

\$1,714,494.97

ORIGINAL

BID OF S&L UNDERGROUND, INC.

2021

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020

CONTRACT NO. 8498

PROJECT NO. 12694

MUNIS NO. 12694

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON JANUARY 5, 2021

CITY ENGINEERING DIVISION
1600 EMIL STREET
MADISON, WISCONSIN 53713

<https://bidexpress.com/login>

**ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020
CONTRACT NO. 8498**

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This Proposal, and Agreement have
been prepared by:

**CITY ENGINEERING DIVISION
CITY OF MADISON
MADISON, DANE COUNTY, WISCONSIN**

Greg Fries 11/5/20

Robert F. Phillips, P.E., City Engineer

RFP: AZ

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

REQUEST FOR BID FOR PUBLIC WORKS CONSTRUCTION CITY OF MADISON, WISCONSIN

A BEST VALUE CONTRACTING MUNICIPALITY

| | |
|--|--|
| PROJECT NAME: | ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020 |
| CONTRACT NO.: | 8498 |
| SBE GOAL | 7% |
| BID BOND | 5% |
| SBE PRE BID MEETING | See Pre Bid Meeting info below |
| PREQUALIFICATION APPLICATION DUE (2:00 P.M.) | November 12, 2020 |
| BID SUBMISSION (2:00 P.M.) | November 19, 2020 |
| BID OPEN (2:30 P.M.) | November 19, 2020 |
| PUBLISHED IN WSJ | November 5 & 12, 2020 |

SBE PRE BID MEETING: Small Business Enterprise Pre-Bid Meetings are not being held in person at this time. Contractors can schedule one-on-one phone calls with Juan Pablo Torres Meza in Affirmative Action to count towards good faith efforts. Juan Pablo can be reached at 608-261-9162 or by email, jtorresmeza@cityofmdison.com.

PREQUALIFICATION APPLICATION: Forms are available on our website, www.cityofmadison.com/business/pw/forms.cfm. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

BIDS TO BE SUBMITTED: by hand to 1600 EMIL ST., MADISON, WI 53713 or online at www.bidexpress.com.

THE BID OPENING is at 1600 EMIL ST., MADISON, WI 53713.

The process for submission of bids has not changed. Bids may be submitted on line through Bid Express or in person at 1600 Emil St. Please note that the doors at 1600 Emil St. are locked, but there is a sign with phone numbers on the door. Please call one of the numbers and staff will come to the door to get your bid. Until further notice, the bid openings will be closed to the public to support the guidance of social distancing as the City responds to responsively to COVID-19 impacts to services. The bids will be posted on line after the bid opening. If you have any questions, please call Alane Boutelle at 608-267-1197, or John Fahrney at 608-266-9091.

STANDARD SPECIFICATIONS

The City of Madison's Standard Specifications for Public Works Construction - 2020 Edition, as supplemented and amended from time to time, forms a part of these contract documents as if attached hereto.

These standard specifications are available on the City of Madison Public Works website, www.cityofmadison.com/Business/PW/specs.cfm.

The Contractor shall review these Specifications prior to preparation of proposals for the work to be done under this contract, with specific attention to Article 102, "BIDDING REQUIREMENTS AND CONDITIONS" and Article 103, "AWARD AND EXECUTION OF THE CONTRACT." For the convenience of the bidder, below are highlights of three subsections of the specifications.

SECTION 102.1: PRE-QUALIFICATION OF BIDDERS

In accordance with Wisconsin State Statutes 66.0901 (2) and (3), all bidders must submit to the Board of Public Works proof of responsibility on forms furnished by the City. The City requires that all bidders be qualified on a biennial basis.

Bidders must present satisfactory evidence that they have been regularly engaged in the type of work specified herein and they are fully prepared with necessary capital, materials, machinery and supervisory personnel to conduct the work to be contracted for to the satisfaction of the City. All bidders must be pre-qualified by the Board of Public Works for the type of construction on which they are bidding prior to the opening of the bid.

In accordance with Section 39.02(9)(a). of the General Ordinances, all bidders shall submit in writing to the Affirmative Action Division Manager of the City of Madison, a Certificate of Compliance or an Affirmative Action Plan at the same time or prior to the submission of the proof of responsibility forms.

The bidder shall be disqualified if the bidder fails to or refuses to, prior to opening of the bid, submit a Certificate of compliance, Affirmative Action Plan or Affirmative Action Data Update, as applicable, as defined by Section 39.02 of the General Ordinances (entitled Affirmative Action) and as required by Section 102.11 of the Standard Specifications.

SECTION 102.4 PROPOSAL

No bid will be accepted that does not contain an adequate or reasonable price for each and every item named in the Schedule of Unit Prices.

A lump sum bid for the work in accordance with the plans and specifications is required. The lump sum bid must be the same as the total amounts bid for the various items and it shall be inserted in the space provided.

All papers bound with or attached to the proposal form are considered a part thereof and must not be detached or altered when the proposal is submitted. The plans, specifications and other documents designated in the proposal form will be considered a part of the proposal whether attached or not.

A proposal submitted by an individual shall be signed by the bidder or by a duly authorized agent. A proposal submitted by a partnership shall be signed by a member/partner or by a duly authorized agent thereof. A proposal submitted by a corporation shall be signed by an authorized officer or duly authorized registered agent of such corporation, and the proposal shall show the name of the State under the laws of which such corporation was chartered. The required signatures shall in all cases appear in the space provided thereof on the proposal.

Each proposal shall be placed, together with the proposal guaranty, in a sealed envelope, so marked as to indicate name of project, the contract number or option to which it applies, and the name and address of the Contractor or submitted electronically through Bid Express (www.bidexpress.com). Proposals will be accepted at the location, the time and the date designated in the advertisement. Proposals received after the time and date designated will be returned to the bidder unopened.

SECTION 102.5: BID DEPOSIT (PROPOSAL GUARANTY)

All bids, sealed or electronic, must be accompanied with a Bid Bond (City of Madison form) equal to at least 5% of the bid or a Certificate of Annual/Biennial Bid Bond or certified check, payable to the City Treasurer. Bid deposit of the successful bidders shall be returned within forty-eight (48) hours following execution of the contract and bond as required.

MINOR DISCREPENCIES

Bidder is responsible for submitting all forms necessary for the City to determine compliance with State and City bidding requirements. Notwithstanding any language to the contrary contained herein, the City

may exercise its discretion to allow bidders to correct or supplement submissions after bid opening, if the minor discrepancy, bid irregularity or omission is insignificant and not one related to price, quality, quantity, time of completion or performance of the contract.

Bidders for this Contract(s) must be Pre-Qualified for at least one of the following type(s) of construction denoted by an

Building Demolition

- 101 Asbestos Removal
120 House Mover

- 110 Building Demolition

Street, Utility and Site Construction

- 201 Asphalt Paving
205 Blasting
210 Boring/Pipe Jacking
215 Concrete Paving
220 Con. Sidewalk/Curb & Gutter/Misc. Flat Work
221 Concrete Bases and Other Concrete Work
222 Concrete Removal
225 Dredging
230 Fencing
235 Fiber Optic Cable/Conduit Installation
240 Grading and Earthwork
241 Horizontal Saw Cutting of Sidewalk
242 Infrared Seamless Patching
245 Landscaping, Maintenance
246 Ecological Restoration
250 Landscaping, Site and Street
251 Parking Ramp Maintenance
252 Pavement Marking
255 Pavement Sealcoating and Crack Sealing
260 Petroleum Above/Below Ground Storage Tank Removal/Installation
262 Playground Installer

- 265 Retaining Walls, Precast Modular Units
270 Retaining Walls, Reinforced Concrete
275 Sanitary, Storm Sewer and Water Main Construction
276 Sawcutting
280 Sewer Lateral Drain Cleaning/Internal TV Insp.
285 Sewer Lining
290 Sewer Pipe Bursting
295 Soil Borings
300 Soil Nailing
305 Storm & Sanitary Sewer Laterals & Water Svc.
310 Street Construction
315 Street Lighting
318 Tennis Court Resurfacing
320 Traffic Signals
325 Traffic Signing & Marking
332 Tree pruning/removal
333 Tree, pesticide treatment of
335 Trucking
340 Utility Transmission Lines including Natural Gas, Electrical & Communications
399 Other _____

Bridge Construction

- 501 Bridge Construction and/or Repair

Building Construction

- 401 Floor Covering (including carpet, ceramic tile installation, rubber, VCT)
402 Building Automation Systems
403 Concrete
404 Doors and Windows
405 Electrical - Power, Lighting & Communications
410 Elevator - Lifts
412 Fire Suppression
413 Furnishings - Furniture and Window Treatments
415 General Building Construction, Equal or Less than \$250,000
420 General Building Construction, \$250,000 to \$1,500,000
425 General Building Construction, Over \$1,500,000
428 Glass and/or Glazing
429 Hazardous Material Removal
430 Heating, Ventilating and Air Conditioning (HVAC)
433 Insulation - Thermal
435 Masonry/Tuck pointing

- 437 Metals
440 Painting and Wallcovering
445 Plumbing
450 Pump Repair
455 Pump Systems
460 Roofing and Moisture Protection
464 Tower Crane Operator
461 Solar Photovoltaic/Hot Water Systems
465 Soil/Groundwater Remediation
466 Warning Sirens
470 Water Supply Elevated Tanks
475 Water Supply Wells
480 Wood, Plastics & Composites - Structural & Architectural
499 Other _____

State of Wisconsin Certifications

- 1 Class 5 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for quarries, open pits and road cuts.
2 Class 6 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for trenches, site excavations, basements, underwater demolition, underground excavations, or structures 15 feet or less in height.
3 Class 7 Blaster - Blasting Operations and Activities for structures greater than 15' in height, bridges, towers, and any of the objects or purposes listed as "Class 5 Blaster or Class 6 Blaster".
4 Petroleum Above/Below Ground Storage Tank Removal and Installation (Attach copies of State Certifications.)
5 Hazardous Material Removal (Contractor to be certified for asbestos and lead abatement per the Wisconsin Department of Health Services, Asbestos and Lead Section (A&LS).) See the following link for application: www.dhs.wisconsin.gov/Asbestos/Cert. State of Wisconsin Performance of Asbestos Abatement Certificate must be attached.
6 Certification number as a Certified Arborist or Certified Tree Worker as administered by the International Society of Arboriculture
7 Pesticide application (Certification for Commercial Applicator For Hire with the certification in the category of turf and landscape (3.0) and possess a current license issued by the DATCP)
8 State of Wisconsin Master Plumbers License.

SECTION B: PROPOSAL

Please refer to the
Bid Express Website
at <https://bidexpress.com>
look up contract number
and go to
Section B: Proposal Page

You can access all City of Madison bid solicitations for FREE at www.bidexpress.com

Click on the "Register for Free" button and follow the instructions to register your company and yourself. You will be asked for a payment subscription preference, since you may wish to bid online someday. Simply choose the method to pay on a 'per bid' basis. This requires no payment until / unless you actually bid online. You can also choose the monthly subscription plan at this time. You will, however, be asked to provide payment information. Remember, you can change your preference at anytime. You will then be able to complete your free registration and have full access to the site. Your free access does not require completion of the 'Digital ID' process, so you will have instant access for viewing and downloading. To be prepared in case you ever do wish to bid online, you may wish to establish your digital ID also, since you cannot bid without a Digital ID.

If you have any problems with the free registration process, you can call the bidexpress help team, toll free at 1-888-352-2439 (option 1, option1).

SECTION C: SMALL BUSINESS ENTERPRISE

Instructions to Bidders City of Madison SBE Program Information

2 Small Business Enterprise (SBE) Program Information

2.1 Policy and Goal

The City of Madison reaffirms its policy of nondiscrimination in the conduct of City business by maintaining a procurement process which remains open to all who have the potential and ability to sell goods and services to the City. It is the policy of the City of Madison to allow Small Business Enterprises (SBE) maximum feasible opportunity to participate in City of Madison contracting. The bidder acknowledges that its bid has been submitted in accordance with the SBE program and is for the public's protection and welfare.

Please refer to the "ADVERTISEMENT FOR BIDS" for the goal for the utilization of SBEs on this project. SBEs may participate as subcontractors, vendors and/or suppliers, which provide a commercially useful function. The dollar value for SBE suppliers or 'materials only' vendors shall be discounted to 60% for purposes of meeting SBE goals.

A bidder which achieves or exceeds the SBE goal will be in compliance with the SBE requirements of this project. In the event that the bidder is unable to achieve the SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Failure to either achieve the goal or demonstrate a good faith effort to do so will be grounds for the bidder being deemed a non-responsible contractor ineligible for award of this contract.

A bidder may count towards its attainment of the SBE goal only those expenditures to SBEs that perform a commercially useful function. For purposes of evaluating a bidder's responsiveness to the attainment of the SBE goal, the contract participation by an SBE is based on the percentage of the total base bid proposed by the Contractor. The total base bid price is inclusive of all addenda.

Work performed by an SBE firm in a particular transaction can be counted toward the goal only if it involves a commercially useful function. That is, in light of industry practices and other relevant considerations, does the SBE firm have a necessary and useful role in the transaction, of a kind for which there is a market outside the context of the SBE Program, or is the firm's role a superfluous step added in an attempt to obtain credit towards goals? If, in the judgment of the Affirmative Action Division, the SBE firm will not perform a commercially useful function in the transaction, no credit towards goals will be awarded.

The question of whether a firm is performing a commercially useful function is completely separate from the question of whether the firm is an eligible SBE. A firm is eligible if it meets the definitional criteria and ownership and control requirements, as set forth in the City of Madison's SBE Program.

If the City of Madison determines that the SBE firm is performing a commercially useful function, then the City of Madison must then decide what that function is. If the commercially useful function is that of an SBE vendor / supplier that regularly transacts business with the respective product, then the City of Madison will count 60% of the value of the product supplied toward SBE goals.

To be counted, the SBE vendor / supplier must be engaged in selling the product in question to the public. This is important in distinguishing an SBE vendor / supplier, which has a regular trade with a variety of customers, from a firm which performs supplier-like functions on an ad hoc basis or for only one or two contractors with whom it has a special relationship.

A supplier of bulk goods may qualify as an eligible SBE vendor / supplier if it either maintains an inventory or owns or operates distribution equipment. With respect to the distribution equipment; e.g., a fleet of trucks, the term "operates" is intended to cover a situation in which the supplier leases the equipment on a regular basis for its entire business. It is not intended to cover a situation in which the firm simply provides drivers for trucks owned or leased by another party; e.g., a prime contractor, or leases such a party's trucks on an ad hoc basis for a specific job.

If the commercially useful function being performed is not that of a qualified SBE vendor / supplier, but rather that of delivery of products, obtaining bonding or insurance, procurement of personnel, acting as a broker or manufacturer's representative in the procurement of supplies, facilities, or materials, etc., only the fees or commissions will apply towards the goal.

For example, a business that simply transfers title of a product from manufacturer to ultimate purchaser; e. g., a sales representative who re-invoices a steel product from the steel company to the Contractor, or a firm that puts a product into a container for delivery would not be considered a qualified SBE vendor / supplier. The Contractor would not receive credit based on a percentage of the cost of the product for working with such firms.

Concerning the use of services that help the Contractor obtain needed supplies, personnel, materials or equipment to perform a contract: only the fee received by the service provider will be counted toward the goal. For example, use of a SBE sales representative or distributor for a steel company, if performing a commercially useful function at all, would entitle the Contractor receiving the steel to count only the fee paid to the representative or distributor toward the goal. This provision would also govern fees for professional and other services obtained expressly and solely to perform work relating to a specific contract.

Concerning transportation or delivery services: if an SBE trucking company picks up a product from a manufacturer or a qualified vendor / supplier and delivers the product to the Contractor, the commercially useful function it is performing is not that of a supplier, but simply that of a transporter of goods. Unless the trucking company is itself the manufacturer or a qualified vendor / supplier in the product, credit cannot be given based on a percentage of the cost of the product. Rather, credit would be allowed for the cost of the transportation service.

The City is aware that the rule's language does not explicitly mention every kind of business that may contribute work on this project. In administering these programs, the City would, on a case-by-case basis, determine the appropriate counting formula to apply in a particular situation.

2.2 Contract Compliance

Questions concerning the SBE Program shall be directed to the Contract Compliance Officer of the City of Madison Department of Civil Rights, Affirmative Action Division, 210 Martin Luther King, Jr. Blvd., Room 523, Madison, WI 53703; telephone (608) 266-4910.

2.3 Certification of SBE by City of Madison

The Affirmative Action Division maintains a directory of SBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the SBE Directory or you may access the SBE Directory online at www.cityofmadison.com/civil-rights/contract-compliance/targeted-business-enterprise-programs/targeted-business-enterprise.

All contractors, subcontractors, vendors and suppliers seeking SBE status must complete and submit the **Targeted Business Certification Application** to the City of Madison Affirmative Action Division by the time and date established for receipt of bids. A copy of the Targeted Business Certification Application is available by contacting the Contract Compliance Officer at the address and telephone indicated in Section 2.2 or you may access the Targeted Business Certification Application online at www.cityofmadison.com/civil-rights/contract-compliance/targeted-business-enterprise-programs/targeted-business-enterprise. Submittal of the Targeted Business Certification Application by the time specified does not guarantee that the applicant will be certified as a SBE eligible to be utilized towards meeting the SBE goal for this project.

2.4 Small Business Enterprise Compliance Report

2.4.1 Good Faith Efforts

Bidders shall take all necessary affirmative steps to assure that SBEs are utilized when possible and that the established SBE goal for this project is achieved. A contractor who self performs a portion of the work, and is pre-qualified to perform that category of work, may subcontract that portion of the work, but shall not be required to do so. When a bidder is unable to achieve the established SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Such a good faith effort should include the following:

- 2.4.1.1 Attendance at the pre-bid meeting.
- 2.4.1.2 Using the City of Madison's directory of certified SBEs to identify SBEs from which to solicit bids.
- 2.4.1.3 Assuring that SBEs are solicited whenever they are potential sources.
- 2.4.1.4 Referring prospective SBEs to the City of Madison Affirmative Action Division for certification.
- 2.4.1.5 Dividing total project requirements into smaller tasks and/or quantities, where economically feasible, to permit maximum feasible SBE participation.
- 2.4.1.6 Establishing delivery schedules, where requirements permit, which will encourage participation by SBEs.
- 2.4.1.7 Providing SBEs with specific information regarding the work to be performed.
- 2.4.1.8 Contacting SBEs in advance of the deadline to allow such businesses sufficient time to prepare a bid.
- 2.4.1.9 Utilizing the bid of a qualified and competent SBE when the bid of such a business is deemed reasonable (i.e. 5% above the lowest bidder), although not necessarily low.
- 2.4.1.10 Contacting SBEs which submit a bid, to inquire about the details of the bid and confirm that the scope of the work was interpreted as intended.
- 2.4.1.11 Completion of Cover Page (page C-6), Summary Sheet (page C-7) and SBE Contact Reports (pages C-8 and C9) if applicable.

2.4.2 Reporting SBE Utilization and Good Faith Efforts

The Small Business Enterprise Compliance Report is to be submitted by the bidder with the bid. This report is due by the specified bid closing time and date. Bids submitted without a completed SBE Compliance Report as outlined below may be deemed non-responsible and the bidder ineligible for award of this contract. Notwithstanding any language to the contrary contained herein, the City may exercise its discretion to allow bidders to correct or supplement submissions after bid opening, if the minor discrepancy, bid irregularity or omission is insignificant and not one related to price, quality, quantity, time of completion, performance of the contract, or percentage of SBE utilization.

2.4.2.1 If the Bidder meets or exceeds the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.1.1 **Cover Page**, Page C-6; and

2.4.2.1.2 **Summary Sheet**, C-7.

2.4.2.2 If the bidder does not meet the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.2.1 **Cover Page**, Page C-6;

2.4.2.2.2 **Summary Sheet**, C-7; and

2.4.2.2.3 **SBE Contact Report**, C-8 and C-9. (A separate Contact Report must be completed for each applicable SBE which is not utilized.)

2.5 Appeal Procedure

A bidder which does not achieve the established goal and is found non-responsible for failure to demonstrate a good faith effort to achieve such goal and subsequently denied eligibility for award of contract may appeal that decision to the Small Business Enterprises Appeals Committee. All appeals shall be made in writing, and shall be delivered to and received by the City Engineer no later than 4:30 PM on the third business day following the bidder's receipt of the written notification of ineligibility by the Affirmative Action Division Manager. Postmark not acceptable. The notice of appeal shall state the basis for the appeal of the decision of the Affirmative Action Division Manager. The Appeal shall take place in accordance with Madison General Ordinance 33.54.

2.6 SBE Requirements After Award of the Contract

The successful bidder shall identify SBE subcontractors, suppliers and vendors on the subcontractor list in accordance with the specifications. The Contractor shall submit a detailed explanation of any variances between the listing of SBE subcontractors, vendors and/or suppliers on the subcontractor list and the Contractor's SBE Compliance Report for SBE participation.

No change in SBE subcontractors, vendors and/or suppliers from those SBEs indicated in the SBE Compliance Report will be allowed without prior approval from the Engineer and the Affirmative Action Division. The contractor shall submit in writing to the City of Madison Affirmative Action Division a request to change any SBE citing specific reasons which necessitate such a change. The Affirmative Action Division will use a general test of reasonableness in approving or rejecting the contractor's request for change. If the request is approved, the Contractor will make every effort to utilize another SBE if available.

The City will monitor the project to ensure that the actual percentage commitment to SBE firms is carried out.

2.7 SBE Definition and Eligibility Guidelines

A Small Business Enterprise is a business concern awarded certification by the City of Madison. For the purposes of this program a Small Business Enterprise is defined as:

- A. An independent business operated under a single management. The business may not be a subsidiary of any other business and the stock or ownership may not be held by any individual or any business operating in the same or a similar field. In determining whether an entity qualifies as a SBE, the City shall consider all factors relevant to being an independent business including, but not limited to, the date the business was established, adequacy of its resources for the work in which it proposes to involve itself, the degree to which financial, equipment leasing and other relationships exist with other ineligible firms in the same or similar lines of work. SBE owner(s) shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their enjoyment interests, as demonstrated by an examination of the substance rather than form or arrangements that may be reflected in its ownership documents.
- B. A business that has averaged no more than \$4.0 million in annual gross receipts over the prior three year period and the principal owner(s) do not have a personal net worth in excess of \$1.32 million.

Firm and/or individuals that submit fraudulent documents/testimony may be barred from doing business with the City and/or forfeit existing contracts.

SBE certification is valid for one (1) year unless revoked.

SECTION D: SPECIAL PROVISIONS

ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020 CONTRACT NO. 8498

It is the intent of these Special Provisions to set forth the final contractual intent as to the matter involved and shall prevail over the Standard Specifications and plans whenever in conflict therewith. In order that comparisons between the Special Provisions can be readily made, the numbering system for the Special Provisions is equivalent to that of the Specifications.

Whenever in these Specifications the term "Standard Specifications" appears, it shall be taken to refer to the City of Madison Standard Specifications for Public Works Construction and Supplements thereto.

SECTION 102.11: BEST VALUE CONTRACTING

This Contract shall be considered a Best Value Contract if the Contractor's bid is equal to or greater than \$63,500 for a single trade contract; or equal to or greater than \$311,500 for a multi-trade contract pursuant to MGO 33.07(7).

ARTICLE 104 SCOPE OF WORK

The work under this contract shall include, but is not limited to, installation sanitary sewer main, laterals, water main and services, storm sewer structures and pipes, culverts, base preparation, curb and gutter, asphalt pavement, sidewalk, shared-use path, driveway aprons, and pavement marking.

The project limits for the work to construct the extension of Rockstream Drive are from the existing end of Rockstream Drive to Maple Grove Drive. The street is approximately 2,300 ft. in length. The project limits for the work to construct the extension of Ambleside Drive are from the existing end of Ambleside Drive to Rockstream Drive. The street is approximately 200 ft. in length.

The Contractor shall view the site prior to bidding to become familiar with the existing conditions. It will be the responsibility of the Contractor to work with the utilities located in the right of way to resolve conflicts during the construction process.

SECTION 105.12 COOPERATION BY THE CONTRACTOR

It is expected that certain items of work will require multiple mobilizations to meet the requirements of the excavation, the restoration, and erosion control requirements.

The Contractor shall establish the Rockstream Drive crossing bed for Badger Mill Creek before building the Rockstream Drive and Ambleside Drive street connections to avoid equipment driving through the neighborhood.

Existing Items to Remain

The Contractor shall use care around existing trees, plantings, fences, walls, steps and driveways that are indicated on the plans to remain. Damage to these items during construction shall be repaired or replaced at the Contractor's expense. No trees, other than those shown on the plan to be removed, shall be cut without the approval of the Construction Engineer and the City Forester; the abutting property owners shall be notified in accordance with the City's Administrative Procedure Memorandum No. 6-2.

Access to Properties

The Contractor shall maintain access to all properties along the project area at all times except as noted in these specifications. This includes local residents, mail delivery, garbage/recycling pickup and emergency vehicles.

Access to property entrance driveways shall be maintained whenever possible. Notice shall be given to the residents and Chavez Elementary School on Rockstream Drive 48 hours before any work is done that would obstruct their driveways.

The Contractor shall maintain access to Chavez Elementary School along the southern driveway from the start date of construction through July 31, 2021 and from September 7, 2021 to the end date of construction to accommodate spring, summer, and fall school. If virtual learning continues at Chavez Elementary School and there are no in-person classes for the spring and summer 2021 school year, the July 31, 2021 may be altered. The contractor shall contact Mike McDonald, Engineering Facilities Manager, 608-204-7915, mmacdonald@madison.k12.wi.us of the Madison Metropolitan School District for questions regarding Chavez Elementary School operations.

Pedestrian Routing

The Contractor shall maintain access to the multi-use path along the north side of the project limits (STA 116+00 to STA 122+79.54) utilizing the temporary pedestrian surface bid item from the start of construction through July 31, 2021 and from September 7, 2021 to the end date of construction to accommodate spring, summer, and fall school. If virtual learning continues at Chavez Elementary School and there are no in-person classes for the spring and summer 2021 school year, the July 31, 2021 may be altered and the Contractor shall utilize the multi-use path detour instead of providing the temporary pedestrian surface.

Coordination with Utilities

Work in this contract may require utility relocations to install the new street connection to Maple Grove Drive. It will be the responsibility of the Contractor to coordinate and work with the utilities located in the right of way to resolve conflicts during the construction process.

Alliant Energy, Charter Communications, City of Madison, Madison Gas and Electric, & TDS Telecom have underground and/or overhead within the project limits.

Alliant Energy will be installing street lighting including conduit, wiring, and poles/fixtures near the end, or after construction is complete. The Contractor shall contact Matt Weir, MatthewWeir@alliantenergy.com of Alliant Energy to discuss timing of the street lighting installation.

There are underground Charter Communication lines traveling north/south along the west side of property line at the dead-end of Rockstream Drive that may be in conflict with the storm sewer connection at STA 100+50. See sheet U-1 for ULO.

There are underground TDS Telecom communication lines along the west side of Maple Grove Drive that may be in conflict with the Rockstream Drive connection with Maple Grove Drive at STA 122+59, STA 122+68, STA 122+71, and STA 122+73. See sheet U-5 for ULOs.

MG&E Gas is not planning to install new gas main facilities as part of this contract. All new gas main facilities are installed as part of City Construction Contract #8402.

SECTION 107.6 DUST PROOFING

The Contractor shall take all necessary steps to control dust arising from operations connected with this contract. When ordered by the Engineer, the Contractor shall dust proof the construction area by using power sweepers and water. Dust proofing shall be incidental with operations connected with this contract.

SECTION 107.7 MAINTENANCE OF TRAFFIC

All signing and barricading shall conform to Part VI of the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

The Contractor shall submit an acceptable Traffic Control Plan to the office of the City Traffic Engineer, at 215 Martin Luther King Jr. Blvd. Suite 109, Madison, WI 53703, a minimum of five (5) working days prior to the pre-construction meeting. The Traffic Control Plan shall address all requirements of this section of the Special Provisions. The Traffic Control Plan shall include any necessary detour routes, signing and phasing schedule with the dates of lane closures. The successful bidder shall work with the City Traffic Engineering Division to develop an approved Traffic Control Plan. The Contractor shall not start work on this project until the Traffic Engineering Division has approved a traffic control plan and traffic control devices have been installed, in accordance with the approved plan. Failure of the Contractor to obtain approval of a Traffic Control Plan, as specified above, may prevent the Contractor from starting work and shall be considered a delay of the project, caused by the Contractor.

Traffic Control shall be measured as a lump sum. Payment for the Traffic Control is full compensation for constructing, assembling, hauling, erecting, re-erecting, maintaining, restoring, and removing non-permanent traffic signs, drums, barricades, and similar control devices, including arrow boards, for providing, placing, and maintaining work zone. Maintaining shall include replacing damaged or stolen traffic control devices. Temporary pavement markings and electronic message boards shall be paid for as separate bid items. Traffic control to install temporary or permanent pavement markings shall be included in the Traffic Control Lump Sum Bid Item.

The traffic control plan may need to be altered as conditions change in the field or as unexpected conditions occur. This shall include relocating existing traffic control or providing additional traffic control. This should be considered incidental to providing traffic control for the project.

Contractor shall supply all necessary mounting hardware and supports for signing. This shall also include covering and uncovering any conflicting overhead signs during the project. Contractor shall display all signing so as to be easily viewed by all users. Contractor shall mount traffic control on posts or existing poles or drive posts whenever possible. Existing poles may be used with approval of Construction Engineer. Contractor shall inspect traffic control daily to ensure all traffic control remains in place during the project.

Type A warning lights shall be installed on all barricades used in the project per State of Wisconsin S.D.D. 15C2-4B. Contractor shall also place Type C warning lights on any barrels used to taper traffic or lane closures.

The contractor shall refer to Chapter 6 in the MUTCD to provide adequate signs and taper lengths. The contractor may use drums as a channelizing device to separate traffic from work zone.

The work areas shall be backfilled, plated, or protected by traffic control devices during non-working hours. If steel plates are used, the Contractor shall notify the City of Madison Streets Division, 266-4681, one (1) working day prior to placement of the plates.

All temporary inlet or structure plating for traffic control phasing shall be considered incidental to the traffic control bid item.

No construction equipment or materials shall be stored in the roadway or street right-of-way that is open to traffic during non-working hours. Construction equipment and materials are not to be stored within the street right-of-way that is outside the project limits as shown on the approved plan.

Contractor shall notify the City of Madison Police Department, Fire Department, Madison Metro, and Traffic Engineering 48 hours in advance of all switchovers of traffic lanes and closures of streets. Notifications must be given by 4:00 P.M. on Thursday for any such work to be done on the following Monday.

Contractor is responsible for obtaining and installing temporary no parking signs to facilitate traffic control plan or as necessary to complete the work within the contract. The contractor shall contact John Villarreal with the City of Madison Parking Utility (608-267-8756) at least 3 working days prior to needing the signs. Contractor shall post signs in accordance with the City of Madison Police Department Guidelines for

temporary no parking restrictions for construction or special events. The guidelines can be found at the link listed below. This shall be considered incidental to the traffic control lump sum bid item.
http://www.cityofmadison.com/business/pw/documents/guidelines_temporarynoparkingrestrictions.pdf

The Contractor shall not remove traffic signs. For removal or replacement of traffic and parking signs, contact the City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767, 8:00 a.m. to 4:00 p.m., a minimum of 2 working days in advance of when any existing signs need to be removed. This service is provided free of charge. If the contractor removes the signs, the contractor will be billed for the reinstallation of, and any damage to, the signing equipment. The contractor shall notify The City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767 upon completion of final landscaping to have permanent signs reinstalled. The contractor shall expect a minimum of seven working days to have permanent signs reinstalled. The contractor shall leave in place all necessary traffic control until given notice by the construction engineer that permanent signing is in place and temporary traffic control may be removed.

Maple Grove Drive-Rockstream Drive Intersection

The contractor shall maintain one (1) lane in each direction of at least eleven (11) feet of width on a hard surface on Maple Grove Drive at all times. Contractor is allowed ten (10) single (1) bike/parking lane closures on Maple Grove Drive at the intersection with Rockstream Drive. Bike/parking lane closures shall only occur on weekdays between 9:00 a.m. and 4:00 p.m. Roadway shall be open to two-way traffic, including the bike/parking lane, in each direction during non-working hours. The contractor shall coordinate with Chavez Elementary School on any closures.

Rockstream Drive and Ambleside Drive

Rockstream Drive and Ambleside Drive shall be closed to through traffic for the duration of the project with access to local driveways being maintained at the connection points at all times. Notice shall be given to the residents and Chavez Elementary School on Rockstream Drive 48 hours before any work is done that would obstruct their driveways.

SECTION 107.8 NOTIFICATION WHEN CLOSING STREET

All Contractors shall give Traffic Engineering (266-4761) notice of their intent to begin work on any street at least seventy-two (72) hours in advance. The Contractor shall not remove traffic signs. For removal or replacement of traffic and parking signs, contact the City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767, 8:00 a.m. to 4:00 p.m., a minimum of two (2) working days in advance of when any existing signs need to be removed. This service is provided free of charge. If the contractor removes the signs, the contractor will be billed for the reinstallation of, and any damage to, the signing equipment.

SECTION 107.10 OPENING OF SECTION OF STREET TO TRAFFIC

The contractor shall notify The City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767 upon completion of final landscaping to have permanent signs reinstalled. The contractor shall expect a minimum of seven (7) working days to have permanent signs reinstalled. The contractor shall leave in place all necessary traffic control until given notice by the construction engineer that permanent signing is in place and temporary traffic control may be removed.

Contact Sean Malloy, City of Madison Traffic Engineering Division, smalloy@cityofmadison.com, 266-5987 with any questions concerning these traffic control specifications.

SECTION 108.2 PERMITS

The City of Madison submit applications for a City of Madison Erosion Control Permit and Wisconsin DNR WRAPP (NOI) and they will be issued prior to the preconstruction meeting for this project.

The Contractor shall meet the conditions of the permits by properly installing and maintaining the erosion control measures shown on the plans, specified in these Special Provisions, or as directed by the Construction Engineer or their designees. This work will be paid for under the appropriate contract bid items or, if appropriate items are not included in the contract, shall be paid for as Extra Work. A copy of the permits will be provided at the preconstruction meeting and is available at the City of Madison Engineering Division office.

These permits covers trench dewatering to a maximum of 70 gallons/minute from the project, provided appropriate control measures are in place. The City's obtaining these permits is not intended to be exhaustive of all permits that may be required to be obtained by the Contractor for construction of this project. It shall be the responsibility of the Contractor to identify and obtain any other permits needed for construction. This includes type II dewatering, which may be needed to construct the sanitary sewer on this project.

The City of Madison has a pending U.S. Army Corps of Engineers and Wisconsin DNR permit application (IP-SC-2020-13-01574) to construct a new road crossing over a waterway that includes wetland impacts, which covers the box culverts and roadway fill for Rockstream Drive over Badger Mill Creek. As a condition of approval of this permit application, the City of Madison is purchasing wetland mitigation credits.

The proposed Rockstream Drive roadway fill and box culverts will cause changes to the mapped Zone AE FEMA floodplain on Badger Mill Creek. The Effective HEC-RAS floodplain model for Badger Mill Creek was updated to reflect the proposed changes and was submitted along with a CLOMR request to FEMA. The modeling and CLOMR request was prepared by the consulting firm Stantec and submitted in September 2020.

Copies of all permits listed above will be provided to the Contractor prior to the start of construction. The Contractor must keep a copy of each individual permit on site at all times throughout construction.

SECTION 109.2 PROSECUTION OF WORK

The Contractor shall begin work on or before **March 22, 2021**. The total time for completion of this contract is **ONE-HUNDRED NINETY (190) CALENDAR DAYS**.

The contractor shall complete the portion of Rockstream Drive from STA 100+43.31 to STA 112+50.00 and Ambleside Drive STA 201+00.00 to STA 202+25.00 including excavation cut, select fill and fill borrow placement, breaker run, and base course by June 18, 2021. The base course shall be allowed to sit for 2 months to allow settling. The base course shall be re-rolled and grade confirmed prior to installation of curb and gutter. If additional base course material is required in order achieve the plan grades, the Contractor shall place additional gradation 2 crushed aggregate, which will be paid under the appropriate bid item. The placement of curb and gutter, sidewalk, driveways, multi-use path, and asphalt pavement shall resume after **August 20, 2021**.

The Contractor shall complete the portion of Rockstream Drive along the school (STA 116+75.00 to STA 122+79.54) including storm sewer installation, base course, curb & gutter, sidewalk, multi-use path, final asphalt surface, and pavement marking by **September 3, 2021**.

Work shall begin only after the start work letter is received. If it is desirable to begin work before the above-mentioned date, the Contractor shall establish a mutually acceptable date with the City Engineer, and the agreed upon date must be determined prior to the preconstruction meeting.

BID ITEM 20101 – EXCAVATION CUT
BID ITEM 20202 – FILL BORROW
BID ITEM 20205 – SELECT FILL

Work under this item shall include all excavation and fill required for the street shown on the cross sections as well as within the grading limits shown on the plans.

The plan quantity for excavation includes all necessary topsoil stripping under the new street. Reusing topsoil material from on-site shall be paid separately. These items shall be in accordance with Article 201 and 202 of the Standard Specifications.

City Engineering issued Construction Plans for 3840 Maple Grove Drive (Fiduciary Real Estate Development (FRED) – Maple Grove Drive) contract #8402 for the construction of Manchester Road, Fairhaven Road, improvements to Maple Grove Drive, and subgrade placement for Rockstream Drive from STA 106+25 to SAT 113+25.

No bulking/expansion or shrink factors were used in determining earthwork quantities for this project. The earthwork summary is shown on the title sheet for this project, and a more detailed summary of the earthwork quantities (unadjusted) is as follows:

Excavation Cut (Rockstream Drive & Ambleside Drive per cross sections)

- Estimated Usable Material (on-site under this contract): 3,900 CY
- Estimated Undercut (waste material under this contract): 2,000 CY
- Estimated Topsoil Stripping (under this contract): 4,200 CY

Total Unclassified Excavation (paid under item 20101).....10,100 CY

Estimated Excavation Cut already completed from STA 106+25 to STA 113+25 as part of City Construction Contract #8402 by others, 3,600 CY, not included in total Excavation Cut above.

Fill Borrow (Rockstream Drive & Ambleside Drive cross sections, paid under item 20202).....14,000 CY

- Placed in fill areas under terraces, sidewalk, and side slopes when above existing ground.
- If on-site excavated material is not usable, fill borrow from offsite will be required.

Estimated Fill Borrow already completed from STA 106+25 to STA 113+25 as part of City Construction Contract #8402 by others, 4,300 CY, not included in total Fill Borrow above.

Select Fill (Rockstream Drive & Ambleside Drive cross sections, paid under item 20204).....7,400 TON

- Placed in fill areas where base course is above existing ground.
- 2-inches placed under sidewalk in fill areas on top of fill borrow
- On-site soil excavated under this contract and contract #8402 by others is expected to be used for fill areas.
- If on-site excavated material is not usable, select fill from offsite will be required.

Estimated Select Fill already completed from STA 106+25 to STA 113+25 as part of City Construction Contract #8402 by others, 11,300 TON, not included in total Select Fill above.

Breaker Run Undercut (Rockstream Drive & Ambleside Drive per cross sections, paid under item 20219).....4,300 TON

It is assumed that 65% of Rockstream Drive and Ambleside Drive will have to be undercut and that material will be wasted. The Contractor shall place breaker run and Geosynthetic Reinforcement Fabric in the undercut areas.

*The Developer (FRED) under City Construction Contract #8402 may provide select fill for use in the Rockstream Drive greenway crossing. The select fill stockpile is stored on-site and shall be used by the

Contractor under this contract. The Contractor may contract the Developer (FRED), Paul Schmitter, Director of Development, 414-274-8212, pschmitter@fred-inc.com. Any fill stockpile soil shall meet the requirements of the City of Madison Standard Specification 202.2(b) for select fill. Representative soil samples of the stockpiled select fill shall be tested to confirm the soil materials meet City of Madison Standard Specification 202.2(b) and the results submitted to City Engineering. Any excess select fill not used under this contract shall be removed by the Developer by August 1, 2021 to ensure hauling activities in the Rockstream Drive area are completed prior to final Rockstream Drive road construction and paving. The Developer is responsible for restoring all areas disturbed and receiving stockpiled select fill soil. The Developer is responsible for maintaining the erosion control measures around the select fill stockpile. The Contractor is responsible for any erosion control devices for the select fill stockpile that are disturbed under this contract.

BID ITEM 20221 – TOPSOIL

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary to provide and place topsoil as necessary throughout the project. Topsoil shall be installed at the locations indicated on the plans and details per the Standard Specifications, except as described in this special provision.

The Contractor may reuse stripped topsoil from on site for restoration of disturbed areas as indicated on the plans or as directed by the Construction Engineer. All topsoil material must meet the requirements of the Standard Specifications, including topsoil that is reused from on site, and it shall be free of noxious/invasive weeds, stones, debris, and vegetable material, and free of excess peat, sand, or clay. Topsoil used in street terraces and on the property side of sidewalk shall be shredded.

In locations where topsoil is to be placed, the Contractor shall install a minimum of 12" of topsoil. Any additional excavation necessary to place topsoil to the required depth shall be considered incidental to the bid item. In areas where topsoil is to be placed adjacent to curb, sidewalk, or driveways, the topsoil shall be placed to a depth of 6" within 1 ft. of these items. All base and backfill materials within 1 ft. of these items shall be placed and compacted per the standard specifications. When working around existing tree roots, the Contractor shall coordinate with City Forestry to determine the appropriate depth of topsoil to use so as not to damage the existing tree.

METHOD OF MEASUREMENT

Topsoil shall be measured by the Square Yard at the top surface, regardless of the placement depth of the topsoil.

BASIS OF PAYMENT

Topsoil, measured as provided above, will be paid at by the contract Square Yard, which price shall be payment in full compensation for furnishing, hauling, placing, and compacting the specified material, including all equipment, tools, labor and incidentals necessary to complete the work as specified.

BID ITEM 20404 – CLEARING **BID ITEM 20409 – GRUBBING**

DESCRIPTION

These bid items are to be used for Clearing and Grubbing trees and brush that are part of a tree or brush line as shown on the plans. Existing stumps from trees/brush and logs previously cut down inside the right-of-way shall be removed under this item. All work for clearing and grubbing the tree and brush lines shall be completed per Article 204 of the Standard Specifications except the Contractor shall be paid for the removal of trees/brush under 3 inches. All trees/brush shall be removed inside the slope intercept as shown on the plans.

METHOD OF MEASUREMENT

These bid items for Clearing and Grubbing are to be measured and paid by the Lump Sum for completed work.

BASIS OF PAYMENT

These items, measured as provided above, will be paid at the contract lump sum, which price shall be payment in full for all labor, equipment, tools, hauling and incidentals necessary to complete the work.

BID ITEM 20705 – DETENTION BASIN SEEDING

DESCRIPTION

Portions of channel near the box culvert that need to be restored, as indicated on the plans, shall have a seed mix placed after they have been graded and prepared in accordance with Bid Item 90034 – Topsoil Installation for Special Plantings.

MATERIALS

The seed mix shall consist of any of the following or approved equal:

1. "Tall Prairie for Medium to Clay Soils" as manufactured by Prairie Nursery, Westfield, WI. Seed shall be placed at a rate of 10 lbs per acre.
2. "Pollinator-Palooza Seed Mix" as manufactured by Prairie Moon Nursery, Winona, MN. Seed shall be placed at a rate of 6.59 lbs per acre.
3. "Tallgrass Prairie for Medium Soils" as manufactured by Agrecol LLC., Evansville, WI. Seed shall be placed at a rate of 13.25 lbs per acre.
4. "Basic Prairie Mix" as manufactured by Shooting Star Native Seed, Spring Grove, MN. Seed shall be placed at a rate of 10 lbs per acre.

Substitution requests shall be submitted to City Engineering for review and approval. Contractor is notified that if an alternative is allowed, the rate of seed may be altered as a condition of approval, and seed shall be native ecotypes. No improved varieties are allowed. Seed source shall be native ecotypes from Southeastern Minnesota, Eastern Iowa, Southern Wisconsin, or Northern Illinois.

METHOD OF MEASUREMENT

Detention Basin Seeding shall be measured by square yard, acceptably installed, measured on the footprint of restored channel areas near box culverts.

BASIS OF PAYMENT

Detention Basin Seeding, as measured above, shall be paid at the contract price and be considered full compensation for all work, materials, and incidentals required to complete the work as described above.

BID ITEM 21073 – EROSION MATTING, CLASS II, TYPE C - ORGANIC

DESCRIPTION

Work under this bid item shall consist of furnishing and installing Class II, Type C - Organic Erosion Control Revegetative Mat (ECRM) on all restored channel areas to be seeded or directed by the Construction Engineer to be matted with a different material. The ECRM shall be one of the products listed in the Wisconsin Department of Transportation Erosion Control Product Acceptability List (PAL), under the category "Erosion Mat, Class II, Type C – Organic."

METHOD OF MEASUREMENT

Erosion Matting, Class II, Type C - Organic shall be measured by the square yard, acceptably installed, not including runout in anchor trenches or overlap. No adjustment shall be made for slope.

BASIS OF PAYMENT

Erosion Matting, Class II, Type C - Organic, as measured above, shall be paid at the contract price and be considered full compensation for all work, materials, and incidentals required to complete the work as described above.

SECTION 210.1(d) STREET SWEEPING

When required, either by the erosion control plan or the Construction Engineer, the Contractor shall perform mechanical street-sweeping on all streets or paved surfaces affected by construction equipment, hauling or related construction activities that result in mud tracking or siltation. Mechanical street sweeping shall be completed as directed by the Construction Engineer and shall remove all loose material to the satisfaction of the Construction Engineer. Depending on site conditions, construction activities, and hauling methods utilized by the Contractor mechanical street sweeping may be required multiple times throughout the day with an absolute minimum that all streets are clean at the end of the work day. Areas not accessible by mechanical street sweepers may require hand scraping with shovels.

ARTICLE 500 SEWER AND SEWER STRUCTURES GENERAL

The storm sewer and sanitary sewer designer for the project is Matt Allie and may be contacted at mallie@cityofmadison.com (preferred) or (608) 266-4058. Questions related to the box culvert and related grading may be directed to Matt Allie.

STORM SEWER GENERAL

Storm sewer pipe work will include installation of approximately 397 feet of new 12" storm sewer, 305 feet of new 15" storm sewer, 297 feet of new 18" storm sewer, 38 feet of new 24" storm sewer, 142 feet of new 27" storm sewer. Storm sewer work also includes five (5) 12' span by 5' rise precast reinforced concrete box culverts, totaling 540' in length. The box culverts shall be constructed in accordance with the specifications for Bid Item 50501 – Precast Reinforced Concrete Box Culvert. Additionally, reinforced concrete box culvert wingwalls shall be constructed at the upstream and downstream ends of the group of five box culverts, in accordance with the specifications for Bid Item 90030 – Reinforced Concrete Box Culvert Wingwalls.

Reconnection of existing pipes at new or existing structures, or new pipes at new or existing structures, shall be considered to be part of the work required to construct the new structure or to construct the new sewer pipe and shall not be rewarded with additional compensation. However, if the structure being removed is larger than the new structure, thus requiring additional pipe, the new pipe shall be paid under the appropriate bid item and the connection of the old pipe to the new pipe shall be accomplished with a concrete collar. All private storm connections to a new structure are incidental to the new structure. If a private connection is not shown on the plan, additional compensation shall be paid for as a private reconnection unless the structure is field poured.

Where a new structure is to be constructed at an existing pipe, it is expected that the Contractor shall saw cut the existing pipe in the required location to accommodate the placement of the new structure. If the Contractor for his or her convenience deems it more suitable to remove the existing pipe to a full joint, the additional pipe and concrete collar required to reconnect to the new structure shall be the Contractor's responsibility and shall not be compensated.

Precast structures are only allowed where field poured structures are not specifically called for and no precast structures are allowed until approval of the design engineer has been received.

SANITARY SEWER GENERAL

Sanitary sewer pipe work will include installation of approximately 77 feet of new 8" diameter ASTM D3034 SDR-35 main and 90' of sanitary lateral ASTM D3034 SDR-25. Sanitary sewer pipe work shall include installing new sewers at the sizes and location specified on the plan set and in accordance with the City of Madison Standard Specifications for Public Works Construction latest edition.

All new sanitary sewer access structures shall include the Neenah R-1550 Frame with City of Madison Logo Lid 1550-0054 (see S.D.D. 5.7.16 of the City of Madison Standard Specification for Public Works Construction latest edition). All new sewer main connections may be factory cored and shall be included in the structure price. Sewer lateral connections to existing sanitary sewer access structures will be paid for as a Sanitary Sewer Tap.

SECTION 507.3(b) PRECAST REQUIREMENTS

Precast structures for storm and sanitary sewer structures shall not be furnished with steps.

SECTION 507.3(d) SEWER CONNECTIONS – NEW PIPE CONNECTIONS

Where a new public TYPE II or III storm pipe is being connected into new precast H inlet concrete structure the contractor shall provide a Kor-N-Seal or approved prefabricated connection to connect the new pipe to new H inlet structure as detailed in Standard Detail Drawing 5.7.31, Flexible Pipe to SAS Connector.

Where a new public TYPE I storm pipe is being connected into a new precast concrete structure the contractor shall be made with the use of concrete collar. The work shall be done in accord with Standard Detail Drawing 5.4.5 Concrete Collar.

Where any type of new public storm pipe is being connected into new poured-in-place concrete structure the contractor shall pour structure around new pipe connection as detailed in Standard Detail Drawing 5.7.3, Storm Sewer Field Poured SAS and Catch Basins.

BID ITEM 50390 – SEWER ELECTRONIC MARKERS

With regard to the City of Madison Standard Specifications for Public Works Construction latest edition Section 503.3(c), each sanitary lateral shall have a minimum of two (2) electronic markers with the City providing the Contractor with the required number of electronic markers. For sanitary laterals, which only include the installation of a wye, a marker ball shall be installed directly above the wye connection to the main.

BID ITEM 50501 – PRECAST REINFORCED CONCRETE BOX CULVERT

DESCRIPTION

This item shall include all work, materials, incidentals, and coordination necessary to provide and install five (5) 12' span x 5' rise precast reinforced concrete box culverts, as shown on the plan set and as specified here. This includes all joint material, bedding, and backfill as described. Box culverts shall be precast reinforced concrete box sections, labeled as "RCBC" in the storm schedule.

A box culvert structural design is required for this bid item and shall be the responsibility of the contractor to provide upon approval of any materials by the City Engineer or their designee. All material submittals must be approved and stamped by a Professional Engineer licensed in the State of Wisconsin. The box shall be manufactured, provided, and installed with the appropriate amount of reinforcing steel, as specified in the structural design. This special provision specifies the dimensions and structural design standards required for this box culvert. The box culvert design and fabrication shall be in accordance with the Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and

Sewers Designed According to AASHTO LRFD, ASTM C1577 – 19 and AASHTO LRFD Specifications, using the controlling cover depth along the profile of the box.

This item includes all excavation required for installation of the box culvert and all necessary removal and disposal of excess trench excavation, off site at a location to be provided by the Contractor. Further, the work under this item includes stockpiling and reuse of excavation spoils for backfill of the box culvert trench.

The Contractor shall be responsible for coordinating delivery of the box culvert sections, unloading, and other incidentals associated with the installation.

The Contractor shall abide by the following guidelines when installing the box culverts:

- 1) The subgrade for the boxes shall have geotextile (paid under **BID ITEM 20241 - RIPRAP FILTER FABRIC, TYPE HR**) placed on all exposed subgrade areas prior to placement of the bedding stone for the boxes.
- 2) A one (1) foot thick layer of three (3) inch clear stone shall then be placed on the geotextile as bedding stone. Three (3) inch clear stone for box culvert bedding is included in the price of box culvert installation.
- 3) Those portions of the box culvert under the pavement structure backfill shall be backfilled with clayey soil classified as a lean clay, USCS classification CL. Once placed, the backfill material shall be compacted to a standard Proctor compaction of 90%. Backfill placement and compaction shall apply to the five foot wide void between P16 and P17 along the entire run of the box culvert. Provision and placement of backfill is included in the price of this bid item.
- 4) Joint sealing shall be included in the price of this bid item and the joints between box culvert sections shall be required in accordance with City of Madison Standard Specifications for Public Works Construction latest edition Section 505.3(a) and shall be sealed as follows:
 - (a) The full interior of the joints of the box shall be sealed with cold plastic trowelable sewer joint compound or two (2) appropriately sized mastic "ropes" (commonly used products include Pro-Stik & EZ-Stik) around the entire joint of the box.
 - (b) The exterior joints of the box shall be sealed with a 12" wide butyl exterior joint wrap (common products include EZ-Wrap & ConSeal). The exterior joints shall be fully wrapped on the sides and roof of each box joint.
 - (c) If multiple, parallel, box installations are called for, the spacing between exterior walls of the boxes shall include a three (3) inch horizontal separation, at minimum, and this separation space shall be maintained between the boxes along the entire run. The void between the boxes shall be filled with TYPE A Slurry Mix as specified in Section 301.9 of the Specifications. This excludes the five foot wide void between P16 and P17, which shall be filled with compacted backfill as stated above.

METHOD OF MEASUREMENT

Precast Reinforced Concrete Box Culvert shall be measured by the linear foot for box culvert provided and installed.

BASIS OF PAYMENT

Precast Reinforced Concrete Box Culvert, as measured above, shall be paid at the contract price and be considered full compensation for all work, materials, and incidentals required to complete the work as described above.

BID ITEM 50797 - EXTERNAL SEWER ACCESS STRUCTURE JOINT SEAL

DESCRIPTION

Work under this item shall include all work, materials, equipment, and incidentals required to provide and install External Sewer Access Structure Joint Seal in accordance with Article 507.3 of the City of Madison Standard Specifications for Public Works Construction latest edition.

METHOD OF MEASUREMENT

External Sewer Access Structure Joint Seal shall be measured by each structure installation acceptably completed.

BASIS OF PAYMENT

External Sewer Access Structure Joint Seal shall be paid for at the contract price, which shall be full compensation for all work as outlined in the description.

BID ITEM 50801 – UTILITY LINE OPENING (ULO)

The work under this item shall be completed in accordance with Article 508 of the Standard Specifications for Public Works Construction. It is the discretion of the Contractor to locate utilities by either a trench excavation or by a pothole technique. However, the Contractor shall not be compensated more than once for multiple utilities located within a maximum distance of five (5) feet long.

This contract includes 3 additional undistributed ULOs to be performed at the direction of the Engineer.

BID ITEM 90001 – GEOSYNTHETIC REINFORCEMENT FABRIC

DESCRIPTION

Work under this item shall include all work, materials, equipment, and incidentals necessary to provide and install **Mirafi RS580i, or an approved equal**.

CONSTRUCTION METHODS

The Geosynthetic Reinforcement Fabric shall be installed in accordance with the manufacturer's recommendations. A maximum of 12" of Undercut shall be removed, under the entire road area, and replaced with Breaker Run. Undercut and Breaker Run shall be paid for under the appropriate bid items. The Breaker Run shall be placed directly over the Geosynthetic Reinforcement Fabric in 8 to 12-inch loose lifts. Rubber-tired vehicles may be driven at low speeds, 10 mph or less, and in straight paths over the exposed Geosynthetic Reinforcement Fabric.

METHOD OF MEASUREMENT

The Geosynthetic Reinforcement Fabric shall be measured by the square yard, in place. Any overlap of the rolls, measured either longitudinally or transversely, shall be included in the pay quantity.

BASIS OF PAYMENT

Geosynthetic Reinforcement Fabric shall be measured as described above, which shall be full compensation for all work, materials, equipment and incidentals to complete the work as described above.

BID ITEM 90002 – RESHAPING SELECT FILL

DESCRIPTION

Reshaping Select Fill from STA 106+25.00 to STA 113+25.00 shall consist of blending the existing select fill to a uniform well-graded material placed as part of City Construction Contract #8402 by others. The existing select fill shall be graded and reshaped to match the subgrade within the construction plans and prepared for the placement of aggregate base and asphalt pavement. If more select fill is needed to be placed, the Contractor shall be paid separately.

METHOD OF MEASUREMENT

Reshaping Select Fill shall be measured by Lump Sum location acceptably completed.

BASIS OF PAYMENT

Reshaping Select Fill shall be paid for at the contract unit price for all work, materials, equipment, and incidentals necessary to complete the work as set forth in the description.

BID ITEM 90003 – REMOVE PERMANENT TYPE III BARRICADE

DESCRIPTION

This bid item includes all work, materials, equipment, labor, transporting and disposing necessary to Remove Permanent Type III Barricade as shown on Plan Sheet P-1.

METHOD OF MEASUREMENT

Remove Permanent Type III Barricade shall be measured on a per unit basis acceptably removed.

BASIS OF PAYMENT

Remove Permanent Type III Barricade shall be paid at the contract unit price, which shall be full compensation for all work as provided in the description.

BID ITEM 90004 – REMOVE SIGN

DESCRIPTION

This bid item includes all work, materials, equipment, labor, transporting and disposing necessary to Remove Sign as shown on Plan Sheet D-4.

METHOD OF MEASUREMENT

Remove Sign shall be measured on a per unit basis acceptably removed.

BASIS OF PAYMENT

Remove Sign shall be paid at the contract unit price, which shall be full compensation for all work as provided in the description.

BID ITEM 90005 – MAINTAIN DRIVEWAY ACCESS

DESCRIPTION

Maintain Driveway Access shall consist of all work, materials and incidentals necessary to maintain access to the driveways of properties identified on the plans, as identified in the special provisions, or as

directed by the Engineer. The Contractor shall maintain access at the identified locations at all times and for the duration of the project. This work may involve constructing temporary accesses using materials approved by the Engineer, using steel plates, limiting the size of the work areas around and within the driveways, or using high early strength concrete or temporary asphalt. Maintaining access may also involve performing work outside of scheduled work hours or outside of the Contractor's planned phasing of the project, if approved or directed by the Engineer. If constructing a temporary access, the Contractor shall ensure that proper drainage is maintained while the temporary access is in use, which includes grading of the temporary access and installation of temporary culverts or piping, as necessary. This item also includes removal of any temporary materials along with any necessary restoration of the area disturbed by the temporary access.

METHOD OF MEASUREMENT

Maintain Driveway Access shall be measured by Each location acceptably completed.

BASIS OF PAYMENT

Maintain Driveway Access shall be paid for at the contract unit price for all work, materials, equipment, and incidentals necessary to complete the work as set forth in the description.

BID ITEM 90006 – CONSTRUCTION FENCING

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide, install, maintain and remove construction fencing from the project site as shown on the plans. This fence shall be highly visible, constructed of a plastic web, and able to withstand the expected amount of use it will receive on a construction site. Any required maintenance or re-installation of fencing is included with this item. The intent of this item is to delineate the area to which the Contractor shall confine his or her operations, to protect trees, and to prevent disturbance of areas by the public following seeding operations. The fencing shall be used freely at the direction of the Engineer.

Relocation of fencing may be required as the work progresses. No extra payment shall be made for temporarily opening and re-closing the fence, or relocation of the fencing as needed to perform the work.

This item includes construction fencing placed as tree protection fencing.

Construction Fencing shall be Orange color, high-density polyethylene mesh conforming to the following:

- Mesh opening: 1 inch minimum to 3 inch maximum
- Height: 4 feet
- Ultimate tensile strength: Avg 3000lb per 4' width (ASTM D638)

METHOD OF MEASUREMENT

Construction Fencing (plastic) shall be measured by the Linear Foot of material placed, maintained, and removed.

BASIS OF PAYMENT

Construction fence (plastic) shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 90007 – TEMPORARY PEDESTRIAN SURFACE

DESCRIPTION

This special provision describes providing, maintaining, and removing temporary pedestrian surface. Place 3-inch asphalt over 2-inch gradation 2 crushed aggregate base course for a width of 5-feet. Place, compact, and level gradation 2 crushed aggregate foundation before placing the asphalt surface. Provide a firm, stable, and slip-resistant surface layer with vertical joints no higher than 1/4 inch and horizontal joints no wider than 1/2 inch.

Do not exceed 5 percent longitudinal slope. Provide cross slope of 1 to 2 percent. Maintain the surface with the specified joint and slope requirements. Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in section 201 of the Standard Specifications when no longer required.

METHOD OF MEASUREMENT

Temporary Pedestrian Surface shall be measured by the Square Foot acceptably completed.

BASIS OF PAYMENT

Temporary Pedestrian Surface shall be measured as described above shall be full payment for providing, maintaining, and removing temporary pedestrian surface.

BID ITEM 90030 – REINFORCED CONCRETE BOX CULVERT WINGWALLS

DESCRIPTION

Work under this item shall include all work, materials, and incidentals necessary to construct and install a full cast-in-place concrete box culvert wingwalls (S12 & S13) at the inlet of P16, P17, P18, P19, and P20 per the City of Madison's Standard Detail Drawings 5.5.1A and 5.5.1B. Excavation and clear stone bedding shall be installed as stated in S.D.D. 5.5.1A and shall be paid for under this bid item. At the edge of the apron, cutoff wall shall be installed, as shown in the detail referenced above. The invert of P16 sits 2.6 feet lower than the other box culverts and the apron and wingwall configuration will need to account for this, see Storm Details on plan sheet U-7. The contractor shall supply a new structure name plate in accordance with Wisconsin Department of Transportation Standard Specifications Section 502.3.11 and WisDOT Standard Detail Drawing 12a3. Name plate to show original construction year and structure number B-13-894.

METHOD OF MEASUREMENT

Reinforced Concrete Box Culvert Wingwalls shall be measured by each unit completed in place and satisfactorily installed.

BASIS OF PAYMENT

Reinforced Concrete Box Culvert Wingwalls, as measured above, shall be paid at contract price and be considered full compensation for all work, materials and incidentals to complete the work as explained in the description above.

BID ITEM 90031 – CULVERT RAILINGS

DESCRIPTION

This Bid Item consists of providing and installing a steel railing at the locations indicated on plan sheets U-1 and U-2. The Contractor shall provide shop drawings of the railing to the Engineer for approval prior

to installation. Note that the details provided contain some flexibility in the dimensions such that the layout can be modified to meet the actual field conditions.

The railing posts shall be embedded into the ground a minimum depth of 18" or to the top of the concrete culvert wingwalls using Ankr-TITE Concrete Anchors. If embedding, surround the embedded concrete posts with a minimum of 18" diameter of concrete. Leave a minimum of 4" above the concrete for placement of topsoil & seed (paid separately).

MATERIALS

Railing: All steel pipe railing material, shall be painted with a three-coat, zinc rich epoxy system consisting of an inorganic, zinc rich primer, intermediate high build epoxy paint coat, and protective shop coat of urethane paint. Prior to painting, all steel posts and rails shall be given a near-white blast cleaning. Painting and cleaning shall conform to Section 517 of the State Standard Specifications.

METHOD OF MEASUREMENT

Railing will be measured by linear foot, acceptably installed.

BASIS OF PAYMENT

Railing shall be paid per the above and shall include all materials, labor and equipment necessary to install the railing as set forth in the description.

BID ITEM 90032 – REMOVE CHANNEL PLUG

DESCRIPTION

Work under this item shall include all labor, materials, and incidentals required to remove the channel plug from Badger Mill Creek that was constructed during channel realignment work in Fall 2020. The channel plug is located about 200 feet upstream (north) from the location of the proposed box culverts and the location is shown in greater detail on plan sheet U-7.

The channel plug is a temporary earthen berm armored with stone that spans Badger Mill Creek. It was installed to aid dewatering and/or flow diversion during work in the realigned channel for low and small flows. The channel plug contains roughly 20 CY of material. When removing this material care shall be taken to match the side slopes and bottom elevation of the channel immediately downstream (south). Prior to beginning removal of the channel plug a silt curtain/turbidity barrier shall be installed across the channel a short distance downstream of the removal area. Any work, materials, and incidentals necessary to remove the channel plug shall be considered incidental to this bid item.

METHOD OF MEASUREMENT

Remove Channel Plug shall be measured as a lump sum bid item.

BASIS OF PAYMENT

Remove Channel Plug, as measured above, shall be paid at the contract price and be considered full compensation for all work, materials, and incidentals required to complete the work as described above.

BID ITEM 90033 – STORM CONTROL PLAN AND IMPLEMENTATION

DESCRIPTION

Work under this item shall include all labor, materials, and incidentals required to prepare a stormwater control plan and to implement the approved plan. The storm control plan shall include dry weather, wet

weather and backwater flow control contingencies. The Contractor shall submit to the project engineer a plan that details how storm flows will be managed and/or diverted during placement of the new five-cell (12' span x 5' rise) box culvert and concrete wingwalls. The approved methodology shall be installed prior to any box culvert work. Any work, materials, and incidentals necessary to repair and restore the site in conjunction with the Storm Control Plan and Implementation shall be considered incidental to this bid item.

If phasing will be required to properly control the storm flows on site during project construction, this shall be defined and detailed in the Storm Control Plan. The Contractor shall provide appropriate storm control measures during the entire duration of the project. Removal of all equipment and materials used for storm control shall be considered incidental to this bid item.

METHOD OF MEASUREMENT

Storm Control Plan and Implementation shall be measured as a lump sum bid item.

BASIS OF PAYMENT

Storm Control Plan and Implementation, as measured above, shall be paid at the contract price and be considered full compensation for all work, materials, and incidentals required to complete the work as described above.

BID ITEM 90034 – TOPSOIL INSTALLATION FOR SPECIAL PLANTINGS

DESCRIPTION

For terraces and other areas that are to be planted with native plants or seed, use the following method to ensure proper preparation of the site. Use Planting Mix Topsoil as defined in section 202.2(f)

Construction shall involve installation of Planting Mix topsoil into planting area. The finished grade in the terrace shall be a straight line grade between the top of the curb and the top of the outside edge of the sidewalk. For non-terrace areas, the finished grade shall be level with areas adjacent. Avoid all foot and equipment traffic and do not store materials or equipment in planting area after installation of topsoil.

METHOD OF MEASUREMENT

Topsoil Installation for Special Plantings shall be measured by square yard, acceptably installed, measured on the footprint of restored channel areas near box culverts.

BASIS OF PAYMENT

Topsoil Installation for Special Plantings, as measured above, shall be paid at the contract price and be considered full compensation for all work, materials, and incidentals required to complete the work as described above.

BID ITEM 90035 – 27 INCH PIPE GRATE

DESCRIPTION

Work under this item shall include all necessary work, materials, and incidentals necessary to construct and install a pipe grate at the outfall of P10 (S7). The grate shall be constructed as shown in City of Madison Standard Detail Drawing (SDD) 5.6.3, but sized to completely cover the outfall of a 27" reinforced concrete pipe. Bar and hinge spacing shall be as shown in SDD 5.6.3. In addition to hinges along the top of the opening, identical hinges shall be installed at the same interval along the bottom of the gate to prevent opening of the gate.

METHOD OF MEASUREMENT

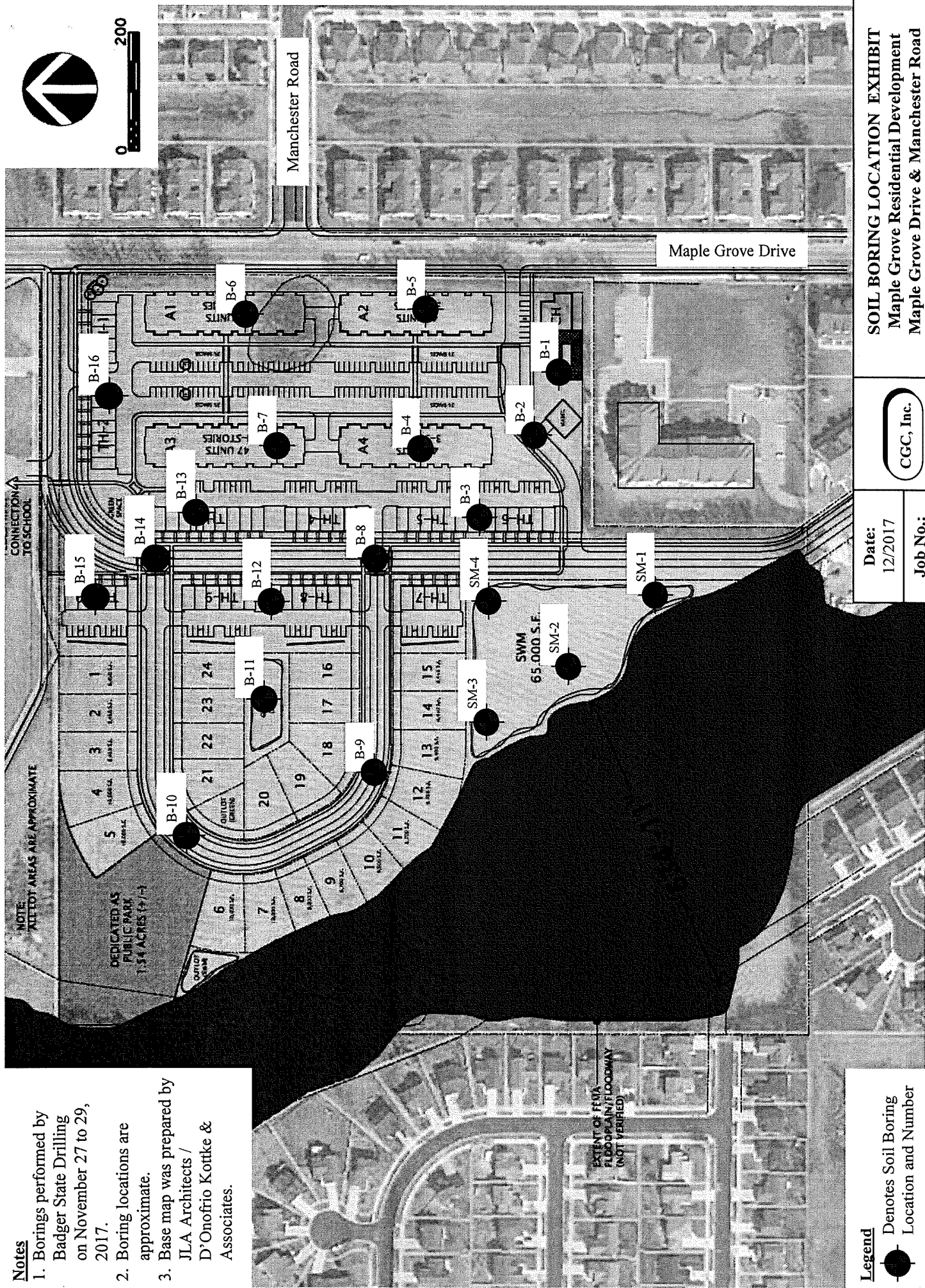
27 Inch Pipe Grate shall be measured by each unit completed in place and satisfactorily installed.

BASIS OF PAYMENT

27 Inch Pipe Grate shall be measured as described above which shall be full compensation for all work, materials and incidentals to complete the work as explained in the description above.

Notes

1. Borings performed by Badger State Drilling on November 27 to 29, 2017.
2. Boring locations are approximate.
3. Base map was prepared by JLA Architects / D'Onofrio Kottke & Associates.



Legend

● Denotes Soil Boring Location and Number

Date:

12/2017

Job No.:

C17490

CGC, Inc.

SOIL BORING LOCATION EXHIBIT
 Maple Grove Residential Development
 Maple Grove Drive & Manchester Road
 Town of Verona, Dane County, Wisconsin

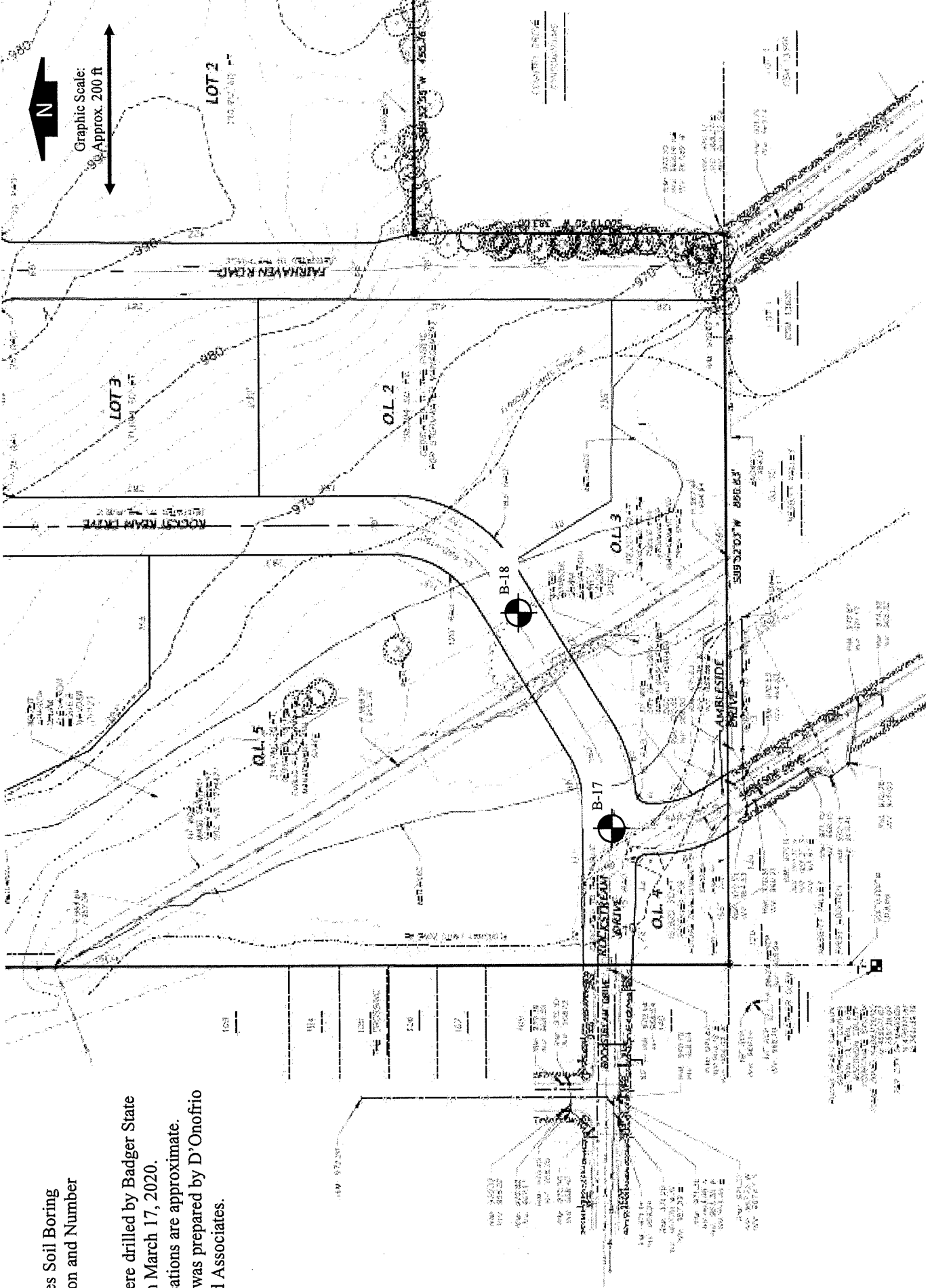
Legend

Denotes Soil Boring Location and Number



Notes

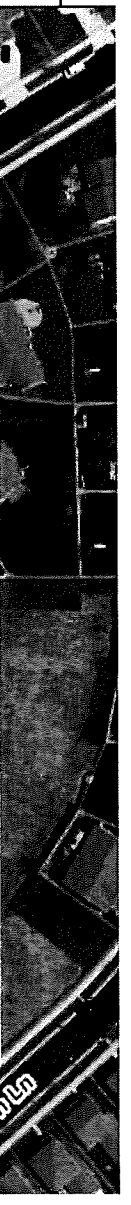
1. Borings were drilled by Badger State Drilling on March 17, 2020.
2. Boring locations are approximate.
3. Base map was prepared by D'Onofrio Kottke and Associates.



SOIL BORING LOCATION EXHIBIT
 Maple Grove Residential Development
 Maple Grove Drive & Manchester Road
 Madison, Wisconsin

Job No.: C20092
 Date: 03/2020

CGC, Inc.





LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. B-01
 Surface Elevation (ft) 991.4
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|--------------|-------|----|---------------|--|---------------------|---|----|----|----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | | 12± in. Topsoil (OL) | | | | | |
| 1 | 6 | M | 3 | | Very Loose, Brown Silty Fine to Medium SAND, Trace Clay and Gravel, Scattered Roots (SM) | | | | | |
| 2 | 16 | M | 17 | | Medium Dense to Dense, Tan Silty Fine SAND, Little Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 3 | 18 | M | 48 | | | | | | | |
| 4 | 16 | M | 66 | | Dense to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) Drove Stone near 8.5 ft | | | | | |
| 5 | 18 | M | 54 | | | | | | | |
| 6 | 18 | M | 46 | | | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 11/29/17 End 11/29/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. B-02
 Surface Elevation (ft) 985.7
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|------|--------------|-------|----|--------------------------------------|--|---------------------|------|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL |
| | | | | | 0 | 12± in. Topsoil (OL) | | | | |
| 1 | █ | 10 | M | 4 | 1 | Medium Stiff to Stiff, Brown Lean CLAY, Trace Sand, Scattered Fine Roots (CL) | (0.75-1.5) | 26.2 | | |
| 2 | █ | 8 | M | 7 | 5 | Medium Stiff, Brown Lean CLAY, Little Sand to Sandy Lean CLAY, Trace Gravel (CL) | (0.75-1.0) | 16.7 | | |
| 3 | █ | 16 | M | 14 | 10 | Medium Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | |
| 4 | █ | 16 | M | 26 | 15 | Gravel Content Slightly Increasing, Drove Stone near 13.5 ft | | | | |
| 5 | █ | 12 | M/W | 28 | 20 | | | | | |
| 6 | █ | 16 | M | 17 | 25 | End of Boring at 20 ft Borehole Backfilled with Bentonite Chips | | | | |
| | | | | | 30 | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 11/29/17 End 11/29/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. **B-03**
 Surface Elevation (ft) 989.6
 Job No. **C17490**
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | | |
|--------|------|--------------|-------|-------|--------------------------------------|--|---------------------|---|----|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | | 0 | 6± in. Topsoil (OL) | | | | | |
| 1 | | 6 | M | 8 | 0-6 | Loose, Tan Silty Fine SAND, Little Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 2 | | 6 | M | 18 | 6-18 | Medium Dense to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 3 | | 8 | M | 32 | 18-32 | Drove Stone near 6 ft | | | | | |
| 4 | | 14 | M | 22 | 32-44 | | | | | | |
| 5 | | 4 | M | 50/4" | 44-48 | Probable Cobble/Boulder near 13.5 ft (Limited Recovery) | | | | | |
| 6 | | 10 | M | 28 | 48-58 | Medium Dense, Reddish Brown Gravelly Fine to Medium SAND, Trace Silt, Scattered Cobbles/Boulders (SP - Possible Highly Weathered Sandstone Bedrock) | | | | | |
| | | | | | 58-60 | End of Boring at 20 ft | | | | | |
| | | | | | 60-65 | Borehole Backfilled with Bentonite Chips | | | | | |

| WATER LEVEL OBSERVATIONS | | | | | | GENERAL NOTES | | | | | |
|---|-------------------------------------|----|-----------------------------|--------------------------|----|---------------|-----------------------|--------|----------|-----|--------|
| While Drilling | <input checked="" type="checkbox"/> | NW | Upon Completion of Drilling | <input type="checkbox"/> | NW | Start | 11/28/17 | End | 11/28/17 | | |
| Time After Drilling | | | | | | Driller | BSD | Chief | MC | Rig | CME-55 |
| Depth to Water | | | | | | Logger | MG | Editor | TFG | | |
| Depth to Cave in | | | | | | Drill Method | 2.25" HSA; Autohammer | | | | |
| The stratification lines represent the approximate boundary between soil types and the transition may be gradual. | | | | | | | | | | | |



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. B-04
 Surface Elevation (ft) 991.6
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|--------------|-------|-------|---------------|---|---------------------|------|----|----|----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | 0 | 6± in. Topsoil (OL) | | | | | |
| 1 | 12 | M | 5 | 0-12 | Loose, Grayish Brown/Orange Brown Silty Fine SAND, Trace Gravel, Scattered Fine Roots (SM) | | | | | |
| 2 | 18 | M | 9 | 12-18 | Loose, Brown/Gray (Laminated) SILT, Little to Some Sand (ML) | | 18.8 | 20 | 19 | |
| 3 | 18 | M | 16 | 18-20 | Medium Dense, Tan Silty Fine SAND, Trace Gravel (SM) | | | | | |
| 4 | 18 | M | 16 | 20-22 | Medium Dense, Tan SILT, Little Sand, Laminated with Medium Stiff to Stiff, Brown/Reddish Brown (Mottled) Silty CLAY (ML/CL-ML) | (0.75-1.5) | | | | |
| 5 | 0 | - | 50/1" | 22-20 | Dense to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) Probable Cobble/Boulder near 13.5 ft (No Recovery) | | | | | |
| 6 | 14 | M/W | 36 | 20 | End of Boring at 20 ft Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 11/28/17 End 11/28/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. **B-05**
 Surface Elevation (ft) 983.2
 Job No. **C17490**
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|------|--------------|-------|-------|---|-----------------|---------------------|---|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | w | LL | PL |
| | | | | | 10± in. Topsoil (OL) | | | | | |
| 1 | | 6 | M | 12 | Stiff, Brown Lean CLAY, Trace Sand (CL) | (1.25) | 26.7 | | | |
| 2 | | 8 | M | 18 | Medium Dense to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) Drove Stone near 3.5 ft | | | | | |
| 3 | | 18 | M | 35 | | | | | | |
| 4 | | 16 | M | 58/9" | Probable Cobble/Boulder near 8.5 ft | | | | | |
| 5 | | 16 | M/W | 40 | | | | | | |
| 6 | | 16 | M | 48 | | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 11/29/17 End 11/29/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Maple Grove Residential Development**
Maple Grove Drive & Manchester Road
 Location **Town of Verona, Dane County, Wisconsin**

Boring No. **B-06**
 Surface Elevation (ft) **978.6**
 Job No. **C17490**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|-----------|-------|----|------------|---|-----------------|------|----|----|-----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | W | LL | PL | LI |
| 1 | 12 | M | 5 | 0-5 | 12± in. Topsoil (OL) Medium Stiff to Stiff, Brown Lean CLAY, Trace Sand (CL) | (0.75-1.5) | 27.3 | | | |
| 2 | 12 | M | 7 | 5-7 | Medium Stiff, Brown Lean CLAY, Little Sand, Trace Gravel (CL) | (0.75-1.0) | 25.6 | | | |
| 3 | 4 | M/W | 2 | 7-9 | Very Loose, Brown Clayey Fine to Medium SAND, Trace to Little Gravel (SC) Trace Organics near 6 ft | | 17.9 | | | 1.5 |
| 4 | 18 | W | 2 | 9-11 | Gravel Content Decreasing near 8.5 ft | | | | | |
| 5 | 6 | W | 2 | 11-13 | Very Loose, Brown Fine to Medium SAND, Some Silt, Trace Clay and Gravel (SM) | | | | | |
| | | | | 13-15 | P200 (Samples 5 and 6): 29.9% | | 19.4 | | | |
| 6 | 18 | W | 2 | 15-17 | Numerous Clayey Sand Seams near 18.5 ft | | | | | |
| 7 | 16 | W | 1 | 17-19 | | | | | | |
| 8 | 16 | W | 23 | 19-23 | Medium Dense, Brown Fine to Coarse SAND, Little Gravel, Trace Silt, Scattered Cobbles/Boulders (SP) | | | | | |
| | | | | 23-30 | End of Boring at 30 ft Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

While Drilling ∇ **8.5'** Upon Completion of Drilling _____
 Time After Drilling _____ **1 Hr.**
 Depth to Water _____ **10.0'** ∇
 Depth to Cave in _____ **11.5'**

GENERAL NOTES

Start **11/29/17** End **11/29/17**
 Driller **BSD** Chief **MC** Rig **CME-55**
 Logger **MG** Editor **TFG**
 Drill Method **2.25" HSA; Autohammer**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. B-07
 Surface Elevation (ft) 981.6
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|---------------|--------------|-------|----|--------------------------------------|---|---------------------|---|----|----|
| No. | DEPTH (ft) | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL |
| | | | | | 0 | 16± in. Topsoil (OL) | | | | |
| 1 | | 8 | M | 4 | 0 | Very Loose to Loose, Brown Silty Fine to Medium SAND, Trace Clay and Gravel (SM) | | | | |
| 2 | | 12 | M | 3 | 5 | Very Loose, Tan Fine to Medium SAND, Little Silt, Trace Gravel (SP-SM) | | | | |
| 3 | | 12 | M | 19 | 5 | Medium Dense to Dense, Tan Fine to Medium SAND, Some Silt, Trace Gravel (SM) | | | | |
| 4 | | 16 | M | 32 | 10 | Scattered Grayish Brown Silty Sand Seams near 8.5 ft | | | | |
| 5 | | 18 | M/W | 28 | 15 | Medium Dense to Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | |
| 6 | | 16 | M/W | 44 | 20 | End of Boring at 20 ft Borehole Backfilled with Bentonite Chips | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 11/29/17 End 11/29/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. B-08
 Surface Elevation (ft) 989.7
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|---------------|--------------|-------|----|---|---------------------|------|----|----|----|
| No. | DEPTH (ft) | Rec (in.) | Moist | N | | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | | 10± in. Topsoil (OL) | | | | | |
| 1 | | 8 | M | 5 | Stiff, Brown Lean CLAY, Trace Sand (CL) | (1.5-2.0) | 26.4 | | | |
| 2 | | 16 | M | 20 | Medium Dense, Tan Silty Fine SAND, Little Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 3 | | 14 | M | 22 | Medium Dense to Dense, Tan Fine SAND, Little Silt, Trace Gravel, Scattered Grayish Brown Silty Fine Sand Seams (SP) | | | | | |
| 4 | | 14 | M | 29 | | | | | | |
| 5 | | 14 | M | 36 | | | | | | |
| 6 | | 14 | M | 44 | Dense, Tan Fine to Medium SAND, Trace Silt and Gravel, Laminated with Grayish Brown Sandy SILT (SP/ML) | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

While Drilling NW Upon Completion of Drilling NW
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 11/28/17 End 11/28/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. B-09
 Surface Elevation (ft) 972.6
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | | |
|--------|------|--------------|-------|----|--------------------------------------|---|---------------------|------|----|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | | 0 | 8± in. Topsoil (OL) | | | | | |
| 1 | █ | 5 | M | 8 | 1 | Stiff, Brown Lean CLAY, Trace to Little Sand, Trace Gravel, Scattered Fine Roots (CL) | (1.0-1.75) | 26.5 | | | |
| 2 | █ | 14 | M | 4 | 5 | Soft to Medium Stiff, Gray/Brown (Mottled) Lean CLAY, Trace to Little Sand, Scattered Fine Sand Seams (CL) | (0.5) | 26.9 | | | |
| 3 | █ | 16 | M/W | 24 | 10 | Medium Dense to Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 4 | █ | 16 | M/W | 22 | 15 | | | | | | |
| 5 | █ | 10 | M | 34 | 20 | Scattered Fine to Coarse Sand Seams with Trace Silt near 18.5 ft | | | | | |
| 6 | █ | 18 | W | 21 | 25 | End of Boring at 20 ft | | | | | |
| | | | | | 30 | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling 18.5' Upon Completion of Drilling _____
 Time After Drilling _____ 24 Hr.
 Depth to Water _____ 6.5' ▼
 Depth to Cave in _____ 7.0'

Start 11/27/17 End 11/27/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. B-10
 Surface Elevation (ft) 978.9
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|------------------|--------------|-------|----|--|-----------------|---------------------|---|----|----|
| No. | TYPE RECORDED | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL |
| | | | | | 7± in. Topsoil (OL) | | | | | |
| 1 | | 8 | M | 7 | Stiff, Brown Lean CLAY, Trace Sand (CL) | (1.25-1.75) | 28.1 | | | |
| 2 | | 12 | M | 4 | Soft, Gray/Brown (Lightly Mottled) Lean CLAY, Trace Sand (CL) | (0.25-0.5) | 31.7 | | | |
| 3 | | 10 | M | 21 | Medium Dense, Tan Fine to Medium SAND, Some Gravel, Little Silt, Scattered Cobbles/Boulders (SP-SM) | | | | | |
| 4 | | 16 | M/W | 19 | Medium Dense to Very Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 5 | | 14 | M | 52 | Drove Stone near 13.5 ft | | | | | |
| 6 | | 12 | W | 21 | | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 18.5' Upon Completion of Drilling _____
 Time After Drilling _____ 24 Hr.
 Depth to Water _____ 11.0' ▼
 Depth to Cave in _____ 12.5'

Start 11/27/17 End 11/27/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. **B-11**
 Surface Elevation (ft) 985.7
 Job No. **C17490**
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | | |
|--------|---------------|--------------|-------|----|--------------------------------------|--|-------------------------|---|----|----|----|
| No. | DEPTH (ft) | Rec (in.) | Moist | N | | Depth (ft) | q _u (tsf) | W | LL | PL | LI |
| | | | | | 0 | 8± in. Topsoil (OL) | | | | | |
| 1 | | 8 | M | 16 | 5 | Medium Dense, Tan Gravelly Fine to Coarse SAND, Little Silt (SP-SM) Scattered Brown Silty Fine to Medium Sand Seams near 1 ft | | | | | |
| 2 | | 8 | M | 15 | | | | | | | |
| 3 | | 12 | M | 26 | | Medium Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 4 | | 16 | M | 26 | 10 | | | | | | |
| 5 | | 16 | M | 28 | 15 | | | | | | |
| 6 | | 16 | M/W | 27 | 20 | | | | | | |
| | | | | | 20 | End of Boring at 20 ft Borehole Backfilled with Bentonite Chips | | | | | |
| | | | | | 25 | | | | | | |
| | | | | | 30 | | | | | | |

| WATER LEVEL OBSERVATIONS | GENERAL NOTES |
|--|--|
| While Drilling <input checked="" type="checkbox"/> <u>NW</u> Upon Completion of Drilling <input type="checkbox"/> <u>NW</u> Time After Drilling _____ Depth to Water _____ Depth to Cave in _____ | Start <u>11/27/17</u> End <u>11/27/17</u> Driller <u>BSD</u> Chief <u>MC</u> Rig <u>CME-55</u> Logger <u>MG</u> Editor <u>TFG</u> Drill Method <u>2.25" HSA; Autohammer</u> |
| The stratification lines represent the approximate boundary between soil types and the transition may be gradual. | |



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. **B-12**
 Surface Elevation (ft) 987.4
 Job No. **C17490**
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|--------------|-------|----|---------------|---|---------------------|------|----|----|----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | w | LL | PL | LI |
| | | | | | 6± in. Topsoil (OL) | | | | | |
| 1 | 12 | M | 7 | | Soft to Very Stiff, Brown Lean CLAY, Trace Sand (CL) | (2.0-2.5) | | | | |
| 2 | 12 | M | 4 | | Trace Gravel near 3.5 ft | (0.25-0.5) | 26.6 | | | |
| 3 | 14 | M | 19 | | Medium Dense to Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 4 | 16 | M | 32 | | | | | | | |
| 5 | 14 | M | 38 | | | | | | | |
| 6 | 18 | M/W | 34 | | Scattered Chert Fragments near 18.5 ft | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

| | |
|--|--|
| While Drilling <u>∇</u> <u>NW</u> Upon Completion of Drilling <u>NW</u> Time After Drilling _____ Depth to Water _____ Depth to Cave in _____ | Start <u>11/27/17</u> End <u>11/27/17</u> Driller <u>BSD</u> Chief <u>MC</u> Rig <u>CME-55</u> Logger <u>MG</u> Editor <u>TFG</u> Drill Method <u>2.25" HSA; Autohammer</u> |
|--|--|

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. **B-13**
 Surface Elevation (ft) 982.0
 Job No. **C17490**
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--|--------------|-------|----|---------------|---|---------------------|------|----|----|----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | 0 | 7± in. Topsoil (OL) | | | | | |
| 1 | 8 | M | 6 | 6 | Medium Stiff to Very Stiff, Gray/Brown (Mottled) Lean CLAY, Trace to Little Sand (CL) | (2.5) | | | | |
| 2 | 16 | M | 6 | 6 | Sand Content Slightly Decreasing near 3.5 ft | (0.5) | 30.9 | | | |
| 3 | 8 | M/W | 14 | 14 | Medium Dense to Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 4 | 14 | M/W | 18 | 18 | | | | | | |
| 5 | 12 | M | 34 | 15 | Drove Stone near 13.5 ft | | | | | |
| 6 | 16 | M/W | 40 | 20 | | | | | | |
| End of Boring at 20 ft | | | | | | | | | | |
| Borehole Backfilled with Bentonite Chips | | | | | | | | | | |

| WATER LEVEL OBSERVATIONS | | | | | GENERAL NOTES | | | | | |
|---|---|-----------------------------|--|--|---------------|------------------------------|--------|-----------------|--|--|
| While Drilling | <input checked="" type="checkbox"/> NW | Upon Completion of Drilling | <input type="checkbox"/> NW | | Start | <u>11/27/17</u> | End | <u>11/27/17</u> | | |
| Time After Drilling | _____ | | <input type="checkbox"/> 24 Hr. | | Driller | <u>BSD</u> | Chief | <u>MC</u> | | |
| Depth to Water | _____ | | <input type="checkbox"/> NW | | Logger | <u>MG</u> | Editor | <u>TFG</u> | | |
| Depth to Cave in | _____ | | <input type="checkbox"/> 12.0' | | Drill Method | <u>2.25" HSA; Autohammer</u> | | | | |
| The stratification lines represent the approximate boundary between soil types and the transition may be gradual. | | | | | | | | | | |



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. **B-14**
 Surface Elevation (ft) 982.2
 Job No. **C17490**
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--|------|--------------|-------|----|--------------------------------------|--|---------------------|---|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL |
| 1 | █ | 12 | M | 7 | 0 | 6± in. Topsoil (OL) Loose to Medium Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | |
| 2 | █ | 14 | M | 21 | 5 | | | | | |
| 3 | █ | 16 | M | 26 | 10 | | | | | |
| 4 | █ | 16 | M | 20 | 15 | | | | | |
| 5 | █ | 12 | M/W | 22 | 20 | | | | | |
| 6 | █ | 8 | W | 26 | 25 | | | | | |
| End of Boring at 20 ft | | | | | | | | | | |
| Borehole Backfilled with Bentonite Chips | | | | | | | | | | |
| | | | | | | | | | | |

| WATER LEVEL OBSERVATIONS | | | | | GENERAL NOTES | | | | |
|---|-------|--------|-----------------------------|-------|---------------|----------|-----|----------|---|
| While Drilling | ∇ | 13.5' | Upon Completion of Drilling | _____ | Start | 11/27/17 | End | 11/27/17 | Driller BSD Chief MC Rig CME-55 Logger MG Editor TFG Drill Method 2.25" HSA; Autohammer |
| Time After Drilling | _____ | 24 Hr. | _____ | 12.7' | | | | | |
| Depth to Water | _____ | 12.7' | _____ | 12.7' | | | | | |
| Depth to Cave in | _____ | 12.7' | _____ | 12.7' | | | | | |
| The stratification lines represent the approximate boundary between soil types and the transition may be gradual. | | | | | | | | | |



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. **B-15**
 Surface Elevation (ft) 983.2
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|------|--------------|-------|----|---|-----------------|---------------------|---|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL |
| | | | | | 6± in. Topsoil (OL) | | | | | |
| 1 | | 8 | M | 8 | Loose, Brown Clayey Fine to Medium SAND, Trace to Little Gravel, Scattered Fine Roots (SC) | | | | | |
| 2 | | 12 | M | 23 | Medium Dense to Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 3 | | 16 | M | 33 | Drove Stone near 3.5 ft | | | | | |
| 4 | | 12 | M | 42 | | | | | | |
| 5 | | 18 | M/W | 34 | | | | | | |
| 6 | | 12 | M/W | 34 | | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

| WATER LEVEL OBSERVATIONS | | | | | GENERAL NOTES | | | | |
|--|-------------------------------------|----|-----------------------------|----|---------------|-----------------------|--------|----------|------------|
| While Drilling | <input checked="" type="checkbox"/> | NW | Upon Completion of Drilling | NW | Start | 11/27/17 | End | 11/27/17 | |
| Time After Drilling | | | | | Driller | BSD | Chief | MC | Rig CME-55 |
| Depth to Water | | | | | Logger | MG | Editor | TFG | |
| Depth to Cave in | | | | | Drill Method | 2.25" HSA; Autohammer | | | |
| <small>The stratification lines represent the approximate boundary between soil types and the transition may be gradual.</small> | | | | | | | | | |



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. B-16
 Surface Elevation (ft) 979.2
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|------|-----------|-------|----|--|-----------------|---------------|---|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL |
| | | | | | 6± in. Topsoil (OL) | | | | | |
| 1 | | 12 | M | 8 | Stiff, Gray/Brown (Mottled) Lean CLAY, Trace Sand, Scattered Roots (CL) | (1.75-2.0) | | | | |
| 2 | | 12 | M | 12 | Medium Dense, Grayish Brown Fine to Medium SAND, Little Silt and Gravel, Scattered Cobbles/Boulders (SP-SM) | | | | | |
| 3 | | 16 | M | 4 | Very Loose, Brown Fine to Medium SAND, Some Silt, Little Clay, Trace to Little Gravel (SM-SC) | | 17.3 | | | |
| 4 | | 16 | W | 2 | P200 (Samples 3 and 4): 26.9% | | | | | |
| | | | | | Very Loose, Brown Fine to Medium SAND, Some Silt, Trace Clay and Gravel (SM) | | | | | |
| 5 | | 18 | W | 2 | | | | | | |
| | | | | | Medium Dense, Brown Fine to Medium SAND, Some Silt, Little to Some Gravel, Trace Clay, Scattered Cobbles/Boulders (SM) | | | | | |
| 6 | | 16 | W | 22 | | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

While Drilling ∇ 8.5' Upon Completion of Drilling _____
 Time After Drilling _____ 24 Hr.
 Depth to Water _____ 9.0' ∇
 Depth to Cave in _____ 10.0'

GENERAL NOTES

Start 11/27/17 End 11/27/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Maple Grove Residential Development**
Maple Grove Drive & Manchester Road
 Location **Madison, Wisconsin**

Boring No. **17**
 Surface Elevation (ft) **967±**
 Job No. **C20092**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|--------------|-------|----|---------------|---|---------------------|---|----|----|----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | 0 | 24± in. TOPSOIL (OL) | | | | | |
| 1 | 12 | M | 6 | 6 | Medium Stiff, Black Organic CLAY to Sedimentary PEAT, Little Sand (OL/PT) | (0.5-0.75) | | | | |
| | | | | 4 | Medium Stiff, Gray/Brown (Mottled) Lean CLAY, Little Sand, Trace Gravel (CL) | (0.5-1.0) | | | | |
| 2 | 14 | W | 4 | 4 | Medium Dense, Grayish Brown/Light Brown (Mottled) Clayey Fine to Coarse SAND, Little Gravel (SC) | | | | | |
| 3 | 6 | W | 16 | 16 | Medium Dense, Grayish Brown Sandy Fine to Coarse GRAVEL, Some Silt, Scattered Cobbles/Boulders (GM) | | | | | |
| 4 | 10 | W | 18 | 18 | Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 5 | 14 | W | 29 | 29 | End of Boring at 15 ft Borehole Backfilled with Bentonite Chips | | | | | |

Approximate Boring Location:
 Lat. 43.00529° / Long. -89.50334°

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling 3.5' Upon Completion of Drilling _____
 Time After Drilling _____ 30 mins.
 Depth to Water _____ 3.0' ▼
 Depth to Cave in _____ 5.5'

Start **3/17/20** End **3/17/20**
 Driller **BSD** Chief **DB** Rig **D-50**
 Logger **DD** Editor **TFG**
 Drill Method **2.25" HSA; Autohammer**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Madison, Wisconsin

Boring No. 18
 Surface Elevation (ft) 967±
 Job No. C20092
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|------|--------------|-------|---|---|--|---------------------|---|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL |
| | | | | | 10± in. TOPSOIL (OL) | | | | | |
| 1 | 18 | M | 4 | | Soft to Stiff, Light Gray to Bluish Gray/Brown to Dark Brown (Mottled) Lean CLAY, Trace Sand (CL) | (0.75-1.25) | | | | |
| 2 | 14 | M/W | 4 | | 5 | (0.25-1.0) | | | | |
| 3 | 14 | M/W | 5 | | 10 | (0.25-0.75) | | | | |
| 4 | 16 | W | 4 | | Very Soft, Light Gray/Light Brown (Mottled) Lean CLAY, Little Sand and Gravel (CL) | (<0.25) | | | | |
| 5 | 16 | W | 24 | | 15 | Medium Dense, Brownish Gray Gravelly Fine to Coarse SAND, Little to Some Silt, Scattered Cobbles/Boulders (SP-SM/SM) | | | | |
| | | | | | End of Boring at 15 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |
| | | | | | Approximate Boring Location: Lat. 43.00559° / Long. -89.50239° | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 8.0' Upon Completion of Drilling _____
 Time After Drilling _____ 30 mins.
 Depth to Water _____ 3.0' ▼
 Depth to Cave in _____ 11.0'

Start 3/17/20 End 3/17/20
 Driller BSD Chief DB Rig D-50
 Logger DD Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Maple Grove Residential Development**
Maple Grove Drive & Manchester Road
 Location **Town of Verona, Dane County, Wisconsin**

Boring No. **SM-01**
 Surface Elevation (ft) **969.4**
 Job No. **C17490**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | | |
|--------|---------------|--------------|-------|---|--------------------------------------|---|---------------------|---|----|----|----|
| No. | TYPE (in.) | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | | 0 | 11± in. Topsoil (OL) | | | | | |
| 1 | 4 | M | 4 | | 1 | Soft, Brown Lean CLAY, Some Sand (CL) <i>USDA: 10YR 4/4 Silty Clay Loam</i> | (0.25-0.5) | | | | |
| 2 | 18 | M/W | 3 | | 5 | Very Soft, Gray/Brown (Mottled) Lean CLAY, Trace Sand (CL) <i>USDA: 10YR 6/2 Silty Clay Loam (Redox: C2P 7.5YR 4/6)</i> | (<0.25) | | | | |
| 3 | 14 | W | 24 | | 10 | Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 5/4 Gravelly Sandy Loam</i> | | | | | |
| 4 | 10 | W | 28 | | 15 | Scattered Thin Sand Seams with Trace to Little Silt (SP/SP-SM) near 15 ft | | | | | |
| 5 | 8 | W | 22 | | 20 | Medium Dense, Brown Fine to Medium SAND, Some Gravel, Trace Silt (SP) <i>USDA: 10YR 5/6 Gravelly Sand</i> | | | | | |
| 6 | 10 | W | 18 | | 20 | End of Boring at 20 ft Borehole Backfilled with Bentonite Chips | | | | | |
| 7 | 10 | W | 21 | | 25 | | | | | | |
| 8 | 18 | W | 16 | | 30 | | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling 8.5' Upon Completion of Drilling _____
 Time After Drilling _____ 24 Hr. _____
 Depth to Water _____ 6.0' ▼
 Depth to Cave in _____ 7.2'

Start 11/28/17 End 11/28/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. SM-02
 Surface Elevation (ft) 970.1
 Job No. C17490
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|------|--------------|-------|----|---|-----------------|---------------------|---|----|----|
| No. | TYPE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL |
| | | | | | 10± in. Topsoil (OL) | | | | | |
| 1 | | 6 | M | 6 | Stiff, Brown Lean CLAY, Little Sand (CL) USDA: 10YR 4/4 Silty Clay Loam | (1.0-1.5) | | | | |
| 2 | | 6 | M | 5 | Soft to Medium Stiff, Dark Brown/Gray (Mottled) Lean CLAY, Little to Some Sand (CL) USDA: 10YR 3/3 Silty Clay Loam (Redox: C2P 10YR 6/2, 10YR 5/6) | (0.5) | | | | |
| 3 | | 8 | W | 34 | Medium Dense to Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 4 | | 10 | W | 26 | USDA: 10YR 5/4 Gravelly Sandy Loam | | | | | |
| 5 | | 8 | W | 24 | Medium Dense, Brown Fine SAND, Some Gravel, Little to Some Silt (SP-SM/SM) | | | | | |
| 6 | | 18 | W | 14 | USDA: 10YR 5/4 Gravelly Loamy Fine Sand | | | | | |
| 7 | | 12 | W | 27 | Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) | | | | | |
| 8 | | 18 | W | 39 | USDA: 10YR 5/4 Gravelly Sandy Loam | | | | | |
| | | | | | Dense, Brown Fine to Medium SAND, Some Gravel, Trace Silt (SP) | | | | | |
| | | | | | USDA: 10YR 5/6 Gravelly Sand | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 6.0' Upon Completion of Drilling _____
 Time After Drilling _____ 24 Hr.
 Depth to Water _____ 5.5' ▼
 Depth to Cave in _____ 6.2'

Start 11/28/17 End 11/28/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Maple Grove Residential Development**
Maple Grove Drive & Manchester Road
 Location **Town of Verona, Dane County, Wisconsin**

Boring No. **SM-03**
 Surface Elevation (ft) **970.1**
 Job No. **C17490**
 Sheet **1** of **1**

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | |
|--------|--------------|-------|----|---------------|---|---------------------------------|---|----|----|----|
| No. | Rec (in.) | Moist | N | Depth (ft) | | q _u (qa) (tsf) | W | LL | PL | LI |
| | | | | | 8± in. Topsoil (OL) | | | | | |
| 1 | 6 | M | 5 | | Medium Stiff, Brown Lean CLAY, Some Sand (CL) <i>USDA: 10YR 4/4 Silty Clay Loam</i> | (0.5-1.0) | | | | |
| 2 | 8 | M/W | 4 | | Soft to Medium Stiff, Gray/Brown (Mottled) Lean CLAY, Trace Sand (CL) <i>USDA: 10YR 6/2 Silty Clay Loam (Redox: C2P 7.5YR 4/6)</i> | (0.25-0.5) | | | | |
| 3 | 12 | W | 19 | | Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) <i>USDA: 10YR 5/4 Gravelly Sandy Loam</i> | | | | | |
| 4 | 12 | W | 18 | | | | | | | |
| 5 | 8 | W | 25 | | | | | | | |
| 6 | 12 | W | 29 | | | | | | | |
| 7 | 6 | W | 20 | | | | | | | |
| 8 | 18 | W | 16 | | Medium Dense, Brown Fine to Medium SAND, Some Gravel, Little to Some Silt (SP-SM/SM) <i>USDA: 10YR 5/4 Gravelly Loamy Sand</i> | | | | | |
| | | | | | End of Boring at 20 ft | | | | | |
| | | | | | Borehole Backfilled with Bentonite Chips | | | | | |

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ 8.5' Upon Completion of Drilling _____
 Time After Drilling _____ 24 Hr.
 Depth to Water _____ 5.0' ∇
 Depth to Cave in _____ 6.8'

Start 11/28/17 End 11/28/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project Maple Grove Residential Development
Maple Grove Drive & Manchester Road
 Location Town of Verona, Dane County, Wisconsin

Boring No. **SM-04**
 Surface Elevation (ft) 979.0
 Job No. **C17490**
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

| SAMPLE | | | | | VISUAL CLASSIFICATION and Remarks | SOIL PROPERTIES | | | | | |
|--|---------|-----------|-------|----|--------------------------------------|--|---------------|---|----|----|----|
| No. | TEXTURE | Rec (in.) | Moist | N | | Depth (ft) | qu (qa) (tsf) | W | LL | PL | LI |
| | | | | | 10± in. | Topsoil (OL) | | | | | |
| 1 | | 8 | M | 6 | 5 | Stiff, Brown/Gray (Lightly Mottled) Lean CLAY, Trace Sand (CL) USDA: 10YR 5/4 Silty Clay Loam (Redox: C1F 10YR 6/2) | (1.5) | | | | |
| 2 | | 8 | M | 5 | 5 | Soft to Medium Stiff, Brown Lean CLAY, Some Sand (CL) | (0.5) | | | | |
| 3 | | 14 | M | 15 | 10 | Medium Dense to Very Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles/Boulders (SM) USDA: 10YR 4/3 Silty Clay Loam | | | | | |
| 4 | | 16 | M | 28 | 15 | | | | | | |
| 5 | | 14 | M | 29 | 20 | | | | | | |
| 6 | | 14 | M/W | 31 | 20 | | | | | | |
| 7 | | 14 | W | 25 | 20 | | | | | | |
| 8 | | 10 | W | 24 | 20 | | | | | | |
| End of Boring at 20 ft | | | | | | | | | | | |
| Borehole Backfilled with Bentonite Chips | | | | | | | | | | | |

WATER LEVEL OBSERVATIONS

While Drilling ∇ 18.5' Upon Completion of Drilling _____
 Time After Drilling _____ 24 Hr.
 Depth to Water _____ 14.0' ∇
 Depth to Cave in _____ 14.5'

GENERAL NOTES

Start 11/28/17 End 11/28/17
 Driller BSD Chief MC Rig CME-55
 Logger MG Editor TFG
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



Department of Public Works
Engineering Division
Robert F. Phillips, P.E., City Engineer
City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
Phone: (608) 266-4751
Fax: (608) 264-9275
engineering@cityofmadison.com
www.cityofmadison.com/engineering

Deputy City Engineer
Gregory T. Fries, P.E.
Deputy Division Manager
Kathleen M. Cryan
Principal Engineer 2
John S. Fahrney, P.E.
Christopher J. Petykowski, P.E.
Janet Schmidt, P.E.
Principal Engineer 1
Christina M. Bachmann, P.E.
Mark D. Moder, P.E.
James M. Wolfe, P.E.
Facilities & Sustainability
Bryan Cooper, Principal Architect
Mapping Section Manager
Eric T. Pederson, P.S.
Financial Manager
Steven B. Danner-Rivers

November 17, 2020

NOTICE OF ADDENDUM
ADDENDUM NO. 1
CONTRACT NO. 8498
ROCKSTREAM DRIVE ASSESSMENT DISTRICT – 2020

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

BID SUBMISSION AND OPENING DATE:

REMOVE AND REPLACE PAGE A-1 OF SECTION A: ADVERTISEMENT FOR BID AND INSTRUCTION TO BIDDERS with the attached page A-1. The Bid submission deadline has been extended. AN ADDITIONAL ADDENDUM WILL BE ISSUED AT A FUTURE DATE TO REVISE AND CLARIFY EXCAVATION CUT QUANTITIES.

PREQUALIFICATION APPLICATION DUE (2:00 P.M.): November 25, 2020
BID SUBMISSION (2:00 P.M.): December 3, 2020
BID OPEN (2:30 P.M.): December 3, 2020

PLANS:

U-7: Railing detail added.

U-9: Clarified structure types.

Sincerely,

Greg Fries for...

Robert F. Phillips, P.E.
City Engineer

RFP:AJZ

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

REQUEST FOR BID FOR PUBLIC WORKS CONSTRUCTION CITY OF MADISON, WISCONSIN

A BEST VALUE CONTRACTING MUNICIPALITY

| | |
|--|--|
| PROJECT NAME: | ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020 |
| CONTRACT NO.: | 8498 |
| SBE GOAL | 7% |
| BID BOND | 5% |
| SBE PRE BID MEETING | See Pre Bid Meeting info below |
| PREQUALIFICATION APPLICATION DUE (2:00 P.M.) | November 25, 2020 |
| BID SUBMISSION (2:00 P.M.) | December 3, 2020 |
| BID OPEN (2:30 P.M.) | December 3, 2020 |
| PUBLISHED IN WSJ | November 5 & 12, 2020 |

SBE PRE BID MEETING: Small Business Enterprise Pre-Bid Meetings are not being held in person at this time. Contractors can schedule one-on-one phone calls with Juan Pablo Torres Meza in Affirmative Action to count towards good faith efforts. Juan Pablo can be reached at 608-261-9162 or by email, jtorresmeza@cityofmadison.com.

PREQUALIFICATION APPLICATION: Forms are available on our website, www.cityofmadison.com/business/pw/forms.cfm. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

BIDS TO BE SUBMITTED: by hand to 1600 EMIL ST., MADISON, WI 53713 or online at www.bidexpress.com.

THE BID OPENING is at 1600 EMIL ST., MADISON, WI 53713.

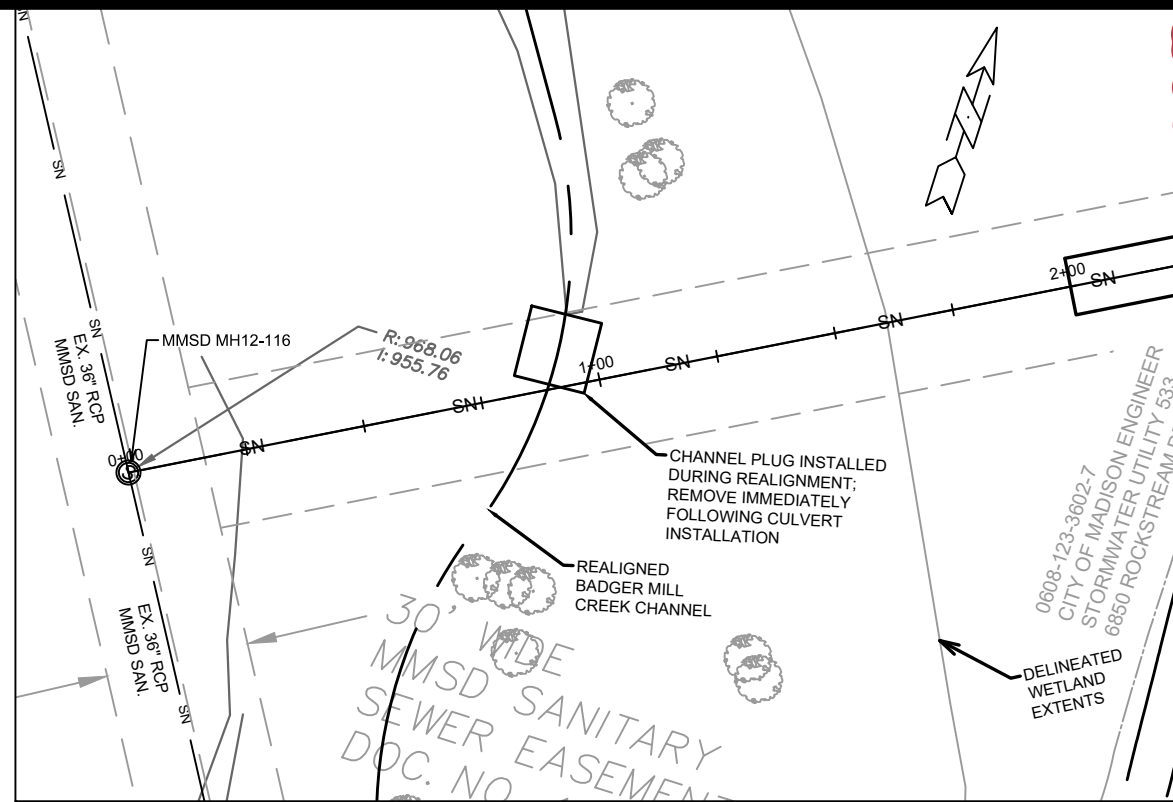
The process for submission of bids has not changed. Bids may be submitted on line through Bid Express or in person at 1600 Emil St. Please note that the doors at 1600 Emil St. are locked, but there is a sign with phone numbers on the door. Please call one of the numbers and staff will come to the door to get your bid. Until further notice, the bid openings will be closed to the public to support the guidance of social distancing as the City responds to responsively to COVID-19 impacts to services. The bids will be posted on line after the bid opening. If you have any questions, please call Alane Boutelle at 608-267-1197, or John Fahrney at 608-266-9091.

STANDARD SPECIFICATIONS

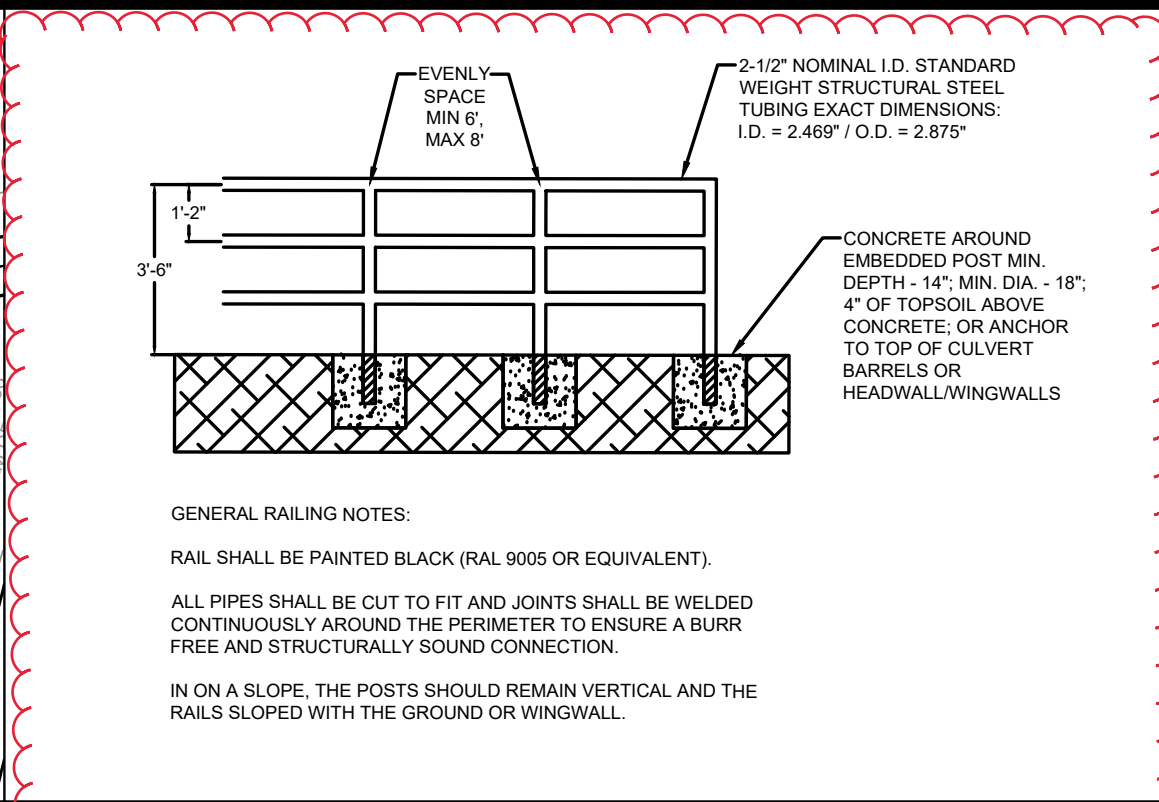
The City of Madison's Standard Specifications for Public Works Construction - 2020 Edition, as supplemented and amended from time to time, forms a part of these contract documents as if attached hereto.

These standard specifications are available on the City of Madison Public Works website, www.cityofmadison.com/Business/PW/specs.cfm.

The Contractor shall review these Specifications prior to preparation of proposals for the work to be done under this contract, with specific attention to Article 102, "BIDDING REQUIREMENTS AND CONDITIONS" and Article 103, "AWARD AND EXECUTION OF THE CONTRACT." For the convenience of the bidder, below are highlights of three subsections of the specifications.

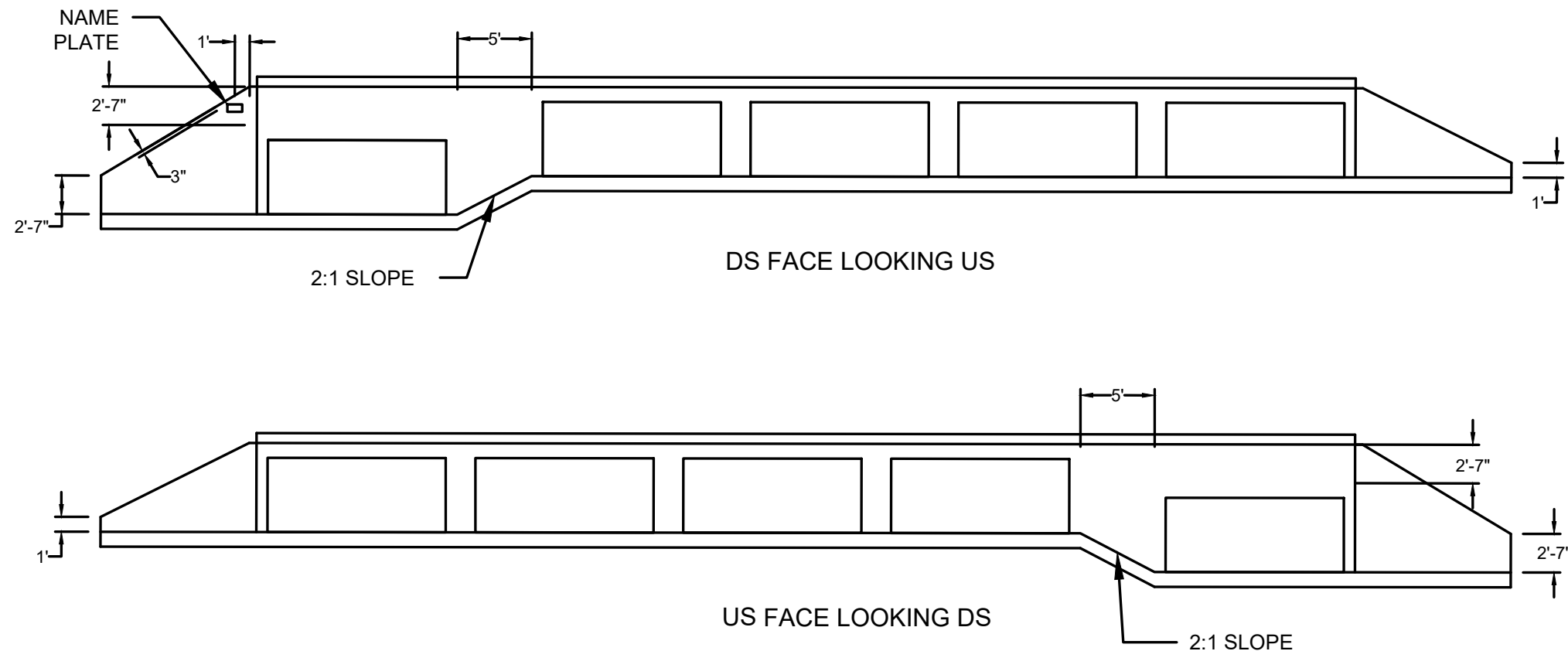


STORM DETAIL 1: BADGER MILL CREEK CHANNEL PLUG REMOVAL



STORM DETAIL 2: CULVERT RAILING DETAILS

STORM DETAIL 3: BOX CULVERT B-13-894 WINGWALL LAYOUT & DIMENSIONS (SEE S.D.D. 5.5.1 A&B FOR DETAILS AND REINFORCEMENT)



| | | | |
|------|----------------------|------------|----|
| MARK | REVISION | DATE | BY |
| 1 | ADDED RAILING DETAIL | 11/13/2020 | |

Designed By: MAA Date: 11/13/2020 9:13 AM Scale: #####/###
12694

12694
MADISON, WI
8498
CONTRACT NO:

U-7
STORM DETAILS
M:\DESIGN\Projects\12694\CAD\Sanitary\12694SAN-STM.dwg

STORM SEWER SCHEDULE

*REVISED 11/13/2020: H INLET TYPES REVISED FOR CONSISTENCY

| | |
|---------------------------------------|------------------|
| ROCKSTREAM DRIVE PROJECT NO. 12694 | SHEET NO. U-9 |
| STORM SEWER SCHEDULE | |
| CITY OF MADISON | |

PROPOSED STORM STRUCTURES

| STRUC. NO. | STATION | LOCATION (OFFSET) | TYPE | TOP OF CASTING | E.I. | DEPTH | NOTES |
|-------------------------|----------|-------------------|---------------------|----------------|--------|-------|---------------------------|
| ROCKSTREAM DRIVE | | | | | | | |
| S1 | 122+23.0 | RT-59.6 | 18" RC AE | - | 978.24 | - | SEE S.D.D. 5.4.1 |
| S2 | 122+36.9 | RT-25.5 | 3X3 AS | 981.74 | 978.41 | 3.33 | FP; w/ R-1550-0054 |
| S3 | 120+25.0 | RT-17.5 | H INLET | 982.34 | 979.47 | 2.87 | FP; w/ R-3067-7004-V |
| S3-A | 120+25.0 | LT-17.5 | H INLET | 982.34 | 979.64 | 2.70 | FP; w/ R-3067-7004-V |
| S4 | 119+07.1 | RT-17.5 | H INLET | 982.84 | 980.06 | 2.79 | FP; w/ R-3067-7004-V |
| S4-A | 119+07.1 | LT-17.5 | H INLET | 982.84 | 980.23 | 2.62 | FP; w/ R-3067-7004-V |
| S5 | 122+45.0 | RT-21.5 | PRECAST H INLET | 981.59 | 978.47 | 3.12 | w/ R-3067-7004-V |
| S5-A | 122+45.0 | LT-20.5 | H INLET | 981.60 | 978.68 | 2.93 | FP; w/ R-3067-7004-V |
| S6 | 106+20.1 | RT-53.6 | 24" RC AE | - | 970.50 | - | SEE S.D.D. 5.4.1 |
| S6-A | 106+32.8 | RT-19.4 | TYPE II TERR. INLET | 974.57 | 970.85 | 3.72 | [1]; FP; w/ R-3067-7004-V |
| S6-B | 106+32.6 | LT-16.8 | PRECAST H INLET | 974.57 | 971.02 | 3.56 | w/ R-3067-7004-V |
| S7 | 104+53.0 | RT-17.0 | TAP | - | 961.60 | - | [6] |
| S8 | 103+65.0 | RT-15.5 | 3X3 AS | 970.45 | 964.46 | 6.00 | w/ R-3067-7004-V |
| S8-A | 103+65.0 | LT-15.5 | PRECAST H INLET | 970.45 | 965.86 | 4.60 | w/ R-3067-7004-V |
| S9 | 103+14.3 | RT-15.5 | 5X5 AS | 970.46 | 964.70 | 5.76 | w/ R-3067-7004-V |
| S9-A | 103+15.3 | LT-15.5 | PRECAST H INLET | 970.46 | 966.10 | 4.36 | w/ R-3067-7004-V |
| S10 | 100+58.0 | RT-7.9 | 3X3 AS | 971.74 | 966.74 | 5.00 | FP; w/ R-1550-0054 |
| S12 | 104+97.7 | RT-53.5 | WINGWALL | 969.20 | 960.10 | 9.10 | [2] |
| S13 | 104+97.7 | LT-54.5 | WINGWALL | 969.40 | 960.30 | 9.10 | [2] |
| AMBLESIDE DRIVE | | | | | | | |
| S11 | 201+73.0 | RT-15.5 | PRECAST H INLET | 970.41 | 966.15 | 4.26 | w/ R-3067-7004-V |
| S11-A | 201+73.0 | LT-15.5 | PRECAST H INLET | 970.41 | 966.55 | 3.86 | w/ R-3067-7004-V |
| S11-B | 201+77.7 | LT-33.0 | 3X3 AS | 970.60 | 966.62 | 3.98 | w/ R-1878-B7G |

PROPOSED STORM PIPES

| PIPE NO. | FROM (DISCH.) | TO (INLET) | DISCH. E.I. | INLET E.I. | PLAN (PAY) LGTH (FT) | PIPE LGTH (FT) | SLOPE (%) | PIPE SIZE | PIPE TYPE | NOTES |
|-------------------------|---------------|------------|-------------|------------|----------------------|----------------|-----------|-----------|-----------|----------|
| ROCKSTREAM DRIVE | | | | | | | | | | |
| P1 | S1 | S2 | 978.24 | 978.41 | 36.9 | 34.4 | 0.50% | 18" | TYPE I | - |
| P2 | S2 | S3 | 978.41 | 979.47 | 212.1 | 209.6 | 0.50% | 15" | TYPE I | - |
| P3 | S3 | S4 | 979.47 | 980.06 | 117.9 | 115.9 | 0.50% | 12" | TYPE I | - |
| P4 | S2 | S5 | 978.41 | 978.47 | 8.3 | 5.7 | 1.00% | 12" | TYPE I | - |
| P5 | S5 | S5-A | 978.47 | 978.68 | 44.0 | 41.0 | 0.50% | 12" | TYPE I | - |
| P6 | S3 | S3-A | 979.47 | 979.64 | 37.0 | 34.0 | 0.50% | 12" | TYPE I | - |
| P7 | S4 | S4-A | 980.06 | 980.23 | 37.0 | 34.0 | 0.50% | 12" | TYPE I | - |
| P8 | S6 | S6-A | 970.50 | 970.85 | 37.7 | 34.6 | 1.00% | 24" | TYPE I | - |
| P9 | S6-A | S6-B | 970.85 | 971.02 | 37.1 | 34.0 | 0.50% | 12" | TYPE I | - |
| P10 | S7 | S8 | 961.60 | 964.46 | 90.5 | 89.5 | 3.19% | 27" | TYPE I | - |
| P10-A | S8 | S8-A | 965.71 | 965.86 | 33.0 | 30.0 | 0.50% | 12" | TYPE I | - |
| P11 | S8 | S9 | 964.46 | 964.70 | 50.9 | 48.9 | 0.50% | 27" | TYPE I | - |
| P11-A | S9 | S9-A | 965.95 | 966.10 | 33.0 | 30.0 | 0.50% | 12" | TYPE I | - |
| P12 | S9 | S10 | 965.45 | 966.74 | 260.2 | 257.6 | 0.50% | 18" | TYPE I | - |
| P13 | S9 | S11 | 965.70 | 966.15 | 92.8 | 90.1 | 0.50% | 15" | TYPE I | - |
| P16 | S12 | S13 | 960.10 | 960.30 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [3]; [5] |
| P17 | S12 | S13 | 962.70 | 962.90 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [4]; [5] |
| P18 | S12 | S13 | 962.70 | 962.90 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [4]; [5] |
| P19 | S12 | S13 | 962.70 | 962.90 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [4]; [5] |
| P20 | S12 | S13 | 962.70 | 962.90 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [4]; [5] |
| AMBLESIDE DRIVE | | | | | | | | | | |
| P14 | S11 | S11-A | 966.40 | 966.55 | 33.0 | 30.0 | 0.50% | 12" | TYPE I | - |
| P15 | S11-A | S11-B | 966.55 | 966.62 | 17.0 | 14.0 | 0.50% | 12" | TYPE I | - |

UTILITY LINE OPENINGS (ULOs)

| ULO NO. | STATION | LOCATION (OFFSET) | TYPE | TOP ELEV. |
|---------|----------|-------------------|-------|-----------|
| ULO1 | 101+77.8 | RT-2.1 | WATER | - |
| ULO2 | 101+98.1 | RT-37.0 | WATER | - |
| ULO3 | 122+59.0 | CL | TEL | - |
| ULO4 | 122+68.0 | CL | FO | - |
| ULO5 | 122+71.0 | CL | FO | - |
| ULO6 | 122+73.0 | CL | FO | - |
| ULO7 | 100+52.0 | RT-2.4 | SAN | - |

SPECIFIC NOTES:

- [1] SEE S.D.D. 5.7.12A
- [2] SEE S.D.D. 5.5.1 A & B
- [3] SET BOX CULVERT SECTIONS TO PROVIDE 5 FT SPACING BETWEEN EXTERIOR WALLS OF P16 AND P17; FILL VOID WITH COMPACTED BACKFILL PER SPECIFICATIONS IN CONTRACT
- [4] SET BOX CULVERT SECTIONS TO PROVIDE A MINIMUM OF 3 INCHES SPACING BETWEEN EXTERIOR WALLS OF P17, P18, P19, AND P20; FILL VOIDS WITH SLURRY PER SPECIFICATIONS IN CONTRACT
- [5] GROUP OF BOX CULVERTS ASSIGNED WISDOT STRUCTURE NUMBER B-13-894
- [6] INSTALL 27" PIPE GRATE AT OUTLET, PER BID ITEM 90035

STANDARD NOTES:

-PLAN LENGTH (PAY LENGTH) IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. SLOPE CALCULATED USING PIPE LENGTH.

-KOR N SEAL BOOTS OR EQUIVALENT SHALL BE USED FOR ALL PIPE CONNECTIONS TO PRECAST INLETS. IN ADDITION, KOR N SEAL BOOTS SHALL BE REQUIRED FOR ANY TYPE II PIPE CONNECTIONS TO SAS STORM STRUCTURES. CONCRETE COLLARS OR KOR N SEAL MAY BE USED FOR ANY RCP OR HERCP CONNECTIONS TO SAS STORM STRUCTURES.

-ALL REBAR FOR FIELD POURED STRUCTURES SHALL BE EPOXY COATED. ANY EXPOSED STEEL SHALL BE TOUCHED UP OR RECOATED PRIOR TO USE.

-ALL FIELD POURED SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW STANDARD DETAIL DRAWING FOR 5.7.3. ALL PRECAST SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING 5.7.5.

- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES; UD = UNDERDRAIN

- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.

- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS'S.

- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.

- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.

- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT MATT ALLIE OF CITY ENGINEERING AT (608) 266-4058 FOR PRECAST APPROVALS, FAX SHOP DRAWINGS TO (608)264-9275, OR EMAIL SHOP DRAWINGS TO MALLIE@CITYOFMADISON.COM.



Department of Public Works
Engineering Division
Robert F. Phillips, P.E., City Engineer
City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
Phone: (608) 266-4751
Fax: (608) 264-9275
engineering@cityofmadison.com
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Principal Engineer 1
Christina M. Bachmann, P.E.
Mark D. Moder, P.E.
James M. Wolfe, P.E.
Facilities & Sustainability
Bryan Cooper, Principal Architect
Mapping Section Manager
Eric T. Pederson, P.S.
Financial Manager
Steven B. Danner-Rivers

November 30, 2020

NOTICE OF ADDENDUM
ADDENDUM NO. 2
CONTRACT NO. 8498
ROCKSTREAM DRIVE ASSESSMENT DISTRICT – 2020

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

SPECIAL PROVISIONS:

REMOVE AND REPLACE SECTION BID ITEM 20101 – EXCAVATION CUT BID ITEM 20202 – FILL BORROW BID ITEM 20205 – SELECT FILL WITH THE FOLLOWING:

Work under this item shall include all excavation and fill required for the street shown on the cross sections as well as within the grading limits shown on the plans.

The plan quantity for excavation includes all necessary topsoil stripping under the new street. Reusing topsoil material from on-site shall be paid separately. Excavation Cut shall be paid as a pay plan quantity. These items shall be in accordance with Article 201 and 202 of the Standard Specifications.

City Engineering issued Construction Plans for 3840 Maple Grove Drive (Fiduciary Real Estate Development (FRED) – Maple Grove Drive) contract #8402 for the construction of Manchester Road, Fairhaven Road, improvements to Maple Grove Drive, and approximate subgrade placement on Rockstream Drive from STA 106+25 to STA 122+79.54.

No bulking/expansion or shrink factors were used in determining earthwork quantities for this project. The earthwork summary is shown on the title sheet for this project, and a more detailed summary of the earthwork quantities (unadjusted) is as follows:

Excavation Cut (Rockstream Drive & Ambleside Drive per cross sections)

- Estimated Usable Material (on-site under this contract as determined by Project Engineer): 4,500 CY
- Estimated Undercut under this contract (waste material, STA 100+43.31 to STA 106+25): 1,500 CY
- Estimated Topsoil Stripping under this contract (STA 100+43.31 to STA 106+25): 2,500 CY
 - o The Contractor shall add the topsoil stripped with this project onto the existing topsoil pile onsite.
 - o The Contractor shall leave the excess topsoil onsite for future use by the Parks department.
 - The excess topsoil pile shall be protected with silt fence, the silt fence shall be paid separately.

- The Contractor is not responsible for hauling away topsoil removed and piled onsite as part of City Construction Contract #8402 by others.
- Topsoil removal complete (STA 106+25 to STA 122+79.54) as part of City Construction Contract #8402 by others.

Total Unclassified Excavation (paid under item 20101).....8,500 CY

Select Fill (Rockstream Drive & Ambleside Drive cross sections, paid under item 20204).....2,800 CY

- Placed in fill areas where base course is above existing ground.
- 2-inches placed under sidewalk in select fill areas on top of fill borrow.
- 4,000 CY of on-site material excavated under contract #8402 by others is available and expected to be used for select fill areas.

Estimated Select Fill already completed from STA 106+25 to STA 122+75 as part of City Construction Contract #8402 by others.

Fill Borrow (Rockstream Drive & Ambleside Drive cross sections, paid under item 20202).....1,600 CY

- Placed in fill areas under terraces, sidewalk, and side slopes when above existing ground.
- The bid item shall pay for fill brought in from offsite.
- Known quantities show fill needed from offsite.
- Total fill needed (7,300 CY) – Onsite usable material (4,500 CY) – Onsite select fill material leftover (1,200 CY) = Fill needed from offsite (1,600 CY)
- Onsite excavated material used as fill is incidental to this item, approximately 4,500 CY.
- Materials cannot be mined onsite adjacent to the project.

Breaker Run Undercut (Rockstream Drive & Ambleside Drive per cross sections, paid under item 20219).....3,100 TON

It is assumed that 65% of Rockstream Drive (STA 100+43.31 to STA 106+25) and Ambleside Drive will have to be undercut and that material will be wasted. The Contractor shall place breaker run and Geosynthetic Reinforcement Fabric in the undercut areas.

*The Developer (FRED) under City Construction Contract #8402 shall provide 4,000 CY of select fill for use in the Rockstream Drive greenway crossing. The select fill stockpile is stored on-site and shall be used by the Contractor under this contract. The Contractor may contract the Developer (FRED), Paul Schmitter, Director of Development, 414-274-8212, pschmitter@fred-inc.com. Any fill stockpile soil shall meet the requirements of the City of Madison Standard Specification 202.2(b) for select fill. Representative soil samples of the stockpiled select fill shall be tested to confirm the soil materials meet City of Madison Standard Specification 202.2(b) and the results submitted to City Engineering. Any excess select fill not used under this contract shall be removed by the Developer by August 1, 2021 to ensure hauling activities in the Rockstream Drive area are completed prior to final Rockstream Drive road construction and paving. The Developer is responsible for restoring all areas disturbed and receiving stockpiled select fill soil. The Developer is responsible for maintaining the erosion control measures around the select fill stockpile. The Contractor is responsible for any erosion control devices for the select fill stockpile that are disturbed under this contract.

PROPOSAL

Items have been revised, removed, and added to the proposal. See Bid Express.

| Action | Bid Item | Description |
|---------|----------|--|
| REVISED | 20101 | EXCAVATION CUT |
| REMOVED | 20140 | GEOTEXTILE FABRIC TYPE SAS (NON-WOVEN) |
| ADDED | 20241 | RIPRAP FILTER FABRIC, TYPE HR |

| | | |
|---------|-------|--|
| REVISED | 20202 | FILL BORROW |
| REMOVED | 20204 | SELECT FILL |
| ADDED | 20205 | SELECT FILL |
| REVISED | 20219 | BREAKER RUN |
| REVISED | 21021 | SILT FENCE – COMPLETE |
| REMOVED | 40102 | CRUSHED AGGREGATE BASE COURSE GRADATION NO. 2 |
| REMOVED | 40102 | CRUSHED AGGREGATE BASE COURSE GRADATION NO. 2 |
| ADDED | 40102 | CRUSHED AGGREGATE BASE COURSE GRADATION NO. 2 |

PLANS:


D-1: Update special notes.

D-2: Update special notes and remove uncut information on Rockstream STA 116+58.18 to STA 122+79.54.

U-9: Revised note for structure S6-A in storm schedule.

X-5 – X17: Update existing surface to reflect current site conditions.

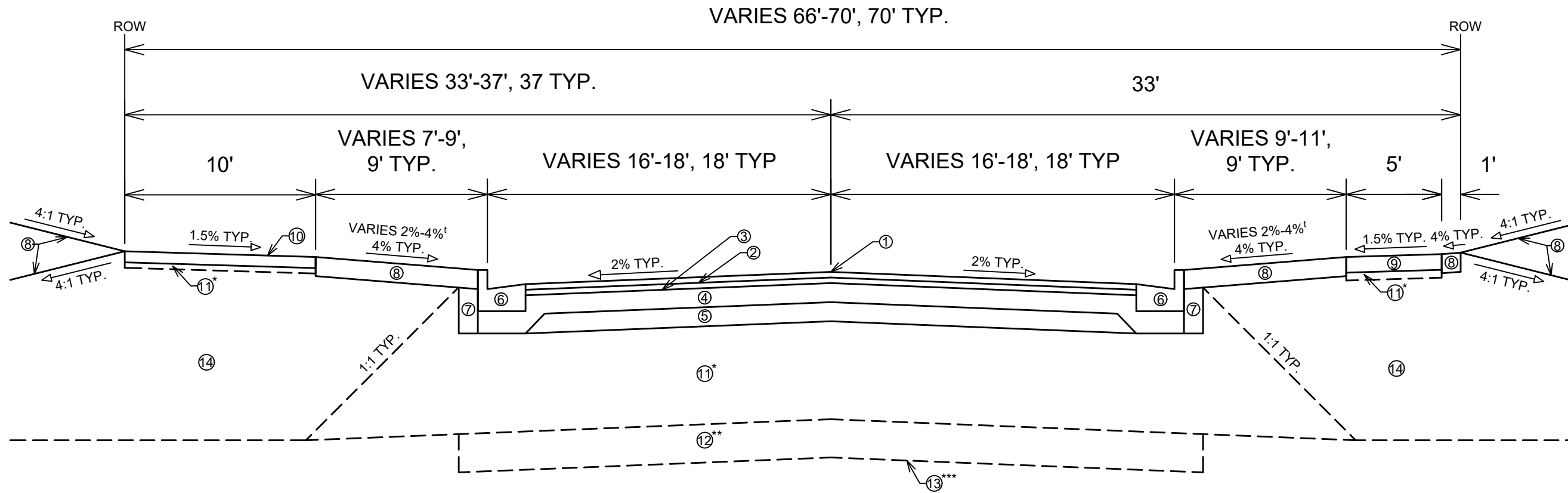
Sincerely,



for

Robert F. Phillips, P.E.
City Engineer

RFP:AJZ



SPECIAL NOTES:

- TYPICAL SECTION NOT TO SCALE

- SEE X-SHEETS FOR CROSS SLOPES, EDGE OF PAVEMENT ELEVATIONS, & TOP OF CURB ELEVATIONS.

- ROCKSTREAM DRIVE SUBGRADE CONSTRUCTION BETWEEN STA 106+25.00 TO STA 113+25.00 PLACED BY OTHERS. AS PART OF THIS CONTRACT, THE CONTRACTOR SHALL RESHAPE SELECT FILL PLACED BY OTHERS.

- TOPSOIL REMOVAL COMPLETE (STA 106+25 TO STA 122+79.54) BY OTHERS.

- IF LOOSE SANDS ARE DISCOVERED BENEATH THE TOPSOIL, VIBRATORY COMPACTIVE EFFORT/DENSIFICATION AND SUBSEQUENT EVALUATION SHALL BE REQUIRED FOR STABILITY PRIOR TO PLACING SELECT FILL.

*STA 100+46.08 - STA 106+25.00 SELECT FILL SHALL BE COMPLETED PER ARTICLE 202(c). REPRESENTATIVE SAMPLES OF PROPOSED FILL SHALL BE SUBMITTED TO THE CITY'S GEOTECH CONSULTANT FOR OPTIMUM MOISTURE-MAXIMUM DENSITY DETERMINATION (ASTM D1557) PRIOR TO THE START OF FILL PLACEMENT. THE SAMPLE SIZE SHALL BE APPROXIMATELY 50 LB. THE CITY'S GEOTECH CONSULTANT SHALL BE RETAINED TO PERFORM FIELD DENSITY TEST TO DETERMINE THE LEVEL OF COMPACTION BEING ACHIEVED IN THE FILL. THE TESTS SHALL GENERALLY BE CONDUCTED ON EACH LIFT AT THE BEGINNING OF FILL PLACEMENT AND AT A FREQUENCY MUTUALLY AGREED UPON BY THE PROJECT TEAM FOR THE REMAINDER OF THE PROJECT. STA 106+25 - STA 113+25 SELECT FILL PLACED AS PART OF CITY CONSTRUCTION CONTRACT #8402 BY OTHERS, SEE RESHAPING SELECT FILL SPECIAL BID ITEM.

**TEST ROLLING (STA 100+46.08 - STA 106+25.00) SHALL BE COMPLETED PER ARTICLE 201.29(c) OF THE STANDARD SPECIFICATIONS.

***GEOSYNTHETIC REINFORCEMENT FABRIC SHALL BE MIRIAFI RS580i OR AN APPROVED EQUAL. THE BREAKER RUN SHALL BE PLACED DIRECTLY OVER THE FABRIC.

† 2% TERRACE STA 101+14.84 TO STA 101+24.84 LT & STA 103+06.41 TI 103+15.43 RT.

**TYPICAL SECTION
ROCKSTREAM DRIVE
STA 100+43.31 TO STA 116+58.18**

- ① POINT REFERRED TO ON PROFILE
- ② 2.00" HMA PAVEMENT, TYPE 4 LT 58-28 S (UPPER LAYER)
- ③ 2.50" HMA PAVEMENT, TYPE 3 LT 58-28 S (LOWER LAYER)
- ④ 6" GRADATION 2 CRUSHED AGGREGATE BASE COURSE (UPPER LAYER)
- ⑤ 6" GRADATION 1 CRUSHED AGGREGATE BASE COURSE (LOWER LAYER)
- ⑥ CONCRETE CURB AND GUTTER TYPE 'A', SEE P-SHEETS FOR LOCATIONS
- ⑦ FILL INCIDENTAL TO CURB AND GUTTER INSTALLATION
- ⑧ RESTORE DISTURBED AREAS W/ 6" TOPSOIL, SEED, AND EROSION MATTING
- ⑨ 5" CONCRETE SIDEWALK
- ⑩ 3.00" HMA PAVEMENT, TYPE 4 LT 58-28 S
- ⑪ *SELECT FILL UNDER STREET, DEPTH VARIES; 2" UNDER SIDEWALK
- ⑫ **12" BREAKER RUN AS NEEDED
- ⑬ ***GEOSYNTHETIC REINFORCEMENT FABRIC AS NEEDED
- ⑭ FILL BORROW

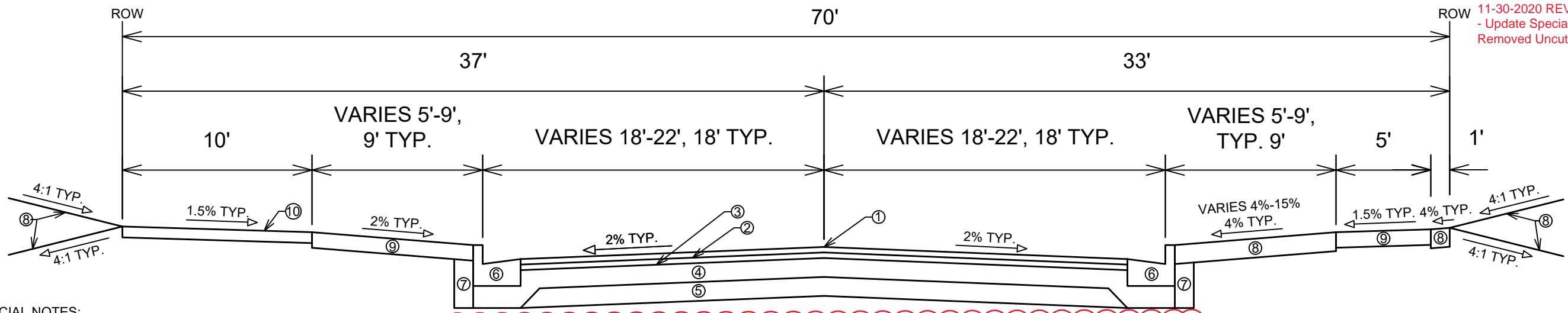
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MADISON, WI
8498
CONTRACT NO:

TYPICAL SECTIONS
ROCKSTREAM DRIVE
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11-30-2020 REVISION AJZ
 - Update Special Notes &
 Removed Uncut Information

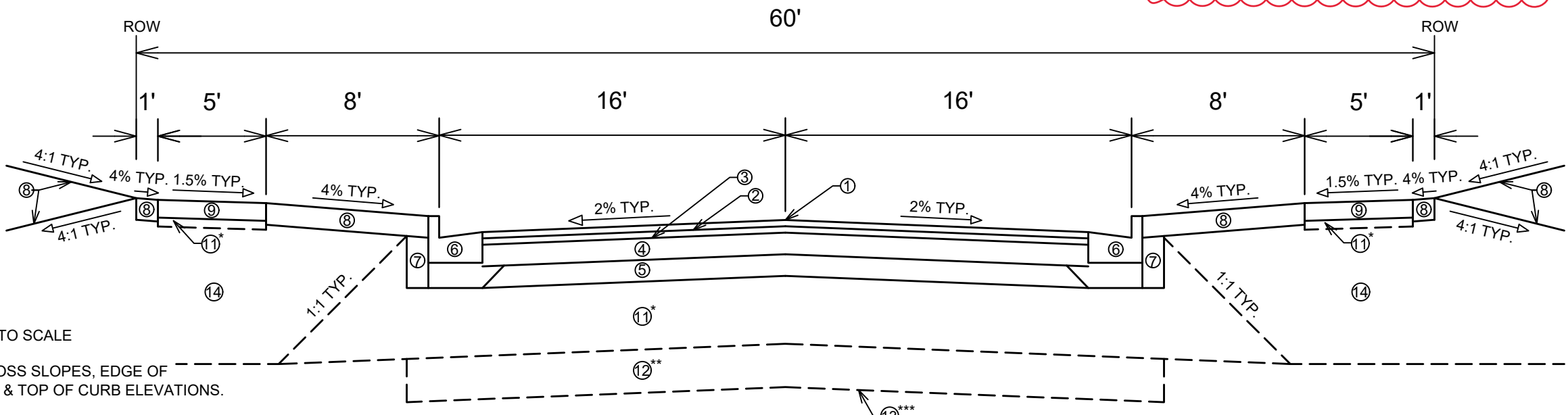


SPECIAL NOTES:

- TYPICAL SECTION NOT TO SCALE
- SEE X-SHEETS FOR CROSS SLOPES, EDGE OF PAVEMENT ELEVATIONS, & TOP OF CURB ELEVATIONS.
- TOPSOIL REMOVAL COMPLETE (STA 106+25 TO STA 122+79.54) BY OTHERS.

**TYPICAL SECTION
 ROCKSTREAM DRIVE
 STA 116+58.18 TO STA 122+79.54**

- ① POINT REFERRED TO ON PROFILE
- ② 2.00" HMA PAVEMENT, TYPE 4 LT 58-28 S (UPPER LAYER)
- ③ 2.50" HMA PAVEMENT, TYPE 3 LT 58-28 S (LOWER LAYER)
- ④ 6" GRADATION 2 CRUSHED AGGREGATE BASE COURSE (UPPER LAYER)
- ⑤ 6" GRADATION 1 CRUSHED AGGREGATE BASE COURSE (LOWER LAYER)
- ⑥ CONCRETE CURB AND GUTTER TYPE 'A', SEE P-SHEETS FOR LOCATIONS
- ⑦ FILL INCIDENTAL TO CURB AND GUTTER INSTALLATION
- ⑧ RESTORE DISTURBED AREAS W/ 6" TOPSOIL, SEED, AND EROSION MATTING
- ⑨ 5" CONCRETE SIDEWALK
- ⑩ 3.00" HMA PAVEMENT, TYPE 4 LT 58-28 S



SPECIAL NOTES:

- TYPICAL SECTION NOT TO SCALE
- SEE X-SHEETS FOR CROSS SLOPES, EDGE OF PAVEMENT ELEVATIONS, & TOP OF CURB ELEVATIONS.
- IF LOOSE SANDS ARE DISCOVERED BENEATH THE TOPSOIL, VIBRATORY COMPACTIVE EFFORT/DENSIFICATION AND SUBSEQUENT EVALUATION SHALL BE REQUIRED FOR STABILITY PRIOR TO PLACING SELECT FILL.

*STA 201+ - STA 202+25.00 SELECT FILL SHALL BE COMPLETED PER ARTICLE 202(c). REPRESENTATIVE SAMPLES OF PROPOSED FILL SHALL BE SUBMITTED TO THE CITY'S GEOTECH CONSULTANT FOR OPTIMUM MOISTURE-MAXIMUM DENSITY DETERMINATION (ASTM D1557) PRIOR TO THE START OF FILL PLACEMENT. THE SAMPLE SIZE SHALL BE APPROXIMATELY 50 LB. THE CITY'S GEOTECH CONSULTANT SHALL BE RETAINED TO PERFORM FIELD DENSITY TEST TO DETERMINE THE LEVEL OF COMPACTION BEING ACHIEVED IN THE FILL. THE TESTS SHALL GENERALLY BE CONDUCTED ON EACH LIFT AT THE BEGINNING OF FILL PLACEMENT AND AT A FREQUENCY MUTUALLY AGREED UPON BY THE PROJECT TEAM FOR THE REMAINDER OF THE PROJECT.

**TEST ROLLING SHALL BE COMPLETED PER ARTICLE 201.29(c) OF THE STANDARD SPECIFICATIONS.

***GEOSYNTHETIC REINFORCEMENT FABRIC SHALL BE MIRIAFI RS580i OR AN APPROVED EQUAL. THE BREAKER RUN SHALL BE PLACED DIRECTLY OVER THE FABRIC.

**TYPICAL SECTION
 AMBLESIDE DRIVE
 STA 200+44.58 TO STA 202+11.00**

- ① POINT REFERRED TO ON PROFILE
- ② 1.75" HMA PAVEMENT, TYPE 4 LT 58-28 S (UPPER LAYER)
- ③ 1.75" HMA PAVEMENT, TYPE 4 LT 58-28 S (LOWER LAYER)
- ④ 6" GRADATION 2 CRUSHED AGGREGATE BASE COURSE (UPPER LAYER)
- ⑤ 6" GRADATION 1 CRUSHED AGGREGATE BASE COURSE (LOWER LAYER)
- ⑥ CONCRETE CURB AND GUTTER TYPE 'A', SEE P-SHEETS FOR LOCATIONS
- ⑦ FILL INCIDENTAL TO CURB AND GUTTER INSTALLATION
- ⑧ RESTORE DISTURBED AREAS W/ 6" TOPSOIL, SEED, AND EROSION MATTING
- ⑨ 5" CONCRETE SIDEWALK
- ⑩ *SELECT FILL, DEPTH VARIES
- ⑪ **12" BREAKER RUN AS NEEDED
- ⑫ ***GEOSYNTHETIC REINFORCEMENT FABRIC AS NEEDED
- ⑬ FILL BORROW

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 MADISON, WI
 8498
 CONTRACT NO:

TYPICAL SECTIONS
 ROCKSTREAM DRIVE
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STORM SEWER SCHEDULE

*REVISED 11/13/2020: H INLET TYPES REVISED FOR CONSISTENCY

*REVISED 11/19/2020: TERRACE INLET NOTES REVISED

| | |
|---------------------------------------|------------------|
| ROCKSTREAM DRIVE PROJECT NO. 12694 | SHEET NO. U-9 |
| STORM SEWER SCHEDULE | |
| CITY OF MADISON | |

PROPOSED STORM STRUCTURES

| STRUC. NO. | STATION | LOCATION (OFFSET) | TYPE | TOP OF CASTING | E.I. | DEPTH | NOTES |
|-------------------------|----------|-------------------|---------------------|----------------|--------|-------|----------------------|
| ROCKSTREAM DRIVE | | | | | | | |
| S1 | 122+23.0 | RT-59.6 | 18" RC AE | - | 978.24 | - | SEE S.D.D. 5.4.1 |
| S2 | 122+36.9 | RT-25.5 | 3X3 AS | 981.74 | 978.41 | 3.33 | FP; w/ R-1550-0054 |
| S3 | 120+25.0 | RT-17.5 | H INLET | 982.34 | 979.47 | 2.87 | FP; w/ R-3067-7004-V |
| S3-A | 120+25.0 | LT-17.5 | H INLET | 982.34 | 979.64 | 2.70 | FP; w/ R-3067-7004-V |
| S4 | 119+07.1 | RT-17.5 | H INLET | 982.84 | 980.06 | 2.79 | FP; w/ R-3067-7004-V |
| S4-A | 119+07.1 | LT-17.5 | H INLET | 982.84 | 980.23 | 2.62 | FP; w/ R-3067-7004-V |
| S5 | 122+45.0 | RT-21.5 | PRECAST H INLET | 981.59 | 978.47 | 3.12 | w/ R-3067-7004-V |
| S5-A | 122+45.0 | LT-20.5 | H INLET | 981.60 | 978.68 | 2.93 | FP; w/ R-3067-7004-V |
| S6 | 106+20.1 | RT-53.6 | 24" RC AE | - | 970.50 | - | SEE S.D.D. 5.4.1 |
| S6-A | 106+32.8 | RT-19.4 | TYPE II TERR. INLET | 974.57 | 970.85 | 3.72 | [1]; FP |
| S6-B | 106+32.6 | LT-16.8 | PRECAST H INLET | 974.57 | 971.02 | 3.56 | w/ R-3067-7004-V |
| S7 | 104+53.0 | RT-17.0 | TAP | - | 961.60 | - | [6] |
| S8 | 103+65.0 | RT-15.5 | 3X3 AS | 970.45 | 964.46 | 6.00 | w/ R-3067-7004-V |
| S8-A | 103+65.0 | LT-15.5 | PRECAST H INLET | 970.45 | 965.86 | 4.60 | w/ R-3067-7004-V |
| S9 | 103+14.3 | RT-15.5 | 5X5 AS | 970.46 | 964.70 | 5.76 | w/ R-3067-7004-V |
| S9-A | 103+15.3 | LT-15.5 | PRECAST H INLET | 970.46 | 966.10 | 4.36 | w/ R-3067-7004-V |
| S10 | 100+58.0 | RT-7.9 | 3X3 AS | 971.74 | 966.74 | 5.00 | FP; w/ R-1550-0054 |
| S12 | 104+97.7 | RT-53.5 | WINGWALL | 969.20 | 960.10 | 9.10 | [2] |
| S13 | 104+97.7 | LT-54.5 | WINGWALL | 969.40 | 960.30 | 9.10 | [2] |
| AMBLESIDE DRIVE | | | | | | | |
| S11 | 201+73.0 | RT-15.5 | PRECAST H INLET | 970.41 | 966.15 | 4.26 | w/ R-3067-7004-V |
| S11-A | 201+73.0 | LT-15.5 | PRECAST H INLET | 970.41 | 966.55 | 3.86 | w/ R-3067-7004-V |
| S11-B | 201+77.7 | LT-33.0 | 3X3 AS | 970.60 | 966.62 | 3.98 | w/ R-1878-B7G |

PROPOSED STORM PIPES

| PIPE NO. | FROM (DISCH.) | TO (INLET) | DISCH. E.I. | INLET E.I. | PLAN (PAY) LGTH (FT) | PIPE LGTH (FT) | SLOPE (%) | PIPE SIZE | PIPE TYPE | NOTES |
|-------------------------|---------------|------------|-------------|------------|----------------------|----------------|-----------|-----------|-----------|----------|
| ROCKSTREAM DRIVE | | | | | | | | | | |
| P1 | S1 | S2 | 978.24 | 978.41 | 36.9 | 34.4 | 0.50% | 18" | TYPE I | - |
| P2 | S2 | S3 | 978.41 | 979.47 | 212.1 | 209.6 | 0.50% | 15" | TYPE I | - |
| P3 | S3 | S4 | 979.47 | 980.06 | 117.9 | 115.9 | 0.50% | 12" | TYPE I | - |
| P4 | S2 | S5 | 978.41 | 978.47 | 8.3 | 5.7 | 1.00% | 12" | TYPE I | - |
| P5 | S5 | S5-A | 978.47 | 978.68 | 44.0 | 41.0 | 0.50% | 12" | TYPE I | - |
| P6 | S3 | S3-A | 979.47 | 979.64 | 37.0 | 34.0 | 0.50% | 12" | TYPE I | - |
| P7 | S4 | S4-A | 980.06 | 980.23 | 37.0 | 34.0 | 0.50% | 12" | TYPE I | - |
| P8 | S6 | S6-A | 970.50 | 970.85 | 37.7 | 34.6 | 1.00% | 24" | TYPE I | - |
| P9 | S6-A | S6-B | 970.85 | 971.02 | 37.1 | 34.0 | 0.50% | 12" | TYPE I | - |
| P10 | S7 | S8 | 961.60 | 964.46 | 90.5 | 89.5 | 3.19% | 27" | TYPE I | - |
| P10-A | S8 | S8-A | 965.71 | 965.86 | 33.0 | 30.0 | 0.50% | 12" | TYPE I | - |
| P11 | S8 | S9 | 964.46 | 964.70 | 50.9 | 48.9 | 0.50% | 27" | TYPE I | - |
| P11-A | S9 | S9-A | 965.95 | 966.10 | 33.0 | 30.0 | 0.50% | 12" | TYPE I | - |
| P12 | S9 | S10 | 965.45 | 966.74 | 260.2 | 257.6 | 0.50% | 18" | TYPE I | - |
| P13 | S9 | S11 | 965.70 | 966.15 | 92.8 | 90.1 | 0.50% | 15" | TYPE I | - |
| P16 | S12 | S13 | 960.10 | 960.30 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [3]; [5] |
| P17 | S12 | S13 | 962.70 | 962.90 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [4]; [5] |
| P18 | S12 | S13 | 962.70 | 962.90 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [4]; [5] |
| P19 | S12 | S13 | 962.70 | 962.90 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [4]; [5] |
| P20 | S12 | S13 | 962.70 | 962.90 | 108.0 | 108.0 | 0.19% | 12'X5' | RCBC | [4]; [5] |
| AMBLESIDE DRIVE | | | | | | | | | | |
| P14 | S11 | S11-A | 966.40 | 966.55 | 33.0 | 30.0 | 0.50% | 12" | TYPE I | - |
| P15 | S11-A | S11-B | 966.55 | 966.62 | 17.0 | 14.0 | 0.50% | 12" | TYPE I | - |

UTILITY LINE OPENINGS (ULOs)

| ULO NO. | STATION | LOCATION (OFFSET) | TYPE | TOP ELEV. |
|---------|----------|-------------------|-------|-----------|
| ULO1 | 101+77.8 | RT-2.1 | WATER | - |
| ULO2 | 101+98.1 | RT-37.0 | WATER | - |
| ULO3 | 122+59.0 | CL | TEL | - |
| ULO4 | 122+68.0 | CL | FO | - |
| ULO5 | 122+71.0 | CL | FO | - |
| ULO6 | 122+73.0 | CL | FO | - |
| ULO7 | 100+52.0 | RT-2.4 | SAN | - |

SPECIFIC NOTES:

- [1] SEE S.D.D. 5.7.12A
- [2] SEE S.D.D. 5.5.1 A & B
- [3] SET BOX CULVERT SECTIONS TO PROVIDE 5 FT SPACING BETWEEN EXTERIOR WALLS OF P16 AND P17; FILL VOID WITH COMPACTED BACKFILL PER SPECIFICATIONS IN CONTRACT
- [4] SET BOX CULVERT SECTIONS TO PROVIDE A MINIMUM OF 3 INCHES SPACING BETWEEN EXTERIOR WALLS OF P17, P18, P19, AND P20; FILL VOIDS WITH SLURRY PER SPECIFICATIONS IN CONTRACT
- [5] GROUP OF BOX CULVERTS ASSIGNED WISDOT STRUCTURE NUMBER B-13-894
- [6] INSTALL 27" PIPE GRATE AT OUTLET, PER BID ITEM 90035

STANDARD NOTES:

-PLAN LENGTH (PAY LENGTH) IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. SLOPE CALCULATED USING PIPE LENGTH.

-KOR N SEAL BOOTS OR EQUIVALENT SHALL BE USED FOR ALL PIPE CONNECTIONS TO PRECAST INLETS. IN ADDITION, KOR N SEAL BOOTS SHALL BE REQUIRED FOR ANY TYPE II PIPE CONNECTIONS TO SAS STORM STRUCTURES. CONCRETE COLLARS OR KOR N SEAL MAY BE USED FOR ANY RCP OR HERCP CONNECTIONS TO SAS STORM STRUCTURES.

-ALL REBAR FOR FIELD POURED STRUCTURES SHALL BE EPOXY COATED. ANY EXPOSED STEEL SHALL BE TOUCHED UP OR RECOATED PRIOR TO USE.

-ALL FIELD POURED SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW STANDARD DETAIL DRAWING FOR 5.7.3. ALL PRECAST SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING 5.7.5.

- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES; UD = UNDERDRAIN

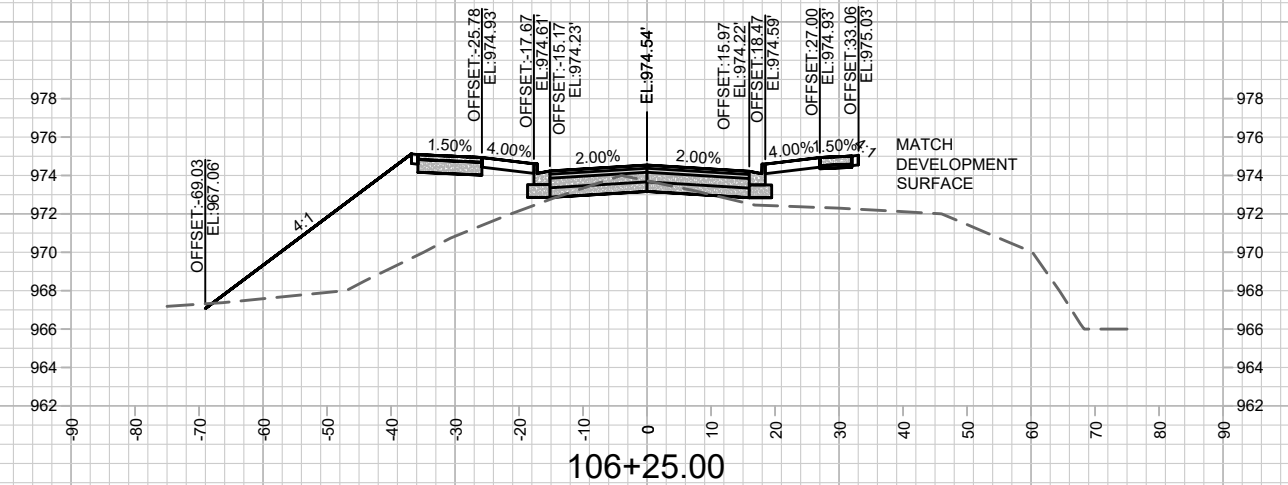
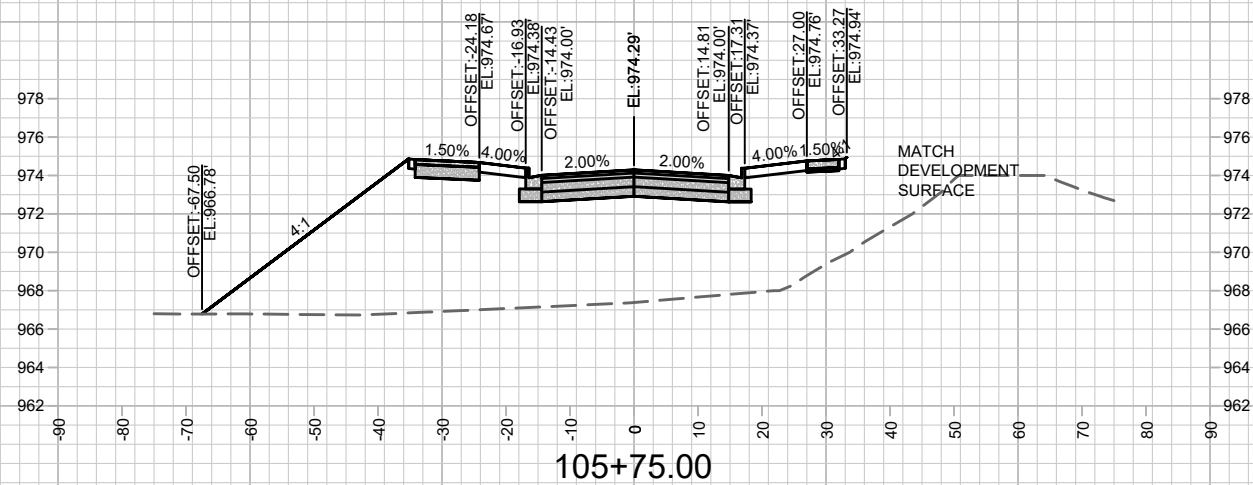
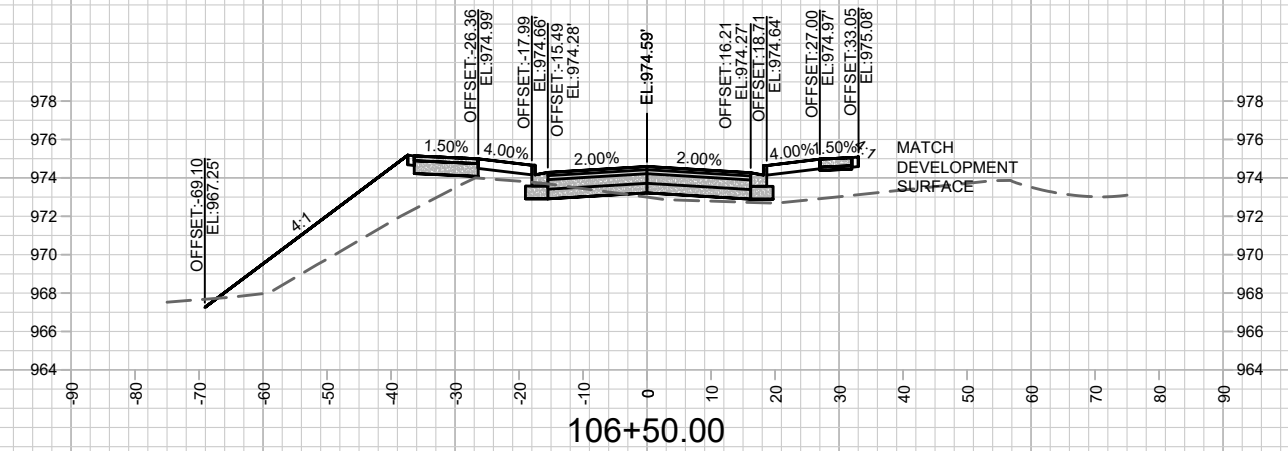
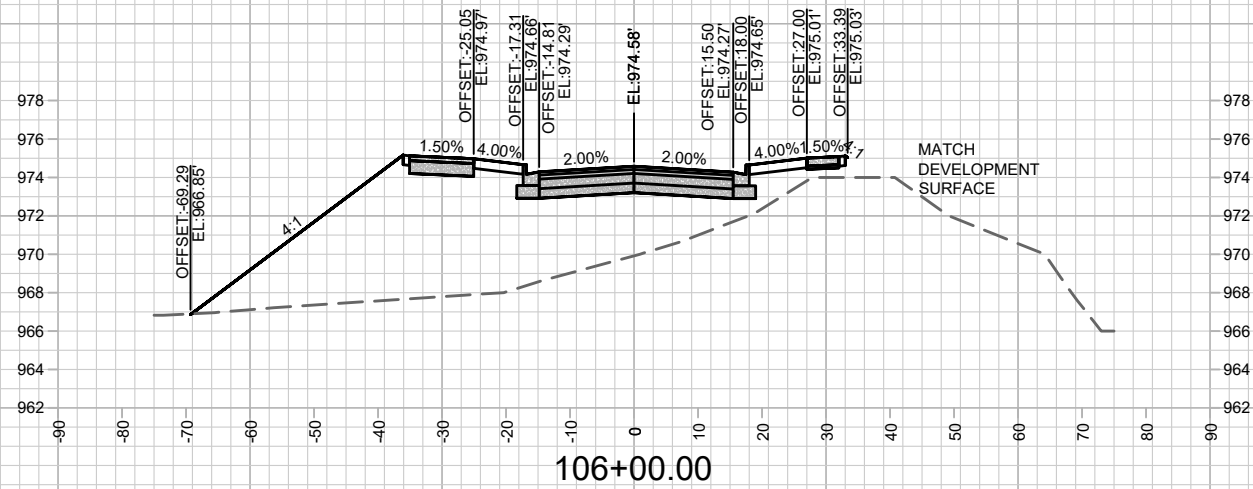
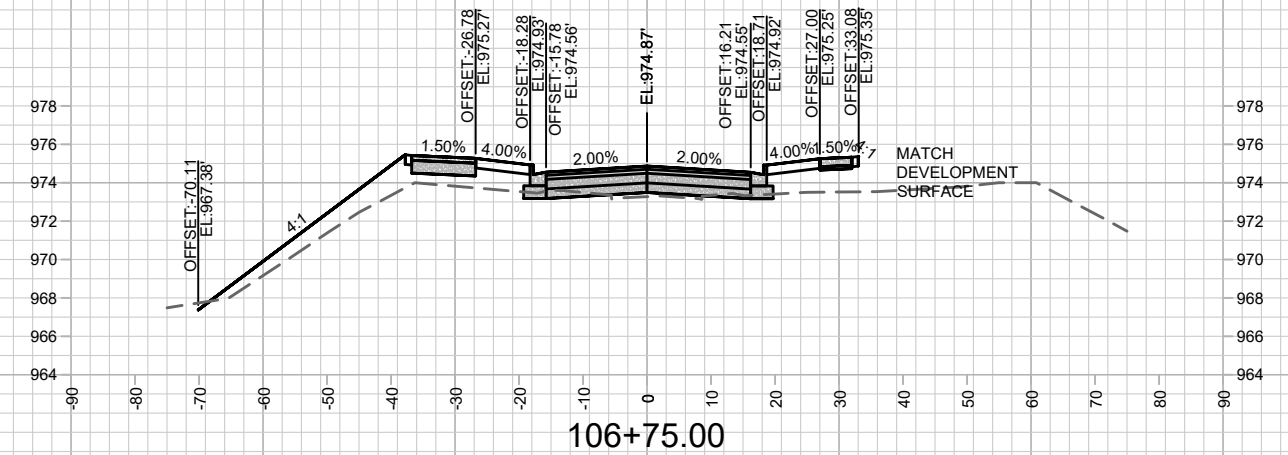
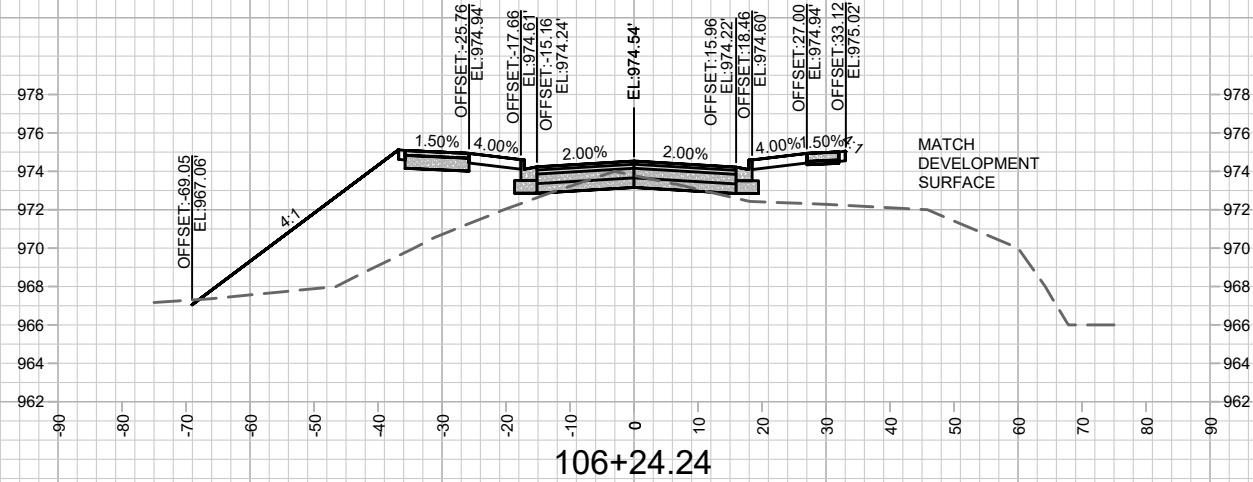
- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.

- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS'S.

- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.

- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.

- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT MATT ALLIE OF CITY ENGINEERING AT (608) 266-4058 FOR PRECAST APPROVALS, FAX SHOP DRAWINGS TO (608)264-9275, OR EMAIL SHOP DRAWINGS TO MALLIE@CITYOFMADISON.COM.



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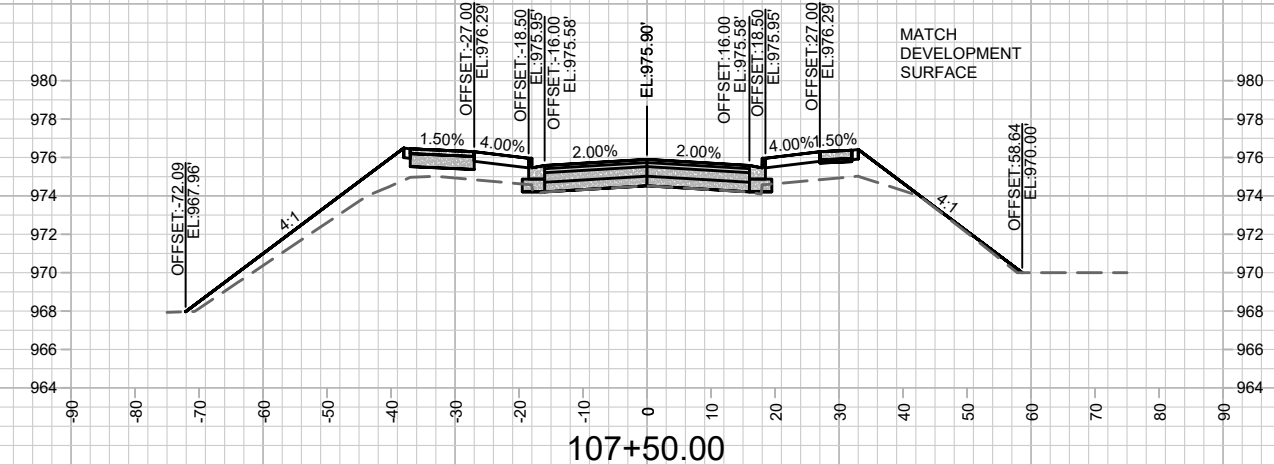
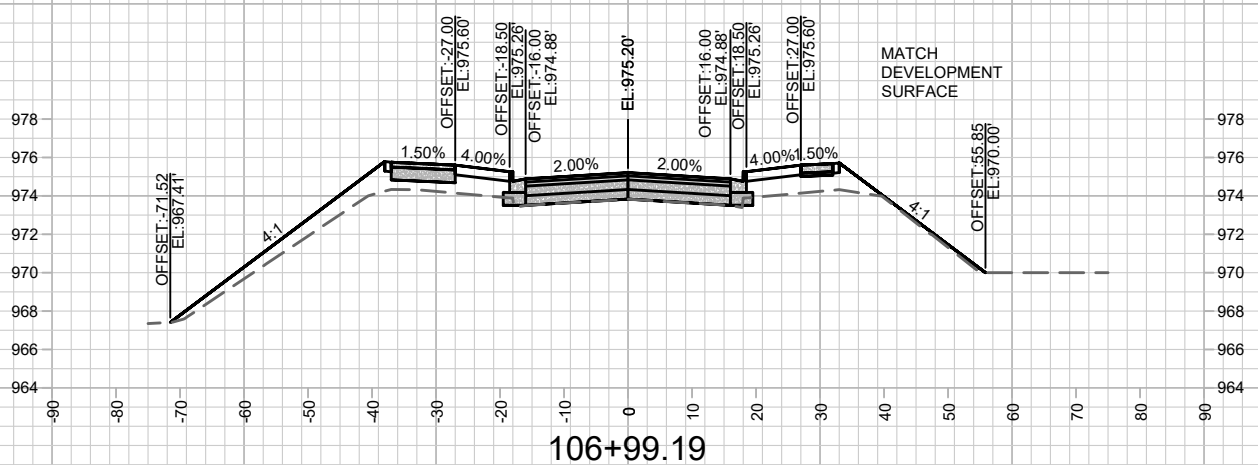
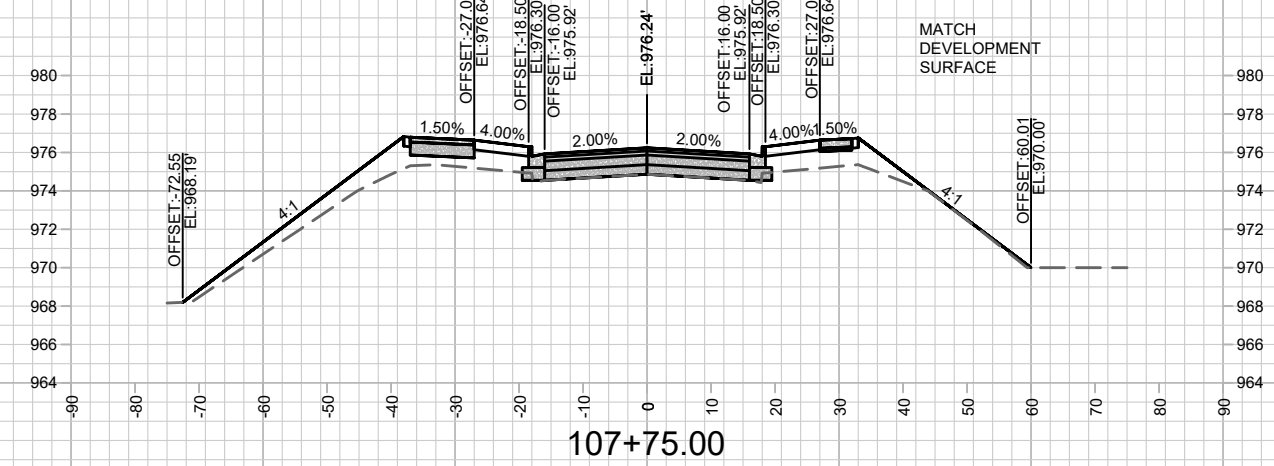
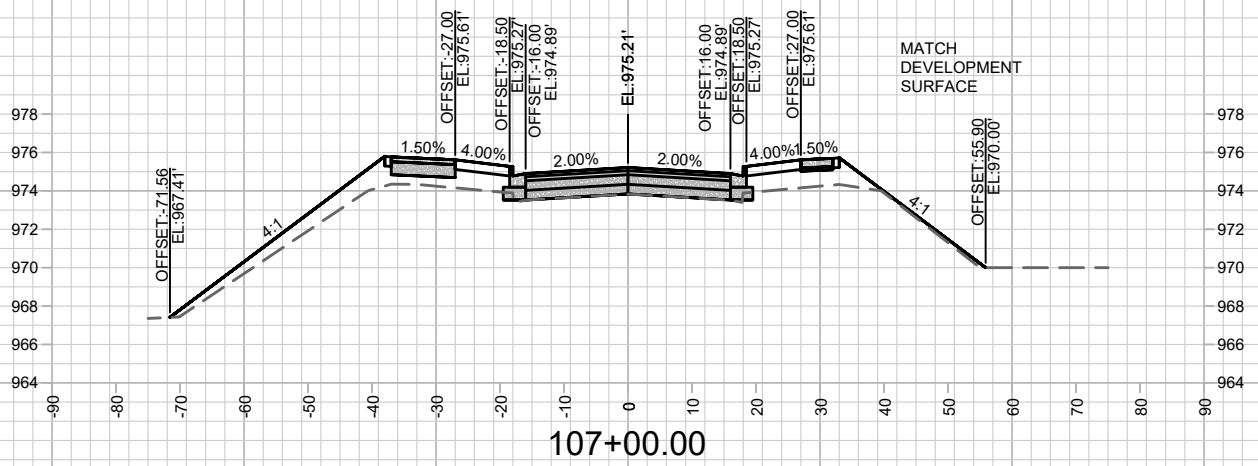
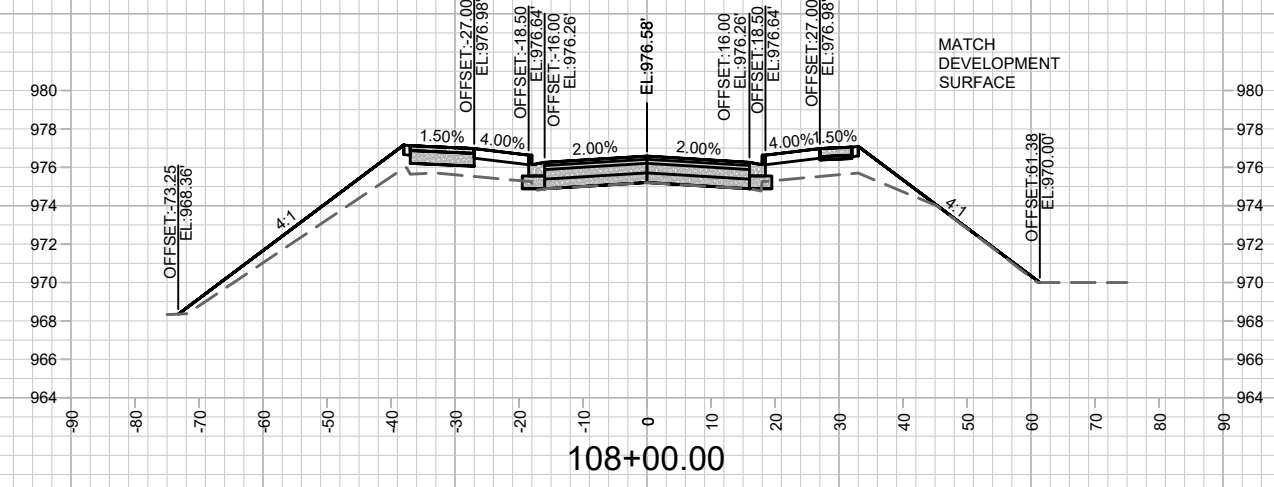
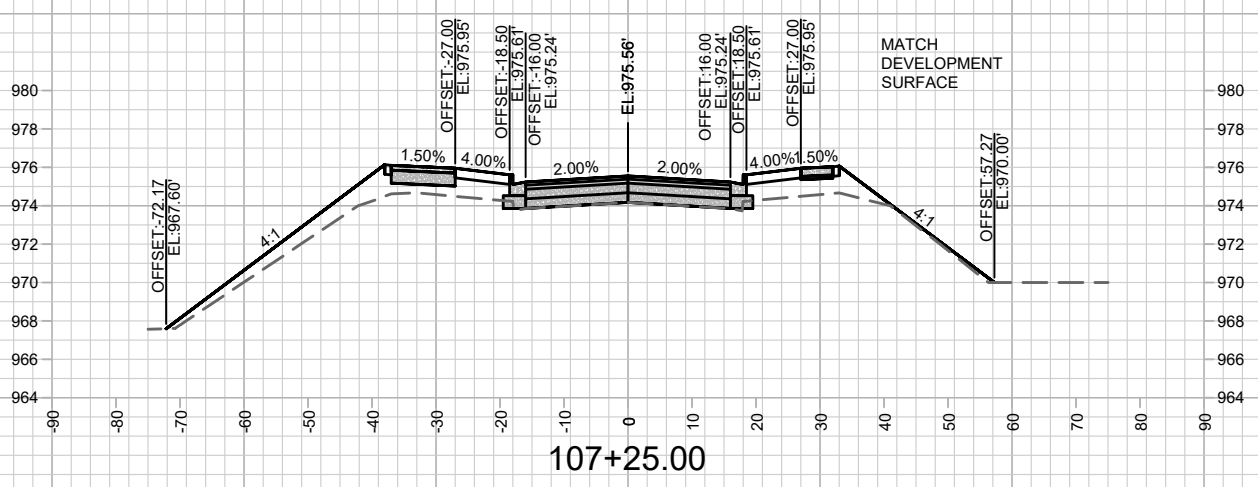
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 MADISON, WI
 8498
 CONTRACT NO:

CROSS SECTIONS
 ROCKSTREAM DRIVE
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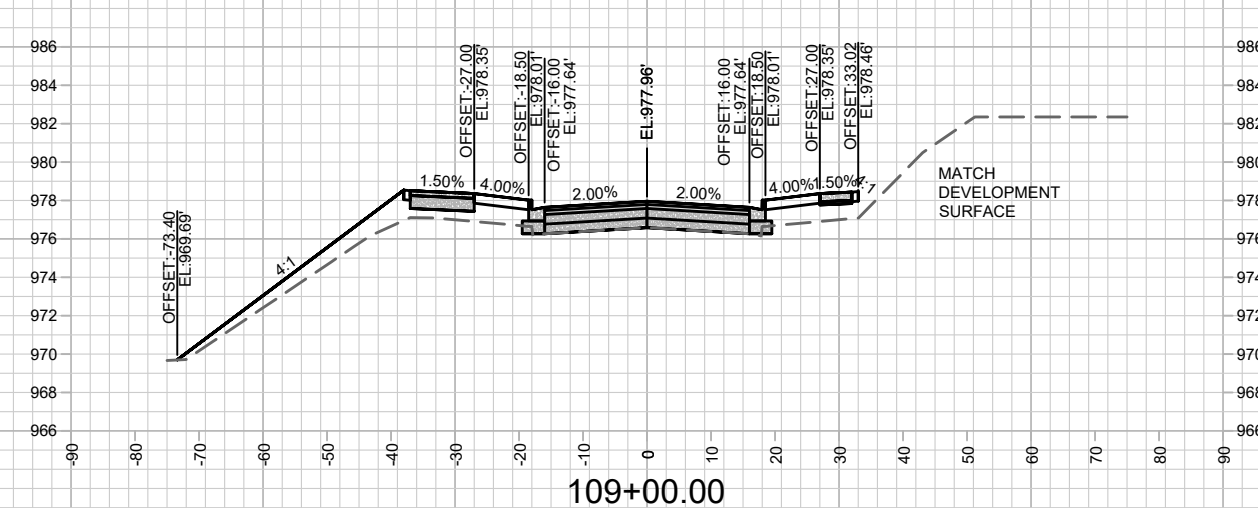
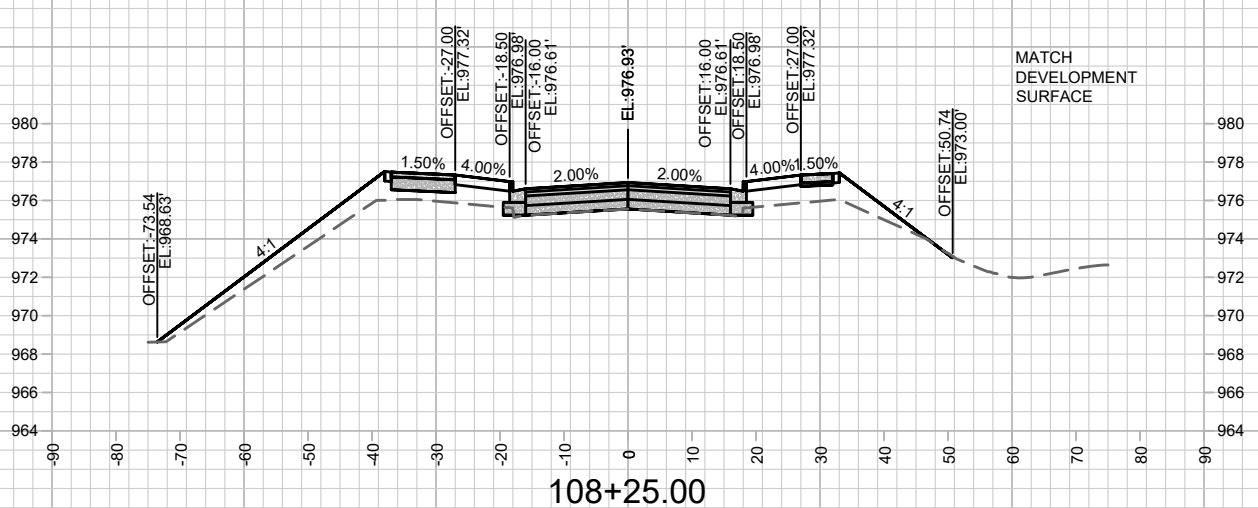
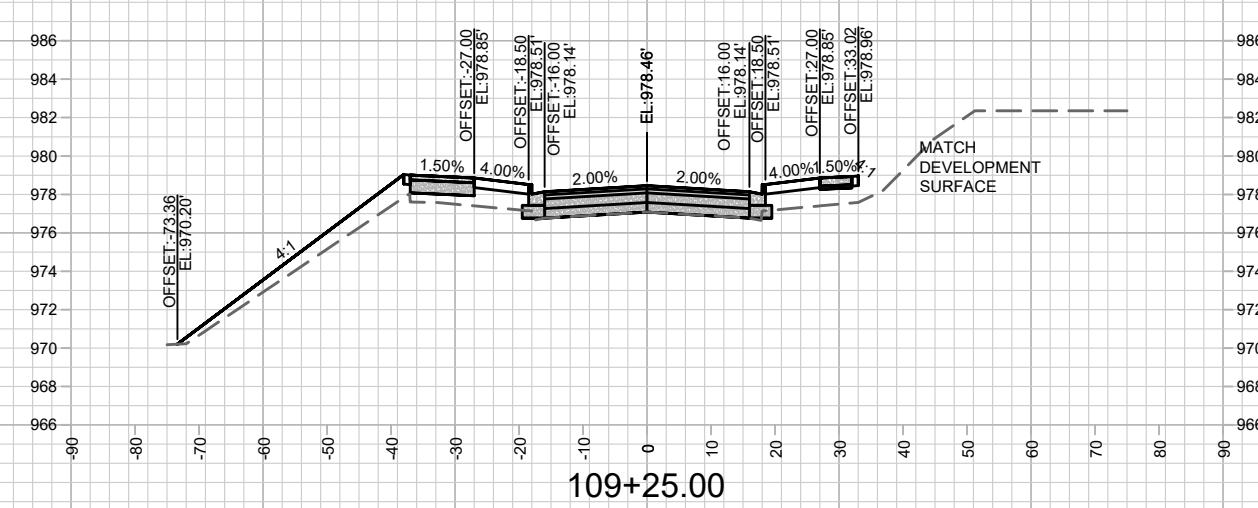
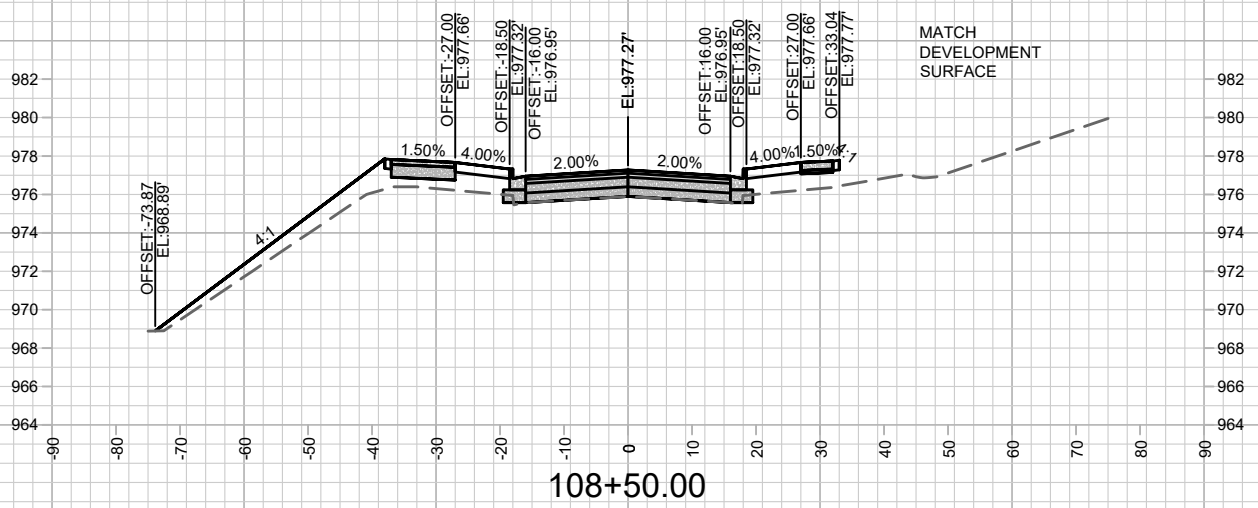
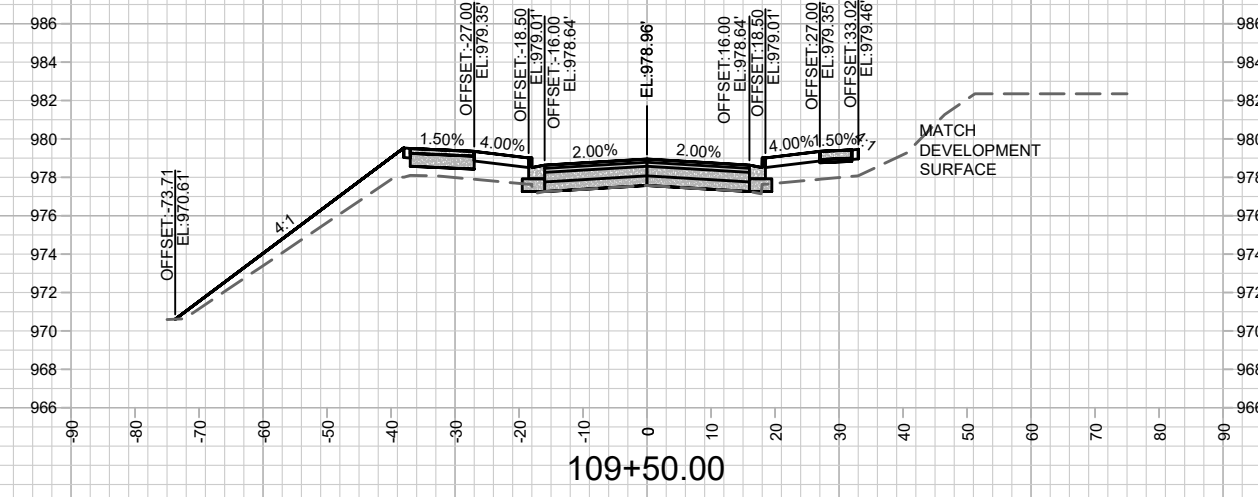
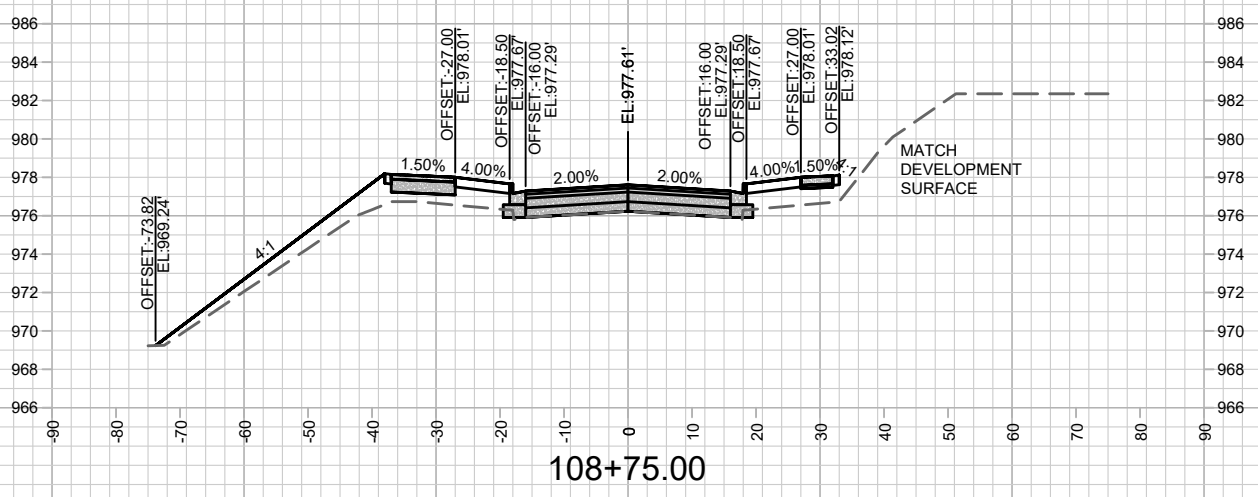
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11-30-2020 REVISION AJZ
 - Updated Existing Surface



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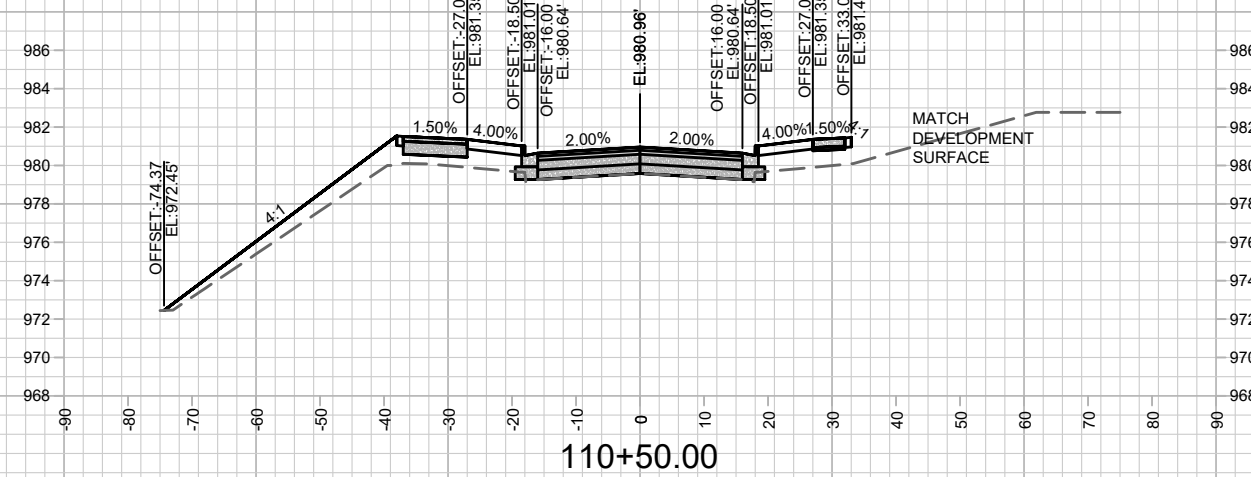
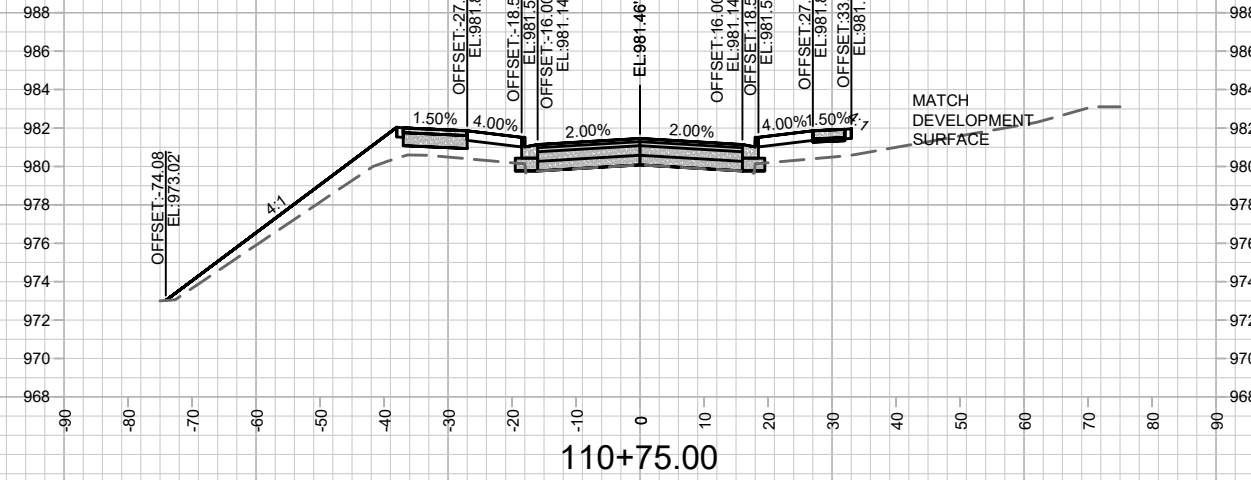
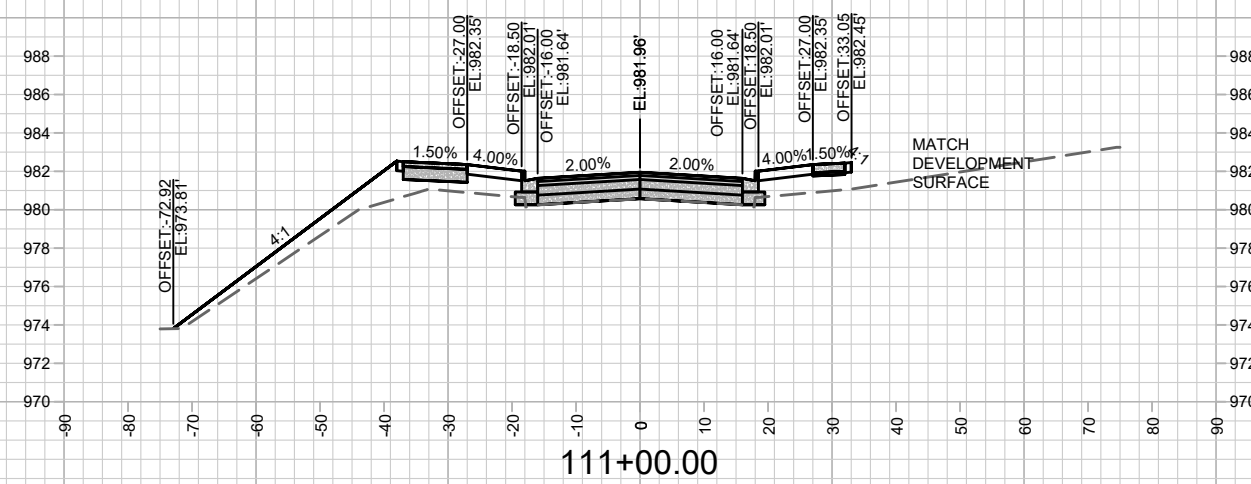
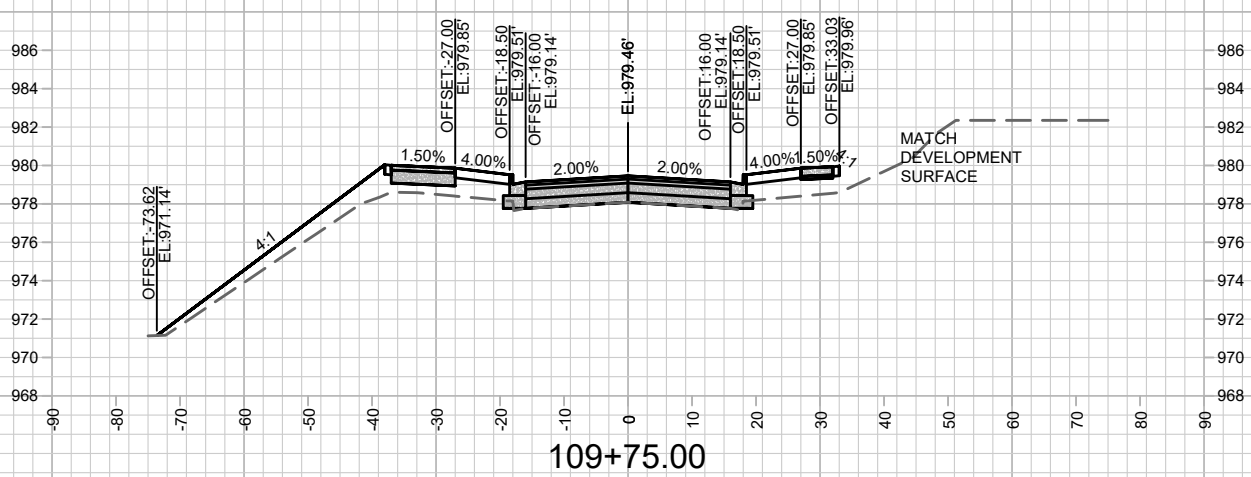
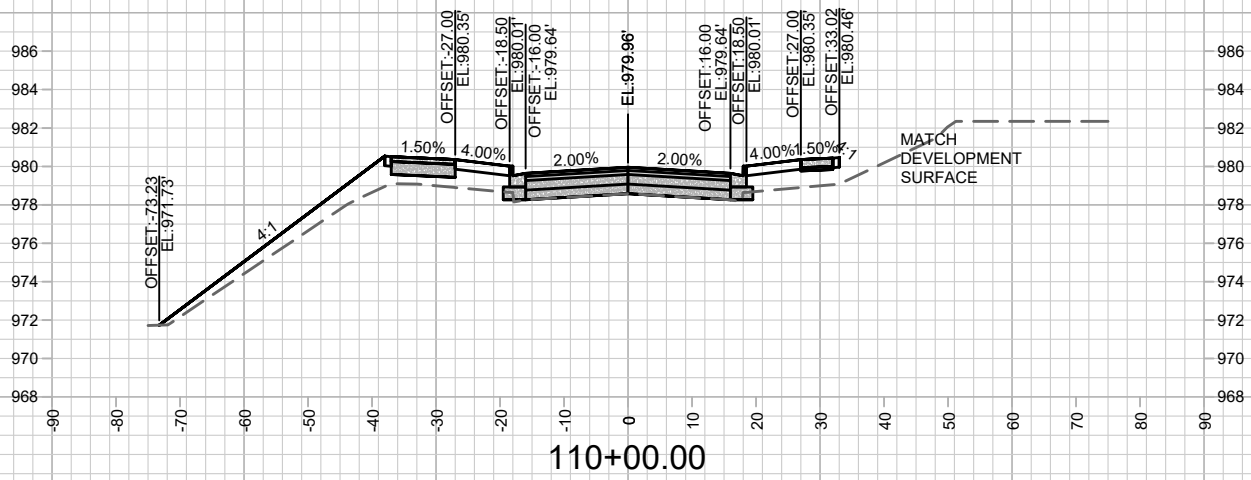
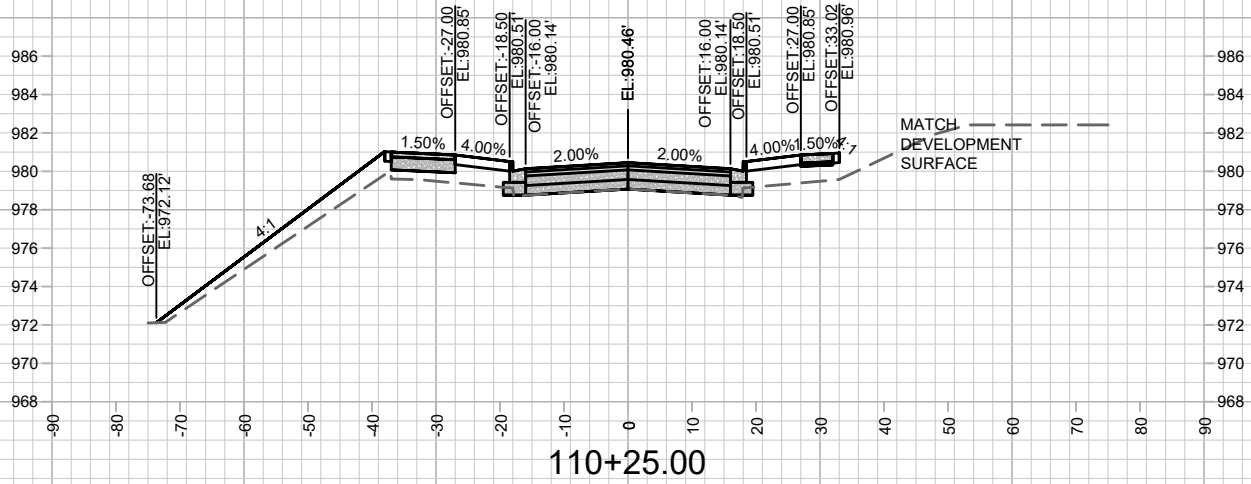


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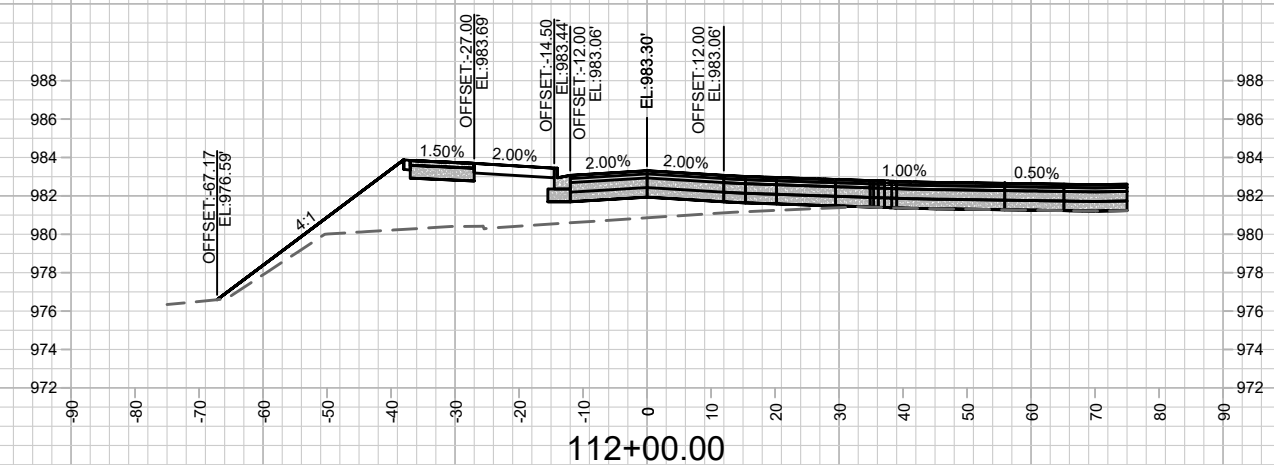
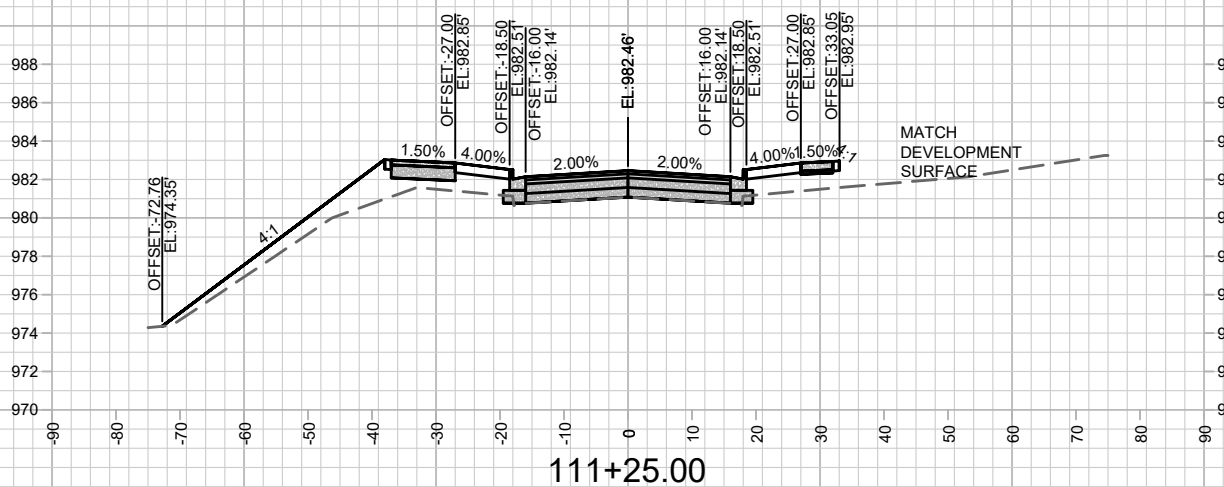
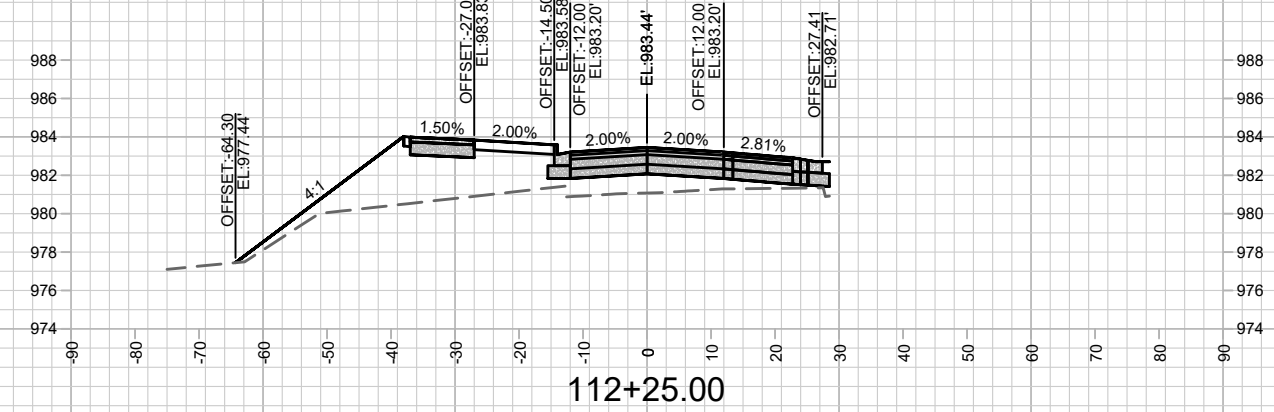
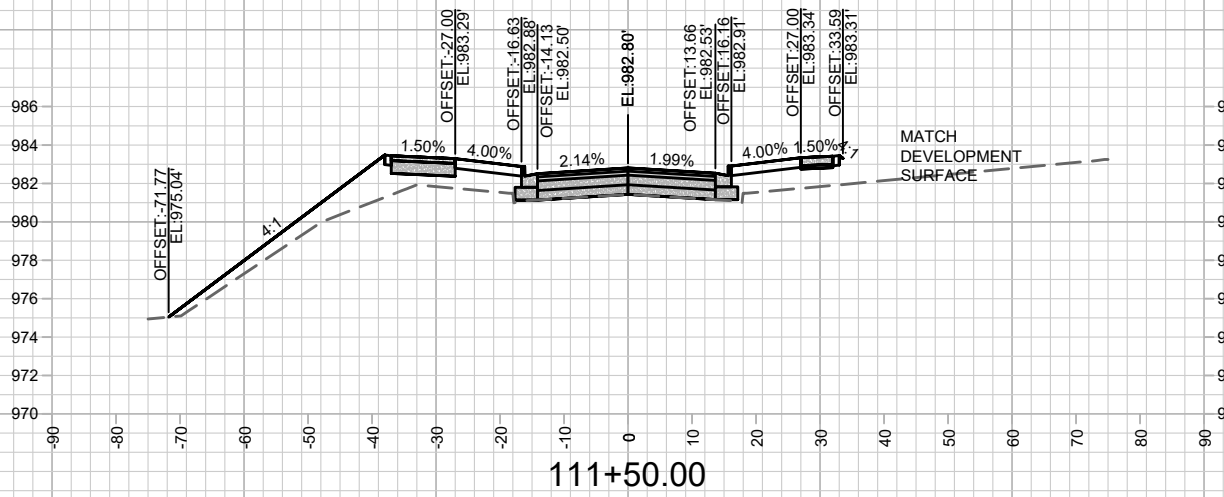
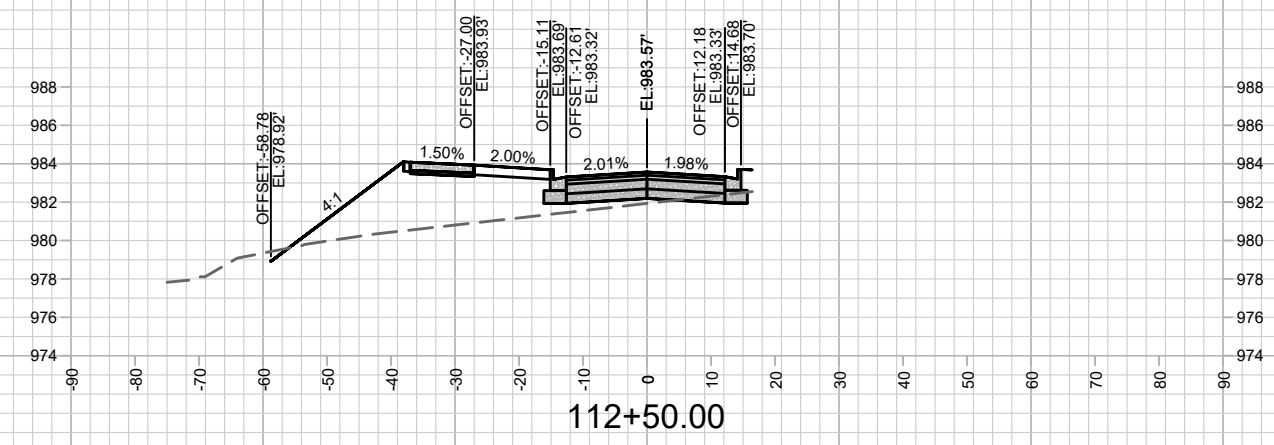
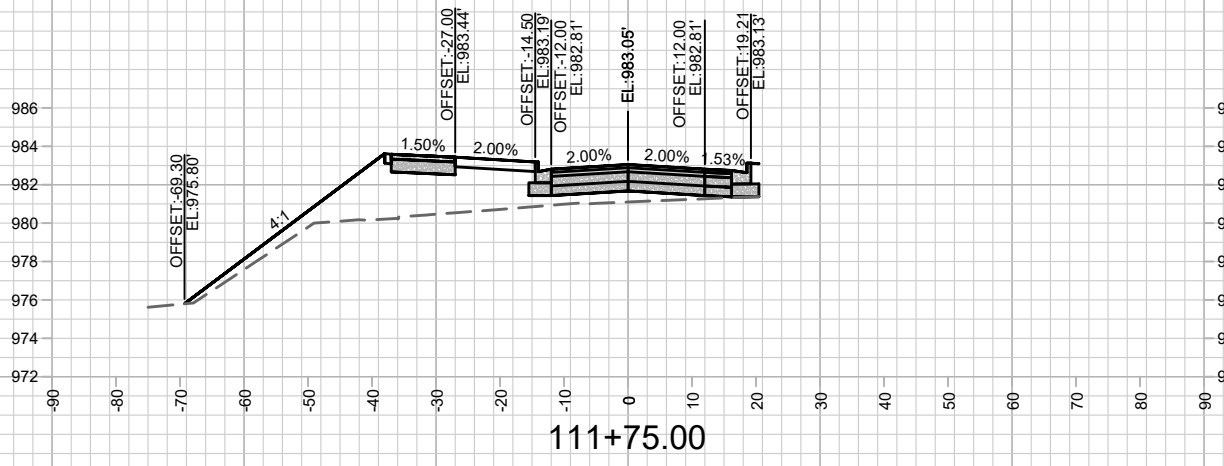
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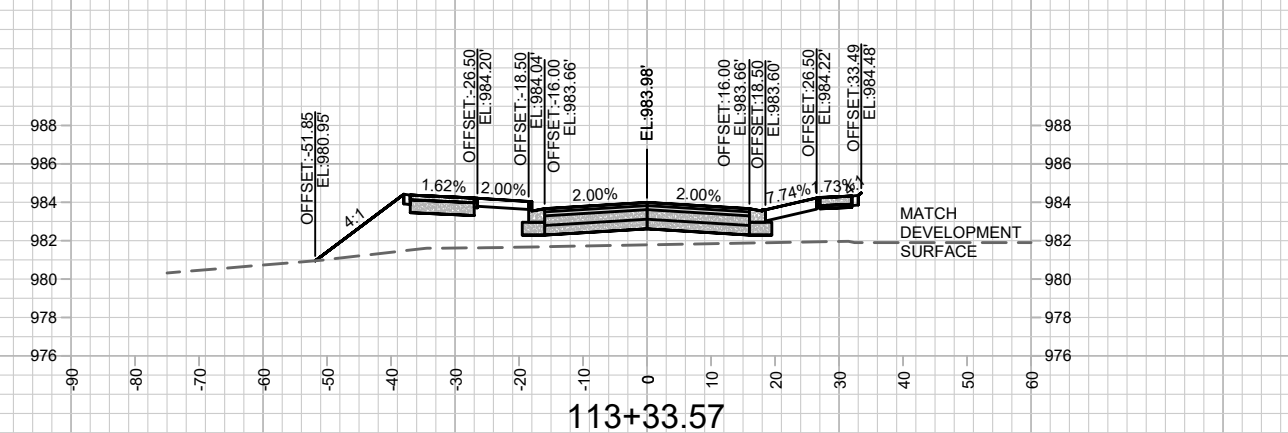
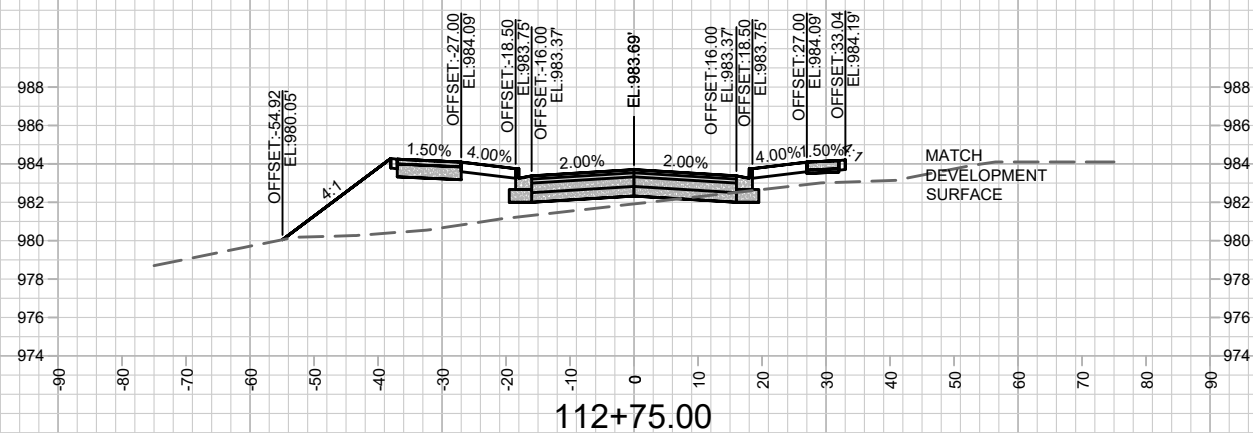
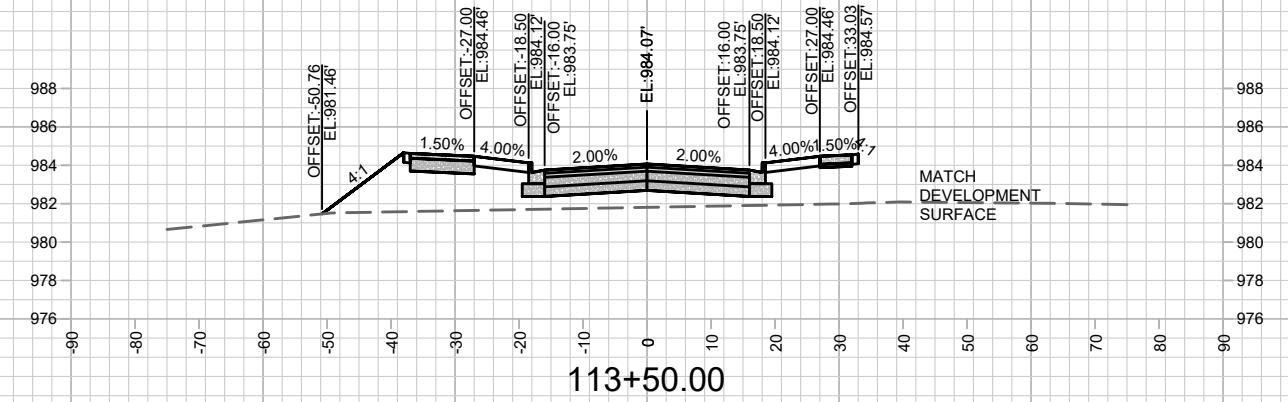
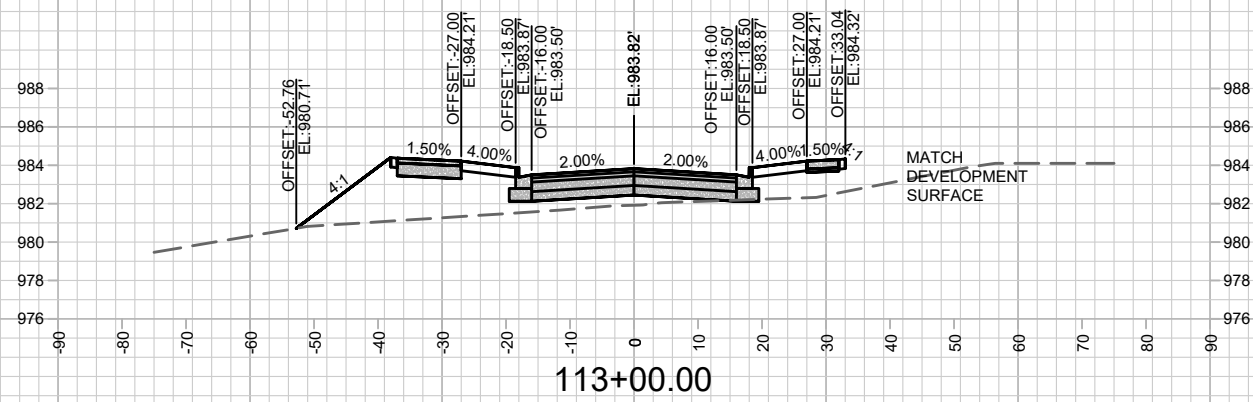
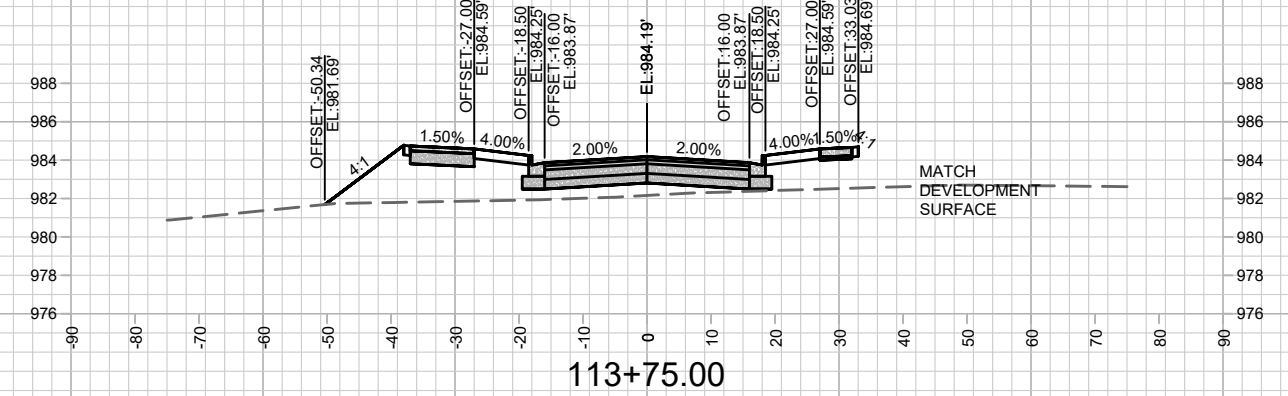
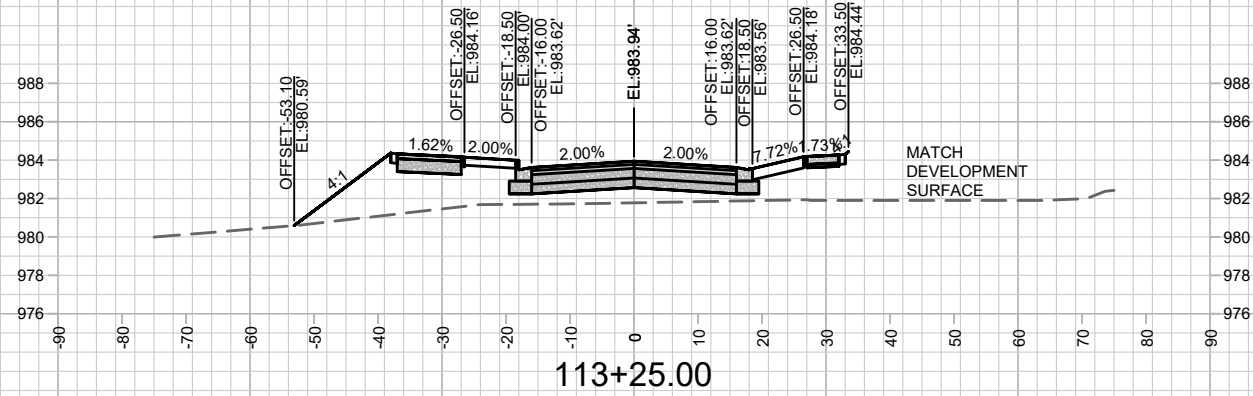


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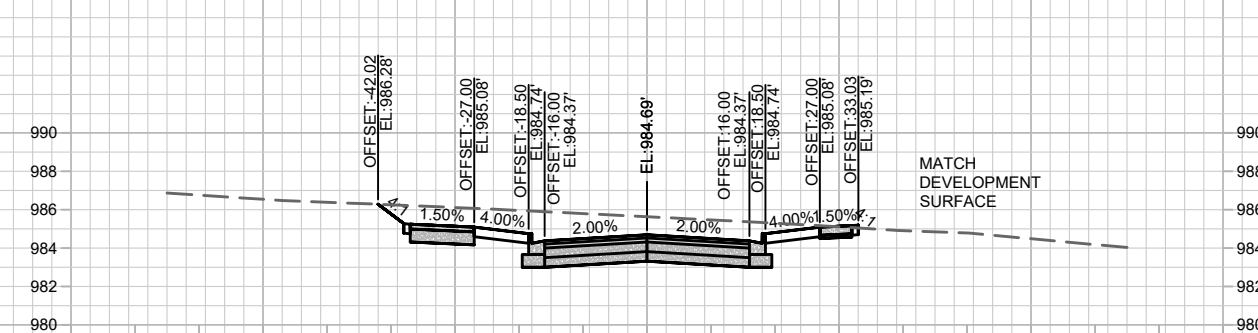
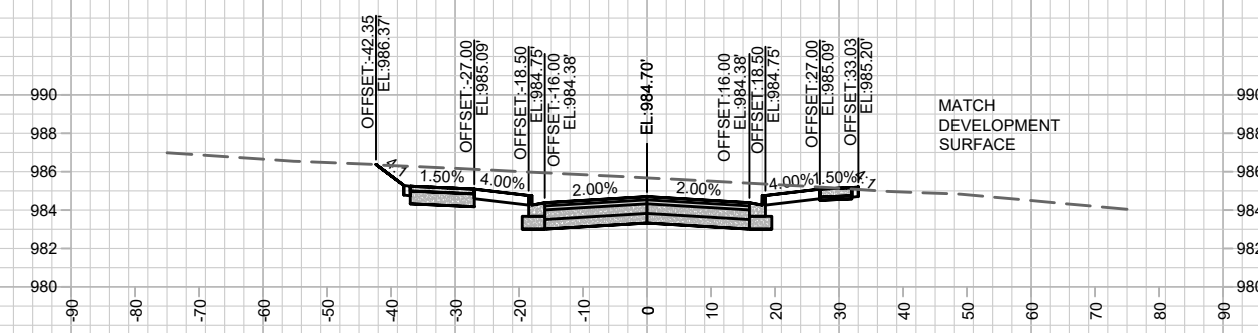
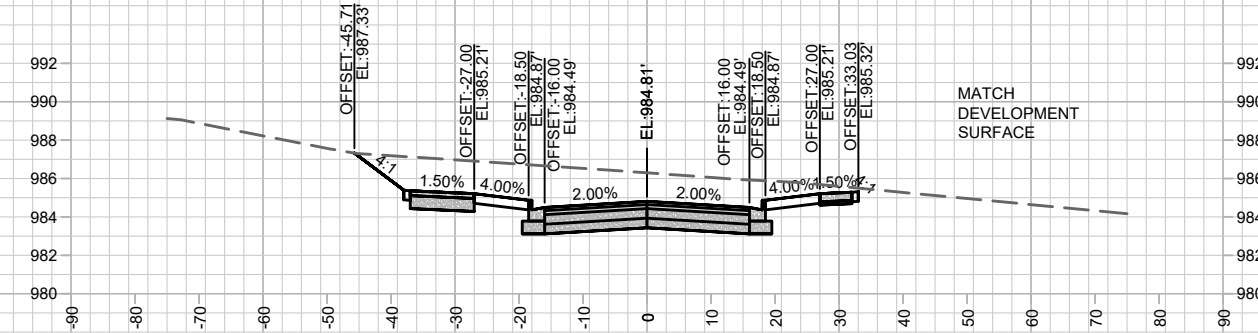
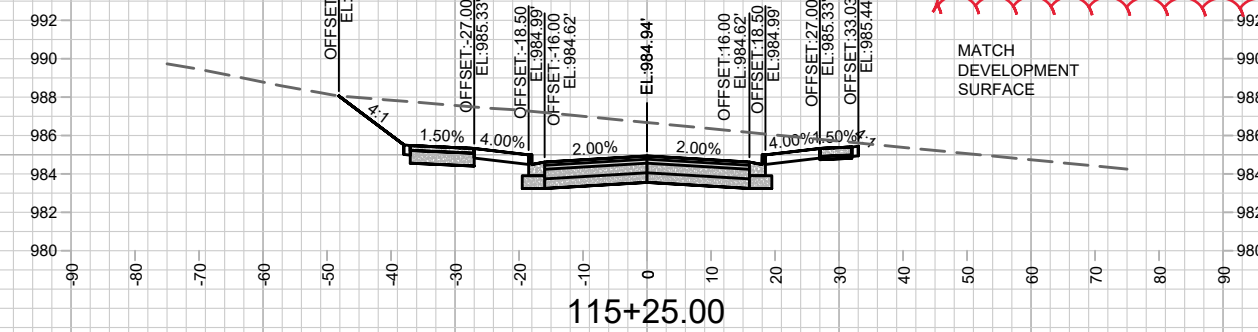
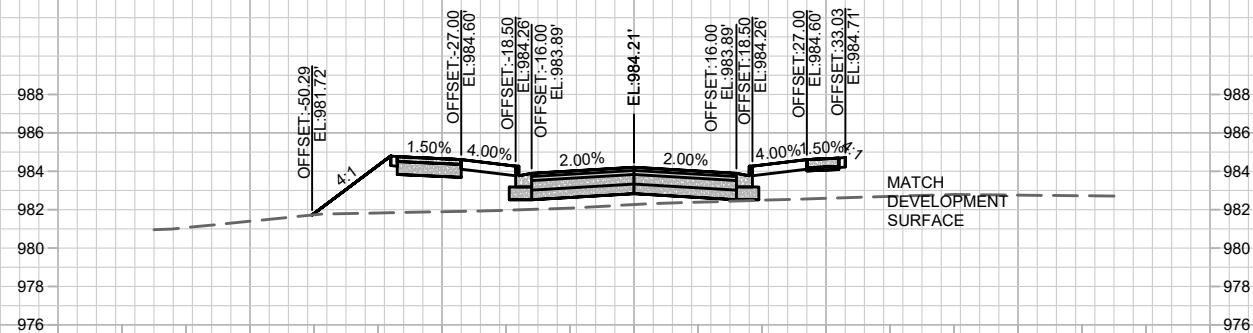
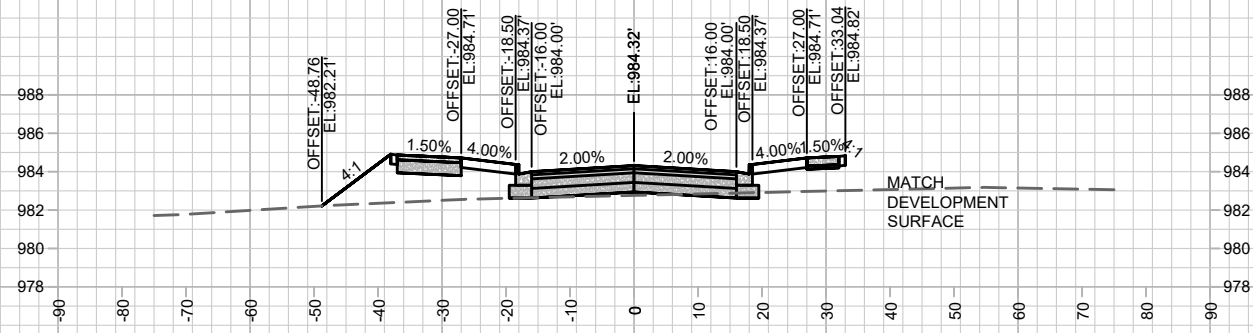
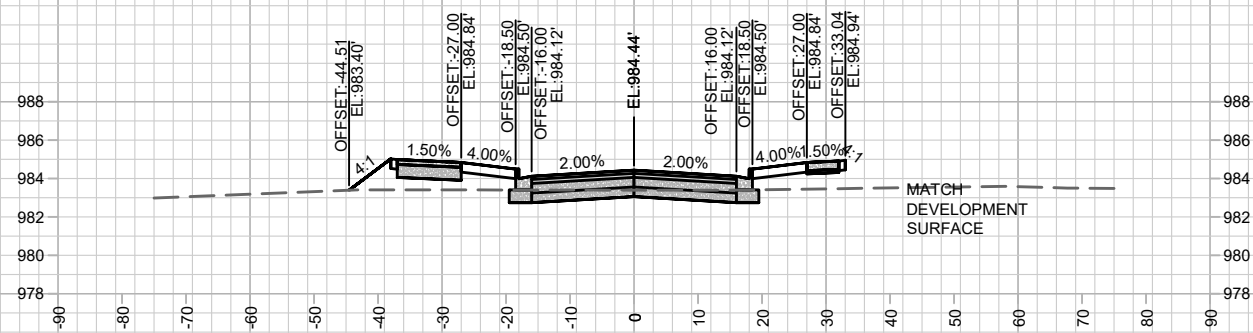
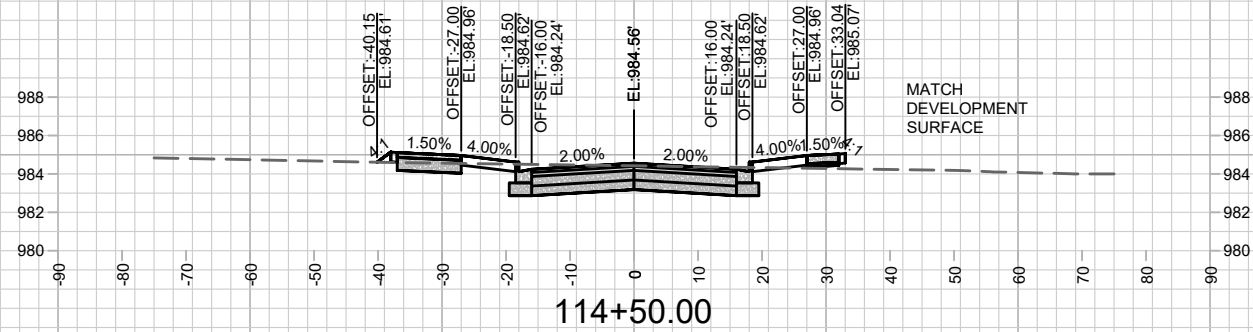


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11-30-2020 REVISION AJZ
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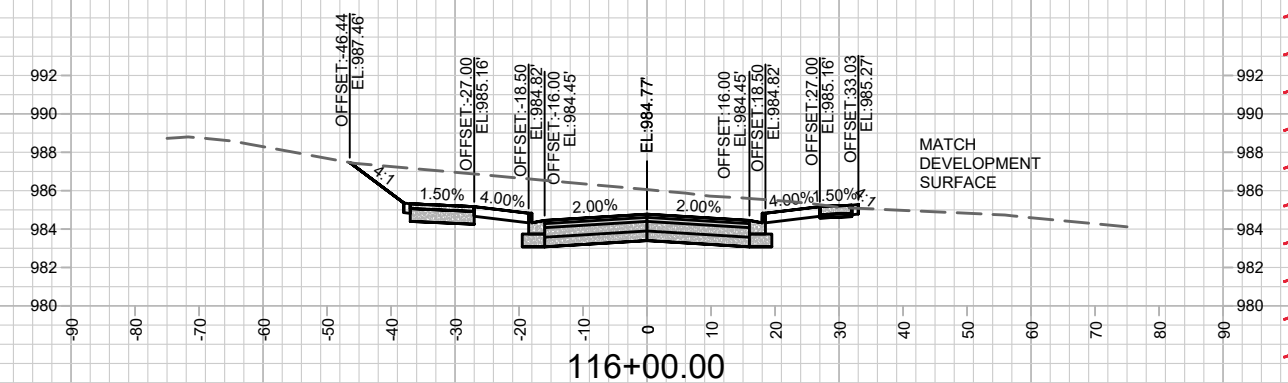
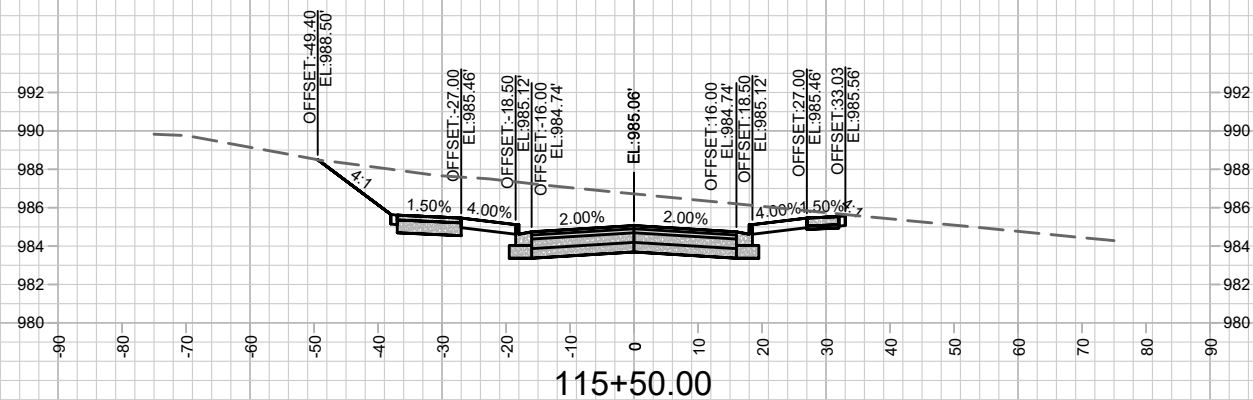
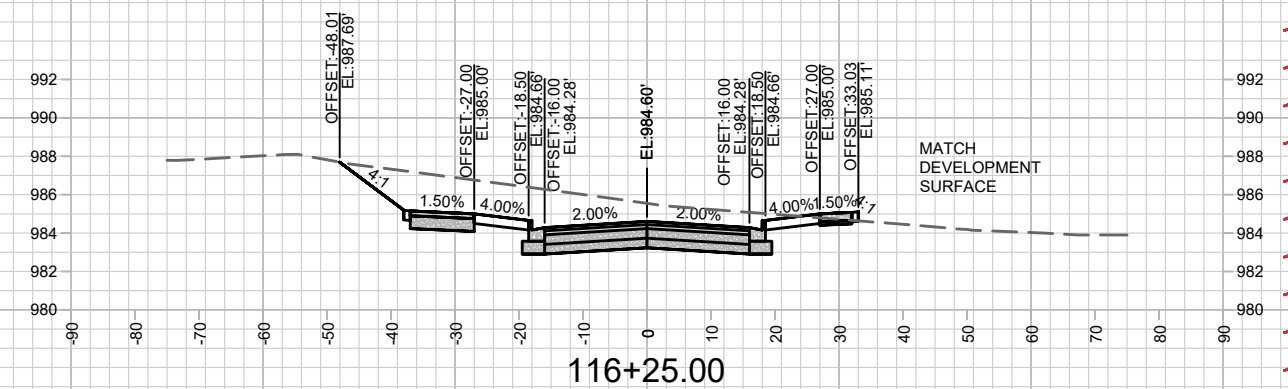
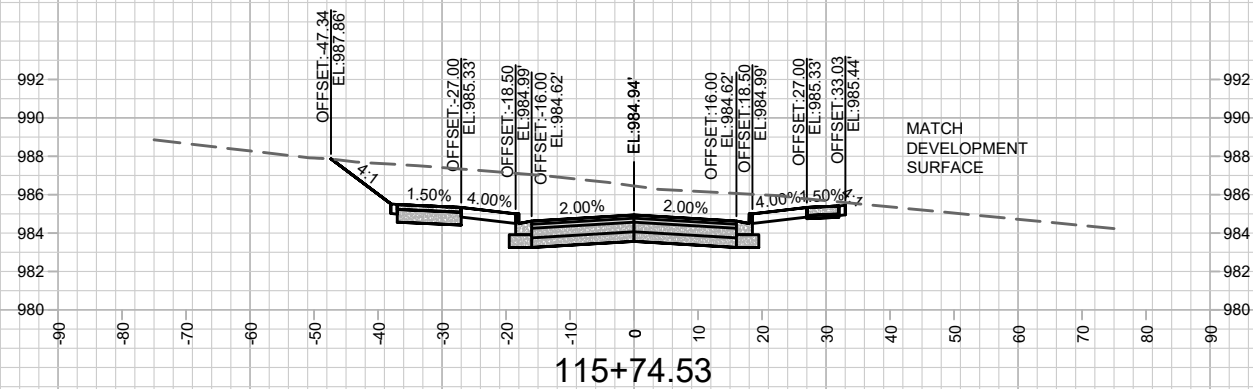
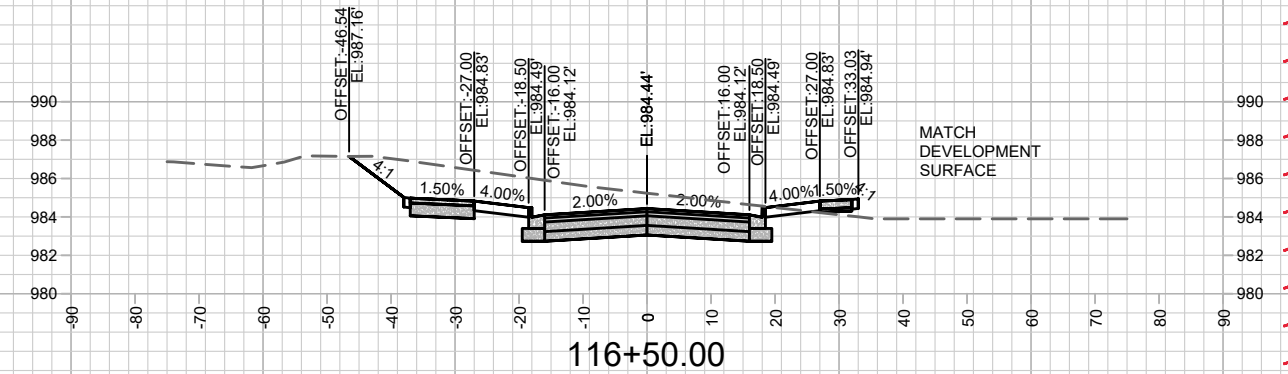
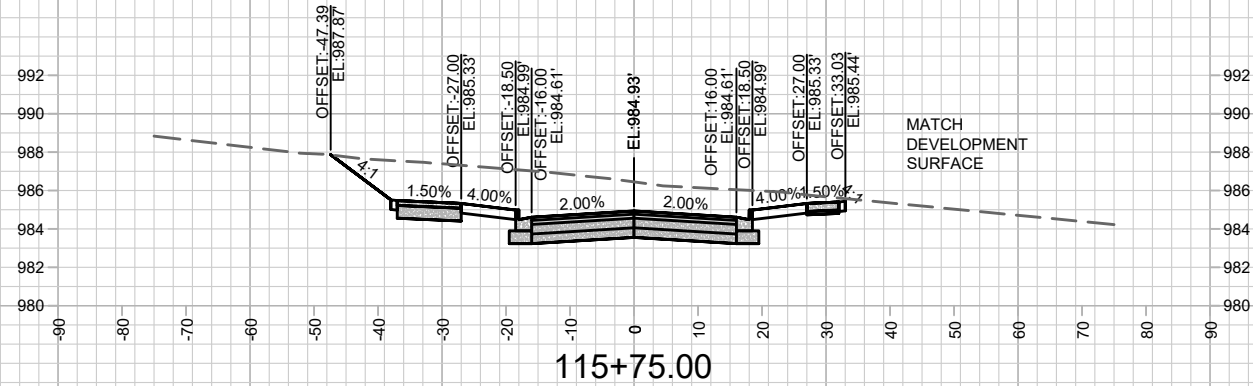
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MADISON, WI
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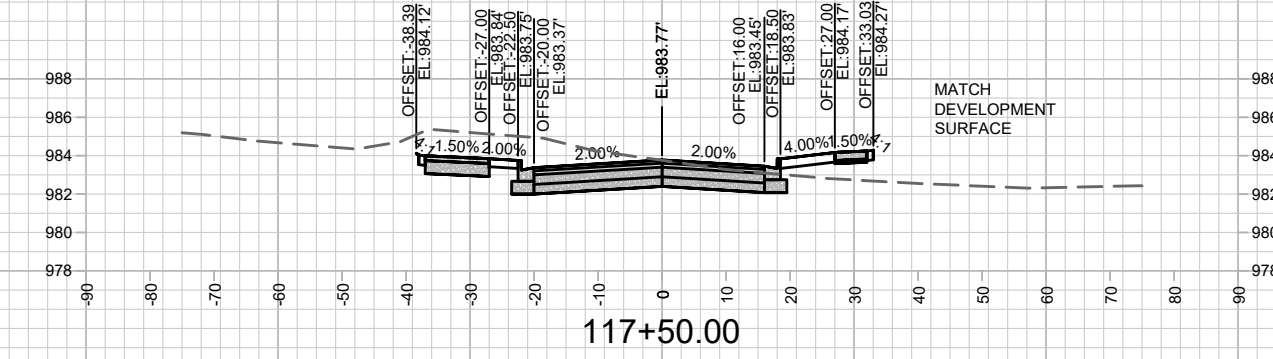
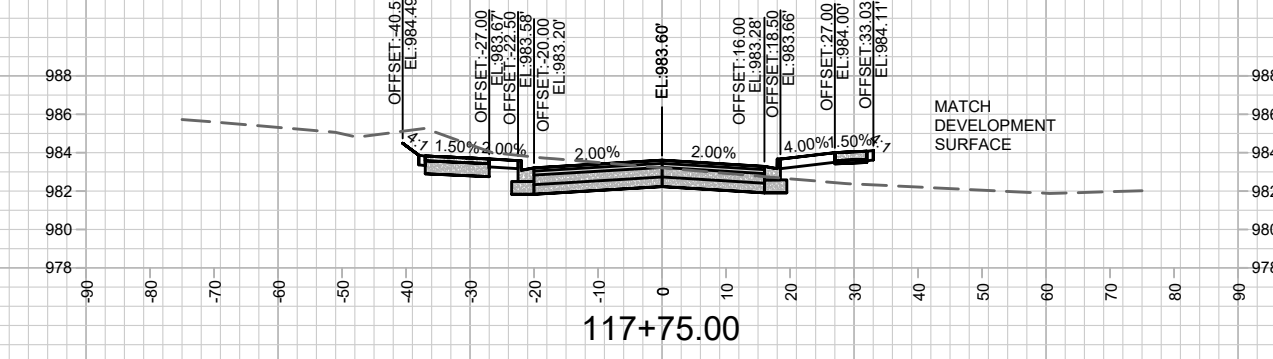
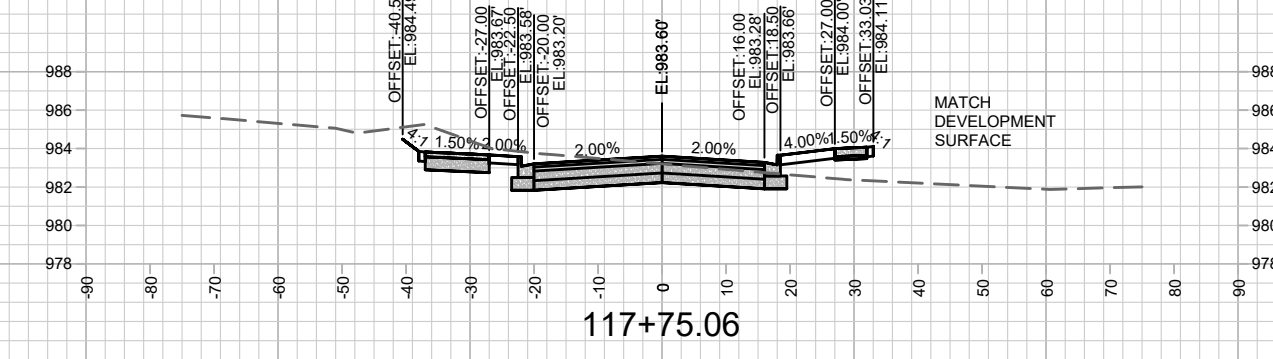
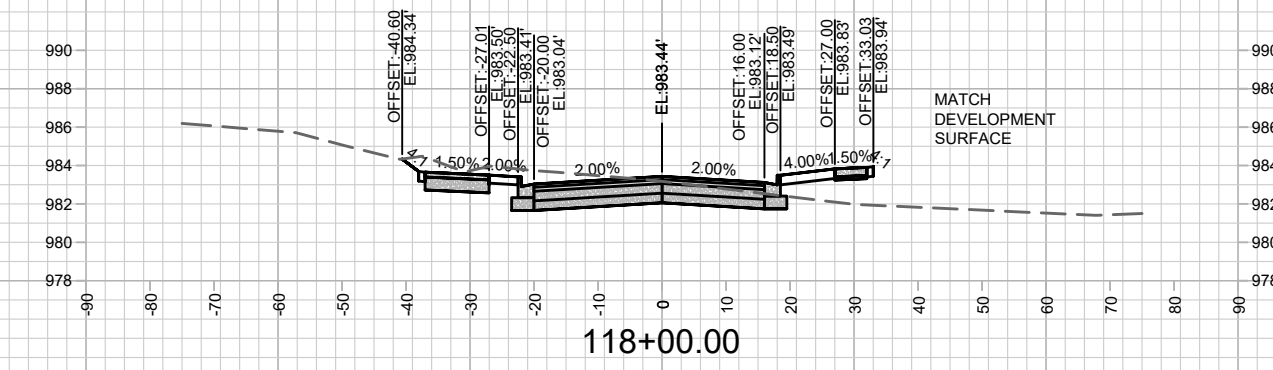
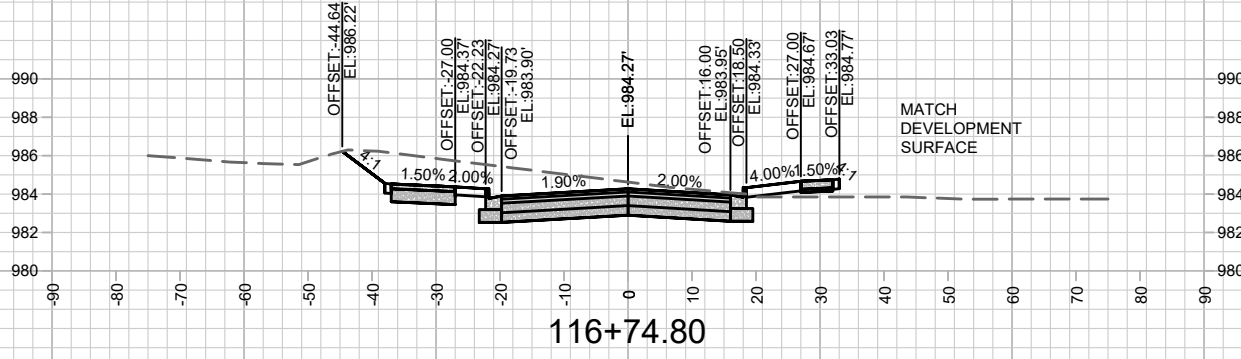
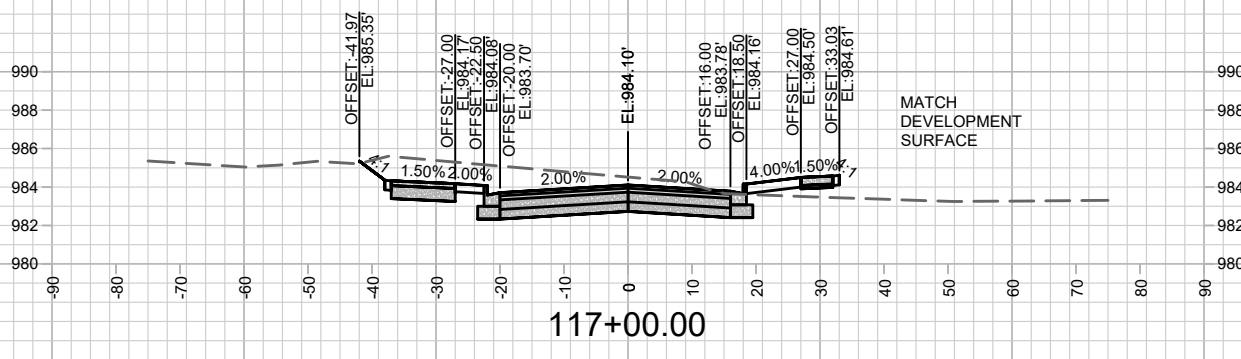
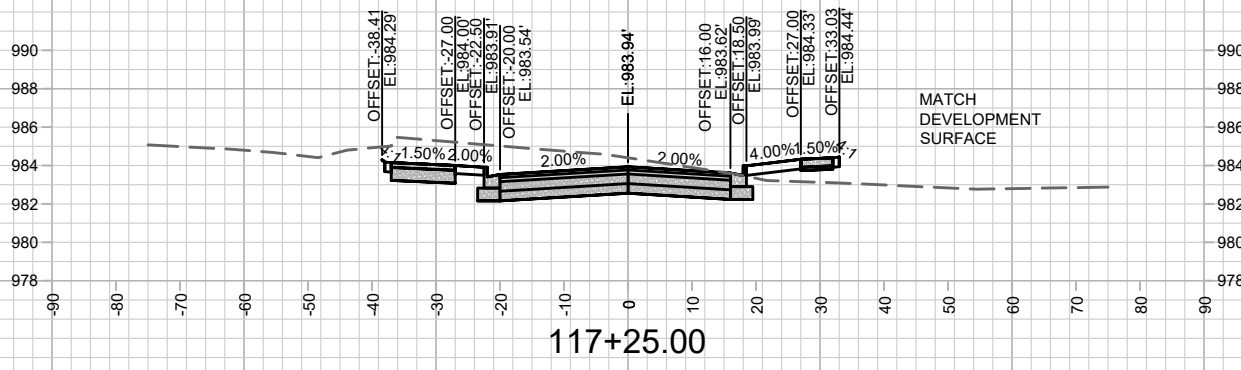
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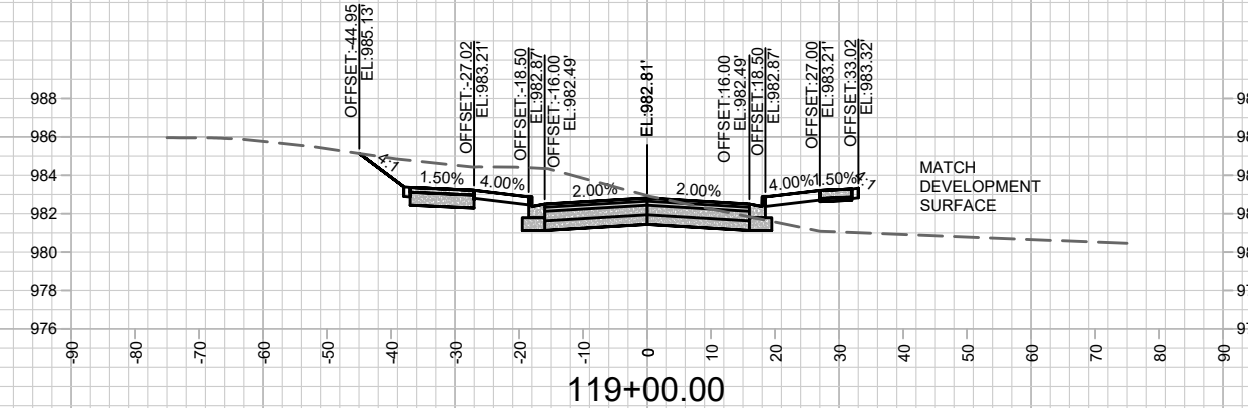
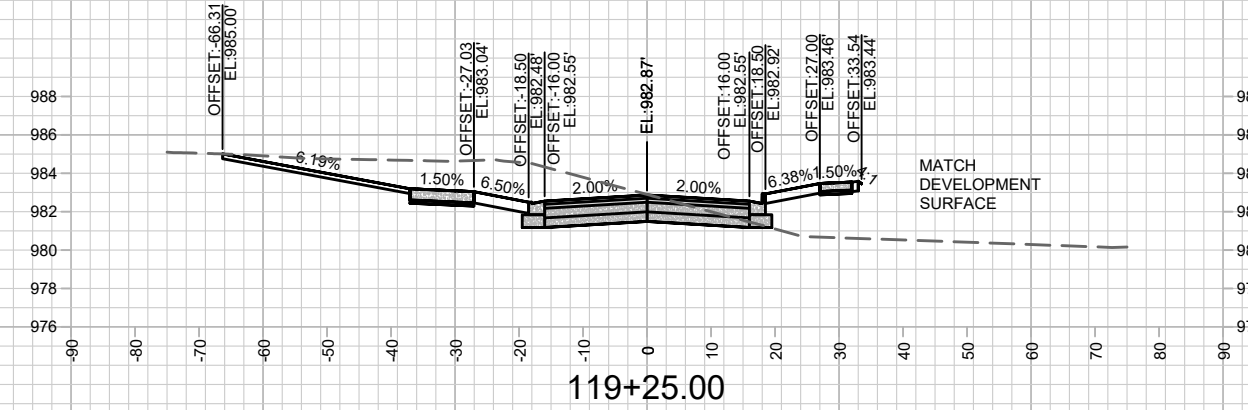
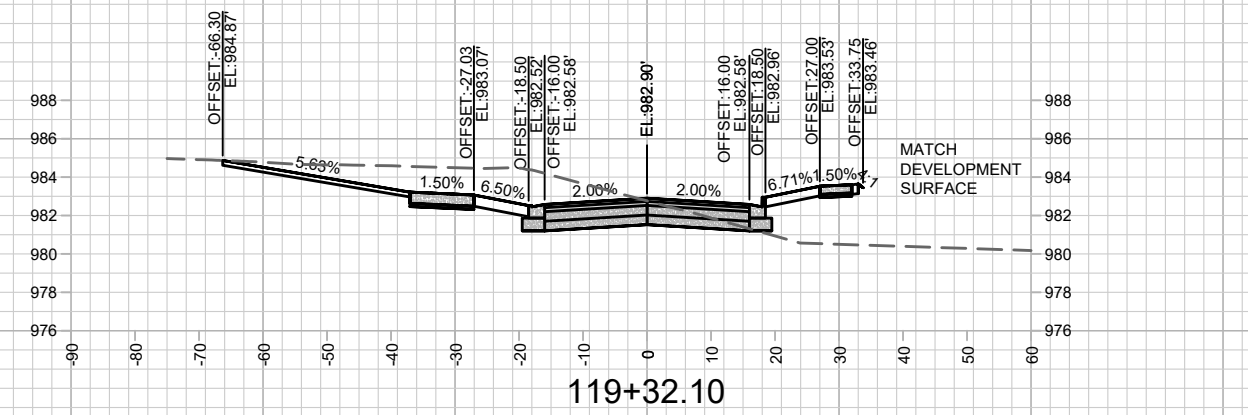
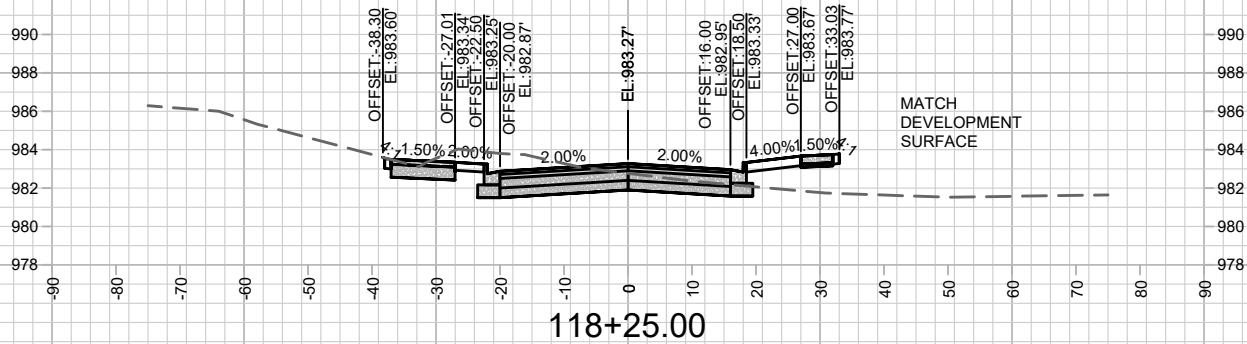
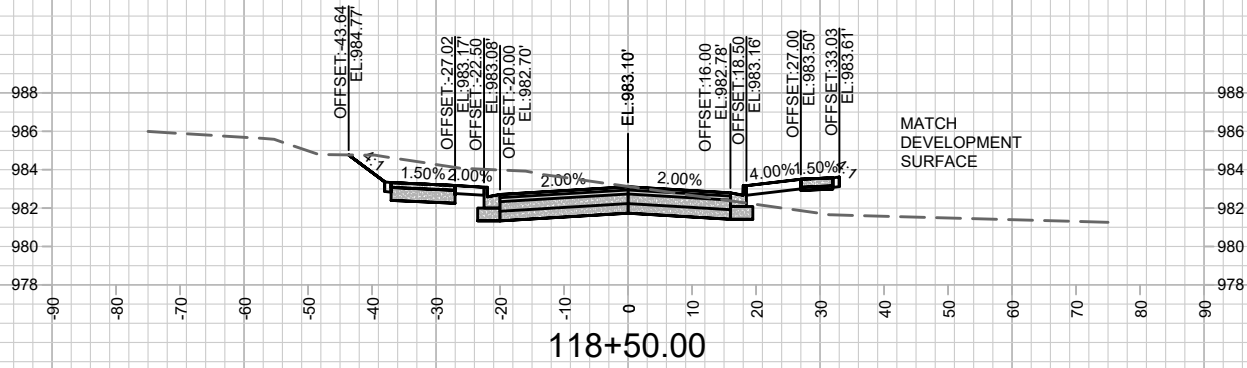
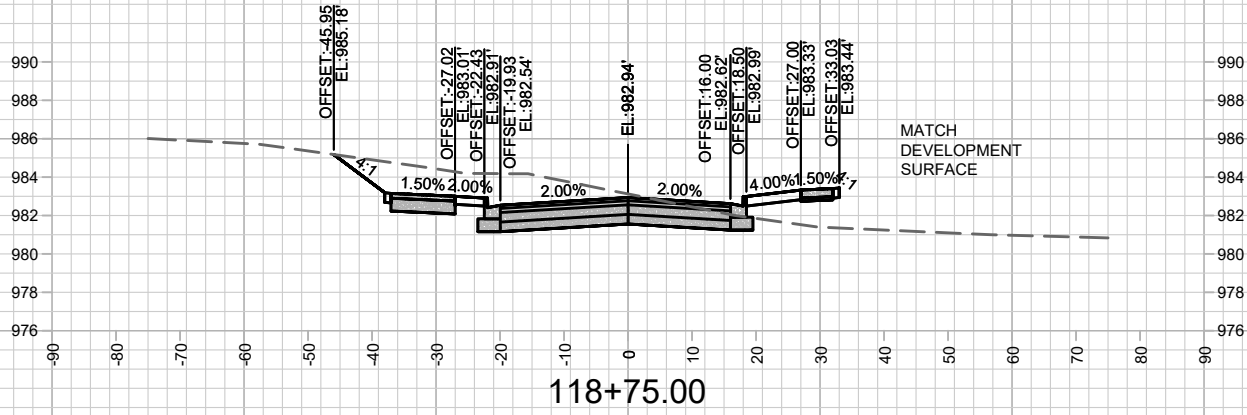
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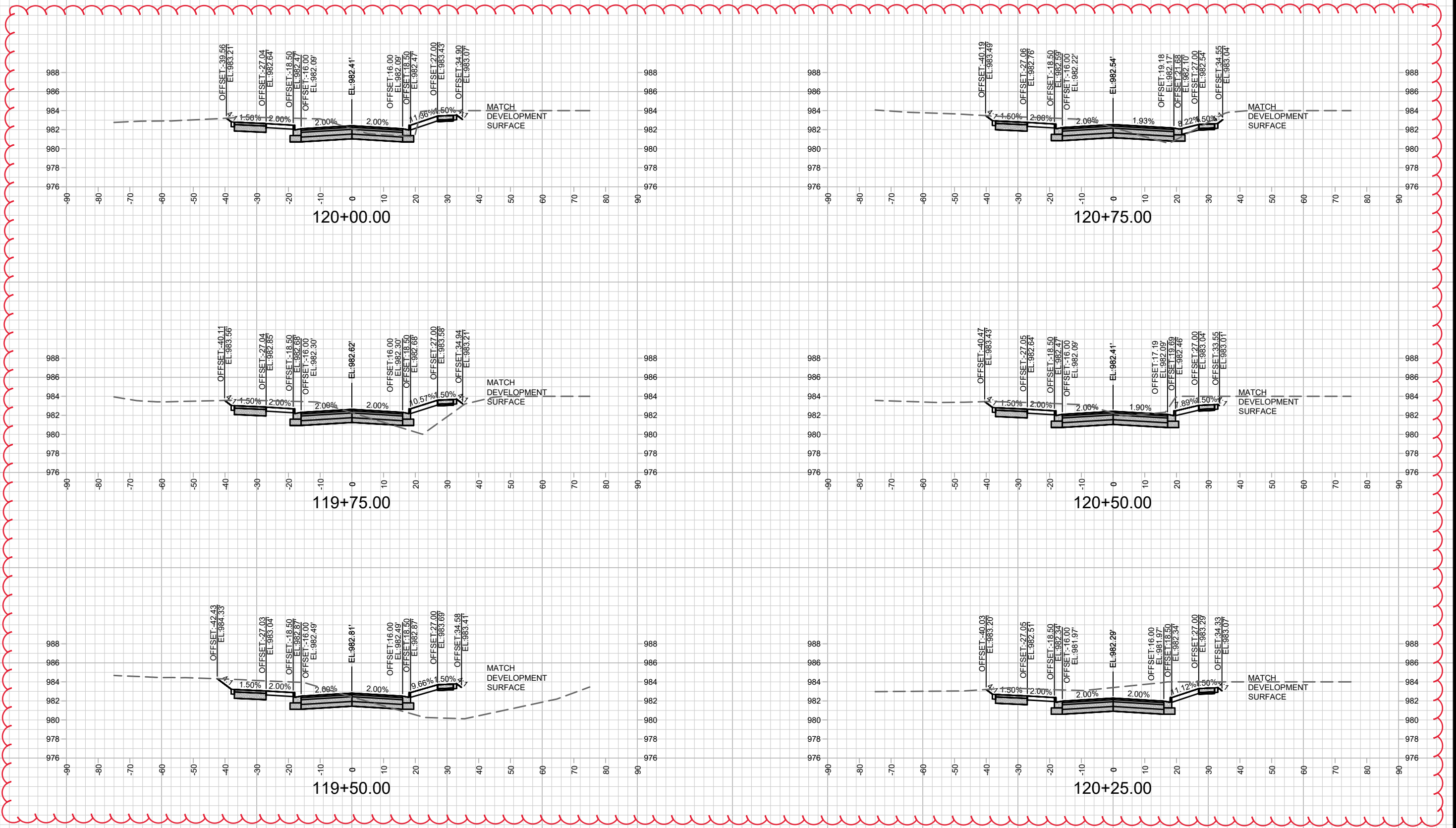
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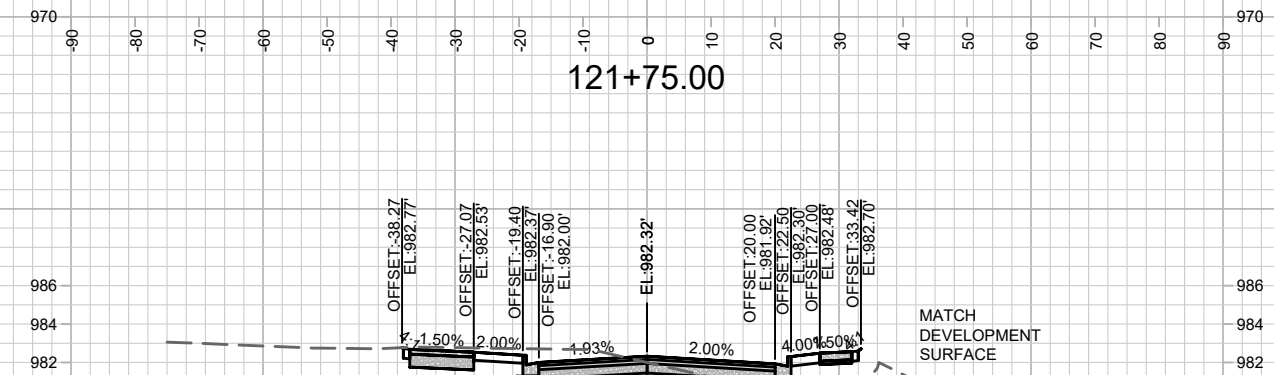
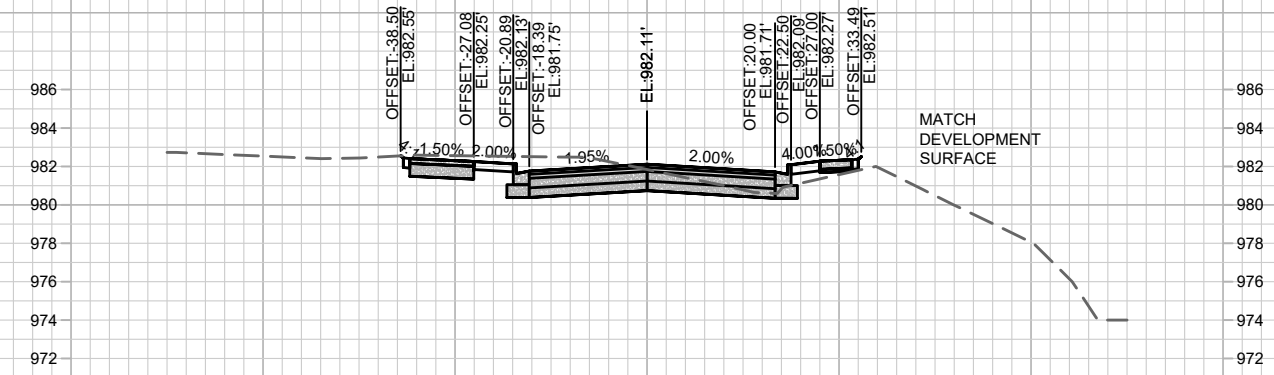
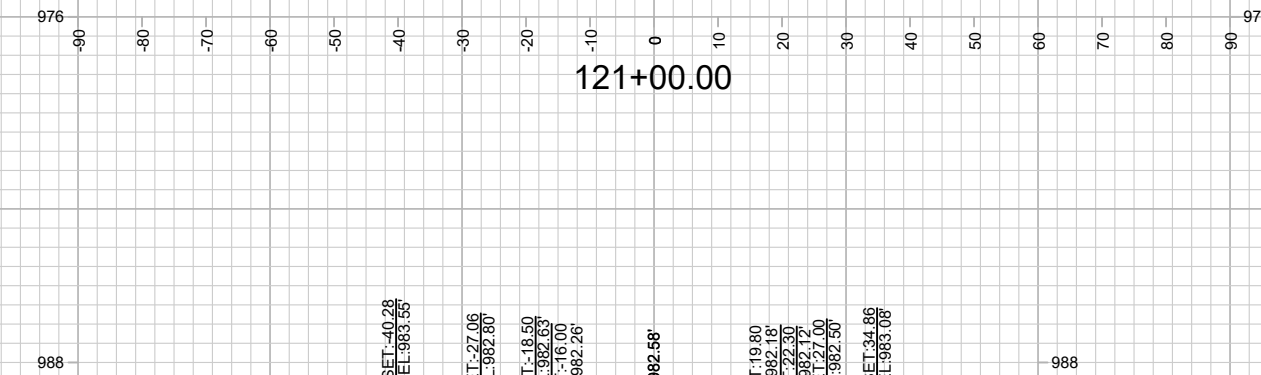
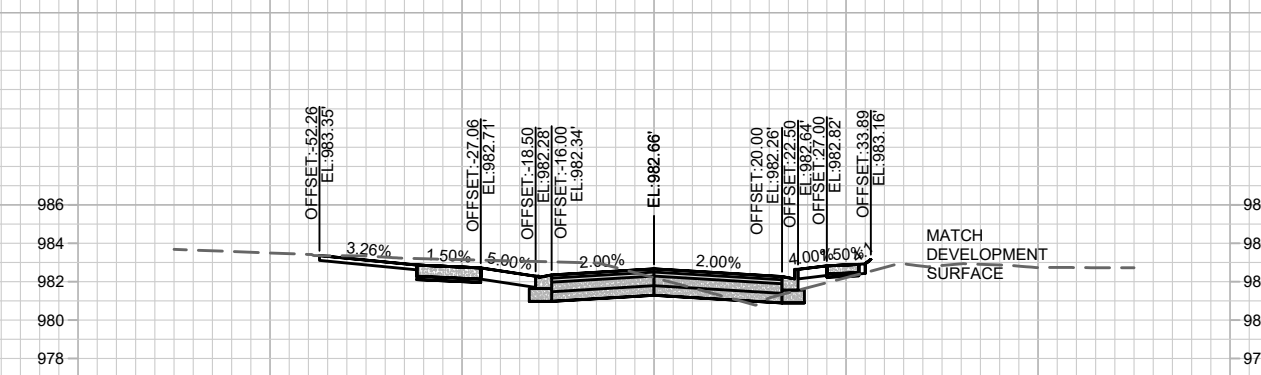
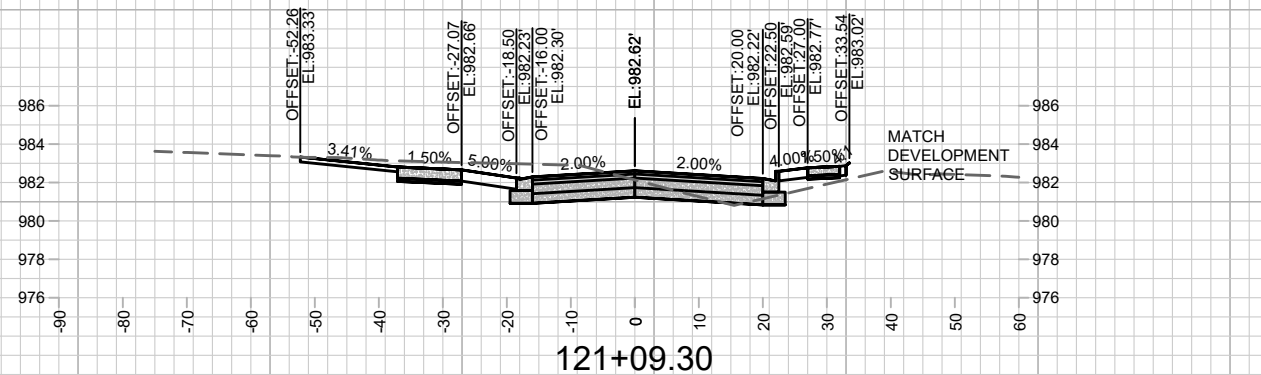
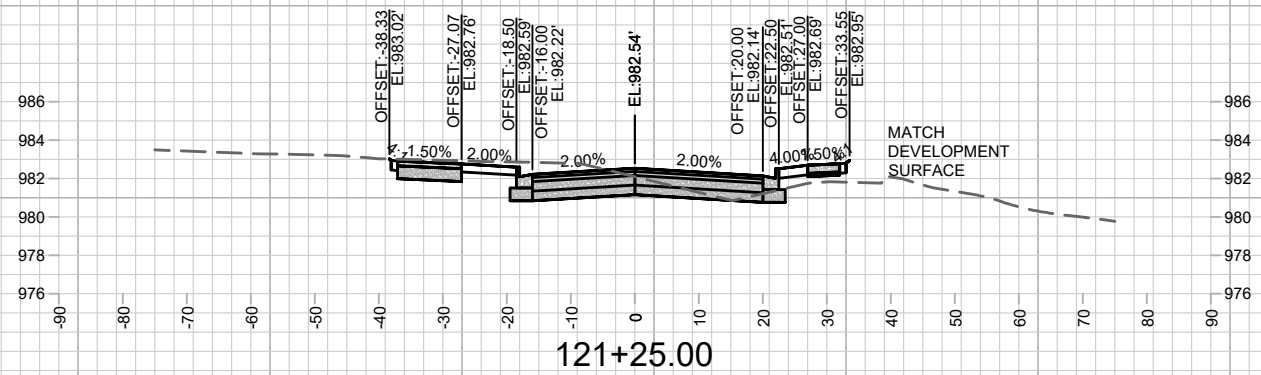
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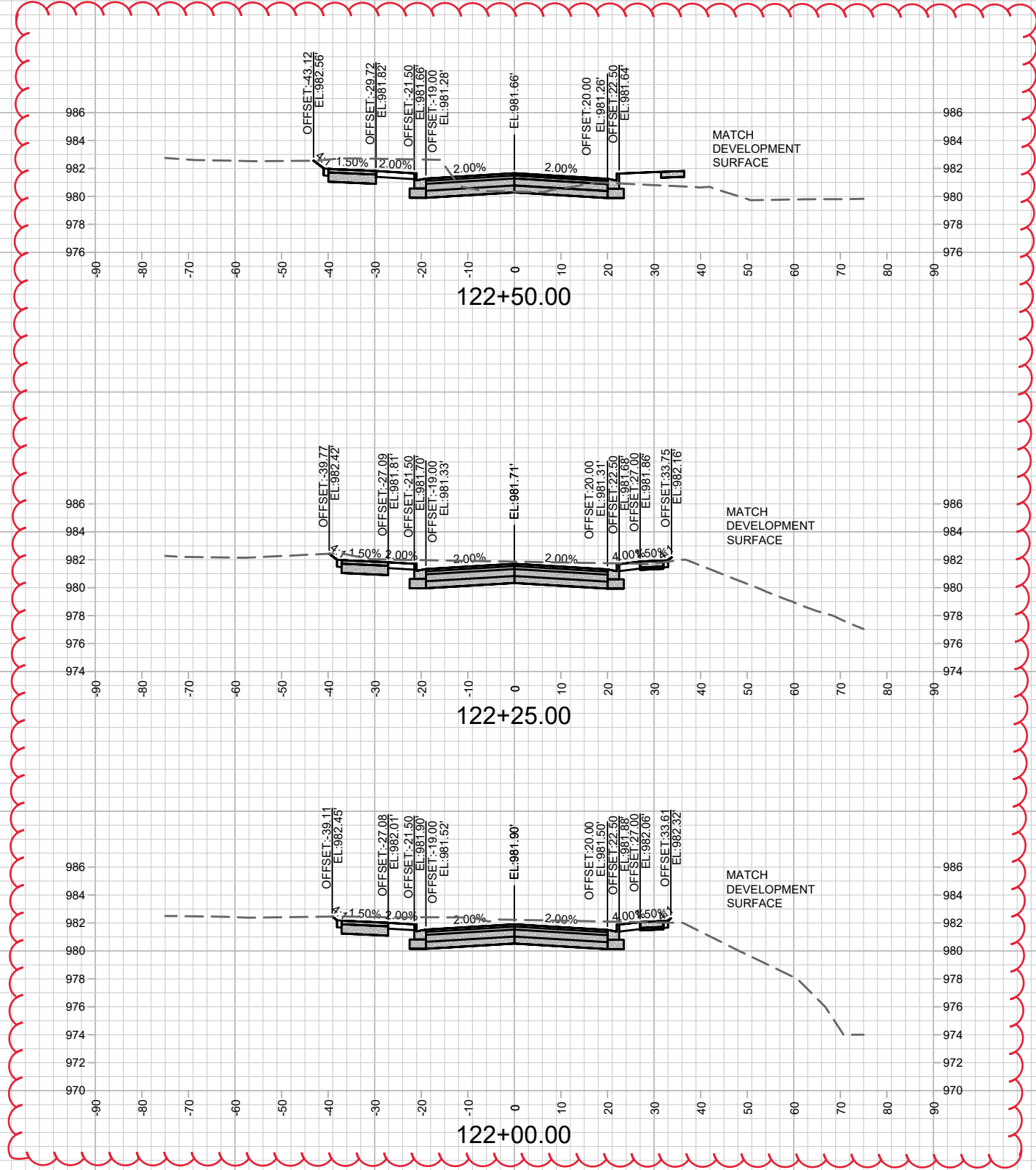


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SECTION E: BIDDERS ACKNOWLEDGEMENT

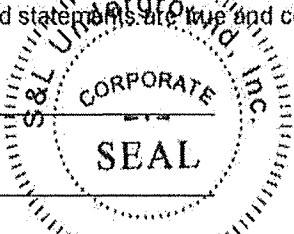
ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020
CONTRACT NO. 8498

Bidder must state a Unit Price and Total Bid for each item. The Total Bid for each item must be the product of quantity, by Unit Price. The Grand Total must be the sum of the Total Bids for the various items. In case of multiplication errors or addition errors, the Grand Total with corrected multiplication and/or addition shall determine the Grand Total bid for each contract. The Unit Price and Total Bid must be entered numerically in the spaces provided. All words and numbers shall be written in ink.

1. The undersigned having familiarized himself/herself with the Contract documents, including Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2020 Edition thereto, Form of Agreement, Form of Bond, and Addenda issued and attached to the plans and specifications on file in the office of the City Engineer, hereby proposes to provide and furnish all the labor, materials, tools, and expendable equipment necessary to perform and complete in a workmanlike manner the specified construction on this project for the City of Madison; all in accordance with the plans and specifications as prepared by the City Engineer, including Addenda Nos. 1 through 2 to the Contract, at the prices for said work as contained in this proposal. (Electronic bids submittals shall acknowledge addendum under Section E and shall not acknowledge here)
2. If awarded the Contract, we will initiate action within seven (7) days after notification or in accordance with the date specified in the contract to begin work and will proceed with diligence to bring the project to full completion within the number of work days allowed in the Contract or by the calendar date stated in the Contract.
3. The undersigned Bidder or Contractor certifies that he/she is not a party to any contract, combination in form of trust or otherwise, or conspiracy in restraint of trade or commerce or any other violation of the anti-trust laws of the State of Wisconsin or of the United States, with respect to this bid or contract or otherwise.
4. I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5. (IF BID BOND IS USED, IT SHALL BE SUBMITTED ON THE FORMS PROVIDED BY THE CITY. FAILURE TO DO SO MAY RESULT IN REJECTION OF THE BID).
5. I hereby certify that all statements herein are made on behalf of S&L Underground, Inc. (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of Wisconsin a partnership consisting of _____; an individual trading as _____ of the City of _____ State of _____; that I have examined and carefully prepared this Proposal, from the plans and specifications and have checked the same in detail before submitting this Proposal; that I have fully authority to make such statements and submit this Proposal in (its, their) behalf; and that the said statements are true and correct.

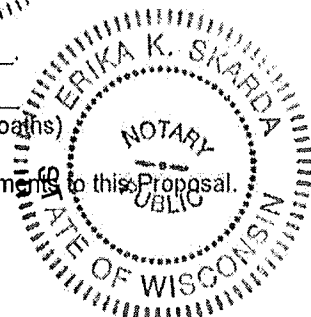
[Signature]
SIGNATURE

President
TITLE, IF ANY



Sworn and subscribed to before me this 19th day of November, 2020.

[Signature]
(Notary Public or other officer authorized to administer oaths)
My Commission Expires 2-11-2020
Bidders shall not add any conditions or qualifying statements to this Proposal.



Contract 8498 – S&L Underground, Inc.

Section F: Best Value Contracting (BVC)

This section is a required document for the bid to be considered complete. There are two methods for completing the Best Value Contracting (BVC) form. Method one: The form can be filled out online and submitted to this site to be included with your electronic bid. Method two: The form can be downloaded from the site and submitted by hand to the City of Madison.

Method of Submittal for BVC (click in box below to choose) *

I will submit Bid Express fillable online form (BVC).

Best Value Contracting

1. The Contractor shall indicate the non-apprenticeable trades used on this contract.

2. Madison General Ordinance (M.G.O.), 33.07(7), does provide for some exemptions from the active apprentice requirement. Apprenticeable trades are those trades considered apprenticeable by the State of Wisconsin. Please check applicable box if you are seeking an exemption.

- Contractor has a total skilled workforce of four or less individuals in all apprenticeable trades combined.
- No available trade training program; The Contractor has been rejected by the only available trade training program, or there is no trade training program within 90 miles.
- Contractor is not using an apprentice due to having a journey worker on layoff status, provided the journey worker was employed by the contractor in the past six months.
- First time contractor on City of Madison Public Works contract requests a onetime exemption but intends to comply on all future contracts and is taking steps typical of a "good faith" effort.
- Contractor has been in business less than one year.
- Contractor doesn't have enough journeyman trade workers to qualify for a trade training program in that respective trade.
- An exemption is granted in accordance with a time period of a "Documented Depression" as defined by the State of Wisconsin.

3. The Contractor shall indicate on the following section which apprenticeable trades are to be used on this contract. Compliance with active apprenticeship, to the extent required by M.G.O. 33.07(7), shall be satisfied by documentation from an applicable trade training body; an apprenticeship contract with the Wisconsin Department of Workforce Development or a similar agency in another state; or the U.S Department of Labor. This documentation is required prior to the Contractor beginning work on the project site.

The Contractor has reviewed the list and shall not use any apprenticeable trades on this project.

LIST APPRENTICABLE TRADES (check all that apply to your work to be performed on this contract)

- BRICKLAYER
- CARPENTER
- CEMENT MASON / CONCRETE FINISHER
- CEMENT MASON (HEAVY HIGHWAY)
- CONSTRUCTION CRAFT LABORER
- DATA COMMUNICATION INSTALLER
- ELECTRICIAN
- ENVIRONMENTAL SYSTEMS TECHNICIAN / HVAC SERVICE TECH/HVAC INSTALL / SERVICE
- GLAZIER
- HEAVY EQUIPMENT OPERATOR / OPERATING ENGINEER
- INSULATION WORKER (HEAT and FROST)
- IRON WORKER
- IRON WORKER (ASSEMBLER, METAL BLDGS)
- PAINTER and DECORATOR
- PLASTERER
- PLUMBER
- RESIDENTIAL ELECTRICIAN
- ROOFER and WATER PROOFER
- SHEET METAL WORKER
- SPRINKLER FITTER
- STEAMFITTER
- STEAMFITTER (REFRIGERATION)
- STEAMFITTER (SERVICE)
- TAPER and FINISHER
- TELECOMMUNICATIONS (VOICE, DATA and VIDEO) INSTALLER-TECHNICIAN
- TILE SETTER

ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020
CONTRACT NO. 8498

Small Business Enterprise Compliance Report

This information may be submitted electronically through
Bid Express or submitted with bid in sealed envelope.

Cover Sheet

Prime Bidder Information

Company: S + L Underground, Inc.
Address: W10440 Cty Rd K Lodi, WI 53555
Telephone Number: 608-592-0625 Fax Number: 608-592-3804
Contact Person/Title: Matt Kundert / Operations Manager

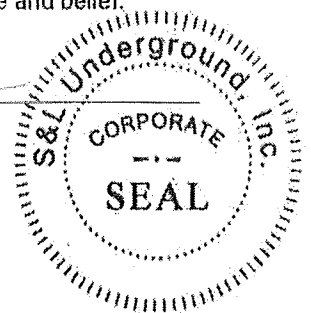
Prime Bidder Certification

I, Ben Larrabee President of
Name Title
S + L Underground, Inc. certify that the information
Company

contained in this SBE Compliance Report is true and correct to the best of my knowledge and belief.

[Signature]
Witness Signature
11/19/2020
Date

[Signature]
Bidder's Signature



**ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020
CONTRACT NO. 8498**

Small Business Enterprise Compliance Report

Summary Sheet

SBE Subcontractors Who Are NOT Suppliers

| Name(s) of SBEs Utilized | Type of Work | % of Total Bid Amount |
|--|--------------|-----------------------|
| ASTI Sawing Inc. | sawcutting | .02 % |
| JR's Construction + Landscaping | landscaping | 3.15 % |
| CA Brumm Trucking Inc. | trucking | 3.7 % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| Subtotal SBE who are NOT suppliers: | | <u>6.87</u> % |

SBE Subcontractors Who Are Suppliers

| Name(s) of SBEs Utilized | Type of Work | % of Total Bid Amount |
|--|--|-----------------------|
| Utility Sales + Supply Inc. | Railing | 2.34 % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| Subtotal Contractors who are suppliers: | <u>2.34</u> % x 0.6 = <u>1.4</u> % (discounted to 60%) | |
| Total Percentage of SBE Utilization: | <u>8.27</u> % | |

ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020

CONTRACT NO. 8498

DATE: 12/3/2020

S&L Underground, Inc.

| Item | Quantity | Price | Extension |
|---|----------|-------------|-------------|
| Section B: Proposal Page | | | |
| 10701 - TRAFFIC CONTROL - LUMP SUM | 1.00 | \$3,900.00 | \$3,900.00 |
| 10912 - MOBILIZATION - LUMP SUM | 1.00 | \$41,500.00 | \$41,500.00 |
| 20101 - EXCAVATION CUT - C.Y. | 8500.00 | \$5.35 | \$45,475.00 |
| 20130 - UNDERDRAIN - L.F. | 1470.00 | \$14.10 | \$20,727.00 |
| 20202 - FILL BORROW - C.Y. | 1600.00 | \$7.60 | \$12,160.00 |
| 20219 - BREAKER RUN - TON | 3100.00 | \$12.60 | \$39,060.00 |
| 20221 - TOPSOIL - S.Y. | 7000.00 | \$4.90 | \$34,300.00 |
| 20303 - SAWCUT BITUMINOUS PAVEMENT, FULL DEPTH - L.F. | 259.00 | \$1.40 | \$362.60 |
| 20322 - REMOVE CONCRETE CURB & GUTTER - L.F. | 120.00 | \$2.90 | \$348.00 |
| 20323 - REMOVE CONCRETE SIDEWALK & DRIVE - S.F. | 1350.00 | \$2.50 | \$3,375.00 |
| 20326 - REMOVE FENCE - L.F. | 300.00 | \$5.00 | \$1,500.00 |
| 20404 - CLEARING - L.S. | 1.00 | \$3,350.00 | \$3,350.00 |
| 20409 - GRUBBING - L.S. | 1.00 | \$3,350.00 | \$3,350.00 |
| 20701 - TERRACE SEEDING - S.Y. | 7000.00 | \$1.25 | \$8,750.00 |
| 21063 - EROSION MATTING, CLASS I, TYPE A - ORGANIC - S.Y. | 7000.00 | \$2.80 | \$19,600.00 |
| 30201 - TYPE 'A' CONCRETE CURB & GUTTER - L.F. | 5000.00 | \$14.75 | \$73,750.00 |
| 30301 - 5" CONCRETE SIDEWALK - S.F. | 12640.00 | \$3.65 | \$46,136.00 |
| 30302 - 7" CONCRETE SIDEWALK AND DRIVE - S.F. | 3100.00 | \$6.75 | \$20,925.00 |
| 30208 - HAND FORMED CONCRETE CURB & GUTTER - L.F. | 100.00 | \$41.00 | \$4,100.00 |
| 30340 - CURB RAMP DETECTABLE WARNING FIELD - S.F. | 160.00 | \$30.30 | \$4,848.00 |
| 40101 - CRUSHED AGGREGATE BASE COURSE GRADATION NO. 1 - TON | 3900.00 | \$16.40 | \$63,960.00 |
| 40201 - HMA PAVEMENT 3 LT 58-28 S - TON | 1400.00 | \$63.89 | \$89,446.00 |
| 40202 - HMA PAVEMENT 4 LT 58-28 S - TON | 1100.00 | \$66.77 | \$73,447.00 |
| 40218 - TACK COAT - GAL | 600.00 | \$2.02 | \$1,212.00 |
| 40301 - FULL WIDTH GRINDING - S.Y. | 200.00 | \$10.90 | \$2,180.00 |
| 40231 - ASPHALT DRIVE & TERRACE - S.Y. | 140.00 | \$21.60 | \$3,024.00 |
| 60801 - PAVEMENT MARKING EPOXY, DOUBLE LINE, 4-INCH - L.F. | 1850.00 | \$2.65 | \$4,902.50 |
| 60802 - PAVEMENT MARKING EPOXY, LINE, 6-INCH - L.F. | 500.00 | \$1.60 | \$800.00 |
| 60803 - PAVEMENT MARKING EPOXY, LINE, 8-INCH - L.F. | 175.00 | \$2.65 | \$463.75 |
| 60812 - PAVEMENT MARKING EPOXY, CROSSWALK, 6-INCH - L.F. | 400.00 | \$8.75 | \$3,500.00 |
| 60814 - PAVEMENT MARKING EPOXY, CROSSWALK, 12-INCH - L.F. | 125.00 | \$9.75 | \$1,218.75 |
| 60816 - PAVEMENT MARKING EPOXY, CONTINENTAL CROSSWALK, 18-INCH - L.F. | 350.00 | \$12.00 | \$4,200.00 |
| 60818 - PAVEMENT MARKING EPOXY, STOP LINE, 24-INCH - L.F. | 75.00 | \$12.50 | \$937.50 |
| 60829 - PAVEMENT MARKING EPOXY, SYMBOL, LEFT ARROW - EACH | 1.00 | \$220.00 | \$220.00 |
| 60830 - PAVEMENT MARKING EPOXY, SYMBOL, RIGHT ARROW - EACH | 1.00 | \$220.00 | \$220.00 |
| 60881 - PAVEMENT MARKING REMOVAL, 6-INCH - L.F. | 350.00 | \$1.50 | \$525.00 |
| 60886 - PAVEMENT MARKING REMOVAL, 4" DOUBLE LINE - L.F. | 200.00 | \$1.50 | \$300.00 |
| 90001 - GEOSYNTHETIC REINFORCEMENT FABRIC - S.Y. | 5500.00 | \$5.30 | \$29,150.00 |
| 90002 - RESHAPING SELECT FILL - L.S. | 1.00 | \$2,030.00 | \$2,030.00 |
| 90003 - REMOVE PERMANENT TYPE III BARRICADE - EACH | 3.00 | \$126.00 | \$378.00 |
| 90004 - REMOVE SIGN - EACH | 2.00 | \$190.00 | \$380.00 |
| 90005 - MAINTAIN DRIVEWAY ACCESS - Each | 1.00 | \$910.00 | \$910.00 |
| 90006 - CONSTRUCTION FENCING - L.F. | 500.00 | \$4.00 | \$2,000.00 |
| 90007 - TEMPORARY PEDESTRIAN SURFACE - S.F. | 4000.00 | \$2.00 | \$8,000.00 |
| 40236 - ASPHALT WALK & BIKEPATH - TON | 500.00 | \$75.15 | \$37,575.00 |
| 20109 - FINISH GRADING - L.S. | 1.00 | \$1,100.00 | \$1,100.00 |
| 20217 - CLEAR STONE - TON | 460.00 | \$15.40 | \$7,084.00 |
| 20705 - DETENTION BASIN SEEDING - S.Y. | 30.00 | \$10.00 | \$300.00 |
| 21001 - EROSION CONTROL PLAN & IMPLEMENTATION - LUMP SUM | 1.00 | \$861.00 | \$861.00 |
| 21011 - CONSTRUCTION ENTRANCE - EACH | 2.00 | \$982.00 | \$1,964.00 |
| 21013 - STREET SWEEPING - LUMP SUM | 1.00 | \$1,400.00 | \$1,400.00 |

ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020

CONTRACT NO. 8498

DATE: 12/3/2020

S&L Underground, Inc.

| Item | Quantity | Price | Extension |
|---|----------|-------------|----------------|
| 21014 - CLEAR STONE BERM (DITCH CHECK) - EACH | 20.00 | \$253.00 | \$5,060.00 |
| 21021 - SILT FENCE - COMPLETE - L.F. | 900.00 | \$3.00 | \$2,700.00 |
| 21056 - INLET PROTECTION TYPE D HYBRID - PROVIDE & INSTALL - EACH | 22.00 | \$280.00 | \$6,160.00 |
| 21057 - INLET PROTECTION TYPE D HYBRID - MAINTAIN - EACH | 22.00 | \$65.00 | \$1,430.00 |
| 21058 - INLET PROTECTION TYPE D HYBRID - REMOVE - EACH | 22.00 | \$25.00 | \$550.00 |
| 21073 - EROSION MATTING, CLASS II, TYPE C - ORGANIC - S.Y. | 30.00 | \$10.00 | \$300.00 |
| 50401 - 12 INCH RCP STORM SEWER PIPE - L.F. | 397.00 | \$51.00 | \$20,247.00 |
| 50741 - TYPE H INLET - EACH | 11.00 | \$2,615.00 | \$28,765.00 |
| 20236 - HEAVY RIPRAP - GLACIAL FIELD STONE - TON | 370.00 | \$69.00 | \$25,530.00 |
| 50211 - SELECT BACKFILL FOR STORM SEWER - T.F. | 1179.00 | \$0.01 | \$11.79 |
| 50402 - 15 INCH RCP STORM SEWER PIPE - L.F. | 305.00 | \$55.00 | \$16,775.00 |
| 50403 - 18 INCH RCP STORM SEWER PIPE - L.F. | 297.00 | \$55.60 | \$16,513.20 |
| 50405 - 24 INCH RCP STORM SEWER PIPE - L.F. | 38.00 | \$77.90 | \$2,960.20 |
| 50406 - 27 INCH RCP STORM SEWER PIPE - L.F. | 142.00 | \$72.00 | \$10,224.00 |
| 50463 - 18 INCH RCP AE - EACH | 1.00 | \$832.00 | \$832.00 |
| 50603 - 18 INCH RCP AE GATE - EACH | 1.00 | \$353.00 | \$353.00 |
| 50465 - 24 INCH RCP AE - EACH | 1.00 | \$954.00 | \$954.00 |
| 50501 - PRECAST REINFORCED CONCRETE BOX CULVERT (12' SPAN X 5' RISE) - L.F. | 540.00 | \$932.00 | \$503,280.00 |
| 50605 - 24 INCH RCP AE GATE - EACH | 1.00 | \$490.00 | \$490.00 |
| 50723 - 3'X3' STORM SAS - EACH | 4.00 | \$4,060.00 | \$16,240.00 |
| 50725 - 5'X5' STORM SAS - EACH | 1.00 | \$6,740.00 | \$6,740.00 |
| 50767 - TERRACE INLET TYPE II - EACH | 1.00 | \$6,667.00 | \$6,667.00 |
| 50792 - STORM SEWER TAP - EACH | 1.00 | \$895.00 | \$895.00 |
| 50801 - UTILITY LINE OPENING (ULO) - EACH | 7.00 | \$676.00 | \$4,732.00 |
| 90030 - REINFORCED CONCRETE BOX CULVERT WINGWALLS - EACH | 2.00 | \$34,760.00 | \$69,520.00 |
| 90031 - CULVERT RAILINGS - L.F. | 210.00 | \$271.00 | \$56,910.00 |
| 90032 - REMOVE CHANNEL PLUG - L.S. | 1.00 | \$1,940.00 | \$1,940.00 |
| 90033 - STORM CONTROL PLAN AND IMPLEMENTATION - L.S. | 1.00 | \$1,724.00 | \$1,724.00 |
| 90034 - TOPSOIL INSTALLATION FOR SPECIAL PLANTINGS - S.Y. | 30.00 | \$15.00 | \$450.00 |
| 90035 - 27 INCH PIPE GRATE - EACH | 1.00 | \$1,892.00 | \$1,892.00 |
| 50103 - RECONSTRUCT BENCH AND FLOWLINES - EACH | 1.00 | \$746.00 | \$746.00 |
| 50202 - TYPE II DEWATERING - L.S. | 1.00 | \$0.01 | \$0.01 |
| 50212 - SELECT FILL FOR SANITARY SEWER MAIN - T.F. | 167.00 | \$0.01 | \$1.67 |
| 50301 - 8" PVC SANITARY SEWER PIPE SDR-35/SDR-26 - L.F. | 77.00 | \$153.00 | \$11,781.00 |
| 50353 - SANITARY SEWER LATERAL SDR-35/SDR-26 - L.F. | 90.00 | \$124.00 | \$11,160.00 |
| 50390 - SEWER ELECTRONIC MARKERS - EACH | 5.00 | \$80.00 | \$400.00 |
| 50701 - 4' DIAMETER SAS - EACH | 1.00 | \$3,928.00 | \$3,928.00 |
| 50771 - INTERNAL CHIMNEY SEAL - EACH | 1.00 | \$444.00 | \$444.00 |
| 50791 - SANITARY SEWER TAP - EACH | 2.00 | \$1,498.00 | \$2,996.00 |
| 50797 - EXTERNAL SEWER ACCESS STRUCTURE JOINT SEAL - EACH | 3.00 | \$264.00 | \$792.00 |
| 20241 - RIPRAP FILTER FABRIC, TYPE HR - S.Y. | 1415.00 | \$2.40 | \$3,396.00 |
| 20205 - SELECT FILL - C.Y. | 2800.00 | \$17.20 | \$48,160.00 |
| 40102 - CRUSHED AGGREGATE BASE COURSE GRADATION NO. 2 - TON | 6400.00 | \$13.85 | \$88,640.00 |
| 94 Items | Totals | | \$1,714,494.97 |

SECTION G: BID BOND

LET ALL KNOW BY THESE DOCUMENTS PRESENTED, THAT Principal and Surety, as identified below, are held and firmly bound unto the City of Madison, (hereinafter referred to as the "Obligee"), in the sum of five per cent (5%) of the amount of the total bid or bids of the Principal herein accepted by the Obligee, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that, whereas the Principal has submitted, to the City of Madison a certain bid, including the related alternate, and substitute bids attached hereto and hereby made a part hereof, to enter into a contract in writing for the construction of:

ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020 CONTRACT NO. 8498

1. If said bid is rejected by the Obligee, then this obligation shall be void.
2. If said bid is accepted by the Obligee and the Principal shall execute and deliver a contract in the form specified by the Obligee (properly completed in accordance with said bid) and shall furnish a bond for his/her faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void.

If said bid is accepted by the Obligee and the Principal shall fail to execute and deliver the contract and the performance and payment bond noted in 2. above executed by this Surety, or other Surety approved by the City of Madison, all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to forfeit to the Obligee as liquidated damages the sum mentioned above, it being understood that the liability of the Surety for any and all claims hereunder shall in no event exceed the sum of this obligation as stated, and it is further understood that the Principal and Surety reserve the right to recover from the Obligee that portion of the forfeited sum which exceed the actual liquidated damages incurred by the Obligee.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by an extension of the time within which the Obligee may accept such bid, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year set forth below.

Seal PRINCIPAL

S & L Underground, Inc.

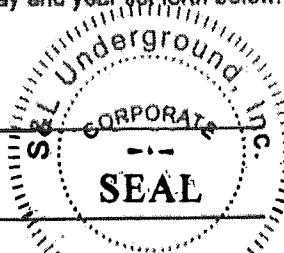
Name of Principal

Ben Larrabee

By

Ben Larrabee, President

Name and Title



11/19/2020
Date

Seal SURETY

Granite Re, Inc.

Name of Surety

Eliot Motu

By

Eliot Motu, Attorney-in-Fact

Name and Title

11/12/2020

Date

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Provider No. 19354385 for the year 2020, and appointed as attorney in fact with authority to execute this bid bond and the payment and performance bond referred to above, which power of attorney has **not** been revoked.

11/12/2020

Date

Eliot Motu
Agent Signature Eliot Motu

P.O. box 465

Address

Hudson, WI 54016

City, State and Zip Code

800-535-0006

Telephone Number

NOTE TO SURETY & PRINCIPAL

The bid submitted which this bond guarantees shall be rejected if the following instrument is not attached to this bond:

Power of Attorney showing that the agent of Surety is currently authorized to execute bonds on behalf of the Surety, and in the amounts referenced above.

GRANITE RE, INC.
GENERAL POWER OF ATTORNEY

Know all Men by these Presents:

That GRANITE RE, INC., a corporation organized and existing under the laws of the State of MINNESOTA and having its principal office at the City of OKLAHOMA CITY in the State of OKLAHOMA does hereby constitute and appoint:

MICHAEL J. DOUGLAS; CHRIS STEINAGEL; CHRISTOPHER M. KEMP; KARLA HEFFRON; ROBERT DOWNEY; CONNIE SMITH; KORY MORTEL; ELIOT MOTU its true and lawful Attorney-in-Fact(s) for the following purposes, to wit:

To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said GRANITE RE, INC. a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said GRANITE RE, INC. through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said:

MICHAEL J. DOUGLAS; CHRIS STEINAGEL; CHRISTOPHER M. KEMP; KARLA HEFFRON; ROBERT DOWNEY; CONNIE SMITH; KORY MORTEL; ELIOT MOTU may lawfully do in the premises by virtue of these presents.

In Witness Whereof, the said GRANITE RE, INC. has caused this Instrument to be sealed with its corporate seal, duly attested by the signatures of its President and Secretary/Treasurer, this 3rd day of January, 2020.

STATE OF OKLAHOMA)
) SS:
COUNTY OF OKLAHOMA)



Kenneth D. Whittington
Kenneth D. Whittington, President
Kyle P. McDonald
Kyle P. McDonald, Treasurer

On this 3rd day of January, 2020, before me personally came Kenneth D. Whittington, President of the GRANITE RE, INC. Company and Kyle P. McDonald, Secretary/Treasurer of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said, that they, the said Kenneth D. Whittington and Kyle P. McDonald were respectively the President and the Secretary/Treasurer of GRANITE RE, INC., the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their name thereto by like order as President and Secretary/Treasurer, respectively, of the Company.

My Commission Expires:
August 8, 2021
Commission #: 01013257



Amber E. Carlson
Notary Public

GRANITE RE, INC.
Certificate

THE UNDERSIGNED, being the duly elected and acting Secretary/Treasurer of Granite Re, Inc., a Minnesota Corporation, HEREBY CERTIFIES that the following resolution is a true and correct excerpt from the July 15, 1987, minutes of the meeting of the Board of Directors of Granite Re, Inc. and that said Power of Attorney has not been revoked and is now in full force and effect.

"RESOLVED, that the President, any Vice President, the Secretary, and any Assistant Vice President shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

IN WITNESS WHEREOF, the undersigned has subscribed this Certificate and affixed the corporate seal of the Corporation this 11 day of Nov, 2020.



Kyle P. McDonald
Kyle P. McDonald, Secretary/Treasurer

SECTION H: AGREEMENT

THIS AGREEMENT made this 6th day of January in the year Two Thousand and Twenty-One between S&L UNDERGROUND, INC. hereinafter called the Contractor, and the City of Madison, Wisconsin, hereinafter called the City.

WHEREAS, the Common Council of the said City of Madison under the provisions of a resolution adopted JANUARY 5, 2021, and by virtue of authority vested in the said Council, has awarded to the Contractor the work of performing certain construction.

NOW, THEREFORE, the Contractor and the City, for the consideration hereinafter named, agree as follows:

1. **Scope of Work.** The Contractor shall, perform the construction, execution and completion of the following listed complete work or improvement in full compliance with the Plans, Specifications, Standard Specifications, Supplemental Specifications, Special Provisions and contract; perform all items of work covered or stipulated in the proposal; perform all altered or extra work; and shall furnish, unless otherwise provided in the contract, all materials, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to the prosecution and completion of the work or improvements:

ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020 CONTRACT NO. 8498

2. **Completion Date/Contract Time.** Construction work must begin within seven (7) calendar days after the date appearing on mailed written notice to do so shall have been sent to the Contractor and shall be carried on at a rate so as to secure full completion SEE SPECIAL PROVISIONS, the rate of progress and the time of completion being essential conditions of this Agreement.
3. **Contract Price.** The City shall pay to the Contractor at the times, in the manner and on the conditions set forth in said specifications, the sum of ONE MILLION SEVEN HUNDRED FOURTEEN THOUSAND FOUR HUNDRED NINETY-FOUR AND 97/100 (\$1,714,494.97) Dollars being the amount bid by such Contractor and which was awarded to him/her as provided by law.
4. **Affirmative Action.** In the performance of the services under this Agreement the Contractor agrees not to discriminate against any employee or applicant because of race, religion, marital status, age, color, sex, disability, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs, or student status. The Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

The Contractor agrees that within thirty (30) days after the effective date of this agreement, the Contractor will provide to the City Affirmative Action Division certain workforce utilization statistics, using a form to be furnished by the City.

If the contract is still in effect, or if the City enters into a new agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the City Affirmative Action Division no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this contract, it will notify the City Affirmative Action Division of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications and application procedures

and deadlines. The Contractor agrees to interview and consider candidates referred by the Affirmative Action Division if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date started in the notice.

Articles of Agreement
Article I

The Contractor shall take affirmative action in accordance with the provisions of this contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin and that the employer shall provide harassment free work environment for the realization of the potential of each employee. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training including apprenticeship insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this contract.

Article II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractors state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin.

Article III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided by the City advising the labor union or worker's representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

Article V

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works contractors in a form approved by the Affirmative Action Division Manager.

Article VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City Affirmative Action Division with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

Article VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action Provisions of this contract or Section 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

1. Cancel, terminate or suspend this Contract in whole or in part.

2. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.
3. Recover on behalf of the City from the prime Contractor 0.5 percent of the contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the contract price, or ten thousand dollars (\$10,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the non-complying subcontractor.

Article VIII

The Contractor shall include the above provisions of this contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

Article IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this contract. (In federally funded contracts the terms "DBE, MBE and WBE" shall be substituted for the term "small business" in this Article.)

5. Substance Abuse Prevention Program Required. Prior to commencing work on the Contract, the Contractor, and any Subcontractor, shall have in place a written program for the prevention of substance abuse among its employees as required under Wis. Stat. Sec. 103.503.
6. **Contractor Hiring Practices.**

Ban the Box - Arrest and Criminal Background Checks. (Sec. 39.08, MGO)

This provision applies to all prime contractors on contracts entered into on or after January 1, 2016, and all subcontractors who are required to meet prequalification requirements under MGO 33.07(7)(l), MGO as of the first time they seek or renew pre-qualification status on or after January 1, 2016. The City will monitor compliance of subcontractors through the pre-qualification process.

- a. **Definitions.** For purposes of this section, "Arrest and Conviction Record" includes, but is not limited to, information indicating that a person has been questioned, apprehended, taken into custody or detention, held for investigation, arrested, charged with, indicted or tried for any felony, misdemeanor or other offense pursuant to any law enforcement or military authority.

"Conviction record" includes, but is not limited to, information indicating that a person has been convicted of a felony, misdemeanor or other offense, placed on probation, fined, imprisoned or paroled pursuant to any law enforcement or military authority.

"Background Check" means the process of checking an applicant's arrest and conviction record, through any means.

- b. **Requirements.** For the duration of this Contract, the Contractor shall:
 1. Remove from all job application forms any questions, check boxes, or other inquiries regarding an applicant's arrest and conviction record, as defined herein.

2. Refrain from asking an applicant in any manner about their arrest or conviction record until after conditional offer of employment is made to the applicant in question.
3. Refrain from conducting a formal or informal background check or making any other inquiry using any privately or publicly available means of obtaining the arrest or conviction record of an applicant until after a conditional offer of employment is made to the applicant in question.
4. Make information about this ordinance available to applicants and existing employees, and post notices in prominent locations at the workplace with information about the ordinance and complaint procedure using language provided by the City.
5. Comply with all other provisions of Sec. 39.08, MGO.

c. Exemptions: This section shall not apply when:

1. Hiring for a position where certain convictions or violations are a bar to employment in that position under applicable law, or
2. Hiring a position for which information about criminal or arrest record, or a background check is required by law to be performed at a time or in a manner that would otherwise be prohibited by this ordinance, including a licensed trade or profession where the licensing authority explicitly authorizes or requires the inquiry in question.

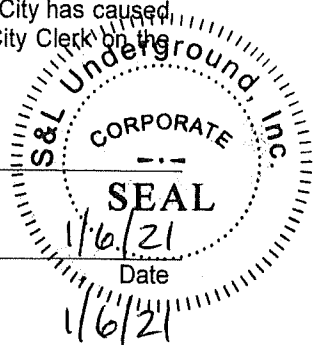
To be exempt, Contractor has the burden of demonstrating that there is an applicable law or regulation that requires the hiring practice in question, if so, the contractor is exempt from all of the requirements of this ordinance for the position(s) in question.

**ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020
CONTRACT NO. 8498**

IN WITNESS WHEREOF, the Contractor has hereunto set his/her hand and seal and the City has caused this contract to be sealed with its corporate seal and to be executed by its Mayor and City Clerk on the dates written below.

Countersigned:

S&L UNDERGROUND, INC.



Erika Steele 1/6/2021
Witness Date

Erika Steele 1/6/2021
Witness Date

Company Name

[Signature] 1/6/21
President Date

[Signature] 1/6/21
Secretary Date

CITY OF MADISON, WISCONSIN

Provisions have been made to pay the liability that will accrue under this contract.

Approved as to form:

[Signature] 01/28/2021
Finance Director Date

[Signature] 2/2/2021
Witness Date

[Signature] 01/22/21
Witness Date

[Signature] 2/11/2021
City Attorney Date

[Signature] 2/11/2021
Mayor Date

[Signature] 1-22-2021
City Clerk Date

SECTION I: PAYMENT AND PERFORMANCE BOND

LET ALL KNOW BY THESE DOCUMENTS PRESENTED, that we S&L UNDERGROUND, INC. as principal, and Granite Re, Inc.

Company of Minnesota as surety, are held and firmly bound unto the City of Madison, Wisconsin, in the sum of ONE MILLION SEVEN HUNDRED FOURTEEN THOUSAND FOUR HUNDRED NINETY-FOUR AND 97/100 (\$1,714,494.97) Dollars, lawful money of the United States, for the payment of which sum to the City of Madison, we hereby bind ourselves and our respective executors and administrators firmly by these presents.

The condition of this Bond is such that if the above bounden shall on his/her part fully and faithfully perform all of the terms of the Contract entered into between him/herself and the City of Madison for the construction of:

ROCKSTREAM DRIVE ASSESSMENT DISTRICT - 2020
CONTRACT NO. 8498

in Madison, Wisconsin, and shall pay all claims for labor performed and material furnished in the prosecution of said work, and save the City harmless from all claims for damages because of negligence in the prosecution of said work, and shall save harmless the said City from all claims for compensation (under Chapter 102, Wisconsin Statutes) of employees and employees of subcontractor, then this Bond is to be void, otherwise of full force, virtue and effect.

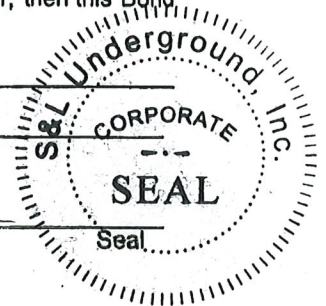
Signed and sealed this 6th day of January, 2021

Countersigned:

S&L UNDERGROUND, INC.
Company Name (Principal)

Erika Slecker
Witness
Danaseo
Secretary

B. J. [Signature]
President



Approved as to form:

Granite Re, Inc.

Surety Seal
 Salary Employee Commission

Michael Haas
City Attorney

By Eliot Motu
Attorney-in-Fact Eliot Motu

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under National Producer Number 19354385 for the year 2021, and appointed as attorney-in-fact with authority to execute this payment and performance bond which power of attorney has not been revoked.

01/06/2021
Date

Eliot Motu
Agent Signature Eliot Motu

GRANITE RE, INC.
GENERAL POWER OF ATTORNEY

Know all Men by these Presents:

That GRANITE RE, INC., a corporation organized and existing under the laws of the State of MINNESOTA and having its principal office at the City of OKLAHOMA CITY in the State of OKLAHOMA does hereby constitute and appoint:

MICHAEL J. DOUGLAS; CHRIS STEINAGEL; CHRISTOPHER M. KEMP; KARLA HEFFRON; ROBERT DOWNEY; CONNIE SMITH; KORY MORTEL; ELIOT MOTU its true and lawful Attorney-in-Fact(s) for the following purposes, to wit:

To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said GRANITE RE, INC. a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said GRANITE RE, INC. through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said:

MICHAEL J. DOUGLAS; CHRIS STEINAGEL; CHRISTOPHER M. KEMP; KARLA HEFFRON; ROBERT DOWNEY; CONNIE SMITH; KORY MORTEL; ELIOT MOTU may lawfully do in the premises by virtue of these presents.


In Witness Whereof, the said GRANITE RE, INC. has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its President and Secretary/Treasurer, this 3rd day of January, 2020.

STATE OF OKLAHOMA)
) SS:
COUNTY OF OKLAHOMA)





Kenneth D. Whittington, President




Kyle P. McDonald, Treasurer

On this 3rd day of January, 2020, before me personally came Kenneth D. Whittington, President of the GRANITE RE, INC. Company and Kyle P. McDonald, Secretary/Treasurer of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said, that they, the said Kenneth D. Whittington and Kyle P. McDonald were respectively the President and the Secretary/Treasurer of GRANITE RE, INC., the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their name thereto by like order as President and Secretary/Treasurer, respectively, of the Company.

My Commission Expires:
August 8, 2021
Commission #: 01013257





Notary Public

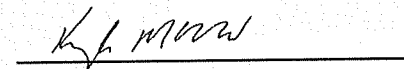
GRANITE RE, INC.
Certificate

THE UNDERSIGNED, being the duly elected and acting Secretary/Treasurer of Granite Re, Inc., a Minnesota Corporation, HEREBY CERTIFIES that the following resolution is a true and correct excerpt from the July 15, 1987, minutes of the meeting of the Board of Directors of Granite Re, Inc. and that said Power of Attorney has not been revoked and is now in full force and effect.

"RESOLVED, that the President, any Vice President, the Secretary, and any Assistant Vice President shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

IN WITNESS WHEREOF, the undersigned has subscribed this Certificate and affixed the corporate seal of the Corporation this 6 day of JAN, 2020





Kyle P. McDonald, Secretary/Treasurer