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

# STATE OF ILLINOIS 04-28-2017 LETTING ITEM 178 DEPARTMENT OF TRANSPORTATION

 F.A. RTE.
 SECTION
 COUNTY
 TOTAL SHEET NO.

 1661
 15-00062-00-RS
 COOK
 23
 1

 FED. ROAD DIST. NO 1
 ILLINOIS
 CONTRACT NO. 61D81

HIGHWAY CLASSIFICATION
STREAMWOOD BOULEVARD - MAJOR COLLECTOR

TRAFFIC DATA
STREAMWOOD BOULEVARD
2014 ADT = 3,800

POSTED SPEED LIMIT STREAMWOOD BOULEVARD = 25 MPH

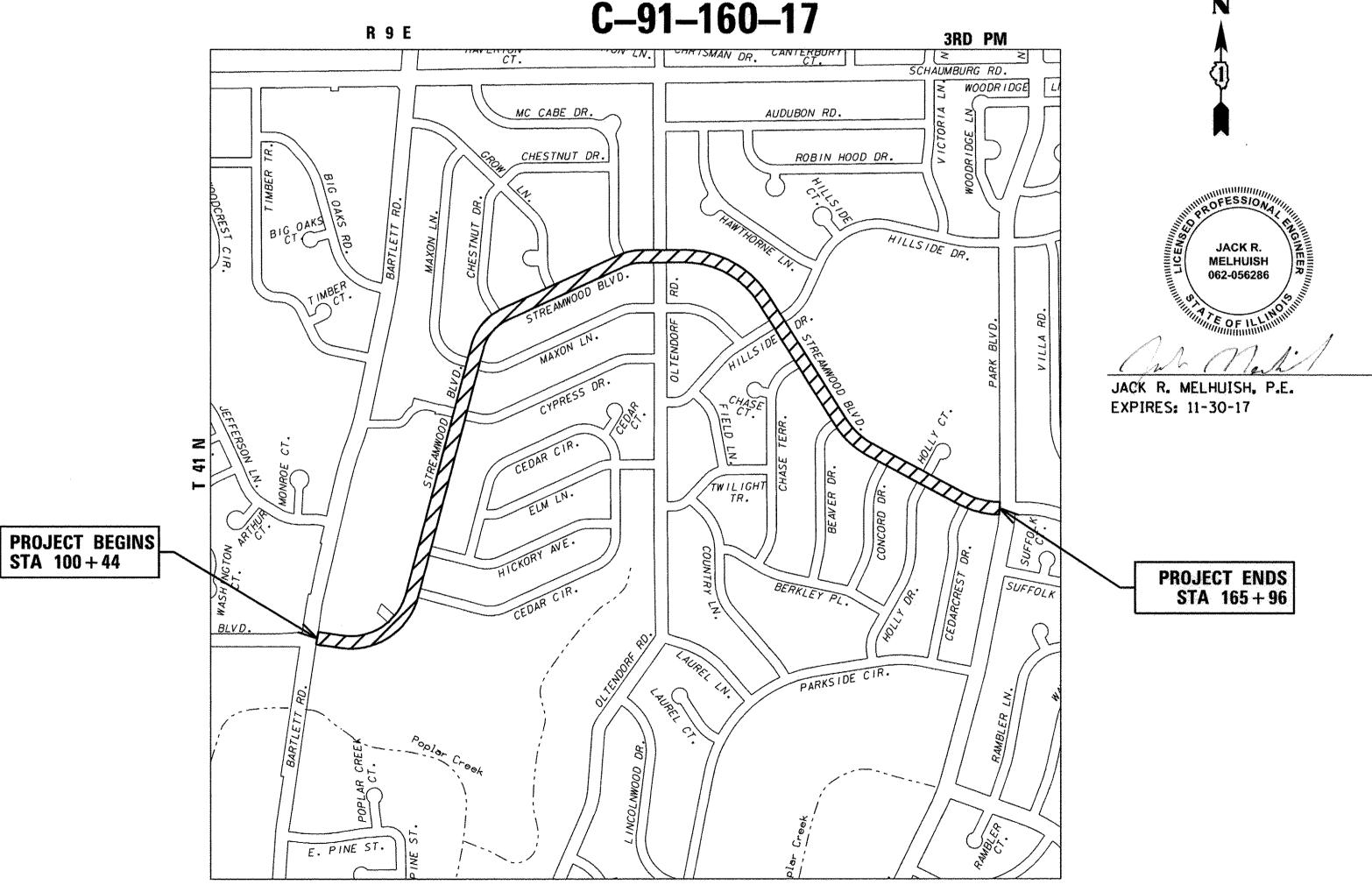
DESIGN SPEED LIMIT STREAMWOOD BOULEVARD = 30 MPH

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU 1661 (STREAMWOOD BOULEVARD)
FAU 2537 (BARTLETT ROAD) TO FAU 2958 (PARK BOULEVARD)
RESURFACING

SECTION: 15-00062-00-RS PROJECT NO.: M-4003(878) VILLAGE OF STREAMWOOD

COOK COUNTY



PROJECT LOCATION MAP N.T.S.

HANOVER TOWNSHIP PROJECT LENGTH

NET AND GROSS LENGTH OF PROJECT = 6,551 FT. = 1.240 MILE

CARROLL

OGLE

ROCK ISLAND

NEMETS STEPHENSON

WINNERSAGO

DOLE

ROCK ISLAND

NEMETS STARK

MARSHALL

LA SALLE

ORUNDIY

KANNAKEE

COCK

KANNAKEE

COCK

KANNAKEE

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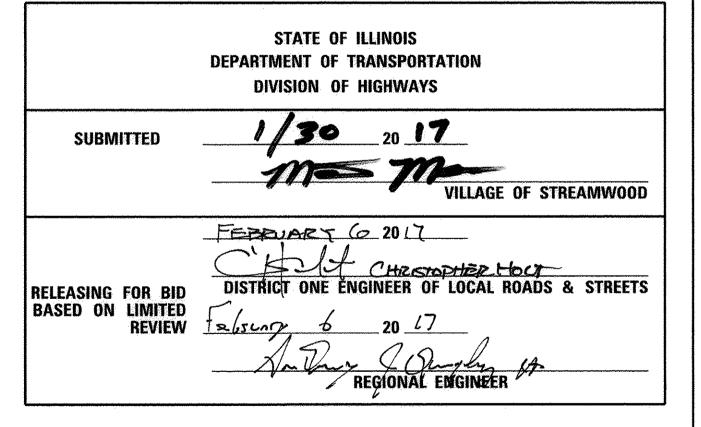
COCK

COCK

KANNAKEE

COCK

C





**HRGreen** 

420 NORTH FRONT STREET, SUITE 100 | McHENRY, ILLINOIS 60050
Phone: 815.385.1778 | Toll Free: 800.728.7805 | Fax: 815.385.1781 | HRGreen.com
ILLINOIS PROFESSIONAL DESIGN FIRM #184-001322

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OF THE STATE OF ILLINOIS

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

DESIGN ENGINEER: J. MELHUISH

PROJECT MANAGER: A. CHAUDHRY

CONTRACT NO. 61D81

ENGINEER: CHARLES F. RIDDLE,

OFFICE

AND

**PROGRAM** 

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# **INDEX OF SHEETS**

- COVER SHEET
- INDEX OF SHEETS, STATE STANDARDS, AND DISTRICT ONE DETAILS
- GENERAL NOTES
- SUMMARY OF QUANTITIES
- TYPICAL SECTIONS
- RESURFACING PLANS 9 - 12 INTERSECTION PLANS
- VILLAGE OF STREAMWOOD DETAILS
- 14 23 DISTRICT ONE DETAILS

# **STATE STANDARDS**

| STANDARD NO. | LIST OF DESCRIPTION                                                          |
|--------------|------------------------------------------------------------------------------|
| 000001-06    | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                                 |
| 420001-08    | PAVEMENT JOINTS                                                              |
| 424001-09    | PERPENDICULAR CURB RAMPS FOR SIDEWALKS                                       |
| 424021-03    | DEPRESSED CORNER FOR SIDEWALKS                                               |
| 424026-01    | ENTRANCE / ALLEY PEDESTRIAN CROSSINGS                                        |
| 442201-03    | CLASS C AND D PATCHES                                                        |
| 701101-05    | OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701427-05    | LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPER., FOR SPEEDS < 40 MPH    |
| 701601-09    | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN           |
| 701701-10    | URBAN LANE CLOSURE, MULTILANE INTERSECTION                                   |
| 701801-06    | SIDEWALK, CORNER OR CROSSWALK CLOSURE                                        |
| 701901-06    | TRAFFIC CONTROL DEVICES                                                      |
| 780001-05    | TYPICAL PAVEMENT MARKINGS                                                    |
|              |                                                                              |

# **DISTRICT ONE DETAILS**

| DIVITIOI VI       | The Delivino                                                                |
|-------------------|-----------------------------------------------------------------------------|
| STANDARD NO.      | LIST OF DESCRIPTION                                                         |
| BD-08             | DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING                         |
| BD-22             | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT                                 |
| BD-24             | CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT                             |
| BD-32             | BUTT JOINT AND HMA TAPER DETAILS                                            |
| TC-10             | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS |
| TC-13             | DISTRICT ONE TYPICAL PAVEMENT MARKINGS                                      |
| TC-16             | SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS                             |
| TC-22             | ARTERIAL ROAD INFORMATION SIGN                                              |
| TS-05 (SHEET 2 OF | 7) DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS                      |
| TS-07             | DISTRICT ONE - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING   |
|                   |                                                                             |

| USER NAME = Jhorwit            | DESIGNED - | JRM     | REVISED - |  |
|--------------------------------|------------|---------|-----------|--|
| FILE NAME = 157-sht-gen_01.dgn | DRAWN -    | JCH     | REVISED - |  |
| PLOT SCALE = N.T.S.            | CHECKED -  | TEH     | REVISED - |  |
| PLOT DATE = 2/21/2017          | DATE -     | 2/21/17 | REVISED - |  |

| INDEX OF     | SHEETS, STATE ST | TANDARDS AND  | DISTRICT ONE DE | TAILS F.A.U. | SECTION                       | COUNTY      | TOTAL<br>SHEETS                        | SHEET<br>NO. |
|--------------|------------------|---------------|-----------------|--------------|-------------------------------|-------------|----------------------------------------|--------------|
|              |                  |               |                 | 1661         | 15-00062-00-RS                | COOK        | 23                                     | 2            |
|              |                  |               |                 |              |                               | CONTRACT    | NO.                                    | 61D8         |
| CALE: N.T.S. | SHEET NO. 1 OF   | 1 SHEETS STA. | TO STA.         | FED. RO      | DAD DIST. NO.   ILLINOIS FED. | AID PROJECT | ************************************** |              |

#### 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, APRIL 1, 2016. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- 2. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).
- 3. ALL ELEVATIONS SHOWN ON THE PLANS ARE ON THE NAVD 88 DATUM.
- 4. OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY CENTERLINE.
- 5. SAW CUTTING OF PAVEMENTS, CURB AND GUTTER, SIDEWALK, ETC. SHALL BE TO FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING.
- 6. MATERIALS RESULTING FROM THE REMOVAL OF ASPHALT SURFACES, CONCRETE REMOVAL, UTILITY STRUCTURE ADJUSTMENTS, GRADING WORK, ETC. SHALL BE REMOVED AT THE END OF EACH DAY TO AN APPROVED SITE. IN THE JUDGEMENT OF THE ENGINEER, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE ENGINEER WILL HAVE THE MATERIAL REMOVED AND THE CONTRACTOR SHALL HAVE THE DOLLAR AMOUNT REDUCED FROM THE NEXT PAY ESTIMATE.
- 7. SIDEWALK REMOVAL AND REPLACEMENT, DRIVEWAY REMOVAL AND REPLACEMENT, AND COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AS SHOWN ON THE PLANS IS FOR INFORMATIONAL PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES TO BE DETERMINED AND MARKED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- STORM SEWERS, WATER MAINS, AND UTILITIES
  THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
- 2. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
- 4. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTION MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION.
- 5. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS.
- 6. ALL FRAMES, GRATES, LIDS, AND BOXES SCHEDULED TO BE REMOVED FROM EXISTING STRUCTURES SHALL REMAIN THE PROPERTY AND BE DELIVERED TO THE PUBLIC WORKS DEPARTMENT. THE PHONE NUMBER FOR DELIVERY ARRANGEMENT IS (630)736-3850.
- 7. ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THE CONTRACT FOR CONSTRUCTION, ADJUSTMENT OR RECONSTRUCTION OF ANY MANHOLE, CATCH BASIN, OR INLET, SHALL HAVE CAST INTO THE LID ONE OF THE FOLLOWING WORDS: ALL LIDS TO BE USED ON STORM SEWER STRUCTURES SHALL BEAR THE WORD "STORM."
- 8. THE INDISCRIMINATE USE OF FIRE HYDRANTS OR 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 SOURCE OTHER THAN HIS YARD, WRITTEN APPROVAL FROM THE AGENCY HAVING JURISDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE ENGINEER PRIOR TO USE OF THE WATER.

#### SIGNING AND STRIPING

- 1. SEE IDOT DISTRICT ONE DETAILS AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.
- SEQUENCE OF CONSTRUCTION ROADWAY
  IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY RESIDENTS AND THE VILLAGE WHEN ACCESS TO THEIR DRIVEWAYS WILL BE TEMPORARILY CLOSED DUE TO CONCRETE CURB AND GUTTER INSTALLATION OR SIDEWALK CONSTRUCTION. AT LOCATIONS WHERE NEW GUTTER OR SIDEWALK IS TO BE INSTALLED ACROSS A DRIVEWAY, THE CONTRACTOR SHALL CONTACT THE HOMEOWNER 48 HOURS PRIOR TO REMOVING THE PAVEMENT. THE CONTRACTOR SHALL DISTRIBUTE NOTICES, PROVIDED BY THE VILLAGE, TO RESIDENTS. EVERY EFFORT SHALL BE MADE TO ACCOMODATE ACCESS TO THESE PROPERTIES (KNOCK ON DOORS WHEN A DRIVEWAY IS ABOUT TO BE CLOSED).
- 2. THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE A DRIVEWAY FOR MORE THAN 48 HOURS UNDER ANY CIRCUMSTANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING BARRICADES TO PREVENT TRAFFIC FROM USING DRIVEWAYS DURING THIS PERIOD.

#### NATURAL GAS AND PIPELINE COMPANY CONSTRUCTION NOTES

- CONTRACTORS SHALL BE ADVISED OF NATURAL GAS PIPELINE NGPL OF AMERICA LLC'S (NGPL) REQUIREMENTS AND BE CONTRACTUALLY OBLIGATED TO COMPLY.
- THE CONTINUED INTEGRITY OF NGPL'S PIPELINES AND THE SAFETY OF ALL INDIVIDUALS IN THE AREA OF PROPOSED WORK NEAR NGPL'S FACILITIES ARE OF THE UTMOST IMPORTANCE. THEREFORE, CONTRACTOR MUST MEET WITH NGPL REPRESENTATIVES PRIOR TO CONSTRUCTION TO PROVIDE AND RECEIVE NOTIFICATION LISTINGS FOR APPROPRIATE AREA OPERATIONS AND EMERGENCY PERSONNEL. NGPL'S ON-SITE REPRESENTATIVE WILL REQUIRE DISCONTINUATION OF ANY WORK THAT, IN HIS OPINION, ENDANGERS THE OPERATIONS OR SAFETY OF PERSONNEL, PIPELINES OR FACILITIES.
- 3. THE CONTRACTOR MUST EXPOSE ALL NGPL TRANSMISSION AND DISTRIBUTION LINES PRIOR TO CROSSING TO DETERMINE THE EXACT ALIGNMENT AND DEPTH OF THE LINES. A NGPL REPRESENTATIVE MUST BE PRESENT. IN THE EVENT OF PARALLEL LINES, ONLY ONE PIPELINE CAN BE EXPOSED AT A TIME.
- 4. NGPL WILL NOT ALLOW PIPELINES TO REMAIN EXPOSED OVERNIGHT WITHOUT CONSENT OF NGPL DESIGNATED REPRESENTATIVE. CONTRACTOR MAY BE REQUIRED TO BACKFILL PIPELINES AT THE END OF EACH DAY.
- 5. A NGPL REPRESENTATIVE SHALL DO ALL LINE LOCATING. A NGPL REPRESENTATIVE SHALL BE PRESENT FOR HYDRAULIC EXCAVATION. THE USE OF PROBING RODS FOR PIPELINE LOCATING SHALL BE PERFORMED BY NGPL REPRESENTATIVES ONLY, TO PREVENT UNNECESSARY DAMAGE TO THE PIPELINE COATING.
- 6. NOTIFICATION SHALL BE GIVEN TO NGPL AT LEAST 72 HOURS BEFORE START OF CONSTRUCTION. A SCHEDULE OF ACTIVITIES FOR THE DURATION OF THE PROJECT MUST BE MADE AVAILABLE AT THAT TIME TO FACILITATE THE SCHEDULING OF NGPL'S WORK SITE REPRESENTATIVE. ANY CONTRACTOR SCHEDULE CHANGES SHALL BE PROVIDED TO NGPL IMMEDIATELY.
- 7. HEAVY EQUIPMENT WILL NOT BE ALLOWED TO OPERATE DIRECTLY OVER NGPL PIPELINES OR IN NGPL ROW UNLESS WRITTEN APPROVAL IS OBTAINED FROM NGPL. HEAVY EQUIPMENT SHALL ONLY BE ALLOWED TO CROSS NGPL PIPELINES AT LOCATIONS DESIGNATED BY NGPL. CONTRACTOR SHALL COMPLY WITH ALL PRECAUTIONARY MEASURES REQUIRED BY NGPL TO PROTECT ITS PIPELINES. WHEN INCLEMENT WEATHER EXISTS, PROVISIONS MUST BE MADE TO COMPENSATE FOR SOIL DISPLACEMENT DUE TO SUBSIDENCE OF TIRES.
- EXCAVATING OR GRADING WHICH MIGHT RESULT IN EROSION OR WHICH COULD RENDER THE NGPL ROW INACCESSIBLE SHALL NOT BE PERMITTED UNLESS THE CONTRACTOR/DEVELOPER/OWNER AGREES TO RESTORE THE AREA TO ITS ORIGINAL CONDITION AND PROVIDE PROTECTION TO NGPL'S FACILITY.
- 9. A NGPL REPRESENTATIVE SHALL BE ON-SITE TO MONITOR ANY CONSTRUCTION ACTIVITIES WITHIN 25-FEET OF A NGPL PIPELINE OR ABOVEGROUND APPURTENANCE. THE CONTRACTOR SHALL NOT WORK WITHIN THIS DISTANCE WITHOUT A NGPL REPRESENTATIVE BEING ON SITE. ONLY HAND EXCAVATION SHALL BE PERMITTED WITHIN A MINIMUM OF 18-INCHES (REFER TO STATE SPECIFIC RULES/REGULATIONS REGARDING ANY ADDITIONAL CLEARANCE REQUIREMENTS) OF NGPL PIPELINES. VALVES AND FITTINGS. HOWEVER, PROCEED WITH EXTREME CAUTION WHEN WITHIN THREE (3) FEET OF THE PIPE.
- 10. RIPPING IS ONLY ALLOWED WHEN THE POSITION OF THE PIPE IS KNOWN AND NOT WITHIN 10-FEET OF NGPL FACILITY UNLESS NGPL REPRESENTATIVE IS PRESENT.
- 11. TEMPORARY SUPPORT OF ANY EXPOSED NGPL PIPELINE BY CONTRACTOR MAY BE NECESSARY IF REQUIRED BY NGPL'S ON-SITE REPRESENTATIVE. BACKFILL BELOW THE EXPOSED LINES AND 12-INCHES ABOVE THE LINES SHALL BE REPLACED WITH SAND OR OTHER SELECTED MATERIAL AS APPROVED BY NGPL'S ON-SITE REPRESENTATIVE AND THOROUGHLY COMPACTED IN 12-INCHES LIFTS TO 95% OF STANDARD PROCTOR DRY DENSITY MINIMUM OR AS APPROVED BY NGPL'S ON-SITE REPRESENTATIVE. THIS IS TO ADEQUATELY PROTECT AGAINST STRESSES THAT MAY BE CAUSED BY THE SETTLING OF THE PIPELINE.
- 12. NO BLASTING SHALL BE ALLOWED WITHIN 1000-FEET OF NGPL'S FACILITIES UNLESS BLASTING NOTIFICATION IS GIVEN TO NGPL INCLUDING COMPLETE BLASTING PLAN DATA. A PRE-BLAST MEETING SHALL BE CONDUCTED BY THE ORGANIZATION RESPONSIBLE FOR BLASTING.

NGPL SHALL BE INDEMNIFIED AND HELD HARMLESS FROM ANY LOSS, COST OF LIABILITY FOR PERSONAL INJURIES RECEIVED, DEATH CAUSED OR PROPERTY DAMAGE SUFFERED OR SUSTAINED BY ANY PERSON RESULTING FROM ANY BLASTING OPERATIONS UNDERTAKEN WITHIN 500-FEET OF ITS FACILITIES. THE ORGANIZATION RESPONSIBLE FOR BLASTING SHALL BE LIABLE FOR ANY AND ALL DAMAGES CAUSED TO NGPL'S FACILITIES AS A RESULT OF THEIR ACTIVITIES WHETHER OR NOT NGPL REPRESENTATIVES ARE PRESENT. NGPL SHALL HAVE A SIGNED AND EXECUTED BLASTING INDEMNIFICATION AGREEMENT BEFORE AUTHORIZED PERMISSION TO BLAST CAN BE GIVEN.

NO BLASTING SHALL BE ALLOWED WITHIN 300-FEET OF NGPL'S FACILITIES UNLESS BLASTING NOTIFICATION IS GIVEN TO NGPL A MINIMUM OF ONE WEEK BEFORE BLASTING. (NOTE: COVERED ABOVE) NGPL SHALL REVIEW AND ANALYZE THE BLASTING METHODS. A WRITTEN BLASTING PLAN SHALL BE PROVIDED BY THE ORGANIZATION RESPONSIBLE FOR BLASTING AND AGREED TO IN WRITING BY NGPL IN ADDITION TO MEETING REQUIREMENTS FOR 500-FEET AND 1000-FEET BEING MET ABOVE. A WRITTEN EMERGENCY PLAN SHALL BE PROVIDED BY THE ORGANIZATION RESPONSIBLE FOR BLASTING. (NOTE: COVERED ABOVE)

- 13. ANY CONTACT WITH ANY NGPL FACILITY, PIPELINE, VALVE SET, ETC. SHALL BE REPORTED IMMEDIATELY TO NGPL. IF REPAIRS TO THE PIPE ARE NECESSARY. THEY WILL BE MADE AND INSPECTED BEFORE THE SECTION IS RE-COATED AND THE LINE IS BACK-FILLED.
- 14. NGPL PERSONNEL SHALL INSTALL ALL TEST LEADS ON NGPL FACILITIES.
- 15. BURNING OF TRASH, BRUSH, ETC. IS NOT PERMITTED WITHIN THE NGPL ROW.

Illinois Professional Design Firm **HRGreen** 

| USER NAME = jhorwit            | DESIGNED | -           | JRM     | REVISED - |
|--------------------------------|----------|-------------|---------|-----------|
| FILE NAME = 157-sht-gen_02.dgn | DRAWN    | -           | JCH     | REVISED - |
| PLOT SCALE = N.T.S.            | CHECKED  | <del></del> | TEH     | REVISED - |
| PLOT DATE = 2/21/2017          | DATE     | <del></del> | 2/21/17 | REVISED - |

| GENERAL NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |             |      |         |           | F.A.U. SEC |               | COUNTY TOTA |     | SHEET<br>NO. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|------|---------|-----------|------------|---------------|-------------|-----|--------------|
| The state of the s |             |             |      |         | 1661      | 15-0006    | 2-00-RS       | COOK        | 23  | 3            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             |             |      |         |           |            |               | CONTRACT    | NO. | 61D8         |
| SCALE: N.T.S.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SHEET NO. 1 | OF 1 SHEETS | STA. | TO STA. | FED. ROAD | DIST. NO.  | ILLINOIS FED. | AID PROJECT |     |              |

|                                 |              |                                       |                                                              |       |        | ROADWAY<br>80% FED<br>20% LOCAL |
|---------------------------------|--------------|---------------------------------------|--------------------------------------------------------------|-------|--------|---------------------------------|
|                                 |              | PAYCODE                               | ITEM DESCRIPTION                                             | UNIT  | TOTAL  | 0005                            |
|                                 |              | 20200100                              | EARTH EXCAVATION                                             | CU YD | 20     | 20                              |
|                                 |              | 20201200                              | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL                  | CU YD | 40     | 40                              |
|                                 |              | 21101615                              | TOPSOIL FURNISH AND PLACE, 4"                                | SO YD | 150    | 150                             |
|                                 |              | 25000400                              | NITROGEN FERTILIZER NUTRIENT                                 | POUND | 2      | 2                               |
|                                 |              | 25000500                              | PHOSPHORUS FERTILIZER NUTRIENT                               | POUND | 2      | 2                               |
|                                 | -            | 25000600                              | POTASSIUM FERTILIZER NUTRIENT                                | POUND | 2      | 2                               |
| Million (Million)<br>St. 180    |              | 25200110                              | SODDING. SALT TOLERANT                                       | SQ YD | 150    | 150                             |
|                                 |              | 35101600                              | AGGREGATE BASE COURSE, TYPE B 4"                             | SQ YD | 72     | 72                              |
|                                 |              | 35501309                              | HOT-MIX ASPHALT BASE COURSE, 6 1/4"                          | SO YD | 64     | 64                              |
|                                 |              | 40600290                              | BITUMINOUS MATERIALS (TACK COAT)                             | POUND | 22,465 | 22,465                          |
|                                 |              |                                       | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS                   | TON   | 50     | 50                              |
|                                 | -            |                                       | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50   | TON   | 1,438  | 1,438                           |
|                                 | ,            |                                       | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT                 | SQ YD | 346    | 346                             |
|                                 |              |                                       |                                                              |       |        |                                 |
|                                 |              |                                       | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50                 | TON   | 3,733  | 3,733                           |
|                                 | 4            |                                       | PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH           | SQ YD | 50     | 50                              |
|                                 | *            | 42400800                              | DETECTABLE WARNINGS                                          | SO FT | 216    | 216                             |
|                                 |              | 44000159                              | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"                      | SO YD | 33,281 | 33,281                          |
|                                 |              | 44000200                              | DRIVEWAY PAVEMENT REMOVAL                                    | SO YD | 50     | 50                              |
|                                 |              | 44000500                              | COMBINATION CURB AND GUTTER REMOVAL                          | FOOT  | 134    | 134                             |
|                                 |              | 44000600                              | SIDEWALK REMOVAL                                             | SO FT | 2,500  | 2,500                           |
|                                 |              | 44201761                              | CLASS D PATCHES, TYPE I, 10 INCH                             | SO YD | 150    | 150                             |
|                                 | -            | 44201765                              | CLASS D PATCHES, TYPE II, 10 INCH                            | SQ YD | 175    | 175                             |
|                                 |              | 44201769                              | CLASS D PATCHES, TYPE III, 10 INCH                           | SO YD | 225    | 225                             |
|                                 |              | 44201771                              | CLASS D PATCHES, TYPE IV. 10 INCH                            | SO YD | 250    | 250                             |
|                                 |              | 60300305                              | FRAMES AND LIDS TO BE ADJUSTED                               | EACH  | 45     | 45                              |
|                                 |              | 60406100                              | FRAMES AND LIDS, TYPE 1. CLOSED LID                          | EACH  | 10     | 10                              |
|                                 |              | 60603800                              | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12            | FOOT  | 39     | 39                              |
|                                 |              |                                       | MOBILIZATION                                                 | LSUM  | 1      | 1                               |
|                                 |              |                                       | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601              | LSUM  | 1      | 1                               |
|                                 |              |                                       | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701              | LSUM  | 1      |                                 |
|                                 |              |                                       |                                                              |       | 1      |                                 |
|                                 | -            | 70102640                              | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801              | LSUM  | 1      | 1                               |
|                                 |              |                                       | SHORT TERM PAVEMENT MARKING                                  | FOOT  | 271    | 271                             |
|                                 |              | 70300150                              | SHORT TERM PAVEMENT MARKING REMOVAL                          | SQ FT | 91     | 91                              |
| †                               | -            | 78000100                              | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS         | SQFT  | 63     | 63                              |
| †                               | -            | 78000200                              | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                     | FOOT  | 11,262 | 11,262                          |
| +                               | -            | 78000400                              | THERMOPLASTIC PAVEMENT MARKING - LINE 6"                     | FOOT  | 1,235  | 1,235                           |
| †                               | •            | 78000600                              | THERMOPLASTIC PAVEMENT MARKING - LINE 12"                    | FOOT  | 114    | 114                             |
| †                               | •            | 78000650                              | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                    | FOOT  | 295    | 295                             |
| †                               | *            | 88600100                              | DETECTOR LOOP, TYPE I                                        | FOOT  | 45     | 45                              |
|                                 | *            | X0320050                              | CONSTRUCTION LAYOUT (SPECAIL)                                | LSUM  | 1      | 1                               |
|                                 | *            | X4021000                              | TEMPORARY ACCESS (PRIVATE ENTRANCE)                          | EACH  | 5      | 5                               |
|                                 | *            | X0326806                              | WASHOUT BASIN                                                | LSUM  | 1      | l                               |
|                                 | *            | X4240430                              | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL            | SQ FT | 2,300  | 2,300                           |
|                                 | *            |                                       | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)                     | EACH  | 15     | 15                              |
|                                 | *            |                                       | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT  | 1,500  | 1,500                           |
|                                 |              |                                       |                                                              |       |        |                                 |
|                                 | *            | Z0030850                              | TEMPORARY INFORMATION SIGNING                                | SQ FT | 52     | 52                              |
| PECIAL PROVISION PECIALTY ITEMS | <del> </del> | · · · · · · · · · · · · · · · · · · · |                                                              | . 1   |        | 1                               |

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\$CLIENT\$
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1L\_pdf\_bw.pltcfg
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HRGre

HRGreen.com
Illinois Professional Design Firm
# 184-001322

USER NAME = Jhorwit

DESIGNED - JRM

REVISED 
FILE NAME = 157-sht-sum\_01.dgn

DRAWN - JCH

REVISED 
PLOT SCALE = N.T.S.

CHECKED - TEH

REVISED 
PLOT DATE = 2/21/2017

DATE - 2/21/17

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA.

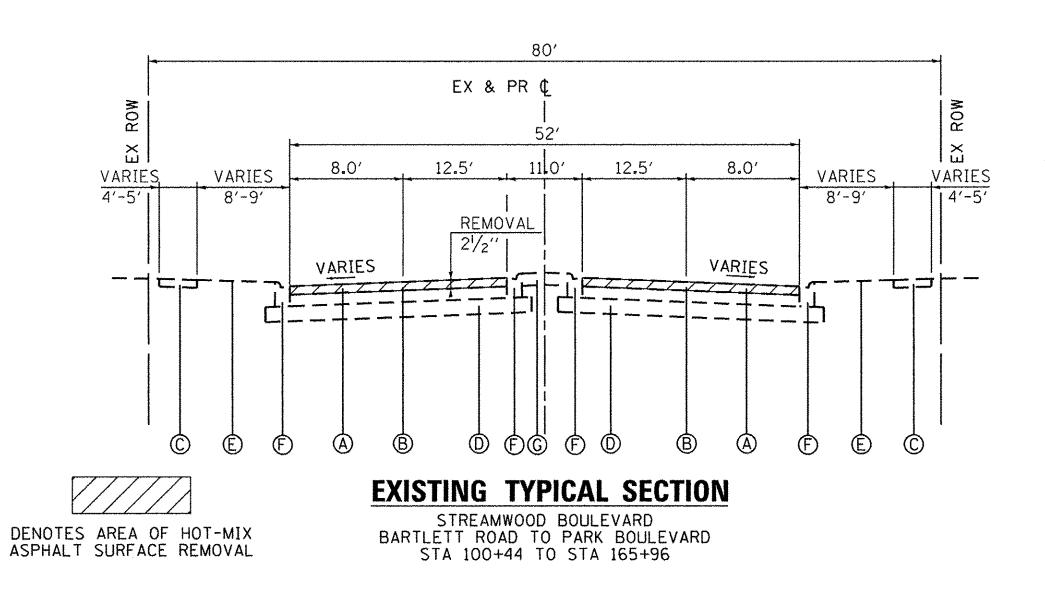
TO STA.

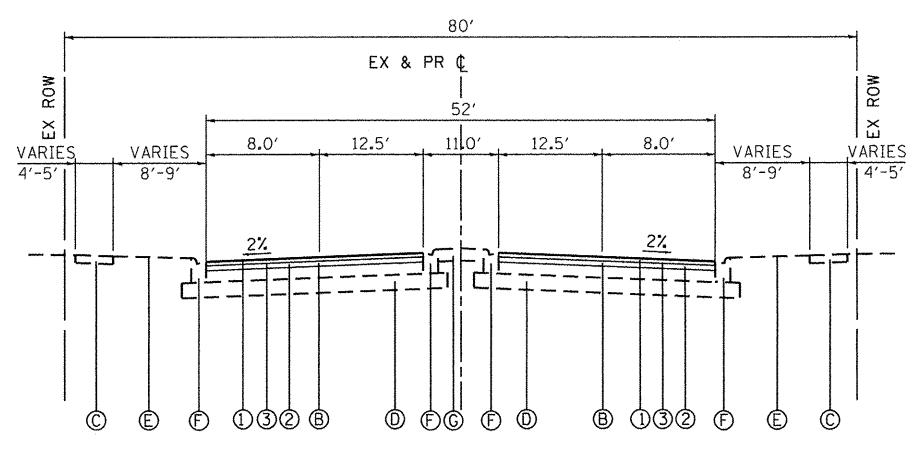
F.A.U. RTE. SECTION COUNTY SHEET SHEET NO.

1661 15-00062-00-RS COOK 23 4

CONTRACT NO. 61D81

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





# PROPOSED TYPICAL SECTION

STREAMWOOD BOULEVARD BARTLETT ROAD TO PARK BOULEVARD STA 100+44 TO STA 165+96

# **EXISTING LEGEND**

- (A) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2
- (12" & VARIES)
- © PORTLAND CEMENT CONCRETE SIDEWALK (SPOT REMOVAL & REPLACEMENT AS DIRECTED BY THE ENGINEER)
- D AGGREGATE SUBBASE, (4"-6")
- © EXISTING GROUND
- © COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12 (SPOT REMOVAL & REPLACEMENT AS DIRECTED BY THE ENGINEER)
- © LANDSCAPED MEDIAN

# PROPOSED LEGEND

3 BITUMINOUS MATERIALS (TACK COAT)

- 1 HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50; 2" 2 POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50; 3/4"
- FULL DEPTH (MEDIAN REPLACEMENT) PAVEMENT SHALL BE PLACE OVER AGGREGATE BASE COURSE, TYPE B 4"
  - MEDIAN REMOVAL IS PAID FOR AS EARTH EXCAVATION AND COMBINATION CURB AND GUTTER REMOVAL.

SCALE: N.T.S.

NOTES: THE PATCHING QUANTITIES HAVE BEEN ESTIMATED BASED ON

FIELD OBSERVATION DURING DESIGN. ACTUAL QUANTITIES TO

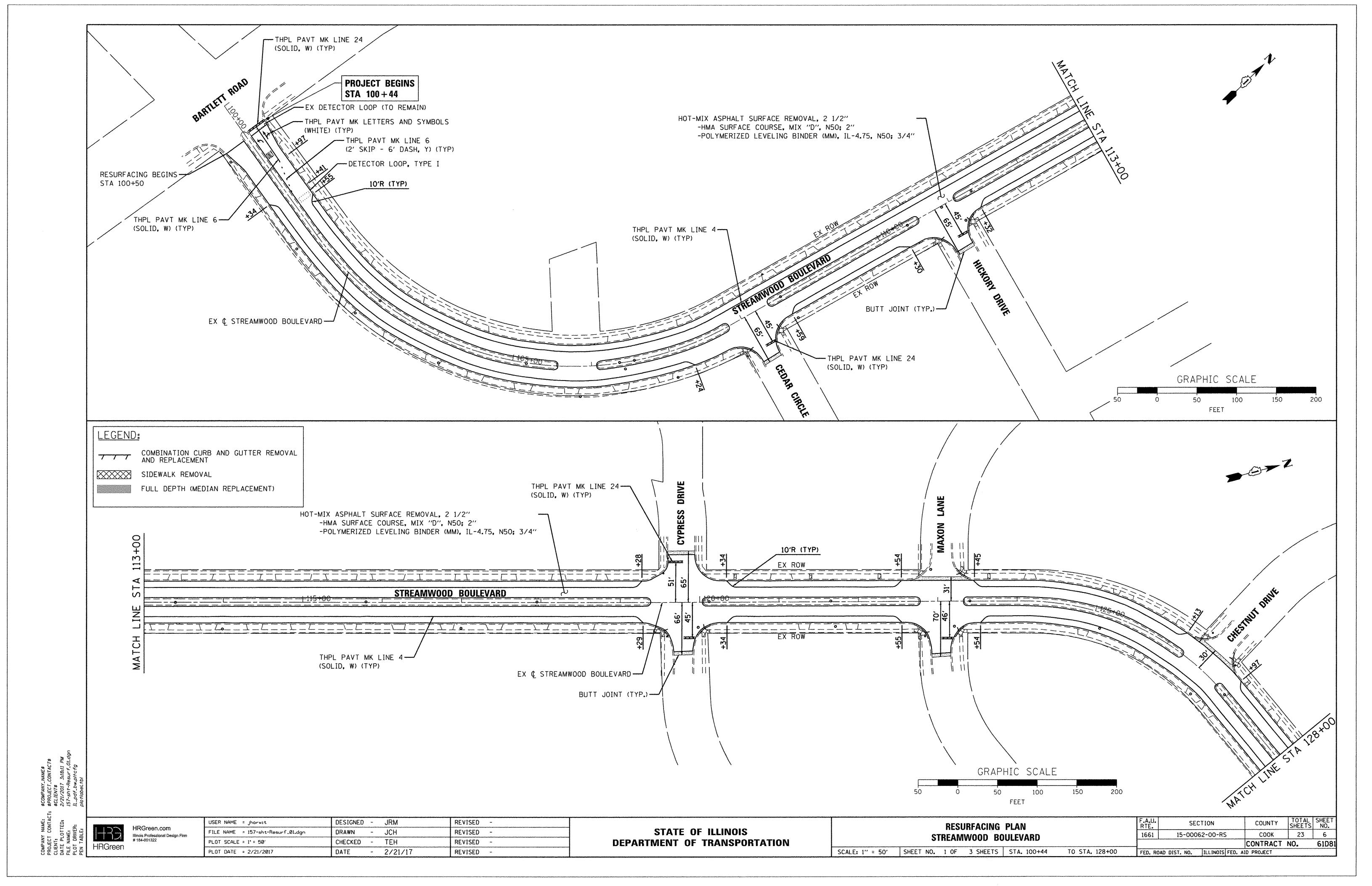
BE DETERMINED DURING CONSTRUCTION BY THE ENGINEER.

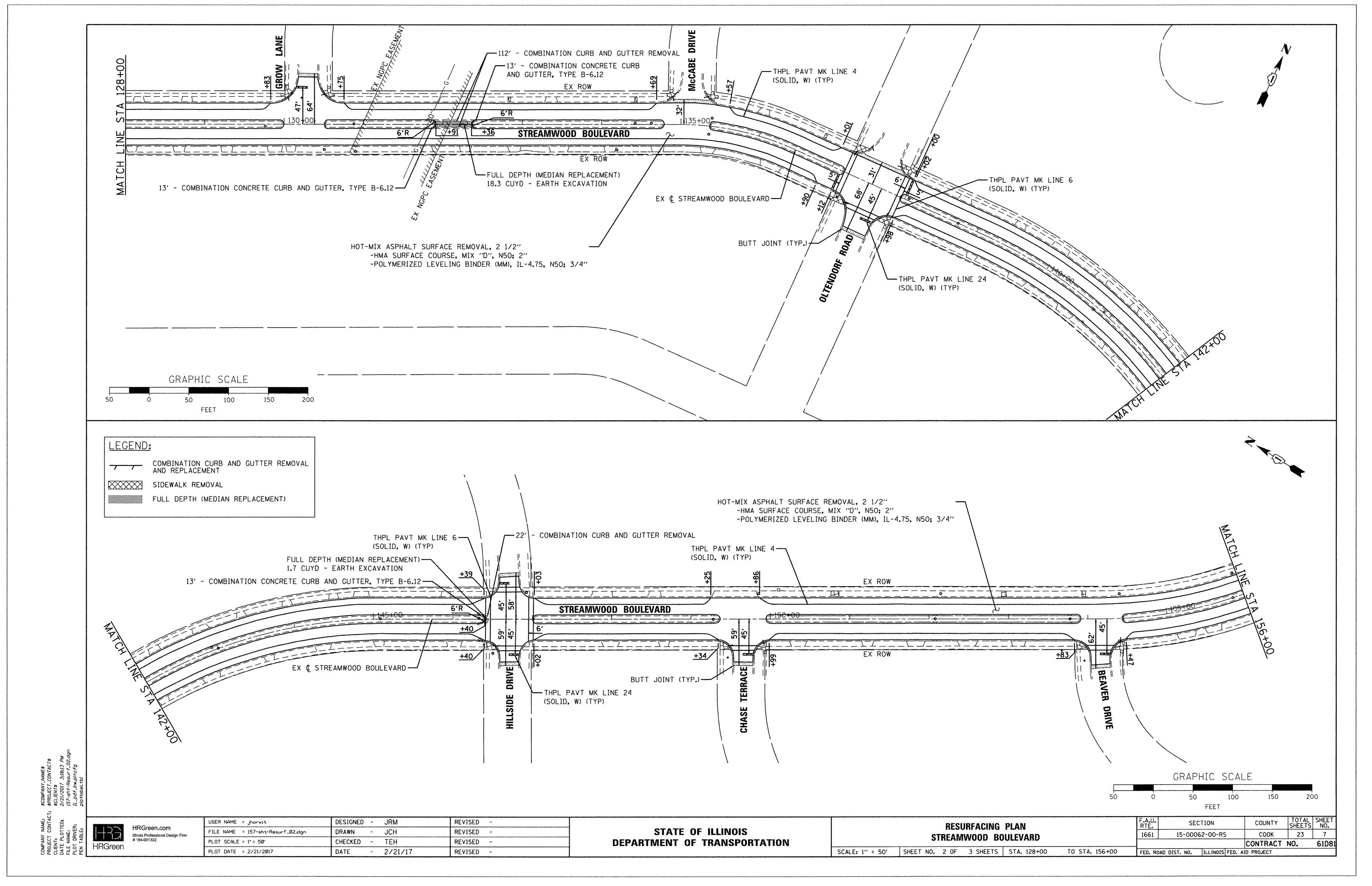
| MIXTURE TYPE                                            | AIR VOIDS<br>© Ndes |
|---------------------------------------------------------|---------------------|
| PAVEMENT RESURFACING                                    |                     |
| HMA SURFACE COURSE, MIX "D", N50; 2"                    | 4.0% @ 50 GYR.      |
| POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50; 3/4"    | 3.5% @ 50 GYR.      |
| FULL DEPTH (MEDIAN REPLACEMENT)                         |                     |
| HMA SURFACE COURSE, MIX "D", N50; 2"                    | 4.0% @ 50 GYR.      |
| POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50; 3/4"    | 3.5% @ 50 GYR.      |
| HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19MM), 6 1/4 | 4.0% @ 50 GYR.      |
| PATCHING (see note)                                     |                     |
| CLASS D PATCHES, (HMA BINDER, IL-19mm)                  | 4.0% @ 70 GYR.      |

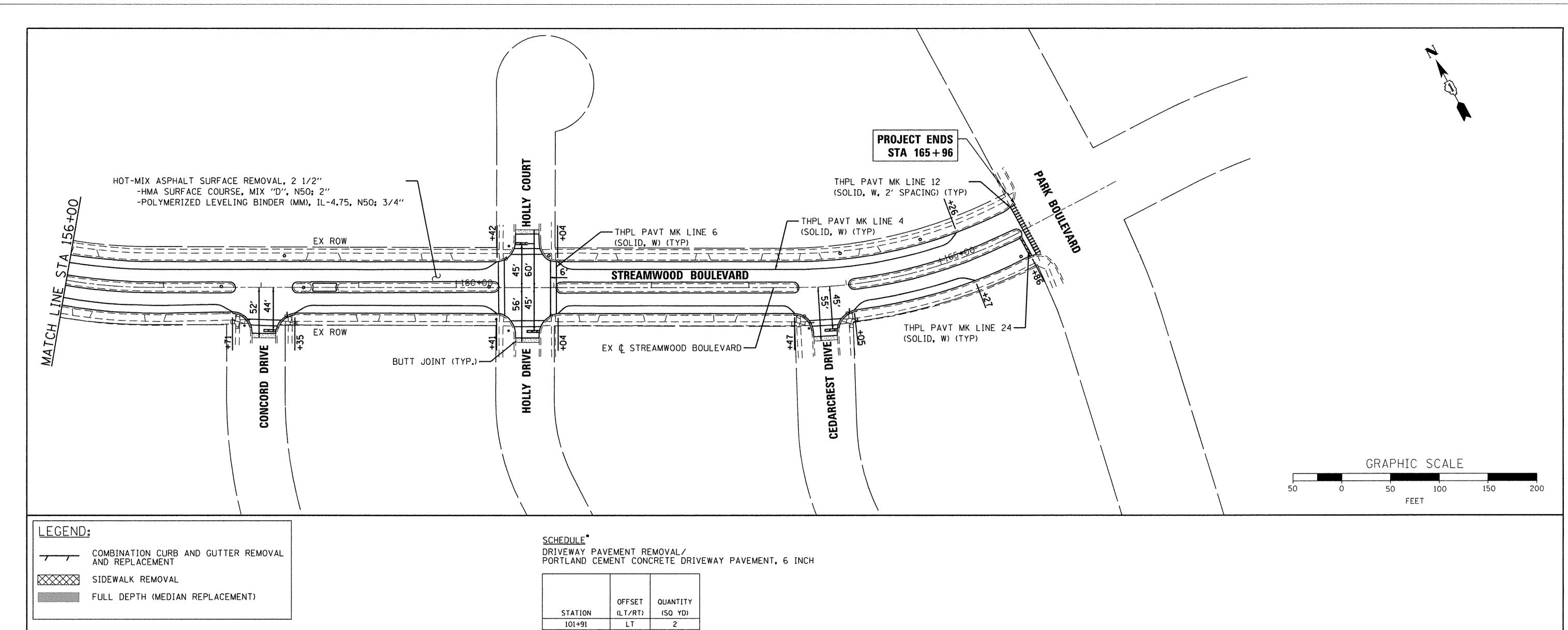
- 1. THE UNIT WEIGHT TO CALCULATE ALL HMA SURFACE MIXTURE QUATITIES IS 112 LBS/SQ YD/IN
- 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- 3. FOR USE OF RECYCLED MATERIAL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

| USER NAME = Jhorwit         | DESIGNED - | JRM     | REVISED - |  |
|-----------------------------|------------|---------|-----------|--|
| FILE NAME = 157-sht-typ.dgn | DRAWN -    | JCH     | REVISED - |  |
| PLOT SCALE = N.T.S.         | CHECKED -  | TEH     | REVISED - |  |
| PLOT DATE = 2/21/2017       | DATE -     | 2/21/17 | REVISED - |  |

|                      | ТУРІ                                  | F.A.U. SECT |      | TION    | COUNTY    | TOTAL     | SHEET<br>NO.  |             |      |   |
|----------------------|---------------------------------------|-------------|------|---------|-----------|-----------|---------------|-------------|------|---|
|                      | TYPICAL SECTIONS STREAMWOOD BOULEVARD |             |      |         | 1661      | 15-0006   | 52-00-RS      | соок        | 23   | 5 |
| SINLAWWOOD DOULLVAND |                                       |             |      |         |           | <u> </u>  | CONTRACT      | NO.         | 61D8 |   |
|                      | SHEET NO. 1 OF                        | 1 SHEETS    | STA. | TO STA. | FED. ROAD | DIST. NO. | ILLINOIS FED. | AID PROJECT |      |   |







|         | OFFSET  | QUANTITY |
|---------|---------|----------|
| STATION | (LT/RT) | (SO YD)  |
| 101+91  | LT      | 2        |
| 105+20  | RT      | 2        |
| 108+58  | LT      | 2        |
| 111+02  | LT      | 2        |
| 115+60  | RT      | 2        |
| 121+92  | RT      | 2        |
| 128+07  | RT      | 2        |
| 128+77  | LT      | 2        |
| 138+70  | LT      | 2        |
| 145+06  | RT      | 2        |
| 145+92  | LT      | 2        |
| 148+54  | LT      | 2        |
| 148+66  | RT      | 2        |
| 150+34  | RT      | 2        |
| 156+14  | LT      | 2        |
| 156+22  | RT      | 2        |
| 159+09  | RT      | 2        |
| 159+74  | RT      | 2        |
| 159+81  | LT      | 2        |
| 161+36  | RT      | 2        |
| 161+54  | LT      | 2        |
| 162+03  | RT      | 2        |
| 162+52  | LT      | 2        |
| 162+75  | RT      | 2        |
| 163+21  | LT      | 2        |

• NOTE: DRIVEWAY REMOVAL AND REPLACEMENT IS FOR INFORMATIONAL PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES TO BE DETERMINED AND MARKED BY THE ENGINEER PRIOR TO CONSTRUCTION.

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\$CLIENT\$
2/21/2017 3:18:14 PW
157-sht-Resurf\_03.dgn
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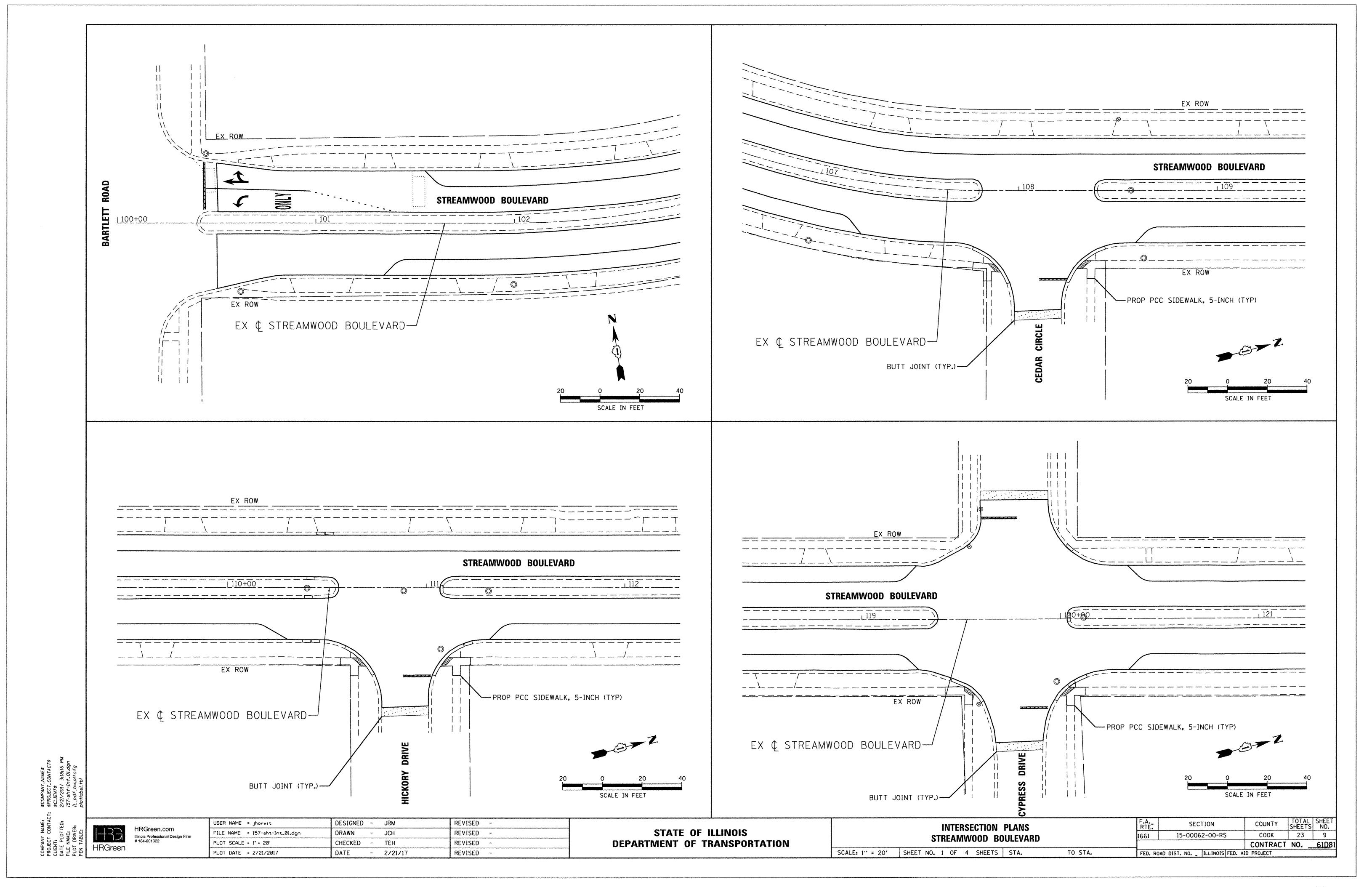
HRGreen

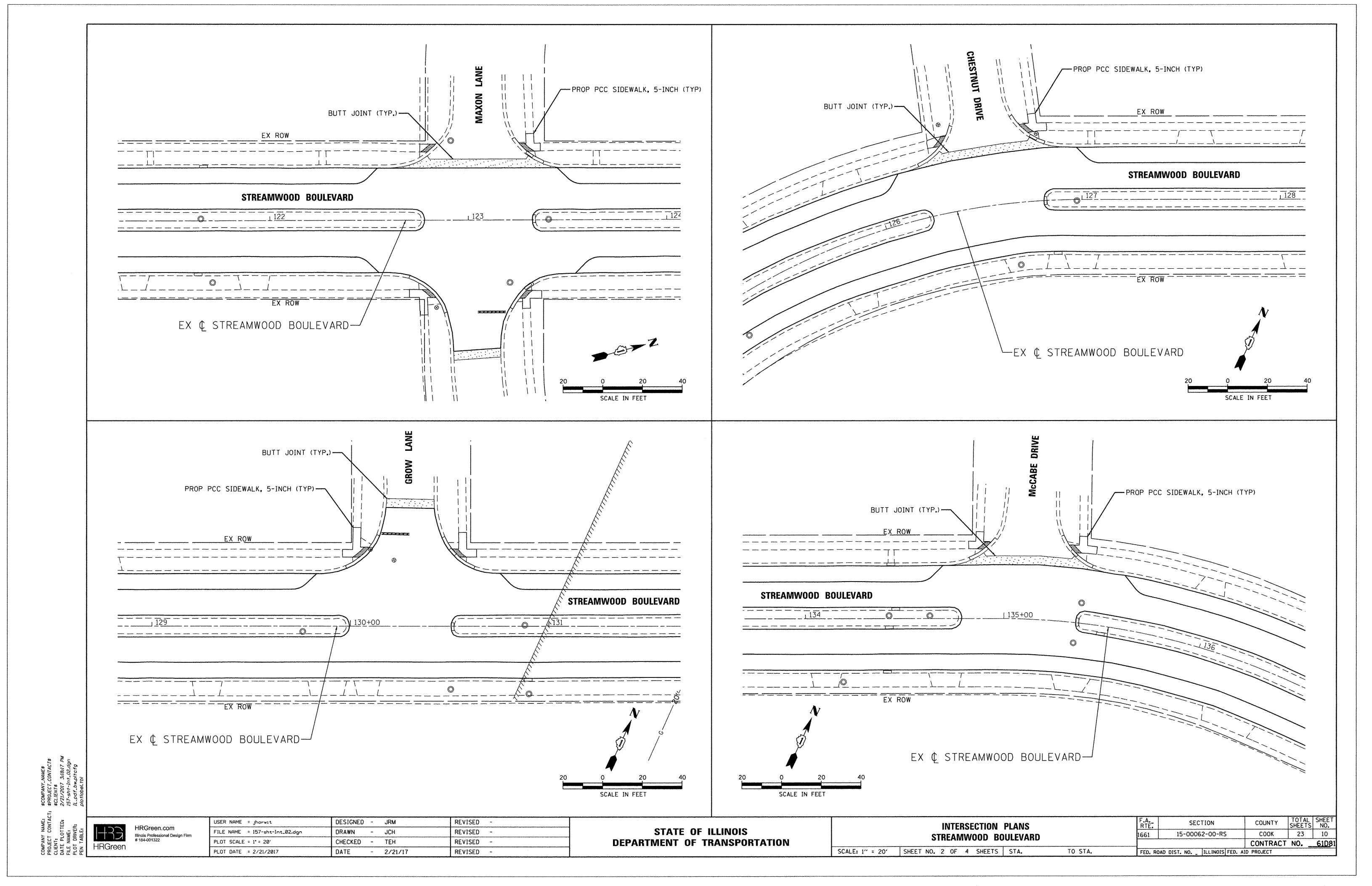
HRGreen.com
Illinois Professional Design Firm
# 184-001322

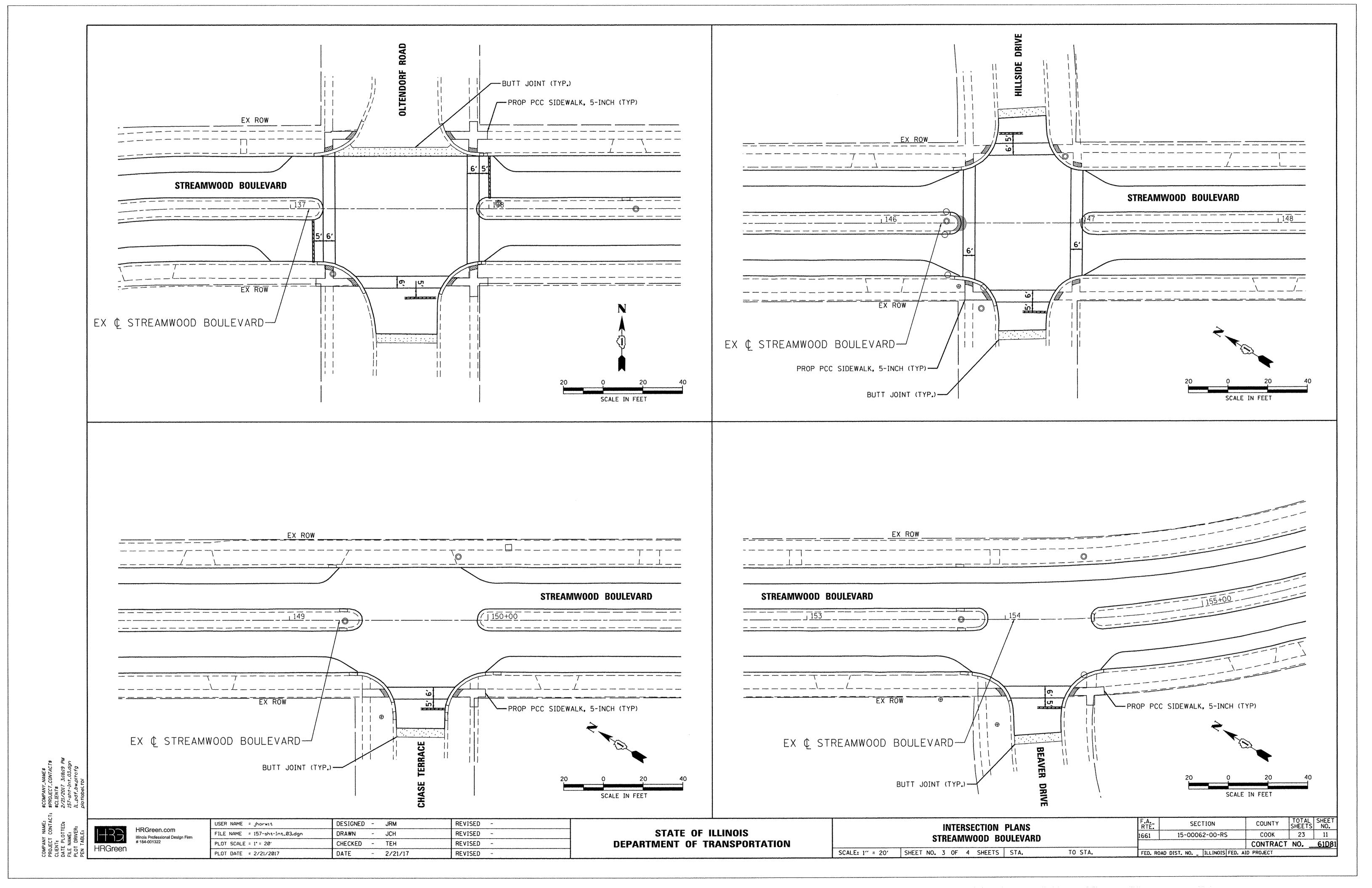
| USER NAME = jhorwit               | DESIGNED - JRM | REVISED - |  |
|-----------------------------------|----------------|-----------|--|
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| PLOT SCALE = 1° = 50′             | CHECKED - TEH  | REVISED - |  |
| PLOT DATE = 2/21/2017             | DATE - 2/21/17 | REVISED - |  |

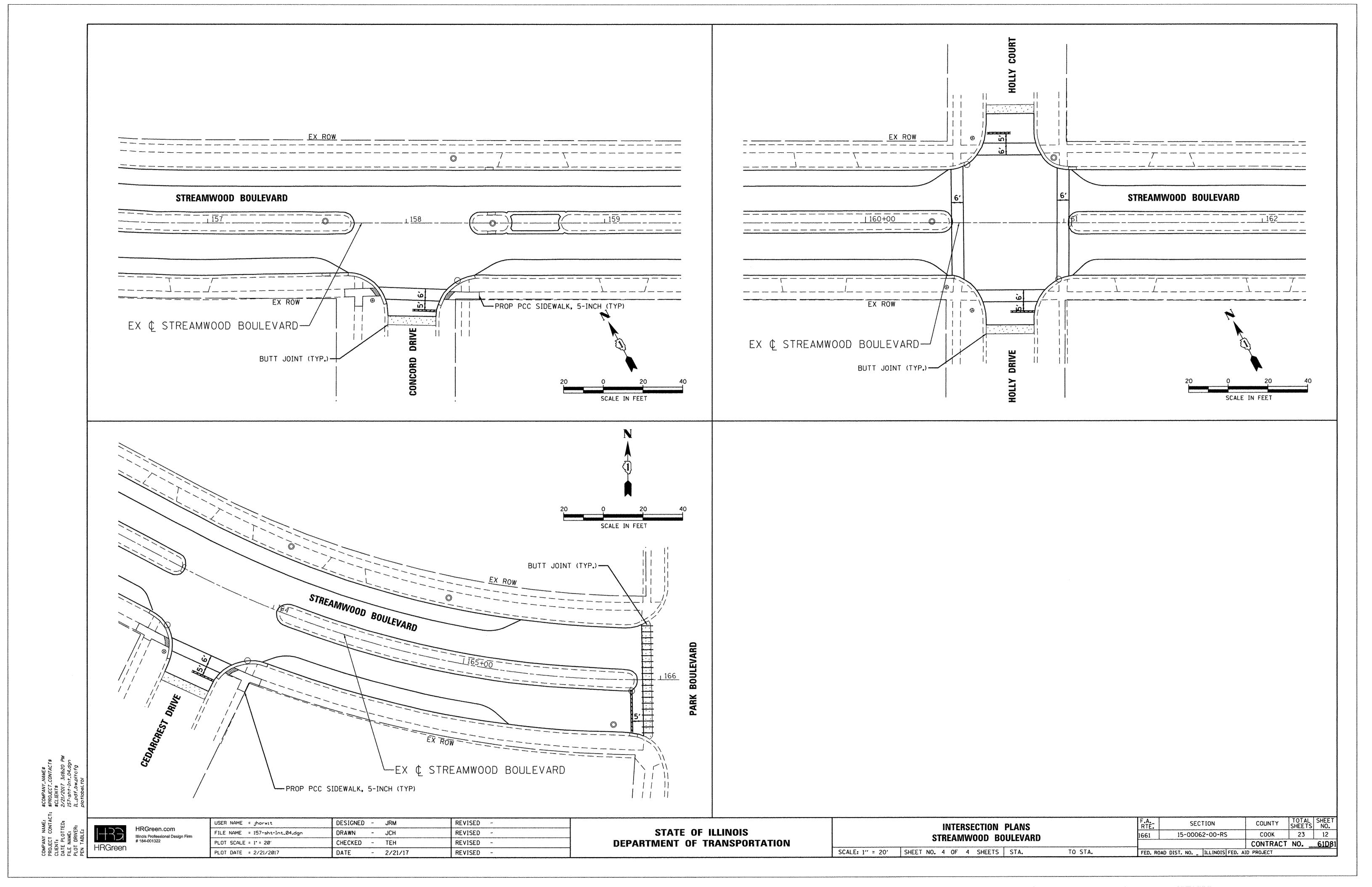
|                 |                | SURFACING PLAN<br>MWOOD BOULEVARD |                |
|-----------------|----------------|-----------------------------------|----------------|
| SCALE: 1" = 50" | SHEET NO. 3 OF | 3 SHEETS STA. 156+00              | TO STA. 165+96 |

| FED. RO        | AD DIST. NO. | ILLINOIS FED. |          | 1102            | 01001        |
|----------------|--------------|---------------|----------|-----------------|--------------|
|                |              |               | CONTRACT | NO.             | 61D81        |
| 1661           | 15-00        | 062-00-RS     | СООК     | 23              | 8            |
| F.A.U.<br>RTE. | S            | ECTION        | COUNTY   | TOTAL<br>SHEETS | SHEET<br>NO. |

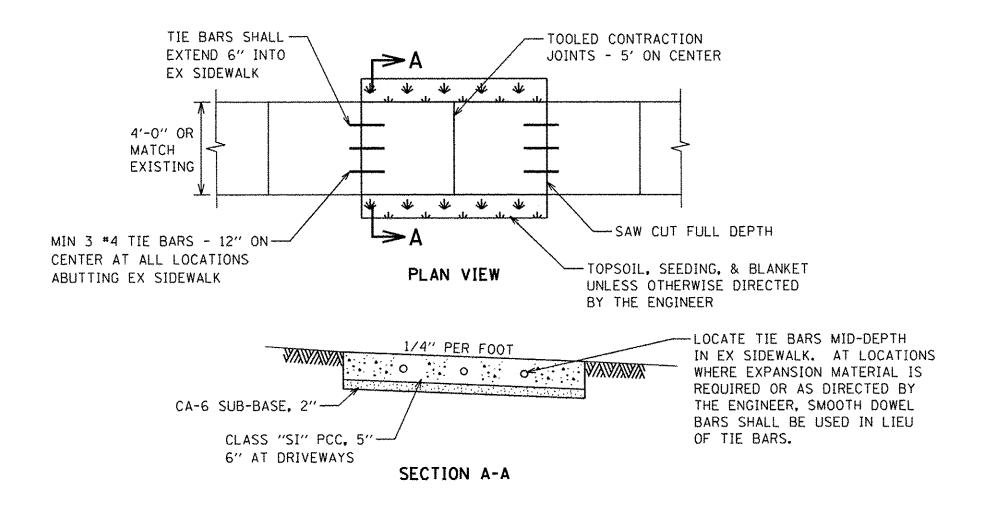




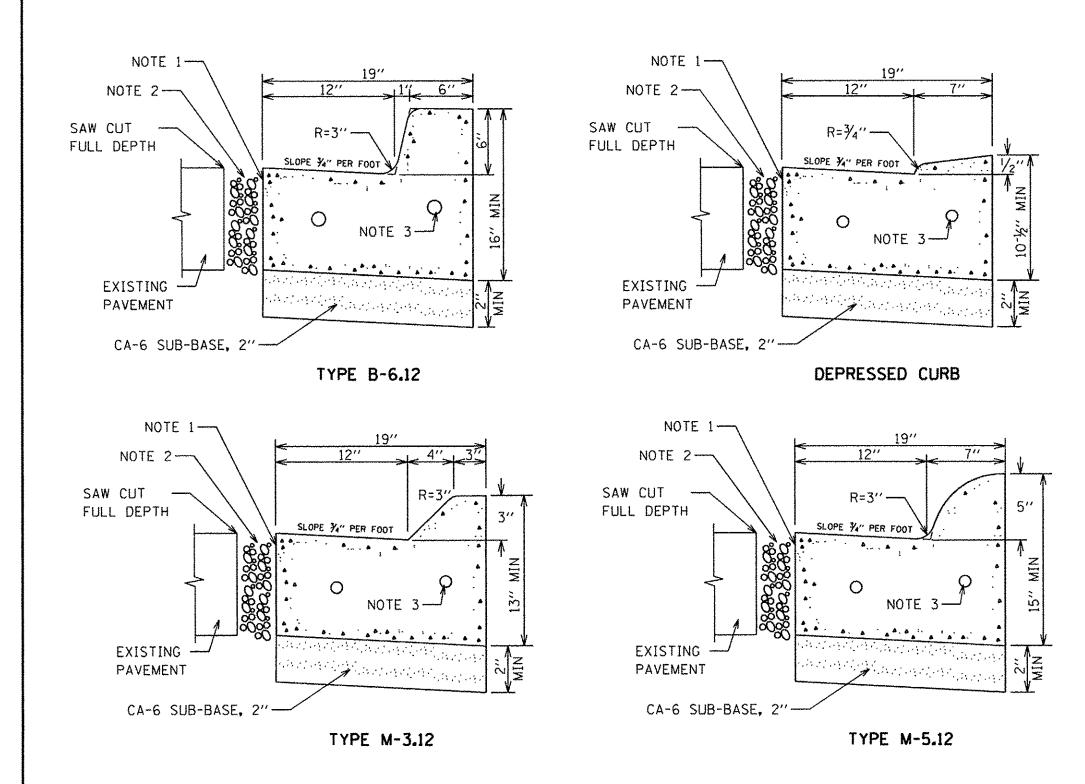




#### PCC SIDEWALK



# PCC CURB & GUTTER

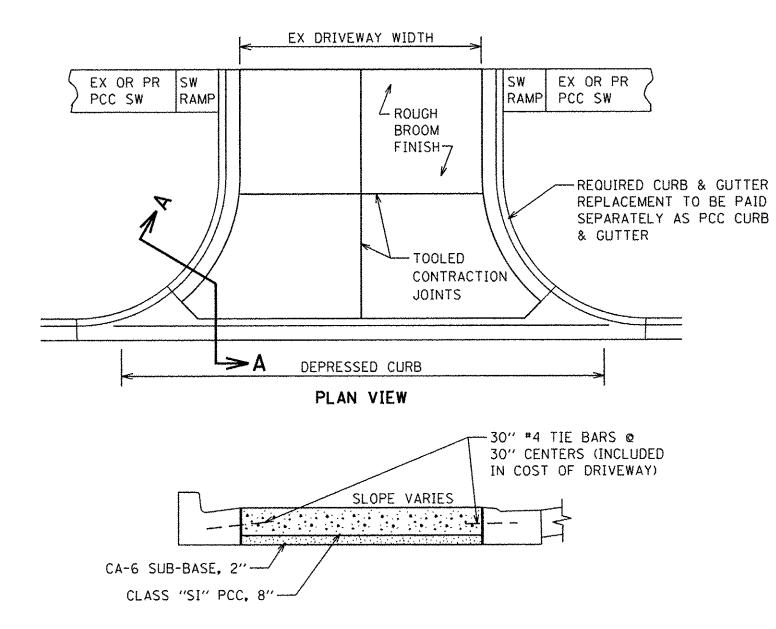


NOTE 1 - THE MINIMUM THICKNESS OF CONCRETE AT THE FACE OF THE GUTTER SHALL BE 10"

NOTE 2 - ON ALL RESURFACING STREETS AND AS DIRECTED BY THE ENGINEER IN THE MISCELLANEOUS AREAS THE GAP BETWEEN THE EXISTING PAVEMENT AND THE NEW CURB SHALL BE BACKFILLED WITH 8" OF PCC BASE COURSE. THE GAP BETWEEN THE PCC BASE COURSE AND PAVEMENT SURFACE SHALL BE BACKFILLED WITH 2" OF TEMPORARY STONE AT ALL LOCATIONS WHERE THE CURB IS DEPRESSED.

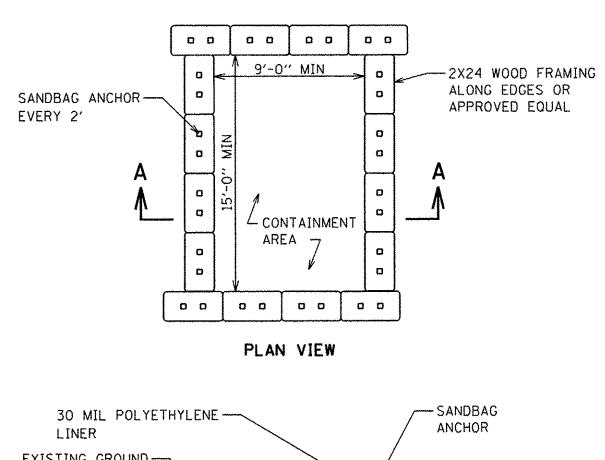
NOTE 3 - TIE BARS OR SMOOTH DOWELL BARS SHALL BE PROVIDED AT VERTICAL FACES OF EXISTING CURB & GUTTER.

#### PCC DRIVEWAY. COMMERCIAL



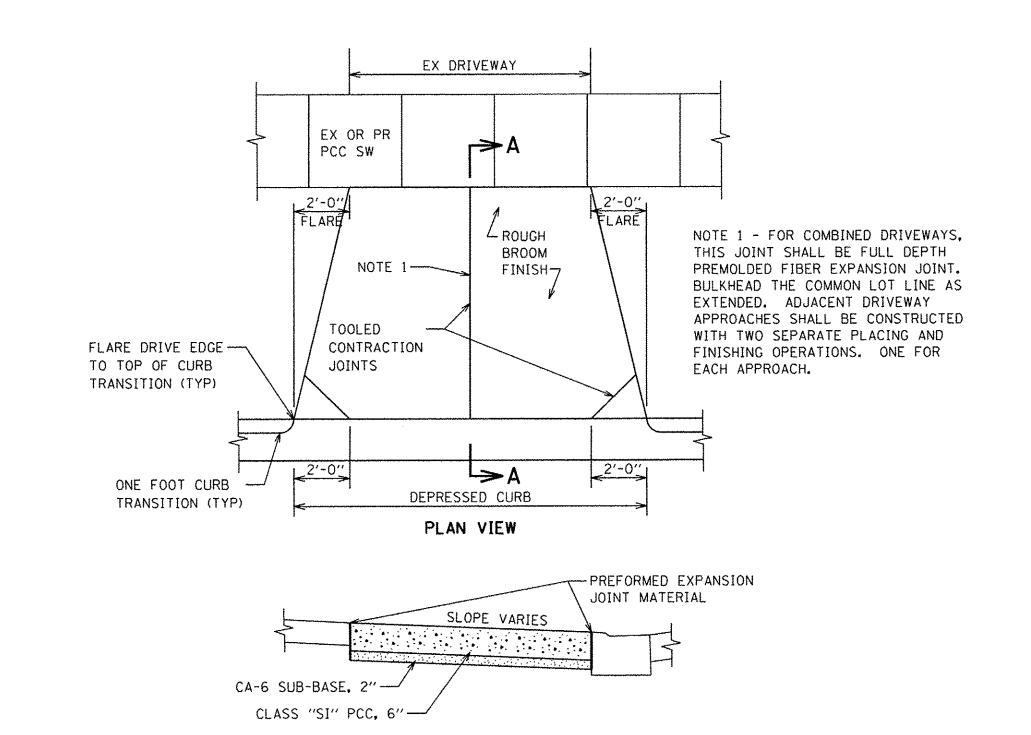
SECTION A-A

# CONCRETE WASHOUT AREA

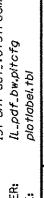


WASHOUT FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL

#### PCC DRIVEWAY. RESIDENTIAL



SECTION A-A



HRGreen.com Illinois Professional Design Firm # 184-001322 HRGreen

| USER NAME = jhorwit                       | DESIGNED |              | JRM     | REVISED | -        |
|-------------------------------------------|----------|--------------|---------|---------|----------|
| FILE NAME = 157-sht-det_VofStreemwood.dgn | DRAWN    |              | JCH     | REVISED | -        |
| PLOT SCALE =                              | CHECKED  | -            | TEH     | REVISED | <b>≓</b> |
| PLOT DATE = 2/21/2017                     | DATE     | <del>-</del> | 2/21/17 | REVISED |          |
|                                           |          |              |         |         |          |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

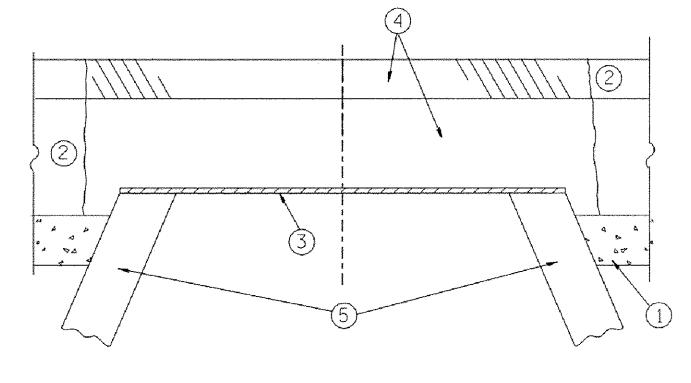
|        | VII       | LAGE | OF STREA | AMWOOD |         | F.A.U.<br>RTE. | SE        | CTION         | COUNTY      | TOTAL<br>SHEETS | SHEET<br>NO. |
|--------|-----------|------|----------|--------|---------|----------------|-----------|---------------|-------------|-----------------|--------------|
|        | DETAILS   |      |          |        |         |                | 15-000    | 62-00-RS      | COOK        | 23              | 13           |
|        |           |      | DEIMILO  |        |         |                |           |               | CONTRACT    | NO.             | 61D81        |
| SCALE: | SHEET NO. | OF   | SHEETS   | STA.   | TO STA. | FED. ROAD      | DIST. NO. | ILLINOIS FED. | AID PROJECT |                 |              |

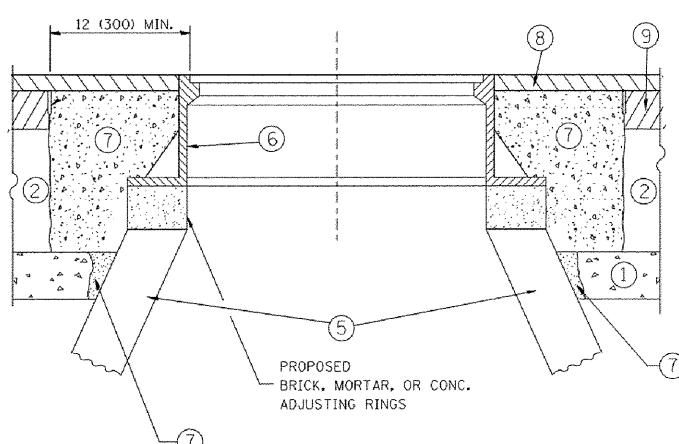
EXISTING GROUND -**CONTAINMENT** AREA

SECTION A-A

NOTES:

MAINTAINING WASHOUT FACILITY SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND SLURRY AND RETURNING THE FACILITY TO A FUNCTIONAL CONDITION





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

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

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

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

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

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

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

#### STAGE 2 (AFTER PAVEMENT MILLING)

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

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

#### LEGEND

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

#### LOCATION OF STRUCTURES:

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

#### BASIS OF PAYMENT:

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

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

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT

WITH MILLING

USER NAME = bauerdl DESIGNED - R. SHAH REVISED - R. WIEDEMAN 05-14-04 REVISED - R. BORO 01-01-07 c:\pw\_work\pwidot\bauerdl\d0108315\bd08.dgn DRAWN CHECKED -PLOT SCALE = 1968.5000 '/ m REVISED - R. BORO 03-09-11 DATE - 10-25-94 PLOT DATE = 12/6/2011 REVISED - R. BORO 12-06-11

STATE OF ILLINOIS

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING SHEET NO. 1 OF 1 SHEETS STA. SCALE: NONE TO STA.

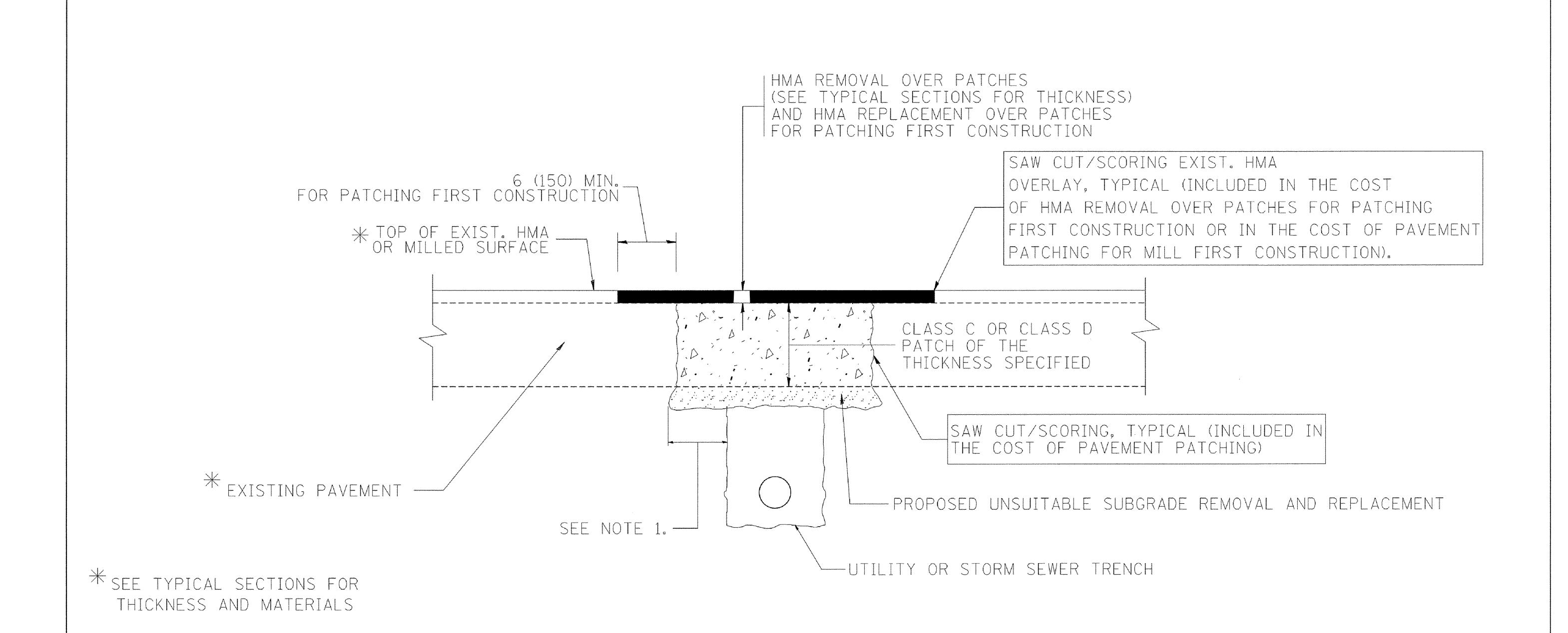
TOTAL SHEETS NO. SECTION \_23 | \_14\_ 1661 15-00062-00-RS COOK CONTRACT NO. 61D81 BD600-03 (BD-8)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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

C00x 15-00062-00-RS 157-8ht-det\_bd08,dgn

**DEPARTMENT OF TRANSPORTATION** 



# NOTES:

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

# SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

# SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST  $4/_2$  INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

TO STA.

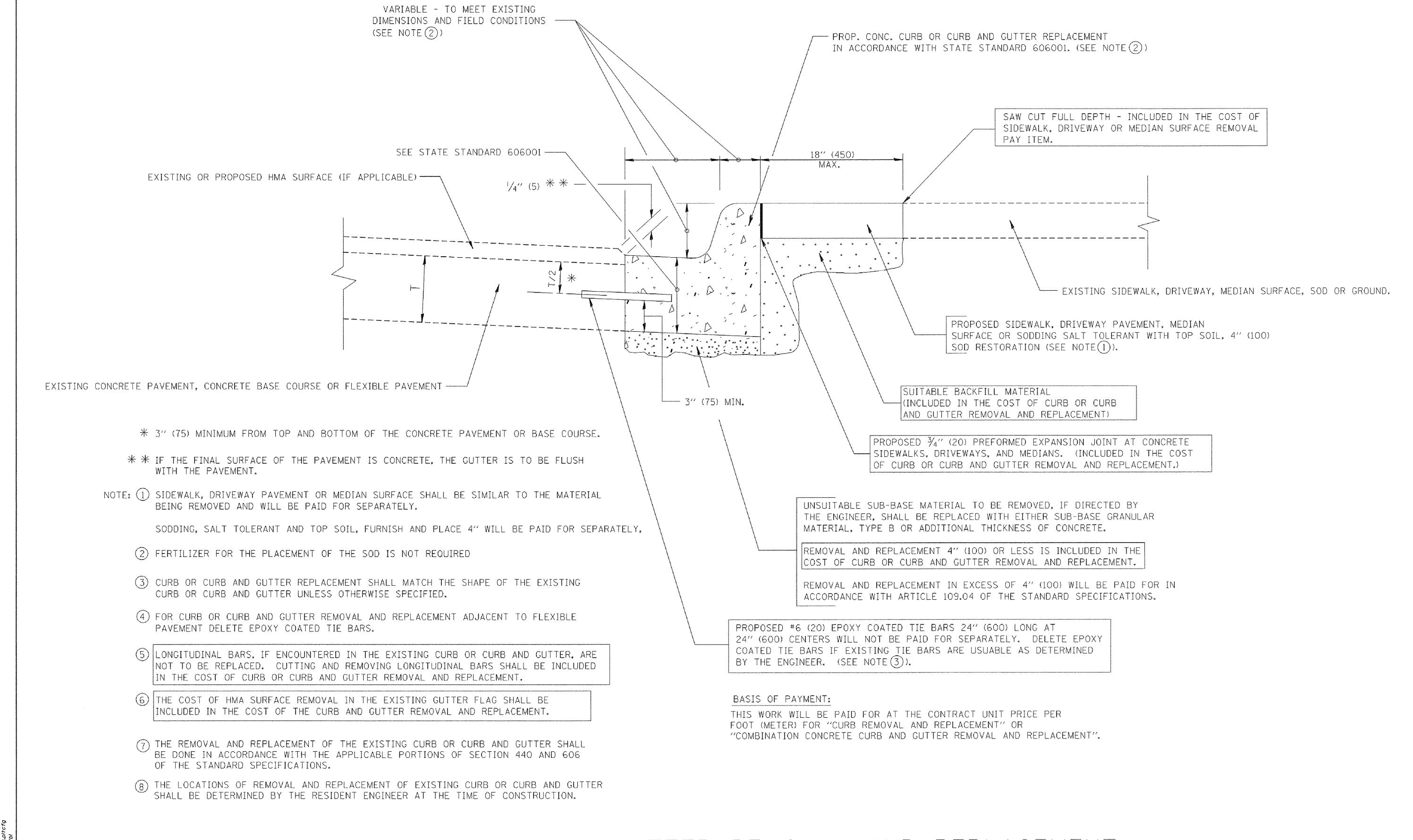
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

|      | FIL€       |
|------|------------|
| ola  | N TABLE:   |
| 11.4 | OT DRIVER: |
| 157  | E NAME:    |

| NAME =                       | USER NAME ≈ bauerdl        | DESIGNED - R. SHAH | REVISED | *** | A. ABBAS 04-27-98 |
|------------------------------|----------------------------|--------------------|---------|-----|-------------------|
| ojects\diststd22x34\bd22,dgn |                            | DRAWN -            | REVISED | _   | R. BORO 01-01-07  |
|                              | PLOT SCALE = 50.000 '/ IN. | CHECKED -          | REVISED | **  | R. BORO 09-04-07  |
|                              | PLOT DATE = 10/27/2008     | DATE - 10-25-94    | REVISED |     | K. ENG 10-27-08   |

|        |      |       |     | P/ | IVE | M  | ENT PATCH | ING FOR |
|--------|------|-------|-----|----|-----|----|-----------|---------|
|        |      |       |     | HN | IA  | SU | IRFACED P | AVEMENT |
| SCALE: | NONE | SHEET | NO. | 1  | OF  | 1. | SHEETS    | STA.    |

|        | F.A.U.<br>RTE. | SECTION                         | COUNTY      | TOTAL<br>SHEETS | SHEET<br>NO. |
|--------|----------------|---------------------------------|-------------|-----------------|--------------|
|        | 1661           | 15-00062-00-RS                  | COOK        | _23_            | _15_         |
| ****** |                | BD400-04 (BD-22)                | CONTRACT    | NO.             | 61D81        |
|        | FED. R         | OAD DIST. NO. 1 ILLINOIS FED. A | AID PROJECT |                 |              |



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

DESIGNED - A. HOUSEH REVISED - R. SHAH 10-03-96 USER NAME = drivakosgn DRAWN REVISED - A. ABBAS 03-21-97 :\pw\_work\pwidot\drivakosgn\d0108315\bd24.dqn REVISED - M. GOMEZ 01-22-01 CHECKED -PLOT SCALE = 50.000 '/ IN. PLOT DATE = 12/15/2009 DATE - 03-11-94 REVISED - R. BORO 12-15-09

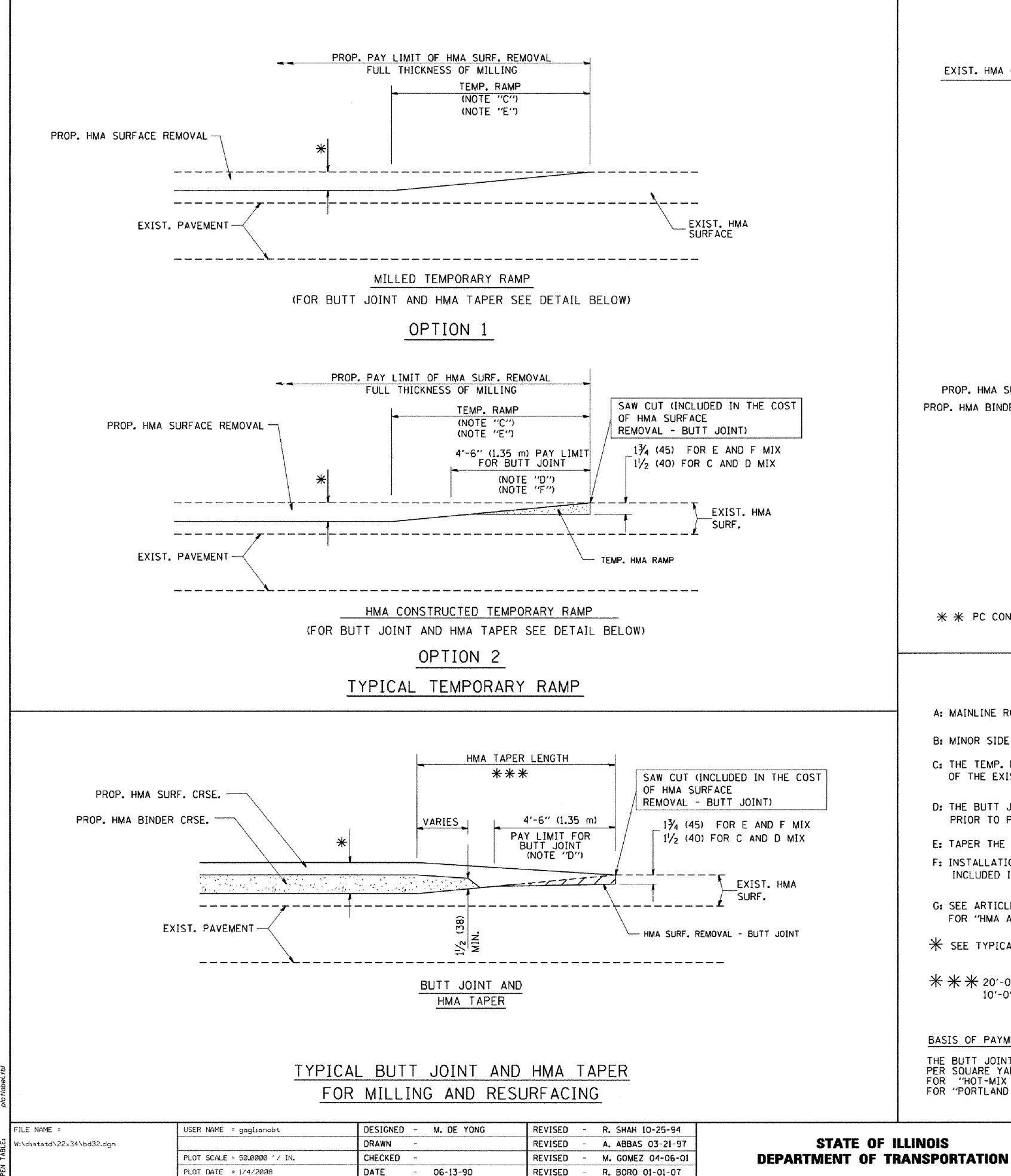
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  **CURB OR CURB AND GUTTER** REMOVAL AND REPLACEMENT

\_23\_ COOK 16 1661 15-00062-00-RS CONTRACT NO. 61D81 BD600-06 (BD-24) FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

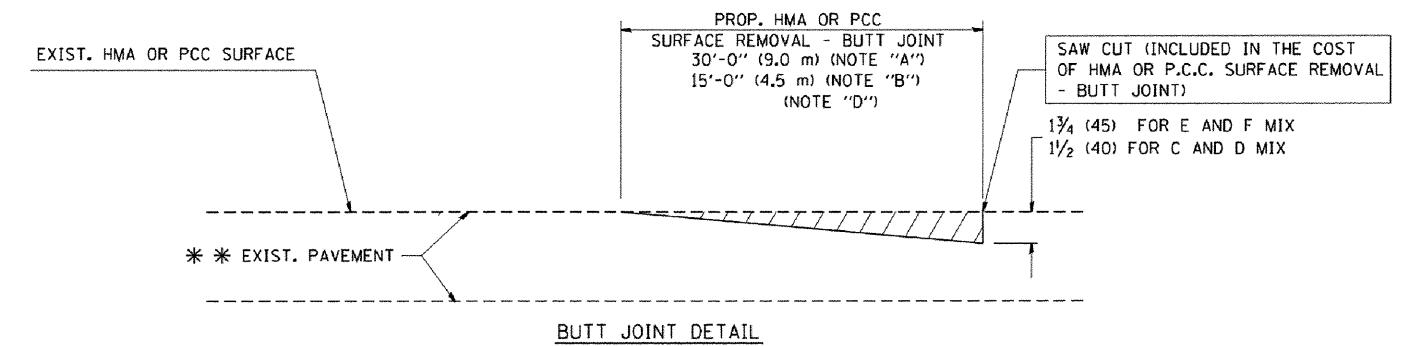
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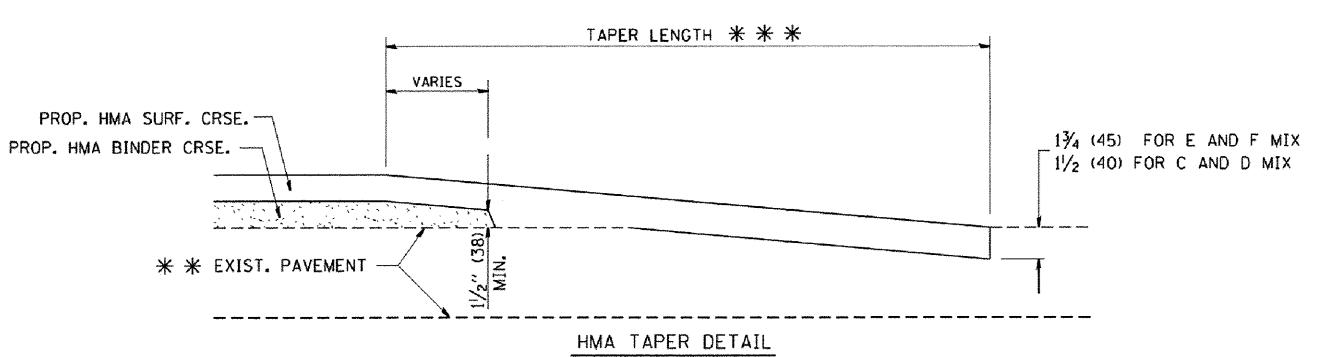
SHEET NO. 1 OF 1 SHEETS STA. SCALE: NONE

TO STA.



COOK 15-00062-00-RS 157-sht-det\_bd32.dgn





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

## NOTES

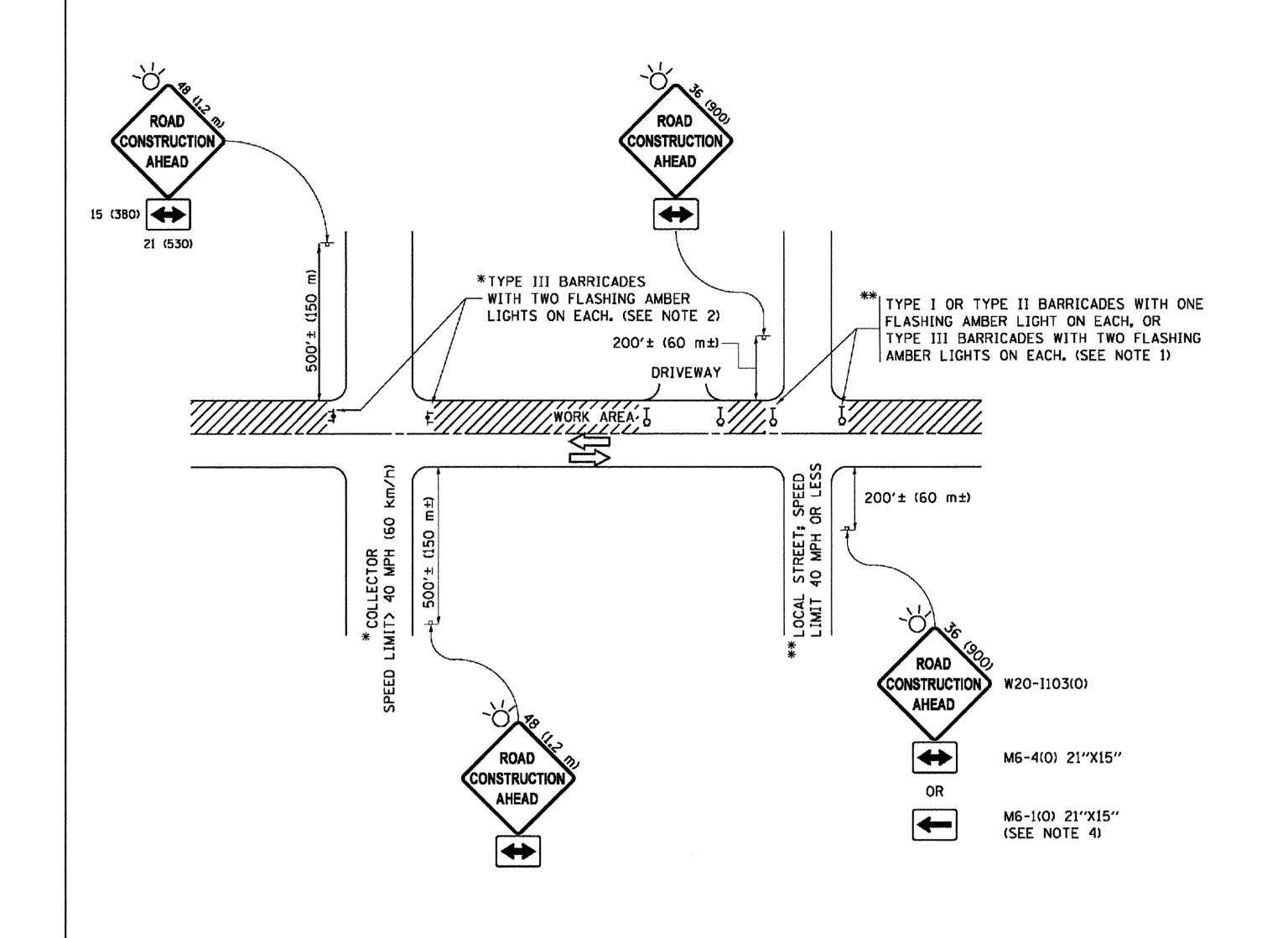
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-O"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

#### BASIS OF PAYMENT:

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

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

COUNTY SECTION **BUTT JOINT AND** 23 17 1661 15-00062-00-RS COOK **HMA TAPER DETAILS** CONTRACT NO. 61D81 BD400-05 BD32 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. 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:
  - O) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 × 36 (900×900) 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:
  - d) 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).

SCALE: NONE

- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS.
  INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE
  COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = footemJ DESIGNED - L.H.A. REVISED - A. HOUSEH 10-15-96
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PLOT SCALE = 50.000 '/ in.

Default

Default

PLOT DATE = 9/15/2016

DATE - 06-89

REVISED - A. HOUSEH 10-15-96
REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 9/15/2016

DATE - 06-89

REVISED - A. SCHUETZE 09-15-16

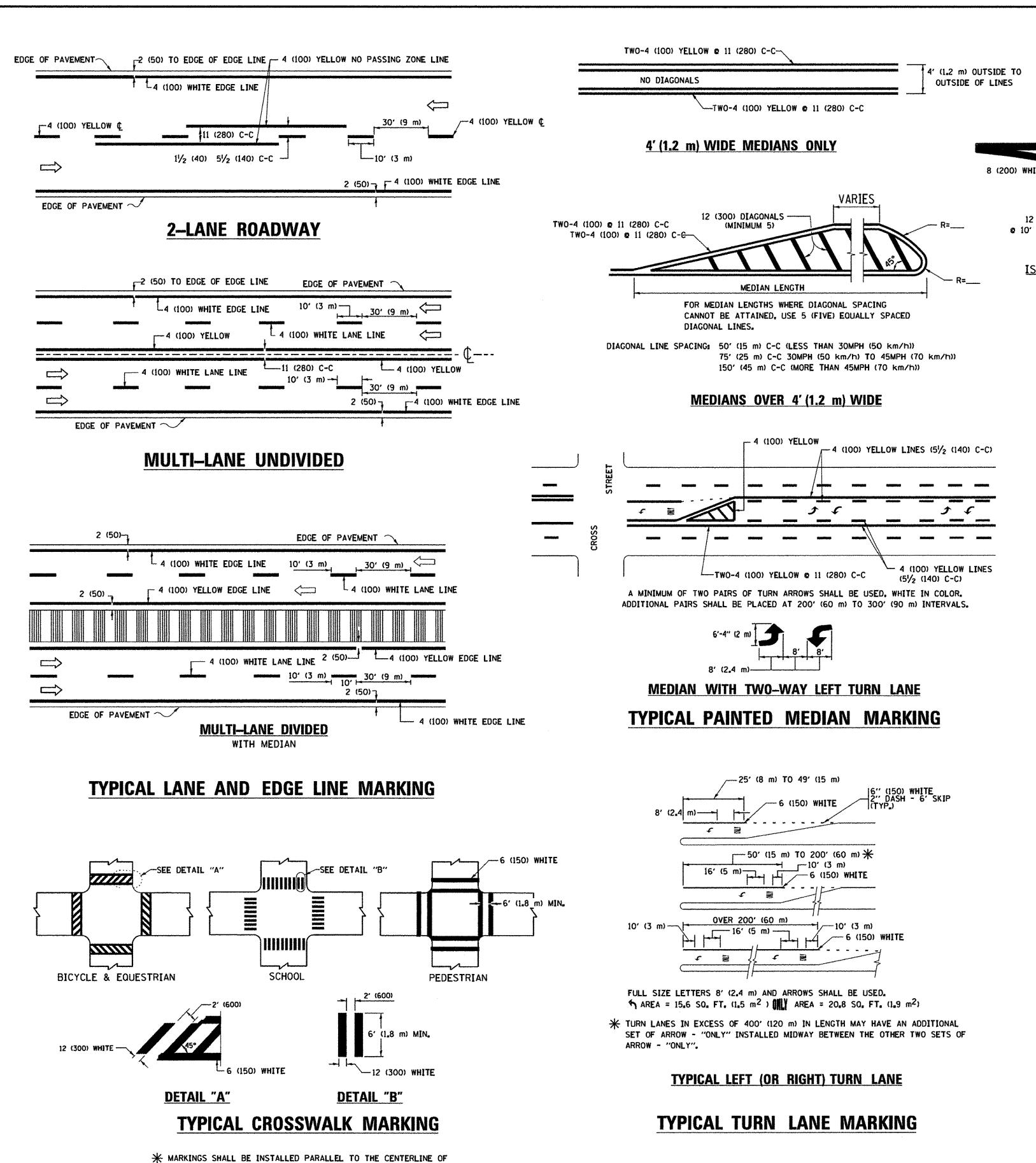
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

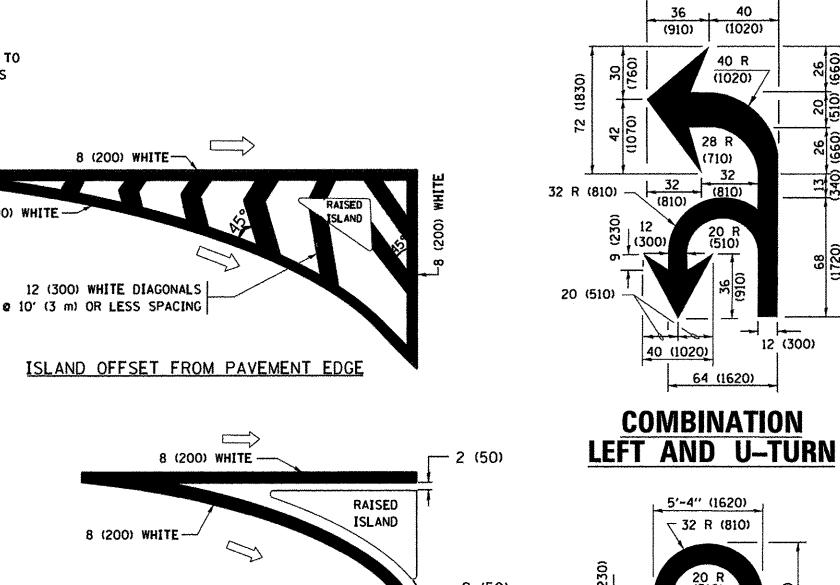
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

TO STA.

SHEET 1 OF 1 SHEETS STA.

C00K 15-00062-00-RS 157-sht-det\_tc10.dgn





ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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

|                                                                                             |                                                                                         | <u>U-1</u>                         | <u>rurn</u>                                             | GREATER OR WHEN SPECIFIED IN PLANS.                                                                                                                                |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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:<br>FOR ONE DIRECTION<br>FOR BOTH DIRECTIONS                          | 4 (100)<br>2 <b>e</b> 4 (100)                                                           | SOLID<br>SOLID                     | YELLOW                                                  | 5½ (140) C-C FROM SKIP-DASH CENTERLINE<br>11 (280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEEN                                                                        |
| LANE LINES                                                                                  | 4 (100)<br>5 (125) ON FREEWAYS                                                          | SKIP-DASH<br>SKIP-DASH             | WHITE<br>WHITE                                          | 10' (3 m) LINE WITH 30' (9 m) SPACE                                                                                                                                |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)                             | SAME AS LINE BEING<br>EXTENDED                                                          | SKIP-DASH                          | SAME AS LINE BEING EXTENDED                             | 2' (600) LINE WITH 6' (1.8 m) SPACE                                                                                                                                |
| EDGE LINES                                                                                  | 4 (100)                                                                                 | SOLID                              | YELLOW-LEFT<br>WHITE-RIGHT                              | OUTLINE MEDIANS IN YELLOW                                                                                                                                          |
| TURN LANE MARKINGS                                                                          | 6 (150) LINE: FULL<br>SIZE LETTERS &<br>SYMBOLS (8' (2.4m))                             | SOLID                              | WHITE                                                   | SEE TYPICAL TURN LANE MARKING DETAIL                                                                                                                               |
| TWO WAY LEFT TURN MARKING                                                                   | 2 @ 4 (100)<br>EACH DIRECTION<br>8' (2,4m) LEFT ARROW                                   | SKIP-DASH<br>AND SOLID<br>IN PAIRS | YELLOW                                                  | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH: 51/2 (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)<br>12 (300) & 45°<br>12 (300) & 90°                                         | SOLID<br>SOLID<br>SOLID            | WHITE<br>WHITE<br>WHITE                                 | NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.                                                                |
| STOP LINES                                                                                  | 24 (600)                                                                                | SOLID                              | WHITE                                                   | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS                                                                             | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID                              | YELLOW:<br>TWO WAY TRAFFIC<br>WHITE:<br>ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE<br>SEE TYPICAL PAINTED MEDIAN MARKING.                                                                                            |
| GORE MARKING AND<br>CHANNELIZING LINES                                                      | 8 (200) WITH 12 (300)<br>DIAGONALS @ 45°                                                | SOLID                              | WHITE                                                   | DIAGONALS:<br>15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h))<br>20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))<br>30' (9 m) C-C (OVER 45MPH (70 km/h))             |
| RAILROAD CROSSING                                                                           | 24 (600) TRANSVERSE<br>LINES; "RR" IS 6' (1.8 m)<br>LETTERS; 16 (400)<br>LINE FOR "X"   | SOLID                              | WHITE                                                   | SEE STATE STANDARD 780001<br>AREA OF:<br>"R"=3,6 SO. FT. (0.33 m <sup>2</sup> ) EACH<br>"X"=54.0 SO. FT. (5.0 m <sup>2</sup> )                                     |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')                                            | 12 (300) <b>e</b> 45°                                                                   | SOLID                              | WHITE - RIGHT<br>YELLOW - LEFT                          | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))<br>75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h))<br>150' (45 m) C-C (OVER 45MPH (70 km/h))                       |
| U TURN ARROW                                                                                | SEE DETAIL                                                                              | SOLID                              | WHITE                                                   | 16.3 SF                                                                                                                                                            |
| 2 ARROW COMBINATION<br>LEFT AND U TURN                                                      | SEE DETAIL                                                                              | SOLID                              | WHITE                                                   | 30.4 SF                                                                                                                                                            |

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO

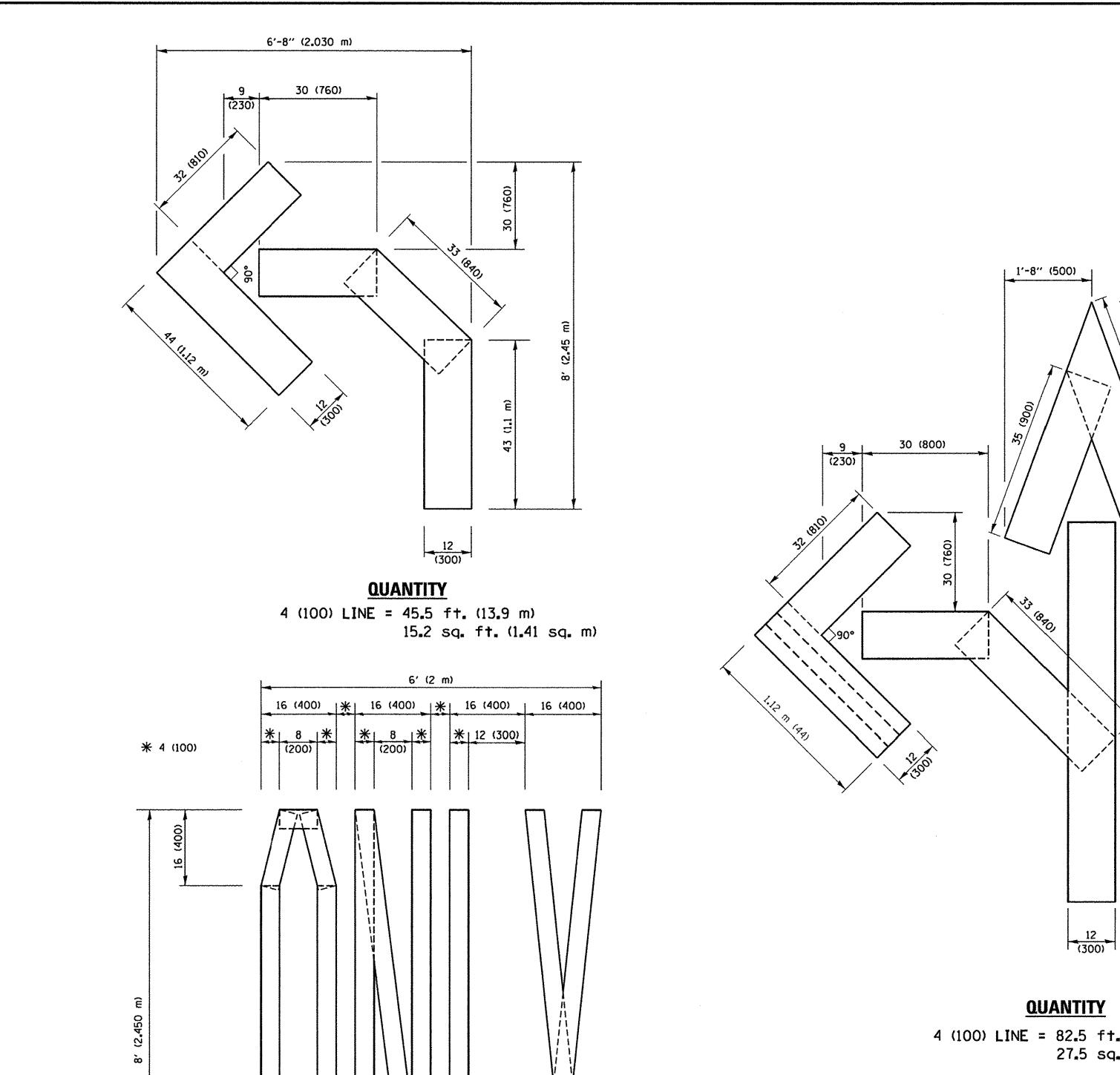
All dimensions are in inches (millimeters) unless otherwise shown.

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

|       |                           |         | DIS      | TRICT O   | NE       |                | F.A.U<br>RTE. | SECTION       | COUNTY      | TOTAL<br>SHEETS | SHEET<br>NO. |
|-------|---------------------------|---------|----------|-----------|----------|----------------|---------------|---------------|-------------|-----------------|--------------|
|       | TYPICAL PAVEMENT MARKINGS |         |          |           | 1661     | 15-00062-00-RS | COOK          | _23_          | _19_        |                 |              |
|       |                           | 117     | IUAL FAI | ACIMICIAI | INWUVINO |                |               | TC-13         | CONTRACT    | NO.             | 61D81        |
| SCALE | NONE                      | SHEET 1 | OF 1     | SHEETS    | STA.     | TO STA.        |               | ILLINOIS FED. | AID PROJECT |                 |              |

USER NAME = footemj DESIGNED - EVERS REVISED - C. JUCIUS 09-09-09 DRAWM\CADData\CADsheets\tc13.dgn cuments\IDOT Offices\District 1\Projects\Dist - C. JUCIUS 07-01-13 PLOT SCALE = 50.000 ' / 10. CHECKED -REVISED - C. JUCIUS 12-21-15 PLOT DATE = 4/13/2016 DATE REVISED - C. JUCIUS 04-12-16 - 03-19-90

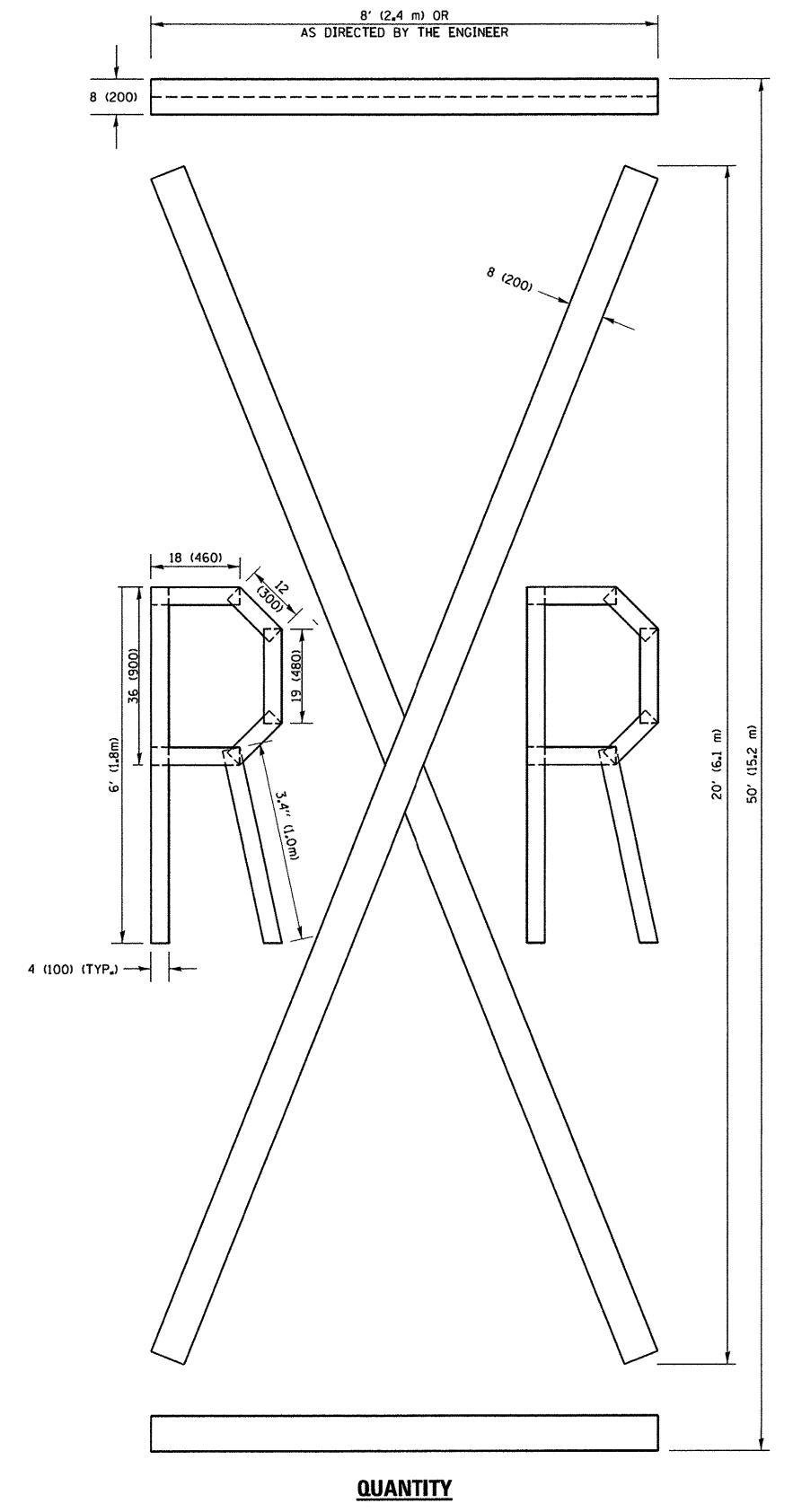
THE ROAD WHICH IT CROSSES



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.



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.

DESIGNED -REVISED -T. RAMMACHER 03-02-98 USER NAME = footemj REVISED -E. GOMEZ 08-28-00 cuments\IDOT Offices\District 1\Projects\Dist**5@RAWM**\CADData\CADsheets\tc16.dgn PLOT SCALE = 50.0000 '/ in. CHECKED -REVISED -E. GOMEZ 08-28-00 DATE - 09-18-94 REVISED - A. SCHUETZE 09-15-16 PLOT DATE = 9/15/2016

QUANTITY

4 (100) LINE = 64.1 ft. (19.5 m)

(300)

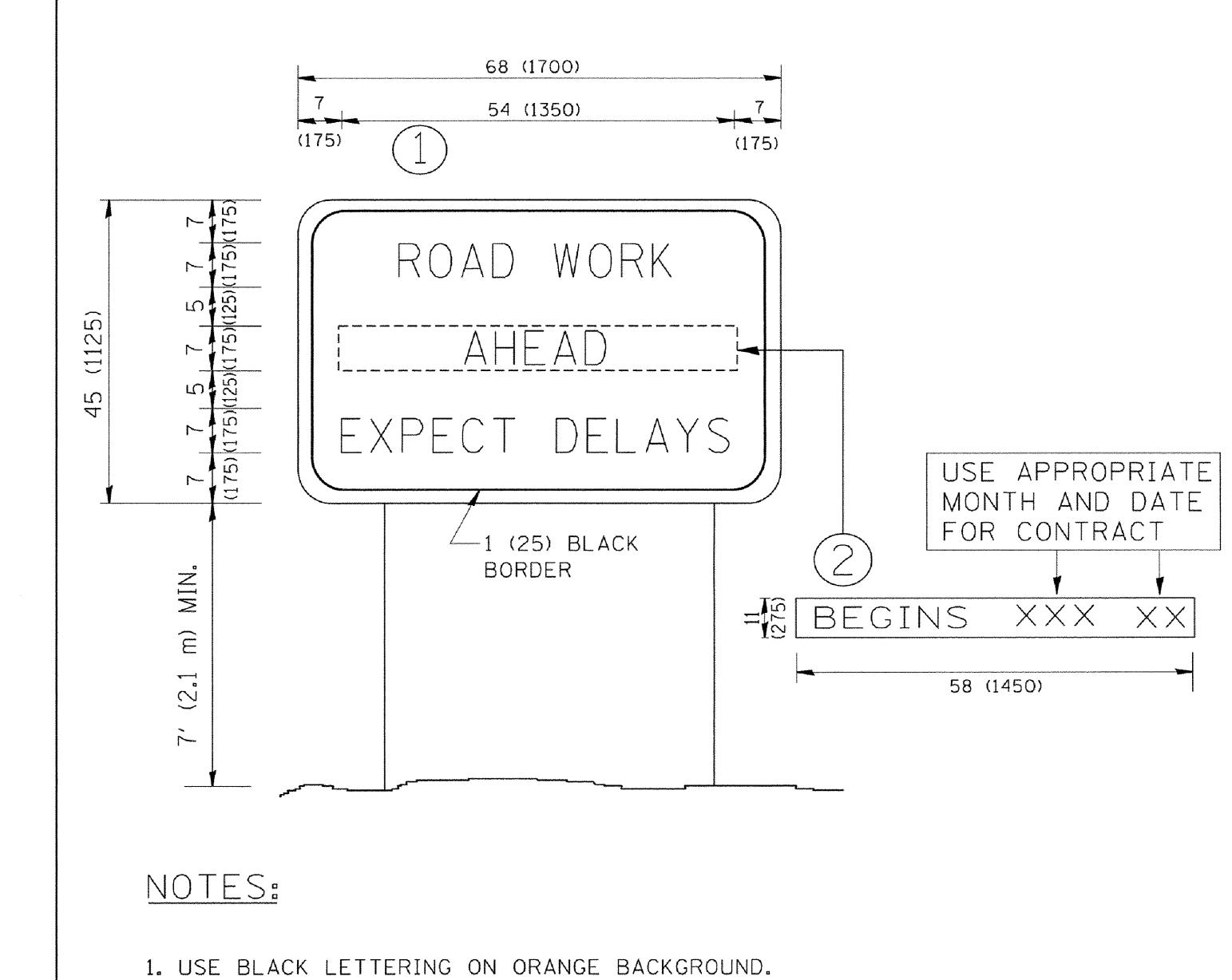
21.4 sq. ft. (1.99 sq. m)

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS SHEET NO. 1 OF 1 SHEETS STA. SCALE: NONE TO STA.

COUNTY TOTAL SHEET NO.

COOK 23 20 F.A.U. RTE. SECTION 1661 15-00062-00-RS CONTRACT NO. 61D8 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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

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

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED | - R. MIRS 09-15-97     |
|---------------------------|----------------------------|------------|---------|------------------------|
| W:\diststd\22x34\tc22.dgn |                            | DRAWN      | REVISED | - R. MIRS 12-11-97     |
|                           | PLOT SCALE = 50.000 '/ IN. | CHECKED -  | REVISED | -T. RAMMACHER 02-02-99 |
|                           | PLOT DATE = 1/4/2008       | DATE -     | REVISED | - C. JUCIUS 01-31-07   |

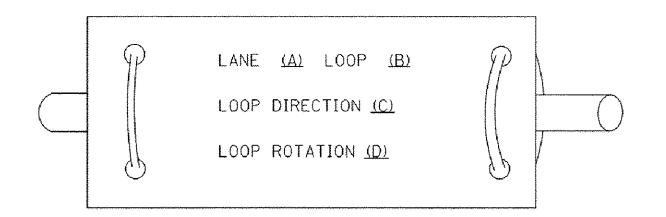
| STATE             | OF        | ILLINOIS       |
|-------------------|-----------|----------------|
| <b>DEPARTMENT</b> | <b>OF</b> | TRANSPORTATION |

|                  | ARTERIAL ROAD                |         | F.A.U.<br>RTE.                                  | SECTION        | COUNTY   | TOTAL<br>SHEETS | SHEE<br>NO. |
|------------------|------------------------------|---------|-------------------------------------------------|----------------|----------|-----------------|-------------|
| INFORMATION SIGN |                              |         | 1661                                            | 15-00062-00-RS | СООК     | _23_            | _21_        |
|                  |                              |         | TC-22                                           |                | CONTRACT | NO.             | 61D8        |
| ALE: NONE        | SHEET NO. 1 OF 1 SHEETS STA. | TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |          |                 |             |

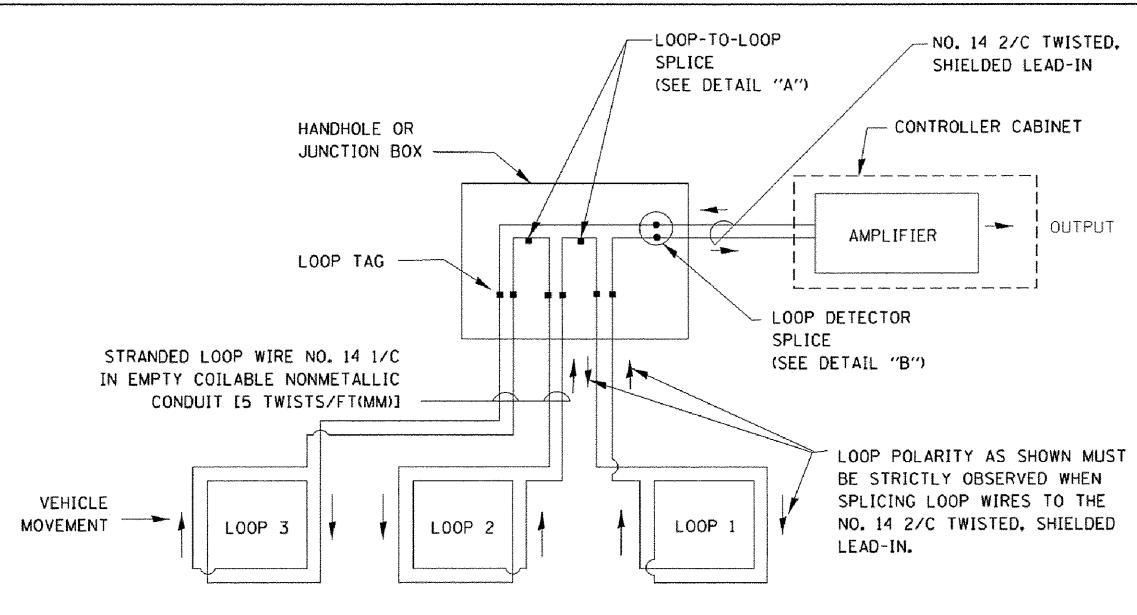
#### LOOP DETECTOR NOTES

- 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.

# LOOP LEAD-IN CABLE TAG

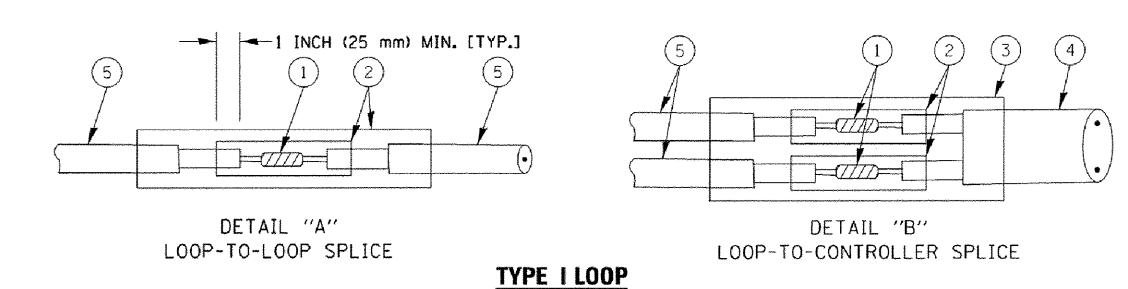


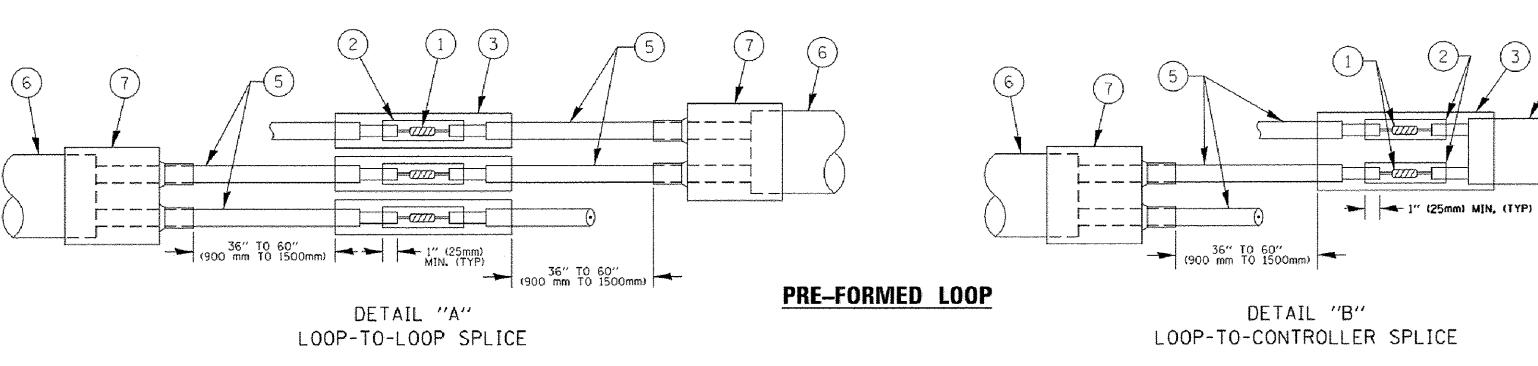
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



# **DETECTOR LOOP WIRING SCHEMATIC**

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





# LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES
  OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.

- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- The state of the s

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 DISTRICT ONE
 F.A.U. RTE.
 SECONDARD TRAFFIC SIGNAL DESIGN DETAILS

 SCALE: NONE
 SHEET NO. 2 OF 7 SHEETS STA. TO STA.
 FED. ROAD DIST. NO. 1

s \$COMPANY\_NAME\$

ACT: \$PROJECT\_CONTACT\$

\$CLIENT\$
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COMPANY NAME:
PROJECT CONTACT:
CLIENT:
DATE PLOTTED:
TILE NAME:
PLOT DRIVER:
PEN TABLE:

C00K 15-00062-00-RS 157-aht-det\_ta05b,dgn

# LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER 74777717-1" (25 mm) UNIT DUCT-TRENCHED (3.0 m)(3.0 m)TO E/P \*\* \* = (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. TRENCHED 1" (25 mm) UNIT DUCT (3) \* \* \* = (600 mm)STRAIGHT SAW CUTS PERPENDICULAR TO MEDIAN (TYP.) (3.6 m)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

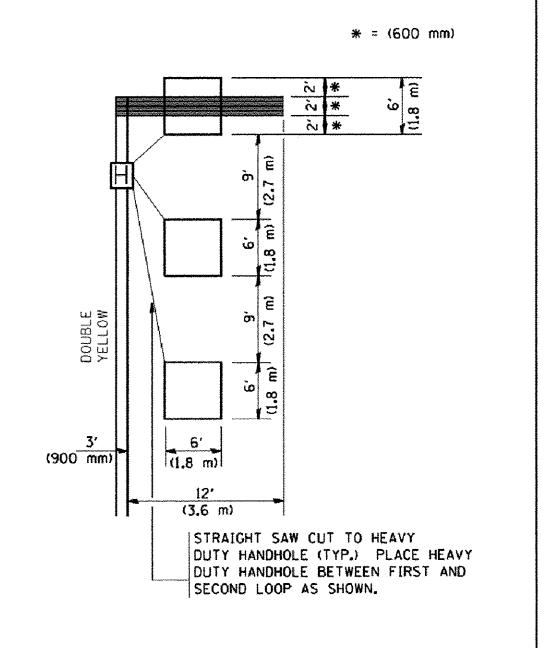
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

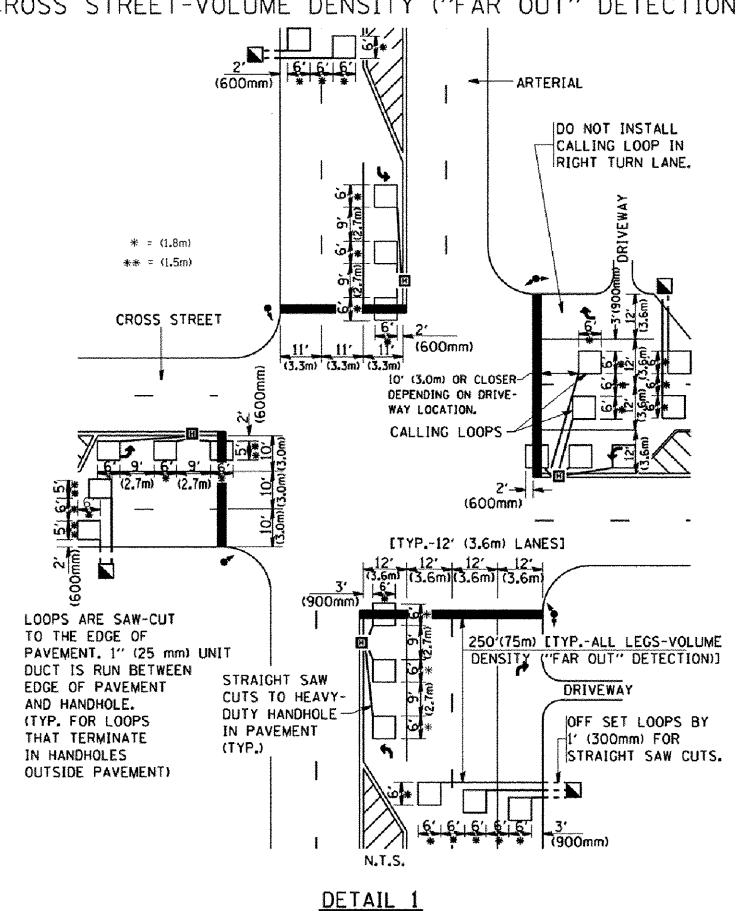
(PROTECTED / PERMITTED LEFT TURN PHASING)

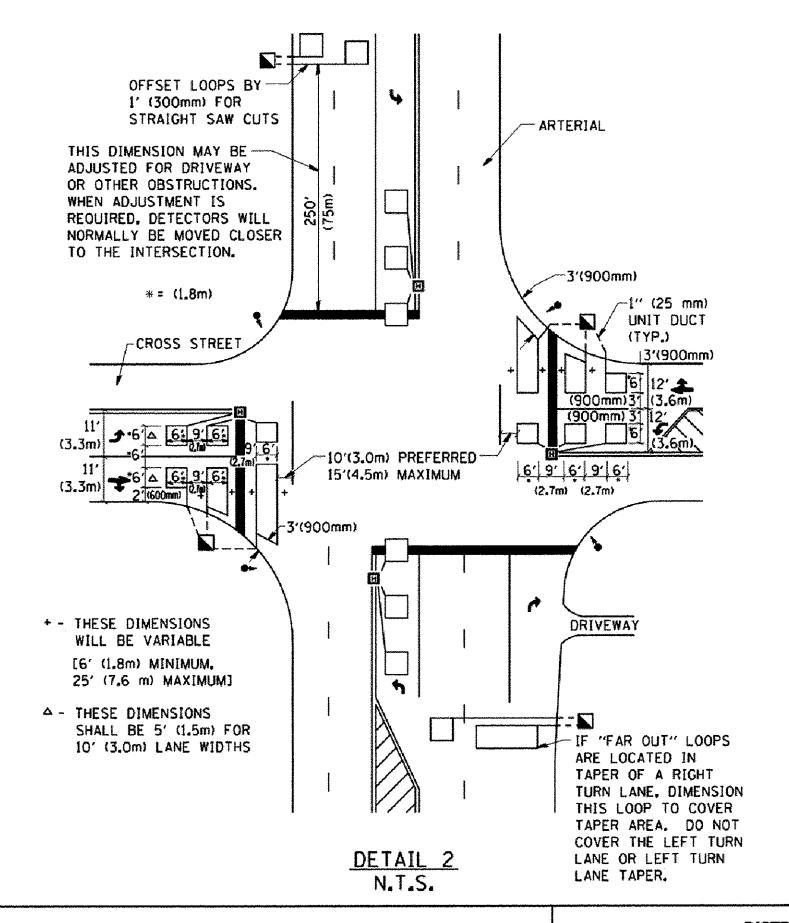


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

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





#### 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 SEPARATLY. 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

TO STA.

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

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

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

# NOTE:

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

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

C00K 15-00062-00-RS 157-sht-det\_ts07.dgn

DESIGNED REVISED USER NAME = gaglianobt DRAWN REVISED W:\diststd\22x34\ts07.dgn CHECKED - R.K.F. REVISED PLOT SCALE = 50.0000 '/ IN. PLOT DATE = 1/4/2008 DATE REVISED

N.T.S.

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING** SCALE: NONE SHEET NO. 1 OF 1 SHEETS | STA.

TOTAL SHEE SHEETS NO. COUNTY SECTION \_23 23\_ COOK 1661 15-00062-00-RS CONTRACT NO. 61D81 TS-07 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT