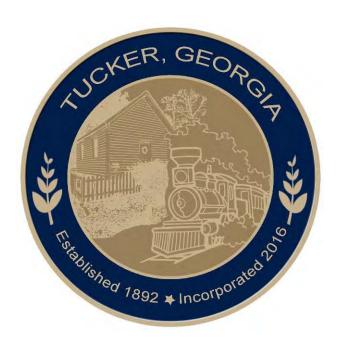
City of Tucker

Invitation to Bid ITB # 2024-013

HUGH HOWELL ROAD SIDEWALK CONSTRUCTION PROJECT



BID MANUAL

City of Tucker 1975 Lakeside Parkway, Suite 350 Tucker, Georgia 30084 **INVITATION**: The City of Tucker, Georgia requests that interested parties submit bids for the Hugh Howell Road Sidewalk Construction Project. Bids will be accepted until the date and time listed below and will be awarded to the responsive and responsible bidder whose bid, conforming with all the material terms and conditions of the ITB, is the lowest in price. Addenda and updates to this bid manual will be posted on the City of Tucker website http://tuckerga.gov/bids or may be requested by email procurement@tuckerga.gov.

BID ACTIVITY SCHEDULE						
Invitation to Bid Issued	May 7, 2024					
Pre-Bid Conference	N/A					
Deadline for Questions	May 21, 2024, at 4:00 p.m. (EST)					
Responses to Questions Posted (Addenda)	May 23, 2024					
Bid Deadline	June 6, 2024, at 4:00 p.m. (EST)					
Award at Council Meeting (Tentative)	June 26, 2024 (Tentative)					
Completion from Notice to Proceed	120 calendar days					

SCOPE OF WORK: Refer to Exhibit A.

QUESTIONS: Submit all questions in writing to <u>procurement@tuckerga.gov</u> with the subject line "Questions: ITB #2024-013".

PRE-BID CONFERENCE: A pre-bid conference will not be scheduled for this project.

ADDENDA: Responses to the questions received will be by addenda and will be posted on the City website www.tuckerga.gov/bids. The signed acknowledgement issued with each addendum must be submitted with the proposal. It is the vendors responsibility to verify if any addenda were created.

SUBMITTAL REQUIREMENTS: Vendor shall submit ITB Response no later than June 6, 2024 at 4:00 p.m. electronically to <u>procurement@tuckerga.gov</u> with the subject line "Submittal: ITB #2024-013". The email must contain the vendor's contact information. Bid Submittal should be one PDF file and named <Company Name>.ITB 2024-013.Bid Submittal.pdf

BID TABULATON: Preliminary Bid results will be posted on the City's website, http://tuckerga.gov/bids following the bid deadline.

BID DOCUMENT SUBMITTAL REQUIREMENTS:

- 1. Unit Price Bid Proposal Form Exhibit B (Provided)
- 2. W-9 Form (Provided)
- 3. Certificate of Insurance
- 4. Contractor Affidavit (Provided)
- 5. Subcontractor Affidavit (Provided)
- 6. Proposed List of Subcontractors
- 7. Bid Bond Form (Provided)
- 8. Related Experience and References
- 9. Contact Form (Provided)
- 10. Acknowledgement of Addendum issued with each Addendum.

All responses must be received electronically by the Bid Deadline. (Addenda will show any schedule updates). No bids will be received orally or by phone. Late bids will not be considered. Bids received after the deadline will be filed unopened. The City of Tucker reserves the right to reject any and all bids or any part, to waive any formalities to make an award and to re-advertise in the best interest of the City.

The city reserves the right to negotiate pricing and may, in its discretion, award a contract to the lowest responsible and responsive bidder submitting the proposal.

EXHIBIT A:

PURPOSE, INTENT AND PROJECT DESCRIPTION

The City of Tucker (City), requests that interested parties submit formal electronic bids for the construction of the Hugh Howell Road Sidewalk Project.

A sidewalk is to be constructed on the north side of Hugh Howell Road from Lawrenceville Highway to Mountain Industrial Boulevard (approx. 0.59 miles). Improvements include the construction of sidewalk and trail, minor repairs to curb and gutter, and pavement markings. This document in its entirety for ITB 2024-013 is available for download on the City of Tucker website: http://tuckerga.gov/bids or request via email to procurement@tuckerga.gov. All future communications and supporting documents for ITB 2024-013 will be posted on the website.

GENERAL CONDITIONS

The contractor shall execute the work according to and meet the requirements of the following:

- Georgia Department of Transportation (GDOT) Specifications, Standards, and Details;
- The Contract Documents including but not limited to the scope of work, plans, and specifications;
- City of Tucker ordinances and regulations;
- OSHA standards and guidelines
- MUTCD Guidelines
- Any other applicable codes, laws and regulations including but not limited to Section 45-10-20 through 45-10-28 of the Official Code of Georgia Annotated, Title VI of the Civil Rights Act, Drug-Free Workplace Act, and all applicable requirements of the Americans with Disabilities Act of 1990.

The contractor will be responsible for providing all labor, materials, and equipment necessary to perform the work. This is a unit price bid. Payment will be made based on actual work completed.

The contractor is responsible for inspecting the jobsite prior to submitting a bid. No change orders will be issued for differing site conditions.

Materials must come from GDOT approved sources. The contractor will be required to submit in writing a list of proposed sources of materials. When required representative samples will be taken for examination and testing prior to approval. The materials used in the work shall meet all quality requirements of the contract. Materials will not be considered as finally accepted until all tests, including any to be taken from the finished work have been completed and evaluated. Standard Specification 106 – Control of Materials will be used as a guide. All materials will be tested according to the GDOT Sampling, Testing, and Inspection Manual by an approved consultant/lab hired by the City.

The successful bidder must have verifiable experience at construction of similar projects in accordance with these specifications. Bidder shall provide at least three examples and reference information (including company name, project name, contact name, phone number and email address) demonstrating experience successfully completing projects of similar scope.

10% retainage will be withheld from the total amount due the contractor until Final Acceptance of

work is issued by the City. The City will inspect the work as it progresses.

PROSECUTION AND PROGRESS

The Contractor will mobilize with sufficient forces such that all construction identified as part of this contract shall be substantially completed within 120 days of Notice to Proceed. The contractor will be considered substantially complete when all work required by this contract has been completed (excluding final punch list work).

Upon Notice of Award, the Contractor will be required to submit a Progress Schedule.

Normal workday for this project shall be 7:00AM to 7:00PM and the normal workweek shall be Monday through Friday. Lane closures on Hugh Howell Road are limited to the hours of 9:00AM to 4:00PM. The City will consider extended workdays or workweeks upon written request by the Contractor on a case-by-case basis. No work will be allowed on national holidays (i.e. Memorial Day, July 4th, Labor Day, etc.).

The work will require bidder to provide all labor, administrative forces, equipment, materials and other incidental items to complete all required work. The City shall perform a Final Inspection upon substantial completion of the work. The contractor will be allowed to participate in the Final Inspection. All repairs shall be completed by the contractor at contractor's expense prior to issuance of Final Acceptance.

A one (1) year maintenance bond will be required. The selected contractor will be responsible for the maintenance of materials for one (1) year including watering and replacement of dead materials. The City will conduct an inspection at the end of the warranty period. The contractor will complete any Punch List work within 45 calendar days.

The contractor shall be assessed liquidated damages in the amount of \$200.00 per calendar day for any contract work (excluding punch list items) that is not completed within 120 days of Notice to Proceed. Liquidated damages shall be deducted from the 10% retainage held by the City. The contractor will also be assessed liquidated damages in the amount of \$200.00 per calendar day for not completing any required Punch List work within 45 calendar days.

The contractor shall provide all material, labor, and equipment necessary to perform the work without delay until final completion.

The contractor shall provide a project progress schedule prior to or at the preconstruction meeting. This schedule should accurately represent the intended work and cannot be vague or broad such as listing every road in the contract.

The contractor shall submit a two-week advance schedule every **Friday by 2:00p.m**, detailing scheduled activities for the following week.

PERMITS AND LICENSES

The contractor shall procure all permits and licenses, pay all charges, taxes and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work.

BONDING AND INSURANCE REQUIREMENTS

No bid may be withdrawn for a period of forty-five (45) days after the time has been called on the date of opening.

All bids must be accompanied by a Bid Bond of a reputable bonding company authorized to do business in the State of Georgia, in an amount equal to at least five percent (5%) of the total amount of the bid.

Upon Notice of Award, the successful contractor shall submit a Performance Bond pursuant to O.C.G.A. § 36-91-70 payable to the City of Tucker in the amount of 100% of the total contract price. The successful contractor shall also submit a Payment Bond in the amount of 100% pursuant to O.C.G.A. § 36-91-90.

Upon Notice of Award, the successful contractor shall procure and maintain a General Liability Insurance Policy with minimum limits of \$1,000,000 per person and \$3,000,000 per occurrence.

MATERIALS

The materials used in the work shall meet all quality requirements of the contract. All materials will meet appropriate GDOT specifications. Materials quality control test types will meet GDOT specifications at a frequency equal to or exceeding that set by those specifications. Contractor will be responsible for replacing any work performed with material from rejected sample lot at no cost to the City.

PUBLIC NOTIFICATION

The contractor shall be responsible for installing variable message signs at each end of the project one week prior to commencement of work requiring lane closure. Payment for this will be included in the item for Traffic Control. The contractor shall be responsible for installing lane closure and construction signage per MUTCD guidelines. Payment for this will be included in the item for Traffic Control. Properties requiring driveway closures be notified no less than one week prior to said closures.

EXISTING CONDITIONS / DEVIATION OF QUANTITIES

All information given in this ITB concerning quantities, scope of work, existing conditions, etc. is for information purposes only. It is the Contractor's responsibility to inspect the project site to verify existing conditions and quantities prior to submitting their bid. This is a Unit Price bid and no payment will be made for additional work without prior written approval from the City. At no time will Contractor proceed with work outside the prescribed scope of services for which additional payment will be requested without the written authorization of the City.

The City reserves the right to add, modify, or delete quantities. The City may also elect to add or eliminate certain work locations at its discretion. The Contractor will not be entitled to any adjustment of unit prices or any other form of additional compensation because of adjustments made to quantities and/or work locations. Contractor will be paid for actual in-place quantities completed and accepted for pay items listed in the Bid Schedule. All other work required by this ITB, plans, specs, standards, etc. but not specifically listed in the Bid Schedule shall be considered "incidental work" and included in the bid prices for items on the Bid Schedule.

TRAFFIC CONTROL

The contractor shall, at all times, conduct their work so as to assure the least possible obstruction of traffic. The safety and convenience of the general public and the residents along the roadway and the protection of persons and property shall be provided for by the contractor as specified in the State of Georgia, Department of Transportation Standard Specifications Sections 104.05, 107.09, and 150.

Traffic whose origin and destination is within the limits of the project shall be provided ingress and egress at all times unless otherwise specified by the City. The ingress and egress includes entrances and exits via driveways at various properties, and access to the intersecting roads and streets. The contractor shall maintain sufficient personnel and equipment (including flaggers and traffic control signing) on the project at all times, particularly during inclement weather, to ensure that ingress and egress are safely provided when and where needed.

Two-way traffic shall be maintained at all times, unless otherwise specified or approved by the City. In the event of an emergency situation, the Contractor shall provide access to emergency vehicles and/or emergency personnel through or around the construction area. Any pavement damaged by such an occurrence will be repaired by the Contractor at no additional cost to the City.

The contractor shall furnish, install and maintain all necessary and required barricades, signs and other traffic control devices in accordance with the MUTCD and DOT specifications, and take all necessary precautions for the protection of the workers and safety of the public.

All existing signs, markers and other traffic control devices removed or damaged during construction operations will be reinstalled or replaced at the contractor's expense, except as otherwise called for in the plans. At no time will contractor remove regulatory signing which may cause a hazard to the public.

PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

The contractor shall be responsible for the preservation of all public and private property, crops, fish ponds, trees, monuments, highway signs and markers, fences, grassed and sodded areas, etc. along and adjacent to the highway, road or street, and shall use every precaution necessary to prevent damage or injury thereto, unless the removal, alteration, or destruction of such property is provided for under the contract.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect or misconduct in the execution of the work, or in consequence of the non-execution thereof by the contractor, he shall restore, at his/her own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding or otherwise restoring as may be directed, or she/he shall make good such damage or injury in an acceptable manner. The contractor shall correct all disturbed areas before retainage will be released.

ADJUSTING UTILITY STRUCTURES TO GRADE

All sewer manholes and water valves are to be adjusted by the DeKalb County Department of Watershed Management. The contractor shall coordinate required utility adjustments with the CEI Consultant.

THERMOPLASTIC PAVEMENT MARKINGS

This work shall include Thermoplastic Pavement Markings. Final pavement markings shall match the signing & marking plans including center lines, lane lines, turn arrows, crosswalks, stop bars, etc. unless specifically directed otherwise by the City. Final pedestrian crosswalk markings shall adhere to the latest standards. Pavement marking materials shall meet GDOT standard specifications and be on the qualified products list. Temporary pavement markings, where required, shall be included in the pay item for thermoplastic pavement markings. There is no separate pay item for temporary pavement markings.

CLEANUP

All restoration and clean-up work shall be performed daily. Operations shall be suspended if the contractor fails to accomplish restoration and clean-up within an acceptable period of time. Asphalt and other debris shall be removed from gutters, sidewalks, yards, driveways, etc. Failure to perform clean-up activities may result in suspension of the work.

SAFETY

Beginning with mobilization and ending with acceptance of work, the contractor shall be responsible for providing a clean and safe work environment at the project site. The contractor shall comply with all OSHA regulations as they pertain to this project.

SPECIAL CONDITIONS

- 1. Remove and properly dispose of all demolished asphalt and concrete.
- 2. All disturbed or damaged grassing and landscaping on backside of sidewalk is to match surrounding conditions. Cost to be included in the "GRADING COMPLETE" bid item.
- 3. All grass strips between back of curb and front of sidewalk shall be Sod.
- 4. All cost for landscaping removal and demo of existing pavement/curb & gutter for the project is to be included in the "GRADING COMPLETE" quantity for the project.
- 5. For all utilities that can't be adjusted by the contractor, coordination shall be conducted with the proper utility company.
- 6. Contractor shall be required to meet all GDOT lane closure requirements. Signage and all other forms of traffic control shall be included in the "TRAFFIC CONTROL" quantity for the project.
- 7. For all driveway aprons that require modification, ensure there is proper drainage toward the curb & gutter line.
- 8. Minor clearing at the northeast corner of E Ponce de Leon Avenue and Idlewood Road to improve sight distance.
- 9. Yellow ADA detectable warning surfaces should be included in "CONC SIDEWALK, 8 IN" for all ADA ramp construction.
- 10. Handrail shall be powder-coated black.

SUBCONTRACTOR

Any contractor utilizing a subcontractor must submit a proposed list of subcontractors and a Subcontractor Affidavit (form provided).

Exhibit B: Cost Proposal

<u>Item No.</u>	EXHIBIT B: COS	<u>Unit</u>	Quantity	<u>Unit Price</u>	<u>Amount</u>		
	Startup and Temporary Cost						
150-1000	TRAFFIC CONTROL	LS	1				
210-0100	GRADING COMPLETE	LS	1				
	Roadwa	У					
441-6222	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	LF	330				
310-1101	GR AGGR BASE CRS, INCL MATL	TN	61				
402-3130	RECYLED ASPH CONC 12.5 MM SUPERPAVE	TN	3				
441-0104	CONC SIDEWALK, 4 IN	SY	1722				
441-0108	CONC SIDEWALK, 8 IN	SY	197				
441-0018	DRIVEWAY CONCRETE, 8 IN TK	SY	65				
500-3201	CLASS B CONCRETE, RETAINING WALL (Gravity Wall)	CY	95				
500-9999	CLASS B CONCRETE, BASE OR PAVEMENT WIDENING	СТ	6				
515-2020	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND	LF	455				
	Drainage	•					
611-8000	ADJUST CATCH BASIN TO GRADE	EA	5				
668-1105	CATCH BASIN, GP 1, SPEC DESIGN(SEE 38-0001)	EA	1				
	Signing & Ma	rking					
653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	LF	2050				
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	LF	90				
610-9001	REM SIGN	EA	17				
611-5551	RESET SIGN	EA	17				
	Erosion Cor	itrol					
163-0232	TEMPORARY GRASSING	AC	1				
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	5				
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	EA	5				
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	2600				
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	1300				
603-2181	STN DUMPED RIP RAP, TP 3, 18 IN	SY	3				
700-9300	SOD	SY	1700				
				Total Cost:			

Company Name:		
Address:		
Contact Person:		
Phone Number:		
Email Address:		
Signature:		

^{*}In case of discrepancy between the unit price and the total price on the completed Bid Schedule, the unit price will prevail, and the total price will be corrected.

NET LENGTH OF EXCEPTIONS GROSS LENGTH OF PROJECT

SAME ARE SHOWN AS INFORMATION ONLY. ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO

SUBSECTIONS 102.04,102.05, AND 104.03 OF THE SPECIFICATIONS.

(678) 417-4000

keckwood.com

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	06-0001	QUANTITIES						
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GENERAL NOTES:

- ALL WORK TO BE DONE IN ACCORDANCE WITH THE CURRENT GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) STANDARD DETAILS AND THE GDOT STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF TRANSPORTATION SYSTEMS, LATEST EDITION, AND SUPPLEMENTS THERETO, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON THE PLANS AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. UTILITY FACILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY UNDER THIS REQUIREMENT EXCEPT AS NOTED BELOW. 'EXISTING UTILITY FACILITIES' MEANS ANY UTILITY THAT EXISTS ON THE PROJECT IN ITS ORIGINAL, RELOCATED, OR NEWLY INSTALLED POSITION. THE CONTRACTOR WILL NOT BE HELD RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGED UTILITY FACILITIES OTHER THAN SERVICE FROM STREET MAINS TO ABUTTING PROPERTY. WHEN SUCH FACILITIES ARE NOT SHOWN ON THE PLANS AND THEIR EXISTENCE IS UNKNOWN TO THE CONTRACTOR PRIOR TO THE DAMAGES OCCURING, PROVIDED THE ENGINEER DETERMINES THE CONTRACTOR HAS OTHERWISE FULLY COMPLIED WITH THE SPECIFICATIONS. ALL UTILITY FACILITIES WHICH ARE IN CONFLICT WITH CONSTRUCTION AND ARE NOT COVERED AS SPECIFIC ITEMS IN THE DETAILED ESTIMATE ARE TO BE REMOVED OR RELOCATED TO CLEAR CONSTRUCTION IN ADVANCE OF THE WORK
- UTILITY WORK COORDINATION WILL BE REQUIRED AS PART OF THIS CONTRACT. THE CONTRACTOR WILL BE REQUIRED TO USE 3. THE ONE-CALL CENTER TELEPHONE NUMBER, 811, FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES. THE CONTRACTOR'S ATTENTION IS CALLED TO SUBSECTION 105.06 OF THE GDOT STANDARD SPECIFICATIONS
- ALL UNDERGROUND UTILITIES ARE TO BE LOCATED BY THE UTILITY OWNER OR A 'LOCATE' FIRM PRIOR TO EARTH DISTURBING ACTIVITIES
- THE CONTRACTOR SHALL STRICTLY ADHERE TO DUST CONTROL REGULATIONS. ALL AREAS SUBJECTED TO DUST FORMATION MUST BE PERIODICALLY WATERED SUFFICIENT TO RETARD DUST. ALL COSTS FOR DUST CONTROL SHALL BE INCLUDED IN PRICE BID FOR GRADING COMPLETE - LUMP SUM.
- TYPE OF GRASS OR SOD USED ON THIS PROJECT WILL BE REQUIRED TO MATCH ANY TYPE OF GRASS OR SOD WHICH MAY BE PLANTED AND GROWING ON THE ADJACENT LAWN. I.E. BERMUDA SOD FOR BERMUDA SOD, ZOYSIA FOR ZOYSIA ETC. NO SEPERATE PAYMENT WILL BE MADE FOR ANY COST INCURRED TO COMPLY WITH THIS REQUIREMENT.
- INGRESS AND EGRESS SHALL BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES. REFER TO SUB-SECTION 107.07 OF THE GDOT STANDARD SPECIFICATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH SUITABLE BORROW MATERIAL FOR THE PROJECT AND DISPOSE OF ANY UNSUITABLE OR WASTE MATERIAL.
- HORIZONTAL CONTROL IS BASED UPON GEORGIA STATE PLANE COORDINATION SYSTEM.
- ALL DRIVEWAYS THAT ARE TO BE RECONSTRUCTED WILL BE PAVED BACK TO THE TIEIN POINT OR REQUIRED RIGHT OF WAY. WHICHEVER IS GREATER. ALL DRIVEWAYS OVER 11X IN GRADE SHALL BE PAVED WITH CONCRETE. ALL OTHER DRIVEWAYS
 SHALL BE REPLACED AS FOLLOWS: ASPHALT FOR ASPHALT, CONCRETE FOR CONCRETE AND ASPHALT FOR EARTH/GRAVEL DRIVES.
 RESIDENTIAL DRIVES SHALL BE 14 FEET WIDE AT THE THROAT UNLESS NOTED OTHERWISE IN THE PLANS. COMMERCIAL DRIVES SHALL BE 24 FEET WIDE UNLESS NOTED OTHERWISE IN THE PLANS. EXISTING DRIVEWAY LOCATIONS ARE SHOWN FROM THE BEST AVAILABLE DATA; THE CONTRACTOR SHALL CONSTRUCT DRIVEWAYS TO MATCH THE LOCATION OF EXISTING DRIVEWAYS AT THE TIE IN POINT, IF APPLICABLE. THE CONTRACTOR SHALL OBTAIN THE APPROVAL FROM THE ENGINEER PRIOR TO MAKING ANY REVISIONS TO LOCATION, WIDTH, AND/OR NUMBER OF DRIVES TO BE CONSTRUCTED. DRIVES SHALL BE CONSTRUCTED USING:

RESIDENTIAL:

RECYCLED ASPH CONC 12.5mm SUPERPAVE, GP 2 ONLY, INCL. BITUM MATL & H. LIME (165 LB/SY) ASPHALT -

GRADED AGGREGATE BASE, 6° CONCRETE DRIVEWAY CONCRETE, 6" THICK

COMMERCIAL:

ASPHALT -

RECYCLED ASPH CONC 12.5mm SUPERPAVE, GP 2 ONLY, INCL. BITUM MATL & H. LIME (165 LB/SY)

RECYCLED ASPH CONC 19mm SUPERPAVE, GP 1 OR 2, INCL. BITUM MATL & H. LIME (220 LB/SY)

GRADED AGGREGATE RASE, 6°

CONCRETE DRIVEWAY CONCRETE, 8° THICK

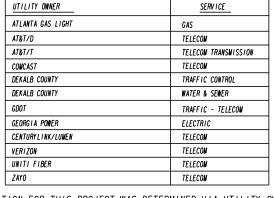
- THE CONTRACTOR SHALL OBSERVE ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS REGARDING PIPE INSTALLATION IN TRENCHES.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLES 104.05 AND 107.07 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND SEQUENCE OF OPERATIONS IN REGARDS TO MAINTENANCE OF
- ALL TEMPORARY SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES'. CURRENT EDITION AND/OR AS DIRECTED BY THE ENGINEER.
- ALL CUT AND FILL SLOPES SHALL BE GRASSED AS DIRECTED BY THE ENGINEER IMMEDIATELY AFTER THE SLOPES ARE ESTABLISHED IN ORDER TO REDUCE EROSION, IF THE SEASON DOES NOT PERMIT GRASSING, TEMPORARY MULCH SHALL BE USED AS DIRECTED BY THE ENGINEER. REFER TO SECTION 161 OF THE STANDARD SPECIFICATIONS.

- 15. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND DISTURBANCE ACTIVITIES AND SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION OR AS DIRECTED BY THE ENGINEER.
- ALL SILT FENCES MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING, NO GRADING SHALL BE DONE UNTIL SILT FENCE INSTALLATION IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL SILT FENCES AND TO REPAIR OR REPLACE ANY SILT FENCE THAT IS NOT SATISFACTORY. EROSION CONTROL GATES SHALL BE PLACED IMMEDIATELY AFTER DRAINAGE STRUCTURES ARE IN PLACE. ALL EROSION CONTROL DEVICES SHALL BE PLACED ACCORDING TO THE PLANS AND AS DIRECTED BY THE ENGINEER. SEE THE GEORGIA STANDARD SPECIFICATIONS AND THE *MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". CURRENT EDITION REGARDING EROSION CONTROL.
- CONTRACTOR TO ADJUST ALL UTILITIES TO FINISHED GRADE UNLESS NOTED OTHERWISE, INCLUDING SANITARY SEWER MANHOLES, WATER METERS, WATER VALVES, GAS METERS, GAS VALVES.
- ANY ADJUSTMENTS OR REJOCATIONS OF DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT SHALL BE IN ACCORDANCE WITH THE DEPARTMENT'S DESIGN AND CONSTRUCTION STANDARDS MANUAL
- CONTRACTOR TO CONFIRM LOCATIONS OF ALL UTILITIES AND INFORM ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
- THE USE OF PRECAST STRUCTURES FOR STORM SEWER IMPROVEMENTS WILL BE DONE SO AT THE CONTRACTOR'S RISK. NO *UTILITY LOCATION FOR THIS PROJECT WAS DETERMINED VIA UTILITY OWNER MARK-UPS. ADDITIONAL PAYMENT WILL BE MADE FOR A REPLACEMENT STRUCTURE DUE TO UTILITY CONFLICTS.
- 21. ALL ADA WHEELCHAIR RAMPS WITHIN RADII SHALL BE 8 INCH THICK CONCRETE.
- 22. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND LOCATING ALL EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT LIMITS (IF APPLICABLE). NO ADDITIONAL PAYMENT WILL BE MADE FOR REMOVING, RELOCATING, OR REPLACING IRRIGATION
- THE CONTRACTOR SHALL ENSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. SLOPE STABILIZATION (MATTING) SHALL BE PLACED ON CUT AND FILL SLOPES THAT ARE 2.5:1 OR GRF ATFR.
- 24. AT LOCATIONS WHERE NEW PAVEMENT IS TO BE PLACED ADJACENT TO EXISTING PAVEMENT WITHOUT AN OVERLAY OR WHERE CURBING IS TO BE PLACED ACROSS A PAVED AREA, A JOINT SHALL BE SAWED ON A LINE ESTABLISHED BY THE ENGINEER TO ENSURE PAVEMENT REMOVAL TO A NEAT LINE.
- THE CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION-RELATED ACTIVITIES (SUCH AS THE USE OF EASEMENTS, STAGING, CONSTRUCTION, VEHICULAR USE, BORROW OR WASTE ACTIVITIES, SEDIMENT BASINS, TRAILER PLACEMENT, ETC.) OCCUR IN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES TO REMAIN IN THE RIGHT OF WAY. THIS DOES NOT APPLY TO TREES WITHIN THE CONSTRUCTION LIMITS OR LIMITS OF DISTURBANCE THAT WILL BE REMOVED OR DESTROYED TO ALLOW FOR CONSTRUCTION.
- GRADING COMPLETE INCLUDES BUT IS NOT LIMITED TO MOBILIZATION, CLEARING, GRUBBING, GRADING, DEMOLITION, TEMPORARY MEASURES, SAWCUTTING PAVEMENT, RESETTING FENCE, RESETTING MAILBOXES, REPLACING EXISTING SIGNS AND SIGN POSTS, REMOVAL OF TREES AND STUMPS, REMOVAL OF CURB AND PAVEMENT. ADJUSTING MANHOLES, RESETTING UTILITY BOXES AND UTILITY PEDESTALS, MANHOLE CURB ENTRANCE, 8' UNDERWAY PIPE, FIRE HYDRANTS, WATER VALVES, WATER METERS, AND OTHER UTILITIES TO FINISH GRADE, REPLACING SPECIAL DESIGN AND STANDARD CATCH BASIN TOPS, CONSTRUCTION TESTING, REPLACEMENT OF PRIVATE PROPERTY OWNER FEATURES (IN KIND OR TO THE SATISFACTION OF THE PRIVATE OWNER) DAMAGED OR REMOVED DURING CONSTRUCTION (THIS INCLUDES ITEMS INSIDE AND OUTSIDE THE CONSTRUCTION LIMITS). ANY ITEM NOT SPECIFIED SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR GRADING COMPLETE.

27. DISTURBED AREA

HUGH HOWELL ROAD

0.85 ACRE





Know what's DGlOW Call before you dig.

COLLABORATION BY DESIGN 3090 Premiere Parkway, Suite 200

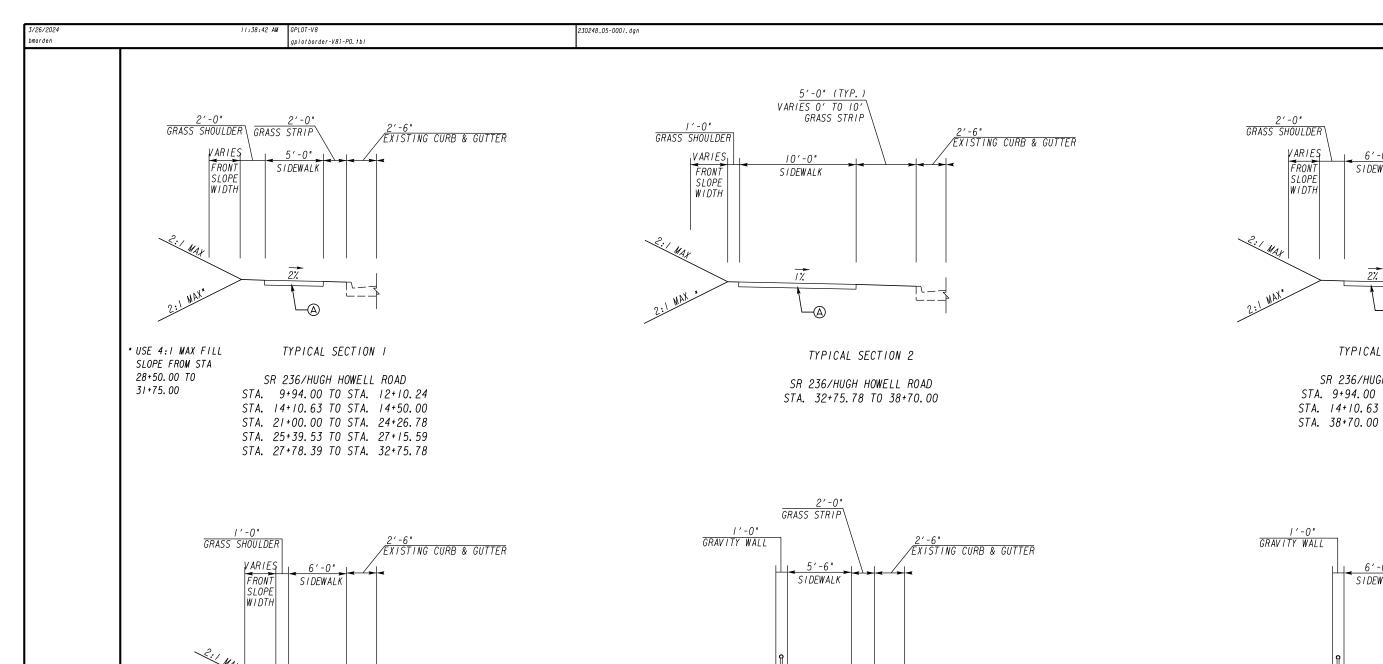
Duluth, GA 30097

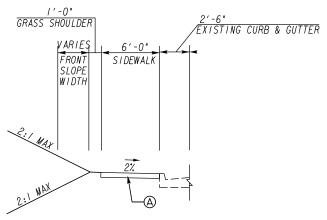
keckwood.com

(678) 417-4000

REVISION DATES GENERAL NOTES HUGH HOWELL ROAD SIDEWALK CITY OF TUCKER DRAWING No RACKCHECKE

11:38:40 AM GPLOT-V8 230248_04. dg	'n													
GENERAL NOTES - STANDARD	SIGNS	. م	pH Resistivit…	5. 3								1		
I. ALL STANDARD HIGHWAY SIGNS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE DETA	ALLS SHOWN IN THE PLANS, THE MANUAL ON UNIFORM			<u> </u>	J	County:	DEKALB							
TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND THE GEORGIA STANDARD SPECIFICATIONS, SO	JPPLEMENTAL SPECIFICATIONS, AND/OR SPECIAL PROVISION	•					Pipe Cu	ilvert Mat	erial Alt					
	2. SIGN ERECTION STATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS WHERE NECESSARY, BUT SHALL BE WITHIN THE LIMITATIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. CURRENT EDITION. NO SIGN LOCATION SHALL BE CHANGED BY THE CONTRACTOR OR				CONCRETE		STEEL		ALUMINUM	,,,, <u>c</u>	1	THERMOPLASTIC		Γ
BY THE PROJECT ENGINEER WITHOUT PRIOR APPROVAL FROM THE OFFICE OF TRAFFIC OPERATIONS.	ECONTROL SINCE DE CIMINOED DI THE CONTINUETON ON	TYPE O	PE OF INS	ST ALLATION	REINFORCED CONCRETE AASHTO M-170	CORRUGATED STEEL ALUMINUM COATED (TYPE 2) AASHTO M-36	CORRUGATED STEEL PLAIN ZINC COATED AASHTO M-36	POLYMER COATED STEEL AASHTO M-245	CORRUGATED ALUMINUM AASHTO M-196	CORRUGATED HDPE AASHTO M-252	SMOOTH LINED HDPE TYPE "S"	CORRUGATED SMOOTH LINED POLYPROPYLENE AASHTO M-330	PVC CORRUGATED SMOOTH INTERIOR AASHTO F-949	PVC Profile Wall Drain Pipe AASHTO M-304
3. ALL STANDARD HIGHWAY SIGNS SHALL BE ERECTED AT A HEIGHT OF 7 FEET ABOVETHE NORMAL EDGE	OF PAVEMENT TO THE BOTTOM OF THE SIGN OR ASSEMBLY,		TRAVEL ARING TSIDE DBEDI	INTERSTATE	Χ									
HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON INTERSTATE HIGHWAYS HALL BE 32 FEET FROM THE OF THE SIGN(S). UNLESS SPECIFIED OTHERWISE IN THE PLANS. HORIZONTAL CLEARANCE FOR STANDARD HIGH		s	NON-TI BEA (OUT; ROAD	NON INTERSTATE	Χ	X		Χ	Χ		X	Χ	X	Χ
NORMAL EDGE OF PAVED SHOULDER, OR EDGE OF GRADED SHOULDER WHEN PRESENT.		0 R M		ADT < 1,500	X	X		X	X		X	Χ	X	Χ
4b. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON ALL OTHER ROADWAYS SHALL BE 6 FEET THE NORMAL EDGE OF PAVEMENT TO THE NEARER EDGE OF THE SIGN(S). WHICHEVER IS GREATER.			NNG SED)	1,500 < ADT < 5,000	X	X		X	X		X	X	X	X
SECTIONS SHALL BE AT LEAST 2 FEET FROM THE CURB FACE TO THE NEARER EDGE OF THE SIGN(S).		0 0	EL BEAR E ROADE GRADE	5,000 < ADT < 15,000	Χ						X	Χ	X	Χ
4c. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS MOUNTED BEHIND GUARD RAIL SHALL BE 6 F	EET FROM THE FACE OF THE GUARD RAIL TO THE NEARER	A A	TRAV	ADT > 15,000 & INTERSTATES	Χ									
EDGE OF THE SIGN(S).		"	G	RADE > 10%				X			X	X	X	Χ
5. SINGLE PLATE, HORIZONTAL RECTANGULAR SIGNS OVER 48 INCHES IN WIDTH SHALL BE MOUNTED ON SIGN) ALUMINUM OR GALVANIZED STEEL STRAPS. THE STRAPS SHALL BE FLUSH WITH THE BACK (•	F	SIDE	DRAIN	X	X	X	X	X		X	X	X	X
THE SIGN. THE CENTERLINE OF EACH POST SHALL BE INSET 1/6TH OF THE SIGN WIDTH FROM TO INCH DIAMETER, DRILLED OR PUNCHED, AS SHOWN ON THE SIGN PLATE DETAILS.	HE EDGE OF THE SIGN. SIGN PLATE BOLT HOLES SHALL BE	٠,	RMANENT	SLOPE DRAIN		X	Χ	X	Χ		X	X	X	Χ
6. EACH 42 OR 48 INCH WIDE x 18 OR 24 INCH HIGH SIGN REQUIRES ONE 2 INCH x '% INCH x (WIDT	TH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAP	PE	RFORATED	UNDERDRAIN		X	X		X	X	X	Χ	X	Χ
LOCATED IN THE CENTER OF THE SIGN AND FLUSH WITH THE BACK OF THE SIGN.		NOTE:				<u> </u>		1						
7. SIGN ASSEMBLIES SHALL BE MOUNTED ON ALUMINUM OR GALVANIZED STEEL STRAP FRAMES. FOR DETYPICAL FRAMING DETAILS.	TAILS AND STRAP SPECIFICATIONS REFER TO SIGN ASSEMBL	V _			dicated by an "X". fill heightand ba	ckfill requireme	nts of storm dra	în pîpe wîll be	in accordance wi	th Georgia Stand	ard 1030-D or 103	O-P and the Stand	ard Specificatio	ns.
					se additional sto. Iy stabilized ear						d. e shall be Class I	′ Concrete Pipe.		
8. TYPE 3 (HIGH INTENSITY LENS) REFLECTIVE SHEETING SHALL BE USED FOR ALL STANDARD HIGHWA AS SPECIFIED BELOW OR SPECIFIED OTHERWISE IN THE PLANS. EITHER CLASS I OR CLASS 2 A		Rev	v. 1-12-16											
9. TYPE 9 (VERY HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL RED SERIES SIGN	IS (RI-I, RI-2, RI-3P, R5-I, R5-IA, R5-IB).													
10. TYPE 9 (VERY HIGH INTENSITY) FLUORESCENT YELLOW GREEN REFLECTIVE SHEETING SHALL BE USE OF THE S5-1) SIGNS, BIBYCLE CROSSING (WII-I) SIGNS, AND PEDESTRIAN CROSSING (WII-2 AL SIGNS SPECIFICALLY LISTED ABOVE AND ALL REGULATORY SIGNS WITHIN THE SCHOOL ZONE SIGN BACKGROUNDS OF THE APPROPRIATE COLOR.	ND WIIA-2) SIGNS. SIGNS WITHIN THE SAME ASSEMBLY AS	HE SCHO	OOL ZON	E										
II. TYPE 9 (VERY HIGH INTENSITY) FLUORESCENT YELLOW REFLECTIVE SHEETING SHALL BE USED FOR	ALL WARNING SIGNS.													
12. A 1°2 INCH MINIMUM AIR SPACE SHALL BE REQUIRED BETWEEN ALL SIGN PLATES WITHIN AN ASSEM	BLY.													
13. WHERE SIGNS WITHIN AN ASSEMBLY EXTEND BELOW THE STANDARD MOUNTING HOLES ON THE POST(S), PUNCHED, SHALL BE REQUIRED TO PROPERLY MOUNT THE ASSEMBLY.	, ADDITIONAL3*8INCH DIAMETER HOLE(S), DRILLED OR													
14. INTERSTATE SHIELDS SHALL CONTAIN THE WORD GEORGIA. ALL INTERSTATE, U.S., AND GEORGIA USE 4 INCH SERIES *D* LETTERS. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE		L												
15. FOR DETAILS OF SPECIAL DESIGN HIGHWAY SIGNS, SEE DETAILS OF MISCELLANEOUS SIGNS.														
16. REFER TO PLAN SHEETS FOR LOCATION OF THE DISTRICT ENGINEERS OFFICE TO BE SHOWN ON ALL	R552-I (LIMITED ACCESS) SIGNS IN THIS PROJECT, IF AI	Υ.												
17. THE CONTRACTOR WILL, AS REQUESTED BY THE DISTRICT TRAFFIC OPERATIONS ENGINEER, BE REQU OR ARE CONTRARY TO THESE SIGN PLANS.	IIRED TO REMOVE ANY EXISTING SIGNS THAT ARE DUPLICATE	D												
18. ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNLESS SPECIFIED OTHERWISE.								NEW 1616# 6:3	T.C					
	1 111							REVISION DAT	t5			IERAL NO		
	Keck+Wood									H	IUGH HOWE			LK
	COLLABORATION BY DESIGN										CIT	Y OF TU	CKER	
	3090 Premiere Parkway, Suite 200	J							CF	HECKED:		DATE:	n	RAWING No.

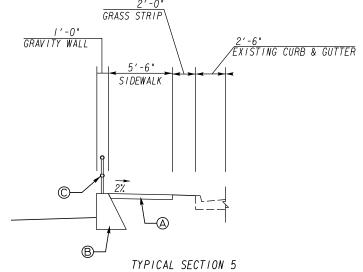




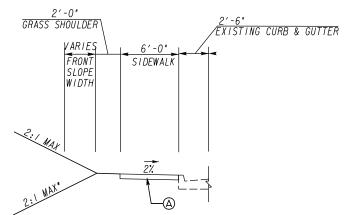
TYPICAL SECTION 4

SR 236/HUGH HOWELL ROAD STA. 16+24.00 TO STA. 21+00.00

- (A) CONCRETE SIDEWALK, 4 IN
- (B) CLASS B CONCRETE RETAING WALL, GA STD. 9031L
- (C) STEEL PIPE HANDRAIL, GA STD. 9031R (POWDERCOATED BLACK)

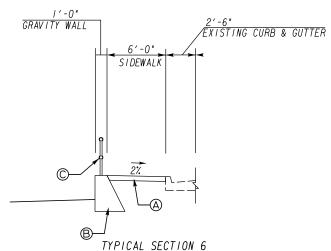


SR 236/HUGH HOWELL ROAD STA. 12+10.24 TO STA. 14+10.63 STA. 24+26.78 TO STA. 25+39.53 STA. 27+15.59 TO STA. 27+78.39



TYPICAL SECTION 3

SR 236/HUGH HOWELL ROAD STA. 9+94.00 TO STA. 10+25.00 STA. 14+10.63 TO STA. 15+13.25 STA. 38+70.00 TO STA. 38+90.13

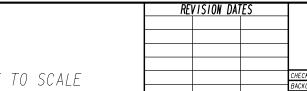


SR 236/HUGH HOWELL ROAD STA. 15+13.25 TO STA. 16+24.00

> TYPICAL SECTIONS HUGH HOWELL ROAD SIDEWALK CITY OF TUCKER

> > DRAWING No.





NOT TO SCALE Duluth, GA 30097 (678) 417-4000

SUMMARY OF QUANTITIES

EROSION CONTROL ITEMS									
ITEM No.	DESCRIPTION	UNIT	TOTAL						
163-0232	TEMPORARY GRASSING	AC	1						
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	5						
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	1300						
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	EA	5						
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	2600						
700-9300	SOD	SY	1700						

	ROADWAY ITEMS								
ITEM No.	DESCRIPTION	UNIT	TOTAL						
441-6222	CONC CURB AND GUTTER, 8X30 TP 2	LF	330						
310-1101	GR AGGR BASE CRS, INCL MATL	TN	61						
402-3130	RECY ASPH CONC 12.5 mm SUPERPAVE	TN	3						
441-0104	CONC SIDEWALK, 4 IN	SY	1722						
441-0108	CONC SIDEWALK, 8 IN	SY	197						
441-0018	DRIVEWAY CONCRETE, 8 IN TK	SY	65						
441-4030	CONC VALLEY GUTTER, 8 IN	SY	28						
500-3201	CLASS B CONCRETE, RETAINING WALL	CY	95						
500-9999	CLASS B CONC, BASE OR PAVEMENT WIDENING	CY	6						
515-2020	*GALV STEEL PIPE HANDRAIL, 2 IN, ROUND	LF	455						

*Note: HANDRAIL TO BE POWDERCOATED BLACK.

	SIGNING AND MARKING ITEMS							
	ITEM No.	DESCRIPTION	UNIT	TOTAL				
	653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	Ŀ	2050				
	653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	LF	90				
610-9001 REM SIGN EA		17						
	611-5551	RESET SIGN	EA	17				

MISCELLANEOUS								
	UNIT	QUANTITY						
150-1000	TRAFFIC CONTROL	LS	1					
210-0100	GRADING COMPLETE	LS	1					

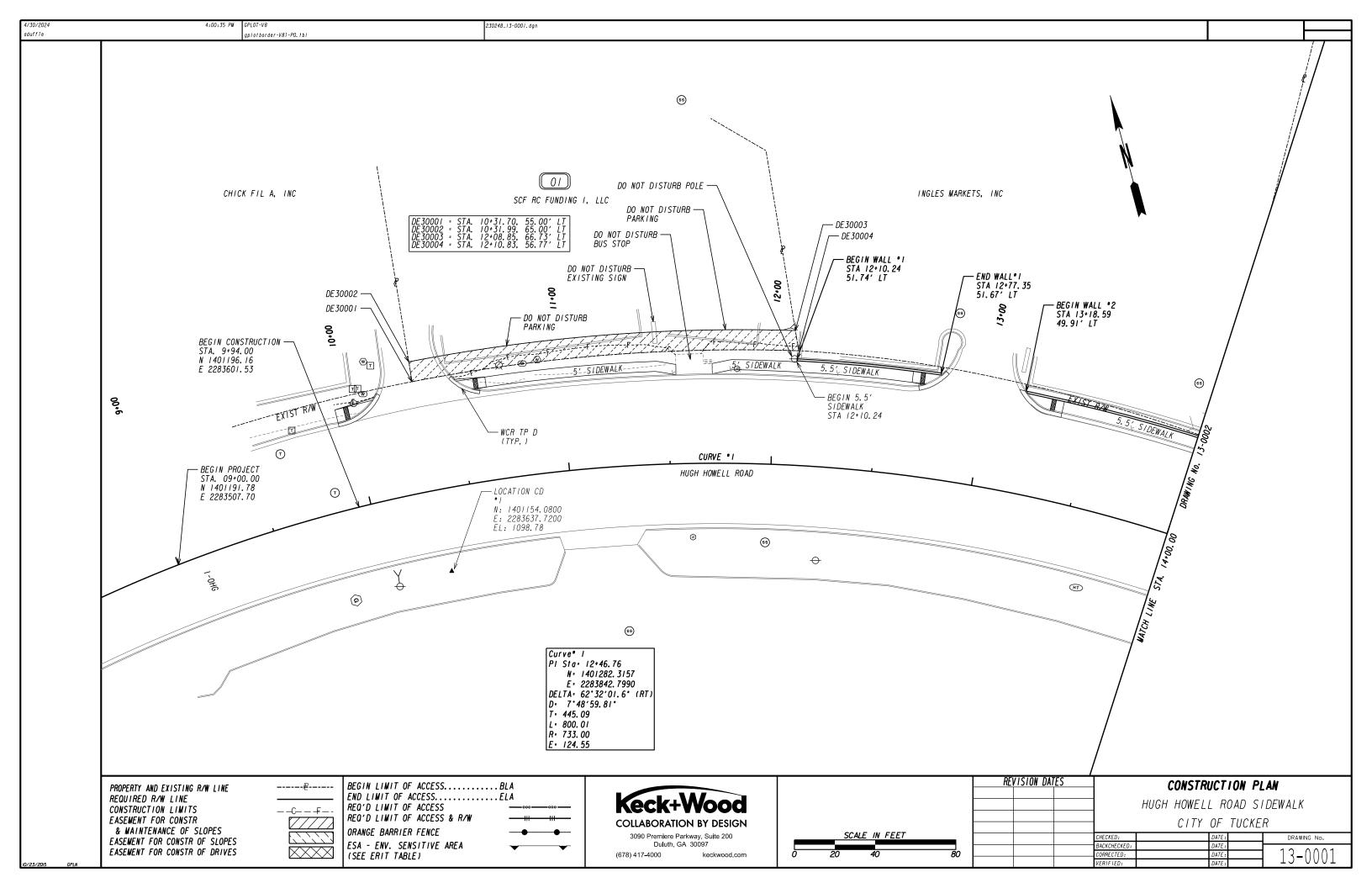
DRAINAGE ITEMS								
STRUCTURE NUMBER	LOCATION		*668-1105 CATCH BASIN, GP 1, SPCL DES	603-2181 STN DUMPED RIP RAP, TP 3, 18 IN	**611-8000 ADJUST CATCH BASIN TO GRADE			
	HUGH HOWELL RD	SIDE						
1	10.25		EA	SY	EA			
1	19+25	LT			1			
2	20+38	LT			1			
3	21+50	LT			1			
4	22+98	LT			1			
5	31+58	LT			1			
6	35+49	LT	1	3				
	TOTAL		1	3	5			

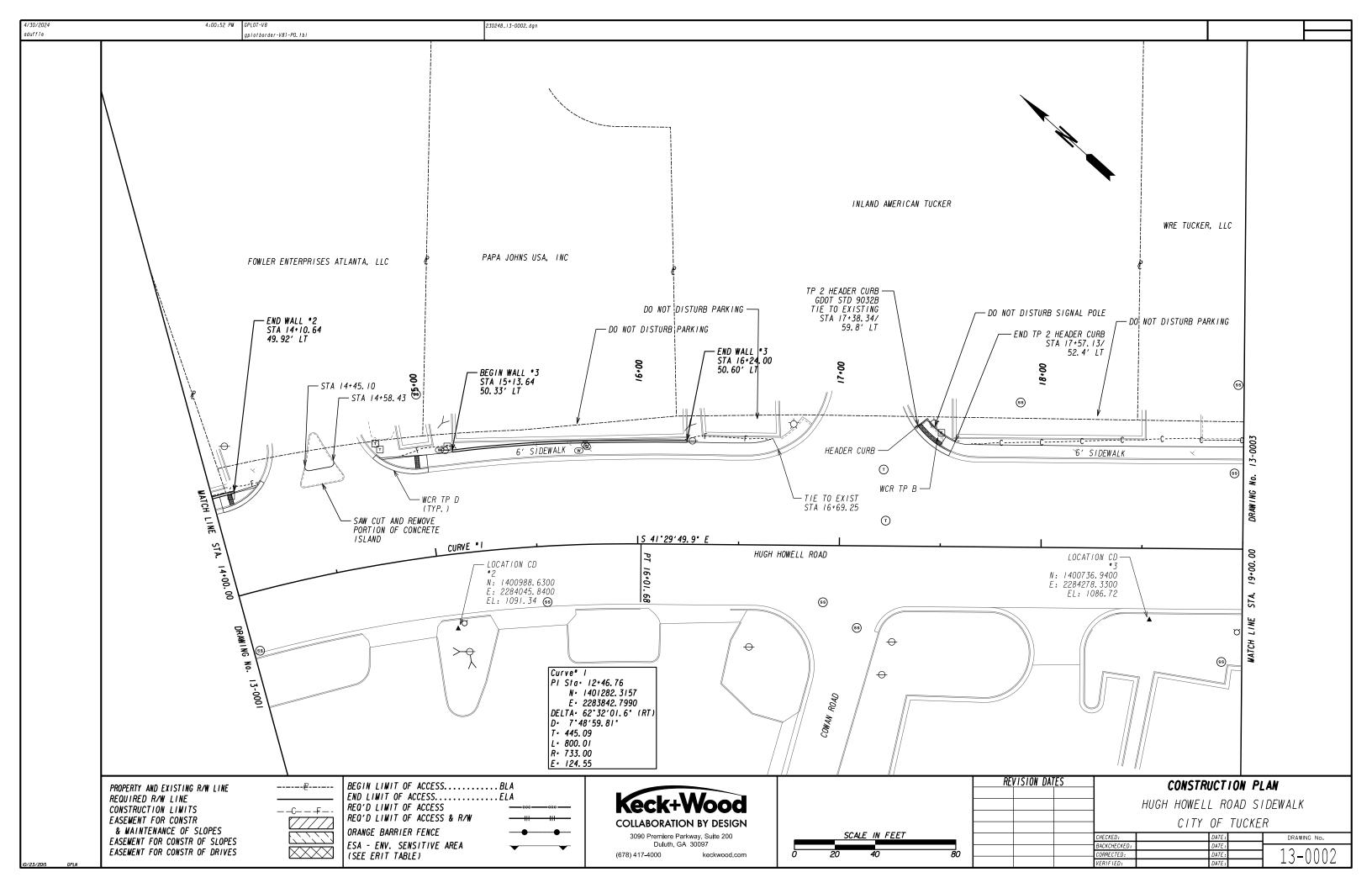
*Note: SEE 38-0001-SPECIAL CONSTRUCTION DETAIL

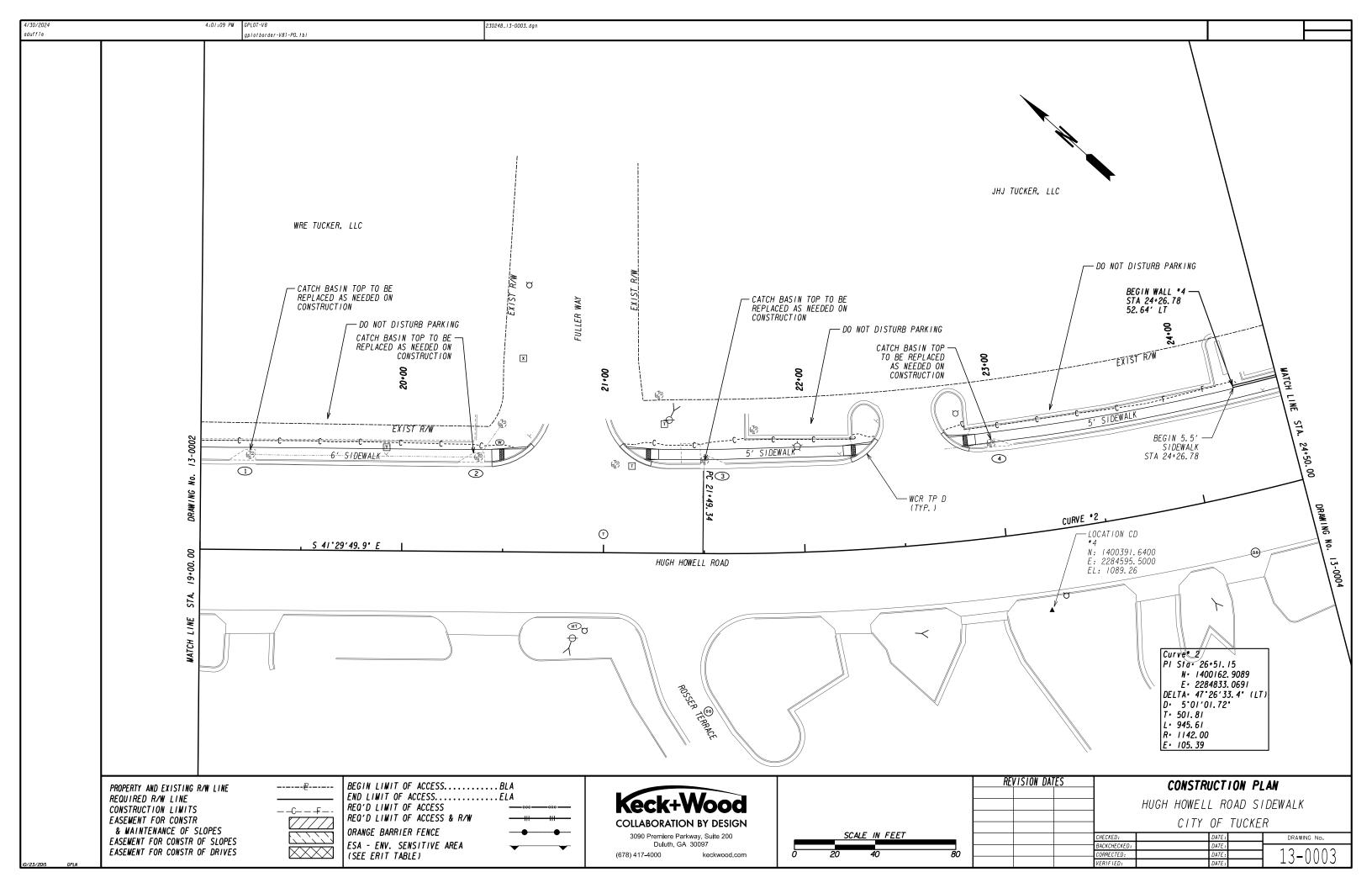
**NOTE: AS NEEDED BY ENGINEER

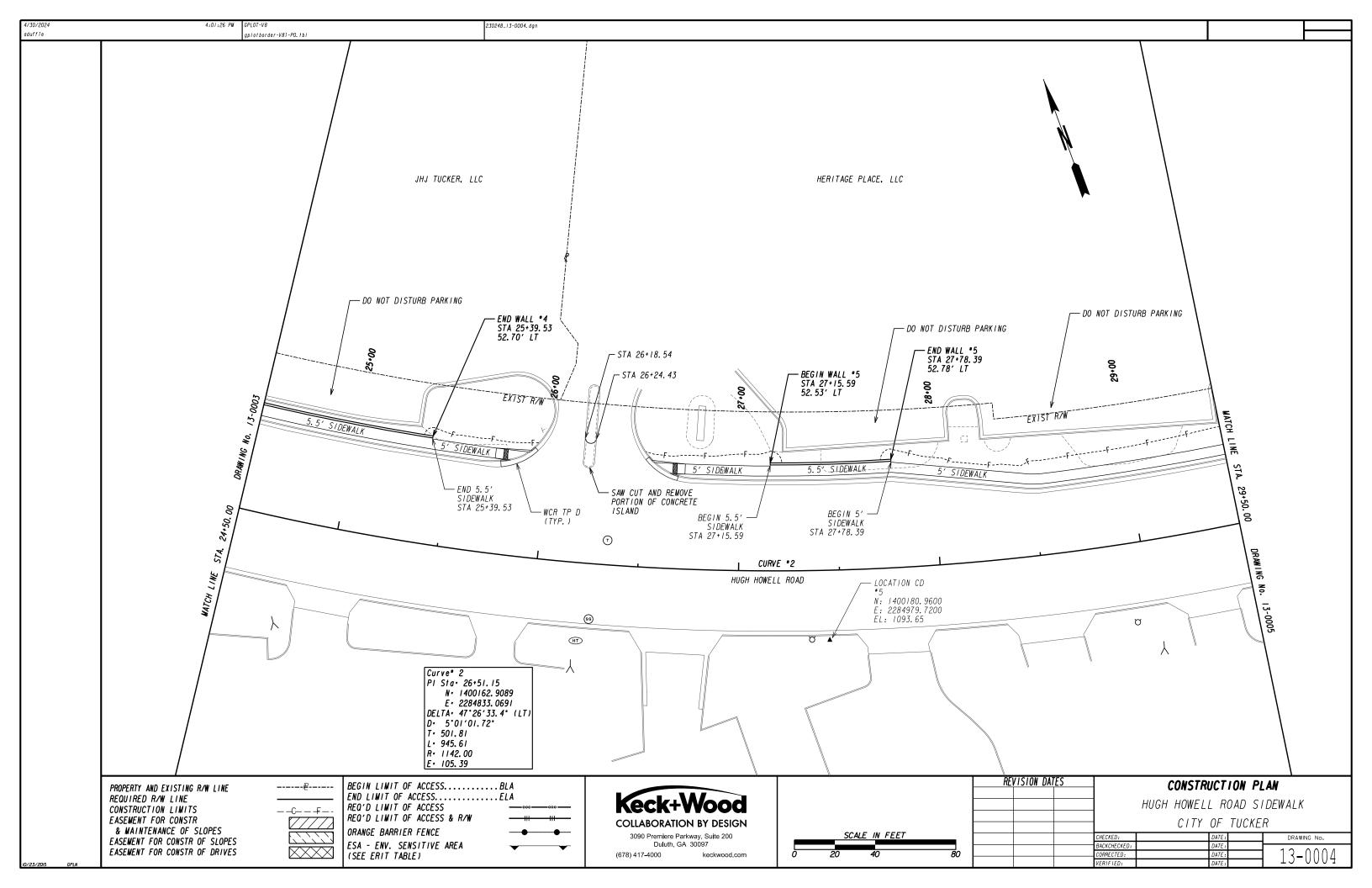
	Wood ON BY DESIGN
3090 Premiere Pa Duluth, G	arkway, Suite 200 6A 30097
(678) 417-4000	keckwood.com

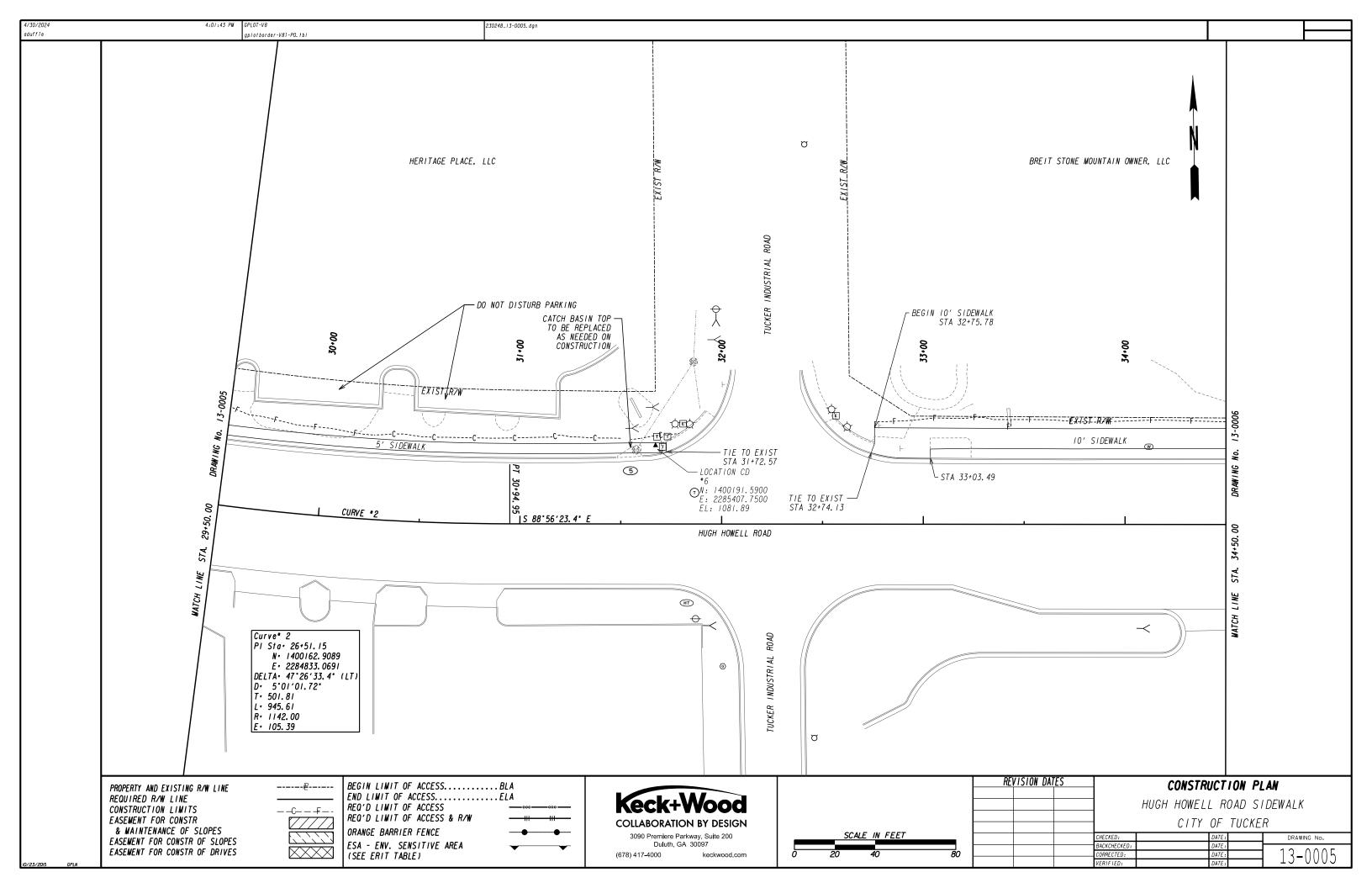
REVISION DATES		SUMMARY QUANTITIES			
	HUGH HOWELL ROAD SIDEWALK				
	_	CITY OF TUCKER			
	CHECKED:		DATE:	DRAWING No.	
	BACKCHECKED:		DATE:	0.0.001	
	CORRECTED: VERIFIED:		DATE:	06-0001	

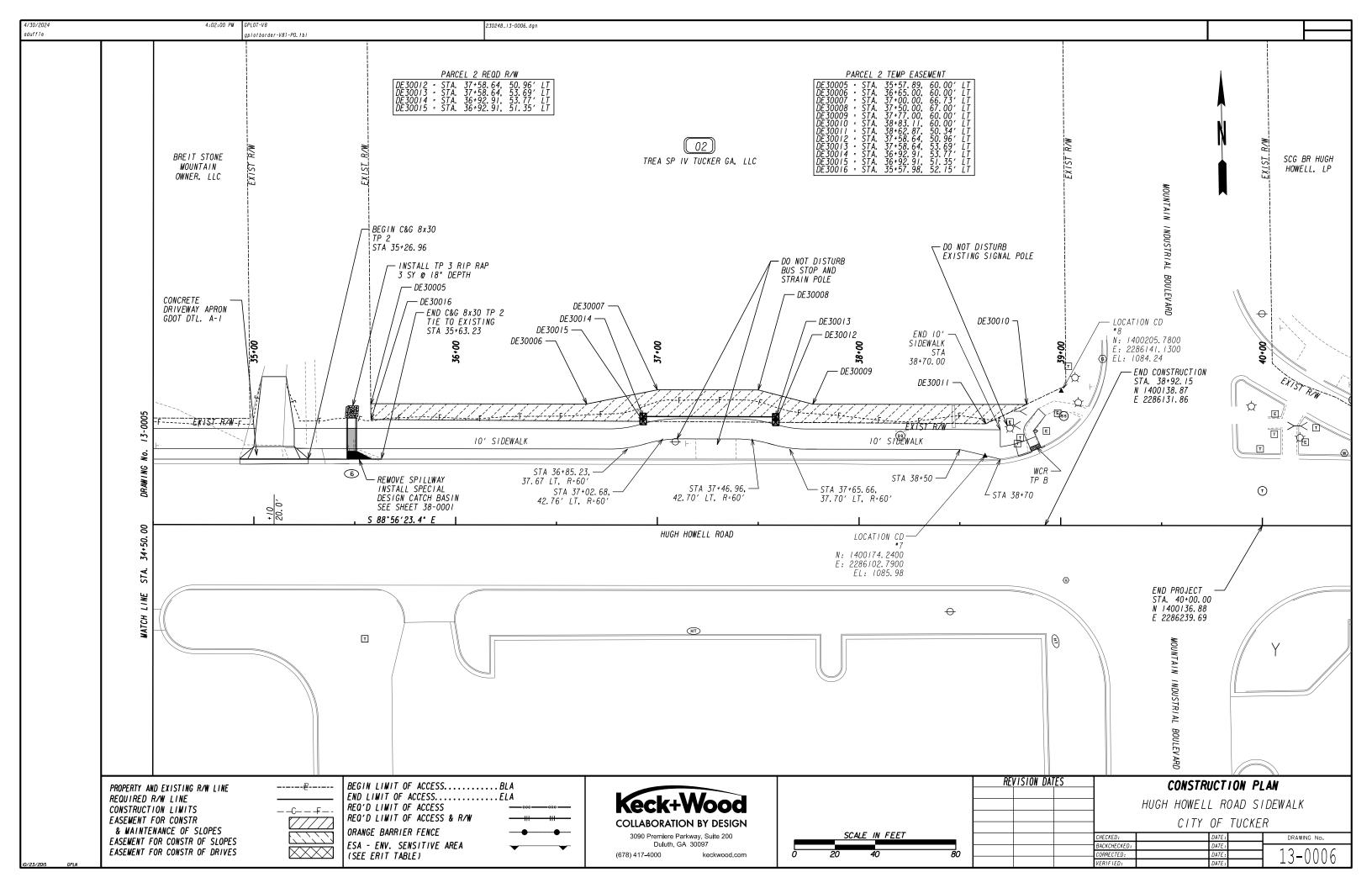


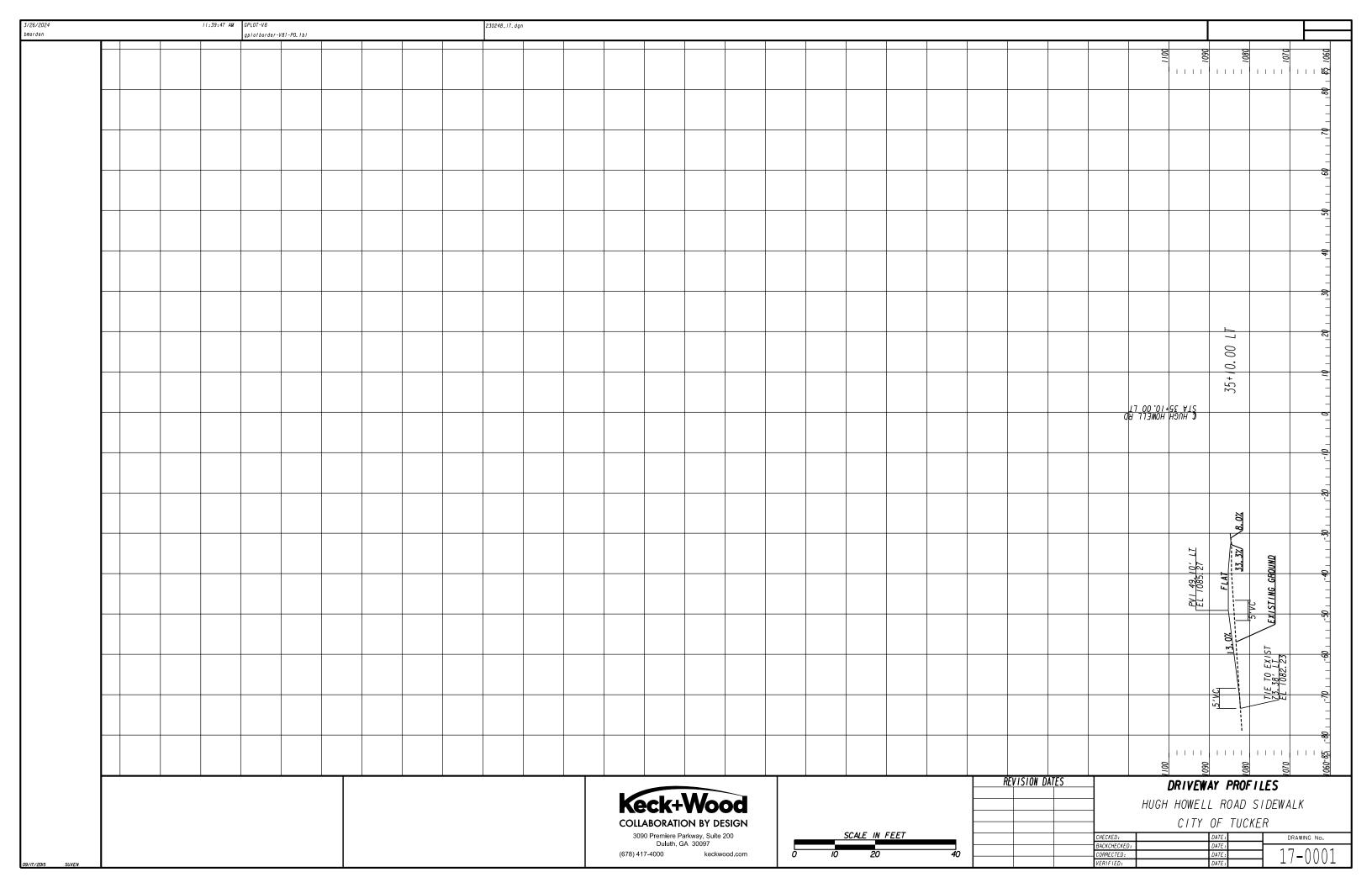


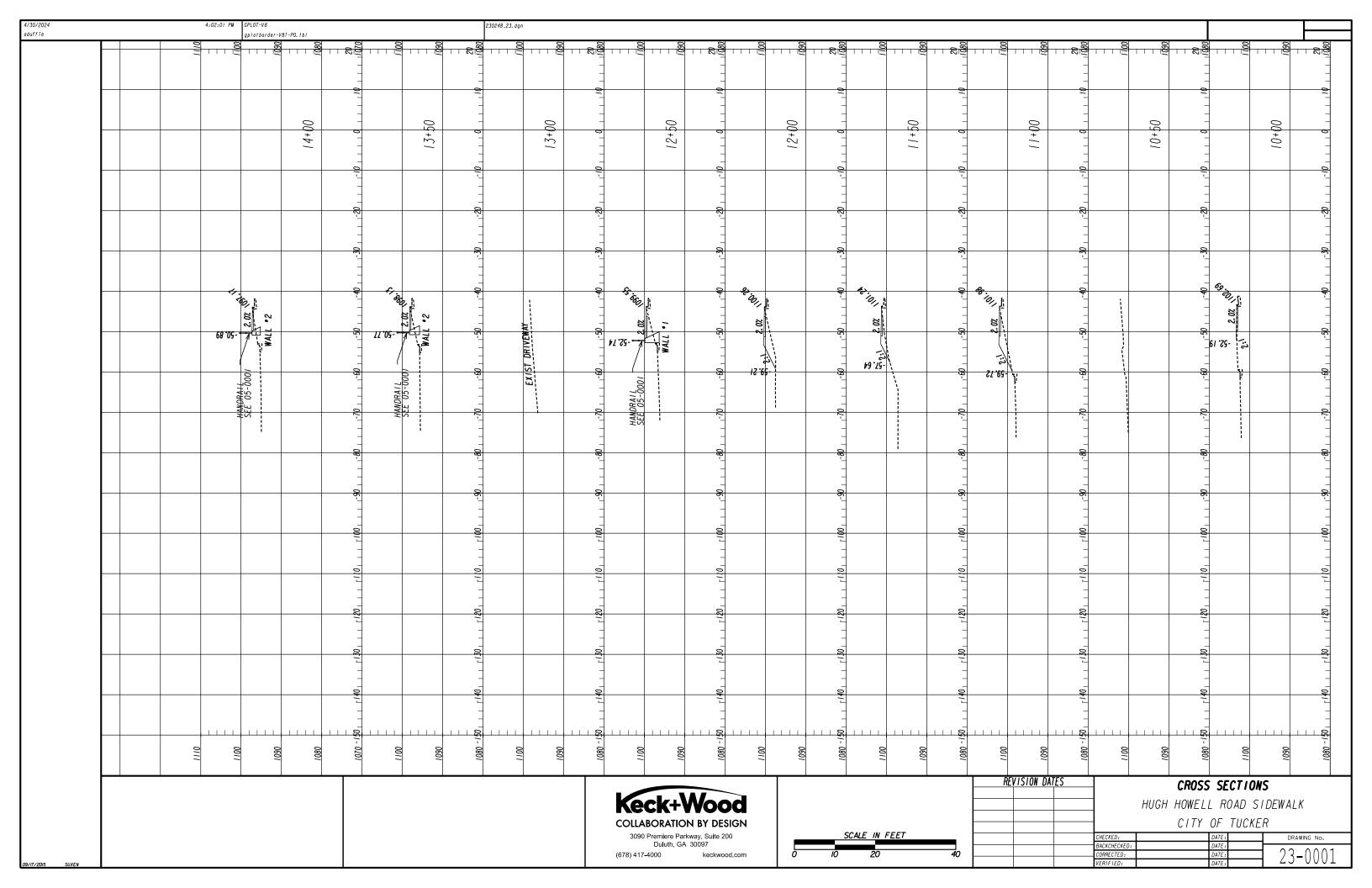


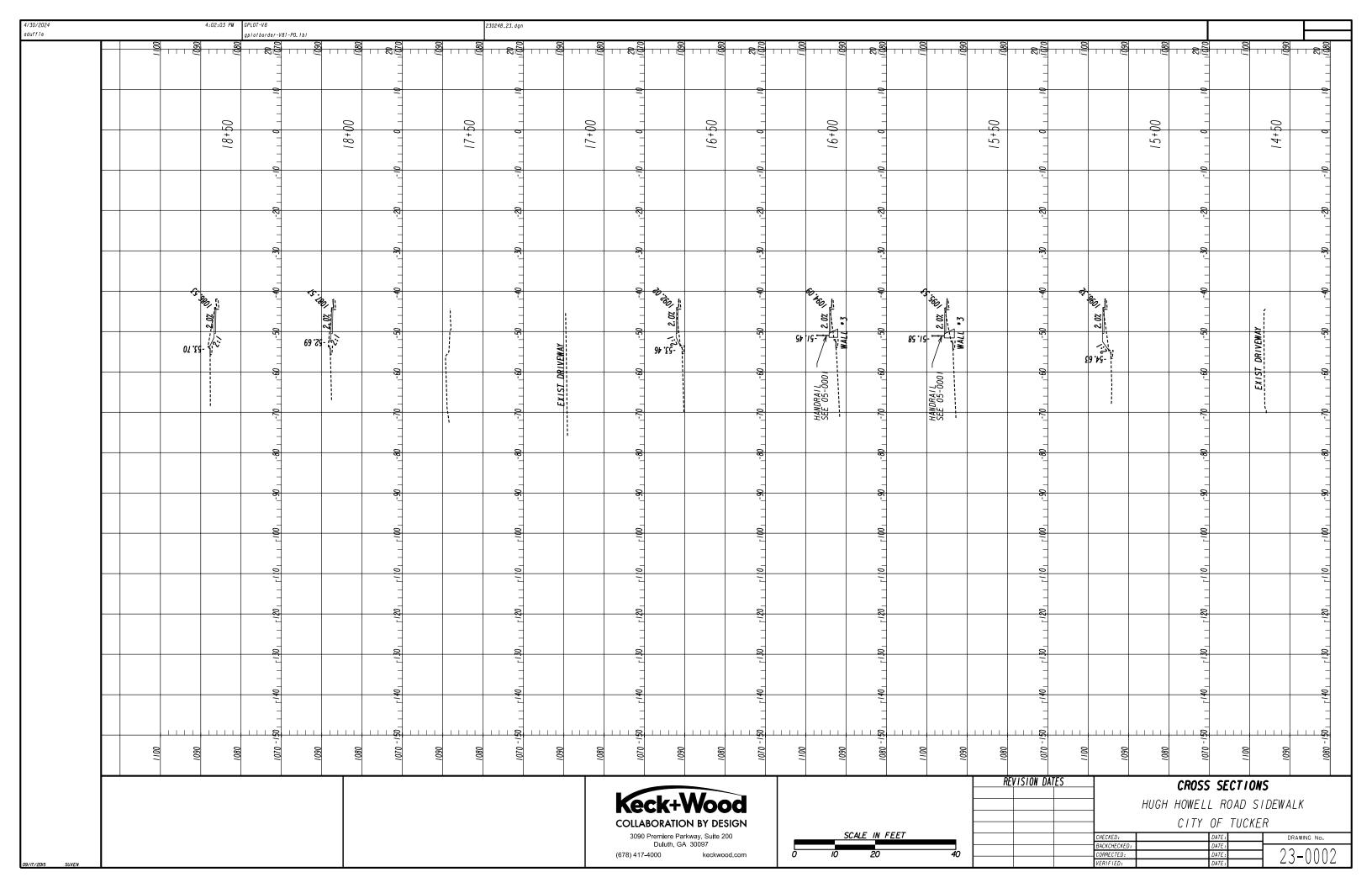


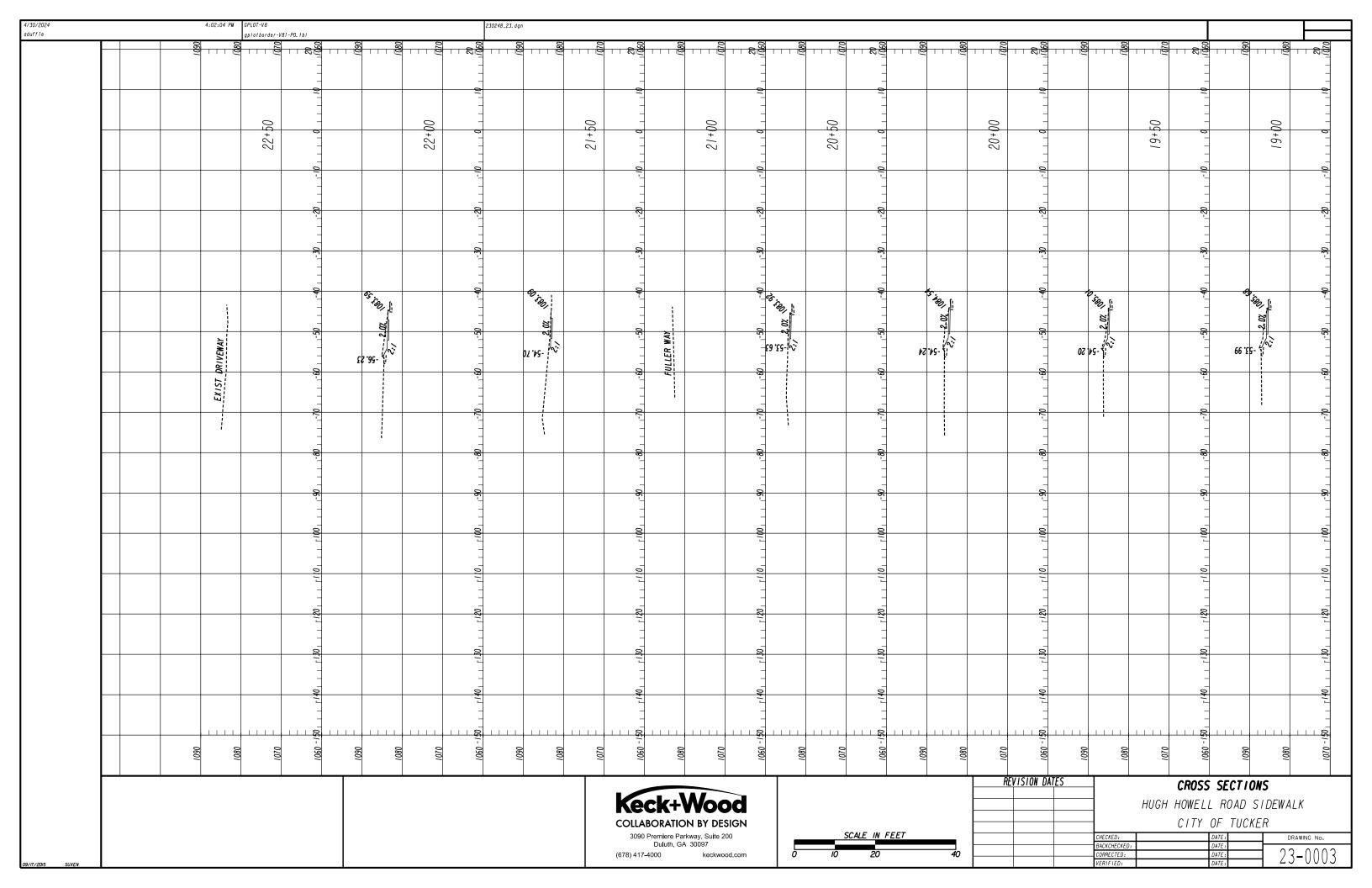


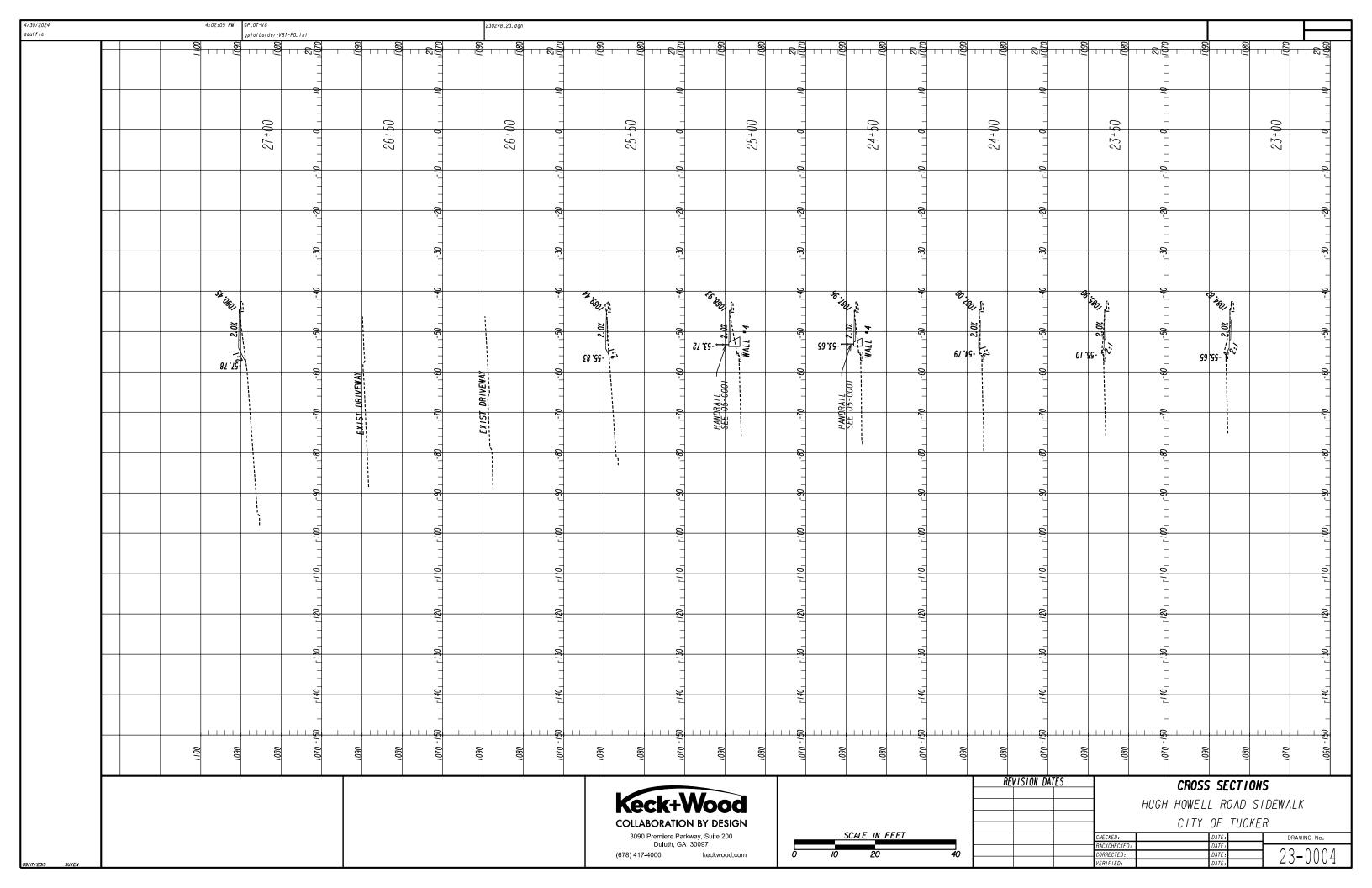


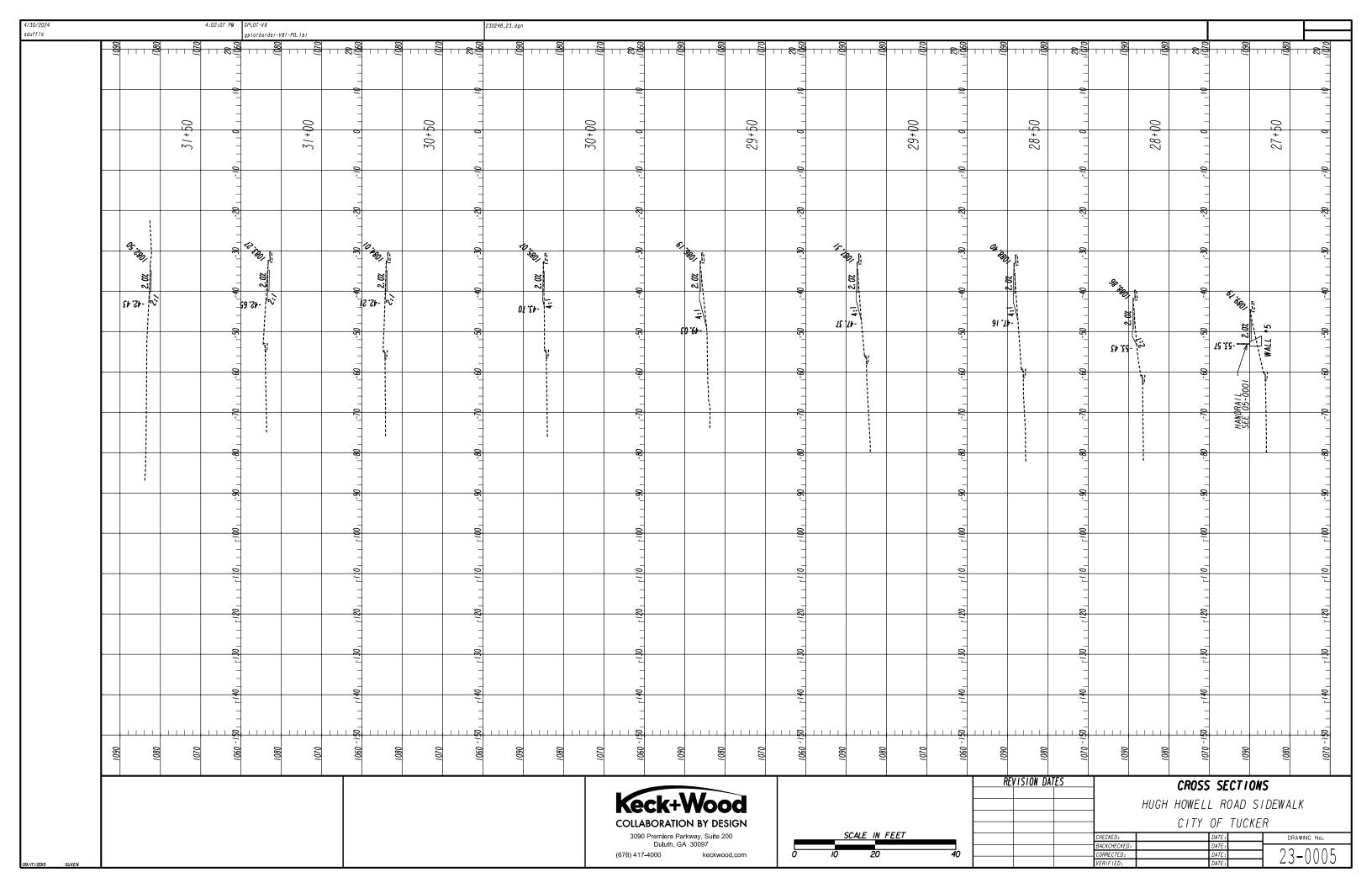


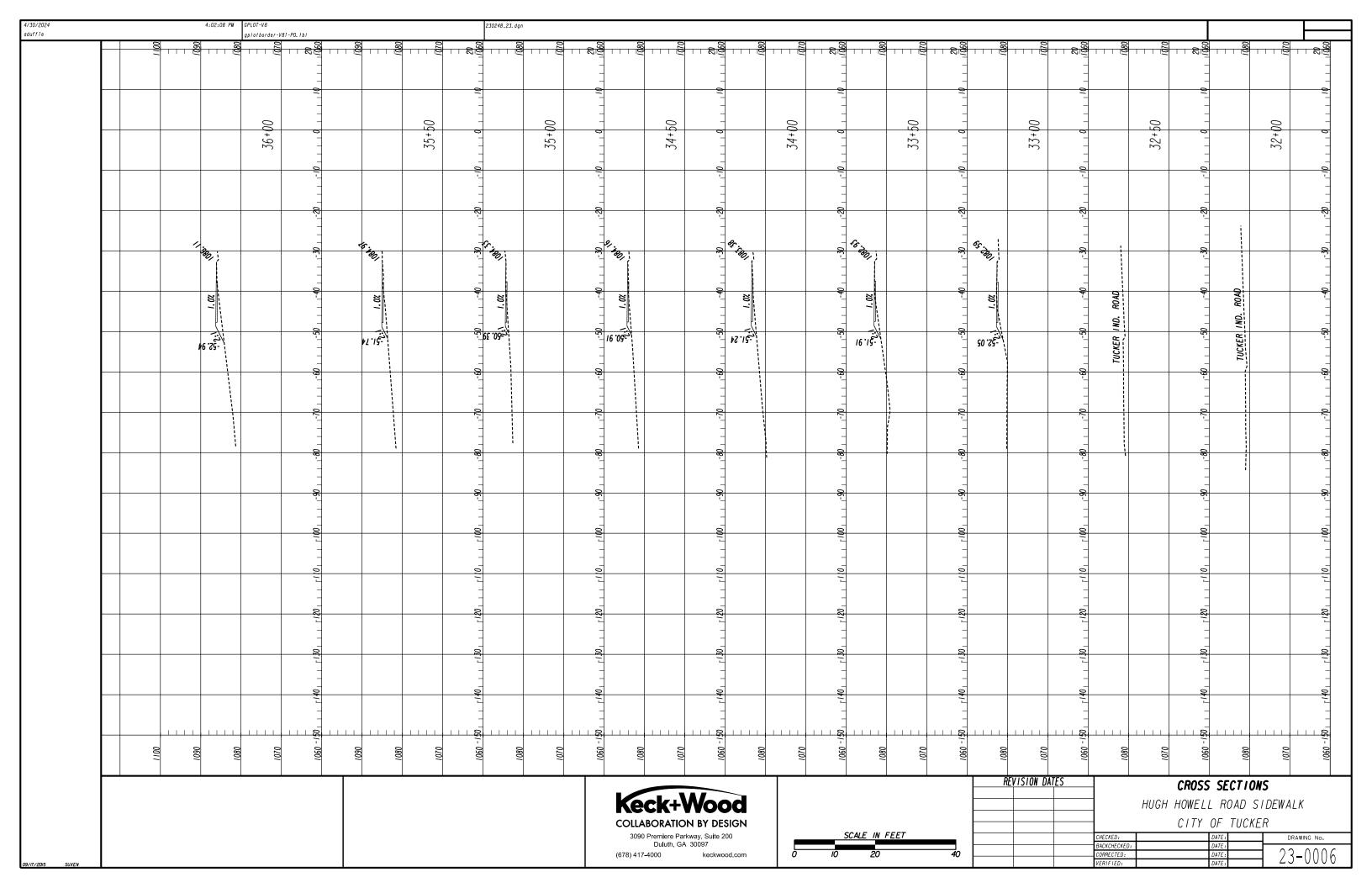


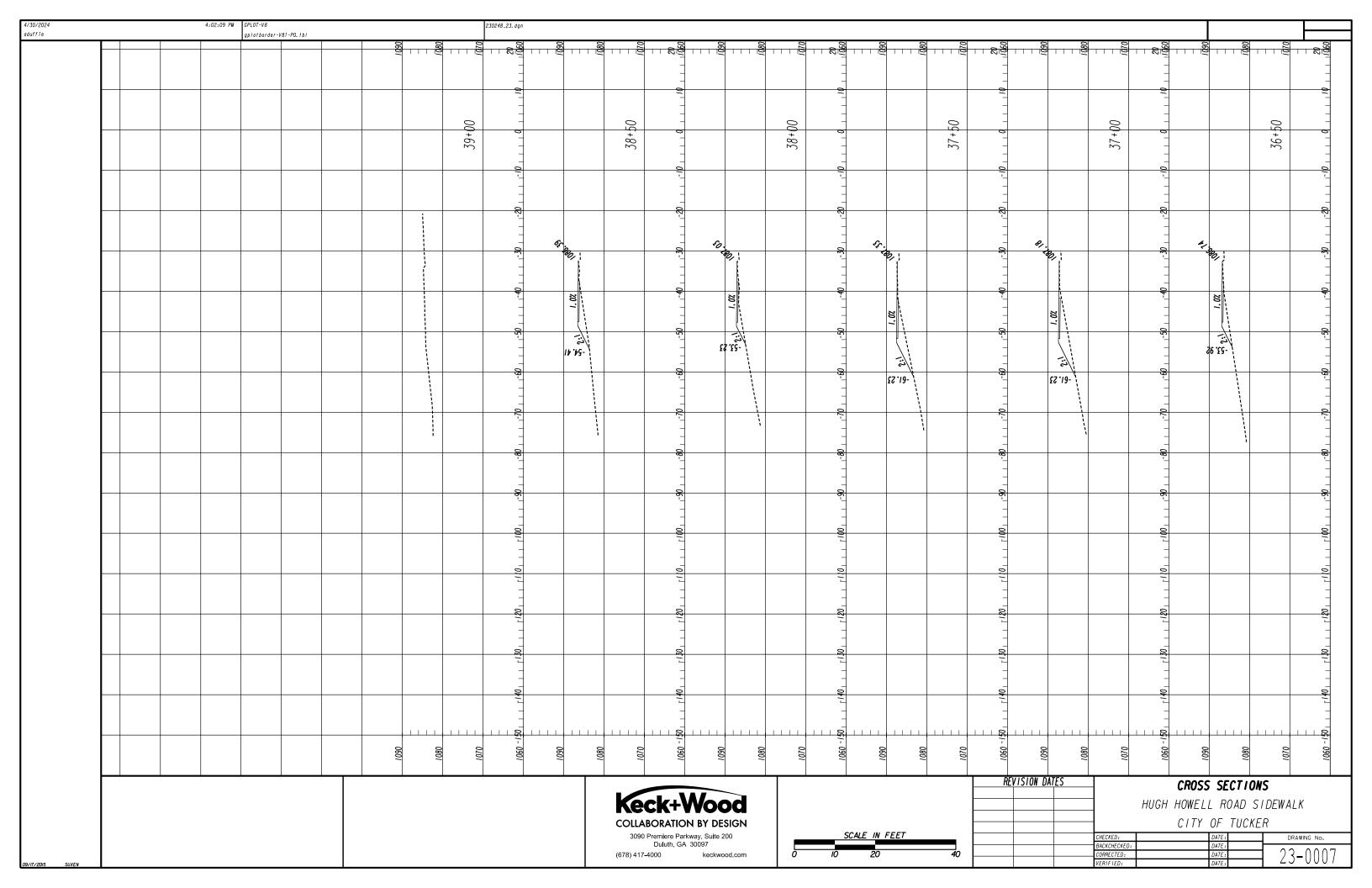


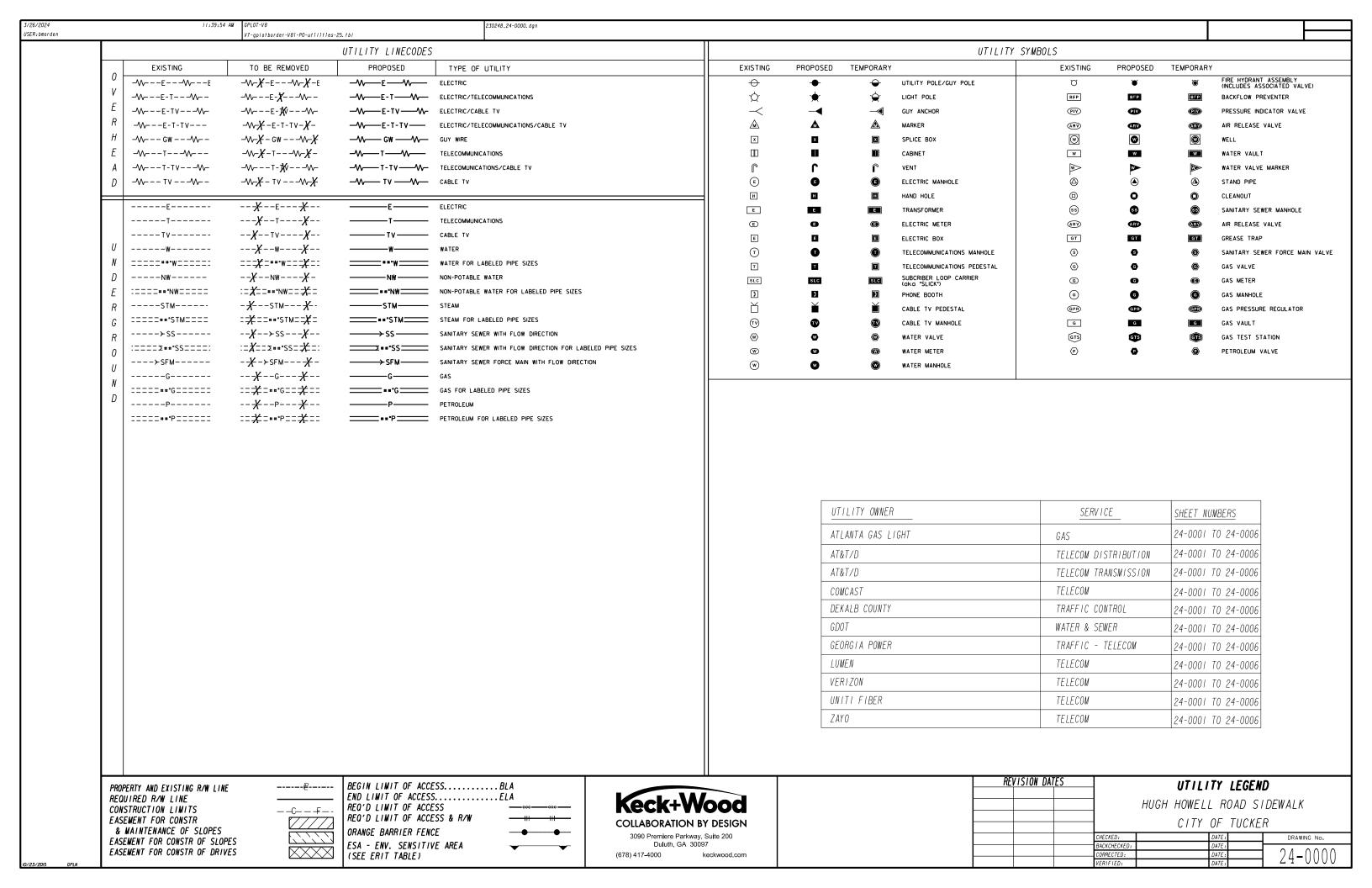


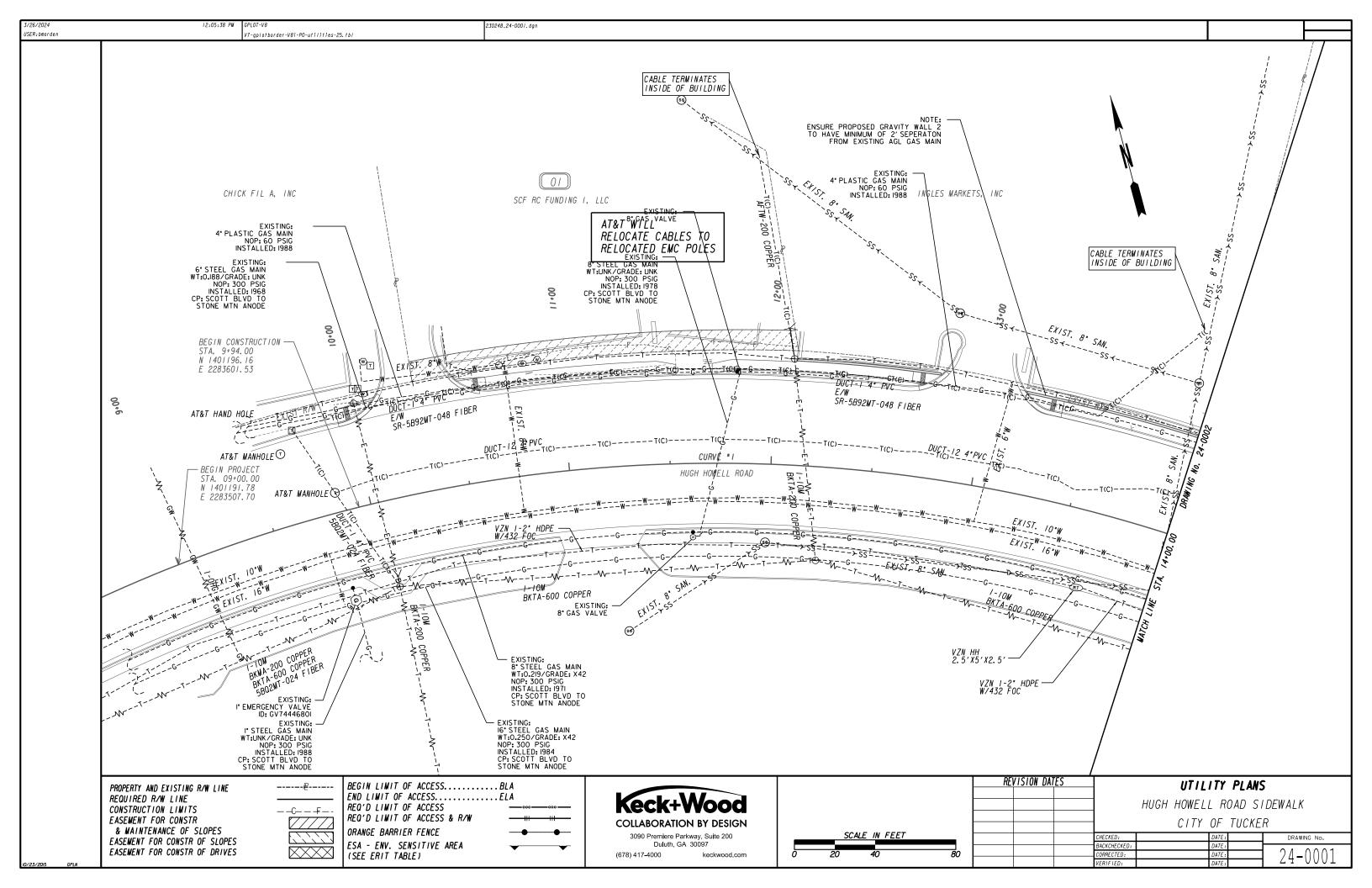


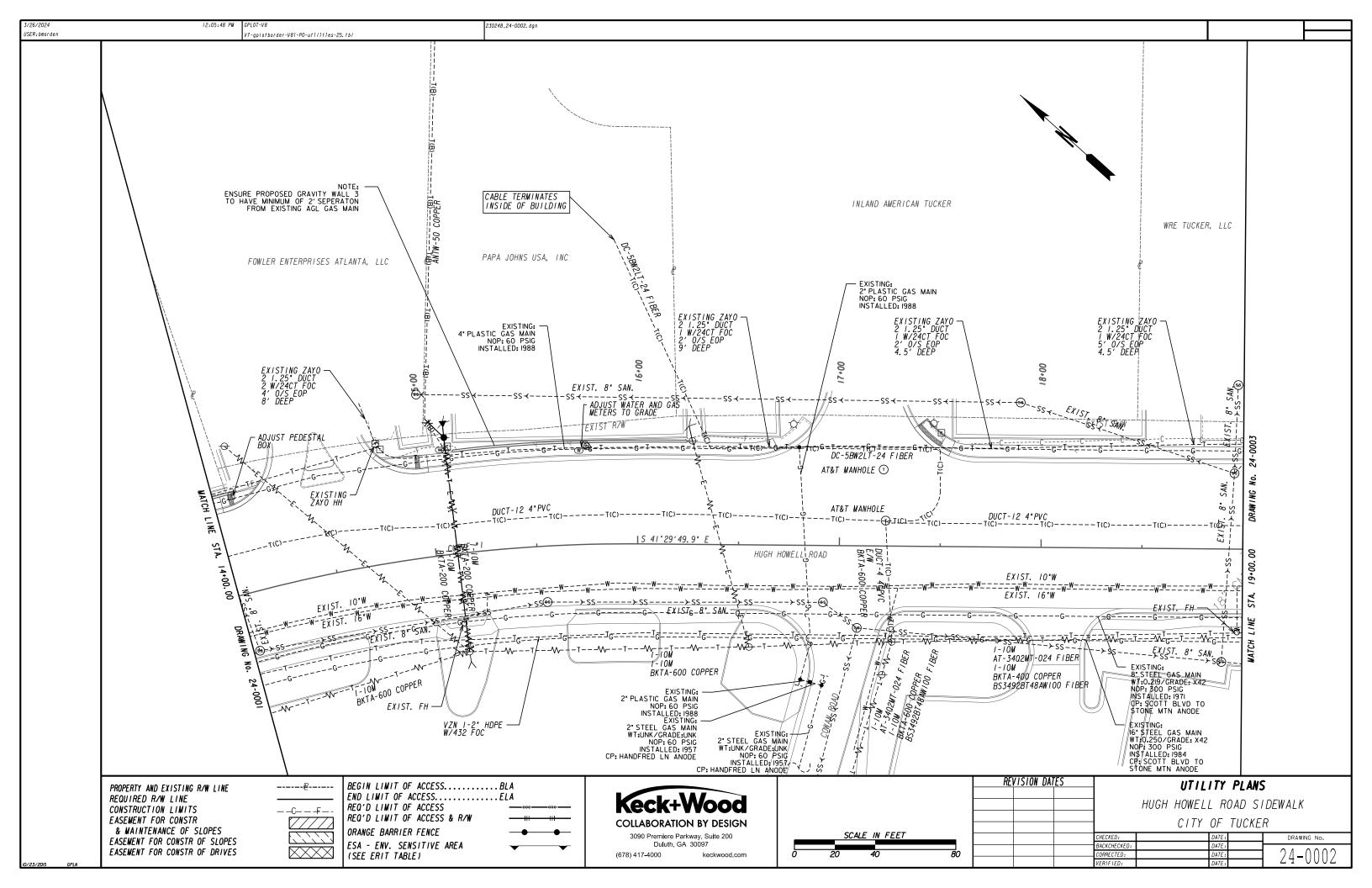


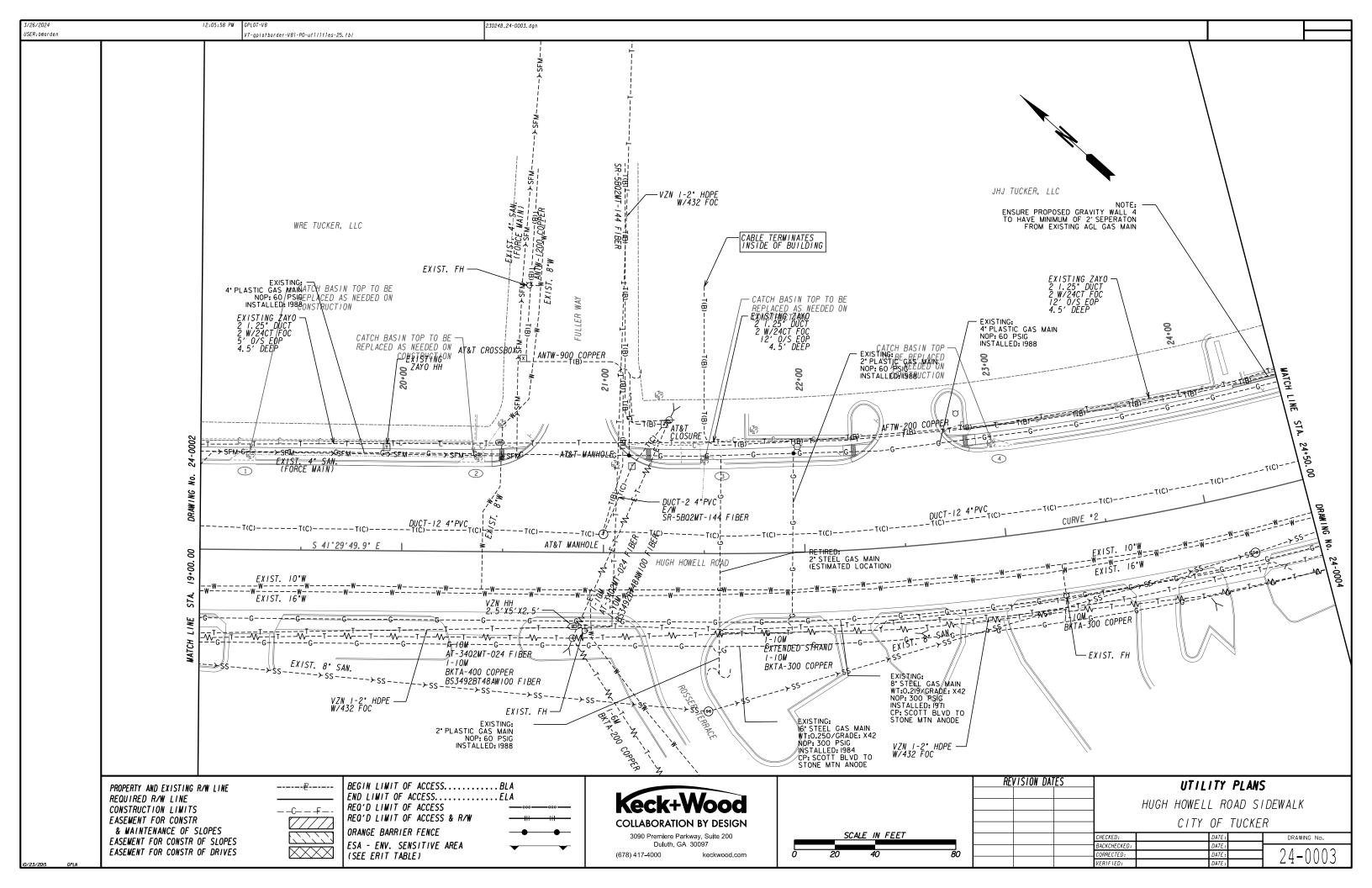


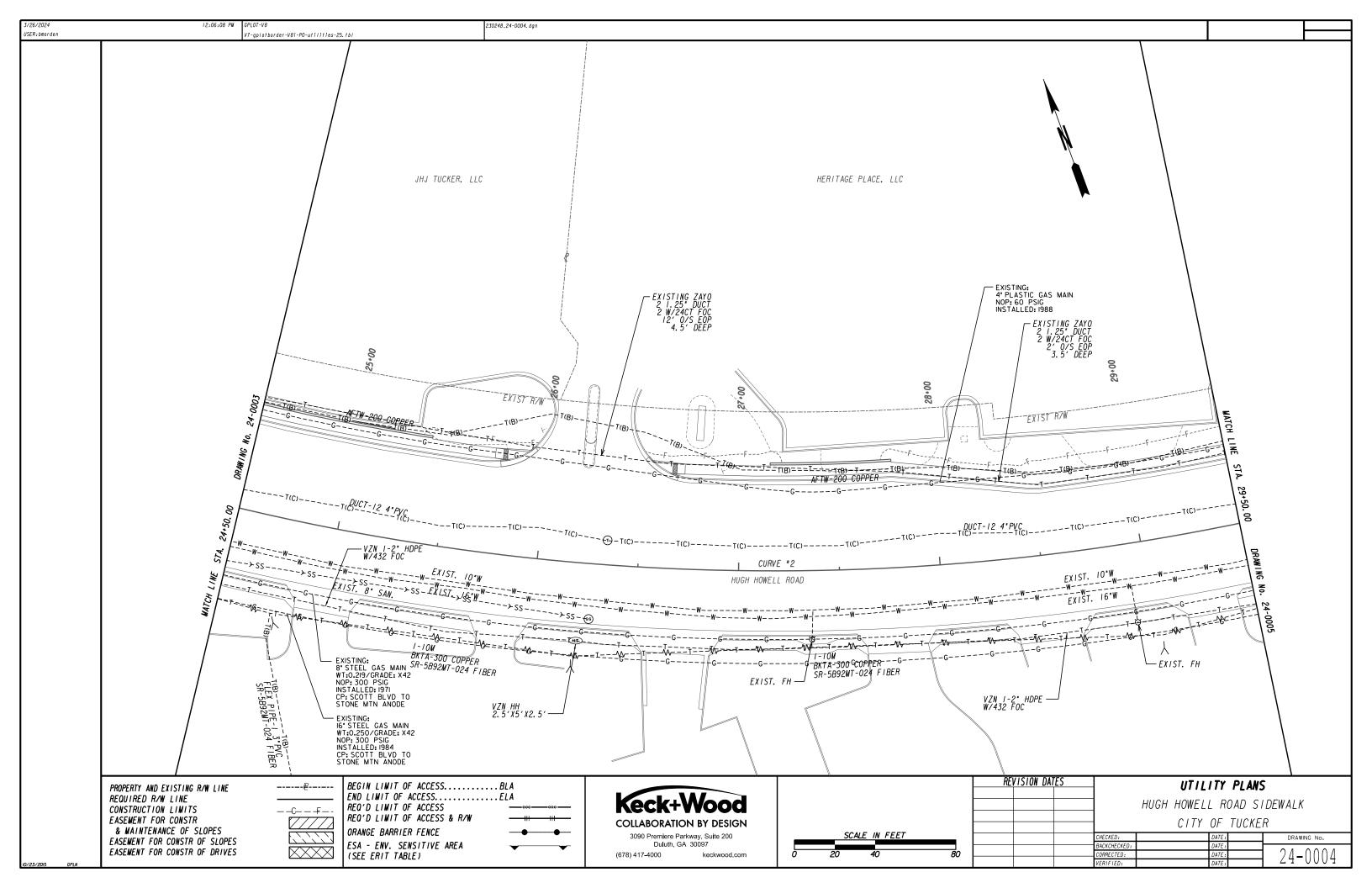


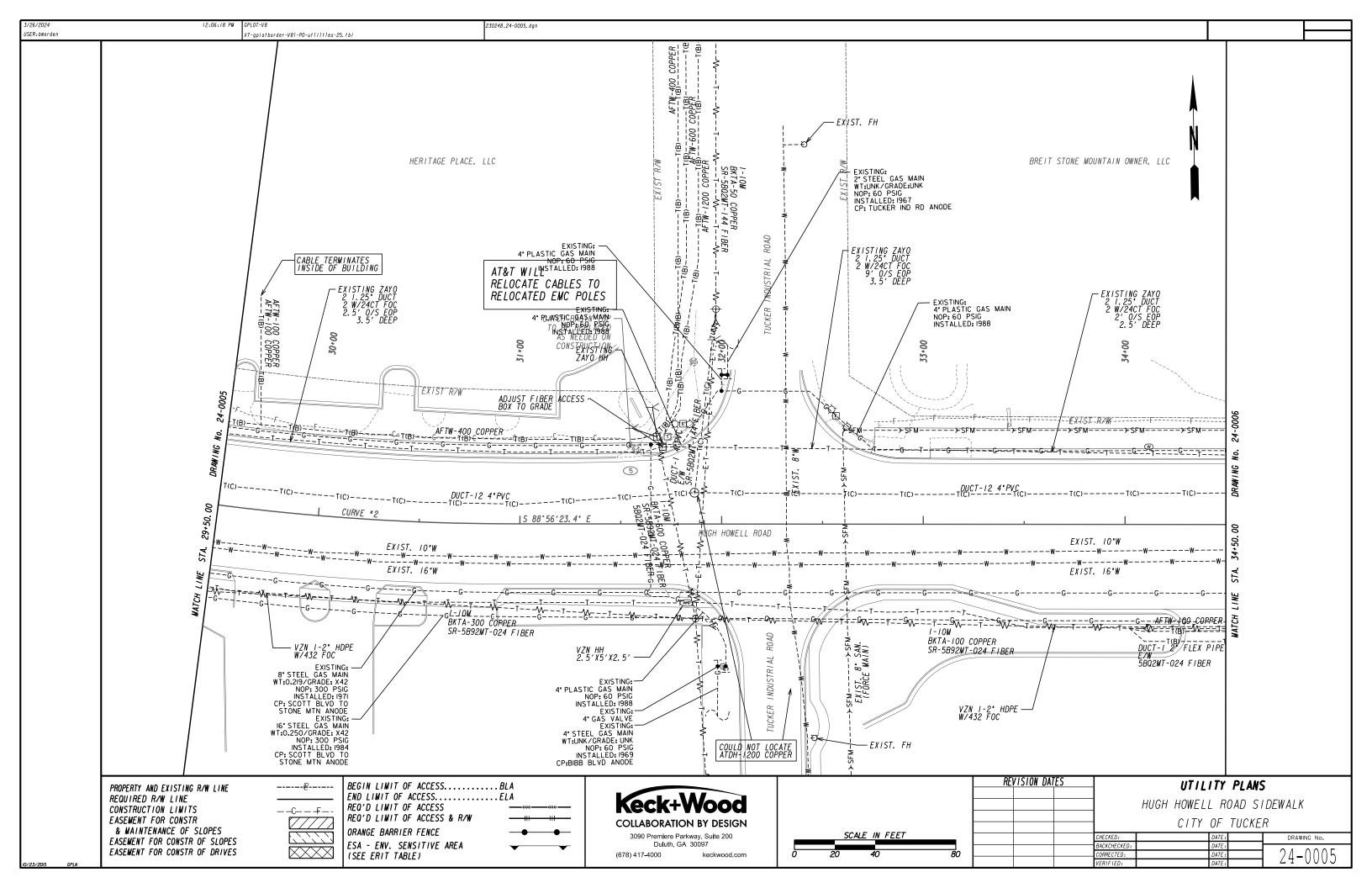


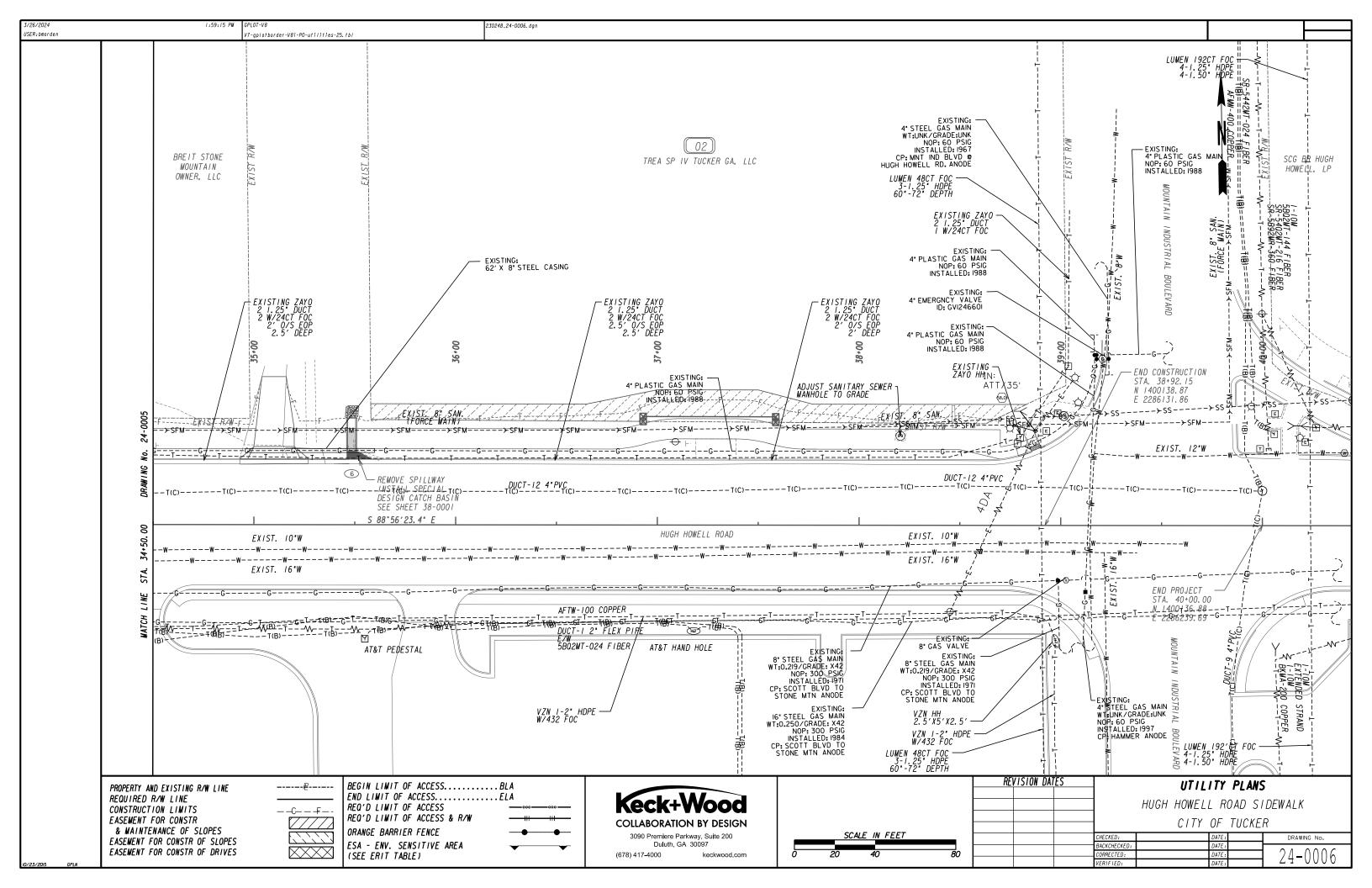


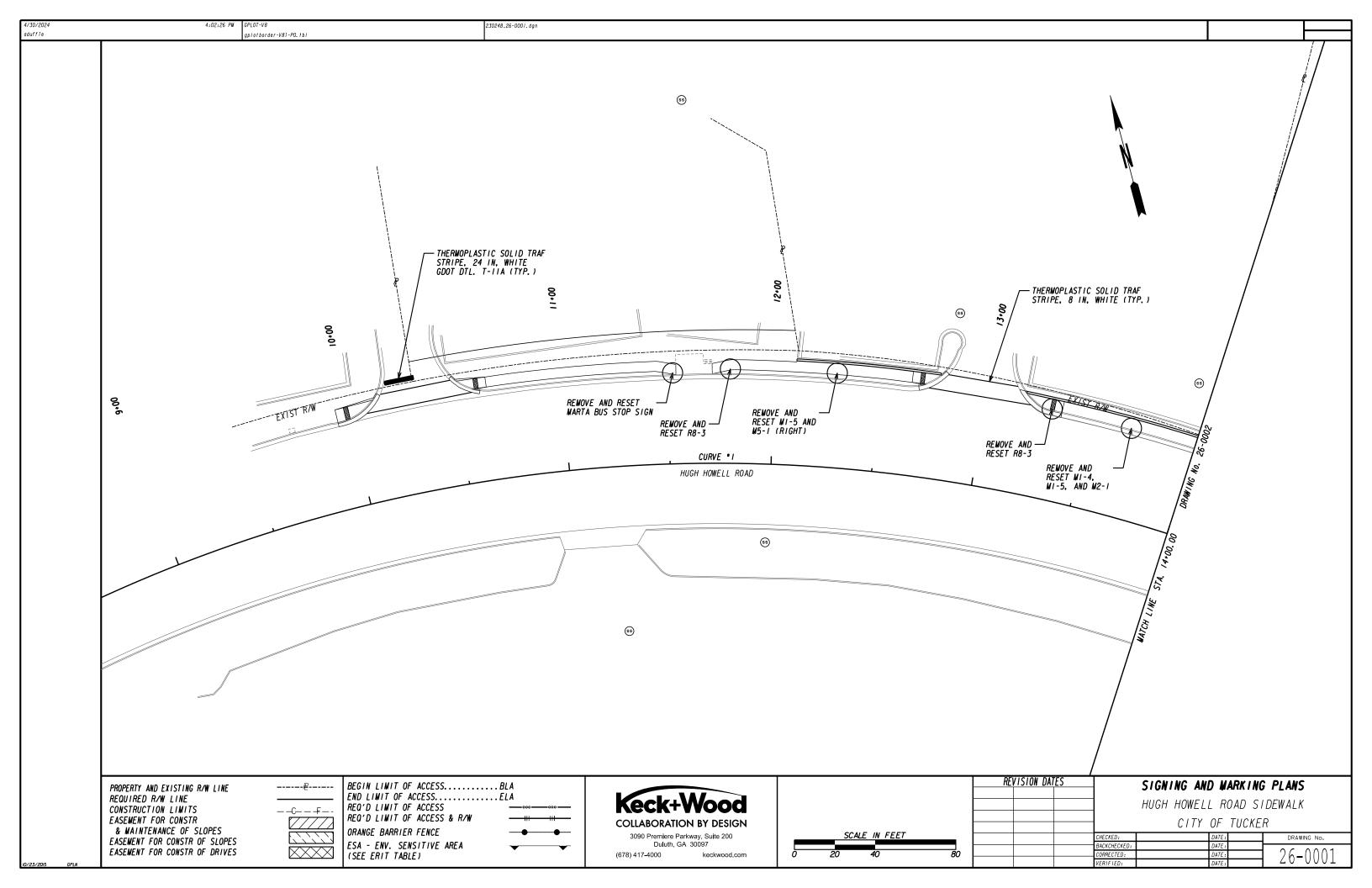


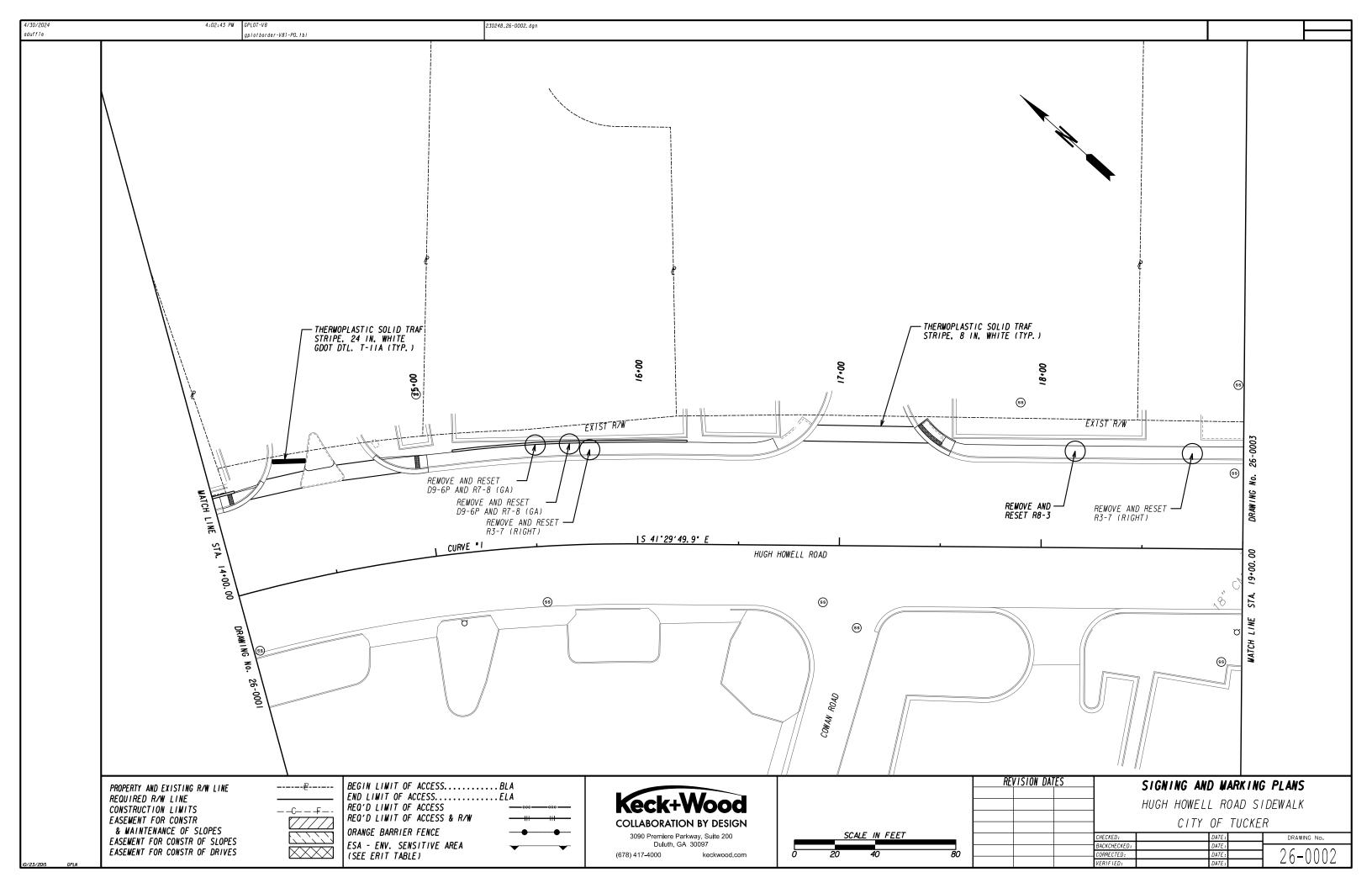


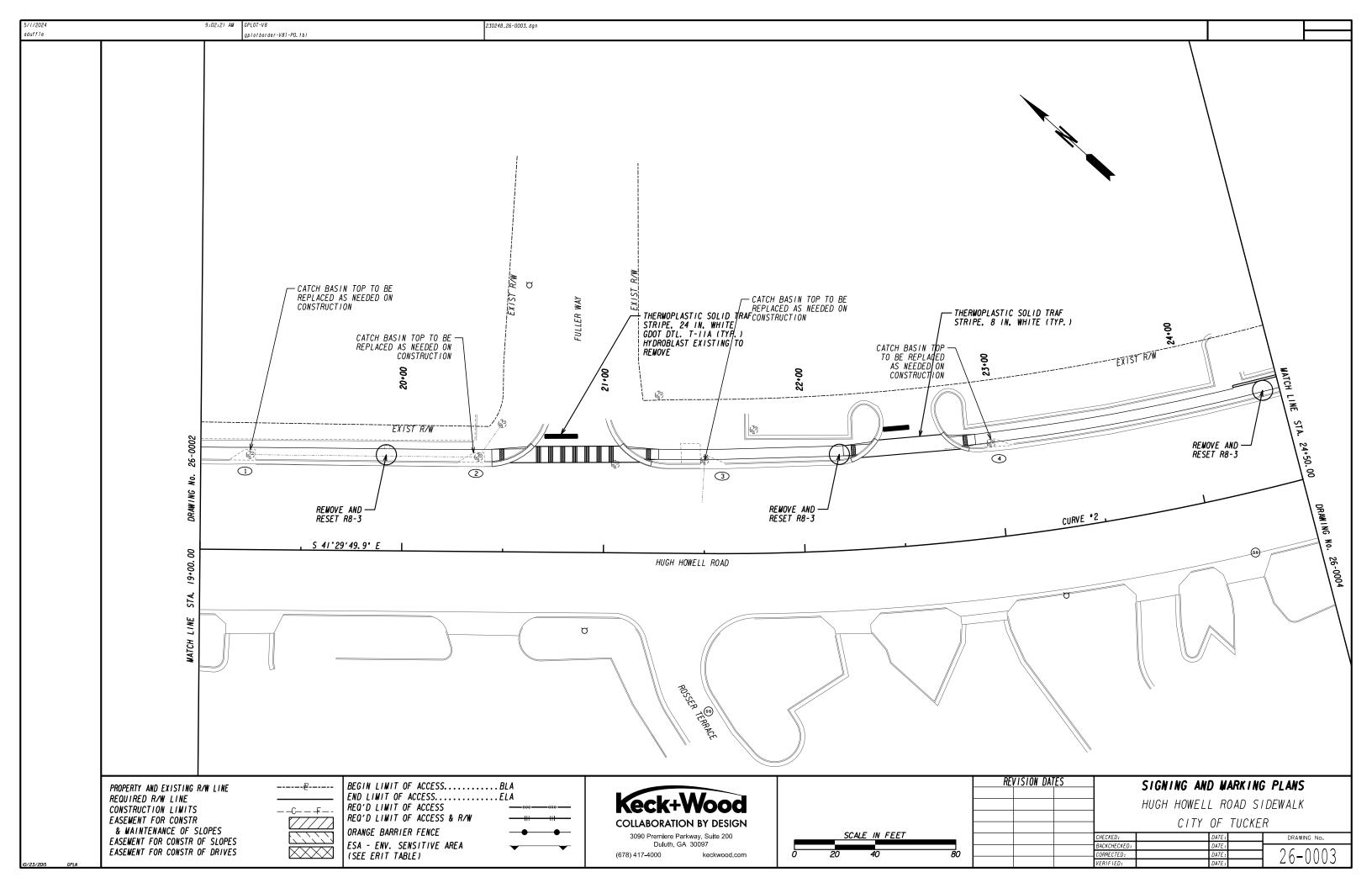


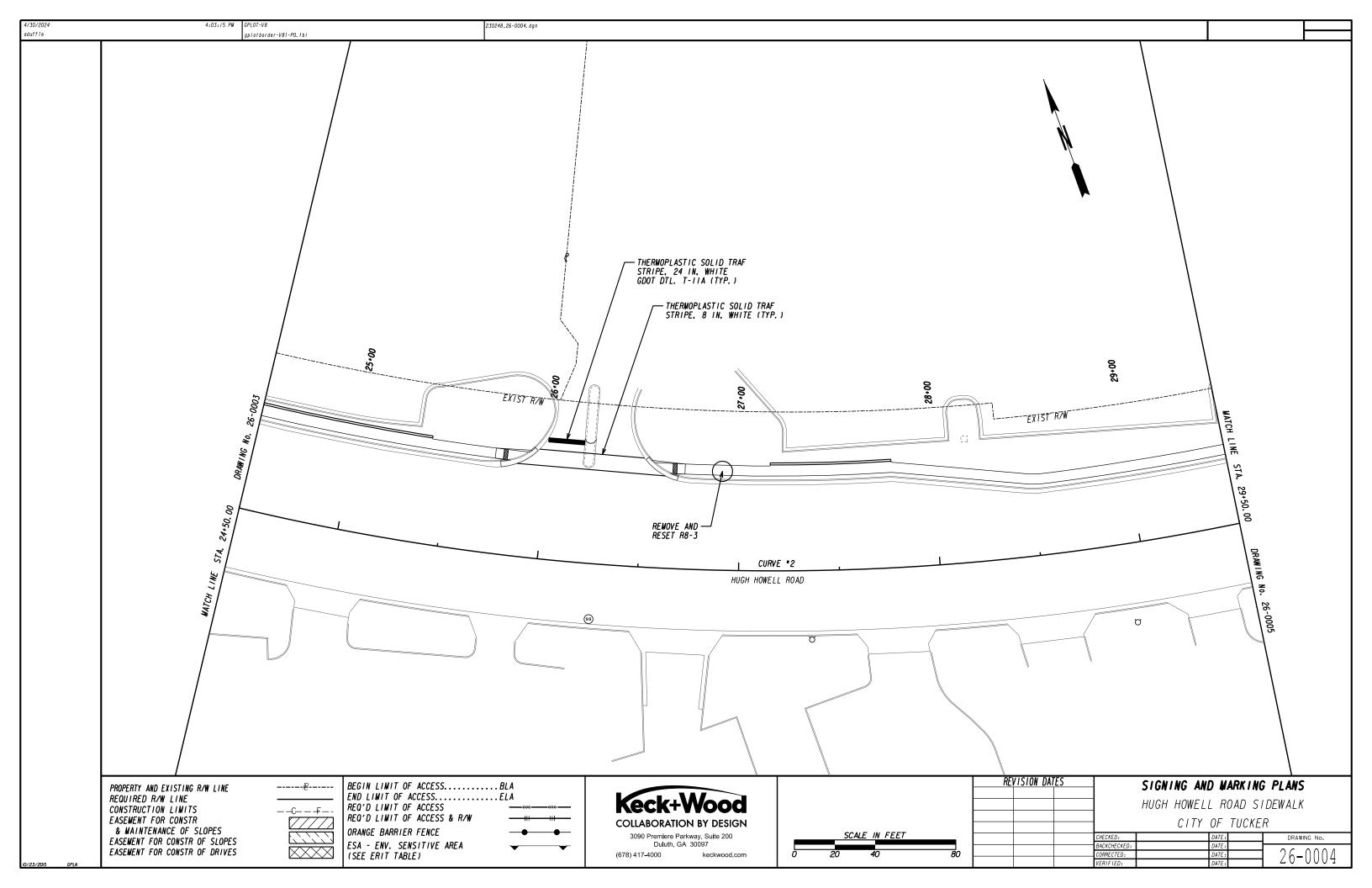


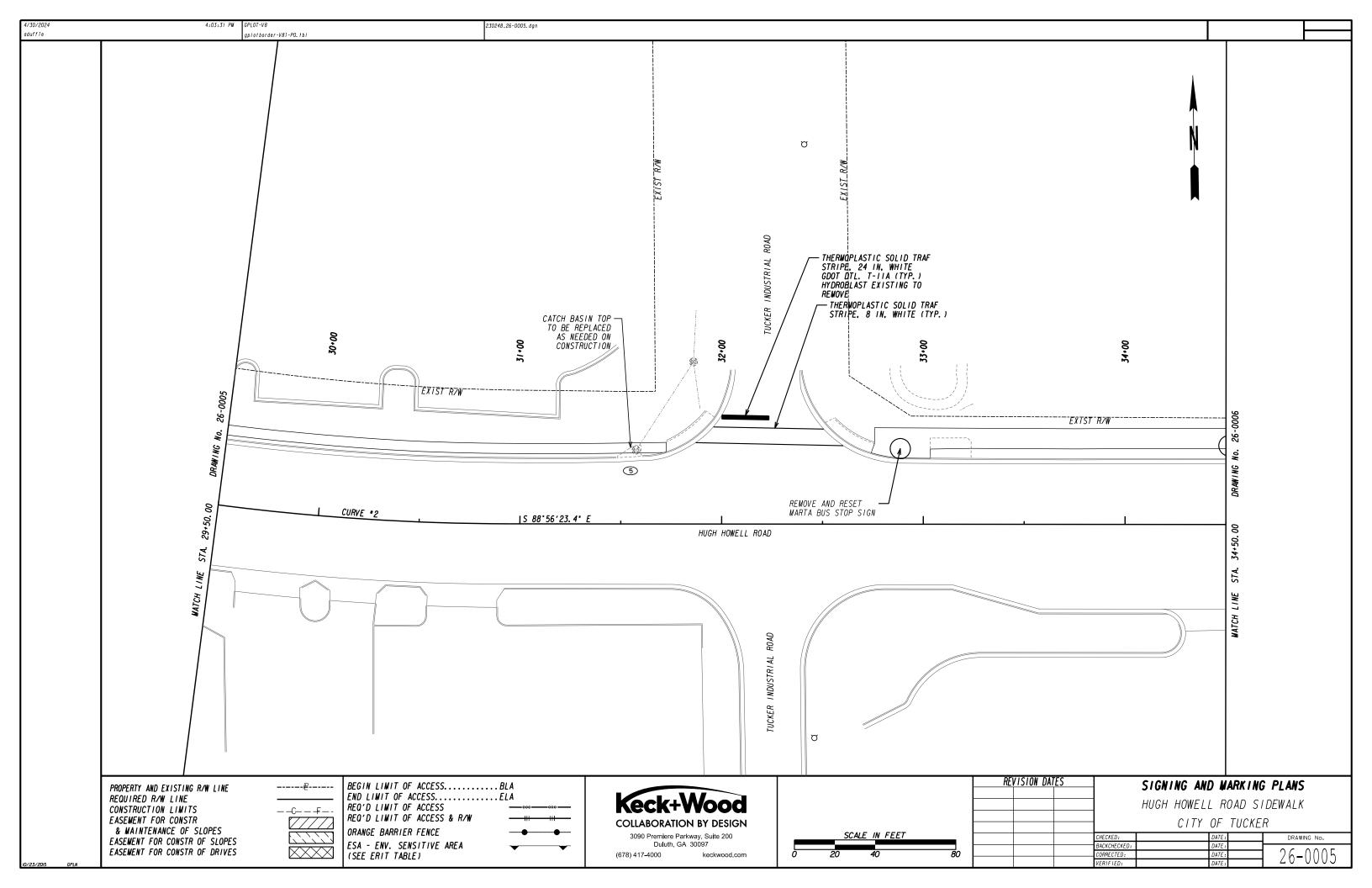


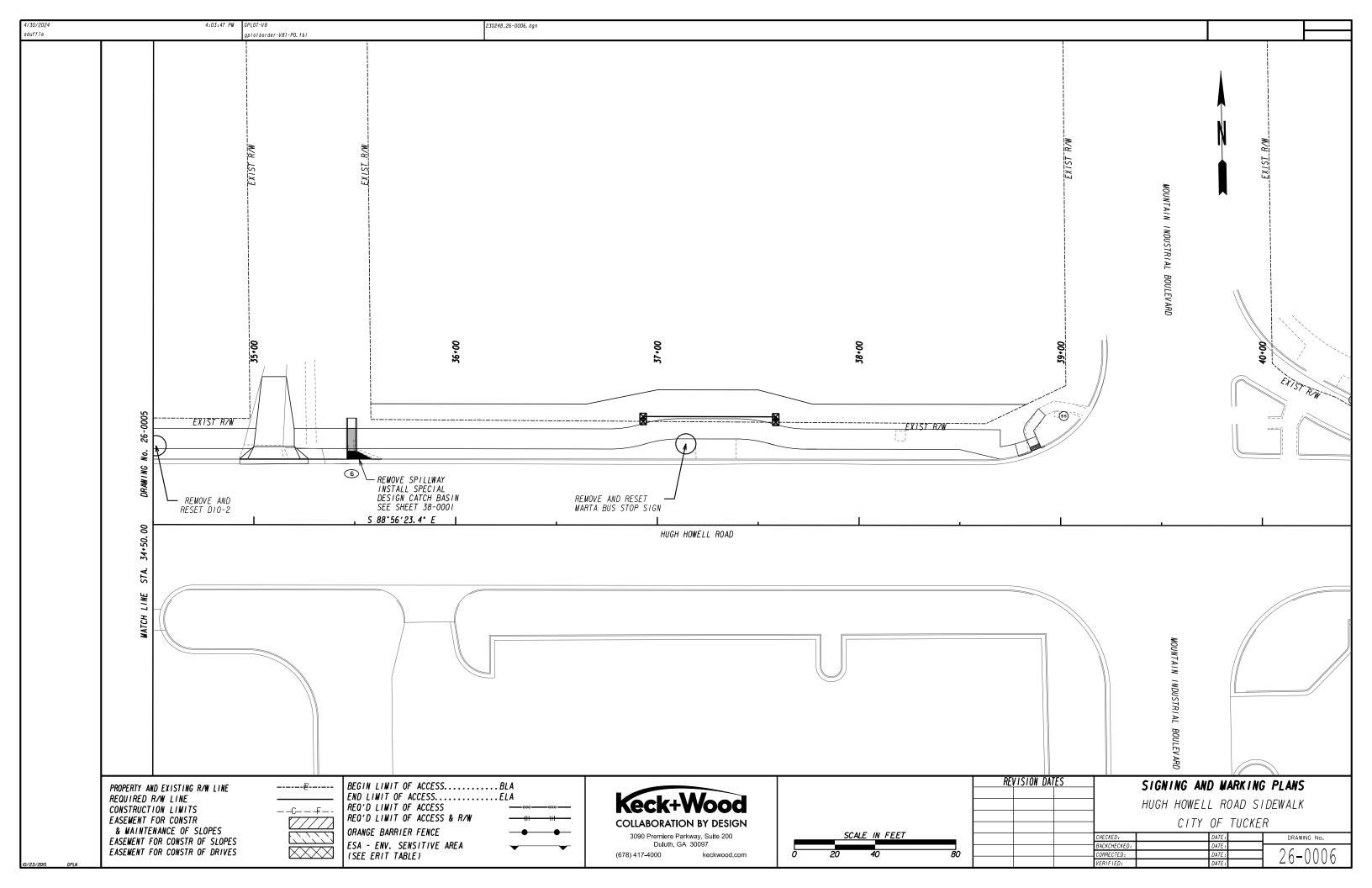


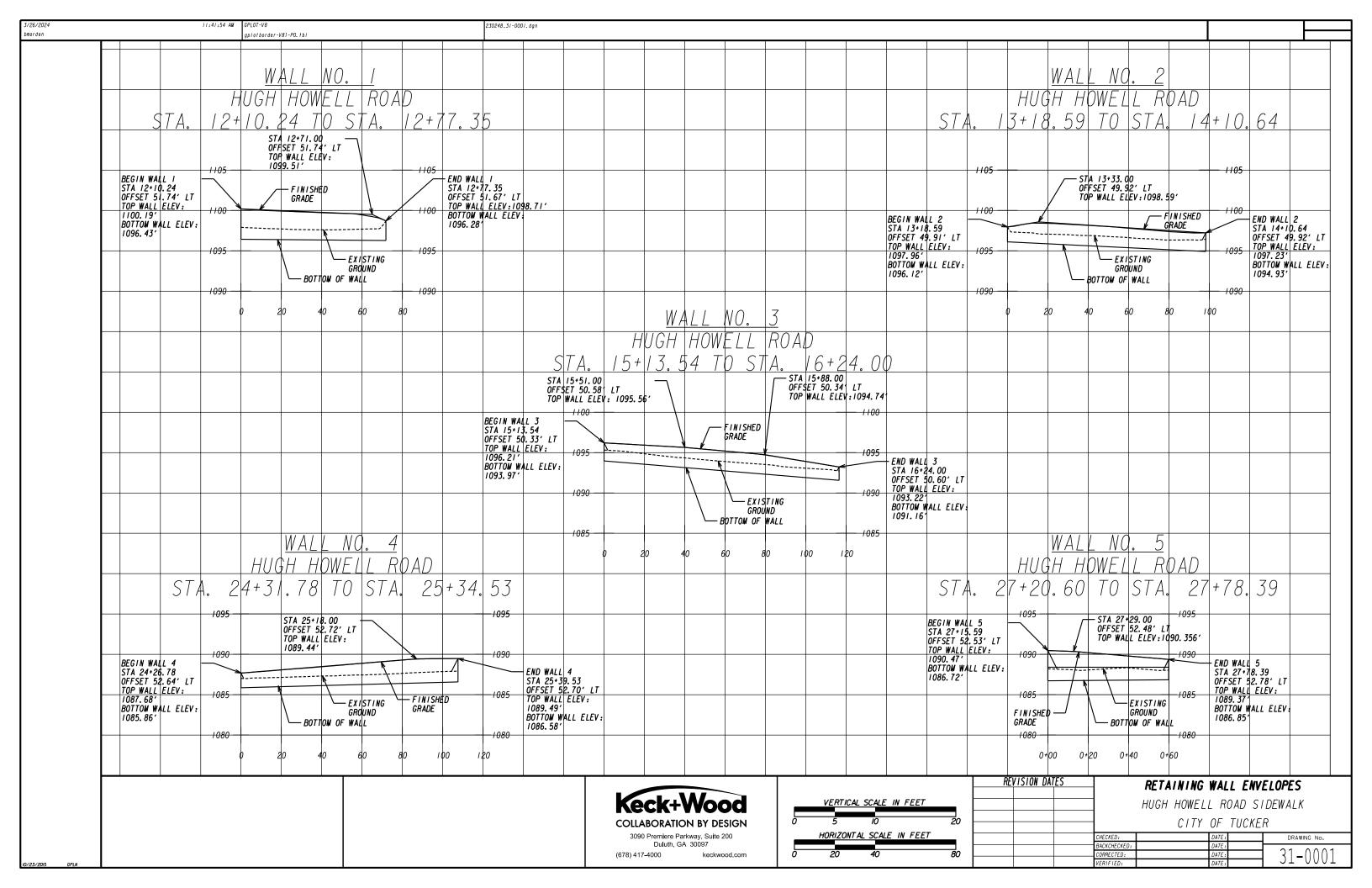


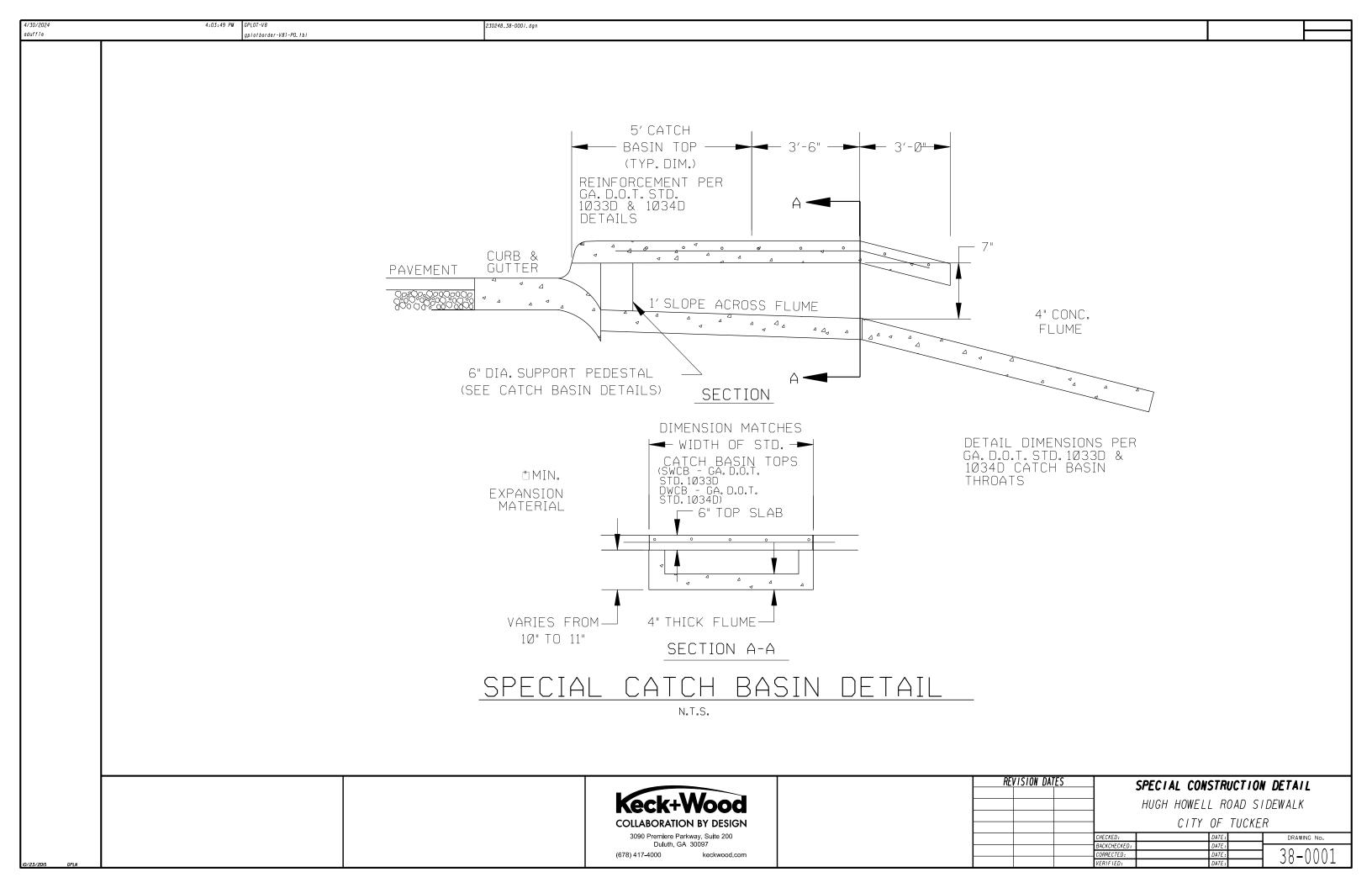












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CDUTTU		gplotborder-V81-P0.tbl				
	CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION		
		ORANGE BARRIER FENCE		ORANGE BARRIER FENCE DELINEATES ENVIRONMENTALLY SENSITIVE AREAS WHERE THE CONTRACTOR SHALL NOT CLEAR, GRUB, OR PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.		
		L	INE CODE			
		ORANGE	BARRIER FENCE			
		ENVIRONMENTALLY SENSITIVE AREA		AN ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE, ESAS INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, HISTORIC SITES, ARCHAEOLOGICAL SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS. IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN		
	ESA	L	INE CODE	ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.		
		ESA-25'(OR 5	O')STREAM BUFFER, ETC.			
	Bf	BUFFER ZONE	BI	A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS. WHEN NECESSARY, BUFFER ZONES ARE TO BE PROTECTED BY ORANGE BARRIER FENCE.		
			SYMBOL Bf			
		MULCH	**************************************	THIS IS AN APPLICATION OF STRAW MULCH USED TO REDUCE SOIL EROSION AND STABILIZE THE SOIL. IT IS USED TO CONTROL EROSION IN AREAS WHERE PERMANENT VEGETATION IS OUT OF SEASON OR TO TEMPORARILY STABILIZE AREAS PRIOR TO FINAL GRADING.		
	Ds I	SECTION 163	444444444444444444444444444444444444444	MULCHING REQUIREMENTS ARE ADDRESSED BY STANDARD SPECIFICATIONS AND/OR THE PROJECT ENGINEER.		
			Ds I	THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.		
		TEMPORARY		THE SOWING OF A QUICK GROWING SPECIES OF GRASS SUITABLE TO THE AREA		
		GRASSING	**************************************	AND SEASON. IT IS TYPICALLY USED TO CONTROL EROSION IN AREAS LONGER THAN MULCHING IS EXPECTED TO LAST. TEMPORARY GRASSING SHOULD BE USED ON ALL PROJECTS ACCORDING TO THE		
	Ds2	SECTION 163,700	***********	STANDARD SPECIFICATIONS. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED		
			SYMBOL	ON APPLICABLE SHEETS IN SECTION 54.		
			Ds2			
		ı				

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ds3	PERMANENT GRASSING SECTION 700	SYMBOL Ds3	THE SOWING OF PERMANENT VEGETATION, SUCH AS GRASS, SUITABLE TO THE AREA AND SEASON. PERMANENT VEGETATION SHALL BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATION. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
Ds4	SODDING CONSTRUCTION DETAIL D-54 SECTION 700, 890	PATTERN DS4	THE INSTALLATION OF A SPECIES OF GRASS SODDING SUITABLE TO THE AREA AND SEASON TO PROVIDE IMMEDIATE PERMANENT VEGETATION. SODDING MAY BE SHOWN FOR HIGHLY SENSITIVE AREAS, TO IMPROVE AESTHETICS, OR FOR SPECIAL PLANTING REQUIREMENTS ON THE BASIS OF ENVIRONMENTAL COMMITMENTS OR LANDSCAPING REQUIREMENTS. THE BMP PATTERN FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
F1-Co		SYMBOL FI-CO YACRYLAMIDE	FLOCCULANTS AND COAGULANTS ARE USED TO SETTLE SUSPENDED SEDIMENT, HEAVY METALS, AND HYDROCARBONS (TSS) IN SLOW MOVING RUNOFF FROM CONSTRUCTION SITES FOR WATER CLARIFICATION. ANIONIC POLYACRYLAMIDES (PAM) MAY BE USED IN CONJUNCTION WITH BMPS WITHIN CHANNELS UPSTREAM OF A POST-CONSTRUCTION POND, TEMPORARY SEDIMENT BASIN, OR TEMPORARY SEDIMENT TRAP. FLOCCULANTS SHALL NOT BE USED DOWNSTREAM OF AFOREMENTIONED BMPS! FLOCCULANTS/COAGULANTS ARE TO BE SHOWN ON PLANS WITH APPLICABLE BMP IF NEEDED. PAYMENT FOR PAM AS A FLOCCULANT WILL BE INCLUDED IN THE PRICE FOR THE INSTALLATION AND/OR MAINTENANCE OF THE BMP IT IS USED IN CONJUNCTION WITH. NO SEPARATE PAYMENT WILL BE MADE.
Sb	STREAMBANK STABILIZATION SECTION 702	PATTERN	STREAMBANK STABILIZATION IS THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAMBANKS, OR TO PREVENT, OR RESTORE AND REPAIR SMALL STREAMBANK EROSION PROBLEMS. STREAMBANK STABILIZATION AREAS SHOULD BE SHOWN ON THE PLANS WHEN APPLICABLE TO THE PROJECT. REFER TO THE PROJECT'S STREAM AND STREAM BUFFER MITIGATION PLANS FOR PLANT SPECIES, LOCATIONS, AND OTHER PLANTING DETAILS.

NOTE:

- I. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- 2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

Keck+Wood
COLLABORATION BY DESIGN

3090 Premlere Parkway, Sulte 200 Duluth, GA 30097 (678) 417-4000 keckwood.com NO SCALE

EROSION CONTROL LEGEN	ES	VISION DAT	RE\
ENOSTON CONTINUE ELOEM			3/2/2017
UNIFORM CODE SHEET			
SHEET I OF 7			
CHECKED. D. EAGLETON DATE: 01/01/16			

CHECKED: D. EAGLETON DATE: 01/01/16 DRAWING NO.

BACKCHECKED: DATE: 52-0001

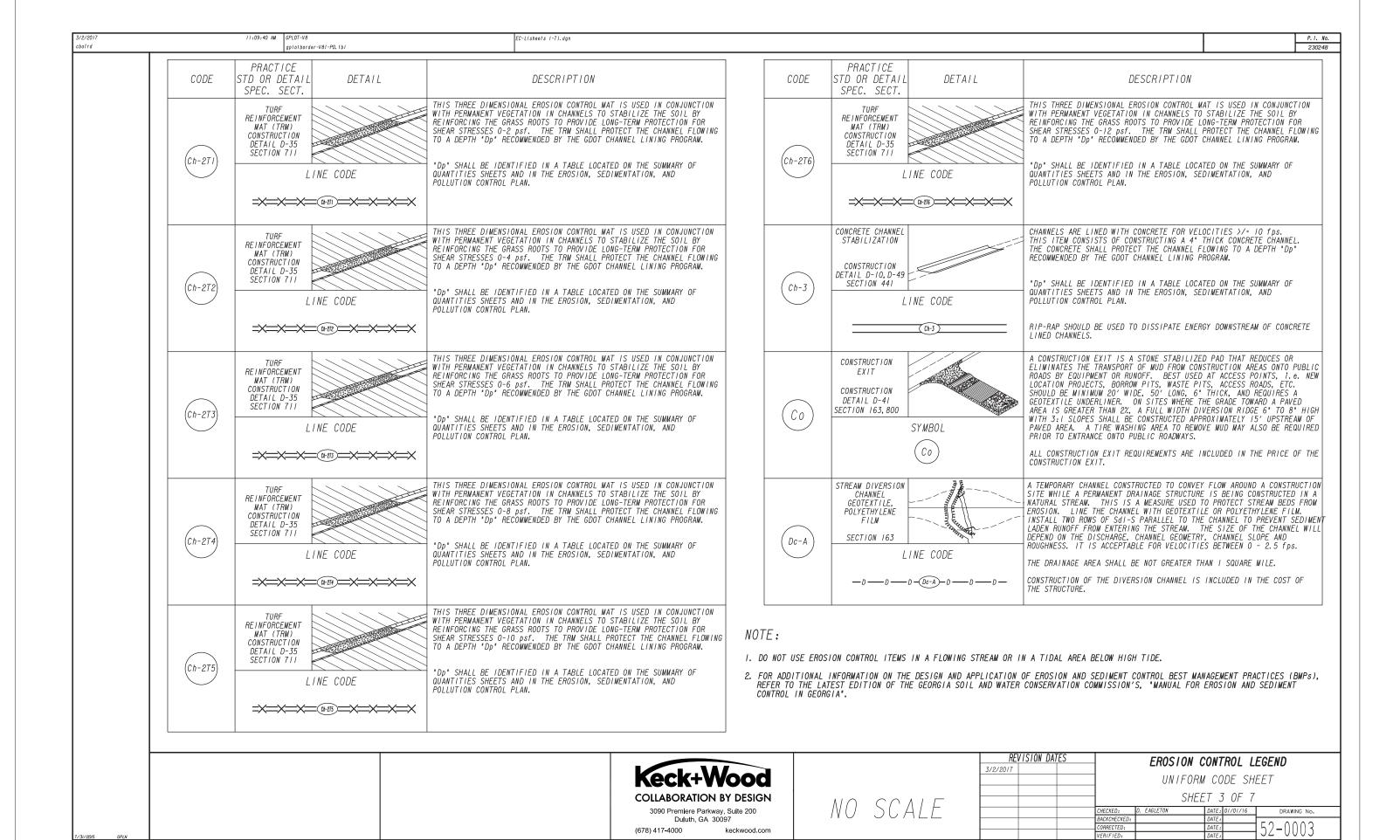
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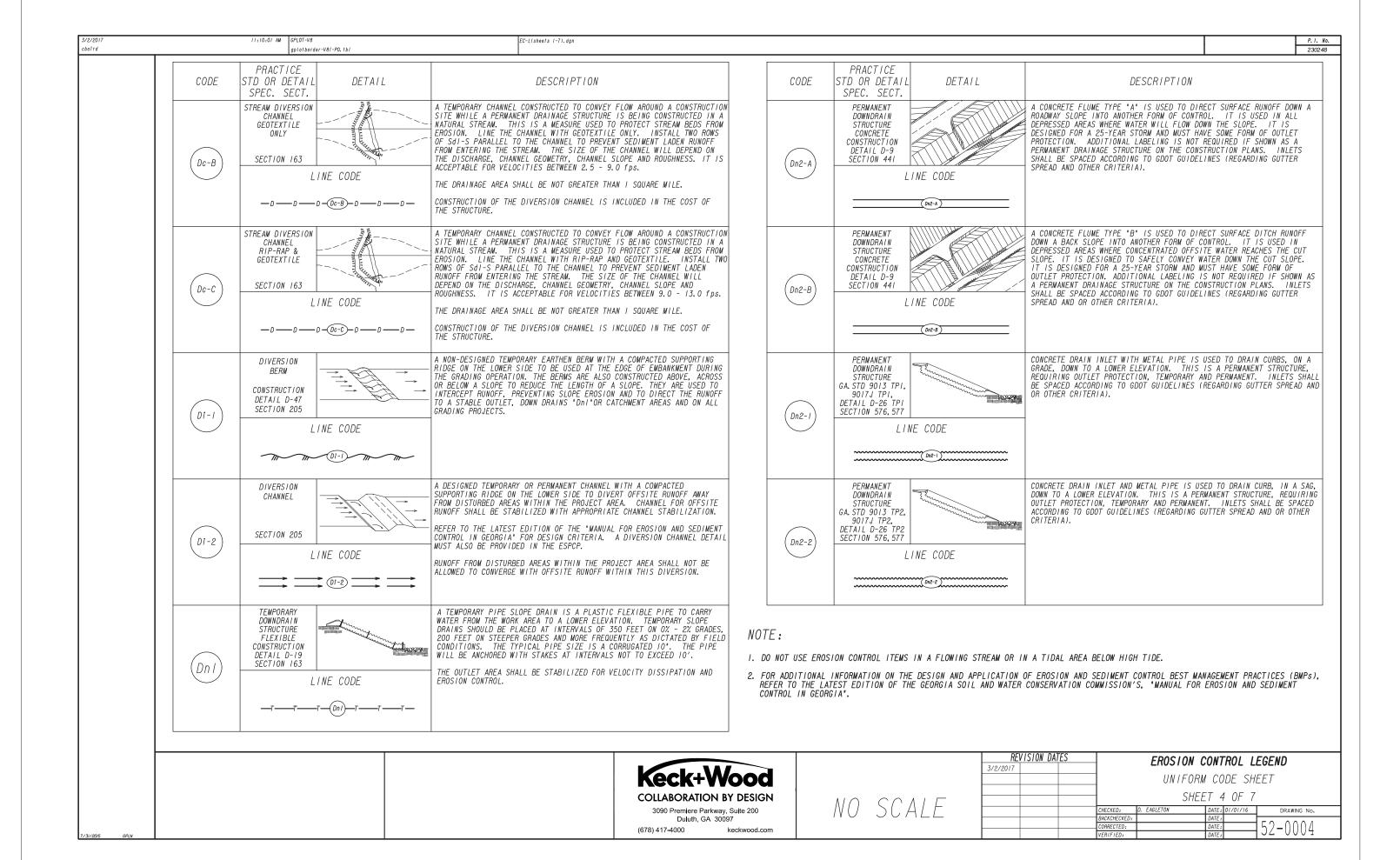
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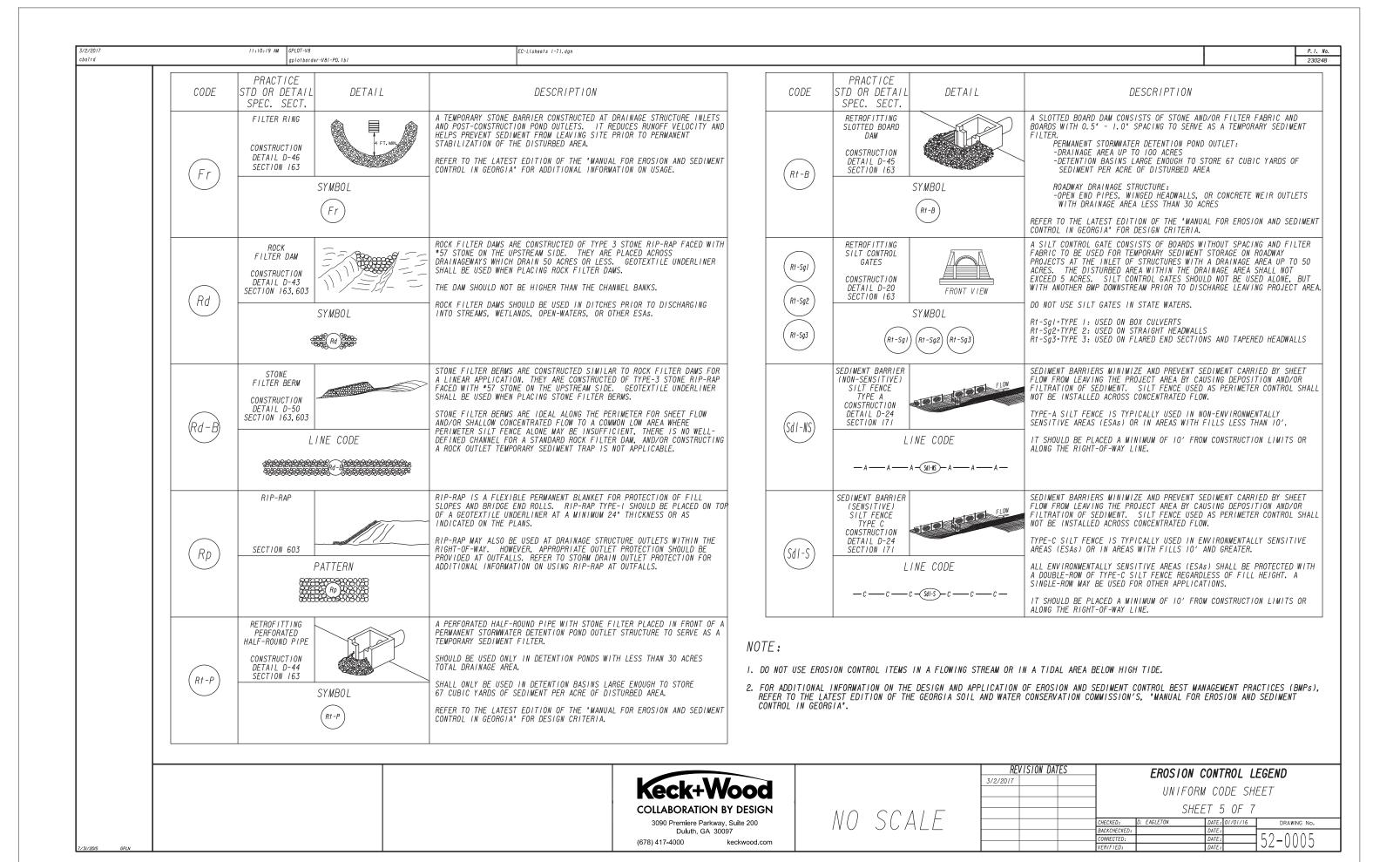
	10:52:37 AM GPLOT-V8 gplotborder-v8i-P0.1bl	EC-L(sheets 1-7).dgn			P. I. No. 230248
CODE ST	PRACTICE FD OR DETAIL DETAIL SPEC. SECT.	DESCRIPTION	CODE	PRACTICE STD OR DETAIL DETAIL SPEC. SECT.	DESCRIPTION
	SLOPE STABILIZATION CONSTRUCTION	SLOPE STABILIZATION (EROSION CONTROL MATTING) IS A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS. SLOPE STABILIZATION MAY BE A ROLLED EROSION CONTROL PRODUCT (RECP.		STONE CHECK DAM OR SANDBAG CHECK DAM CONSTRUCTION	STONE CHECK DAMS ARE CONSTRUCTED OF TYPE-3 RIP-RAP WITH GEOTEXTILE UNDERLINER. STONE CHECK DAMS ARE PREFERRED IN ROADWAY DITCHES OUTSIDE THE CLEAR ZONE. CONSIDERATION SHOULD BE GIVEN TO USING OTHER APPROPRIATE CHECK DAMS AND/OR BMPs WITHIN THE CLEAR ZONE.
Ss —	DETAIL D-35 SECTION 716 PATTERN	OR A HYDRAULIC EROSION CONTROL PRODUCT (HECP). SLOPE STABILIZATION SHALL BE USED ON ALL CUT OR FILL SLOPES OF 2.5:1 OR STEEPER AND WITHIN 50 FEET OF ALL CROSS DRAINS AND CULVERTS.	(Cd-S)	DETAIL D-56 SECTION 163, 603 SYMBOL	SANDBAG CHECK DAMS ARE RECOMMENDED IN CONCRETE LINED CHANNELS FOR TEMPORARY VELOCITY CONTROL ONLY. ENSURE DISCHARGE POINT IS PROPERLY STABILIZED AND INCLUDE APPROPRIATE BMPs FOR SEDIMENT STORAGE UPSTREAM AND/OR DOWNSTREAM OF CONCRETE LINED CHANNELS.
	S S	NOTE: ONLY COCONUT FIBER BLANKET OR WOOD FIBER BLANKET SHALL BE USED AS SLOPE STABILIZATION WITHIN BUFFERED AREAS.		(Cd-S)	IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.O-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
	TACKIFIERS O MANAGEMENT	TACKIFIERS HYDRATE IN WATER AND READILY BLEND WITH OTHER SLURRY MATERIALS AND ARE USED TO TIE-DOWN FOR SOIL, COMPOST, SEED, STRAW, HAY OR MULCH.		VEGETATED CHANNEL STABILIZATION	A NEW OR EXISTING CHANNEL MAY BE LINED WITH PERMANENT VEGETATION ONLY FOR VELOCITIES UP TO 5.0 fps. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT CHANNEL LINING DESIGN PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED.
Tac	SECTION 163, 700, 895 SYMBOL	TACKIFIERS REQUIREMENTS, SUCH AS ANIONIC POLYACRYLAMIDES (PAM) ARE ADDRESSED BY STANDARD SPECIFICATIONS AND ARE NOT TYPICALLY SHOWN OF THE PLANS. PAM IS TYPICALLY USED BY THE CONTRACTOR FOR TEMPORARY OR PERMANENT GRASSING.	(Ch-1)	SECTION 700 LINE CODE	TYPICALLY NOT SHOWN IN PLANS.
	Tac POLYACRY LAMI DE	REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMEN CONTROL IN GEORGIA' FOR CRITERIA.		******	
	FABRIC CHECK DAM CONSTRUCTION DETAIL D-24D SECTION 171	A CHECK DAW COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POST, OVERFLOW WEIR, AND TURF REINFORCEMENT MATTING (TRM) SPLASHPAP PLACED IN DITCHES IN A SPECIAL CONFIGURATION WHICH CONTROLS ENERGY DISSIPATION AND FILTRATION OF STORM WATER. SEE CONSTRUCTION DETAIL D-24D FOR ADDITIONAL INFORMATION AND SPACING REQUIREMENTS.		CHANNEL STABILIZATION RIP-RAP, TYPE I CONSTRUCTION DETAIL D-49	THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE I RIP-RAP 24' THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED.
(Cd-F)	SYMBOL (cd-F)	THIS ITEM IS SUITABLE FOR USE IN ROADSIDE DITCHES THAT ARE PART OF INFRASTRUCTURE CONSTRUCTION PROJECTS AND WITHIN THE CLEAR ZONE. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OF WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL E USED AT THE DOWNSTREAM DISCHARGE POINT.		LINE CODE	"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	COMPOST FILTER SOCK CHECK DAM CONSTRUCTION DETAIL D-52	A COMPOST FILTER SOCK CHECK DAM IS COMPOSED OF A PHOTODEGRADABLE OB BIODEGRADABLE KNITTED MESH MATERIAL CONTAINING A WEED FREE FILLER MATERIAL DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THEY SHALL BE PROPERLY STAKED FOR DITCH APPLICATIONS. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMEN		CHANNEL STABILIZATION RIP-RAP, TYPE 3 CONSTRUCTION DETAIL D-49	THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 3 RIP-RAP 24' THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED.
(Cd-Fs)	SYMBOL (cd-Fs)	CONTROL IN GEORGIA' FOR MATERIAL SPECIFICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL B USED AT THE DOWNSTREAM DISCHARGE POINT.	(Ch-2R3)	SECTION 603 / LINE CODE	*Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF OUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	BALED STRAW CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163	A BALE STRAW CHECK DAM IS COMPOSED OF BALES PREFERABLY BOUND WITH WIRE OR NYLON INSTEAD OF TWINE. BALES SHOULD BE PLACED IN ROWS WID BALE ENDS TIGHTLY ABUTTING ADJACENT BALES. THE DOWNSTREAM ROW OF BALES SHALL BE PLACED IN A TRENCH TO ALLOW THE TOP OF THE BALE'S LONG, WIDE SIDE TO BE LEVEL WITH THE GROUND AS A NON-ERODIBLE SPLAPAD. PROPER STAKING IS ALSO REQUIRED FOR DITCH APPLICATIONS.	NOTE:	SION CONTROL ITEMS IN A FLOWING STREAM OR	IN A TIDAL AREA BELOW HIGH TIDE.
(Cd-Hb)	SYMBOL (Cd-Hb)	IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL B USED AT THE DOWNSTREAM DISCHARGE POINT.		ATEST EDITION OF THE GEORGIA SOIL AND WATER	OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), R CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT
		Keck+V	Vood	RE 3/2/2017 11/28/2018	VISION DATES EROSION CONTROL LEGEND UNIFORM CODE SHEET
		COLLABORATION 3090 Premiere Parkw Duluth, GA 3	BY DESIGN ay, Suite 200	NO SCALE	SHEET 2 OF 7 CHECKED: D. EAGLETON DATE: 01/01/16 DRAWING NO. BACKHECKED: DATE: DAT

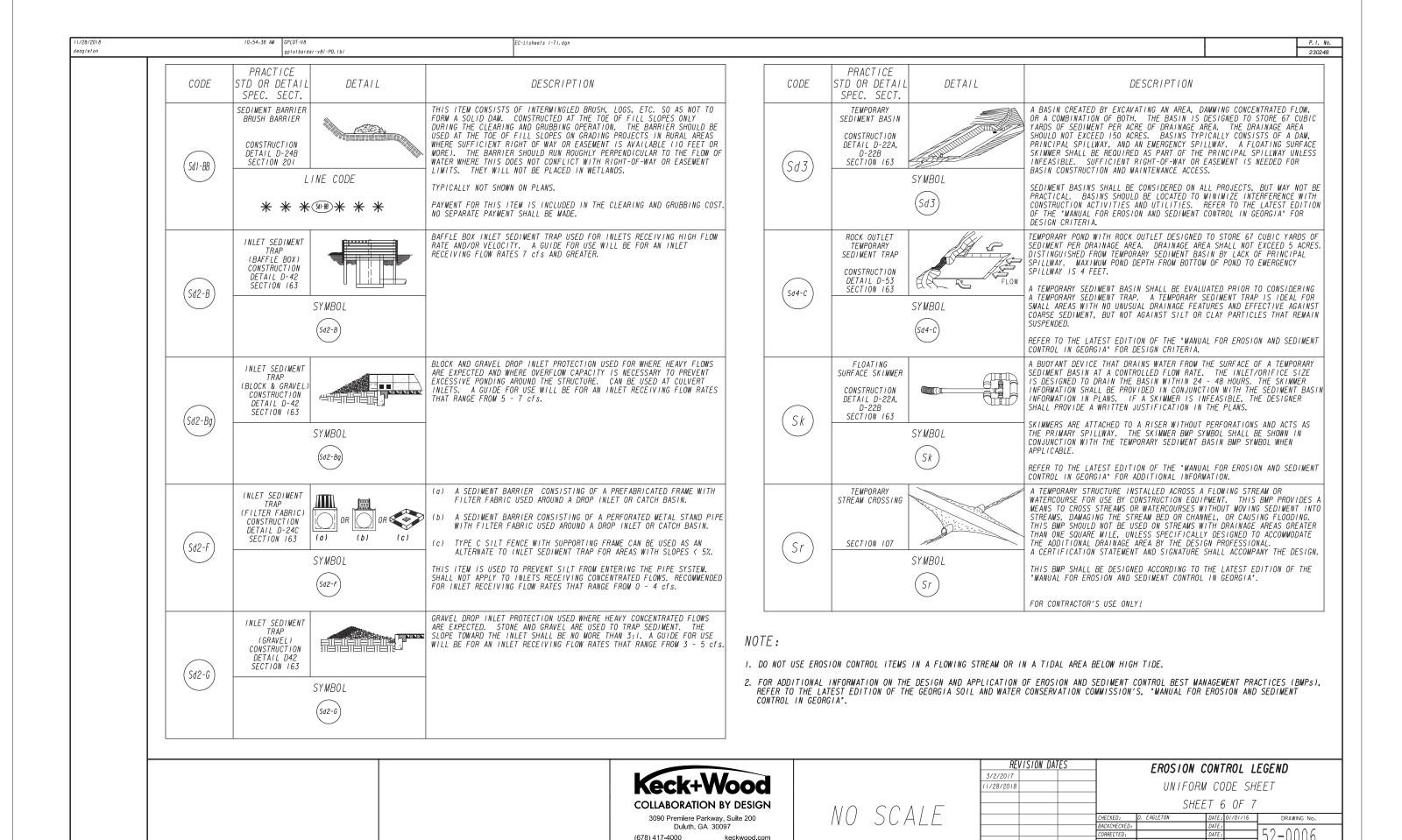
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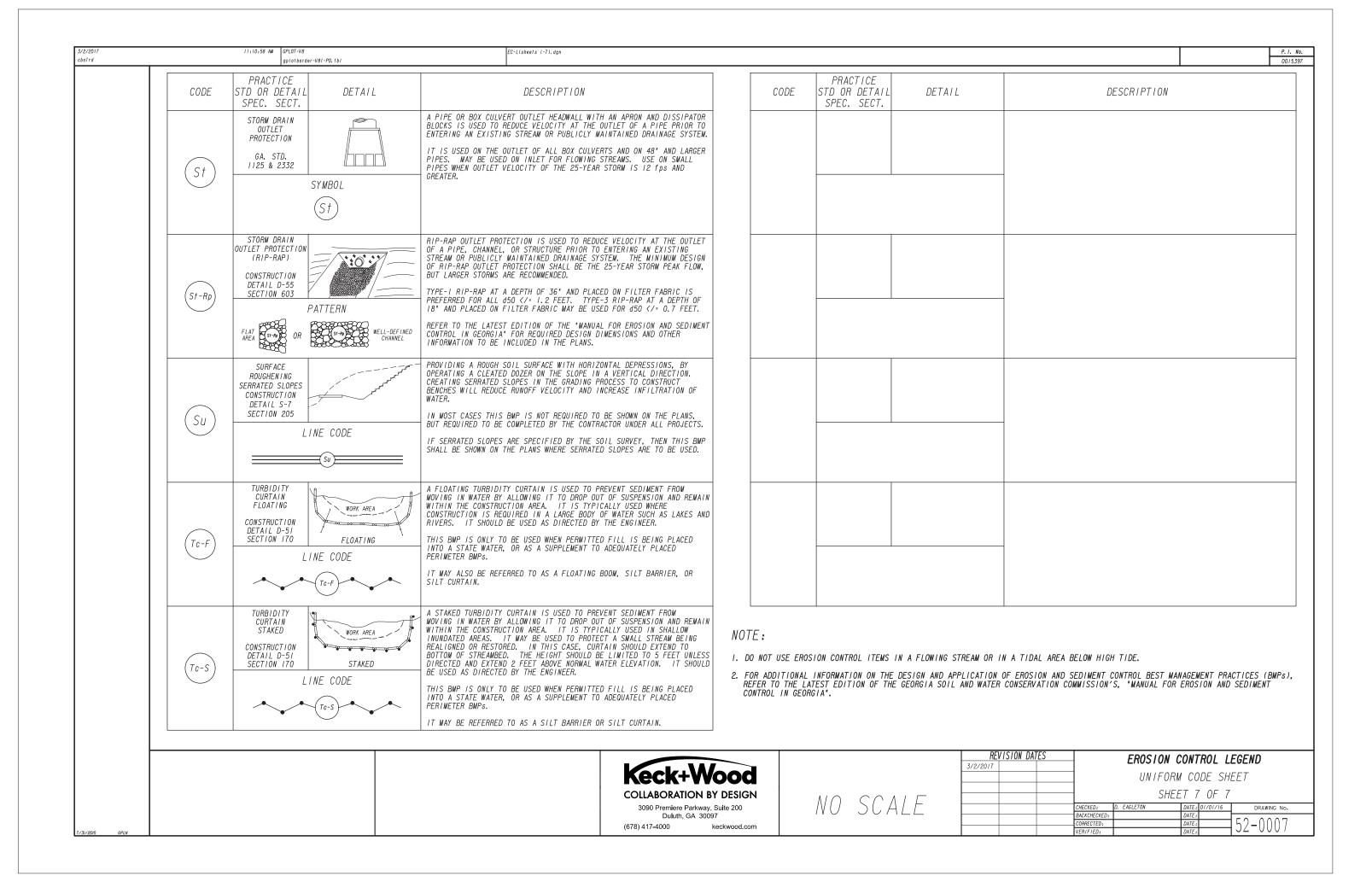
keckwood.com

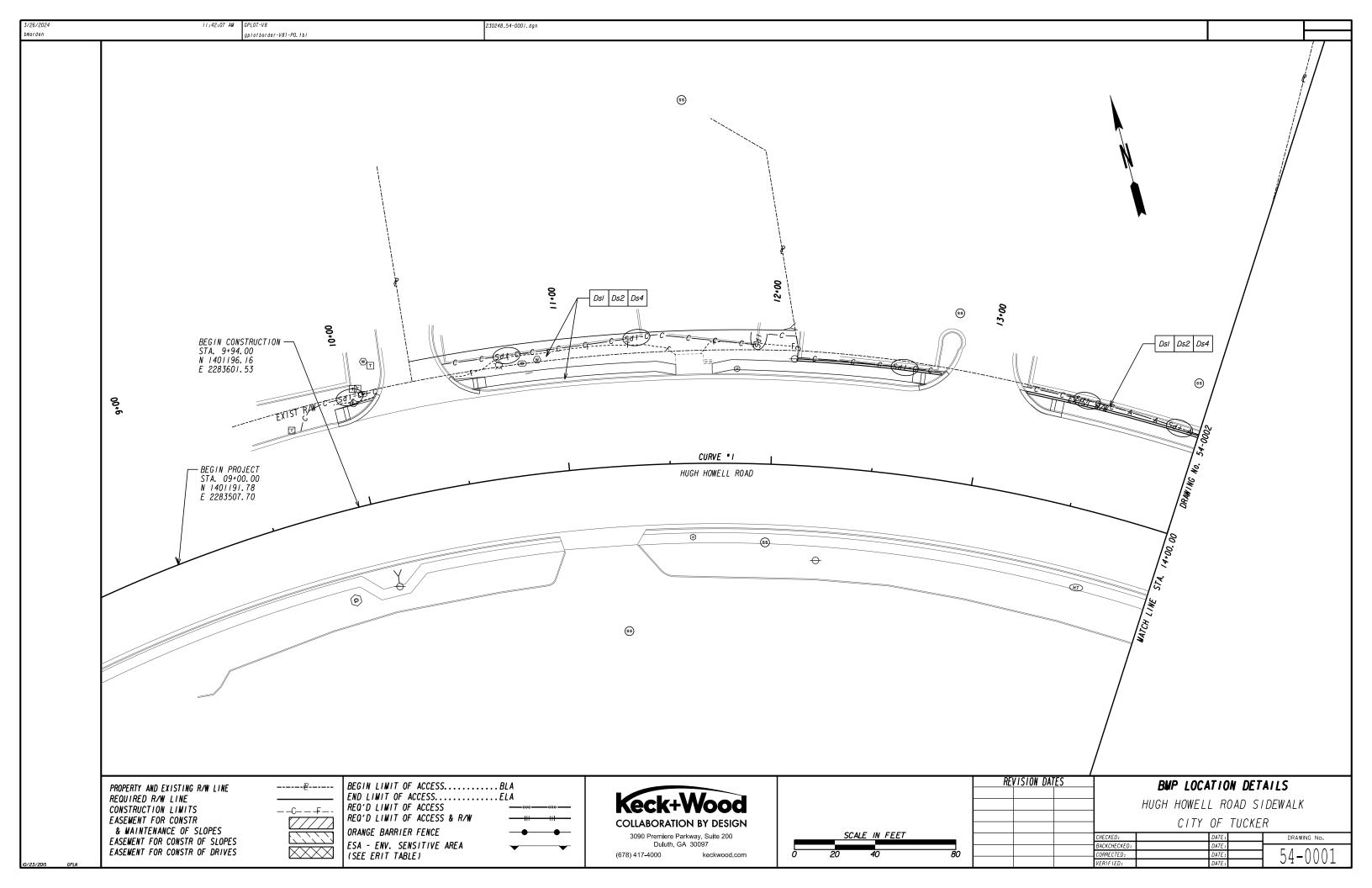


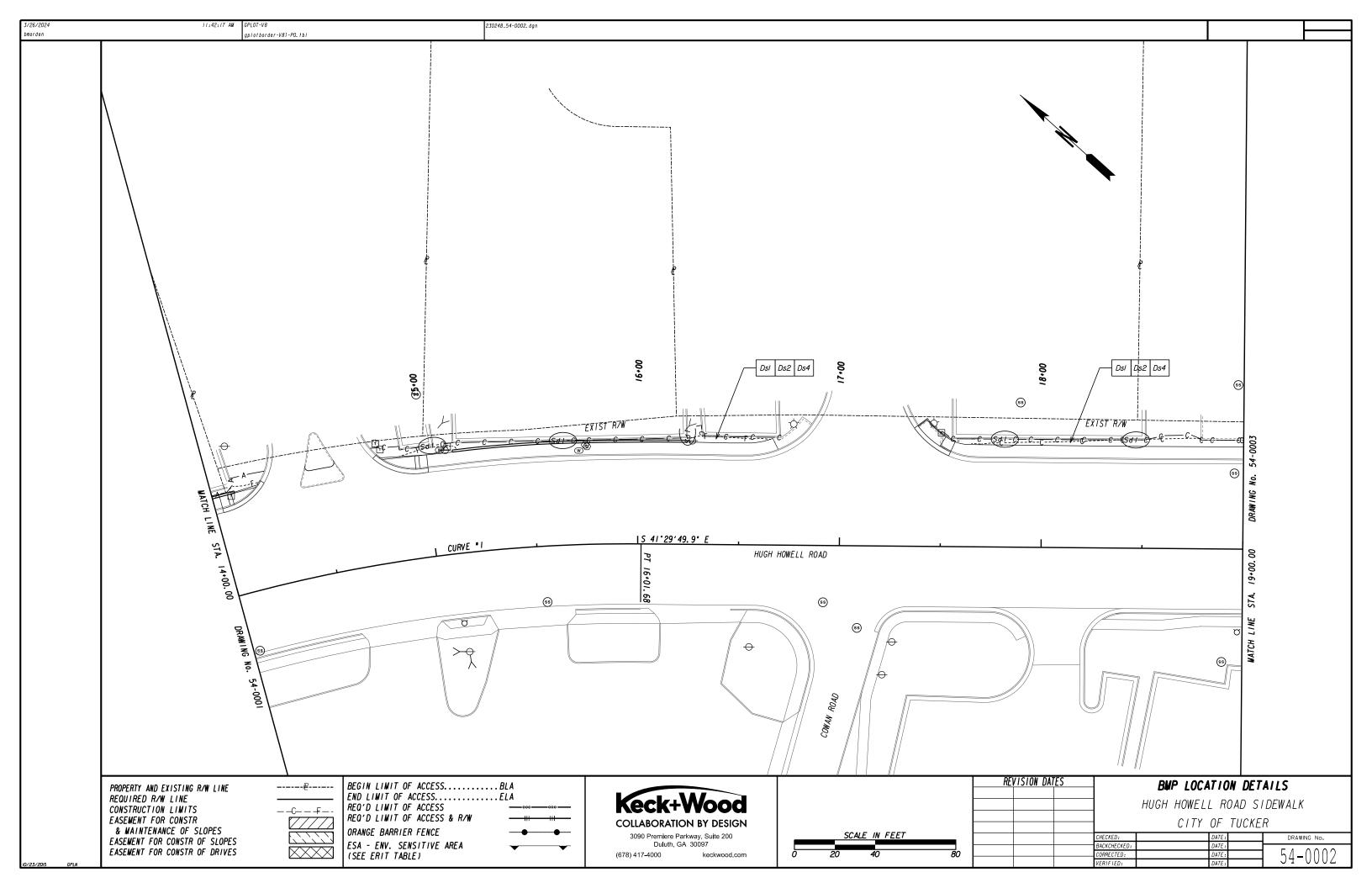


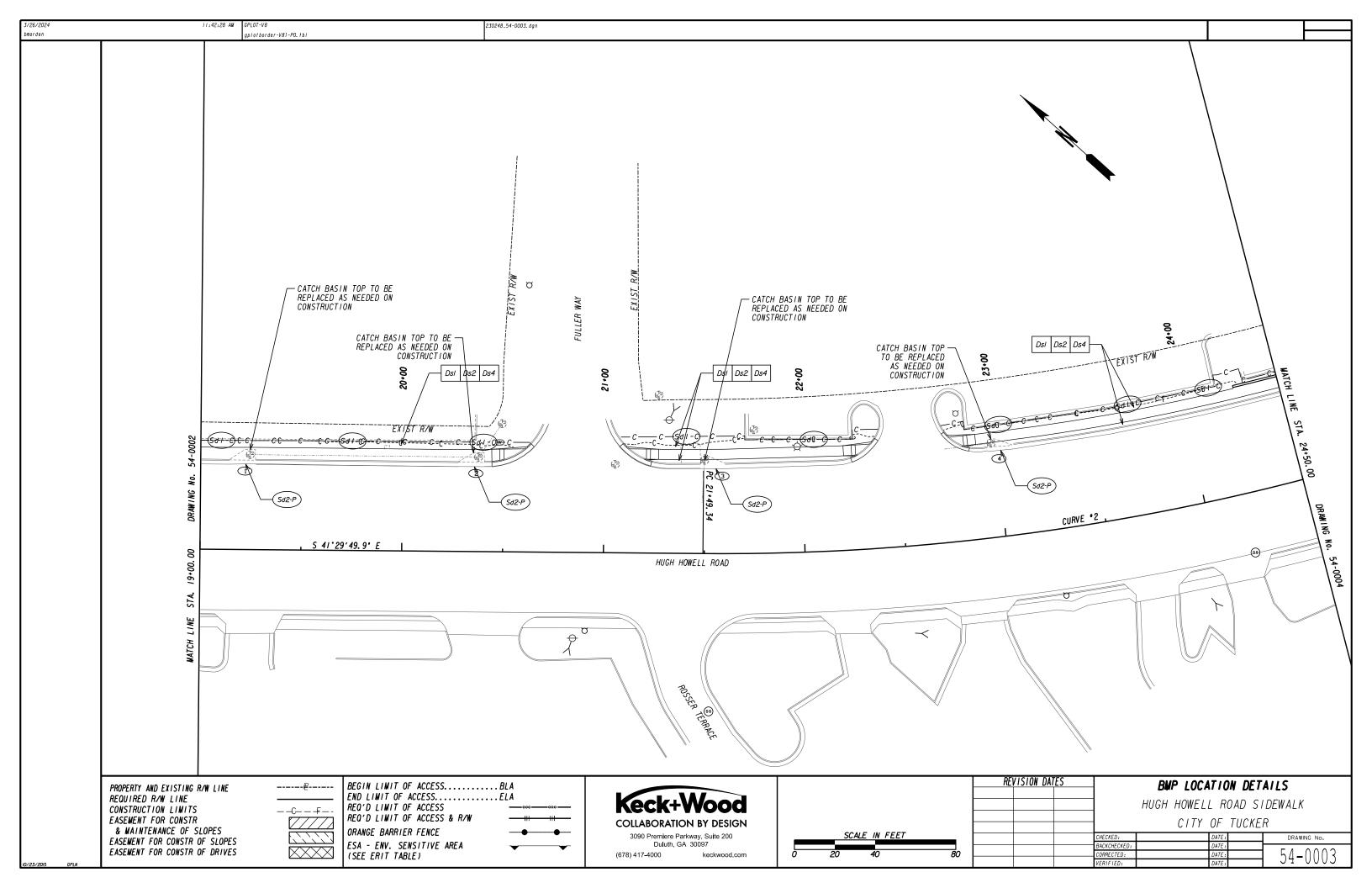


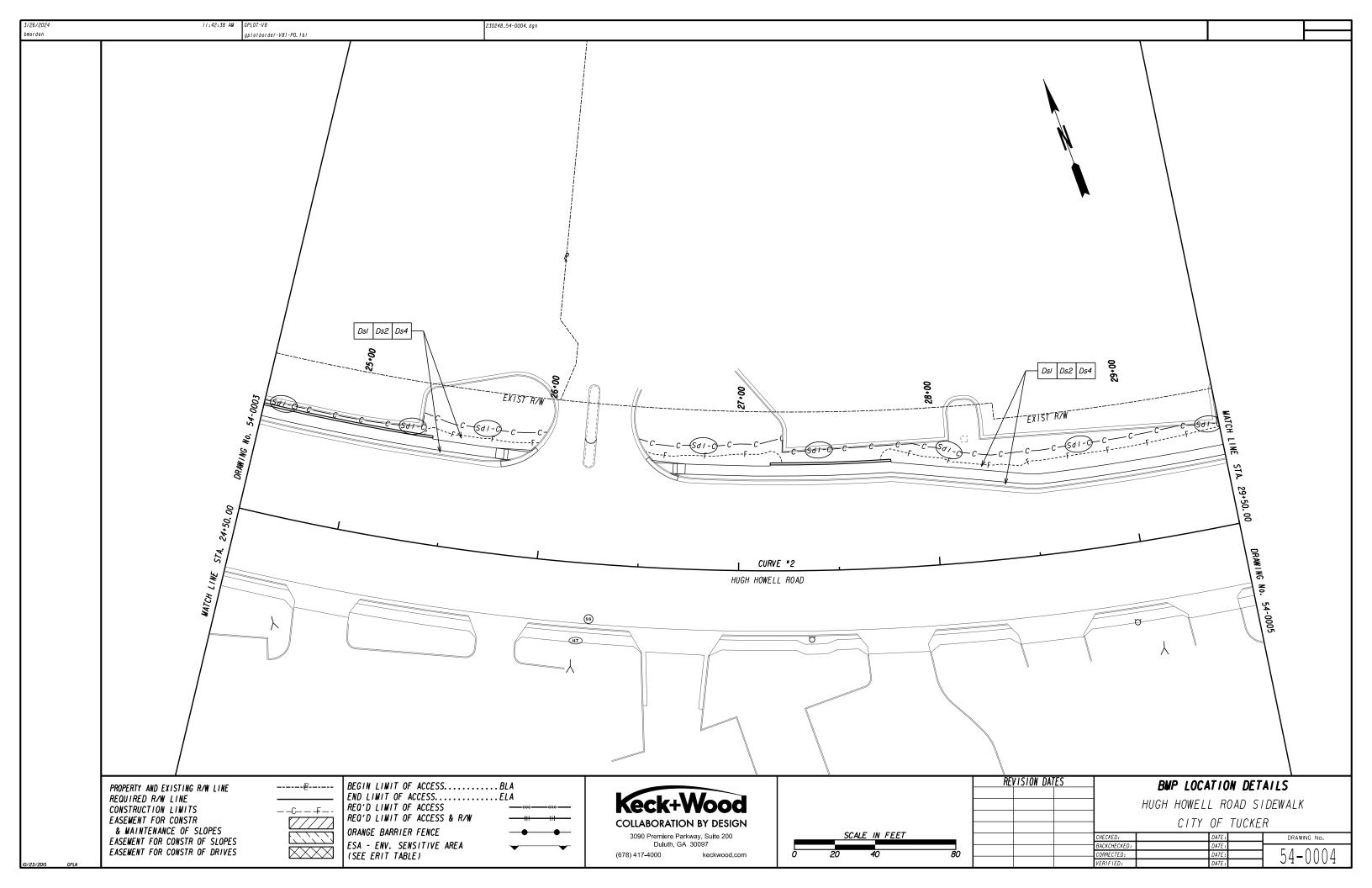


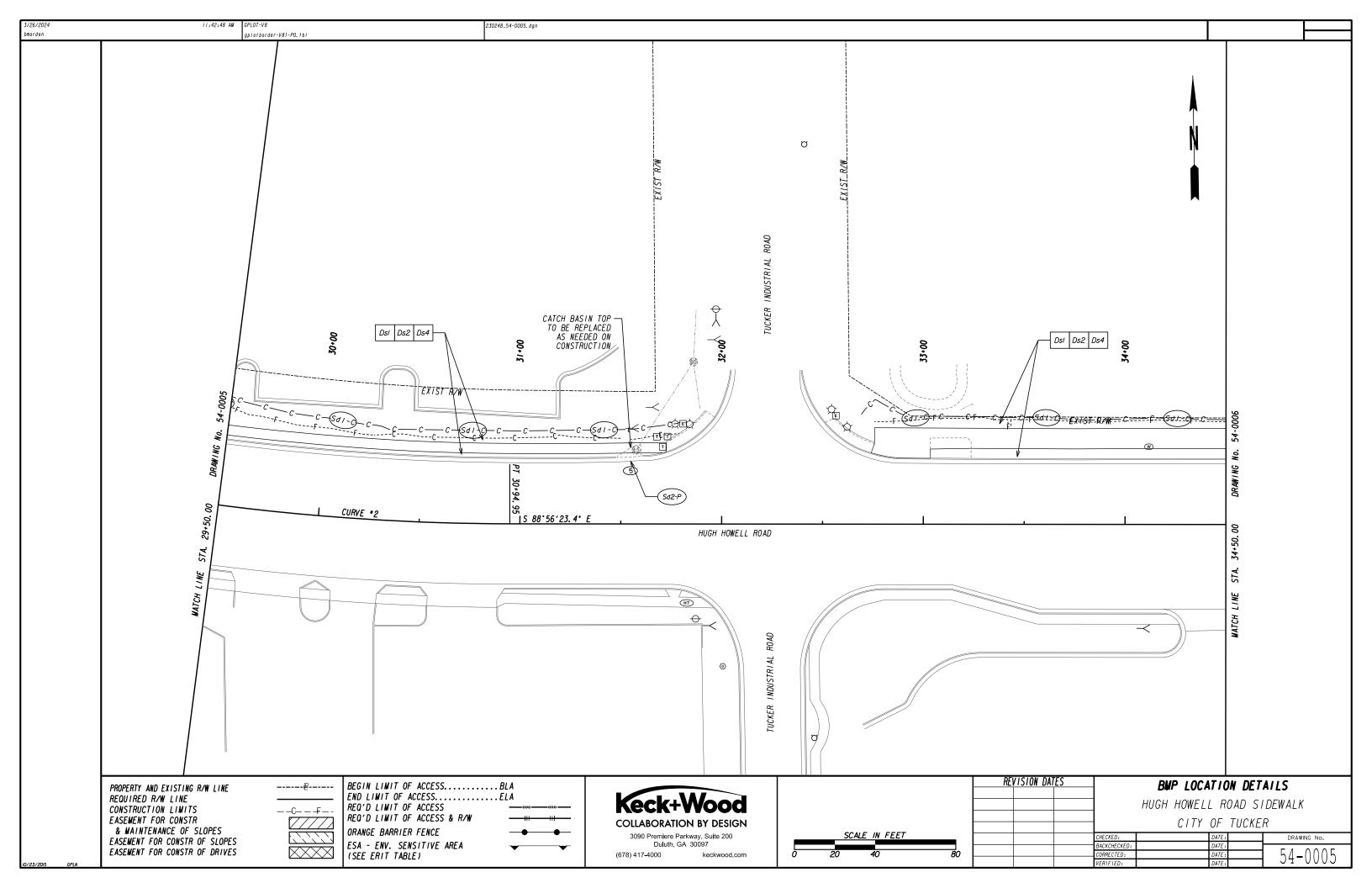


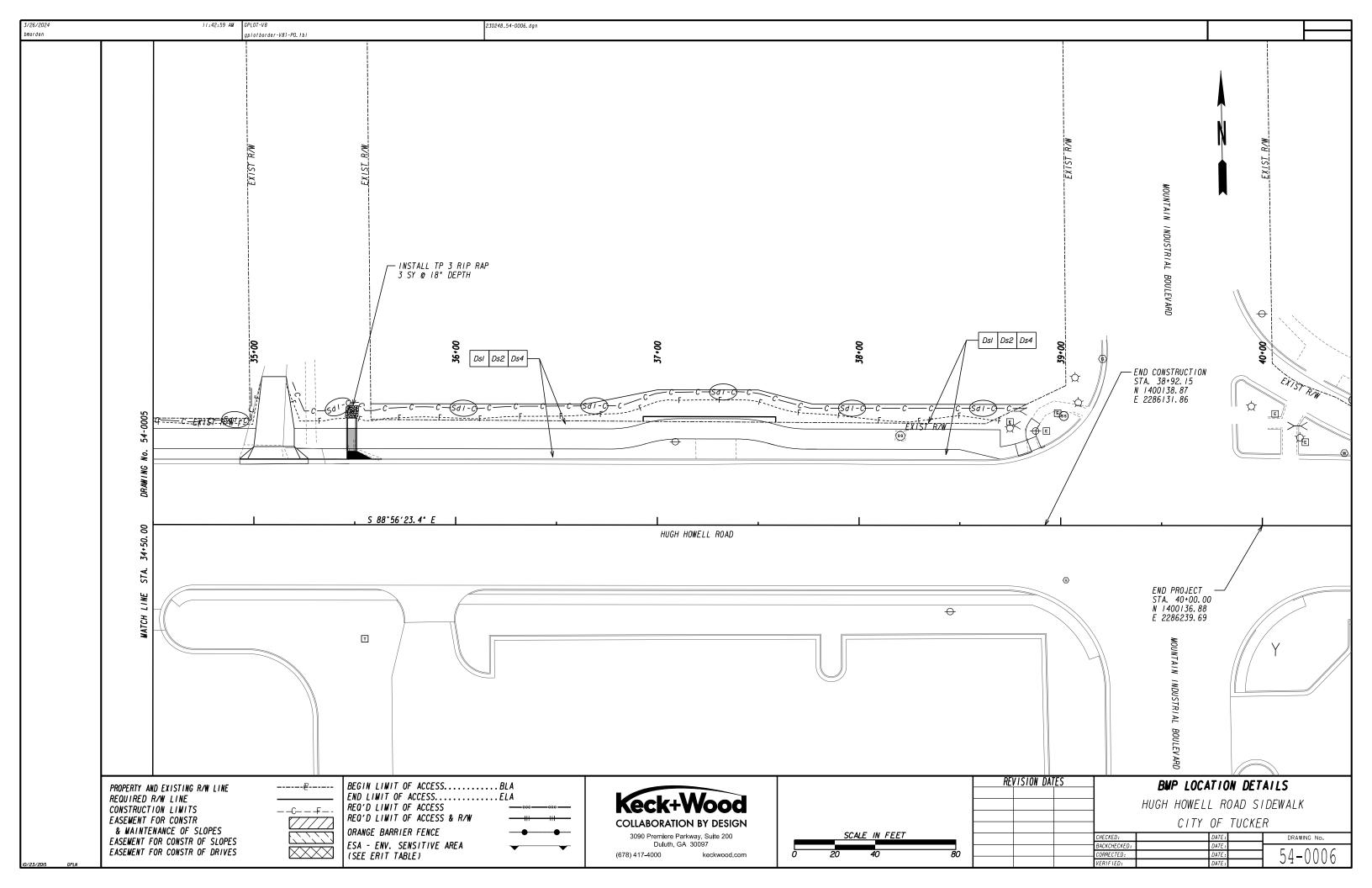


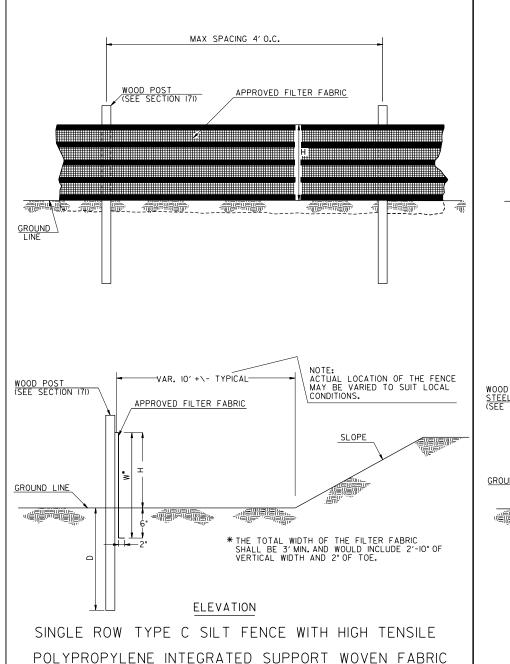


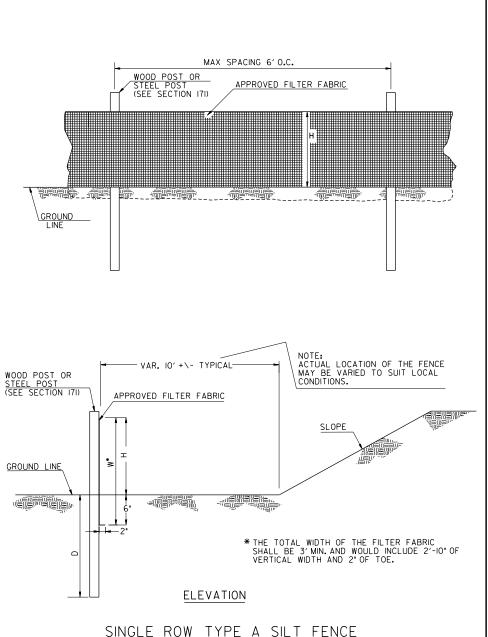


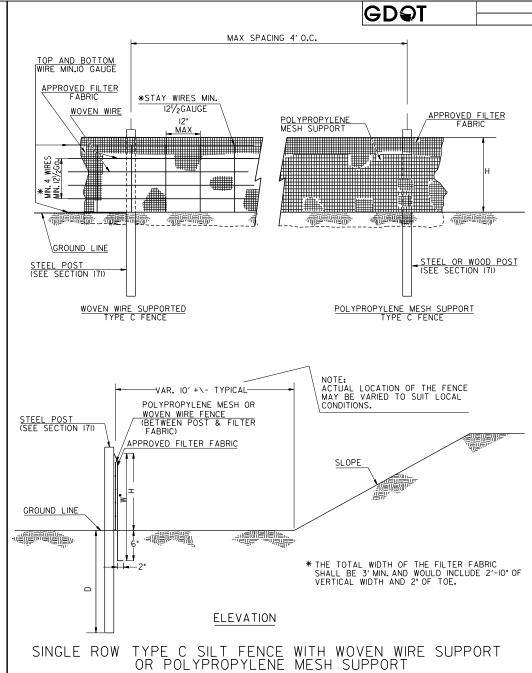












FENCE TYPE	POST LENGTH	Н	D	w*	TYPICAL USES
TYPE "A"	4 FT.		1'-6"	3′-0"	
TYPE "C"	4 FT.	2'-4"	1′-6"	3′-0"	AT BRIDGE END ROLLS, DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24D.

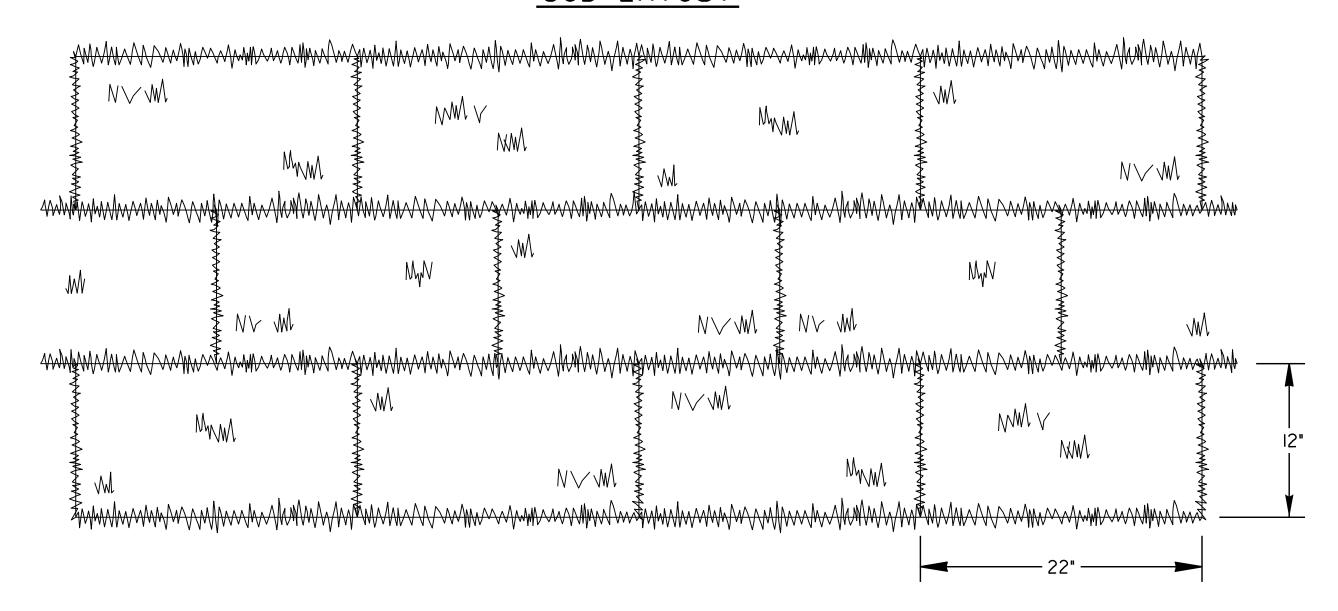
NOTES:

- I. WIRE STAPLES SHALL BE AT LEAST 17 GAUGE, WITH LEGS AT LEAST $\frac{1}{2}$ INCHES LONG AND A CROWN AT LEAST $\frac{3}{4}$ INCHES WIDE. NAILS SHALL BE AT LEAST 14 GAUGE, I INCH LONG , WITH BUTTON HEADS AT LEAST $\frac{3}{4}$ INCHES WIDE.
- 2. SEE SECTION 171 FOR PLACEMENT OF NAILS OR STAPLES FOR TYPE A AND TYPE C FENCES.
- 3. THE VERTICAL WIRES FOR THE WOVEN WIRE SUPPORT FENCE SHALL HAVE A MAXIMUM SPACING OF 12 INCHES. THE TOP AND BOTTOM WIRES SHALL BE AT LEAST 10 GAUGE AND ALL OTHER WIRES SHALL BE AT LEAST $12\frac{1}{2}$ GAUGE.
- 4. TEMPORARY SILT FENCE INSTALLATION IS DIFFERENT THAN THE SILT RETENTION BARRIER INSTALLATION.
- 5. SEE SECTION 171 FOR SILT FENCE SPECIFICATIONS.
- 6. SEE SECTION 894 FOR FENCING SPECIFICATIONS.
- 7. SEE QPL-36 FOR A LIST OF APPROVED SILT FENCE FABRIC.
- 8. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS UNLESS PERMITTED.

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA					
ADDED HICH TENSILE POLYPROPYLENE INTEGRATED FABRIC REVISION	CONSTRUCTION DETAIL TEMPORARY SILT FENCE				
AL BY	JANUARY 2011 NUMBER D-24A				

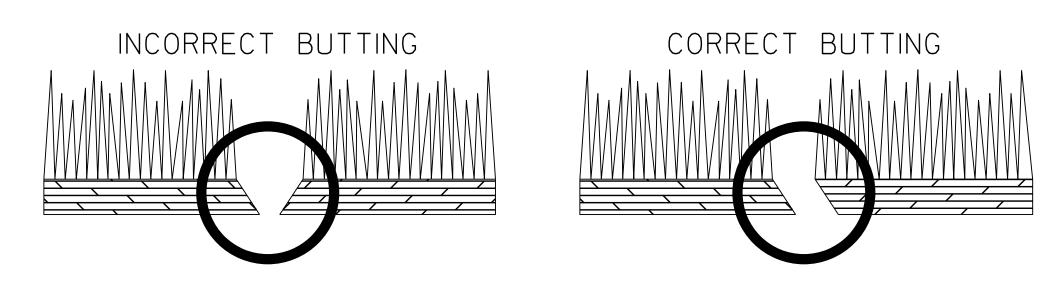
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GΔ			

SOD LAYOUT

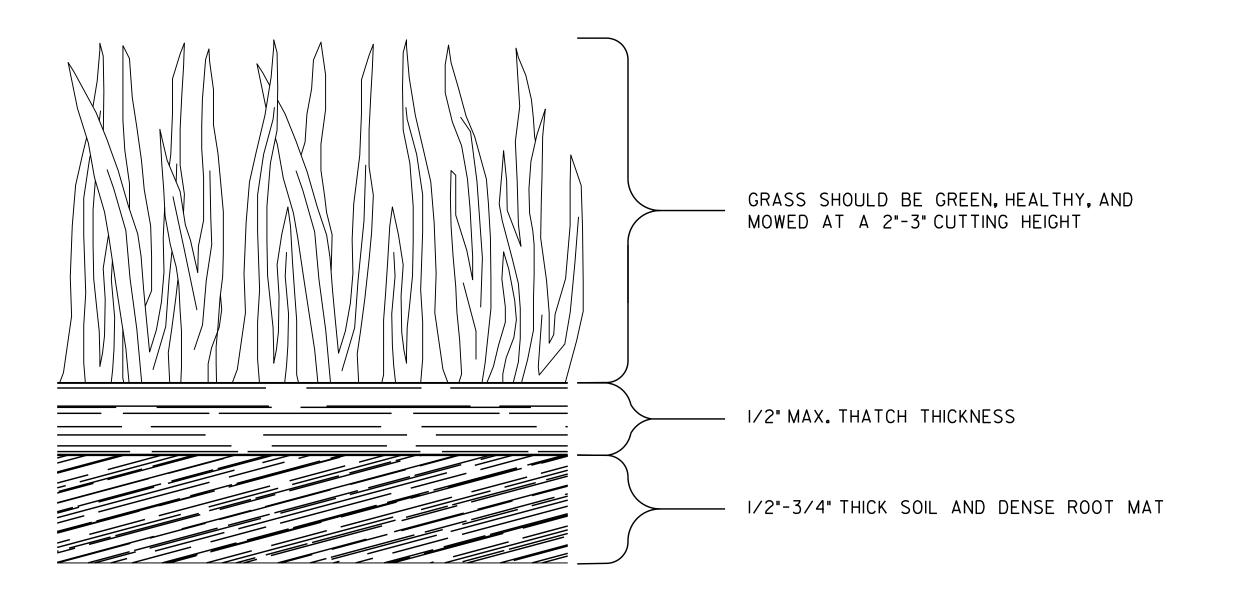


NOTE: SOD MAY BE EITHER 12" WIDE BY 22" LONG BLOCKS OR 21" WIDE BY 52' LONG ROLLS.

ABUTTING SOD



SOD APPEARANCE

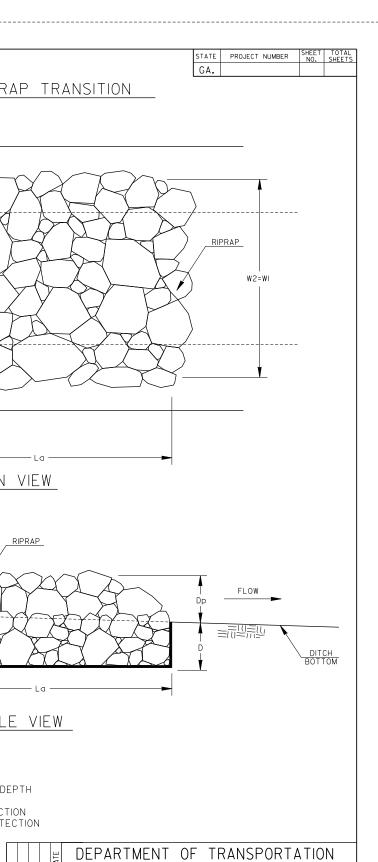


GENERAL NOTES:

- I. SOD SHALL MEET SECTIONS 700 AND 890 OF THE STANDARD SPECIFICATIONS AND SUPPLEMENTS THERETO. SOD SHALL BE CUT INTO 12"W×22"L BLOCKS OR 21"W×52'L ROLLS.
- 2. PLACE SOD IN A STAGGERED PATTERN ENSURING FIRM CONTACT WITH THE SOIL. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER WITH THE AUTOMATIC SOD CUTTER ANGLES CORRECTLY MATCHED WITHOUT SPACES OR OVERLAP.
- 3. PLACE THE LONG SIDE OF SOD PERPENDICULAR TO DRAINAGE FLOW IF INSTALLED IN DITCHES.
- 4. STAKE SOD PLACED IN DITCHES OR SLOPES STEEPER THAN 2:10R ANY OTHER AREAS WHERE SOD SLIPPING MAY OCCUR. USE WOOD STAKES THAT ARE A MINIMUM OF 8" LONG AND A MAXIMUM OF 1" WIDE. DRIVE STAKES FLUSH WITH THE TOP OF SOD AND USE A MINIMUM OF 8 STAKES PER SQUARE YARD TO HOLD SOD IN PLACE.
- 5. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.
- 6. WATER THE SOD IMMEDIATELY AFTER INSTALLATION AND WATER TO A DEPTH OF 4" AS NEEDED.
- 7. MOW ESTABLISHED SOD TO A HEIGHT NOT LESS THAN 2"-3" AS NECESSARY.

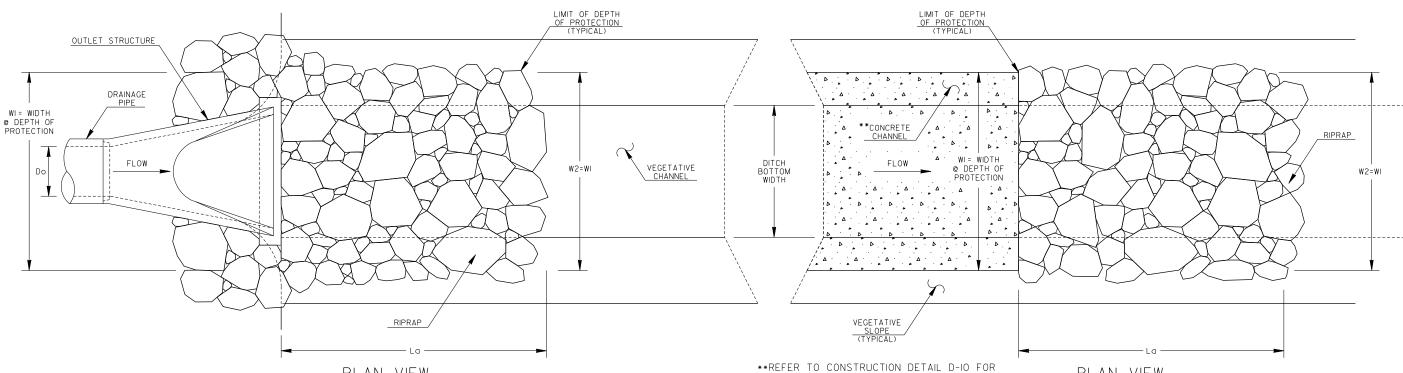
PAY ITEM: 700-9300 SOD (SY)

DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA						
	CONS	STRUCTION DETAILS	5				
REVISION							
	NO SCALE		4-22-2016				
ВУ	DESIGNED DRAWN _DLE TRACED CHECKED		NUMBER D-54				



OUTLET PARALLEL TO WELL-DEFINED CHANNEL

CONCRETE CHANNEL TO RIPRAP TRANSITION



PLAN VIEW OUTLET STRUCTURE DESIGN STORM DRAINAGE PIPE PLASTIC FILTER FABRIC

GENERAL NOTES:

PROFILE VIEW

- RIPRAP OUTLET PROTECTION SHOULD BE USED TO REDUCE A DRAINAGE STRUCTURE'S DISCHARGE VELOCITY. RIPRAP OUTLET PROTECTION IS SHOWN FOR GEORGIA STANDARD 1120, BUT IS INSTALLED SIMILARLY FOR OTHER DRAINAGE OUTLET STRUCTURES. RIPRAP OUTLET PROTECTION IS SHOWN FOR A CONCRETE DITCH, BUT IS INSTALLED SIMILARLY TO TRANSITION FROM OTHER CHANNEL LININGS.
- RIPRAP OUTLET PROTECTION SHALL BE DESIGNED IN ACCORDANCE WITH THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

 THE DESIGNER SHALL PROVIDE THE FOLLOWING IN THE PLANS: PIPE DIAMETER (Do), FLOW RATE OF DESIGN STORM (O), VELOCITY (V), TAILWATER CONDITION (Tw), APRON LENGTH (Lo), APRON WIDTH AT DRAINAGE STRUCTURE (WI), APRON WIDTH DOWNSTREAM (W2), AVERAGE STONE DIAMETER (d50), INSTALLATION DEPTH (D). AND TYPE OF RIPRAP WITH QUANTITY.

THE MINIMUM DESIGN FOR RIPRAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM EVENT, BUT LARGER STORMS ARE RECOMMENDED.

- THE APRON WIDTHS SHALL BE THE SAME WHEN THE DRAINAGE STRUCTURE DISCHARGES PARALLEL INTO A WELL-DEFINED CHANNEL. THE APRON WIDTHS IN THIS CASE SHALL REPRESENT THE WIDTH AT THE DEPTH OF PROTECTION. THE RIPRAP SHALL BE INSTALLED TO THE TOP OF CHANNEL OR I-FOOT ABOVE THE NORMAL DEPTH OF THE CHANNEL'S DESIGN STORM (WHICHEVER IS LESS). THE DESIGNER SHALL PROVIDE THE DEPTH OF PROTECTION (Dp) IF THE RIPRAP SHOULD NOT BE INSTALLED TO THE TOP OF THE CHANNEL. RIPRAP SHOULD ALSO BE INSTALLED TO ARMOR CHANNEL CORNER AT THE OUTLET STRUCTURE.
- 4. IF THE OUTLET HYDRAULICS REQUIRE A d50<=0.70 FEET, TYPE-3 RIPRAP MAY BE USED. IF THE OUTLET HYDRAULICS REQUIRE A d50<=1.20 FEET, TYPE-I RIPRAP SHOULD BE USED.

 IF THE OUTLET HYDRAULICS REQUIRE A d50>1.20 FEET, THE DESIGNER SHALL DESIGN AND PROVIDE A SPECIAL DETAIL FOR APPROPRIATE OUTLET PROTECTION.
- PLASTIC FILTER FABRIC IS REQUIRED UNDERNEATH RIPRAP APRON.
- PAYMENT FOR RIPRAP SHALL BE MEASURED IN SQUARE YARDS FOR SPECIFIED INSTALLATION DEPTH, PAYMENT FOR PLASTIC FILTER FABRIC SHALL BE MEASURED IN SQUARE YARDS CONSISTENT WITH RIPRAP QUANTITY AND PAID FOR SEPARATELY.

PIPE DIAMETER

CONCRETE DITCH PAVING INFORMATION

**CONCRETE CHANNEL

DESIGN STORM FLOW RATE

PLASTIC FILTER FABRIC

DESIGN STORM VELOCITY

TAILWATER CONDITION/DESIGN STORM NORMAL DEPTH Τw

APRON LENGTH La

APRON WIDTH UPSTREAM AT DEPTH OF PROTECTION W2 APRON WIDTH DOWNSTREAM AT DEPTH OF PROTECTION

DESIGN STORM NORMAL DEPTH

PLAN VIEW

PROFILE VIEW

RIPRAP

d50 =AVERAGE STONE DIAMETER INSTALLATION DEPTH D

DEPTH OF PROTECTION

RIPRAP TYPE	REQUIRED d50 (FT)	MIN. DEPTH "D" (IN)
1	≤1.20	36
3	≤0.67	18

		TIVU	ט	EPARIMENT OF STATE OF		TATION
				CONSTRUCTI	ON DETAIL	.S
		REVISION		RIPRAP OUTLE (SHEET	T PROTECTION 2 OF 2)	N
			NO	SCALE		4-22-2016

NUMBER

DESIGNED DLE DRAWN DLE D-55B TRACED

(Rev. October 2018) Department of the Treasury

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

ntemai	Revenue Service Go to www.irs.gov/Formw9 for it	instructions and the late	st information.			
Print or type. Specific Instructions on page 3.	Name (as shown on your income tax return). Name is required on this line	; do not leave this line blank.				
	2 Business name/disregarded entity name, if different from above					
	3 Check appropriate box for federal tax classification of the person whose r following seven boxes. Individual/sole proprietor or C Corporation S Corporation Single-member LLC	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):				
		Exempt payee c	Exempt payee code (if any)			
	Limited liability company. Enter the tax classification (C=C corporation Note: Check the appropriate box in the line above for the tax classifica LLC if the LLC is classified as a single-member LLC that is disregarded another LLC that is not disregarded from the owner for U.S. federal tay is disregarded from the owner should check the appropriate box for the	Exemption from FATCA reporting code (if any)				
	☐ Other (see instructions) ▶			(Applies to accounts maintained outside the U.S.)		he U.S.)
Sp	5 Address (number, street, and apt. or suite no.) See instructions.		Requester's name a	and address (opti	onal)	
See						
	6 City, state, and ZIP code					
	7 List account number(s) here (optional)					-
-						
Par						
	your TIN in the appropriate box. The TIN provided must match the n p withholding. For individuals, this is generally your social security n			curity number		
	ent alien, sole proprietor, or disregarded entity, see the instructions for		or a	L	-	
	s, it is your employer identification number (EIN). If you do not have	a number, see How to ge				Ш
TIN, la Note:	If the account is in more than one name, see the instructions for line	a 1 Also see What Name	or Employer	r identification number		
	er To Give the Requester for guidelines on whose number to enter.	2 1. Also see What Name				=
				-		
Par	t II Certification					
Unde	penalties of perjury, I certify that:	=				
2. I ar Ser	enumber shown on this form is my correct taxpayer identification nunnot subject to backup withholding because: (a) I am exempt from I vice (IRS) that I am subject to backup withholding as a result of a failonger subject to backup withholding;	backup withholding, or (b)	I have not been n	otified by the li	nternal Rever	
3. I ar	n a U.S. citizen or other U.S. person (defined below); and					
4. The	FATCA code(s) entered on this form (if any) indicating that I am exe	empt from FATCA reporting	g is correct.			
you ha acquis	ication instructions. You must cross out item 2 above if you have beer ave failed to report all interest and dividends on your tax return. For real sition or abandonment of secured property, cancellation of debt, contrib than interest and dividends, you are not required to sign the certification	estate transactions, item 2 outions to an individual retir	does not apply. For ement arrangement	or mortgage inte t (IRA), and gen	erest paid, erally, payme	nts
Sign Here		-	Date ►			
Ge	neral Instructions	• Form 1099-DIV (di funds)	vidends, including	those from sto	cks or mutu	al
Section noted	on references are to the Internal Revenue Code unless otherwise .	Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)				
	e developments. For the latest information about developments d to Form W-9 and its instructions, such as legislation enacted	Form 1099-B (stock or mutual fund sales and certain other				

after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

Form 1099-INT (interest earned or paid)

- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.



GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

GEORGIA E-Verify and Public Contracts: The Georgia E-Verify law requires contractors and all sub-contractors on Georgia public contract (contracts with a government agency) for the physical performance of services over \$2,499 in value to enroll in E-Verify, regardless of the number of employees.

Contractor Name:			
Solicitation/Bid number or Project Description:			
By executing this affidavit, the undersigned affirmatively that the individual, entity or corp behalf of the <u>City of Tucker, Georgia</u> has reg commonly known as E-Verify, or any subsedeadlines established in O.C.G.A. § 13-10-91.	poration which is engagistered with, is author equent replacement [aged in the physical performance of servorized to use and uses the federal work	vices under a contract on authorization program
Furthermore, the undersigned contractor will period as required by O.C.G.A. § 13-10-91(b) services in satisfaction of such contract only wrequired by O.C.G.A. § 13-10-91(b). Contract date of authorization are as follows:) and the undersigned with subcontractors when	contractor will contract for the physical ho present and affidavit to the contractor	performance of with the information
Federal Work Authorization User Identification (EEV/E-Verify Company Identification Number		Date of Authorization	
Name of Contractor			
I hereby declare under penalty of perjury the foregoing is true and correct	nat the		
Printed Name (of Authorized Officer or Agent	t of Contractor)	Title (of Authorized Officer or A	Agent of Contractor)
Signature (of Authorized Officer or Agent)		Date Signed	
SUBSCRIBED AND SWORN BEFORE ME	ON THIS THE		
DAY OF, 2	20		
Notary Public		[NOTARY SEAL]	
My Commission Expires:			



GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

GEORGIA E-Verify and Public Contracts: The Georgia E-Verify law requires contractors and all sub-contractors on Georgia public contract (contracts with a government agency) for the physical performance of services over \$2,499 in value to enroll in E-Verify, regardless of the number of employees.

Contractor Name:			
Subcontractor's (Your) Name			
Solicitation/Bid number or Project Description:			
affirmatively that the individual, entity or corbehalf of the <u>City of Tucker, Georgia</u> has reg	poration which is eng gistered with, is authors sequent replacement	fies its compliance with O.C.G.A. § 13-10-91, a gaged in the physical performance of services under norized to use and uses the federal work authorized program, in accordance with the applicable program.	er a contract on ation program
period as required by O.C.G.A. § 13-10-91(b) services in satisfaction of such contract only v	o) and the undersigned with sub-subcontractor (b). Subcontractor he	the federal work authorization program throughout to disubcontractor will contract for the physical performs who present and affidavit to the contractor with the attests that its federal work authorization use	rmance of the
Federal Work Authorization User Identification (EEV/E-Verify Company Identification Num		Date of Authorization	
Name of Subcontractor I hereby declare under penalty of perjury t foregoing is true and correct	hat the		
Printed Name (of Authorized Officer or Agen	at of Contractor)	Title (of Authorized Officer or Agent of C	Contractor)
Signature (of Authorized Officer or Agent)		Date Signed	
SUBSCRIBED AND SWORN BEFORE ME	ON THIS THE		
DAY OF	20		
Notary Public		[NOTARY SEAL]	
My Commission Expires:			



REFERENCES FORM: ITB #2024-013

BIDDERS MUST RETURN THIS FORM WHICH WILL BE ADDED TO SUBMITTED PROPOSAL

Please complete this form and return as part of your bid package when it is submitted.

Name of Bidder
REFERENCE #1
Contact Name:
Contact Number:
Brief Description of work provided:
REFERENCE #2
Contact Name:
Contact Number:
Brief Description of work provided:
REFERENCE #3
Contact Name:
Contact Number:
Brief Description of work provided:

BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT

(Address of Contractor) (Corporation, Partnership and / or Individual) hereinafter called Principal, and
(Corneration, Partnership and / or Individual) harainefter called Principal, and
(Corporation, Farthership and 7 or individual) heremarter caned Frincipal, and
(Name of Surety)
(Address of Surety)
A corporation of the State of, and a surety authorized by law to do
business in the State of Georgia, hereinafter called Surety, are held, and firmly bound unto
(Name of Obligee) <u>City of Tucker Georgia</u>
(Address of Obligee) 1975 Lakeside Parkway, Suite 350, Tucker, Georgia 30084
Hereinafter referred to as Obligee, in the penal sum of
Dollars (\$) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.
WHEREAS, the Principal is about to submit, or has submitted, to the City of Tucker, Georgia, a proposal for furnishing materials, labor, and equipment for:

ITB # 2024-013 HUGH HOWELL SIDEWALK CONSTRUCTION

WHEREAS, the Principal desires to file this Bond in accordance with law in lieu of a certified Bidder's check otherwise required to accompany this Proposal.

NOW, THEREFORE, the conditions of this obligation are such that if the bid is accepted, the Principal shall within ten days after receipt of notification of the acceptance execute a Contract in accordance with the Bid and upon the terms, conditions, and prices set forth in the form and manner required by the City of Tucker, Georgia, and execute a sufficient and satisfactory Performance Bond and Payment Bond payable to the City of Tucker, Georgia, each in an amount of 100% of the total Contract Price, in form and with security satisfactory to said the City of Tucker, Georgia, and otherwise, to be and remain in full force and virtue in law; and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the City of Tucker, Georgia,

upon demand, the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

PROVIDED, FURTHER, that Principal and Surety agree and represent that this bond is executed pursuant, to and in accordance with the applicable provisions of the Official Code of Georgia Annotated, as Amended, including, but not limited to, O.C.G.A. § 13-10-20, et. Seg. And § 36-91-50, et. Seg. and is intended to be and shall be constructed as a bond in compliance with the requirements thereof.

Signed, sealed, and dated this	day ofA.D., 20	
ATTEST:		
(Principal Secretary)	(Principal)	
(SEAL)	BY:	
(Witness to Principal)	(Address)	
(Address)	(Surety)	
ATTEST:		
BY:		
(Attorney-in-Fact) and Resident Agent		
(Attorney-in-Fact)		
	(SEAL)	
(Address)		
(Witness as to Surety)		

Contact Information Form

Please fill out this form with the appropriate contact information for your company.

Full Legal Name of Company:	
Date:	
Contractor Information:	
Primary Contact Person:	
Title:	Telephone Number:
E-mail Address:	
Secondary Contact Person:	
Title:	Telephone Number:
E-mail Address:	
Preferred Contact for Administration: (i.e.	Document Processing) (Choose one)
□ Primary Contact	□ Secondary Contact
Address:	
City / State / Zip:	
•	
Mailing Address (If different than above):	
City / State / Zip:	
Federal Employee ID Number (FEIN):	