

06-12-2020 LETTING ITEM 002

FOR INDEX OF SHEETS AND HIGHWAY STANDARDS SEE SHEET NO. 2

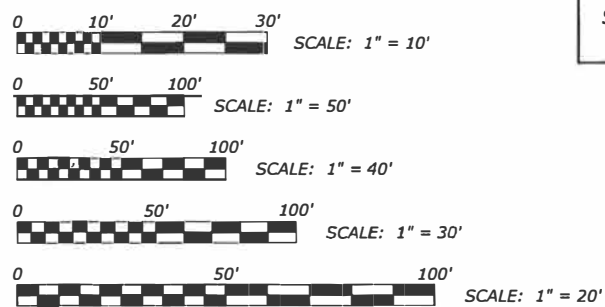
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY  
MUN 2030 21ST AVENUE FROM 16TH STREET TO 19TH STREET AND  
MUN 0004 19TH STREET FROM 21ST AVENUE TO 17TH AVENUE  
ROADWAY RECONSTRUCTION  
SECTION NO. 16-00080-01-PV  
PROJECT NO. LTLC (578)  
VILLAGE OF BROADVIEW  
COOK COUNTY  
C-91-384-19**

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2015	16-00080-01-PV	COOK	102	1
ILLINOIS PROJECT				
SECTION				
CONTRACT NO. 61G35				



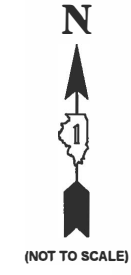
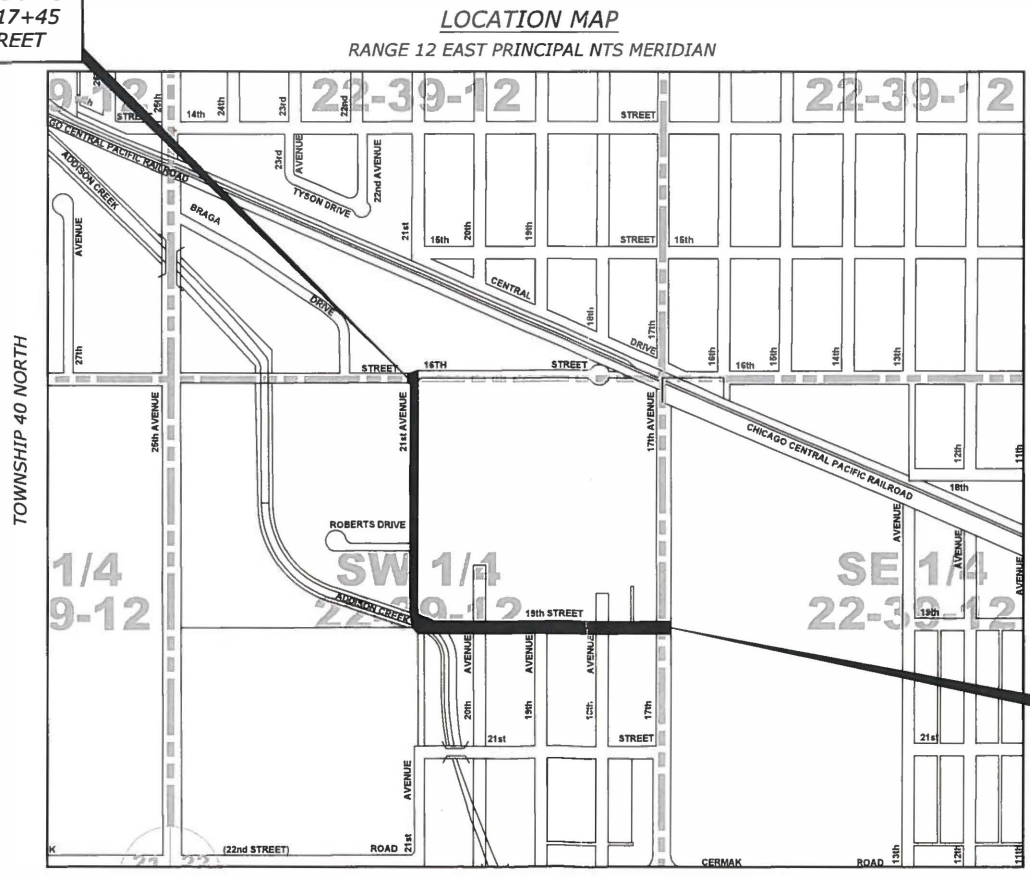
LOCATION OF SECTION INDICATED THUS:

**TRAFFIC DATA**  
ADT (2016) = 3,000  
ADT (2040) = 3,600  
POSTED SPEED LIMIT: 25 MPH  
DESIGN SPEED LIMIT: 30 MPH  
COLLECTOR



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.

PROJECT BEGINS  
STATION 17+45  
16TH STREET



PROJECT ENDS  
STATION 44+45  
19TH STREET

MAP SCALE : NONE  
**PROVISO TOWNSHIP**

- AREA OF IMPROVEMENT  
GROSS LENGTH OF PROJECT = 2700 FT. = 0.511 MI.  
NET LENGTH OF PROJECT = 2700 FT. = 0.511 MI.

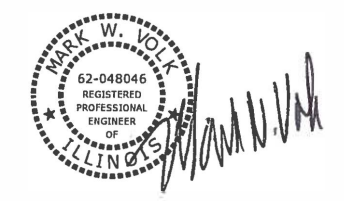
**STATE OF ILLINOIS  
ILLINOIS DEPARTMENT OF TRANSPORTATION**

APPROVED: 20 20  
VILLAGE OF BROADVIEW, PRESIDENT

PASSED: 20 20  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
BASED ON LIMITED  
REVIEW: 20 20  
REGIONAL ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



DATE SIGNED: FEBRUARY 3 2020  
LICENSE EXPIRES: 11-30 -21

EDWIN HANCOCK ENGINEERING COMPANY  
9933 ROOSEVELT ROAD PHONE: (708)865-0300  
WESTCHESTER, ILLINOIS 60154

E.H.E. NO. 120-19-00801



CONTRACT NO. 61G35

FEDERAL AID PROGRAM ENGINEER: CARMEN E. RAMOS, P.E.  
SCHAUMBURG, ILLINOIS  
CONSULTANT: EDWIN HANCOCK ENGINEERING CO.  
9933 ROOSEVELT ROAD  
WESTCHESTER, IL 60154 PHONE: (708)865-0300

Drawing File: W:\Projects\City\_of\_Broadview\12019008 - Provo Drive Stage II - Design\A\_CAD\Site\01\_C01050.dwg Date: 1-13-2019 2:55pm

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	TITLE SHEET, LOCATION MAP
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3	GENERAL NOTES
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54	SIGNING PLAN LEGEND AND NOTES
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83-84	STREET LIGHT WIRING PLAN
85	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
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87	DETOUR SIGNING FOR CLOSING STAGE HIGHWAYS (TC-21)
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90	BUTT JOINTS AND HMA TAPER DETAILS (BD-32)
91	LIGHT POLE FOUNDATION, METAL (BE-305)
92	ALUMINUM LIGHT POLE, 30' MOUNTING HEIGHT (BE-403)
93	MISC. ELECTRICAL DETAILS, SHEET A (BE-702)
94-102	STATION CROSS SECTIONS

**LEGEND OF SYMBOLS**

(TO BE USED IN CONJUNCTION WITH I.D.O.T. STANDARD 000001-06)

EXISTING	PROPOSED	DESCRIPTION	EXISTING	PROPOSED	DESCRIPTION
		POWER POLE			PIPE UNDERDRAIN TYPE 2, 4"
		GAS VALVE			STORM SEWER TO BE REMOVED
		STREET LIGHT			STORM SEWER PIPE
		WATER MAIN BUFFALO BOX			COMBINATION SEWER PIPE
		WATER MAIN VALVE BOX			SANITARY SEWER PIPE
		SPRINKLER			WATER MAIN
		WATER MAIN VALVE VAULT			ELECTRIC LINE
		STORM INLET			GAS LINE
		FIRE HYDRANT			TELEPHONE LINE
		EXISTING STRUCTURE TO BE REMOVED			CURB AND GUTTER
		EXISTING STRUCTURE TO BE FILLED			GUARDRAIL TO BE REMOVED
		TREE TO BE REMOVED			GUARDRAIL
		BUSH			DIRECTION OF FLOW
		TREE			DRAINAGE SUMMIT
		EXISTING CURB AND GUTTER TO BE REMOVED			WATER MAIN VALVE VAULT RIM AND TOP OF PIPE ELEVATION
		EARTH EXCAVATION SPECIAL			COMBINATION MANHOLE RIM AND INVERT ELEVATION
		NON-SPECIAL WASTE DISPOSAL			STORM SEWER MANHOLE/CATCHBASIN RIM AND INVERT ELEVATION
		EXISTING CONCRETE SIDEWALK TO BE REMOVED			STRUCTURE TO BE ADJUSTED
		EXISTING CONCRETE DRIVEWAY TO BE REMOVED			TYPE 1 FRAME & CLOSED LID
		HOT-MIX ASPHALT SURFACE REMOVAL- BUTT JOINT			TYPE 1 FRAME & OPEN LID
		PROPOSED CONCRETE PAVEMENT/SIDEWALK			RECONSTRUCT EXISTING STRUCTURE
		PROPOSED HOT MIX ASPHALT PAVING			GROUND ELEVATIONS

**HIGHWAY STANDARDS DRAWINGS**

STANDARD NO.	TITLE OR DESCRIPTION	STANDARD NO.	TITLE OR DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS	720006-04	SIGN PANEL ERECTION DETAILS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS	720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
420001-09	PAVEMENT JOINTS	720016-04	MAST ARM MOUNTED STREET NAME SIGNS
420111-04	PCC PAVEMENT ROUNDOUTS	729001-01	APPLICATIONS OF TYPES A&B METAL POSTS
424001-11	PERPENDICULAR CURB RAMP FOR SIDEWALKS	780001-05	TYPICAL PAVEMENT MARKINGS
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS	B,L,R, 14-12	PORTLAND CEMENT CONCRETE PAVEMENT (NONREINFORCED)
602601-06	PRECAST REINFORCED CONCRETE FLAT SLAB TOP	814001-03	HANDHOLES
630001-12	STEEL PLATE BEAM GUARDRAIL	814006-02	DOUBLE HANDHOLES
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24"(600MM) FROM PAVEMENT EDGE	838001-01	BREAKAWAY DEVICES
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY	857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600mm) FROM PAVEMENT EDGE	862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS	873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY	877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED	877006-06	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE	878001-10	CONCRETE FOUNDATION DETAILS
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN	880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION	880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE	886001-01	DETECTOR LOOP INSTALLATIONS
701901-08	TRAFFIC CONTROL DEVICES	886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS
720001-01	SIGN PANEL MOUNTING DETAILS		

B.M. NO.	DESCRIPTION	ELEVATION
1	N.W. 'BURY' BOLT ON F.H. AT STA. 17+75	626.41
2	N.W. BONNET BOLT ON F.H. AT STA. 14+70	626.17
3	NORTH 'BURY' BOLT ON F.H. AT STA. 11+35	629.11
4	N.E. 'BURY' BOLT ON F.H. AT STA. 8+60	631.04
5	NORTH 'BURY' BOLT ON F.H. AT STA. 5+75	629.17
6	NORTH 'BURY' BOLT ON F.H. AT STA. 2+50	627.34
7	P.K. NAIL ON GUARDRAIL AT STA. 1+10	627.74

**BENCHMARKS**

**DATUM IS NAVD 88**

B.M. NO.	DESCRIPTION	ELEVATION
1	N.W. 'BURY' BOLT ON F.H. AT STA. 17+75	626.41
2	N.W. BONNET BOLT ON F.H. AT STA. 14+70	626.17
3	NORTH 'BURY' BOLT ON F.H. AT STA. 11+35	629.11
4	N.E. 'BURY' BOLT ON F.H. AT STA. 8+60	631.04
5	NORTH 'BURY' BOLT ON F.H. AT STA. 5+75	629.17
6	NORTH 'BURY' BOLT ON F.H. AT STA. 2+50	627.34
7	P.K. NAIL ON GUARDRAIL AT STA. 1+10	627.74

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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

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

**INDEX OF SHEETS, LEGEND OF SYMBOLS**  
 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	2
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		

I.H.E. PROJECT NO. 120-19-00801

## ACCESS

THE CONTRACTOR SHALL MAINTAIN INGRESS AND EGRESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING THE CONSTRUCTION PERIOD. DURING CONSTRUCTION, GARBAGE TRUCKS MUST BE PERMITTED ACCESS TO THE WORK ZONE TO PICK UP RESIDENTIAL AND COMMERCIAL GARBAGE FOR THOSE PROPERTIES FRONTING THE WORK ZONE. IF GARBAGE TRUCK ACCESS IS NOT PROVIDED, THE CONTRACTOR SHALL MOVE TRASH CONTAINERS TO AN ACCESSIBLE LOCATION.

## UNDERGROUND UTILITIES

ADJUSTMENTS REQUIRED BY UTILITY COMPANIES WILL BE PERFORMED BY THE COMPANY INVOLVED OR ITS CONTRACTOR, BUT WILL BE COORDINATED BY GENERAL CONTRACTOR.

COORDINATION OF ALL UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT A PRE-CONSTRUCTION CONFERENCE.

THE CONTRACTOR SHALL USE EXTREME CAUTION IN THE REMOVAL OF ABANDONED EXISTING GAS LINES SINCE RESIDUAL MATERIALS CONTAINED THEREIN ARE HIGHLY EXPLOSIVE, FLAMMABLE, AND TOXIC. ONCE THE MAINS ARE ABANDONED BY THE OWNER, THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DAMAGE AND/OR INJURY OCCURRING ON THE PROJECT DUE TO HIS OPERATIONS NEXT TO THE MAINS AND/OR THE METHOD OF REMOVAL OF THE ABANDONED MAINS.

## STORM SEWER

THE VERTICAL AND HORIZONTAL CLEARANCES BETWEEN WATER MAINS AND PROPOSED OR EXISTING STORM SEWERS SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS 41-1.02A THROUGH 41-1.02D OF THE "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS".

BACKFILLING STORM SEWER CONSTRUCTED UNDER THE ROADWAY SPECIFIED UNDER ART. 550.07(b, c) OF THE SSRBC WILL NOT BE ALLOWED.

## FRAMES AND GRATES

THE TYPE OF FRAMES AND GRATES REQUIRED FOR ALL CATCH BASINS AND MANHOLES LISTED IN THE SUMMARY OF QUANTITIES MAY BE FOUND ON THE PLANS AT THEIR RESPECTIVE LOCATIONS. WHERE LIDS ARE CALLED FOR ON THE PLANS, THEY SHALL BE IN ACCORDANCE WITH ARTICLE 604.01 OF THE STANDARD SPECIFICATIONS AND THE TERM LID IS USED IN LIEU OF GRATE.

ON ALL IMPROVEMENTS, THE FRAMES AND LIDS OF EXISTING CATCH BASINS, INLETS, MANHOLES, AND VALVE VAULTS WHICH ARE TO BE ABANDONED DUE TO CONSTRUCTION OF THIS IMPROVEMENT ARE TO REMAIN THE PROPERTY OF THE VILLAGE AND BE SALVAGED. THE CONTRACTOR IS TO DELIVER FRAMES AND LIDS TO THE VILLAGE'S PUBLIC WORKS YARD, LOCATION AT 2734 SOUTH 9TH AVENUE.

## FORMS FOR CONCRETE SIDEWALKS, DRIVEWAYS, PAVEMENT, AND GUTTER FLAGS

A 2" X 6" BOARD WILL BE USED AS A FORM FOR ALL SIDEWALKS TO BE INSTALLED FIVE INCHES (5") IN THICKNESS.. A 2" X 8" BOARD WILL BE USED AS A FORM FOR ALL DRIVEWAYS TO BE INSTALLED SEVEN INCHES (7") IN THICKNESS. A 2" X 10" BOARD WILL BE USED AS THE FORM FOR ALL PAVEMENTS TO BE INSTALLED EIGHT INCHES (8") IN THICKNESS. A 2" X 12" BOARD WILL BE USED AS THE FORM FOR THE FACE OF THE GUTTER FLAGS TO BE INSTALLED TEN INCHES (10") IN THICKNESS. ALL FORMS MUST BE OF A MINIMUM HEIGHT OF THE PROPOSED THICKNESS OF THE RESPECTIVE CONCRETE ITEMS TO BE INSTALLED.

## OPEN EXCAVATION

LEAVING OF ANY EXCAVATION NECESSARY FOR STORM SEWERS OPEN OVERNIGHT WILL NOT BE ALLOWED ON THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLETELY BACKFILLING OR PLATING OVER OF ALL EXCAVATIONS AT THE END OF EACH DAY. IF THE EXCAVATIONS ARE BACKFILLED THEY SHALL BE FILLED WITH AN AGGREGATE MEETING THE GRADATION OF CA-6. THE MATERIAL WILL BE COMPACTED SUFFICIENTLY TO PREVENT RUTTING OR SETTLEMENT OF MATERIAL UNDER TRAFFIC LOADS. IF PLATES ARE USED THEY SHALL BE OF SUFFICIENT THICKNESS TO SUPPORT VEHICULAR LOADS. ADDITIONALLY THEY SHALL EXTEND A MINIMUM OF NINE INCHES (9") BEYOND THE LIMITS OF THE EXCAVATION ON ALL SIDES. IF THE PLATES ARE TO BE LEFT OVER THE WEEKEND, THE EDGES OF THE PLATES SHALL BE CUSHIONED WITH A BITUMINOUS MIXTURE IN AREAS WHERE VEHICULAR TRAFFIC WILL CROSS THE PLATES.

## MAINTENANCE OF SEWER FLOWS

THE CONTRACTOR SHALL CONDUCT THEIR OPERATIONS SO AS TO MAINTAIN AT ALL TIMES FLOWS THROUGH EXISTING STORM AND COMBINED SEWER SYSTEMS. HE SHALL ALSO PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT IF NECESSARY AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER COLLECTED IN A SAFE MANNER WITHOUT DAMAGE OF ANY KIND TO ADJACENT PROPERTIES. THE ENDS OF EXISTING DRAINAGE LINES THAT ARE NOT TO BE INCORPORATED INTO THE PROJECT ARE TO BE SEALED AS SPECIFIED IN THE SPECIAL PROVISIONS. ALL ACCUMULATION OF MATERIAL IN THE STRUCTURE DUE TO CONSTRUCTION OPERATIONS AS WELL AS MATERIAL EXISTING BEFORE CONSTRUCTION, SHALL BE REMOVED BY THE CONTRACTOR.

## EXISTING STRUCTURE MODIFICATIONS

ALL KNOWN EXISTING STRUCTURES IN THE PAVEMENT OR ADJACENT AREAS THAT ARE INVOLVED IN THE CONSTRUCTION HAVE BEEN SHOWN ON THE PLANS AND NOTED TO BE REMOVED, FILLED, RECONSTRUCTED, OR ADJUSTED BY THE CONTRACTOR EXCEPT THOSE OF AT&T, COMED, AND THE NICOR GAS COMPANY, WHICH ARE TO BE ADJUSTED BY THE APPROPRIATE UTILITY FORCE. WHERE EXISTING STRUCTURES ARE TO BE REMOVED OR FILLED, OR THE EXISTING CASTING REPLACED, THE CASTINGS REMOVED FROM THE STRUCTURE ARE TO REMAIN THE PROPERTY OF THE VILLAGE AND BE SALVAGED. THE CONTRACTOR IS TO DELIVER FRAMES AND LIDS TO THE VILLAGE'S PUBLIC WORKS YARD.

## MAINTENANCE OF EXISTING DRAINAGE STRUCTURES

ANY LOOSE MATERIAL THAT IS DEPOSITED IN THE FLOW LINE OF ANY GUTTERS OR DRAINAGE STRUCTURE SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE FACILITIES SHALL BE CLEAN AND FREE OF ALL OBSTRUCTIONS.

## SAW CUTTING

THE CONTRACTOR SHALL SAW CUT ASPHALT PAVEMENT AND CONCRETE PAVEMENT AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, TO SEPARATE THE EXISTING PAVEMENT TO BE REMOVED BY MEANS OF AN APPROVED CONCRETE SAW TO A DEPTH AS DIRECTED BY THE ENGINEER. SUITABLE GUIDELINES OR DEVICES SHALL BE USED TO ASSURE CUTTING A NEAT, STRAIGHT LINE AS SHOWN ON THE PLANS. CARE SHALL BE TAKEN BY THE CONTRACTOR SO AS NOT TO DAMAGE THE REMAINING PAVEMENT DIRECTLY ADJACENT TO THE PAVEMENT TO BE REMOVED. ANY DAMAGE TO THE EXISTING PAVEMENT RESULTING FROM PAVEMENT REMOVAL OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR.

## PROPOSED STRUCTURES

THE CONTRACTOR SHALL NOT ORDER PROPOSED STRUCTURES UNTIL A JULIE REQUEST HAS BEEN EXECUTED AND THE ENGINEER HAS BEEN NOTIFIED BY THE CONTRACTOR OF ANY CONFLICTS.

## ITEMS TO BE SALVAGED

WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, EXISTING SEWER FRAMES AND LIDS, VALVE BOXES, DOMESTIC WATER SERVICE BOXES, FIRE HYDRANTS AND OTHER CASTINGS ARE TO BE REMOVED BY THE CONTRACTOR. ADDITIONALLY, ALL EXISTING SIGNAGE SCHEDULED FOR REMOVAL WILL ALSO BE APPROPRIATED BY THE CONTRACTOR. THESE ITEMS WILL REMAIN THE PROPERTY OF THE VILLAGE, AND SHALL BE DELIVERED TO THE OWNER AT ITS PUBLIC WORKS FACILITY AT 2734 S. 9TH AVENUE, BROADVIEW, IL 60155.

## NOTIFICATION OF RESIDENTS

THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING WRITTEN NOTICE TO ALL RESIDENCES AND/OR PLACES OF BUSINESS IN THE WORK ZONE AT LEAST ONE (1) WORKING DAY PRIOR TO PERFORMING ANY CONSTRUCTION ACTIVITY THAT WILL ELIMINATE ACCESS TO THEIR PROPERTY. THE WRITTEN NOTICE SHALL BE APPROVED BY THE ENGINEER AND COORDINATED WITH THE VILLAGE PRIOR TO THE BEGINNING OF CONSTRUCTION.

## TRAFFIC PROTECTION

WHEN WORK COMMENCES, THE CONTRACTOR SHALL ASSUME THE MAINTENANCE OF ANY PAVEMENT, SHOULDERS, DRAINAGE FACILITIES, TRAFFIC CONTROL SIGNS, PAVEMENT MARKINGS, AND OTHER APPURTENANCES ON ROADWAYS WITHIN THE LIMITS OF THE CONTRACT THAT ARE TO BE USED BY THE PUBLIC DURING CONSTRUCTION AND TO RETAIN THIS MAINTENANCE RESPONSIBILITY UNTIL PROJECT COMPLETION. NEED FOR SNOW AND ICE CONTROL DURING THE CONSTRUCTION PERIOD SHALL BE ACCOMMODATED FOR BY OTHERS.

## PLUGGING EXISTING SEWERS AND DRAINS

UNLESS OTHERWISE SPECIFIED, ABANDONED SEWERS AND DRAINS, AS DESIGNATED BY THE ENGINEER, SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO (2) FOOT LONG NON-SHRINK/MORTAR PLUG.

## UNDERCUT AND AGGREGATE SUBGRADE IMPROVEMENT

A QUANTITY OF AGGREGATE SUBGRADE IMPROVEMENT AND SUBGRADE REMOVAL HAVE BEEN PROVIDED FOR USE IF THE EXISTING SOILS ARE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH IMPROVED SUBGRADE WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHALL BE TESTED WITH A STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSUITABLE MATERIAL IS ENCOUNTERED, THE SOIL SHALL BE REMOVED AND REPLACED AS DETERMINED BY THE ENGINEER. IF UNSUITABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY OF AGGREGATE SUBGRADE IMPROVEMENT WILL REMAIN UNUSED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR. THE 3-INCH CAPPING AGGREGATE (CA-6 GRADATION) WILL NOT BE REQUIRED SINCE GRANULAR SUBBASE WILL BE PLACED ON TOP OF THE AGGREGATE SUBGRADE IMPROVEMENT.

THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECT BY THE ENGINEER AT CONTRACTOR EXPENSE.

## STORM SEWER STRUCTURES

PRE-CAST REINFORCED CONCRETE SECTIONS FABRICATED IN ACCORDANCE WITH ASTM C-478 WILL BE USED ON ALL STRUCTURES AND RECONSTRUCTED STRUCTURES. FINAL ADJUSTMENT SHALL BE MADE USING PRE-CAST ADJUSTING RINGS. A MAXIMUM OF 6" OF ADJUSTING RINGS WILL BE PERMITTED. THE WORK DESCRIBED WITHIN THE SPECIAL PROVISION FOR FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) SHALL BE PERFORMED WHEN INSTALLING A NEW STORM SEWER STRUCTURE.

## MANHOLE OR VALVE VAULT COVERS

THE WORD "WATER", "SANITARY", OR "STORM" SHALL BE CAST INTO THE LID OF EACH RESPECTIVE MANHOLE OR VALVE VAULT.

## BACKFILLING SEWERS UNDER ROADWAY

FOR SEWERS UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE (JETTING) AS DESCRIBED IN ARTICLE 550.07 WILL NOT BE ALLOWED.

## CONCRETE BREAKERS

WHEN REMOVING PAVEMENT, CURB AND GUTTER, SHOULDER, AND/OR ANY OTHER STRUCTURES, THE USE OF ANY TYPE OF CONCRETE BREAKERS SUCH AS DROP HAMMERS, WHICH MIGHT DAMAGE UNDERGROUND PUBLIC OR PRIVATE UTILITIES, WILL NOT BE PERMITTED. UNDER NO CIRCUMSTANCES WILL THE USE OF A FROST BALL BE PERMITTED.

## NOTE

THE CONTRACTOR SHALL NOTIFY THE IDOT TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

## PAVEMENT MARKING DOCUMENTATION

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 DIRECTED BY THE ENGINEER.

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DRAWN -	DMM, SFB	REVISED -
CHECKED -	JGG, MWV	REVISED -
DATE -	2-11-20	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

### GENERAL NOTES

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

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	3
FIELD BOOK NO. :-	CONTRACT NO. 61G35			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801

## M.W.R.D.G.C. GENERAL NOTES

### 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 BROADVIEW 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 BROADVIEW 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 1-800-892-0123.

### c. GENERAL NOTES

- ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS 0.0 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 BY THE CONTRACTOR.
- MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED ON TRENCH BACKFILL MATERIAL IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENT 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) FUSION	ASTM D-3350	ASTM D-3261, F-2620 (HEAT FUSION)
	ASTM D-3035	ASTM D-3212, F-477
(GASKETED)		
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	D-3212, F-477

- ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE 1/2" 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 AND PROPER INSTALLATION OF HUB-WYE 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 FLEXIBLE NON-SHEAR CONNECTORS 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 WATERMAIN, THE SEWER SHALL BE CONSTRUCTED TO WATERMAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATERMAIN 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 DISCHARGED 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.

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<p><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	4
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		

I.H.E. PROJECT NO. 120-19-00801

**SUMMARY OF QUANTITIES**

PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE RECONSTRUCTION	CONSTRUCTION TYPE CODE RECONSTRUCTION	CONSTRUCTION TYPE CODE RECONSTRUCTION	CONSTRUCTION TYPE CODE RECONSTRUCTION
				0004 80% FEDERAL 20% LOCAL	0004 0% FEDERAL 100% LOCAL	0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	0042 TRAINEES 80% FEDERAL 20% LOCAL
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	800	800			
20700220	POROUS GRANULAR EMBANKMENT	CU YD	800	800			
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQYD	2,700	2,700			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	22	22			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	22	22			
25200100	SODDING	SQ YD	1,750	1,750			
25200200	SUPPLEMENTAL WATERING	UNIT	25	25			
28000400	PERIMETER EROSION BARRIER	FOOT	1,400	1,400			
~ 28000510	INLET FILTERS	EACH	28	28			
~ 30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQYD	12,400	12,400			
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	100	100			
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	200	200			
~ 40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	410	410			
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	70	70			
40604060	HOT-MIX ASPHALT SURFACE COURSE, MIX "D" IL 9.5, N50	TON	40	40			
~ 40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	80	80			
~ 42000900	HIGH-EARLY-STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT 8"	SQ YD	2,670	2,670			

~ DENOTES SPECIAL PROVISION HAS BEEN PROVIDED  
 \* DENOTES SPECIALTY ITEM

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DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	3-19-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>SUMMARY OF QUANTITIES</b>			
SCALE: NONE	SHEET NO. 1 OF 10 SHEETS	STA.	TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	18-00880-01-PV	COOK	102	5
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801

**SUMMARY OF QUANTITIES**

PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 0% FEDERAL 100% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0042 TRAINEES 80% FEDERAL 20% LOCAL
~ 42001000	HIGH-EARLY-STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT 9"	SQ YD	10,790	10,790			
~ 42001300	PROTECTIVE COAT	SQ YD	16,000	16,000			
~ 42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	14,450	14,450			
~ 42400800	DETECTABLE WARNINGS	SQ FT	236	236			
~ 44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	1,760	1,760			
~ 44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	5,500	5,500			
~ 44000600	SIDEWALK REMOVAL	SQ FT	17,500	17,500			
~ 44201696	CLASS D PATCHES, TYPE IV, 4 INCH	SQ YD	1,200	1,200			
~ 550A2350	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 21"	FOOT	649	649			
~ * 56103000	DUCTILE IRON WATER MAIN 6"	FOOT	140		140		
~ * 56103100	DUCTILE IRON WATER MAIN 8"	FOOT	145		145		
~ * 56103300	DUCTILE IRON WATER MAIN 12"	FOOT	1,255		1,255		
~ * 56104900	WATER VALVES 6"	EACH	4		4		
~ * 56105000	WATER VALVES 8"	EACH	3		3		
~ * 56105200	WATER VALVES 12"	EACH	3		3		
~ * 56400500	FIRE HYDRANTS TO BE REMOVED	EACH	4		4		

~ DENOTES SPECIAL PROVISION HAS BEEN PROVIDED  
 \* DENOTES SPECIALTY ITEM

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CHECKED -	JGG, MWV	REVISED -	
DATE -	3-19-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>SUMMARY OF QUANTITIES</b>			
SCALE: NONE	SHEET NO. 2 OF 10 SHEETS	STA.	TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00689-01-PV	COOK	102	6
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

Drawing file: W:\Projects\_02\_2019\12019028 -Riviera Drive Stage II - 06.mxd; Date: 3/19/2020; 3:28pm

E.I.E. PROJECT NO. 120-19-00061

**SUMMARY OF QUANTITIES**

PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 0% FEDERAL 100% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0042 TRAINEES 80% FEDERAL 20% LOCAL
~ * 56400820	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	4		4		
~ 60108204	PIPE UNDERDRAINS TYPE 2, 4"	FOOT	162	162			
~ 60248900	VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	10		10		
~ 60255500	MANHOLES TO BE ADJUSTED	EACH	13	13			
~ 60257900	MANHOLES TO BE RECONSTRUCTED	EACH	23	23			
~ 60265700	VALVE VAULTS TO BE ADJUSTED	EACH	3	3			
~ 60266100	VALVE VAULTS TO BE RECONSTRUCTED	EACH	16	16			
~ 60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	47	47			
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	250	250			
~ 63200310	GUARDRAIL REMOVAL	FOOT	250	250			
~ * 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	21	21			
~ * 66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3			
~ * 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1			
~ * 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	200	200			
~ * 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1			
~ 67100100	MOBILIZATION	L SUM	1	1			

~ DENOTES SPECIAL PROVISION HAS BEEN PROVIDED  
 \* DENOTES SPECIALTY ITEM

Drawing file: W:\Projects\By Design\Bioscience\120190008 -Biosp Five Steps 4 - Design\540384\09-14\_Summary.dwg Mar 20, 2020 - 10:30am

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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	3-19-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET NO. 3 OF 10 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	18-00080-01-PV	COOK	102	7
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

S.H.E. PROJECT NO. 120-19-00801

**SUMMARY OF QUANTITIES**

PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 0% FEDERAL 100% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0042 TRAINEES 80% FEDERAL 20% LOCAL
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	240	240			
~ 70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	5,175	5,175			
~ 70300912	PAVEMENT MARKING TAPE, TYPE IV 12"	FOOT	160	160			
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1,900	1,900			
* 72000100	SIGN PANEL - TYPE 1	SQ FT	196	173		23	
* 72900100	METAL POST - TYPE A	FOOT	594	594			
* 78009000	MODIFIED URETHANE PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	450	450			
* 78009004	MODIFIED URETHANE PAVEMENT MARKING TYPE I - LINE 4"	FOOT	4,830	4,830			
* 78009006	MODIFIED URETHANE PAVEMENT MARKING TYPE I - LINE 6"	FOOT	880	880			
* 78009024	MODIFIED URETHANE PAVEMENT MARKING TYPE I - LINE 24"	FOOT	170	170			
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL. 2" DIA.	FOOT	320	240		80	
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL. 3" DIA.	FOOT	120			120	
* 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL. 4" DIA.	FOOT	366			366	
* 81400100	HANDHOLE	EACH	1			1	
* 81400300	DOUBLE HANDHOLE	EACH	1			1	

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 \* DENOTES SPECIALTY ITEM

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DRAWN -	DMM, SFB	REVISED -
CHECKED -	JGG, MWV	REVISED -
DATE -	3-19-20	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: NONE    SHEET NO. 4 OF 10 SHEETS    STA.    TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	8
FIELD BOOK NO.:		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

Drawing File: W:\Projects\By\_Village\Bridges\12019028 - Bridge Drive Steps II - Design\CAD\Sheet\05-14\_Summary.dwg    Date: 03/19/2020    3:25pm

SHEET PROJECT NO. 126-79-00801



**SUMMARY OF QUANTITIES**

PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 0% FEDERAL 100% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0042 TRAINEES 80% FEDERAL 20% LOCAL
* 81603040	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	2,800	2,800			
* 83006500	LIGHT POLE ALUMINUM, 30 FT. M.H., 12 FT. MAST ARM	EACH	16	16			
* 83600352	LIGHT POLE FOUNDATION, METAL, 11 1/2" BOLT CIRCLE, 8 5/8" X 6'	EACH	16	16			
* 83800505	BREAKAWAY DEVICE COUPLING ALUMINUM SKIRT	EACH	64	64			
* 84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	20	20			
* 84200804	REMOVAL OF POLE FOUNDATION	EACH	20	20			
~ * 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2			2	
* 87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1,785			1,785	
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,251			1,251	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,391			1,391	
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	831			831	
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,854			1,854	
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,220			1,220	
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	55			55	
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	605			605	
* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3			3	

~ DENOTES SPECIAL PROVISION HAS BEEN PROVIDED  
 ~ DENOTES SPECIALTY ITEM

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DATE -	3-19-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: NONE    SHEET NO. 5 OF 10 SHEETS    STA.    TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-0088-01-PV	COOK	102	9
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

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I.L.E. PROJECT NO. 120-19-0901

**SUMMARY OF QUANTITIES**

PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 0% FEDERAL 100% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0042 TRAINEES 80% FEDERAL 20% LOCAL
* 87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1			1	
* 87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1			1	
* 87702490	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 32 FT. AND 40 FT.	EACH	1			1	
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16			16	
* 87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10			10	
* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	25			25	
* 87900200	DRILL EXISTING HANDHOLE	EACH	7			7	
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4			4	
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4			4	
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6			6	
* 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	
* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	8			8	
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1			1	
* 89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	1			1	
* 89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1			1	

~ DENOTES SPECIAL PROVISION HAS BEEN PROVIDED  
 \* DENOTES SPECIALTY ITEM



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CHECKED -	JGG, MWV	REVISED -	
DATE -	3-19-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: NONE    SHEET NO. 6 OF 10 SHEETS    STA.    TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3915	16-00089-01-PV	COOK	102	10
FIELD BOOK NO. : -		CONTRACT NO. 81G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

Drawing Title: W:\Projects\2019\808 - Bridge One Stage 1 - Design\CD\31615-16-14\_Summary\_of\_Quantities.dwg    Mar 20, 2020 - 10:34am

S.H.E. PROJECT NO. 120-19-00061



**SUMMARY OF QUANTITIES**

					CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 0% FEDERAL 100% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0042 TRAINEES 80% FEDERAL 20% LOCAL
	PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY				
~ *	X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1			1	
*	X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1			1	
~	X2020410	EARTH EXCAVATION (SPECIAL)	CU YD	8,600	8,600			
~	X2080250	TRENCH BACKFILL, SPECIAL	CU YD	2,200	980	1,220		
~	X2110104	TOPSOIL FURNISH AND PLACE, 4" (SPECIAL)	SQ YD	1,750	1,750			
~	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	400	400			
~	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	28	28			
~	X4023000	TEMPORARY ACCESS (ROAD)	EACH	5	5			
~	X5510100	STORM SEWER REMOVAL	FOOT	1,220	1,220			
~ *	X5610004	DUCTILE IRON WATER MAIN FITTINGS	POUND	7,500		7,500		
~ *	X5620040	WATER SERVICE CONNECTION, 2"	EACH	1		1		
~ *	X5630706	CONNECTION TO EXISTING WATER MAIN 6"	EACH	4		4		
~ *	X5630708	CONNECTION TO EXISTING WATER MAIN 8"	EACH	4		4		
~ *	X5630712	CONNECTION TO EXISTING WATER MAIN 12"	EACH	1		1		
~	X6022805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID, SPECIAL	EACH	27	27			
~	X6023700	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, <b>CLOSED</b> LID, SPECIAL	EACH	7	7			

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CHECKED -	JGG, MWV	REVISED -	
DATE -	3-19-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET NO. 8 OF 10 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	18-0080-01-PV	COOK	102	12
FIELD BOOK NO.:		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

Drawing file: W:\Projects\by\_vendor\Illinois\12019008 -Burg Drive Stage II - Design\CD\3015\_PV-12\_Summary\_Qty.dwg Apr 20, 2020 - 10:31am

C.H.E. PROJECT NO. 12019-0081

**SUMMARY OF QUANTITIES**

PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 0% FEDERAL 100% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0042 TRAINEES 80% FEDERAL 20% LOCAL
~ *	X6026055 SANITARY MANHOLE, SPECIAL	EACH	2	2			
~	X6064200 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	5,500	5,500			
~	X7010216 TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
~	X7240600 REMOVE AND RE-ERECT EXISTING SIGN	EACH	12	12			
*	X8710024 FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	1,785		1,785		
*	X8780010 CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER	FOOT	4			4	
~	Z0018700 DRAINAGE STRUCTURE TO BE REMOVED	EACH	30	30			
~	Z0019600 DUST CONTROL WATERING	UNIT	75	75			
~	Z0023200 FILLING DRAINAGE STRUCTURES	EACH	1	1			
~	Z0030850 TEMPORARY INFORMATION SIGNING	SQ FT	206	206			
~ *	Z0033028 MAINTENANCE OF LIGHTING SYSTEM	CAL MO	8	8			
~ *	Z0033046 RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1			1	
~	Z0056648 STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"	FOOT	816	816			
~	Z0056652 STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 18"	FOOT	40	40			
~ *	Z0058300 SANITARY SEWER, TYPE 1, 8"	FOOT	258	258			
~ *	Z0059500 SANITARY SEWER, TYPE 2, 6"	FOOT	40	40			

~ DENOTES SPECIAL PROVISION HAS BEEN PROVIDED  
 \* DENOTES SPECIALTY ITEM

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DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 3-19-20	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET NO. 9 OF 10 SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3D15	16-00080-01-PV	COOK	102	13
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

Drawing File: W:\Projects\By Village\Illinois\17015008 - Bogo Drive Stage II - Design\CAD\Sheet\08-14\_Sum\_of\_Qty.dwg 1/27/20 2:23:10 PM

S.H.E. PROJECT NO. 126-19-0001

**SUMMARY OF QUANTITIES**

	PIN	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0004 0% FEDERAL 100% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0021 TRAFFIC SIGNALS 80% FEDERAL 20% LOCAL	CONSTRUCTION TYPE CODE RECONSTRUCTION 0042 TRAINEES 80% FEDERAL 20% LOCAL
~	Z0062000	SAW CUTTING	FOOT	2,700	2,700			
~	Z0062456	TEMPORARY PAVEMENT	SQ YD	2,600	2,600			
~	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1			1	
~	Z0076600	TRAINEES	HOUR	500				500
~	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500				500
~ *	XX000836	PRESSURE TESTING AND DISINFECTION	L SUM	1		1		
~ *	XX006227	RESTRAINED JOINT 8"	EACH	40		40		
~ *	XX006228	RESTRAINED JOINT 6"	EACH	30		30		
~ *	XX008914	RESTRAINED JOINT 12"	EACH	40		40		
~ *	XX006834	ELECTRICAL CONNECTION TO EXISTING LIGHTING SYSTEM	EACH	5	5			

~ DENOTES SPECIAL PROVISION HAS BEEN PROVIDED  
 \* DENOTES SPECIALTY ITEM

Drawing file: w:\projects\by\m\m\12018008 - Bridge Drive Stage 2 - Design\CD\Sheet\08-14\_Sum\_of\_Qty.dwg Date: 03/19/2020 3:32pm



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DATE -	3-19-20	REVISED -	

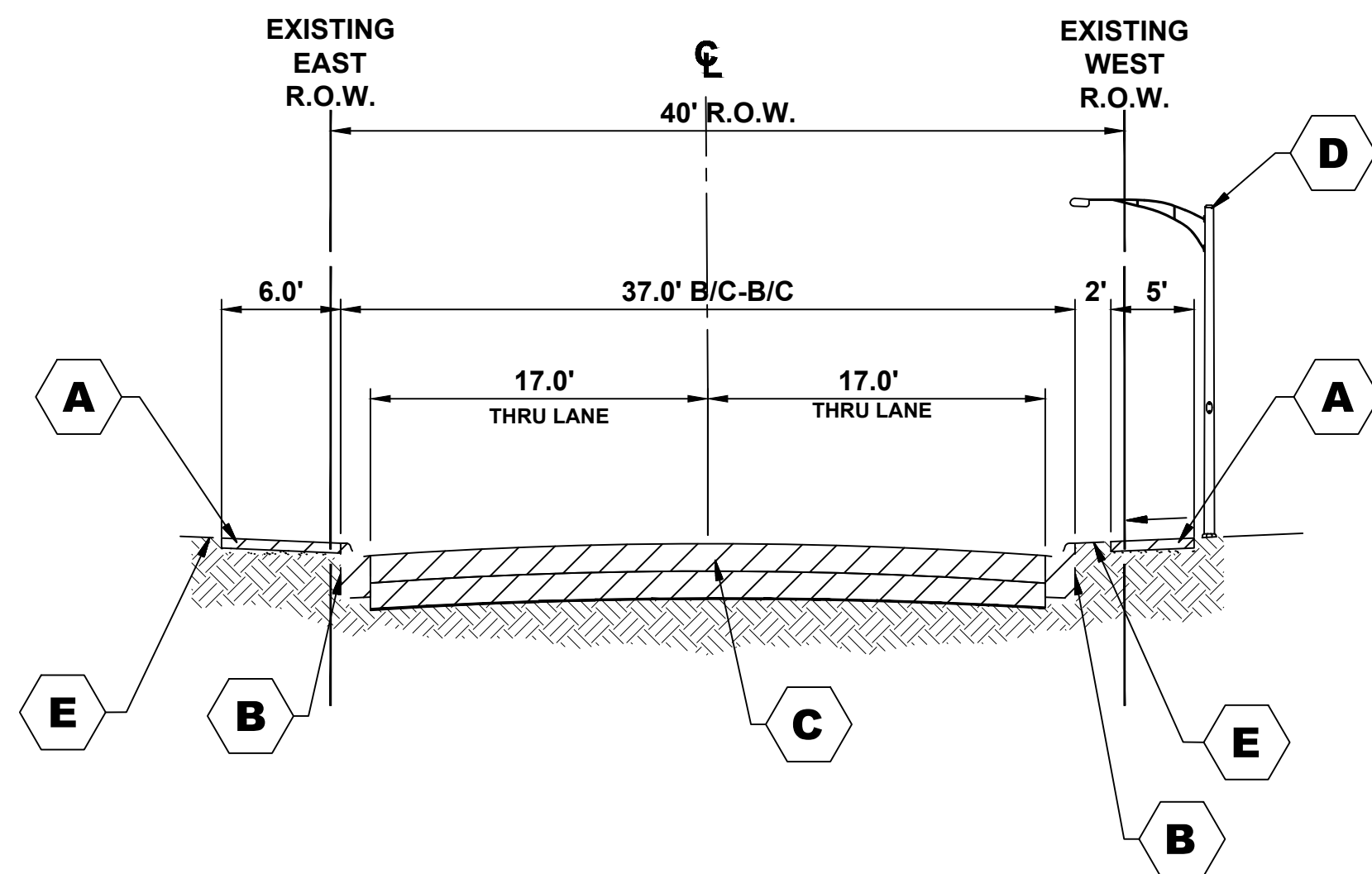
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

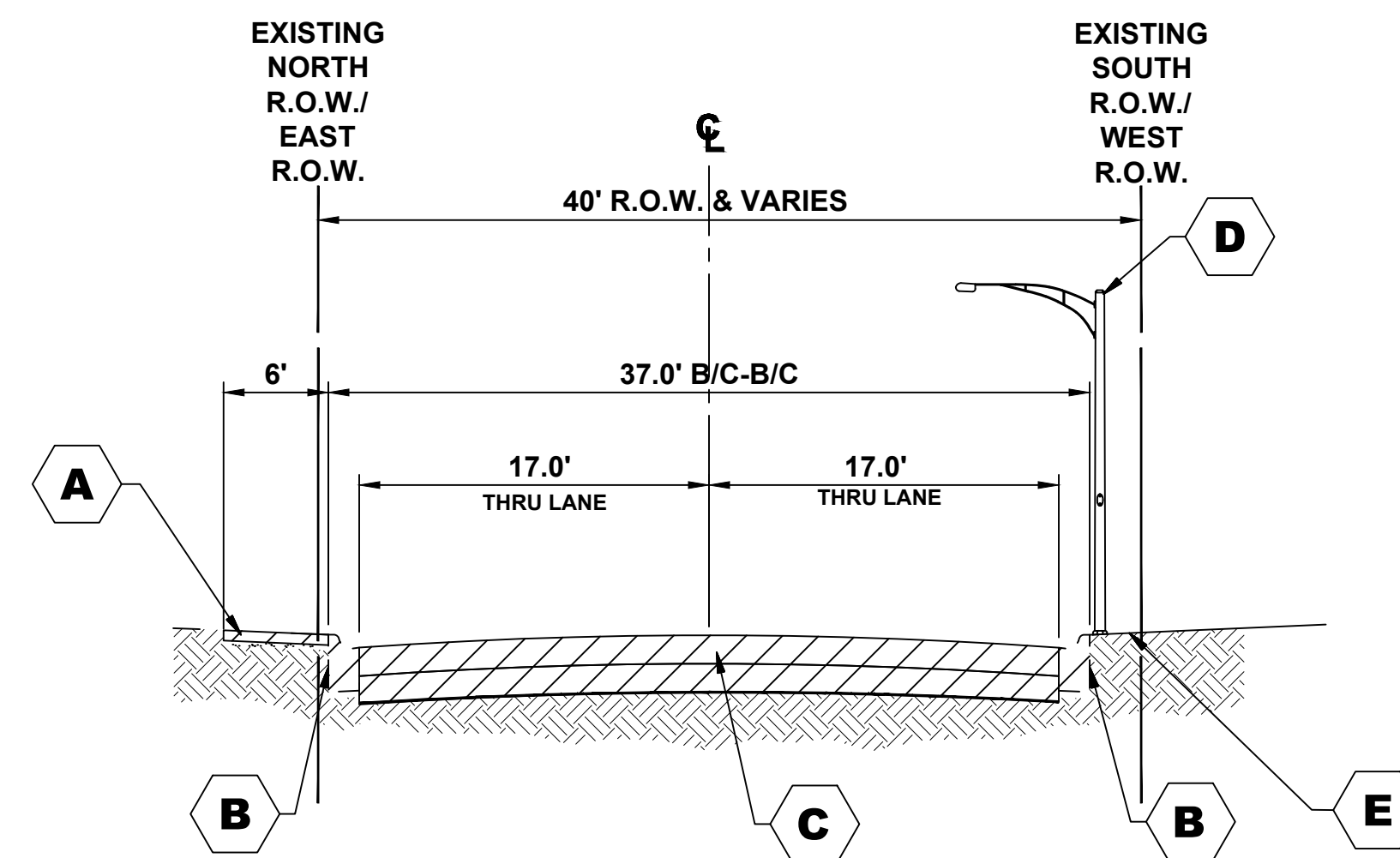
SCALE: NONE SHEET NO. 10 OF 10 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	14
FIELD BOOK NO.:		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

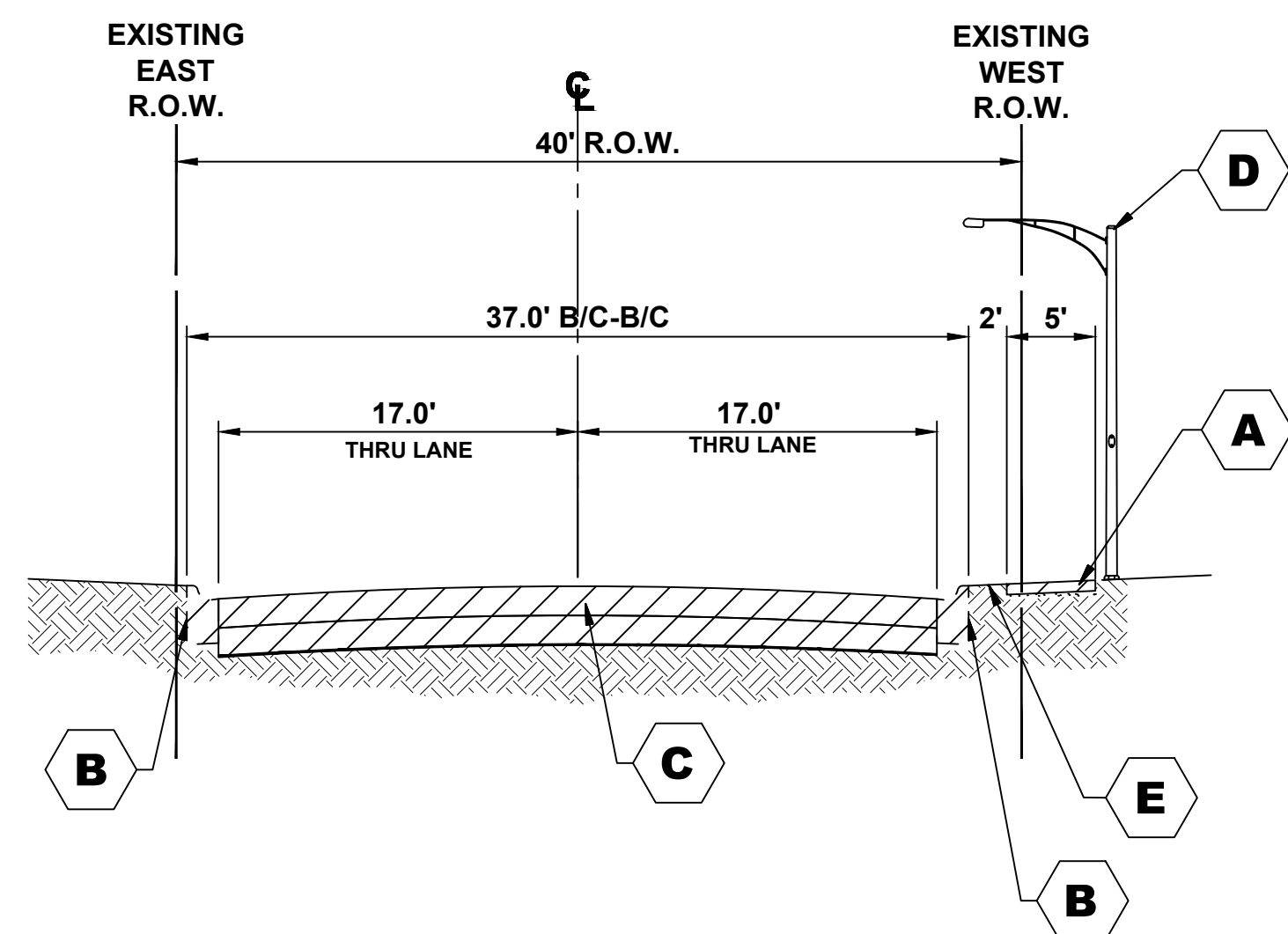
SHEET PROJECT NO. 120-15-0081



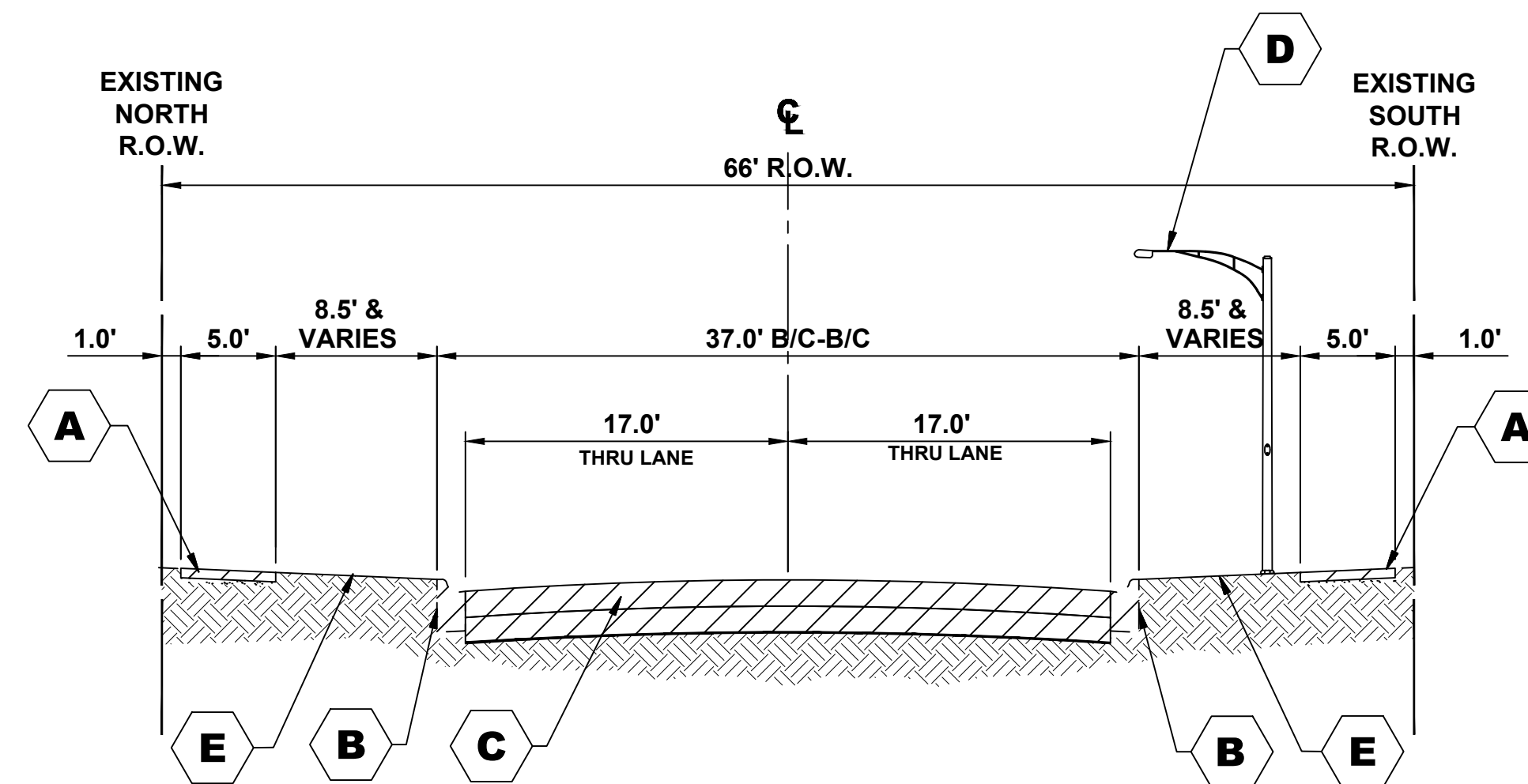
**EXISTING TYPICAL SECTION**  
**21ST AVENUE**  
 (STA. 17+45 TO 21+20)  
 (STA. 27+75 TO 29+67)



**EXISTING TYPICAL SECTION**  
**21ST AVENUE**  
 (STA. 29+67 TO 32+00)



**EXISTING TYPICAL SECTION**  
**21ST AVENUE**  
 (STA. 21+20 TO 27+75)



**EXISTING TYPICAL SECTION**  
**19TH STREET**  
 (STA. 32+00 TO 43+30)

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE TYPE	AIR VOIDS @ Ndes
<b>HOT-MIX ASPHALT SURFACING - BUTT JOINT</b>	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL 9.5mm)	4% @ 50 Gyr.
<b>INCIDENTAL HOT-MIX ASPHALT SURFACING - HMA PARKWAYS</b>	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 3" (2 LIFTS) (IL 9.5mm)	4% @ 50 Gyr.
<b>TEMPORARY PAVEMENT</b>	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 Gyr.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1.5" (IL 9.5mm)	4% @ 50 Gyr.
<b>21ST AVENUE / 19TH STREET</b>	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1.5" (IL 9.5mm)	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50, 2.5"	4% @ 50 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES 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 DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

**PAVEMENT CORE SUMMARY**

BORE	STREET	STATION	LANE	BITUMINOUS	STONE BASE
B-6	21ST AVE.	17+80, 35'LT	NORTHBOUND LANE	5.25"	10.75"
B-7	21ST AVE.	21+50, 15'RT	SOUTHBOUND LANE	5"	9"
B-8	21ST AVE.	24+20, 8'LT	NORTHBOUND LANE	5.25"	10.75"
B-9	21ST AVE.	27+30, 11'RT	SOUTHBOUND LANE	6"	10"
B-10	21ST AVE.	29+40, 14'LT	NORTHBOUND LANE	5.75"	10.75"
B-11	19TH ST.	32+90, 11'RT	EASTBOUND LANE	6"	9"
B-12	19TH ST.	35+90, 14'LT	WESTBOUND LANE	4"	10"
B-13	19TH ST.	39+10, 10'RT	EASTBOUND LANE	5.5"	9.5"
B-14	19TH ST.	41+70, 14'LT	WESTBOUND LANE	4"	11"

**NOTES:**

THESE CORES REFLECT ONLY THE INFORMATION FOUND AT LOCATIONS LISTED. THEY DO NOT REFLECT ANY VARIATIONS WHICH MAY OCCUR BETWEEN THESE BORINGS.

**TYPICAL SECTION LEGEND**

**EXISTING**

- A** PORTLAND CEMENT CONCRETE SIDEWALK
- B** COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- C** EXISTING PAVEMENT
- D** EXISTING STREET LIGHT TO BE REMOVED
- E** LANDSCAPED PARKWAY

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Brpgo Drive Stage II - Design\CAD\Site\15-16\_Typ\_Sections.dwg Mar 25, 2020 - 9:05am

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CHECKED -	JGG, MWV	REVISED -	
DATE -	3-25-20	REVISED -	

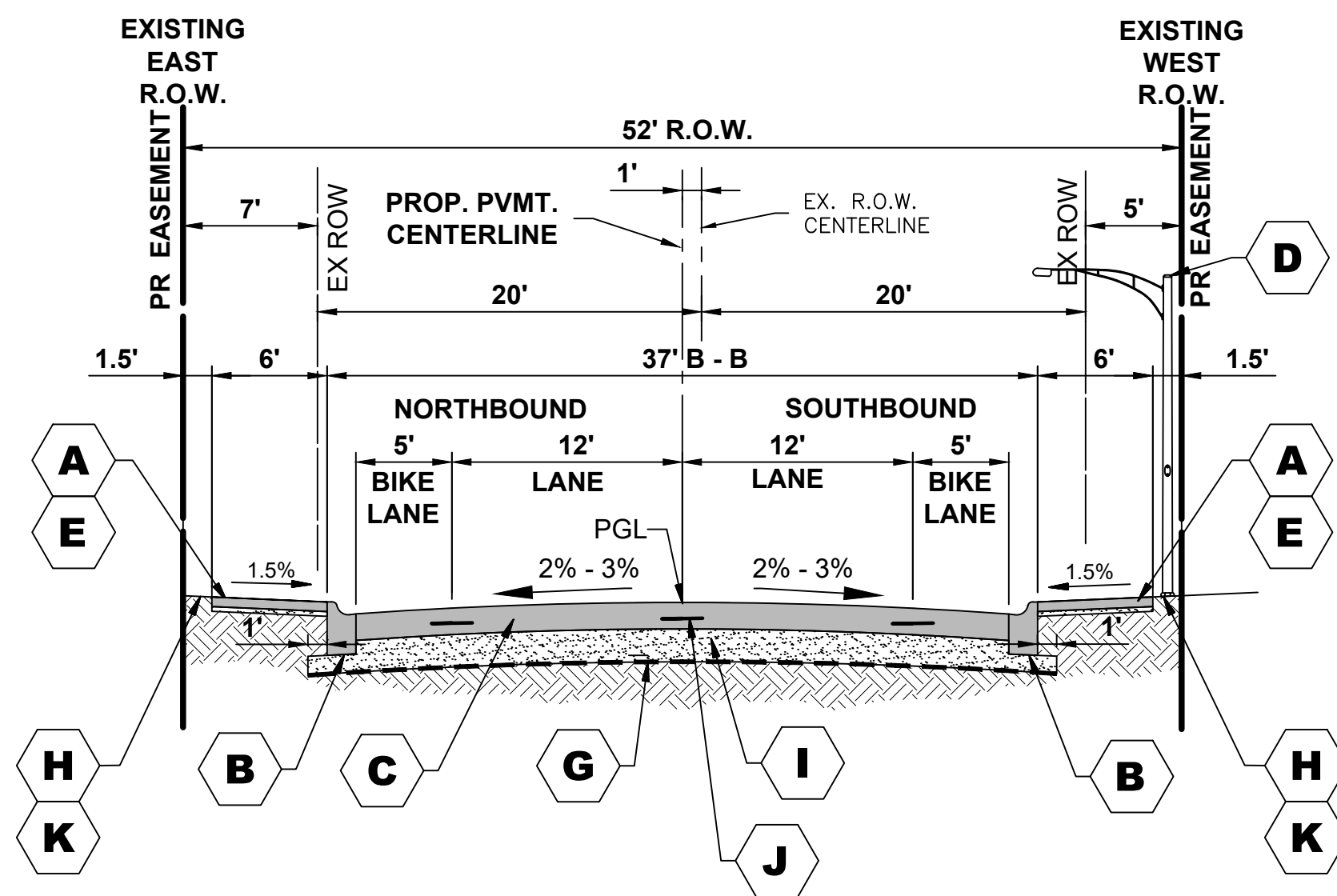
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS**

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

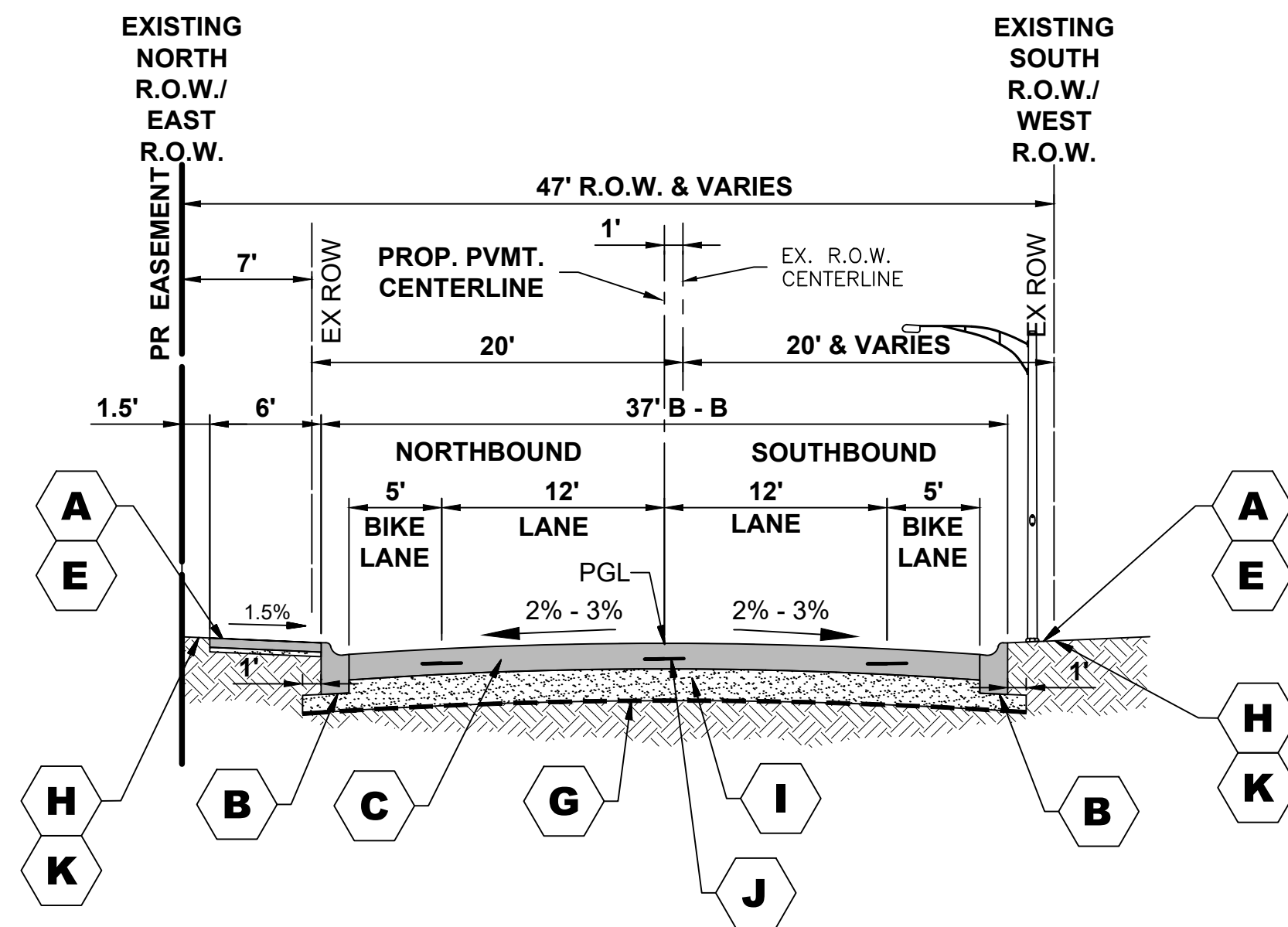
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	15
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801



**PROPOSED TYPICAL SECTION**

**21ST AVENUE**  
**STA. 17+45 TO STA. 21+20**  
**STA. 27+75 TO STA. 29+67**



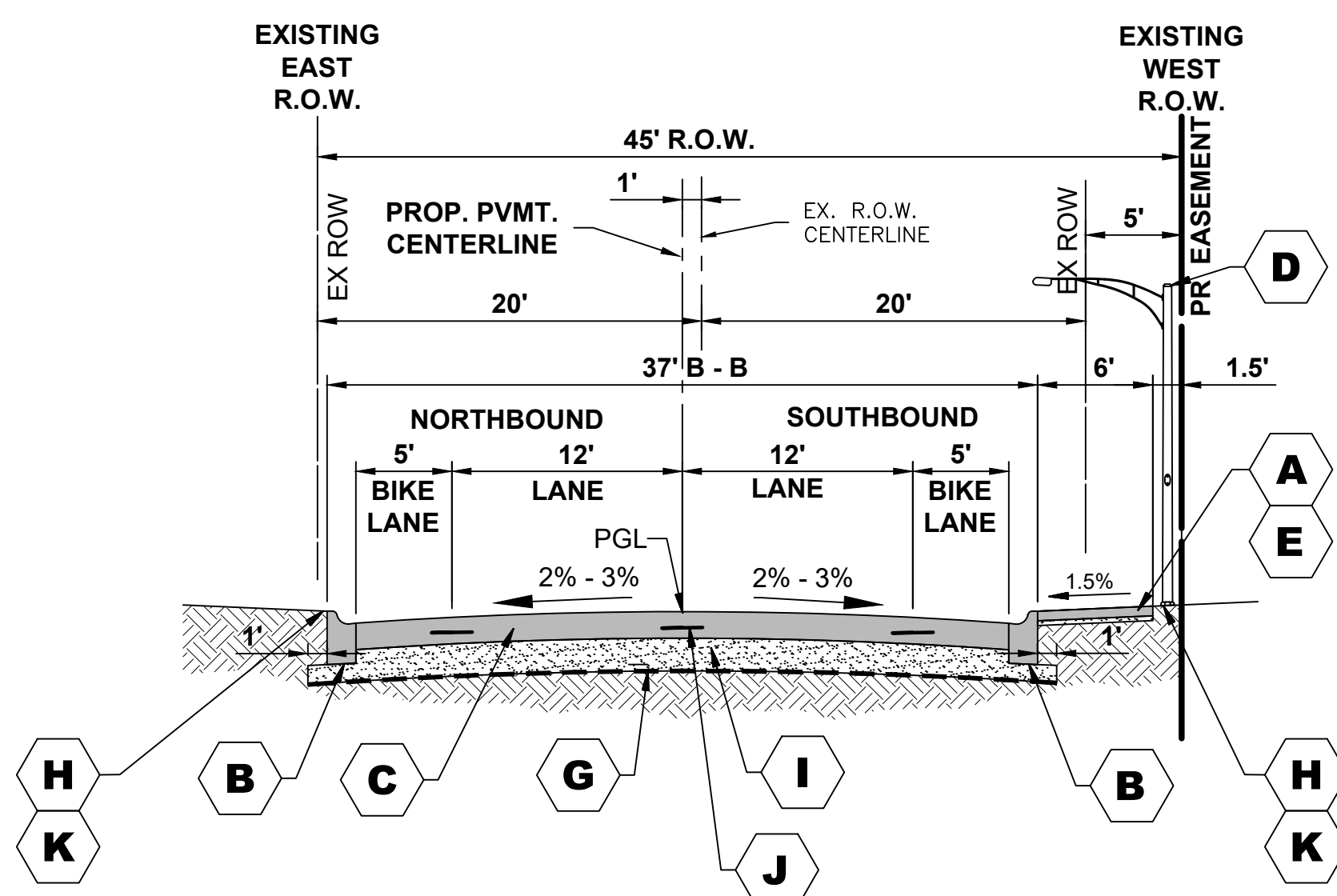
**PROPOSED TYPICAL SECTION**

**21ST AVENUE**  
**STA. 29+67 TO STA. 31+86**

**TYPICAL SECTION LEGEND**

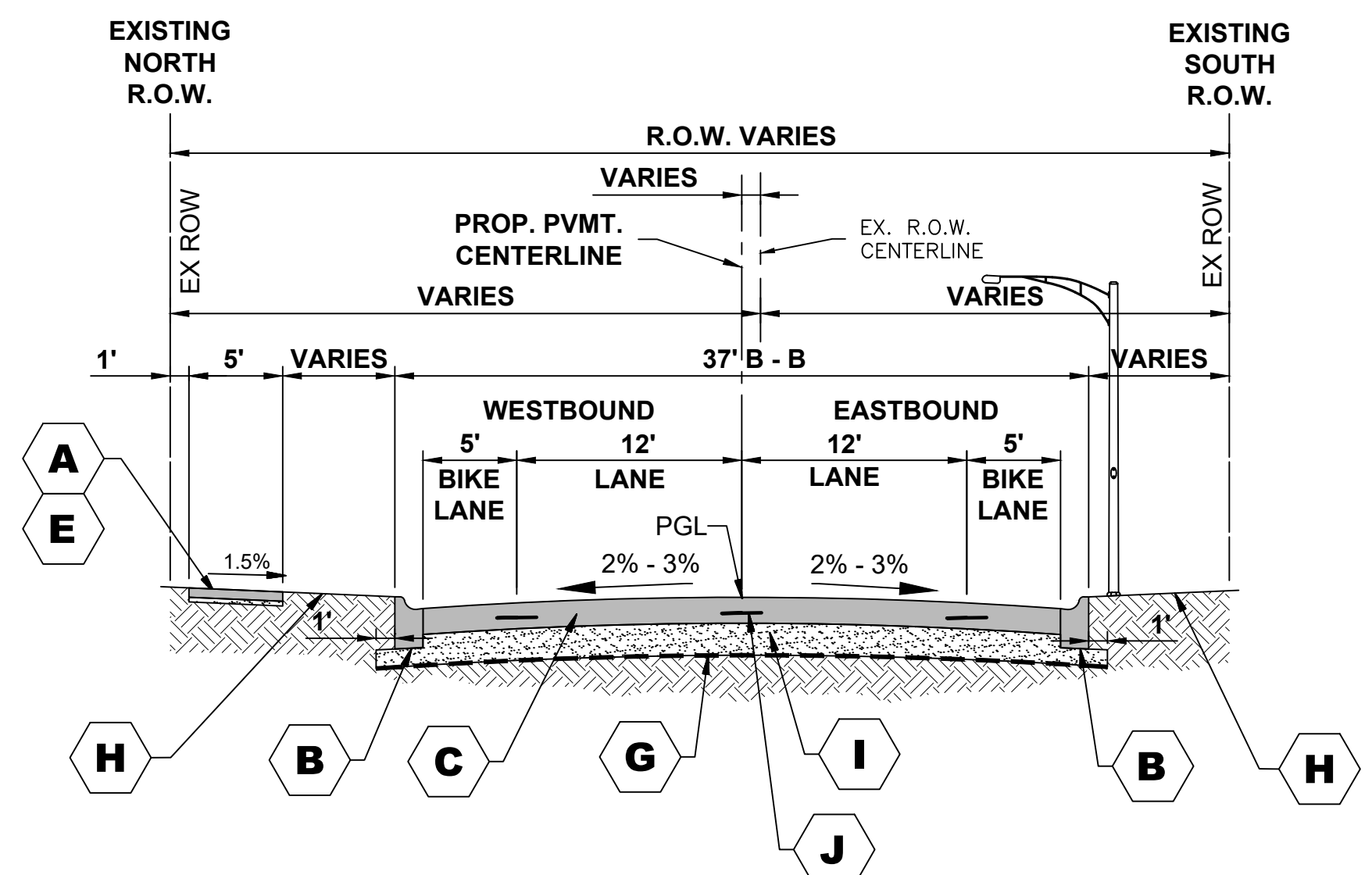
**PROPOSED**

- A** PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- B** COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- C** HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE PAVEMENT, 9"
- D** PROPOSED LIGHT POLE
- E** SUBBASE GRANULAR MATERIAL, TYPE B, 2" FOR SIDEWALKS, 4" FOR DRIVEWAYS
- G** GROUND STABILIZATION GEOSYNTHETIC
- H** LANDSCAPED PARKWAY
- I** AGGREGATE SUBGRADE IMPROVEMENT, 12"
- J** TIE BARS
- K** INCIDENTAL HOT-MIX ASPHALT RESURFACING



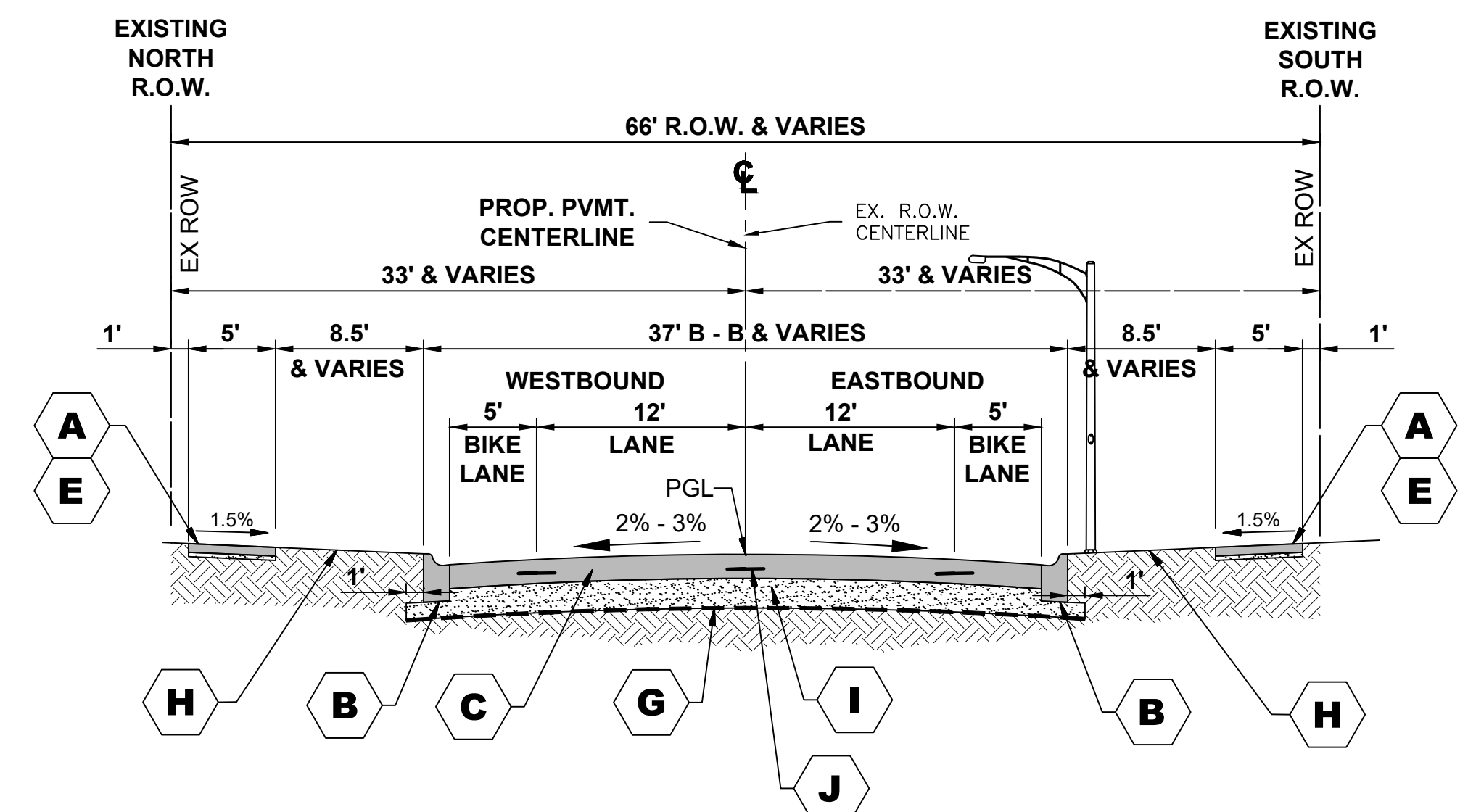
**PROPOSED TYPICAL SECTION**

**21ST AVENUE**  
**STA. 21+20 TO STA. 27+75**



**PROPOSED TYPICAL SECTION**

**21ST AVENUE, 19TH STREET**  
**STA. 31+86 TO STA. 32+28**



**PROPOSED TYPICAL SECTION**

**19TH STREET**  
**STA. 32+28 TO STA. 43+30**

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Brpgo Drive Stage II - Design\CAD\Site\15-16\_Typ\_Sections.dwg Feb 10, 2020 - 2:47pm

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CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

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

**TYPICAL SECTIONS**

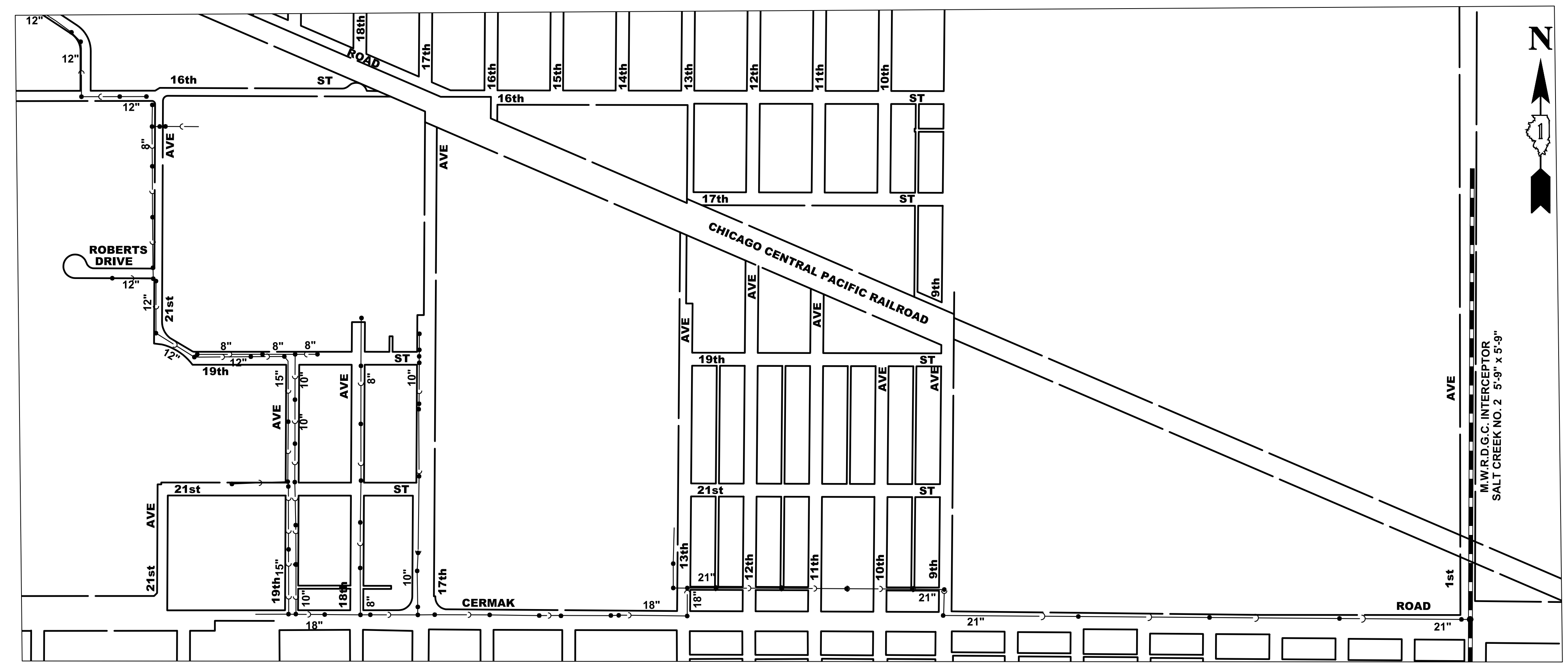
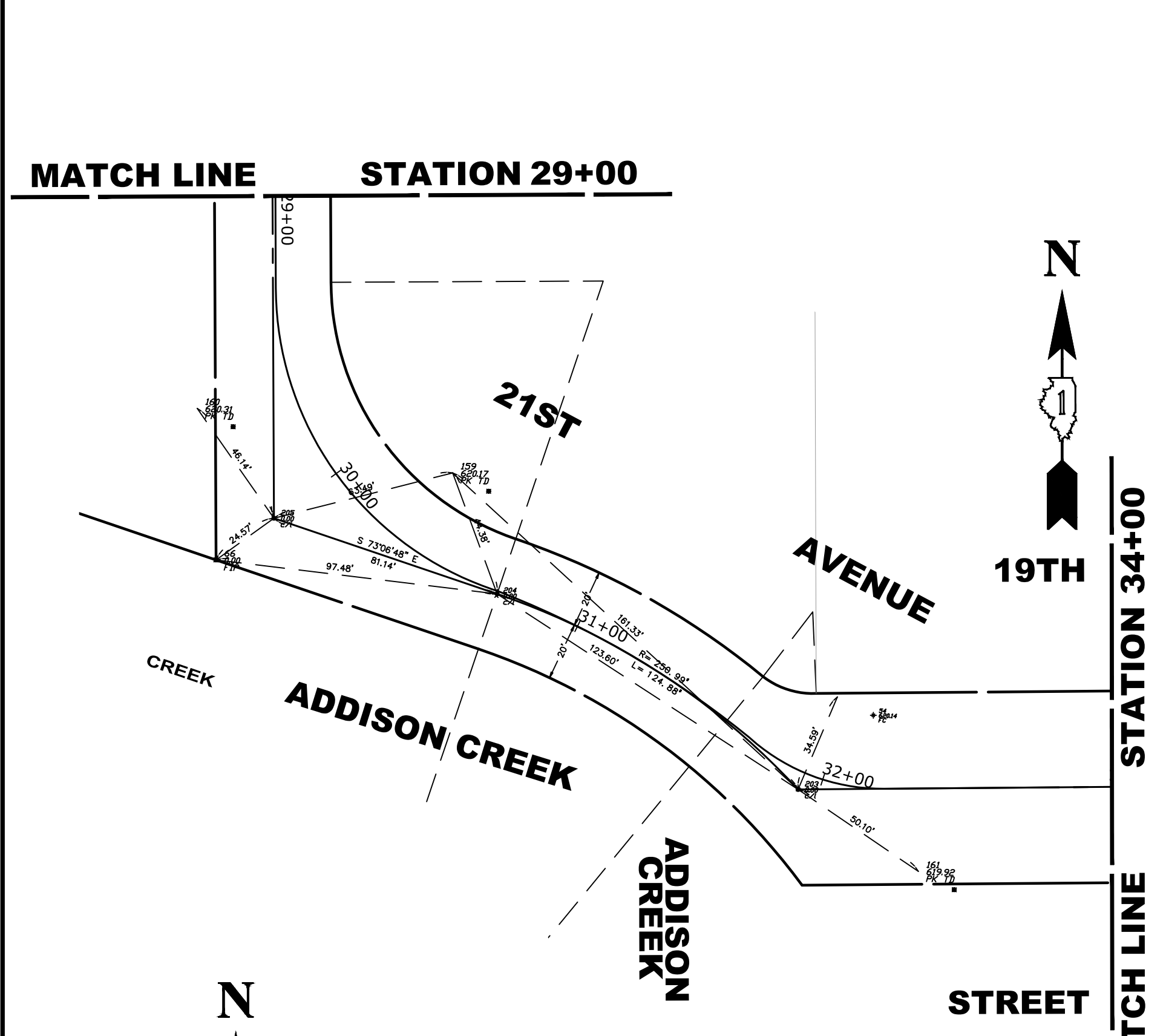
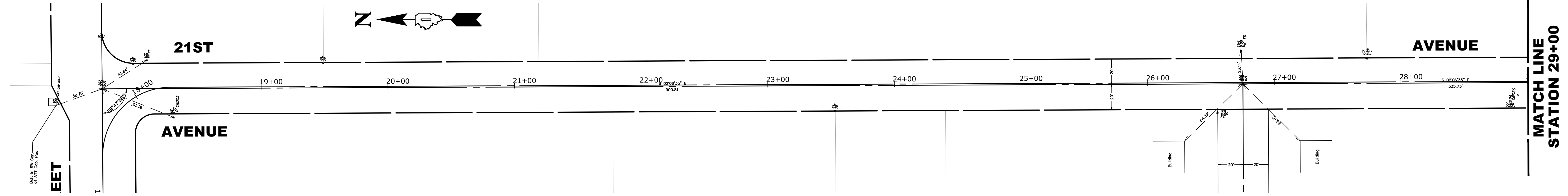
SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	16
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801



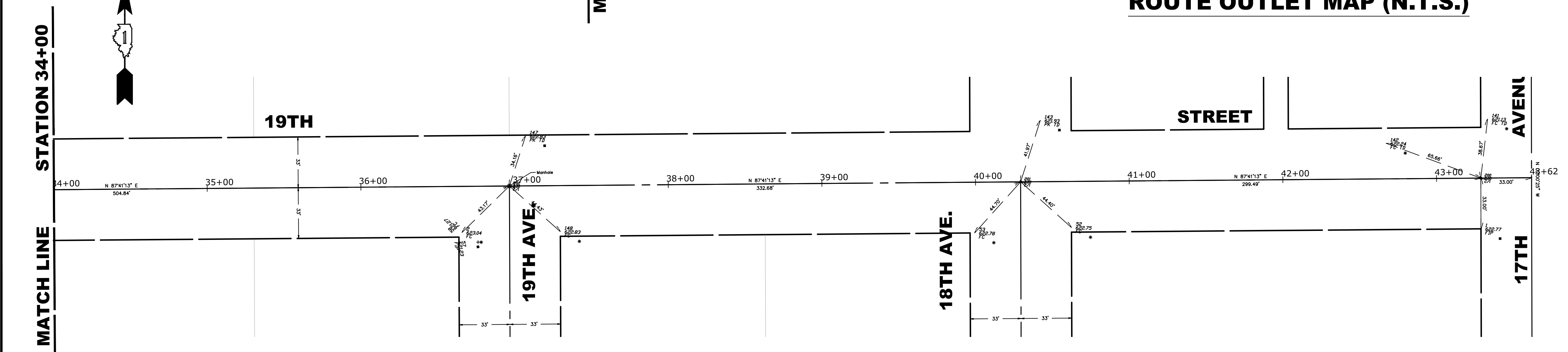
Drawing file: W:\Projects\_by\_Village\Broadview\12019008 - Broad Drive Stage II - Design\CAD\Site\17\_Alignment.dwg Feb 10, 2020 - 2:50pm



**ROUTE OUTLET MAP (N.T.S.)**

**LEGEND**

SYMBOL	DESCRIPTION
	SANITARY SEWER/VILLAGE OF BROADVIEW
	MWRDGC INTERCEPTOR



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CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

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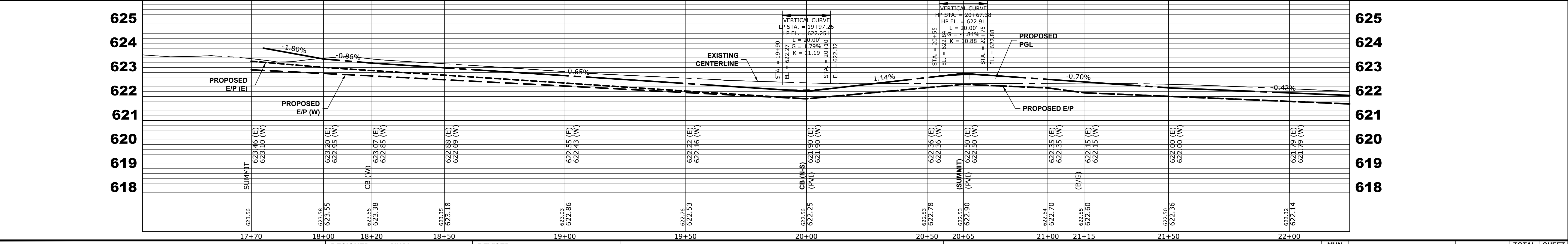
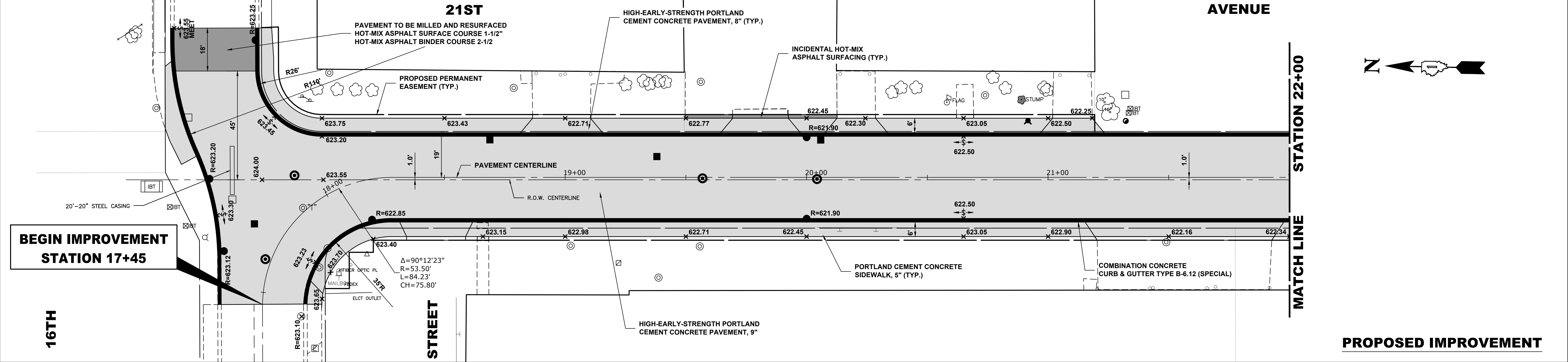
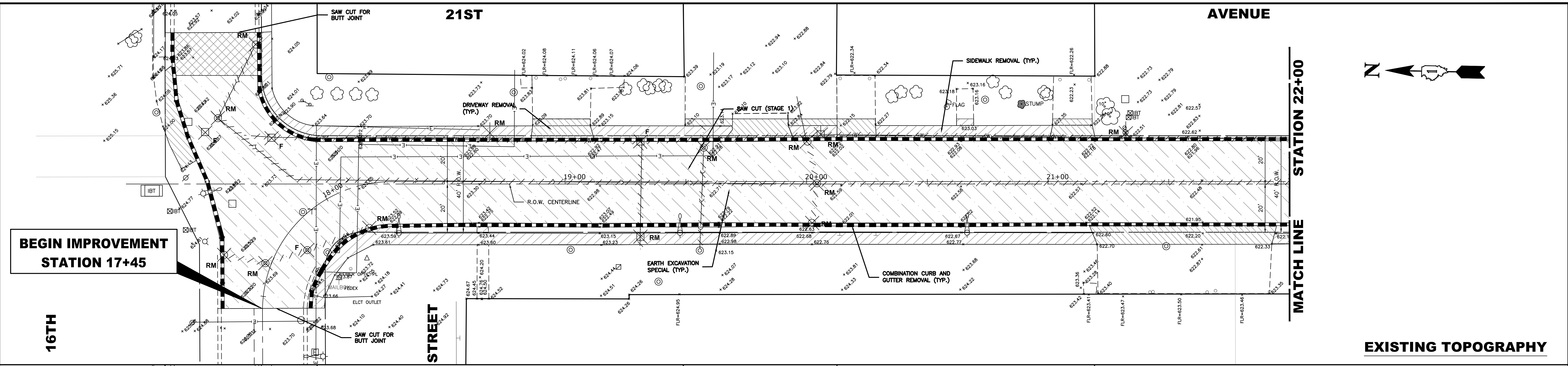
**ALIGNMENT AND TIES, ROUTE OUTLET MAP**

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

MUN. RTE. 3015	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 17
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		

E.N.E. PROJECT NO. 120-19-00801

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**21ST AVENUE  
PAVING PLAN AND PROFILE**

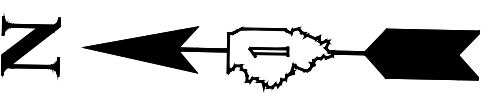
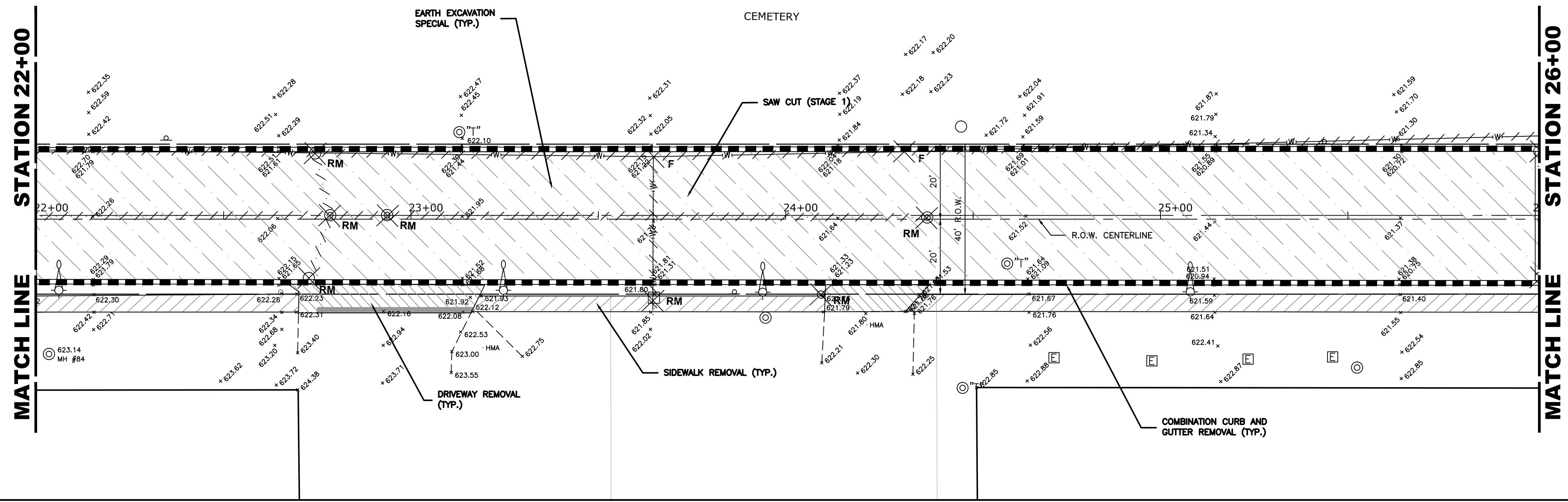
SCALE: H:1"=20', V:1"=2'    SHEET NO. 1 OF 7 SHEETS    STA. 17+45 TO STA. 22+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	18
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS   FED. AID PROJECT		

E.I.E. PROJECT NO. 120-19-00801

21ST

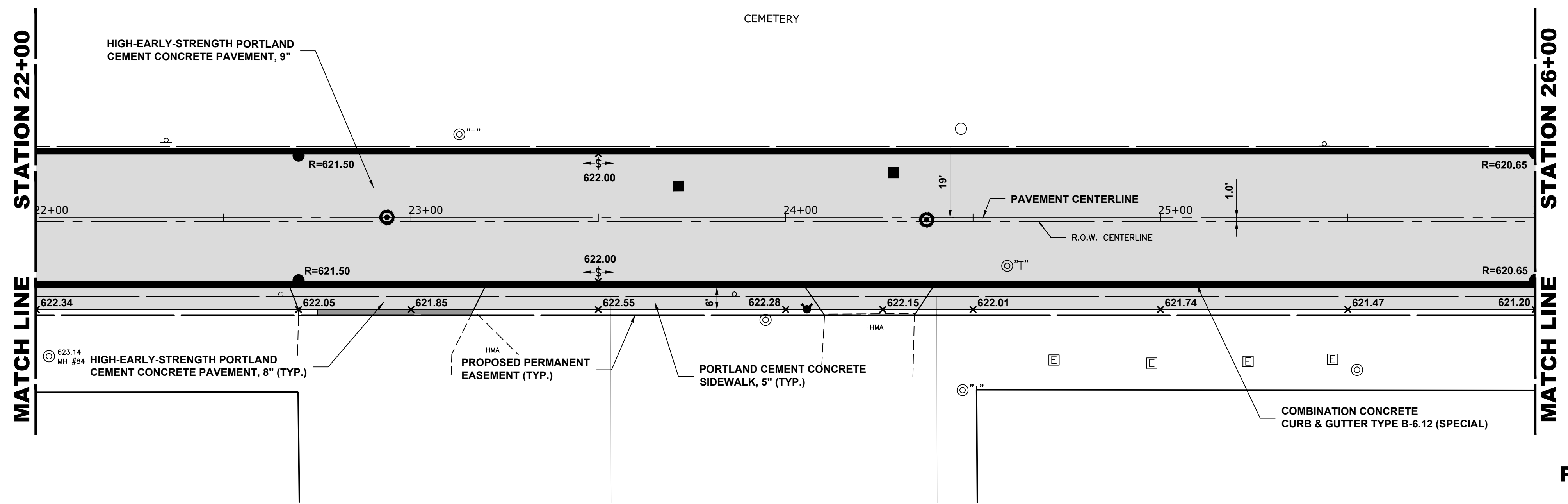
AVENUE



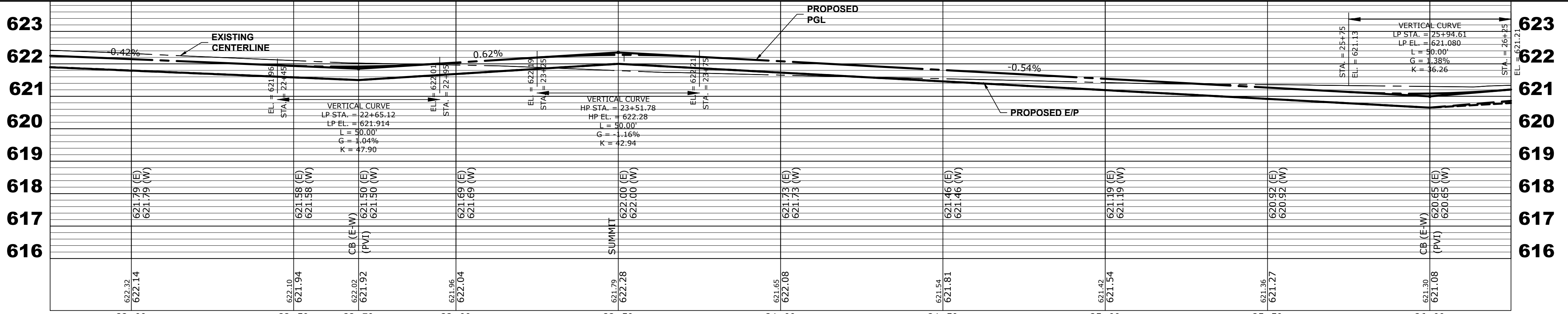
EXISTING TOPOGRAPHY

21ST

AVENUE



PROPOSED IMPROVEMENT



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

**21ST AVENUE**  
**PAVING PLAN AND PROFILE**

SCALE: H:1"=20', V:1"=2'

SHEET NO. 2 OF 7 SHEETS

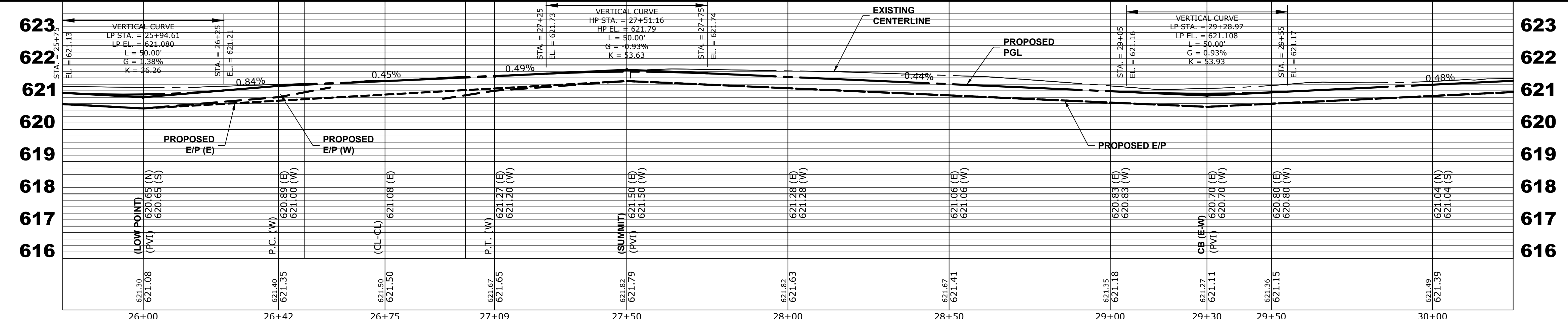
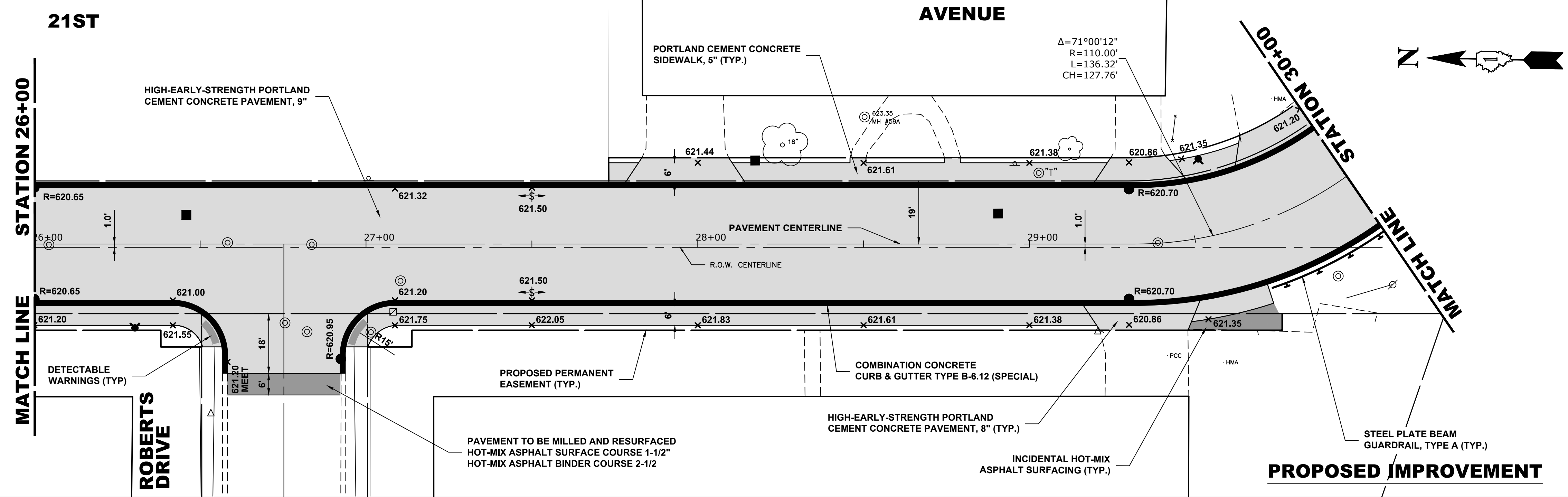
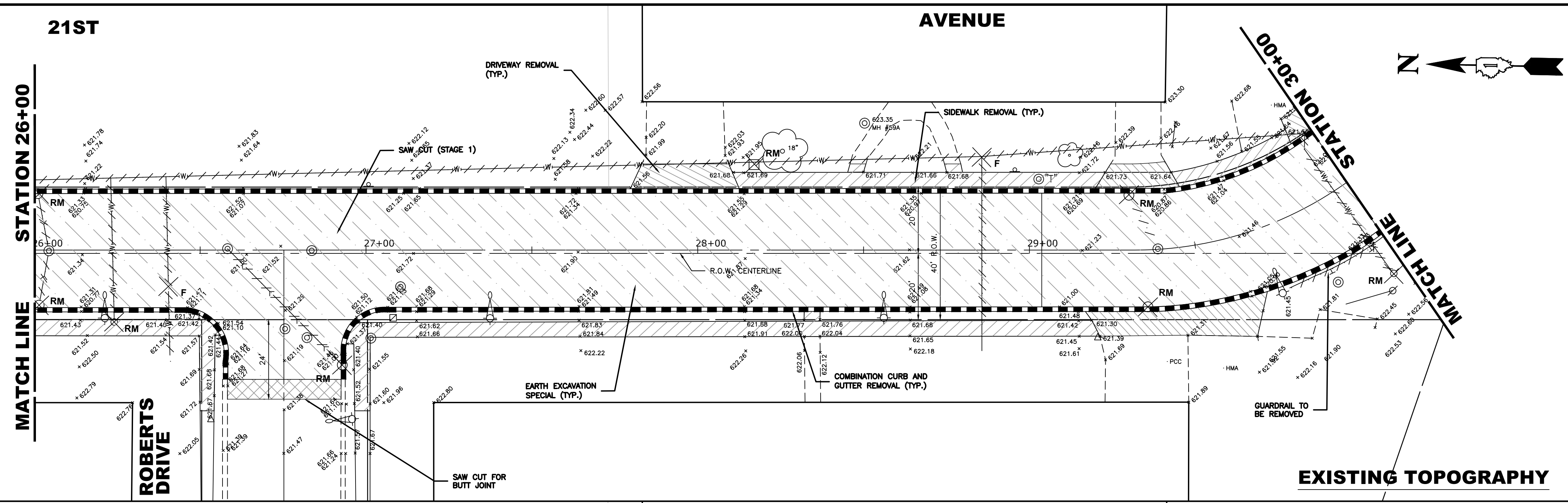
STA. 22+00 TO STA. 26+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	19
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

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DATE - 2-11-20	REVISED -

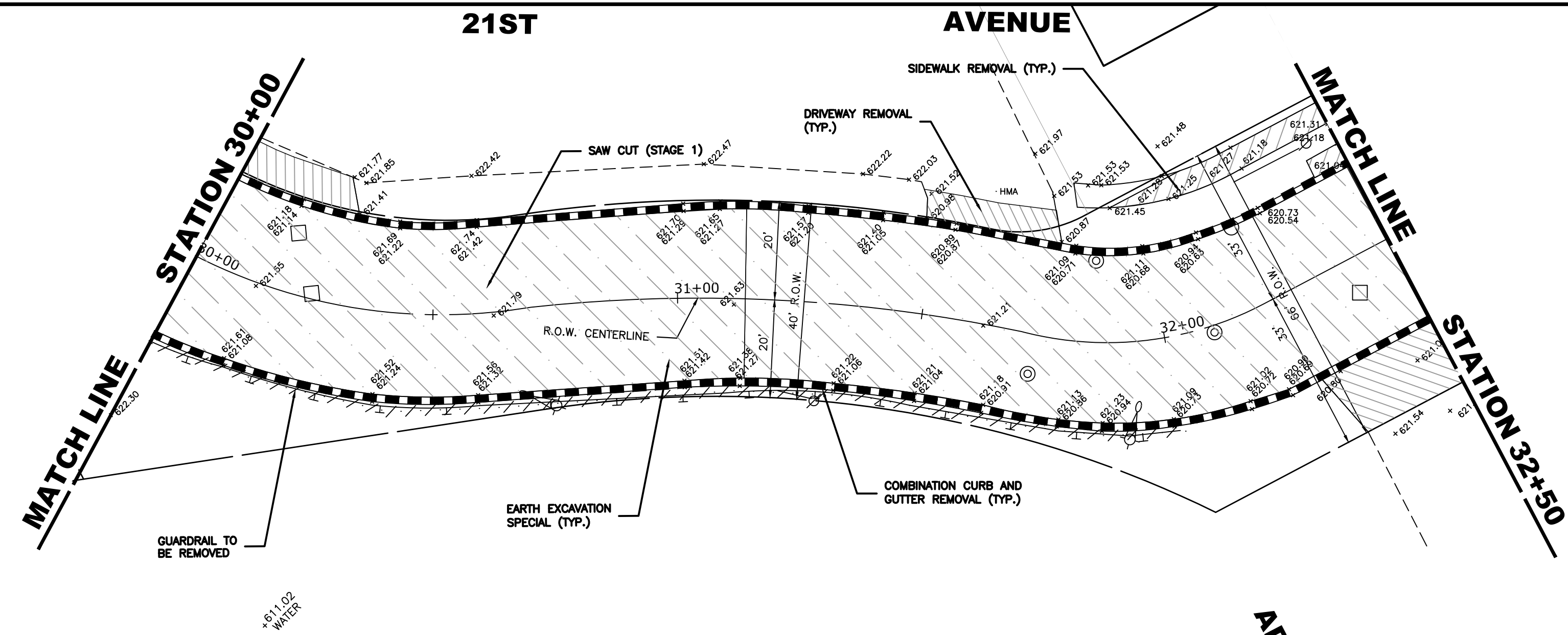
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>21ST AVENUE PAVING PLAN AND PROFILE</b>	
SCALE: H:1"=20', V:1"=2'	SHEET NO. 3 OF 7 SHEETS
STA. 26+00	TO STA. 30+00

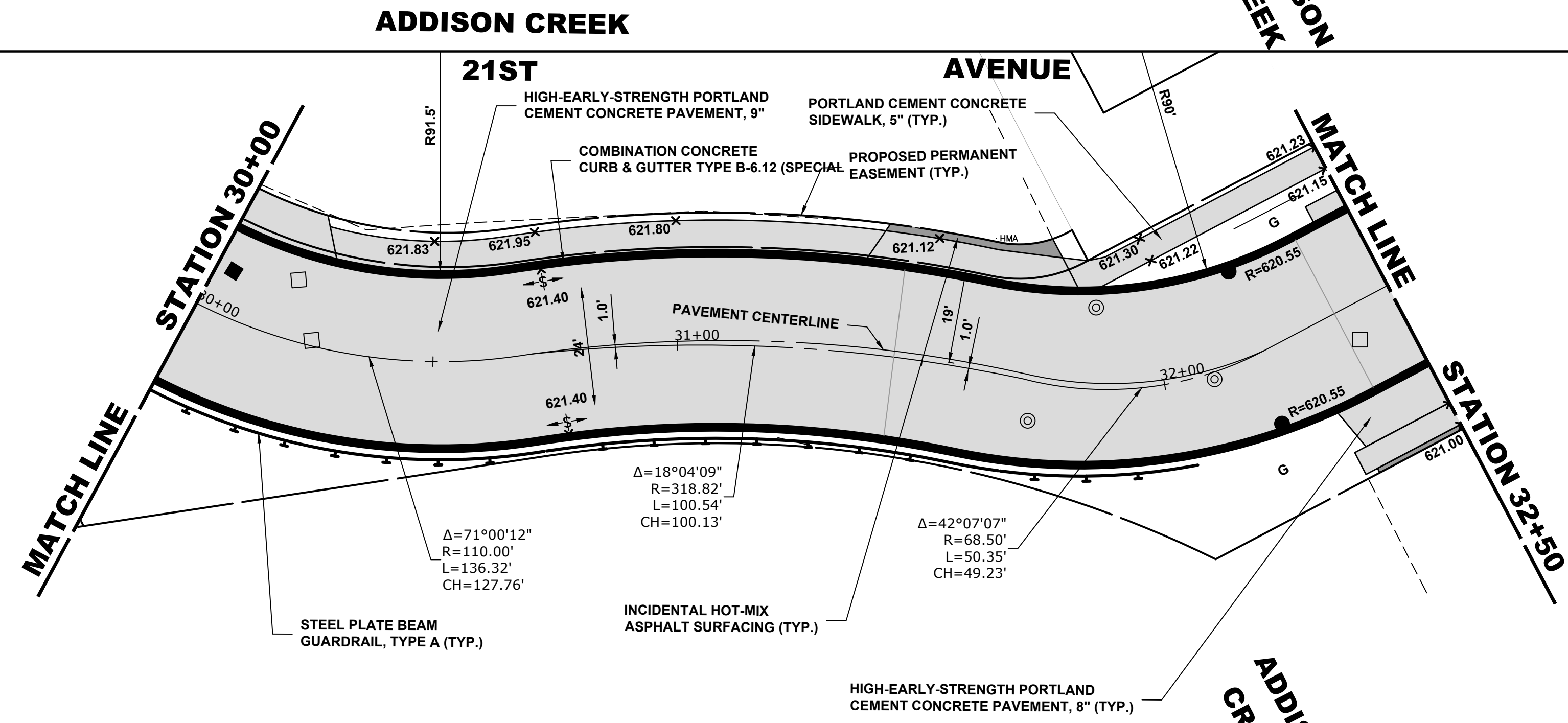
MUN. RTE. 3015	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 20
FIELD BOOK NO. 1		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801

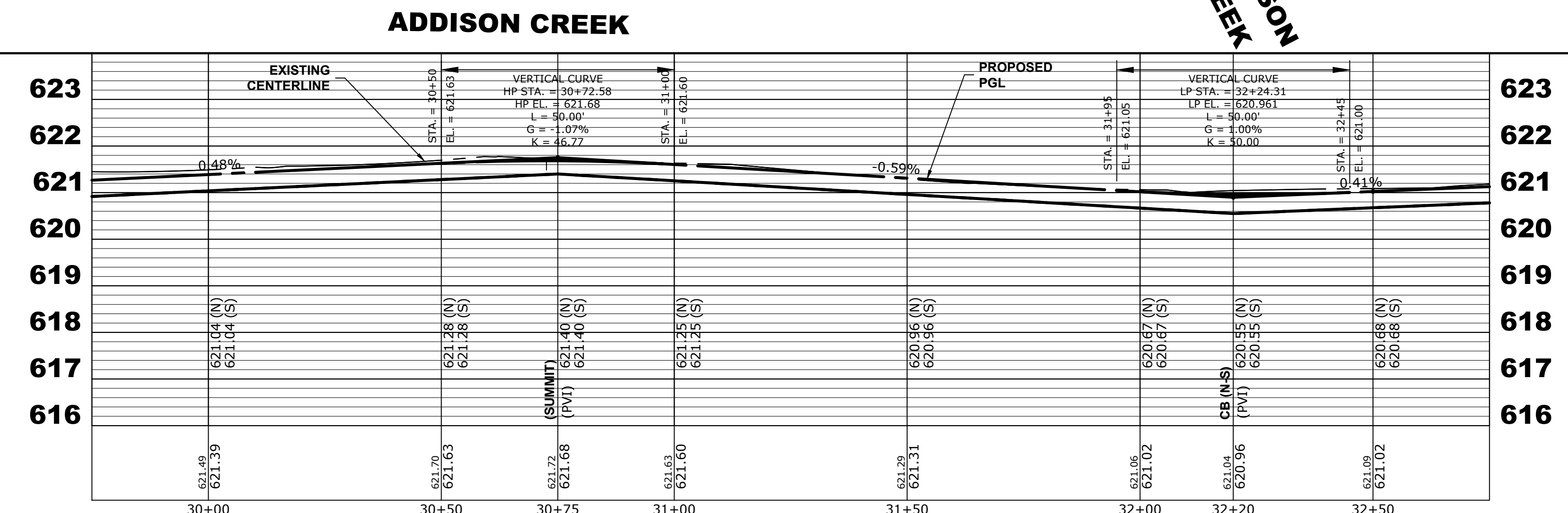
Drawing file: W:\Projects\_by\_Village\Broadview\12019008 - Broga Drive Stage II - Design\CAO\She\Brops Dr\_Ph 2\_Sig\_IL.dwg  
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DATE -	2-11-20	REVISED -	

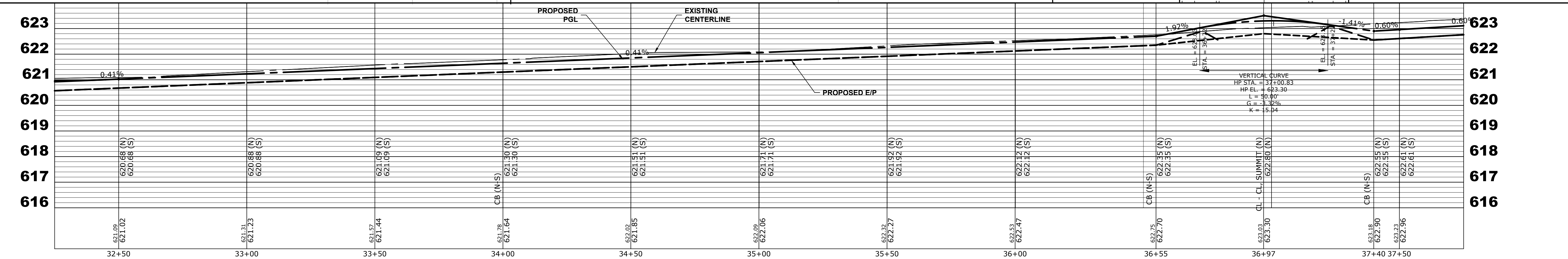
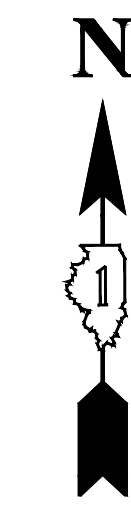
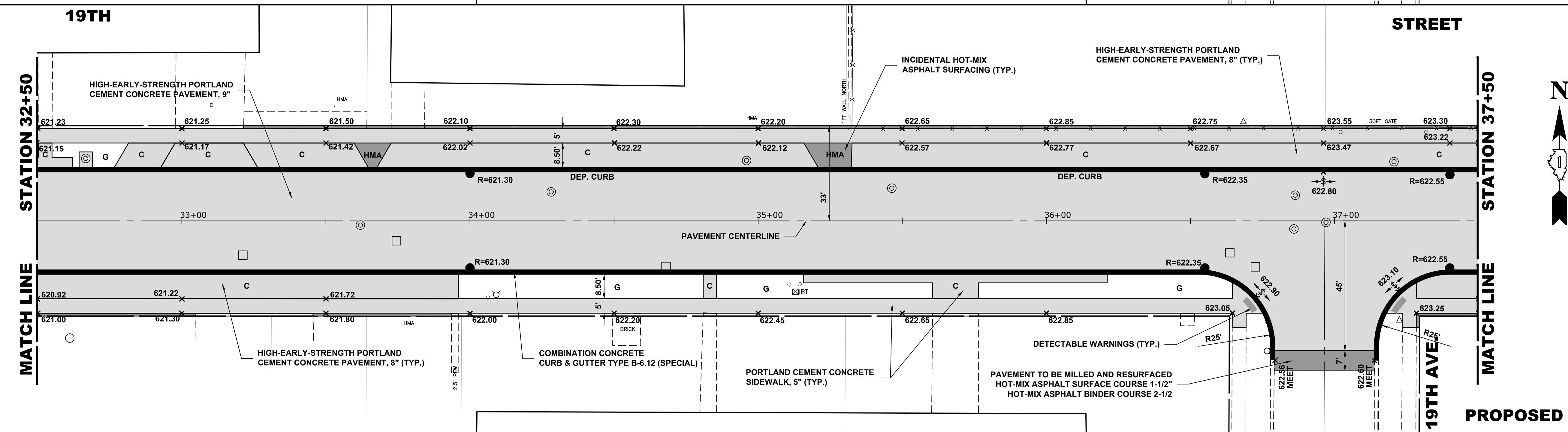
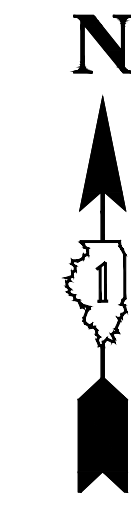
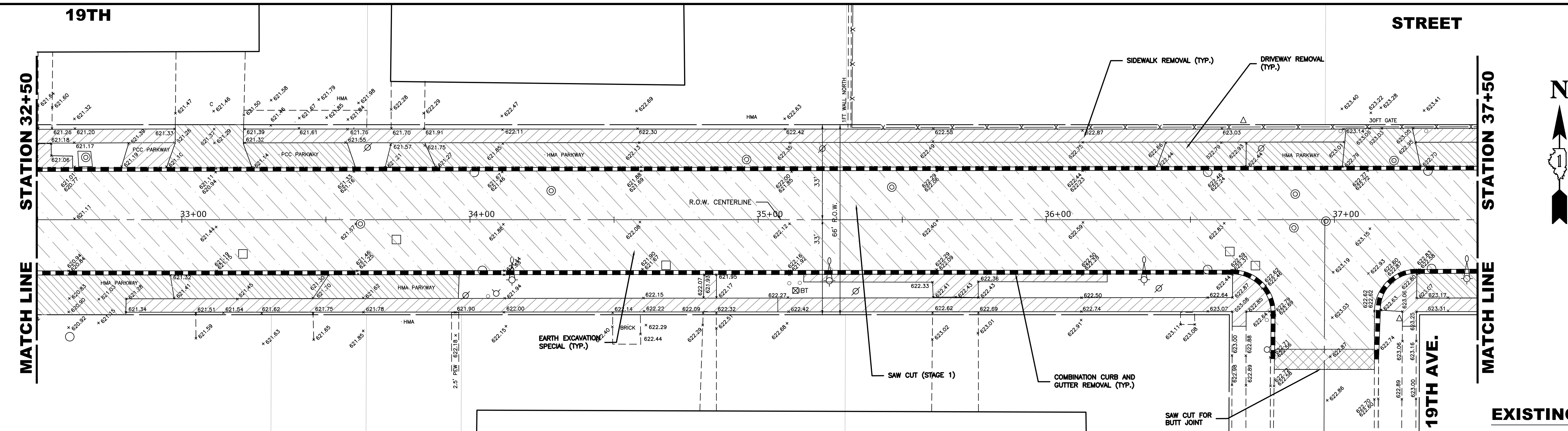
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**21ST AVENUE  
PAVING PLAN AND PROFILE**

SCALE: H:1"=20', V:1"=2'    SHEET NO. 4 OF 7 SHEETS    STA. 30+00 TO STA. 32+50

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	21
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS   FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801



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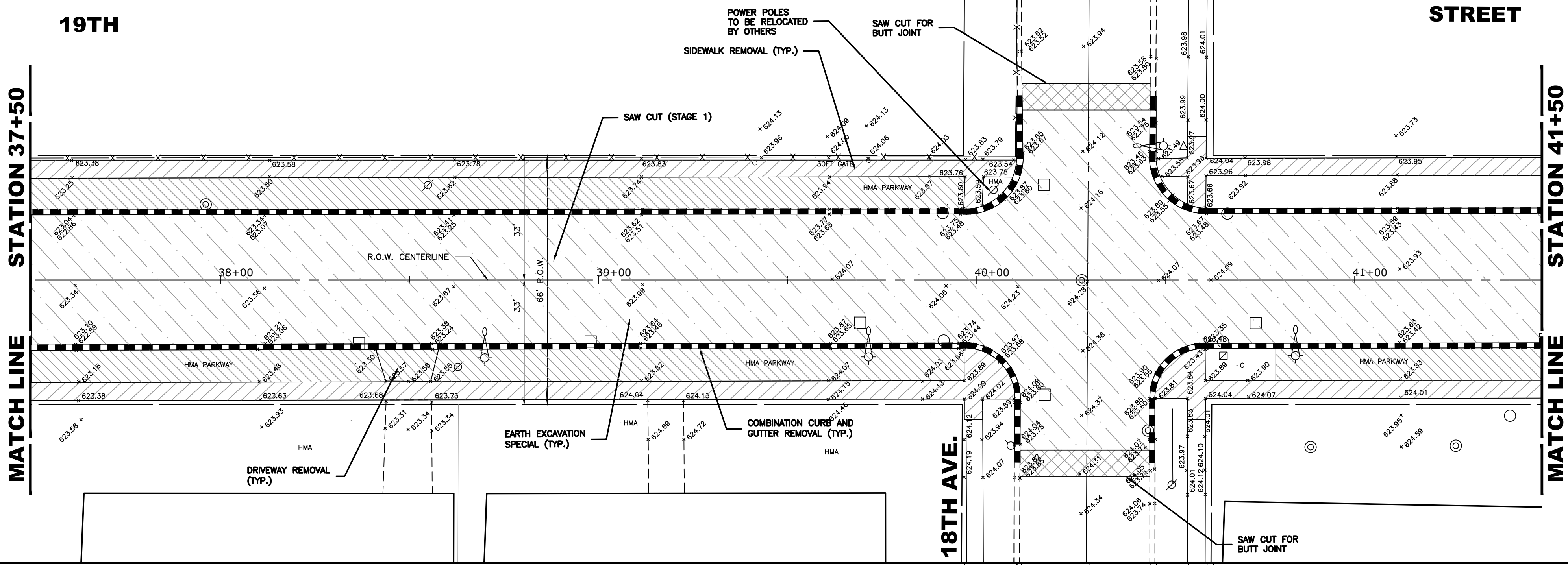
**19TH STREET  
PAVING PLAN AND PROFILE**

SCALE: H:1"=20', V:1"=2'    SHEET NO. 5 OF 7 SHEETS    STA. 32+50 TO STA. 37+50

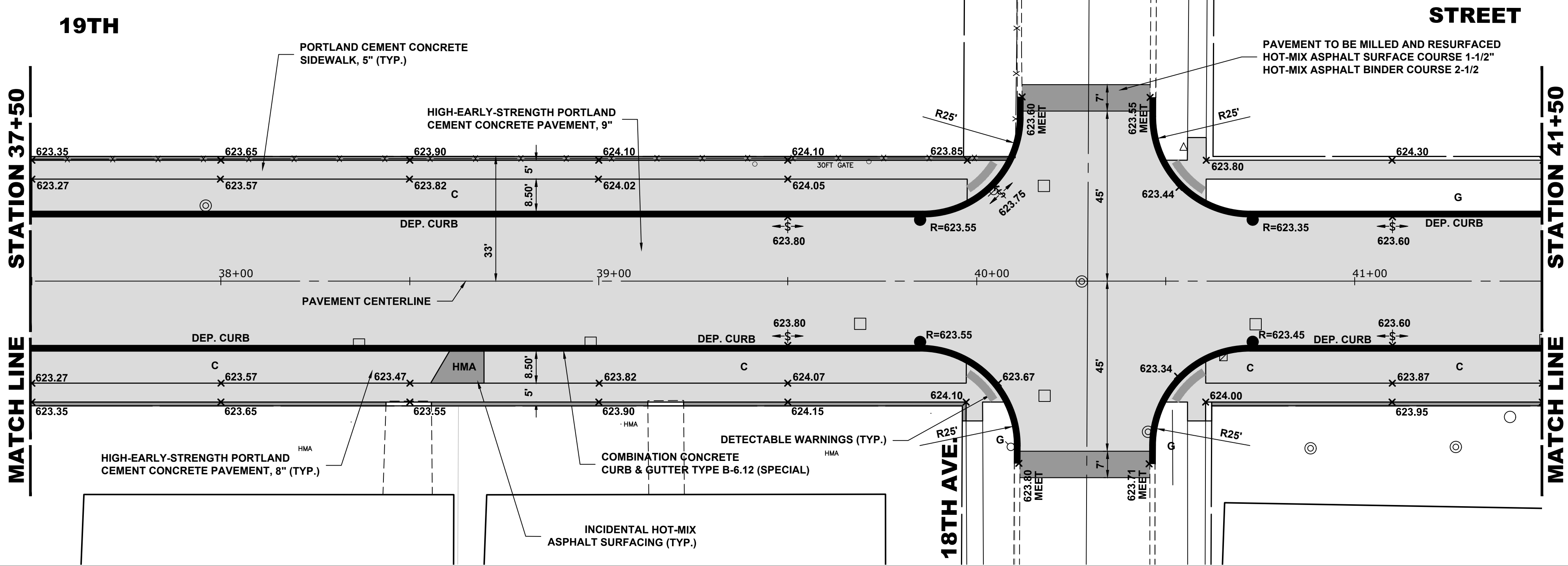
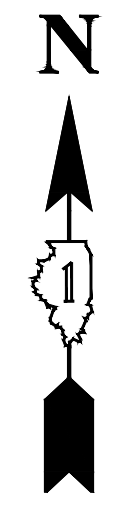
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	22
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS   FED. AID PROJECT		

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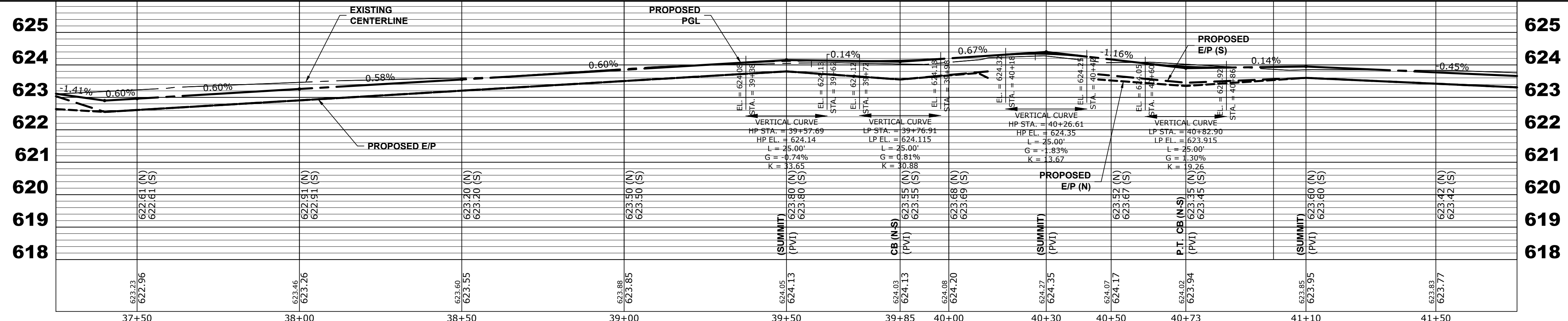
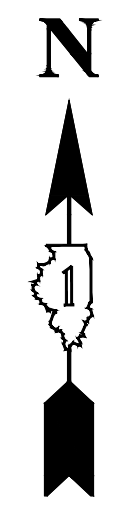
Drawing file: W:\Projects\_By\_Village\Broadview\12019008 - Broga Drive Stage II - Design\CAO\She\Brogas Dr\_Ph 2\_Sig\_IL.dwg Feb 10, 2020 - 2:57pm



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DATE -	2-11-20	REVISED -	

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<b>19TH STREET PAVING PLAN AND PROFILE</b>	
SCALE: H:1"=20', V:1"=2'	SHEET NO. 6 OF 7 SHEETS
STA. 37+50	TO STA. 41+50

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	23
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

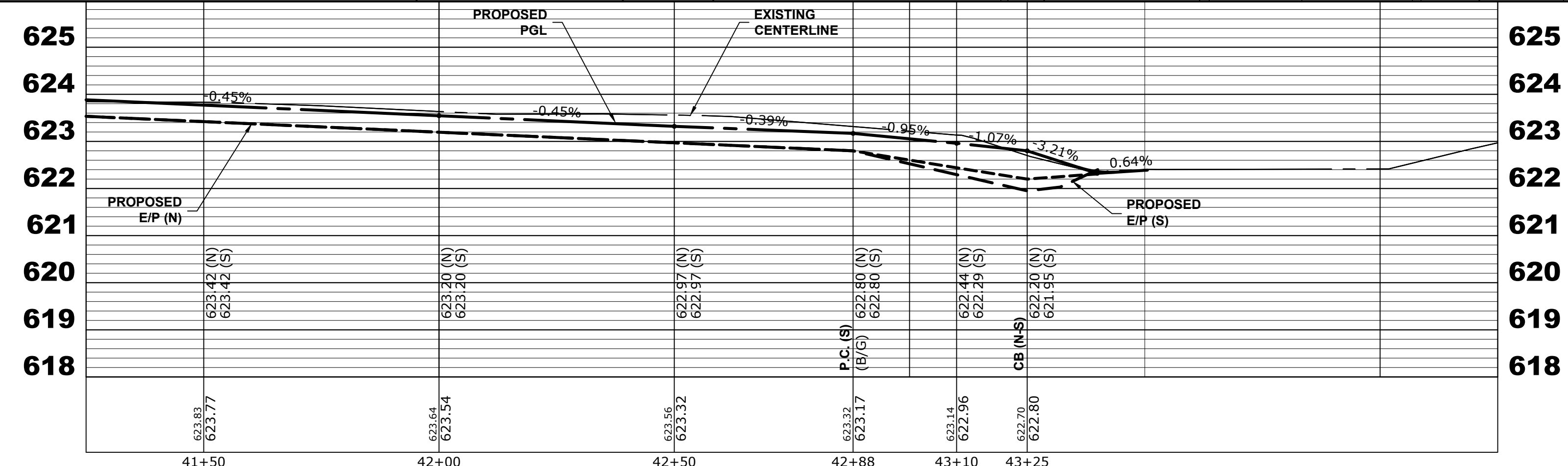
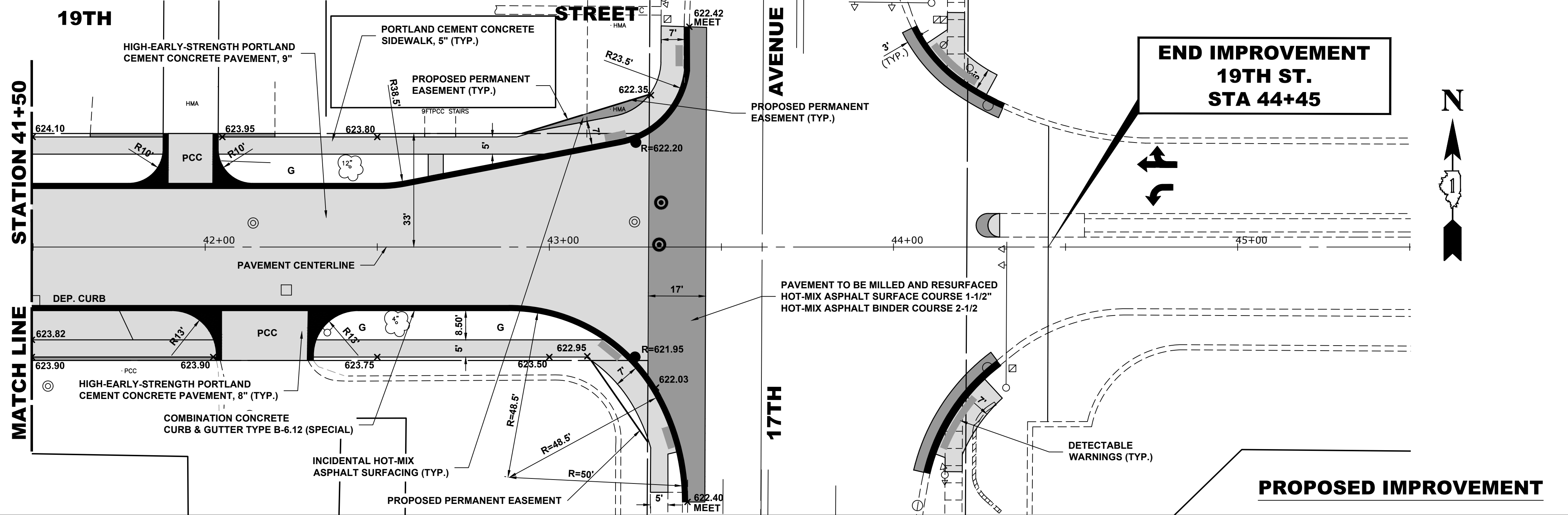
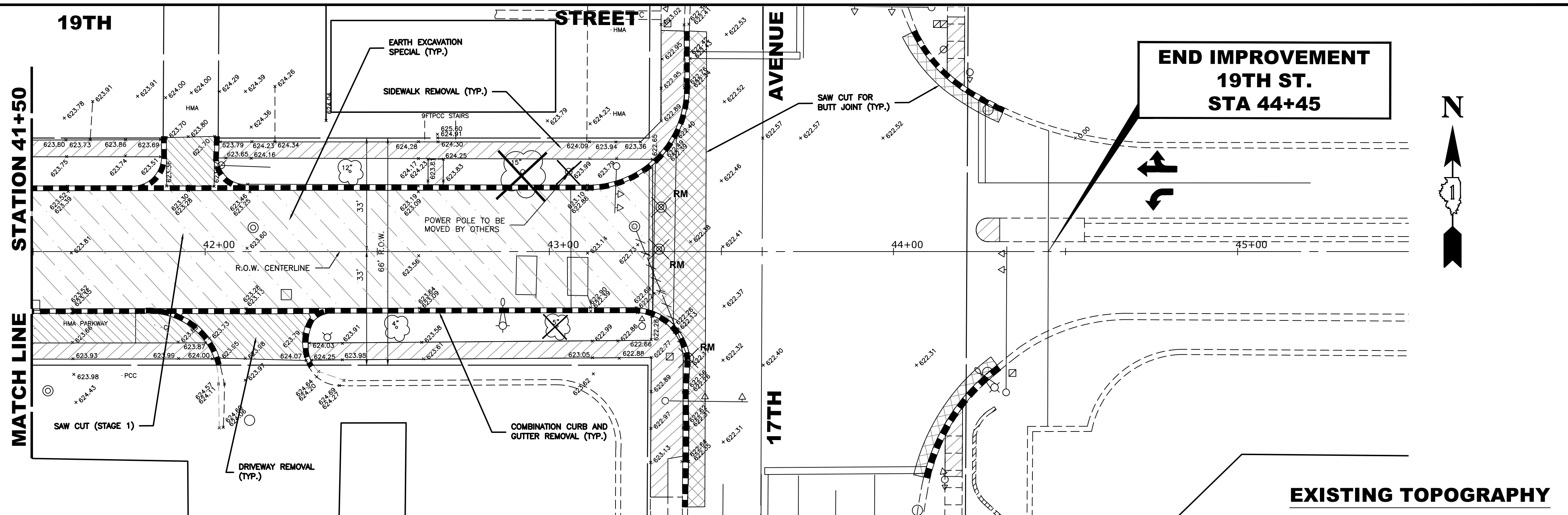


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**19TH STREET  
 PAVING PLAN AND PROFILE**

SCALE: H:1"=20', V:1"=2'    SHEET NO. 7 OF 7 SHEETS    STA. 42+00 TO STA. 45+50

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	24
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

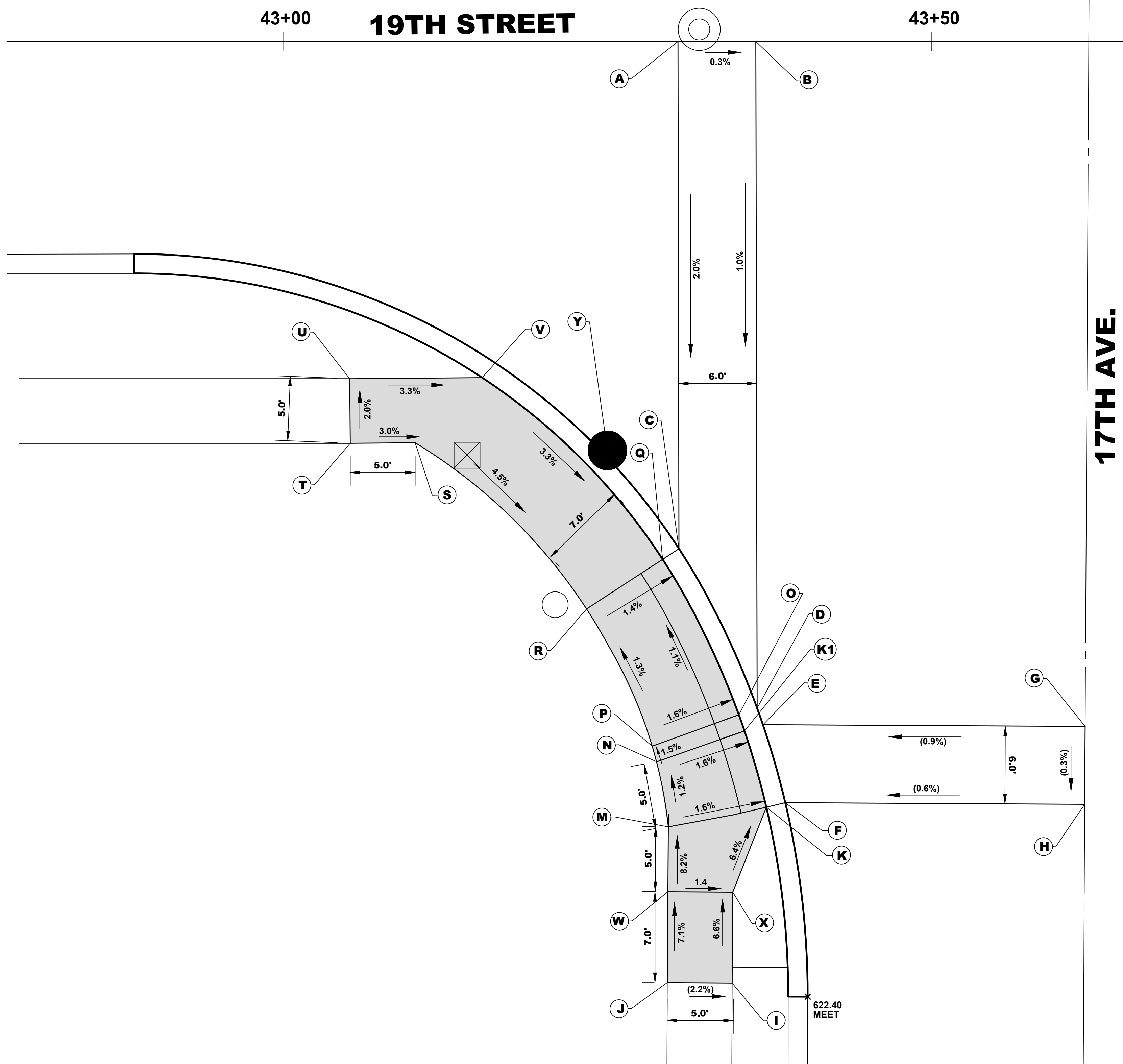
E.I.E. PROJECT NO. 120-19-00801



43+00

**19TH STREET**

43+50



**17TH AVE.**

SW CORNER				
	STATION	OFFSET (FT.)	SIDE	Elevation
A	43+30.15	0.0	R	622.80
B	43+36.50	0.0	R	622.67
C	43+30.15	39.1	R	622.03
D	43+36.50	51.2	R	622.17
E	43+37.43	52.7	R	622.19
F	43+38.40	58.7	R	622.25
G	43+62.30	52.8	R	(622.42)
H	43+62.25	58.8	R	(622.40)
I	43+34.70	71.3	R	(623.14)
J	43+29.70	71.3	R	(623.25)
K	43+37.24	59.0	R	622.23
K1	43+35.56	53.1	R	622.17
M	43+29.70	60.5	R	622.34
N	43+28.94	55.5	R	622.28
O	43+35.11	51.8	R	622.15
P	43+28.54	54.3	R	622.26
Q	43+29.12	39.9	R	622.01
R	43+23.38	43.7	R	622.11
S	43+10.18	31.1	R	622.95
T	43+05.18	31.1	R	623.10
U	43+05.14	26.1	R	623.00
V	43+15.34	25.9	R	622.67
W	43+29.70	65.5	R	622.75
X	43+34.70	65.5	R	622.68
Y	43+25.00	32.3	R	621.95

LEGENDS:	
	PROPOSED SIDEWALK
	DETECTABLE WARNINGS
	PROPOSED SIDE CURB
XXX.XX'	PROPOSED LENGTH/ELEVATION
(XXX.XX')	EXISTING LENGTH/ELEVATION
XX%	PROPOSED SLOPE
(XX%)	EXISTING SLOPE

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Braja Drive Stage II - Design\CAO\Sheets\25-28\_Braja Dr\_ADA.dwg Feb 10, 2020 - 3:04pm

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CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

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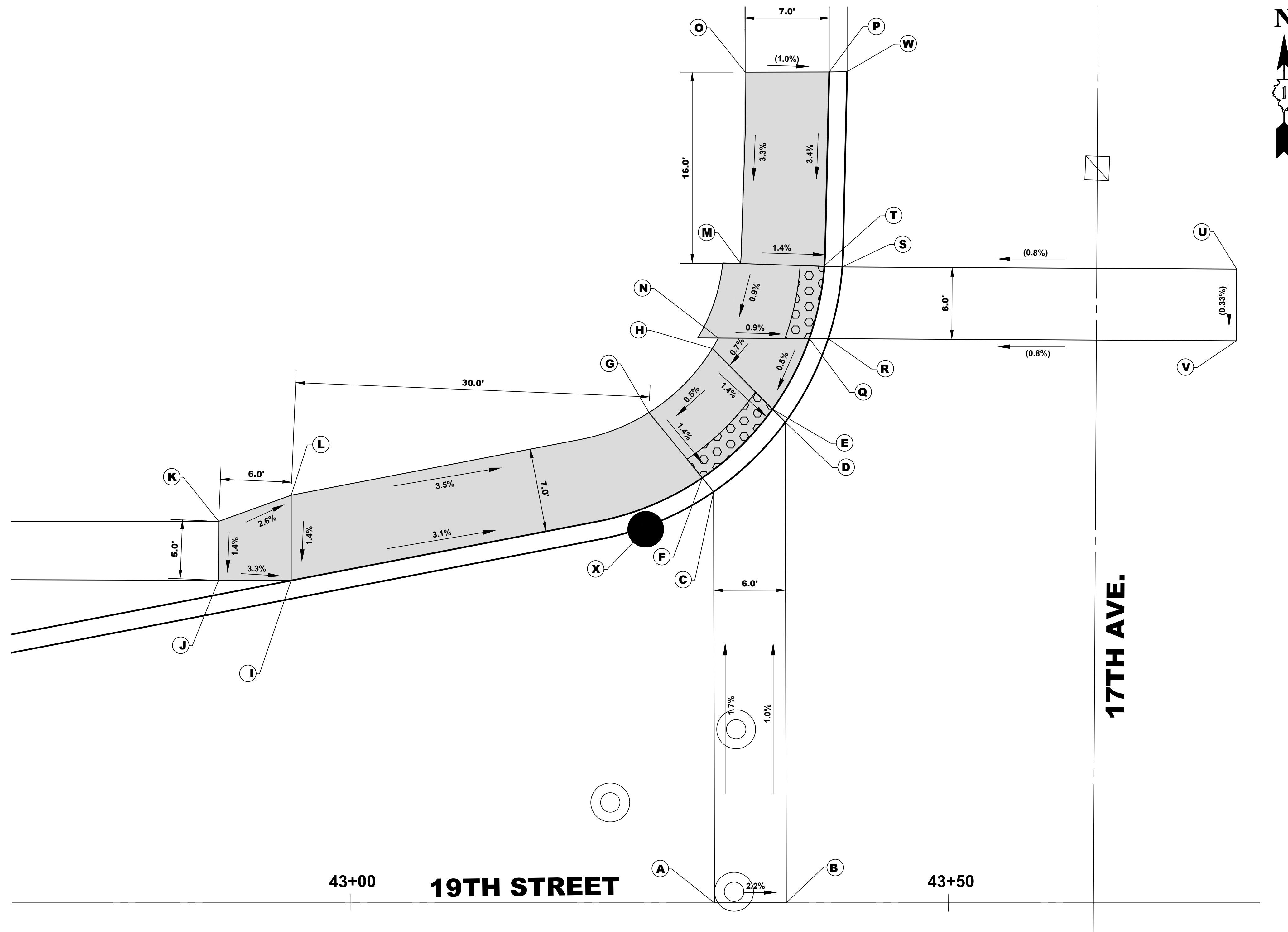
**ADA RAMP DETAILS  
 AT 19TH STREET AND 17TH AVENUE**

SCALE: 1"=5'      SHEET NO. 1 OF 4 SHEETS      STA. 42+00 TO STA. 43+46

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	25
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Braja Drive Stage II - Design\CAO\She\25-2B\_Braja Dr\_ADA.dwg Feb 10, 2020 - 3:03pm



NW CORNER				
	STATION	OFFSET (FT.)	SIDE	Elevation
A	43+30.15	0.0	L	622.80
B	43+36.50	0.0	L	622.67
C	43+30.15	34.4	L	622.23
D	43+36.50	40.2	L	622.27
E	43+34.90	41.5	L	622.25
F	43+29.20	35.6	L	622.21
G	43+25.00	41.4	L	622.31
H	43+30.60	46.6	L	622.35
I	42+95.00	27.2	L	623.26
J	42+89.01	27.2	L	623.46
K	42+89.02	32.2	L	623.53
L	42+95.00	34.3	L	623.36
M	43+32.00	53.8	L	622.42
N	43+30.00	47.4	L	622.36
O	43+32.40	70.0	L	(622.94)
P	43+39.00	70.0	L	(622.87)
Q	43+37.50	47.4	L	622.29
R	43+39.20	47.4	L	622.31
S	43+40.50	53.4	L	622.34
T	43+39.00	53.4	L	622.32
U	43+74.06	53.4	L	(622.60)
V	43+74.10	47.4	L	(622.58)
W	43+40.50	69.4	L	(622.42)
X	43+25.00	31.5	L	622.20

**LEGENDS:**

- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- PROPOSED SIDE CURB
- XXX.XX'      PROPOSED LENGTH/ELEVATION
- (XXX.XX')    EXISTING LENGTH/ELEVATION
- XX%          PROPOSED SLOPE
- (XX%)        EXISTING SLOPE

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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS  
 AT 19TH STREET AND 17TH AVENUE**

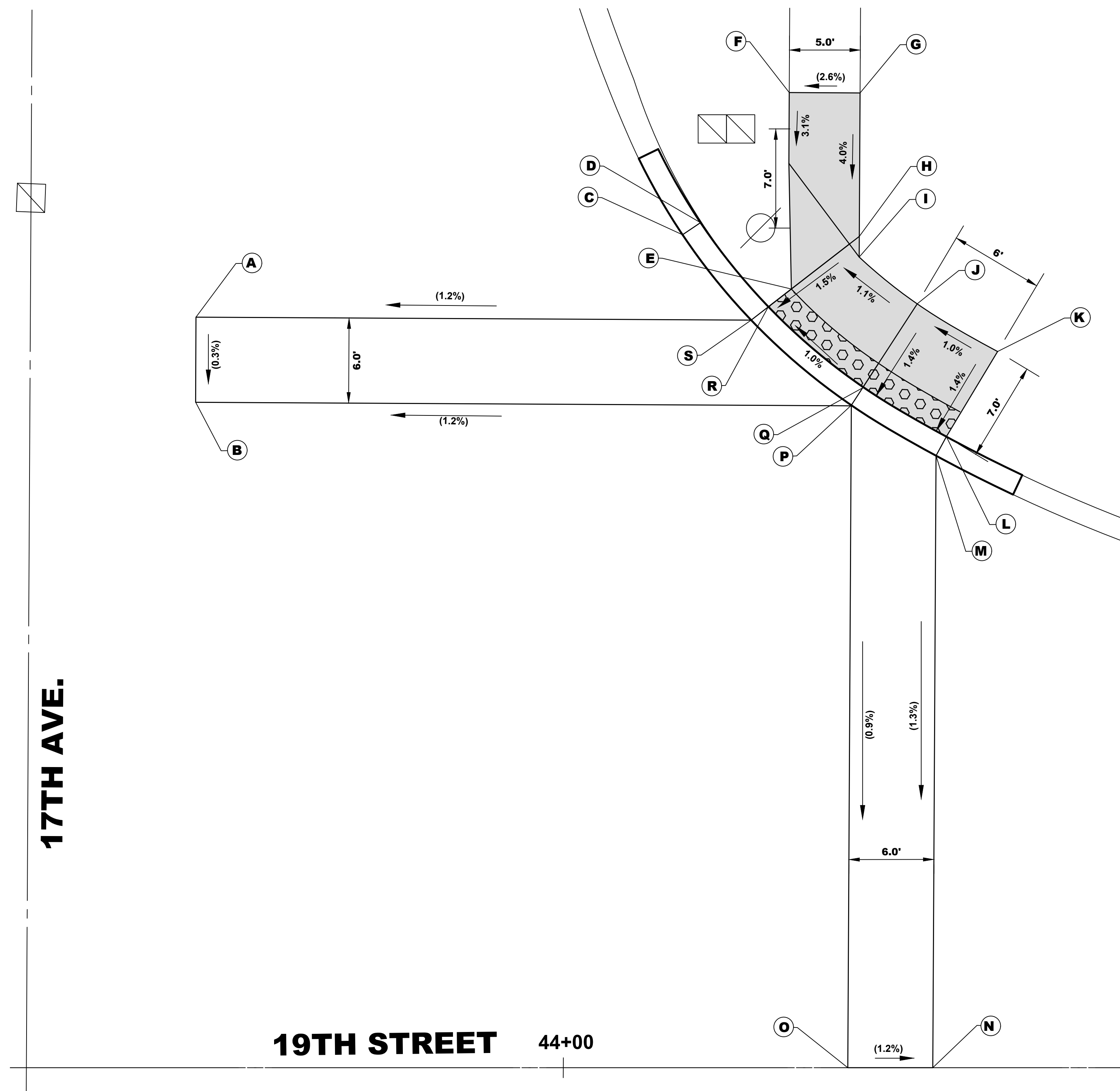
SCALE: 1"=5'      SHEET NO. 2 OF 4 SHEETS      STA. 42+00 TO STA. 43+46

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	26
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

E.I.E. PROJECT NO. 120-19-00801



Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Braga Drive Stage II - Design\CAO\She\25-28\_Braga Dr\_ADA.dwg Feb 10, 2020 - 3:02pm



NE CORNER				
	STATION	OFFSET (FT.)	SIDE	Elevation
A	43+74.10	52.9	L	622.60
B	43+74.06	46.9	L	622.58
C	44+08.40	58.8	L	623.00
D	44+09.70	59.6	L	622.98
E	44+15.91	55.0	L	623.07
F	44+15.94	69.0	L	(622.50)
G	44+20.94	69.0	L	(622.63)
H	44+20.87	59.0	L	623.16
I	44+20.87	57.4	L	623.17
J	44+24.80	54.0	L	623.23
K	44+30.10	50.7	L	623.29
K1	44+27.03	44.5	L	623.19
M	44+26.30	43.2	L	623.21
N	44+26.07	0.0	L	(622.65)
O	44+20.07	0.0	L	(622.72)
P	44+20.32	46.8	L	623.15
Q	44+21.19	48.2	L	623.13
R	44+14.25	54.0	L	623.04
S	44+13.25	52.8	L	623.06

**LEGENDS:**

- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- PROPOSED SIDE CURB
- XXX.XX' PROPOSED LENGTH/ELEVATION
- (XXX.XX') EXISTING LENGTH/ELEVATION
- XX% PROPOSED SLOPE
- (XX%) EXISTING SLOPE

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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

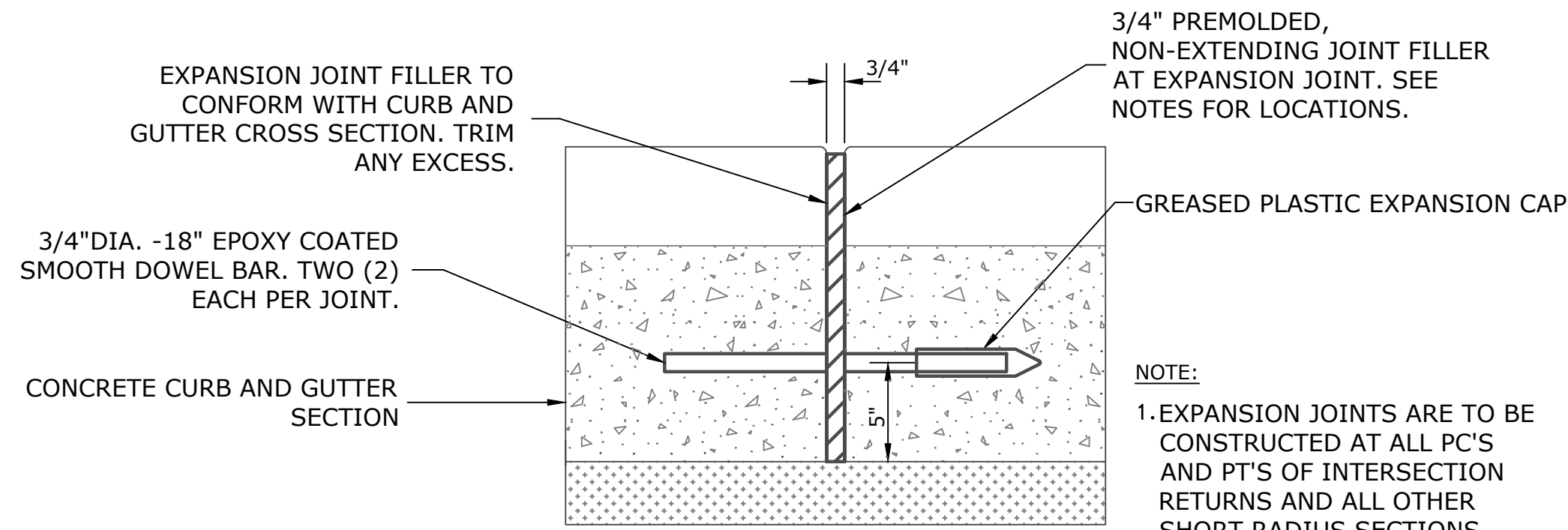
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS  
AT 19TH STREET AND 17TH AVENUE**

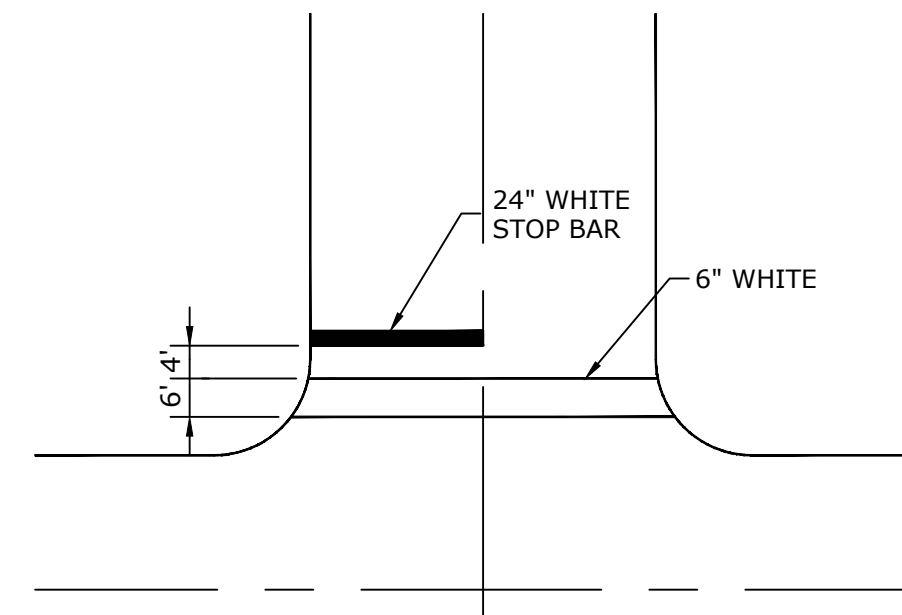
SCALE: 1"=5'      SHEET NO. 4 OF 4 SHEETS      STA. 42+00 TO STA. 44+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	28
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS   FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-010801



**TYPICAL CURB AND GUTTER EXPANSION JOINT**



**TYPICAL CROSSWALK & STOP BAR**

**GENERAL NOTES**

**DEPRESSED CURBS** - THE TOP OF CURBS SHALL BE DEPRESSED WHERE THE CURB AND GUTTER IS CONSTRUCTED AT HANDICAP ACCESSIBLE SIDEWALK RAMP AT ALLEY RETURNS AND STREET INTERSECTIONS, AND FOR PRIVATE AND COMMERCIAL DRIVES AND AS DIRECTED BY THE ENGINEER

**DRAINAGE OPENINGS** - AT ALL LOCATIONS WHERE CASTINGS ARE TO BE INCORPORATED IN THE CURB AND GUTTER, A 3/4" EXPANSION JOINT SHALL BE INSTALLED IN THE CURB AND GUTTER A DISTANCE OF 5 FT. FROM EACH SIDE OF THE CASTING. 2-NO. 4 RE-BARS, 9' IN LENGTH, SHALL BE INCORPORATED IN THE CONTINUOUS PORTION OF CONCRETE CURB BEHIND THE CASTING.

**DETECTABLE WARNINGS** - DETECTABLE WARNINGS SHALL BE INSTALLED AT HANDICAP ACCESSIBLE SIDEWALK RAMP, AT ALLEY RETURNS, AND STREET INTERSECTIONS. THESE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE IDOT STANDARDS.

**SLIPFORM CONSTRUCTION** - VERTICAL FACES MAY BE BATTERED AT THE RATE OF 3/4" PER FOOT OF HEIGHT TO AID IN SLIPFORM OPERATIONS. THE PROPOSED CURB HEIGHT IS VARIABLE.

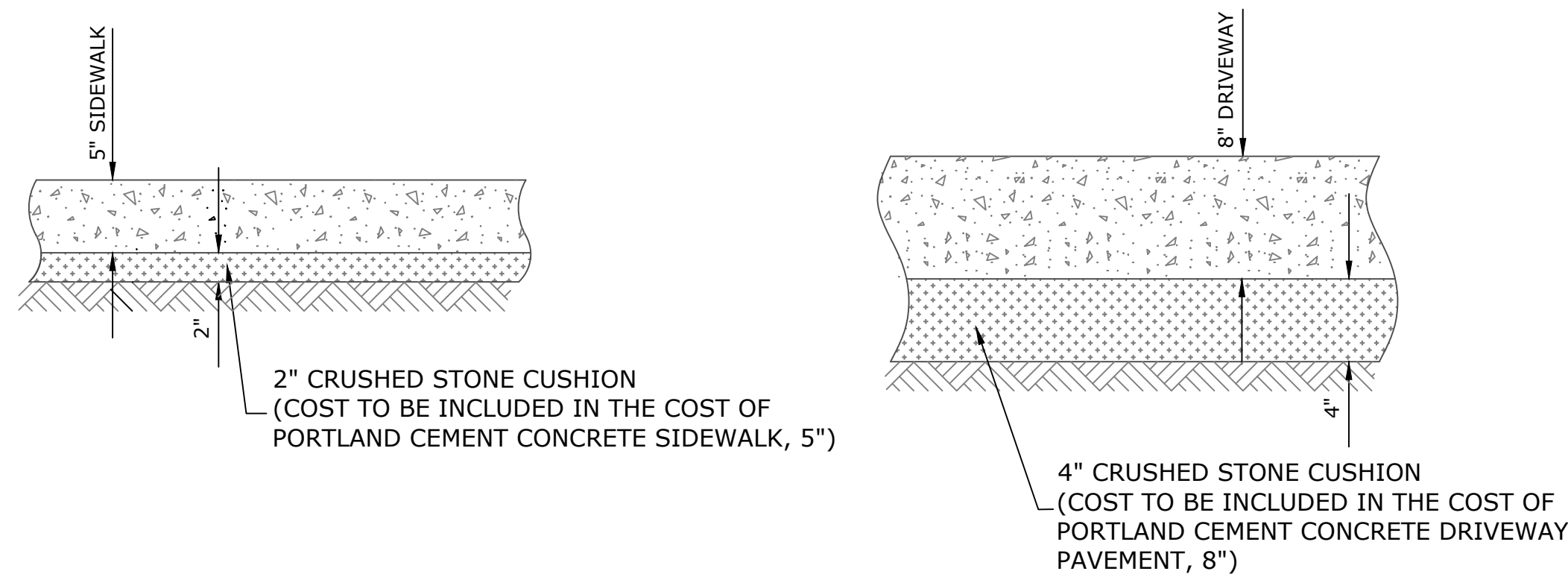
**DEPRESSED CURB HEIGHT** - THE HEIGHT OF THE DEPRESSED CURB SHALL BE 1-1/2" AT DRIVEWAYS. SEE IDOT STANDARD 424001-05 FOR HEIGHT AT SIDEWALK RAMP.

**BITUMINOUS EXPANSION JOINTS** - THREE QUARTER INCH (3/4") BITUMINOUS PREMOLDED INORGANIC FIBER EXPANSION JOINTS SHALL BE INSTALLED WHERE NEW SIDEWALK OR CURB AND GUTTER OR DRIVEWAY PAVEMENT ABUTS AN EXISTING CONCRETE WALK, DRIVE, OR CURB WHICH IS TO REMAIN IN PLACE, AND AT NOT LESS THAN NINETY FOOT (90') INTERVALS AT LOCATIONS WHERE CURB REPLACEMENT IS IN EXCESS OF NINETY FEET (90'); AT RADIUS POINTS, AT BOTH SIDES OF FRAMES AND GRATES WHICH FALL IN THE CURB; AND AS DIRECTED BY THE ENGINEER.

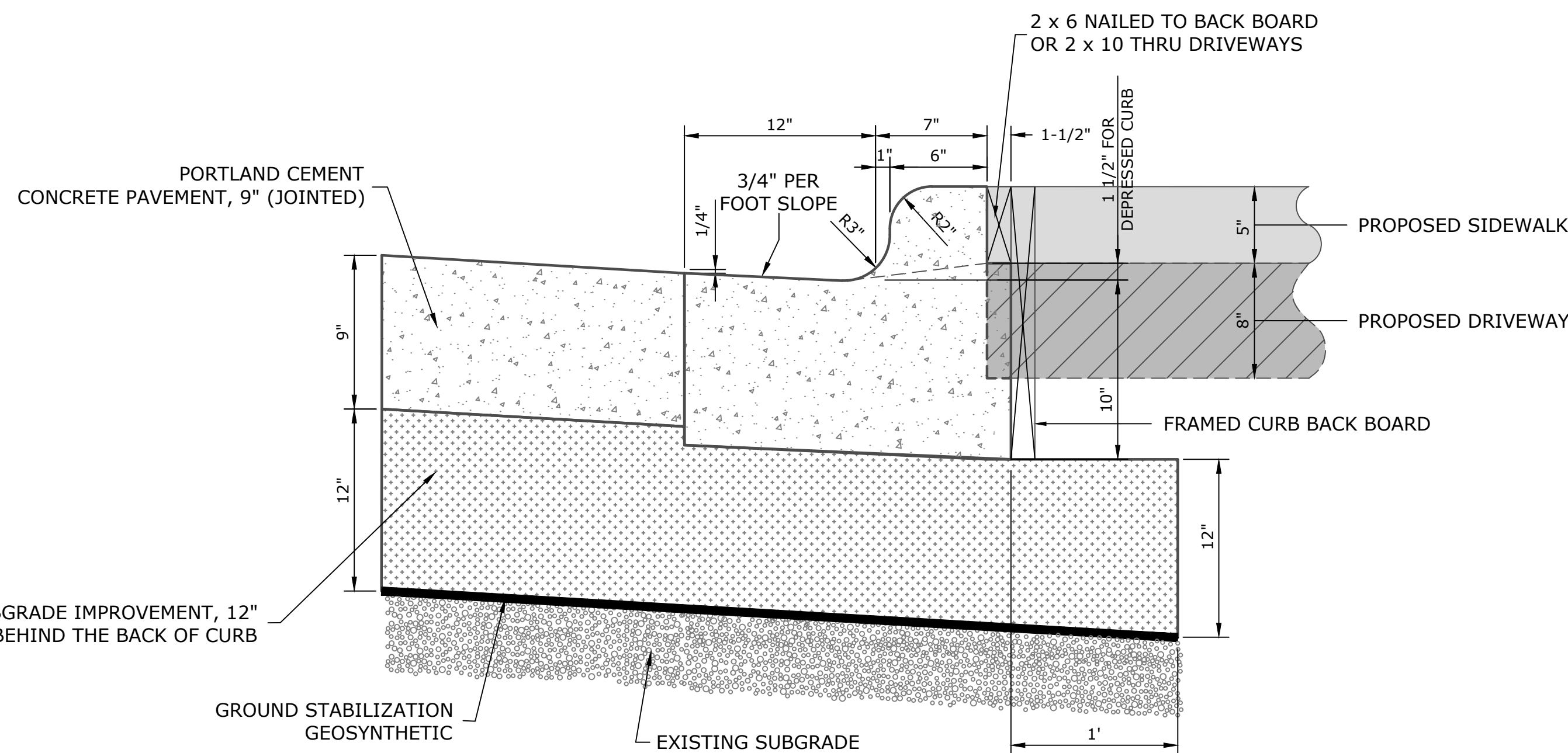
ALL EXPANSION JOINTS LOCATED IN THE CURB AND GUTTER SHALL HAVE TWO (2) THREE QUARTER INCH (3/4") DIAMETER, SMOOTH, ROUND, EPOXY COATED DOWEL BARS, EIGHTEEN INCHES (18") IN LENGTH, WITH GREASED PLASTIC END CAPS INSERTED TO ALLOW THE CURB AND GUTTER TO EXPAND AND CONTRACT Laterally. CONTRACTION JOINTS SHALL BE TOOLED INTO THE CURB AND GUTTER AT INTERVALS NOT TO EXCEED FIFTEEN FEET (15'). THESE CONTRACTION JOINTS SHALL BE SAW CUT TO A DEPTH OF TWO INCHES (2") WITHIN TWENTY-FOUR (24) HOURS OF CONCRETE PLACEMENT AND CAULKED WITHIN SEVEN (7) DAYS. THE COST OF THE ABOVE WORK SHALL BE INCLUDED IN THE RESPECTIVE ITEMS FOR CONCRETE INSTALLATION.

THE COSTS FOR REMOVAL OF ANY ASPHALT OVERLAY THAT EXTENDS INTO THE GUTTER PORTION OF THE CURB AND GUTTER WILL BE INCLUDED IN THE PRICE FOR COMBINATION CURB AND GUTTER REMOVAL.

THE EDWIN HANCOCK ENGINEERING COMPANY AND THE VILLAGE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY.

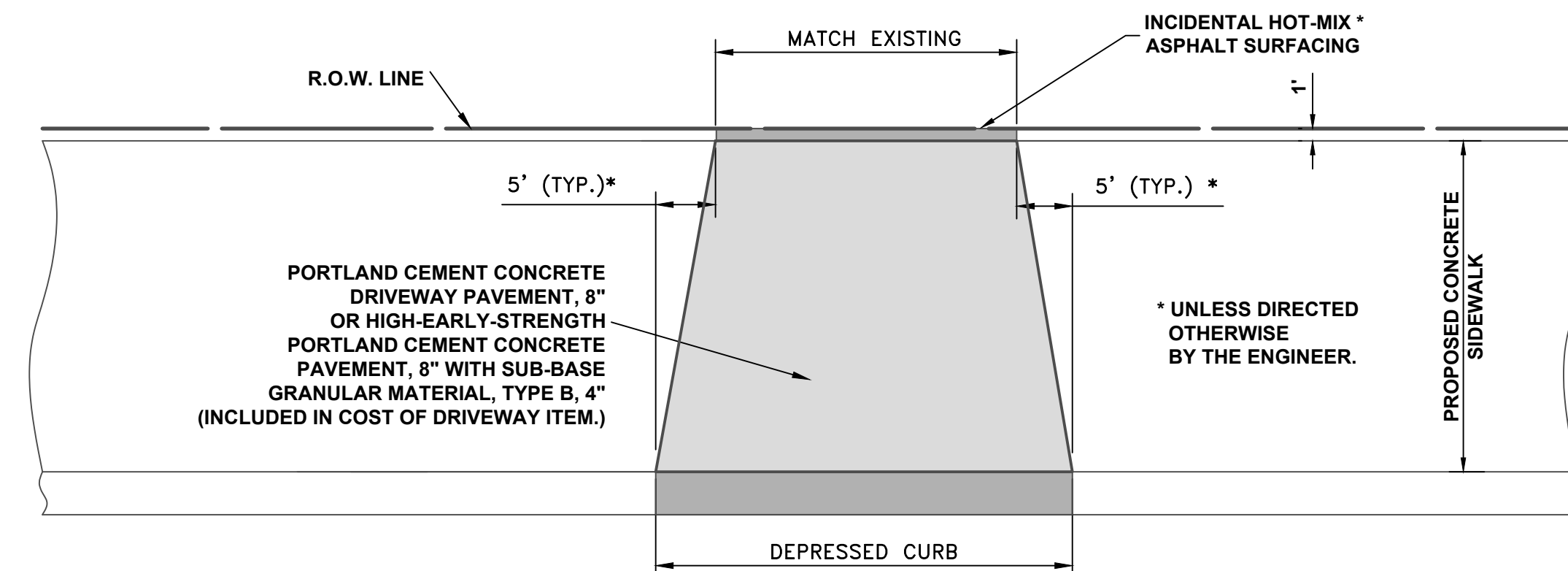


**TYPICAL P.C.C. SIDEWALK & DRIVEWAY**



NOTE:  
TO BE USED FOR ALL CURB AND GUTTER.

**COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12 (SPECIAL)**



**DRIVEWAY**

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Braga Drive Stage II - Design\CAD\Sheets\29\_Roadway-Details.dwg Feb 10, 2020 - 3:04pm



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DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY DETAILS**

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

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	29
FIELD BOOK NO. -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00301

Drawing File: W:\Projects\_by\_Village\Broadview\12019008 -Broad Drive Stage II - Design\CAD\Site\30-36\_BROAD\_MAINT\_OF\_TRAFFIC.dwg Feb 10, 2020 3:45pm

LEGEND OF SYMBOLS					
SYMBOL	DESCRIPTION	CODE & SIZE	SYMBOL	DESCRIPTION	CODE & SIZE
	END WORK ZONE SPEED LIMIT	G20- I103 36"x60"		STOP	R1-1 30"x30"
	LOCAL BUSINESSES OPEN	CUSTOM 36"x24" 5" WHITE LETTERS ON BLUE BACKGROUND			R3-2 24"x24"
	WORK ZONE SPEED LIMIT 25 \$XXX FINE MINIMUM	W21-I115 36"x18"  R2-1 36"x48"  R2-I106P 36"x18"			R3-1 24"x24"
		M6-1(0) 21"x15"		KEEP RIGHT	R4-7a 24"x30"
		M6-1(0) 21"x15"		KEEP LEFT	R4-8a 24"x30"
		W20-3 48"x48"		WRONG WAY	R5-1a 36"x24"
		W20-I103 48"x48"		ONE WAY	R6-2 24"x30"
	21st Av-19th St	M4-8 36"x12"		ONE WAY	R6-2 24"x30"
		R5-1 30"x30"		BEGIN ONE WAY	R6-6 24"x30"
	ROAD CLOSED	R11-2 48"x30"		END ONE WAY	R6-7 24"x30"
		W1-6L(0) 60"x30"		SIDEWALK CLOSED USE OTHER SIDE	R11-I102 24"x30"
		R3-27 24"x24"			W1-3L(0) 48"x48"
				ONLY	R3-5 30"x36"
				ONLY	R3-5 30"x36"

**NOTE:**  
CONTRACTOR MUST NOTIFY IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847)705-4470, SEVENTY-TWO HOURS IN ADVANCE OF SETTING UP DETOUR ROUTE.

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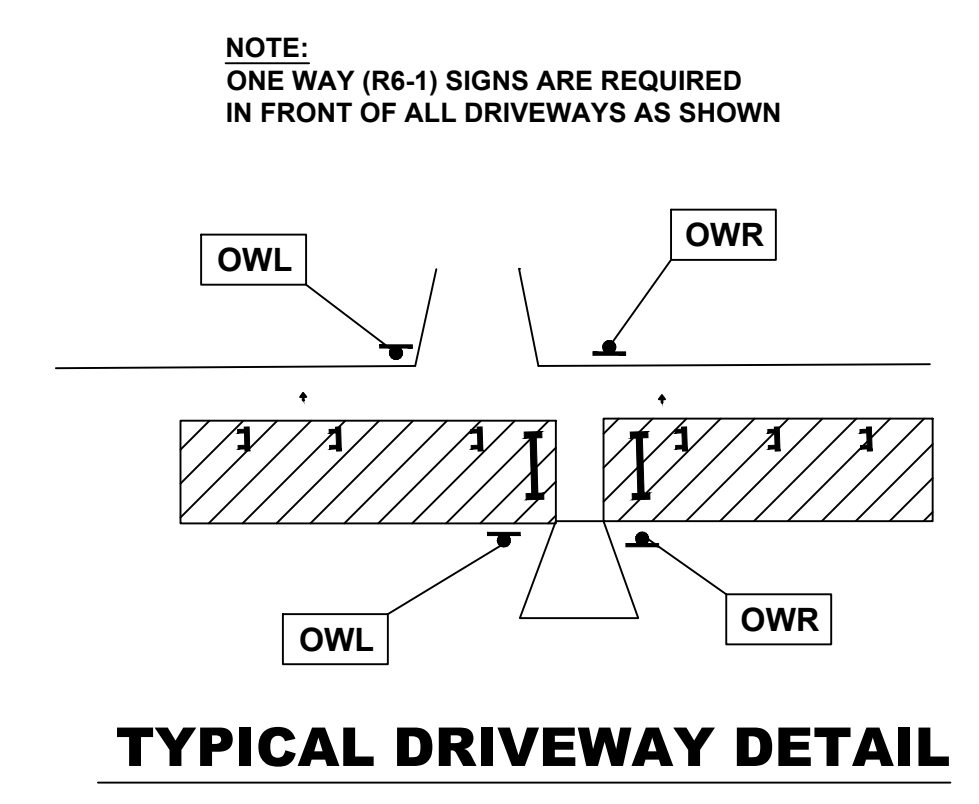
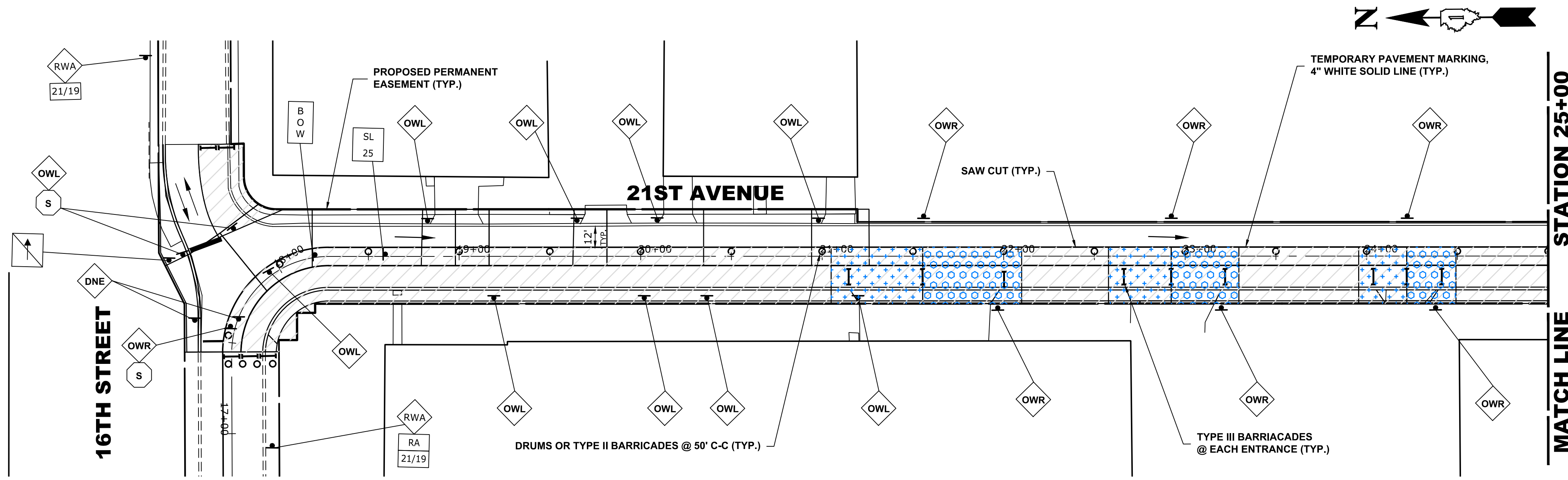
DESIGNED - MWV	REVISED -
DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>MAINTENANCE OF TRAFFIC LEGEND STAGE CONSTRUCTION</b>		
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	30
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801

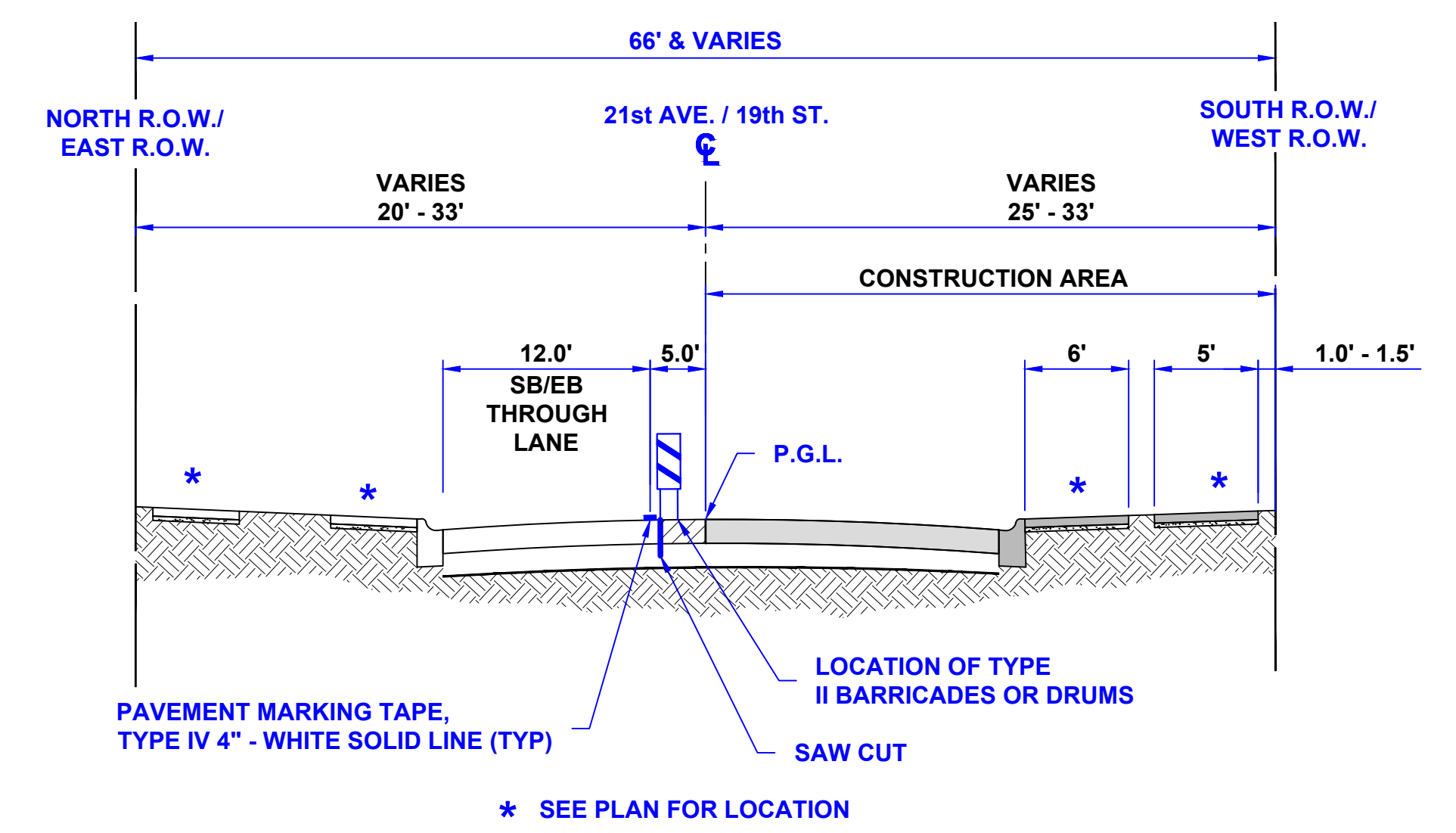


**STAGE 1 CONSTRUCTION**

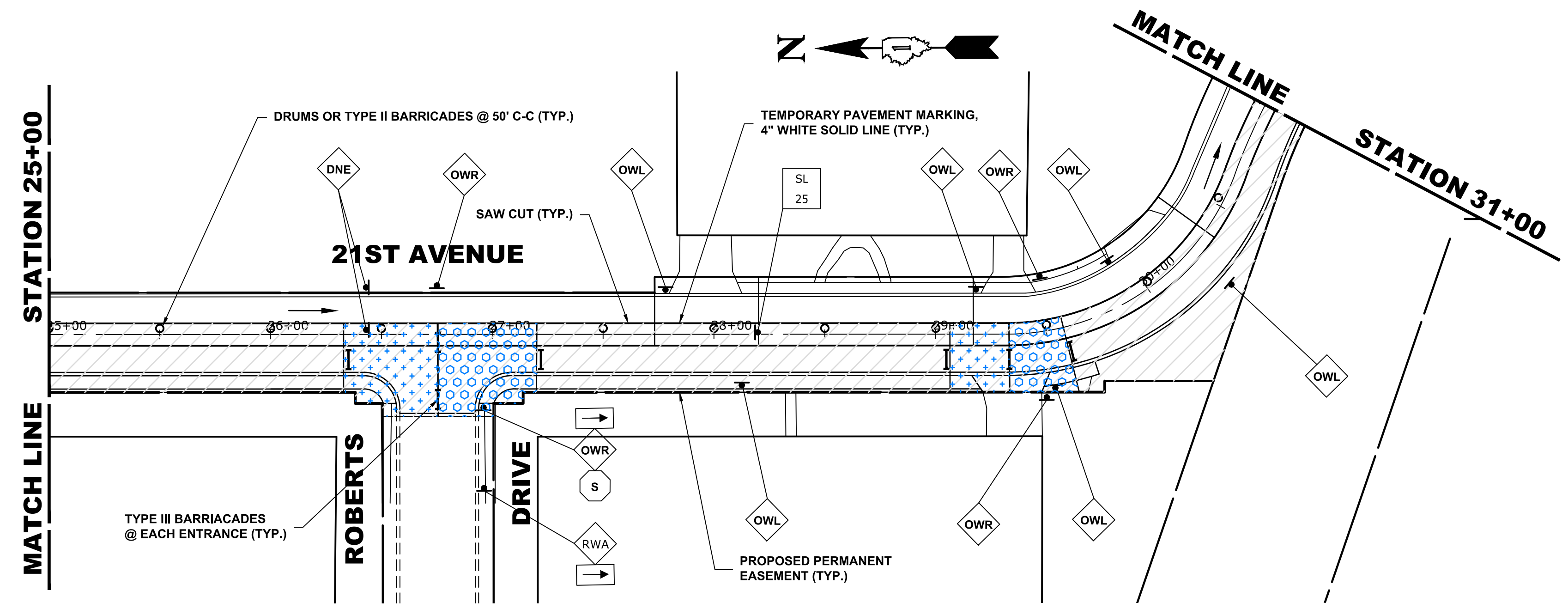
1. WORK DURING THIS STAGE SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF UTILITIES AND ROADWAY AS INDICATED ON THE PROPOSED PAVEMENT AND UTILITY PLANS ALONG THE SOUTH AND WEST SIDE OF 19TH STREET AND 21ST AVENUE, AND A CLOSURE OF THE FULL STREET BETWEEN 18TH AVENUE AND 17TH AVENUE.
2. ALL THE COMMERCIAL DRIVEWAYS ARE TO BE OPENED THROUGHOUT CONSTRUCTION FOR TRAFFIC OR AS DIRECTED BY THE ENGINEER AND AS PAID FOR AS TEMPORARY ACCESS (COMMERCIAL ENTRANCE).
3. IDOT STANDARD 701501-06 SHALL BE USED TO ESTABLISH TRAFFIC CONTROL AND PROTECTION NECESSARY FOR SAW CUTTING, THE REMOVAL OF EXISTING PAVEMENT, EARTH EXCAVATION AS NECESSARY AND PERFORMING ALL THE PROPOSED PAVEMENT WORK ALONG THE SOUTH AND WEST SIDE OF 19TH STREET AND 21ST AVENUE.
4. INTERSECTIONS ARE TO REMAIN OPEN AT ALL TIMES, EXCEPT DURING PREPARATION, POURING AND CURING OF NEW PAVEMENT, AND SHALL BE PAID FOR AS TEMPORARY ACCESS (ROAD).
5. CONSTRUCTION VEHICLES, INCLUDING CONSTRUCTION DELIVERY VEHICLES, WILL NEED TO SHARE THE "THROUGH" LANE. FLAGGERS TO BE USED FOR COORDINATING TRAFFIC FLOW.
6. CONTRACTOR CANNOT REMOVE EXISTING PAVEMENT IN AREA OUTSIDE OF CONSTRUCTION LIMITS. THE EXISTING STONE AND ASPHALT MUST BE MAINTAINED THROUGHOUT THIS STAGE.

**LEGEND**

- CONSTRUCTION WORK ZONE
- DIRECTION OF TRAFFIC FLOW
- PHASE I CONSTRUCTION ACCESS
- PHASE II CONSTRUCTION ACCESS
- HIGH EARLY STRENGTH PCC PAVEMENT, 9" OR 8" \*NOTE: 9" PAVEMENT TO BE INSTALLED WITHIN CURB AND GUTTER, 8" PAVEMENT TO BE INSTALLED BEHIND BACK OF CURB.
- PROPOSED PAVEMENT AREA WITH STANDARD PCC PAVEMENT, PCC SIDEWALK, AND CURB & GUTTER
- DRUMS OR TYPE II BARRICADES
- TYPE III BARRICADE
- TYPE II BARRICADE OR DRUM IN TYPICAL CROSS SECTION



**TYPICAL SECTION DURING STAGE 1 CONSTRUCTION**



Drawing File: W:\Projects\_by\_Village\Brownsview\12019008 -Brgo Drive Stage II - Design\CAD\Site\30-36\_BRAVA\_MAINT\_OF\_TRAFFIC.dwg  
 Feb 10, 2020 - 4:00pm  
 E.H.E. PROJECT NO. 120-19-00801



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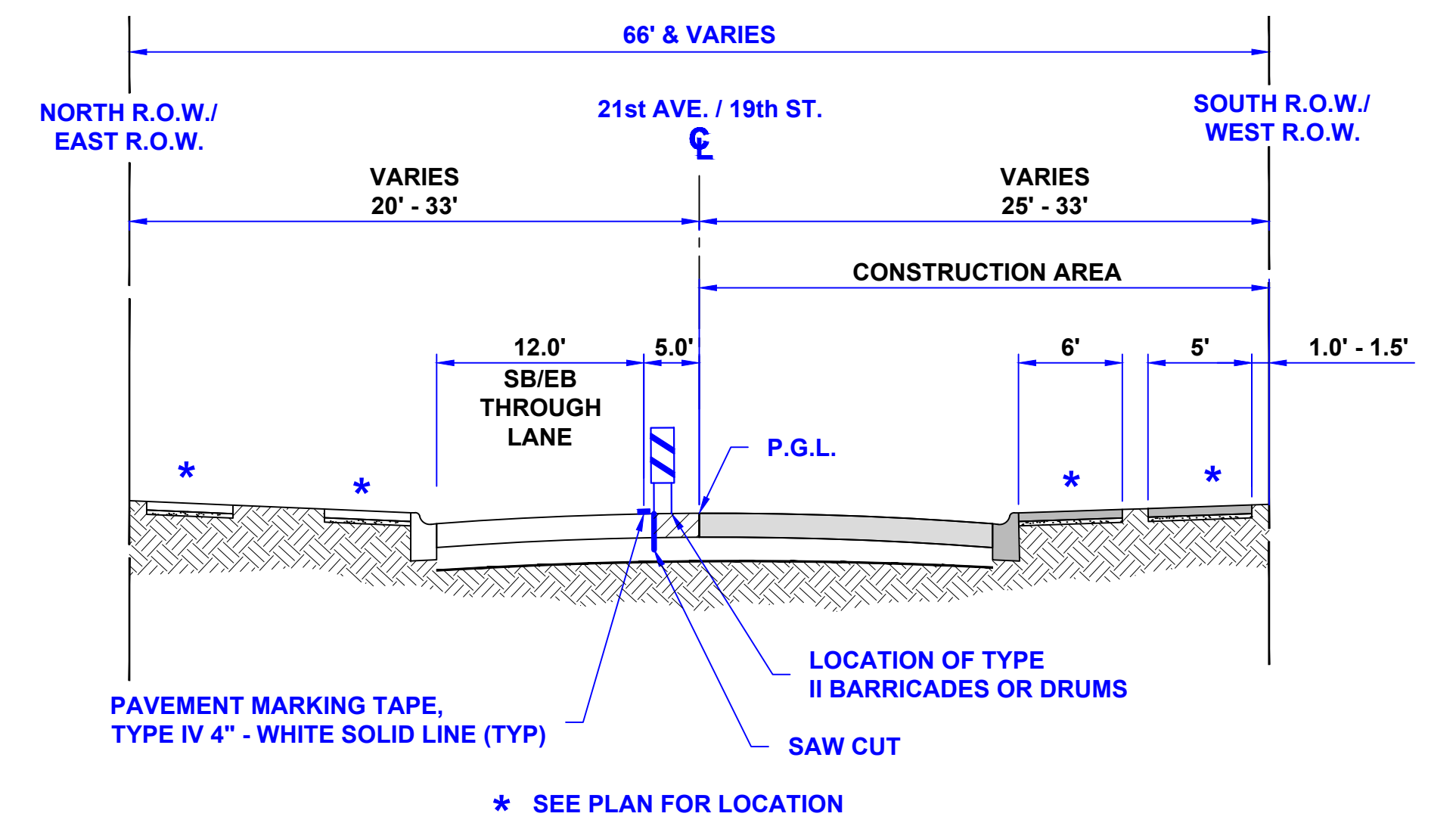
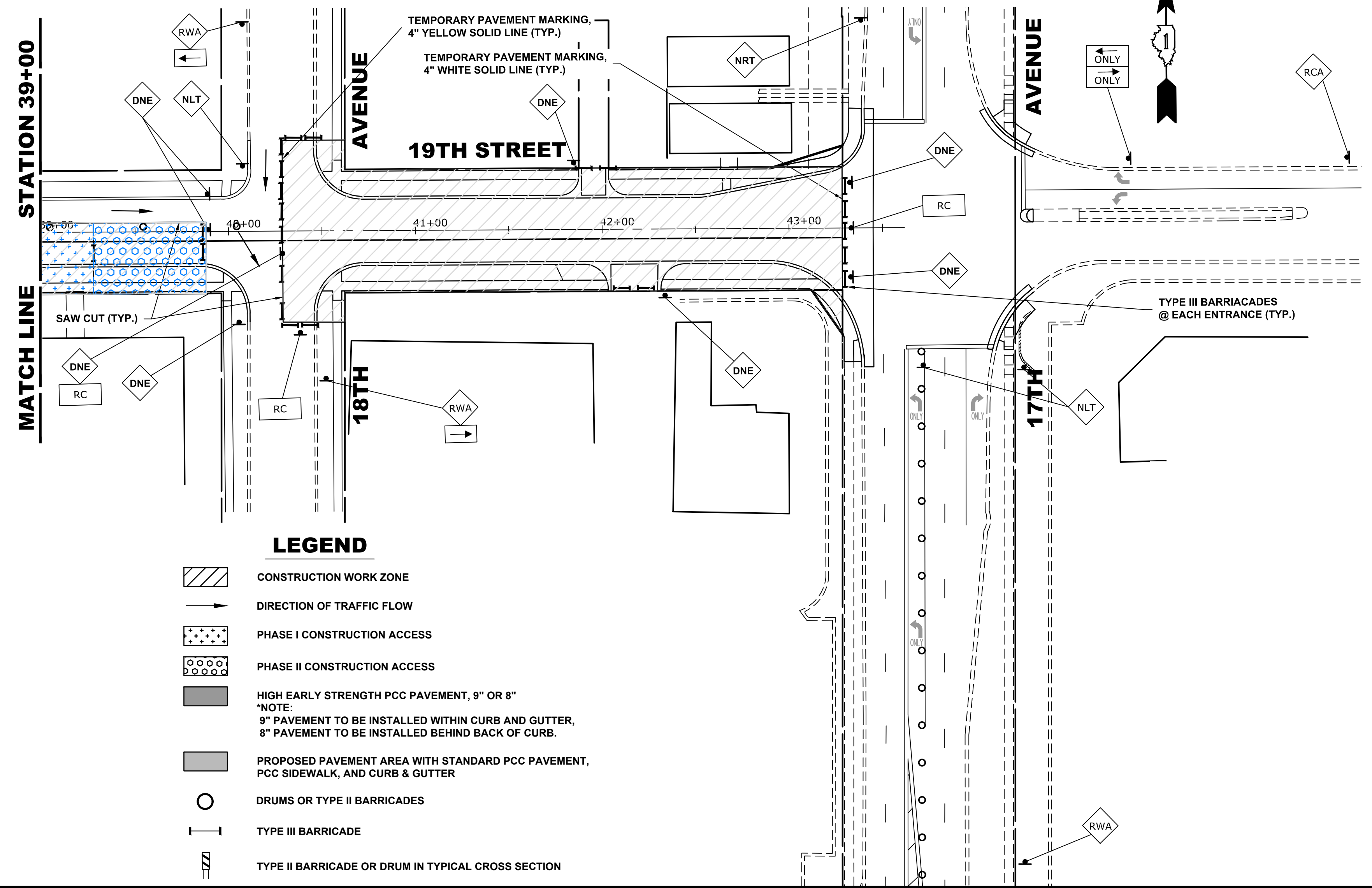
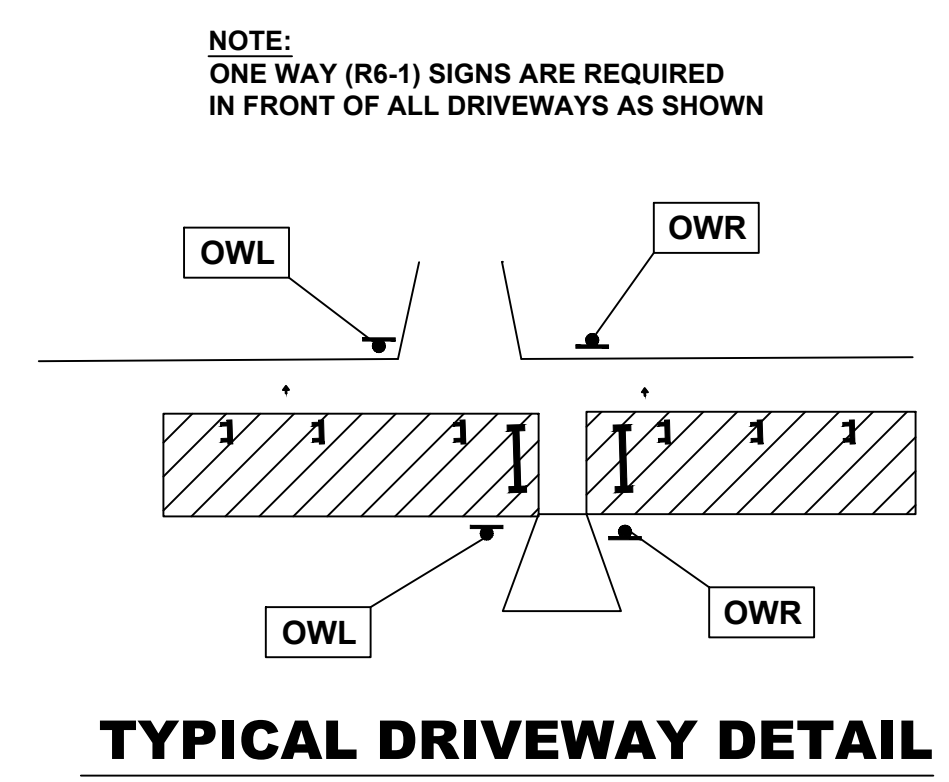
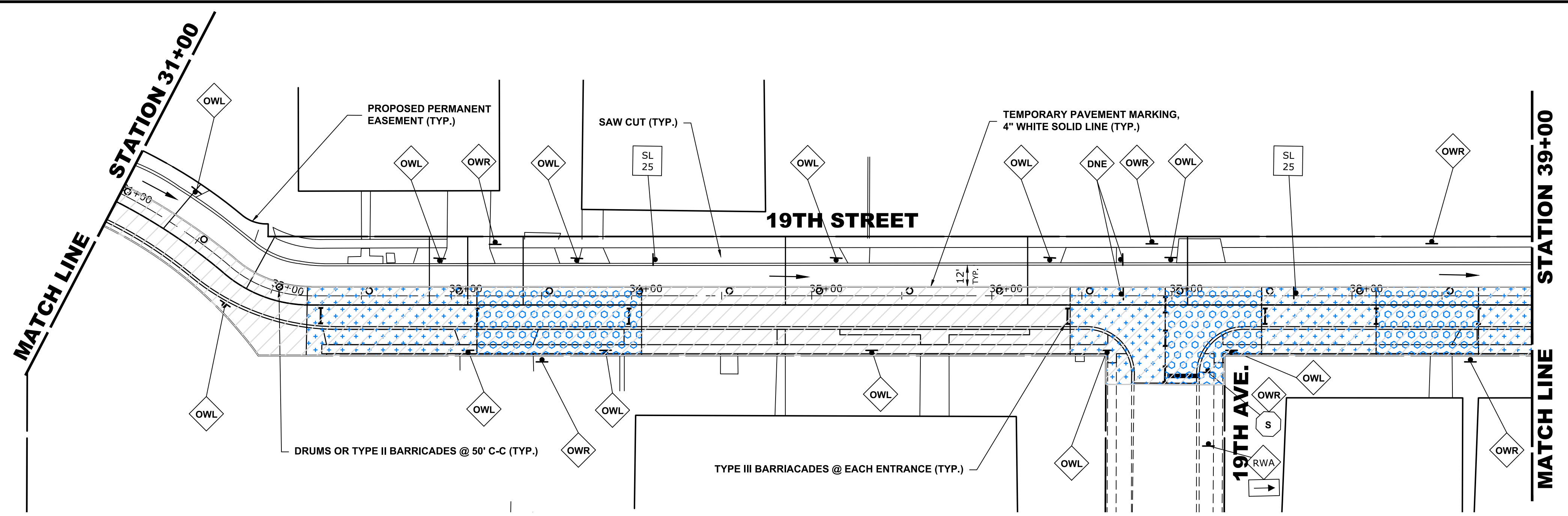
DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

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

<b>MAINTENANCE OF TRAFFIC PLAN</b>			
<b>STAGE 1 CONSTRUCTION</b>			
SCALE: 1" = 40'	SHEET NO. 1 OF 2 SHEETS	STA. 17+45	TO STA. 31+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	31
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

Drawing File: W:\Projects\_by\_Village\Brownsview\12019008 -Brgo Drive Stage II - Design\CAD\Site\30-36\_BRACA\_MAINT\_OF\_TRAFFIC.dwg  
 Feb 10, 2020 - 4:12pm  
 E.H.E. PROJECT NO. 120-19-0081



**LEGEND**

	CONSTRUCTION WORK ZONE
	DIRECTION OF TRAFFIC FLOW
	PHASE I CONSTRUCTION ACCESS
	PHASE II CONSTRUCTION ACCESS
	HIGH EARLY STRENGTH PCC PAVEMENT, 9" OR 8" NOTE: 9" PAVEMENT TO BE INSTALLED WITHIN CURB AND GUTTER, 8" PAVEMENT TO BE INSTALLED BEHIND BACK OF CURB.
	PROPOSED PAVEMENT AREA WITH STANDARD PCC PAVEMENT, PCC SIDEWALK, AND CURB & GUTTER
	DRUMS OR TYPE II BARRICADES
	TYPE III BARRICADE
	TYPE II BARRICADE OR DRUM IN TYPICAL CROSS SECTION

**STAGE 1 CONSTRUCTION**

1. WORK DURING THIS STAGE SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF UTILITIES AND ROADWAY AS INDICATED ON THE PROPOSED PAVEMENT AND UTILITY PLANS ALONG THE SOUTH AND WEST SIDE OF 19th STREET AND 21st AVENUE, AND A CLOSURE OF THE FULL STREET BETWEEN 18TH AVENUE AND 17TH AVENUE.
2. ALL THE COMMERCIAL DRIVEWAYS ARE TO BE OPENED THROUGHOUT CONSTRUCTION FOR TRAFFIC OR AS DIRECTED BY THE ENGINEER AND AS PAID FOR AS TEMPORARY ACCESS (COMMERCIAL ENTRANCE).
3. IDOT STANDARD 701501-06 SHALL BE USED TO ESTABLISH TRAFFIC CONTROL AND PROTECTION NECESSARY FOR SAW CUTTING, THE REMOVAL OF EXISTING PAVEMENT, EARTH EXCAVATION AS NECESSARY AND PERFORMING ALL THE PROPOSED PAVEMENT WORK ALONG THE SOUTH AND WEST SIDE OF 19TH STREET AND 21ST AVENUE.
4. INTERSECTIONS ARE TO REMAIN OPEN AT ALL TIMES, EXCEPT DURING PREPARATION, POURING AND CURING OF NEW PAVEMENT, AND SHALL BE PAID FOR AS TEMPORARY ACCESS (ROAD).
5. CONSTRUCTION VEHICLES, INCLUDING CONSTRUCTION DELIVERY VEHICLES, WILL NEED TO SHARE THE "THROUGH" LANE. FLAGGERS TO BE USED FOR COORDINATING TRAFFIC FLOW.
6. CONTRACTOR CANNOT REMOVE EXISTING PAVEMENT IN AREA OUTSIDE OF CONSTRUCTION LIMITS. THE EXISTING STONE AND ASPHALT MUST BE MAINTAINED THROUGHOUT THIS STAGE.



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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

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

**MAINTENANCE OF TRAFFIC PLAN**  
**STAGE 1 CONSTRUCTION**

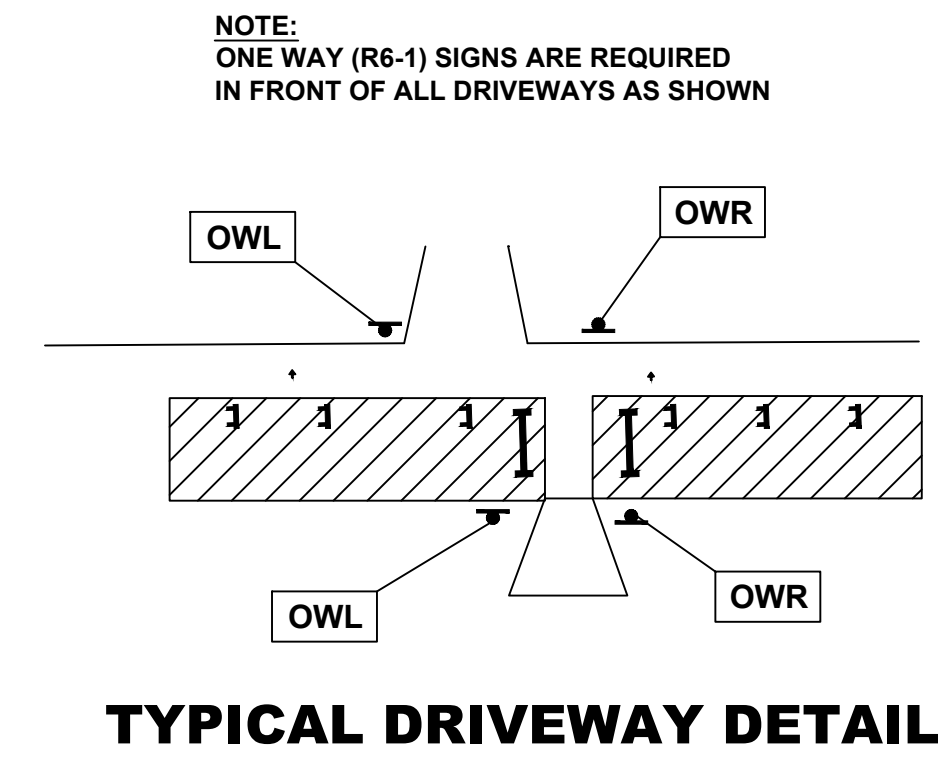
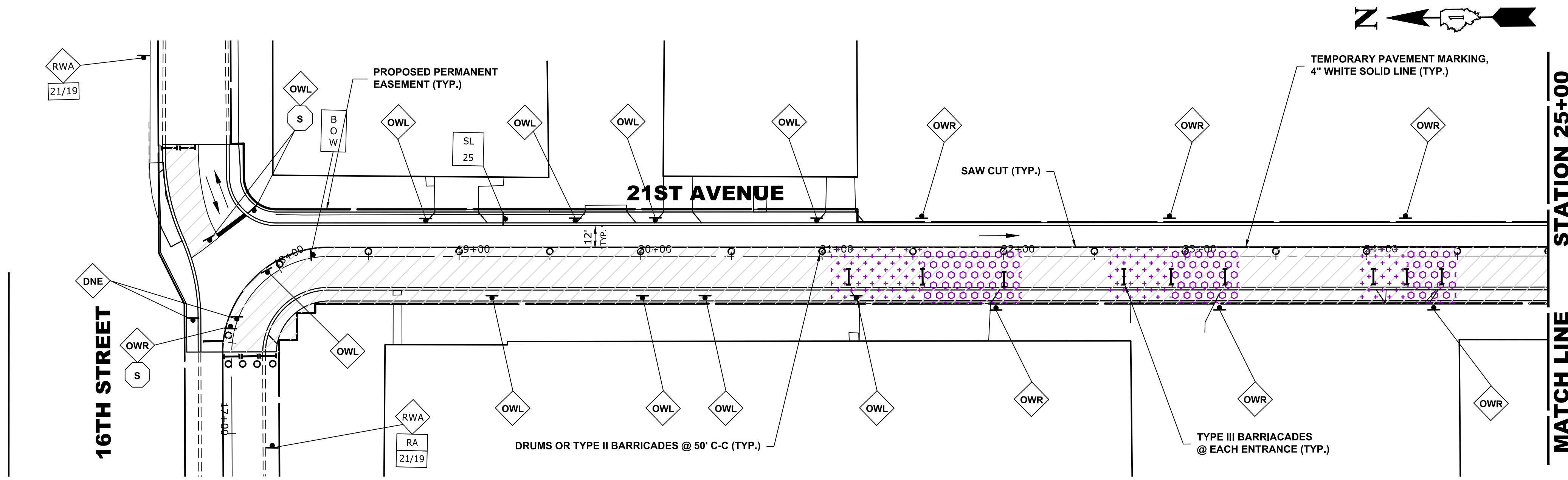
SCALE: 1" = 40'

SHEET NO. 2 OF 2 SHEETS

STA. 31+00 TO STA. 43+46

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	32
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



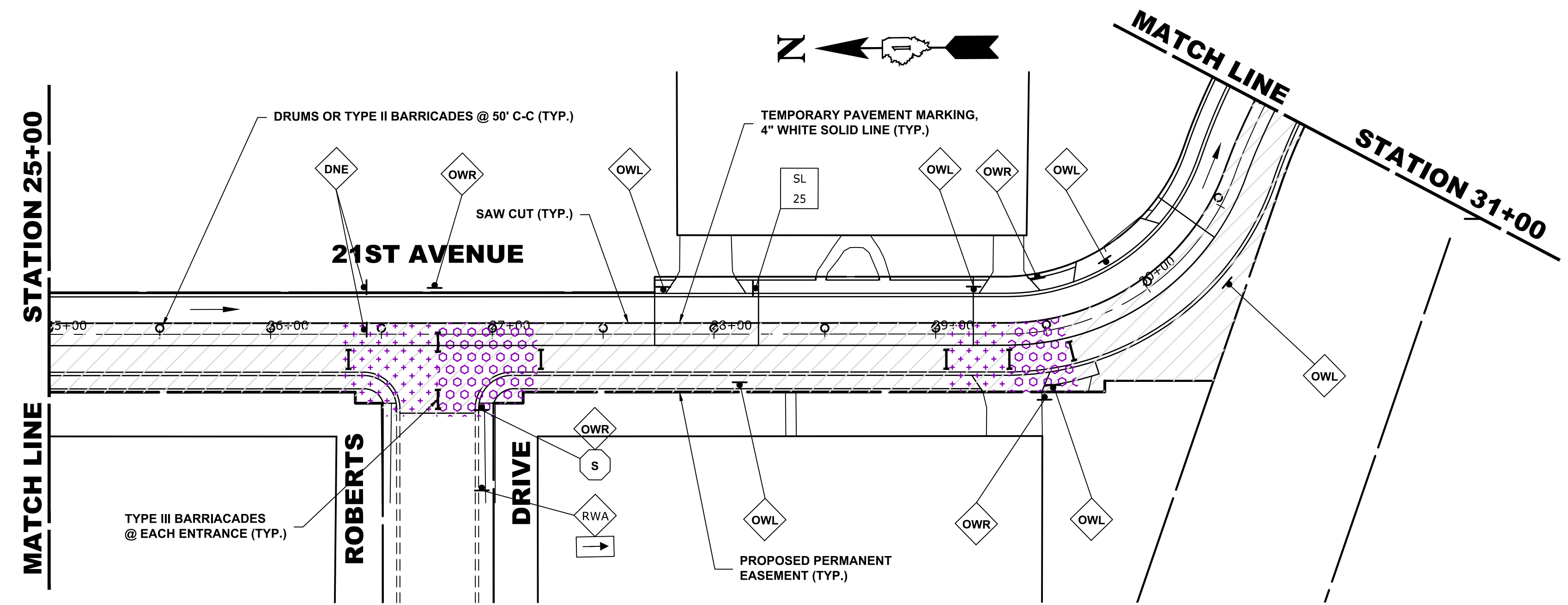
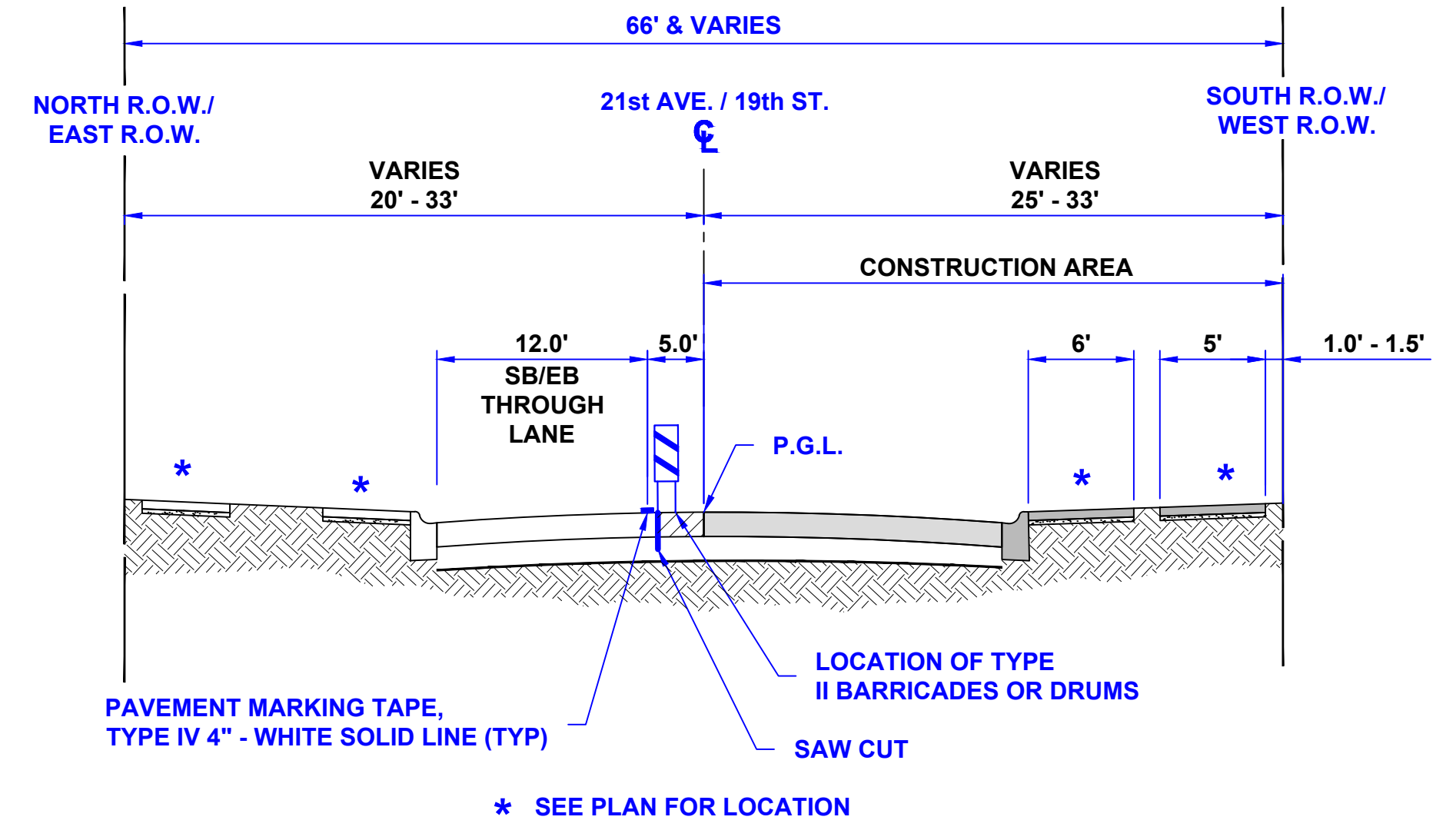


**STAGE 2 CONSTRUCTION**

1. WORK DURING THIS STAGE SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF UTILITIES AND ROADWAY AS INDICATED ON THE PROPOSED PAVEMENT AND UTILITY PLANS ALONG THE SOUTH AND WEST SIDE OF 19th STREET AND 21st AVENUE.
2. ALL THE COMMERCIAL DRIVEWAYS ARE TO BE OPENED THROUGHOUT CONSTRUCTION FOR TRAFFIC OR AS DIRECTED BY THE ENGINEER AND AS PAID FOR AS TEMPORARY ACCESS (COMMERCIAL ENTRANCE).
3. IDOT STANDARD 701501-06 SHALL BE USED TO ESTABLISH TRAFFIC CONTROL AND PROTECTION NECESSARY FOR SAW CUTTING, THE REMOVAL OF EXISTING PAVEMENT, EARTH EXCAVATION AS NECESSARY AND PERFORMING ALL THE PROPOSED PAVEMENT WORK ALONG THE NORTH AND EAST SIDE OF 19TH STREET AND 21ST AVENUE.
4. INTERSECTIONS ARE TO REMAIN OPEN AT ALL TIMES, EXCEPT DURING PREPARATION, POURING AND CURING OF NEW PAVEMENT, AND SHALL BE PAID FOR AS TEMPORARY ACCESS (ROAD).
5. CONSTRUCTION VEHICLES, INCLUDING CONSTRUCTION DELIVERY VEHICLES, WILL NEED TO SHARE THE "THROUGH" LANE. FLAGGERS TO BE USED FOR COORDINATING TRAFFIC FLOW.
6. CONTRACTOR CANNOT REMOVE EXISTING PAVEMENT IN AREA OUTSIDE OF CONSTRUCTION LIMITS. THE EXISTING STONE AND ASPHALT MUST BE MAINTAINED THROUGHOUT THIS STAGE.

**LEGEND**

- CONSTRUCTION WORK ZONE
- DIRECTION OF TRAFFIC FLOW
- PHASE I CONSTRUCTION ACCESS
- PHASE II CONSTRUCTION ACCESS
- HIGH EARLY STRENGTH PCC PAVEMENT, 9" OR 8"  
\*NOTE:  
9" PAVEMENT TO BE INSTALLED WITHIN CURB AND GUTTER,  
8" PAVEMENT TO BE INSTALLED BEHIND BACK OF CURB.
- PROPOSED PAVEMENT AREA WITH STANDARD PCC PAVEMENT,  
PCC SIDEWALK, AND CURB & GUTTER
- DRUMS OR TYPE II BARRICADES
- TYPE III BARRICADE
- TYPE II BARRICADE OR DRUM IN TYPICAL CROSS SECTION



**TYPICAL SECTION DURING STAGE 2 CONSTRUCTION**

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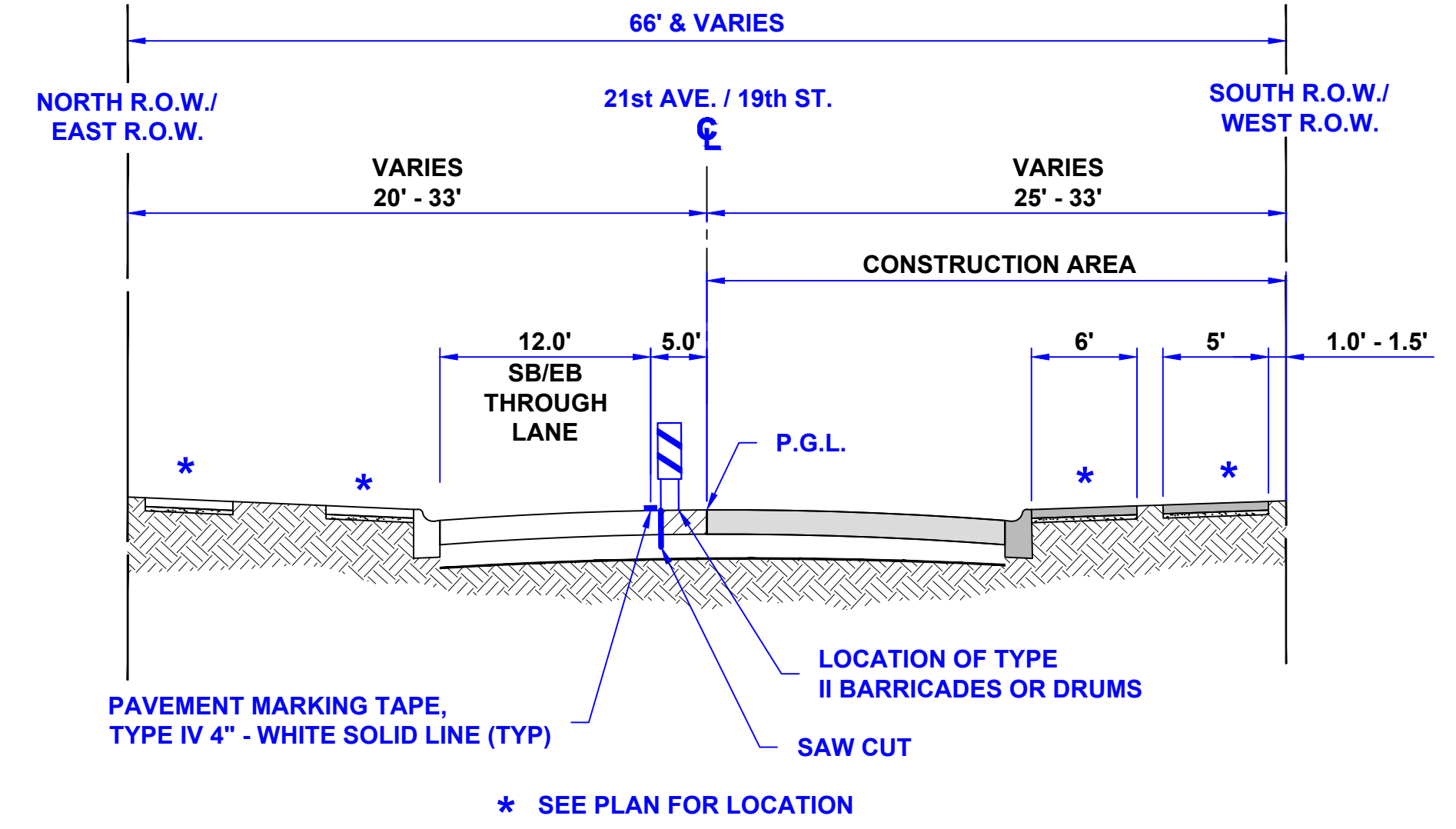
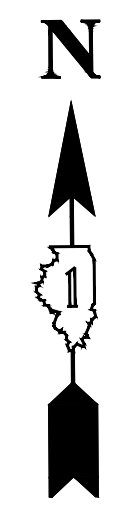
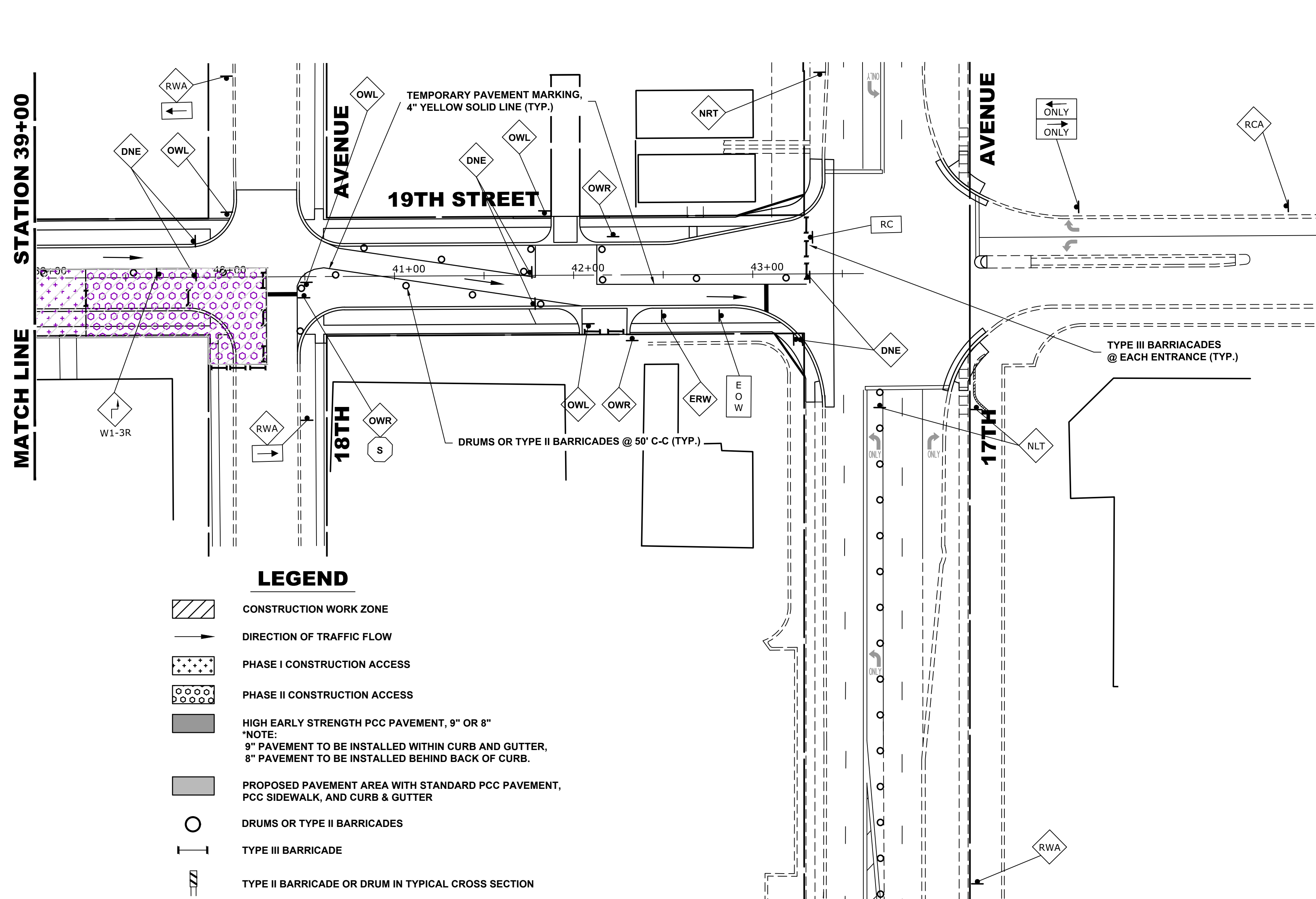
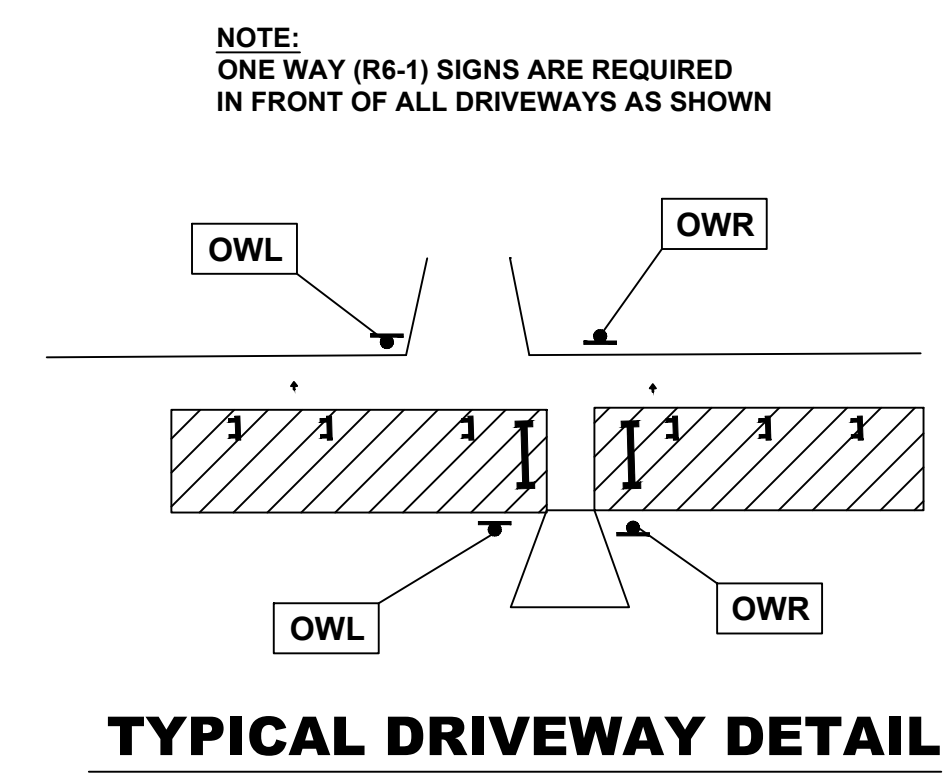
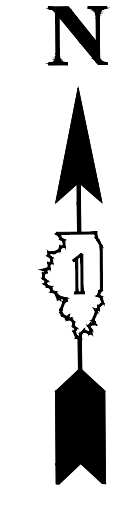
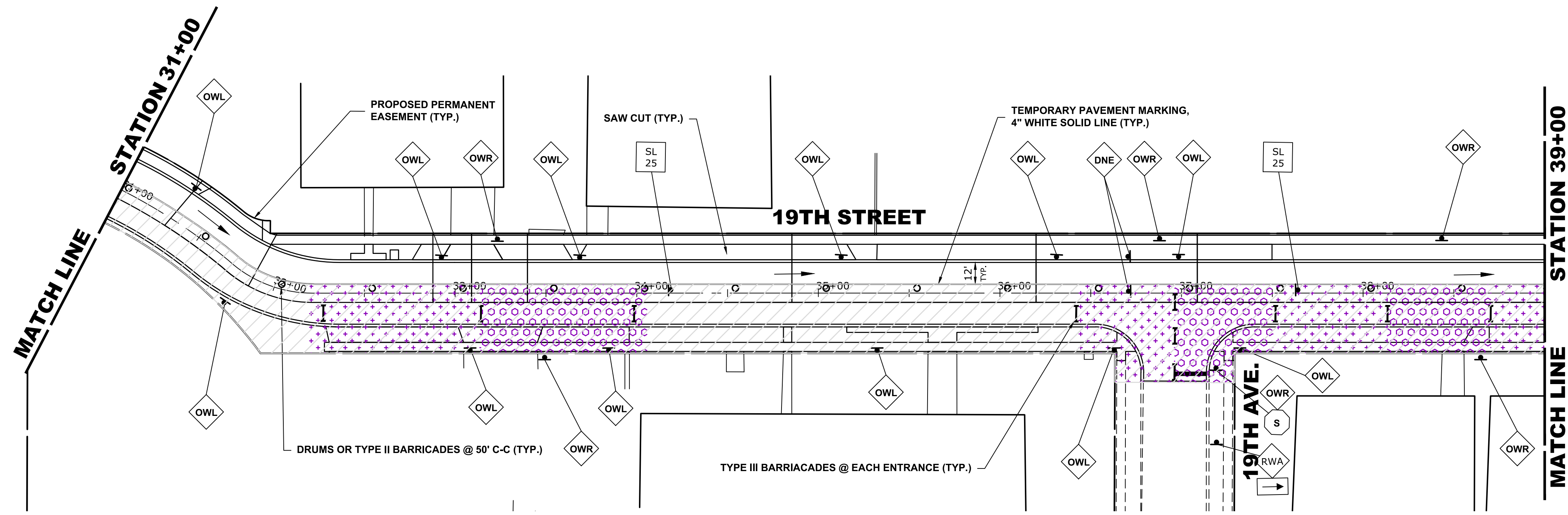
DESIGNED - MWV	REVISED -
DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

<b>MAINTENANCE OF TRAFFIC PLAN STAGE 2 CONSTRUCTION</b>			
SCALE: 1" = 40'	SHEET NO. 1 OF 2 SHEETS	STA. 17+45	TO STA. 31+00

MUN. RTE. 3015	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 33
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

Drawing File: W:\Projects\_by\_Village\Broomview\12019008 -Broom Drive Stage II - Design\CAD\Site\30-36\_BROOM\_MAINT\_OF\_TRAFFIC.dwg  
 Feb 10, 2020 - 4:22pm  
 E.H.E. PROJECT NO. 120-19-0081



**TYPICAL SECTION DURING  
STAGE 2 CONSTRUCTION**

**STAGE 2 CONSTRUCTION**

1. WORK DURING THIS STAGE SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF UTILITIES AND ROADWAY AS INDICATED ON THE PROPOSED PAVEMENT AND UTILITY PLANS ALONG THE SOUTH AND WEST SIDE OF 19th STREET AND 21st AVENUE.
2. ALL THE COMMERCIAL DRIVEWAYS ARE TO BE OPENED THROUGHOUT CONSTRUCTION FOR TRAFFIC OR AS DIRECTED BY THE ENGINEER AND AS PAID FOR AS TEMPORARY ACCESS (COMMERCIAL ENTRANCE).
3. IDOT STANDARD 701501-06 SHALL BE USED TO ESTABLISH TRAFFIC CONTROL AND PROTECTION NECESSARY FOR SAW CUTTING, THE REMOVAL OF EXISTING PAVEMENT, EARTH EXCAVATION AS NECESSARY AND PERFORMING ALL THE PROPOSED PAVEMENT WORK ALONG THE NORTH AND EAST SIDE OF 19TH STREET AND 21ST AVENUE.
4. INTERSECTIONS ARE TO REMAIN OPEN AT ALL TIMES, EXCEPT DURING PREPARATION, POURING AND CURING OF NEW PAVEMENT, AND SHALL BE PAID FOR AS TEMPORARY ACCESS (ROAD).
5. CONSTRUCTION VEHICLES, INCLUDING CONSTRUCTION DELIVERY VEHICLES, WILL NEED TO SHARE THE "THROUGH" LANE. FLAGGERS TO BE USED FOR COORDINATING TRAFFIC FLOW.
6. CONTRACTOR CANNOT REMOVE EXISTING PAVEMENT IN AREA OUTSIDE OF CONSTRUCTION LIMITS. THE EXISTING STONE AND ASPHALT MUST BE MAINTAINED THROUGHOUT THIS STAGE.

**LEGEND**

- CONSTRUCTION WORK ZONE
- DIRECTION OF TRAFFIC FLOW
- PHASE I CONSTRUCTION ACCESS
- PHASE II CONSTRUCTION ACCESS
- HIGH EARLY STRENGTH PCC PAVEMENT, 9" OR 8"  
NOTE:  
9" PAVEMENT TO BE INSTALLED WITHIN CURB AND GUTTER,  
8" PAVEMENT TO BE INSTALLED BEHIND BACK OF CURB.
- PROPOSED PAVEMENT AREA WITH STANDARD PCC PAVEMENT,  
PCC SIDEWALK, AND CURB & GUTTER
- DRUMS OR TYPE II BARRICADES
- TYPE III BARRICADE
- TYPE II BARRICADE OR DRUM IN TYPICAL CROSS SECTION

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 E.H.E. PROJECT NO. 120-19-0081

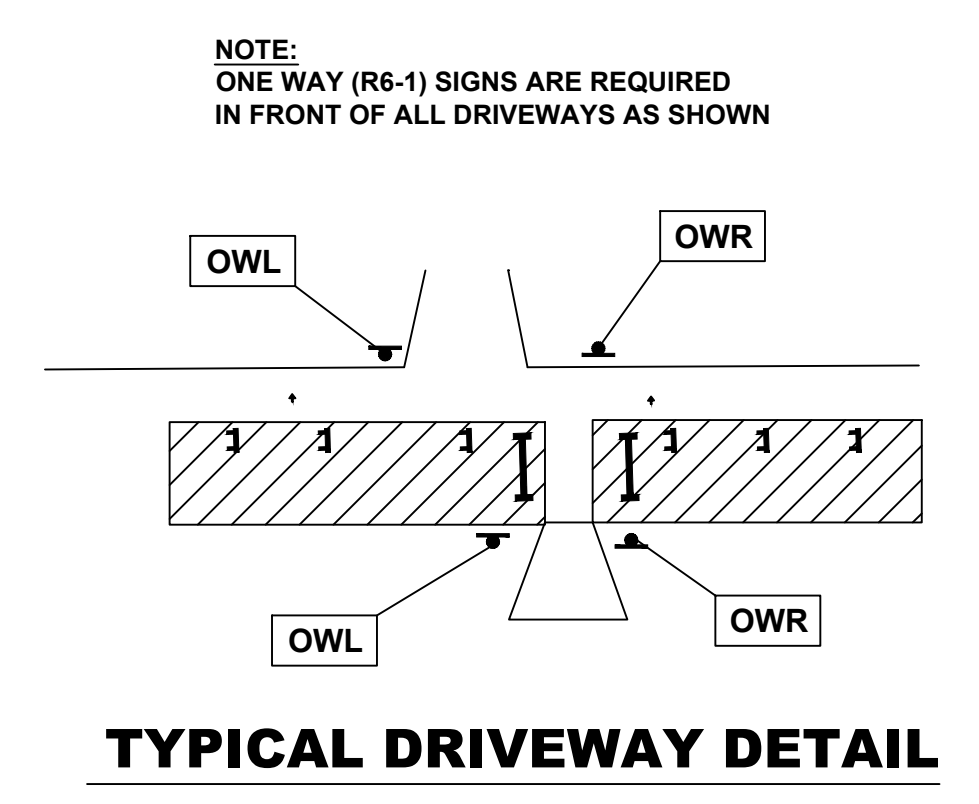
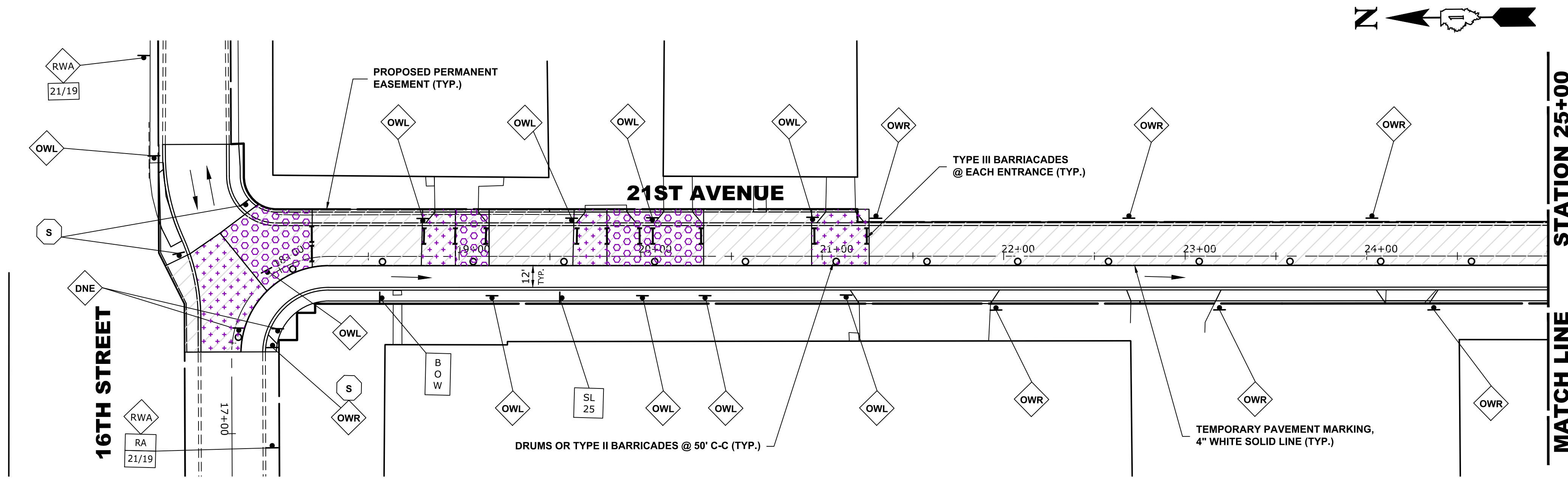
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DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC PLAN  
STAGE 2 CONSTRUCTION**  
 SCALE: 1" = 40'  
 SHEET NO. 2 OF 2 SHEETS  
 STA. 31+00 TO STA. 43+46

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	34
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

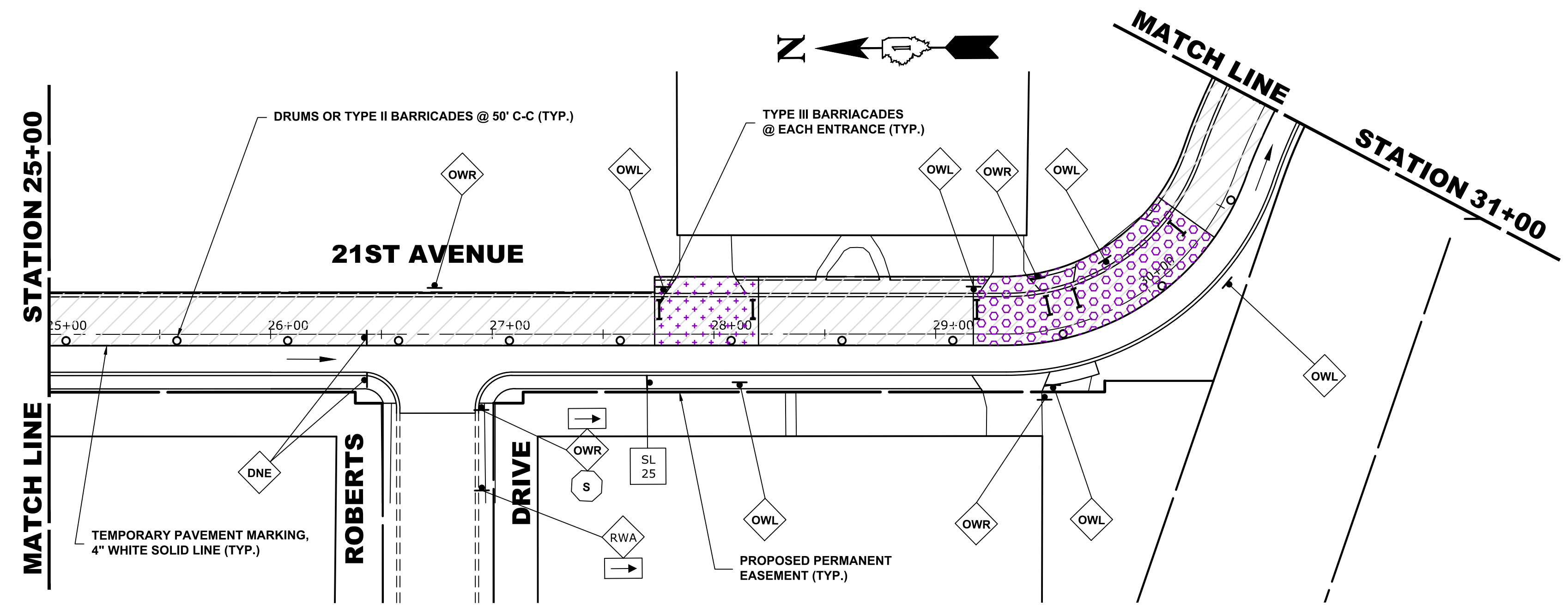
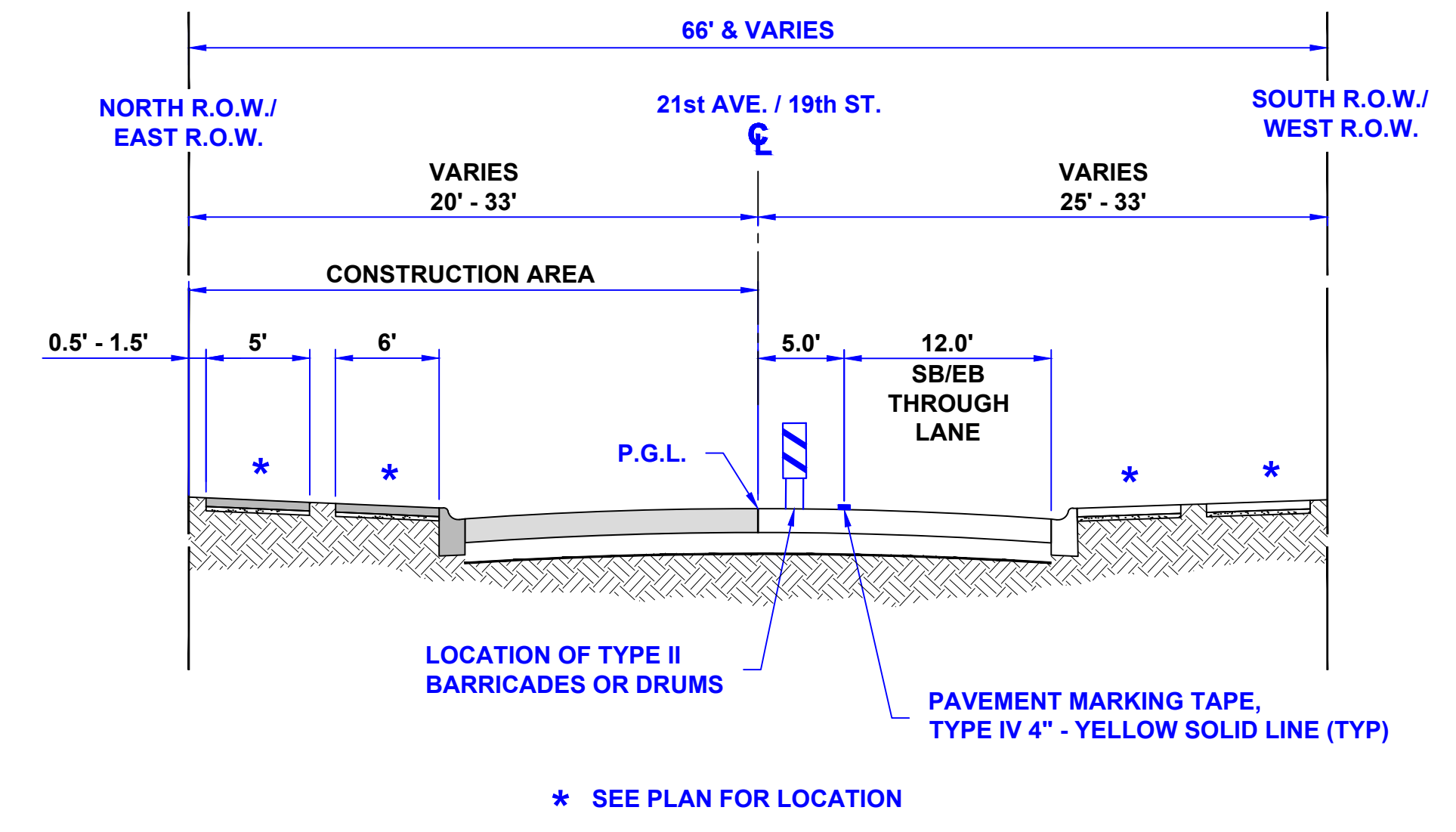


**STAGE 3 CONSTRUCTION**

1. WORK DURING THIS STAGE SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF UTILITIES AND ROADWAY AS INDICATED ON THE PROPOSED PAVEMENT AND UTILITY PLANS ALONG THE SOUTH AND WEST SIDE OF 19th STREET AND 21st AVENUE.
2. ALL THE COMMERCIAL DRIVEWAYS ARE TO BE OPENED THROUGHOUT CONSTRUCTION FOR TRAFFIC OR AS DIRECTED BY THE ENGINEER AND AS PAID FOR AS TEMPORARY ACCESS (COMMERCIAL ENTRANCE).
3. IDOT STANDARD 701501-06 SHALL BE USED TO ESTABLISH TRAFFIC CONTROL AND PROTECTION NECESSARY FOR SAW CUTTING, THE REMOVAL OF EXISTING PAVEMENT, EARTH EXCAVATION AS NECESSARY AND PERFORMING ALL THE PROPOSED PAVEMENT WORK ALONG THE NORTH AND EAST SIDE OF 19th STREET AND 21ST AVENUE.
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6. CONTRACTOR CANNOT REMOVE EXISTING PAVEMENT IN AREA OUTSIDE OF CONSTRUCTION LIMITS. THE EXISTING STONE AND ASPHALT MUST BE MAINTAINED THROUGHOUT THIS STAGE.

**LEGEND**

- CONSTRUCTION WORK ZONE
- DIRECTION OF TRAFFIC FLOW
- PHASE I CONSTRUCTION ACCESS
- PHASE II CONSTRUCTION ACCESS
- HIGH EARLY STRENGTH PCC PAVEMENT, 9" OR 8"  
\*NOTE:  
9" PAVEMENT TO BE INSTALLED WITHIN CURB AND GUTTER,  
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- PROPOSED PAVEMENT AREA WITH STANDARD PCC PAVEMENT,  
PCC SIDEWALK, AND CURB & GUTTER
- DRUMS OR TYPE II BARRICADES
- TYPE III BARRICADE
- TYPE II BARRICADE OR DRUM IN TYPICAL CROSS SECTION



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 E.H.E. PROJECT NO. 120-19-00801



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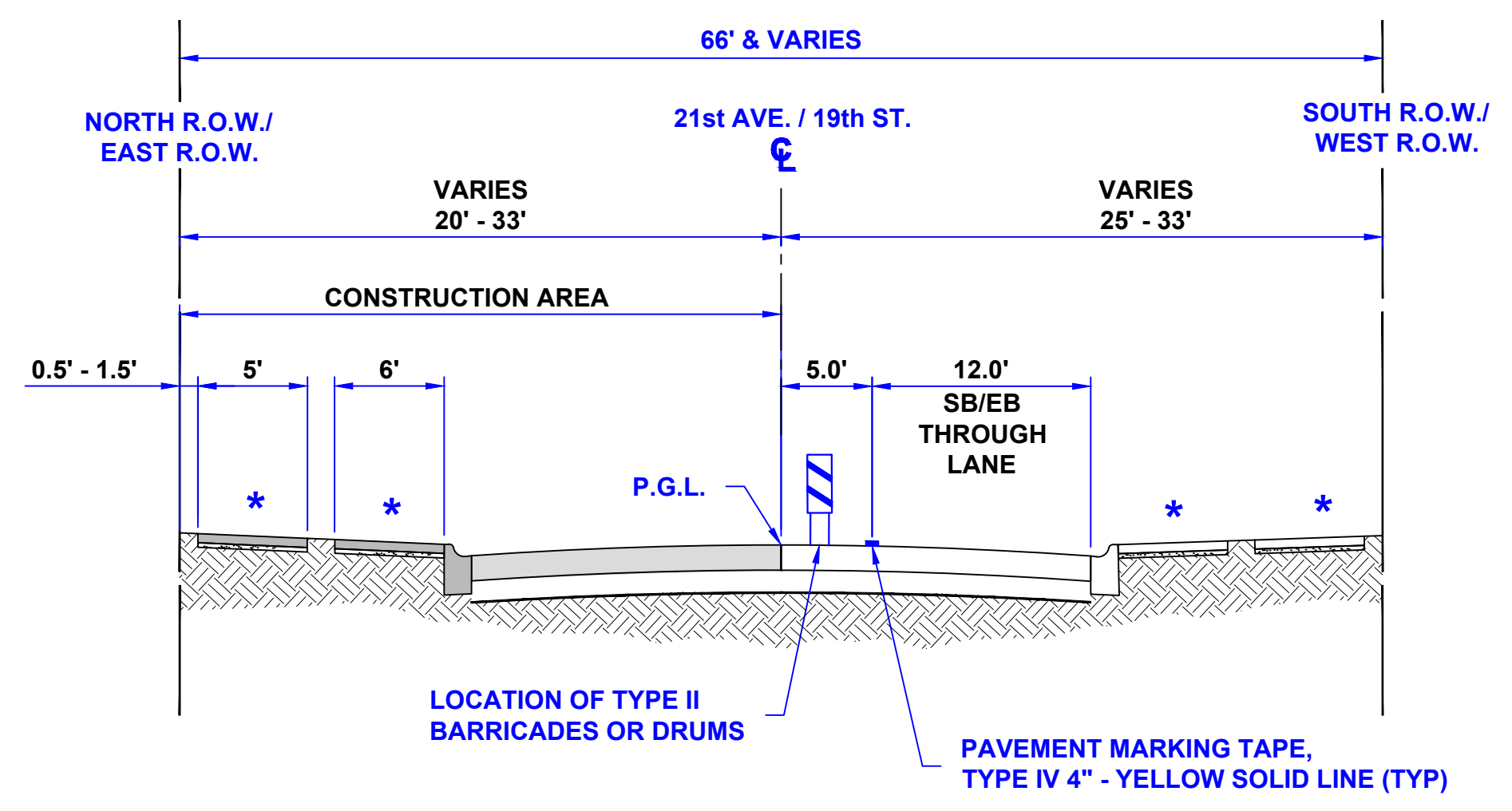
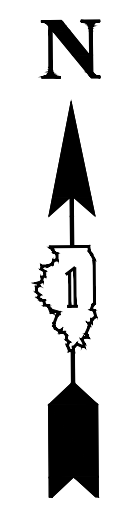
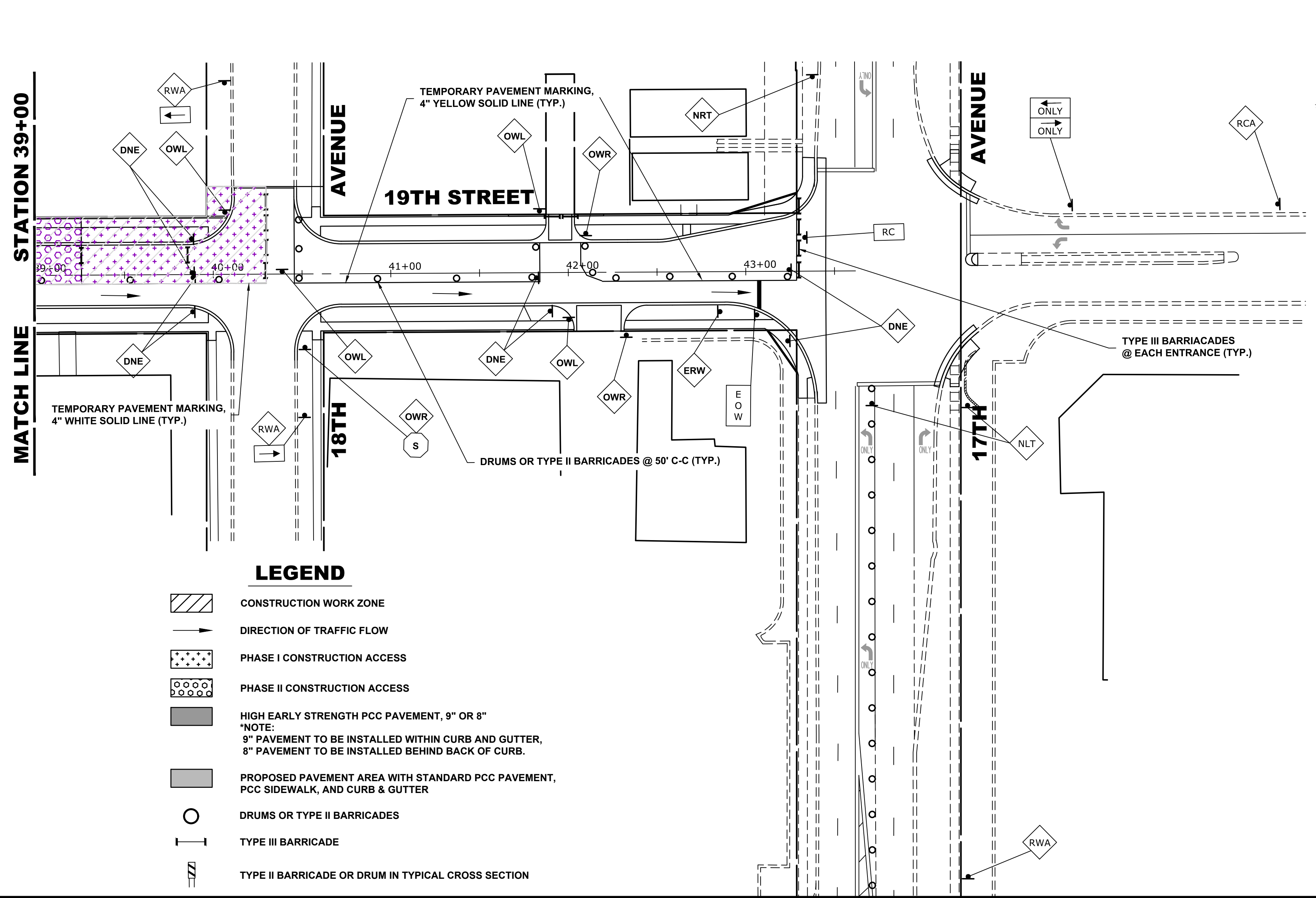
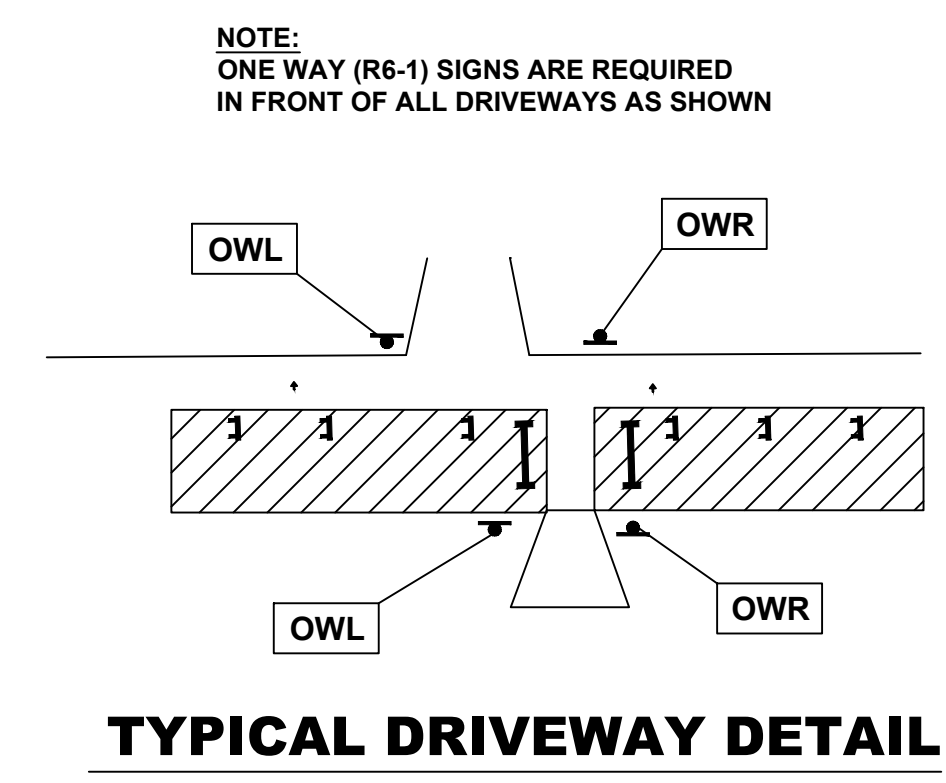
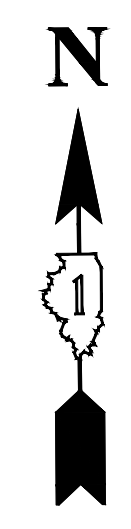
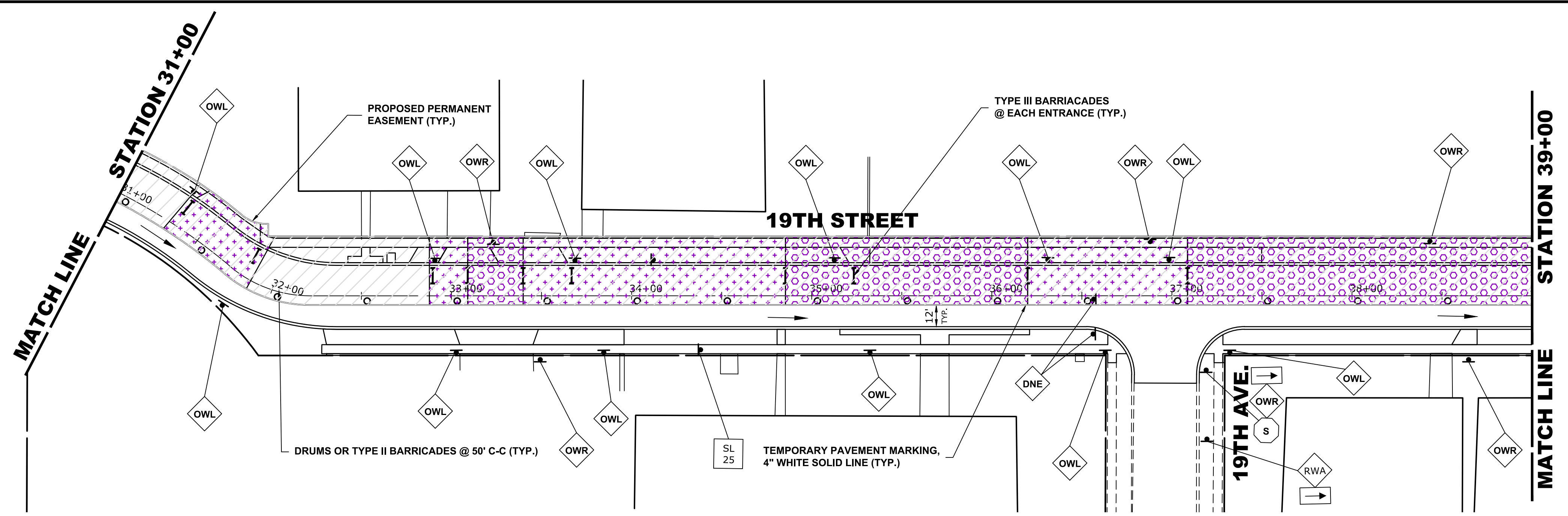
DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

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

<b>MAINTENANCE OF TRAFFIC PLAN</b> <b>STAGE 3 CONSTRUCTION</b>			
SCALE: 1" = 40'	SHEET NO. 1 OF 2 SHEETS	STA. 17+45	TO STA. 31+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	35
FIELD BOOK NO. : -	CONTRACT NO. 61G35			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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 Feb 10, 2020 - 5:01pm  
 E.H.E. PROJECT NO. 120-19-0081



**TYPICAL SECTION DURING  
STAGE 3 CONSTRUCTION**

**STAGE 3 CONSTRUCTION**

1. WORK DURING THIS STAGE SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF UTILITIES AND ROADWAY AS INDICATED ON THE PROPOSED PAVEMENT AND UTILITY PLANS ALONG THE SOUTH AND WEST SIDE OF 19th STREET AND 21st AVENUE.
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**LEGEND**

- CONSTRUCTION WORK ZONE
- DIRECTION OF TRAFFIC FLOW
- PHASE I CONSTRUCTION ACCESS
- PHASE II CONSTRUCTION ACCESS
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DESIGNED - MWV  
 DRAWN - DMM, SFB  
 CHECKED - JGG, MWV  
 DATE - 2-11-20

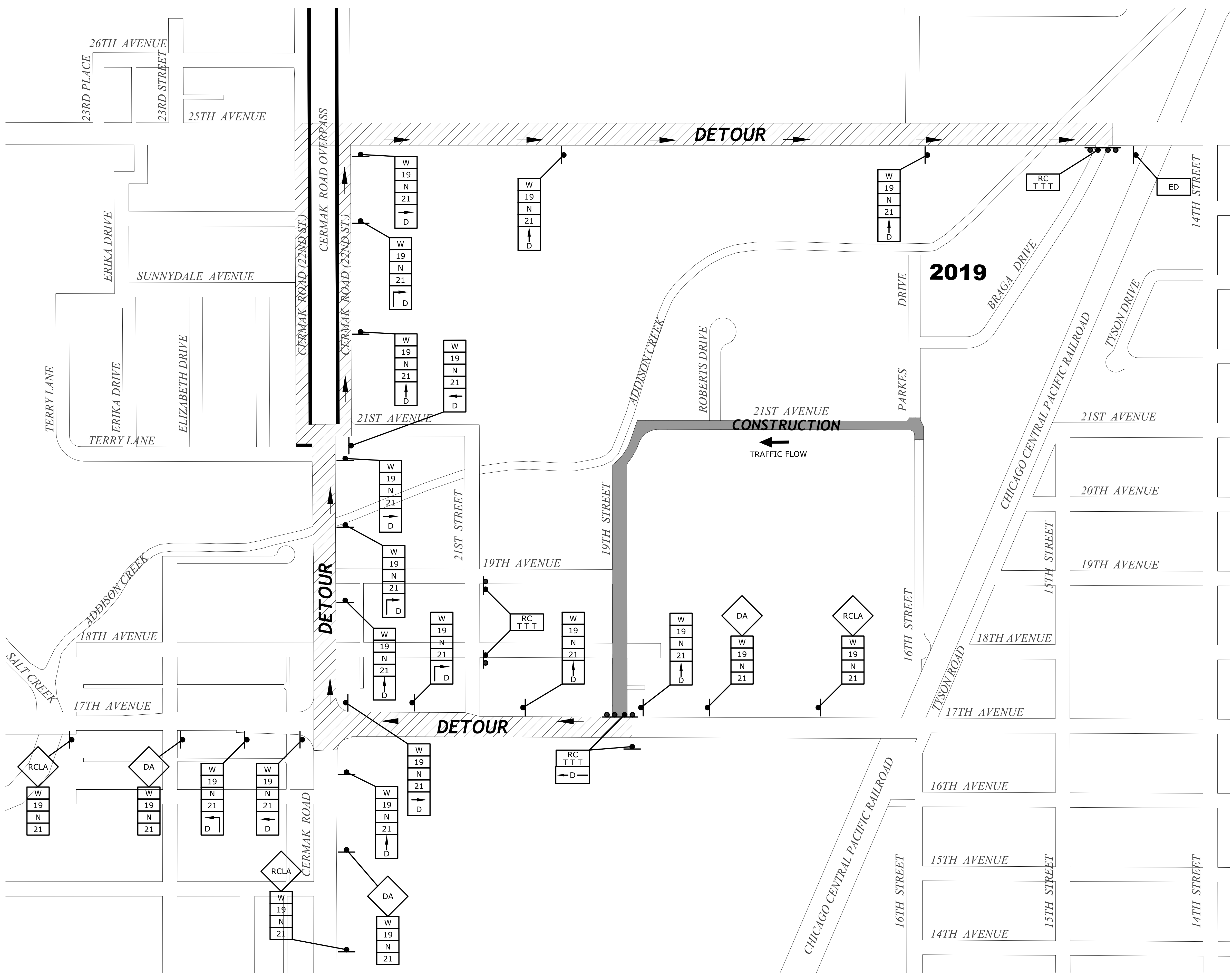
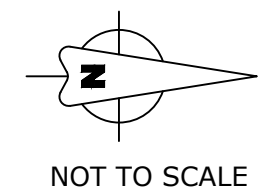
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

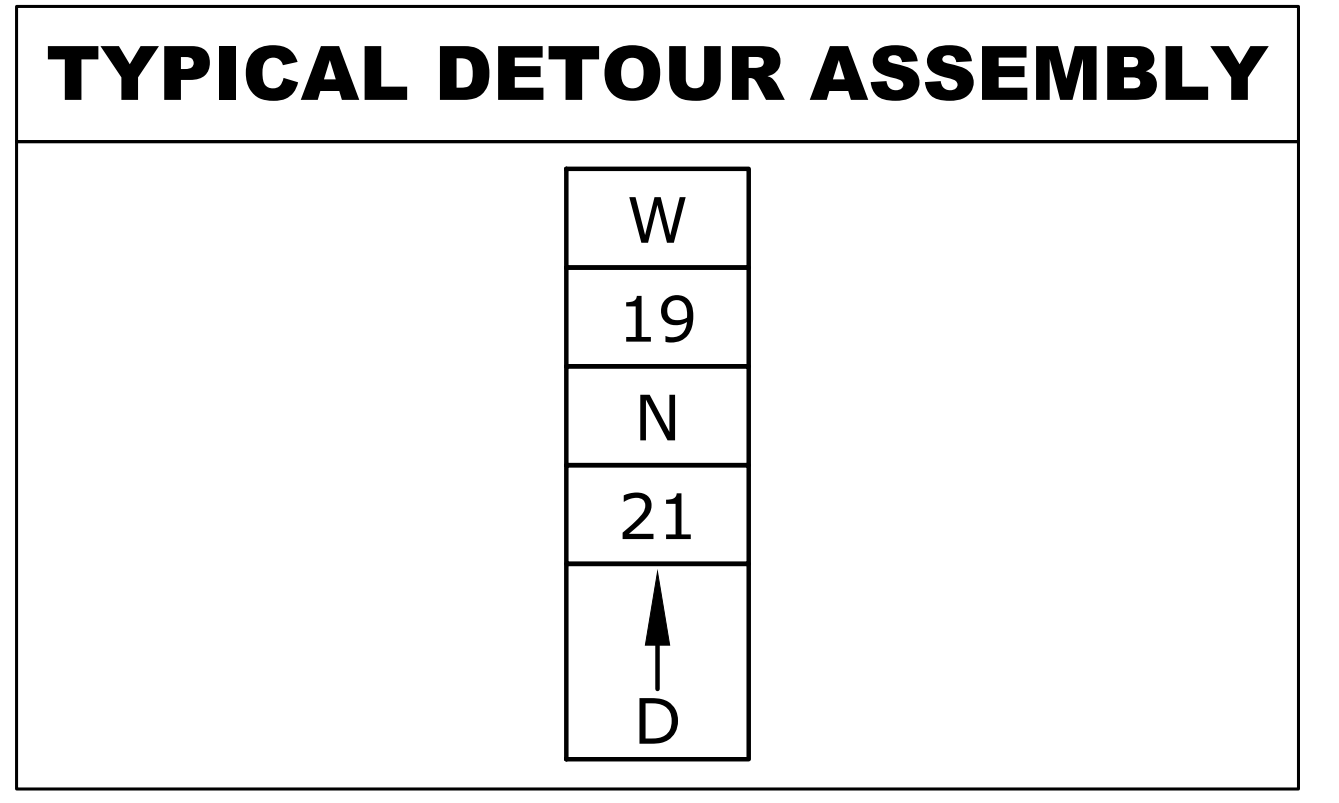
**MAINTENANCE OF TRAFFIC PLAN  
 STAGE 3 CONSTRUCTION**

SCALE: 1" = 40'  
 SHEET NO. 2 OF 2 SHEETS  
 STA. 31+00 TO STA. 43+46

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	36
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND OF SYMBOLS		
SYMBOL	DESCRIPTION	CODE & SIZE
		W20-3 48"x48"
		W20-2 48"x48"
	WEST	M3-4(0) 24"x12"
	NORTH	M3-4(0) 24"x12"
	19th Street	M4-8 36"x12"
	21st Avenue	M4-8 36"x12"
	END DETOUR	M4-8 24"x18"
		M4-9 30"x24"
		M4-9 30"x24"
		M4-9 30"x24"
		M4-9R 24"x30"
		M4-9L 24"x30"
	ROAD CLOSED	R11-4 60"x30"
	ROAD CLOSED TO THRU TRAFFIC	R11-4 60"x30"
		M4-10L 48"x18"



Drawing file: W:\Projects\_by\_Village\Broadview\12019008 --Braga Drive Stage II -- Design\CAD\Site\37\_BRAGA\_DRIVE--Detour.dwg Feb 10, 2020 - 5:04pm  
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DESIGNED - MWV  
 DRAWN - DMM, SFB  
 CHECKED - JGG, MWV  
 DATE - 2-11-20

REVISED -  
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 REVISED -

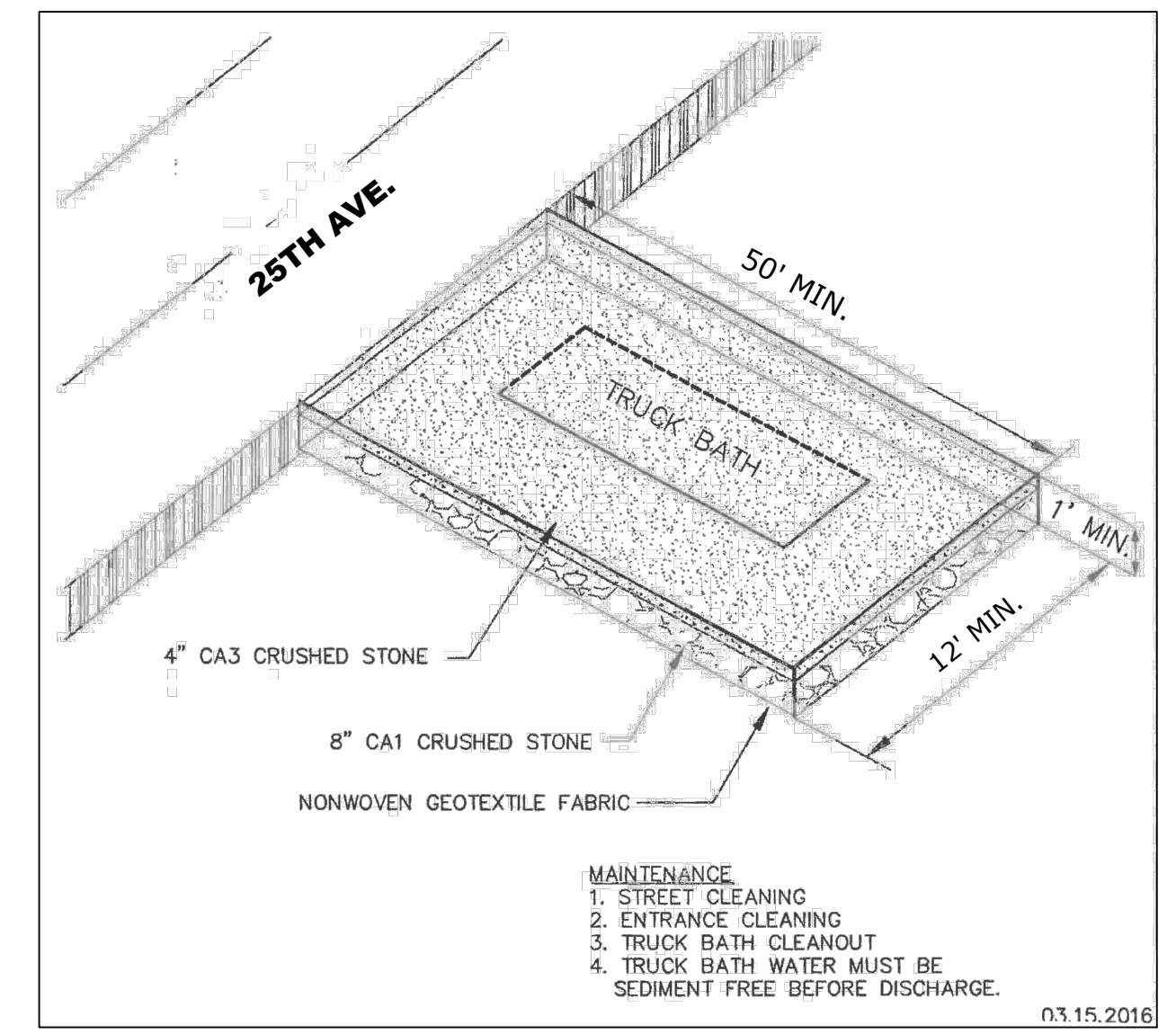
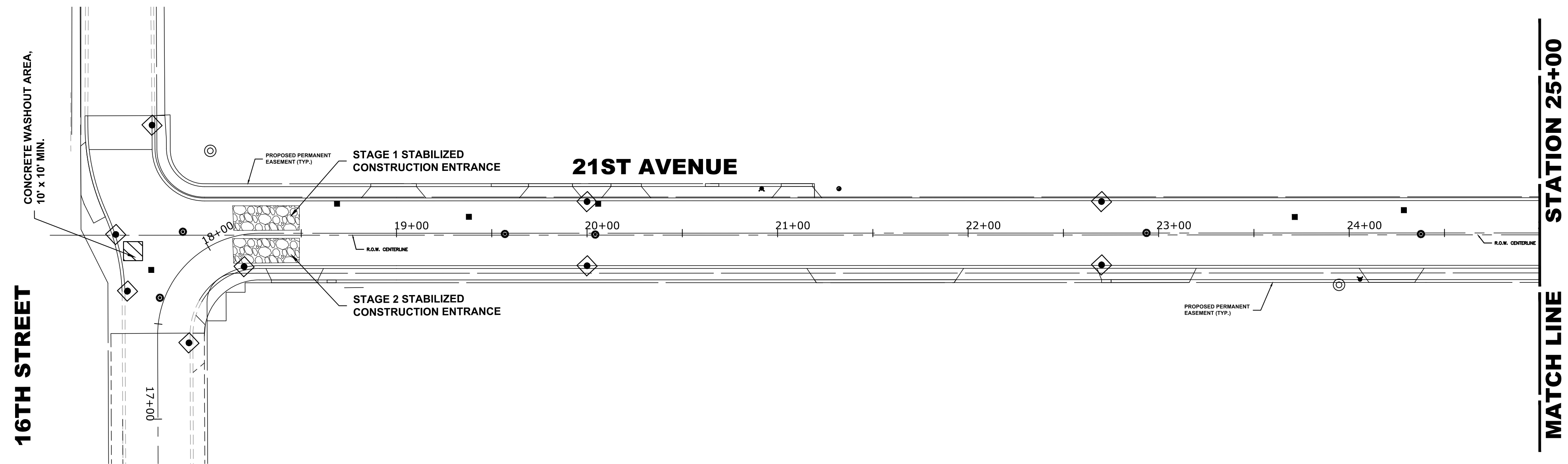
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DETOUR PLAN  
 STAGE 1 AND STAGE 2

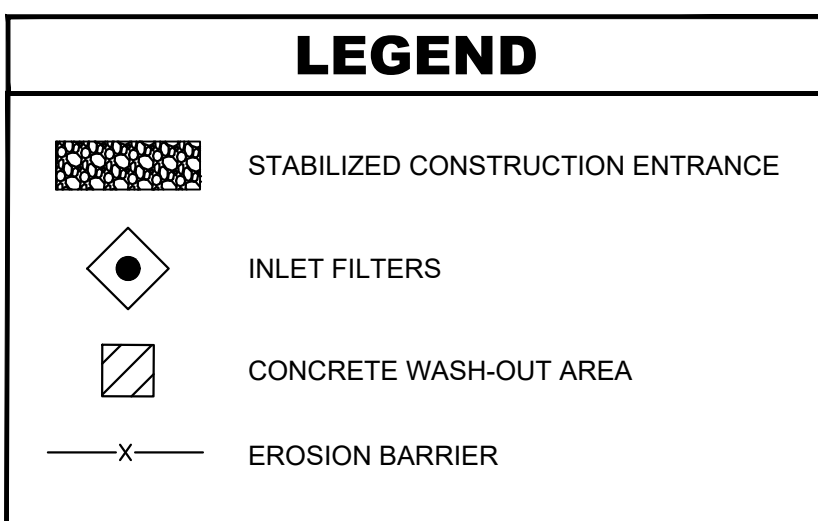
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	37
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801



**STABILIZED CONSTRUCTION ENTRANCE**



**TENTATIVE SCHEDULE:**

SOIL EROSION MEASURES - INSTALLED BEFORE START OF CONSTRUCTION (WITH ONGOING MAINTENANCE THROUGH STABILIZATION)

- STAGE 1 DEMOLITION AND PAVEMENT REMOVAL - 4 WEEKS
- STAGE 1 UNDERGROUND UTILITIES - 3 WEEKS
- STAGE 1 EARTHWORK AND GRADING - 3 WEEKS
- STAGE 1 PAVING AND FINAL RESTORATION - 4 WEEKS

**TENTATIVE SCHEDULE:**

SOIL EROSION MEASURES - INSTALLED BEFORE START OF CONSTRUCTION (WITH ONGOING MAINTENANCE THROUGH STABILIZATION)

- STAGE 2 DEMOLITION AND PAVEMENT REMOVAL - 4 WEEKS
- STAGE 2 UNDERGROUND UTILITIES - 3 WEEKS
- STAGE 2 EARTHWORK AND GRADING - 3 WEEKS
- STAGE 2 PAVING AND FINAL RESTORATION - 4 WEEKS

**NOTES**

1. SEE IDOT STANDARD 280001-07 FOR TEMPORARY EROSION CONTROL SYSTEMS.
2. THE CONTRACTOR SHALL ENSURE THAT ADJACENT PROPERTIES REMAIN PROTECTED FROM SEDIMENT DEPOSITION.
3. SOIL STOCKPILES SHALL BE PROTECTED WITH PERIMETER EROSION BARRIER OR OTHER EROSION PROTECTION SPECIFIED BY THE RESIDENT ENGINEER. THE COST SHALL BE INCLUDED IN THE UNIT PRICE FOR THE INDIVIDUAL SOIL MATERIALS.
4. WHEREVER CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS. PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY RUNOFF OR VEHICLE TRACKING WHEELS ONTO THE PAVED SURFACE. THE PROVISIONS MAY INCLUDE SPRAYING VEHICLE WHEELS TO CLEAR SEDIMENT BEFORE EXITING THE CONSTRUCTION SITE OR OTHER MEASURES APPROVED BY THE ENGINEER. THE COST OF ABOVE WORK WILL BE INCLUDED IN COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL)

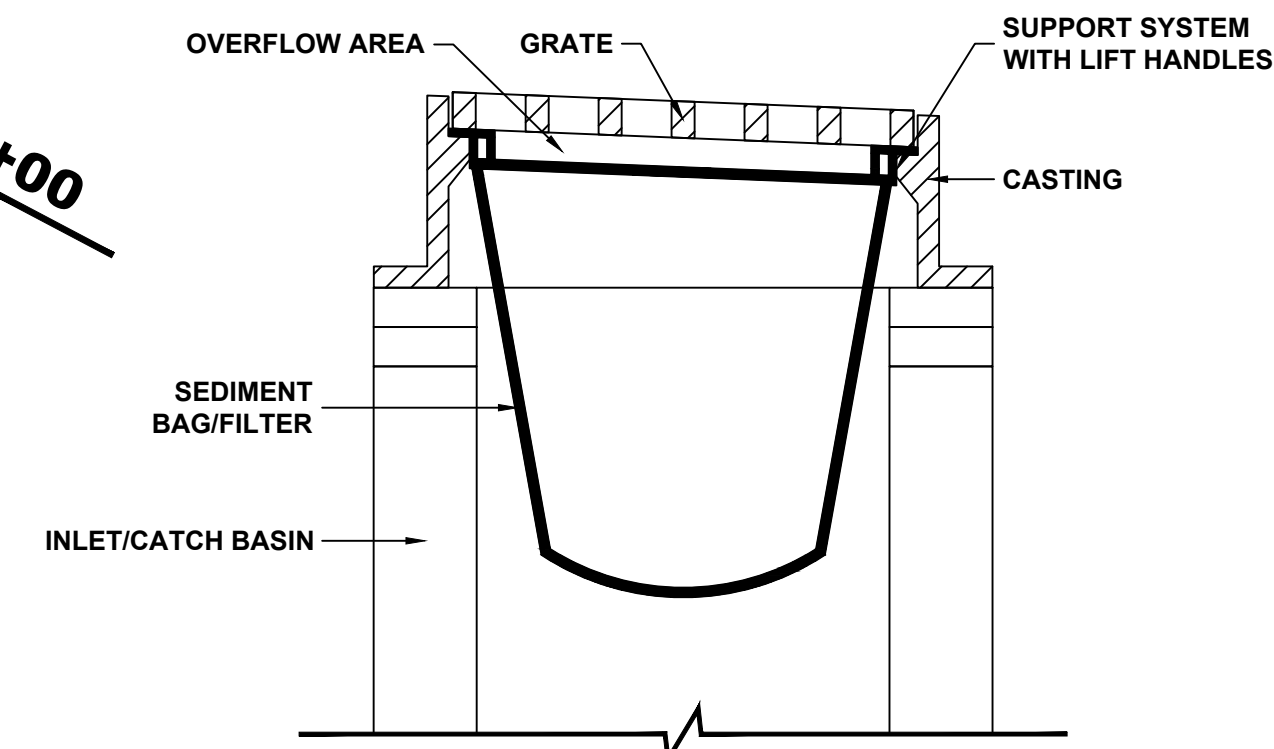
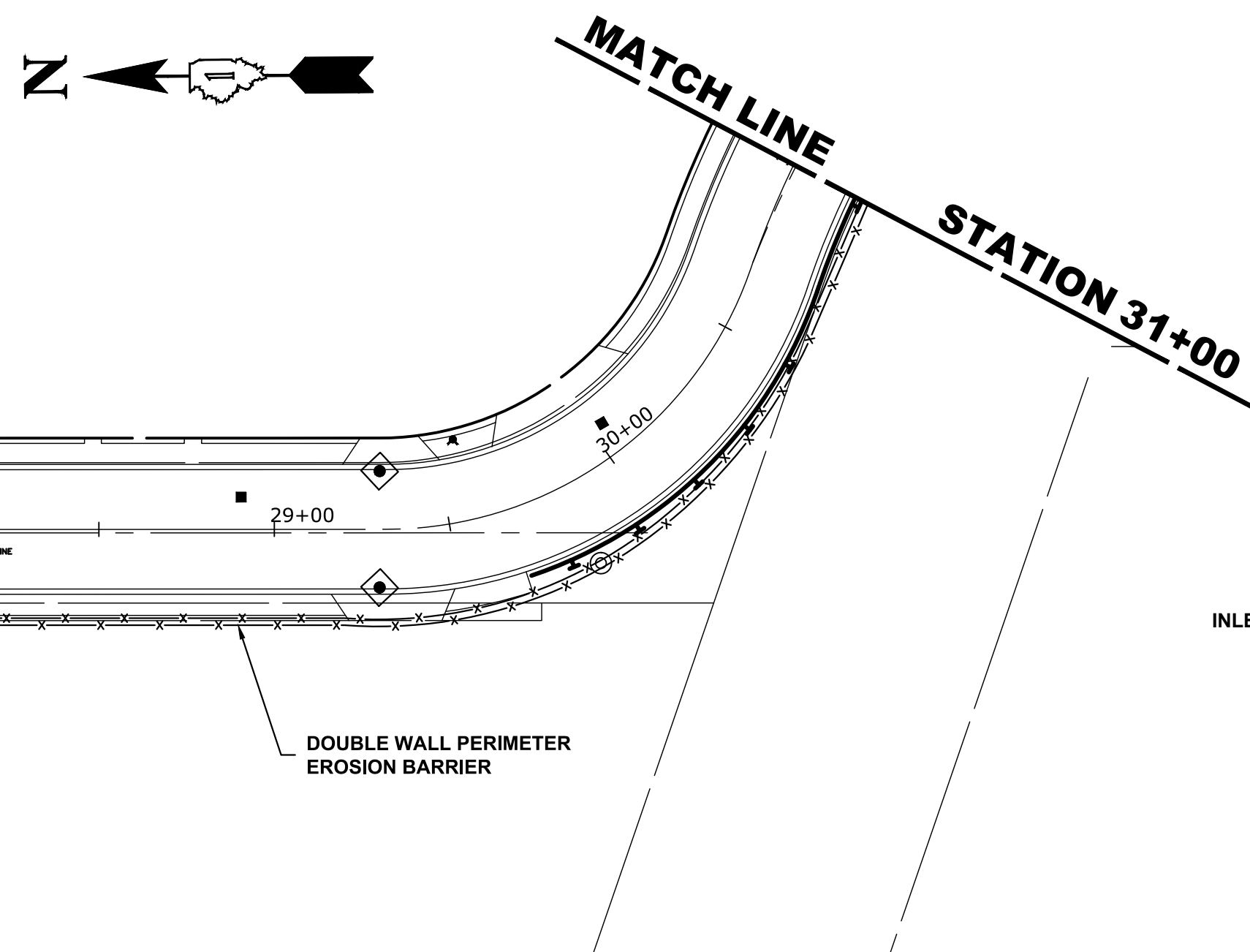
**CONTRACTOR CERTIFICATION STATEMENT:**

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS.

CONTRACTOR NAME (PRINT): \_\_\_\_\_

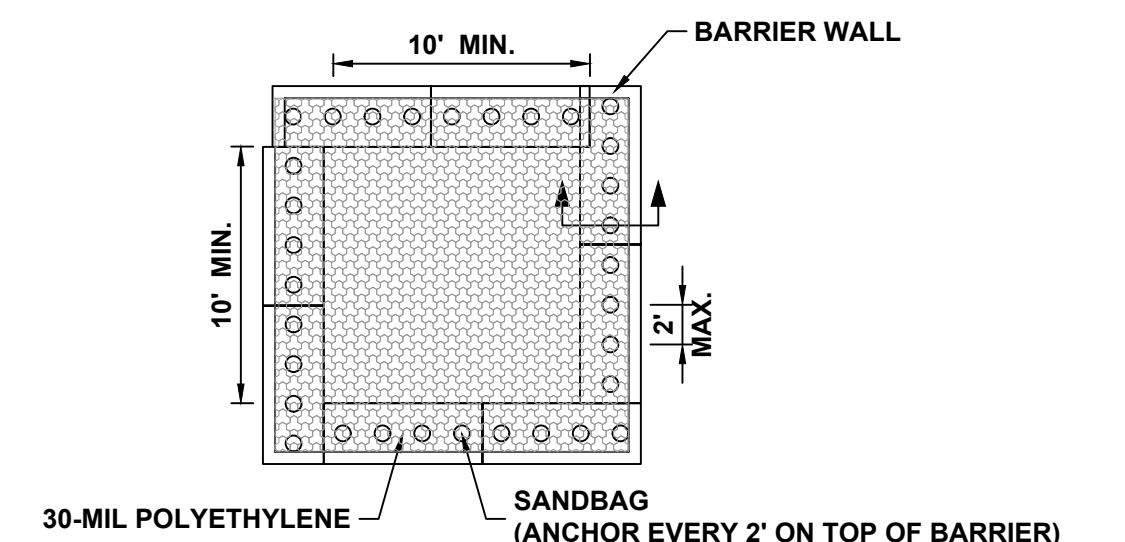
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DATE: \_\_\_\_\_

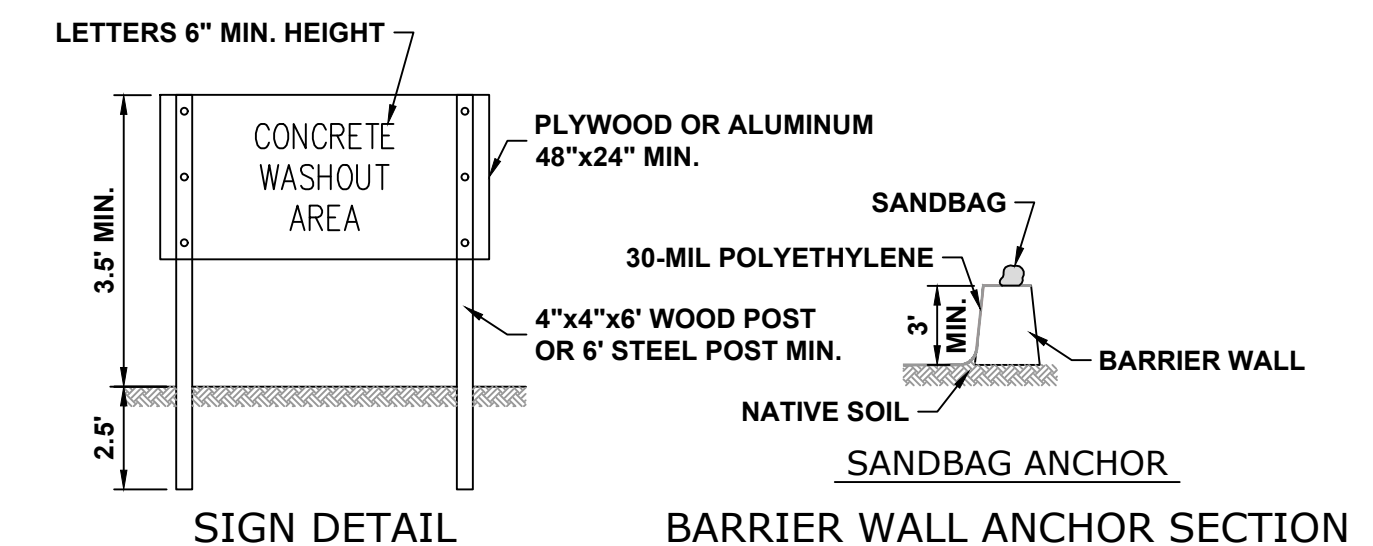


**INLET/CATCH BASIN PROTECTION DETAIL (DROP-IN PROTECTION)**

1. CLEAN OUT AFTER EVERY RAIN EVENT.
2. INSTALL BEFORE BEGINNING ANY WORK.



**PLAN VIEW**



**NOTES:**

1. MAINTAINING TEMPORARY CONCRETE FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDEN CONCRETE AND/OR SLURRY AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION.
2. FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.

**CONCRETE WASHOUT (BARRIER WALL)**



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 Civil Engineers  
 Municipal Consultants  
 Established 1911  
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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

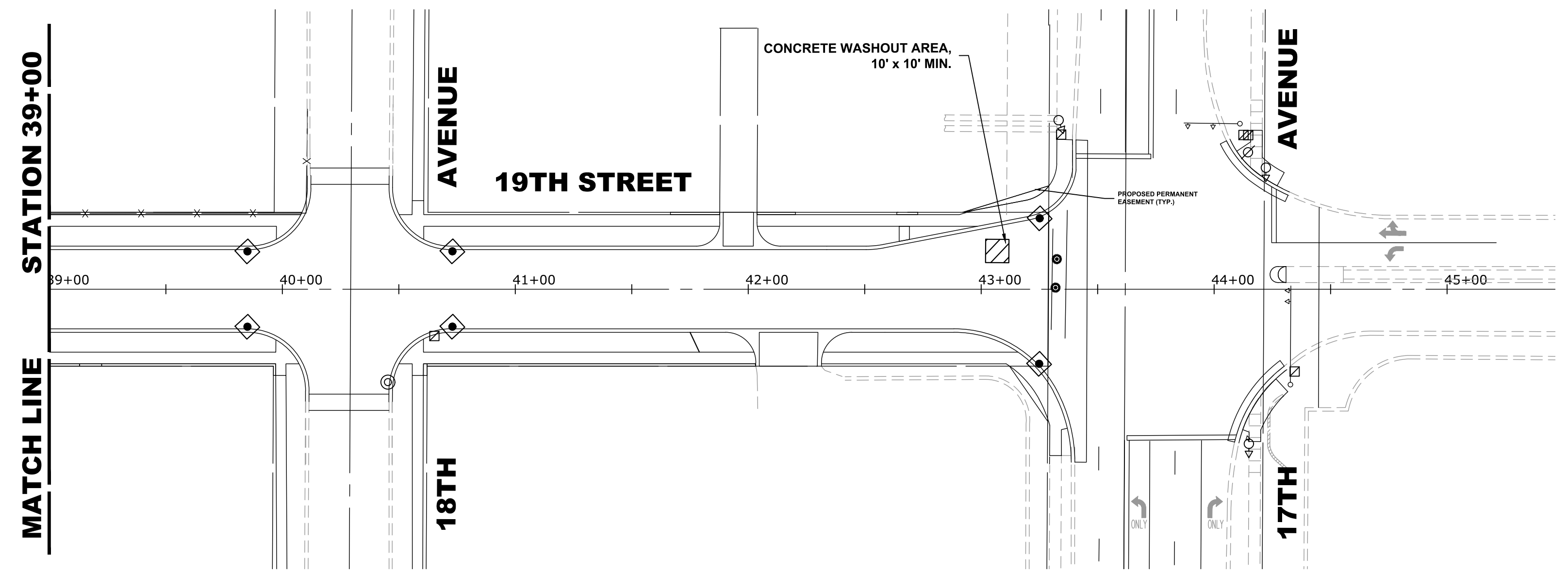
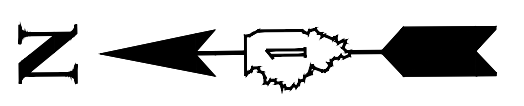
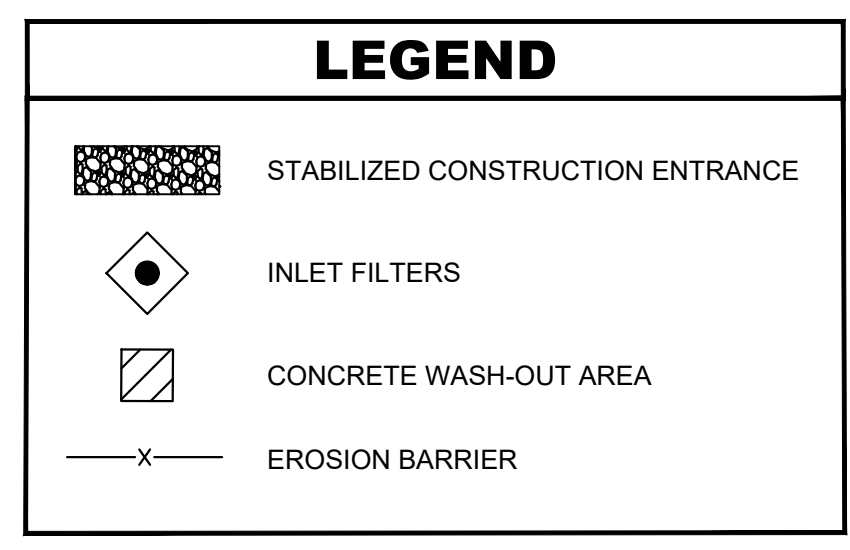
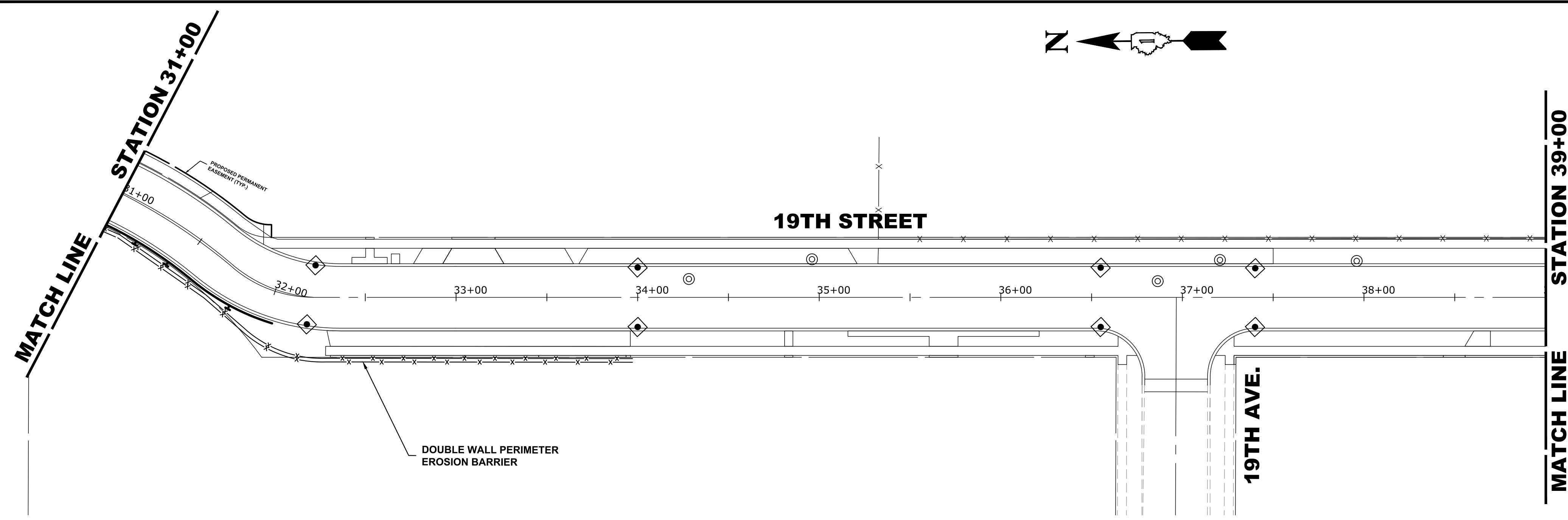
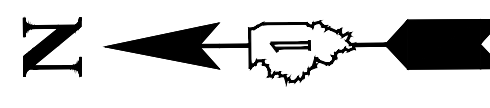
**EROSION CONTROL AND SWPPP**

SCALE: 1" = 40' SHEET NO. 1 OF 2 SHEETS STA. 17+45 TO STA. 31+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	38
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801

Drawing File: W:\Projects\_by\_Village\Brookview\12019008 -Braga Drive Stage II - Design\CAD\Site\Braga\_DR\_Ph 2\_Stg II 40scale.dwg Feb 11, 2020 - 2:50pm



**NARRATIVE DESCRIPTION OF EXISTING CONDITIONS AND PROPOSED DEVELOPMENT**

THE PROJECT WILL COMPLY WITH THE APPLICABLE SOIL EROSION AND SEDIMENT CONTROL REQUIREMENTS OF ALL CITY ORDINANCES AND THE IEPA NPDES. THE EXISTING SITE IS PRIMARILY AN IMPERVIOUS R.O.W. SOILS ARE PRIMARILY SILTY CLAY AND ARE DESIGNATED AS TYPE 533 ON THE NRCS REPORT. THE SOILS AFTER DEVELOPMENT WILL REMAIN THE SAME. THE SITE IS NOT WITHIN THE FLOOD PROTECTION AREA OR FLOOD ZONE. ALL STORM WATER WILL BE DISCHARGED TO THE EXISTING CITY STORM SEWER ALONG BRAGA DRIVE AND 16TH ST.

**DESCRIPTION OF STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION (WHERE APPLICABLE):**

- A) AT LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, INLET PROTECTION SHALL BE INSTALLED AROUND EXISTING INLETS OR CATCH BASINS.

**DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION (WHERE APPLICABLE):**

- 1) DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION AREA AS OUTLINED PREVIOUSLY SHALL BE PROTECTED FROM DAMAGE EFFECTS OF CONSTRUCTION. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESIGNATED ON THE PLANS OR DIRECTED BY THE ENGINEER), PARKING VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.
- A) WITHIN THE CONSTRUCTION ZONE, CRITICAL AREAS WHICH HAVE HIGH FLOWS OF WATER AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
- B) TOP SOIL AND EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS.
- C) AS THE CONTRACTOR CONSTRUCTS THE UNDERGROUND IMPROVEMENTS, THEY SHALL ADHERE TO THE FOLLOWING STEPS AS DIRECTED BY THE ENGINEER:
  - I. PLACE TEMPORARY EROSION CONTROL SYSTEMS AT LOCATIONS WHERE WATER LEAVES AND ENTERS THE CONSTRUCTION ZONE.
- D) THE CONTRACTOR SHALL IMMEDIATELY FOLLOW MAJOR EARTH MOVING OPERATIONS WITH FINAL GRADING EQUIPMENT. AFTER MAJOR EARTH SPREAD OPERATION HAS MOVED TO A NEW LOCATION, FINAL GRADING SHALL BE COMPLETED WITHIN FOURTEEN DAYS. IF GRADING IS NOT COMPLETED WITHIN FOURTEEN DAYS, ALL MAJOR EARTH MOVING OPERATIONS WILL BE STOPPED, AS DIRECTED BY THE ENGINEER, UNTIL DISTRIBUTED AREAS ARE FINAL GRADED AND SEEDED.
- E) EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED WHEN FINAL GRADED. IF NOT, THEY SHALL BE TEMPORARILY SEEDED AS STATED IN THE SPECIAL PROVISION "TEMPORARY EROSION CONTROL SEEDING".
- F) CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUN-OFF IN COMPLIANCE WITH EPA WATER QUALITY REGULATIONS LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
- G) THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING ACTIVITIES AND WEEKLY OR AFTER LARGE RAINS DURING THE WINTER SHUTDOWN PERIOD. THIS PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BIWEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER CONTROL WORK IS NECESSARY.
- H) SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS TEMPORARY EROSION CONTROL SYSTEM SHALL BE DISPOSED OF ON SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF MAINTENANCE IS INCIDENTAL TO THE CONTRACT.
- I) THE TEMPORARY EROSION CONTROL SYSTEM SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER IT'S USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING.

**DOCUMENTATION**

- 1) A REPORT SUMMARIZING THE SCOPE OF INSPECTION, NAME(S) AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTION, DATE(S) OF THE SECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLANTATION OF THE STORM WATER POLLUTION PREVENTION PLAN, AND ACTION TAKEN IN ACCORDANCE WITH SECTION 4.B, SHALL BE MADE AND RETAINED AS PART OF THE PLAN FOR AT LEAST THREE YEARS AFTER THE DATE OF INSPECTION. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART VI.G, OF THE GENERAL PERMIT.
- 2) IF ANY VIOLATION OF THE PROVISIONS OF THIS PLAN IS IDENTIFIED DURING THE CONDUCT OF THE CONSTRUCTION WORK COVERED BY THIS PLAN, THE RESIDENT ENGINEER OR RESIDENT TECHNICIAN SHALL COMPLETE AND FILE AN "INCIDENT OF NONCOMPLIANCE (ION)" REPORT FOR THE IDENTIFIED VIOLATION. THE RESIDENT ENGINEER OR RESIDENT TECHNICIAN SHALL USE FORMS PROVIDED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND SHALL INCLUDE SPECIFIC INFORMATION ON THE NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE. ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY IN ACCORDANCE WITH PART VI.G. OF THE GENERAL PERMIT. THE REPORT ID NONCOMPLIANCE SHALL BE MAILED TO THE FOLLOWING ADDRESS:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
 DIVISION OF WATER POLLUTION CONTROL  
 COMPLIANCE ASSURANCE SECTION #19  
 POST OFFICE BOX 19276  
 SPRINGFIELD, IL 62794-9276

**DESCRIPTION OF INTENDED SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB EARTH AND LEAD TO POSSIBLE EROSION FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:**

- 1) EXCAVATION AND REMOVAL OF EXISTING STRUCTURES AND PAVED SURFACES WILL BE COMPLETED AT LOCATIONS AS INDICATED ON THE PLANS OR DIRECTED BY THE ENGINEER.
- 2) DRAINAGE STRUCTURES WILL BE INSTALLED BEFORE AND/OR DURING THE EXCAVATION AND REMOVAL OF THE EXISTING STRUCTURES TO ALLOW FOR PROPER DRAINAGE OF THE SITE.
- 3) PLACEMENT, MAINTENANCE, REMOVAL AND PROPER CLEANUP OF TEMPORARY EROSION CONTROL, SUCH AS EROSION CONTROL FENCE, HAY OR STRAW BALE DITCH CHECKS, INLET PROTECTION, AND TEMPORARY SEEDING AND MULCHING.
- 4) FINAL GRADING AND PLACEMENT OF PERMANENT EROSION CONTROL SEEDING AND MULCHING.

**AREA OF DISTURBED GROUND**

THE TOTAL AREA DISTURBED BY CONSTRUCTION ACTIVITIES IS APPROXIMATELY 3.59 ACRES.  
 THE FOLLOWING PLAN WAS ESTABLISHED AND INCLUDED IN THESE PLANS TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEM AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES. THE CONTRACTOR SHALL ABIDE TO ALL REQUIREMENTS WITHIN THIS PLAN AS PART OF THE CONTRACT.  
 ALL DISTURBED AREAS HAVING HIGH POTENTIAL FOR EROSION, AS DETERMINED BY THE ENGINEER, SHALL BE PERMANENTLY SEEDED AS SOON AS POSSIBLE.

**MAINTENANCE AFTER CONSTRUCTION (WHERE APPLICABLE):**

- 1) CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE IS RECEIVED AT THE FINAL INSPECTION.
- 2) AREAS WILL BE INSPECTED ON A REGULAR BASIS BY THE ENGINEER AND THE VILLAGE OF BROADVIEW.
- 3) MAINTENANCE CREWS WILL ALSO AID IN ANY DRAINAGE PROBLEMS.
- 4) ALL MAINTENANCE WILL BE CONDUCTED AT TIMES WHEN WEATHER CONDITIONS WILL NOT CAUSE SITE DAMAGE.
- 5) CONTRACTORS SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF IEPA NPDES PERMIT ILR 10. RESTORATION SHALL OCCUR WITHIN 7 DAYS OF DISTURBANCE.
- 6) CONTRACTORS SHALL SUBMIT INSPECTION REPORTS TO THE VILLAGE AT LEAST ONCE PER SEVEN DAYS AND AFTER RAINFALL EVENTS OF HALF INCH (OR EQUIVALENT SNOW FALL).
- 7) THE CONTRACTOR IS RESPONSIBLE FOR HAVING THE SWPPP ON SITE AT ALL TIMES.
- 8) TECHNIQUES SHALL BE EMPLOYED BY THE CONTRACTOR TO PREVENT THE BLOWING OF DUST OR SEDIMENT FROM THE SITE.
- 9) DAILY REMOVAL OF SEDIMENT AND DEBRIS FROM THE STREET SHALL BE REQUIRED OF THE CONTRACTOR.

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DESIGNED - MWV	REVISED -
DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

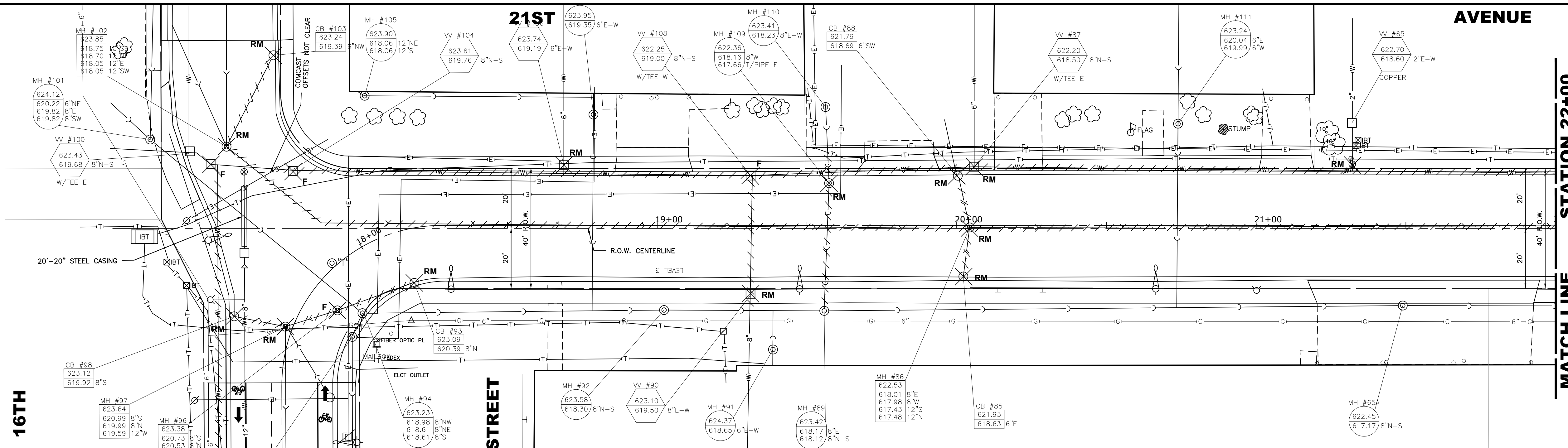
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL AND SWPPP**

SCALE: 1" = 40'  
 SHEET NO. 2 OF 2 SHEETS  
 STA. 31+00 TO STA. 43+46

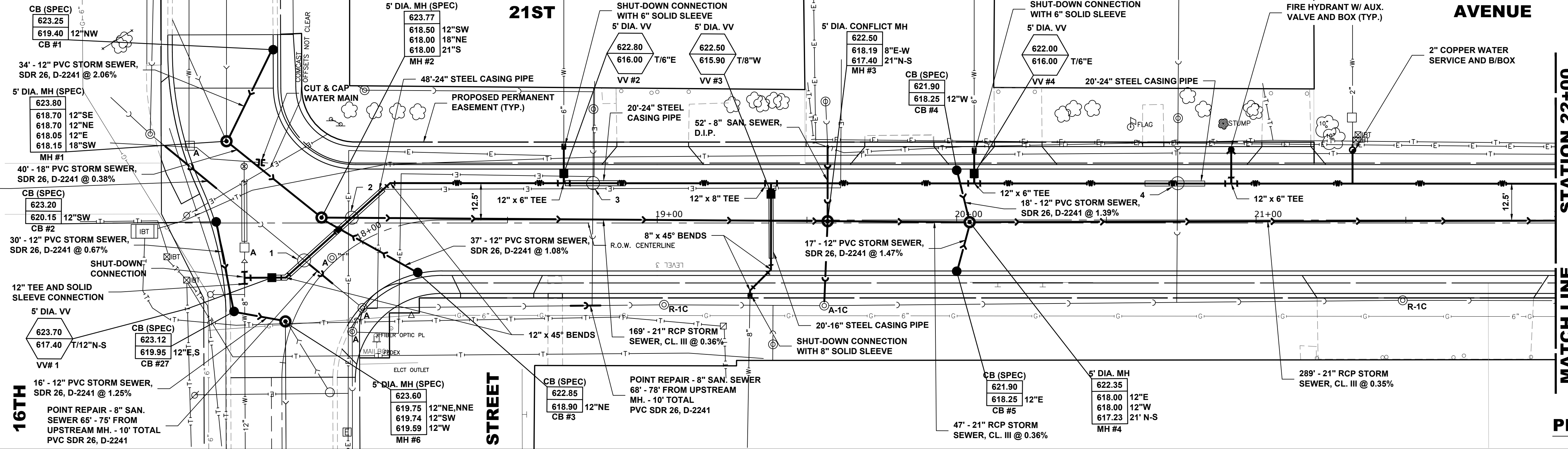
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FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801



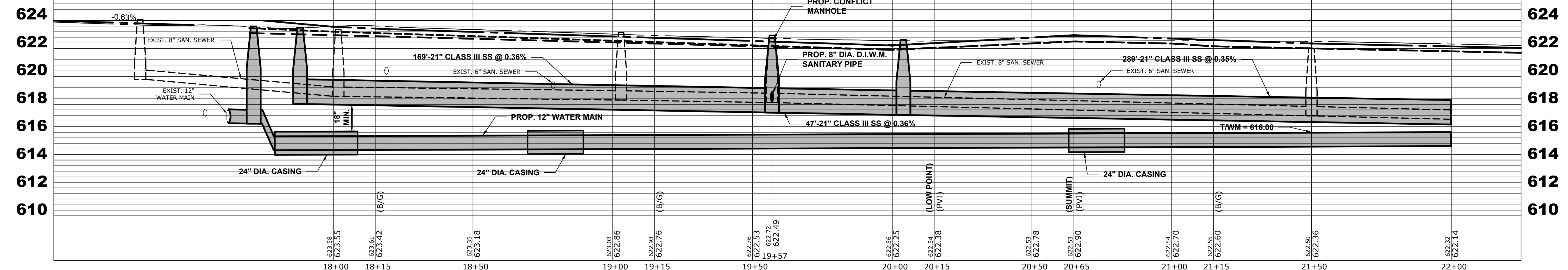
**NOTE:**

STORM SEWER LATERALS ORIGINATING IN THE NORTH/EAST SIDE OF THE ROAD WILL NEED TO BE CONSTRUCTED IN STAGES. NEW LATERAL PIPE WILL BE INSTALLED AS FAR AS POSSIBLE BEYOND THE MAIN SEWER TO ALLOW THE CONCRETE PAVEMENT TO BE POURED AND REMAIN UNDISTURBED DURING THE STAGE 2 SEWER REPLACEMENT. THE NEW AND EXISTING PIPE SHALL BE TEMPORARILY CONNECTED WITH A FLEXIBLE NON-SHEAR CONNECTOR.



**NOTE:**

- 8" SAN. SEWER INV. = 618.93; T/P 24" CASING = 616.00
- 21" STORM SEWER INV. = 617.95; T/P 24" CASING = 616.20
- 6" SAN. SEWER INV. = 618.98; T/P 24" CASING = 616.40
- 6" SAN. SEWER INV. = 619.23; T/P 24" CASING = 616.40



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DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

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

**21ST AVENUE**  
**UTILITY PLAN AND PROFILE**

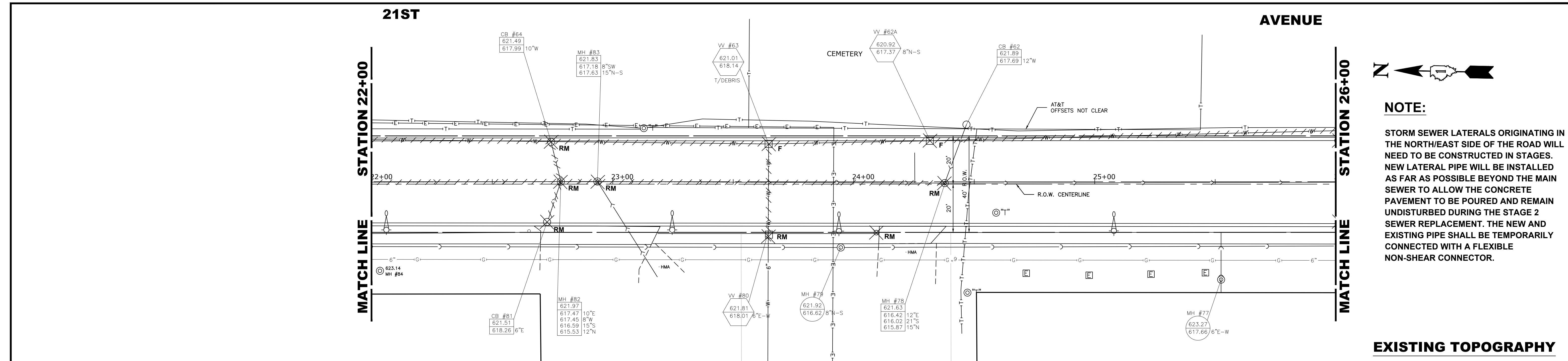
SCALE: H:1"=20', V:1"=4'    SHEET NO. 1 OF 6 SHEETS    STA. 17+45    TO STA. 22+00

MUN. RTE. 3015	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 40
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801

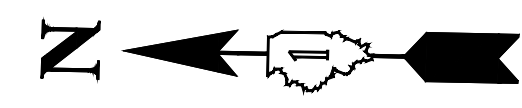
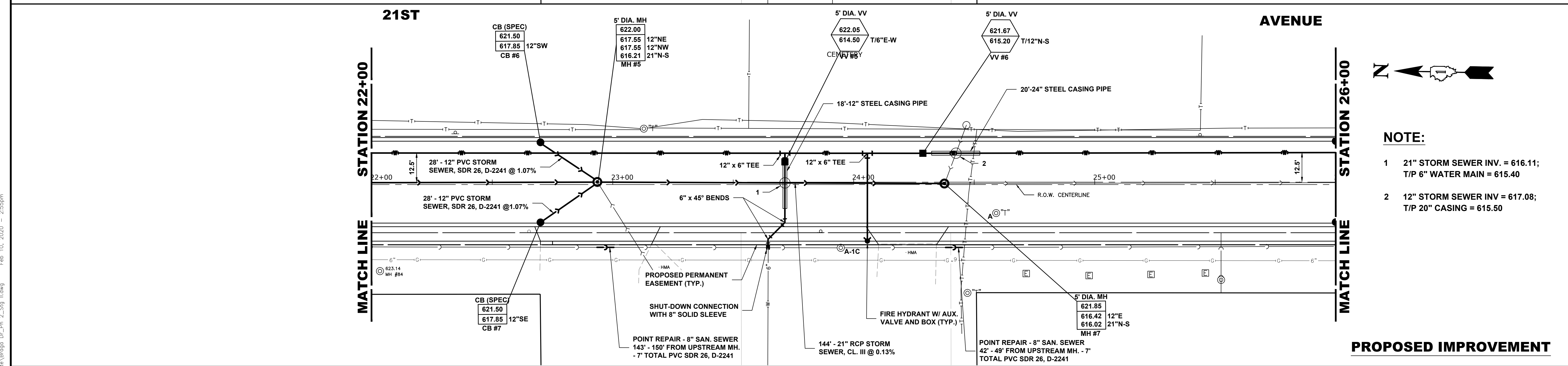


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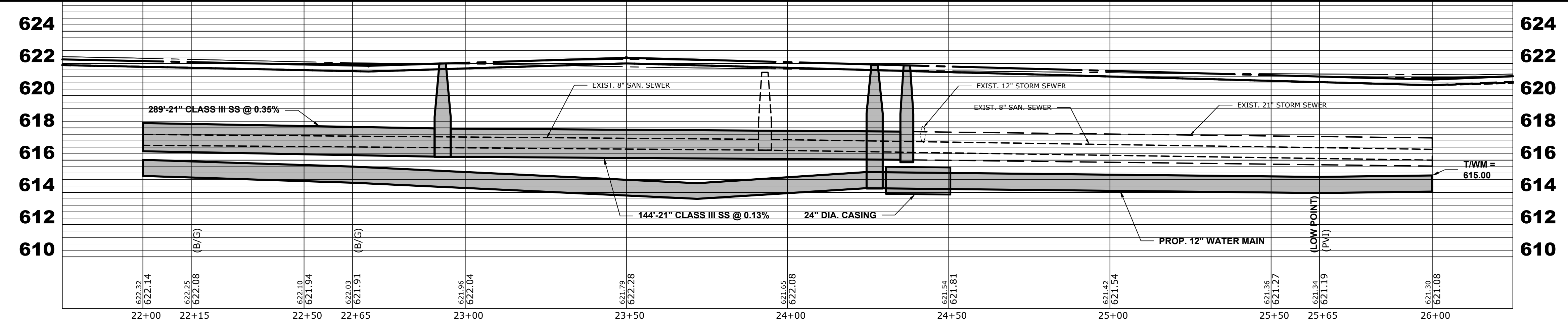
**NOTE:**  
STORM SEWER LATERALS ORIGINATING IN THE NORTH/EAST SIDE OF THE ROAD WILL NEED TO BE CONSTRUCTED IN STAGES. NEW LATERAL PIPE WILL BE INSTALLED AS FAR AS POSSIBLE BEYOND THE MAIN SEWER TO ALLOW THE CONCRETE PAVEMENT TO BE POURED AND REMAIN UNDISTURBED DURING THE STAGE 2 SEWER REPLACEMENT. THE NEW AND EXISTING PIPE SHALL BE TEMPORARILY CONNECTED WITH A FLEXIBLE NON-SHEAR CONNECTOR.

**EXISTING TOPOGRAPHY**



**NOTE:**  
1 21" STORM SEWER INV. = 616.11;  
T/P 6" WATER MAIN = 615.40  
2 12" STORM SEWER INV = 617.08;  
T/P 20" CASING = 615.50

**PROPOSED IMPROVEMENT**



DESIGNED -	MWV	REVISED -
DRAWN -	DMM, SFB	REVISED -
CHECKED -	JGG, MWV	REVISED -
DATE -	2-11-20	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**21ST AVENUE  
UTILITY PLAN AND PROFILE**

SCALE: H:1"=20', V:1"=4'    SHEET NO. 2 OF 7 SHEETS    STA. 22+00 TO STA. 26+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	41
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		



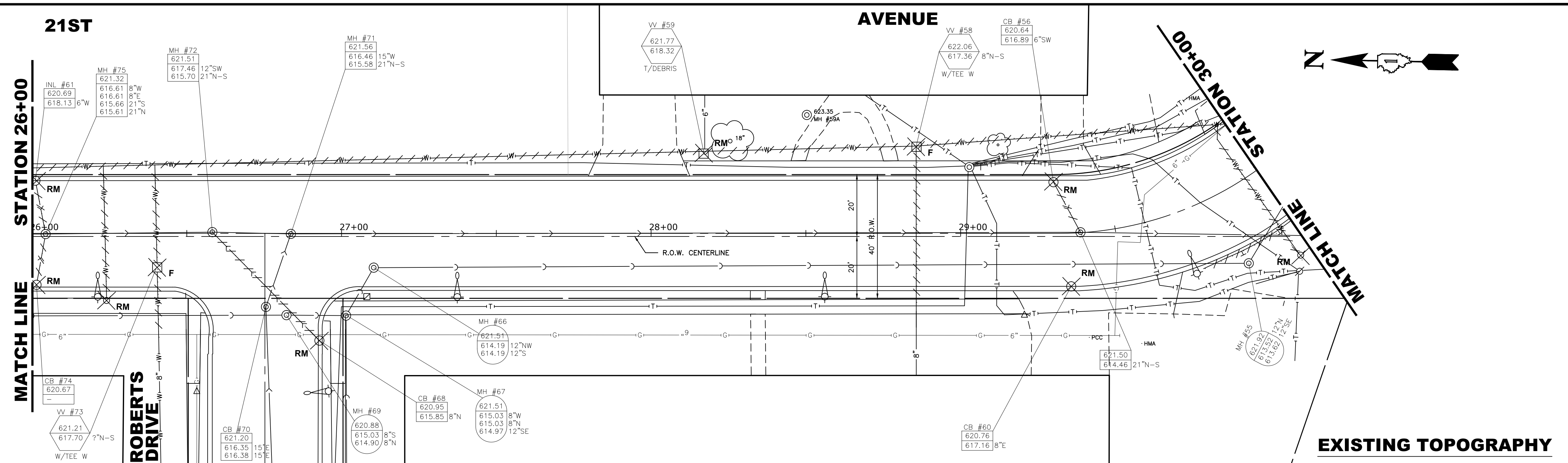
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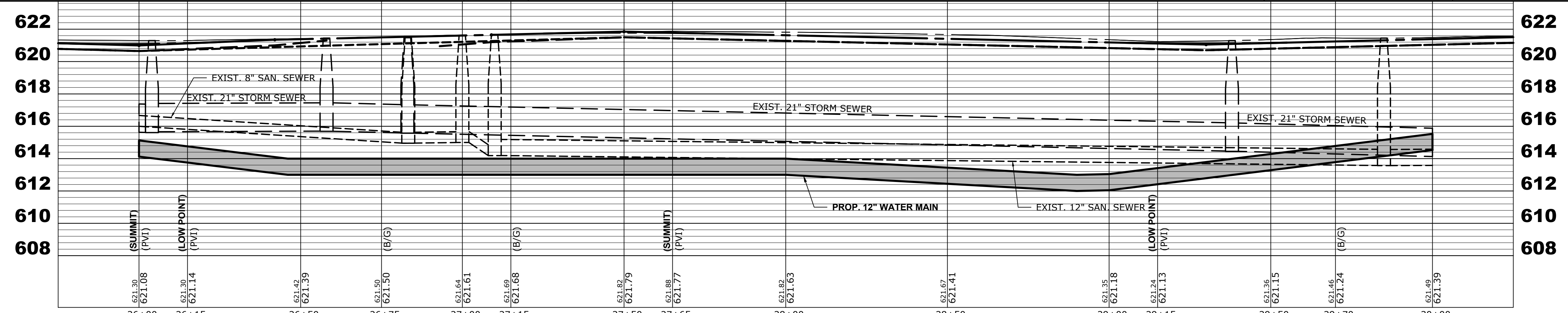
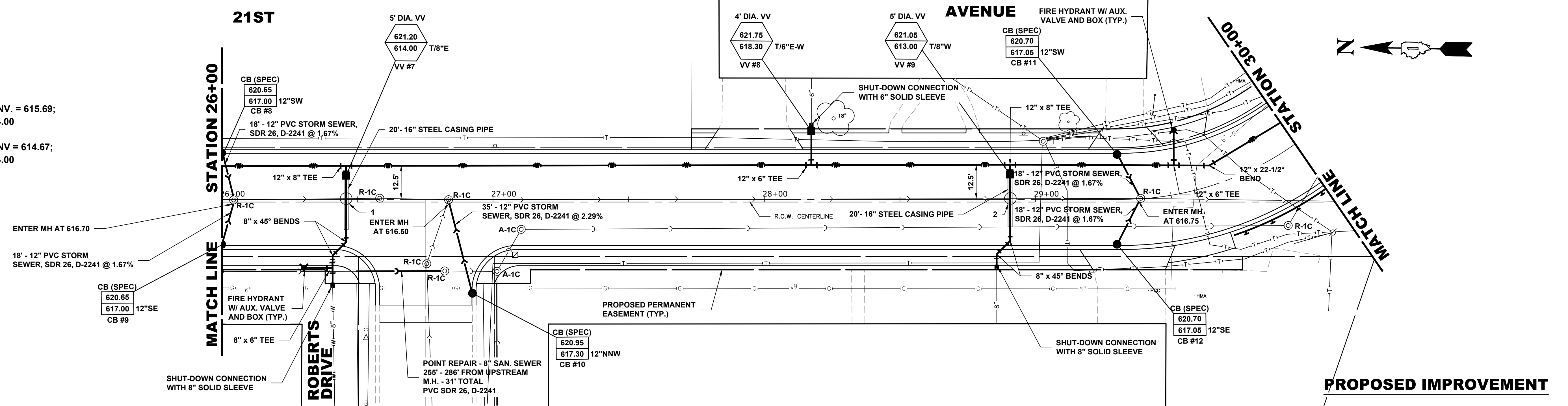
**NOTE:**

STORM SEWER LATERALS ORIGINATING IN THE NORTH/EAST SIDE OF THE ROAD WILL NEED TO BE CONSTRUCTED IN STAGES. NEW LATERAL PIPE WILL BE INSTALLED AS FAR AS POSSIBLE BEYOND THE MAIN SEWER TO ALLOW THE CONCRETE PAVEMENT TO BE POURED AND REMAIN UNDISTURBED DURING THE STAGE 2 SEWER REPLACEMENT. THE NEW AND EXISTING PIPE SHALL BE TEMPORARILY CONNECTED WITH A FLEXIBLE NON-SHEAR CONNECTOR.



**NOTE:**

- 21" STORM SEWER INV. = 615.69;  
T/P 12" CASING = 614.00
- 21" STORM SEWER INV = 614.67;  
T/P 12" CASING = 613.00



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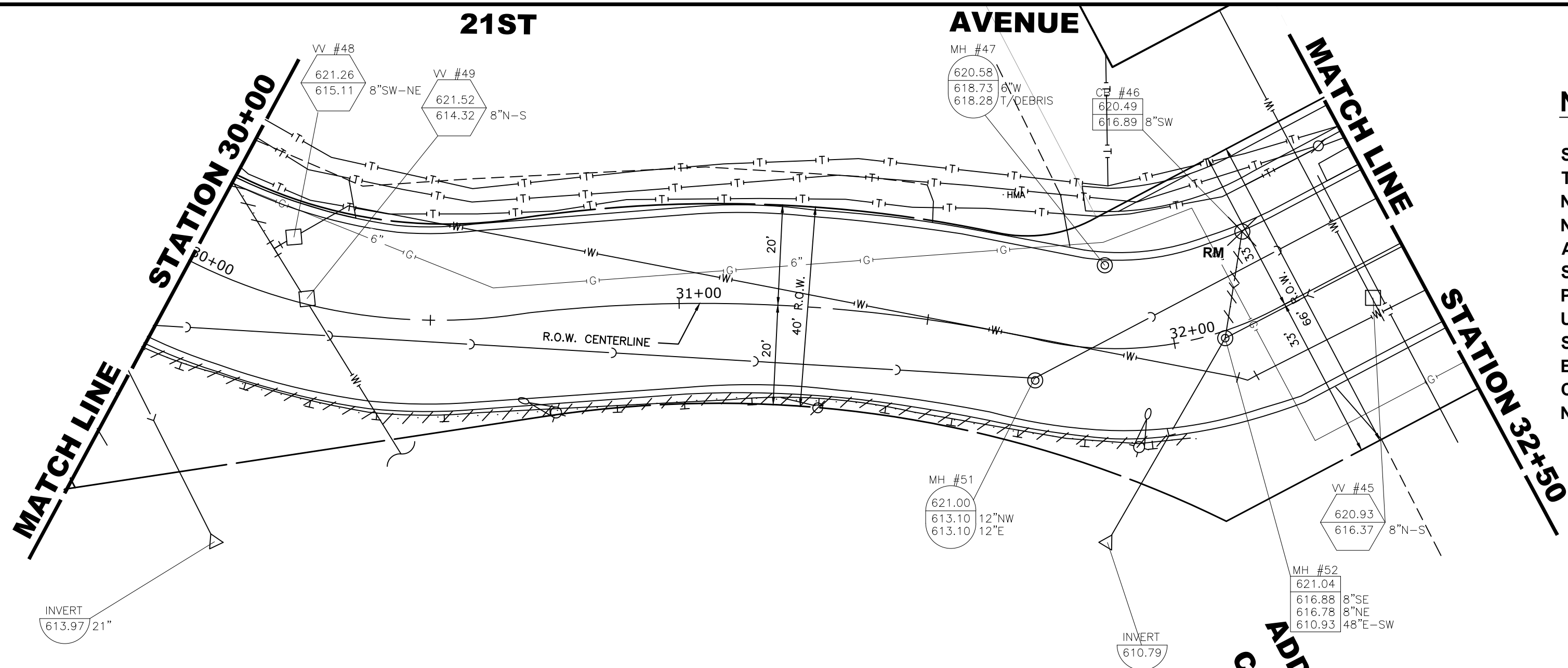
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DRAWN -	DMM, SFB	REVISED -
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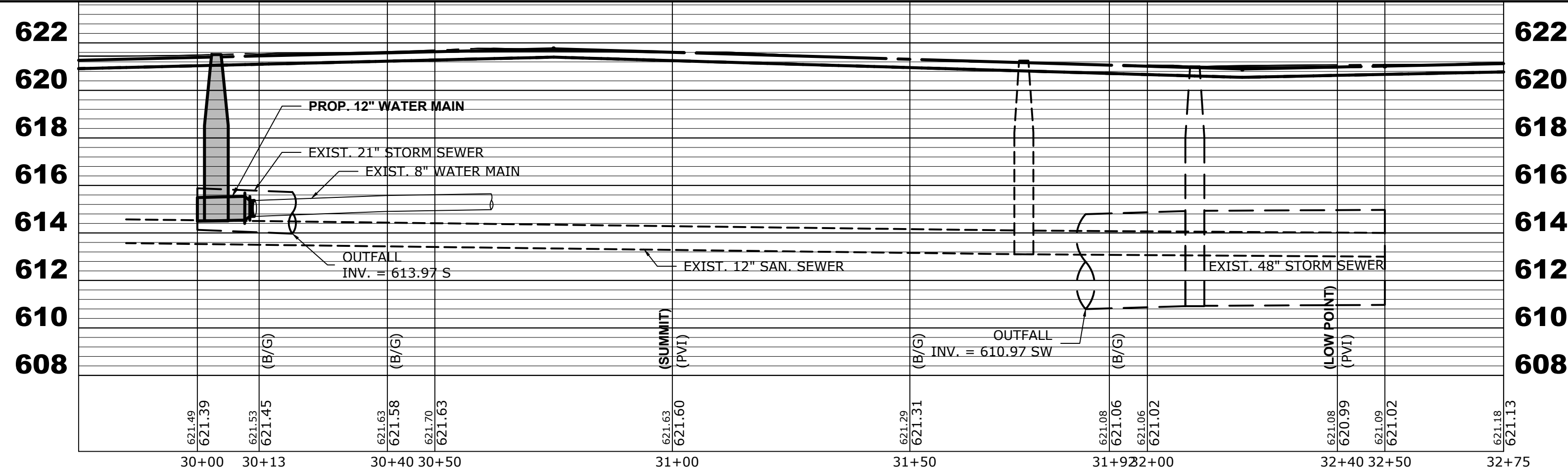
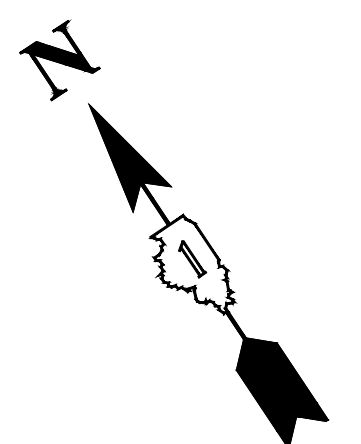
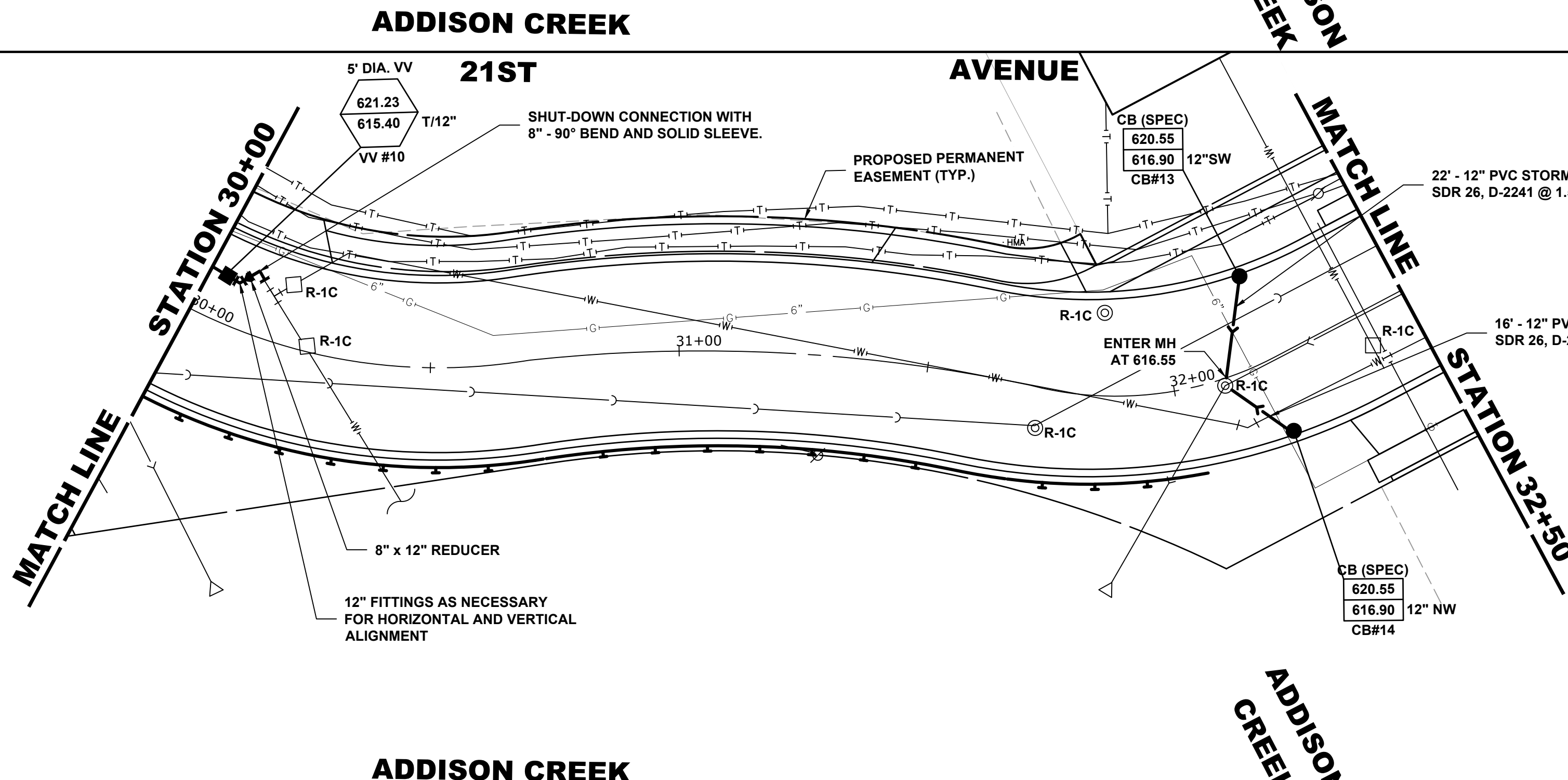
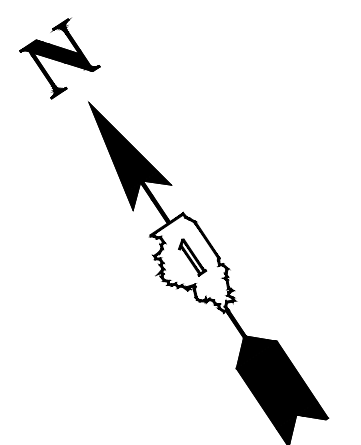
<b>21ST AVENUE UTILITY PLAN AND PROFILE</b>	
SCALE: 1"=20', V: 1"=4'	SHEET NO. 3 OF 7 SHEETS
STA. 26+00	TO STA. 30+00

MUN. RTE. 3015	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 42
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801



**NOTE:**  
 STORM SEWER LATERALS ORIGINATING IN THE NORTH/EAST SIDE OF THE ROAD WILL NEED TO BE CONSTRUCTED IN STAGES. NEW LATERAL PIPE WILL BE INSTALLED AS FAR AS POSSIBLE BEYOND THE MAIN SEWER TO ALLOW THE CONCRETE PAVEMENT TO BE POURED AND REMAIN UNDISTURBED DURING THE STAGE 2 SEWER REPLACEMENT. THE NEW AND EXISTING PIPE SHALL BE TEMPORARILY CONNECTED WITH A FLEXIBLE NON-SHEAR CONNECTOR.



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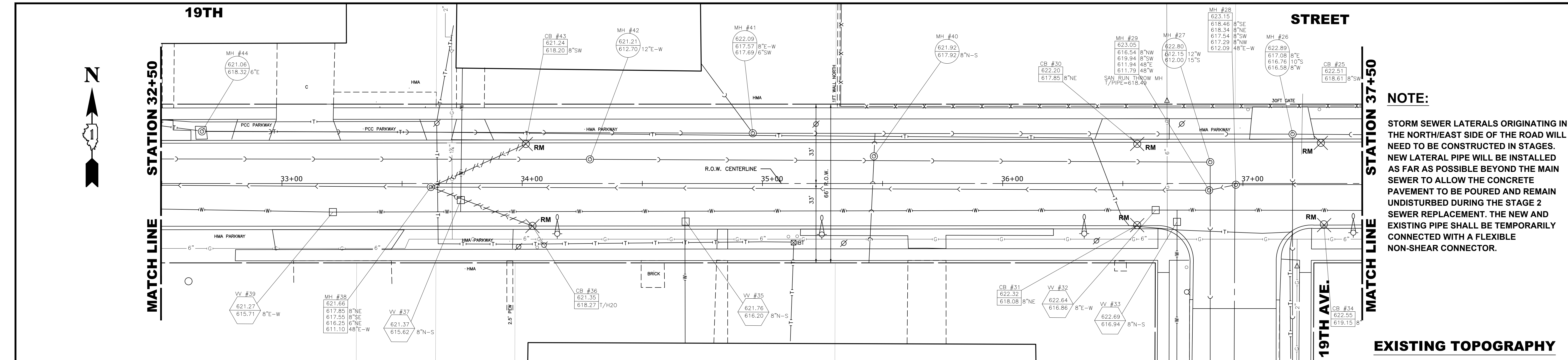
DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
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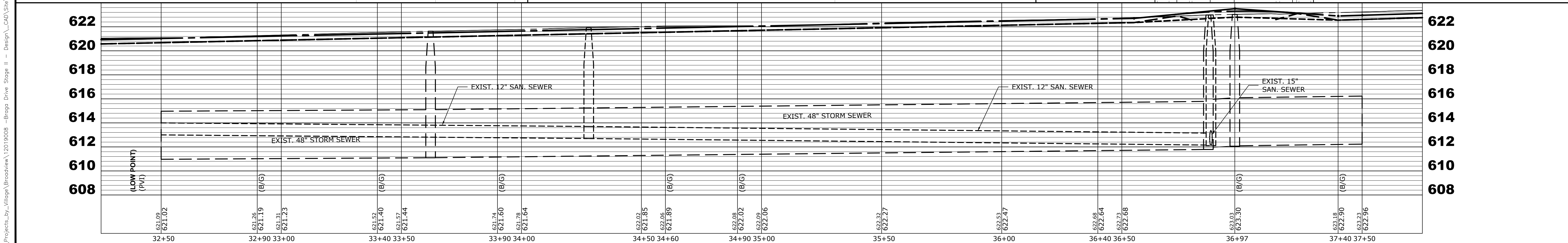
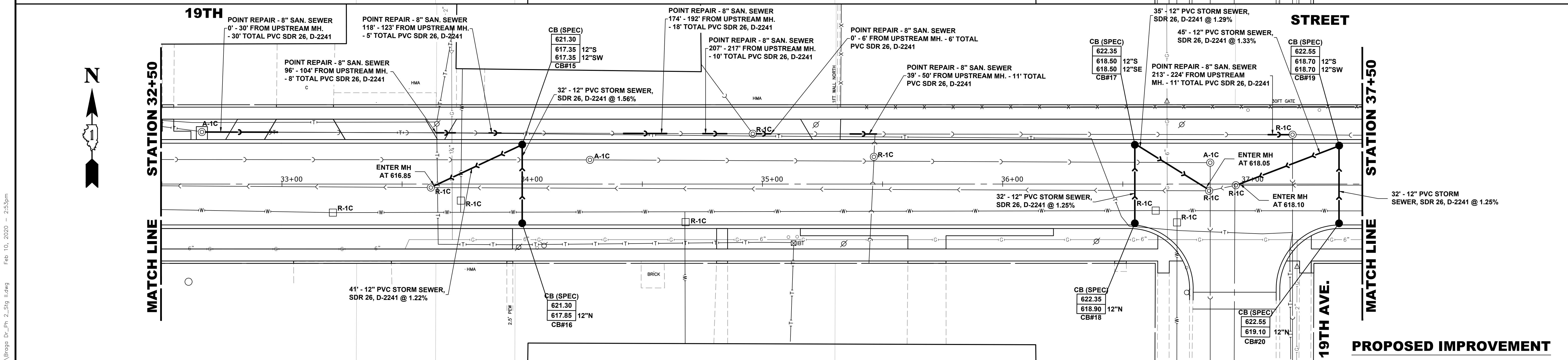
<b>21ST AVENUE/ 19TH STREET UTILITY PLAN AND PROFILE</b>	
SCALE: H:1"=20', V:1"=4'	SHEET NO. 4 OF 7 SHEETS
STA. 30+00	TO STA. 32+50

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	43
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801



**NOTE:**  
 STORM SEWER LATERALS ORIGINATING IN THE NORTH/EAST SIDE OF THE ROAD WILL NEED TO BE CONSTRUCTED IN STAGES. NEW LATERAL PIPE WILL BE INSTALLED AS FAR AS POSSIBLE BEYOND THE MAIN SEWER TO ALLOW THE CONCRETE PAVEMENT TO BE POURED AND REMAIN UNDISTURBED DURING THE STAGE 2 SEWER REPLACEMENT. THE NEW AND EXISTING PIPE SHALL BE TEMPORARILY CONNECTED WITH A FLEXIBLE NON-SHEAR CONNECTOR.

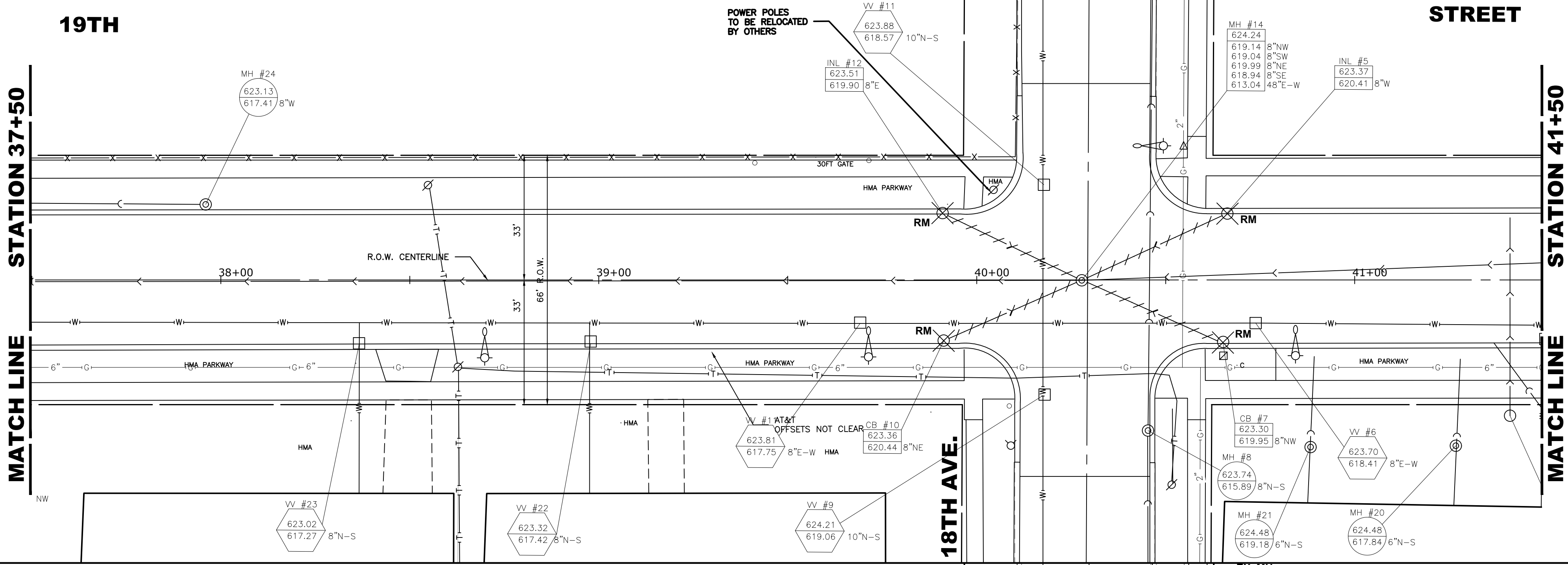


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	FIELD BOOK NO. : - FED. ROAD DIST. NO.   ILLINOIS   FED. AID PROJECT		CONTRACT NO. 61G35	SCALE: H:1"=20', V:1"=4' SHEET NO. 5 OF 7 SHEETS STA. 32+50 TO STA. 37+50	E.I.E. PROJECT NO. 120-19-00801	

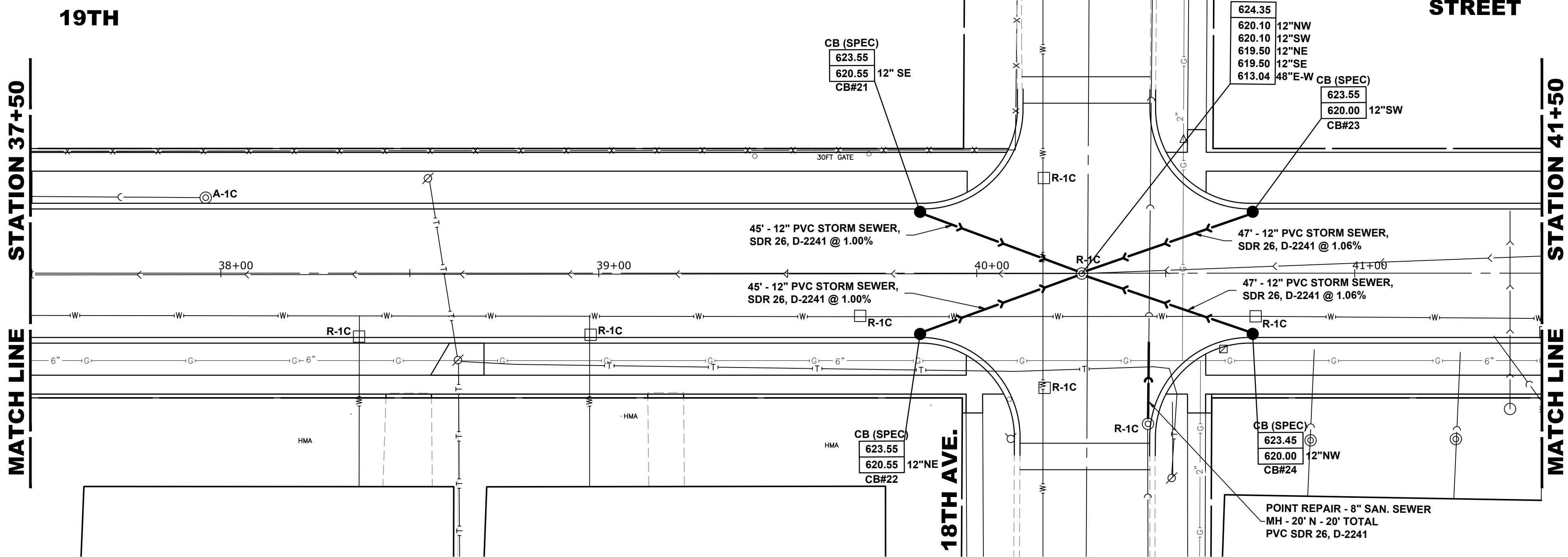
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**NOTE:**

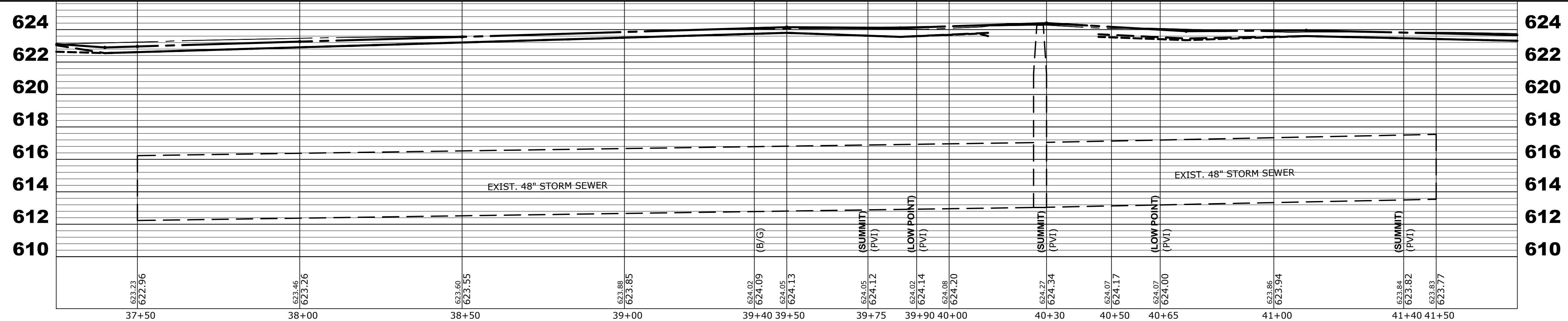
STORM SEWER LATERALS ORIGINATING IN THE NORTH/EAST SIDE OF THE ROAD WILL NEED TO BE CONSTRUCTED IN STAGES. NEW LATERAL PIPE WILL BE INSTALLED AS FAR AS POSSIBLE BEYOND THE MAIN SEWER TO ALLOW THE CONCRETE PAVEMENT TO BE POURED AND REMAIN UNDISTURBED DURING THE STAGE 2 SEWER REPLACEMENT. THE NEW AND EXISTING PIPE SHALL BE TEMPORARILY CONNECTED WITH A FLEXIBLE NON-SHEAR CONNECTOR.



**EXISTING TOPOGRAPHY**



**PROPOSED IMPROVEMENT**



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CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**19TH STREET  
 UTILITY PLAN AND PROFILE**

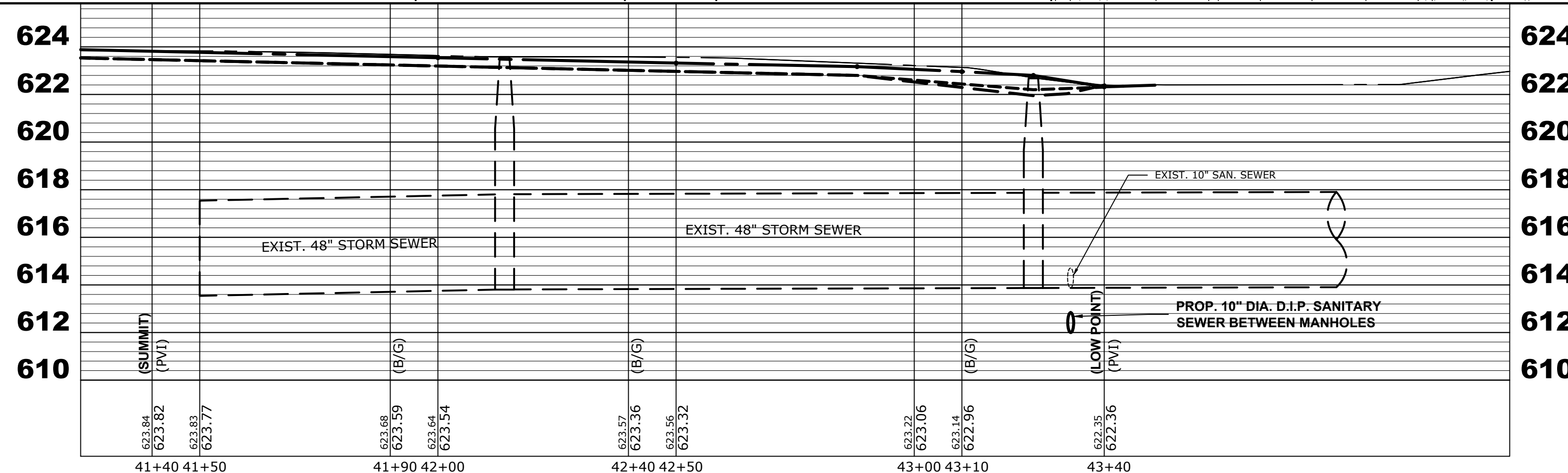
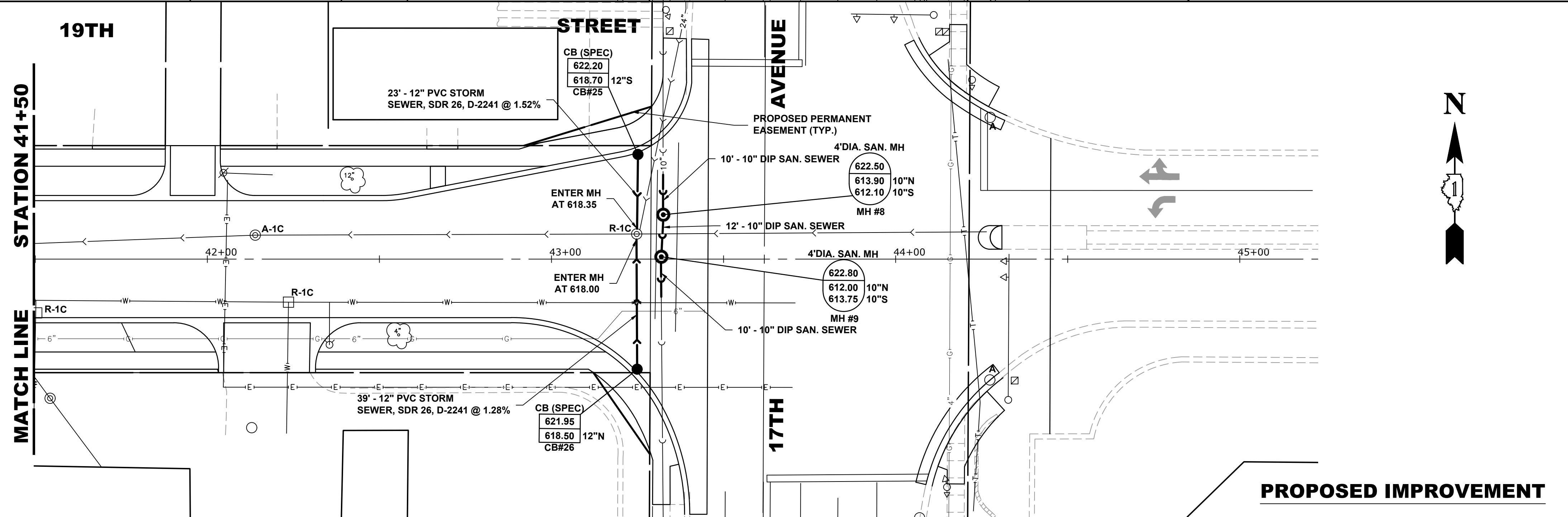
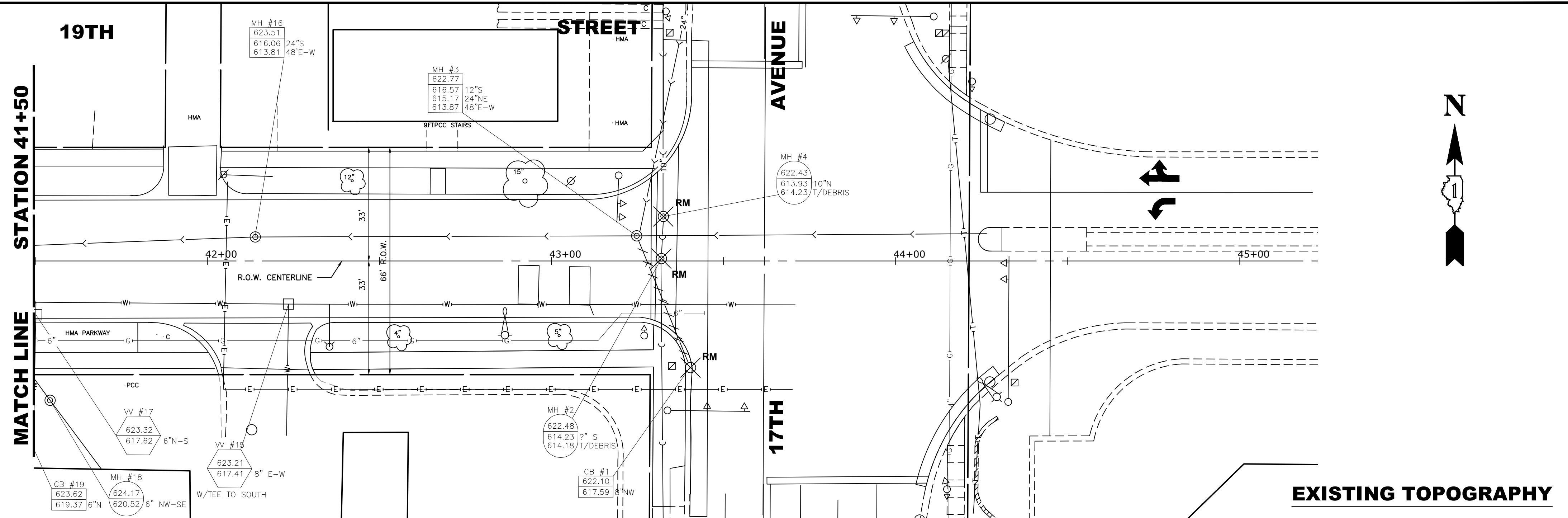
SCALE: H:1"=20', V:1"=4' SHEET NO. 6 OF 7 SHEETS STA. 37+50 TO STA. 41+50

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	45
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

E.I.E. PROJECT NO. 120-19-00801

**NOTE:**

STORM SEWER LATERALS ORIGINATING IN THE NORTH/EAST SIDE OF THE ROAD WILL NEED TO BE CONSTRUCTED IN STAGES. NEW LATERAL PIPE WILL BE INSTALLED AS FAR AS POSSIBLE BEYOND THE MAIN SEWER TO ALLOW THE CONCRETE PAVEMENT TO BE POURED AND REMAIN UNDISTURBED DURING THE STAGE 2 SEWER REPLACEMENT. THE NEW AND EXISTING PIPE SHALL BE TEMPORARILY CONNECTED WITH A FLEXIBLE NON-SHEAR CONNECTOR.



Drawing file: W:\Projects\_By\_Village\Broadview\12019008 - Broga Drive Stage II - Design\CAO\She\Brgs Dr\_Ph 2\_Sig\_IL.dwg Apr 07, 2020 - 11:10am



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DESIGNED - MWV  
 DRAWN - DMM, SFB  
 CHECKED - JGG, MWV  
 DATE - 3-25-20

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

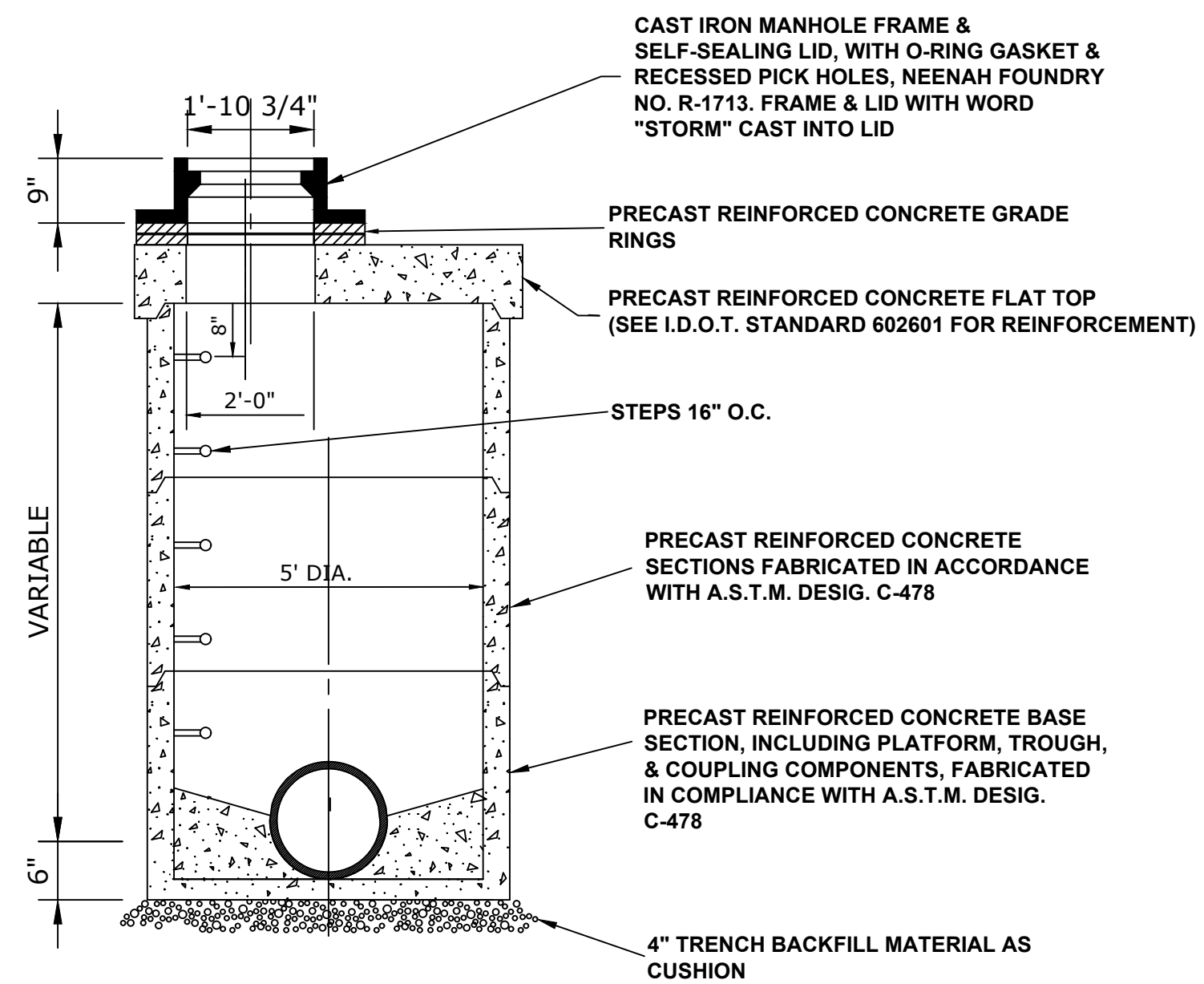
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

19TH STREET  
 UTILITY PLAN AND PROFILE

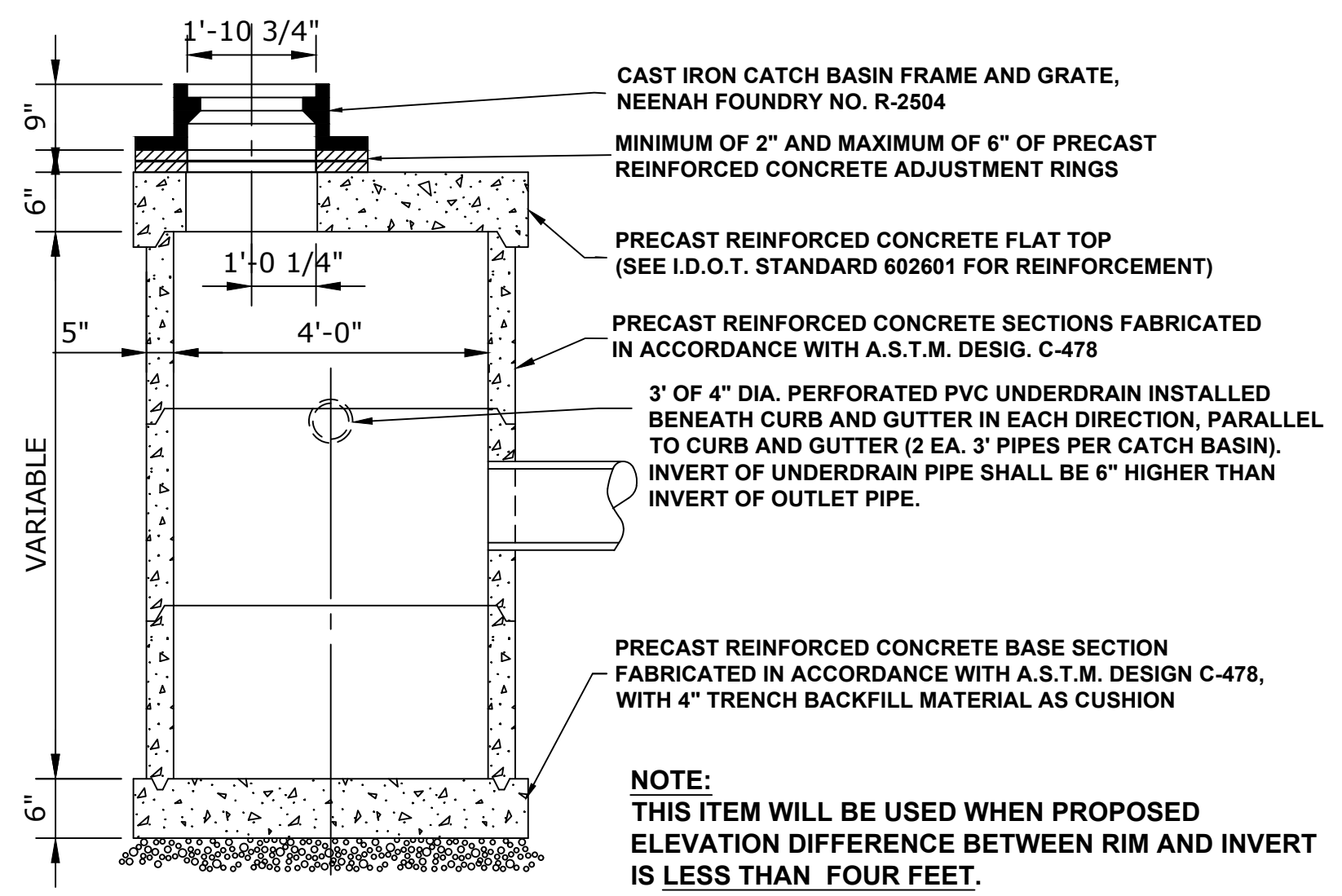
SCALE: H:1"=20', V:1"=4' SHEET NO. 7 OF 7 SHEETS STA. 41+50 TO STA. 44+50

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	46
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

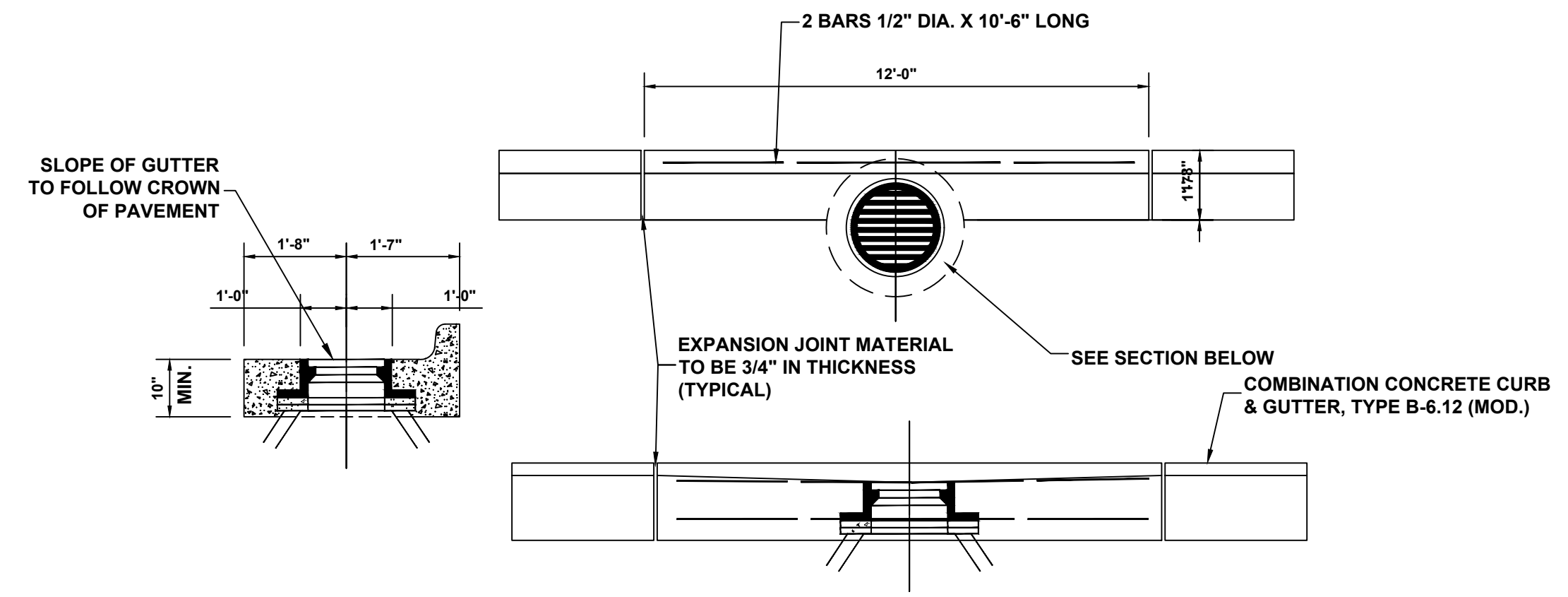
E.H.E. PROJECT NO. 120-19-00801



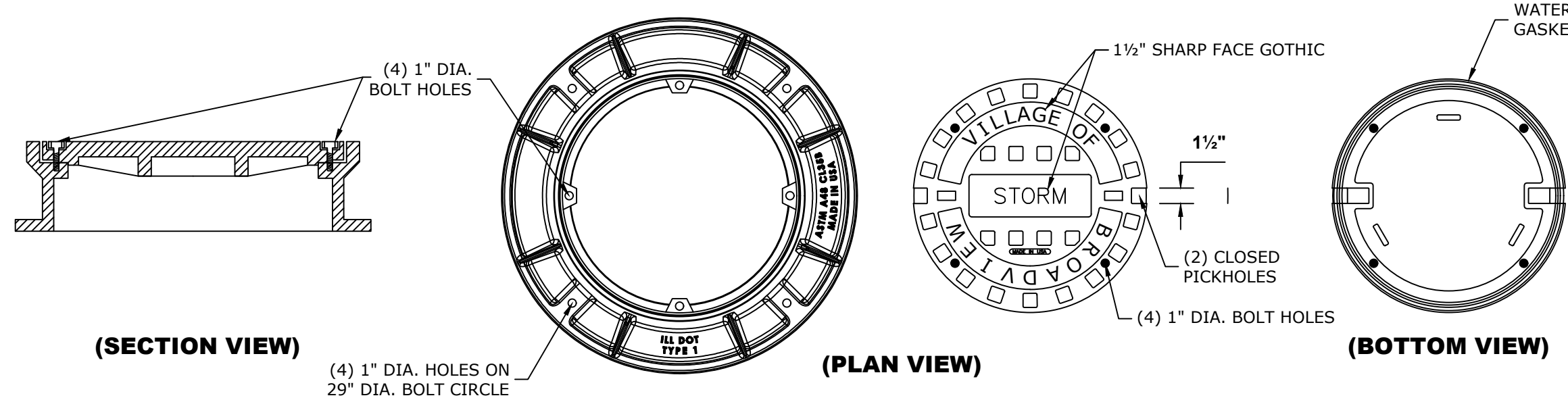
**MANHOLES, TYPE A, 5' DIAMETER, TYPE 1 FRAME, CLOSED LID, (SPECIAL)**



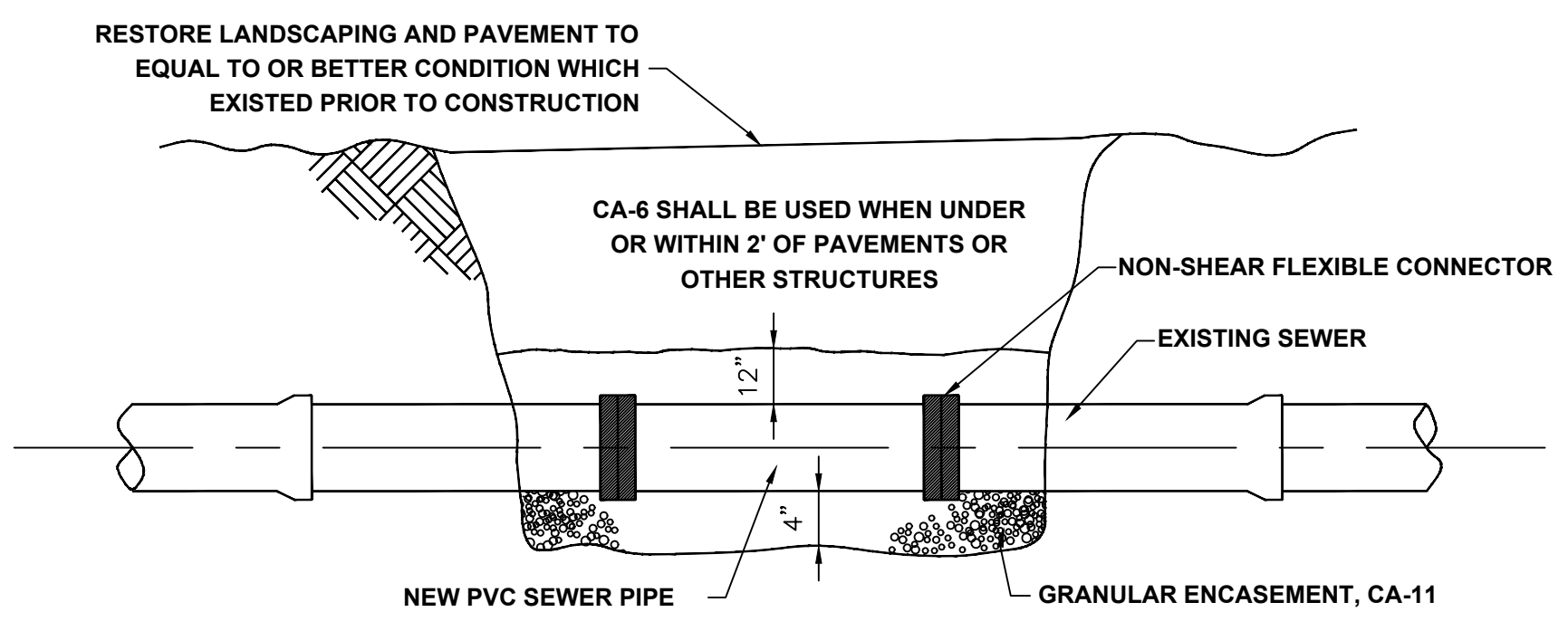
**CATCH BASINS, TYPE A, 4' DIAMETER, TYPE 1 FRAME, OPEN LID (SPECIAL)**



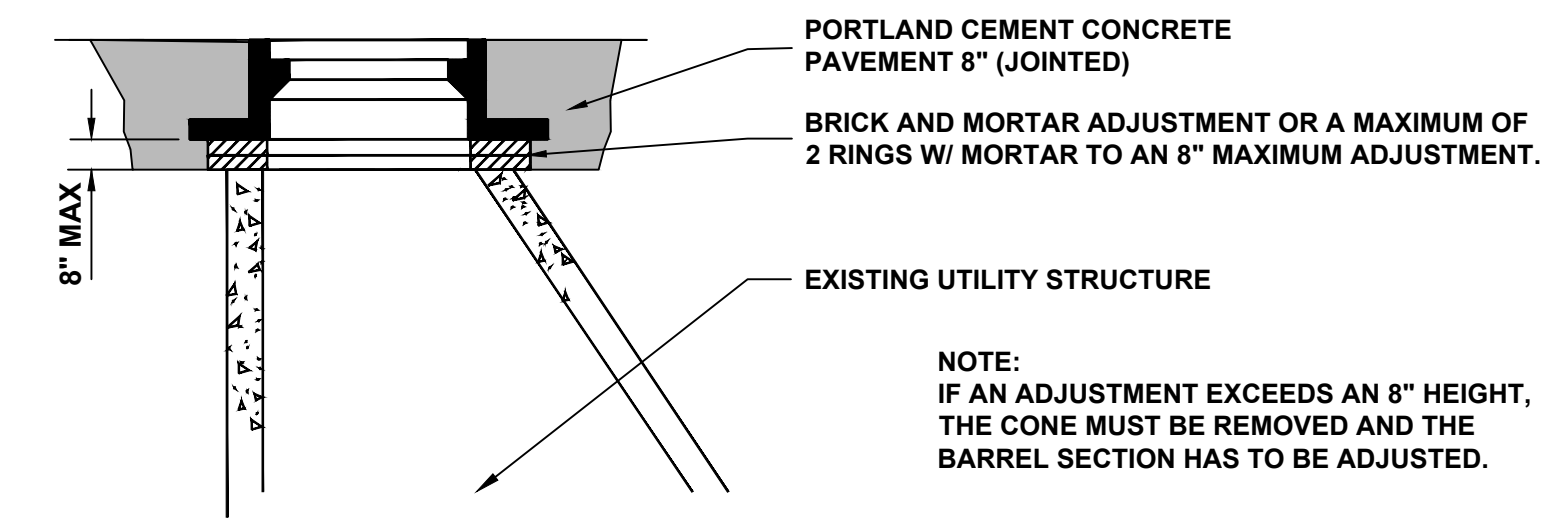
**GUTTER DETAIL AT DRAINAGE STRUCTURE**



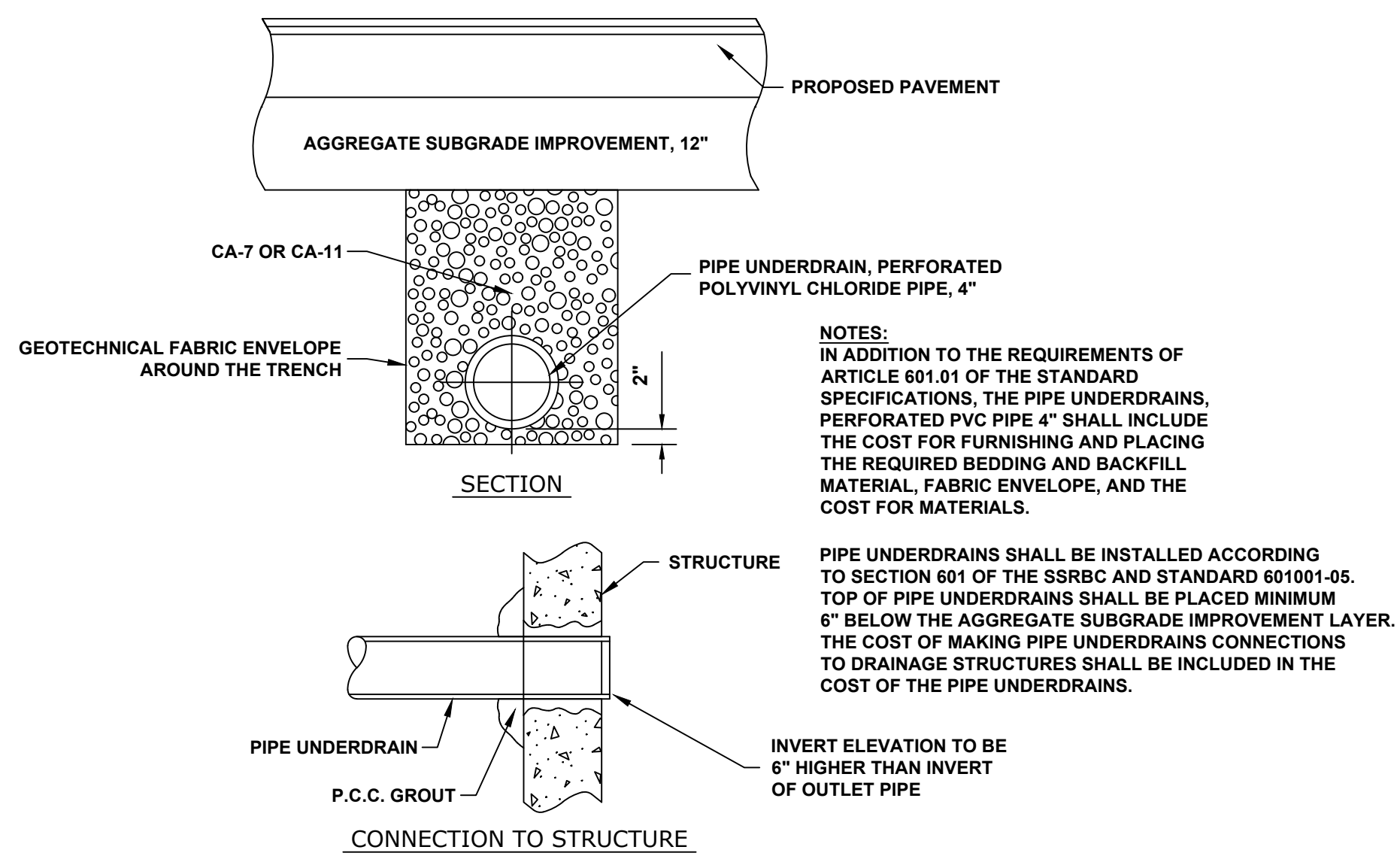
**WATERTIGHT BOLT DOWN FRAME AND LID**



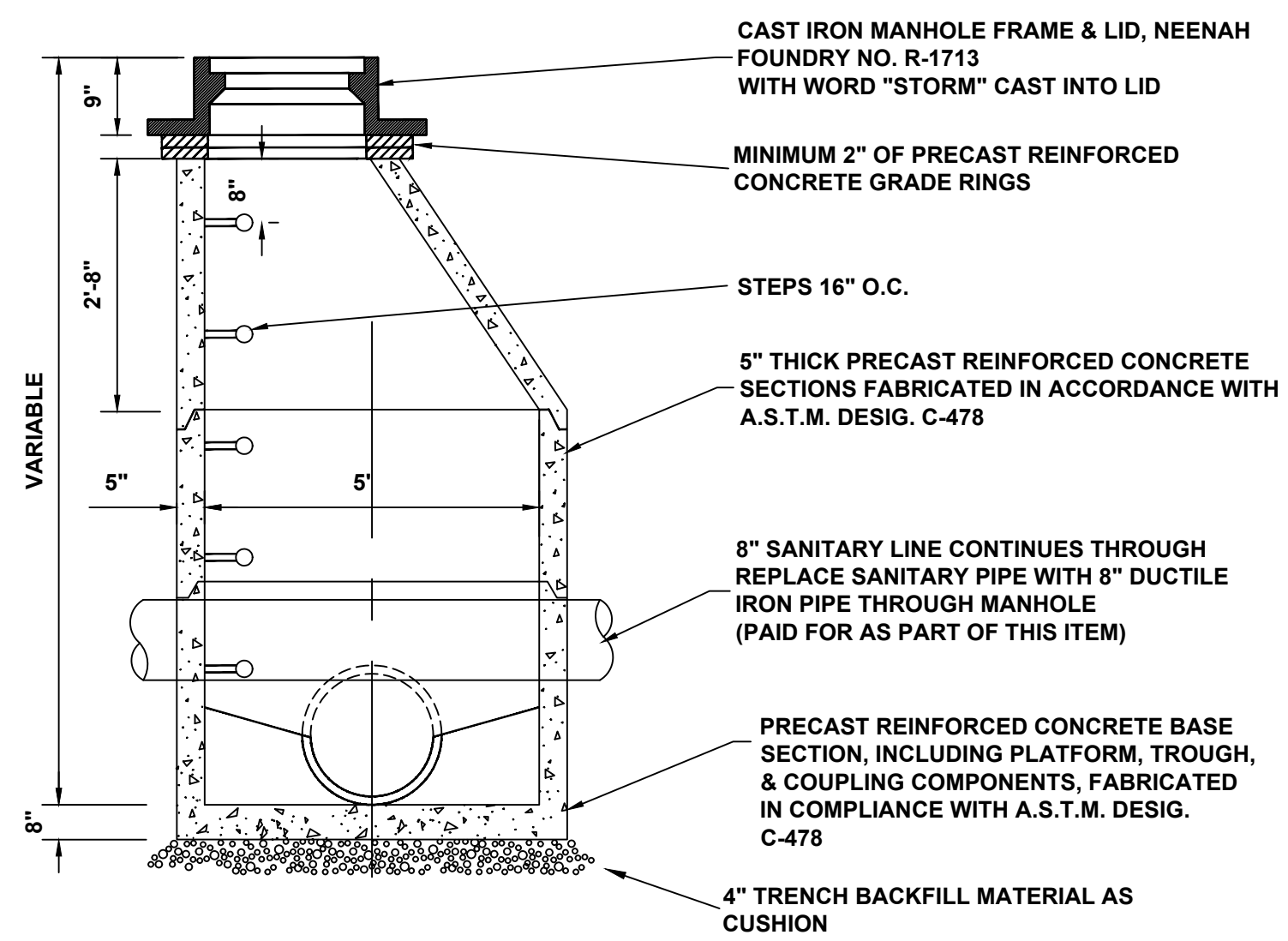
**TYPICAL SEWER PIPE REPAIR**



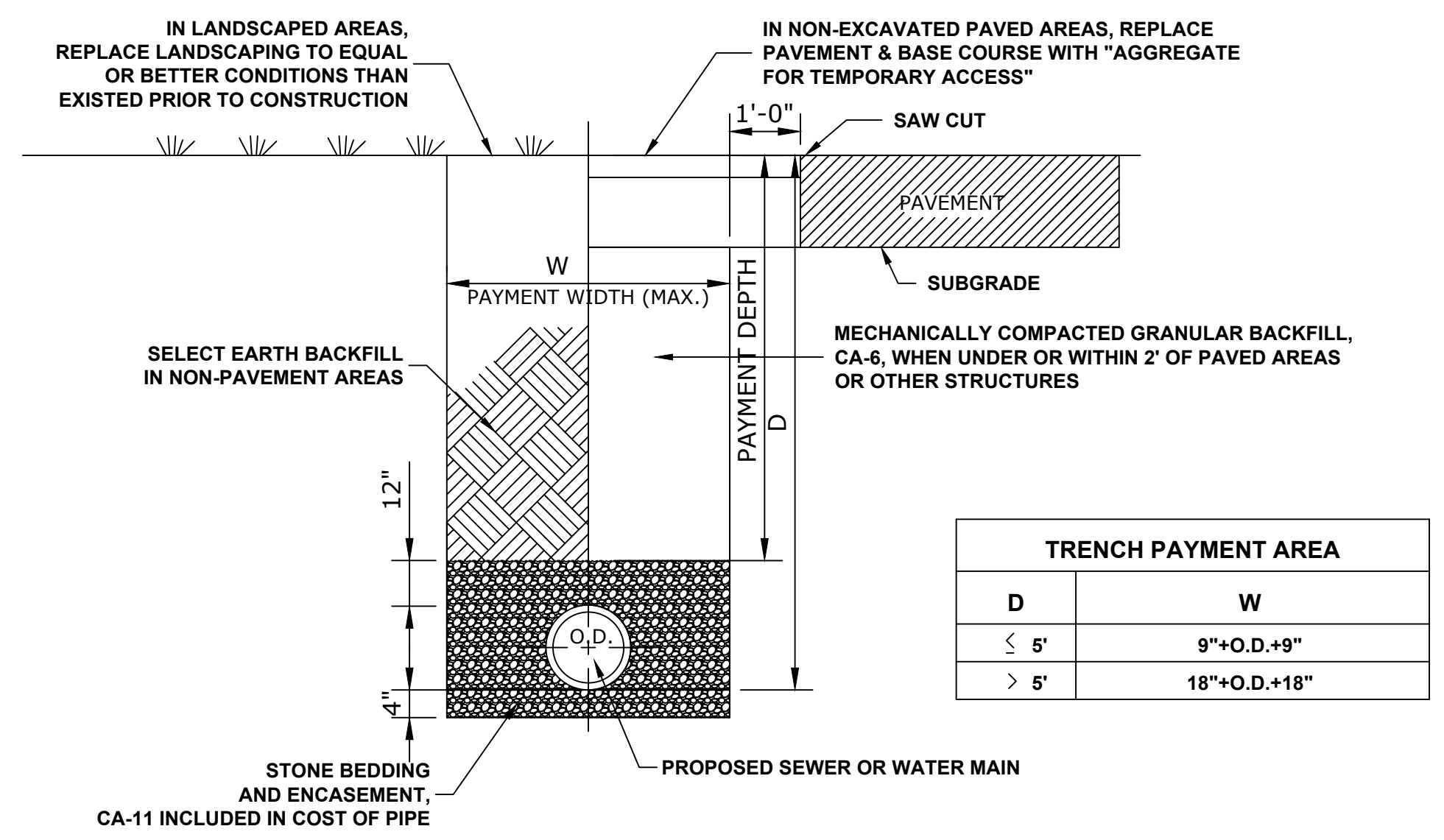
**TYPE 1 FRAME ADJUSTMENT**



**PIPE UNDERDRAIN DETAIL**



**STANDARD DEPTH CONFLICTION MANHOLE**



**TYPICAL SEWER AND WATER MAIN TRENCH DETAIL (ROADWAY)**

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Braga Drive Stage II - Design\CAD\Site\47-48\_Drainage-Details.dwg Mar 19, 2020 - 3:03pm

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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	3-19-20	REVISED -	

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

SCALE: NONE	SHEET NO. 1 OF 2 SHEETS	STA. TO STA.
-------------	-------------------------	--------------

MUN. RTE. 3015	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 47
FIELD BOOK NO. -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

I.H.E. PROJECT NO. 120-19-00801

## DRAINAGE AND UTILITIES NOTES

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, COMBINED SEWERS, TELEPHONE LINES, COMMUNICATION LINES, ELECTRIC LINES, GAS MAINS, AND WATER SERVICES ARE APPROXIMATE AND THEIR SPECIFIC LOCATIONS ARE TO BE DETERMINED IN THE FIELD AT NO COMPENSATION TO THE CONTRACTOR.

COORDINATION OF ALL UTILITY WORK INVOLVED WITHIN THE CONSTRUCTION AREAS SHALL BE SUBJECT TO DISCUSSION AND CLARIFICATION AT A PRECONSTRUCTION MEETING.

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINAGE STRUCTURES OR SEWERS UNTIL PERMANENT CONNECTIONS TO SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL BE PAID FOR AS TEMPORARY DRAINAGE CONNECTIONS.

IF, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIALS ARE DEPOSITED IN THE FLOW LINES OF GUTTERS OR DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE OBSTRUCTING MATERIALS SHALL BE REMOVED AT THE CLOSE OF EACH WORK DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES ARE TO BE FREE OF ALL DIRT, DEBRIS, AND OBSTRUCTING MATERIALS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF PROPOSED ITEMS BEING CONSTRUCTED.

ALL COSTS INVOLVED IN CONNECTING PROPOSED STORM SEWERS AND STORM STRUCTURES TO EXISTING STORM SEWERS OR PROPOSED STORM SEWERS SHALL BE CONSIDERED INCLUDED IN THE COST OF PROPOSED ITEMS BEING CONSTRUCTED.

ALL PROPOSED WATER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", SEVENTH EDITION, DATED 2014, AND ALL REVISIONS THERETO.

THE CONTRACTOR SHALL VERIFY THE TYPE OF ALL WATER MAIN HARDWARE INCLUDING VALVES, FIRE HYDRANTS, VALVE BOXES, CORPORATION STOPS, CURB STOPS, AND WATER SERVICES BOXES WITH THE UTILITY SUPERINTENDENT PRIOR TO ORDERING SUCH MATERIAL.

THE TYPE OF FRAMES AND GRATES REQUIRED FOR ALL CATCH BASINS AND MANHOLES LISTED IN THE SUMMARY OF QUANTITIES MAY BE FOUND ON THE PLANS AT THEIR RESPECTIVE LOCATIONS. WHERE LIDS ARE CALLED FOR ON THE PLANS, THEY SHALL BE IN ACCORDANCE WITH ARTICLE 604.01 OF THE STANDARD SPECIFICATIONS AND THE TERM LID IS USED IN LIEU OF GRATE.

ON ALL IMPROVEMENTS, THE FRAMES AND LIDS OF EXISTING CATCH BASINS, INLETS, MANHOLES, AND VALVE VAULTS WHICH ARE TO BE ABANDONED DUE TO CONSTRUCTION OF THIS IMPROVEMENT ARE TO REMAIN THE PROPERTY OF THE VILLAGE OF BROADVIEW AND BE SALVAGED. THE CONTRACTOR IS TO DELIVER FRAMES AND LIDS TO THE VILLAGE OF BROADVIEW PUBLIC WORKS YARD.

ANY COSTS FOR SHEETING OR SHORING REQUIRED FOR THE STORM SEWER INSTALLATION OR OTHER CONSTRUCTION ELEMENTS REQUIRING RELATIVELY DEEP EXCAVATIONS SHALL BE INCLUDED IN THE PARTICULAR PAYMENT ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY SUPPLEMENTAL WORK ASSOCIATED WITH THE MAINTENANCE OF TRENCH SIDES OR OTHER EXCAVATED AREAS.

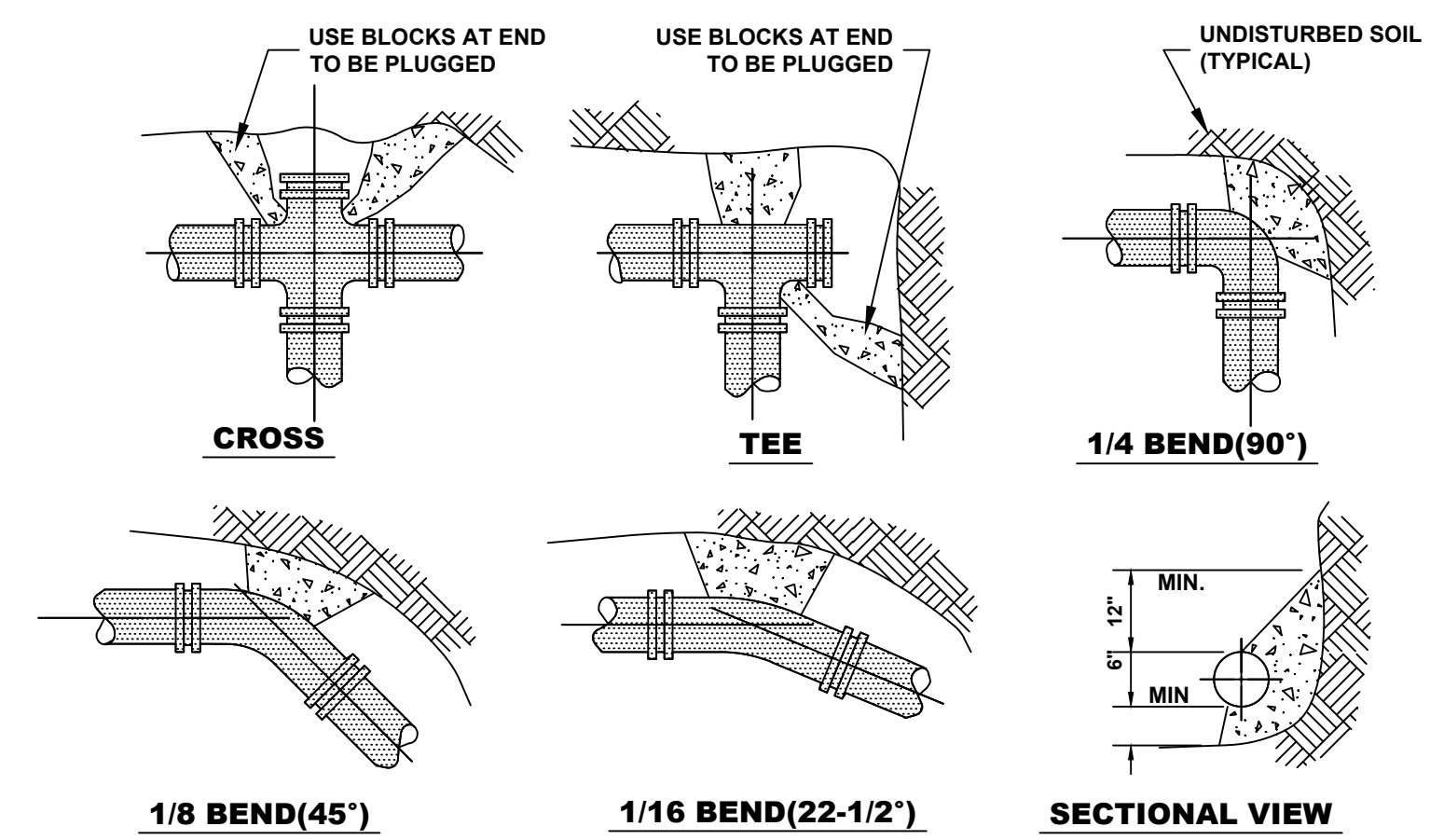
UNLESS OTHERWISE SPECIFIED, ABANDONED SEWERS AND DRAINS, AS DESIGNATED BY THE ENGINEER, SHALL BE PLUGGED WITH CLASS "SI" CONCRETE OR BRICK AND SUITABLE MORTAR TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE PAY ITEMS FOR REMOVING AND/OR FILLING THE VARIOUS TYPES OF STRUCTURES.

SEWER PIPE INSTALLED ON THIS PROJECT SHALL CONFORM TO THE FOLLOWING STANDARD:

TYPE OF PIPE	MATERIAL STANDARD	JOINT STANDARD
REINFORCED CONCRETE PIPE	ASTM C-76	ASTM C-443
POLYVINYLCHLORIDE PIPE, SDR 26	ASTM D-2241	ASTM D-3139
DUCTILE IRON PIPE, CLASS 52	ASTM A-21.51	ASTM A-21.11

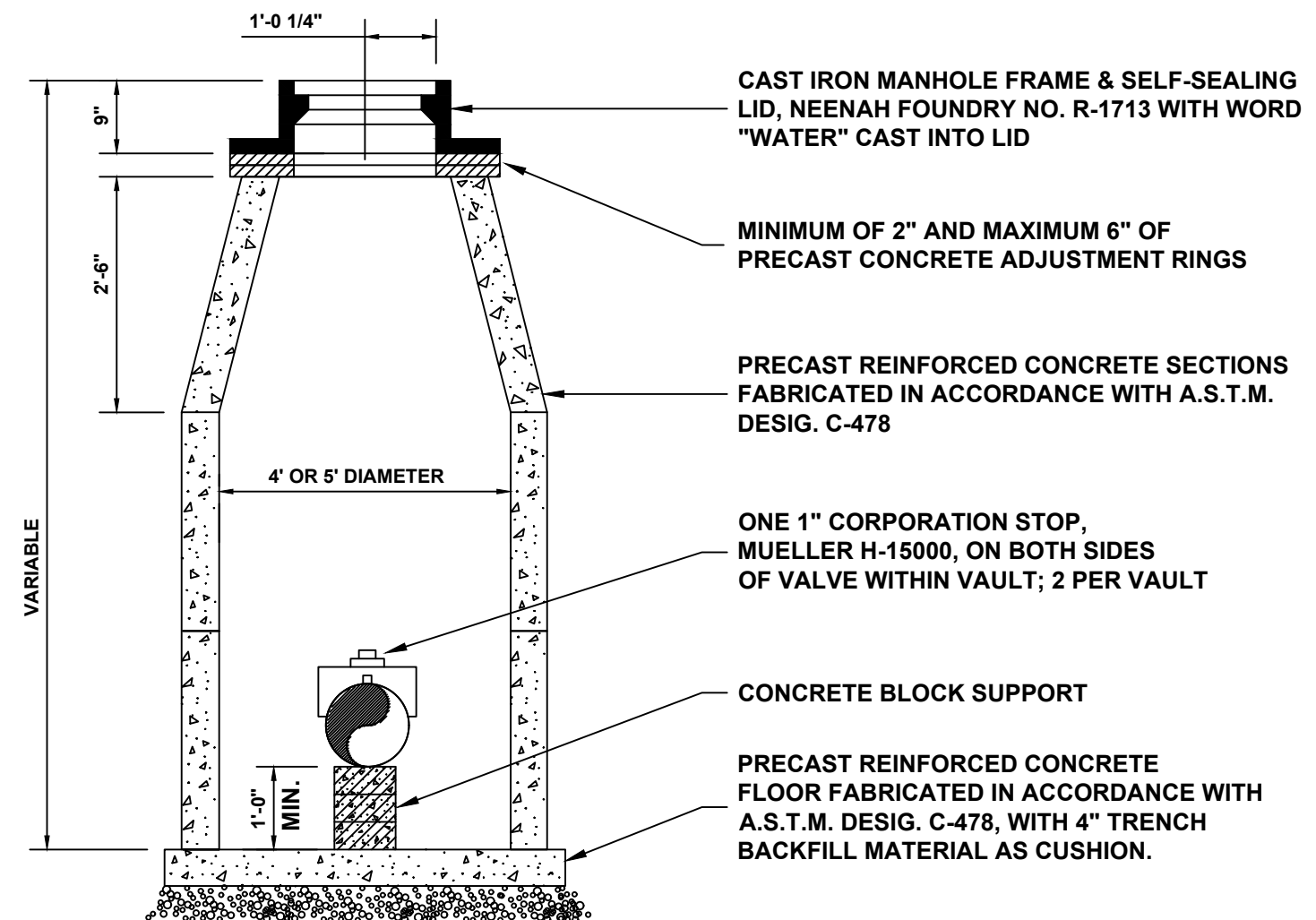
## DUCTILE IRON PIPE SPECIFICATIONS

- ALL DUCTILE IRON PIPE WATER MAINS AND SEWER MAINS SHALL BE CLASS 52, CEMENT-LINED AND TAR-COATED, MEETING THE REQUIREMENTS OF SPECIFICATIONS ANSI/AWWA C151/A21.51 WITH "PUSH-ON" JOINTS MEETING THE REQUIREMENTS OF SPECIFICATIONS ANSI/AWWA C111/A21.11. WHERE SPECIFIED ON THE PLANS, OR IN THE SPECIFICATIONS, MECHANICAL JOINTS AND "LOCK-TYPE" JOINTS SHALL BE USED IN LIEU OF "PUSH-ON" JOINTS.
- ALL PIPE FITTINGS AND SPECIAL CASTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C153/A21.53 AND ANSI/AWWA C111/A21.11 SPECIFICATIONS AND SHALL MEET THE MINIMUM REQUIREMENTS OF CLASS 150 DUCTILE IRON PIPE. IF CERTAIN FITTINGS ARE NOT MANUFACTURED IN DUCTILE IRON, CAST IRON FITTINGS SHALL BE ACCEPTABLE. MECHANICAL JOINT TYPE FITTINGS SHALL BE USED.
- ALL PROPOSED DUCTILE IRON PIPE WATER MAIN AND SEWER MAIN WILL BE ENCASED WITHIN SIX (6) MIL THICK, HIGH-DENSITY POLYETHYLENE TUBING. ALL FITTINGS SHALL BE ENCASED IN A DOUBLE-LAYER OF POLYETHYLENE TUBING. THE POLYETHYLENE MATERIAL SHALL BE MANUFACTURED AND INSTALLED IN COMPLIANCE WITH ANSI/AWWA C105/A21.5.

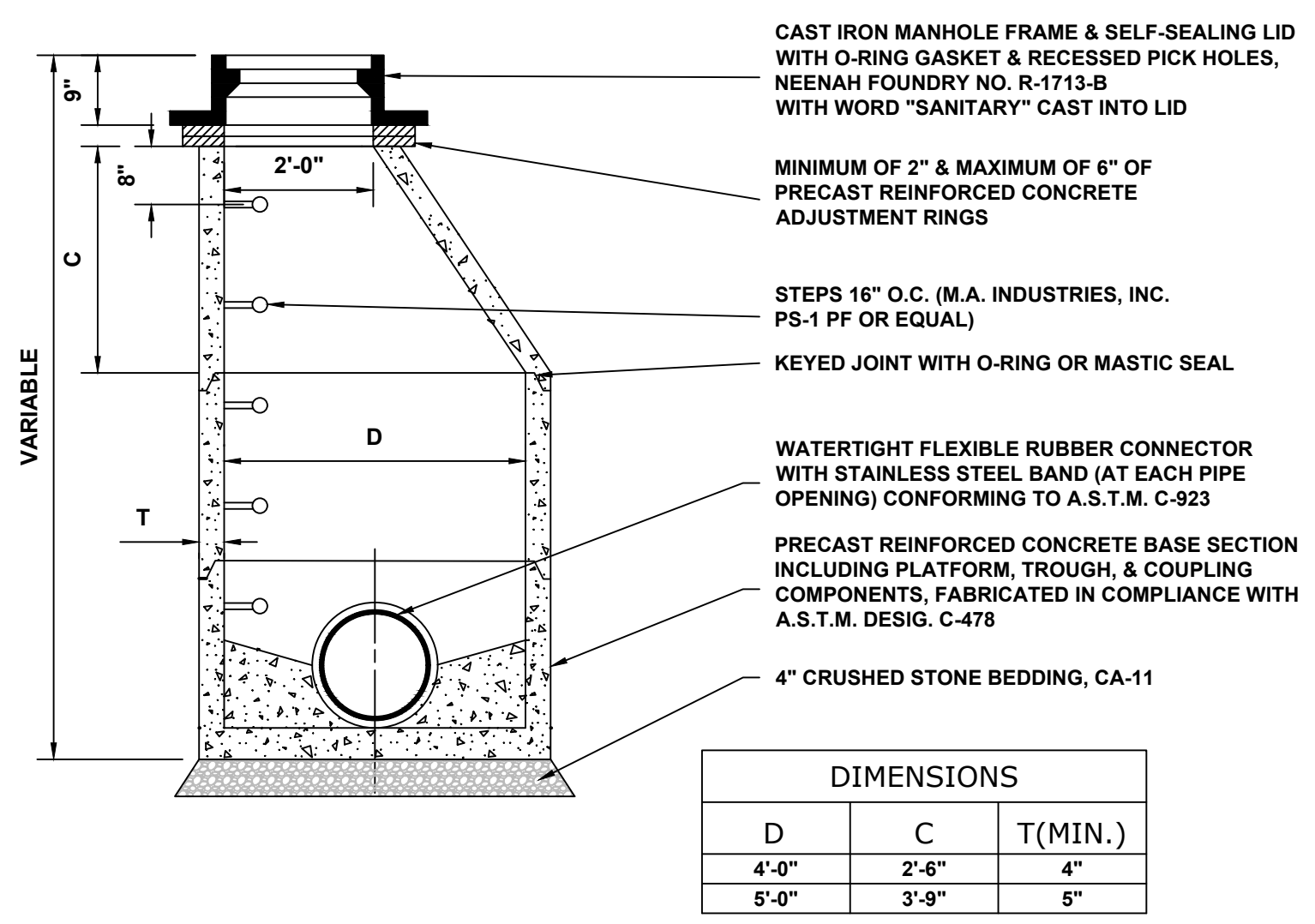


**NOTE:**  
 1. THRUST BLOCKS TO BE USED AT 1/16(22-1/2°) OR GREATER BENDS & AT ALL ENDS TO BE PLUGGED.  
 2. PRECAST CONCRETE THRUST BLOCKS TO BE PLACED AGAINST FIRM, UNDISTURBED SOIL.

### THRUST BLOCK

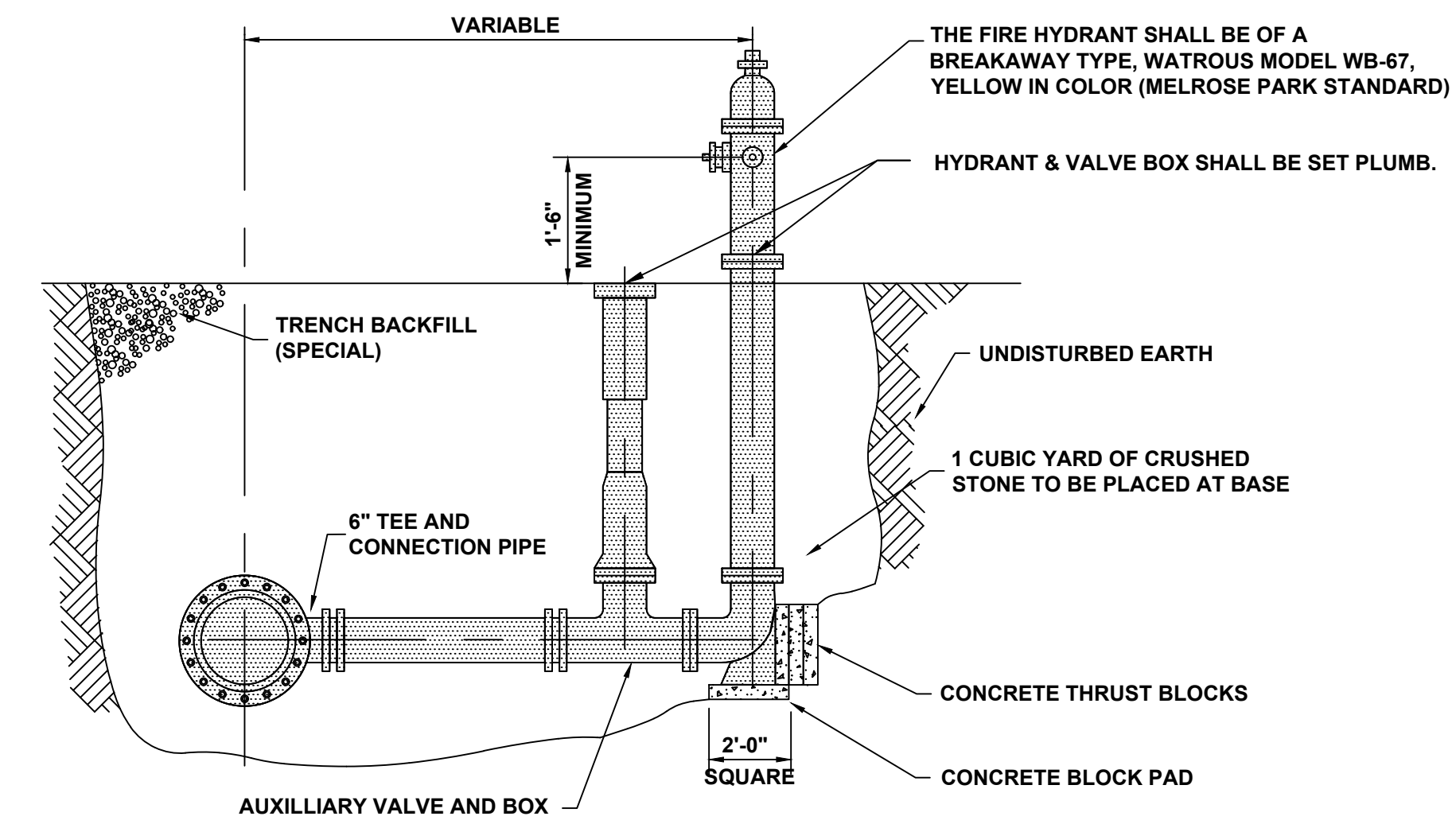


### STANDARD VALVE VAULT

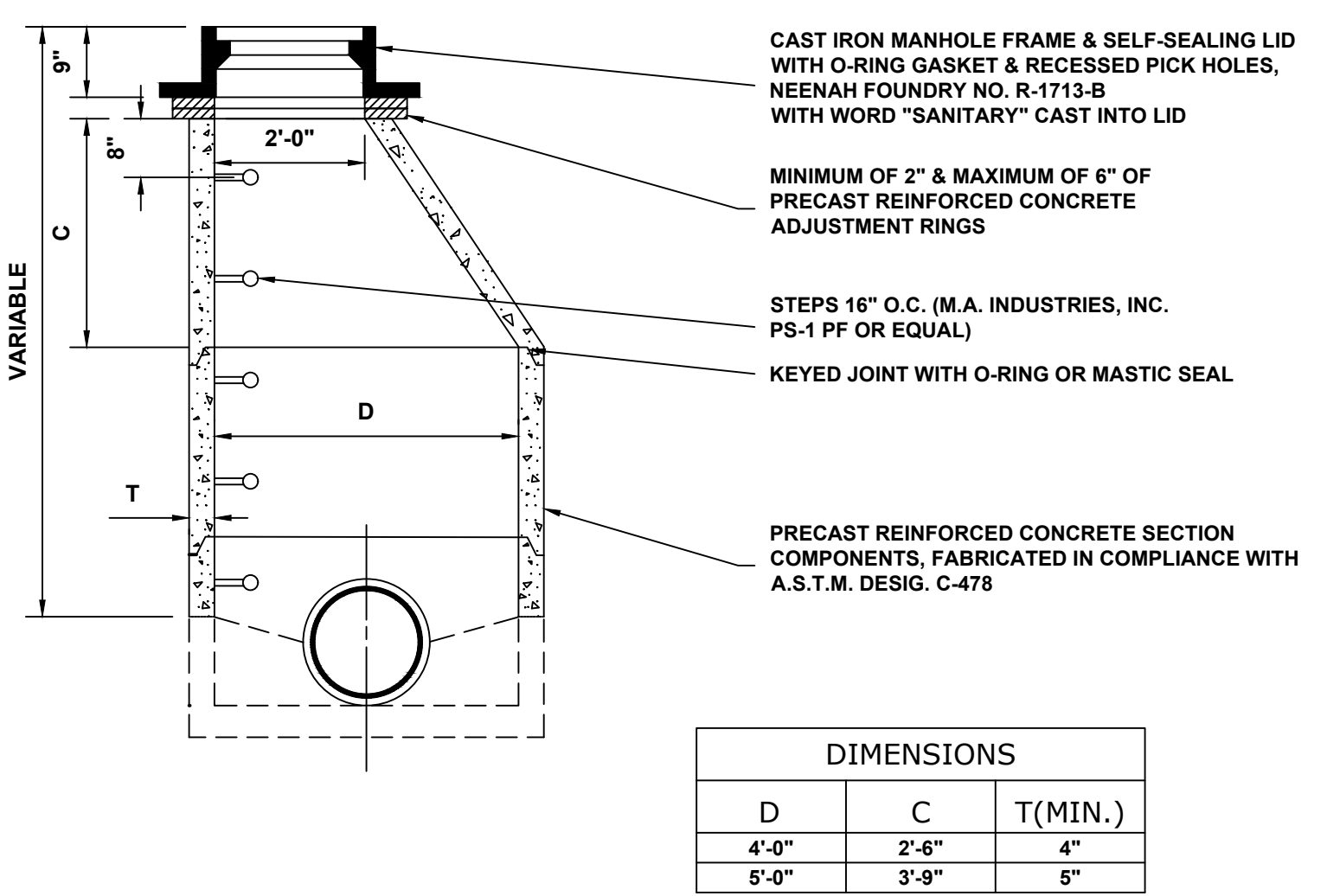


DIMENSIONS		
D	C	T(MIN.)
4'-0"	2'-6"	4"
5'-0"	3'-9"	5"

### SANITARY SEWER MANHOLE

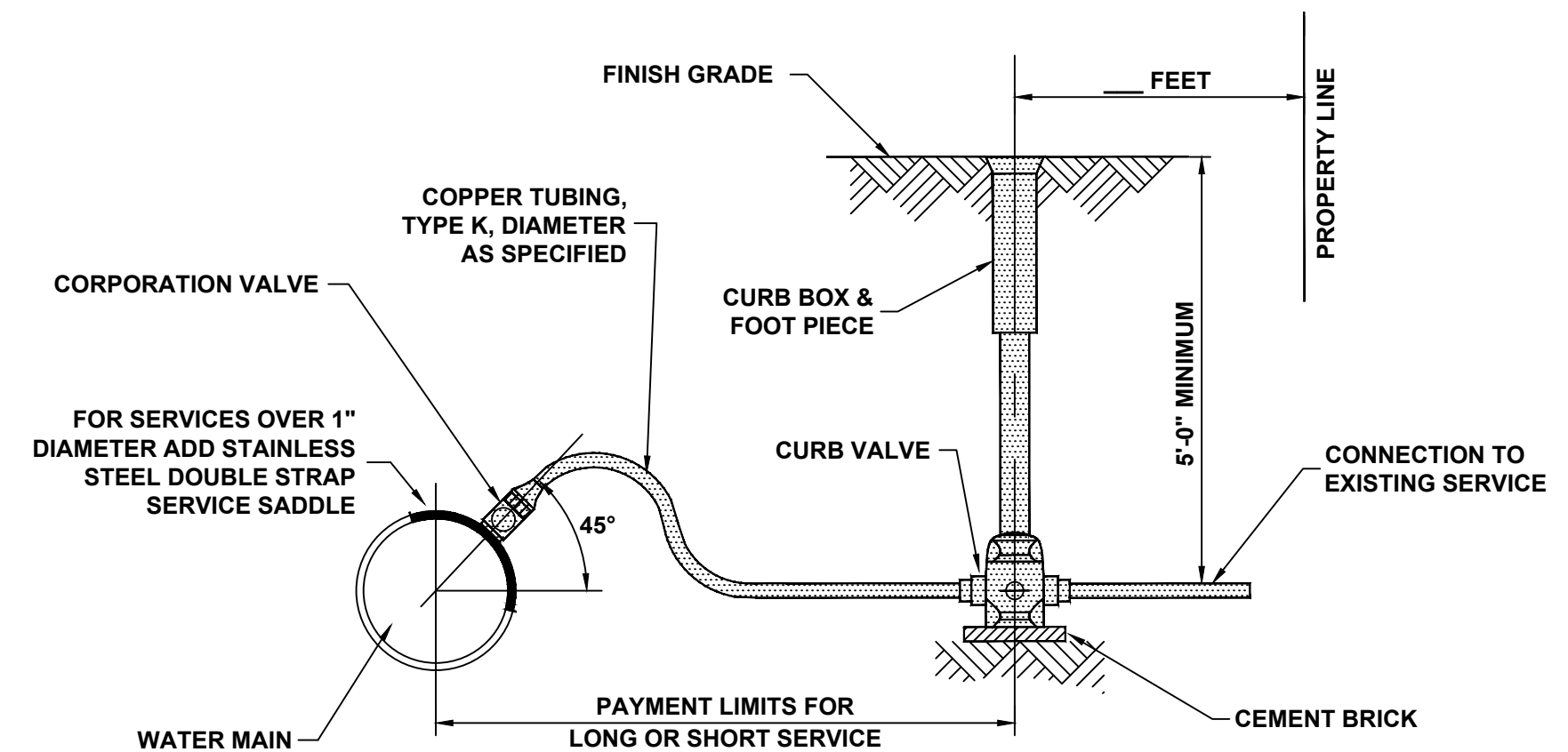


### FIRE HYDRANT



DIMENSIONS		
D	C	T(MIN.)
4'-0"	2'-6"	4"
5'-0"	3'-9"	5"

### SANITARY SEWER MANHOLE RECONSTRUCTION



NOTE: MAKE & MODEL OF WATER SERVICE COMPONENTS PER SPECIFICATIONS

### WATER SERVICE

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Braga Drive Stage II - Design\CAD\Site\47-49\_Drainage-Details.dwg Feb 10, 2020 - 5:09pm

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DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

<b>DRAINAGE AND UTILITIES DETAILS</b>	
SCALE: NONE	SHEET NO. 2 OF 2 SHEETS
STA.	TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	48
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

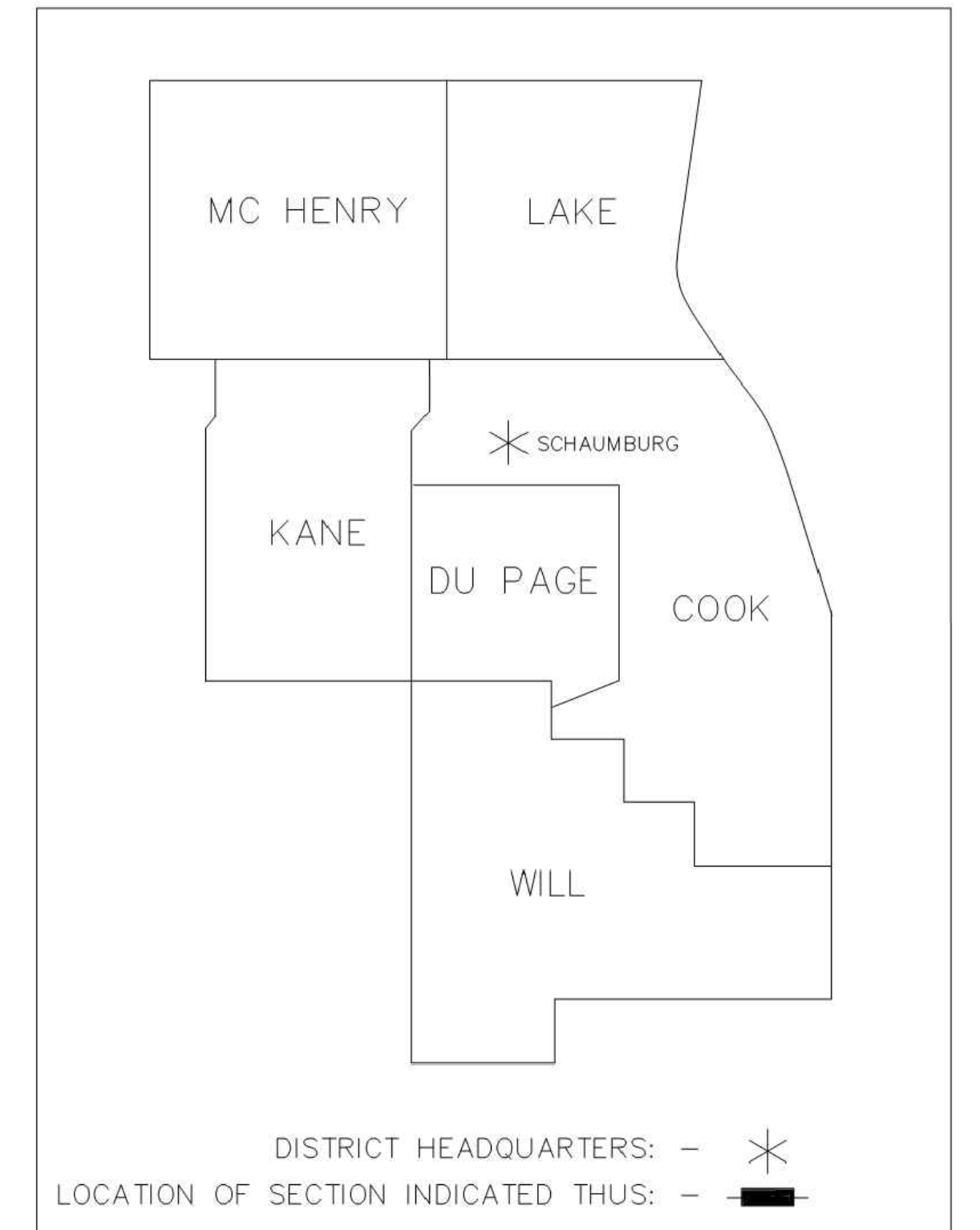
I.L.E. PROJECT NO. 120-19-00801



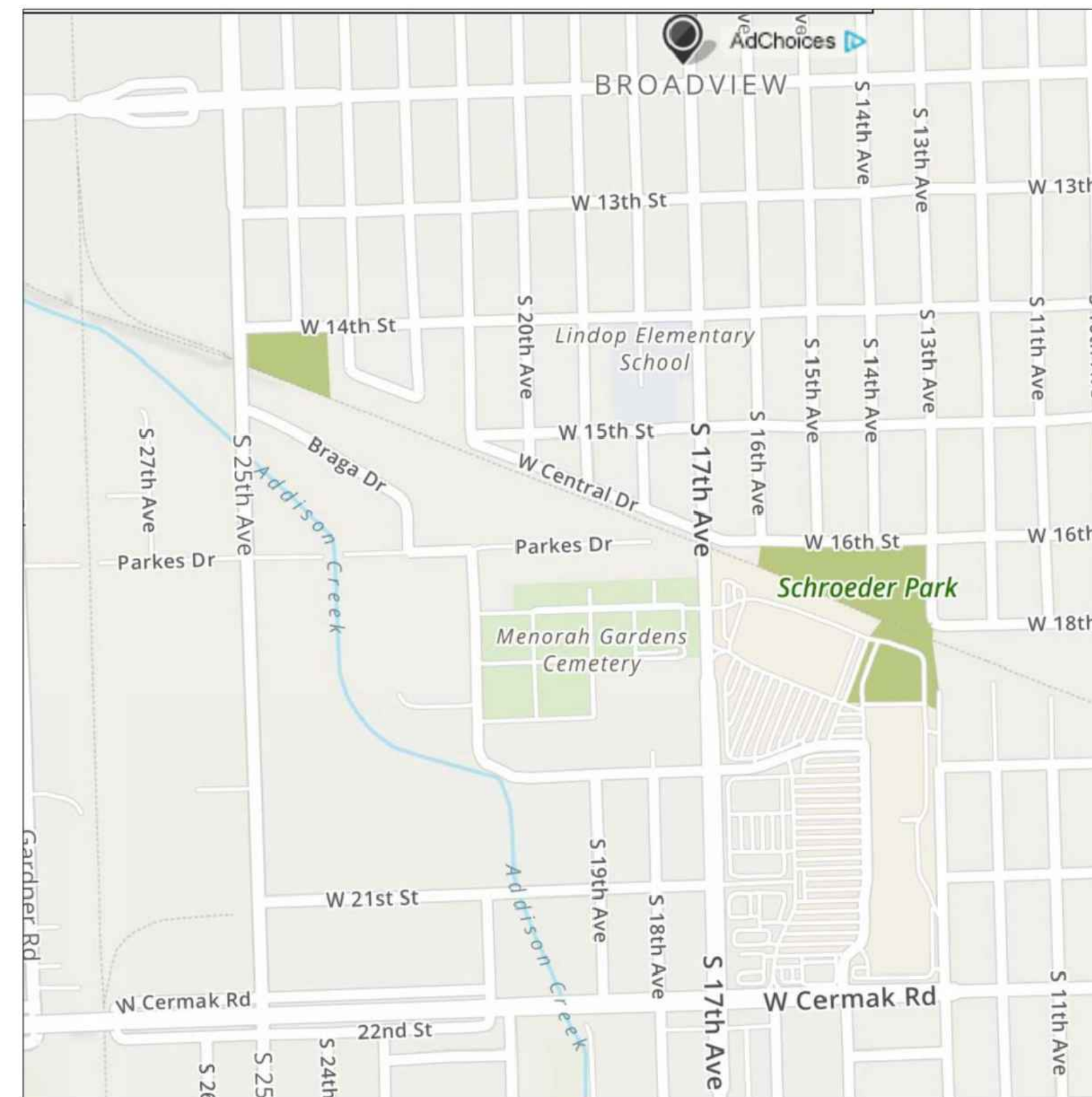
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLAT OF HIGHWAYS**

ROUTE: 21ST AVENUE  
SECTION:  
COUNTY: COOK  
LIMITS: 17th AVE. - PARKES AVE.  
JOB NO.: R-55-001-97

PARCEL NUMBER	OWNER	SHEET NUMBER	PROPERTY ACQUIRED BY
0001	CENTRAL STEEL FABRICATORS, INC	2	
0002	CHICAGO DRY LL, LLC	2	
0003	CTI PROPERTY MANAGEMENT, LLC	2	
0004	HLS HOLDINGS, INC	3	
0005	WILLIAMS COMMUNICATIONS, INC	3	
0006	ORBAN HOLDINGS, LLC	4	
0007	ECS REALTY, LLC	4	
0008	MAYWOOD PROVISO STATE BANK	5	
0009	SCHIFF ENTERPRISES	5	



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LOCATION MAP

RETURN ORIGINAL TO:  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SHAUMBURG ILLINOIS, 60169  
ATTN: BUREAU OF LAND ACQUISITION

SHEET 1 OF 5

IDOT USE ONLY

DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAT OF HIGHWAYS  
FOR PERMANENT EASEMENTS**

SCALE: NONE SHEET NO. 1 OF 5 SHEETS STA. TO STA.

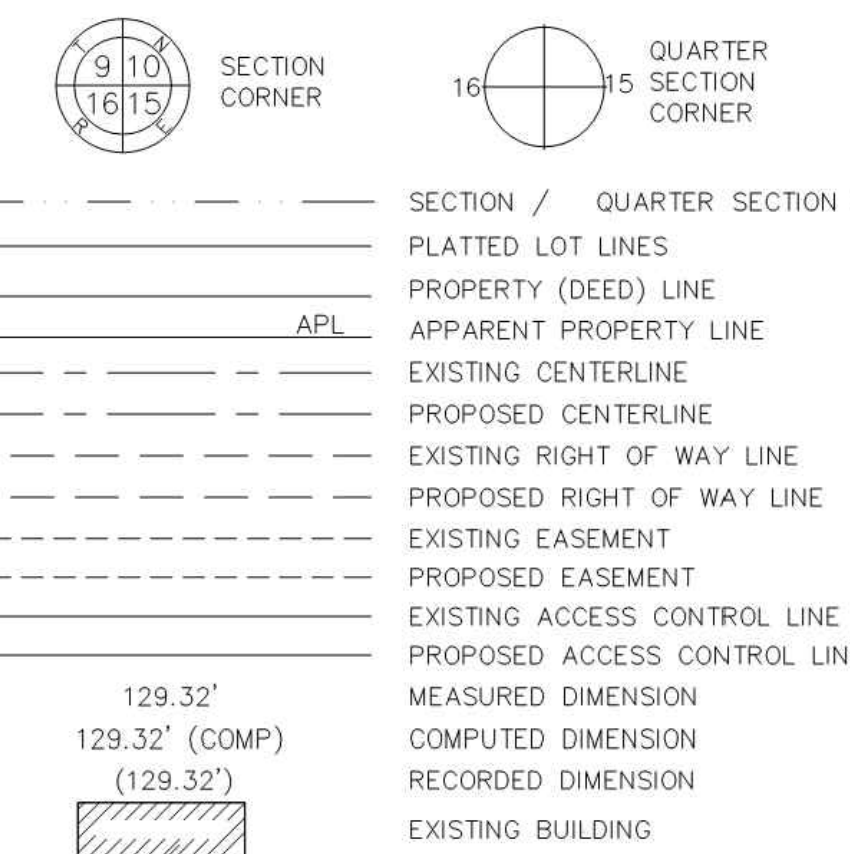
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-0080-01-PV	COOK	102	49
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

PART OF THE SW 1/4 OF SECTION 22, TWP. 39 N., R. 12 E. OF THE 3RD. P.M., IN COOK COUNTY, ILLINOIS.

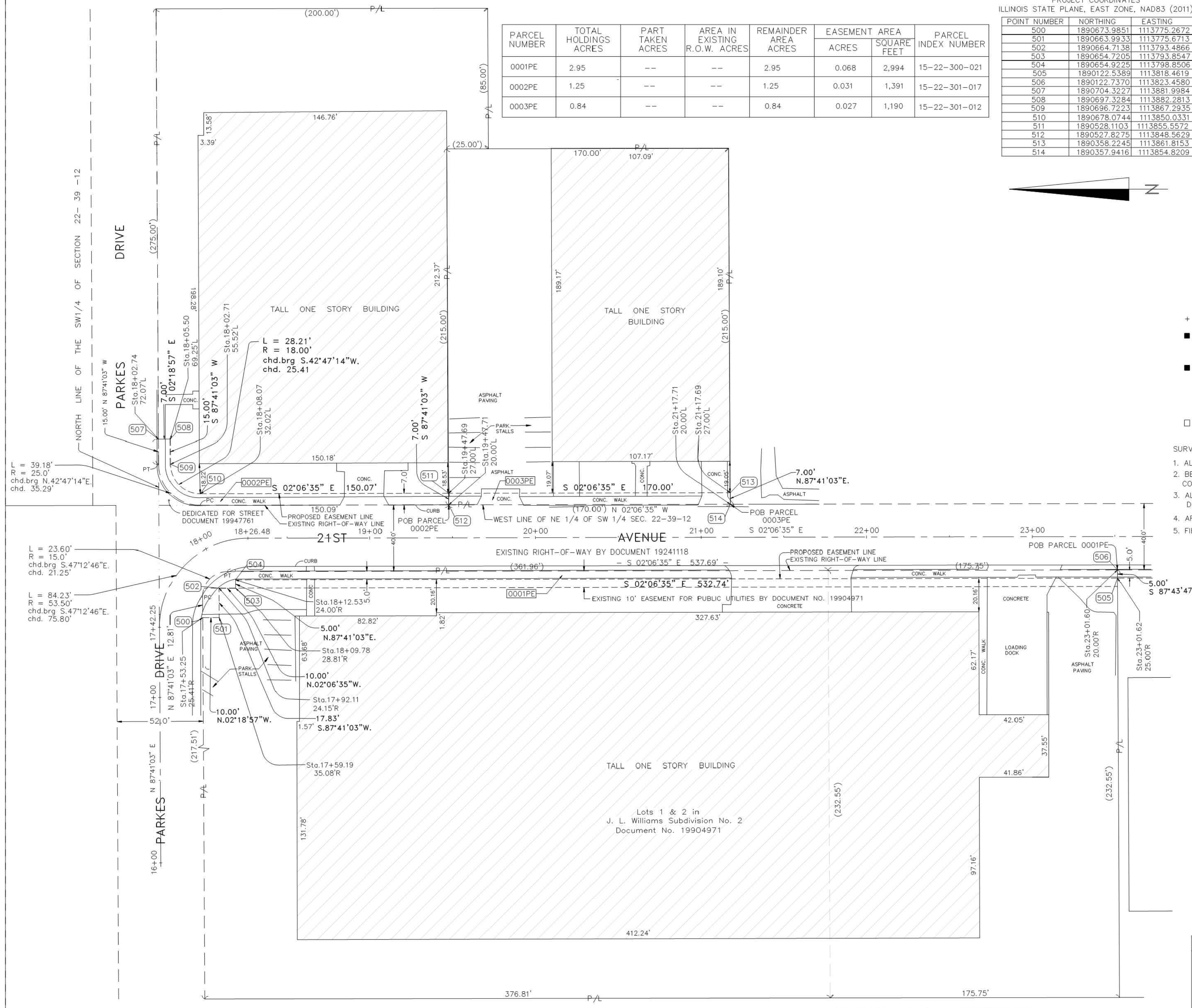
PROJECT COORDINATES  
ILLINOIS STATE PLANE, EAST ZONE, NAD83 (2011)

POINT NUMBER	NORTHING	EASTING
500	1890673.9851	1113775.2672
501	1890663.9933	1113775.6713
502	1890664.7138	1113793.4866
503	1890654.7205	1113793.8547
504	1890654.9225	1113798.8506
505	1890122.5389	1113818.4619
506	1890122.7370	1113823.4580
507	1890704.3227	1113881.9984
508	1890697.3284	1113882.2813
509	1890696.7223	1113867.2935
510	1890678.0744	1113850.0331
511	1890528.1103	1113855.5572
512	1890527.8275	1113848.5629
513	1890358.2245	1113861.8153
514	1890357.9416	1113854.8209

LEGEND



PARCEL NUMBER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA		PARCEL INDEX NUMBER
					ACRES	SQUARE FEET	
0001PE	2.95	--	--	2.95	0.068	2,994	15-22-300-021
0002PE	1.25	--	--	1.25	0.031	1,391	15-22-301-017
0003PE	0.84	--	--	0.84	0.027	1,190	15-22-301-012



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DRAWN -	DMM, SFB	REVISED -
CHECKED -	JGG, MWV	REVISED -
DATE -	2-11-20	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAT OF HIGHWAYS  
FOR PERMANENT EASEMENTS**

SCALE: NONE SHEET NO. 2 OF 5 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	50
FIELD BOOK NO. -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

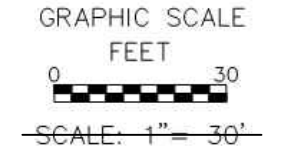
FILE PROJECT NO. 120-19-00801

PART OF THE SW 1/4 OF SECTION 22, TWP. 39 N., R. 12 E. OF THE 3RD. P.M., IN COOK COUNTY, ILLINOIS.

LEGEND



- SECTION / QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING ACCESS CONTROL LINE
- PROPOSED ACCESS CONTROL LINE
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- EXISTING BUILDING



BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.

- + IRON PIPE OR ROD FOUND      ⊕ "MAG" NAIL SET
- + CUT CROSS FOUND OR SET      ○ 5 / 8" REBAR SET
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 667101.02 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET

SURVEY NOTES:

1. ALL DIMENSIONS ARE MEASURED UNLESS OTHERWISE SPECIFIED.
2. BEARING, DISTANCES, AND COORDINATES SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT) "GRID".
3. ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND". TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES SHOWN BY THE COMBINATION FACTOR OF 0.99982904.
4. AREAS SHOWN ON THIS PLAT ARE "GROUND".
5. FIELD SURVEY COMPLETED ON MARCH 21, 2019.

STATE OF ILLINOIS )  
COUNTY OF )SS

THIS IS TO CERTIFY THAT I, MICHAEL L. KRISCH, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, KRISCH LAND SURVEYING, LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER\_\_\_\_\_) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 22, TOWNSHIP 39 NORTH, 12 RANGE EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT \_\_\_\_\_, ILLINOIS THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2501  
LICENSE EXPIRATION DATE: NOVEMBER 30, 2020

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

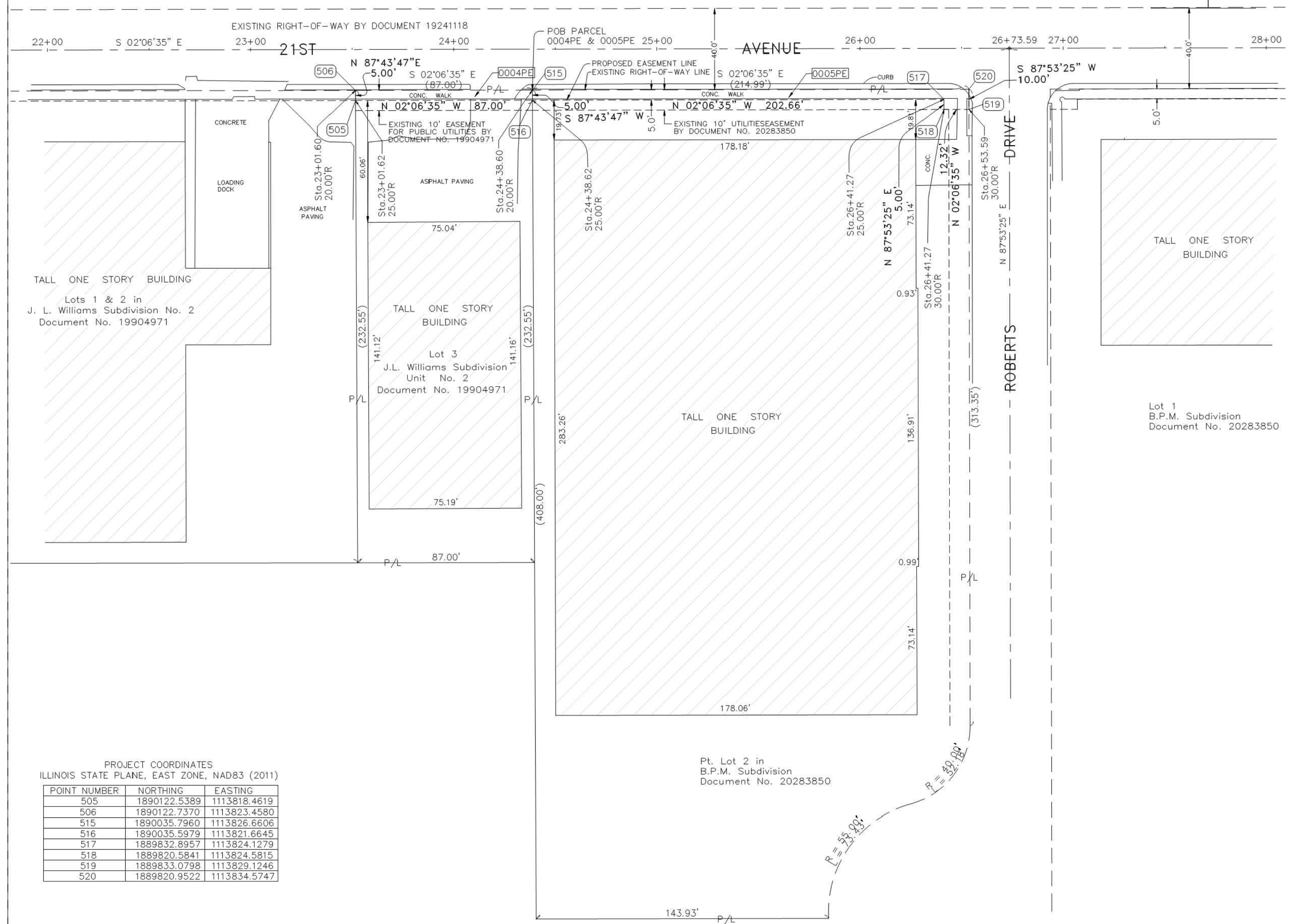
**KRISCH LAND SURVEYING, LLC**  
P.O. BOX 929  
PLAINFIELD, IL 60544  
630-627-5589

PLAT OF HIGHWAYS  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
21st AVENUE

IDOT USE ONLY

LIMITS: COUNTY: COOK  
SECTION: JOB NO.: R-55-001-97  
STA. 24+38.62 TO STA. 26+73.59  
SCALE: 1" = 30'

BUREAU OF LAND ACQUISITION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196



PROJECT COORDINATES

ILLINOIS STATE PLANE, EAST ZONE, NAD83 (2011)

POINT NUMBER	NORTHING	EASTING
505	1890122.5389	1113818.4619
506	1890122.7370	1113823.4580
515	1890035.7960	1113826.6606
516	1890035.5979	1113821.6645
517	1889832.8957	1113824.1279
518	1889820.5841	1113824.5815
519	1889833.0798	1113829.1246
520	1889820.9522	1113834.5747

PARCEL NUMBER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA		PARCEL INDEX NUMBER
					ACRES	SQUARE FEET	
0004PE	0.46	--	--	0.46	0.01	435	15-22-300-018
0005PE	1.92	--	--	1.92	0.026	1,137	15-22-300-026

REVISION DATE: // REVISION MADE BY:



9933 Roosevelt Road  
Westchester, IL 60154-2780  
Phone: 708-865-0300  
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DESIGNED - MWV	REVISED -
DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAT OF HIGHWAYS  
FOR PERMANENT EASEMENTS**

SCALE: NONE SHEET NO. 3 OF 5 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	51
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

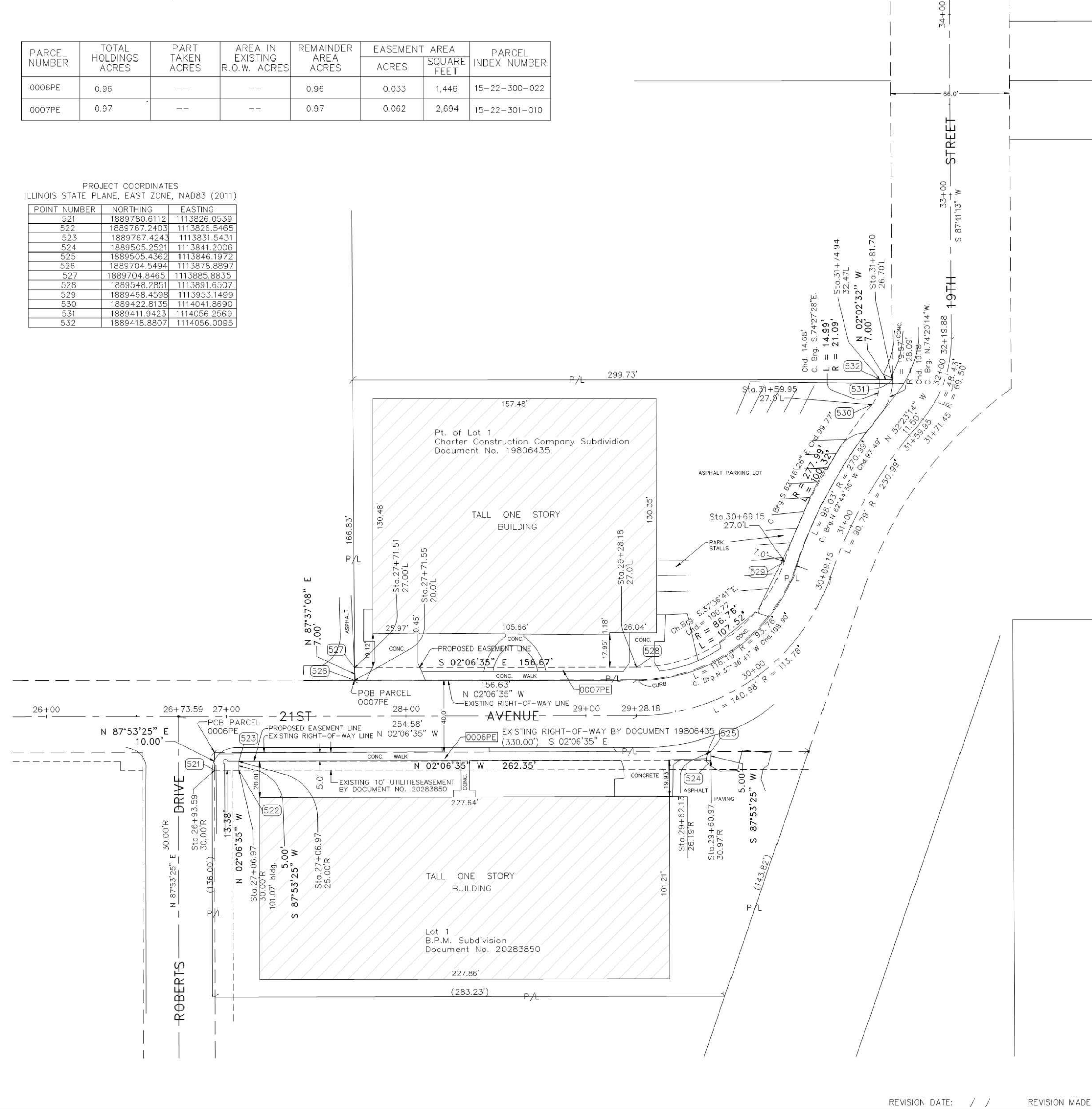
FILE PROJECT NO. 120-19-00001

PART OF THE SW 1/4 OF SECTION 22, TWP. 39 N., R. 12 E. OF THE 3RD. P.M., IN COOK COUNTY, ILLINOIS.

PARCEL NUMBER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT ACRES	AREA SQUARE FEET	PARCEL INDEX NUMBER
0006PE	0.96	---	---	0.96	0.033	1,446	15-22-300-022
0007PE	0.97	---	---	0.97	0.062	2,694	15-22-301-010

PROJECT COORDINATES  
ILLINOIS STATE PLANE, EAST ZONE, NAD83 (2011)

POINT NUMBER	NORTHING	EASTING
521	1889780.6112	1113826.0539
522	1889767.2403	1113826.5465
523	1889767.4243	1113831.5431
524	1889505.2521	1113841.2006
525	1889505.4362	1113846.1972
526	1889704.5494	1113878.8997
527	1889704.8465	1113885.8835
528	1889548.2851	1113891.6507
529	1889468.4598	1113953.1499
530	1889422.8135	1114041.8690
531	1889411.9423	1114056.2569
532	1889418.8807	1114056.0095



LEGEND

9 10 16 15 SECTION CORNER

16 15 QUARTER SECTION CORNER

SECTION / QUARTER SECTION LINE

PLATTED LOT LINES

PROPERTY (DEED) LINE

APL APPARENT PROPERTY LINE

EXISTING CENTERLINE

PROPOSED CENTERLINE

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

EXISTING ACCESS CONTROL LINE

PROPOSED ACCESS CONTROL LINE

MEASURED DIMENSION

COMPUTED DIMENSION

RECORDED DIMENSION

EXISTING BUILDING

GRAPHIC SCALE  
0 30  
FEET  
SCALE: 1" = 30'

129.32'  
129.32' (COMP)

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.

IRON PIPE OR ROD FOUND    ⊕ "MAG" NAIL SET  
CUT CROSS FOUND OR SET    ○ 5 / 8" REBAR SET

STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 667101.02 (TO BE SET BY OTHERS)

RIGHT OF WAY STAKING PROPOSED TO BE SET

SURVEY NOTES:

- ALL DIMENSIONS ARE MEASURED UNLESS OTHERWISE SPECIFIED.
- BEARING, DISTANCES, AND COORDINATES SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT) "GRID".
- ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND". TO OBTAIN GRID DISTANCES, DIVIDE GRID DISTANCES SHOWN BY THE COMBINATION FACTOR OF 0.99982904.
- AREAS SHOWN ON THIS PLAT ARE "GROUND".
- FIELD SURVEY COMPLETED ON MARCH 21, 2019.

STATE OF ILLINOIS )  
COUNTY OF )

THIS IS TO CERTIFY THAT I, MICHAEL L. KRISCH, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, KRISCH LAND SURVEYING, LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER \_\_\_\_\_) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 22, TOWNSHIP 39 NORTH, 12 RANGE EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT \_\_\_\_\_, ILLINOIS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2501  
LICENSE EXPIRATION DATE: NOVEMBER 30, 2020

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

**KRISCH LAND SURVEYING, LLC**  
P.O. BOX 929  
PLAINFIELD, IL 60544  
630-627-5589

PLAT OF HIGHWAYS  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
21st AVENUE

LIMITS: COUNTY: COOK  
SECTION: JOB NO.: R-55-001-97  
STA. 26+73.59 TO STA. 31+81.70  
SCALE: 1" = 30' SHEET 4 OF 5

BUREAU OF LAND ACQUISITION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196

REVISION DATE: / / REVISION MADE BY:



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DRAWN -	DMM, SFB	REVISED -
CHECKED -	JGG, MWV	REVISED -
DATE -	2-11-20	REVISED -

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

PLAT OF HIGHWAYS FOR PERMANENT EASEMENTS	
MUN. RTE. 3015	SECTION 16-0080-01-PV
COUNTY COOK	TOTAL SHEETS 102
SHEET NO. 4 OF 5 SHEETS	SHEET NO. 52
SCALE: NONE	TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-0080-01-PV	COOK	102	52
FIELD BOOK NO.:		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

FILE PROJECT NO. 120-19-00801

PART OF THE SW 1/4 OF SECTION 22, TWP. 39 N., R. 12 E. OF THE 3RD. P.M., IN COOK COUNTY, ILLINOIS.

PROJECT COORDINATES  
ILLINOIS STATE PLANE, EAST ZONE, NAD83 (2011)

POINT NUMBER	NORTHING	EASTING
533	1889456.0438	1115148.0537
534	1889469.5701	1115185.6025
535	1889390.9309	1115171.3479
536	1889367.6317	1115189.1745

LEGEND

- SECTION / QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING ACCESS CONTROL LINE
- PROPOSED ACCESS CONTROL LINE
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- EXISTING BUILDING

GRAPHIC SCALE  
0 10 20  
FEET  
SCALE: 1" = 30'

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.

- IRON PIPE OR ROD FOUND    ⊕ "MAG" NAIL SET
- CUT CROSS FOUND OR SET    ○ 5 / 8" REBAR SET
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 667101.02 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET

SURVEY NOTES:

- ALL DIMENSIONS ARE MEASURED UNLESS OTHERWISE SPECIFIED.
- BEARING, DISTANCES, AND COORDINATES SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT) "GRID".
- ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND". TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES SHOWN BY THE COMBINATION FACTOR OF \_\_\_\_\_
- AREAS SHOWN ON THIS PLAT ARE "GROUND".
- FIELD SURVEY COMPLETED ON MARCH 21, 2019.

STATE OF ILLINOIS )  
                                  )SS  
COUNTY OF )

THIS IS TO CERTIFY THAT I, MICHAEL L. KRICH, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, KRISCH LAND SURVEYING, LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER \_\_\_\_\_) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 22, TOWNSHIP 39 NORTH, 12 RANGE EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT \_\_\_\_\_, ILLINOIS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2501  
LICENSE EXPIRATION DATE: NOVEMBER 30, 2020

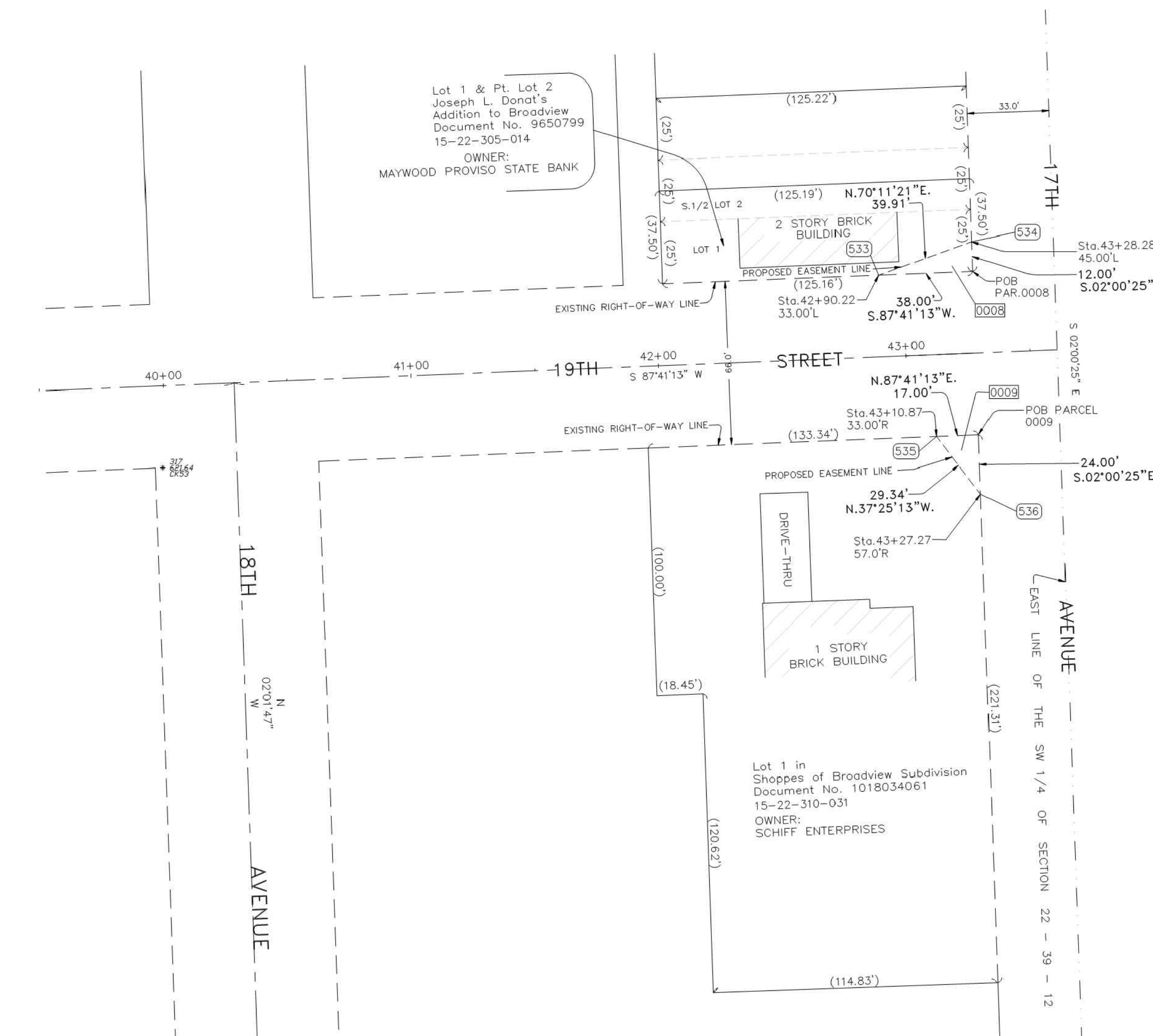
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

**KRISCH LAND SURVEYING, LLC**  
P.O. BOX 929  
PLAINFIELD, IL 60544  
630-627-5589

PLAT OF HIGHWAYS  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
21st AVENUE

LIMITS: COUNTY: COOK  
SECTION: JOB NO.:  
STA. 43+12.81 TO STA. 43+28.27  
SCALE: 1" = 30' SHEET 5 OF 5

BUREAU OF LAND ACQUISITION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196



PARCEL NUMBER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA		PARCEL INDEX NUMBER
					ACRES	SQUARE FEET	
0008	0.11	--	--	0.11	--	228	15-22-305-014
0009	0.62	--	--	0.62	--	204	15-22-310-031

REVISION DATE: 4/09/2019 REVISION MADE BY: MLK



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DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

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

**PLAT OF HIGHWAYS**  
**FOR PERMANENT EASEMENTS**

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	53
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

SCALE: NONE SHEET NO. 5 OF 5 SHEETS STA. TO STA.

FILE PROJECT NO. 120-19-00001

Drawing File: W:\Projects\_by\_Village\Broadview\12019008 -Broad Drive Stage II - Design\CAD\Site\Braga\_Dr\_Ph 2\_Sig II 40scaled.dwg Feb 11, 2020 - 2:54pm

**SIGNING NOTES:**

DESIGN: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 1975.

CONSTRUCTION: CURRENTS STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS, AND APPLICABLE SPECIAL PROVISIONS.

LOADING: FOR 80 MPH WIND VELOCITY WITH 30% GUST FACTOR, NORMAL TO SIGN.

SOIL PRESSURE: MINIMUM ALLOWABLE SOIL PRESSURE = 1.25 TSF.

MATERIALS: POSTS SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.29, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF ILLINOIS.

HARDWARE FOR ATTACHING SIGN PANELS TO POSTS SHALL BE CADMIUM OR ZINC COATED STEEL, STAINLESS STEEL, OR ALUMINUM, AND SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS: CADMIUM OR ZINC COATED STEEL: BOLTS, NUTS, AND WASHERS: ASTM A165, TYPE NS. ZINC COATED IN ACCORDANCE WITH AASHTO M-232 OR ASTM A164, TYPE GS.

STAINLESS STEEL: BOLTS: ASTM A193, CLASS I, GRADE B8, NUTS: ASTM A194, GRADE 8 OR 8F, WASHERS: ASTM A240, TYPE 302 OR 304.

ALUMINUM: BOLTS: ASTM B211 ALLOY 6061-T6 OR 2024-T4, NUTS: ASTM B211 ALLOY 6061-T6 OR 6262-T9, WASHERS: ASTM B209 ALCLAD 2024-T4.

**NOTE:** PER 2009 MUTCD SECTION 2D.43, PARAGRAPH 03, STREET NAME SIGNS ARE TO BE MIXED CASE FONT.

JOB-SITE SIGNING CODES AND SIZES			JOB-SITE SIGNING CODES AND SIZES		
SYMBOL	SIGN	CODE & SIZE	SYMBOL	SIGN	CODE & SIZE
		R1-1 30"x 30"			NEW STREET NAME SIGN AND NEW POST TO BE INSTALLED BY CONTRACTOR (1 EACH) (SIZE TO BE DETERMINED BY ENGINEER)
		R2-1 24"x 30"			NEW STREET NAME SIGN AND NEW POST TO BE INSTALLED BY CONTRACTOR (1 EACH) (SIZE TO BE DETERMINED BY ENGINEER)
		R7-1 12"x 18"			NEW STREET NAME SIGN AND NEW POST TO BE INSTALLED BY CONTRACTOR (1 EACH) (SIZE TO BE DETERMINED BY ENGINEER)
		R3-17 24"x 18"			NEW STREET NAME SIGN AND NEW POST TO BE INSTALLED BY CONTRACTOR (1 EACH) (SIZE TO BE DETERMINED BY ENGINEER)
		R5-1b 12"x 18"			NEW STREET NAME SIGN AND NEW POST TO BE INSTALLED BY CONTRACTOR (1 EACH) (SIZE TO BE DETERMINED BY ENGINEER)
		R9-3cP 12"x 12"			
		R3-17bP 24"x 8"			
		W1-1L 30"x 30"			
		W1-1R 30"x 30"			
		W1-7 48"x 24"			

SYMBOL	DESCRIPTION
	METAL POST - TYPE A



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DATE -	2-11-20	REVISED -

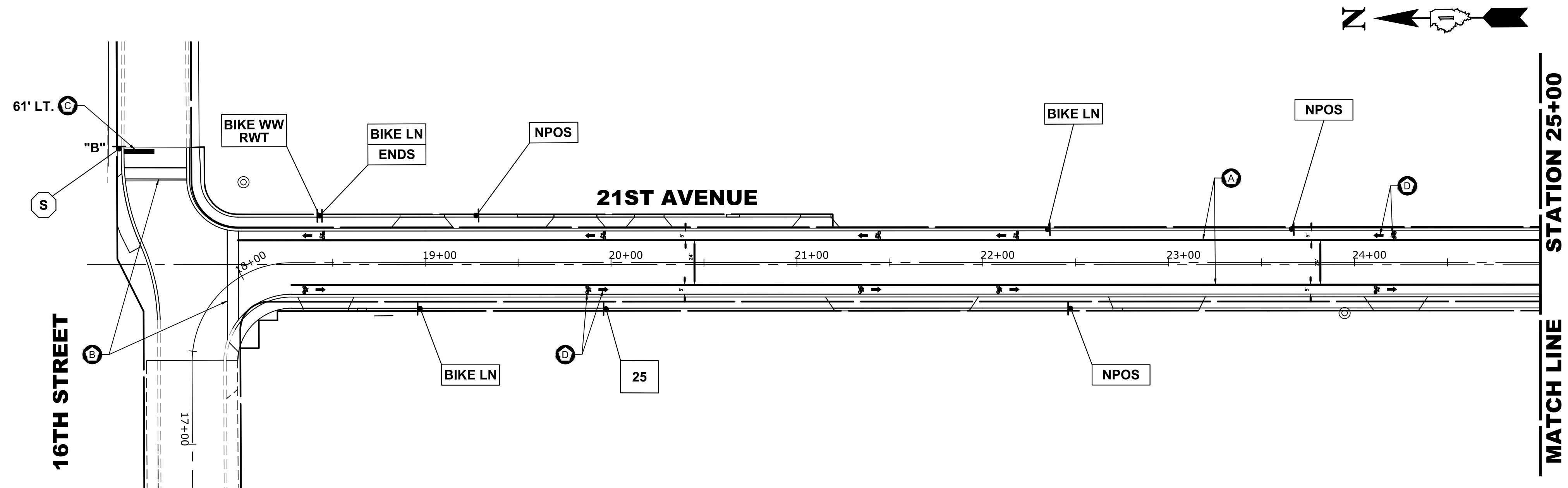
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN LEGENDS AND NOTES**

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

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	54
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-0081



**NOTE:**

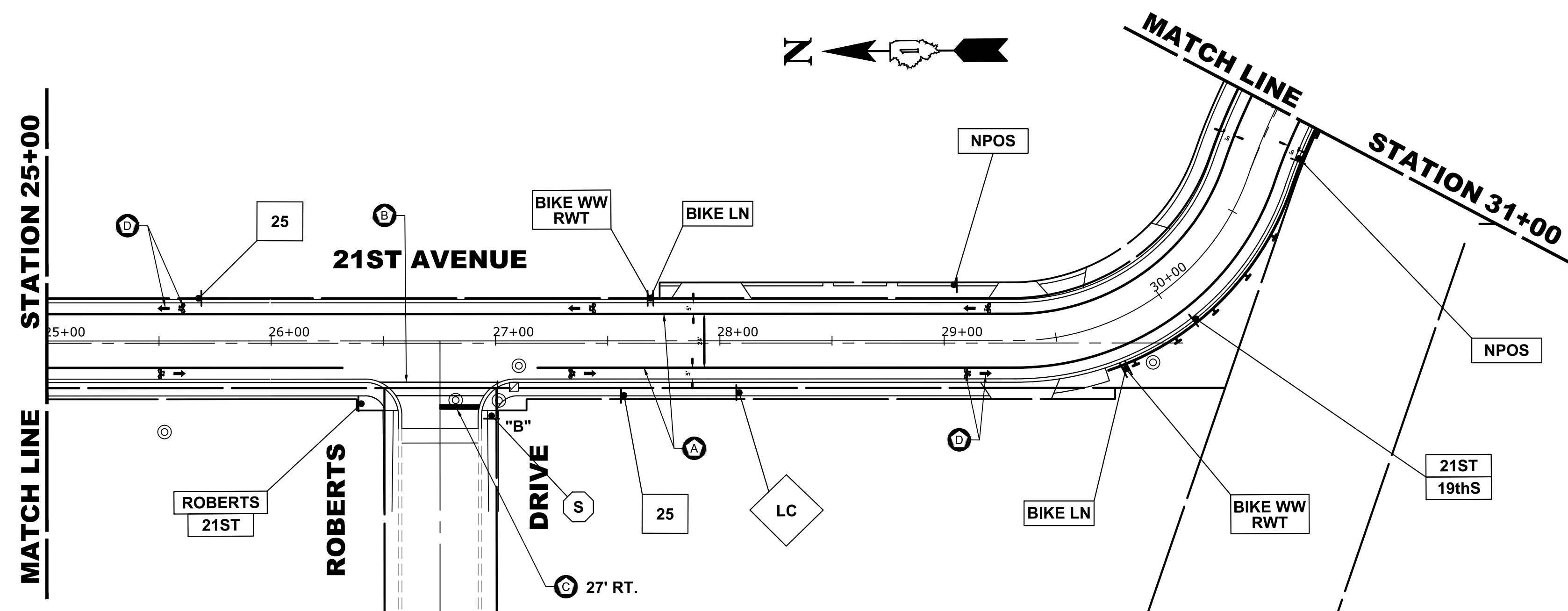
- VILLAGE MISCELLANEOUS (SPECIALTY) SIGNS ARE TO BE REMOVED BY THE THE CONTRACTOR PRIOR TO CONSTRUCTION. AS DESIGNATED BY ENGINEER, THE CONTRACTOR SHALL REINSTALL SIGNS AFTER COMPLETION OF PROJECT. REMOVAL AND NEW REPLACEMENT OF VILLAGE MISCELLANEOUS (SPECIALTY) SIGNS AND THEIR POSTS ARE TO BE DETERMINED BY THE ENGINEER. (COST IS TO BE INCLUDED IN THE "REMOVE AND RE-ERECT EXISTING SIGN " OR "SIGN PANEL - TYPE 1" AND "METAL POST - TYPE I" PAY ITEM)
- ALL POSTS TO BE TYPE A UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY LOCATIONS OF ALL SIGNAGE.

**ITEM DESCRIPTION**

- MODIFIED URETHANE PAVEMENT MARKING TYPE 1 - LINE 4", WHITE
- MODIFIED URETHANE PAVEMENT MARKING TYPE 1 - LINE 6", CROSS WALK, WHITE
- MODIFIED URETHANE PAVEMENT MARKING TYPE 1 - LINE 24", STOP BAR, WHITE
- MODIFIED URETHANE PAVEMENT MARKING TYPE 1 - LETTERS & SYMBOLS, WHITE

**SYMBOL**

- (A)
- (B)
- (C)
- (D)



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DESIGNED -	MWV	REVISED -
DRAWN -	DMM, SFB	REVISED -
CHECKED -	JGG, MWV	REVISED -
DATE -	2-11-20	REVISED -

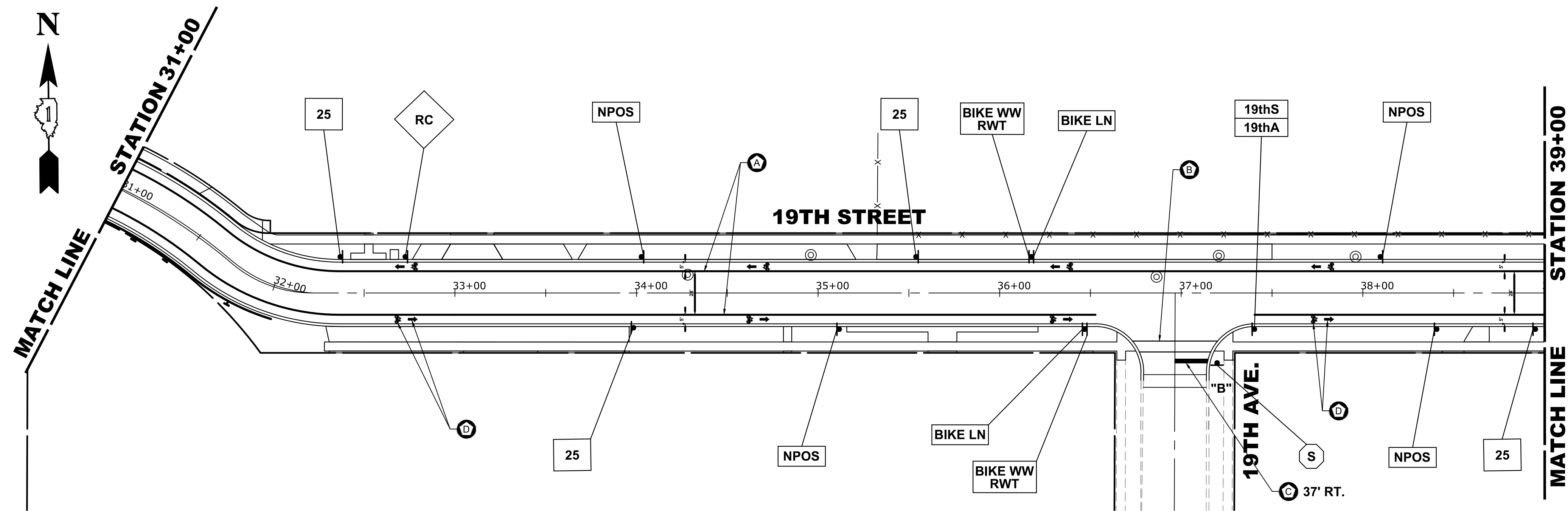
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING  
 AND SIGNING PLAN**

SCALE: 1" = 40'    SHEET NO. 1 OF 2 SHEETS    STA. 17+45    TO STA. 31+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	55
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

Drawing File: W:\Projects\_by\_Village\Brookview\12019008 -Brook Drive Stage II - Design\CAD\Site\Brogg\_Dr\_Ph 2\_Stg II 40scaled.dwg    Feb. 11, 2020 - 2:55pm  
 E.H.E. PROJECT NO. 120-19-00801



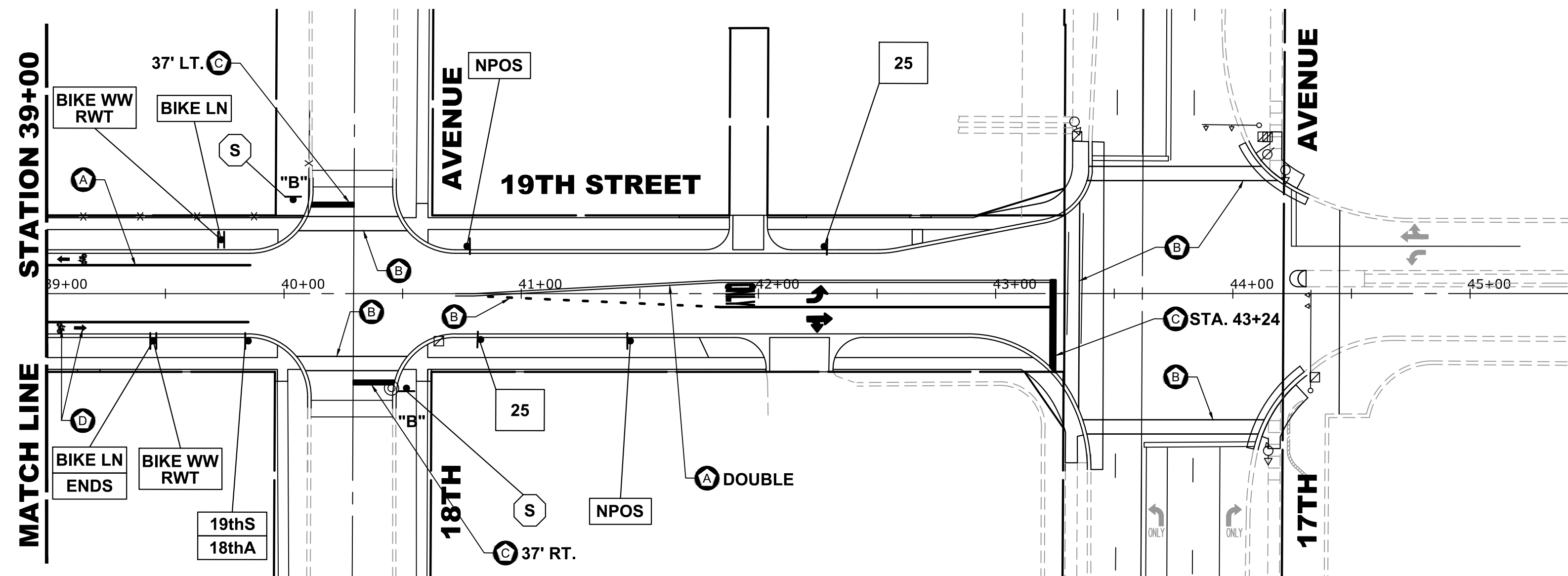
**NOTE:**

- VILLAGE MISCELLANEOUS (SPECIALTY) SIGNS ARE TO BE REMOVED BY THE THE CONTRACTOR PRIOR TO CONSTRUCTION. AS DESIGNATED BY ENGINEER, THE CONTRACTOR SHALL REINSTALL SIGNS AFTER COMPLETION OF PROJECT. REMOVAL AND NEW REPLACEMENT OF VILLAGE MISCELLANEOUS (SPECIALTY) SIGNS AND THEIR POSTS ARE TO BE DETERMINED BY THE ENGINEER. (COST IS TO BE INCLUDED IN THE "REMOVE AND RE-ERECT EXISTING SIGN " OR "SIGN PANEL - TYPE 1" AND "METAL POST - TYPE I" PAY ITEM)
- ALL POSTS TO BE TYPE A UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY LOCATIONS OF ALL SIGNAGE.

**ITEM DESCRIPTION**

- MODIFIED URETHANE PAVEMENT MARKING TYPE 1 - LINE 4", WHITE
- MODIFIED URETHANE PAVEMENT MARKING TYPE 1 - LINE 6", CROSS WALK, WHITE
- MODIFIED URETHANE PAVEMENT MARKING TYPE 1 - LINE 24", STOP BAR, WHITE
- MODIFIED URETHANE PAVEMENT MARKING TYPE 1 - LETTERS & SYMBOLS, WHITE

**SYMBOL**



Drawing File: W:\Projects\_by\_Village\Brownsview\12019008 -Browns Drive Stage II - Design\_CAD\Site\Browns\_Dr\_Ph 2\_Sig II 40scaled.dwg Feb 11, 2020 - 2:56pm



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CHECKED -	JGG, MWV	REVISED -
DATE -	2-11-20	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

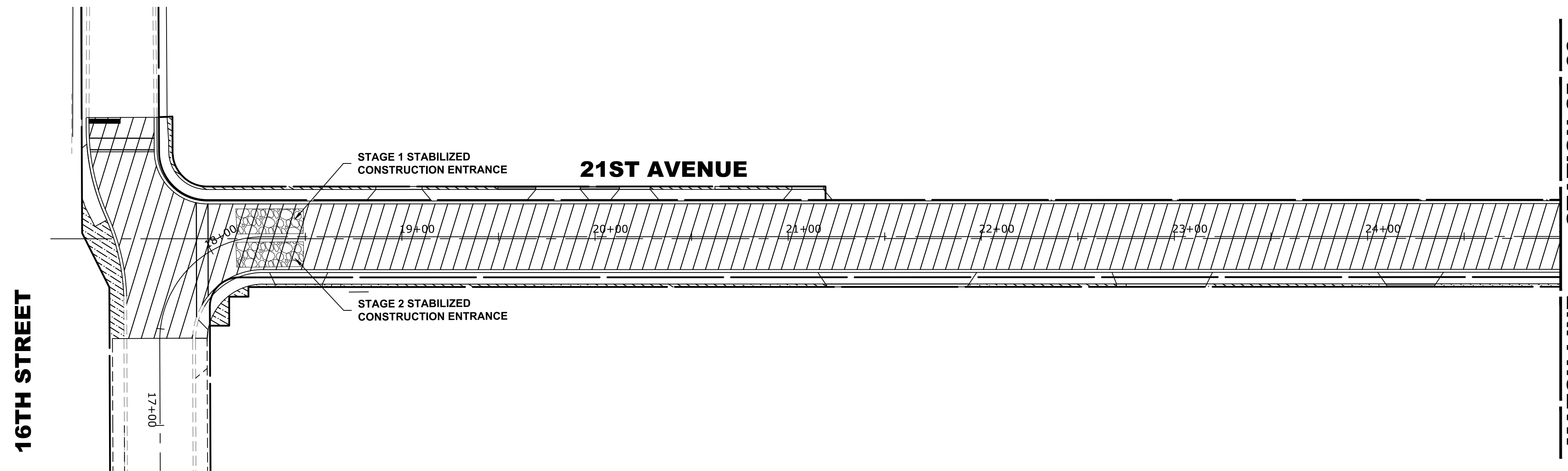
**PAVEMENT MARKING  
 AND SIGNING PLAN**

SCALE: 1" = 40' SHEET NO. 2 OF 2 SHEETS STA. 31+00 TO STA. 43+46

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	56
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801





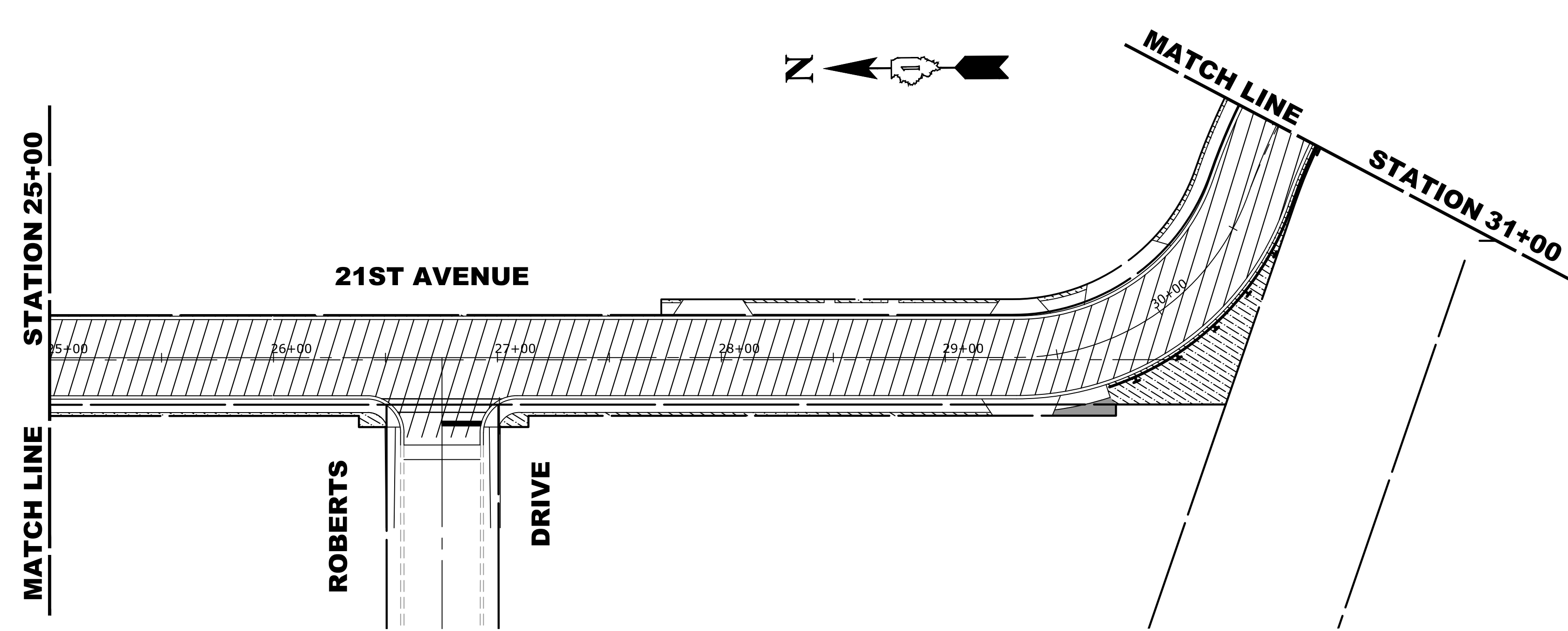
**LANDSCAPING NOTES**

**SODDING:**  
 ALL DISTURBED AREAS INDICATED ON CROSS SECTION OR LANDSCAPING PLANS TO BE SODDED, INCLUDING FERTILIZER NUTRIENTS\*, AND SUPPLEMENTAL WATERING WHICH IS TO BE USED AFTER THE INITIAL WATERING (AS SPECIFIED AND AS DIRECTED BY THE ENGINEER) AT THE RATE OF 10 GALLONS PER SQUARE YARD SODDING. SODDED SLOPES WHICH ARE 2:1 OR STEEPER SHALL BE STAKED. (PROVIDE A 3" STRIP AROUND CATCH BASINS IN SEEDING AREAS).

**FERTILIZER NUTRIENTS\* FOR SODDING:**  
 USE A FERTILIZER WITH A 1:1:1 RATIO PER ACRE:  
 60 LBS. NITROGEN FERTILIZER NUTRIENT  
 60 LBS POTASSIUM FERTILIZER NUTRIENT  
 120 LBS. PER ACRE

**4" TOP SOIL LAYER:**  
 SOIL SHALL BE SPREAD AS INDICATED ON THE TYPICAL CROSS SECTIONS.

A MINIMUM OF GRADING TO BE PERMITTED WITHIN AN APPROXIMATE RADIUS OF 6' FROM ALL TREES TO BE SAVED AS DETERMINED BY THE ENGINEER.



**LEGEND OF SYMBOLS**

SYMBOL	DESCRIPTION
	PROPOSED SODDED PARKWAY
	PROPOSED CONCRETE AREA
	PROPOSED 9" CONCRETE PAVEMENT AREA
	PROPOSED HOT-MIX ASPHALT AREA

Drawing File: W:\Projects\_by\_Village\Broomview\12019008 -Broom Drive Stage II - Design\CAD\Site\Broom\_Dr\_Ph 2\_Stg II\_40scaled.dwg Feb 11, 2020 - 2:57pm  
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DESIGNED - MWV	REVISED -
DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

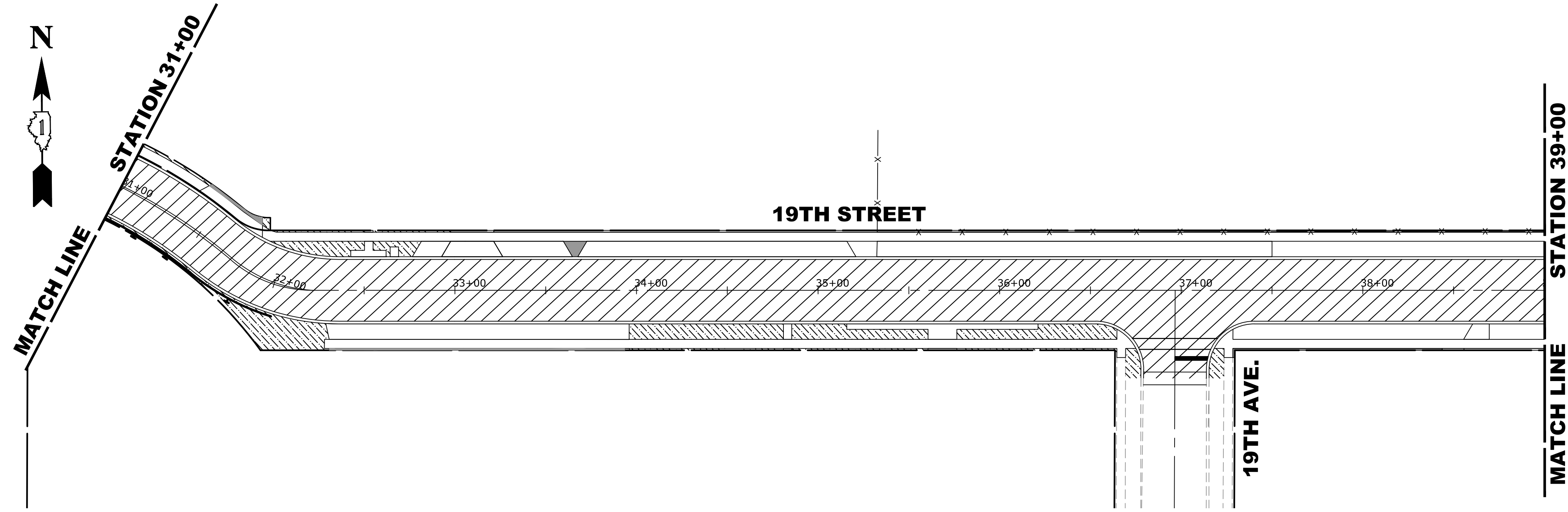
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CONCRETE AND LANDSCAPING PLAN**

SCALE: 1" = 40' SHEET NO. 1 OF 2 SHEETS STA. 17+45 TO STA. 31+00

MUN. RTE. 3015	SECTION 16-0080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 57
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801



**LANDSCAPING NOTES**

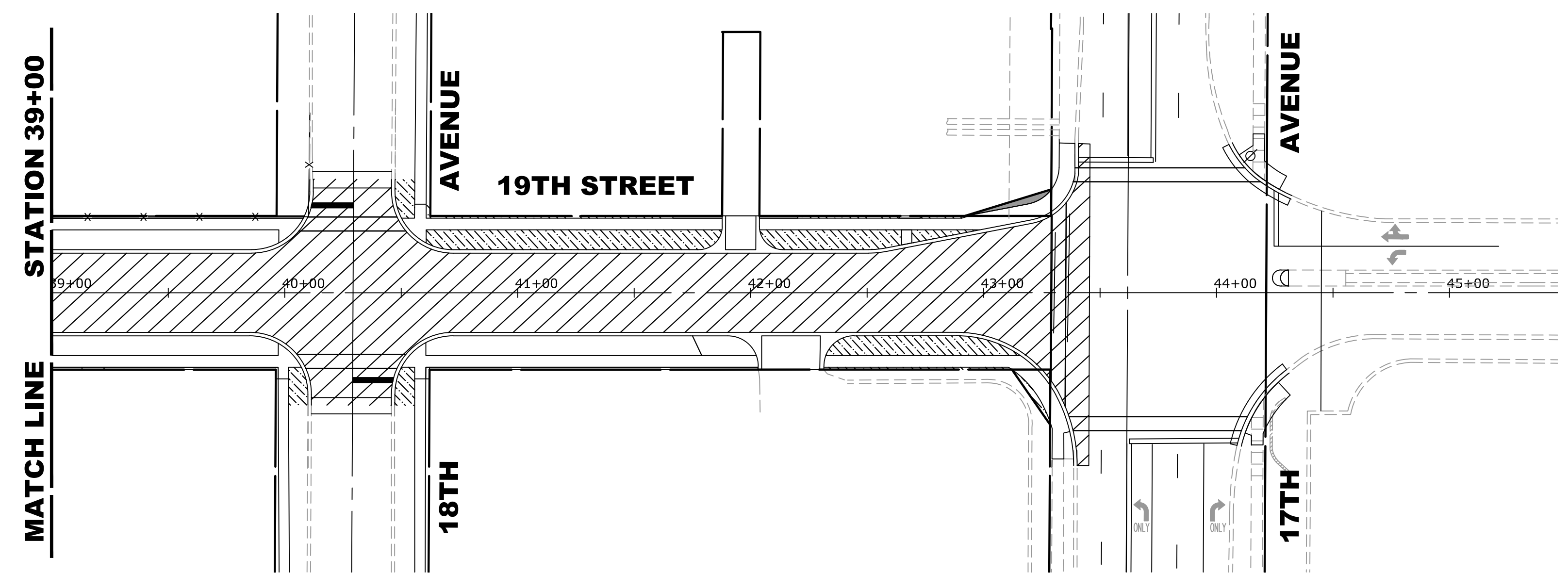
**SODDING:**  
 ALL DISTURBED AREAS INDICATED ON CROSS SECTION OR LANDSCAPING PLANS TO BE SODDED, INCLUDING FERTILIZER NUTRIENTS\*, AND SUPPLEMENTAL WATERING WHICH IS TO BE USED AFTER THE INITIAL WATERING (AS SPECIFIED AND AS DIRECTED BY THE ENGINEER) AT THE RATE OF 10 GALLONS PER SQUARE YARD SODDING. SODDED SLOPES WHICH ARE 2:1 OR STEEPER SHALL BE STAKED. (PROVIDE A 3" STRIP AROUND CATCH BASINS IN SEEDED AREAS).

**FERTILIZER NUTRIENTS\* FOR SODDING:**  
 USE A FERTILIZER WITH A 1:1:1 RATIO PER ACRE:  
 60 LBS. NITROGEN FERTILIZER NUTRIENT  
 60 LBS POTASSIUM FERTILIZER NUTRIENT

120 LBS. PER ACRE

**4" TOP SOIL LAYER:**  
 SOIL SHALL BE SPREAD AS INDICATED ON THE TYPICAL CROSS SECTIONS.

A MINIMUM OF GRADING TO BE PERMITTED WITHIN AN APPROXIMATE RADIUS OF 6' FROM ALL TREES TO BE SAVED AS DETERMINED BY THE ENGINEER.



**LEGEND OF SYMBOLS**

SYMBOL	DESCRIPTION
	PROPOSED SODDED PARKWAY
	PROPOSED CONCRETE AREA
	PROPOSED 9" CONCRETE PAVEMENT AREA
	PROPOSED HOT-MIX ASPHALT AREA

Drawing File: W:\Projects\_by\_Village\Brownsview\12019008 -Braga Drive Stage II - Design\CAD\Site\Braga\_DR\_Ph 2\_Sig II 40scaled.dwg Feb 11, 2020 - 2:57pm

**HANCOCK ENGINEERING**  
 100 Years of Excellence  
 Civil Engineers  
 Municipal Consultants  
 Established 1911  
 9933 Roosevelt Road  
 Westchester, IL 60154-2780  
 Phone: 708-865-0300  
 www.hancock.com

DESIGNED - MWV	REVISED -
DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

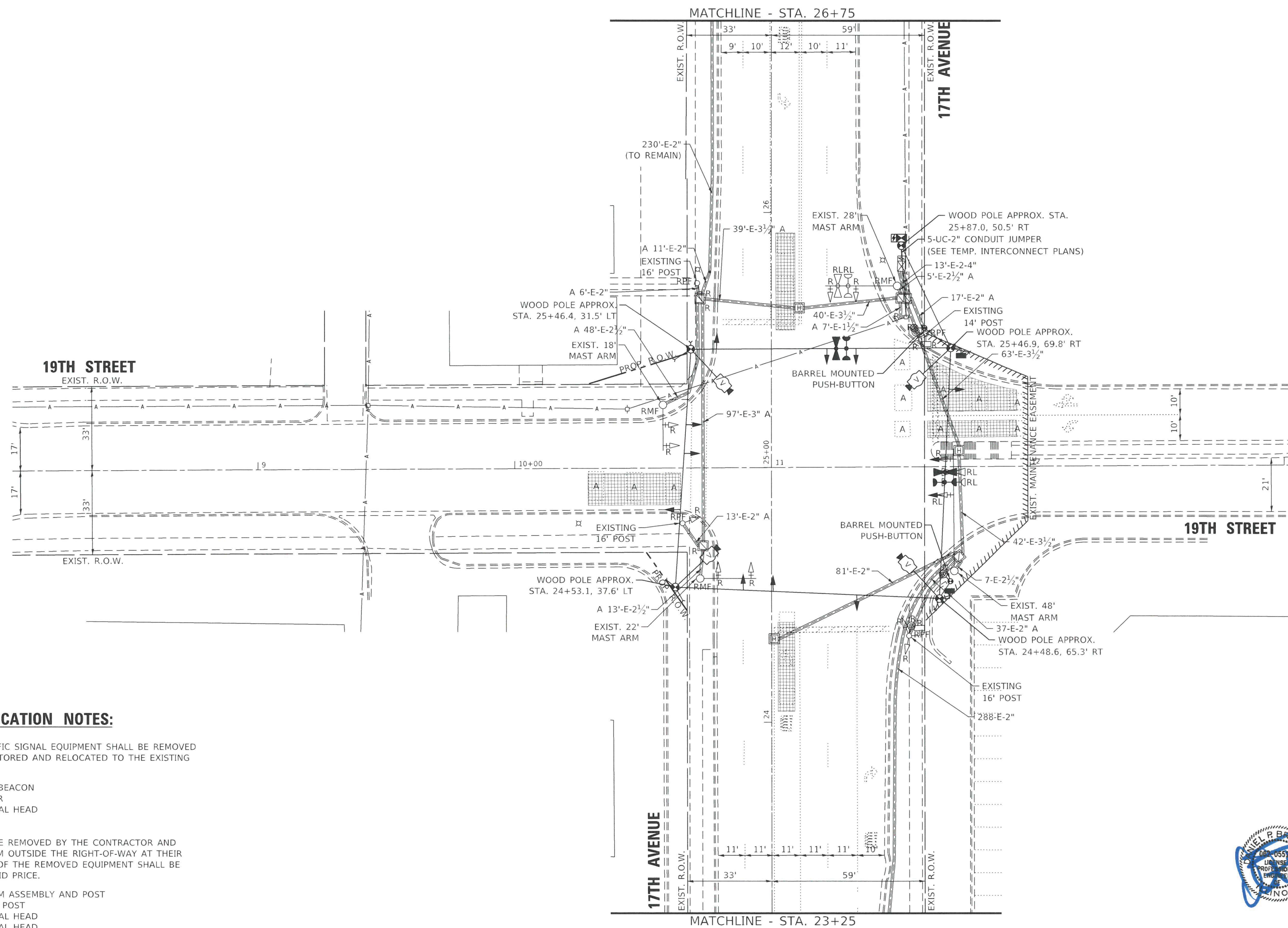
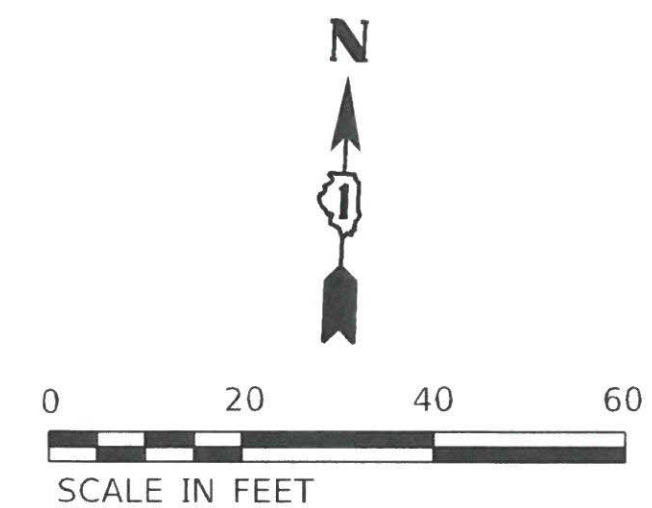
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CONCRETE AND LANDSCAPING PLAN**

SCALE: 1" = 40' SHEET NO. 2 OF 2 SHEETS STA. 31+00 TO STA. 43+46

MUN. RTE. 3015	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 58
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801



**REMOVAL AND RELOCATION NOTES:**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE EXISTING AND PROPOSED MAST ARMS:

- 2 EACH CONFIRMATION BEACON
- 2 EACH LIGHT DETECTOR
- 1 EACH 3-SECTION SIGNAL HEAD

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.

- 3 EACH STEEL MAST ARM ASSEMBLY AND POST
- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH 3-SECTION SIGNAL HEAD
- 8 EACH 5-SECTION SIGNAL HEAD
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 7 EACH TRAFFIC SIGNAL BACKPLATE
- 1 EACH SERVICE INSTALLATION

*Handwritten signature and date: EXP 11/15/21*

**GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 1**

**TS 22120  
ECON 27**

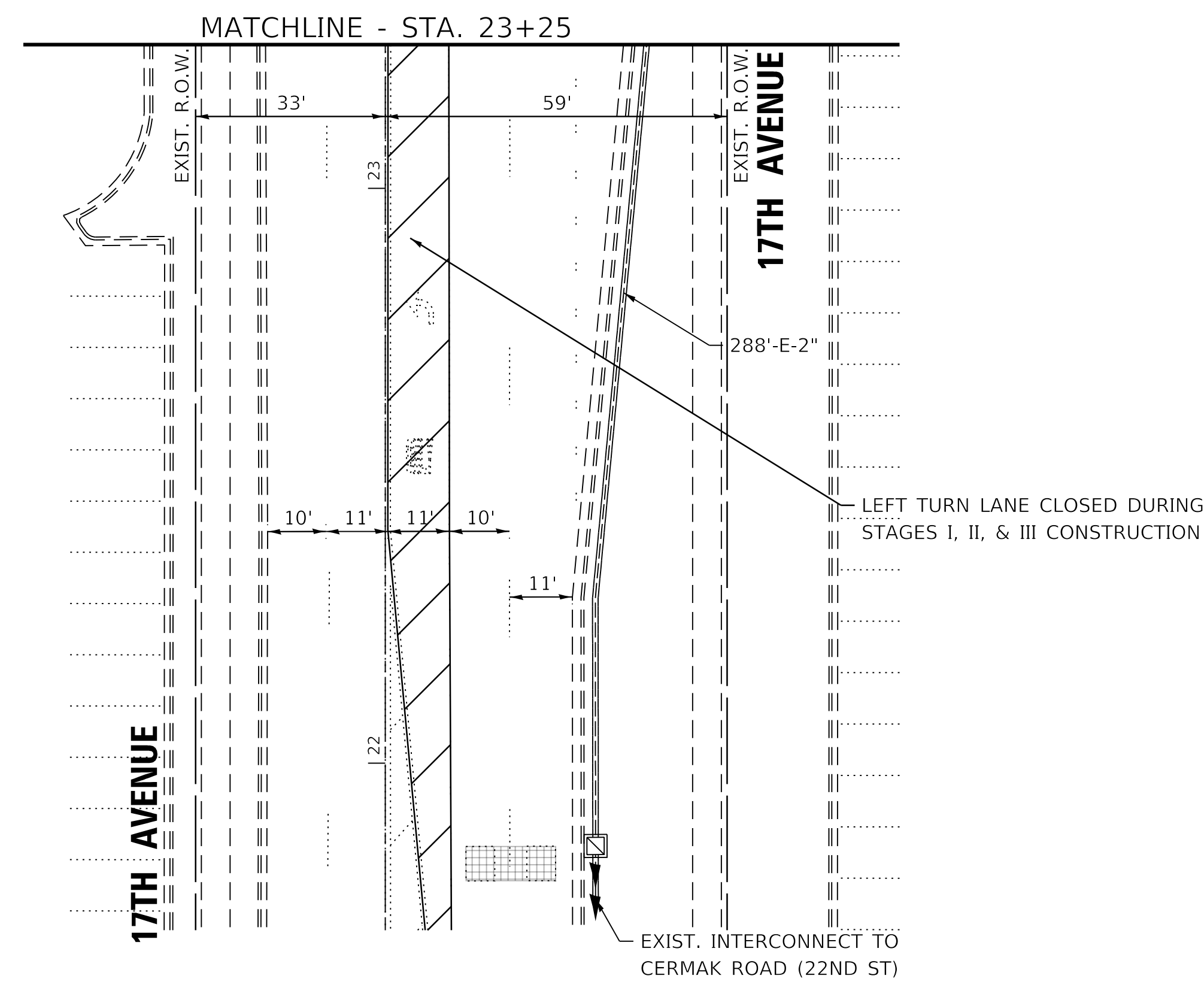
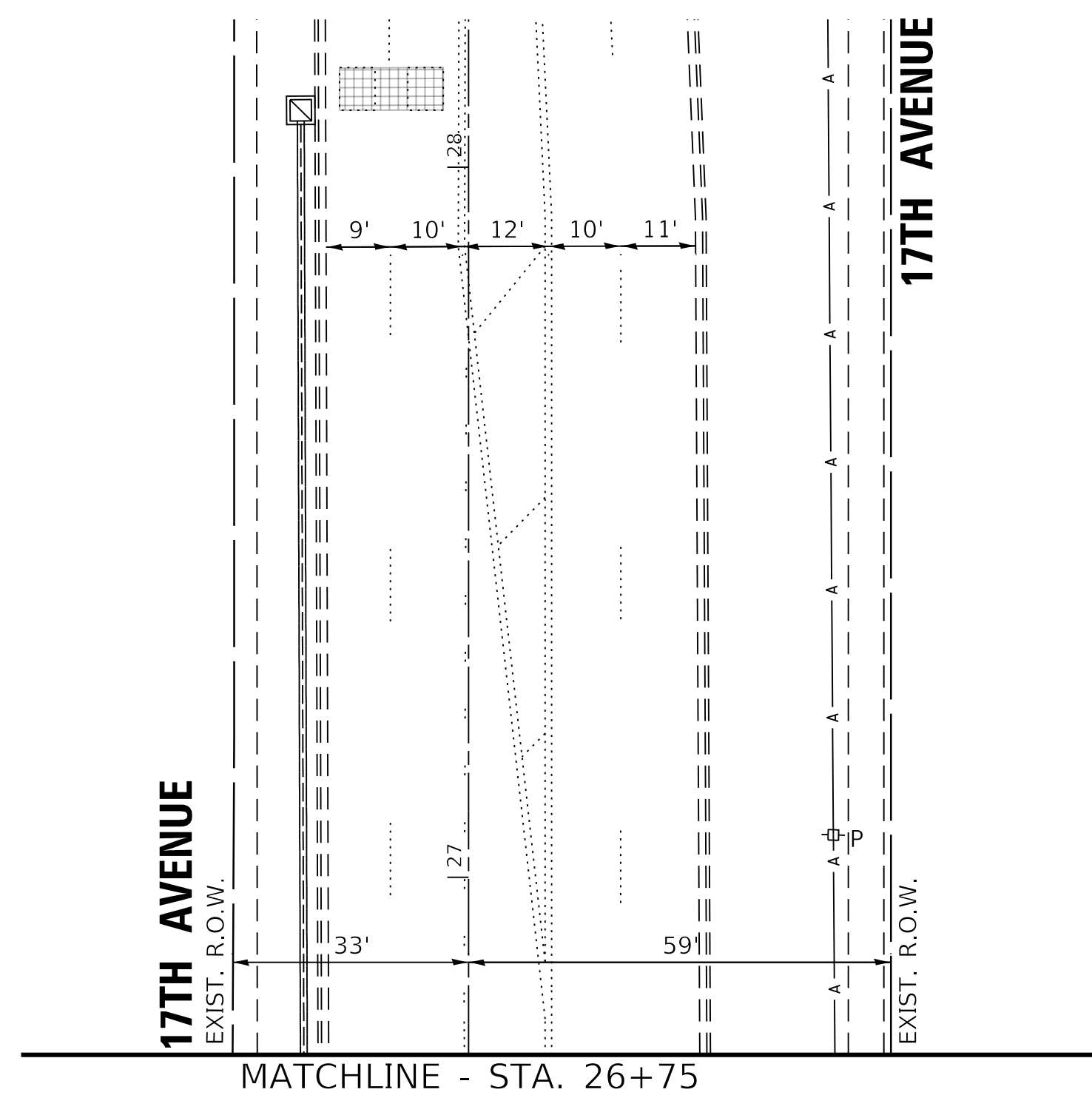
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PreStage - Sheet 1	PLOT DATE = 2/5/2020	DATE - 12/3/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PRE-STAGE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE  
EXISTING TRAFFIC SIGNAL EQUIPMENT - 19TH STREET & 17TH AVENUE**

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

F.A.U. RTE. 0004	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 59
ILLINOIS FED. AID PROJECT				CONTRACT NO. 61G35



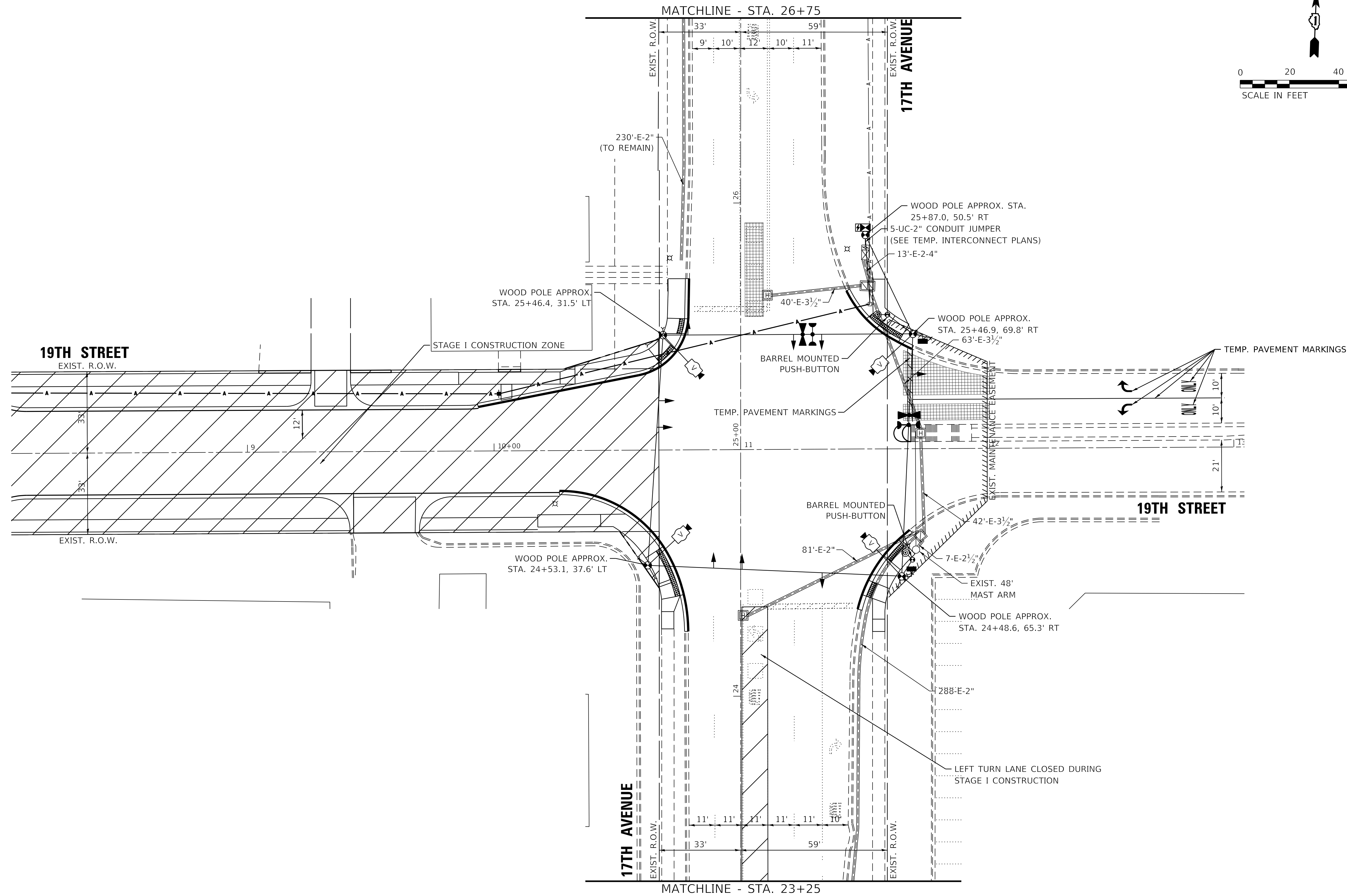
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5274.805	PLOT SCALE = 1:20	CHECKED - DPB	REVISED -
PreStage - Sheet 2	PLOT DATE = 2/5/2020	DATE - 12/3/2019	REVISED -

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

**PRE-STAGE, STAGE I, STAGE II, AND STAGE III TEMPORARY**  
**TRAFFIC SIGNAL INSTALLATION - 19TH STREET AND 17TH AVENUE**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0004	16-00080-01-PV	COOK	102	60
				CONTRACT NO. 61G35
		ILLINOIS	FED. AID PROJECT	



**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 3**

FILE NAME =	USER NAME = zwallsten
5274.805-Temp-TS-Sht.dgn	
5274.805	
Stage 1 - Sheet 1	

DESIGNED -	DPB
DRAWN -	ZCW
CHECKED -	DPB
DATE -	12/3/2019

REVISED -	
REVISED -	
REVISED -	
REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

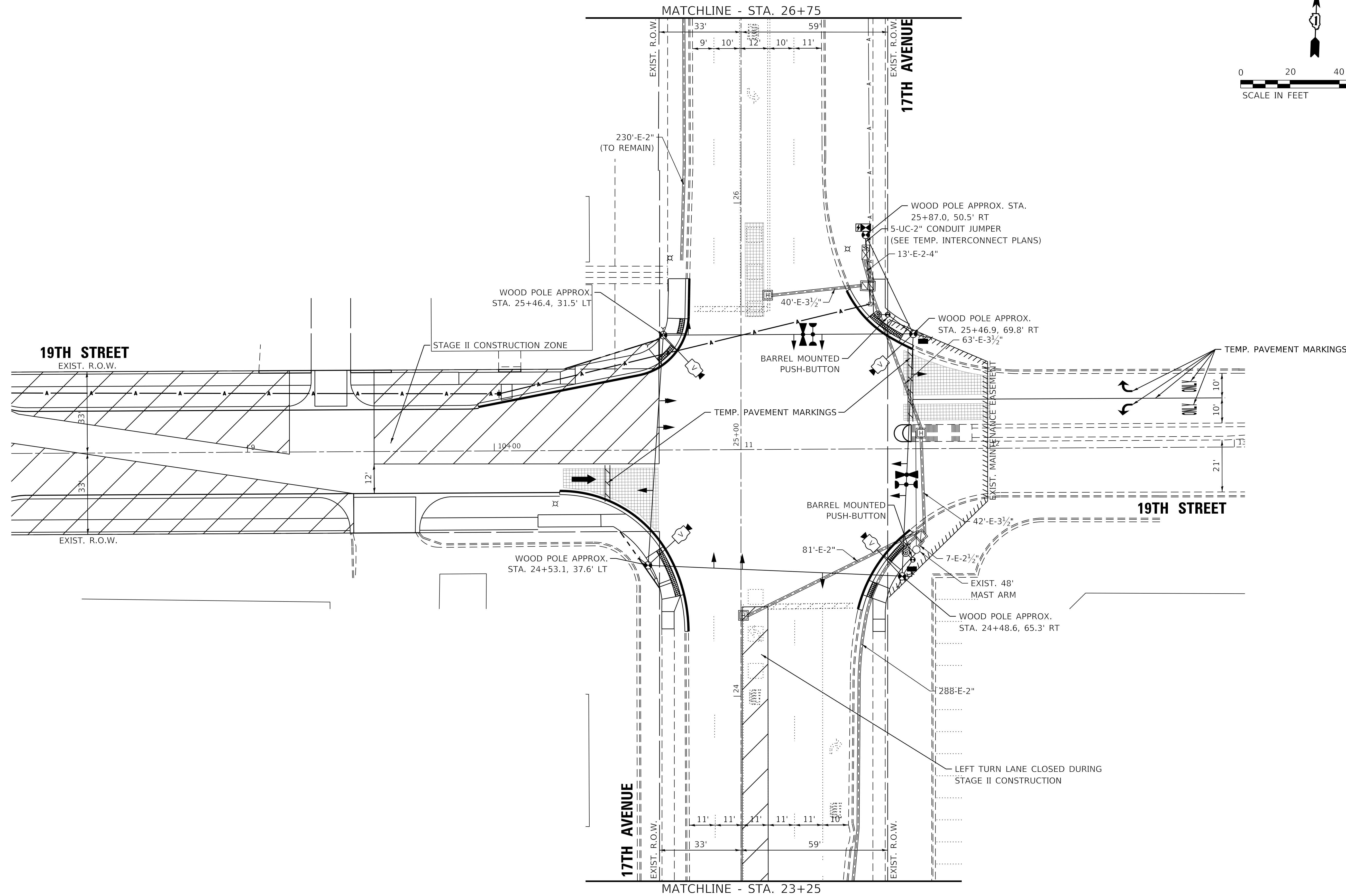
**STAGE I TEMPORARY TRAFFIC SIGNAL INSTALLATION  
19TH STREET AND 17TH AVENUE**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0004	16-00080-01-PV	COOK	102	61
ILLINOIS			FED. AID PROJECT	

**TS 22120  
ECON 27**

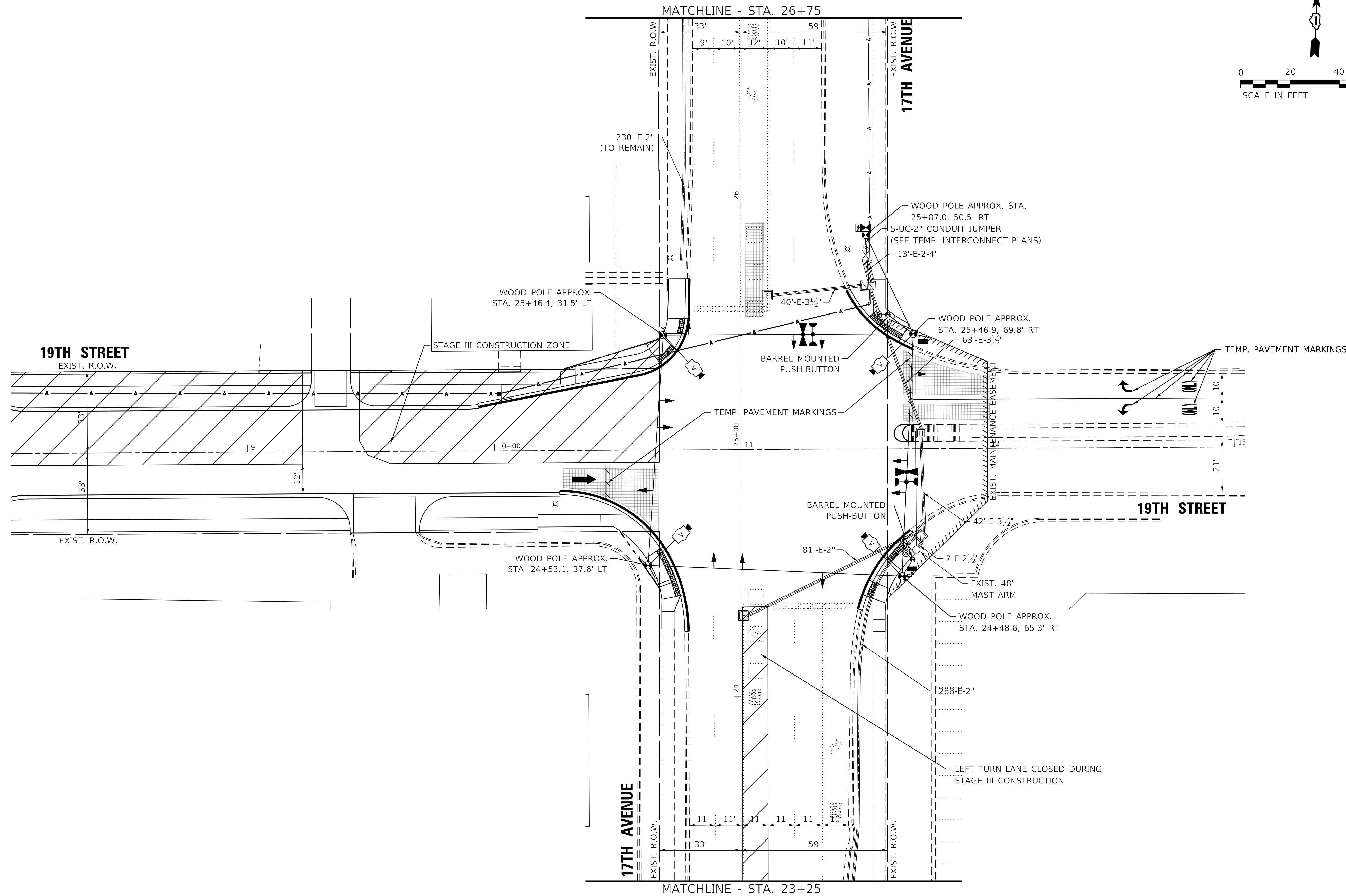
CONTRACT NO. 61G35



**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 4**

**TS 22120**  
**ECON 27**

FILE NAME = 5274.805-Temp-TS-Sht.dgn 5274.805 Stage II - Sheet 1	USER NAME = zwallsten	DESIGNED - DPB DRAWN - ZCW	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE II TEMPORARY TRAFFIC SIGNAL INSTALLATION</b> <b>19TH STREET AND 17TH AVENUE</b>			F.A.U. RTE. 0004	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 62
	PLOT SCALE = 1:20 PLOT DATE = 2/5/2020	CHECKED - DPB DATE - 12/3/2019	SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT	CONTRACT NO. 61G35						



**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 5**

**TS 22120  
ECON 27**

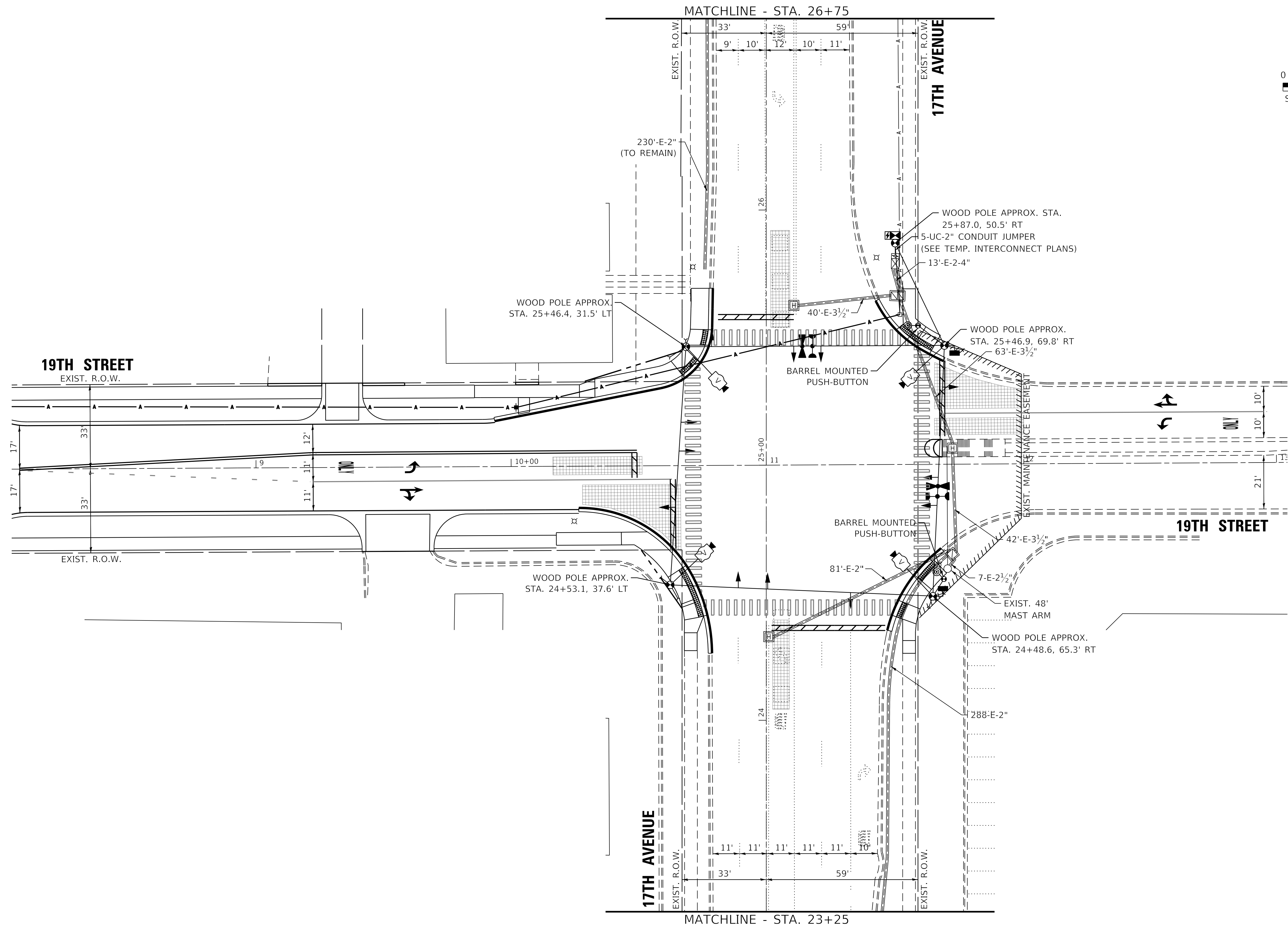
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5274.805		CHECKED - DPB	REVISED -
Stage III - Sheet 1		DATE - 12/3/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE III TEMPORARY TRAFFIC SIGNAL INSTALLATION  
19TH STREET AND 17TH AVENUE**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0004	16-00080-01-PV	COOK	102	63
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G35	



**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 6**

**TS 22120  
ECON 27**

FILE NAME =	USER NAME = zwallsten	DESIGNED - DPB	REVISED -
5274.805-Temp-TS-Sht.dgn		DRAWN - ZCW	REVISED -
5274.805		CHECKED - DPB	REVISED -
Stage IV - Sheet 1		DATE - 12/3/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE IV TEMPORARY TRAFFIC SIGNAL INSTALLATION  
19TH STREET AND 17TH AVENUE**

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

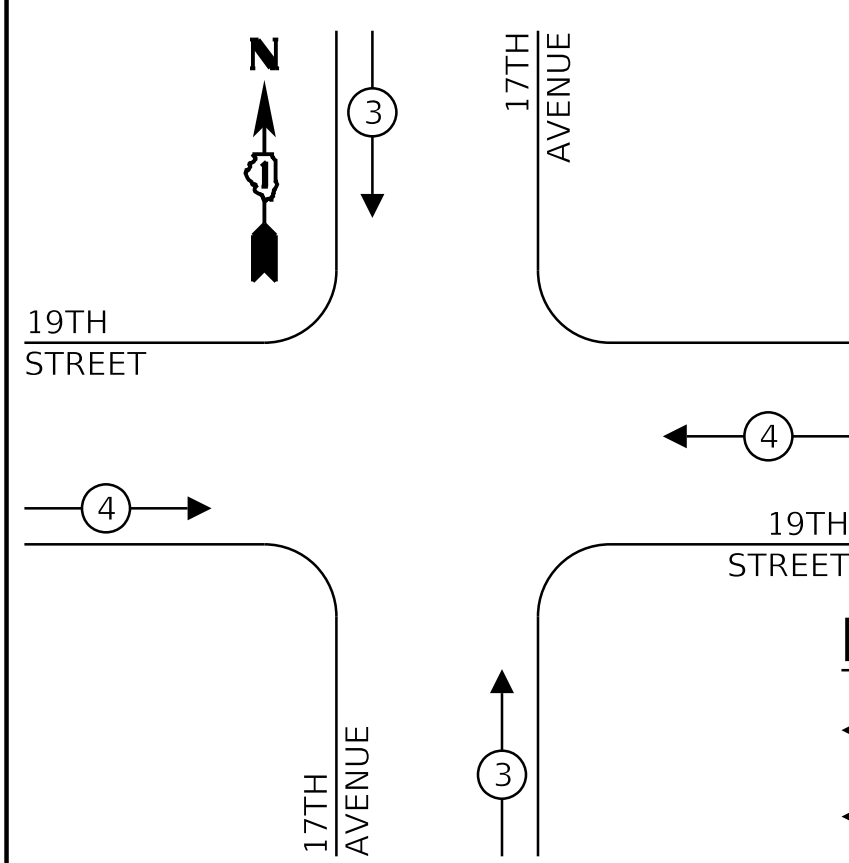
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0004	16-00080-01-PV	COOK	102	64
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G35	





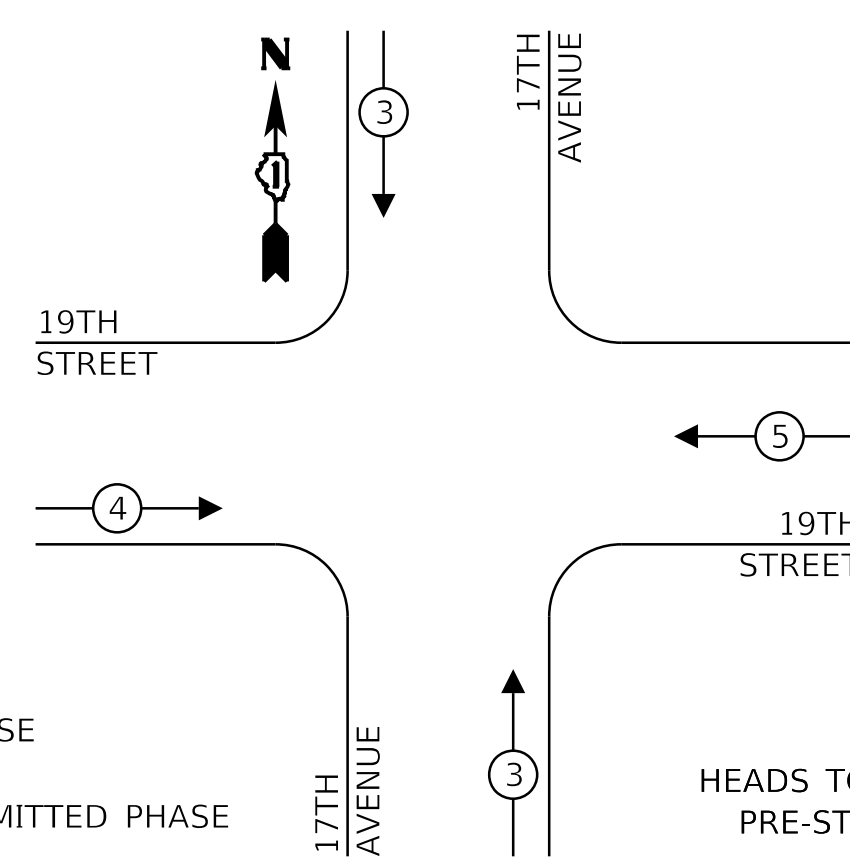
**TEMPORARY EMERGENCY**

**VEHICLE PREEMPTION  
SEQUENCE PRE-STAGE  
AND STAGE IV**



**TEMPORARY EMERGENCY**

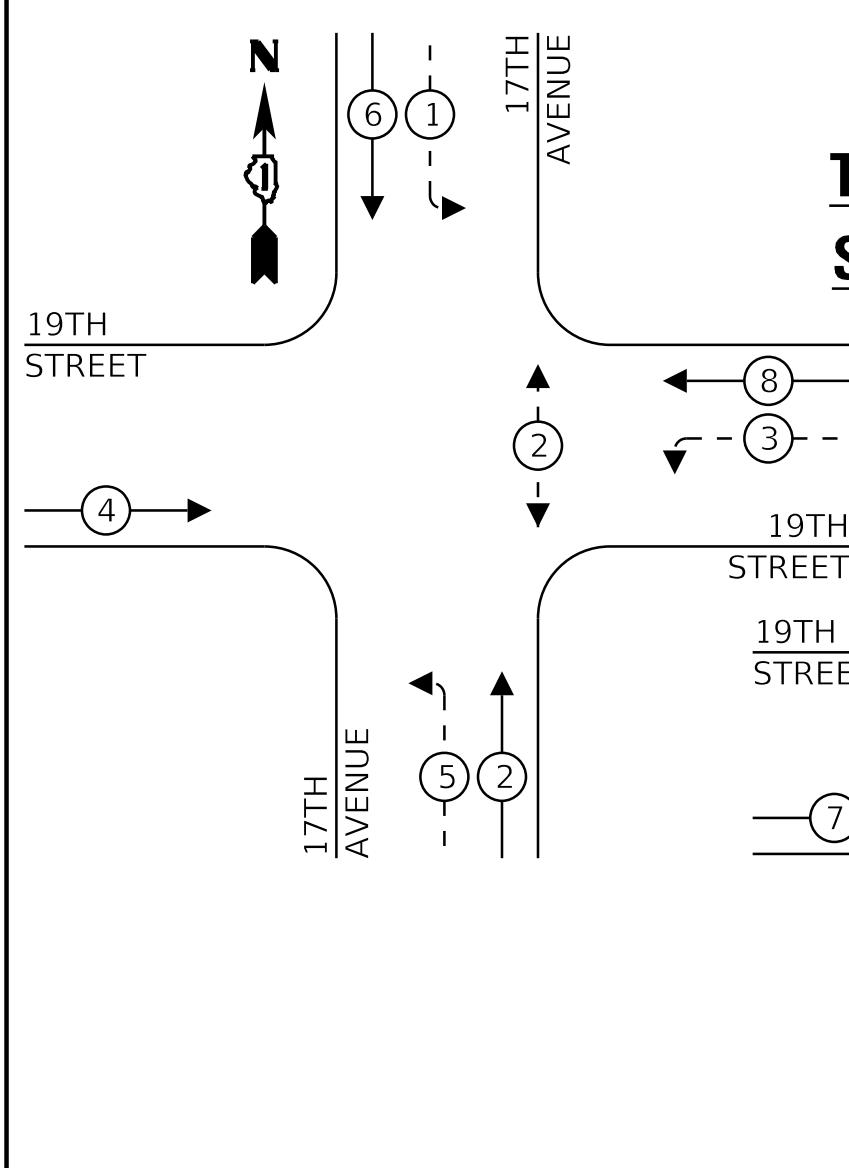
**VEHICLE PREEMPTION  
SEQUENCE  
STAGES I, II, & III**



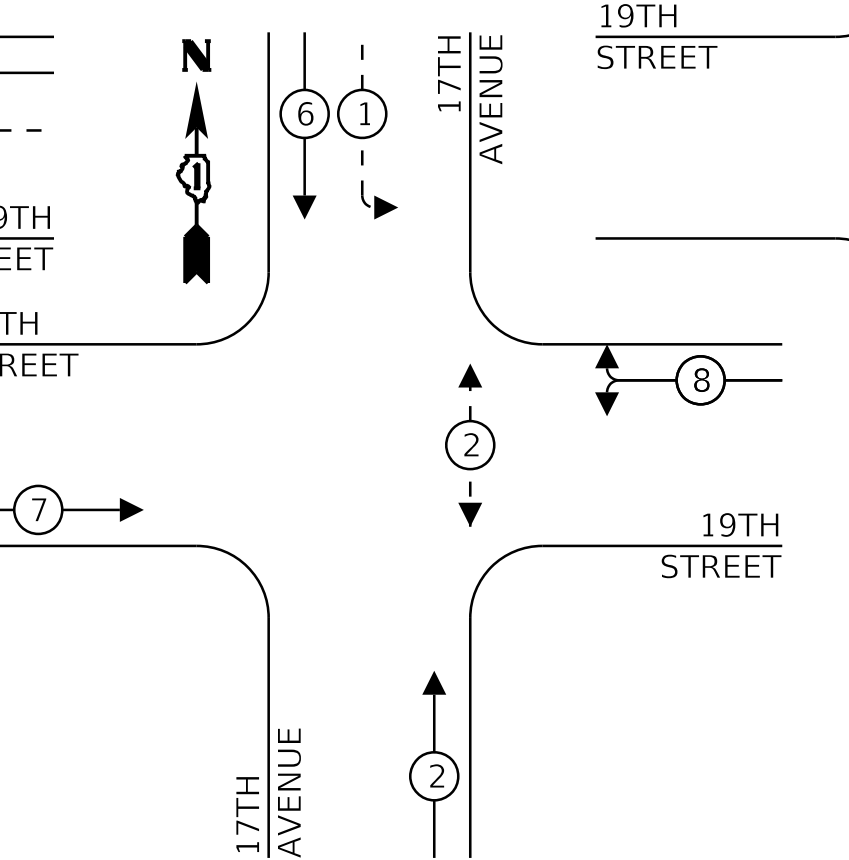
**LEGEND:**

- ← (⊙) ← PROTECTED PHASE
- ← (⊙) ← PROTECTED/PERMITTED PHASE
- ← (⊙) ← PEDESTRIAN PHASE
- ← (⊙) ← OL OVERLAP

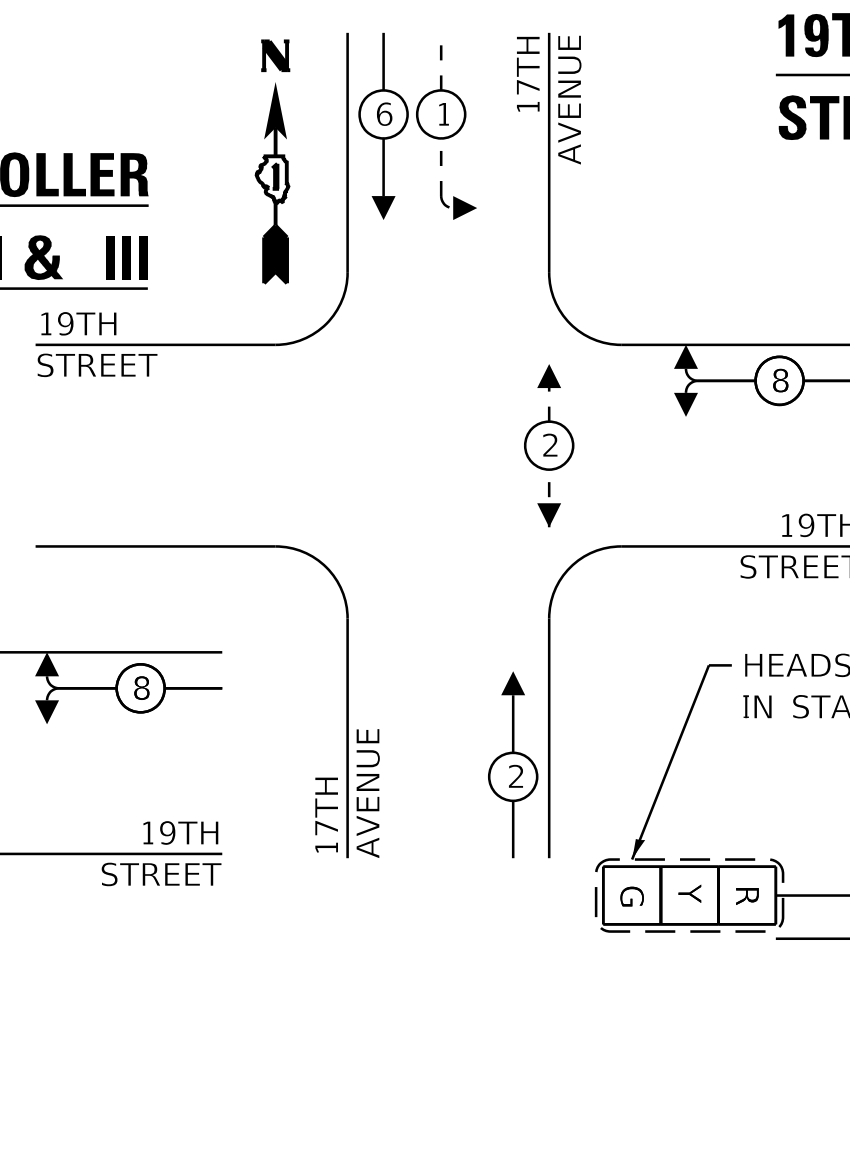
**TEMPORARY CONTROLLER  
SEQUENCE PRE-STAGE**



**TEMPORARY CONTROLLER  
SEQUENCE STAGE II & III**



**TEMPORARY CONTROLLER  
SEQUENCE STAGE I**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

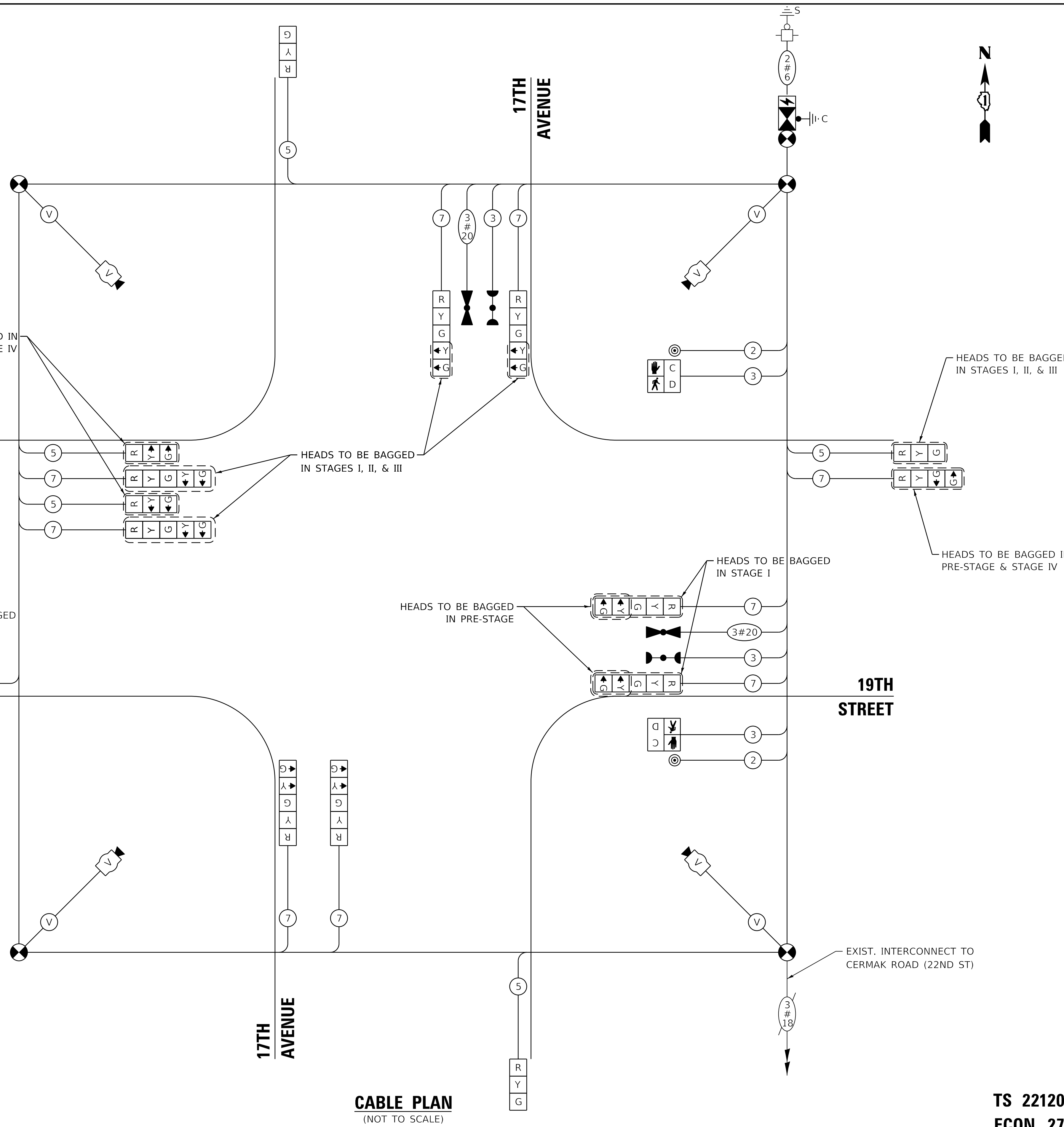
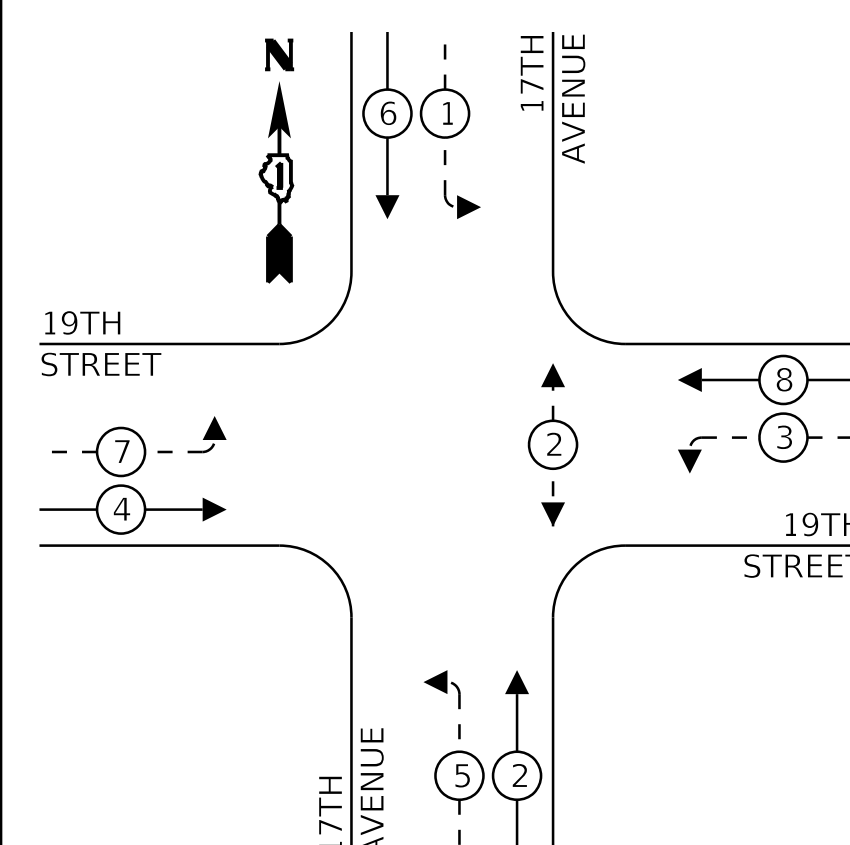
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66
(YELLOW)	12	20	5	12
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	8	10	10	8
PED. SIGNAL	2	20	100	40
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	1	150	100	150
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
TOTAL =				471.2

ENERGY COSTS TO:

VILLAGE OF BROADVIEW  
2350 SOUTH 25TH AVENUE  
BROADVIEW, IL 60155

ENERGY SUPPLY: CONTACT: -  
PHONE: -  
COMPANY: COM-ED  
ACCOUNT NUMBER: -

**TEMPORARY CONTROLLER  
SEQUENCE STAGE IV**



**CABLE PLAN  
(NOT TO SCALE)**

**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 7**

FILE NAME =	USER NAME = zwallsten	DESIGNED - DPB	REVISED -
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Default		DATE - 12/3/2019	REVISED -

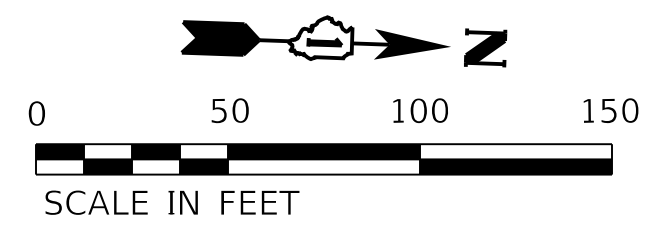
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
19TH STREET AND 17TH AVENUE**

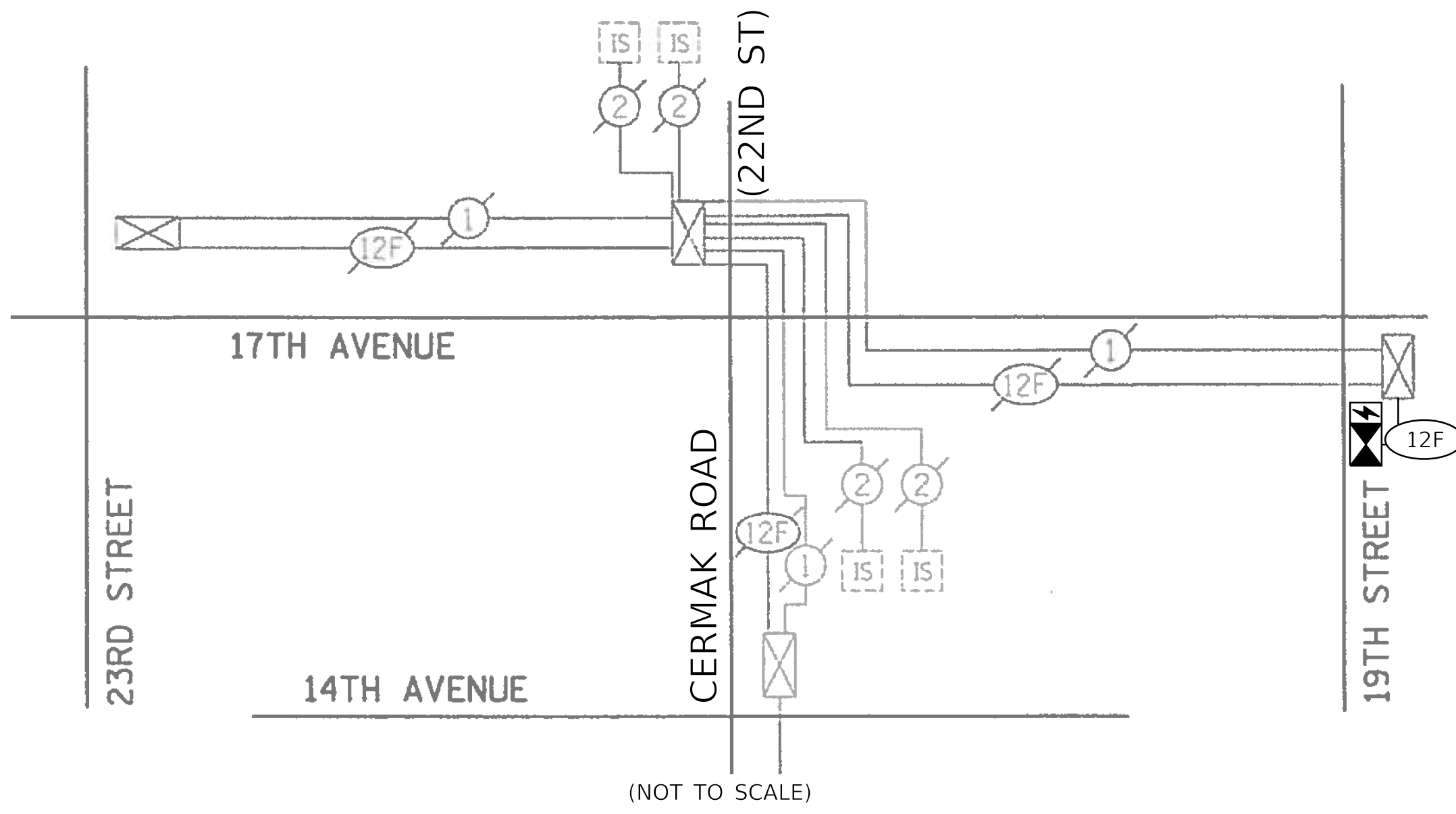
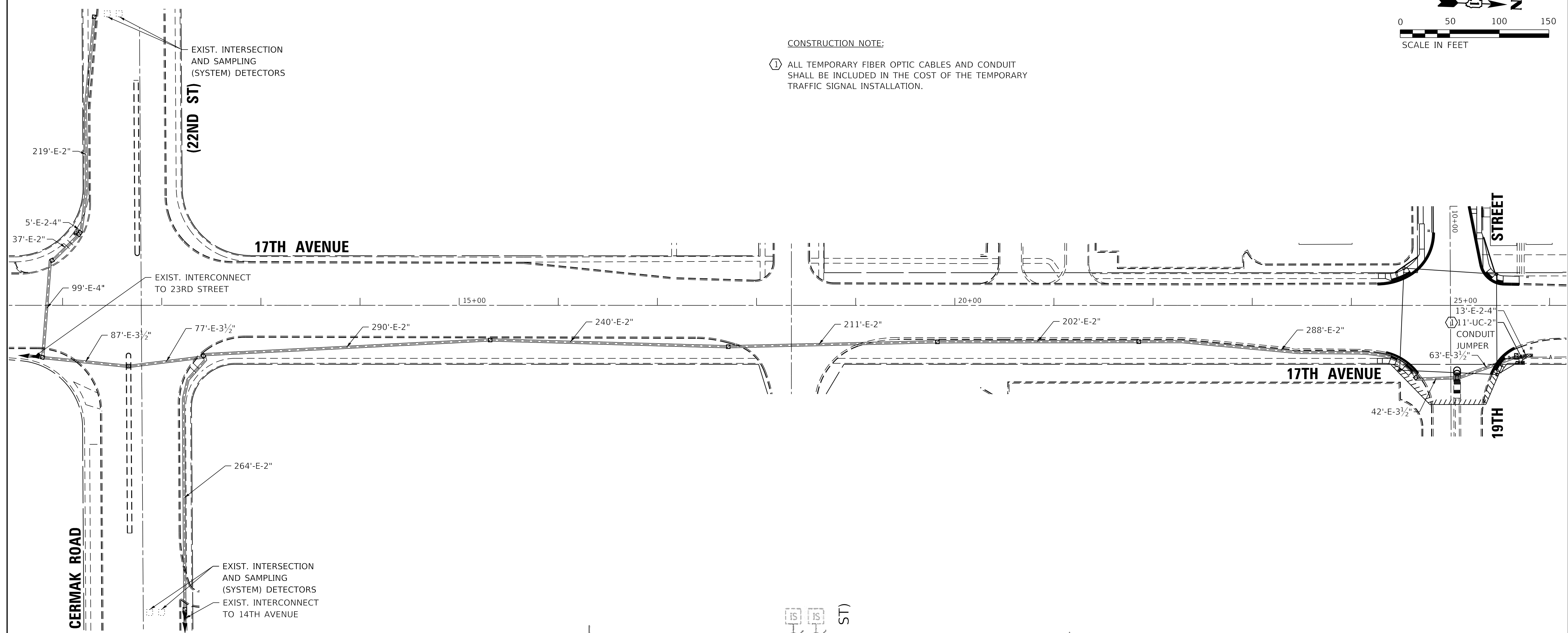
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0004	16-00080-01-PV	COOK	102	65
CONTRACT NO. 61G35				
ILLINOIS FED. AID PROJECT				

**TS 22120  
ECON 27**



CONSTRUCTION NOTE:  
 ① ALL TEMPORARY FIBER OPTIC CABLES AND CONDUIT SHALL BE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.



**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 8**

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Temp Interconnect	PLOT DATE = 2/5/2020	CHECKED - DPB	REVISED -
		DATE - 12/3/2019	REVISED -

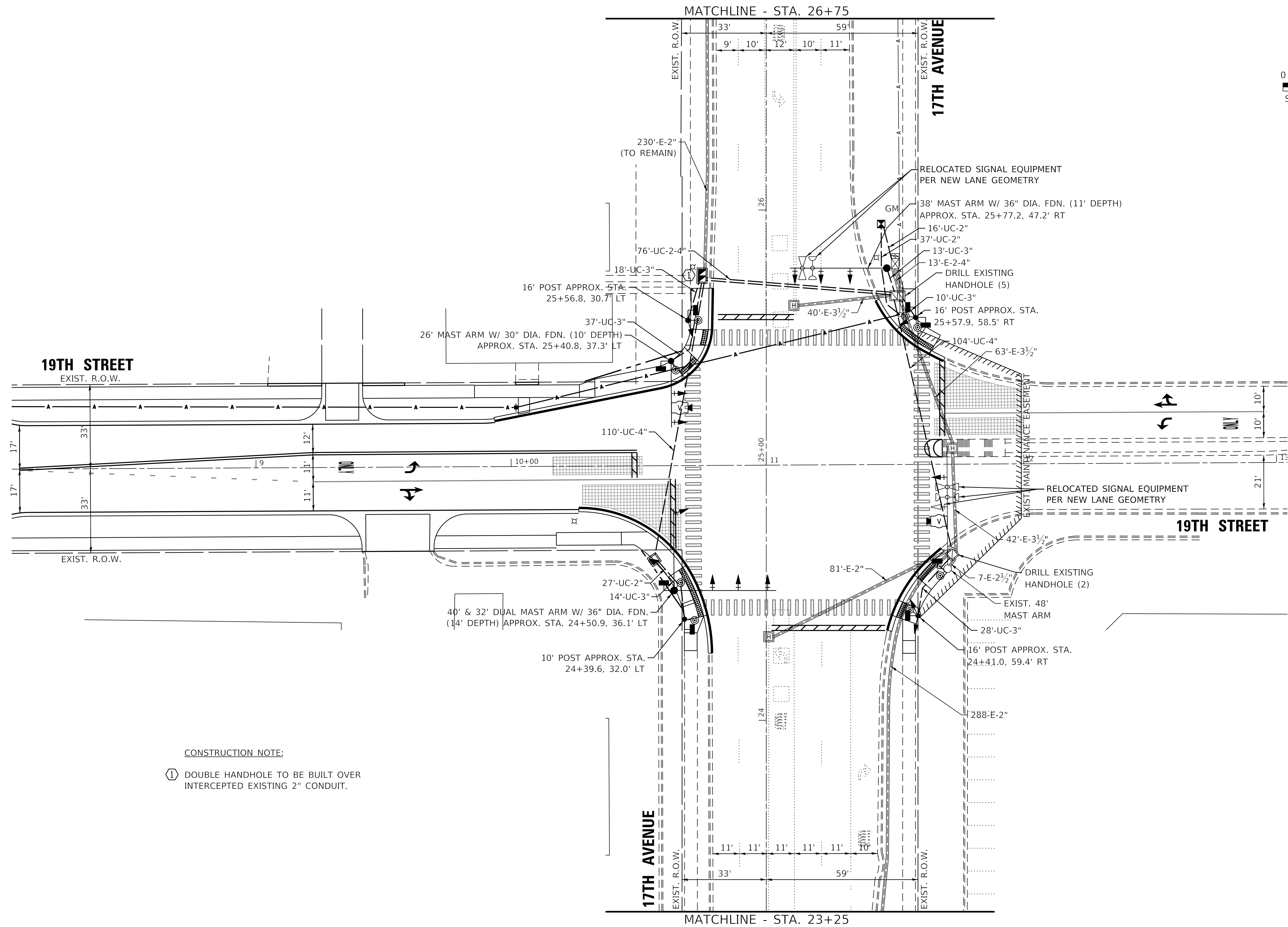
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN AND SCHEMATIC -  
 19TH STREET FROM 17TH AVENUE TO CERMAK ROAD (22ND ST)**

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

F.A.U. RTE. 0004	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 66
CONTRACT NO. 61G35				
ILLINOIS FED. AID PROJECT				

**ECON 27**



CONSTRUCTION NOTE:  
 ① DOUBLE HANDHOLE TO BE BUILT OVER INTERCEPTED EXISTING 2" CONDUIT.

**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 9**

**TS 22120  
ECON 27**

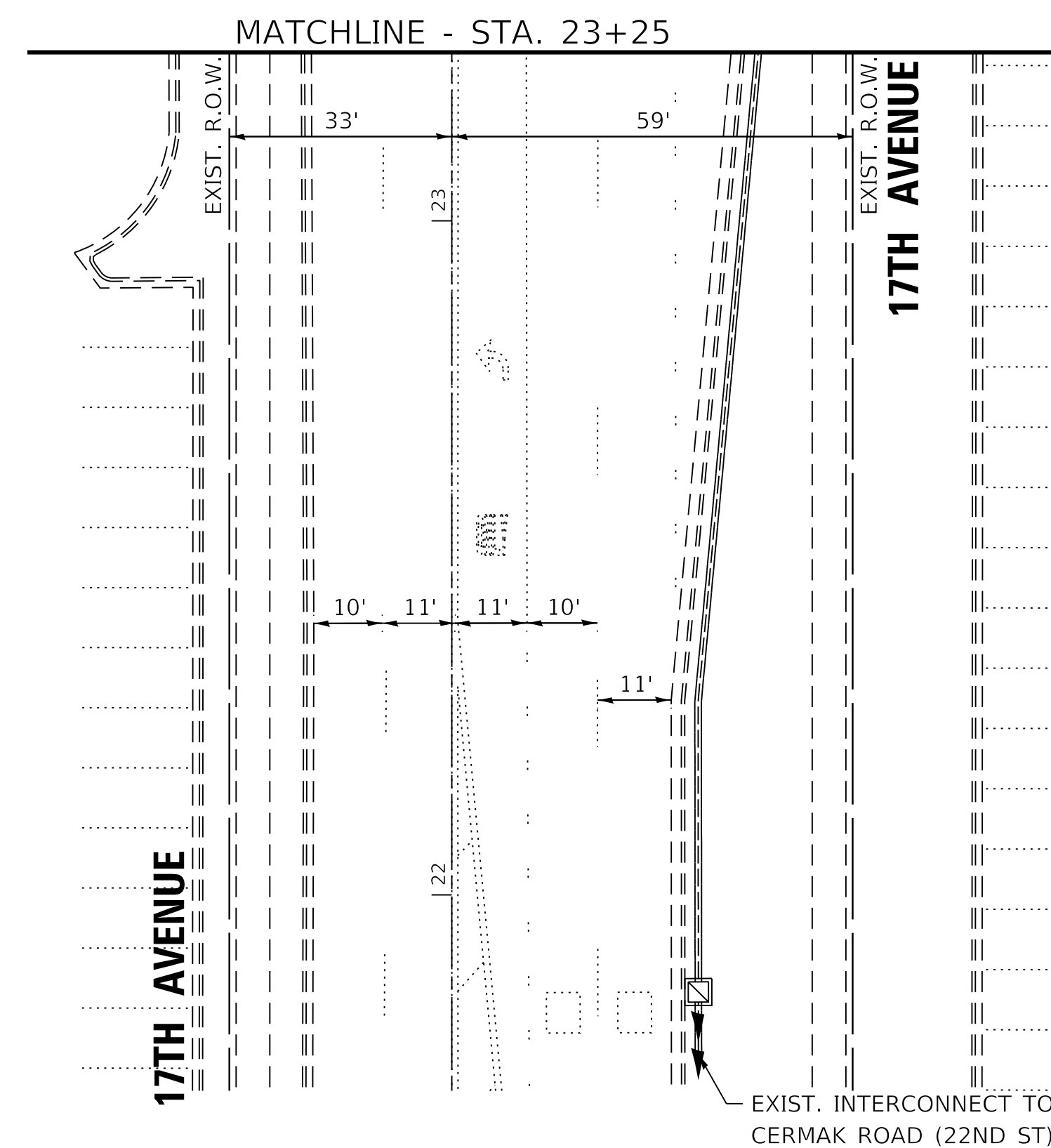
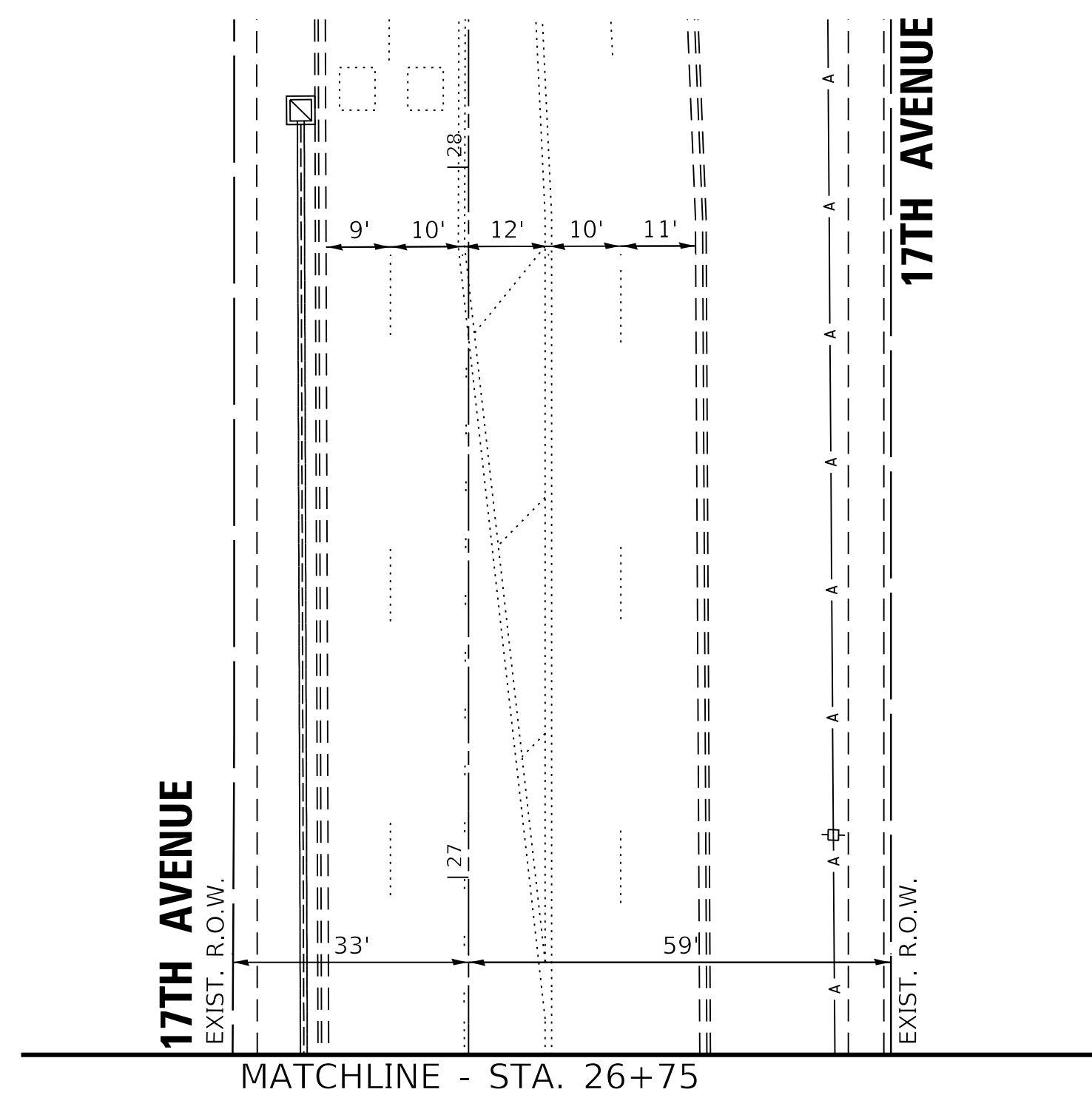
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Sheet 1	PLOT DATE = 2/5/2020	CHECKED - DPB	REVISED -
		DATE - 12/3/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN  
19TH STREET AND 17TH AVENUE**

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

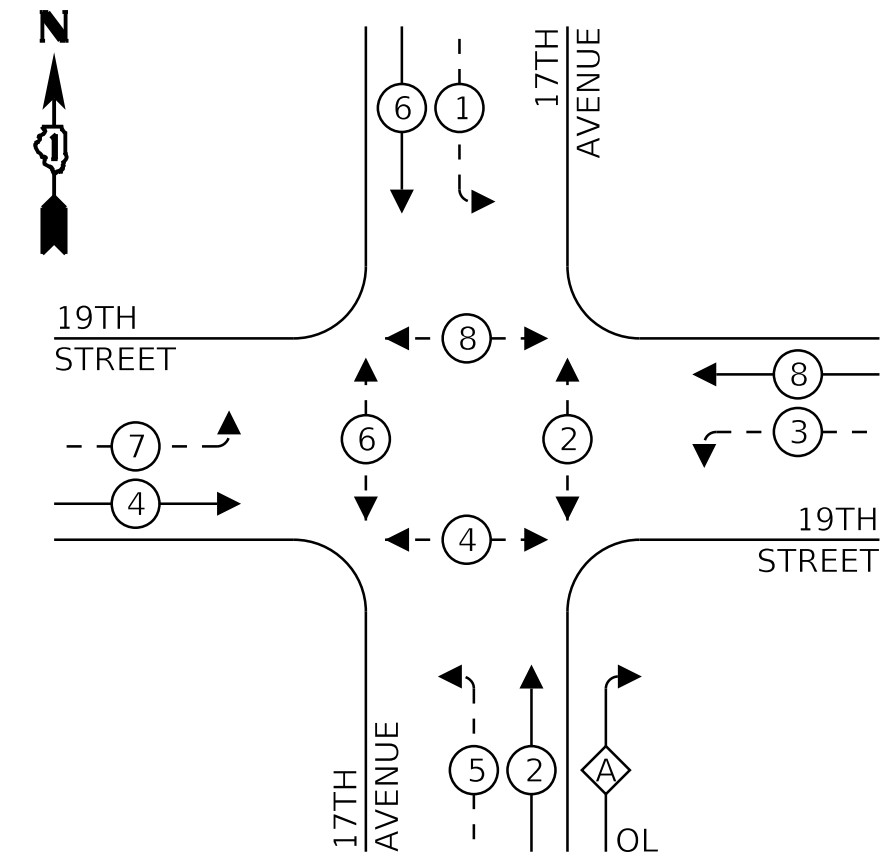
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G35	



FILE NAME =	USER NAME = zwallsten	DESIGNED - DPB	REVISED -
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Sheet 2	PLOT DATE = 2/5/2020	DATE - 12/3/2019	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0004	16-00080-01-PV	COOK	102	68
				CONTRACT NO. 61G35
		ILLINOIS	FED. AID PROJECT	

**PROPOSED CONTROLLER SEQUENCE**



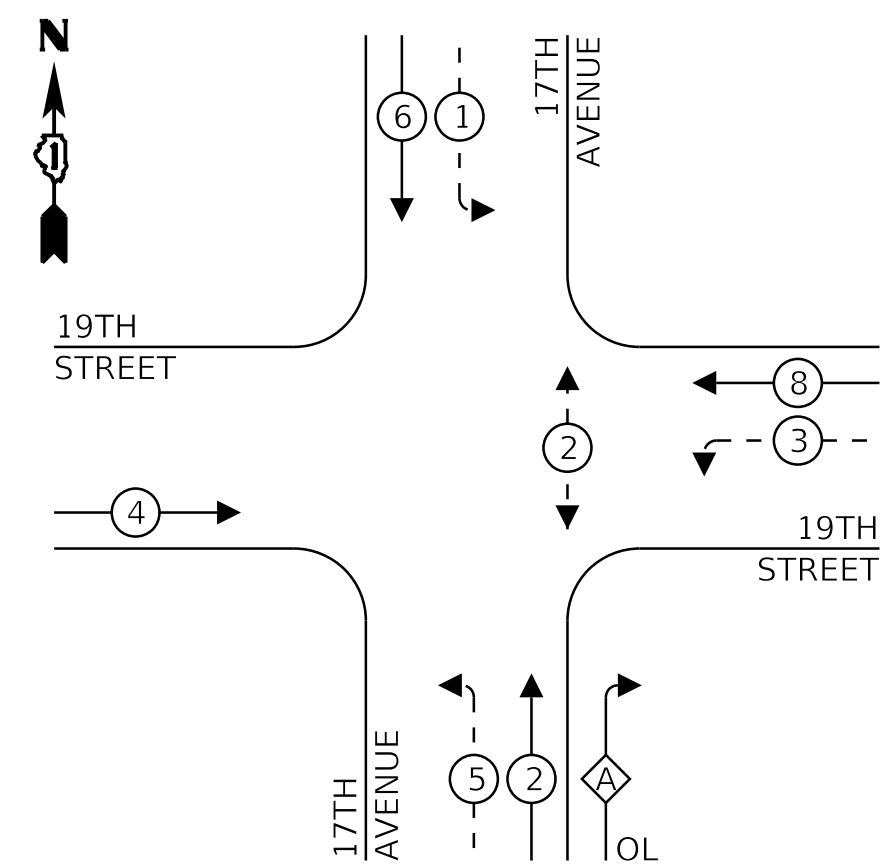
**LEGEND:**

- ← \* → PROTECTED PHASE
- ← - \* - → PROTECTED/PERMITTED PHASE
- ← \* → PEDESTRIAN PHASE
- ← \* OL → OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER = PERMISSIVE PHASE + PROTECTED PHASE  
 A = 2 + 3

**EXISTING CONTROLLER SEQUENCE**



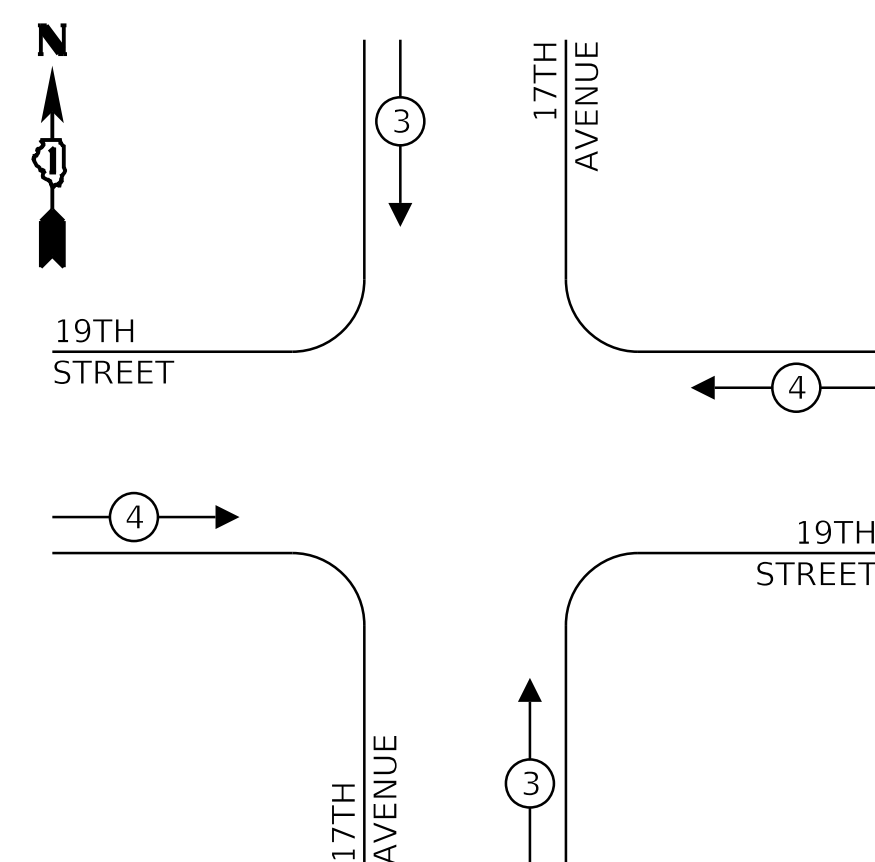
**LEGEND:**

- ← \* → PROTECTED PHASE
- ← - \* - → PROTECTED/PERMITTED PHASE
- ← \* → PEDESTRIAN PHASE
- ← \* OL → OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER = PERMISSIVE PHASE + PROTECTED PHASE  
 A = 2 + 3

**EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



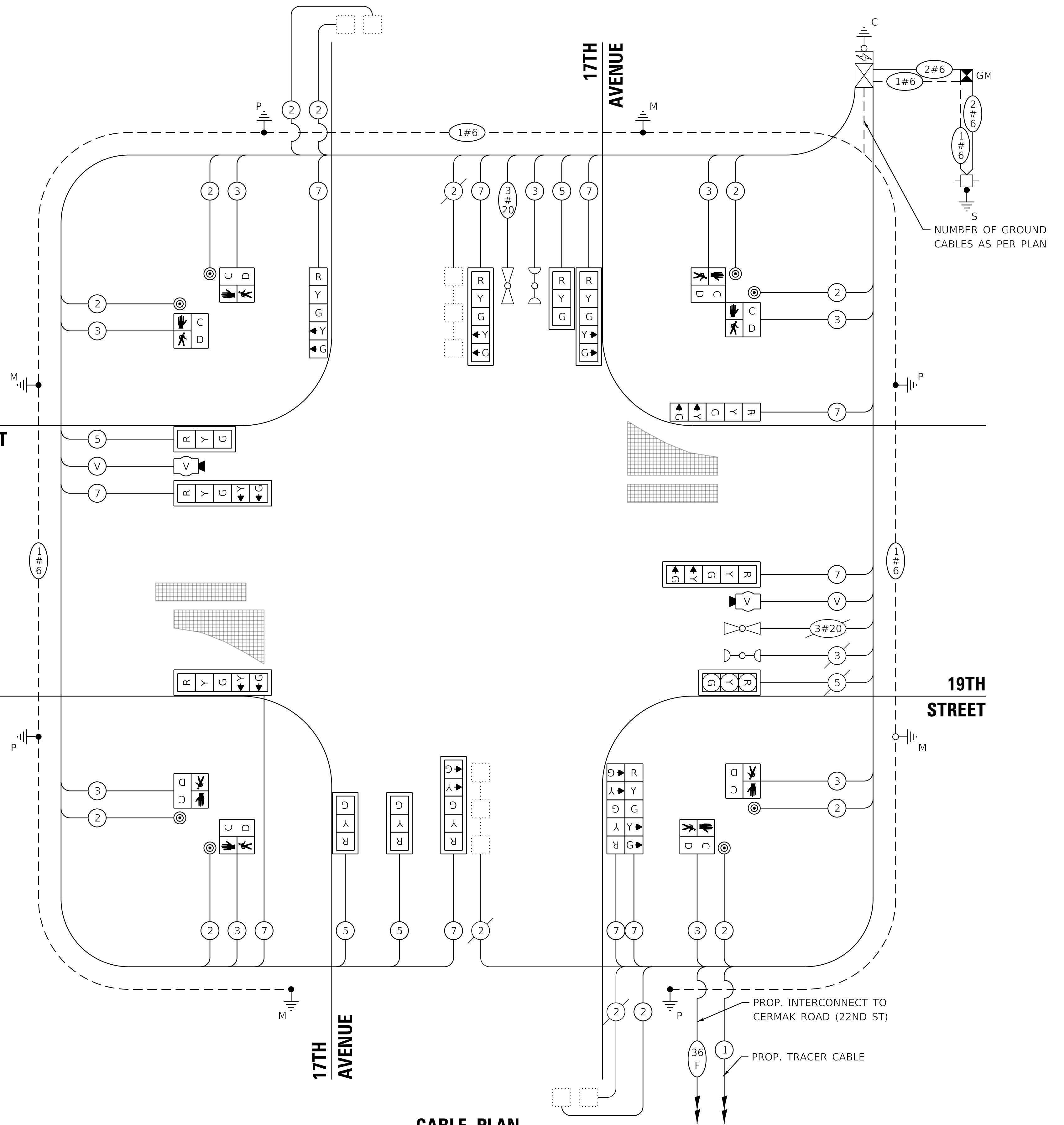
19TH STREET

17TH AVENUE

19TH STREET

17TH AVENUE

**CABLE PLAN**  
(NOT TO SCALE)



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15
(GREEN)	15	12	45	81
PERMISSIVE ARROW	20	10	10	20
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
TOTAL =				483.5

ENERGY COSTS TO:

VILLAGE OF BROADVIEW  
 2350 SOUTH 25TH AVENUE  
 BROADVIEW, IL 60155

ENERGY SUPPLY: CONTACT: -  
 PHONE: -  
 COMPANY: COM-ED  
 ACCOUNT NUMBER: -

FILE NAME =	USER NAME = zwallsten	DESIGNED - DPB	REVISED -
5274.805-Perm-Cable.dgn		DRAWN - ZCW	REVISED -
5274.805	PLOT SCALE = 1:20	CHECKED - DPB	REVISED -
Default	PLOT DATE = 2/5/2020	DATE - 12/3/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE 19TH STREET AND 17TH AVENUE**

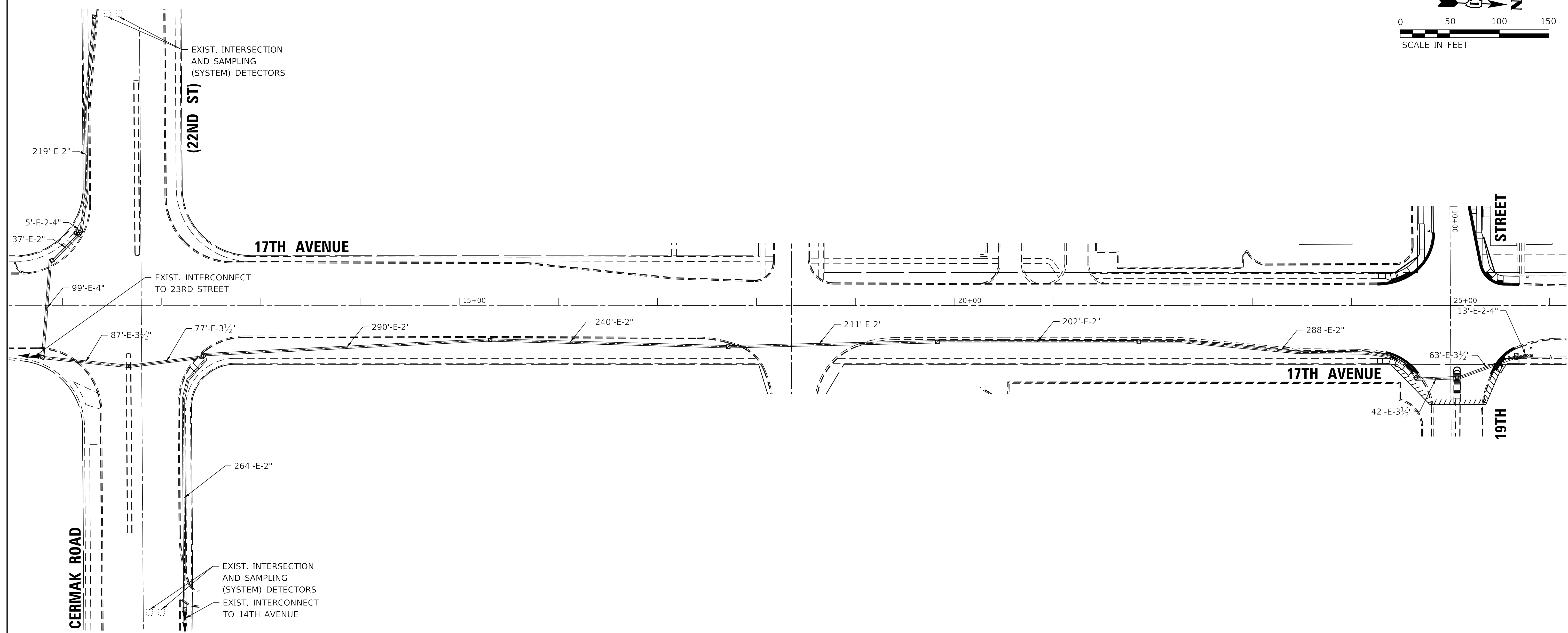
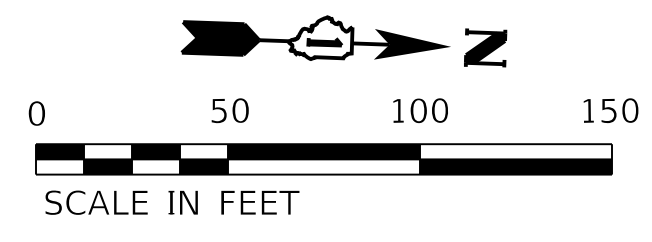
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0004	16-00080-01-PV	COOK	102	69
CONTRACT NO. 61G35				
ILLINOIS FED. AID PROJECT				

TS 22120  
 ECON 27

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 11





**GHA GEWALT HAMILTON ASSOCIATES, INC.** TS SHT NO. 13

**ECON 27**

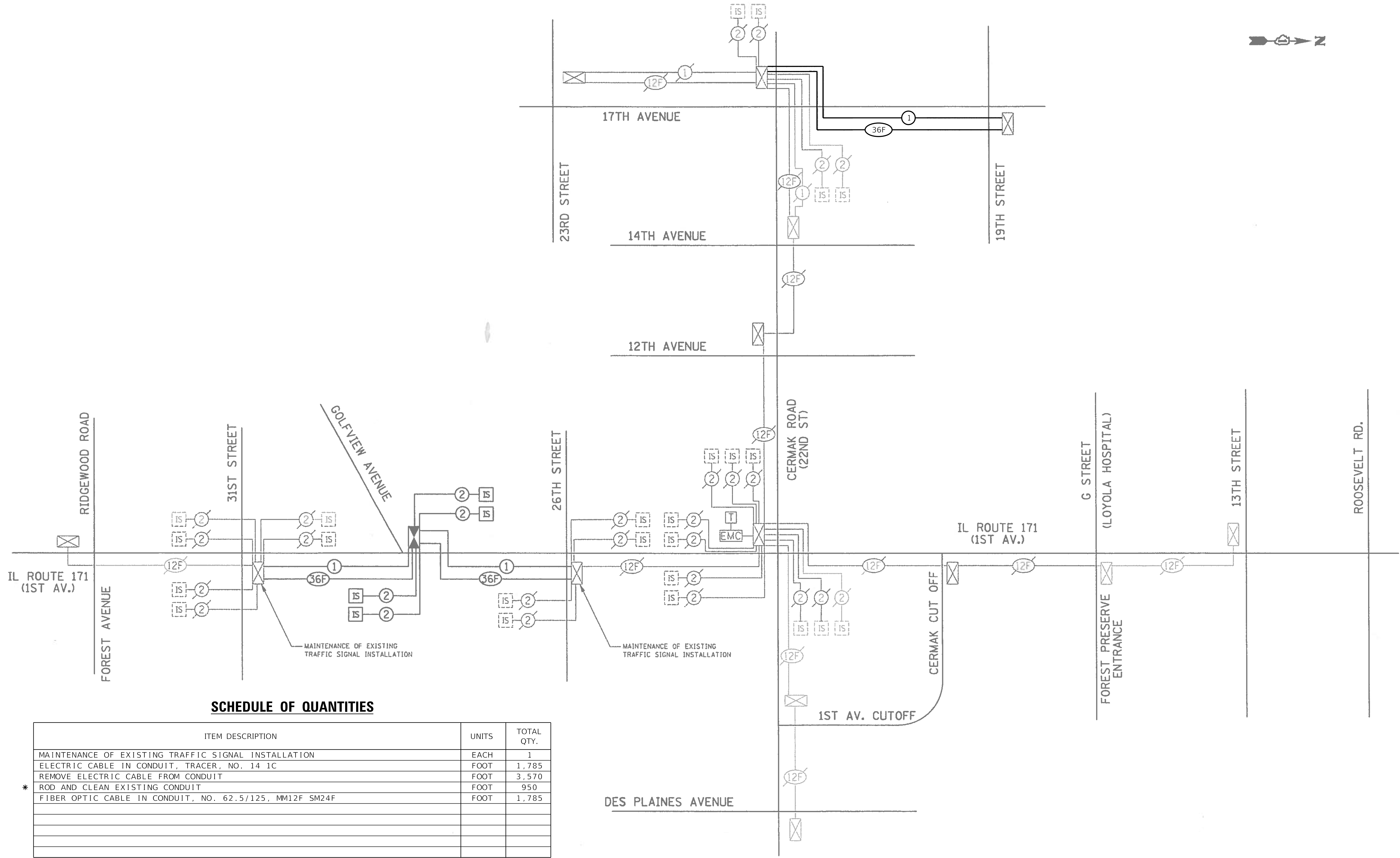
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Perm Interconnect	PLOT DATE = 2/5/2020	CHECKED - DPB	REVISED -
		DATE - 12/3/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PERMANENT INTERCONNECT PLAN -  
19TH STREET FROM 17TH AVENUE TO CERMAK ROAD (22ND ST)**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0004	16-00080-01-PV	COOK	102	71
CONTRACT NO. 61G35			ILLINOIS FED. AID PROJECT	

SCALE: NONE SHEET OF SHEETS STA. TO STA.



**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1,785
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,570
* ROD AND CLEAN EXISTING CONDUIT	FOOT	950
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	1,785

\* QUANTITY USED AS NEEDED

**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 14**

FILE NAME = 5274.805-Int-Sht.dgn	USER NAME = zwallsten	DESIGNED - DPB	REVISED -
5274.805	PLOT SCALE = 1:50	DRAWN - ZCW	REVISED -
Perm Interconnect Schematic	PLOT DATE = 2/5/2020	CHECKED - DPB	REVISED -
		DATE - 12/3/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PERMANENT INTERCONNECT SCHEMATIC -  
ECONOLITE SYSTEM 27**

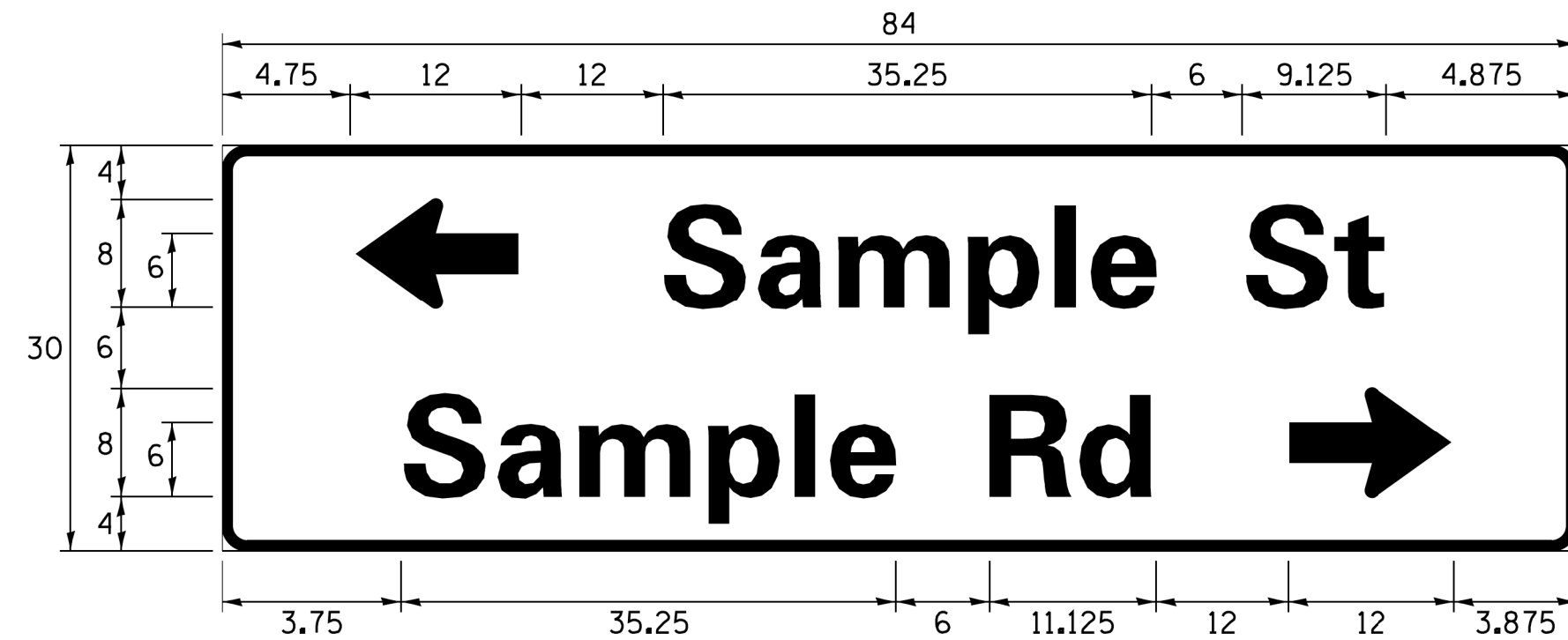
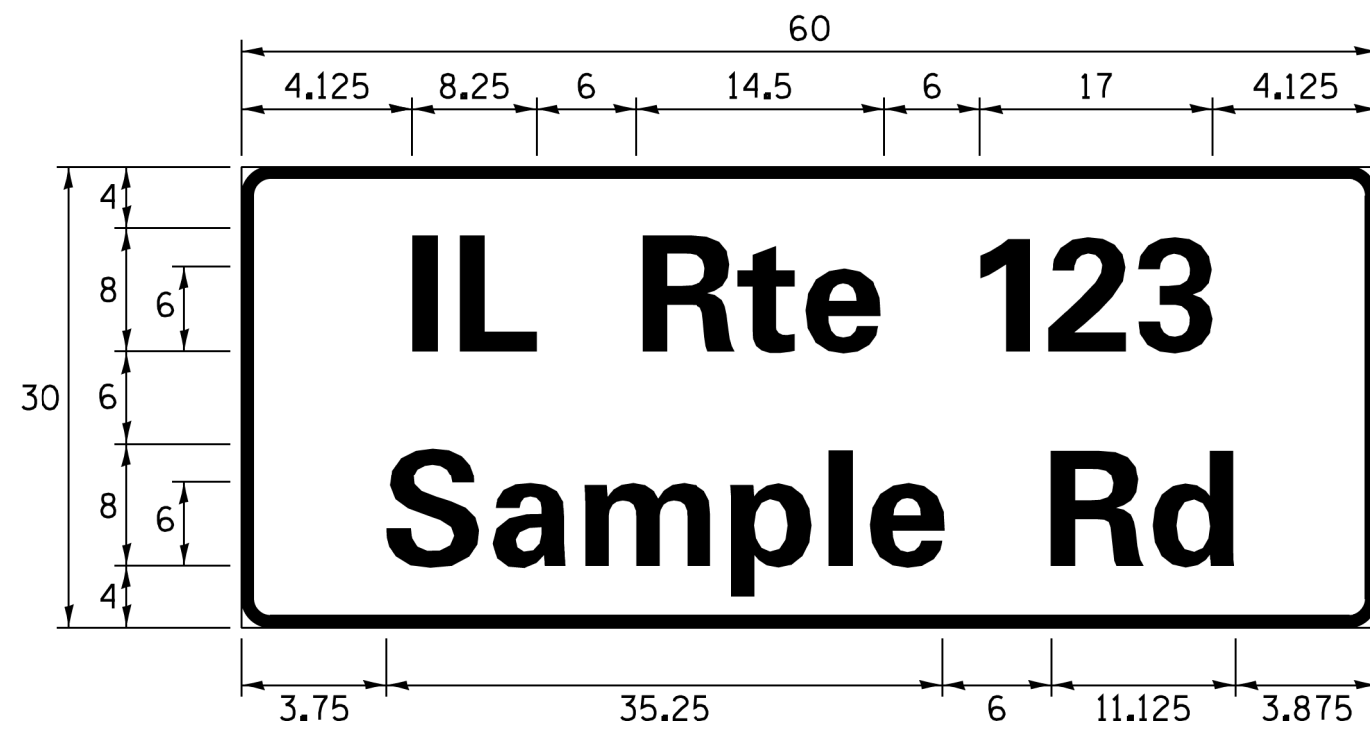
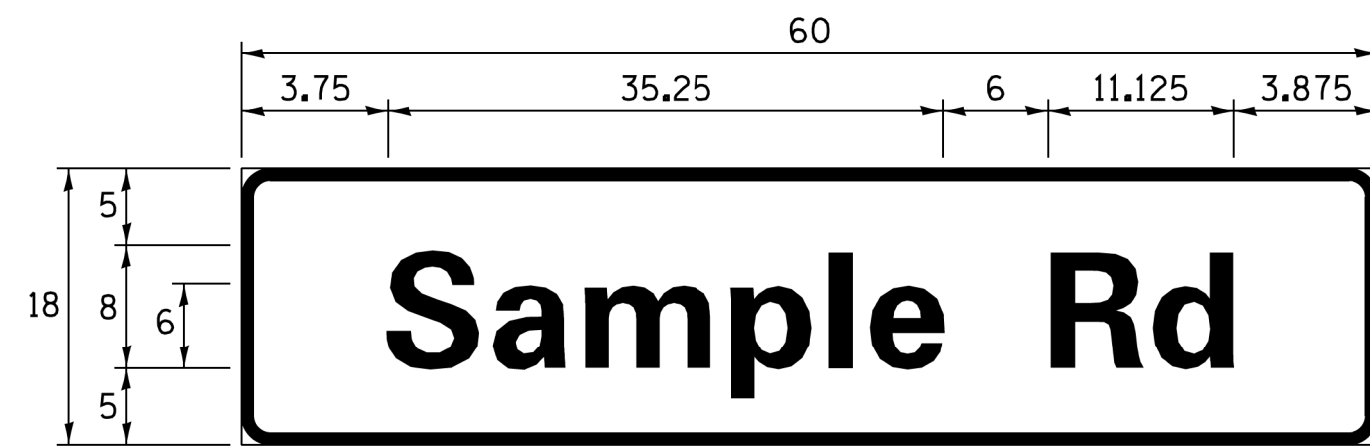
SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 0004	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 72
CONTRACT NO. 61G35			ILLINOIS FED. AID PROJECT	

**ECON 27**



**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	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

**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 SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 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:**

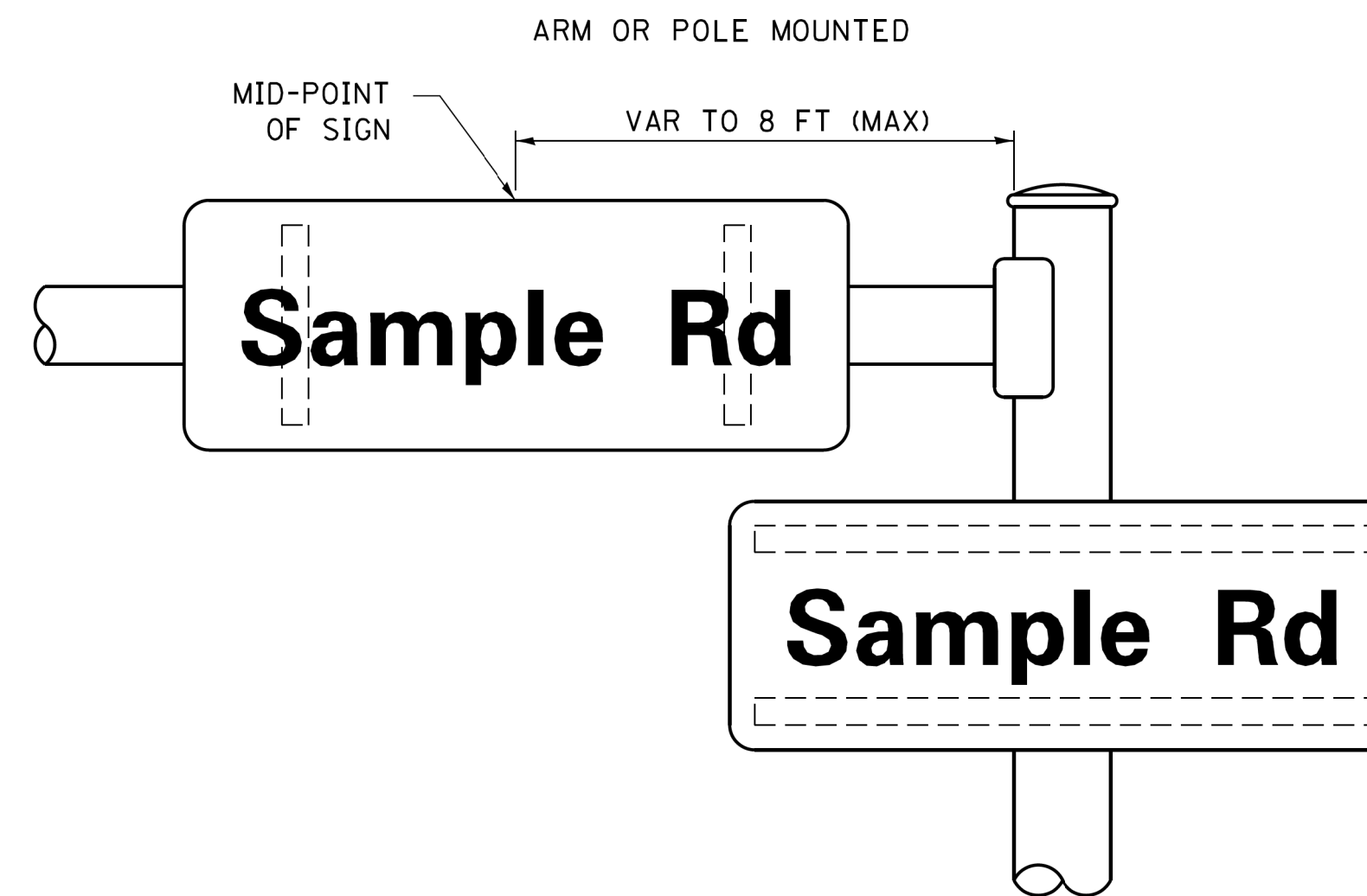
- J.O. HERBERT COMPANY, INC  
MIDLOTHIAN, VA
- WESTERN REMAC, INC.  
WOODRIDGE, IL

**PARTS LISTING:**

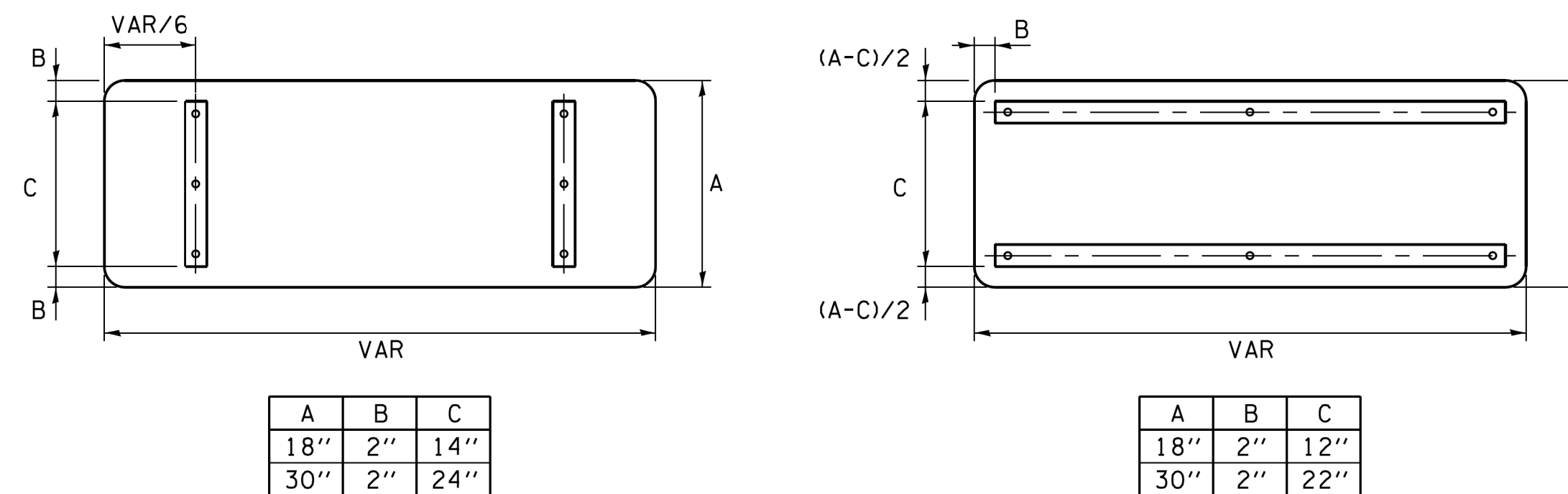
- SIGN CHANNEL PART \*HPN053 (MED. CHANNEL)  
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3  
SELF TAPPING WITH NEOPRENE WASHER  
PART \*HPN034 (UNIVERSAL)
- BRACKETS CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

**MOUNTING LOCATION**



**SUPPORTING CHANNELS**



**STANDARD ALPHABETS SPACING CHART**

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

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	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

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5274.805	PLOT SCALE = 1:1	CHECKED - IP	REVISED -
IDOT D1 STANDARD TS02	PLOT DATE = 2/5/2020	DATE - 10/01/2014	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-00080-01-PV	COOK	102	73
	TS-02	CONTRACT NO. 61G35		
ILLINOIS		FED. AID PROJECT		

# 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								

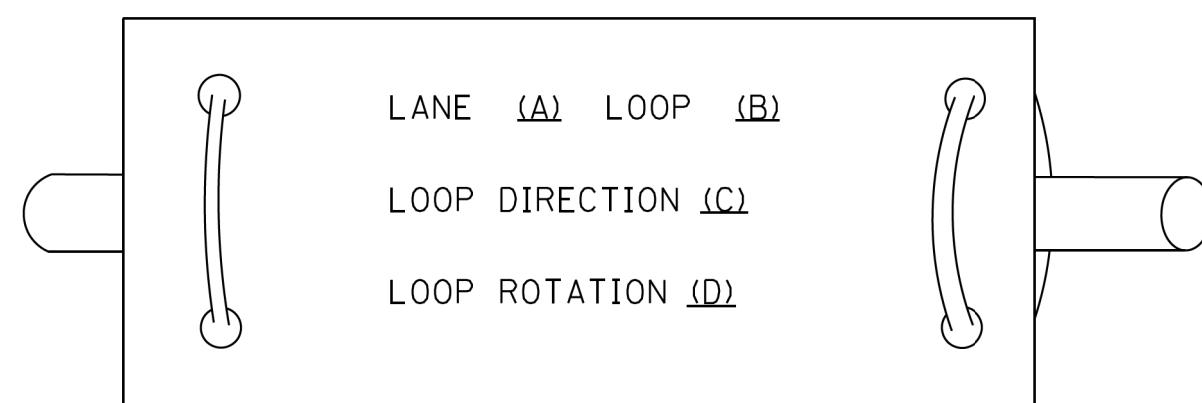
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IDOT D1 STANDARD TS05a	PLOT DATE = 2/5/2020	DATE - 9/29/2016	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-00080-01-PV	COOK	102	74
<b>TS-05</b>		CONTRACT NO. 61G35		
ILLINOIS FED. AID PROJECT				

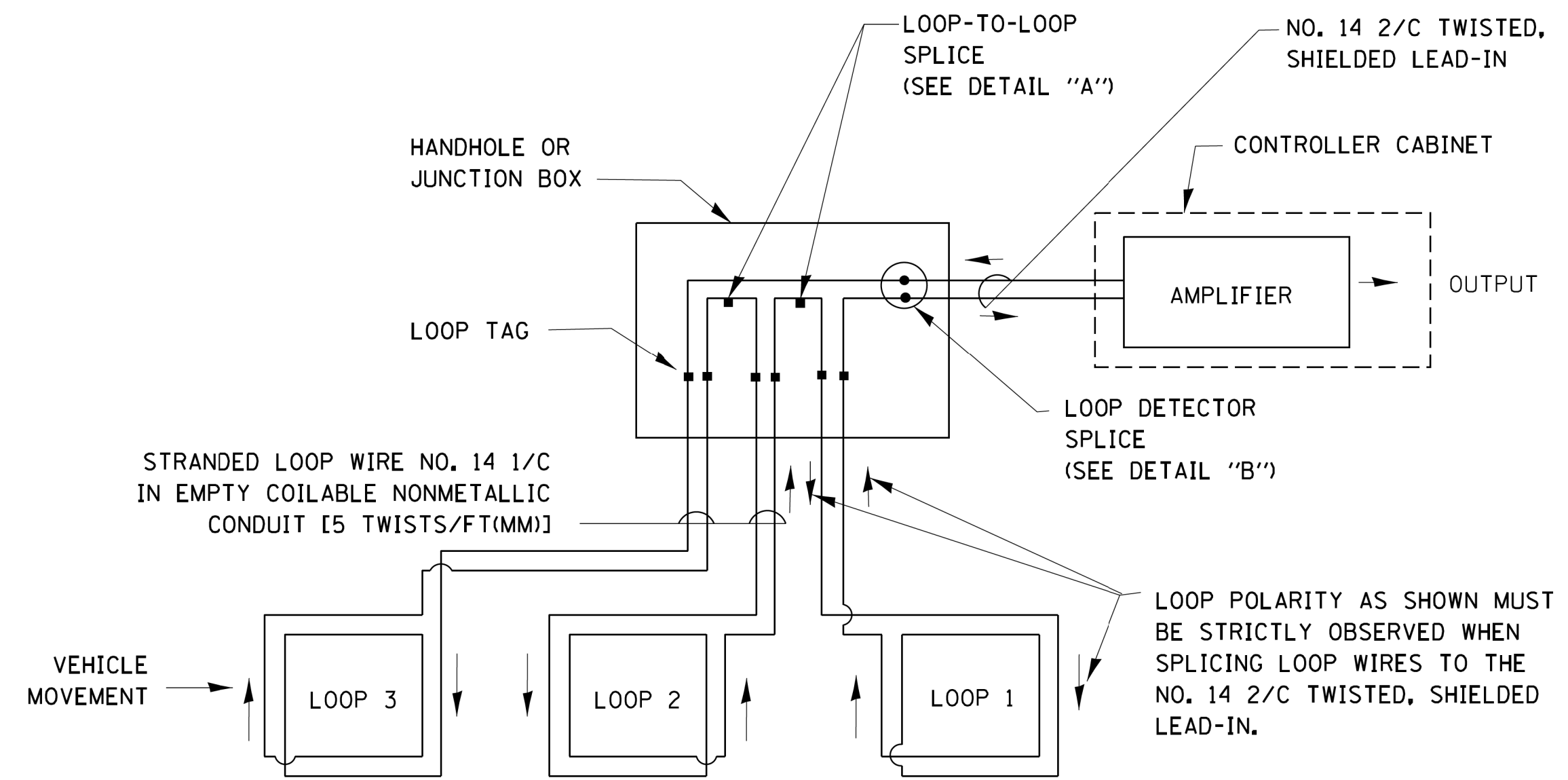
**LOOP DETECTOR NOTES**

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

**LOOP LEAD-IN CABLE TAG**

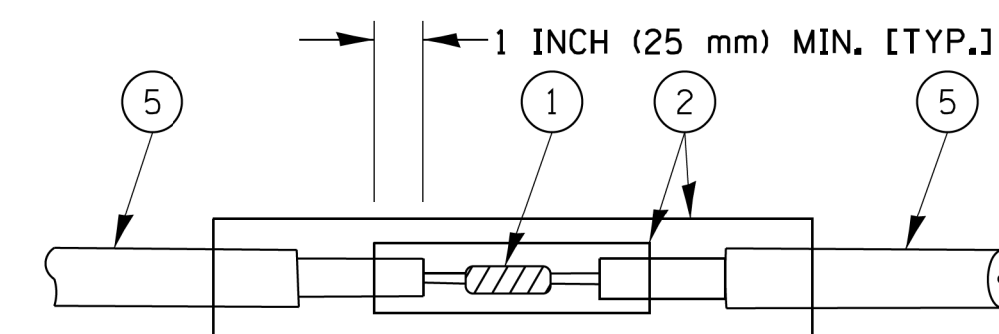


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

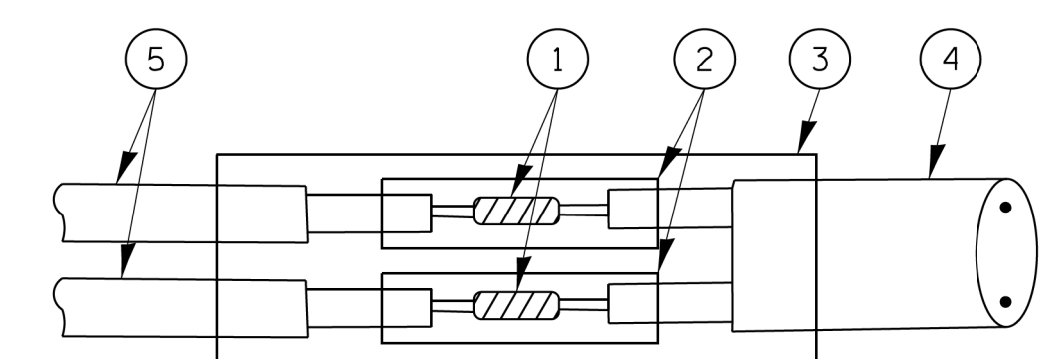


**DETECTOR LOOP WIRING SCHEMATIC**

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

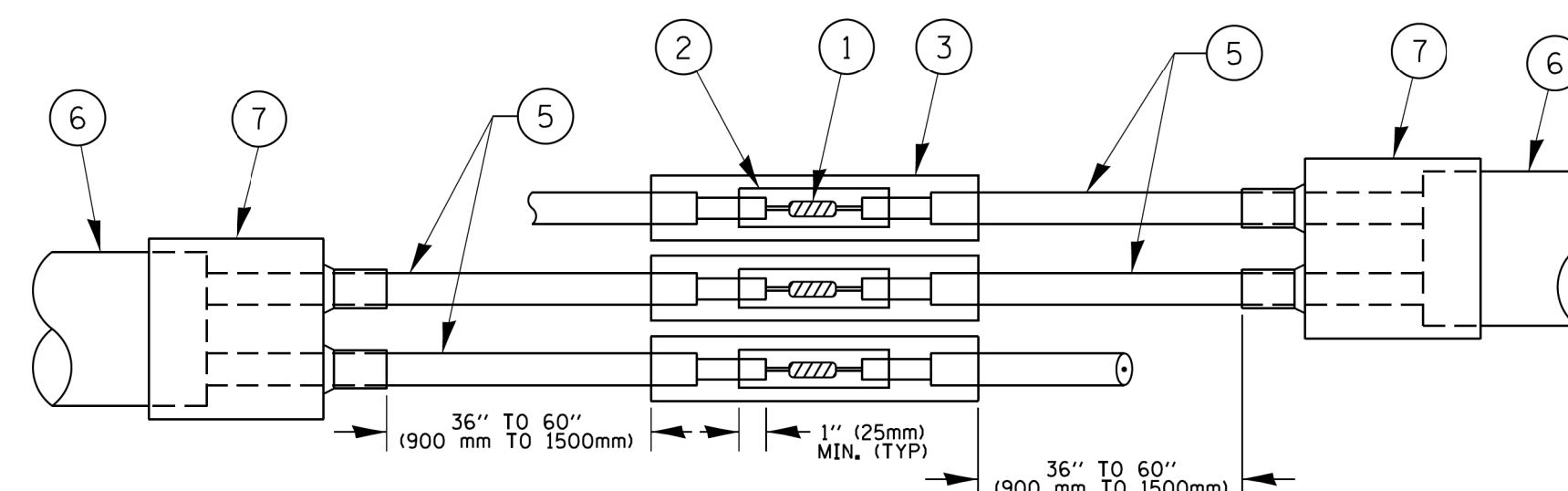


DETAIL "A"  
LOOP-TO-LOOP SPLICE

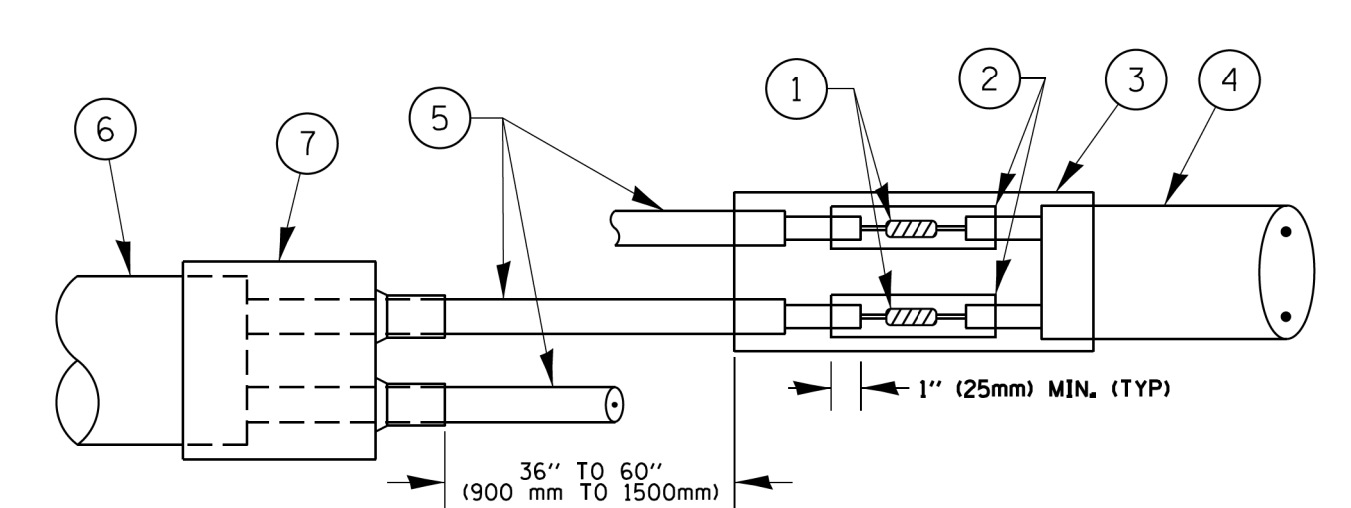


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED LOOP**

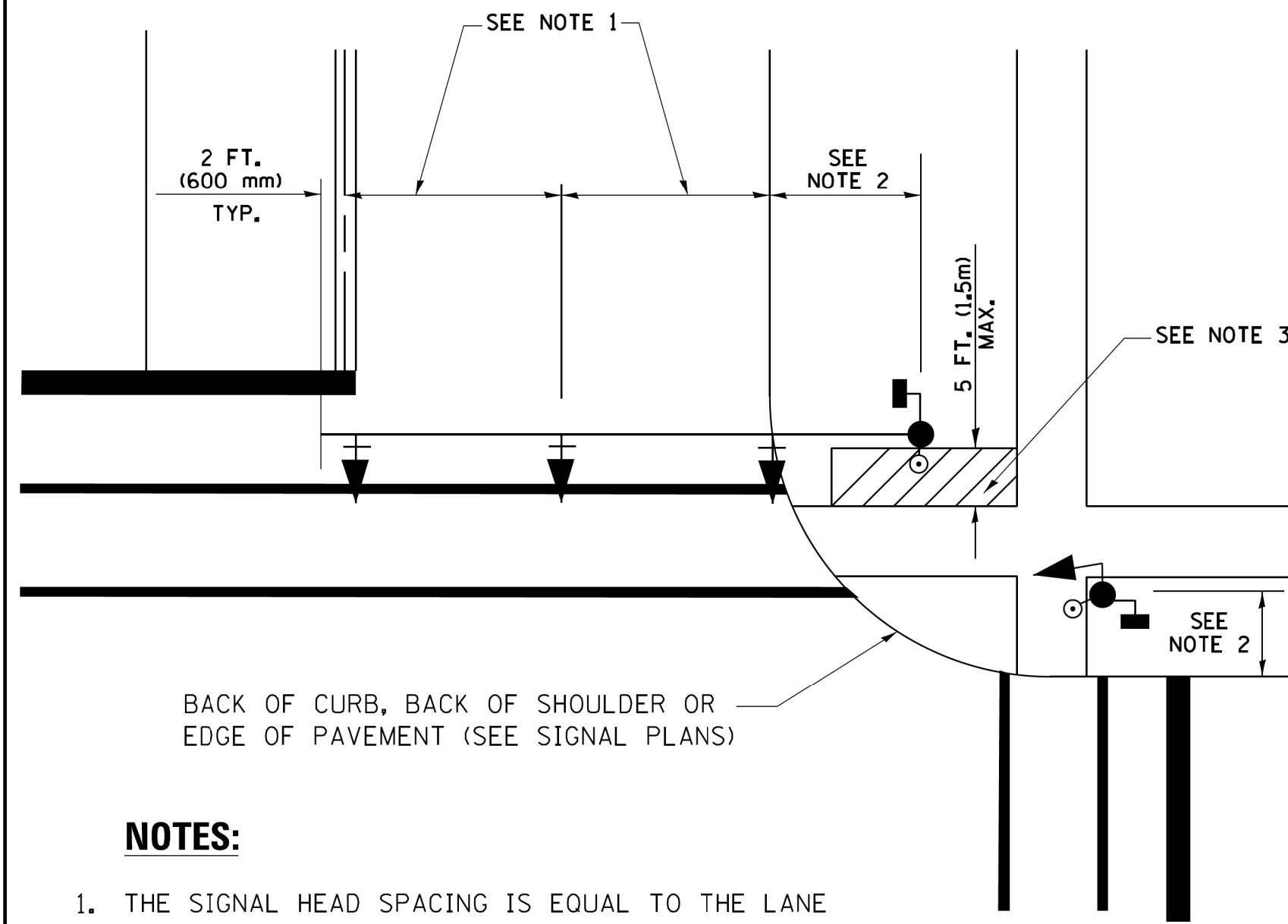
**LOOP DETECTOR SPLICE**

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

FILE NAME =	USER NAME = zwallsten	DESIGNED - DAD	REVISED - DAG 1-1-14
IDOT-StdDetails.dgn		DRAWN - BCK	REVISED -
5274.805	PLOT SCALE = 1:1	CHECKED - DAD	REVISED -
IDOT D1 STANDARD TS05b	PLOT DATE = 2/5/2020	DATE - 10-28-09	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-00080-01-PV	COOK	102	75
TS-05		CONTRACT NO. 61G35		
ILLINOIS FED. AID PROJECT				

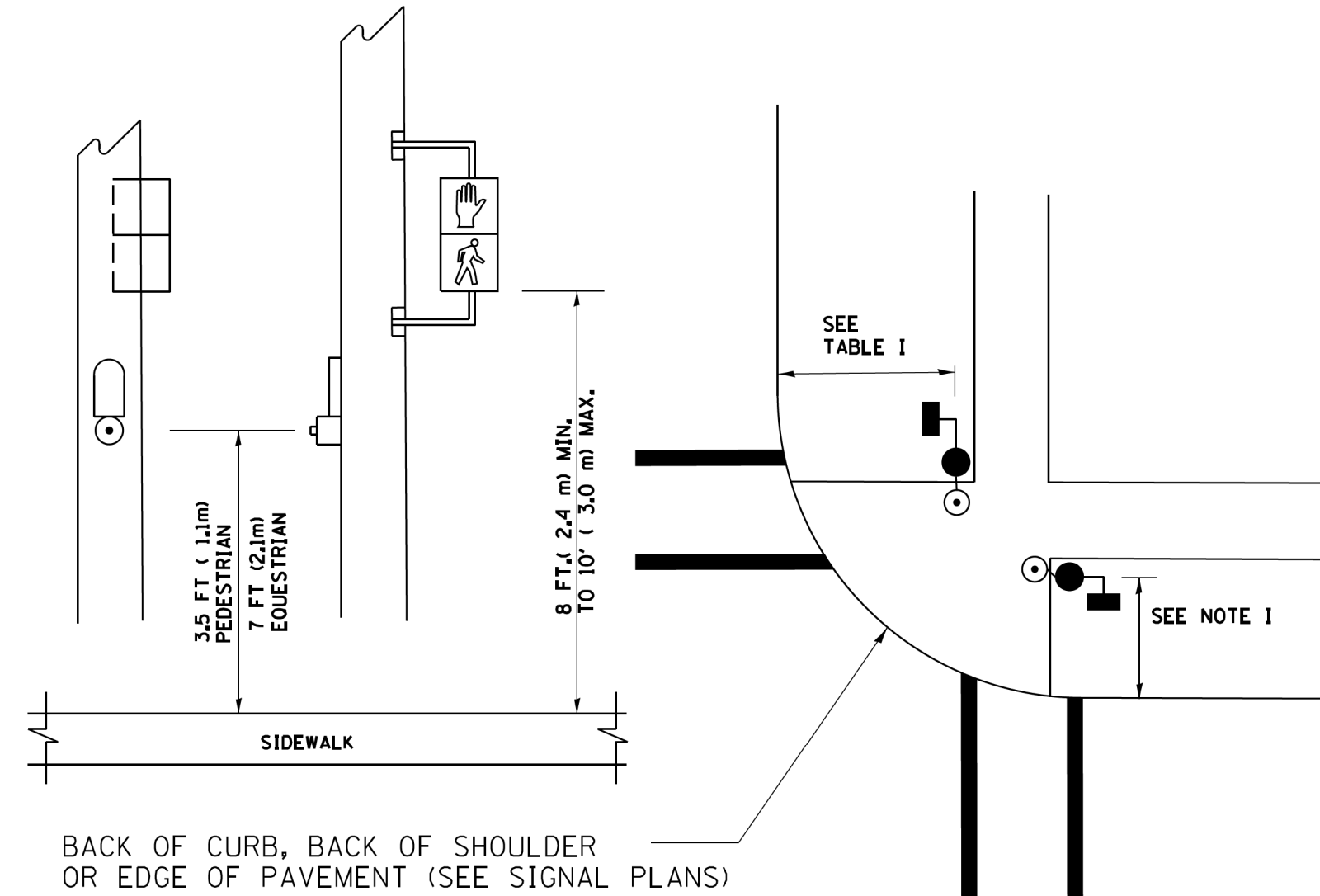
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**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."

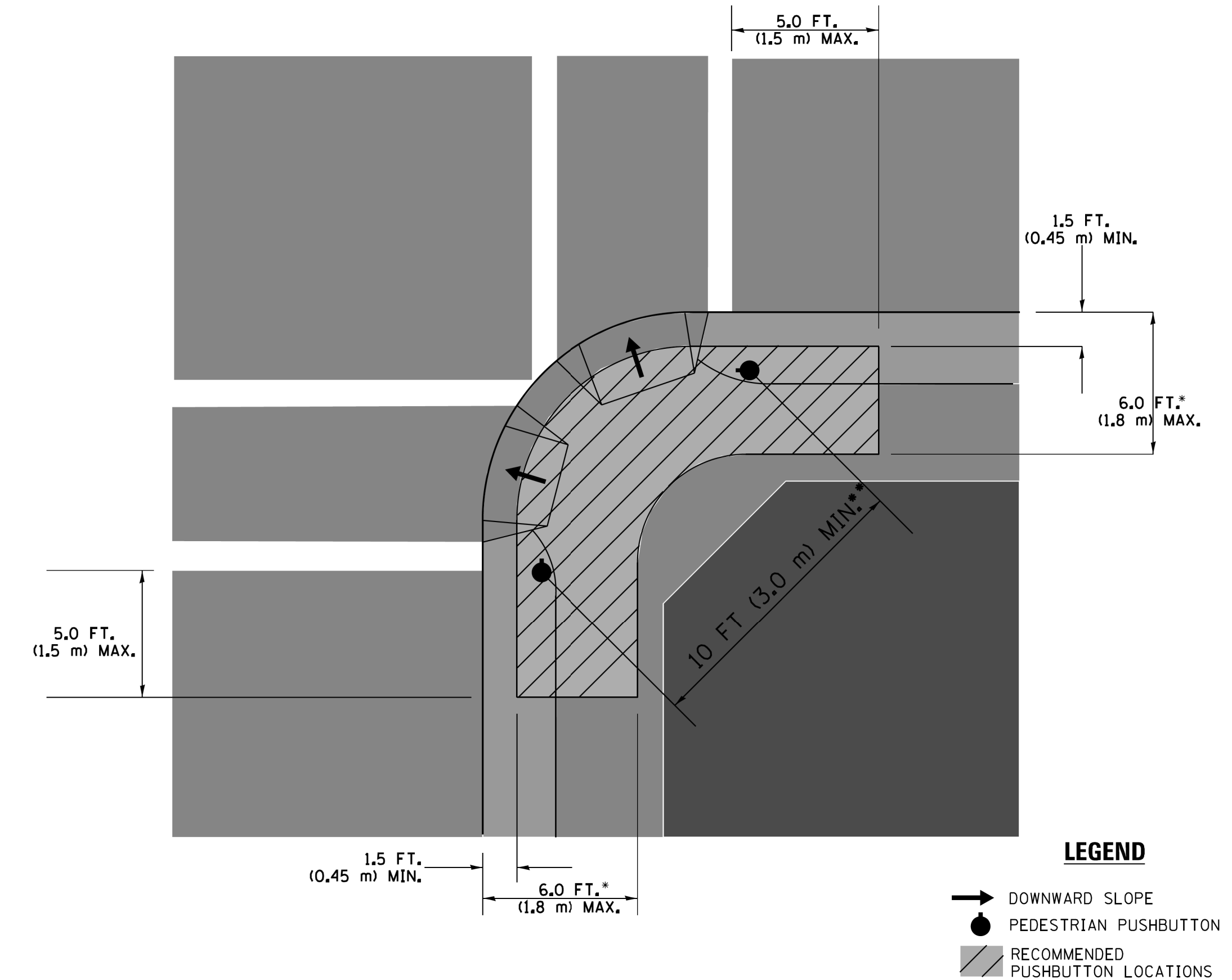
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**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**



- 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) SEPARATION 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**

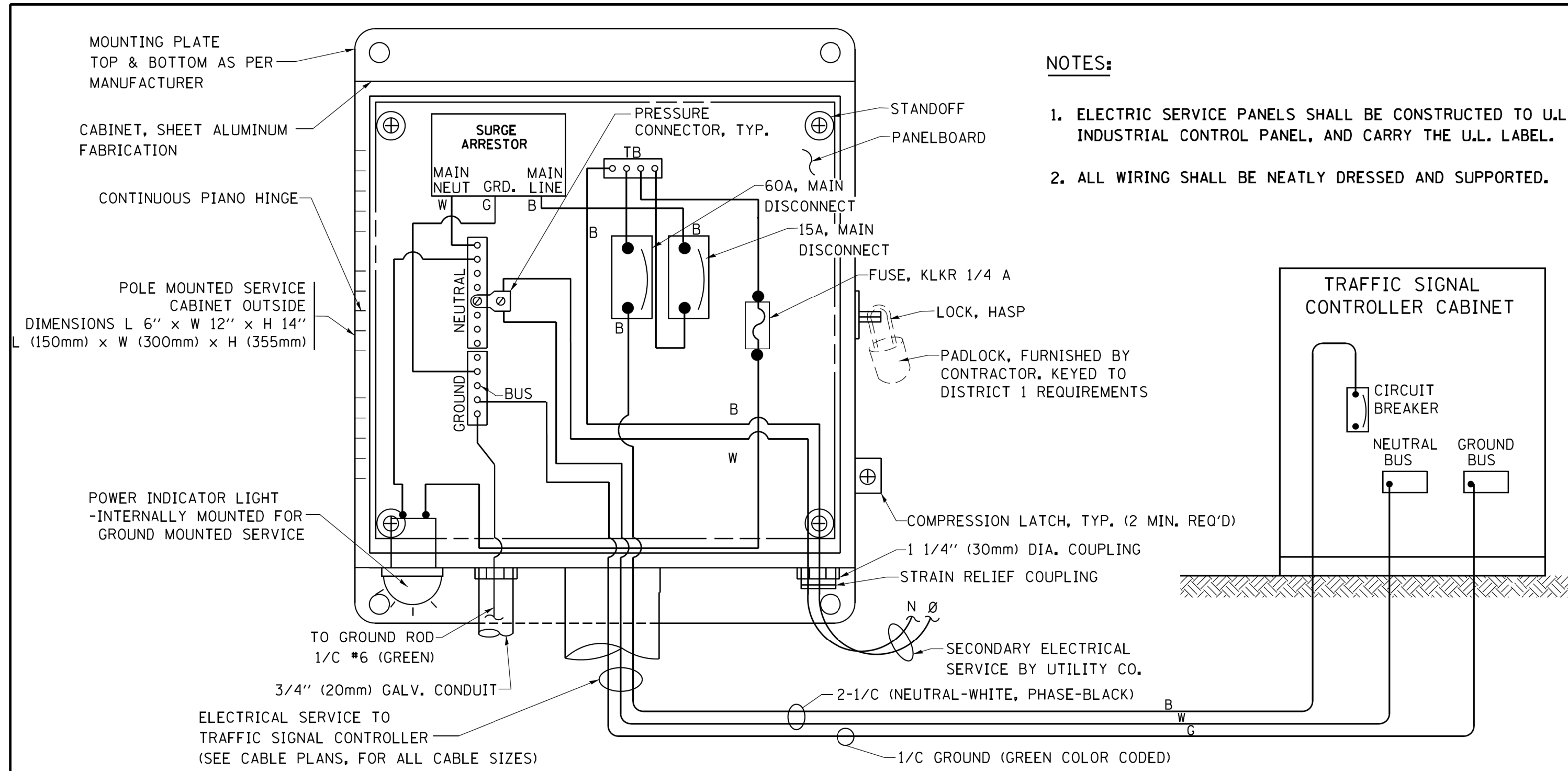
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

**NOTES:**

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

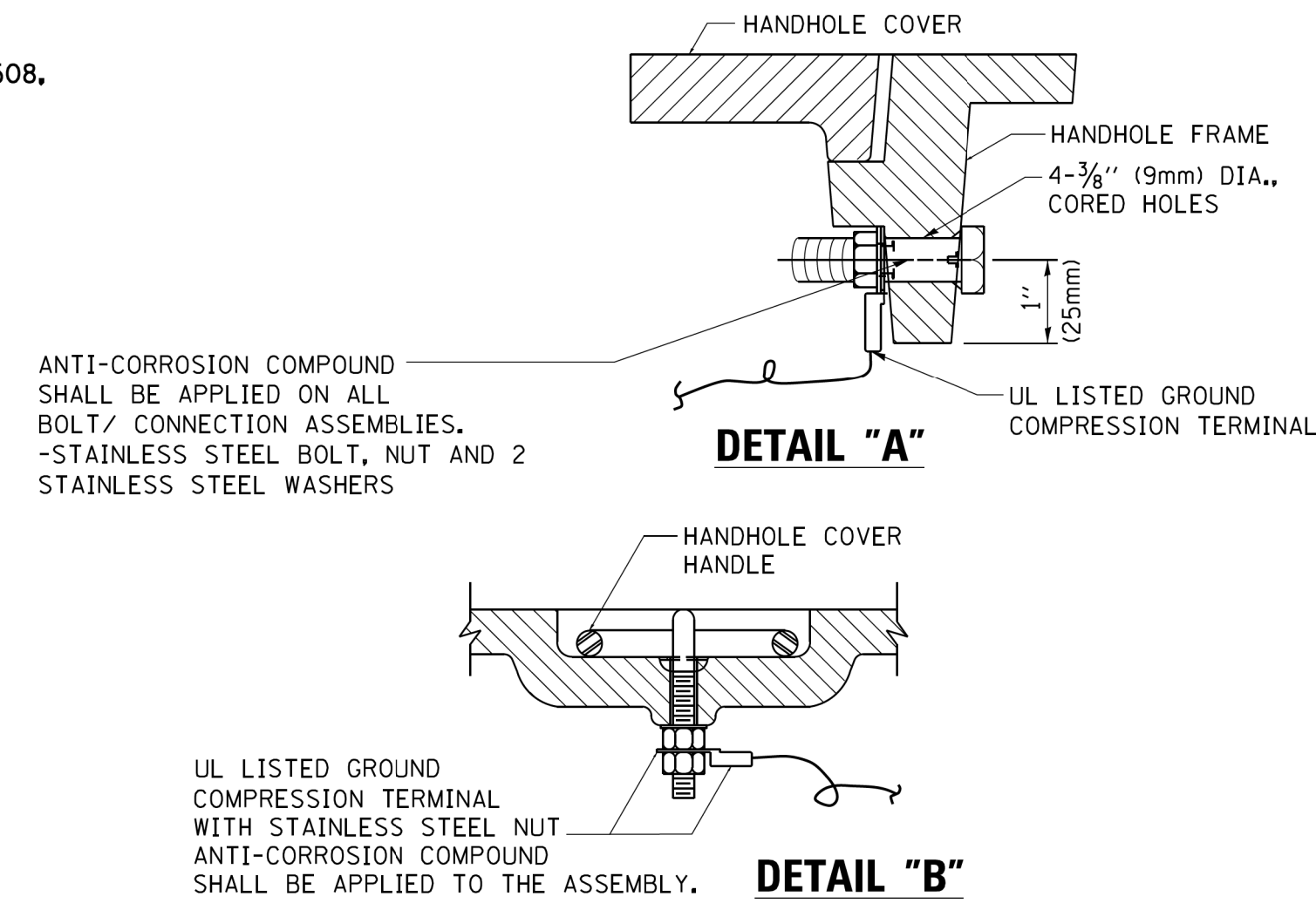
**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 18**

FILE NAME = IDOT-StdDetails.dgn	USER NAME = zwallsten	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5274.805	PLOT SCALE = 1:1	CHECKED - DAD	REVISED -		SCALE: NONE	SHEET NO. 3 OF 7 SHEETS	STA.	TO STA.	16-00080-01-PV	COOK	102	76
IDOT D1 STANDARD TS05c	PLOT DATE = 2/5/2020	DATE - 10-28-09	REVISED -					<b>TS-05</b>		CONTRACT NO. 61G35		
								ILLINOIS		FED. AID PROJECT		



**NOTES:**

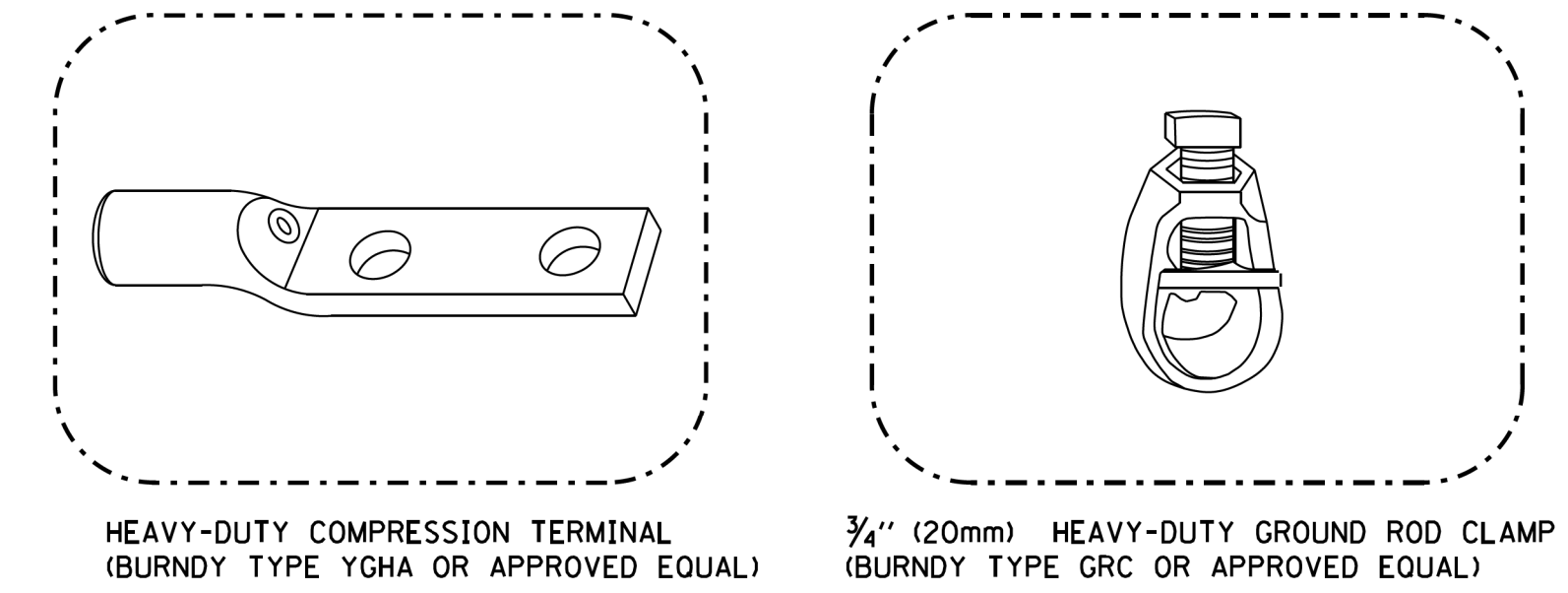
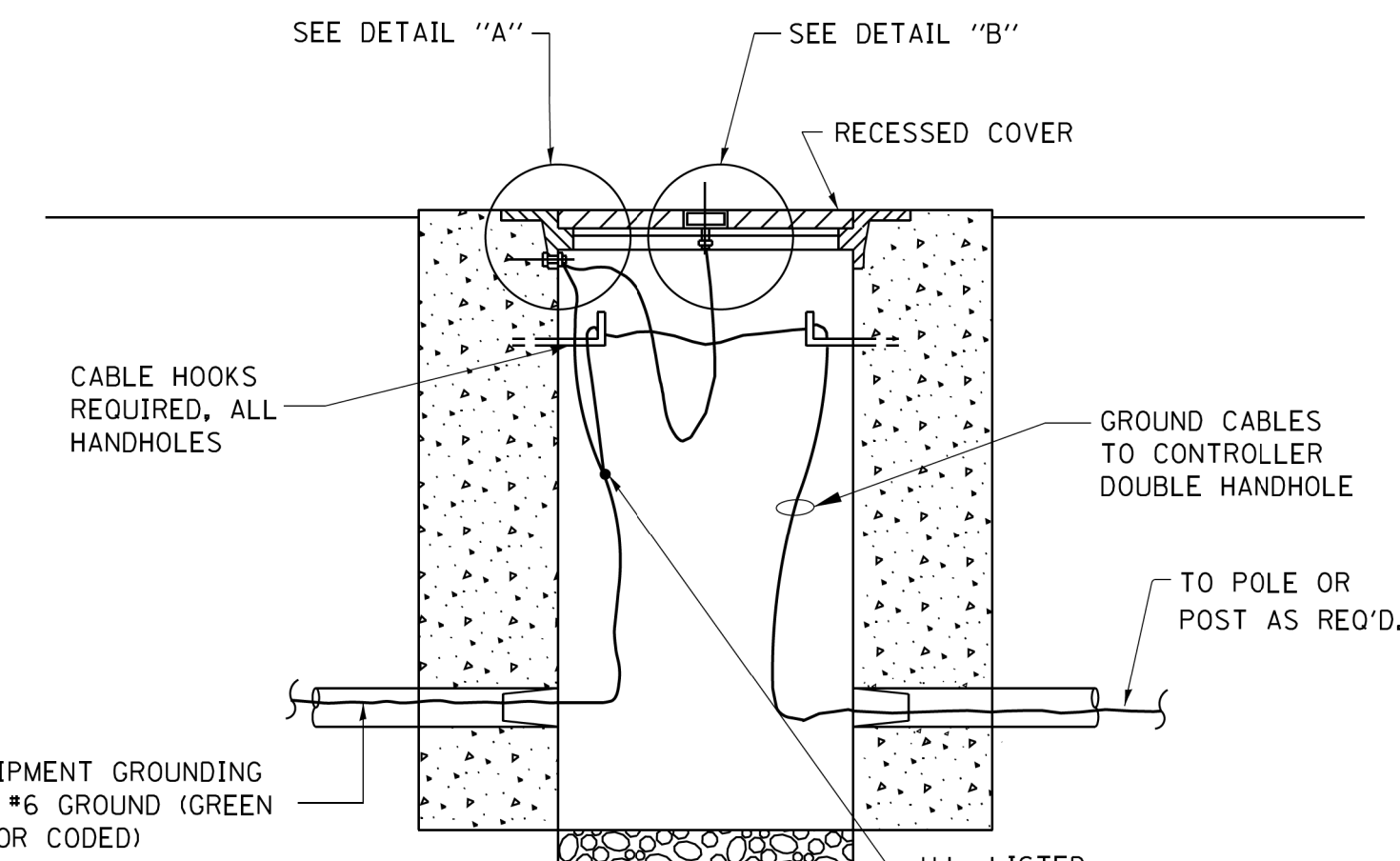
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



**NOTES:**  
**GROUNDING SYSTEM**

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

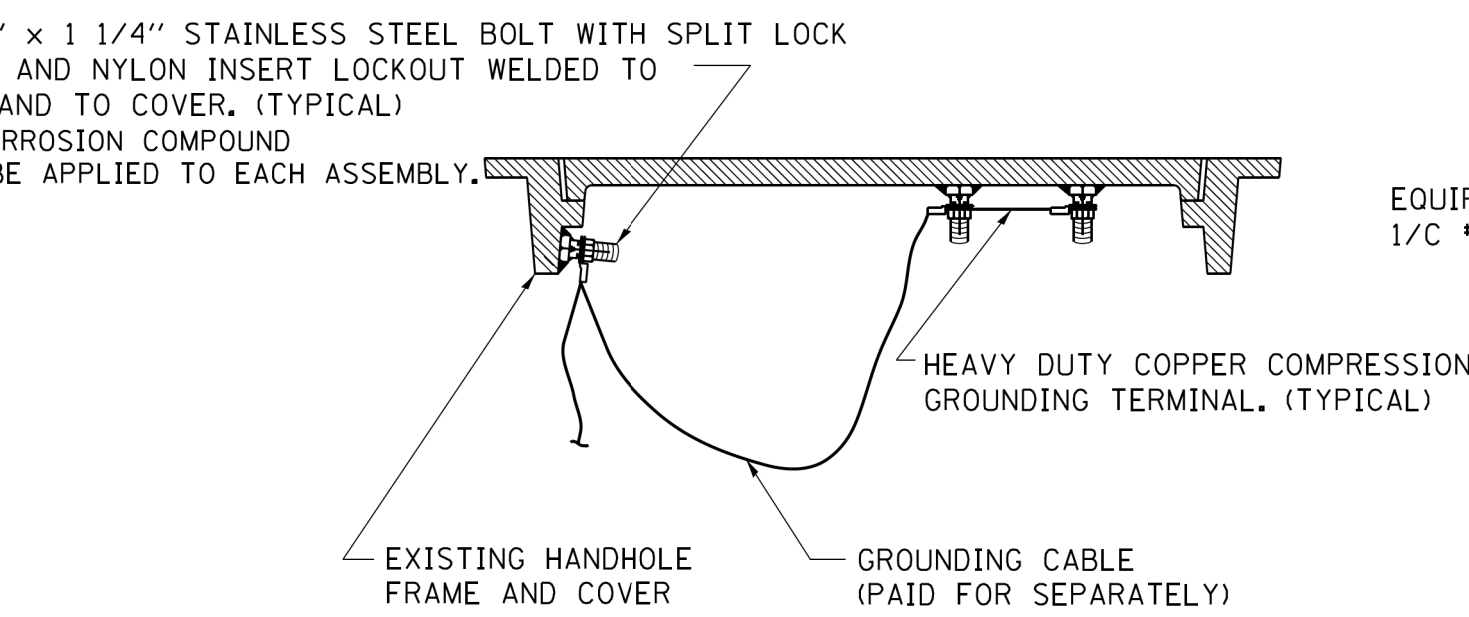
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)**



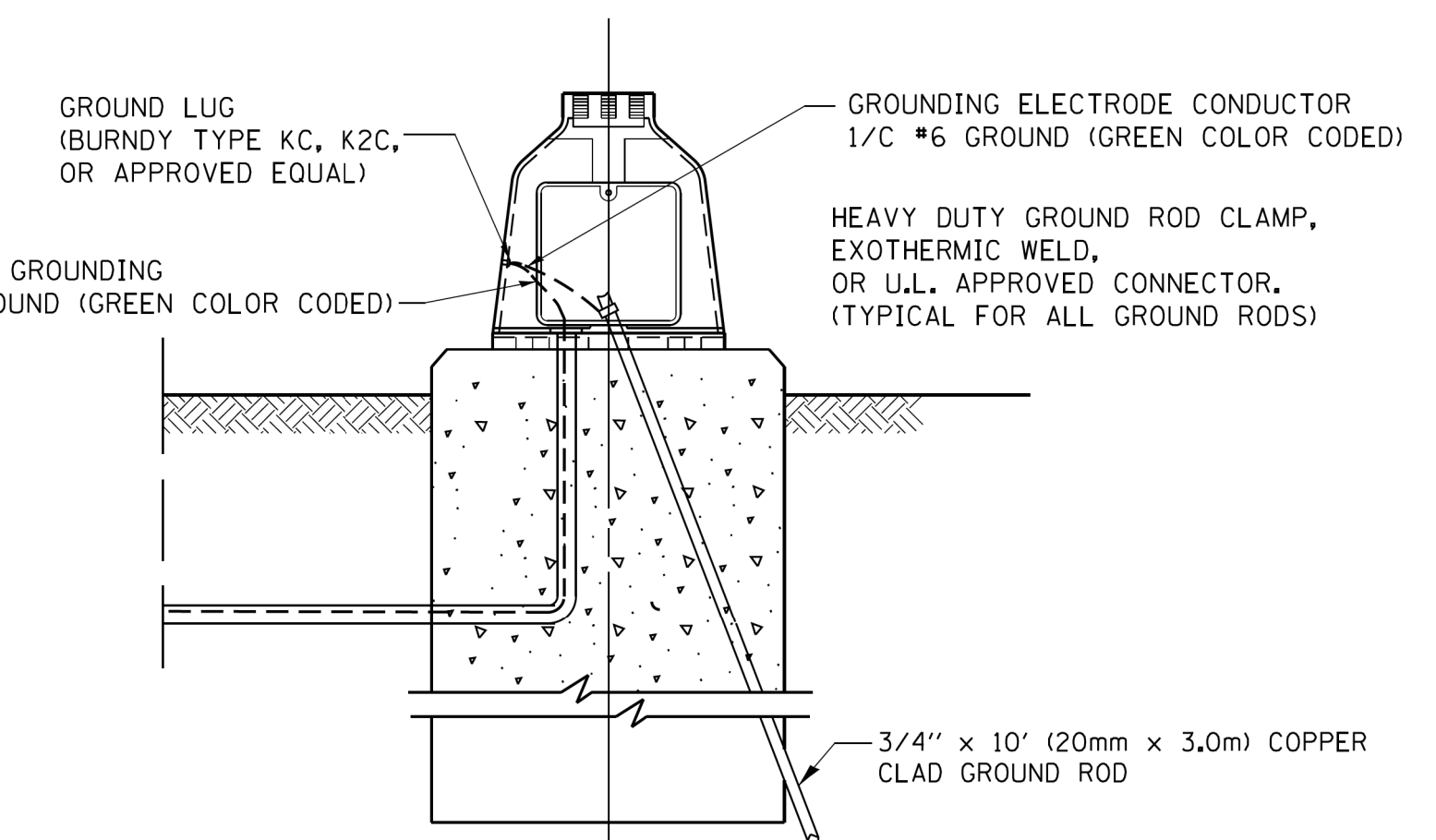
**NOTES:**

- 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.

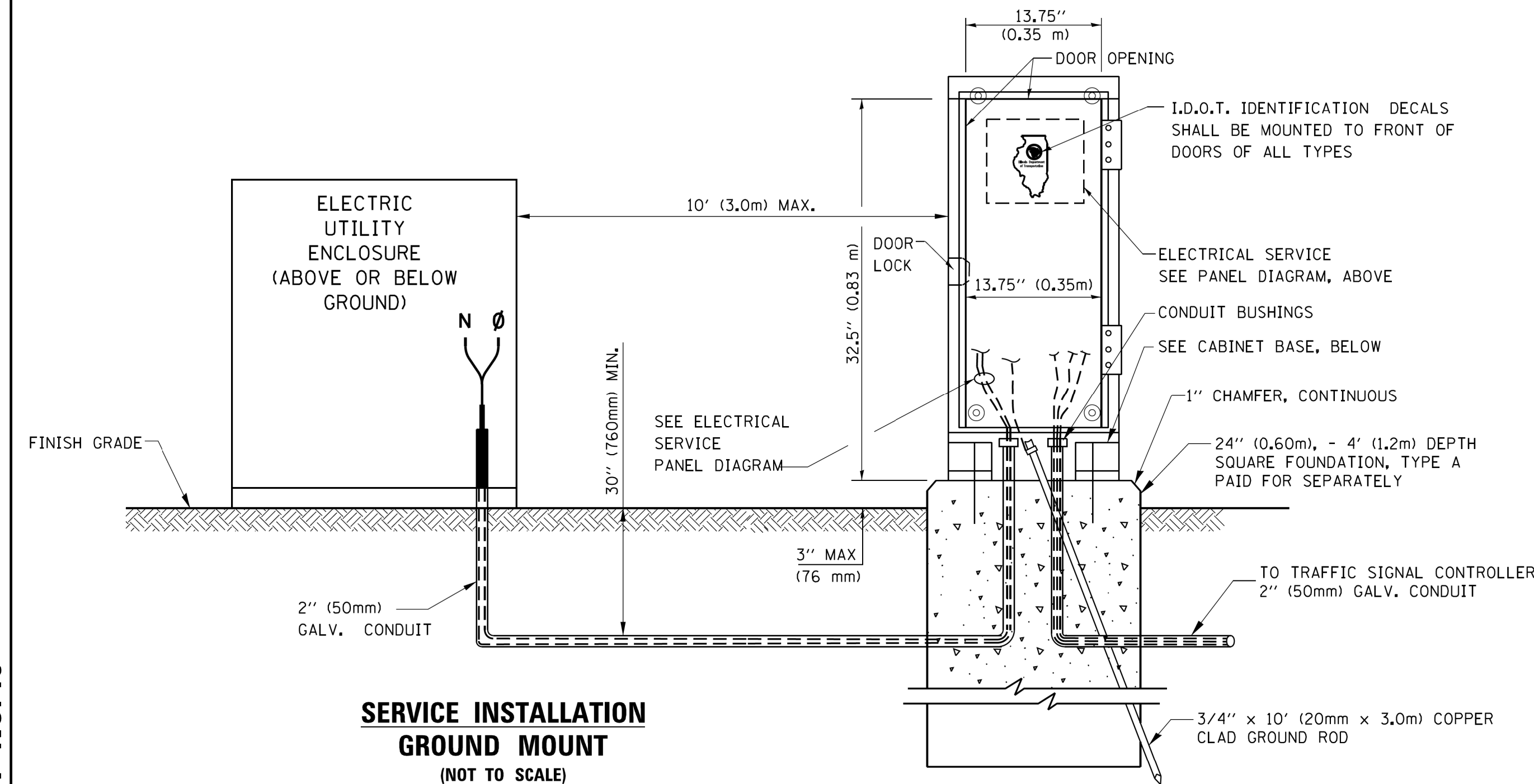
**HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**



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

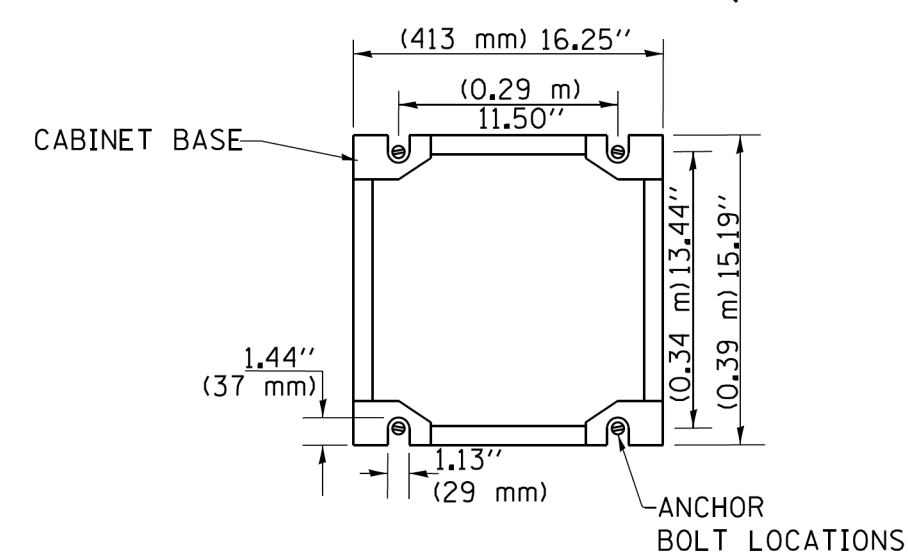


**MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)**



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

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

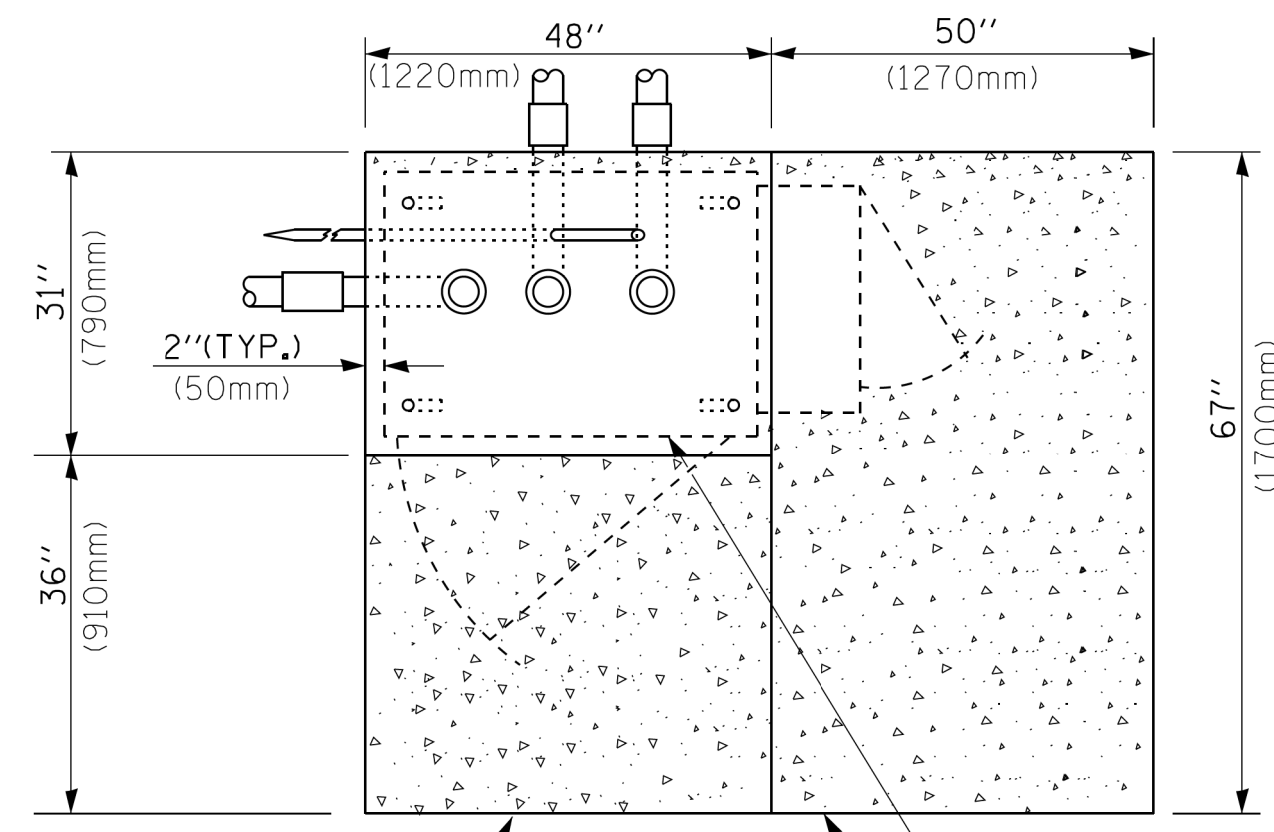


**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 19**

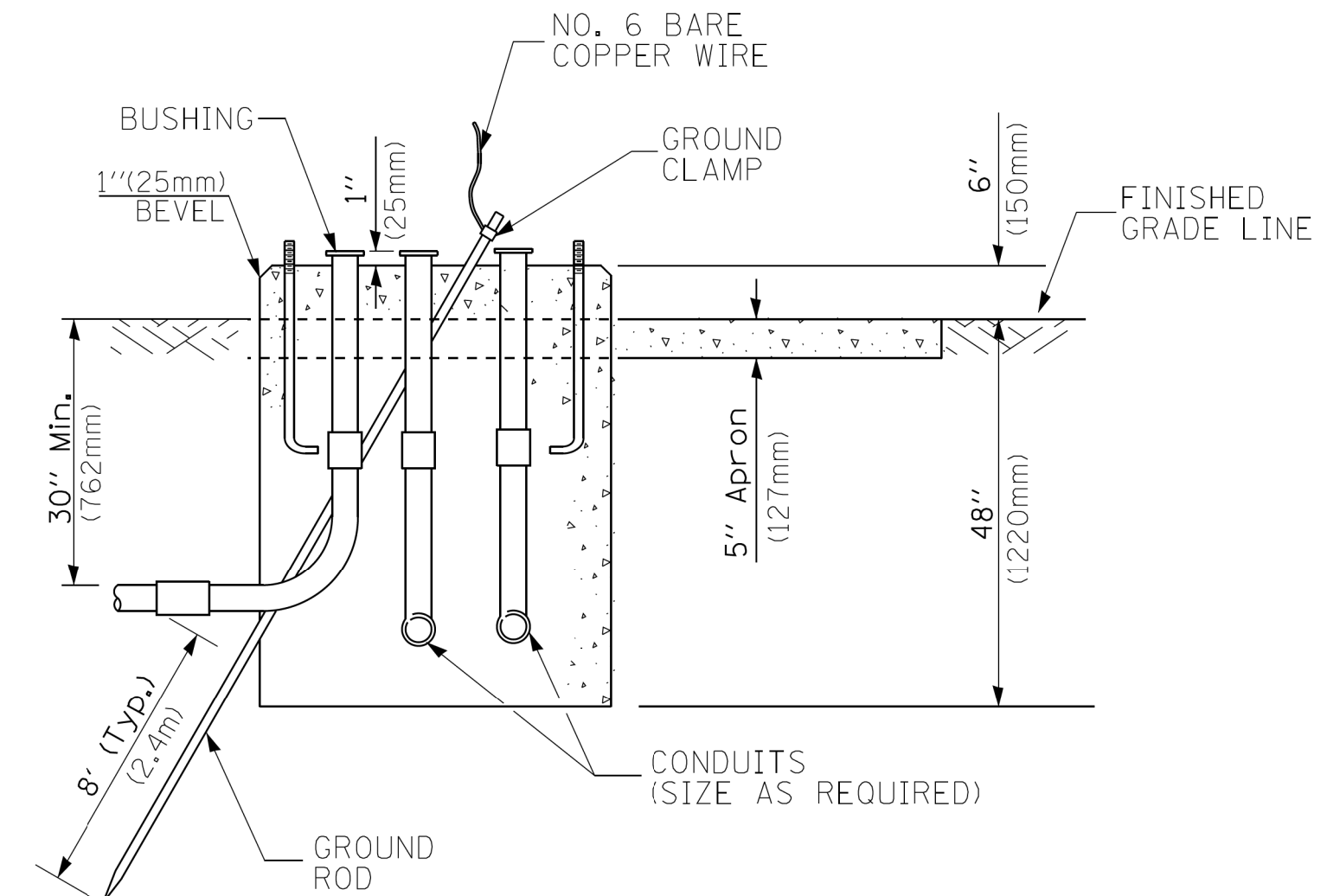
FILE NAME =	USER NAME = zwallsten	DESIGNED - DAD	REVISED - DAG 1-1-14
IDOT-StdDetails.dgn		DRAWN - BCK	REVISED -
5274.805	PLOT SCALE = 1:1	CHECKED - DAD	REVISED -
IDOT D1 STANDARD TS05d	PLOT DATE = 2/5/2020	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

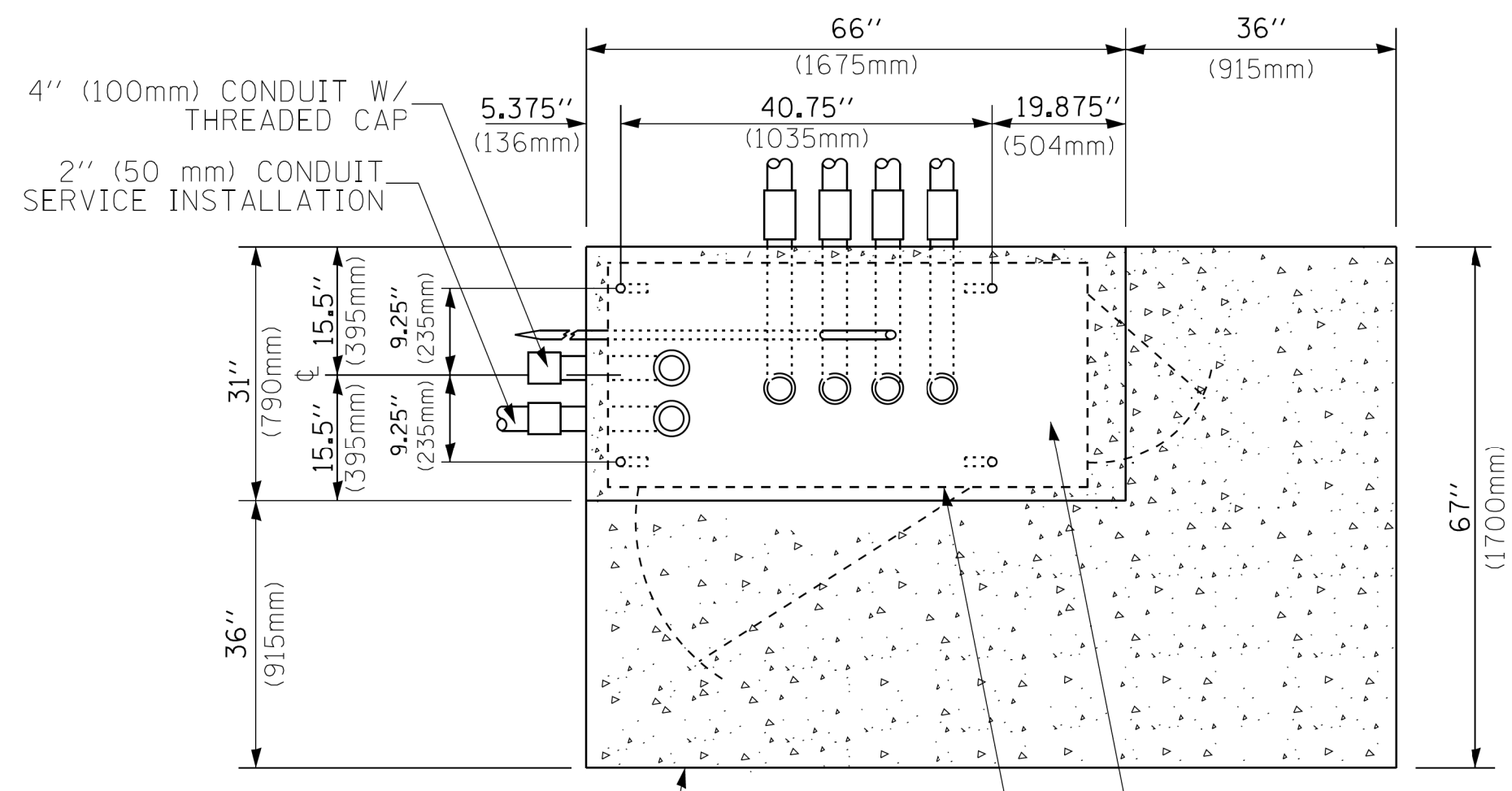
DISTRICT ONE		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			16-00080-01-PV	COOK	102	77
SCALE: NONE		TS-05		CONTRACT NO. 61G35		
SHEET NO. 4 OF 7 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				



**TOP VIEW**

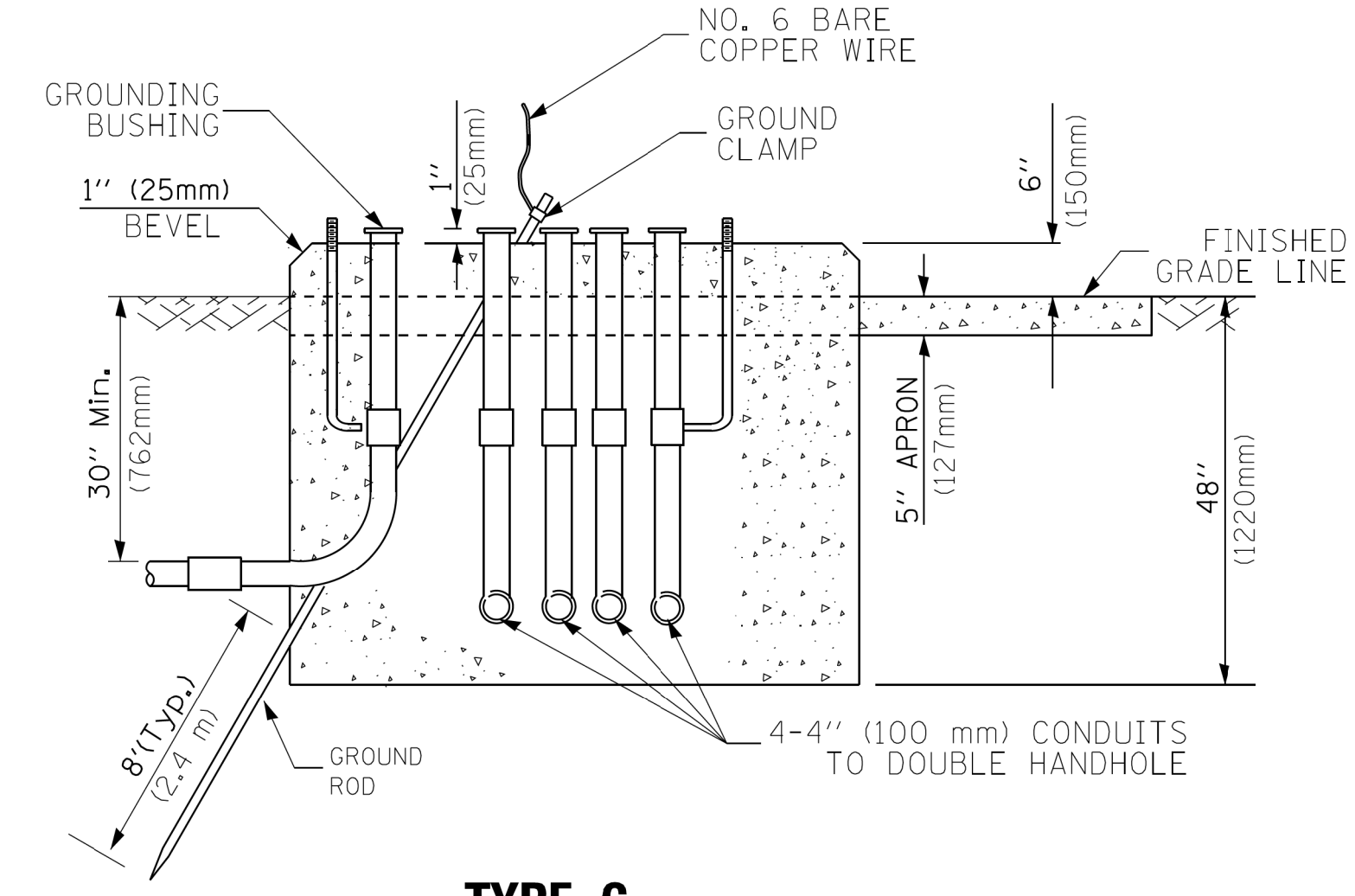


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

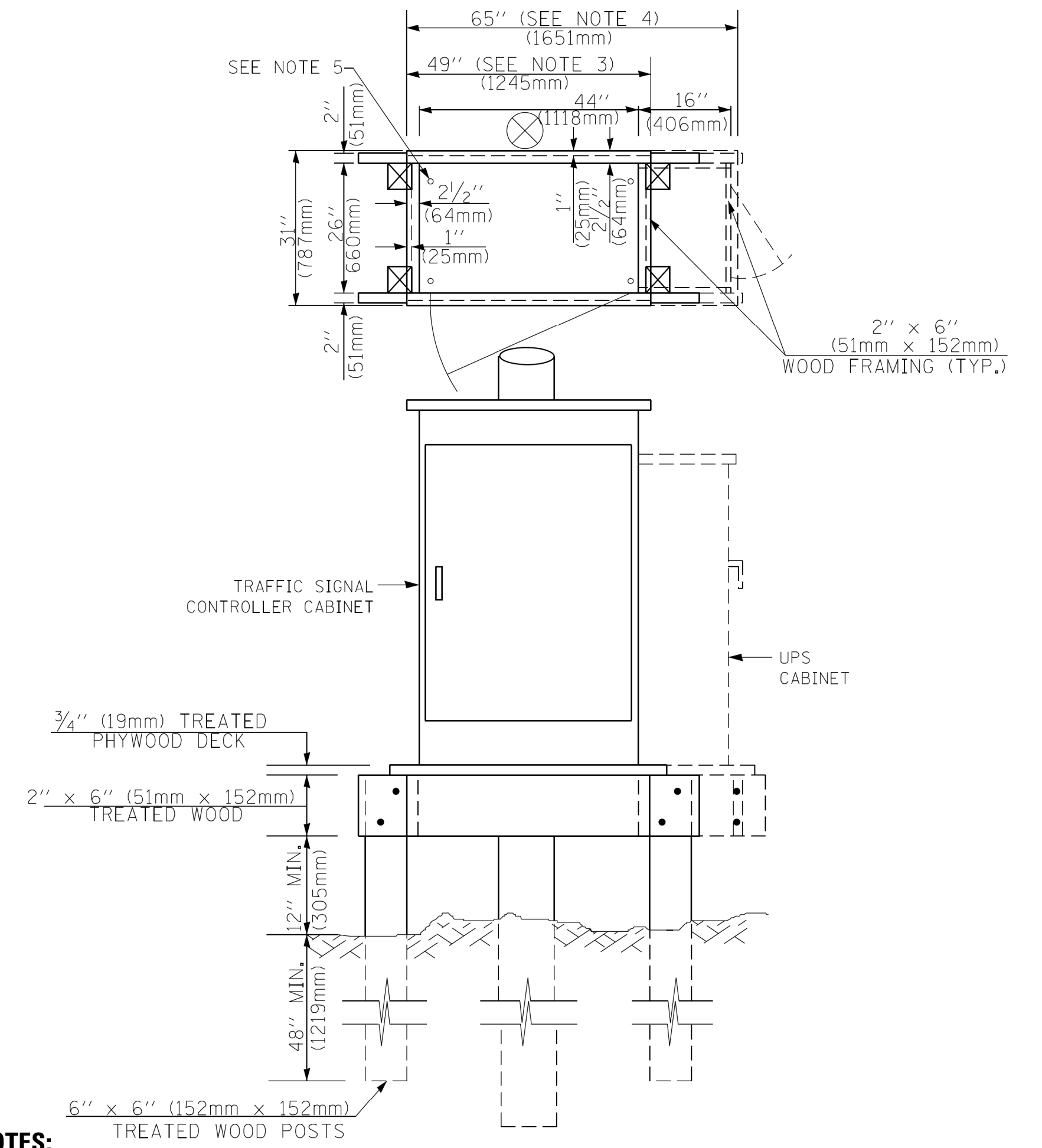


**TOP VIEW**

**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)	24" (600mm)	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 up to 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) and up to 85' (25.9 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..

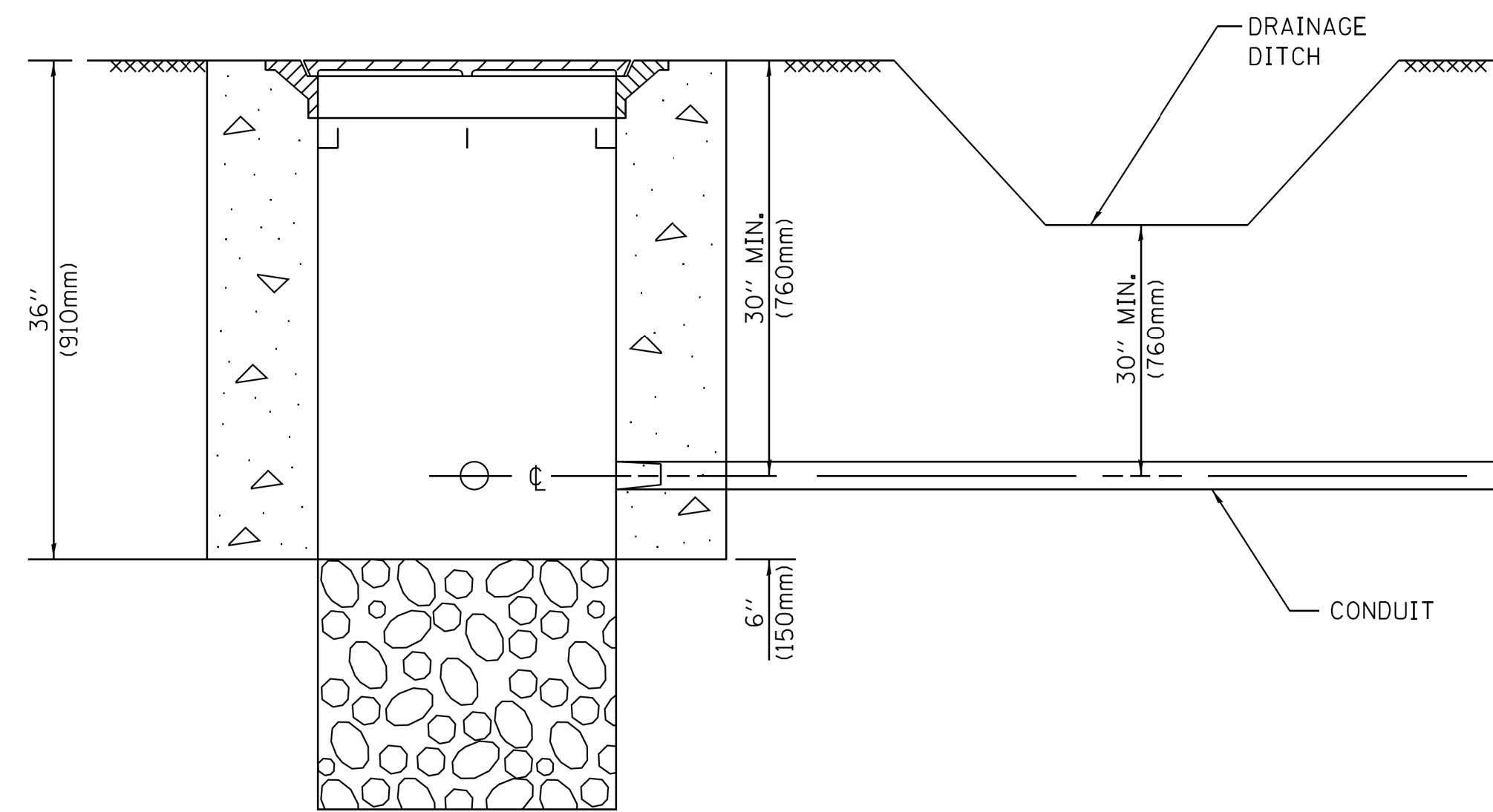
**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 20**

FILE NAME =	USER NAME = zwallsten	DESIGNED - DAG	REVISED - DAG 1-1-14
IDOT-StdDetails.dgn		DRAWN - BCK	REVISED -
5274.805	PLOT SCALE = 1:1	CHECKED - DAD	REVISED -
IDOT D1 STANDARD TS05e	PLOT DATE = 2/5/2020	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

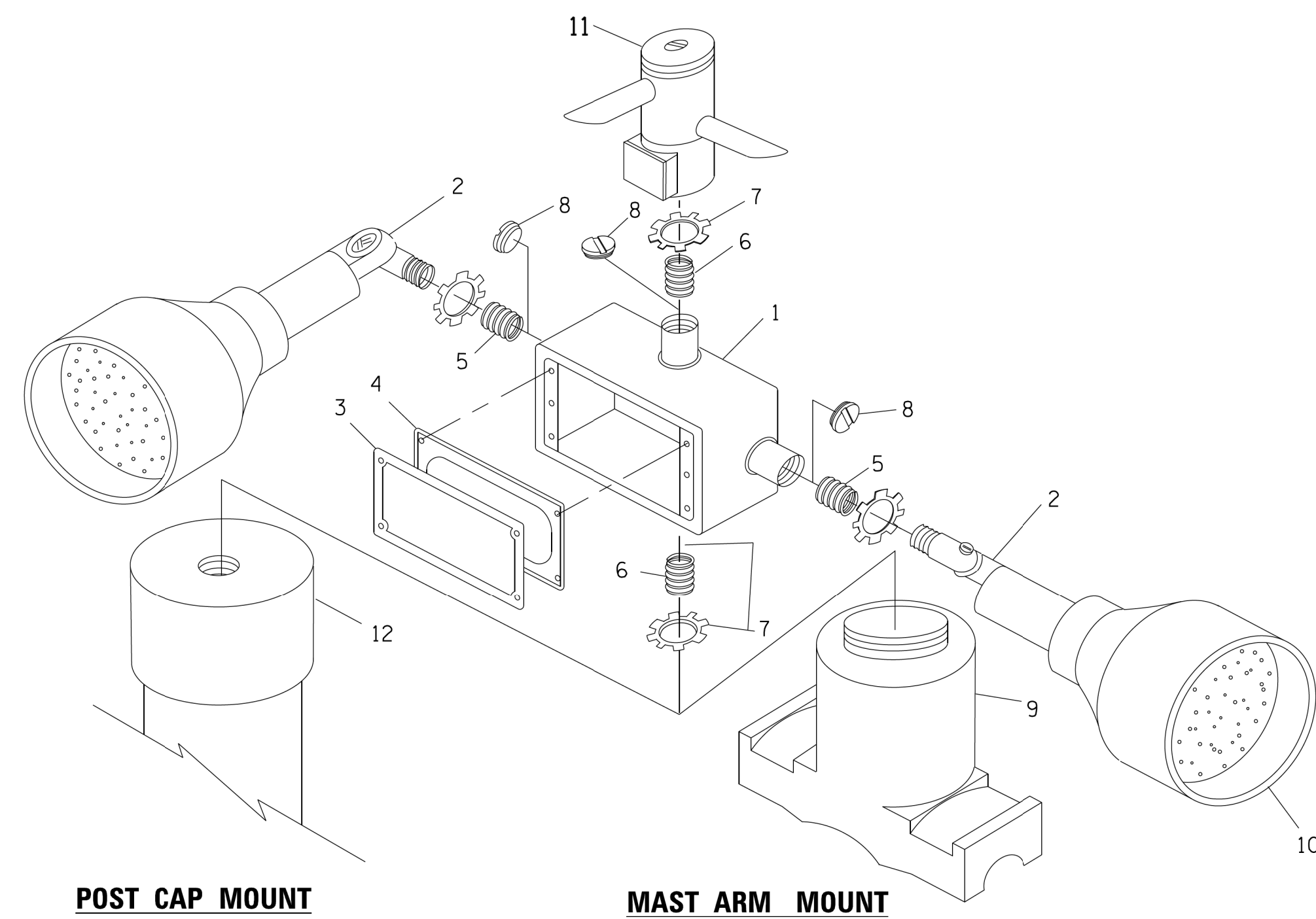
DISTRICT ONE		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			16-00080-01-PV	COOK	102	78
SCALE: NONE		SHEET NO. 5 OF 7 SHEETS		STA. TO STA.	CONTRACT NO. 61G35	
		ILLINOIS		FED. AID PROJECT		



**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

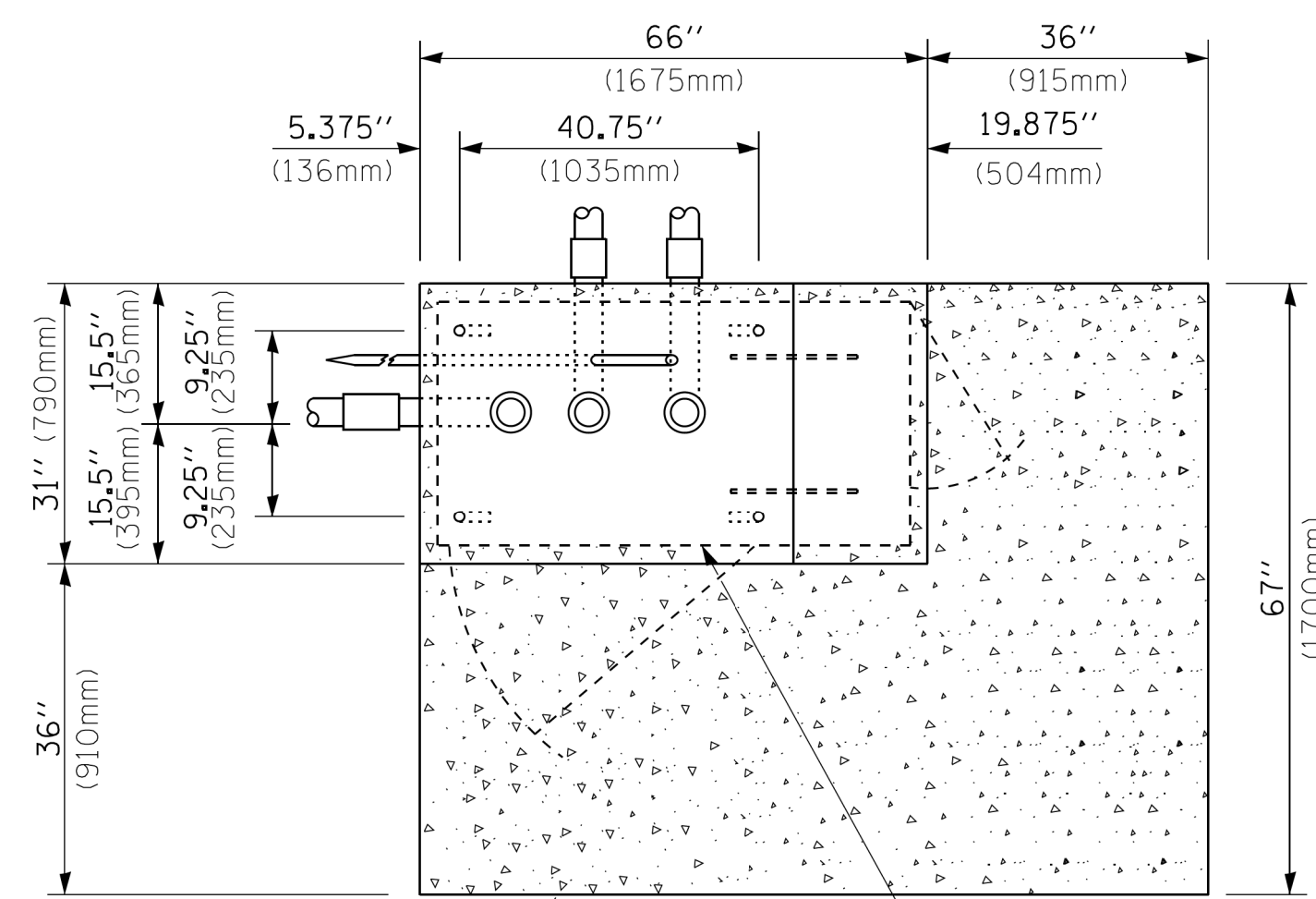
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



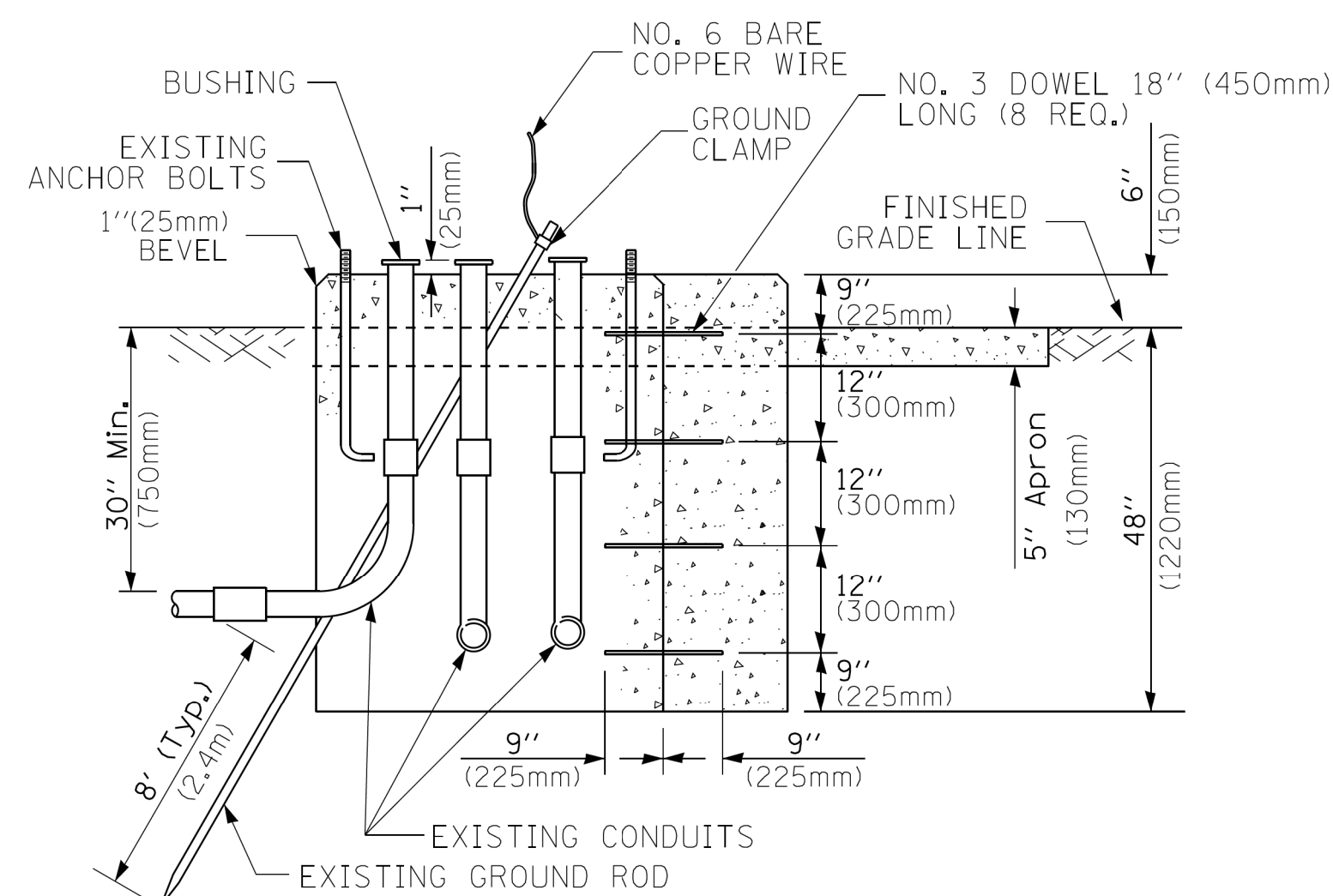
**POST CAP MOUNT**

**MAST ARM MOUNT**

**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



**TOP VIEW**  
(NOT TO SCALE)

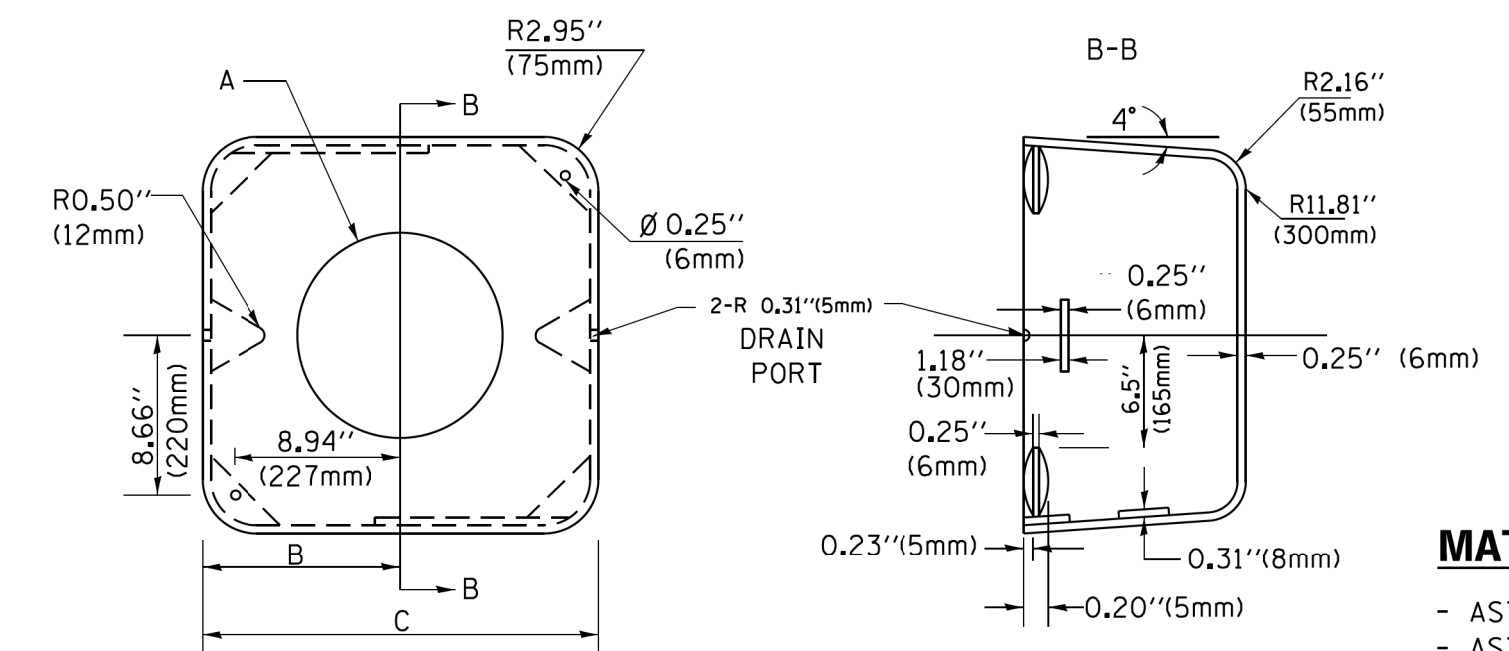


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

**NOTES:**

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**MATERIAL:**  
- ASTM A36 STEEL  
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

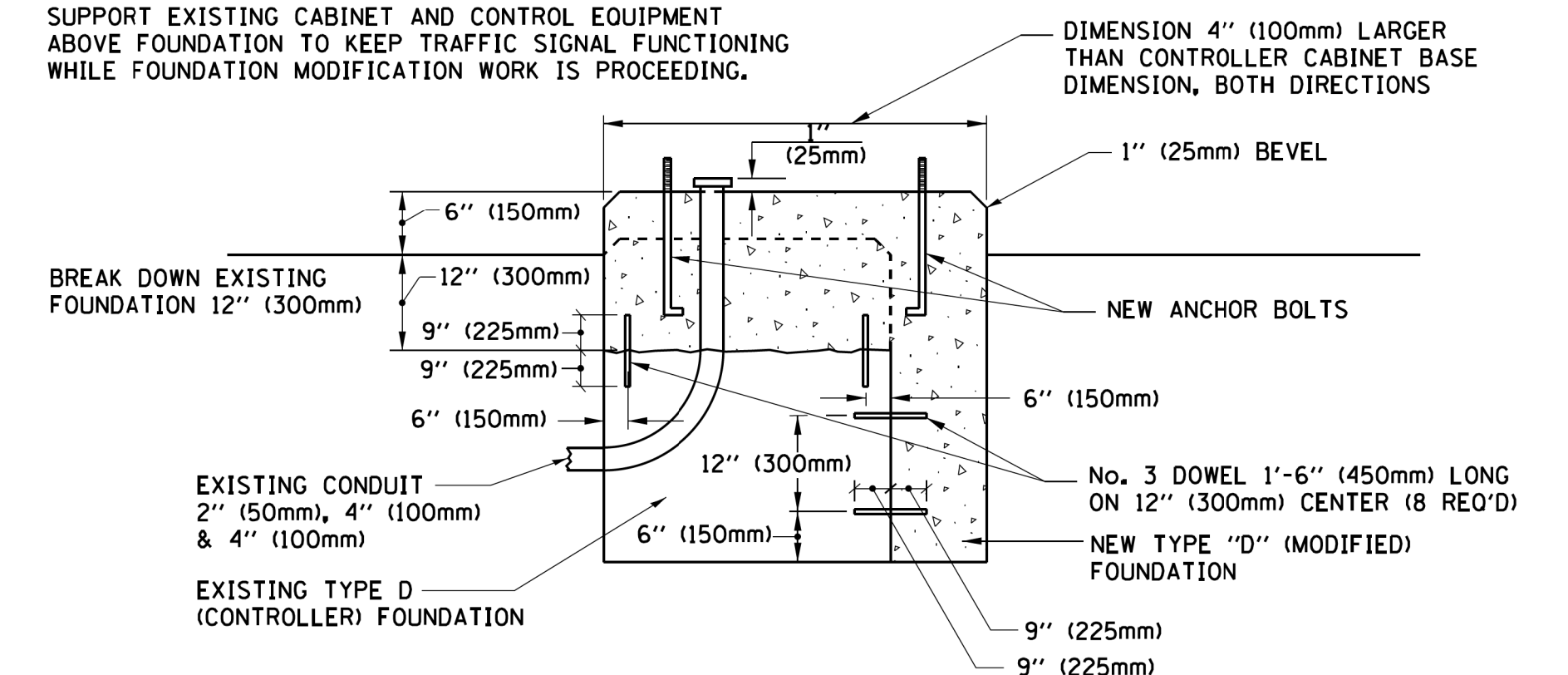
**SHROUD**

**NOTES:**

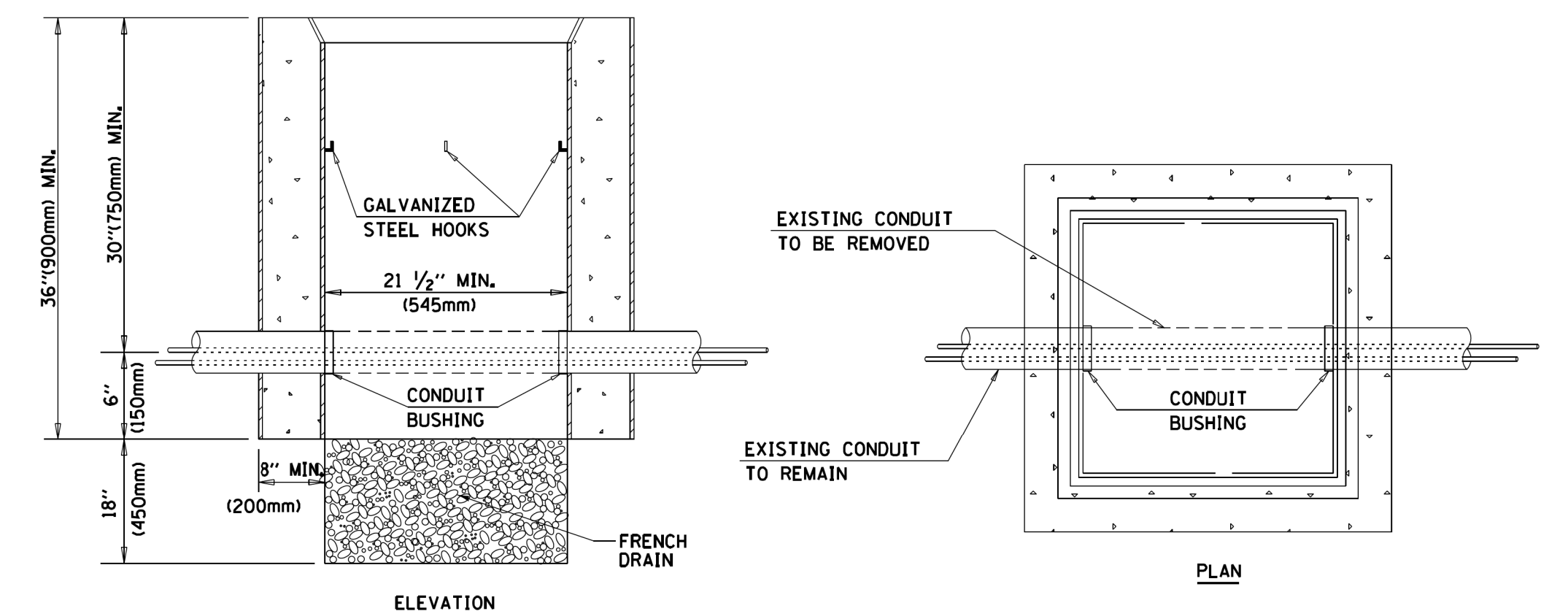
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**MODIFY EXISTING TYPE "D" FOUNDATION**



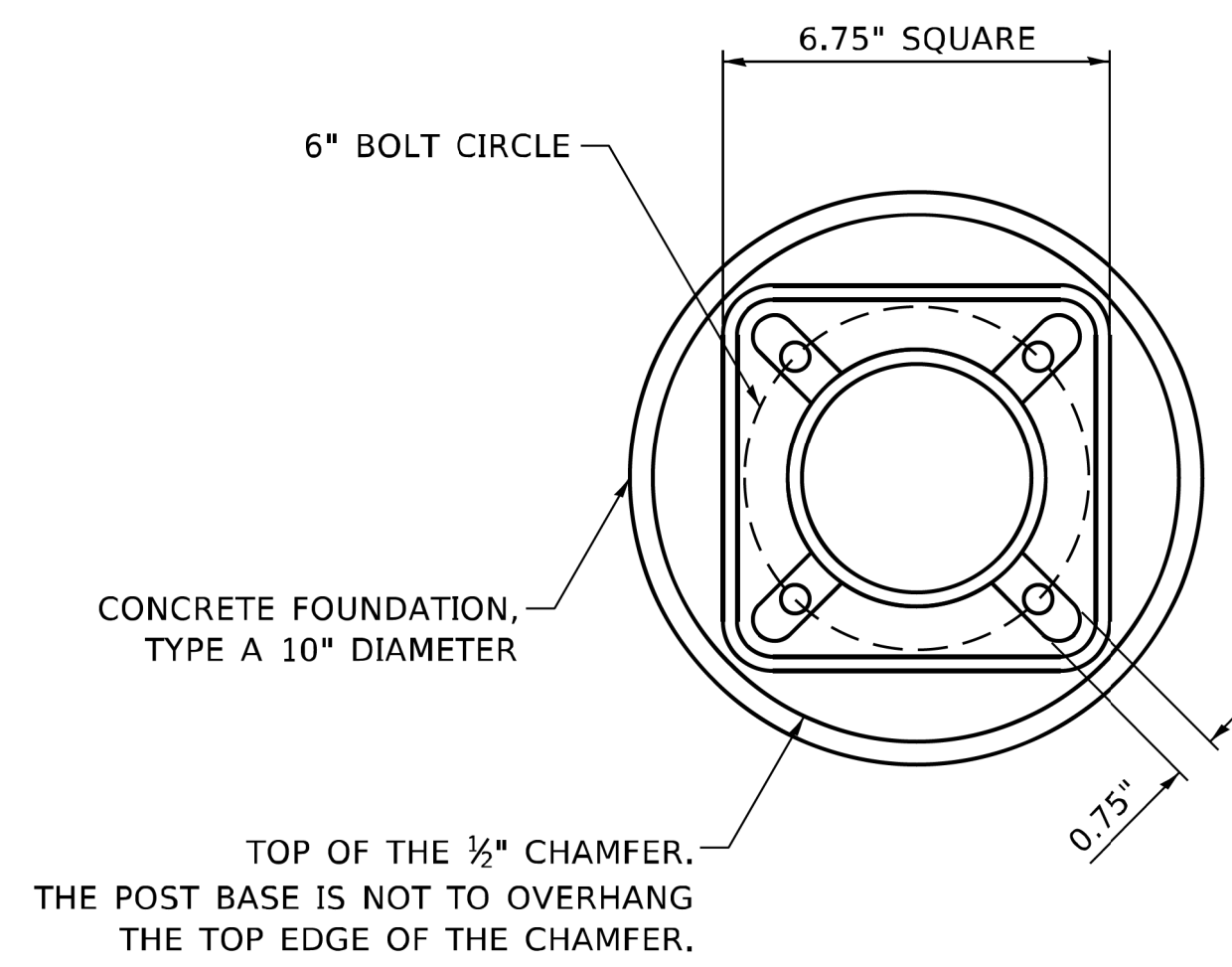
**NOTES:**

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

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

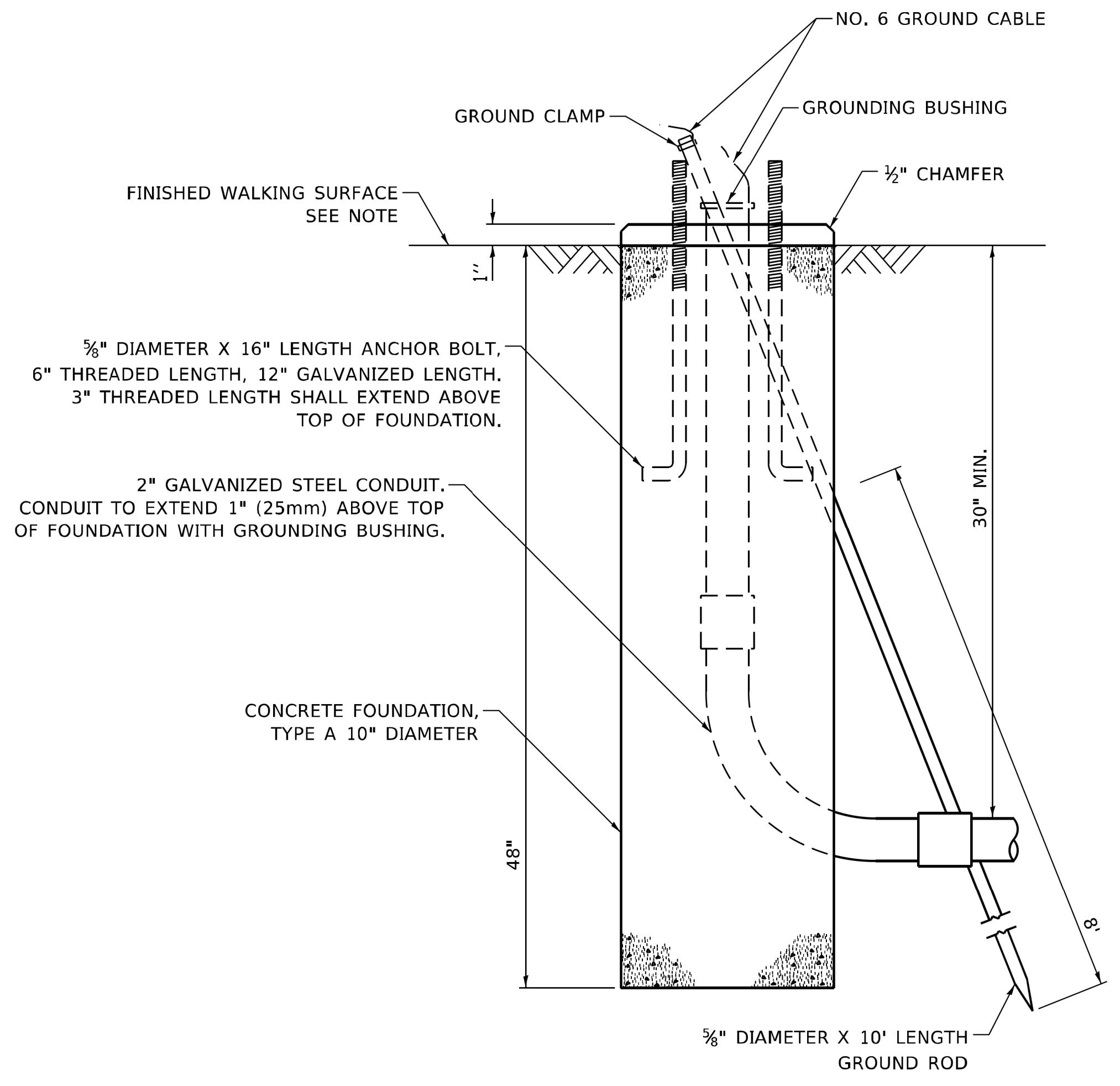
FILE NAME =	USER NAME = zwallsten	DESIGNED - DAD	REVISED - DAG 1-1-14
IDOT-StdDetails.dgn		DRAWN - BCK	REVISED -
5274.805	PLOT SCALE = 1:1	CHECKED - DAD	REVISED -
IDOT D1 STANDARD TS05f	PLOT DATE = 2/5/2020	DATE - 10-28-09	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-00080-01-PV	COOK	102	79
	<b>TS-05</b>		CONTRACT NO. 61G35	
		ILLINOIS FED. AID PROJECT		

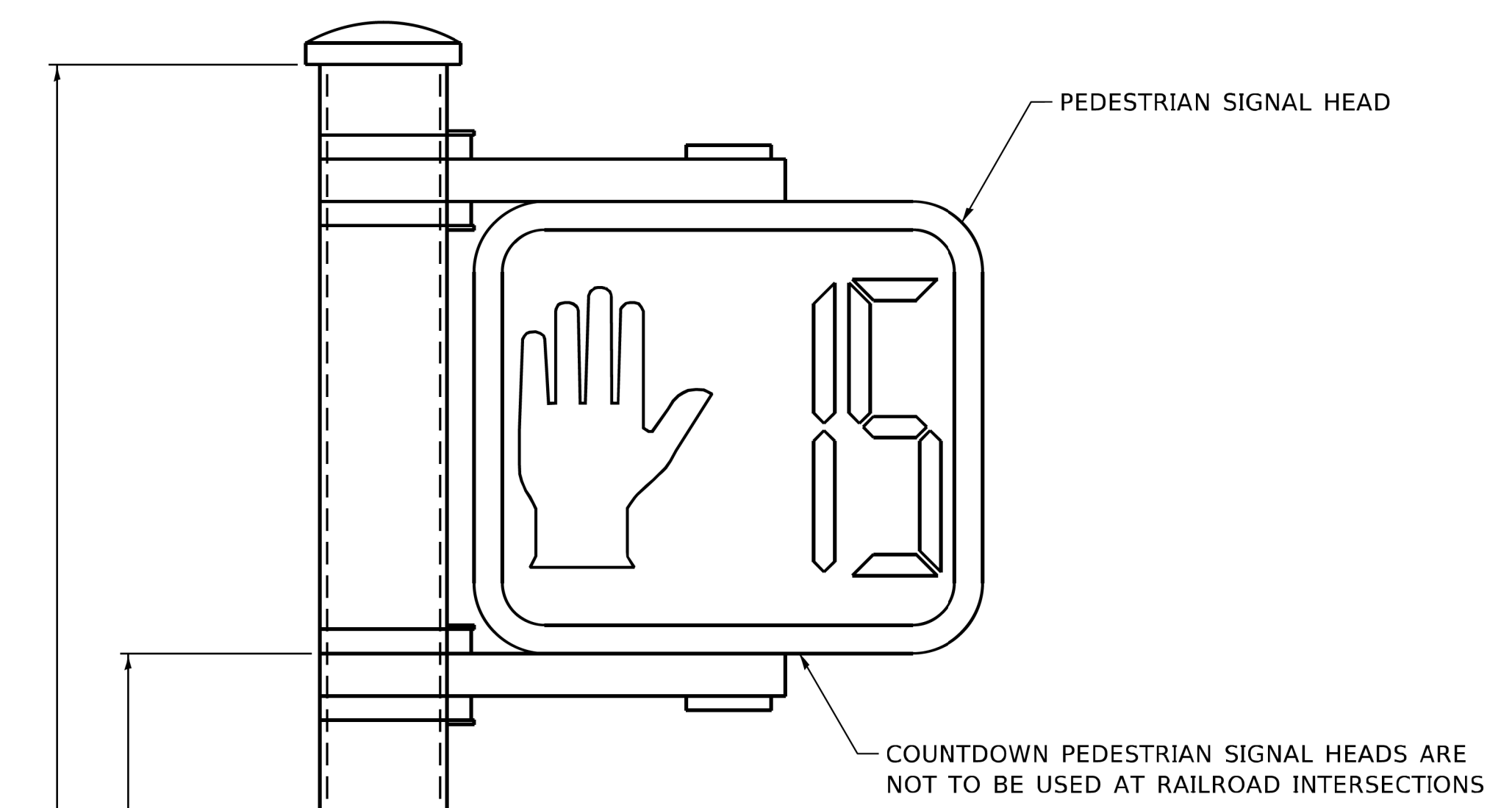


**BOLT PATTERN**

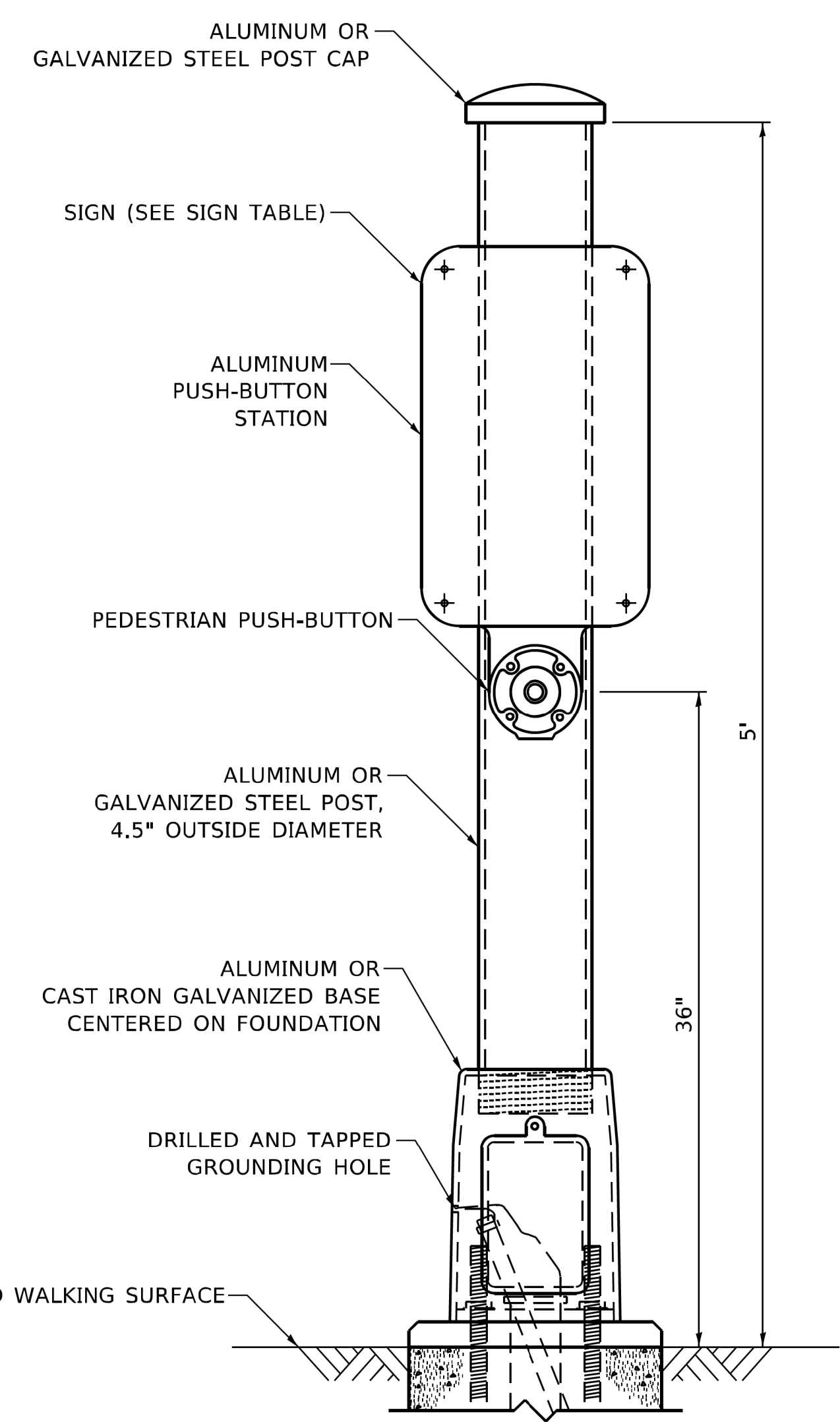
NOTE:  
 1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



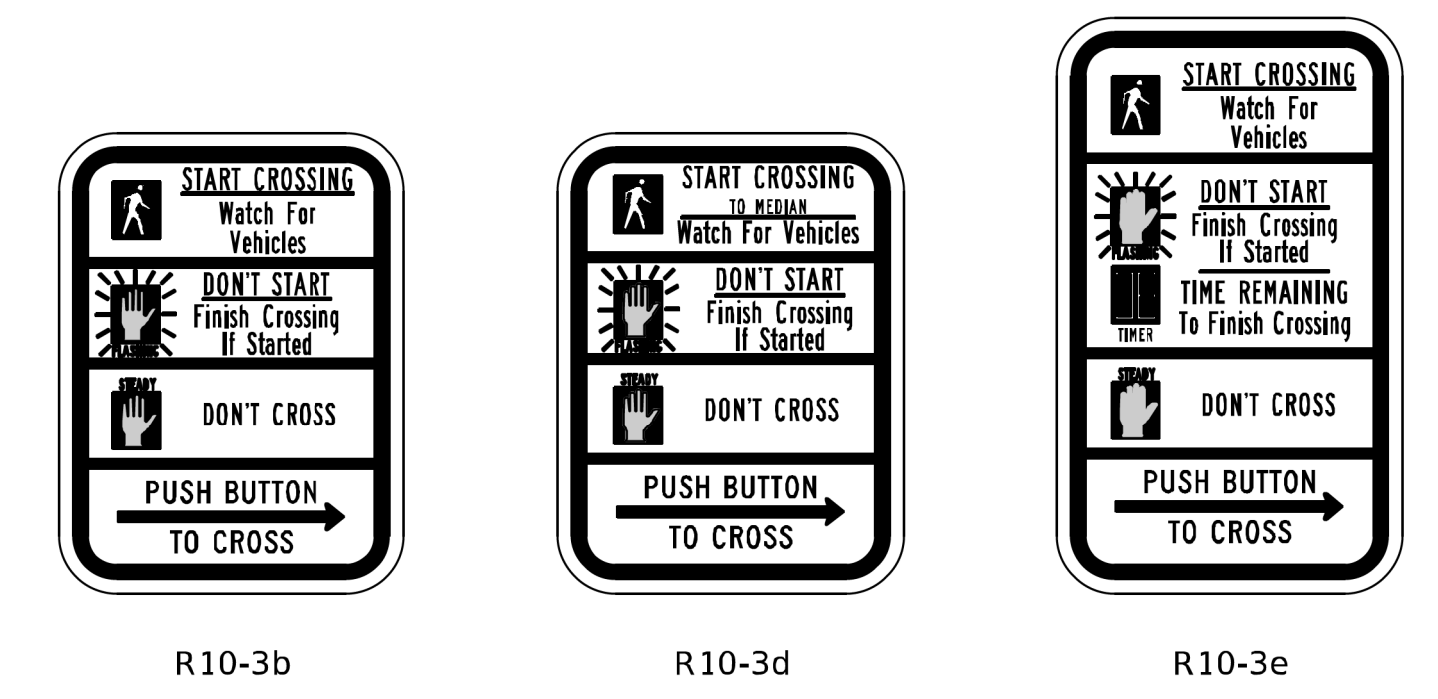
**CONCRETE FOUNDATION,  
TYPE A 10-INCH DIAMETER**



**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"

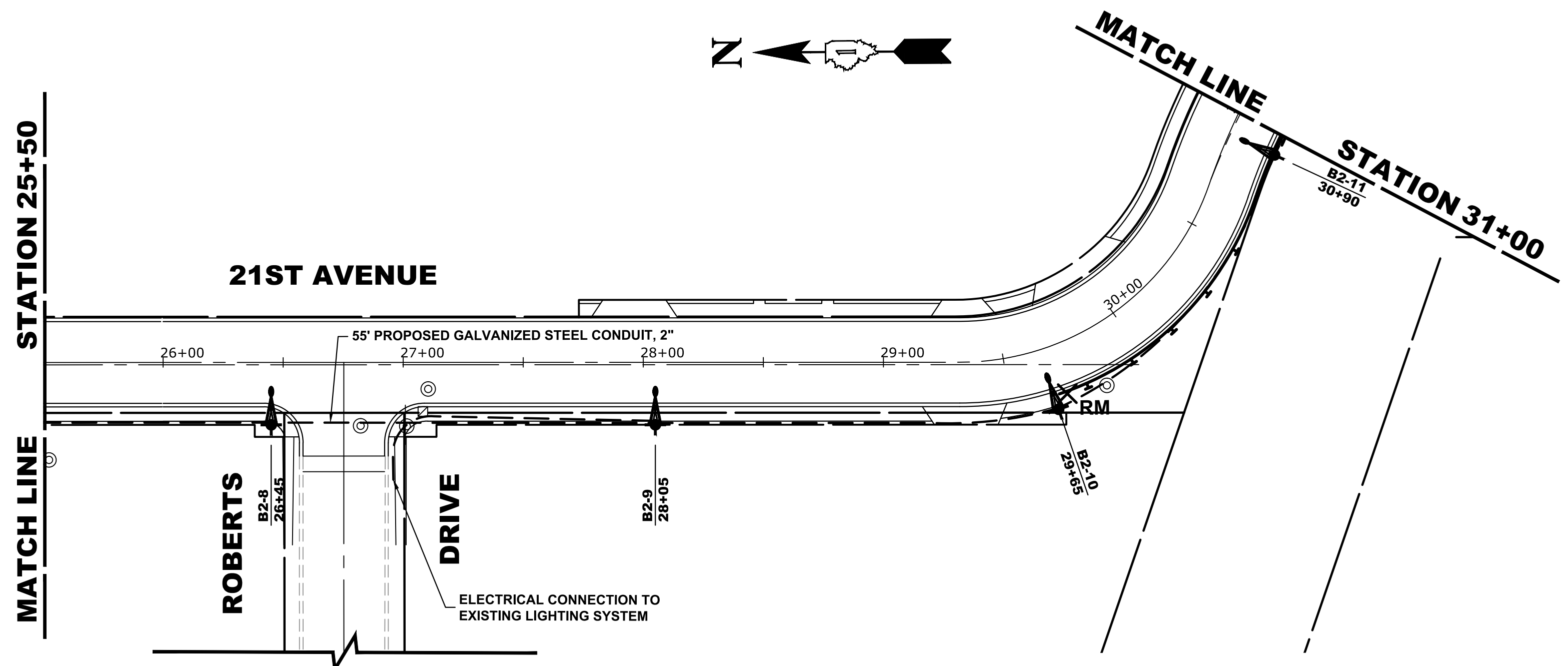
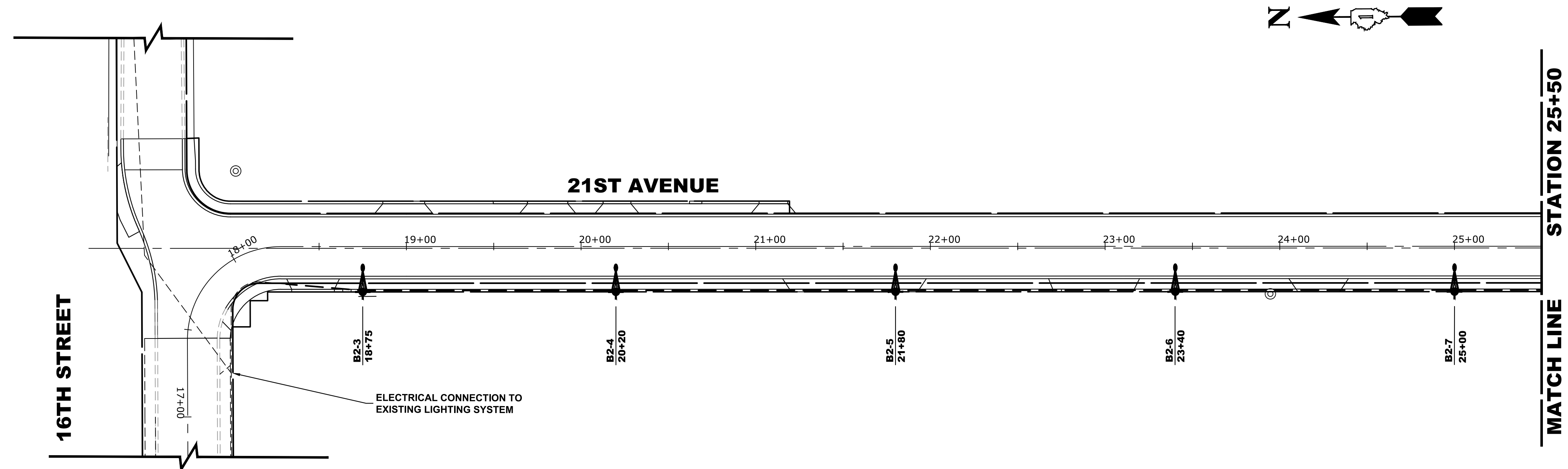
NOTES:  
 1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.  
 2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.  
 3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

**GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 22**

FILE NAME = 1DOT-StdDetails.dgn	USER NAME = zwallsten	DESIGNED - IP	REVISED - IP 1/8/2020	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5274.805	PLOT SCALE = 1:1	CHECKED - LP	REVISED -			16-00080-01-PV	COOK	102	80	
IDOT D1 STANDARD TS05g	PLOT DATE = 2/5/2020	DATE - 10/15/2018	REVISED -			<b>TS-05</b>		CONTRACT NO. 61G35		
						SCALE: NONE	SHEET 7 OF 7 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	



Drawing File: W:\Projects\_by\_Village\Brosview\12019008 -Brogg Drive Stage II - Design\CAD\Site\Brogg\_DR\_Ph 2\_Stg II\_40scale.dwg Feb 11, 2020 - 2:58pm



LEGEND OF SYMBOLS	
	EXISTING LIGHT POLE AND FIXTURE
	EXISTING LIGHT POLE AND FIXTURE TO BE REMOVED
	PROPOSED 30' MOUNTING HEIGHT POLE WITH 12' MAST ARM AND LED LUMINAIRE
	PROPOSED HANDHOLE
	PROPOSED CONTROL CENTER
	PROPOSED UNIT DUCT WITH 2-1/C No. 6 & 1-1/C No. 8 GROUND, 600V (XLP-TYPE USE), 1" DIAMETER OR AS NOTED, BORED & PULLED OR AS NOTED
	EXISTING UNIT DUCT
	PROPOSED RIGID GALVANIZED STEEL CONDUIT
	CONTROLLER IDENTIFICATION (TYP.)
	CIRCUIT NUMBER (TYP.)
	POLE NUMBER (TYP.)
	STATION NUMBER (TYP.)

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DESIGNED -	MWV	REVISED -
DRAWN -	DMM, SFB	REVISED -
CHECKED -	JGG, MWV	REVISED -
DATE -	2-11-20	REVISED -

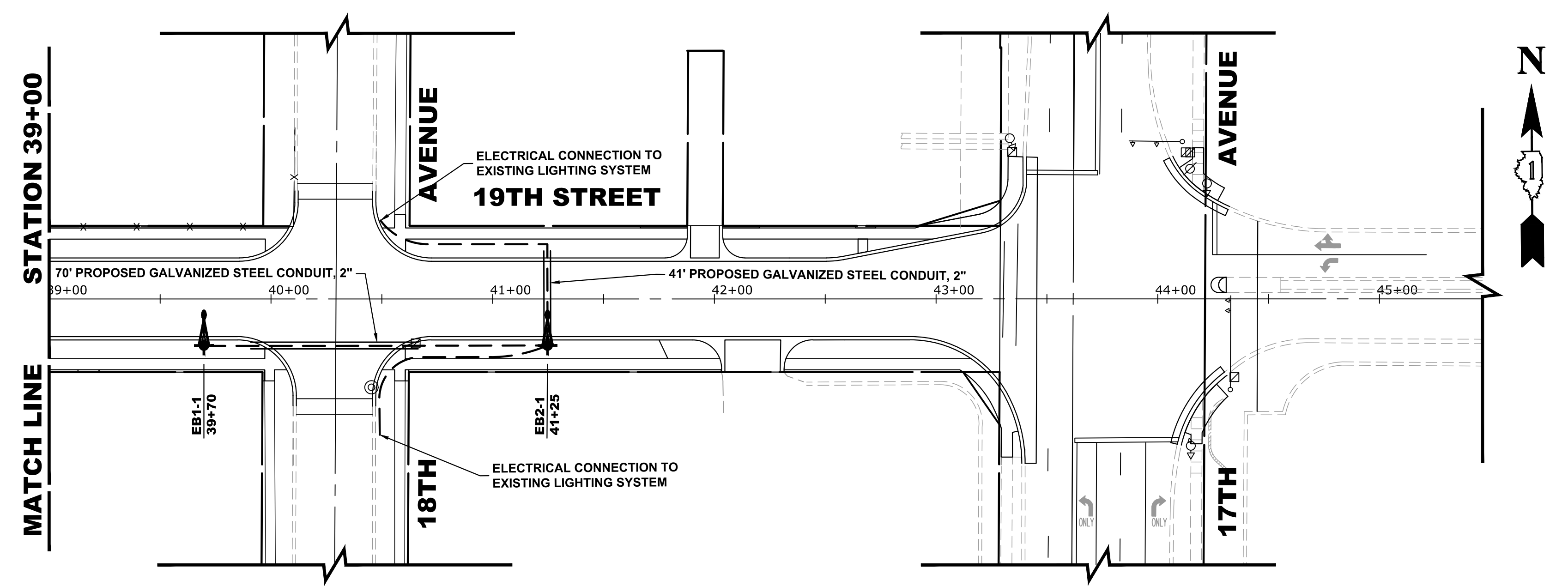
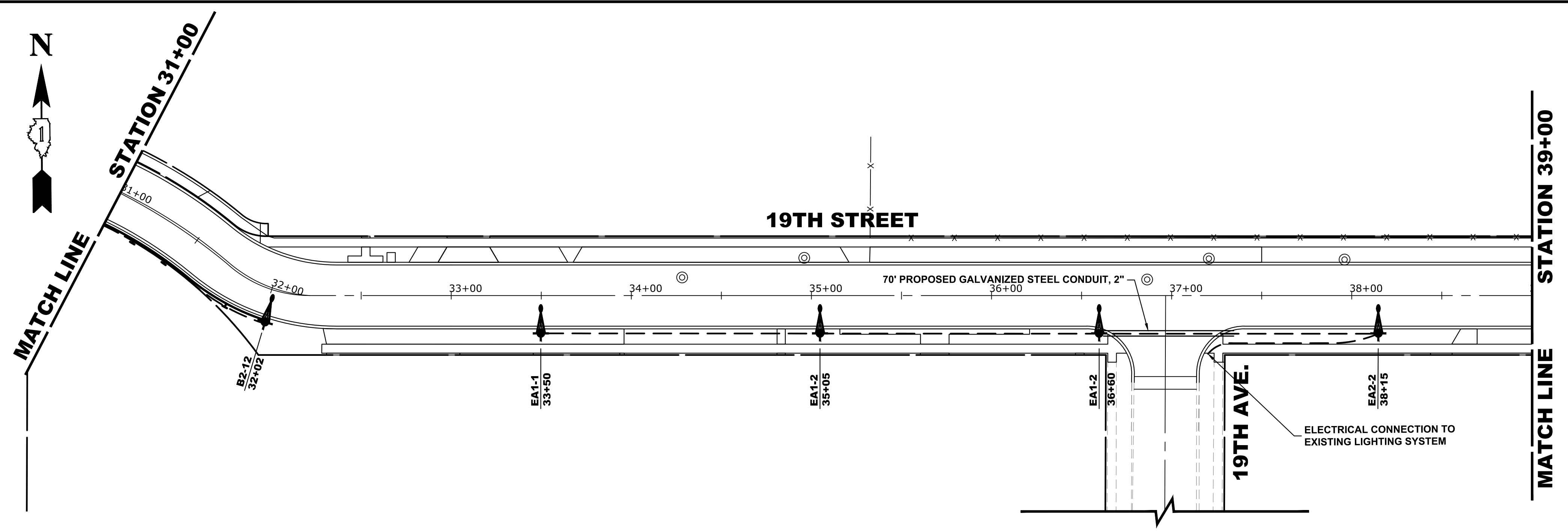
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>STREET LIGHTING PLAN    CONTROLLER "A"</b>			
SCALE: 1" = 40'	SHEET NO. 1 OF 2 SHEETS	STA. 17+45	TO STA. 31+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	81
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801

Drawing File: W:\Projects\_by\_Village\Brosview\12019008 -Braga Drive Stage II - Design\CAD\Site\Braga\_DR\_Ph 2\_Stg II\_40scale.dwg  
 Feb 11, 2020 - 2:59pm



LEGEND OF SYMBOLS	
	EXISTING LIGHT POLE AND FIXTURE
	EXISTING LIGHT POLE AND FIXTURE TO BE REMOVED
	PROPOSED 30' MOUNTING HEIGHT POLE WITH 12' MAST ARM AND LED LUMINAIRE
	PROPOSED HANDHOLE
	PROPOSED CONTROL CENTER
	PROPOSED UNIT DUCT WITH 2-1/C No. 6 & 1-1/C No. 8 GROUND, 600V (XLP-TYPE USE), 1" DIAMETER OR AS NOTED, BORED & PULLED OR AS NOTED
	EXISTING UNIT DUCT
	PROPOSED RIGID GALVANIZED STEEL CONDUIT
	CONTROLLER IDENTIFICATION (TYP.)
	CIRCUIT NUMBER (TYP.)
	POLE NUMBER (TYP.)
	STATION NUMBER (TYP.)

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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

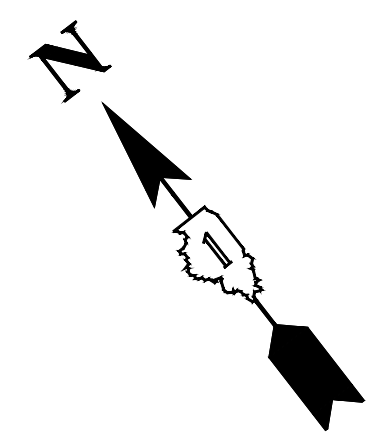
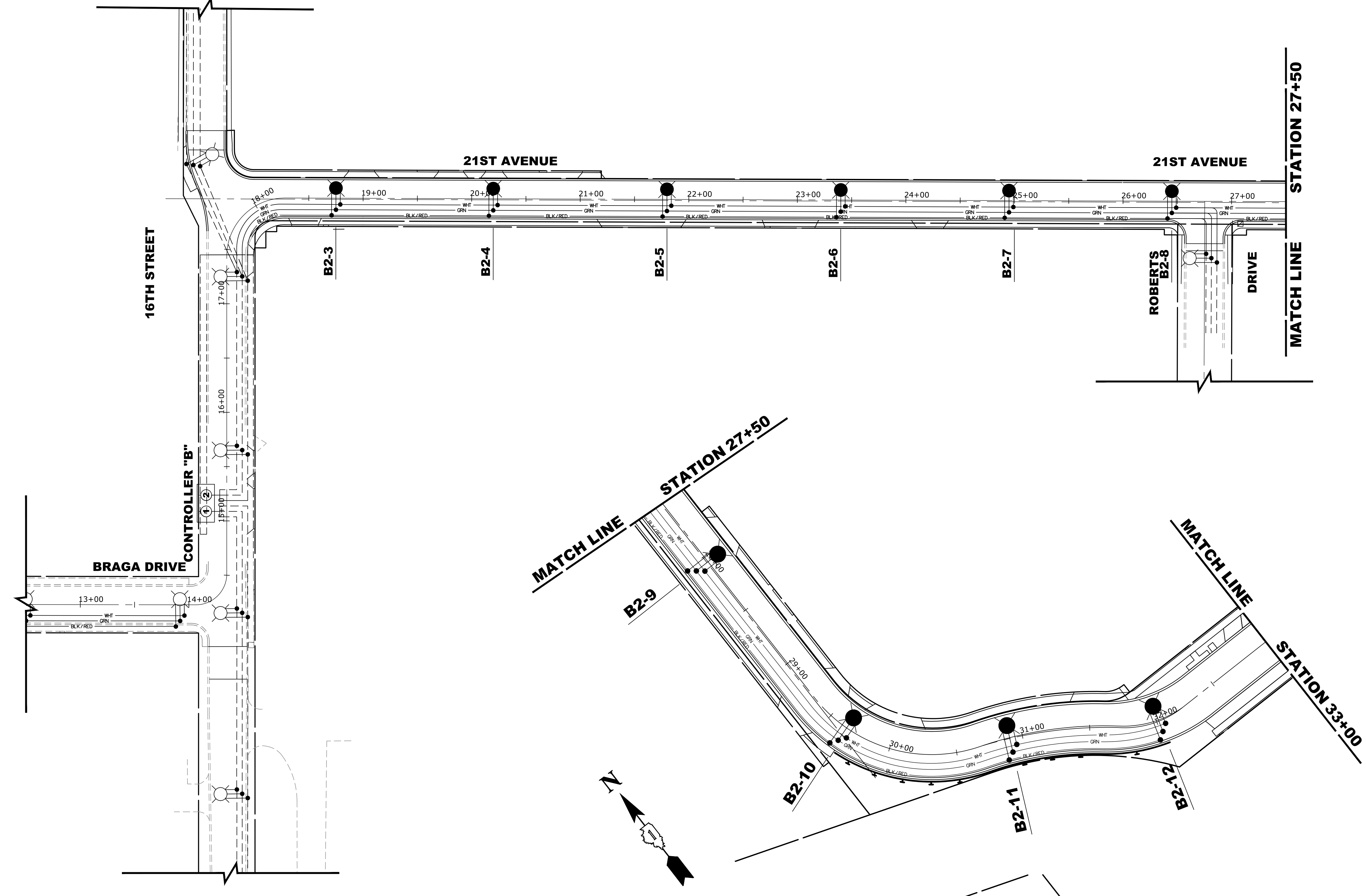
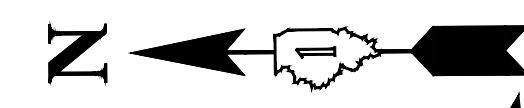
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>STREET LIGHTING PLAN CONTROLLER "B"</b>	
SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEETS
STA. 31+00	TO STA. 43+46

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	82
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801

Drawing File: W:\Projects\_by\_Village\Broadview\12019008 -Braga Drive Stage II - Design\CAD\Site\Braga\_Dr\_Ph\_2\_Stg\_II\_40scale.dwg  
 Feb 11, 2020 - 2:59pm



LIGHTING CONTROLLER "B" CIRCUIT LOADS		
CIRCUIT	AMPS	WATTS
1	1.20	300
2	12.0	1500
<b>TOTAL</b>	<b>13.2</b>	

LEGEND OF SYMBOLS	
	BLK/RED 240 VOLT PHASE CABLE (BLACK OR RED)
	WHI 240 VOLT NEUTRAL CABLE (WHITE)
	GRN GROUND WIRE (GREEN)
	EXISTING CABLE
	SPLICE
	EXISTING LUMINAIRE
	PROPOSED LED LUMINAIRE
<b>A1-1</b>	PROPOSED CIRCUIT/POLE NUMBER



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DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

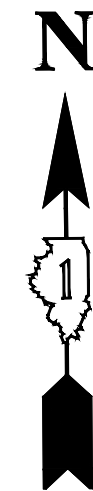
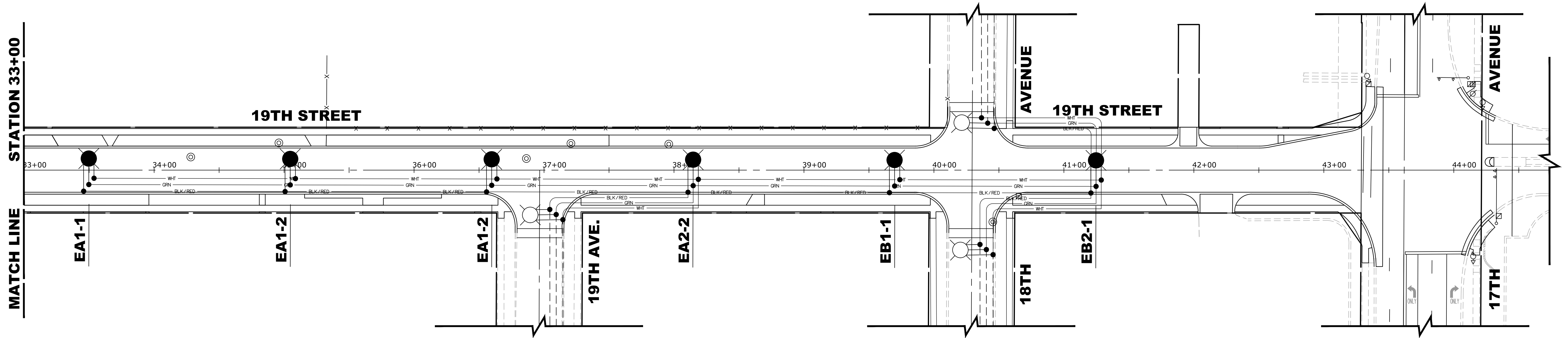
**STREET LIGHTING WIRING DIAGRAM**

SCALE: 1" = 50'    SHEET NO. 1 OF 1 SHEETS    STA. 17+45    TO STA. 33+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	83
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801

Drawing File: W:\Projects\_by\_Village\Broadview\12019008 -Broad Drive Stage II - Design\CAD\Site\Braga\_Dr\_Ph 2\_Stg II 40scaled.dwg Feb 11, 2020 - 5:00pm



LEGEND OF SYMBOLS	
	BLK/RED 240 VOLT PHASE CABLE (BLACK OR RED)
	WHT 240 VOLT NEUTRAL CABLE (WHITE)
	GRN GROUND WIRE (GREEN)
	EXISTING CABLE
	SPLICE
	EXISTING LUMINAIRE
	PROPOSED LED LUMINAIRE
<b>A1-1</b>	PROPOSED CIRCUIT/POLE NUMBER

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DESIGNED - MWV	REVISED -
DRAWN - DMM, SFB	REVISED -
CHECKED - JGG, MWV	REVISED -
DATE - 2-11-20	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

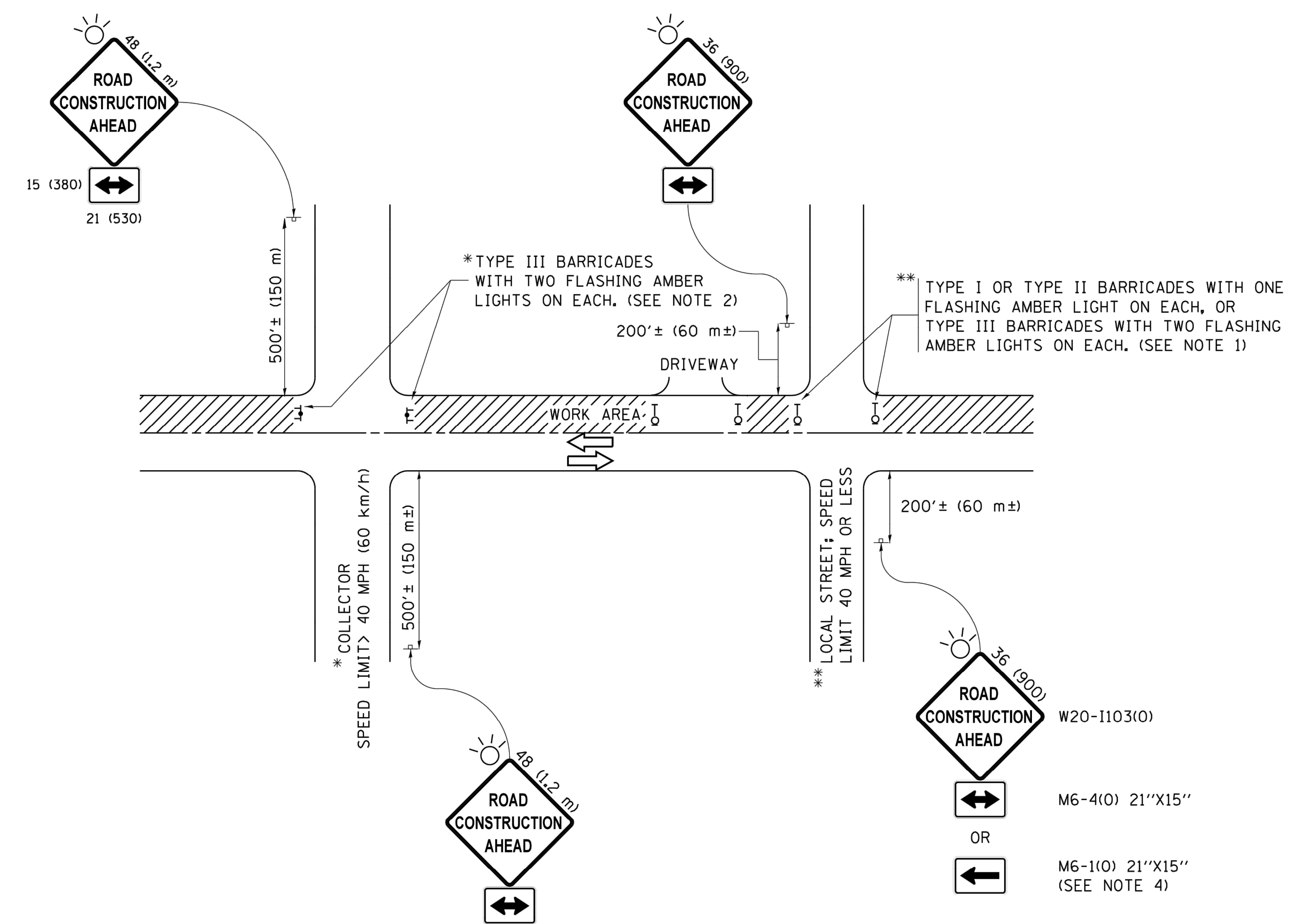
**STREET LIGHTING WIRING DIAGRAM**

SCALE: 1" = 50'      SHEET NO. 1 OF 1 SHEETS      STA. 33+00      TO STA. 43+46

MUN. RTE. 3015	SECTION 16-00080-01-PV	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 84
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Broad Drive Stage II - Design\CAD\Sites\85-TC\_10.dwg Feb 11, 2020 - 3:11pm



**NOTES:**

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

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

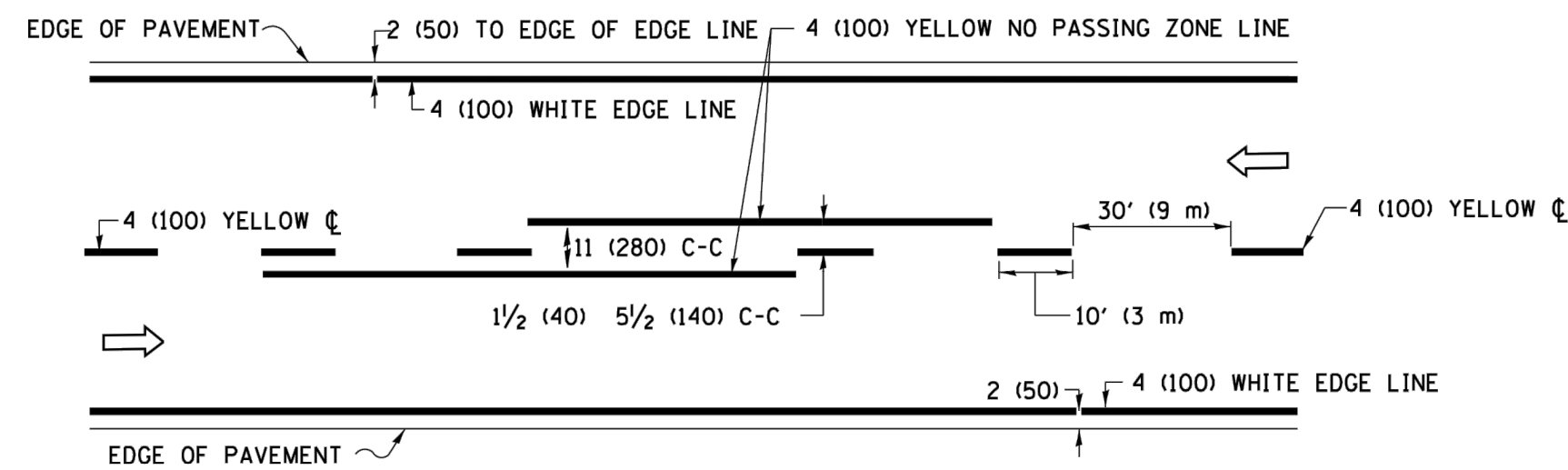
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Default	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

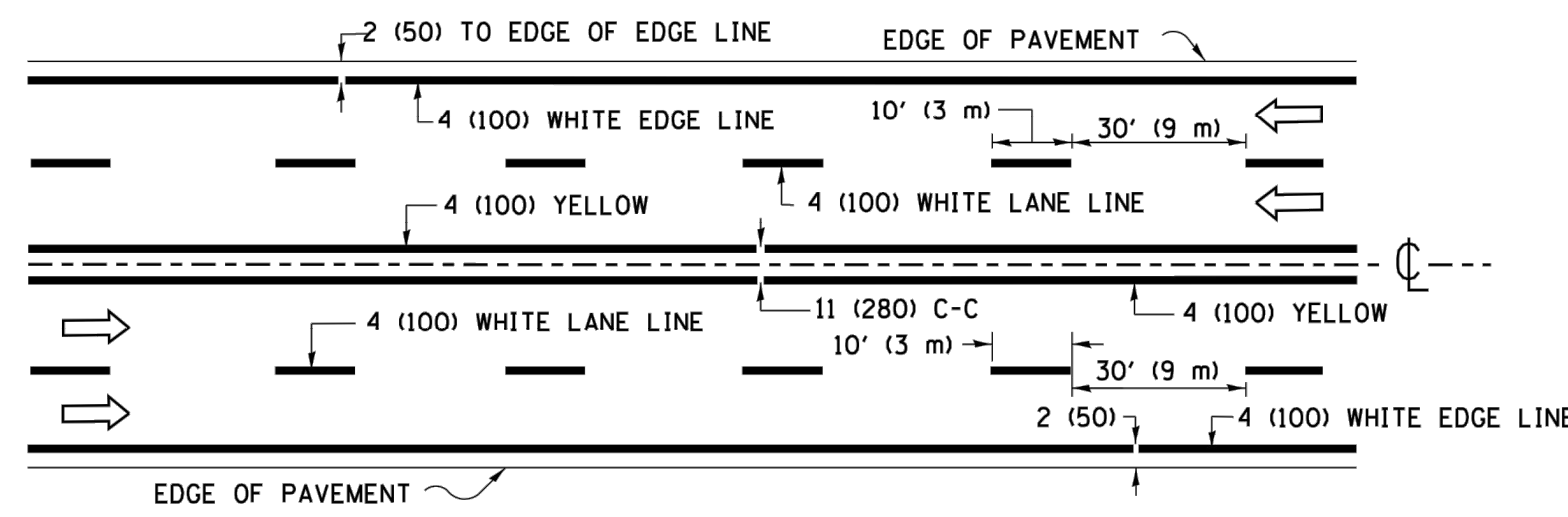
<b>TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS</b>			
SCALE: NONE	SHEET 1	OF 1	SHEETS
STA.	TO STA.		

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	85
TC-10		CONTRACT NO.	61G35	
ILLINOIS FED. AID PROJECT				

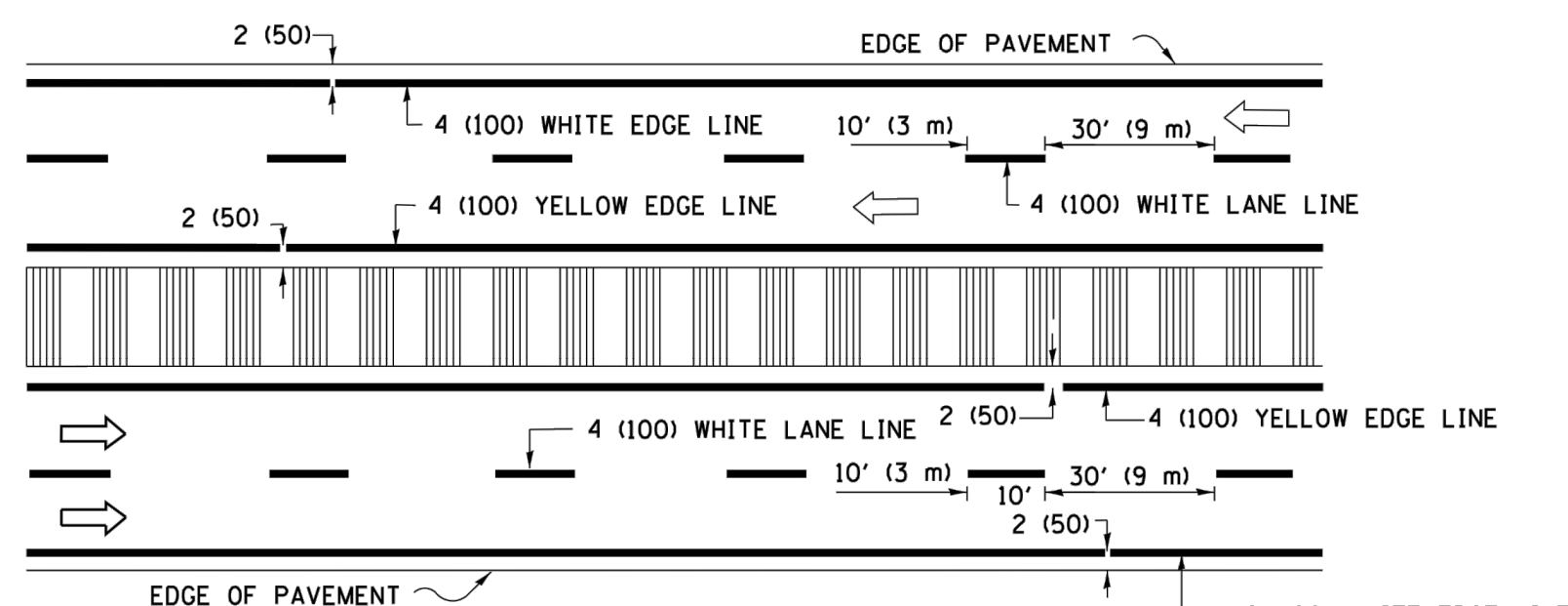
I.H.E. PROJECT NO. 120-19-00801



**2-LANE ROADWAY**

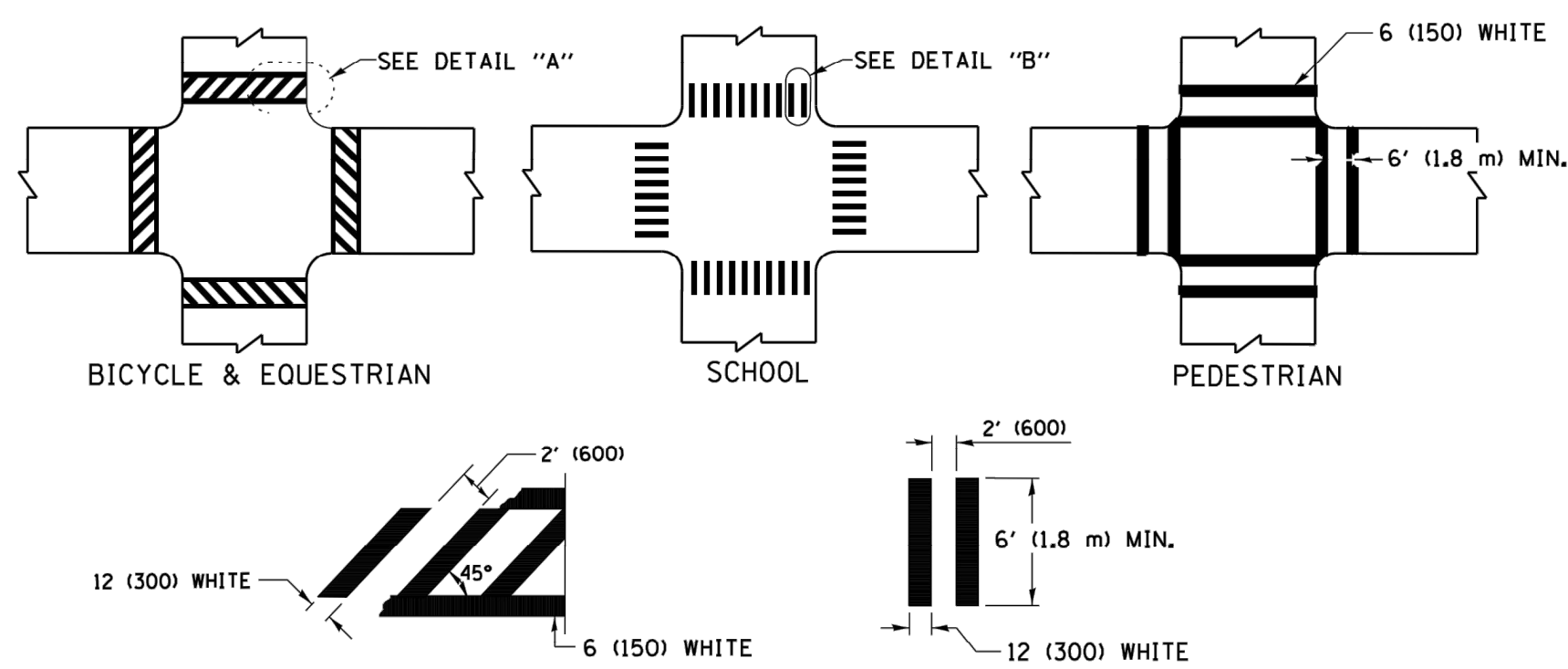


**MULTI-LANE UNDIVIDED**



**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

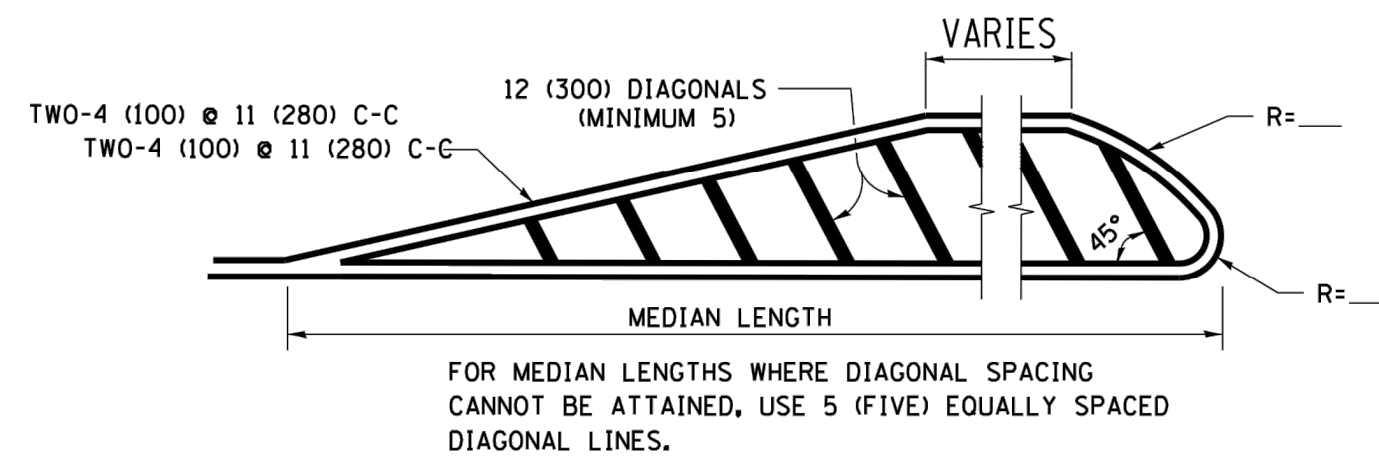
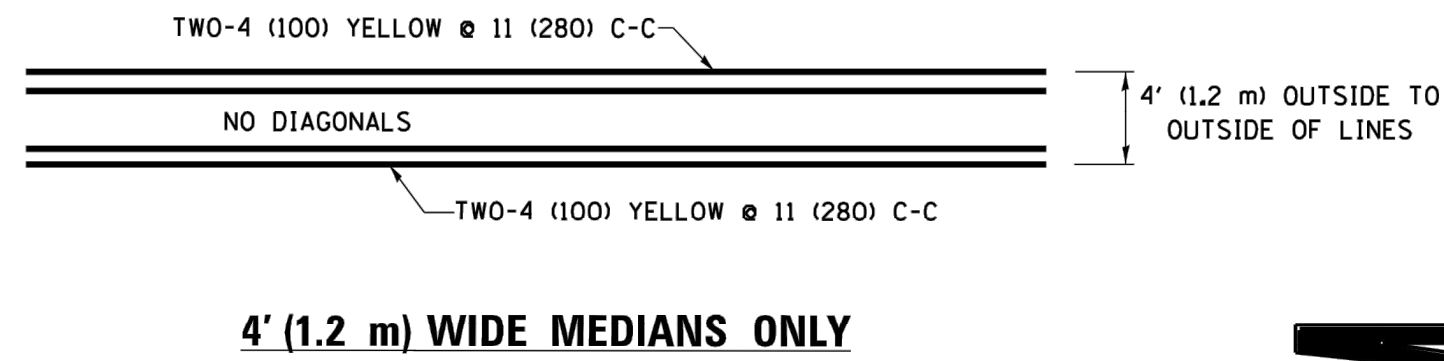


**DETAIL "A"**

**DETAIL "B"**

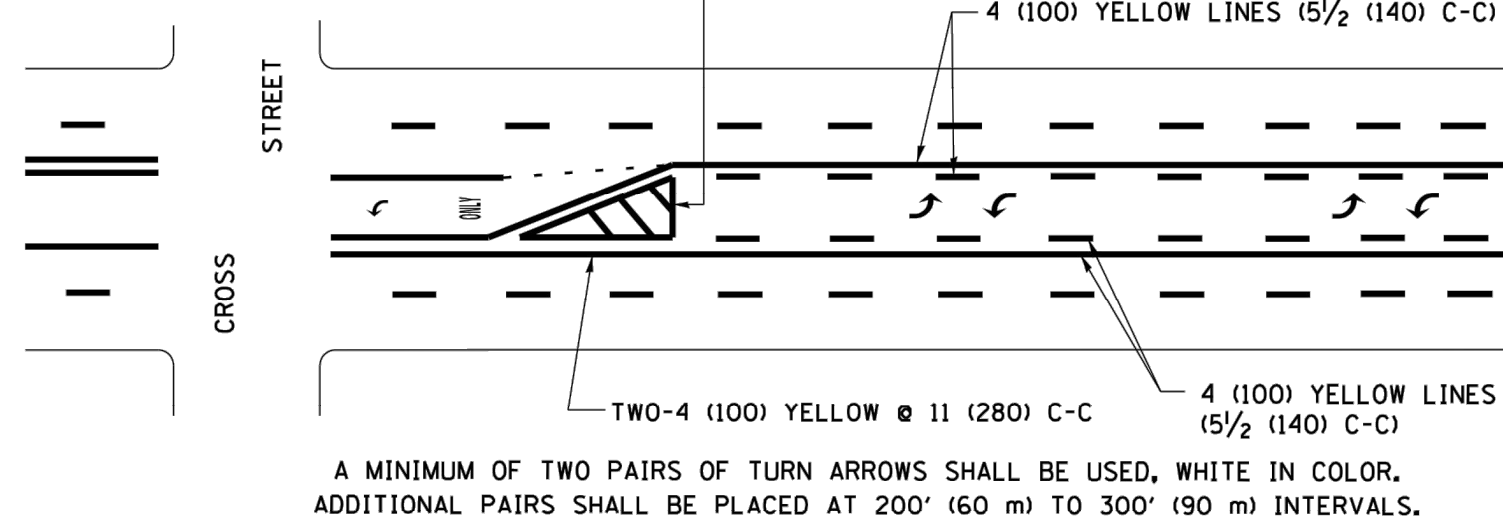
**TYPICAL CROSSWALK MARKING**

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



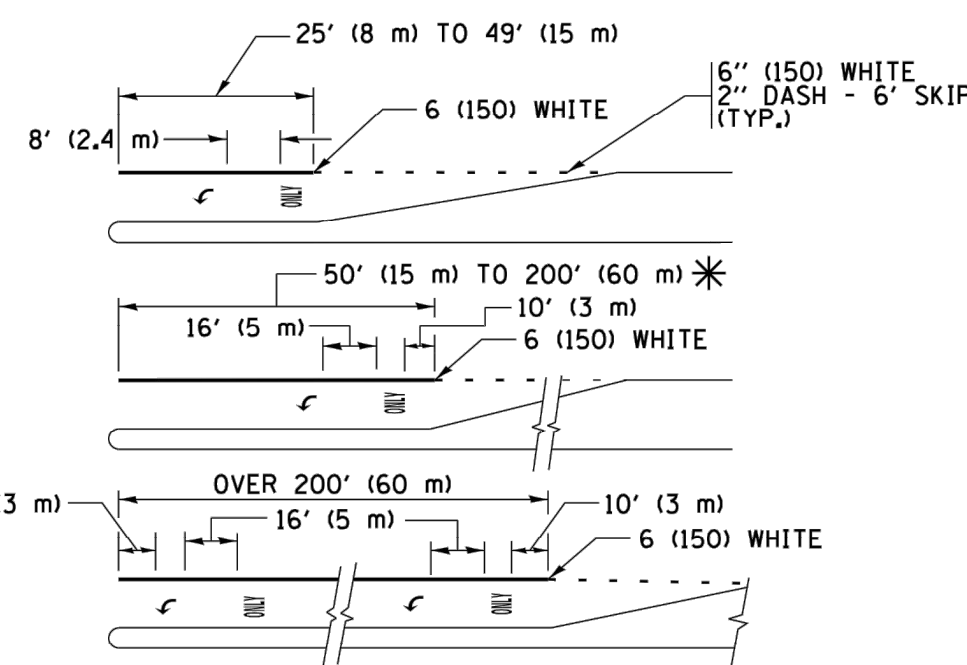
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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



**MEDIAN WITH TWO-WAY LEFT TURN LANE**

**TYPICAL PAINTED MEDIAN MARKING**

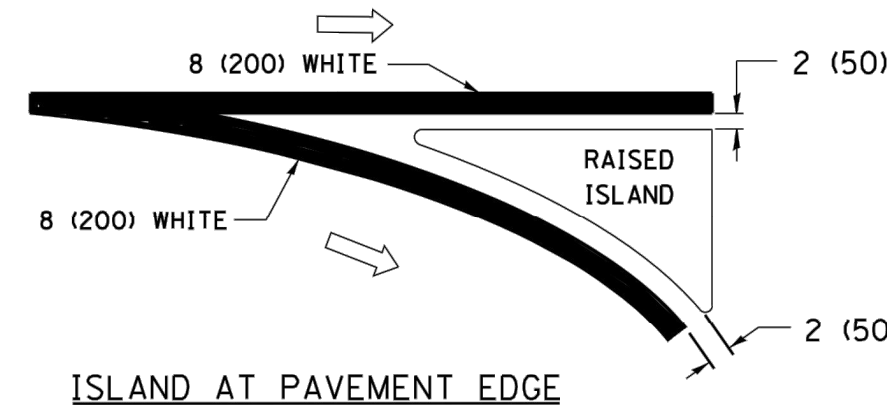
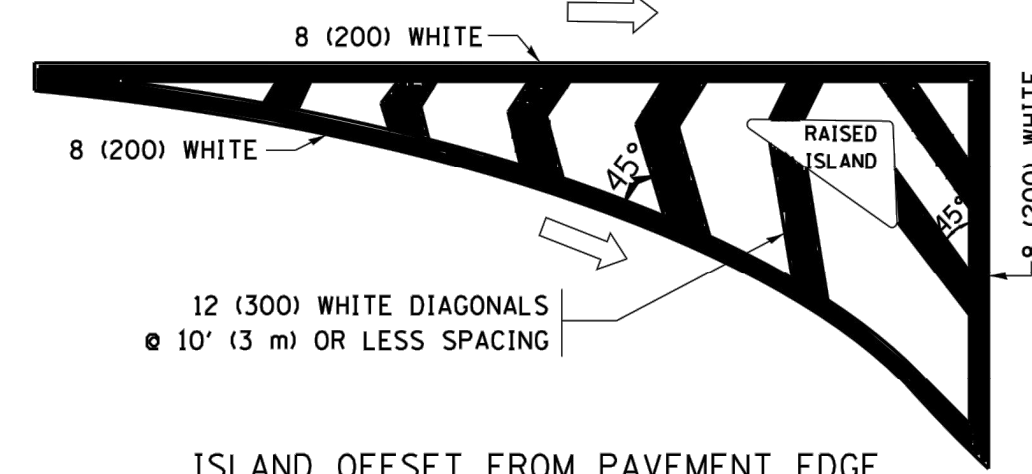


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

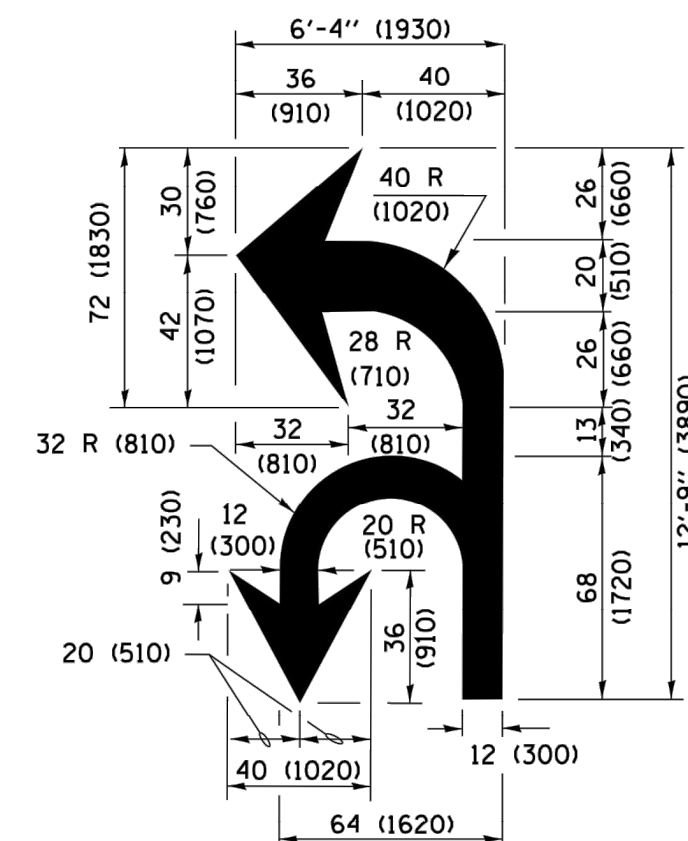
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

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

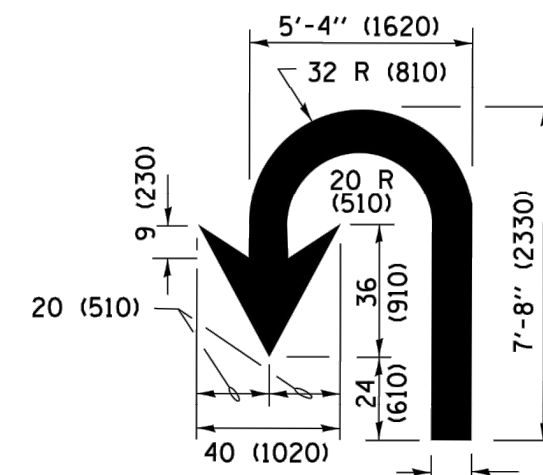
**TYPICAL TURN LANE MARKING**



**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

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

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (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; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 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.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "R"=3.6 SQ. FT. (0.33 m <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.

FILE NAME =	USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
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	PLOT DATE = 4/13/2016		REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**


**DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS**


SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.
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MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	86
TC-13		CONTRACT NO.	61G35	
ILLINOIS FED. AID PROJECT				

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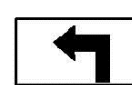
**ROUTE MARKERS**

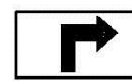
 FOR U.S. ROUTES  
M1-40-2424

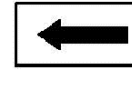
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M1-50-2424

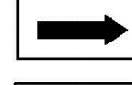
 R.R. UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND


**ARROWS SIGNS**

 M5-1L-2115


 M5-1R-2115


 M6-1-2115


 M6-1-2115


 M6-3-2115


**CARDINAL DIRECTION & DETOUR SIGNS**

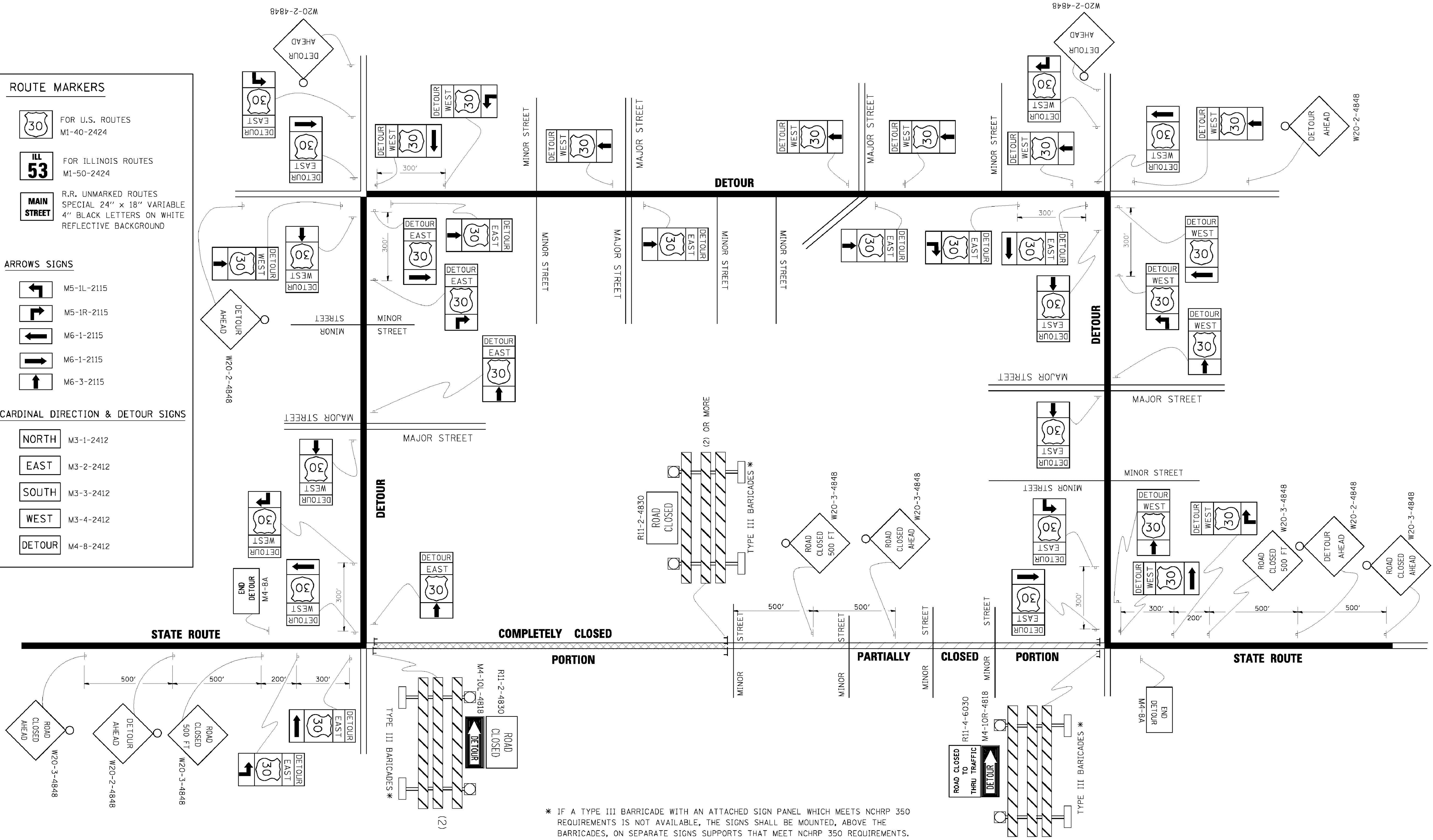
 NORTH M3-1-2412

 EAST M3-2-2412

 SOUTH M3-3-2412

 WEST M3-4-2412

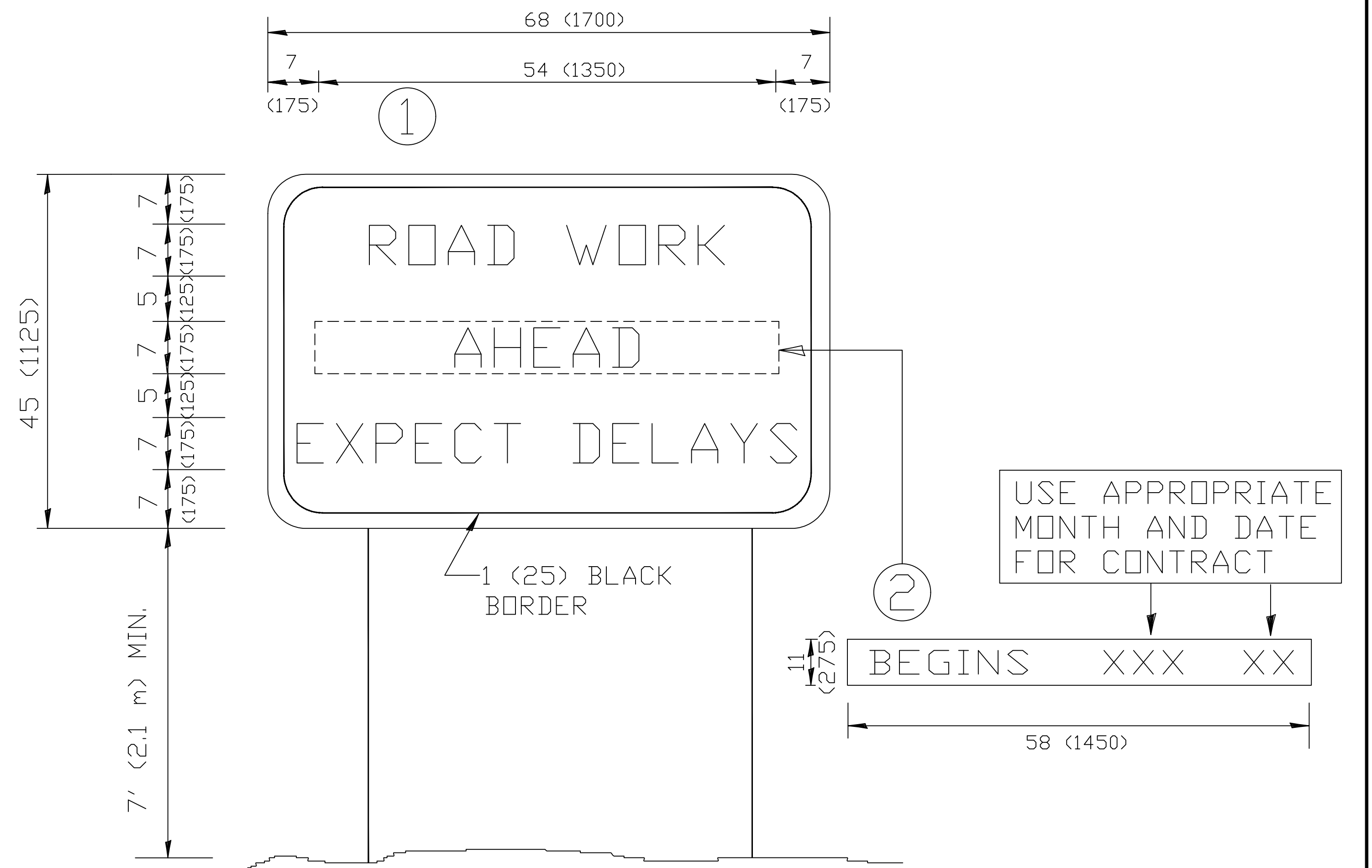
 DETOUR M4-8-2412



\* 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.

FILE NAME = c:\pwork\PW100T\DRIVAK\OSGN\d0100315\21.dgn	USER NAME = drivakosgn	DESIGNED - DRAWN -	REVISED - REVISED -	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETOUR SIGNING FOR CLOSING STATE HIGHWAYS</b>		F.A. RTE. 3015	SECTION 16-00080-01-PV TC-21	COUNTY COOK	TOTAL SHEETS 102	SHEET NO. 87	
	PLOT SCALE = 49.9999' / IN.	CHECKED -	REVISED -	CHECKED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61G35	
	PLOT DATE = 9/14/2009	DATE -	REVISED -	DATE -	REVISED -									
E.H.E. PROJECT NO. 120-19-00801														

Drawing file: \\Projects\_by\_Village\Brodview\12019008 -Bragg Drive Stage II - Design\CAD\SIA\88-TC\_22\_2013.dwg Feb 11, 2020 - 3:13pm



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.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

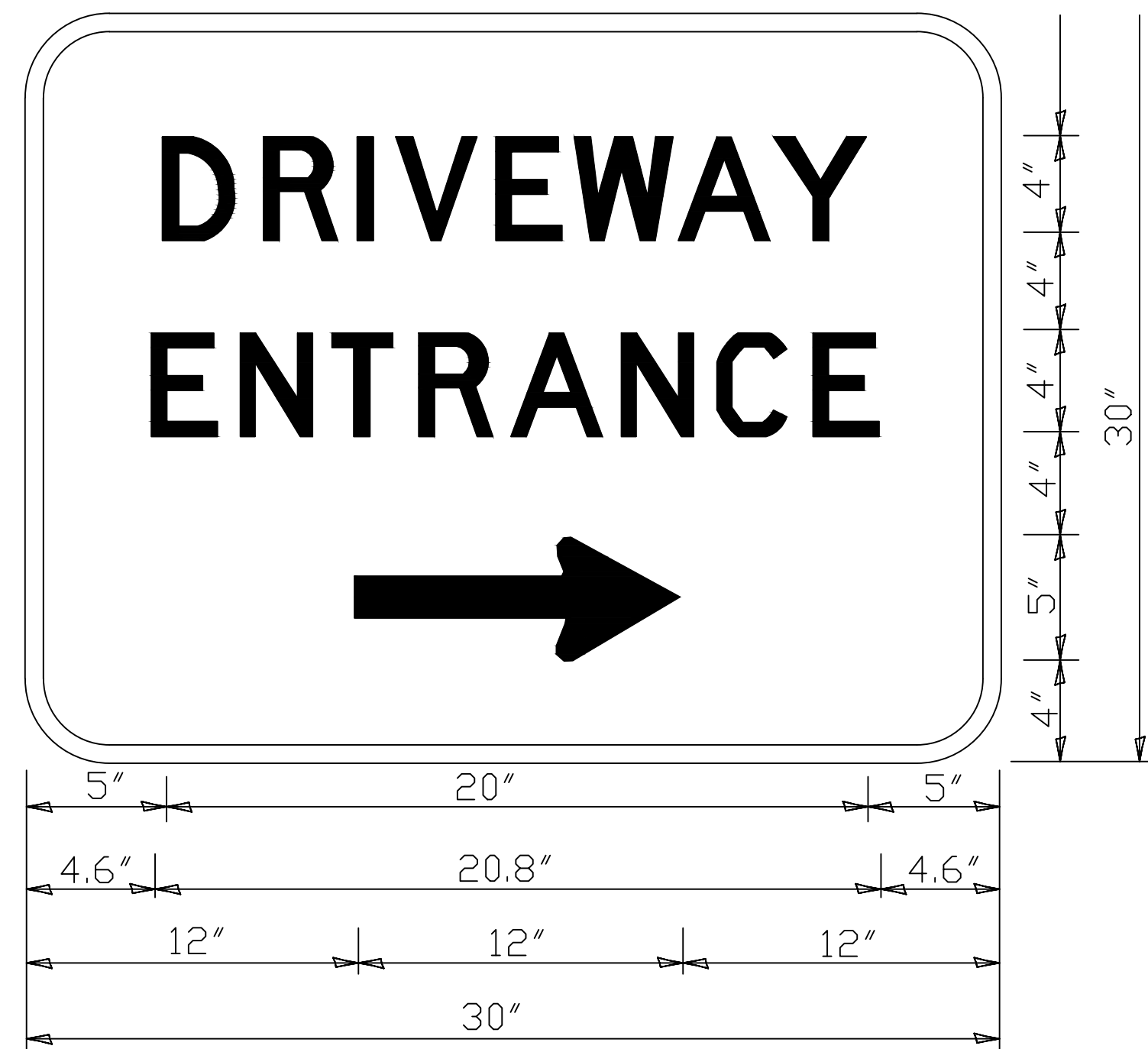
**ARTERIAL ROAD  
INFORMATION SIGN**

USER NAME =	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE =	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE =	DATE -	REVISED - C. JUCIUS 01-31-07

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	88
TC-22		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.I.E. PROJECT NO. 120-19-00801





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".

Drawing File: W:\Projects\by\_Village\Broomview\2019008 -Bragg Drive Stage II - Design\_CAD\Site\99-TC-26\_2013.dwg Feb 11, 2020 - 3:14pm

USER NAME =	DESIGNED -	REVISED - C. JUCIUS 02-15-07
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

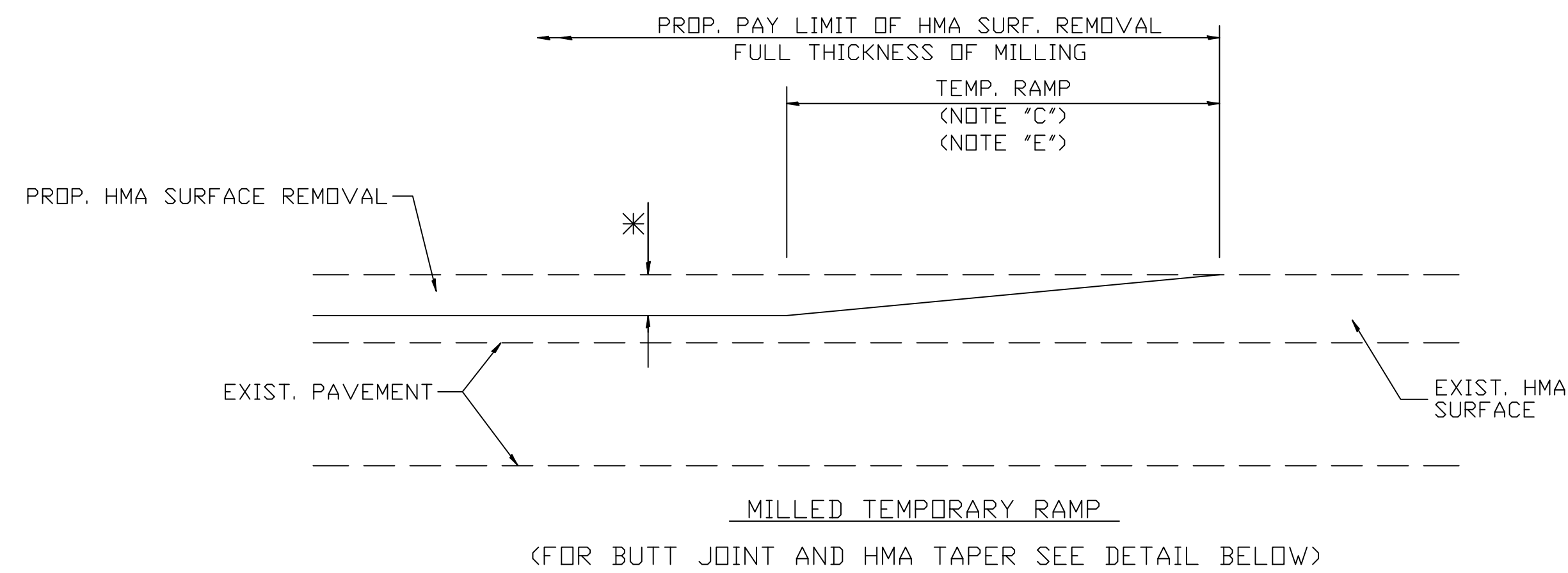
**DRIVEWAY ENTRANCE SIGNING**

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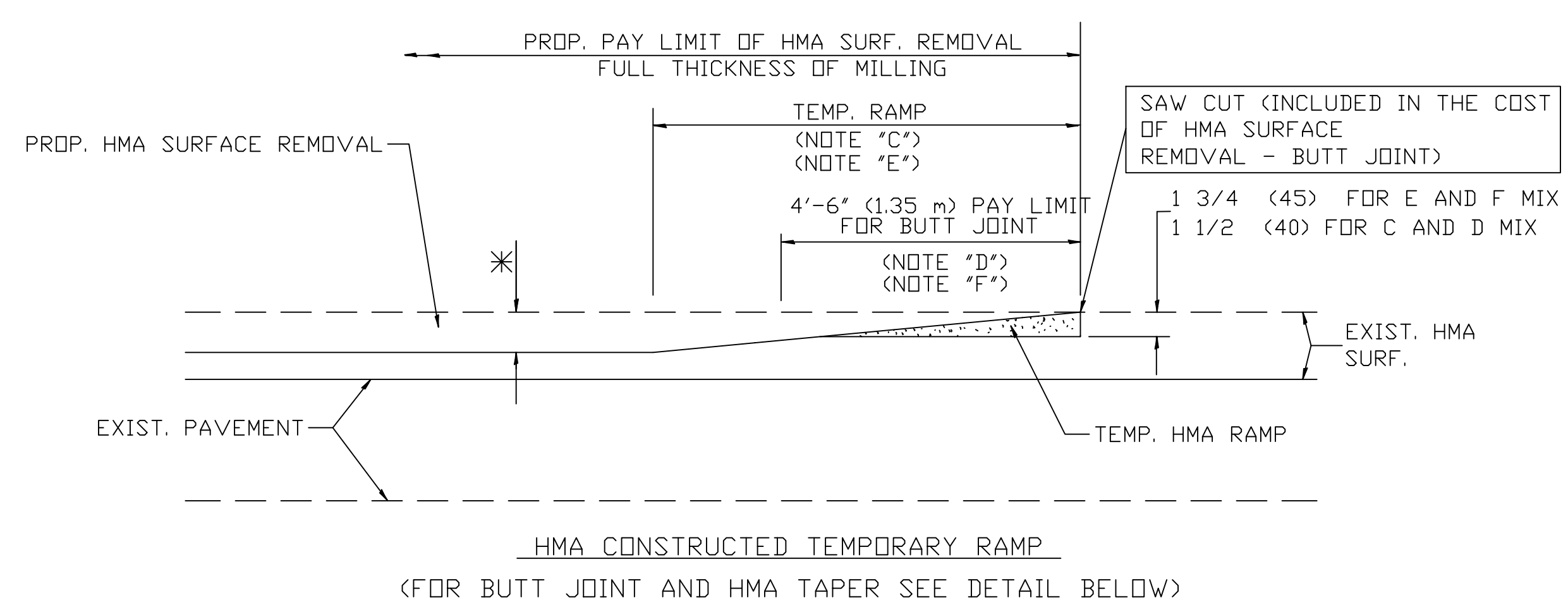
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TC-26			CONTRACT NO. 61G35	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

I.E.H. PROJECT NO. 120-19-00801

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Broad Drive Stage II - Design\CA0\She\90-bd32.dwg Feb 11, 2020 - 3:15pm

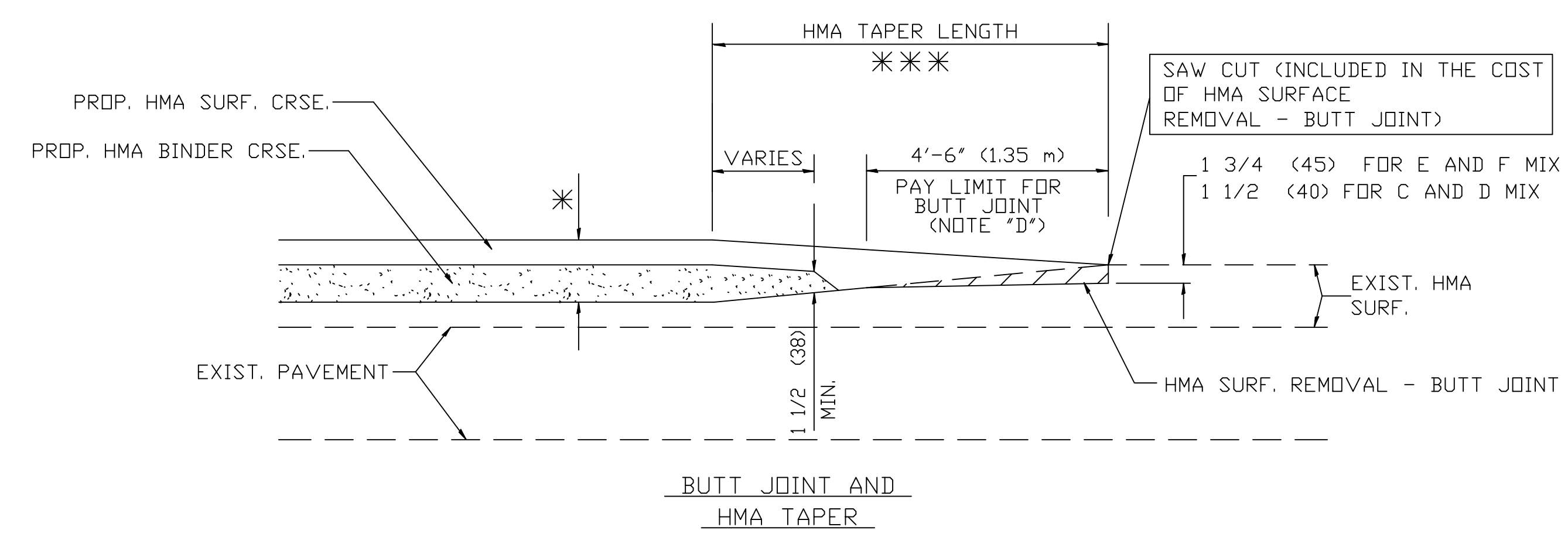


**OPTION 1**

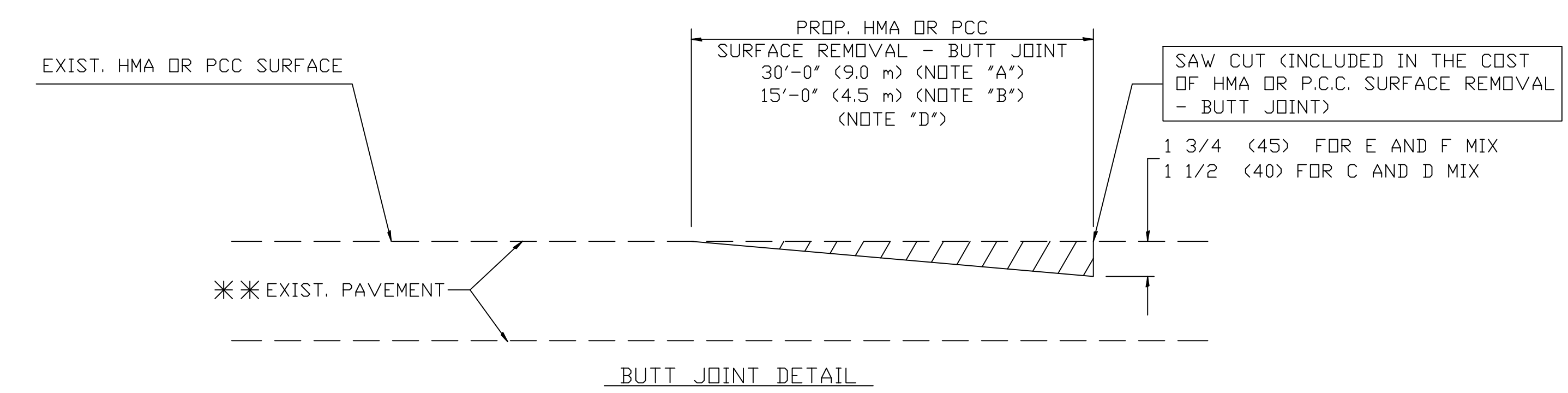


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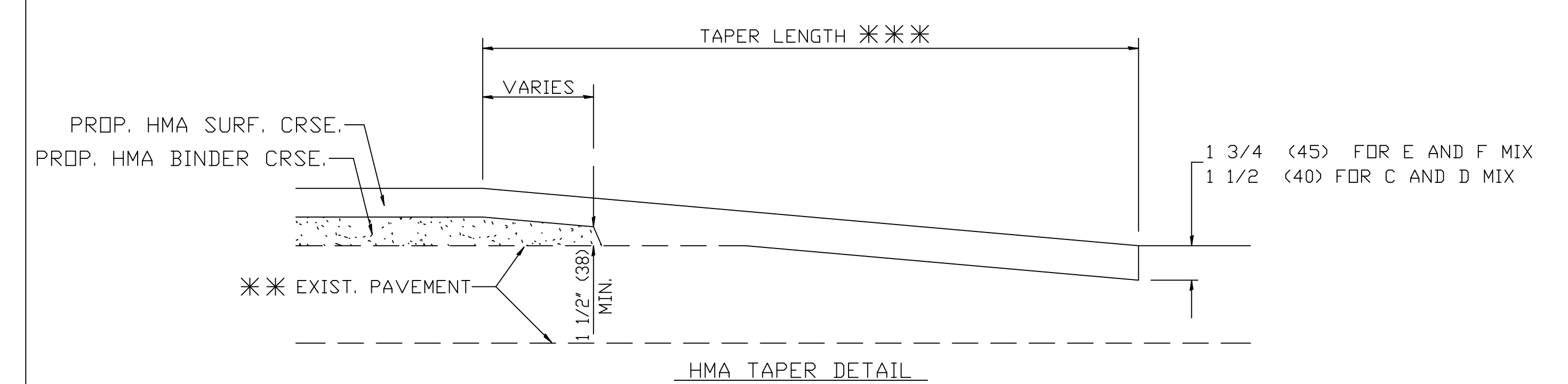
**TYPICAL TEMPORARY RAMP**



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



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

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

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

**NOTES**

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

\*\*\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

\*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

USER NAME =	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
	DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT SCALE =	CHECKED -	REVISED - M. GOMEZ 04-06-01
PLOT DATE =	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

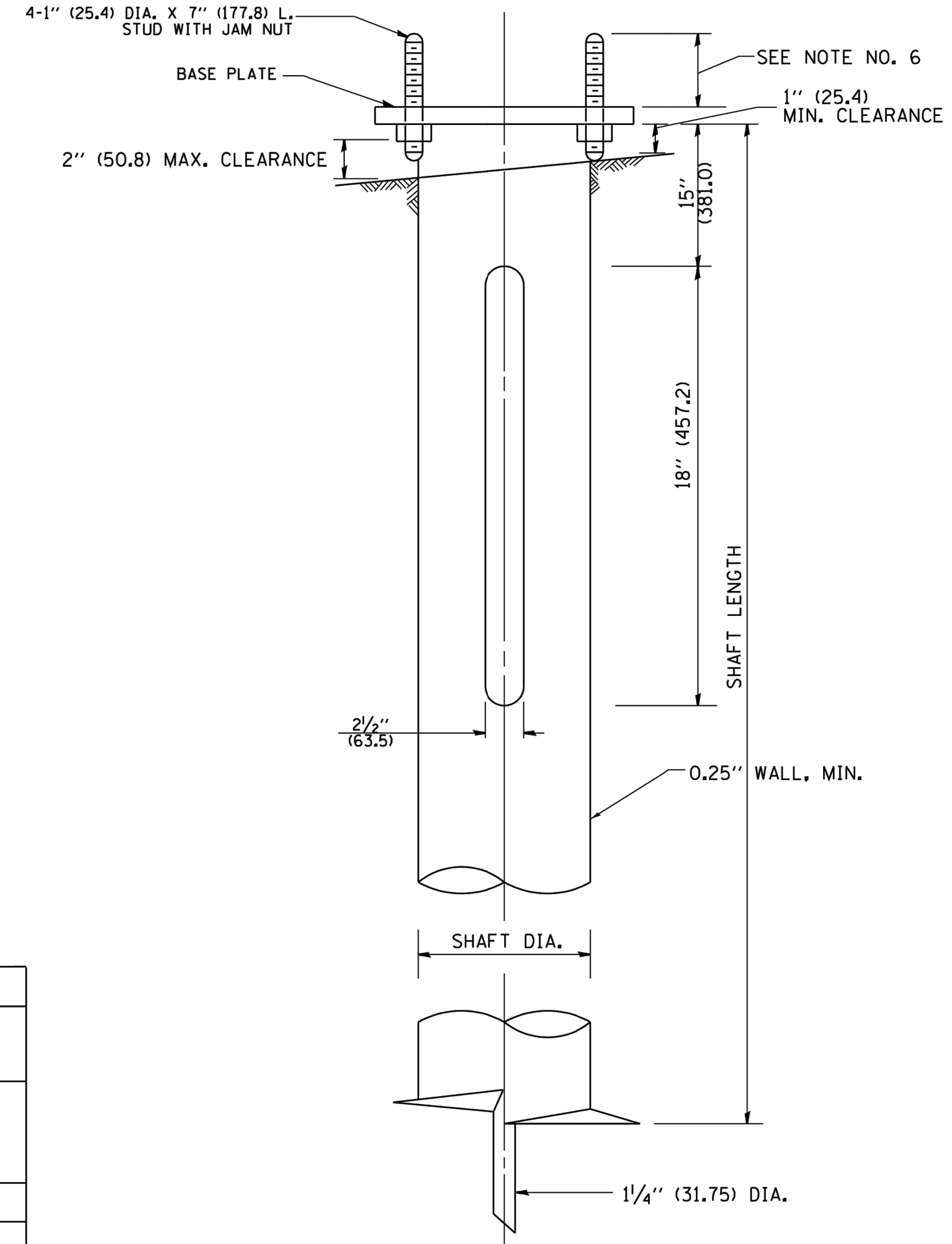
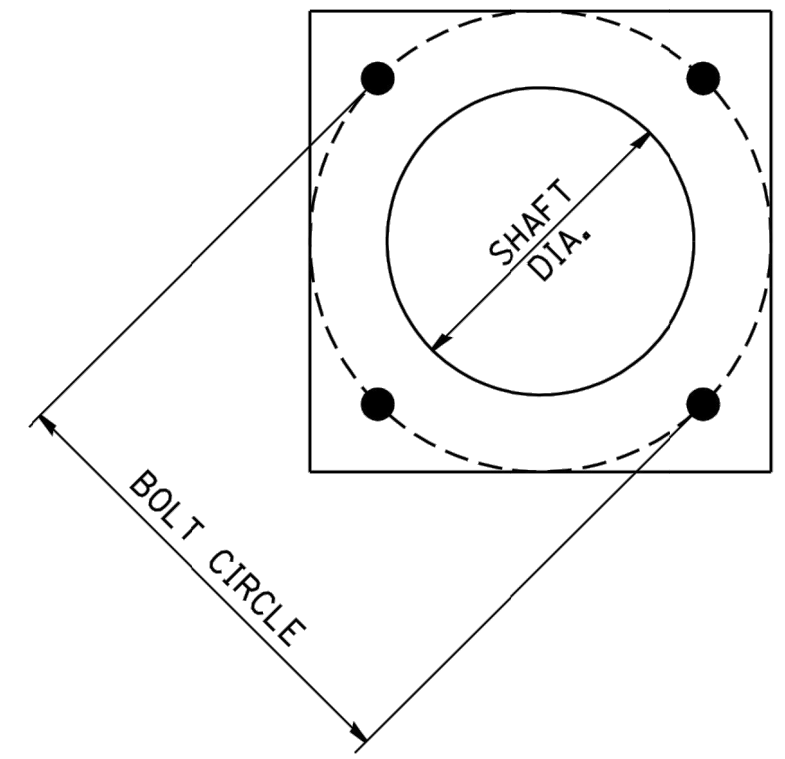
**BUTT JOINT AND  
HMA TAPER DETAILS**

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

MS RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	90
BD400-05 (BD-32)		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801

Drawing file: W:\Projects\_by\_Village\Broadview\12019008 -Braja Drive Stage II - Design\_CAD\She\91-93\_Lighting-Details.dwg Feb 11, 2020 - 3:16pm



**HELIX FOUNDATION SIZE**

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

**METAL HELIX FOUNDATION MATERIALS**

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

**NOTES:**

- ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDATION IS NOT ALLOWED.
- THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS ( $\pm 1^\circ$ ) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC ( $\pm 0.188$ ) TO THE SHAFT AXIS.
- THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC ( $\pm 0.125$ ) AND IN LINE ( $\pm 2^\circ$ ).
- THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LIGHT POLE FOUNDATION, METAL**

MUN RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	91
<b>BE-305</b>		<b>CONTRACT NO.</b>	<b>61635</b>	
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

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PLOT DATE = 1/4/2008

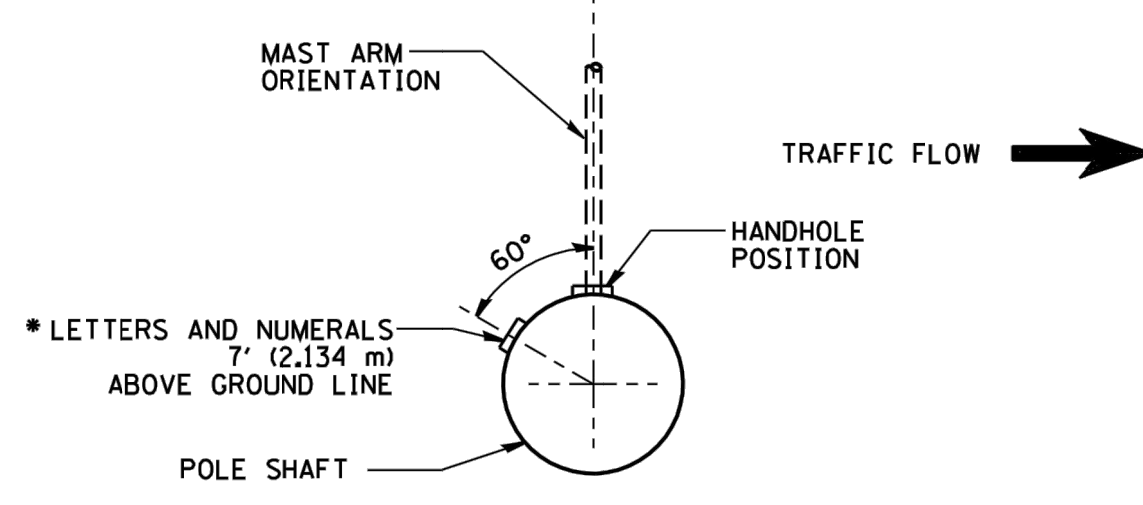
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DATE - 02-27-07

REVISED -  
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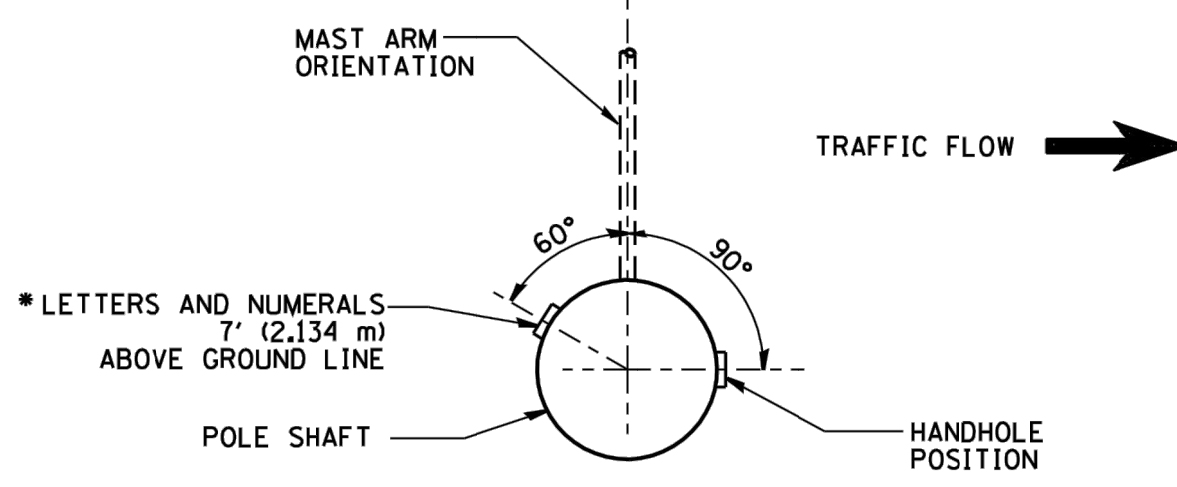
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E.H.E. PROJECT NO. 120-19-00801

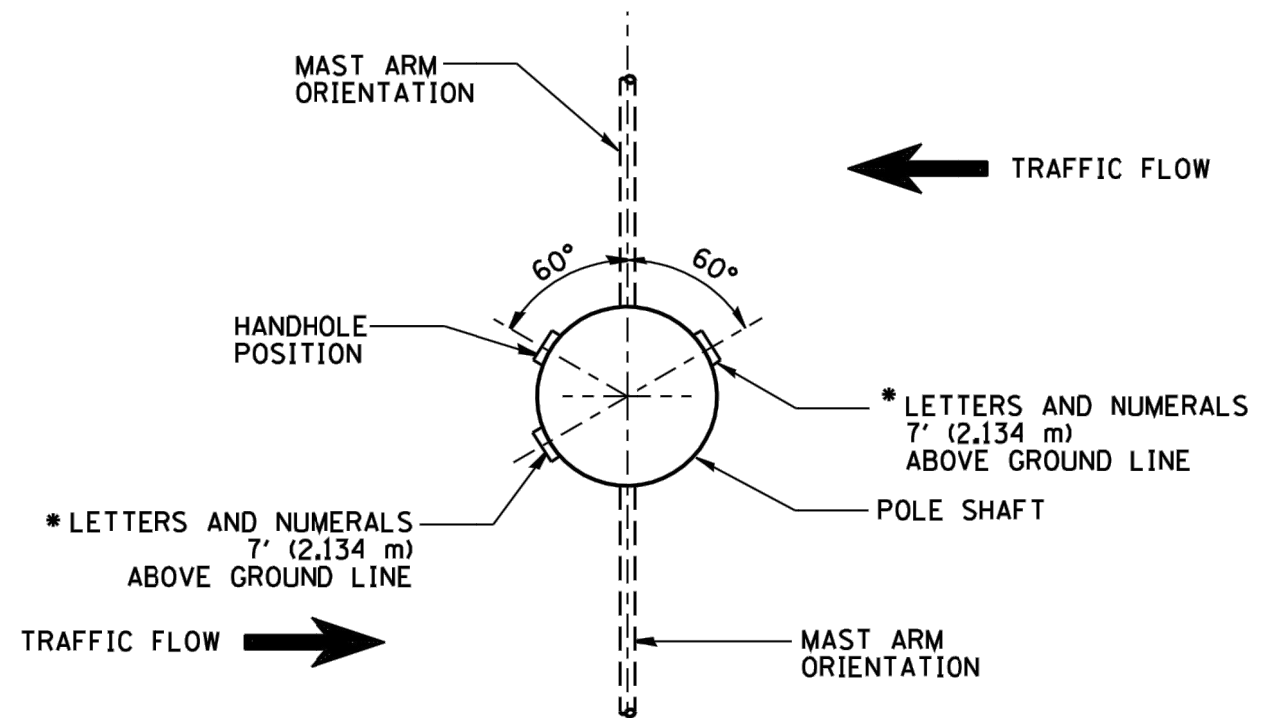
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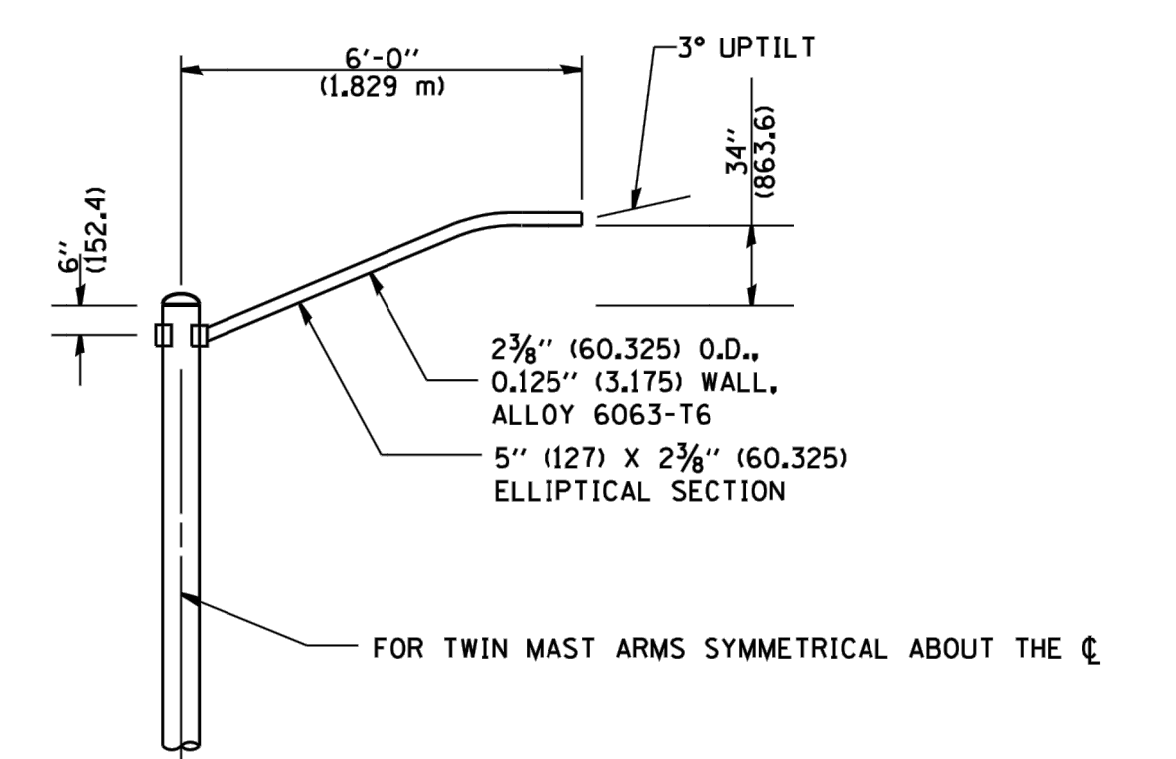
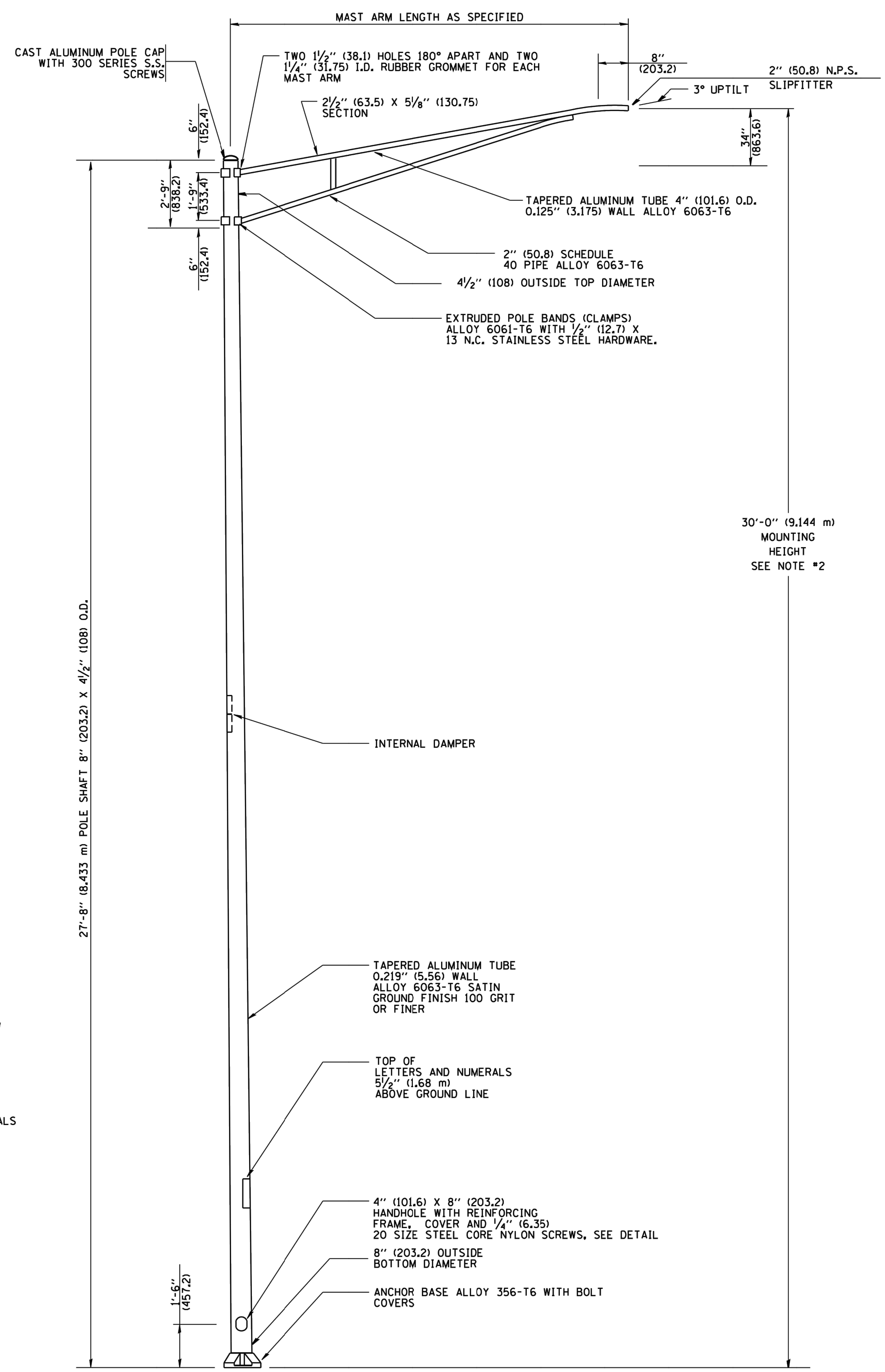
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES

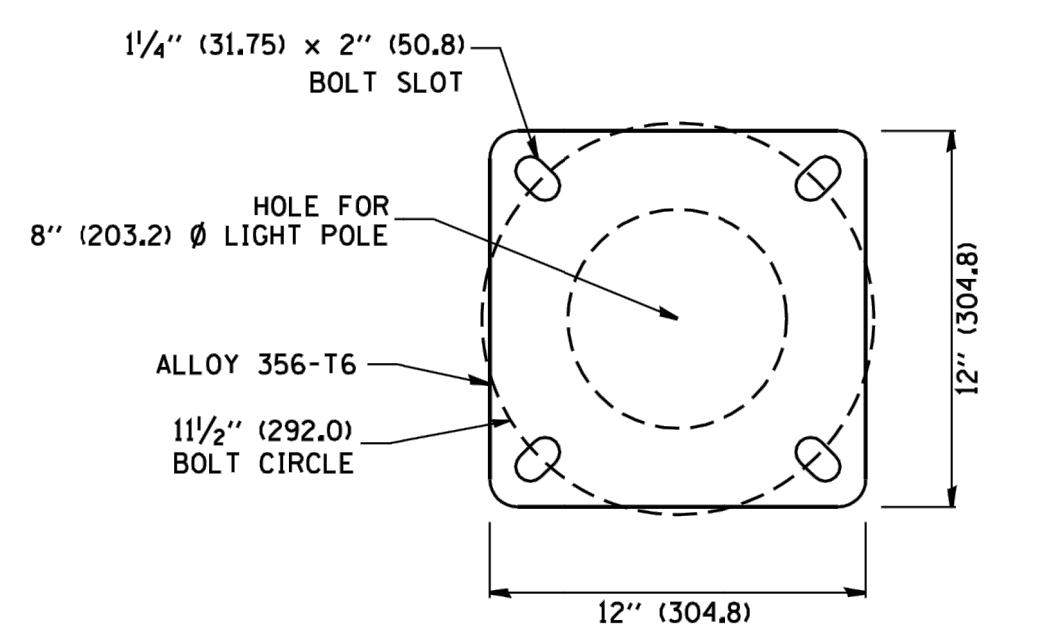


POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES

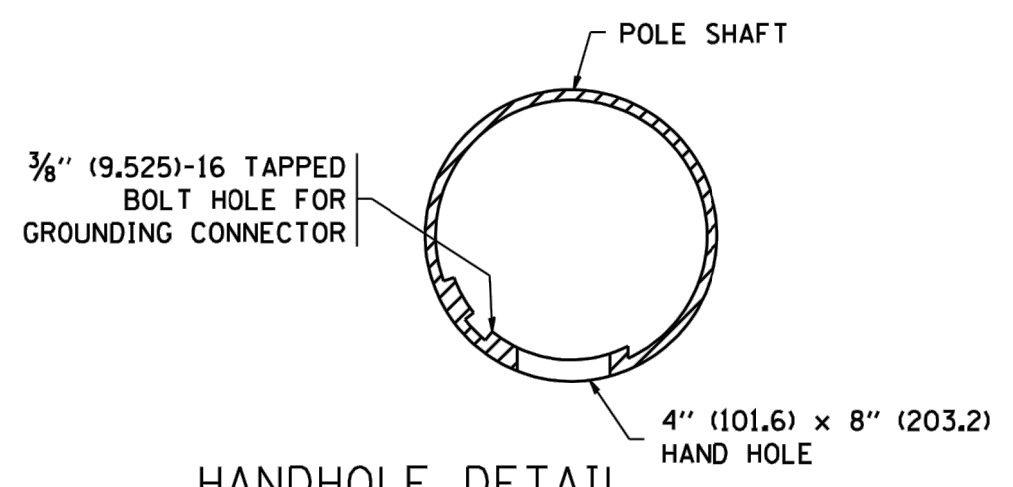


6' (1.8 m) SINGLE MEMBER MAST ARM (N.T.S.)

- NOTES:**
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
  2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
  3. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
  4. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
  5. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
  6. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
  7. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



LIGHT POLE BASE PLATE DETAIL  
11/2" (292.0) BOLT CIRCLE



HANDHOLE DETAIL (N.T.S.)

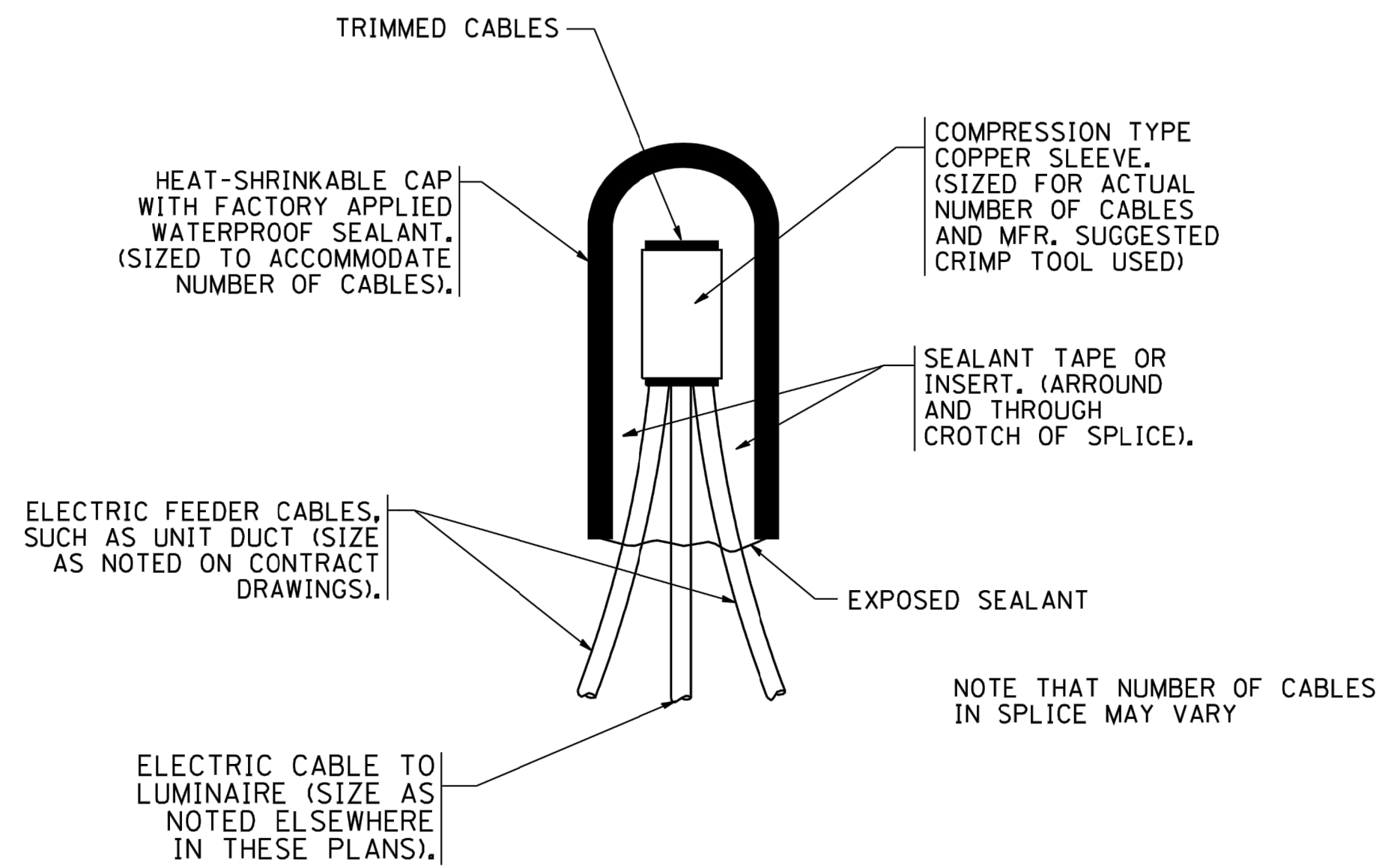
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PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -	
PLOT DATE = 1/4/2008	DATE -	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ALUMINUM LIGHT POLE			
30'-0" (9.144 m) MOUNTING HEIGHT			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

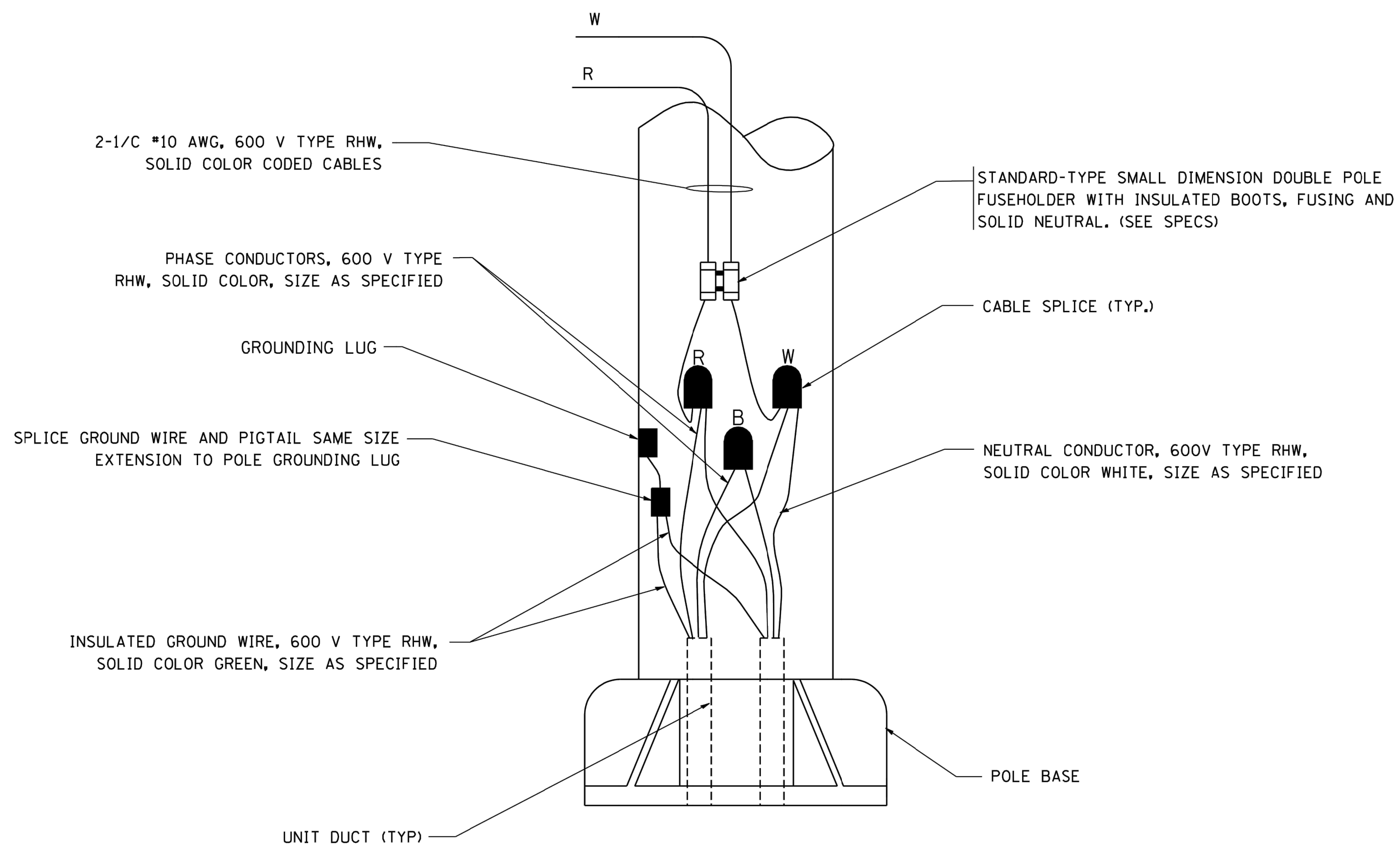
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BE-403		CONTRACT NO.	61635	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801



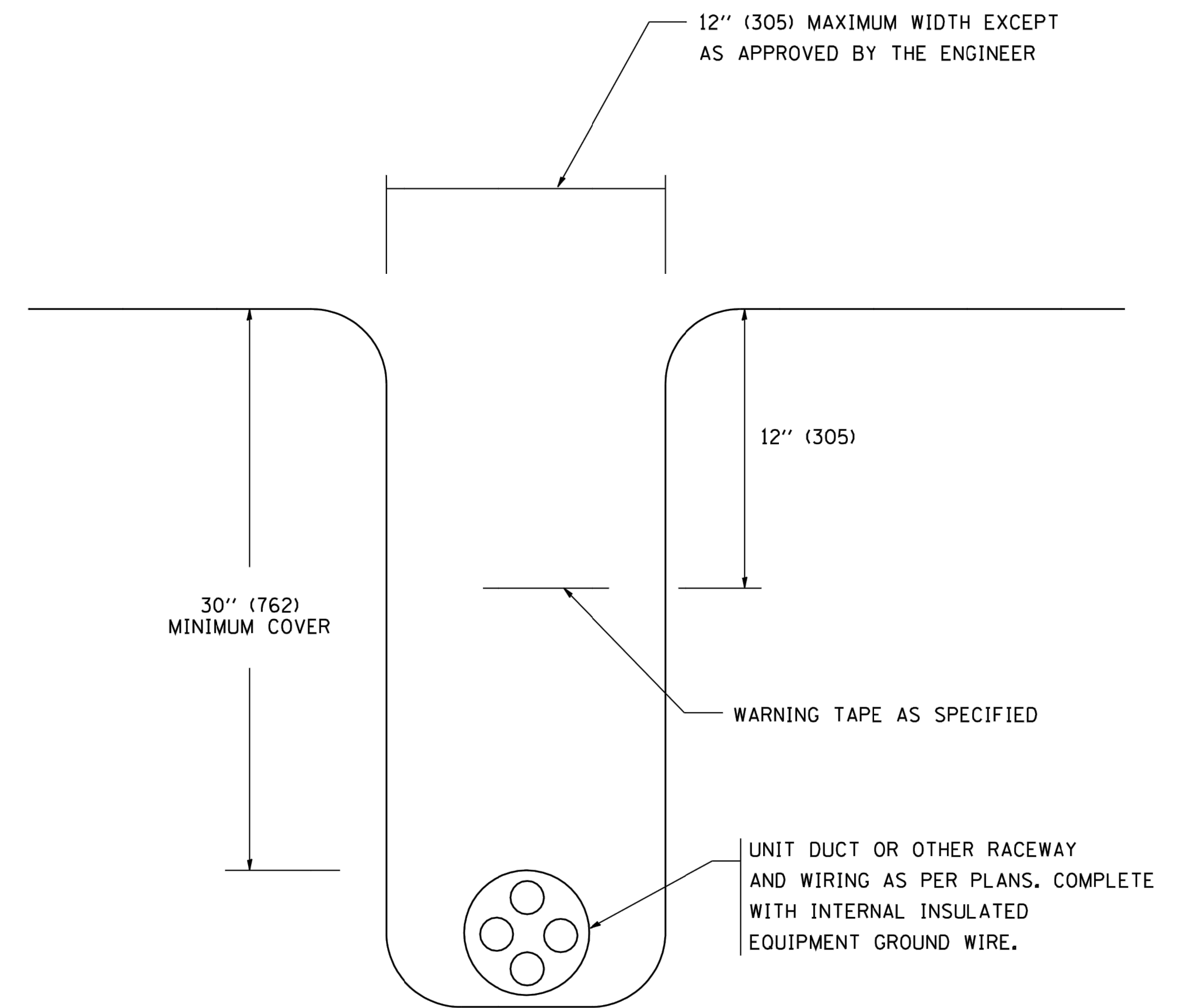
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION


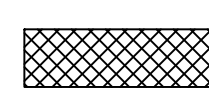
MISC. ELECTRICAL DETAILS  
SHEET A

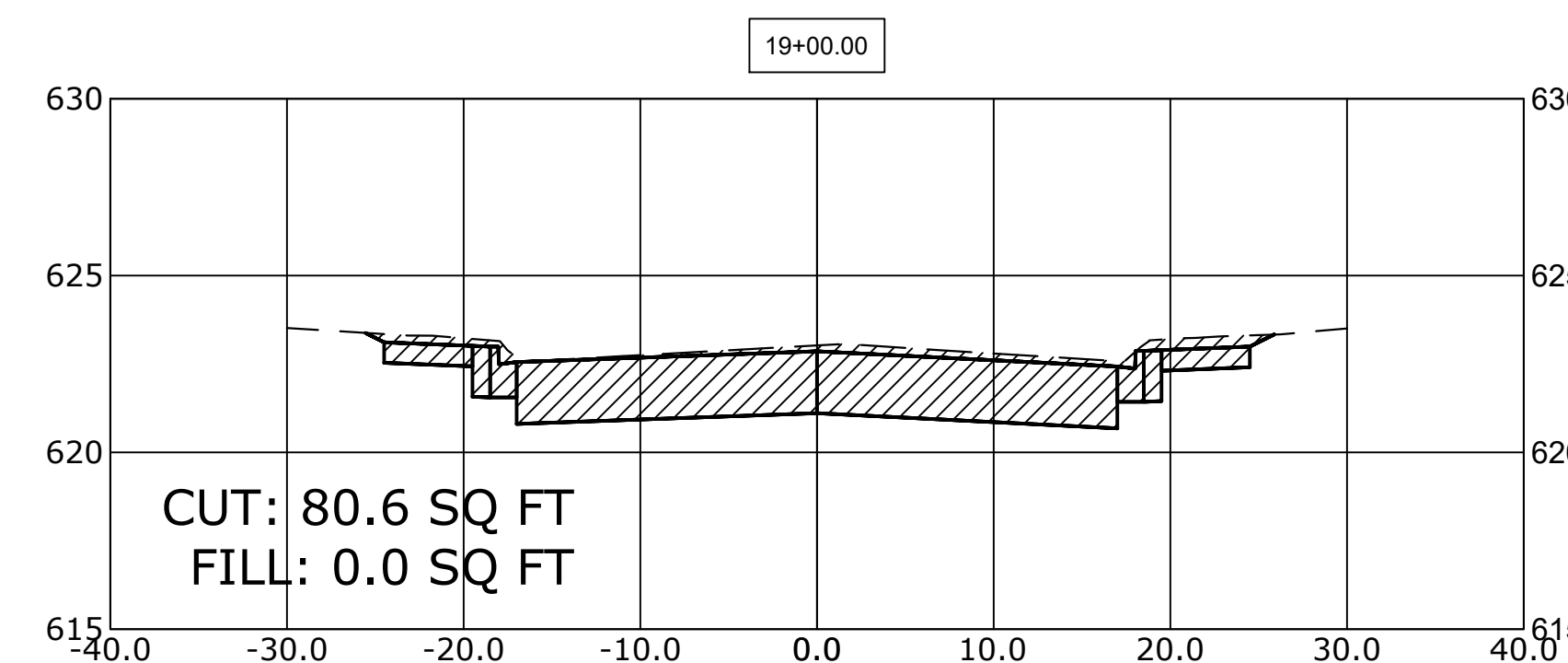
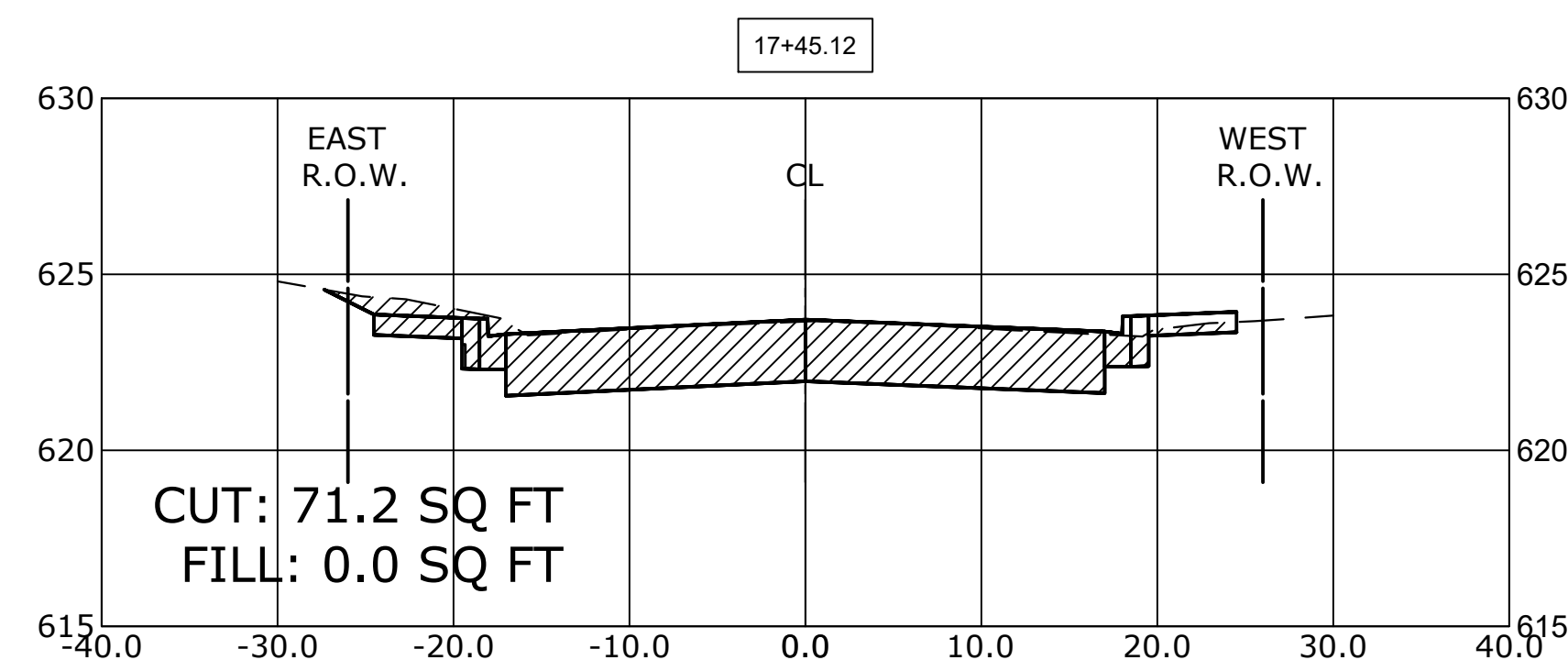
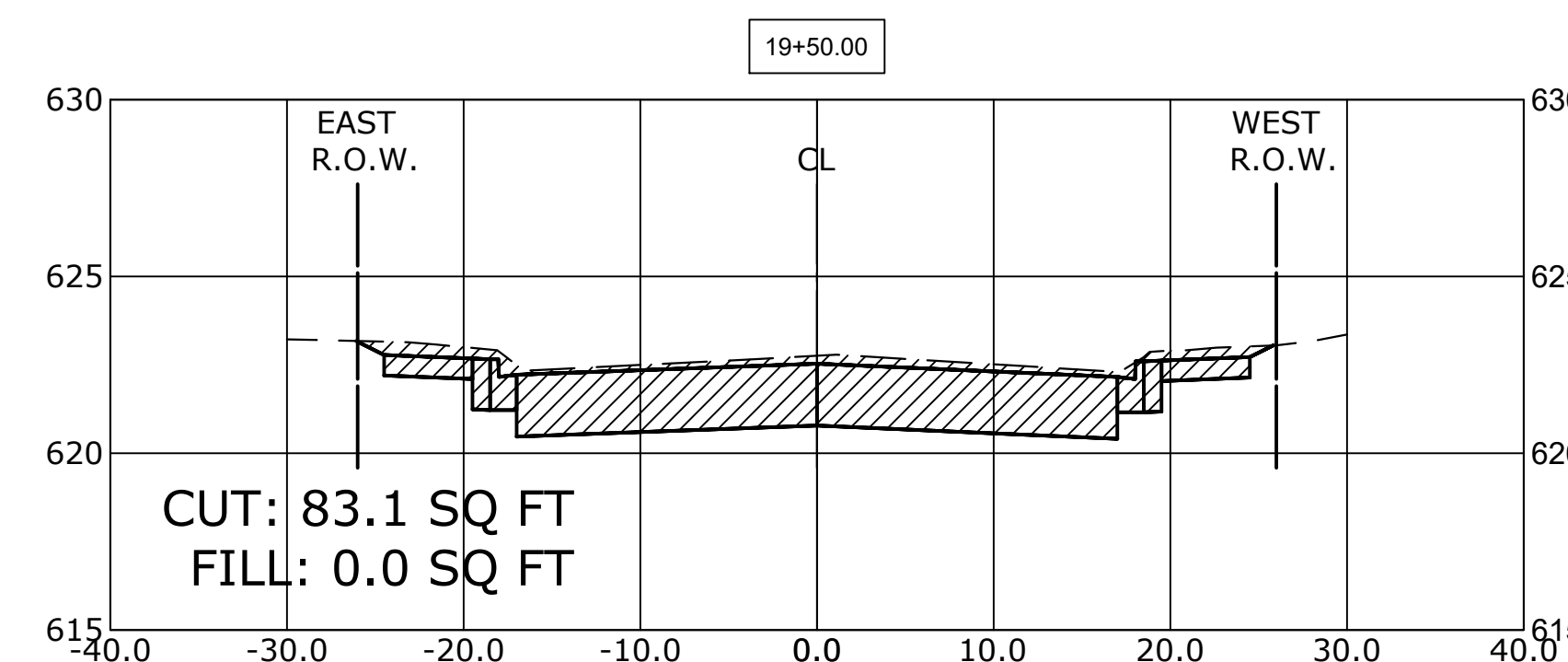
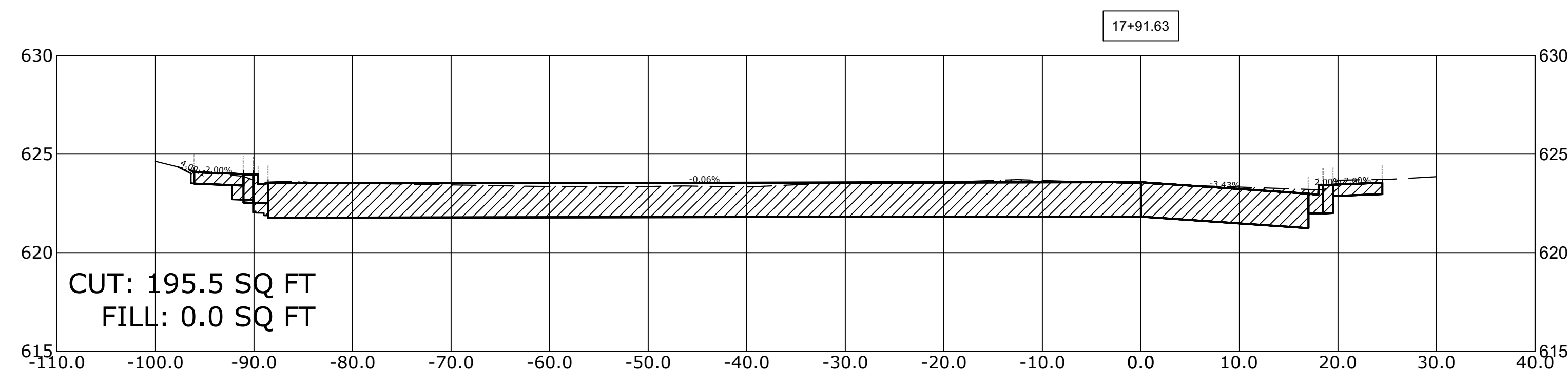
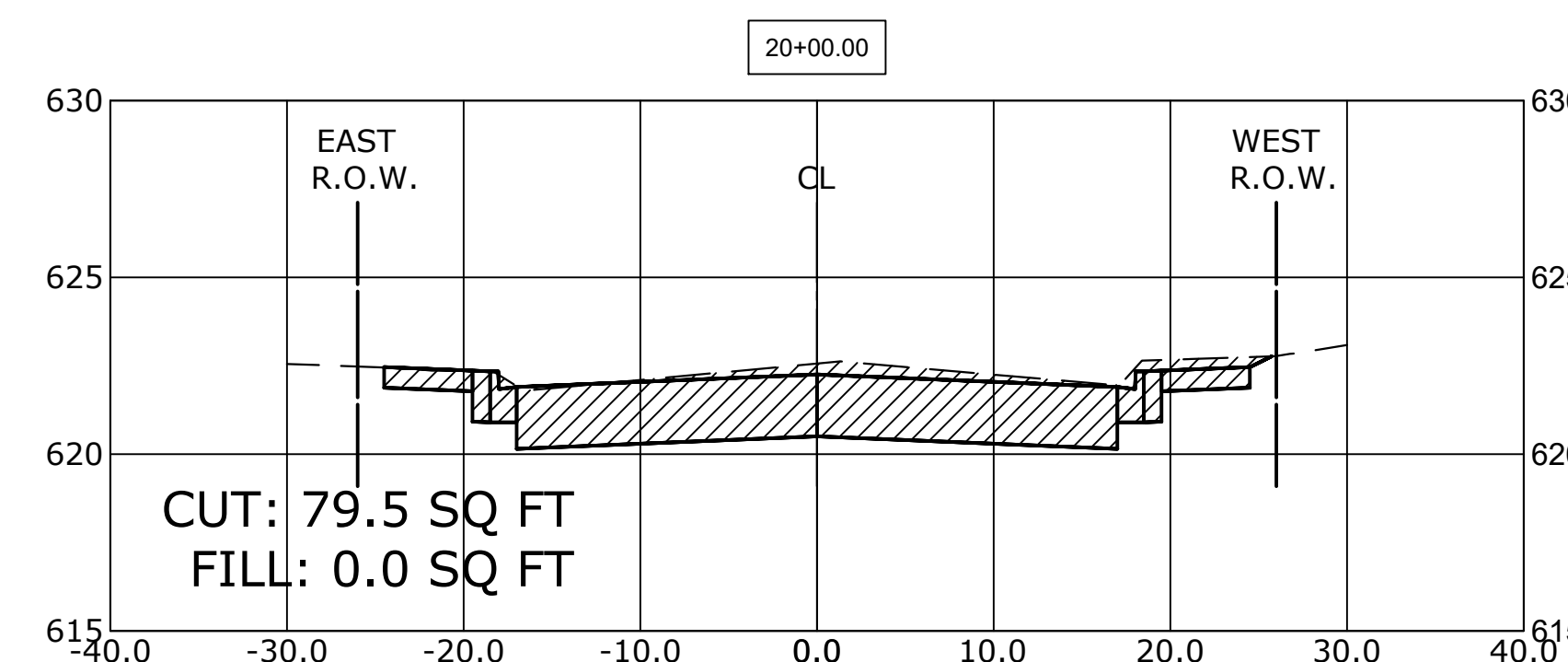
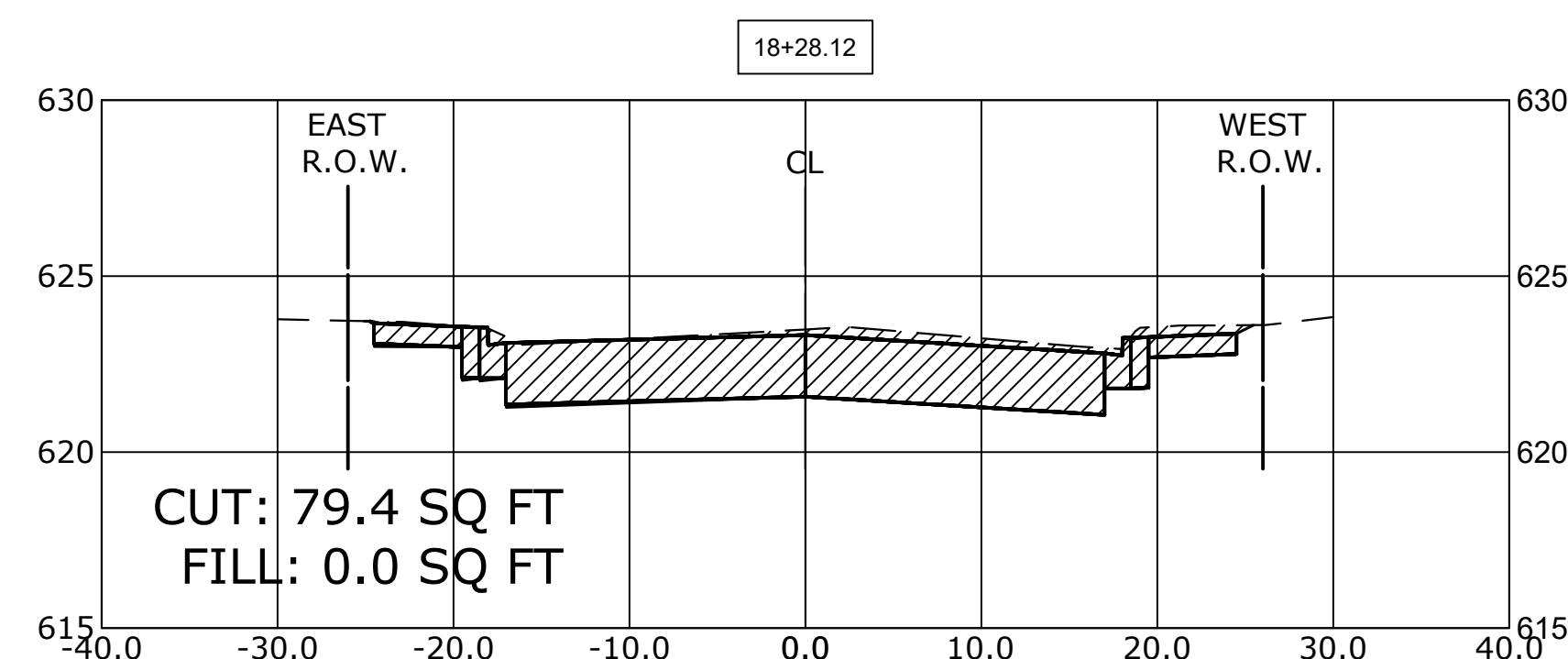
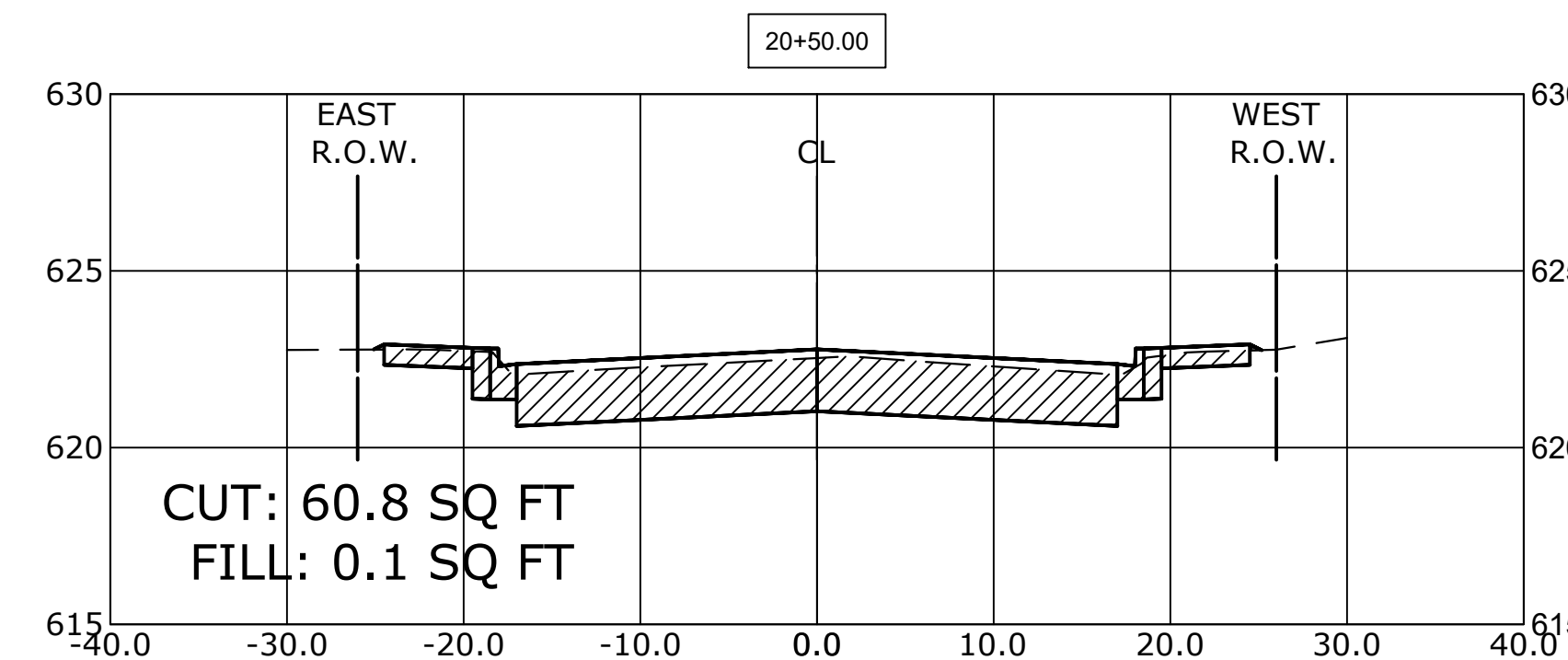
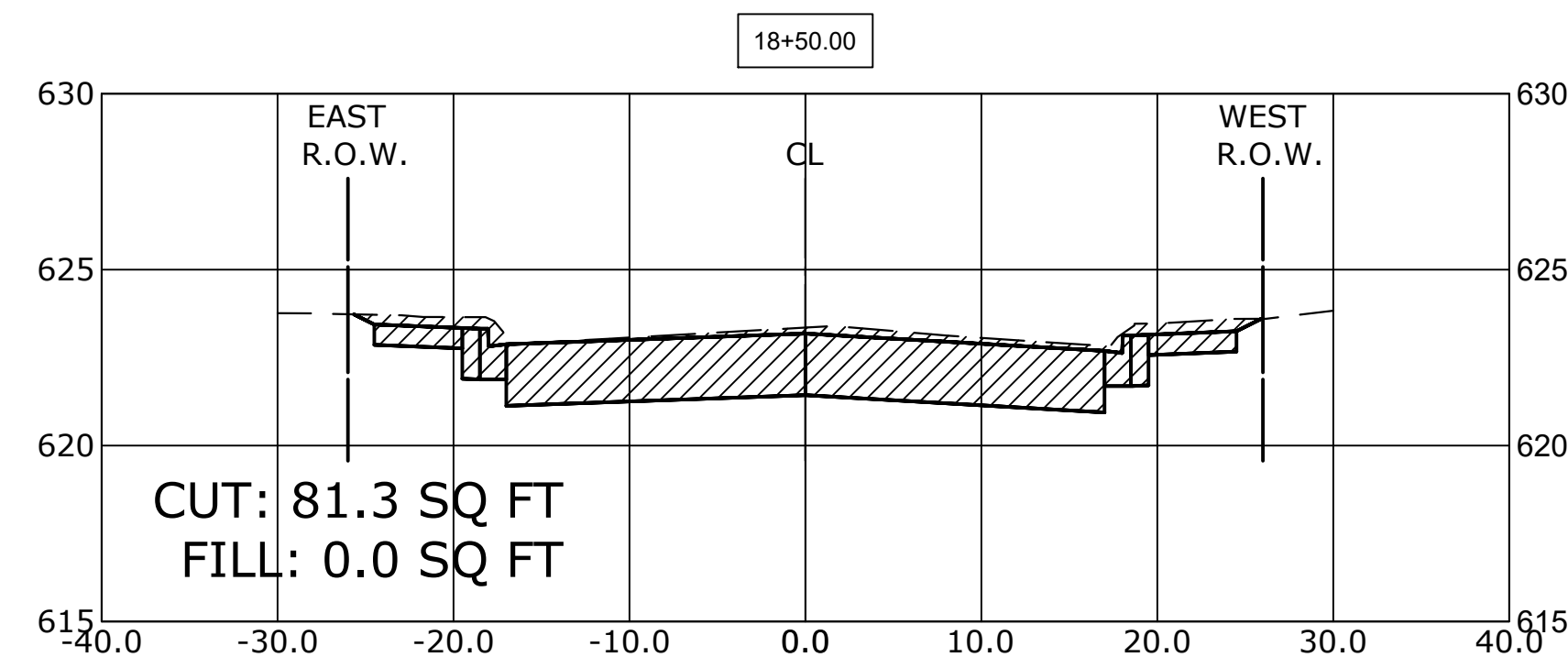
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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BE-702		CONTRACT NO. 61635		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-00801

**CROSS SECTION LEGEND**

**C = CUT (SQ. FT.)**   
**F = FILL (SQ. FT.)** 



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CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

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**BRAGA DRIVE  
 CROSS SECTIONS**

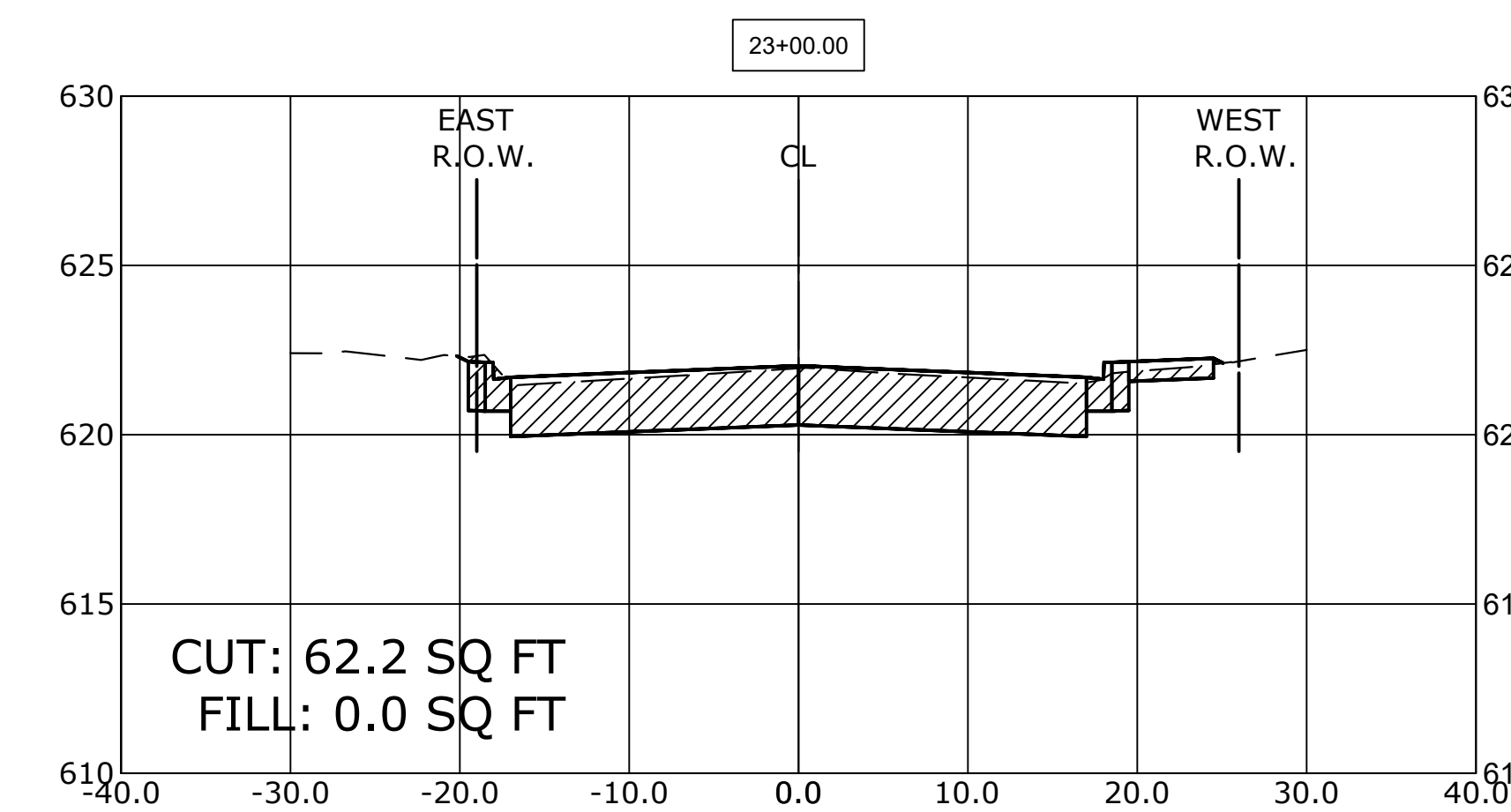
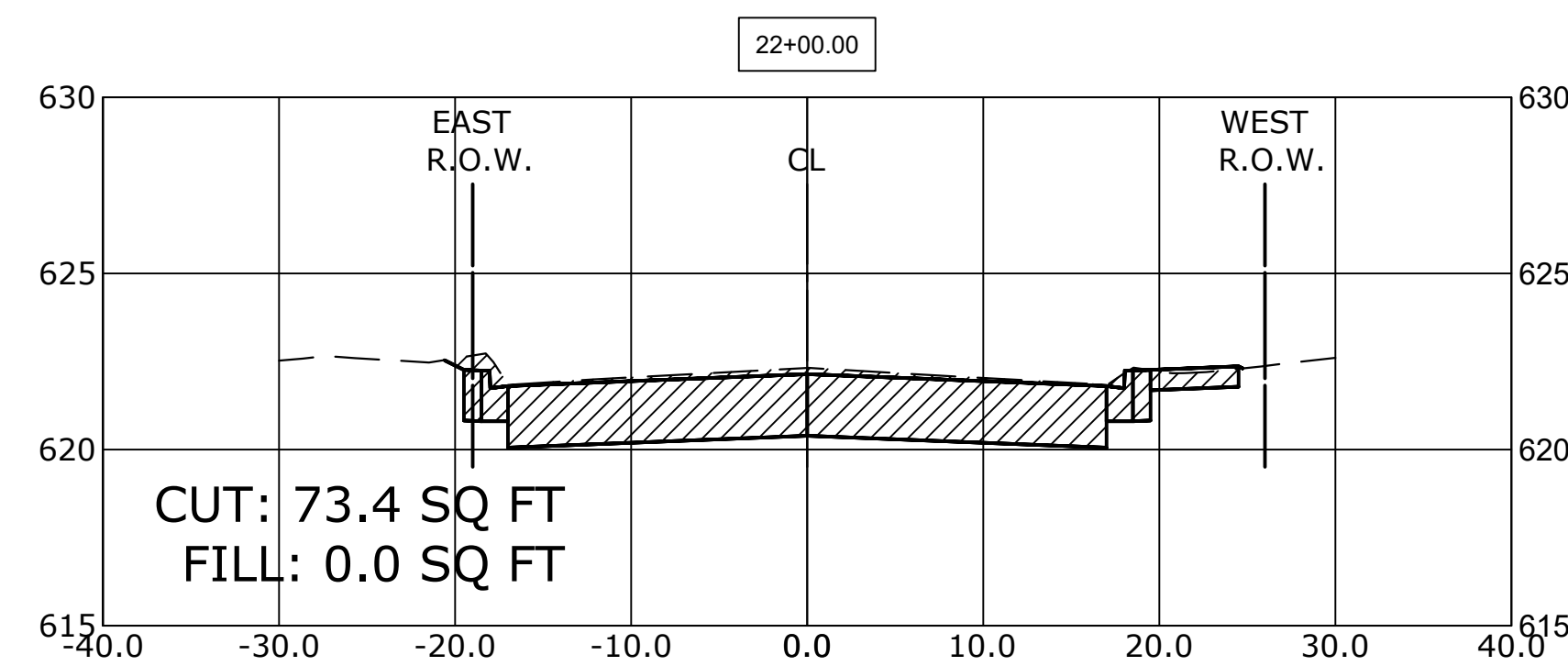
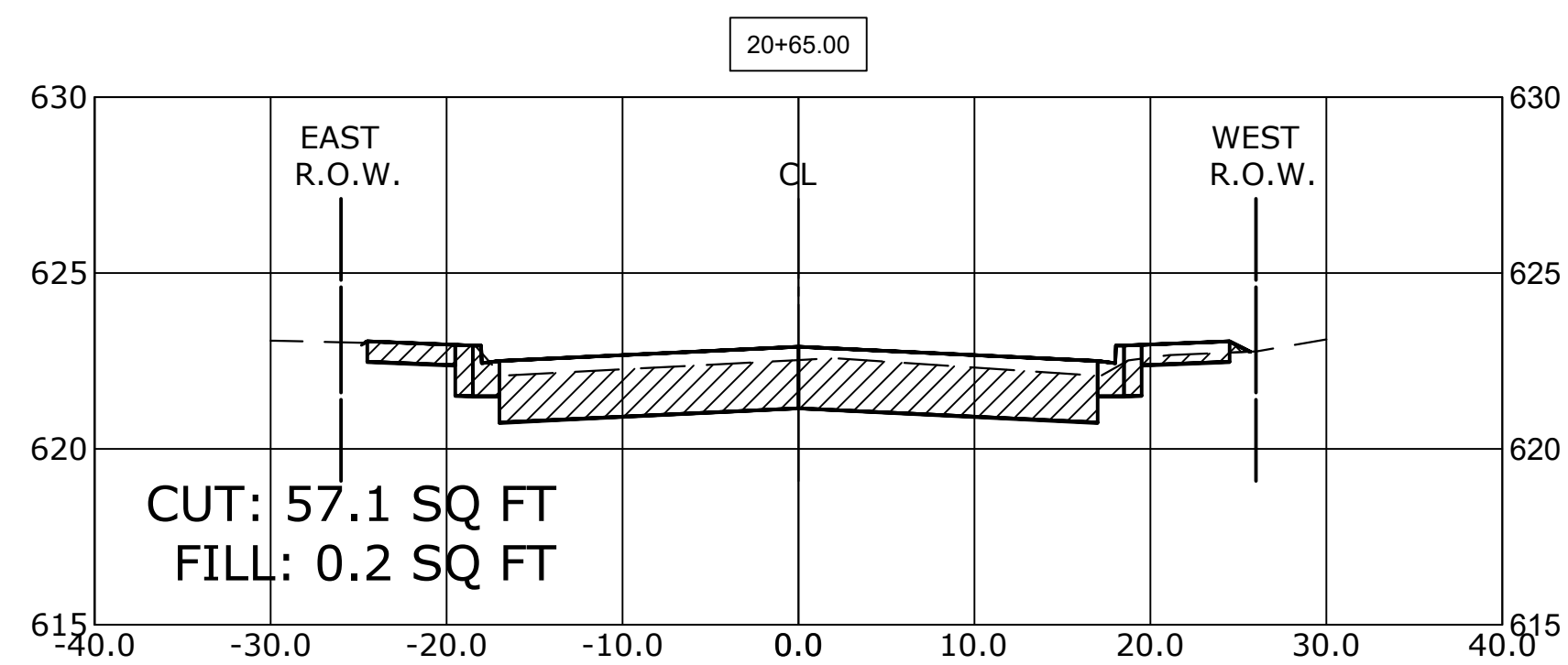
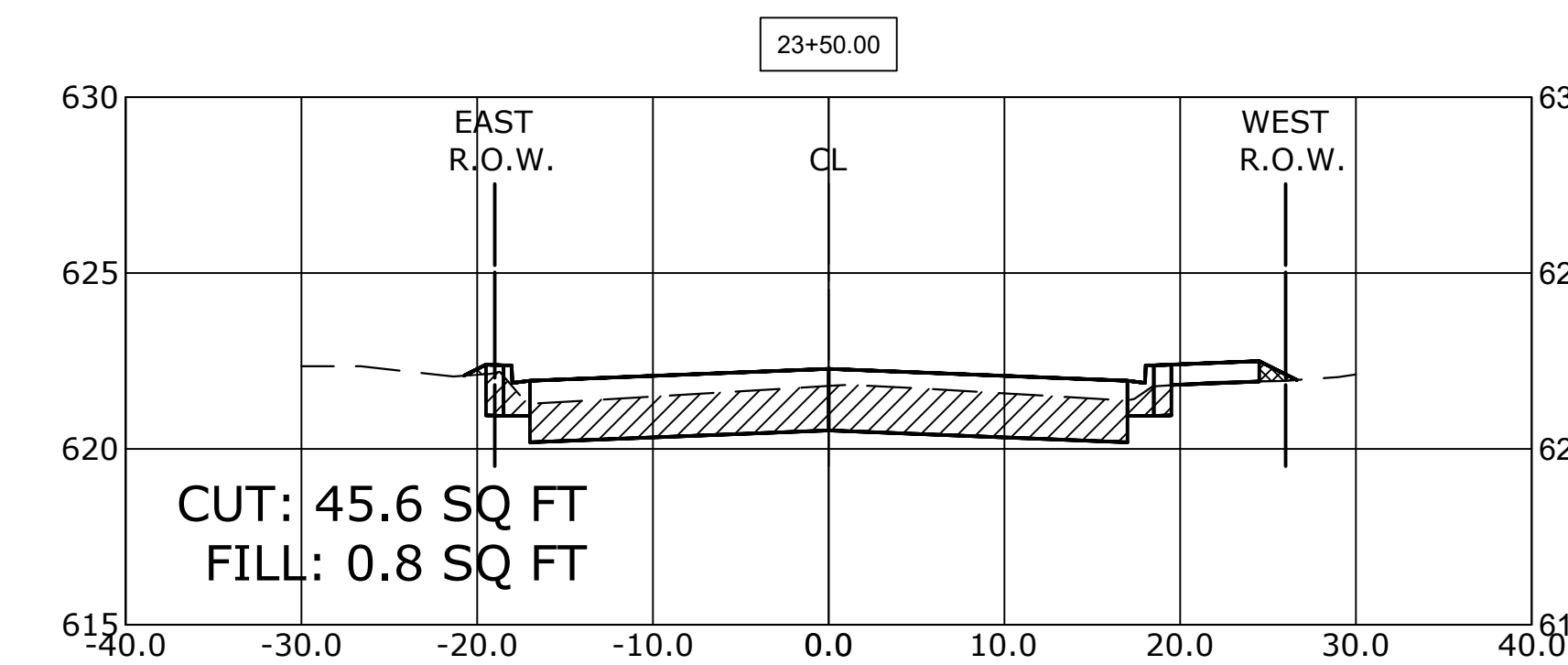
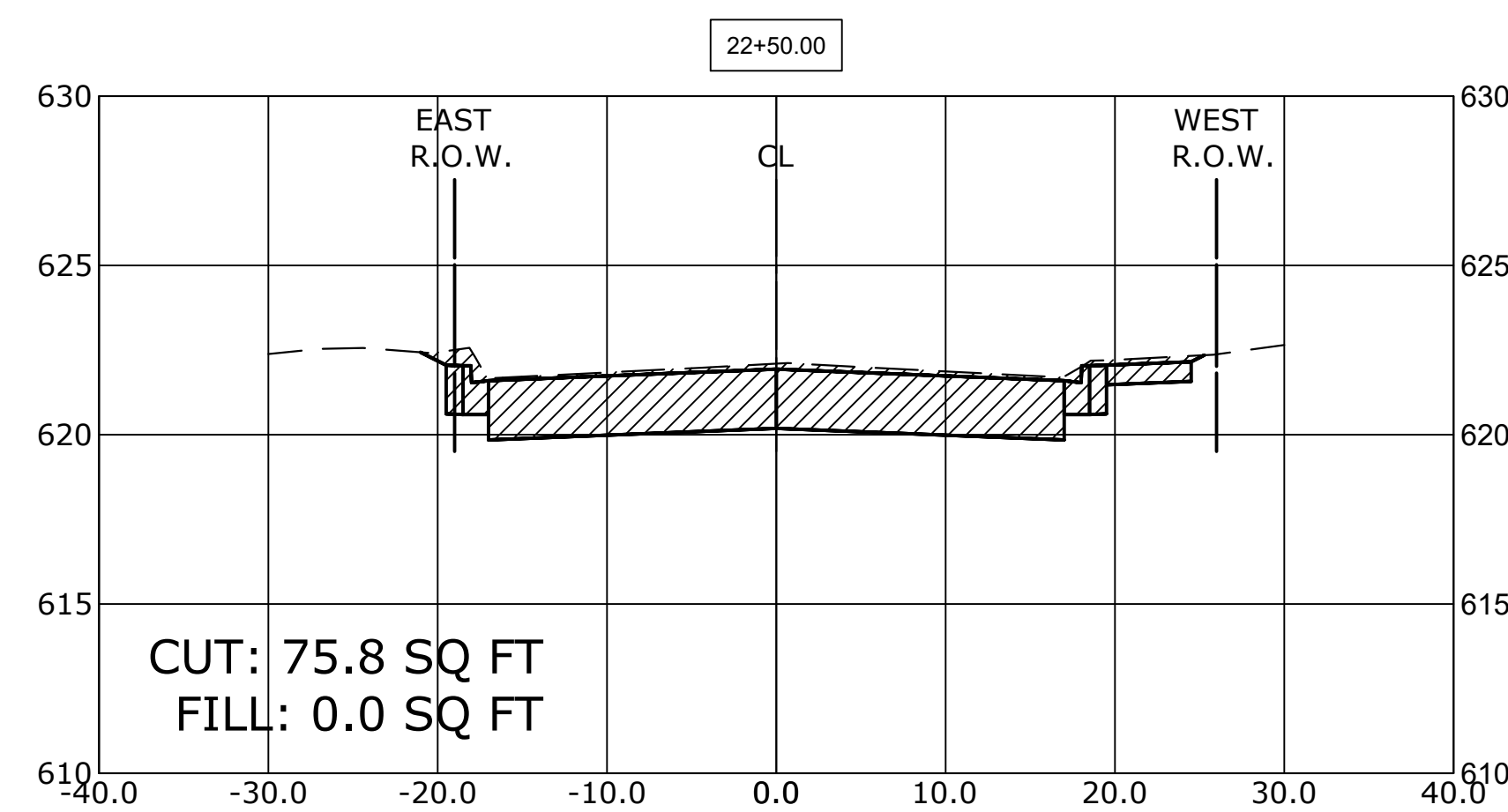
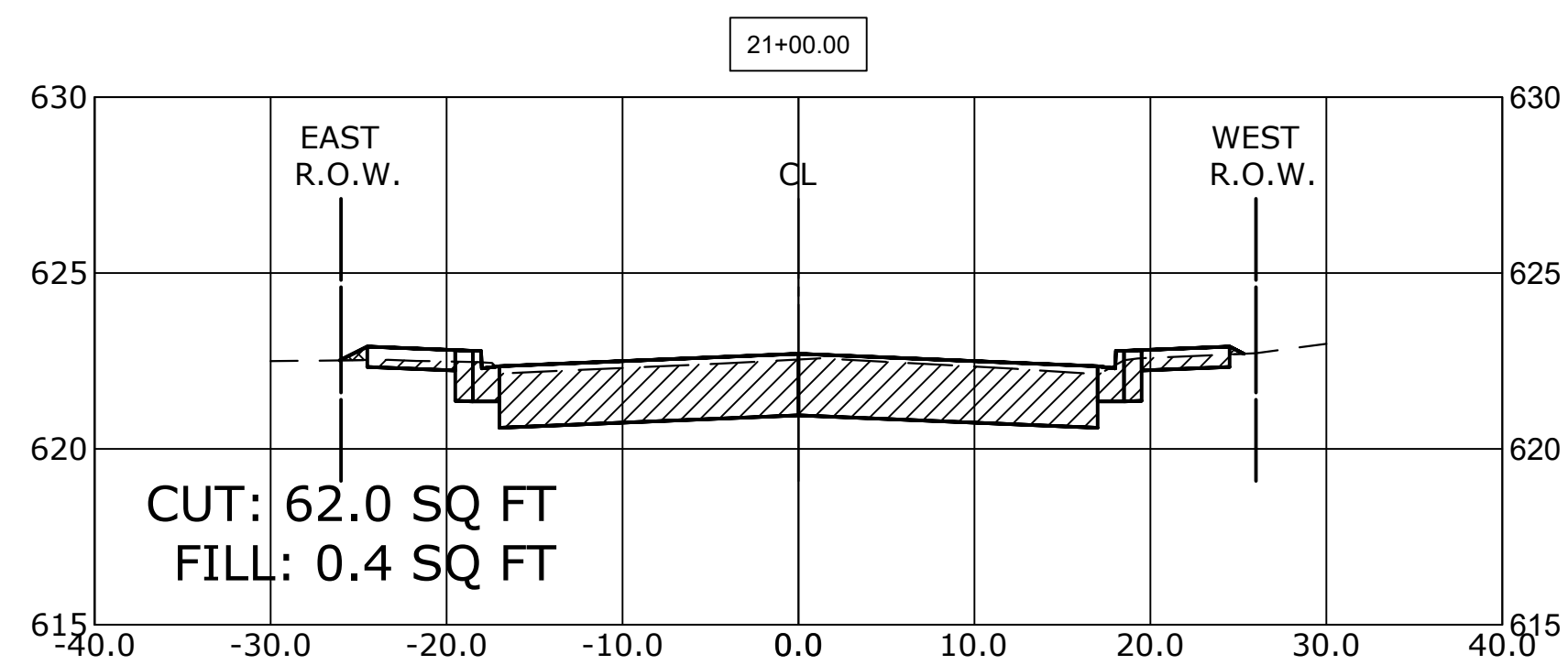
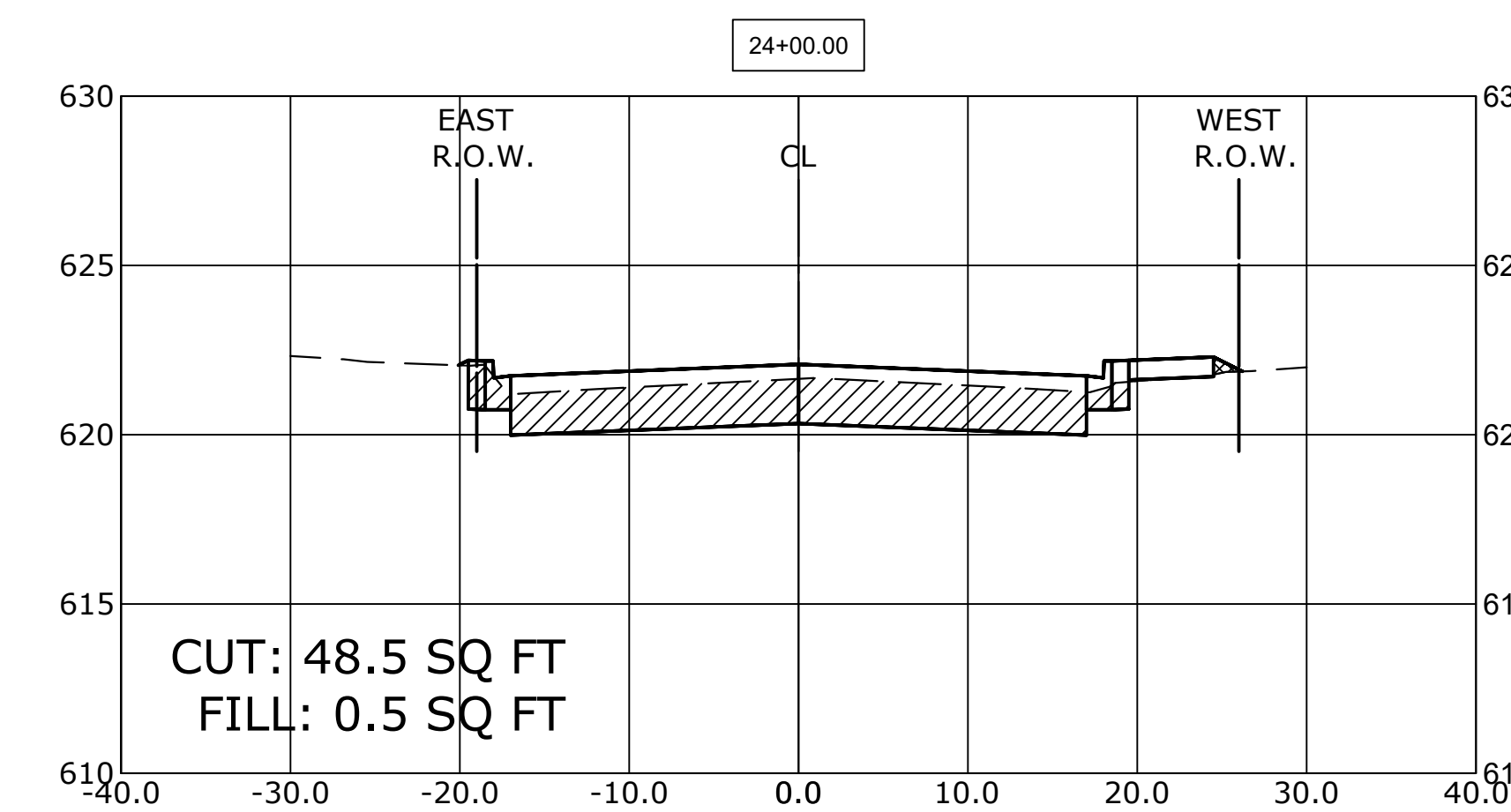
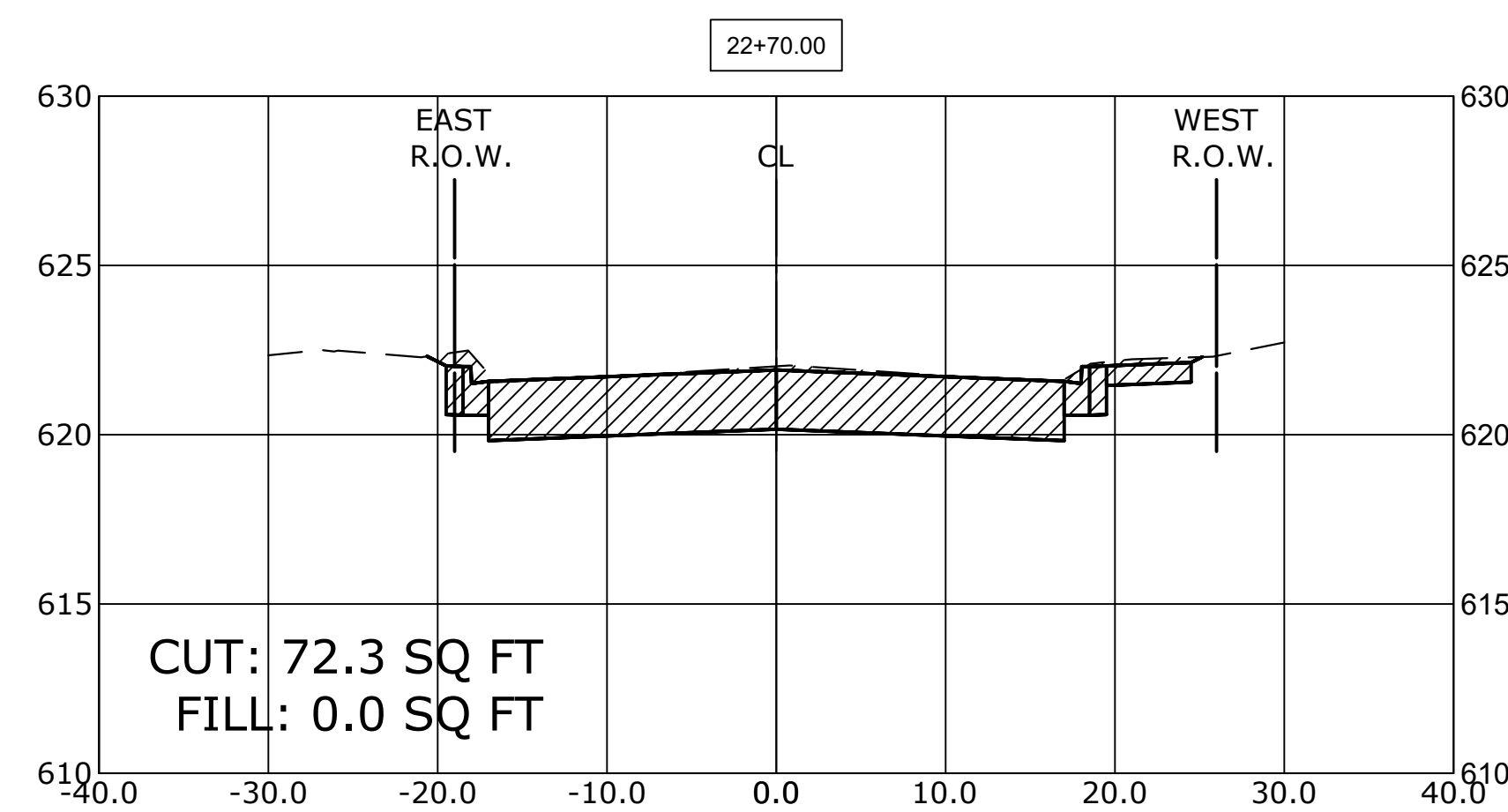
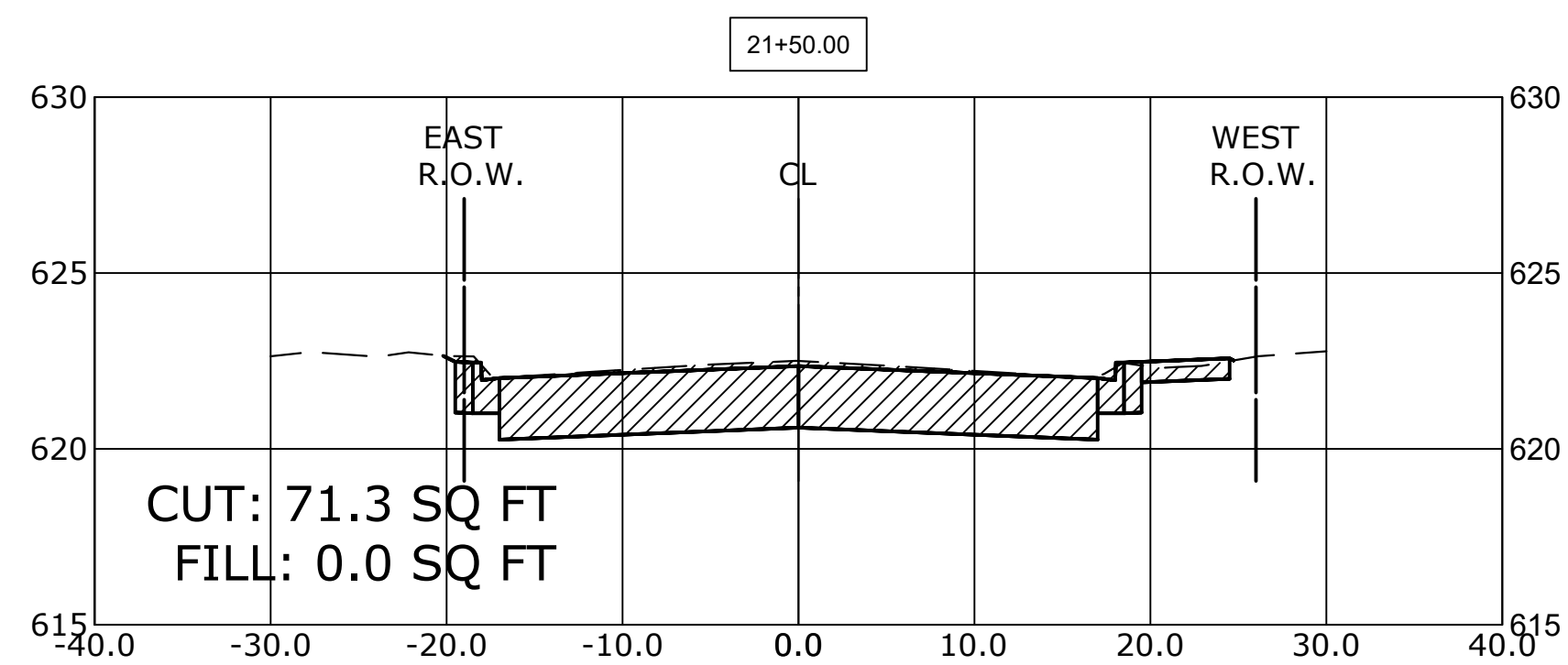
SCALE: H:1"=10', V:1"=5' SHEET NO. 1 OF 9 SHEETS STA. 17+46 TO STA. 20+50

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	94
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801

**CROSS SECTION LEGEND**

**C = CUT (SQ. FT.)**   
**F = FILL (SQ. FT.)** 



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DATE -	2-11-20	REVISED -	

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**BRAGA DRIVE  
 CROSS SECTIONS**

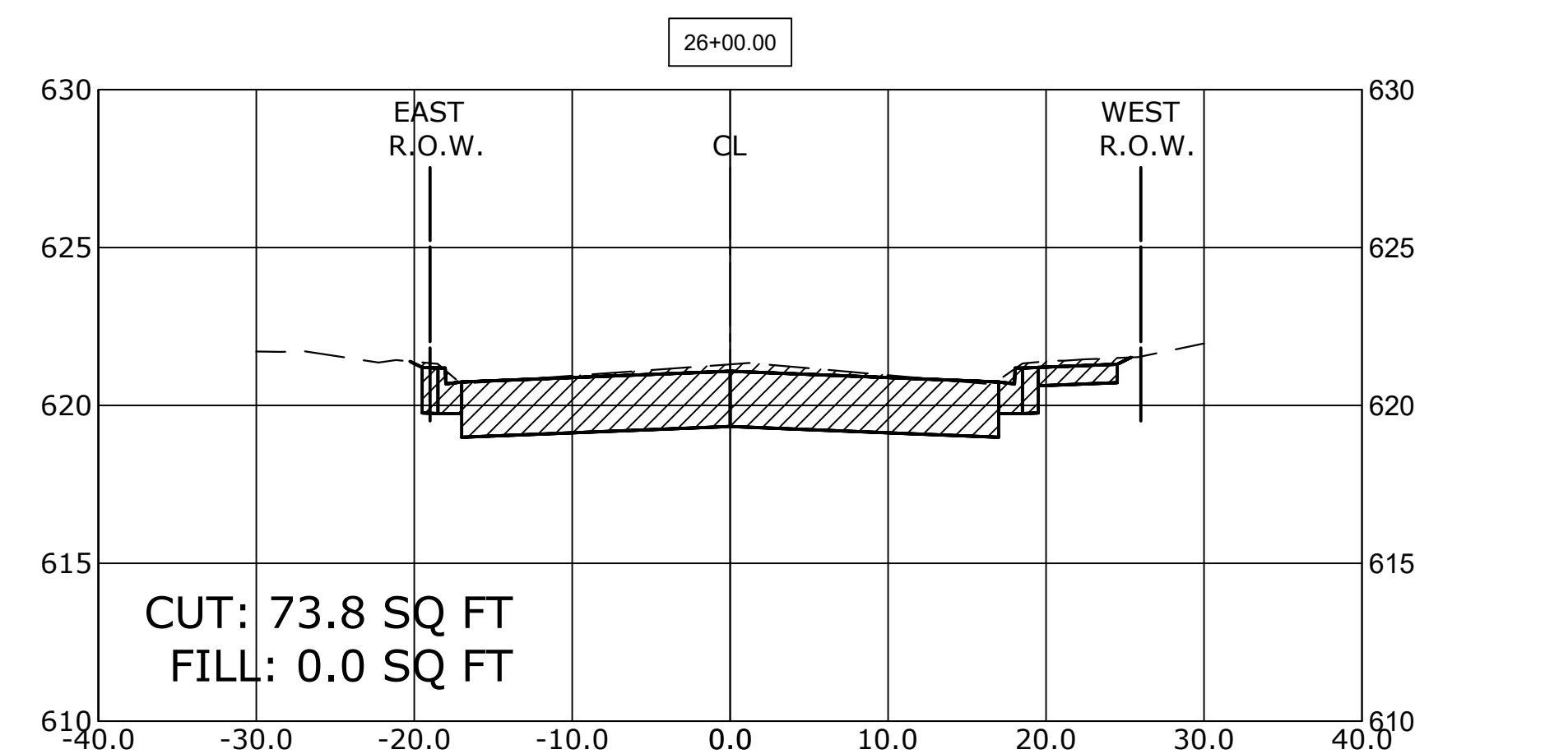
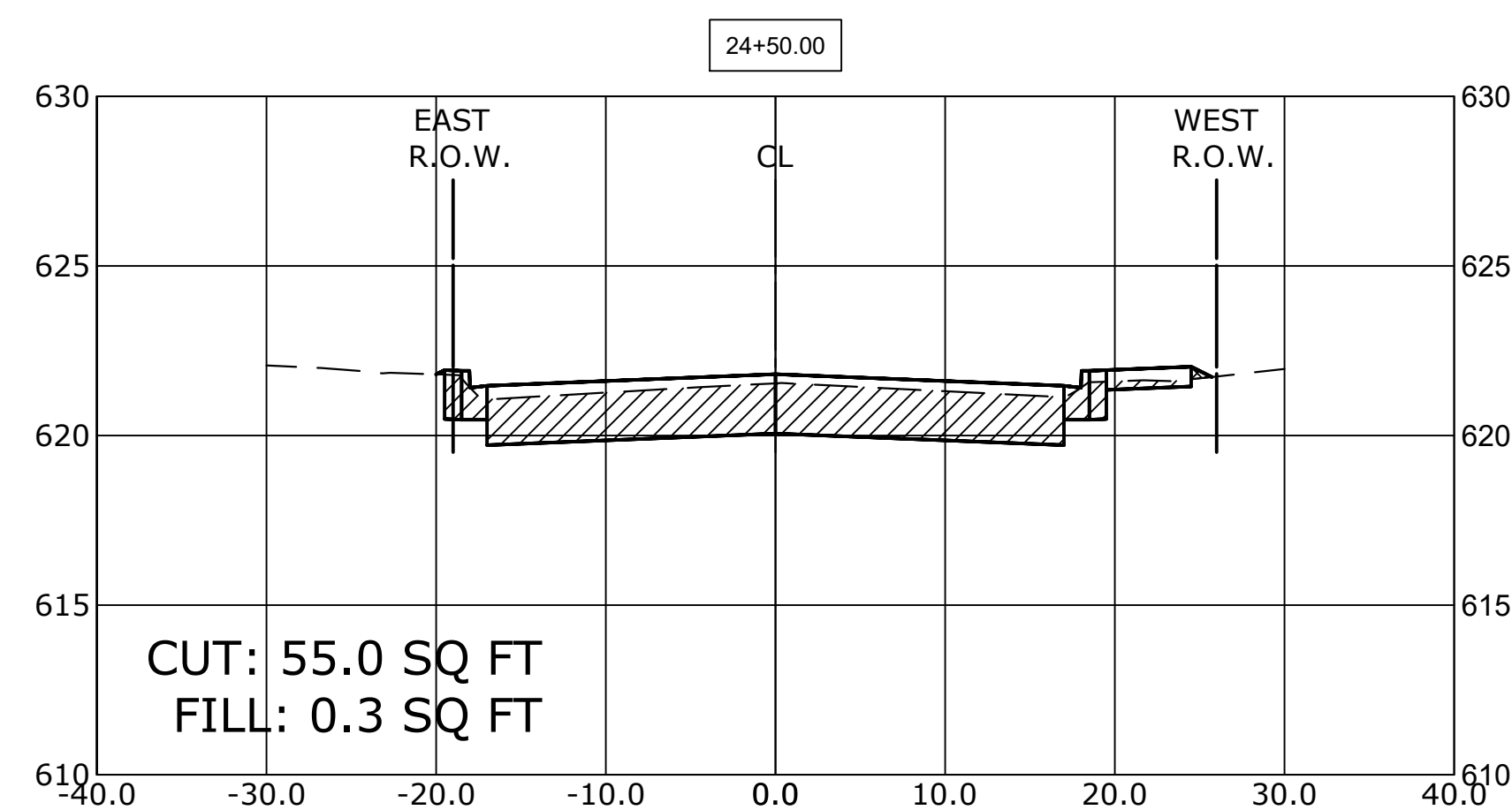
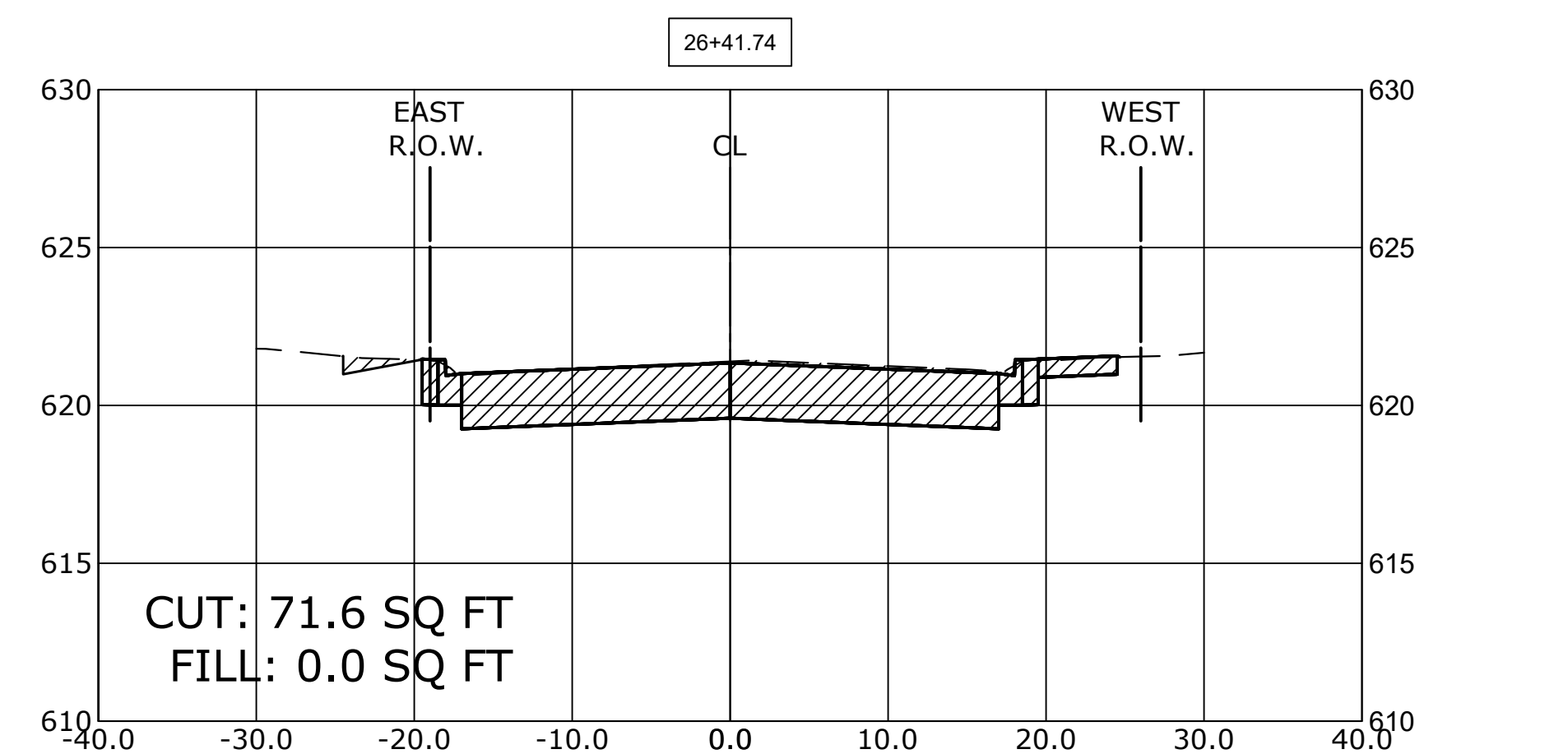
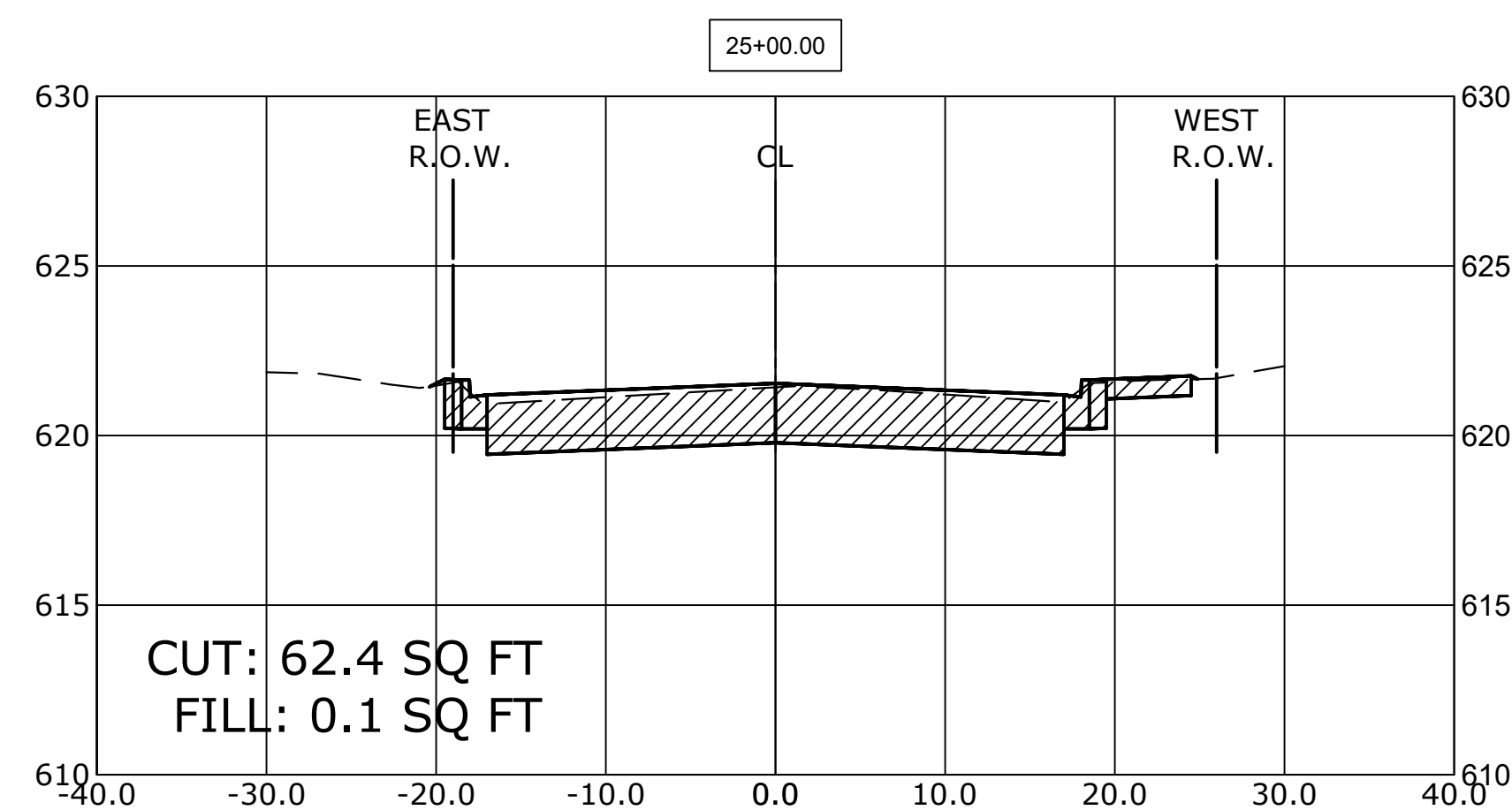
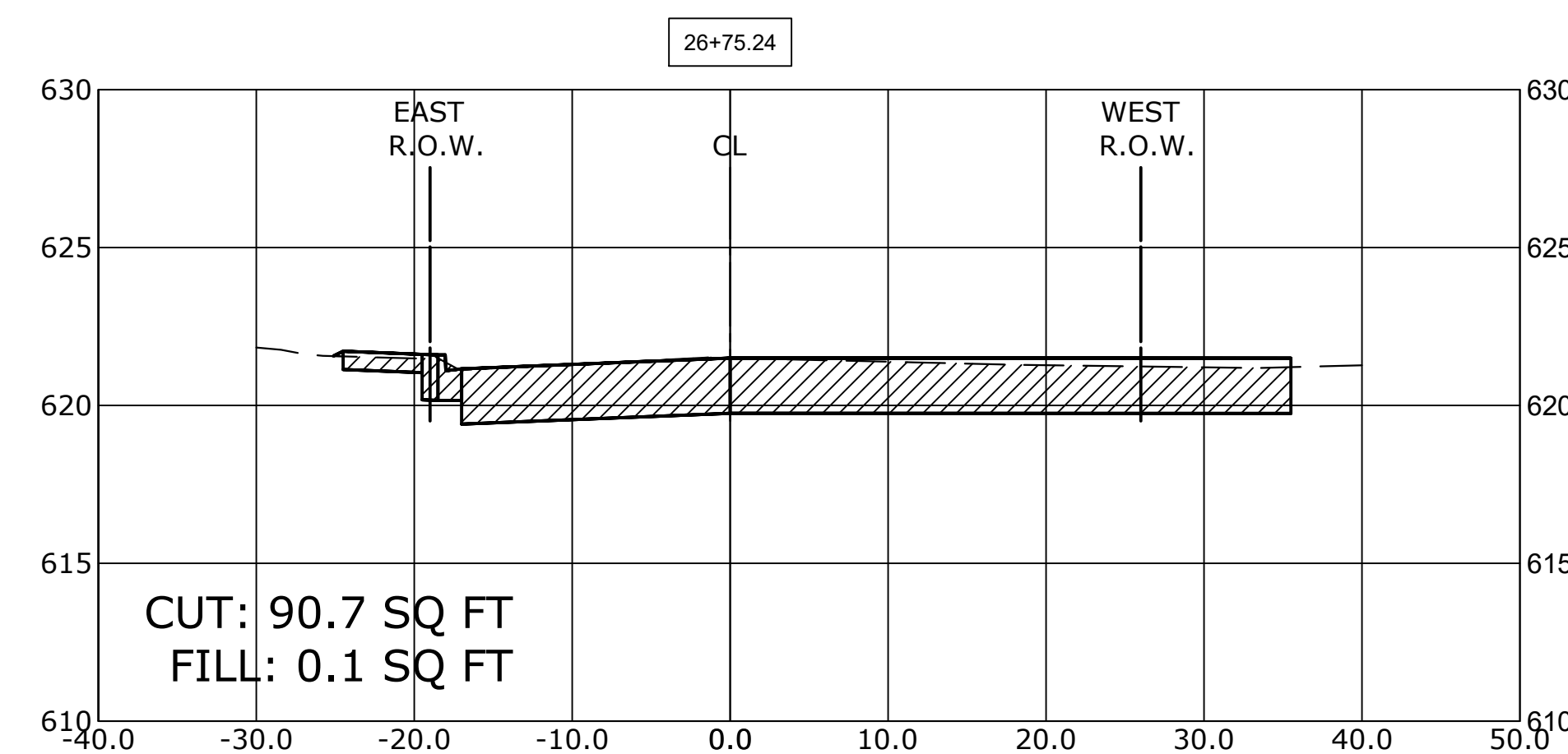
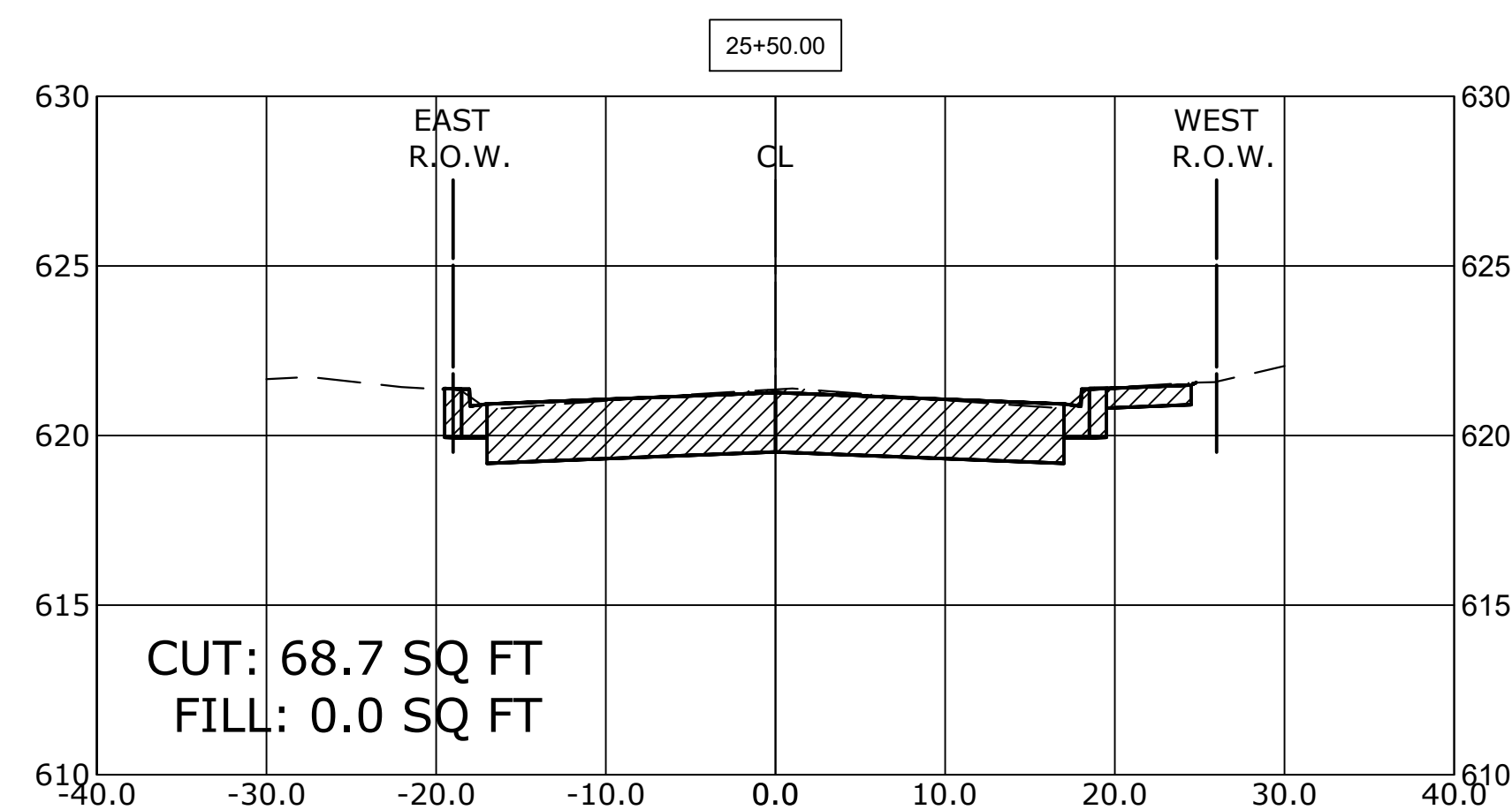
SCALE: H:1"=10', V:1"=5' SHEET NO. 2 OF 9 SHEETS STA. 20+65 TO STA. 24+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	95
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

E.H.E. PROJECT NO. 120-19-010801

**CROSS SECTION LEGEND**

C = CUT (SQ. FT.)   
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DATE -	2-11-20	REVISED -	

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**BRAGA DRIVE  
 CROSS SECTIONS**


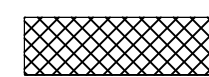
SCALE: H:1"=10', V:1"=5' SHEET NO. 3 OF 9 SHEETS STA. 24+50 TO STA. 26+75

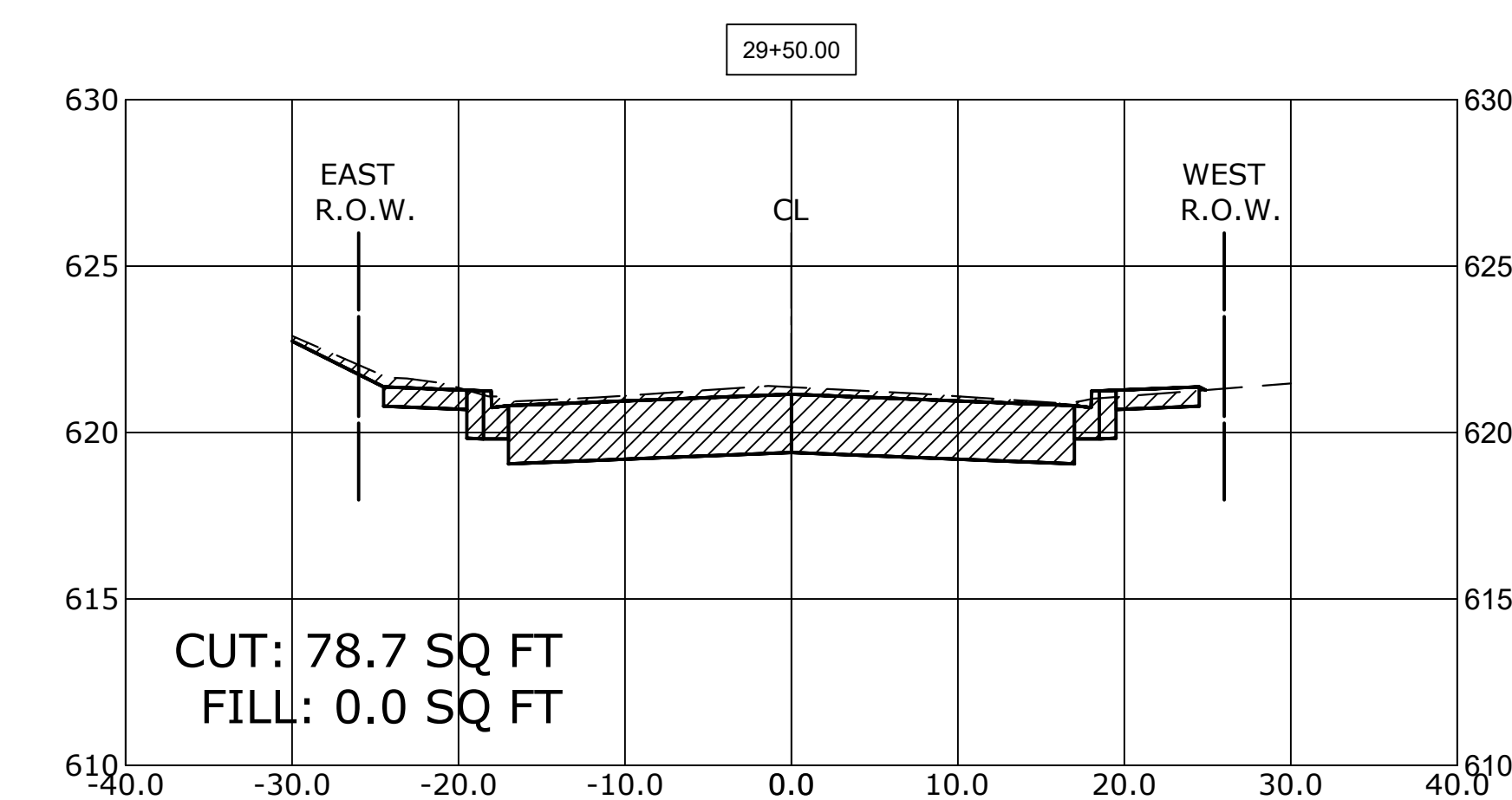
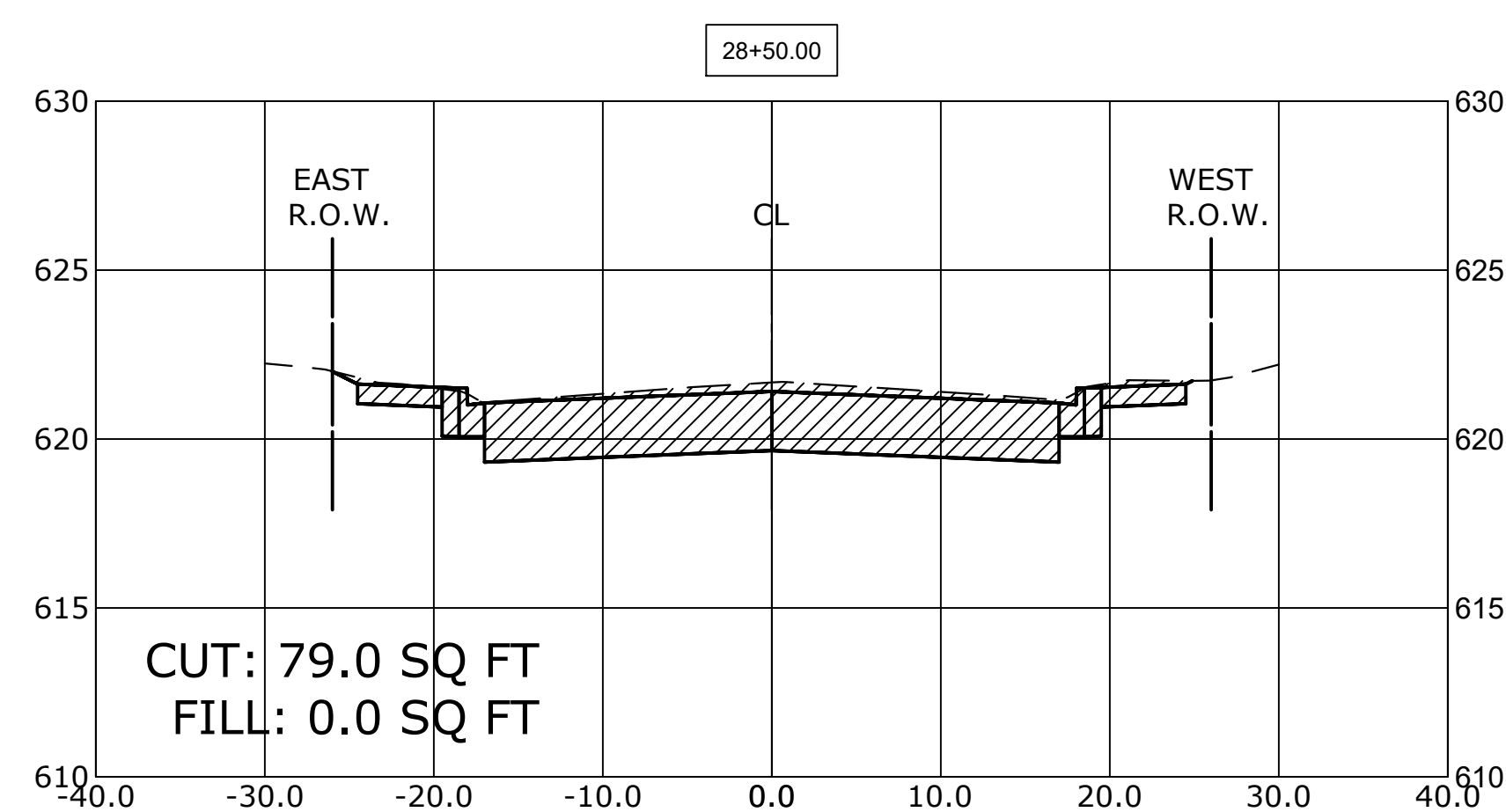
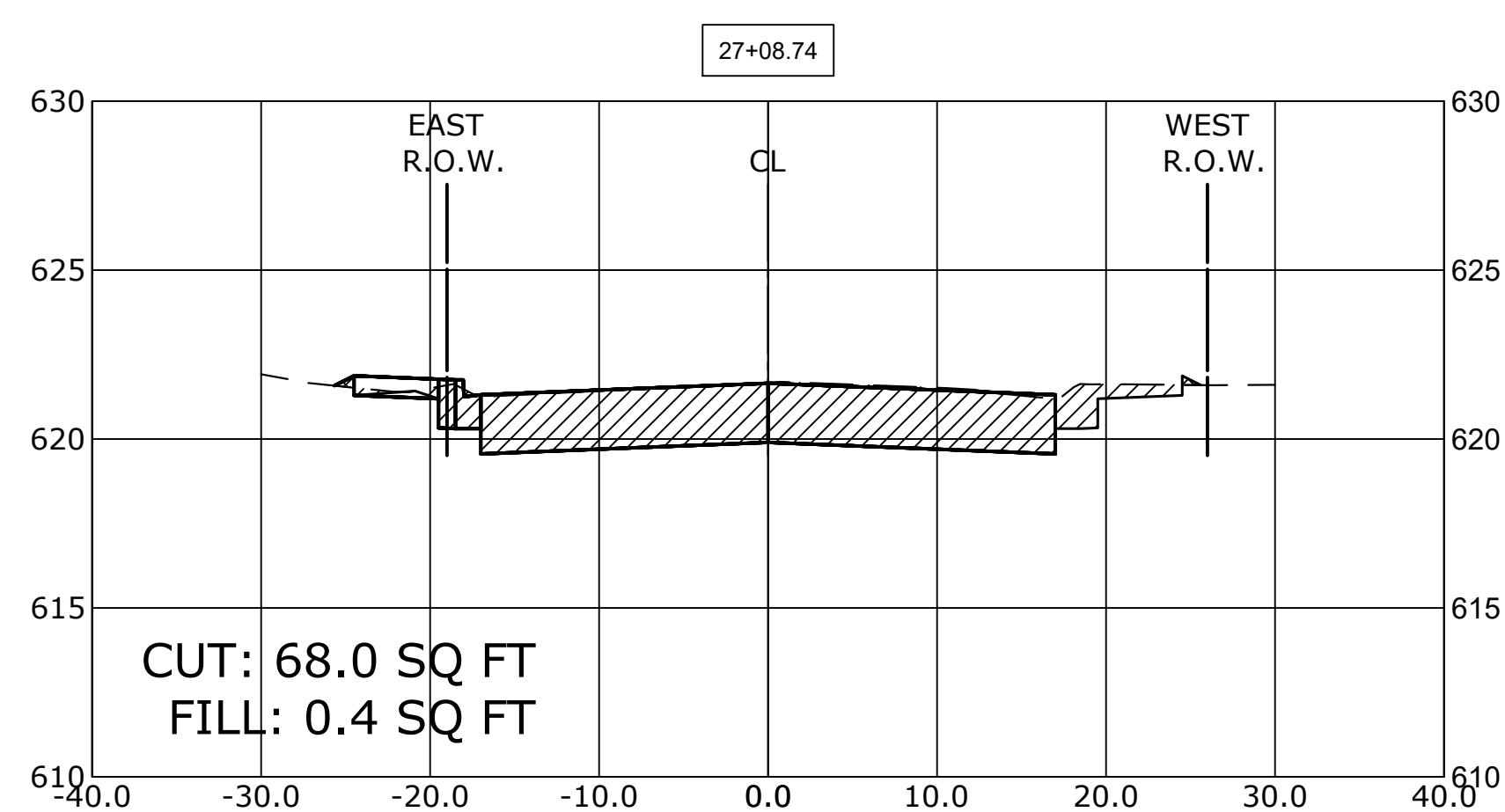
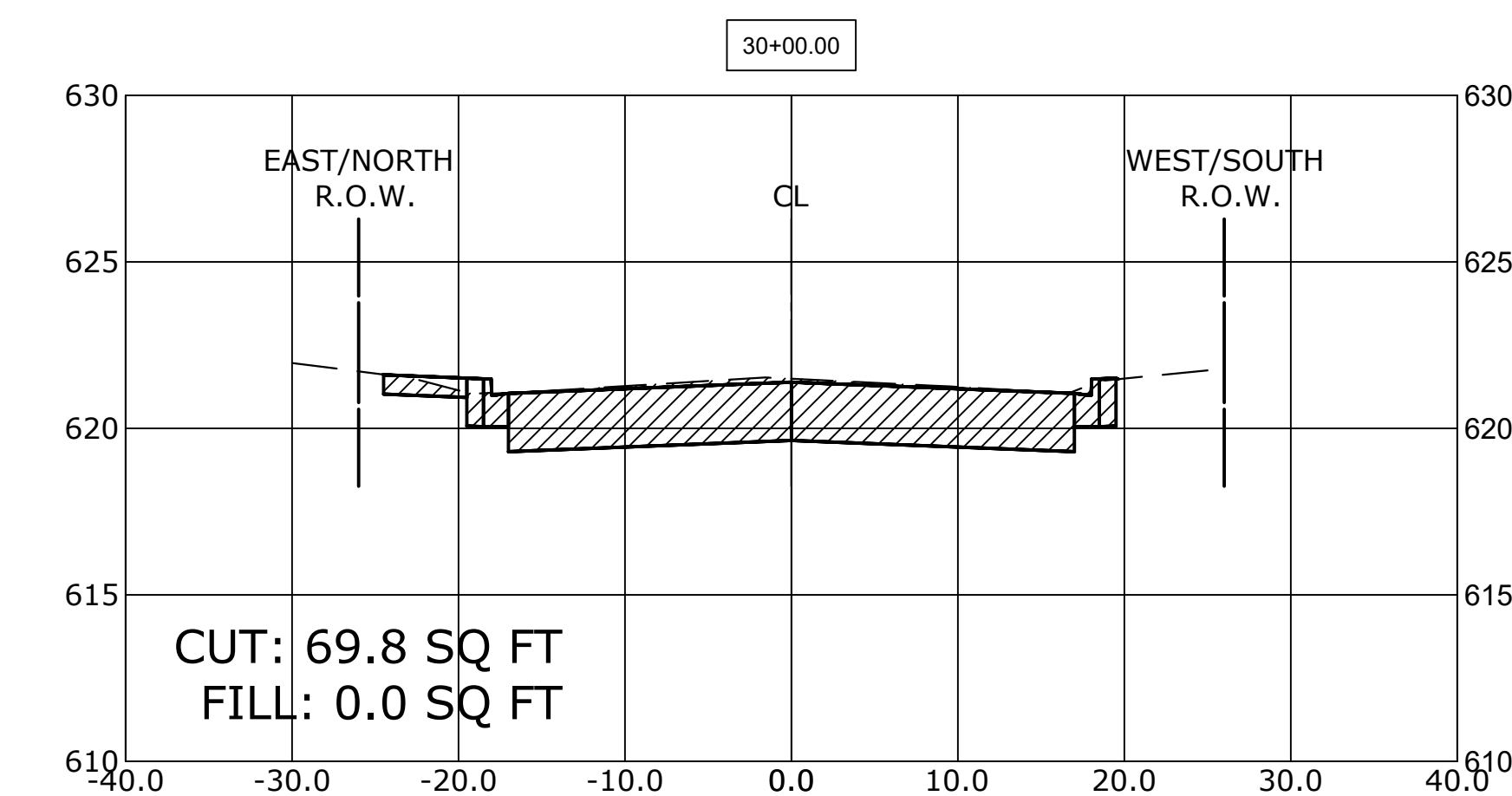
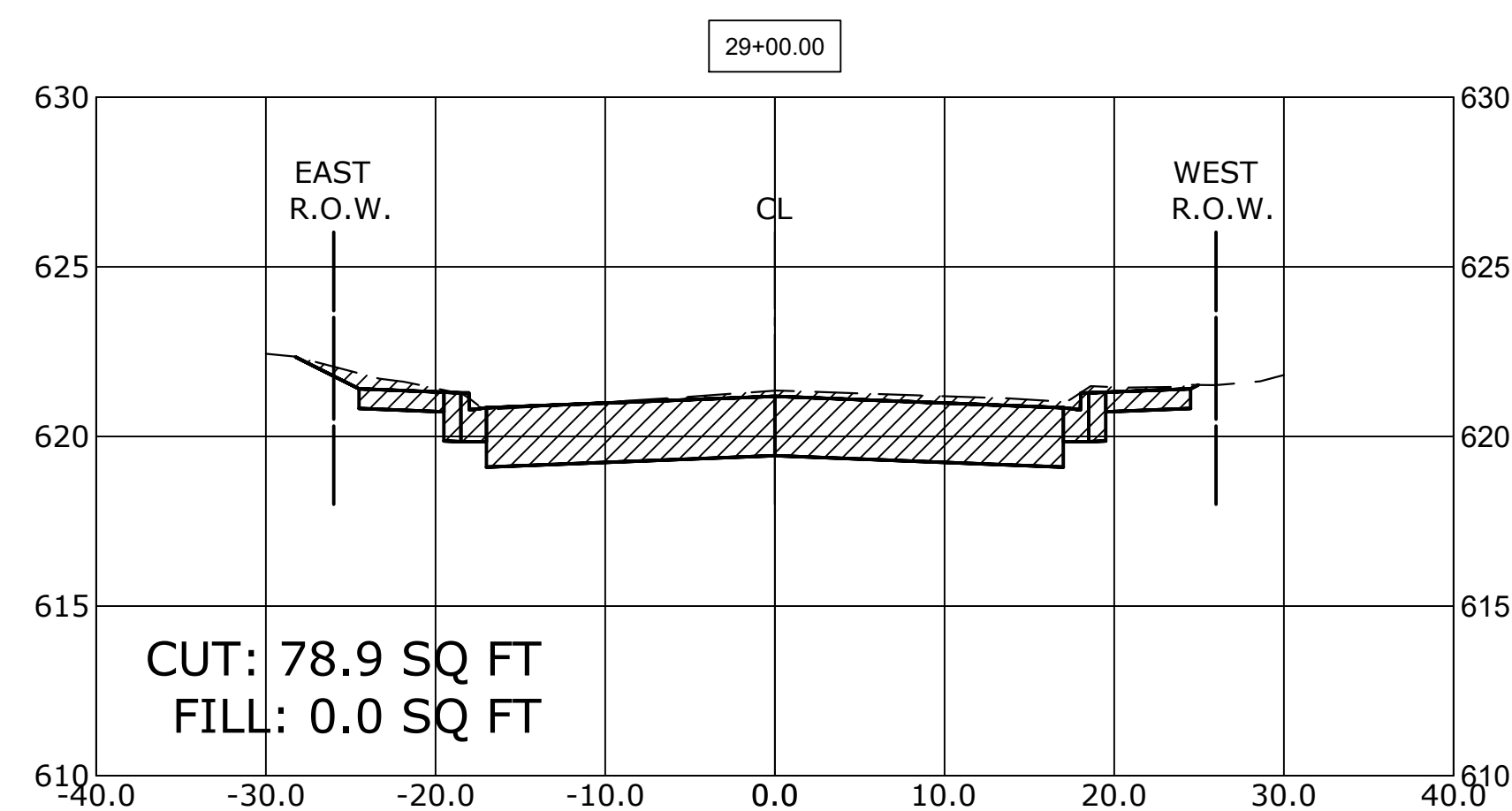
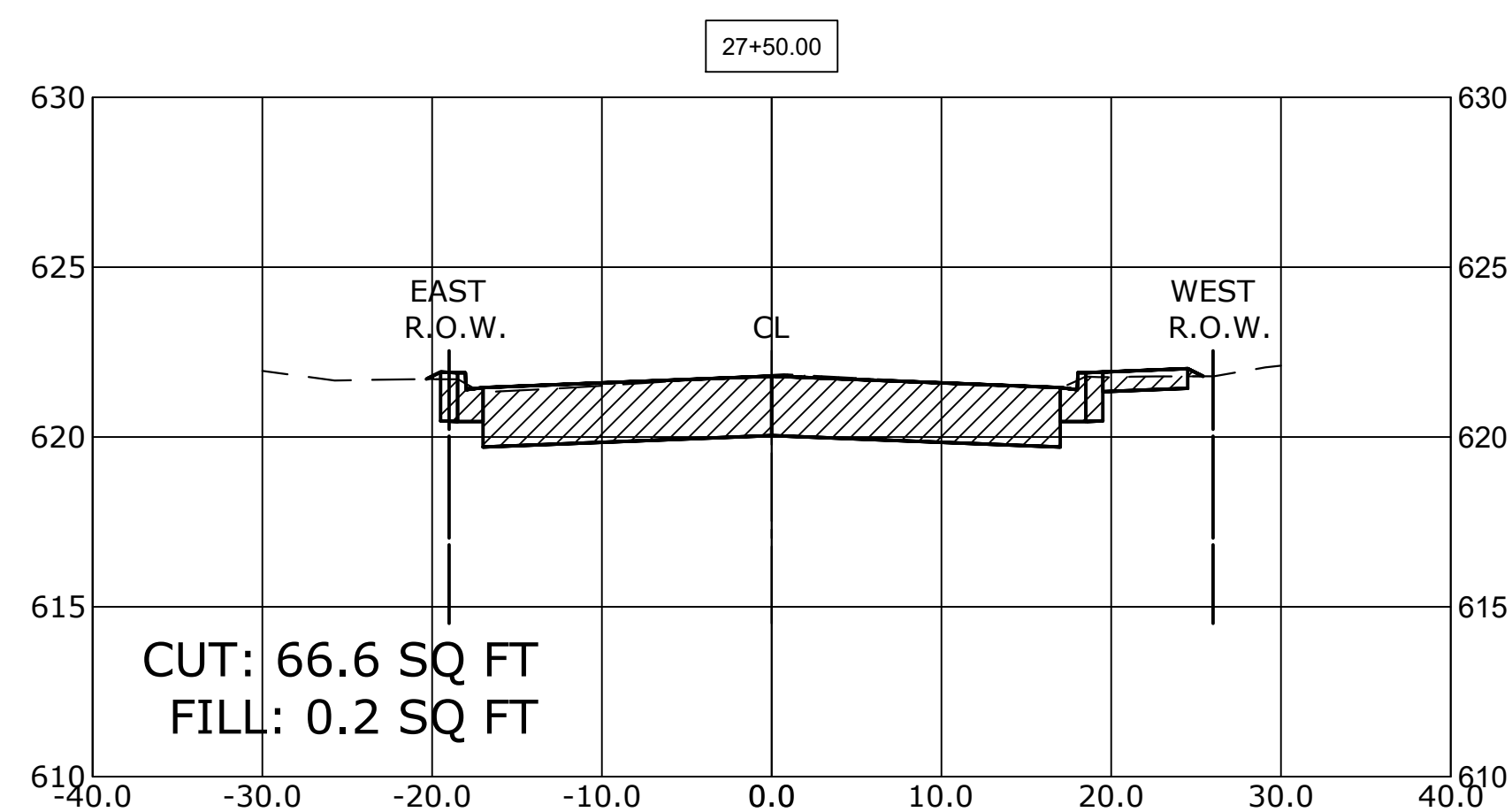
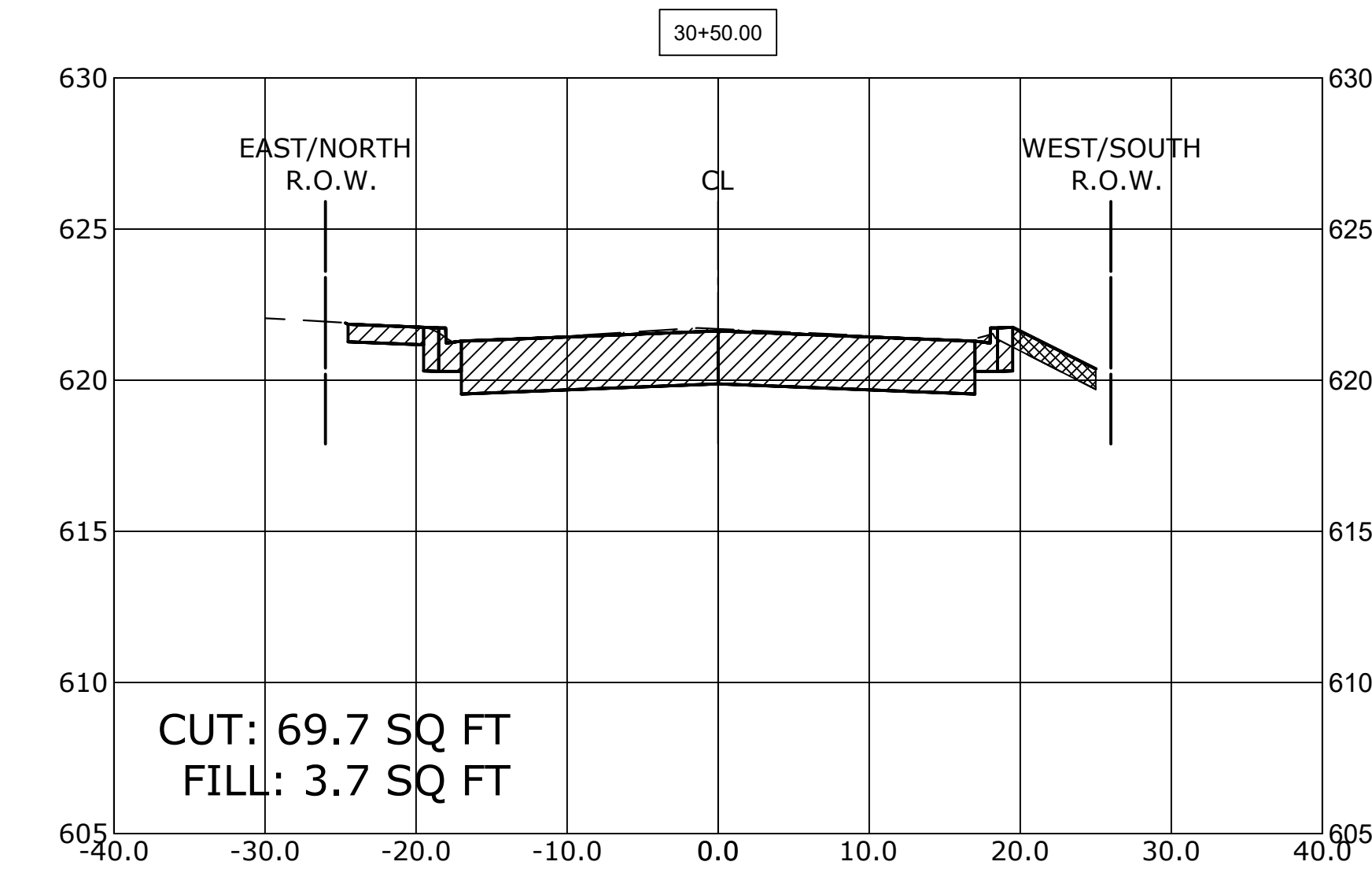
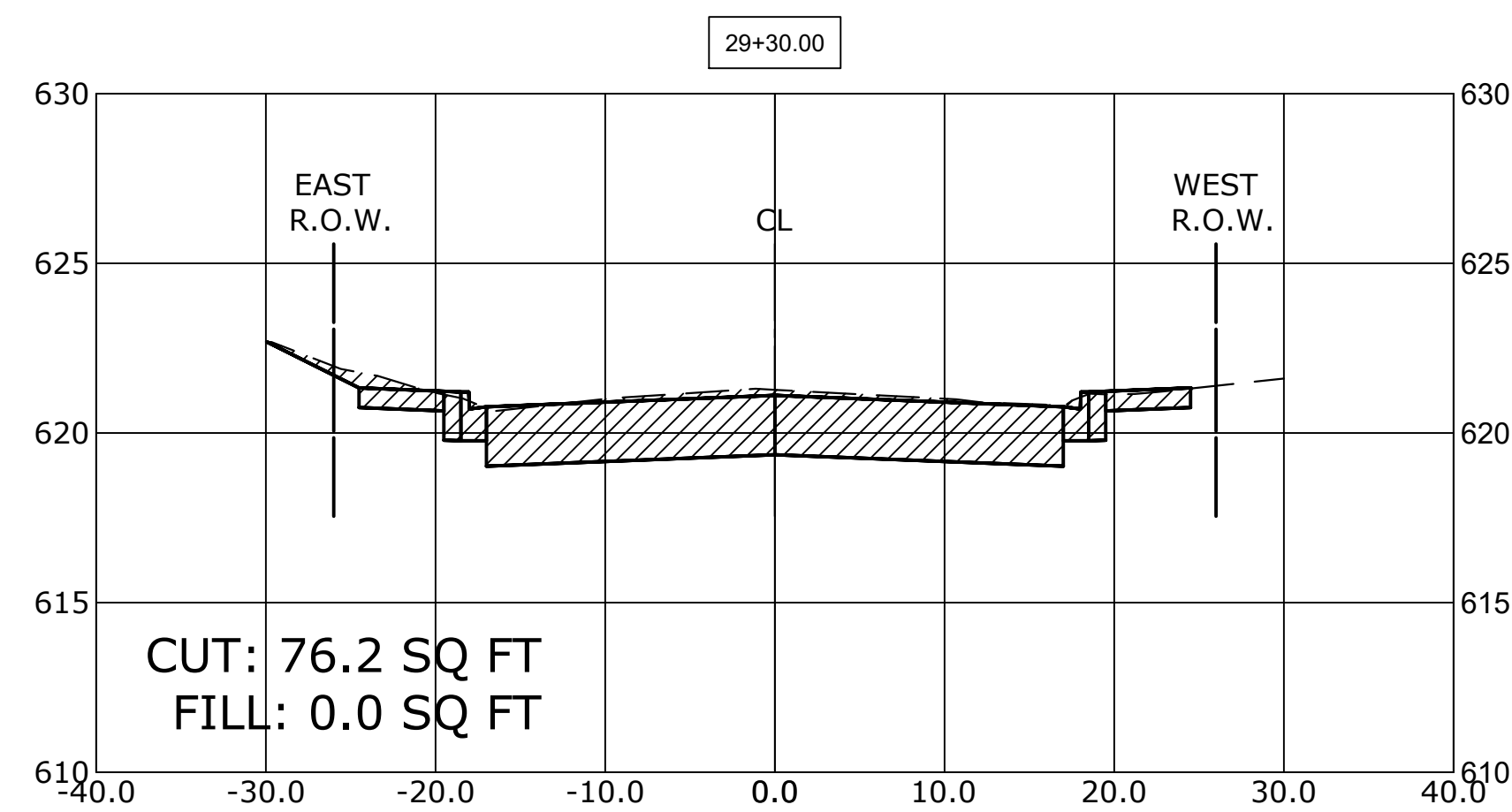
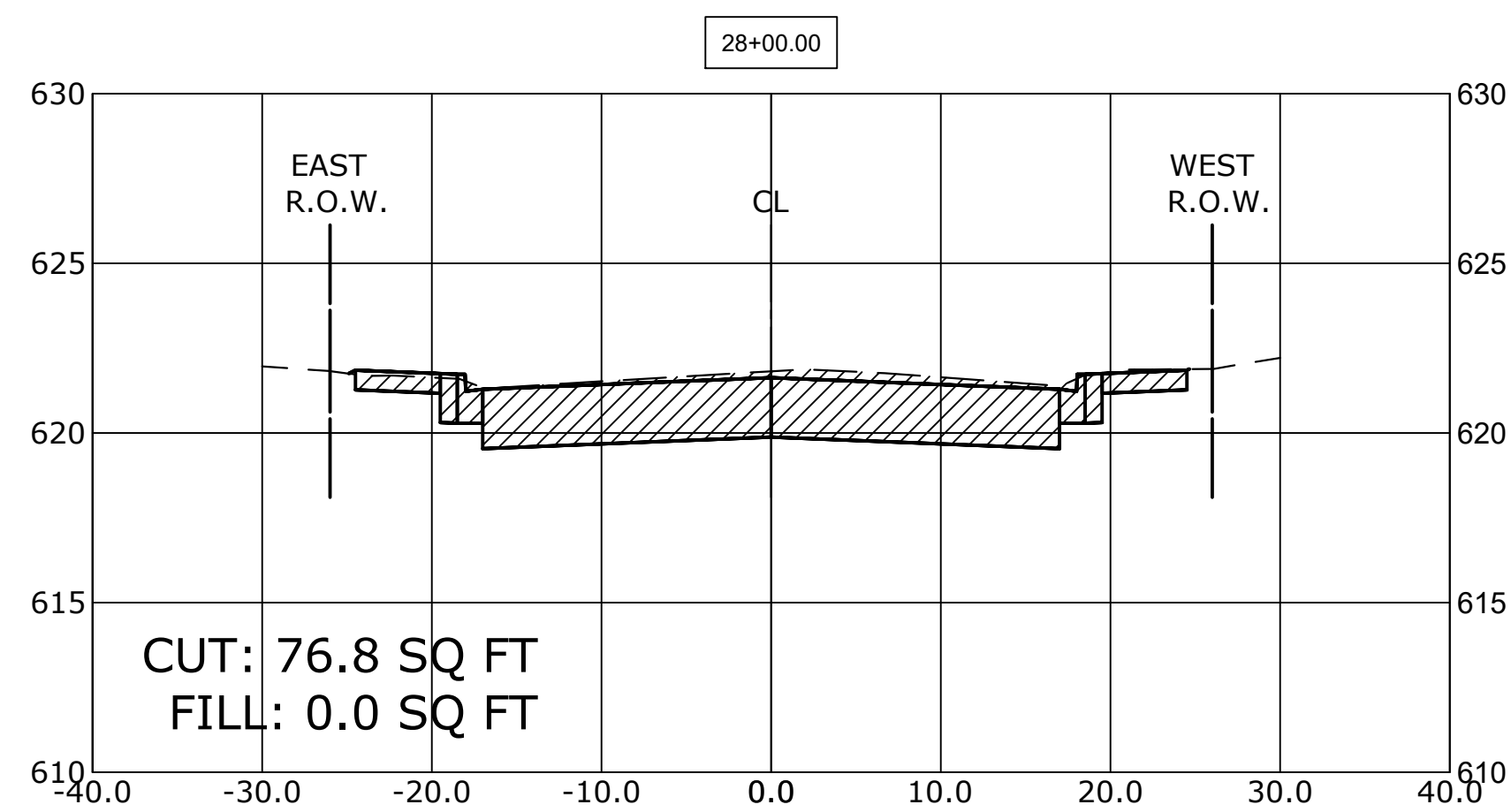
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	96
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

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**CROSS SECTION LEGEND**

**C = CUT (SQ. FT.)**   
**F = FILL (SQ. FT.)** 



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**BRAGA DRIVE  
 CROSS SECTIONS**

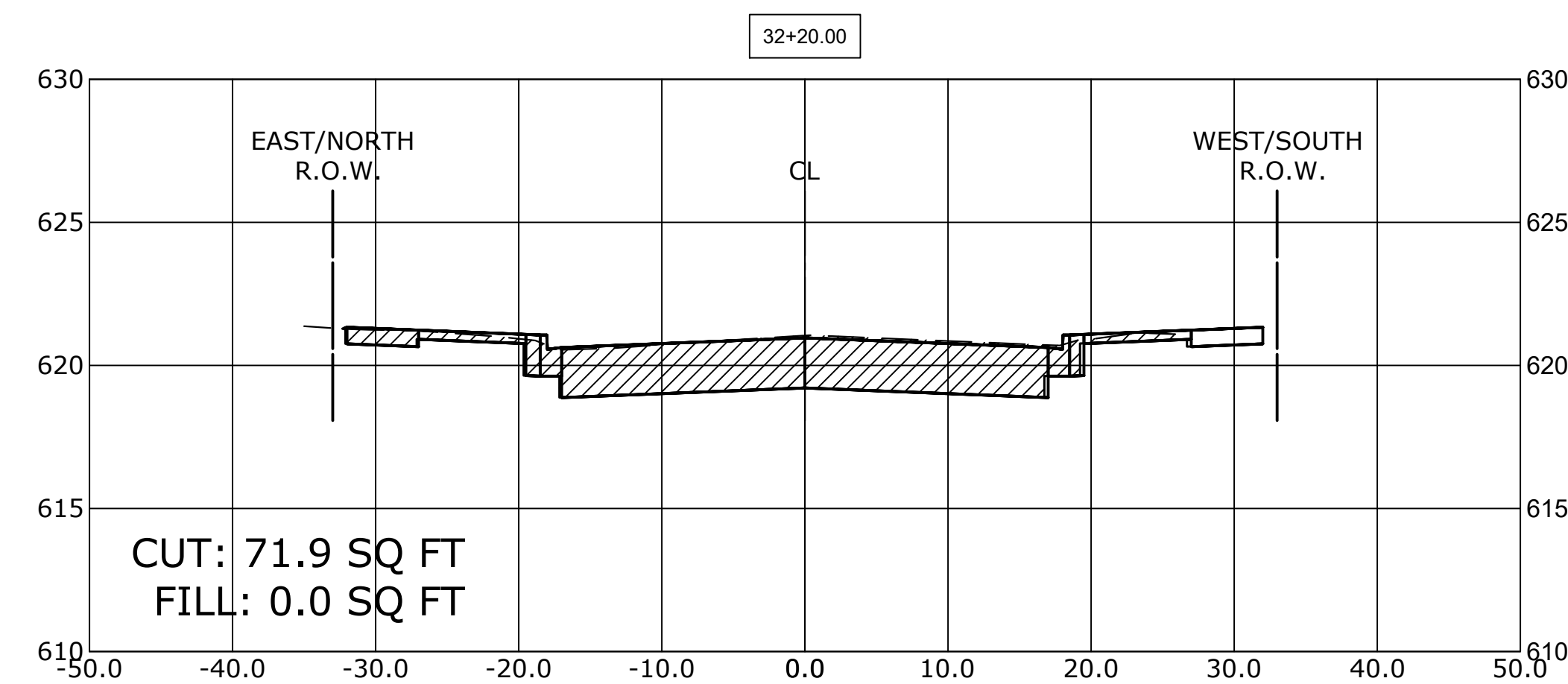
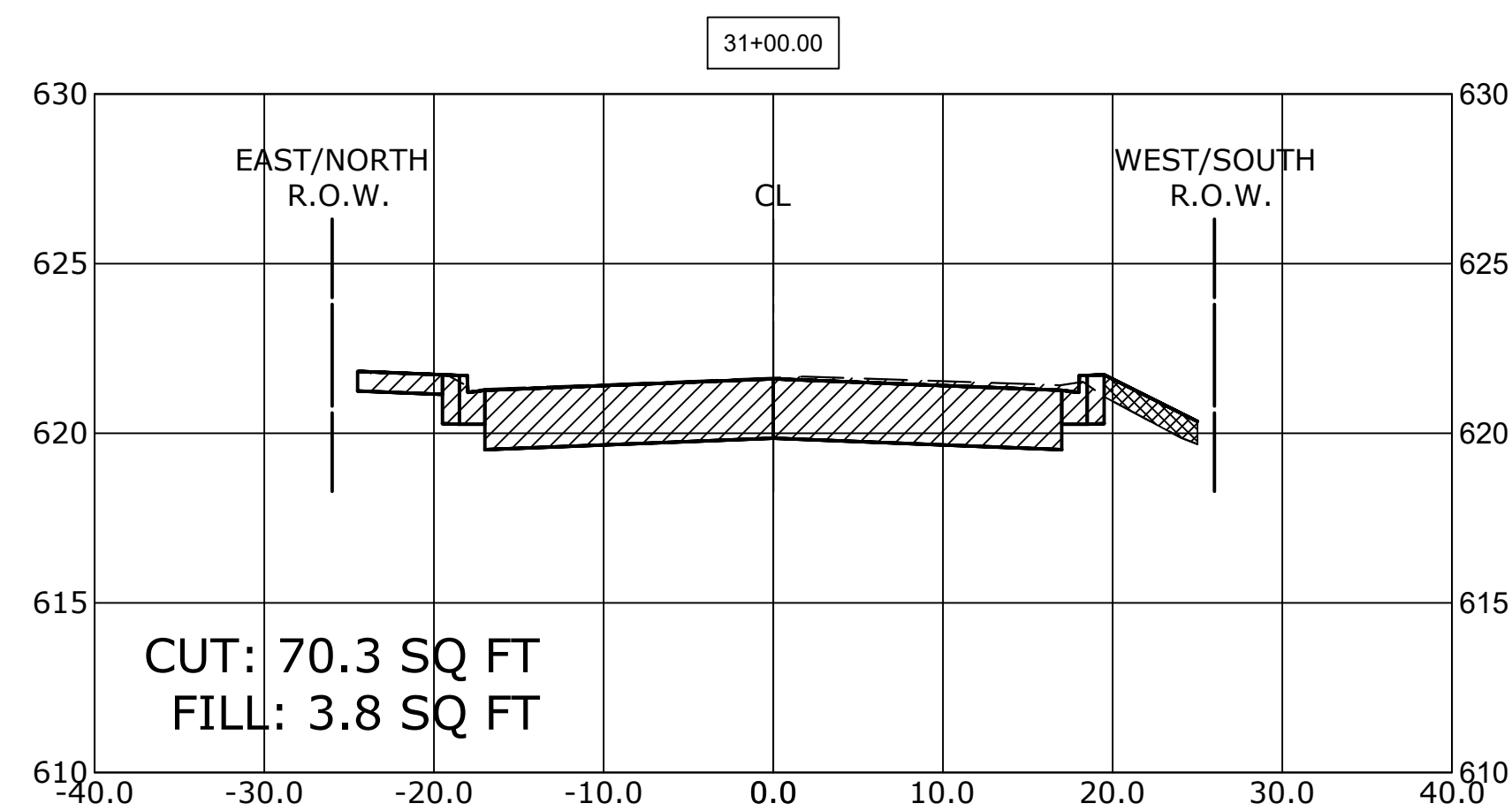
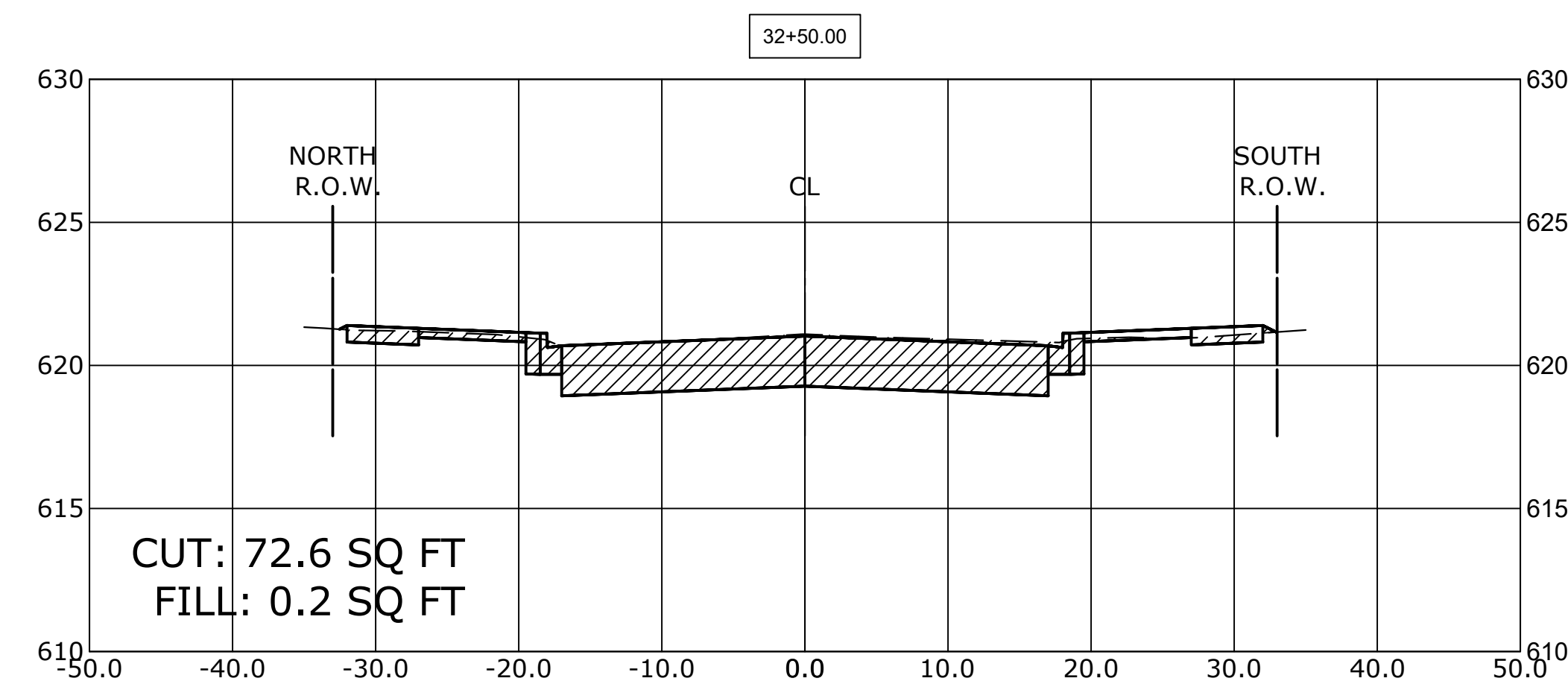
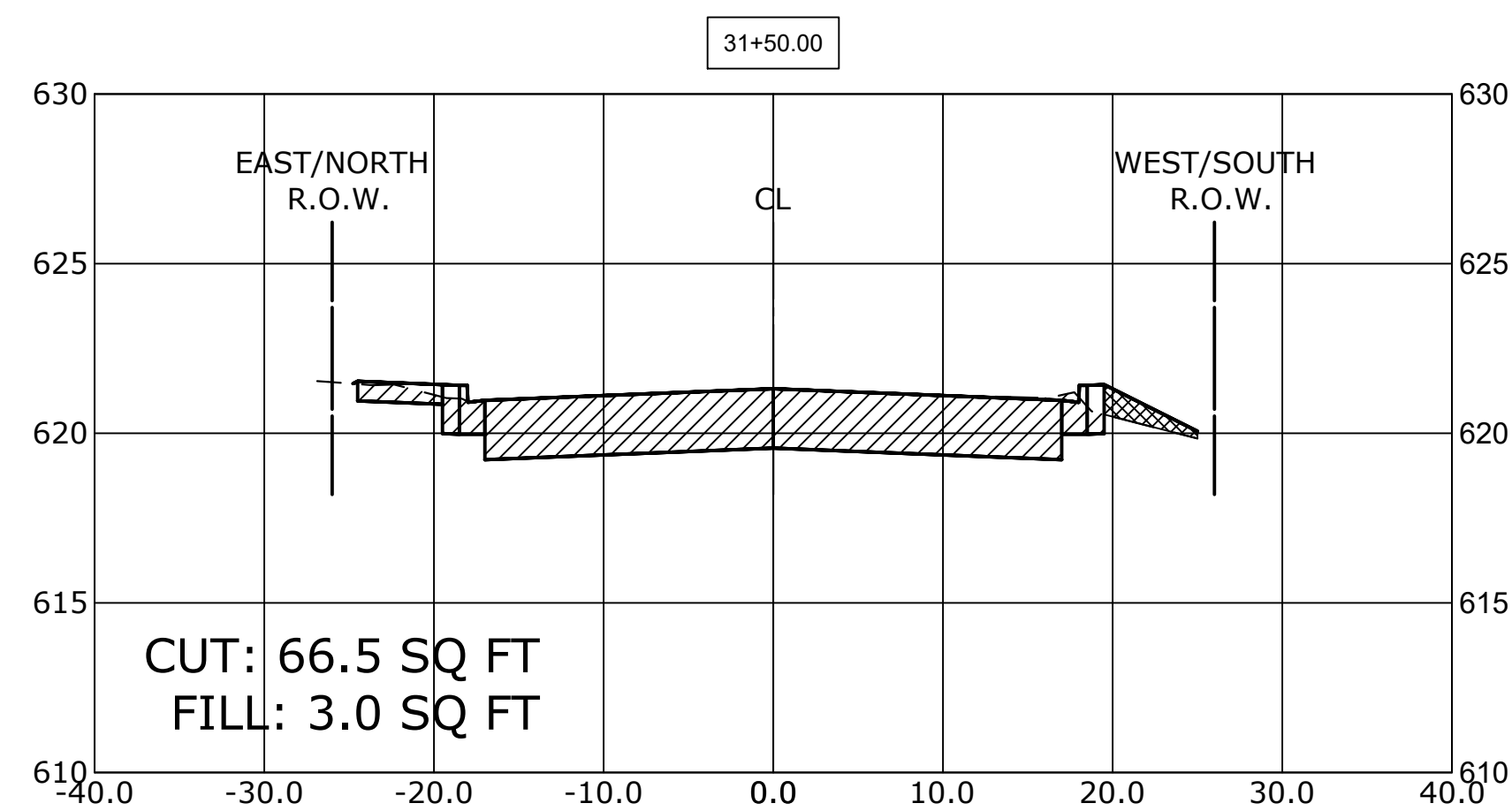
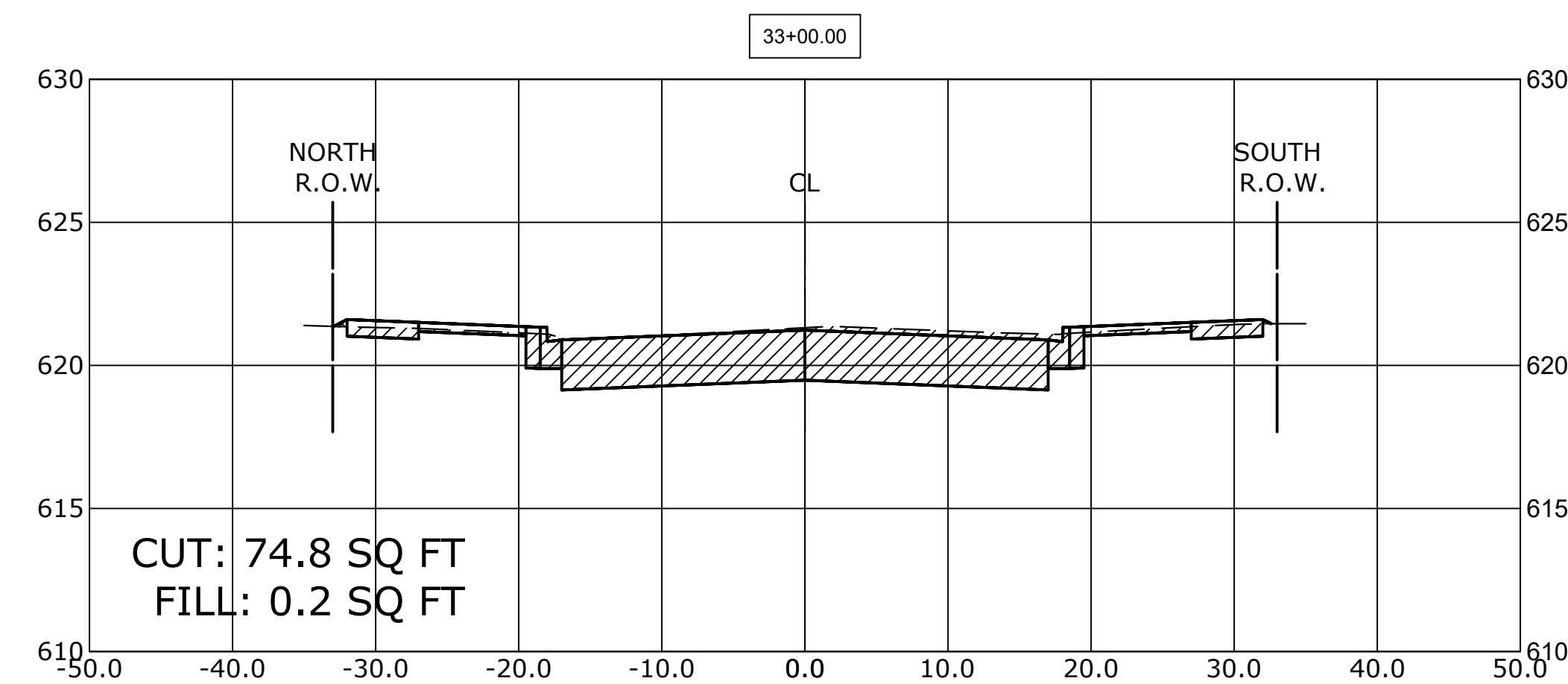
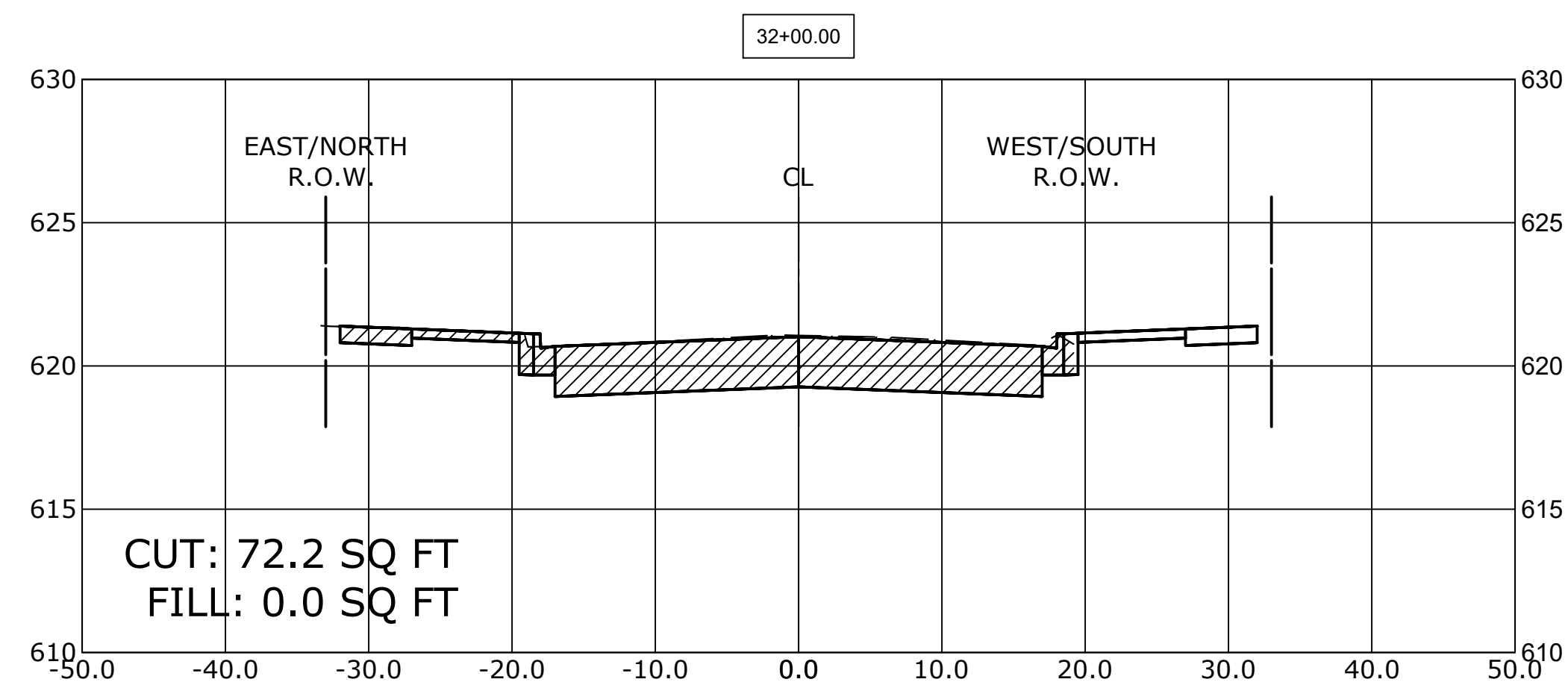
SCALE: 1"=10', V: 1"=5' SHEET NO. 4 OF 9 SHEETS STA. 27+08 TO STA. 30+50

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	97
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

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**CROSS SECTION LEGEND**

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 F = FILL (SQ. FT.) 



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DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
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**BRAGA DRIVE  
CROSS SECTIONS**

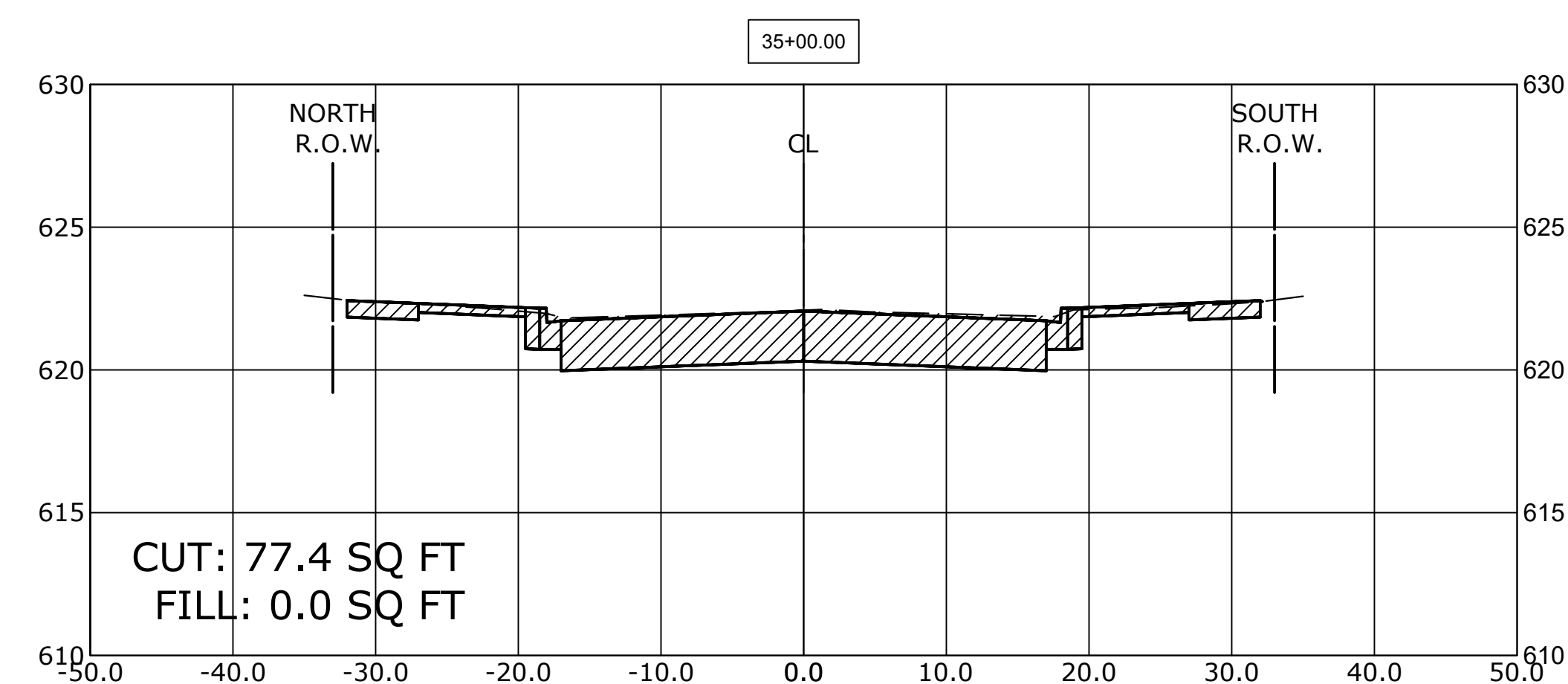
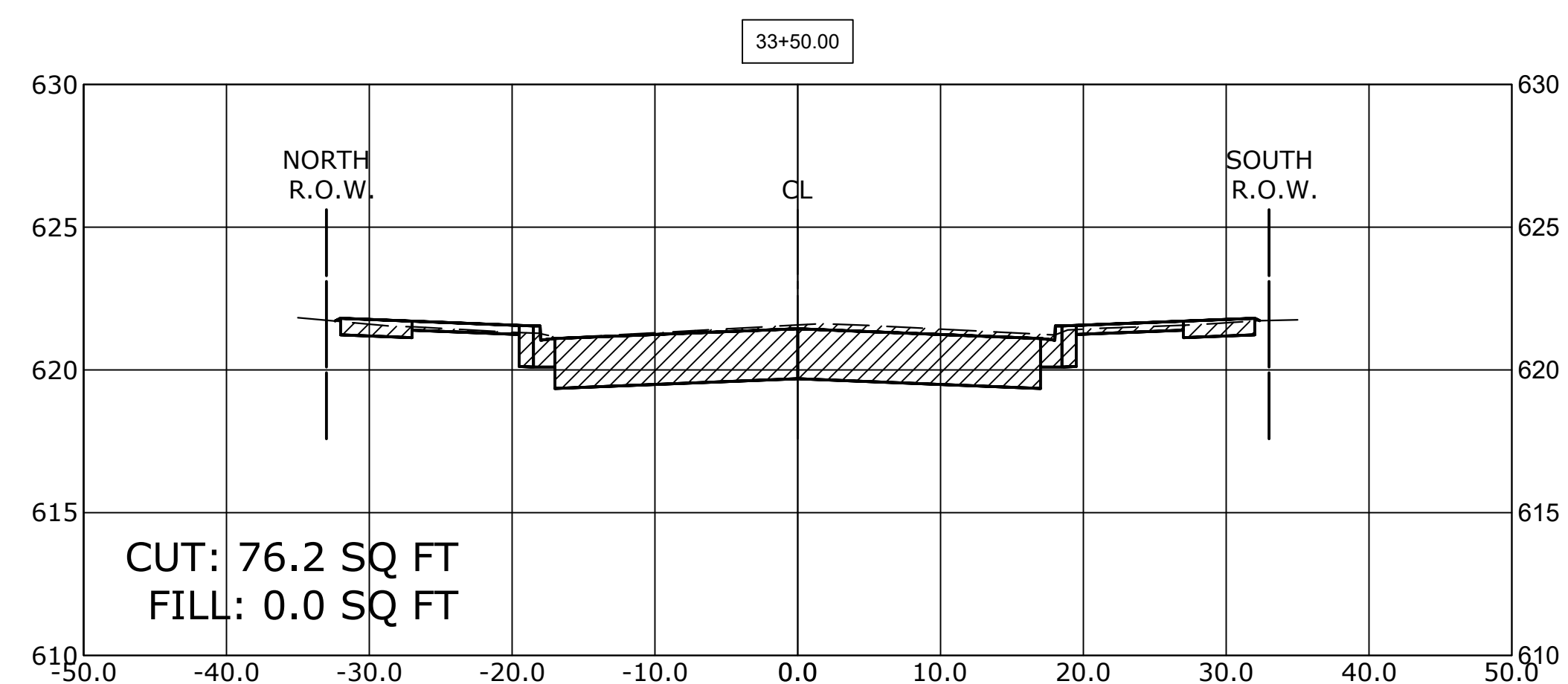
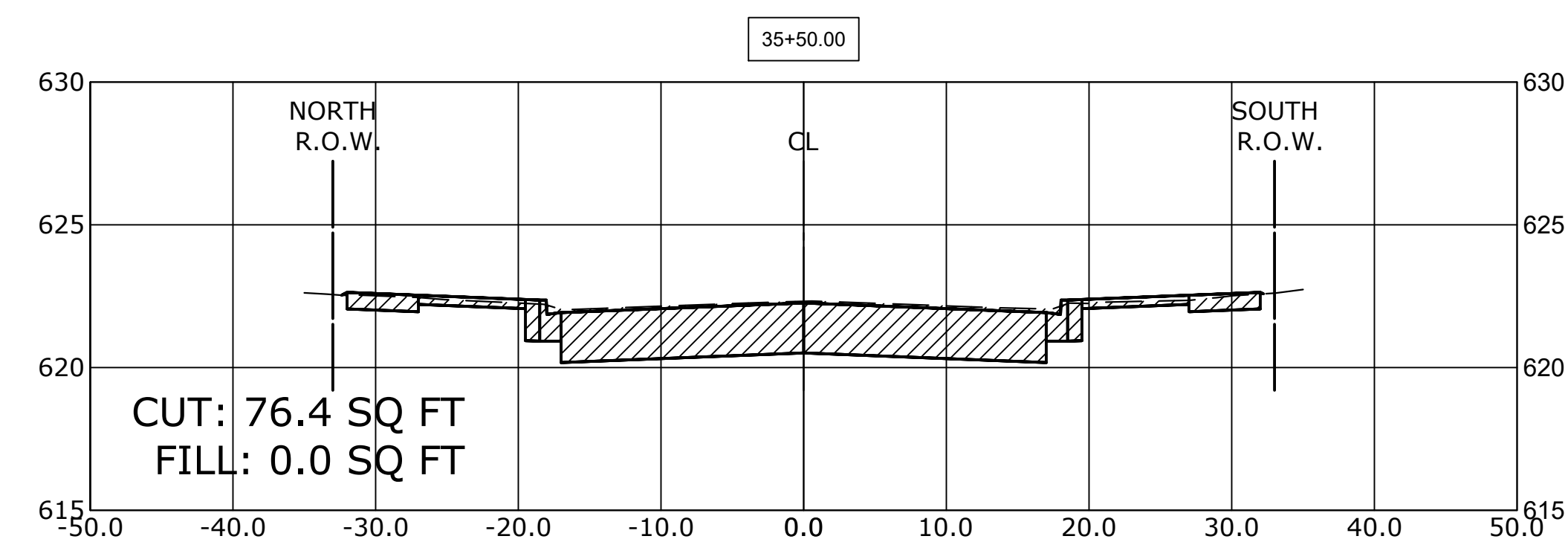
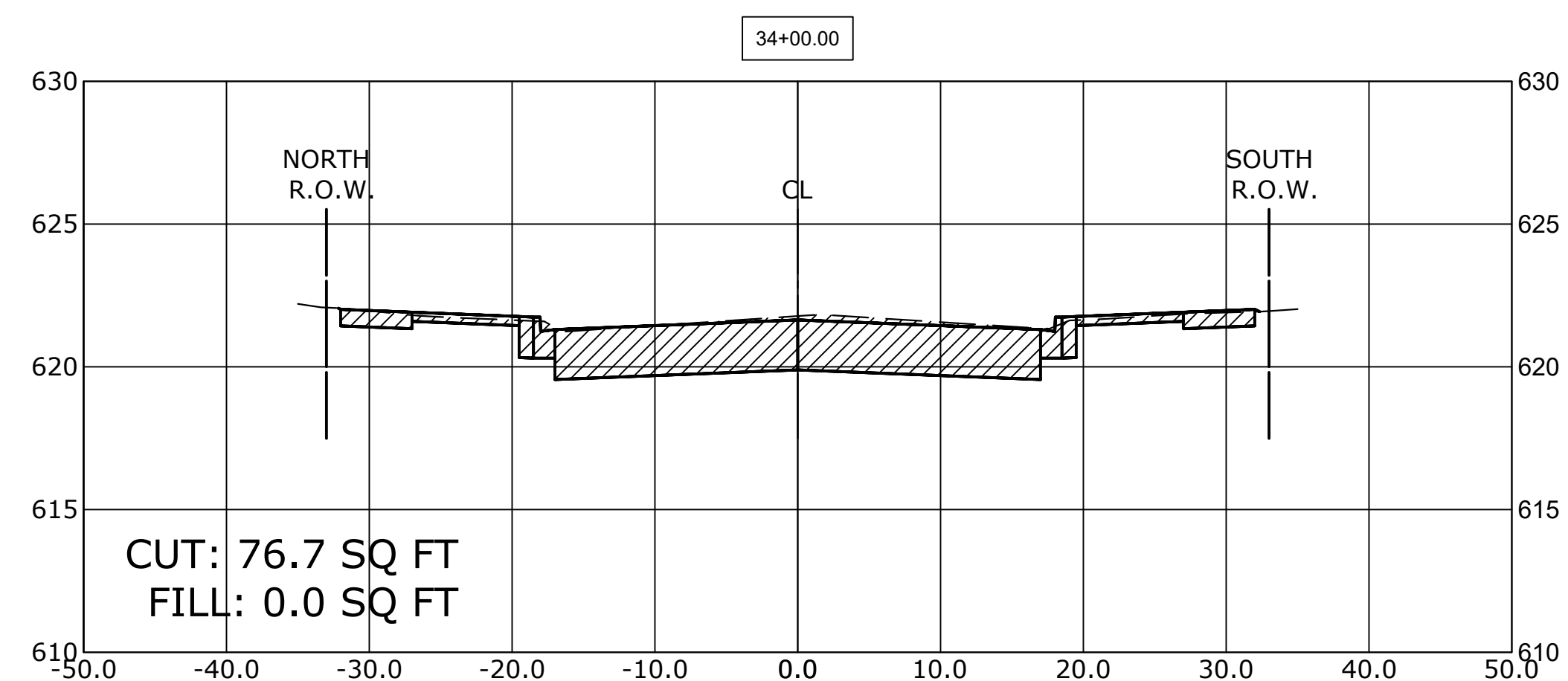
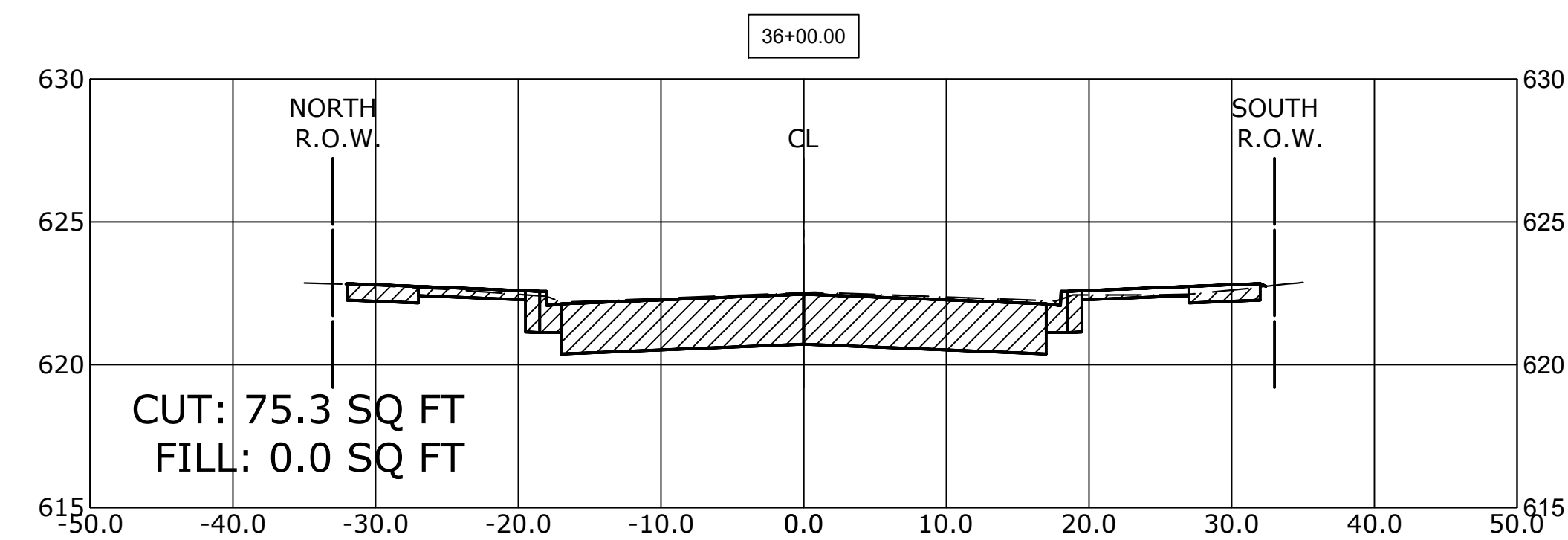
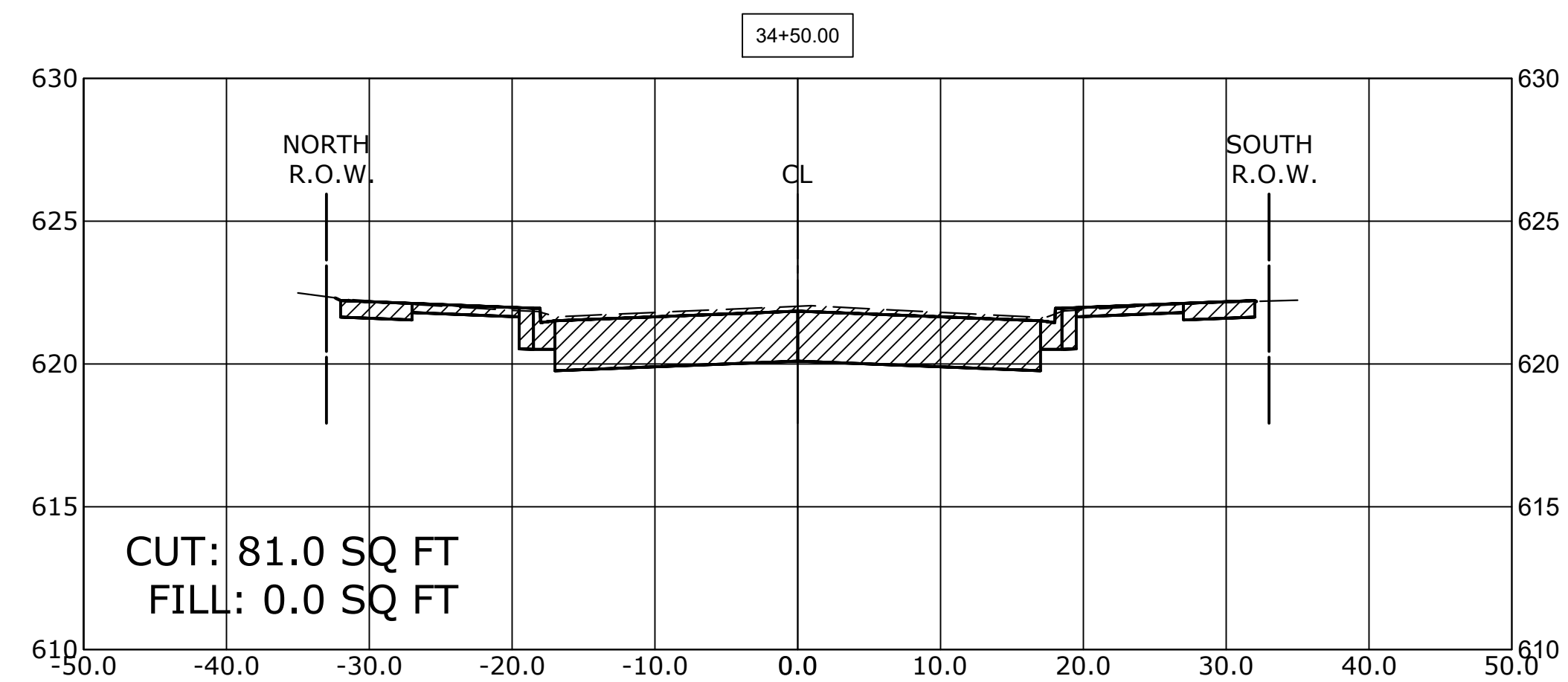
SCALE: H:1"=10', V:1"=5' SHEET NO. 5 OF 9 SHEETS STA. 31+00 TO STA. 33+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	98
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

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**CROSS SECTION LEGEND**

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DATE -	2-11-20	REVISED -	

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**BRAGA DRIVE  
CROSS SECTIONS**

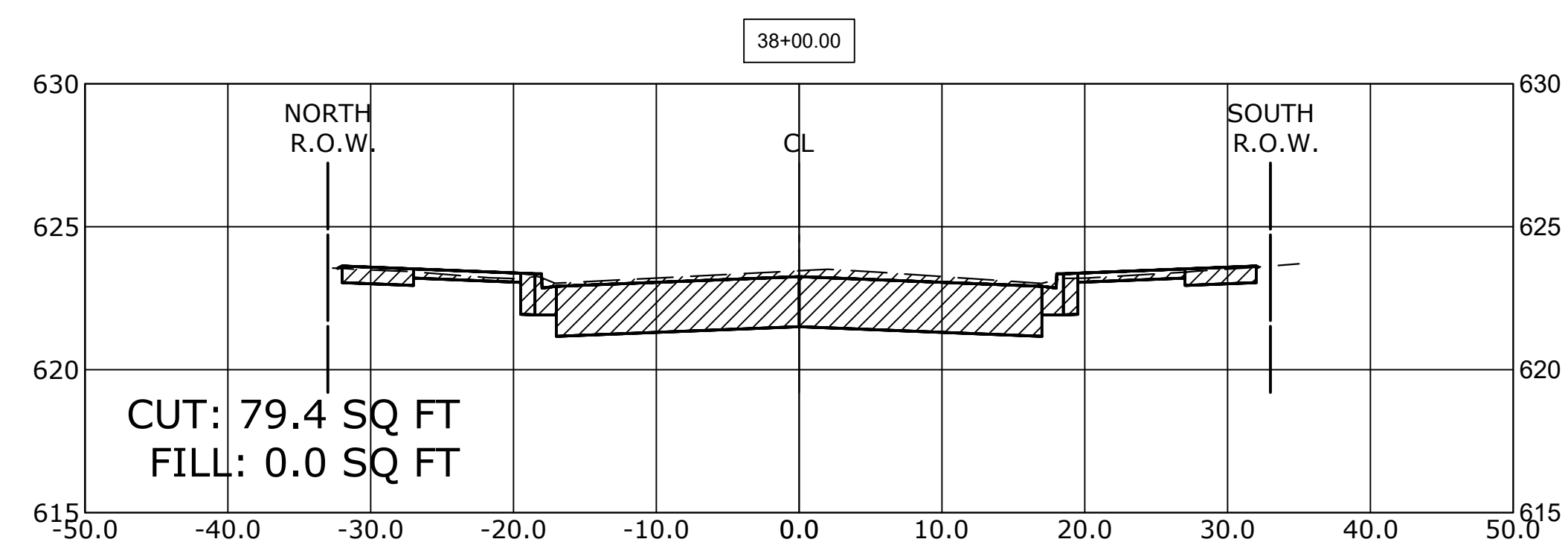
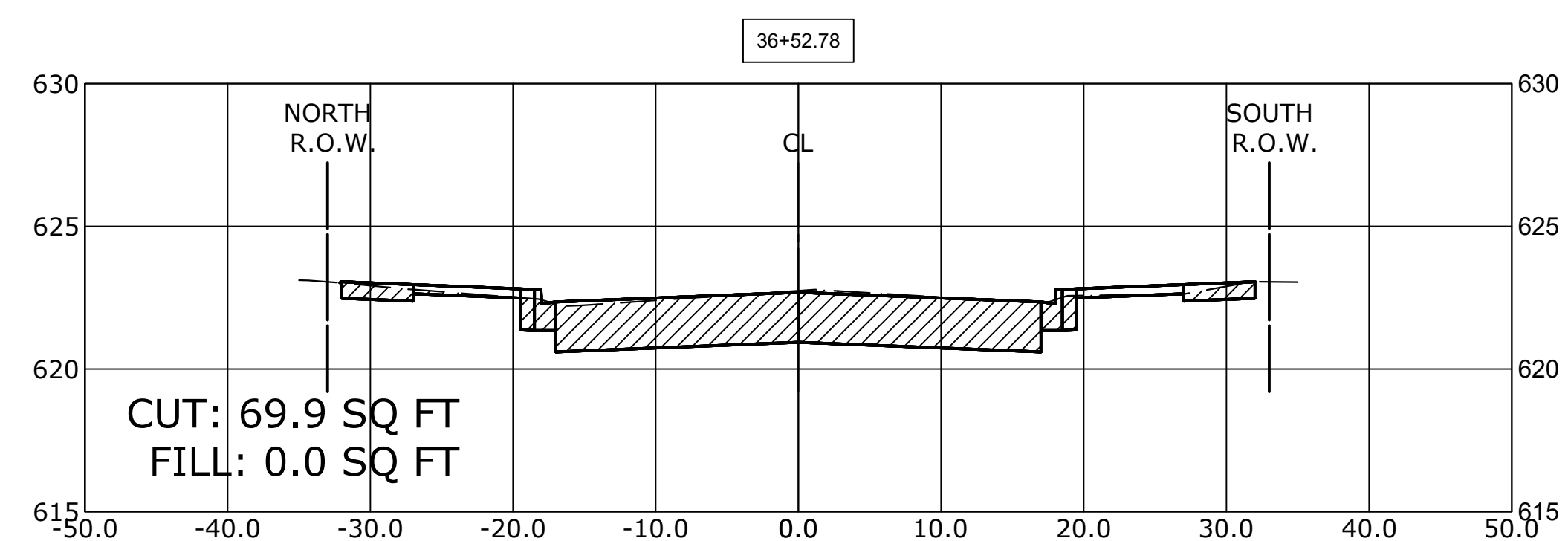
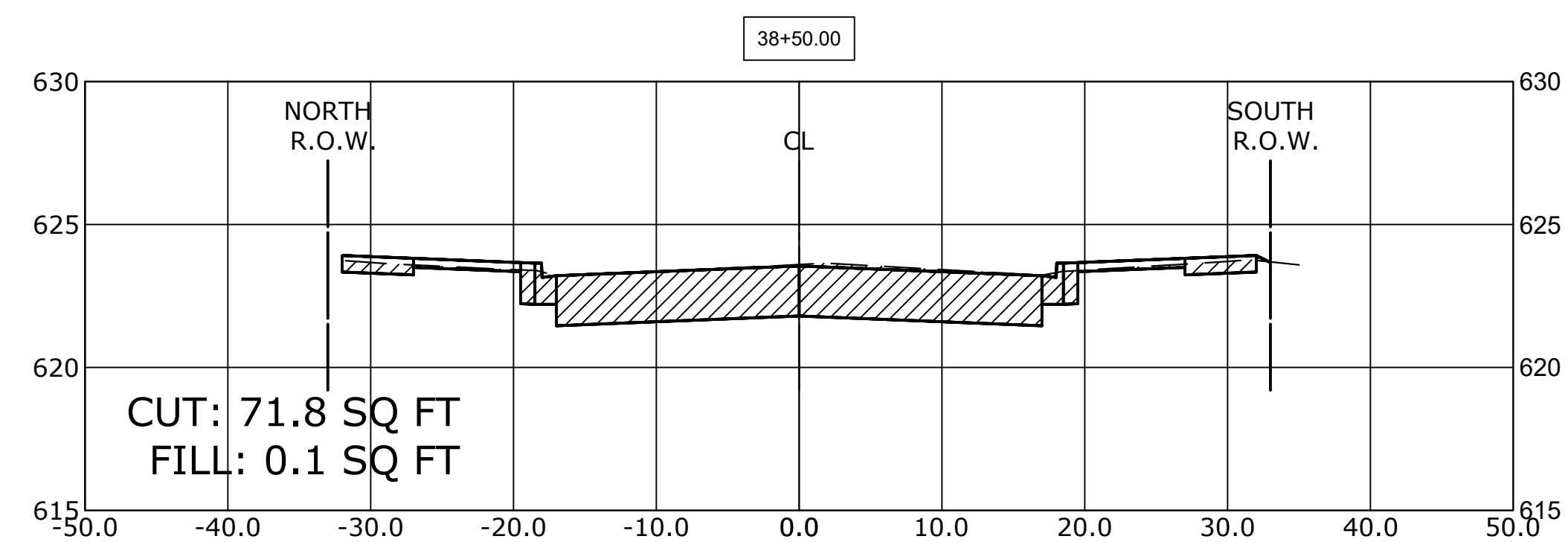
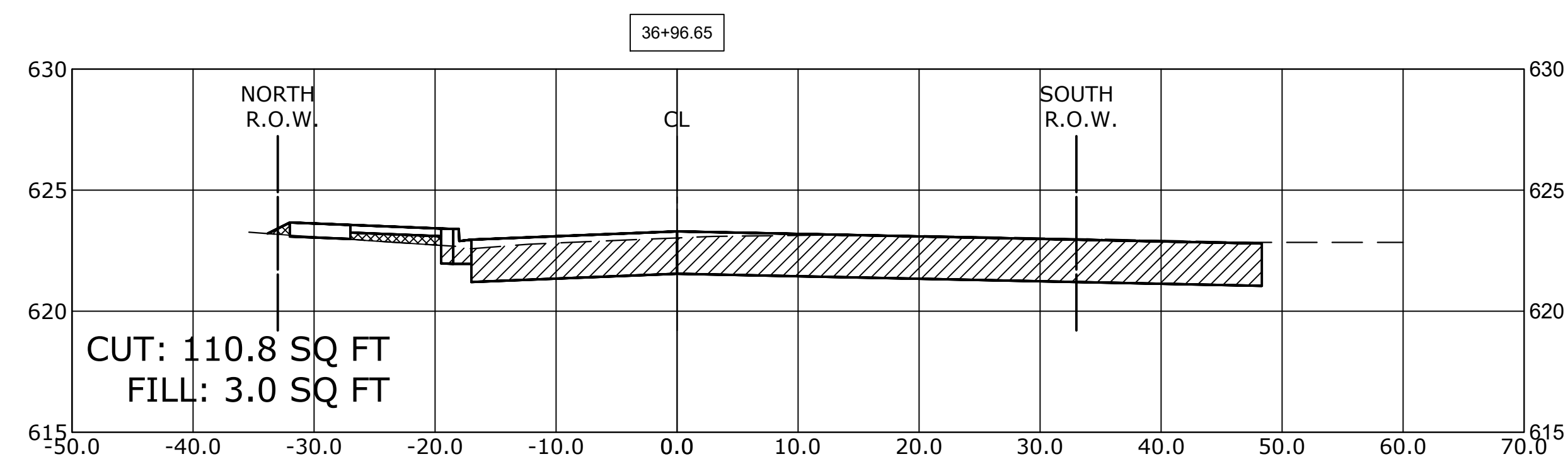
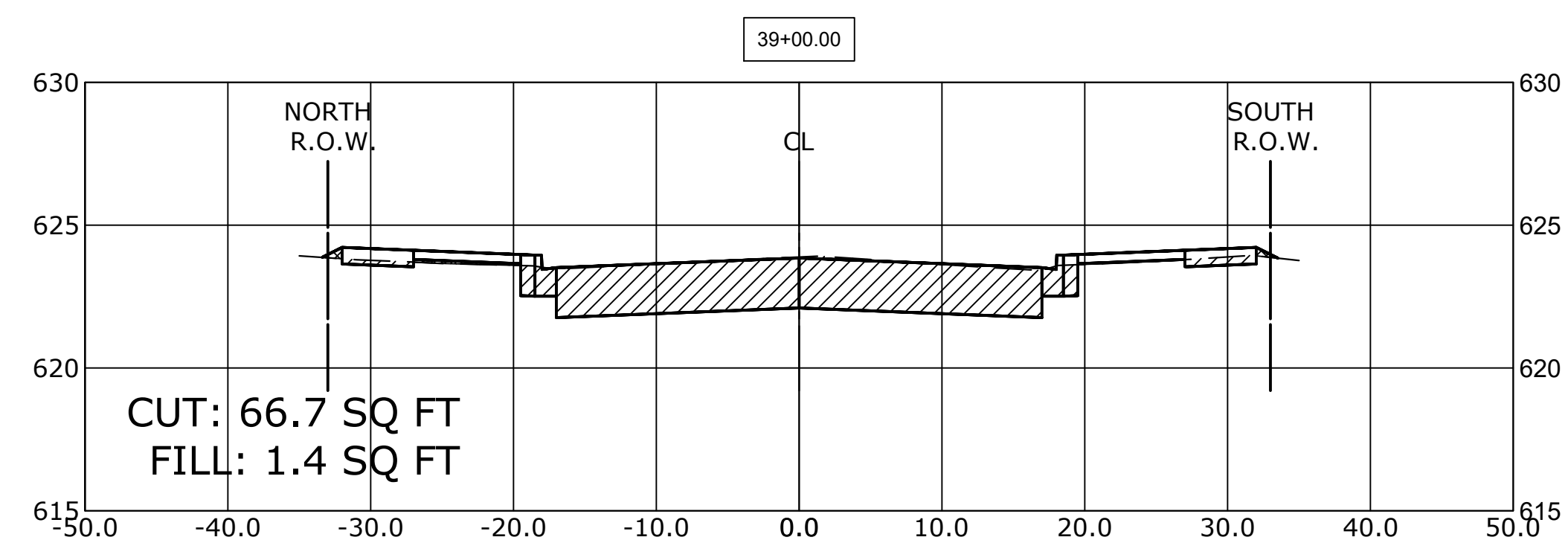
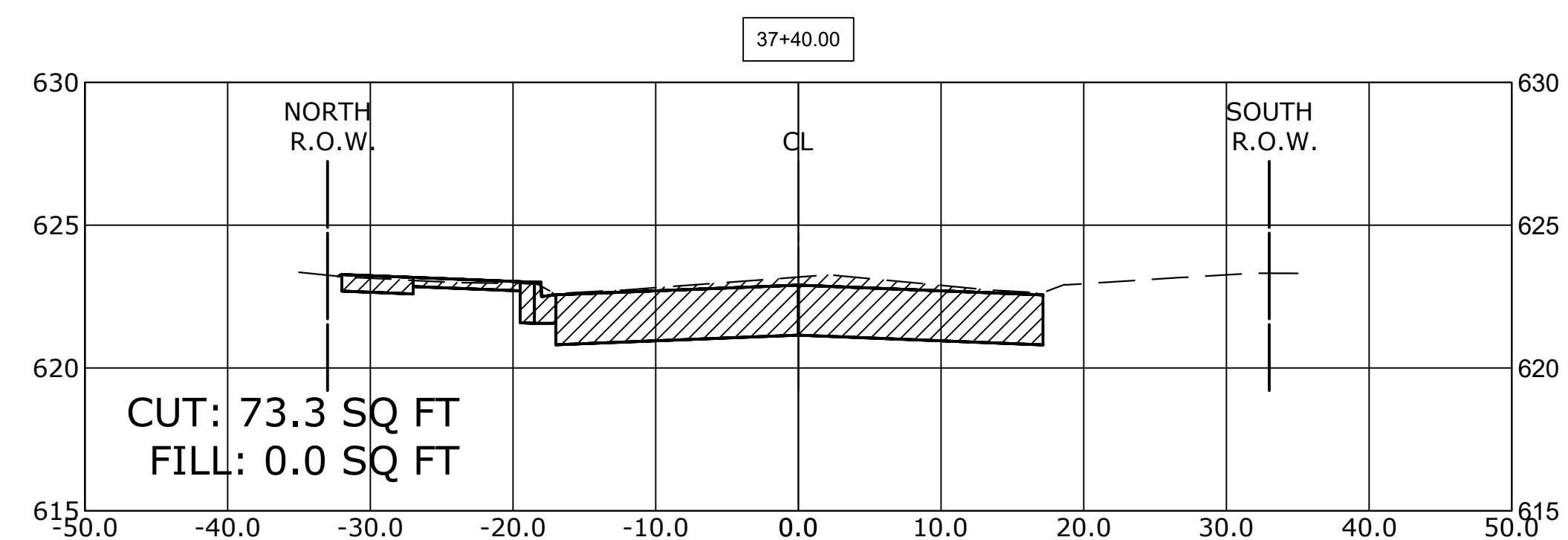
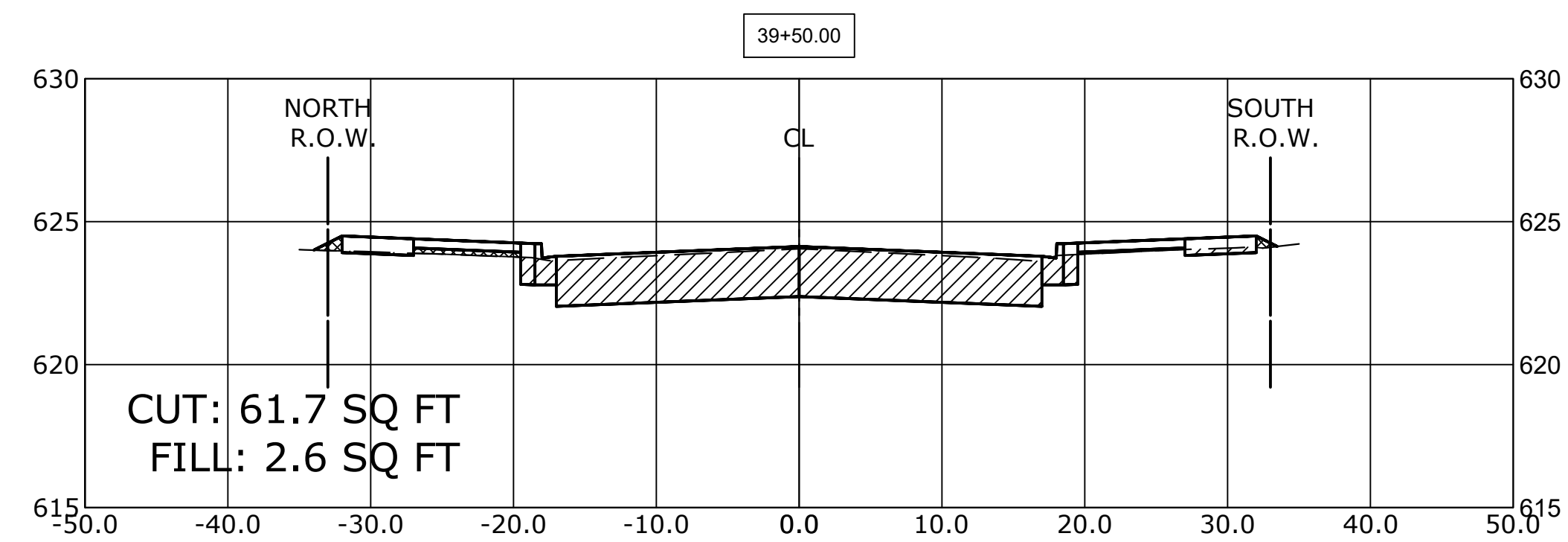
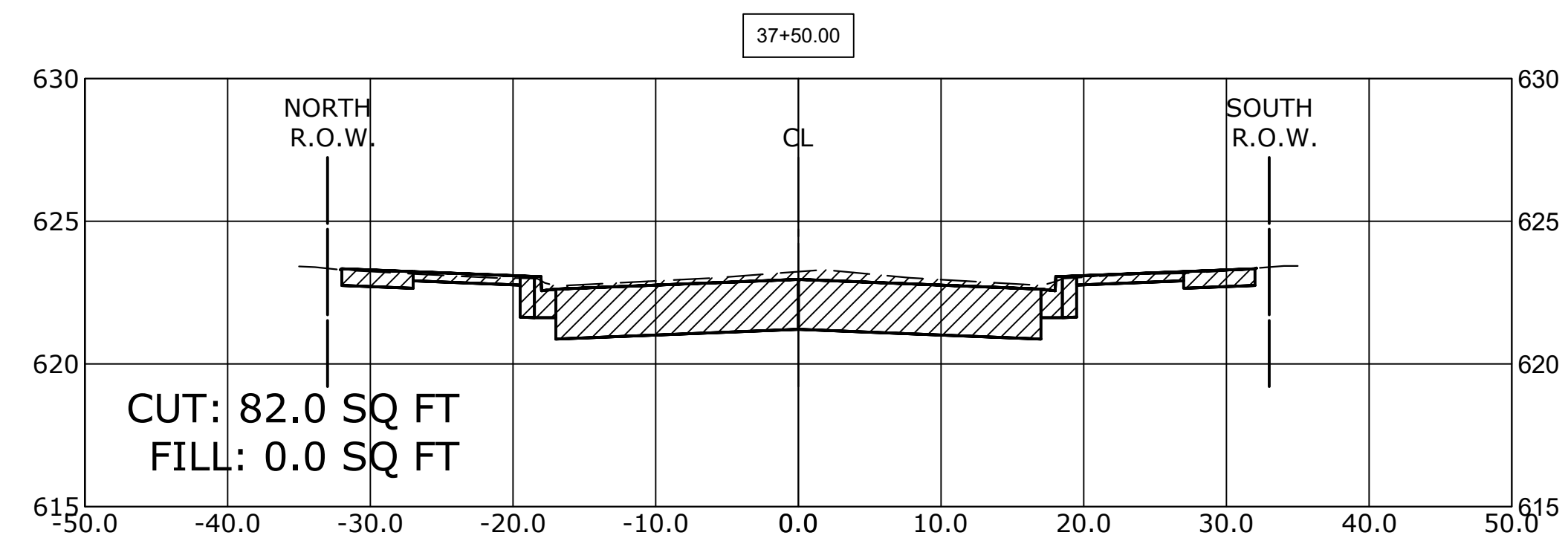
SCALE: H:1"=10', V:1"=5' SHEET NO. 6 OF 9 SHEETS STA. 33+50 TO STA. 36+00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	99
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
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**C = CUT (SQ. FT.)**   
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DATE -	2-11-20	REVISED -	



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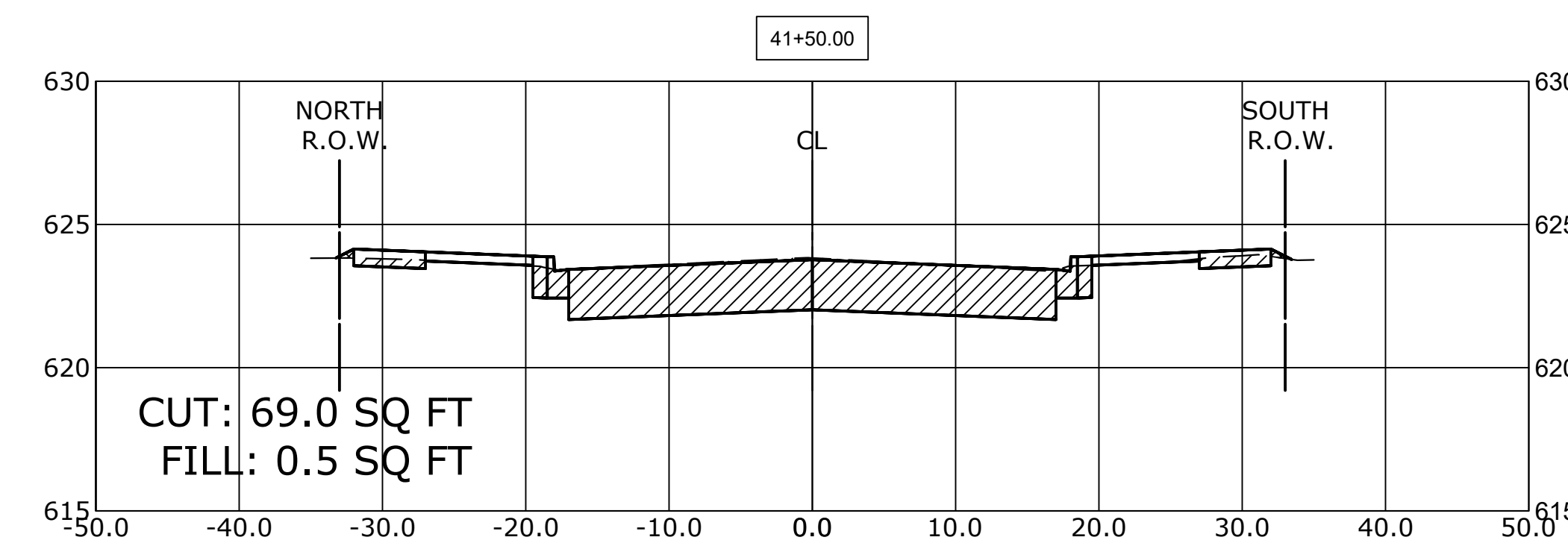
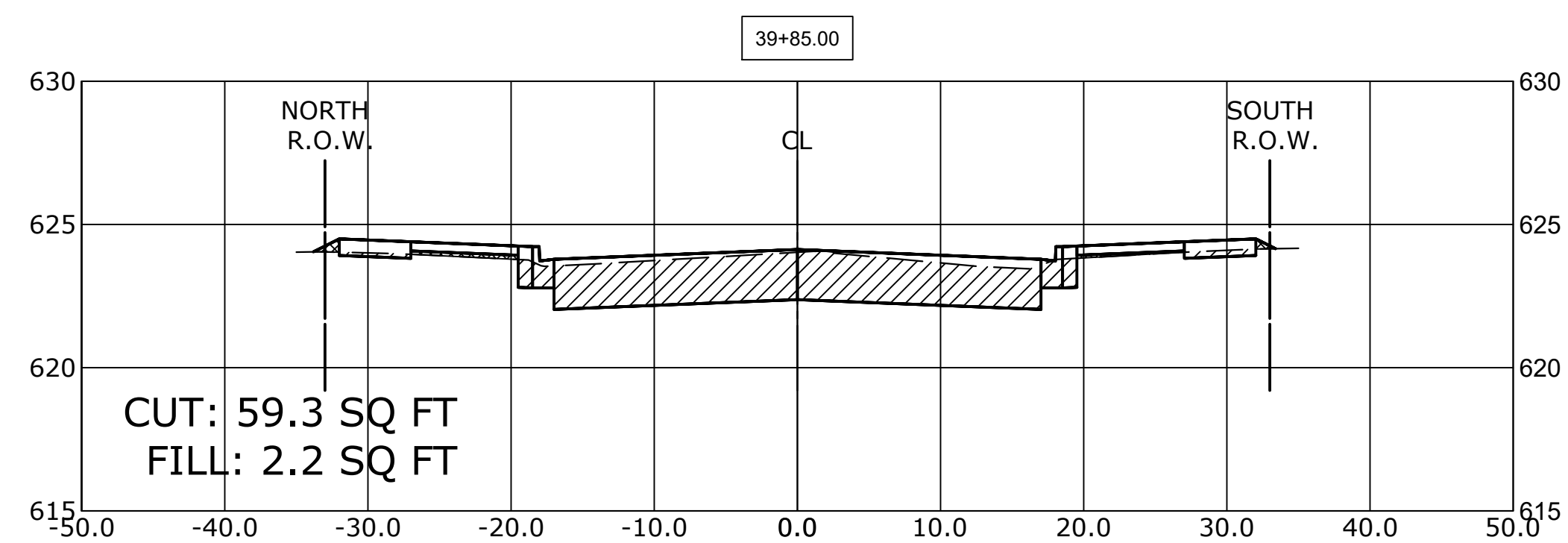
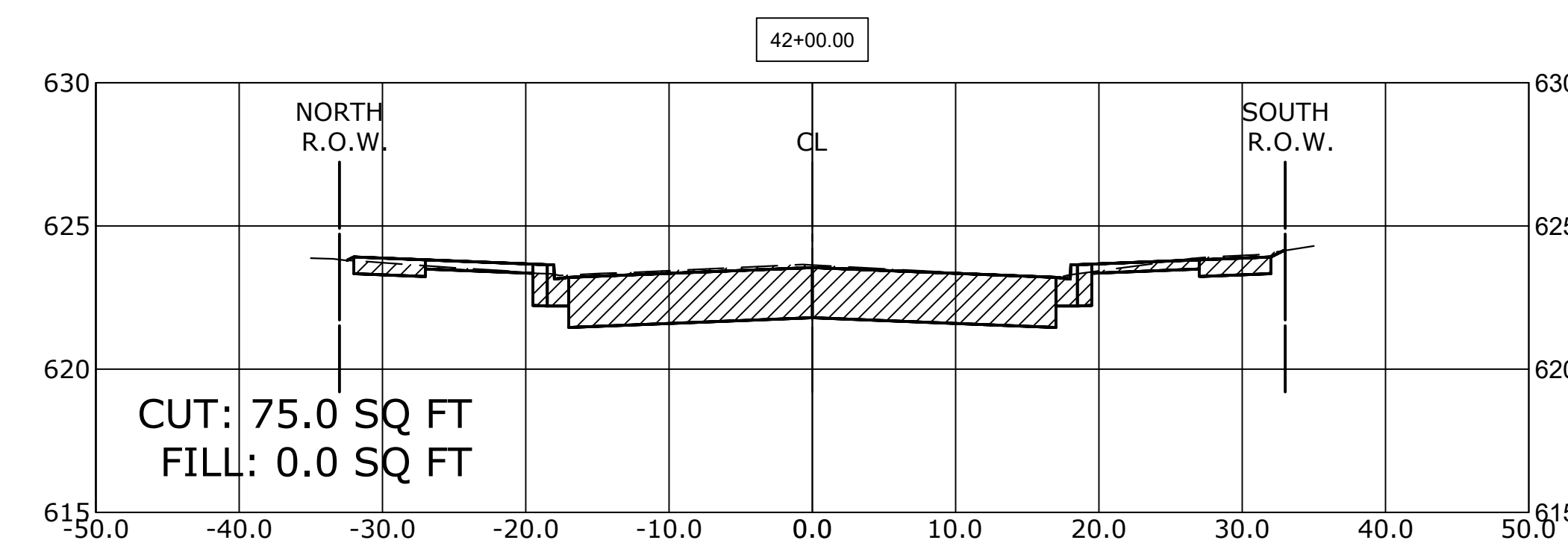
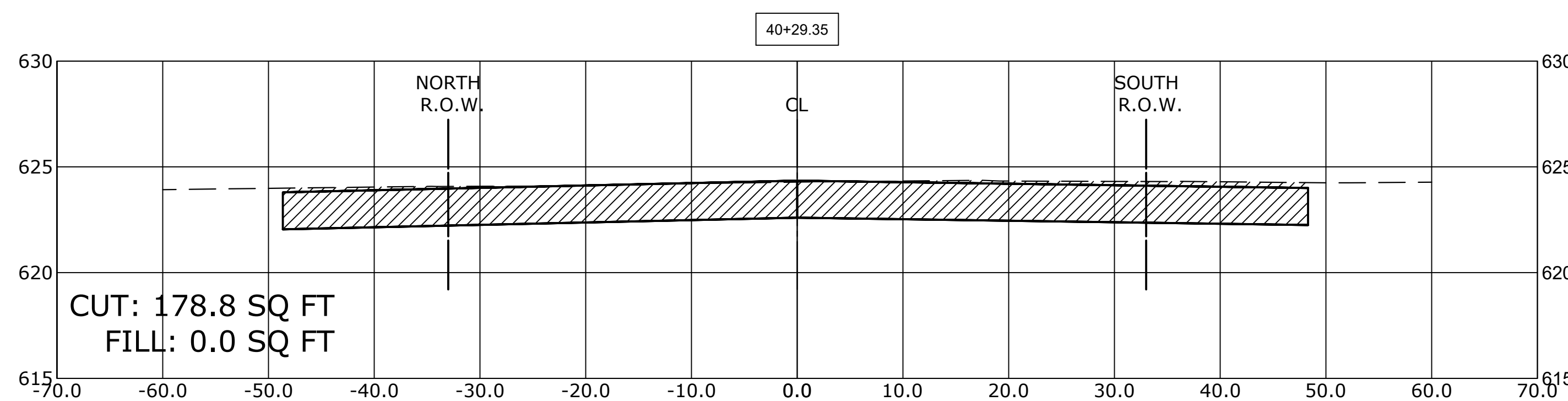
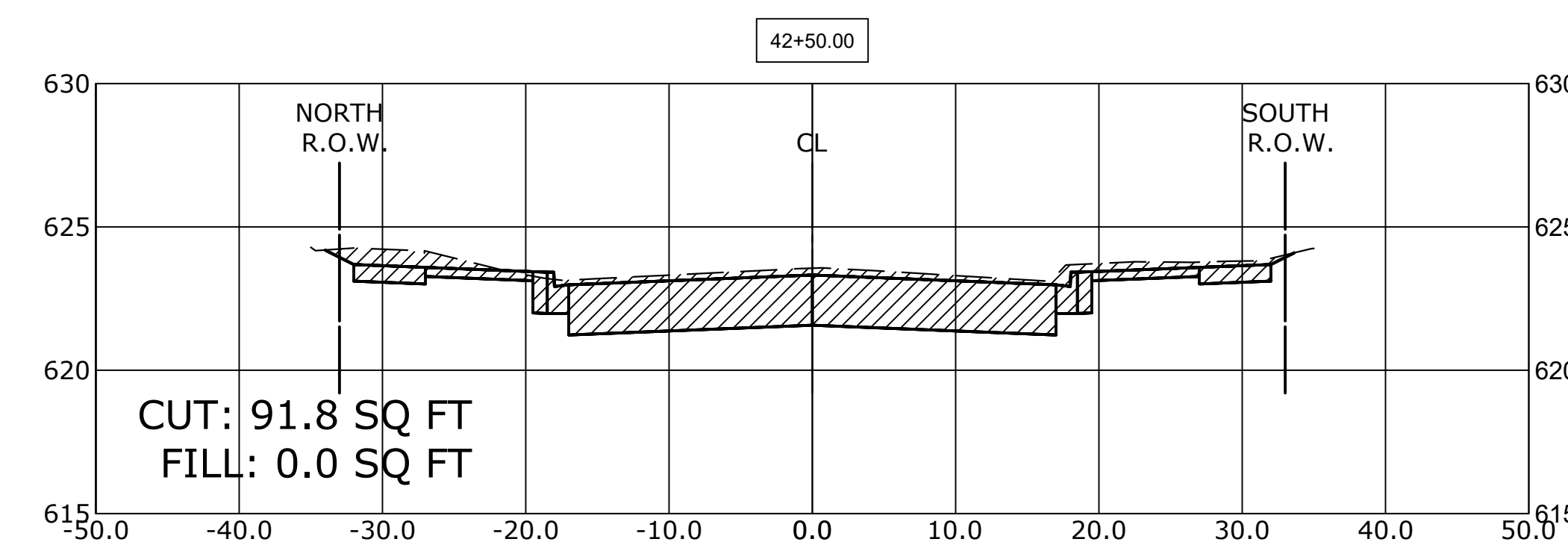
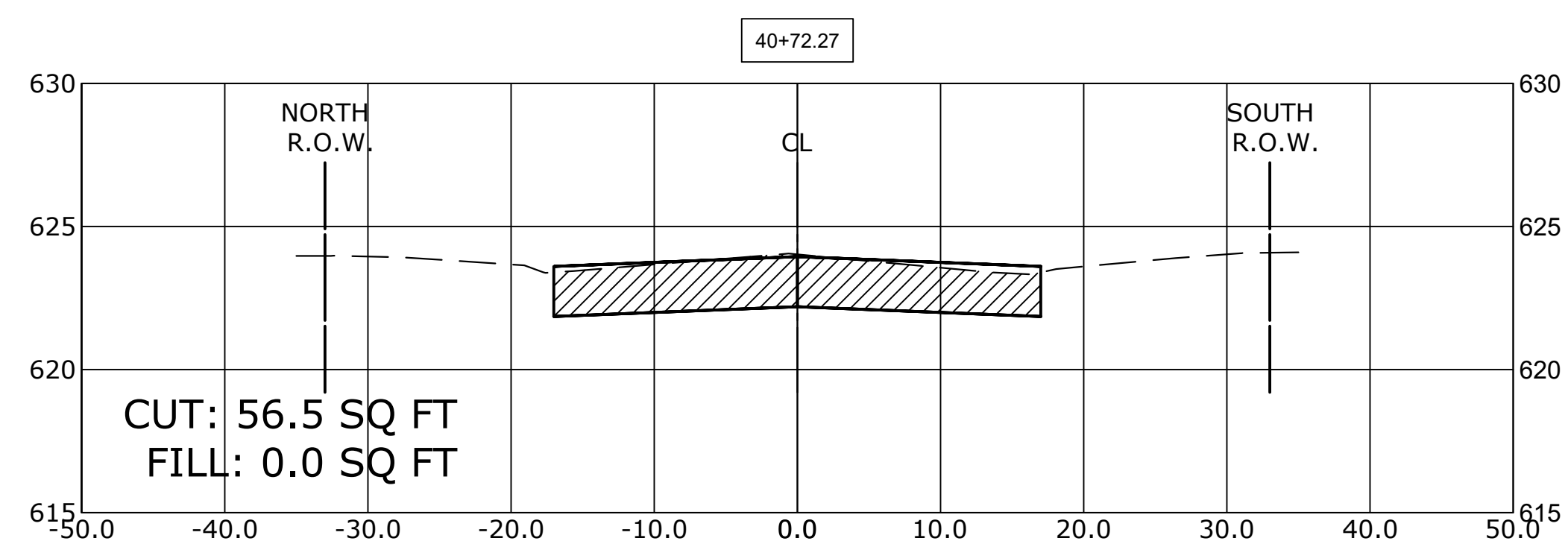
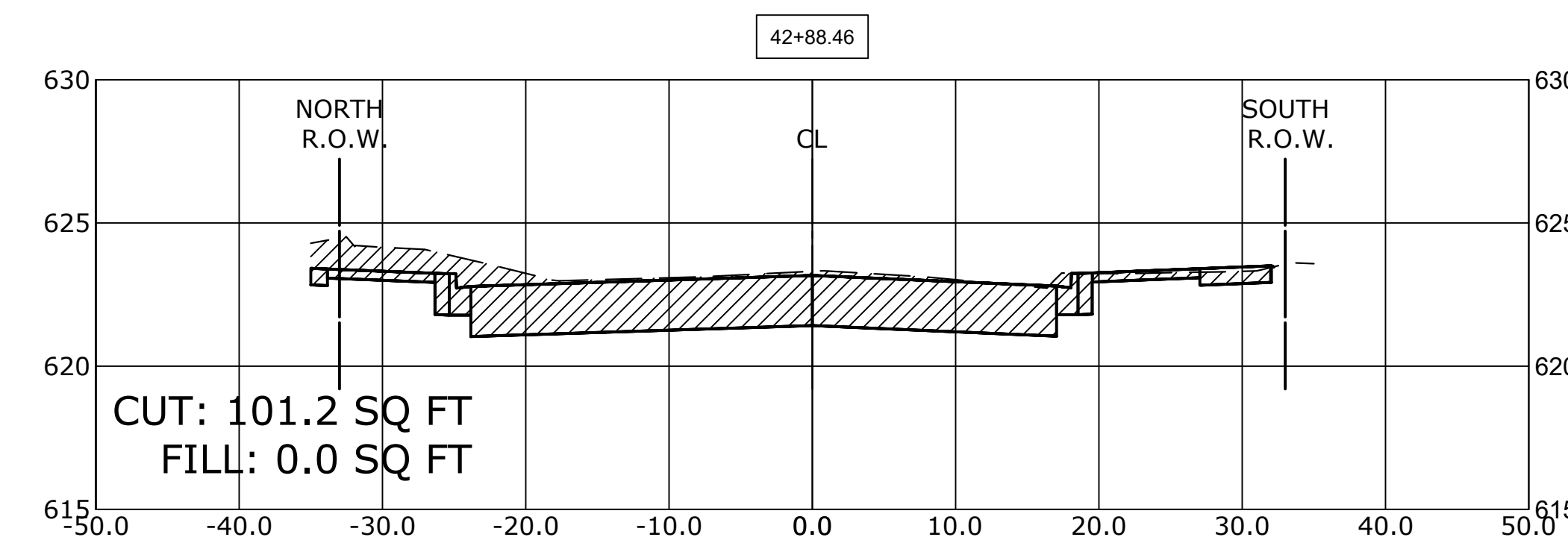
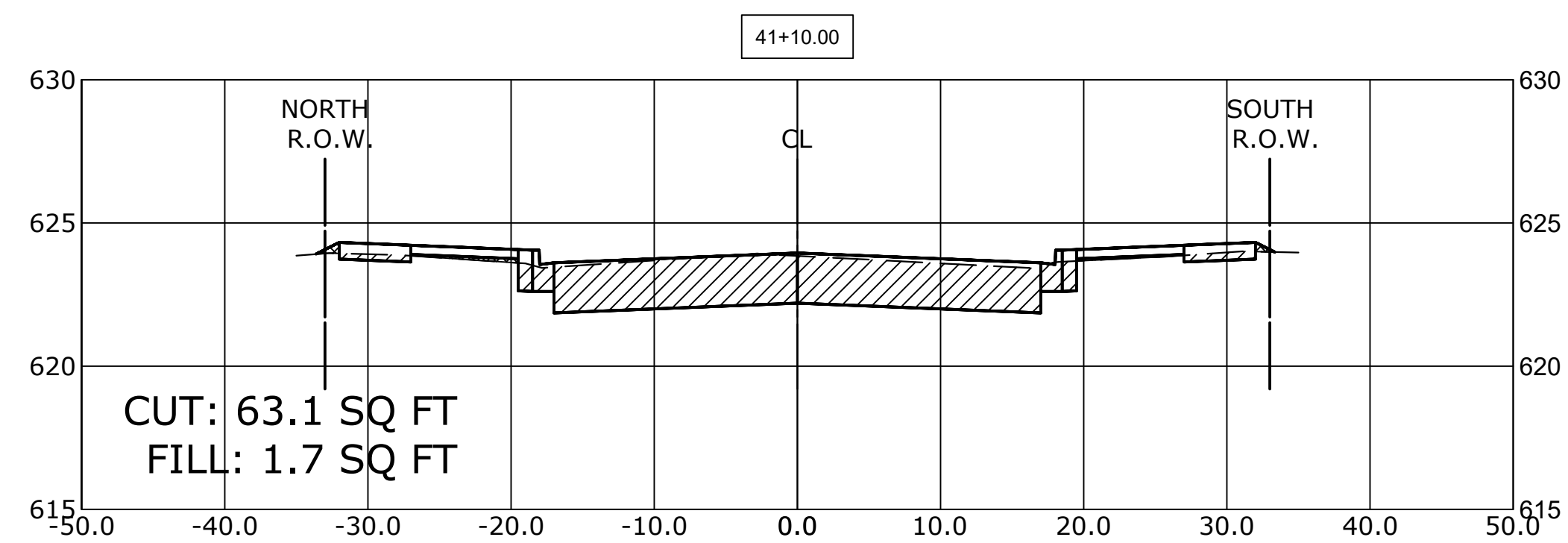
**BRAGA DRIVE  
CROSS SECTIONS**  
 SCALE: H:1"=10', V:1"=5' SHEET NO. 7 OF 9 SHEETS STA. 36+52 TO STA. 39+50

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	100
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

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**CROSS SECTION LEGEND**

**C = CUT (SQ. FT.)**   
**F = FILL (SQ. FT.)** 



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 REVISED -  
 REVISED -

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**BRAGA DRIVE  
 CROSS SECTIONS**

SCALE: H:1"=10', V:1"=5' SHEET NO. 8 OF 9 SHEETS STA. 39+85 TO STA. 42+88

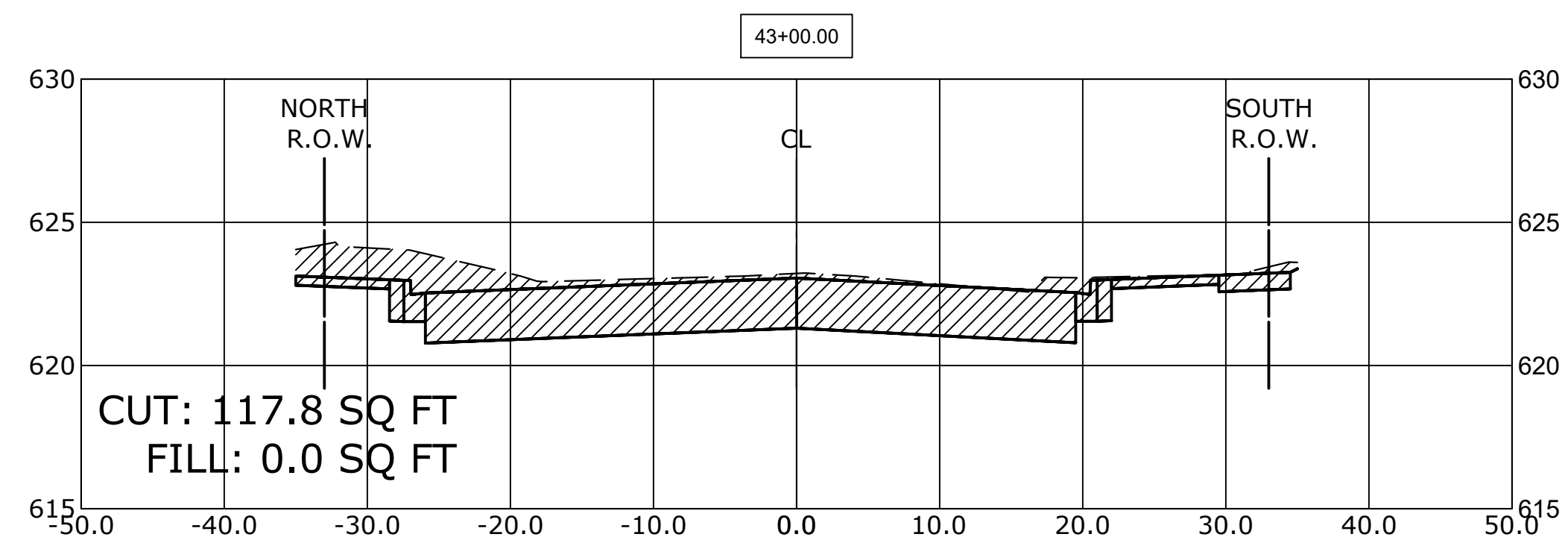
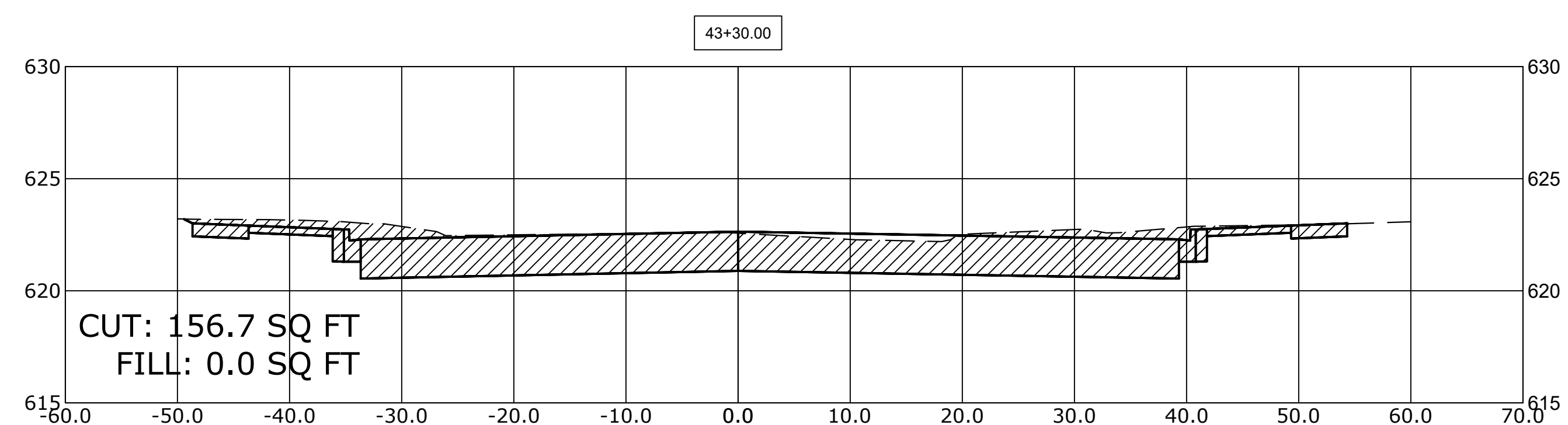
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	101
FIELD BOOK NO. : -			CONTRACT NO. 61G35	
FED. ROAD DIST. NO. 1   ILLINOIS			FED. AID PROJECT	

E.H.E. PROJECT NO. 120-19-00801

**CROSS SECTION LEGEND**

C = CUT (SQ. FT.) 

F = FILL (SQ. FT.) 



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 ♦ Established 1911

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 Westchester, IL 60154-2780  
 Phone: 708-845-0300  
 www.hancock.com

DESIGNED -	MWV	REVISED -	
DRAWN -	DMM, SFB	REVISED -	
CHECKED -	JGG, MWV	REVISED -	
DATE -	2-11-20	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRAGA DRIVE  
 CROSS SECTIONS**

SCALE: H:1"=10', V:1"=5' SHEET NO. 9 OF 9 SHEETS STA. 43+00 TO STA. 43+30

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3015	16-00080-01-PV	COOK	102	102
FIELD BOOK NO. : -		CONTRACT NO. 61G35		
FED. ROAD DIST. NO. 1   ILLINOIS		FED. AID PROJECT		

E.H.E. PROJECT NO. 120-19-00801