

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	1
		ILLINOIS	CONTRACT NO. 61H59	

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
 FOR LIST OF HIGHWAY STANDARDS SEE SHEET NO. 2  
**TRAFFIC DATA** 03-10-2023 LETTING ITEM 078

ADT:  
 TOUHY AVE. 29,500 VPD (2017)  
 GROSS POINT RD. 6,510 VPD (2018)  
 HARTS RD. 6,510 VPD (2018)

	SPEED POSTED	DESIGN SPEED
TOUHY AVE.	35 MPH	35 MPH
GROSS POINT RD.	35 MPH	35 MPH
HARTS RD.	35 MPH	35 MPH

**DESIGN DESIGNATION**  
 FAU 0341 (Touhy Avenue) - PRINCIPAL ARTERIAL  
 FAU 3519 (Gross Point Road/ Harts Road) - MAJOR COLLECTOR

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP 341 TOUHY AVENUE  
 AT GROSS POINT ROAD /HARTS ROAD  
 RECONSTRUCTION, WIDENING, ROADWAY LIGHTING & TRAFFIC SIGNAL  
 MODERNIZATION

SECTION: 13-00118-00-WR  
 PROJECT: 55J1(395)  
 VILLAGE OF NILES  
 COOK COUNTY  
 JOB: C-91-090-21

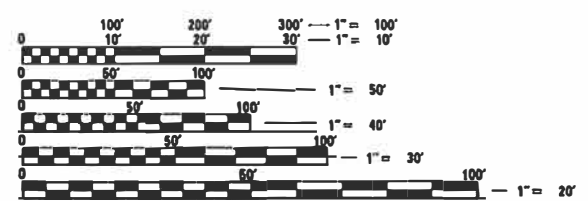
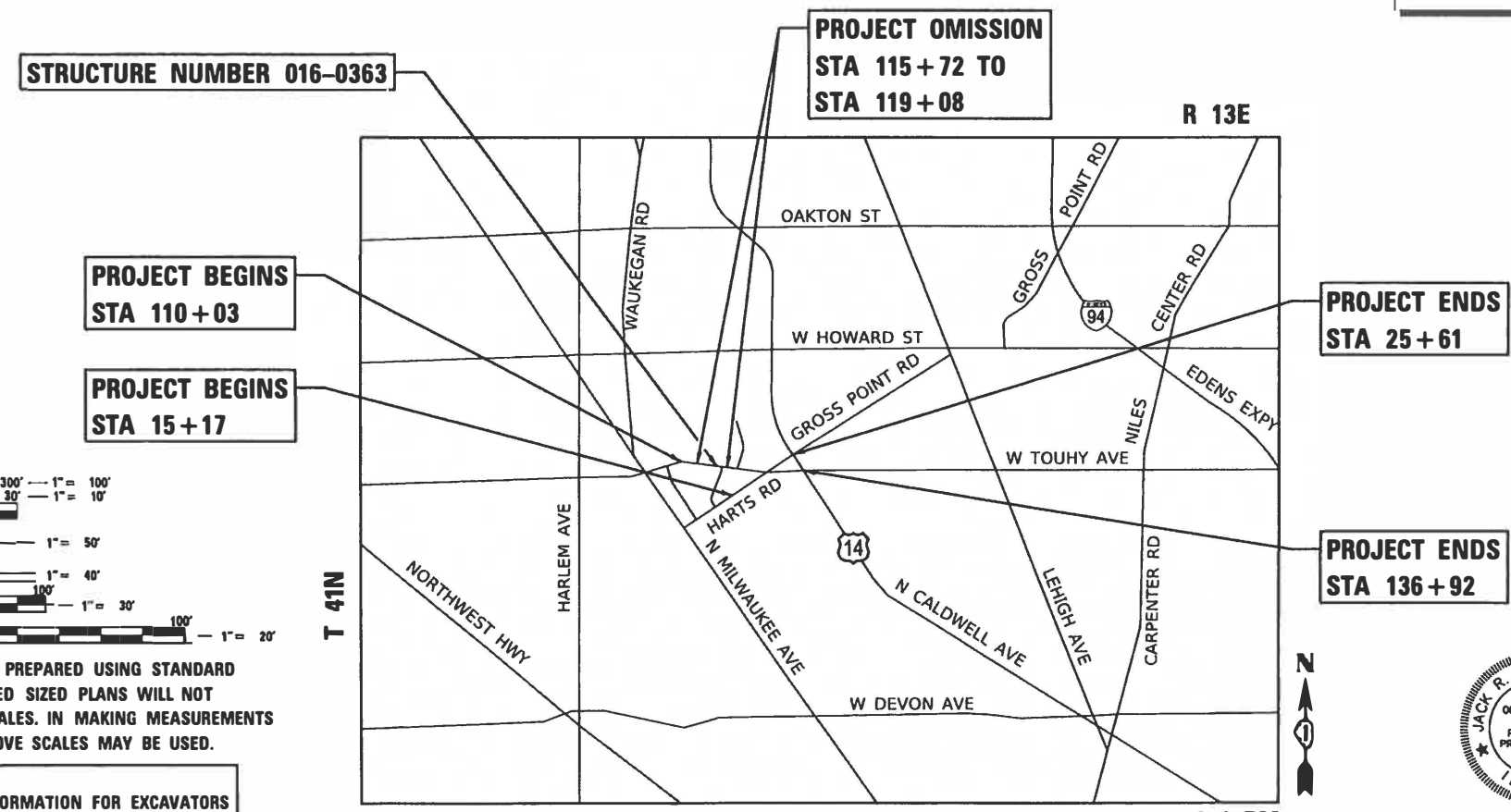
PROJECT LOCATED IN THE  
 VILLAGE OF NILES

Contact the Metropolitan  
 Water Reclamation District  
 of Greater Chicago 2 days  
 before starting work.  
 P (708) 588 4055  
 E WMCJobStart@mwrdd.org

FEDERAL AID PROGRAM ENGINEER: CARMEN E. RAMOS, P.E. SCHAUMBURG, IL



LOCATION OF SECTION INDICATED THIS: - [black box] -



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 EXCAVATORS  
 1-800-892-0123  
 OR 811

PROJECT ENGINEER: M. ZUZZIO  
 PROJECT MANAGER: J. MELHUISH

CONTRACT NO. 61H59

LOCATION MAP  
 N.T.S.

PROJECT LENGTH

GROSS LENGTH OF PROJECT= 3,678 FT. = 0.70 MILES  
 NET LENGTH OF PROJECT= 3,341 FT. = 0.64 MILES



PROFESSIONAL ENGINEER'S SIGN & SEAL  
 EXCLUDING SHEETS

*Jack Melhuish*  
 JACK R. MELHUISH, P.E.  
 EXPIRES: 11-30-23



1391 CORPORATE DRIVE, SUITE 203 | McHENRY, ILLINOIS 60050  
 Phone: 815.385.1778 | Toll Free: 800.728.7805 | Fax: 815.385.1781 | HRGreen.com  
 ILLINOIS PROFESSIONAL DESIGN FIRM #184-001322

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

APPROVED *12/20/23* 20 23  
*Tom Orman* PE  
 VILLAGE OF NILES

PASSED *Jan 3* 20 23  
*Chris*  
 DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID  
 BASED ON LIMITED REVIEW *January 3* 20 23  
*Joel Biss* / *LOB*  
 REGIONAL ENGINEER

PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS

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**STATE STANDARDS**

STANDARD NO.	LIST OF DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-05	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424021-06	DEPRESSED CURB FOR SIDEWALKS
424026-03	ENTRANCE / ALLEY PEDESTRIAN CROSSINGS
442201-03	CLASS C AND D PATCHES
601001-05	PIPE UNDERDRAINS
602001-02	CATCH BASIN, TYPE A
602011-02	CATCH BASIN, TYPE C
602301-04	INLET, TYPE A
602402-03	MANHOLE, TYPE A 5' DIAMETER
602406-11	MANHOLE, TYPE A 6' DIAMETER
602601-06	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-05	FRAME AND LIDS, TYPE 1
604051-04	FRAME AND GRATE, TYPE 11
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24" (600 MM) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-05	OFF-RD MOVING OPERATIONS, MULTILANE, 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
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS <= 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL TURN LANE
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, SW WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS, AND DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATION OF TYPE A AND B METAL POSTS (FOR SIGNS AND MARKERS)
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
836001-04	LIGHT POLE FOUNDATION
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877002-04	STEEL MAST ARM ASSEMBLY AND POLE 56' THROUGH 75'
878001-11	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

**DISTRICT ONE DETAILS**

STANDARD NO.	LIST OF DESCRIPTION
BD01	DRIVEWAY DETAILS-DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER ≥ TO 15 FT
BD02	DRIVEWAY DETAILS-DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER < TO 15 FT
BD07	DETAIL OF STORM SEWER CONNECTION TO EXISTING STORM SEWER
BD08	FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD12	MANHOLE WITH RESTRICTOR PLATE
BD24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BD32	BUTT JOINTS AND HMA TAPER
BD36	FIRE HYDRANT TO BE MOVED
BE215	LIGHTING CONTROLLER SINGLE DOOR
BE220	ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT
BE300	LIGHT POLE FOUNDATION 30' TO 35' M.H. 1 1/2" BOLT CIRCLE
BE310	LIGHT POLE FOUNDATION 40' TO 47' m.h. 15" BOLT CHARGE
BE702	MISCELLANEOUS DETAILS, SHEET B-J BOX EMBEDDED IN BARRIER WALL-INSTALLATION OF CONDUIT IN BRIDGE PARAPET EXPANSION JOINT-ELECTRICAL CONNECTION TO UNDERPASS LIGHTING
BE800	TEMPORARY LIGHT POLE
TC10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
TC13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TC16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS
TC22	ARTERIAL ROAD INFORMATION SIGN
TC26	DRIVEWAY ENTRANCE SIGNING
TS02	MAST ARM MOUNTED STREET NAME SIGNS
TS05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS

HRG PROJECT NO.: 191406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191406.dwg - sht - gemo's.dgn  
 PEN TABLE: 191406.tbl



USER NAME = mzuz210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, DISTRICT 1 DETAILS AND STATE STANDARDS**

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

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	2
CONTRACT NO. 61H59			FED. ROAD 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, JANUARY 1, 2022. THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2023. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THE PROJECT.
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1 IDOT AT (847) 705-4436 AND THE VILLAGE OF NILES AT (847) 588-7900 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).
- ALL ELEVATIONS SHOWN ON THE PLANS ARE ON THE NAVD88 DATUM.
- THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. CURB AND GUTTER ELEVATIONS SHOWN ALONG RETURNS AND AT POINTS OF CURVATURE, ETC. ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- SAW CUTTING WILL BE REQUIRED FOR ALL REMOVAL ITEMS LISTED IN SECTION 440 OF THE STANDARD SPECIFICATIONS, SHOWN IN THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- DRIVEWAYS ARE TO BE CONSTRUCTED TO THE R.O.W. UNLESS OTHERWISE NOTED.
- ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.
- THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT, UNLESS OTHERWISE NOTED.
- CURB RAMPS SHALL BE INSTALLED AT ALL INTERSECTING STREETS AND DRIVEWAYS PER CURRENT IDOT STANDARDS AT LOCATIONS WHERE SIDEWALK IS SHOWN ON THE PLAN.
- THE CONTRACTOR SHALL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON VILLAGE OR IDOT PROPERTY WITHOUT WRITTEN CONSENT FROM THE VILLAGE OF NILES OR IDOT.
- THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXEL TRUCK.
- ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENT IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.
- AGGREGATE SUBGRADE IMPROVEMENT (CU.YD.) HAS BEEN PROVIDED FOR USE AT THE LOCATION INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH AGGREGATE SUBGRADE IMPROVEMENT (CU.YD.) WILL BE IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOIL SHOULD BE TESTED WITH A STATIC AND/OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC STANDARD AND CURRENT IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOIL ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
- TREES THREE (3) INCHES IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST THROUGH SEPTEMBER 30TH OF ANY GIVEN YEAR.

**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.
- 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.
- 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 BY THE CONTRACTOR.
- ALL UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 3 DAYS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE WITH THE VILLAGE OF NILES IF ANY UTILITY IMPROVEMENTS ARE REQUIRED BY THE VILLAGE WITHIN THE DURATION OF THE CONTRACT.
- OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY CENTERLINE.
- FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL NEW, ADJUSTED OR RECONSTRUCTED STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE.
- WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH CONSTRUCTION, NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- ALL FRAMES, GRATES, LIDS, AND BOXES SCHEDULED TO BE REMOVED FROM EXISTING STRUCTURES SHALL REMAIN THE PROPERTY AND BE DELIVERED TO THE VILLAGE OF NILES, AS APPLICABLE.
- 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.

- CONTRACTOR SHALL MAINTAIN THE CONVEYANCE OF ALL FLOWS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE AND PUBLIC DRAINS, SEWERS, CULVERTS, AND OTHER DRAINAGE FACILITIES. THE CONTRACTOR SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME THAT THE PERMANENT CONNECTIONS WITH SEWERS OR CULVERTS ARE BUILT AND IN SERVICE.
- ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THE CONTRACT FOR CONSTRUCTION. A DJUSTMENT OR RECONSTRUCTION OF ANY MANHOLE, CATCH BASIN, INLET, VALVE VAULT OR METER VAULT SHALL HAVE CAST INTO THE LID ONE OF THE FOLLOWING WORDS: ALL LIDS TO BE USED ON WATER STRUCTURES SHALL BEAR THE WORD "WATER." ALL LIDS TO BE USED ON STORM SEWER STRUCTURES SHALL BEAR THE WORD "STORM." ALL LIDS TO BE USED ON SANITARY SYSTEM STRUCTURES SHALL BEAR THE WORD "SANITARY". REFER TO THE VILLAGE OF NILES DETAILS FOR ORDERING INFORMATION OR CONTACT THE DEPARTMENT OF PUBLIC WORKS.
- ONLY PRECAST CONCRETE ADJUSTMENT RINGS, MAXIMUM OF 12" IN HEIGHT, WILL BE ALLOWED IN THE ADJUSTMENT OR RECONSTRUCTION OF CATCH BASIN, MANHOLE, INLET AND VALVE VAULT STRUCTURES. COMMON BRICK WILL NOT BE ALLOWED.
- 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 THE 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.
- PIPE UNDERDRAINS SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE SSRBC AND STANDARD 601001-05. TOP OF PIPE UNDERDRAINS SHALL BE PLACED MINIMUM 6" BELOW THE AGGREGATE SUBGRADE IMPROVEMENT LAYER. THE COST OF MAKING PIPE UNDERDRAINS CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PIPE UNDERDRAINS.
- A FLEXIBLE RUBBER BOOT THAT MEETS ASTM C923 IS REQUIRED FOR ALL CONNECTIONS. BOOTS ARE REQUIRED FOR STORM SEWERS IN COMBINED AREAS AND SANITARY SEWER IN ALL AREAS.

**BACKFILL**

- STORM SEWER WITHIN IDOT ROW SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 550.07, METHOD 1 ONLY.
- PROVIDE TRENCH BACKFILL FOR ALL UTILITY LINES WITHIN 2' OF PAVED AREAS. ALL TRENCH BACKFILL QUANTITIES FOR STORM SEWER HAVE BEEN COMPUTED AND SHALL BE PAID FOR IN ACCORDANCE WITH THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS BUREAU OF CONSTRUCTION TRENCH BACKFILL TABLE, BASED ON PIPE SIZE AND INVERT DEPTH FROM SUBGRADE. BACK FILLING STORM AND SEWER CONSTRUCTED UNDER THE ROADWAY SPECIFIED UNDER ART.550.07 (b,c) OF THE SSRBC WILL NOT BE ALLOWED.

**SIGNING AND STRIPING**

- TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS THE ENGINEER SHALL CONTACT FADI SULTAN, AREA TRAFFIC FIELD ENGINEER, AT FADI.SULTAN@ILLINOIS.GOV.
- SEE IDOT STANDARD DETAIL 780001, DISTRICT ONE DETAILS AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.
- SIGNS SHALL NOT BE MOVED OR COVERED UNTIL PROGRESS OF WORK NECESSITATES IT.
- IN ACCORDANCE TO ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS, THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL SUCH SIGNS THAT INTERFERE WITH HIS CONSTRUCTION OPERATIONS. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING AND MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO THE TRAFFIC FOR WHICH IT IS INTENDED.
- LONGER POSTS MAY BE REQUIRED AT SOME TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS. THIS WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 729 OF THE STANDARD SPECIFICATIONS.
- ALL SIGNS SHALL BE INSTALLED IN PERMANENT LOCATIONS AS THE ROADWAY IS COMPLETED. ALL SIGNS TO BE REMOVED SHALL REMAIN THE PROPERTY OF IDOT AND SHALL BE RETURNED TO IDOT UPON REMOVAL AT 895 S. STATE STREET, ELGIN, IL. THE PHONE NUMBER IS 847-741-5302. SIGNS TEMPORARILY RELOCATED OR COVERED SHALL NOT BECOME THE PROPERTY OF IDOT UNTIL PERMANENTLY REMOVED.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

**EARTHWORK**

- SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH ARTICLE 301.04 OF THE STANDARD SPECIFICATIONS BEFORE REMOVAL OF ANY UNSTABLE MATERIAL.
- PRIOR TO ANY EMBANKMENT PLACEMENT, ALL VEGETATION AND UNSTABLE MATERIAL SHOULD BE REMOVED TO DEPTH ENCOUNTERED AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL AS APPROVED BY THE ENGINEER.
- THE AGGREGATE GRADATION FOR "THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR 1.

**TRAFFIC CONTROL**

- SEE TRAFFIC CONTROL PLANS FOR GENERAL NOTES CONCERNING TRAFFIC CONTROL AND PROTECTION.
- THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURG A@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

**LIGHTING PLANS**

- MEADE ELECTRIC CO. DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES 773-287-7672

**COMMITMENTS**

- NONE.

**TRAFFIC SIGNALS**

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.
- IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.
- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR UNDERGROUND AND OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE AREA ENGINEER, THE RESIDENT ENGINEER AND ANY IMPACTED UTILITY COMPANY OF THE CONFLICT AND SHALL COORDINATE AND RESOLVE THE ISSUE PRIOR TO ORDERING MATERIALS, AND PRIOR TO POURING FOUNDATIONS.
- RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250, RESPECTIVELY.
- LOCATIONS WITH PEDESTRIAN EQUIPMENT HAVE BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THE PLANS FOR TRAFFIC SIGNAL MAST ARM/POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER AS COORDINATED WITH DISTRICT ONE BUREAU OF TRAFFIC TO ENSURE ADA COMPLIANCE.

**SEDIMENTATION AND EROSION CONTROL**

- SEE EROSION CONTROL PLANS FOR GENERAL NOTES CONCERNING EROSION CONTROL.

HRG PROJECT NO.: 191406.01  
 HRG PROJ. CONTACT:  
 FILE NO.: 191406.01-SP-GENERAL-2.dgn  
 PLOT DATE: 12/16/2022  
 PEN TABLE: plotTable.tbl



USER NAME = mzuz210	DESIGNED - MLZ	REVISED -
PLOT SCALE = 2.0000' / 1" =	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES**

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

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	3
<b>CONTRACT NO.</b>				61H59
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

**A. REFERENCED SPECIFICATIONS**

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

**B. NOTIFICATIONS**

- THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
- THE VILLAGE OF NILES ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-992-0123.

**C. GENERAL NOTES**

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

**D. SANITARY SEWER**

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

**PIPE MATERIAL PIPE SPECIFICATIONS JOINT SPECIFICATIONS**

VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)		
4-INCH TO 36-INCH	ASTM D-3350	ASTM D-3261, F-2620 (HEAT FUSION)
4-INCH TO 12-INCH	ASTM D-3035	ASTM D-3212, F-477 (GASKETED)
14-INCH TO 48-INCH		
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

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

**PIPE MATERIAL PIPE SPECIFICATIONS JOINT SPECIFICATIONS**

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

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

**E. EROSION AND SEDIMENT CONTROL**

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

TECHNICAL GUIDANCE MANUAL

MWRD GENERAL NOTES

07/12/2016

STD. DWG. NO.18

PAGE NO. 19

HRG PROJECT NO.: 19W06.01  
 HRG PROJ. CONTACT:  
 FILE: 19W060601.dgn - MWRD.dgn  
 PLOT: 19W060601.dgn - MWRD.ctb  
 PEN: TABLE.ctb - 10/26/15



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 #194-001522

USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

MWRD SPECIFICATIONS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
342	13-00118-00-WR	COOK	120	4
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	



HRG PROJECT NO. 19408.01  
 HRG PROJ. CONTACT  
 FILE NAME: 19408.01-19-500.dgn  
 PLOT NUMBER: 13-00118-00-01  
 PLOT DATE: 12/16/2022

- SPECIAL PROVISION
- + SPECIALTY ITEM

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
+ 20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	110	110		
+ 20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	133	133		
+ 20101200	TREE ROOT PRUNING	EACH	6	6		
20200100	EARTH EXCAVATION	CU YD	650	650		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	150	150		
20400800	FURNISHED EXCAVATION	CU YD	113	113		
20800150	TRENCH BACKFILL	CU YD	1,200	1,200		
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1,590	1,590		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	3,400	3,400		
+ 25000210	SEEDING, CLASS 2A	ACRE	0.75	0.75		
+ 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	63	63		
+ 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	63	63		
+ 25100630	EROSION CONTROL BLANKET	SQ YD	9,338	9,338		
+ 25200110	SOODING, SALT TOLERANT	SQ YD	1,010	1,010		
+ 25200200	SUPPLEMENTAL WATERING	UNIT	97	97		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	70	70		
28000400	PERIMETER EROSION BARRIER	FOOT	3,320	3,320		



USER NAME = muzzio	DESIGNED - MLZ	REVISED -
PLOT SCALE = 2,0000' / 1"	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
SCALE:	SHEET	OF	TOTAL SHEETS
	1	14	14

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	6
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

URG PROJECT NO. - 19/002.0  
 HRG PROJ CONTACT  
 FILE NAME: 19/002.01-st-500.dgn  
 PLOT DRIVER: x\_caf\_bwpicf9  
 PEN TABLE: plot006.tbl

- SPECIAL PROVISION
- + SPECIALTY ITEM

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
28000510	INLET FILTERS	EACH	30	30		
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	3,387	3,387		
* 30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	319	319		
* 30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	3,949	3,949		
31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	2,018	2,018		
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	2,276	2,276		
35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	192	192		
35400300	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"	SQ YD	103	103		
35501318	HOT-MIX ASPHALT BASE COURSE, 8 1/2"	SQ YD	2,306	2,306		
35600665	HOT-MIX ASPHALT BASE COURSE WIDENING, 4 3/4"	SQ YD	124	124		
35600710	HOT-MIX ASPHALT BASE COURSE WIDENING, 8 1/2"	SQ YD	344	344		
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	267	267		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	9,338	9,338		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	176	176		
40602985	HOT-MIX ASPHALT BINDER COURSE, 1L-9.5, N70	TON	443	443		
40603080	HOT-MIX ASPHALT BINDER COURSE, 1L-19.0, N50	TON	256	256		
40604060	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5, MIX "D", N50	TON	178	178		



USER NAME = mzuzio  
 PLOT SCALE = 2.0000' / 1" in.  
 PLOT DATE = 12/16/2022

DESIGNED - MLZ  
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET 2 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	7
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	





PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	539	539		
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	477	477		
55100200	STORM SEWER REMOVAL 6"	FOOT	48	48		
55100300	STORM SEWER REMOVAL 8"	FOOT	26	26		
55100400	STORM SEWER REMOVAL 10"	FOOT	28	28		
55100500	STORM SEWER REMOVAL 12"	FOOT	473	473		
55100900	STORM SEWER REMOVAL 18"	FOOT	19	19		
55101200	STORM SEWER REMOVAL 24"	FOOT	45	45		
* +	56400400 FIRE HYDRANTS TO BE RELOCATED	EACH	4	4		
	60108204 PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	286	286		
	60201105 CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	3	3		
	60207905 CATCH BASINS, TYPE C, TYPE 11 FRAME AND GRATE	EACH	1	1		
	60221100 MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2		
	60222000 MANHOLES, TYPE A, 5'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	7	7		
*	60223800 MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	3		
	60224020 MANHOLES, TYPE A, 6'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	3	3		
	60224446 MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		

- \* SPECIAL PROVISION
- + SPECIALTY ITEM

HRG PROJECT NO: 18140820  
 FILE NAME: 18140820-13-00118-00-WR.dgn  
 PLOT DRIVER: & path: hp plotters  
 PEN TABLE: plot10tbl.tbl



USER NAME = mzuuzio	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET 4 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	129	9
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

HRC PROJECT NO.: 0940860  
 HRC PROJ. CONTACT  
 FILE NAME: 0940860-sh-300.dgn  
 PLOT DRIVER: k...pdf...  
 PER TABLE: 0940860.tbl

- SPECIAL PROVISION
- + SPECIALTY ITEM

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1	1		
60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	5	5		
60250400	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	2	2		
60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	2	2		
60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	6	6		
60261300	INLETS TO BE ADJUSTED WITH NEW TYPE 11 FRAME AND GRATE	EACH	2	2		
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	4	4		
60500040	REMOVING MANHOLES	EACH	2	2		
60500050	REMOVING CATCH BASINS	EACH	1	1		
60500060	REMOVING INLETS	EACH	5	5		
60600605	CONCRETE CURB, TYPE B	FOOT	116	116		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	4,270	4,270		
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	6	6		
+ 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	3,166	3,166		
+ 66900530	SOIL DISPOSAL ANALYSIS	EACH	8	8		
+ 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1		
+ 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1		



USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - W/H	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/15/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SUMMARY OF QUANTITIES</b>	
SCALE:	SHEET 5 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-08-WR	COOK	120	10
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
* + 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	80	80		
67100100	MOBILIZATION	L SUM	1	1		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	80	80		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	145	145		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	8,279	8,279		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	8,575	8,575		
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	437	437		
70300221	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	FOOT	10,405	10,405		
70300241	TEMPORARY PAVEMENT MARKING - LINE 6" - PAINT	FOOT	3,105	3,105		
70300261	TEMPORARY PAVEMENT MARKING - LINE 12" - PAINT	FOOT	2,086	2,086		
70300281	TEMPORARY PAVEMENT MARKING - LINE 24" - PAINT	FOOT	248	248		
70307100	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - TYPE IV TAPE	SQ FT	130	130		
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	10,165	10,165		
70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	320	320		
70307160	TEMPORARY PAVEMENT MARKING - LINE 12" - TYPE IV TAPE	FOOT	75	75		
70307210	TEMPORARY PAVEMENT MARKING - LINE 24" - TYPE IV TAPE	FOOT	71	71		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	50	50		

- \* SPECIAL PROVISION
- + SPECIALTY ITEM

PG PROJECT NO.: 13/0403.01  
 PG PROJ CONTACT:  
 FILE NAME: 13/0403-01-13-00118-00-001.dgn  
 LOT DRIVER: L:\prof\_bw\p13e1e  
 EN TABLE: p13 Mobil.tbl



USER NAME = m2u2218	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED -	REVISED -

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

**SUMMARY OF QUANTITIES**

F.A.P RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	11
			CONTRACT NO. 61H59	

HRG PROJECT NO.: 19108.01  
 FILE: 19108.01.dwg  
 PLOT DRIVER: & path of the plotter  
 PEN TABLE: p610200.tbl



- SPECIAL PROVISION
- + SPECIALTY ITEM

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2		
+ 72000100	SIGN PANEL - TYPE 1	SQ FT	69	54		15
+ 72000200	SIGN PANEL - TYPE 2	SQ FT	40			40
+ 72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	8	8		
+ 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	192	192		
+ 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	437	437		
+ 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	11,220	11,220		
+ 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	3,330	3,330		
+ 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	2,896	2,896		
+ 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	288	288		
+ 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	350	350		
+ 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	232	232		
+ 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	2	2		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	225	225		
78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	1,895	1,895		
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	235	235		
* + 80400100	ELECTRIC SERVICE INSTALLATION	EACH	1		1	

USER NAME = mzu2210	DESIGNED - MLZ	REVISED -
PLOT SCALE = 2.0000' / 1"	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

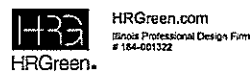
SCALE: SHEET 7 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	12
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
* + 80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1		1	
* + 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2,367			2,367
* + 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	243		50	193
* + 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1,357		785	572
* + 81400100	HANDHOLE	EACH	5			5
* + 81400200	HEAVY-DUTY HANDHOLE	EACH	2			2
* + 81400300	DOUBLE HANDHOLE	EACH	2			2
* + 81603600	UNIT DUCT, 600V, 6-1C NO.8, 1/C NO.8 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	4,734		4734	
* + 81702460	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 3/0	FOOT	60		60	
* + 81800340	AERIAL CABLE, 3-1/C NO. 8 WITH MESSENGER WIRE	FOOT	270		270	
	82500370	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 200AMP	EACH	1	1	
+ 83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	330	10	320	
+ 84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	3	3		
+ 84200804	REMOVAL OF POLE FOUNDATION	EACH	1	1		
+ 84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	1	1		
+ 84400405	RELOCATE EXISTING WOOD POLES	EACH	1	1		
+ 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3			3

\* SPECIAL PROVISION  
+ SPECIALTY ITEM

HRG PROJECT NO.: 1940801  
 USER: mzuzzio  
 FILE NAME: 1940801.dwg  
 PLOT DRIVER: acadplot  
 PEN TABLE: p1940801.tbl



USER NAME = mzuzzio	DESIGNED - MLZ	REVISED -
PLOT SCALE = 2.0000' / 1" =	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET 8 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	13
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
* + 85100500	PAINT NEW TRAFFIC SIGNAL POST	EACH	6			6
* + 85100600	PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	3			3
* + 85100701	PAINT NEW MAST ARM AND POLE, 40 FOOT AND OVER	EACH	1			1
+ 86400100	TRANSCEIVER - FIBER OPTIC	EACH	1			1
+ 87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	4,385			4,385
+ 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,607			1,607
+ 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2,348			2,348
+ 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,039			2,039
+ 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,106			2,106
+ 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2,073			2,073
+ 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	47			47
+ 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	951			951
* + 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2			2
* + 87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	2			2
* + 87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1			1
* + 87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1			1

- \* SPECIAL PROVISION
- + SPECIALTY ITEM

HRG PROJECT NO. 191406.01  
 FILE PROJ CONTACT  
 PLOT DRIVER: k:\proj\191406.dgn  
 PEN TABLE: 191406.tbl



USER NAME = muzzio	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/19/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET 9 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	14
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
* + 87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1			1
* + 87702850	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	1			1
* + 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16			16
* + 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4			4
* + 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45			45
+ 87900200	DRILL EXISTING HANDHOLE	EACH	3			3
* + 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4			4
* + 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2			2
* + 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2			2
* + 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2			2
* + 88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1			1
* + 88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	1			1
* + 88055190	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3			3
* + 88055200	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3			3
* + 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8			8
* + 88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10			10
+ 88500100	INDUCTIVE LOOP DETECTOR	EACH	6			6

\* SPECIAL PROVISION  
+ SPECIALTY ITEM

HRG PROJECT NO.: 19/002/01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19/002/01-sh-500.dgn  
 PEN TABLE: 19/002/01-sh-500.dgn  
 PEN TABLE: 19/002/01-sh-500.dgn



USER NAME = muzz210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES		
SCALE:	SHEET 10 OF 14 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	15
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

	PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
					ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
* +	88600100	DETECTOR LOOP, TYPE 1	FOOT	451			451
* +	88700200	LIGHT DETECTOR	EACH	2			2
* +	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1			1
* +	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1			1
* +	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4,039			4,039
+	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1			1
+	89502376	REBUILD EXISTING HANDHOLE	EACH	1			1
+	89502380	REMOVE EXISTING HANDHOLE	EACH	7			7
* +	89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1			1
+	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	11			11
+	A2002916	TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 2" CALIPER, BALLED AND BURLAPPED	EACH	6	6		
+	B2000766	TREE, AMELANCHIER X GRANDIFLORA AUTUMN BRILLIANCE (AUTUMN BRILLIANCE SERVICE BERRY), 6' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	5	5		
+	B2004116	TREE, MALUS PRAIRIFIRE (PRAIRIFIRE CRABAPPLE), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	6	6		
+	B2005416	TREE, PRUNUS VIRGINIANA SCHUBERT (SCHUBERT CHOKEBERRY), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	14	14		
+	C2002124	SHRUB, COTONEASTER APICULATUS (CRANBERRY COTONEASTER), 2' WIDTH, BALLED AND BURLAPPED	EACH	12	12		
+	C2002624	SHRUB, EUONYMUS ALATA COMPACTA (DWARF WINGED EUONYMUS), 2' HEIGHT, BALLED AND BURLAPPED	EACH	30	30		
+	K0012990	PERENNIAL PLANTS, ORNAMENTAL TYPE, GALLON POT	UNIT	1	1		

- \* SPECIAL PROVISION
- + SPECIALTY ITEM

USC PROJECT NO. 15R040L01  
 HRGreen.com  
 15R040L01  
 FILE NAME: 15R040L01-ent-500.dwg  
 PLOT DRIVER: acadplotpcfg  
 PEN TABLE: plot100tbl.tbl



USER NAME = m2u2210	DESIGNED - MLZ	REVISED -
	DRAWN - WHH	REVISED -
PLOT SCALE = 2.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET 11 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	16
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT
CONTRACT NO. 61H59				



IRG PROJECT NO. 184488.01  
 IRG PROJ. CONTACT:  
 FILE NAME: 184488.01-184488-500.dgn  
 PLOT DRIVER: h:\pdr\h\pdr.ctb  
 PLOT TABLE: p01.tbl

\* SPECIAL PROVISION  
 + SPECIALTY ITEM

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
+ K0029634	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	5	5		
+ K0036117	MULCH PLACEMENT 2"	SQ YD	67	67		
+ K0036118	MULCH PLACEMENT 3"	SQ YD	359	359		
* + X0322463	CONNECTION TO EXISTING SEWER	EACH	6	6		
* + X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	677			677
* + X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	1,000			1,000
* + X0325034	MANHOLES, TYPE A, 6'-DIAMETER, WITH 2 TYPE 1 FRAME, OPEN LIDS, RESTRICTOR PLATE	EACH	1	1		
* X1240302	REMOVE SIGN (SPECIAL)	EACH	4	4		
* X0327070	REMOVE EXISTING FLAGPOLE	EACH	1	1		
* + X0327758	RELOCATE EXISTING CONDUIT AND CABLES	FOOT	100	100		
* + X1200093	WATER MAIN LOWERING, 12"	FOOT	30	30		
* + X1400081	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1			1
* + X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1			1
* + X1400201	RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, STOP BAR	EACH	2			2
* + X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2			2
* X2080250	TRENCH BACKFILL, SPECIAL	CU YD	24	24		
* X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	200	200		



USER NAME = msuz210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/27/2017	DATE	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES	
SCALE:	SHEET 12 OF 14 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION NO. 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 17
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 61H59	



PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	CONSTRUCTION CODE		
				ROADWAY 80% FEDERAL 20% STATE 0004	LIGHTING 80% FEDERAL 20% STATE 0021	TRAFFIC SIGNALS 80% FEDERAL 20% STATE 0021
* 20056610	STORM SEWER (WATER MAIN REQUIREMENTS) 15 INCH	FOOT	27	27		
* 20056616	STORM SEWER (WATER MAIN REQUIREMENTS) 24 INCH	FOOT	5	5		
* 20067500	STEEL CASINGS 16"	FOOT	30	30		
* 20073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	5			5
* X 20076600	TRAINEES	HOUR	1,000	1,000		
* X 20076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1,000	1,000		

- \* SPECIAL PROVISION
- + SPECIALTY ITEM
- x CONSTRUCTION CODE 0042

HRC PROJECT NO. 161408.01  
 HRC PROJ CONTACT  
 FILE NAME: 161408.01-111-500.dgn  
 PLOT DRIVER: e:\pdf\dwgploter  
 PEN TABLE: plottable.tbl



USER NAME = mzuz210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

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

**SUMMARY OF QUANTITIES**

SCALE: [ SHEET 14 OF 14 SHEETS ] STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	19
CONTRACT NO. 61H59				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

TOUHY	WEST (CU YD)				EARTHWORK BALANCE WASTE ( ) OR SHORTAGE (-) WITH 15% SHRINKAGE
STATION	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	EARTH EXCAVATION	EMBANKMENT	AGGREGATE SUBGRADE IMPROVEMENT	STAGE 1
110+49.00					0.0
110+50.00	0.2	0.4	0.0	0.0	0.3
111+00.00	21.3	39.8	0.0	0.0	33.8
111+50.00	23.1	48.1	0.0	0.0	40.9
112+00.00	30.6	66.7	0.0	0.0	56.7
112+50.00	39.8	83.3	0.0	0.0	70.8
113+00.00	39.8	99.1	0.0	0.0	84.2
113+50.00	26.9	106.5	0.0	0.0	90.5
114+00.00	9.3	125.9	0.0	0.0	107.0
114+37.00	8.2	89.1	0.0	0.0	75.7
114+50.00	8.7	26.7	0.0	0.0	22.7
115+00.00	50.9	115.7	0.0	0.0	98.4
115+50.00	38.0	80.6	0.0	21.3	68.5
115+55.00	0.9	2.1	0.0	2.1	1.8
119+00.00	0.0	0.0	0.0	0.0	0.0
119+50.00	1.9	37.0	0.0	1.9	31.5
120+00.00	3.7	78.7	0.0	3.7	66.9
120+50.00	3.7	73.1	1.9	3.7	60.3
121+00.00	3.7	73.1	2.8	3.7	59.4
121+50.00	2.8	41.7	0.9	2.8	34.5
122+50.00	1.9	92.6	0.0	1.9	78.7
123+00.00	0.0	46.3	0.0	0.0	39.4
123+50.00	0.0	38.0	0.0	0.0	32.3
124+00.00	0.9	68.5	0.0	0.9	58.2
124+50.00	0.9	67.6	0.0	0.9	57.5
125+00.00	0.0	88.0	0.0	0.0	74.8
125+08.75	0.0	17.8	0.0	0.0	15.2
125+50.00	1.5	70.3	0.0	0.0	59.7
126+00.00	1.9	75.9	0.0	0.0	64.5
126+50.00	0.0	81.5	0.0	0.0	69.3
127+00.00	0.0	66.7	0.0	0.0	56.7
130+00.00	44.4	322.2	61.1	0.0	212.8
130+50.00	12.0	55.6	11.1	0.0	36.1
131+00.00	9.3	54.6	1.9	0.0	44.6
131+50.00	8.3	50.0	1.9	0.0	40.6
132+00.00	10.2	50.0	2.8	0.0	39.7
132+50.00	13.0	50.0	3.7	0.0	38.8
133+00.00	12.0	47.2	3.7	0.0	36.4
133+50.00	10.2	42.6	3.7	0.0	32.5
134+00.00	10.2	35.2	3.7	0.0	26.2
134+50.00	11.1	29.6	4.6	0.0	20.6
135+00.00	9.3	26.9	2.8	0.0	20.0
135+25.00	1.9	6.5	0.0	0.0	5.5
TOTALS	472.3	2671.2	106.5	42.9	2164.1

HARTS/GROSS	STAGE 1 (CU YD)				EARTHWORK BALANCE WASTE ( ) OR SHORTAGE (-) WITH 15% SHRINKAGE
STATION	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	EARTH EXCAVATION	EMBANKMENT	AGGREGATE SUBGRADE IMPROVEMENT	STAGE 1
15+40.00					0.0
15+50.00	0.6	0.6	0.0	0.0	0.5
16+00.00	6.5	9.3	0.0	0.0	7.9
16+50.00	7.4	13.0	0.0	0.0	11.0
17+00.00	7.4	13.0	0.0	0.0	11.0
17+50.00	7.4	15.7	0.0	0.0	13.4
18+00.00	7.4	13.9	0.0	0.0	11.8
18+50.00	7.4	10.2	0.0	0.0	8.7
20+00.00	19.4	38.9	2.8	0.0	30.3
20+50.00	5.6	13.9	1.9	0.0	10.0
21+00.00	5.6	14.8	0.9	0.0	11.7
21+50.00	5.6	23.1	0.0	0.0	19.7
21+73.20	1.3	25.8	0.0	0.0	21.9
22+00.00	2.0	34.7	0.0	0.0	29.5
22+50.00	4.6	48.1	0.0	0.0	40.9
23+00.00	0.9	42.6	0.0	0.0	36.2
23+50.00	1.9	25.0	0.0	0.0	21.3
24+00.00	1.9	6.5	0.0	0.0	5.5
TOTALS	92.72	349.04	5.56	0.00	291.1

EARTHWORK SUMMARY

ITEM NO.	CODE	DESCRIPTION	CROSS SECTION BASED		
			TOUHY AVE	HARTS/GROSS	TOTAL
1	20200100	EARTH EXCAVATION	2,671.2	349.0	3,020.3
2	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	1,030.0	155.0	1,185.0
3	20400800	FURNISHED EXCAVATION	0.0	0.0	0.0

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-schedule.dgn  
 PEN TABLE: 191405.tbl



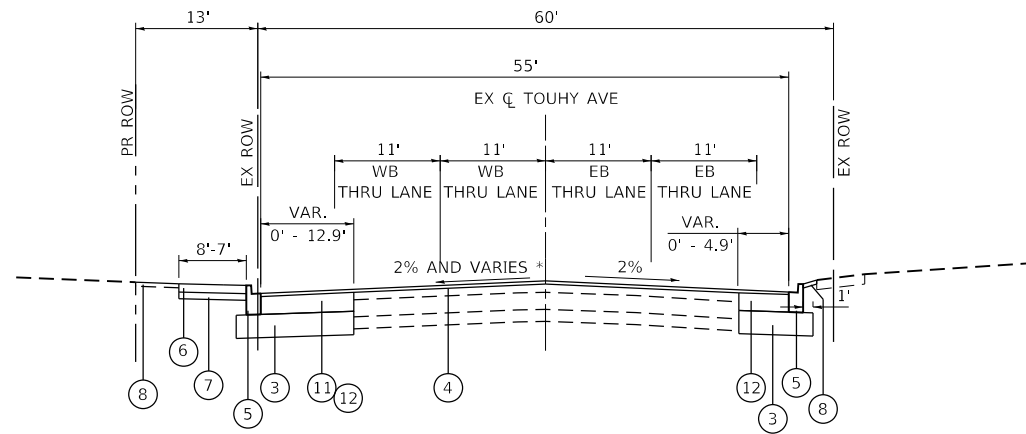
USER NAME = mzuzzio	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

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

<b>SCHEDULE OF QUANTITIES</b>	
SCALE:	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	20
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	





\* FOLLOW EXIST CROSS SLOPE THROUGH CURVE

**PROPOSED TYPICAL SECTION**

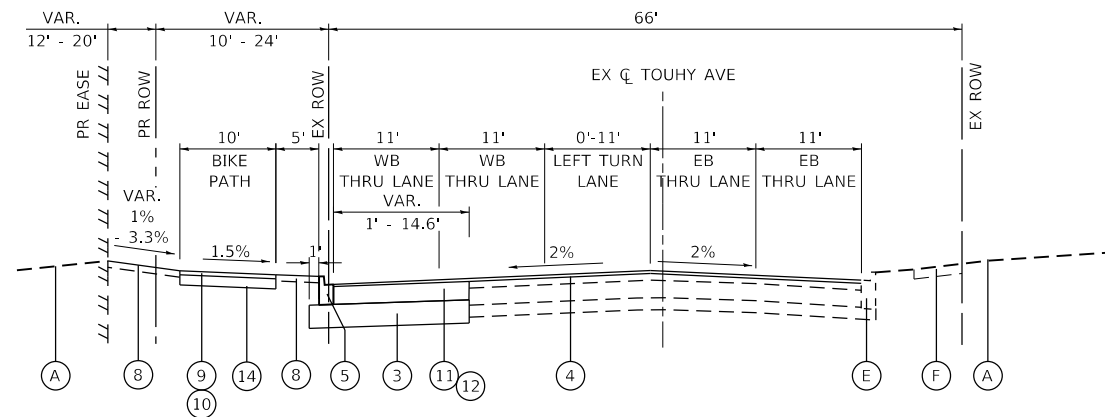
TOUHY AVENUE  
STA 110+03.42 - STA 115+71.79

**EXISTING LEGEND**

- (A) EXISTING GROUND
- (B) EXISTING HMA PAVEMENT, 6" ±
- (C) EXISTING PCC BASE COURSE, 9" ±
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER
- (F) EXISTING PCC SIDEWALK
- (G) EXISTING SUBBASE GRANULAR MATERIAL

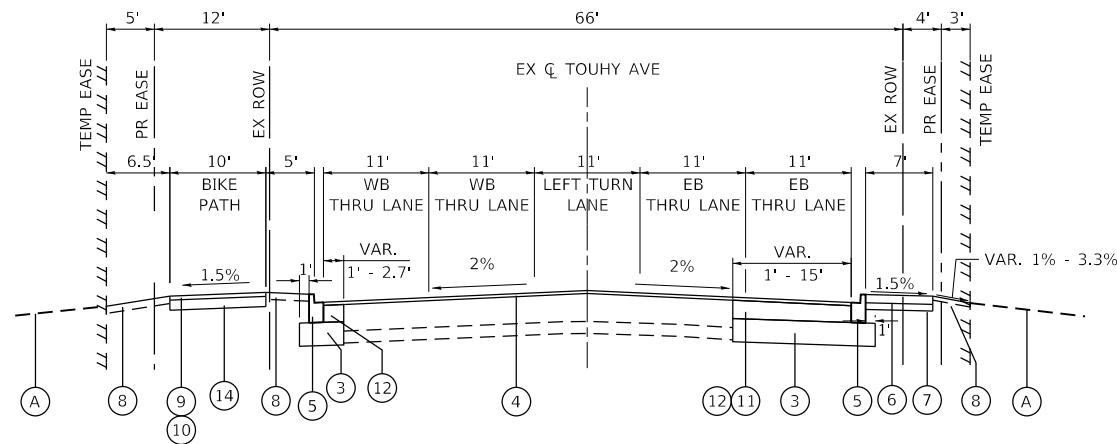
**PROPOSED LEGEND**

- (1) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1 1/2"
- (2) HOT-MIX ASPHALT BINDER COURSE, IL 9.5; N70, 2 1/4"
- (3) AGGREGATE SUBGRADE IMPROVEMENT 12" (SQ YD)
- (4) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA, MIX "F", 9.5, N80, 1-3/4"
- (5) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (6) PORTLAND CEMENT CONCRETE SIDEWALK 5" (8" THRU COMMERCIAL DRIVEWAYS)
- (7) AGGREGATE BASE COURSE, TYPE B 4"
- (8) SEEDING, CLASS 2A / TOPSOIL FURNISH AND PLACE, 4"
- (9) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM); 1 1/2"
- (10) HMA BINDER COURSE, IL-19.0, N50; 2 1/4"
- (11) HOT-MIX ASPHALT BASE COURSE, 8 1/2"
- (12) HOT-MIX ASPHALT BASE COURSE WIDENING, 8 1/2"
- (13) HOT-MIX ASPHALT BASE COURSE WIDENING, 4 3/4"
- (14) SUBBASE GRANULAR MATERIAL, TYPE B 6"



**PROPOSED TYPICAL SECTION**

TOUHY AVENUE  
STA 119+08.41 - STA 128+32.56



**PROPOSED TYPICAL SECTION**

TOUHY AVENUE  
STA 128+32.56 - STA 135+25.39

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-Typical-02.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED TYPICAL SECTIONS**

SCALE: N.T.S. SHEET 2 OF 3 SHEETS STA. TO STA.

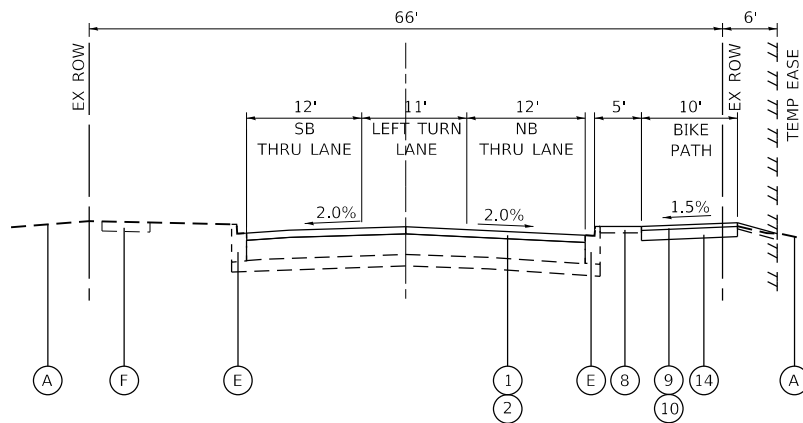
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	22
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

**EXISTING LEGEND**

- (A) EXISTING GROUND
- (B) EXISTING HMA PAVEMENT, 6" ±
- (C) EXISTING PCC BASE COURSE, 9" ±
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER
- (F) EXISTING PCC SIDEWALK
- (G) EXISTING SUBBASE GRANULAR MATERIAL

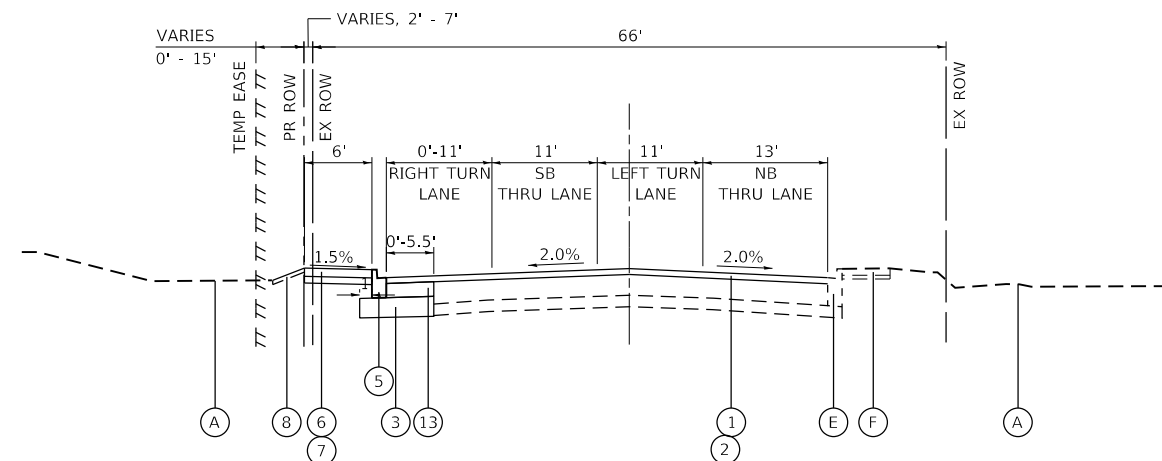
**PROPOSED LEGEND**

- (1) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1 1/2"
- (2) HOT-MIX ASPHALT BINDER COURSE, IL 9.5; N70, 2 1/4"
- (3) AGGREGATE SUBGRADE IMPROVEMENT 12" (SQ YD)
- (4) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA, MIX "F", 9.5, N80, 1-3/4"
- (5) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (6) PORTLAND CEMENT CONCRETE SIDEWALK 5" (8" THRU COMMERCIAL DRIVEWAYS)
- (7) AGGREGATE BASE COURSE, TYPE B 4"
- (8) SEEDING, CLASS 2A / TOPSOIL FURNISH AND PLACE, 4"
- (9) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM); 1 1/2"
- (10) HMA BINDER COURSE, IL-19.0, N50; 2 1/4"
- (11) HOT-MIX ASPHALT BASE COURSE, 8 1/2"
- (12) HOT-MIX ASPHALT BASE COURSE WIDENING, 8 1/2"
- (13) HOT-MIX ASPHALT BASE COURSE WIDENING, 4 3/4"
- (14) SUBBASE GRANULAR MATERIAL, TYPE B 6"



**PROPOSED TYPICAL SECTION**

HARTS ROAD  
STA. 15+17.22 - STA. 19+26.89



**PROPOSED TYPICAL SECTION**

GROSS POINT ROAD  
STA. 19+26.89 - 25+61.28

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QMP
MIXTURE TYPE	AIR VOIDS @NDES	
<b>PAVEMENT RESURFACING: TOUHY AVENUE &amp; WIDENING AREA</b>		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, MIX "F", 9.5, N80, 1 3/4"	3.5% @ 80 GYR.	LR 1030-2
<b>PAVEMENT RESURFACING: HARTS ROAD/GROSS POINT ROAD &amp; WIDENING AREA</b>		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 1 1/2"	4% @ 70 GYR.	LR 1030-2
HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70; 2 1/4"	4% @ 70 GYR.	LR 1030-2
<b>PAVEMENT RESURFACING: OAK PARK AVENUE &amp; WIDENING AREA</b>		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70; 2"	4% @ 70 GYR.	LR 1030-2
<b>HMA PAVEMENT WIDENING - GROSS POINT ROAD</b>		
HOT-MIX ASPHALT BASE COURSE WIDENING (HMA BINDER IL-19mm); 4 3/4"	4% @ 70 GYR.	LR 1030-2
<b>HMA PAVEMENT WIDENING - TOUHY AVENUE</b>		
HOT-MIX ASPHALT BASE COURSE (HMA BINDER, IL-19.0) - 6 FEET OVER OF WIDENING; 8 1/2"	4% @ 70 GYR.	LR 1030-2
HOT-MIX ASPHALT BASE COURSE WIDENING (HMA BINDER, IL-19.0) - UNDER 6 FEET OF WIDENING; 8 1/2"	4% @ 70 GYR.	LR 1030-2
<b>HMA MULTI-USE PATH</b>		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 1 1/2"	4% @ 50 GYR.	LR 1030-2
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 2 1/4"	4% @ 50 GYR.	LR 1030-2
<b>DRIVEWAYS</b>		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50; 4" (IN 2 LIFTS)	4% @ 50 GYR.	LR 1030-2
<b>CLASS D PATCHING</b>		
CLASS D (HMA BINDER IL-19 mm)	4% @ 70 GYR.	LR 1030-2
QMP DESIGNATION: QUALITY CONTROL/ QUALITY ASSURANCE PER LR 1030-2		

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD/IN.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 - 22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 - 22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-TypSec-03.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED TYPICAL SECTIONS**

SCALE: N.T.S. SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	23
CONTRACT NO. 61H59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TOUHY AVENUE CENTERLINE COORDINATES ILLINOIS STATE PLANE, EAST ZONE, NAD 83 (2011)				
PT.NO.	NORTHING	EASTING	STATION	GEOMETRY
200	1947581.063	1129437.626	107+46.51	P.C.
201	1947617.134	1129687.862	110+00.00	P.O.C. - BEGIN
202	1947607.887	1129843.570	111+56.14	P.T.
203	1947408.286	1131296.759	126+22.97	P.C.
204	1947400.442	1131490.643	128+17.31	STA. EQ.
205	1947397.191	1131485.613	128+23.30	STA. EQ.
206	1947429.945	1132222.724	135+61.14	P.O.T.
207	1947430.439	1132361.585	137+00.00	P.O.T. - END
HARTS/GROSS POINT ROAD CENTERLINE COORDINATES ILLINOIS STATE PLANE, EAST ZONE, NAD 83 (2011)				
PT.NO.	NORTHING	EASTING	STATION	GEOMETRY
208	1947219.769	1131211.064	16+00.00	P.O.T. - BEGIN
205	1947397.191	1131485.613	19+26.89	STA. EQ.
204	1947400.442	1131490.643	19+32.88	STA. EQ.
209	1947708.255	1131966.962	25+00.00	P.O.T. - END

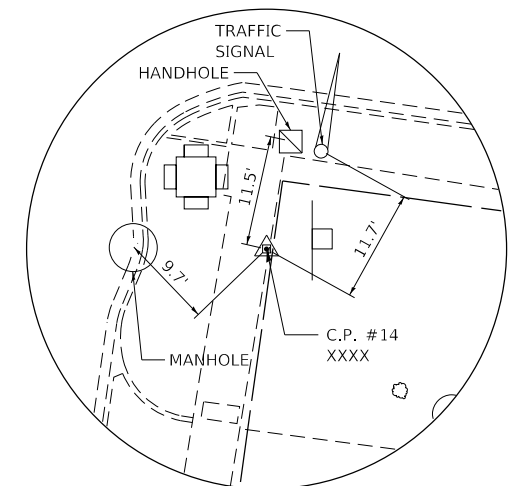
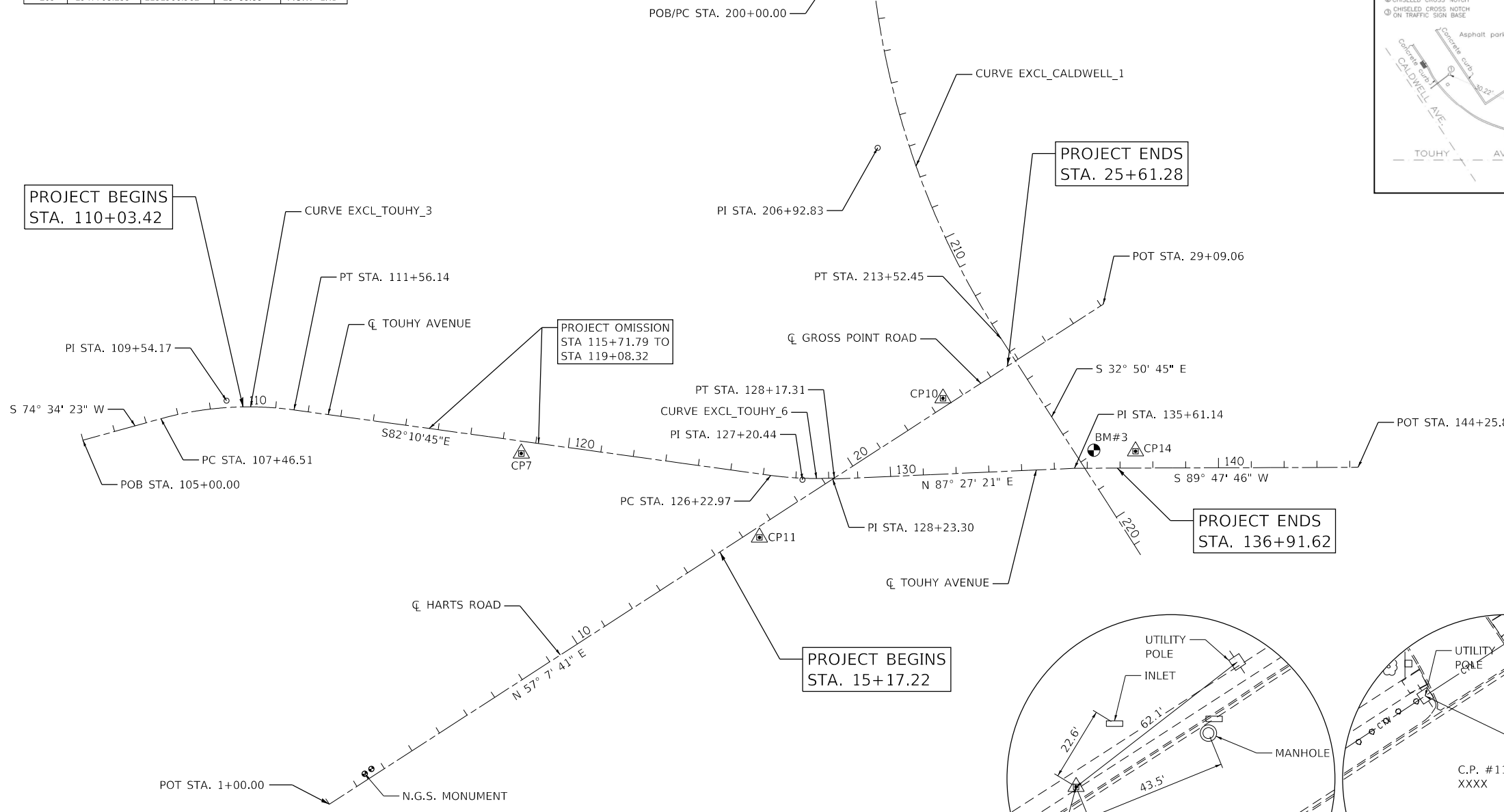
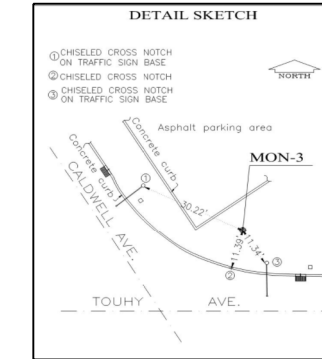
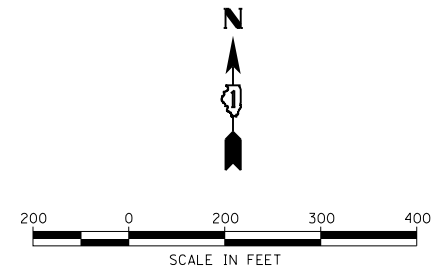
EXIST. CURVE EXCL\_TOUHY\_3  
 PI STA. = 109+54.17  
 N: 1947515.4879  
 E: 1129199.9931  
 $\Delta = 23^\circ 12' 09"$  (RT)  
 $D = 5^\circ 39' 52"$   
 $R = 1,011.52'$   
 $T = 207.66'$   
 $L = 409.62'$   
 $E = 21.10'$   
 P.C. STA. = 107+46.51  
 N: 1947581.0633  
 E: 1129437.6256  
 P.T. STA. = 111+56.14  
 N: 1947607.8866  
 E: 1129843.5701

EXIST. CURVE EXCL\_TOUHY\_6  
 PI STA. = 127+20.44  
 N: 1947395.0220  
 E: 1131393.3231  
 $\Delta = 11^\circ 00' 30"$  (LT)  
 $D = 5^\circ 39' 52"$   
 $R = 1,011.51'$   
 $T = 97.47'$   
 $L = 194.34'$   
 $E = 4.69'$   
 P.C. STA. = 126+22.97  
 N: 1947408.2855  
 E: 1131296.7591  
 P.T. STA. = 128+17.31  
 N: 1947400.4415  
 E: 1131490.6429

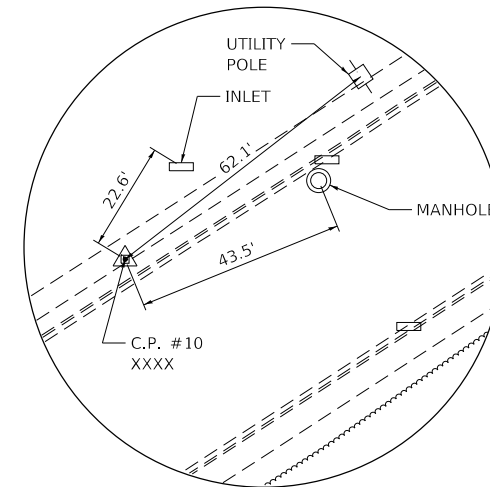
EXIST. CURVE EXCL\_CALDWELL\_1  
 PI STA. = 206+92.83  
 N: 1948406.8902  
 E: 1131622.8093  
 $\Delta = 30^\circ 39' 13"$  (LT)  
 $D = 2^\circ 15' 59"$   
 $R = 2,527.92'$   
 $T = 692.83'$   
 $L = 1,352.45'$   
 $E = 93.22'$   
 P.C. STA. = 200+00.00  
 N: 1949099.1939  
 E: 1131595.7753  
 P.T. STA. = 213+52.45  
 N: 1947825.1084  
 E: 1131999.0340

### BENCHMARKS

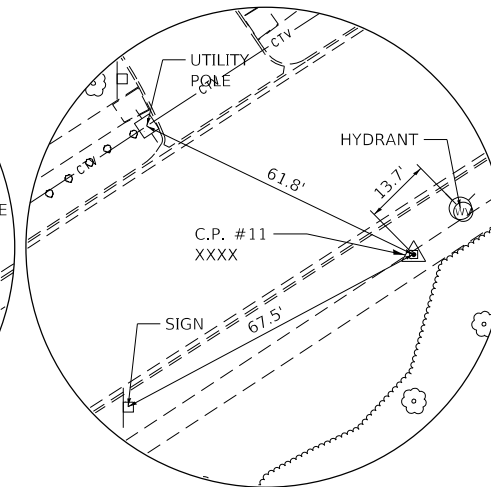
BENCHMARK #3  
 VILLAGE OF NILES SURVEY MONUMENT #3  
 STATION IS LOCATED AT THE NORTHEAST CORNER OF THE  
 INTERSECTION OF TOUHY AVENUE AND CALDWELL ROAD.  
 STATION IS 53.0 FT EAST OF THE CENTERLINE OF CALDWELL  
 ROAD AND 54.9 FT NORTH OF THE CENTERLINE OF TOUHY  
 AVENUE. MONUMENT IS A BERSTEIN GPS 3D.  
 N: 1,947,484.9790  
 E: 1,132,281.6660  
 (NORTHING AND EASING INFORMATION IS GIVEN IN  
 NAD-83 ILLINOIS STATE PLANE EAST AND ARE FOR LOCATION  
 REFERENCE ONLY).  
 ELEVATION 623.647 (NAVD-88)



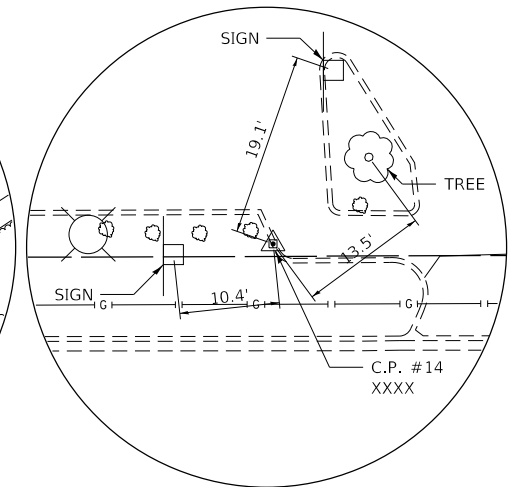
CONTROL POINT #7  
 N: 1947475.0717  
 E: 1130536.3222



CONTROL POINT #10  
 N: 1947643.3264  
 E: 1131821.7712



CONTROL POINT #11  
 N: 1947219.1199  
 E: 1131262.4192



CONTROL POINT #14  
 N: 1947481.9050  
 E: 1132408.7095

HRG PROJECT NO: 1940601  
 HRG PROJ CONTACT:  
 FILE NAME: 1940601-1940601-1940601.dwg  
 PEN TABLE: 1940601.tbl



USER NAME = mzuzio	DESIGNED - MLZ	REVISED -
PLOT SCALE = 400.0000' / in.	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

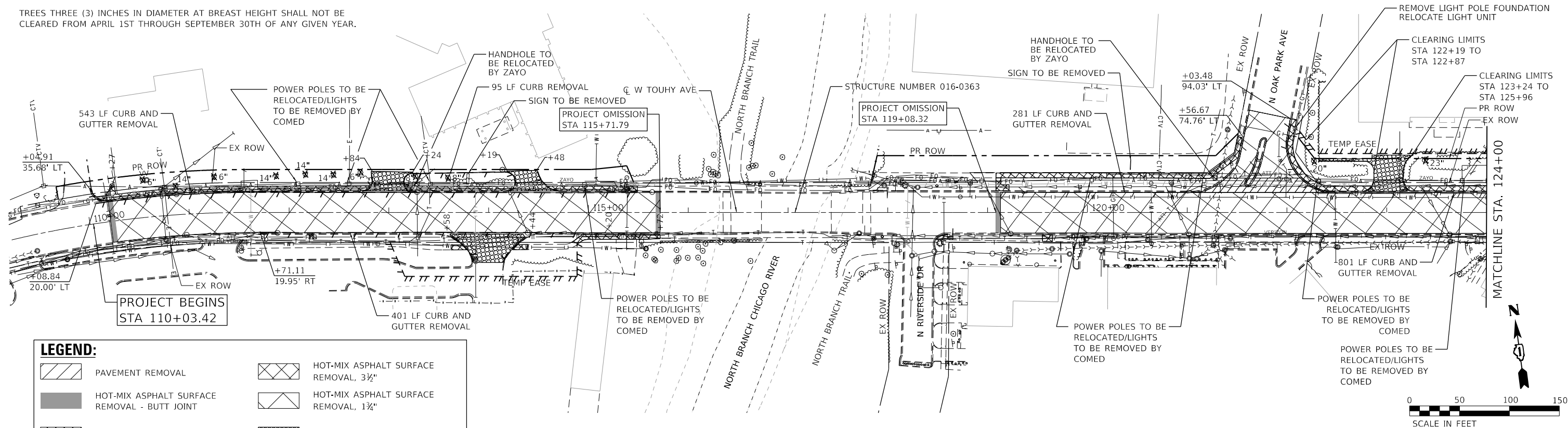
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

ALIGNMENT TIES AND BENCHMARKS		
SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	STA. 110+03.42 TO STA. 124+00

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	24
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	



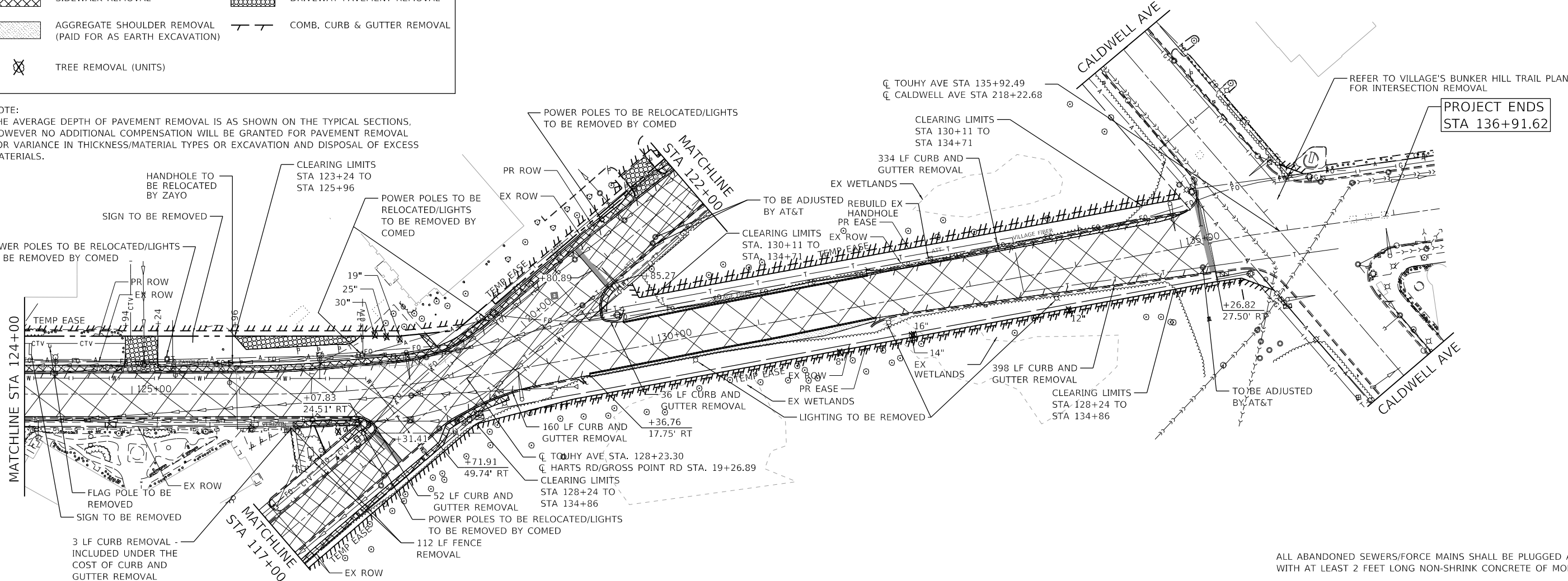
TREES THREE (3) INCHES IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST THROUGH SEPTEMBER 30TH OF ANY GIVEN YEAR.



**LEGEND:**

- |  |                                                           |  |                                         |
|--|-----------------------------------------------------------|--|-----------------------------------------|
|  | PAVEMENT REMOVAL                                          |  | HOT-MIX ASPHALT SURFACE REMOVAL, 3 1/2" |
|  | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT              |  | HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4" |
|  | SIDEWALK REMOVAL                                          |  | DRIVEWAY PAVEMENT REMOVAL               |
|  | AGGREGATE SHOULDER REMOVAL (PAID FOR AS EARTH EXCAVATION) |  | COMB. CURB & GUTTER REMOVAL             |
|  | TREE REMOVAL (UNITS)                                      |  |                                         |

**NOTE:**  
THE AVERAGE DEPTH OF PAVEMENT REMOVAL IS AS SHOWN ON THE TYPICAL SECTIONS, HOWEVER NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR PAVEMENT REMOVAL FOR VARIANCE IN THICKNESS/MATERIAL TYPES OR EXCAVATION AND DISPOSAL OF EXCESS MATERIALS.



ALL ABANDONED SEWERS/FORCE MAINS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OF MORTAR PLUG.

HRG PROJECT NO. 191405.01  
HRG PROJ. CONTACT:  
FILE NAME: 191405.01-sht-rem-01.dgn  
PEN TABLE: 191405.tbl



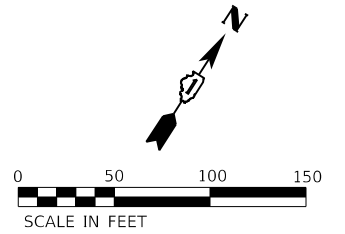
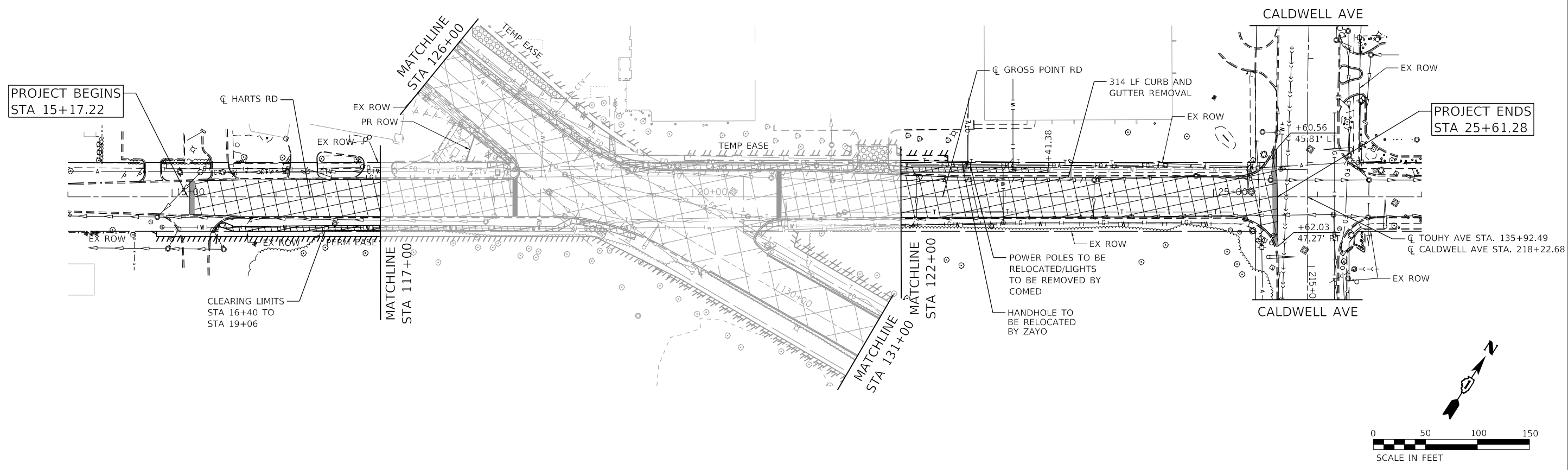
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PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REMOVAL PLAN  
TOUHY AVENUE**

SCALE: 1"=50' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	25
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT
CONTRACT NO. 61H59				



**LEGEND:**

	PAVEMENT REMOVAL		HOT-MIX ASPHALT SURFACE REMOVAL, 3 1/2"
	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT		HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"
	SIDEWALK REMOVAL		DRIVEWAY PAVEMENT REMOVAL
	AGGREGATE SHOULDER REMOVAL (PAID FOR AS EARTH EXCAVATION)		COMB. CURB & GUTTER REMOVAL
	TREE REMOVAL (UNITS)		

**NOTE:**  
 THE AVERAGE DEPTH OF PAVEMENT REMOVAL IS AS SHOWN ON THE TYPICAL SECTIONS, HOWEVER NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR PAVEMENT REMOVAL FOR VARIANCE IN THICKNESS/MATERIAL TYPES OR EXCAVATION AND DISPOSAL OF EXCESS MATERIALS.

ALL ABANDONED SEWERS/FORCE MAINS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OF MORTAR PLUG.

TREES THREE (3) INCHES IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST THROUGH SEPTEMBER 30TH OF ANY GIVEN YEAR.

HRG PROJECT NO.: 19405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19405.01-sht-rm-02.dgn  
 PEN TABLE: 19405.tbl



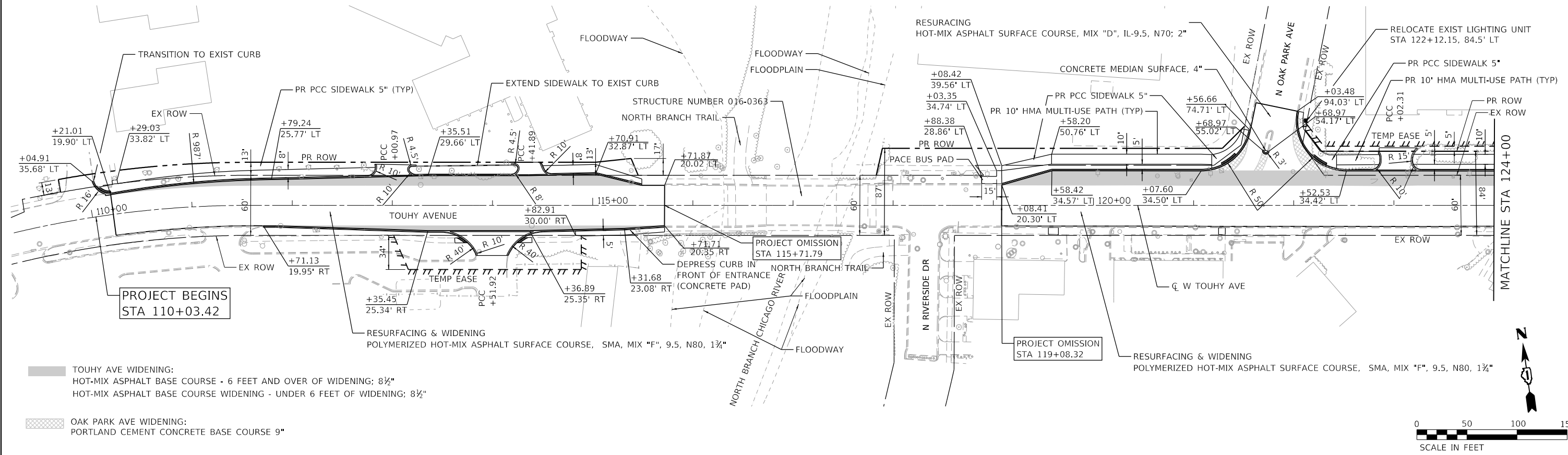
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PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>REMOVAL PLAN</b>	
<b>HARTS ROAD /GROSS POINT ROAD</b>	
SCALE: 1"=50'	SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	26
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILED	
	NO.	

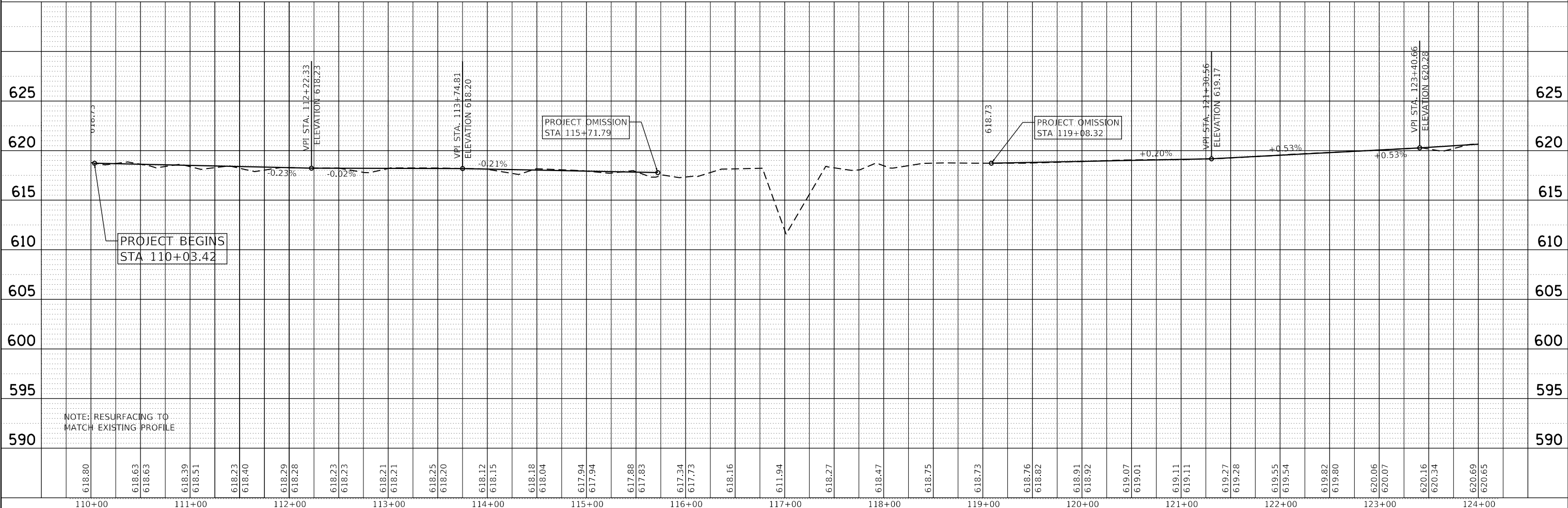


**TOUHY AVE WIDENING:**  
HOT-MIX ASPHALT BASE COURSE - 6 FEET AND OVER OF WIDENING; 8½"  
HOT-MIX ASPHALT BASE COURSE WIDENING - UNDER 6 FEET OF WIDENING; 8½"

**OAK PARK AVE WIDENING:**  
PORTLAND CEMENT CONCRETE BASE COURSE 9"



PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.	



HRG PROJECT NO.: 19406.01  
HRG PROJ. CONTACT:  
FILE NAME: 19406.01-19406.01-19406.01-19406.01.dgn  
PEN TABLE: 19406.tbl

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USER NAME = mzu210	DESIGNED - MLZ	REVISED -
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PLOT DATE = 12/16/2022	DATE -	REVISED -

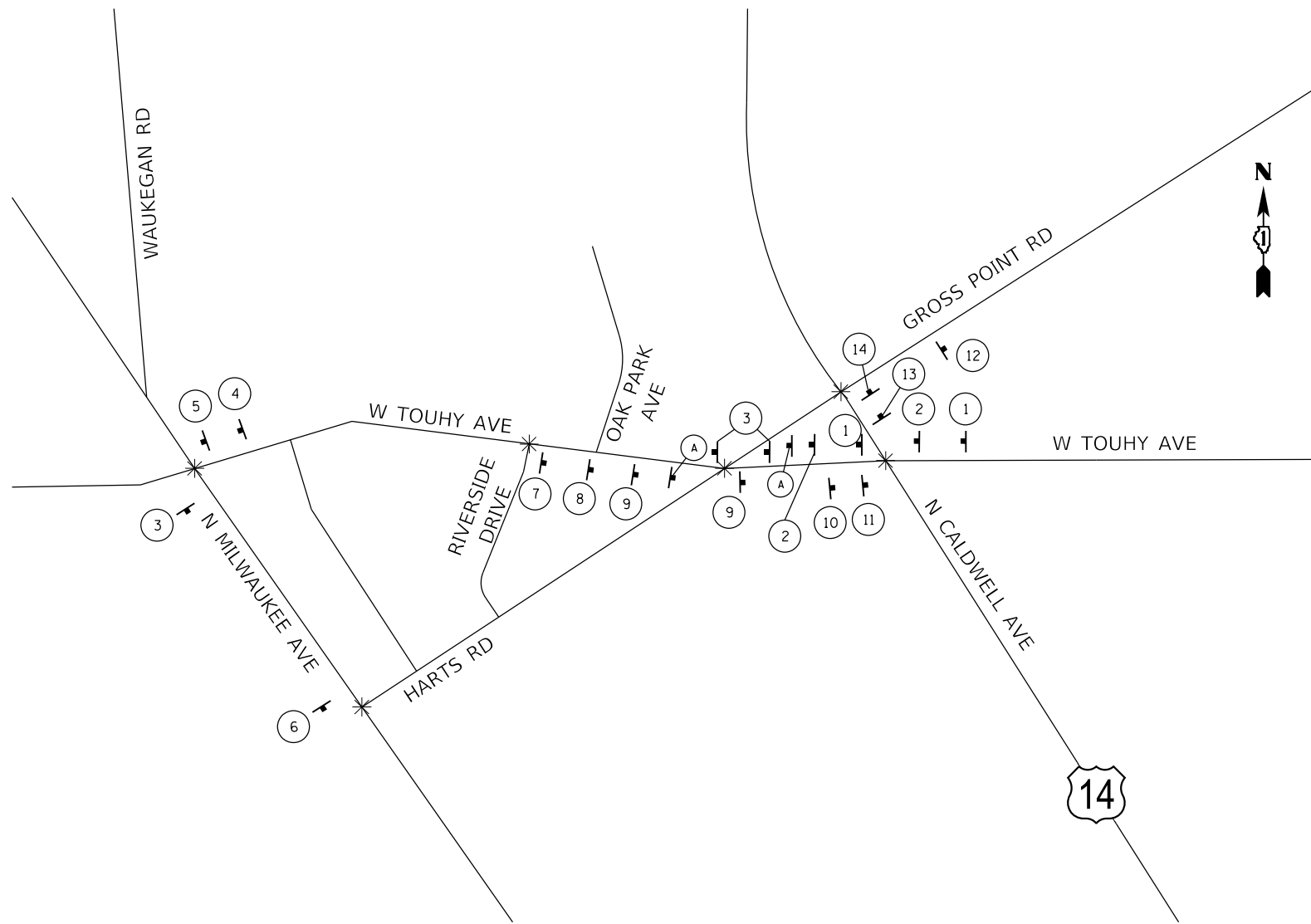
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PLAN AND PROFILE TOUHY AVENUE</b>			
SCALE: 1"=50'	SHEET 1 OF 2 SHEETS	STA. 110+03.42 TO STA. 124+00	

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	27
CONTRACT NO. 61H59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				







MAINTENANCE OF TRAFFIC SIGN    
 \* TEMPORARY TRAFFIC SIGNAL TIMING = 6 EACH

NOTE: R3-2 SIGN LOCATION IS SHOWN ON MOT SHEET

**SIGNING LEGEND FOR MOT STAGE 1**

- 1 SPECIAL 5" BLACK LETTERS ON ORANGE BACKGROUND
- 2 W20-2A-4848
- 3 M3-3(0)-2412 24"X18"  
M4-9(0)-3024
- 4 M3-3(0)-2412 24"X18"  
M4-9(0)-3024
- 5 M3-3(0)-2412 24"X18"  
M4-9(0)-3024
- 6 M4-8A-2418

**SIGNING LEGEND FOR MOT STAGE 2**

- 7 SPECIAL 5" BLACK LETTERS ON ORANGE BACKGROUND
- 8 W20-2A-4848
- 9 M3-3(0)-2412 24"X18"  
M4-9(0)-3024
- 10 M3-3(0)-2412 24"X18"  
M4-9(0)-3024
- 11 M3-3(0)-2412 24"X18"  
M4-9(0)-3024
- 12 M4-8A-2418
- 13 M3-3(0)-2412 24"X18"  
M4-9(0)-3024
- 14 M3-3(0)-2412 24"X18"  
M4-9(0)-3024

**DETOUR GENERAL NOTES**

1. THE LEFT TURNING MOVEMENTS SHALL NOT BE RESTRICTED UNTIL ALL SIGNING HAS BEEN ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND APPROVED BY THE ENGINEER.
2. THE ENGINEER, VILLAGE OF NILES EMERGENCY SERVICES, THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE VILLAGE OF NILES SHALL BE NOTIFIED IN WRITING AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
3. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS" THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AND AS DIRECTED BY THE ENGINEER.
4. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL CONFORM TO "CONVENTIONAL ROAD" AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE.
5. ALL WORK REQUIRED FOR SIGNAGE SHALL BE PAID AS "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)". ADDITIONAL SIGNING AND/OR BARRICADES DEEMED NECESSARY BY THE ENGINEER SHALL BE PROVIDED AND INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
6. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH NAMES AND PHONE NUMBERS OF HIS/HER REPRESENTATIVES ON THE CONSTRUCTION SITE. (INCLUDING 24-HR EMERGENCY NUMBER) AND HIS/HER REPRESENTATIVES SHALL BE RESPONSIBLE FOR THE DETOUR SIGNING, PRIOR TO THE START OF WORK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD LOCATION OF ALL DETOUR AND CONSTRUCTION SIGNING.
8. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WITH THE DETOUR IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR IN A MANNER MEETING THE APPROVAL OF THE ENGINEER.
9. ALL DETOUR SIGNING SHALL BE POST MOUNTED.
10. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1084.02 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR IN LIKE-NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNS, INCLUDING CUTTING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER, AND SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".
12. THE ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS BEFORE THE ROAD IS TO BE REOPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
13. ALL DETOUR SIGN SPACING SHALL BE SETUP IN ACCORDANCE WITH DISTRICT DETAIL TC-21.

HRG PROJECT NO: 19405.01  
 HRG PROJ CONTACT:  
 FILE NAME: 19405.01-sht-detour-01.dgn  
 PEN TABLE: 19405.tbl



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PLOT SCALE = 800.0000' / 1"	CHECKED -	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LEFT TURN DETOUR PLAN  
HARTS ROAD /GROSS POINT ROAD**

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

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	30
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

**SUGGESTED MAINTENANCE OF TRAFFIC GENERAL NOTES**

1. THE TRAFFIC CONTROL PLAN SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY IMPROVE OR MODIFY THE TRAFFIC CONTROL PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT [KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV](mailto:KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV) A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
3. ALL OF THE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE BEFORE CONSTRUCTION IS STARTED. ALL TEMPORARY PAVEMENT MARKINGS & TRAFFIC CONTROL DEVICES SHALL BE IN PLACE AT THE BEGINNING OF EACH STAGE AND SHALL BE MAINTAINED FOR THE DURATION OF THAT STAGE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. A MINIMUM OF ONE (1) NINE FOOT (10') LANE IN EACH DIRECTION SHALL BE KEPT OPEN TO TRAFFIC AT ALL TIMES.
5. THE CONTRACTOR SHALL PROVIDE INFORMATION SIGNS ON TEMPORARY SUPPORTS FOR THE COMMERCIAL DRIVEWAYS. THESE SIGNS SHALL BE WHITE ON GREEN IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS TO ALL ENTRANCES, APPROACHES AND TEMPORARY ROADS WITHIN THE PROJECT LIMITS. ALL "DRIVEWAY ENTRANCE" SIGNS PER DISTRICT ONE DETAIL TC-26 THAT ARE SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL & PROTECTION (SPECIAL).
6. THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS, STATE STANDARDS AND AS DIRECTED BY THE ENGINEER.
7. THE CONTRACTOR SHALL INFORM THE ENGINEER OF ANY CHANGES IN STAGING AT LEAST TWO (2) WORKING DAYS IN ADVANCE.
8. TEMPORARY SIGNING, AS SHOWN, SHALL CONFORM TO THE APPLICABLE STANDARDS INCLUDED IN THE SPECIAL PROVISIONS AND CONTRACT PLANS OR AS DIRECTED BY THE ENGINEER.
9. ALL "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE EQUIPPED WITH MONO-DIRECTIONAL AMBER FLASHING LIGHTS.
10. ALL STATE ROUTE MARKERS SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT ALL STAGES OF CONSTRUCTION.
11. EXISTING TRAFFIC CONTROL DEVICES WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGED SIGNS CAUSED BY THIS WORK SHALL BE REPLACED BY THE CONTRACTOR.
12. TRAFFIC CONTROL DEPICTED ON THE MAINTENANCE OF TRAFFIC PLANS IS THE MINIMUM REQUIREMENT. OTHER WORK OR SIGNING MAY BE REQUIRED BY THE ENGINEER.
13. THE TYPE III BARRICADES ARE TO BE PLACED IN ACCORDANCE WITH STANDARD 701901 UNLESS AUTHORIZED BY THE ENGINEER TO USE AN ALTERNATIVE ARRANGEMENT.
14. TYPE 1, TYPE II OR DRUM BARRICADES WITH TWO-WAY FLASHING LIGHTS SHALL BE REQUIRED AT ALL OPEN TRENCHES, EXCAVATIONS, OPEN OR EXPOSED SEWER STRUCTURES, TRANSVERSE PAVEMENT JOINTS, MATERIALS OR EQUIPMENT WITHIN THE RIGHT-OF-WAY (NUMBER AND SPACING DEPENDS ON THE CONDITIONS); AND AT LOCATIONS DESIGNATED BY THE ENGINEER OR LOCAL LAW ENFORCEMENT AGENCIES.
15. THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".
16. ARROW BOARDS WILL BE REQUIRED WHEN IMPLEMENTING ALL LANE CLOSURES.
17. ANY SAW CUTTING OF THE EXISTING PAVEMENT FOR STAGE CONSTRUCTION SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE YARD FOR "PAVEMENT REMOVAL".
18. TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY, OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION WITHIN TWO HOURS FROM THE TIME OF NOTIFICATION.
19. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
20. A DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE WITH A "SIDEWALK CLOSED" SIGN AFFIXED, SHALL BE PLACED ON ALL SIDEWALKS CLOSED DUE TO CONSTRUCTION ACTIVITIES AS SHOWN IN STDs. 701801 & 701901.
21. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE TEMPORARY PAVEMENT MARKING FOR STAGING SHALL BE REMOVED. THIS WORK SHALL BE PAID FOR AS "PAVEMENT MARKING REMOVAL-GRINDING", WITHIN THE PROJECT LIMITS AND "PAVEMENT MARKING REMOVAL-WATER BLASTING" OUTSIDE THE PROJECT LIMITS.
22. FOR TRAFFIC STAGING, PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR STAGE 1 AND STAGE 2.
23. CHANGEABLE MESSAGE SIGNS SHALL BE INSTALLED TWO WEEKS PRIOR TO ALL TRAFFIC STAGE CHANGES ON EACH APPROACH OF THE EFFECTED ROADWAY TO WARN MOTORISTS OF THE UPCOMING EVENT. THE SIGNS SHALL BE REMOVED TWO WEEKS THEREAFTER UNLESS THE SIGNS ARE NEEDED AGAIN FOR A SUBSEQUENT FUTURE EVENT THAT WILL OCCUR WITHIN 2 WEEKS ON THE SAME APPROACH OF THE EFFECTED ROADWAY. THE SIGN LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.
24. WORK ZONE SPEED LIMIT SIGNS SHALL BE LOCATED APPROXIMATELY 500' FROM THE START OF THE WORK ZONE.

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-motefgn-01.dgn  
 PLOT DATE: 12/16/2022  
 PEN TABLE: 191405.tbl



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	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

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

**MAINTENANCE OF TRAFFIC NOTES**  
**TOUHY AVENUE**

SCALE: SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	31
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

**SUGGESTED MAINTENANCE OF TRAFFIC AND CONSTRUCTION STAGING SEQUENCE OF CONSTRUCTION**

**PRE-STAGE - TOUHY AVENUE / HARTS ROAD/GROSS POINT ROAD**

**CONSTRUCTION**  
INSTALL TEMPORARY SIGNALS AT THE INTERSECTION OF TOUHY AVENUE AND HARTS ROAD/GROSS POINT ROAD.

**SUGGESTED MAINTENANCE OF TRAFFIC**  
INSTALL ARTERIAL ROAD INFORMATION SIGNING PER DISTRICT 1 DETAIL TC-22 A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION.

**STAGE 1 - TOUHY AVENUE / HARTS ROAD/GROSS POINT ROAD**

**CONSTRUCTION**  
CONSTRUCT CURB AND GUTTER, BASE COURSE, AND DRAINAGE STRUCTURES IN THE NORTH PORTION OF TOUHY AVENUE AND THE WEST PORTION OF GROSS POINT ROAD.

**SUGGESTED MAINTENANCE OF TRAFFIC**  
INSTALL LANE CLOSURE AND LEFT TURN DETOUR ADVANCE SIGNING ACCORDING TO THE PLANS.

COVER AND REMOVE PERMANENT SIGNS AS NEEDED FOR STAGE 1 CONSTRUCTION.

REMOVE ALL CONFLICTING RAISED REFLECTIVE PAVEMENT MARKERS WITHIN THE PROJECT LIMITS.

REMOVAL ALL CONFLICTING PAVEMENT MARKINGS ALONG TOUHY AVENUE AND GROSS POINT ROAD AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL FOR LANE DROPS ACCORDING TO HIGHWAY STANDARDS 701606 AND 701701.

INSTALL ALL TEMPORARY PAVEMENT MARKING AND TEMPORARY TRAFFIC CONTROL DEVICES FOR STAGE 1 CONSTRUCTION, SHIFT TRAFFIC.

**STAGE 2 - TOUHY AVENUE/HARTS ROAD/GROSS POINT ROAD**

**CONSTRUCTION**  
CONSTRUCT CURB AND GUTTER, BASE COURSE, AND DRAINAGE STRUCTURES IN THE SOUTH PORTION OF TOUHY AVENUE. CONSTRUCT MULTI-USE PATH ALONG THE EAST SIDE OF HARTS ROAD.

**SUGGESTED MAINTENANCE OF TRAFFIC**  
INSTALL LANE CLOSURE AND LEFT TURN DETOUR ADVANCE SIGNING ACCORDING TO THE PLANS.

COVER AND REMOVE PERMANENT SIGNS AS NEEDED FOR STAGE 2 CONSTRUCTION.

REMOVAL ALL CONFLICTING PAVEMENT MARKINGS ALONG TOUHY AVENUE AND GROSS POINT ROAD AND INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL FOR LANE DROPS ACCORDING TO HIGHWAY STANDARDS 701606, 701701.

INSTALL ALL TEMPORARY PAVEMENT MARKING AND TEMPORARY TRAFFIC CONTROL DEVICES FOR STAGE 2 CONSTRUCTION, SHIFT TRAFFIC.

**STAGE 3 - NOT ILLUSTRATED**

**CONSTRUCTION**  
MILL EXISTING PAVEMENT AT VARIOUS LOCATIONS AS DIRECTED BY THE ENGINEER.

INSTALL BINDER COURSE ALONG HARTS ROAD AND GROSS POINT ROAD.

INSTALL TRAFFIC SIGNALS.

INSTALL SURFACE COURSE AND SHORT TERM PAVEMENT MARKING.

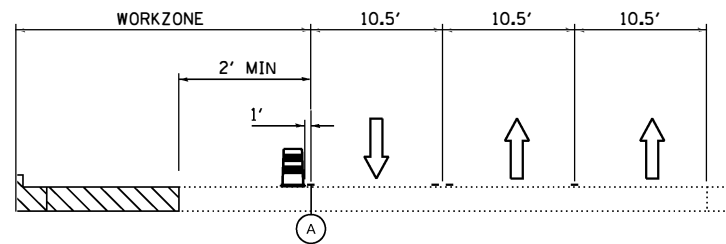
**SUGGESTED MAINTENANCE OF TRAFFIC**  
ESTABLISH TRAFFIC CONTROL WITH THE LATEST REVISION OF HIGHWAY STANDARDS 701501, 701502, 701602 AND 701606, 701611, AND 701701.

**END CONSTRUCTION**

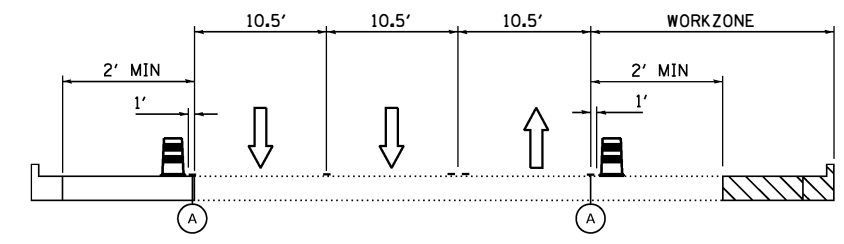
RE-ESTABLISH PERMANENT PAVEMENT MARKING, RAISED REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH DISTRICT 1 DETAILS UTILIZING LANE CLOSURES.

REMOVAL ALL CONSTRUCTION SIGNING AND TRAFFIC CONTROL MEASURES.

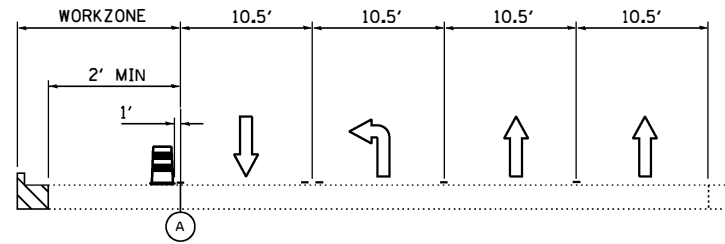
UNCOVER ALL PERMANENT SIGNS.



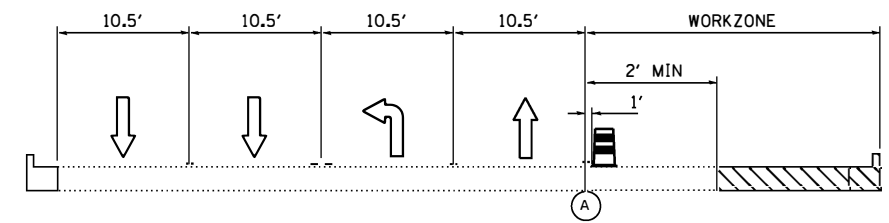
**TYPICAL SECTION - STAGE 1  
TOUHY AVENUE WEST OF GROSS POINT ROAD INTERSECTION**



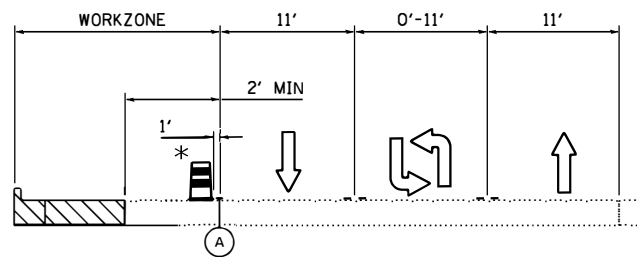
**TYPICAL SECTION - STAGE 2  
TOUHY AVENUE WEST OF GROSS POINT ROAD INTERSECTION**



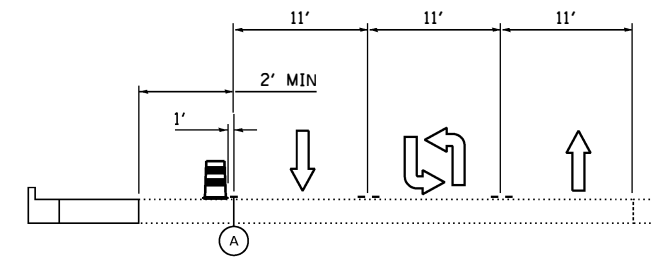
**TYPICAL SECTION - STAGE 1  
TOUHY AVENUE WEST OF GROSS POINT ROAD INTERSECTION**



**TYPICAL SECTION - STAGE 2  
TOUHY AVENUE WEST OF GROSS POINT ROAD INTERSECTION**



**TYPICAL SECTION - STAGE 1  
GROSS POINT ROAD**



**TYPICAL SECTION - STAGE 2  
GROSS POINT ROAD**

\* TEMPORARY CONCRETE BARRIER IS LOCATED AT STA. 22+09.66 TO STA. 22+56.98 TO PROTECT FROM INSTALLATION OF MANHOLE

Ⓐ 4" WHITE SOLID LINE TYPE IV TAPE TEMP. PVMT. MARKING

HRG PROJECT NO.: 19/0606.01  
 HRG PROJ. CONTACT:  
 FILE: 19/0606.01-shr-mot/tpm-02.dgn  
 PLOT DATE: 12/16/2022  
 PEN TABLE: pvt/tpm.tbl



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	DRAWN - WJH	REVISED -
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PLOT DATE = 12/16/2022	DATE -	REVISED -

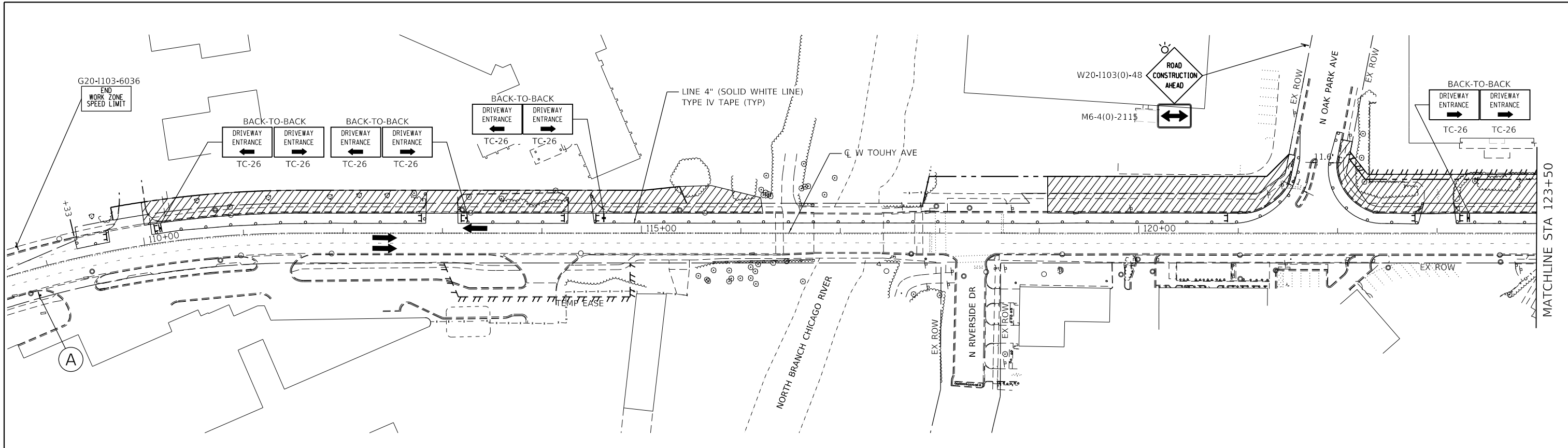
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC NOTES  
TOUHY AVENUE**

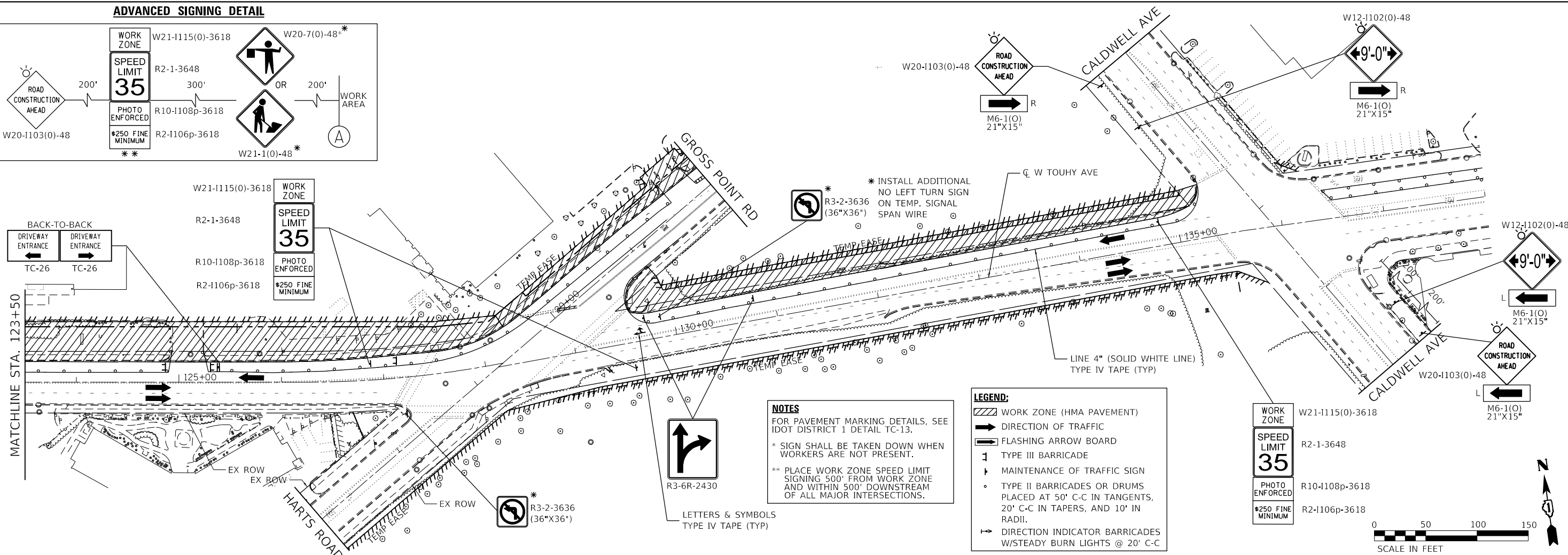
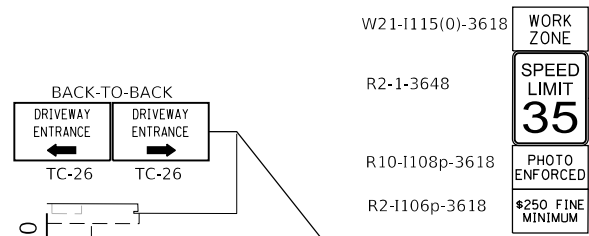
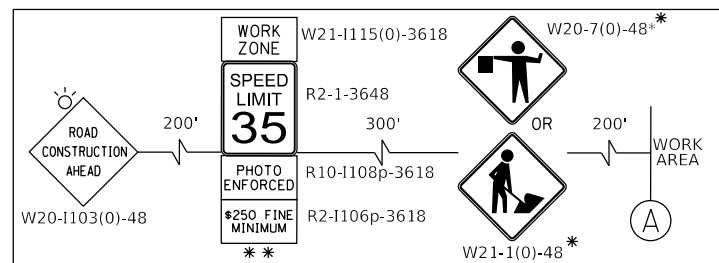
SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	32
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	



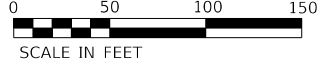


**ADVANCED SIGNING DETAIL**



**NOTES**  
 FOR PAVEMENT MARKING DETAILS, SEE IDOT DISTRICT 1 DETAIL TC-13.  
 \* SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT.  
 \*\* PLACE WORK ZONE SPEED LIMIT SIGNING 500' FROM WORK ZONE AND WITHIN 500' DOWNSTREAM OF ALL MAJOR INTERSECTIONS.

- LEGEND:**
- ▨ WORK ZONE (HMA PAVEMENT)
  - ➔ DIRECTION OF TRAFFIC
  - ⚡ FLASHING ARROW BOARD
  - 1 TYPE III BARRICADE
  - ⚡ MAINTENANCE OF TRAFFIC SIGN
  - TYPE II BARRICADES OR DRUMS PLACED AT 50' C-C IN TANGENTS, 20' C-C IN TAPERS, AND 10' IN RADII.
  - ➔ DIRECTION INDICATOR BARRICADES W/STEADY BURN LIGHTS @ 20' C-C



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-mtr-01.dgn  
 PEN TABLE: 191405.tbl



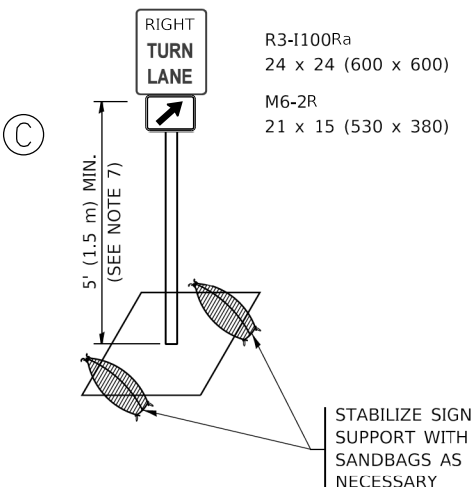
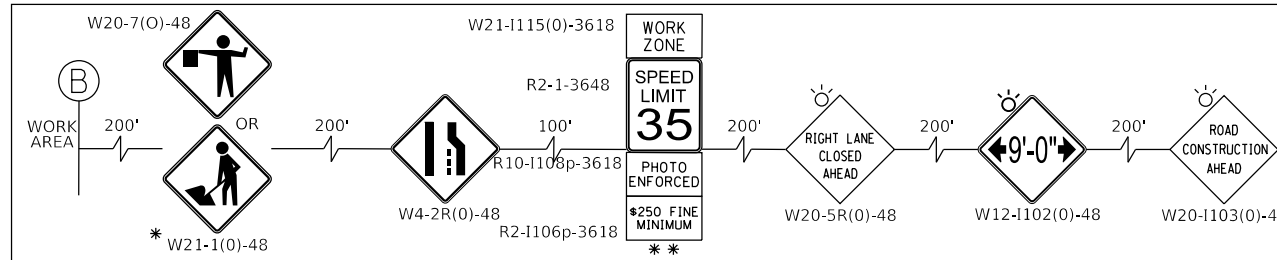
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PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 1  
 TOUHY AVENUE-HARTS ROAD /GROSS POINT ROAD**  
 SCALE: 1"=50' SHEET 3 OF 6 SHEETS STA. TO STA.

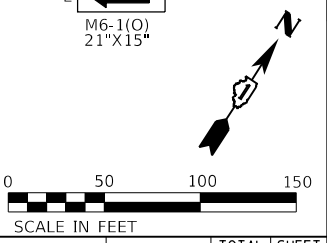
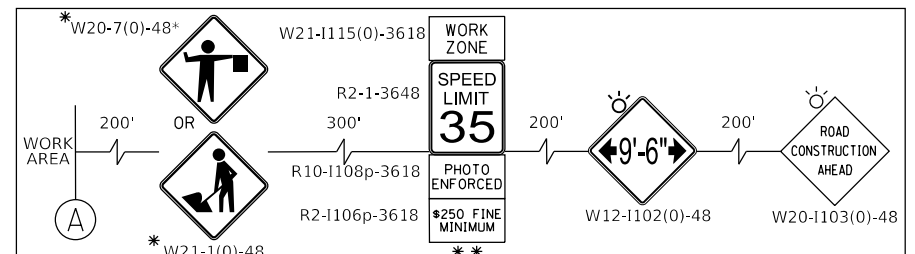
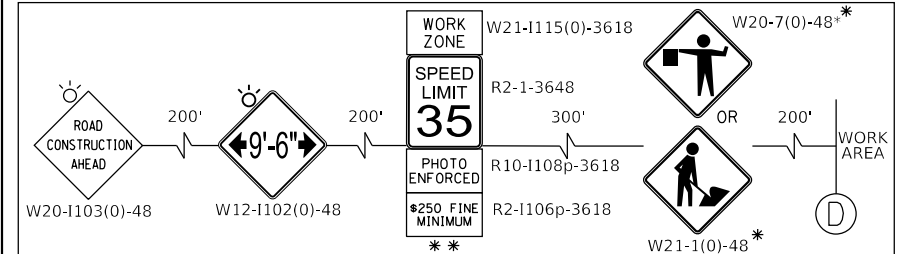
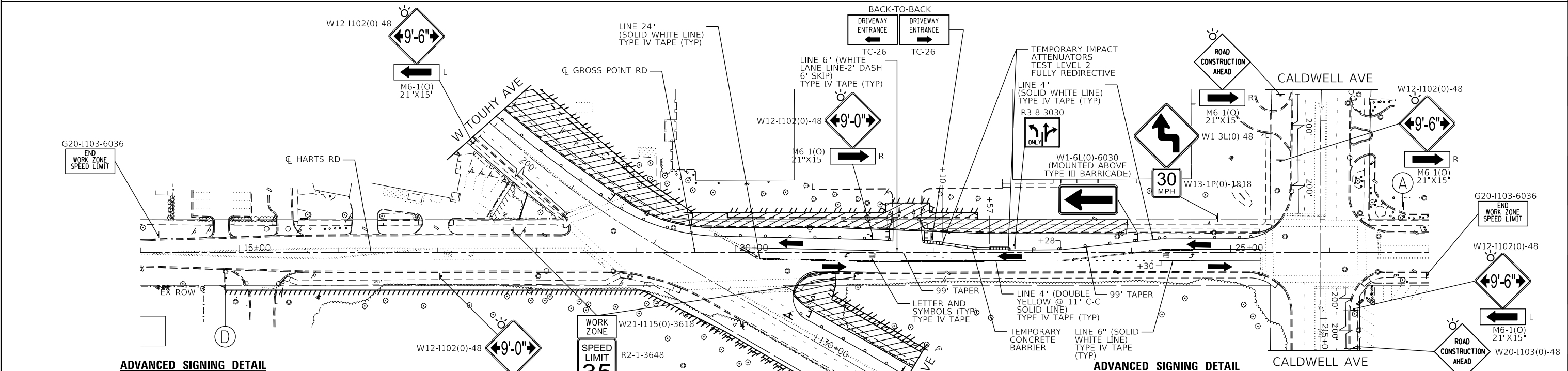
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	33
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

**ADVANCED SIGNING DETAIL**



**NOTES**  
 FOR PAVEMENT MARKING DETAILS, SEE IDOT DISTRICT 1 DETAIL TC-13.  
 \* SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT.  
 \*\* PLACE WORK ZONE SPEED LIMIT SIGNING 500' FROM WORK ZONE AND WITHIN 500' DOWNSTREAM OF ALL MAJOR INTERSECTIONS.

- LEGEND:**
- WORK ZONE (HMA PAVEMENT)
  - DIRECTION OF TRAFFIC
  - FLASHING ARROW BOARD
  - TYPE III BARRICADE
  - MAINTENANCE OF TRAFFIC SIGN
  - TYPE II BARRICADES OR DRUMS PLACED AT 50' C-C IN TANGENTS, 20' C-C IN TAPERS, AND 10' IN RADII.
  - DIRECTION INDICATOR BARRICADES W/STEADY BURN LIGHTS @ 20' C-C



HRG PROJECT NO.: 191406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191406.01-srt-mtr-02.dgn  
 PEN TABLE: 191406.tbl



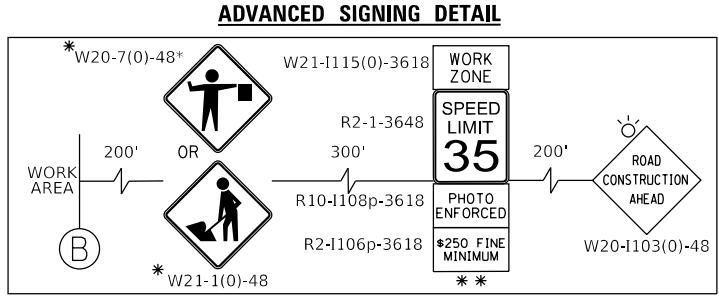
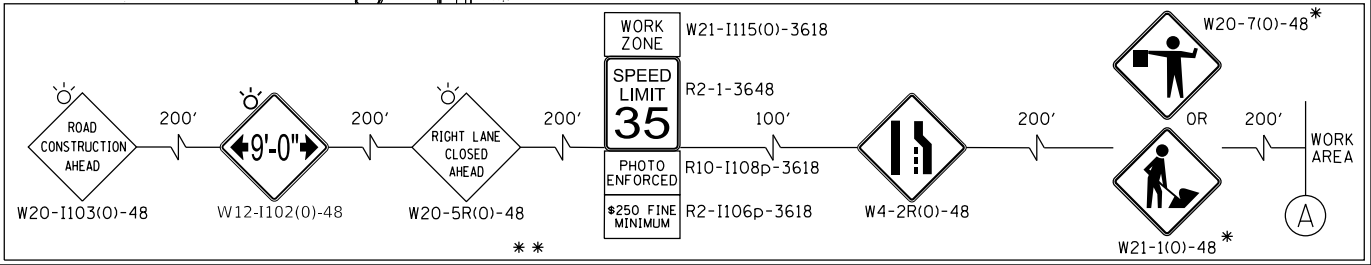
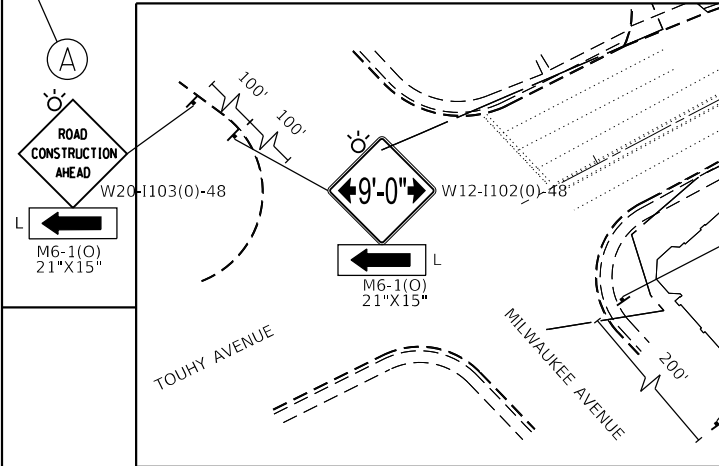
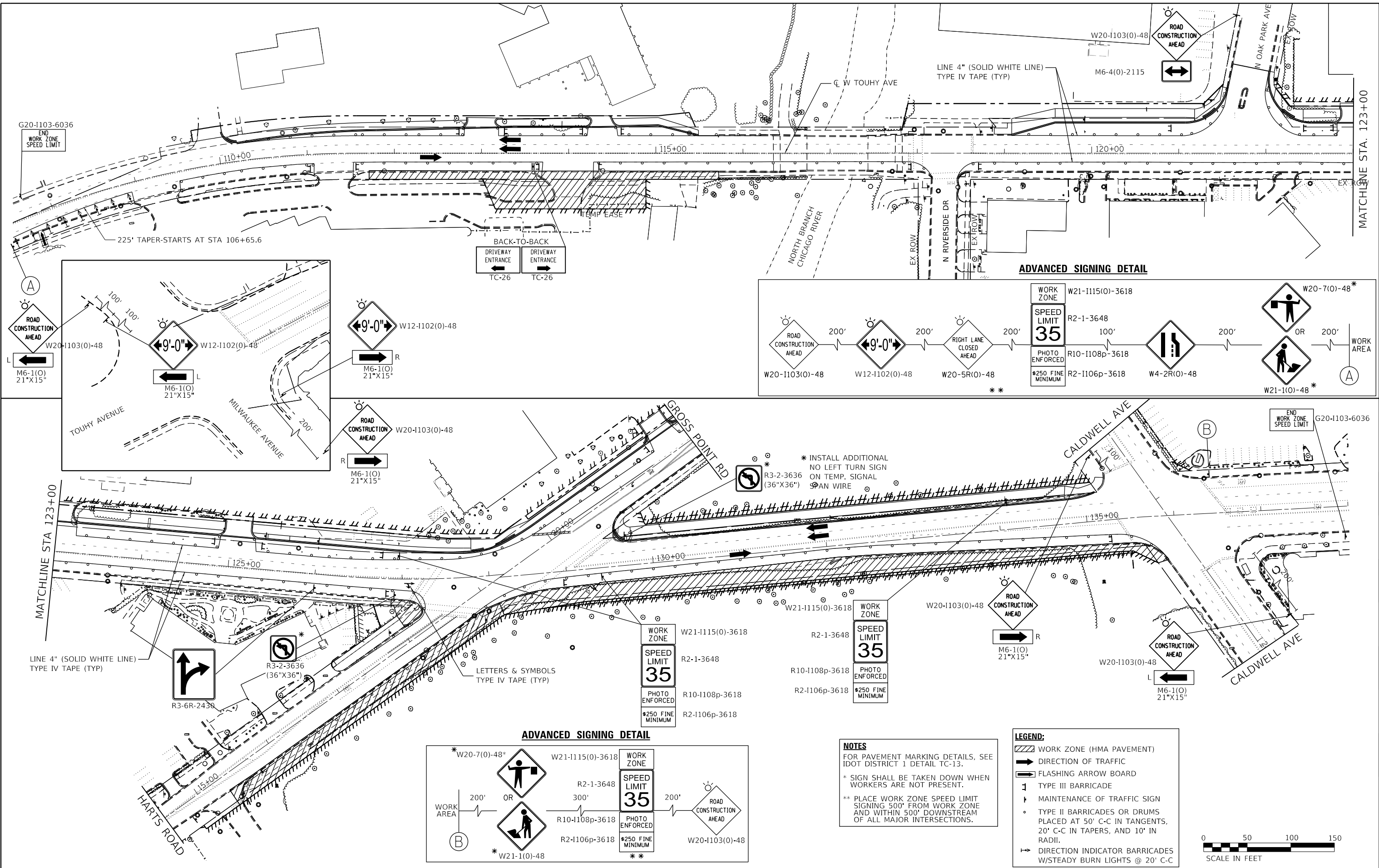
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PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 1  
 TOUHY AVENUE-HARTS ROAD /GROSS POINT ROAD**

SCALE: 1"=50'    SHEET 4 OF 6 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	34
CONTRACT NO. 61H59				
FED. ROAD DIST. NO.    ILLINOIS FED. AID PROJECT				



**NOTES**  
 FOR PAVEMENT MARKING DETAILS, SEE IDOT DISTRICT 1 DETAIL TC-13.  
 \* SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT.  
 \*\* PLACE WORK ZONE SPEED LIMIT SIGNING 500' FROM WORK ZONE AND WITHIN 500' DOWNSTREAM OF ALL MAJOR INTERSECTIONS.

- LEGEND:**
- WORK ZONE (HMA PAVEMENT)
  - DIRECTION OF TRAFFIC
  - FLASHING ARROW BOARD
  - TYPE III BARRICADE
  - MAINTENANCE OF TRAFFIC SIGN
  - TYPE II BARRICADES OR DRUMS PLACED AT 50' C-C IN TANGENTS, 20' C-C IN TAPERS, AND 10' IN RADII.
  - DIRECTION INDICATOR BARRICADES W/STEADY BURN LIGHTS @ 20' C-C



HRG PROJECT NO. 19406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19406.01-srt-motz-01.dgn  
 PEN TABLE: 19406.tbl

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 Mirco Professional Design Firm  
 #184-001322

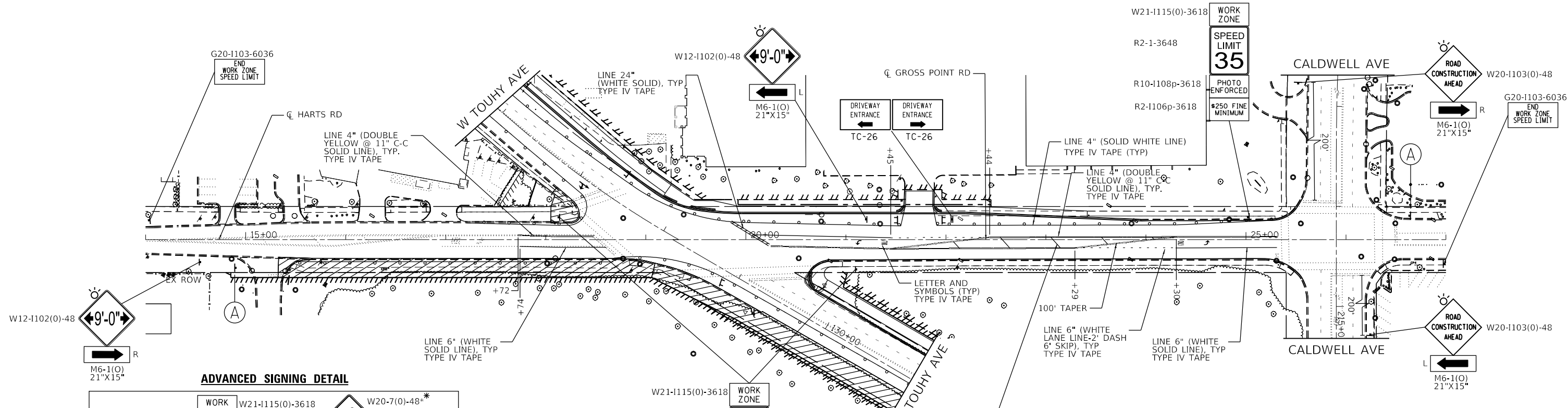
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	DRAWN - WJH	REVISED -
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	DATE -	REVISED -

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

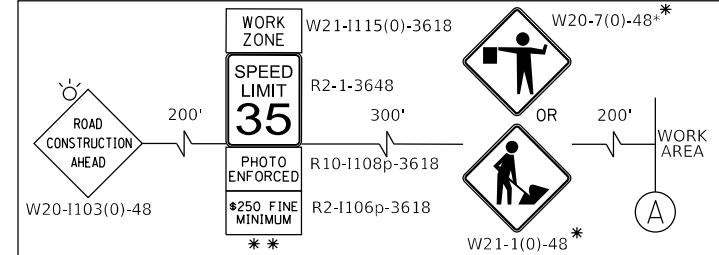
**MAINTENANCE OF TRAFFIC STAGE 2**  
**TOUHY AVENUE**

SCALE: 1"=50'    SHEET 5 OF 6 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	35
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	



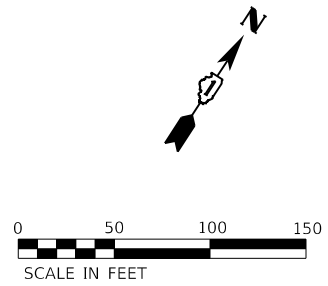
**ADVANCED SIGNING DETAIL**



**NOTES**  
 FOR PAVEMENT MARKING DETAILS, SEE IDOT DISTRICT 1 DETAIL TC-13.  
 \* SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT.  
 \*\* PLACE WORK ZONE SPEED LIMIT SIGNING 500' FROM WORK ZONE AND WITHIN 500' DOWNSTREAM OF ALL MAJOR INTERSECTIONS.

**LEGEND:**

- WORK ZONE (HMA PAVEMENT)
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- TYPE III BARRICADE
- MAINTENANCE OF TRAFFIC SIGN
- TYPE II BARRICADES OR DRUMS PLACED AT 50' C-C IN TANGENTS, 20' C-C IN TAPERS, AND 10' IN RADII.
- DIRECTION INDICATOR BARRICADES W/STEADY BURN LIGHTS @ 20' C-C



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-mof2-02.dgn  
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PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

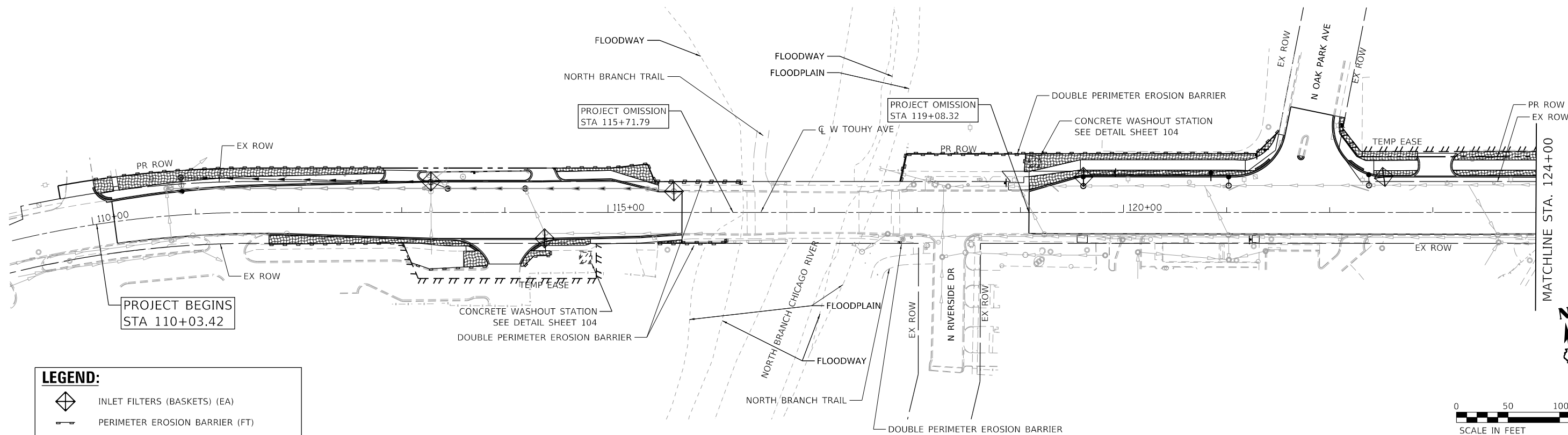
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC STAGE 2  
 HARTS ROAD /GROSS POINT ROAD**

SCALE: 1"=50' SHEET 6 OF 6 SHEETS STA. TO STA.

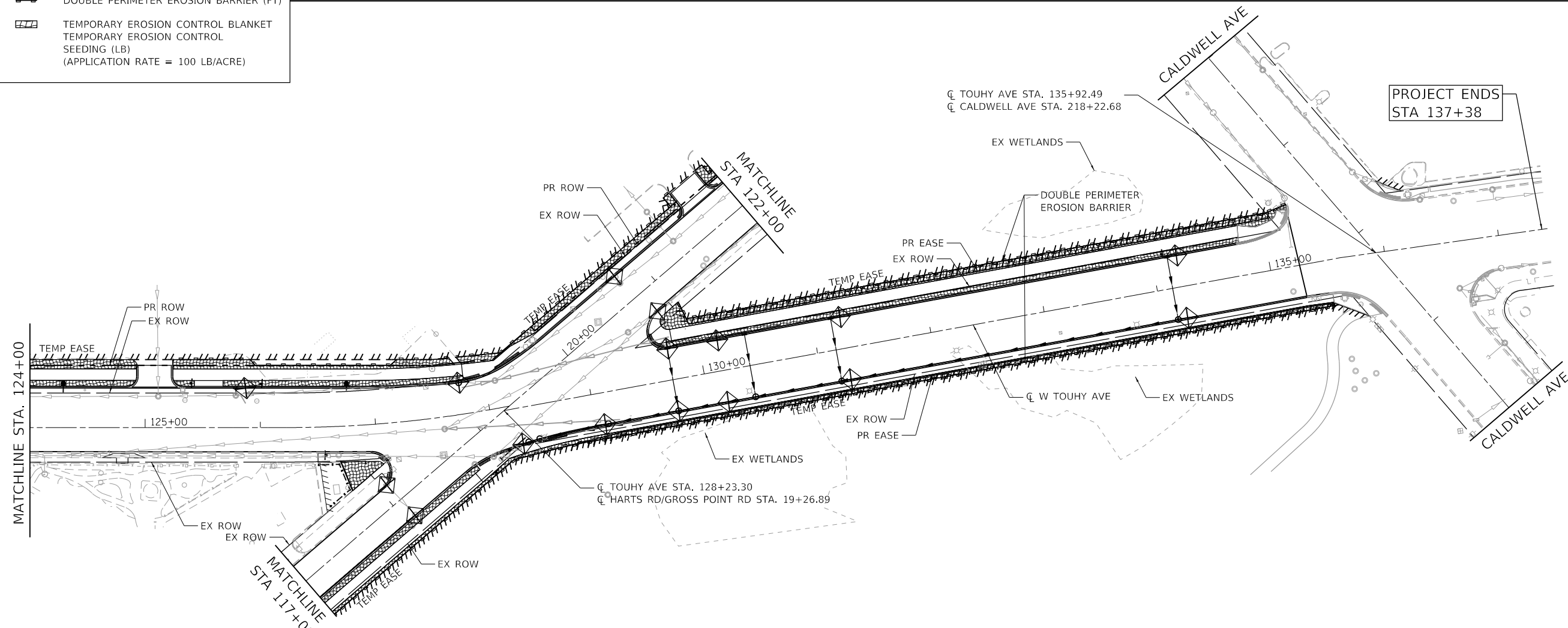
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	36
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

CONTRACT NO. 61H59



**LEGEND:**

- INLET FILTERS (BASKETS) (EA)
- PERIMETER EROSION BARRIER (FT)
- DOUBLE PERIMETER EROSION BARRIER (FT)
- TEMPORARY EROSION CONTROL BLANKET
- TEMPORARY EROSION CONTROL SEEDING (LB)  
(APPLICATION RATE = 100 LB/ACRE)



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt+eroc-01.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzu210	DESIGNED - MLZ	REVISED -
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PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

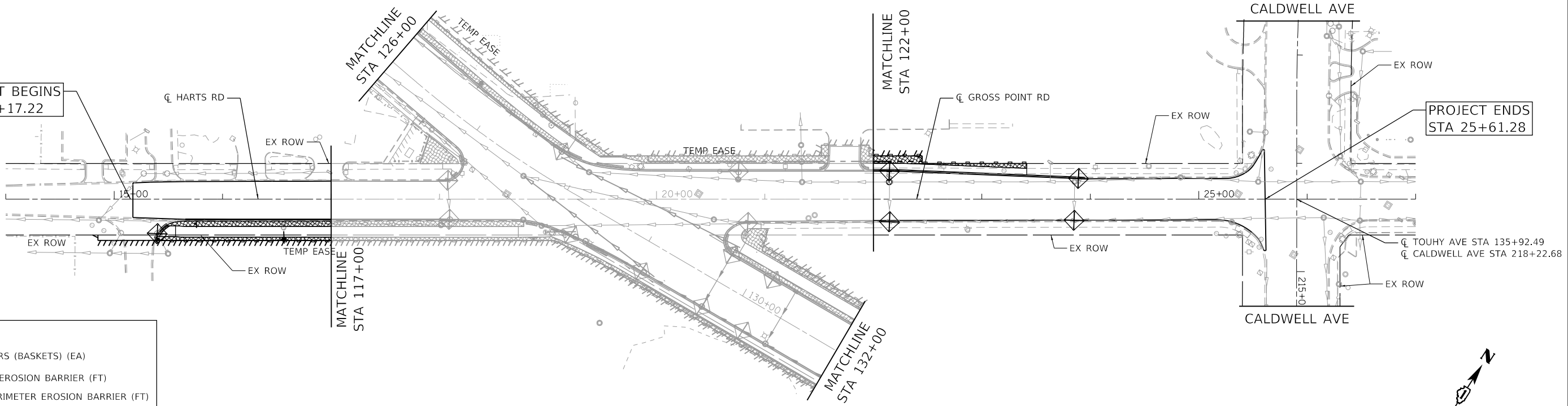
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>EROSION CONTROL PLAN TOUHY AVENUE</b>		F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
		341	13-00118-00-WR	COOK	120	37
SCALE: 1"=50'		SHEET 1 OF 2 SHEETS		STA.	TO STA.	

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	37
CONTRACT NO. 61H59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

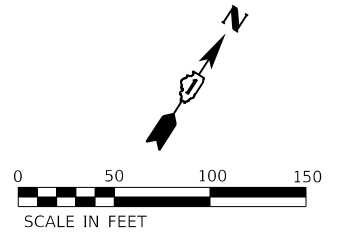
PROJECT BEGINS  
STA 15+17.22

PROJECT ENDS  
STA 25+61.28



**LEGEND:**

- INLET FILTERS (BASKETS) (EA)
- PERIMETER EROSION BARRIER (FT)
- DOUBLE PERIMETER EROSION BARRIER (FT)
- TEMPORARY EROSION CONTROL BLANKET
- TEMPORARY EROSION CONTROL SEEDING (LB)  
(APPLICATION RATE = 100 LB/ACRE)



**SEDIMENTATION AND EROSION CONTROL NOTES**

1. CONTROL MEASURES SHALL MEET THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE ILLINOIS URBAN MANUAL (WWW.AISWCD.ORG/IUM) UNLESS STATED OTHERWISE.
2. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. AREAS OF THE SITE THAT ARE NOT TO BE DISTURBED SHALL BE PROTECTED FROM CONSTRUCTION TRAFFIC OR OTHER DISTURBANCE UNTIL FINAL STABILIZATION IS ACHIEVED.
3. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
4. STABILIZATION BY SEEDING SHALL INCLUDE TOPSOIL PLACEMENT AND FERTILIZATION, AS NECESSARY.
5. NATIVE SEED MIXTURES SHALL INCLUDE RAPID-GROWING ANNUAL GRASSES OR SMALL GRAINS TO PROVIDE INITIAL, TEMPORARY SOIL STABILIZATION.
6. OFFSITE PROPERTY SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. VELOCITY DISSIPATION DEVICES SHALL BE PLACED AT CONCENTRATED DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL, AS NECESSARY TO PREVENT EROSION.
7. SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE DISTURBANCE OF TRIBUTARY AREAS.
8. STABILIZATION OF DISTURBED AREAS SHALL BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE DEVELOPMENT SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE DEVELOPMENT SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS SHALL BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE, BUT NOT LATER THAN 14 CALENDAR DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED BELOW: A) WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE; AND B) IN AREAS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED AND WILL RESUME AFTER 14 DAYS, A TEMPORARY STABILIZATION METHOD MAY BE USED.
9. DISTURBANCE OF STEEP SLOPES SHALL BE MINIMIZED. AREAS OR EMBANKMENTS HAVING SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH STAKED IN PLACE SOD, EROSION CONTROL BLANKET IN COMBINATION WITH SEEDING, OR AN EQUIVALENT CONTROL MEASURE.
10. PERIMETER CONTROL MEASURES SHALL BE PROVIDED DOWNSLOPE AND PERPENDICULAR TO THE FLOW OF RUNOFF FROM DISTURBED AREAS, WHERE THE TRIBUTARY AREA IS GREATER THAN 5,000 SQUARE FEET, AND WHERE RUNOFF WILL FLOW IN A SHEET FLOW MANNER. PERIMETER EROSION CONTROL SHALL ALSO BE PROVIDED AT THE BASE OF SOIL STOCKPILES.
11. THE STORMWATER MANAGEMENT SYSTEM SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION DOWNSLOPE FROM DISTURBED AREAS. INLET PROTECTION THAT REDUCES SEDIMENT LOADING, WHILE ALLOWING RUNOFF TO ENTER THE INLET SHALL BE REQUIRED FOR ALL STORM SEWERS. CHECK DAMS, OR AN EQUIVALENT CONTROL MEASURE, SHALL BE REQUIRED FOR ALL CHANNELS. FILTER FABRIC INLET PROTECTION AND STRAW BALE DITCH CHECKS ARE NOT ACCEPTABLE CONTROL MEASURES.
12. IF DEWATERING SERVICES ARE USED, DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G., SEDIMENT TRAP OR AN EQUIVALENT CONTROL MEASURE). THE ENFORCEMENT OFFICER SHALL BE NOTIFIED PRIOR TO THE COMMENCEMENT OF DEWATERING ACTIVITIES.
13. ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION OF THE DEVELOPMENT SITE IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NECESSARY. TRAPPED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED.
14. STOCKPILED SOIL AND MATERIALS SHALL BE REMOVED FROM FLOOD HAZARD AREAS AT THE END OF EACH WORK DAY. SOIL AND MATERIALS STOCKPILED IN IWMC OR BUFFER AREAS SHALL BE PLACED ON TIMBER MATS, OR AN EQUIVALENT CONTROL MEASURE.
15. EFFECTIVE CONTROL MEASURES SHALL BE UTILIZED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE DEVELOPMENT SITE. AT A MINIMUM, CONTROL MEASURES SHALL BE IMPLEMENTED IN ORDER TO: A) MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATER; AND B) MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, VEHICLE FLUIDS, SANITARY WASTE, AND OTHER MATERIALS PRESENT ON THE DEVELOPMENT SITE TO PRECIPITATION AND TO STORMWATER.
16. ADEQUATE RECEPTACLES SHALL BE PROVIDED FOR THE DEPOSITING OF ALL CONSTRUCTION MATERIAL DEBRIS GENERATED DURING THE DEVELOPMENT PROCESS. THE APPLICANT SHALL NOT CAUSE OR PERMIT THE DUMPING, DEPOSITING, DROPPING, THROWING, DISCARDING OR LEAVING OF CONSTRUCTION MATERIAL DEBRIS UPON OR INTO ANY DEVELOPMENT SITE, CHANNEL, OR IWMC. THE DEVELOPMENT SITE SHALL BE MAINTAINED FREE OF CONSTRUCTION MATERIAL DEBRIS.
17. THE ENFORCEMENT OFFICER MAY REQUIRE ADDITIONAL OR ALTERNATE SOIL EROSION AND SEDIMENT CONTROL MEASURES, BASED ON DEVELOPMENT SITE SPECIFIC CONSIDERATIONS AND THE EFFECTIVENESS OF THE INSTALLED CONTROL MEASURES.
18. DOUBLE-ROW SILT FENCE SHALL BE PROVIDED ALONG THE FLOODPLAIN OF NORTH BRANCH CHICAGO RIVER AND ALONG TOUHY AVENUE BETWEEN GROSS POINT ROAD/HARTS ROAD TO CALDWELL AVENUE AS SHOWN ON THE EROSION CONTROL SHEETS.
19. THERE SHALL BE NO FILL OR STOCKPILING OF MATERIALS WITHIN THE FLOODPLAIN OR ALONG TOUHY AVENUE BETWEEN GROSS POINT ROAD/HARTS ROAD AND CALDWELL AVENUE.

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt+eros-02.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzuz210	DESIGNED - MLZ	REVISED -
PLOT SCALE = 100.0000' / 1"	DRAWN - W/JH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

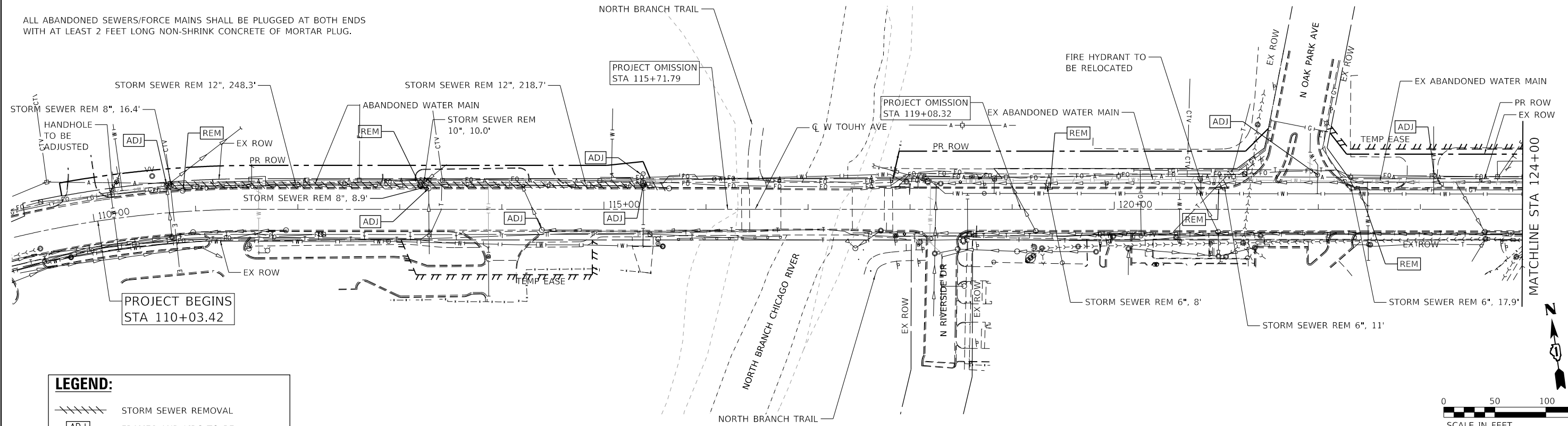
**EROSION CONTROL PLAN  
HARTS ROAD /GROSS POINT ROAD**

SCALE: 1"=50'    SHEET 2 OF 2 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	38
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

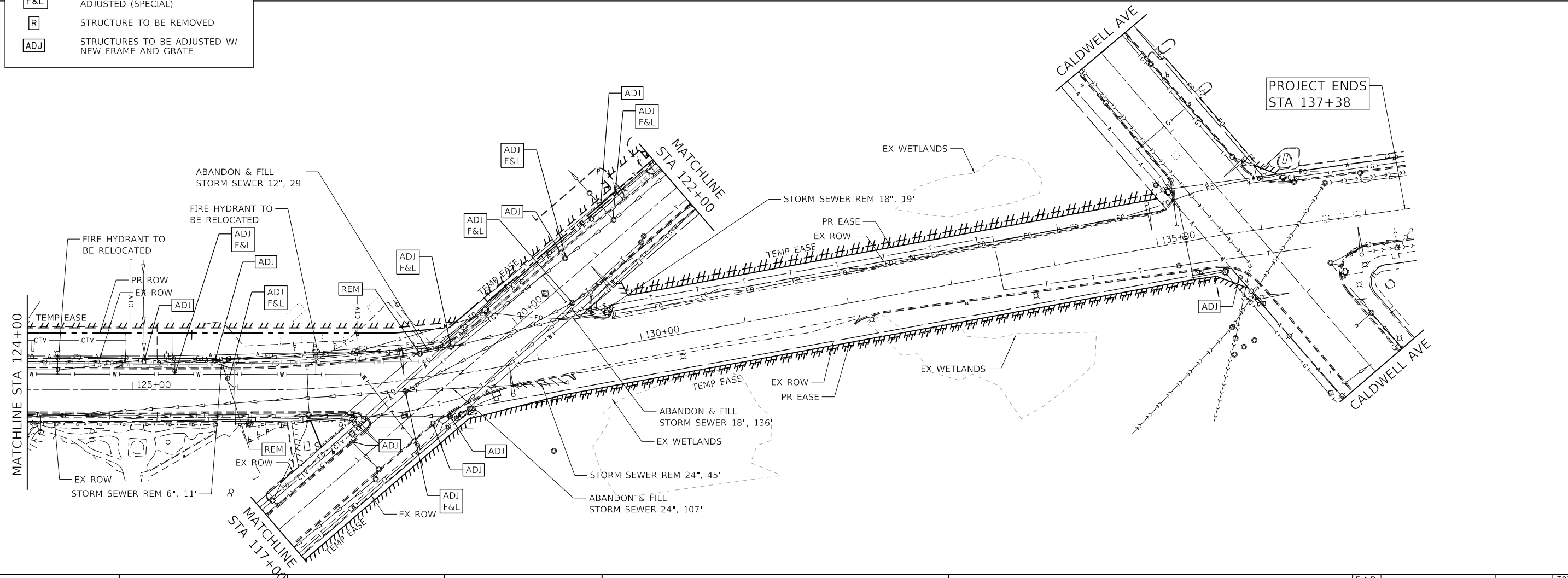
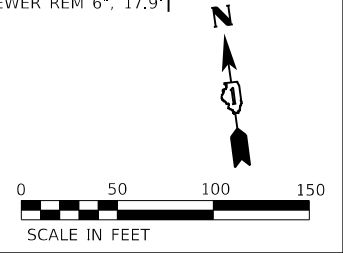
EXISTING STORM SEWER WEST OF THE PROJECT OMISSION IS VCP

ALL ABANDONED SEWERS/FORCE MAINS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OF MORTAR PLUG.



**LEGEND:**

- STORM SEWER REMOVAL
- FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)
- STRUCTURE TO BE REMOVED
- STRUCTURES TO BE ADJUSTED W/ NEW FRAME AND GRATE



HRG PROJECT NO. 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-drem-0.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzu210  
 DESIGNED - MLZ  
 DRAWN - WJH  
 CHECKED -  
 DATE -  
 PLOT SCALE = 100.0000' / 1" / 10'  
 PLOT DATE = 12/16/2022

REVISED -  
 REVISED -  
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 REVISED -

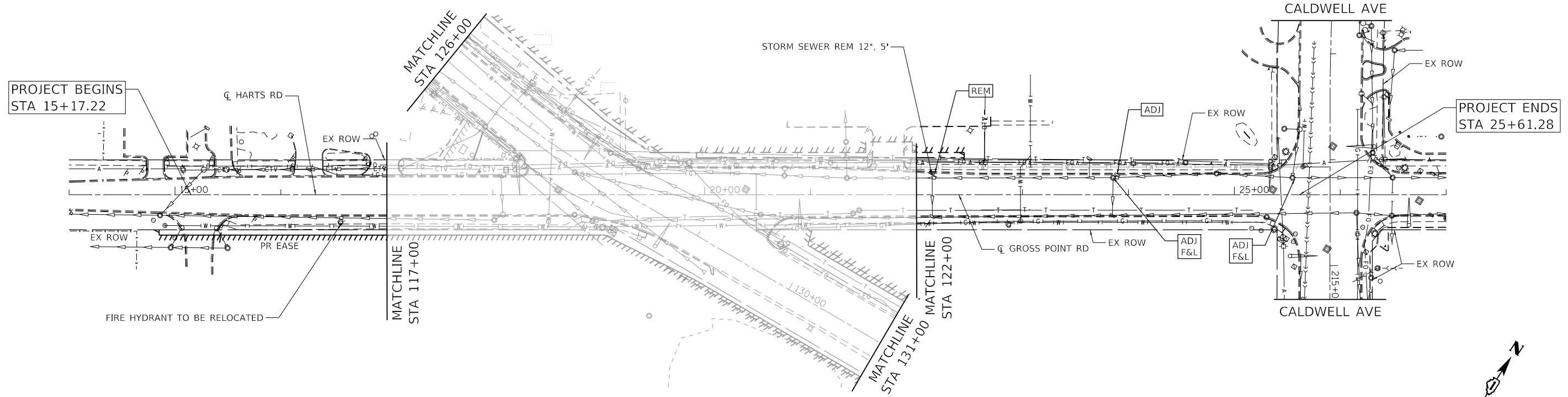
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE REMOVAL PLAN  
 TOUHY AVENUE**

SCALE: 1"=50'    SHEET 1 OF 2 SHEETS    STA. 110+03.42 TO STA. 136+91.62

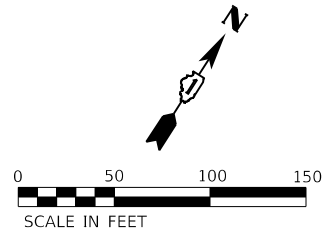
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	39
				CONTRACT NO. 61H59
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

ALL ABANDONED SEWERS/FORCE MAINS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.



**LEGEND:**

- STORM SEWER REMOVAL
- FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)
- STRUCTURE TO BE REMOVED
- STRUCTURES TO BE ADJUSTED W/ NEW FRAME AND GRATE



LOCATION				CATCH BASINS TO BE ADJUSTED TIF, OL (EACH)	CATCH BASINS TO BE ADJUSTED TIF, CL (EACH)	MANHOLES TO BE ADJUSTED TIF, CL (EACH)	INLETS TO BE ADJUSTED T11F (EACH)	VALVE VAULTS TO BE ADJUSTED (EACH)	REMOVING MANHOLES (EACH)	REMOVING CATCH BASINS (EACH)	REMOVING INLETS (EACH)
STATION	OFFSET (FOOT)	EXIST. RIM ELEV.	PROP. RIM ELEV.	60250400	60250500	60255800	60260100	60265700	60500040	60500050	60500060
TOUHY AVE											
110+73.64	-26.7	619.21	619.02			1					
110+88.49	-20.5								1		
113+19.79	-23.3								1		
113+28.24	-20.5	617.56	617.87		1						
114+39	20.2	617.48	617.66		1						
115+38	-34.8	617.31	618.11					1			
115+38.50	-23.1	617.74	617.53			1					
119+37.07	-20.3										1
121+99	-19.4										1
121+99.6	34.0	618.78	618.79					1			
122+38.01	-21.3										1
123+13.4	-33.7	620.12	619.30					1			
125+11.38	-27.1	620.68	620.50			1					
125+78.68	-27.9	621.23	620.90			1					
125+86.75	-20.6										1
127+78.10	-22.9								1		
135+73.5	42.6	623.55	623.47					1			
SUBTOTAL TOUHY AVE				0	2	4	0	4	2	1	4

LOCATION				CATCH BASINS TO BE ADJUSTED TIF, OL (EACH)	CATCH BASINS TO BE ADJUSTED TIF, CL (EACH)	MANHOLES TO BE ADJUSTED TIF, CL (EACH)	INLETS TO BE ADJUSTED T11F (EACH)	VALVE VAULTS TO BE ADJUSTED (EACH)	REMOVING MANHOLES (EACH)	REMOVING CATCH BASINS (EACH)	REMOVING INLETS (EACH)
STATION	OFFSET (FOOT)	EXIST. RIM ELEV.	PROP. RIM ELEV.	60250400	60250500	60255800	60260100	60265700	60500040	60500050	60500060
GROSS POINT RD/HART RD											
18+07.71	-17.4						1				
18+77.20	18.9	621.32	621.38			1					
18+97.10	24.5	621.93	621.41			1					
20+75.70	-25.0	621.67	621.65	1							
21+33.79	-34.6	621.52	622.10	1							
22+14.63	-20.9										1
23+89.46	-19.5	621.77	621.87				1				
SUBTOTAL GROSS POINT RD/HART RD				2	0	2	2	0	0	0	1

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-drem-02.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzuzio	DESIGNED - MLZ	REVISED -
PLOT SCALE = 100.0000' / 1"	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

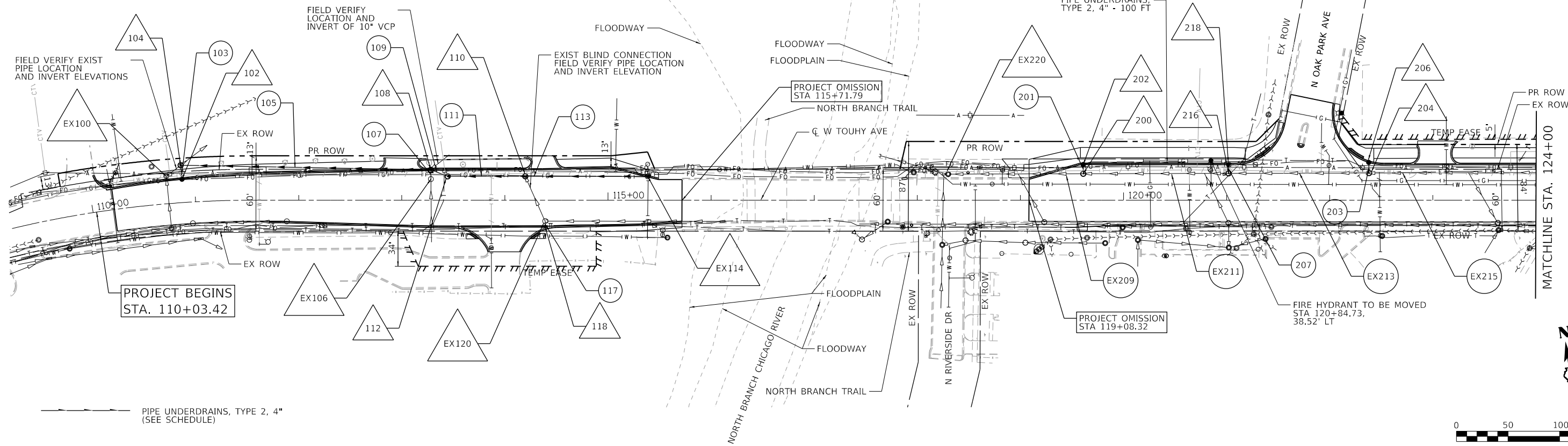
**DRAINAGE REMOVAL PLAN  
HARTS ROAD /GROSS POINT ROAD**

SCALE: 1"=50'    SHEET 2 OF 2 SHEETS    STA. 15+17.22 TO STA. 25+61.28

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	40
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

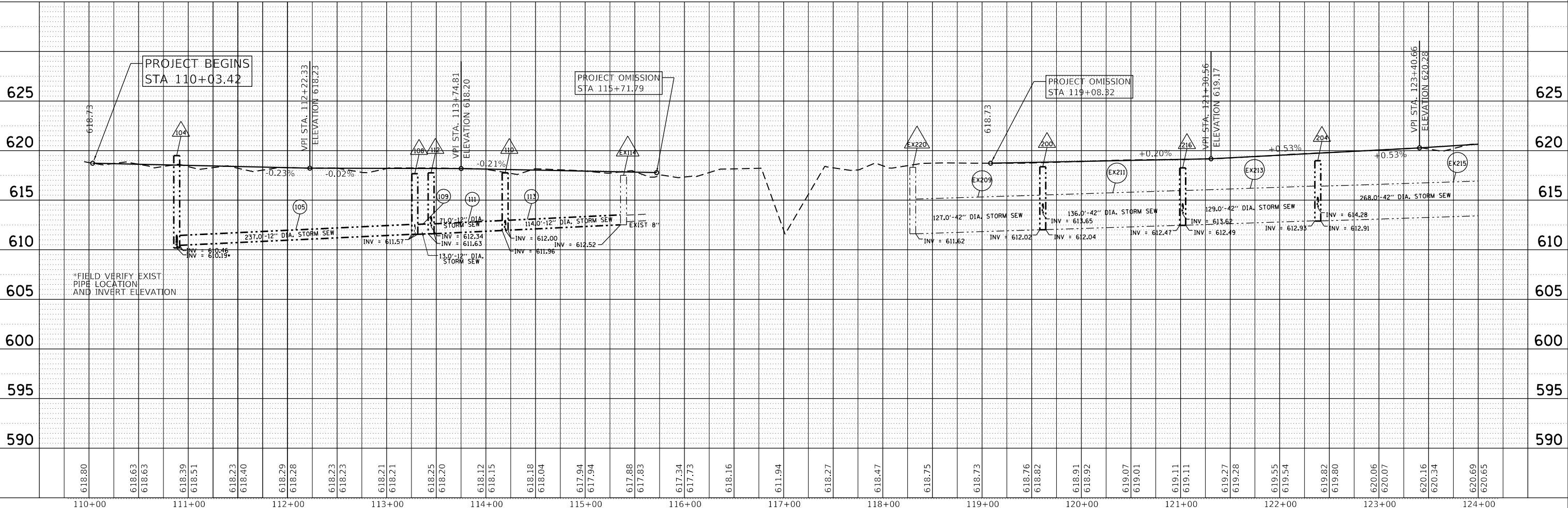


STRUCTURE 104 WILL REQUIRE A FLEXIBLE BOOT FOR ALL STORM SEWER OPENINGS.  
REFER TO DETAIL PRECAST CONCRETE MANHOLE, SHEET 105 AND  
GENERAL NOTE #16 UNDER STORM SEWERS, WATER MAINS AND UTILITIES.



DATE	
BY	
PLAN	
NO. _____	
DATE	
BY	
PROFILE	
NO. _____	

DATE	
BY	
PROFILE	
NO. _____	
DATE	
BY	
PLAN	
NO. _____	



HRG PROJECT NO. 19406.01  
HRG PROJ. CONTACT:  
FILE NAME: 19406.01-swt-dwp-01.dgn  
PEN TABLE: 19406.tbl

USER NAME = mzuzio	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

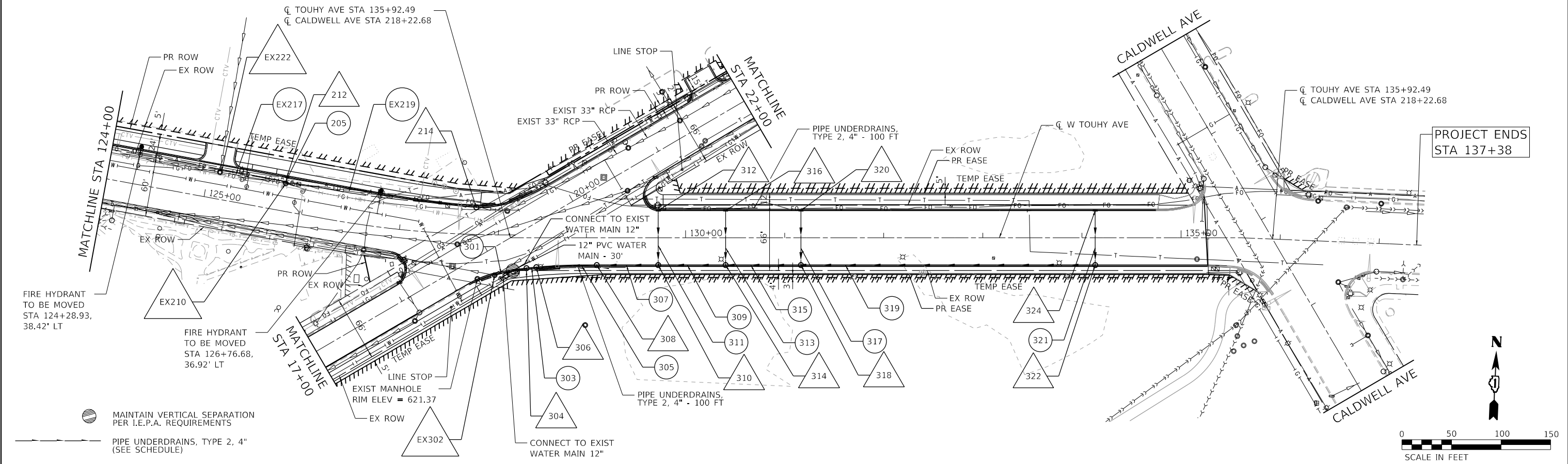
DESIGNED - MLZ	REVISED -
DRAWN - WJH	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

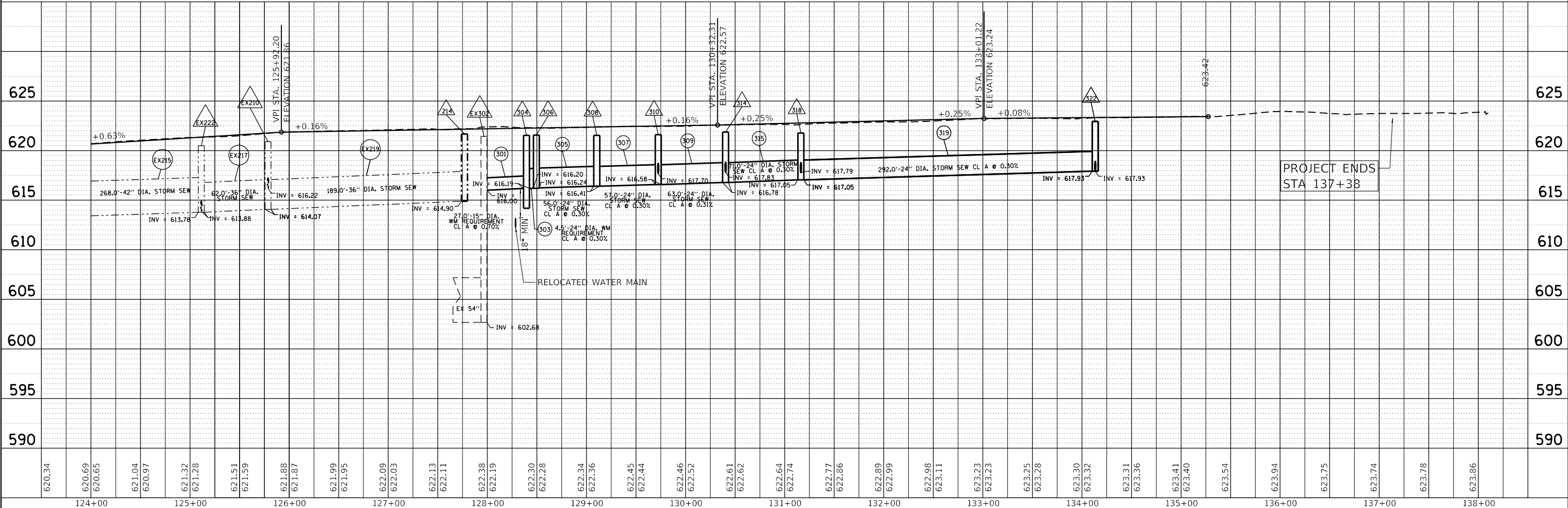
DRAINAGE PLAN AND PROFILE  
TOUHY AVENUE  
SCALE: SHEET 1 OF 4 SHEETS STA. 110+03.42 TO STA. 124+00

F.A.P. R.E. 341	SECTION NO. 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 41
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 61H59				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	CHECKED
	NOTED	FILE NAME
	NO.	



PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	CHECKED
	STRUCTURE	NOT AT THIS OFFICE
	NO.	



HRG PROJECT NO. 19406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19406.01-19406.01-19406.01-19406.01-19406.01.dwg  
 PEN TABLE: 19406.01.tbl

**HRGreen**  
 HRGreen.com  
 Micro Professional Design Firm  
 #184-001322

USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

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

**DRAINAGE PLAN AND PROFILE**  
**TOUHY AVENUE**  
 SCALE: SHEET 2 OF 4 SHEETS STA. 124+00 TO STA. 136+91.62

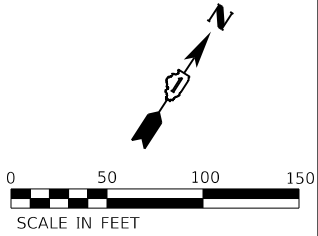
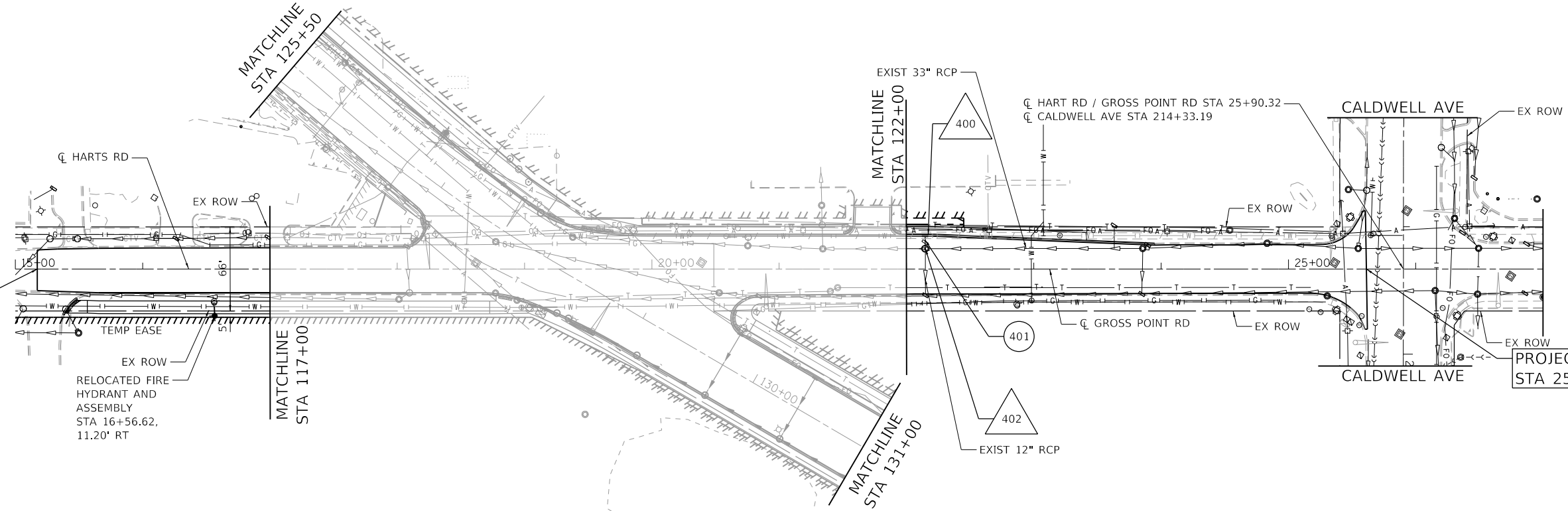
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	42
CONTRACT NO. 61H59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	NO. _____		
	FILE NAME _____		
	TABLE _____		

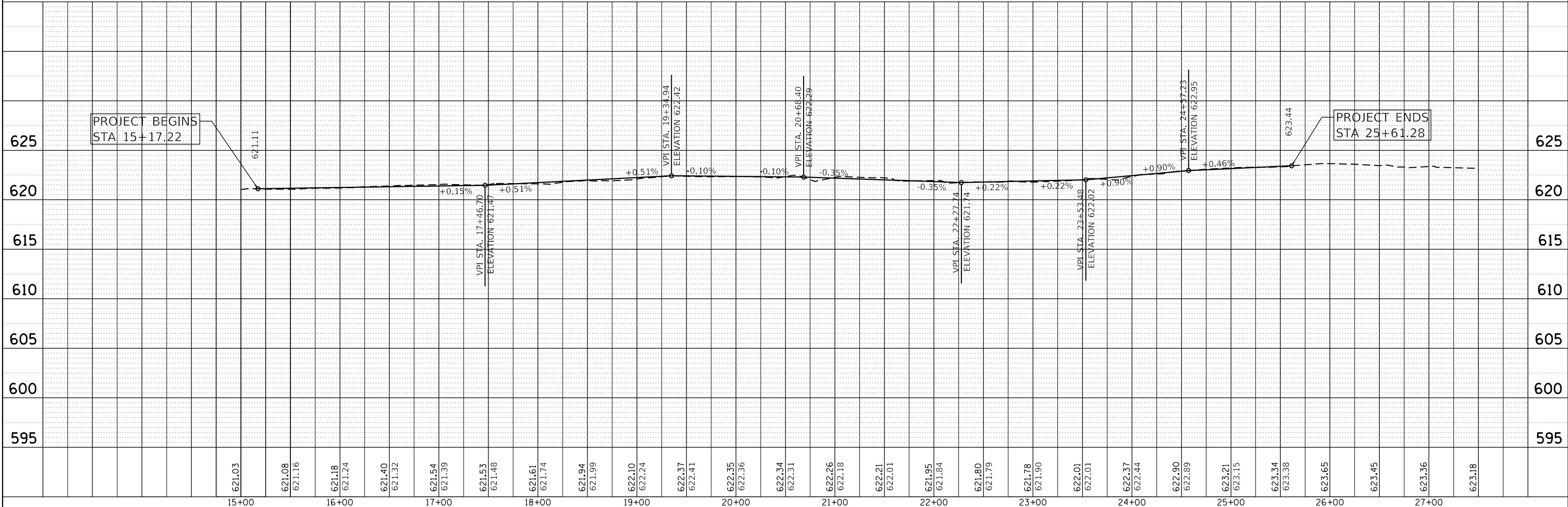
PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NO. _____		
	FILE NAME _____		
	TABLE _____		

HRG PROJECT NO.: 19406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19406.01-19406.01-19406.01-19406.01.dgn  
 PEN TABLE: 19406.01.tbl

PROJECT BEGINS  
STA 15+17.22



SCALE IN FEET



PROJECT BEGINS  
STA 15+17.22

PROJECT ENDS  
STA 25+61.28

15+00	16+00	17+00	18+00	19+00	20+00	21+00	22+00	23+00	24+00	25+00	26+00	27+00													
621.03	621.08 621.16	621.18 621.24	621.40 621.32	621.54 621.39	621.53 621.48	621.61 621.74	621.94 621.99	622.10 622.24	622.37 622.41	622.35 622.36	622.34 622.31	622.26 622.18	622.21 622.01	621.95 621.84	621.80 621.79	621.78 621.90	622.01 622.01	622.37 622.44	622.90 622.89	623.21 623.15	623.34 623.38	623.65	623.45	623.36	623.18

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

USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE  
 HARTS ROAD /GROSS POINT ROAD**  
 SCALE: SHEET 3 OF 4 SHEETS STA. 15+17.22 TO STA. 25+61.28

F.A.P. R.T.E.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	43
CONTRACT NO. 61H59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**DRAINAGE STRUCTURE AND PIPE SCHEDULE**

STRUCTURE NUMBER	STATION	OFFSET (FT)	STRUCTURE TYPE	FRAME & GRATE	RIM ELEVATION	STORM SEWER INVERTS				PIPE UNDERDRAIN INVERTS			
						NORTH	WEST	SOUTH	EAST	NORTH	WEST	EAST	SOUTH
TOUHY AVENUE													
EX100	110+73.79	26.4' LT	EX MANHOLE	TYPE 1, CLOSED LID	EX 619.21	EX 610.21		EX 613.91	610.41				
102	110+88.30	22.7' LT	CATCH BASIN, TYPE C	TYPE 11	618.09	610.81							
104	110+87.88	36.2' LT	MANHOLE, TYPE A, 7' DIAMETER	TYPE 1, CLOSED LID	619.50	* 610.19 NE	* 610.19 SW	610.46	610.46				
EX106	113+28.24	20.5' LT	EX CATCH BASIN	TYPE 1, CLOSED LID	617.87	611.62		EX 613.46					
108	113+28.13	29.5' LT	MANHOLE, TYPE A, 6' DIAMETER	TYPE 11	617.68	612.5 NE	611.57	611.57	611.57 SE				
110	114+19.58	23.4' LT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 1, CLOSED LID	617.31		611.96	* 612.00	612.00				
112	113+44.54	23.1' LT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 1, CLOSED LID	617.77		611.63 NW		611.63				
EX114	115+38.50	23.1' LT	EX MANHOLE	TYPE 1, CLOSED LID	617.53		EX 612.54		612.52 NE				
118	114+38.94	25.3' RT	INLET TYPE A	TYPE 1, OPEN LID	617.56	613.85							
EX120	114+39.12	20.2' RT	EX CATCH BASIN	TYPE 1, CLOSED LID	617.66			613.83	EX 613.83				
200	119+60.98	25.6' LT	MANHOLE, TYPE A, 6' DIAMETER	TYPE 1, CLOSED LID	618.37	613.65	612.02		612.04				
202	119+60.95	34.6' LT	CATCH BASIN, TYPE A, 4' DIAMETER	TYPE 11	618.19			613.69		615.50			
204	122+38.11	26.3' LT	MANHOLE, TYPE A, 6' DIAMETER	TYPE 1, CLOSED LID	618.98	614.28	612.91		612.93				
206	122+37.82	36.6' LT	CATCH BASIN, TYPE A, 4' DIAMETER	TYPE 11	618.91			614.34					
EX210	125+78.68	27.9' LT	EX MANHOLE	TYPE 1, CLOSED LID	620.90	616.22	EX 614.07		EX 614.07				
212	125+78.68	34.3' LT	INLET TYPE A	TYPE 11	620.77				615.55				
214	127+76.92	27.6' LT	MANHOLE, TYPE A, 6'-DIAMETER	TYPE 11	621.67		614.90		614.90				
216	121+01.97	26.0' LT	MANHOLE, TYPE A, 6' DIAMETER	TYPE 11	618.26	613.62	612.47		612.49				
218	121+01.98	34.5' LT	CATCH BASIN, TYPE A, 4' DIAMETER	TYPE 11	618.10			613.65					
EX220	118+30	EX	EXISTING MANHOLE	-	-		EX 611.62		EX 611.62				
EX222	125+11.38	27.1' LT	EXISTING MANHOLE	TYPE 1, CLOSED LID	620.50	EX 613.88	EX 613.78		EX 613.88				
EX302	127+96.59	40.7' RT	EX MANHOLE	TYPE 1, CLOSED LID	621.42	EX 602.68	EX 602.68		616.00				
304	128+39.52	30.6' RT	MANHOLE, TYPE A, 6'-DIAMETER, WITH 2 TYPE 1 FRAME, OPEN LIDS, RESTRICTOR PLATE	2 TYPE 1 OPEN LID	621.54		616.19		616.19				
306	128+49.45	29.6' RT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 11	621.56		616.20		616.24	618.87			
308	129+10.42	27.5' RT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 11	621.53		616.41		616.41				
310	129+72.42	27.5' RT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 11	621.60	617.70	616.58		616.58				
312	129+72.42	27.5' LT	INLET TYPE A	TYPE 11	622.19			618.21		619.50			
314	130+40.42	27.5' RT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 11	621.87	617.83	616.78		616.83				
316	130+40.42	27.5' LT	INLET TYPE A	TYPE 11	621.64			618.34					
318	131+16.42	27.5' RT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 11	621.77	617.79	617.05		617.05				
320	131+16.42	27.5' LT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 11	621.80			618.30					
322	134+13.42	27.5' RT	MANHOLE, TYPE A, 5' DIAMETER	TYPE 11	622.94	617.93	617.93						
324	134+13.42	27.5' LT	INLET TYPE A	TYPE 11	623.00			618.44					
GROSS POINT ROAD													
400	22+14.61	25.9' LT	INLET TYPE A	TYPE 11	621.63			618.05 SE					
402	22+14.64	15.9' LT	MANHOLE, TYPE A, 6' DIAMETER	TYPE 1, CLOSE LID	621.76	617.85 NW	615.27 SW		615.27 NE				

PIPE NO.	FROM STRUCT.	TO STRUCT.	CLASS	TYPE	SIZE, DIA. (IN)	LENGTH (FT)	SLOPE (%)	TBF (CY)
TOUHY AVENUE								
103	102	104	A	TYPE 2	12	8.0	0.44%	3.5
105	108	104	A	TYPE 2	12	237.0	0.47%	195.3
107	EX106	108	A	TYPE 2	12	5.0	1.00%	1.8
109	112	108	A	TYPE 2	12	13.0	0.48%	4.8
111	112	110	A	TYPE 2	12	71.0	0.47%	21.2
113	EX114	112	A	TYPE 2 / WATERMAIN REQUIREMENT	12	74/40	0.47%	31.7
117	118	EX120	A	TYPE 1	12	2.0	1.00%	0.3
201	202	200	A	TYPE 2	12	4.0	1.00%	0.9
203	206	204	A	TYPE 2	12	6.0	1.00%	1.2
205	212	210	A	TYPE 2	12	3.0	1.00%	0.7
207	218	216	A	TYPE 2	12	4.0	1.00%	0.8
EX209	200	EX220		EXISTING 42" RCP		127.0		23.4
EX211	216	200		EXISTING 42" RCP		136.0		61.0
EX213	204	216		EXISTING 42" RCP		129.0		33.5
EX215	EX222	204		EXISTING 42" RCP		268.0		134.6
EX217	EX210	EX222		EXISTING 36" RCP		62.0		41.5
EX219	214	EX210		EXISTING 36" RCP		189.0		107.6
301	304	EX302	A	WATER MAIN REQUIREMENT	15	27.0	0.70%	8.3
303	306	304	A	WATER MAIN REQUIREMENT	24	5.0	0.30%	1.4
305	308	306	A	TYPE 1	24	56.0	0.30%	14.8
307	310	308	A	TYPE 1	24	57.0	0.30%	15.1
309	314	310	A	TYPE 1	24	63.0	0.31%	16.7
311	312	310	A	TYPE 1	12	52.0	1.00%	7.9
313	316	314	4	TYPE 1	12	52.0	1.00%	6.8
315	318	314	A	TYPE 1	24	71.0	0.30%	16.7
317	320	318	A	TYPE 1	12	52.0	1.00%	6.8
319	322	318	A	TYPE 1	24	292.0	0.30%	68.7
321	324	322	A	TYPE 2	12	52.0	1.00%	12.2
GROSS POINT ROAD								
401	400	402	A	TYPE 1	12	6.0	3.33%	1.0

\* FIELD VERIFY INVERT ELEVATION

HRG PROJECT NO.: 19405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19405.01-drain-struct.dwg  
 PEN TABLE: 19405.tbl



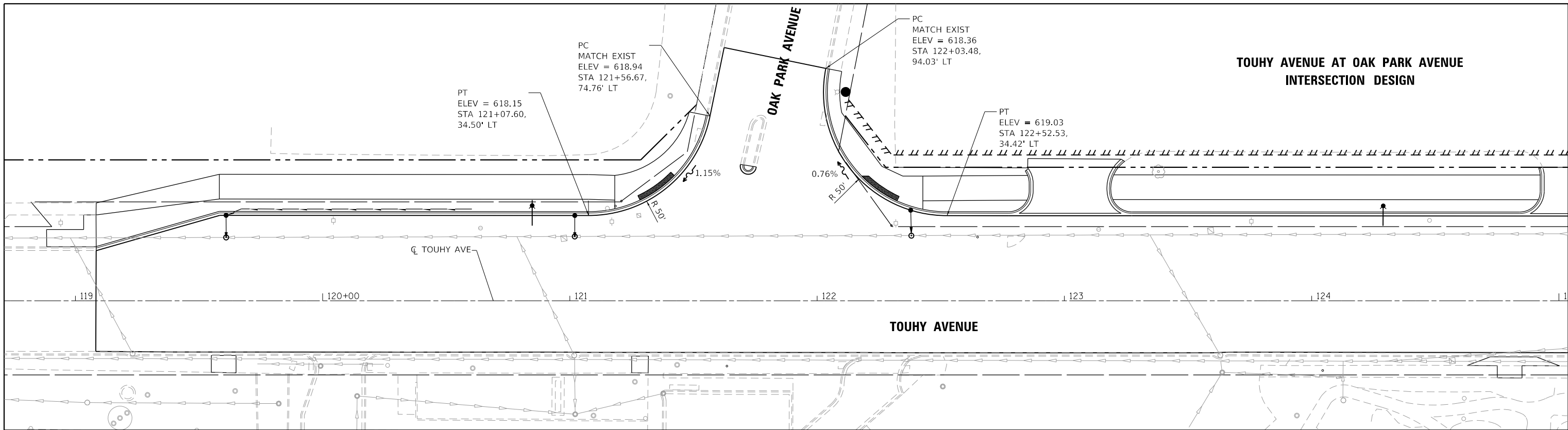
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	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

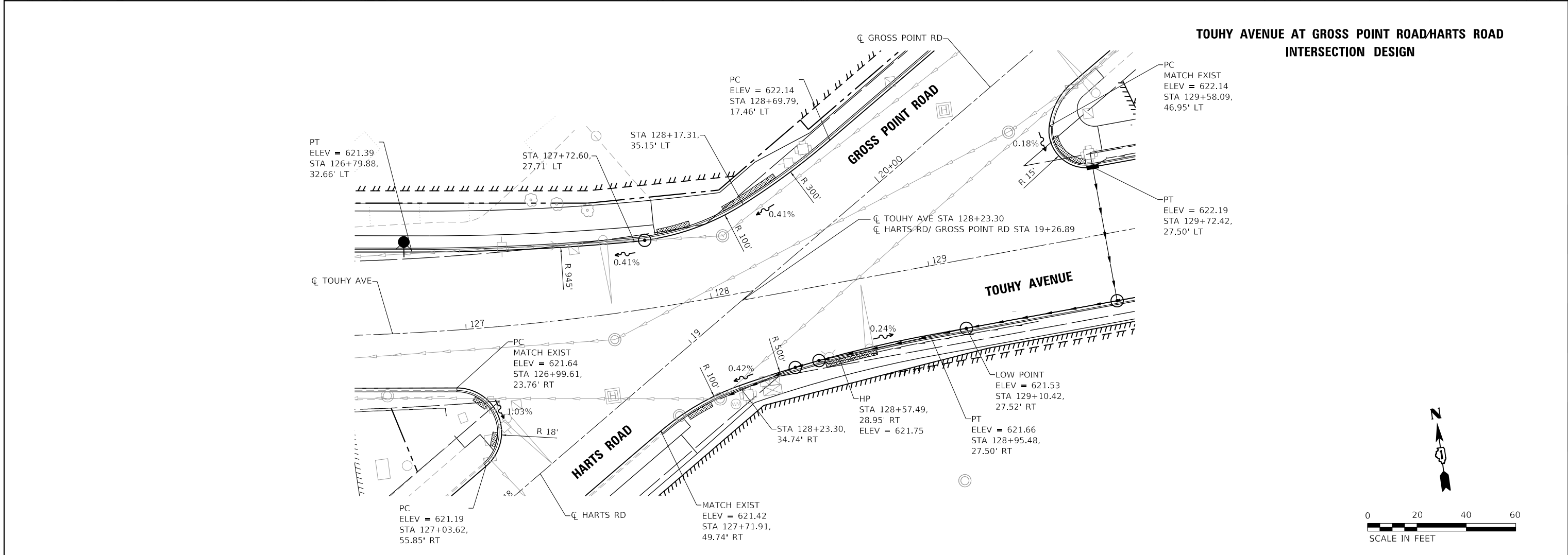
**DRAINAGE SCHEDULE OF QUANTITIES**

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

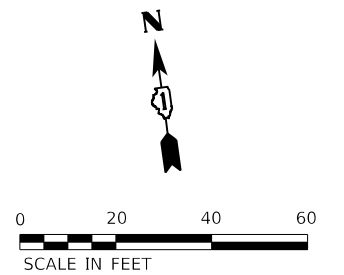
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	44
CONTRACT NO. 61H59			ILLINOIS FED. AID PROJECT	



**TOUHY AVENUE AT OAK PARK AVENUE  
INTERSECTION DESIGN**



**TOUHY AVENUE AT GROSS POINT ROAD/HARTS ROAD  
INTERSECTION DESIGN**



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-Intersec-01.dgn  
 PEN TABLE: 191405.tbl

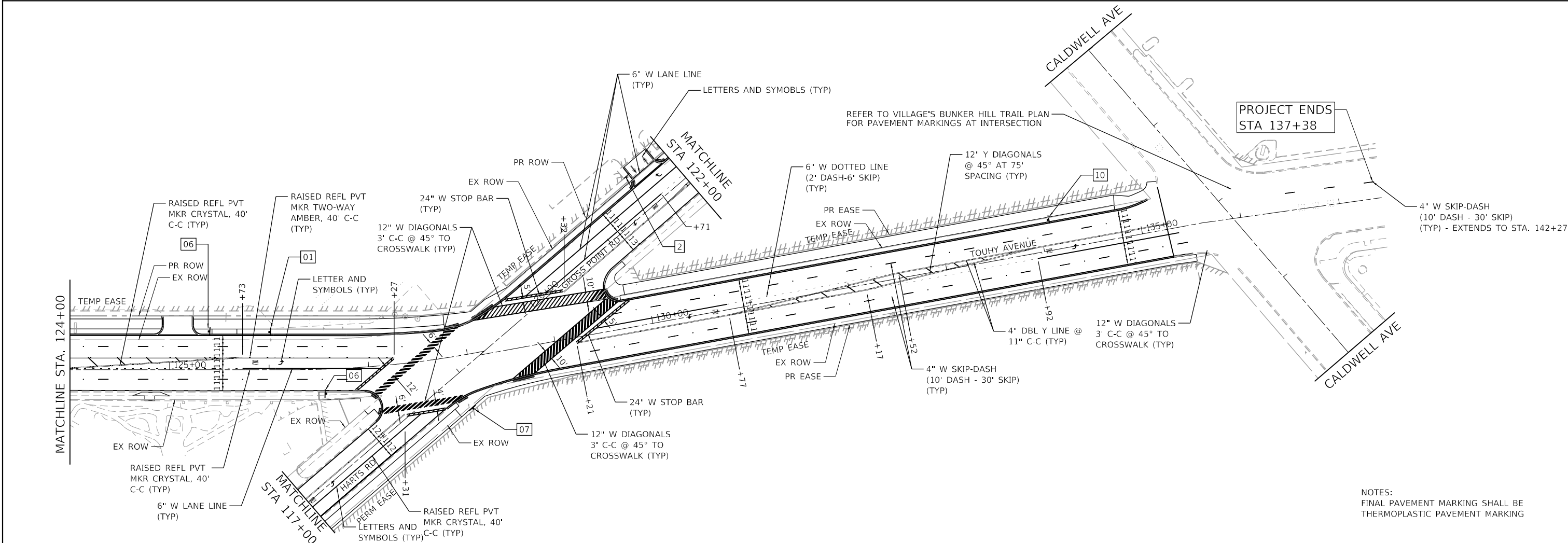
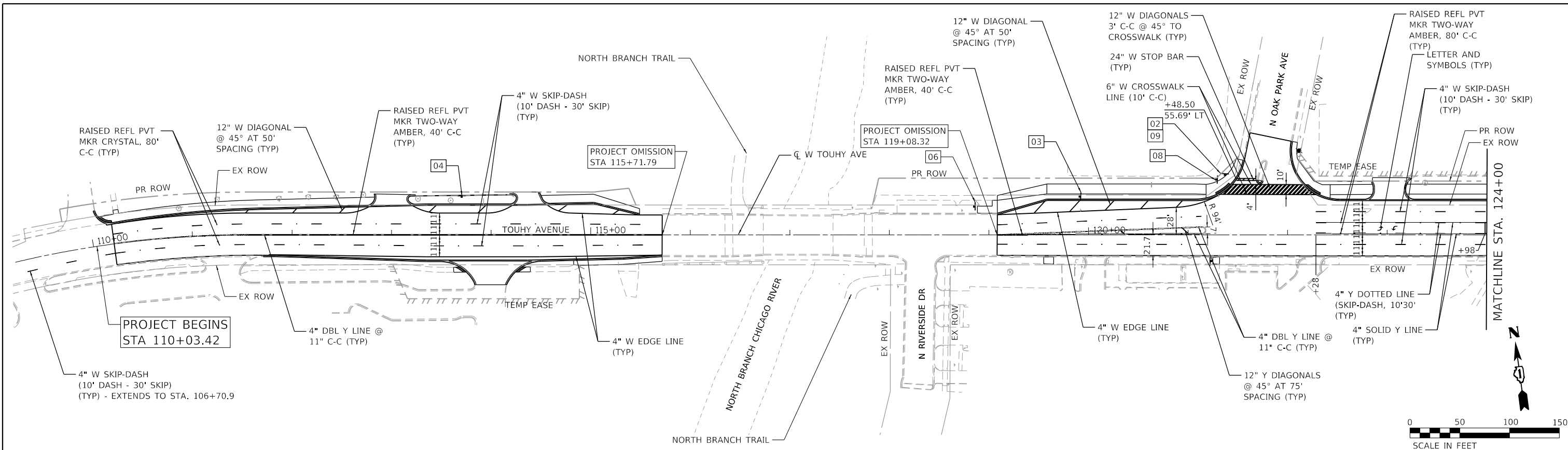


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	DRAWN - WJH	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

INTERSECTION DETAILS	
<b>TOUHY AVENUE / HARTS ROAD / GROSS POINT ROAD</b>	
SCALE: 1"=20'	SHEET 1 OF 1 SHEETS
STA.	TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	45
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	



NOTES:  
FINAL PAVEMENT MARKING SHALL BE THERMOPLASTIC PAVEMENT MARKING

HRG PROJECT NO. 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-pmk-01.dgn  
 PEN TABLE: 191405.tbl



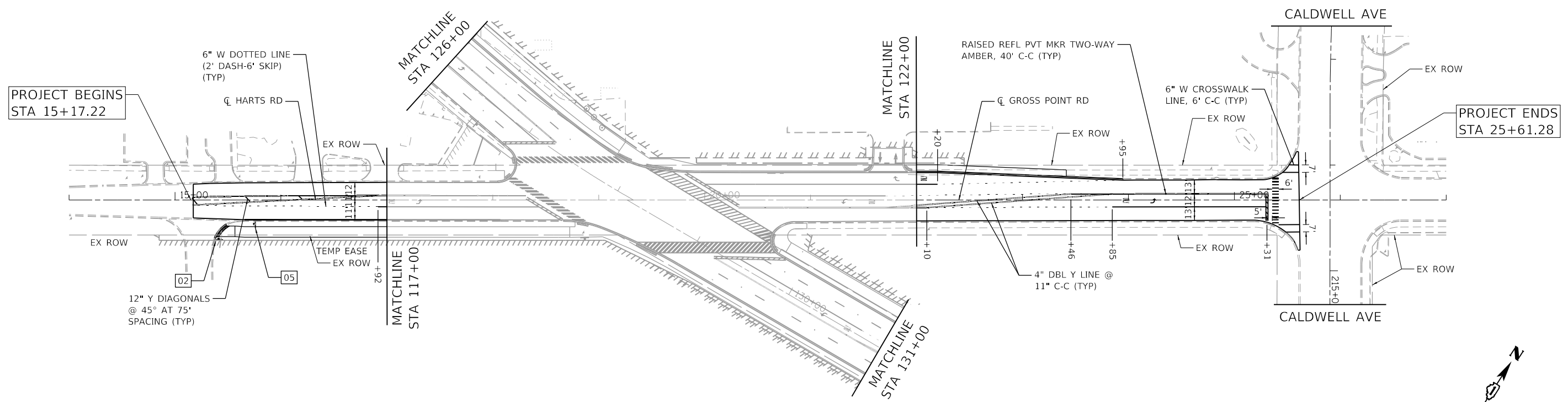
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	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

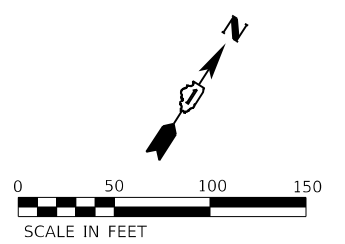
**PAVEMENT MARKING PLAN  
TOUHY AVENUE**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

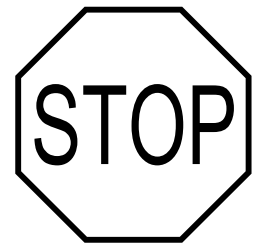
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	46
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	



NOTES:  
FINAL PAVEMENT MARKING SHALL BE THERMOPLASTIC PAVEMENT MARKING



01  
W11-8  
36" X 36"



02  
R1-1  
30" X 30"



W11-1  
36" X 36"  
  
W16-9P  
24" X 12"



03



04  
EXISTING



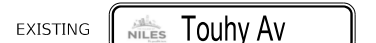
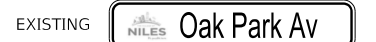
05  
AR-216  
18" X 12"



06  
EXISTING



07  
EXISTING



08



09  
R3-5R  
30" X 36"



10  
R2-1  
30" X 36"

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-pmk-02.dgn  
 PEN TABLE: 191405.tbl

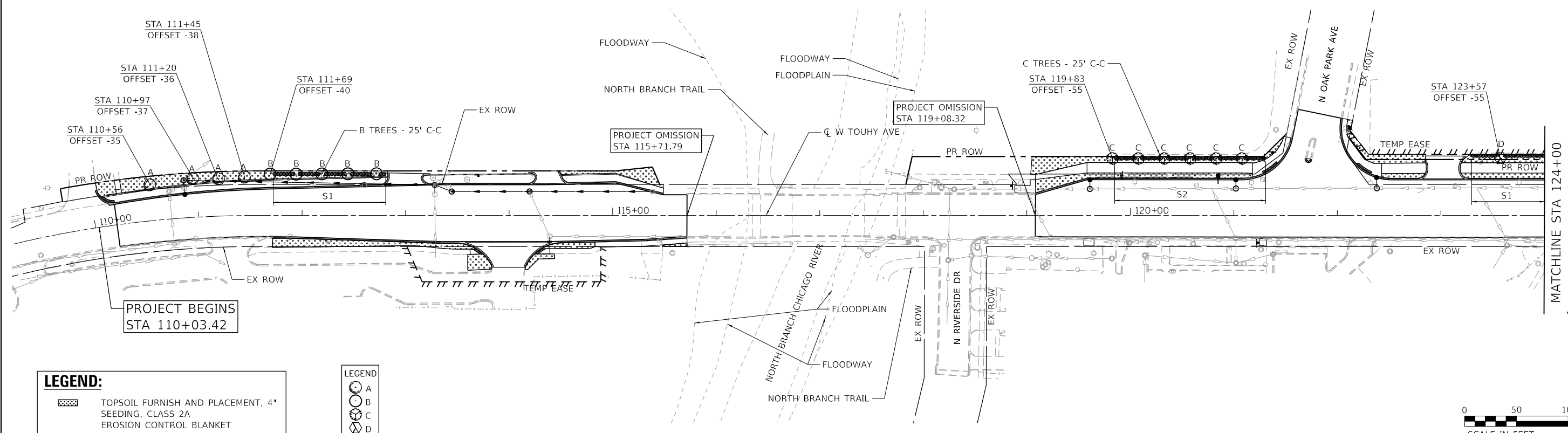


USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN			
HARTS ROAD /GROSS POINT ROAD			
SCALE:	SHEET 2 OF 2 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	47
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

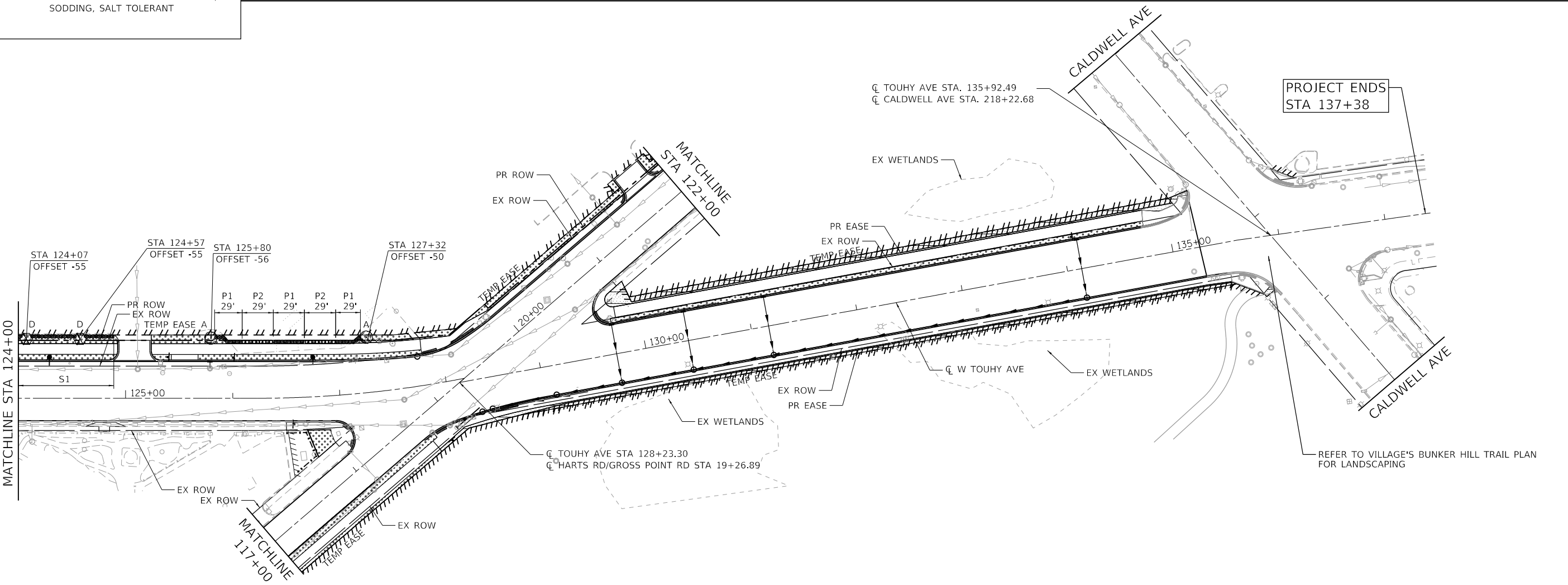


**LEGEND:**

- TOPSOIL FURNISH AND PLACEMENT, 4" SEEDING, CLASS 2A
- EROSION CONTROL BLANKET
- TOPSOIL FURNISH AND PLACEMENT, 4" SODDING, SALT TOLERANT

**LEGEND:**

- A
- B
- C
- D



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-1-landscap-01.dgn  
 PEN TABLE: 191405.dtl

HRGreen.com  
 Micro Professional Design Firm  
 #184-001322

USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

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

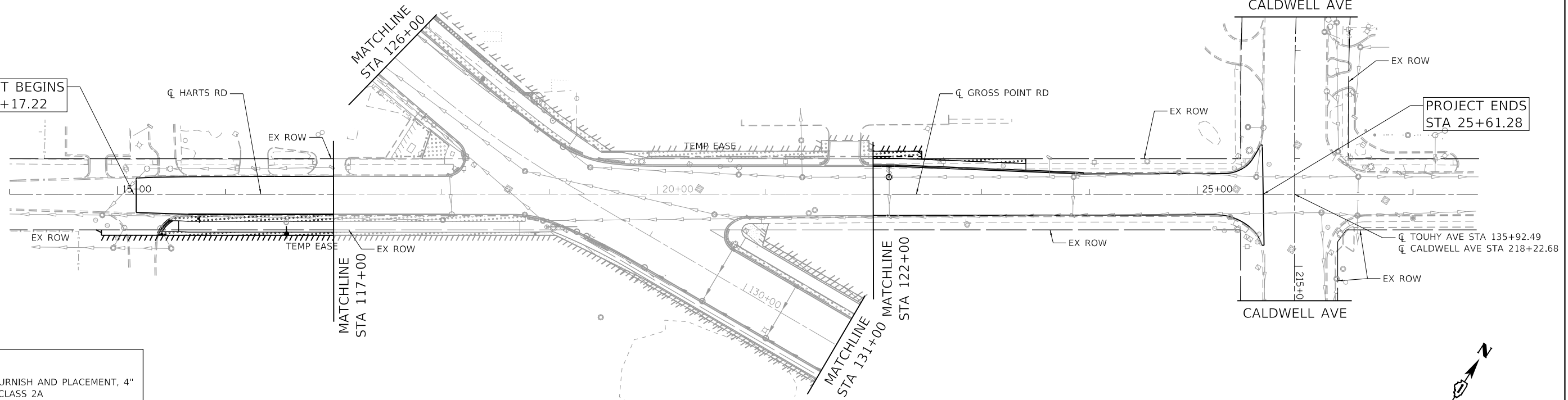
<b>LANDSCAPING AND RESTORATION PLAN</b>		
<b>TOUHY AVENUE</b>		
SCALE: 1"=50'	SHEET 1 OF 3 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	48
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	CONTRACT NO. 61H59



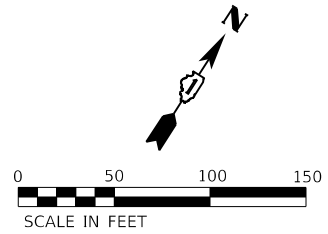
PROJECT BEGINS  
STA 15+17.22

PROJECT ENDS  
STA 25+61.28



**LEGEND:**

	TOPSOIL FURNISH AND PLACEMENT, 4" SEEDING, CLASS 2A EROSION CONTROL BLANKET
	TOPSOIL FURNISH AND PLACEMENT, 4" SODDING, SALT TOLERANT



TREE PLANTING SCHEDULE

PAY ITEM	QTY	BOTANICAL NAME/ITEM	SPACING
A	A2002916	6 TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 2" CALIPER, BALLED AND BURLAPPED	MATCH TO PLAN
B	B2000766	5 TREE, AMELANCHIER X GRANDIFLORA AUTUMN BRILLIANCE (AUTUMN BRILLIANCE SERVICE BERRY), 6' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	25' O.C.
C	B2004116	6 TREE, MALUS PRAIRIFIRE (PRAIRIFIRE CRABAPPLE), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	25' O.C.
D	B2005416	3 TREE, PRUNUS VIRGINIANA SCHUBERT (SCHUBERT CHOKEBERRY), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	MATCH TO PLAN

SHRUB PLANTING SCHEDULE

PAY ITEM	QTY	BOTANICAL NAME/ITEM	SPACING
S1	C2002124	53 SHRUB, COTONEASTER APICULATUS (CRANBERRY COTONEASTER), 2' WIDTH, BALLED AND BURLAPPED	4' O.C.
S2	C2002336	30 SHRUB, EUONYMUS ALATA COMPACTA (DWARF WINGED EUONYMUS), 2' HEIGHT, BALLED AND BURLAPPED	4' O.C.

PERENNIAL PLANTING SCHEDULE

PAY ITEM	QTY	BOTANICAL NAME/ITEM	SPACING
P1	K0012990	0.5 PERENNIAL PLANTS, ORNAMENTAL TYPE, PANICUM V. 'HEAVY METAL' (HEAVY METAL SWITCH GRASS), GALLON POT	3' O.C.
P2	K0012990	0.5 PERENNIAL PLANTS, ORNAMENTAL TYPE, PANICUM VIRGATUM 'CHEYENNE SKY' (CHEYENNE SKY RED SWITCH GRASS), GALLON POT	3' O.C.

LANDSCAPING NOTES

- TREES TO BE PROTECTED DURING CONSTRUCTION WILL RECEIVE PROTECTION IN ACCORDANCE WITH ARTICLE 201 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL PLANT MATERIAL WITH THE INSTALLATION OF OTHER IMPROVEMENTS SUCH AS HARDSCAPE ELEMENTS AND RELATED STRUCTURES, ANY DAMAGE TO EXISTING IMPROVEMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL STAKE ALL TREE LOCATIONS AND THE PERIMETER OF SHRUB/PERENNIAL BEDS PER PLAN PRIOR TO INSTALLATION AND CONTACT THE RESIDENT ENGINEER FOR APPROVAL. FINAL LOCATION AND STAKING OF ALL PLANT MATERIALS SHALL BE APPROVED BY THE RESIDENT ENGINEER IN ADVANCE OF PLANTING. IF CONFLICTS ARISE BETWEEN THE SIZE OF AREAS AND PLANS, THE CONTRACTOR IS REQUIRED TO CONTACT THE RESIDENT ENGINEER FOR RESOLUTION PRIOR TO INSTALLATION.
- ALL PLANTS SHALL BE NURSERY GROWN PLANTS MEETING AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) STANDARDS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1-2004). PLANTS ARE TO BE TYPICAL IN SHAPE AND SIZE FOR SPECIES. PLANTS PLANTED IN ROWS OR GROUPS SHALL BE MATCHED IN FORM. PLANTS SHALL NOT BE ROOT-BOUND OR LOOSE IN THEIR CONTAINERS. HANDLE ALL PLANTS WITH CARE IN TRANSPORTING, PLANTING AND MAINTENANCE UNTIL INSPECTION AND FINAL ACCEPTANCE.
- TREES THREE (3) INCHES IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST THROUGH SEPTEMBER 30TH OF ANY GIVEN YEAR.

HRG PROJECT NO: 191405.01  
 HRG PROJ CONTACT:  
 FILE NAME: 191405.01-191405-191405-191405.dwg  
 PEN TABLE: 191405.tbl



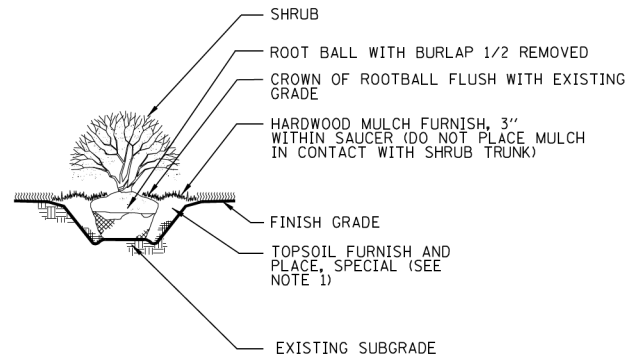
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PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LANDSCAPING AND RESTORATION PLAN  
HARTS ROAD /GROSS POINT ROAD

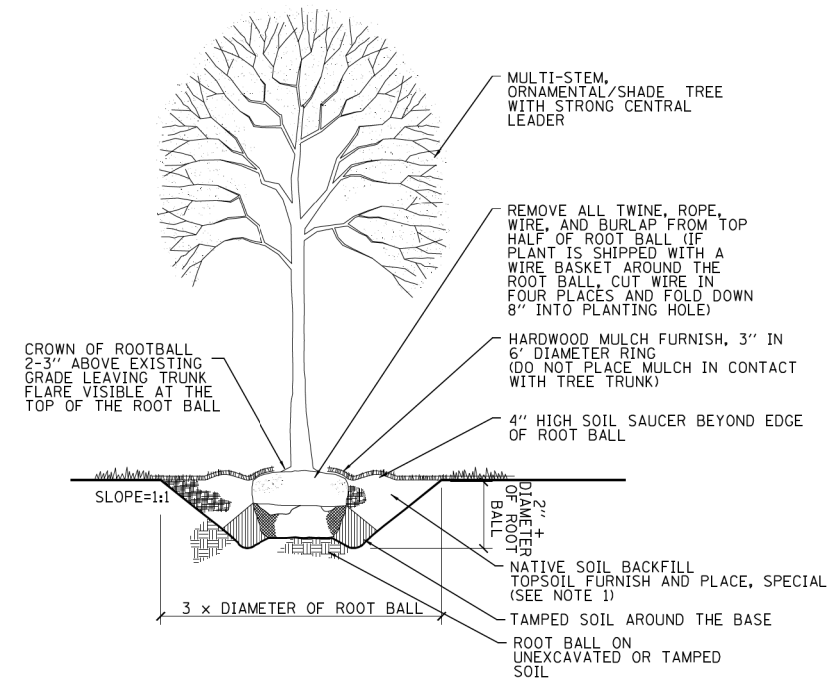
SCALE: 1"=50' SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

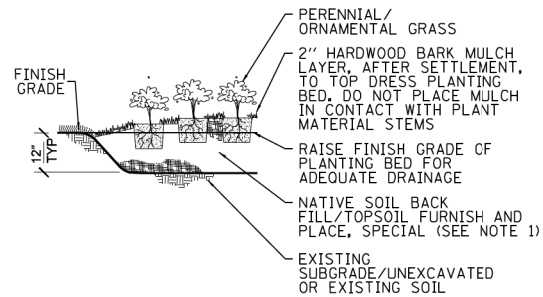


NOTE:  
 1. THE BACKFILL SHALL BE NATIVE SOIL BACKFILL WHEN APPROPRIATE  
 2. WHEN UNSUITABLE MATERIAL IS ENCOUNTERED, THE HOLE SHALL BE BACKFILLED WITH TOPSOIL FURNISH AND PLACED (SPECIAL)

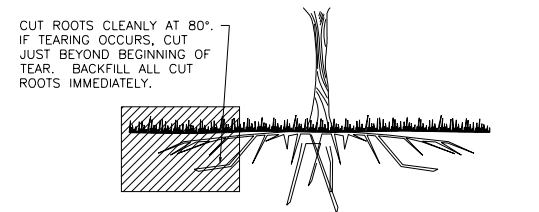
**SHRUB PLANTING DETAIL**  
 NOT TO SCALE



**SHADE AND ORNAMENTAL TREE TYPICAL PLANTING DETAIL**  
 NOT TO SCALE



**ORNAMENTAL GRASS INSTALLATION PLANTING DETAIL**  
 NOT TO SCALE



**TYP. ROOT PRUNING DETAIL**  
 SCALE: NTS

- NOTES:
1. TREE PITS TO BE BACKFILLED WITH THE NATIVE SOIL THAT WAS REMOVED FROM THE HOLE. WHEN UNSUITABLE MATERIAL IS ENCOUNTERED, THE HOLE SHALL BE BACKFILLED WITH TOPSOIL FURNISH AND PLACED, SPECIAL.
  2. SHREDDED HARDWOOD BARK MULCH SHALL BE PLACED AROUND ALL NEW PLANTS AND INCLUDED IN THE COST OF THE TREES, SHRUBS, VINES, AND PERENNIAL PLANT PAY ITEMS.
  3. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON THE FINAL PLACEMENTS OF THE PLANT MATERIALS TO AVOID ANY CONFLICTS BETWEEN TREES AND UNDERGROUND UTILITY LINES.

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-1-lands-der-01.dgn  
 PLOT DATE: 12/16/2022  
 PEN TABLE: 191405.tbl



USER NAME = mzuzzio	DESIGNED - MLZ	REVISED -
	DRAWN - W/JH	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING DETAILS  
 HARTS ROAD /GROSS POINT ROAD**

SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	50
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

# TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND			SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED			RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED			MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-1-detailed-7505a.dgn  
 FILE NUMBER: 191405.01-sht-1-detailed-7505a.dgn  
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## TS SHT. NO 1

USER NAME = footemj	DESIGNED - IP	REVISED -
	DRAWN - IP	REVISED -
PLOT SCALE = 50,0000' / 1/4"	CHECKED - LP	REVISED -
PLOT DATE = 3/4/2019	DATE - 9/29/2016	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

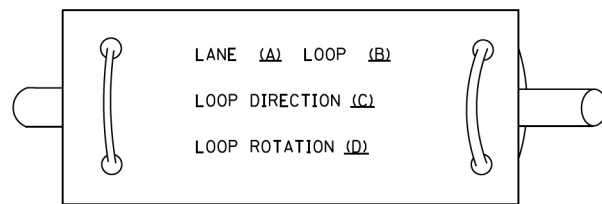
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	51
<b>TS-05</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

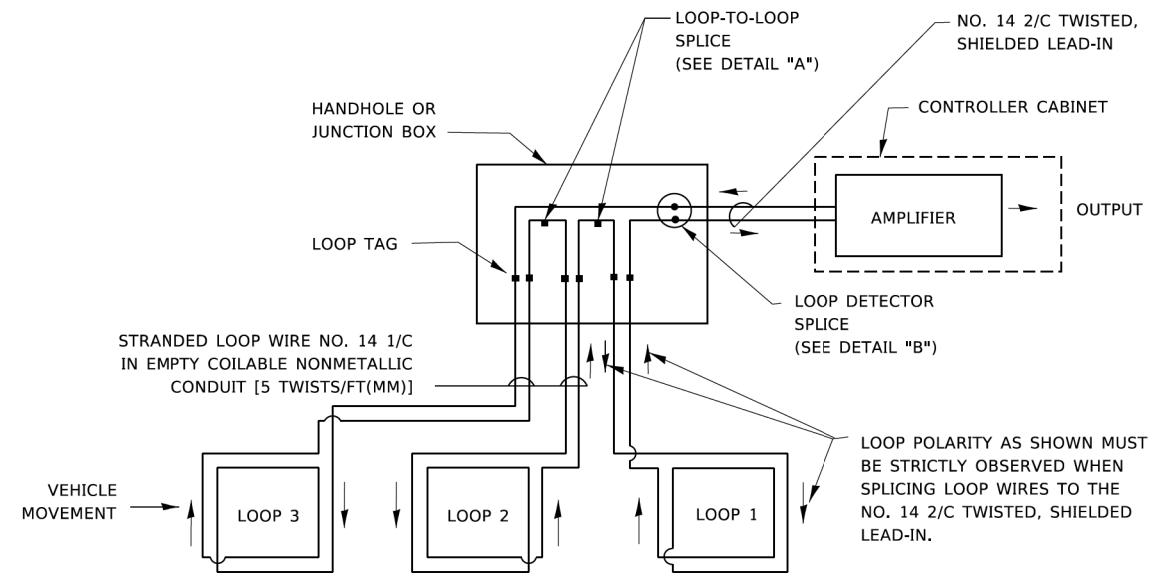
**LOOP DETECTOR NOTES**

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 DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

**LOOP LEAD-IN CABLE TAG**

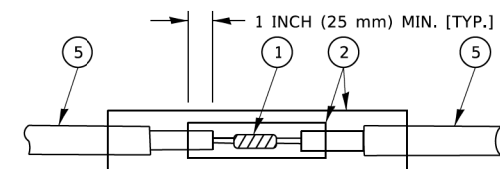


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

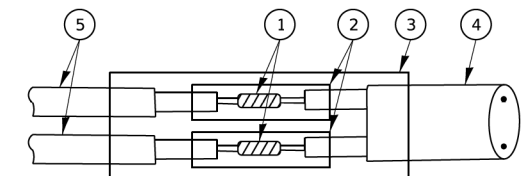


**DETECTOR LOOP WIRING SCHEMATIC**

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

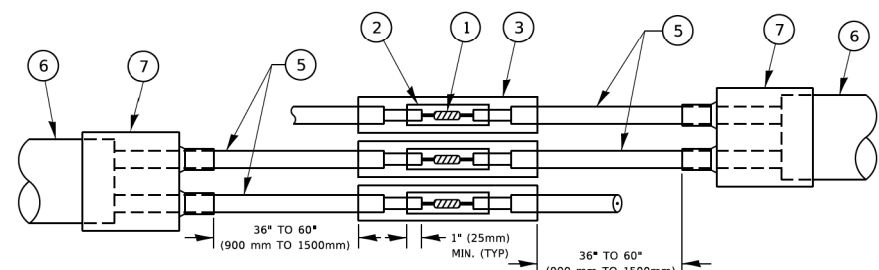


DETAIL "A"  
LOOP-TO-LOOP SPLICE

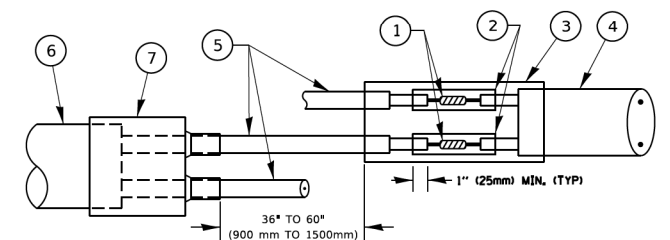


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED 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. PREFORMED LOOP
- 6 XL POLYOLEFIN 2 CONDUCTOR
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-detais-7505b.dgn  
 PLOT DATE: 3/4/2019  
 PLOT SCALE: 50,0000 1 / in.  
 REVISIONS:  
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**TS SHT. NO 2**

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	DRAWN -	REVISED -
PLOT SCALE = 50,0000 1 / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

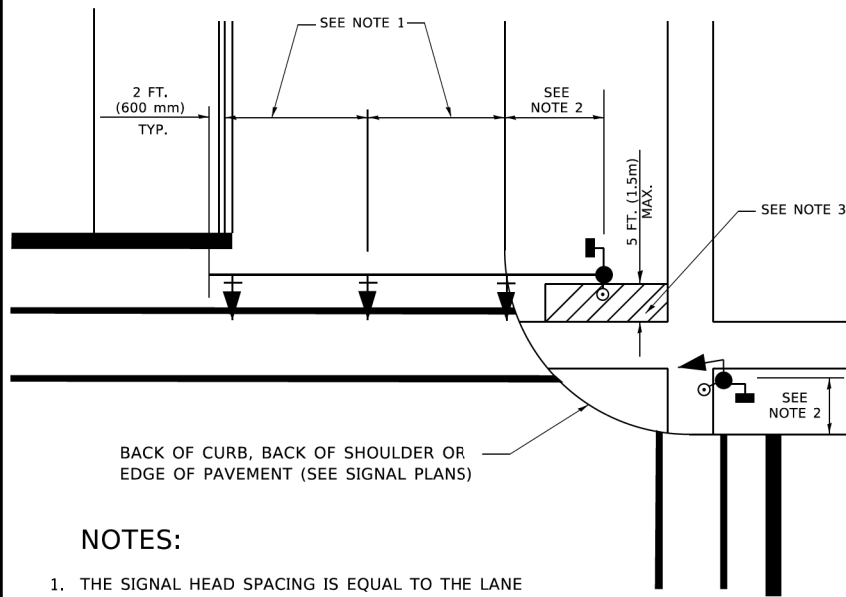
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 52
<b>TS-05</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

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

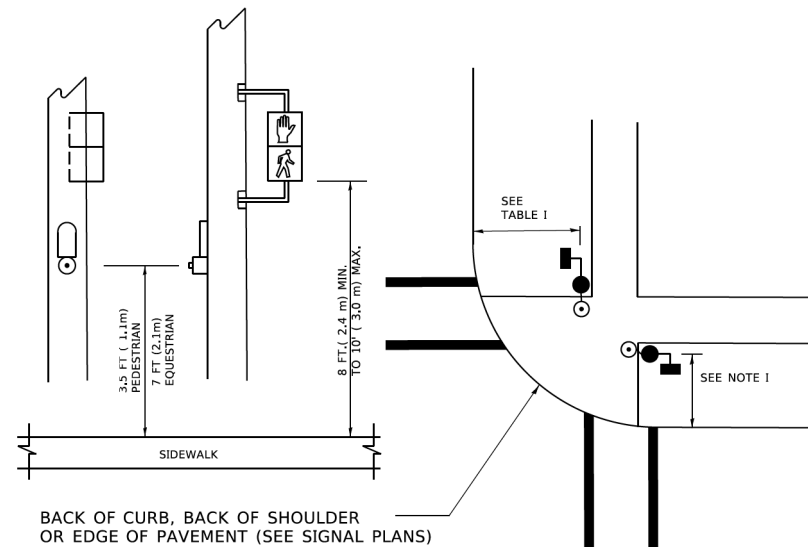


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

**NOTES:**

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

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

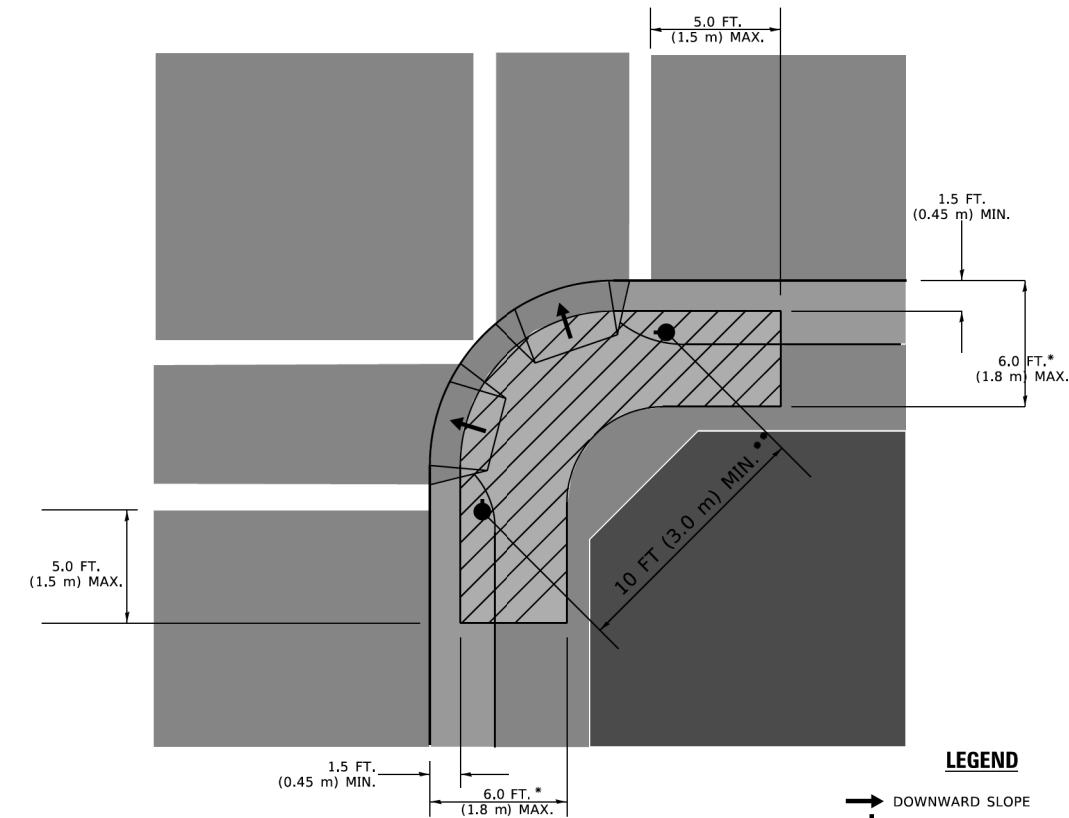


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

**NOTES:**

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

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- RECOMMENDED PUSHBUTTON LOCATIONS

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

**NOTES:**

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

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.3m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.3m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

**NOTES:**

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

**TS SHT. NO 3**

HRG PROJECT NO.: 19406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19406.01-sht-03-ts-sht-no-3.dgn  
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 PLOT SCALE: 1/8" = 1'-0"

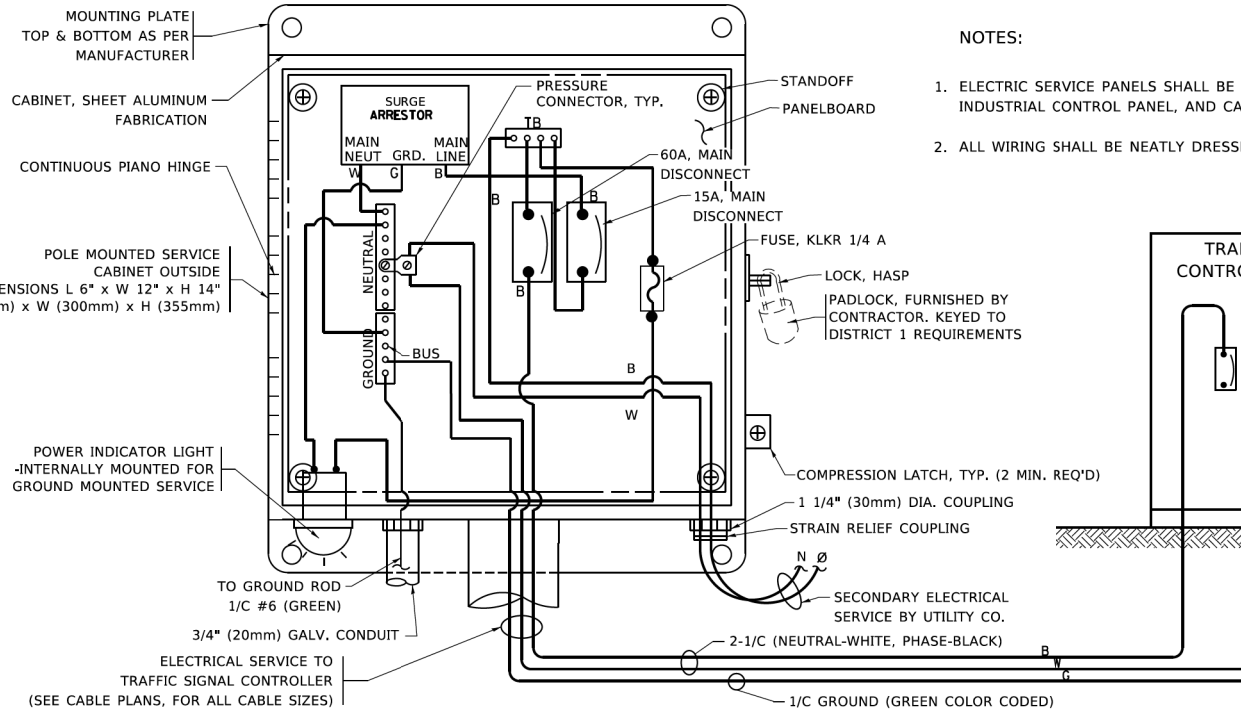
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	DRAWN -	REVISED -
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PLOT DATE = 3/4/2019	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

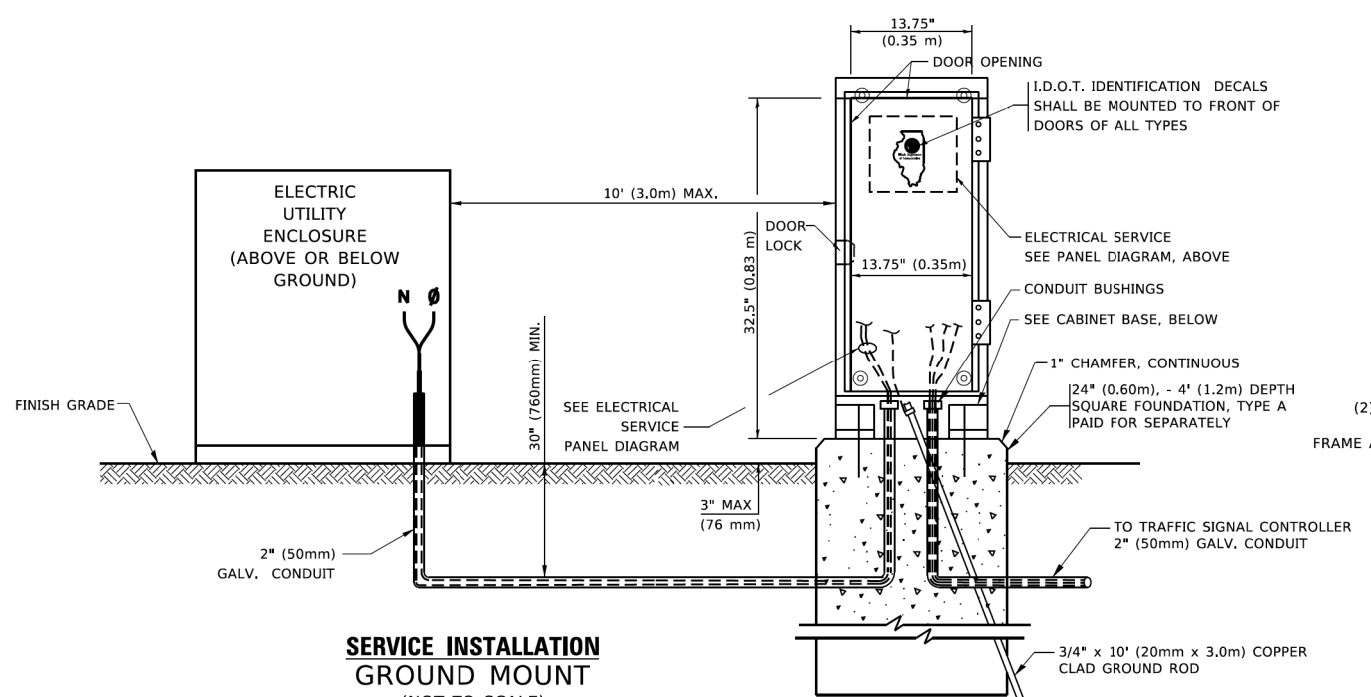
SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	53
<b>TS-05</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



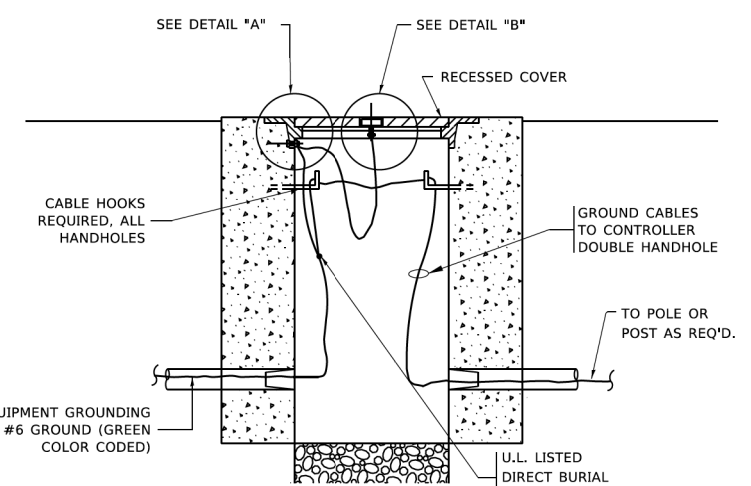
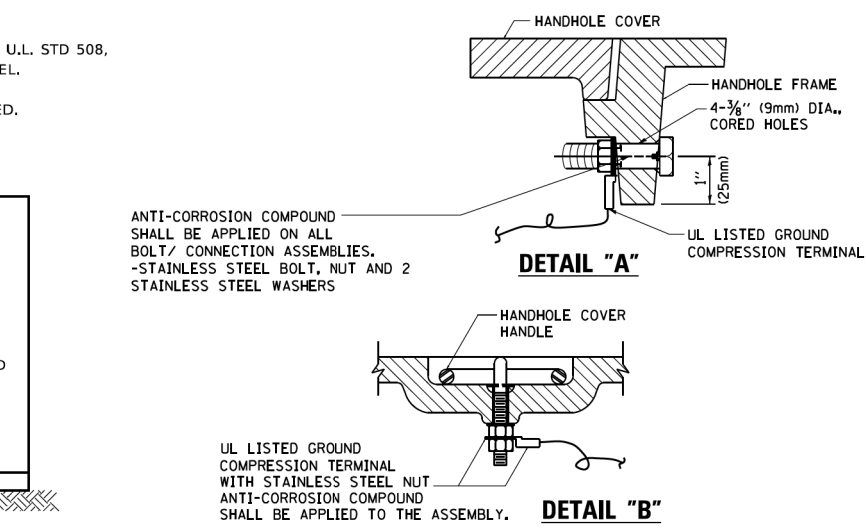
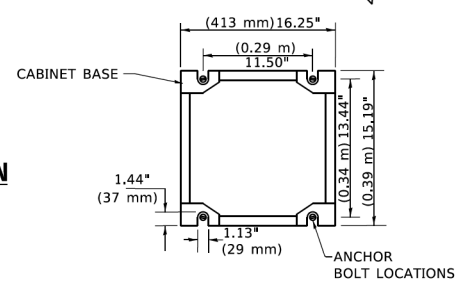
- NOTES:
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
  2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

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

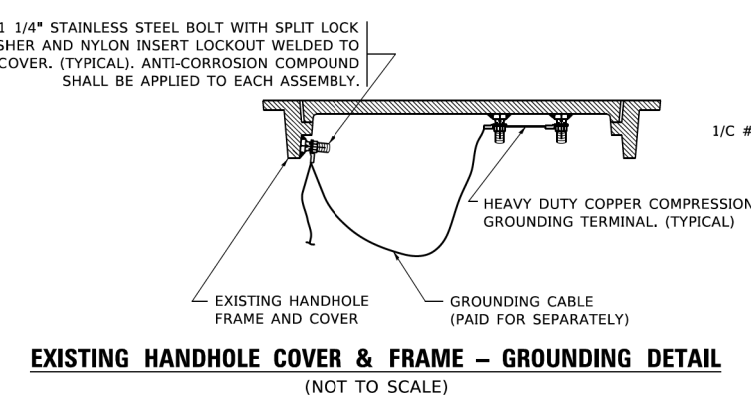


**SERVICE INSTALLATION GROUND MOUNT**  
(NOT TO SCALE)

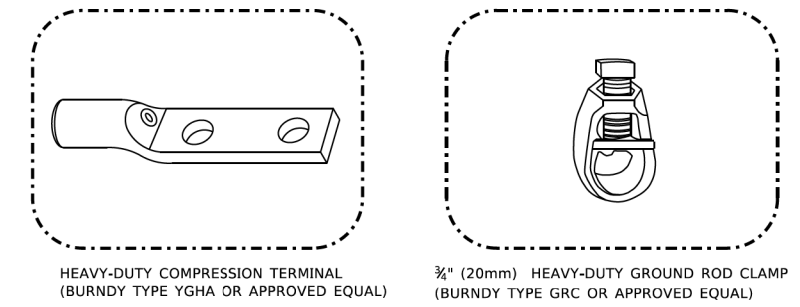
**CABINET - BASE BOLT PATTERN**  
(NOT TO SCALE)



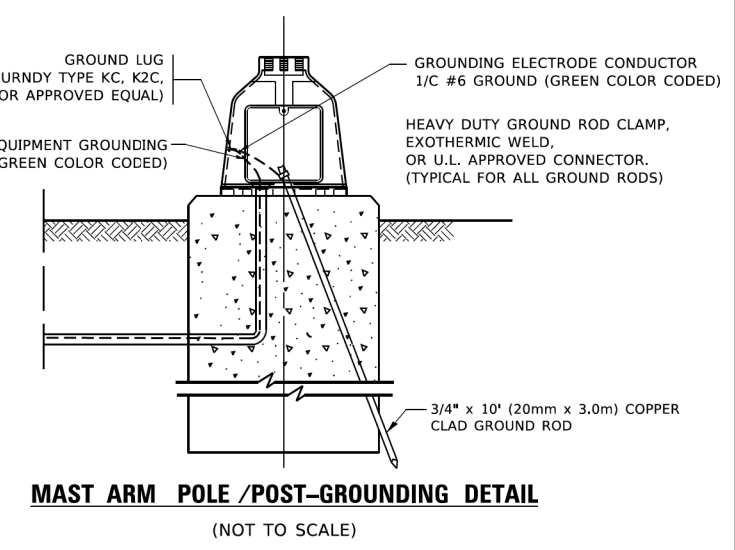
**HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
(NOT TO SCALE)



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



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



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

TS SHT. NO 4

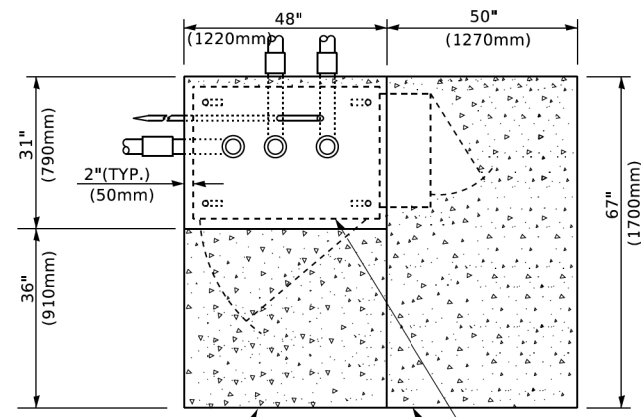
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HRG PROJ. CONTACT:  
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FILE NUMBER: 191405.01-7505.dgn  
REVISIONS:  
FILE NAME: p:\1108\BENTLEY\Illinois.gov\PROJECTS\Documents\DOT Offices\District 1\Projects\Dist1\22-21\CAD\Drawings\CAD\sheet1505.dgn

USER NAME = footemj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

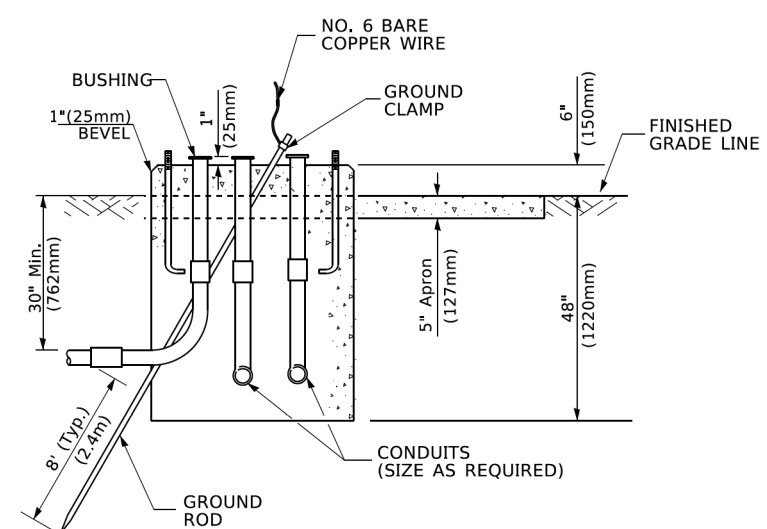
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 4	OF 7 SHEETS	STA. TO STA.

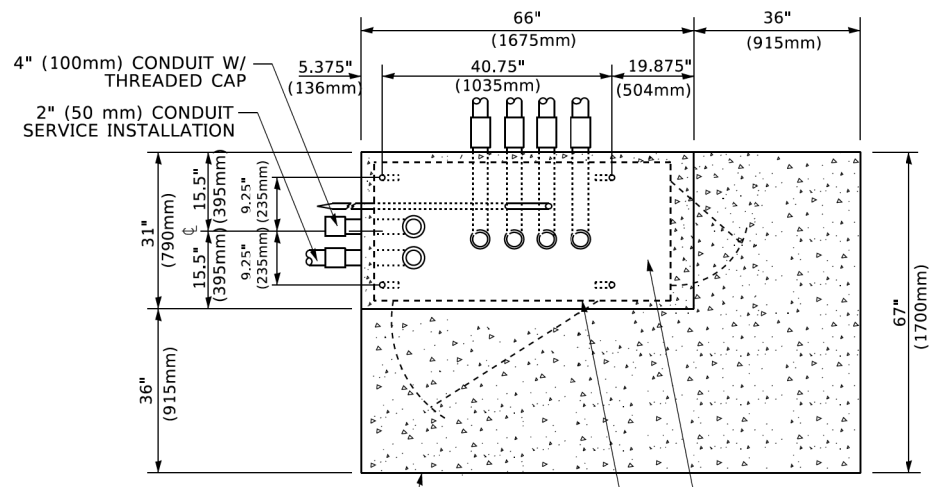
F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 54
TS-05		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



**TOP VIEW**

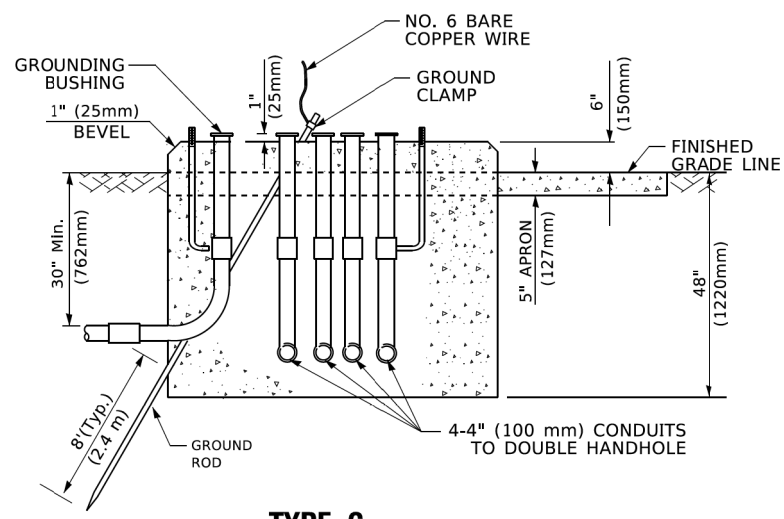


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

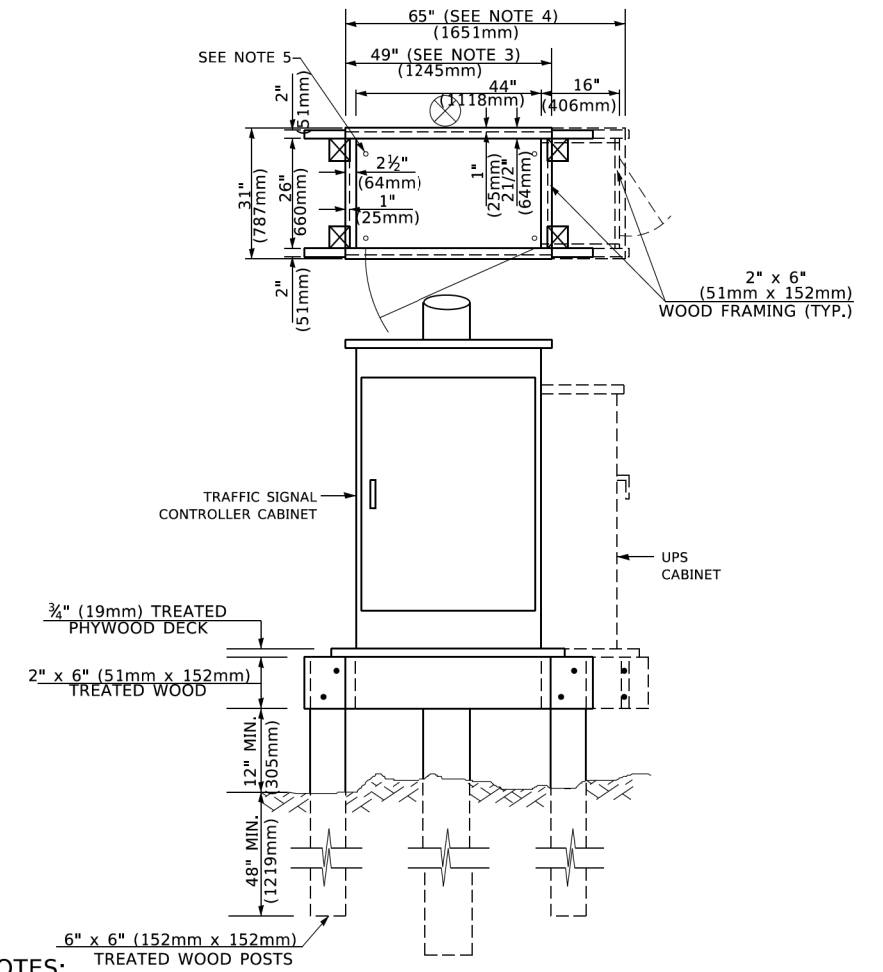


**TOP VIEW**

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



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



**NOTES:**

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

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

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

**DEPTH OF FOUNDATION**

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

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

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

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 HRG PROJ CONTACT:  
 FILE NAME: 194040.01-srt-detais-7506.dgn  
 PLOT DATE: 3/4/2019  
 PLOT SCALE: 50.0000' / 1.  
 PLOT DATE: 3/4/2019

**TS SHT. NO 5**

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PLOT DATE = 3/4/2019	DATE -	REVISED -

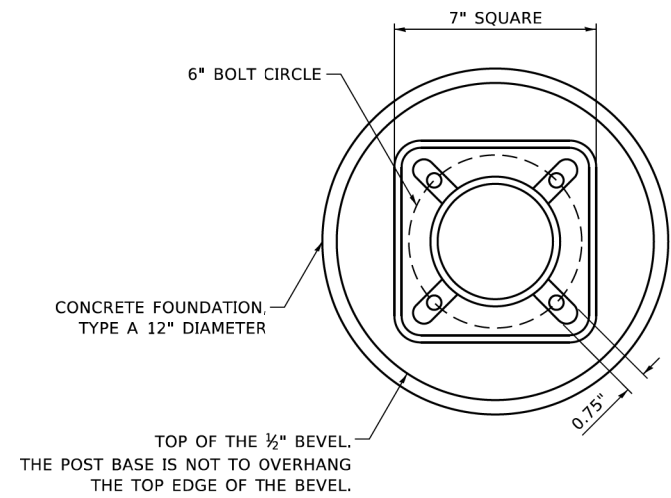
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE</b>	
<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	
SCALE: NONE	SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 55
<b>TS-05</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

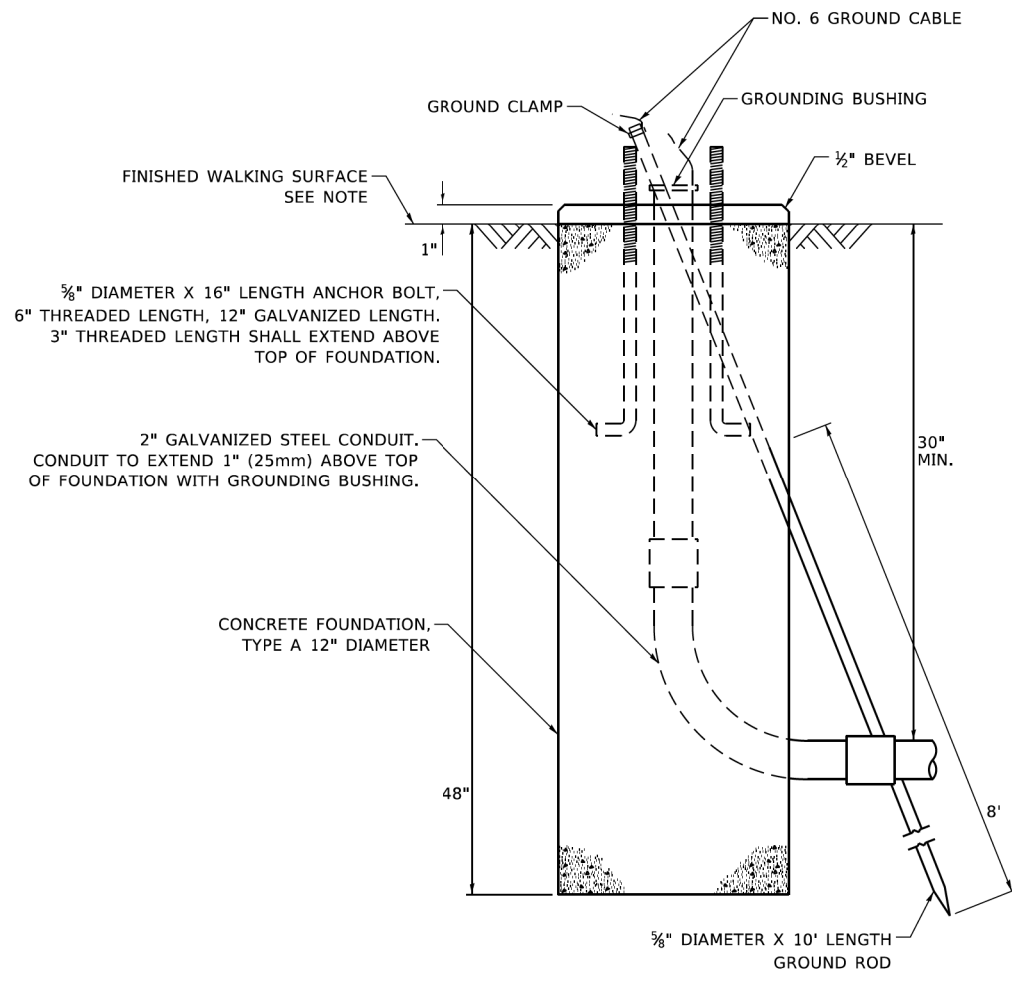




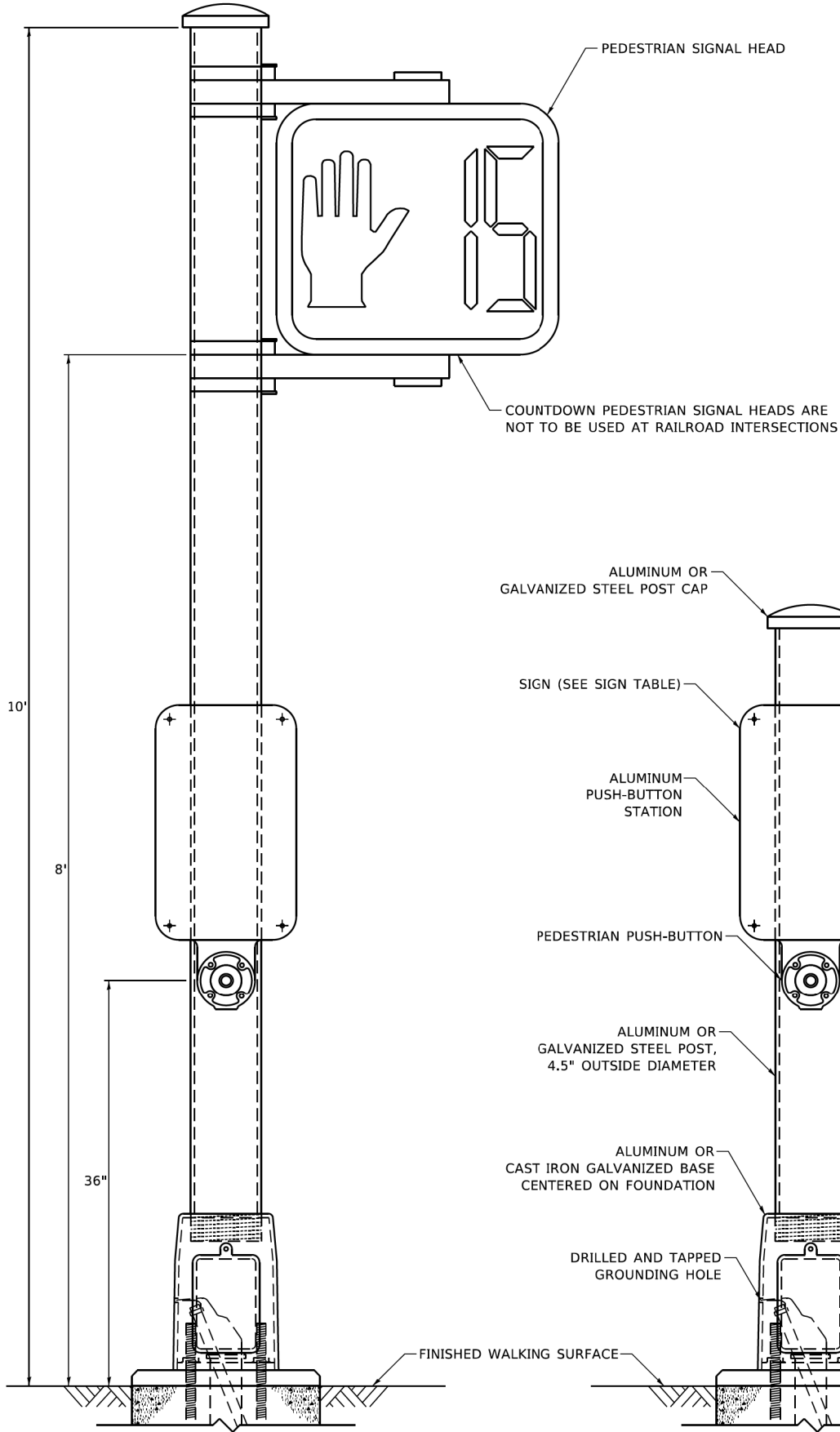


**BOLT PATTERN**

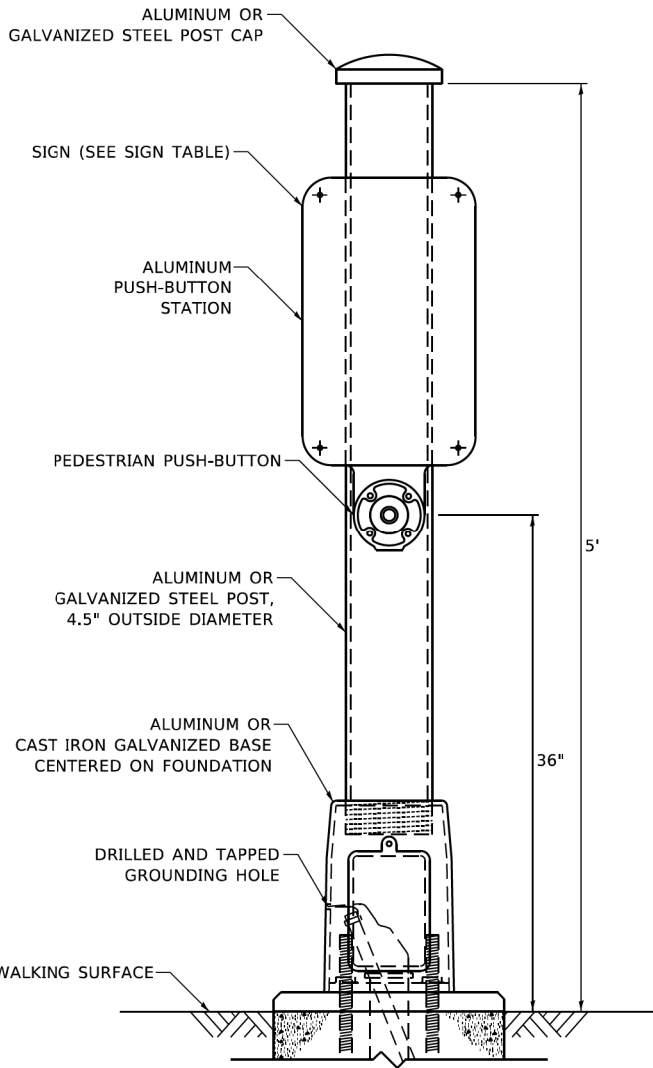
NOTE:  
 1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



**CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER**



**PEDESTRIAN SIGNAL POST, 10 FT.**



**PEDESTRIAN SIGNAL POST, 5 FT.**



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 15"

NOTES:  
 1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.  
 2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.  
 3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

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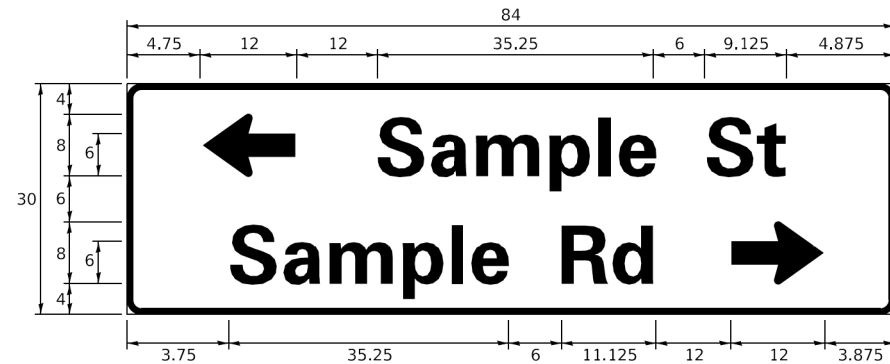
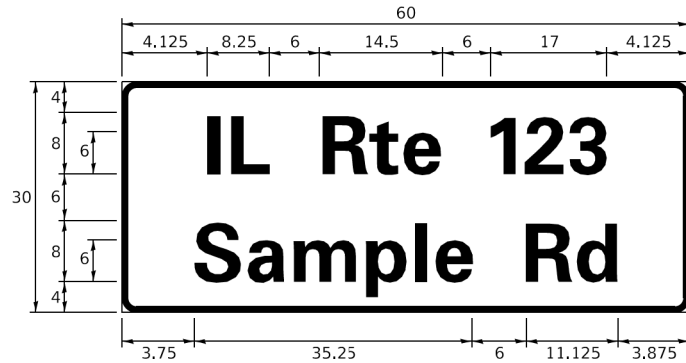
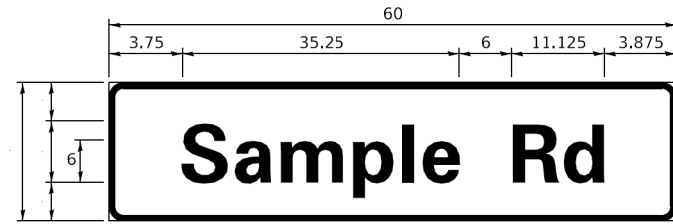
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	DATE - 10/15/2018	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE      STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	
SCALE: NTS	SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 57
<b>TS-05</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

**SIGN PANEL – TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

**COMMON STREET NAME ABBREVIATIONS AND WIDTHS**

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

**GENERAL NOTES**

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

**LOCAL SUPPLIERS:**

- J.O. HERBERT COMPANY, INC  
MIDLOTHIAN, VA
- WESTERN REMAC, INC.  
WOODRIDGE, IL

**PARTS LISTING:**

- SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
- SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
- BRACKETS SELF TAPPING WITH NEOPRENE WASHER
- CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING PART #HPN034 (UNIVERSAL)

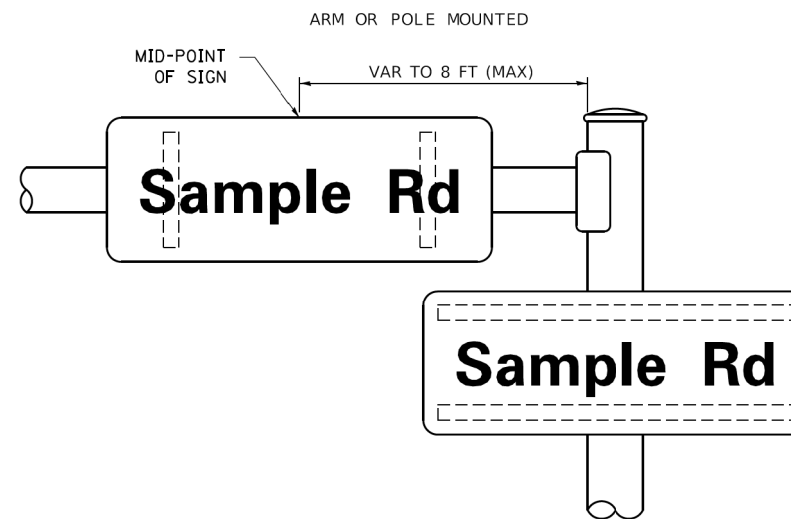
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

**STANDARD ALPHABETS SPACING CHART**

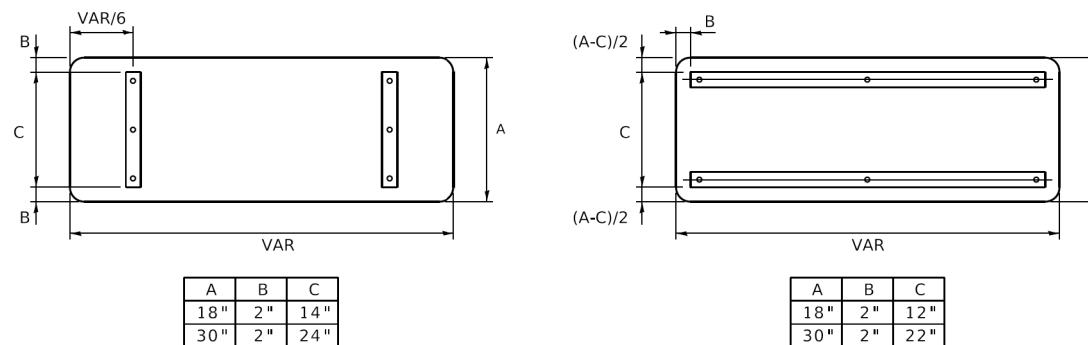
(8") UPPER CASE AND (6") LOWER CASE

CHARACTER	FHWA SERIES "C"			CHARACTER	FHWA SERIES "D"		
	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)		LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

**MOUNTING LOCATION**



**SUPPORTING CHANNELS**



TS SHT. NO 8

HRG PROJECT NO: 19405.01  
 HRG PROJ CONTACT:  
 FILE NAME: 19405.01-sht-08-ts-1502.dgn  
 PLOT DATE: 3/4/2019  
 PLOT SCALE: 50.0000' / 1"  
 REVISIONS: NONE

USER NAME = footemj	DESIGNED - LP/IP	REVISED - LP 07/01/2015
PLOT SCALE = 50.0000' / 1"	CHECKED - IP	REVISED -
PLOT DATE = 3/4/2019	DATE - 10/01/2014	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
 MAST ARM MOUNTED STREET NAME SIGNS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 58
TS-02		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

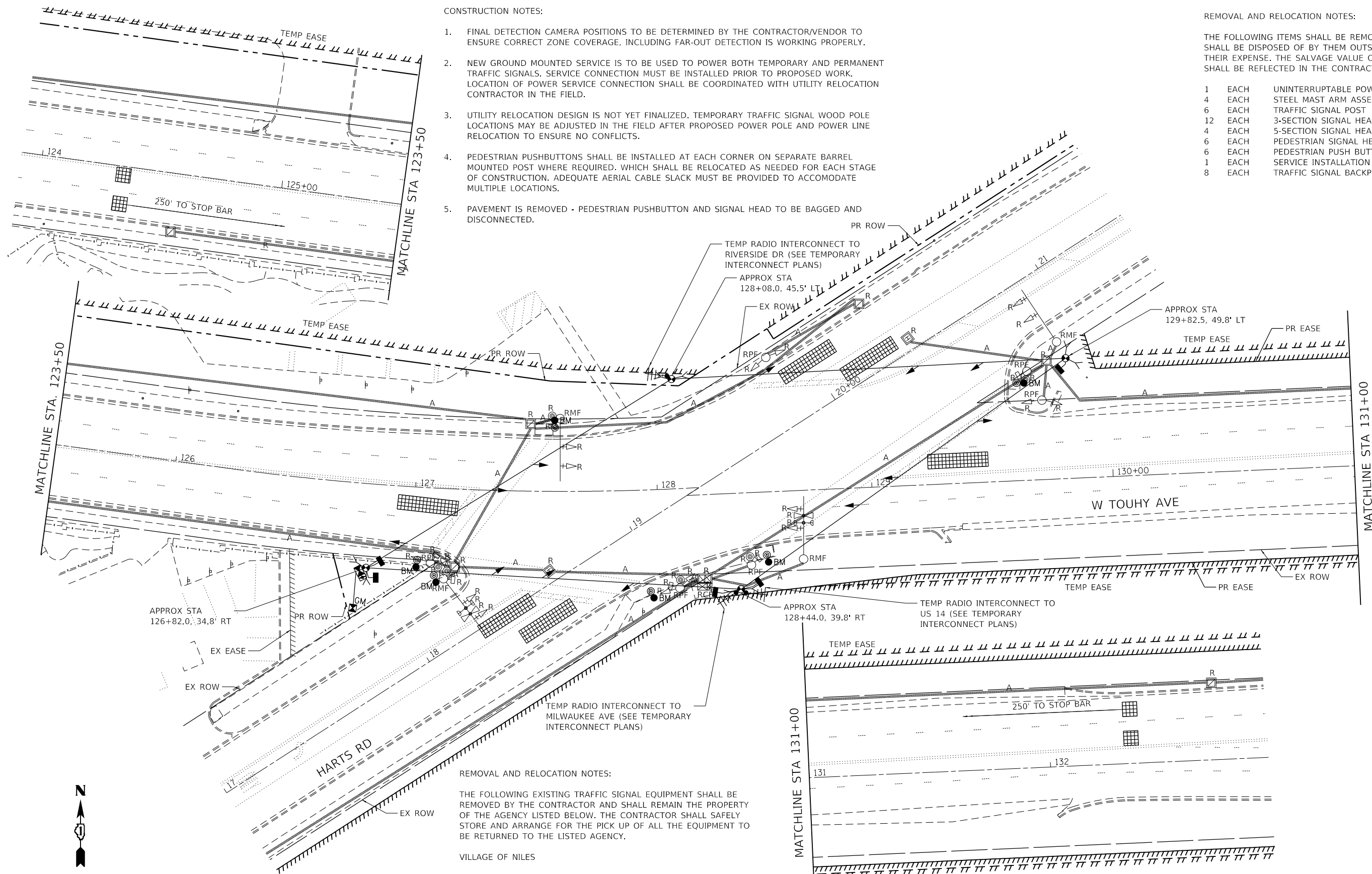
CONSTRUCTION NOTES:

1. FINAL DETECTION CAMERA POSITIONS TO BE DETERMINED BY THE CONTRACTOR/VENDOR TO ENSURE CORRECT ZONE COVERAGE, INCLUDING FAR-OUT DETECTION IS WORKING PROPERLY.
2. NEW GROUND MOUNTED SERVICE IS TO BE USED TO POWER BOTH TEMPORARY AND PERMANENT TRAFFIC SIGNALS. SERVICE CONNECTION MUST BE INSTALLED PRIOR TO PROPOSED WORK. LOCATION OF POWER SERVICE CONNECTION SHALL BE COORDINATED WITH UTILITY RELOCATION CONTRACTOR IN THE FIELD.
3. UTILITY RELOCATION DESIGN IS NOT YET FINALIZED. TEMPORARY TRAFFIC SIGNAL WOOD POLE LOCATIONS MAY BE ADJUSTED IN THE FIELD AFTER PROPOSED POWER POLE AND POWER LINE RELOCATION TO ENSURE NO CONFLICTS.
4. PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED AT EACH CORNER ON SEPARATE BARREL MOUNTED POST WHERE REQUIRED. WHICH SHALL BE RELOCATED AS NEEDED FOR EACH STAGE OF CONSTRUCTION. ADEQUATE AERIAL CABLE SLACK MUST BE PROVIDED TO ACCOMMODATE MULTIPLE LOCATIONS.
5. PAVEMENT IS REMOVED - PEDESTRIAN PUSHBUTTON AND SIGNAL HEAD TO BE BAGGED AND DISCONNECTED.

REMOVAL AND RELOCATION NOTES:

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

- |    |      |                                    |
|----|------|------------------------------------|
| 1  | EACH | UNINTERRUPTABLE POWER SUPPLY (UPS) |
| 4  | EACH | STEEL MAST ARM ASSEMBLY AND POST   |
| 6  | EACH | TRAFFIC SIGNAL POST                |
| 12 | EACH | 3-SECTION SIGNAL HEAD              |
| 4  | EACH | 5-SECTION SIGNAL HEAD              |
| 6  | EACH | PEDESTRIAN SIGNAL HEAD             |
| 6  | EACH | PEDESTRIAN PUSH BUTTON             |
| 1  | EACH | SERVICE INSTALLATION               |
| 8  | EACH | TRAFFIC SIGNAL BACKPLATE           |



REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY.

VILLAGE OF NILES

- |   |      |                          |
|---|------|--------------------------|
| 2 | EACH | CONFIRMATION BEACON      |
| 2 | EACH | LIGHT DETECTOR           |
| 1 | EACH | LIGHT DETECTOR AMPLIFIER |

ILLINOIS DEPARTMENT OF TRANSPORTATION

- |   |      |                                   |
|---|------|-----------------------------------|
| 1 | EACH | CONTROLLER AND CABINET (COMPLETE) |
|---|------|-----------------------------------|

TS SHT. NO 9



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-151g-pr6.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzu210  
 DESIGNED - TAY  
 DRAWN - WJH  
 PLOT SCALE = 40.0000' / in.  
 CHECKED -  
 PLOT DATE = 12/16/2022  
 DATE -

REVISIONS:  
 REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVE  
 EXISTING TRAFFIC SIGNAL EQUIPMENT PLANS-PRESTAGE  
 TOUHY AVENUE /HARTS ROAD /GROSS POINT ROAD

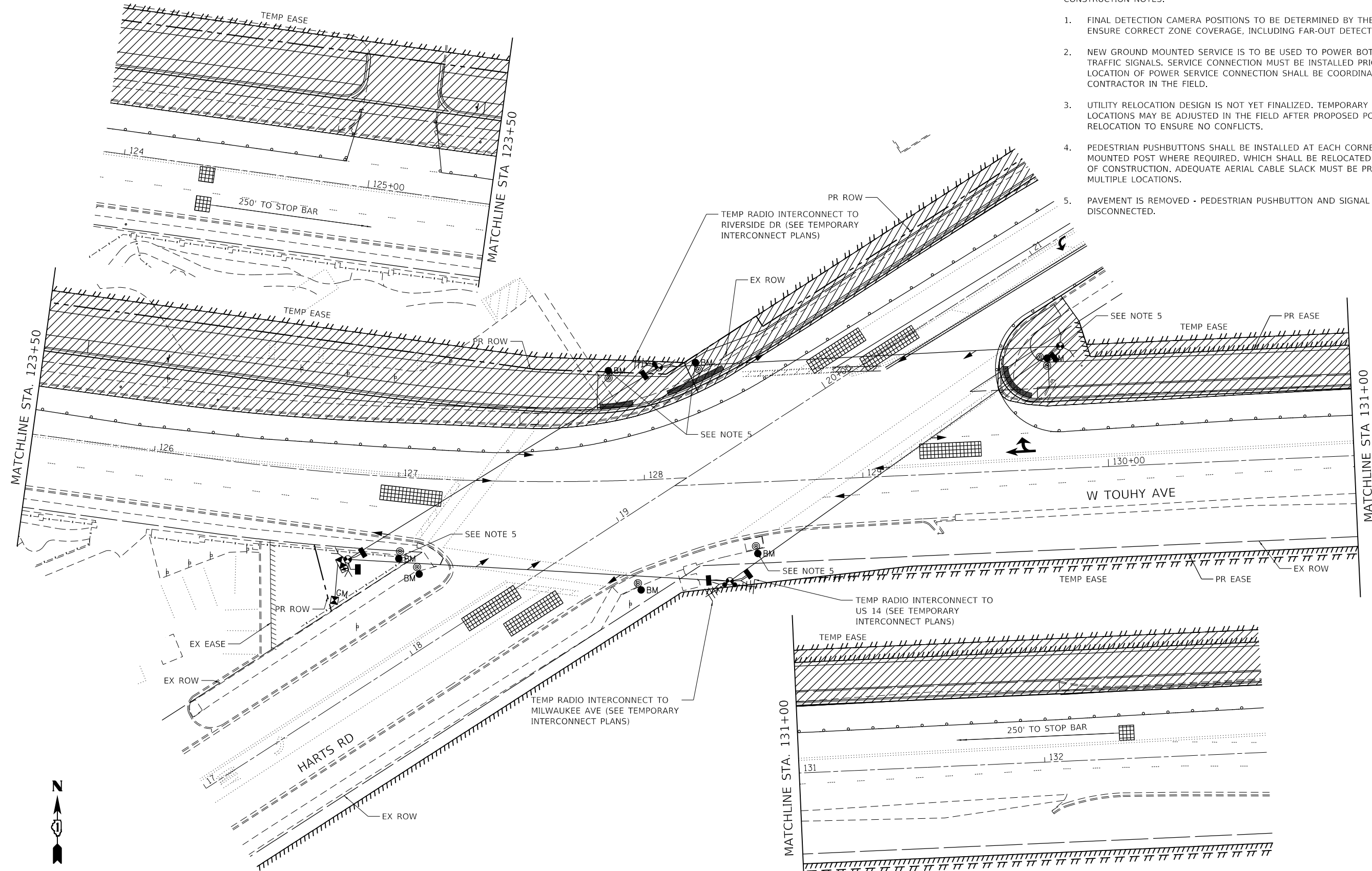
SCALE: 1"=20' SHEET 9 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	59
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

TS 1560  
 ECON 156

CONSTRUCTION NOTES:

1. FINAL DETECTION CAMERA POSITIONS TO BE DETERMINED BY THE CONTRACTOR/VENDOR TO ENSURE CORRECT ZONE COVERAGE, INCLUDING FAR-OUT DETECTION IS WORKING PROPERLY.
2. NEW GROUND MOUNTED SERVICE IS TO BE USED TO POWER BOTH TEMPORARY AND PERMANENT TRAFFIC SIGNALS. SERVICE CONNECTION MUST BE INSTALLED PRIOR TO PROPOSED WORK. LOCATION OF POWER SERVICE CONNECTION SHALL BE COORDINATED WITH UTILITY RELOCATION CONTRACTOR IN THE FIELD.
3. UTILITY RELOCATION DESIGN IS NOT YET FINALIZED. TEMPORARY TRAFFIC SIGNAL WOOD POLE LOCATIONS MAY BE ADJUSTED IN THE FIELD AFTER PROPOSED POWER POLE AND POWER LINE RELOCATION TO ENSURE NO CONFLICTS.
4. PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED AT EACH CORNER ON SEPARATE BARREL MOUNTED POST WHERE REQUIRED, WHICH SHALL BE RELOCATED AS NEEDED FOR EACH STAGE OF CONSTRUCTION. ADEQUATE AERIAL CABLE SLACK MUST BE PROVIDED TO ACCOMMODATE MULTIPLE LOCATIONS.
5. PAVEMENT IS REMOVED - PEDESTRIAN PUSHBUTTON AND SIGNAL HEAD TO BE BAGGED AND DISCONNECTED.



TS SHT. NO 10



HRG PROJECT NO.: 19405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19405.01-sht-10.dgn  
 PEN TABLE: 19405.tbl



USER NAME = mzu210	DESIGNED - TAY	REVISED -
PLOT SCALE = 40.0000' / 1"	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

DESIGNED - TAY	REVISED -
DRAWN - WJH	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN  
 STAGE 1  
 TOUHY AVENUE / HARTS ROAD / GROSS POINT ROAD

SCALE: 1"=20' SHEET 10 OF 22 SHEETS STA. TO STA.

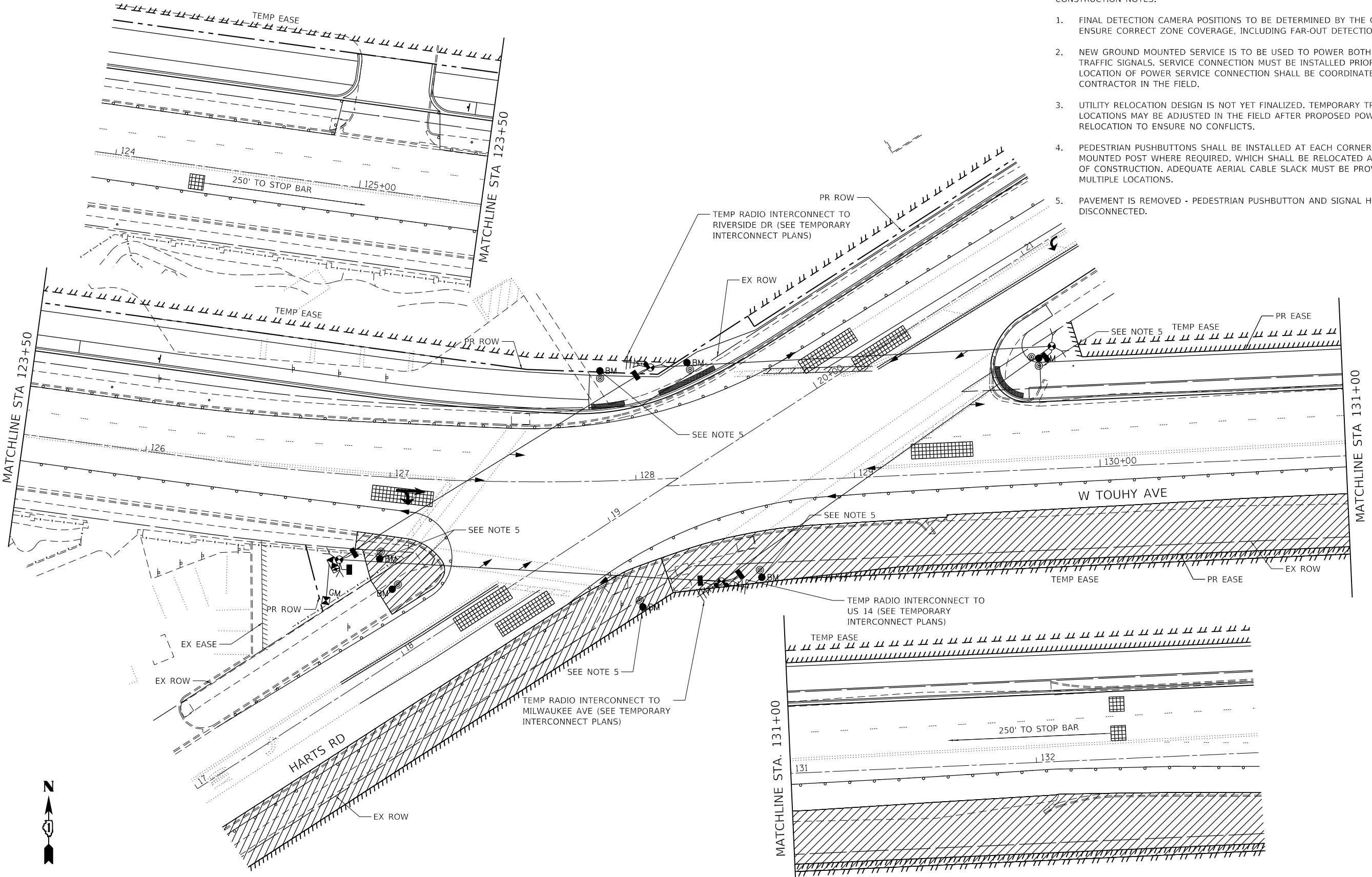
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	60
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT

TS 1560  
 ECON 156

CONTRACT NO. 61H59

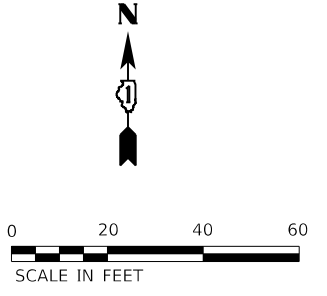
CONSTRUCTION NOTES:

1. FINAL DETECTION CAMERA POSITIONS TO BE DETERMINED BY THE CONTRACTOR/VENDOR TO ENSURE CORRECT ZONE COVERAGE, INCLUDING FAR-OUT DETECTION IS WORKING PROPERLY.
2. NEW GROUND MOUNTED SERVICE IS TO BE USED TO POWER BOTH TEMPORARY AND PERMANENT TRAFFIC SIGNALS. SERVICE CONNECTION MUST BE INSTALLED PRIOR TO PROPOSED WORK. LOCATION OF POWER SERVICE CONNECTION SHALL BE COORDINATED WITH UTILITY RELOCATION CONTRACTOR IN THE FIELD.
3. UTILITY RELOCATION DESIGN IS NOT YET FINALIZED. TEMPORARY TRAFFIC SIGNAL WOOD POLE LOCATIONS MAY BE ADJUSTED IN THE FIELD AFTER PROPOSED POWER POLE AND POWER LINE RELOCATION TO ENSURE NO CONFLICTS.
4. PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED AT EACH CORNER ON SEPARATE BARREL MOUNTED POST WHERE REQUIRED, WHICH SHALL BE RELOCATED AS NEEDED FOR EACH STAGE OF CONSTRUCTION. ADEQUATE AERIAL CABLE SLACK MUST BE PROVIDED TO ACCOMMODATE MULTIPLE LOCATIONS.
5. PAVEMENT IS REMOVED - PEDESTRIAN PUSHBUTTON AND SIGNAL HEAD TO BE BAGGED AND DISCONNECTED.



TS SHT. NO 11

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-11-191405.dgn  
 PEN TABLE: 191405.tbl



TS 1560  
 ECON 156



USER NAME = mzu210	DESIGNED - TAY	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN  
 STAGE 2  
 TOUHY AVENUE / HARTS ROAD / GROSS POINT ROAD

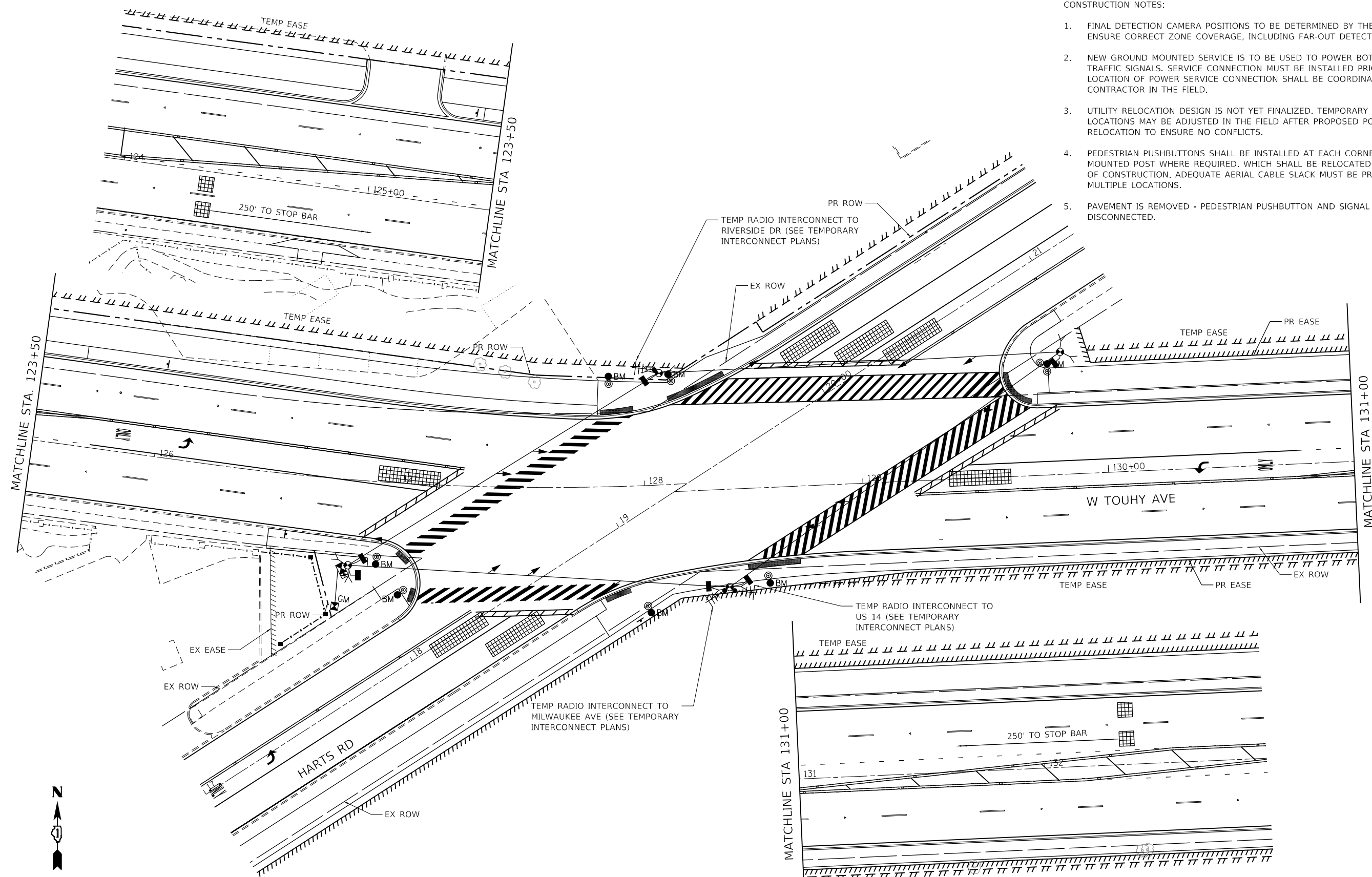
SCALE: 1"=20' SHEET 11 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	61
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT

CONTRACT NO. 61H59

CONSTRUCTION NOTES:

1. FINAL DETECTION CAMERA POSITIONS TO BE DETERMINED BY THE CONTRACTOR/VENDOR TO ENSURE CORRECT ZONE COVERAGE, INCLUDING FAR-OUT DETECTION IS WORKING PROPERLY.
2. NEW GROUND MOUNTED SERVICE IS TO BE USED TO POWER BOTH TEMPORARY AND PERMANENT TRAFFIC SIGNALS. SERVICE CONNECTION MUST BE INSTALLED PRIOR TO PROPOSED WORK. LOCATION OF POWER SERVICE CONNECTION SHALL BE COORDINATED WITH UTILITY RELOCATION CONTRACTOR IN THE FIELD.
3. UTILITY RELOCATION DESIGN IS NOT YET FINALIZED. TEMPORARY TRAFFIC SIGNAL WOOD POLE LOCATIONS MAY BE ADJUSTED IN THE FIELD AFTER PROPOSED POWER POLE AND POWER LINE RELOCATION TO ENSURE NO CONFLICTS.
4. PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED AT EACH CORNER ON SEPARATE BARREL MOUNTED POST WHERE REQUIRED, WHICH SHALL BE RELOCATED AS NEEDED FOR EACH STAGE OF CONSTRUCTION. ADEQUATE AERIAL CABLE SLACK MUST BE PROVIDED TO ACCOMMODATE MULTIPLE LOCATIONS.
5. PAVEMENT IS REMOVED - PEDESTRIAN PUSHBUTTON AND SIGNAL HEAD TO BE BAGGED AND DISCONNECTED.



TS SHT. NO 12



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-12-191405.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzu210	DESIGNED - TAY	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

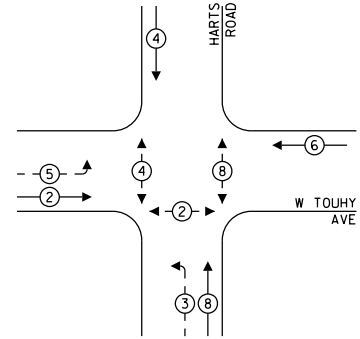
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN  
 FINAL STAGE  
 TOUHY AVENUE /HARTS ROAD /GROSS POINT ROAD

SCALE: 1"=20' SHEET 12 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	62
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

TS 1560  
 ECON 156

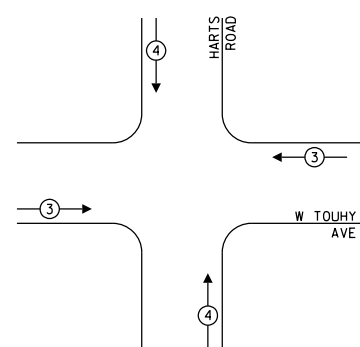
**TEMPORARY CONTROLLER SEQUENCE**



**LEGEND:**

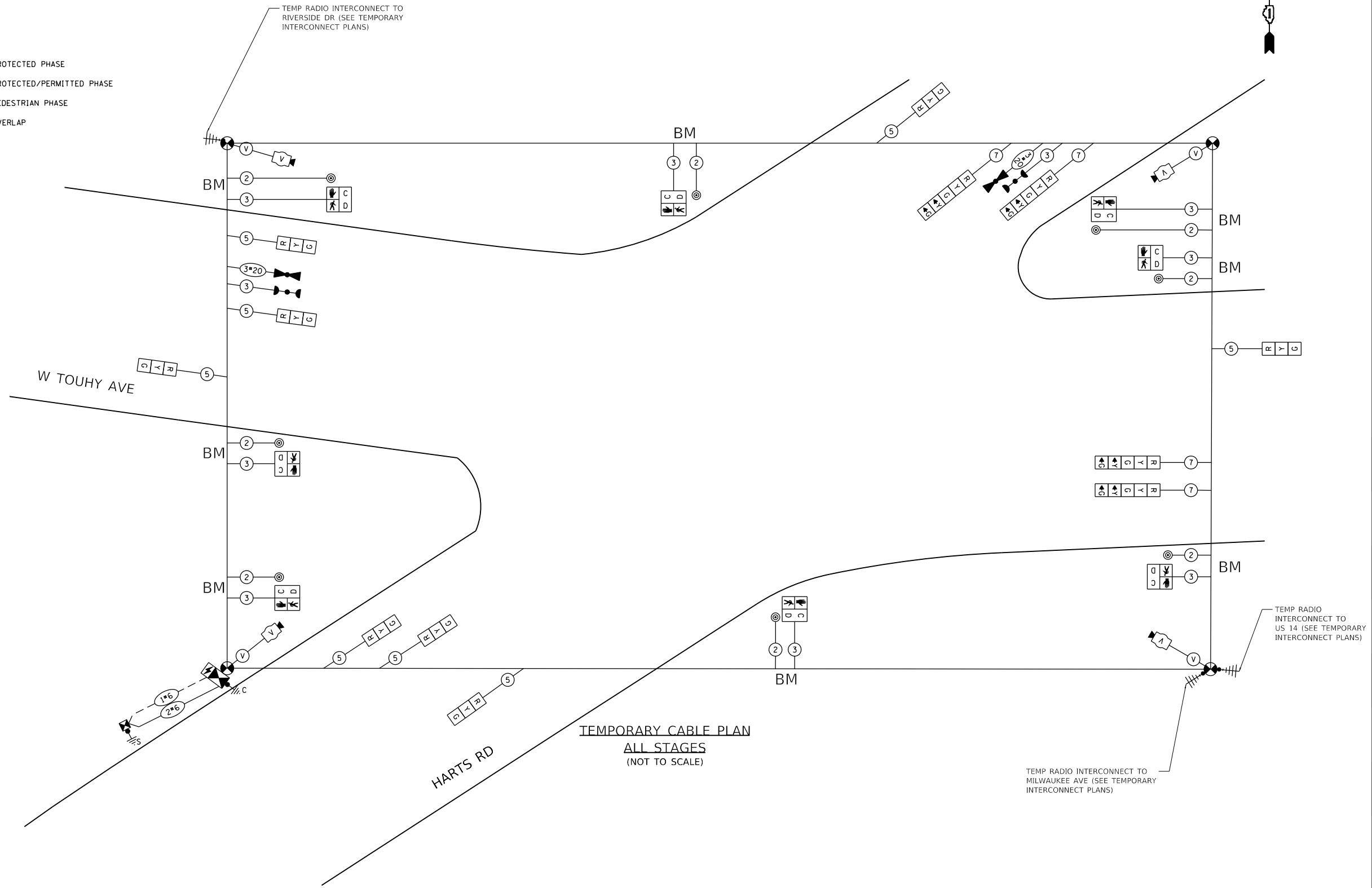
- ← ⊙ — PROTECTED PHASE
- ← ⊙ - — PROTECTED/PERMITTED PHASE
- ← ⊙ — PEDESTRIAN PHASE
- ← ⊙ OL — OVERLAP

**TEMPORARY EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**CONSTRUCTION NOTES:**

ALL TEMPORARY PEDESTRIAN SIGNAL HEADS SHALL BE BAGGED AND DISCONNECTED WHEN EXISTING PAVEMENT IS REMOVED AND REMAINED BAGGED UNTIL PAVEMENT IS RESTORED, AND AS DETERMINED BY THE ENGINEER DURING CONSTRUCTION. SEE PLAN NOTES FOR SUGGESTED BAGGING AND DISCONNECTING OF SIGNAL HEADS AND PUSHBUTTONS DURING EACH STAGE.



**TEMPORARY CABLE PLAN  
ALL STAGES  
(NOT TO SCALE)**

**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
TOTAL =				395.8

ENERGY COSTS TO:  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 W. CENTER COURT  
SCHAUMBURG, IL 60196-1096  
ENERGY SUPPLY: CONTACT: JOE STACHO  
PHONE: (630) 424-5704  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: ---

TS SHT. NO 13

HRG PROJECT NO.: 191405.01  
HRG PROJ. CONTACT:  
FILE NAME: 191405.01-sht-13-ig-cab.dgn  
PEN TABLE: 191405.tbl



USER NAME = mzu2210	DESIGNED - TAY	REVISED -
PLOT SCALE = 50.0000' / in.	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

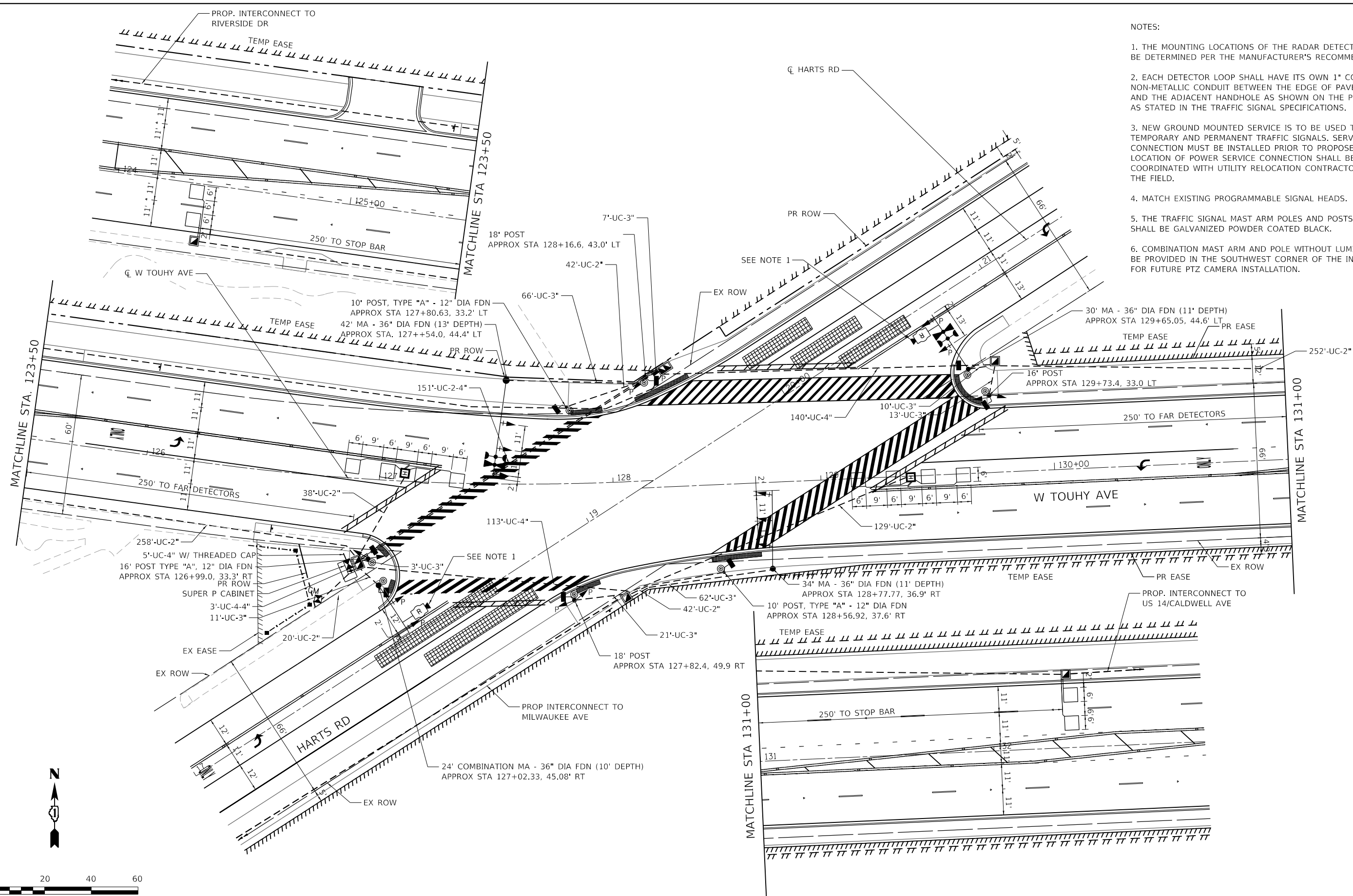
**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM  
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
TOUHY AVENUE /HARTS ROAD /GROSS POINT ROAD**

SCALE: 1"=20' SHEET 13 OF 22 SHEETS STA. TO STA.

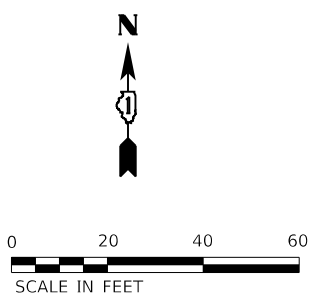
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	63
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

**TS 1560  
ECON 156**

- NOTES:
1. THE MOUNTING LOCATIONS OF THE RADAR DETECTORS WILL BE DETERMINED PER THE MANUFACTURER'S RECOMMENDATIONS.
  2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
  3. NEW GROUND MOUNTED SERVICE IS TO BE USED TO POWER BOTH TEMPORARY AND PERMANENT TRAFFIC SIGNALS. SERVICE CONNECTION MUST BE INSTALLED PRIOR TO PROPOSED WORK. LOCATION OF POWER SERVICE CONNECTION SHALL BE COORDINATED WITH UTILITY RELOCATION CONTRACTOR IN THE FIELD.
  4. MATCH EXISTING PROGRAMMABLE SIGNAL HEADS.
  5. THE TRAFFIC SIGNAL MAST ARM POLES AND POSTS ASSEMBLIES SHALL BE GALVANIZED POWDER COATED BLACK.
  6. COMBINATION MAST ARM AND POLE WITHOUT LUMINAIRE SHALL BE PROVIDED IN THE SOUTHWEST CORNER OF THE INTERSECTION FOR FUTURE PTZ CAMERA INSTALLATION.



TS SHT. NO 14



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-14.dwg  
 PEN TABLE: 191405.tbl

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

USER NAME = mzu210	DESIGNED - TAY	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 48.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL INSTALLATION PLAN  
 TOUHY AVENUE /HARTS ROAD /GROSS POINT ROAD**

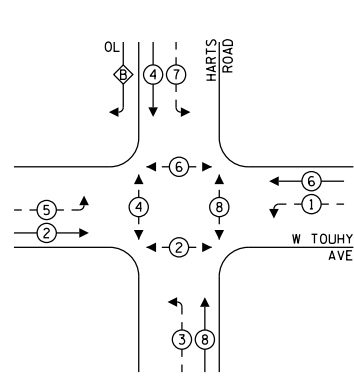
SCALE: 1"=20' SHEET 14 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	64
CONTRACT NO. 61H59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**TS 1560  
 ECON 156**



**PROPOSED CONTROLLER SEQUENCE**



**RIGHT TURN OVERLAP**

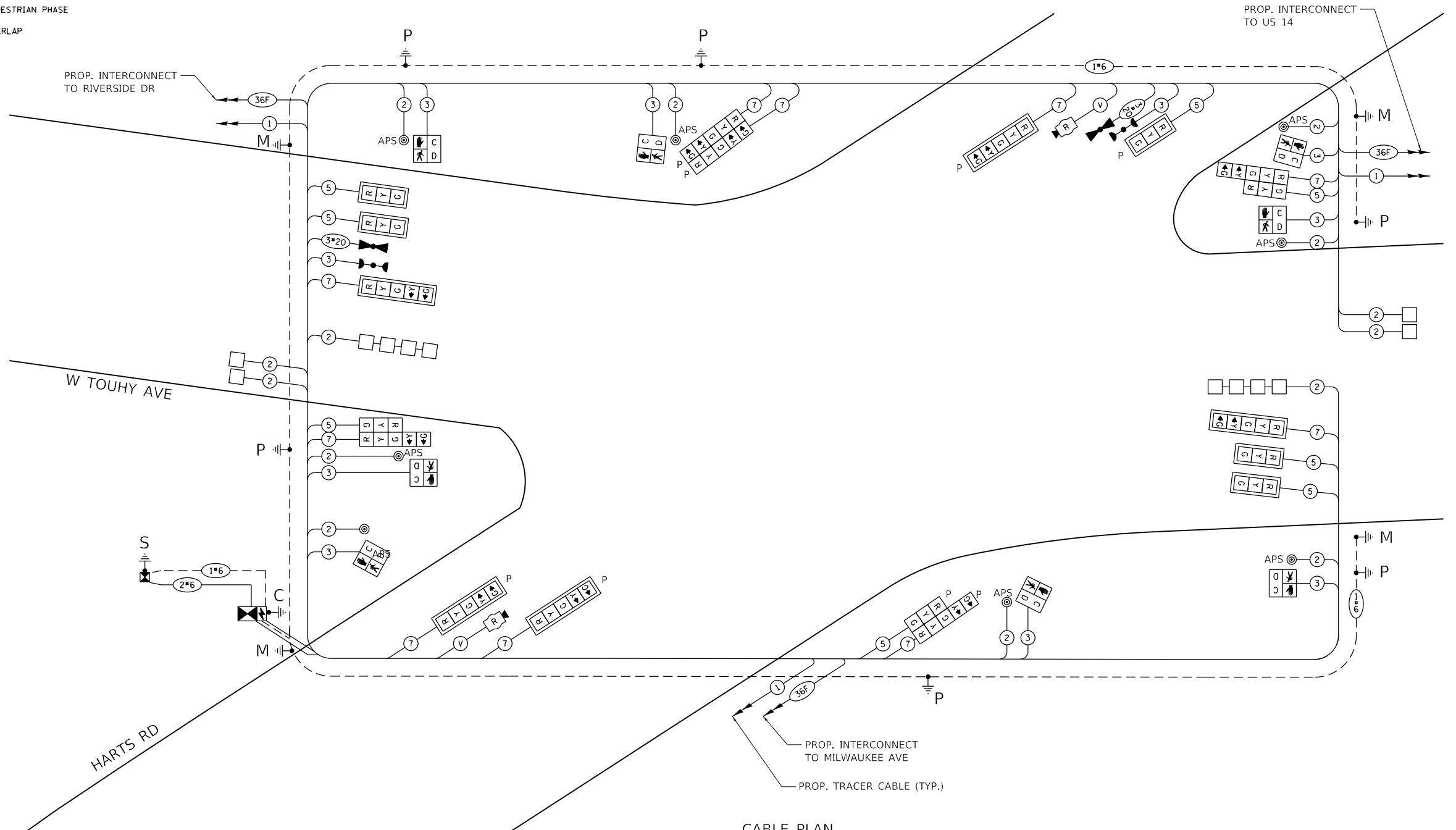
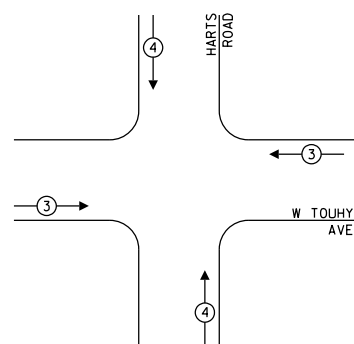
**PHASE DESIGNATION:**

$$\text{OVERLAP LETTER } B = \frac{\text{PERMISSIVE PHASE}}{4} + \frac{\text{PROTECTED PHASE}}{5}$$

**LEGEND:**

- ← ⊙ — PROTECTED PHASE
- ← ⊙ - — PROTECTED/PERMITTED PHASE
- ← ⊙ — PEDESTRIAN PHASE
- ← ⊙ OL — OVERLAP

**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**CABLE PLAN**  
(NOT TO SCALE)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	11	50	99.0
(YELLOW)	18	20	5	18.0
(GREEN)	18	12	45	98
PERMISSIVE ARROW	20	10	10	20.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
<b>TOTAL =</b>				<b>520.0</b>

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 W. CENTER COURT  
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: JOE STACHO  
PHONE: (630) 424-5704  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: ---

TS SHT. NO 15

HRG PROJECT NO.: 191405.01  
HRG PROJ. CONTACT:  
FILE NAME: 191405.01-sht-15-1.dwg  
PEN TABLE: 191405.tbl



USER NAME = mzu2210	DESIGNED - TAY	REVISED -
PLOT SCALE = 50.0000' / in.	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

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

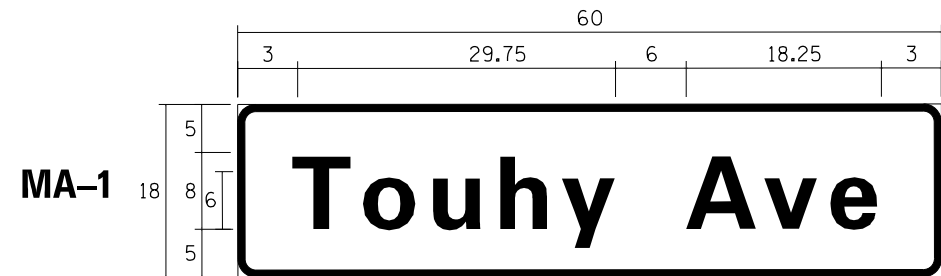
**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE TOUHY AVENUE /HARTS ROAD /GROSS POINT ROAD**

SCALE: 1"=20' SHEET 15 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	65
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

**TS 1560**  
**ECON 156**

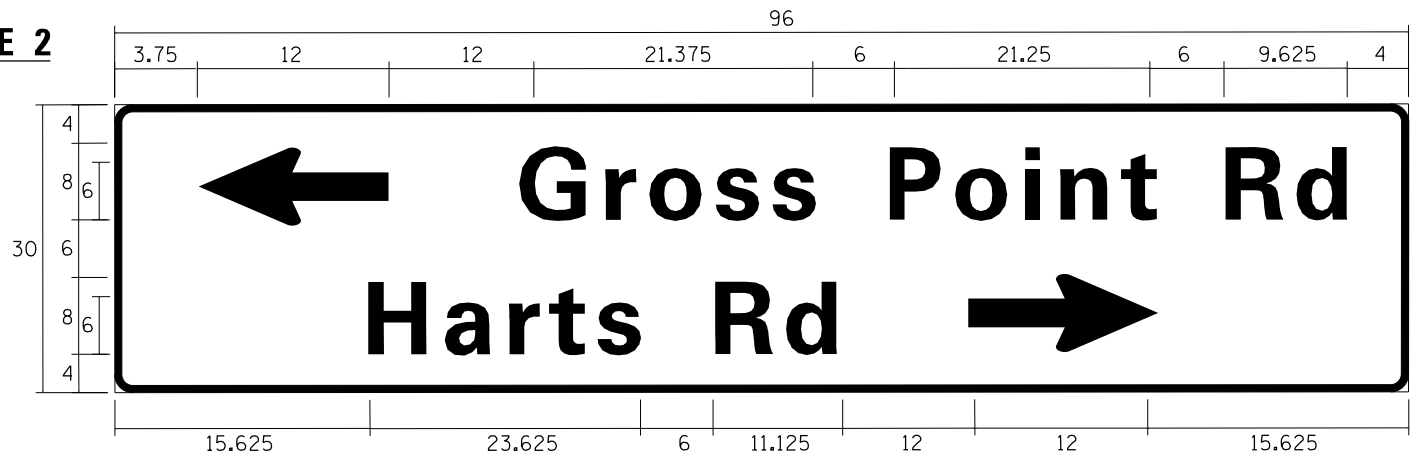
CONTRACT NO. 61H59



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	7.5	1	ZZ	2

**SIGN PANEL – TYPE 1 OR TYPE 2**

MA-2

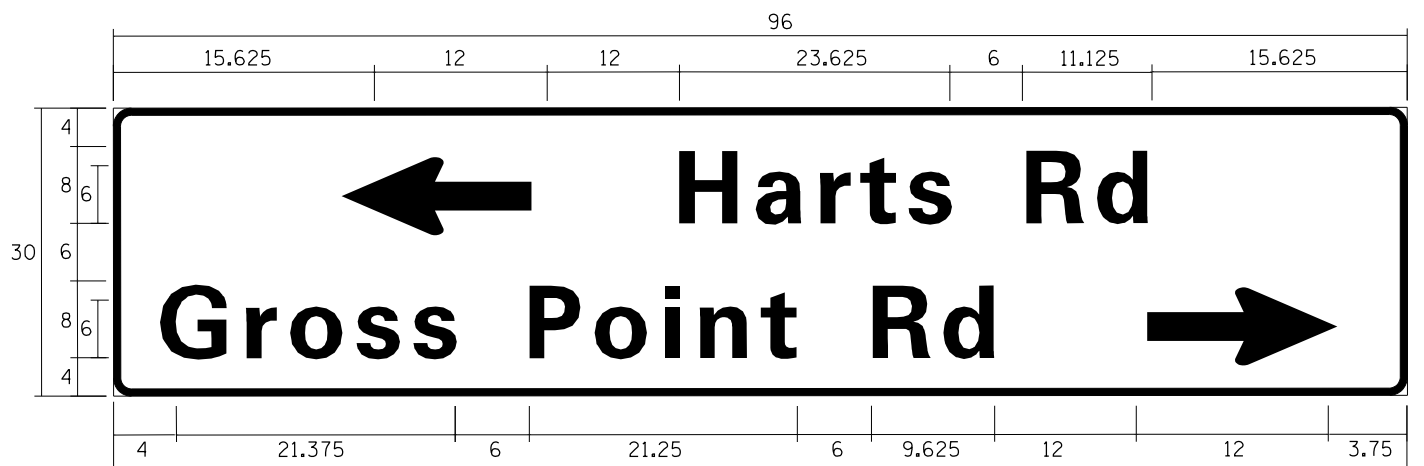


DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
C	20	2	ZZ	1

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	40
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	781
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	193
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	572
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
PAINT NEW TRAFFIC SIGNAL POST	EACH	6
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	3
PAINT NEW MAST ARM AND POLE, 40 FOOT AND OVER	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,607
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2,348
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,039
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,106
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2,073
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	47
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	951
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10

MA-3



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
C	20	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	451
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	677
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, STOP BAR	EACH	2
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	5

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS  
AND SCHEDULE OF QUANTITIES  
TOUHY AVENUE /HARTS ROAD /GROSS POINT ROAD

SCALE: 1"=20' SHEET 16 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	66
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

TS 1560  
ECON 156

CONTRACT NO. 61H59

TS SHT. NO 16

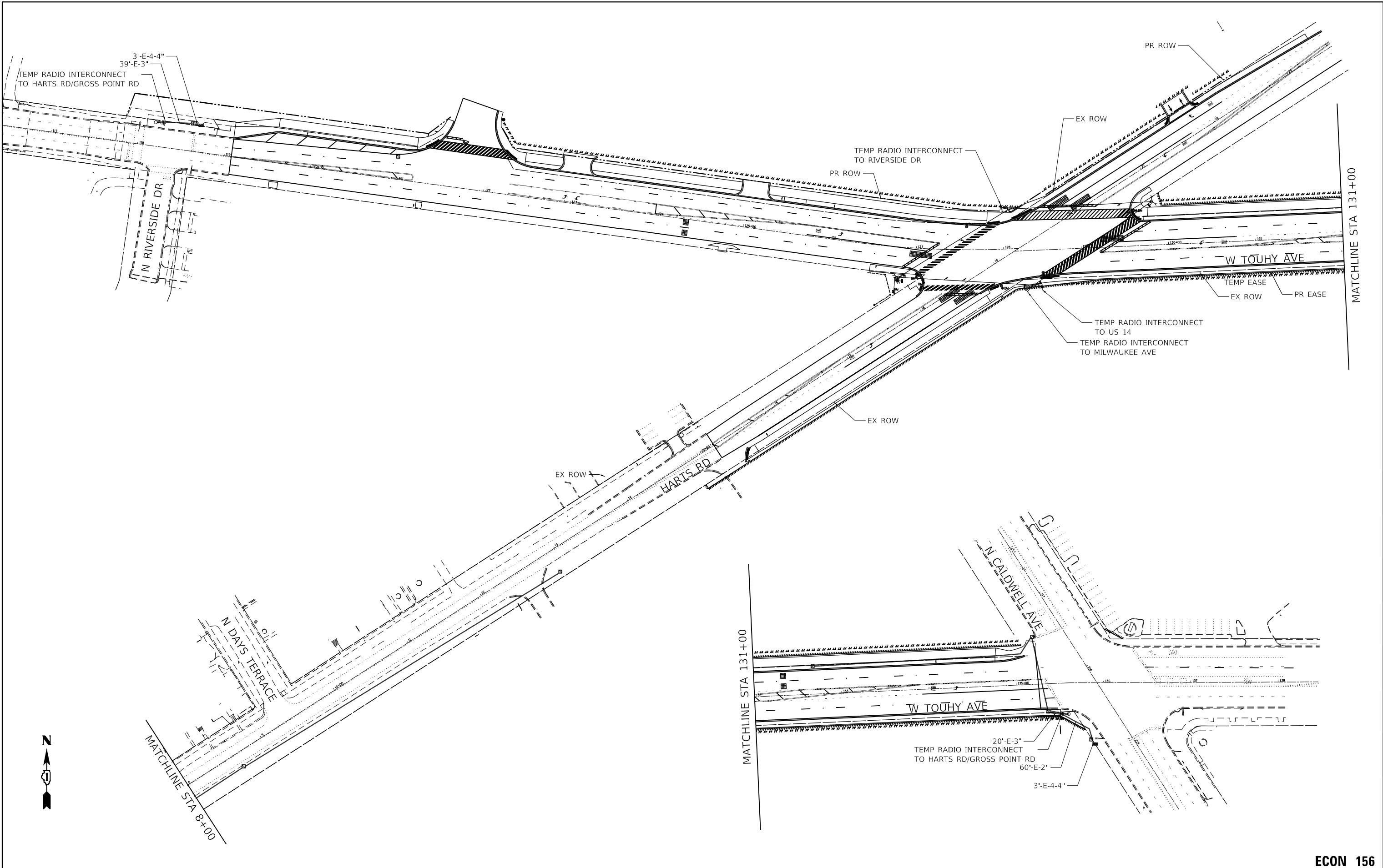
HRG PROJECT NO.: 191405.01  
HRG PROJ. CONTACT:  
FILE NAME: 191405.01-sht-16-sig-schedule.dgn  
PEN TABLE: 191405.tbl



USER NAME = mzuzzio	DESIGNED - TAY	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 48.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

TS SHT. NO 17

HRG PROJECT NO: 191405.01  
 HRG PROJ CONTACT:  
 FILE NAME: 191405.01-sht-17.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzu2210  
 PLOT SCALE = 100.0000' / 1" = 100'  
 PLOT DATE = 12/16/2022

DESIGNED - TAY	REVISED -
DRAWN - WJH	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

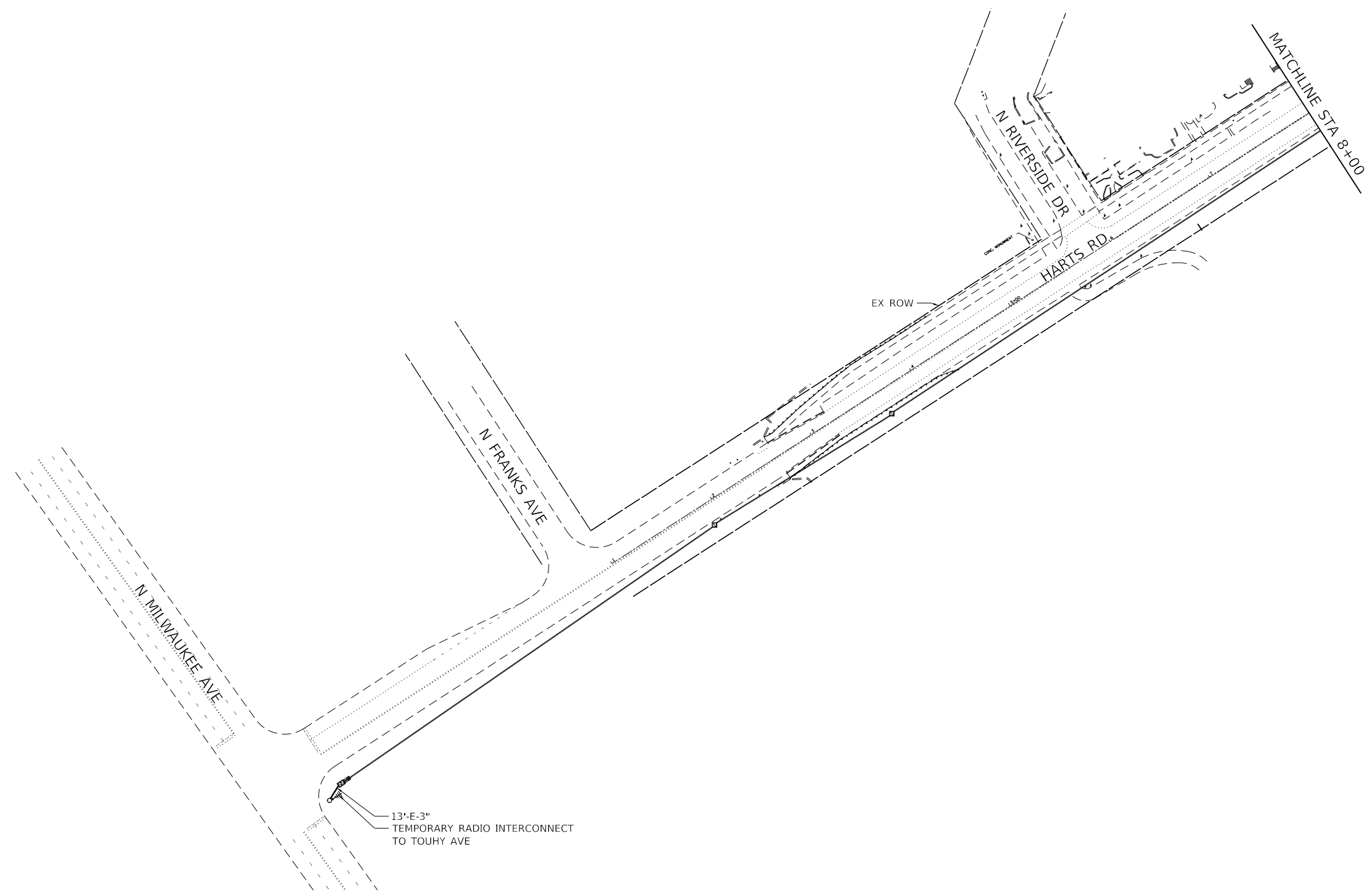
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN  
 TOUHY AVENUE - RIVERSIDE DRIVE TO US 14  
 HARTS ROAD - MILWAUKEE AVENUE TO TOUHY AVENUE**

SCALE: 1"=20' SHEET 17 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	67
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

**ECON 156**



TS SHT. NO 18

HRG PROJECT NO.: 19405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19405.01-sht-18.dgn  
 PEN TABLE: 19405.tbl



USER NAME = mzuz210	DESIGNED - TAY	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

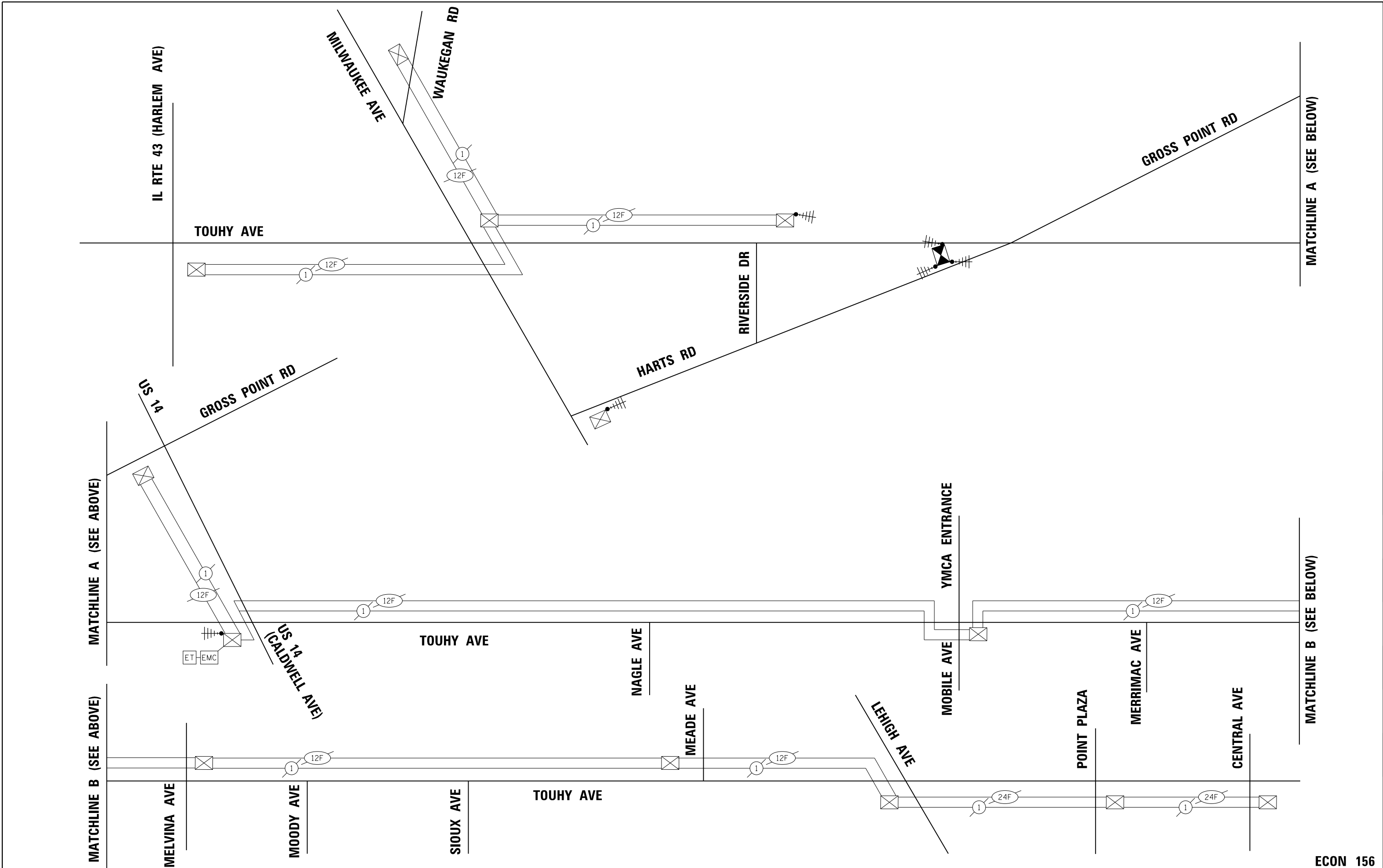
**TEMPORARY INTERCONNECT PLAN  
TOUHY AVENUE - RIVERSIDE DRIVE TO US 15  
HARTS ROAD - MILWAUKEE AVENUE TO TOUHY AVENUE**

SCALE: 1"=20'    SHEET 18 OF 22 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	68
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

**ECON 156**

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-19.dgn  
 PEN TABLE: 191405.tbl  
**TS SHT. NO 19**



USER NAME = mzu210	DESIGNED - TAY	REVISED -
PLOT SCALE = 100.0000' / 1"	DRAWN - WJH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

DESIGNED - TAY	REVISED -
DRAWN - WJH	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT SCHEMATIC  
 TOUHY AVENUE - RIVERSIDE DRIVE TO US 16  
 HARTS ROAD - MILWAUKEE AVENUE TO TOUHY AVENUE**

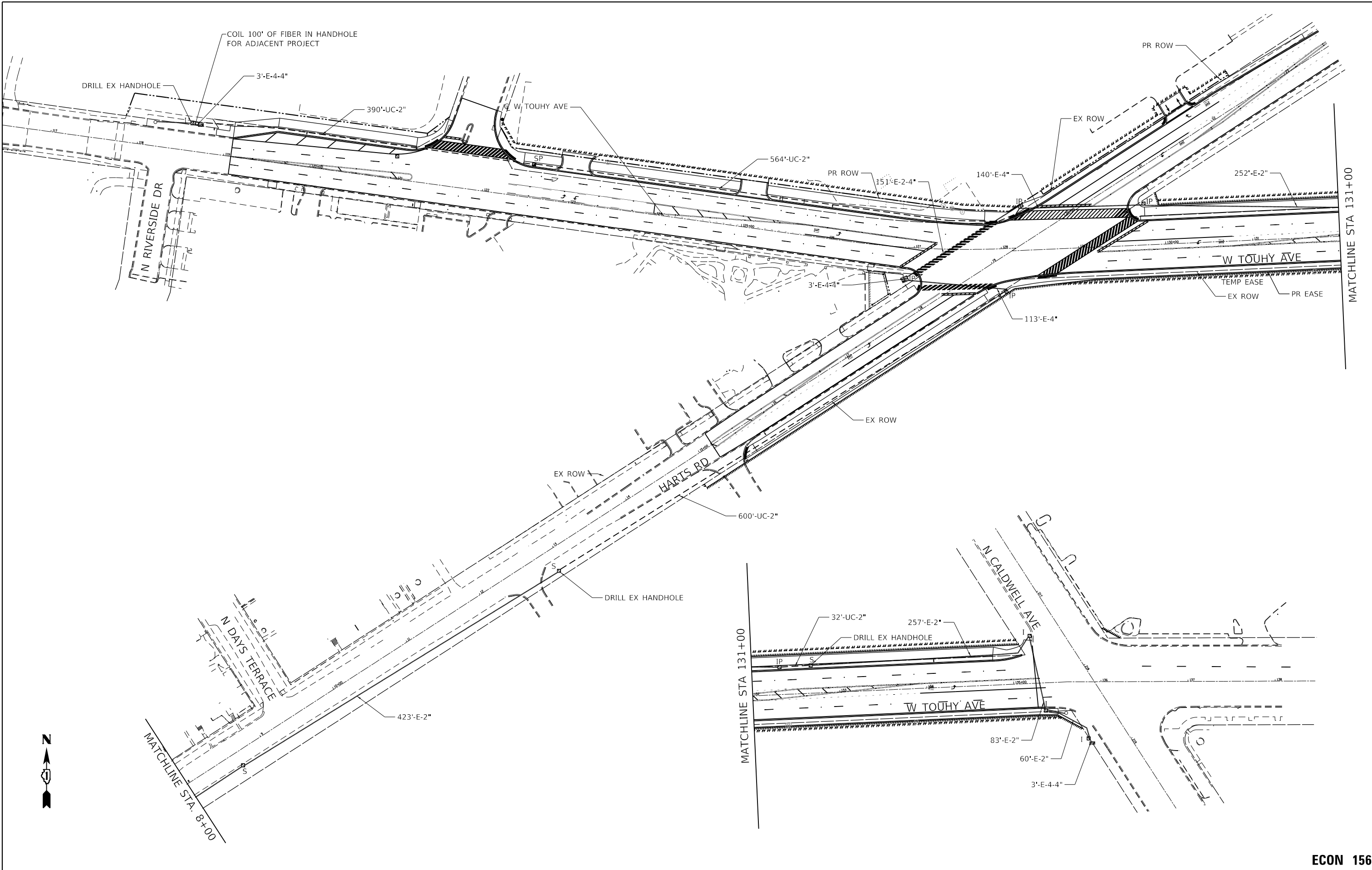
SCALE: 1"=20' SHEET 19 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	69
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

**ECON 156**

TS SHT. NO 20

HRG PROJECT NO: 19405.01  
 HRG PROJ CONTACT:  
 FILE NAME: 19405.01-sht-20-sign-01.dgn  
 PEN TABLE: 19405.tbl



HRGreen.com  
 Illinois Professional Design Firm  
 #184-001322  
 USER NAME = mzuz210  
 PLOT SCALE = 100.0000' / 1" =  
 PLOT DATE = 12/16/2022

DESIGNED - TAY	REVISED -
DRAWN - WJH	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

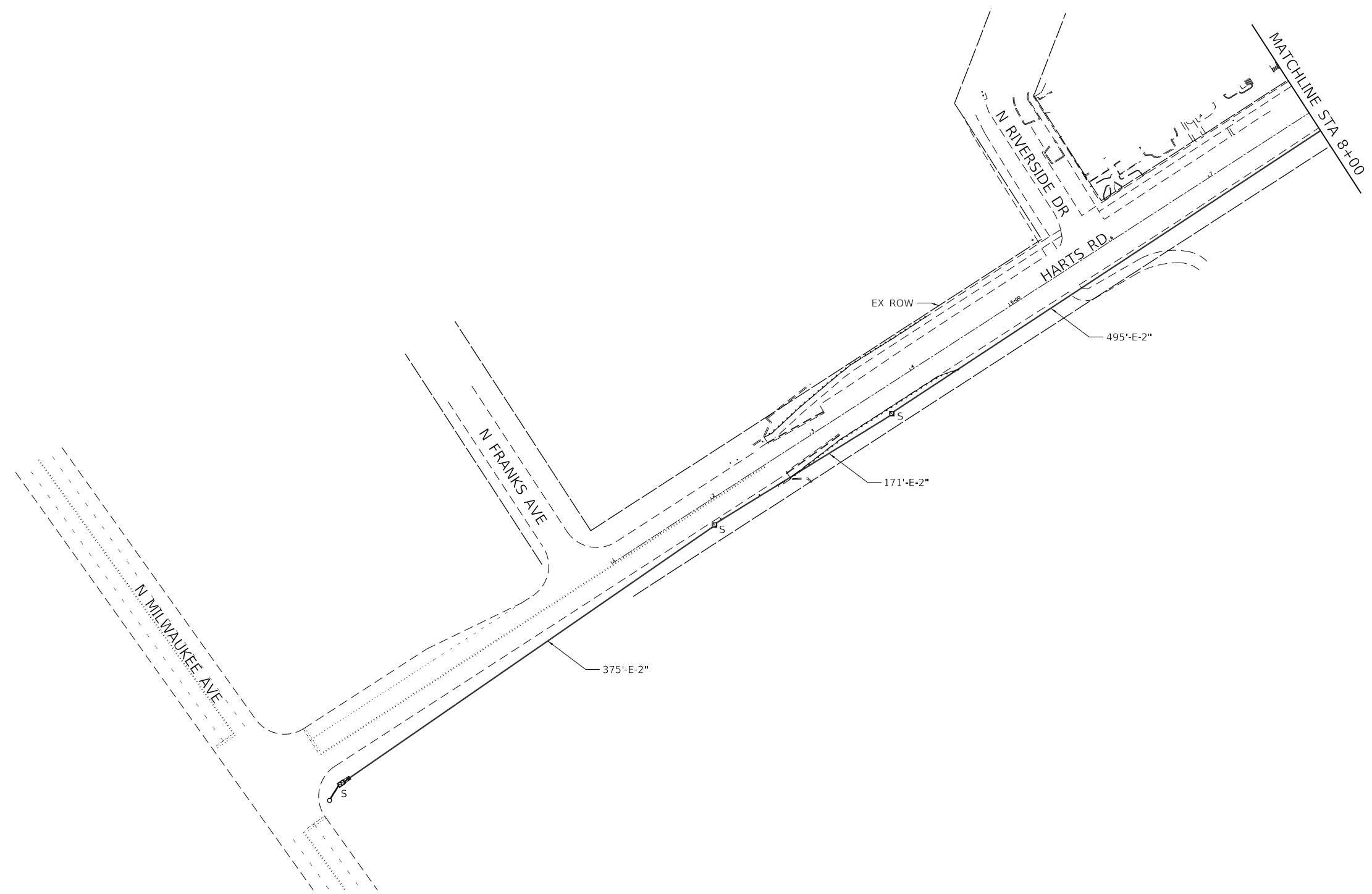
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT PLAN  
 TOUHY AVENUE – RIVERSIDE DRIVE TO US 17  
 HARTS ROAD – MILWAUKEE AVENUE TO TOUHY AVENUE

SCALE: 1"=20' SHEET 20 OF 22 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	70
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

ECON 156



TS SHT. NO 21

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-21.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzuz210	DESIGNED - TAY	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN  
TOUHY AVENUE - RIVERSIDE DRIVE TO US 18  
HARTS ROAD - MILWAUKEE AVENUE TO TOUHY AVENUE**

SCALE: 1"=20'    SHEET 21 OF 22 SHEETS    STA.    TO STA.

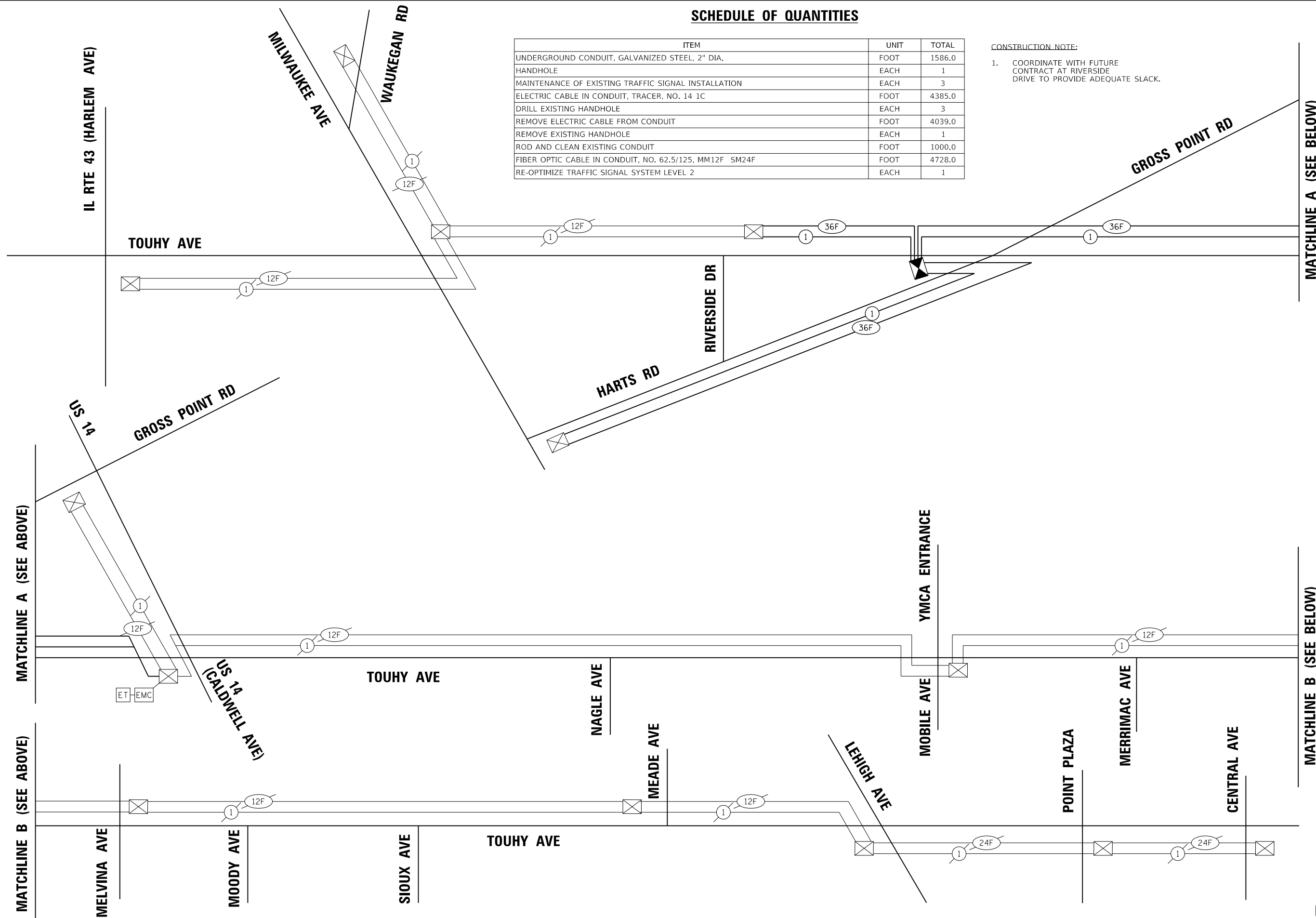
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	71
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	

**ECON 156**

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1586.0
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	4385.0
DRILL EXISTING HANDHOLE	EACH	3
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4039.0
REMOVE EXISTING HANDHOLE	EACH	1
ROD AND CLEAN EXISTING CONDUIT	FOOT	1000.0
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	4728.0
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1

- CONSTRUCTION NOTE:  
 1. COORDINATE WITH FUTURE CONTRACT AT RIVERSIDE DRIVE TO PROVIDE ADEQUATE SLACK.



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-22-signif-schem-0.dgn  
 PLOT DATE: 12/16/2022  
 PEN TABLE: 191405.tbl

TS SHT. NO 22



USER NAME = mzu2210	DESIGNED - TAY	REVISED -
PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

DRAWN - WJH	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES  
 TOUHY AVENUE - RIVERSIDE DRIVE TO US 19  
 HARTS ROAD - MILWAUKEE AVENUE TO TOUHY AVENUE

SCALE: 1"=20' SHEET 22 OF 22 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION NO. 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 72
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

ECON 156











## BILL OF MATERIALS

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	50
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	785
UNIT DUCT, 600V, 6-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	4734
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 3/0	FOOT	60
AERIAL CABLE, 3-1/C NO. 8 WITH MESSENGER WIRE	FOOT	270
LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 200 AMP	EACH	1
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	320
LIGHTING UNIT COMPLETE, SPECIAL	EACH	32

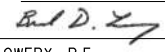
### GENERAL NOTES:

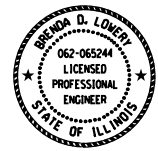
1. THIS PROJECT INCLUDES THE INSTALLATION OF A NEW LIGHTING SYSTEM AT THE RECONSTRUCTED INTERSECTION OF TOUHY AVE AT GROSS POINT ROAD/HARTS ROAD. PROPOSED LIGHTING ON TOUHY AVE WEST OF INTERSECTION OF TOUHY AVE AND CROSS POINT ROAD UP TO STATION 110+03.42 IS INCLUDED IN THE CURRENT PROJECT. THE PROPOSED LIGHTING AT THE INTERSECTION INCLUDING THE PROPOSED ADDITIONAL STREET LIGHTING SHALL BE OWNED AND MAINTAINED BY THE VILLAGE OF NILES. ADDRESS AND PHONE NUMBER ARE AS FOLLOWS:  
VILLAGE OF NILES MUNICIPAL BUILDING 1000 CIVIC CENTER DR, NILES, IL. 60714 AND 847-588-8000.
2. THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY COMPANY TO COORDINATE THE ELECTRIC SERVICE WORK. THE CONTACT PERSON IS JAVIER LA LUZ AT 847-929-2302.
3. THE QUANTITIES OF RACEWAY WERE INDICATED ON THESE PLANS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLETE COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
4. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.
5. THE CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND/OVERHEAD UTILITIES PRIOR TO INSTALLATION OF LIGHT POLES AND CONDUITS. IF THERE IS A CONFLICT WITH THE LIGHT POLES/CONDUITS AS SHOWN ON PLANS, THE CONTRACTOR SHALL SUGGEST ALTERNATIVE LOCATIONS AND COORDINATE WITH THE ENGINEER PRIOR TO PERFORMING ANY CONSTRUCTION WORK.
6. TRENCHES FOR LIGHTING RACEWAYS SHALL HAVE A MINIMUM DEPTH OF 30".
7. LIGHTING SYSTEM INSTALLATION SHALL CONFORM TO THE LATEST IDOT STANDARDS, NEC AND LOCAL CODES.
8. ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE UL LISTED AND LABELED.
9. THE CONTRACTOR SHALL TAKE CARE WHEN INSTALLING UNIT DUCT TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES AND TREE'S ROOTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE AS DETERMINED BY THE ENGINEER.
10. THE CONTRACTOR SHALL TAKE CARE WHEN INSTALLING LIGHT POLE FOUNDATIONS TO AVOID CONFLICTS WITH UNDERGROUND UTILITIES. WHEN CONFLICTS ARE ENCOUNTERED, THE CONTRACTOR SHALL SUGGEST TO RELOCATE THE FOUNDATIONS. THE NEW LOCATION SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
11. GROUND RODS SHALL BE INSTALLED AT EACH LIGHTING UNIT.
12. ON SOME EXISTING ComEd WOOD POLES MAST ARM WITH STREET LIGHTING LUMINAIRES ARE MOUNTED. THE CONTRACTOR IN CONSULTATION WITH ELECTRICAL DEPARTMENT OF VILLAGE OF NILES SHALL ARRANGE THEIR DISCONNECTION, REMOVAL AND DISPOSAL.

### LEGEND

-  PROPOSED LIGHTING UNIT, 34'-6" FT. MH, 6 FT. MAST ARM, (240V-LINE TO LINE), LED LUMINAIRE WITH BREAKAWAY DEVICE AND 120V RECEPTACLE
-  PROPOSED LIGHTING CONTROLLER, 200A 120/240V, SINGLE PHASE, BASE MOUNTED
-  ComEd ELECTRICAL SERVICE POLE 120/240V, 1 PHASE
-  UNIT DUCT, 600V, 6-1C NO. 8, 1/C NO.8 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE
-  RIGID GALVANIZED STEEL CONDUIT, WITH UNIT DUCT
-  ELECTRIC SERVICE CABLE IN CONDUIT
-  AERIAL CABLE, 3-1/C NO. 8 WITH MESSENGER WIRE
-  GROUND ROD

#### PROFESSIONAL ENGINEER'S SIGN & SEAL

FOR SHEETS: \_\_\_\_\_  
  
 \_\_\_\_\_  
 BRENDA D LOWERY, P.E.  
 EXPIRES 11-30-2023



**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

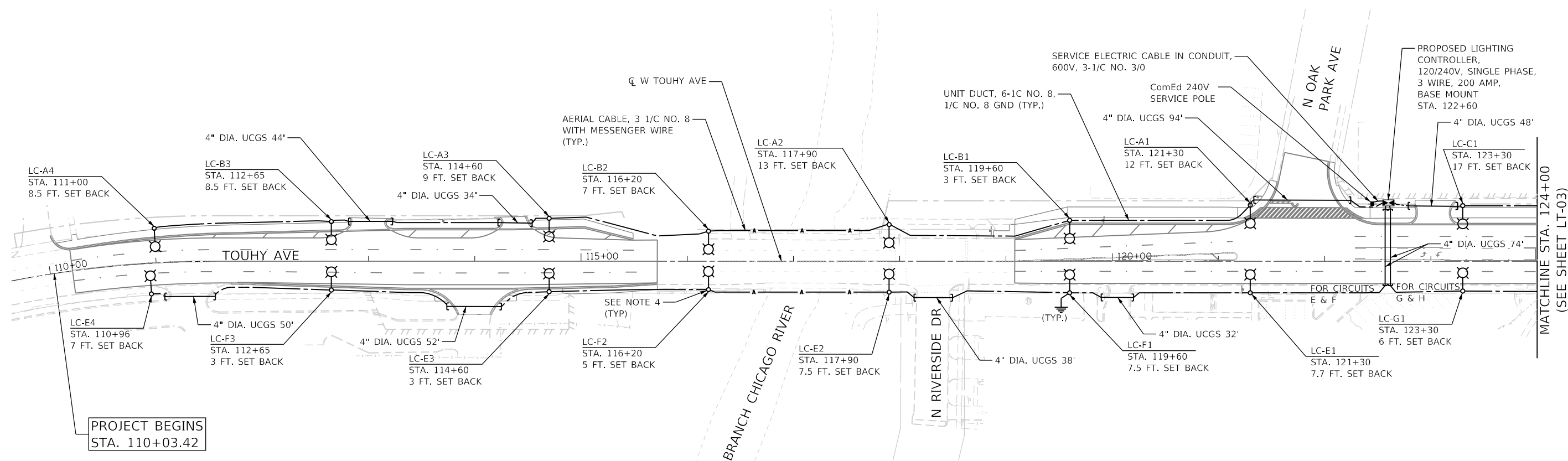
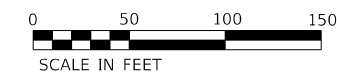
**GENERAL NOTES, BILL OF MATERIALS AND LEGEND  
TOUHY AVE AT GROSS POINT ROAD / HARTS ROAD**

SCALE: N.T.S.    SHEET 1 OF 1 SHEETS    STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	73
CONTRACT NO. 61H59				
ILLINOIS		FED. AID PROJECT		

**LT-01**

USER NAME = mdeitche	DESIGNED - MB	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - BL	REVISED -
PLOT DATE = 4/28/2022	DATE - 12-29-2021	REVISED -



**NOTES:**

1. FOR GENERAL NOTES AND LEGEND SEE SHEET LT-01.
2. THE SET BACK IS FROM FACE OF CURB TO CENTER OF LIGHT POLE UNLESS NOTED OTHERWISE.
3. UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
4. 20A-120V TWISTLOCK WEATHER RESISTANT TYPE (WR) RECEPTACLE IS INSTALLED IN EACH LIGHT POLE. TO GET THE FEED OF 120V FROM LIGHTING CONTROLLER "LC", ONE POLE OF SPARE BRANCH CIRCUIT BREAKER AND NEUTRAL SHALL BE USED AS SHOWN ON SHEETS LT-05 AND LT-07.
5. THE BRIDGE OVER BRANCH CHICAGO RIVER WILL BE CONSTRUCTED UNDER SEPARATE CONTRACT. FOR CONTINUATION OF POWER FEED TO PROPOSED LUMINAIRES WEST OF PROPOSED BRIDGE, AERIAL CABLE AS SHOWN IN PROPOSED LIGHTING PLAN, SHALL BE USED.

MODEL: D:\p1\11-Touhy\_Ave\11-Touhy\_Ave\11-Touhy\_Ave\11-Touhy\_Ave.dwg  
 FILE NAME: 11-Touhy\_Ave.dwg  
 GREEN: 11-Touhy\_Ave.dwg  
 DATE: 2/15/2022

**AMES Engineering, Inc.**  
 CONSULTING ENGINEERS  
 6330 Belmont Road, Suite 4B  
 Downers Grove, IL 60515

USER NAME = mdeitch	DESIGNED - MB	REVISED -
PLOT SCALE = 100,0000 ' / in.	DRAWN - MD	REVISED -
PLOT DATE = 2/15/2022	CHECKED - BL	REVISED -
	DATE - 12-29-2021	REVISED -

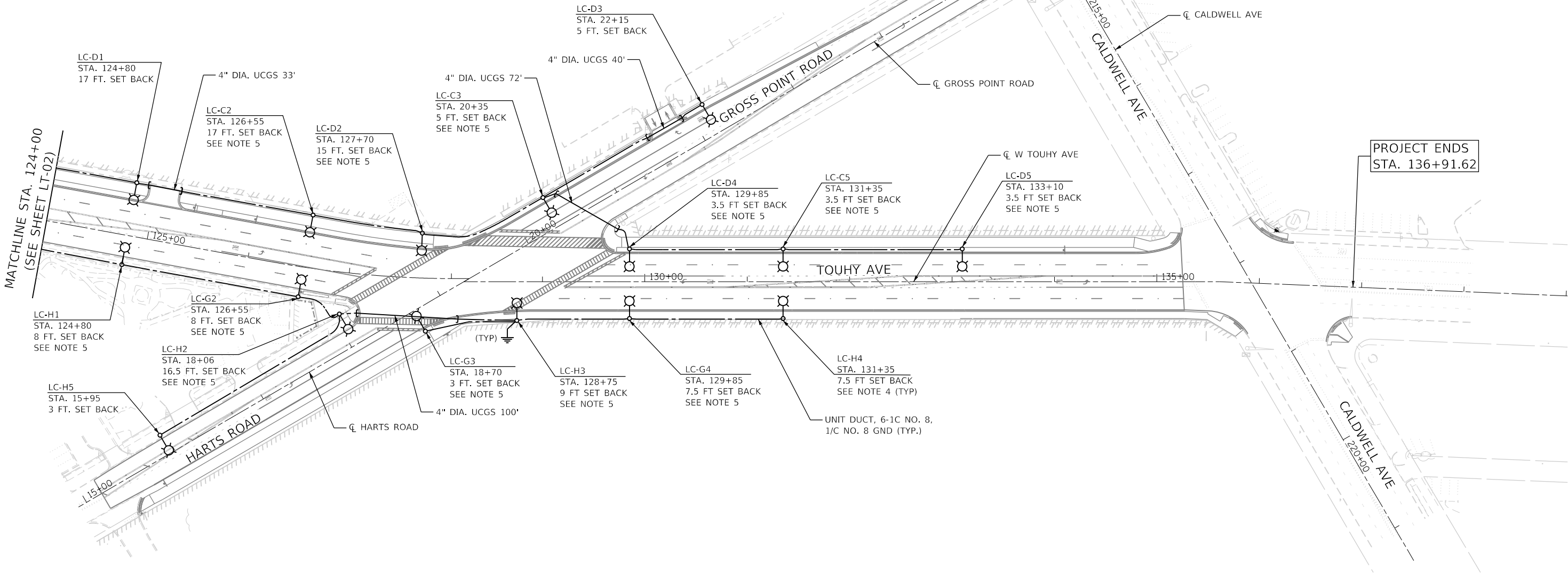
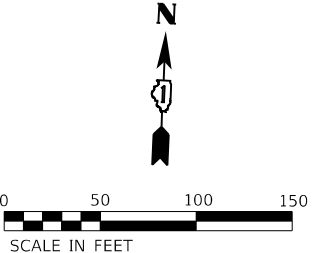
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN**  
**TOUHY AVENUE**

SCALE: 1"=50'    SHEET 1 OF 2 SHEETS    STA. 110+03.42 TO STA. 124+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	74
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				

**LT-02**



**NOTES:**

1. FOR GENERAL NOTES AND LEGEND SEE SHEET LT-01.
2. THE SET BACK IS FROM FACE OF CURB TO CENTER OF LIGHT POLE UNLESS NOTED OTHERWISE.
3. UCGS STANDS FOR UNDERGROUND CONDUIT GALVANIZED STEEL.
4. 20A-120V TWISTLOCK WEATHER RESISTANT TYPE (WR) RECEPTACLE IS INSTALLED IN EACH LIGHT POLE. TO GET THE FEED OF 120V FROM LIGHTING CONTROLLER "LC", ONE POLE OF SPARE BRANCH CIRCUIT BREAKER AND NEUTRAL SHALL BE USED AS SHOWN ON SHEETS LT-05 AND LT-07.
5. NO BANNER ARM SHALL BE INSTALLED AT THIS LOCATION.

MODEL: 1409BELNAMES  
 FILE NAME: D:\1408\13-00118-00-03.dwg

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 6330 Belmont Road, Suite 4B  
 Downers Grove, IL 60515

USER NAME = mdeitche	DESIGNED - MB	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - MD	REVISED -
PLOT DATE = 4/28/2022	CHECKED - BL	REVISED -
	DATE - 12-29-2021	REVISED -

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

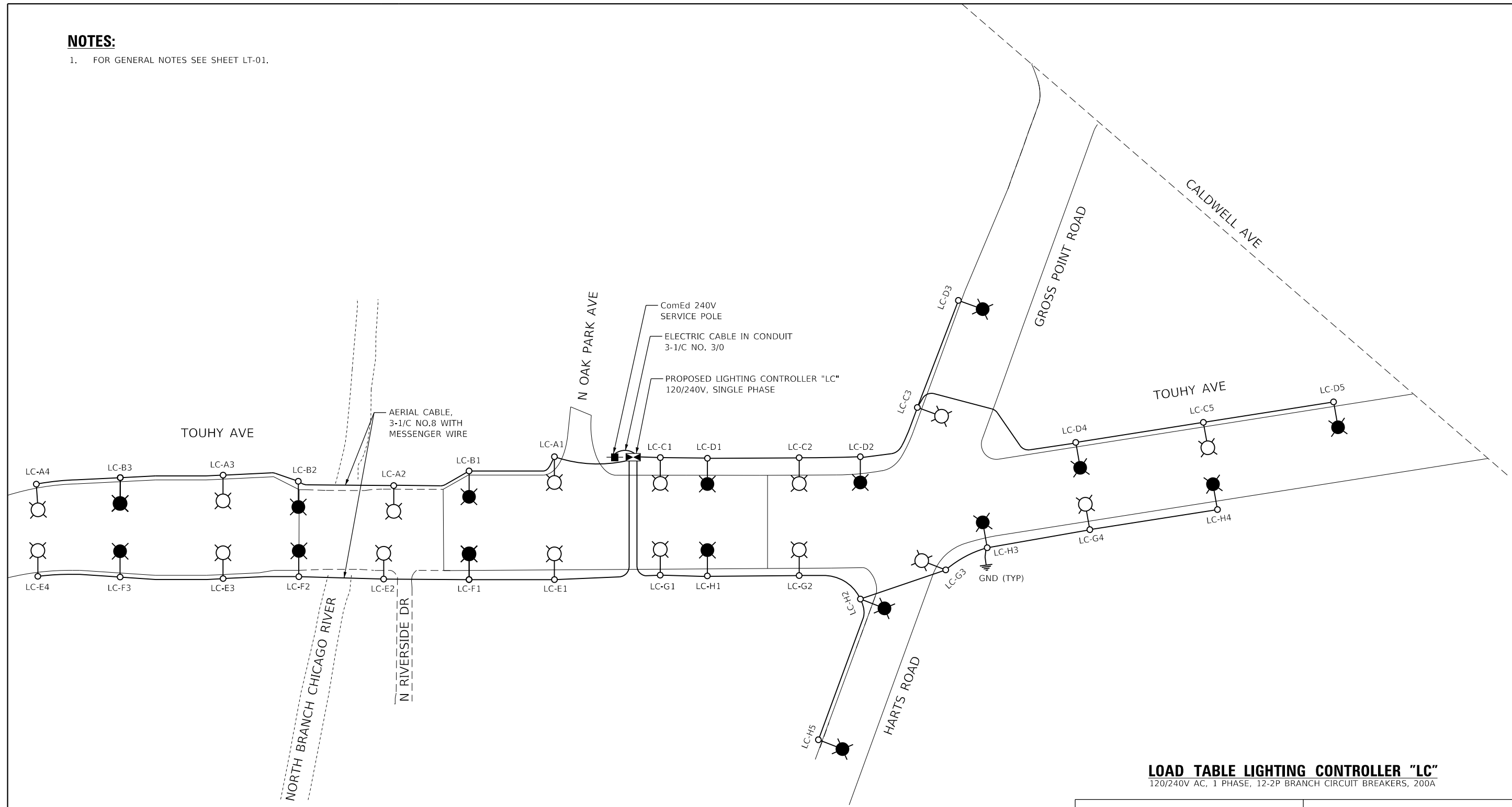
**PROPOSED LIGHTING PLAN**  
**TOUHY AVENUE / HARTS ROAD / GROSS POINT ROAD**  
 SCALE: 1"=50'    SHEET 2 OF 2 SHEETS    STA. 124+00 TO STA. 136+91.62

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	75
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

**LT-03**

**NOTES:**

1. FOR GENERAL NOTES SEE SHEET LT-01.



**LOAD TABLE LIGHTING CONTROLLER "LC"**  
120/240V AC, 1 PHASE, 12-2P BRANCH CIRCUIT BREAKERS, 200A

CIRCUIT	TOTAL LUM.	TOTAL CURRENT IN AMPS	TOTAL WATTAGE	CIRCUIT	TOTAL LUM.	TOTAL CURRENT IN AMPS	TOTAL WATTAGE
A	4	3.20	692	B	3	2.40	519
C	4	3.20	692	D	5	4.00	865
E	4	3.20	692	F	3	2.40	519
G	4	3.20	692	H	5	4.00	865
<b>TOTAL</b>	<b>16</b>	<b>12.80</b>	<b>2768</b>	<b>TOTAL</b>	<b>16</b>	<b>12.80</b>	<b>2768</b>

TOTAL LOAD IN WATTS 5536.00  
TOTAL LOAD IN AMPS 25.60

**LEGEND**

- LUMINAIRE, LED, 240V, 0.80A, 173W, 1 PHASE, ON RED AND BLACK WIRE.
- LUMINAIRE, LED, 240V, 0.80A, 173W, 1 PHASE, ON ORANGE AND BROWN WIRE.
- UNIT DUCT, 6-1/C NO. 8, 1/C NO. 8 GROUND (XLP-TYPE USE) 1 1/2" DIA. POLYETHYLENE (UNLESS OTHERWISE INDICATED)

MODEL: 1400BELNAMES  
FILE: 1400BELNAMES.DWG  
DATE: 03/14/2022 09:28:11 AM

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**SINGLE LINE DIAGRAM**  
**TOUHY AVE AT GROSS POINT ROAD/HARTS ROAD**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	76
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				

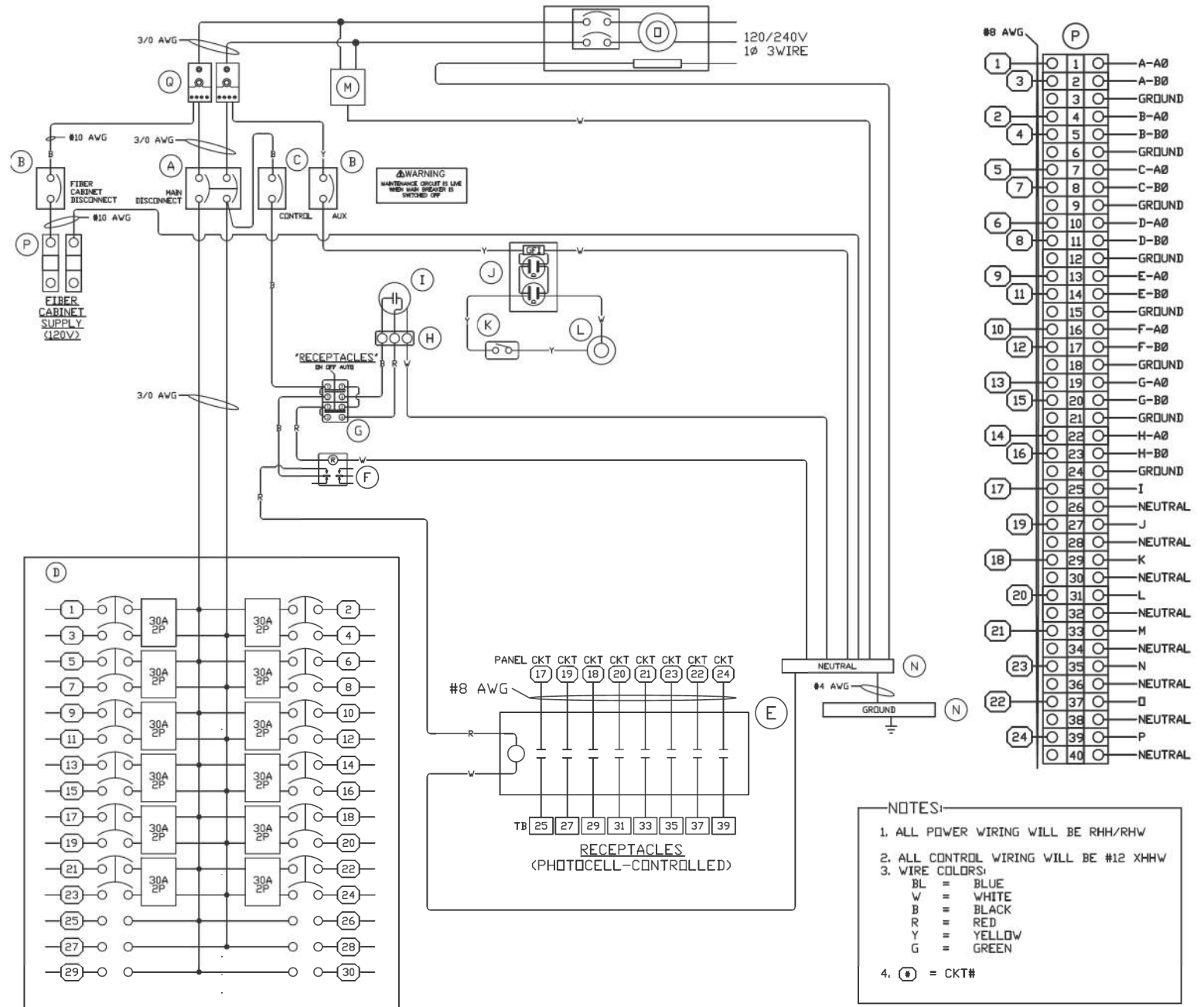
**LT-04**

PANEL EQUIPMENT

BILL OF MATERIAL

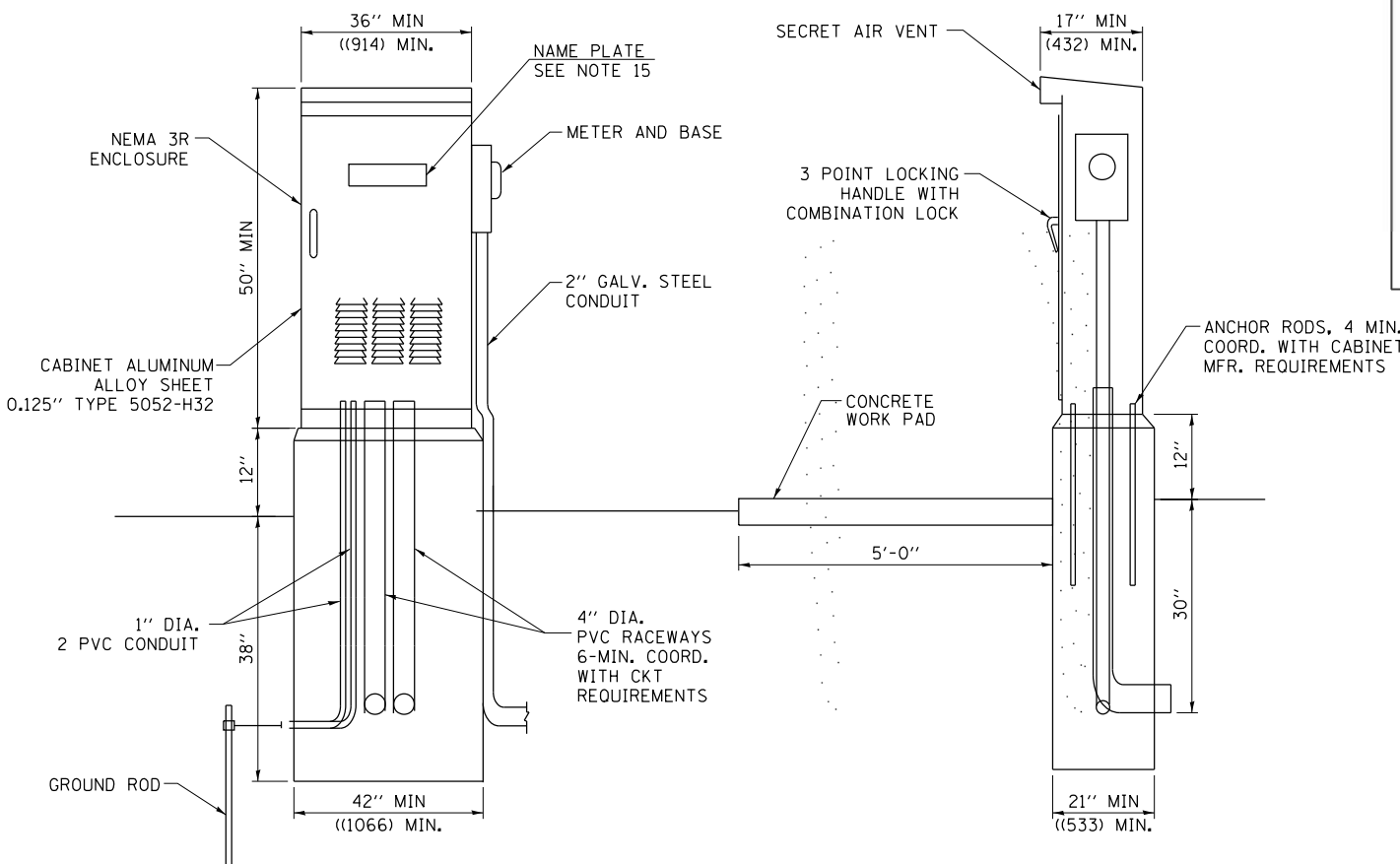
ITEM	QTY.	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 200 AMP. FRAME, 200 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 240 VOLT
B	2	AUX/FIBER DISCONNECT CIRCUIT BREAKER, 1 POLE, 240 V, 100 AMP. FRAME, 20 AMP.
C	1	CONTROL CIRCUIT BREAKER, 1 POLE, 240 V, 100AMP. FRAME, 15 AMP.
D	1	225 AMP. BREAKER PANEL WITH (12) 2P/30 AMP. BRANCH BREAKERS
E	1	8P 30A 120V CONTACTOR
F	1	120V COIL CONTROL RELAY
G	1	ON-OFF-AUTO DISCONNECT SWITCH
H	1	3P TERMINAL BLOCK
I	1	FLUSH MOUNT PHOTOCELL CONTROL, 120V
J	1	20 AMP., 120V., DUPLEX RECEPTACLE, GFCI.
K	1	SPST 20A DOOR SWITCH
L	1	LIGHT FIXTURE
M	1	SURGE PROTECTION DEVICE
N	2	COPPER GROUND BUS 1/4" X 1" X 12" LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS
O	1	ELECTRIC UTILITY METER BOX
P	42	TERMINAL BLOCKS
Q	1	DISTRIBUTION BLOCK

PANELBOARD DESCRIPTION	LP-2	MAIN	ALL	LOCATION
SERVICE VOLTAGE	200/240V 1PH 3W	BUS RATING	200 AMPERE	VOLTAJE DE SERVICIO, IL. DELVOLTAGE AWG/ VOLTAGE DE SERVICIO
INTERRUPT RATING	20K	100K	100K	
CIRCUIT (A)	1	30/2	30/2	CIRCUIT (A)
CIRCUIT (B)	3	30/2	30/2	CIRCUIT (B)
CIRCUIT (C)	5	30/2	30/2	CIRCUIT (C)
CIRCUIT (D)	7	30/2	30/2	CIRCUIT (D)
CIRCUIT (E)	9	30/2	30/2	CIRCUIT (E)
CIRCUIT (F)	11	30/2	30/2	CIRCUIT (F)
CIRCUIT (G)	13	30/2	30/2	CIRCUIT (G)
CIRCUIT (H)	15	30/2	30/2	CIRCUIT (H)
CIRCUIT (I)	17	30/2	30/2	CIRCUIT (I)
CIRCUIT (J)	19	30/2	30/2	CIRCUIT (J)
CIRCUIT (K)	21	30/2	30/2	CIRCUIT (K)
CIRCUIT (L)	23	30/2	30/2	CIRCUIT (L)
PREV	25			25 PREV
PREV	27			27 PREV
PREV	29			29 PREV



- NOTES:
1. ALL POWER WIRING WILL BE RHH/RHW
  2. ALL CONTROL WIRING WILL BE #12 XHHW
  3. WIRE COLORS:  
BL = BLUE  
W = WHITE  
B = BLACK  
R = RED  
Y = YELLOW  
G = GREEN
  4. (C) = CKT#

- NOTES:
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.
  2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
  3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8mm) TOP SOIL. LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) x 4" (101 mm) MIN. SIZE THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
  4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
  5. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 6.35 mm (1/4) DIA. STAINLESS STEEL HINGE PIN.
  7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
  8. CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
  9. METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
  10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
  11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
  12. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.  
R = RED BL = BLUE W = WHITE  
B = BLACK Y = YELLOW G = GREEN
  13. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
  14. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
  15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
  16. 304.8 mm (12") X 406.4 mm (16") STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.



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DEPARTMENT OF TRANSPORTATION

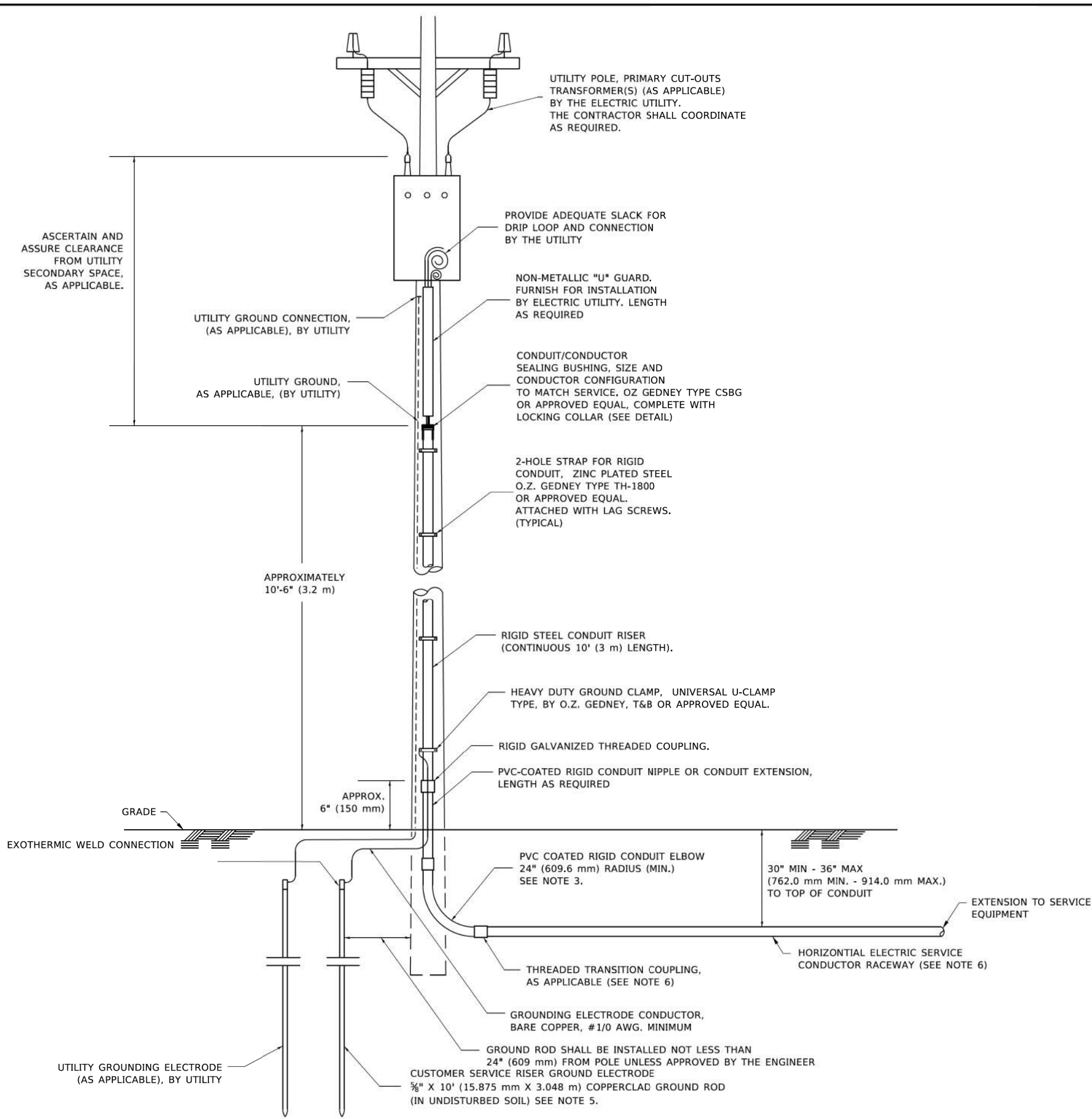
MISC. ELECTRICAL DETAILS SHEET A

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	77

CONTRACT NO. 61H59

LT-05

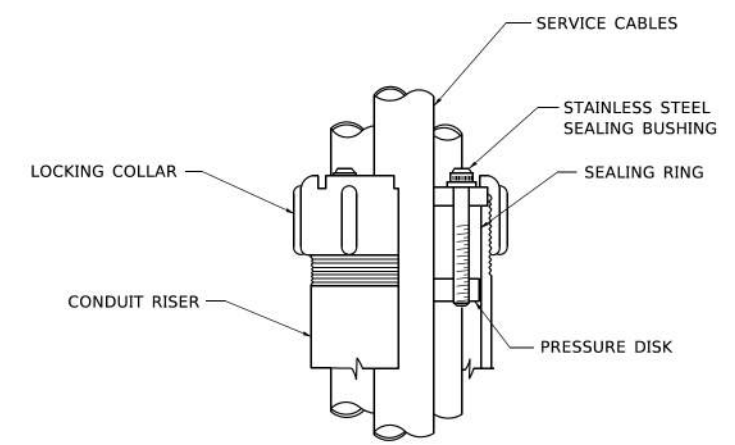


**APPLICATION**

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

**NOTES**

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



**SEALING BUSHING DETAIL**

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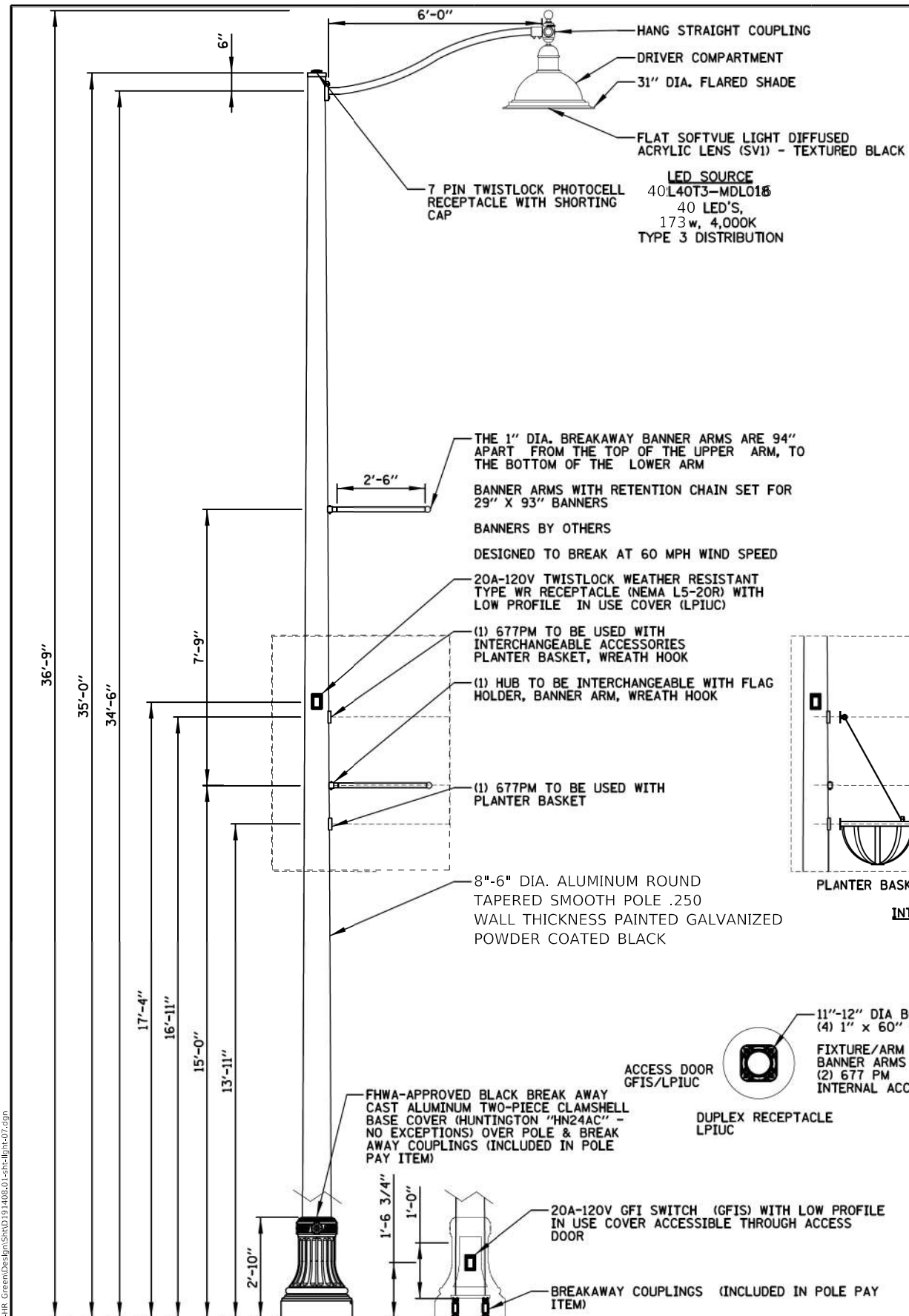
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ELECTRIC SERVICE INSTALLATION  
AERIAL, REMOTE DISCONNECT**

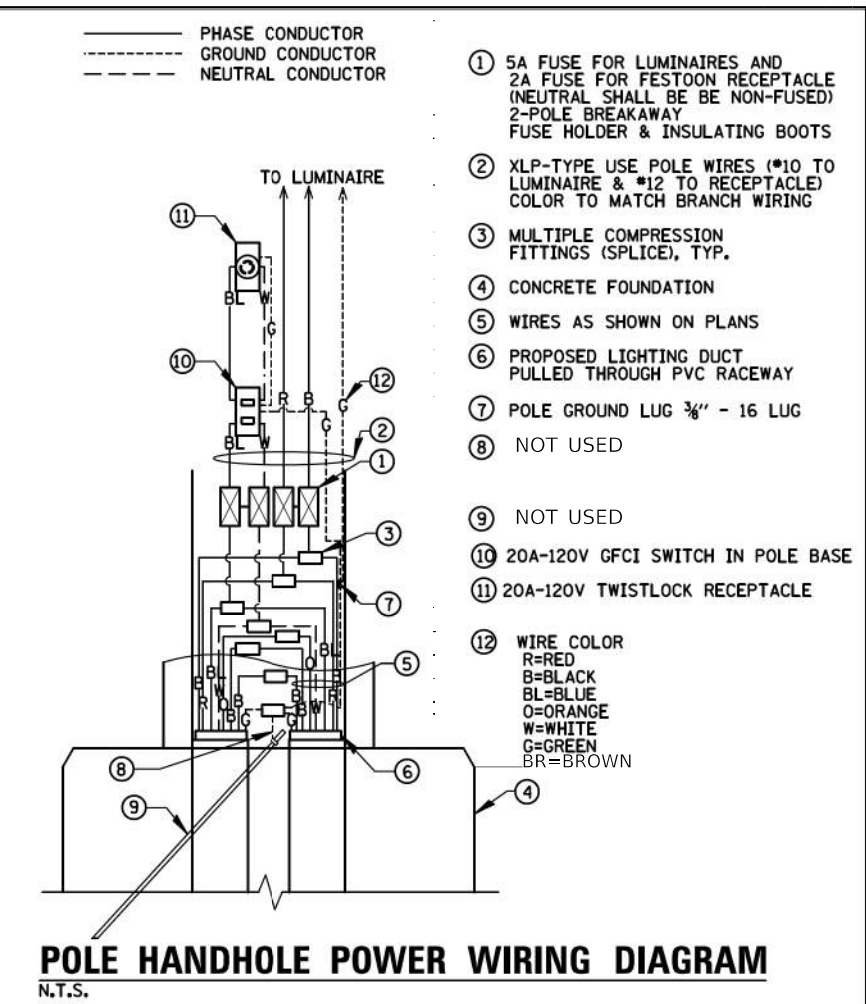
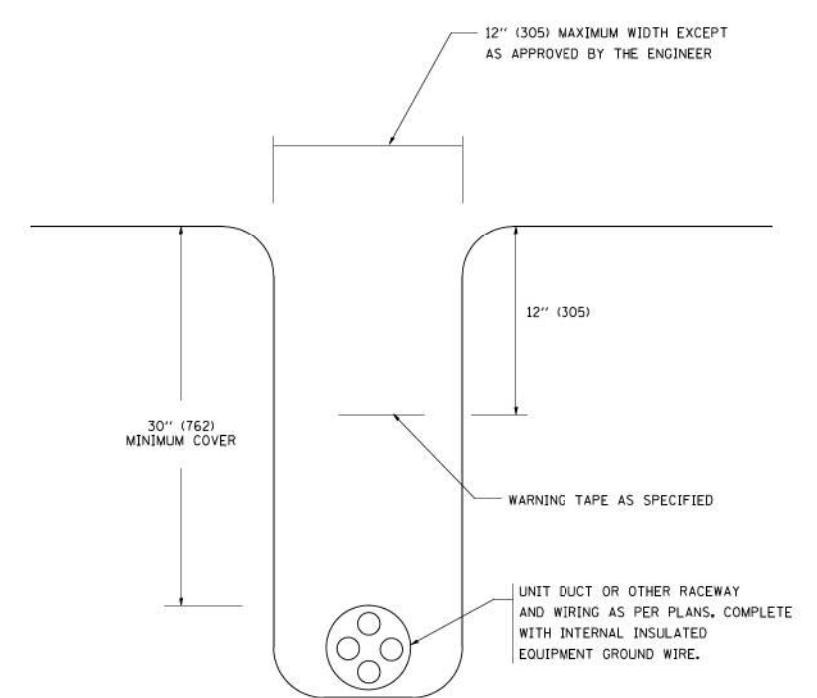
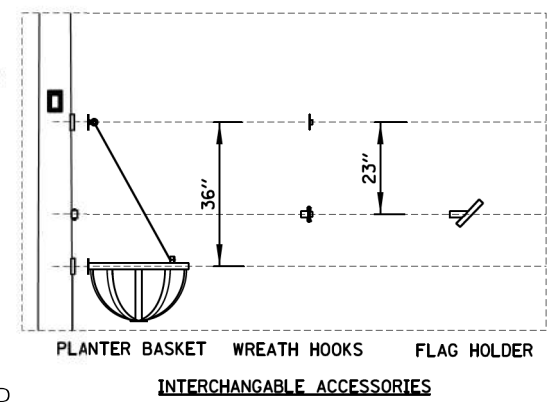
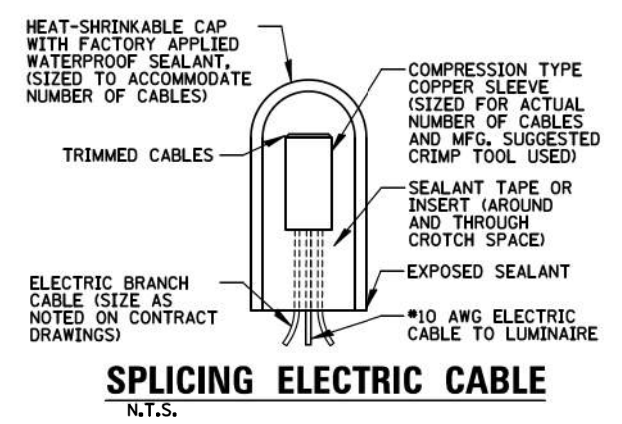
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	78
			CONTRACT NO. 61H59	
		ILLINOIS FED. AID PROJECT		

**LT-06**



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



- NOTES:**
- LIGHT POLE ASSEMBLY SHALL BE STERNBERG MODEL NO. 1A-1531LED-F-40L40T3-MDL016-FG -HSHB/CA6/HUSB/-35'ARTS-PCC-R7-SC-ABC(11")-BDBA6-TLDPL20 LPIUC-GFB LPIUC-(2) 677PM/BKT (NO EXCEPTIONS).
  - PAID FOR UNDER "LIGHTING UNIT COMPLETE, SPECIAL", WHICH SHALL INCLUDE EVERYTHING SHOWN (SEE SPECIAL PROVISION).

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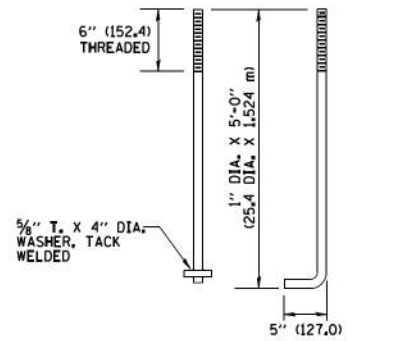
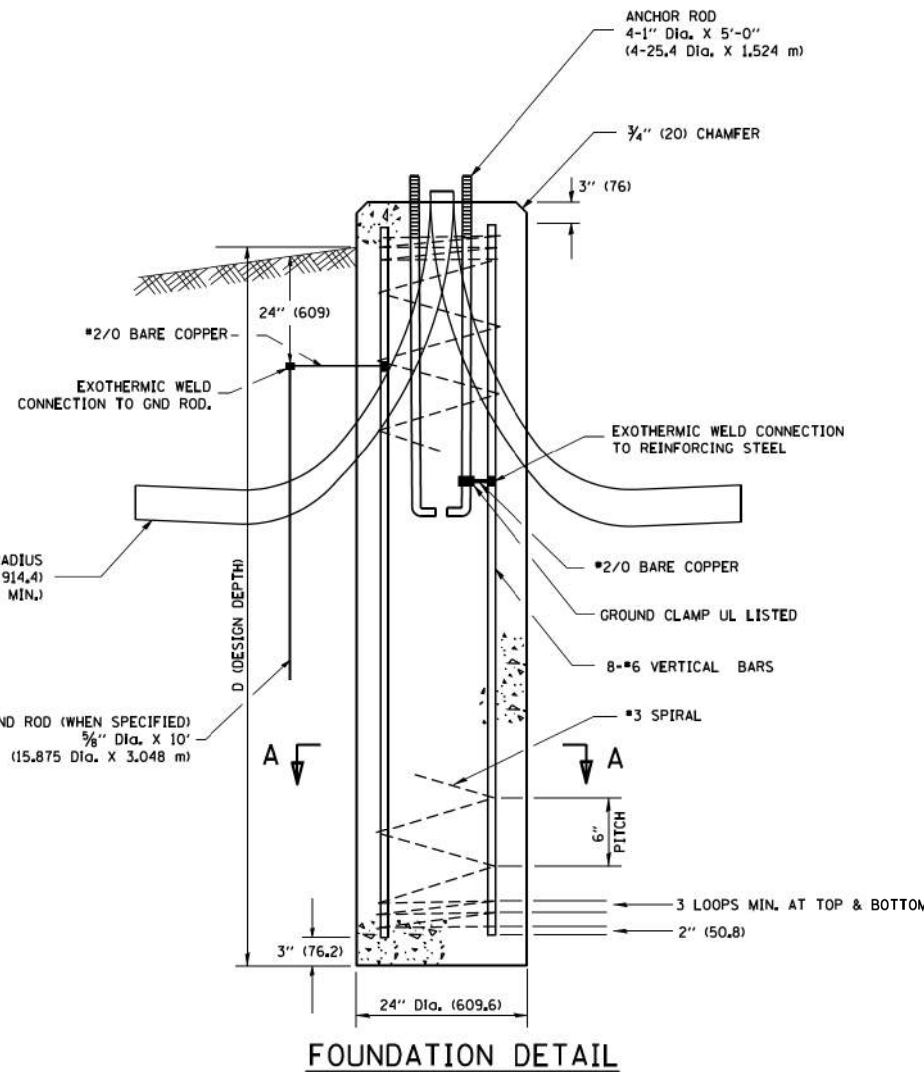
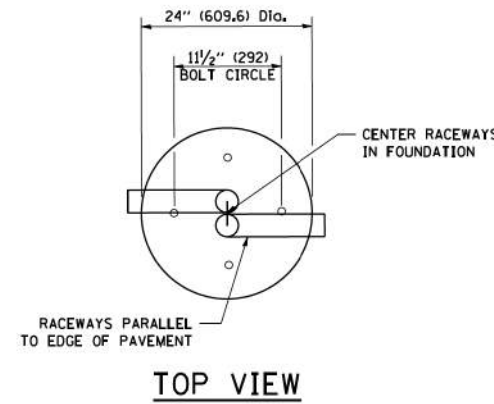
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>LIGHTING DETAILS</b>				
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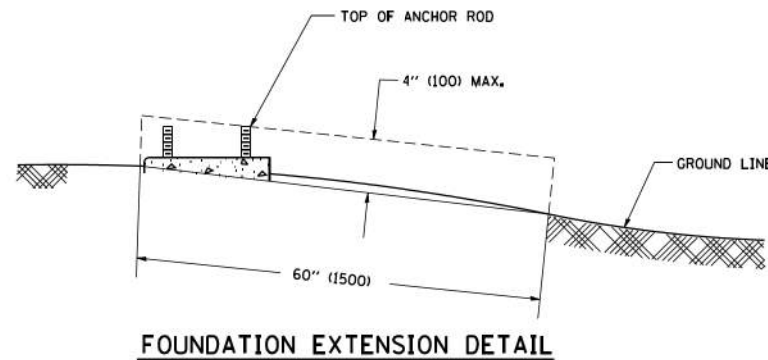
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341	13-00118-00-WR	COOK	120	79
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				

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

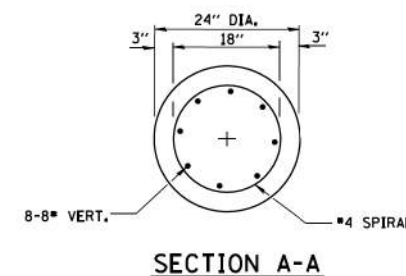
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SO. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY Qu = 0.75 TON/SO.FT	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY Qu = 1.50 TON/SO. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND φ = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND φ = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND φ = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



**ANCHOR BOLT DETAIL**



**FOUNDATION EXTENSION DETAIL**



**SECTION A-A**

**NOTES**

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

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 DATE: 12/29/2021

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	DATE - 12-29-2021	REVISED -

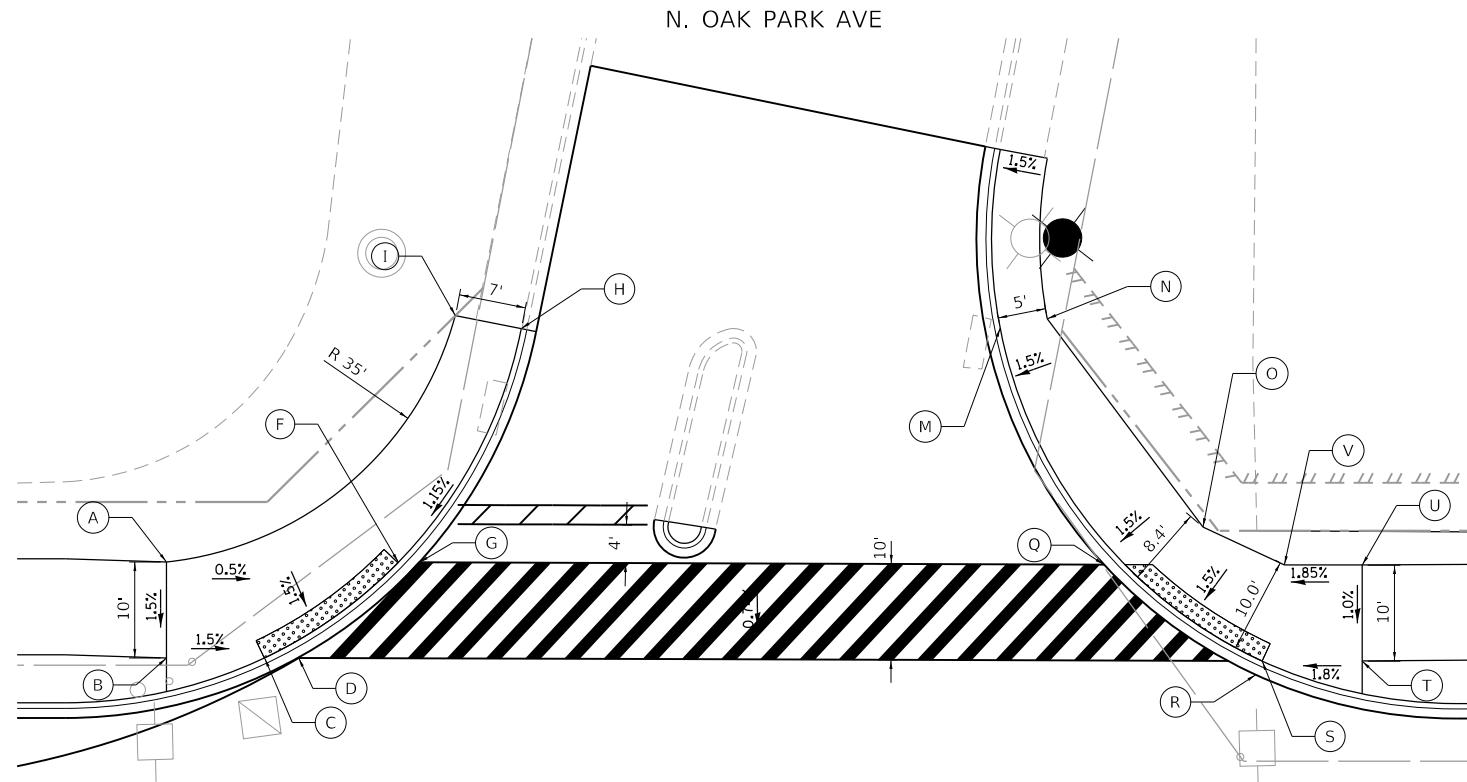
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**LIGHT POLE FOUNDATION**  
**30' (9.144m) TO 35' (10.668m) M.H. 1 1/2" (292mm) BOLT CIRCLE**  
 SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	80
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				

**LT-08**

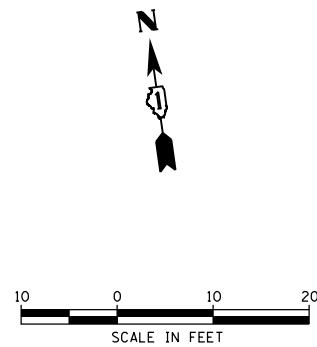




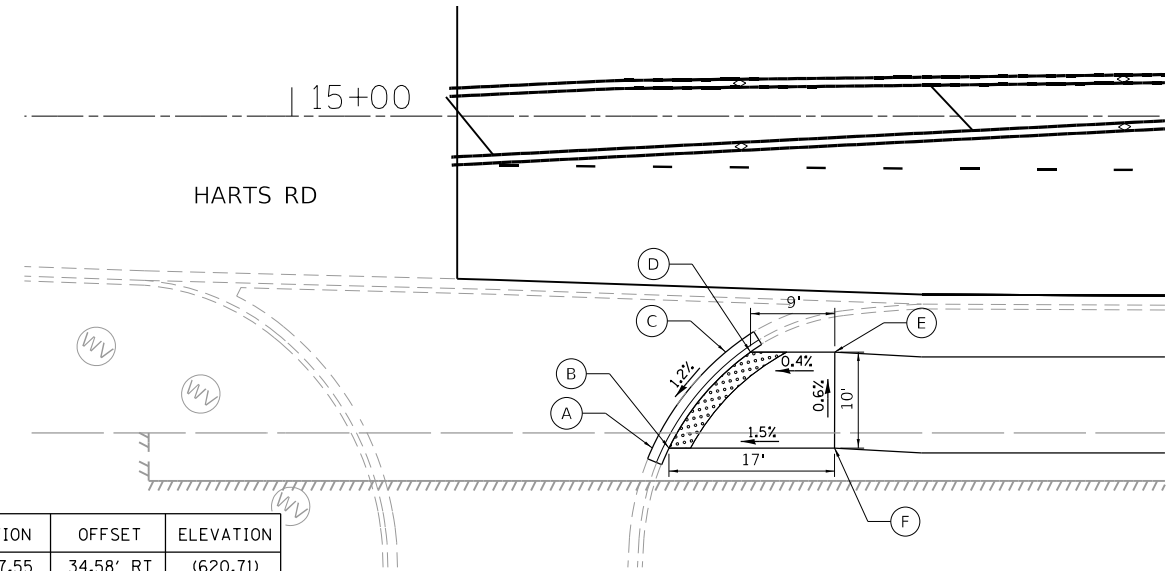
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B	121+18.16	40.75' LT	618.60
C	121+28.38	40.75' LT	618.45
D	121+31.92	40.75' LT	618.44
F	121+42.32	50.72' LT	618.63
G	121+44.48	50.71' LT	618.62
H	121+55.12	75.07' LT	(619.44)
I	121+48.26	76.43' LT	619.55

TOUHY AVE

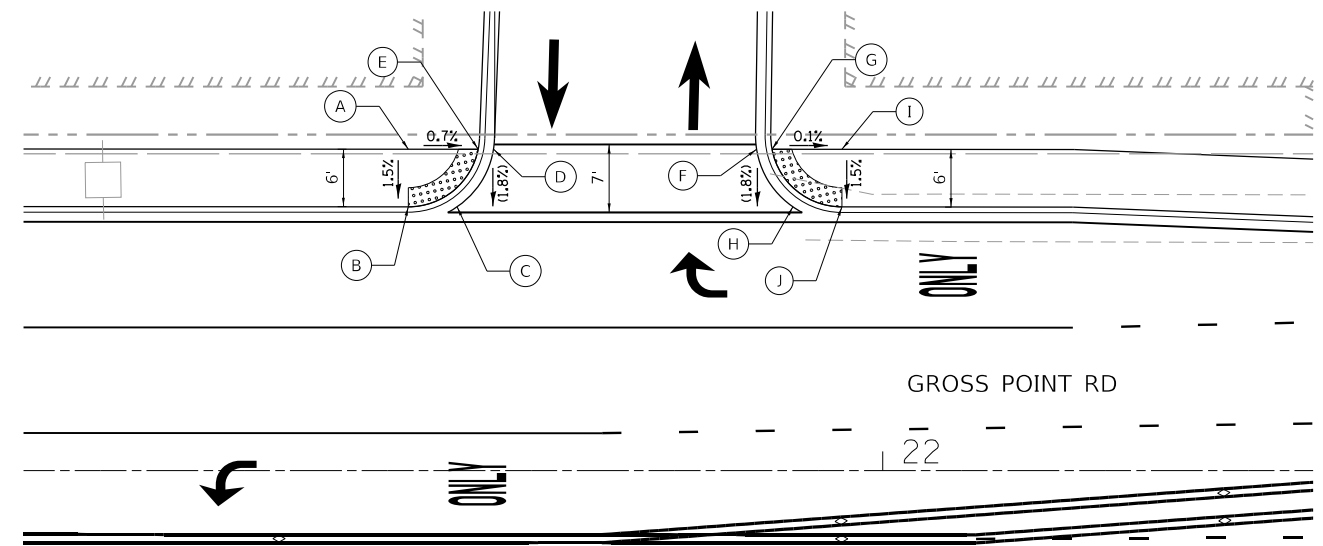
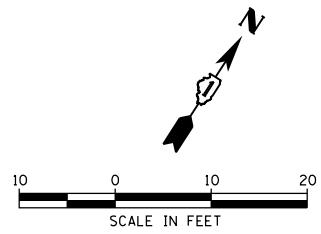
POINT	STATION	OFFSET	ELEVATION
M	122+05.03	75.13' LT	618.95
N	122+09.54	76.09' LT	619.02
O	122+26.15	54.37' LT	618.88
Q	122+15.87	50.45' LT	618.72
R	122+31.66	39.00' LT	618.86
S	122+32.32	40.44' LT	618.86
T	122+42.74	40.43' LT	619.05
U	122+28.88	50.44' LT	619.15
V	122+34.64	50.43' LT	619.00



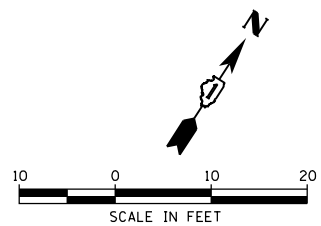
LEGEND			
(A)	POINT	(XXX.XX')	EXISTING ELEVATION
[Hatched Box]	DETECTABLE WARNINGS	(%)	EXISTING SLOPE



POINT	STATION	OFFSET	ELEVATION
A	15+37.55	34.58' RT	(620.71)
B	15+39.30	34.58' RT	620.71
C	15+45.21	24.58' RT	(620.87)
D	15+47.79	24.58' RT	620.87
E	15+56.56	24.58' RT	620.91
F	15+56.56	34.58' RT	620.97



POINT	STATION	OFFSET	ELEVATION
A	21+50.57	33.48' LT	621.65
B	21+50.57	27.48' LT	621.56
C	21+55.66	27.48' LT	(621.49)
D	21+59.46	33.48' LT	(621.60)
E	21+57.86	33.48' LT	621.60
F	21+86.87	33.47' LT	(621.41)
G	21+88.47	33.47' LT	621.41
H	21+90.66	27.47' LT	(621.28)
I	21+95.75	33.46' LT	621.40
J	21+95.75	27.46' LT	621.31



HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-swr-amps-01.dgn  
 PEN TABLE: 191405.tbl



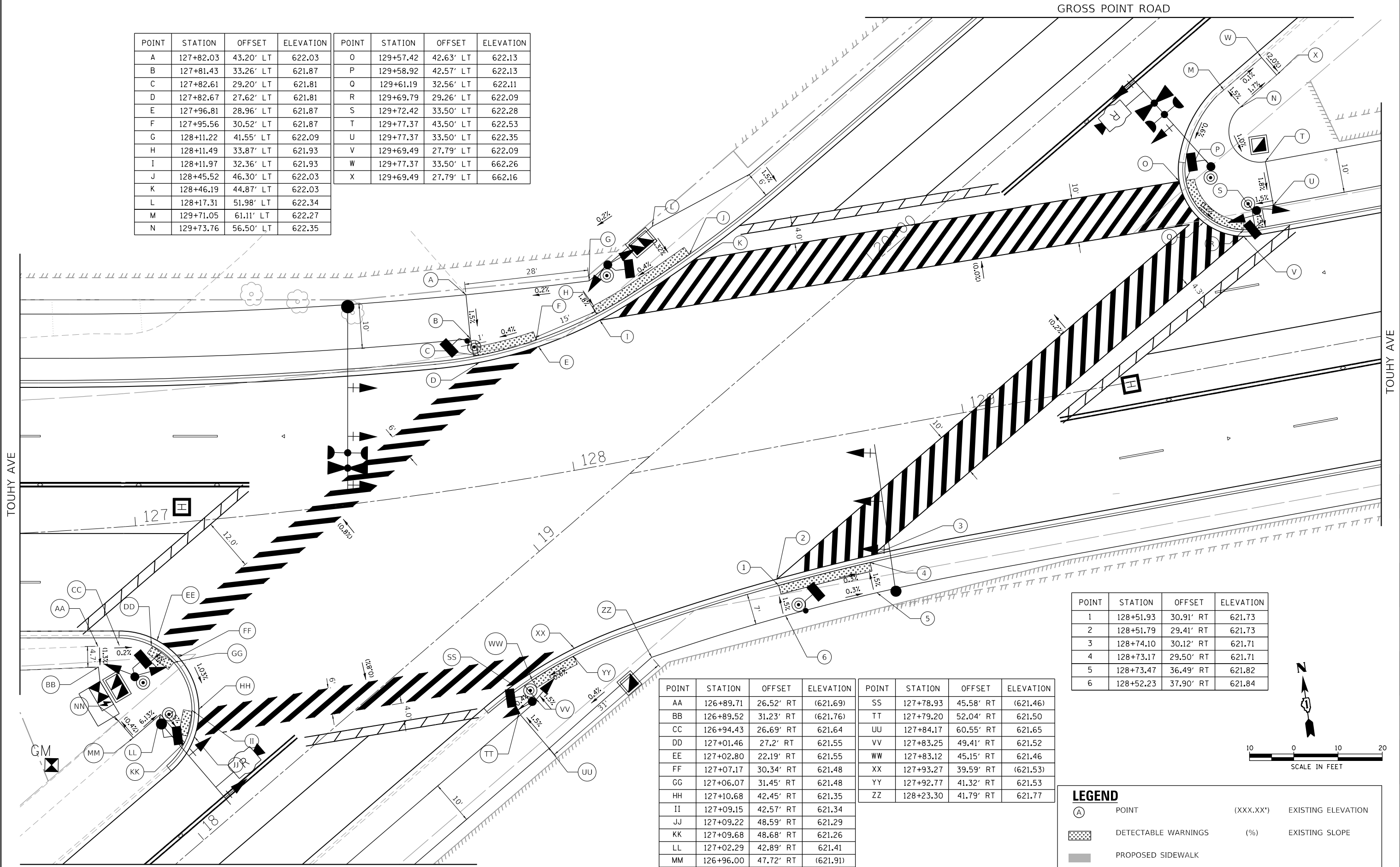
USER NAME = mzu210	DESIGNED - MLZ	REVISED -
PLOT SCALE = 20.0000' / 1"	DRAWN - W/JH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**SIDEWALK RAMP DETAILS**  
**TOUHY AVENUE / HARTS ROAD / GROSS POINT ROAD**  
 SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

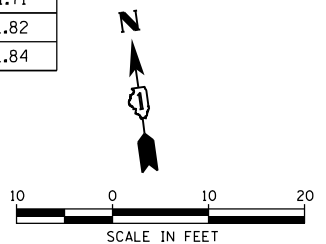
F.A.P. RTE. 341	SECTION NO. 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 81
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

POINT	STATION	OFFSET	ELEVATION	POINT	STATION	OFFSET	ELEVATION
A	127+82.03	43.20' LT	622.03	O	129+57.42	42.63' LT	622.13
B	127+81.43	33.26' LT	621.87	P	129+58.92	42.57' LT	622.13
C	127+82.61	29.20' LT	621.81	Q	129+61.19	32.56' LT	622.11
D	127+82.67	27.62' LT	621.81	R	129+69.79	29.26' LT	622.09
E	127+96.81	28.96' LT	621.87	S	129+72.42	33.50' LT	622.28
F	127+95.56	30.52' LT	621.87	T	129+77.37	43.50' LT	622.53
G	128+11.22	41.55' LT	622.09	U	129+77.37	33.50' LT	622.35
H	128+11.49	33.87' LT	621.93	V	129+69.49	27.79' LT	622.09
I	128+11.97	32.36' LT	621.93	W	129+77.37	33.50' LT	662.26
J	128+45.52	46.30' LT	622.03	X	129+69.49	27.79' LT	662.16
K	128+46.19	44.87' LT	622.03				
L	128+17.31	51.98' LT	622.34				
M	129+71.05	61.11' LT	622.27				
N	129+73.76	56.50' LT	622.35				



POINT	STATION	OFFSET	ELEVATION
1	128+51.93	30.91' RT	621.73
2	128+51.79	29.41' RT	621.73
3	128+74.10	30.12' RT	621.71
4	128+73.17	29.50' RT	621.71
5	128+73.47	36.49' RT	621.82
6	128+52.23	37.90' RT	621.84

POINT	STATION	OFFSET	ELEVATION	POINT	STATION	OFFSET	ELEVATION
AA	126+89.71	26.52' RT	(621.69)	SS	127+78.93	45.58' RT	(621.46)
BB	126+89.52	31.23' RT	(621.76)	TT	127+79.20	52.04' RT	621.50
CC	126+94.43	26.69' RT	621.64	UU	127+84.17	60.55' RT	621.65
DD	127+01.46	27.2' RT	621.55	VV	127+83.25	49.41' RT	621.52
EE	127+02.80	22.19' RT	621.55	WW	127+83.12	45.15' RT	621.46
FF	127+07.17	30.34' RT	621.48	XX	127+93.27	39.59' RT	(621.53)
GG	127+06.07	31.45' RT	621.48	YY	127+92.77	41.32' RT	621.53
HH	127+10.68	42.45' RT	621.35	ZZ	128+23.30	41.79' RT	621.77
II	127+09.15	42.57' RT	621.34				
JJ	127+09.22	48.59' RT	621.29				
KK	127+09.68	48.68' RT	621.26				
LL	127+02.29	42.89' RT	621.41				
MM	126+96.00	47.72' RT	(621.91)				
NN	126+93.15	43.75' RT	(621.89)				



**LEGEND**

(A)	POINT	(XXX.XX')	EXISTING ELEVATION
[Pattern]	DETECTABLE WARNINGS	(%)	EXISTING SLOPE
[Hatched]	PROPOSED SIDEWALK		

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt+swr+emps-02.dgn  
 PEN TABLE: 191405.tbl

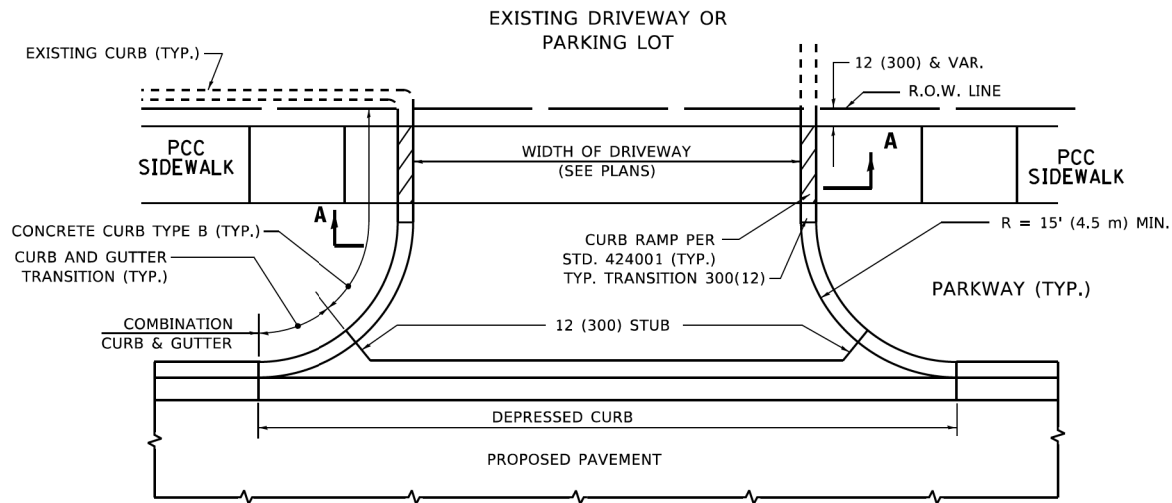


USER NAME = mzuzio	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

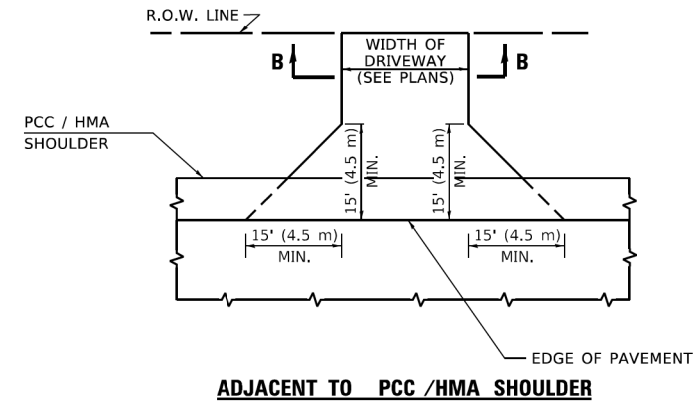
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SIDEWALK RAMP DETAILS</b>	
<b>TOUHY AVENUE</b>	
SCALE:	SHEET 2 OF 2 SHEETS STA. TO STA.

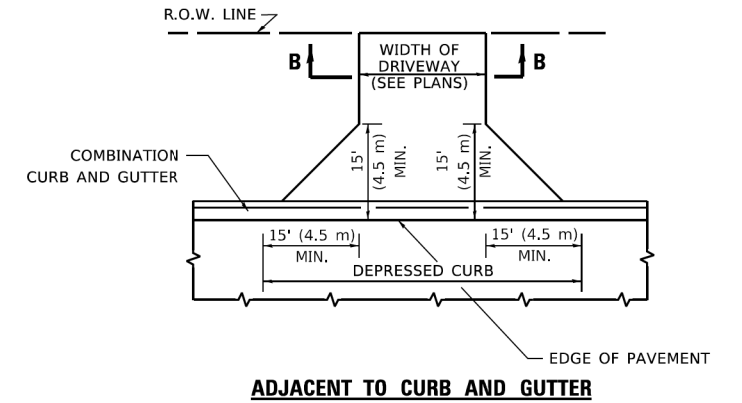
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	82
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61H59	



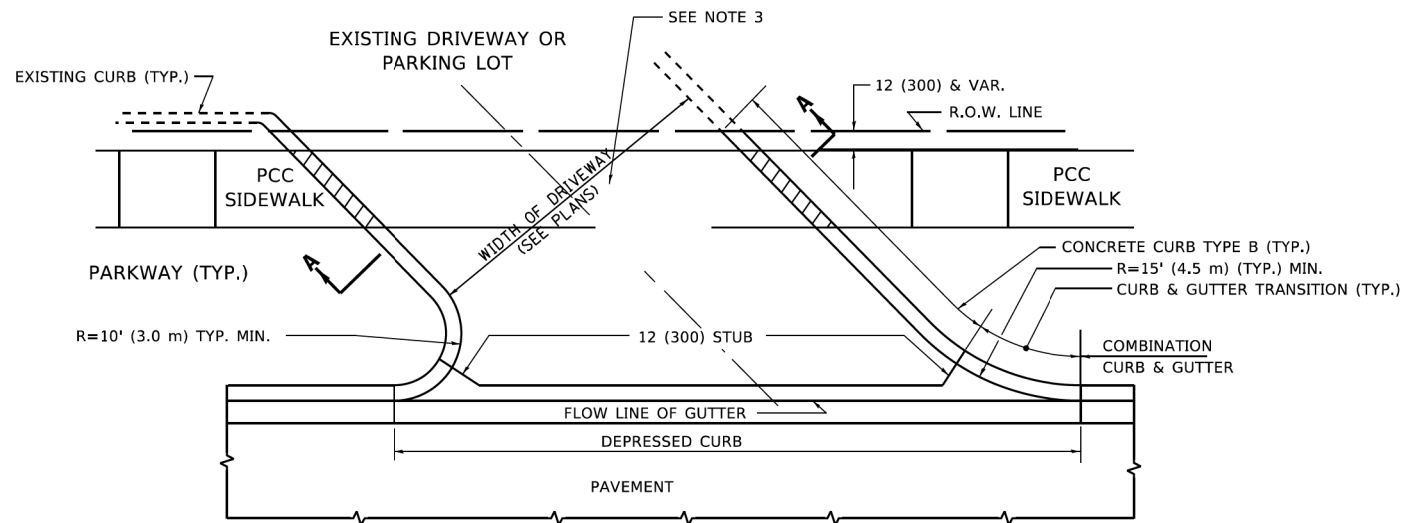
**WITH CONCRETE CURB, TYPE B**



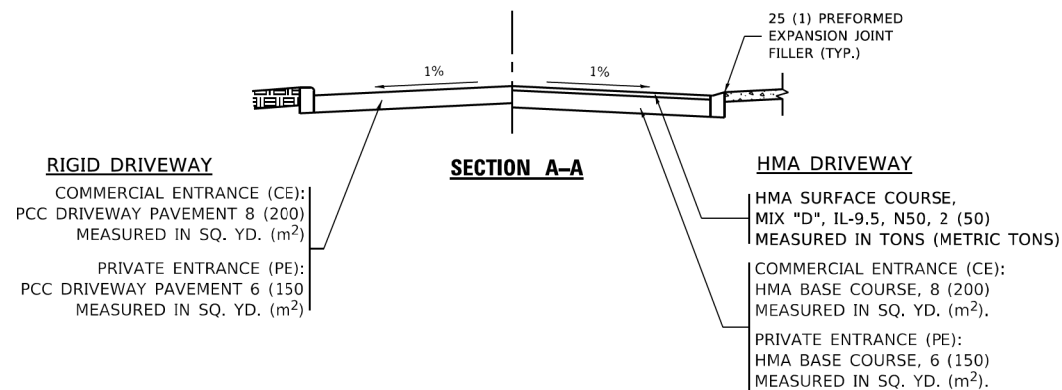
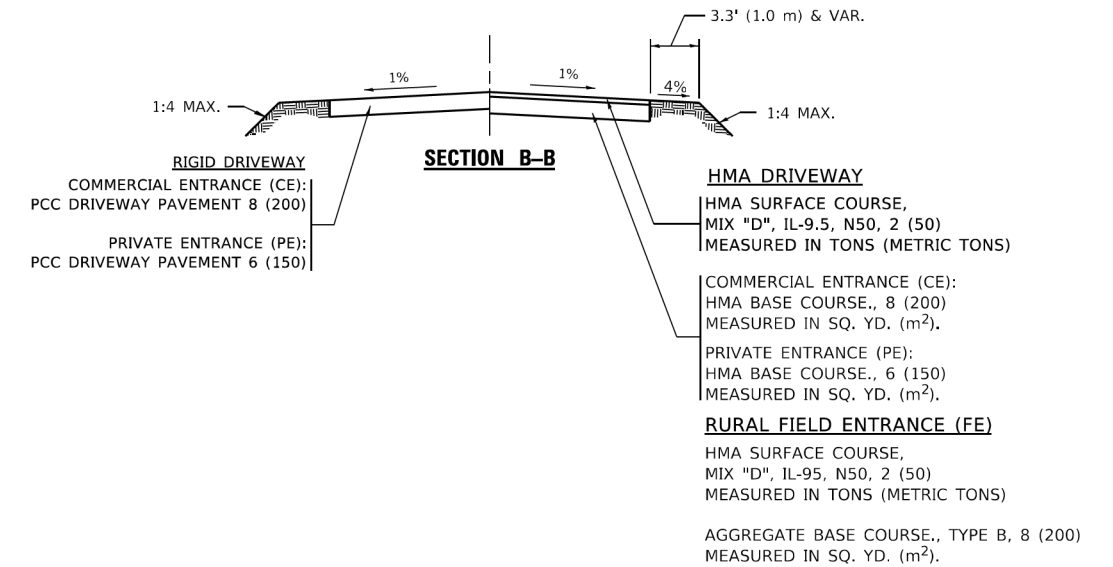
**ADJACENT TO PCC /HMA SHOULDER**



**ADJACENT TO CURB AND GUTTER**



**WITH CONCRETE CURB, TYPE B**



**GENERAL NOTES**

- DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.
- COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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

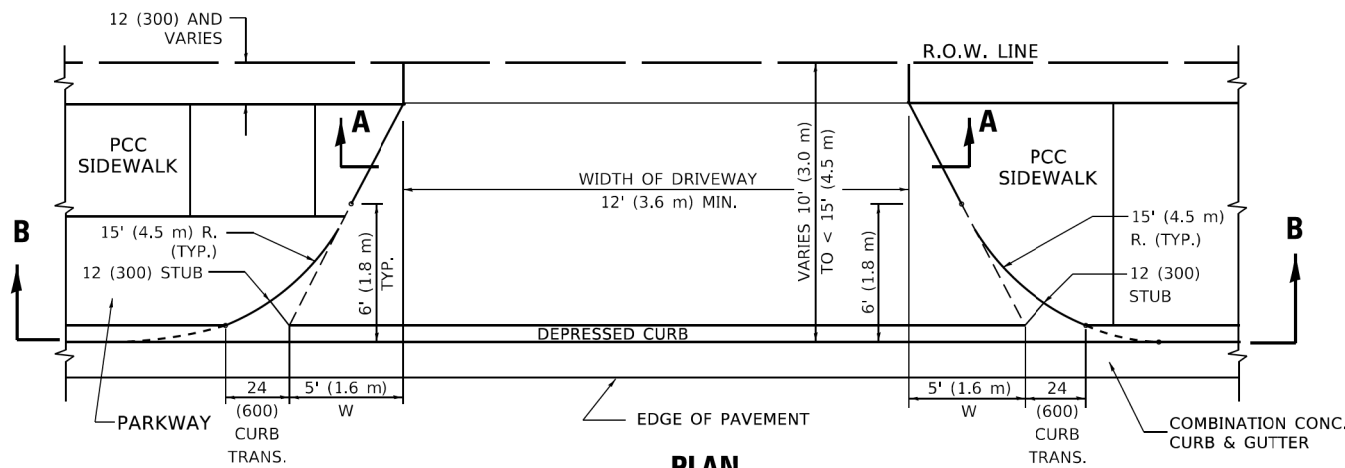
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 PLOT DATE: 2/2/2022  
 PLOT SCALE: 100,0000' / 1in.  
 FILE NUMBER: W:\191405\191405.01.dgn

USER NAME = demanchelt	DESIGNED - R. SHAH	REVISED - R. BORO 06-11-08
	DRAWN -	REVISED - R. BORO 09-06-11
PLOT SCALE = 100,0000' / 1in.	CHECKED -	REVISED - K. SMITH 08-28-19
PLOT DATE = 2/2/2022	DATE - 11-04-95	REVISED - K. SMITH 02-01-22

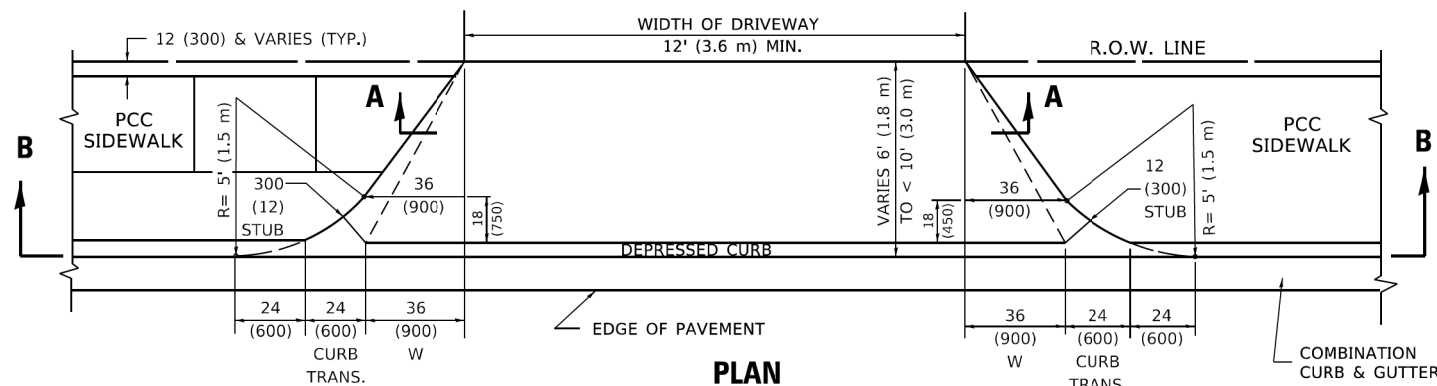
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB &amp; EDGE OF SHOULDER ≥ 15'(4.5m)</b>			
SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. TO STA.	

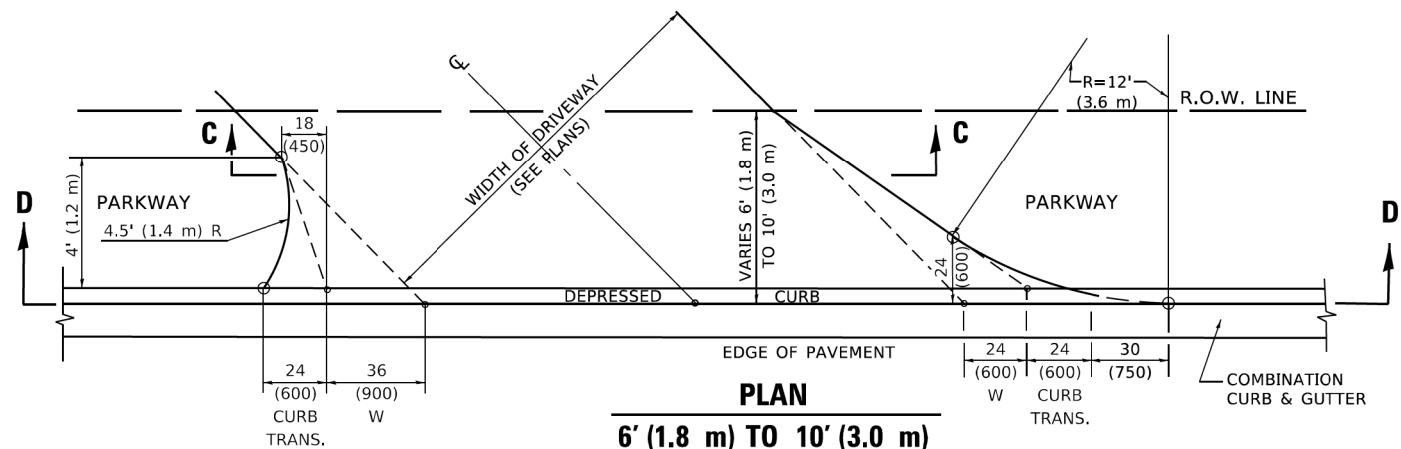
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	83
<b>BD400-01 (BD-01)</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



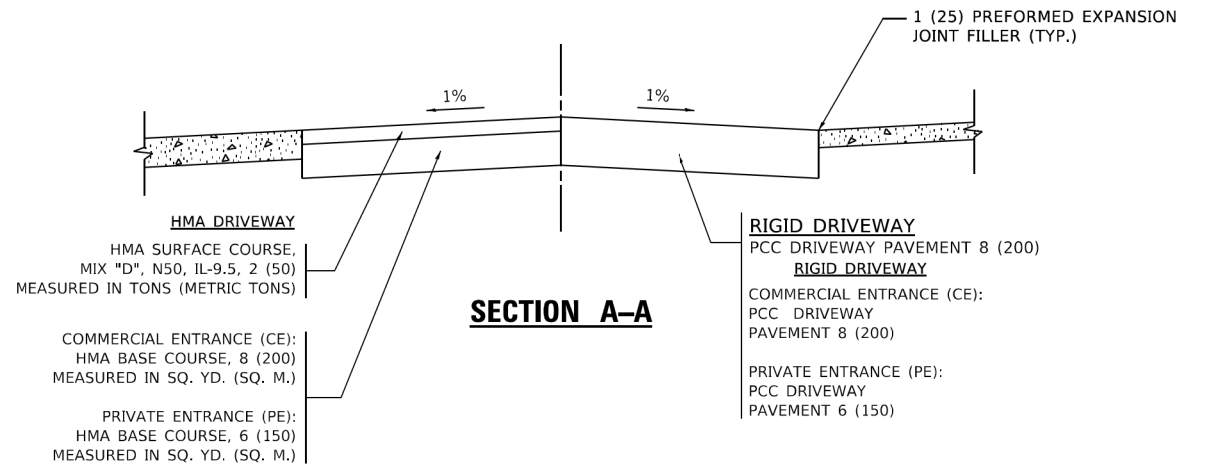
**PLAN**  
10' (3.0 m) TO < 15' (4.5 m)



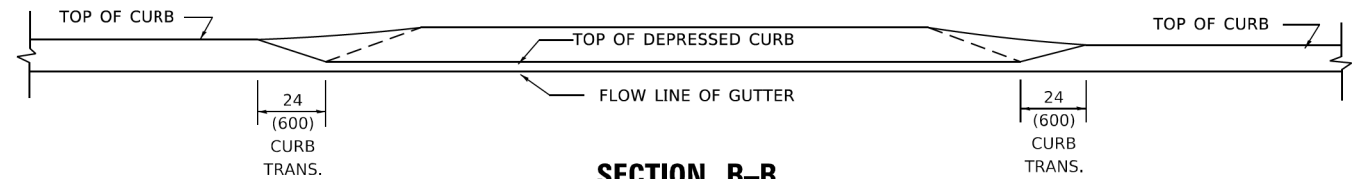
**PLAN**  
6' (1.8 m) TO < 10' (3.0 m)



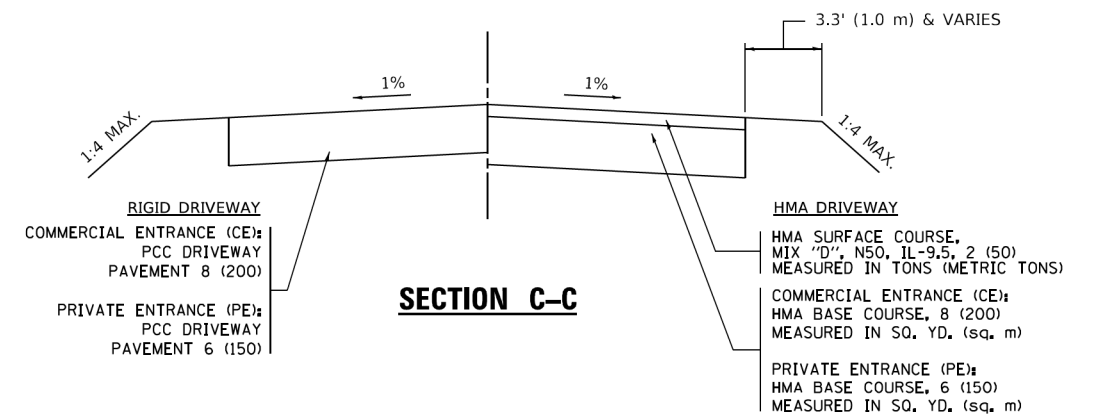
**PLAN**  
6' (1.8 m) TO 10' (3.0 m)



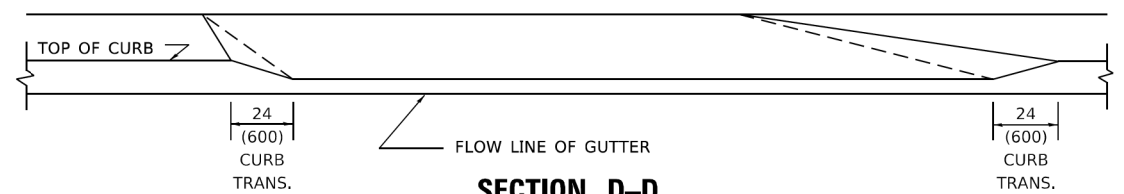
**SECTION A-A**



**SECTION B-B**



**SECTION C-C**



**SECTION D-D**

**GENERAL NOTES**

1. DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.
2. WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE PCC SIDEWALK SHALL EXTEND TO THE BACK OF CURB.
3. "W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

HRG PROJECT NO.: 19406.01  
HRG PROJ. CONTACT:  
FILE NAME: 19406.01-srt-drt-d02.dgn  
PLOT DATE: 2/2/2022  
PLOT SCALE: 100,0000' / 1 in.  
REVISIONS: 11-06-95

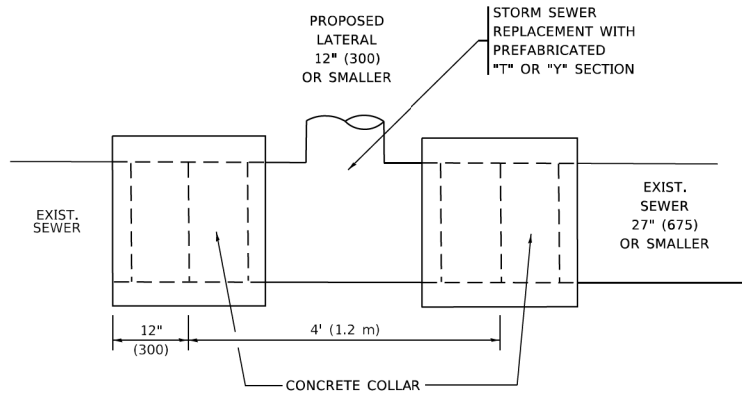
USER NAME = demanchelt	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07
	DRAWN -	REVISED - R. BORO 09-06-11
PLOT SCALE = 100,0000' / 1 in.	CHECKED -	REVISED - K. SMITH 08-27-19
PLOT DATE = 2/2/2022	DATE - 11-06-95	REVISED - K. SMITH 02-01-22

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

**DRIVEWAY DETAILS**  
**DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5m)**

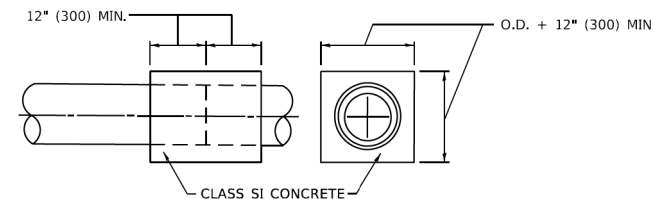
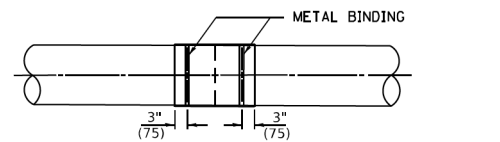
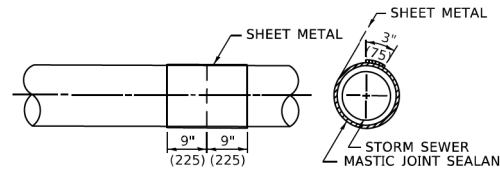
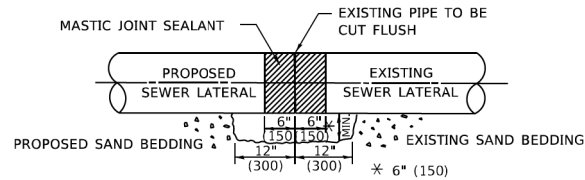
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	84
<b>BD400-02 (BD-02)</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



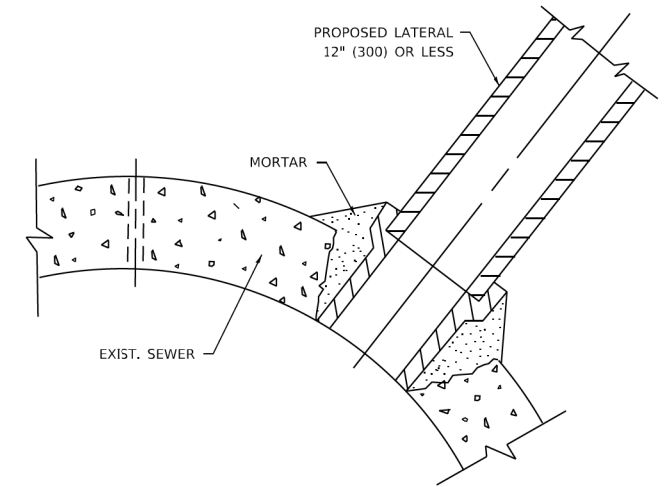
**DETAIL "A"**

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



**DETAIL "B"**

CLASS SI CONCRETE COLLAR



**DETAIL "C"**

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

**CONSTRUCTION SEQUENCE**

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

**NOTES:**

**MATERIAL**

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

**CONSTRUCTION METHODS**

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
  - A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
  - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

**GENERAL**

1. CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.
2. CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

**BASIS OF PAYMENT**

1. TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.
2. REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.
3. TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.
4. CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

HRG PROJECT NO.: 191408.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191408.01-srt-dbt-dbt-2007.dgn  
 REVISIONS: 01/14/2022  
 FILE NAME: 191408.01-srt-dbt-dbt-2007.dgn

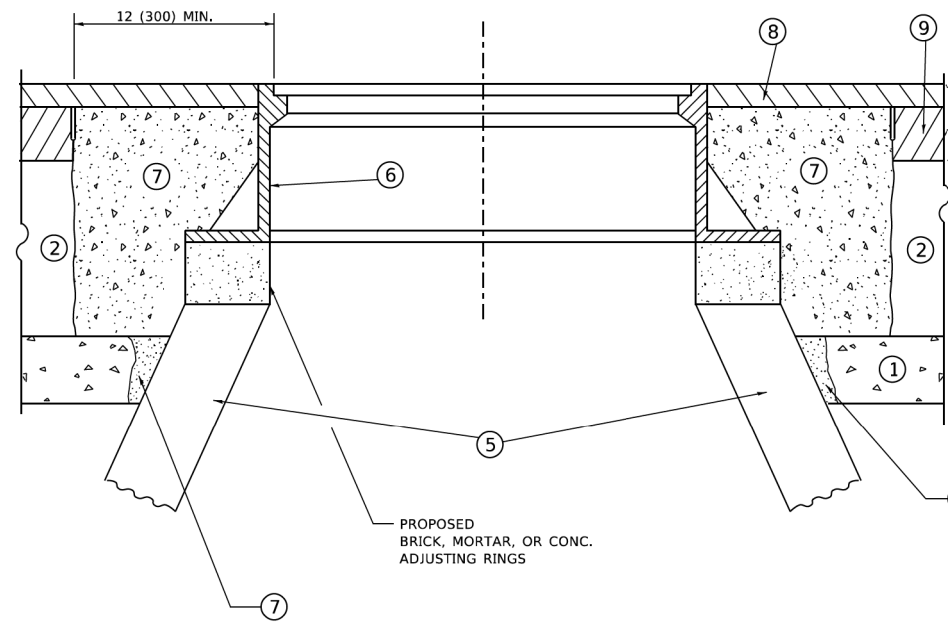
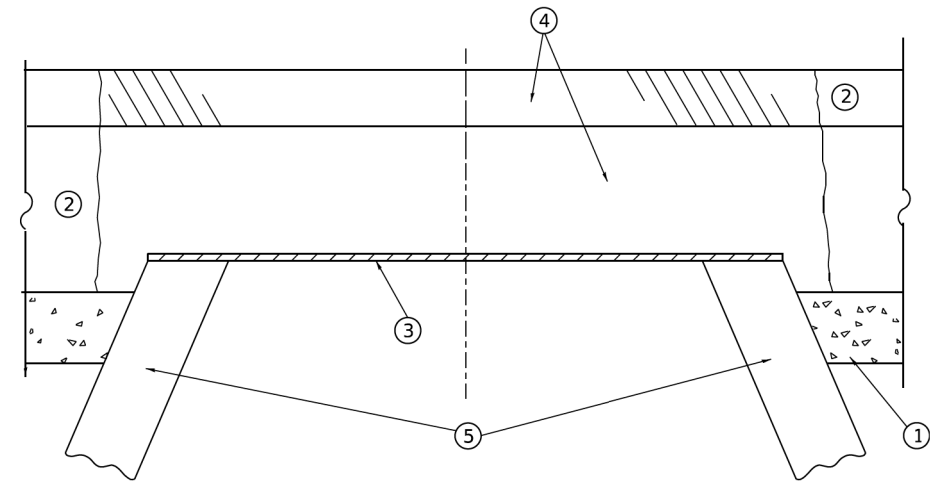
USER NAME = demanchelt	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94
	DRAWN -	REVISED - R. SHAH 10-25-94
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - R. SHAH 06-12-96
PLOT DATE = 2/2/2022	DATE - 07-25-90	REVISED - K. SMITH 02-01-22

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF STORM SEWER  
CONNECTION TO EXISTING SEWER**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	85
BD500-01 (BD-07)			CONTRACT NO. 61H59	
ILLINOIS FED. AID PROJECT				



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

**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 HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 1 1/2 (40) HMA TO REMAIN AFTER MILLING).

**STAGE 2 (AFTER PAVEMENT MILLING)**

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

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

**LEGEND**

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

**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**

1. 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)."
2. THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
4. 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.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

**NOTES**

1. 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.
2. 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.
3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

HRG PROJECT NO.: 191408.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191408.01-srt-drt-drt-drt-drt-drt  
 REVISIONS: 01/2022  
 FILE NAME: 191408.01-srt-drt-drt-drt-drt-drt

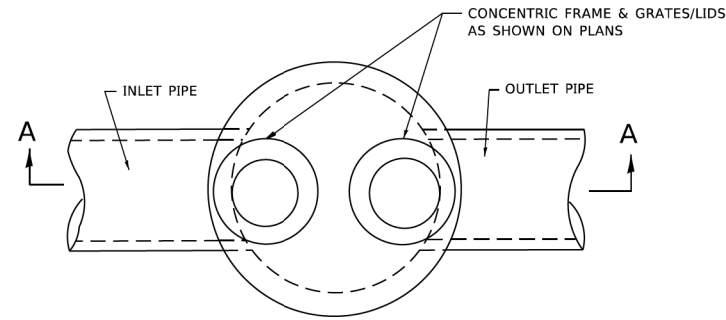
USER NAME = demanchelt	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07
	DRAWN -	REVISED - R. BORO 03-09-11
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - R. BORO 12-06-11
PLOT DATE = 2/2/2022	DATE - 10-25-94	REVISED - K. SMITH 02-01-22

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

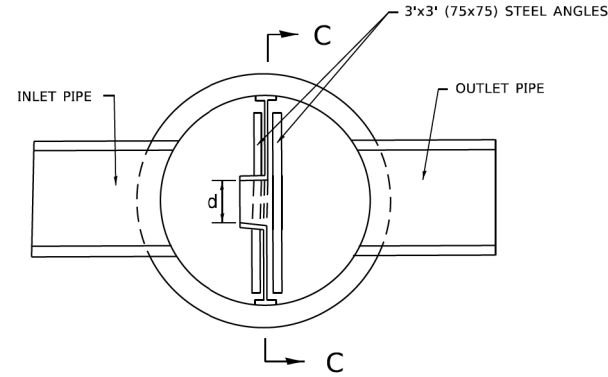
**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

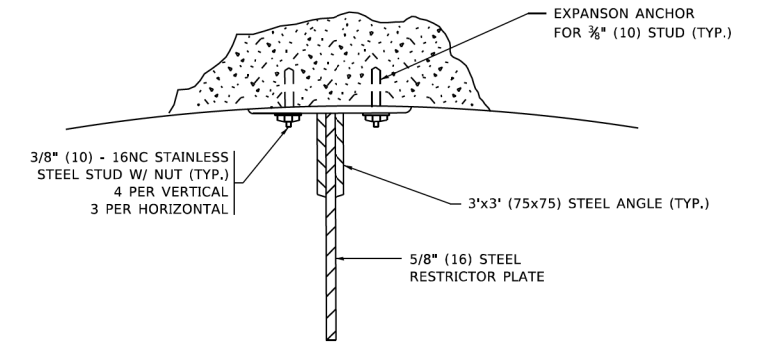
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	86
BD600-03 (BD-08)			CONTRACT NO. 61H59	
ILLINOIS FED. AID PROJECT				



**PLAN**



**SECTION B-B**



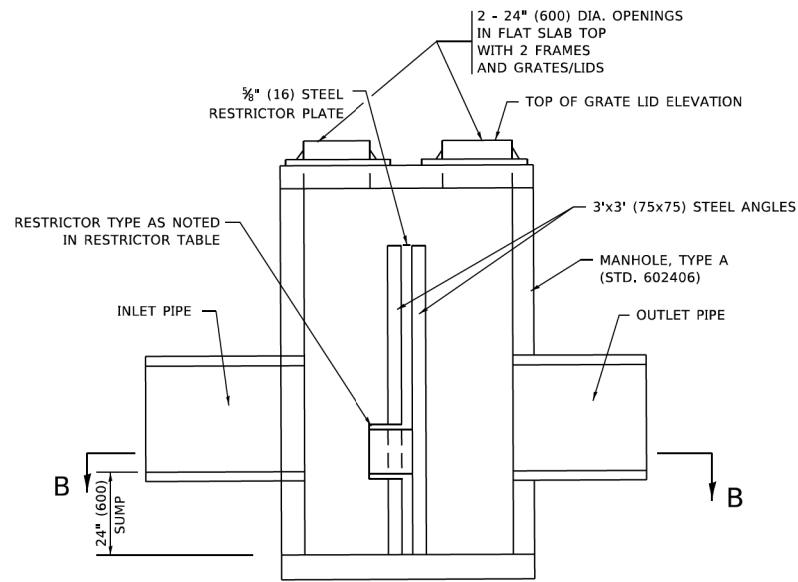
**ANGLE FASTENER DETAIL**

**NOTES:**

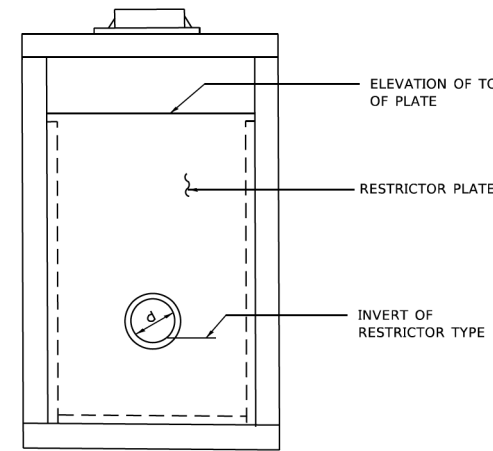
1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.

**BASIS OF PAYMENT:**

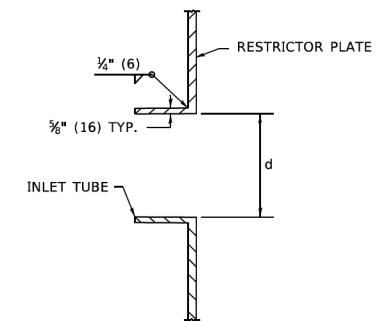
1. TO BE PAID FOR AS "MANHOLES, TYPE A, 6 FT. (1.8 m)-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE" EACH
2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.



**SECTION A-A**

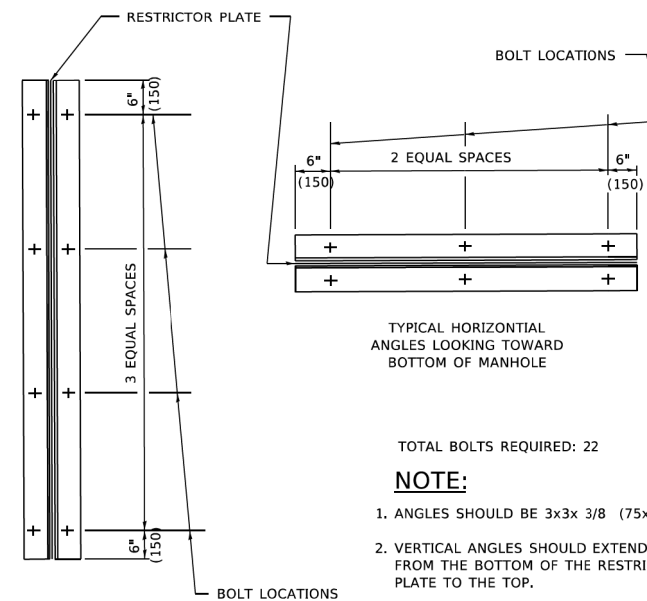


**SECTION C-C**



**INLET TUBE DETAIL**

STATION AND OFFSET	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER in. (mm) (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW
128+39.52, 30.6'RT	6'	2-TYPE 1, OPEN LID	3	7.9"	616.19	619.16



**STEEL ANGLE BOLTING DETAILS**

RESTRICTOR TYPE					
1	2	3	4	5	6
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED
LENGTH: 1/2 TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-1/2 DIA.	LENGTH: 2-1/2 DIA.	
C=.52	C=.61	C=.61	C=.73	C=.82	C=.98

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

HRG PROJECT NO.: 19406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19406.01-srt-drt-d02.dgn  
 PLOT DATE: 2/2/2022  
 PLOT SCALE: 100.0000' / in.  
 FILE NAME: 19406.01-srt-drt-d02.dgn

USER NAME = demanchelt	DESIGNED - R. SHAH	REVISED - R. SHAH 10-25-94
	DRAWN -	REVISED - E. GOMEZ 08-28-00
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 01-08-01
PLOT DATE = 2/2/2022	DATE - 09-09-94	REVISED - K. SMITH 02-01-22

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

MANHOLE WITH  
 RESTRICTOR PLATE

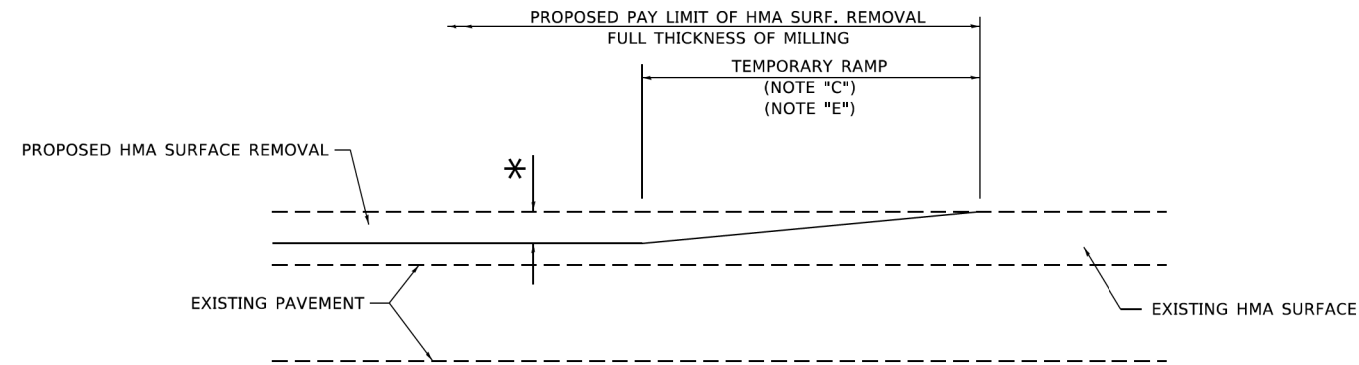
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	87
BD600-04 (BD-12)		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



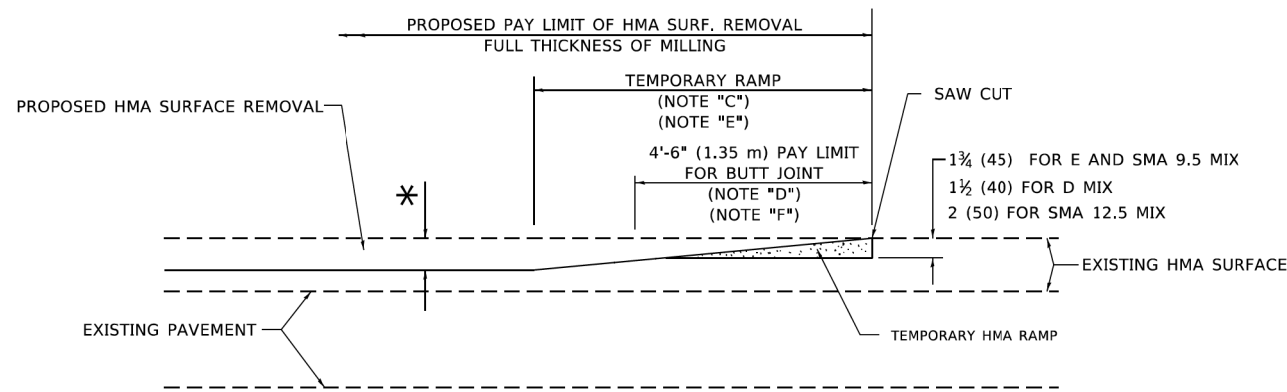




**MILLED TEMPORARY RAMP**

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**

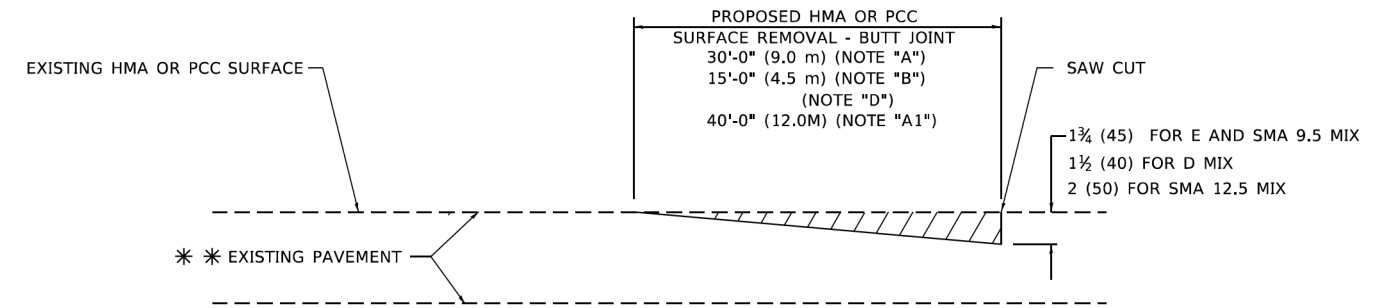


**HMA CONSTRUCTED TEMPORARY RAMP**

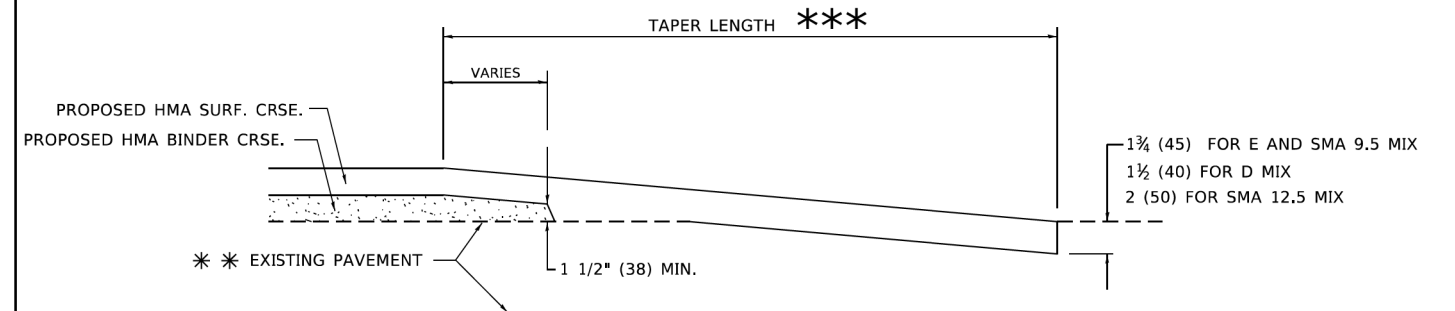
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

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

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

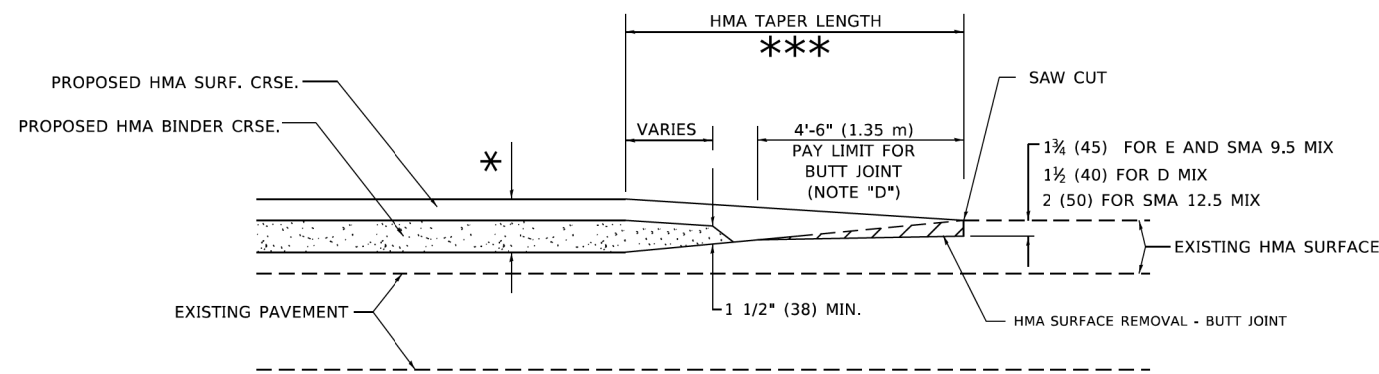
**GENERAL NOTES**

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- 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' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.  
\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".  
\*\*\* 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**

- 1. 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".
- 2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

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



**BUTT JOINT AND HMA TAPER**

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

HRG PROJECT NO.: 19406.01  
HRG PROJ. CONTACT:  
FILE NAME: 19406.01-srt-dbt-d032.dgn  
REVISIONS: 1/1/2022  
FILE NAME: 19406.01-srt-dbt-d032.dgn

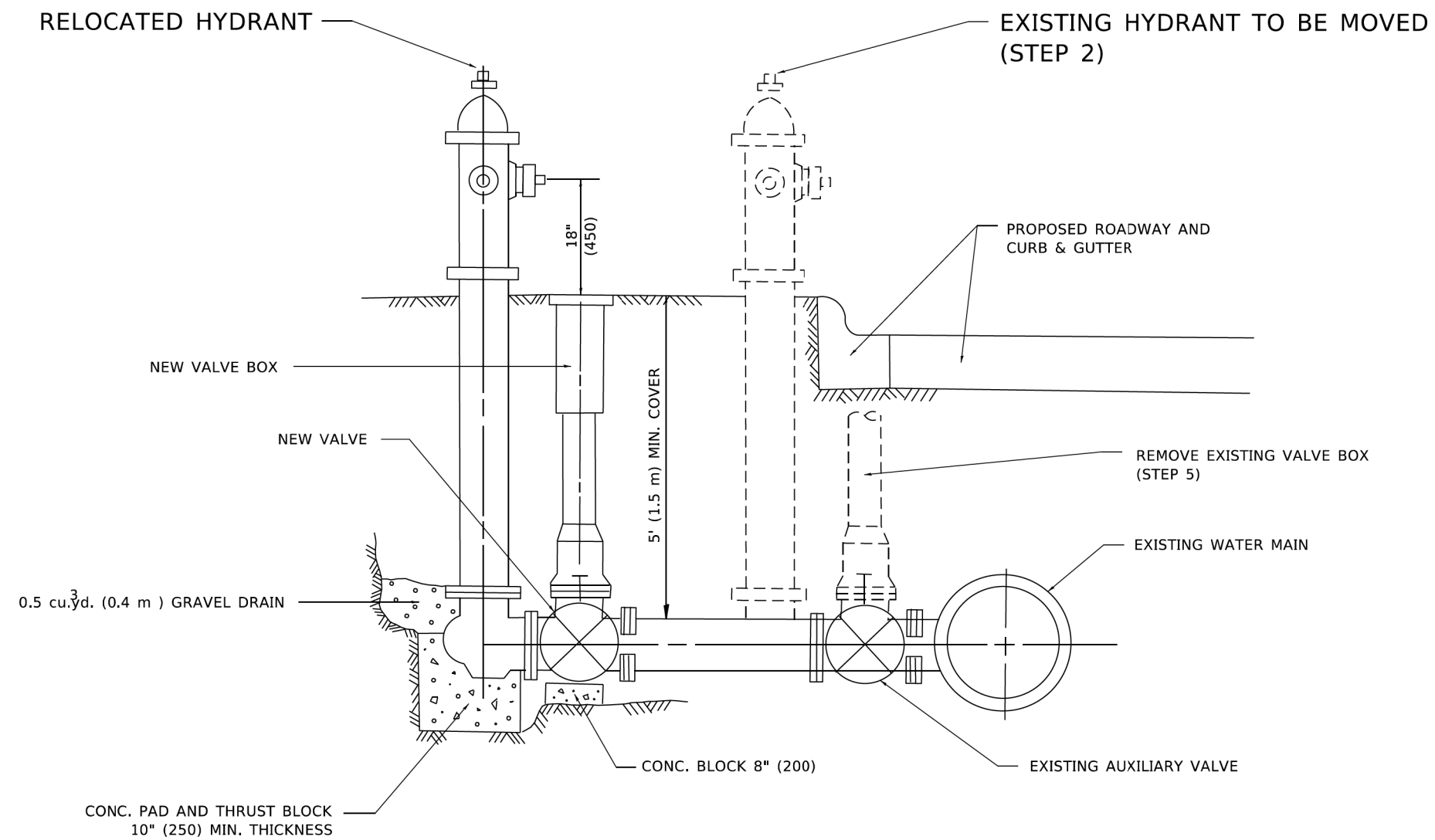
USER NAME = demanchelt	DESIGNED - M. DE YONG	REVISED - A. ABBAS 03-21-97
	DRAWN -	REVISED - M. GOMEZ 04-06-01
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - R. BORO 01-01-07
PLOT DATE = 2/2/2022	DATE - 06-13-90	REVISED - K. SMITH 02-01-22

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND  
HMA TAPER DETAILS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	89
<b>BD400-05 BD-32</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



**SEQUENCE OF CONSTRUCTION:**

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

**NOTE:**

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

# FIRE HYDRANT TO BE MOVED

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

HRG PROJECT NO.: 19406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19406.01-sht-dbt-2036.dgn  
 PLOT DATE: 2/2/2022  
 BRN: 19406.01-sht-dbt-2036.dgn  
 FILE NAME: 19406.01-sht-dbt-2036.dgn

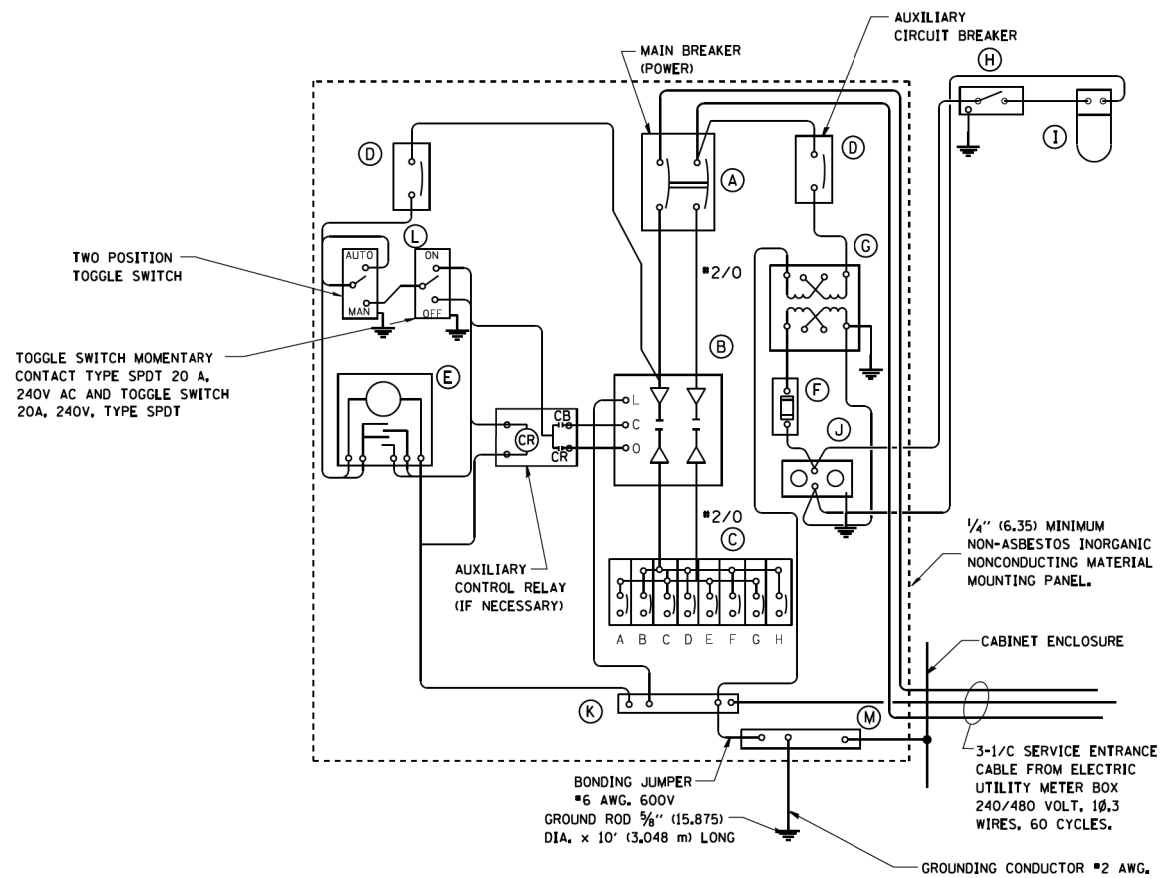
USER NAME = demanchelt	DESIGNED -	REVISED - R. SHAH 09-09-94
	DRAWN -	REVISED - R. SHAH 10-25-94
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - K. SMITH 02-01-22
PLOT DATE = 2/2/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FIRE HYDRANT TO BE MOVED**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

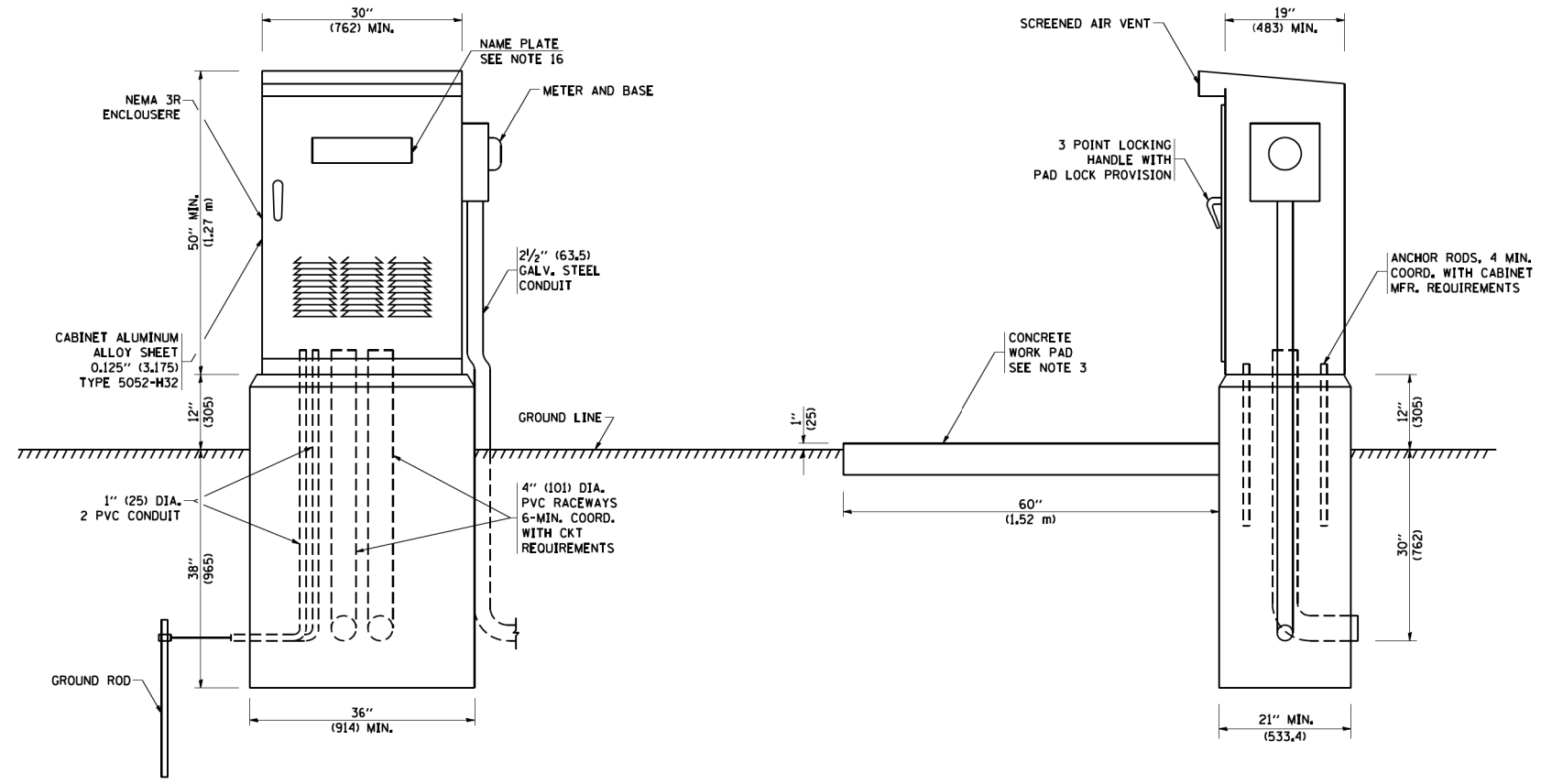
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	90
<b>BD-36</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



**PANEL WIRING DIAGRAM**

**PANEL EQUIPMENT**

BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100 AMP. FRAME, 100 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
C	8	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100 AMP. FRAME, 15 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH].
F	1	20 A., 120 V. FUSE.
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 HZ.
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN,
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 4" (101.6) X 4" (101.6 mm) BOX.
M	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS

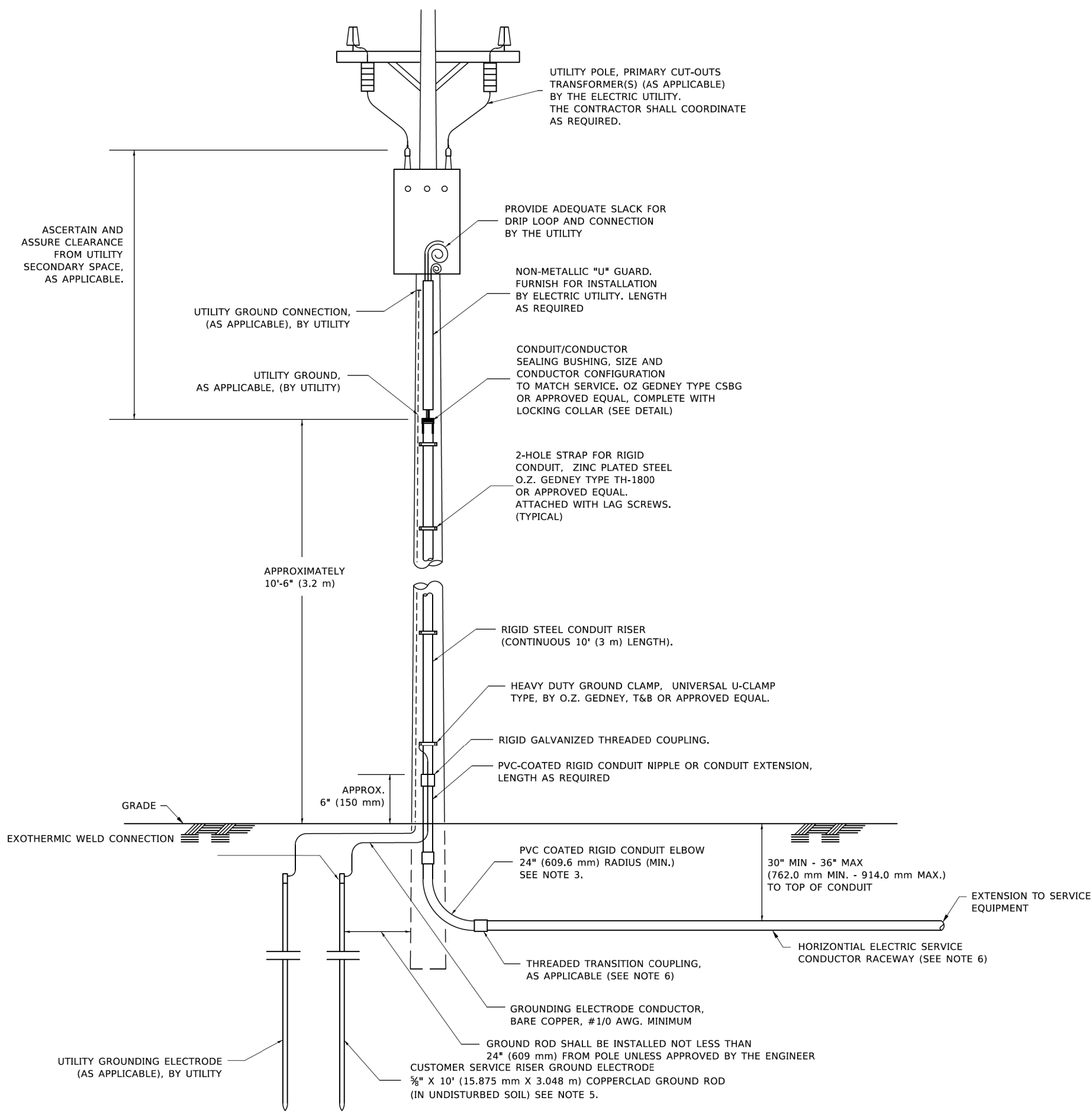


**NOTES:**

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL, LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) x 60" (18,288 m) x 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
- ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
- CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.  
R = RED      BL = BLUE      W = WHITE  
B = BLACK      Y = YELLOW      G = GREEN
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.

HRG PROJECT NO: 19405.01  
 HRG PROJ CONTACT:  
 FILE NAME: 19405.01-sht-dwg-be215.dwg  
 PEN TABLE: 19405.tbl

FILE NAME = W:\dstata\22x34\be215.dgn	USER NAME = geglennob	DESIGNED - DRAWN -	REVISED - 08-20-04 REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>LIGHTING CONTROLLER SINGLE DOOR</b>		F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 91
PLOT SCALE = 50.0000 / IN. PLOT DATE = 1/4/2008	CHECKED - DATE -	REVISIONS	SCALE: NONE		SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BE-215</b>		CONTRACT NO. 61H59	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

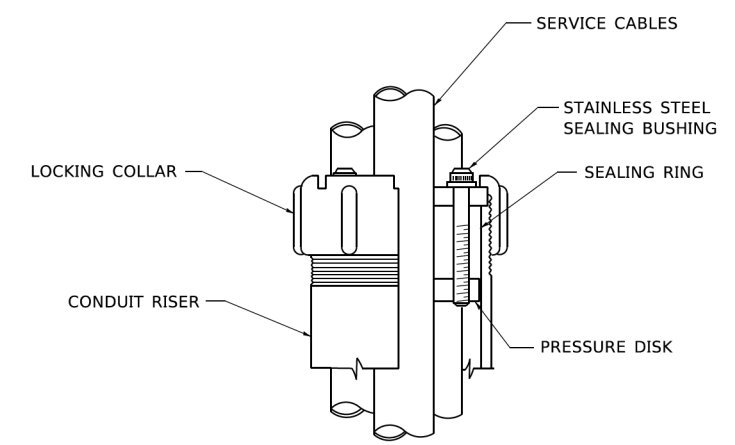


**APPLICATION**

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

**NOTES**

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



**SEALING BUSHING DETAIL**

HRG PROJECT NO.: 19406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19406.01-srt-drt-be220.dgn  
 REVISIONS: 19406.01-19406.01-19406.01  
 FILE: \\msc1-pw\p\proj\19406.01\19406.01.dwg  
 PROJECT: 19406.01-19406.01-19406.01

USER NAME = footemj	DESIGNED -	REVISED - 03-03-06
	DRAWN -	REVISED -
PLOT SCALE = 50.0000' / 1"	CHECKED - MEA	REVISED -
PLOT DATE = 4/19/2019	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

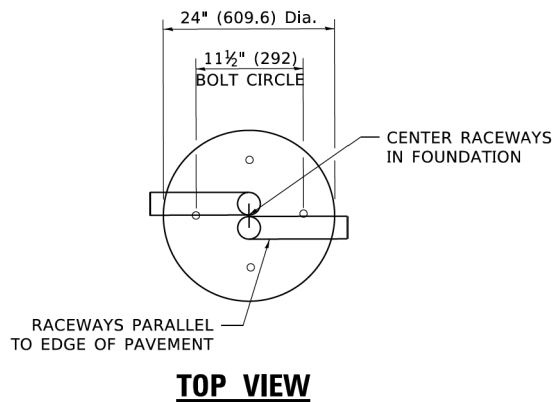
**ELECTRIC SERVICE INSTALLATION  
AERIAL, REMOTE DISCONNECT**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

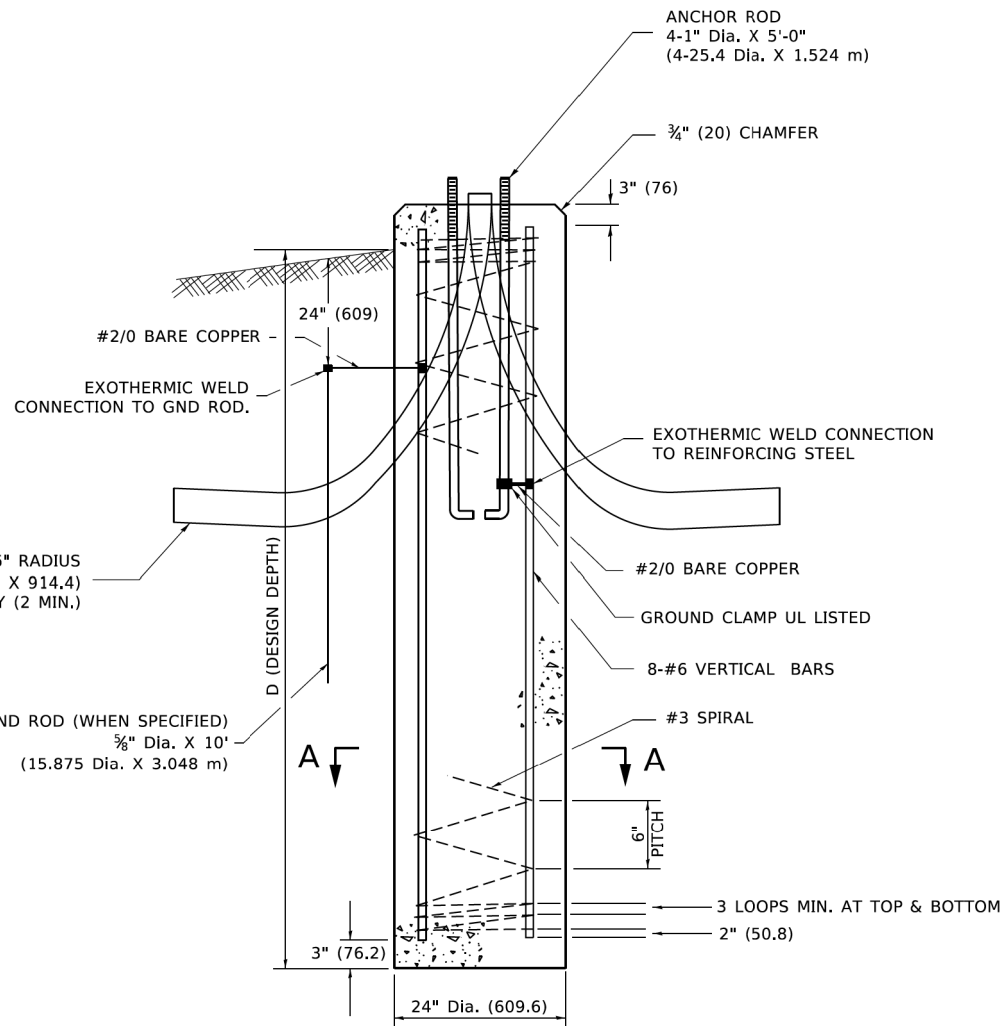
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	92
<b>BE-220</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

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

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT.	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND φ = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND φ = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND φ = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



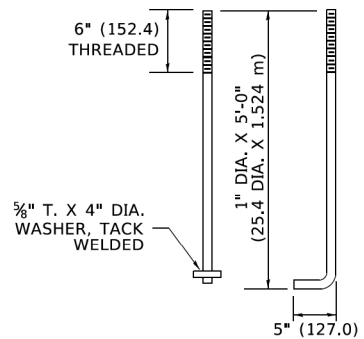
TOP VIEW



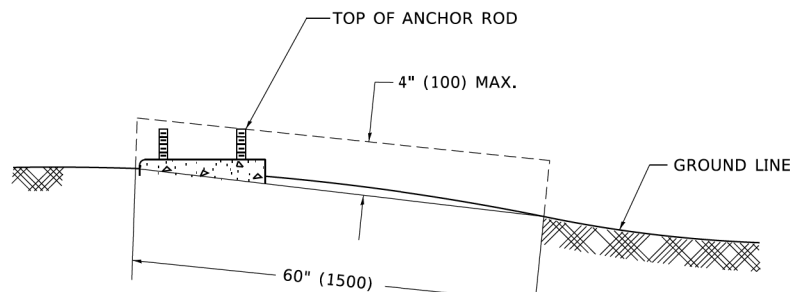
FOUNDATION DETAIL

**NOTES**

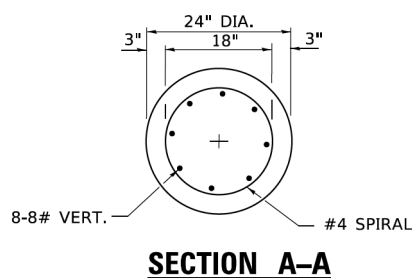
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3#4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 23#4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



ANCHOR BOLT DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-dbt-be300.dgn  
 REVISION: 191405.01-191405.01-191405.01  
 FILE NAME: 191405.01-sht-dbt-be300.dgn

USER NAME = footemj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 4/19/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION  
30' (9.144 m) TO 35' (10.668 m) M.H. 11 1/2" (292 mm) BOLT CIRCLE  
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	93
BE-300		CONTRACT 61H59		
ILLINOIS FED. AID PROJECT				

FOUNDATION DESIGN TABLE

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

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET from Q-MED'N FT.	LENGTH of BAR a FT.
UP TO 24" (609.6 mm)	3'-3" (0.991 m)	#6 x 5'-3" (1.600 m)
27" (685.8 mm) TO 36" (914.4 mm)	3'-9" (1.143 m)	5'-9" (1.753 m)
42" (1066.8 mm) TO 48" (1219.2 mm)	4'-6" (1.372 m)	6'-6" (1.981 m)
54" (1371.6 mm) TO 60" (1524.0 mm)	5'-0" (1.524 m)	7'-0" (2.134 m)
66" (1676.4 mm) TO 72" (1828.8 mm)	5'-6" (1.676 m)	7'-6" (2.286 m)

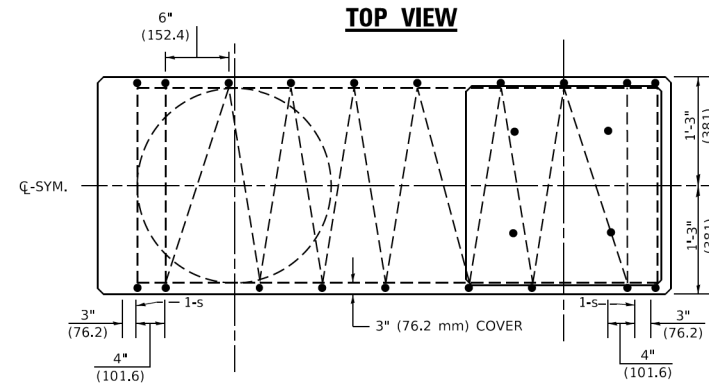
BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8'-0" (2.438 m)	□
s1	3	3	7'-6" (2.286 m)	□
v1	8	6	2'-9" (0.838 m)	—
v2				

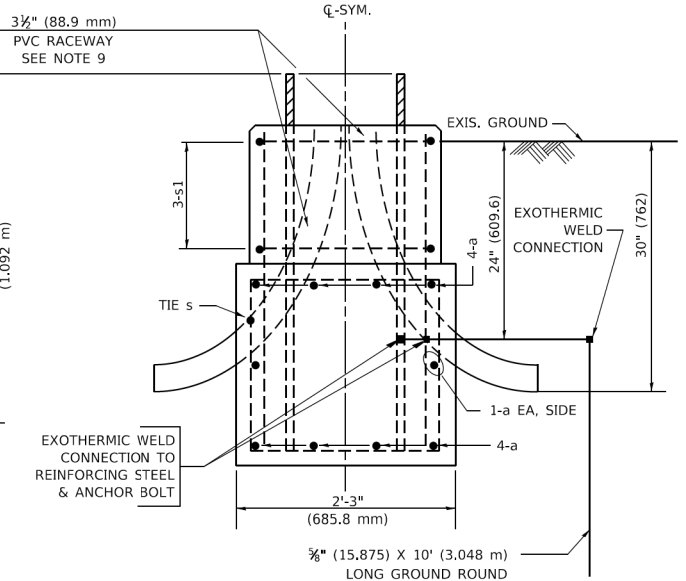
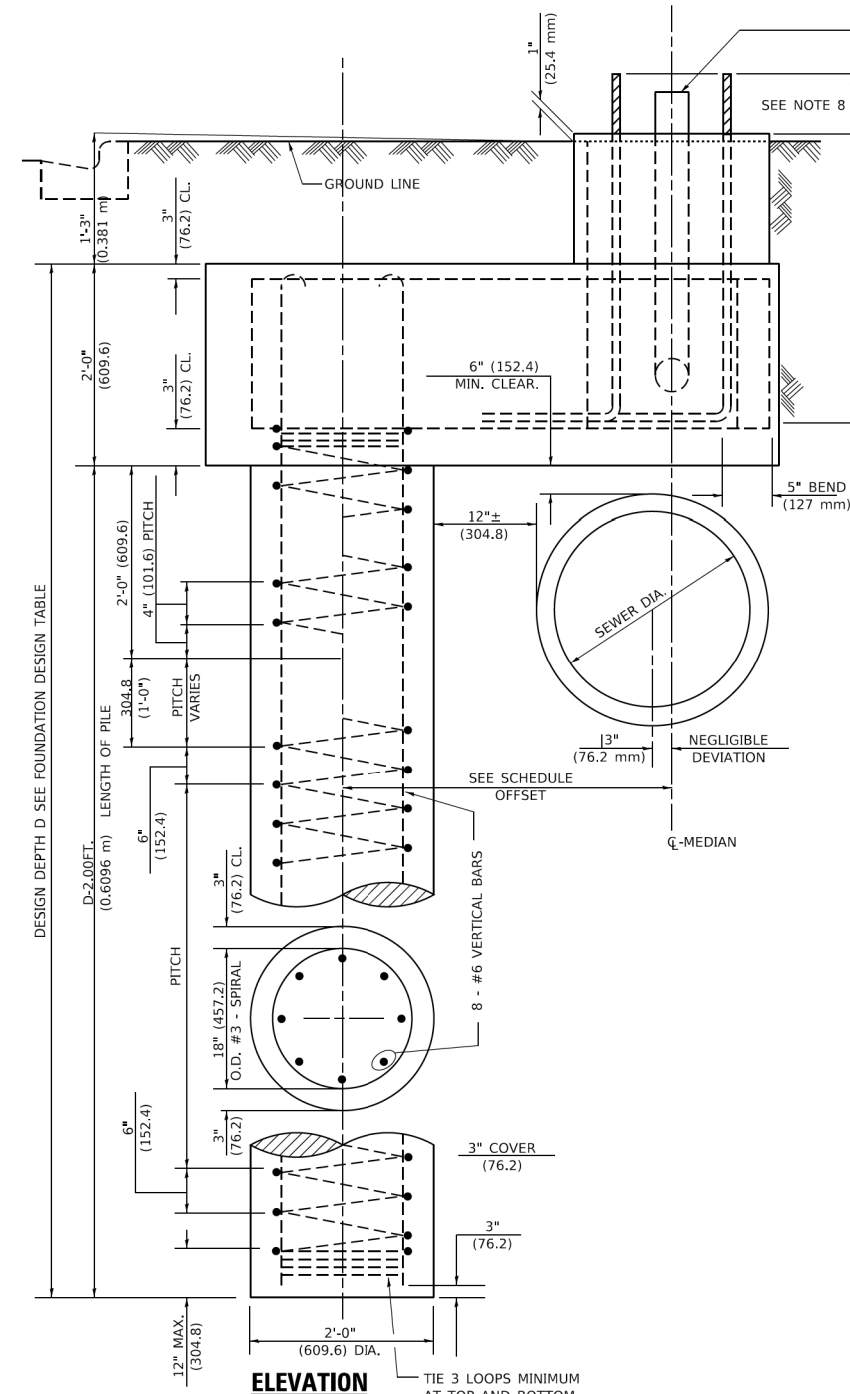
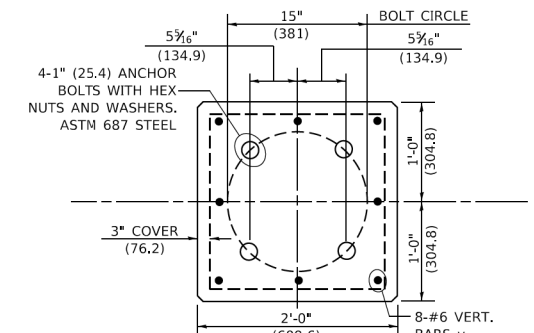
NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 23#4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.

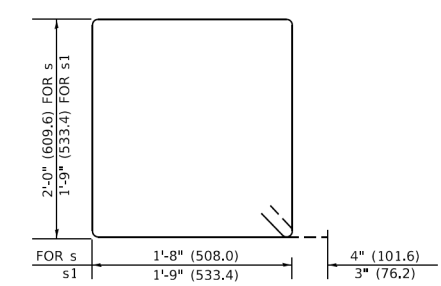
PLAN-CAP BEAM



TOP VIEW



END VIEW



BARS s, s1

HRG PROJECT NO.: 191406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191406.01-srt-dbr-eB310.dgn  
 PLOT DATE: 4/19/2019  
 PLOT SCALE: 50.0000' / 1"  
 USER: R.TOMSONS  
 TITLE: FOUNDATION DESIGN TABLE

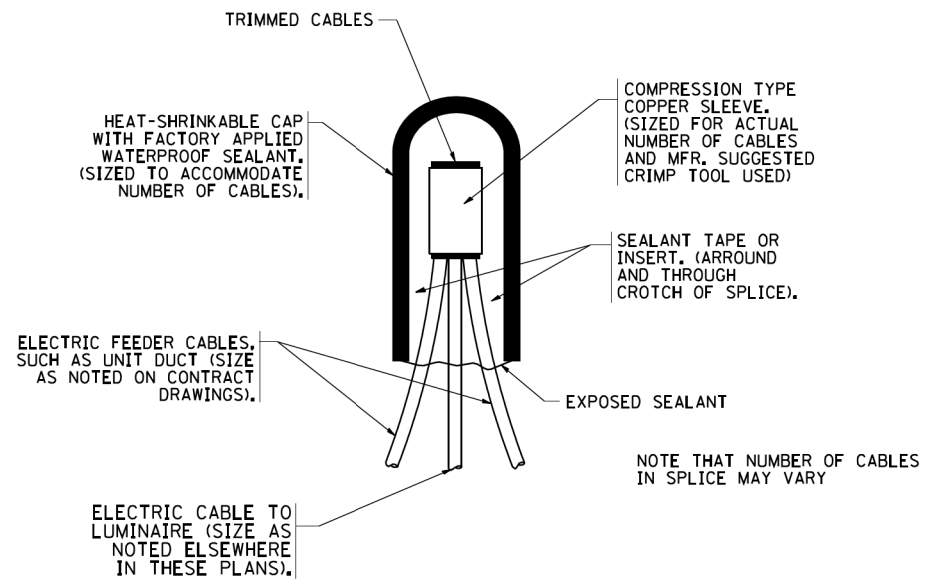
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	DRAWN -	REVISED -
PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 4/19/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION OFFSET  
40' (12.192m) TO 47 1/2' (14.478m) M.H., 15" (381mm) BOLT CIRCLE

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 94
BE310		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

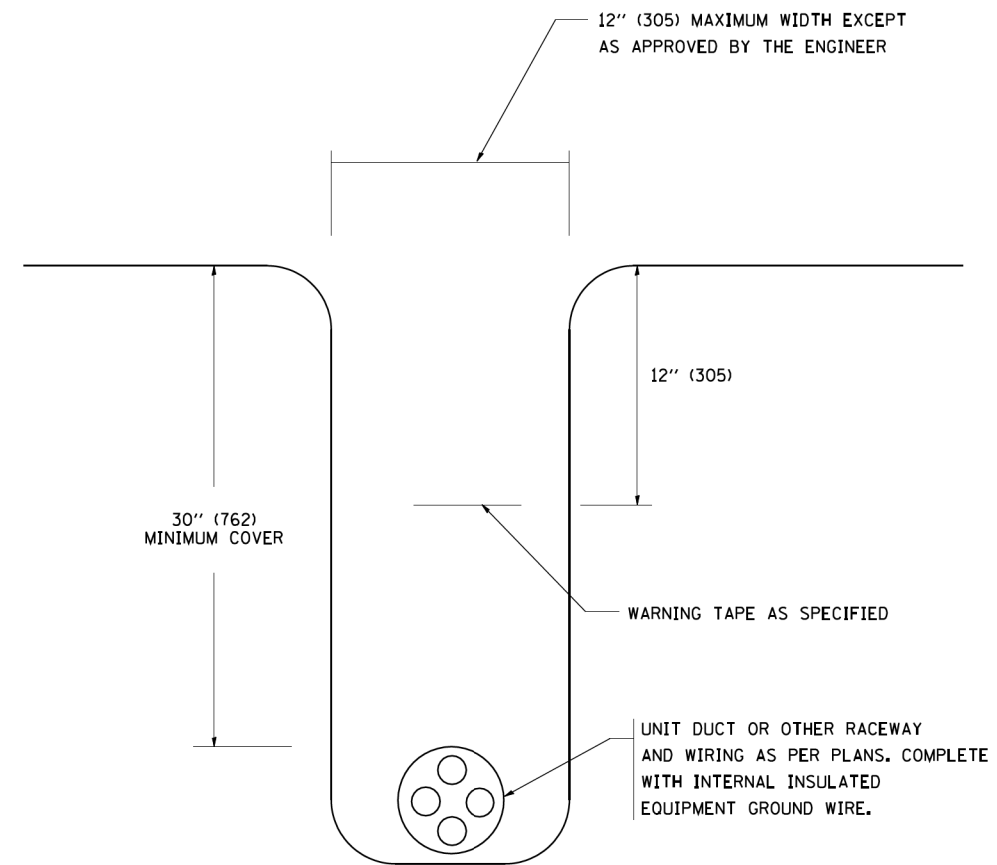
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**TYPICAL SPLICE DETAIL**

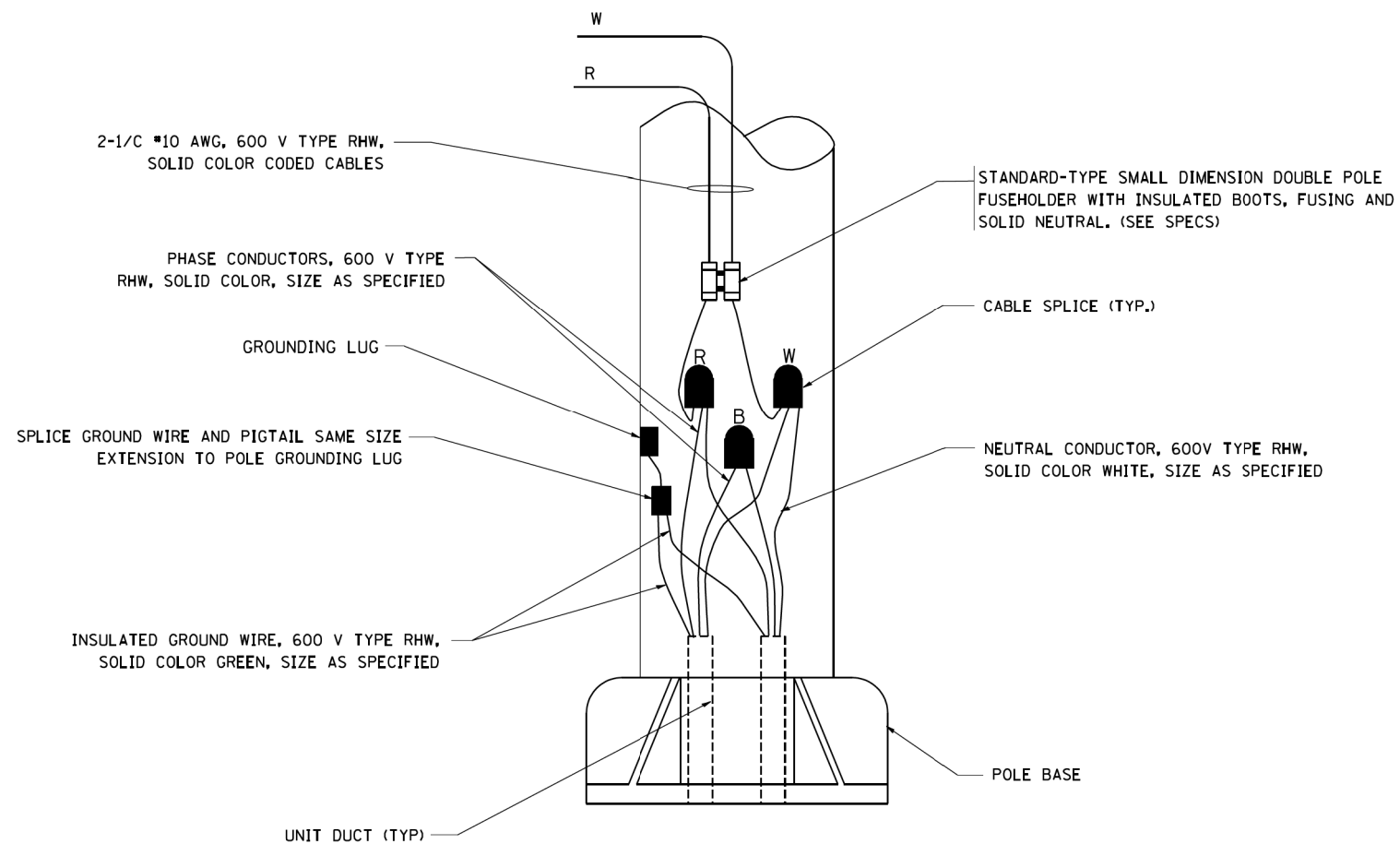
N.T.S.

NOTE THAT NUMBER OF CABLES IN SPLICE MAY VARY



**TYPICAL WIRING IN TRENCH DETAIL**

N.T.S.



**POLE WIRING DETAIL**

N.T.S.

HRG PROJECT NO.: 19405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19405.01-sht-det-be702.dgn  
 PEN TABLE: 19405.01.dwg

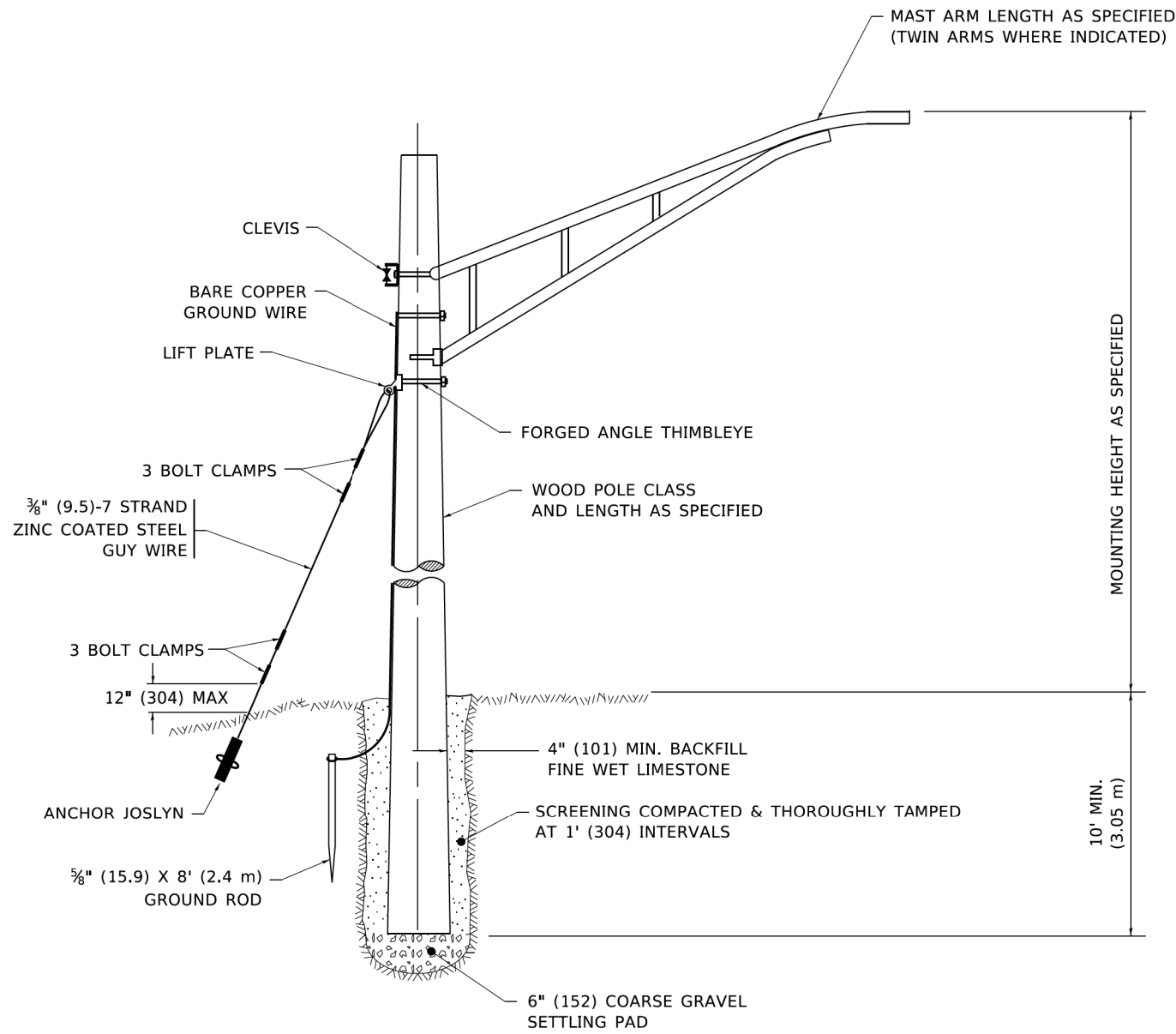
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		CHECKED -	REVISED -
		DATE -	REVISED -
PLOT SCALE = 50.000 ' / IN.			
PLOT DATE = 1/4/2008			

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MISC. ELECTRICAL DETAILS  
SHEET A**

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

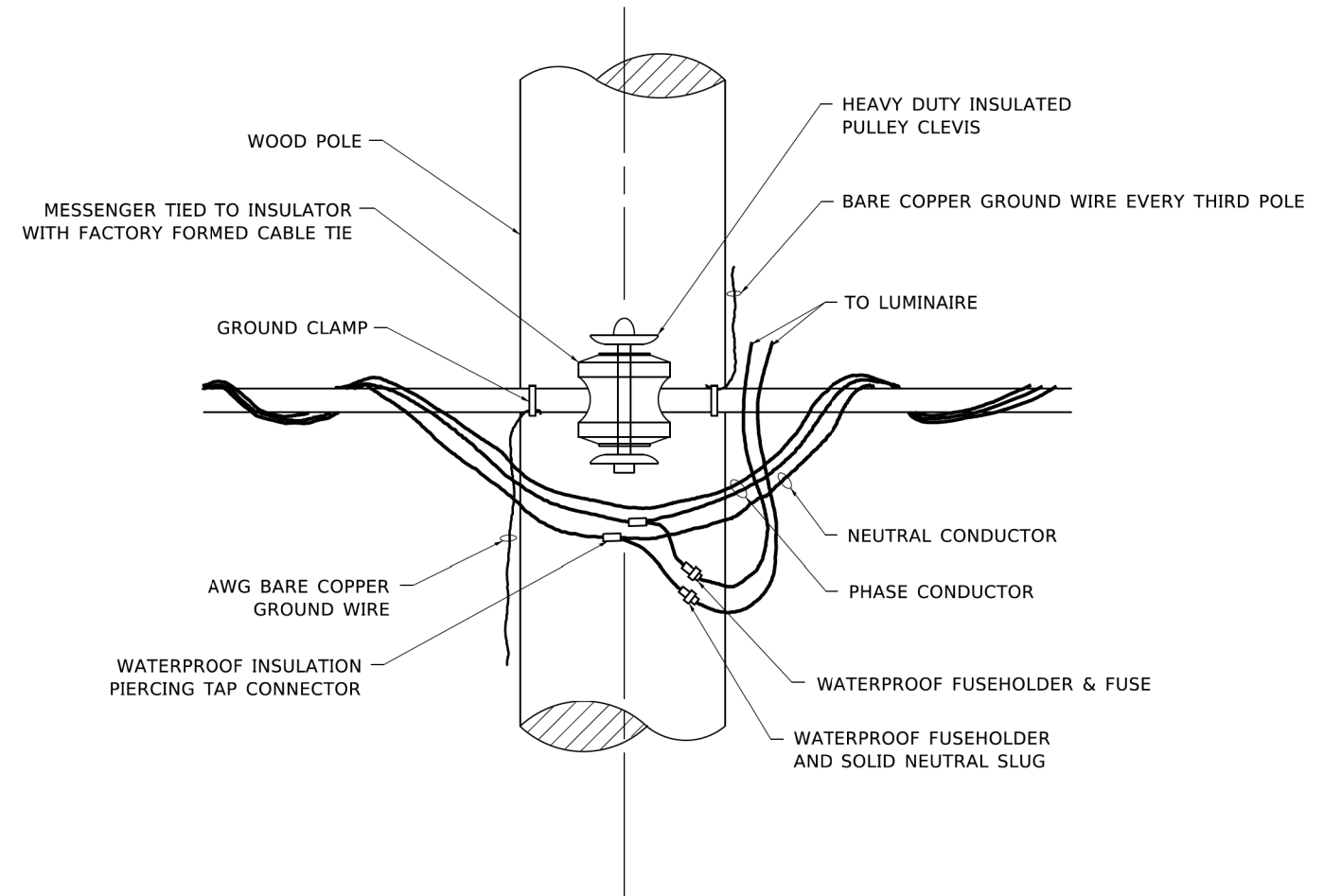
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	95
<b>BE-702</b>		<b>CONTRACT NO.</b>	61H59	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



## TEMPORARY LIGHT POLE DETAIL

### NOTE:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.



## TEMPORARY LIGHT POLE ATTACHMENT DETAIL

HRG PROJECT NO.: 19405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19405.01-sht-det-be800.dgn  
 PLOT DATE: 4/19/2019  
 PLOT SCALE: 50.0010 1/16"  
 USER: jrb  
 FILE: \\p111111\proj\19405\19405.dwg

USER NAME = jrb	DESIGNED -	REVISED - 08-08-03
	DRAWN -	REVISED - R.T. 07-26-16
PLOT SCALE = 50.0010 1/16"	CHECKED -	REVISED -
PLOT DATE = 4/19/2019	DATE -	REVISED -

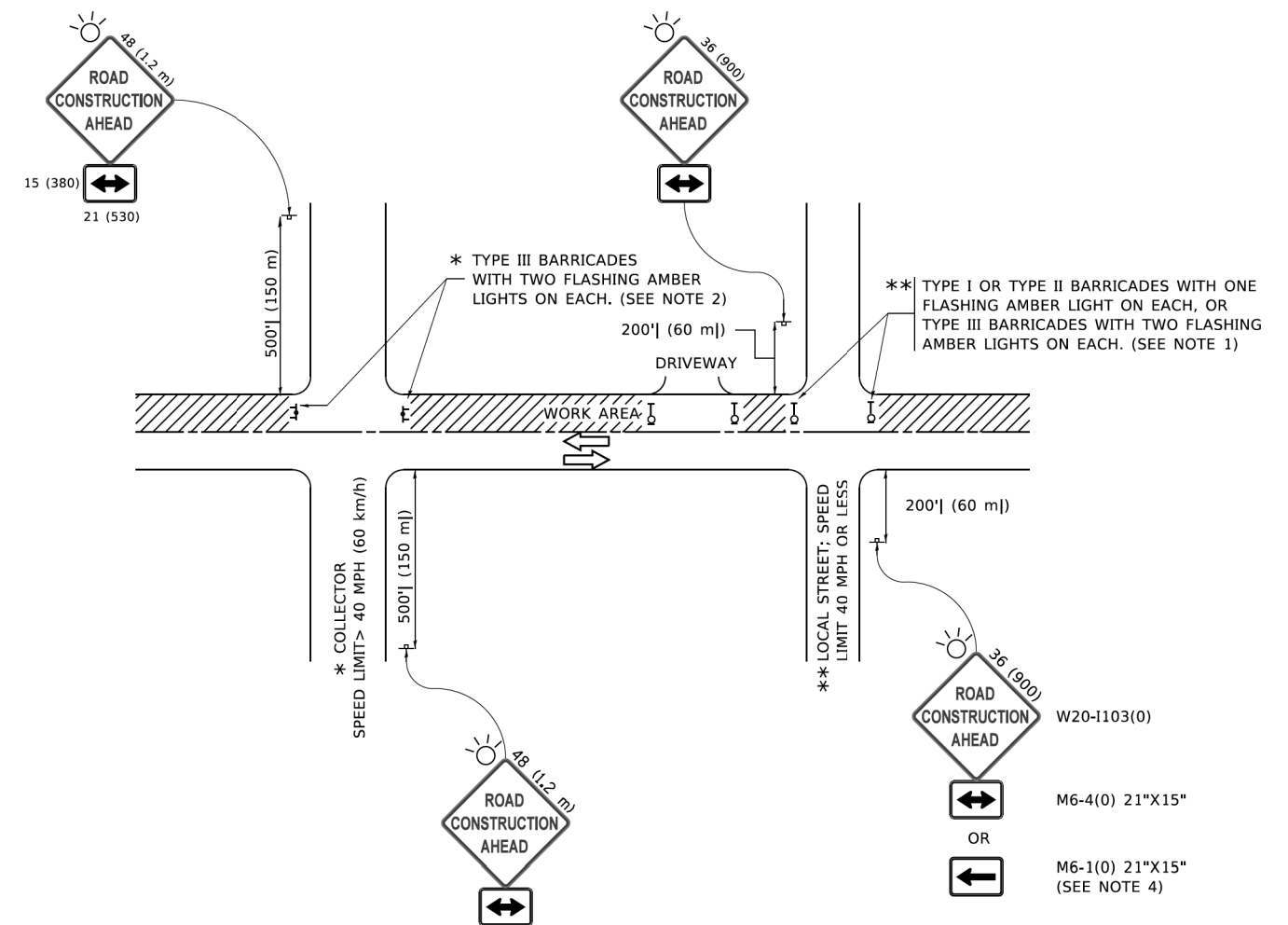
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHT POLE DETAILS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	96
BE-800		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				





**NOTES:**

- 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:
  - 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.
  - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - 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.
  - 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.
- 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.
- SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- 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.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 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.

HRG PROJECT NO.: 19405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19405.01-srt-drt-7-10.dgn  
 PLOT DATE: 3/4/2019  
 PLOT SCALE: 50.0000' / 1"  
 PLOT DATE: 3/4/2019

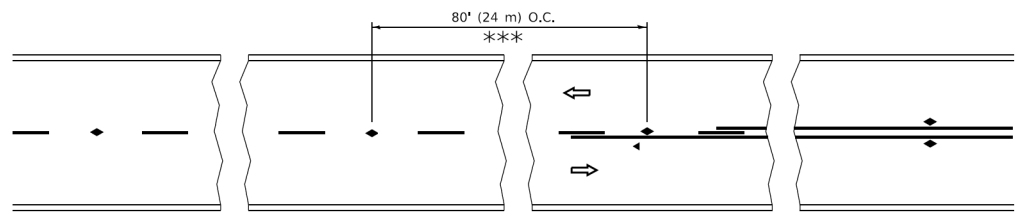
USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 3/4/2019	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

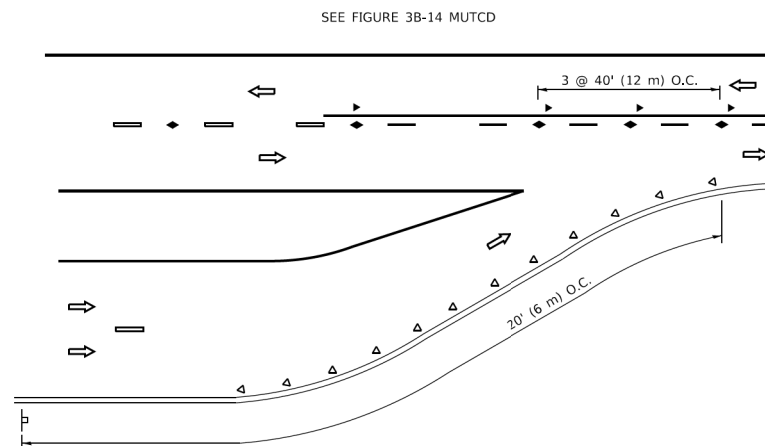
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	97
<b>TC-10</b>			CONTRACT NO. 61H59	
ILLINOIS FED. AID PROJECT				

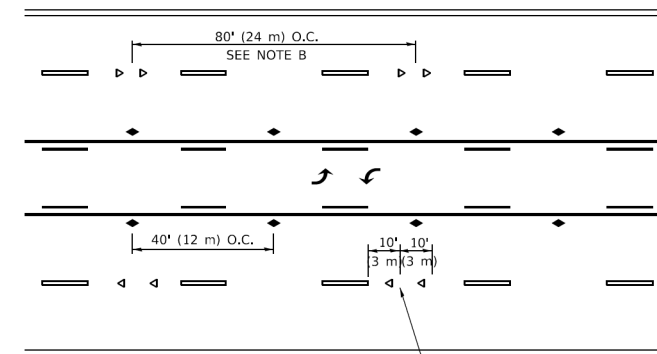


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

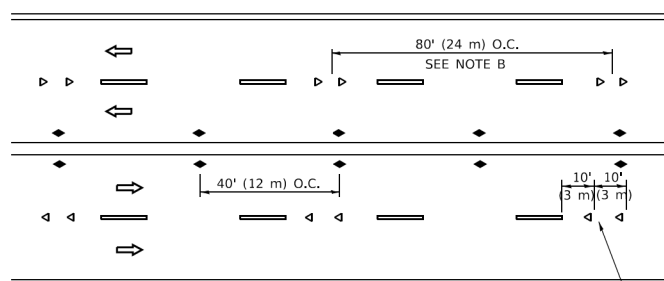
**TWO-LANE/TWO-WAY**



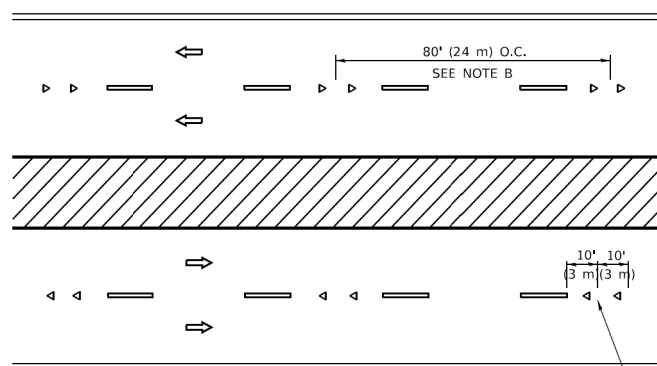
**LANE REDUCTION TRANSITION**



**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.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

**SYMBOLS**

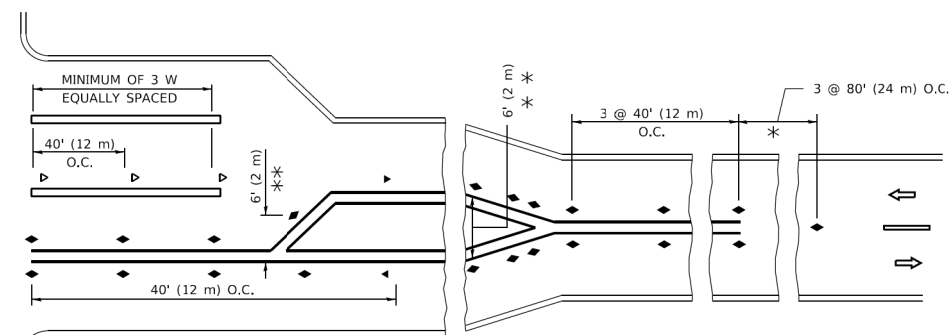
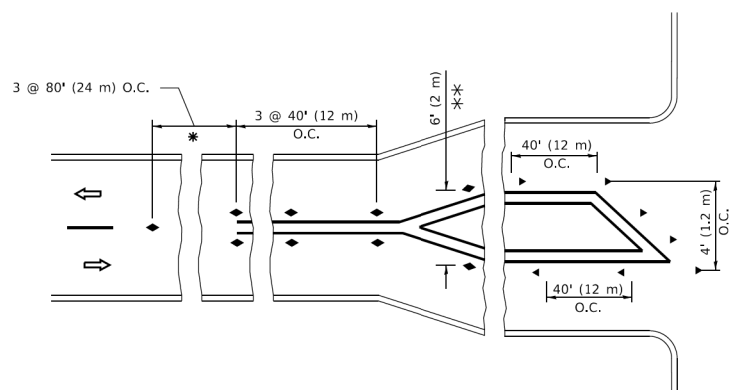
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

**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.



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

**TURN LANES**

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

HRG PROJECT NO.: 19405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19405.01-srt-drt-01.dgn  
 PLOT DATE: 3/4/2019  
 PLOT SCALE: 50.0000 1/16  
 REVISIONS: NONE  
 FILE NAME: PROJ\19405\19405.dwg

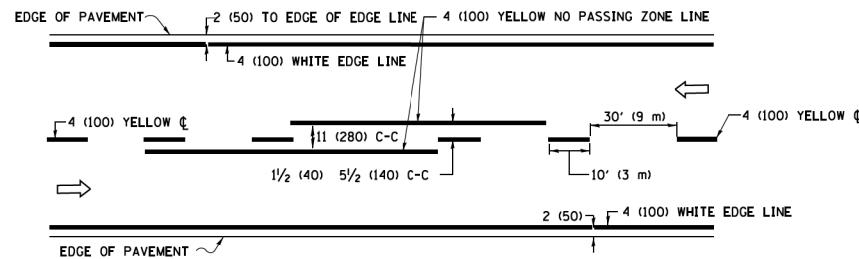
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	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 50.0000 1/16	CHECKED -	REVISED - C. JUCIUS 09-09-09
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 07-01-13

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

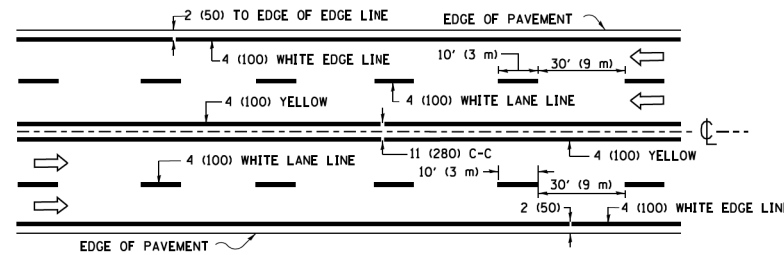
**TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

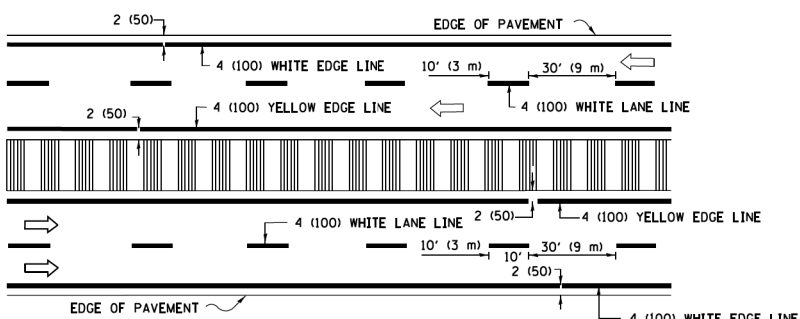
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	98
TC-11		CONTRACT NO. 61H59		
ILLINOIS		FED. AID PROJECT		



**2-LANE ROADWAY**

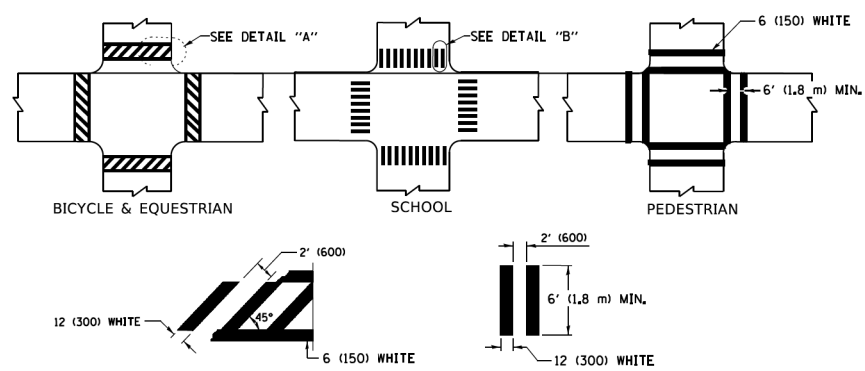


**MULTI-LANE UNDIVIDED**

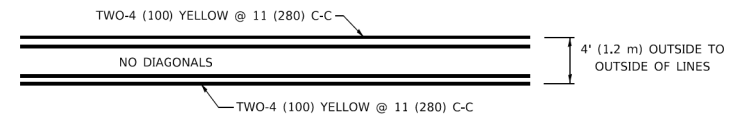


**MULTI-LANE DIVIDED WITH MEDIAN**

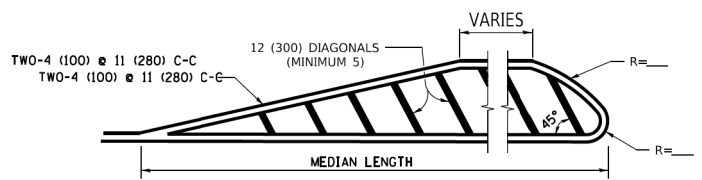
**TYPICAL LANE AND EDGE LINE MARKING**



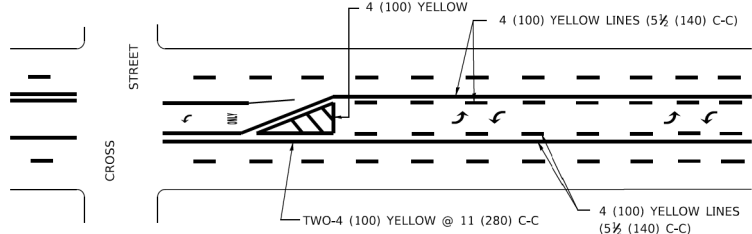
**TYPICAL CROSSWALK MARKING**



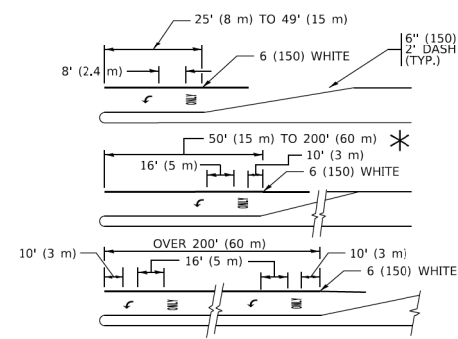
**4' (1.2 m) WIDE MEDIANS ONLY**



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

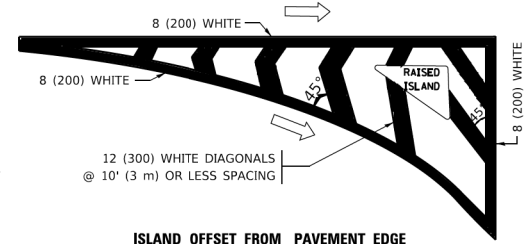


**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**

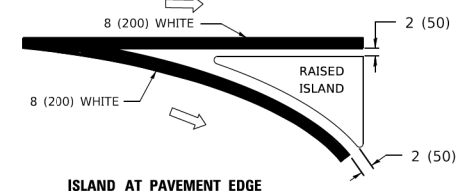


**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**

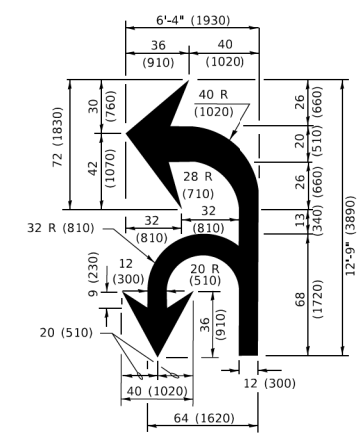


**ISLAND OFFSET FROM PAVEMENT EDGE**

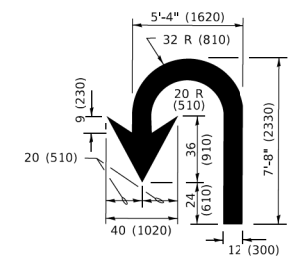


**ISLAND AT PAVEMENT EDGE**

**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

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

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR 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) 2' (600) @ 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 (30 MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15' 6" (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 <sup>2</sup> EACH) "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

HRG PROJECT NO: 191404.01  
 HRG PROJ CONTACT:  
 FILE NAME: 191404.01-srt-dbt-7-03.dgn  
 PROJECT: ILLINOIS STATE HIGHWAY DEPARTMENT  
 PROJECT: ILLINOIS STATE HIGHWAY DEPARTMENT  
 PROJECT: ILLINOIS STATE HIGHWAY DEPARTMENT  
 PROJECT: ILLINOIS STATE HIGHWAY DEPARTMENT

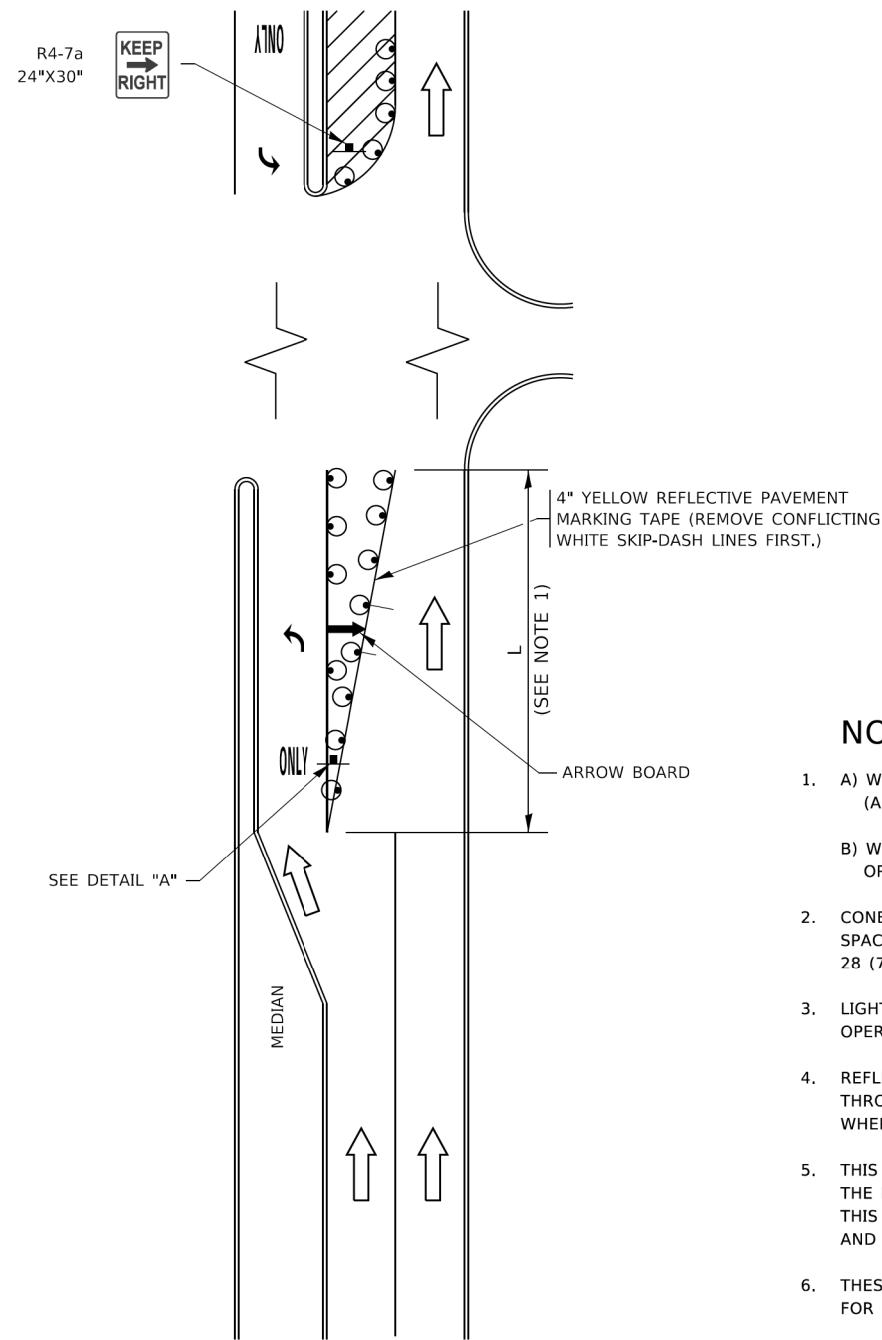
USER NAME	DESIGNED	REVISED
= footemj	- EVERS	- C. JUCIUS 09-09-09
	-	- C. JUCIUS 07-01-13
	-	- C. JUCIUS 12-21-15
	-	- C. JUCIUS 04-12-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE	
TYPICAL PAVEMENT MARKINGS	
SCALE: NONE	SHEET 1 OF 2 SHEETS STA. TO STA.

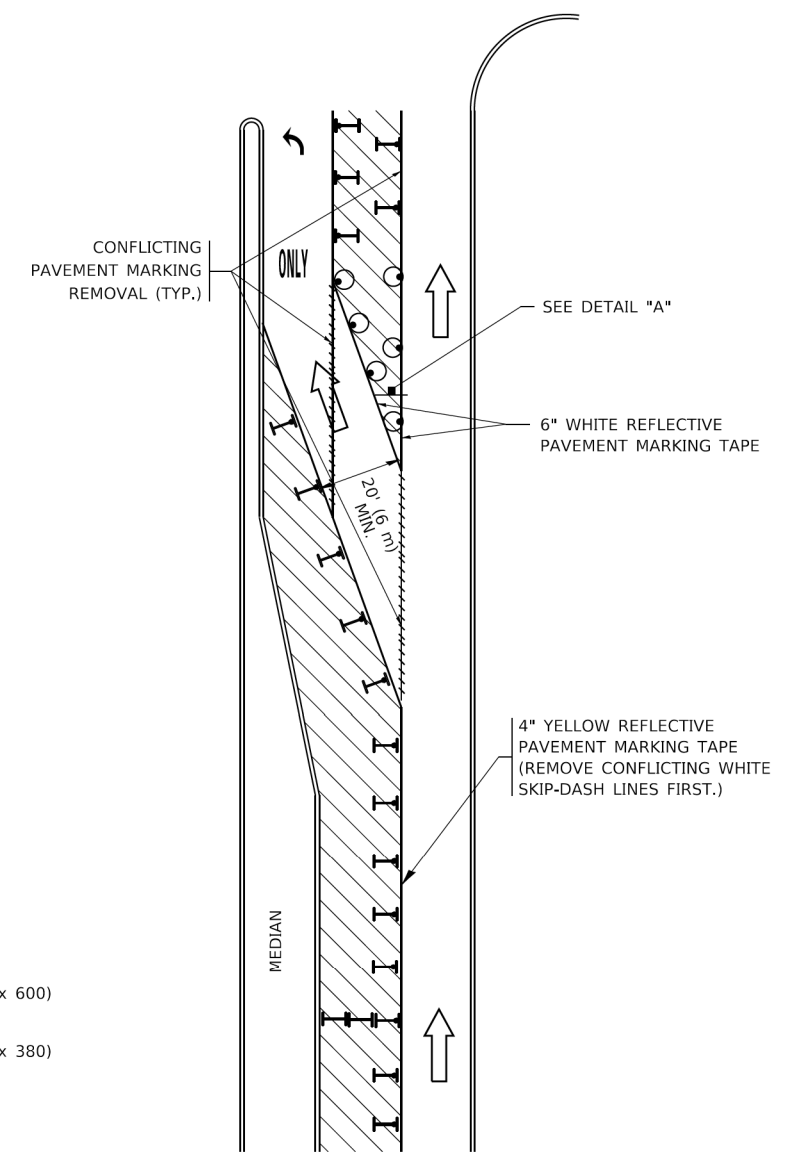
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	99
<b>TC-13</b>		CONTRACT NO. 61H59		
ILLINOIS		FED. AID PROJECT		

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



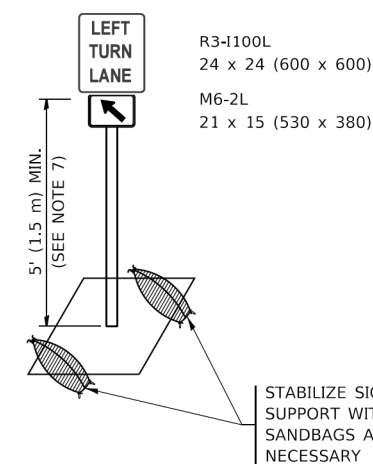
**FIGURE 2**

### LEGEND

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

### NOTES:

1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



**DETAIL A**

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

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-dbt-TC14.dgn  
 PLOT DATE: 3/4/2019  
 PLOT SCALE: 1/8" = 1'-0"  
 PLOT DATE: 3/4/2019

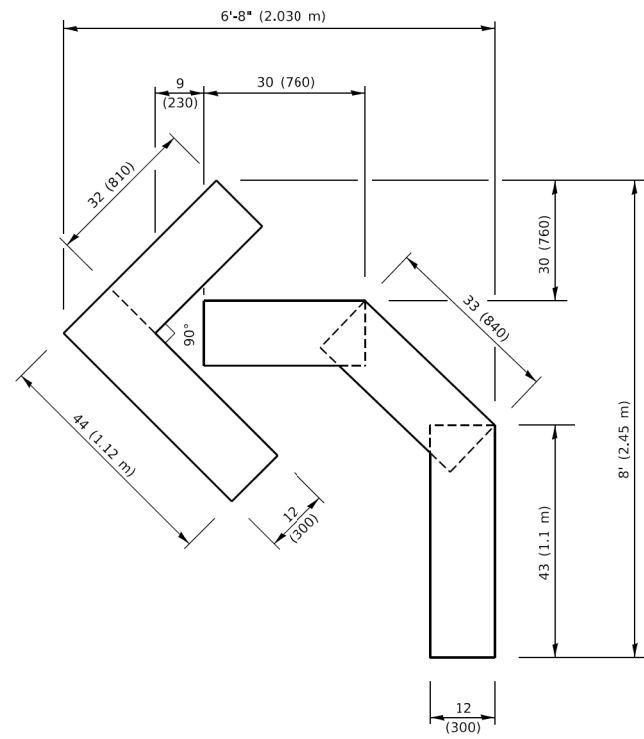
USER NAME = footemj	DESIGNED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
	DRAWN - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13
PLOT SCALE = 50.0000' / 1"	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 3/4/2019	DATE - T. RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

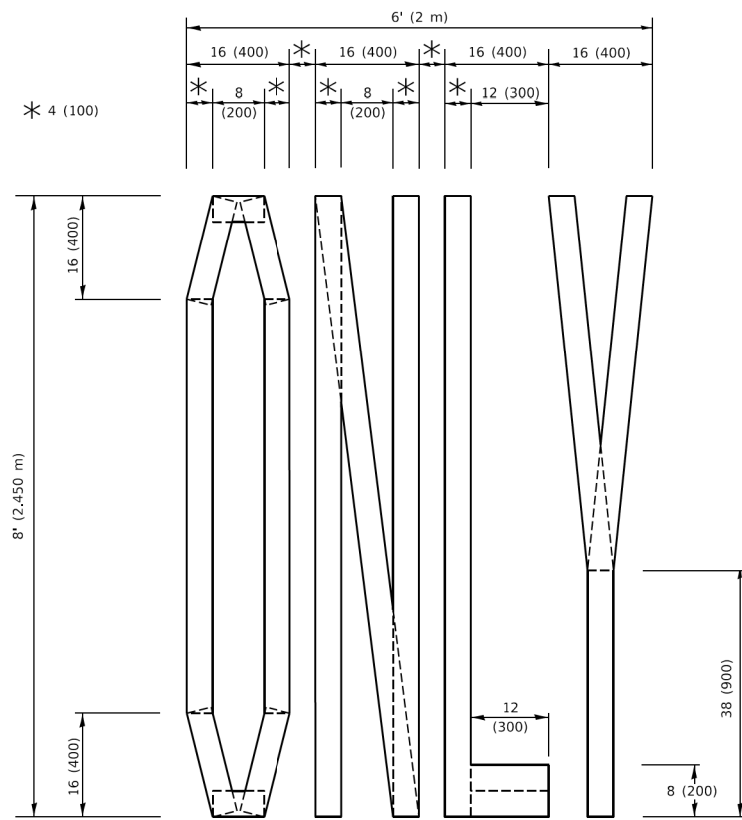
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	100
TC-14		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



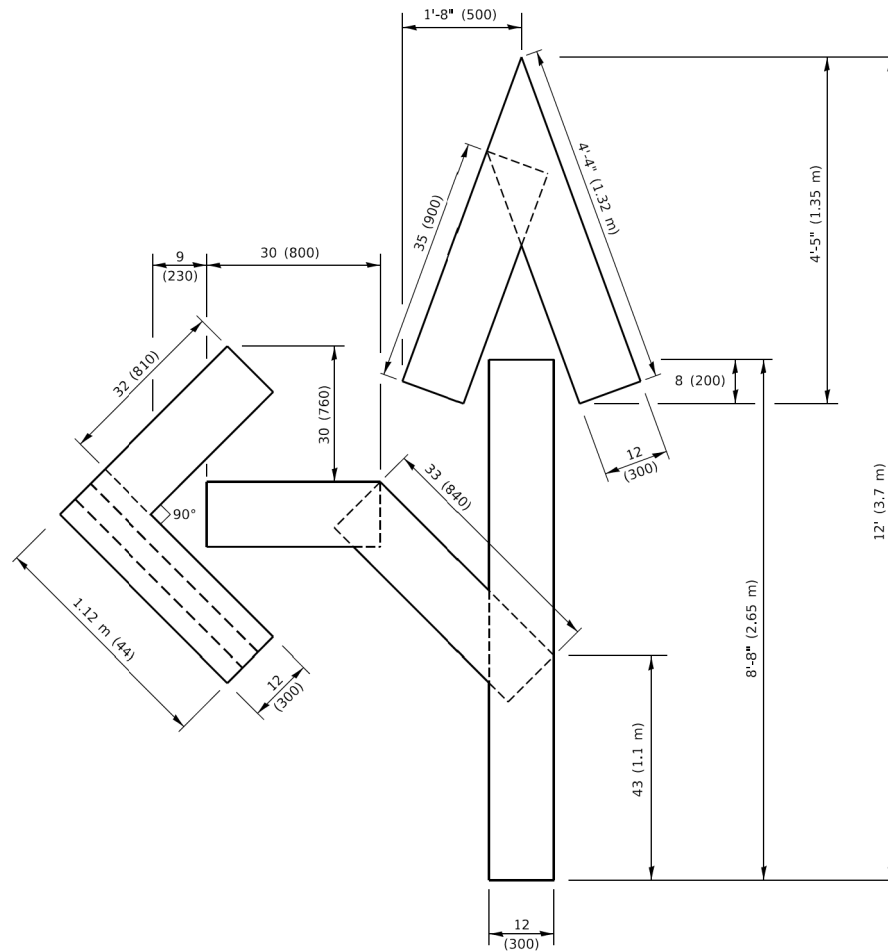
**QUANTITY**

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)

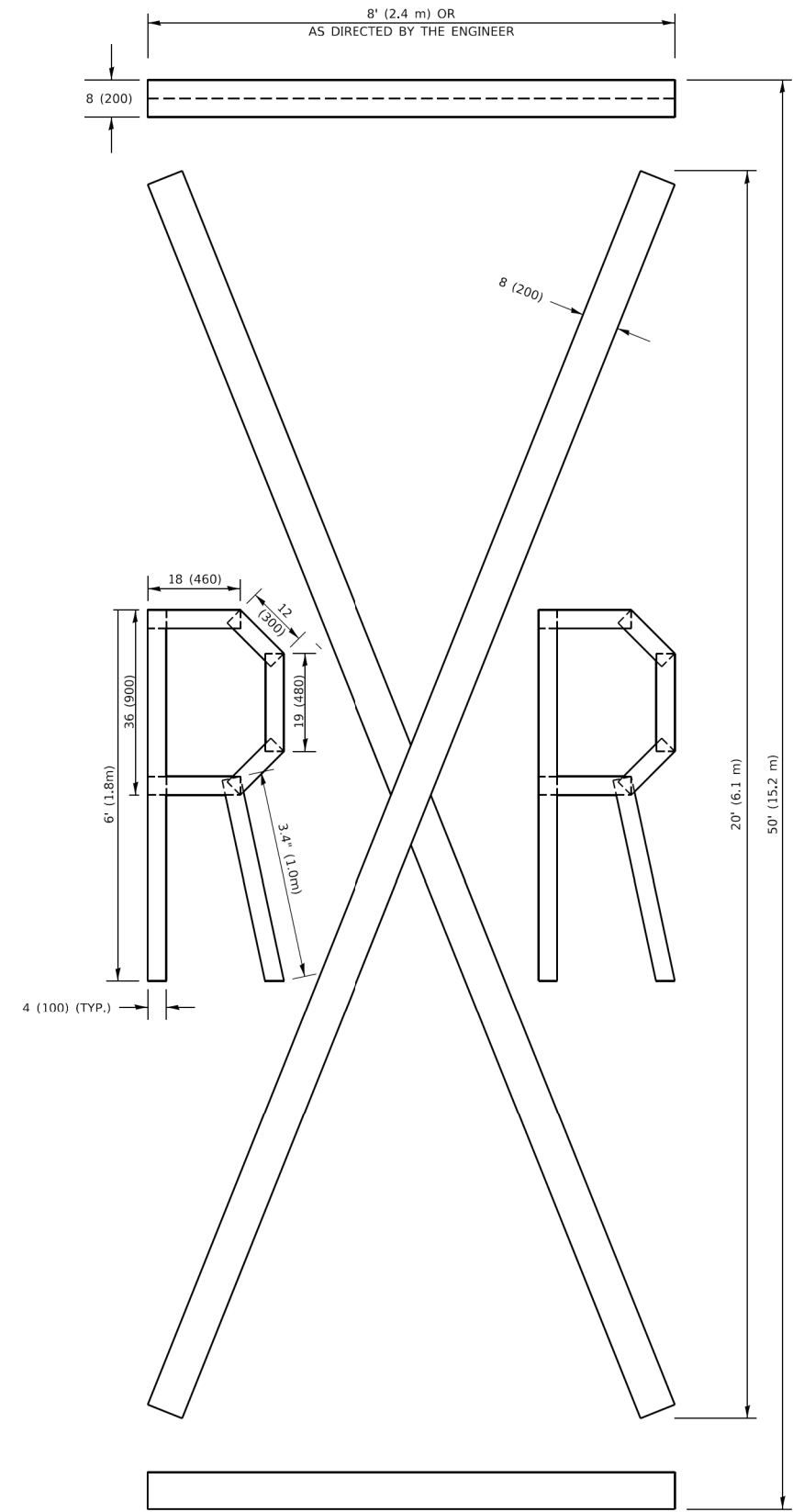


**QUANTITY**

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.

HRG PROJECT NO.: 19406.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 19406.01-srt-drt-TC16.dgn  
 PLOT DATE: 3/4/2019  
 PLOT SCALE: 50.0068" / in.  
 PLOT DATE: 3/4/2019  
 FILE NAME: P:\1108\FEB\NITEG\Illinois.gov\PR\WIDOT\Documents\DOT\_Offices\Berket\_1\Projects\BIS\S22\22-34\CAD\B3A\CAD\Sheets\TC16.dgn

USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
	DRAWN -	REVISED - E. GOMEZ 08-28-00
PLOT SCALE = 50.0068" / in.	CHECKED -	REVISED - E. GOMEZ 08-28-00
PLOT DATE = 3/4/2019	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 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	101
<b>TC-16</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

HRG PROJECT NO.: 191405.01  
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 PLOT DATE: 3/4/2019 10:46:33 AM  
 REVISIONS: NONE  
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**ROUTE MARKERS**

FOR U.S. ROUTES  
M1-40-2424

FOR ILLINOIS ROUTES  
M1-50-2424

R.R. UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND

**ARROWS SIGNS**

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-2-2115

M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

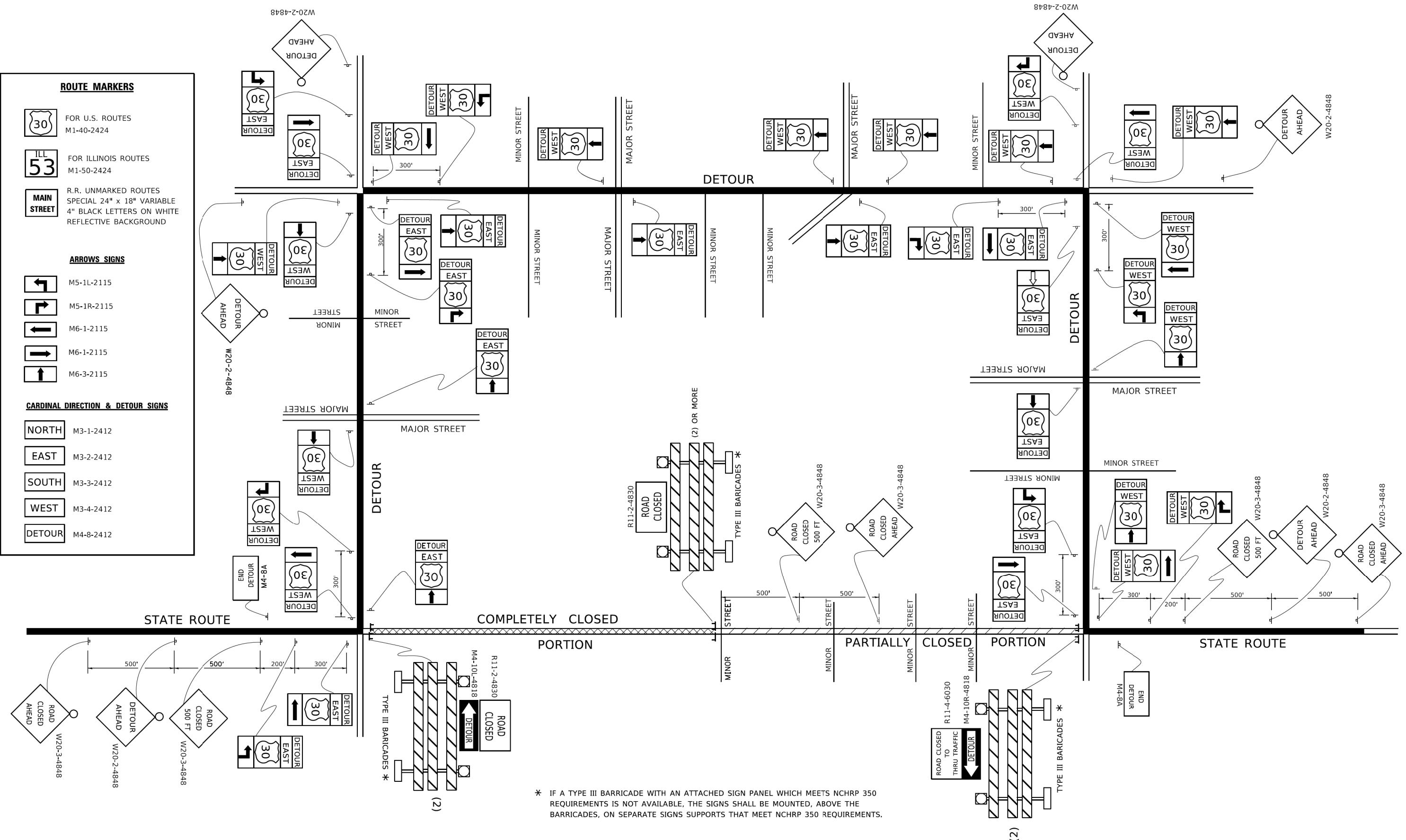
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

USER NAME = footemj	DESIGNED -	REVISED - 10-18-02
	DRAWN -	REVISED - R. BORO 09-14-09
PLOT SCALE = 50,0000 ' / 1.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

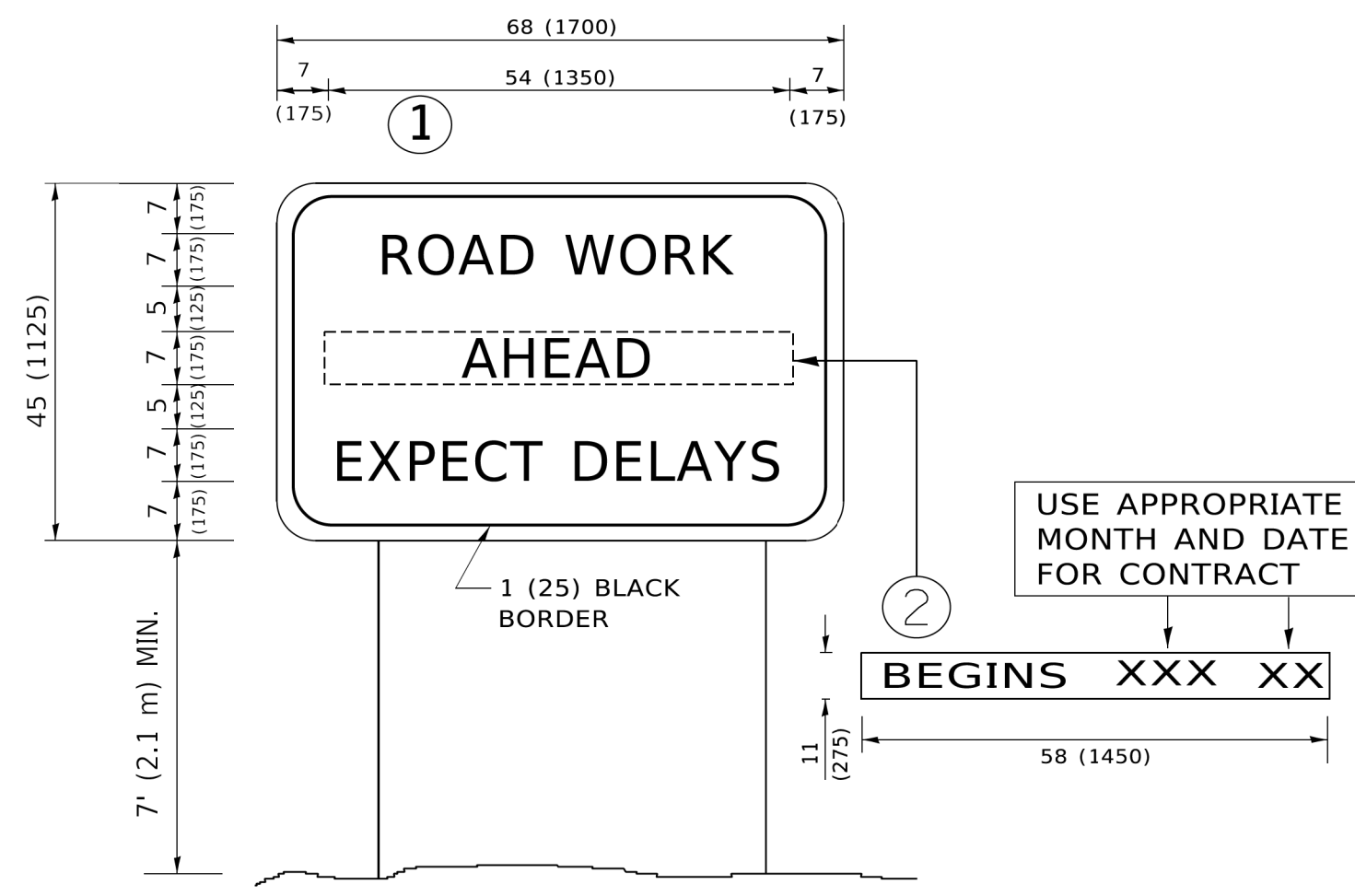
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETOUR SIGNING  
FOR CLOSING STATE HIGHWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 102
<b>TC-21</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				

HRG PROJECT NO.: I9405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: I9405.01-sht-dg+tc22.dgn  
 PLOT DATE: 3/4/2019 10:48:10 AM  
 REVISIONS: NONE  
 FILE NAME: I:\08\BIDDING\ILLINOIS\DOT\Documents\DOT Offices\District 1\Projects\I9405.01\CADData\CADsheets\TC22.dgn



**NOTES:**

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

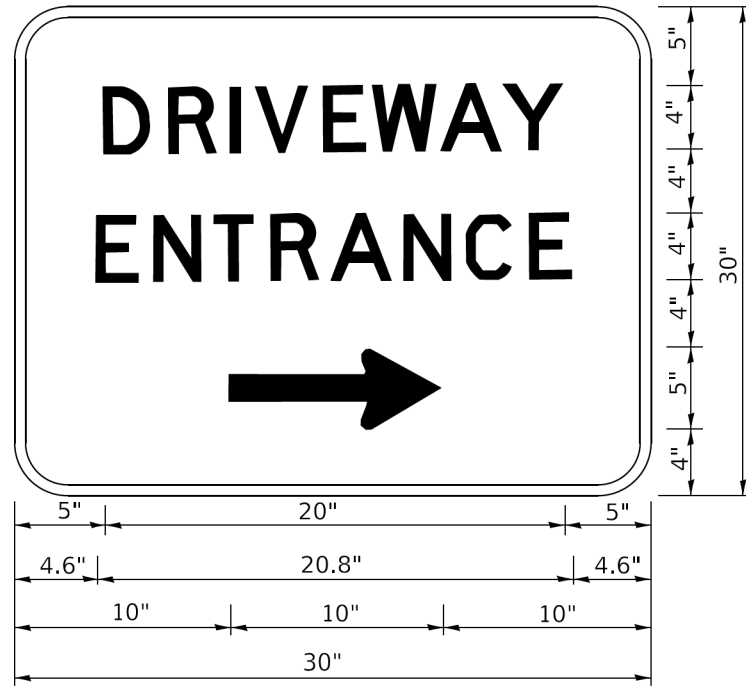
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = footemj	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>ARTERIAL ROAD INFORMATION SIGN</b>			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	103
<b>TC-22</b>		CONTRACT NO. 61H59		
ILLINOIS FED. AID PROJECT				



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

**NOTES:**

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

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-dgn-1-c26.dgn  
 PLOT DATE: 3/4/2019 10:59:25 AM  
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USER NAME = footemj	DESIGNED -	REVISED - C. JUCIUS 02-15-07
	DRAWN -	REVISED -
PLOT SCALE = 50,0000 ' / ft.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

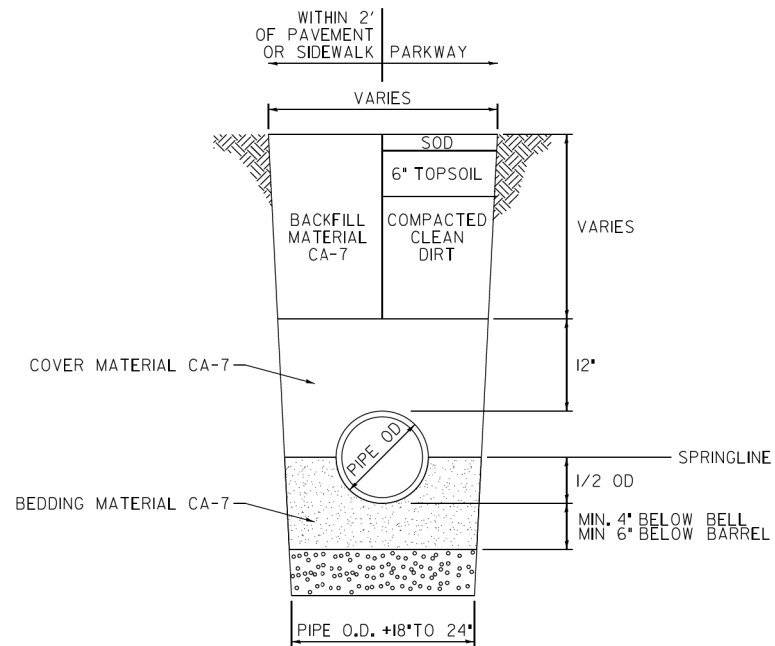
**DRIVEWAY ENTRANCE SIGNING**

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	104
<b>TC-26</b>			CONTRACT NO. 61H59	
ILLINOIS FED. AID PROJECT				



DESIGNED	- TJP
DRAWN	- RJR
CHECKED	- DJR



**PIPE TRENCH DETAIL**

NOTE: BACKFILL WITH FA-6 SAND FULL DEPTH WITHIN COOK COUNTY R.O.W.

**NOTES:**

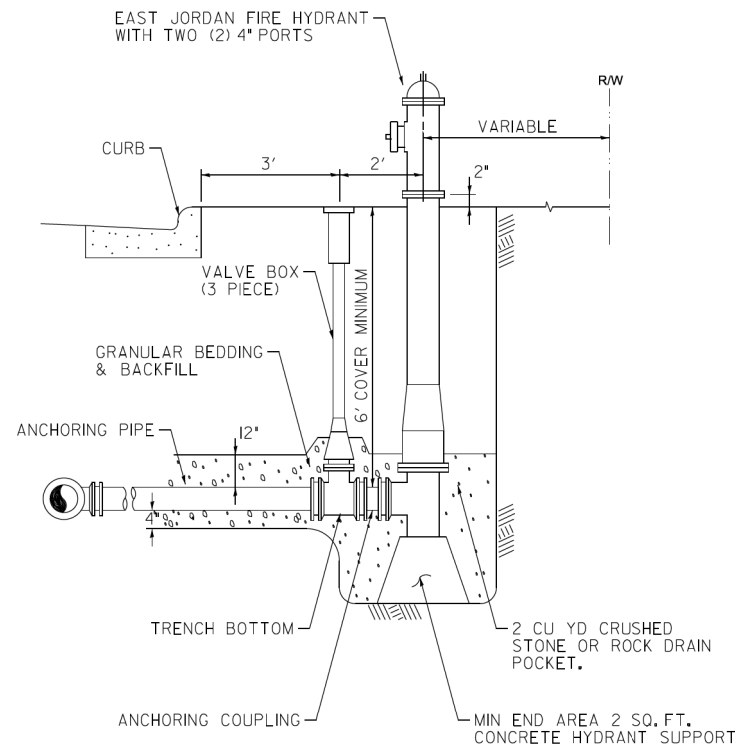
ALL TRENCH EXCAVATIONS SHALL MEET OSHA REQUIREMENTS.

IF APPROVED BY THE VILLAGE FOR USE BETWEEN APRIL 16 AND OCTOBER 31 ONLY, A ONE (1) INCH THICK STEEL PLATE SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR UNTIL THE SURFACE RESTORATION IS COMPLETE. THE PLATE SHALL BE PROTECTED FROM SLIDING AND PROVIDED WITH BITUMINOUS RAMPS IF REQUIRED BY VILLAGE.

REFER TO PAVEMENT PATCH DETAIL FOR PAVEMENT RESTORATION

USER NAME = RJR	<b>PIPE TRENCH DETAIL</b>	TOTAL SHEETS	SHEET NO.
PLOT SCALE = NTS		01	01
PLOT DATE = SEPT 2015	<b>VILLAGE OF NILES</b>		

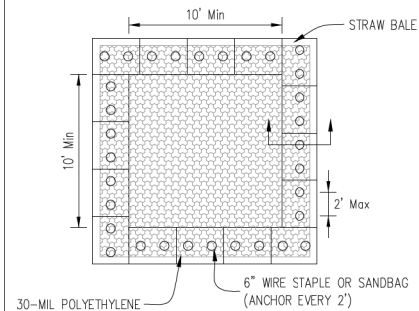
DESIGNED	- TJP
DRAWN	- RJR
CHECKED	- DJR



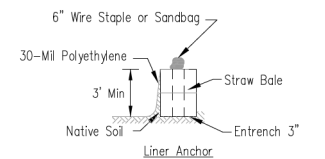
**TYPICAL HYDRANT DETAIL**

USER NAME = RJR	<b>TYPICAL HYDRANT DETAIL</b>	TOTAL SHEETS	SHEET NO.
PLOT SCALE = NTS		01	01
PLOT DATE = SEPT 2015	<b>VILLAGE OF NILES</b>		

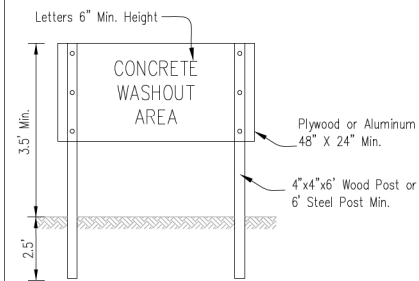
AUTOCAD2006



**PLAN VIEW**



**STRAW BALE ANCHOR SECTIONS**



**SIGN DETAIL**

**NOTES:**

- Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
- Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
- Each straw bale s to be staked in place using (2) 2"x2"x4' wooden stakes.

8" x 11" SHEET 6/27/15 6/27/15	<b>TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE</b>		Designed _____	Date _____
			Drawn R. JOHNSON	6/28/15
			Checked _____	Approved _____

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-sht-01.dgn  
 PEN TABLE: 191405.tbl



USER NAME = mzuzzio	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

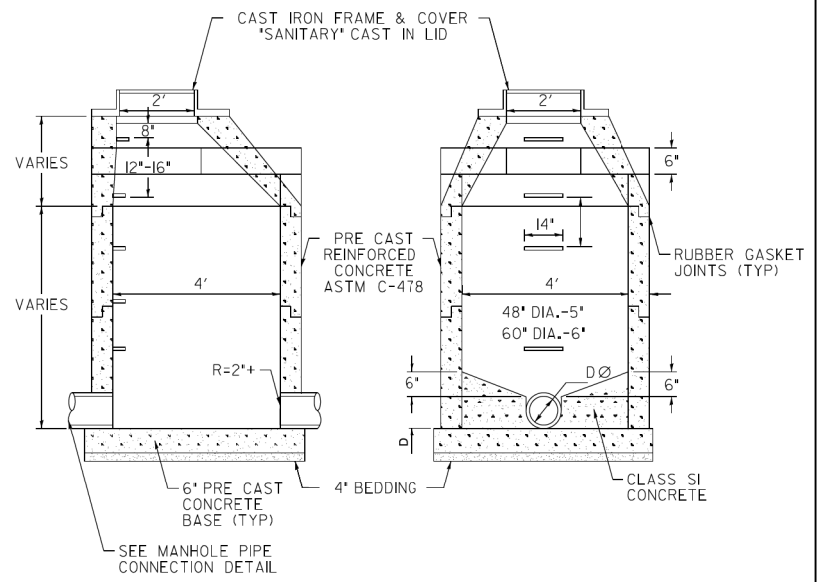
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**VILLAGE OF NILES DETAILS  
TOUHY AVENUE /HARTS ROAD /GROSS POINT ROAD**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	105
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			<b>CONTRACT NO. 61H59</b>	

DESIGNED	- TJP
DRAWN	- RJR
CHECKED	- DJR

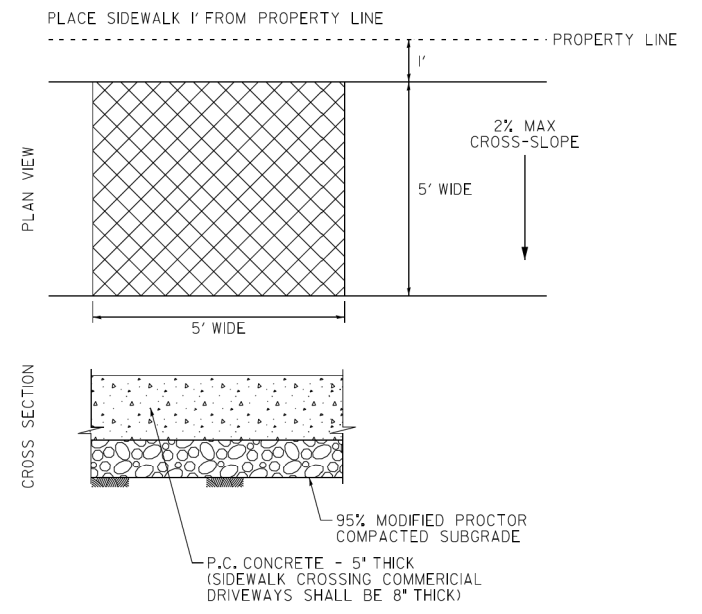


**PRE CAST CONCRETE MANHOLE DETAIL**

NOTES: INSTALL INSPECTION MANHOLE, MINIMUM 48\"/>

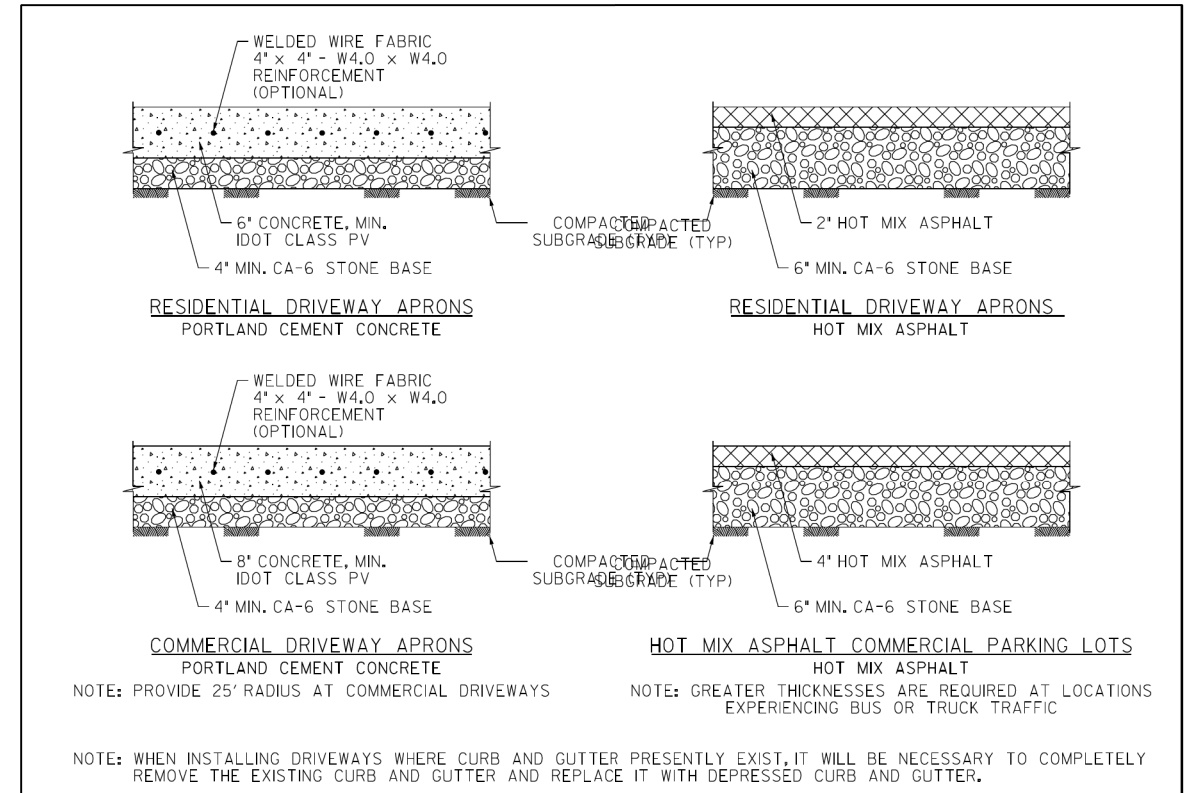
USER NAME = RJR	PRECAST CONCRETE MANHOLE DETAIL		
PLOT SCALE = NTS			
PLOT DATE = SEPT 2015		01	01

DESIGNED	- TJP
DRAWN	- RJR
CHECKED	- DJR



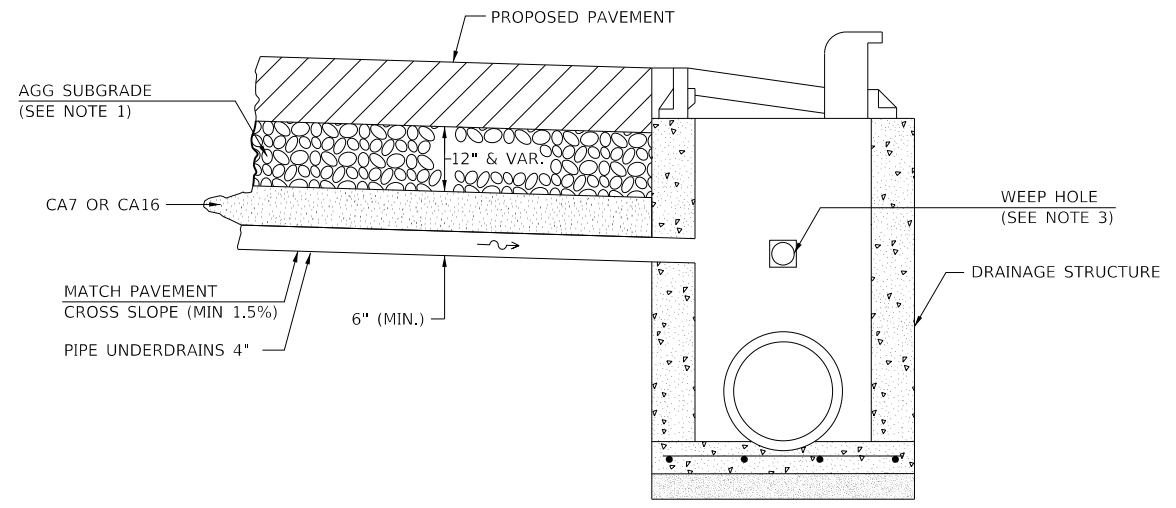
NOTES:  
 SETTLED OR CRACKED PUBLIC SIDEWALK IS TO BE REMOVED AND REPLACED.  
 NEW SIDEWALK TO BE PLACED ON 4\"/>

USER NAME = RJR	SIDEWALK REPLACEMENT DETAIL	TOTAL SHEETS	SHEET NO.
PLOT SCALE = NTS			
PLOT DATE = SEPT 2015	VILLAGE OF NILES	01	01



NOTE: WHEN INSTALLING DRIVEWAYS WHERE CURB AND GUTTER PRESENTLY EXIST, IT WILL BE NECESSARY TO COMPLETELY REMOVE THE EXISTING CURB AND GUTTER AND REPLACE IT WITH DEPRESSED CURB AND GUTTER.

USER NAME = RJR	DESIGNED - TJP	PAVEMENT DETAIL PCC AND HMA	TOTAL SHEETS	SHEET NO.
PLOT SCALE = NTS	DRAWN - RJR			
PLOT DATE = JULY 2019	CHECKED - DJR	VILLAGE OF NILES	01	01



**PIPE UNDERDRAINS WITH OUTLET TO DRAINAGE STRUCTURE IN CURB**

NOTES:  
 1. TRANSVERSE PIPE UNDERDRAINS SHALL BE INSTALLED ACROSS THE BOTTOM OF THE AGGREGATE SUBGRADE AT ALL LOCATIONS WHERE THERE IS A SAG IN THE PROPOSED PROFILE GRADE LINE (PGL), DESIGNATED ON THE PLANS OR WHERE UNDERDRAINS ARE REQUIRED. SEE PLAN AND PROFILES FOR LOCATIONS. THIS WORK SHALL COMPLETED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS AND STANDARD 601001-05.  
 2. DRAINAGE STRUCTURES (CATCH BASINS, INLETS OR MANHOLES PER PLANS) WHICH HAVE PIPE UNDERDRAIN CONNECTIONS SHALL INCLUDE FOUR (4) WEEP HOLES, INCLUDING DRAINAGE FABRIC, IN ACCORDANCE WITH CITY OF AURORA STANDARDS. ALL OTHER DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH TYPICAL IDOT HIGHWAY STANDARDS.  
 3. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR PIPE UNDERDRAINS OF THE DIAMETER SPECIFIED, WHICH PRICE SHALL INCLUDE THE CA7 OR CA16. ALL EQUIPMENT, LABOR AND MATERIALS REQUIRED TO CONNECT THE PIPE UNDERDRAINS TO THE PROPOSED DRAINAGE STRUCTURES, AS WELL AS THE ADDITION OF WEEP HOLES AND DRAINAGE FABRIC, WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR THE DRAINAGE STRUCTURES.

HRG PROJECT NO.: 191405.01  
 HRG PROJ. CONTACT:  
 FILE NAME: 191405.01-srt-dbt-02.dgn  
 PEN TABLE: 191405.tbl

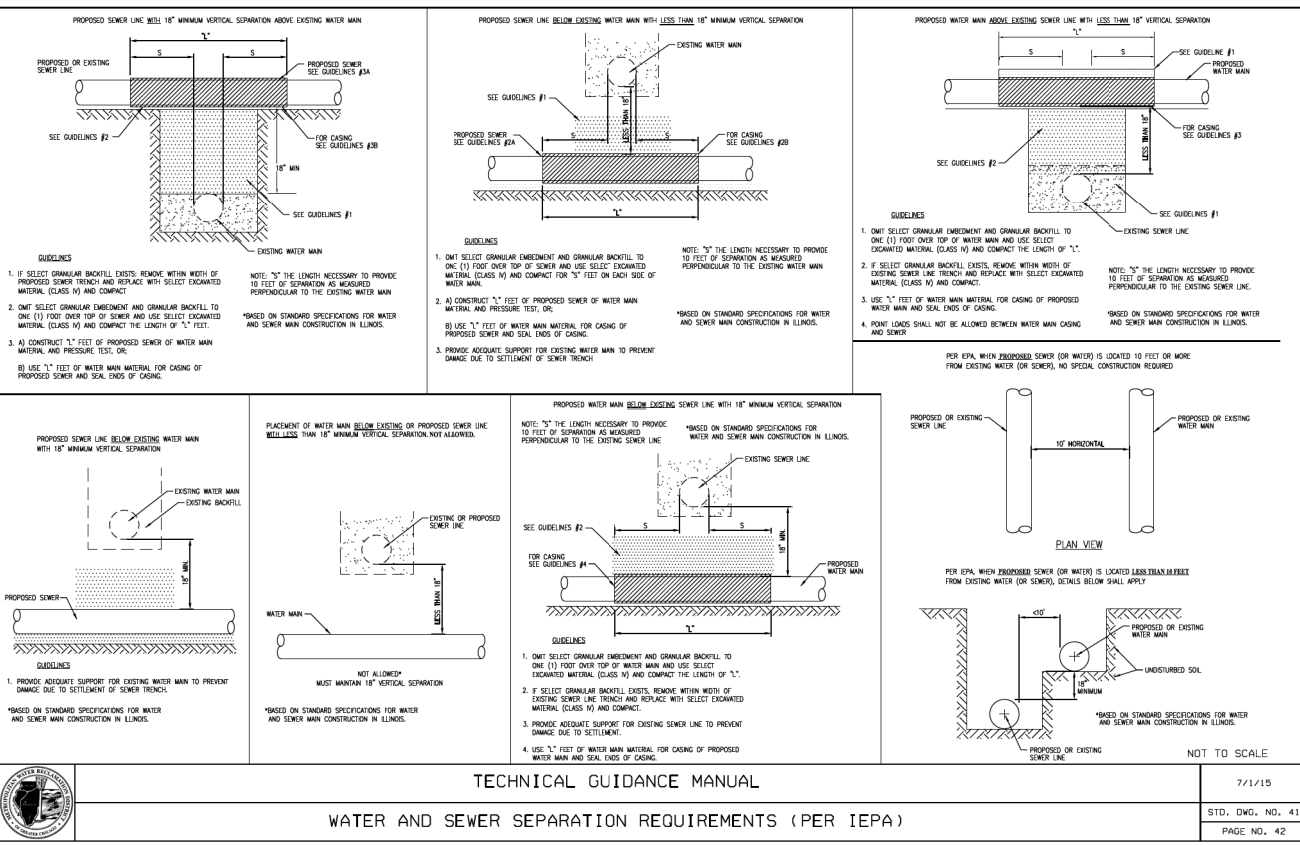
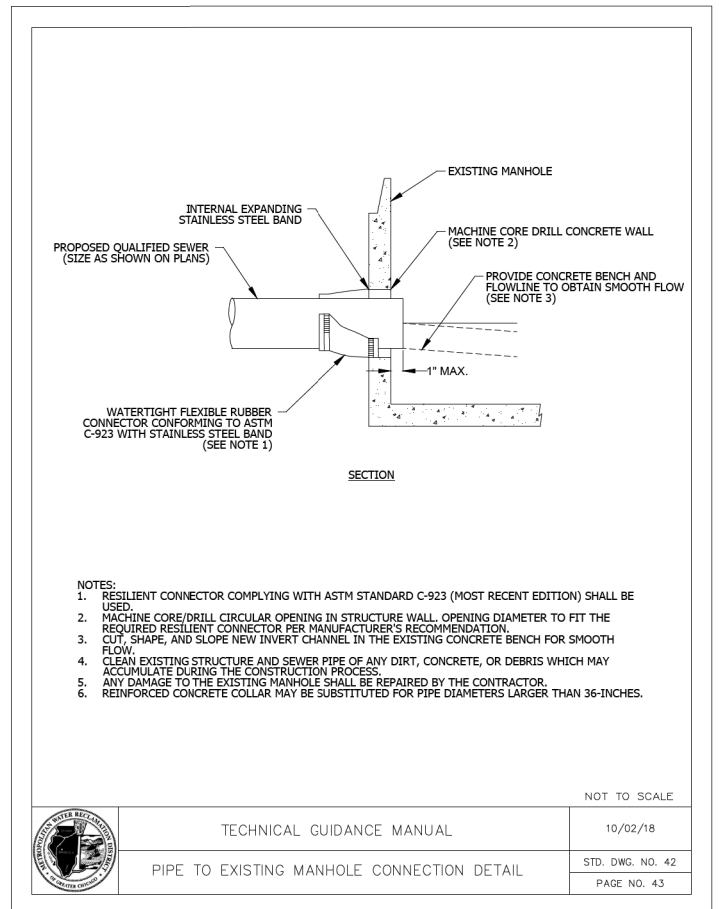
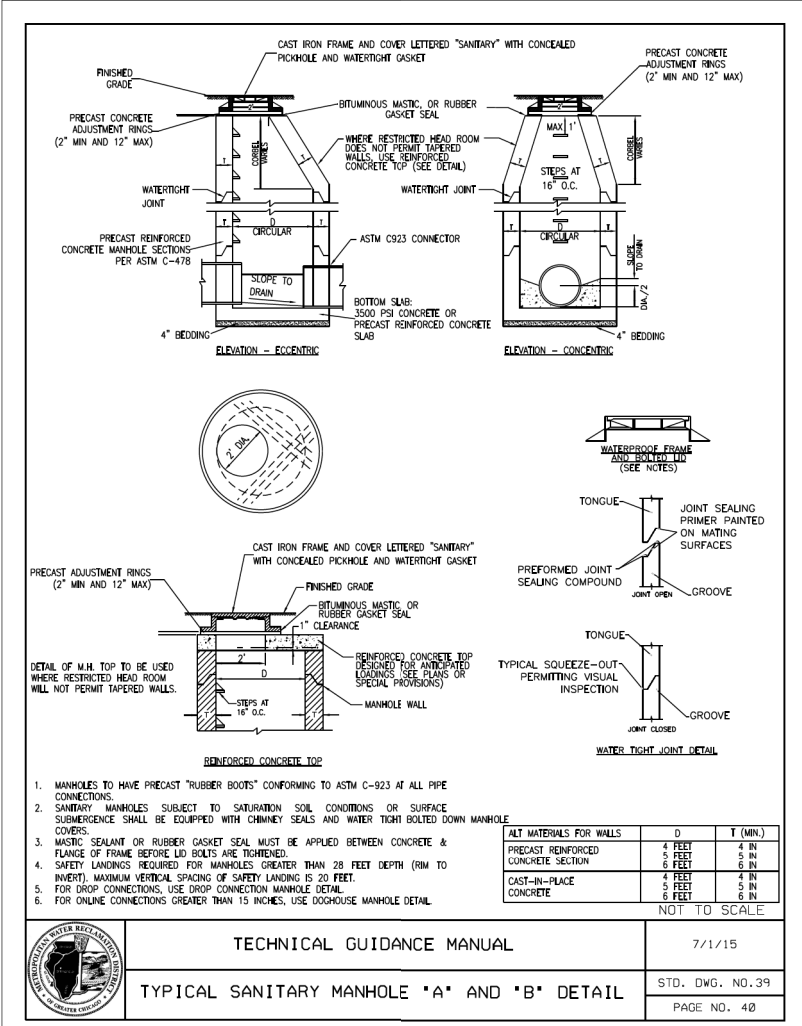
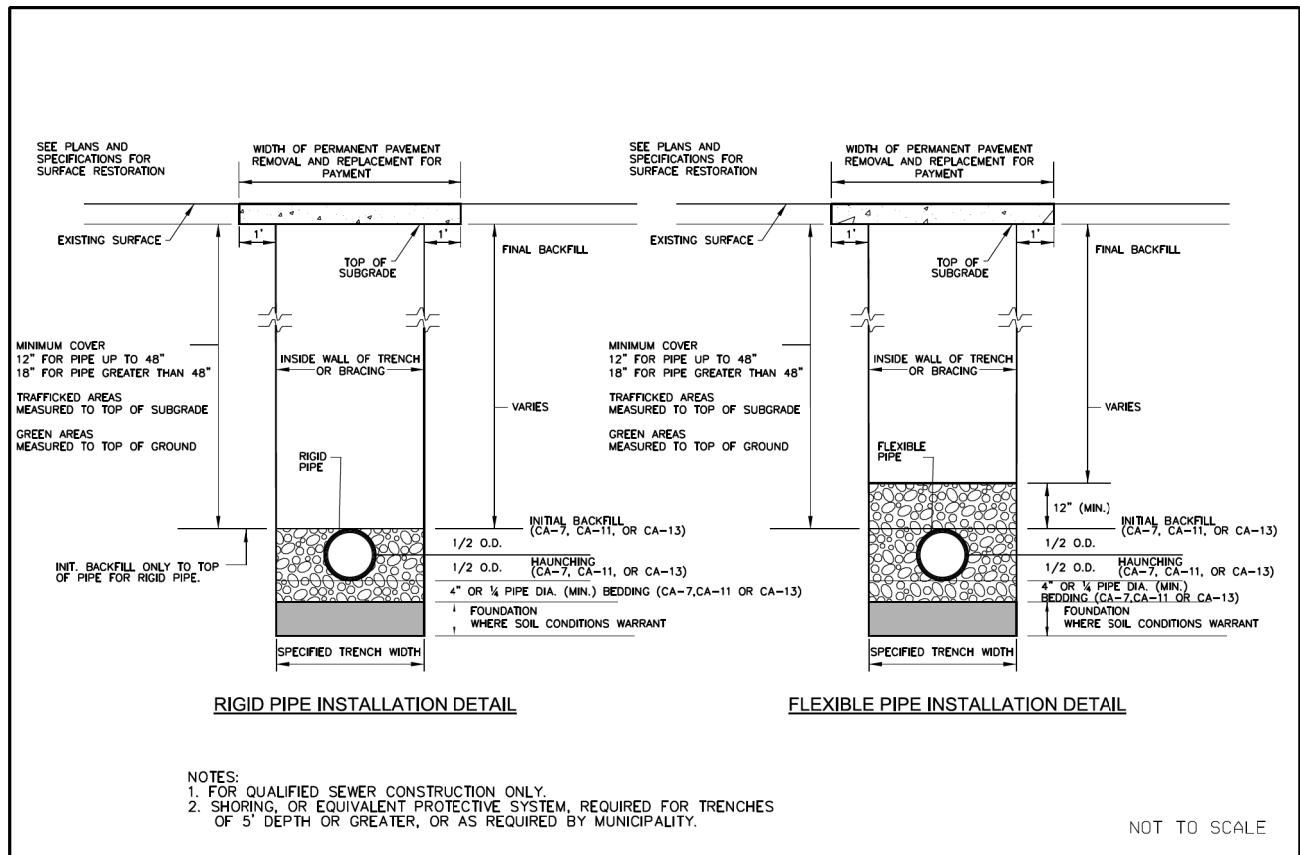


USER NAME = mzu210	DESIGNED - MLZ	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 2.0000' / 1\"/>		

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

VILLAGE OF NILES DETAILS	
TOUHY AVENUE /HARTS ROAD /GROSS POINT ROAD	
SCALE:	SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	106
CONTRACT NO.			61H59	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



HRG PROJECT NO: 19406.01  
HRG PROJ CONTACT:  
FILE NAME: 19406.01-sht-dbt-03.dgn  
PEN TABLE: 19406.tbl



USER NAME = mzu210	DESIGNED - MLZ	REVISED -
PLOT SCALE = 2.0000' / 1" =	DRAWN - W/JH	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MWRD DETAILS  
TOUHY AVENUE / HARTS ROAD / GROSS POINT ROAD

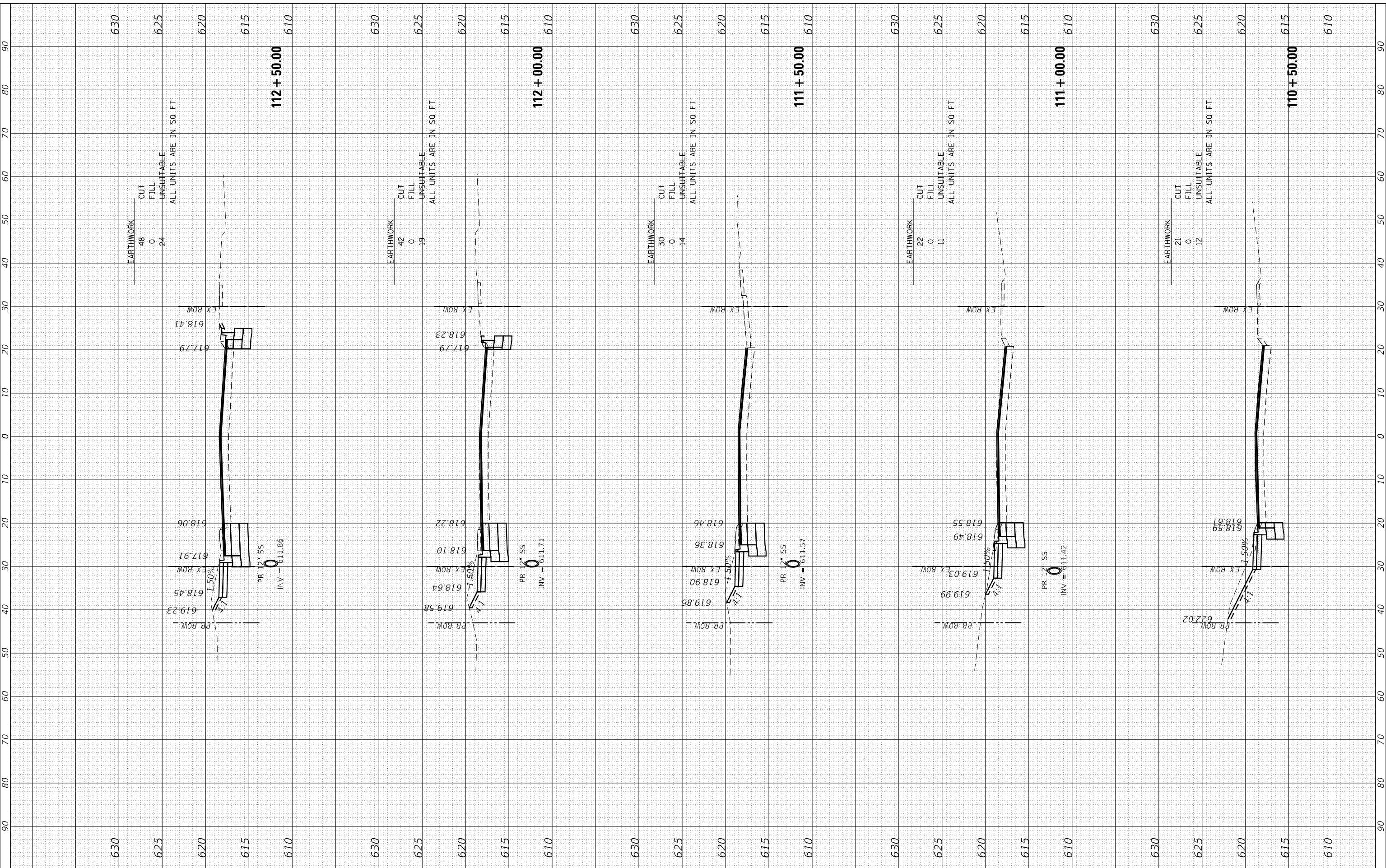
F.A.P. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	107
CONTRACT NO.				61H59
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

HRC PROJECT No: 19408.01  
 FILE NAME: 19408.01 - 13-00118-00-00-00-00.dgn  
 PLOT DRIVER: il\_cadf\_bmp1cfcg  
 PEN TABLE: plot.tbl

ORIGINAL SURVEY NO.	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	

FINAL SURVEY NO.	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	



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USER NAME = mzu2zi0	DESIGNED - MLZ	REVISED -
	DRAWN - DMS	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 TOUHY AVENUE**

SCALE: 10H:5V SHEET 1 OF 9 SHEETS STA. 110+50.00 TO STA. 112+50.00

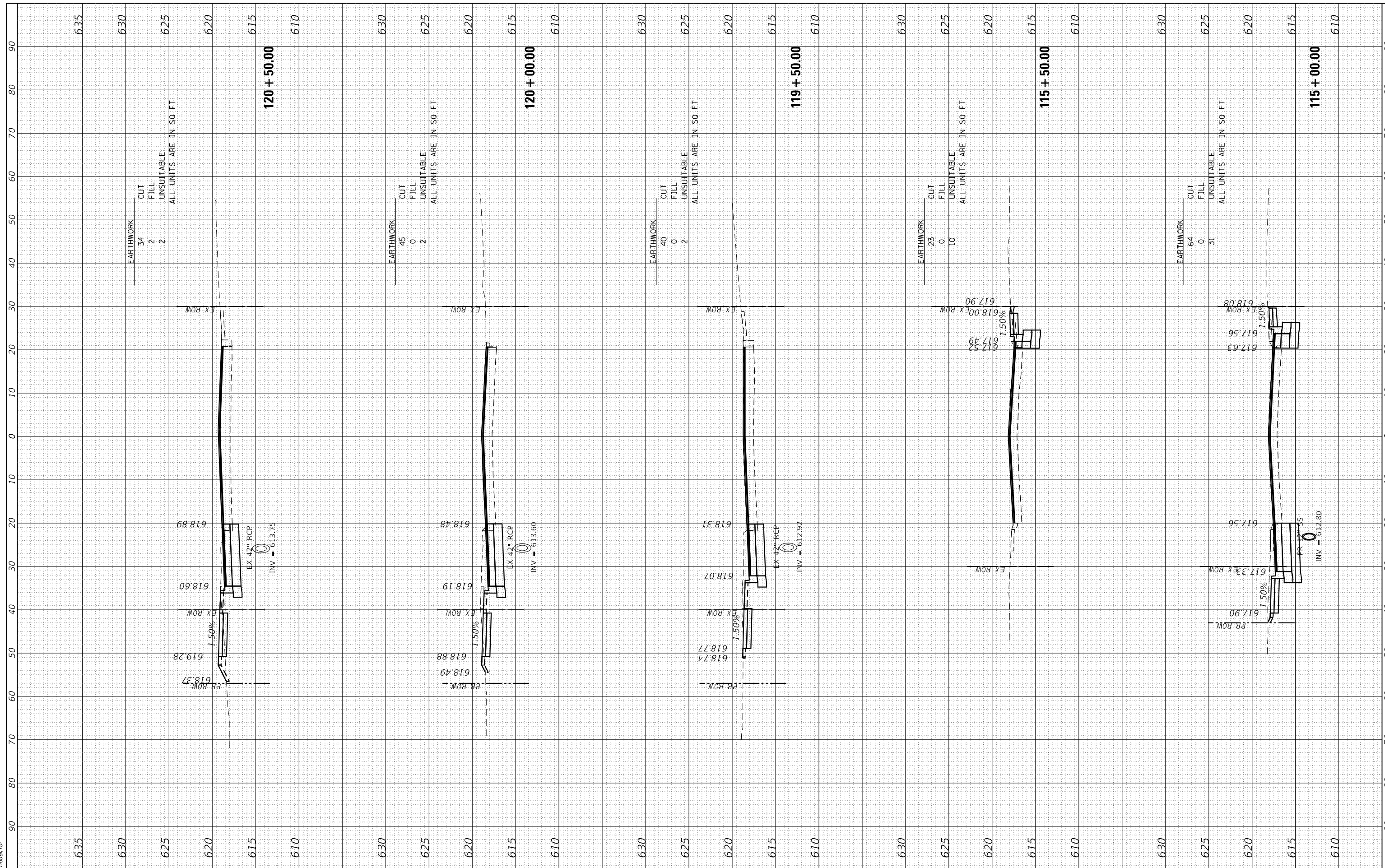
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	108
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				



FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

HRG PROJECT No: 19408.0  
 FILE NAME: 19408.0 - 13-00118-00-00-00-00.dgn  
 PLOT DRIVER: il\_def\_bmp1r1c1g  
 PEN TABLE: plot.tbl



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USER NAME	= mzzzzio
DESIGNED	- MLZ
DRAWN	- DMS
CHECKED	-
DATE	-
PLOT SCALE	= 20.0000' / in.
PLOT DATE	= 12/16/2022

REVISIONS	-
REVISIONS	-
REVISIONS	-
REVISIONS	-

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 TOUHY AVENUE**

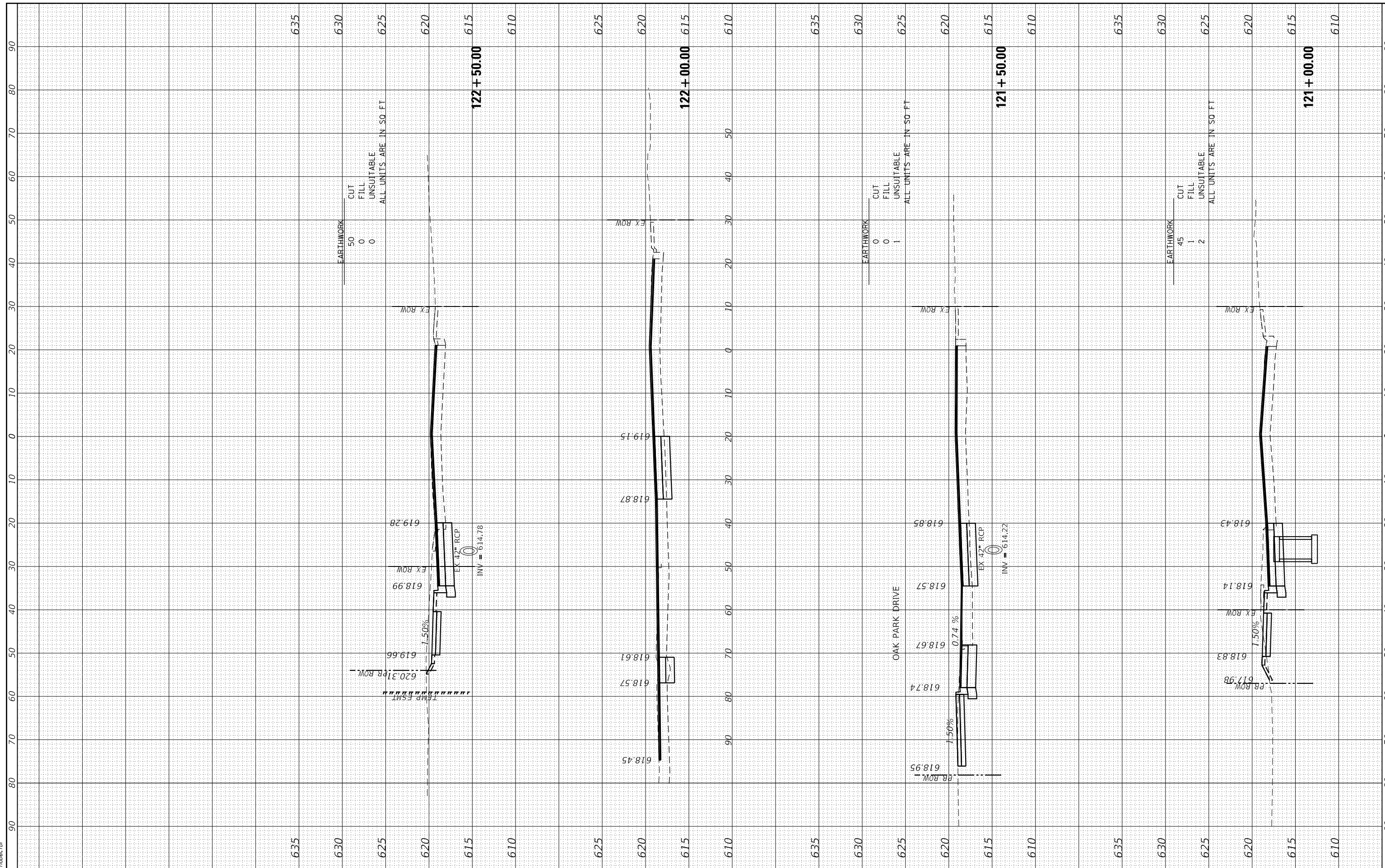
SCALE: 10H:5V    SHEET 3 OF 9 SHEETS    STA. 115+00.00 TO STA. 120+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	110
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
CHECKED		

ORIGINAL SURVEY NO.	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
CHECKED		

HRC PROJECT NO: 191406.0  
 FILE NAME: 191406\_01\_13-00118-00-WR.dgn  
 PLOT DRIVER: \\cprc\bin\pcg  
 PEN TABLE: plot\table.tbl



EARTHWORK	CUT
50	0
0	0
0	0
ALL UNITS ARE IN SO FT	

EARTHWORK	CUT
0	0
0	1
1	0
ALL UNITS ARE IN SO FT	

EARTHWORK	CUT
45	1
1	0
2	0
ALL UNITS ARE IN SO FT	

USER NAME = mzuuzio	DESIGNED - MLZ	REVISED -
	DRAWN - DMS	REVISED -
	CHECKED -	REVISED -
	DATE -	REVISED -

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

SCALE: 10H:5V		SHEET 4 OF 9 SHEETS	STA. 121+00.00 TO STA. 122+50.00
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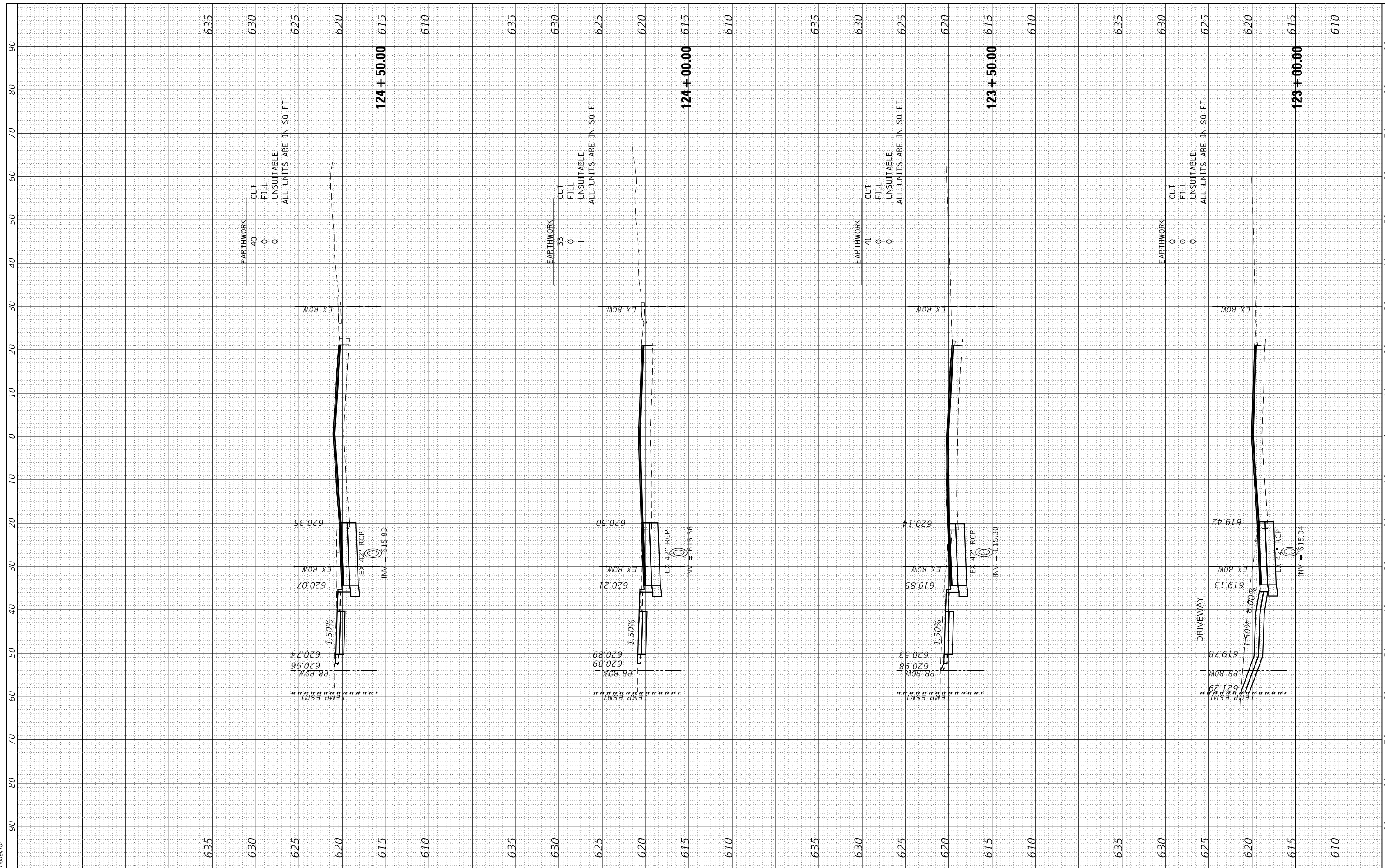
F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 111
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				



FINAL SURVEY NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
BY	
DATE	

ORIGINAL SURVEY NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
BY	
DATE	

HRG PROJECT No: 19406.0  
 FILE NAME: 19406.0 - 13-00118-00-WR - 1215.dgn  
 PLOT DRIVER: ilprof.dwgpcrctcg  
 PEN TABLE: p10.tbl



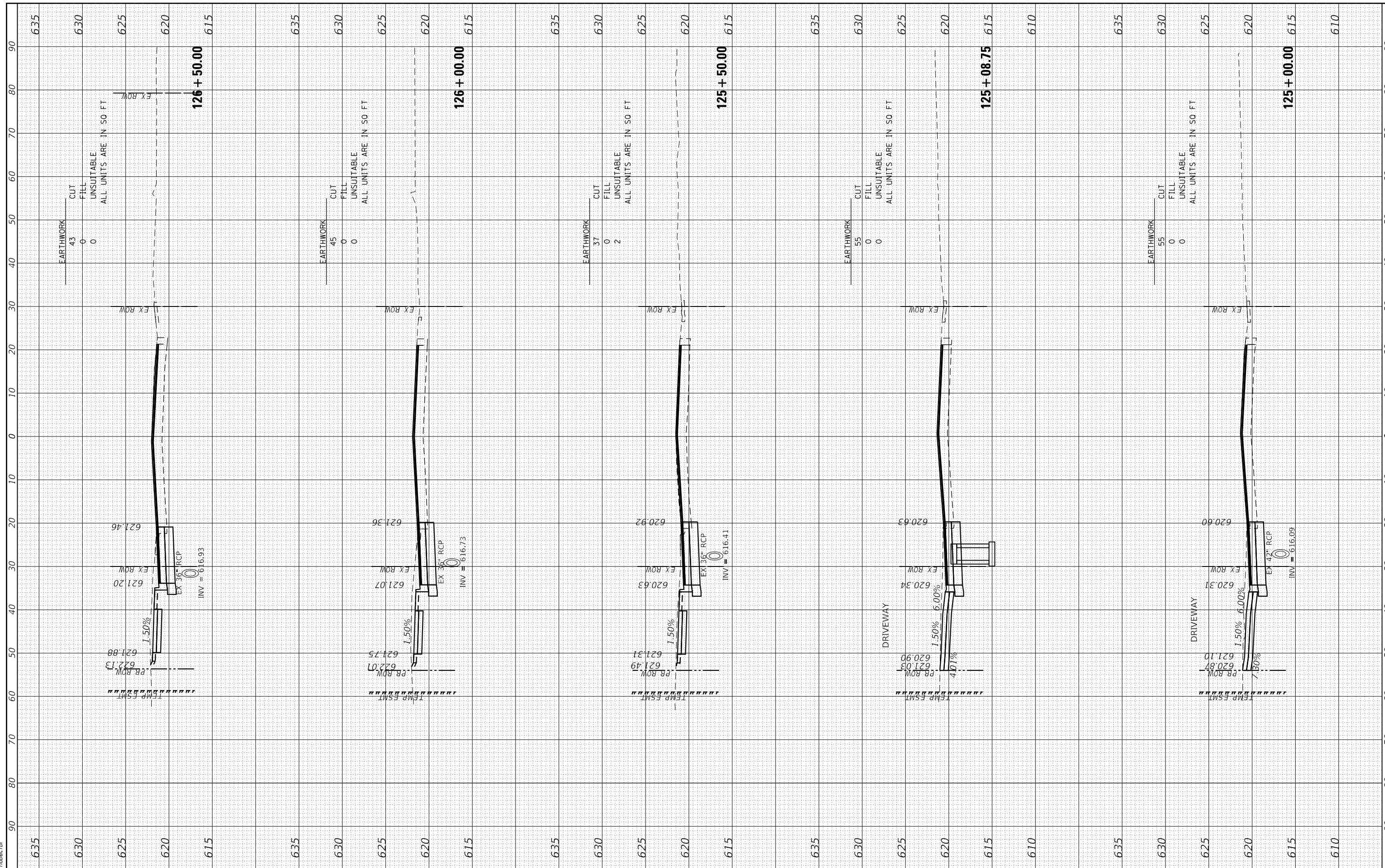
	USER NAME = mzuuzio DESIGNED - MLZ DRAWN - DMS CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b> <b>TOUHY AVENUE</b>	SCALE: 10H:5V SHEET 5 OF 9 SHEETS STA. 123+00.00 TO STA. 124+50.00	F.A.P. RTE. 341 SECTION 13-00118-00-WR COUNTY COOK TOTAL SHEETS 120 SHEET NO. 112 CONTRACT NO. 61H59 ILLINOIS FED. AID PROJECT
	HRGreen.com Illinois Professional Design Firm #184-001322	PLOT SCALE = 20.0000" / 1" PLOT DATE = 12/16/2022				



FINAL SURVEY NO.	
SURVEYED PLOTTED	
TEMPLATE AREAS CHECKED	
NOTE BOOK AREAS CHECKED	
BY	
DATE	

ORIGINAL SURVEY NO.	
SURVEYED PLOTTED	
TEMPLATE AREAS CHECKED	
NOTE BOOK AREAS CHECKED	
BY	
DATE	

HRG PROJECT No: 19406.0  
 FILE NAME: 19406.0 - 13-00118-00-WR+Touhy.dgn  
 PLOT DRIVER: l:\soft\dwgplotcsg  
 PEN TABLE: plot.tbl



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USER NAME	= mzuizio
DESIGNED	- MLZ
DRAWN	- DMS
CHECKED	-
DATE	-

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

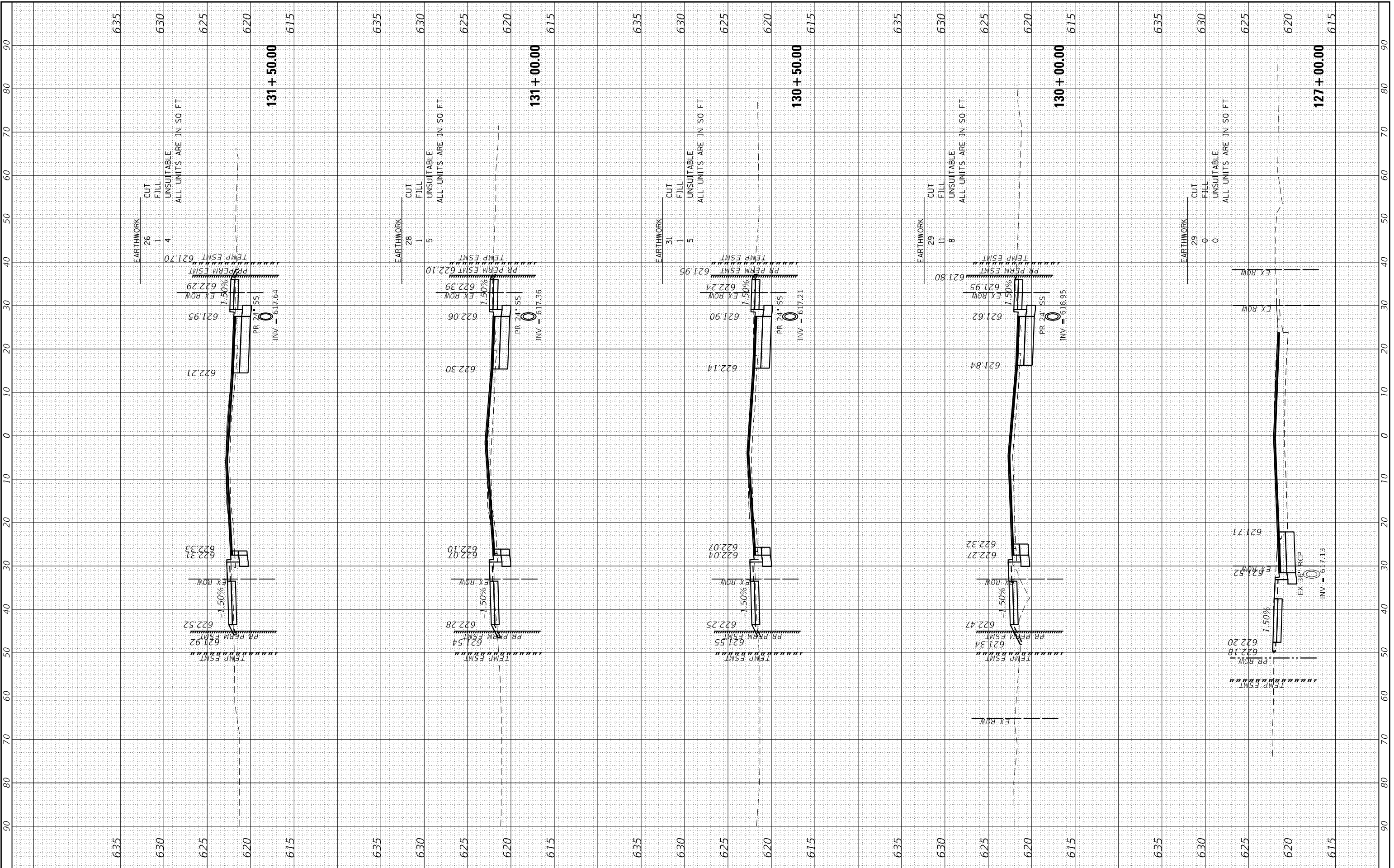
<b>CROSS SECTIONS TOUHY AVENUE</b>	
SCALE: 10H:5V	SHEET 6 OF 9 SHEETS
STA. 125+00.00 TO STA. 126+50.00	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	113
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				

HRG PROJECT No: 19408.01  
 FILE NAME: 19408.01 - 13-00118-00-01 - Touhy.dgn  
 PLOT DRIVER: ilprof.dwgprtcrfg  
 PEN TABLE: plottable.tbl

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		



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USER NAME = mzuuzio	DESIGNED - MLZ	REVISED -
	DRAWN - DMS	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

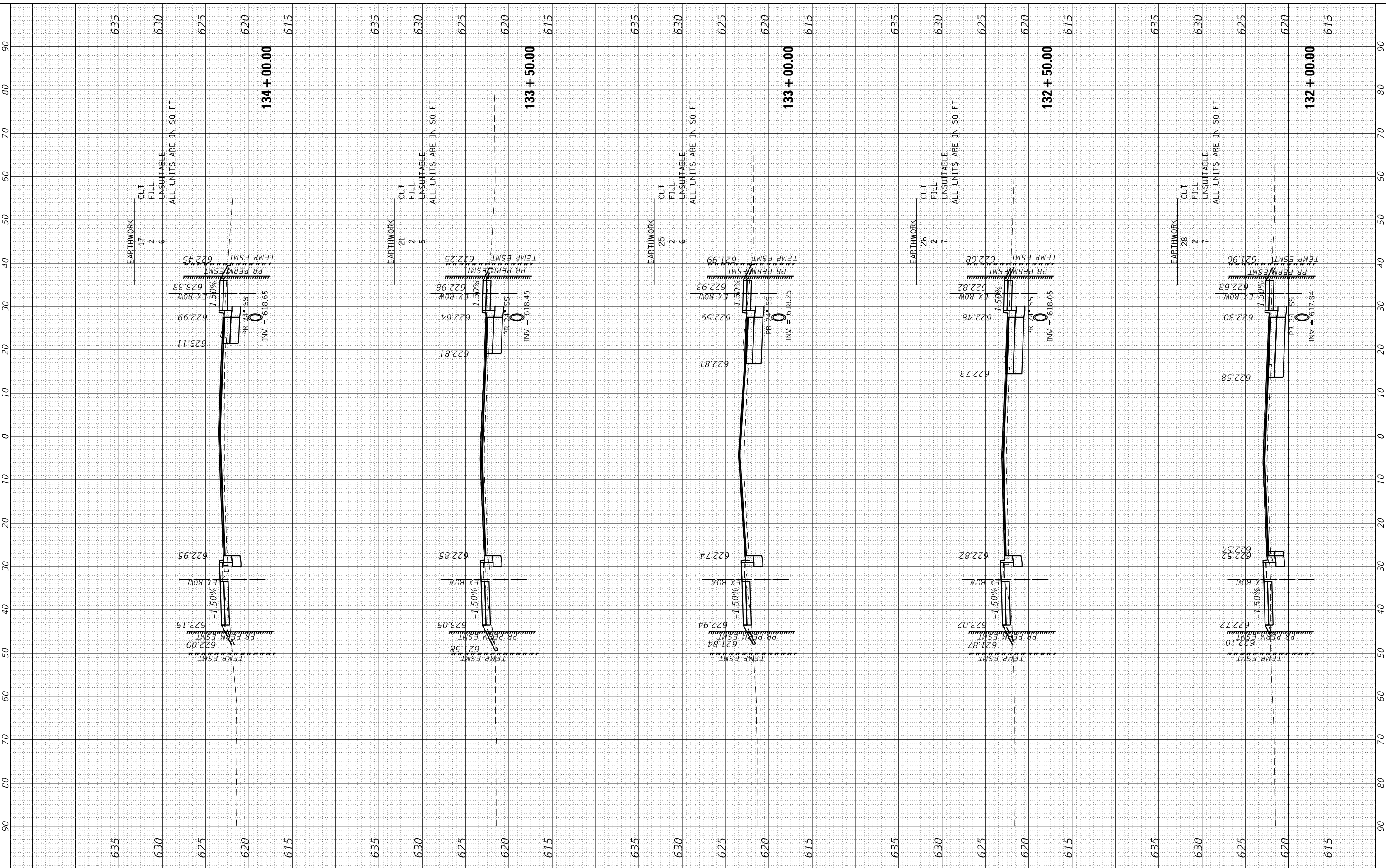
<b>CROSS SECTIONS TOUHY AVENUE</b>	
SCALE: 10H:5V	SHEET 7 OF 9 SHEETS
STA. 127+00.00 TO STA. 131+50.00	

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 114
CONTRACT NO. 61H59				ILLINOIS FED. AID PROJECT

HRG PROJECT No: 19406.0  
 FILE NAME: 19406.0 - 13-00118-00-WR - 13-00118-00-WR - 13-00118-00-WR.dgn  
 PLOT DRIVER: il\_cad.ctb  
 PEN TABLE: p10.tbl

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		
	AREAS CHECKED		



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USER NAME = mzuizio	DESIGNED - MLZ	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - DMS	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 TOUHY AVENUE**

SCALE: 10H:5V SHEET 8 OF 9 SHEETS STA. 132+00.00 TO STA. 134+00.00

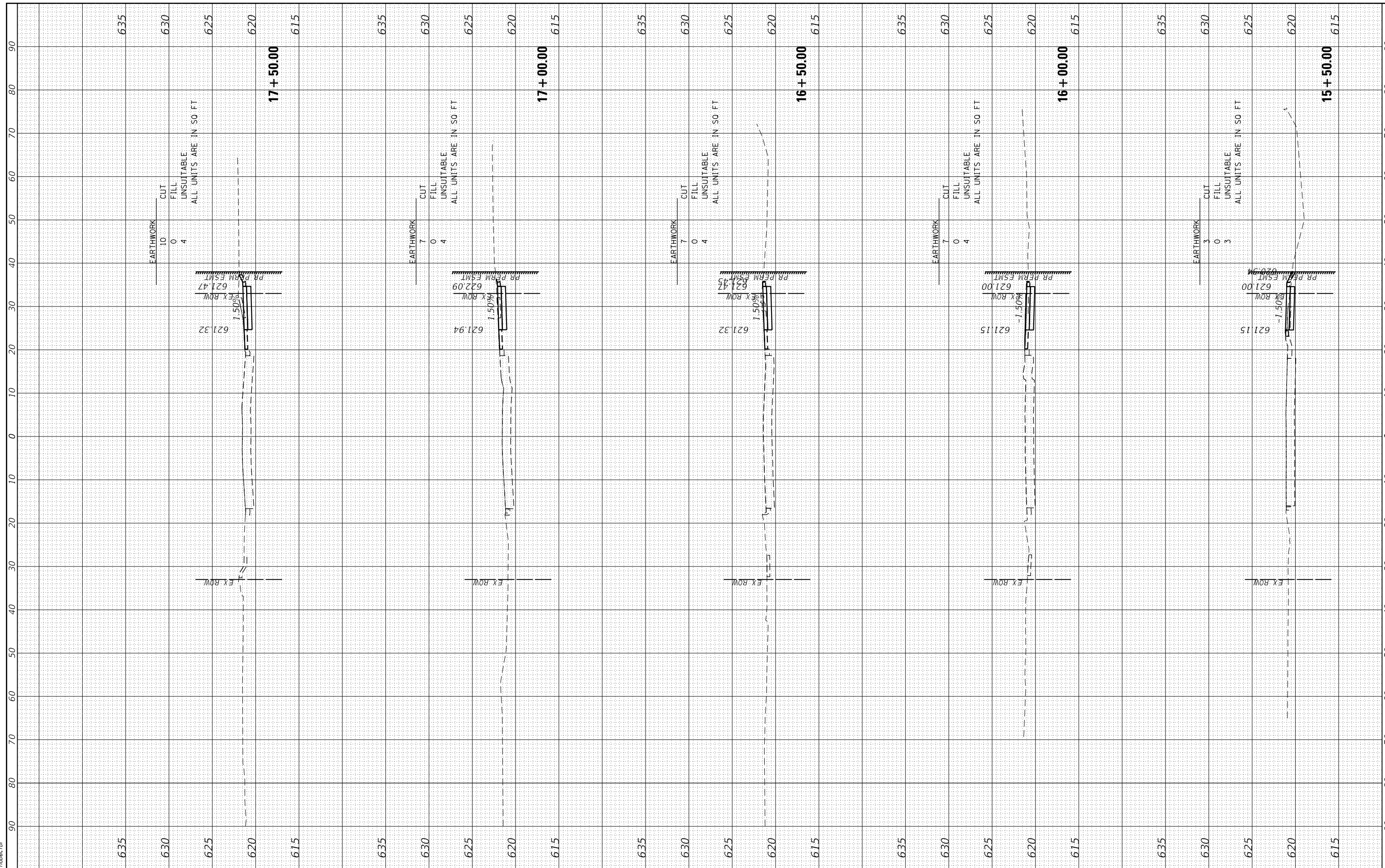
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	115
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				



FINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS		

ORIGINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS		

HRG PROJECT No: 19406.0  
 FILE NAME: 19406.01  
 PLOT DRIVER: j:\soft\dwgplotcsg  
 PEN TABLE: plot10a.tbl



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 #184-001322

USER NAME = mzuizio	DESIGNED - MLZ	REVISED -
	DRAWN - DMS	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 HARTS ROAD/GROSS POINT ROAD**

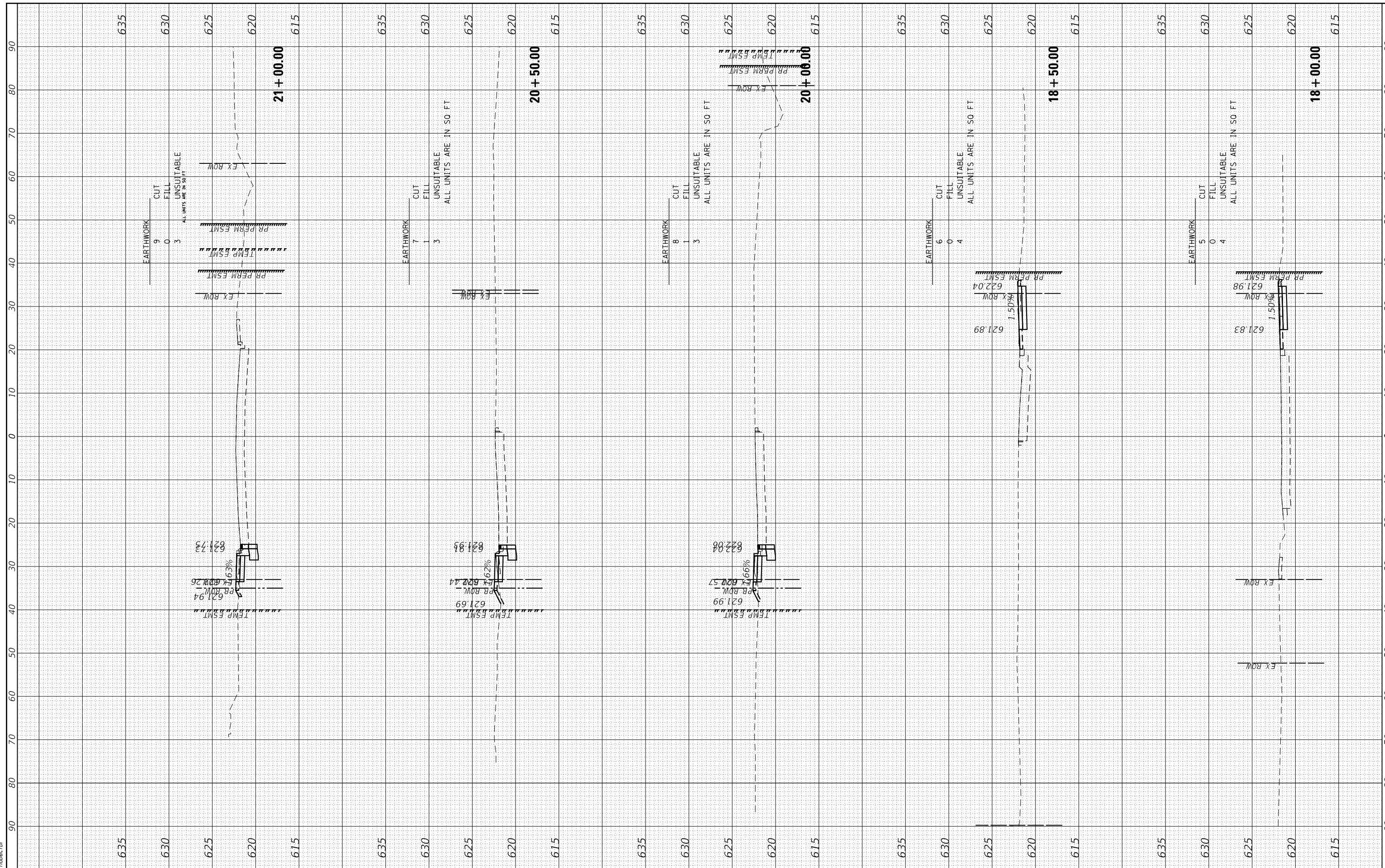
SCALE: 10H:5V    SHEET 1 OF 4 SHEETS    STA. 15+50.00 TO STA. 17+50.00

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 117
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

HRG PROJECT No: 19406.0  
 FILE NAME: 19406.ctb  
 PLOT DRIVER: l:\soft\dwgplotcsg  
 PEN TABLE: plot.tbl



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USER NAME = mzuizio
DESIGNED - MLZ
DRAWN - DMS
CHECKED -
DATE -
PLOT SCALE = 20.0000' / in.
PLOT DATE = 12/16/2022

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 HARTS ROAD/GROSS POINT ROAD**

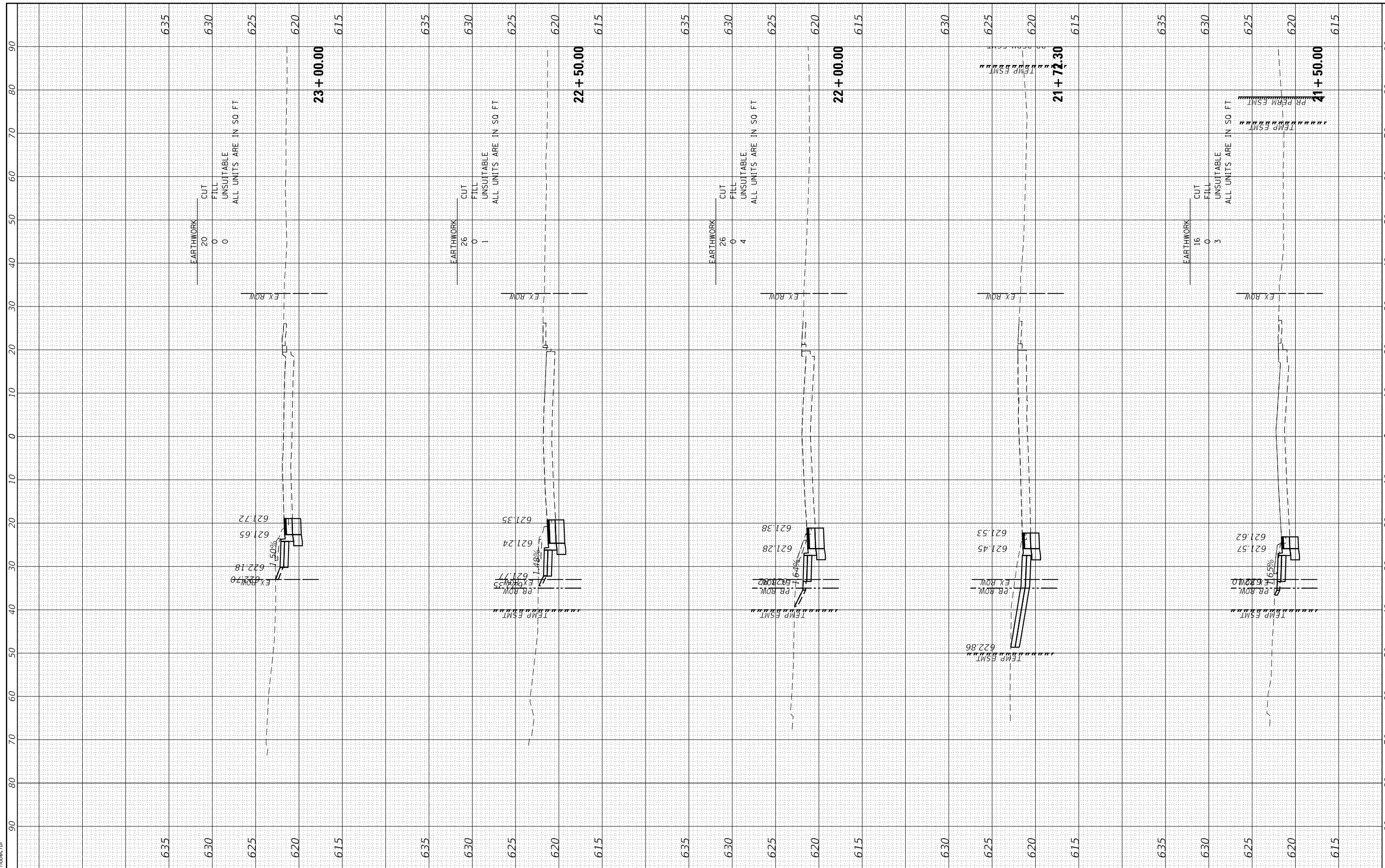
SCALE: 10H:5V    SHEET 2 OF 4 SHEETS    STA. 18+00.00 TO STA. 21+00.00

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 118
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS CHECKED		

ORIGINAL SURVEY NO.	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS CHECKED		

HRG PROJECT No: 19406.0  
 FILE NAME: 19406.01 - 13-00118-00-WR - 21+50.00 - 23+00.00.dgn  
 PLOT DRIVER: ilprof.dwgplotcsg  
 PEN TABLE: plottable.tbl



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USER NAME = mizu210	DESIGNED - MLZ	REVISED -
	DRAWN - DMS	REVISED -
PLOT SCALE = 20.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/16/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 HARTS ROAD/GROSS POINT ROAD**

SCALE: 10H:5V    SHEET 3 OF 4 SHEETS    STA. 21+50.00 TO STA. 23+00.00

F.A.P. RTE. 341	SECTION 13-00118-00-WR	COUNTY COOK	TOTAL SHEETS 120	SHEET NO. 119
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H59	

FINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS		
	CHECKED		

ORIGINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS		
	CHECKED		

HRG PROJECT No: 190405.0  
 FILE NAME: 190405\_01\_13-00118-00-WR+GPR.dgn  
 PLOT DRIVER: \\prof-bwpcr\csg  
 PEN TABLE: plot\table.tbl



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 #184-001322

USER NAME = mzuzzio	DESIGNED - MLZ	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - DMS	REVISED -
PLOT DATE = 12/16/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 HARTS ROAD/GROSS POINT ROAD**

SCALE: 10H:5V    SHEET 4 OF 4 SHEETS    STA. 23+50.00 TO STA. 23+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	13-00118-00-WR	COOK	120	120
CONTRACT NO. 61H59				
ILLINOIS FED. AID PROJECT				