

| | | | | |
|---------------------|---------------------------|------------------|--------------------|----------------|
| F.A.U. RTE. 2561 | SECTION 15-00111-00-RS | COUNTY DUPAGE | TOTAL SHEETS 23 | SHEET NO. 1 |
| ILLINOIS | | | CONTRACT NO. 61D51 | |

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

**FAU ROUTE 2561 (GARY AVENUE)
FROM JEWELL ROAD TO HARRISON AVENUE
RESURFACING**

**SECTION: 15-00111-00-RS
PROJECT: M-4003(652)
CITY OF WHEATON
DUPAGE COUNTY
JOB NO: C-91-186-16**



LOCATION OF SECTION INDICATED THUS:

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

APPROVED December 12 20 16
Paul Alderman
CITY OF WHEATON, DIRECTOR OF ENGINEERING

PASSED December 28 20 16
C. Holt
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

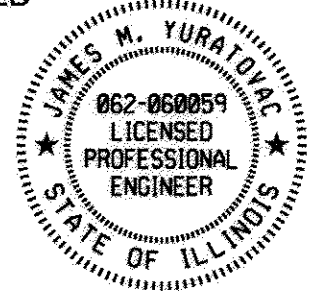
RELEASING FOR
LIMITED REVIEW December 28 20 16
John F. ...
REGIONAL ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

PROFESSIONAL ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SUBMISSION WAS PREPARED UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS 8th DAY OF December, 2016

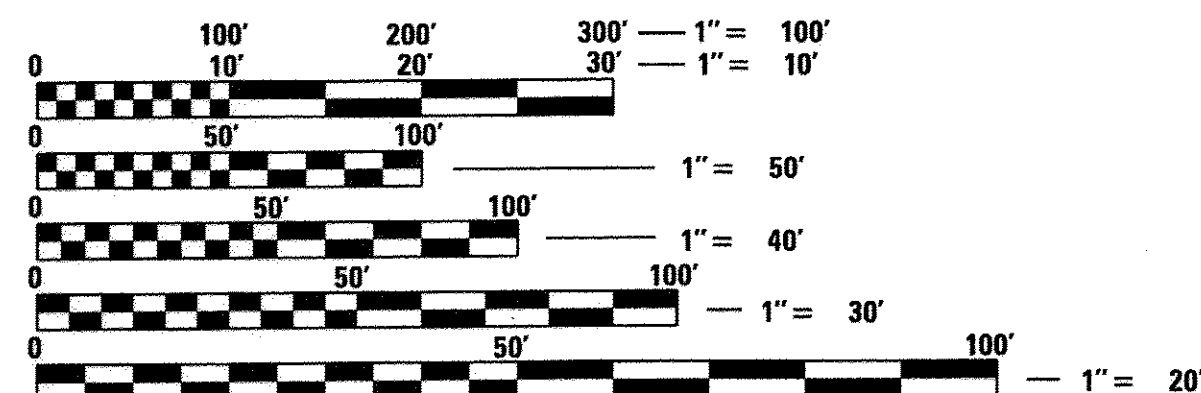


JAMES M. YURATOVAC
ILLINOIS REG. PROF. ENGINEER NO. 062-060059 EXPIRATION DATE 11-30-2017

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406, SCHAUMBURG, IL

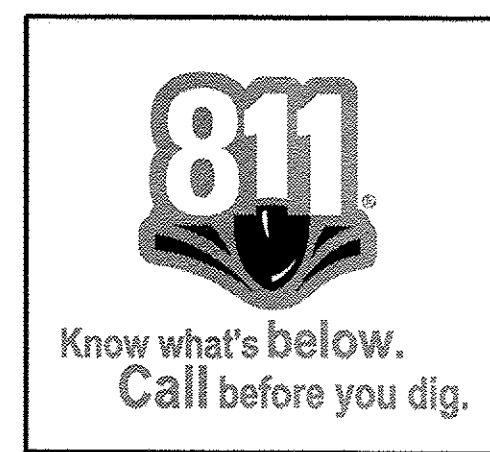
GARY AVENUE

**DESIGN DESIGNATION: MAJOR COLLECTOR
SPEED LIMIT = 35 MPH
TRAFFIC = 15,100 ADT (2012)**



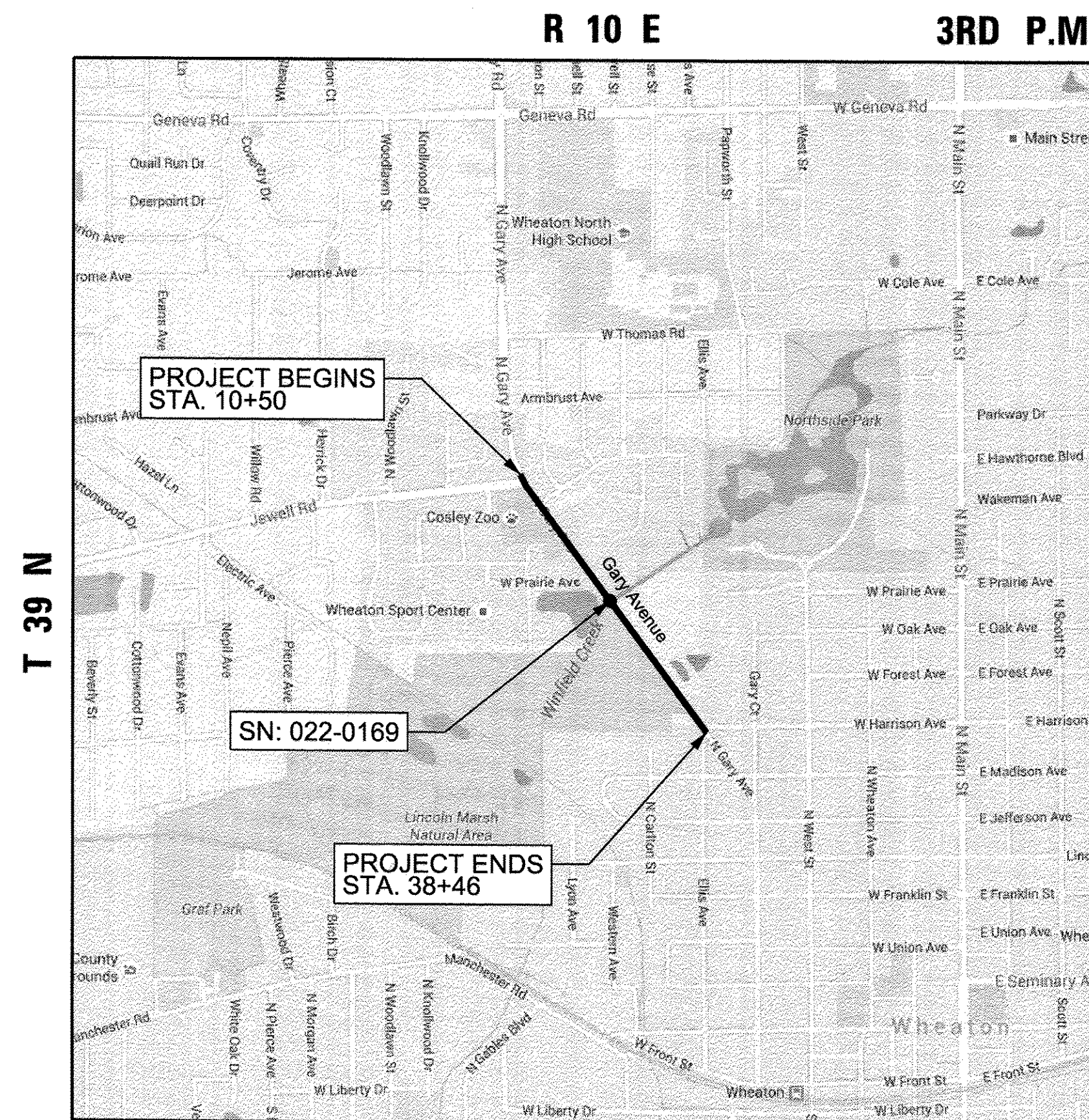
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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



PROJECT MANAGER: JIM YURATOVAC

CONTRACT NO. 61D51



**MILTON TOWNSHIP
LOCATION MAP**

GARY AVE GROSS LENGTH = 2,796 FT. = 0.53 MILES

GARY AVE NET LENGTH = 2,796 FT. = 0.53 MILES

GENERAL NOTES:

- ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, JANUARY 1, 2016.
- ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER.
- THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, THEIR AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- THE CONTRACTOR SHALL COORDINATE PAVING OPERATIONS FOR BOTH HMA LEVEL BINDER AND SURFACE COURSES SO THAT THE LONGITUDINAL JOINS ARE CLOSED AND COMPACTED AT THE END OF EACH DAY. PAVING OPERATIONS SHALL BE SCHEDULED SO THAT ADJACENT LANES ARE PAVED IN THE SAME DIRECTION AS THE INITIAL LANE MINIMIZING THE TIME THE EDGE OF A PAVEMENT MAT IS ALLOWED TO COOL.
- THE CONTRACTOR SHALL USE 2 CHANGEABLE MESSAGE SIGNS AT LOCATIONS TO BE DETERMINED BY THE ENGINEER FOR A PERIOD FROM ONE WEEK PRIOR TO THE START OF CONSTRUCTION TO THE CONCLUSION OF THE PROJECT.
- THE CONTRACTOR SHALL ENSURE ALL WATER SYSTEM VALVES, VALVE VAULTS, AND SANITARY SEWER MANHOLES REMAIN READILY ACCESSIBLE FOR EMERGENCY OPERATIONS. THE LOCATIONS OF ALL WATER AND SANITARY FACILITIES SHALL BE MARKED AND READILY VISIBLE AT ALL TIMES.
- THE INDISCRIMINATE USE OF FIRE HYDRANTS, EXISTING STREAMS, CREEKS, WETLANDS, OR PONDS IS STRICTLY PROHIBITED. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK AND DRIVER AS REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER FROM AN APPROVED SOURCE. IF THIS WATER IS FROM A JURISDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE CONTRACTOR PRIOR TO THE USE OF WATER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SELECT DUMPING SITES. HE/SHE SHALL PROVIDE A LIST OF THESE SITES TO THE ENGINEER FOR HIS/HER EXAMINATION AND GENERAL INFORMATION.
- ALL EXCESS MATERIAL (BROKEN CONCRETE, ASPHALT, CULVERT PIPE, WASTE ROADWAY EXCAVATION, AND SURPLUS MATERIALS FROM UTILITY TRENCHES) SHALL BE WASTED OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY.
- ALL PROPERTY AND SURFACE STRUCTURES WITHIN THE RIGHT-OF-WAY SHALL BE PROTECTED DURING CONSTRUCTION OPERATIONS UNLESS THE ENGINEER DIRECTS REMOVAL FOR PURPOSES RELATED TO CONSTRUCTION UNDER THIS CONTRACT. ANY FENCES, POLES, FLAGSTONE, DECORATIVE STONE, SPECIAL LANDSCAPING, OR OTHER MAN MADE SURFACE IMPROVEMENT WHICH IS REMOVED OR DISTURBED BY THE CONTRACTOR SHALL BE RESTORED BY HIM TO ITS ORIGINAL CONDITION AFTER THE CONSTRUCTION ACTIVITIES ARE COMPLETED.
- ALL FRAMES, GRATES, LIDS, FIRE HYDRANTS, AND VALVE BOXES WHICH ARE REMOVED AND ARE TO BE ABANDONED SHALL REMAIN THE PROPERTY OF THE CITY OF WHEATON. ANY OF THESE ITEMS WHICH ARE DAMAGED BY THE CONTRACTOR DURING HANDLING SHALL BE REPLACED BY HIM AT HIS EXPENSE. UPON REMOVAL FROM THEIR WORKING LOCATIONS, THEY ARE TO BE STOCKPILED AT AN ON-SITE LOCATION DETERMINED BY THE ENGINEER WHERE THEY WILL BE PICKED UP BY CITY PERSONNEL AT THE CONCLUSION OF WORK ON THAT STREET.
- WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE AND PUBLIC DRAINS, SEWERS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES TO ACCEPT ALL STORM WATER THAT WILL BE DELIVERED BY THESE DRAINS AND BASINS AND SHALL DISCHARGE THE SAME. IF NECESSARY, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT AND TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF WATER WHICH IS RECEIVED FROM ALL TEMPORARY CONNECTIONS. THESE TEMPORARY FACILITIES SHALL BE MAINTAINED UNTIL ALL PERMANENT CONNECTIONS ARE COMPLETED.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE FOLLOWED WHEN EXISTING CURB AND GUTTER IS REMOVED AND EXISTING DRAINAGE STRUCTURES ARE TO REMAIN ACTIVE. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAIL PROVIDED IN THE CONTRACT DOCUMENTS.
- THE THICKNESS OF THE HMA SHOWN ON THE PLANS IS NOMINAL. DEVIATIONS MAY OCCUR IN THE FIELD DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE UPON WHICH THE HMA IS BEING PLACED.
- THE LOCATIONS AND ELEVATIONS OF THE VARIOUS UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE NOT TO BE TAKEN AS EXACT. THE CONTRACTOR SHALL EXERCISE CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR UTILITIES TO PREVENT DAMAGE. THE FAILURE OF A UTILITY COMPANY TO ACCURATELY LOCATE THEIR UTILITY DOES NOT FREE THE CONTRACTOR FROM RESPONSIBILITY. THE MAJOR CONCERN OF THE CITY OF WHEATON IS PUBLIC SAFETY.
- THE CONTRACTOR SHALL COOPERATE WITH THE CITY IN ANY UNDERGROUND UTILITY CONSTRUCTION WHICH THE CITY MAY WANT TO PERFORM DURING THE CONTRACTOR'S OPERATIONS.
- THE CONTRACTOR SHALL HAVE LINE AND/OR FORMS SET A MINIMUM OF FOUR WORKING HOURS PRIOR TO THE SCHEDULED ARRIVAL OF CONCRETE ON SITE FOR THE PLACEMENT OF CURB AND GUTTER, DRIVEWAYS, AND SIDEWALK TO ALLOW THE ENGINEER TIME TO CHECK LINE AND GRADE.
- ALL RADII FOR PROPOSED COMBINATION CONCRETE CURB AND GUTTER SHALL BE PLACED AT THE EXISTING DIMENSION UNLESS OTHERWISE INDICATED ON THE PROJECT PLANS OR AS DIRECTED BY THE ENGINEER. ELEVATIONS SHOWN AT POINT ON THE CURB INDICATED FLOW LINE ELEVATIONS UNLESS NOTED OTHERWISE.
- WHEN WATER SERVICE BOXES FALL WITHIN THE LIMITS OF CONCRETE FLATWORK, THE CONTRACTOR SHALL PROVIDE EITHER A SECTION OF 4" POLY VINYL CHLORIDE (PVC) PIPE OR 4" HIGH DENSITY POLYETHYLENE (HDPE) PIPE TO SLEEVE THE BOX. THE SLEEVE SHALL EITHER BE REMOVED OR TRIMMED TO MATCH THE EXISTING CONCRETE GRADE LEVEL. THE FINAL RESULT SHALL BE A SMOOTH FINISHED "BOX-OUT" AROUND THE SERVICE BOX WHICH SHALL FACILITATE EASY REMOVAL OF THE CAP.
- WHEN A SEWER STRUCTURE FALLS WITHIN THE LIMITS OF A CONCRETE DRIVEWAY, THE CONTRACTOR SHALL PLACE EXPANSION MATERIAL IN A BOX APPROXIMATELY EIGHTEEN (18") INCHES FROM THE CENTER OF THE LID FORMING A SQUARE "BOX-OUT" AROUND THE FRAME. THE RESULT SHALL BE A CONDITION THAT WILL ALLOW FOR THE REMOVAL OF THE SQUARE OF CONCRETE FROM THE DRIVEWAY FOR THE PURPOSE OF REPLACING THE FRAME WITHOUT DAMAGING THE REMAINDER OF THE DRIVEWAY PAVEMENT.
- ALL CONSTRUCTION PERSONNEL SHALL BE REQUIRED TO WEAR A FLUORESCENT YELLOW / GREEN SAFETY VEST AT ALL TIMES WHILE ON THE CONSTRUCTION SITE.

- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1-1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD THE LOCATIONS OF ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE REESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL PROVIDE SAFE AND ORDERLY PASSAGE FOR TRAFFIC AND PEDESTRIANS WHERE CONSTRUCTION OPERATIONS IMPACT PUBLIC THOROUGHFARES AND ADJACENT PROPERTY. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- ALL SIDEWALK CURB RAMPS SHALL BE COMPLIANT WITH ALL APPLICABLE ADA STANDARDS AND INCLUDED DETAILS. INDIVIDUAL DESIGN DETAILS HAVE BEEN PROVIDED FOR ALL LOCATIONS WITH AN EXISTING SLOPE OVER 5%.
- A NOMINAL QUANTITY HAS BEEN INCLUDED FOR THE FOLLOWING PAY ITEMS:
 - EARTH EXCAVATION
 - POROUS GRANULAR EMBANKMENT
 - COMBINATION CURB AND GUTTER REMOVAL
 - CLASS D PATCHES
 - REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
 - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
 - SIDEWALK REMOVAL
 - COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

GENERAL NOTES - SEWERS:

- ALL FRAMES WITH CLOSED LIDS BEING FURNISHED FOR THIS PROJECT AS CONSTRUCTION, ADJUSTMENT, OR RECONSTRUCTION OF ANY MANHOLE, CATCH BASIN, INLET, OR WATER VALVE VAULT SHALL HAVE CAST INTO THE LID ONE OR MORE OF THE FOLLOWING WORDS:
 - ALL LIDS BEING USED FOR STORM SEWER MANHOLES SHALL BEAR THE WORD "STORM". ALL LIDS BEING USED FOR SANITARY MANHOLES SHALL BEAR THE WORD "SANITARY". ALL LIDS BEING USED FOR CITY'S WATER SYSTEM STRUCTURES SHALL BEAR THE WORD "WATER". THE INCLUSION OF THESE LIDS SHALL BE INCLUDED IN THE COST OF THE APPROPRIATE CONTRACT LINE ITEM. ALL CURB INLET FRAMES SHALL BE STAMPED WITH A "FISH" SYMBOL DIRECTLY ON THE CURB BACK.
- IF AT ANY TIME DURING THE CONSTRUCTION OF THIS PROJECT LOOSE MATERIAL IS DEPOSITED INTO THE FLOW LINE OF A SEWER STRUCTURE IN SUCH A WAY AS TO RESTRICT OR OBSTRUCT THE NATURAL FLOW OF WATER IN THE STRUCTURE, THE MATERIAL SHALL BE REMOVED BEFORE THE CLOSE OF THE WORKING DAY DURING WHICH IT WAS DEPOSITED. AT THE CONCLUSION OF CONSTRUCTION ACTIVITIES, AND BEFORE THE CITY ACCEPTS THE PROJECT, ALL SEWERS AND SEWER STRUCTURES THAT FALL WITHIN THE LIMITS OF THE PROJECT SHALL BE FREE OF CONSTRUCTION DEBRIS AND LOOSE MATERIAL.

| LIST OF ABBREVIATIONS | | | |
|-----------------------|--------------------------|-------|--------------------------|
| CB | CATCH BASIN | SF | SQUARE FEET |
| C&G | CURB & GUTTER | SY | SQUARE YARDS |
| DIA. | DIAMETER | T1FCL | TYPE 1 FRAME, CLOSED LID |
| FR | FRAME | T1FOL | TYPE 1 FRAME, OPEN LID |
| HMA | HOT-MIX ASPHALT | WM | WATER MAIN |
| INV. | INVERT | ADJ | TO BE ADJUSTED |
| LF | LINEAL FEET | STM | STORM |
| MH | MANHOLE | SAN | SANITARY |
| P.C.C. | PORTLAND CEMENT CONCRETE | WQ | WATER QUALITY |

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 GENERAL NOTES
- 3-4 SUMMARY OF QUANTITIES
- 5-6 GARY AVENUE TYPICAL SECTIONS
- 7-9 GARY AVENUE PLAN SHEETS
- 10-12 GARY AVENUE PAVEMENT MARKING PLAN
- 13-14 WHEATON CONSTRUCTION DETAILS
- 15-23 DISTRICT 1 DETAILS (SHEET 21 NOT INCLUDED)

| LEGEND | EXISTING | PROPOSED |
|--|----------|----------|
| MAIL BOX | | |
| HANDHOLE | | |
| EVERGREEN TREE | | |
| DECIDUOUS TREE | | |
| BUSH | | |
| PAVEMENT BUTT JOINT | | |
| POWER POLE | | |
| TELEPHONE BOX | | |
| B-BOX | | |
| FIRE HYDRANT | | |
| VALVE | | |
| VALVE VAULT | | |
| ABANDON VALVE VAULT | | |
| WATER MAIN | | |
| MANHOLE | | |
| ABANDON MANHOLE | | |
| CATCH BASIN | | |
| INLET | | |
| STORM SEWER LINE | | |
| SANITARY SEWER LINE | | |
| GAS MAIN | | |
| INDICATES STORM MANHOLE | | |
| INDICATES SANITARY MANHOLE | | |
| INDICATES STORM SEWER STRUCTURE | | |
| INDICATES VALVE TO BE ADJUSTED | | |
| INDICATES TYPICAL CROSS SECTION LOCATION | | |

DISTRICT 1 HIGHWAY STANDARDS

| | |
|-------|---|
| BD-22 | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT |
| BD-32 | BUTT JOINT AND HMA TAPER DETAILS |
| TC-10 | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS |
| TC-11 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-FLOW RESISTANT) |
| TC-13 | TYPICAL PAVEMENT MARKINGS |
| TC-16 | PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING |
| TS-05 | STANDARD TRAFFIC SIGNAL DESIGN DETAILS |
| TS-07 | DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING |

IDOT STATE STANDARDS

| | |
|-----------|---|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS |
| 424001-09 | PERPENDICULAR CURB RAMPS FOR SIDEWALKS |
| 424006-02 | DIAGONAL CURB RAMPS FOR SIDEWALKS |
| 424011-03 | CORNER PARALLEL CURB RAMPS FOR SIDEWALKS |
| 424016-03 | MID-BLOCK CURB RAMPS FOR SIDEWALKS |
| 424021-03 | DEPRESSED CORNER FOR SIDEWALKS |
| 424026-01 | ENTRANCE / ALLEY PEDESTRIAN CROSSINGS |
| 442201-03 | CLASS C AND D PATCHES |
| 606001-06 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 606301-04 | PC CONCRETE ISLANDS AND MEDIANS |
| 701006-05 | OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-03 | LANE CLOSURE 2L, 2W MOVING OPERATIONS- DAY ONLY |
| 701501-06 | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701801-06 | SIDEWALK, CORNER OR CROSSWALK CLOSURE |
| 701901-06 | TRAFFIC CONTROL DEVICES |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |
| 781001-04 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS |

SUMMARY OF QUANTITIES

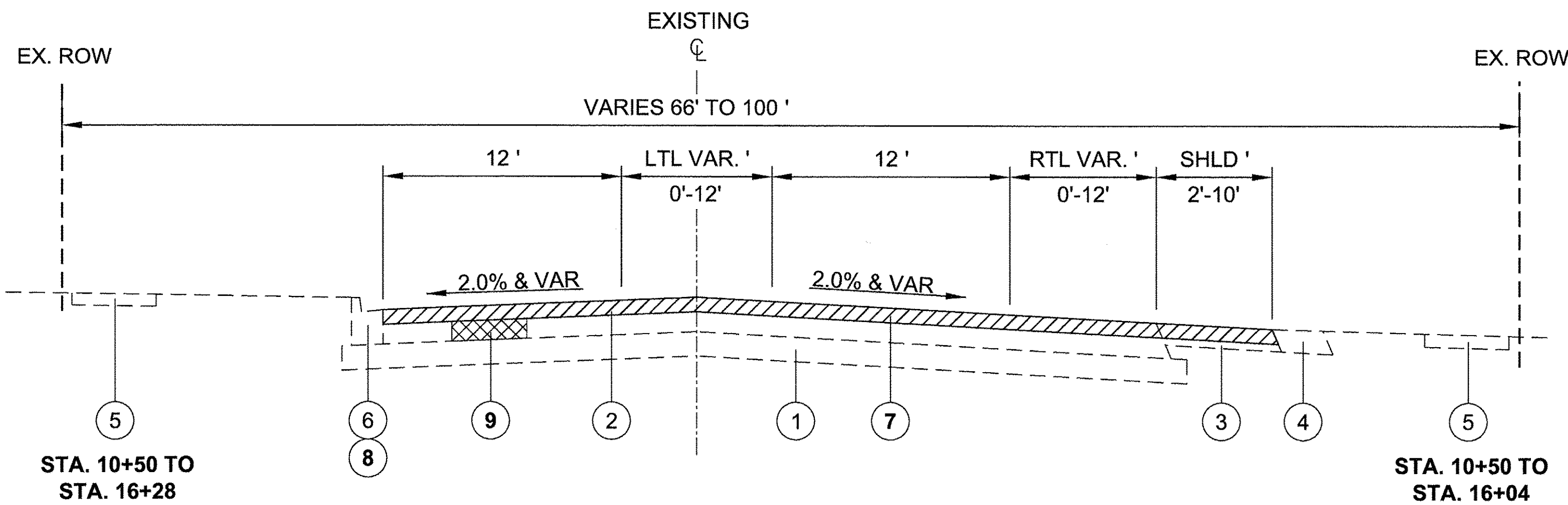
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|----------|--|-------|------------------------------------|
| 20200100 | EARTH EXCAVATION | CU YD | 18 |
| 20201200 | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL | CU YD | 20 |
| 20700220 | POROUS GRANULAR EMBANKMENT | CU YD | 20 |
| 21101615 | TOPSOIL FURNISH AND PLACE, 4" | SQ YD | 165 |
| 25200110 | SODDING, SALT TOLERANT | SQ YD | 165 |
| 28000510 | INLET FILTERS | EACH | 12 |
| 40600290 | BITUMINOUS MATERIALS (TACK COAT) | POUND | 7740 |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS | TON | 15.9 |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 89 |
| 40600990 | TEMPORARY RAMP | SQ YD | 65 |
| 40603085 | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 | TON | 1589 |
| 40603340 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 | TON | 963 |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SQ FT | 1321 |
| 42400800 | DETECTABLE WARNINGS | SQ FT | 100 |
| 44000155 | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" | SQ YD | 116 |

| CODE NO. | ITEM | UNIT | TOTAL QTY. CONSTR. CODE 0005 |
|----------|--|-------|------------------------------------|
| 44000165 | HOT-MIX ASPHALT SURFACE REMOVAL, 4" | SQ YD | 11352 |
| 44000500 | COMBINATION CURB AND GUTTER REMOVAL | FOOT | 215 |
| 44000600 | SIDEWALK REMOVAL | SQ FT | 1469 |
| 44201725 | CLASS D PATCHES, TYPE I, 7 INCH | SQ YD | 57 |
| 44201729 | CLASS D PATCHES, TYPE II, 7 INCH | SQ YD | 115 |
| 44201733 | CLASS D PATCHES, TYPE III, 7 INCH | SQ YD | 172 |
| 44201735 | CLASS D PATCHES, TYPE IV, 7 INCH | SQ YD | 229 |
| 48102100 | AGGREGATE WEDGE SHOULDER, TYPE B | TON | 126 |
| 60251500 | CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 11 FRAME AND GRATE | EACH | 2 |
| 60255500 | MANHOLES TO BE ADJUSTED | EACH | 14 |
| 60603800 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 | FOOT | 78 |
| 60604400 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 | FOOT | 136 |
| 67100100 | MOBILIZATION | LSUM | 1 |
| 70102620 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 | LSUM | 1 |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | LSUM | 1 |

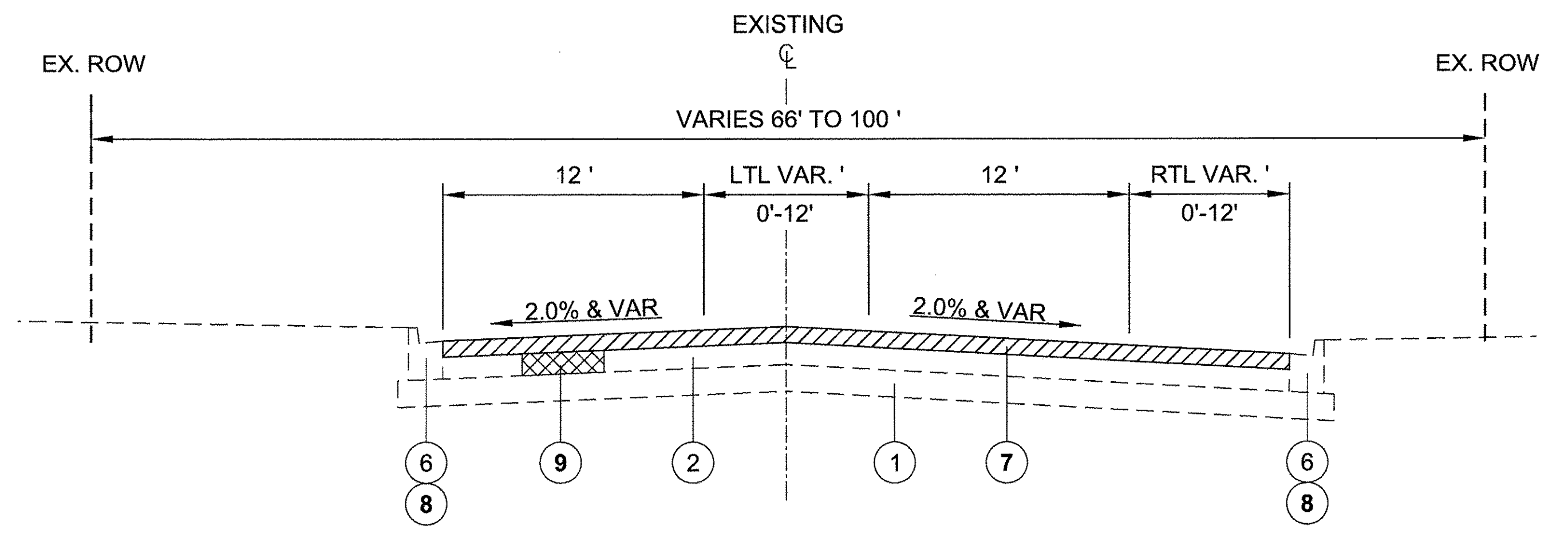
SUMMARY OF QUANTITIES

| CODE NO. | ITEM | UNIT | TOTAL QTY. |
|------------|--|--------|-------------------|
| | | | CONSTR. CODE 0005 |
| 70102640 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 | LSUM | 1 |
| 70106800 | CHANGEABLE MESSAGE SIGN | CAL MO | 4 |
| 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 927 |
| 70300150 | SHORT TERM PAVEMENT MARKING REMOVAL | SQ FT | 306 |
| * 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 218 |
| * 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 6338 |
| * 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 413 |
| * 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 330 |
| * 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 151 |
| * 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | EACH | 72 |
| * 88600600 | DETECTOR LOOP REPLACEMENT | FOOT | 528 |
| * 89500400 | RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON | EACH | 2 |
| * X7810300 | RECESSED REFLECTIVE PAVEMENT MARKER | EACH | 72 |
| Z0019600 | DUST CONTROL WATERING | UNIT | 10 |
| X0320050 | CONSTRUCTION LAYOUT (SPECIAL) | LSUM | 1 |

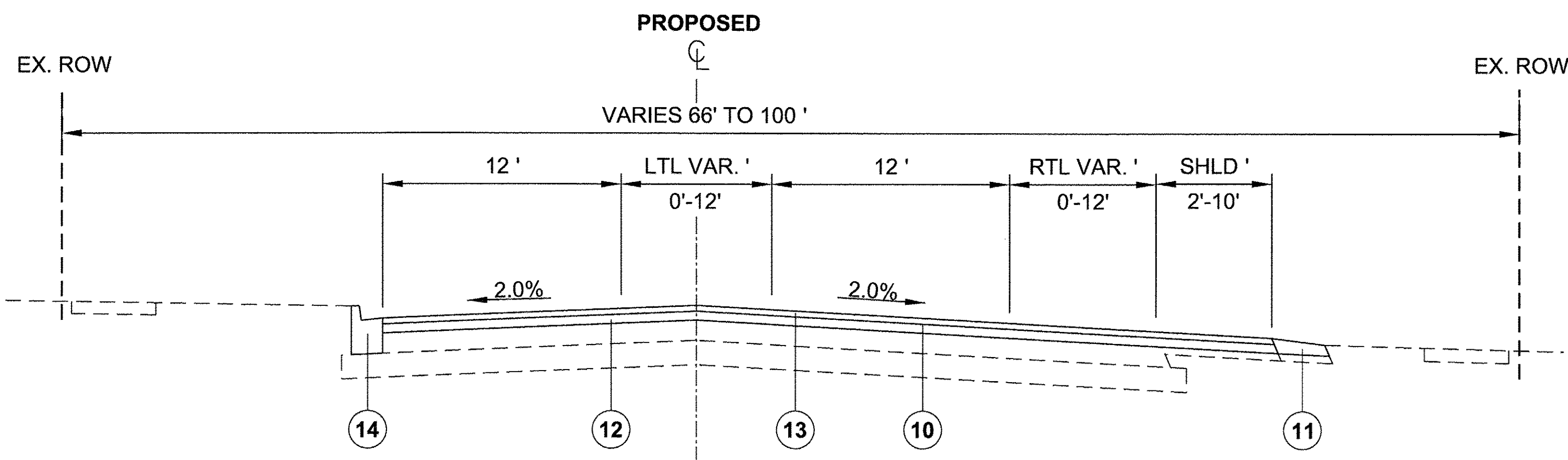
* INDICATES SPECIALTY ITEM



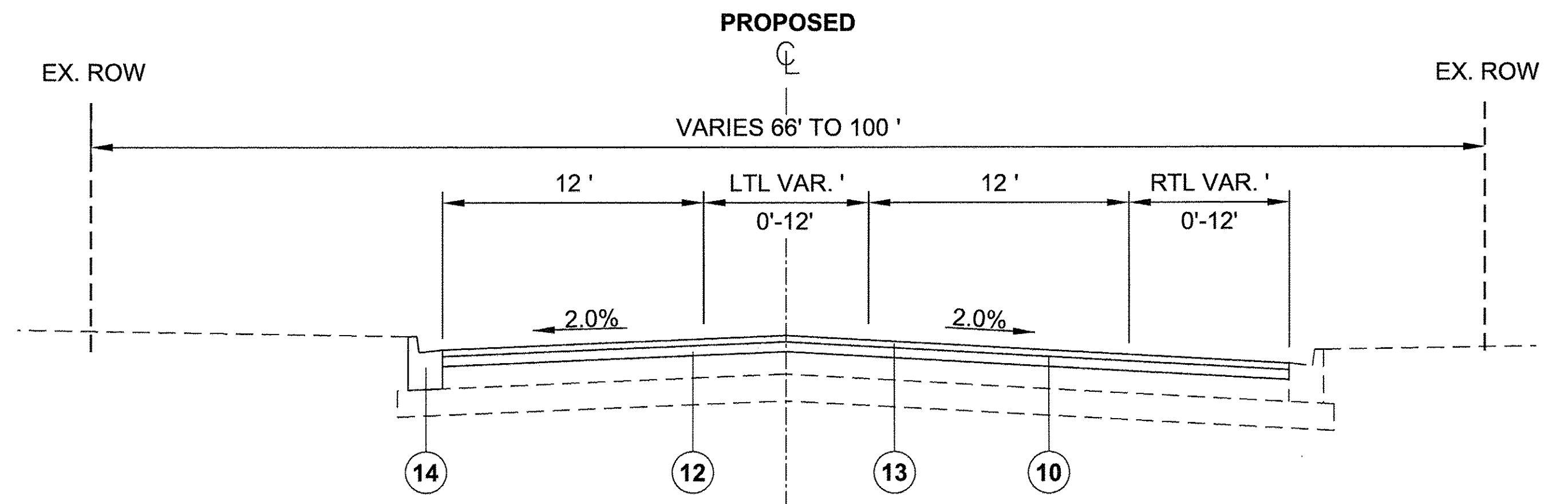
EXISTING TYPICAL SECTION
GARY AVENUE
 STA. 10+50 TO STA. 18+02



EXISTING TYPICAL SECTION
GARY AVENUE
 STA. 18+02 TO STA. 21+98



PROPOSED TYPICAL SECTION
GARY AVENUE
 STA. 10+50 TO STA. 18+02



PROPOSED TYPICAL SECTION
GARY AVENUE
 STA. 18+02 TO STA. 21+98

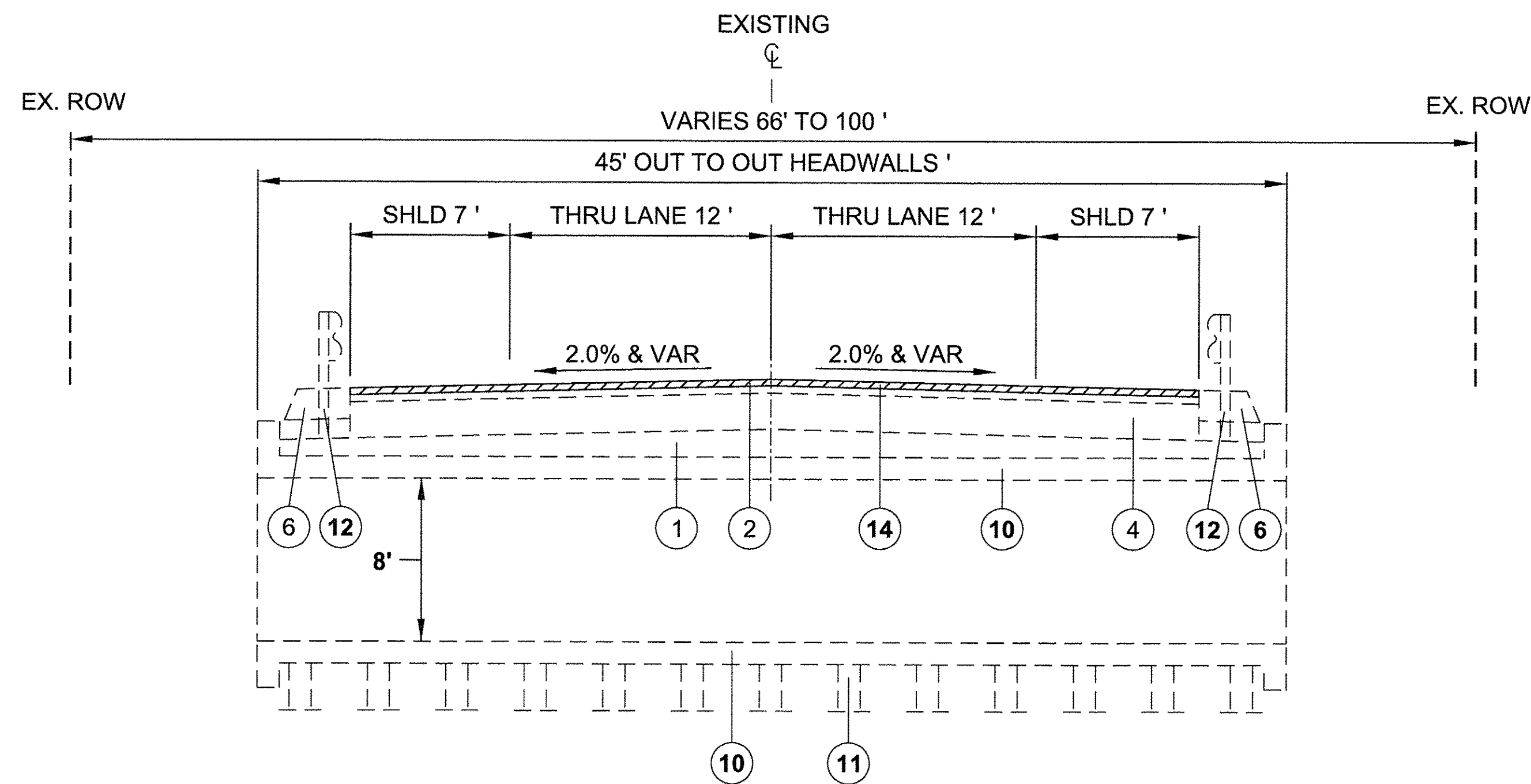
- LEGEND**
- ① EX SUB-BASE GRAN MATL, THICKNESS VARIES
 - ② EX HMA PAVEMENT, 10"
 - ③ EX HMA SHOULDERS
 - ④ EX AGGREGATE SHOULDERS
 - ⑤ EX PCC SIDEWALK
 - ⑥ EX COMB. CONC. CURB AND GUTTER
 - ⑦ HMA SURFACE REMOVAL, 4"
 - ⑧ COMB. CURB AND GUTTER REMOVAL (SEE NOTE A)
 - ⑨ PR. CLASS D PATCHES, 7" (SEE NOTE A)
 - ⑩ PR BITUMINOUS MATERIALS (TACK COAT)
 - ⑪ PR AGGREGATE WEDGE SHOULDER, TYPE B, 3"
 - ⑫ PR HMA BINDER CSE, IL-19.0, N70, 2-1/2"
 - ⑬ PR HMA SURF CSE, MIX "D", N70, 1-1/2"
 - ⑭ PR COMB CONC CURB AND GUTTER, TY B-6.12 (SEE NOTE A)

NOTES:

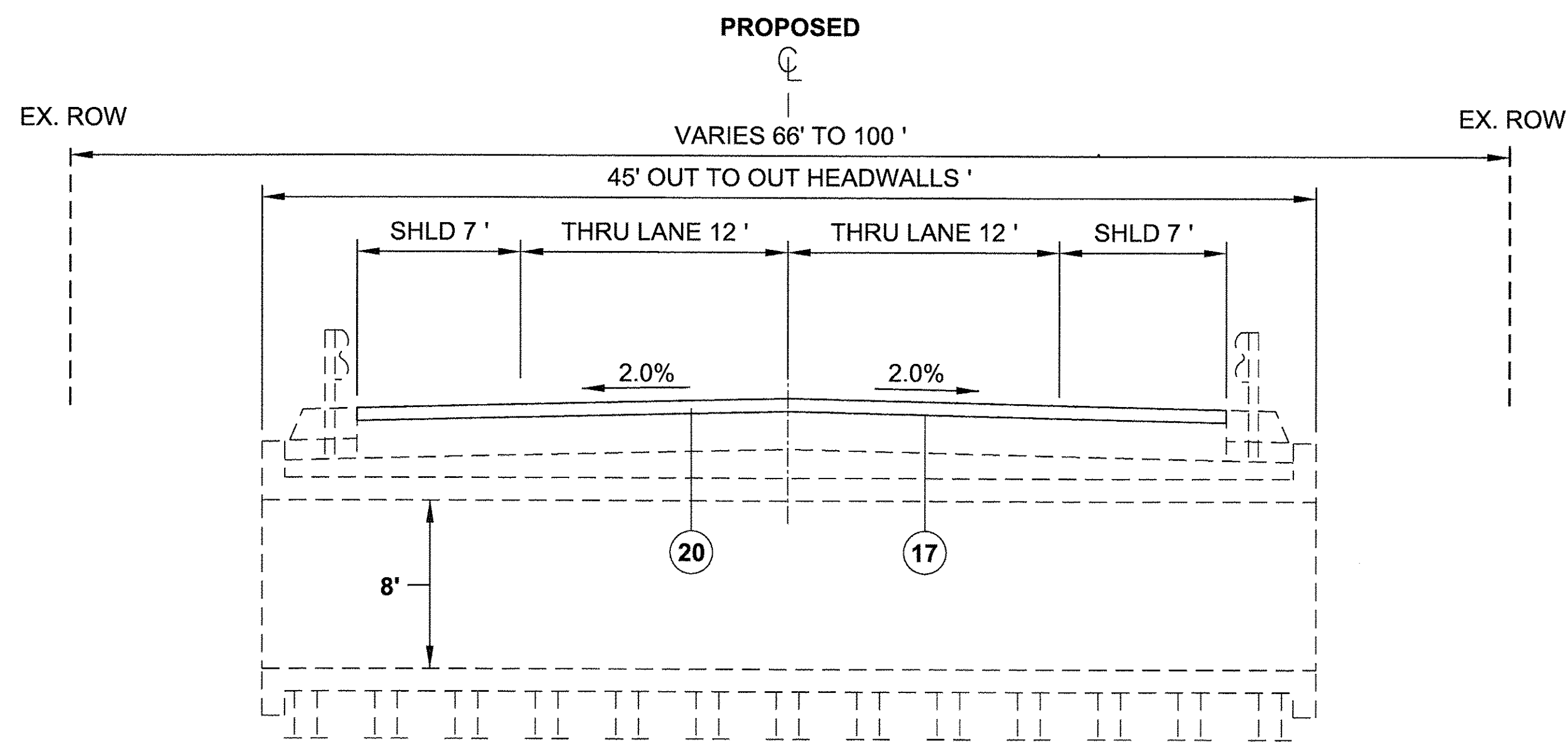
A. PATCHING AND CURB AND GUTTER LOCATIONS WILL BE SPECIFIED BY THE ENGINEER IN THE FIELD DURING CONSTRUCTION.

| HOT-MIX ASPHALT MIXTURE REQUIREMENTS | |
|--|------------------|
| MIXTURE TYPE | AIR VOIDS @ Ndes |
| ROADWAY RESURFACING | |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm) | 4% @ 70 Gyr. |
| HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 | 4% @ 70 Gyr. |
| ROADWAY PATCHING - (PAY ITEM = CLASS D PATCHES) | |
| HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 | 4% @ 70 Gyr. |

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIALS PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.
 3. THE CONTRACTOR SHALL MILL BEFORE PATCHING.



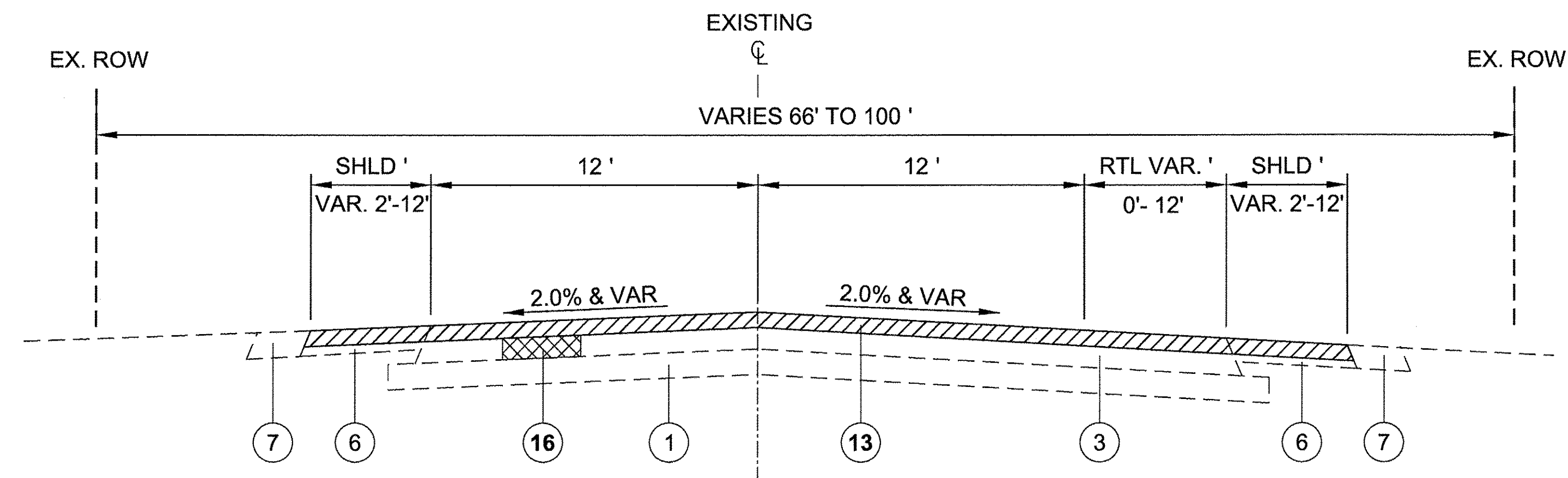
EXISTING TYPICAL SECTION
GARY AVENUE BRIDGE
 STA. 23+96 TO STA. 24+27



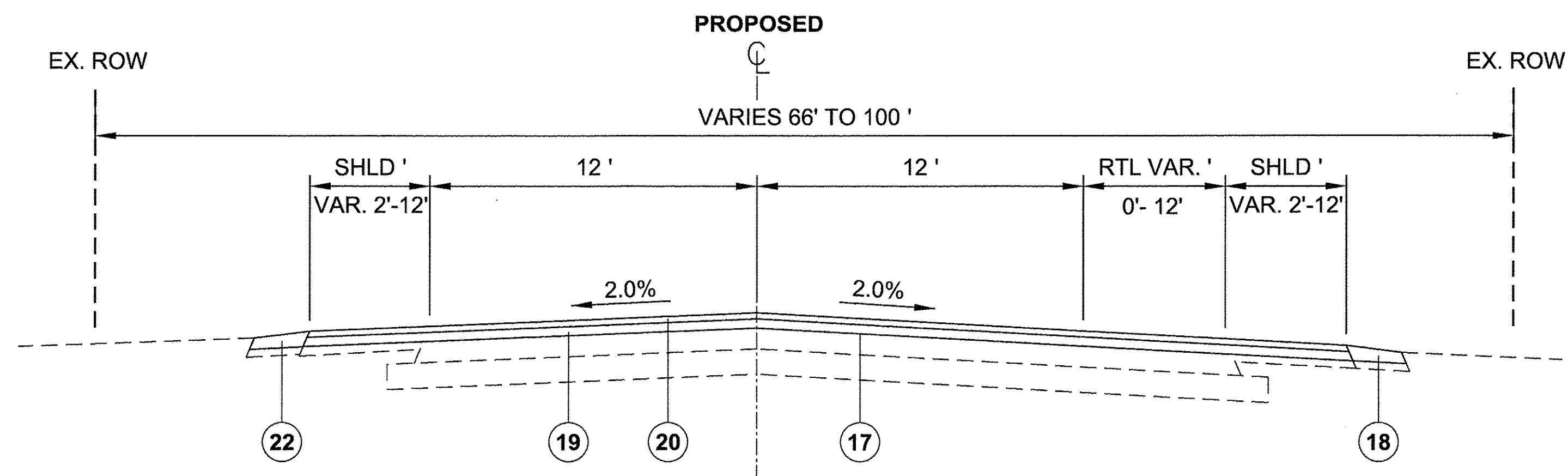
PROPOSED TYPICAL SECTION
GARY AVENUE BRIDGE
 STA. 23+96 TO STA. 24+27

NOTES:

- A. LOCATIONS WILL BE SPECIFIED BY THE ENGINEER IN THE FIELD DURING CONSTRUCTION**



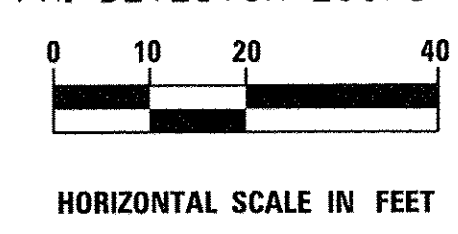
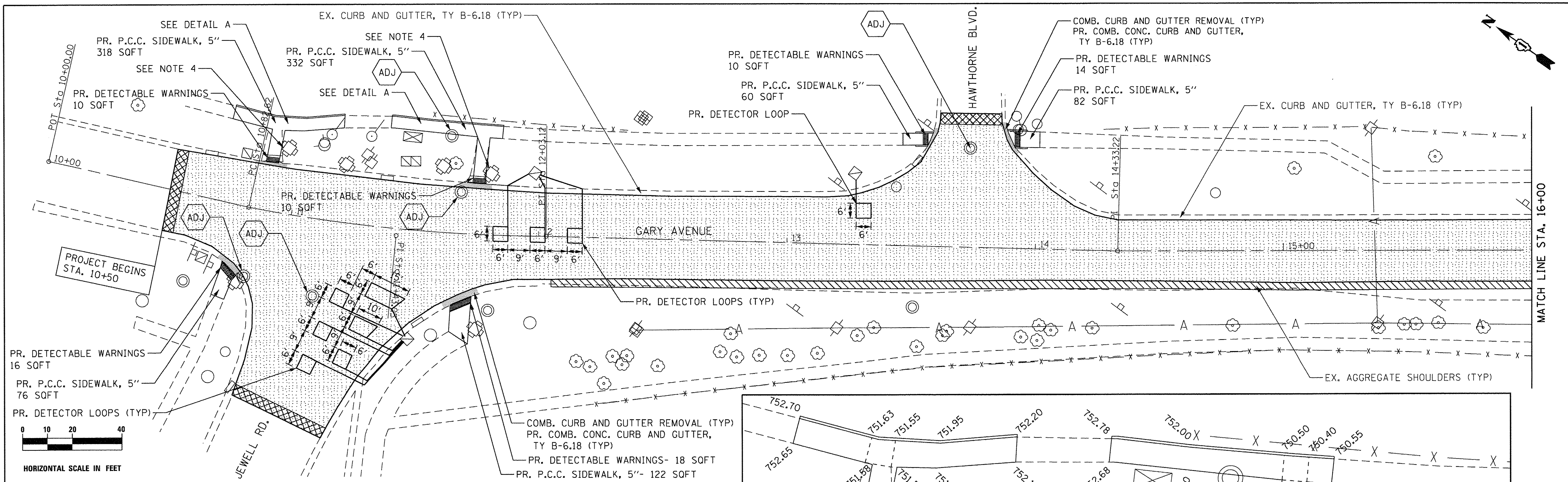
EXISTING TYPICAL SECTION
GARY AVENUE
 STA. 21+98 TO STA. 23+96
 STA. 24+27 TO STA. 38+46



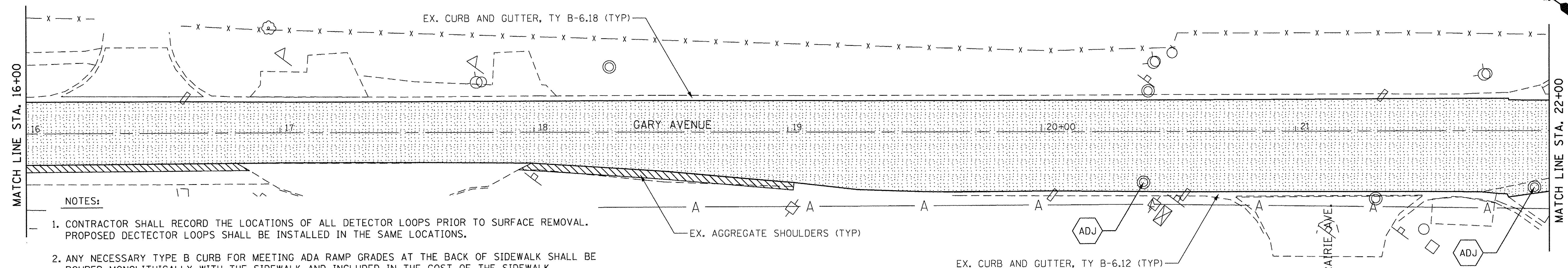
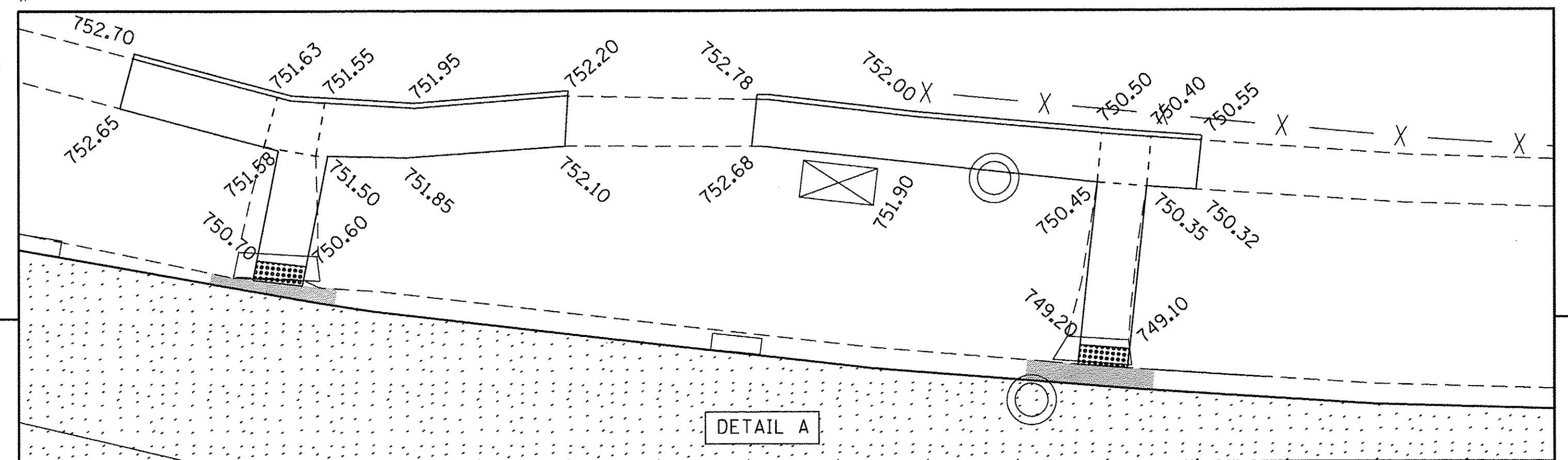
PROPOSED TYPICAL SECTION
GARY AVENUE
 STA. 21+98 TO STA. 23+96
 STA. 24+27 TO STA. 38+46

LEGEND

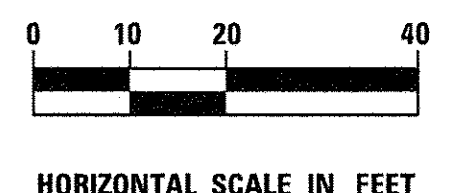
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|---|--|
| ① EX SUB-BASE GRAN MATL, THICKNESS VARIES | ⑬ PR HMA SURFACE REMOVAL, 4" |
| ② EX HMA PAVEMENT, 3" | ⑭ PR HMA SURFACE REMOVAL, 1.5" |
| ③ EX HMA PAVEMENT, 10" | ⑮ PR. COMB. CURB AND GUTTER REMOVAL (SEE NOTE A) |
| ④ EX PCC PAVEMENT, 9" | ⑯ PR. CLASS D PATCHES, 7" (SEE NOTE A) |
| ⑤ EX HMA SURFACE COURSE | ⑰ PR BITUMINOUS MATERIALS (TACK COAT) |
| ⑥ EX HMA SHOULDERS | ⑱ PR AGGREGATE WEDGE SHOULDER, TYPE B, 3" |
| ⑦ EX AGGREGATE SHOULDER | ⑲ PR HMA BINDER CSE, IL-19.0, N70, 2-1/2" |
| ⑧ EX PCC SIDEWALK | ⑳ PR HMA SURF CSE, MIX "D", N70, 1-1/2" |
| ⑨ EX COMB. CONC. CURB AND GUTTER | ㉑ PR COMB CONC CURB AND GUTTER, TY B-6.12 (SEE NOTE A) |
| ⑩ EX BOX CULVERT | |
| ⑪ EX METAL SHEET PILING | |
| ⑫ EX GUARDRAIL | |

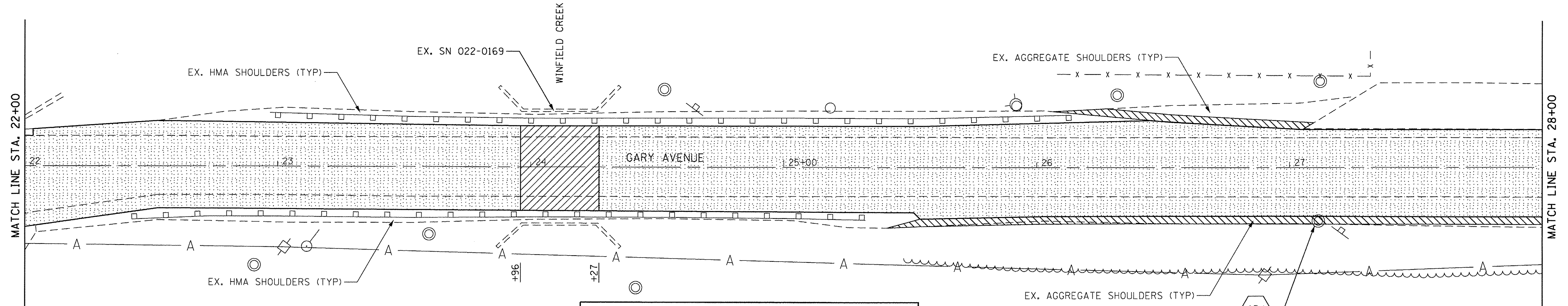
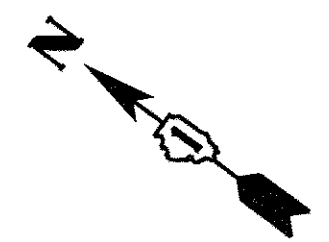


| LEGEND | |
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| | HMA SURFACE REMOVAL, 4" PR. HMA BINDER COURSE, 1L-19.0, N70, 2-1/2" PR. HMA SURFACE COURSE, MIX "D", N70, 1-1/2" |
| | HMA SURFACE REMOVAL, 1-1/2" PR. HMA SURFACE COURSE, MIX "D", N70, 1-1/2" |
| | PR. HMA SURFACE REMOVAL- BUTT JOINT |
| | PR. STRUCTURE TO BE ADJUSTED |
| | PR. STRUCTURE TO BE ADJUSTED WITH NEW FRAME AND GRATE OR LID (OF TYPE SPECIFIED) |
| | PR. AGGREGATE WEDGE SHOULDER, TYPE B |



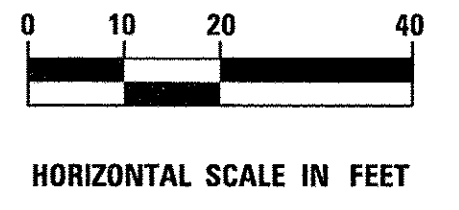
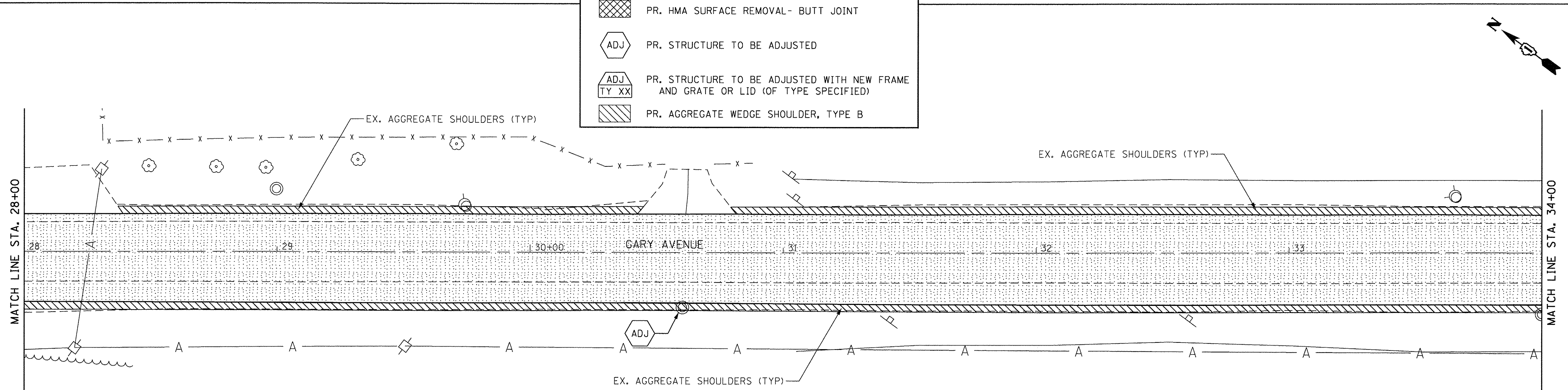
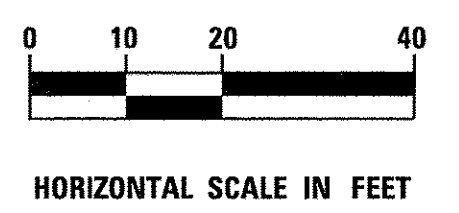
- NOTES:**
- CONTRACTOR SHALL RECORD THE LOCATIONS OF ALL DETECTOR LOOPS PRIOR TO SURFACE REMOVAL. PROPOSED DETECTOR LOOPS SHALL BE INSTALLED IN THE SAME LOCATIONS.
 - ANY NECESSARY TYPE B CURB FOR MEETING ADA RAMP GRADES AT THE BACK OF SIDEWALK SHALL BE POURED MONOLITHICALLY WITH THE SIDEWALK AND INCLUDED IN THE COST OF THE SIDEWALK.
 - A MINIMUM TRANSITION OF 18" WILL BE USED FROM DEPRESSED CURB TO FULL CURB HEIGHT (TYP).
 - EXISTING PUSH BUTTON SHALL BE RELOCATED ON THE POLE TO A HEIGHT OF 42" ABOVE THE FINISHED GRADE OF THE ADJACENT SIDEWALK, OR AS DIRECTED BY THE ENGINEER, TO MEET ADA REQUIREMENTS.





LEGEND

| | |
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| | HMA SURFACE REMOVAL, 4" PR. HMA BINDER COURSE, IL-19.0, N70, 2-1/2" PR. HMA SURFACE COURSE, MIX "D", N70, 1-1/2" |
| | HMA SURFACE REMOVAL, 1-1/2" PR. HMA SURFACE COURSE, MIX "D", N70, 1-1/2" |
| | PR. HMA SURFACE REMOVAL- BUTT JOINT |
| | PR. STRUCTURE TO BE ADJUSTED |
| | PR. STRUCTURE TO BE ADJUSTED WITH NEW FRAME AND GRATE OR LID (OF TYPE SPECIFIED) |
| | PR. AGGREGATE WEDGE SHOULDER, TYPE B |



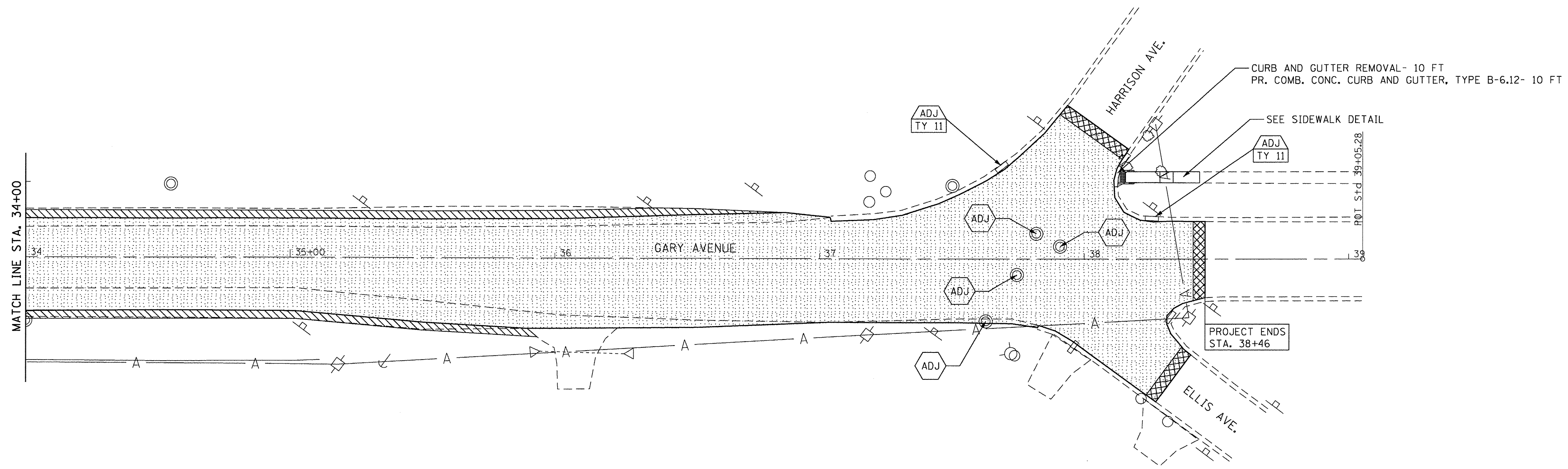
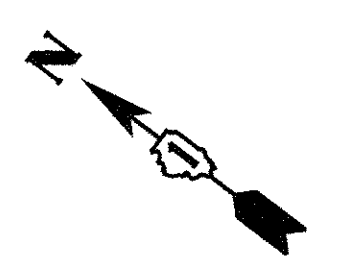
thomas engineering group, llc
762 shoreline drive
suite 200
aurora, illinois 60504
phone: 855-533-1700

| | | |
|----------------------------|------------|-----------|
| USER NAME = DonN | DESIGNED - | REVISED - |
| PLOT SCALE = 20.0000' / 1" | DRAWN - | REVISED - |
| PLOT DATE = 12/13/2016 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

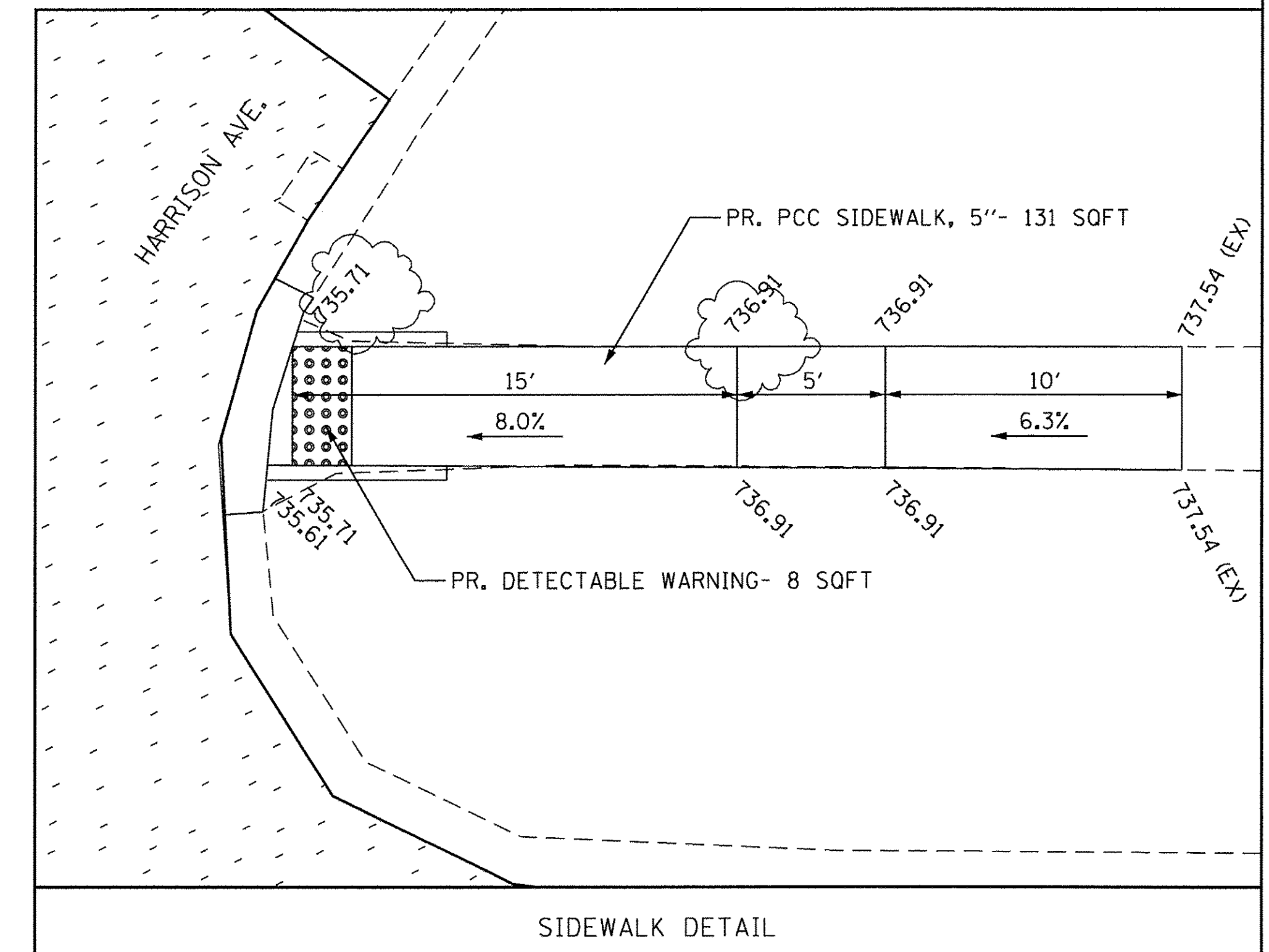
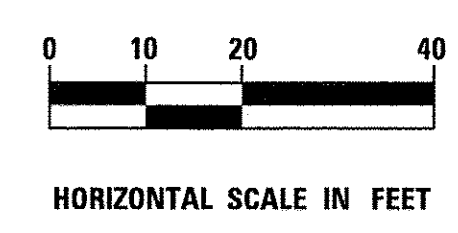
ROADWAY PLANS
SCALE: 20 SHEET 2 OF 3 SHEETS STA. 22+00 TO STA. 34+00

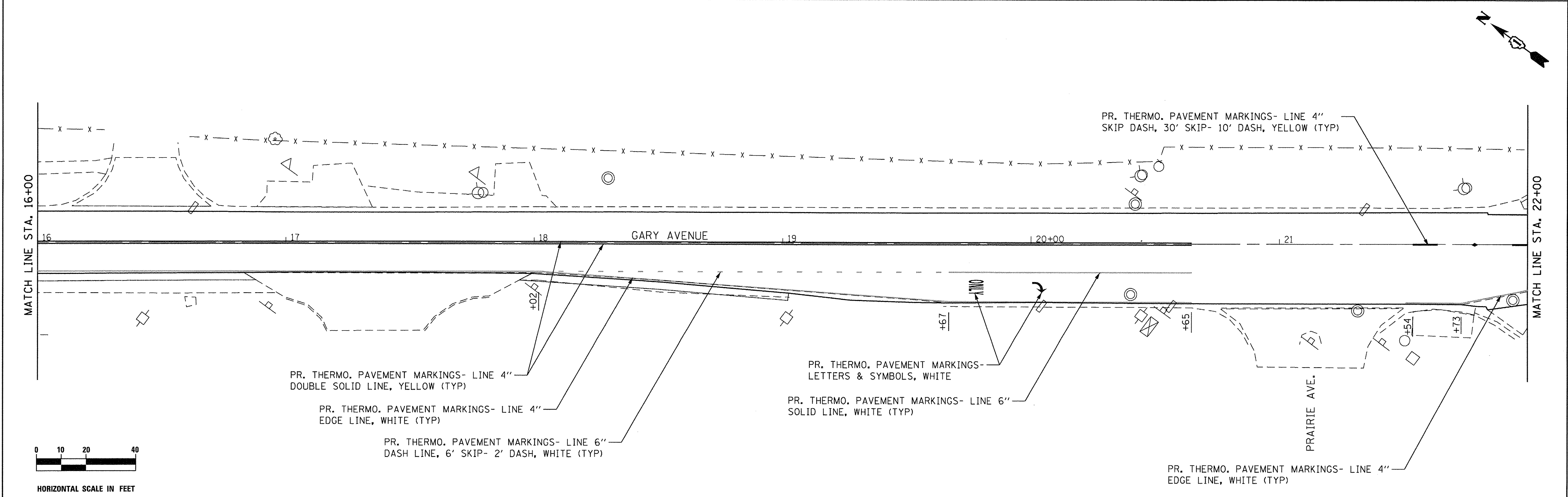
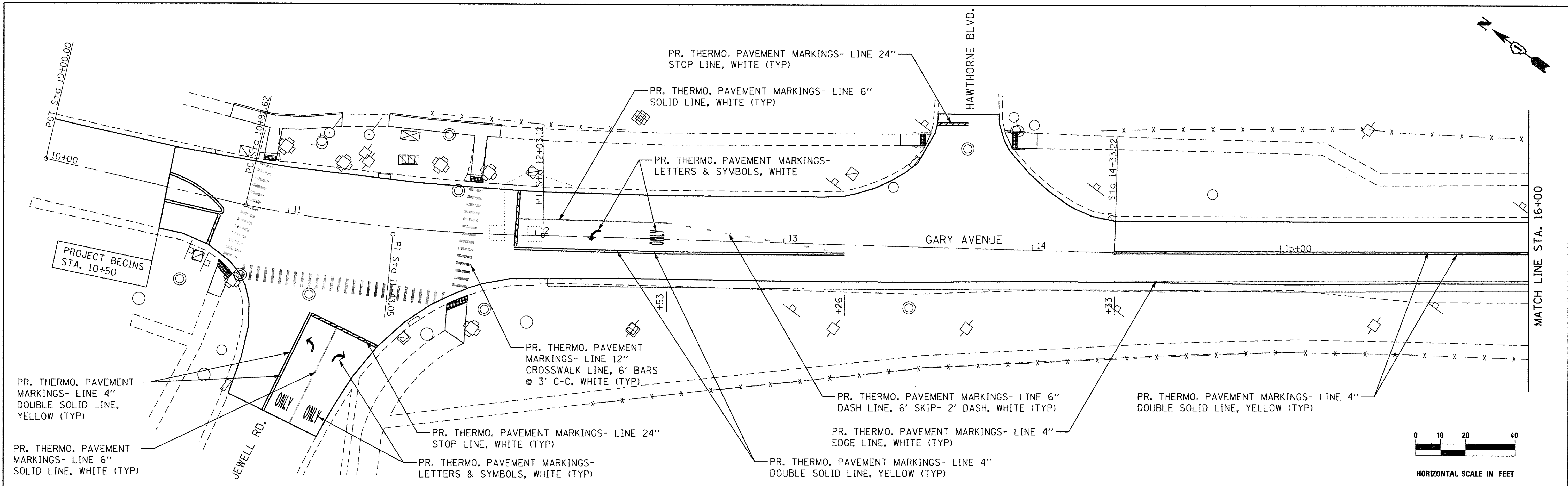
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| F.A.U. RTE. 2561 | SECTION 15-00111-00-RS | COUNTY DUPAGE | TOTAL SHEETS 23 | SHEET NO. 8 |
| | | | | CONTRACT NO. 61D51 |
| ILLINOIS FED. AID PROJECT | | | | |



| LEGEND | |
|--------|--|
| | HMA SURFACE REMOVAL, 4" PR. HMA BINDER COURSE, IL-19.0, N70, 2-1/2" PR. HMA SURFACE COURSE, MIX "D", N70, 1-1/2" |
| | HMA SURFACE REMOVAL, 1-1/2" PR. HMA SURFACE COURSE, MIX "D", N70, 1-1/2" |
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| | PR. AGGREGATE WEDGE SHOULDER, TYPE B |

- NOTES:**
1. ANY NECESSARY TYPE B CURB FOR MEETING ADA RAMP GRADES AT THE BACK OF SIDEWALK SHALL BE POURED MONOLITHICALLY WITH THE SIDEWALK AND INCLUDED IN THE COST OF THE SIDEWALK.





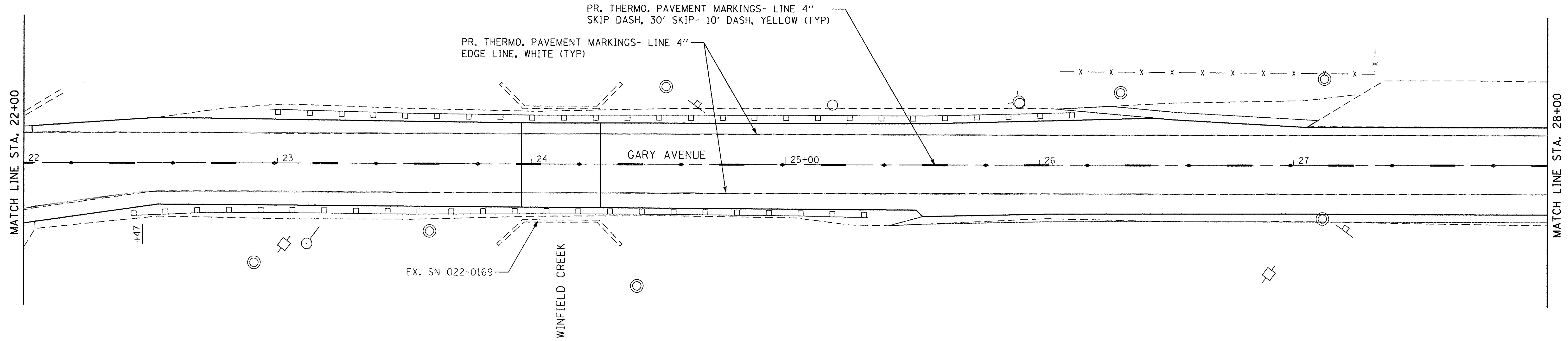
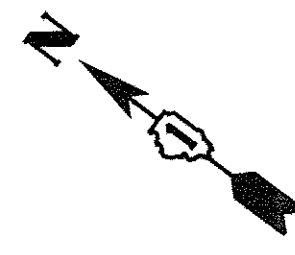
thomas engineering group, llc
762 shoreline drive
suite 200
aurora, illinois 60504
phone: 855-533-1700

| | | |
|-----------------------------|------------|--------------------|
| USER NAME = DonN | DESIGNED - | REVISED 12/28/2016 |
| PLOT SCALE = 40.0000' / in. | DRAWN - | REVISED - |
| PLOT DATE = 1/19/2017 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

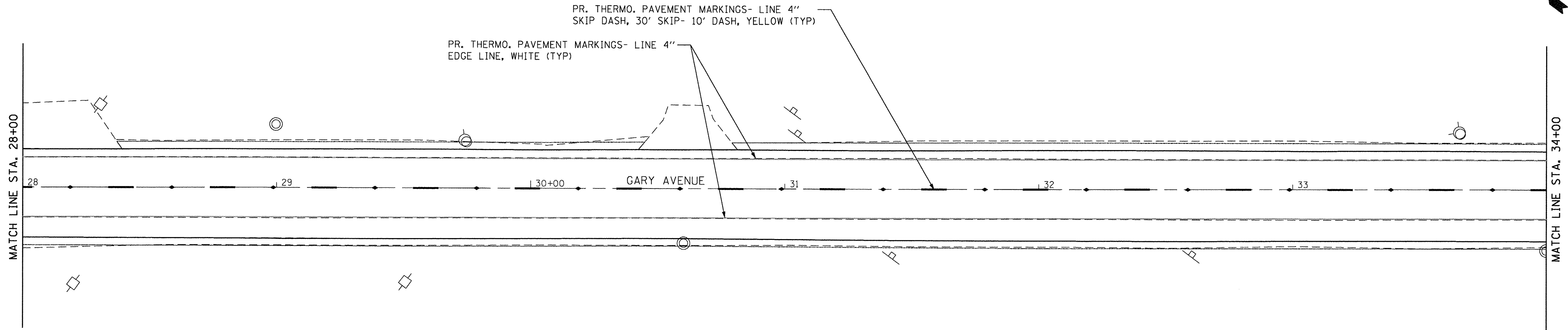
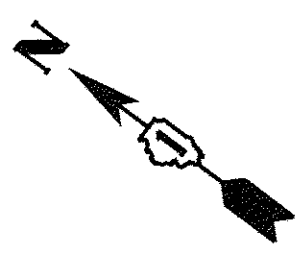
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLANS
SCALE: 20 SHEET 1 OF 3 SHEETS STA. 10+00 TO STA. 22+00

| | | | | |
|---------------------------|------------------------|--------|--------------------|--------------|
| F.A.U. RTE. 2561 | SECTION 15-00111-00-RS | COUNTY | TOTAL SHEETS 23 | SHEET NO. 10 |
| | | DUPAGE | CONTRACT NO. 61D51 | |
| ILLINOIS FED. AID PROJECT | | | | |



HORIZONTAL SCALE IN FEET



HORIZONTAL SCALE IN FEET

thomas
 engineering group
 service at the highest grade

thomas engineering group, llc
 762 shoreline drive
 suite 200
 aurora, illinois 60504
 phone: 855-533-1700

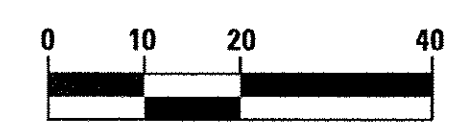
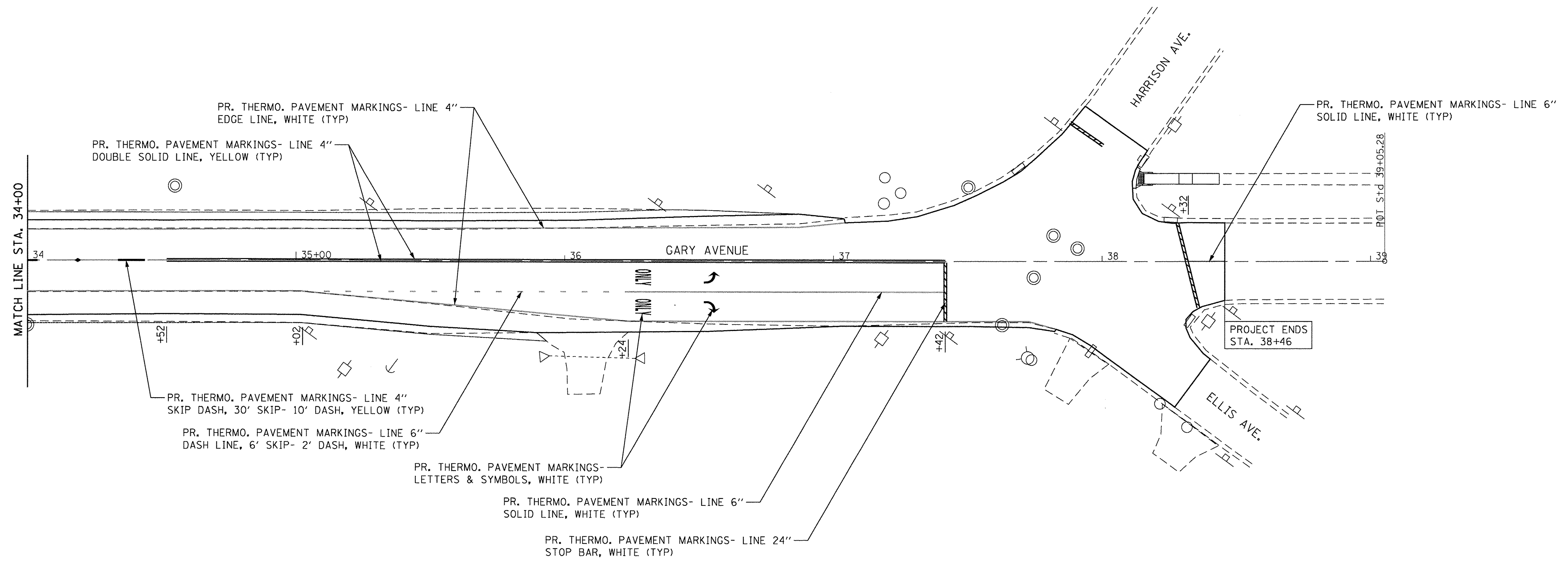
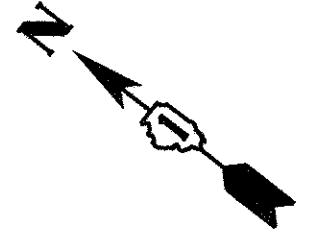
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| PLOT DATE = 12/28/2016 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLANS

SCALE: 20 SHEET 2 OF 3 SHEETS STA. 22+00 TO STA. 34+00

| | | | | |
|---------------------|---------------------------|------------------|--------------------|---------------------------|
| F.A.U. RTE. 2561 | SECTION 15-00111-00-RS | COUNTY DUPAGE | TOTAL SHEETS 23 | SHEET NO. 11 |
| CONTRACT NO. 61D51 | | | | ILLINOIS FED. AID PROJECT |



HORIZONTAL SCALE IN FEET

thomas
engineering group
service at the highest grade

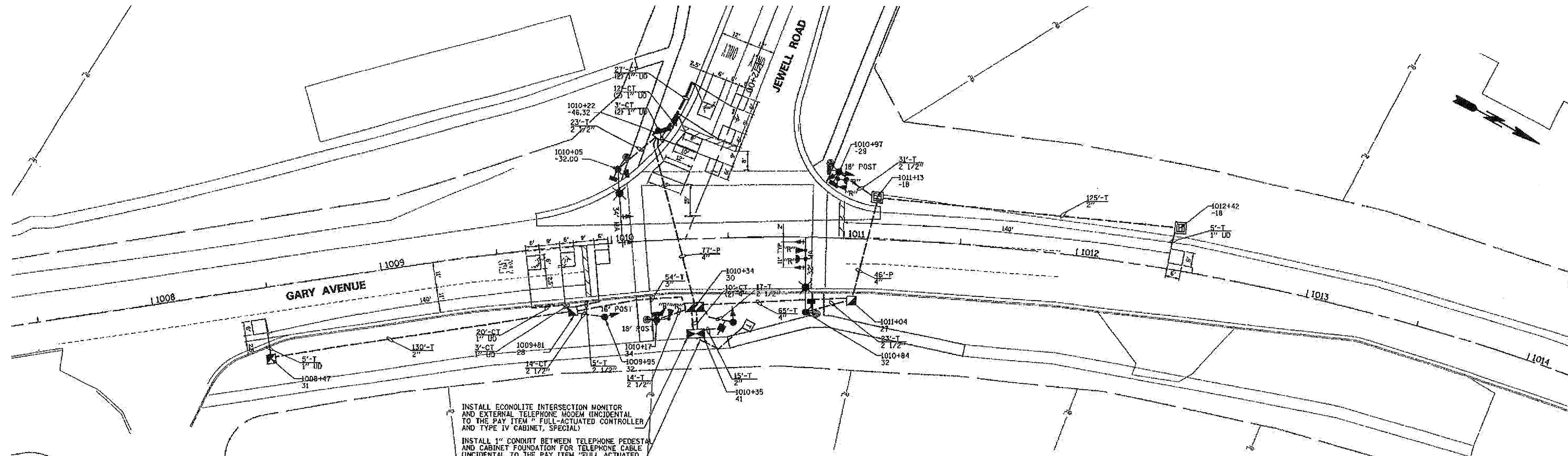
thomas engineering group, llc
762 shoreline drive
suite 200
aurora, illinois 60504
phone: 855-533-1700

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|------------------------------|------------|-----------|
| USER NAME = DonN | DESIGNED - | REVISED - |
| PLOT SCALE = 20.0000' / 1" = | DRAWN - | REVISED - |
| PLOT DATE = 12/13/2016 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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|-------------------------------|---------------------|--------------------------|--|
| PAVEMENT MARKING PLANS | | | |
| SCALE: 20 | SHEET 3 OF 3 SHEETS | STA. 34+00 TO STA. 39+05 | |

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|---------------------------|------------------------|---------------|-----------------|--------------------|
| F.A.U. RTE. 2561 | SECTION 15-00111-00-RS | COUNTY DUPAGE | TOTAL SHEETS 23 | SHEET NO. 12 |
| ILLINOIS FED. AID PROJECT | | | | CONTRACT NO. 61D51 |



INSTALL ECONOLITE INTERSECTION MONITOR AND EXTERNAL TELEPHONE MODEM (INCIDENTAL TO THE PAY ITEM "FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL")

INSTALL 1" CONDUIT BETWEEN TELEPHONE PEDESTAL AND CABINET FOUNDATION FOR TELEPHONE CABLE (INCIDENTAL TO THE PAY ITEM "FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL").

TRAFFIC SIGNAL LEGEND:

- PROPOSED**
- CONTROLLER
 - SERVICE INSTALLATION
 - ▲ SIGNAL HEAD
 - ▲+ SIGNAL HEAD WITH BACKPLATE
 - SIGNAL HEAD, PEDESTRIAN
 - SIGNAL POST
 - MAST ARM ASSEMBLY AND POLE, STEEL
 - MAST ARM ASSEMBLY AND POLE, ALUMINUM
 - CT COMMON TRENCH
 - UD UNIT DUCT
 - HANDHOLE
 - REAMY DUTY HANDHOLE
 - DOUBLE HANDHOLE
 - G.S. CONDUIT IN TRENCH OR PUSHED
 - ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
 - DETECTOR LOOP
 - ⊙ CAST IRON JUNCTION BOX
 - ⊙ EMERGENCY VEHICLE SYSTEM DETECTOR
 - ⊙ CONFIRMATION BEACON
 - ⊙ SIGNAL HEAD OPTICALLY PROGRAMMED
 - CONDUIT SPLICE
 - ⊙ WOOD POLE
 - ⊙ 310 WATTS/120 VOLTS, HPS LUMINAIRE, ON 15' MAST ARM
 - "R" RELOCATED FROM EXISTING SIGNAL INSTALLATION
 - T TELEPHONE PEDESTAL

DETECTOR LOOP NOTES:

1. TYPE 1 DETECTOR LINES SHALL BE INSTALLED IN THE BINDER COURSE.
2. DRIVEWAYS ON GARY AVENUE EXIST BETWEEN STOP BARS AND FAR-OUT DETECTORS. GARY AVENUE THROUGH MOVEMENTS (PHASES 2 AND 6) SHALL BE PLACED ON RECALL.
3. FAR-OUT DETECTOR LOOPS ON GARY AVENUE LOCATED BASED ON 35 MPH POSTED SPEED LIMIT.

TRAFFIC SIGNAL NOTES

1. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING AT HANDHOLES, JACKING PITS AND INSPECTION OPENINGS SHALL BE SAW CUT AROUND THE AREA TO BE REMOVED. THE REMOVAL AND REPLACEMENT OF SIDEWALK, DRIVEWAY, MEDIAN AND ISLAND SURFACE PAVING WILL BE PAID FOR SEPARATELY.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES CALL J.U.L.I.T.E. TOLL FREE NUMBER 1-800-892-0123.
3. ALL SIGNAL POSTS AND MAST ARM POLES SHALL BE LOCATED WITH THEIR CENTERLINES A MINIMUM OF FOUR (4) FEET AND SIX (6) FEET RESPECTIVELY FROM THE BACK OF CURB UNLESS NOTED OR DIMENSIONED TO THE CONTRARY ON THE DRAWINGS. IN NON-CURBED AREAS THE MAST ARM POLE SHALL BE LOCATED A MINIMUM OF TEN (10) FEET BEHIND THE EDGE OF PAVEMENT OR TWO (2) FEET BEHIND THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. SIGNAL POSTS SHALL BE PLACED AT A MINIMUM OF TWO (2) FEET BEHIND THE EDGE OF SHOULDER.
4. THE CONTRACTOR SHALL CONTACT THE DU PAGE COUNTY DIVISION OF TRANSPORTATION (630/407-6900) FOR TRAFFIC SIGNAL CABLE LOCATION, A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAY EXCLUDED AT ANY LOCATION WITHIN THE RIGHT-OF-WAY).
5. CONTACT THE DU PAGE COUNTY TRAFFIC CONTROL COORDINATOR (630/407-6900) TO APPROVE LOCATIONS OF LOOPS, SIGNAL FOUNDATIONS, AND SIGNAL HEADS.
6. ALL PRESENCE LOOPS SHALL BE EQUIPPED WITH AN INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT.

RESTORATION OF WORK AREA:
 RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM, SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, DRIVEWAYS, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. ALL DAMAGE TO UN-MOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 282 AND 280 RESPECTIVELY.

NOTE:
 TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

COMBINATION POLE LIGHTING NOTES:

1. USE 120V, 310 WATT, SODIUM VAPOR LUMINAIRE AT LOCATIONS SHOWN ON PLAN. ONE LUMINAIRE AT EACH INTERSECTION SHALL BE EQUIPPED WITH A PHOTOCELL (COST INCIDENTAL TO LUMINAIRE PAY ITEM). LUMINAIRE GROUND WIRE SHALL BE CONNECTED TO POLE BASE AS PER IDOT STANDARD.
2. INSTALL STREET LIGHTING CONTROLLER WITH 120V, 20 AMP CIRCUIT IN CONTROLLED CABINET (INCIDENTAL TO THE PAY ITEM "FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL"). LIGHTING CONTROLLER SHALL HAVE ITS OWN CIRCUIT BREAKER.
3. STREET LIGHTING CABLE SHALL BE 2 - 1/C NO. 10.
4. DOUBLE FUSED HOLDERS AND SURGE ARRESTORS ARE TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR IN THE BASE OF THE COMBINATION MAST ARMS AS INCIDENTAL TO THE LIGHT FIXTURE PAY ITEM.

FOR INFORMATION ONLY

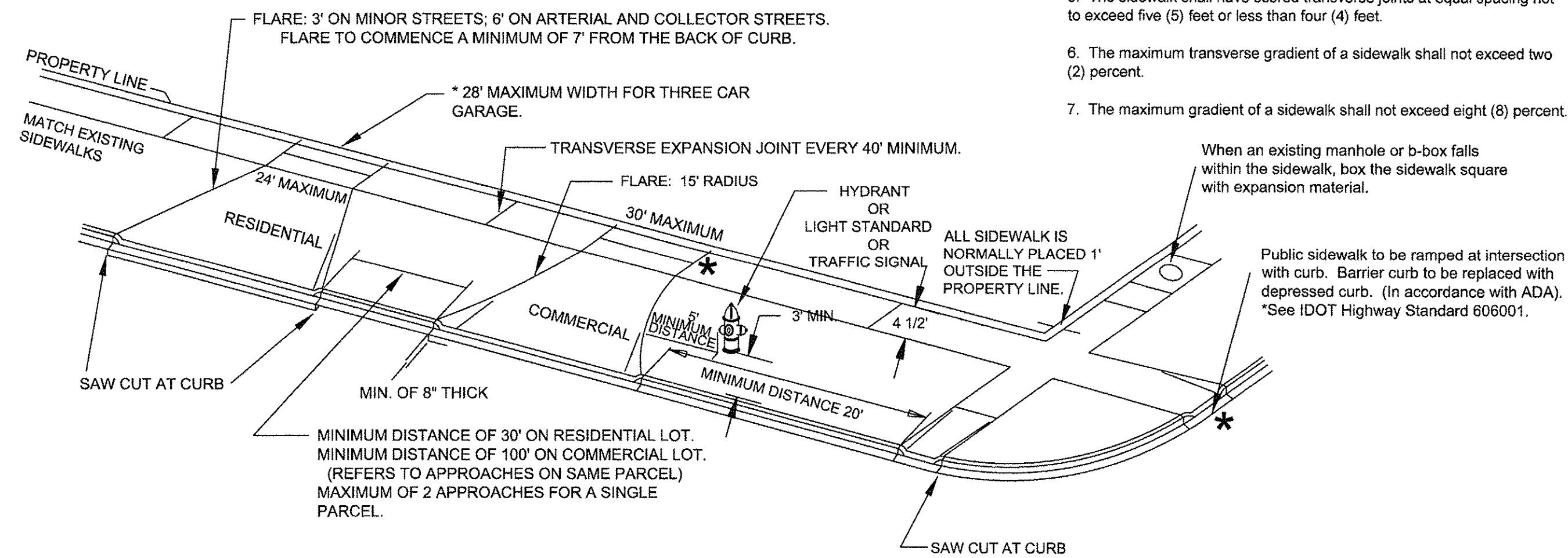
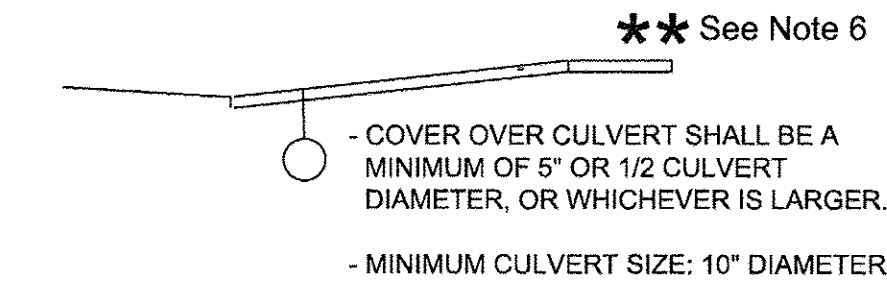
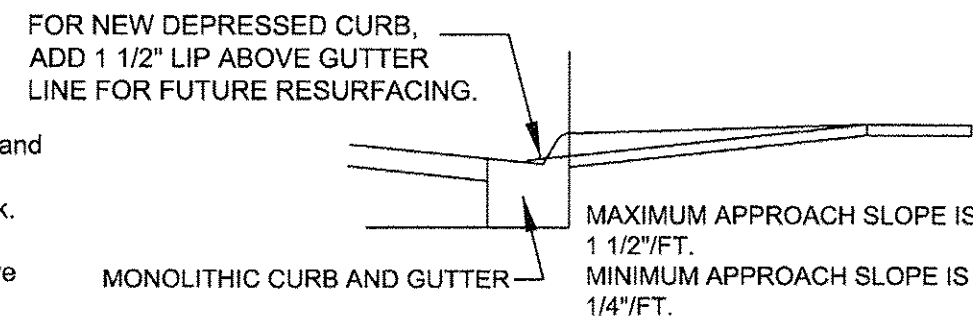
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| USER NAME = DonN | DESIGNED - | REVISED |
| PLOT SCALE = 2,000' / 1" | DRAWN - | REVISED - |
| PLOT DATE = 1/19/2017 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

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|---------------------------|---------------------------|------------------|--------------------|------------------|
| F.A.U. RTE. 2561 | SECTION 15-00111-00-RS | COUNTY DUPAGE | TOTAL SHEETS 23 | SHEET NO. 12A |
| CONTRACT NO. 61D51 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

DRIVE APPROACH & SIDEWALK

GENERAL STANDARDS

- All Portland Cement Concrete shall conform to Illinois Department of Transportation Class SI mix.
- Where new concrete work meets or abuts any existing concrete structures, the existing concrete shall be saw cut to a straight and clean edge and expansion material placed between the new and existing work.
- Expansion material is also required between new curb and new concrete approaches; new sidewalk and new concrete driveways; and new curb and new sidewalk.
- A culvert will be required where the street does not have curb and gutter.
- Replacement of barrier curb and gutter with depressed curb and gutter to be with a single pour. Gutter shall be a minimum of 8" thick.
- Wire mesh is not required.
- Pea gravel is not allowed as fill or base material.
- All curb replacements shall be a minimum of 5' in length.



RESIDENTIAL APPROACH

- Shall be 5" thick, Portland Cement Concrete, Class SI
- 1 1/2" Bituminous Concrete, on an 8" thick aggregate base
- Brick pavers shall be constructed in accordance with the manufacturer's specifications. Manufacturer's specifications must be submitted as part of the permit application.

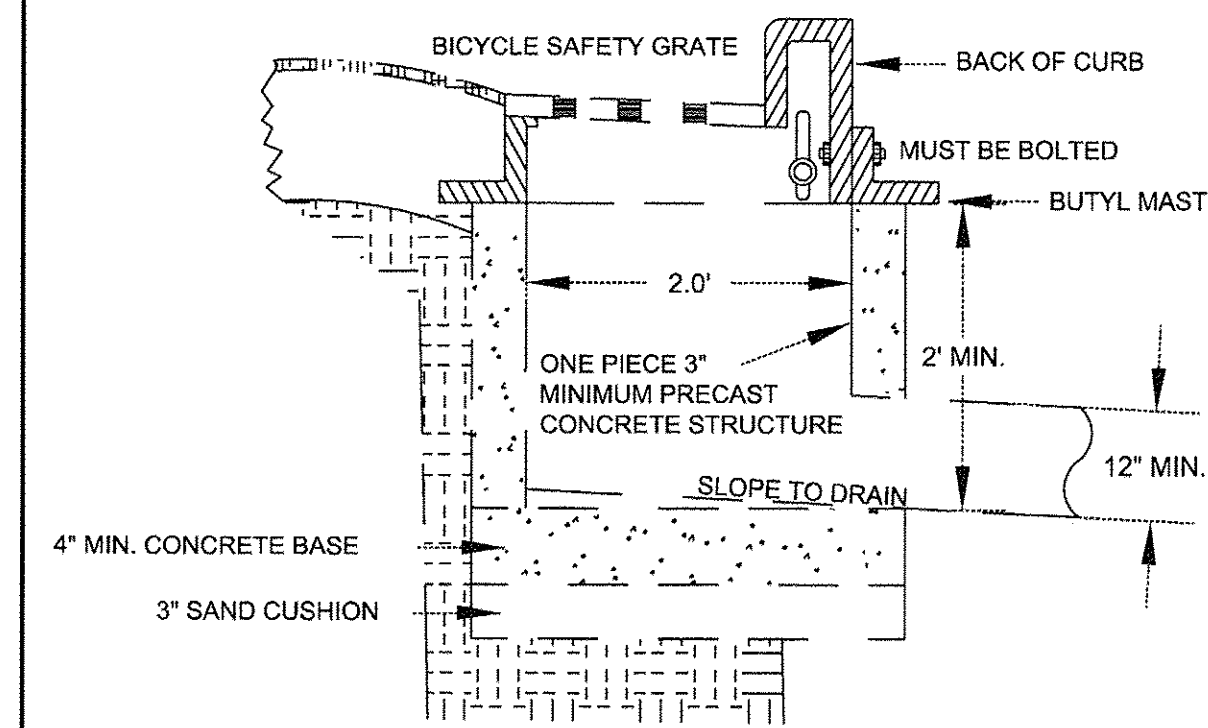
COMMERCIAL APPROACH

- 8" thick, Portland Cement Concrete, Class SI (Bituminous is not permitted)

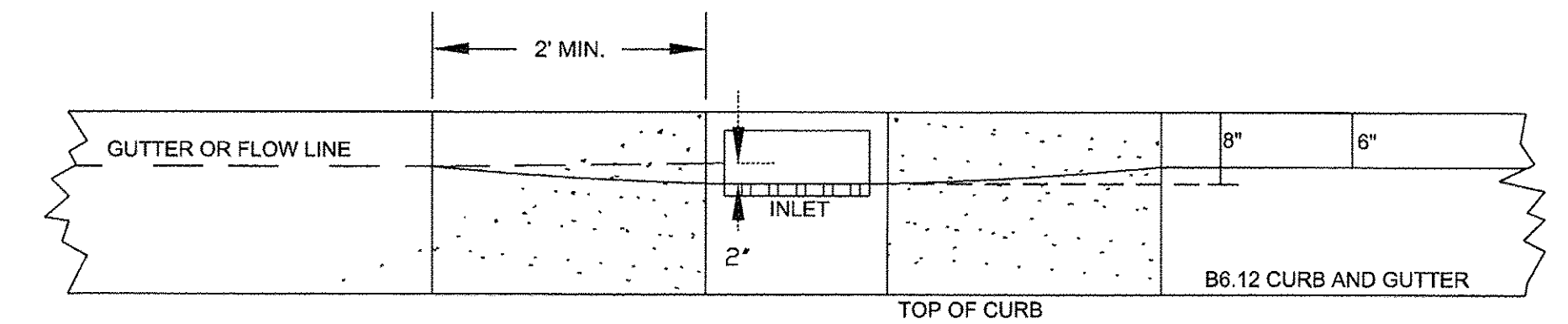
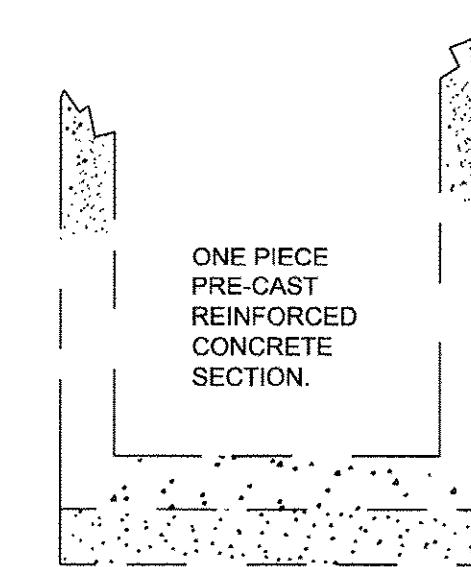
SIDEWALK

- 4" thick, Portland Cement Concrete on a compacted crushed aggregate or bank run gravel base.
- 5" thick through Residential Approaches
- 6" thick through Commercial Approaches
- Walk shall be no lower than the centerline of the street.
- The sidewalk shall have scored transverse joints at equal spacing not to exceed five (5) feet or less than four (4) feet.
- The maximum transverse gradient of a sidewalk shall not exceed two (2) percent.
- The maximum gradient of a sidewalk shall not exceed eight (8) percent.

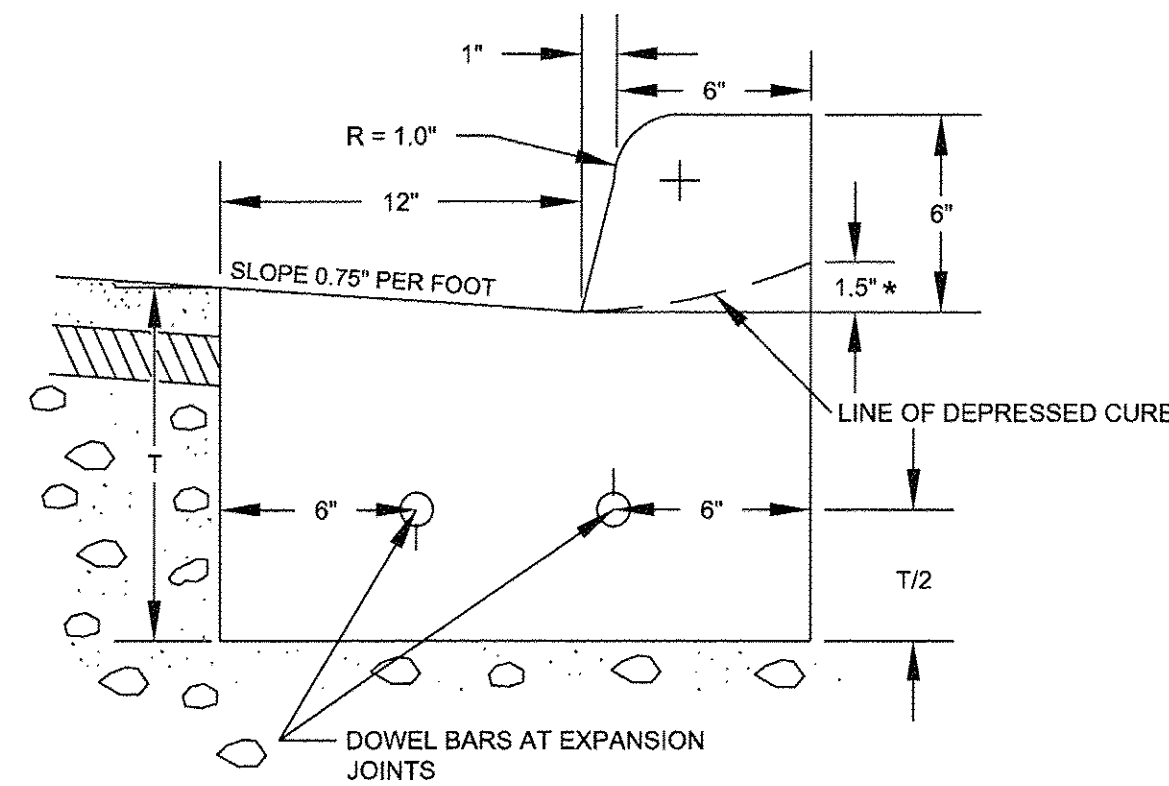
TRANSITION CURB AT INLET OR C.B.



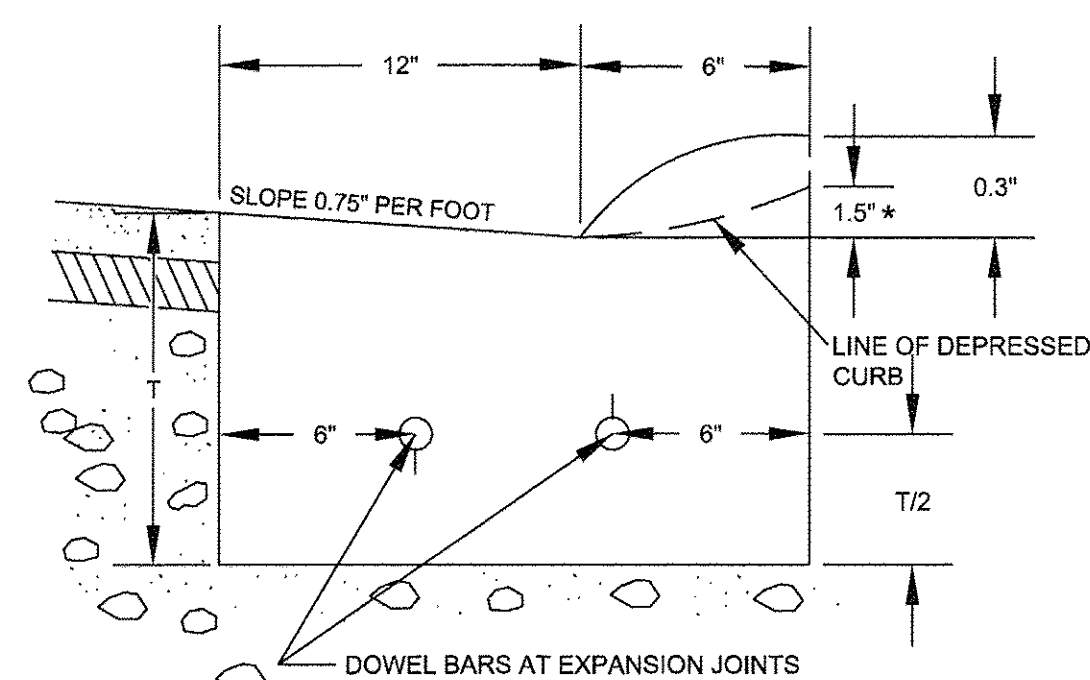
- A MAXIMUM ADJUSTMENT OF 8" USING 2 (TWO) RUBBER RINGS IS ALLOWED. A MINIMUM OF 1 (ONE) RUBBER RING SHOULD BE INSTALLED BETWEEN THE FRAME AND STRUCTURE
- BRICKS ARE NOT PERMITTED FOR ADJUSTMENTS.
- FOR ROLLED AND/OR BARRIER CURB USE NEENAH R-3010 OR EJIW 7045Z FRAME, 7040M1 GRATE AND 7050T1 CURB BACK OR US FOUNDRY 5132.
- ALL JOINTS BETWEEN BARREL SECTION, RISER, AND CASTING SHALL BE SEALED WITH FLEXIBLE BUTYL MASTIC MATERIAL 2-1/4" WIDE AND 3/8" THICK OR ENGINEER APPROVED SUBSTITUTE. MORTAR IS NOT ALLOWED.
- THE GRATE SHALL BE A BICYCLE SAFETY GRATE.
- REFERENCE: STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, MAY 1996, SECTION 33.
- ANY SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER.
- 2" INSIDE DIAMETER TO BE USED AT END OF PIPE RUN ONLY. IN ALL INSTANCES WHERE 2 OR MORE PIPES ENTER OR EXIT C.B., 4" INSIDE DIAMETER STRUCTURE MUST BE USED.
- MINIMUM PIPE DIAMETER IS 12" ON 2" STRUCTURE.
- ANY NEW FRAME BACKS MUST HAVE STAMPED FISH SYMBOL PER NPDES REQUIREMENTS.



BARRIER CURB AND GUTTER TYPE B 6.12



TYPE M 3.12



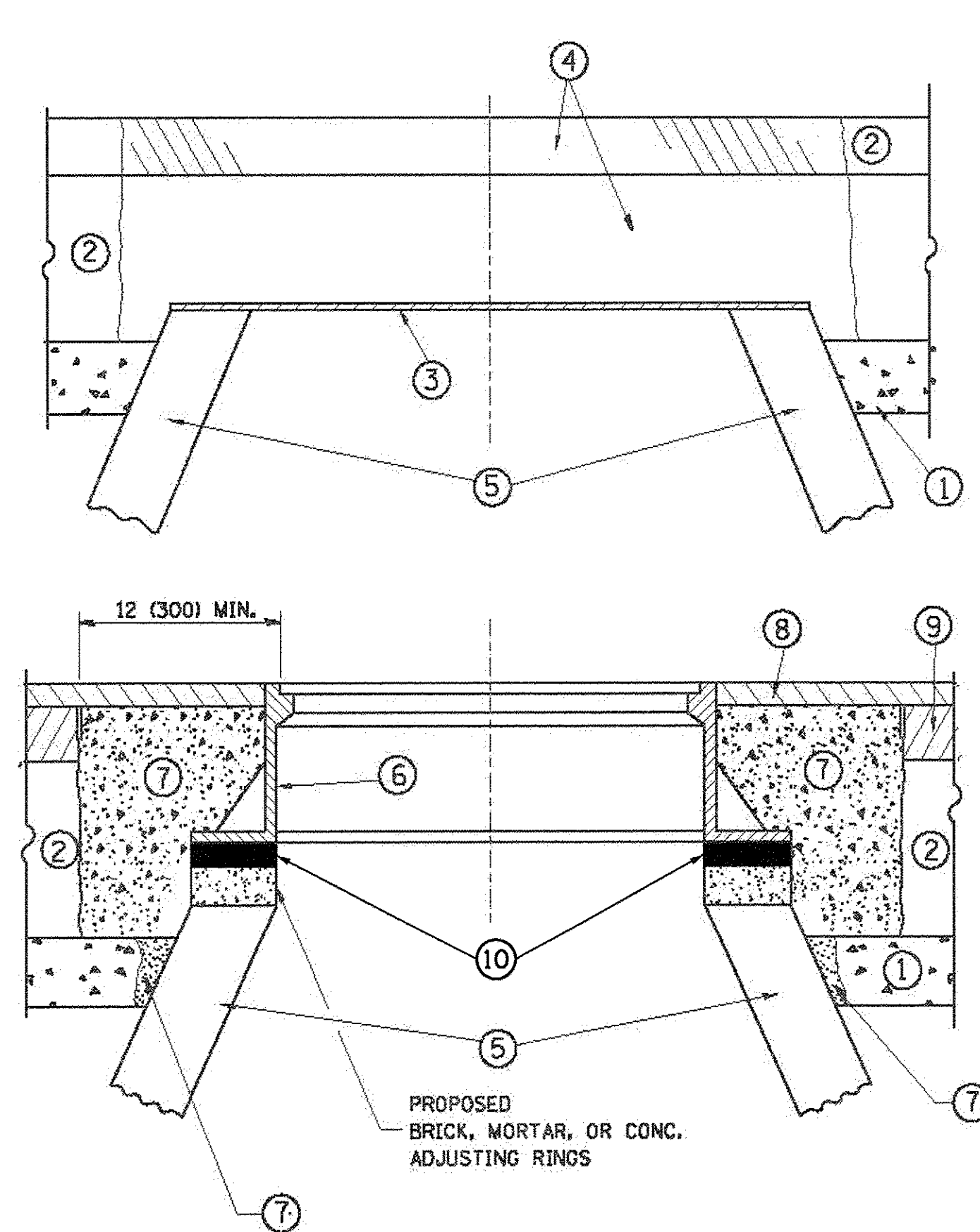
T = THICKNESS OF PAVEMENT
* = 1/2" AT ADA RAMP LOCATIONS

- NOTE:
- TWO NO. 6 STEEL DOWEL BARS WITH CAPS TO BE USED AT ALL EXPANSION JOINTS 100 ft. INTERVALS.
 - CONSTRUCTION JOINTS AT 25 ft. INTERVALS.
 - THREE 3/8" RE-BARS AT ALL TRENCH CROSSINGS. BARS TO EXTEND TWO FEET BEYOND EDGE OF TRENCH AND HAVE A MINIMUM LENGTH OF 10 FT.
 - THE BASE COURSE WILL BE OF A DEPTH SUFFICIENT TO BRING THE CURB AND GUTTER TO THE PROPOSED GRADE.
 - THE BASE COURSE LOCATED UNDER THE CURB AND GUTTER WILL NOT BE MEASURED FOR PAYMENT, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR COMBINATION CONCRETE CURB AND GUTTER OF THE TYPE SPECIFIED.
 - THE HEIGHT OF DEPRESSED CURB ADJACENT TO ADA RAMP LOCATIONS SHALL BE 1/2".
 - SEE STANDARD 606001-06.

| | | |
|---------------------------|------------|-----------|
| USER NAME = DonN | DESIGNED - | REVISED |
| PLOT SCALE = 2.0000' / 1" | DRAWN - | REVISED - |
| PLDT DATE = 1/19/2017 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2561 | 15-00111-00-RS | DUPAGE | 23 | 13 |
| CONTRACT NO. 61D51 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

FRAMES AND LIDS ADJUSTMENT WITH MILLING



- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36" DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE
- ⑩ PROPOSED ADJUSTMENT RISER RING
- RUBBER (WHEATON)
- PRECAST CONCRETE (DUPAGE)

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12" 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" DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2" 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. A MINIMUM OF ONE RUBBER ADJUSTMENT RISER RING SHALL BE USED.
- 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."

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 AS "STRUCTURE TO BE ADJUSTED," OF THE TYPE OF STRUCTURE SPECIFIED.

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

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

NOTES:

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

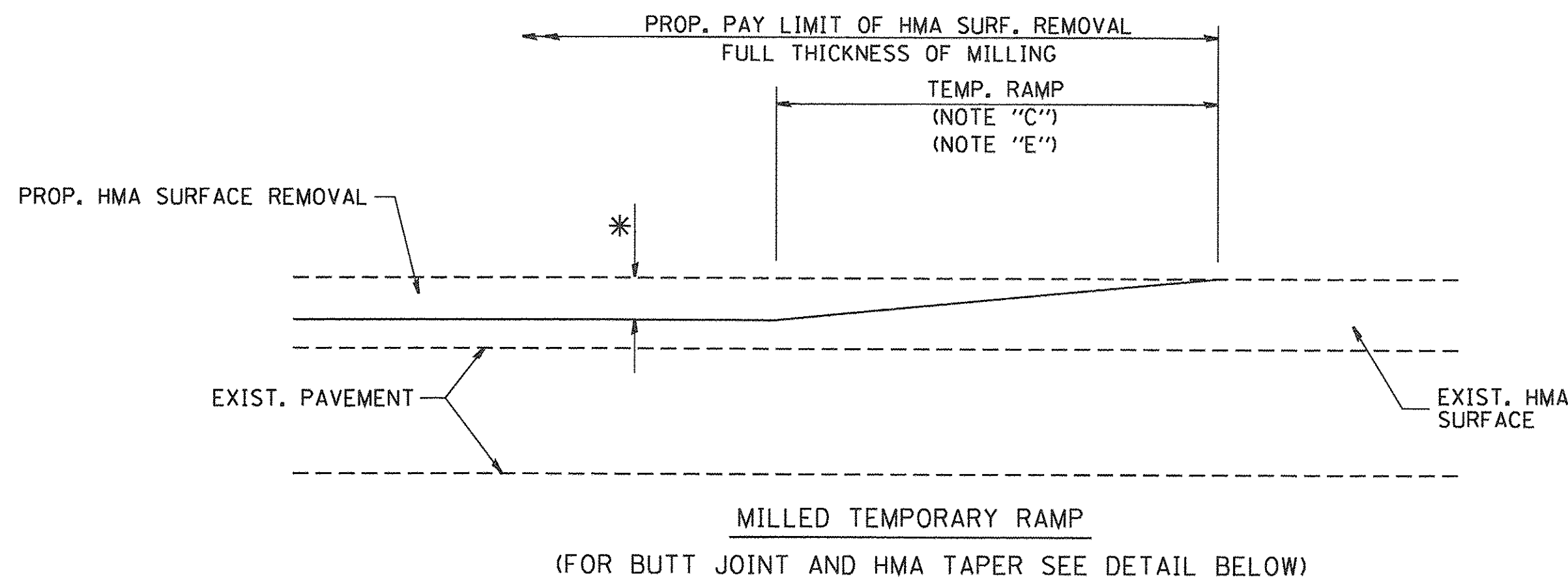
IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

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

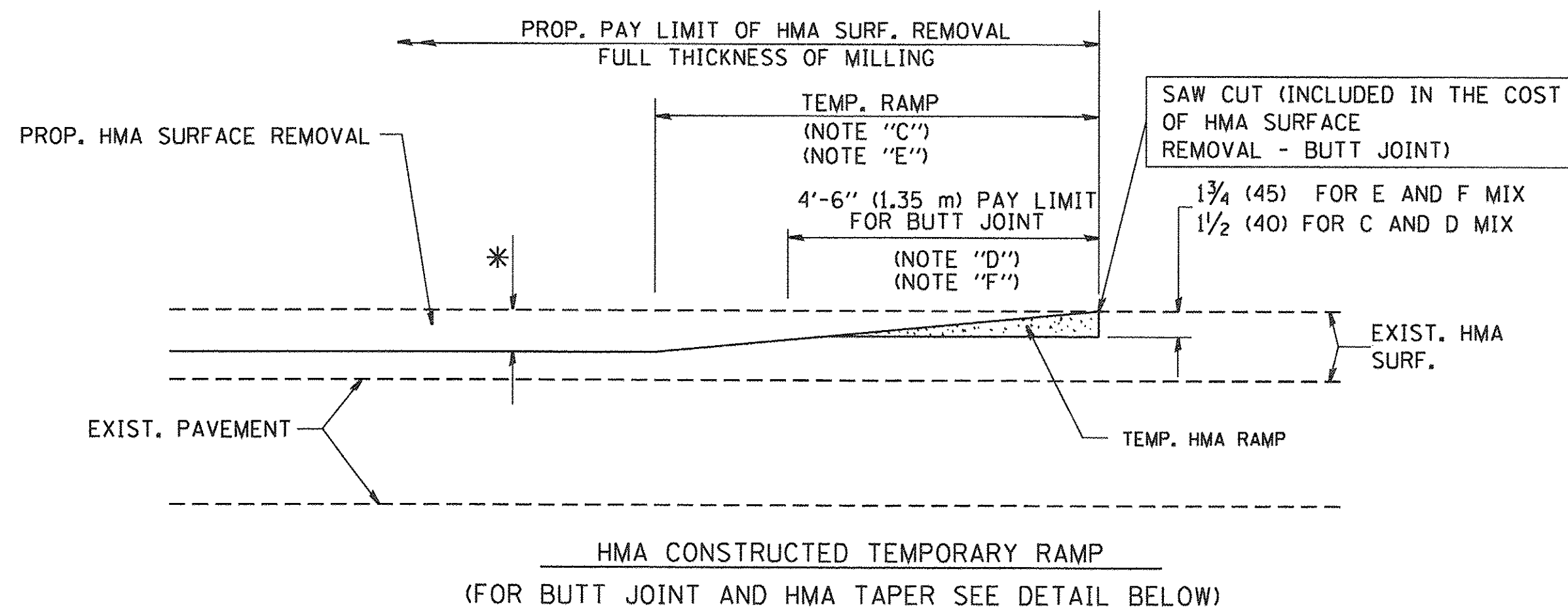
WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

| | | |
|---------------------------|------------|-----------|
| USER NAME = Jamesy | DESIGNED - | REVISED |
| PLOT SCALE = 1.0000' / 1" | DRAWN - | REVISED - |
| PLOT DATE = 1/19/2017 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

| F.A.J. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 2561 | 15-00111-00-RS | DUPAGE | 23 | 14 |
| CONTRACT NO. 61D51 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

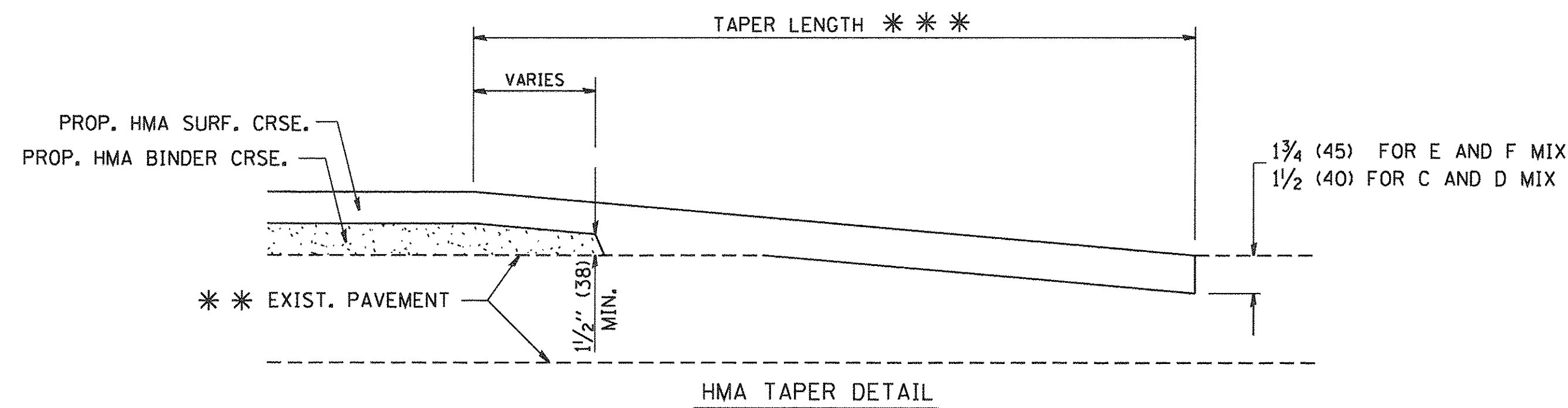
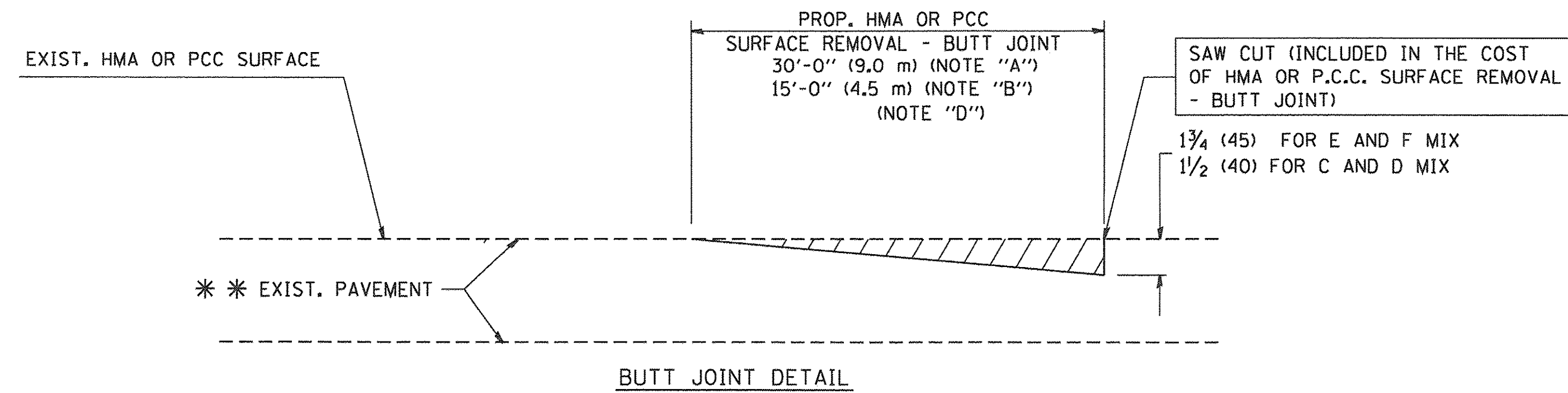


OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

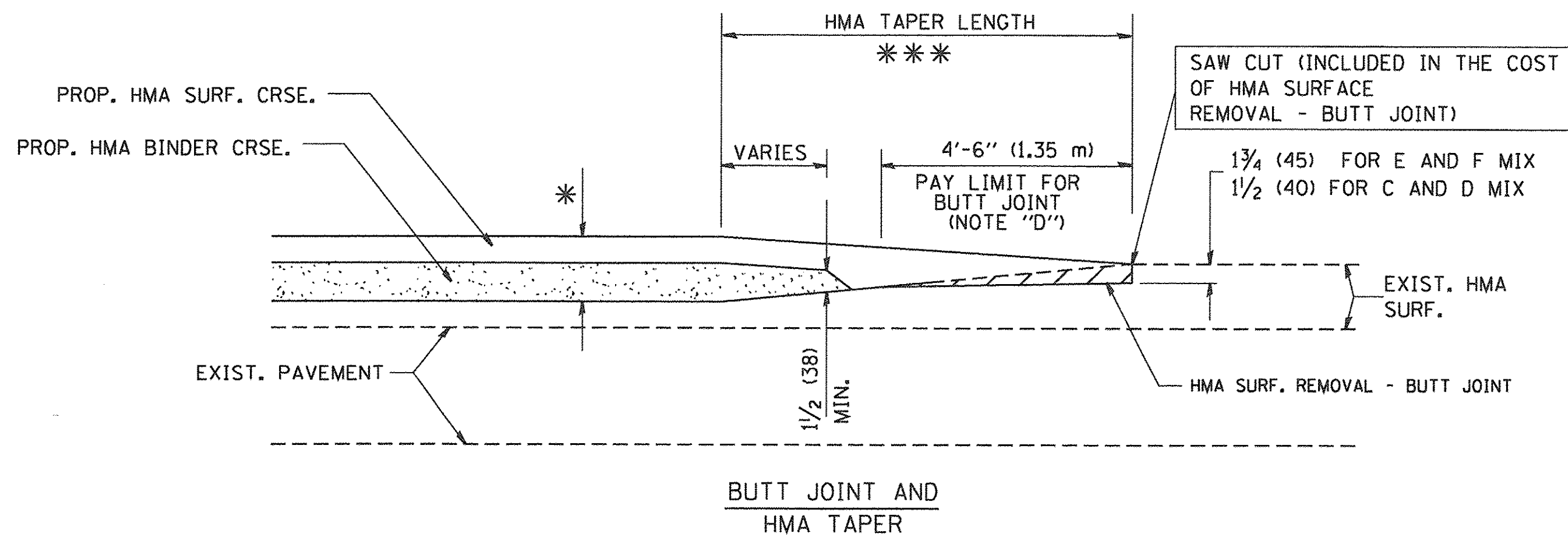
NOTES

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

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

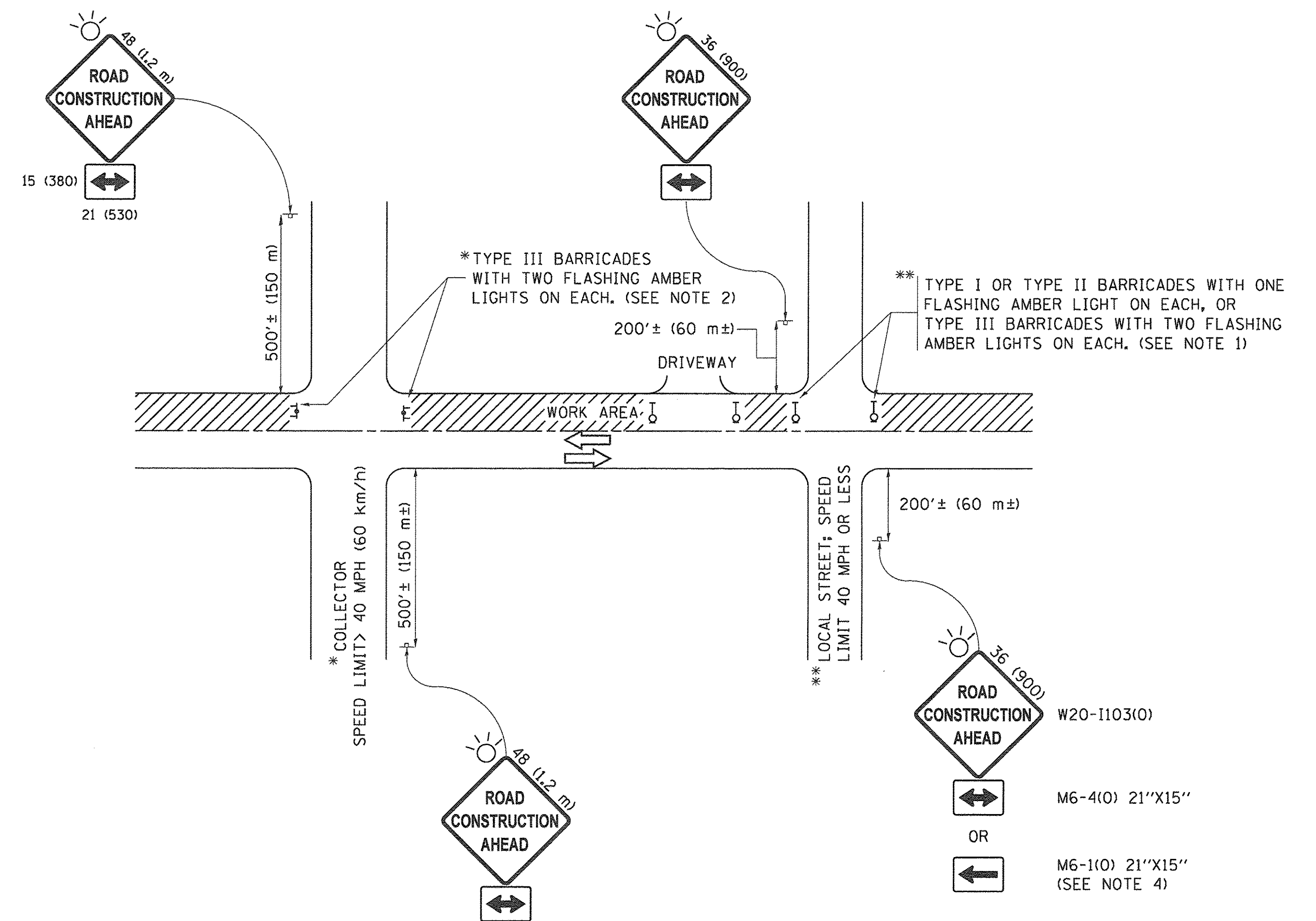
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| | | DRAWN - | REVISED - A. ABBAS 03-21-97 |
| | PLOT SCALE = 50,0000' / IN. | CHECKED - | REVISED - M. GOMEZ 04-06-01 |
| | PLOT DATE = 1/4/2008 | DATE - 06-13-90 | REVISED - R. BORO 01-01-07 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---|----------------|--------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2561 | 15-00111-00-RS | DUPAGE | 23 | 16 |
| BD400-05 BD32 | | CONTRACT NO. 61D51 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



NOTES:

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

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

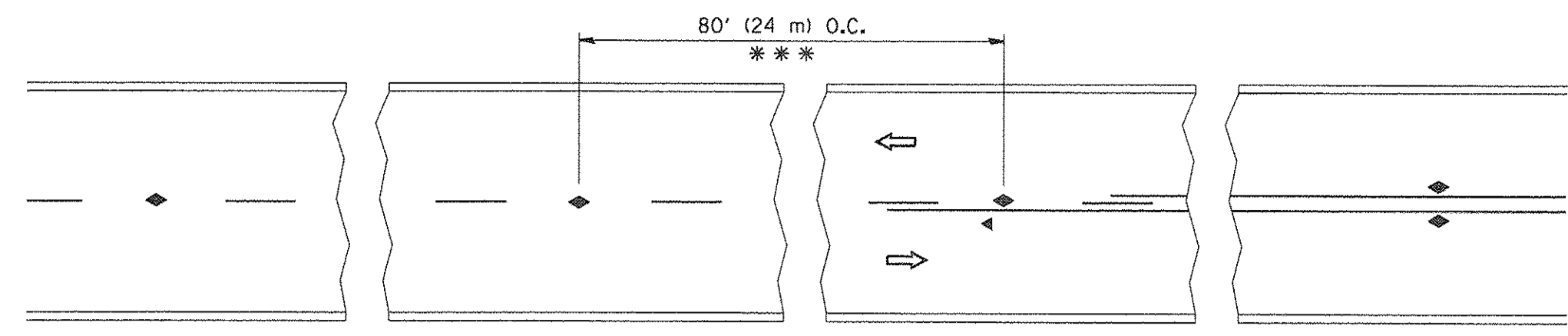
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| Default | PLOT SCALE = 50.000' / in. | CHECKED - | REVISED - A. SCHUETZE 07-01-13 |
| | PLOT DATE = 9/15/2016 | DATE - 06-89 | REVISED - A. SCHUETZE 09-15-16 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

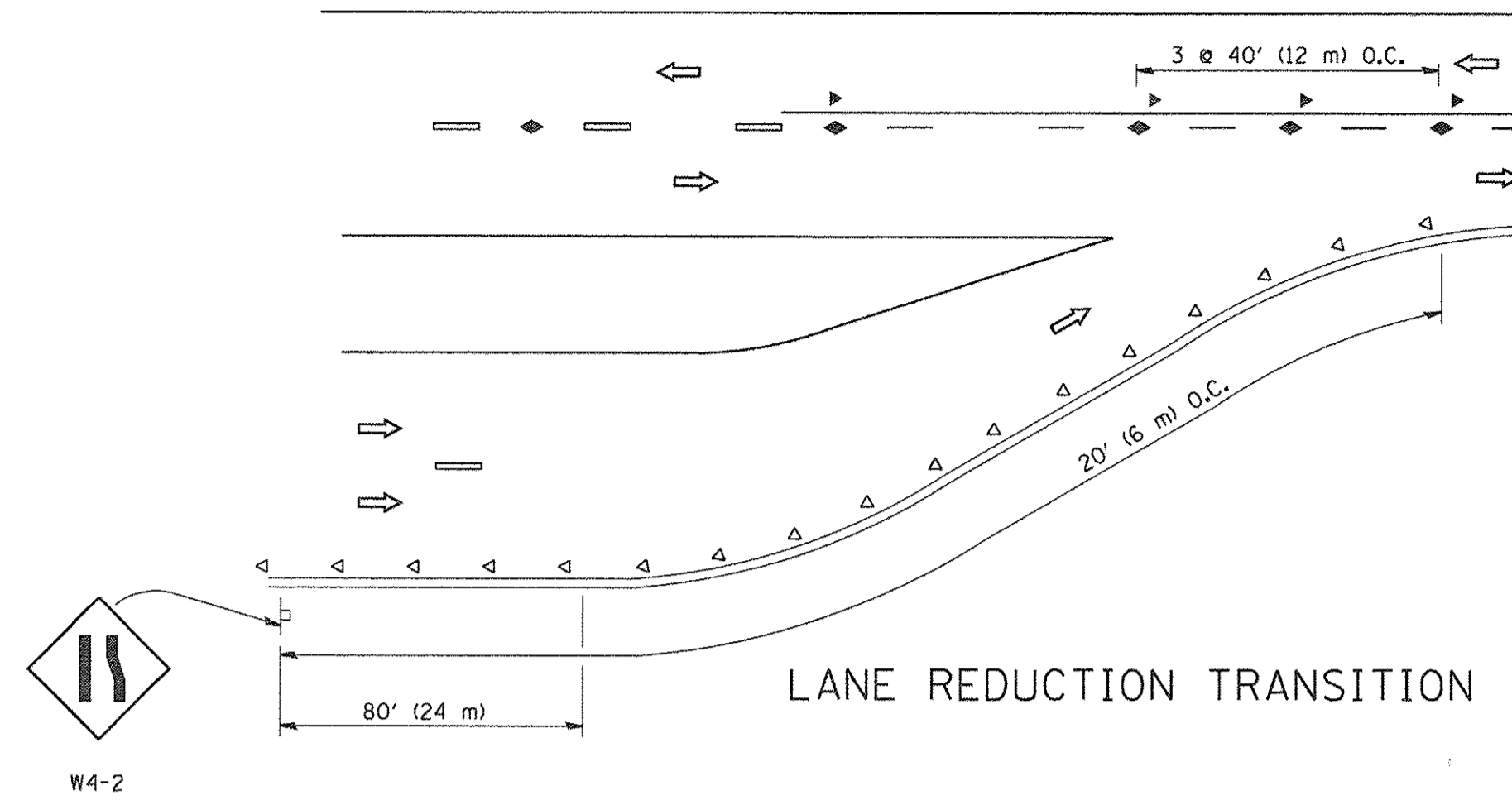
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------------|-----------|
| 2561 | 15-00111-00-RS | DUPAGE | 23 | 17 |
| TC-10 | | | CONTRACT NO. 61D51 | |
| ILLINOIS FED. AID PROJECT | | | | |

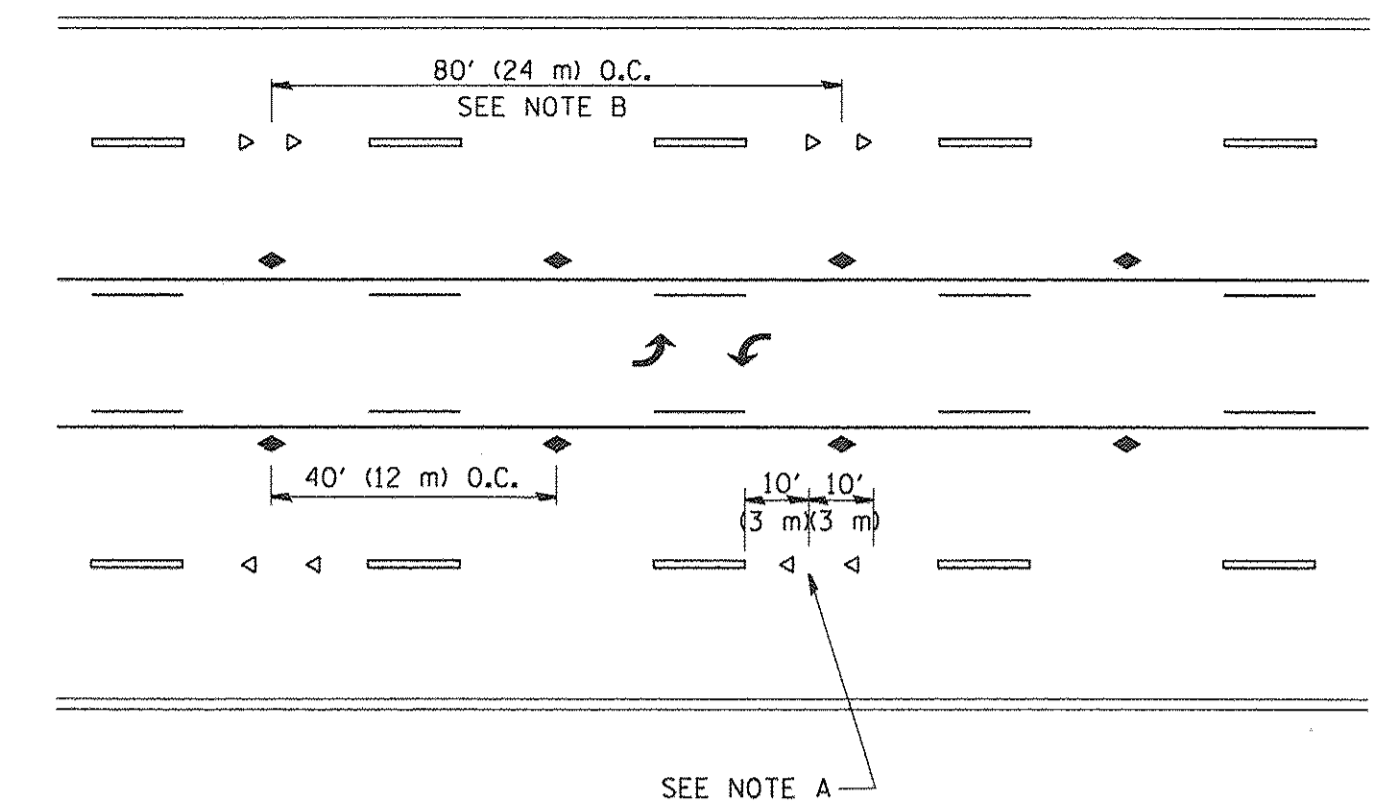


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

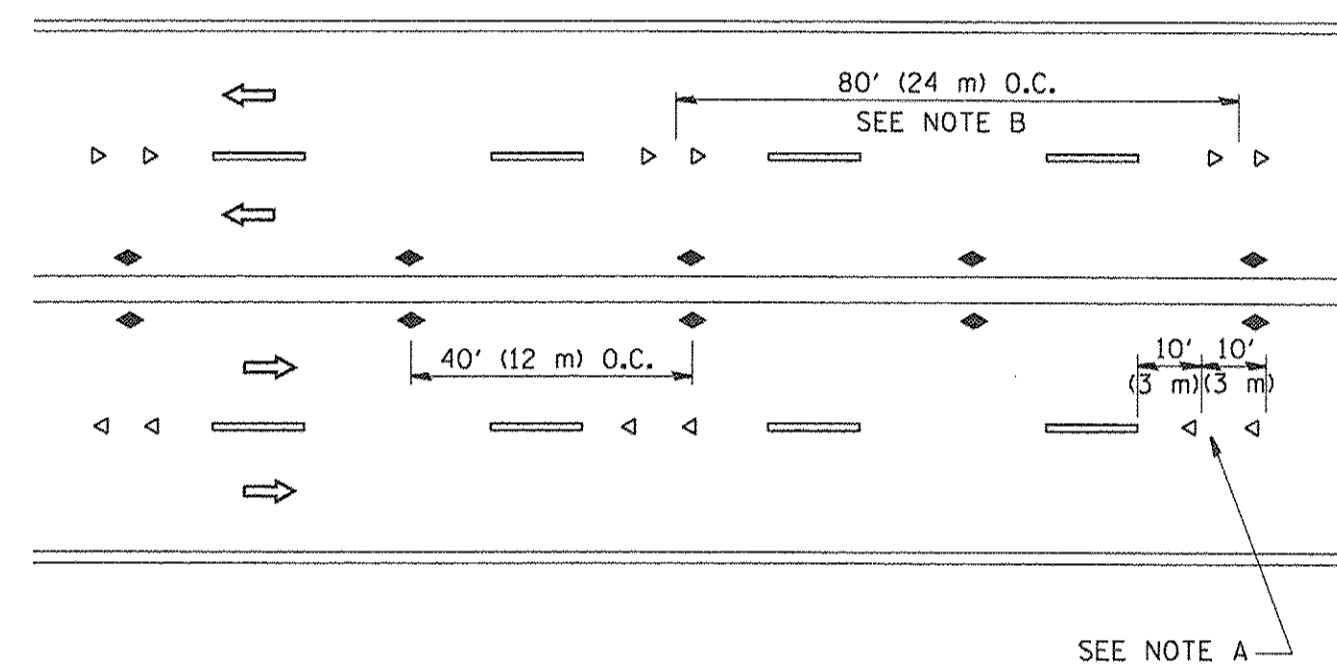
TWO-LANE/TWO-WAY



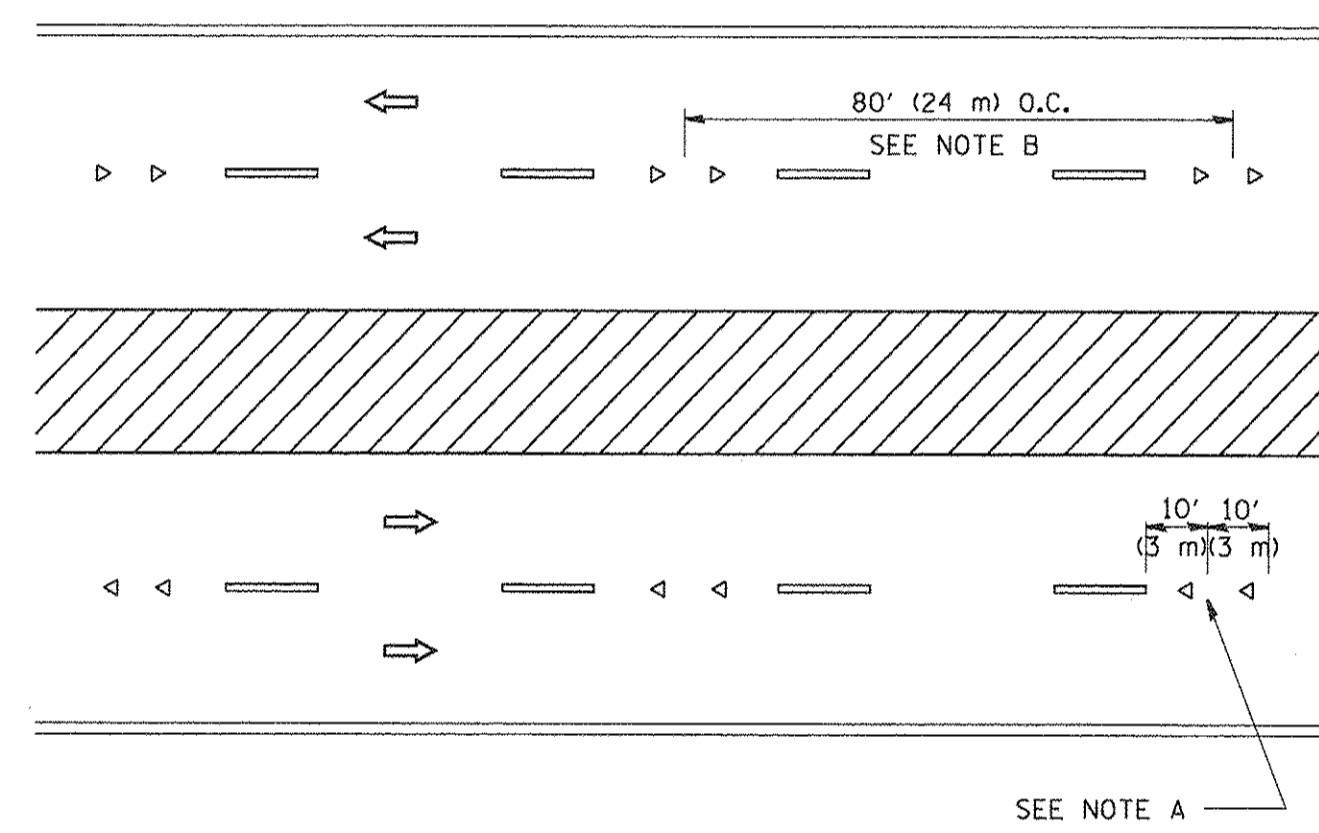
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

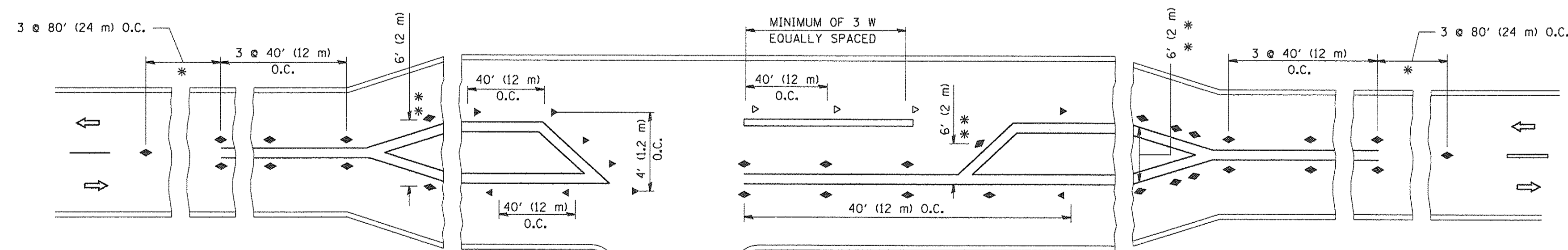
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

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

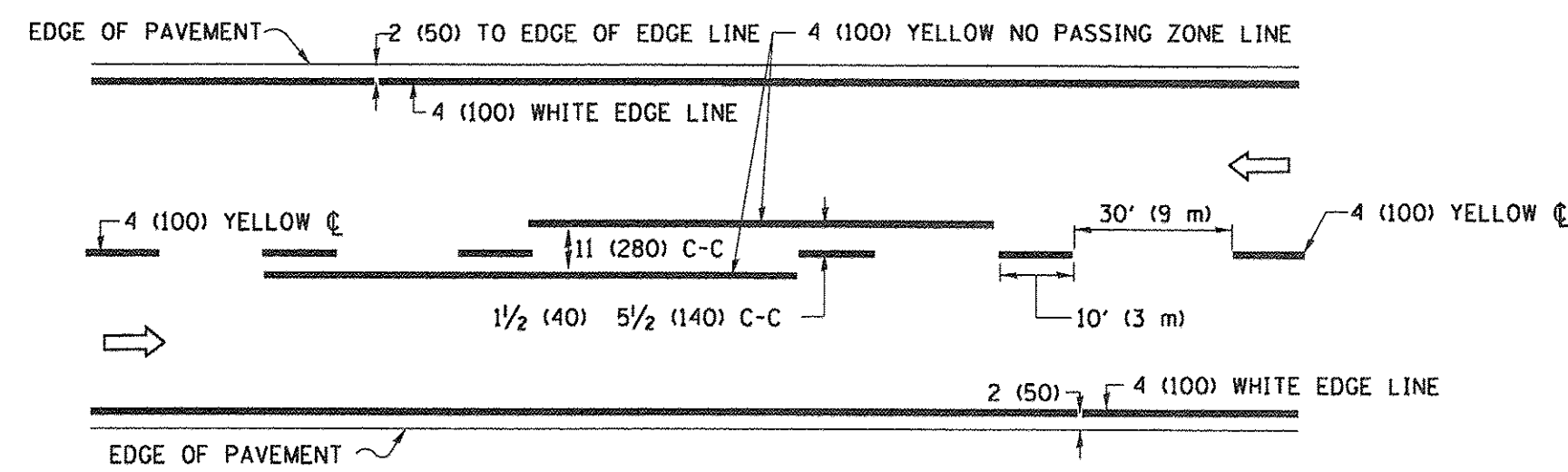
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| | PLOT SCALE = 50.000' / IN. | CHECKED - | REVISED - T. RAMMACHER 01-06-00 |
| | PLOT DATE = 3/2/2011 | DATE - | REVISED - C. JUCIUS 09-09-09 |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

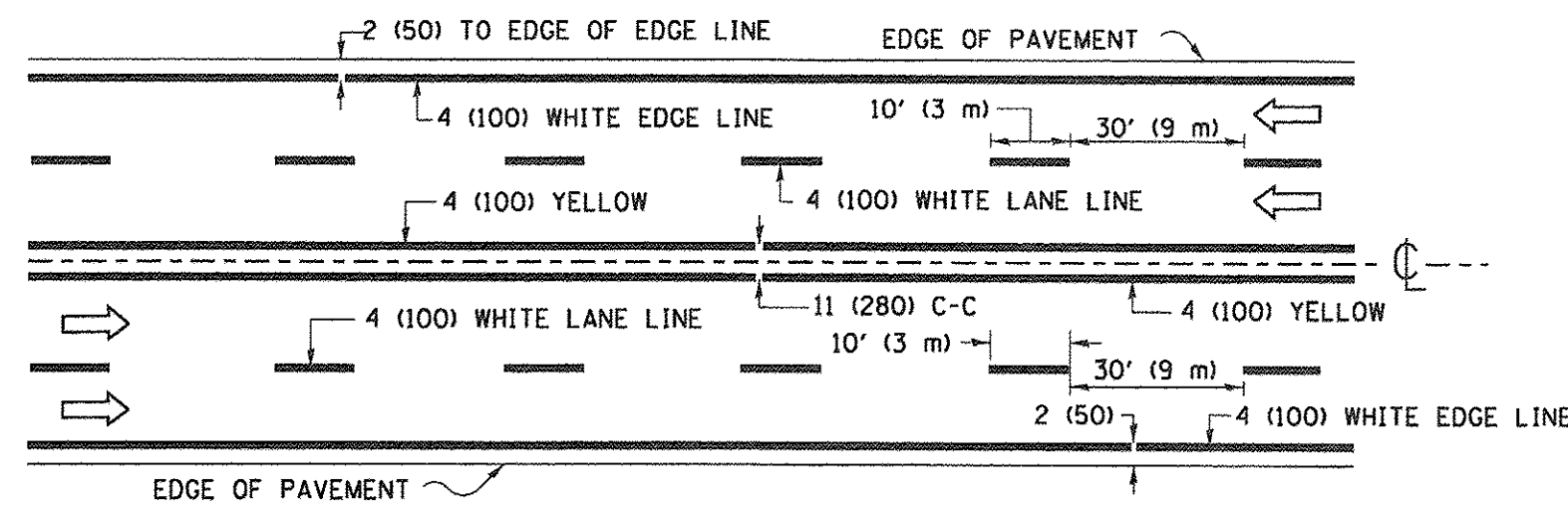
TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

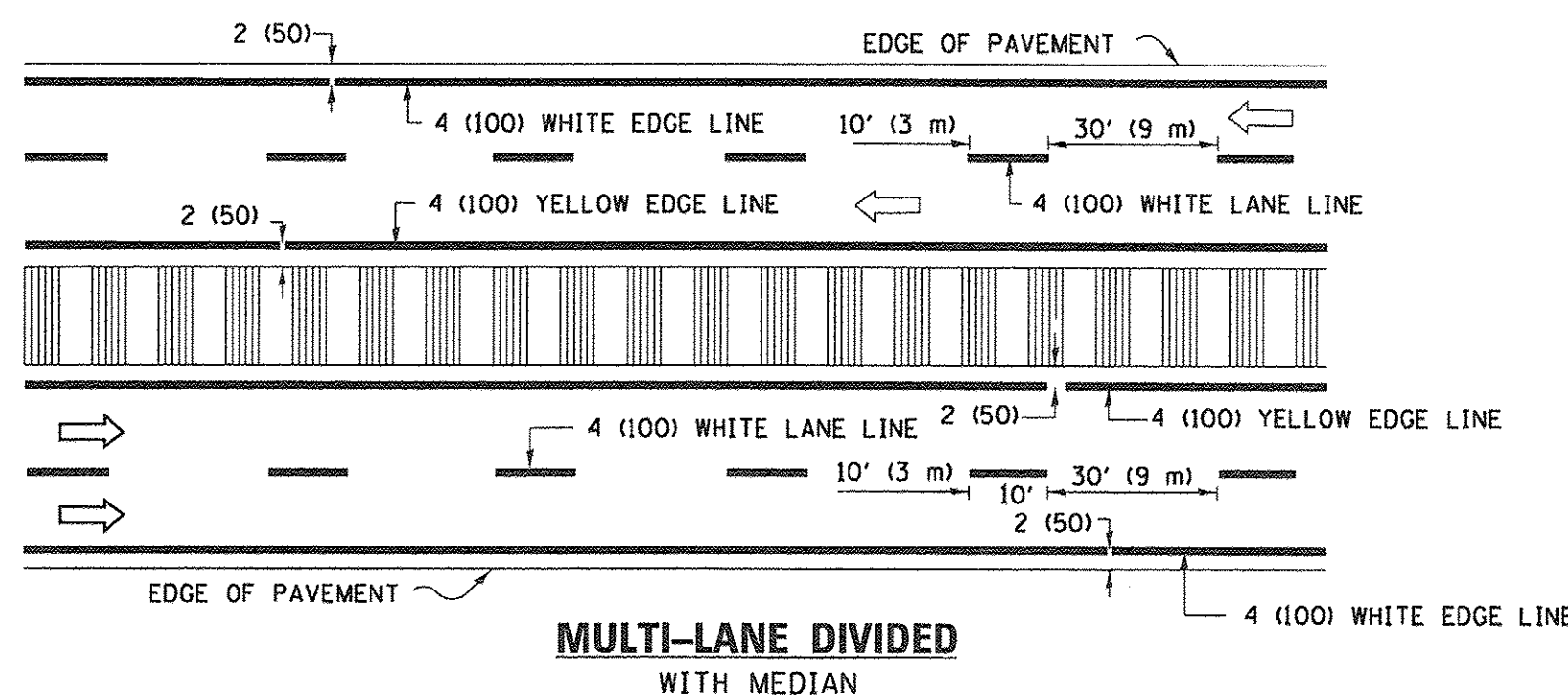
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2561 | 15-00111-00-RS | DUPAGE | 23 | 18 |
| TC-11 | | | CONTRACT NO. 61D51 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



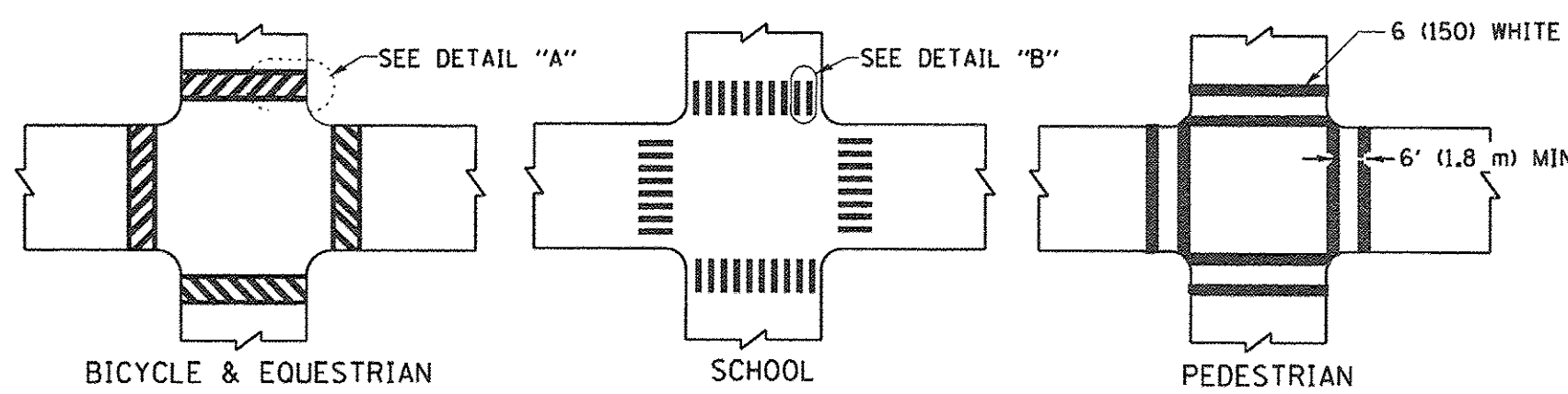
2-LANE ROADWAY



MULTI-LANE UNDIVIDED

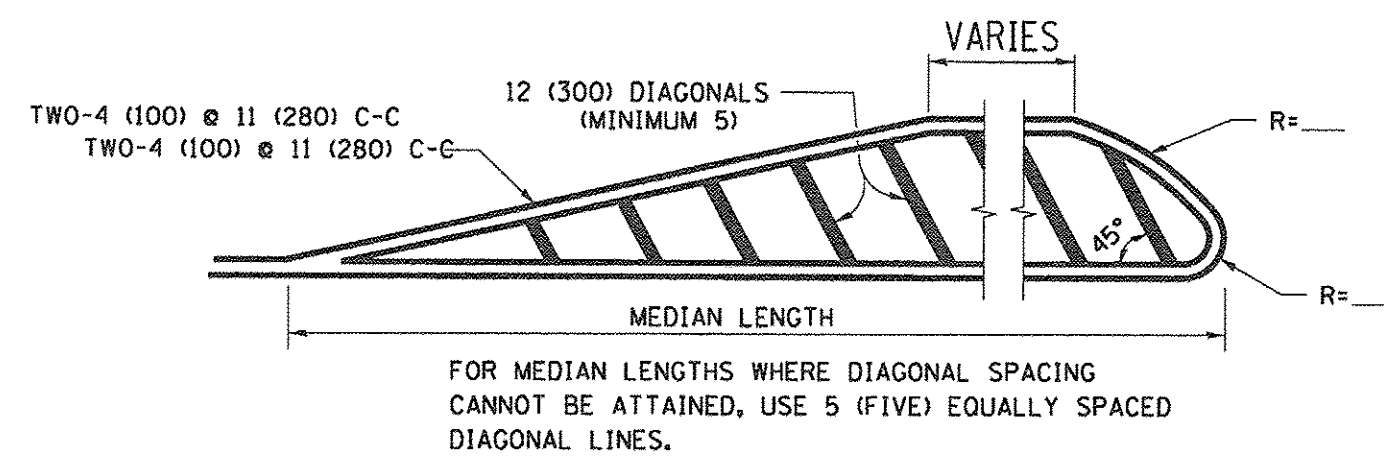
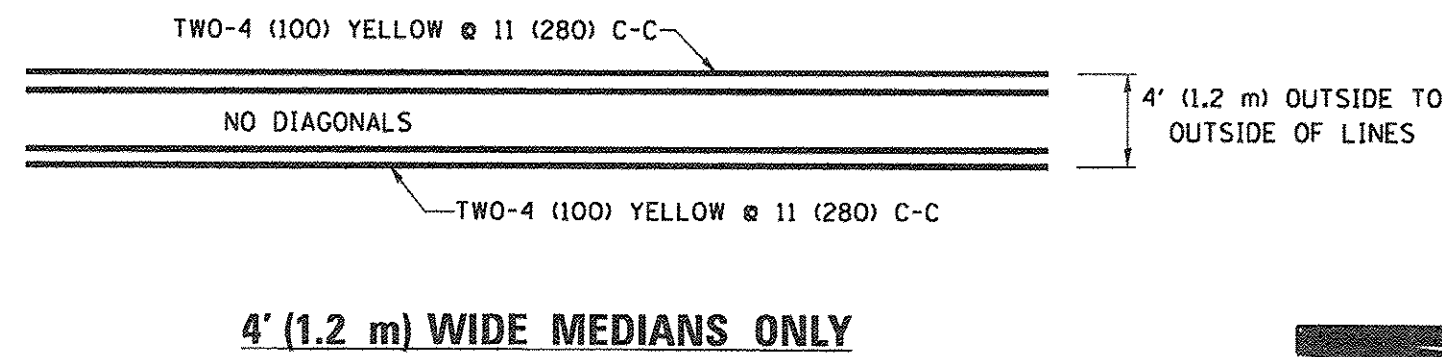


TYPICAL LANE AND EDGE LINE MARKING

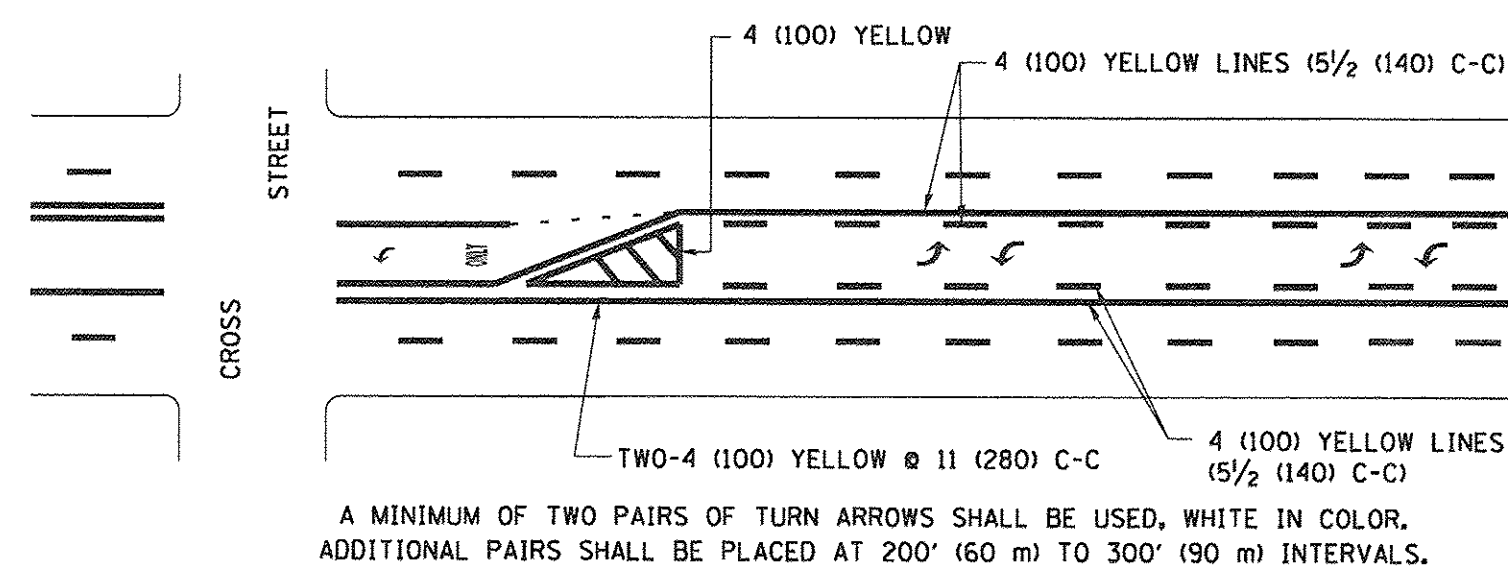


DETAIL "A" TYPICAL CROSSWALK MARKING

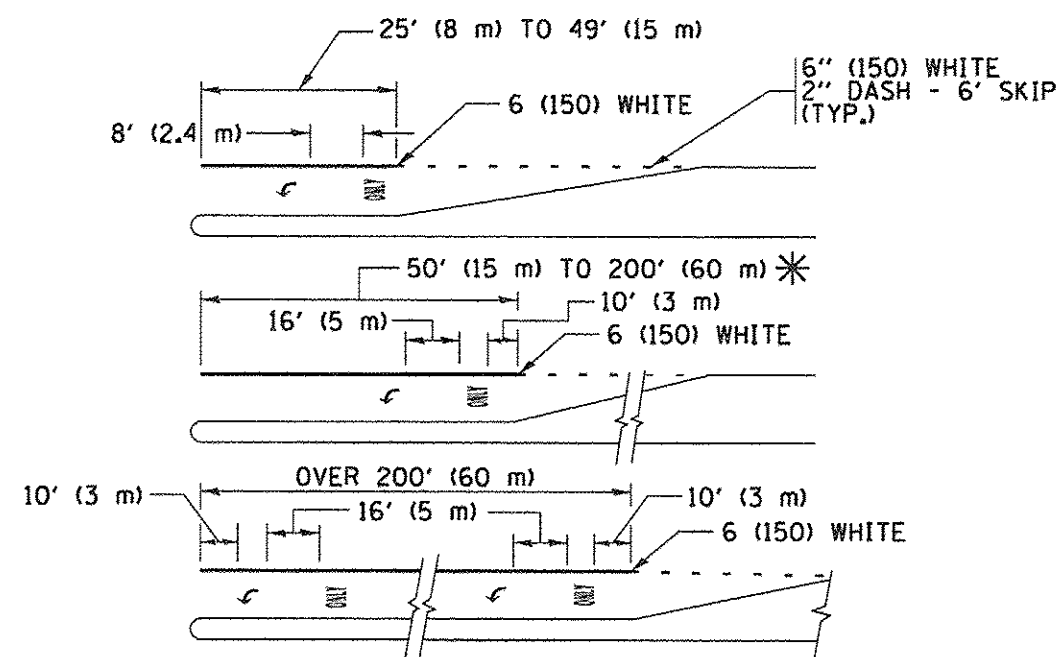
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



MEDIANS OVER 4' (1.2 m) WIDE

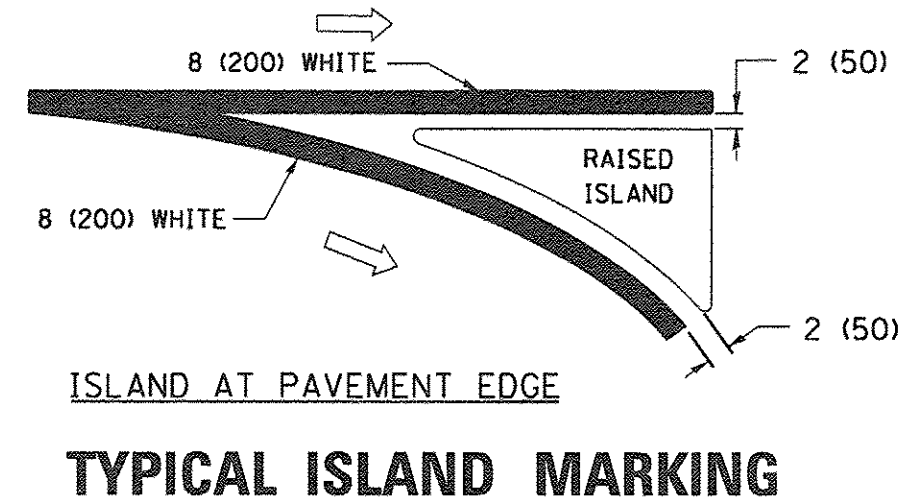
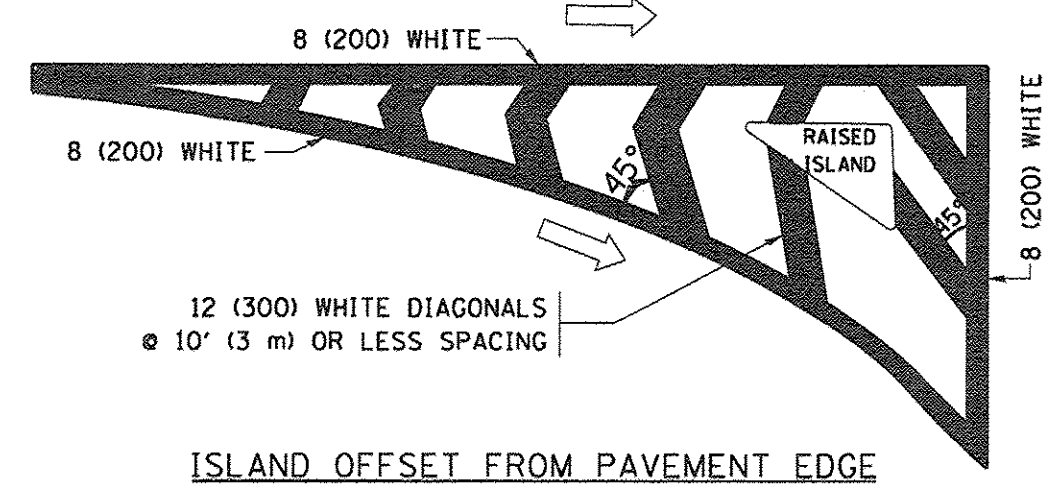


MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING

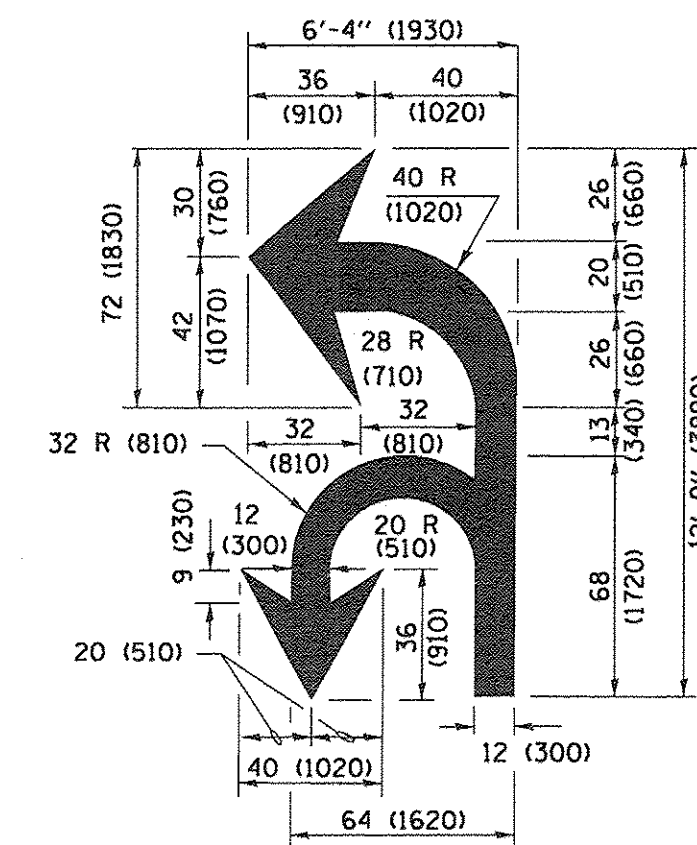


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²) * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

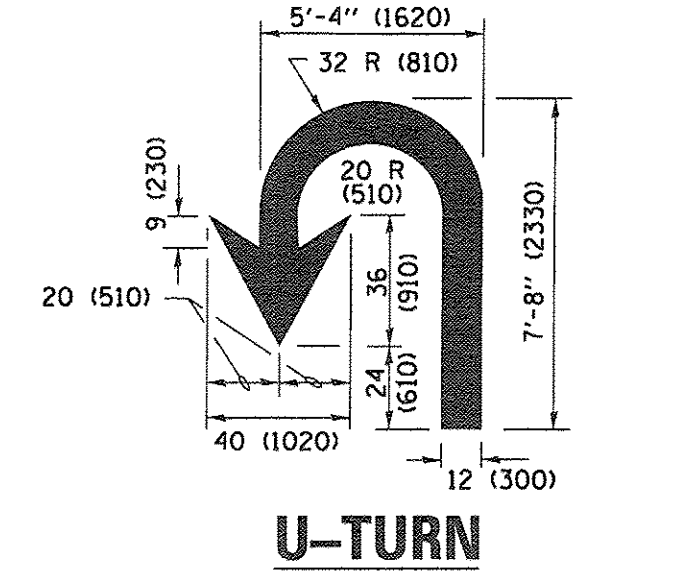
TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

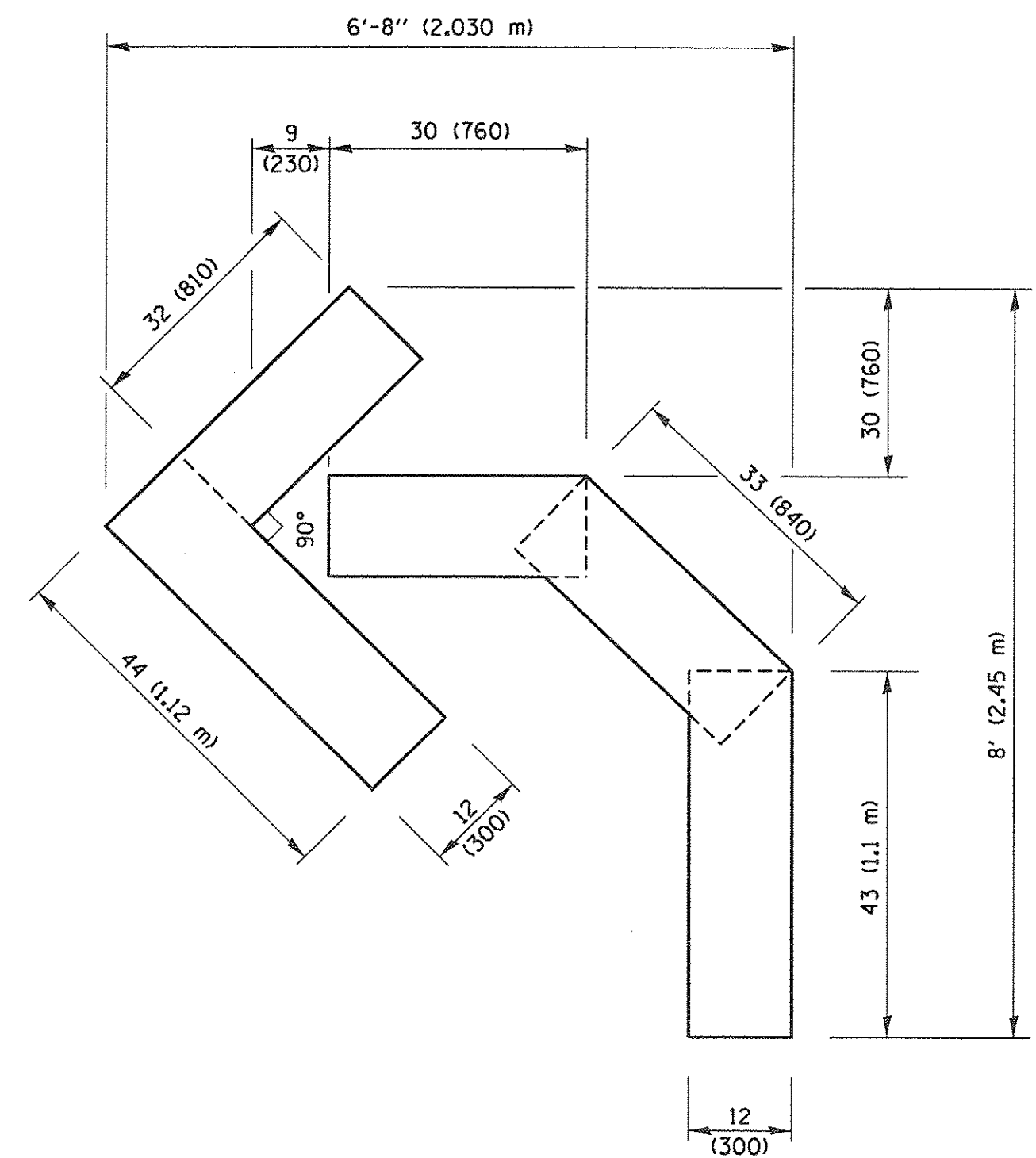
* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

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

| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING /REMARKS |
|---|--|---------------------------------|---|--|
| CENTERLINE ON 2 LANE PAVEMENT | 4 (100) | SKIP-DASH | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS | 4 (100) 2 @ 4 (100) | SOLID SOLID | YELLOW YELLOW | 5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100) 5 (125) ON FREEWAYS | SKIP-DASH SKIP-DASH | WHITE WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE |
| EDGE LINES | 4 (100) | SOLID | YELLOW-LEFT WHITE-RIGHT | OUTLINE MEDIANS IN YELLOW |
| TURN LANE MARKINGS | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) | SOLID | WHITE | SEE TYPICAL TURN LANE MARKING DETAIL |
| TWO WAY LEFT TURN MARKING | 2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW | SKIP-DASH AND SOLID IN PAIRS | YELLOW WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90° | SOLID SOLID SOLID | WHITE WHITE WHITE | NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID | YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²) |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8') | 12 (300) @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h)) |
| U TURN ARROW | SEE DETAIL | SOLID | WHITE | 16.3 SF |
| 2 ARROW COMBINATION LEFT AND U TURN | SEE DETAIL | SOLID | WHITE | 30.4 SF |

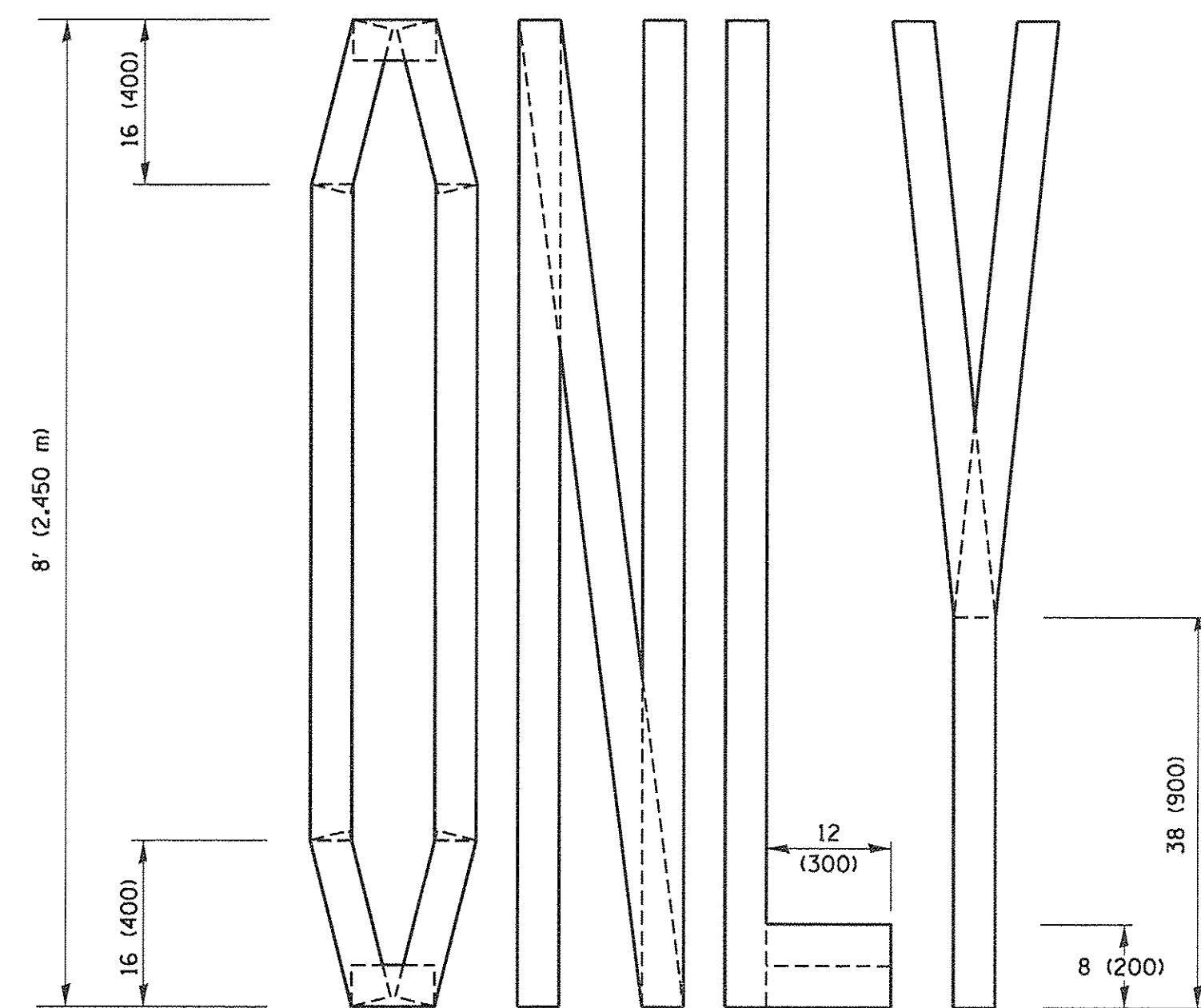
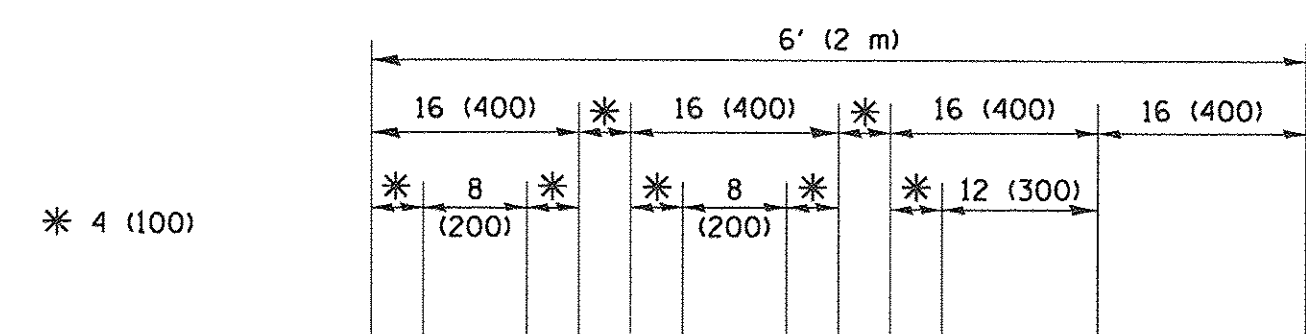
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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



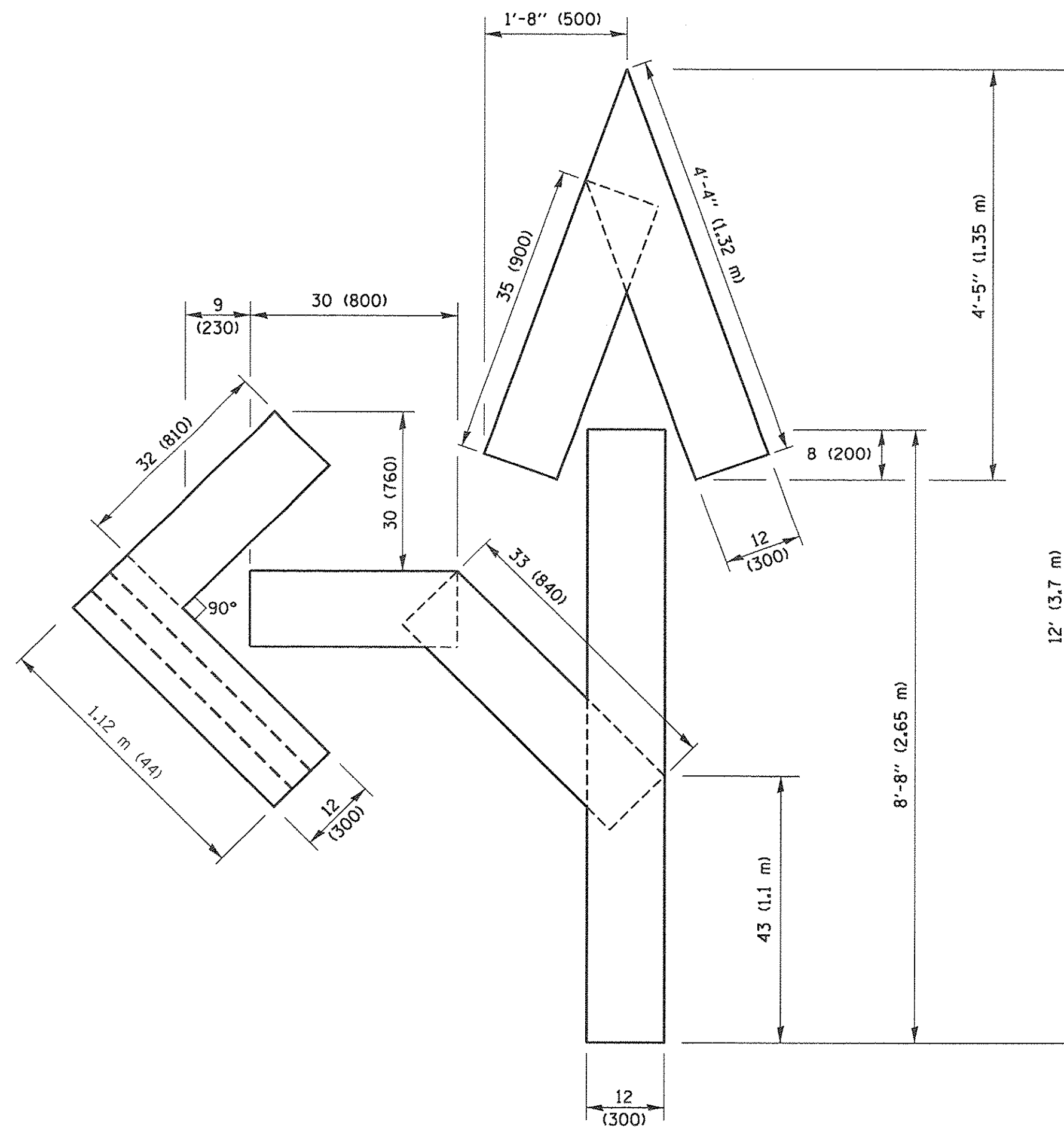
QUANTITY

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



QUANTITY

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

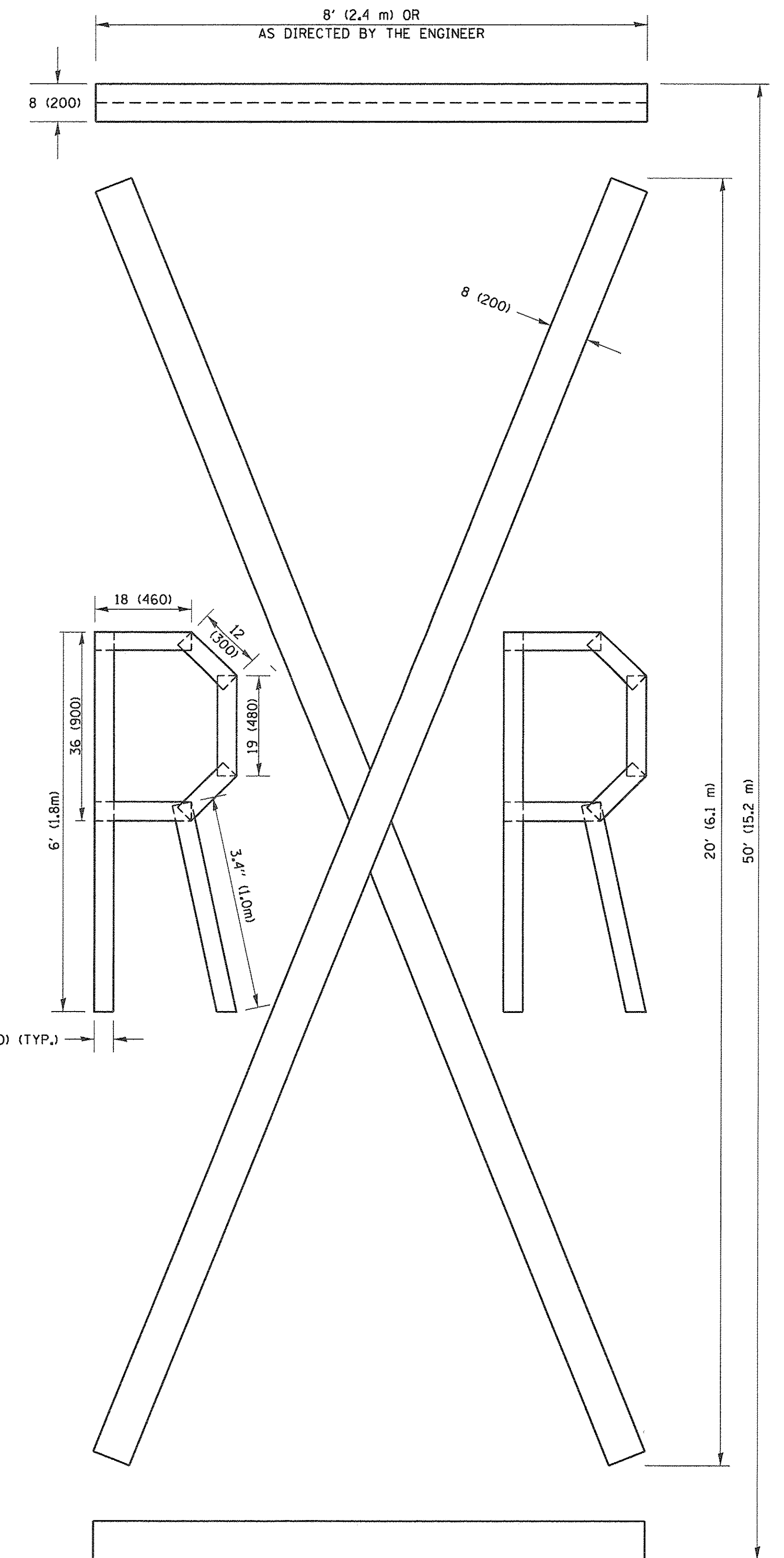


QUANTITY

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

NOTE:

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



QUANTITY

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

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

| | | | |
|---|---------------------|-----------------|---------------------------------|
| FILE NAME = | USER NAME = footemj | DESIGNED - | REVISED - T. RAMMACHER 03-02-98 |
| pw\l\084EBID\INTEC\illinois.gov\PIWIDT\Documents\IDOT Offices\District 1\Projects\Dist 1\CAD\CADData\CADsheets\tcl6.dgn | | CHECKED - | REVISED - E. GOMEZ 08-28-00 |
| PLOT SCALE = 50.0000' / in. | | CHECKED - | REVISED - E. GOMEZ 08-28-00 |
| PLOT DATE = 9/15/2016 | | DATE - 09-18-94 | REVISED - A. SCHUETZE 09-15-16 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

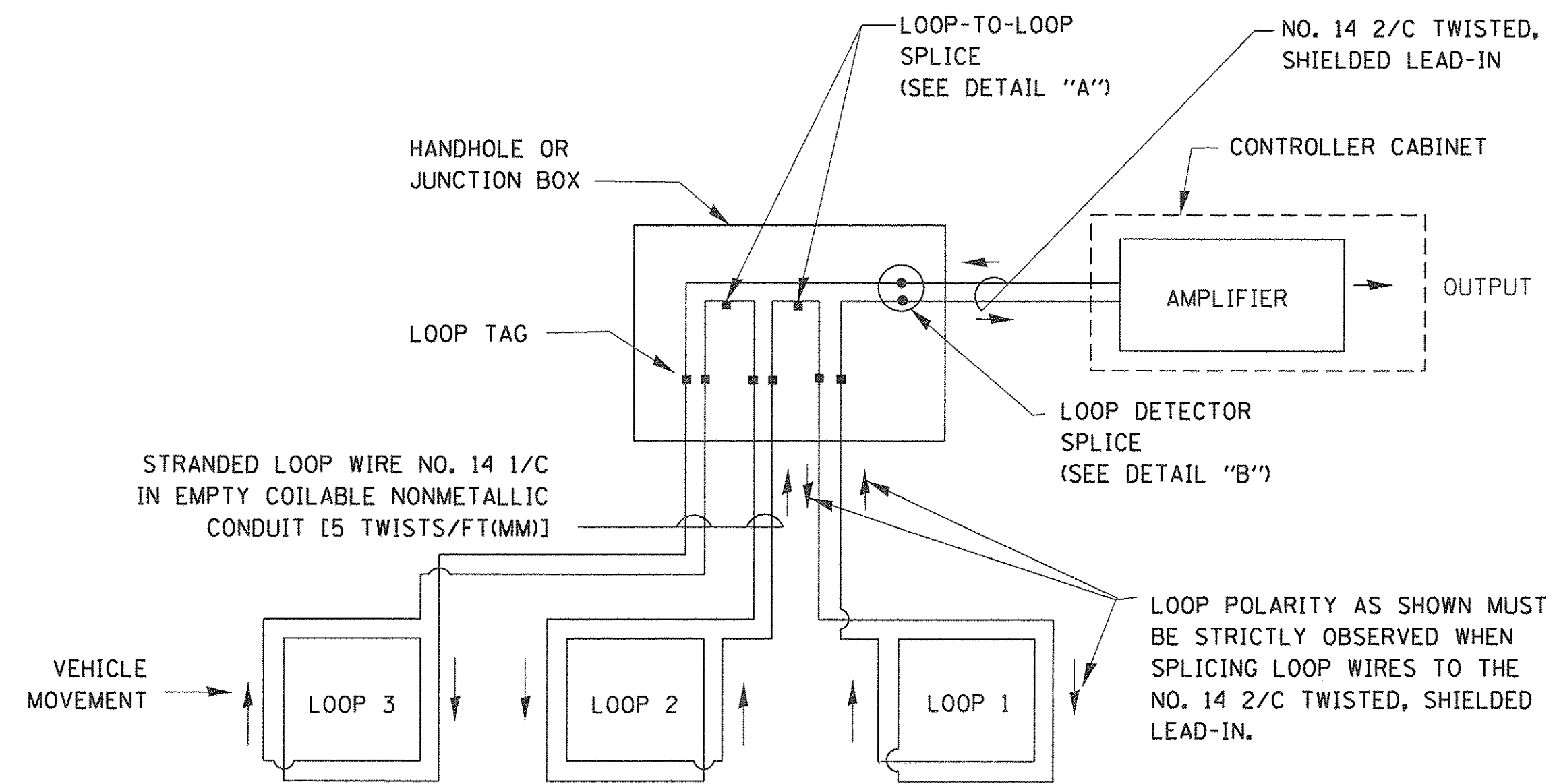
SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---|----------------|--------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2561 | 15-00111-00-RS | DUPAGE | 23 | 20 |
| TC-16 | | CONTRACT NO. 61D51 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

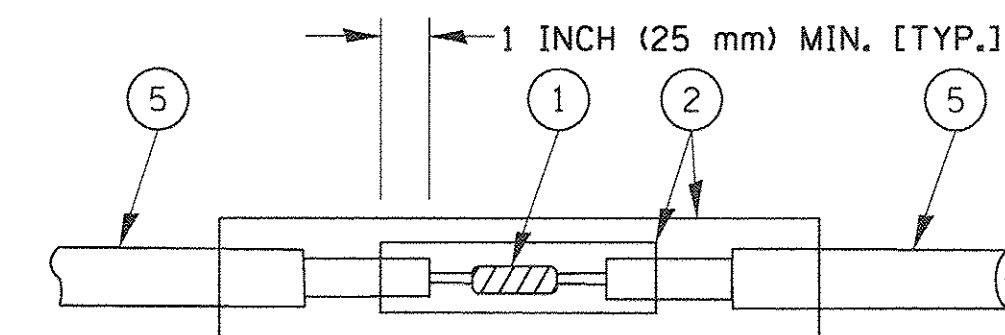
LOOP DETECTOR NOTES

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.

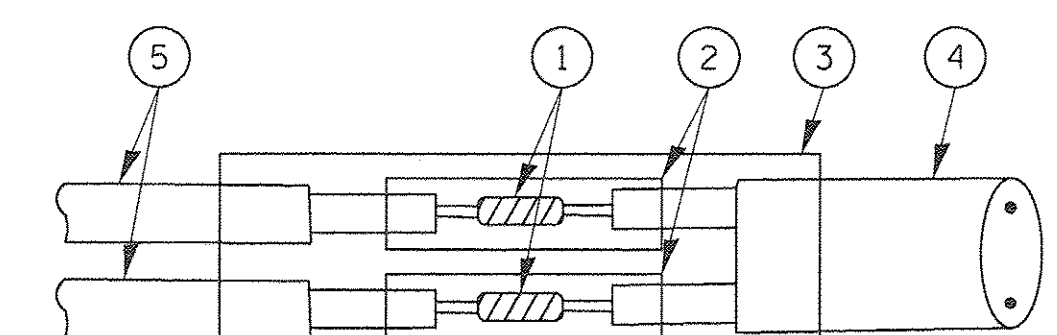


DETECTOR LOOP WIRING SCHEMATIC

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



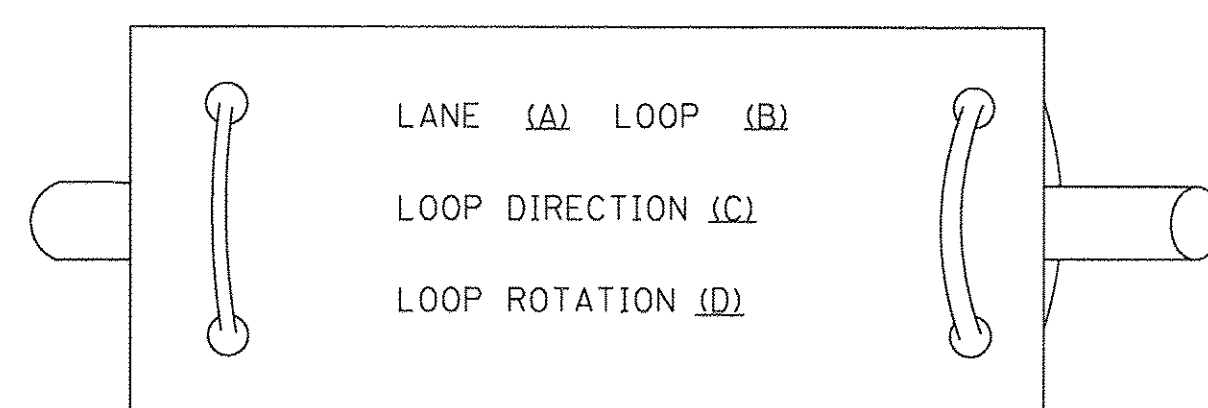
DETAIL "A"
LOOP-TO-LOOP SPLICE



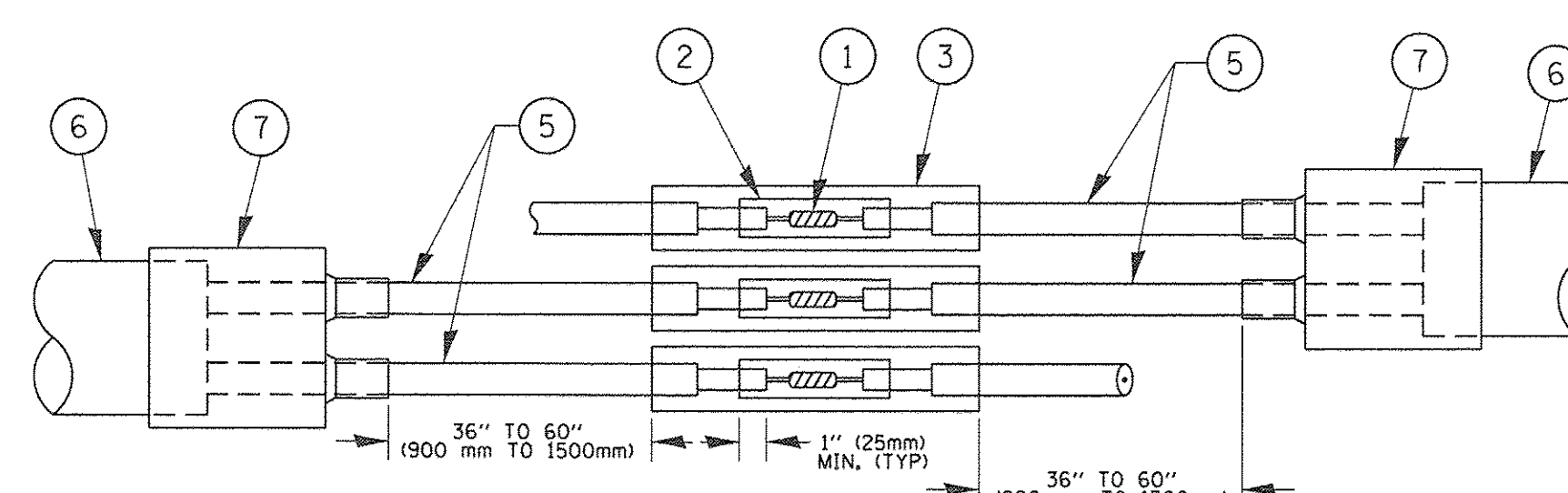
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP

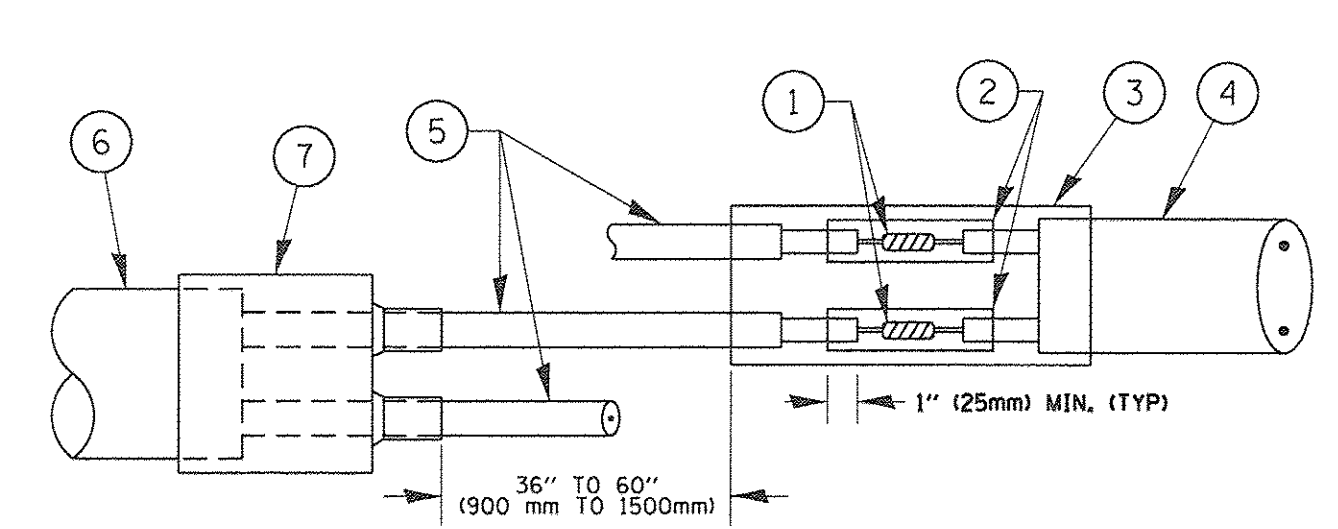
LOOP LEAD-IN CABLE TAG



- 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.



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PRE-FORMED LOOP

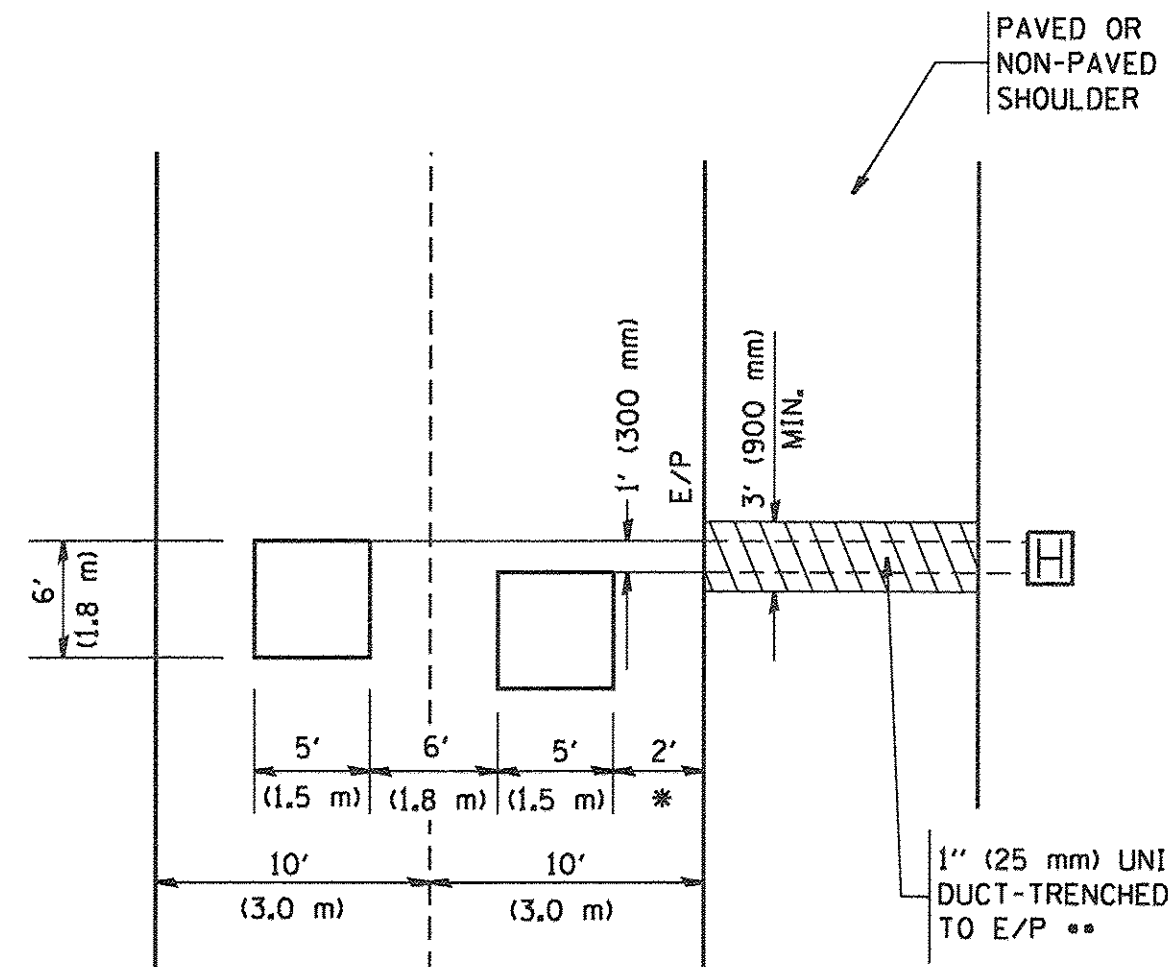
LOOP DETECTOR SPLICE

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

| | | | | | | | | | | | | |
|------------------------------|---------------------|----------------|----------------------|---|--|-------------------------|------|------------------|------------------------|---------------|-----------------|--------------|
| FILE NAME = | USER NAME = footemj | DESIGNED - DAD | REVISED - DAG 1-1-14 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS | | | F.A.U. RTE. 2561 | SECTION 15-00111-00-RS | COUNTY DUPAGE | TOTAL SHEETS 23 | SHEET NO. 22 |
| Plot SCALE = 50,0000 ' / in. | CHECKED - DAD | REVISIONS | | | SCALE: NONE | SHEET NO. 2 OF 7 SHEETS | STA. | TO STA. | TS-05 | | | |
| PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISIONS | | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | | | | |
| CONTRACT NO. 61D51 | | | | | | | | | | | | |

LOOPS NEXT TO SHOULDERS

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



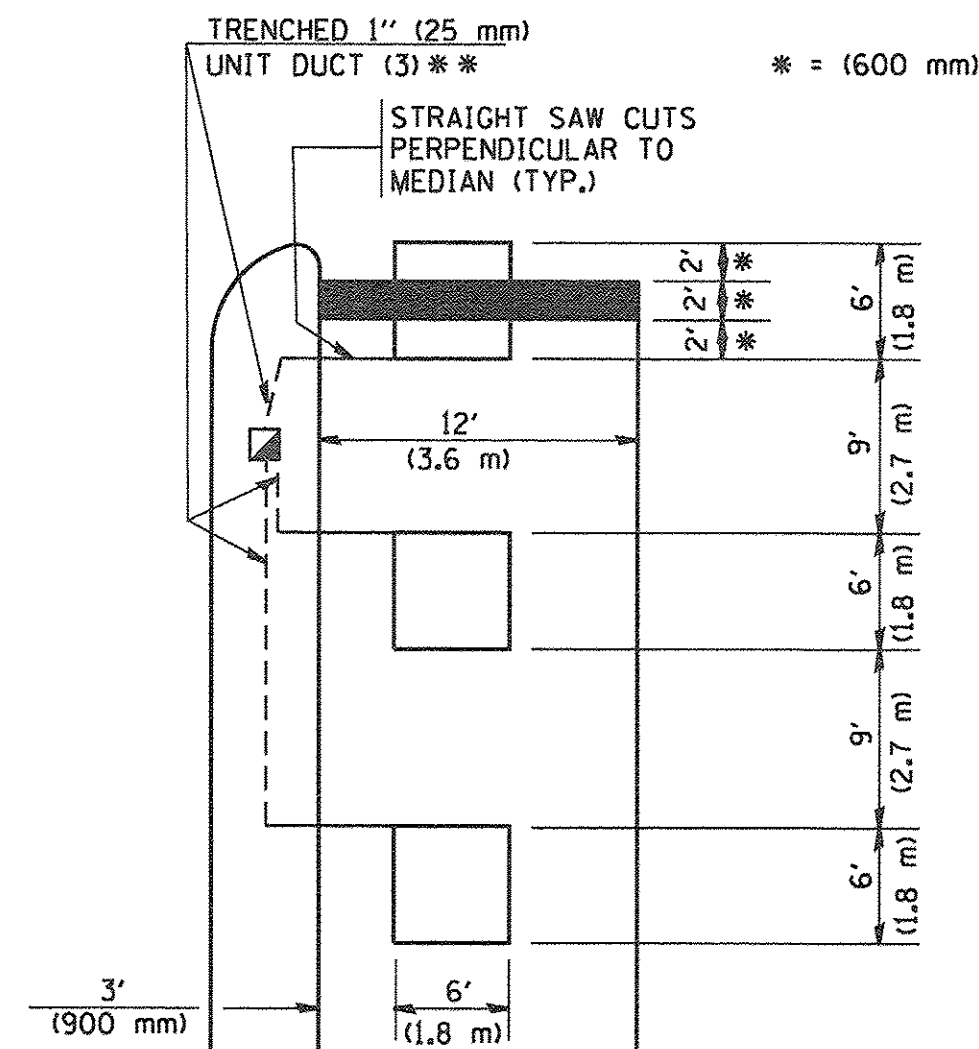
* = (600 mm)

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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

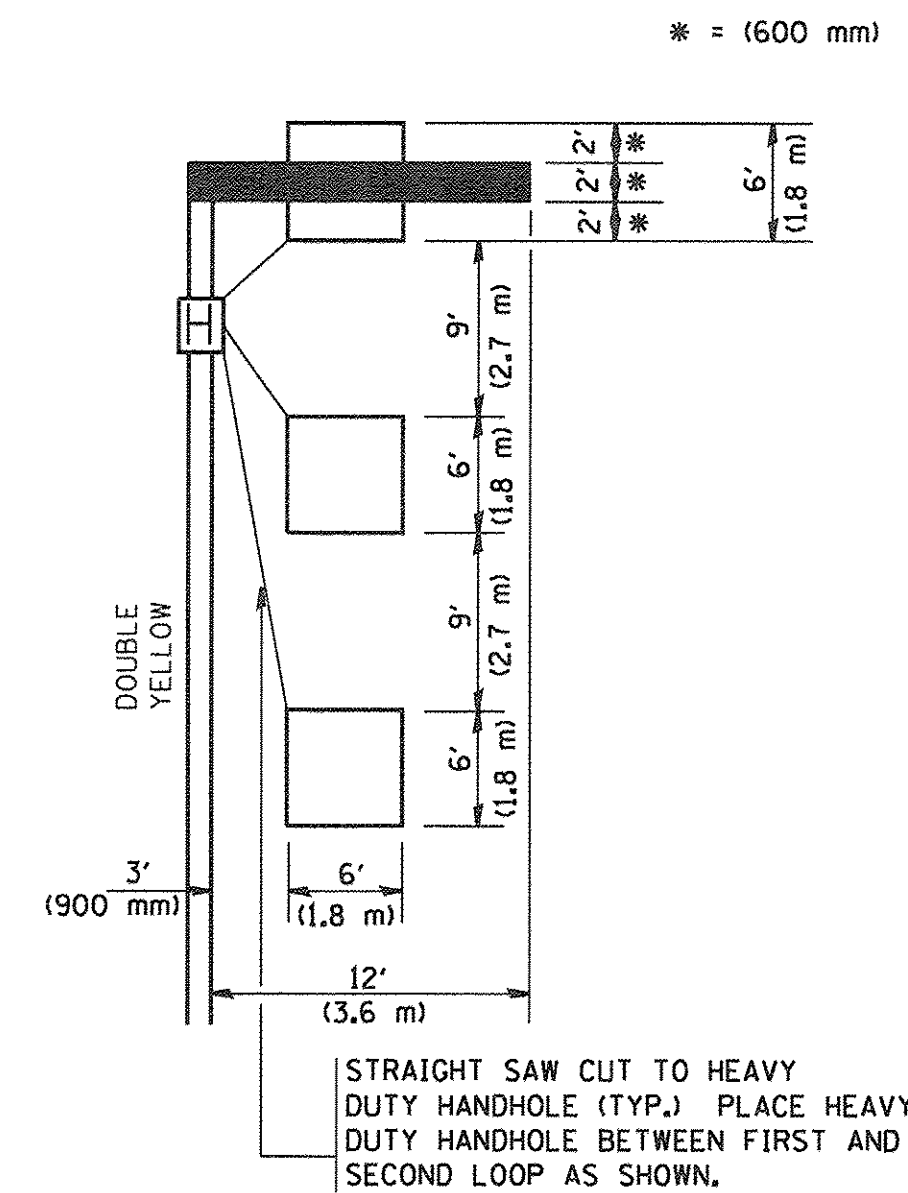


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

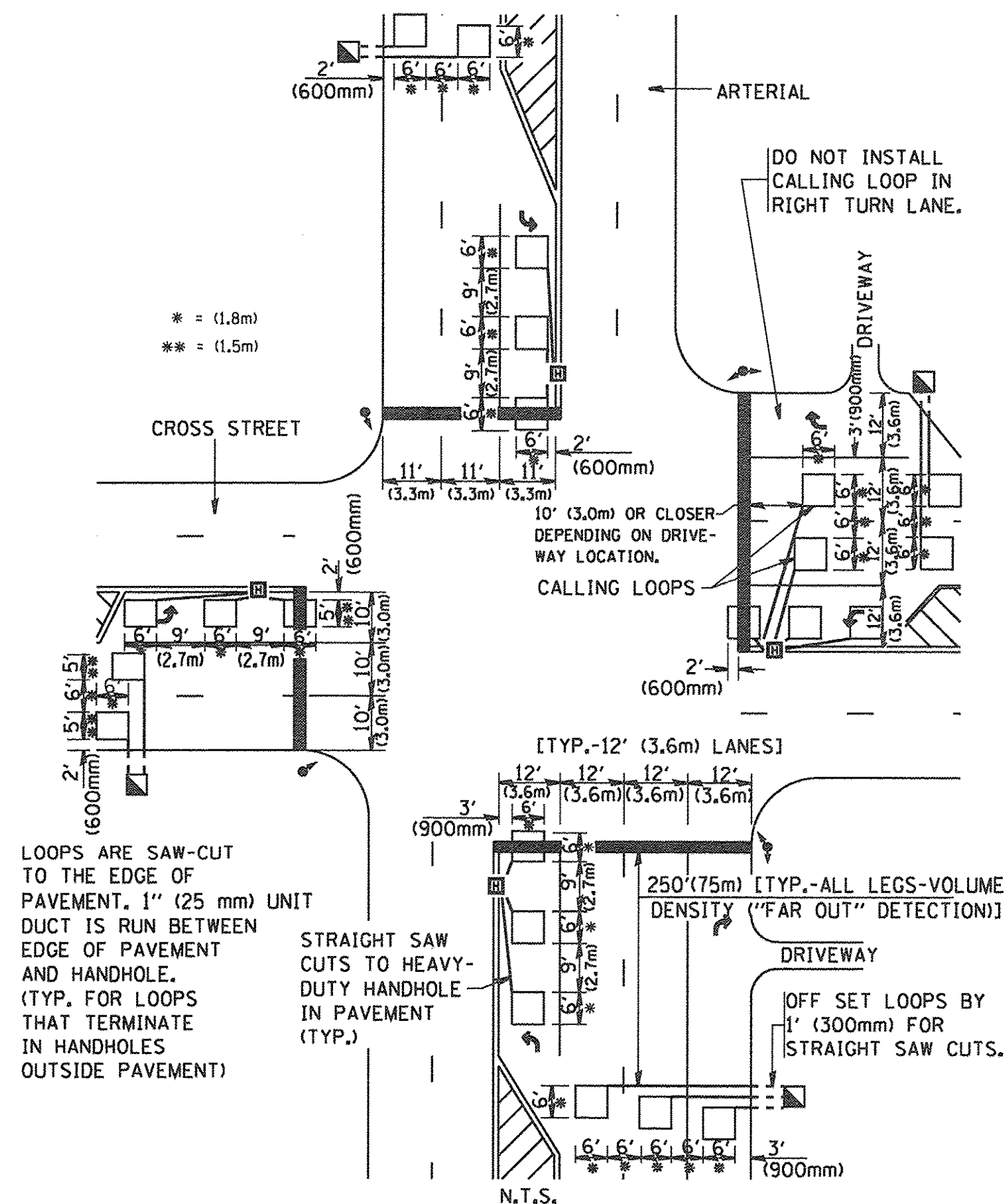
LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



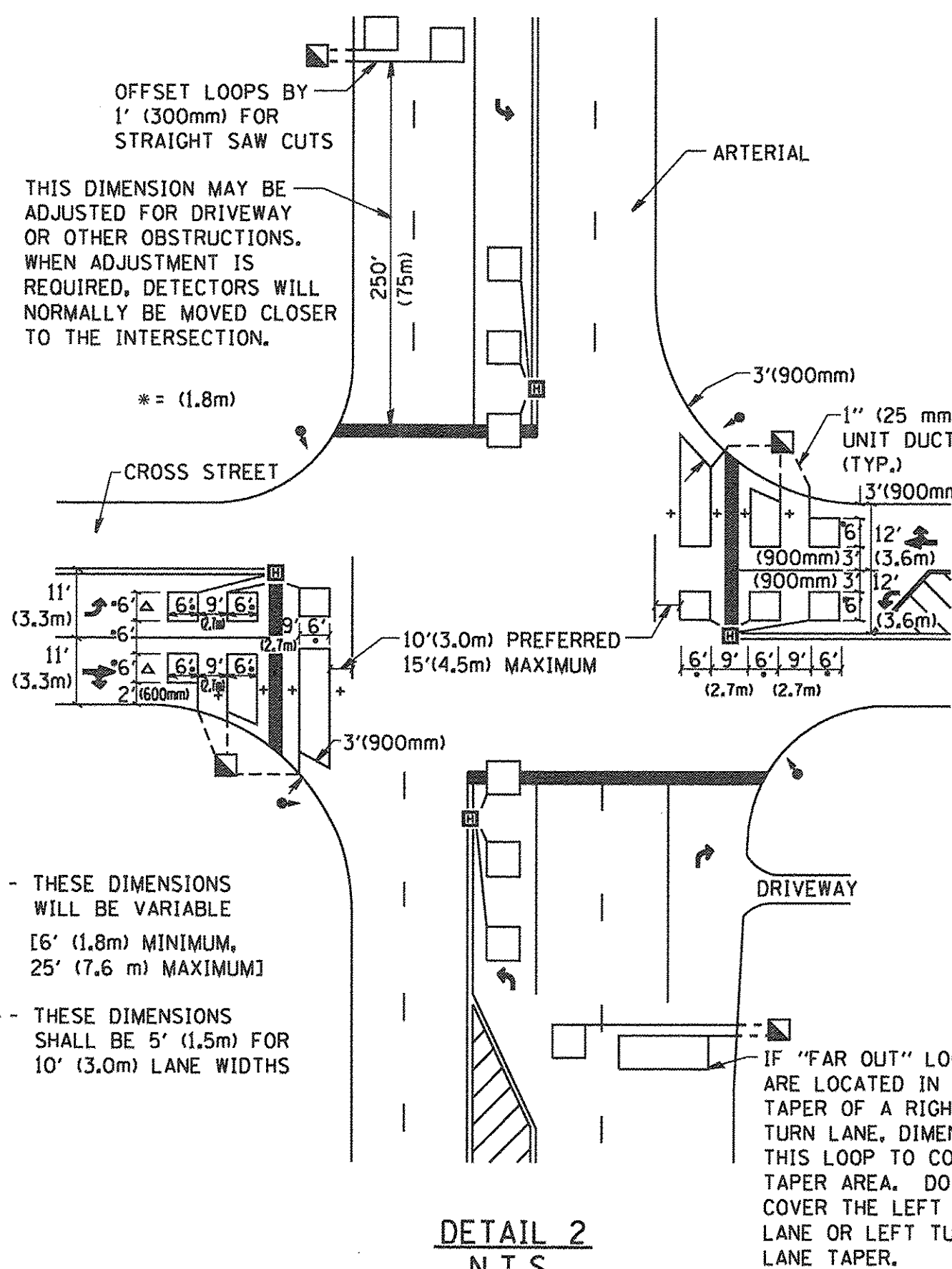
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

FILE NAME = W:\diststd\22x34\ts07.dgn

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|----------------------------|------------------|-----------|
| USER NAME = goglionobt | DESIGNED - | REVISED - |
| PLOT SCALE = 50.0000 / IN. | DRAWN - | REVISED - |
| PLOT DATE = 1/4/2008 | CHECKED - R.K.F. | REVISED - |
| | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------------|-----------|
| 2561 | 15-00111-00-RS | DUPAGE | 23 | 23 |
| TS-07 | | | CONTRACT NO. 61D51 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |