

04-22-2016 LETTING ITEM 146

STATE OF ILLINOIS  
**WINNEBAGO COUNTY HIGHWAY DEPARTMENT**  
 PLANS FOR PROPOSED HSIP IMPROVEMENT  
**FAU 5146 (FOREST HILLS ROAD)**



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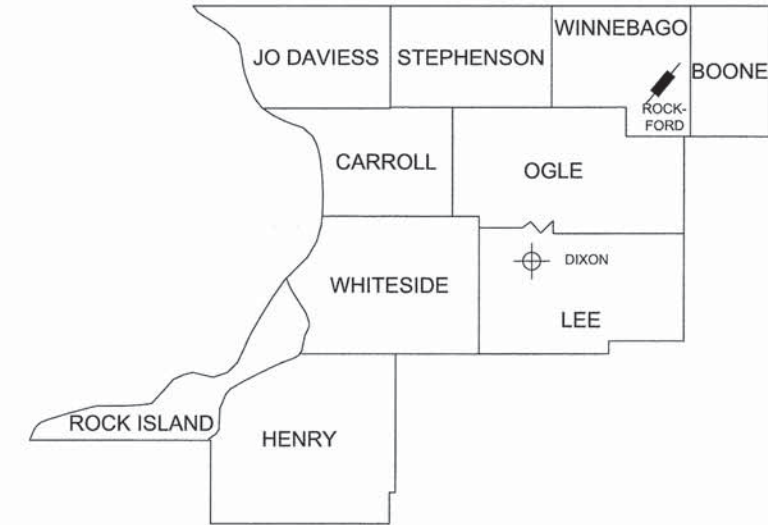
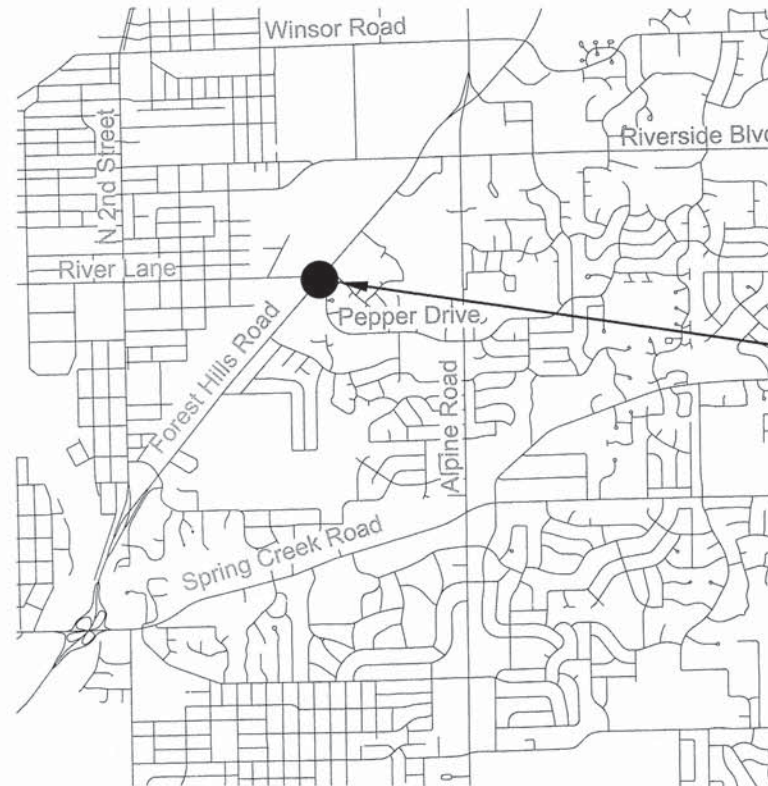
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| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS   |
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| 424011-02 | CORNER PARALLEL CURB RAMPS FOR SIDEWALKS  |
| 606001-06 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER                   |
| 701006-05 | OFF-RD OPERATIONS, 2 LANE, 2-WAY, 15' TO 24" FROM PAVEMENT EDGE                 |
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| 701427-04 | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS <= 40 MPH |
| 701602-07 | URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE             |
| 701606-10 | URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIA                   |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION                                      |
| 701801-06 | SIDEWALK, CORNER OR CROSSWALK CLOSURE   |
| 701901-05 | TRAFFIC CONTROL DEVICES   |
| 720001-01 | SIGN PANEL MOUNTING DETAILS   |
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| 720016-03 | MAST ARM MOUNTED STREET NAME SIGNS  |
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| 729001-01 | APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)                   |
| 731001-01 | BASE FOR TELESCOPING STEEL SIGN SUPPORT   |
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| 862001-01 | UNITERRUPTABLE POWER SUPPLY (UPS)   |
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**SECTION: 14-00571-00-RS**  
**PROJECT NO.: HSIP-5099 (117)**

RESURFACING ON FOREST HILLS ROAD (C.H. 7)  
 JOB NO.: C-92-026-16  
 CONTRACT NO.: 85636



⊕ DISTRICT HEADQUARTER      ▬ PROJECT LOCATION

**14-00571-00-RS PROJECT ENDS  
 STA 75+30 (NORTH OF TOFT STREET)**

**14-00571-00-RS PROJECT BEGINS  
 STA 62+25 (SOUTH OF PEPPER DRIVE / RIVER LANE)**

| SCALES:               |                           |
|-----------------------|---------------------------|
| <b>CROSS-SECTIONS</b> | <b>PLAN &amp; PROFILE</b> |
| <b>FULL SIZE</b>      | <b>FULL SIZE</b>          |
| HORIZONTAL: 1" = 20'  | HORIZONTAL: 1" = 50'      |
| VERTICAL: 1" = 10'    | VERTICAL: 1" = 10'        |
| <b>1/4 SIZE</b>       | <b>1/4 SIZE</b>           |
| HORIZONTAL: 1" = 40'  | HORIZONTAL: 1" = 100'     |
| VERTICAL: 1" = 20'    | VERTICAL: 1" = 20'        |

FOREST HILLS ROAD: 1,305.00 FT = 0.25 MILES  
 SIDE ROAD IMPROVEMENTS: 0.00 FT = 0.00 MILES  
 TOTAL LENGTH OF IMPROVEMENTS = 1,305.00 FT = 0.25 MILES

**ADT: 19,100 (2016) 3% TRUCKS**  
**OTHER PRINCIPAL ARTERIAL**  
**DESIGN SPEED: 45 MPH**  
**3R POLICY**

**CALL J.U.L.I.E.**  
**BEFORE YOU DIG**  
 1-800-892-0123  
 ROCKFORD TWP (T44N-R2E)  
 SEC. - 5, 6, & 7

**THESE PLANS PREPARED BY:**  
**WINNEBAGO COUNTY HIGHWAY DEPARTMENT**

APPROVED *Feb 23* 20 16  
 WINNEBAGO ASSISTANT COUNTY ENGINEER

PASSED *Feb 23* 20 16  
 DISTRICT 2 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
 BASED ON LIMITED REVIEW *Feb 23* 20 16  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER



# GENERAL NOTES

## GENERAL NOTES AND CONDITIONS

The scale shown on the drawings applies only to the full size plans and not reduced size plans.

The Contractor shall field verify the elevations of the benchmarks prior to commencing work. The Contractor shall also field verify location, elevation and size of existing work. The contractor shall field verify horizontal control by referencing shown coordinates to known property lines. Notify the Engineer of discrepancies in either vertical or horizontal control prior to proceeding with work.

CADD data will be available to Contractors and Consultants working on this project. This information will be provided upon request as AutoDesk Civil 3D CADD files ONLY. If data is required in other formats it will be your responsibility to make these conversions. If any discrepancy or inconsistency arises between the electronic data and the information on the hard copy, the information on the hard copy should be used. Contact the Project Engineer to request these files.

Where section or subsection monuments are encountered, the Engineer shall be notified before such monuments are removed. The Contract shall protect and carefully preserve all property markers, monuments and right-of-way pins until the owner, an authorized surveyor, or agent has been witnessed or otherwise referenced their location.

## UTILITIES

Exact horizontal and vertical locations of existing utilities shall be determined by the Contractor at no additional cost to the contract. Locations and depths shown on these plans are only schematic representation.

Abandoned underground utilities that conflict with construction or have the potential for creating future problems shall be disposed of outside the limits of the right-of-way according to Article 202.03 of the standard specifications and as directed by the Engineer. This work will not be paid for separately but shall be considered incidental no additional compensation will be allowed.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. The phone number for J.U.L.I.E. is 800-892-0123. The utilities located within the project limits or immediately adjacent to the project construction limits are members of J.U.L.I.E.

**AT&T**  
c/o Hector Garcia  
2408 8th Avenue  
Rockford, IL 61108  
(815) 394-7297

**City of Loves Park**  
c/o Nathan Bruck  
100 Heart Boulevard  
Loves Park, IL 61111  
(815) 378-5750

**Commonwealth Edison**  
c/o Nora Fernandez  
123 Energy Avenue  
Rockford, IL 61109  
(815) 490-2335

**Nicor Gas**  
c/o Bruce Koppang  
1844 Ferry Road  
Naperville, IL 60563  
(630) 388-3046

**Comcast**  
c/o Mike Owens  
4450 Kishwaukee Street  
Rockford, IL 61109  
(815) 395-8977

**City of Rockford**  
c/o Matt Vitner  
425 E State Street  
Rockford, IL 61104  
(815) 967-6748

**Illinois Fiber Resources Group**  
c/o Lance Sandy  
(630) 388-2362

**Rock River Water Reclamation**  
3333 Kishwaukee Street  
P.O. Box 7480  
Rockford, IL 61109  
(815) 387-7400

## GRADING, EARTH EXCAVATION, & EMBANKMENT NOTES

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The final top four inches of soil in any right-of-way area disturbed by the Contractor must be a cohesive soil capable of supporting vegetation.

## GRADING, EARTH EXCAVATION, & EMBANKMENT NOTES CONT.)

The Contractor shall use care in grading or excavating near any and all existing items which are not indicated to be removed. Any damage done to existing items by the Contractor's operations shall be repaired at no additional expense to the owner.

Special attention is brought to article 202.03 of the standard specification. The contractor shall conduct the earth excavation operation in such a way as to minimize the mixing of clean soil with construction debris. If the contractor chooses to dispose of excess soil, construction and demolition debris, or waste at an IEPA regulated facility, the contractor shall be responsible to perform all necessary testing, documentation, and correspondence to comply with all IEPA requirements. The cost of complying with IEPA requirements shall not be paid for separately, but shall be considered incidental to the contract. IEPA form LPC 663 (Uncontaminated Soil Certification for P.E.) is in the proposal; based on this certification, no contaminated soil is expected.

## PAVING AND DRAINAGE NOTES

The Contractor is responsible for maintaining positive drainage at the conclusion of each working day.

The area to be primed shall be limited to that which can be covered with HMA the same day, unless otherwise permitted by the Engineer.

Reflective Crack Control shall be placed on the existing surface prior to any resurfacing, unless pavement is milled then it will be placed on the binder course.

All Type A Disabled Ramps must have barrier curbs on the sides of the ramps as shown on Highway Standard 424011. The barrier curbs shall be constructed according to the detail of side curb on Highway Standard 424011.

The Contractor shall place temporary hot-mix asphalt tapers along all sides of the utility structures protruding above the milled surface. The temporary tapers shall extend 2' outside of the castings, except for the approach side to traffic shall have a 4' taper length. Hot-mix asphalt meeting the approval of the Engineer shall be used, no cold millings will be allowed. The cost of the material, placement, maintenance, removal and disposal of said work will be included in the Pay Item for Hot-Mix Asphalt Surface Removal.

Where proposed construction abuts existing appurtenances, a saw cut shall be made to achieve a neat butt joint. Saw cutting shall be done in accordance with the applicable portions of Section 442 of the Standard Specifications and as directed by the Engineer. All saw cutting, including but not limited to, saw cuts for removals, patching, butt joints, and construction staging shall not be paid for separately, but shall be considered as included in the various items for removal.

All drainage structures within the project limits shall be delivered to the County without silt, debris or other such obstructions at the time of final inspection. The need for additional cleaning of the structures shall be at the direction of the Engineer. This work shall not be paid for separately, but shall be considered incidental to the contract.

The Contractor shall construct all private driveways and field entrances in accordance with the plans. The Contractor is responsible to maintain access to all existing driveways during all stages of construction.

## PAVING AND DRAINAGE NOTES CONT.)

The Contractor, at his own expense, shall relocate and replace to the satisfaction of the Engineer, all mailboxes in accordance with Article 107.20 of the Standard Specifications. Emergency access, garbage pick-up, and mail service shall be maintained at all times. It will be the contractor's responsibility to notify residents when access to their driveways will be temporarily closed due to curb and gutter and / or driveway replacement. The Contractor shall distribute notices provided by the County to residents. Every effort shall be made to accommodate access to these properties including knocking on doors when driveways are about to be closed.

The Contractor shall be responsible for collecting and maintaining an electronic log of all stakeout survey that is performed on the job, either by him / her or any sub-contractor performing the stakeout. Upon request, all logs shall be submitted to the County. No additional compensation will be allowed for this work, but shall be considered included in the cost for CONSTRUCTION LAYOUT.

CONTRACT: 85636



ROUTE 7 SECTION 14-00571-00-RS SHEET 2 OF 10

GENERAL NOTES

## LEGEND

| EXISTING | PROPOSED | DESCRIPTION                  |
|----------|----------|------------------------------|
|          |          | TREE                         |
|          |          | UTILITY POLE                 |
|          |          | UNDERGROUND ELECTRIC LINE    |
|          |          | OVERHEAD UTILITY LINE        |
|          |          | ELECTRIC PEDESTAL            |
|          |          | GAS LINE                     |
|          |          | GAS VALVE                    |
|          |          | TELEPHONE LINE               |
|          |          | TELEPHONE PEDESTAL           |
|          |          | TELEPHONE VAULT              |
|          |          | WATER LINE                   |
|          |          | WATER VALVE                  |
|          |          | FIRE HYDRANT                 |
|          |          | SANITARY MANHOLE             |
|          |          | SANITARY SEWER               |
|          |          | STORM SEWER INLET SPECIAL, 1 |
|          |          | STORM SEWER INLET SPECIAL, 2 |
|          |          | STORM SEWER MANHOLE          |
|          |          | GUARD RAIL                   |
|          |          | CONCRETE END SECTION         |
|          |          | METAL END SECTION            |
|          |          | PROPERTY LINE                |
|          |          | RIGHT-OF-WAY                 |
|          |          | DITCH FLOW                   |
|          |          | INLET PROTECTION             |
|          |          | PERIMETER EROSION BARRIER    |
|          |          | TEMPORARY DITCH CHECK        |
|          |          | TEMPORARY ROCK DITCH CHECK   |
|          |          | SIGN                         |
|          |          | LUMINAIRE                    |
|          |          | SIGNAL POST                  |
|          |          | MAST ARM                     |
|          |          | HANDHOLE                     |
|          |          | HEAVY DUTY HANDHOLE          |
|          |          | DOUBLE HANDHOLE              |
|          |          | SIGNAL CONTROLLER            |

GENERAL NOTES



# SUMMARY OF QUANTITIES

CONTRACT: 85636



ROUTE 7 SECTION 14-00571-00-RS SHEET 03 OF 10  
SUMMARY OF QUANTITIES

| ITEM NO. | PAY CODE NUMBER | ITEMS   | UNIT | QUANTITIES     |           | SPECIAL PROVISION |
|----------|-----------------|---|------|----------------|-----------|-------------------|
|          |                 |   |      | 14-00571-00-RS | TOTAL     |                   |
| 1        | 20200100        | EARTH EXCAVATION  | CY   | 15.00          | 15.00     | Y                 |
| 2        | 20201200        | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL                               | CY   | 10.00          | 10.00     | N                 |
| 3        | 35101400        | AGGREGATE BASE COURSE, TYPE B   | TON  | 12.00          | 12.00     | N                 |
| 4        | 40600290        | BITUMINOUS MATERIALS (TACK COAT)  | LBS  | 13,200.00      | 13,200.00 | N                 |
| 5        | 40600400        | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS                                | TON  | 5.00           | 5.00      | N                 |
| 6        | 40600555        | LEVELING BINDER (HAND METHOD), N70  | TON  | 5.00           | 5.00      | N                 |
| 7        | 40600982        | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT                              | SY   | 265.00         | 265.00    | N                 |
| 8        | 40600985        | PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT                     | SY   | 347.00         | 347.00    | N                 |
| 9        | 40600990        | TEMPORARY RAMP  | SY   | 70.00          | 70.00     | N                 |
| 10       | 40603085        | HOT-MIX ASPHALT BINDER COURSE IL-19.0, N70                                | TON  | 1,193.00       | 1,193.00  | N                 |
| 11       | 40603340        | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70                              | TON  | 542.00         | 542.00    | N                 |
| 12       | 40800050        | INCIDENTAL HOT-MIX ASPHALT SURFACING                                      | TON  | 137.00         | 137.00    | N                 |
| 13       | 42400100        | PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH                                  | SF   | 468.00         | 468.00    | N                 |
| 14       | 42400800        | DETECTABLE WARNINGS   | SF   | 105.00         | 105.00    | N                 |
| 15       | 44000158        | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"                                   | SY   | 104.00         | 104.00    | N                 |
| 16       | 44000500        | COMBINATION CURB AND GUTTER REMOVAL                                       | FT   | 78.00          | 78.00     | N                 |
| 17       | 44000100        | FIBER GLASS FABRIC REPAIR SYSTEM  | SY   | 1,322.00       | 1,322.00  | N                 |
| 18       | 60255500        | MANHOLES TO BE ADJUSTED   | EA   | 5.00           | 5.00      | N                 |
| 19       | 60608582        | COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24                         | FT   | 78.00          | 78.00     | N                 |
| 20       | 66900200        | NON-SPECIAL WASTE DISPOSAL  | CY   | 14.00          | 14.00     | Y                 |
| 21       | 66900205        | SPECIAL WASTE DISPOSAL  | CY   | 14.00          | 14.00     | N                 |
| 22       | 66900210        | HAZARDOUS WASTE DISPOSAL  | CY   | 14.00          | 14.00     | Y                 |
| 23       | 66900450        | SPECIAL WASTE PLANS AND REPORTS   | LSUM | 1.00           | 1.00      | Y                 |
| 24       | 66900550        | SOIL DISPOSAL ANALYSIS  | EA   | 2.00           | 2.00      | Y                 |
| 25       | 67100100        | MOBILIZATION  | LSUM | 1.00           | 1.00      | N                 |
| 26       | 70300100        | SHORT-TERM PAVEMENT MARKING   | FT   | 1,000.00       | 1,000.00  | N                 |
| 27       | 72000100        | SIGN PANEL - TYPE 1   | SF   | 0.00           | 31.50     | N                 |
| 28       | 72000200        | SIGN PANEL - TYPE 2   | SF   | 0.00           | 40.00     | N                 |
| 29       | 78000100        | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS                      | SF   | 0.00           | 218.40    | N                 |
| 30       | 78000200        | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                                  | FT   | 0.00           | 5,800.00  | N                 |
| 31       | 78000300        | THERMOPLASTIC PAVEMENT MARKING - LINE 8"                                  | FT   | 0.00           | 220.00    | N                 |
| 32       | 78000400        | THERMOPLASTIC PAVEMENT MARKING - LINE 12"                                 | FT   | 0.00           | 130.00    | N                 |
| 33       | 78000500        | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                                 | FT   | 0.00           | 150.00    | N                 |
| 34       | 78100100        | RAISED REFLECTIVE PAVEMENT MARKER   | EA   | 0.00           | 98.00     | N                 |
| 35       | 78300100        | PAVEMENT MARKING REMOVAL  | SF   | 333.00         | 333.00    | N                 |
| 36       | 80500200        | SERVICE INSTALLATION, TYPE B  | EA   | 0.00           | 1.00      | N                 |
| 37       | 81028350        | UNDERGROUND CONDUIT, PVC, 2" DIA.   | FT   | 0.00           | 7.00      | N                 |
| 38       | 81028360        | UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.                                     | FT   | 0.00           | 159.00    | N                 |
| 39       | 81028370        | UNDERGROUND CONDUIT, PVC, 3" DIA.   | FT   | 0.00           | 80.00     | N                 |
| 40       | 81028390        | UNDERGROUND CONDUIT, PVC, 4" DIA.   | FT   | 0.00           | 127.00    | N                 |
| 41       | 81400700        | HANDHOLE, PORTLAND CEMENT CONCRETE  | EA   | 0.00           | 4.00      | N                 |
| 42       | 81400720        | DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE                                 | EA   | 0.00           | 1.00      | N                 |
| 43       | 81702110        | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1C NO. 10                  | FT   | 0.00           | 525.00    | N                 |
| 44       | 82103400        | LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 460 WATT   | EA   | 0.00           | 2.00      | N                 |
| 45       | 85700200        | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET                              | EA   | 0.00           | 1.00      | N                 |
| 46       | 86200200        | UNINTERRUPTIBLE POWER SUPPLY, STANDARD                                    | EA   | 0.00           | 1.00      | N                 |
| 47       | 87301215        | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C                               | FT   | 0.00           | 116.00    | N                 |
| 48       | 87301225        | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C                               | FT   | 0.00           | 169.00    | N                 |
| 49       | 87301245        | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C                               | FT   | 0.00           | 1,114.00  | N                 |
| 50       | 87301255        | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C                               | FT   | 0.00           | 1,472.00  | N                 |
| 51       | 87301815        | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C                             | FT   | 0.00           | 60.00     | N                 |
| 52       | 87301900        | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C        | FT   | 0.00           | 424.00    | N                 |
| 53       | 87502480        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.                              | EA   | 0.00           | 2.00      | N                 |
| 54       | 87700220        | STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.                                  | EA   | 0.00           | 1.00      | N                 |
| 55       | 87700280        | STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.                                  | EA   | 0.00           | 1.00      | N                 |
| 56       | 87702880        | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.                       | EA   | 0.00           | 1.00      | N                 |
| 57       | 87702950        | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.                       | EA   | 0.00           | 1.00      | N                 |
| 58       | 87800100        | CONCRETE FOUNDATION, TYPE A   | FT   | 0.00           | 6.00      | N                 |
| 59       | 87800150        | CONCRETE FOUNDATION, TYPE C   | FT   | 0.00           | 3.00      | N                 |
| 60       | 87800415        | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER                              | FT   | 0.00           | 48.00     | N                 |
| 61       | 88040050        | SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3 SECTION, MAST ARM MOUNTED      | EA   | 0.00           | 6.00      | N                 |
| 62       | 88040150        | SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5 SECTION, BRACKET MOUNTED       | EA   | 0.00           | 3.00      | N                 |
| 63       | 88040160        | SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5 SECTION, MAST ARM MOUNTED      | EA   | 0.00           | 4.00      | N                 |
| 64       | 88102717        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EA   | 0.00           | 2.00      | N                 |
| 65       | 88200100        | TRAFFIC SIGNAL BACKPLATE  | EA   | 0.00           | 10.00     | N                 |
| 66       | 88800100        | PEDESTRIAN PUSH-BUTTON  | EA   | 0.00           | 2.00      | N                 |
| 67       | 89502375        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  | EA   | 0.00           | 1.00      | Y                 |
| 68       | 89502380        | REMOVE EXISTING HANDHOLE  | EA   | 0.00           | 3.00      | Y                 |
| 69       | 89502385        | REMOVE EXISTING CONCRETE FOUNDATION                                       | EA   | 0.00           | 6.00      | Y                 |
| 70       | X5430100        | INSERTION CULVERT LINER (SPECIAL)   | FT   | 10.00          | 10.00     | Y                 |
| 71       | X6060500        | CORRUGATED MEDIAN REMOVAL   | SF   | 4,220.00       | 4,220.00  | Y                 |
| 72       | X6062000        | INLETS TO BE ADJUSTED (SPECIAL)   | EA   | 10.00          | 10.00     | Y                 |
| 73       | X7910216        | TRAFFIC CONTROL AND PROTECTION, (SPECIAL)                                 | LSUM | 1.00           | 1.00      | Y                 |
| 74       | X8870300        | EMERGENCY VEHICLE PRIORITY SYSTEM   | EA   | 0.00           | 1.00      | Y                 |
| 75       | Z0013798        | CONSTRUCTION LAYOUT   | LSUM | 1.00           | 1.00      | Y                 |
| 76       | Z0033070        | VIDEO VEHICLE DETECTION, 4 CAMERAS  | EA   | 0.00           | 1.00      | Y                 |

△ SPECIALTY ITEMS

**THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS**

| FOREST HILLS ROAD |                            |
|-------------------|----------------------------|
| STA               | THPL PVT MK LTR & SYM (SF) |
| 62+75 to 75+30    | 218.40                     |
| <b>Total</b>      | <b>218.40</b>              |

**THERMOPLASTIC PAVEMENT MARKING - LINE 4"**

| FOREST HILLS ROAD |                         |
|-------------------|-------------------------|
| STA               | THPL PVT MK LINE 4 (FT) |
| 62+75 to 75+30    | 5,800.00                |
| <b>Total</b>      | <b>5,800.00</b>         |

**THERMOPLASTIC PAVEMENT MARKING - LINE 8"**

| FOREST HILLS ROAD |                         |
|-------------------|-------------------------|
| STA               | THPL PVT MK LINE 8 (FT) |
| 62+75 to 75+30    | 220.00                  |
| <b>Total</b>      | <b>220.00</b>           |

**THERMOPLASTIC PAVEMENT MARKING - LINE 12"**

| FOREST HILLS ROAD |                          |
|-------------------|--------------------------|
| STA               | THPL PVT MK LINE 12 (FT) |
| 62+75 to 75+30    | 130.00                   |
| <b>Total</b>      | <b>130.00</b>            |

**THERMOPLASTIC PAVEMENT MARKING - LINE 24"**

| FOREST HILLS ROAD |                          |
|-------------------|--------------------------|
| STA               | THPL PVT MK LINE 24 (FT) |
| 62+75 to 75+30    | 150.00                   |
| <b>Total</b>      | <b>150.00</b>            |

**RAISED REFLECTIVE PAVEMENT MARKER**

| FOREST HILLS ROAD  |                           |
|--------------------|---------------------------|
| STA                | RAISED REFL PAVT MKR (EA) |
| STA 62+75 to 75+30 |                           |
| AMBER:             |                           |
| 1 Way              | 27.0                      |
| 2 Way              | 33.0                      |
| CRYSTAL            |                           |
| 1 Way              | 39.0                      |
| <b>Total</b>       | <b>98.0</b>               |

# SCHEDULE OF QUANTITIES

**BITUMINOUS MATERIALS (TACK COAT)**

| FOREST HILLS ROAD       |           |               |                  |                     |                         |
|-------------------------|-----------|---------------|------------------|---------------------|-------------------------|
| STA                     | AREA (SY) | RATE (GAL/SY) | DENSITY (LB/GAL) | NUMBER APPLICATIONS | BIT MATLS TACK CT (GAL) |
| 62+75 to 75+30          | 7,530.00  | 0.10          | 8.40             | 2                   | 1,506.0                 |
| Driveway & Side Streets | 1,183.96  | 0.05          | 8.40             | 1                   | 59.2                    |
| <b>Total</b>            |           |               |                  |                     | <b>1,565.2</b>          |

**AGGREGATE (PRIME COAT)**

| FOREST HILLS ROAD       |           |              |                     |                  |
|-------------------------|-----------|--------------|---------------------|------------------|
| STA                     | AREA (SY) | RATE (T/BSY) | NUMBER APPLICATIONS | AGG PR CT (TONS) |
| 62+75 to 75+30          | 7,530.00  | 2.00         | 2                   | 13.1             |
| Driveway & Side Streets | 1,183.96  | 2.00         | 1                   | 1.2              |
| <b>Total</b>            |           |              |                     | <b>16.2</b>      |

**HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70**

| FOREST HILLS ROAD |                          |
|-------------------|--------------------------|
| STA               | HMA BC IL-19.0 N70 (TON) |
| 62+75 to 75+30    | 1,192.3                  |
| <b>Total</b>      | <b>1,192.3</b>           |

**HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70**

| FOREST HILLS ROAD |                      |
|-------------------|----------------------|
| STA               | HMA SC "D" N70 (TON) |
| 62+75 to 75+30    | 541.9                |
| <b>Total</b>      | <b>541.9</b>         |

**INCIDENTAL BITUMINOUS SURFACING (TONS)**

| FOREST HILLS ROAD |     |        |                            |  |
|-------------------|-----|--------|----------------------------|--|
| STA               | O/S | TYPE   | INCIDENTAL BIT SURF (TONS) |  |
| 64+68             | RT  | C.E.   | 12.6                       |  |
| 67+76             | LT  | STREET | 32.1                       |  |
| 67+79             | RT  | STREET | 27.9                       |  |
| 69+51             | LT  | C.E.   | 5.2                        |  |
| 70+55             | LT  | C.F.   | 8.9                        |  |
| 70+99             | RT  | STREET | 16.4                       |  |
| 71+41             | LT  | C.E.   | 9.2                        |  |
| 74+93             | LT  | C.E.   | 14.2                       |  |
| 73+01             | RT  | C.E.   | 9.6                        |  |
| <b>Total</b>      |     |        | <b>136.2</b>               |  |

**INLETS TO BE ADJUSTED (SPECIAL)**

| FOREST HILLS ROAD  |     |                        |
|--------------------|-----|------------------------|
| STA                | O/S | INLETS ADJUST SPL (EA) |
| 63+66              | Lt  | 1.0                    |
| 63+66              | Rt  | 1.0                    |
| 66+61              | Rt  | 1.0                    |
| 66+96              | Lt  | 1.0                    |
| 70+53              | Rt  | 1.0                    |
| 70+83 - Contingent | Rt  | 1.0                    |
| 70+97              | Lt  | 1.0                    |
| 71+14 - Contingent | Rt  | 1.0                    |
| 73+95              | Lt  | 1.0                    |
| 73+95              | Rt  | 1.0                    |
| <b>Total</b>       |     | <b>10.0</b>            |

**MANHOLES TO BE ADJUSTED**

| FOREST HILLS ROAD  |     |                 |
|--------------------|-----|-----------------|
| STA                | O/S | MAN ADJUST (EA) |
| 67+51              | Rt  | 1.0             |
| 67+96              | Lt  | 1.0             |
| 67+97              | Lt  | 1.0             |
| 68+00              | Rt  | 1.0             |
| 70+98 - Contingent | Rt  | 1.0             |
| <b>Total</b>       |     | <b>5.0</b>      |

**INSERTION CULVERT LINER (SPECIAL)**

| FOREST HILLS ROAD |     |                         |
|-------------------|-----|-------------------------|
| STA               | O/S | INSERT CUL LIN SPL (FT) |
| 66+96             | Lt  | 10.0                    |
| <b>Total</b>      |     | <b>10.0</b>             |

**COMBINATION CURB AND GUTTER REMOVAL**

| FOREST HILLS ROAD |     |                           |
|-------------------|-----|---------------------------|
| STA               | O/S | COMB CURB GUTTER REM (FT) |
| 67+99 to 68+21    | Lt  | 42.0                      |
| 68+02 to 68+38    | Rt  | 36.0                      |
| <b>Total</b>      |     | <b>78.0</b>               |

**CORRUGATED MEDIAN REMOVAL**

| FOREST HILLS ROAD |     |                         |
|-------------------|-----|-------------------------|
| STA               | O/S | CORRUGATED MED REM (SF) |
| 62+75 to 67+20    | N/A | 1,780.0                 |
| 68+30 to 70+55    | N/A | 900.0                   |
| 71+45 to 75+30    | N/A | 1,540.0                 |
| <b>Total</b>      |     | <b>4,220.0</b>          |

**COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24**

| FOREST HILLS ROAD |     |                   |
|-------------------|-----|-------------------|
| STA               | O/S | CCC&G TM4.24 (FT) |
| 67+99 to 68+21    | Lt  | 42.0              |
| 68+02 to 68+38    | Rt  | 36.0              |
| <b>Total</b>      |     | <b>78.0</b>       |



# HMA MIXTURE CHART (MAINLINE)

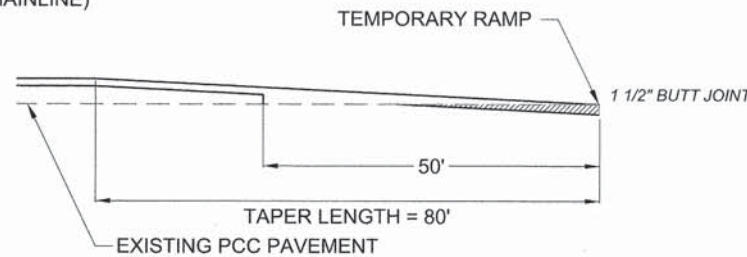
| MIXTURE USE (S):                         | SURFACE           | BINDER COURSE |
|--|-------------------|---------------|
| PG:                                      | PG 64-22          | PG 64-22      |
| DESIGN AIR VOIDS:                        | 4.0% @ N70        | 4.0% @ N70    |
| MIXTURE COMPOSITION (GRADATION MIXTURE): | IL-9.5            | IL-19.0       |
| FRICTION AGGREGATE:                      | MIX D             | N/A           |
| 20 YEAR ESAL:                            | 7.9               | N/A           |
| MIX UNIT WEIGHT:                         | 112 LBS / SY / IN |               |

# PAVEMENT DESIGN

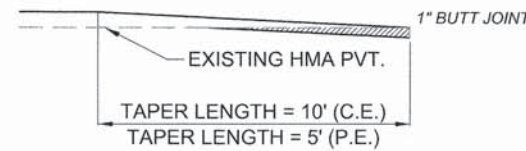
|  |  |
|--|--|
| <b>DATE:</b> November 20, 2015                     | <b>ROUTE:</b> C.H. 7 (Forest Hills Road)                   |
| <b>CALCULATIONS BY:</b> JMF                        | <b>SECTION:</b> 14-00571-00-RS                             |
| <b>CHECKED BY:</b>                                 | <b>COUNTY:</b> Winnebago                                   |
| <b>CLASS</b> II <b>ROADS AND STREETS</b>           | <b>LOCATION:</b> At Intersection of River Ln. / Pepper Dr. |
| <b>LIMITS OF ANALYSIS:</b>                         | <b>PAVEMENT DESIGN:</b>                                    |
| <b>STATION</b> 62+75.00 <b>TO</b>                  | <b>SUBGRADE SUPPORT RATING (SSR):</b>                      |
| <b>STATION</b> 75+30.00                            | Fair (FAIR, POOR, OR GRANULAR)                             |
| <b>LENGTH:</b> 1,30500 <b>FT</b> 0.25 <b>MILES</b> | <b>FLEXIBLE TRAFFIC FACTOR:</b> 7.9                        |
| <b>STRUCTURAL DESIGN TRAFFIC:</b>                  | <b>SELECTED DESIGN PG BINDER:</b> PG 64-22                 |
| <b>ADT</b> 20,700 (2026)                           | <b>DESIGN PAVEMENT HMA TEMP.:</b> 77 °F                    |
| <b>PV</b> 18,216 (88%)                             | <b>DESIGN HMA MODULUS (E<sub>AC</sub>):</b> 625 ksi        |
| <b>SU</b> 207 (1%)                                 | <b>DESIGN HMA MICROSTRAIN:</b> 55                          |
| <b>MU</b> 2,277 (2%)                               | <b>PAVEMENT THICKNESS:</b> 4" (Min. Overlay Class II)      |
|  | <b>SUBGRADE:</b> 6" per Original Plans                     |
|  | <b>COMMENTS:</b> None                                      |

## BUTT JOINT DETAILS

HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT & TAPER DETAIL (MAINLINE)



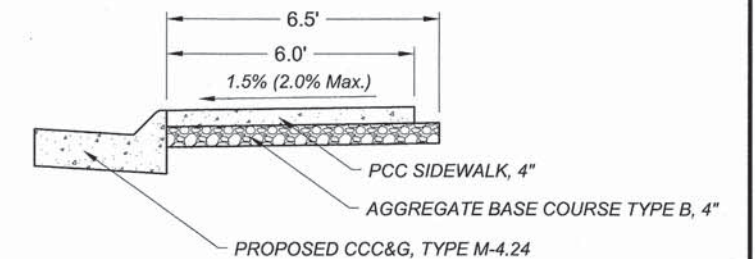
HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT & TAPER DETAIL (SIDE ROADS, CE'S AND PE'S ONLY)



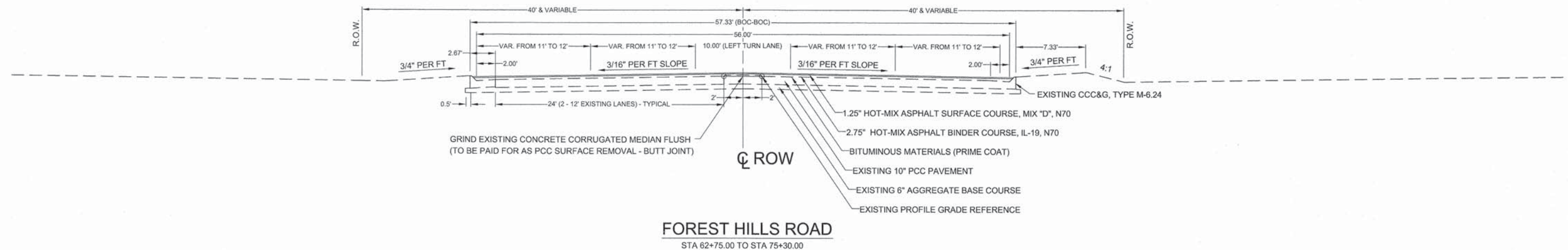
NOTE:  
THE THICKNESS OF INCIDENTAL BITUMINOUS SURFACING FOR ALL DRIVES SHALL BE 2" MINIMUM UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

EXISTING AGGREGATE DRIVEWAYS SHALL BE PREPARED USING AGGREGATE BASE, TYPE B TO BRING THE DRIVEWAY TO PROPER WIDTH AND GRADE BEFORE PLACING THE INCIDENTAL BITUMINOUS SURFACING.

## SIDEWALK DETAILS

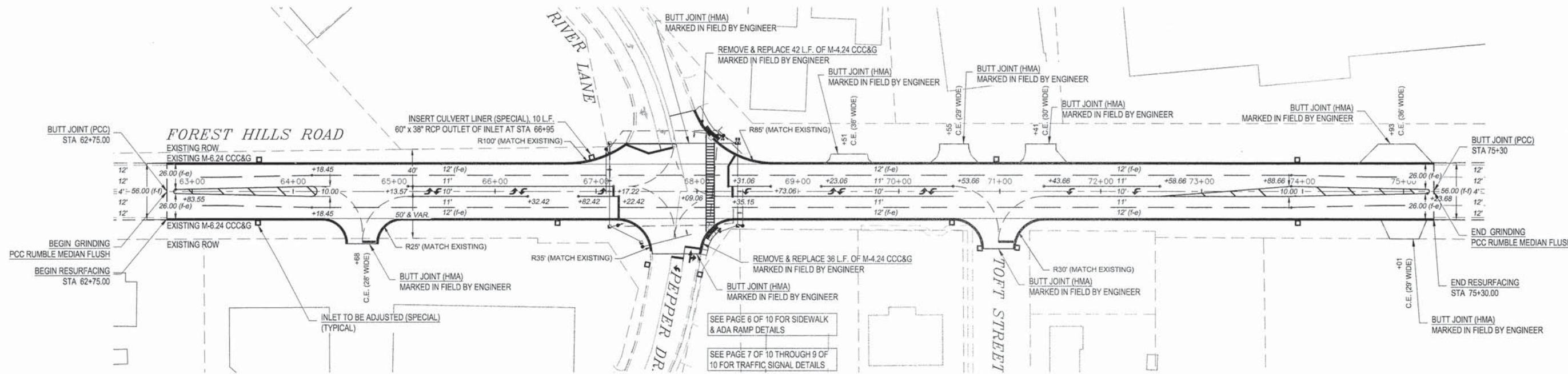


PEPPER DRIVE AND RIVER LANE

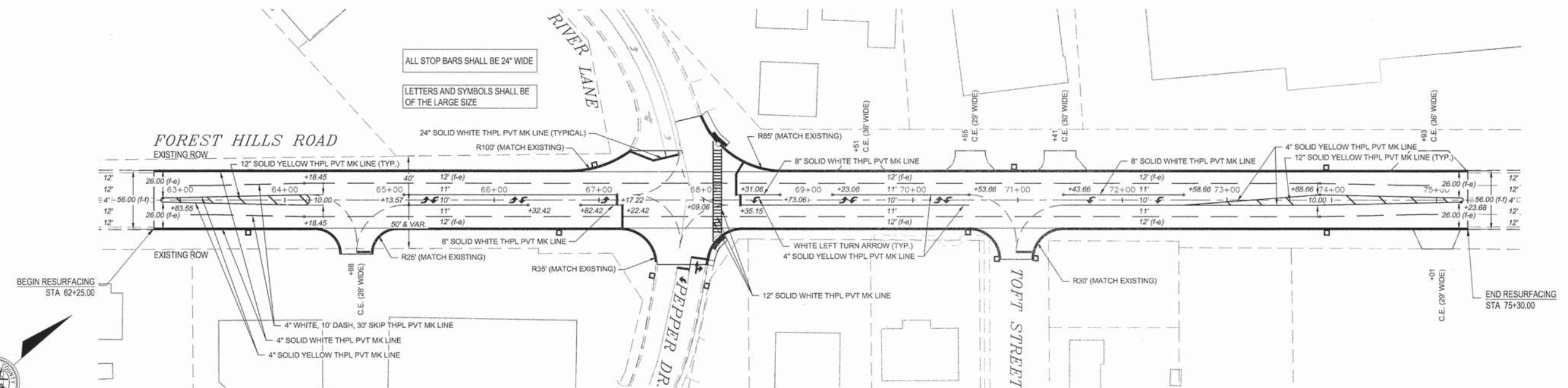


FOREST HILLS ROAD  
STA 62+75.00 TO STA 75+30.00





PLAN DETAILS



STRIPING DETAILS



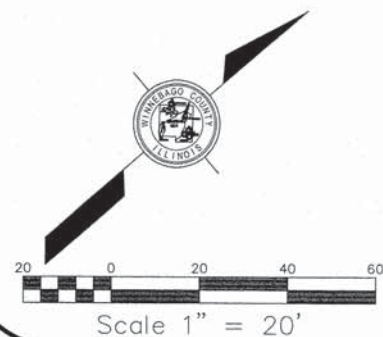
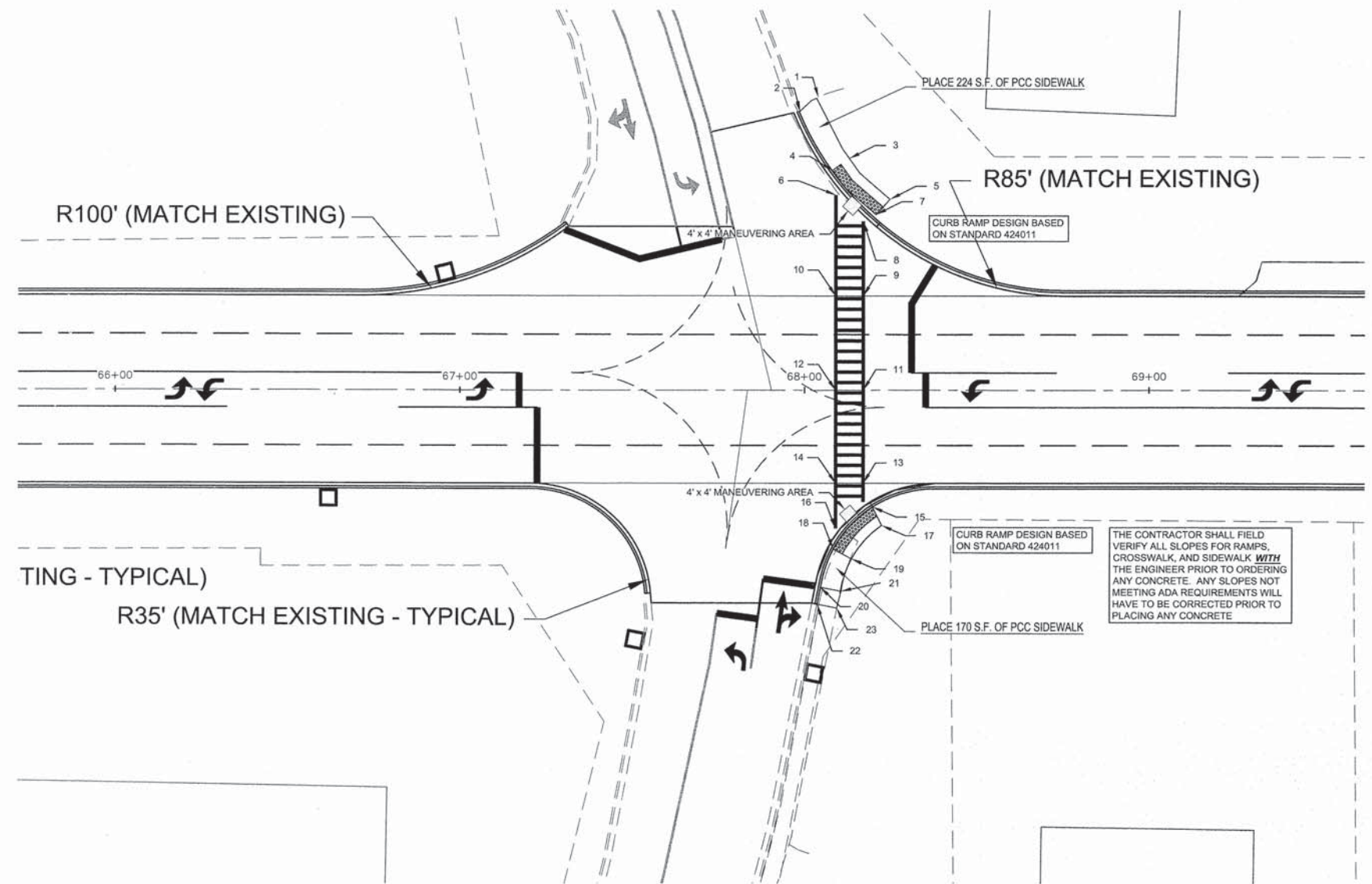




SIDEWALK COMPLIANCE

| POINT | STATION  | OFFSET | ELEVATION | POINT TO POINT | SIDEWALK DESCRIPTION         | DISTANCE | Δ ELEVATION | SLOPE | LEGALLY ACCEPTABLE RANGE |
|-------|----------|--------|-----------|----------------|------------------------------|----------|-------------|-------|--------------------------|
| 1     | 68+03.40 | 84.66  | 750.77    | 1 2            | Sidewalk cross-slope         | 6        | 0.09        | 1.50% | 0.0% to 2.0%             |
|       |          |        |           | 1 3            | Sidewalk ramp slope          | 20.19    | 0.69        | 3.37% | 0.5% to 8.3%             |
| 2     | 67+98.63 | 80.79  | 750.86    | 2 4            | Sidewalk ramp slope          | 19.78    | 0.50        | 2.53% | 0.5% to 8.3%             |
| 3     | 68+12.95 | 66.91  | 751.45    | 4 3            | Sidewalk cross-slope         | 6        | 0.09        | 2.00% | 0.0% to 2.0%             |
| 4     | 68+08.06 | 63.44  | 751.36    | - -            | -                            | -        | -           | -     | -                        |
| 5     | 68+24.77 | 54.99  | 751.75    | 7 5            | Sidewalk cross-slope         | 6        | 0.09        | 1.50% | 0.0% to 2.0%             |
|       |          |        |           | 5 3            | Landing / Turning Space      | 16.89    | 0.30        | 1.78% | 0.1% to 2.0%             |
| 6     | 68+09.06 | 56.25  | 751.44    | 6 10           | Crosswalk running slope      | 29.25    | 1.18        | 4.03% | 0.5% to 5.0%             |
| 7     | 68+20.78 | 50.51  | 751.66    | - -            | -                            | -        | -           | -     | -                        |
| 8     | 68+17.06 | 48.59  | 751.61    | 8 9            | Crosswalk running slope      | 21.59    | 0.99        | 4.59% | 0.5% to 5.0%             |
| 9     | 68+17.06 | 27.00  | 752.60    | 9 10           | Crosswalk cross-slope        | 8        | 0.02        | 0.25% | 0.0% to 2.0%             |
|       |          |        |           | 9 11           | Crosswalk running slope      | 27       | 0.49        | 1.81% | 0.5% to 5.0%             |
| 10    | 68+09.06 | 27.00  | 752.62    | 10 12          | Crosswalk running slope      | 27       | 0.45        | 1.67% | 0.5% to 5.0%             |
| 11    | 68+17.06 | 0.00   | 753.09    | 11 12          | Crosswalk cross-slope        | 8        | 0.02        | 0.25% | 0.0% to 2.0%             |
| 12    | 68+09.06 | 0.00   | 753.07    | 12 14          | Crosswalk running slope      | 27       | 0.30        | 1.11% | 0.5% to 5.0%             |
| 13    | 68+17.06 | 27.00  | 752.77    | 13 14          | Crosswalk cross-slope        | 8        | 0.00        | 0.00% | 0.0% to 2.0%             |
|       |          |        |           | 13 11          | Crosswalk running slope      | 27       | 0.32        | 1.19% | 0.5% to 5.0%             |
|       |          |        |           | 13 15          | Crosswalk running slope      | 7.48     | .08         | 1.07% | 0.5% to 5.0%             |
| 14    | 68+09.06 | 27.00  | 752.77    | - -            | -                            | -        | -           | -     | -                        |
| 15    | 68+19.76 | 33.92  | 752.69    | 15 17          | Landing / Turning Space      | 6        | 0.09        | 1.50% | 0.0% to 2.0%             |
| 16    | 68+09.06 | 40.24  | 752.92    | 14 16          | Crosswalk running slope      | 13.24    | 0.15        | 1.13% | 0.5% to 5.0%             |
| 17    | 68+22.44 | 39.35  | 752.76    | 17 19          | Landing / Turning Space      | 13.25    | 0.20        | 1.51% | 0.1% to 2.0%             |
| 18    | 68+08.39 | 46.30  | 752.89    | 18 19          | Landing / Turning Space      | 6        | 0.09        | 1.50% | 0.0% to 2.0%             |
| 19    | 68+13.68 | 49.12  | 752.98    | 19 21          | Sidewalk ramp slope          | 9.97     | 0.62        | 6.22% | 0.0% to 8.3%             |
| 20    | 68+04.73 | 57.40  | 753.51    | 20 21          | Sidewalk cross-slope         | 6        | 0.09        | 1.50% | 0.0% to 2.0%             |
|       |          |        |           | 20 18          | Sidewalk ramp slope          | 11.74    | 0.62        | 5.28% | 0.0% to 8.3%             |
| 21    | 68+10.68 | 58.57  | 753.60    | - -            | -                            | -        | -           | -     | -                        |
| 22    | 68+03.69 | 62.29  | 753.58    | 22 20          | Sidewalk upper landing slope | 5        | 0.07        | 1.40% | 0.0% to 2.0%             |
|       | 68+09.47 | 63.42  | 753.60    | 23 22          | Sidewalk cross-slope         | 8        | 0.09        | 1.50% | 0.0% to 2.0%             |
|       |          |        |           | 23 21          | Sidewalk upper landing slope | 5        | 0.07        | 1.40% | 0.0% to 2.0%             |

NOTE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL AS-BUILT SLOPES MEET THE LEGAL REQUIREMENTS AND COMPLY WITH THE ADA LAW.





# SUMMARY OF SIGNAL QUANTITIES

CONTRACT: 85636



ROUTE C.H. 7 SECTION 14-00571-00-RS SHEET 7 OF 10  
FOREST HILLS ROAD / RIVER LANE / PEPPER DR.

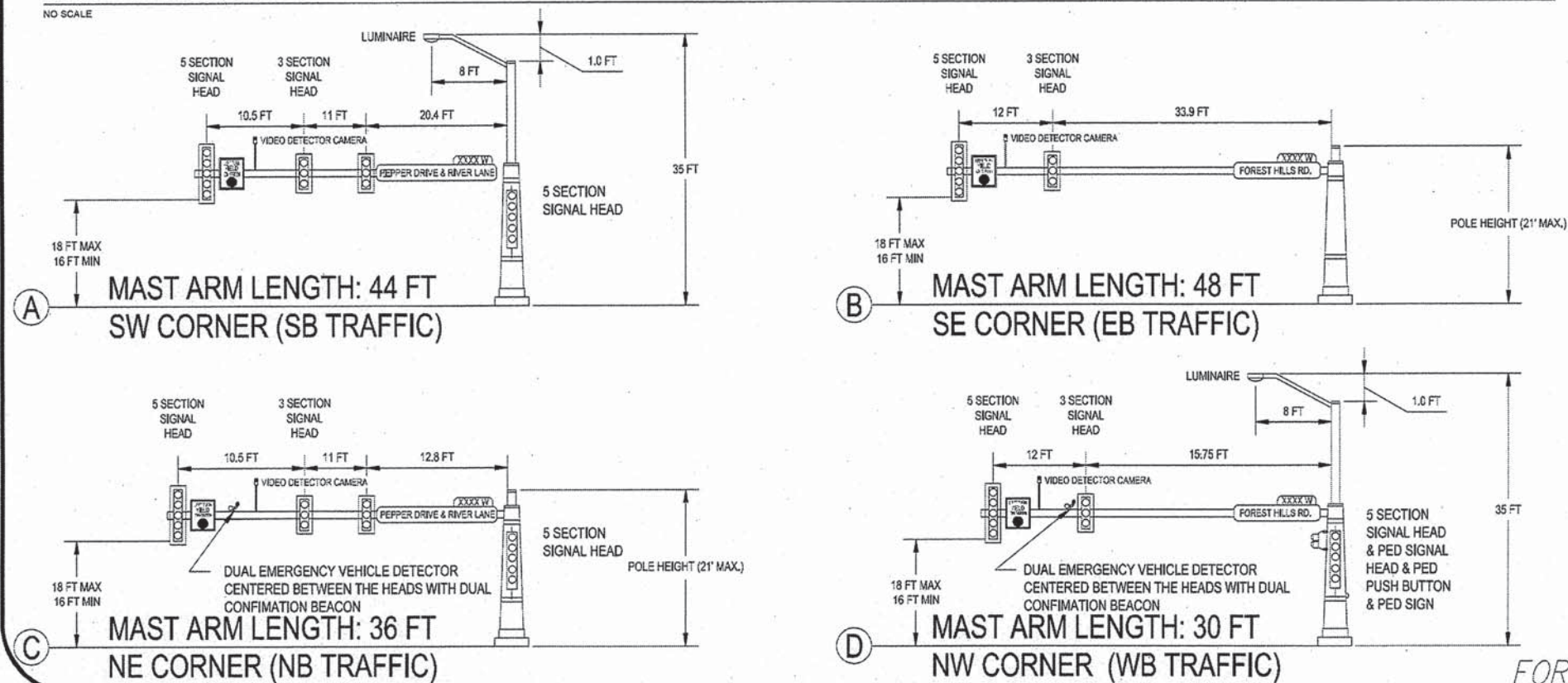
| ITEM NO. | PAY CODE NUMBER | ITEMS   | UNIT | QUANTITY |
|----------|-----------------|---|------|----------|
| 1        | 72000100        | SIGN PANEL - TYPE 1   | SF   | 31.50    |
| 2        | 72000200        | SIGN PANEL - TYPE 2   | SF   | 40.00    |
| 3        | 80500200        | SERVICE INSTALLATION, TYPE B  | EA   | 1.00     |
| 4        | 81028350        | UNDERGROUND CONDUIT, PVC, 2" DIA.                                       | FT   | 7.00     |
| 5        | 81028360        | UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.                                   | FT   | 159.00   |
| 6        | 81028370        | UNDERGROUND CONDUIT, PVC, 3" DIA.                                       | FT   | 80.00    |
| 7        | 81028390        | UNDERGROUND CONDUIT, PVC, 4" DIA.                                       | FT   | 127.00   |
| 8        | 81400700        | HANDHOLE, PORTLAND CEMENT CONCRETE                                      | EA   | 4.00     |
| 9        | 81400720        | DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE                               | EA   | 1.00     |
| 10       | 81702110        | ELECTRIC CABLE IN CONDUIT, 600V (XLPE-TYPE USE) 1C NO. 10               | FT   | 525.00   |
| 11       | 82103400        | LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT | EA   | 2.00     |
| 12       | 85700200        | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET                            | EA   | 1.00     |
| 13       | 86200200        | UNINTERRUPTIBLE POWER SUPPLY, STANDARD                                  | EA   | 1.00     |
| 14       | 87301215        | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C                             | FT   | 115.50   |
| 15       | 87301225        | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C                             | FT   | 168.50   |
| 16       | 87301245        | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C                             | FT   | 1,115.50 |
| 17       | 87301255        | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C                             | FT   | 1,472.00 |
| 18       | 87301815        | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C                           | FT   | 60.00    |
| 19       | 87301900        | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C      | FT   | 424.00   |
| 20       | 87502480        | TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT.                           | EA   | 2.00     |
| 21       | 87700220        | STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.                                | EA   | 1.00     |
| 22       | 87700280        | STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.                                | EA   | 1.00     |
| 23       | 87702880        | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.                     | EA   | 1.00     |
| 24       | 87702950        | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.                     | EA   | 1.00     |
| 25       | 87800100        | CONCRETE FOUNDATION, TYPE A   | FT   | 6.00     |
| 26       | 87800150        | CONCRETE FOUNDATION, TYPE C   | FT   | 3.00     |
| 27       | 87800415        | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER                            | FT   | 48.00    |
| 28       | 88040090        | SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3 SECTION, MAST ARM MOUNTED    | EA   | 6.00     |
| 29       | 88040150        | SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5 SECTION, BRACKET MOUNTED     | EA   | 3.00     |
| 30       | 88040160        | SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5 SECTION, MAST ARM MOUNTED    | EA   | 4.00     |
| 31       | 88102717        | PEDESTRIAN SIGNAL, HEAD, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER   | EA   | 2.00     |
| 32       | 88200100        | TRAFFIC SIGNAL BACKPLATE  | EA   | 10.00    |
| 33       | 88800100        | PEDESTRIAN PUSH-BUTTON  | EA   | 2.00     |
| 34       | 89502375        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                | EA   | 1.00     |
| 35       | 89502380        | REMOVE EXISTING HANDHOLE  | EA   | 3.00     |
| 36       | 89502385        | REMOVE EXISTING CONCRETE FOUNDATION                                     | EA   | 6.00     |
| 37       | X8870300        | EMERGENCY VEHICLE PRIORITY SYSTEM                                       | EA   | 1.00     |
| 38       | Z0035070        | VIDEO VEHICLE DETECTION, 4 CAMERAS                                      | EA   | 1.00     |

## GENERAL NOTES

- CALL J. U. I. L. E. AT (800) 892-0123 AT LEAST 48 HRS PRIOR TO BEGINNING CONSTRUCTION. ALL UTILITIES SHALL BE LOCATED IN THE FIELD AND THE ENGINEER SHALL BE NOTIFIED OF ANY CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- ALL SIGNING, STRIPING, TRAFFIC SIGNALS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) CURRENT EDITION AND TO THE STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION. ALL BACKPLATES SHALL HAVE A 3" YELLOW RETROREFLECTIVE STRIP PLACED ALONG THE PERIMETER OF THE FACE OF THE SIGNAL BACKPLATE.
- MAST ARM ASSEMBLIES AND TRAFFIC SIGNAL POSTS SHALL BE GALVANIZED STEEL. SIGNAL HEADS SHALL BE POLYCARBONATE WITH 12" LENSES.
- THE EXISTING AND PROPOSED CONTROLLER CABINET IS LOCATED IN THE NORTHWEST QUADRANT OF THE INTERSECTION. THE CONTRACTOR SHALL COORDINATE WITH COMED ALL WORK ASSOCIATED WITH SERVICE INSTALLATION, TYPE B. ALL COSTS ASSOCIATED WITH ENERGIZING THE NEW CONTROLLER, INCLUDING ANY COMED FEES FOR TRANSFORMER UPGRADES / CHANGES SHALL BE CONSIDERED INCIDENTAL TO THE SERVICE INSTALLATION, TYPE B.
- THE CONTRACTOR SHALL USE EAGLE BRAND EQUIPMENT OR EQUIPMENT COMPATIBLE WITH EAGLE BRAND.
- THE EMERGENCY VEHICLE PRIORITY SYSTEM (EVPS) SHALL BE THE "TOMAR/OPTRONX OPTICAL PRE-EMPTION SYSTEM". THIS TRAFFIC SIGNAL INSTALLATION SHALL INCLUDE DUAL EMERGENCY VEHICLE DETECTORS WITH DUAL CONFIRMATION BEACONS FOR EACH ROADWAY. CONTACT BROWN TRAFFIC PRODUCTS AT 1-800-888-7078 FOR FURTHER INFORMATION IN REGARDS TO THE MANUFACTURER'S INSTALLATION REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE WRITTEN CONFIRMATION FROM THE JURISDICTIONAL EMERGENCY AGENCY (WEST SUBURBAN FIRE PROTECTION FIRE DISTRICT (815) 964-3441) THAT THE SYSTEM IS COMPATIBLE WITH EXISTING FIRE DISTRICT EMERGENCY EQUIPMENT PRIOR TO INSTALLATION. SEE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS FOR EVPS.
- THE FOLLOWING VIDEO DETECTION SYSTEMS ARE APPROVED FOR USE IN DISTRICT 2: 1) ITERIS VANTAGE EDGE 2 (4 CAMERA SYSTEM), AND 2) AUTOSCOPE SOLO PRO (4 CAMERA SYSTEM). SEE SPECIAL PROVISIONS FOR ADDITIONAL VIDEO DETECTION SYSTEM REQUIREMENTS. CONTACT BROWN TRAFFIC PRODUCTS AT 1-800-888-7078 FOR FURTHER INFORMATION REGARDING THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
- PROVIDE TWO CONDUITS FROM THE CONTROLLER TO THE ADJACENT SERVICE POLE. ONE 2" CONDUIT SHALL BE USED FOR POWER AND ONE 1" CONDUIT SHALL BE RESERVED FOR THE TELEPHONE SERVICE.
- SIGN PANELS FOR STREET NAMES SHALL BE 2.5' X 8' AND SHALL BE MOUNTED AS SHOWN ON STANDARD 877011-06 AND 720016-03.
- FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD 878001-10.
- SALVAGE EXISTING STREET NAME SIGNS FROM EXISTING MAST ARMS AND RE-INSTALL ON NEW MAST ARMS. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO REMOVING EXISTING TRAFFIC SIGNAL EQUIPMENT. IF THE EXISTING SIGNS BECOME DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT NO ADDITIONAL COST TO THE CONTRACT.
- FOUNDATIONS SHALL BE SET AT A MINIMUM OF 3" ABOVE THE BACK OF CURB ELEVATION

## MAST ARM EQUIPMENT MOUNTING DETAIL

NO SCALE



FOREST HILLS ROAD / RIVER LANE / PEPPER DRIVE  
SIGNAL PLAN



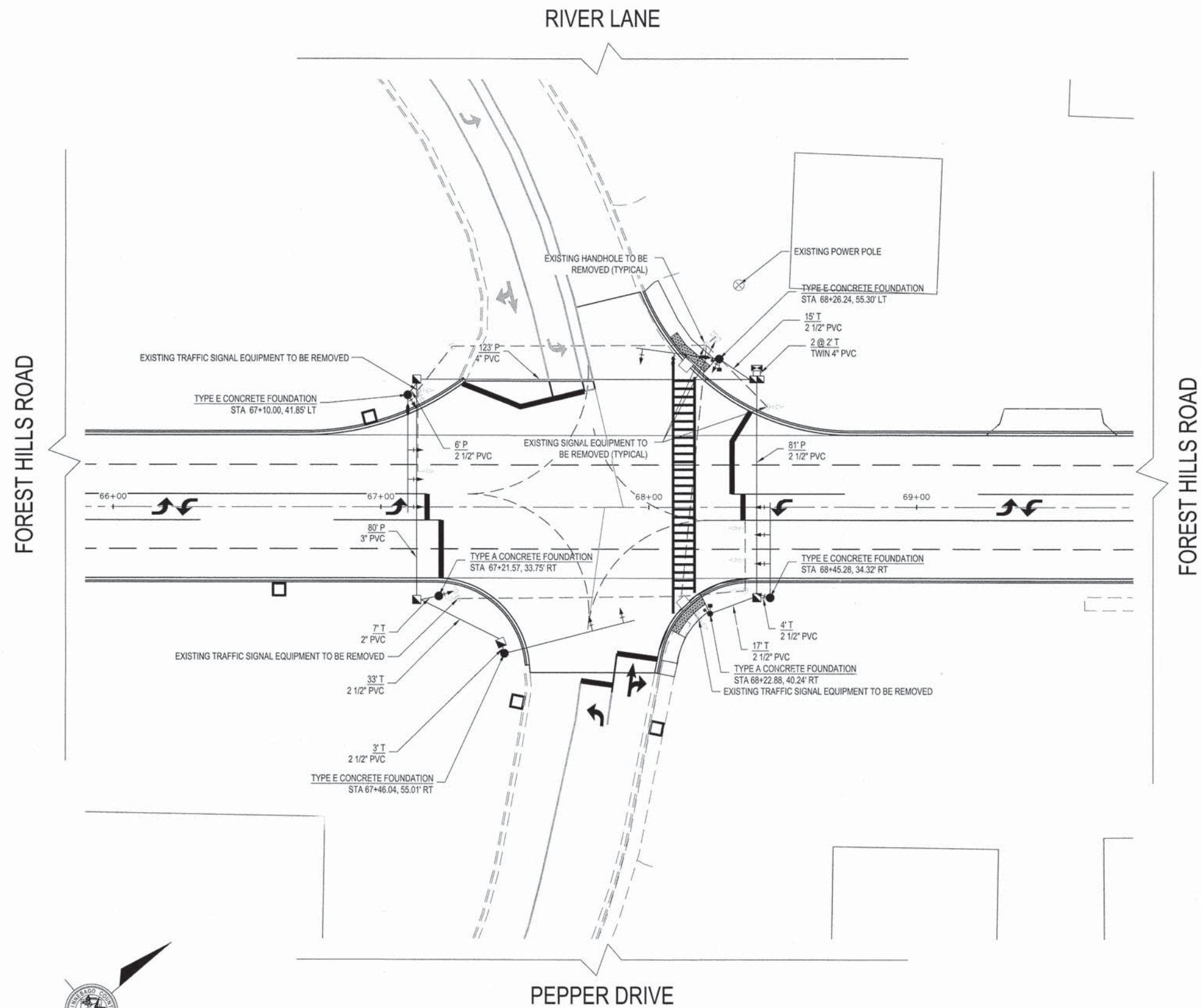


**NOTE:**

THE CONTRACTOR SHALL CONDUCT THIS WORK IN SUCH A WAY THAT THE EXISTING SIGNALS REMAIN IN OPERATION UNTIL SUCH TIME AS THE PROPOSED SIGNALS CAN BE TURNED ON AND BECOME OPERATIONAL. THE CONTRACTOR SHALL COORDINATE THE TURN ON OF THE PROPOSED SIGNALS WITH THE ENGINEER.

THE CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL CLEARANCES OF ALL OVERHEAD UTILITIES PRIOR TO THE PLACEMENT OF ANY SIGNAL FOUNDATIONS TO ENSURE THAT POLES, MAST ARMS AND SIGNAL HEADS WILL NOT CONFLICT. ANY COSTS ASSOCIATED WITH RESOLVING CONFLICTS AFTER THE PLACEMENT OF FOUNDATIONS DUE TO THE CONTRACTOR'S FAILURE TO VERIFY CLEARANCES SHALL BE BORN BY THE CONTRACTOR AND NO ADDITION TO THE CONTRACT WILL BE ALLOWED. IF DURING THE PROCESS OF VERIFYING CLEARANCES IT IS DETERMINED THAT THERE WILL BE A CONFLICT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO DETERMINE A RESOLUTION TO THE CONFLICT.

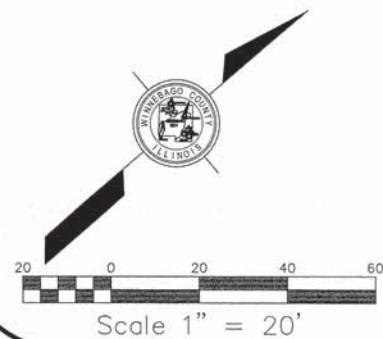
ELEVATIONS FOR THE TOP OF ALL SIGNAL POST FOUNDATIONS SHALL BE SET AT 3" (MINIMUM) ABOVE THE BACK OF CURB ELEVATION.



**TRAFFIC SIGNAL LEGEND**

|  | EXISTING | PROPOSED |
|--|----------|----------|
| CONTROLLER                             |          |          |
| SERVICE INSTALLATION                   |          |          |
| SIGNAL HEAD                            |          |          |
| SIGNAL HEAD WITH BACKPLATE             |          |          |
| SIGNAL HEAD, PEDESTRIAN                |          |          |
| PEDESTRIAN PUSHBUTTON DETECTOR         |          |          |
| SIGNAL POST                            |          |          |
| MAST ARM ASSEMBLY AND POLE             |          |          |
| HANDHOLE                               |          |          |
| HEAVY DUTY HANDHOLE                    |          |          |
| DOUBLE HANDHOLE                        |          |          |
| EMERGENCY VEHICLE SYSTEM DUAL DETECTOR |          |          |
| EMERGENCY VEHICLE SYSTEM DETECTOR      |          |          |
| CONFIRMATION BEACON                    |          |          |
| WOOD POLE                              |          |          |
| CONDUIT IN TRENCH OR PUSHED            |          |          |
| COMMON TRENCH                          |          |          |
| DETECTOR LOOP                          |          |          |
| LUMINAIRE W/MAST ARM                   |          |          |
| VIDEO DETECTOR CAMERA                  |          |          |

FOREST HILLS ROAD / RIVER LANE / PEPPER DRIVE  
SIGNAL PLAN

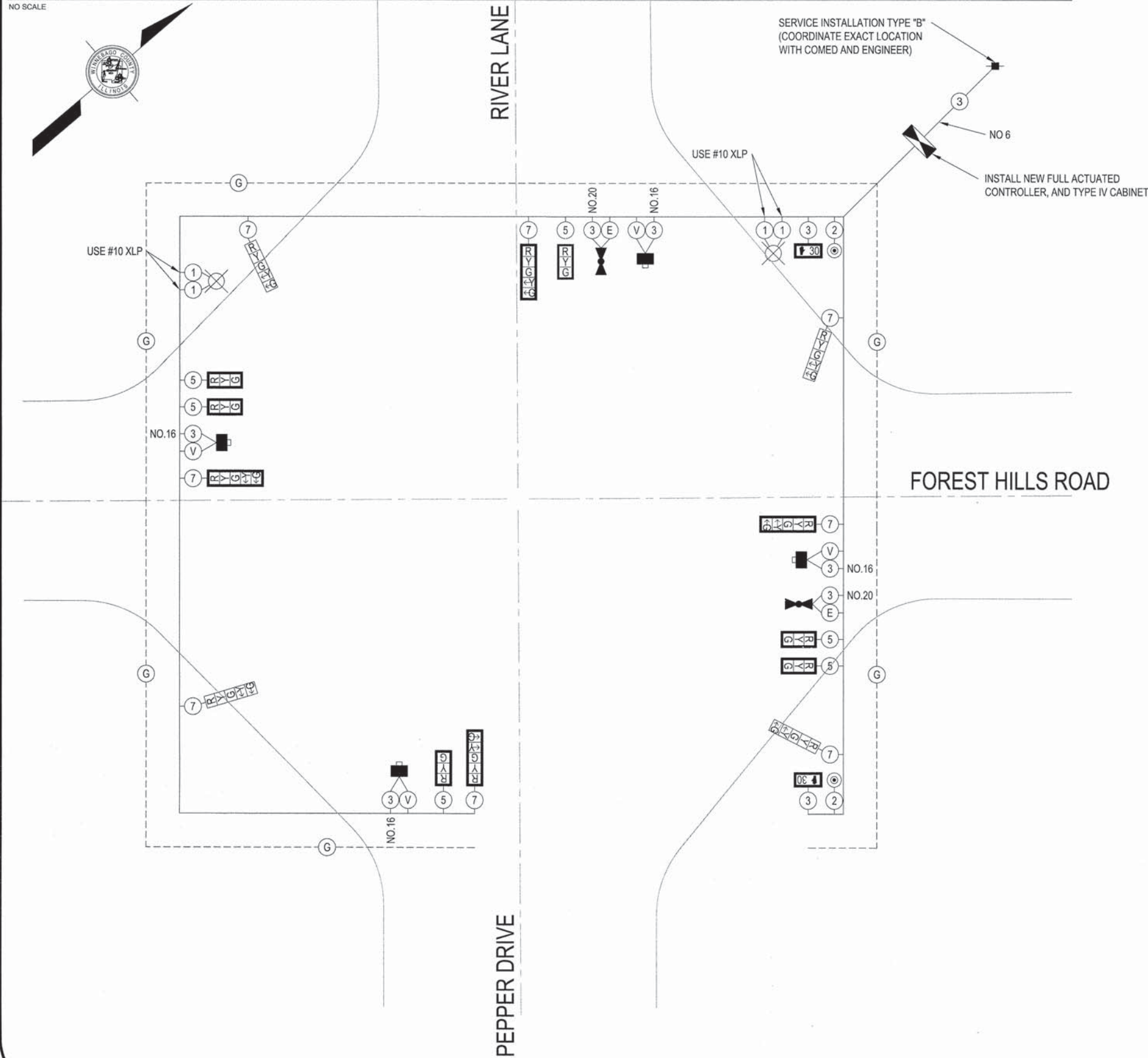






CABLE PLAN

NO SCALE



PHASE DESIGNATION DIAGRAM

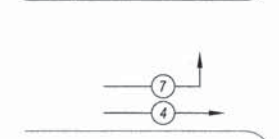
NO SCALE

REFER TO I.D.O.T. STANDARD 857001-01

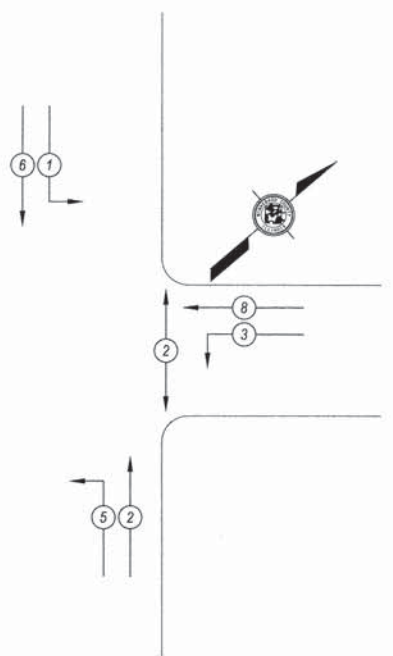
LEGEND

- VEHICULAR MOVEMENT
- NUMBER REFERS TO ASSOCIATED PHASE

FOREST HILLS RD



PEPPER DRIVE



CABLE PLAN LEGEND

- PEDESTRIAN COUNT DOWN SIGNAL HEAD
- PEDESTRIAN PUSH BUTTON
- SERVICE INSTALLATION
- CABLE WITH NO. OF CONDUCTORS
- SIGNAL HEAD WITH BACKPLATE (12" LENSES)
- SIGNAL HEAD WITHOUT BACKPLATE (12" LENSES)
- HIGH PRESSURE SODIUM LUMINAIRE (400 WATTS)
- EMERGENCY VEHICLE PRIORITY SYSTEM LEAD-IN CABLE (3/C NO. 20)
- EMERGENCY VEHICLE DOUBLE OPTICAL DETECTOR WITH DOUBLE CONFIRMATION BEACON
- CONTROLLER CABINET
- VIDEO DETECTOR CAMERA
- VIDEO DETECTOR CABLE (SEE SPECIAL PROVISIONS)
- GROUNDING CIRCUIT AS PER STD 873001-02 (1/C NO. 6)



# CATCH BASIN OR INLETS TO BE ADJUSTED OR RECONSTRUCTED (DETAILS FOR CURB & GUTTER REPLACEMENT)

CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, STANDARD 606001 AND THIS DRAWING.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. A HOLE 1-1/2 IN DIAMETER AND 9 DEEP SHALL BE DRILLED IN THE EXISTING CONCRETE CURB AS SHOWN. A 1-1/4 X 18 SMOOTH DOWEL BAR SHALL BE GROUTED IN THE HOLE LONGITUDINALLY.

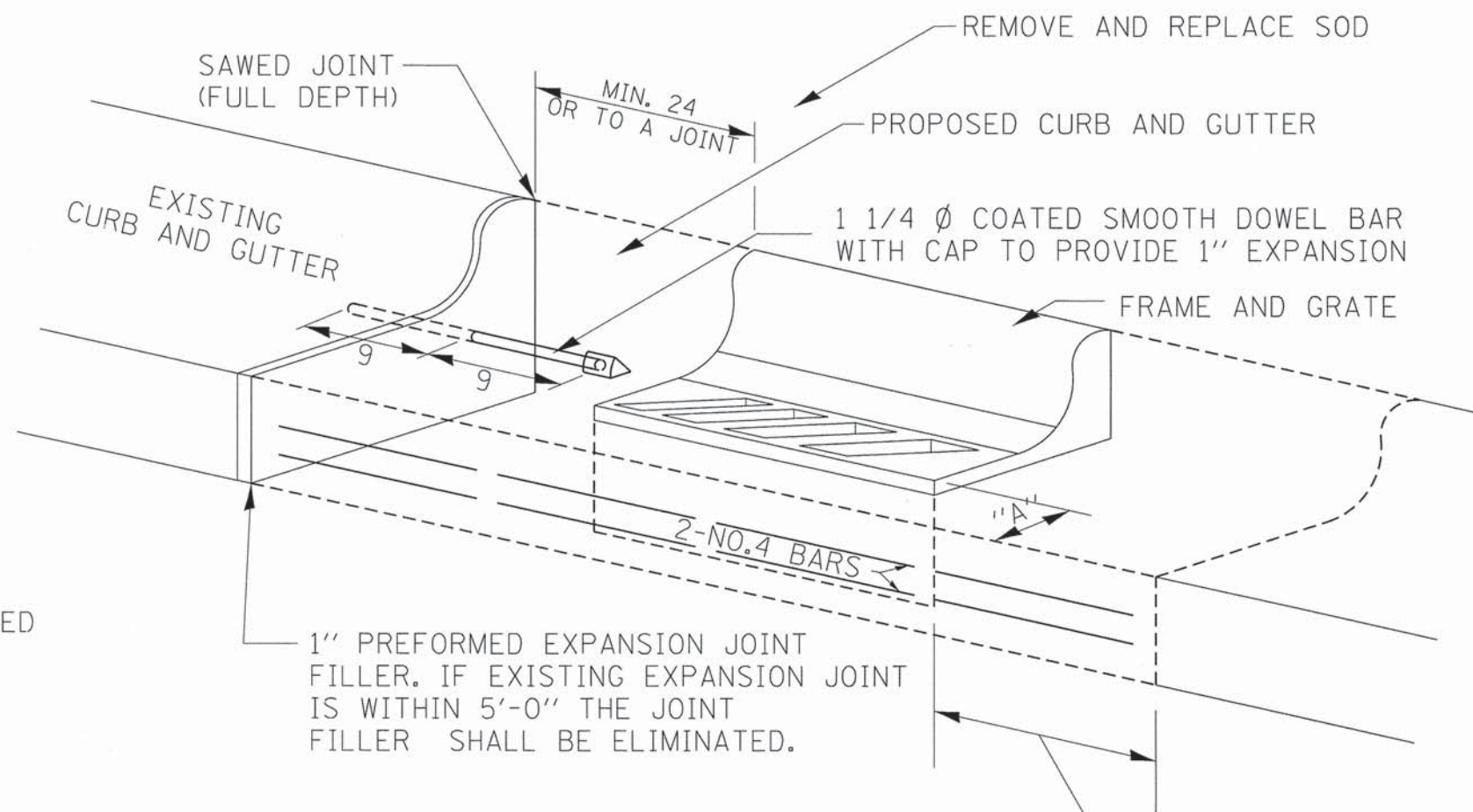
JOINTS OF A TYPE SIMILAR TO THAT IN THE UNDERLYING PAVEMENT (EXPANSION OR CONTRACTION) SHALL BE INSTALLED IN THE CONCRETE CURB IN ALIGNMENT WITH THE JOINTS IN THE PAVEMENT.

THE PROPOSED CONFIGURATION OF THE CURB AND GUTTER SHALL MATCH THAT REMOVED.

THE LOCATION OF THE DOWEL BAR SHALL BE DETERMINED BY THE ENGINEER.

ALL EXISTING TIE BARS IN EDGE OF PAVEMENT SLAB THRU REPLACEMENT AREA SHALL BE CUT OFF.

THE WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS AND INCLUDES THE REMOVAL AND REPLACEMENT OF SOD, CONCRETE PAVEMENT AND/OR CURB AND GUTTER ADJACENT TO CATCH BASINS OR INLETS TO BE ADJUSTED OR RECONSTRUCTED AND SHALL BE INCLUDED IN THE PAY ITEM OF CATCH BASINS OR INLETS TO BE ADJUSTED OR RECONSTRUCTED AS SPECIFIED.



WHEN "A" IS GREATER THAN 2, 2-NO. 4 BARS SHALL BE PLACED AS SHOWN.

SAME REPAIR AS INDICATED ON OTHER SIDE OF FRAME AND GRATE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

PLOT DATE = Thu Nov 13 11:31:44 2014

|                   |                                       |  |  |  |                       |           |        |              |           |
|-------------------|---------------------------------------|--|--|--|-----------------------|-----------|--------|--------------|-----------|
| REVISED - 9-30-11 | <b>REGION 2 / DISTRICT 2 STANDARD</b> |  |  |  | F.A. RTE.             | SECTION   | COUNTY | TOTAL SHEETS | SHEET NO. |
| REVISED -         |                                       |  |  |  |                       |           |        |              |           |
| REVISED -         |                                       |  |  |  | CONTRACT NO.          |           |        |              |           |
| REVISED -         |                                       |  |  |  | SCALE: 1.0000' / 1in. | SHEET NO. | OF     | SHEETS       | STA.      |