

FOR INDEX OF SHEETS SEE SHEET 2

FOR LIST OF APPLICABLE HIGHWAY STANDARDS SEE SHEET 2

04-26-2024 LETTING ITEM 011

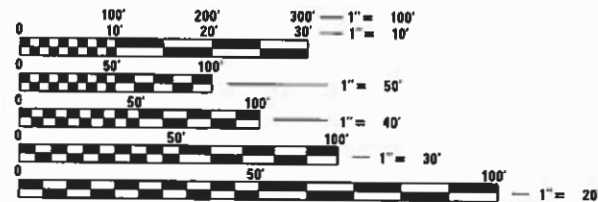
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT SECTION 19-00058-00-BT PROJECT 8YBQ(608) CITY OF PALOS HEIGHTS COOK COUNTY JOB NO. C-91-009-20

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET No.
4312	19-00058-00-BT	COOK	32	1
ILLINOIS CONTRACT NO. 61K41				



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.

DRAINAGE CERTIFICATION STATEMENT

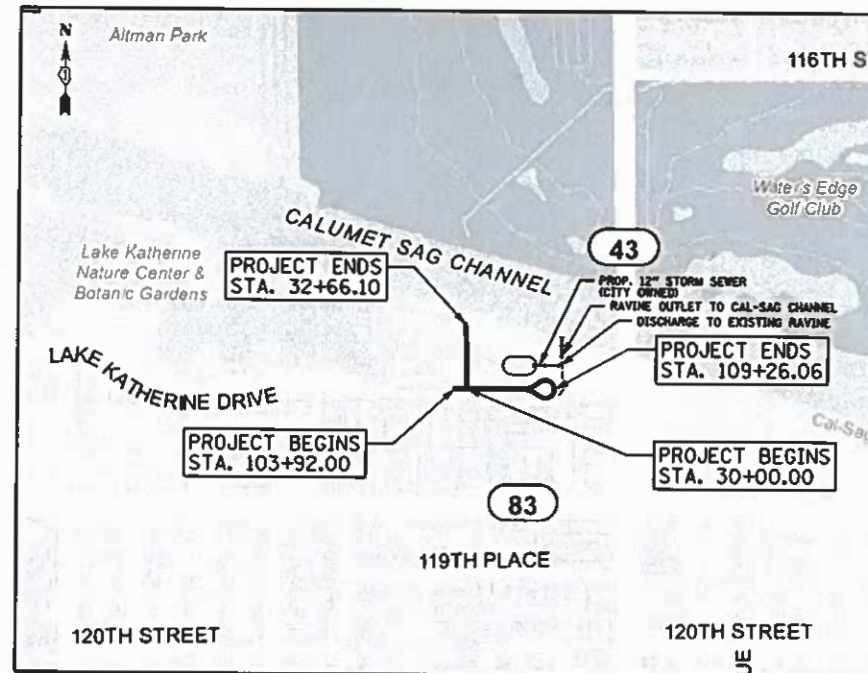
TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF THE SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THESE IMPROVEMENTS OR ANY PART THEREOF, OR THAT IF SUCH WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISIONS HAVE BEEN MADE FOR THE COLLECTION AND DIVERSION OF SUCH WATERS IN PUBLIC AREAS OR DRAINS WHICH THE OWNER HAS THE RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DRAINAGE TO THE ADJOINING PROPERTIES BECAUSE OF THE CONSTRUCTION OF THESE IMPROVEMENTS.

ENGINEER:



FEBRUARY 13TH, 2024

STEPHEN N. SUGG
ILLINOIS REGISTRATION No. 062-044117
EXPIRATION DATE: 11/30/2025



LOCATION MAP
1" = 840 FT

GROSS LENGTH = 800 FT = 0.15 MILES

NET LENGTH = 800 FT = 0.15 MILES

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

CONTRACT NO. 61K41

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 800
Rosemont, Illinois 60018
(847) 823-0500

PROFESSIONAL DESIGN FIRM NO. 184-001175
EXPIRATION DATE: 04/30/25

THE FOLLOWING FLOOD PROTECTION AREAS ARE LOCATED WITHIN 100 FEET OF THE DEVELOPMENT: FLOODWAY, FLOODPLAIN, WETLANDS/BUFFERS, AND RIPARIAN ENVIRONMENT.

STEPHEN N. SUGG, PE

Contact the Metropolitan Water Reclamation District of Greater Chicago 2 days before starting work.

(708) 588-4055
WMOJobStart@mwrdd.org



FEBRUARY 13TH, 2024

STEPHEN N. SUGG
ILLINOIS REGISTRATION No. 062-044117
EXPIRATION DATE: 11/30/2025

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Approved: City of Palos Heights, Mayor

Passed: District 1 Engineer of Local Roads & Streets

Releasing for Bid Based on Limited Review: Regional Engineer

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2022: THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2024: THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (IMUTCD), THE DETAILS IN THE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL LIMIT HIS/HER CONSTRUCTION ACTIVITIES TO THE WORK AREAS DESIGNATED ON THE PLANS. ANY DAMAGE TO AREAS OUTSIDE OF THESE LIMITS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY ADAM JASINSKI, PE, DIRECTOR OF PUBLIC WORKS AT THE CITY OF PALOS HEIGHTS AT (708) 361-1806, AT LEAST 48 HOURS IN ADVANCE OF BEGINNING WORK. ALL CONSTRUCTION OPERATIONS SHALL BE COORDINATED WITH THE ENGINEER.
- DURING THE CONSTRUCTION OPERATIONS WHEN ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS, OR DRAINAGE STRUCTURES SO THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS CAUSED BY THE CONSTRUCTION.
- THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES BEARING ON SAFETY OF PERSONS OR PROPERTY OR THEIR PROTECTION FROM DAMAGE, INJURY OR LOSS.
- THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.
- GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED.
- 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.
- THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR 1.
- THE CONTRACTOR SHALL CONTACT THE CITY OF PALOS HEIGHTS WATER DEPARTMENT TO OBTAIN A WATER METER, AND FOR PERMISSION TO USE WATER FROM EXISTING FIRE HYDRANTS. THE WATER DEPARTMENT RESERVES THE RIGHT TO RESTRICT WHICH FIRE HYDRANT(S) MAY BE USED. THE CONTRACTOR SHALL USE SPECIAL CARE IN OPENING AND CLOSING OF FIRE HYDRANTS FOLLOWING WATER DEPARTMENT GUIDELINES. THE COST FOR NECESSARY REPAIRS THAT ARE CAUSED BY FAILURE TO COMPLY WITH PROPER OPERATING GUIDELINES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE FEE FOR WATER WILL BE \$100 OR THE COST OF ACTUAL METERED WATER AT A COMMERCIAL NON-RESIDENT RATE, WHICHEVER IS GREATER; AND A \$600 METER RENTAL DEPOSIT. THE CITY'S CURRENT COMMERCIAL, NON-RESIDENT RATE IS \$14.92 PER 1,000 GALLONS.
- ADJUSTING RINGS FOR ALL NEW STRUCTURES (AND STRUCTURES TO BE ADJUSTED) SHALL BE HDPE, IN ACCORDANCE WITH ARTICLE 1043.02 OF THE STANDARD SPECIFICATIONS. THE MINIMUM THICKNESS FOR ADJUSTING RINGS SHALL BE 1/2".
- WHEN REMOVING PAVEMENT, CURB AND GUTTER, SHOULDER, AND/OR OTHER STRUCTURES, THE USE OF ANY TYPE OF CONCRETE BREAKERS, WHICH MIGHT DAMAGE UNDERGROUND PUBLIC OR PRIVATE UTILITIES, WILL NOT BE PERMITTED. UNDER NO CIRCUMSTANCES WILL THE USE OF A FROST BALL BE PERMITTED. THE CONTRACTOR IS PROHIBITED FROM BREAKING UP CONCRETE BY DROPPING IT ON THE PAVEMENT OR IN ANY OTHER MANNER, WHICH IN THE OPINION OF THE ENGINEER MAY DAMAGE EXISTING OR PROPOSED PAVEMENTS OR OTHER ROADWAY APPURTENANCES.
- THE CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS WITHIN THE AREAS DESIGNATED ON THE PLANS. EQUIPMENT AND MATERIAL STORAGE WILL NOT BE ALLOWED WITHIN ANY OTHER AREAS.
- THE CONTRACTOR SHALL MAINTAIN ALL AREAS OPEN TO TRAFFIC AS SHOWN ON THE PLANS.
- THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASIS ON WHICH THEY ARE TO BE PLACED.
- PHOSPHORUS FERTILIZER NUTRIENT SHALL NOT BE USED.

17. UTILITIES

- ALL UNDERGROUND UTILITY LOCATIONS, INCLUDING BUT NOT LIMITED TO SANITARY AND STORM SEWERS, WATER MAINS AND THEIR RESPECTIVE SERVICE LINES, SHOWN ON THE PLANS ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE RESPECTIVE UTILITY COMPANIES FIELD LOCATE ALL UTILITIES AS NECESSARY, PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. AT (800) 892-0123, (OR 811) AND ALL PUBLIC AND PRIVATE UTILITIES BEFORE STARTING CONSTRUCTION (48 HOUR NOTICE IS REQUIRED).
- THE CONTRACTOR SHALL TEMPORARILY BRACE/SUPPORT EXISTING UTILITIES DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER.

18. SEDIMENT AND EROSION CONTROL

- SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- 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 CONTRACTOR SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- A STABILIZED MAT OF CRUSHED STONE MEETING IDOT GRADATION CA-1 UNDERLAIN WITH FILTER FABRIC AND IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL, OR OTHER APPROPRIATE MEASURE(S) AS APPROVED BY THE ENFORCEMENT OFFICER, 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.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE END OF ACTIVE HYDROLOGIC DISTURBANCE OR REDISTURBANCE.
- ALL STOCKPILES SHALL HAVE APPROPRIATE MEASURES TO PREVENT EROSION. STOCKPILES SHALL NOT BE PLACED IN FLOOD PRONE AREAS OR WETLANDS AND DESIGNATED BUFFERS.

- APPROPRIATE EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN THE NORMAL WATER LEVEL AND HIGH-WATER LEVEL.
 - STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
 - ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
19. EXISTING VEGETATED AREAS (TREES, SHRUBS, VEGETATIVE BUFFERS, TURF AREAS, ETC.) WHERE DISTURBANCE IS NOT OCCURRING (INCLUDING AREAS OUTSIDE THE PROJECT LIMITS) SHALL NOT BE DISTURBED TO ENSURE THAT EXISTING VEGETATION IS PRESERVED HEALTHY TO MINIMIZE SOIL EROSION AND TO ELIMINATE SOIL COMPACTION. NO MATERIALS ARE TO BE STORED OR VEHICLES DRIVEN OR PARKED WITHIN THESE UNDISTURBED AREAS AT ANY TIME.

20. CONSTRUCTION STAGING

- THE CONTRACTOR SHALL COORDINATE WITH THE CITY LOCATIONS FOR THE PARKING OF CONTRACTOR EMPLOYEE VEHICLES DURING CONSTRUCTION.
- INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL SE/SC MEASURES
 - SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
 - SILT FENCE INSTALLATION
 - TEMPORARY CHAIN LINK FENCE AROUND AREAS NOT TO BE DISTURBED
 - STABILIZED CONSTRUCTION ENTRANCE
- COMPLETE ALL GRADING (BASIN, SWALES, ETC.) AND CONSTRUCT STORM SEWER, PIPE UNDERDRAIN, DRAINAGE STRUCTURES, AND OUTLETS
- PLACE TOPSOIL AND FINE GRADE SITE
- PERMANENTLY STABILIZE RETENTION BASIN WITH SEED AND EROSION CONTROL BLANKET, AND PLANT MATERIAL
- TEMPORARILY STABILIZE ALL OTHER AREAS
- INSTALL CONCRETE PAVER PAVEMENT AND HMA PARKING AREAS. SPECIAL CARE SHALL BE TAKEN BY THE CONTRACTOR NOT TO DRIVE ASPHALT PAVING MACHINES, ROLLERS, LOADED TRUCKS, ETC. ON THE NEWLY PLACED CONCRETE PAVER PAVEMENT.
- THE CONTRACTOR SHALL COORDINATE THE TEMPORARY SHUTDOWN AND RECONSTRUCTION OF THE CAL-SAG TRAIL LINK WITH THE CITY. THIS WORK SHALL NOT BEGIN WITHOUT PRIOR APPROVAL FROM THE CITY.
- CONTRACTOR SHALL NOT STOCKPILE ANY MATERIAL ON THE CONCRETE PAVERS. IN ADDITION, THE CONTRACTOR SHALL LIMIT CONSTRUCTION TRAFFIC ON THE CONCRETE PAVERS.
- REMOVE ALL TEMPORARY SE/SC MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION

COMMITMENTS

- ILLINOIS ENDANGERED SPECIES PROTECTION AND ILLINOIS NATURAL AREAS PRESERVATION – THERE IS RECORD OF THE NORTHERN LONG EARED BAT 2.5 MILES WEST OF THE PROJECT. TREES THREE INCHES OR GREATER IN DIAMETER SHALL NOT BE REMOVED FROM APRIL 1ST THROUGH SEPTEMBER 20TH.

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FILE NAME =	USER NAME = rhowellindgren	DESIGNED - NKHL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT GENERAL NOTES	M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\PALOSHEIGHTS\230178\Civil\NOT.01.23018.sht		DRAWN - NKHL	REVISED -			4312	19-00058-00-BT	COOK	32	2	
Default		CHECKED - SNS	REVISED -			CONTRACT NO. 61K41					
	PLOT DATE = 2/13/2024	DATE - 2/13/2024	REVISED -			SCALE: N.T.S.	SHEET 1 OF 2 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		

A. REFERENCED SPECIFICATIONS

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
 * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
 * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
 * CITY OF PALOS HEIGHTS 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 OR SEND EMAIL NOTIFICATION WITH PROJECT NAME, LOCATION AND PERMIT NUMBER TO WMOJOBSTART@MWRD.ORG).
- THE CITY OF PALOS HEIGHTS 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).
- MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
- THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

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

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

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

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

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

E. EROSION AND SEDIMENT CONTROL

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

TECHNICAL GUIDANCE MANUAL

MWRD GENERAL NOTES

10/13/2022

STD. DWG. NO. 18

PAGE NO. 19

FILE NAME = N:\PALOSHEIGHTS\230178\Civ1\NOT_01_23018.sht	USER NAME = rhowellindgren	DESIGNED - NKHL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT MWRD GENERAL NOTES SCALE: N.T.S. SHEET 2 OF 2 SHEETS STA. TO STA.	M.U.N. RTE. 4312	SECTION 19-00058-00-BT	COUNTY COOK	TOTAL SHEETS 32	SHEET NO. 3
Default	PLOT SCALE = 2'	CHECKED - SNS	REVISED -		CONTRACT NO. 61K41		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 2/13/2024	DATE - 2/13/2024	REVISED -						

CODE NUMBER	ITEM	UNIT	0028
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	17
35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	145
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	5150
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	515
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	360
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	269
42000100	PORTLAND CEMENT CONCRETE PAVEMENT 6"	SQ YD	17
42400800	DETECTABLE WARNINGS	SQ FT	20
44000100	PAVEMENT REMOVAL	SQ YD	1400
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	3
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	279
60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	115
60108212	PIPE UNDERDRAINS, TYPE 2, 12"	FOOT	544
60200205	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1

* SPECIALTY ITEM

FILE NAME *	USER NAME = rhowellindgren	DESIGNED = NKHL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT SUMMARY OF QUANTITIES			M.I.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
MinPLOTSHEIGHTS\230178\CV\11500\VL_2301	PLT	DRAWN - NKHL	REVISED -					4312	19-00058-00-BT	COOK	32	5
Plot Scale = 2	PLT SCALE = 2	CHECKED = SNS	REVISED -		SCALE: N.T.S.			SHEET 2 OF 4 SHEETS	STA.	TO STA.	CONTRACT NO. 61K41	
Plot Date = 2/13/2024	PLT DATE = 2/13/2024	DATE = 2/13/2024	REVISED -		ILLINOIS FED. AID PROJECT							

CODE NUMBER	ITEM	UNIT	0028
60235300	INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID	EACH	2
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1
67100100	MOBILIZATION	L SUM	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	30
* 72000100	SIGN PANEL - TYPE 1	SQ FT	43
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	2
72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	13
* 72900100	METAL POST - TYPE A	FOOT	144
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	80
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1900
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	45
* K0013055	PERENNIAL PLANTS, WETLAND EMERGENT	ACRE	0.13
X0300019	REMOVE AND REINSTALL PARKING BLOCKS	EACH	20
X0325110	BIAXIAL GEOGRID	SQ YD	3675
X0326806	WASHOUT BASIN	L SUM	1
X0327978	CONCRETE PAVER PAVEMENT	SQ YD	1740

* SPECIALTY ITEM

FILE NAME * M:\PALOSHHEIGHTS\230178\CV\11500\VL_230178.dwg	USER NAME * rhowellj\indgren	DESIGNED * NKHL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT SUMMARY OF QUANTITIES		M.I.N. RTE. 4312	SECTION 19-00058-00-BT	COUNTY COOK	TOTAL SHEETS 32	SHEET NO. 6
PLLOT SCALE * 2	CHECKED * SNS	REVISED -	SCALE: N.T.S.				SHEET 3 OF 4 SHEETS	STA. TO STA.	CONTRACT NO. 61K41		
PLLOT DATE * 2/13/2024	DATE - 2/13/2024	REVISED -	ILLINOIS FED. AID PROJECT								

CODE NUMBER	ITEM	UNIT	0028
* X2511630	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	4315
* X3020004	ENGINEERED SOIL FURNISH AND PLACE (SPECIAL)	CU YD	615
X3510407	AGGREGATE BASE COURSE, TYPE CA-7	TON	1375
X5021507	DEWATERING	L SUM	1
X5610001	CLEANOUTS	EACH	1
X6640200	TEMPORARY CHAIN LINK FENCE	FOOT	220
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
* XX006493	WEATHERING STEEL PLATE BEAM GUARDRAIL SPECIAL	FOOT	105
XX007079	CONCRETE RIBBON	FOOT	1240
Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	40
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
Z0019600	DUST CONTROL WATERING	UNIT	260

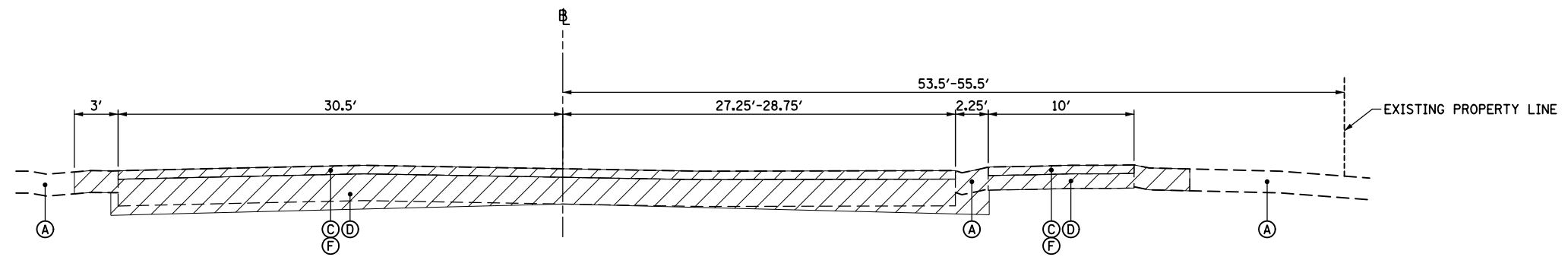
* SPECIALTY ITEM

	CUT (SQ FT)	FILL (SQ FT)	CUT VOLUME (CU YD)	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE (15% SHRINKAGE FACTOR) (CU YD)	FILL (CU YD)	EARTHWORK BALANCE ("+" = WASTE, "-" = SHORTAGE) (CU YD)
SUBTOTALS - PARKING LOTS			1,547	1,315	236	1,079
103+92.00	12.3	3.9				
104+00.00	8.2	3.7	3.0	2.6	1.1	1.5
104+25.00	17.7	3.5	12.0	10.2	3.3	6.9
104+50.00	20.5	3.2	17.7	15.0	3.1	11.9
104+76.79	12.6	4.5	16.4	14.0	3.8	10.1
105+00.00	5.8	20.3	7.9	6.7	10.7	-3.9
105+37.49	82.3	5.0	61.2	52.0	17.6	34.4
106+00.00	122.3	8.5	236.8	201.3	15.6	185.7
106+50.00	85.4	8.4	192.3	163.5	15.6	147.8
107+00.00	122.3	5.6	192.3	163.5	13.0	150.5
107+23.49	138.6	4.5	113.5	96.5	4.4	92.1
107+50.00	149.4	4.7	141.4	120.2	4.5	115.7
107+92.49	152.0	7.7	237.2	201.6	9.8	191.8
108+00.00	71.3	22.2	31.1	26.4	4.2	22.2
108+25.00	66.9	28.1	64.0	54.4	23.3	31.1
108+50.00	103.8	4.5	79.0	67.2	15.1	52.1
108+76.06	116.3	11.2	106.2	90.3	7.6	82.7
108+76.06	37.5	37.6	0.0	0.0	0.0	0.0
109+26.06	0.0	52.2	34.7	29.5	83.1	-53.6

	CUT (SQ FT)	FILL (SQ FT)	CUT VOLUME (CU YD)	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE (15% SHRINKAGE FACTOR) (CU YD)	FILL (CU YD)	EARTHWORK BALANCE ("+" = WASTE, "-" = SHORTAGE) (CU YD)
SUBTOTALS - TRAIL LINK			22	19	34	-15
30+45.84	8.7	8.0				
30+50.00	4.8	8.6	1.0	0.9	1.3	-0.4
30+75.00	2.1	3.6	3.2	2.7	5.6	-2.9
31+00.00	0.7	4.5	1.3	1.1	3.8	-2.6
31+25.00	0.6	4.8	0.6	0.5	4.3	-3.8
31+50.00	1.7	3.7	1.1	0.9	3.9	-3.0
31+75.00	2.7	4.0	2.0	1.7	3.6	-1.8
32+00.00	3.4	3.1	2.8	2.4	3.3	-0.9
32+25.00	3.8	3.4	3.3	2.8	3.0	-0.2
32+50.00	3.9	3.3	3.6	3.0	3.1	-0.1
32+66.10	5.7	1.5	2.9	2.4	1.4	1.0

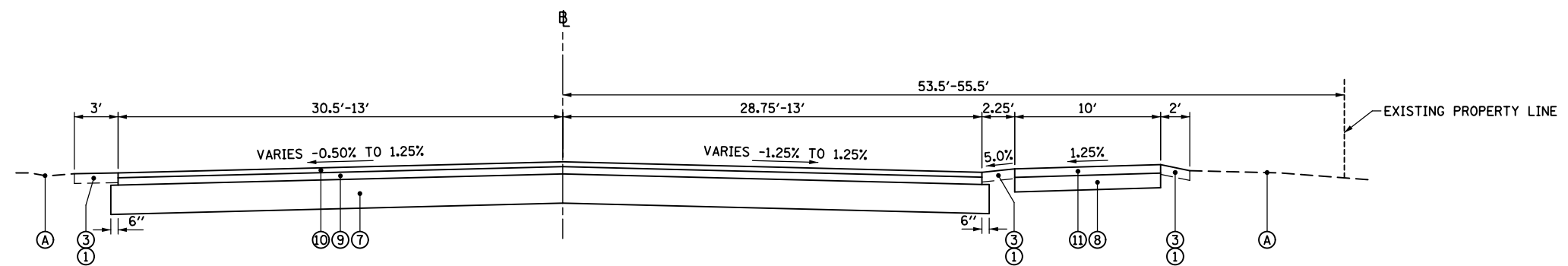
	CUT (SQ FT)	FILL (SQ FT)	CUT VOLUME (CU YD)	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE (15% SHRINKAGE FACTOR) (CU YD)	FILL (CU YD)	EARTHWORK BALANCE ("+" = WASTE, "-" = SHORTAGE) (CU YD)
SUBTOTALS - DETENTION POND			1,550	1,318	7	1,311
107+12.91	0.0	0.0				
107+22.91	15.7	2.0	2.9	2.5	0.4	2.1
107+32.91	123.5	1.3	25.8	21.9	0.6	21.3
107+42.91	273.4	1.0	73.5	62.5	0.4	62.0
107+52.91	348.5	0.9	115.2	97.9	0.4	97.5
107+62.91	372.3	0.9	133.5	113.5	0.3	113.1
107+72.91	374.7	0.9	138.3	117.6	0.3	117.3
107+82.91	377.1	0.9	139.2	118.3	0.3	118.0
107+92.91	379.2	0.9	140.1	119.0	0.3	118.7
108+02.91	378.7	0.9	140.4	119.3	0.3	119.0
108+12.91	377.7	0.9	140.1	119.1	0.3	118.7
108+22.91	378.0	0.9	139.9	119.0	0.3	118.6
108+32.91	356.5	0.9	136.0	115.6	0.3	115.3
108+42.91	281.2	1.0	118.1	100.4	0.4	100.0
108+52.91	128.5	1.2	75.9	64.5	0.4	64.1
108+62.91	19.8	2.0	27.5	23.3	0.6	22.8
108+72.91	0.0	0.0	3.7	3.1	0.4	2.7

EARTHWORK SUMMARY				
LOCATION	(1) CUT VOLUME (EARTH EXCAVATION) (CU YD)	(2) EXCAVATION AVAILABLE FOR EMBANKMENTS ADJUSTED BY 15% SHRINKAGE FACTOR (CU YD)	(3) EMBANKMENT (FILL) (CU YD)	(4) EARTHWORK BALANCE ("+" = WASTE, "-" = SHORTAGE) (CU YD)
PARKING LOTS	1,547	1,315	236	1,079
TRAIL LINK	22	19	34	-15
DETENTION POND	1,550	1,318	7	1,311
PROJECT TOTALS	3,119	2,652	277	2,375



EXISTING TYPICAL SECTION

PARKING LOT RECONSTRUCTION
STA 103+92.00 TO STA 105+37.49



PROPOSED TYPICAL SECTION

PARKING LOT RECONSTRUCTION
STA 103+92.00 TO STA 105+37.49

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AIR VOIDS @NDES	QMP
PARKING LOT RECONSTRUCTION, PARKING LOT TURNAROUND, CAL-SAG TRAIL LINK		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50; 2"	4% @ 50 GYR	LR 1030 - 2
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 3"	4% @ 50 GYR	LR 1030 - 2
MULTI-USE PATH REPLACEMENT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50; 3 1/2" (IN 2 LIFTS)	4% @ 50 GYR	LR 1030 - 2
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA) PER LR-1030-2		

HOT-MIX ASPHALT MIXTURE NOTES:

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQYD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22", UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

PAVEMENT CORE AND SOIL BORING DETAILS		
CORE/BORING	APPROXIMATE STA/OFF	COMPOSITION
C-103	STA 104+98, 18' RT	3 1/2" HMA PAVEMENT, 11" CRUSHED STONE BASE
B-1	STA 105+54, 51' LT	0.8' TOPSOIL, 4.7' CLAY, 2.5' SILT, 2.0' CLAY
B-2	STA 106+88, 22' LT	0.8' TOPSOIL, 3.2' CLAY, 2.5' TOPSOIL, 4.5' CLAY
B-3	STA 107+94, 36' LT	1.0' TOPSOIL, 9.0' CLAY
B-4	STA 109+21, 3' RT	0.5' TOPSOIL, 15.0' CLAY, 2.5' PEAT, 2.0' SILT

NOTE: SEE EXISTING CONDITIONS AND REMOVAL PLAN FOR CORE/BORING LOCATIONS.

REMOVAL LEGEND

* AS DIRECTED BY THE ENGINEER

- REMOVAL ITEMS
- (A) EXISTING TOPSOIL AND GROUND COVER (THICKNESS VARIES, SEE SOIL BORINGS)
- (B) EXISTING CLAY (THICKNESS VARIES, SEE SOIL BORINGS)
- (C) EXISTING PAVEMENT (THICKNESS VARIES, SEE PAVEMENT CORES)
- (D) EARTH EXCAVATION (20200100)
- (E)* REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)
- (F) PAVEMENT REMOVAL (44000100)

PROPOSED LEGEND

- (1) TOPSOIL FURNISH AND PLACE, 4" (21101615)
- (2) TOPSOIL FURNISH AND PLACE, 6" (21101625)
- (3) SEEDING, CLASS 1A (25000110)
- (4) SEEDING, CLASS 4A (25000312)
- (5) PERENNIAL PLANTS, WETLAND EMERGENT (K0013055)
- (6)* AGGREGATE SUBGRADE IMPROVEMENT (30300001)
- (7) AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)
- (8) AGGREGATE BASE COURSE, TYPE B 6" (35101800)
- (9) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 3" (40603080)
- (10) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 2" (40604060)
- (11) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 3 1/2" (40604060)
- (12) PIPE UNDERDRAINS, TYPE 2, 4" (60108204) (PERFORATED PVC PIPE) (2" MINIMUM BEDDING THICKNESS) INV = 697.00
- (13) PIPE UNDERDRAINS, TYPE 2, 12" (60108212) (PERFORATED PVC PIPE) (2" MINIMUM BEDDING THICKNESS)
- (14) BIAXIAL GEOGRID (X0325110)
- (15) CONCRETE PAVER PAVEMENT (X0327978)
- (16) OPEN GRADED CHIP STONE, 1" (INCLUDED IN THE COST OF CONCRETE PAVER PAVEMENT)
- (17) ENGINEERED SOIL FURNISH AND PLACE (SPECIAL) (X3020004) (12" DEPTH @ BIOSWALES, 18" DEPTH @ POND & TURNAROUND)
- (18) AGGREGATE BASE COURSE, TYPE CA-7 (X3510407)
- (19) CONCRETE RIBBON (XX007079) (12" DEPTH)

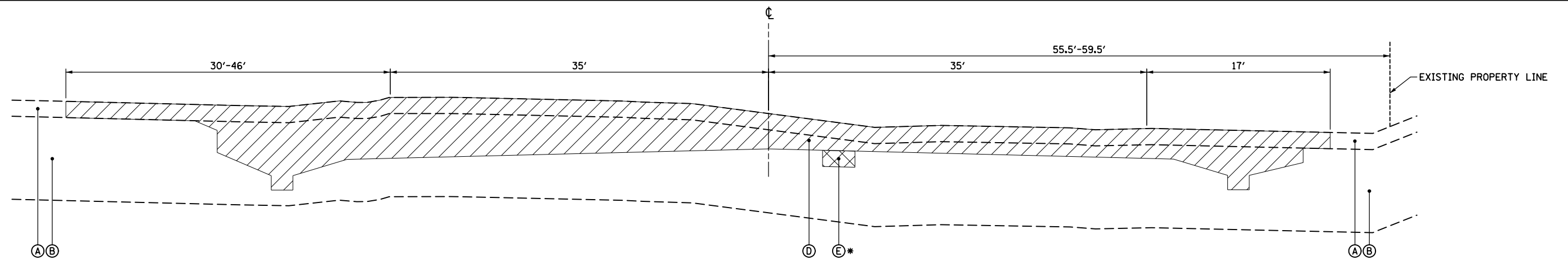
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
TYPICAL SECTIONS

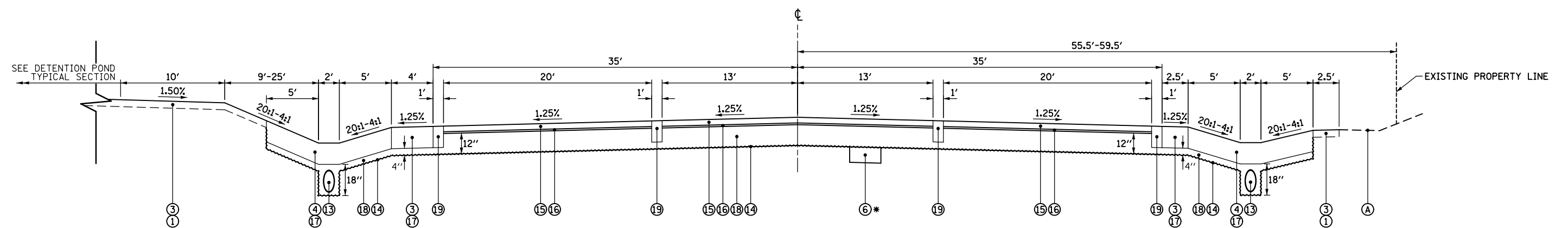
SCALE: N.T.S. SHEET 1 OF 4 SHEETS STA. TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	9
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	



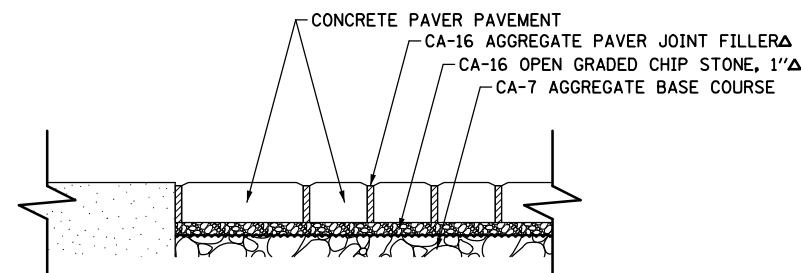
EXISTING TYPICAL SECTION

PERMEABLE PAVER PARKING LOT
STA 105+37.49 TO STA 107+92.49



PROPOSED TYPICAL SECTION

PERMEABLE PAVER PARKING LOT
STA 105+37.49 TO STA 107+92.49



CONCRETE PAVER PAVEMENT DETAIL

Δ INCLUDED IN THE COST OF CONCRETE PAVER PAVEMENT

REMOVAL LEGEND

- REMOVAL ITEMS
- (A) EXISTING TOPSOIL AND GROUND COVER (THICKNESS VARIES, SEE SOIL BORINGS)
- (B) EXISTING CLAY (THICKNESS VARIES, SEE SOIL BORINGS)
- (C) EXISTING PAVEMENT (THICKNESS VARIES, SEE PAVEMENT CORES)
- (D) EARTH EXCAVATION (20200100)
- (E)* REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)
- (F) PAVEMENT REMOVAL (44000100)

* AS DIRECTED BY THE ENGINEER

PROPOSED LEGEND

- (1) TOPSOIL FURNISH AND PLACE, 4" (21101615)
- (2) TOPSOIL FURNISH AND PLACE, 6" (21101625)
- (3) SEEDING, CLASS 1A (25000110)
- (4) SEEDING, CLASS 4A (25000312)
- (5) PERENNIAL PLANTS, WETLAND EMERGENT (K0013055)
- (6)* AGGREGATE SUBGRADE IMPROVEMENT (30300001)
- (7) AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)
- (8) AGGREGATE BASE COURSE, TYPE B 6" (35101800)
- (9) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 3" (40603080)
- (10) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 2" (40604060)
- (11) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 3 1/2" (40604060)
- (12) PIPE UNDERDRAINS, TYPE 2, 4" (60108204) (PERFORATED PVC PIPE) (2" MINIMUM BEDDING THICKNESS) INV = 697.00
- (13) PIPE UNDERDRAINS, TYPE 2, 12" (60108212) (PERFORATED PVC PIPE) (2" MINIMUM BEDDING THICKNESS)
- (14) BIAXIAL GEOGRID (X0325110)
- (15) CONCRETE PAVER PAVEMENT (X0327978)
- (16) OPEN GRADED CHIP STONE, 1" (INCLUDED IN THE COST OF CONCRETE PAVER PAVEMENT)
- (17) ENGINEERED SOIL FURNISH AND PLACE (SPECIAL) (X3020004) (12" DEPTH @ BIOSWALES, 18" DEPTH @ POND & TURNAROUND)
- (18) AGGREGATE BASE COURSE, TYPE CA-7 (X3510407)
- (19) CONCRETE RIBBON (XX007079) (12" DEPTH)

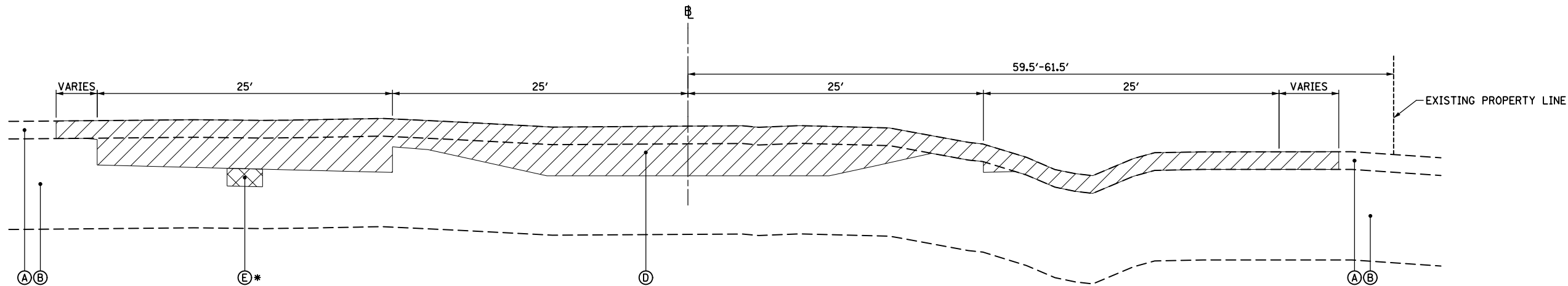
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Default	PLOT SCALE = 1/8"	CHECKED - SNS	REVISED -
	PLOT DATE = 3/8/2024	DATE - 3/8/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
TYPICAL SECTIONS

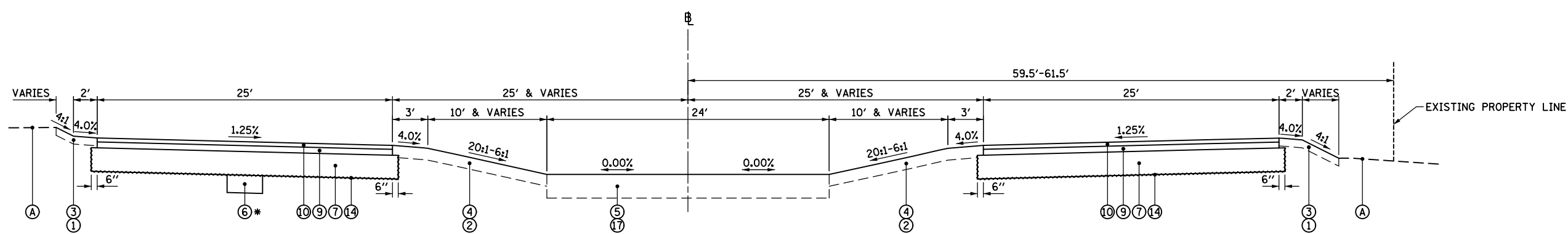
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M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	10
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	



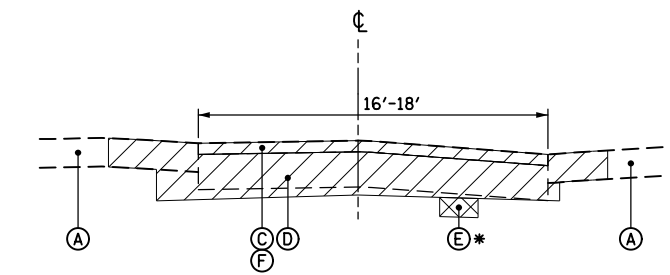
EXISTING TYPICAL SECTION

PARKING LOT TURNAROUND
STA 107+92.49 TO STA 109+26.06



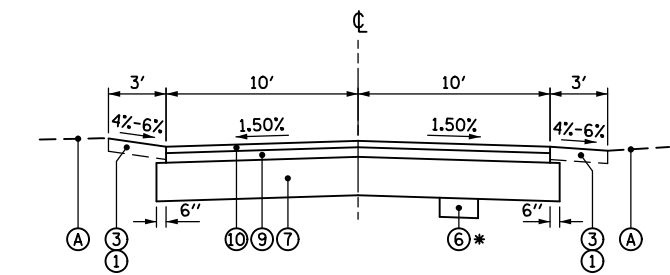
PROPOSED TYPICAL SECTION

PARKING LOT TURNAROUND
STA 107+92.49 TO STA 109+26.06



EXISTING TYPICAL SECTION

CAL-SAG TRAIL LINK
STA 30+00.00 TO STA 32+66.10



PROPOSED TYPICAL SECTION

CAL-SAG TRAIL LINK
STA 30+00.00 TO STA 32+66.10

REMOVAL LEGEND * AS DIRECTED BY THE ENGINEER

- REMOVAL ITEMS
- (A) EXISTING TOPSOIL AND GROUND COVER (THICKNESS VARIES, SEE SOIL BORINGS)
- (B) EXISTING CLAY (THICKNESS VARIES, SEE SOIL BORINGS)
- (C) EXISTING PAVEMENT (THICKNESS VARIES, SEE PAVEMENT CORES)
- (D) EARTH EXCAVATION (20200100)
- (E)* REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)
- (F) PAVEMENT REMOVAL (44000100)

PROPOSED LEGEND

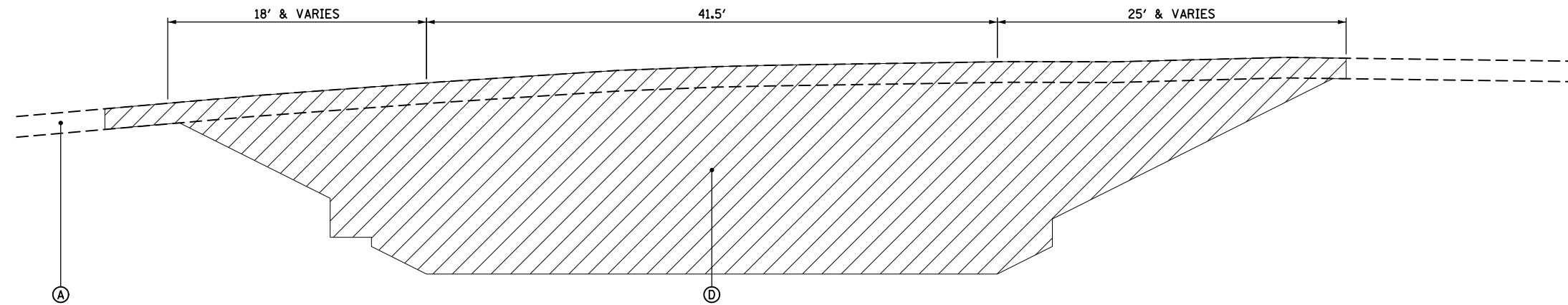
- (1) TOPSOIL FURNISH AND PLACE, 4" (21101615)
- (2) TOPSOIL FURNISH AND PLACE, 6" (21101625)
- (3) SEEDING, CLASS 1A (25000110)
- (4) SEEDING, CLASS 4A (25000312)
- (5) PERENNIAL PLANTS, WETLAND EMERGENT (K0013055)
- (6)* AGGREGATE SUBGRADE IMPROVEMENT (30300001)
- (7) AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)
- (8) AGGREGATE BASE COURSE, TYPE B 6" (35101800)
- (9) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 3" (40603080)
- (10) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 2" (40604060)
- (11) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 3/2" (40604060)
- (12) PIPE UNDERDRAINS, TYPE 2, 4" (60108204) (PERFORATED PVC PIPE) (2" MINIMUM BEDDING THICKNESS) INV = 697.00
- (13) PIPE UNDERDRAINS, TYPE 2, 12" (60108212) (PERFORATED PVC PIPE) (2" MINIMUM BEDDING THICKNESS)
- (14) BIAXIAL GEOGRID (X0325110)
- (15) CONCRETE PAVER PAVEMENT (X0327978)
- (16) OPEN GRADED CHIP STONE, 1" (INCLUDED IN THE COST OF CONCRETE PAVER PAVEMENT)
- (17) ENGINEERED SOIL FURNISH AND PLACE (SPECIAL) (X3020004) (12" DEPTH @ BIOSWALES, 18" DEPTH @ POND & TURNAROUND)
- (18) AGGREGATE BASE COURSE, TYPE CA-7 (X3510407)
- (19) CONCRETE RIBBON (XX007079) (12" DEPTH)

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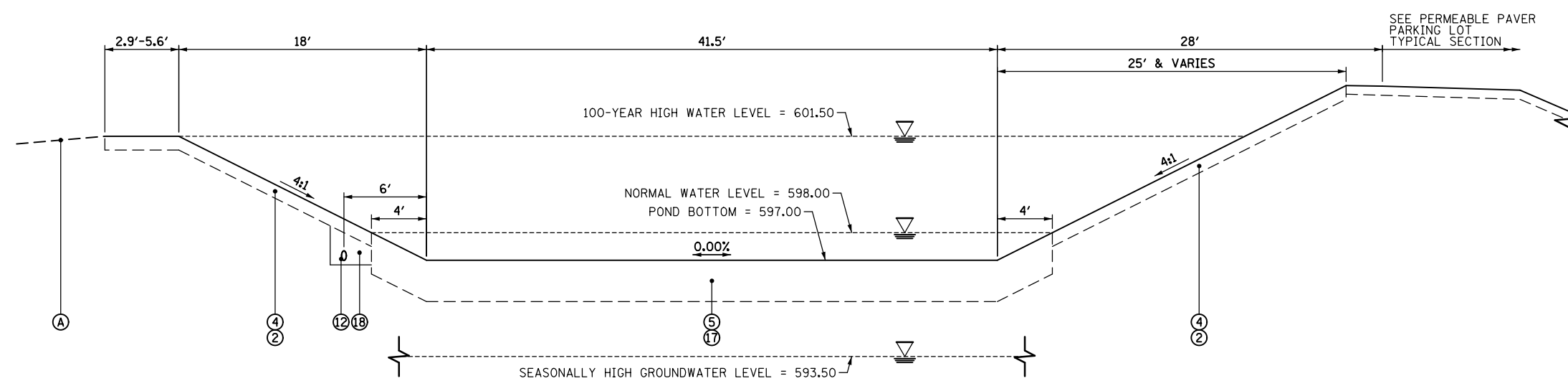
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT			
TYPICAL SECTIONS			
SCALE: N.T.S.	SHEET 3	OF 4 SHEETS	STA. TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	11
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	



EXISTING TYPICAL SECTION
DETENTION POND



PROPOSED TYPICAL SECTION
DETENTION POND

REMOVAL LEGEND

* AS DIRECTED BY THE ENGINEER

- REMOVAL ITEMS
- (A) EXISTING TOPSOIL AND GROUND COVER (THICKNESS VARIES, SEE SOIL BORINGS)
- (B) EXISTING CLAY (THICKNESS VARIES, SEE SOIL BORINGS)
- (C) EXISTING PAVEMENT (THICKNESS VARIES, SEE PAVEMENT CORES)
- (D) EARTH EXCAVATION (20200100)
- (E)* REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)
- (F) PAVEMENT REMOVAL (44000100)

PROPOSED LEGEND

- (1) TOPSOIL FURNISH AND PLACE, 4" (21101615)
- (2) TOPSOIL FURNISH AND PLACE, 6" (21101625)
- (3) SEEDING, CLASS 1A (25000110)
- (4) SEEDING, CLASS 4A (25000312)
- (5) PERENNIAL PLANTS, WETLAND EMERGENT (K0013055)
- (6)* AGGREGATE SUBGRADE IMPROVEMENT (30300001)
- (7) AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)
- (8) AGGREGATE BASE COURSE, TYPE B 6" (35101800)
- (9) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 3" (40603080)
- (10) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 2" (40604060)
- (11) HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 3/2" (40604060)
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- (16) OPEN GRADED CHIP STONE, 1" (INCLUDED IN THE COST OF CONCRETE PAVER PAVEMENT)
- (17) ENGINEERED SOIL FURNISH AND PLACE (SPECIAL) (X3020004) (12" DEPTH @ BIOSWALES, 18" DEPTH @ POND & TURNAROUND)
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- (19) CONCRETE RIBBON (XX007079) (12" DEPTH)

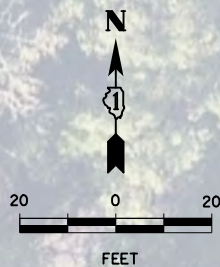
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
TYPICAL SECTIONS

SCALE: N.T.S. SHEET 4 OF 4 SHEETS STA. TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	12
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	



PT Sta 33+00.00
 N 1 825 557.25
 E 1 130 022.92
 END IMPROVEMENTS
 STA. 32+66.10

+68.18
 13.27' RT
 +64.60
 16.19' RT

+64.08
 12.52' LT

PI Sta 32+43.15

N 1 825 557.25
 E 1 130 022.92

N 1 825 443.89
 E 1 130 032.30
 PC Sta 31+86.19

PROPOSED CURVE CAL SAG
 PI STA. = 32+43.15
 $\Delta = 6^{\circ} 32' 27''$ (LT)
 $D = 5^{\circ} 44' 49''$
 $R = 997.00'$
 $T = 56.97'$
 $L = 113.81'$
 $E = 1.63'$
 P.C. STA = 31+86.19
 P.T. STA = 33+00.00

CAL-SAG TRAIL LINK

APPROXIMATE \bar{C} EX MWRD DEEP TUNNEL

LIMIT OF CONSTRUCTION

LIMITS OF CONSTRUCTION

PAVEMENT REMOVAL
 (1265 SY)

"BUZZ N BLOOM PRAIRIE" SIGN TO
 BE RELOCATED (BY OTHERS)

BEGIN IMPROVEMENTS
 STA. 103+92.00

RELOCATE SIGN PANEL - TYPE 1
 (CAL-SAG TRAIL EMBLEM)
 (SEE PAVEMENT MARKING & SIGNING PLAN FOR PROPOSED LOCATION)

RELOCATE SIGN PANEL - TYPE 1
 (CAL-SAG TRAIL EMBLEM)
 (REMOVAL AND DISPOSAL OF METAL POST INCLUDED IN COST OF RELOCATION)
 (SEE PAVEMENT MARKING & SIGNING PLAN FOR PROPOSED LOCATION)

REMOVE AND REINSTALL PARKING BLOCKS
 (20 TOTAL)

PAVEMENT REMOVAL
 (135 SY)

REMOVE SIGN PANEL ASSEMBLY - TYPE A
 (W11-1 & W1-6)

REMOVE SIGN PANEL ASSEMBLY - TYPE A
 (R1-1)

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

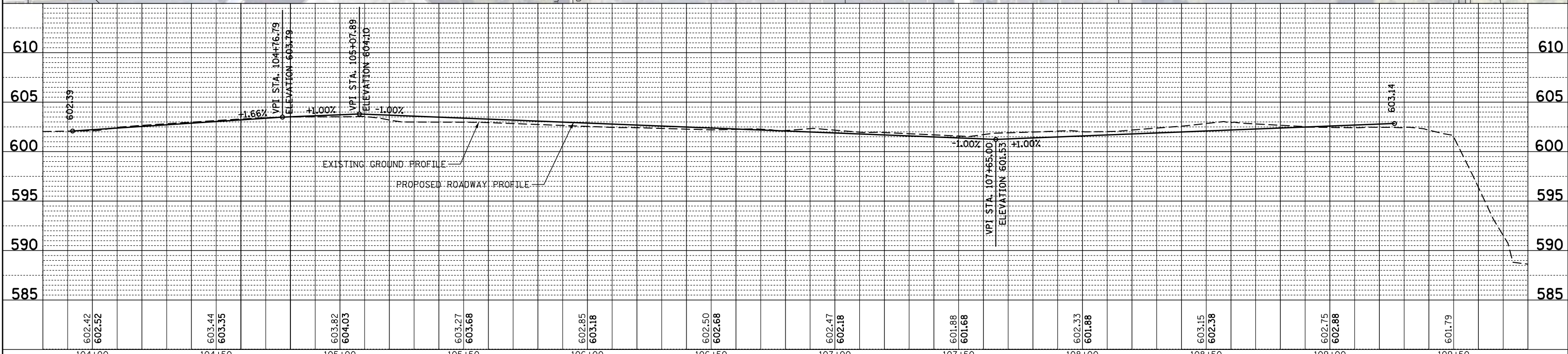
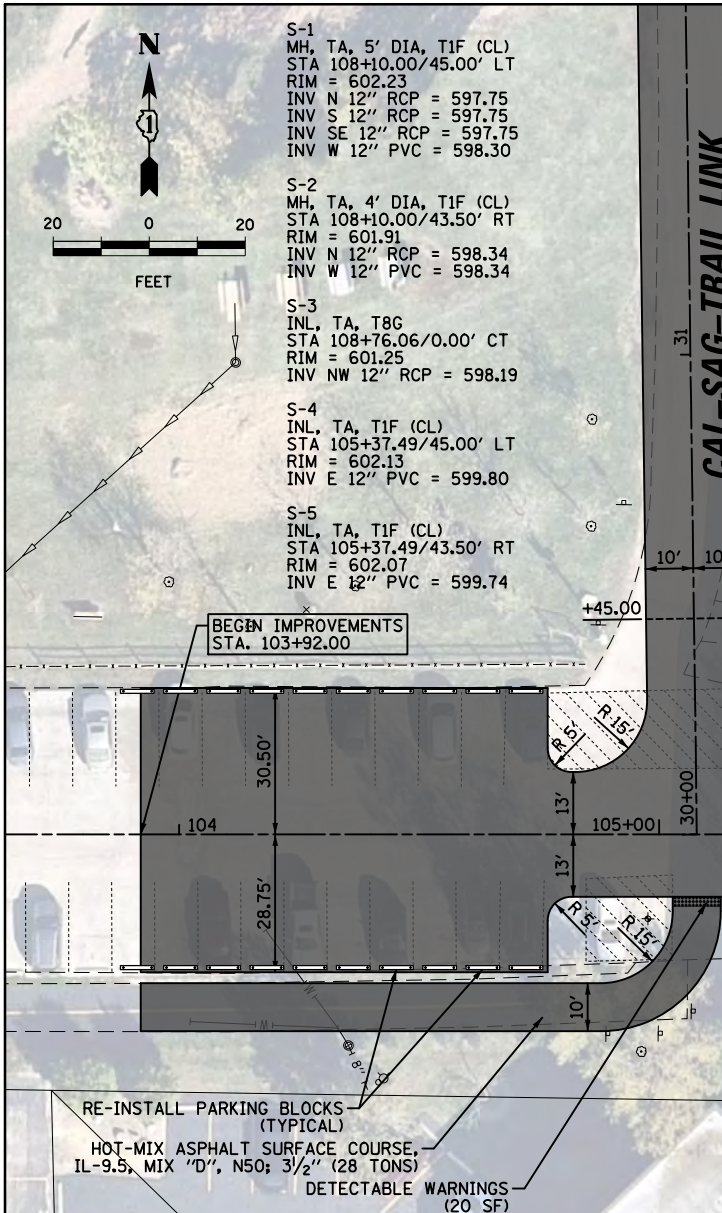
CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
 EXISTING CONDITIONS AND REMOVAL PLAN

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 103+92.00 TO STA. 109+26.06

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	13
CONTRACT NO. 61K41				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
FILE NAME	



FILE NAME =	USER NAME = rhowellindgren	DESIGNED -	REVISED -	M.U.N. RT. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 48"	CHECKED -	REVISED -	CONTRACT NO. 61K41				
	PLOT DATE = 2/13/2024	DATE -	REVISED -	ILLINOIS FED. AID PROJECT				

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
PROPOSED PLAN AND PROFILE - PERMEABLE PAVER PARKING LOT**

SCALE: 1" = 20' SHEET 1 OF 2 SHEETS STA. 103+92.00 TO STA. 109+26.06

OCS-1 (SEE DETAIL ON SHEET 16)
CB, TA, 4" DIA, TIF (CL)
(WITH REMOVABLE HOOD)
STA 108+71.00/113.75' LT
RIM = 603.07
INV NW 4" PVC = 597.00
INV E 12" RCP (W/2.60" REST) = 597.00
INV W 12" RCP = 597.50

PROPOSED DETENTION & WATER QUALITY BASIN
BOTTOM = 597.00
NORMAL WATER LEVEL = 598.00
100-YEAR HIGH WATER LEVEL = 601.50
PROVIDED DETENTION STORAGE = 0.575 AC-FT
PROVIDED DRC VOLUME = 3,824 CF
PROVIDED VOLUME CONTROL = 1,518 CF

SEE NEXT SHEET FOR CAL-SAG TRAIL LINK PAVEMENT INFORMATION
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 2" (92 TONS)
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 3" (137 TONS)

HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 2" (9 TONS)
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 3" (13 TONS)
FUTURE WALKING PATH (BY OTHERS)

PROPOSED BIOSWALE BOUNDARY (LOCALLY REQUIRED GREEN INFRASTRUCTURE)
CONCRETE PAVER PAVEMENT (140 SY)

CONCRETE PAVEMENT (731 SY)
CONCRETE PAVEMENT (140 SY)

CONCRETE RIBBON (1240 LF)

CONCRETE PAVER PAVEMENT (400 SY)
CONCRETE PAVER PAVEMENT (140 SY)

PIPE UNDERDRAINS, TYPE 2, 12" Ø 0.55% (PERFORATED PVC PIPE) (272 LF)
PROPOSED BIOSWALE BOUNDARY (LOCALLY REQUIRED GREEN INFRASTRUCTURE)

STORM SEWER, CLASS A, TYPE 2, 12" Ø 0.55% (88 LF)
TBF = 11 CY

STORM SEWER, CLASS A, TYPE 2, 12" Ø 0.55% (40 LF)

STORM SEWER, CLASS A, TYPE 2, 12" Ø 0.55% (80 LF)
TBF = 7 CY

HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 2" (84 TONS)
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 3" (125 TONS)

WEATHERING STEEL PLATE BEAM GUARDRAIL SPECIAL (105 FT)

END IMPROVEMENTS STA. 109+26.06

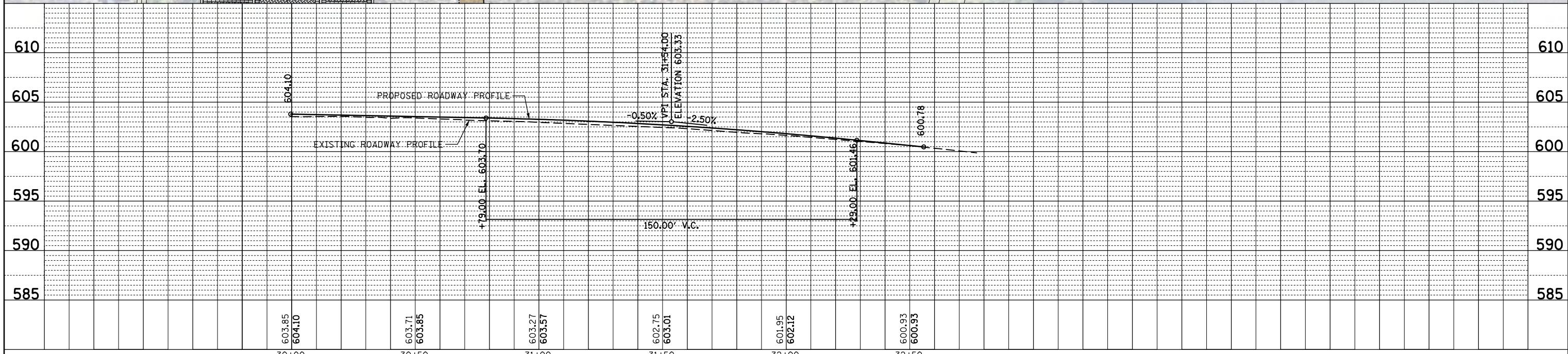
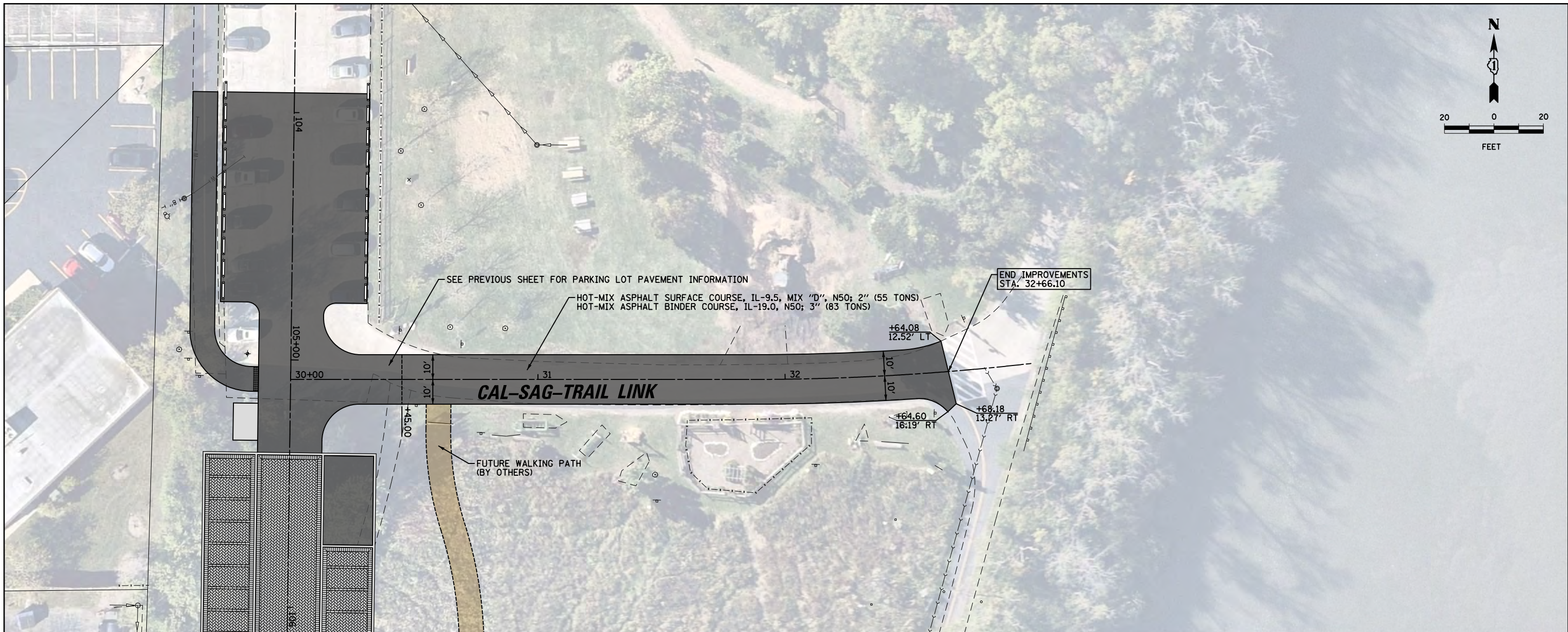
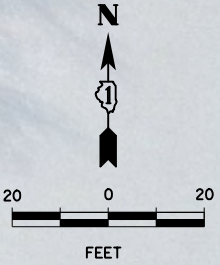
BEGIN IMPROVEMENTS STA. 103+92.00

RE-INSTALL PARKING BLOCKS (TYPICAL)
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50; 3/2" (28 TONS)
DETECTABLE WARNINGS (20 SF)

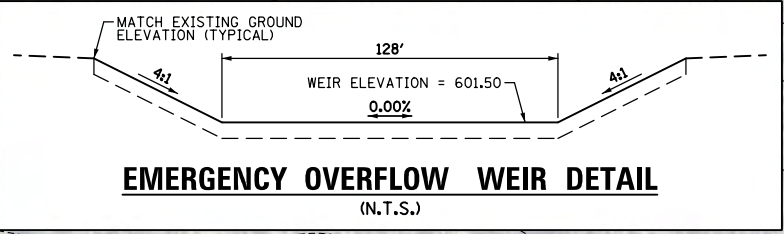
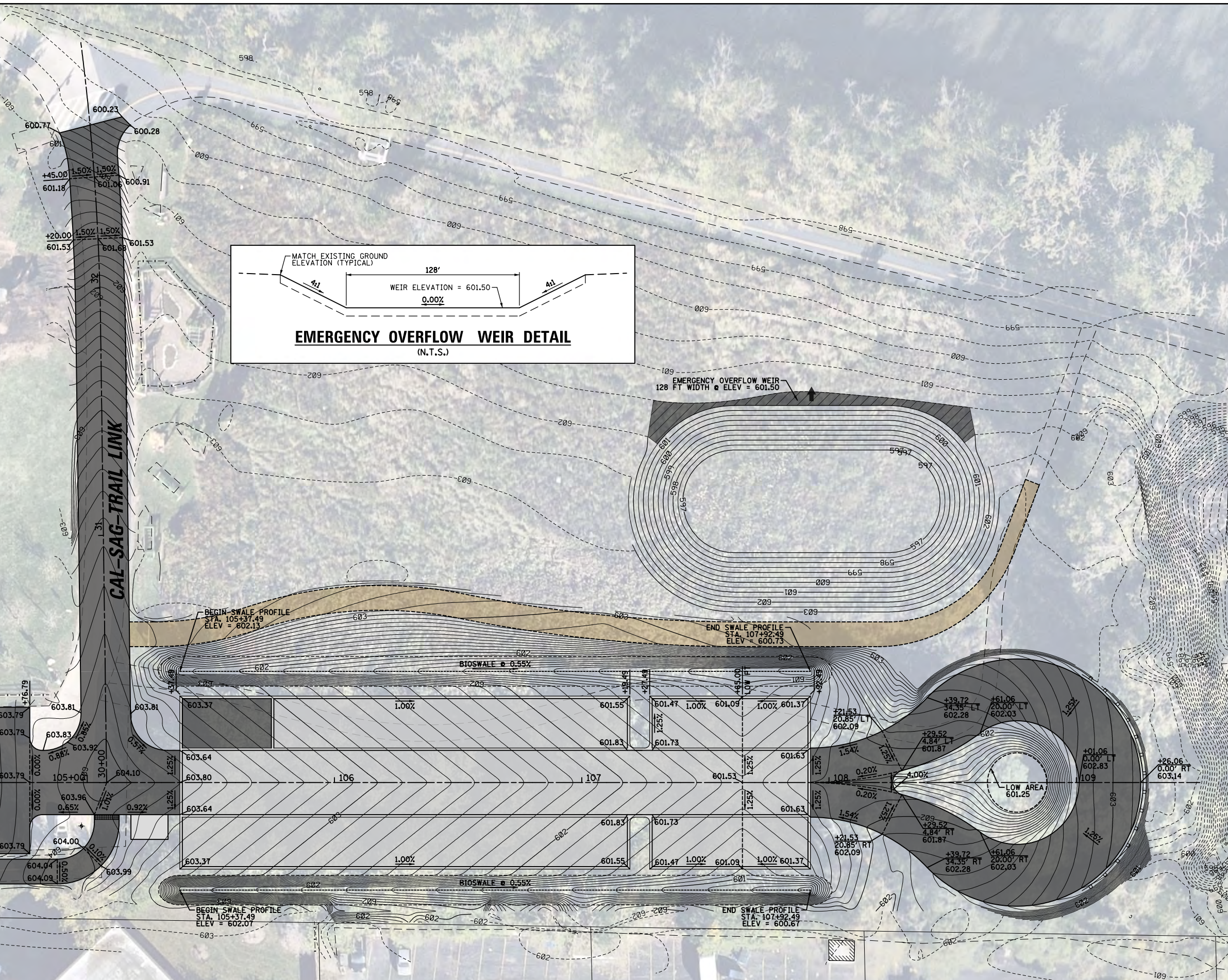
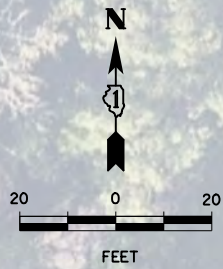
PORTLAND CEMENT CONCRETE PAVEMENT 6" SUBBASE GRANULAR MATERIAL, TYPE B 4" (17 SY)

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	FILE NAME		



FILE NAME =	USER NAME = rhowellindgren	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT PROPOSED PLAN AND PROFILE - CAL-SAG TRAIL LINK	M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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Default	PLOT DATE = 2/13/2024	CHECKED -	REVISED -			CONTRACT NO. 61K41		ILLINOIS FED. AID PROJECT			
		DATE -	REVISED -			SCALE: 1" = 20'	SHEET 2 OF 2 SHEETS	STA. 30+00.00 TO STA. 32+66.10			



EMERGENCY OVERFLOW WEIR
128 FT WIDTH @ ELEV = 601.50

BEGIN SWALE PROFILE
STA. 105+37.49
ELEV = 602.13

END SWALE PROFILE
STA. 107+92.49
ELEV = 600.73

BEGIN SWALE PROFILE
STA. 105+37.49
ELEV = 602.07

END SWALE PROFILE
STA. 107+92.49
ELEV = 600.67

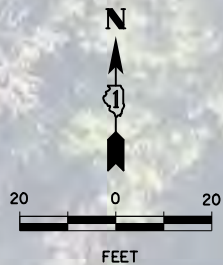
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Default	PLOT SCALE = 48"	CHECKED - SNS	REVISED -
	PLOT DATE = 2/13/2024	DATE - 2/13/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
PROPOSED GRADING PLAN**

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 103+92.00 TO STA. 109+26.06

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	16
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	



CONSTRUCTION STAGING

- (A) THE CONTRACTOR SHALL COORDINATE WITH THE CITY LOCATIONS FOR THE PARKING OF CONTRACTOR EMPLOYEE VEHICLES DURING CONSTRUCTION.
- (B) INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL SE/SC MEASURES
 - SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
 - SILT FENCE INSTALLATION
 - TEMPORARY CHAIN LINK FENCE AROUND AREAS NOT TO BE DISTURBED
 - STABILIZED CONSTRUCTION ENTRANCE
- (C) COMPLETE ALL GRADING (BASIN, SWALES, ETC.) AND CONSTRUCT STORM SEWER, PIPE UNDERDRAIN, DRAINAGE STRUCTURES, AND OUTLETS
- (D) PLACE TOPSOIL AND FINE GRADE SITE
- (E) PERMANENTLY STABILIZE RETENTION BASIN WITH SEED AND EROSION CONTROL BLANKET, AND PLANT MATERIAL
- (F) TEMPORARILY STABILIZE ALL OTHER AREAS
- (G) INSTALL CONCRETE PAVER PAVEMENT AND HMA PARKING AREAS. SPECIAL CARE SHALL BE TAKEN BY THE CONTRACTOR NOT TO DRIVE ASPHALT PAVING MACHINES, ROLLERS, LOADED TRUCKS, ETC. ON THE NEWLY PLACED CONCRETE PAVER PAVEMENT.
- (H) THE CONTRACTOR SHALL COORDINATE THE TEMPORARY SHUTDOWN AND RECONSTRUCTION OF THE CAL-SAG TRAIL LINK WITH THE CITY. THIS WORK SHALL NOT BEGIN WITHOUT PRIOR APPROVAL FROM THE CITY.
- (I) CONTRACTOR SHALL NOT STOCKPILE ANY MATERIAL ON THE CONCRETE PAVERS. IN ADDITION, THE CONTRACTOR SHALL LIMIT CONSTRUCTION TRAFFIC ON THE CONCRETE PAVERS.
- (J) REMOVE ALL TEMPORARY SE/SC MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION

THERMOPLASTIC PAVEMENT MARKING LEGEND

- ① LETTERS AND SYMBOLS
- ② 4" WHITE SOLID LINE
- ③ 4" YELLOW SOLID LINE
- ④ 4" YELLOW SOLID LINE @ 45° 3' C-C
- ⑤ 4" DOUBLE YELLOW SOLID LINE @ 11" C-C
- ⑥ 24" WHITE SOLID LINE

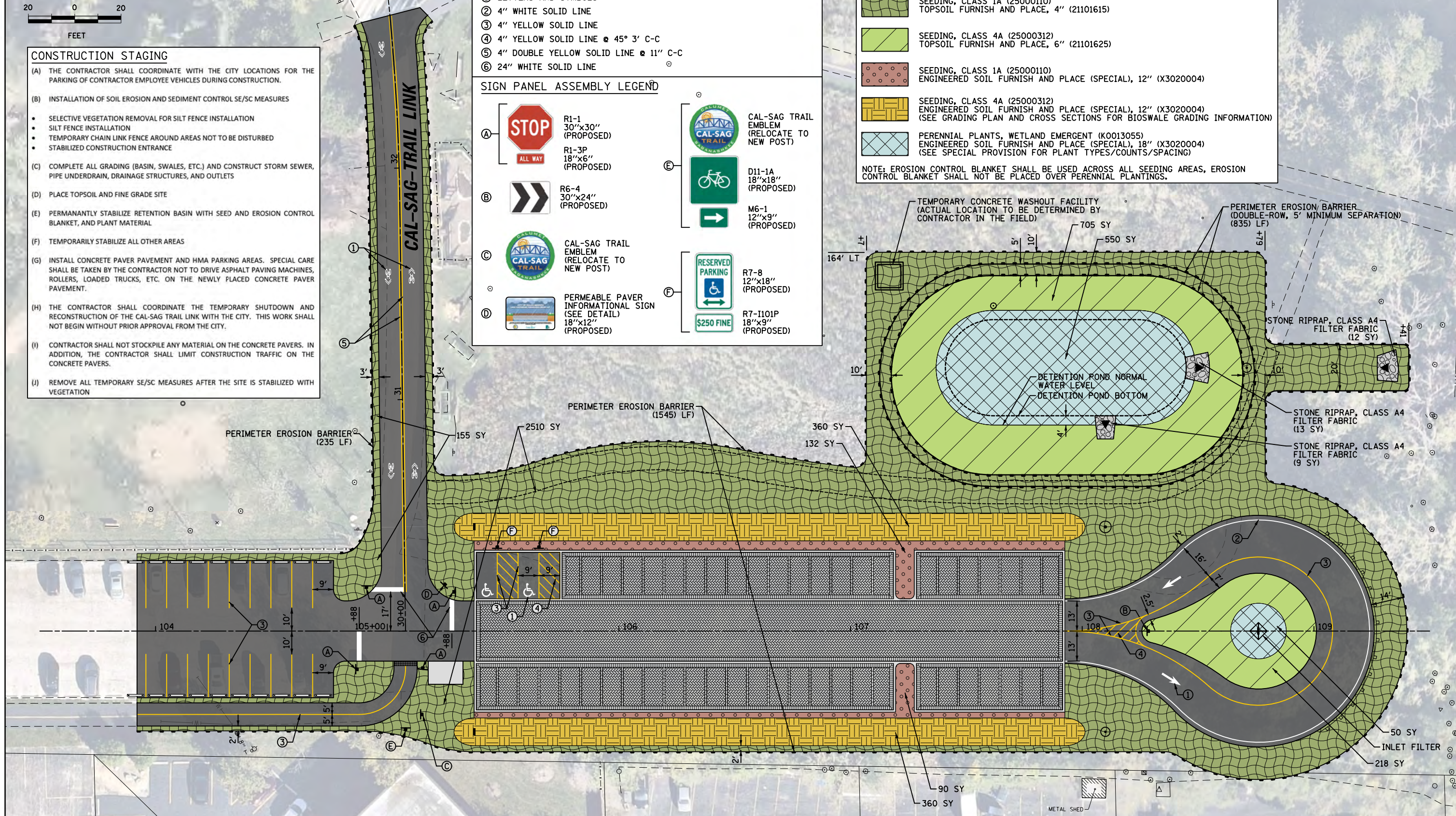
SIGN PANEL ASSEMBLY LEGEND

<p>(A) R1-1 30"x30" (PROPOSED)</p> <p>(B) R1-3P 18"x6" (PROPOSED)</p> <p>(C) R6-4 30"x24" (PROPOSED)</p> <p>(D) CAL-SAG TRAIL EMBLEM (RELOCATE TO NEW POST)</p> <p>(E) PERMEABLE PAVER INFORMATIONAL SIGN (SEE DETAIL) 18"x12" (PROPOSED)</p>	<p>(F) CAL-SAG TRAIL EMBLEM (RELOCATE TO NEW POST)</p> <p>(G) R7-8 12"x18" (PROPOSED)</p> <p>(H) R7-101P 18"x9" (PROPOSED)</p>	<p>(I) D11-1A 18"x18" (PROPOSED)</p> <p>(J) M6-1 12"x9" (PROPOSED)</p>
--	---	--

SEEDING & TOPSOIL LEGEND

- SEEDING, CLASS 1A (25000110)
TOPSOIL FURNISH AND PLACE, 4" (21101615)
- SEEDING, CLASS 4A (25000312)
TOPSOIL FURNISH AND PLACE, 6" (21101625)
- SEEDING, CLASS 1A (25000110)
ENGINEERED SOIL FURNISH AND PLACE (SPECIAL), 12" (X3020004)
- SEEDING, CLASS 4A (25000312)
ENGINEERED SOIL FURNISH AND PLACE (SPECIAL), 12" (X3020004)
(SEE GRADING PLAN AND CROSS SECTIONS FOR BIOSWALE GRADING INFORMATION)
- PERENNIAL PLANTS, WETLAND EMERGENT (K0013055)
ENGINEERED SOIL FURNISH AND PLACE (SPECIAL), 18" (X3020004)
(SEE SPECIAL PROVISION FOR PLANT TYPES/COUNTS/SPACING)

NOTE: EROSION CONTROL BLANKET SHALL BE USED ACROSS ALL SEEDING AREAS, EROSION CONTROL BLANKET SHALL NOT BE PLACED OVER PERENNIAL PLANTINGS.



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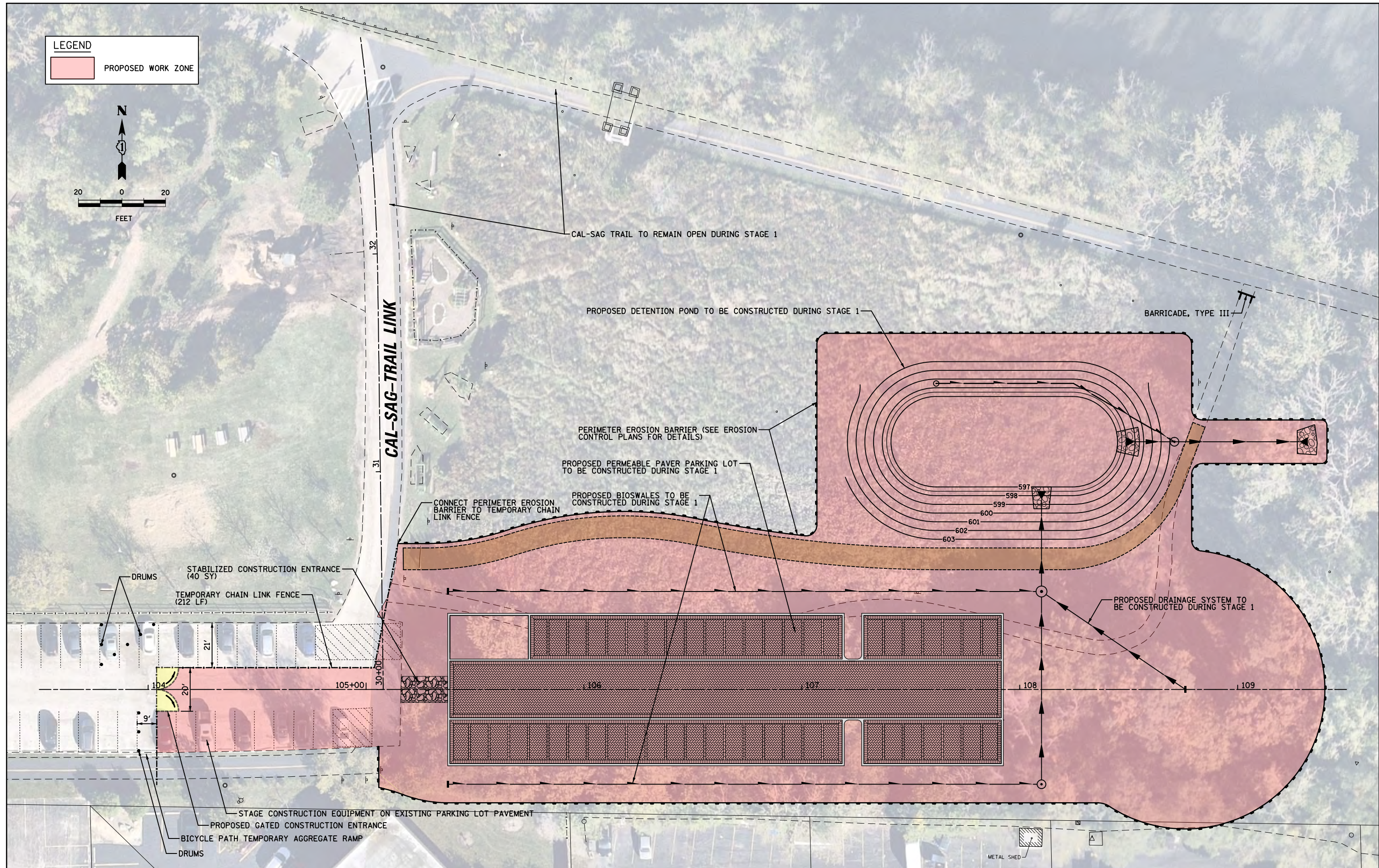
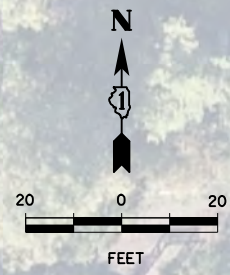
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
PAVEMENT MARKING, SIGNING, SOIL EROSION AND SEDIMENT CONTROL,
AND STORMWATER POLLUTION PREVENTION PLANS**

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 103+92.00 TO STA. 109+26.06

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	17
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	

LEGEND
 PROPOSED WORK ZONE



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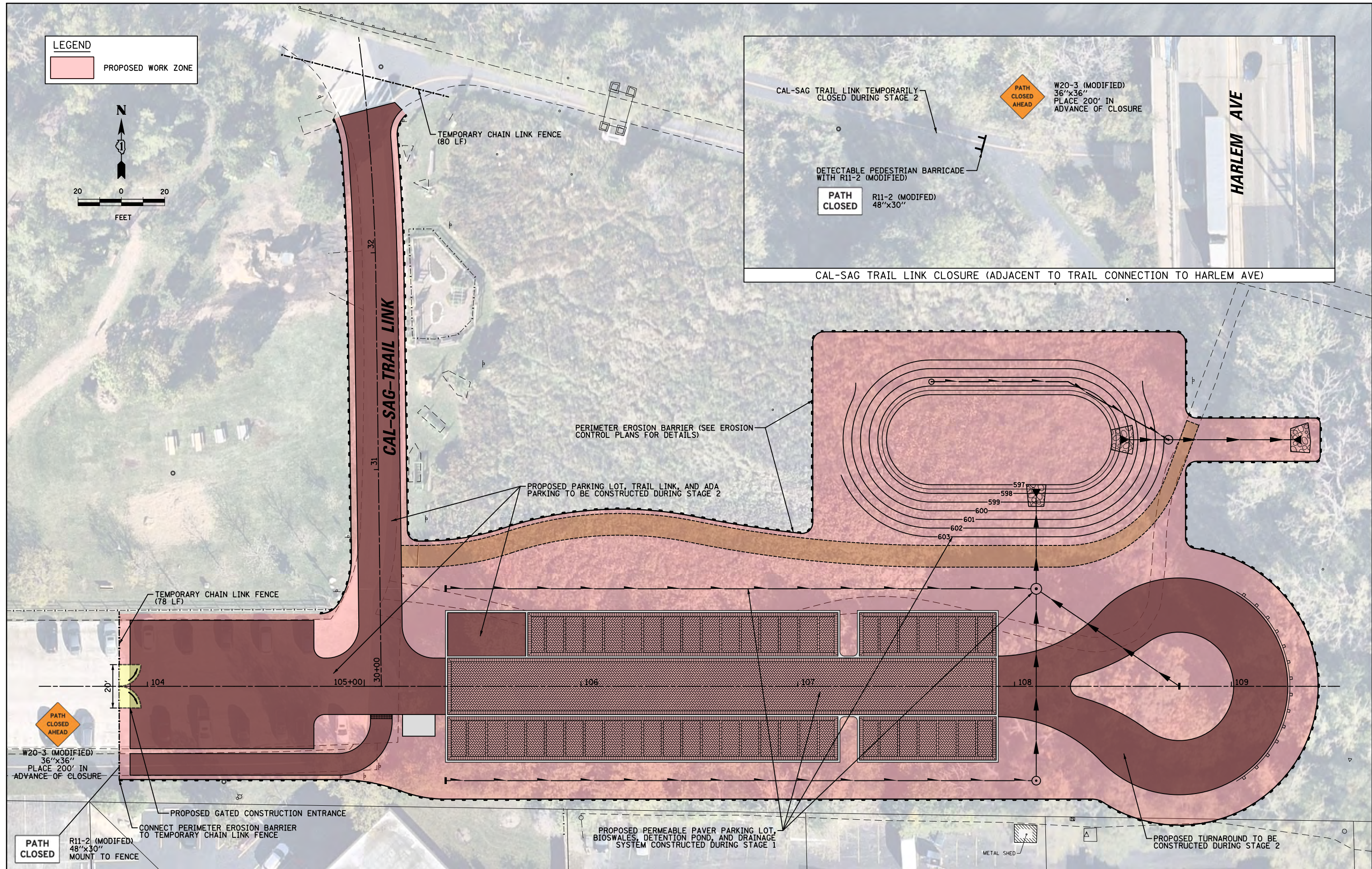
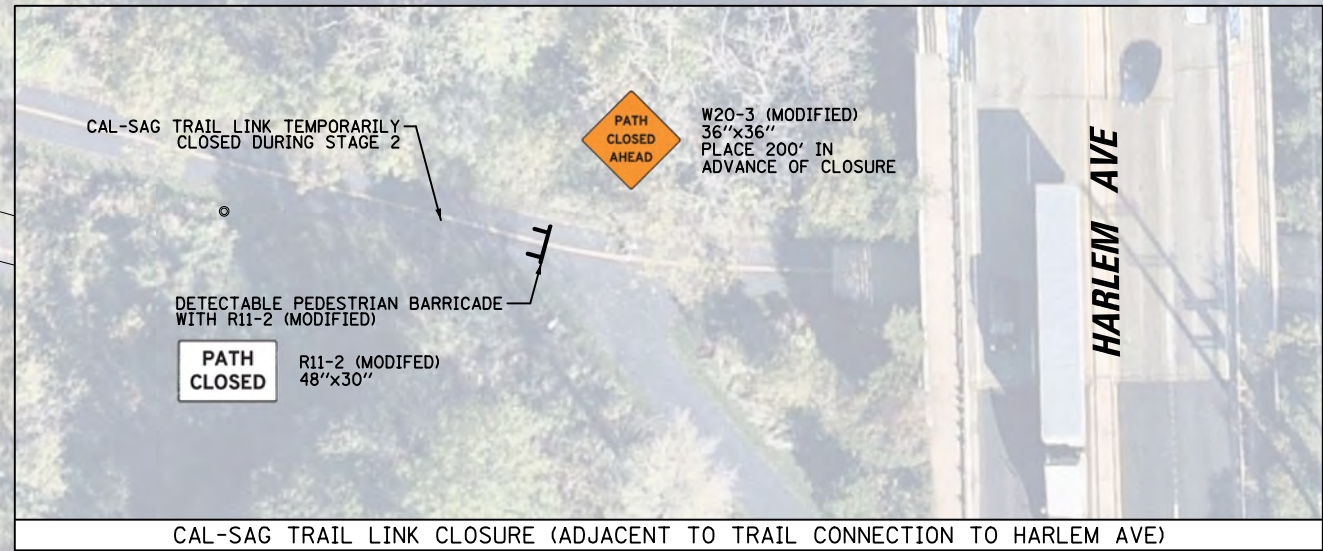
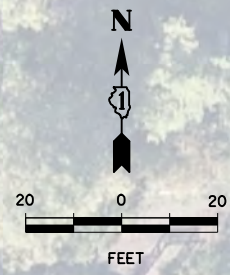
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
CONSTRUCTION STAGING & MAINTENANCE OF TRAFFIC PLAN - STAGE 1**

SCALE: 1" = 20' SHEET 1 OF 2 SHEETS STA. 103+92.00 TO STA. 109+26.06

M.U.N. RTE. 4312	SECTION 19-00058-00-BT	COUNTY COOK	TOTAL SHEETS 32	SHEET NO. 18
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	

LEGEND
 PROPOSED WORK ZONE



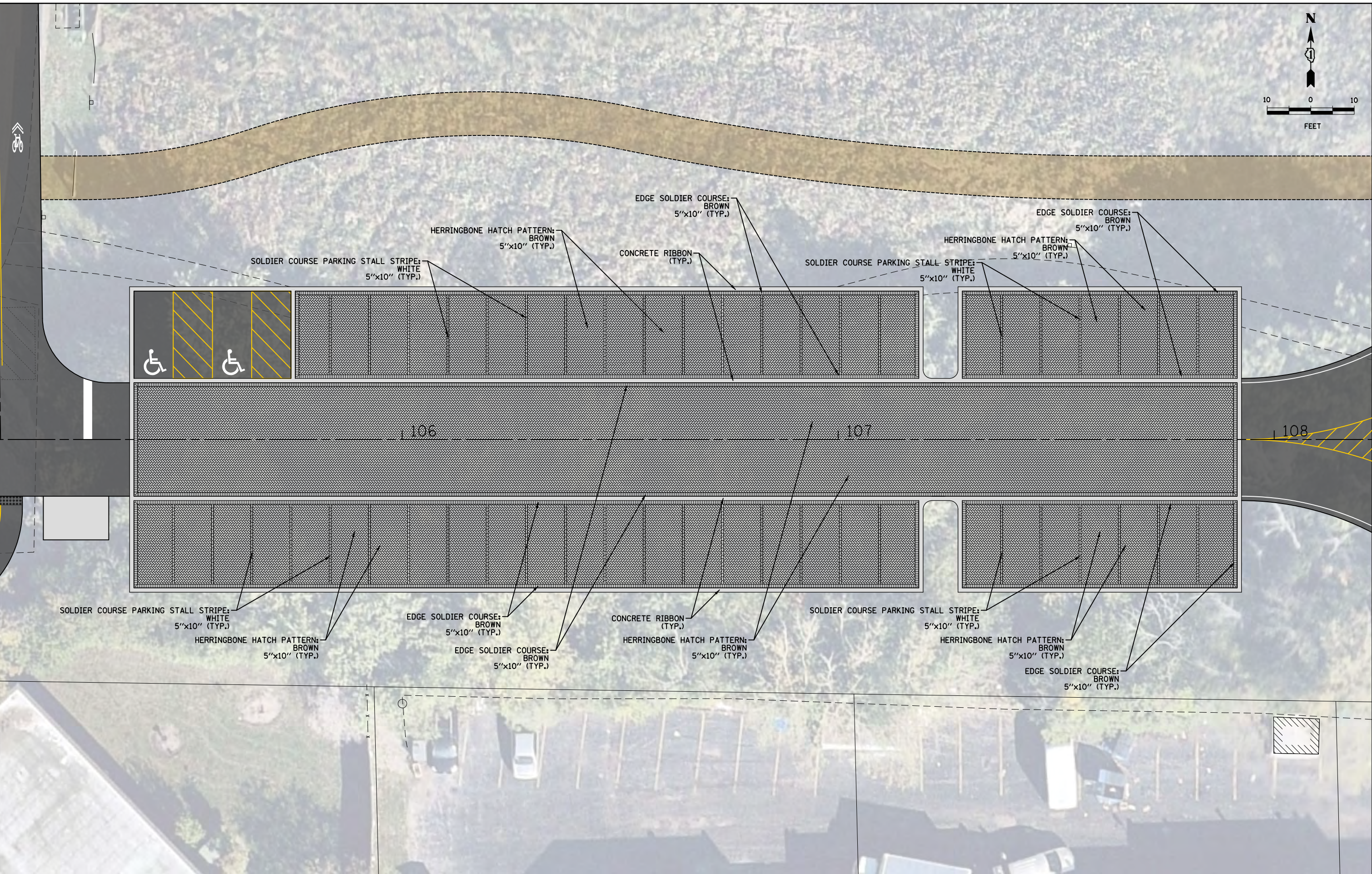
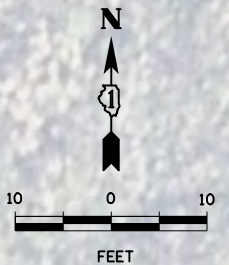
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
CONSTRUCTION STAGING & MAINTENANCE OF TRAFFIC PLAN - STAGE 2**

SCALE: 1" = 20' SHEET 2 OF 2 SHEETS STA. 103+92.00 TO STA. 109+26.06

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	19
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	



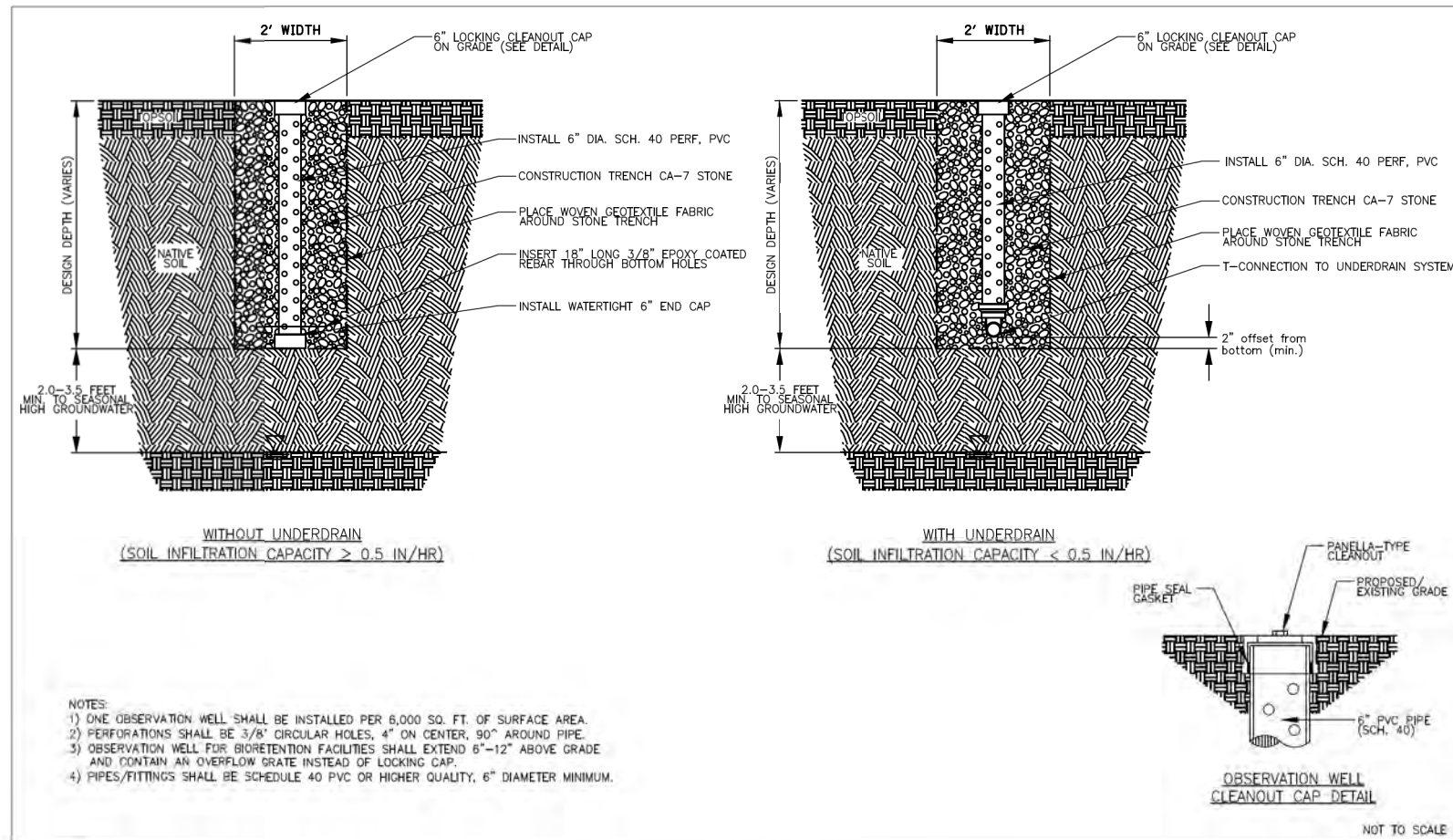
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

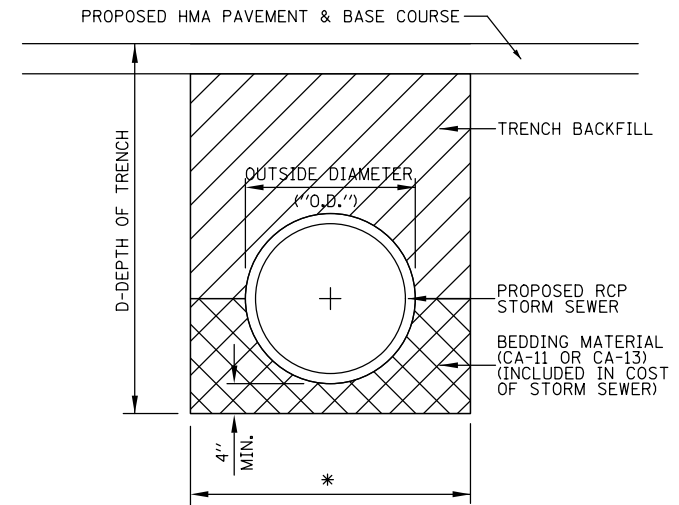
**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
CONCRETE PAVER PAVEMENT PATTERN DETAIL**

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

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	20
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	

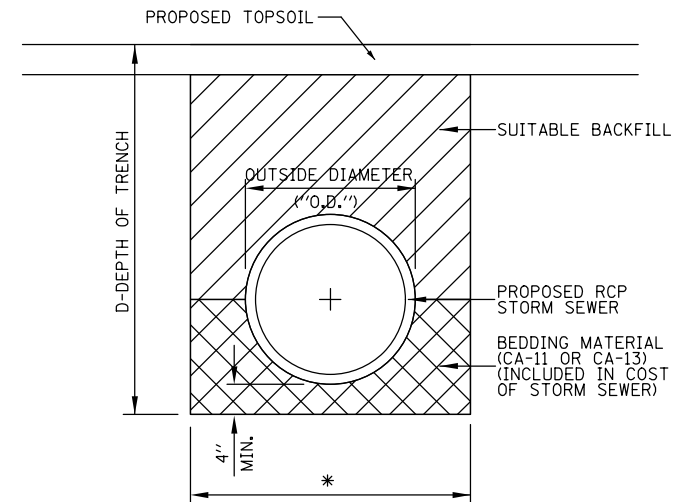


	TECHNICAL GUIDANCE MANUAL	10/11/18
	TYPICAL OBSERVATION WELL DETAIL (PAID FOR AS "CLEANOUTS")	STD. DWG. NO. 8
		PAGE NO. 9



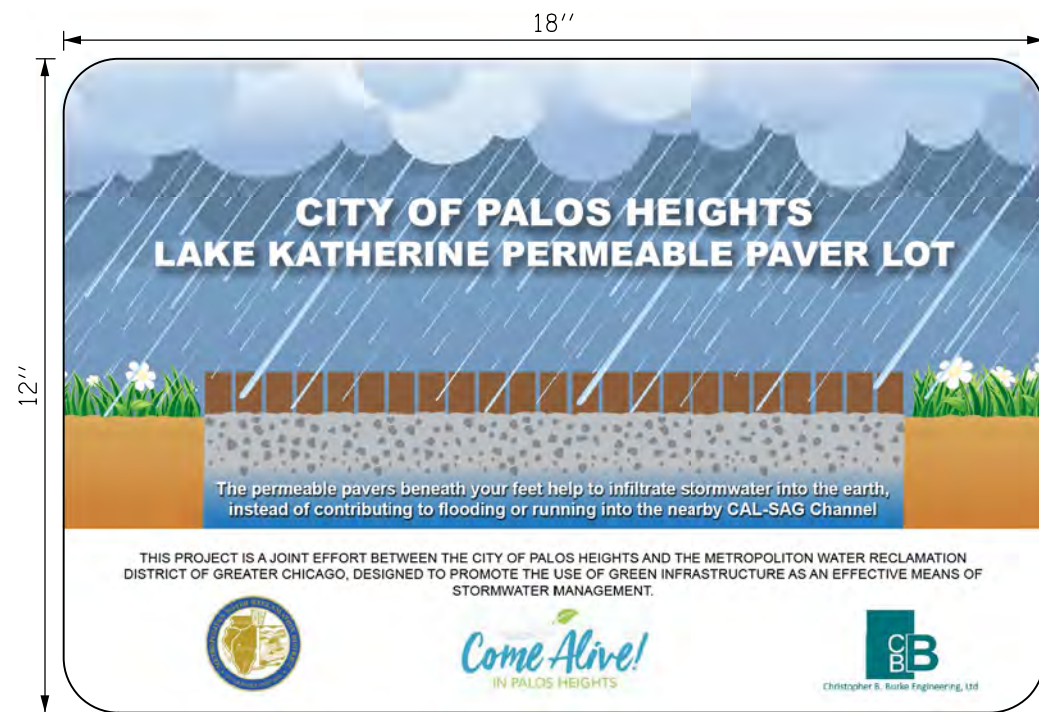
* TRENCH BACKFILL, PAY LIMIT
 MAX. WIDTH = 9"+O.D.+9" WHEN D ≤ 5 FT.
 MAX. WIDTH = 18"+O.D.+18" WHEN D ≥ 5 FT.

TRENCH BACKFILL DETAIL FOR RCP STORM SEWER IN PAVEMENT



* TRENCH BACKFILL, PAY LIMIT
 MAX. WIDTH = 9"+O.D.+9" WHEN D ≤ 5 FT.
 MAX. WIDTH = 18"+O.D.+18" WHEN D ≥ 5 FT.

TRENCH BACKFILL DETAIL FOR RCP STORM SEWER OUTSIDE PAVEMENT



PERMEABLE PAVER INFORMATIONAL SIGN DETAIL

(PAID FOR AS SIGN PANEL - TYPE 1)
 (DESIGN SUBJECT TO CHANGE, CONTRACTOR TO SUBMIT SHOP DRAWINGS TO CITY PRIOR TO FABRICATION)

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT			
CONSTRUCTION DETAILS			
SCALE: N.T.S.	SHEET 1 OF 4 SHEETS	STA.	TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	21
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	

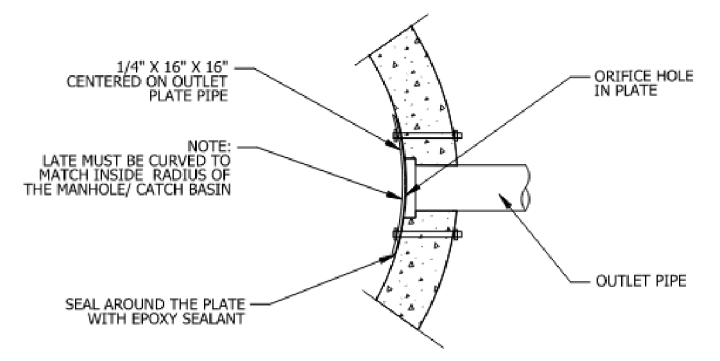
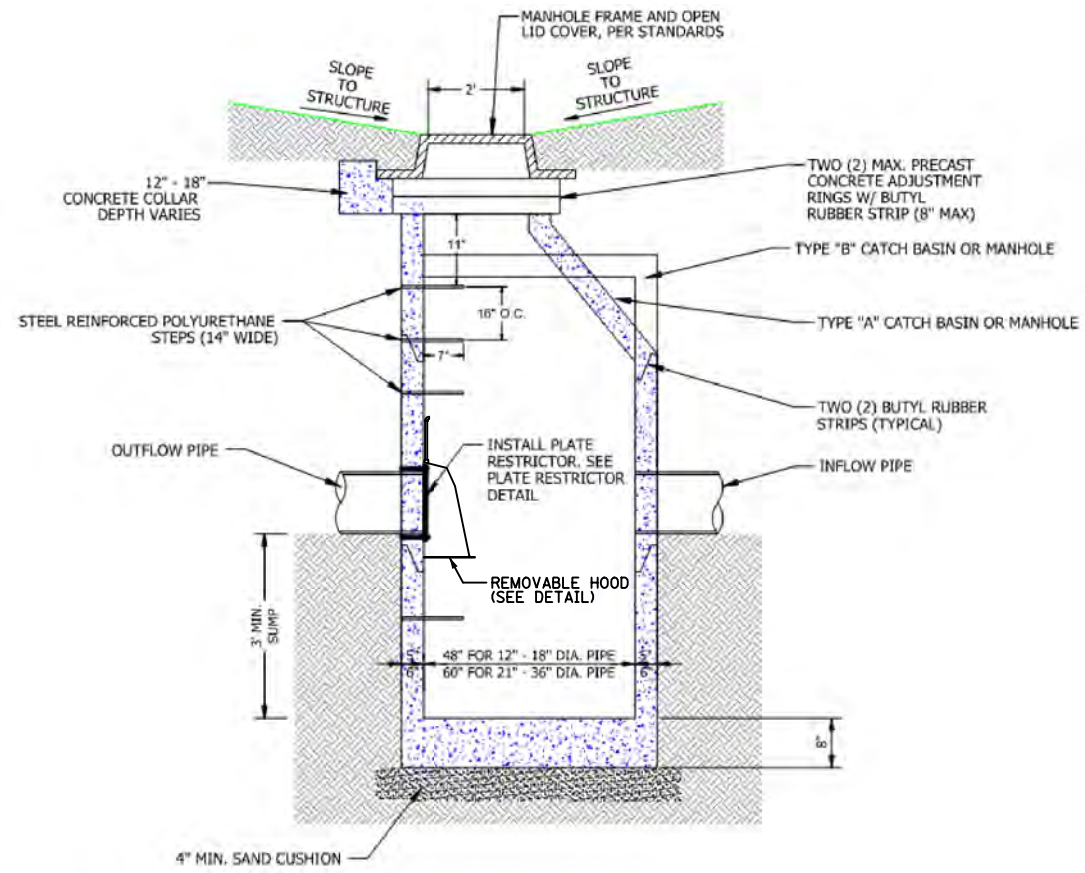


PLATE RESTRICTOR DETAIL: SECTION

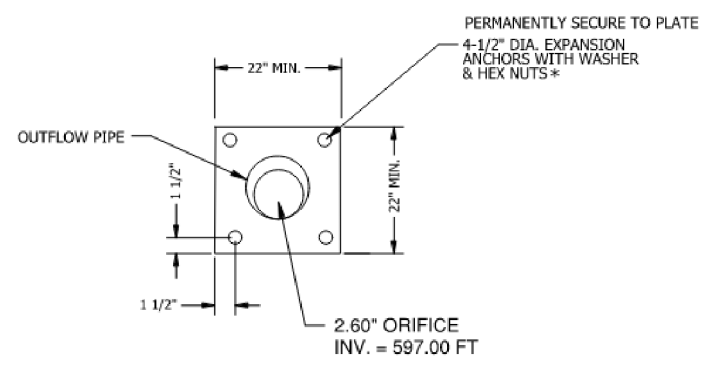
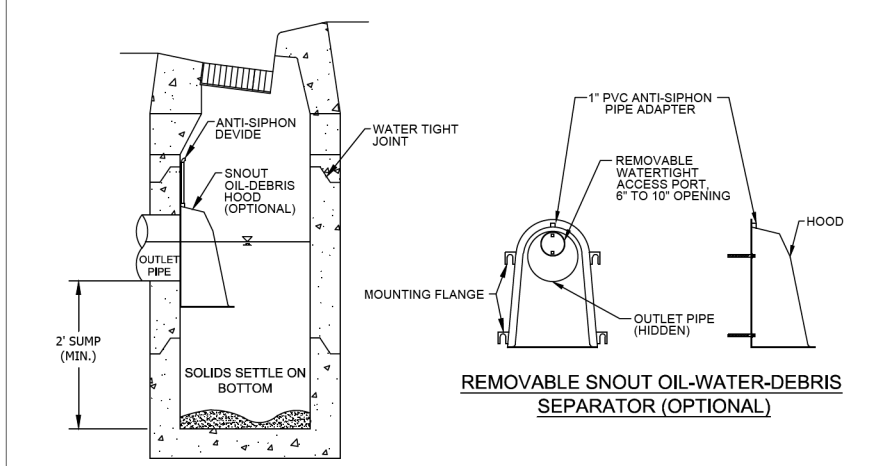
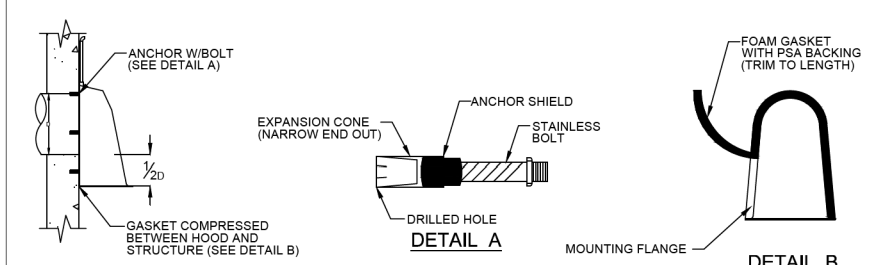


PLATE RESTRICTOR DETAIL: ELEVATION



CATCH BASIN WITH OPTIONAL HOOD

REMOVABLE SNOOT OIL-WATER-DEBRIS SEPARATOR (OPTIONAL)



OUTLET PIPE

NOTES:

1. ALL HOODS SHALL BE CONSTRUCTED OF A FIBERGLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125\"/>
- 2. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT PIPE AND ELBOW AS DRAWN. (SEE CONFIGURATION DETAIL).
- 3. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (SNOOT SIZE ALWAYS LARGER THAN PIPE SIZE).
- 4. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6\"/>
- 5. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3\"/>
- 6. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL AND PIPE SHALL BE FINISHED FLUSH TO WALL.
- 7. THE REMOVABLE HOOD SHALL BE ATTACHED TO THE STRUCTURE WITH THE SLOTTED TABS MOUNTED OVER 3/8\"/>
- 8. POSITION HOOD SUCH THAT BOTTOM FLANGE IS AT A DISTANCE OF 1/2 OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES <12\"/>
- 9. RESTRICTOR AND SNOOT WHEN PAIRED SHOULD BE INSTALLED IN SUCH A WAY THAT RESTRICTOR AND SNOOT REMAIN INSPECTABLE.
- 10. RESTRICTOR AND SNOOT HOOD SHALL BE CURVED TO INSIDE RADIUS OF STRUCTURE AND WATERTIGHT.

NOT TO SCALE

	TECHNICAL GUIDANCE MANUAL		7/1/15
	REMOVABLE HOOD basin and water quality structure DETAIL		STD. DWG. NO.11
			PAGE NO. 12

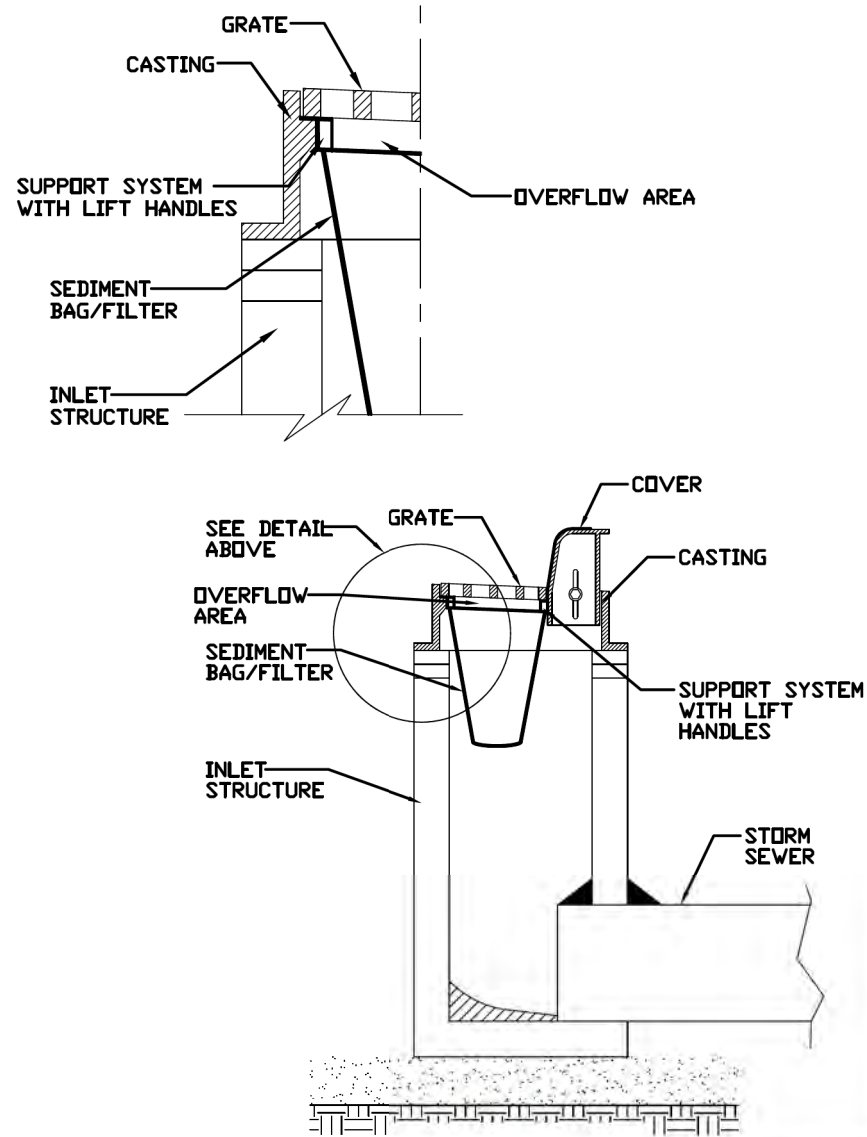
- NOTES:
1. CATCH BASINS MUST CONFORM TO ASTM C-478.
 2. CATCH BASIN SECTIONS TO BE TONGUE AND GROOVED.
 3. NON-SHRINKGROUT OR CEMENT TO BE USED ON ALL PENETRATIONS INSIDE AND OUTSIDE OF STRUCTURE.
 4. ALL PIPE PENETRATIONS TO BE CORED, RUBBER BOOTED AND INTERIOR GROUTED (NON-SHRINK) OR CEMENTED, ASTM C923 CONNECTORS IN COMBINED SEWER AREAS.

* ANCHOR EMBEDMENT SHALL BE 3\"/>

OUTLET CONTROL STRUCTURE (OCS-1) DETAIL

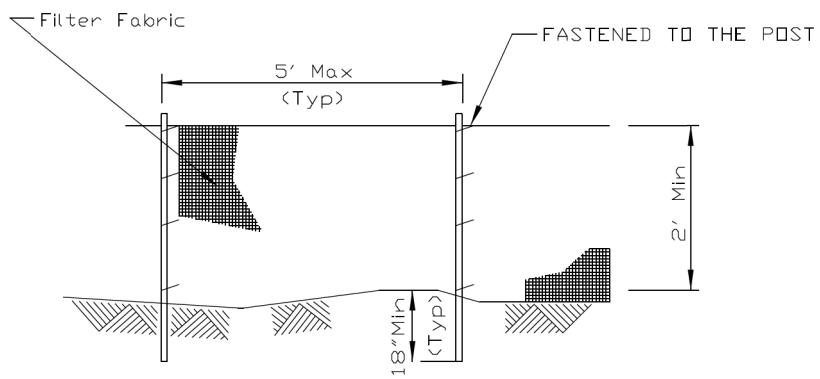
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Default	PLOT SCALE = 2'	CHECKED - SNS	REVISED -			SCALE: N.T.S.	SHEET 2 OF 4 SHEETS	STA. TO STA.	CONTRACT NO. 61K41		ILLINOIS FED. AID PROJECT
	PLOT DATE = 2/13/2024	DATE - 2/13/2024	REVISED -								

INLET PROTECTION - PAVED AREAS DROP-IN PROTECTION

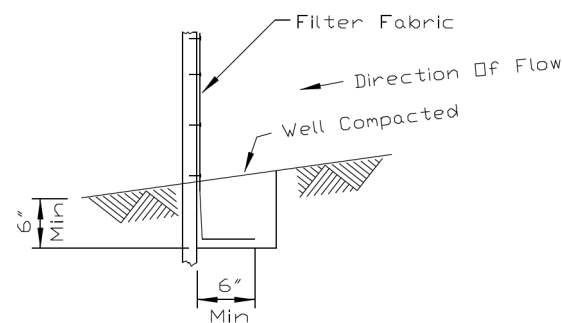


REFERENCE	STANDARD DWG. NO.
Project _____	IUM-561D
Designed _____ Date _____	SHEET 1 OF 1
Checked _____ Date _____	DATE 01-11-11
Approved _____ Date _____	

SILT FENCE PLAN



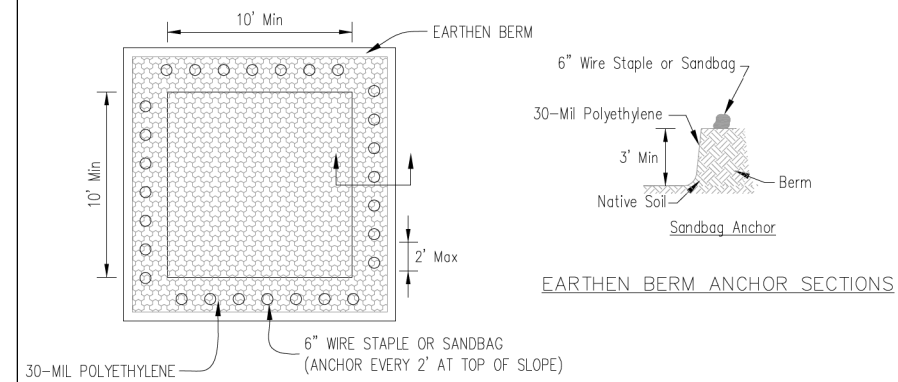
ELEVATION



FABRIC ANCHOR DETAIL

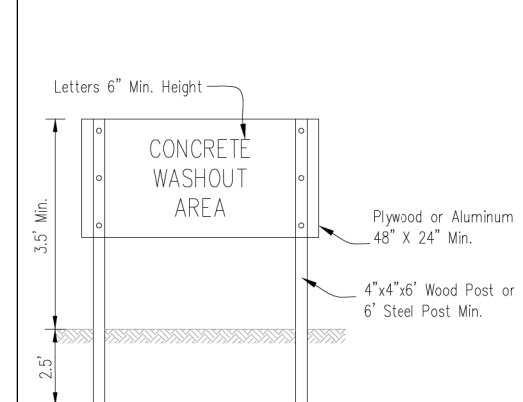
- NOTES:
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
 2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1, Class 2.
 3. Fence posts shall be either standard steel post or wood post 2" X 2" nominal.

REFERENCE	STANDARD DWG. NO.
Project _____	IUM-620A
Designed _____ Date _____	SHEET 1 OF 2
Checked _____ Date _____	DATE 04-15-2021
Approved _____ Date _____	

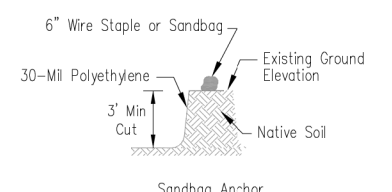


PLAN VIEW

EARTHEN BERM ANCHOR SECTIONS



SIGN DETAIL

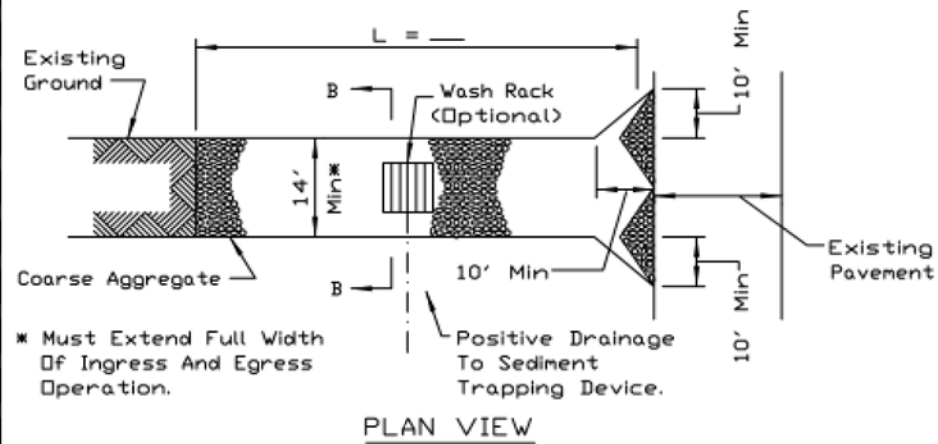


SUBGRADE ANCHOR SECTIONS

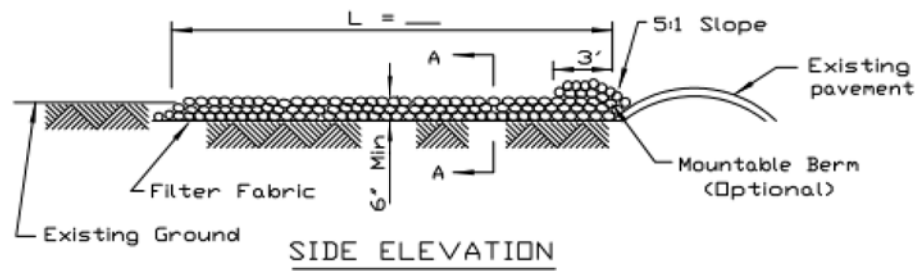
- NOTES:
1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
 2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

Project _____	Designed _____ Date _____	Checked _____ Date _____	Approved _____ Date _____
TEMPORARY CONCRETE WASHOUT FACILITY - EARTHEN TYPE			

STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW



SIDE ELEVATION

NOTES:

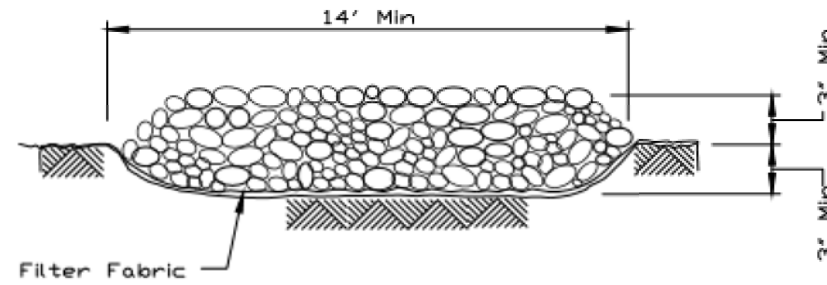
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____

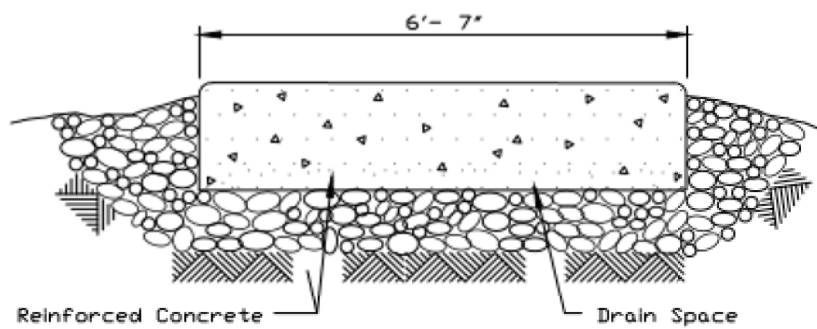


STANDARD DWG. NO.	IL-630
SHEET	1 OF 2
DATE	8-18-94

STABILIZED CONSTRUCTION ENTRANCE PLAN



SECTION A-A



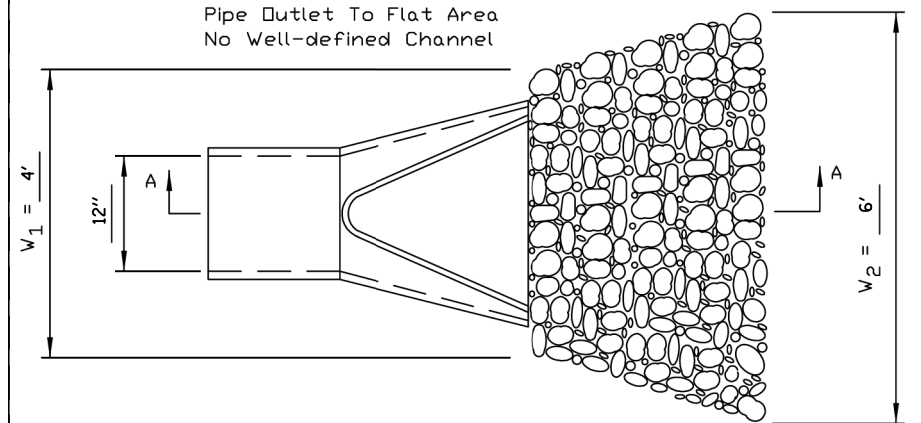
SECTION B-B

REFERENCE Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____

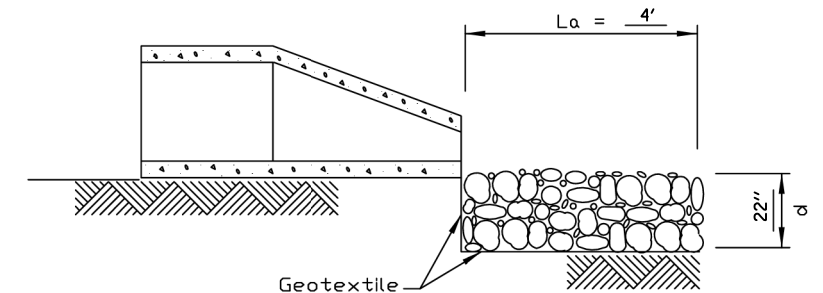


STANDARD DWG. NO.	IL-630
SHEET	2 OF 2
DATE	8-18-94

PIPE OUTLET TO FLAT AREA



PLAN



SECTION A-A

NOTES:

1. The filter fabric shall meet the requirements in material specifications 592 GEOTEXTILE Table 1 or 2, class I, II or III.
2. The rock riprap shall meet the IDOT requirements for the following gradation: RR 4, Quality A.
3. The riprap shall be placed according to construction specification 61 LOOSE ROCK RIPRAP. The rock may be equipment placed.

REFERENCE Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



STANDARD DWG. NO.	IL-610
SHEET	1 OF 1
DATE	9-15-93

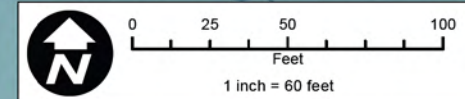
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
CONSTRUCTION DETAILS

SCALE: N.T.S. SHEET 4 OF 4 SHEETS STA. TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	24
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	



Legend

- Parcel Boundary (Total 82.36 Acres)
- Maintenance Area (0.31 acres)
- Development (1.26 acres)
- Grass (0.16 acres)
- Native Plantings (0.46 acres)
- Permeable Pavement (0.36 acres)
- Impervious Area (0.28 acres)
- Proposed Drainage Structure
- Proposed Underdrain
- Proposed Storm Sewer
- Zone A Floodplain

City of Palos Heights
Cal-Sag Trail Link & Parking Improvement Project

Total Ownership Area = 82.36 acres
Onsite Development Area = 1.26 acres
Non-Qualified Development Area = 0.31 acres
Onsite Undisturbed Area = 1.95 acres

PINs:
23-24-406-025-0000
23-24-406-026-0000
23-24-401-002-0000
23-24-300-120-0000

Stormwater Management Summary

Onsite Development Area = 1.26 acres
Onsite Non-Qualified Development Area (Maintenance/Demolition) = 0.31 acres
Proposed Impervious Area = 0.28 acres
Volume Control Required = 0.023 acre-feet
Volume Control Provided = 0.034 acre-feet
Detention Volume Required = 0.335 acre-feet
Detention Volume Provided = 0.575 acre-feet

Volume Control/Stormwater Detention Facility Summary

Basin Bottom = 597.00 ft, NAVD88
NWL = 598.00 ft, NAVD88
HWL = 601.5 ft, NAVD88
Volume Control Provided (below NWL) = 0.034 acre-feet
Detention Volume Provided @ HWL = 601.5 ft = 0.575 acre-feet
Allowable Release Rate = 0.30 cfs/acre = 0.38 cfs
Actual Release Rate @ HWL = 601.5 ft = 0.38 cfs
Outlet Control Structure = 2.60" Restrictor Plate @ 597.00 ft, NAVD88
Total Tributary Area to Facility = 1.45 acres
100-Year Peak Flowrate = 8.81 cfs
Emergency Overflow Weir = 128-ft Spillway @ 601.50 ft
Weir Capacity @ Top of Berm (602 ft) = 135.76 cfs



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
PROPOSED DRAINAGE EXHIBIT

SCALE: 1" = 60' SHEET 1 OF 1 SHEETS STA. TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	25
CONTRACT NO. 61K41				
ILLINOIS FED. AID PROJECT				

MAINTENANCE & MONITORING PLAN

The City of Palos Heights (Owner of the Cal-Sag Trail Link and Parking Improvement Development), with facilities as shown on this exhibit, shall assume responsibility for the following perpetual maintenance activities:

- 1. General**
 Regular inspections and routine maintenance of general areas shall be performed on a monthly or as-needed basis. Specific items of concern include:
- ___ Litter and debris shall be controlled
 - ___ Landscaped areas shall be maintained with regular mowing and restored with appropriate seeding/vegetation as necessary
 - ___ Accumulated sediment shall be disposed of properly, along with any wastes generated during maintenance operations
 - ___ Riprap areas shall be repaired with the addition of new riprap, as necessary, of similar size and shape
 - ___ Roads shall be swept, vacuumed and/or washed on a regular basis

- 2. Stormwater Management Facilities**
 All components of the stormwater management facilities shall be checked monthly between March and November and maintained as necessary to ensure proper performance. It is critical that all inflows and outflows to the detention facility are clean and performing as designed. In addition, the design volume of the detention facility shall also be maintained. Inspections for the following specific items should be conducted monthly between March and November:

- Side Slopes/Embankment/Emergency Overflow Structure**
- ___ Inspect embankments for settlement and erosion
 - ___ Remove woody growth from the embankment
 - ___ Any breaks, hire Registered Professional Engineer for design resolution
 - ___ Seed and sod any eroded areas
 - ___ Signs of piping (leakage), repair
 - ___ Signs of seepage or wet spots on the downstream face of a berm, may require toe drains or chimney drains to solve problems
 - ___ Stabilize emergency overflow structure if erosion observed
 - ___ Remove obstructions blocking emergency overflow spillway

- Vegetated Areas**
- ___ Regular mowing to control vegetation, no cutting of native vegetation
 - ___ Need for planting, reseeding or sodding. Supplement alternative native vegetation if a significant portion has not established (50% of the surface area). Reseed with alternative grass species if original grass cover has not successfully established.
 - ___ Evidence of grazing, motorbikes or other vehicles, repair
 - ___ Check for invasive vegetation, remove where possible
 - ___ All vegetation must be maintained per the approved planting plan

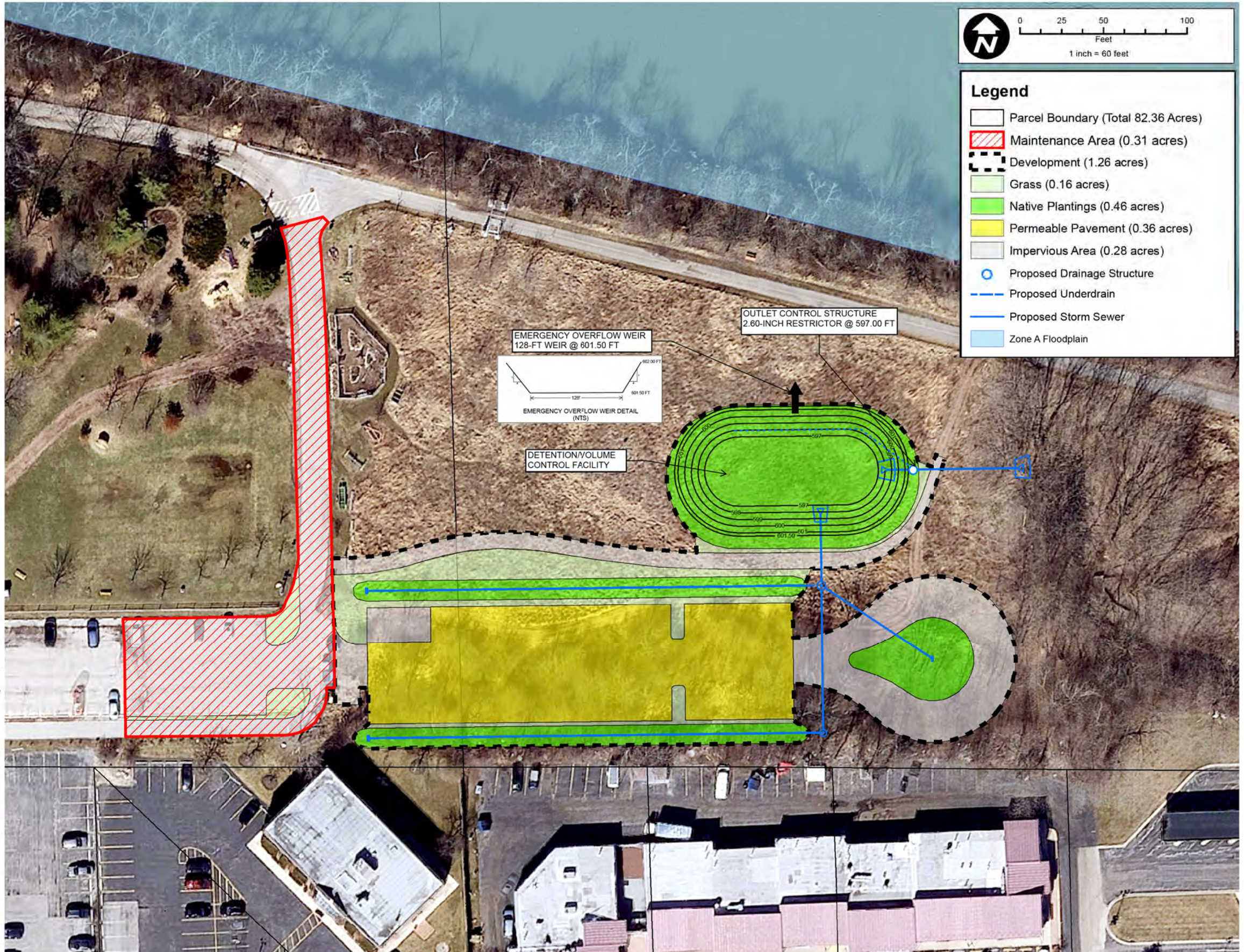
- Outlet Control Structure**
- ___ Inspect restrictor and remove debris if clogged or discharge reduced
 - ___ Remove accumulated sediment at outlet
 - ___ Scour and erosion at outlet, repair and reseed
 - ___ Any ice damage to outlet of pipe, repair if necessary
 - ___ Condition of trash tracks, remove debris
 - ___ Outlet channel conditions downstream

- Volume Control Facilities**
- ___ Routine inspection and maintenance of volume control facilities shall be performed by the Owner on a yearly or as-needed basis.
 - ___ Vegetation shall be monitored and maintained in accordance with the *Vegetated Areas* requirements listed under Item 2
 - ___ Accumulated sediment shall be removed and disposed of properly.

- 3. Stormwater Collection System**
 The Owner shall perform monthly inspections of all components of the stormwater collection system. The monthly inspection shall occur between March and November and include the following specific areas of concern:

- Storm Inlets/Manholes**
- ___ Remove accumulated leaves and other debris from grates
 - ___ Reset covers/lids on as-needed basis
 - ___ Remove accumulated sediment from bottom of manhole when 50% of sump is filled

- Storm Sewers/Culverts**
- ___ Visually inspect pipes by removing manhole lids, make repairs as necessary
 - ___ Storm sewers and culverts shall be checked for siltation deposits at inlets, outlets, and within the conduit, clean out as necessary
 - ___ Restore riprap at outfalls if erosion observed
 - ___ Restore riprap at outfalls
 - ___ Replant and reseed any eroded areas



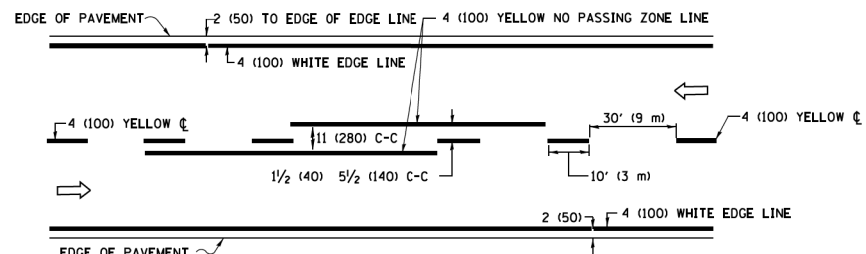
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

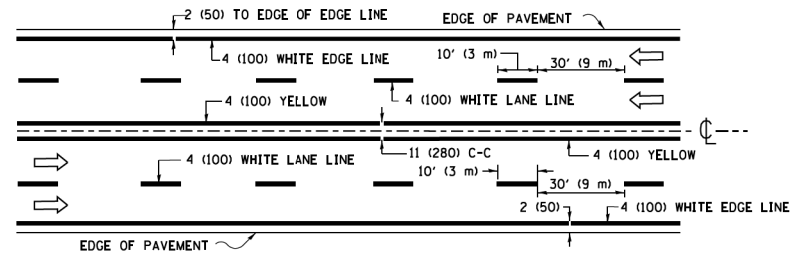
**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
 MAINTENANCE & MONITORING EXHIBIT**

SCALE: 1" = 60' SHEET 1 OF 1 SHEETS STA. TO STA.

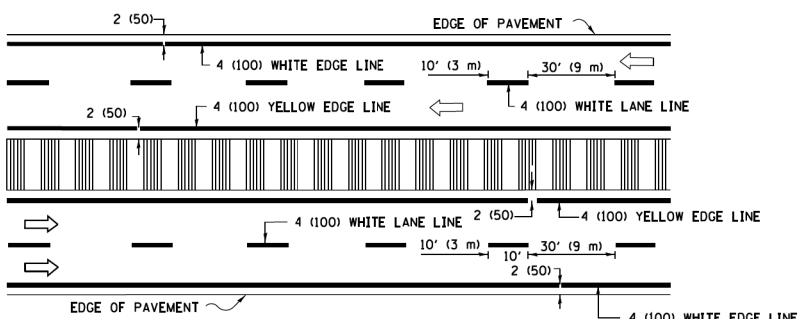
M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	26
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	



2-LANE ROADWAY

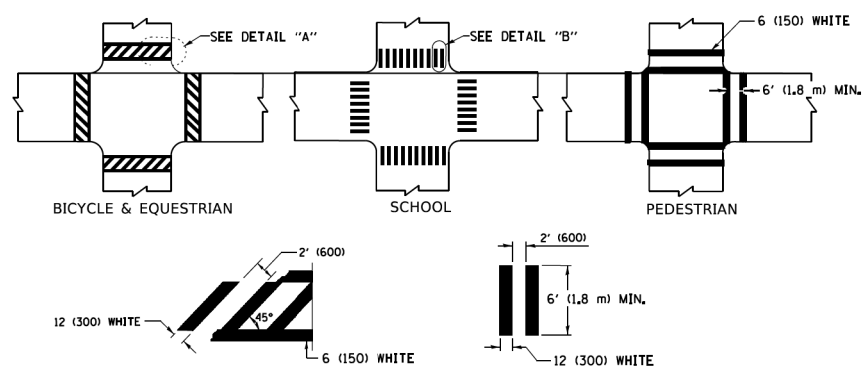


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

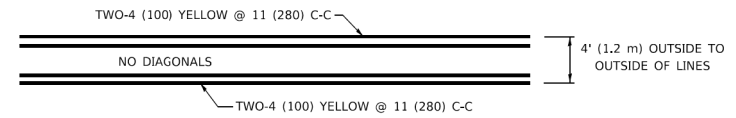


DETAIL "A"

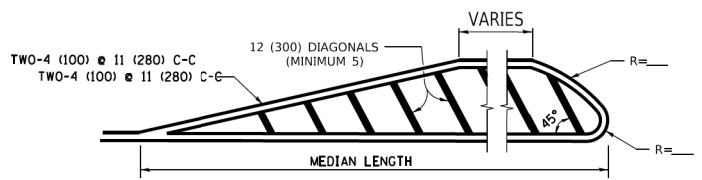
DETAIL "B"

TYPICAL CROSSWALK MARKING

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



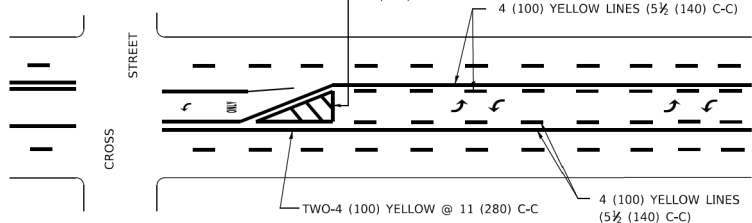
4' (1.2 m) WIDE MEDIANS ONLY



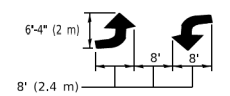
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

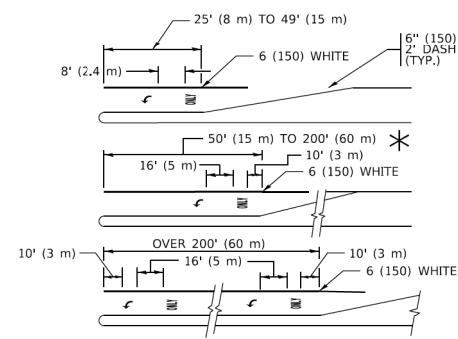


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

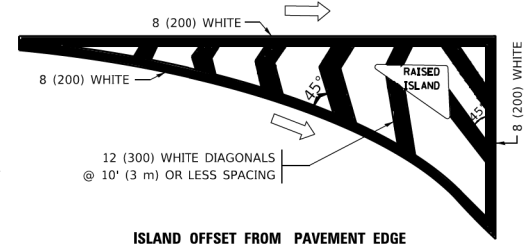


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

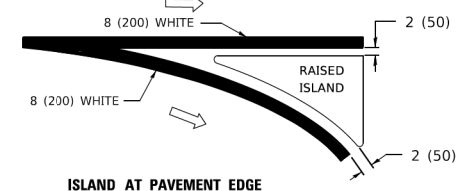
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

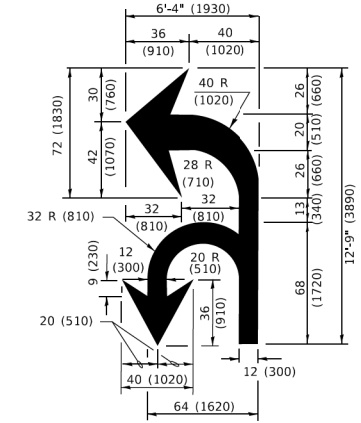


ISLAND OFFSET FROM PAVEMENT EDGE

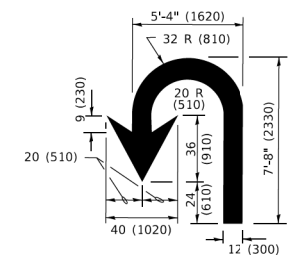


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

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

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (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.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" 15' 6" (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: *R*=3.6 SQ. FT. (0.33 m ²) EACH *X*=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

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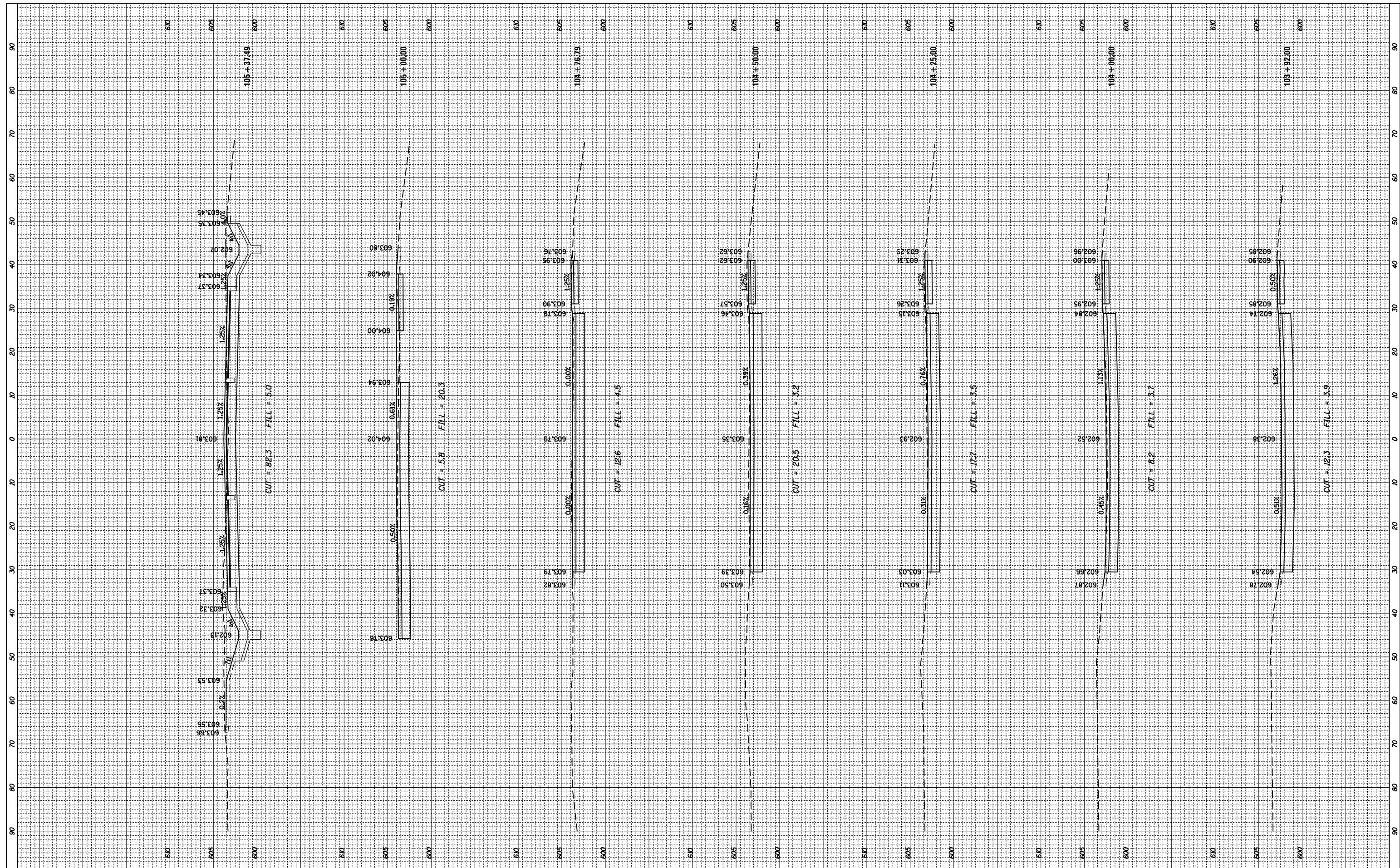
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE		M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		4312	19-00058-00-BT	COOK	32	27
SCALE: NONE		TC-13		CONTRACT NO. 61K41		
SHEET 1 OF 2 SHEETS		ILLINOIS		FED. AID PROJECT		

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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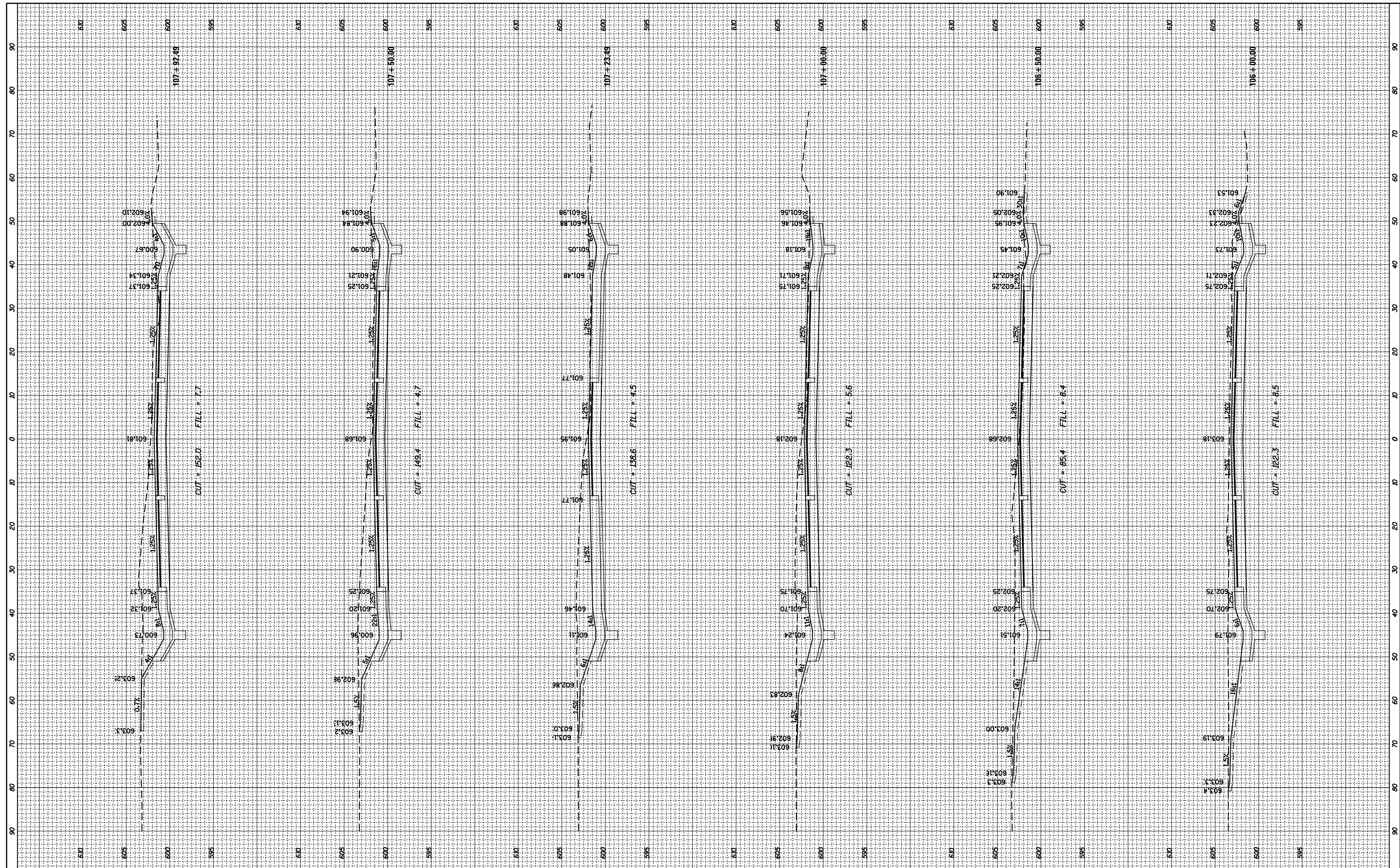
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
 CROSS SECTIONS - PERMEABLE PAVER PARKING LOT
 SCALE: 1"=10'H-5"V SHEET 1 OF 3 SHEETS STA. 103+92.00 TO STA. 105+37.49

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	28
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	

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

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



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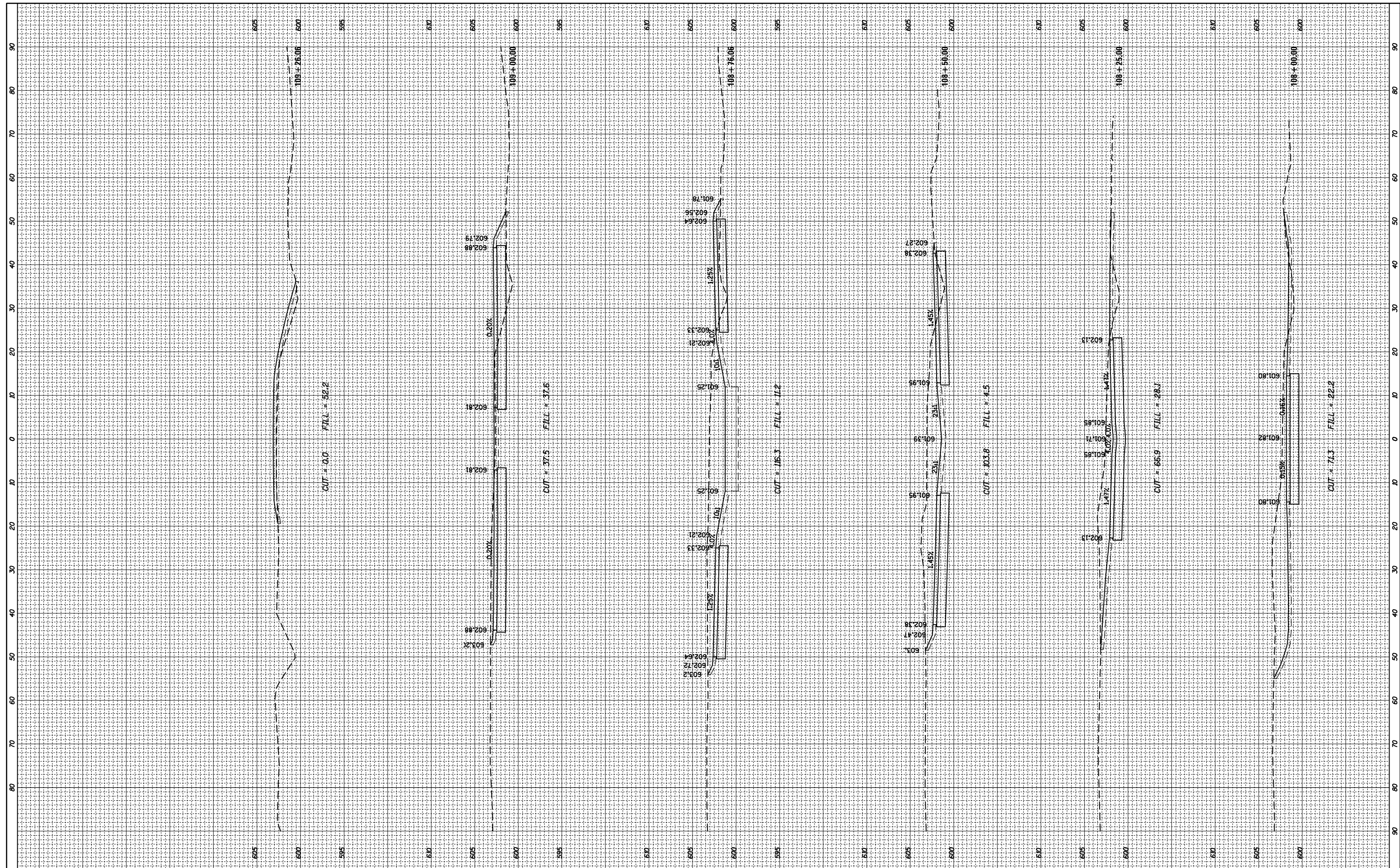
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
 CROSS SECTIONS - PERMEABLE PAVER PARKING LOT**
 SCALE: 1"=10'H-5'V SHEET 2 OF 3 SHEETS STA. 106+00.00 TO STA. 107+92.49

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	29
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	

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



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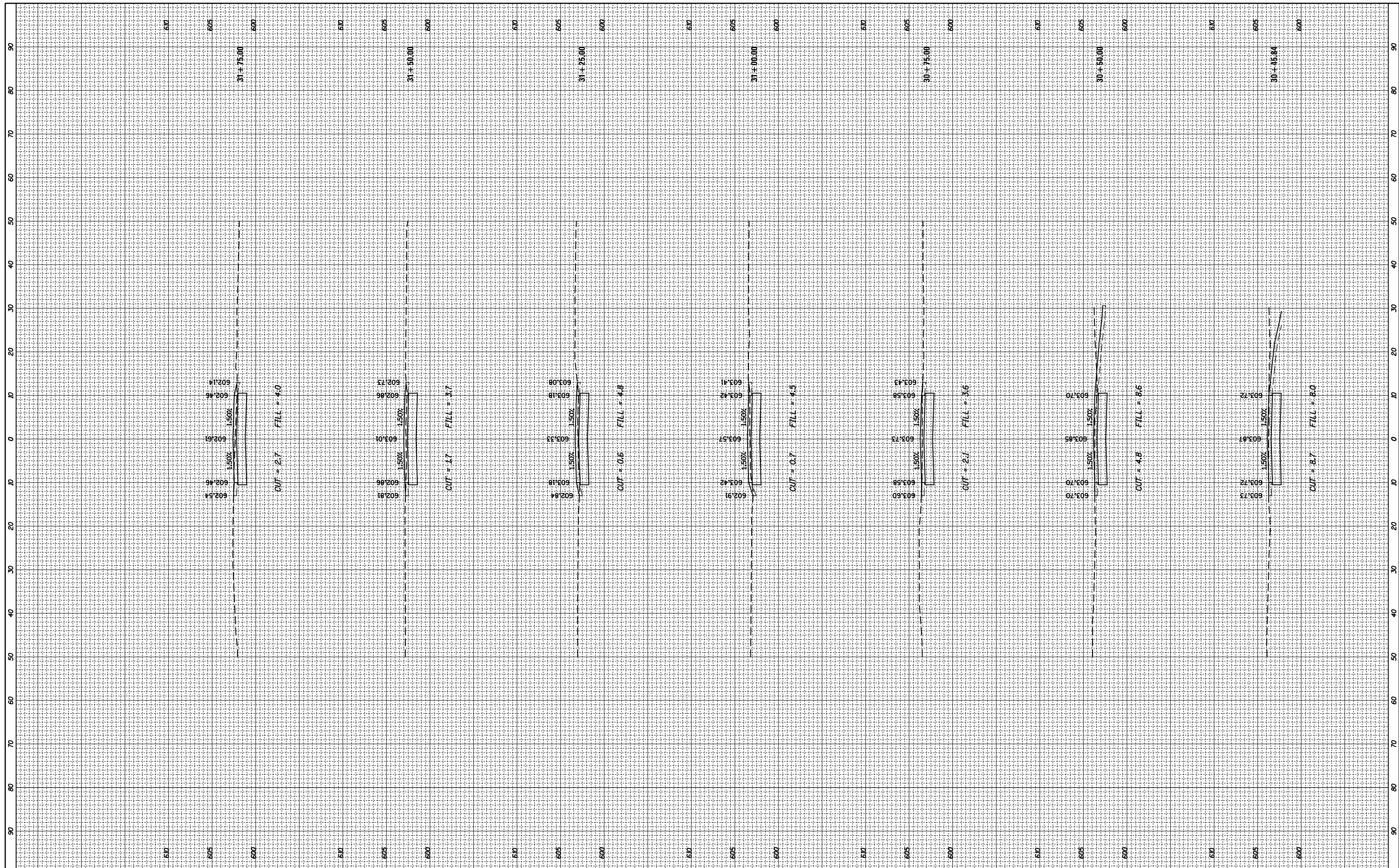
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
CROSS SECTIONS - PERMEABLE PAVER PARKING LOT**
 SCALE: 1"=10'H-5'V SHEET 3 OF 3 SHEETS STA. 108+00.00 TO STA. 109+50.00

M.U.N. RTE. 4312	SECTION 19-00058-00-BT	COUNTY COOK	TOTAL SHEETS 32	SHEET NO. 30
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	

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ORIGINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

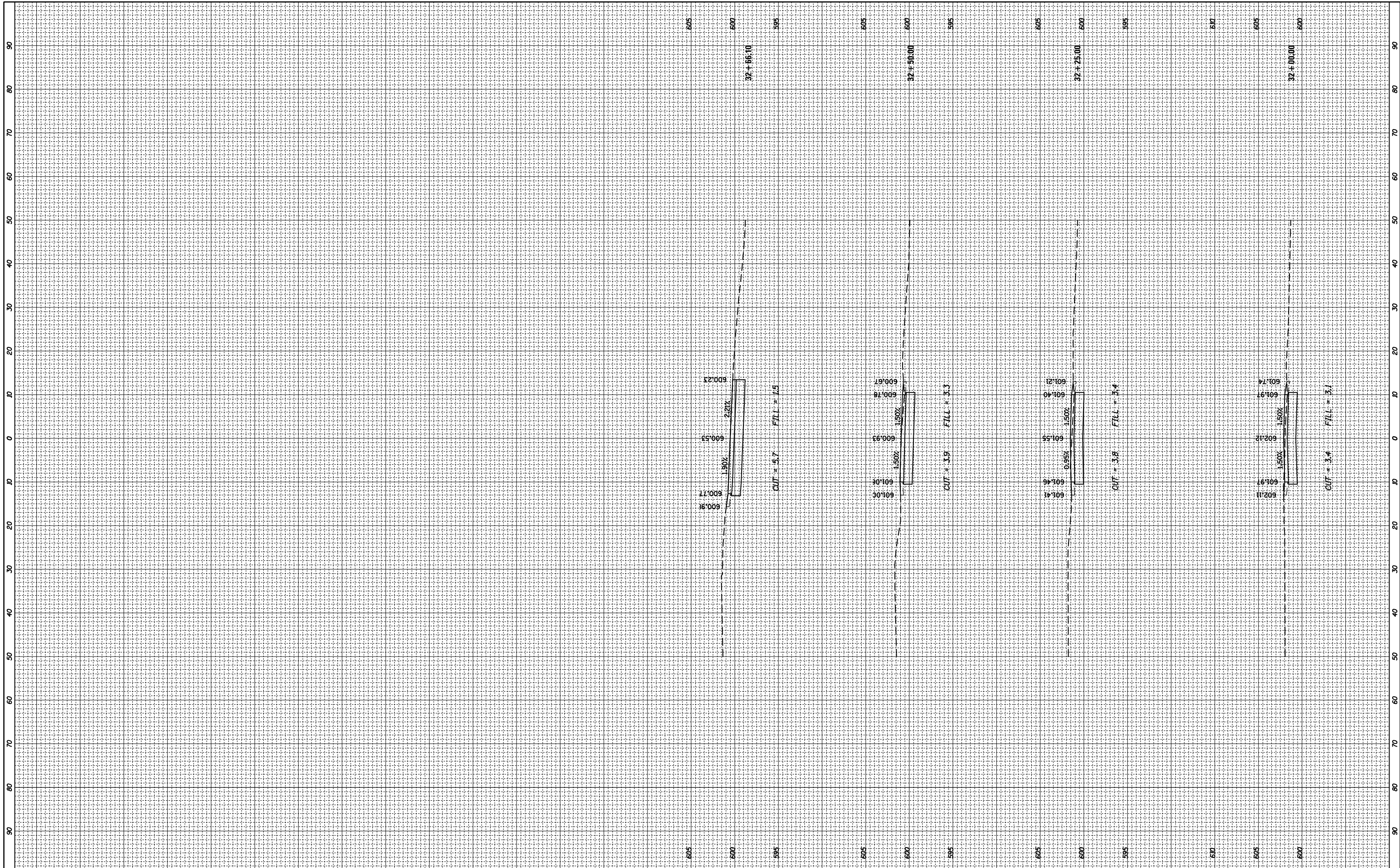
CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
 CROSS SECTIONS - CAL-SAG TRAIL LINK

SCALE: 1"=10'H-5'V SHEET 1 OF 2 SHEETS STA. 30+45.84 TO STA. 31+75.00

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	31
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	

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

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	TEMPLATE		
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 PLOT SCALE = 28'
 PLOT DATE = 2/13/2024

DESIGNED - NKHL	REVISOR -
DRAWN - NKHL	REVISOR -
CHECKED - SNS	REVISOR -
DATE - 2/13/2024	REVISOR -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CAL-SAG TRAIL LINK & TRAILHEAD PARKING IMPROVEMENT
CROSS SECTIONS - CAL-SAG TRAIL LINK**

SCALE: 1"=10'H-5'V SHEET 2 OF 2 SHEETS STA. 32+00.00 TO STA. 32+66.10

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4312	19-00058-00-BT	COOK	32	32
CONTRACT NO. 61K41			ILLINOIS FED. AID PROJECT	