) | 4% @ 50Gyr | | | | | |
| LEVELING BINDER (MACHINE METHOD), N50, 3/4" | 4% @ 50 Gy | | | | | |
| FULL DEPTH PAVEMENT | | | | | | |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL-9.5mm) | 4% @ 50Gyı | | | | | |
| HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 5" | 4% @ 50 Gy | | | | | |
| PATCHING | | | | | | |
| CLASS D PATCHES, TYPE I, II (HMA BINDER IL-19.0mm): 6" (IN 2 LIFTS) | 4% @70 Gyr | | | | | |
| DRIVEWAYS | | | | | | |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL-9.5mm) | 4% @ 50Gyr | | | | | |
| HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0mm); PE -6", CE - 8" | 4% @ 50 Gy | | | | | |

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.
THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
FOR HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS.

*NOTE: CLASS D PATCHES, TYPE I & II SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER

FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

TOTAL CUT = 1709 CY

TOTAL EXISTING PAVEMENT REMOVAL = 225 CY

TOTAL TOPSOIL EXCAVATION AND PLACEMENT = 142 CY

TOTAL AVAILABLE CUT TO FILL (EARTH EXCAVATION) = 1342 CY

TOTAL FILL = 105 CY

CUT TO FILL (15% SHRINKAGE) 121 CY

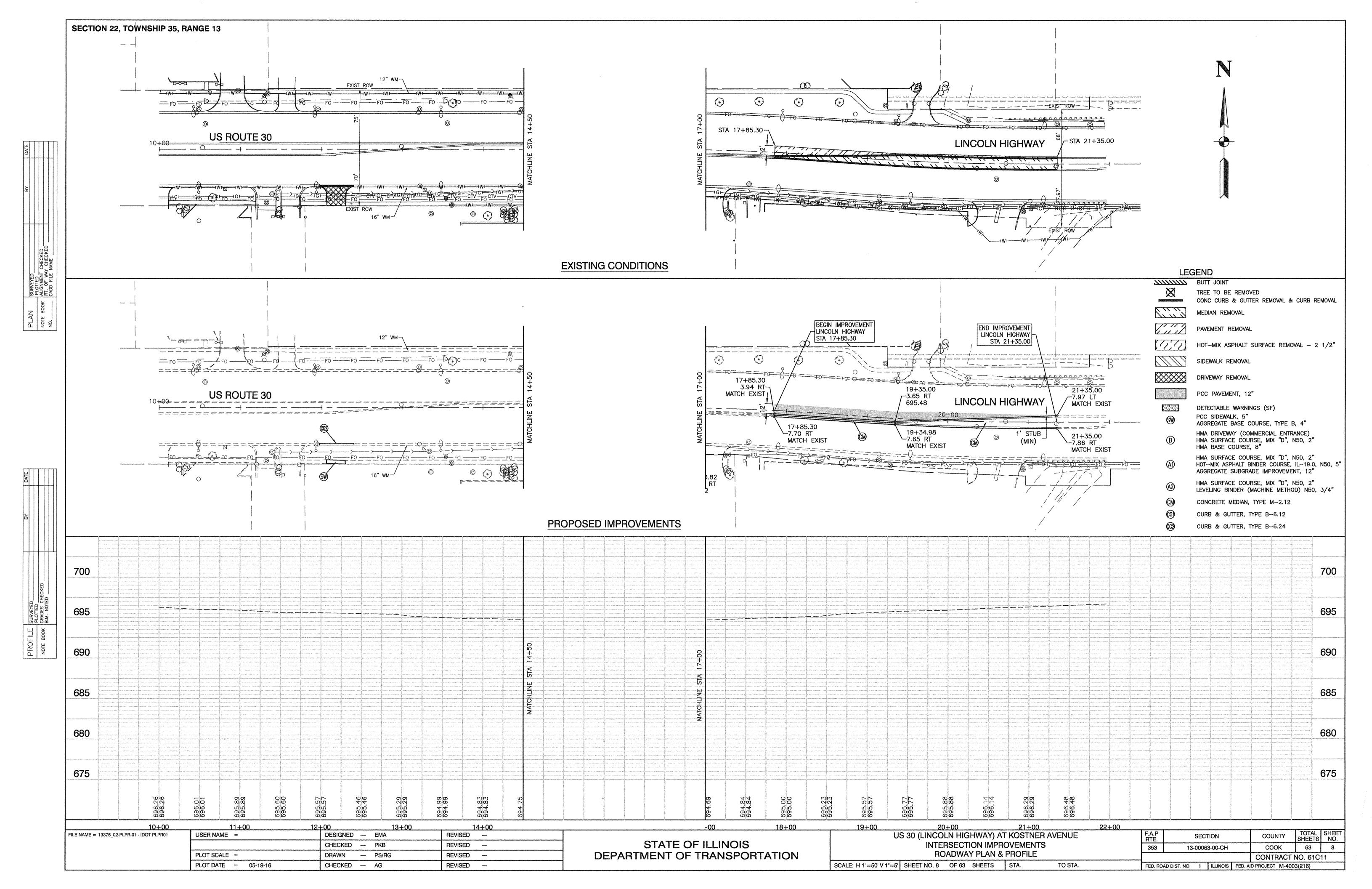
LEGEND

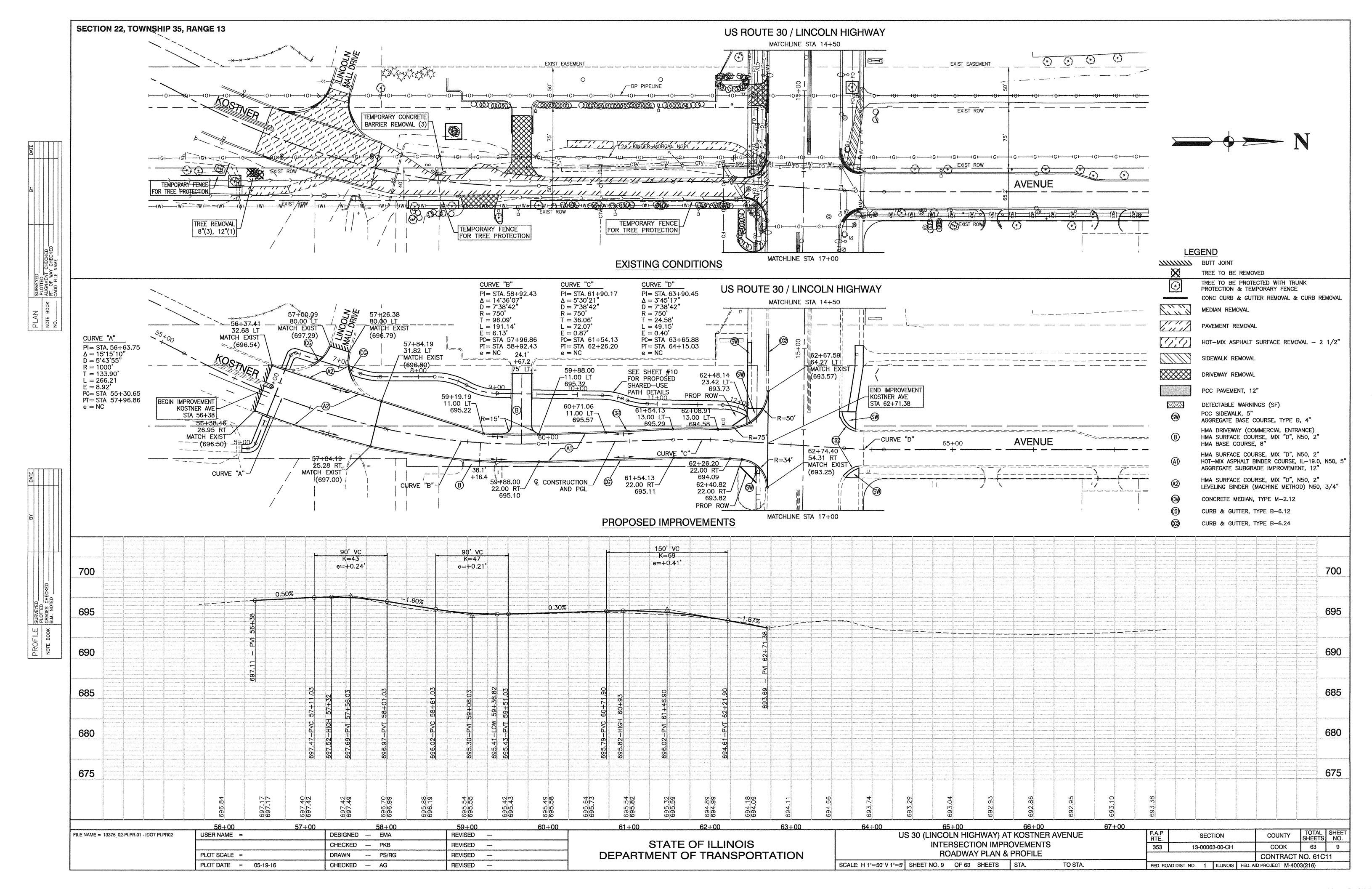
- (A) EXISTING HMA PAVEMENT, 8.5"
- B EXISTING CONCRETE CURB AND GUTTER
- © EXISTING HMA SURFACE REMOVAL, 2-1/2*
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING SUBGRADE
- F EXISTING PCC PAVEMENT, 12"
- G EXISTING HMA MEDIAN
- (H) EXISTING PCC SIDEWALK
- J EXISTING HMA PATH
- 1) HMA SURFACE COURSE, MIX "D", N50, 2"
- 2) HMA BINDER COURSE, IL-19.0, N50, 5"

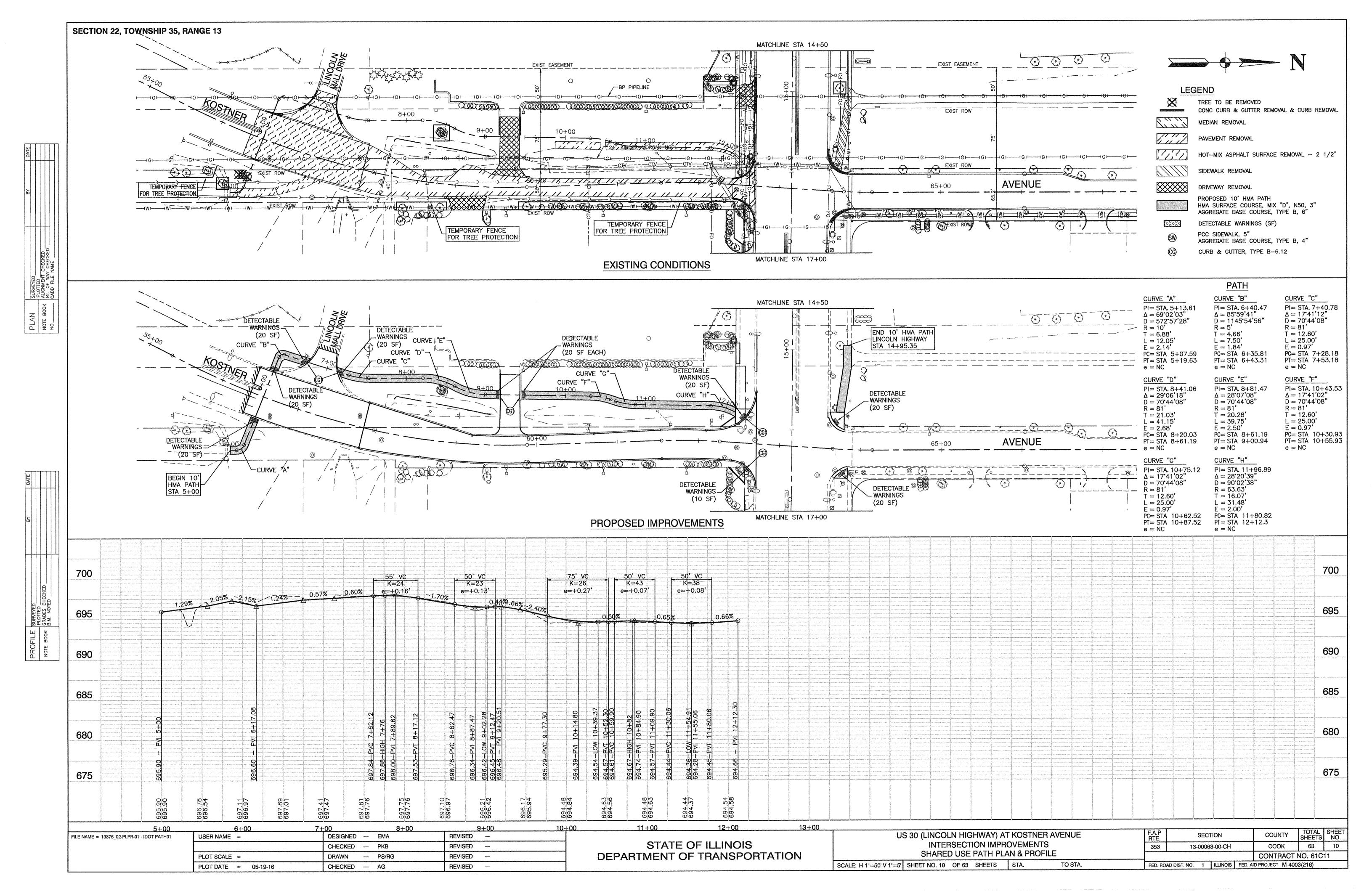
(4) AGGREGATE SUBGRADE IMPROVEMENT, 12"

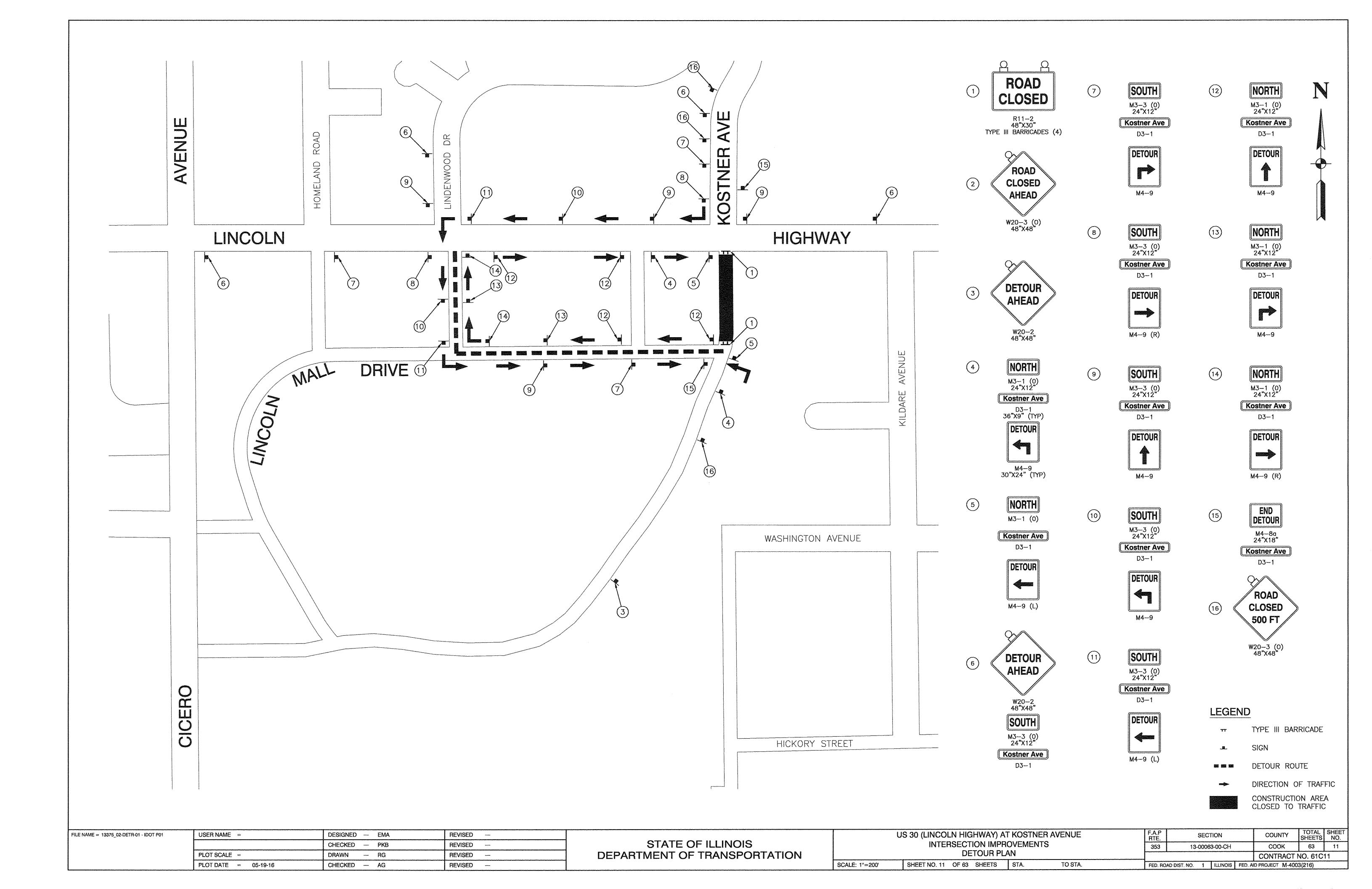
- 3 LEVELING BINDER (MACHINE METHOD), N50, 3/4"
- (5) CLASS D PATH, 6" (AS DIRECTED BY THE RESIDENT ENGINEER)
- (6) HMA SURFACE COURSE, MIX "D", N50, 3"
- (7) AGGREGATE BASE COURSE, TYPE B, 6"
- O TODOGU FURNICU AND DIAGE 48
- (8) TOPSOIL, FURNISH AND PLACE, 4"
- 9 SEEDING, CLASS 1A
- 10) TYPE B-6.12 COMBINATION CONCRETE CURB AND GUTTER
- 11) PCC PAVEMENT, 12"
- (12) PCC MEDIAN TYPE M-2.12
- (13) NO. 6 (NO. 19) TIE BARS 24" LONG AT 24" C-C SPACING

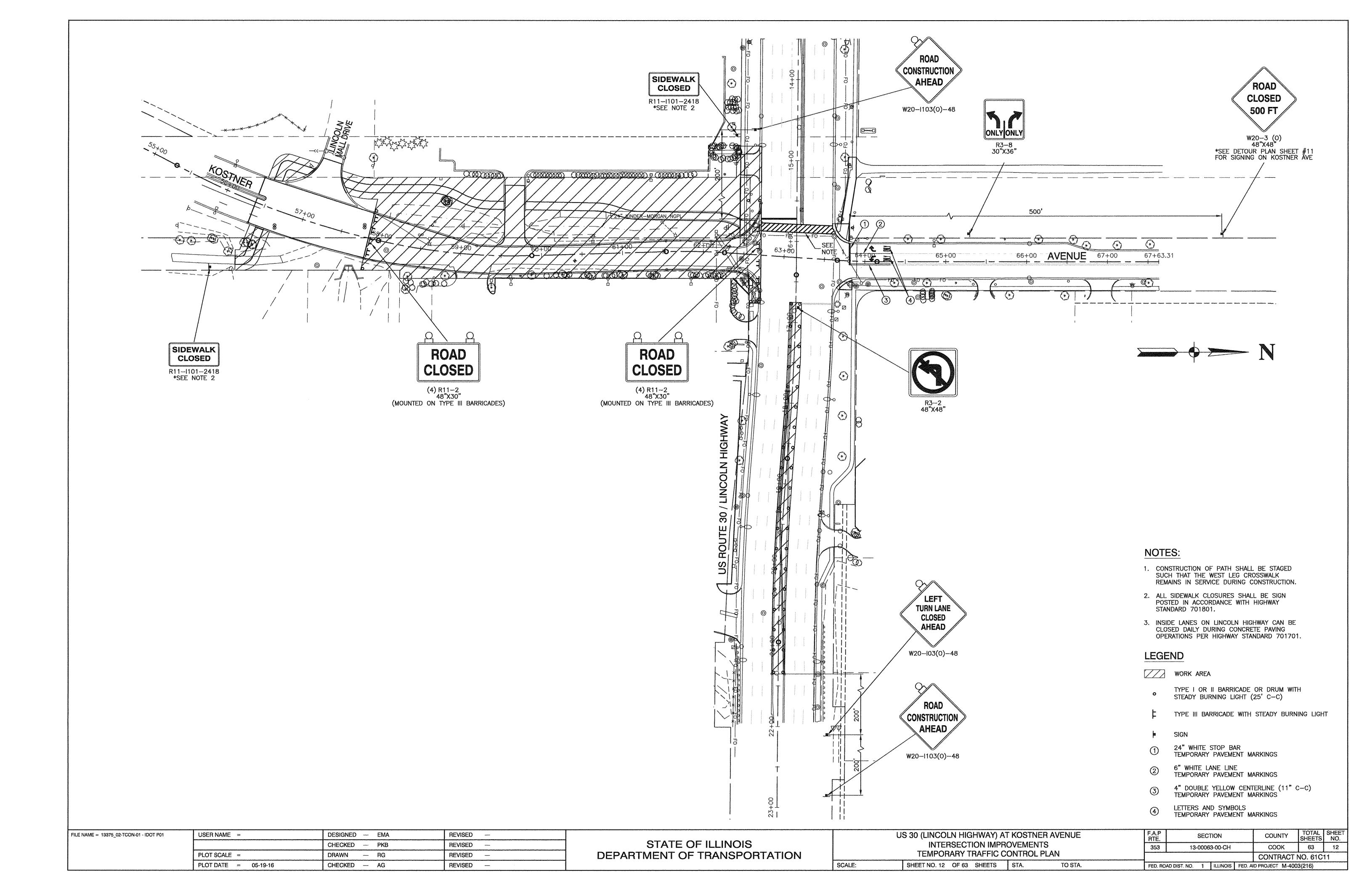
| FILE NAME = 13375_02-TYPX-01 - IDOT P01 | USER NAME = | DESIGNED — EMA | REVISED — | | US 30 (LINCOLN HIGHWAY) AT KOSTNER AVENUE | F.A.P BTF | SECTION | COUNTY | TOTAL S SHEETS | HEET NO. |
|---|----------------------|----------------|-----------|------------------------------|--|--------------|-------------------------|----------------------|-------------------|-------------|
| | | CHECKED — PKB | REVISED — | STATE OF ILLINOIS | INTERSECTION IMPROVEMENTS | 353 | 13-00063-00-CH | соок | 63 | 7 |
| | PLOT SCALE = | DRAWN — RG | REVISED — | DEPARTMENT OF TRANSPORTATION | TYPICAL SECTIONS | | | CONTRACT | ΓNO. 61C1 | |
| | PLOT DATE = 05-19-16 | CHECKED — AG | REVISED — | | SCALE: SHEET NO. 7 OF 63 SHEETS STA. TO STA. | FED. ROAD | DIST. NO. 1 ILLINOIS FE | ED. AID PROJECT M-40 | 003(216) | |

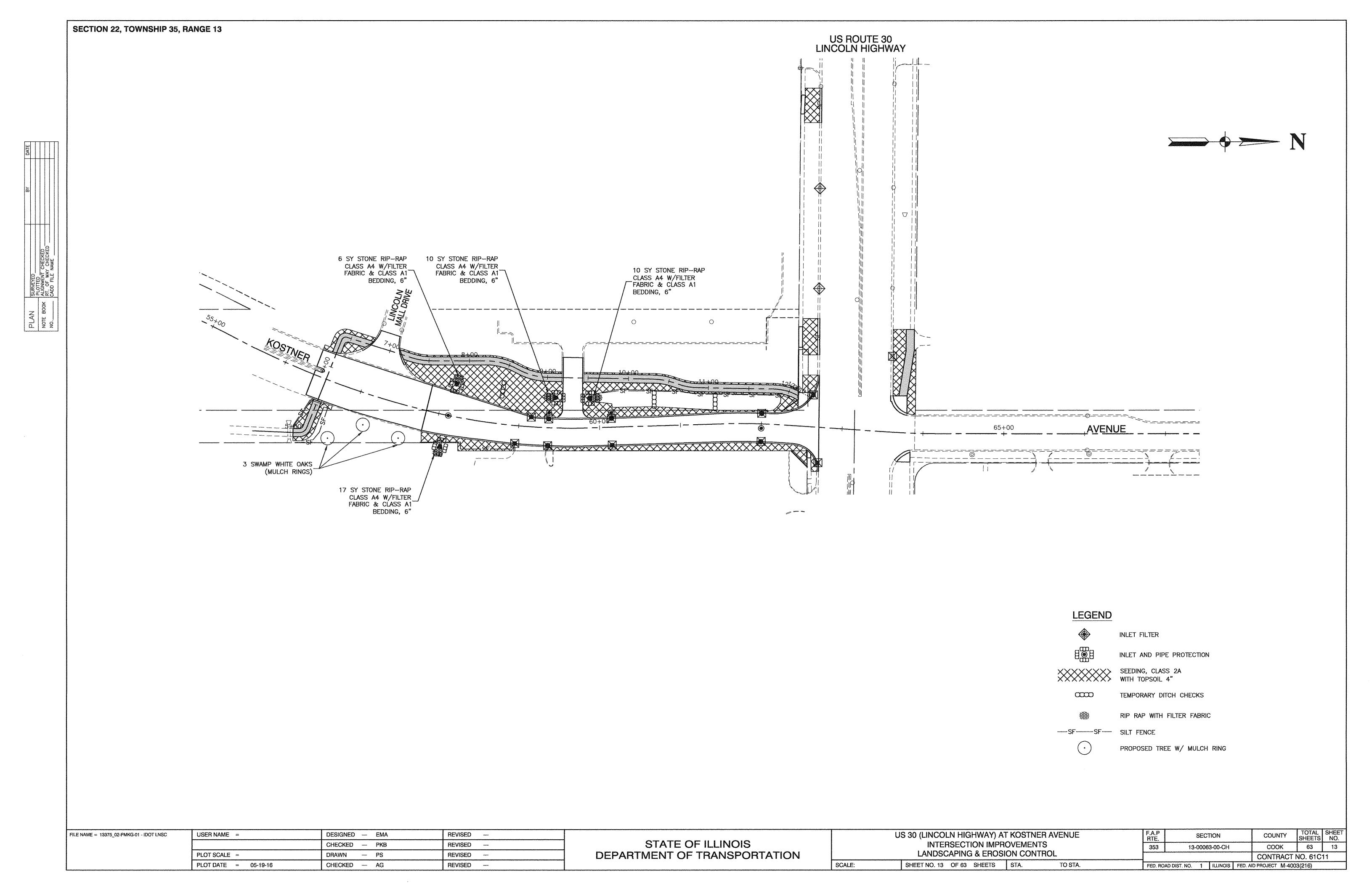


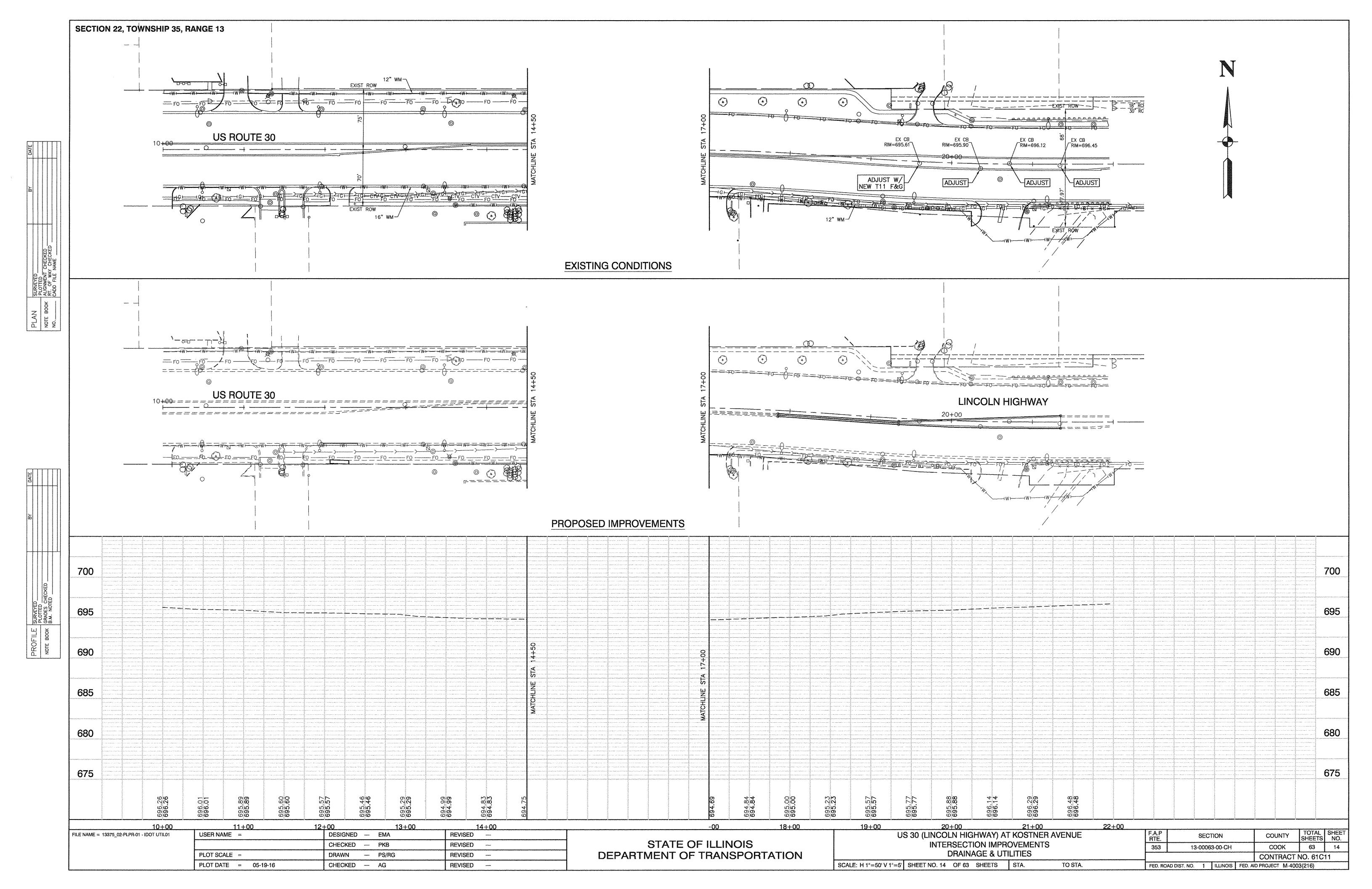


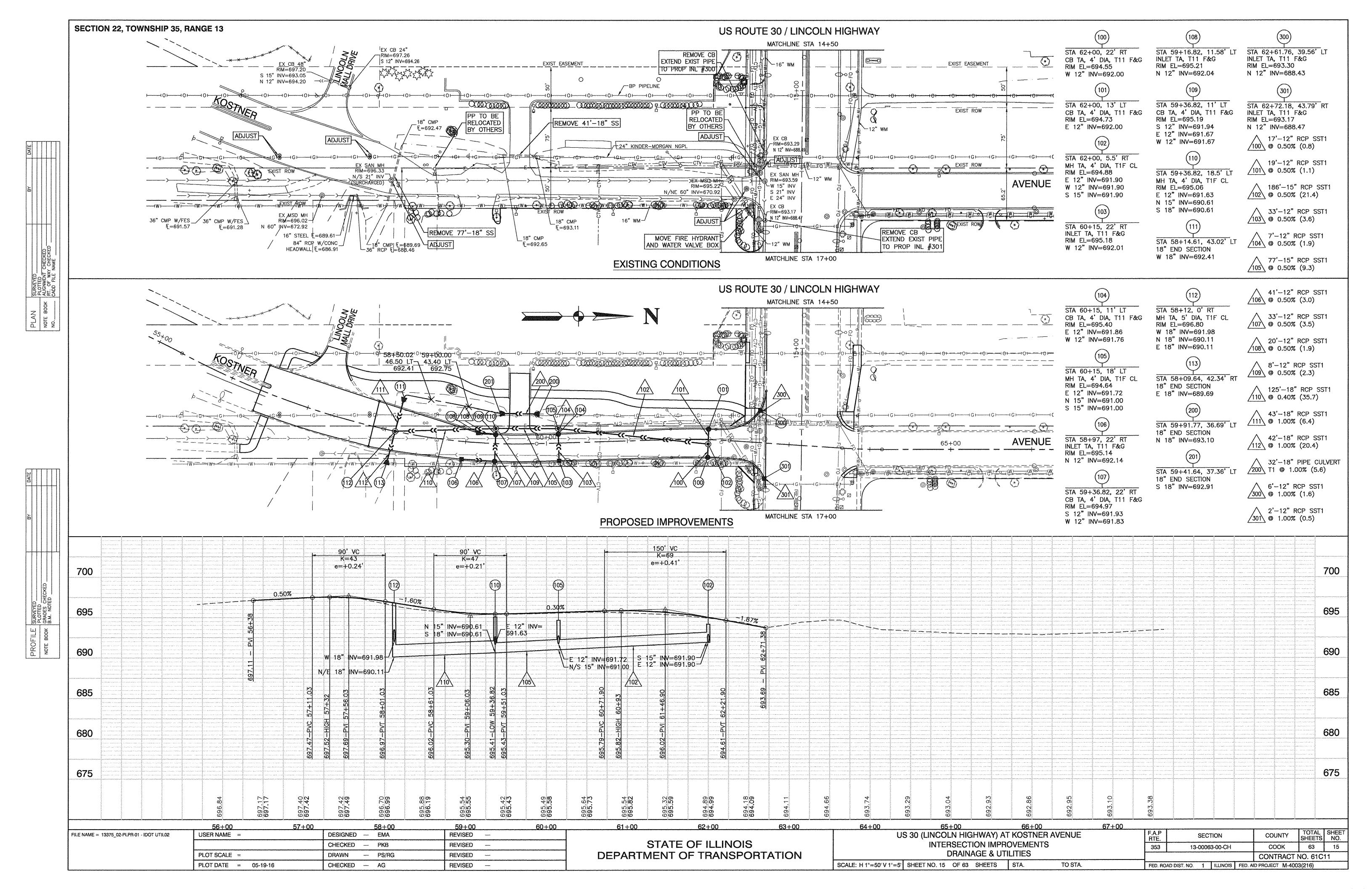


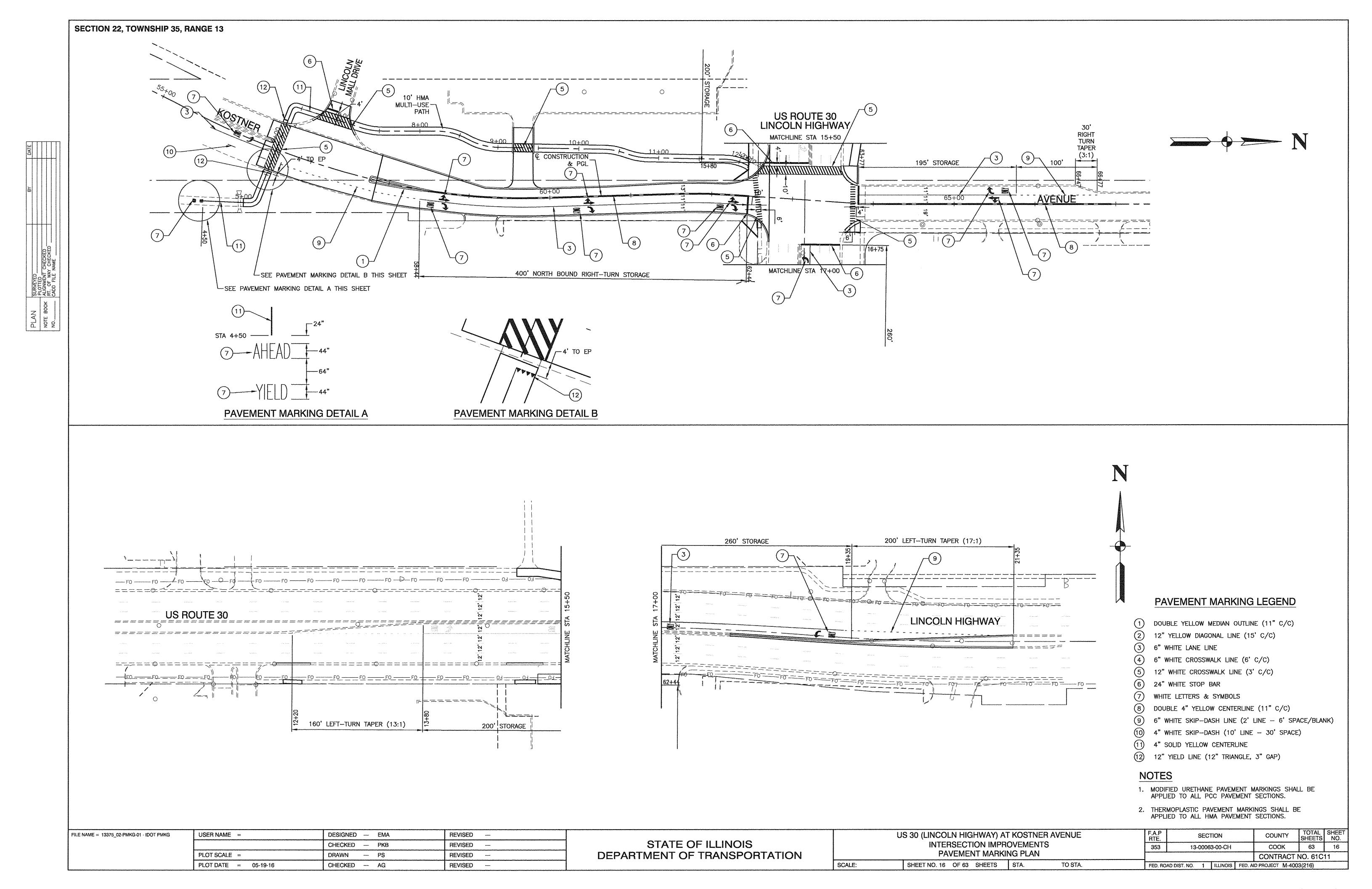


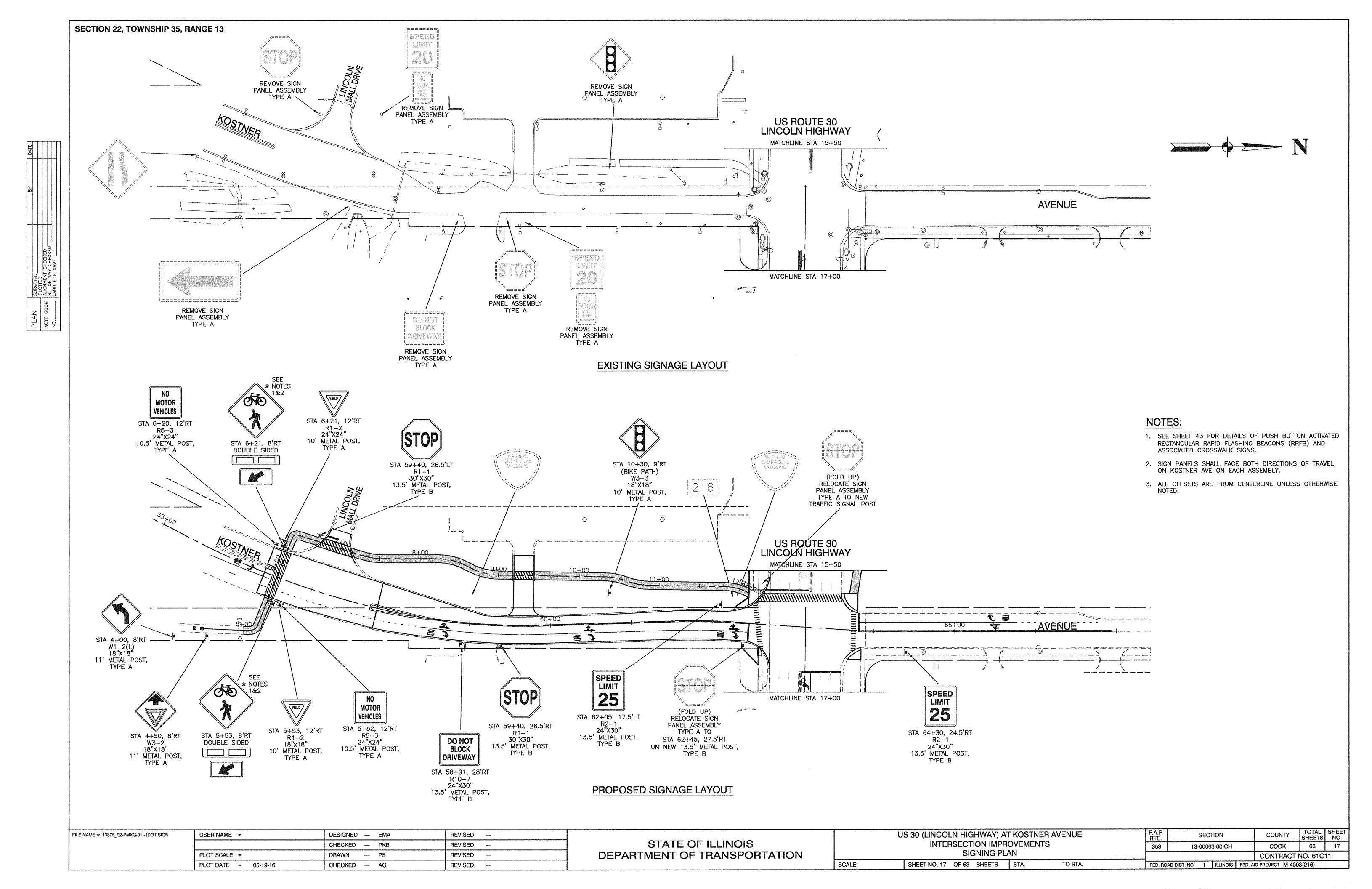










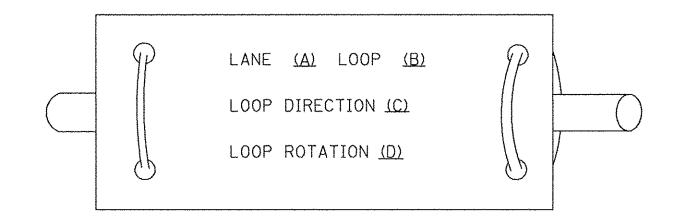


| | | | | TRAFFIC | SIGNAL | LEGEN | | | | | |
|--|--|--|--|--|--------------------|------------|----------------------------|---|---------------|--|--------------------|
| ITEM | REMOVAL | EXISTING | PROPOSED | ITEM | REMOVAL | EXISTING | PROPOSED | ITEM | REMOVAL | EXISTING | PROPOSED |
| CONTROLLER CABINET | R | | | EMERGENCY VEHICLE LIGHT DETECTOR | R≪ | \bowtie | • | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE | | | |
| RAILROAD CONTROL CABINET | | | R ►R | CONFIRMATION BEACON | R_{o-1} | 0-() | •{ | NO. 14 17 C, UNLESS NOTED OTHERWISE | | / " | |
| COMMUNICATIONS CABINET | C C | ECC | CC | HANDHOLE. | R □ | | K -7 | COAXIAL CABLE | | <u> </u> | —(C)— |
| MASTER CONTROLLER | ************************************** | EMC | MC | HANDHOLE | p | | | | | | |
| MASTER MASTER CONTROLLER | D | EMMC | MMC | HEAVY DUTY HANDHOLE | TH | | H | VENDOR CABLE FOR CAMERA | | | |
| UNINTERRUPTABLE POWER SUPPLY | UPS " | EUPS | UPS | DOUBLE HANDHOLE | R | | | COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED | | 6 | 6 |
| SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT | - <u></u> R | - <u>P</u> | P | JUNCTION BOX UNDERGROUND CONDUIT, | R | Q | | FIBER OPTIC CABLE NO. 62.5/125, MM12F | | —(12F)— | |
| TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT | R | P | P. | GALVANIZED STEEL (UC) | | | | FIBER OPTIC CABLE | | — <u>(24F</u>)— | (24F) |
| STEEL MAST ARM ASSEMBLY AND POLE | R | 0 | • | TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE | <u>R</u> | | | NO. 62.5/125, MM12F SM12F | | <u> </u> | |
| ALUMINUM MAST ARM ASSEMBLY AND POLE | R Q | 0 | | COMMON TRENCH | | | СТ | FIBER OPTIC CABLE | | —36F)— | —(36F)— |
| STEEL COMBINATION MAST ARM | a | 0 % | 8 W | COILABLE NONMETALLIC CONDUIT (EMPTY) | | | CNC | NO. 62.5/125, MM12F SM24F | | <u> </u> | |
| ASSEMBLY AND POLE WITH LUMINAIRE | ^O→X | O-X | ⊕ ——— | SYSTEM ITEM | | S | S | GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, | | C _{II} | C _I II— |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA | R [PTZ]1 | Q————————————————————————————————————— | PTZ N | INTERSECTION ITEM | | Ι | IP | OR (S) SERVICE | | 111-0 | ' |
| SIGNAL POST | [<u>[</u>]4] R | O | ● | REMOVE ITEM | R | | | CONTROLLER CABINET AND | RCF | | |
| TEMPORARY WOOD POLE (CLASS 5 OR | °O R_ | \otimes | | RELOCATE ITEM | RL | | | FOUNDATION TO BE REMOVED | | | |
| BETTER) 45 FOOT (13.7m) MINIMUM | `⊗ | ₩ | & | ABANDON ITEM | А | | | STEEL MAST ARM POLE AND | ORMF | | |
| GUY WIRE | R | > | > | 12" (300mm) TRAFFIC SIGNAL SECTION | | R | R | FOUNDATION TO BE REMOVED | | | |
| SIGNAL HEAD | R \ | | - | 10// /700 DED WITTH O// (000) | | R | | ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED | RMF | | |
| SIGNAL HEAD CONSTRUCTION STAGES NUMBERS INDICATE THE CONSTRUCTION STAGE) | | | 2 | 12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE | | | | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND | RMF ○───── | | |
| SIGNAL HEAD WITH BACKPLATE | + R | + | + | | | (R) | R | FOUNDATION TO BE REMOVED | | | |
| SIGNAL HEAD OPTICALLY PROGRAMMED | R →>′′P′′ | — > ′′p′′ | - > "P" | SIGNAL FACE | | G | G | SIGNAL POST AND FOUNDATION TO BE REMOVED | RPF O | | |
| FLASHER INSTALLATION S DENOTES SOLAR POWER) | R O- ▷ ′′F′′ | O- ▷ ″F″ | ● ► "F" | | | ♦ G | ◆ -Y ◆ -G | INTERSECTION & SAMPLING (SYSTEM) DETECTOR | | IS | IS |
| PEDESTRIAN SIGNAL HEAD | R - | -0 | - | | | R | R | SAMPLING (SYSTEM) DETECTOR | | S | S |
| PEDESTRIAN PUSHBUTTON DETECTOR | R | © | © | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD | | 6 | G | QUEUE DETECTOR | | | Q |
| ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR | R APS | <pre> @APS</pre> | | "RB" INDICATES REFLECTIVE BACKPLATE | | ♣ C | ∢ Y ∢ G | | | | |
| LLUMINATED SIGN 'NO LEFT TURN'' | R | | (5) | | | "P" | "P" | PREFORMED QUEUE DETECTOR | | ÎPQÎ | PO |
| | R | | | 12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL | | DW W | | PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR | | PIS | PIS |
| ILLUMINATED SIGN ''NO RIGHT TURN'' | | | | 12" (300mm) PEDESTRIAN SIGNAL HEAD | | | | PREFORMED SAMPLING (SYSTEM) DETECTOR | | PS | PS |
| DETECTOR LOOP, TYPE I | | | | INTERNATIONAL SYMBOL, OUTLINED | | | | | | 12 | <u> </u> |
| PREFORMED DETECTOR LOOP | | P | P | 12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID | | | * | RAILROAD | SYMB(| OLS | |
| MICROWAVE VEHICLE SENSOR | R M) | | M | PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER | | C C | C X D | | | EXISTING | PROPOSEI |
| /IDEO DETECTION CAMERA | R V) | (V) | V | RADIO INTERCONNECT | R O | | 444 | RAILROAD CONTROL CABINET | | | RR |
| VIDEO DETECTION ZONE | | | | | 1. | 1. | [; - | RAILROAD CANTILEVER MAST ARM | | XOX X | XOX |
| | R | 1111111 | | RADIO REPEATER | RERR | ERR | RR | | | | |
| PAN, TILT, ZOOM CAMERA | PIZI | PZ | PTZ | DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, | | | (5) | FLASHING SIGNAL | | ⊠o X | X |
| WIRELESS DETECTOR SENSOR | RW | W | W | ALL DETECTOR LOOP CABLE TO BE SHIELDED | | | <u></u> | CROSSING GATE | | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | |
| WIRELESS ACCESS POINT | R D | | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) | | | | CROSSBUCK | | ₹ | |
| AME = 13375_02-SGNL_DTLS-03 - P01 | | ESIGNED — DAG/BCK | ······································ | — DAG 1-1-14 | | | | DISTRICT ONE | F.A.P RTE. | SECTION | COUNTY SH |
| PLOT SCALE = 50.0000 1 | | HECKED — BCK RAWN — DAD | REVISED REVISED | STATEDEPARTMENT C | OF ILLINOI | • | | STANDARD TRAFFIC SIGNAL DESIGN DETAILS | 353 | 13-00063-00-CH | COOK CONTRACT NO |

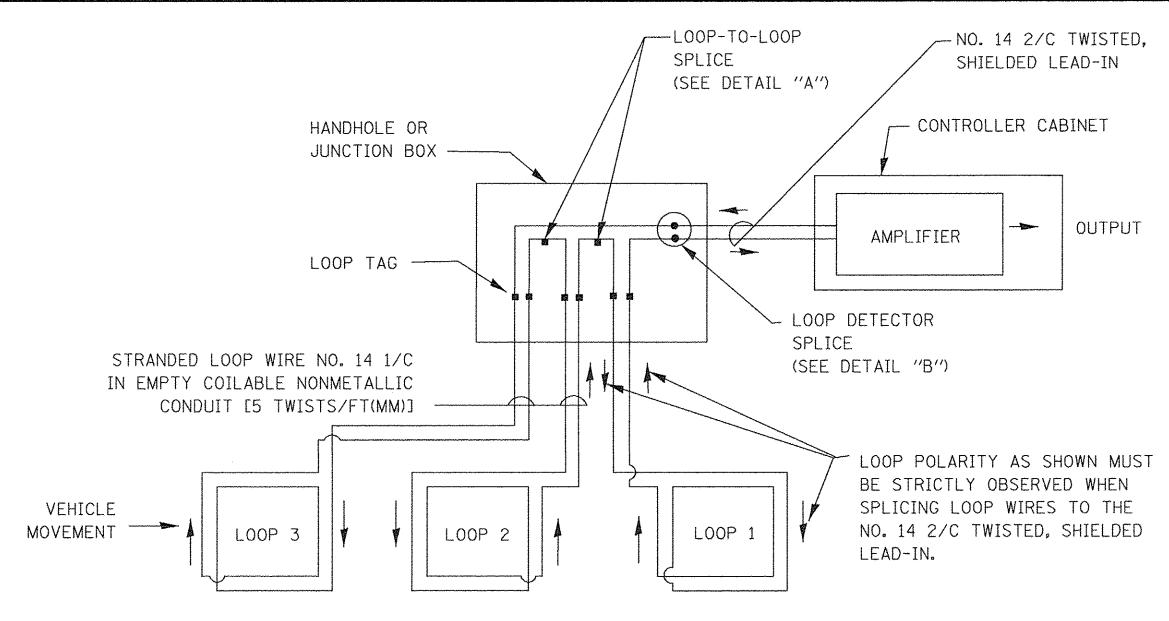
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

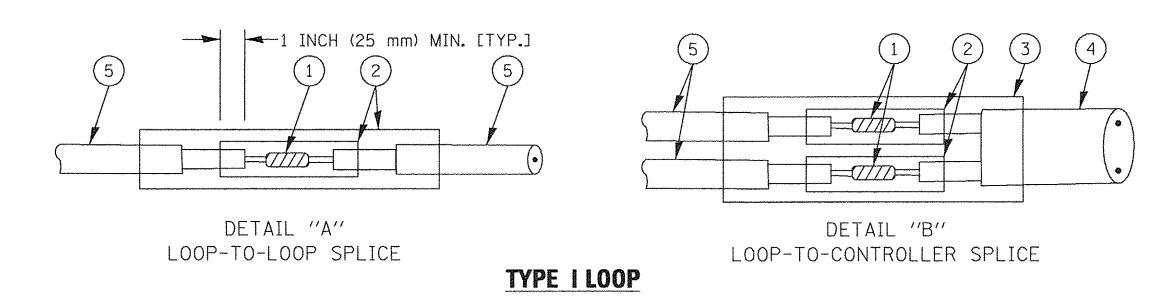


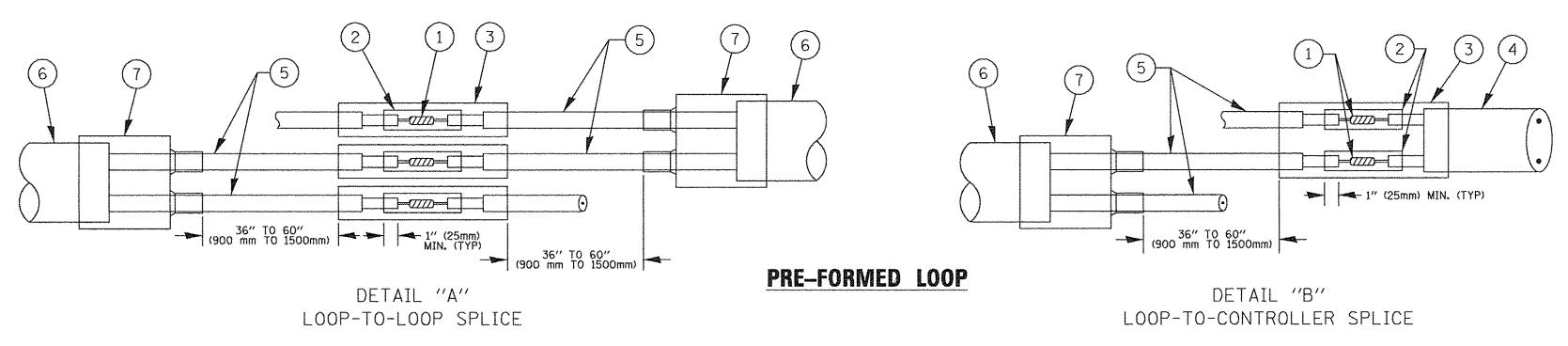
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

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





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.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

SCALE: NONE

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

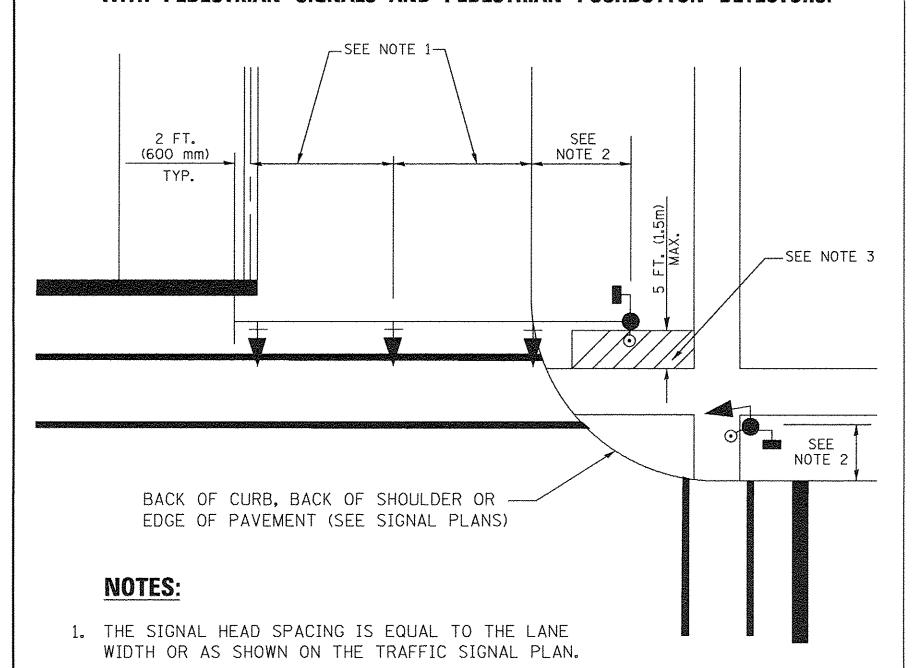
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

| FILE NAME = 13375_02-SGNL_DTLS-03 - P02 | USER NAME = footemj | DESIGNED — DAD | REVISED — DAG 1-1-14 |
|---|-----------------------------|---------------------------|----------------------|
| | | CHECKED — BCK | REVISED — |
| | PLOT SCALE = 50.0000 '/ in. | DRAWN — DAD | REVISED — |
| | PLOT DATE = 1/13/2014 | CHECKED — 10-28-09 | REVISED — |

| STATE OF ILLINOIS | |
|---------------------------|-----|
| DEPARTMENT OF TRANSPORTAT | ION |

| DISTRICT ONE | F.A.P RTE. | SECTION | COUNTY TOTAL SHEET NO. COOK 63 19 CONTRACT NO. 61C11 AID PROJECT M-4003(216) | | | |
|--|---------------|-------------------------|---|--------------------|--------|--|
| | 353 | 13-00063-00-CH | COOK | 63 | 19 | |
| DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS SHEET NO. 2 OF 7 SHEETS STA. TO STA. | | TS-05 | | CONTRACT NO. 61C11 | | |
| SHEET NO. 2 OF 7 SHEETS STA. TO STA. | FED. RO | AD DIST. NO. 1 ILLINOIS | FED. AI | D PROJECT M-400 | 3(216) | |

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.

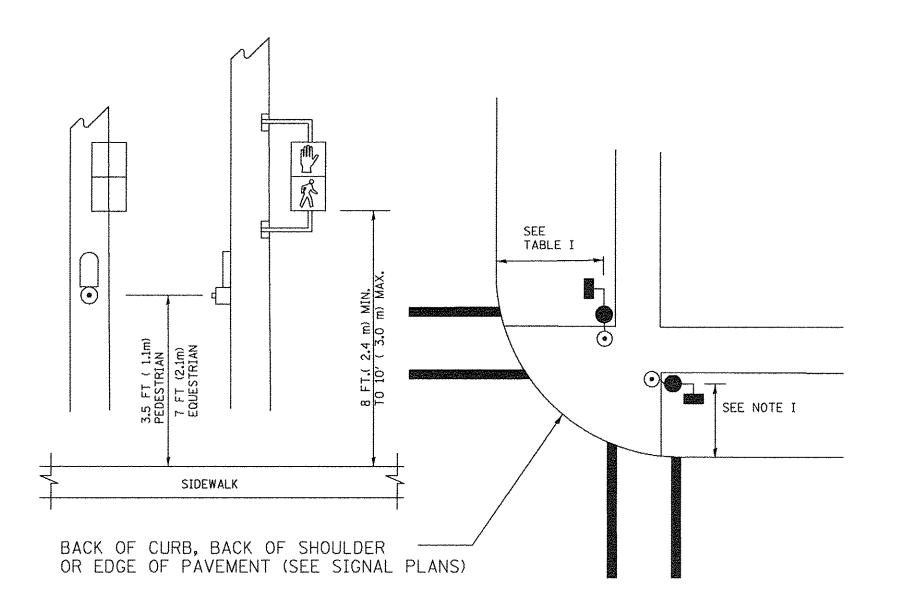


- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO 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."

NOTES:

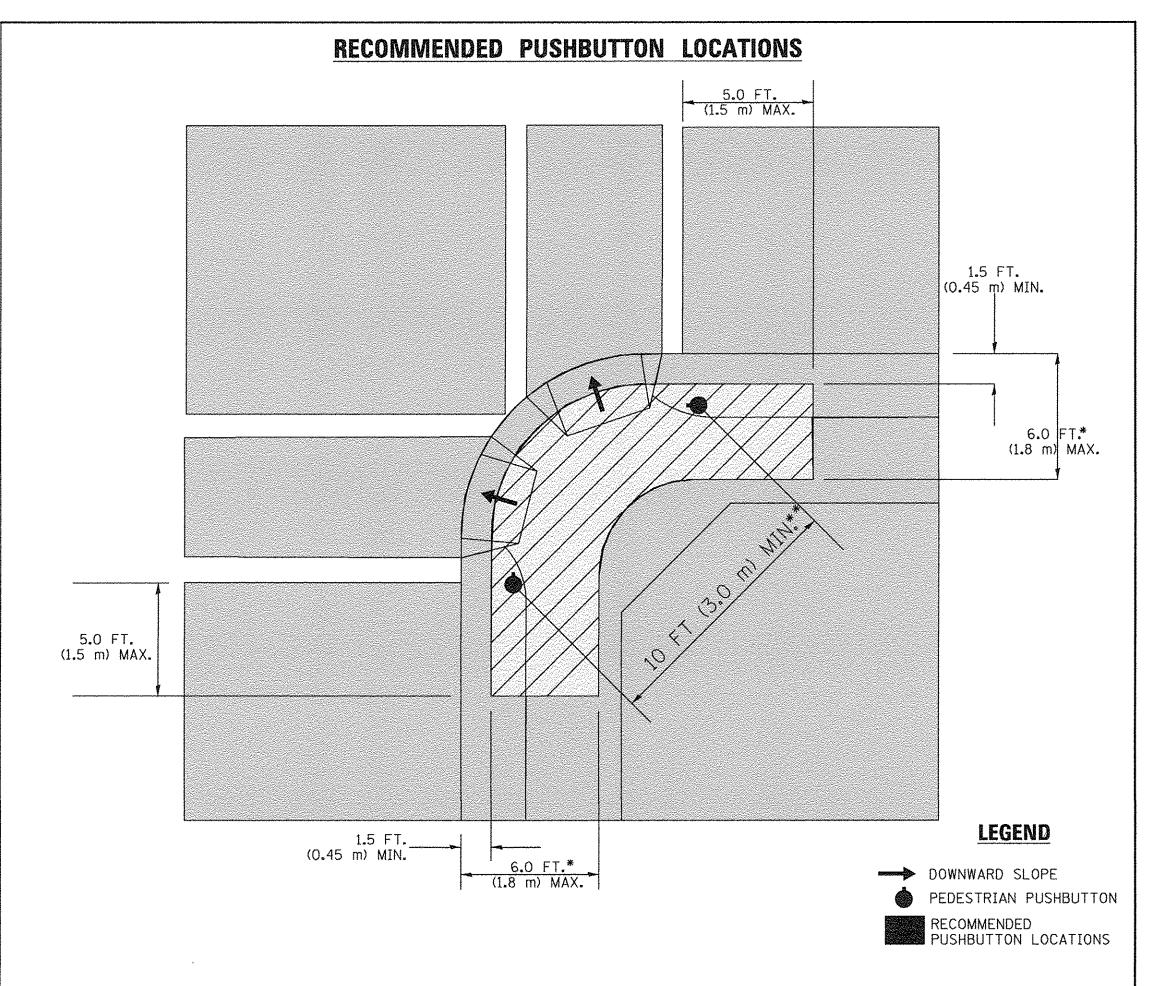
- 1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM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

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."



- * 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.

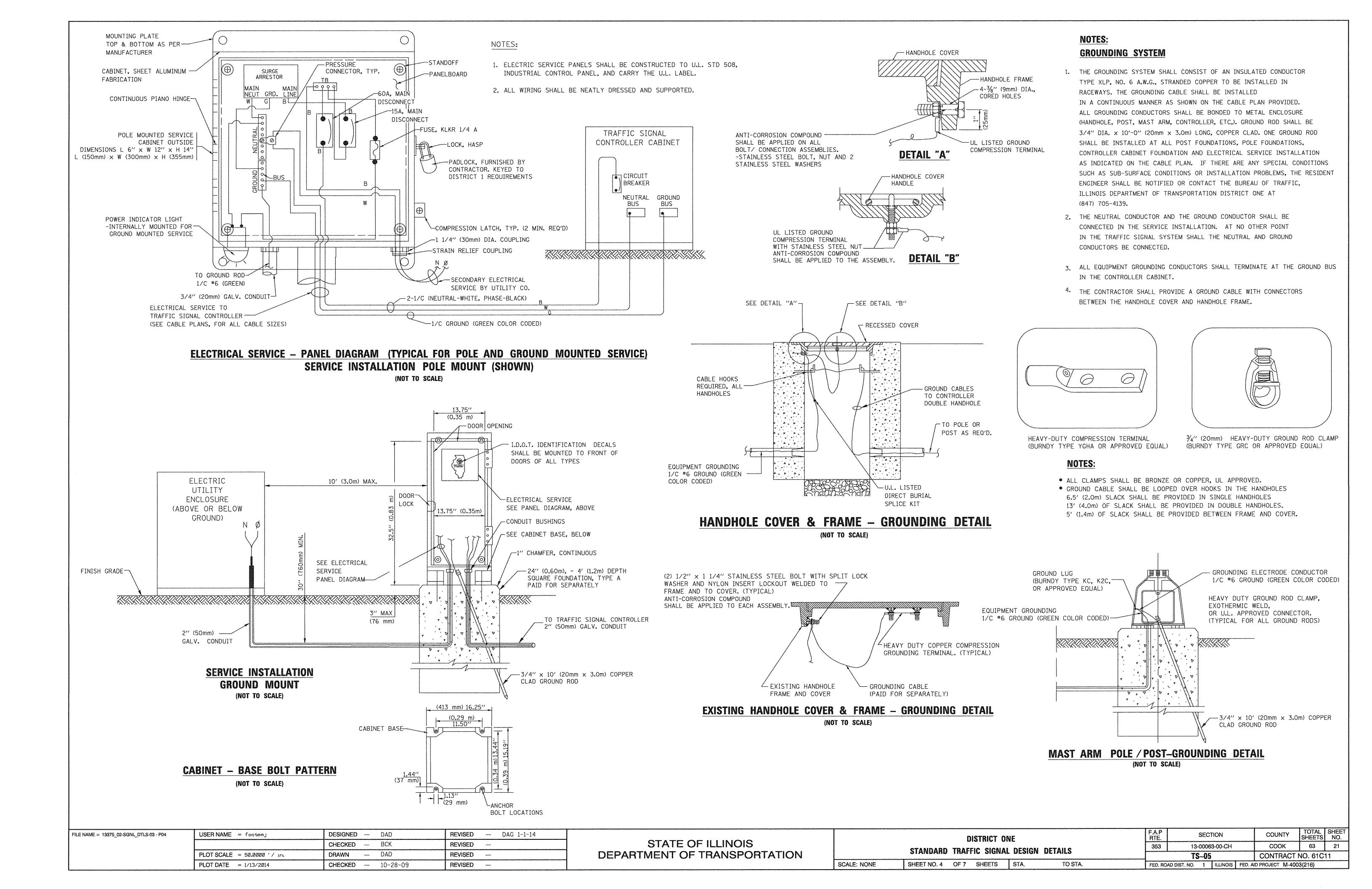
TRAFFIC SIGNAL EQUIPMENT OFFSET

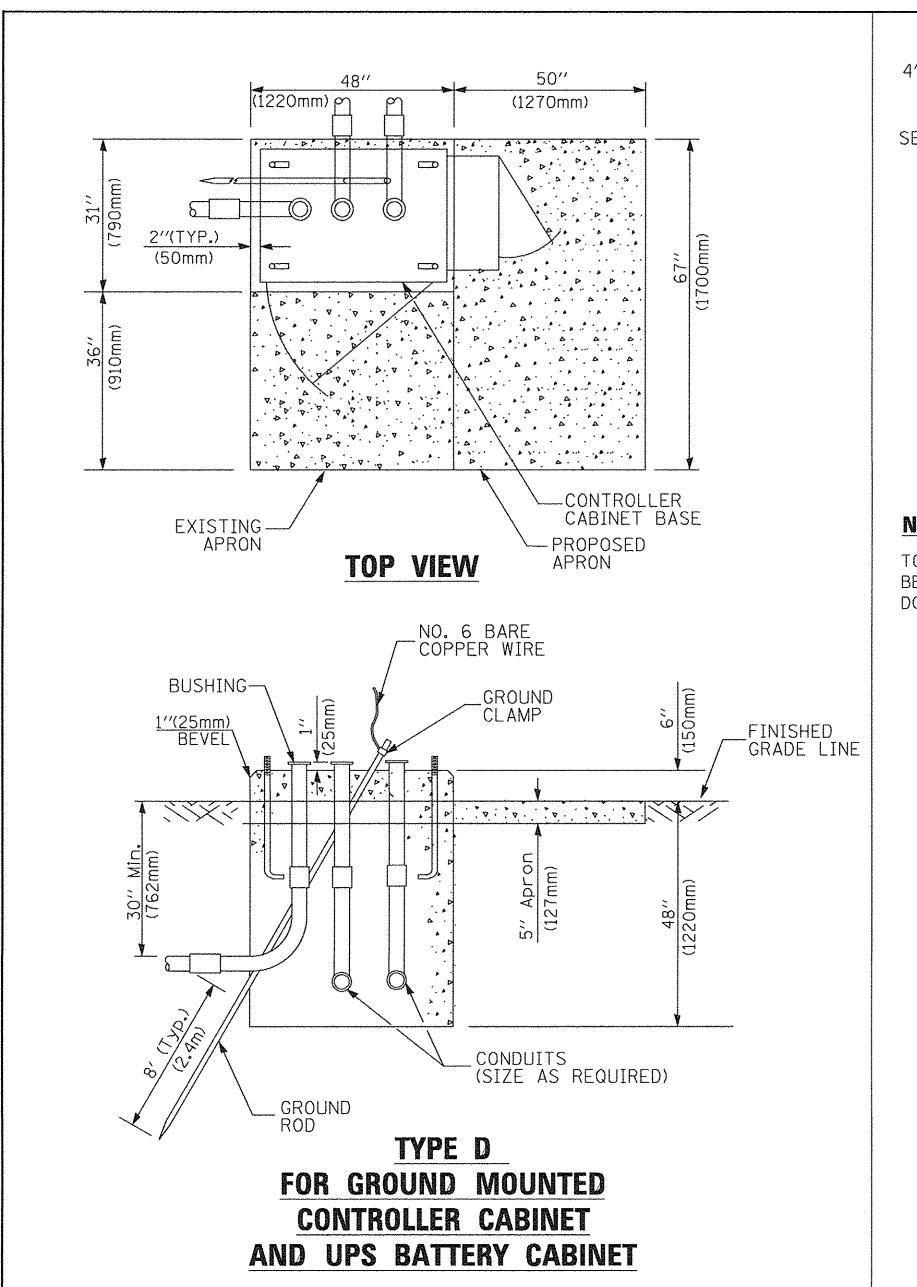
| TRAFFIC SIGNAL EQUIPMENT | COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION) | SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION) |
|------------------------------------|---|---|
| TRAFFIC SIGNAL MAST ARM 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. |

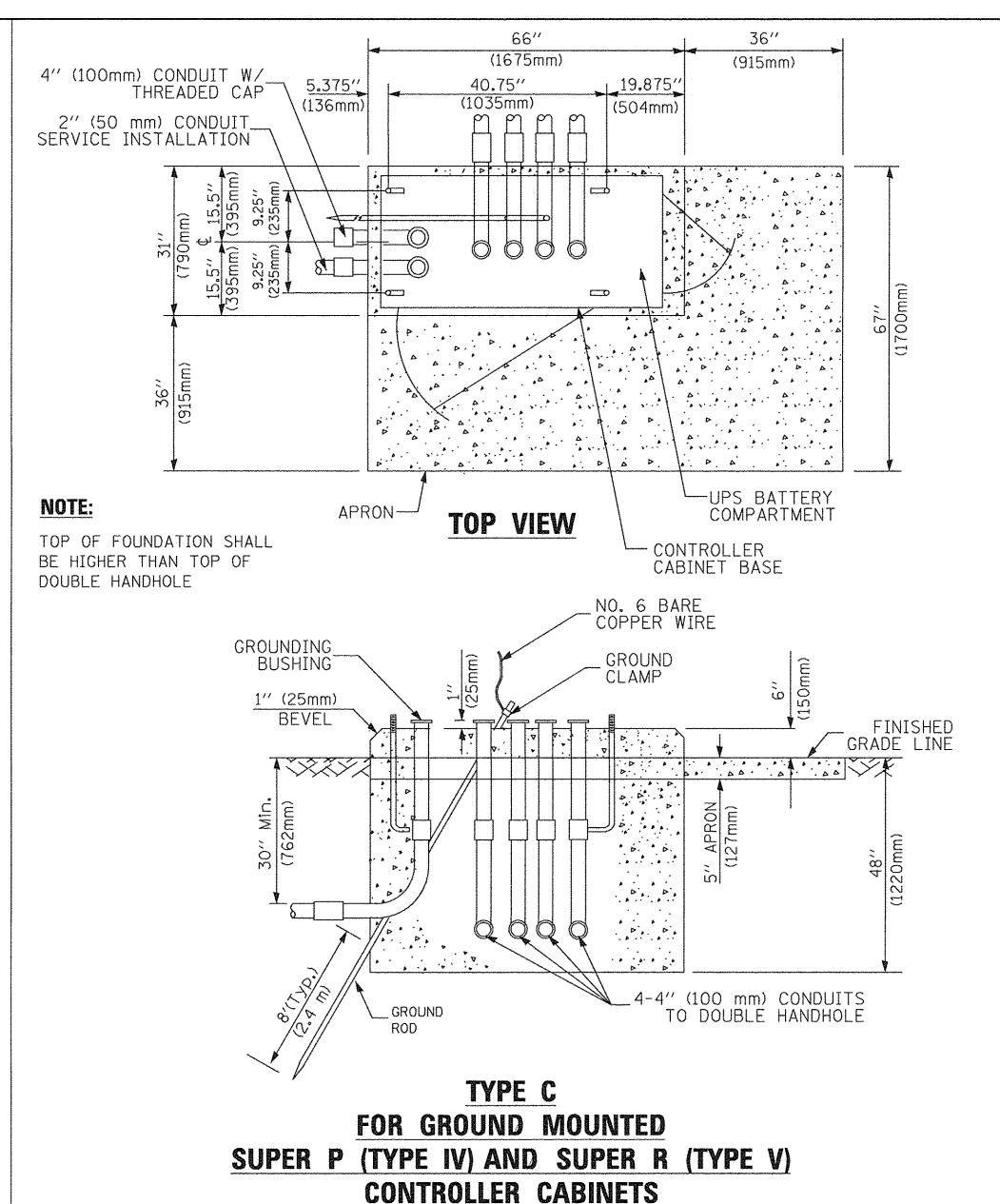
NOTES:

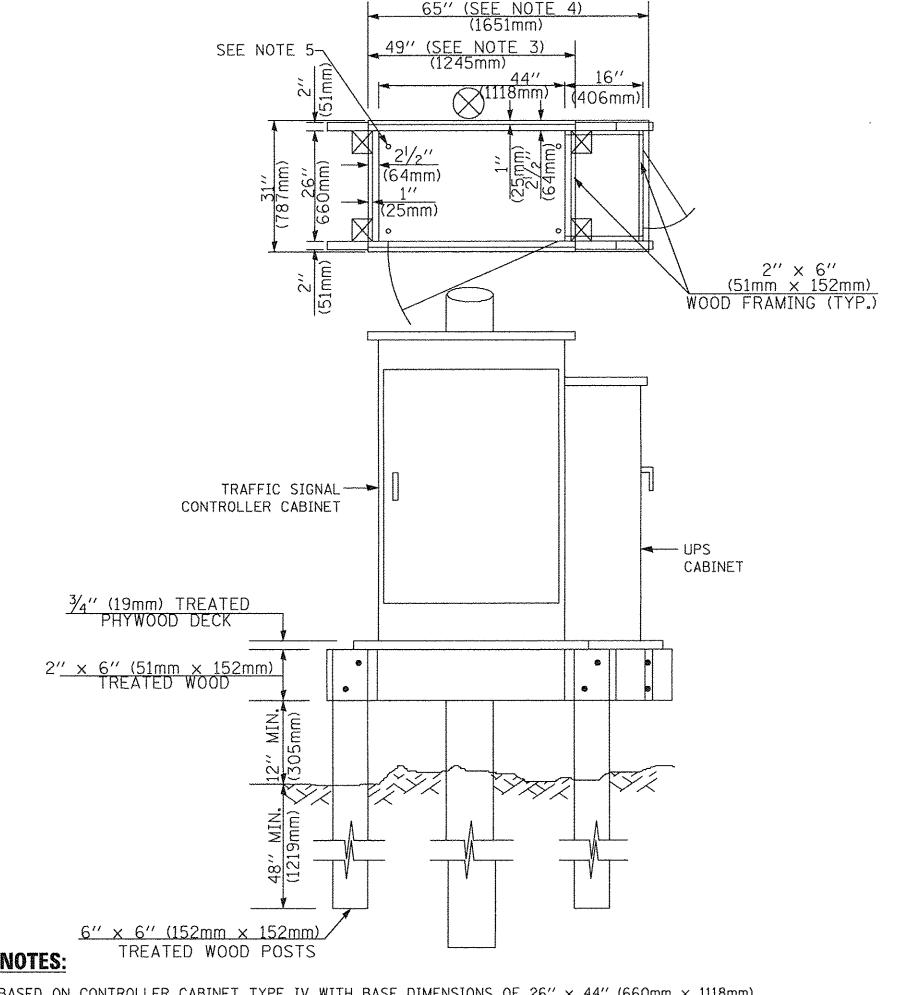
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE 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.

TOTAL SHEET SHEETS NO. USER NAME = footemj **DESIGNED** — DAD REVISED — DAG 1-1-14 FILE NAME = 13375_02-SGNL_DTLS-03 - P03 SECTION COUNTY DISTRICT ONE STATE OF ILLINOIS CHECKED — BCK REVISED 13-00063-00-CH 63 20 STANDARD TRAFFIC SIGNAL DESIGN DETAILS — DAD DEPARTMENT OF TRANSPORTATION PLOT SCALE = 50.0000 '/ 10. DRAWN REVISED TS-05 CONTRACT NO. 61C11 PLOT DATE = 1/13/2014 **CHECKED** — 10-28-09 SCALE: NONE SHEET NO. 3 OF 7 SHEETS STA. REVISED — TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216)









- 1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF $26^{\prime\prime}$ \times $44^{\prime\prime}$ (660mm \times 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
- 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF $16'' \times 25''$ (406mm \times 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

| | | A F 11 8 8 4 |
|--|--|--------------|
| | | |
| | | |
| | | |
| | | |

| 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) |

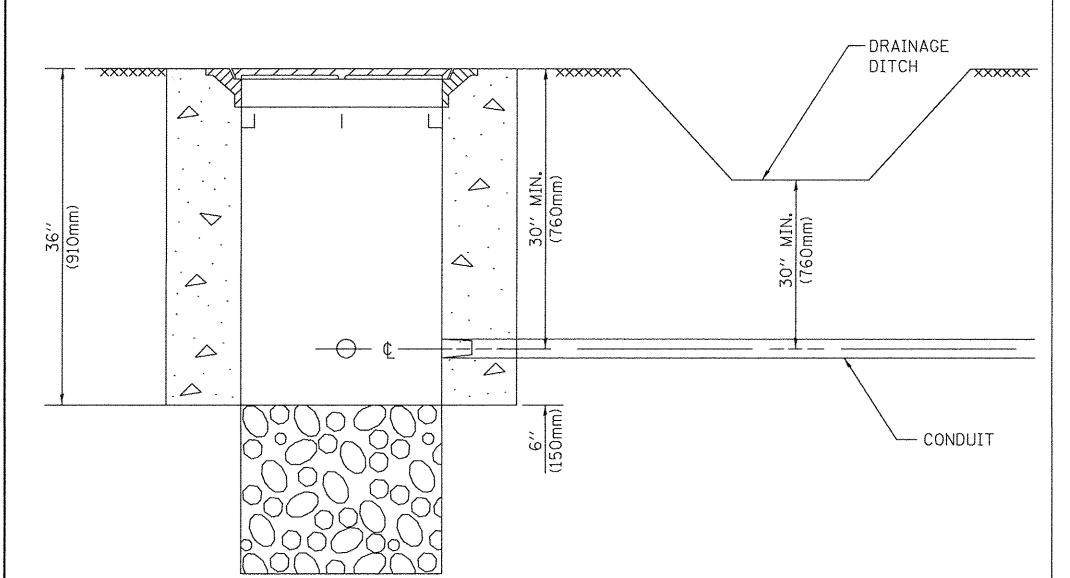
DEPTH OF FOUNDATION

| ① Foundation Depth | Foundation Diameter | Spiral Diameter | Quantity of Rebars | Size of Rebars |
|--------------------------|--|--|---|--|
| 10'-0" (3.0 m) | 30" (750mm) | 24" (600mm) | 8 | 6(19) |
| 13'-6" (4.1 m) | 30" (750mm) | 24" (600mm) | 8 | 6(19) |
| 11'-0'' (3.4 m) | 36" (900mm) | 30" (750mm) | 12 | 7(22) |
| 13'-0'' (4.0 m) | 36" (900mm) | 30" (750mm) | 12 | 7(22) |
| 15'-0" (4.6 m) | 36" (900mm) | 30" (750mm) | 12 | 7(22) |
| 21'-0" (6.4 m) | 42'' (1060mm) | 36" (900mm) | 16 | 8(25) |
| 25′-0′′ (7 . 6 m) | 42" (1060mm) | 36" (900mm) | 16 | 8(25) |
| | 10'-0" (3.0 m) 13'-6" (4.1 m) 11'-0" (3.4 m) 13'-0" (4.0 m) 15'-0" (4.6 m) 21'-0" (6.4 m) | 10'-0" (3.0 m) 30" (750mm) 13'-6" (4.1 m) 30" (750mm) 11'-0" (3.4 m) 36" (900mm) 13'-0" (4.0 m) 36" (900mm) 15'-0" (4.6 m) 36" (900mm) 21'-0" (6.4 m) 42" (1060mm) | Dep111 Didinater Didinater 10'-0" (3.0 m) 30" (750mm) 24" (600mm) 13'-6" (4.1 m) 30" (750mm) 24" (600mm) 11'-0" (3.4 m) 36" (900mm) 30" (750mm) 13'-0" (4.0 m) 36" (900mm) 30" (750mm) 15'-0" (4.6 m) 36" (900mm) 30" (750mm) 21'-0" (6.4 m) 42" (1060mm) 36" (900mm) | Dep 111 Diditioner of the ref Diditioner of the ref Rebdits 10'-0" (3.0 m) 30" (750mm) 24" (600mm) 8 13'-6" (4.1 m) 30" (750mm) 24" (600mm) 8 11'-0" (3.4 m) 36" (900mm) 30" (750mm) 12 13'-0" (4.0 m) 36" (900mm) 30" (750mm) 12 15'-0" (4.6 m) 36" (900mm) 30" (750mm) 12 21'-0" (6.4 m) 42" (1060mm) 36" (900mm) 16 |

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

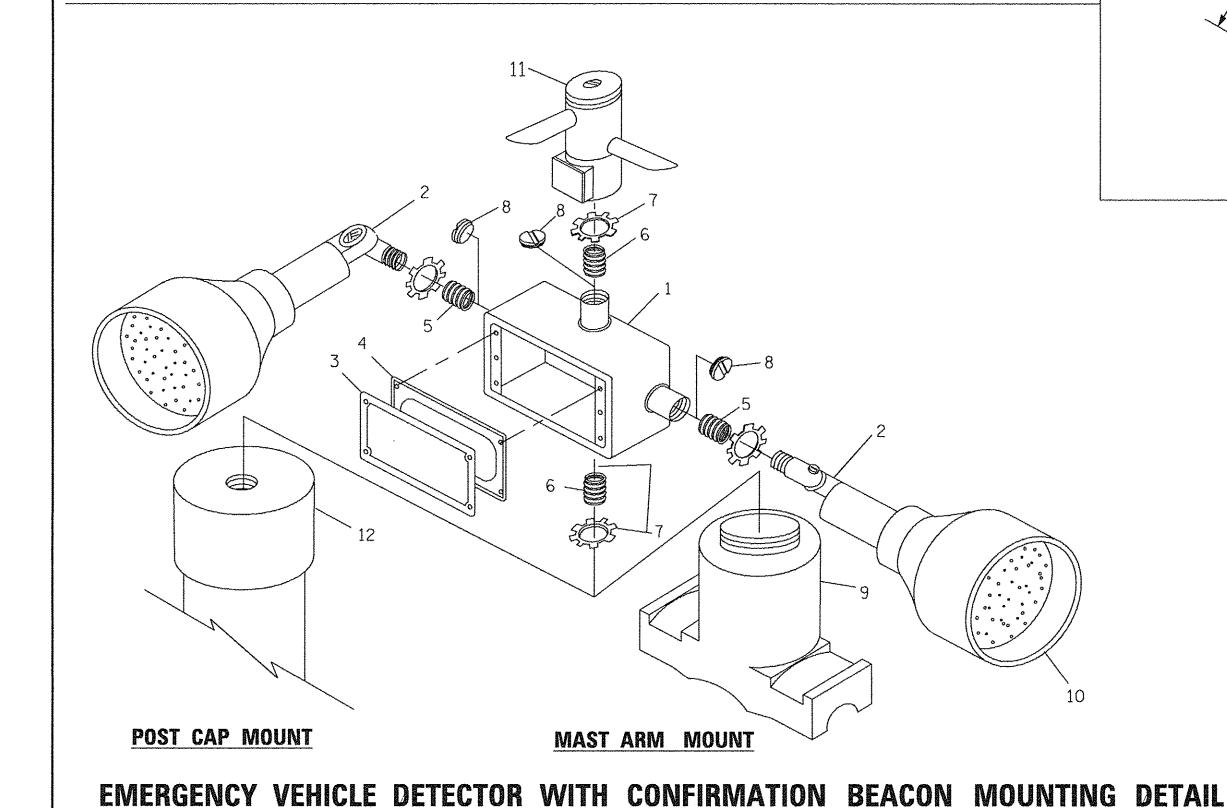
| FILE NAME = 13375_02-SGNL_DTLS-03 - P05 | USER NAME = footemj | DESIGNED — DAG | REVISED — DAG 1-1-14 | | DISTRICT ONE | F.A.P RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|------------------------------|---------------------------|----------------------|------------------------------|--|---------------|------------------------|----------------------|-----------------|--------------|
| | <u></u> | CHECKED — BCK | REVISED — | STATE OF ILLINOIS | STANDARD TRAFFIC SIGNAL DESIGN DETAILS 353 13-13-13-13-13-13-13-13-13-13-13-13-13-1 | | 13-00063-00-CH | COOK | 63 | 22 |
| | PLOT SCALE = 50.0000 ' / in. | DRAWN — DAD | REVISED — | DEPARTMENT OF TRANSPORTATION | | | TS-05 | CONTRAC | T NO. 61C1 | ,11 |
| | PLOT DATE = 1/13/2014 | CHECKED — 10-28-09 | REVISED — | | SCALE: NONE SHEET NO. 5 OF 7 SHEETS STA. TO STA. | FED. ROAD I | DIST. NO. 1 ILLINOIS F | FED. AID PROJECT M-4 | +003(216) | |

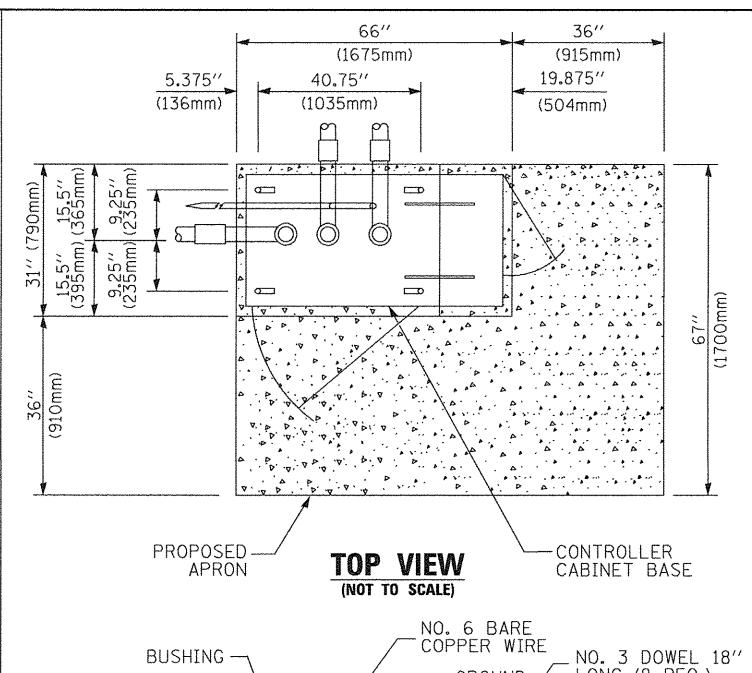


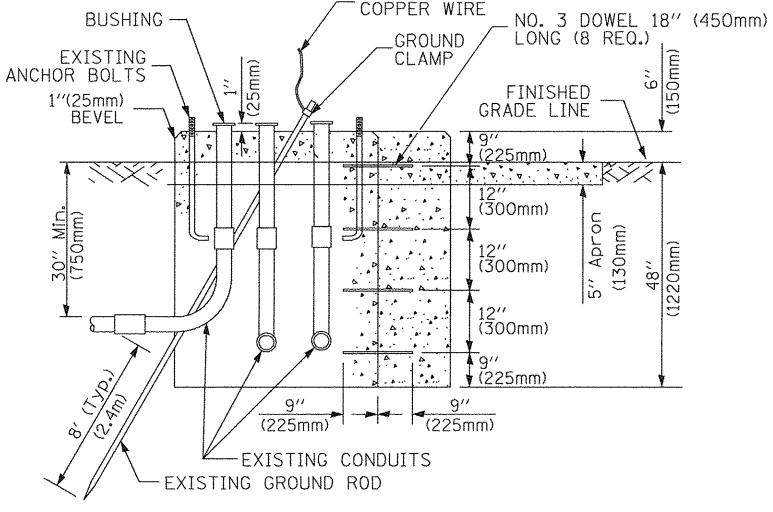
NOTES:

- 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)







MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)

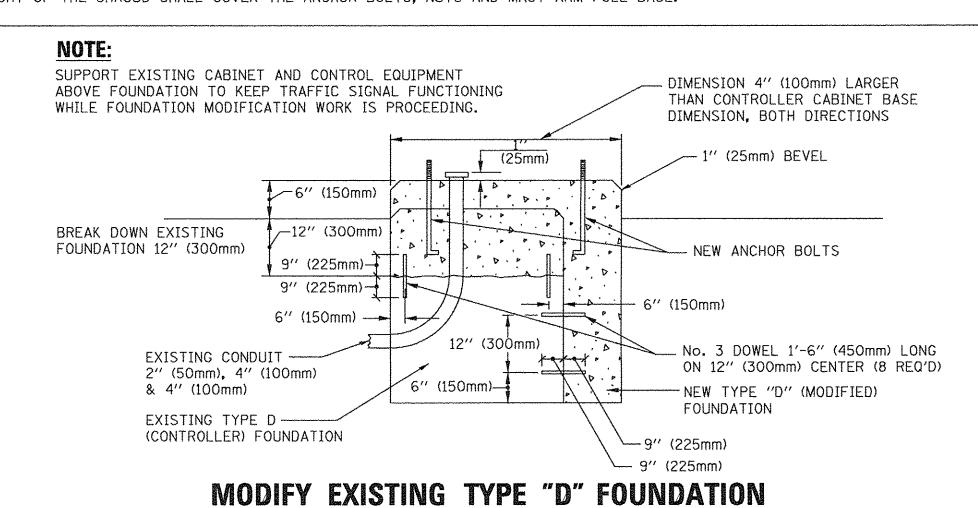
R2.95" (75mm) B-B R2.16" (55mm) R11.81" (300mm) DRAIN PORT (300mm) 0.25" (6mm) 0.25" (6mm) DRAIN PORT (300mm) 0.25" (6mm) 0.25" (6mm) 0.25" (6mm) ATERIAL: - ASTM A36 STEEL - ASTM A-123 HOT DIPPED GALVANIZED

| | | · · | | <u> </u> |
|--------|------------------------|--------------|--------------------------|-----------------|
| Α | В | С | 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 VERIFIED 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.



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

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

12 POST CAP [18 FT. (5.4 m) POST MIN.]

11 DETECTOR UNIT

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.

CONDUIT BUSHING B" MID COODUIT TO BE REMOVED CONDUIT TO REMAIN EXISTING CONDUIT TO REMAIN EXISTING CONDUIT TO REMAIN PLAN

NOTES:

SCALE: NONE

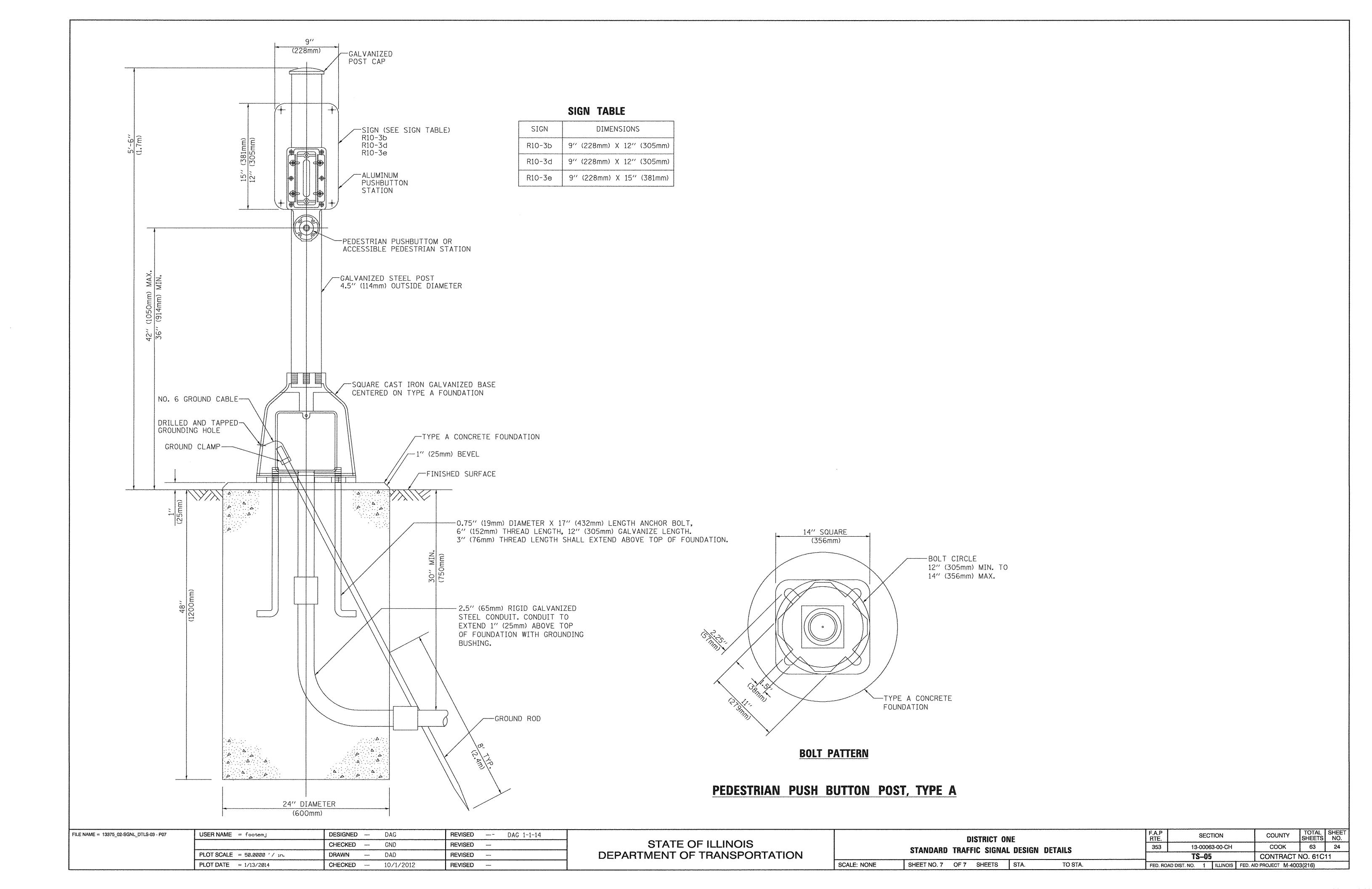
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

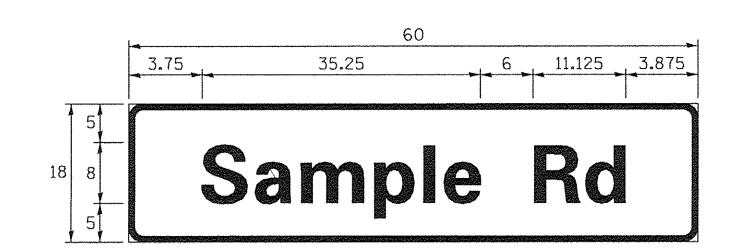
| FILE NAME = 13375_02-SGNL_DTLS-03 - P06 | USER NAME = footemj | DESIGNED — DAD | REVISED — DAG 1-1-14 |
|---|------------------------------|---------------------------|----------------------|
| | | CHECKED BCK | REVISED — |
| | PLOT SCALE = 50.0000 ' / 1n. | DRAWN — DAD | REVISED — |
| | PLOT DATE = 1/13/2014 | CHECKED — 10-28-09 | REVISED — |

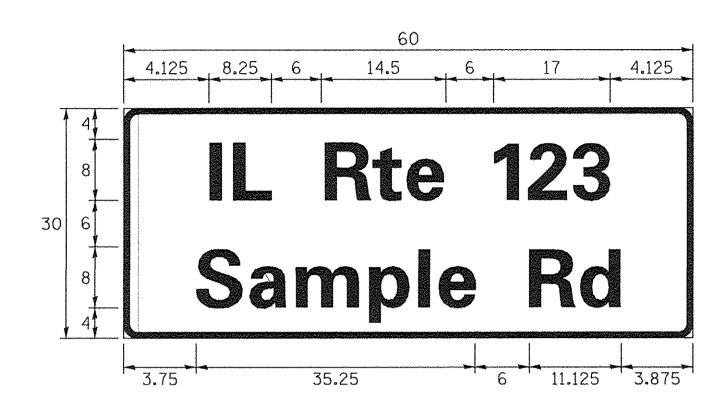
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

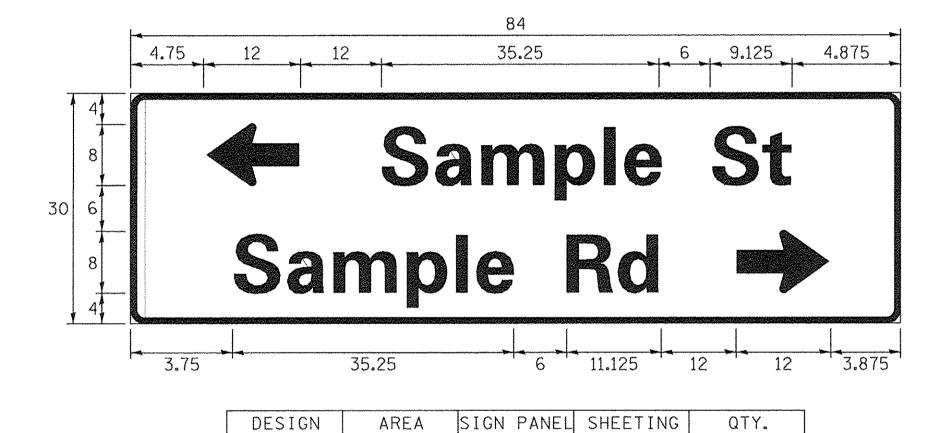
| DISTRICT ONE | | F | F.A.P SECTION 353 13-00063-00-CH | | | COUNTY TOTAL SHEETS | | SHEET NO. | | | |
|---|-------------|------|----------------------------------|---|---|---------------------|--|--------------|----------|---------|----|
| STANDARD TRAFFIC SIGNAL DESIGN DETAILS | | | | | | | | COOK | 63 | 23 | |
| 21MINNAUD INALLIC SIGNAF DESIGN DEIMITS | | | | × · · · · · · · · · · · · · · · · · · · | TS- | 05 | | | CONTRACT | NO. 61C | 11 |
| SHEET NO. 6 | OF 7 SHEETS | STA. | TO STA. | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216) | | | | | | |



SIGN PANEL - TYPE 1 OR TYPE 2







SERIES

D OR C

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

TYPE

1 OR 2

(SQ FT)

TYPE

ZZ

REQUIRED

| | | WITTI | (TNC!!) | |
|---|---|--------------|------------|--|
| NAME | ABBREVATION | WIDTH (INCH) | | |
| 4.4.4.1.4.1.4.1.4.1.4.1.4.1.4.1.4.1.4.1 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | SERIES "C" | SERIES "D" | |
| AVENUE | Ave | 15.000 | 18.250 | |
| BOULEVARD | Blvd | 17. 125 | 20.000 | |
| CIRCLE | CIr | 11.125 | 13.000 | |
| COURT | C† | 8. 250 | 9.625 | |
| DRIVE | Dr | 8. 625 | 10.125 | |
| HIGHWAY | Hwy | 18.375 | 22.000 | |
| ILLINOIS | IL | 7.000 | 8. 250 | |
| LANE | Ln | 9. 125 | 10.750 | |
| PARKWAY | Pkwy | 23. 375 | 27. 375 | |
| PLACE | PI | 7. 125 | 7. 750 | |
| ROAD | Rd | 9. 625 | 11.125 | |
| ROUTE | Rte | 12.625 | 14.500 | |
| STREET | S† | 8.000 | 9.125 | |
| TERRACE | Ter | 12.625 | 14.625 | |
| TRAIL | Tr | 7. 750 | 9.125 | |
| UNITED STATES | US | 10.375 | 12.250 | |

GENERAL NOTES

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" × 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUX OF 8'-O" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-O" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-O" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THERE IS SPACE AVAILABLE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

| LOCAL SUPPLIERS: | PARTS LISTING: |
|------------------|----------------|
|------------------|----------------|

- J.O. HERBERT COMPANY, INC SIGN C SIGN S

- WESTERN REMAC, INC.

WOODRIDGE, IL

SIGN CHANNEL SIGN SCREWS

BRACKETS

PART #HPN053 (MED. CHANNEL)

1/4" × 14 × 1" H.W.H. #3

SELF TAPPING WITH NEOPRENE WASHER

PART #HPN034 (UNIVERSAL)

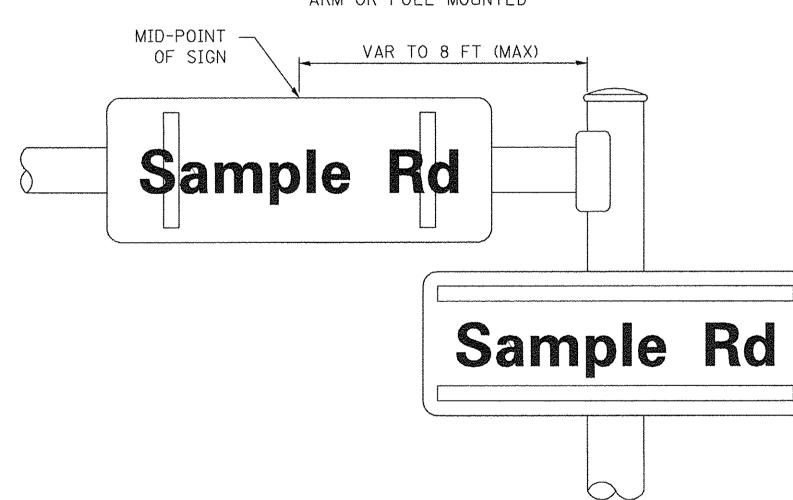
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND

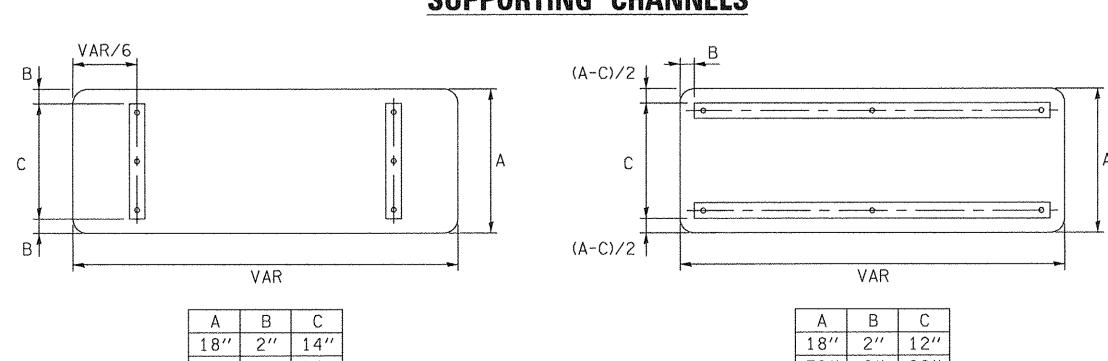
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

ARM OR POLE MOUNTED



SUPPORTING CHANNELS



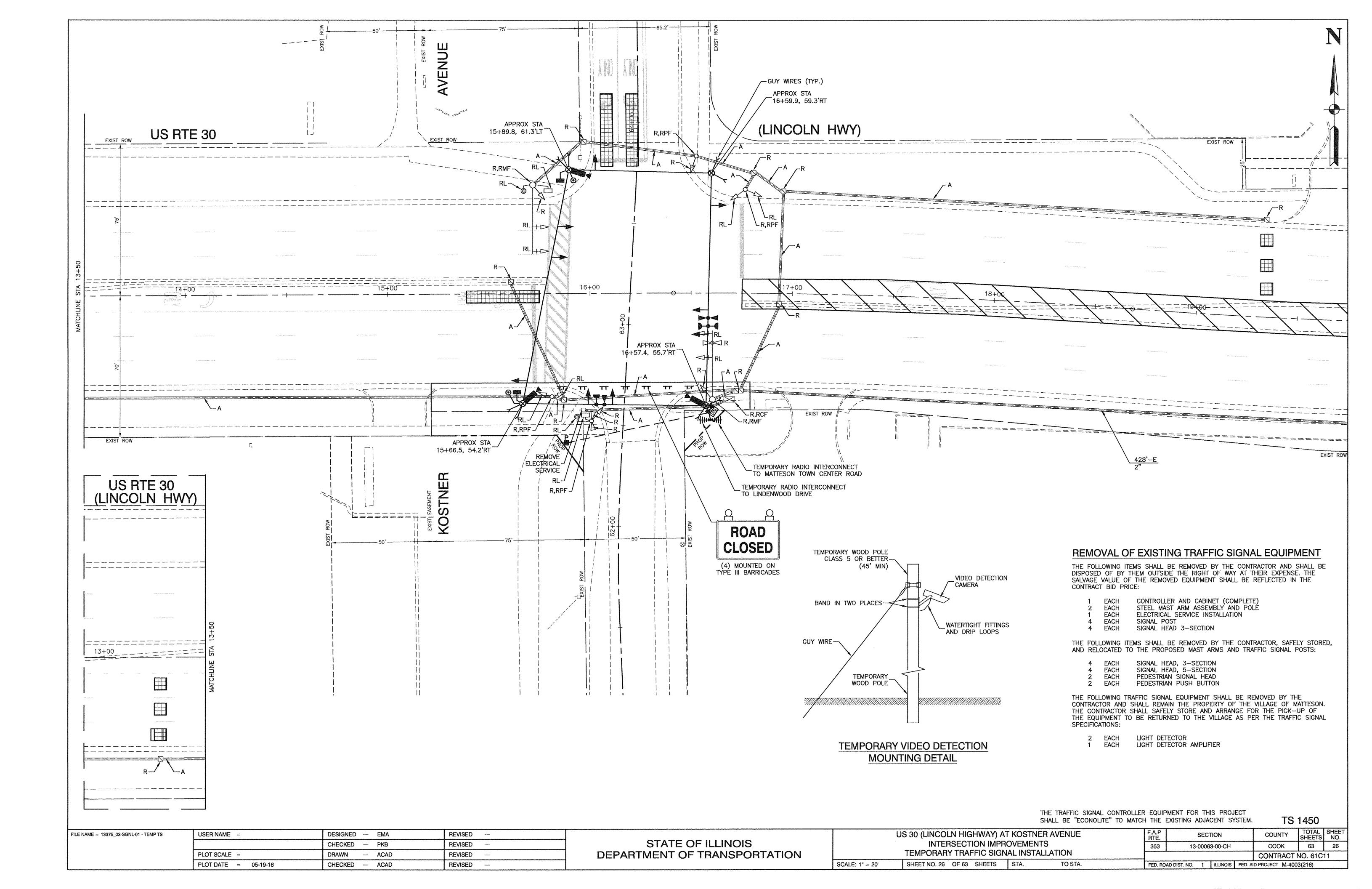
STANDARD ALPHABETS SPACING CHART

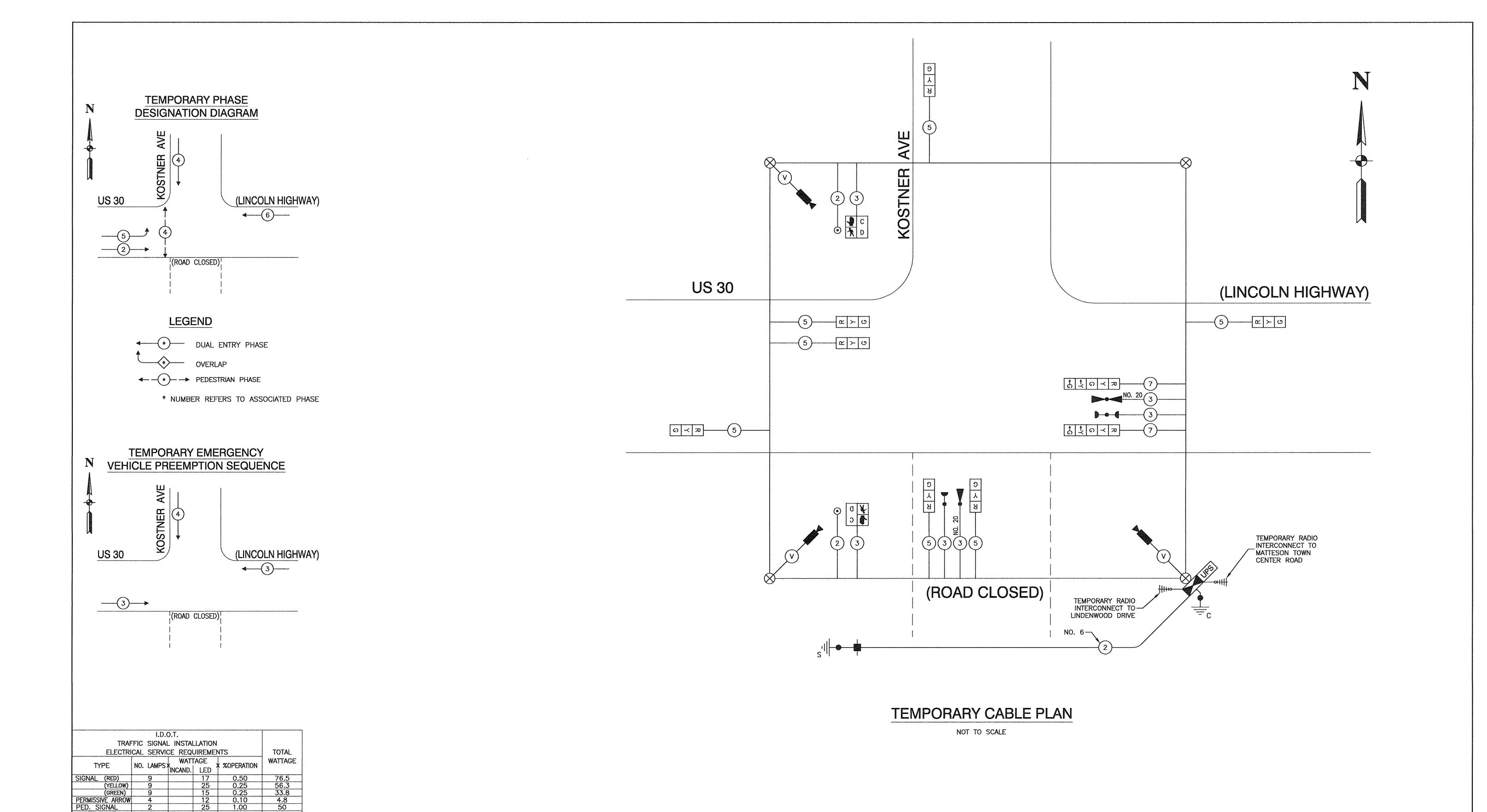
(8") UPPER CASE AND (6") LOWER CASE

| | FHWA SEF | | T | FHWA SERIES "D" | | | | | |
|---------------|---------------------------|------------------|----------------------------|-----------------|---|------------------|----------------------------|--|--|
| CHARACTER | LEFT SPACING (INCH) | WIDTH (INCH) | RIGHT SPACING (INCH) | CHARACTER | LEFT SPACING (INCH) | WIDTH (INCH) | RIGHT SPACING (INCH) | | |
| Α | 0.240 | 5.122 | 0.240 | Α | 0.240 | 6.804 | 0.240 | | |
| В | 0.880 | 4.482 | 0.480 | В | 0.960 | 5.446 | 0.400 | | |
| С | 0.720 | 4.482 | 0.720 | С | 0.800 | 5.446 | 0.800 | | |
| <u>D</u> | 0.880 | 4.482 | 0.720 | D | 0.960 | 5.446 | 0.800 | | |
| E | 0.880 | 4.082 4.082 | 0.480 | E | 0.960 0.960 | 4. 962 4. 962 | 0.400 | | |
| G | 0.880 0.720 | 4. 482 | 0.240 | G | 0.800 | 5.446 | 0.800 | | |
| <u></u> Н | 0. 880 | 4. 482 | 0. 720 | Н | 0.960 | 5.446 | 0.960 | | |
| Ī | 0.880 | 1.120 | 0.880 | I | 0.960 | 1.280 | 0.960 | | |
| J | 0.240 | 4.082 | 0.880 | J | 0.240 | 5.122 | 0.960 | | |
| K | 0.880 | 4.482 | 0.480 | К | 0.960 | 5.604 | 0.400 | | |
| L | 0.880 | 4.082 | 0.240 | L | 0.960 | 4.962 | 0.240 | | |
| M | 0.880 | 5. 284 | 0.880 | M | 0.960 | 6. 244 | 0.960 | | |
| N | 0.880 | 4.482 | 0.880 | N | 0.960 | 5.446 | 0.960 | | |
| 0 P | 0.720 | 4.722 | 0.720 | 0 P | 0.800 | 5.684 | 0.800 | | |
| Q | 0,880 0.720 | 4. 482 4. 722 | 0.720 | Q | 0.960 0.800 | 5.446 5.684 | 0. 240 | | |
| R | 0. 720 | 4. 482 | 0. 480 | R | 0.960 | 5.446 | 0. 400 | | |
| S | 0.480 | 4.482 | 0.480 | S | 0.400 | 5.446 | 0.400 | | |
| T | 0. 240 | 4.082 | 0.240 | T | 0.240 | 4.962 | 0.240 | | |
| U | 0.880 | 4.482 | 0.880 | U | 0.960 | 5.446 | 0.960 | | |
| V | 0.240 | 4.962 | 0.240 | V | 0.240 | 6.084 | 0.240 | | |
| W | 0.240 | 6. 084 | 0.240 | W | 0.240 | 7. 124 | 0.240 | | |
| X | 0.240 | 4. 722 | 0, 240 | X | 0.400 | 5. 446 | 0.400 | | |
| Y | 0.240 | 5.122 | 0.240 | Y | 0.240 | 6.884 | 0.240 | | |
| Z | 0.480 | 4.482 | 0.480 | Z | 0.400 | 5. 446 4. 562 | 0.400 | | |
| a b | 0.320 0.720 | 3.842 4.082 | 0.480 | Ь | 0.800 | 4.802 | 0.480 | | |
| C | 0.480 | 4.002 | 0. 240 | G | 0.480 | 4. 722 | 0.240 | | |
| d | 0.480 | 4.082 | 0.720 | d | 0.480 | 4.802 | 0.800 | | |
| е | 0.480 | 4.082 | 0.320 | е | 0.480 | 4.722 | 0.320 | | |
| f | 0.320 | 2.480 | 0.160 | f | 0.320 | 2.882 | 0.160 | | |
| g | 0.480 | 4.082 | 0.720 | g | 0.480 | 4.802 | 0.800 | | |
| <u>h</u> | 0.720 | 4.082 | 0.640 | h | 0.800 | 4.722 | 0.720 | | |
| | 0.720 | 1. 120 | 0.720 | | 0.800 | 1. 280 | 0.800 | | |
| <u> </u> | 0.000 0.720 | 2. 320 4. 322 | 0.720 | l J K | 0.000 0.800 | 2.642 5.122 | 0.800 | | |
| <u> </u> | 0.720 | 1. 120 | 0. 720 | 1 | 0.800 | 1. 280 | 0.800 | | |
| m | 0.720 | 6. 724 | 0.640 | m | 0.800 | 7. 926 | 0.720 | | |
| n | 0.720 | 4.082 | 0.640 | n | 0.800 | 4.722 | 0.720 | | |
| 0 | 0.480 | 4.082 | 0.480 | 0 | 0.480 | 4.882 | 0.480 | | |
| Р | 0.720 | 4.082 | 0.480 | р | 0.800 | 4.802 | 0.480 | | |
| q | 0.480 | 4.082 | 0.720 | q | 0.480 | 4.802 | 0.800 | | |
| <u> </u> | 0.720 | 2.642 | 0.160 | r | 0.800 | 3.042 | 0.160 | | |
| S | 0.320 | 3. 362 | 0.240 | s | 0.320 | 3. 762 3. 202 | 0. 240 | | |
| + | 0.080 0.640 | 2.882 4.082 | 0.080 | U | 0.080 0.720 | 4. 722 | 0.800 | | |
| u V | 0.160 | 4. 722 | 0. 160 | V | 0.160 | 5. 684 | 0.160 | | |
| W | 0.160 | 7. 524 | 0.160 | W | 0. 160 | 9, 046 | 0.160 | | |
| × | 0.000 | 5, 202 | 0.000 | × | 0.000 | 6. 244 | 0.000 | | |
| У | 0.160 | 4.962 | 0.160 | У | 0.160 | 6.004 | 0.160 | | |
| Z | 0.240 | 3. 362 | 0.240 | Z | 0.240 | 4.002 | 0.240 | | |
| 1 | 0.720 | 1.680 | 0.880 | 1 | 0.800 | 2.000 | 0.960 | | |
| 2 | 0.480 | 4.482 | 0.480 | 2 | 0.800 | 5.446 | 0.800 | | |
| 3 | 0.480 | 4. 482 | 0.480 | 3 | 1.440 | 5.446 | 0,800 | | |
| <u>4</u> 5 | 0.240 | 4. 962 4. 482 | 0.720 0.480 | 5 | 0.160 0.800 | 6. 004 5. 446 | 0.960 | | |
| 5 6 | 0.480 | 4.482 | 0. 720 | 6 | 0.800 | 5.446 | 0.800 | | |
| | 0.720 | 4. 482 | 0.720 | 7 | 0.560 | 5.446 | 0.560 | | |
| 8 | 0.480 | 4.482 | 0.480 | 8 | 0.800 | 5.446 | 0.800 | | |
| 9 | 0.480 | 4. 482 | 0,480 | 9 | 0.800 | 5.446 | 0.800 | | |
| 0 | 0.720 | 4.722 | 0.720 | 0 | 0.800 | 5.684 | 0.800 | | |
| · | 0.240 | 2.802 | 0.240 | - | 0.240 | 2.802 | 0.240 | | |
| | | | | 1 | *************************************** | | | | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | F.A.P RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEE NO. |
|--|---------------|-----------------------------|-------------------|-----------------|-------------|
| MAST ARM MOUNTED STREET NAME SIGNS | 353 | 13-00063-00-CH | соок | 53 | 25 |
| IAIWO IAIOOMIED SIVEEL IAWATE SIGIAS | | TS-02 | CONTRACT | NO. 61C | 11 |
| SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA, | FED. RO | AD DIST. NO. 1 ILLINOIS FED | AID PROJECT M-400 | 3(216) | |





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

TS 1450

| FILE NAME = 13375_02-SGNL_CBLE-01 - IDOT P01 | USER NAME = | DESIGNED — EMA | REVISED — |
|--|----------------------|----------------|-----------|
| | | CHECKED — PKB | REVISED — |
| | PLOT SCALE = | DRAWN — JJB | REVISED — |
| | PLOT DATE = 05-19-16 | CHECKED — APG | REVISED — |

TOTAL = 371.3

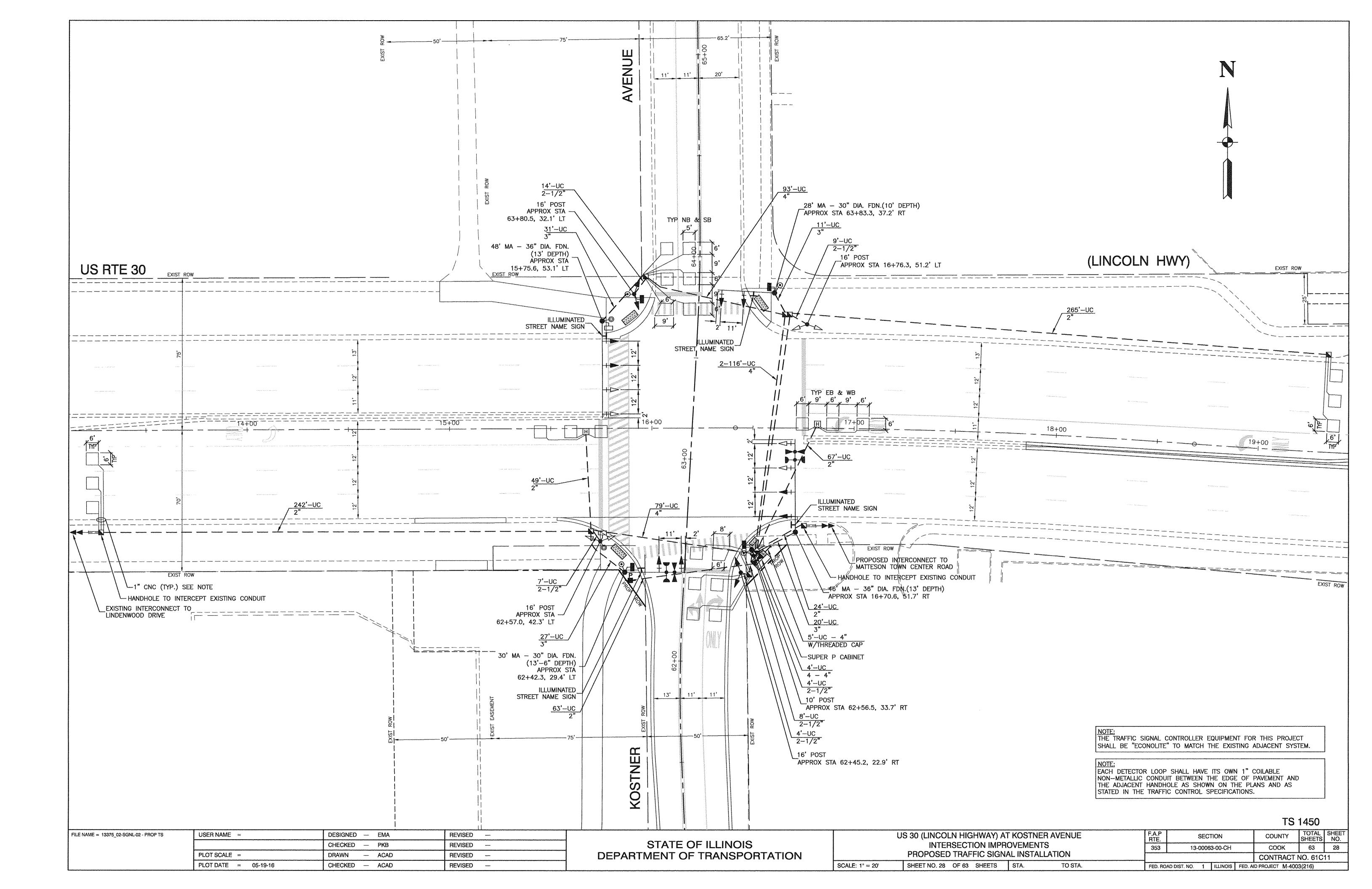
CONTACT: LASHAWN LAO
PHONE: (708)235-2346
COMPANY: COMMONWEALTH EDISON

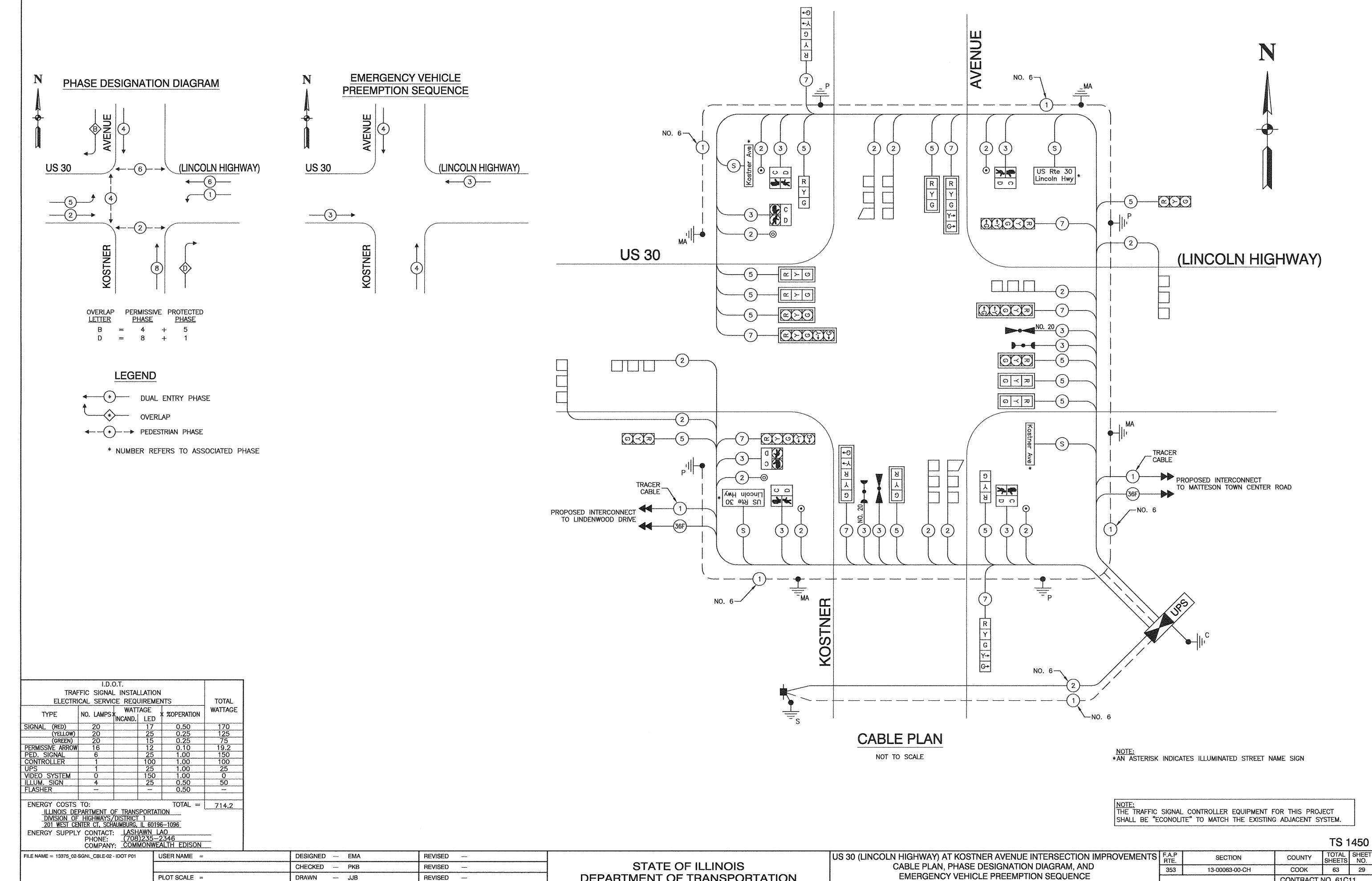
ENERGY COSTS TO:

ENERGY SUPPLY CONTACT:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

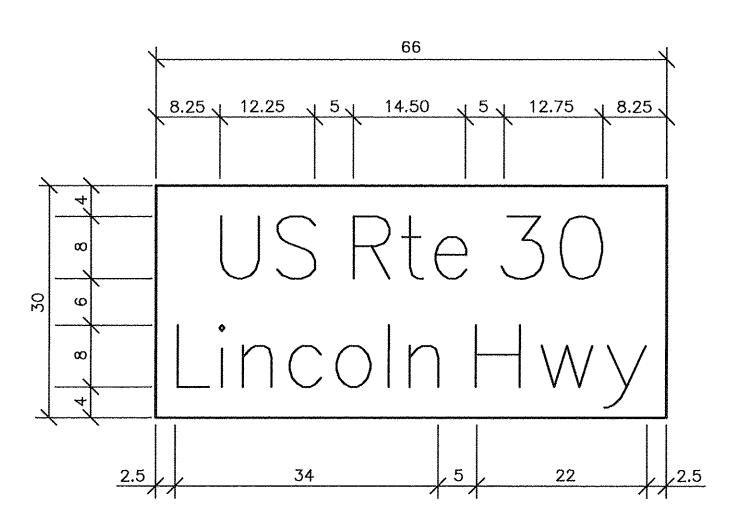
| US 30 (LINCOLN H | IIGHWAY) AT KOST | NER AVEN | IUE INTER | RSECTION IMPROVEMENTS | F.A.P RTE. |
|--|--------------------|----------|-----------|-----------------------|---------------|
| TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND | | 353 | | | |
| EMERGENCY VEHICLE PREEMPTION SEQUENCE | | | | | |
| SCALE: | SHEET NO. 27 OF 63 | SHEETS | STA. | TO STA. | FED. RO |



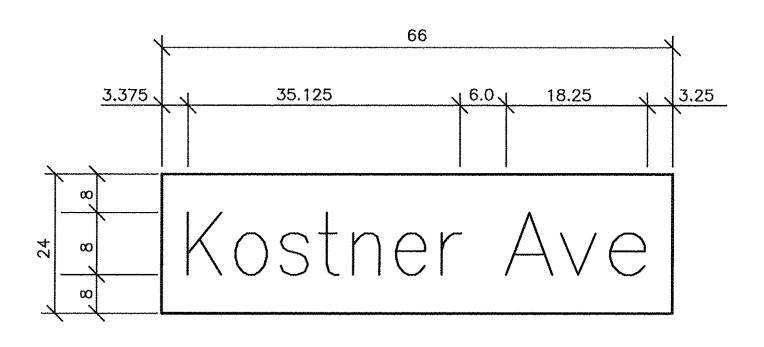


EMERGENCY VEHICLE PREEMPTION SEQUENCE DEPARTMENT OF TRANSPORTATION PLOT SCALE = - JJB REVISED CONTRACT NO. 61C11 SHEET NO. 29 OF 63 SHEETS STA. PLOT DATE = 05-19-16 REVISED -SCALE: CHECKED — APG FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216)

SIGN PANEL LED INTERNALLY ILLUMINATED STREET NAME SIGN



| DESIGN SERIES | AREA | SHEETING | QTY. REQUIRED |
|------------------|------|----------|------------------|
| " ' ' | 1 | ZZ | 2 |



| *************************************** | D | 8.25 | ZZ | 2 |
|---|--------|---------|----------|----------|
| | SERIES | (SQ FT) | TYPE | REQUIRED |
| - | DESIGN | AREA | SHEETING | QTY. |

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION SEE
DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS DETAIL,
AND ILLUMINATED STREET NAME SIGN MOUNTING DETAIL.

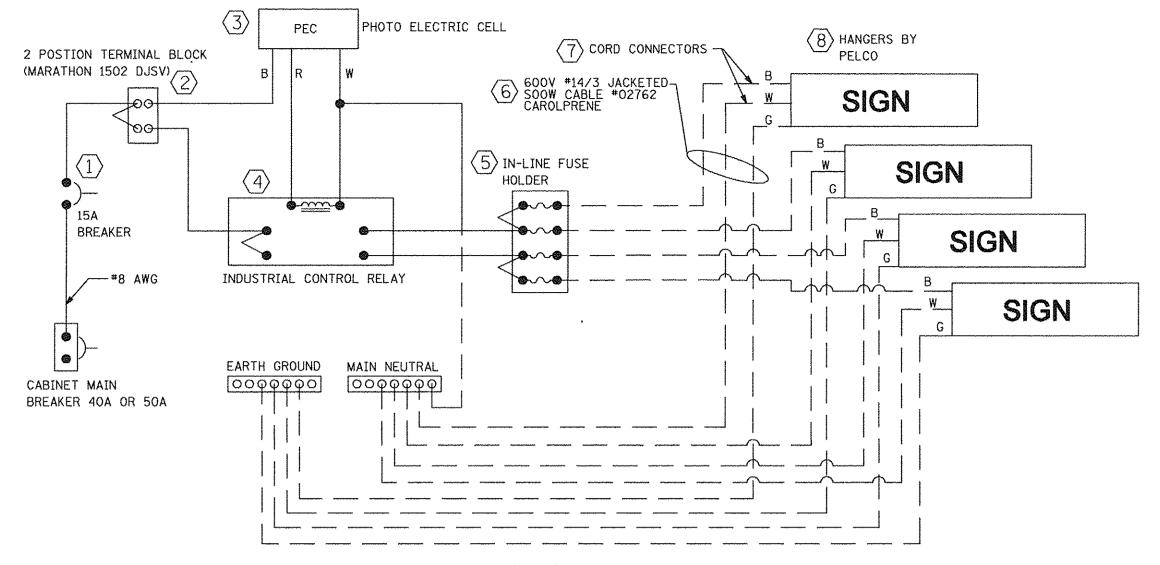
SCHEDULE OF QUANTITIES

| UNITS | TOTAL QTY |
|-------------|---|
| EACH | |
| FOOT | 71 |
| FOOT | 4 |
| FOOT | 9 |
| FOOT | 43 |
| EACH | |
| EACH | |
| EACH | - |
| FOOT | 108 |
| FOOT | 142 |
| FOOT | 235 |
| FOOT | 152 |
| FOOT | 165 |
| FOOT | 9 |
| FOOT | 62 |
| EACH | |
| | |
| | 2 |
| | |
| | 2. |
| | 20 |
| | |
| | |
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| | |
| | |
| | 1 |
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| | 870 |
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| | 4 |
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| | |
| | |
| | |
| | |
| | |
| | 200 |
| FOOT | 30: |
| | EACH FOOT FOOT FOOT EACH EACH EACH FOOT FOOT FOOT FOOT FOOT FOOT FOOT EACH EACH EACH EACH EACH EACH EACH EACH |

TS 1450

| FILE NAME = 13375_02-SGNL_DTLS-01 - IDOT P01 | USER NAME = | DESIGNED — EMA | REVISED — |
|--|----------------------|----------------|-----------|
| | | CHECKED — PKB | REVISED — |
| | PLOT SCALE = | DRAWN — JJB | REVISED — |
| | PLOT DATE ≈ 05-19-16 | CHECKED — APG | REVISED — |

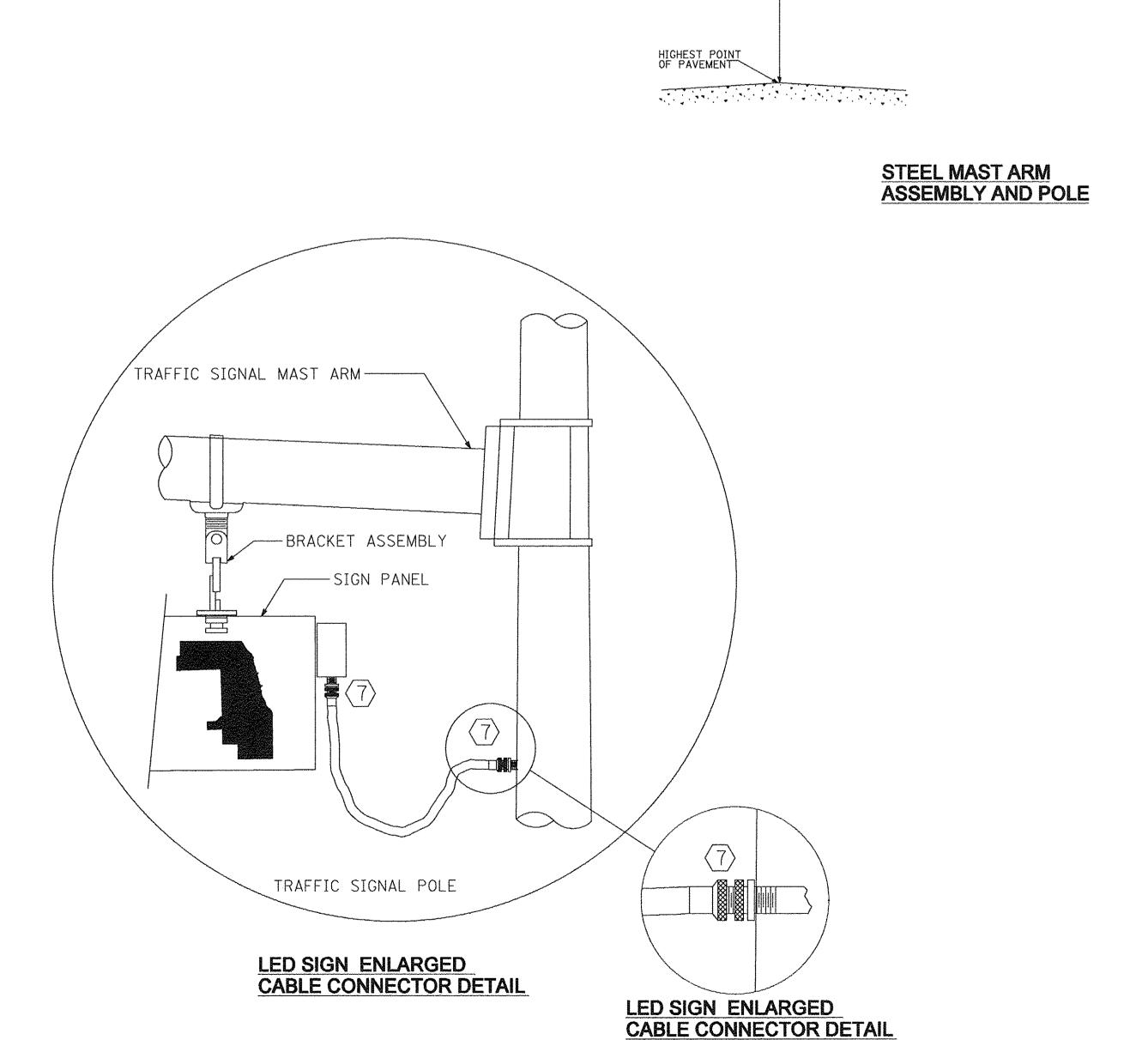
SCALE:



LED SIGN WIRING DETAIL

| DESCRIPTION | MANUFACTURER | MODEL | NOTES |
|--|------------------|---------------------|-----------------------------|
| 1. CIRCUIT BREAKER | | 15 AMPERE | |
| 2. TERMINAL BLOCK | MARATHON | 1502 DJSV | |
| 3. PHOTO ELECTRIC CONTROL | FISHER PIERCE | B124-1.5-07762 | |
| 4. CONTRACTOR (INDUSTRIAL CONTROL RELAY) | SQUARE D | 8501X020V02 | BOLT ON W/SCREW TERMINAL |
| 5. INLINE FUSE HOLDER WITH 5 AMP FUSE | BUSSMANN | S-8000 BK/S-8-3-4-R | |
| 6. ELECTRIC CABLE, No. 14, 3/C (BLACK, WHITE, GREEN) | CAROLPRENE /SOOW | 02762 | |
| (7.) CORD/CABLE CONNECTOR | APPLETON | CG5050S (STEEL) | |
| (8.) SIGN MOUNTING HARDWARE | PELCO | SE-5015 | |
| | | | |

| | | FRACKET, FREE-SWINGING MAST ARM SIGN SE-5015 W BAND MXXNT MINI-BRAC | j |
|---|--|--|---|
| | M45 | AB-O121 CLAWP KIT 13 INTERNALLY SIGN | |
| أممم | 0 | BAND LENGTH: 26° FITS 4°-8° POLE DIA 42° FITS 4°-12° POLE DIA 42° FITS 4°-12° POLE DIA STAINLESS UPGRADE (SEE NO | OTE) |
| | 0 | 28" FITS 4"-8" POLE DIA. 42" FITS 4"-12" POLE DIA. | OTE) |
| EM. | PART NO. | ## POLE DIA ## PO | QTY |
| 1 | PART NO. FS-3205-SS | ## POLE DIA ## PO | 0TY 2 |
| 1 2 | PART NO. FS-3205-SS AB-0266-M1 | ### AP - STAINLESS UPGRADE SHALL INCLUDE: AP - 303 - SS CLAMP SCREW NOT SE 3123 - SS CHARDAWRE KIT FS 6000 - SS CLEWS FIN PAINT DESCRIPTION SCREW, SET SQ HD 14" - 20 × 5/8", STAINLESS CLAMP, MINI - BRAC BAND MOUNT, 11/2" NPS, ALUM | 01Y 2 2 |
| 1 2 3 | PART NO. FS-3205-SS AB-0266-M1 FS-5201-ZN1 | 20° FITS 4"-8" POLE DIA. 42° FITS 4"-12" POLE DIA. STAINLESS LIPGRADE (SEE N. PAINT DESCRIPTION SCREW, SET SQ HD ¼"-20 x 5/6", STAINLESS CLAMP, MINI-BRAC BAND MOUNT, 1½" NPS, ALUM PIN, GROOVE 3/16" x 1¼", ZINC1 | QIY 2 2 2 |
| 1 2 3 4 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS | AD-0303-SS CLAMP SCREW NIT STAINLESS UPGRADE (SEE N. STAINLESS UPGRADE (SEE N. PAINT) DESCRIPTION SCREW, SET SQ HD ¼"-20 x 5/8", STAINLESS CLAMP, MINI-BRAC BAND MOUNT, 1½" NPS, ALUM PIN, GROOVE 3/16" x 1¼", ZINC1 CLAMP, BAND 5/8", STAINLESS | OTY 2 2 2 2 2 |
| 1 2 3 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L | 26' FITS 4"-8" POLE DIA. 42' FITS 4"-12" POLE DIA. 42' FITS 4"-12" POLE DIA. 42' FITS 4"-12" POLE DIA. STAINLESS UPGRADE (SEE N. PAINT DESCRIPTION SCREW, SET SQ HD ¼"-20 x 5/8", STAINLESS CLAMP, MINI-BRAC BAND MOUNT, 1½" NPS, ALUM PIN, GROOVE 3/16" x 1¼", ZINC1 CLAMP, BAND 5/8", STAINLESS BAND, 5/8", STAINLESS | QIY 2 2 2 |
| 1 2 3 4 5 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS | AD-0303-SS CLAMP SCREW NIT STAINLESS UPGRADE (SEE N. STAINLESS UPGRADE (SEE N. PAINT) DESCRIPTION SCREW, SET SQ HD ¼"-20 x 5/8", STAINLESS CLAMP, MINI-BRAC BAND MOUNT, 1½" NPS, ALUM PIN, GROOVE 3/16" x 1¼", ZINC1 CLAMP, BAND 5/8", STAINLESS | OIY 2 2 2 2 2 2 2 |
| 1 2 3 4 5 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS | ### Pole Dia. ### Po | 2 2 2 2 2 2 2 2 |
| 1 2 3 4 5 6 7 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV | ### Pole Dia. ### STAINLESS UPGRADE (SEE N.) PAINT **DESCRIPTION **SCREW, SET SQ HD ¼"-20 x 5/6", STAINLESS **CLAMP, MINI—BRAC BAND MOUNT, 1½" NPS, ALUM PIN, GROOVE 3/16" x 1¼", ZINC1 **CLAMP, BAND 5/8", STAINLESS #### Band | 2 2 2 2 2 2 2 2 2 2 |
| 1 2 3 4 5 6 7 8 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV SE-0371-M1 | ADDITION SCREW, SET SQ HD ¼"-20 x 5/8", STAINLESS CLAMP, MINI-BRAC BAND MOUNT, 1½" NPS, ALUM PIN, GROOVE 3/16" x 1¼", ZINC1 CLAMP, BAND 5/8", STAINLESS BAND, 5/8", STAINLESS SCREW, SET SOC HD 5/16"-18, STAINLESS KIT, CLAMP SCREW FOR MINI-BRAC, GALV ADAPTER, SPAN WIRE, DIE CAST ALUM W/ SS INSERT | 2 2 2 2 2 2 2 2 2 2 2 |
| 1 2 3 4 5 6 7 8 9 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV SE-0371-M1 SE-0464-M2 FS-1001-SS FS-4201-SS | ### AP STAINLESS UPGRADE SHALL INCLUDE: ### AP - 0303-SS CLAMP SCREW INT ### SE-\$123-9S HARDAWRE NIT ### PAINT ### DESCRIPTION SCREW, SET SQ HD ¼"-20 x 5/8", STAINLESS CLAMP, MINI-BRAC BAND MOUNT, 1½" NPS, ALUM PIN, GROOVE 3/16" x 1¼", ZINC1 CLAMP, BAND 5/8", STAINLESS BAND, 5/8", STAINLESS SCREW, SET SOC HD 5/16"-18, STAINLESS KIT, CLAMP SCREW FOR MINI-BRAC, GALV ADAPTER, SPAN WIRE, DIE CAST ALUM W/ STAINLESS NUT, HEX HD 5/16", STAINLESS WASHER, SPLIT LOCK, 5/16", STAINLESS WASHER, SPLIT LOCK, 5/16", STAINLESS WASHER, SPLIT LOCK, 5/16", STAINLESS | 2 2 2 2 2 2 2 2 2 2 2 2 8 |
| 1 2 3 4 5 6 7 8 9 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV SE-0371-M1 SE-0464-M2 FS-1001-SS FS-4201-SS SE-0508-M2 | ### AP STAINLESS UPGRADE SHALL INCLUDE AP GRADE (SEE IN AP GRADE) ### AP GRADE STAINLESS UPGRADE (SEE IN PAINT) ### AP GRADE STAINLESS UPGRADE (SEE IN PAINT) ### AP GRADE STAINLESS UPGRADE (SEE IN PAINT) ### AP GRADE STAINLESS ### AP GRADE S | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
| 1 2 3 4 5 6 7 8 9 10 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV SE-0371-M1 SE-0464-M2 FS-1001-SS FS-4201-SS SE-0508-M2 SE-0507-11 | ## POLE DIA. ## PROPOSE STANLESS UPGRADE SHALL INCLUDE: ## POLE DIA. ## PROPOSE STANLESS UPGRADE (SEE N. PAINT ## POLE DIA. ## PROPOSE STANLESS UPGRADE (SEE N. PAINT) ## PAINT DESCRIPTION | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
| 1 2 3 4 5 6 7 8 9 10 11 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV SE-0371-M1 SE-0464-M2 FS-1001-S9 FS-4201-SS SE-0508-M2 SE-0507-11 SE-0512-M1 | **MOTE STANLESS UPGRADE SHALL INCLUDE AB-0303-SS CLAMP SCREW NOT SE-5123-SS HAPDAWRE KIT FS-6000-SS CLEMS RN **DESCRIPTION **SCREW, SET SQ HD ¼"-20 x 5/8", STAINLESS **CLAMP, MINI-BRAC BAND MOUNT, 1½" NPS, ALUM PIN, GROOVE 3/16" x 1¼", ZINC1 **CLAMP, BAND 5/8", STAINLESS **SCREW, SET SOC HD 5/16"-18, STAINLESS **SCREW, SET SOC HD 5/16"-18, STAINLESS **SCREW, SET SOC HD 5/16"-18, STAINLESS **KIT, CLAMP SCREW FOR MINI-BRAC, GALV **ADAPTER, SPAN WIRE, DIE CAST ALUM W/ SS INSERT **CLEVIS-CLEVIS, ½" x ½", ALUM W/ STAINLESS BUSHINGS **NUT, HEX HD 5/16", STAINLESS **WASHER, SPLIT LOCK, 5/16", STAINLESS **EXTENDER CONNECTOR HANGER, ALUM W/ STAINLESS BUSHING EXTENDER, 11" **HANCER, TRI-STUD, ALUM | 2 2 2 2 2 2 2 2 2 2 2 8 8 8 8 2 2 |
| 1 2 3 4 5 6 7 8 9 10 11 12 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV SE-0371-M1 SE-0464-M2 FS-1001-S9 FS-4201-SS SE-0508-M2 SE-0508-M2 SE-0512-M1 SE-5046-SS | **MOTE STANLESS UPGRADE SHALL INCLUDE AB-0303-SS CLAMP SCREW NOT SE-5123-SS HARDAWRE KIT SE-6123-SS HARDAWRE KIT SE-6123-SS HARDAWRE KIT SE-6123-SS HARDAWRE KIT SE-6123-SS HARDAWRE KIT SE-61000-SS CLEMS RN **DESCRIPTION** **SCREW**, SET SQ HD %**-20 x 5/8**, STAINLESS **CLAMP**, MINI-BRAC BAND MOUNT, 1½** NPS. ALUM **PIN, GROOVE 3/16** x 1%**, ZINC1 **CLAMP**, BAND 5/8**, STAINLESS **BAND**, 5/8**, STAINLESS **SCREW**, SET SOC HD 5/16**-18, STAINLESS **KIT, CLAMP SCREW FOR MINI-BRAC, GALV **ADAPTER**, SPAN WIRE**, DIE CAST ALUM W/ SS INSERT **CLEVIS-CLEVIS**, ½** x ½**, ALUM W/ STAINLESS BUSHINGS **NUT**, HEX HD 5/16**, STAINLESS **WASHER**, SPLIT LOCK**, 5/16**, STAINLESS **EXTENDER** CONNECTOR HANGER**, ALUM W/ STAINLESS BUSHING EXTENDER**, 11** **HANGER**, TRI-STUD, ALUM **HARDWARE** KIT W/ GASKET**, 5/16**-18, STAINLESS | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
| 1 2 3 4 5 6 7 8 9 10 11 12 13 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV SE-0371-M1 SE-0464-M2 FS-1001-S9 FS-4201-SS SE-0508-M2 SE-0508-M2 SE-0507-11 SE-0512-M1 SE-5048-SS FS-6000-GLV | ************************************** | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 4 |
| 1 2 3 4 5 6 7 8 9 10 11 12 13 | PART NO. FS-3205-SS AB-0266-M1 FS-6201-ZN1 AB-0244-SS AB-0243-L FS-3202-SS AB-0303-GLV SE-0371-M1 SE-0464-M2 FS-1001-S9 FS-4201-SS SE-0508-M2 SE-0508-M2 SE-0512-M1 SE-5046-SS | **MOTE STANLESS UPGRADE SHALL INCLUDE AB-0303-SS CLAMP SCREW NOT SE-5123-SS HARDAWRE KIT SE-6123-SS HARDAWRE KIT SE-6123-SS HARDAWRE KIT SE-6123-SS HARDAWRE KIT SE-6123-SS HARDAWRE KIT SE-61000-SS CLEMS RN **DESCRIPTION** **SCREW**, SET SQ HD %**-20 x 5/8**, STAINLESS **CLAMP**, MINI-BRAC BAND MOUNT, 1½** NPS. ALUM **PIN, GROOVE 3/16** x 1%**, ZINC1 **CLAMP**, BAND 5/8**, STAINLESS **BAND**, 5/8**, STAINLESS **SCREW**, SET SOC HD 5/16**-18, STAINLESS **KIT, CLAMP SCREW FOR MINI-BRAC, GALV **ADAPTER**, SPAN WIRE**, DIE CAST ALUM W/ SS INSERT **CLEVIS-CLEVIS**, ½** x ½**, ALUM W/ STAINLESS BUSHINGS **NUT**, HEX HD 5/16**, STAINLESS **WASHER**, SPLIT LOCK**, 5/16**, STAINLESS **EXTENDER** CONNECTOR HANGER**, ALUM W/ STAINLESS BUSHING EXTENDER**, 11** **HANGER**, TRI-STUD, ALUM **HARDWARE** KIT W/ GASKET**, 5/16**-18, STAINLESS | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |



REMOVABLE—

GENERAL NOTE:

MAST ARM LENGTH AS SPECIFIED ON THE PLANS

3.6 m(TYP.)

2.4 m(MIN.)

3.6 m(TYP.)

750×600 (2.5′×2′)

SIGN PANEL

2.4 m(MIN.)

THIS SIGNAL HEAD ONLY FOR -ARMS10.97 m (36') AND LONGER.

8'-0"x2'-6" (750x2.5 m) (MAX.) SIGN PANEL (110 lbs)

100×200 (4×8) HANDHOLE WITH FRAME AND COVER— LOCATED OPPOSITE OF ONCOMING TRAFFIC

BOLT COVERS (4 REQUIRED)

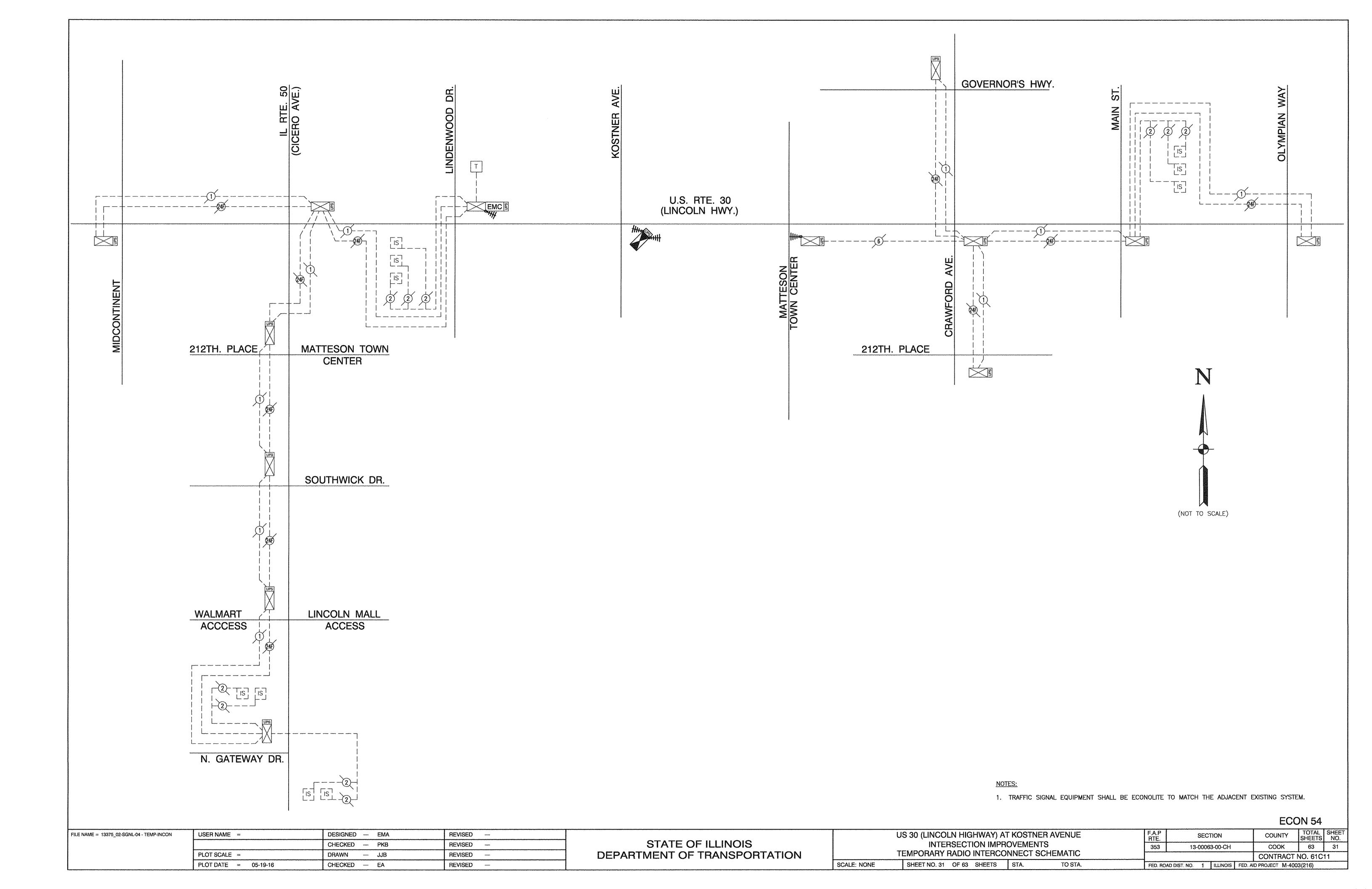
- SEE ENLARGED DETAIL THIS SHEET

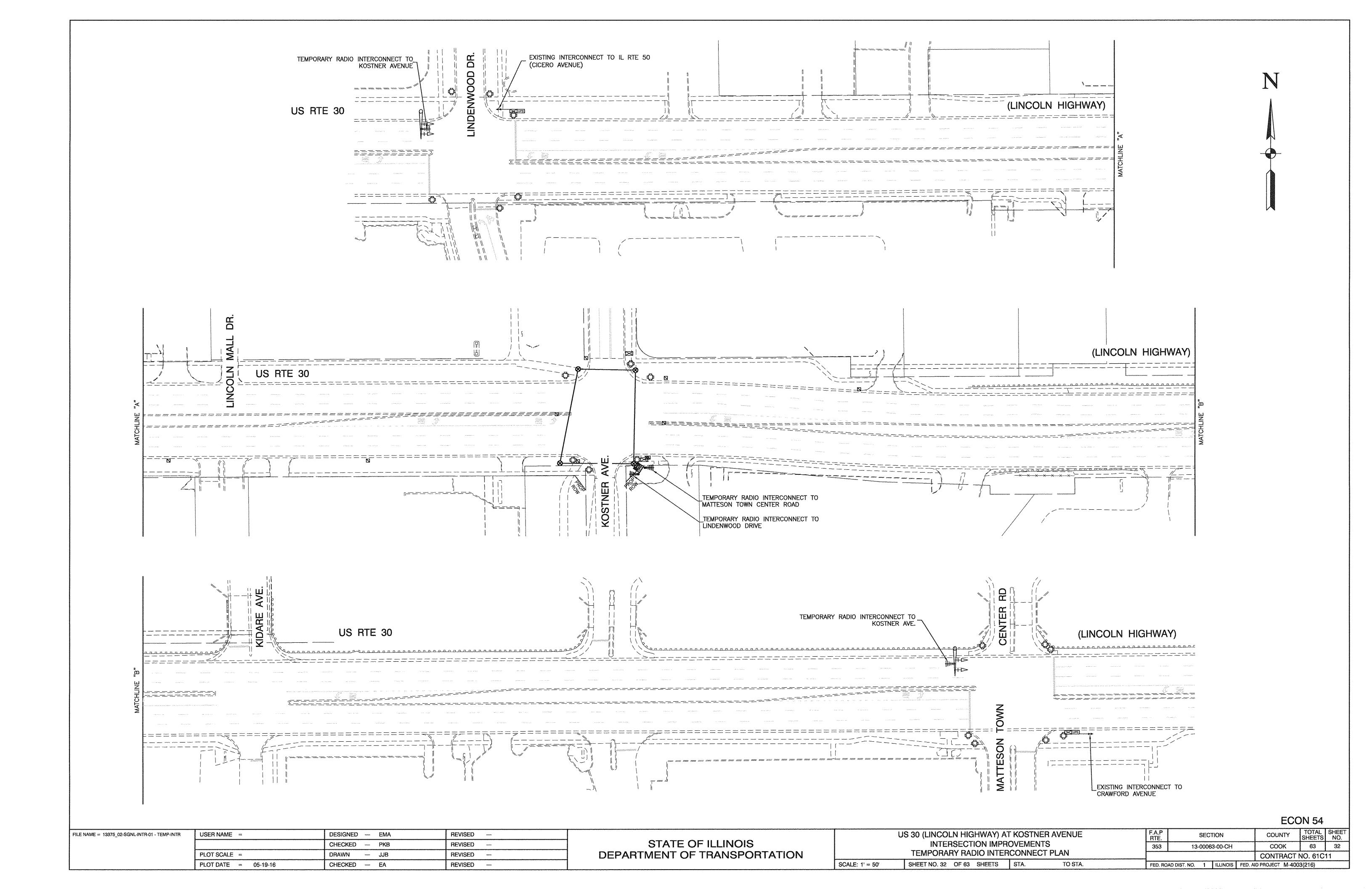
- 1. SIGNAL HEADS, SIGN PANELS, AND OTHER ATTACHMENT ARE SHOWN FOR MINIMUM DESIGN LOADING PURPOSES ONLY. EACH SIGNAL HEAD SHALL WEIGH 36 Kg (80 lb) AND HAVE A PROJECTED AREA OF 1.37 sq. m (14.7 sq ft.).
- 2. PHOTO ELECTRIC CELL IS TO BE MOUNTED ABOVE CABINET DOOR.
- 3. THE SIGN SHALL BE LOCATED AT A MAXIMUM OF 8' FROM CENTER OF SIGN
- TO POLE.

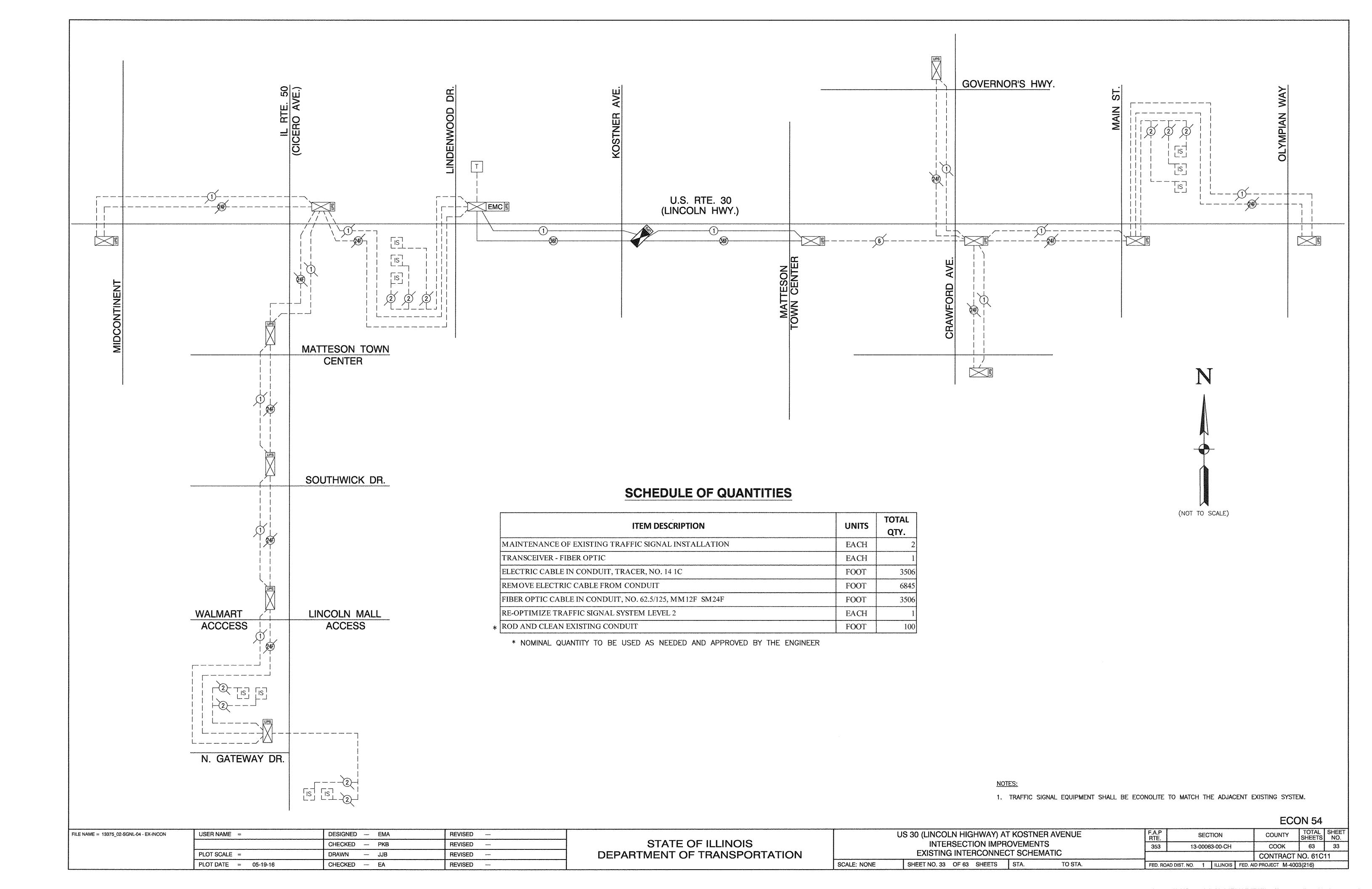
4. SIGN IS TO BE MOUNTED A MINIMUM OF 16' ABOVE PAVEMENT.

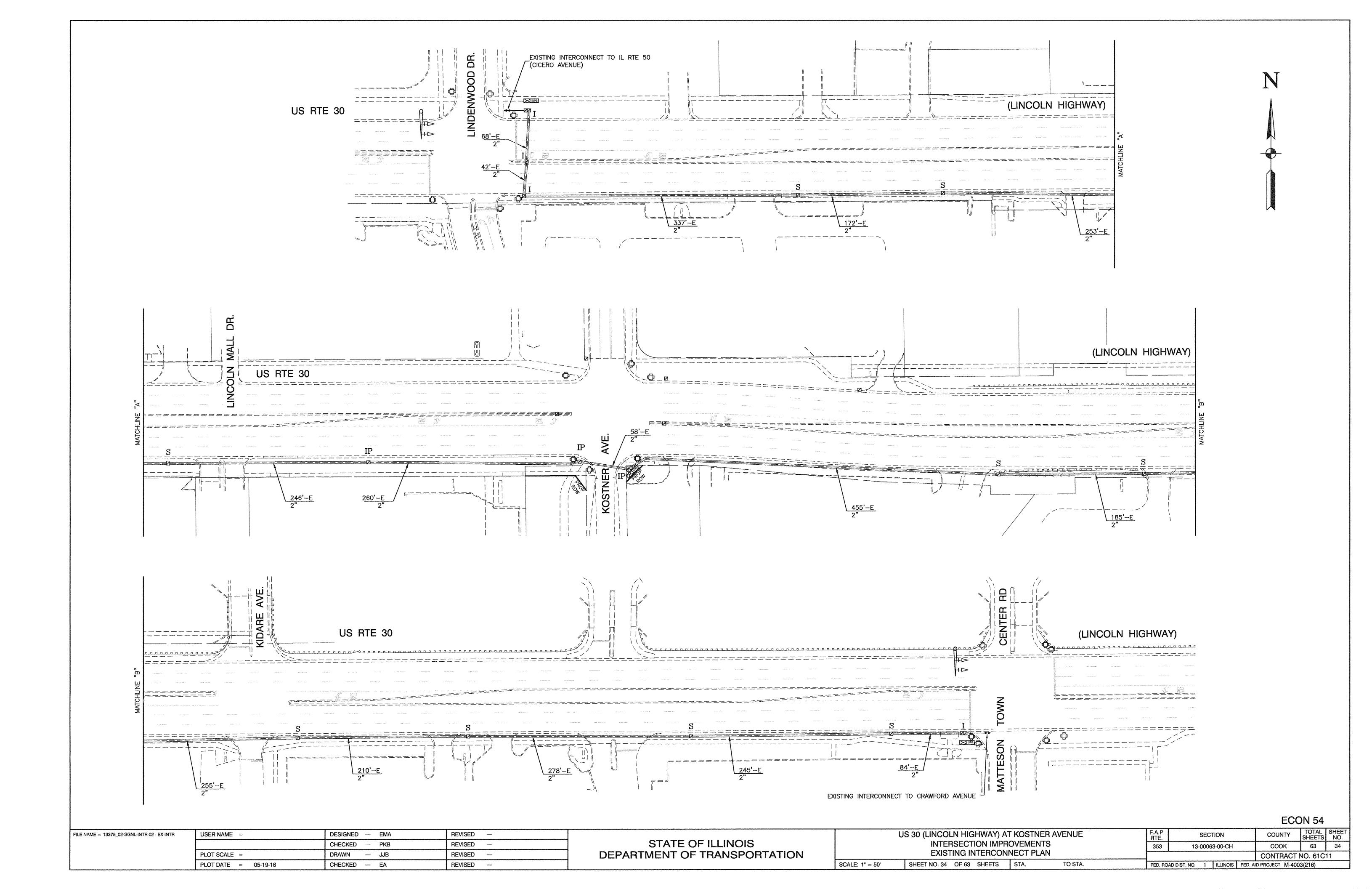
TS 1450

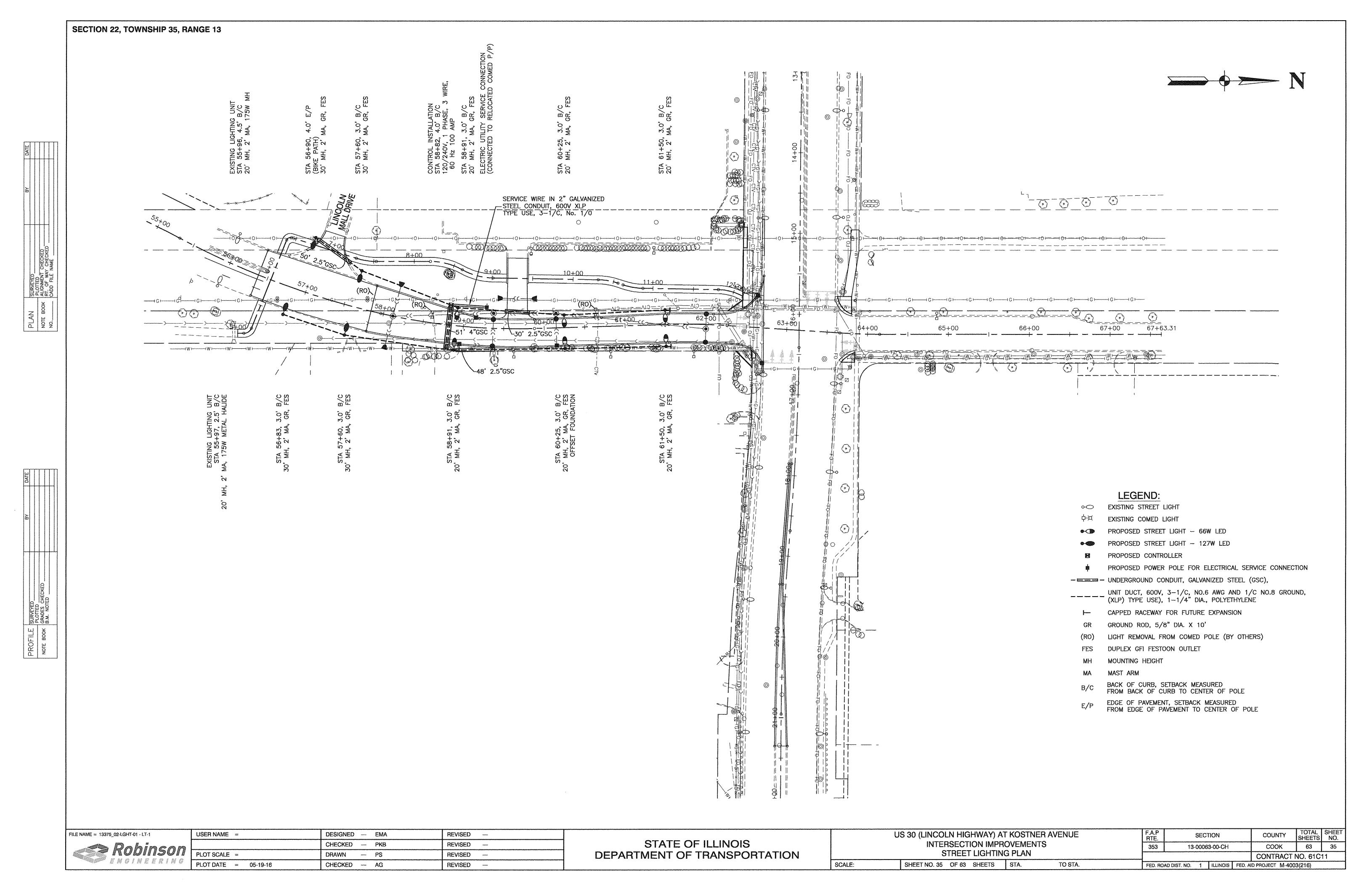
TOTAL SHEET SHEETS NO. US 30 (LINCOLN HIGHWAY) AT KOSTNER AVENUE USER NAME = DESIGNED — EMA REVISED FILE NAME = 13375_02-SGNL_DTLS-04 - IDOT P01 COUNTY SECTION STATE OF ILLINOIS INTERSECTION IMPROVEMENTS CHECKED — PKB REVISED 353 COOK 63 30A 13-00063-00-CH ILLUMINATED STREET NAME SIGN MOUNTING DETAIL DEPARTMENT OF TRANSPORTATION PLOT SCALE = DRAWN K.W.M. REVISED CONTRACT NO. 61C11 SHEET NO. 30A OF 63 SHEETS STA. TO STA. PLOT DATE = 05-19-16 SCALE: CHECKED — APG REVISED -FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216)

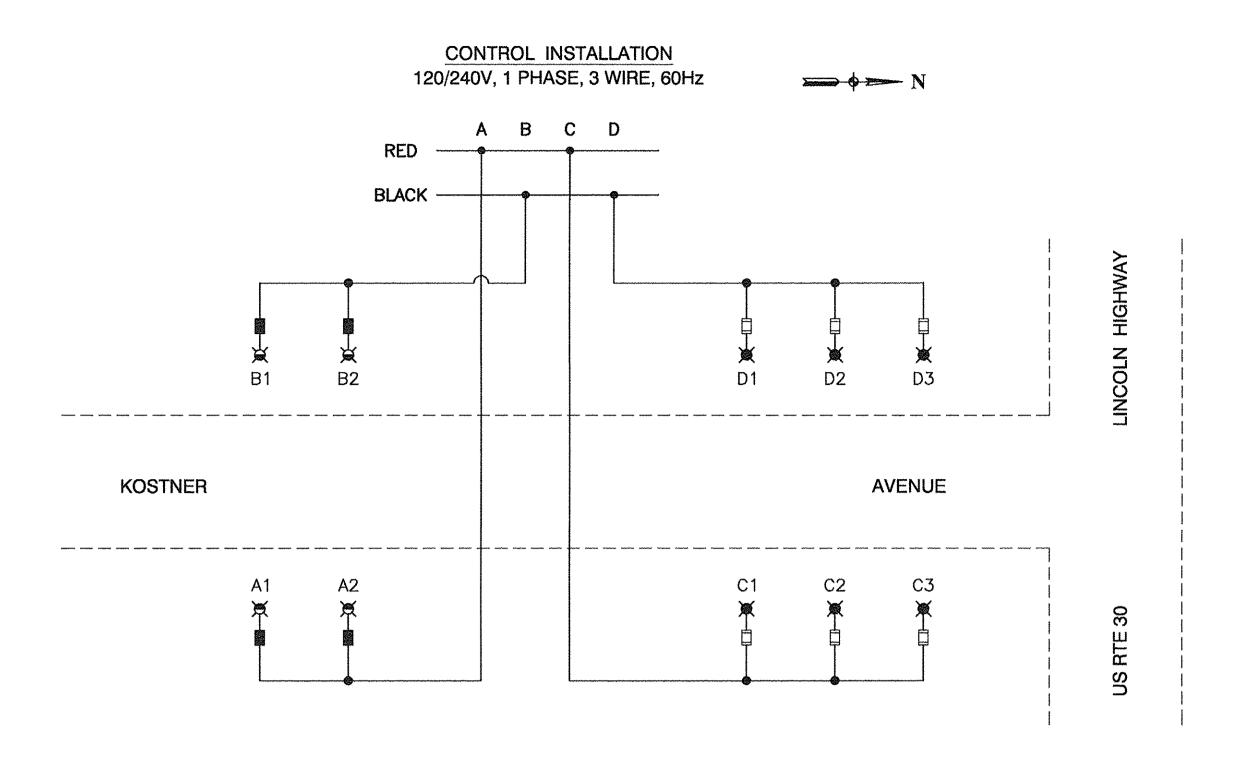








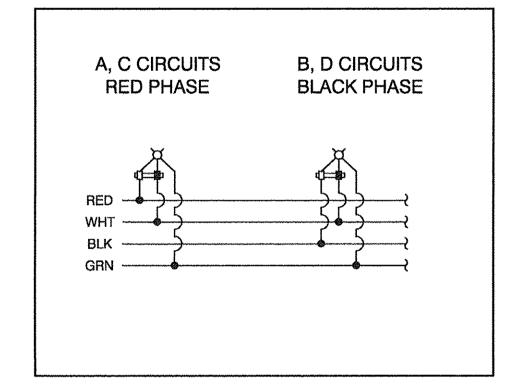




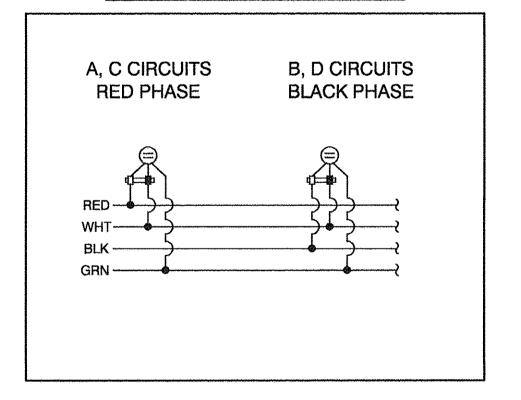
LOAD TABULATIONS CONTROLLER #1

| CIRCUIT | WATTS | AMPS @ 120V | | | | | |
|----------|---------|-------------|-------------|--|--|--|--|
| | | RED PHASE | BLACK PHASE | | | | |
| A | 254 | 2.12 | | | | | |
| В | 254 | | 2.12 | | | | |
| С | 198 | 1.65 | | | | | |
| D | 198 | | 1.65 | | | | |
| SUBTOTAL | 904 | 3.77 | 3.77 | | | | |
| | TOTAL A | MPS @ 120 V | 7.54 | | | | |

TYPICAL LUMINAIRE WIRING



TYPICAL FESTOON WIRING



LEGEND

LUMINAIRE, 127W LED

🕱 LUMINAIRE, 66W LED

FUSE, 2.5 AMP LUMINAIRE, 6.5 AMP FESTOON

FUSE, 1.5 AMP LUMINAIRE, 6.5 AMP FESTOON

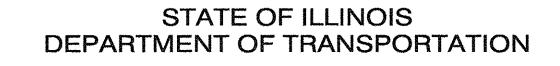
A1 LUMINAIRE CIRCUIT

CIRCUIT BREAKER

CONNECTION

| FILE NAME = 13375_02-LGHT-02 - P01 | | | | | | | | | |
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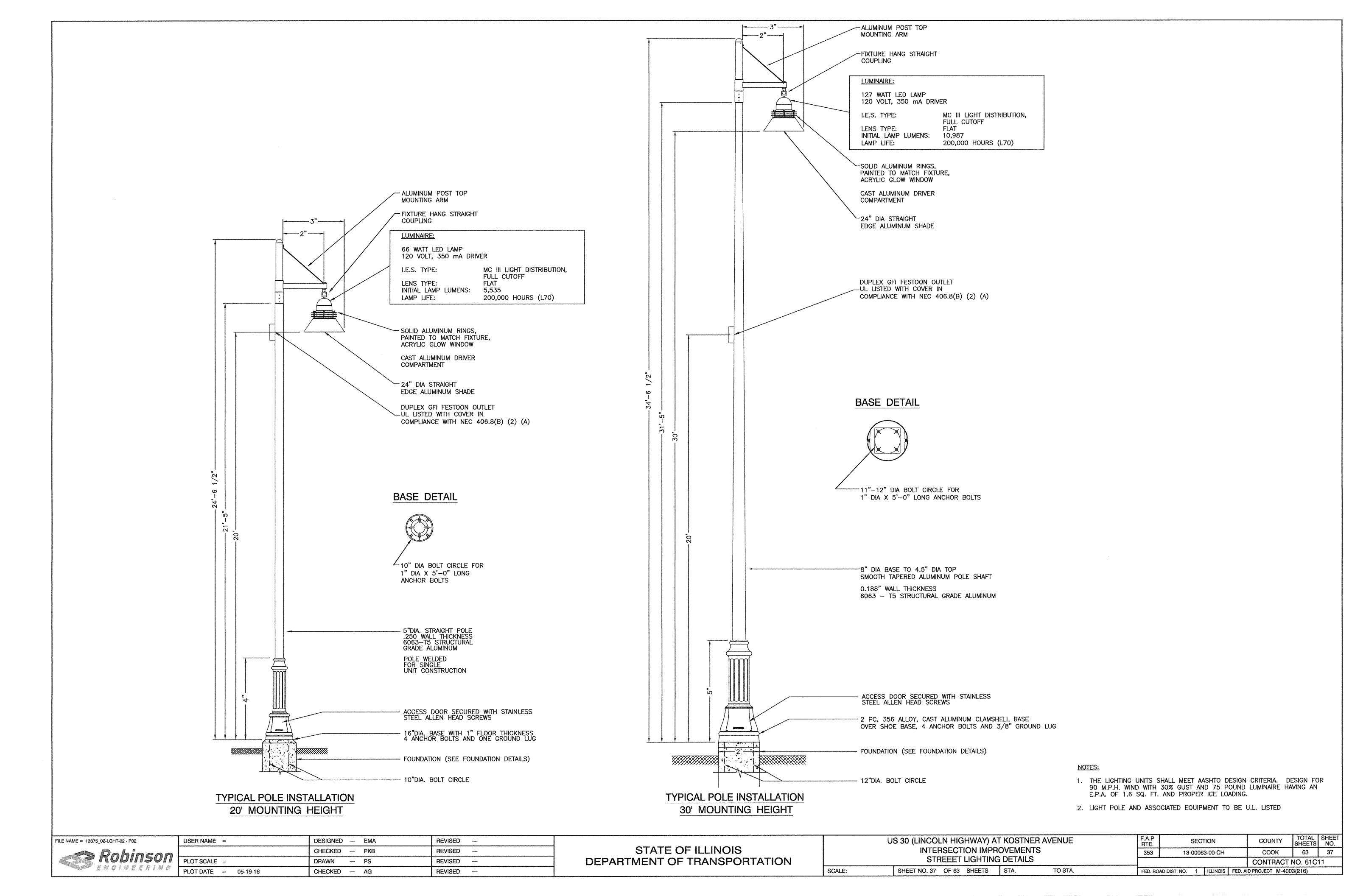
| USER NAME = | DESIGNED — EMA | REVISED — |
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| PLOT SCALE = | DRAWN — PS | REVISED — |
| PLOT DATE = 05-19-16 | CHECKED — AG | REVISED — |

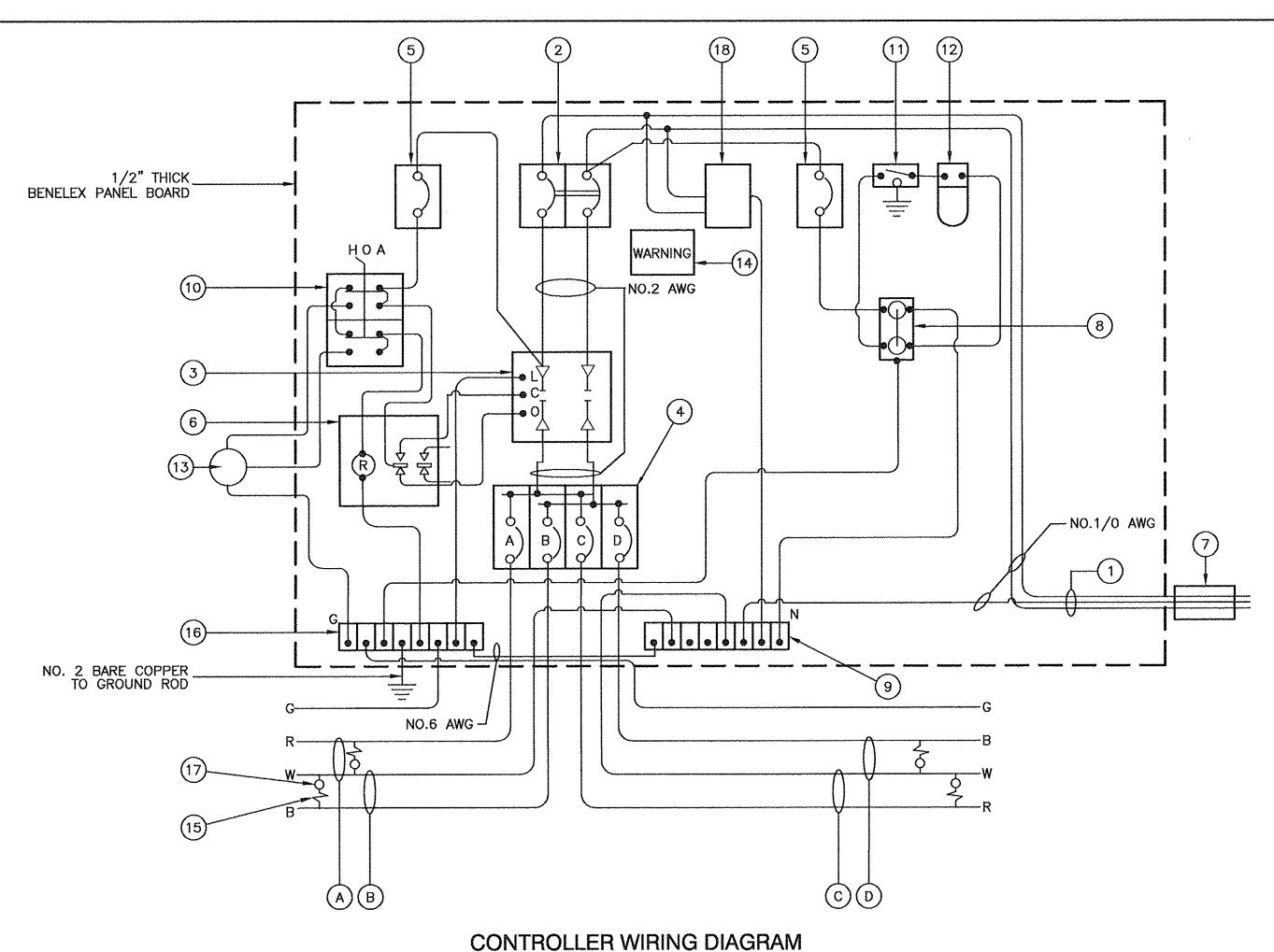


| L | IS 30 (LINCO | N HIG | HWAY) A | r Kost | NER AVENUE |
|---|--------------|-------|-----------------|--------|------------|
| | INTE | RSECT | TON IMPR | OVEME | ENTS |
| | STE | REEET | LIGHTING | DETAI | LS |
| | SHEET NO. 36 | OF 63 | SHEETS | STA. | TO STA. |

SCALE:

| LP SECTION | | | | COUNTY | TOTAL SHEETS | SHEE NO. | |
|---|-----|------|---------|----------|-----------------|-------------|--|
| 53 | 13- | 0006 | 3-00-CH | соок | 63 | 36 | |
| *************************************** | | | | CONTRACT | NO. 61C | 11 | |
| D. ROAD DIST. NO. 1 ILLINOIS FED. | | | | FED. Al | D PROJECT M-40 | 03(216) | |





TRIMMED CABLES-COMPRESSION TYPE COPPER SLEEVE. (SIZED FOR ACTUAL NUMBER OF CABLES AND MFR. SUGGESTED CRIMP TOOL USED) HEAT-SHRINKABLE CAP WITH FACTORY APPLIED WATERPROOF SEALANT. (SIZED TO-

SEALANT TAPE OR INSERT. (AROUND AND THROUGH CROTCH OF

ACCOMMODATE NUMBER OF CABLES).

ELECTRIC CABLE TO LUMINAIRE (SIZE AS NOTED ELSEWHERE IN-

THESE PLANS).

ELECTRIC FEEDER CABLES, SUCH AS UNIT DUCT THAT NUMBER OF CABLES IN SPLICE MAY VARY. (SIZE AS NOTED ON CONTRACT DRAWINGS).

> SPLICING ELECTRIC CABLES BASIC MATERIALS AND METHODS

-EXPOSED SEALANT

CONTROLLER WIRING DIAGRAM LEGEND

- 3-1/C, NO. 1/O, 600V SERVICE WIRE IN 2" DIA. GALVANIZED STEEL CONDUIT FOR 120/240 VOLT, 1ø, 3 WIRE, 60HZ. SERVICE.
- (1) 100 AMP MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 480 V.
- (1) 100 AMP REMOTE CONTROL CONTACTOR SWITCH, ELECTRICALLY OPERATED, ELECTRICALLY HELD, 2 POLE, 600 VOLT
- (4) 30 AMP CIRCUIT BREAKER, 1 POLE, 120 VOLT, 100 AMP BASE, NON-INTER-CHANGEABLE TRIP RATING NEMA - 14000 AMP AT 240 VOLTS.
- (2) 20 AMP CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 120 VOLT, 100 AMP BASE. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA 14000 AMP AT 240 V.
- (1) 20 AMP, 1 POLE DOUBLE THROW, 120 VOLT RELAY
- METER SOCKET, 10, 3 WIRE, 100A
- (1) 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE MOUNTED IN BOX.
- NEUTRAL BUS BAR, 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS.
- 3 POSITION SELECTOR SWITCH, 120V.
- SWITCH FOR LIGHTING FIXTURE MOUNTED IN BOX, 20 AMP.
- WEATHER-PROOF LIGHTING FIXTURE WITH 1600 LUMEN, 120 V LED LAMP.
- PHOTOCELL MOUNTED TO CABINET, 120 V. 1000 VA BALLAST RATING, 1-4 FC ON 3-12 FC OFF, 30 SECOND MINIMUM DELAY.
- WARNING PLATE TO READ: WARNING, MAINTENANCE CIRCUIT IS LIVE WHEN MAIN BREAKER IS SWITCHED OFF
- IN-LINE FUSEHOLDER WITH FUSE AS NOTED IN FUSE TABLE
- GROUND BUS BAR 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS
- LUMINAIRE OR FESTOON OUTLET
- SURGE ARRESTER, UL LISTED, NEC 280 COMPLIANT, 10, 3 WIRE 60 HZ. MAX. 3,405 JOULES
- CIRCUIT (RED)
- CIRCUIT (BLACK)
- CIRCUIT (RED)
- CIRCUIT (BLACK)

GENERAL NOTES FOR CONTROL CABINET

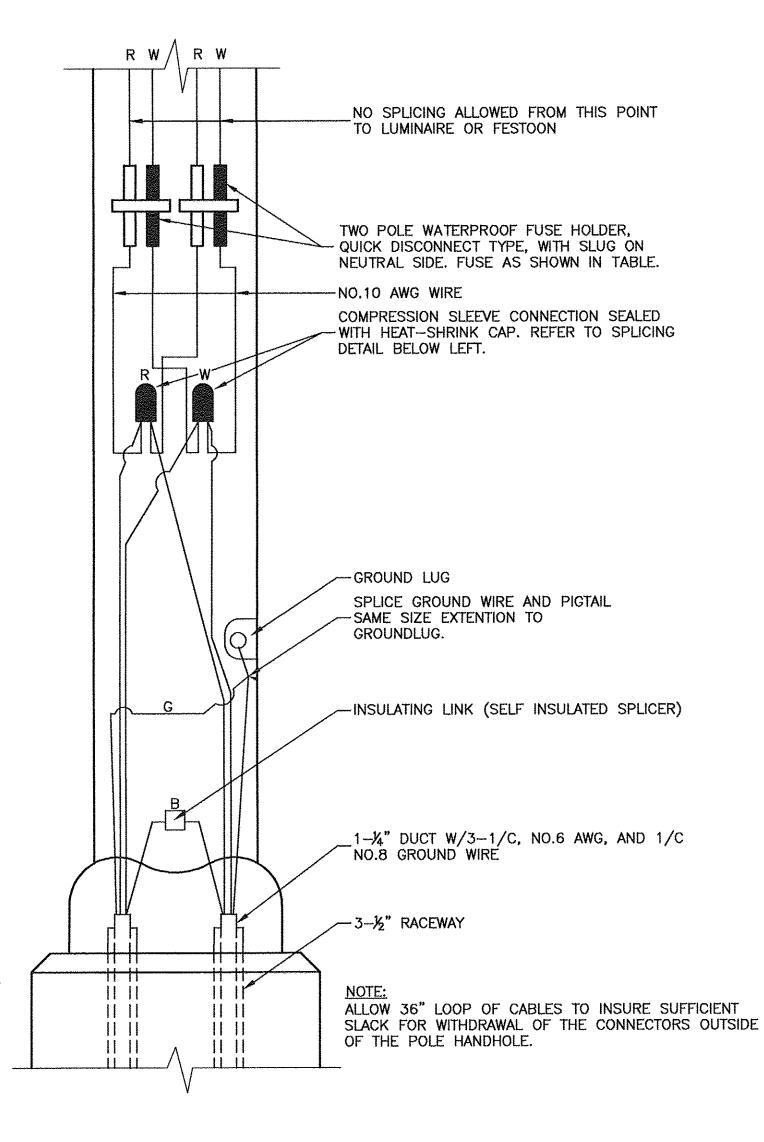
- 1. ENTIRE CONTROL CABINET SHALL BE GROUNDED.
- 2. ALL WIRING SHALL BE TAGGED WITH SELF-STICKING WIRE MARKERS.
- GROUND BUS TO BE COLOR CODED GREEN, NEUTRAL BUS WHITE, AND BONDED TO CABINET ENCLOSURE, BY LISTED PRESSURE CONNECTORS OR LISTED CLAMPS.
- 4. ALL INTERNAL CONTROLLER WIRING TO BE NO.12 AWG UNLESS OTHERWISE SPECIFIED.
- 5. CABINET WIRING INSULATION TO BE TYPE XHHW OR APPROVED EQUAL.
- 6. THE CONTROLLER SHALL BE UL LISTED, NEMA 3R AND SUITABLE FOR USE AS SERVICE ENTRANCE

LIGHTING GENERAL NOTES

- 1. ALL WORK TO CONFORM TO THE MOST RECENT NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
- 2. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING OR AUGERING.
- 3. BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES CALL C.E. Co. FOR APPROVAL OF LOCATION.
- 4. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
- 5. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
- 6. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
- 7. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
- 8. CONDUITS AND UNIT DUCTS MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES.

SCALE:

NOMINAL WATTAGE **FUSE SIZE** 1.5 AMP 127 2.5 AMP 6.5 AMP FESTOON LUMINAIRE FUSE SIZE TABLE



POLE HANDHOLE WIRING DIAGRAM

(TYPICAL FOR SINGLE LUMINAIRE INSTALLATION)

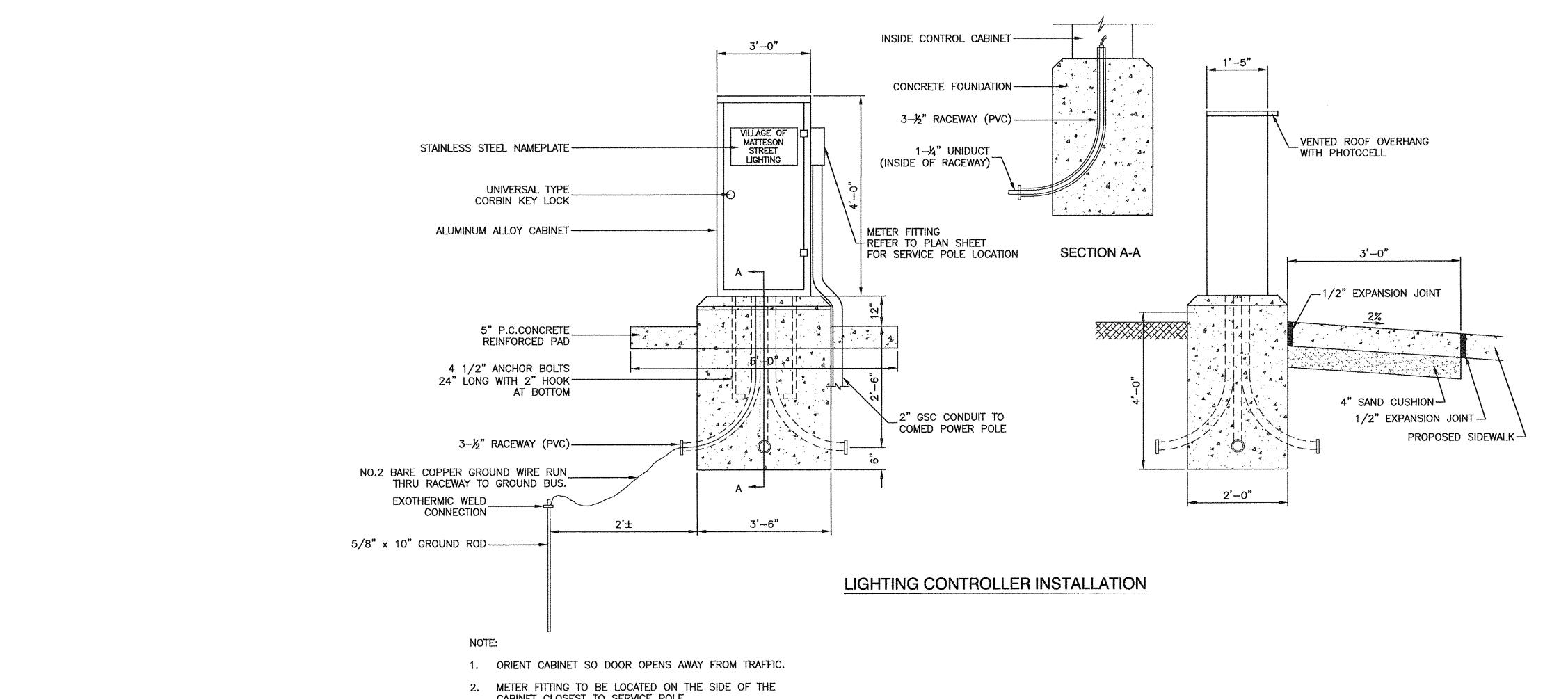
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FILE NAME = 13375_02-LGHT-02 - P03

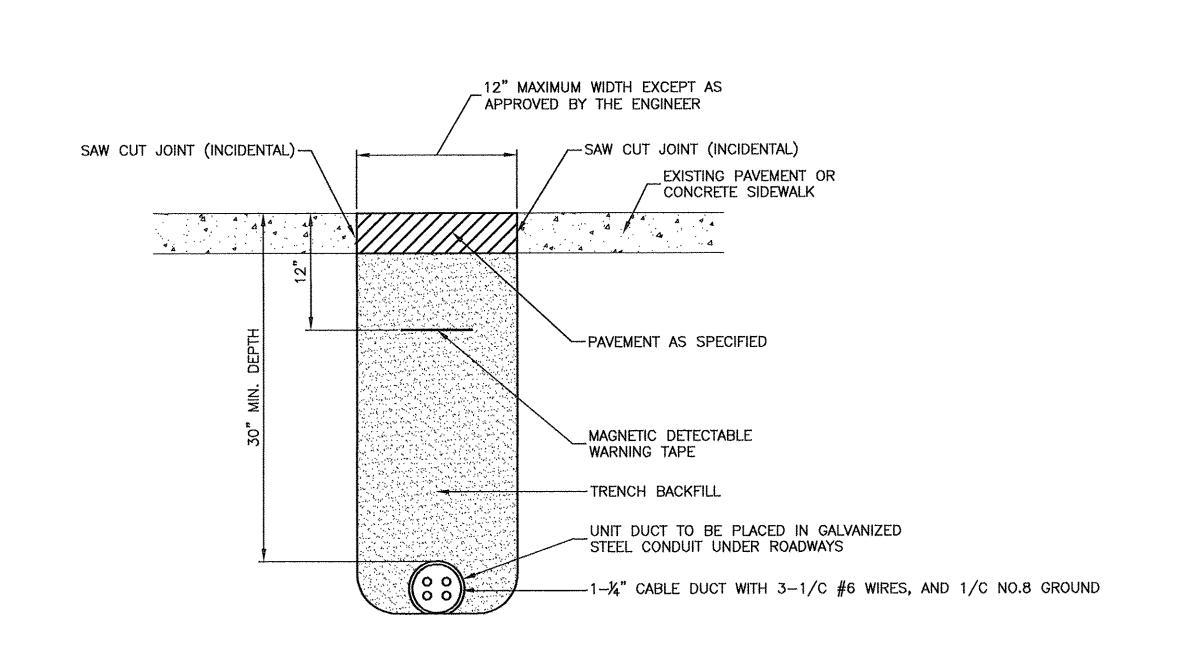
REVISED USER NAME = CHECKED — PKB REVISED PLOT SCALE = DRAWN REVISED - PS PLOT DATE = 05-19-16 REVISED — CHECKED - AG

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION US 30 (LINCOLN HIGHWAY) AT KOSTNER AVENUE INTERSECTION IMPROVEMENTS STREEET LIGHTING DETAILS SHEET NO. 38 OF 63 SHEETS STA. TO STA.

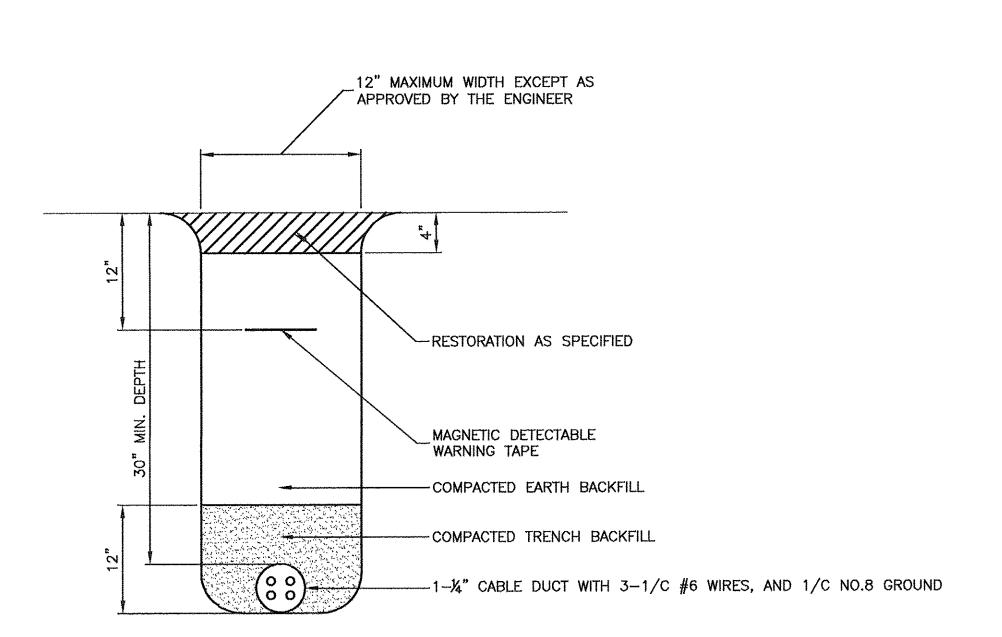
TOTAL SHEE SHEETS NO. F.A.P RTE. COUNTY SECTION 63 38 353 COOK 13-00063-00-CH CONTRACT NO. 61C11 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216)



CABINET CLOSEST TO SERVICE POLE.



TRENCH DETAIL - PAVED AREAS



TRENCH DETAIL - UNPAVED AREAS

| FILE NAME = 13375_02-LGHT-02 - P04 | | | | | | | | | | _ | | |
|------------------------------------|-----|---|---|-----|------------|--------------------|---|------------|---|---|---|--|
| | | R | 0 | b | | $ \overline{n} $ | S | | 9 | M | ŀ | |
| | For | Ñ | Ö | I N | ice Sec | - To | R | Total Park | N | G | ŀ | |

| USER NAME = | DESIGNED — EMA | REVISED — |
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| | CHECKED — PKB | REVISED — |
| PLOT SCALE = | DRAWN PS | REVISED — |
| PLOT DATE = 05-19-16 | CHECKED AG | REVISED — |

| | STATE | OF ILLING | DIS |
|--------|--------|-----------|-----------|
| DEPART | MENT O | F TRANS | PORTATION |

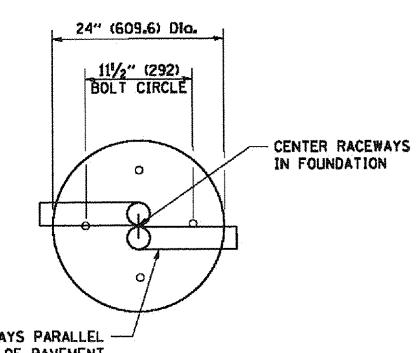
SCALE:

| US 30 (LINCOLN HIGHWAY) AT KOSTNER AVENUE | | F.A.P RTE. | 1 | SEC | TION | | COUNTY | TOTAL SHEETS | SHEI NO | | |
|---|---------------------------|---------------|-----|--------------------|---------------------------------------|---|----------|-----------------|-----------------|---------|----------------------|
| | INTERSECTION IMPROVEMENTS | | 353 | 353 13-00063-00-CH | | | COOK | 63 | 39 | | |
| | STREEET LIGHTING DETAILS | | | | · · · · · · · · · · · · · · · · · · · | | | | CONTRACT | NO. 61C | 11 |
| | SHEET NO. 39 OF 63 SHEETS | STA. TO ST | ГА. | FED. ROA | AD DIST. NO. | 1 | ILLINOIS | FED. Al | D PROJECT M-400 | 03(216) | In((()) / / / / / / |

TOTAL SHEET SHEETS NO.

LIGHT POLE FOUNDATION DEPTH TABLE 30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

| | DESIGN DEPTH " | D" OF FOUNDATION |
|-----------------------------------|--------------------|-------------------|
| SOIL CONDITIONS | SINGLE ARM POLE | TWIN ARM POLE |
| SOFT CLAY | 11′-0″ | 12'-8" |
| Ou = 0.375 TON/SO. FT. | (3.35 m) | (3.85 m) |
| MEDIUM CLAY | 9'-0" | 14'-10'' |
| Qu = 0.75 TON/SO,FT | (2.74 m) | (4 <u>.</u> 52 m) |
| STIFF CLAY Ou = 1.50 TON/SO. FT. | 7'-6'' (2,29 m) | 8'-7" (2.61 m) |
| LOOSE SAND | 9'-6'' | 10'-7" |
| Ø = 34° | (2.90 m) | (3 <u>.</u> 22 m) |
| MEDIUM SAND | 9'-0" | 9'-10" |
| Ø = 37.5° | (2,74 m) | (2.99 m) |
| DENSE SAND | 8'-3'' | 9'-7" |
| Ø = 40° | (2 . 51 m) | (2.91 m) |



ANCHOR ROD

--- ¾" (20) CHAMFER

EXOTHERMIC WELD CONNECTION

TO REINFORCING STEEL

- GROUND CLAMP UL LISTED

-3 LOOPS MIN. AT TOP & BOTTOM

SCALE: NONE

- 8-*6 VERTICAL BARS

- *2/O BARE COPPER

3" (76)

4-1" Dia, X 5'-0" (4-25,4 Dia, X 1,524 m)

NOTE: FOUNDATION BOLT CIRCLE SHALL MATCH THE POLE BOLT CIRCLE.

RACEWAYS PARALLEL —
TO EDGE OF PAVEMENT

24" (609)

3" (76,2)

*2/O BARE COPPER-

EXOTHERMIC WELD

CONNECTION TO GND ROD.

GROUND ROD (WHEN SPECIFIED)

5%" Dta. X 10" (15.875 Dta. X 3.048 m)

31/2" DIO. X 36" RADIUS

PVC RACEWAY (2 MIN.)

(88.9 X 9[4.4)

TOP VIEW

60

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

NOTES

ALL DIMERSIONS AND IN INCIRES WHILLIAM FLUS CHILLIANTOL SH

2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.

APPROVAL OF THE ENGINEER.

THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 [N. (100 mm) 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.

4. 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.

5. 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 1/2-IN. (20 mm).

6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.

7. 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

8. 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.

9. 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.

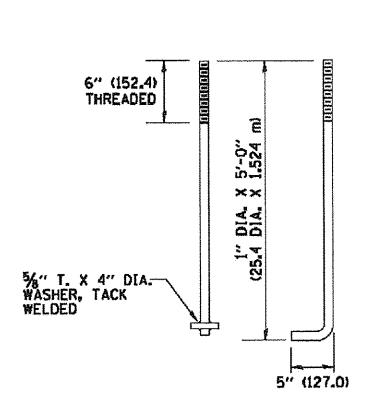
THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.

11. ANCHOR RODS SHALL PROJECT 23/4" (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.

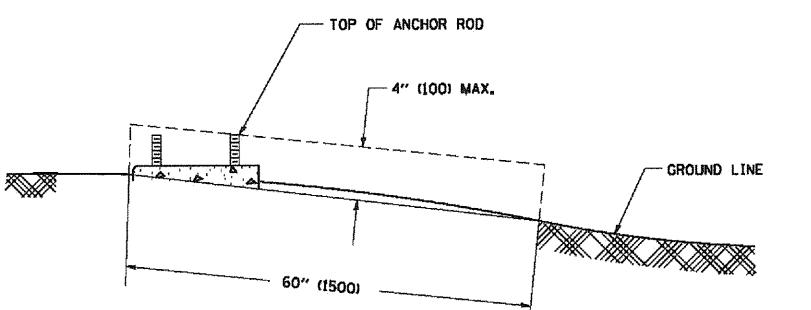
12. THE CONTRACTOR SHALL USE A *3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE *3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.

13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.

14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



ANCHOR BOLT DETAIL



FOUNDATION EXTENSION DETAIL

24" DIA.

3"
18"
3"
8-8" VERT.

24 SPIRAL

24" Dla. (609.6)

FOUNDATION DETAIL

SECTION A-A

FILE NAME = 13375_02-LGHT-03 - P01

RODINSON
ENGINEERING

| | USER NAME = gaglianobt | DESIGNED — | REVISED — |
|---|-----------------------------|------------|-----------|
| | | CHECKED — | REVISED — |
| | PLOT SCALE = 50.0000 '/ IN. | DRAWN — | REVISED — |
| | PLOT DATE = 1/4/2008 | CHECKED — | REVISED — |
| • | | | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

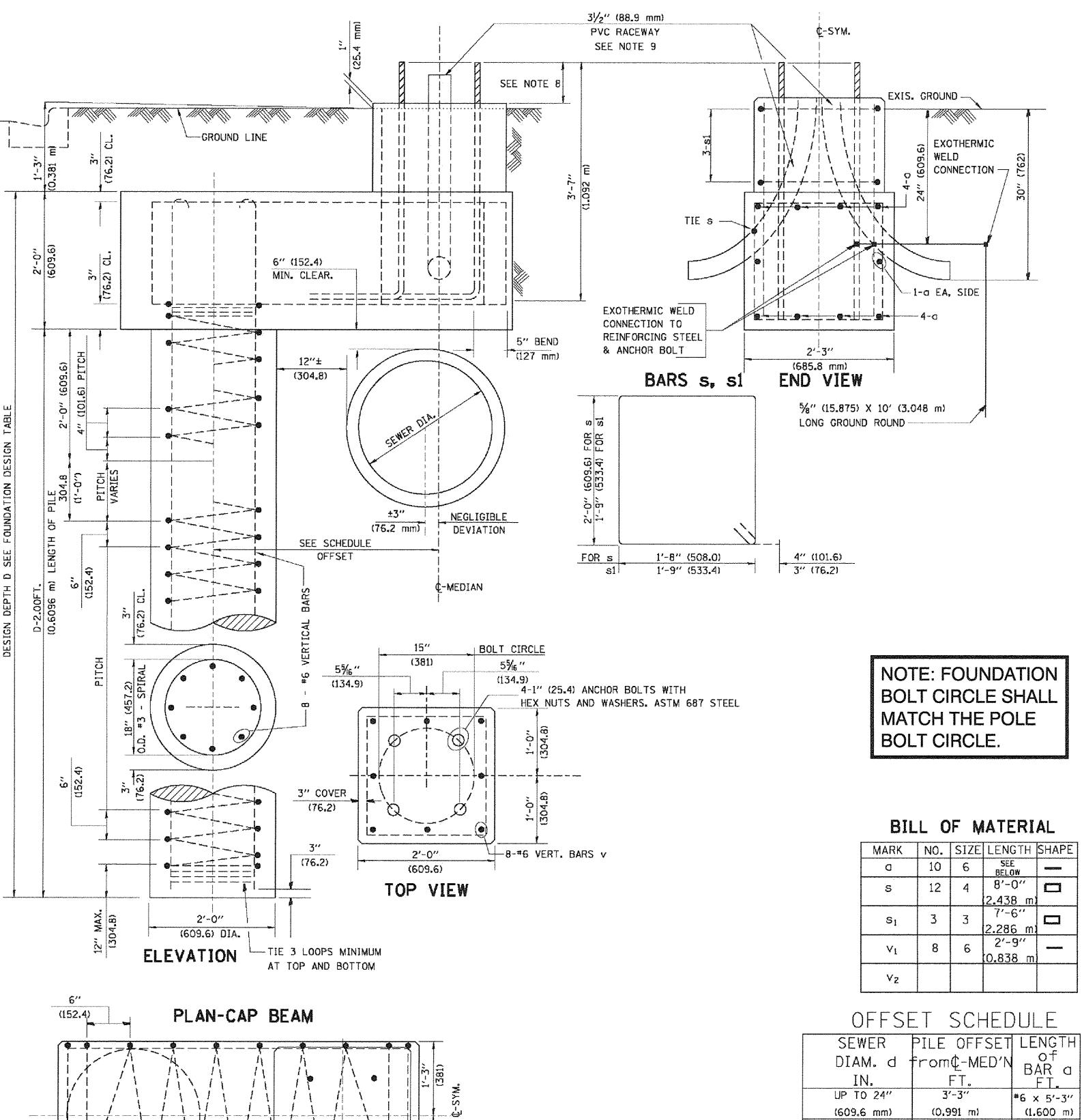
| LIGHT POLE FOUNDATION (9.144 m) TO 35' (10.668 m) M.H. 11 1/2" (292 mm) BOLT CIRCLE | | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---------|---------------------------------|-----------------|-----------------|--------------|
| | | 353 13-00063-00-CH | | 63 | 40 |
| | | BE-300 | CONTRACT | NO. 61C1 | 1 |
| SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. RO | AD DIST. NO. 1 ILLINOIS FED. AI | D PROJECT M-400 | 3(216) | |

FOUNDATION DESIGN TABLE

| | DESIGN DEPTH (| OF FOUNDATION | REINFORCEMENT IN FOUNDATION | | | | | |
|----------------------------|------------------------------|----------------------------------|-----------------------------|------------|--------------|---------------------|--|--|
| TYPE OF SOIL | SINGLE ARM | TWIN ARM | SINGLE | | TWIN | ARM | | |
| | D | D | VERT BARS | SPIRAL | VERT BARS | SPIRAL | | |
| SOFT CLAY | 13′-0″ | 15′-0′′ | 8-#6X12'-6'' | #3X122' | 8-#6X14'-3'' | #3X141′ | | |
| | (3.962 m) | (4 . 572 m) | (3.810 m) | (37.186 m) | (4.343 m) | (42.977 m) | | |
| MEDIUM CLAY | 9'-6'' | 10′-9′′ | 8-#6X9'-0'' | #3X90′ | 8-#6X10'-0'' | #3X100′ | | |
| | (2.896 m) | (3,277 m) | (2.743 m) | (27.432 m) | (3.048 m) | (30.480 m) | | |
| STIFF CLAY | 7'-0'' | 8'-0'' | 8-#6X6'-6'' | #3X66′ | 8-#6X7'-6'' | #3X76′ | | |
| | (2.134 m) | (2.438 m) | (1.981 m) | (20.112 m) | (2.286 m) | (23,165 m) | | |
| LOOSE SAND | 9'-0'' | 10'-0'' | 8-#6X8'-6'' | #3X85′ | 8-#6X9'-6'' | #3X94′ | | |
| | (2.743 m) | (3.048 m) | (2.591 m) | (25.908 m) | (2.896 m) | (28.651 m) | | |
| MEDIUM SAND | 8'-3" | 9′-0′′ | 8-#6X8'-0'' | #3X78' | 8-#6X8'-6" | #3X85′ | | |
| | (2 . 515 m) | (2.743 m) | (2.438 m) | (23.774 m) | (2.591 m) | (25 . 908 m) | | |
| DENSE SAND | 7′-9′′ | 9'-0'' | 8-#6X7'-6'' | #3X73′ | 8-#6X8'-6'' | #3X85′ | | |
| | (2.362 m) | (2.743 m) | (2.286 m) | (22.250 m) | (2.591 m) | (25.908 m) | | |
| ROCK OR SOLIDIFIED SLAG | 5'-0'' (1 . 524 m) | 5'-0'' (1 ₌ 524 m) | NONE | NONE | NONE | NONE | | |

NOTES

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- 3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- 4. 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.
- 5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 6. 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.
- 7. 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 2¾" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- 8. RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- 9. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.



| | 6" C152.4) PLAN-CAP BEAM | |
|-------------------------------|--------------------------|---------------------------|
| passer, ste, serve | | 1'-3" (381) (C-SYM, |
| | 1-5- | (381) |
| 3" (76.2) 4" (101.6) | -1-s 1-s | (76.2) 4" (101.6) |

SCALE: NONE

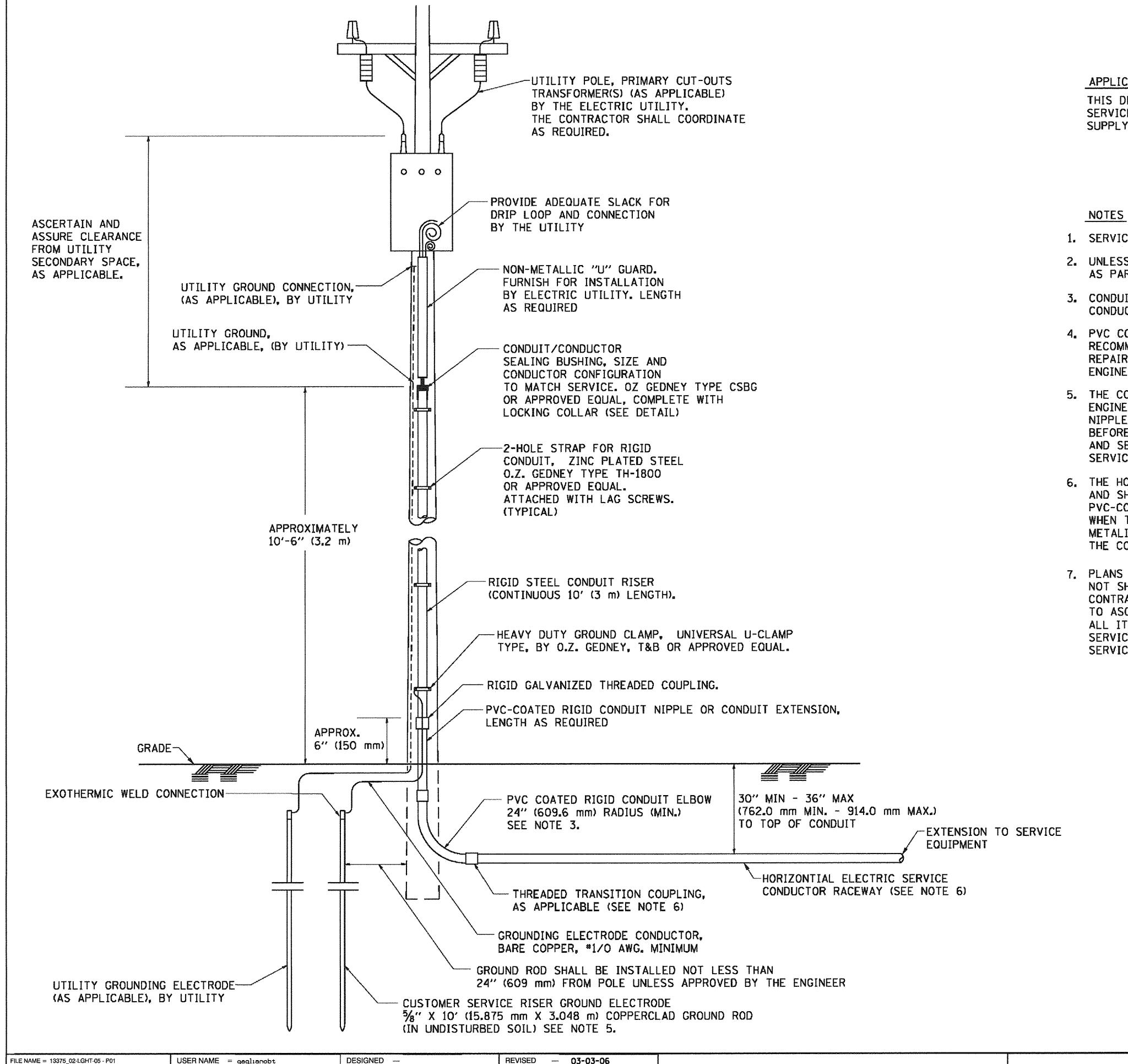
| SEWER | , | PILE | OF | FSET | LENG | |
|-----------------|-----|-------|-------|-------|-----------|-----|
| DIAM. c | 1 - | from | ¢-N | /ED'N | of BAR | |
| IN. | | | FT. | | FT. | u |
| UP TO 24" | | 3′ | -3" | | #6 × 5'- | 3'' |
| (609,6 mm) | | (0.9 | 91 m | ı١ | (1.600 | m) |
| 27" (685.8 m) | TO | 3' | -9" | | 5′-9' | 17 |
| 36" (914.4 mr | n) | (1.1- | 43 m |) | (1.753 | m) |
| 42" (1066.8 mm) | ΤO | 4 | ′-6′′ | | 6'-6' | 11 |
| 48" (1219.2 mm | 1) | (1.3 | 72 n | 1) | (1.981 | m) |
| 54" (1371.6 mm) | ΤO | 5 | ′-0′′ | | 7′-0′ | , |
| 60" (1524.0 mi | n) | (1.5 | 24 п | ገ) | (2.134 | m) |
| 66" (1676.4 mm) | ΤO | 5 | ′-6′′ | | 7'-6' | , |
| 72" (1828.8 mm | ר) | (1.6 | 76 n | n) | (2.286 | m) |
| | | 4 | | | | |

FILE NAME = 13375_02-LGHT-04 - P01 RODINSOL ENGINEERING

| USER NAME = bauerdl | DESIGNED — | REVISED - 06-16-08 R. TOMSONS |
|-----------------------------|------------|-------------------------------|
| | CHECKED — | REVISED — |
| PLOT SCALE = 50.000 ' / IN. | DRAWN — | REVISED — |
| PLOT DATE = 6/16/2008 | CHECKED — | REVISED — |

| | (12.1 | 92 m) | FOUNDAT TO 47 1/2 ' 1 mm) BOL1 | (14.478 n | |
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| SHEET NO |) 1 | OF 1 | SHEETS | STA | TO STA |

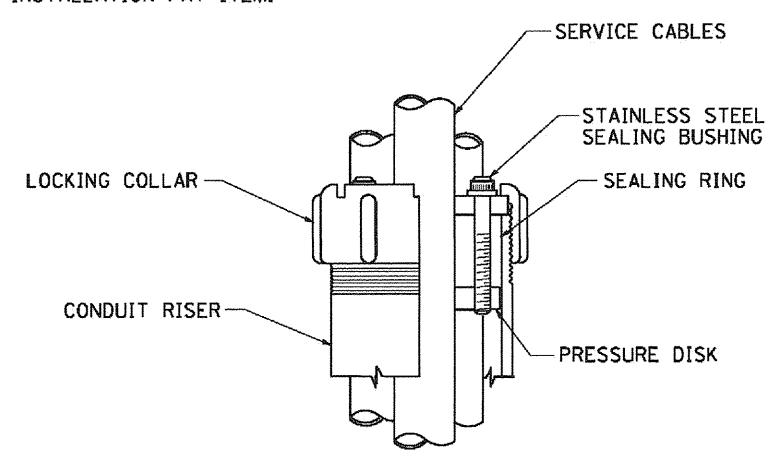
| LP E. | 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | COUNTY | | TOTAL SHEETS | SHEET NO. | | |
|----------|---|---|----------|--------|-----------------|--------------|--------|--|
| 53 | 3 13-00063-00-CH | | | COOK | , | 63 | 41 | |
| BE-310 | | | CONTRA | CT | NO. 61C | 11 | | |
| D. ROA | D DIST, NO. | 1 | ILLINOIS | FED. A | D PROJECT N | 1-400 | 3(216) | |



APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

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



SEALING BUSHING DETAIL

| FILE NAME = 13375_02-LGHT-05 - P01 | | | | | | |
|------------------------------------|---|----|-------------|----------|--|--|
| | R | Ob | ins Eeri | on NG | | |

| | USER NAME = gaglianobt | DESIGNED — | REVISED — 03-03-06 |
|---|-----------------------------|-------------|--------------------|
| • | | CHECKED — | REVISED — |
| Î | PLOT SCALE = 50.0000 '/ IN. | DRAWN — MEA | REVISED — |
| | PLOT DATE = 1/4/2008 | CHECKED — | REVISED — |

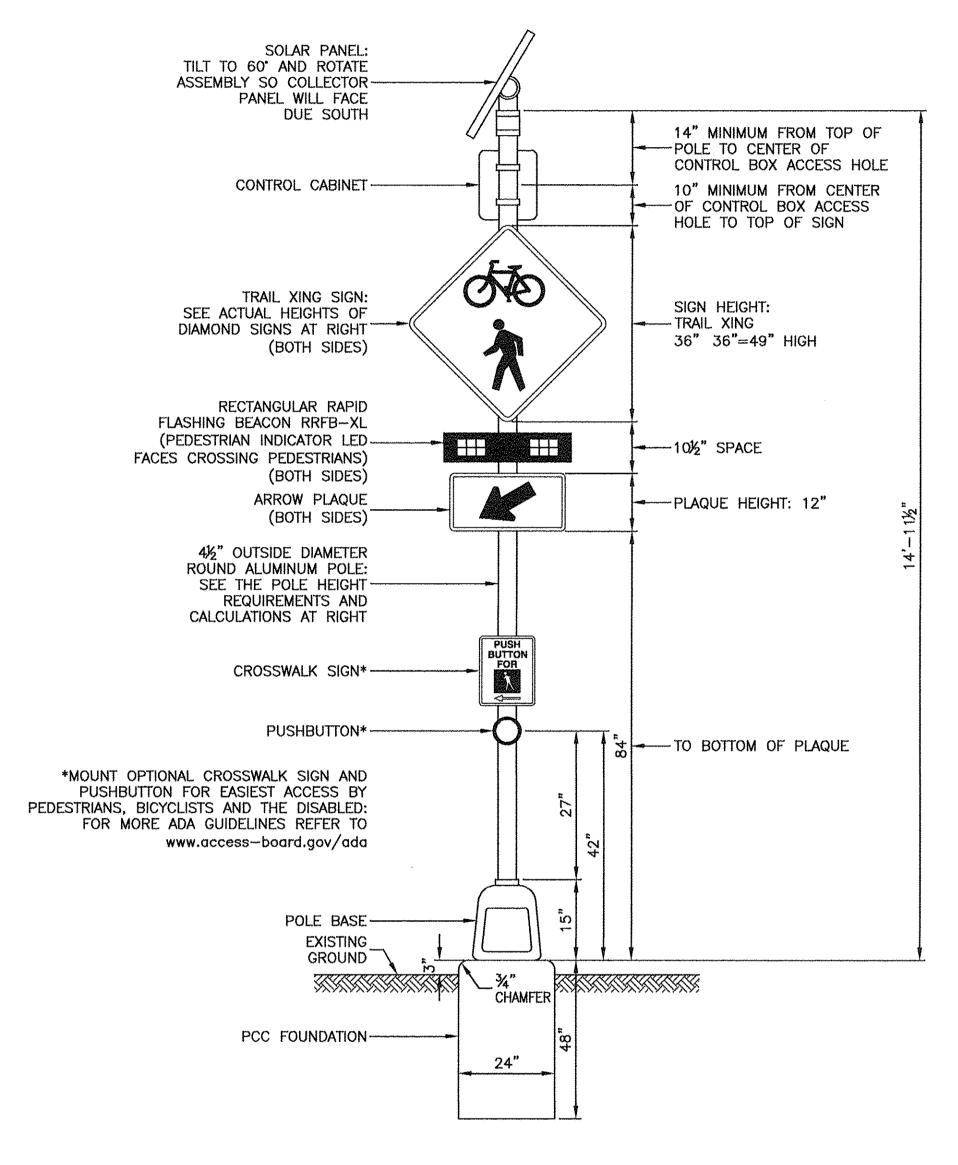
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: NONE

| ELECTRIC SERVICE INSTALLATION | | | F.A.P RTE. | SEC | CTION | | COUNTY | TOTAL SHEETS | SHE NO | | | | |
|-------------------------------|---------------------------|------|---------------|------|---------|----------|---------|-----------------|-----------|--------|-----------------|--------|-----|
| | AERIAL, REMOTE DISCONNECT | | | 353 | 13-000 | 63-00-CH | | соок | 63 | 42 | | | |
| | | | | | BE-22 | 20 | | CONTRACT | NO. 61C | 11 | | | |
| | SHEET NO. 1 | OF 1 | SHEETS | STA. | TO STA. | | FED. RO | AD DIST. NO. 1 | ILLINOIS | FED. A | D PROJECT M-400 | 3(216) | *** |

TOTAL SHEET NO.

63 42



TYPICAL RECTANGULAR RAPID FLASHING BEACON CONFIGURATION

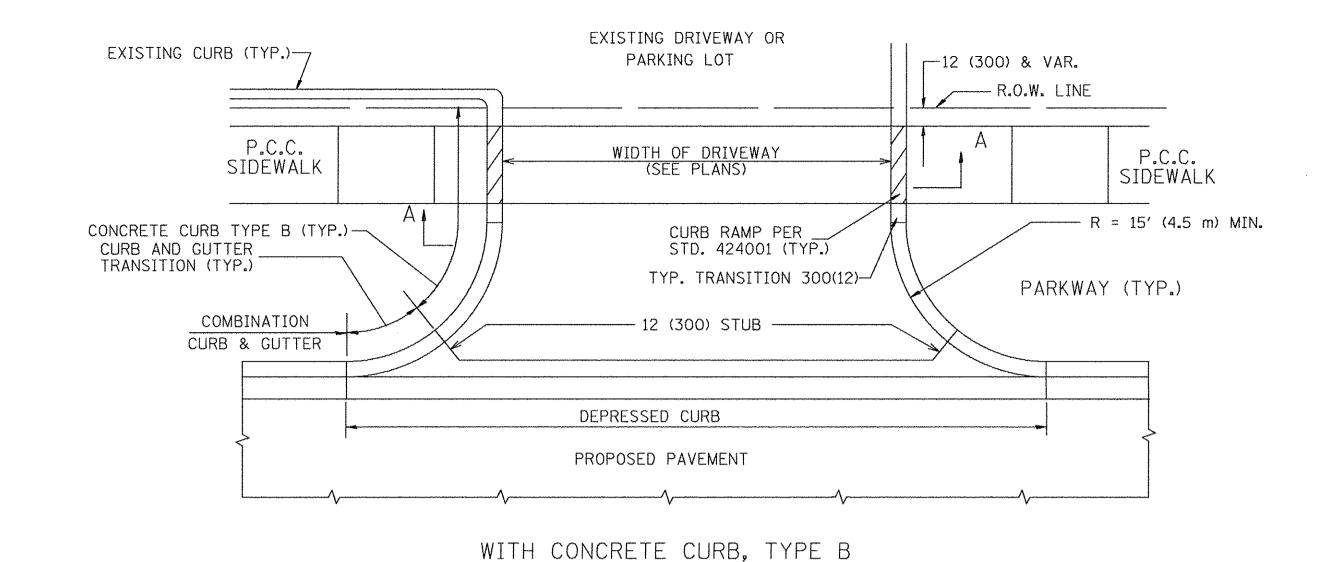
NOTES

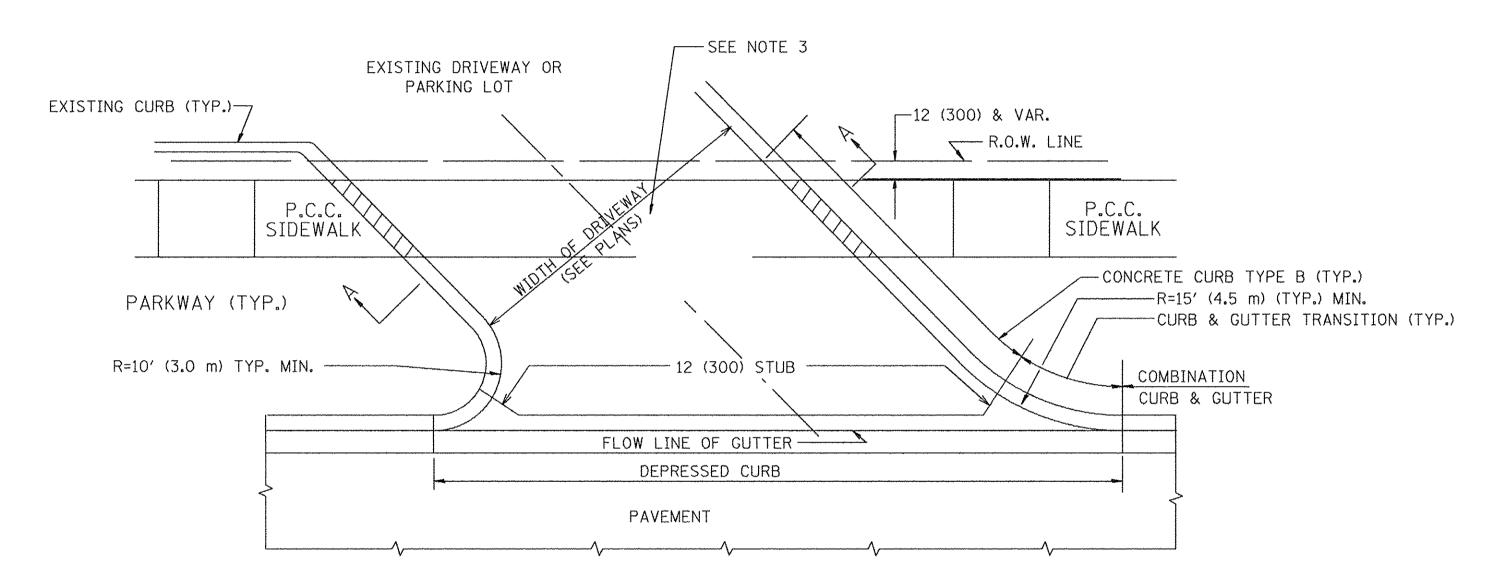
- THE SCHEDULE OF QUANTITIES LISTS ITEMS INCLUDED FOR ONE COMPLETE ASSEMBLY.
- 2. SEE THE SPECIAL PROVISIONS FOR SOLAR POWERED FLASHING BEACON ASSEMBLY (COMPLETE) FOR FURTHER DETAILS.
- TRAIL CROSSING, ARROW PLAQUES, AND RRFB SHALL BE INSTALLED FACING BOTH DIRECTIONS OF VEHICLE TRAFFIC ON EACH SIDE OF THE KOSTNER AVE TRAIL CROSSING.

SCHEDULE OF QUANTITIES PER ASSEMBLY

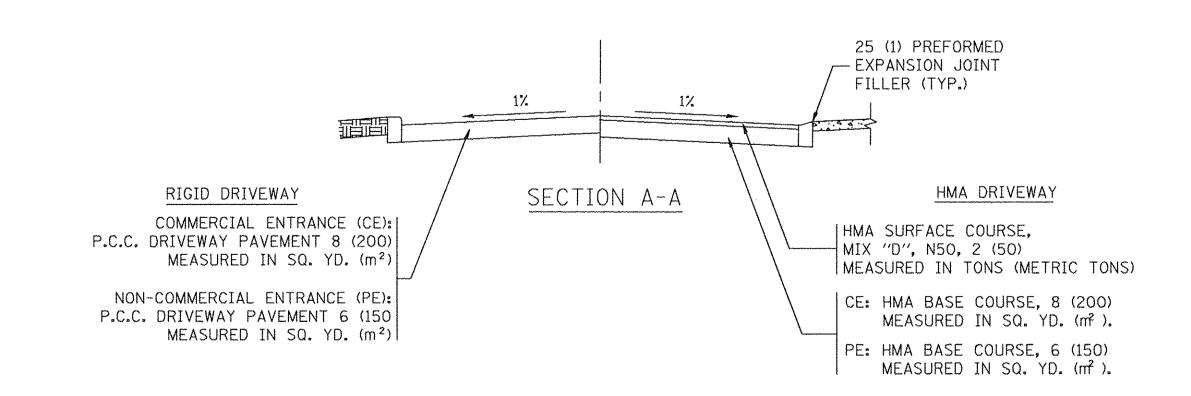
| <u>ITEM</u> | <u>UNIT</u> | QUAN |
|---|-------------|------|
| SOLAR PANEL | EACH | 1 |
| CONTROL CABINET AND ELECTRICAL COMPONENTS | EACH | 1 |
| RRFB-XL | EACH | 2 |
| PEDESTRIAN PUSHBUTTON | EACH | 1 |
| 4 1/2" DIAMETER ALUMINUM POLE | EACH | 1 |
| P.C.C. FOUNDATION | EACH | 1 |
| TRAIL CROSSING SIGN | EACH | 2 |
| ARROW PLAQUE | EACH | 2 |
| CROSSWALK SIGN | EACH | 1 |
| | | |

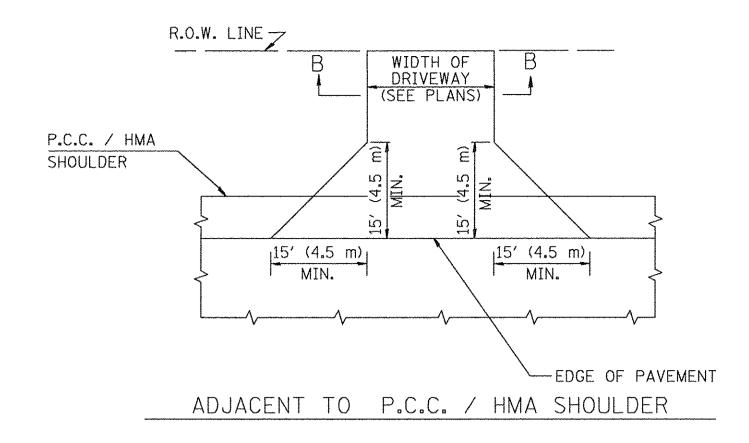
| FILE NAME = 13375_02-DT | TLS-02 - IDOT P01 USER NAME = | DESIGNED — EMA | REVISED — | | INTERSECTION IMPROVEMENTS | F.A.P SECTION COUNTY TOTAL SHEET NO. |
|--|-------------------------------|----------------|-----------|------------------------------|--|---|
| | | CHECKED — PKB | REVISED — | STATE OF ILLINOIS | US 30 (LINCOLN HIGHWAY) AT KOSTNER AVENUE | 353 13-00063-00-CH COOK 63 43 |
| | PLOT SCALE = | DRAWN — RG | REVISED | DEPARTMENT OF TRANSPORTATION | FLASHING BEACON ASSEMBLY DETAILS | CONTRACT NO. 61C11 |
| CAST GAVED BY: RGDADER ON 1711, PLOTTED BY: PROMARD GOALDER OA | V16 PLOT DATE = 05-19-16 | CHECKED — AG | REVISED — | | SCALE: NONE SHEET NO. 43 OF 63 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216) |

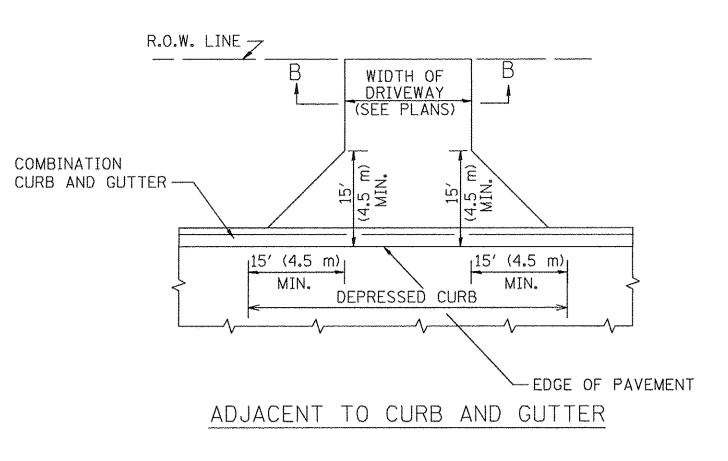


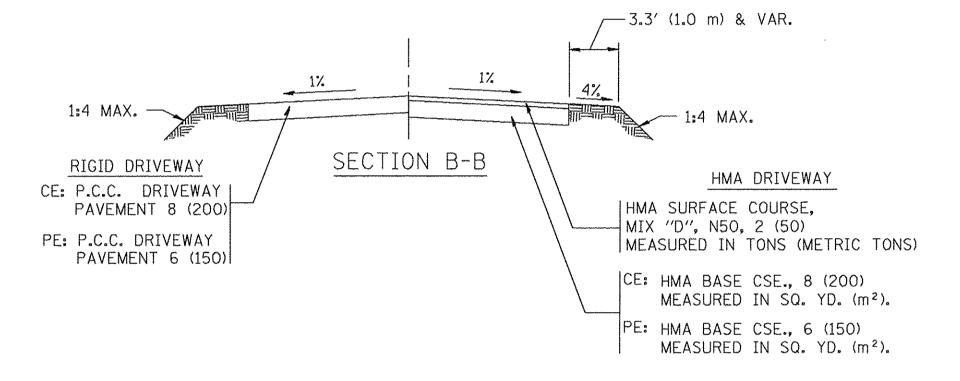


WITH CONCRETE CURB, TYPE B









RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

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

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

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

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

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

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

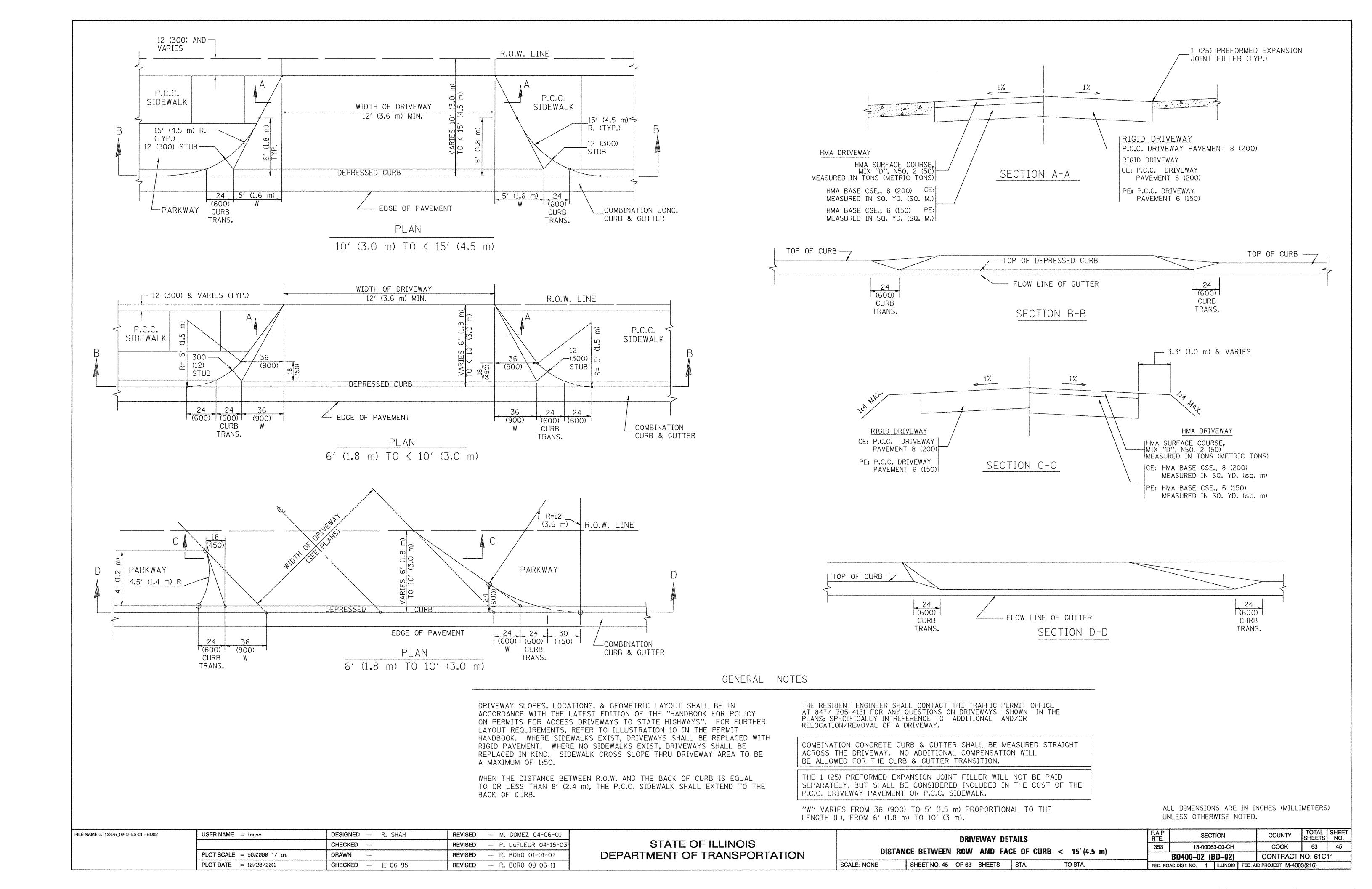
SCALE: NONE

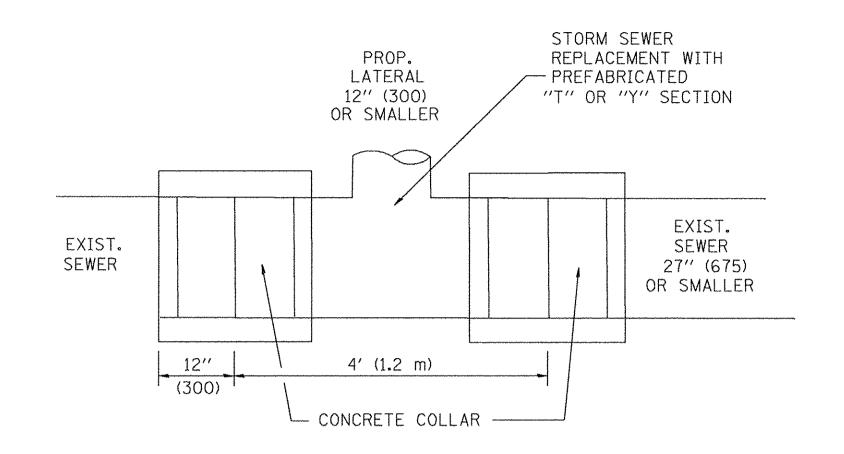
| FILE NAME = | 13375_02-DTLS-01 - BD01 | |
|-------------|-------------------------|--|
| | | |

| USER NAME = leysa | DESIGNED — R. SHAH | REVISED — P. LaFLUER 04-15-03 |
|-----------------------------|---------------------------|-----------------------------------|
| | CHECKED — | REVISED — R. BORO 01-01-07 |
| PLOT SCALE = 50.0000 '/ in. | DRAWN — | REVISED — R. BORO 06-11-08 |
| PLOT DATE = 9/6/2011 | CHECKED — 11-04-95 | REVISED — R. BORO 09-06-11 |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

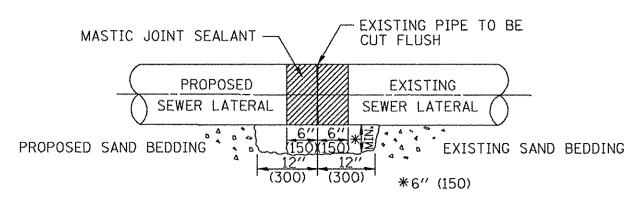
| DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W. | F.A.P RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--|---|-------------------|----------|-----------------|--------------|
| AND FACE OF CURB & EDGE OF SHOULDER > = 15' (4.5 m) | | 13-00063-00-CH | COOK | 63 | 44 |
| AND FACE OF CORB & EDGE OF SHOULDER > = 15 (4.5 III) | | BD0156-07 (BD-01) | CONTRACT | NO. 61C | 11 |
| SHEET NO. 44 OF 63 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216) | | | | |

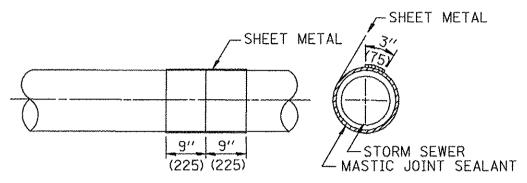


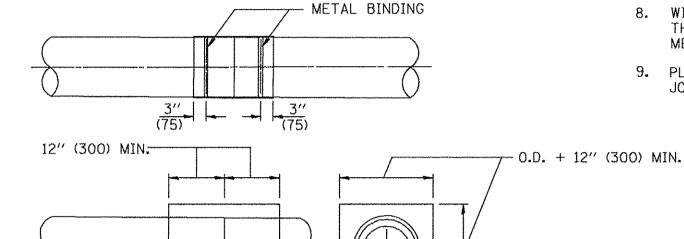


DETAIL "A"

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







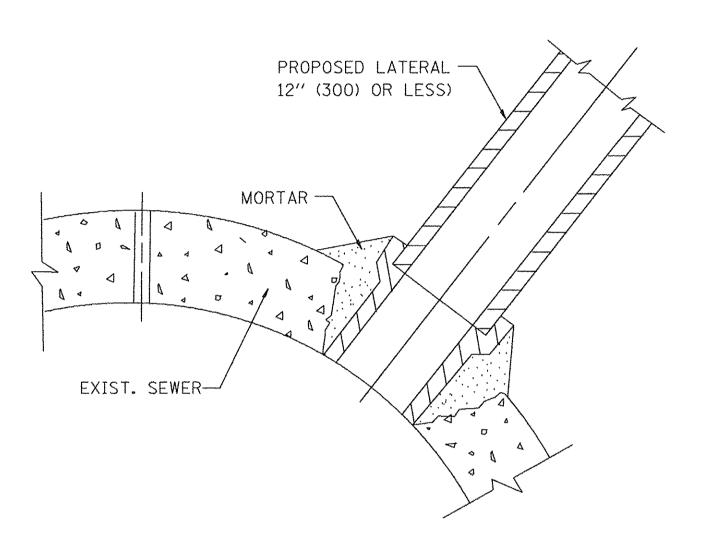
∽CLASS SI CONCRETE-

DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

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



DETAIL "C"
PROPOSED LATER

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

NOTES

MATERIAL

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

CONSTRUCTION METHODS

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

 A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE

 DETAIL "A" AND "B".
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".
 - IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER.

ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST

BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

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

BASIS OF PAYMENT

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

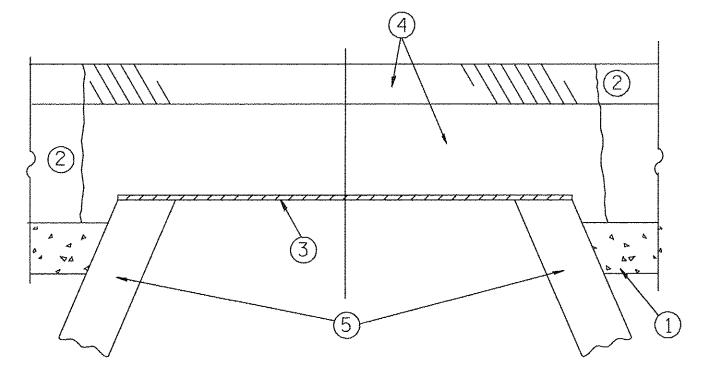
REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

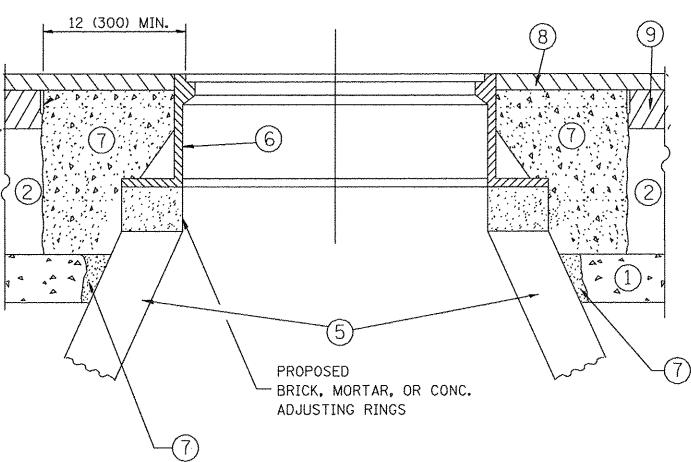
TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

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

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

TOTAL SHEE SHEETS NO. F.A.P RTE. USER NAME = gaglianobt REVISED - VI. DE YONG 05-08-92 FILE NAME = 13375_02-DTLS-01 - BD7 **DESIGNED** — M. DE YONG COUNTY DETAIL OF STORM SEWER STATE OF ILLINOIS CHECKED REVISED — R. SHAH 09-09-94 353 COOK 63 46 13-00063-00-CH CONNECTION TO EXISTING SEWER DEPARTMENT OF TRANSPORTATION PLOT SCALE = 50.000 '/ IN. DRAWN REVISED - R. SHAH 10-25-94 BD500-01 (BD-7) CONTRACT NO. 61C11 **REVISED** — **?.** SHAH 06-12-96 SCALE: NONE SHEET NO. 46 OF 63 SHEETS STA. TO STA. PLOT DATE = 1/4/2008**CHECKED** — 07-25-90 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216)





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.

SCALE: NONE

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 $1\frac{1}{2}$ (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
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 7 CLASS PP-1* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- (8) PROPOSED HMA SURFACE COURSE
- 4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- (5) EXISTING STRUCTURE
- 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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT
WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = 13375_02-DTLS-01 - BD08

USER NAME = bauerdl

CHECKED - R. SHAH

REVISED - R. WIEDEMAN 05-14-04

REVISED - R. BORO 01-01-07

PLOT SCALE = 1968.5000 '/ m

PLOT DATE = 12/6/2011

CHECKED - 10-25-94

REVISED - R. BORO 03-09-11

REVISED - R. BORO 12-06-11

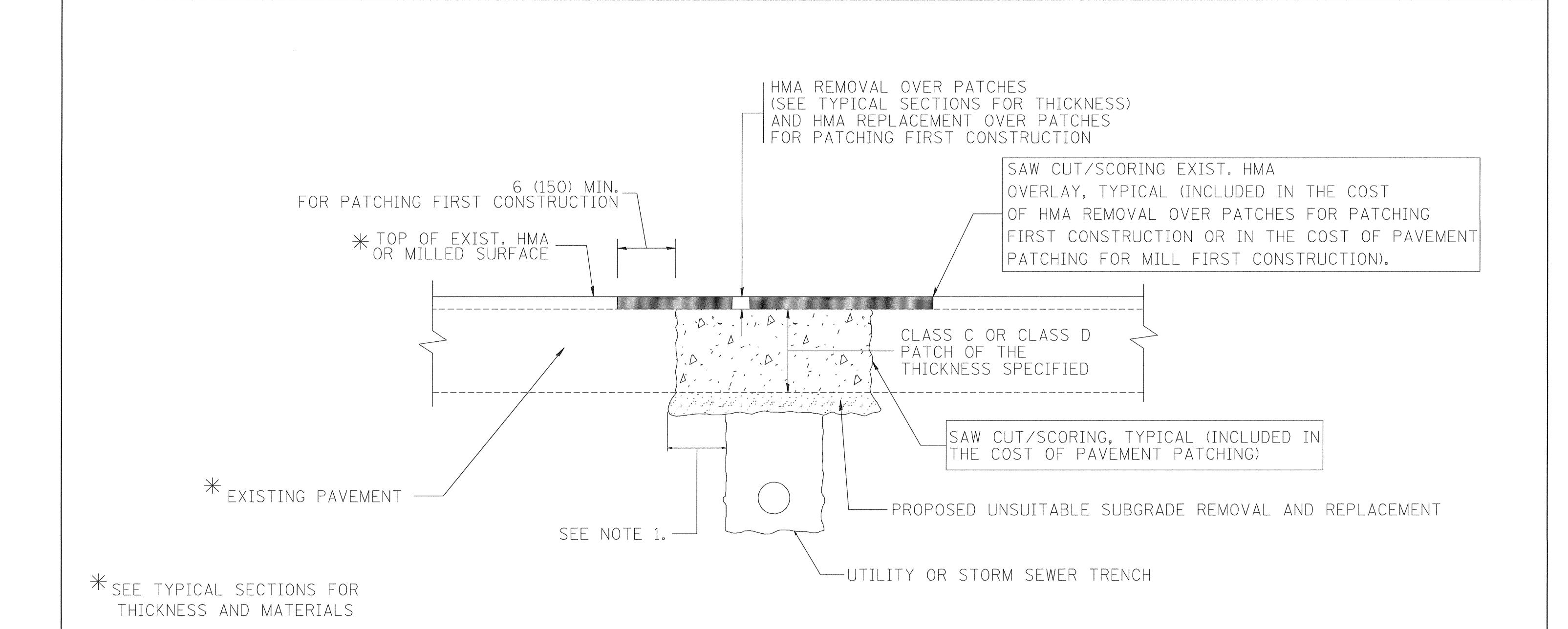
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING
SHEET NO. 47 OF 63 SHEETS STA. TO STA.

F.A.P RTE. SECTION COUNTY TOTAL SHEETS NO.

353 13-00063-00-CH COOK 63 47

BD600-03 (BD-8) CONTRACT NO. 61C11

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216)



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)

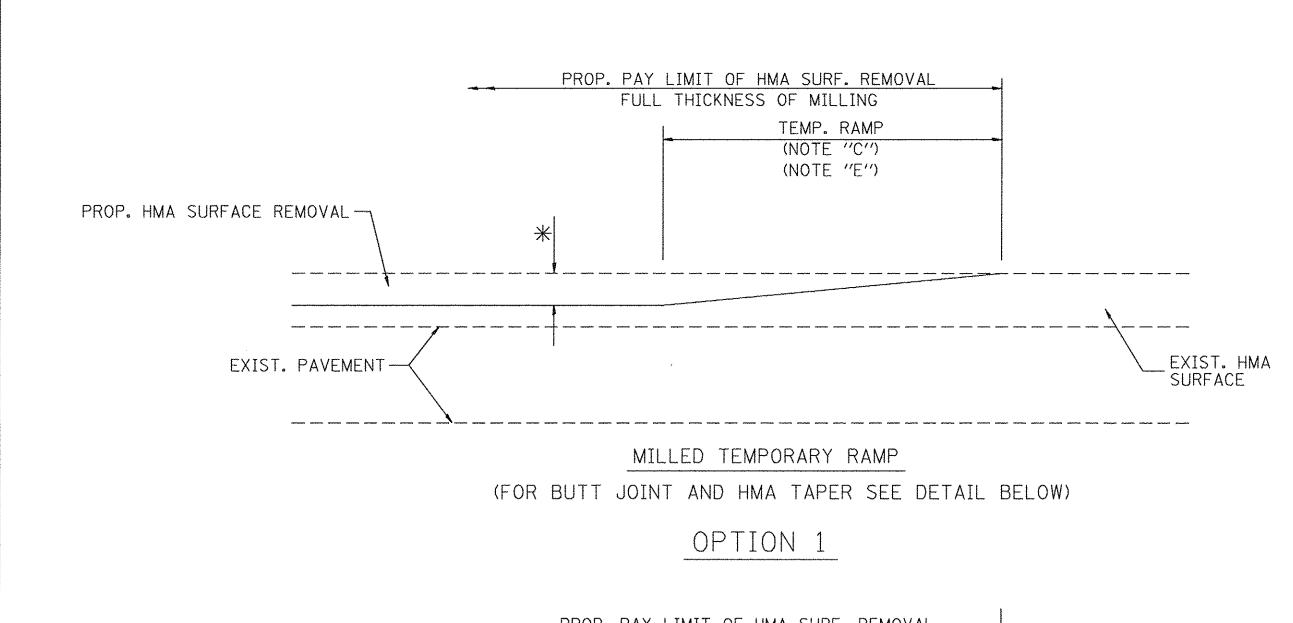
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

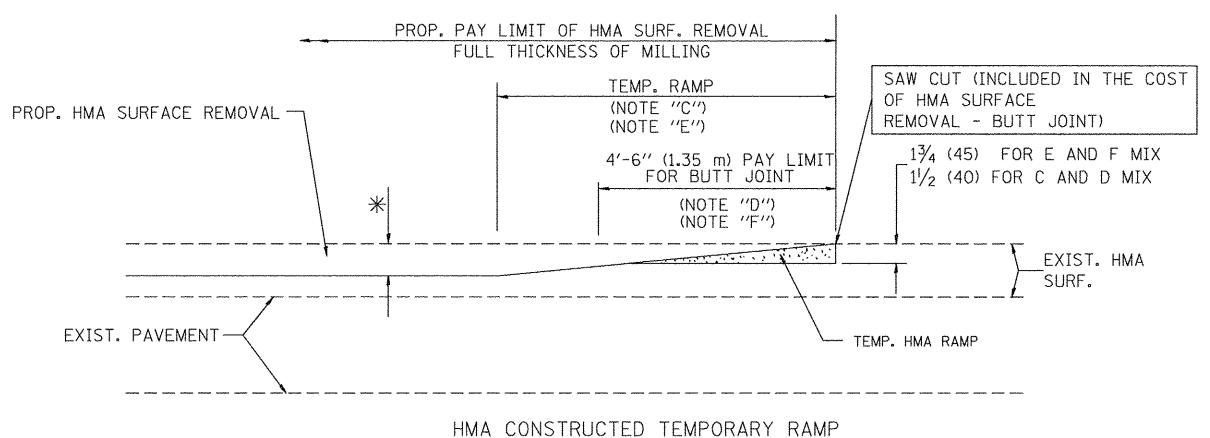
SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 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 = 13375_02-DTLS-01 - BD22 | USER NAME = bauerdl | DESIGNED — R. SHAH | REVISED — A. ABBAS 04-27-98 | | PAVEMENT PATCHING FOR | F.A.P SECTION | COUNTY TOTAL SHEET SHEETS NO. |
|-------------------------------------|----------------------------|---------------------------|-----------------------------------|------------------------------|--|-------------------------------------|-------------------------------|
| | | CHECKED — | REVISED — R. BORO 01-01-07 | STATE OF ILLINOIS | HMA SURFACED PAVEMENT | 353 13-00063-00-CH | COOK 63 48 |
| | PLOT SCALE = 50.000 '/ IN. | DRAWN — | REVISED — R. BORO 09-04-07 | DEPARTMENT OF TRANSPORTATION | MMA SUNFACED FAVENCIAL | BD400-04 (BD-22) | CONTRACT NO. 61C11 |
| PLOT DATE = 10/27/2008 | | CHECKED — 10-25-94 | REVISED — K. ENG 10-27-08 | | SCALE: NONE SHEET NO. 48 OF 63 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. | AID PROJECT M-4003(216) |





(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

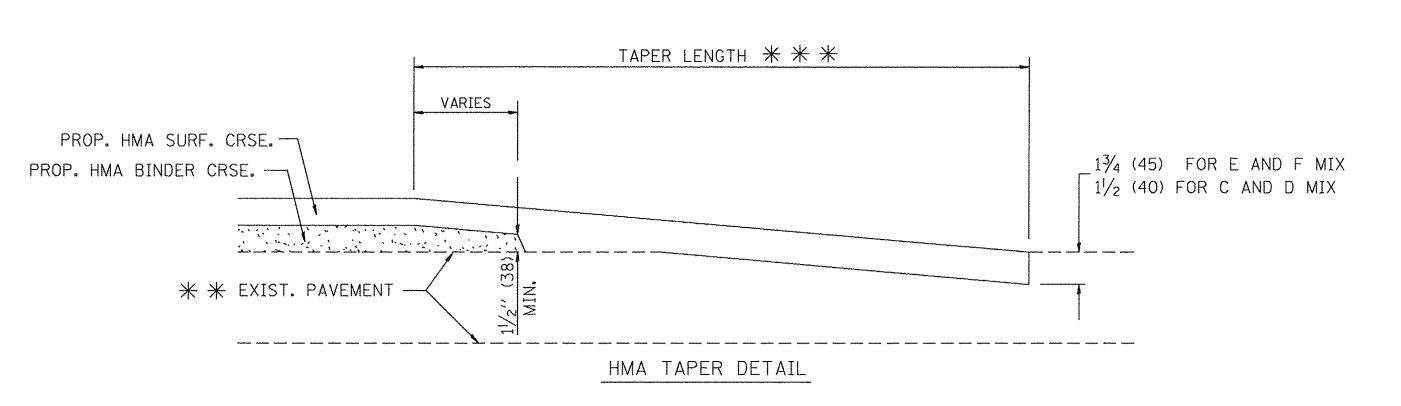
OPTION 2 TYPICAL TEMPORARY RAMP

HMA TAPER LENGTH *** SAW CUT (INCLUDED IN THE COST OF HMA SURFACE PROP. HMA SURF. CRSE. -REMOVAL - BUTT JOINT) PROP. HMA BINDER CRSE. -4'-6" (1.35 m) | VARIES | $1\frac{3}{4}$ (45) FOR E AND F MIX PAY LIMIT FOR BUTT JOINT (NOTE "D") $1\frac{1}{2}$ (40) FOR C AND D MIX EXIST. HMA SURF. EXIST. PAVEMENT - HMA SURF. REMOVAL - BUTT JOINT BUTT JOINT AND

> TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

HMA TAPER

PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT SAW CUT (INCLUDED IN THE COST EXIST. HMA OR PCC SURFACE 30'-0" (9.0 m) (NOTE "A") OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") BUTT JOINT) (NOTE "D") $1\frac{3}{4}$ (45) FOR E AND F MIX $1\frac{1}{2}$ (40) FOR C AND D MIX * * EXIST. PAVEMENT BUTT JOINT 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".
- 米 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".

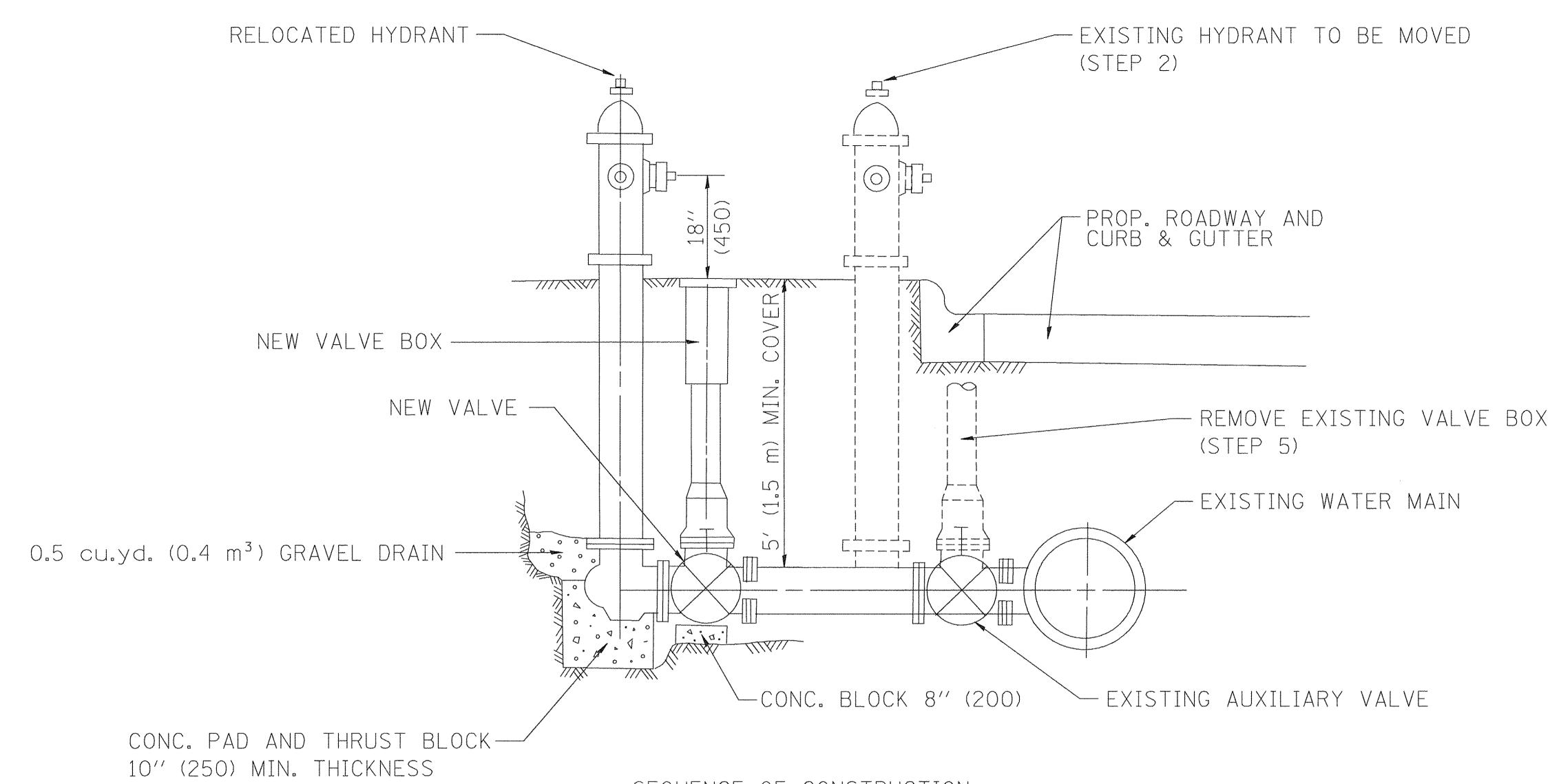
SCALE: NONE

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

DESIGNED -FILE NAME = 13375_02-DTLS-01 - BD32 USER NAME = gaglianobt M. DE YONG REVISED R. SHAH 10-25-94 CHECKED REVISED — A. ABBAS 03-21-97 PLOT SCALE = 50.0000 '/ IN. DRAWN REVISED - M. GOMEZ 04-06-01 PLOT DATE = 1/4/2008 **REVISED** — R. BORO 01-01-07 **CHECKED** — 06-13-90

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

| BUTT JOINT AND | | | | | F. | A.P RTE. | SECTION | | | COUNTY | TOTAL SHEETS | SHEET NO. | |
|----------------|-------------------|-------|--------|------|---------|-------------|---------|----------------|----------|----------|-----------------|--------------|----|
| | | | | | | 353 | 13-0006 | 3-00-CH | | COOK | 63 | 49 | |
| | HMA TAPER DETAILS | | | | | | | BD400-05 | BD32 | | CONTRAC | T NO. 61C | 11 |
| | SHEET NO. 49 | OF 63 | SHEETS | STA. | TO STA. | Fi | ED. ROA | AD DIST. NO. 1 | ILLINOIS | FED. All | D PROJECT M-4 | 1003(216) | |



SEQUENCE OF CONSTRUCTION:

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

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

FIRE HYDRANT TO BE MOVED

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

| FILE NAME = 13375_02-DTLS-01 - BD36 | USER NAME = gaglianobt | DESIGNED — | REVISED — R. SHAH 09-09-94 | | FIRE HYDRANT TO BE MOVED | | | | | SECTION | COUNTY | TOTAL SHEET SHEET NO. |
|-------------------------------------|-----------------------------|------------|-----------------------------------|------------------------------|--|----------------------------|------|---------|-----------|-------------------------|----------|-----------------------|
| | | CHECKED — | REVISED — R. SHAH 10-25-94 | STATE OF ILLINOIS | e esere es a referencia es e esta esta esta esta esta esta est | | | | 353 | 13-00063-00-CH | соок | 63 49A |
| | PLOT SCALE = 50.0000 '/ IN. | DRAWN — | REVISED — | DEPARTMENT OF TRANSPORTATION | | | | | | BD-36 | CONTRACT | NO. 61C11 |
| | PLOT DATE = 1/4/2008 | CHECKED — | REVISED — | | SCALE: NONE | SHEET NO. 49A OF 63 SHEETS | STA. | TO STA. | FED. ROAD | DIST. NO. 1 ILLINOIS FE | 003(216) | |

| FRAME EXTENSION INTO PAVEMENT | INNER HOOP REINFORCEMENT DIAMETER | SEMI CIRCULAR FORM DIAMETER | OUTER HOOP REINFORCEMENT DIAMETER |
|----------------------------------|---|--------------------------------|---|
| UP TO 8" (200) | 3'-6" (1.1 m) | 4'-0'' (1.2 m) | 5'-0'' (1.5 m) |
| > 8" (200) T0 14" (360) | 4′-0′′ (1.2 m) | 4'-6" (1.4 m) | 5'-0'' (1.5 m) |

CHECKED — TOM MATOUSEK

CHECKED — 01-04-99

— A. ABBAS

REVISED

REVISED

-T. MATOUSEK 10-02-00

—T. MATOUSEK 04-25-02

REVISED — . LAFLEUR 08-27-02

DESIGNER NOTE: THIS DETAIL IS TO BE USED WHEN THE GUTTER FLAG IS LESS THAN 24"

LEGEND:

PLOT SCALE = 50.0000 '/ IN.

PLOT DATE = 1/4/2008

FILE NAME = 13375_02-DTLS-01 - BD48

NOTES:

- 1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
- 2. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT, EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
- 3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
- 4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
- 5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
- 6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.

TOTAL SHEET SHEETS NO.

50

63

CONTRACT NO. 61C11

COOK

353

13-00063-00-CH

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216)

BD-48

- 7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
- 8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
- 9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.

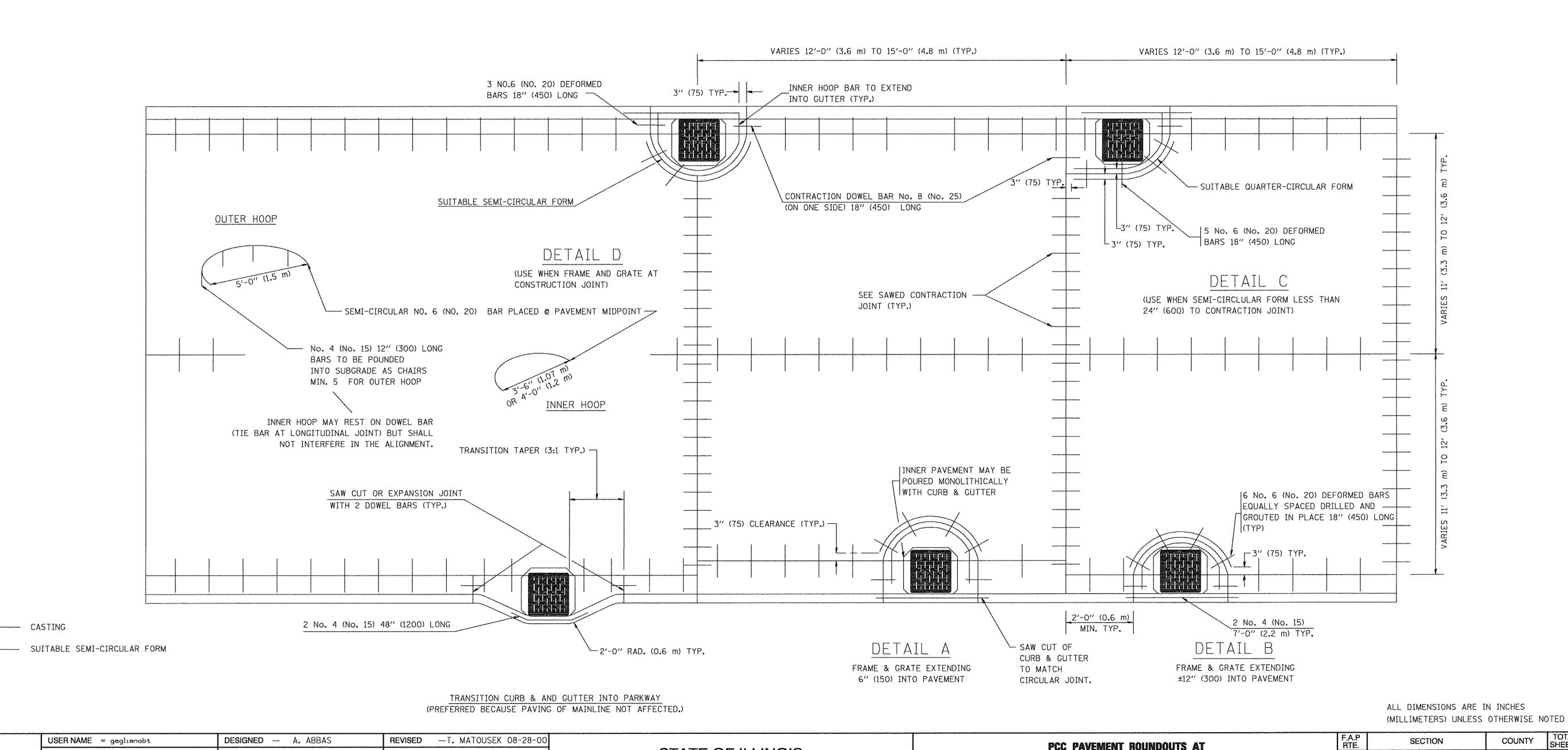
PCC PAVEMENT ROUNDOUTS AT

CURB AND GUTTER

TO STA.

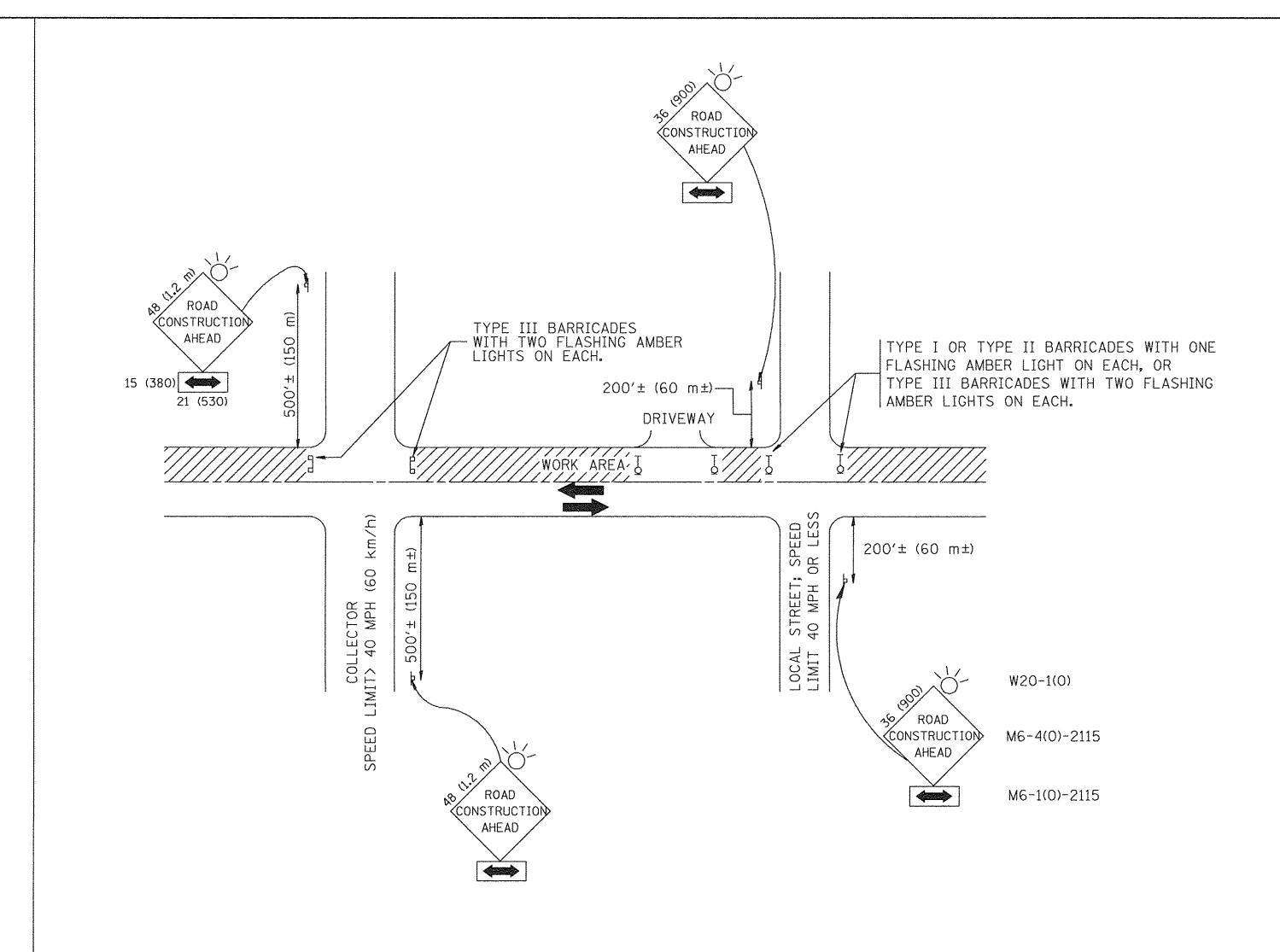
SHEET NO. 50 OF 63 SHEETS STA.

SCALE: NONE



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

SCALE: NONE

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

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

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

FILE NAME = 13375_02-DTLS-01 - TC10

USER NAME = gaglianobt

CHECKED - LHA

REVISED - J. OBERLE 10-18-95

CHECKED - REVISED - A. HOUSEH 03-06-96

PLOT SCALE = 50.000 '/ IN.

DRAWN - REVISED - A. HOUSEH 10-15-96

PLOT DATE = 1/4/2008

CHECKED - 06-89

REVISED - T. RAMMACHER 01-06-00

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

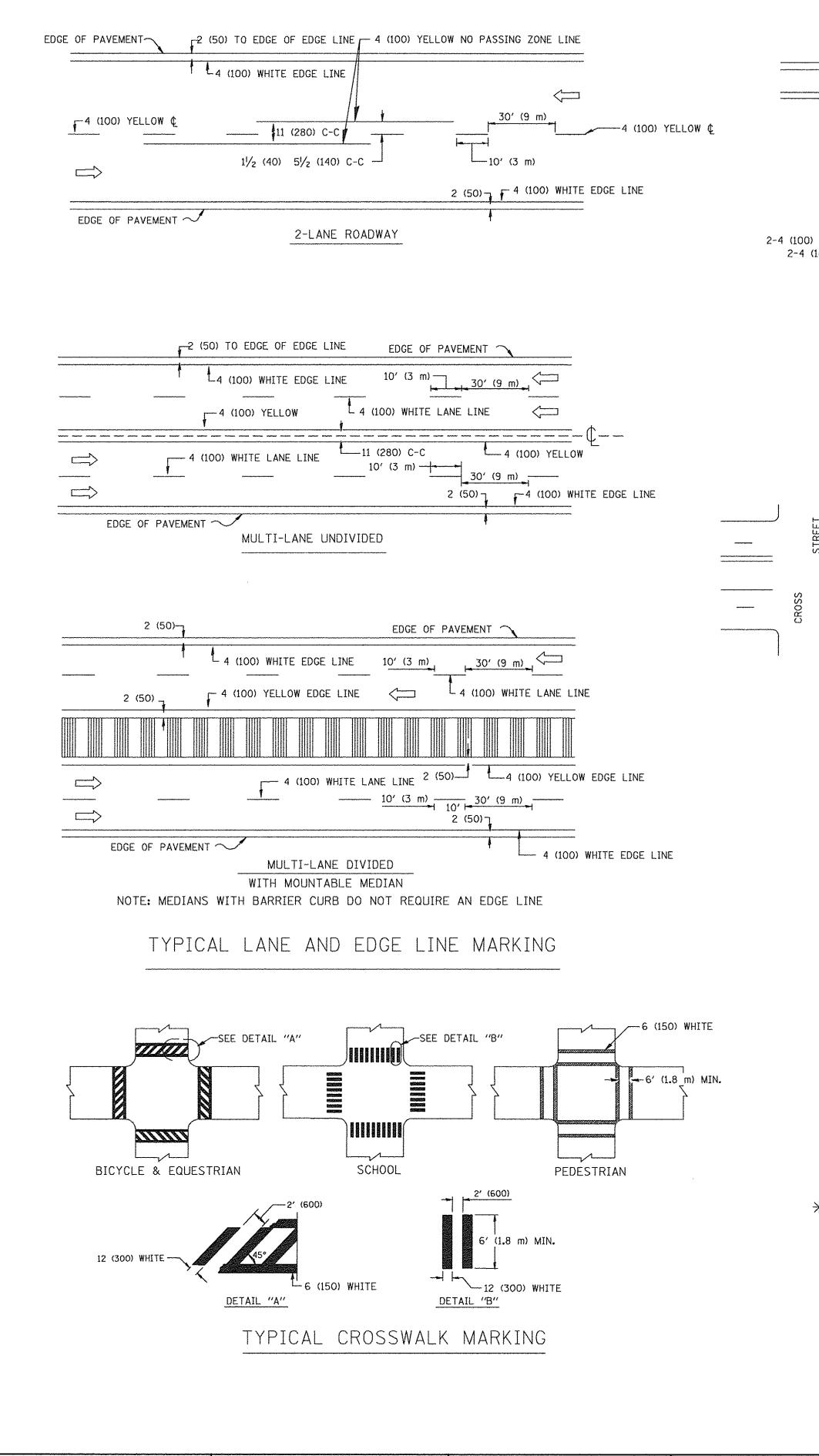
SHEET NO. 50A OF 63 SHEETS STA. TO STA.

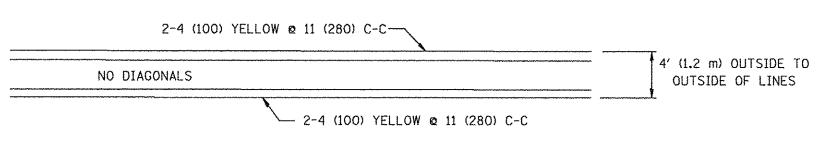
 F.A.P RTE.
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 353
 13-00063-00-CH
 COOK
 63
 50A

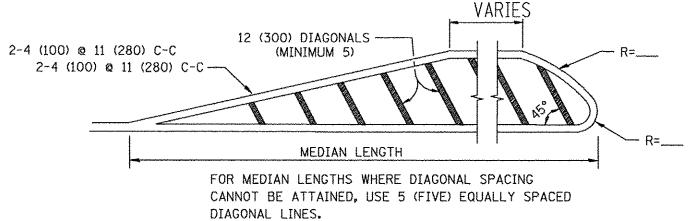
 TC-10
 CONTRACT NO. 61C11

 FED. ROAD DIST. NO. 1
 ILLINOIS
 FED. AID PROJECT M-4003(216)



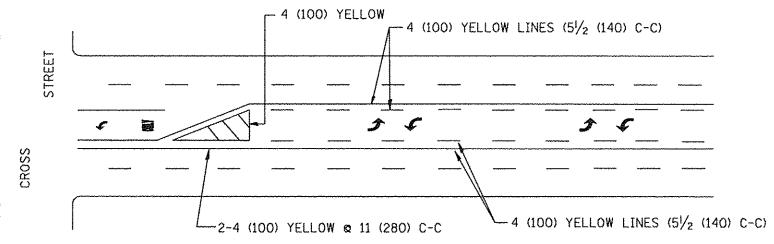


4' (1.2 m) WIDE MEDIANS ONLY

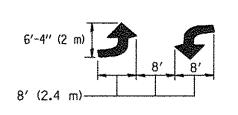


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

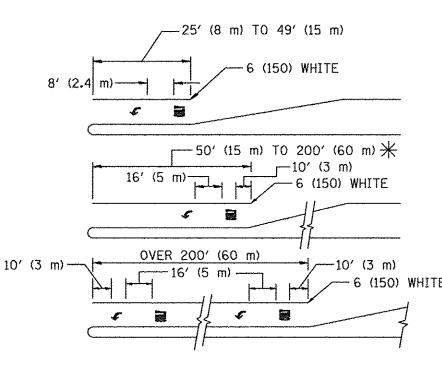


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

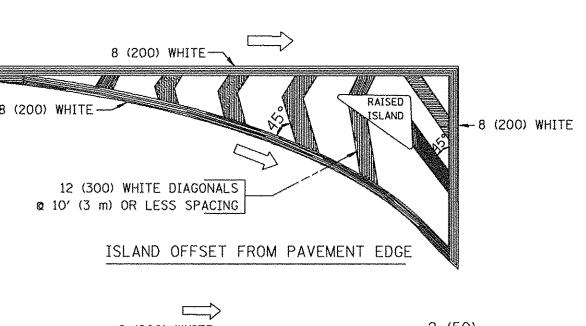


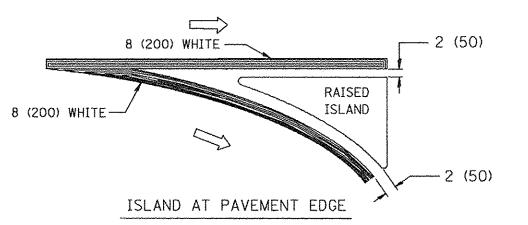
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \uparrow AREA = 15.6 SQ. FT. (1.5 m²) **(1.1)** AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING





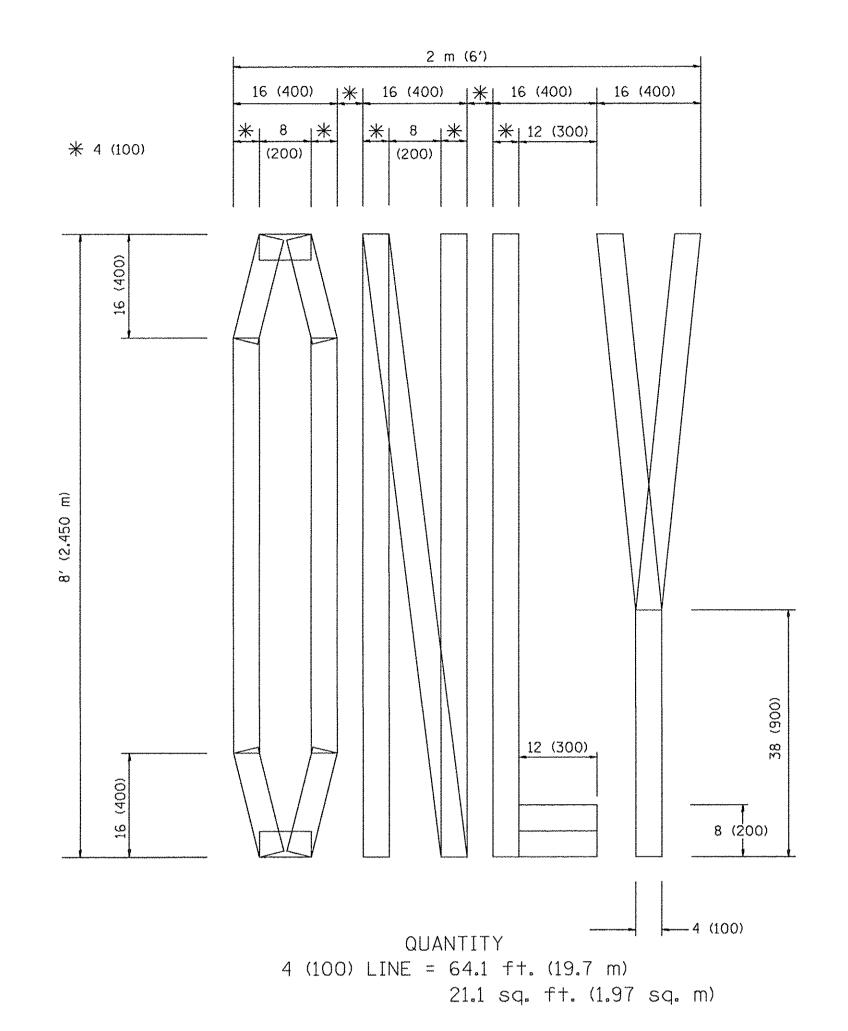
TYPICAL ISLAND MARKING

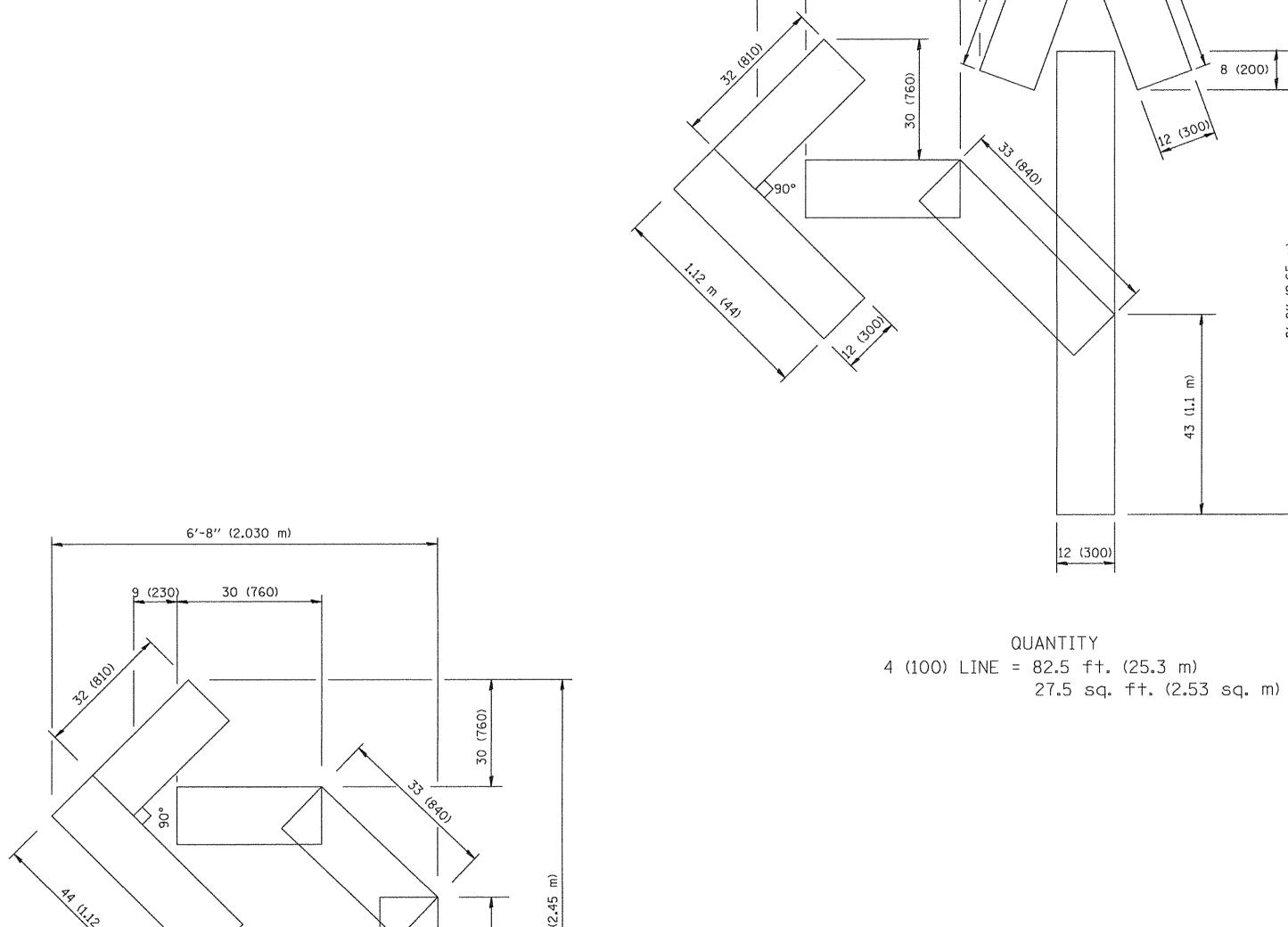
| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING / REMARKS |
|---|---|-------------------------|--------------------------------|--|
| CENTERLINE ON 2 LANE PAVEMENT | 4 (100) | SKIP-DASH | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS | 4 (100) 2 Q 4 (100) | SOLID SOLID | YELLOW YELLOW | 51/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100) 5 (125) ON FREEWAYS | SKIP-DASH SKIP-DASH | WHITE WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE |
| EDGE LINES | 4 (100) | SOLID | YELLOW-LEFT WHITE-RIGHT | OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB |
| TURN LANE MARKINGS | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) | SOLID | WHITE | SEE TYPICAL TURN LANE MARKING DETAIL |
| TWO WAY LEFT TURN MARKING | 2 @ 4 (100) EACH DIRECTION | SKIP-DASH AND SOLID | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; $5\frac{1}{2}$ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE |
| | 8' (2.4m) LEFT ARROW | IN PAIRS | WHITE | SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 & 6 (150) 12 (300) & 45° 12 (300) & 90° | SOLID SOLID SOLID | WHITE WHITE WHITE | NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS | 2 @ 4 (100) WITH 12 (300) DIAGONALS | SOLID | YELLOW: TWO WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE |
| | © 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | | WHITE: ONE WAY TRAFFIC | SEE TYPICAL PAINTED MEDIAN MARKING. |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²) |
| SHOULDER DIAGONALS | 12 (300) & 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h)) |

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

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

| FILE NAME = 13375_02-DTLS-01 - TC13 | USER NAME = drivakosgn | DESIGNED — EVERS | REVISED —T. RAMMACHER 10-27-94 | STATE OF ILLINOIS | DISTRICT ONE | | | | SECTION | COUNTY | TOTAL | 3HEET NO. |
|-------------------------------------|----------------------------|-------------------------|--------------------------------|------------------------------|--|---------------------------|----------------|---------------------------------------|---------------------|----------|----------|-----------|
| | | CHECKED — | REVISED —€. JUCIUS 09-09-09 | | | | | 353 | 13-00063-00-CH | соок | 63 | 51 |
| | PLOT SCALE = 50.000 '/ IN. | DRAWN — | REVISED — | DEPARTMENT OF TRANSPORTATION | | TYPICAL PAVEMENT MARKINGS | | | TC-13 | CONTRACT | NO. 61C1 | 1 |
| | PLOT DATE = 9/9/2009 | REVISED — | | SCALE: NONE | SHEET NO. 51 OF 63 SHEETS STA. TO STA. | | FED. ROAD DIST | · · · · · · · · · · · · · · · · · · · | PROJECT M-4003(216) | | | |





1'-8" (500)

9 (230) 30 (800)

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

12 (300)

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

TOTAL SHEET NO. 63 52 F.A.P RTE. 353 REVISED -T. RAMMACHER 06-05-96 COUNTY FILE NAME = 13375_02-DTLS-01 - TC16 SECTION USER NAME = gaglianobt DESIGNED — PAVEMENT MARKING LETTERS AND SYMBOLS STATE OF ILLINOIS REVISED -T. RAMMACHER 11-04-97 CHECKED 13-00063-00-CH соок FOR TRAFFIC STAGING REVISED -T. RAMMACHER 03-02-98 DEPARTMENT OF TRANSPORTATION TC-16 PLOT SCALE = 50.0000 ' / IN. CONTRACT NO. 61C11 REVISED —E. GOMEZ 08-28-00 SHEET NO. 52 OF 63 SHEETS STA. TO STA. SCALE: NONE FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(216) PLOT DATE = 1/4/2008 **CHECKED** — 09-18-94

