CITY OF DUBLIN, FRANKLIN COUNTY, OHIO **PLAN**

EARLINGTON PARK DRAINAGE BASIN IMPROVEMENTS

2025

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BENCH MARKS

(NAVD 1988)

ource BM N39RESET	Aluminum disk in the top of the south end abutment of Brand Road bridge WAS-44-2.09 over North Fork Indian Run, 0.20 miles northwest of Coffman Road, 19.5 feet south of the centerline.
	Northing = 772935
HI-29	Aluminum disk in the southwest wingwall of Brand Road bridge WAS 44—1.82, 0.10 miles northwest of Earlington Parkway/Brandonway Drive, 17.2 feet south of the centerline.
	Northing = 773978
BM#8	Chiseled "X" on the east flange of a fire hydrant located on the southwest side of Brand Road, being the first fire hydrant (75 feet) northwest of the intersection with Earlington Parkway.
	Northing = 773622 Easting = 1790407 Elev. = 890.30
BM#10	Chiseled "X" on the east flange bolt of a fire hydrant located on the southwest side of Brand Road, being the first fire hydrant (290 feet) southeast of the driveway to residence #5545.
	Northing = 774323
BM#11	Chiseled "X" on the northwest flange bolt of a fire hydrant located on the east side of Bristol Parkway being the first hydrant (220 feet) north of the

Northing = 774919

Easting = 1788772

Wyandot Elementary School

> INDEX MAP Scale: 1" = 200'

GRAPHIC SCALE 1 inch = 200 feet

STANDARD CONSTRUCTION DRAWINGS

The Standard Construction Drawings listed on these plans are to be

The Standard		gs listed on these plans part thereof.
City of Columbus	City of Dublin (2024 Edition)	ODOT
AA-S102	RD-01	CB-2.5
AA-S106	RD-02	CB-2.6
AA-S107	RD-05	HW-1
AA-S112	RD-06	
AA-S117	ST-01	
AA-S119	ST-03	
AA-S133B	ST-05	
AA-S139		
AA-S149		
AA-S150		
AA-S151		
AA-S168		
AA-S169		

OWNER CITY OF DUBLIN 6555 SHIER RINGS ROAD

DUBLIN, OHIO 43016 Tel: (614) 410-4740

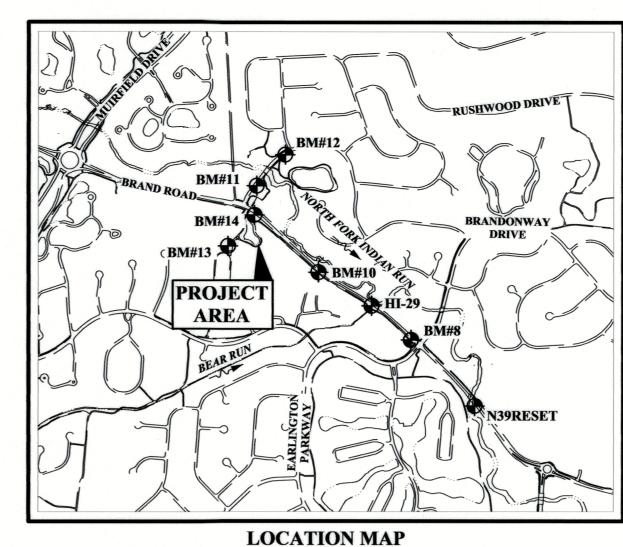












K DRAINAGE EMENTS

SHAWN W. ARDEN E-71554

JUNE 2025

AS NOTED

JOB NO. 2024-0677

GENERAL The requirements of the City of Dublin General Conditions, Division 100, together with the most current version of the City of Columbus Construction and Material Specifications (CMSC) and the Ohio Department of Transportation Construction and Material Specification (ODOT CMS), including all supplements thereto, shall govern construction items unless otherwise noted. Item Numbers listed refer to City of Columbus Item Numbers unless otherwise noted. In case of any conflict among these technical specifications, the greater requirement, as determined by the City of Dublin, shall take precedence.

The City Engineer will not be responsible for means, methods, procedures, techniques, or sequences of construction that are not specified herein. The City Engineer will not be responsible for safety on the work site, or for failure by the Contractor to perform work according to contract documents.

The Contractor shall notify the City of Dublin Division of Engineering in writing at least 14 days prior to beginning construction.

The Contractor shall be solely responsible for complying with all federal, state, and local safety requirements including the Occupational Safety and Health Act of 1970. The Contractor shall exercise precaution always for the protection of persons (including employees) and property. It shall also be the sole responsibility of the Contractor to initiate, maintain, and supervise all safety requirements, precautions and programs in connection with the work, including the requirements for confined spaces per 29 CFR 1910.146.

Following completion of construction, a proof survey shall be provided by the Contractor to the Division of Engineering that documents "as-built" elevations, dimensions, slopes, and alignments of all public utilities (storm, water) completed as part of this project. The proof survey shall be prepared, signed, and submitted by an Ohio Professional Surveyor. The Contractor shall revise the original mylars in red ink, to the satisfaction of the City, showing all changes in the work. The cost of the Proof Survey, including mylar revisions, will be paid at the Lump Sum price bid for Item Spec., Record Drawing, As Per Plan. See supplemental notes (Sheet 04).

The Contractor shall restrict construction activity to public right—of—way and areas defined as permanent and/or temporary construction easements, unless otherwise authorized by the City Engineer.

The Contractor shall carefully preserve benchmarks, property corners, reference points, stakes, and other survey reference monuments or markers. In cases of willful or careless destruction, the Contractor shall be responsible for restorations. Resetting of markers shall be performed by an Ohio Professional Surveyor as approved by the City Engineer.

Non-rubber tired vehicles shall not be moved on or across public streets or highways without the written permission of the City Engineer.

The Contractor shall restore all disturbed areas to equal or better condition than existed before construction. Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross-sections that existed before construction.

Tracking or spilling mud, dirt, or debris upon streets, residential or commercial drives, sidewalks, or bike paths is prohibited according to Section 97.38 of the Dublin Code of Ordinances. Any such occurrence shall be cleaned up immediately by the Contractor at no cost to the City. If the Contractor fails to remove said mud, dirt, debris, or spillage, the City reserves the right to remove these materials and clean affected areas, the cost of which shall be the responsibility of the Contractor.

All signs, landscaping, structures, or other appurtenances within right—of—way disturbed or damaged during construction shall be replaced or repaired to the satisfaction of the City Engineer. The cost of this work shall be the responsibility of the Contractor.

All field tile broken or encountered during excavation shall be replaced or repaired and connected to the public storm sewer system as directed by the City Engineer. The cost of this work shall be the responsibility of the Contractor.

All precast concrete products shall be inspected at the location of manufacture. Approved recast concrete products will be stamped or have such identification noting the inspection has been conducted by the City of Columbus. Precast concrete products without proof of inspections shall not be approved for installation.

Unless indicated otherwise on the plan details, backfill within a 1:1 influence line of existing structures (houses, garages, etc.) or public infrastructure (pavement, curbs, sidewalks, shared use paths, etc.) shall be compacted granular backfill according to Item 912 of the Standard Specifications or Flowable CDF, Type 2 according to Item 613. Item 911 of the Standard Specifications shall be used elsewhere.

The Contractor shall submit a copy of the approved construction drawings and list of proposed precast concrete product manufacturers to the City of Columbus Construction Inspections Division before commencing construction.

Send the information to the following address:

Construction Inspection Division City of Columbus 1800 East 17th Avenue Columbus, Ohio 43219

Send a copy of the transmittal letter to the following address:

Attn.: Paul Hammersmith, PE Division of Engineering City of Dublin 6555 Shier Rings Road Dublin, Ohio 43016

All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during nonworking hours. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during nonworking hours. Clean up shall follow closely behind the trenching operation.

The Contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of one year from the final acceptance of the work, and shall make any necessary repairs at no cost to the City.

Pavements shall be cut in neat, straight lines the full depth of the existing pavement, or as required by the City Engineer. Pavement replacement shall be conducted according to City of Columbus Standard Drawing 1441 and applicable City of Dublin standard drawings. The replacement of driveways, handicapped ramps, sidewalks, bike paths, parking lot pavement, etc. shall be provided according to the approved construction drawings and City of Dublin standard construction drawings.

Tree trimming within the construction zone is to be completed by a certified Arborist. At the completion of the project, the Arborist is to return and trim any broken branches as needed.

Any modification to the work shown on drawings must have prior written approval by the City Engineer, City of Dublin.

The following utilities are known to be located within the limits of this project:

For Water, Storm Sewer, Sanitary Sewer: City of Dublin Division of Engineering 6555 Shier Rings Road Dublin, OH 43016 Office: (614) 410-4740

Columbia Gas of Ohio Attn: Rob Caldwell 3350 Johnny Appleseed Ct Columbus, OH 43231 Office: (614) 818-2104

Attn: Bob Matthews 700 Morrison Road Gahanna, OH 43230 Office: (740) 647-2080

AltaFiber Attn: Bradley Kearns 201 E. 4th Street Cincinnati, OH 45201 Office: (513) 417-5206 City of Columbus Division of Water 910 Dublin Road Columbus, OH 43215 Office (614) 818-2104

AT&T Attn: Steve Connell 111 N. 4th Street Columbus, OH 43215 Phone: (614) 312-2095 Fax: (614) 223-5579

Verizon Business (MCI/XO) 757 Commerce Ct. Lewis Center, OH 43035 Cell: 614-809-8866 (Deere) Cell: 614-816-0361 (Dillow) Robert.dillow@verizon.com John.Deere@verizon.com

The Contractor shall give notice of intent to construct to Ohio Utilities Protection Service (telephone number 800-362-2764) and to owners of underground utilities that are not members of a registered underground protection service. Notice shall be given at least 3 working days before start of construction.

The identity and locations of existing underground utilities in the construction area have been shown on the approved construction drawings as accurately as provided by the owner of the underground utility. The City of Dublin, City Engineer, and the Design Professional assumes no responsibility for the accuracy or depths of underground facilities shown on the approved construction drawings. If damage is caused, the Contractor shall be responsible for repair of the same and for any resulting contingent damage.

Location, support, protection and restoration of all existing utilities and appurtenances, whether shown or not shown on the approved construction drawings, shall be the responsibility of the Contractor. When unknown or incorrectly located underground utilities are encountered during construction, the Contractor shall immediately notify the owner and the City Engineer.

Public street lighting may be in the vicinity of this project. Contact the City of Dublin, Division of Engineering at (614) 410-4637, two days prior to beginning work.

EROSION AND SEDIMENT CONTROL

The City is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Ohio EPA. The NOI must be submitted to OEPA 21 days prior to the start of construction and may entitle coverage under the Ohio EPA General Permit for Stormwater Discharges associated with construction activity. A project location map must be submitted with the NOI. A sediment and erosion control plan must be submitted to the City Engineer for approval if a sediment and erosion control plan has not already been included with the approved construction drawings. This plan must be made available at the project site at all times. The design of erosion control systems shall follow the requirements of Ohio EPA, Item 207 of City of Columbus Construction and Material Specifications, and the City Engineer. An individual NPDES Stormwater Discharge Permit is required. The Contractor shall be considered a co-permittee.

The Contractor shall provide sediment control at all points where storm water runoff leaves the project, including waterways, overland sheet flow, and storm sewers.

Accepted methods of providing erosion/sediment control include but are not limited to: sediment basins, silt filter fence, aggregate check dams, and temporary ground cover. Hay or straw bales are not permitted.

The Contractor shall provide adequate drainage of the work area at all times consistent with erosion control practices.

Disturbed areas that will remain unworked for 14 days or more shall be seeded or protected within seven calendar days of the disturbance. Other sediment controls that are installed shall be maintained until vegetative growth has been established. The Contractor shall be responsible for the removal of all temporary sediment devices at the conclusion of construction but not before growth of permanent ground cover.

For Additional Sediment and Erosion Control Notes & Details, see Sheets 24 - 27.

USE OF FIRE HYDRANTS

The Contractor shall make proper arrangements with the Dublin Service Department and the Columbus Division of Water for the use of fire hydrants when used for work performed under this contract and provide the City of Dublin a copy of the Hydrant Usage Permit obtained from the City of Columbus. The Contractor shall also send copies of permits obtained from Dublin and Columbus to the Washington Twp Fire Department. Permits shall be kept at the construction site at all times.

Before the final estimate is paid, the Contractor shall submit a letter from the City of Columbus Division of Water to the City Engineer stating that the Contractor has returned the Siamese Valve to the City of Dublin and has paid all costs arising from the use of the fire hydrants.

PROJECT SPECIFIC GENERAL NOTES

ELEVATION DATUM

Elevations are based on North American Vertical Datum of 1988 (NAVD 88).

The Contractor shall perform field reconnaissance to become acquainted with the existing site conditions and the potential effects upon the scope of work.

PRE-CONSTRUCTION MEETING:

A pre-construction conference involving the City, the Principal Contractor, and all available Sub-Contractors will be held prior to the start of construction.

During the conference the Contractor shall submit his construction schedule, proposed schedule for controlling siltation and erosion, and temporary and permanent seeding for the project.

PERMITS

The Contractor shall secure and pay for all permits, government fees, and licenses necessary for the proper execution and completion of the improvements shown on the plans.

Waterway Permit

The City will obtain waterway permits from the U.S. Army Corps of Engineers (CWA Section 404 Permit #s LRH-2025-00215-SCR-North Fork Indian Run). The Contractor must abide by all terms and conditions of the waterway permit that has been obtained for the project for all work within Waters of the United States (i.e., streams, wetlands, etc.). If necessary, the City will pursue an In Water Work Waiver from ODNR to allow for work to occur within the stream channel through the restricted period of March 15 — June 30. All required tree clearing must occur prior to March 31 or after September 30 to comply with permit conditions. USACE NWP's expire March 14, 2026, ODNR allowable instream work resulting from mussel relocations expires on May 2027. Mussel relocations will be performed by others in June 2025. Contractor shall assume instream work cannot occur before July 1, 2025.

Floodplain Permit

The project area is shown on Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) for Franklin County, Ohio and Incorporated Areas, Panel No. 39049C0019K (effective date: June 17, 2008). The project area is located in Zone AE, the 100-year floodplain and regulatory floodway. The proposed storm sewer work within the North Fork Indian Run and the identified flood hazard areas are subject to the Floodplain Development Permit.

NPDES Permit

The City will obtain a Notice of Intent (NOI) for the project, providing coverage under the Ohio EPA's Construction General Permit. Prior to starting work on the project, the contractor shall become a co-permittee on the NOI.

Copies of all permits shall be kept on-site at all times.

NOTIFICATION

The Contractor shall notify all adjacent landowners a minimum of one week in advance of work near their property. The Contractor shall coordinate with City Engineer for a suggested format for the notice.

Two (2) working days prior to construction, contact the Division of Engineering and their designee identified at the preconstruction meeting to schedule inspection. The City shall inspect the following: All underground utilities, detention/retention ponds, grading, pavement in City Right-of-Way, all sidewalks or bike paths in any public Right-of-Way, and any other items noted during review or at the pre-construction meeting. Final acceptance may be affected if procedures are not followed for proper inspection.

The Contractor is responsible to notify the City's designee for inspection and request a final punch-list inspection of the site once all items on the approved plans have been completed.

INSPECTION

The City of Dublin will provide construction inspection for this project. No work shall be commenced until arrangements have been made with the City Engineer for inspection services and a pre-construction meeting has been held.

WORK HOURS

General work hours on this project shall be from 7AM to 6PM unless otherwise approved by the City. Weekend work may be permitted on a case—by—case basis. Contractor shall make requests for weekend work to the City no later than 48 hours prior.

AERIAL UTILITY CROSSINGS

The Contractor shall install and maintain safety signage at all aerial utility crossings during construction.

ABANDONED UTILITIES

The Contractor shall be responsible for the removal and disposal of any abandoned utility facility that may conflict with any facility or construction activity proposed in these plans, including the installation of proposed conduit, underdrain, storm sewer, structure, waterline, sanitary sewer line, subgrade stabilization, foundations, etc. The Contractor is advised to verify that a utility facility has been abandoned before proceeding with removing it. If it is determined that the utility facility is active and in conflict, then the Contractor shall notify the City prior to proceeding with any affected proposed work.

The cost of the operations necessary to remove and dispose of conflicting abandoned utilities shall be included with the price of the affected item for payment. No separate payment shall be made.

WORK LIMITS

The Contractor is responsible for containing all performed work and all equipment, materials, vehicles, etc., used to complete the work within the rights-of-way of the streets, roadways, temporary easements, permanent easements, property boundaries, and limits of disturbance of the project improvements, as shown on these plans.

The Contractor is responsible for cost of restoration for any area outside of the right-of-way, permanent easement, property boundaries, or limits of disturbance to former condition or better and to the satisfaction of the City.

CONSTRUCTION LAYOUT

General field layout control shall be provided by the Contractor. Provisions for all other construction staking required to accomplish the improvements shall be performed in accordance with the Contract Documents. All staking shall be completed by a Professional Surveyor registered with the State of Ohio.

ACCESS

Access to adjoining properties shall be maintained at all times.

ACCESS TO THE STREAM CORRIDOR

During construction of the storm sewer outlet, the Contractor shall minimize vehicular travel along unstabilized slopes. Contractor shall maintain a minimal number of access points for construction vehicles to enter the stream corridor.

CONVENIENCE FACILITIES

The Contractor shall furnish and maintain sanitary convenience facilities for the workmen and inspectors for the duration of the work. Cost shall be included in the price bid for the various items.

SIGNS, MAILBOXES, FENCES, ETC.

The Contractor shall be responsible for restoring all signs, mailboxes, fences, guardrail, shrubs, property, drainage structures, or other physical features disturbed or damaged during construction, whether shown on the plans or not, to their original or better condition and location and to the satisfaction of the City. Cost to be included in the price bid for the various items.

MAINTAIN DRAINAGE

The flow in all sewers, drains, and watercourses encountered shall be maintained by the Contractor at his own expense, and whenever such watercourses and drains are disturbed or destroyed during the prosecution of the work, they shall be restored by the Contractor at his own cost and expense, unless specific provision is made within the Contract Documents for the measure of and payment for such cost specific items, to a condition satisfactory to the

All drain tile and storm sewers damaged, disturbed, or removed as a result of the Contractor's operations shall be replaced with the same auglity pipe or better, maintaining the same gradient as existing. Replaced drain tile shall be laid on compacted bedding equal in density to surrounding stratum. Replacement shall be done at the time of the backfill operation.

SOIL STOCKPILES

The Contractor shall be responsible for keeping all soil stockpiles, including trench excavation stockpiles, protected from erosion. The areas surrounding the stockpiles are to be protected from sediment with the use of perimeter control devices such as earth or straw bale devices or silt fences. These perimeter control devices shall be maintained for the duration of the project.

CONSTRUCTION DEBRIS

All debris, rubble, unusable materials, and items not salvaged by the City shall become the property of the Contractor and shall be removed from the site by the Contractor and disposed of properly.

DUST CONTROL

The Contractor shall be responsible for providing Dust Control measures in accordance with ODOT CMS Item 616. Dust control operations shall be performed on a periodic basis and/or as directed by the City to alleviate and/or prevent the dust nuisance originating within the project work limits. Calcium Chloride will not be permitted. The cost for all dust control including but not limited to calcium chloride, water, and street sweeping shall be included in the price bid for the various related items.

MAINTENANCE OF CONSTRUCTION EQUIPMENT

All construction equipment shall be inspected daily for hydraulic and fuel leaks. Contractor shall use Environmentally Acceptable (EA) hydraulic fluid in all machinery used to work within or along the stream corridor or basin. All fuel operations, lubricating, hydraulic topping off and equipment repairs and maintenance shall be performed at upland locations away from the onsite wetlands, basin, and stream channels. These activities must take place on an approved pad with spill control/collection devices in place. No storage of fuels or lubricants will be allowed on site. All equipment and materials not in use must be securely locked to avoid vandalism and accidental spills. Emergency response liquid containment devices such as absorbent socks and pads shall be readily available on site. Fuel tank purging or draining of water from fuel bowls is prohibited on site.

General Notes continue on Sheet 03...

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JUNE 2025

NONE

2024-0677

SCALE

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PROHIBITED CONSTRUCTION ACTIVITIES

The Contractor shall not use construction proceedings, activities, or operations that may unnecessarily impact the natural environment or the public health and safety. Prohibited construction proceedings, activities or operations include, but are not limited to:

- a) Disposing of excess or unsuitable excavated material in wetlands or floodplains, even with the permission of the property owner.
- b) Indiscriminate, arbitrary, or capricious operation of equipment in any stream corridors any wetlands, any surface waters, or outside the easement lines.
- c) Pumping of sediment—laden water from trenches or other excavations into any surface waters, any stream corridors, any wetlands or storm drains.
- d) Discharging pollutants such as chemicals, fuel, lubricants, bituminous materials, raw sewage, and other harmful waste into or alongside of rivers, streams, impoundments, or into natural or man-made channels leading thereto.
- e) Permanent or unspecified alteration of the flow line of a stream beyond what is depicted on the plans.
- f) Damaging vegetation outside of the construction area.
- g) Disposal of trees, brush and other debris in any stream corridors, any wetlands, and surface water, or at unspecified locations.
- h) The open burning of site-cleaning debris, trash, etc. is prohibited in the City.
- i) Storing construction equipment and vehicles and/or stock piling construction materials on property, public or private, not previously specified by the City for said purpose.

SAW CUTTING

When saw cutting of pavement (concrete, asphalt, etc.) is necessary, the Contractor shall employ dust collection measures and shall ensure all slurry is cleaned from the roadway immediately after sawing. The Contractor is solely responsible for any damage to private property caused by fugitive dust and slurry. Saw cutting of any material containing silica shall conform to OSHA requirements.

GRADE CHECKS

The Contractor shall ensure there is surveyor's equipment on the project site for use in performing grade checks. The Contractor shall make this equipment available for the use of, and assist, the City in performing grade checks when requested by the Inspector. The Inspector will make all reasonable attempts to confine requests for assistance in performing grade checks to a time convenient to the Contractor.

A grade check performed by the City in no way relieves the Contractor from the ultimate responsibility to ensure construction to the plan grade.

GRADE CHANGES

If it is determined that the elevation of the existing sewer, or existing appurtenance to be connected to, differs from the plan elevation or results in a change in the plan sewer slope, the City shall be notified before starting construction of any portion of the proposed sewer which will be affected by the variance in the existing elevations.

If it is determined that the proposed sewer will intersect an existing sewer or underground utility if constructed as shown on the plan, the City shall be notified before starting construction of any portion of the proposed sewer which would be affected by the interference with an existing facility

Grades and elevations shown on the plans shall not be revised under any circumstances without first obtaining written approval from the City.

ENVIRONMENTAL COMMITMENTS

Call the Ohio EPA Spill Hotline (1-800-282-9378) and the Ohio EPA Section 401/IWP

Any unpermitted impacts to surface waters and/or their buffers shall be reported to Ohio EPA Section 401/IWP Manager (614-728-3778) within 24 hours.

Authorized Ohio EPA representative shall be allowed to inspect the property at reasonable

Chemically treated lumber shall not be used in structures that come into contact with waters of the state.

Limits of wetland and stream buffers/tree protection areas shall be staked prior to any land disturbance activity

Ensure temporary fill consists of suitable non-erodible material and is stabilized to prevent

erosion.

Construction activities will be performed during low flow conditions to the greatest extent practicable.

The Contractor shall not stockpile soil or any other materials/equipment in the vicinity of any identified wetlands.

PROTECTION OF TOPSOIL

Contractor shall avoid unnecessary vehicular travel across placed and existing topsoil within the stream corridor. Compacted topsoil shall be disced prior to seeding or planting. See Topsoil Notes on This Sheet.

PROTECTION OF LANDSCAPING

The Contractor shall constrict all activities, equipment storage and staging to within the construction limits. Unless otherwise identified in the plans, the construction limits are plotted

Care shall be exercised when working in the area around existing trees and shrubs. Any trees or shrubs not marked for removal that are damaged by the Contractor will have to be replaced by the Contractor to the satisfaction of the owner.

LANDSCAPE CONTRACTOR QUALIFICATIONS REQUIRED

The Contractor is hereby advised that the landscape improvements to be constructed under this project are critical to the project's success. All landscape work shall be performed by a qualified landscaping contractor with documented prior experience successfully completing installations on similar projects.

LANDSCAPING WARRANTY

The Contractor shall refer to the Planting Notes (Sheet 31) for information regarding the landscaping warranty.

MAINTENANCE OF TRAFFIC

All temporary traffic control devices shall be furnished, erected, maintained, and removed by the Contractor in accordance with the most recent edition of the "Ohio Manual of Traffic Control Devices for Construction and Maintenance Operations".

Lane restrictions or closures required during construction must be approved by the City (and county/township if their roads will be used for detour) a minimum of two (2) weeks prior to any work being performed. Otherwise, traffic lanes shall be fully open to traffic at all times and ingress and egress shall be maintained to public and private property.

SITE RESTORATION

The Contractor shall repair or replace any and all existing work damaged during or due to the execution of this contract to equal or better condition prior to the damage, at the Contractor's own expense. All said work to be repaired or replaced to the satisfaction of the City. Any damage to other utilities caused by the Contractor shall be repaired by the appropriate utility company.

COMPLETE PROJECT

The Contractor shall be required to construct a complete project, meeting the intent of these drawings and specifications. Any items required to complete the work that do not have a specific method of payment described shall be performed by the Contractor. The cost of the work shall be included in the price for the various related items.

SUPPLEMENTAL NOTES

ITEM 201, CLEARING AND GRUBBING, AS PER PLAN

Existing trees to be removed, as indicated on the plan, shall be removed prior to April 1st or after September 30. An approximate estimate of the location of trees to be removed is shown on Sheet 07. If approved by the City, all wood chips that result from clearing and grubbing activities may remain onsite at a location to be determined by the City.

The cost of all work and expenses connected with the removal of trees, stumps, roots, and/or branch cutting shall be included in price bid for Item 201, Clearing and Grubbing, As Per Plan. No extra payment shall be made therefore.

ITEM 202, CONCRETE PAD REMOVED, AS PER PLAN

Contractor shall remove and dispose of existing concrete pad at location indicated on Sheet 07. The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 202, Concrete Pad Removed, As Per Plan.

ITEM 202. FENCE REMOVED AND RESET. AS PER PLAN

Contractor shall remove, store, and reset existing fence as needed to facilitate construction access to project site. Existing materials shall be salvaged and reused in resetting the fence. Materials damaged or lost by the Contractor and those components of the fencing which by nature of their construction are not suitable for reuse, shall be replaced in kind by the Contractor at their expense. The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 202, Fence Removed and Reset, As Per

ITEM 202. SIGN REMOVED, STORED, AND REINSTALLED, AS PER PLAN

Contractor shall remove existing signs at locations indicated on Sheet 07. Signs shall be stored by the Contractor and reinstalled in the locations shown on Sheet 08. The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 202, Sign Removed, Stored, and Reinstalled, As Per Plan.

ITEM 202. REMOVAL MISC.: HEADWALL REMOVED. AS PER PLAN

This work shall consist of removing and disposing of existing headwalls at locations indicated ITEM 609, REMOVE AND REPLACE CONCRETE CURB & GUTTER, AS PER PLAN on the plans. General Construction Requirements for this work shall be per Item 202.02. Cavities created by the removal of the headwalls shall be backfilled in accordance with Item 202.02. Pavment shall be per each headwall removed and shall include all equipment, labor, materials, and incidentals necessary to complete this item of work as described above to the satisfaction of the City.

ITEM 202, PIPE FILLED IN PLACE, 24" AND UNDER, AS PER PLAN

Pipes identified as "To Be Abandoned" (TBA), shall be cut at the point the abandonment begins and filled in place. This work shall consist of constructing masonry bulkheads or placing precast stoppers and filling the pipe's internal void. The fill material shall be Item 613, Low Strength Mortar Backfill, Type II. Payment for this item shall be per Item 202, Pipe Filled in Place, 24" and Under. As Per Plan.

ITEM 203, EMBANKMENT, AS PER PLAN

The specifications of Item 203 shall apply for this work along with the following notes. Fill material used on this project, whether reused from onsite excavation work or imported, shall be limited to cohesive natural soils per ODOT CMS 703.16.A. Compact fill according to Item 203. All required testing to be provided by the Contractor.

The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 203. Embankment, As Per Plan.

ITEM 203, EXCAVATION (STOCKPILED), AS PER PLAN

This item consists of excavating material from the proposed grading area and stockpiling on—site for reuse as embankment material within the project area.

The specifications within Item 203 shall apply for this work along with the following notes. The Contractor shall coordinate with the City if the material is suitable for reuse and to confirm the temporary onsite stockpile location shown in the plans. The cost of all labor. equipment, and materials associated with this work shall be included in the price bid for Item 203, Excavation (Stockpiled), As Per Plan.

ITEM 203, EXCAVATION (TO HAUL OFFSITE), AS PER PLAN

This item consists of excavating material from the proposed grading area to be disposed off—site. The Contractor shall provide a copy of the signed, written agreement between the Contractor and the offsite landowner before such disposal occurs. The agreement shall clearly state the purpose of the agreement and indicate the landowner's permission for such use. This item also includes, but is not limited to, removal and disposal of pipe and headwall

The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 203. Excavation (To Haul Offsite). As Per Plan.

ITEM 207, EROSION AND SEDIMENT CONTROL, AS PER PLAN

Refer to Plan Sheets 24 through 28 for the erosion and sediment control plan, notes and details. The cost of all labor, equipment, and materials associated with the installation and removal of the concrete washout, rock check dams, temporary construction fencing, and compost filter sock shall be included in the price bid for Item 207, Erosion and Sediment Control. As Per Plan.

ITEM 253, SPOT FULL DEPTH ASPHALT PAVEMENT REPAIR, ROADWAY, AS PER PLAN

This item shall consist of the removal of the existing pavement areas shown on the plans to subgrade, as directed by the City, by full—depth sawing and excavation. The depth/thickness of the pavement shall consist of 6" of Item 304 Aggregate Base, 6" of Item 301 -Bituminous Aggregate Base, 1 $\frac{3}{4}$ " of Item 441, Asphalt Concrete Intermediate Course Type 2 PG. 64-22 Medium Traffic, and 1 ½" of Item 441. Asphalt Concrete Surface Course Type PG. 64-22 Medium Traffic. Reference City of Dublin Standard Drawing RD-01 for replacement details for depth/thickness of the pavement. The width of these repairs will be the full width of the roadway. All surrounding yard areas that are disturbed as a result of this construction shall be restored per the Item 659. Seeding and Mulching. Class Special. As Per Plan Note on Sheet 04. The cost of said restoration shall be included in the price bid for Item 253. Spot Full Depth Asphalt Pavement Repair, Roadway, As Per Plan.

ITEM 601. ROCK CHANNEL PROTECTION, TYPE C, WITH AGGREGATE FILTER, AS PER PLAN (OUTFALL PROTECTION)

The specifications within Item 601 shall apply for this work along with the following notes. No reinforcing steel is permitted. Rock Channel Protection shall conform to ODOT CMS Section 601.09. In addition, the voids between stones shall be filled with #1 and #2 stone. Plan quantities assume a 30% void ratio in rock channel protection to be infilled with #1 and #2 stone. Recycled concrete is not permitted for use as riprap (rock channel protection) on this project. Rock Channel Protection, Type C, with Aggregate Filter shall be installed at the location shown on the plans. The cost of all labor, equipment, and materials associated with this work shall be in included in the price bid for Item 601. Rock Channel Protection. Type C, With Aggregate Filter, As Per Plan (Bank Stabilization).

ITEM 601, DUMPED ROCK FILL, AS PER PLAN

The specifications within Item 601 shall apply for this work along with the following notes. No reinforcing steel is permitted. The dumped rock fill will consist of 50% Rock Channel Protection, Type D and shall conform to ODOT CMS Section 601.09. The remaining 50% of the dumped rock fill will consist of #1 or #2 stone to fill in the void space in the rock channel protection. Recycled concrete is not permitted for use as riprap (rock channel protection) on this project. Dumped Rock Fill shall be installed at the location shown on the plans. The cost of all labor, equipment, and materials associated with this work shall be in included in the price bid for Item 601, Dumped Rock Fill, As Per Plan.

ITEM 608. ASPHALT PAVEMENT (TRAIL). AS PER PLAN

This item shall consist of the installation of the asphalt pavement trail per City of Dublin Standard Drawing RD-06 and includes all aspects of Standard Drawing RD-06, including asphalt surface course, asphalt concrete base, aggregate base, and subgrade compaction. This item also includes Geotextile Fabric, Type D (where shown on the plan). Reference the Standard Drawing for the depth/thickness of the pavement. The width of the trail shall be 8'. All surrounding yard areas that are disturbed as a result of this construction shall be restored per Item 659, Seeding and Mulching, Class Special, As Per Plan on Sheet 04. The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 608, Asphalt Pavement (Trail). As Per Plan.

ITEM 608. CONCRETE SHARED-USE PATH. AS PER PLAN

This item shall consist of the installation of the concrete shared use path per City of Dublin Standard Drawing RD-05 and includes all aspects of Standard Drawing RD-05, including concrete pavement, aggregate base, and subgrade compaction. Reference the Standard Drawing for the depth/thickness of the pavement. The width of the trail shall be 8'. All surrounding yard areas that are disturbed as a result of this construction shall be restored per Item 659, Seeding and Mulching, Class Special, As Per Plan on Sheet 04. The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 608, Concrete Shared-Use Path, As Per Plan.

This item involves the removal and disposal of the existing combination curb and gutter situated along Bristol Parkway (location shown on Sheet 07), and replacement of same with City of Dublin Standard Drawing RD-02 Combination Concrete Curb and Gutter, all as directed by the City. All disturbed pavement shall be repaired according to City of Dublin Standard Drawing RD-01 within 10 working days of curb placement.

The Contractor shall take all necessary precautions to prevent damage to adjacent asphalt street pavement adjacent to curb being removed on streets where no asphalt overlay is planned. Precautions shall include, but not be limited to wet-sawing existing curb with a vermeer saw and sawing asphalt full depth per attached curb and gutter drawing. Additionally, the Contractor must clean and remove any slurry that is deposited during wet-sawing.

The Contractor shall exercise special care to maintain gutter grades and to make certain that existing asphalt concrete surfaces are not damaged during curb removal operations. Disturbed grass greas, including depressions, shall be restored by placing topsoil, approved seed, fertilizer and mulch material, see Item 659, Seeding and Mulching, Class Special, As Per Plan Note on Sheet 04. All labor, materials, equipment, lights, signs, barricades, landscape restoration, and other incidentals necessary to perform the work as outlined, including asphalt concrete repair on street where no overlay is planned, shall be included in the price bid for Item 609. Remove and Replace Concrete Curb and Gutter. No additional compensation will be allowed over and above the contract price.

Care shall be taken in the removal of the existing curb so as not to damage or displace existing drain tile, and any existing drain tile damaged by the Contractor's operation, shall be restored to its existing condition or replaced with a new tile at the Contractor's expense.

All spot curb and gutter removed shall be replaced within three working days after its removal, and whenever the Contractor exceeds this time stipulation he shall suspend curb removal until he is again in conformance with this provision. The section of curb to be replaced may not begin or end at curb joints. The Contractor shall saw cut the existing curb and gutter full depth at these points prior to curb removal. The Contractor will also utilize full—height forms when forming curbs. The price for performing the saw cuts shall be included with this item.

ITEM 614, MAINTENANCE OF TRAFFIC, AS PER PLAN

See Maintenance of Traffic Plan. Sheets 33 to 36.

The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 614, Maintenance of Traffic, As Per Plan.

Supplemental Notes continue on Sheet 04...

DRAINA MENTS

X ON

JUNE 2025

SCALE NONE

2024-0677

SHEET

03/36

ITEM 653, TOPSOIL FURNISHED AND PLACED, AS PER PLAN

The Contractor shall spread topsoil across the work areas specified on this plan to the following depths:

-All Locations: 4-Inches Minimum

All topsoil shall be of the highest quality and free of all stones, trash, and other deleterious materials greater than 1/4".

Submittals:

- 1. Prior to placing topsoil material, Contractor shall submit topsoil test results in conformance with the requirements of ODOT CMS 659.02 and provide the test results to the City. The City shall determine if soil amendments (compost, lime, fertilizer, etc.) are be included in the price bid for Item 712, Geogrid Composite with Geotextile, As Per Plan. required. If soil amendments are required, the labor, materials, and equipment associated with providing the soil amendments will be paid for under a change order.
- 2. Prior to placing topsoil, the Contractor shall have approval of subgrade elevations according to Item Spec, Grade Checking, As Per Plan.
- 3. Prior to seeding, the Contractor shall have approval of final grade elevations according to Item Spec, Grade Checking, As Per Plan.

Construction Methods:

- 1. The Contractor shall prepare the site prior to installation of seed and plant materials, including discing the subgrade 12" prior to placing topsoil.
- 2. The Contractor shall spread topsoil (with approved amendments) on the project site to the minimum depths indicated on the plans.
- 3. All topsoil shall be saturated with water and allowed to settle prior to seeding. Settled areas shall be refilled and saturated again prior to seeding.
- 4. The site shall be fine graded to the elevations shown on the plans, within tolerances specified in Item Spec., Grade Checking, As Per Plan.
- 5. Topsoil shall be loosened prior to seeding using disks, rakes, or other methods
- 6. All seeding, fertilizer, mulch and erosion control matting shall be placed within five (5) working days of placing topsoil.

Perform the work according to ODOT CMS Item 653. The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 653, Topsoil Furnished and Placed, As Per Plan.

ITEM 659, SEEDING AND MULCHING, CLASS SPECIAL, AS PER PLAN

Repair seeding and mulching shall conform to the notes contained herein and the requirements of ODOT CMS Section 659. In addition to these requirements, the seeding and mulching shall conform to the following:

Permanent seeding: disturbed areas that are at final grade must be permanently stabilized within seven days of the most recent disturbance. Disturbed areas within 50 feet of a surface water must be permanently stabilized within 2 days of reaching final grade.

Temporary seeding: disturbed areas that are not at final grade and that will be dormant for more than 14 days shall be temporarily stabilized within 7 days of the most recent disturbance. Disturbed areas within 50 feet of a surface water and that will be dormant for more than 14 days shall be temporarily stabilized within 2 days of the most recent disturbance.

The following permanent seed mix shall be used to repair any additional disturbed earth not covered on Sheet 29 and referred to within this plan as Item 659, Seeding and Mulching, Class Special, As Per Plan.

REQUIRED PERMANENT SEED MIXES FOR CONSTRUCTION

Option #1 (Seeding Dates: March 1 to September 14)

40% Kentucky Blue Grass

20% Creeping Red Fine Fescue 20% Chewings Fine Fescue

20% Penn Fine Perennial Rye Grass

Option #2 (Fall Seeding Dates: September 15 to October 31)

30% Kentucky Blue Grass

20% Creeping Red Fine Fescue 50% Perennial Rye (Penn Fine, Keystone, or equal)

<u>Fertilizer</u>

12-12-12 at 20 pounds per 1,000 square feet (dry or liquid)

Temporary seeding shall be applied per the specifications provided within the OEPA "Rainwater and Land Development" manual.

ITEM 659. SEEDING AND MULCHING, RETENTION BASIN MIX, AS PER PLAN

Seedina shall conform to the notes contained herein and the requirements of ODOT CMS Section 659. Cover for the seeding will use mulch and/or slope erosion protection matting, as shown in the Planting Plan and Typical Section Details. In addition to these requirements, the seeding shall conform to the following:

Permanent seeding: disturbed areas that are at final grade must be permanently stabilized. Subgrade [Final Grade — Topsoil Depth]: within seven days of the most recent disturbance. Disturbed areas within 50 feet of a Final Grade: surface water must be permanently stabilized within 2 days of reaching final grade.

Temporary seeding: disturbed areas that are not at final grade and that will be dormant for more than 14 days shall be temporarily stabilized within 7 days of the most recent disturbance. Disturbéd areas within 50 feet of a surface water and that will be dormant for more than 14 days shall be temporarily stabilized within 2 days of the most recent disturbance.

Perform the work according to ODOT CMS Item 659. The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item 659, Seeding And Mulching, Retention Basin Mix, As Per Plan.

ITEM 661, DECIDUOUS SHRUB, NO. 5 CONT., AS PER PLAN ITEM 661, DECIDUOUS TREE, NO. 15 CONT., AS PER PLAN ITEM 661, BALLED & BURLAPPED TREES, AS PER PLAN

ITEM 670. SLOPE EROSION PROTECTION MAT. AS PER PLAN

This work includes all labor, equipment, and material required to install a slope erosion protection mat at the location and elevation indicated on the plans. The slope erosion protection mat shall be North American Green C125BN or approved equal. Mat shall be installed with anchor trenches, overlaps, and anchor staples following the manufacturers recommendations. Anchor staples shall be installed at no less than density shown on the plans. A detail of the installation is provided on Sheets 26-27. The cost of all labor, equipment, and materials required for this work shall be included in the price bid for Item 670. Slope Erosion Protection Mat. As Per Plan.

ITEM 712, GEOGRID COMPOSITE WITH GEOTEXTILE, AS PER PLAN

This work includes all labor, equipment, and material required to install a geogrid composite with a geotextile mat at the location and elevation indicated on the plans. The geogrid composite shall be Tensar NX850-FG or approved equal. The geogrid and geotextile shall be installed with anchor trenches, overlaps, and anchor staples following the manufacturers recommendations. The cost of all labor, equipment, and materials required for this work shall

ITEM 801, 8" DUCTILE IRON PIPE, CLASS 52. AS PER PLAN

This work includes all labor, equipment, and material required to install the 8" Ductile Iron, Class 52 pipe at the location and elevation indicated on Sheets 11 and 23. The Ductile Iron pipe and fittings used shall conform to the notes contained herein and the requirements of CMSC Section 801. The cost of all labor, equipment, and materials required for this work following: shall be included in the price bid for Item 801, 8" Ductile Iron Pipe, Class 52, As Per Plan.

ITEM 901, 36" STORM PIPE, WITH TYPE I BEDDING AND LOW STRENGTH MORTAR BACKFILL, AS PER PLAN

This work includes all labor, equipment, and material required to install the 36" storm pipe, with Type I bedding and low strength mortar backfill at the location and elevation indicated on Sheets 20 and 22. The 36" storm pipe and fittings used shall conform to the notes contained herein and the requirements of CMSC Section 901. The Low Strength Mortar Backfill shall conform to ODOT Item 613. The cost of all labor, equipment, and materials required for this work shall be included in the price bid for Item 901, 36" Storm Pipe, With Type I Bedding and Low Strength Mortar Backfill. As Per Plan.

ITEM SPEC., CONCRETE BENCH PAD, AS PER PLAN

This item shall consist of the installation of the concrete bench pad. The location of the proposed concrete bench pad is shown on Sheet 08. Reference the concrete bench pad detail on Sheet 05 for the depth/thickness of the pad. The width of the pad shall be 4.5' from the edge of asphalt trail and the length shall be 10'. The cost of all labor, equipment, and materials required for this work shall be included in the price bid for Item Spec., Concrete Bench Pad. As Per Plan.

ITEM SPEC., DEWATERING, AS PER PLAN

Contractor shall perform dewatering operations as indicated on the plans and as necessary to perform the work. Contractor shall be responsible for design of the dewatering program, which may include, but not be limited to, local nuisance water removal, trench groundwater removal, and localized groundwater lowering, all as necessary to accomplish the project goals. Contractor shall provide a dewatering plan for the City's approval, install and maintain dewatering operations, collect and remove accumulated sediment from the work area, and remove dewatering works upon completion of the construction activities that require dewatering. The basin normal pool may be lowered to facilitate construction, either by pumping and/or installation of a temporary outlet pipe connected to the basin outlet storm sewer. Dewatering activities shall be performed in strict accordance with local noise ordinances. The Contractor shall furnish, install, and maintain throughout the course of the work mufflers, noise-control enclosures, or other noise control methods, measures, and features on and around all dewatering pumps such that steady noise emanating from this equipment does not disturb adjacent property operations. The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item Spec., Dewatering, As Per Plan.

ITEM SPEC., GRADE CHECKING, AS PER PLAN

Grade checking shall be performed at incremental stages of the project. Surveying shall be performed under supervision of an Ohio licensed Professional Surveyor. Survey data will be evaluated by the City for conformance within the specified tolerance. The Contractor must submit updated survey data to document that all required adjustments have resolved the noted deficiencies.

Submittal Requirements:

Submit survey spot shots to the City in a CAD-compatible format (i.e. point files as .csv or .txt) for the following items until grade is approved to be within plan tolerance.

Storm Sewer:

Submit spot shots at all manholes and catch basins, of the pipe inverts, and top of casting; pipe invert at headwalls and endwalls.

Subgrade [Final Grade - Topsoil Depth]:

Submit spot shots of the subgrade within the proposed grading area on a 15-foot grid minimum and include all grade breaks. Cross sections along hydraulic model sections shall also be submitted, as directed by the City. Topsoil shall not be placed until approval of subgrade elevations is obtained.

Final Grade

grid, as directed by the City. Topsoil shall not be seeded until approval of final grade or sprayer. Do not place field cuts in contact with the ground. elevations is obtained.

Project Tolerance:

+0.00 ft / - 0.25 ft+/- 0.15 ft Storm Sewer: +/- 0.10 ft

ITEM SPEC.. DIGITAL VIDEO RECORDING

A minimum of one week prior to commencing Work, the Contractor shall have digital video taken of all areas where construction is to take place. The video shall be provided to the City prior to commencing Work and shall be taken along the line of construction and site access and staging areas at sufficient detail as necessary to clearly depict details of existing conditions. The video shall serve as a record of the existing conditions and will be used as a reference by the City to determine sufficiency of restoration of areas disturbed decrease the post spacing, or nest two rail elements as approved by the enaineer. Do not by construction access and staging, including pedestrian trails, roadways, curbs, sidewalks, lawns and open space. The Contractor shall also have digital video taken of any unusual conditions encountered during construction that are not already a matter of video or photographic record. In any areas where existing conditions cannot be determined by means of the video provided by the Contractor, the area shall be restored as directed by the City at no additional cost to the Owner.

All digital video shall be in color and submitted to the City on flash drive. All videos shall be indexed and catalogued in such a manner that each recorded area is readily identifiable, Tighten all bolts. and shall also indicate the date and time (hour, minutes and seconds) on which the recording was made. All flash drives shall become the property of the Owner.

All work required to produce the deliver the video to the City shall paid for under Item Spec., Digital Video Recordina.

ITEM SPEC.. ORIFICE PLATE, AS PER PLAN

This work includes all labor, equipment, and material required to construct and place orifice plate. Orifice plate shall be constructed per City of Columbus Construction Drawing AA-S145 orifice plate is shown on Sheet 20. The cost of all labor, equipment, and materials required field cut wood rails at the joints. Do not use a torch to cut holes. for this work shall be included in the price bid for Item Spec., Orifice Plate, As Per Plan.

ITEM SPEC.. STONE COATED WITH BENTONITE. AS PER PLAN

This work includes all labor, equipment, and material required to place stone coated with bentonite. This item shall be placed per the basin berm typical section shown on Sheet 19 This material shall meet the specification of Pondseal or approved equal. The cost of all labor, equipment, and materials required for this work shall be included in the price bid for Item Spec., Stone Coated with Bentonite, As Per Plan.

ITEM SPEC.. RECORD DRAWING, AS PER PLAN

After all items within the Item Spec, Grade Checking, As Per Plan specification are approved the Contractor shall submit a record drawing of the project to the City complying with the

- 1. Final spot elevations overlaid on 22"x34" plan sheets in both CAD and PDF format for the project area, as specified under Item Spec., Grade Checking, As Per Plan.
- 2. Record drawing shall include a statement indicating elevations are within plan tolerance and represents a record survey of the completed Earlington Park Drainage Basin Improvements project.
- 3. Record drawing shall be signed and sealed by a Professional Surveyor registered in the Accepted quantities will be paid at the contract price per unit as follows: State of Ohio.

The cost of all labor, equipment, and materials associated with this work shall be included in the price bid for Item Spec., Record Drawing, As Per Plan.

ITEM SPEC.. STEEL BACKED TIMBER GUARDRAIL

This work consists of constructing steel-backed timber guardrail and related guardrail posts and related appurtenances. The work shall include the furnishing, assembling, and erecting of all component parts, materials, and incidentals, complete and in place, in accordance with the details and at the locations shown in the plans, or as directed by the City Engineer, and according to the Manufacturer's recommendations, where applicable.

<u>Materials</u>

The Contractor shall furnish materials in accordance with the following requirements:

Timber rail, posts and blockouts: furnish timber conforming to AASHTO M 168. Fabricate the timber rail, blockouts, and posts from dry, well seasoned, and dressed rough sawn Douglas Fir, Southern Pine, or other species having a stress grade of at least 1,500 pounds per square inch. Treat the timber rail, blockout elements, and posts according to AASHTO M

Steel backing and hardware: fabricate the steel backing elements from 3/8-inch structural steel that conforms to the high-strength, low-alloy requirements of ASTM A 242. The steel backing elements and fastener hardware shall be galvanized in accordance with ODOT 711.02.

Concrete anchors and curbing: shall be class C conforming to ODOT 499, ODOT 511, and

Reinforcing steel: shall conform to ODOT 509, 709.01 (ASTM A 615)

Dowel Bars: shall conform to ODOT 709.13

Painting: timber guardrail shall be "cured" from the pressure treatment process at least 4 months prior to painting. Blockouts, and the exposed post lengths and hardware shall be painted wolf grey as supplied by Sherwin-Williams paint — 883 King Avenue Commercial Store (614) 299-2116. First, use primer paint coat pro-cryl by Sherwin-Williams on all galvanized surfaces. Paint bolt heads on the face side of the guardrail as well as all steel bolts, nuts, washers and the steel plate on the back side with pro-cryl. Apply two coats of Woodscapes paint by Sherwin-Williams on the treated timber as well as over the pro-cryl primer. Each coat to be applied in a uniform, consistent, and even application on the surface. Woodscapes paint shall be applied in two coats, each with a minimum 2.0 mill dry film thickness for each coat. Paint shall be high quality, all weather paint suitable for use on aglyanized metal, timber rail, and wood posts.

Construction Requirements

posts with acceptable material.

by 12 inches as directed by the Engineer.

The following requirements shall supplement, and in cases of perceived conflict, replace the requirements of ODOT 606.

Posts: all posts shall be driven to grade. Augering and/or excavation of post hole before placing post is not an approved method of installation

Submit spot shots of the final grade within the proposed grading area on a 15-foot Posts: treat field cuts for wood posts with two coats of preservative applied with a brush

Where the pavement surface is within 3 feet of the guardrail face, install posts before placing the pavement surface.

Punch or drill pilot holes no more than 1/2 inches larger than the post dimensions. Drive

the posts into the pilot holes and set the posts plumb. Backfill and compact around the

Where it is not possible to maintain a 24-inch minimum distance between the back of the guardrail post and the top of a 1v:2h or steeper slope, increase the standard post length

Where an impenetrable object is encountered, use a short post with a concrete anchor, change the post lengths and spacings in terminal sections.

Rail Elements: do not modify specified hole diameters or slot dimensions.

Erect rail elements in a smooth continuous line with the laps in the direction of traffic flow. Use bolts that extend at least 1/4 inch but not more than 1 inch beyond the nuts.

Paint all scrapes on galvanized surfaces that are through to the base metal with 2 coats of

zinc-oxide paint.

Equally space bolts along the front face of the timber rail to match the holes in the steel backing. Align timber quardrail along the top and front of the timber rail.

Field cut timber rails to produce a close fit at joints. Treat field cuts with 2 coats of chromated copper arsenate.

and mounted per the mounting detail shown on Sheet 22. The location of the proposed When required, field drill holes in the steel backing on curved sections to correspond to the

Where concrete anchors are installed, construct either cast—in—place or precast units. Do not connect the guardrail to cast—in—place anchors until the concrete has cured 7 days. Install end anchor cables tightly without slack.

Guardrail reflection tabs: install in accordance with the requirements of ODOT 626 pertinent to Type A, one—way guardrail blockout reflectors.

Method of Measurement

Steel-backed timber rail of the type and post length specified in the plans will be measured by the number of feet from center-to-center of end posts furnished and erected complete. excluding terminal sections as shown in the standard drawings.

Basis of Payment

All cost associated with furnishing and installing guardrail posts, providing reductions to the standard post spacing (as needed/directed), and painting the guardrail system are considered incidental to the contract unit price of the respective steel-backed timber guardrail.

<u>Unit</u> <u>Description</u>

Special Foot Steel-Backed Timber Guardrail

Payment will be full compensation for the work prescribed in this section.

ITEM SPEC.. ROOT PRUNING, AS PER PLAN

This work includes all labor, equipment, and material required to perform root pruning at the location indicated on Sheet 09. Root pruning shall be performed prior to any earthwork in the vicinity. The roots shall be cleanly cut using mechanical root pruner, vibratory knife, or similar equipment that will result in clean cuts. If the root pruning trench is cut using excavation equipment without the aforementioned methods, all roots one inch or greater must be cut by hand using pruners. The trench should be immediately backfilled with excavated soil or other organic soil. The root trench shall be a minimum depth of 24 inches. The cost of all labor, equipment, and materials required for this work shall be included in the price bid for Item Spec., Root Pruning, As Per Plan.

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LEGEND

	EXISTING
	Ex Major Contour Ex Minor Contour
	Ex Parcel Boundary
	Ex Flow Path
	Ex Edge of Water
——————————————————————————————————————	Ex Storm Pipe
——————————————————————————————————————	Ex Water Main
OHE OHE	Ex Overhead Electric Line
———F0———F0——	Ex Gas Main
	Ex Fiber Optic Line
ccc	Ex Communication Line
——————————————————————————————————————	Ex Underground Electric Line
	Ex Guardrail
xxxx	Ex Fence
	Ex Edge of Pavement
	Ex Edge of Asphalt
	Ex Building
	Ex Brushline/Treeline
	Ex FEMA Floodway
	Ex FEMA 100-Year Floodplain
	Ex FEMA 500-Year Floodplain
	Ex Wetlands
	Ex Shared-Use Path

	· · <u>·</u>	Ex	Wetlands
		Ex	Shared-Use Path
0	Ex Storm Manhole		Ex Deciduous Tree
	Ex Storm Catch Basin	Z.W.Z	Ex Evergreen Tree
	Ex Storm Drain	\odot	Ex Bush
*	Ex Light Pole	A	Ex Stump
q	Ex Hydrant	F	Ex Power Pole
\otimes	Ex Water Valve	*	Ex Miscellaneous Pole

↓ Ex Guy Wire

■ Ex Power Box

⊕ Ex Power Marker

⊸ Ex Sign

Ex Electric Box

Ex Soil Boring

FO	Ex Fiber Optic Box	ENC	Ex Power Duct
б	Ex Fiber Optic Marker	0	Ex Communications Manhole
MB	Ex Mailbox	o	Mag Nail Set
		•	Iron Pin Found
		<u>P</u>	ROPOSED

	PROPOSED
	Prop Major Contour
	Prop Minor Contour
STMSTM	Prop Storm Pipe
	Prop Normal Pool
	Prop 100—Year Elevation
	Drainage Flow Arrow
	Prop Catch Basin
	Prop Headwall
	Prop Manhole

	rrop willion contour			
тм	Prop Storm Pipe			
	Prop Normal Pool			
	Prop 100-Year Elevation			
◆ ~	Drainage Flow Arrow			
•	Prop Catch Basin			
	Prop Headwall			
	Prop Manhole			
	Prop RCP			
	Prop Asphalt Trail			
4	Prop Concrete Shared—Use Path			

TEMPORARY

Limit of Disturbance Temp Construction Fence/Tree Protection Fence Compost Filter Sock



Temp Staging Area



Timber Matting



Temp Tree Protection Fence

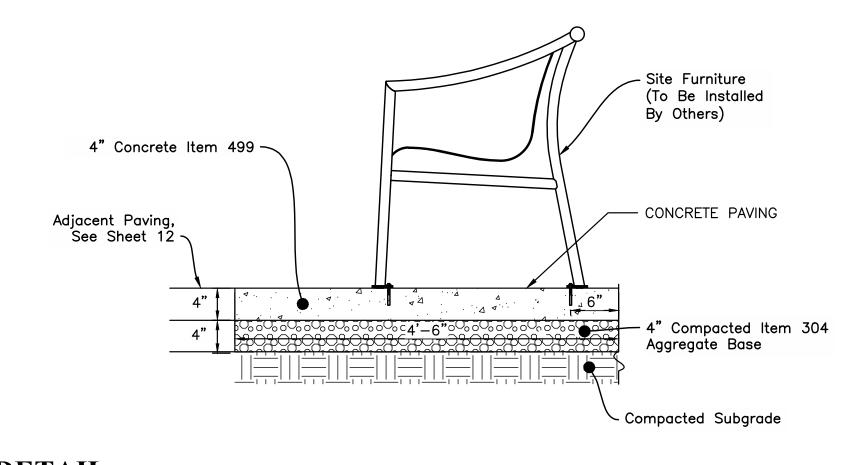


Temp Rock Check Dam

Temp Inlet Protection

ABREVIATIONS

Ac	Acres	МН	Manhole
CB	Catch Basin	NWL	Normal Water Level
Φ	Centerline	Prop	Proposed
DND	Do Not Disturb	R&R	Remove and Replace
E/P	Edge of Pavement	RCP	Rock Channel Protection
Elec	Electric	R/W	Right of Way
Elev	Elevation	Sta	Station
Ex	Existing	Stm	Storm
FH	Fire Hydrant	TBR	To Be Removed
FO	Fiber Optic	TBRL	To Be Relocated
HW	Headwall	Temp	Temporary
Inv	Invert	Тур	Typical
Max	Maximum	Wat	Water
Min	Minimum	WM	Water Meter
Misc	Miscellaneous	WV	Water Valve



DETAIL
CONCRETE BENCH PAD NOT TO SCALE

	A. General Project Items		
Item No.	Description	Quantity	Units
201	Clearing and Grubbing, As Per Plan	1	LS
202	Concrete Pad Removed, As Per Plan	3	SY
202	Fence Removed and Reset, As Per Plan	80	LF
202	Sign Removed, Stored, and Reinstalled, As Per Plan	2	EA
202	Guardrail Removed	60	LF
202	Walk Removed	1270	SY
202	Walk Removed, Brick Path	40	SY
202	Catch Basin Removed	2	EA
202	Manhole Abandoned	1	EA
202	Removal Misc.: Headwall Removed, As Per Plan	1	EA
202	Pipe Filled in Place, 24" and Under, As Per Plan	280	LF
202	Pipe Removed, 24" and Over	170	LF
203	Embankment (Placing Stockpiled Material), As Per Plan	300	CY
203	Excavation (Stockpiled), As Per Plan	300	CY
203	Embankment (Placing Imported Material), As Per Plan	70	CY
207	Erosion and Sediment Control, As Per Plan	1	LS
253	Spot Full Depth Asphalt Repair, Roadway, As Per Plan	60	SY
601	Rock Channel Protection, Type C with Aggregate Filter, As Per Plan (Outfall Protection)	16	CY
601	Dumped Rock Fill, As Per Plan	390	CY
602	Concrete Masonry Includes Reinforcing	13	CY
604	Catch Basin AA-S133B	2	EA
604	Manhole AA-S102	1	EA
608	Asphalt Pavement (Trail), As Per Plan	1340	SY
608	Concrete Shared Use Path, As Per Plan	60	SF
609	Remove and Replace Concrete Curb & Gutter, As Per Plan	15	LF
611	Catch Basin No. 2-5	2	EA
611	Catch Basin No. 2-6, with Trash Rack	2	EA
614	Maintaining Traffic	1	LS
614	Law Enforcement Officer with Patrol Car, As Per Plan	12	HR
623	Construction Layout Stakes	1	LS
624	Mobilization	1	LS
653	Topsoil Furnished and Placed, As Per Plan	330	CY
659	Seeding and Mulching, Class Special, As Per Plan	6170	SY
659	Seeding and Mulching, Retention Basin Mix, As Per Plan	400	SY
659	Repair Seeding and Mulching, Class Special and Retention Basin Mix	1400	SY
661	Deciduous Shrub, No. 5 Cont., As Per Plan	3	EA
661	Deciduous Tree, No. 15 Cont., As Per Plan	3	EA
661	Balled & Burlapped Trees, As Per Plan	27	EA
670	Slope Erosion Protection Mat, As Per Plan	3330	SY
712	Geogrid Composite with Geotextile, As Per Plan	270	SY
801	8" Ductile Iron Pipe, Class 52, As Per Plan	80	FT
901	15" Storm Pipe, with Type I Bedding	140	FT
901	36" Storm Pipe, with Type I Bedding	140	FT
901	36" Storm Pipe, with Type I Bedding and Low Strength Mortar Backfill, As Per Plan	100	FT
901	45"x29" Elliptical Storm Pipe, with Type I Bedding	32	FT
SPEC	Concrete Bench Pad, As Per Plan	1	LS
	Dewatering, As Per Plan	1	LS
	Digital Video Recording	1	LS
	Grade Checking, As Per Plan	1	LS
	Record Drawing, As Per Plan	1	LS
	Orifice Plate, As Per Plan	1	LS
	Stone Coated with Bentonite, As Per Plan	15	CY
SPEC	Storie Coated with Bentonite, As Per Pian Steel-Backed Timber Guardrail	60	LF
OI LC	DICCE-DACKCU TIIIIOCI QUATUIAII	00	LS

EARLINGTON I BASIN IMP EGEND, DETAILS & EST

JUNE 2025

AS NOTED

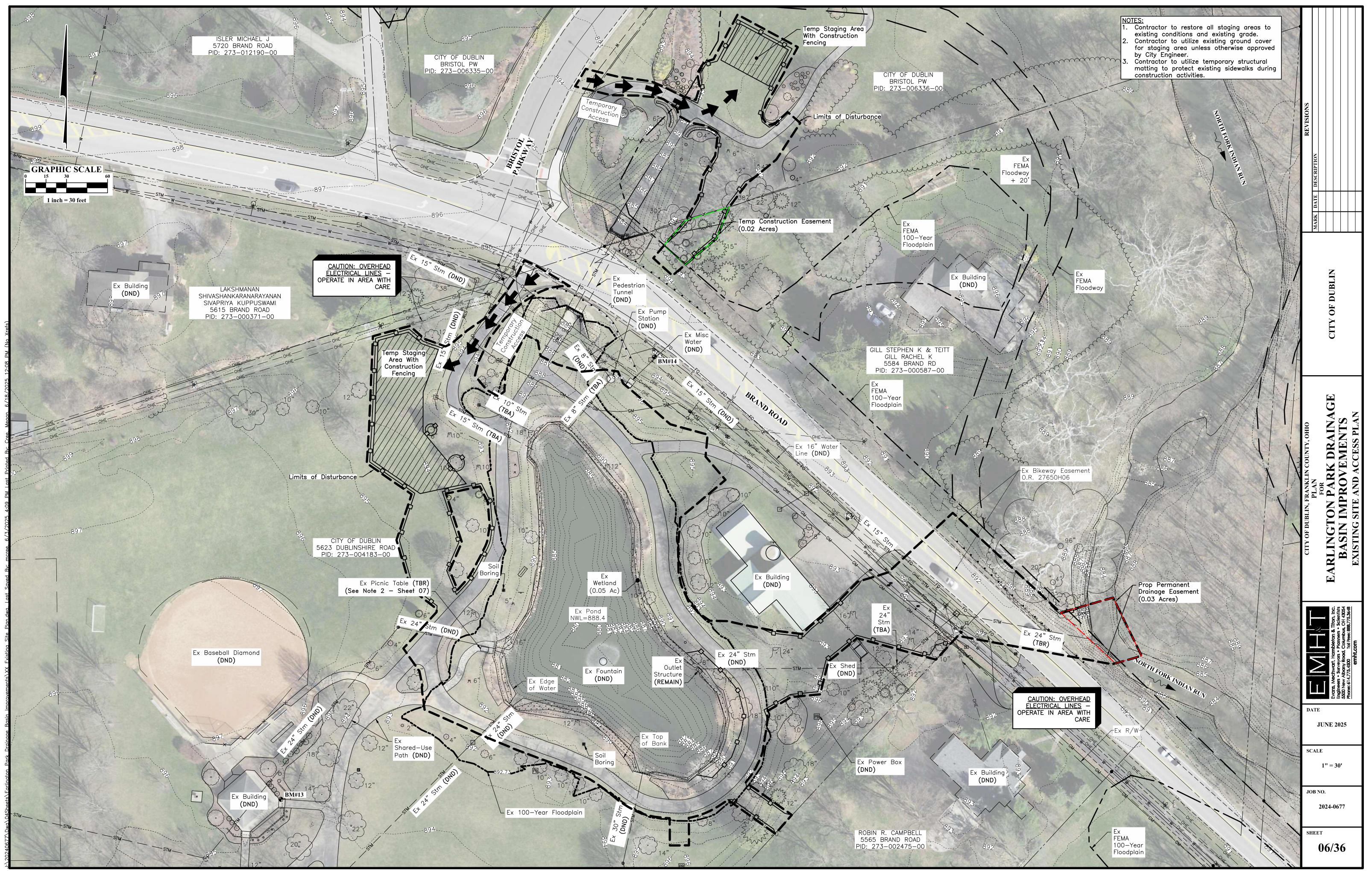
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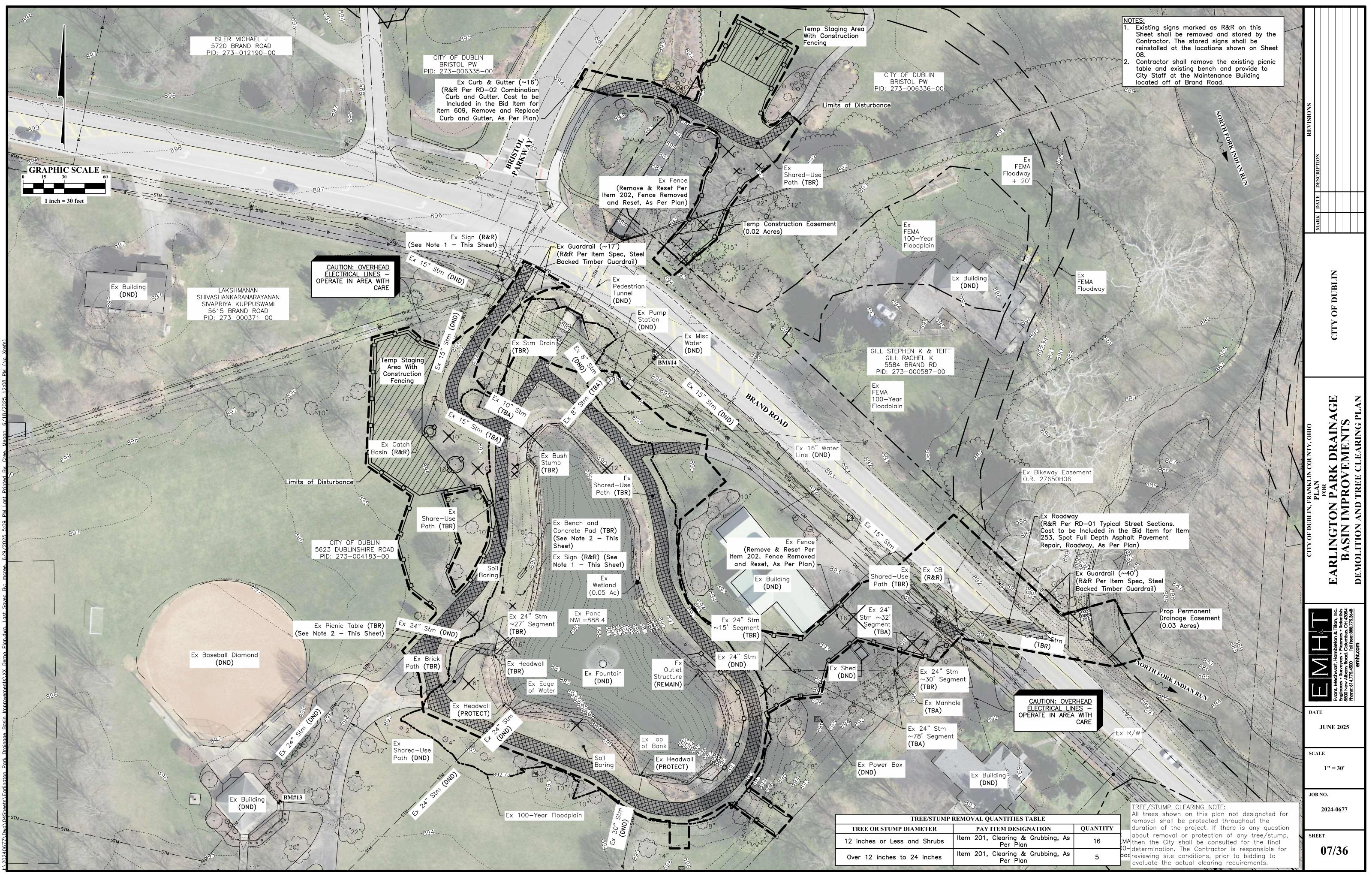
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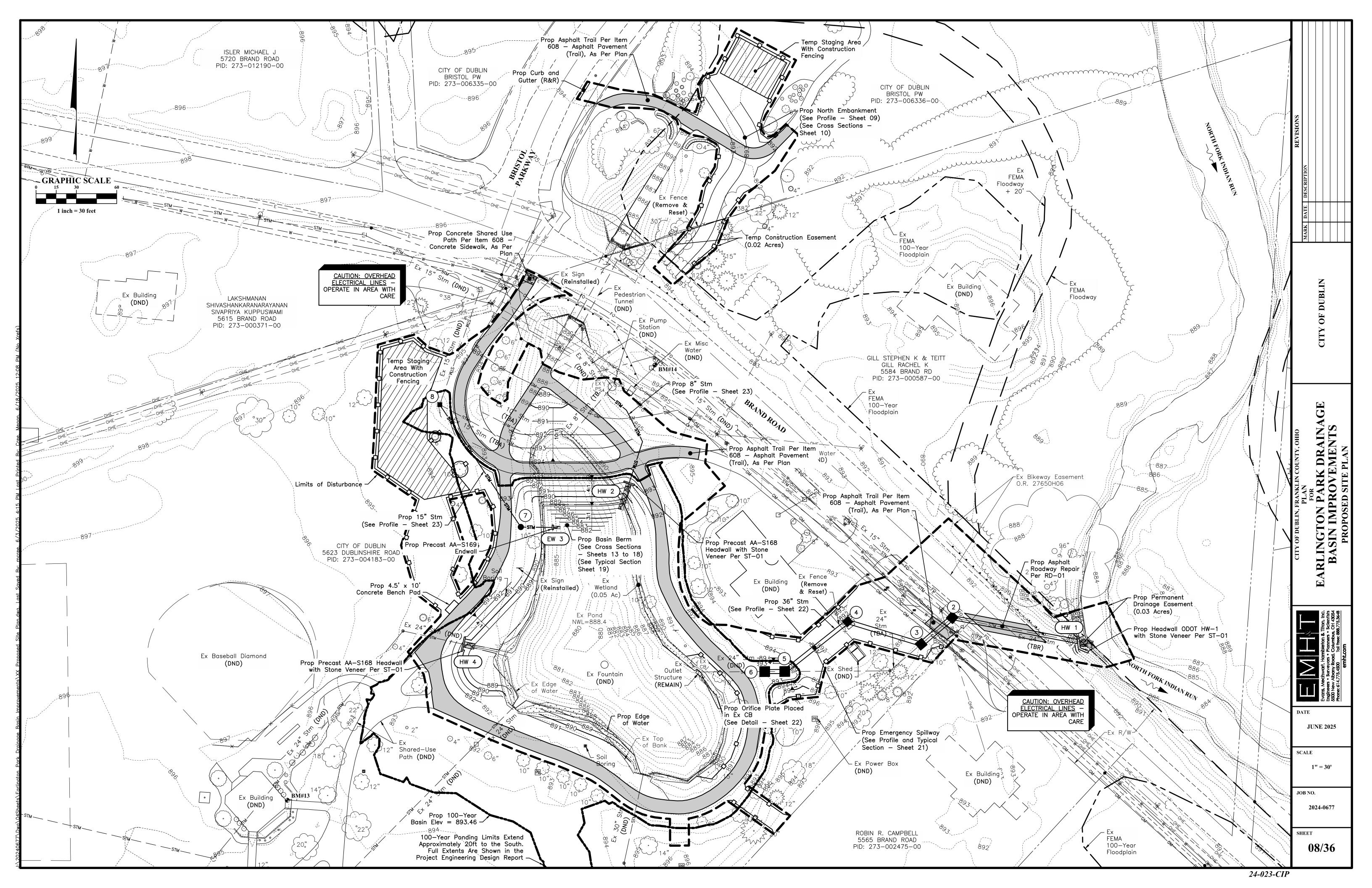
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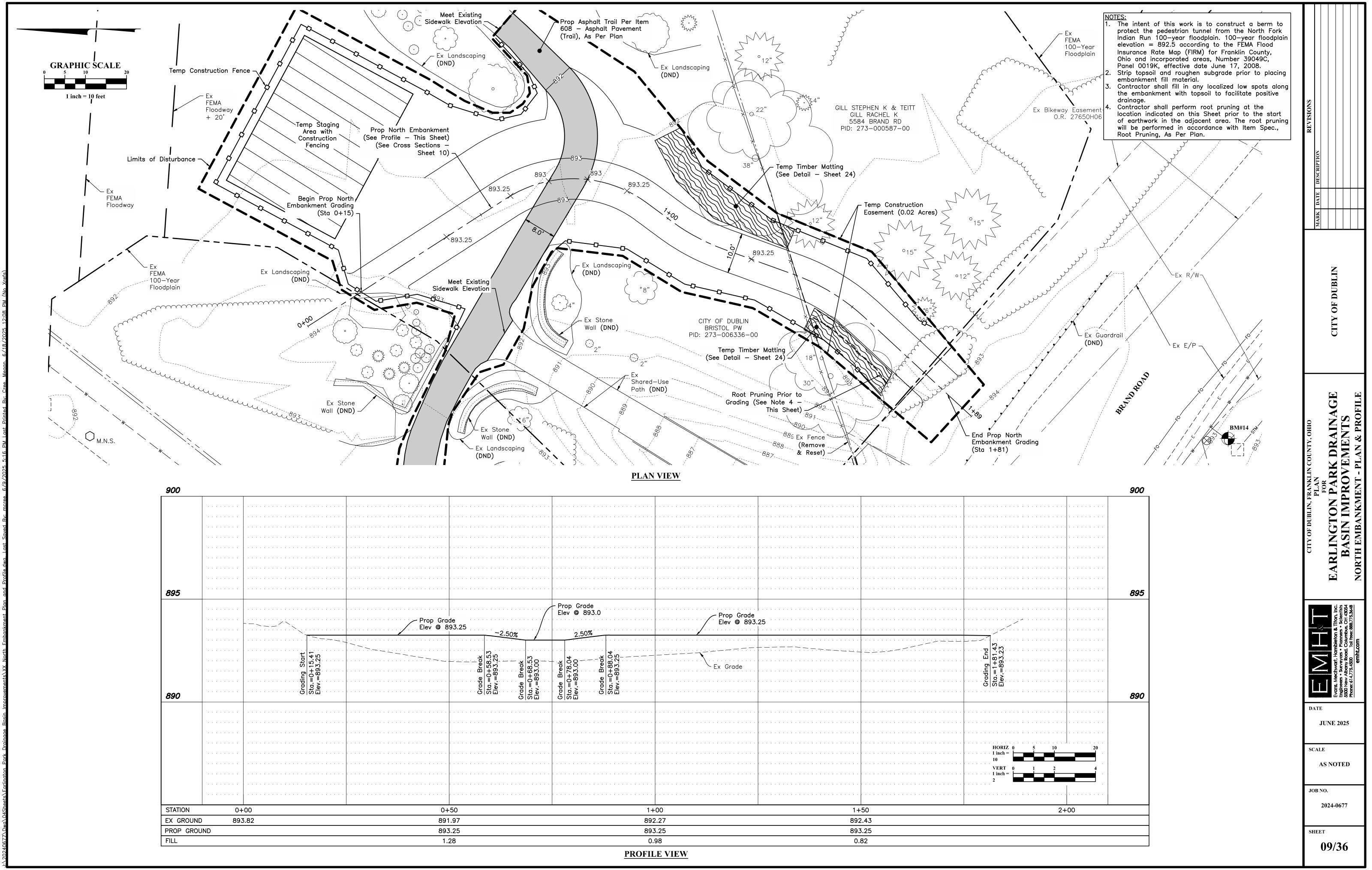
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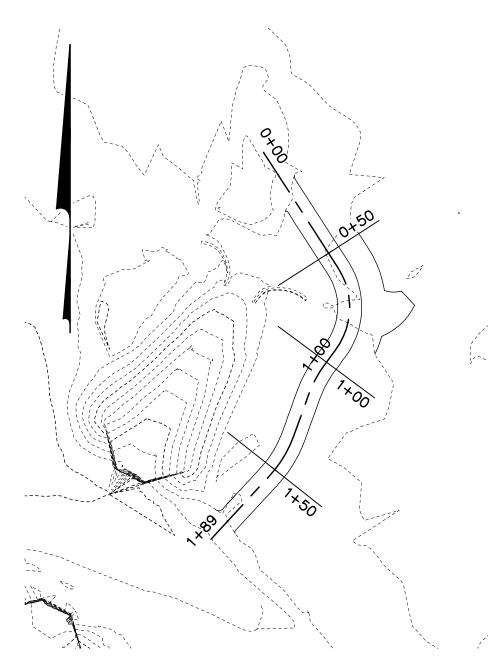
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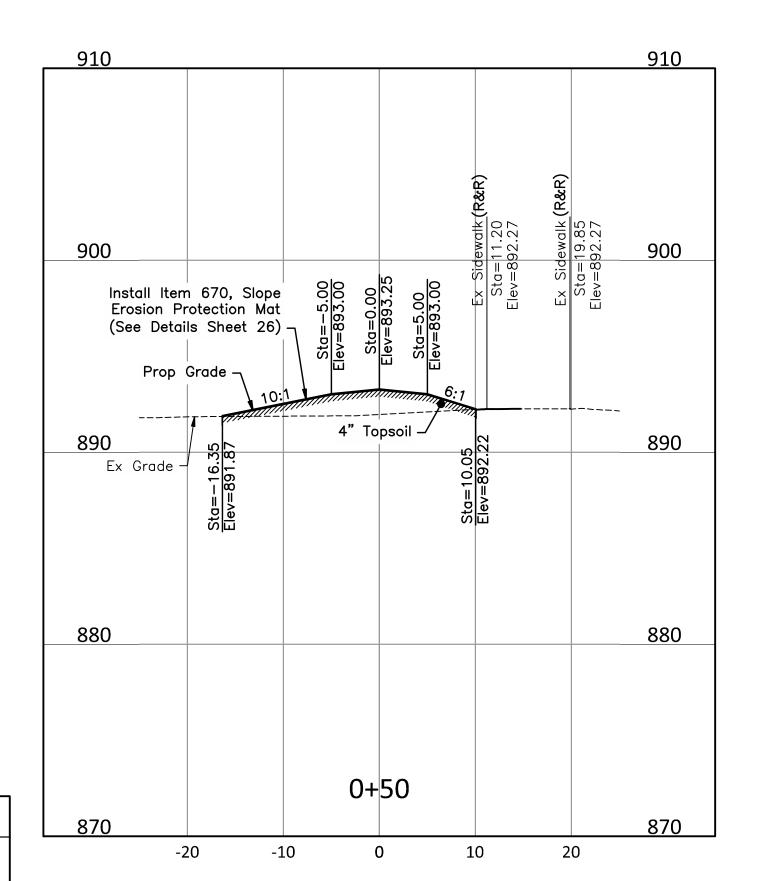


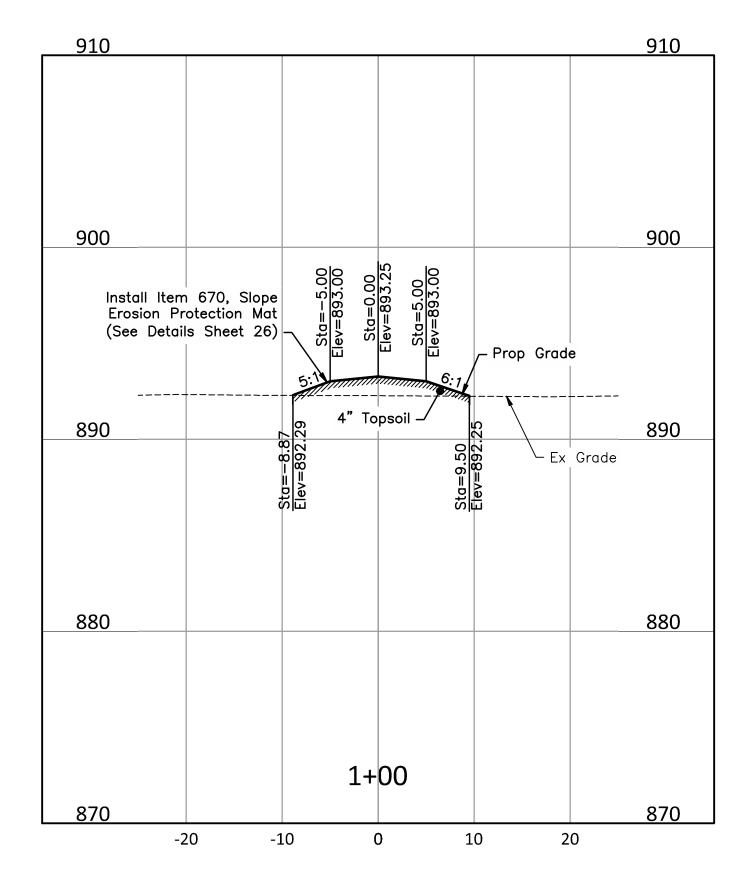
Cross Section Index Map

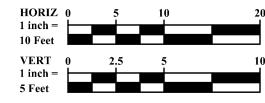
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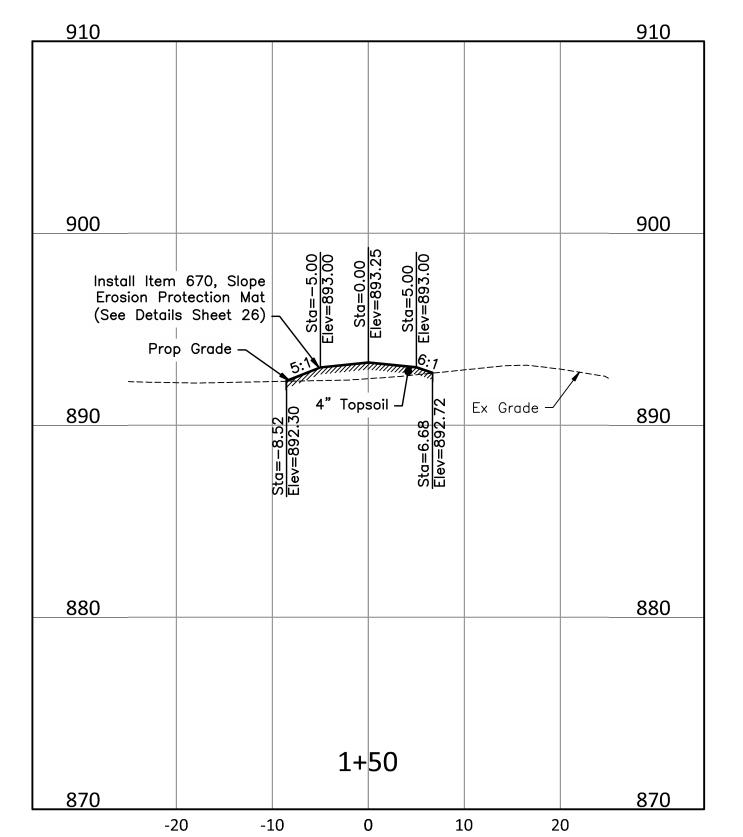


CROSS SECTION COORDINATE TABLE						
CROSS SECTION ID	STARTING POINT NORTHING	STARTING POINT EASTING	BEARING	DISTANCE	END POINT NORTHING	END POINT EASTING
0+50	775087.3997'	1788806.0706	N57°10'57"E	50.000	775114.4979'	1788848.0907
1+00	775070.4508'	1788806.1377'	S53°26'49"E	50.000	775040.6724'	1788846.3029
1+50	775028.7760'	1788781.9297	S51°36'53"E	54.058	774995.2090'	1788824.3030









NOTES:

SLOPE EROSION PROTECTION MAT:

The specified slope erosion protection mat shall meet the specifications identified on this plan, unless otherwise approved by the Engineer.

The slope erosion protection mat rolls shall be furnished with suitable wrapping for protection against moisture and extended ultraviolet exposure prior to placement. Each roll shall be labeled or tagged to provide product identification sufficient for field inventory and quality control purposes. Rolls shall be stored in a manner which provides identification, as well as protection from the elements. If stored outdoors, the rolls shall be elevated and protected with a waterproof cover.

INSTALLATION:

- Item 670, Slope Erosion Protection Mat, As Per Plan shall be installed as depicted in the North Embankment Cross Sections on this sheet and Installation Detail (Sheet 27).
- Stake matting to soil at density of 1.15 staples per square yard.

SEEDING:

See seeding notes on Sheets 04 and seeding zones and native grass seeding tables on Sheet 29.

TOPSOIL:

See topsoil notes on Sheet 04. Depth of topsoil placed shall be as follows:

Side slopes (as shown in the North Embankment Cross Sections on this sheet):

— 4" Min

MARK DATE DESCRIPTION

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IMPROVEMENTS

EARLINGTON I BASIN IMP NORTH EMBANKM

vars, Mechwart, Hambleton & Tilton, Incagineers • Surveyors • Planners • Scientist 500 New Albarry Road, Columbus, OH 4305

DATE

JUNE 2025

SCALE

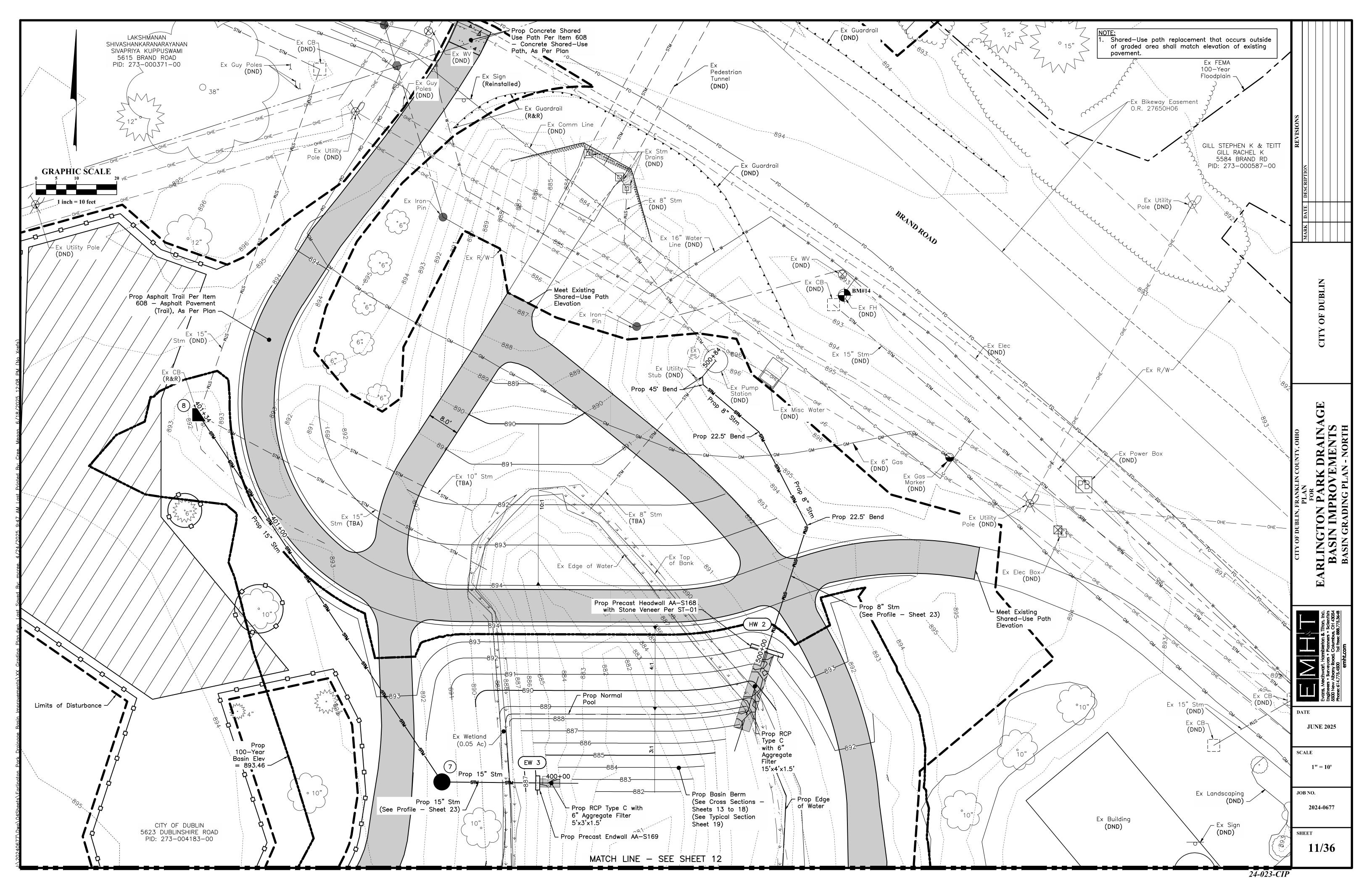
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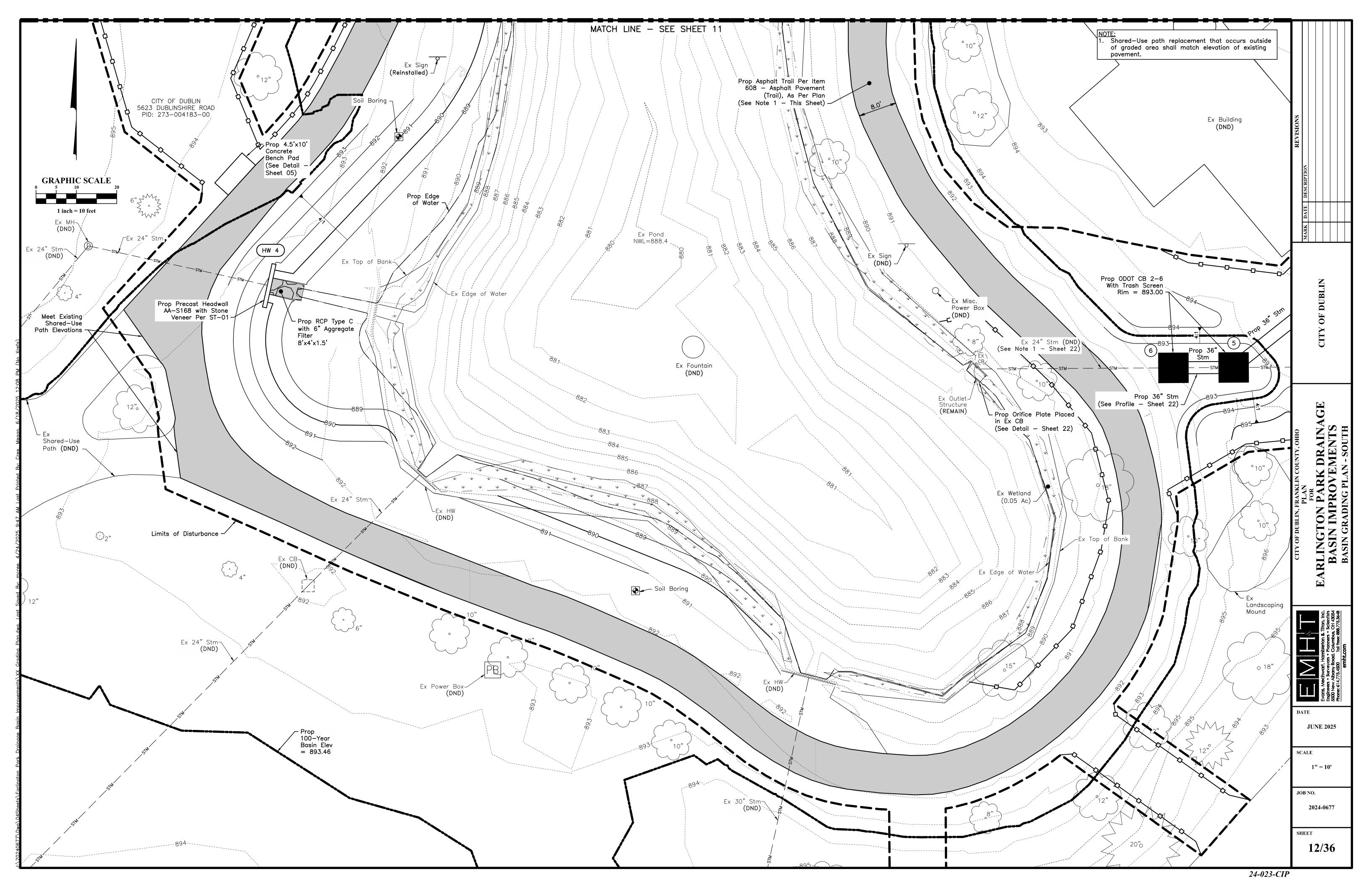
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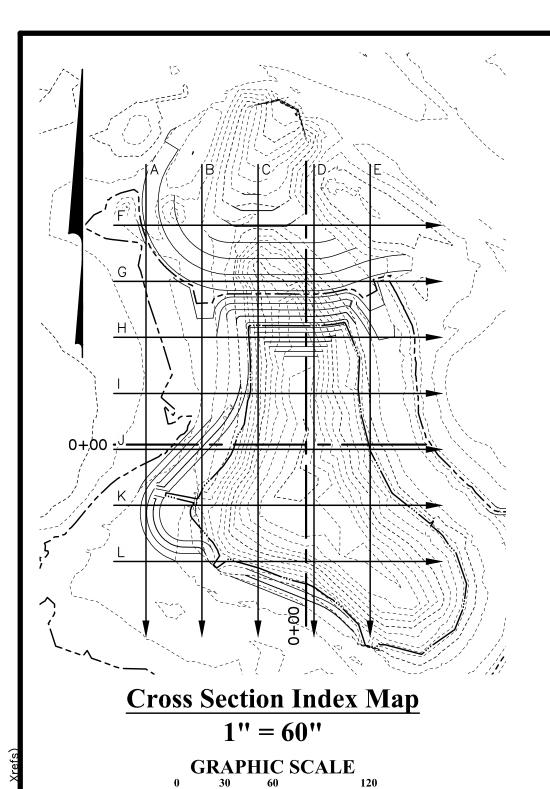
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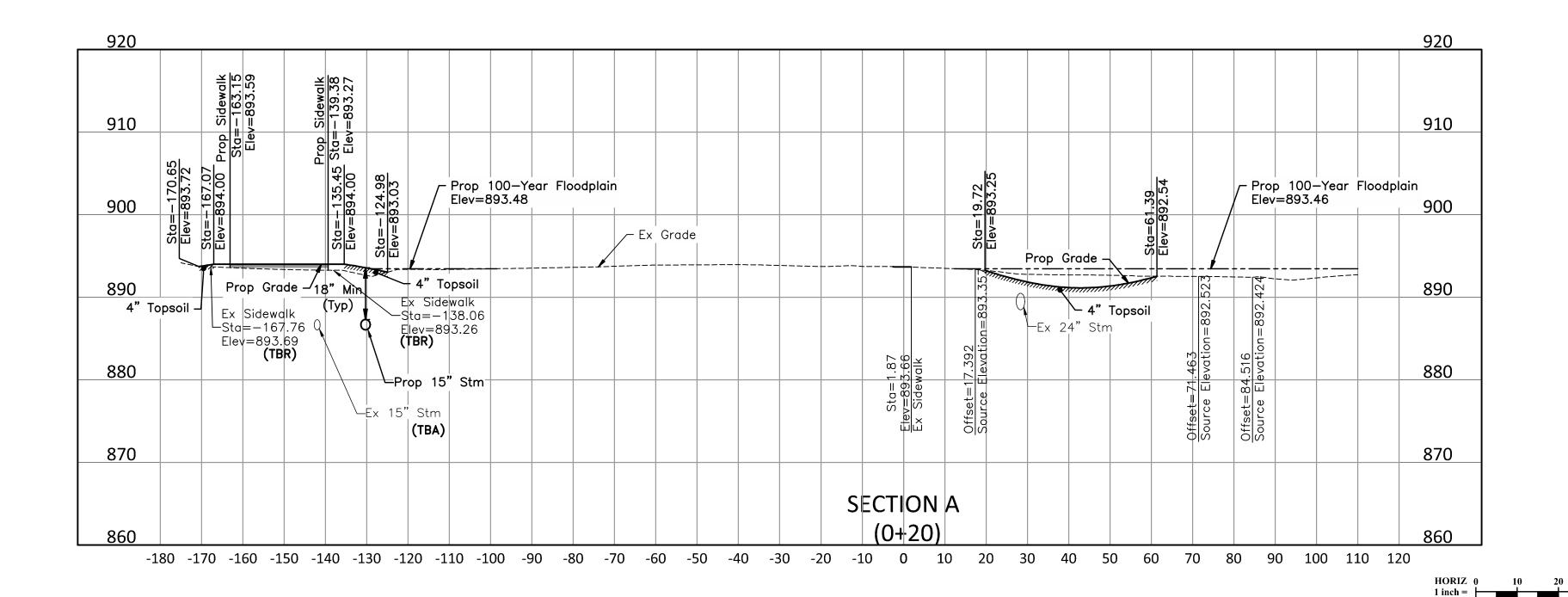
	1 inch = 60 feet		
	· · · · · · · · · · · ·		
STARTING POINT NORTHING	STARTING POINT EASTING	BEARING	DISTANCI
	BAS STARTING POINT	HORIZONTAL ALIGN BASELINE GEOMETRY STARTING POINT STARTING POINT	HORIZONTAL ALIGNMENT BASELINE GEOMETRY TABLE STARTING POINT STARTING POINT REARING

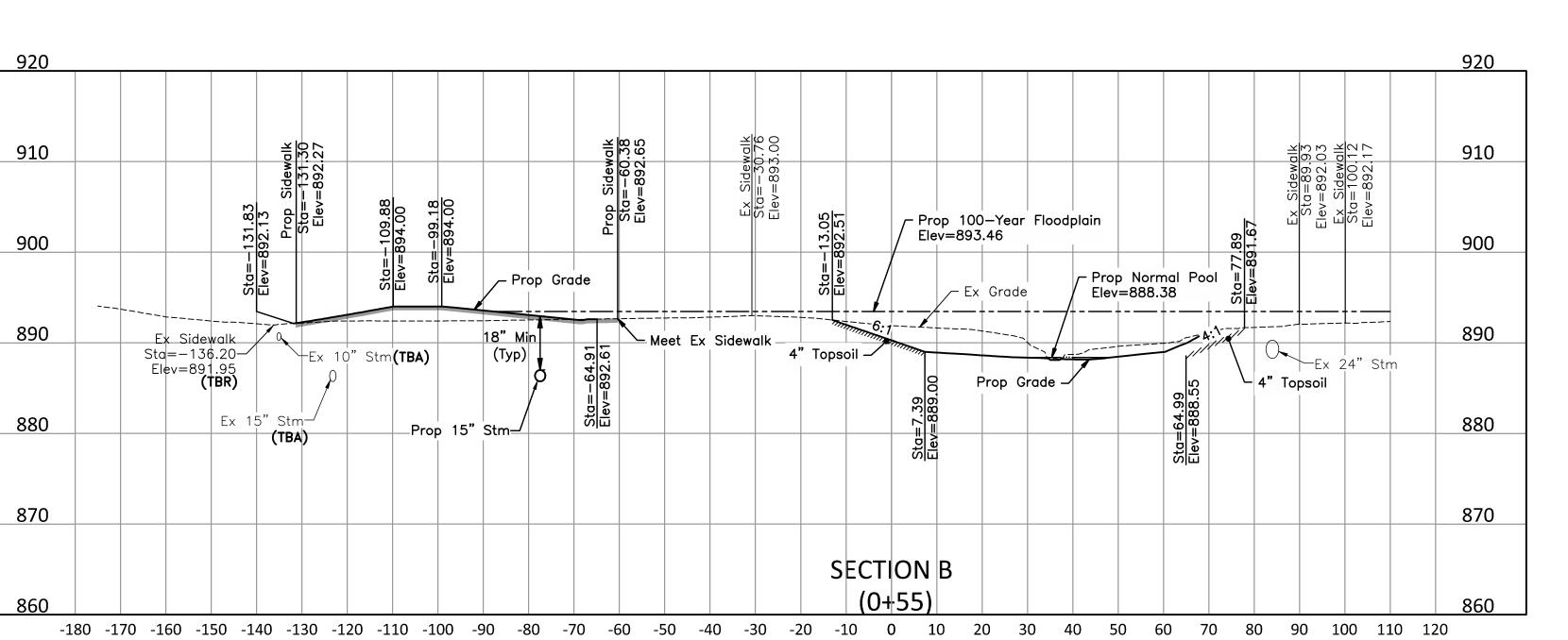
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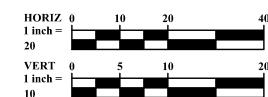
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	CROSS SECTION COORDINATE TABLE							
CROSS SECTION ID	STARTING POINT NORTHING	STARTING POINT EASTING	BEARING	DISTANCE	END POINT NORTHING	END POINT EASTING		
Α	774916.3495	1788624.7635	S00°00'00"E	285.000	774631.3495	1788624.7635		
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К	774703.3495	1788604.7635	N90°00'00"E	195.000	774703.3495	1788799.7635		
L	774668.3495'	1788604.7635	N90°00'00"E	195.000	774668.3495'	1788799.7635		

N90°00'00"E 195.00'







FRANKLIN COUNTY, OHIO
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ROSS SECTIONS EARLINGTON I BASIN IMP BASIN CRO DATE

JUNE 2025

AS NOTED

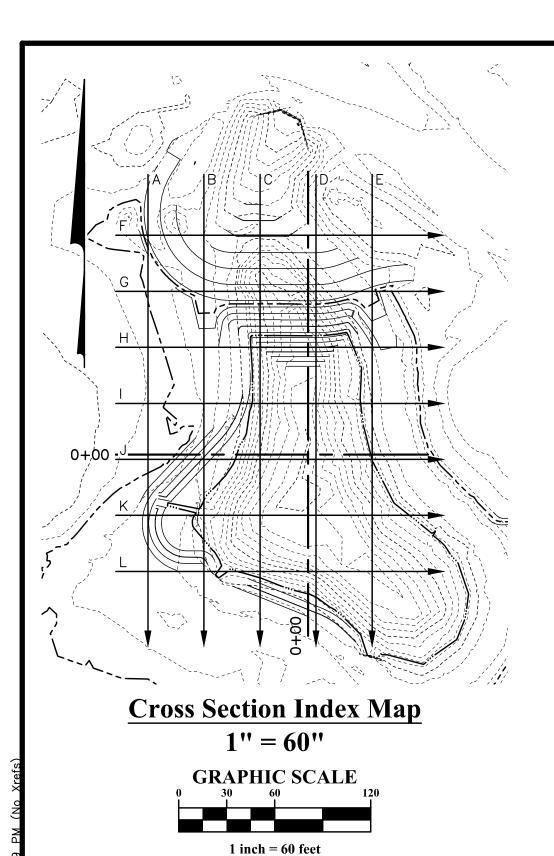
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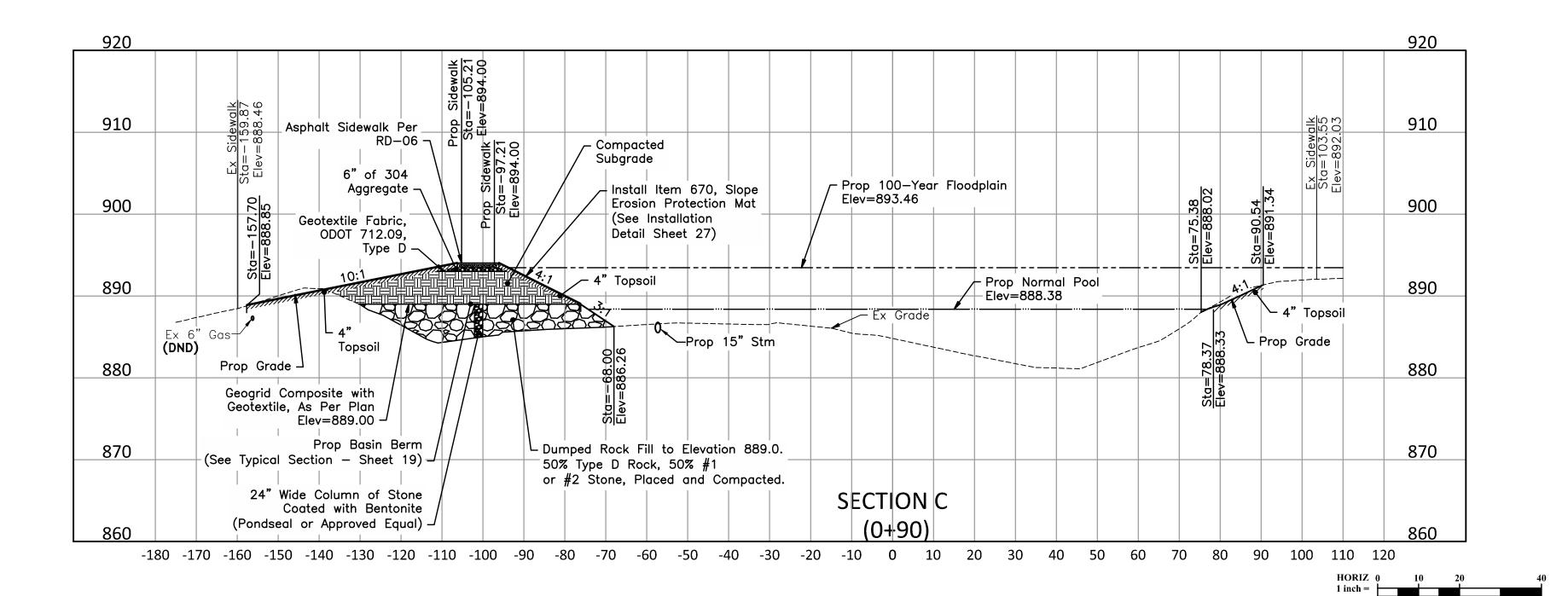
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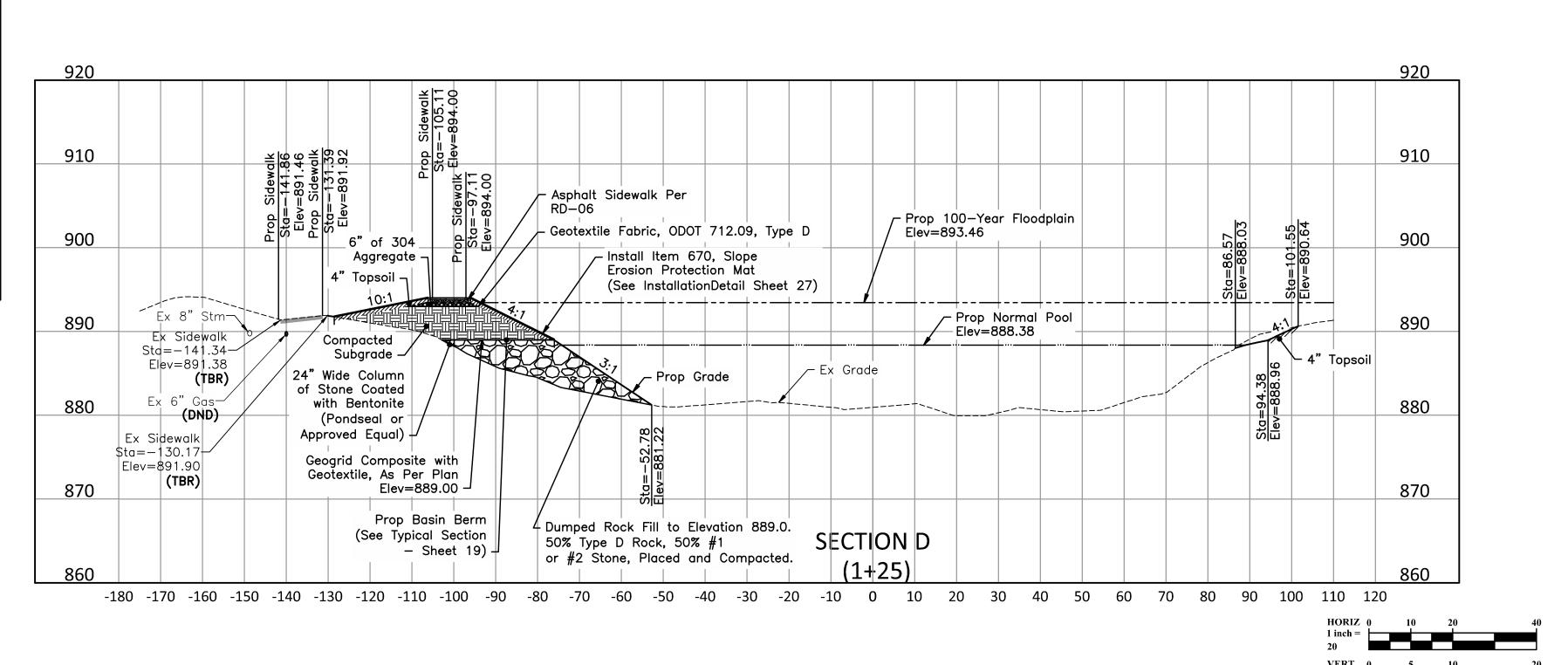
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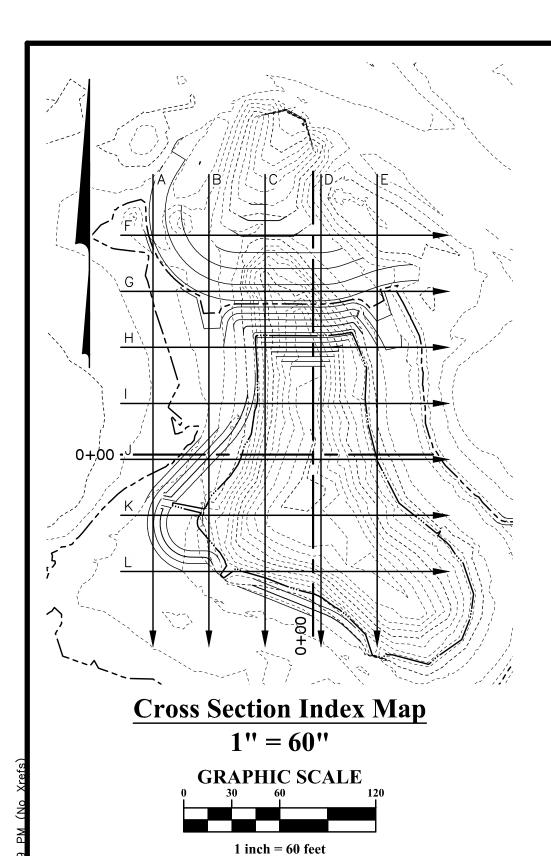


HORIZONTAL ALIGNMENT BASELINE GEOMETRY TABLE					
STARTING POINT NORTHING	STARTING POINT EASTING	BEARING	DISTANCE		
774741.3495'	1788604.7635'	N90°00'00"E	195.00'		

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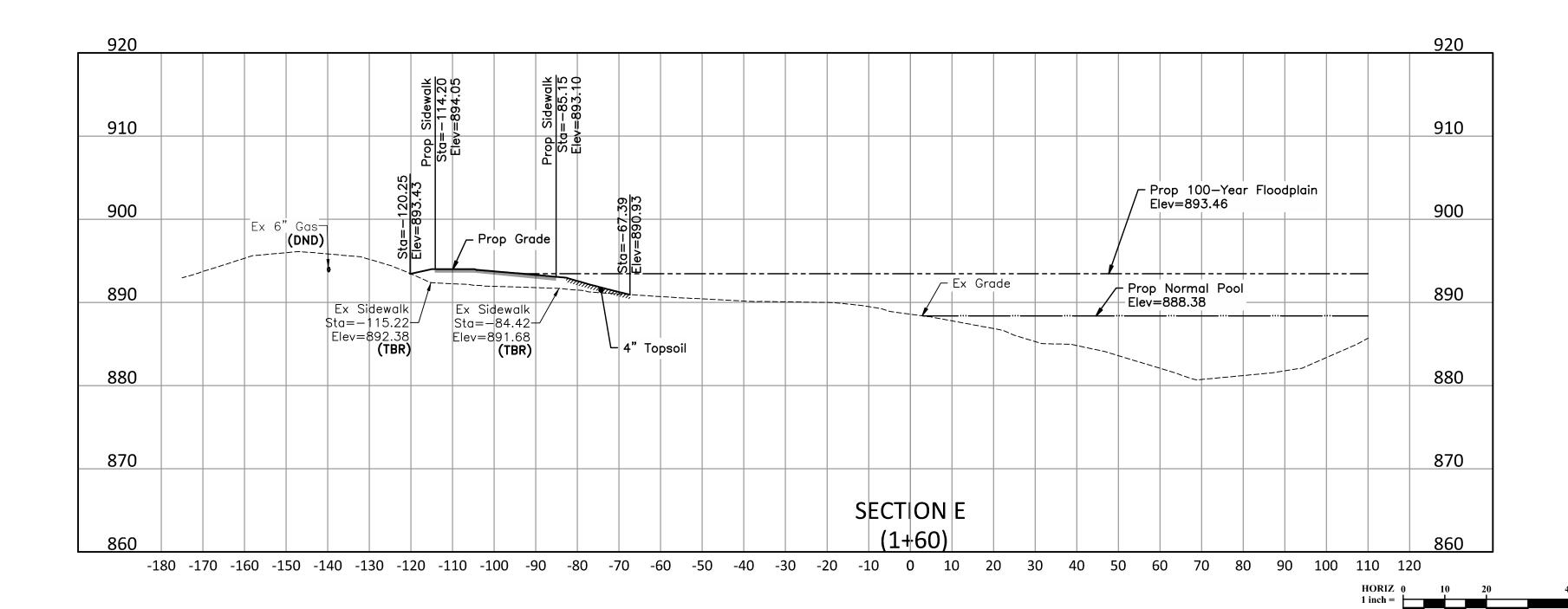


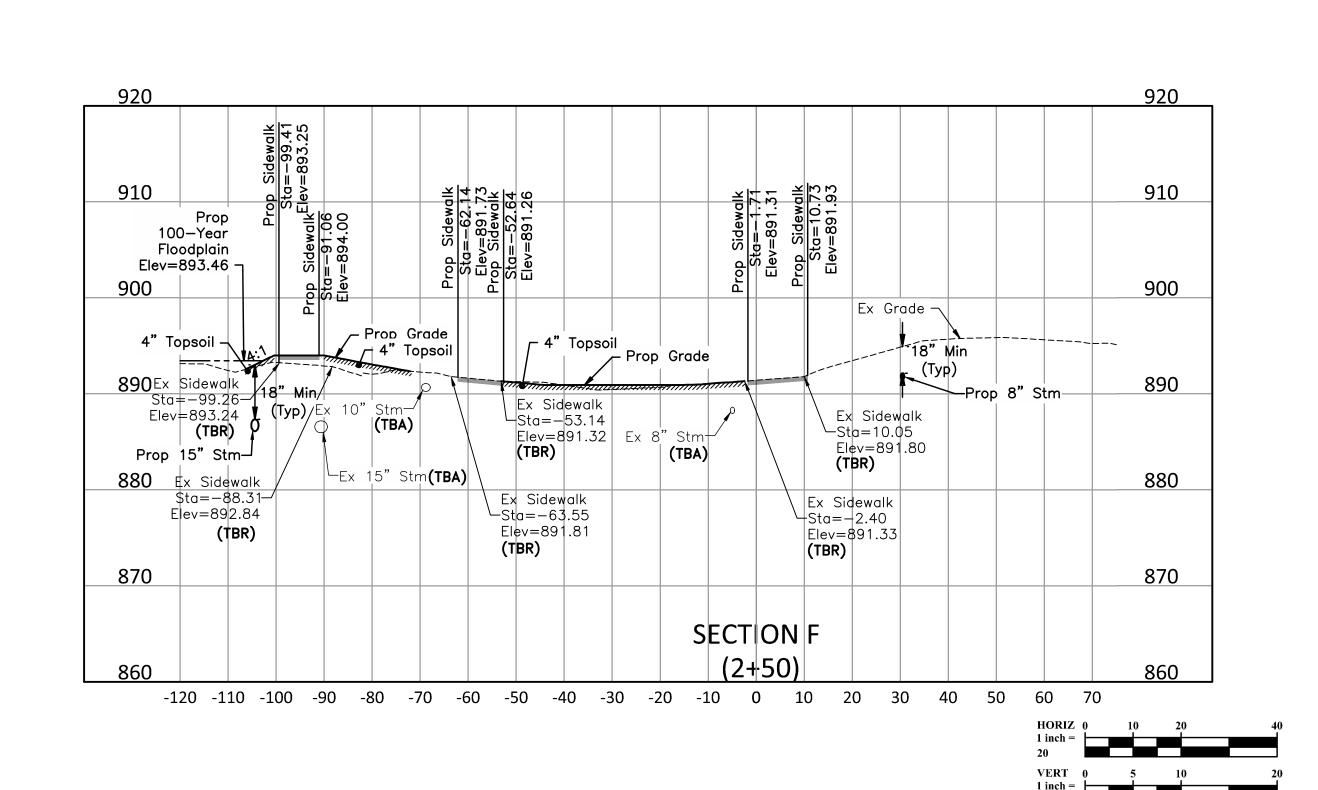


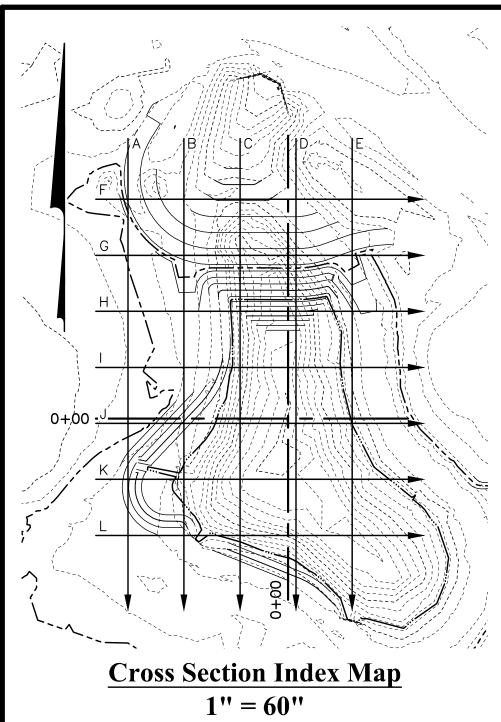
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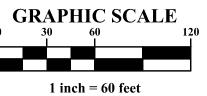
VERTICAL ALIGNMENT BASELINE GEOMETRY TABLE					
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	CROSS SECTION COORDINATE TABLE						
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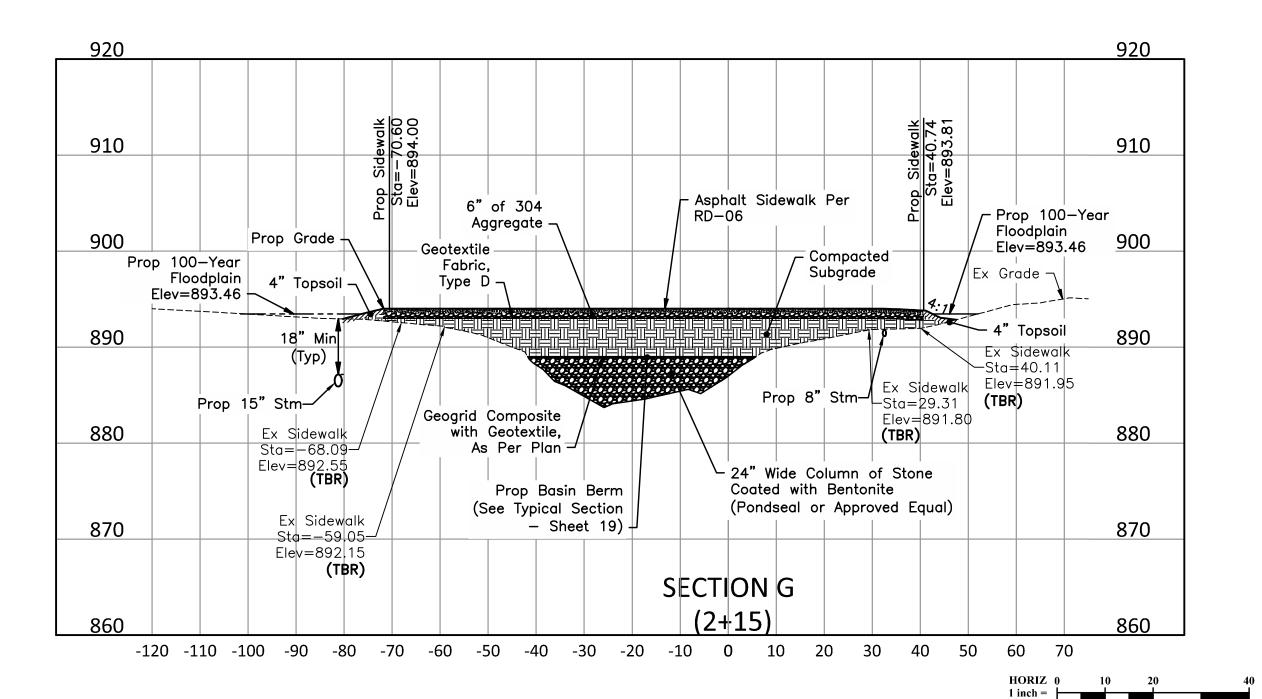


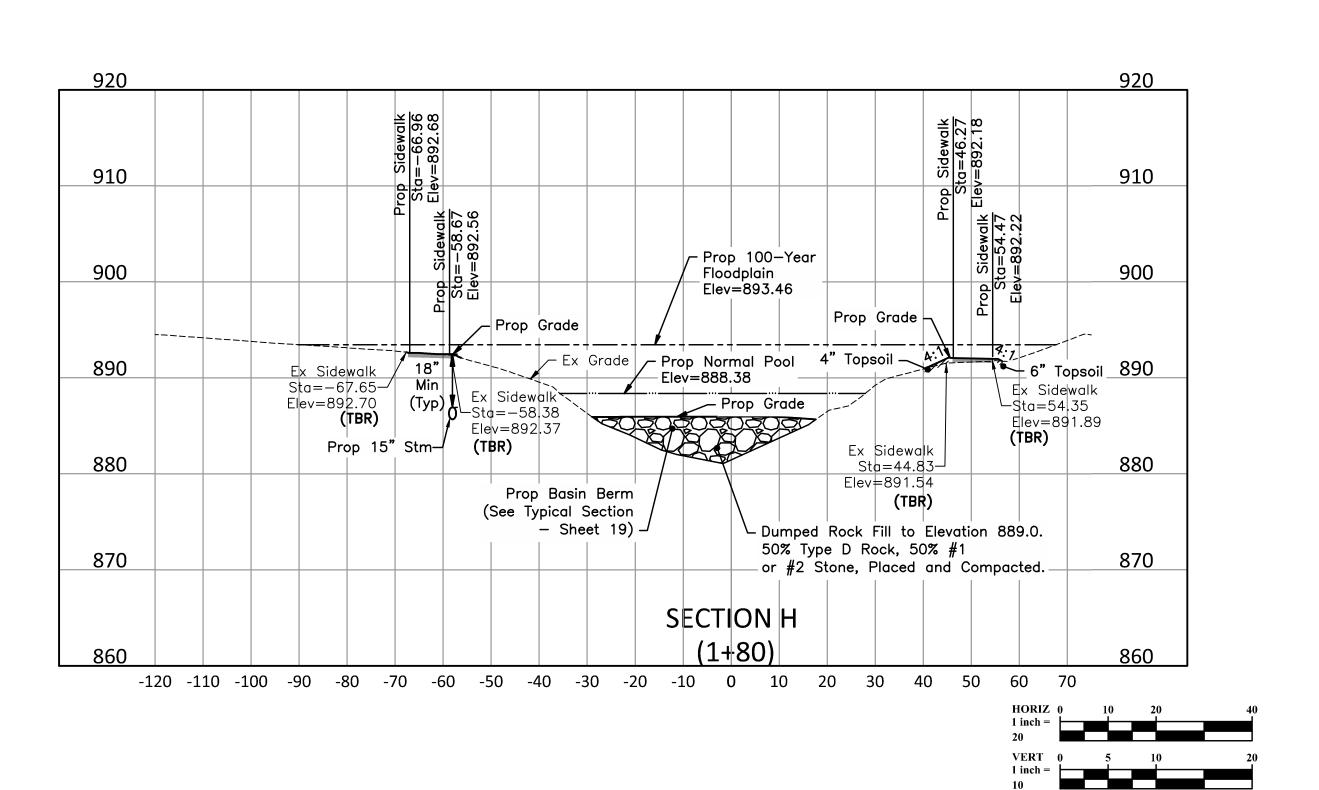




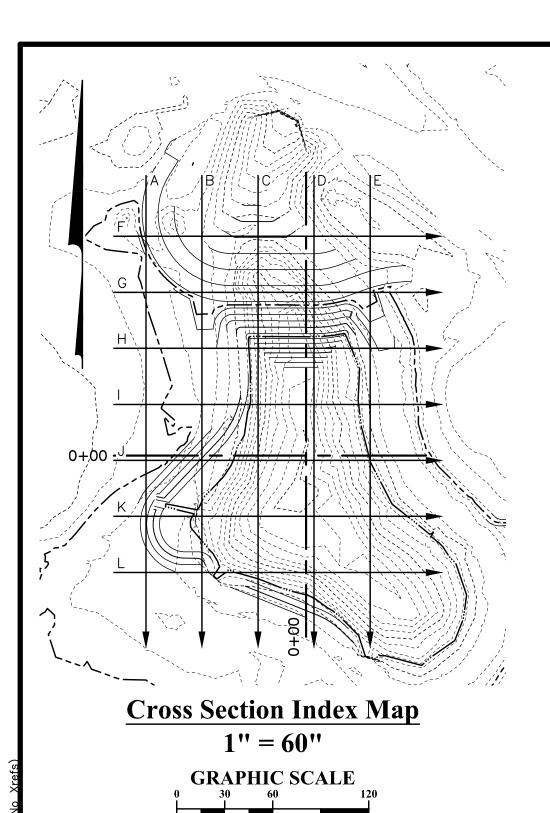
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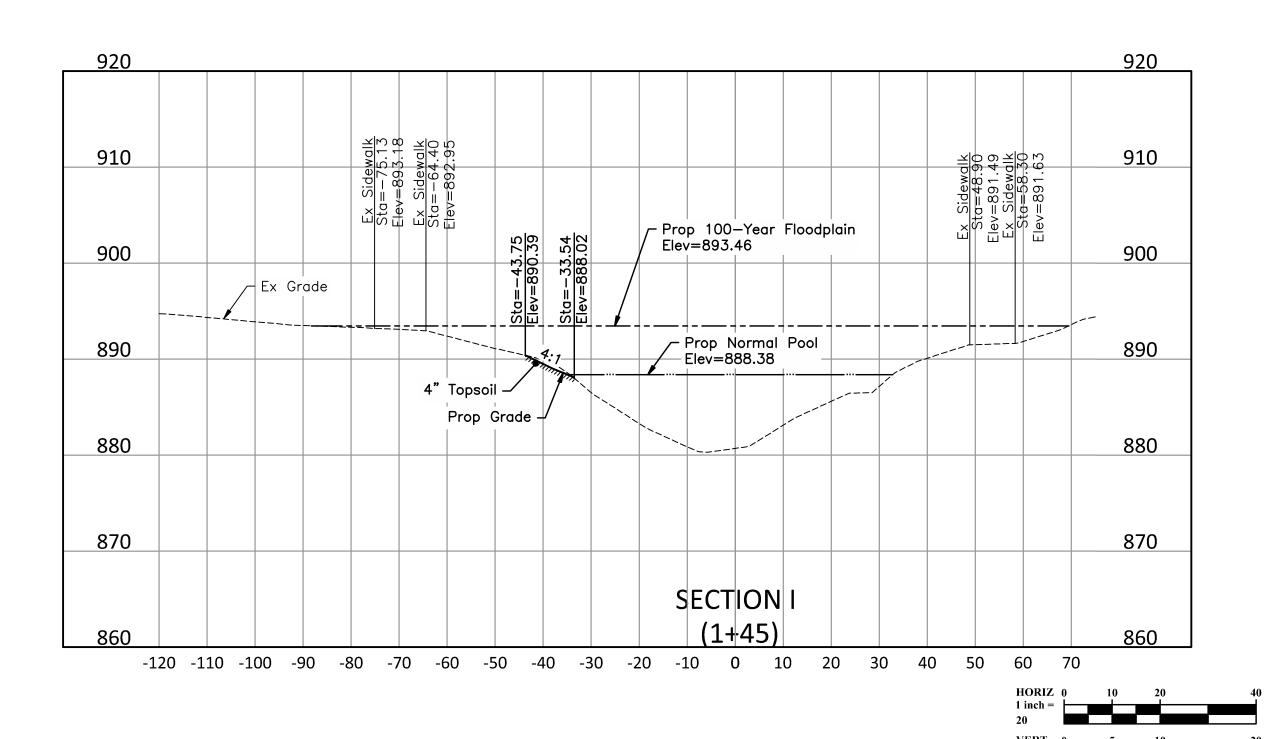
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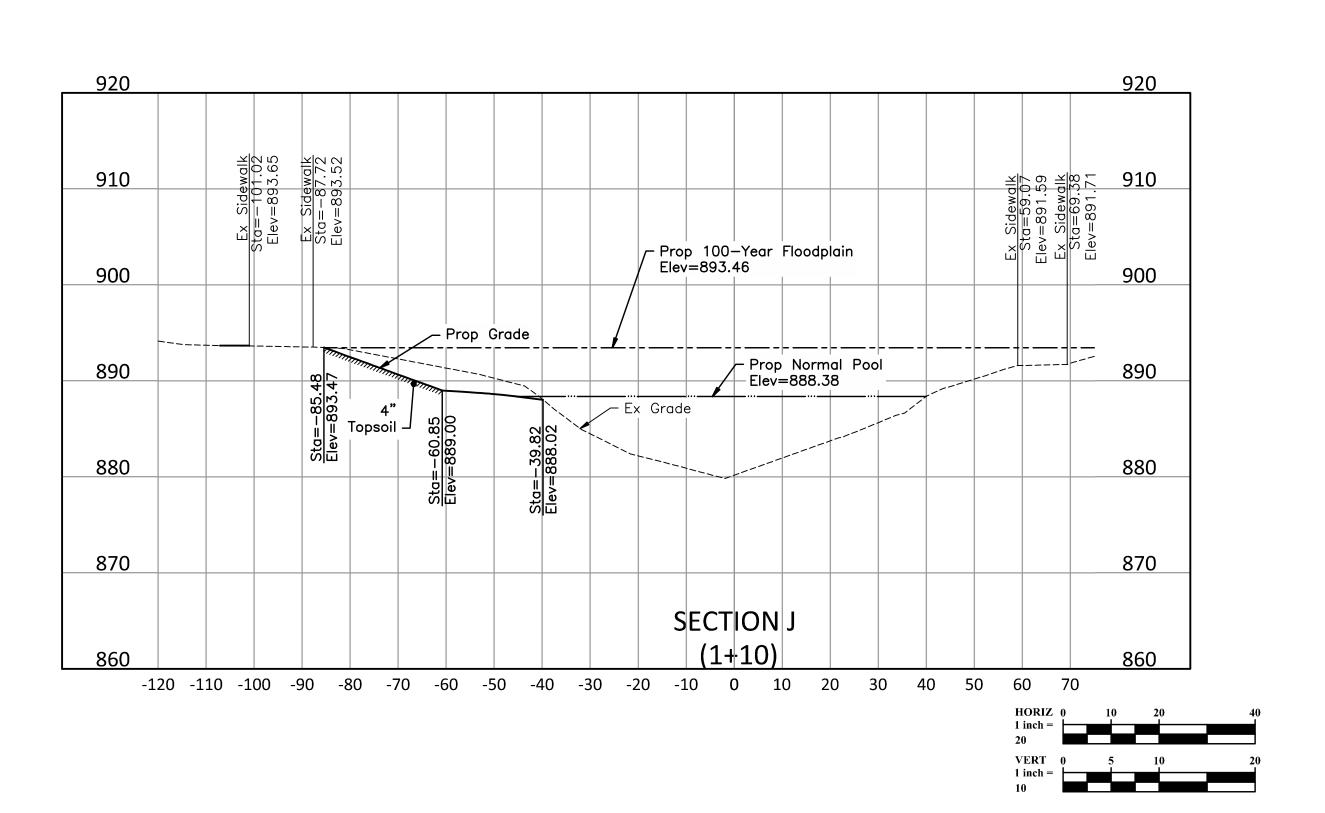


VERTICAL ALIGNMENT BASELINE GEOMETRY TABLE					
STARTING POINT NORTHING	STARTING POINT EASTING	BEARING	DISTANCE		
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1 inch = 60 feet

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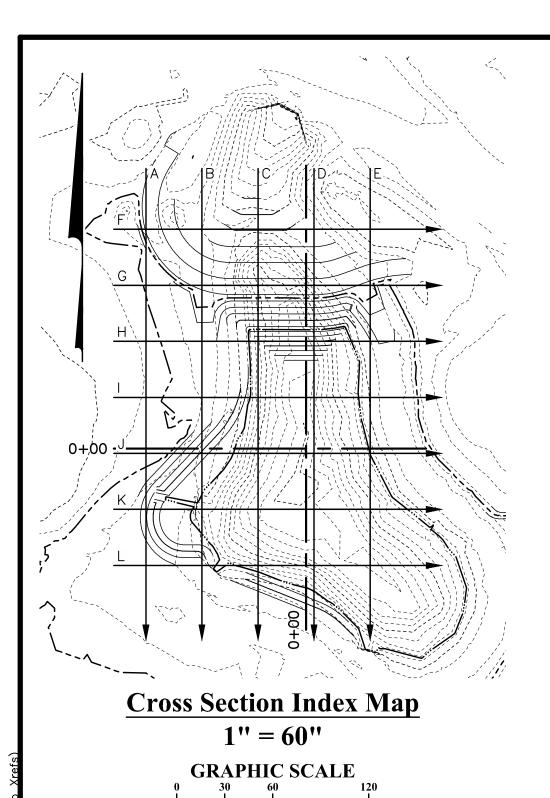


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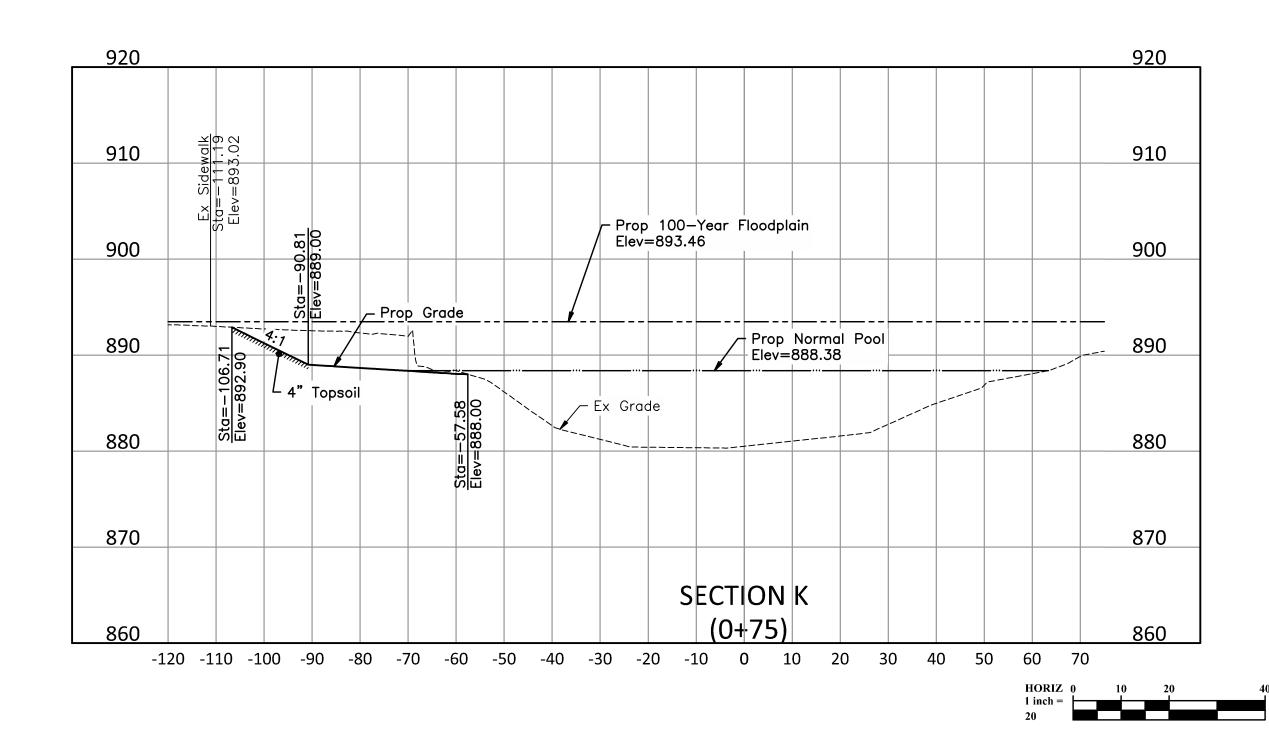
	1 inch = 60 feet		
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STARTING POINT NORTHING	STARTING POINT EASTING	BEARING	DISTAN

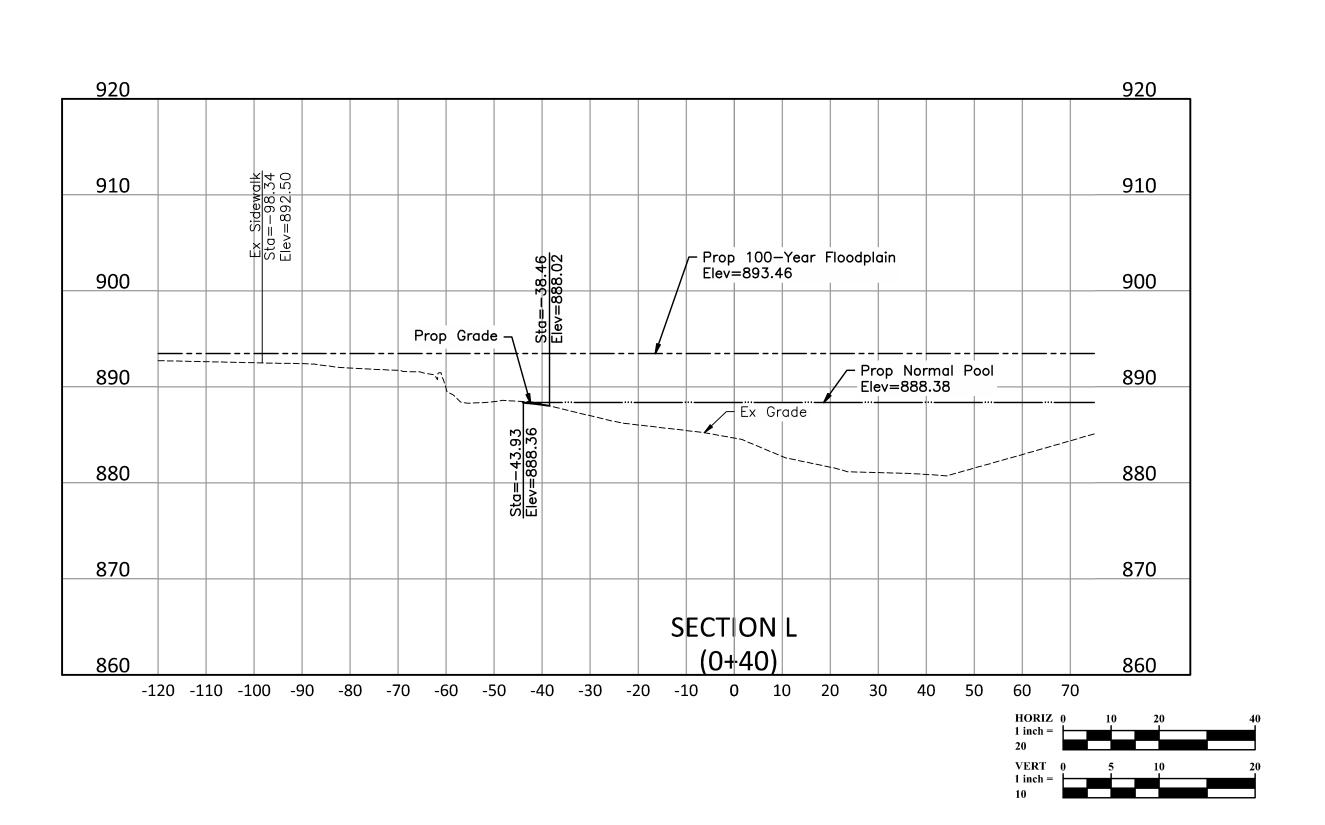
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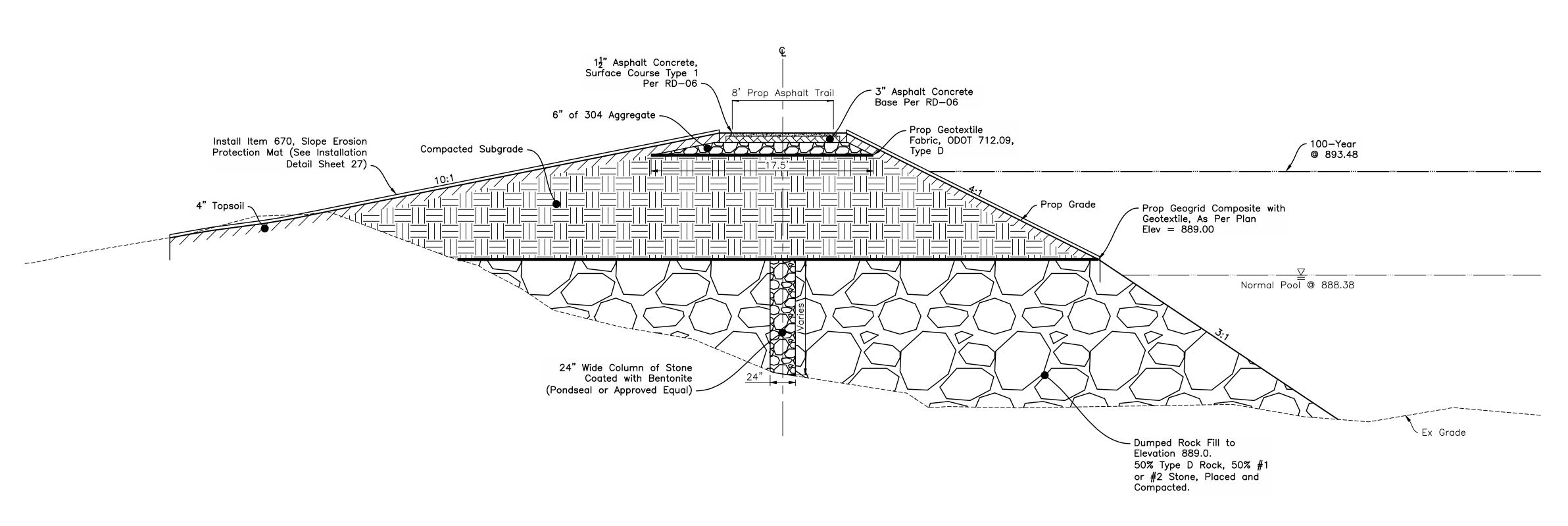
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	CROSS SECTION COORDINATE TABLE							
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N00°00'00"E 290.00'







DETAILBASIN BERM TYPICAL SECTION

TYPICAL SECTION NOTES:

GEOGRID AND GEOTEXTILE FABRIC:

The specified geogrid and geotextile fabric shall meet the specifications identified on this plan, unless otherwise approved by the Engineer. The specified geogrid composite with geotextile shall be Tensar NX850—FG, or approved equal. The specified standalone geotextile fabric shall be from the Ohio Department of Transportation (ODOT) approved list and meet the requirements of ODOT Item 712.09, Type D.

The geogrid and geotextile rolls shall be furnished with suitable wrapping for protection against moisture and extended ultraviolet exposure prior to placement. Each roll shall be labeled or tagged to provide product identification sufficient for field inventory and quality control purposes. Rolls shall be stored in a manner which provides identification, as well as protection from the elements. Protect geogrid from direct sunlight, and do not store directly on the ground.

INSTALLATION:

- Item 712, Geogrid Composite with Geotextile, As Per Plan shall be installed as depicted in the Basin Berm Typical Section Detail on this Sheet.
- Item 712, Geotextile Fabric, ODOT 712.09, Type D shall be installed as depicted in the Basin Berm Typical Section on this Sheet.
- Install geotextile fabric and geogrid flush against the compacted ground. Provide anchor trenches and pins per manufacturerer's recommendations.

SLOPE EROSION PROTECTION MAT:

The specified slope erosion protection mat shall meet the specifications identified on this plan, unless otherwise approved by the Engineer.

The slope erosion protection mat rolls shall be furnished with suitable wrapping for protection against moisture and extended ultraviolet exposure prior to placement. Each roll shall be labeled or tagged to provide product identification sufficient for field inventory and quality control purposes. Rolls shall be stored in a manner which provides identification, as well as protection from the elements. If stored outdoors, the rolls shall be elevated and protected with a waterproof cover.

INSTALLATION:

- Item 670, Slope Erosion Protection Mat, As Per Plan shall be installed as depicted in the Basin Berm Typical Section Detail on this Sheet and Installation Detail (Sheet 27).
- Stake matting to soil at density of 1.15 staples per square yard.

SEEDING:

See seeding notes on Sheets 04 and seeding zones and native grass seeding tables on Sheet 29.

TOPSOIL:

See topsoil notes on Sheet 04. Depth of topsoil placed shall be as follows:

Side slopes (as shown in the Basin Berm Typical Section Detail on this sheet): – 4" Min

BASIN BERM INSTALLATION NOTES:

- 1. The Contractor may lower the basin normal pool elevation to facilitate the work. Refer to Item Spec., Dewatering, As Per Plan on Sheet 04.
- 2. The Contractor shall begin by placing dumped rock fill or concrete rubble directly into the water to build up a platform to an elevation of 889.00. A 24" wide column of stone coated with bentonite (Pondseal® or
- approved equal) shall be place concurrently with the rock fill material. 3. Once an elevation of 889.00 is reached, the Contractor shall compact the dumped material using a
- 4. A layer of the composite geogrid with geotextile fabric shall be placed over the compacted rock to provide reinforcement.
- 5. After the installation of the composite geogrid with geotextile fabric, begin placing fine—grained fill soil directly on top in accordance with ODOT Item 203 until final elevation is reached.

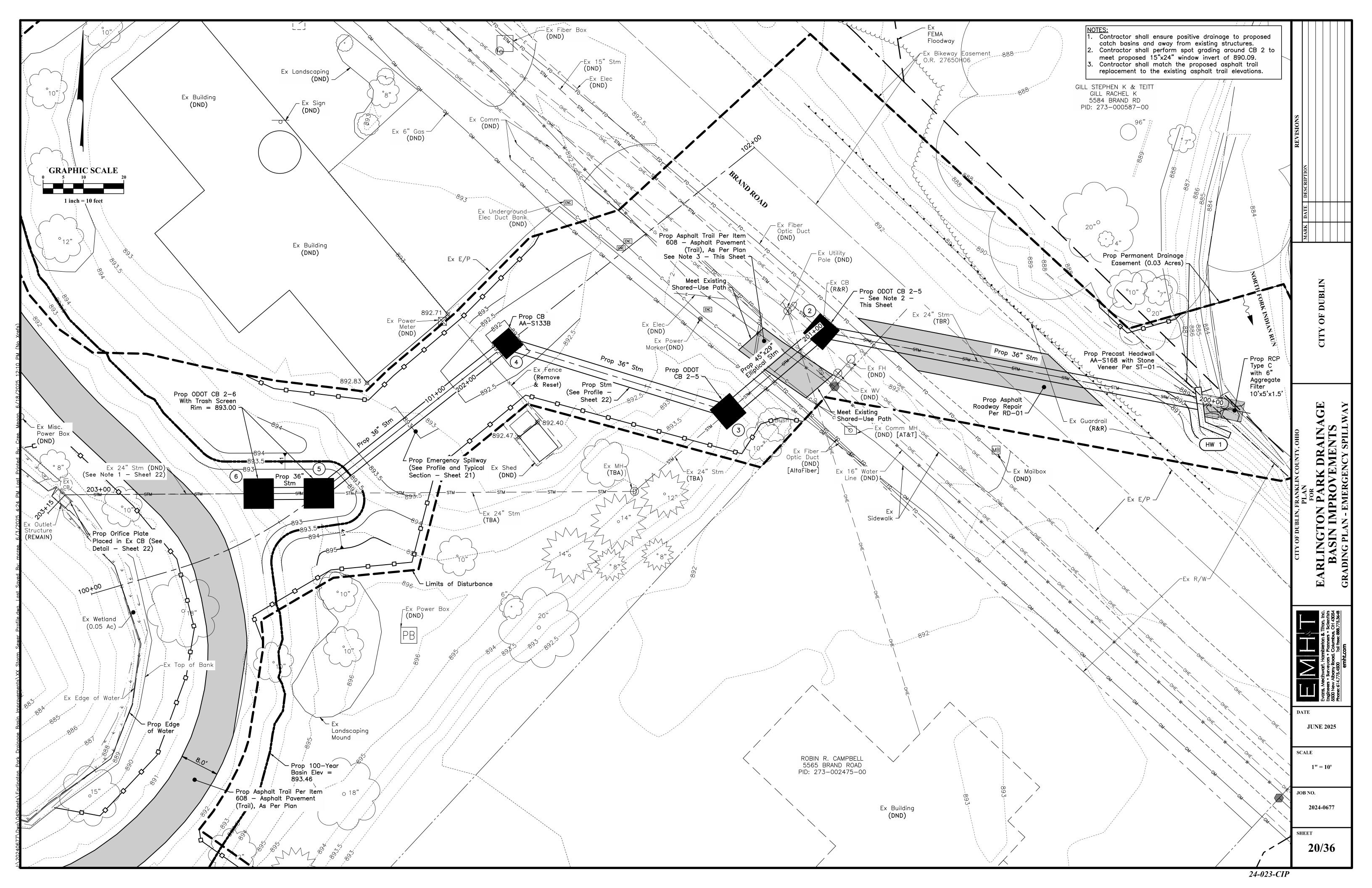
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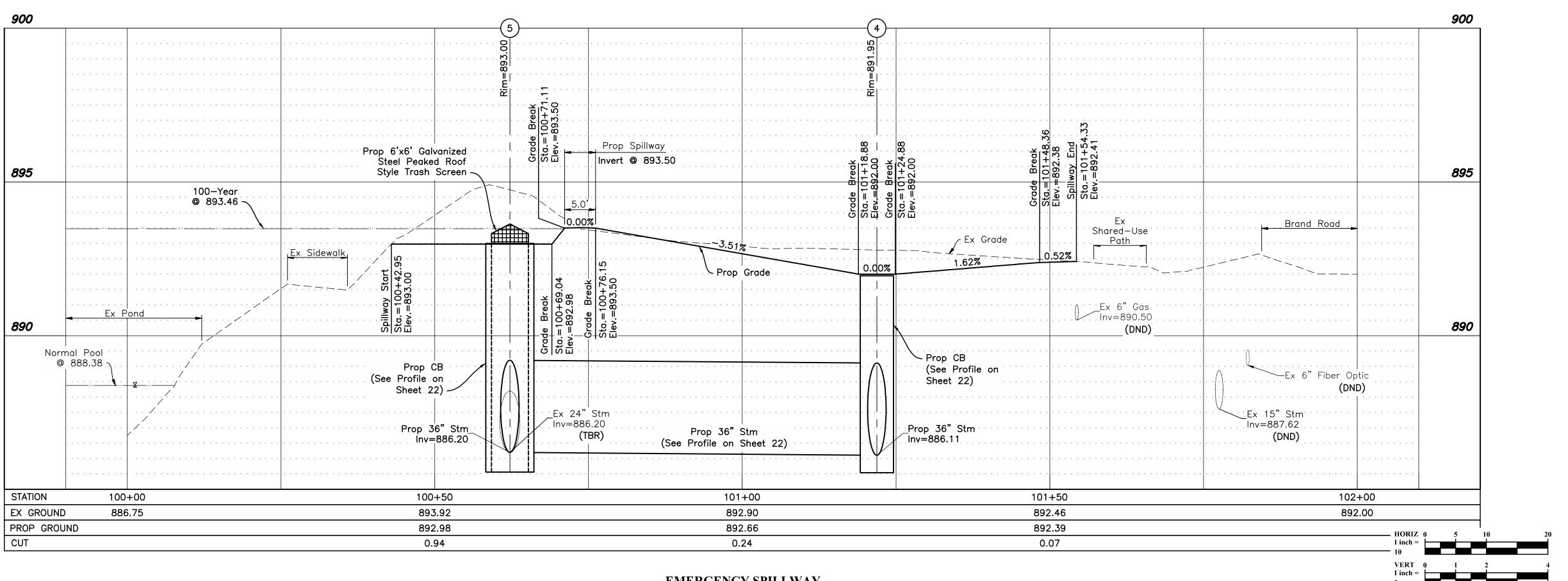
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JOB NO.

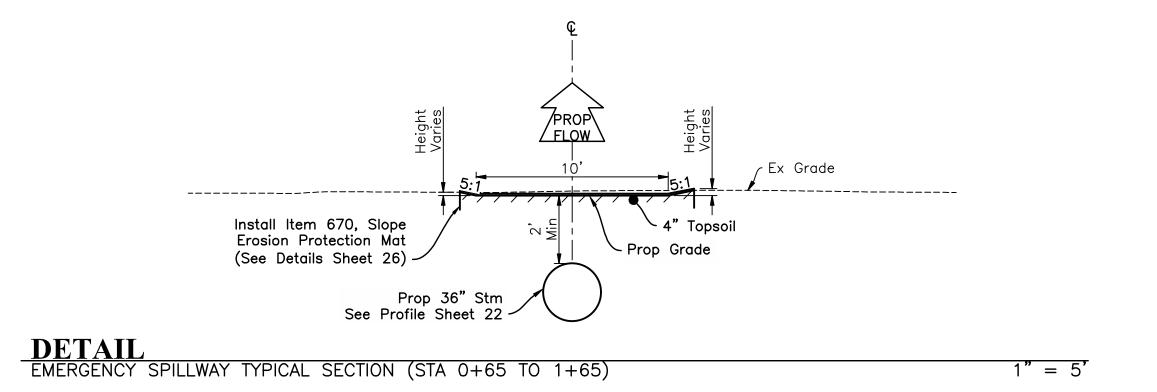
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SHEET 19/36





EMERGENCY SPILLWAY PROFILE VIEW



TYPICAL SECTION NOTES:

SLOPE EROSION PROTECTION MAT:

The specified slope erosion protection mat shall meet the specifications identified on this plan, unless otherwise approved by the Engineer.

The slope erosion protection mat rolls shall be furnished with suitable wrapping for protection against moisture and extended ultraviolet exposure prior to placement. Each roll shall be labeled or tagged to provide product identification sufficient for field inventory and quality control purposes. Rolls shall be stored in a manner which provides identification, as well as protection from the elements. If stored outdoors, the rolls shall be elevated and protected with a waterproof cover.

INSTALLATION:

- Item 670, Slope Erosion Protection Mat, As Per Plan shall be installed as depicted in the North Embankment Cross Sections on this sheet and Installation Detail (Sheet 26).
- Stake matting to soil at density of 1.15 staples per square yard.

SEEDING:

See seeding notes on Sheets 04 and seeding zones and native grass seeding tables on Sheet 29.

TOPSOIL:

See topsoil notes on Sheet 04. Depth of topsoil placed shall be as follows:

Side slopes & Spillway Bottom (as shown in the Spillway Typical Section Detail on this sheet):

— 4" Min

MARK DATE DESCRIPTION

MARK DATE DESCRIPTION

CITY OF I

EARLINGTON PARK DRAINAGE
BASIN IMPROVEMENTS
WERGENCY SPILLWAY PROFILE AND TYPICAL SECTION

Aechwart, Hambleton & Tilton, Inc. is - Surveyors - Planners - Scientists w Albarry Road, Columbus, OH 43054

DATE

JUNE 2025

SCALE

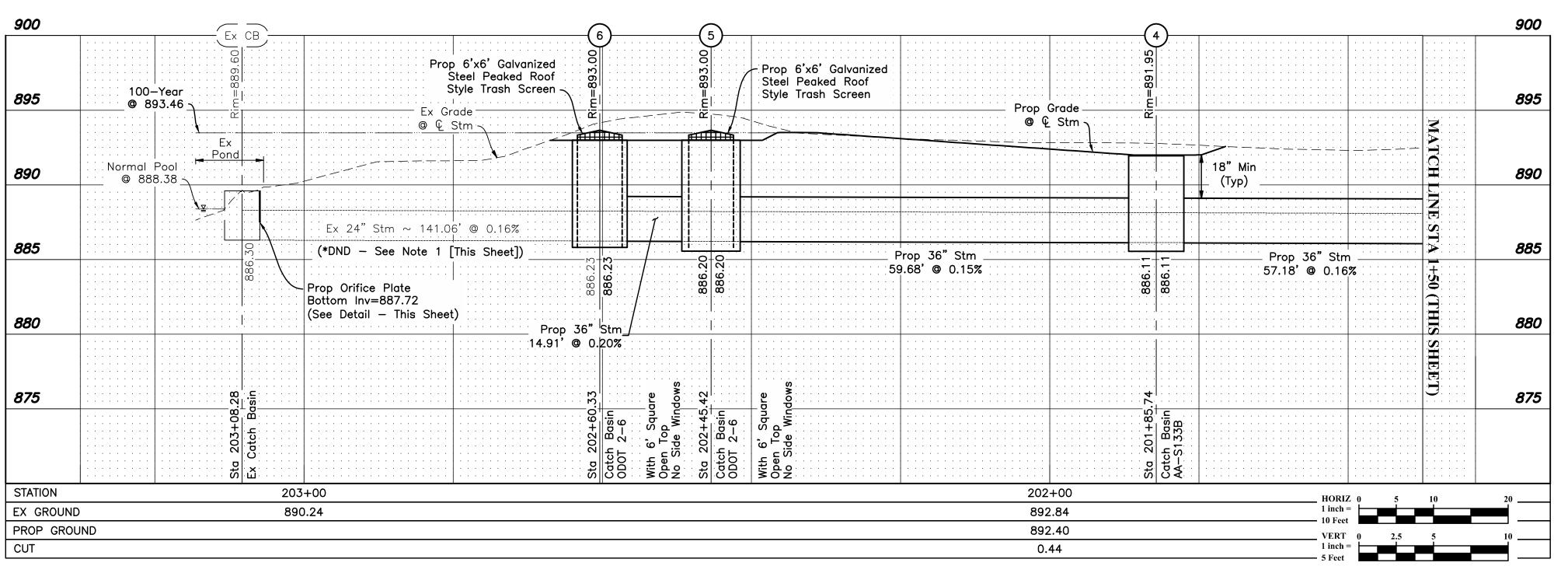
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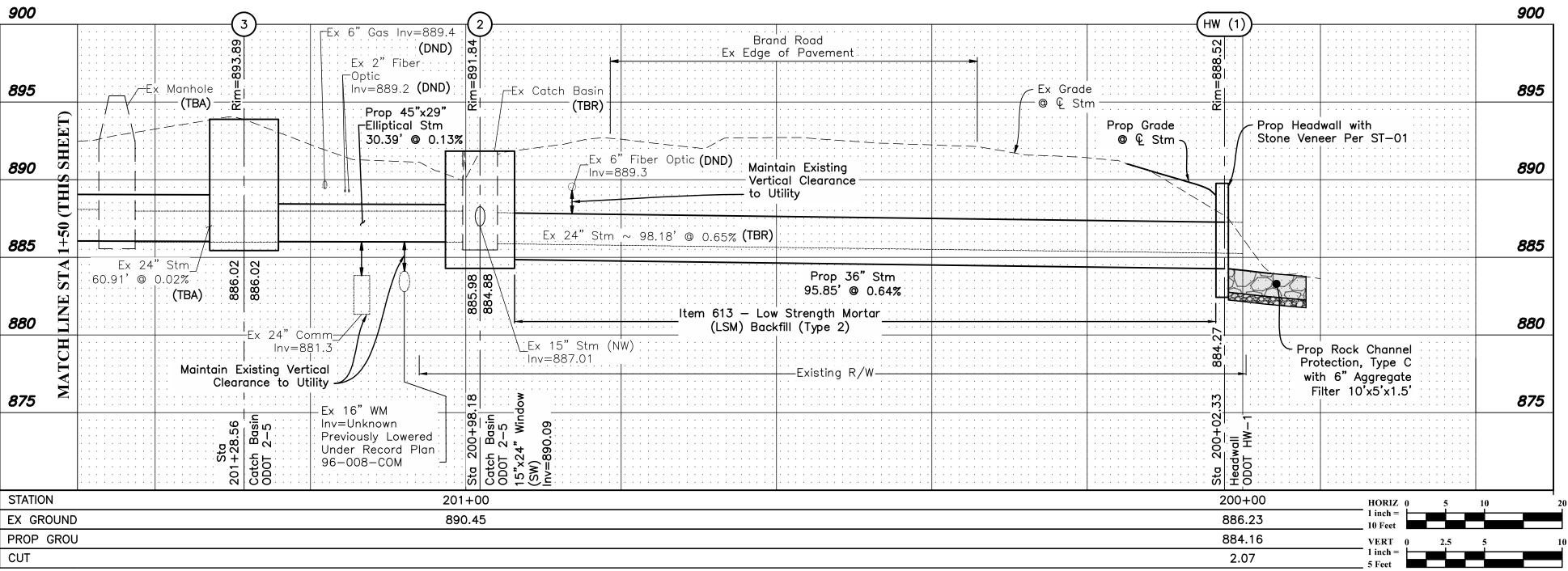
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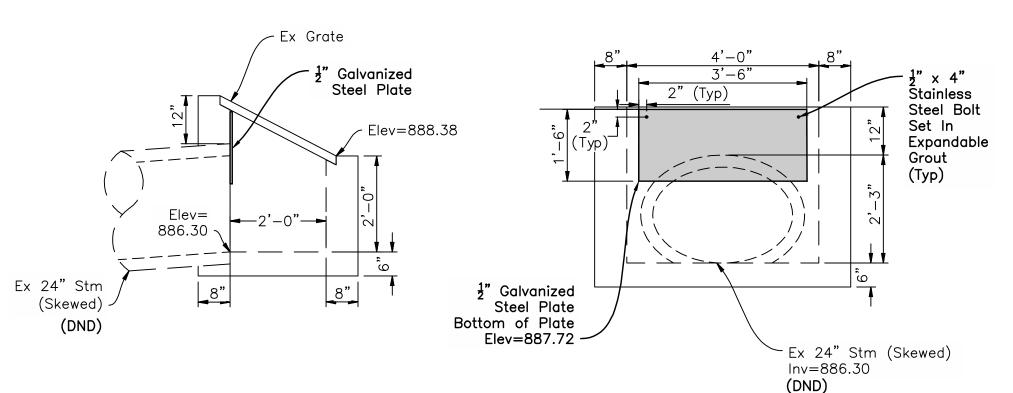
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FRONT VIEW

- 1. Orifice plate to be set inside existing outlet structure as indicated on plans.
- 2. Orifice plate shall be sealed on all sides. gaps from $\frac{1}{8}$ " to $\frac{1}{4}$ " in width between the orifice plate and headwall shall be sealed with silicone rubber-based caulk or polyurethane. gaps greater than $\frac{1}{4}$ " shall be sealed with non-shrink grout.

EARLINGTON PARK DETENTION BASIN - PROPOSED OUTLET CONTROL

888.38 ft.

894.00 ft.

Existing CB Grate (888.38 ft.)

Proposed CB 5&6 Grate

(893.00 ft.)

3'-6"x1'-6" Orifice Plate Mounted

on Existing 24" Stm, Bottom of

Orifice Plate @ Elev. 887.72 36-inch Outlet Pipe with 0.15%

Slope, Invert at 886.20 ft.

Berm Between Shed and

Maintenance Building (893.50 ft.

Normal Pool

Top of Basin Embankment

1st Stage Outlet

2nd Stage Outlet

Tailwater Control

(1st Stage Outlet)

Tailwater Control

(1st & 2nd Stage Outlets)

Emergency Spillway

STORM SEWER NOTES:

- 1. The existing 24 inch storm sewer between Ex CB and CB 6 shall remain and be connected to CB 6. The existing 24 inch storm sewer between CB 6 and CB 5 shall be removed and replaced with 36 inch storm sewer by the Contractor. The existing 24" storm sewer between CB 5 and the existing manhole shall be abandoned by the Contractor.
- 2. All circular and elliptical storm sewer pipe specified throughout these plans shall be Reinfoced Concrete Pipe unless otherwise noted on these plans.

CITY OF DUBLIN STORM SEWER NOTES:

- 3. The minimum pipe size for private or public storm sewer systems is 12 inches unless authorized by the City Engineer.
- 4. Minimum requirements for public storm sewer pipe:
- 4.a. Reinforced Concrete Pipe
 - i. 12 inch 15 inch: ASTM C76, Wall B, Class IV
 - ii. 18 inch 24 inch: ASTM C76, Wall B, Class III
 - iii. 27 inch and larger: ASTM C76, Wall B, Class II
- 5. Gaskets shall be installed by the pipe manufacturer and covered with removable, protective wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during joint assembly.
- 6. Granular Backfill shall be Compacted Granular Material per Item 912 or Low Strength Mortar Backfill per Item 613, Type II.
- 7. All bedding material shall be in accordance with City of Columbus Standard Construction Drawing AA-S149.
- 8. All storm water detention and retention areas and flood routing swales shall be constructed to finish grade and hydro—seeded and hydro—mulched according to Items 203 and 659 of the Standard Specifications.
- 9. Storm inlets and catch basins shall be channelized and have bicycle safe grates. Manhole lids shall include City of Dublin logo. All curb inlets and catch basin grates shall include engraved lettering per City of Dublin Standard Drawing ST-04: "Dump No Waste! Drains to Waterways".
- 10. Storm sewer outlets 18 inches and greater in diameter accessible from storm water management facilities or watercourses shall include safety grates per City of Dublin Standard Drawing ST-02.
- 11. Headwalls shall be required at all storm sewer inlets or outlets to and from storm water management facilities. Stone veneer and wall caps treatments shall be applied to all exposed concrete surfaces per City of Dublin Standard Drawing ST-01.

EARLINGTON PARK DETENTION BASIN STORMWATER MANAGEMENT TABLE - EXISTING CONDITION						
Storm Event (Recurrence Interval)	Peak Inflow Rates (cfs)	Basin Outlet Pipe Peak Flow Rates (cfs)	Basin Overflow Rates to Pedestrian Tunnel (cfs)	Maximum Water Surface Elevation (ft)	Storage Volume Utilized (ac-ft)	
1-Year	30.93	16.47	0.00	890.00	5.683	
2-Year	38.62	18.37	0.00	890.59	6.033	
5-Year	52.18	20.03	8.05	891.11	6.370	
10-Year	62.91	21.30	17.70	891.60	6.735	
25-Year	75.09	23.68	29.82	892.44	7.501	
50-Year	84.29	24.28	37.49	892.63	7.705	
100-Year	90.27	24.61	53.60	892.73	7.818	

EARLINGTO	ON PARK DETENTION	BASIN STORMWATE	ER MANAGEMENT TA	ABLE - PROPOSED CO	NDITION
Storm Event (Recurrence Interval)	Peak Inflow Rates (cfs)	Basin Outlet Pipe Peak Flow Rates (cfs)	Basin Overflow Rates to Pedestrian Tunnel (cfs)	Maximum Water Surface Elevation (ft)	Storage Volume Utilized (ac—ft)
1-Year	29.64	15.09	0.00	890.23	5.425
2-Year	36.28	16.97	0.00	890.87	5.805
5-Year	49.20	19.51	0.00	891.79	6.441
10-Year	58.87	21.22	0.00	892.46	7.008
25-Year	70.78	33.41	0.00	893.17	7.750
50-Year	79.21	52.62	0.00	893.34	7.959
100-Year	88.42	66.76	0.00	893.46	8.117

STORM SEWER TABLE					
LINE	BEARING	LENGTH	SIZE		
2-HW (1)	S79°12'37"E	95.85'	36"		
3-2	N49°28'50"E	30.39'	45"		
4-3	S72°54'58"E	57.18'	36"		
5-4	N51°34'13"E	59.68'	36"		
6-5	N89°39'37"E	14.91'	36"		
Ex CB-6	N89°39'37"E	47.95'	24"		

STRUCTURE COORDINATES					
STRUCTURE #	NORTHING - PLAN	EASTING - PLAN	NORTHING - AS BUILT	EASTING - AS BUILT	
HW (1)	774713.6525	1789087.8116			
2	774731.5950	1788993.6610			
3	774711.8532	1788970.5623			
4	774728.6514	1788915.9042			
5	774691.5582	1788869.1543			
6	774691.4698	1788854.2412			
Ex CB	774691.1855	1788806.2965			

MARK DATE DESCRIPTION			
DATE			
MARK			

FARK DRAINAGE
PROVEMENTS
EWER PROFILE EARLINGTON BASIN IMP STORM SEV

DATE **JUNE 2025**

SCALE AS NOTED

JOB NO. 2024-0677

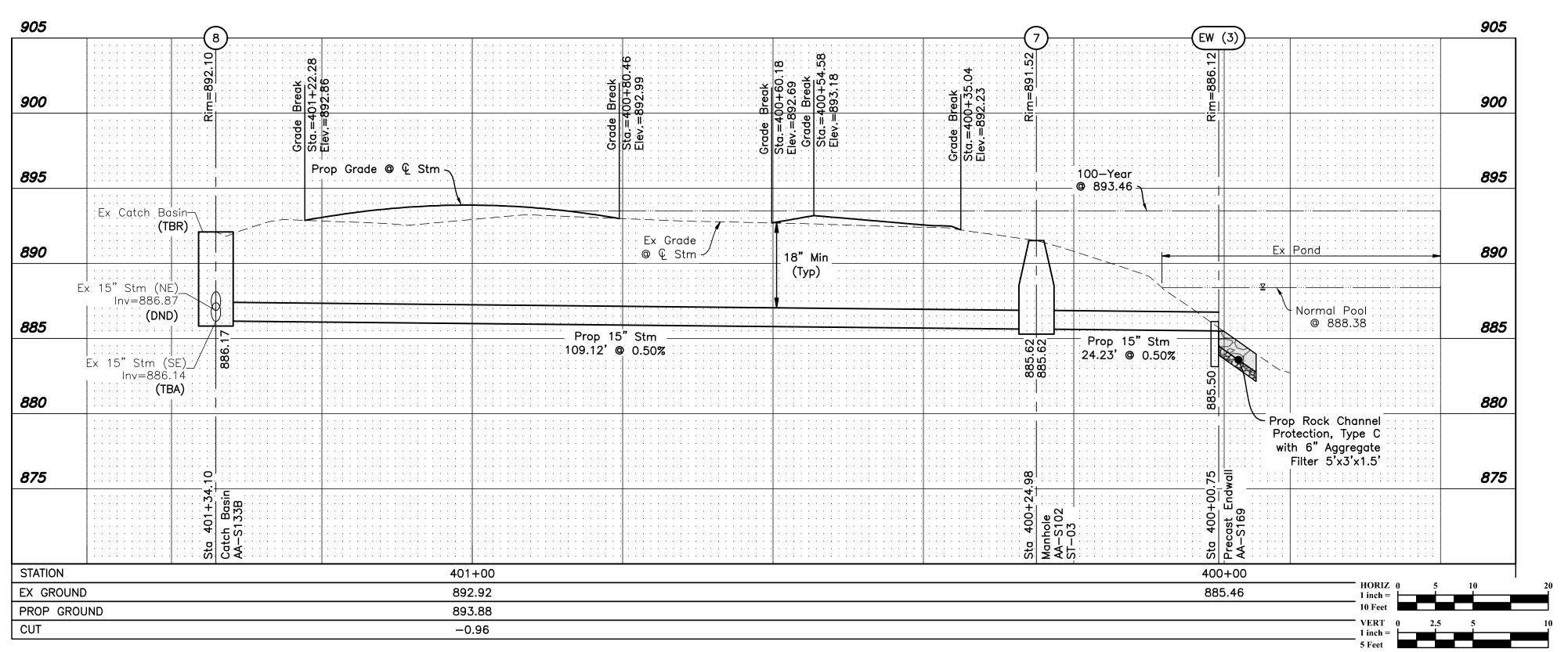
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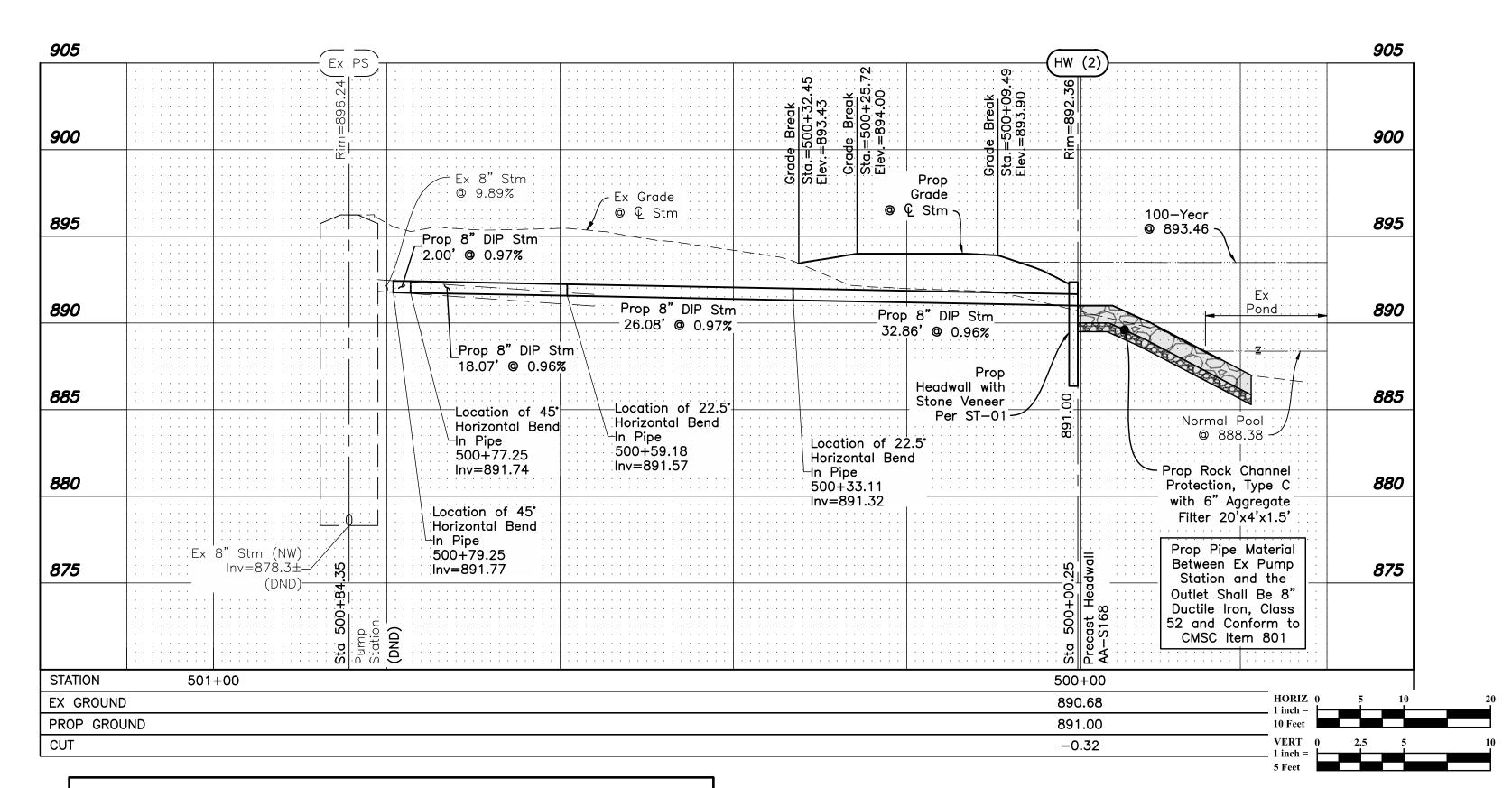
DETAILORIFICE PLATE MOUNTING NOT TO SCALE

SIDE VIEW



STRUCTURE COORDINATES						
STRUCTURE #	NORTHING - PLAN	EASTING - PLAN	NORTHING - AS BUILT	EASTING - AS BUILT		
EW (3)	774798.6266	1788697.1977				
7	774798.8771	1788672.9707				
8	774889.8550	1788612.7160				

STORM SEWER TABLE							
LINE	BEARING	LENGTH	SIZ				
7-EW (3)	S89°24'27"E	24.23'	15				
8-7	S33°30'59"E	109.12'	15				



	STRUCTURE COORDINATES					
STRUCTURE #	NORTHING - PLAN	EASTING - PLAN	NORTHING - AS BUILT	EASTING - AS BUILT		
HW (2)	774831.1723	1788753.4027				
Elbow (1)	774899.3001	1788737.5425				
Elbow (2)	774897.3070	1788737.7087				
Elbow (3)	774885.6365	1788751.5014				
Elbow (4)	774862.4563	1788763.4474				
Ex PS	774903.1904	1788740.8342				

STORM SEWER TABLE						
LINE	BEARING	LENGTH	SIZE			
Elbow (1)—Elbow (2)	S04°45'52"E	2.00'	8"			
Elbow (2)—Elbow (3)	S49°45'52"E	18.07'	8"			
Elbow (3)—Elbow (4)	S27°15'52"E	26.08'	8"			
Elbow (4)-HW (2)	S17°48'03"W	32.86'	8"			

CITY OF DUBLIN, FRANKLIN COUNTY, OHIO PLAN FOR FOR BASIN IMPROVEMENTS STORM SEWER PROFILE
wort, Hamblehon & Tilhon, Inc. urveyors • Planners • Scientists any Road, Columbus, OH 43054 5.4500 Toll Ree: 888.775.3648 emht.com

DATE

SCALE

JOB NO.

SHEET

JUNE 2025

AS NOTED

2024-0677

23/36

CITY OF DUBLIN

PLAN DESIGNER: EMH&T Inc.

> Shawn Arden, PE 5500 New Albany Road Columbus, Ohio 43054 Tel: (614) 775-4210

OWNER:

City of Dublin 6555 Shier Rings Road Dublin, Ohio 43016 Tel: (614) 410-4740

Fax: (614) 775-4800

PROJECT DESCRIPTION:

the realignment of storm sewer, and the construction of a berm north of Brand Road.

The project includes widening of an existing stormwater detention basin in Earlington Park, the construction of a basin embankment

RECEIVING STREAM: North Fork Indian Run

ADJACENT AREAS: The site is bordered by Bristol Parkway to the west, North Fork Indian Run to the east, existing development to the south, and

existing single family houses to the north. Brand Road bisects the two work areas.

EXISTING SITE CONDITIONS: Pre-development conditions of the sites include eroded banks throughout the existing stream reach.

DISTURBED AREA: The total disturbed area is $2.16 \pm acres$.

EROSION AND SEDIMENT MEASURES:

Erosion and sediment control for the project will be managed in 1 phase.

MAINTENANCE:

Once the newly graded embankment and storm sewer are operating, all components, including seeding and planting materials, shall be inspected weekly by the Contractor and after significant rainfalls for a period of 12 months. Any damaged or impaired items are

to be replaced or repaired immediately as necessary.

CONSTRUCTION SEQUENCING CONSTRUCTION SEQUENCE:

> 1. Contractor to utilize existing paved paths as construction exits. Ensure any tracked mud is removed from any public roadway daily or as needed.

2. Install the perimeter controls and construction fencing as shown on the plan.

3. Install a rock check dam within North Fork Indian Run as shown on the plan. 4. Contractor to provide stormwater runoff bypass pumping as needed during installation of the proposed storm sewer.

5. Begin the installation of the new storm sewer from HW1 to CB 5. If pumping of stormwater trench is required, a dewatering filter baa must be utilized.

6. Once the storm sewer is installed, repair the roadway and trail per the plan. Remove the temporary rock check dam from North

Fork Indian Run. Temporarily stabilize any disturbed areas. 7. Begin basin grading activities, excavating in the southwest corner of the basin. If pumping of the basin water is needed, surface

pumping of clean water shall be directed to the existing outlet structure. Any muddy water encountered must be pumped through a dewatering filter bag.

8. Relocate the existing headwall in the southwest corner of the basin.

9. Continue with basin grading activities, adding the fill material and regrading the northern embankment.

10. Install the proposed storm sewer inlet network pipes.

11. Once grading is complete, permanently stabilize the disturbed areas per the restoration plan.

12. Repair any damaged paths.

13. Once permanent vegetation is established, remove all temporary erosion and sediment control BMPs.

The construction sequence provided above is for NPDES permit coverage compliance only. The Contractor will be responsible for determining their own project schedule and shall not soley rely on the stated sequence of construction for bidding.

The Contractor shall provide a schedule of operations to the

Owner. Sedimentation and erosion control features shall be placed in accordance with this schedule.

OHIO EPA NPDES FACILITY

PERMIT NUMBER:

SCHEDULE:

SITE CONTACT:

Michael Hendershot, PE City of Dublin (614) 410-4657

To Be Determined

Sediment Filter

1. Stand grate on end. Place Catch Basin Protection Bag over grate. Roll grate over so that open end is up. Pull up slack. Tuck flap in. Be sure end of grate is completely covered by flap or Catch Basin Protection Bag will not fit properly. Holding handles, carefully place Catch Basin Protection Bag with grate inserted into catch basin frame so that red dot on the top of the Čatch Basin Protection Bag is visible.

1. With a stiff bristle broom or square point shovel, remove silt & other debris

off surface after each event.

1. Dandy Bag, FryeFlow Systems Inlet Protection, FLEXSTORM Inlet Filter or approved equal are acceptable

DETAIL

CATCH BASIN SEDIMENT FILTER

Not to Scale

SEDIMENT AND EROSION CONTROL NOTES

MAINTENANCE:

It is the Contractor's responsibility to maintain the sedimentation and erosion control features on this project. Any sediment or debris which has reduced the efficiency of a control shall be removed immediately. Should a structure or feature become damaged, the Contractor shall repair or replace at no additional cost to the Owner.

INSPECTIONS:

The NPDES permit holder along with the Contractor shall provide qualified personnel to conduct site inspections ensuring proper functionality of the erosion and sedimentation controls. All erosion and sedimentation controls are to be inspected once per every seven calendar days and within 24 hours of a 0.5" storm event or greater that occurs over a 24 hour period. Records of the site inspections shall be kept and made available to jurisdictional agencies if requested.

Any sediment or debris which has reduced the efficiency of structure shall be removed immediately. Should a structure or feature become damaged, the Contractor shall repair or replace it at no additional cost to the City of Dublin.

CONTRACTORS RESPONSIBILITIES:

Details have been provided on the plans in an effort to help the Contractor provide erosion and sedimentation control. The details shown on the plan shall be considered a minimum. Additional or alternate details may be found in the Ohio EPA Manual "Rainwater and Land Development". The Contractor shall be solely responsible for providing necessary and adequate measures for proper control of erosion and sediment runoff from the site along with proper maintenance and inspection in compliance with the NPDES General Permit for Storm Discharges Associated with Construction Activity.

The City shall file a Notice of Intent as per NPDES requirements including any offsite dumping or borrow areas. The Contractor is to submit a co-permittee Notice of Intent to obtain coverage under the NPDES permit coverage issued to the City. It is the Contractor's responsibility to notify his subcontractors of the OEPA requirements. Furnish copies of the documents to the City of Dublin.

The Construction Sequence shown on this plan is provided to satisfy Ohio EPA SWPPP requirements and for the Contractor's convenience only. The Contractor is required to develop and submit his own construction sequence (schedule of operations) to the Owner. The schedule should include a sequence of the placement of the sedimentation and erosion control measures that provides for continual protection of the site throughout the earth moving activities.

Prior to construction operations in a particular area, all sedimentation and erosion control features shall be in place. Field adjustments with respect to locations and dimensions may be made by the Engineer, City of Dublin, and the Ohio EPA.

It may become necessary to remove portions of sedimentation controls during construction to facilitate the grading operations in certain areas. However, the controls shall be replaced upon grading or during any inclement weather.

The Contractor shall be responsible to have the current Storm Water Pollution Prevention Plan immediately available or posted on site.

The contractor is responsible for ensuring that offsite soil borrow and export areas have Ohio EPA NPDES permit coverage and that appropriate erosion and sediment controls are properly installed and maintained.

Street cleaning (on an as-needed basis) is required through the duration of this construction project. This includes sweeping, power cleaning and (if necessary) manual removal of dirt or mud in the street gutters.

The Contractor shall be responsible to ensure that no solid or liquid waste is discharged into storm water runoff. Untreated sediment—laden runoff shall not flow off of site without being directed through a control practice.

Direct discharge of sediment laden water to the City's sewer system or a receiving stream is a violation of Ohio EPA and City of Dublin regulations; the Contractor will be held liable for the violation and subsequent fines.

This plan must be posted on-site. A copy of the SWPPP plan and the approved Ohio EPA Stormwater Permit (with the site-specific NOI number) shall be kept on-site at all times.

> Stream Channel Width (Low Center Section Must Cause Flow Over Not Around Check Dam)

> > **CROSS SECTION VIEW**

1. The check dam shall be constructed of 4-8 inch diameter stone, placed so that it completely covers the

2. Maximum height of check dam shall not exceed 3.0 feet. Minimum height shall not be less than 1.0 foot. 3. The midpoint of the rock check dam shall be a minimum of 6 inches lower than the sides in order to

6. A Splash Apron shall be constructed where check dams are expected to be in use for an extended period of time, a stone apron shall be constructed immediately downstream of the check dam to prevent flows from undercutting the structure. The apron should be 6 in. thick and its length two times the height of

7. Stone placement shall be performed either by hand or mechanically as long as the center of check dam

width of the channel. ODOT Type D stone is acceptable, but should be underlain with a gravel filter

5. Spacing of check dams shall be in a manner such that the toe of the upstream dam is at the same

Set Height Above Channel

Baseflow

consisting of ODOT No. 3 or 4 or suitable filter fabric.

elevation as the top of the downstream dam.

8. Side slopes shall be a minimum of 2:1.

DETAIL

ROCK CHECK DAM

direct across the center and away from the channel sides.

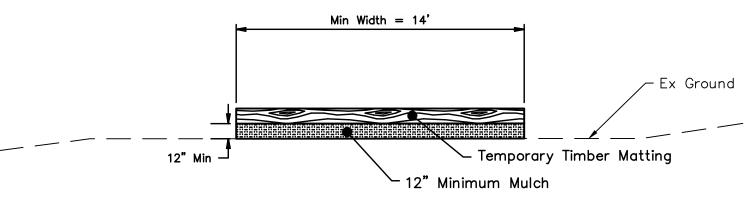
is lower than the sides and extends across entire channel.

The base of the check dam shall be entrenched approximately 6 inches.

All Erosion & Sediment Control practices are subject to Field Modification at the direction of the City of Dublin and/or Ohio EPA.

TABLE 1: PERMANENT STABILIZATION AREA REQUIRING PERMANENT TIME FRAME TO APPLY EROSION **STABILIZATION** CONTROL Any areas that will lie dorment for one Within seven days of the most recent vear or more disturbance Any areas within 50 feet of a surface Within two days of reaching final grade water of the state and at final grade Within seven days of reaching final Any areas at final grade arade within that area

TABLE 2: TEMPORAI	RY STABILIZATION
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL
Any areas within 50 feet of a surface water of the state and at final grade	Within two days of the most recent disturbance if the area will remain idle for more than fourteen days
For all construction activities, any disturbed areas that will be dormant for more than 14 days but less than one year, and not within 50 feet of a surface water of the state	Within seven days of the most recent disturbance within the area For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s)
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

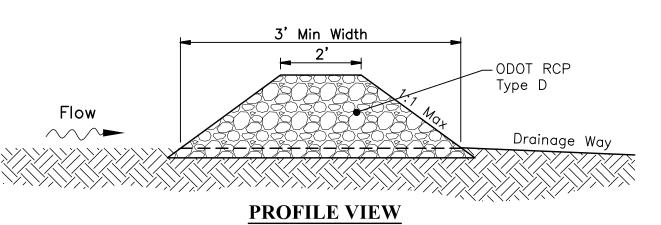


CROSS SECTION VIEW

- 1. Place timber mats along access route to project area to protect existing ground and/or critical root zones during construction.
- 2. Following construction, matting shall be removed and existing ground shall be restored to existing conditions.

DETAIL TEMPORARY TIMBER MATTING

NOT TO SCALE



1. Rock check dams shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.

2. Close attention shall be paid to the repair of damaged check dams, end runs and undercutting beneath dams.

Necessary repairs to check dams shall be accomplished promptly. 4. Sediment deposits should be removed after each rainfall. They must be removed when the level

of deposition reaches approximately one—half the height of the barrier. 5. Any sediment deposits remaining in place after the aggregate is no longer required shall be

dressed to conform to the existing grade, prepared and seeded.

Not to Scale

24/36

SHEET

1'' = XXX'JOB NO. 2024-0677

JUNE 2025

AGE

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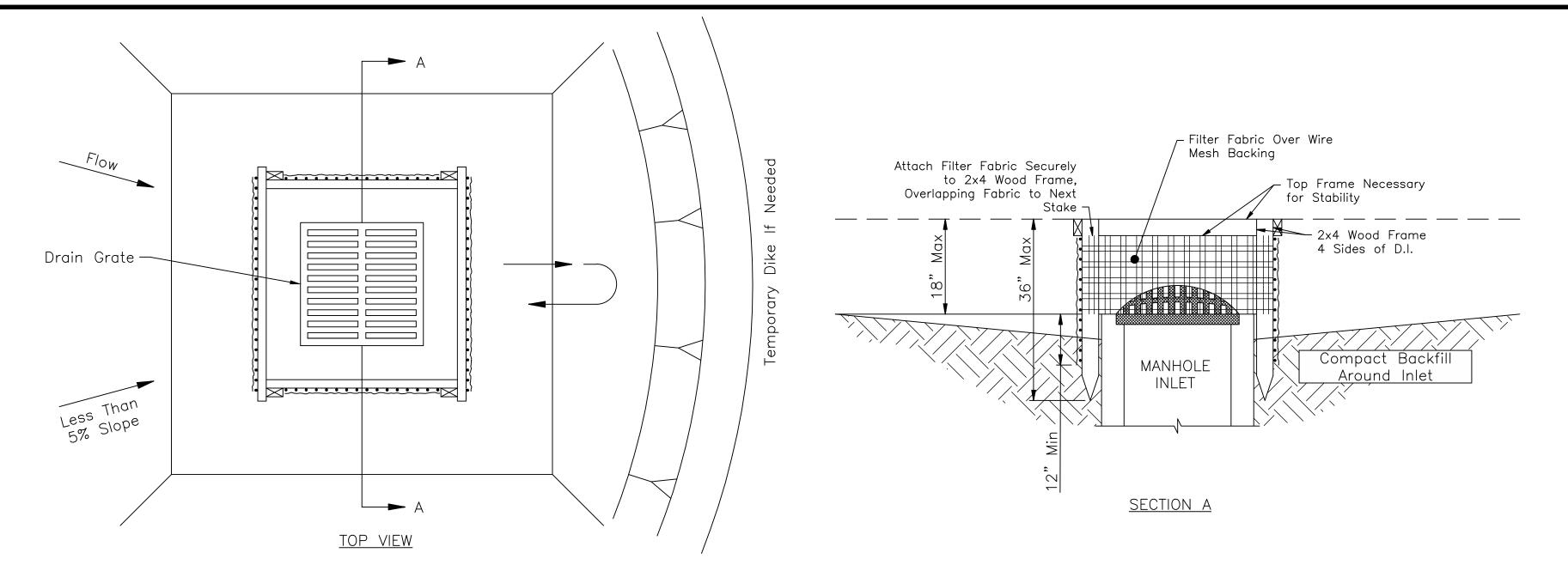
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SCALE

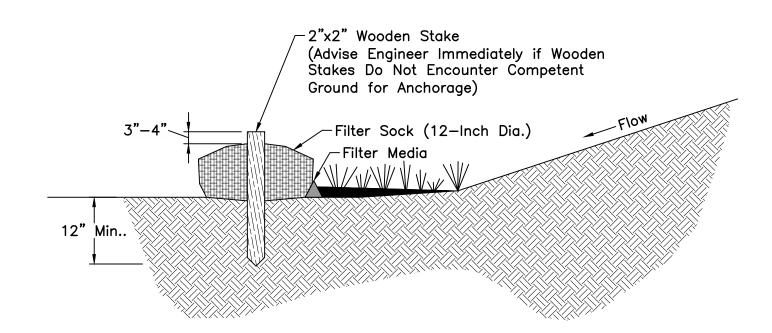


- 1. Manhole inlet sediment barriers are to be used for small, nearly level drainage areas (less than 5%). Inlet protection shall be constructed either before
- upslope land disturbance or before the inlet becomes functional. 2. The earth around the inlet shall be excavated completely to a depth of at least 18 inches.
- 3. Use 2"x4" wood or equivalent metal stakes, 3' minimum length, to construct the wooden frame.
- 4. Install 2"x4" wood top frame to insure stability.
- 5. The top of the frame (ponding height) must be well below the ground elevation downslope to prevent runoff from by—passing the inlet. A temporary dike may be necessary on the downslope side of the structure.
- 6. Filter fabric material shall have an equivalent opening size 20-40 sieve and be resistant to sunlight. Fabric shall extend from the top of the frame to 18 inches below the inlet notch elevation.
- 7. Backfill shall be placed around the inlet in compacted 6—inch layers until the earth is even with notch elevation on ends and top elevation on sides.

MAINTENANCE:

- 1. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.
- 2. Sediment deposits should be removed after each storm event. they must be removed when deposits reach approximately one—half the height of the barrier.
- 3. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

DETAIL FILTER FABRIC INLET PROTECTION NOT TO SCALE



- 1. Materials compost used for filter socks shall be weed, pathogen and insect free and free of any refuse, contaminants or other materials toxic to plant growth, they shall be derived from a well-decomposed source of organic matter and consist of a particles ranging from 3/8" to 2".
- 2. Filter socks shall be 3 or 5 mil continuous, tubular, hdpe 3/8" knitted mesh netting material, filled with compost passing the above specifications for compost products.

<u>Installation</u>:

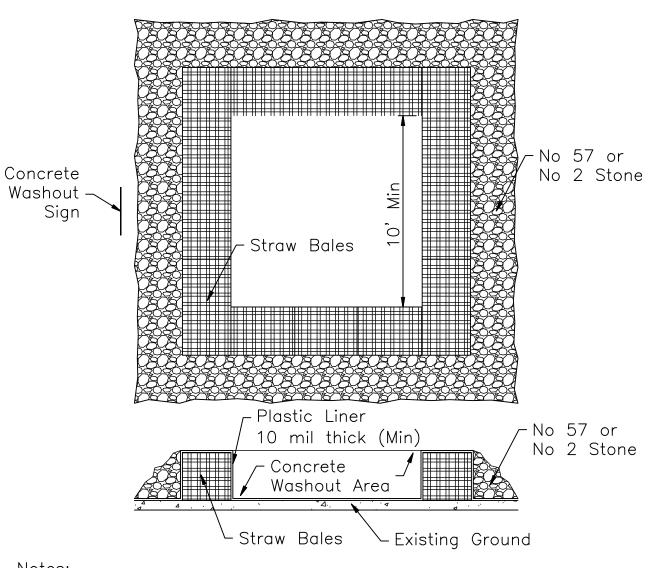
- 1. Filter socks will be placed on a level line across slopes, generally parallel to the base of the slope or other affected area. on slopes approaching 2:1, additional socks shall be provided at the top and as needed midslope.
- 2. Upon installation of the filter sock, additional filter media (matching the media inside of the sock) shall be placed on the upland side of the filter sock. filter media shall extend halfway up the sock and slope at a maximum of 45 degrees to existing ground elevation.
- 3. Filter socks intended to be left as a permanent filter or part of the natural landscape, shall be seeded at the time of installation for establishment of permanent vegetation.
- 4. Filter socks are not to be used in concentrated flow situations or in runoff channels.

Maintenance:

- 1. Routinely inspect filter socks after each significant rain, maintaining filter socks in a functional condition at all times.
- 2. Remove sediments collected at the base of the filter socks when they reach 1/3 of the exposed height of the practice.
- 3. Where the filter sock deteriorates or fails, it will be repaired or replaced with a more effective alternative.
- 4. Removal filter socks will be dispersed on site when no longer required in such as way as to facilitate and not obstruct seedings.

DETAIL COMPOST FILTER SOCK DETAIL

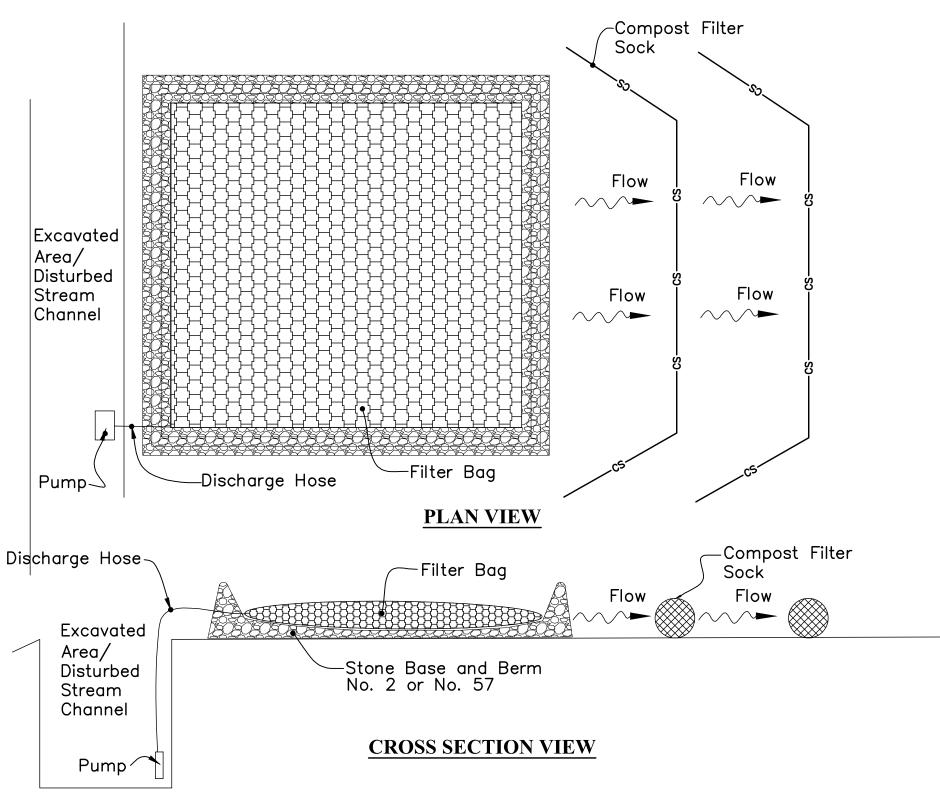
Not to Scale



1. Concrete trucks shall utilize areas to washout trucks. Accumulated concrete shall be removed from the site and disposed of properly. 2. As an alternative, contractor shall use a roll off box with liner.

DETAIL CONCRETE WASHOUT DETAIL

Not to Scale



Installation:

The Contractor shall pump muddy water encountered within excavated areas that are not tributary to sediment basins into a filter fabric bag. The bag shall be placed within a level undisturbed area as far away from the stormwater outfall as possible. The bag shall be placed on top of a aggregate pad. Additionally, a perimeter aggregate berm shall be constructed around the bag. Perimeter controls such as compost filter socks shall be utilized along the downstream side of the bag. The perimeter controls shall be installed to ensure that the water flowing out of the bag does not flow around the ends of the controls. Upon completion, the bag shall be removed to an area away from the stormwater outfall and opened. The accumulated sediment shall be spread out to allow to dry and stabilized with vegetation. Filter bag shall be sized based upon the pumping rate into the bag.

Maintenace:

The filter bag shall be replaced when the bag is half filled with sediment.

The Contractor shall contact the Owner/Engineer for consultative services if dewatering activities overwhelm the filter bag and perimeter controls.

DETAIL DEWATERING FILTER BAG Not to Scale

24-023-CIP

AGE

ON

ARLINGT BASIN I

JUNE 2025

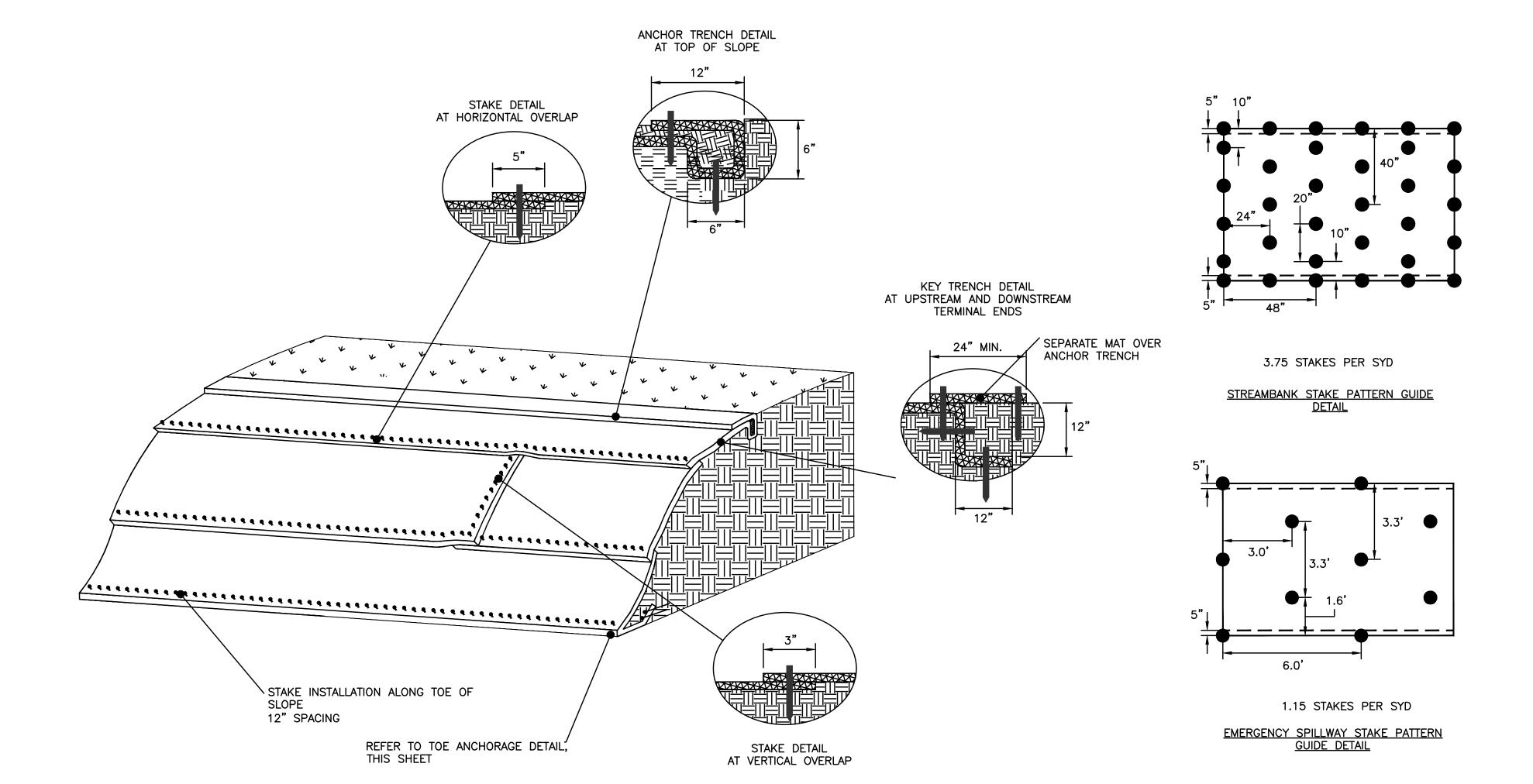
1'' = XXX'

2024-0677

25/36

SCALE

SHEET



2. Install seed mix with fertilizer.

Item 670, Slope Erosion Protection Mat Installation Notes:

- 1. Install topsoil to final grade, as shown on the plans.
- 3. Begin at the toe of slope. Unroll mat parallel to the basin. Ensure mat is flat on the ground. Anchor matting in toe trench with 2x2x12 inch wood stakes or 2x2x12 wedges. 12 inch wire "U" staples may be substituted for
- wood stakes. Refer to Detail, This Sheet. 4. Unroll matting over topsoil and affix firmly to the slope with stakes placed in appropriate locations as shown in the stake pattern guide.
- 5. Stake through the matting at the toe of slope, approximately 12 inches apart across entire mat length.
- 6. Consecutive sections of matting spliced upstream to downstream must be end-over-end (shingle style) with an approximate 3 inch overlap. Stake through overlapped area, approximately 12 inches apart across entire mat
- 7. At the upstream and downstream terminal ends of the matting, provide an anchor trench to key matting into the soil. Provide a 12 inch wide x 24 inch deep trench with a row of stakes approximately 12 inches apart. Backfill and compact the trench after staking. Apply seed and fertilizer. Install separate minimum 24 inch wide mat over anchor trench, secure mat with stakes spaced 24 inches apart along both sides of the trench.
- 8. The edges of parallel sections of matting must be staked with an approximately 5 inch overlap. Overlap the mat section from higher on the slope over the mat positioned lower on the slope. Space stakes 12 inches apart along the mat overlap.
- 9. Anchor the matting along the top of slope in a 6 inch deep x 6 inch wide trench with approximately 12 inches of matting extended beyond the upslope portion of the trench. Anchor the matting with a row of stakes approximately 12 inches apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed and fertilizer to the compacted soil and fold the remaining 12 inch portion of matting back over the seed and compacted soil. Secure matting over compacted soil with a row of stakes spaced approximately 12 inches apart across the length of the matting.
- 10. Product Standard: Details and Notes for temporary matting products are based on the North American Green C125BN. Substitute Biodegradable products that provide equal erosion protection will be considered as outlined in the specifications for Item 670, Slope Erosion Protection Mat, As Per

DETAIL
TEMPORARY EROSION CONTROL MAT — HORIZONTAL INSTALLATION DETAIL

- TOPSOIL TEMPORARY EROSION CONTROL MAT TEMPORARY EROSION CONTROL MAT - 12" WOOD STAKES (TYP) EMBED MAT 12" UNDER TOPSOIL AND STAKE IN PLACE DETAIL
SLOPE EROSION PROTECTION MAT TOE ANCHORAGE DETAIL AT RIPRAP

Not to Scale

12" WOOD STAKES (TYP) BACKFILL TRENCH WITH COMPACTED EXCAVATED MATERIAL DETAIL
SLOPE EROSION PROTECTION MAT TOE ANCHORAGE DETAIL IN SOIL Not to Scale

AGE

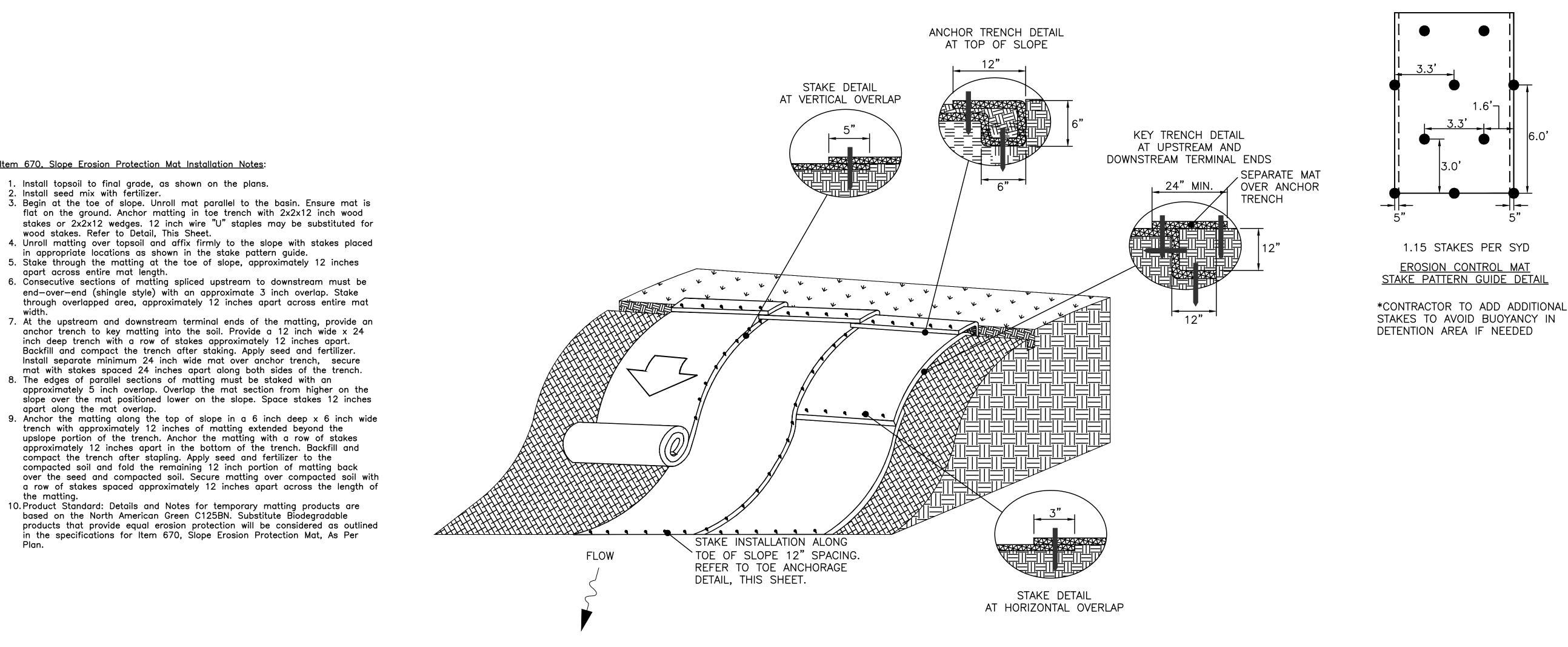
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NONE

JOB NO. 2024-0677

26/36

SHEET



DETAIL
TEMPORARY EROSION CONTROL MAT - VERTICAL INSTALLATION DETAIL

<u>Item 670, Slope Erosion Protection Mat Installation Notes:</u>

apart across entire mat length.

apart along the mat overlap.

the matting.

Install topsoil to final grade, as shown on the plans.
 Install seed mix with fertilizer.

in appropriate locations as shown in the stake pattern guide.

5. Stake through the matting at the toe of slope, approximately 12 inches

inch deep trench with a row of stakes approximately 12 inches apart.

Backfill and compact the trench after staking. Apply seed and fertilizer.

Install separate minimum 24 inch wide mat over anchor trench, secure

mat with stakes spaced 24 inches apart along both sides of the trench. 8. The edges of parallel sections of matting must be staked with an

compact the trench after stapling. Apply seed and fertilizer to the compacted soil and fold the remaining 12 inch portion of matting back

TEMPORARY EROSION CONTROL MAT

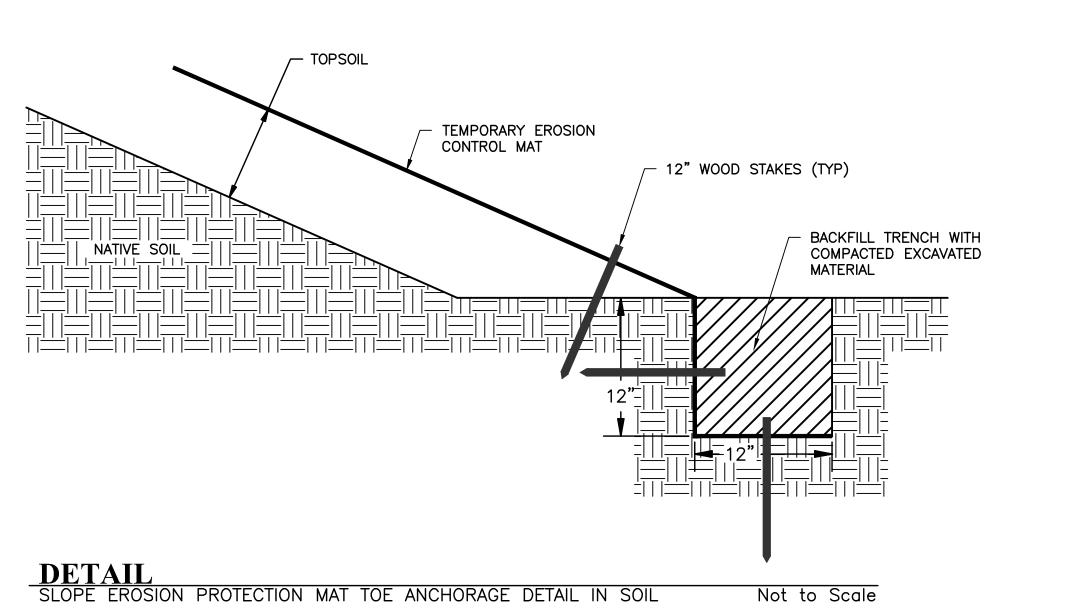
EMBED MAT 12" UNDER TOPSOIL AND STAKE IN PLACE

DETAIL
SLOPE EROSION PROTECTION MAT TOE ANCHORAGE DETAIL AT RIPRAP

- 12" WOOD STAKES (TYP)

Not to Scale

- TOPSOIL TEMPORARY EROSION CONTROL MAT 12" WOOD STAKES (TYP) BACKFILL TRENCH WITH COMPACTED EXCAVATED MATERIAL



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DATE

SCALE

JOB NO.

SHEET

JUNE 2025

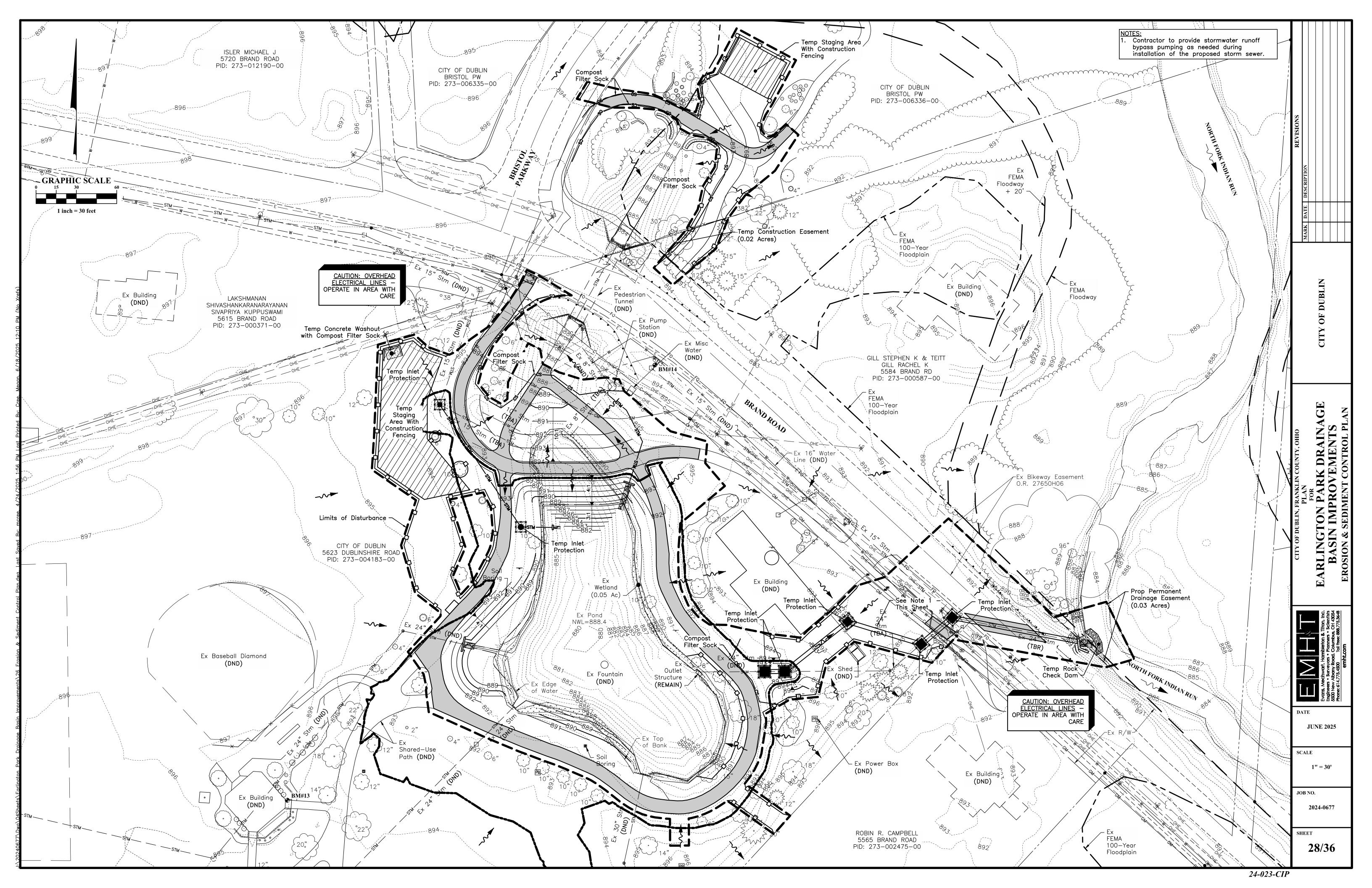
NONE

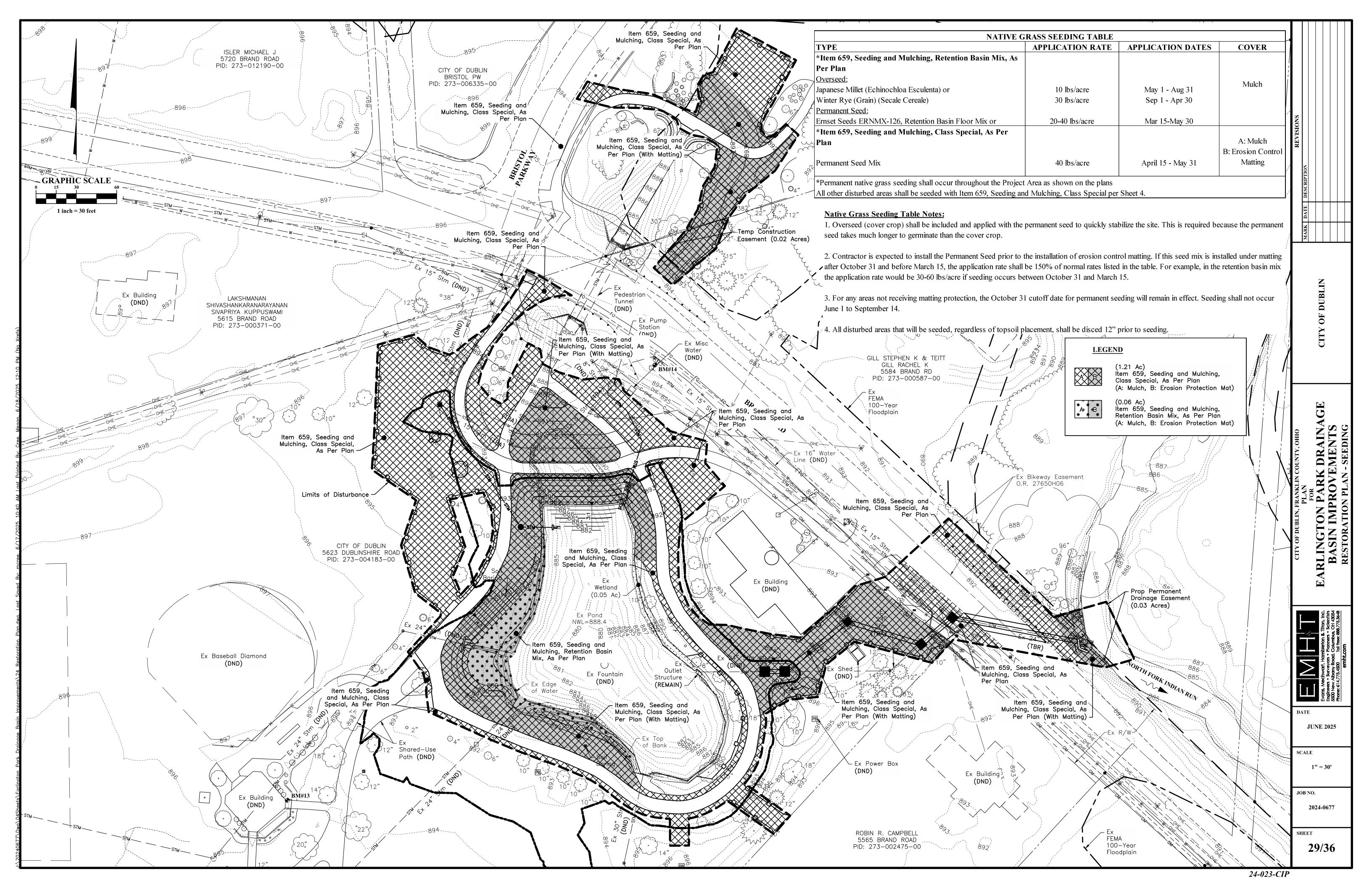
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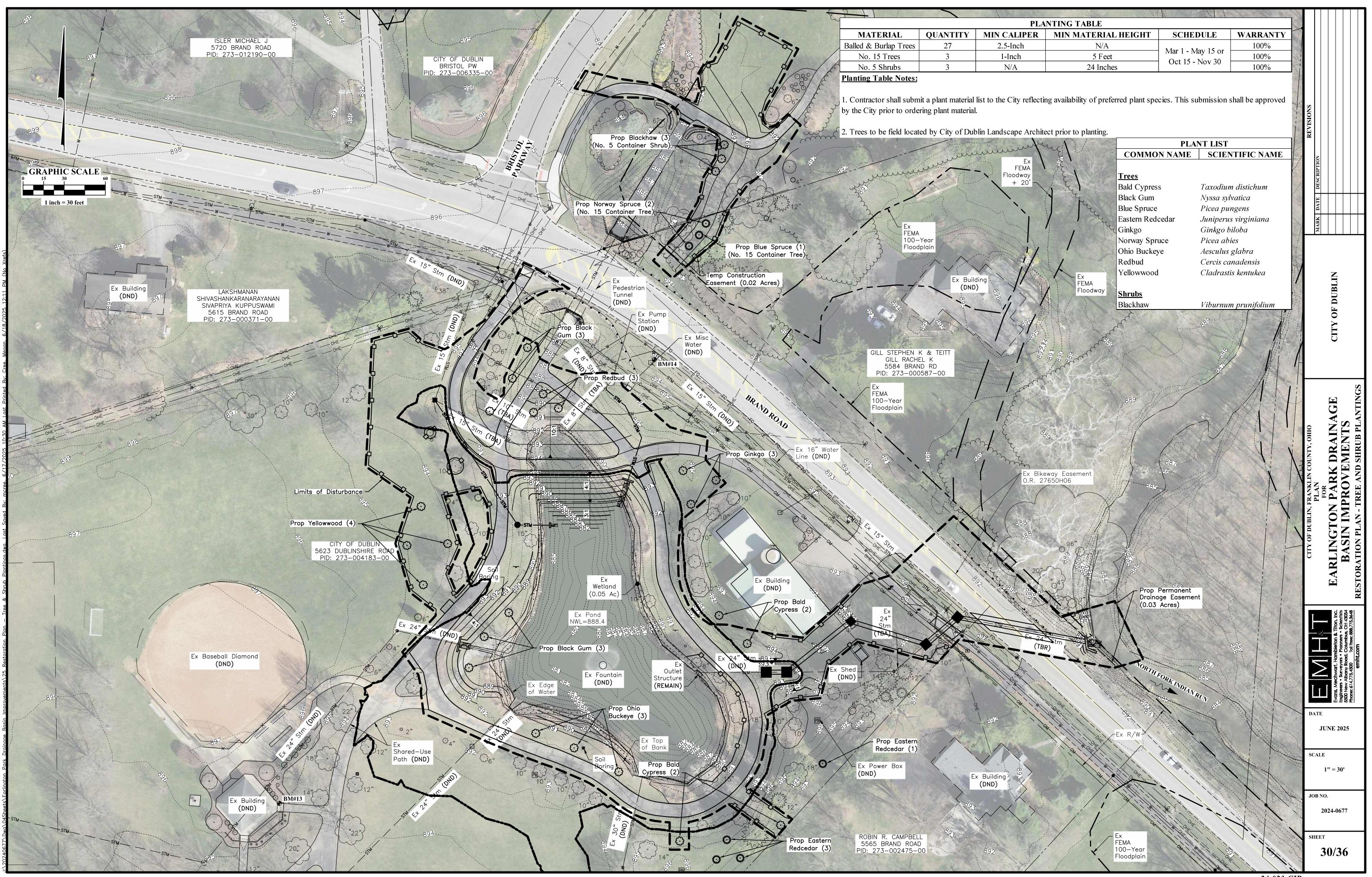
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SITE PREPARATION AND TOPSOIL PLACEMENT

SUBMITTALS:

- 1.1. Contractor shall submit topsoil test results according to Item 5. 653, Topsoil Furnished and Placed, As Per Plan.
- Prior to placing topsoil, the Contractor shall have approval of subgrade elevations according to Item Spec, Grade Checking, As Per Plan.
- Prior to seeding, the Contractor shall have approval of final grade elevations according to Item Spec, Grade Checking, As Per Plan.

CONSTRUCTION METHODS:

2.1. Contractor shall prepare the site in conformance with Item 652. Placing Stockpiled Topsoil, As Per Plan and Item 653, Topsoil Furnished and Placed. As Per Plan.

PLANTING TREES AND SHRUBS

SUBMITTALS

- Prior to the start of work on this item, the Contractor shall submit the nursery order and bill of lading from the nursery to the City for review and approval.
 - Within thirty (30) days of the award of the contract, the Contractor shall submit a complete listing of the proposed planting materials to be provided under this section to the City for approval. The City will review the submitted materials. If deficient, as solely determined by the City, additional information shall be forwarded to the City. Any problems with obtaining any of the specified plant materials shall be forwarded in writing to the City. The cause of the acquisition problems shall be discussed in full and a list of vendors contacted shall be included. The Contractor shall be aware that more than one (1) vendor may be required to obtain all the necessary plant materials. Suggestions concerning appropriate substitutions may be included with this correspondence; however, only the City may approve such substitutions.

MATERIALS

- The project area shall be planted with the tree and shrub species in accordance with the Planting Tables on Sheet 30. Final species selection shall be approved by the City in writing prior to purchasing the materials. All plants shall be healthy. vigorous, stress-free specimens free from harmful defects. decay, disfigured stems and roots, plant diseases, and insect
- No material is to be delivered until Landscaper and City are in 4.2. agreement that the particular zone is ready for planting.
- 4.3. Plant quality and size: All plants shall be true to type and nomenclature and typical of their species or variety. Ensure that all plant materials conform to the current edition of the American Standard for Nursery Stock, as published by the American Nursery and Landscape Association. They shall have a normal habit of growth with well—developed branch systems and vigorous root systems. They shall be sound, healthy, and vigorous plants, free from visible defects, disfiguration, injury, recognizable disease of any kind, insect eggs, borers, and any infestation. All plants shall be nursery grown in a suitable growth medium. It is the responsibility of the Contractor to inspect the plants before removal from the nursery where they have been grown to make sure that the plants meet these requirements.
- All plants shall conform to all sizes and measurements detailed in these specifications and indicated on the plans. Unacceptable plants shall be culled at the nursery prior to being packed. No substitutions for any materials shall be made unless agreed to in writing by the City. With the approval of the City, plants larger in size than specified may be utilized, but such plants 10. shall not increase the contract price. Larger plants shall not be cut back to meet size specifications. Plants shall have a form and architecture that is easily planted for the stock specified.
- 4.5. The Contractor shall install the trees and shrubs as shown on the Planting Plans on Sheet 30.
- CONTAINER TREE AND SHRUB SPECIFICATIONS:
 - Plants shall be established and well rooted in removable containers.

Container class size shall conform to ANSI Z60.1 for container plants for each size and type of plant.

NOMENCLATURE (FOR ALL PLANTS)

A Synonymized Checklist of the Vascular Flora of the United States, Canada and Greenland: Volume II; The Biota of North America (Kartesz and Kartesz, University of North Carolina Press, 1980, or later edition) shall be the authority for plant names. The Contractor shall supply certification from the suppliers that the plants supplied are the plants specified or agreed to under substitution. No compensation shall be made for materials or the cost of installation for plants species that are not specified.

INSPECTION

The Contractor shall be responsible for all certificates of inspection of plant materials that may be required by federal, state, or other authorities to accompany shipments of plants.

SCHEDULE

- Plant deciduous, woody plants within the planting window shown on the plans whenever the temperature is between 32 degrees F and 65 degrees F and the soil is in a workable condition. unless otherwise approved in writing. Planting shall be after the permanent seed mix has been installed throughout the preservation area.
- Except for container-grown material, the time limitation from digging to installing plant material shall be a maximum 21

DELIVERY, STORAGE, AND HANDLING

- No material is to be delivered until Landscaper and City are in agreement that the particular zone is ready for planting.
- All plants shall be packed, transported, and handled with utmost care to ensure adequate protection against injury or damage to the root ball and desiccation. Plants must be protected from excessive vibrations. Plants shall not be thrown or bounded off a truck or loader to the ground. Plants shall not be dragged, lifted, or pulled by the trunk or braces in a manner that will damage the branches or loosen the roots in the ball.
- Plant materials transported in vehicles shall be protected from wind whipping either by use of covered vehicles or secure tarps. Failure to protect plant materials during transport to the site will result in rejection of plant materials.
- Plants will be delivered as close as possible to the date planting will actually begin.
- Upon shipment arrival, plants will be unpacked and roots will be checked to ensure they are moist. Roots will be watered if they appear dry.

PRE-INSTALLATION INSPECTION

- The Contractor shall meet with the City during delivery of plant materials at the project site. Each item shall be labeled with the product name (genus, species, variety, and cultivar), material size, and vendor. The Contractor shall provide the City with copies of all shipping manifests for the materials. The City shall verify the materials delivered are in a healthy and vigorous condition, and are consistent with the plan requirements in regards to quantity, species, and size.
- The City shall be the sole judge of the conditions of quality and acceptability and will direct all corrections to the Contractor in writing. All rejected materials shall be immediately removed from the site and replaced with specified materials at the Contractor's expense.

INSTALLATION GENERAL

- The Contractor shall not proceed with installation without written direction from the City if the actual time of installation does not comply with the installation periods listed in the Planting Table.
- The Contractor shall mark all planting areas with stakes. The City shall approve the layout before planting begins.
 - Prior permission from the City is required for planting trees and shrubs if the majority of the planting area is excessively

wet (areas >0.5—inch inundation) or exceedingly dry.

- If an area is planted in a monoculture or an inappropriate mix. as solely determined by the City, at the direction of the City, the planting or a segment of the planting shall be removed and the plants discarded. The area will then be replanted as specified. No compensation for the discarded plants, the cost of the installation of the discarded plants, or the cost of the removal of the discarded plants shall be made to the Contractor.
- The Contractor shall ensure all utilities within the planting area are located and marked prior to plant installation.
- Observe each plant after delivery and prior to installation for damage of other characteristics that may cause rejection of the plant. Notify the City of any condition observed.
- No more plants shall be distributed about the planting area than can be planted and watered on the same day.

10.8. ROOT SYSTEM

- The root system of each plant, regardless of root ball package type, shall be observed by the Contractor, at the time of planting to confirm that the roots meet the requirements for plant root quality. The Contractor shall undertake, at the time of planting, all modifications to the root system required by the City to meet these quality standards.
- Modifications, at the time of planting, to meet the specifications for the depth of the root collar and removal of stem girdling roots and circling roots may make the plant unstable or stress the plant to the point that the City may choose to reject the plant rather than permitting the modification.
- Any modifications required by the City to make the root system conform to the plant quality standards, outlined in Special Planting Requirements (Sheet 32), shall not be considered as grounds to modify or void the plant warranty.
- The resulting root ball may need additional staking and water after planting. The City may reject the plant if the root modification process makes the tree unstable or if the tree is not healthy at the end of the warranty period. Such plants shall still be covered under the warranty.
- The Contractor remains responsible to confirm that the grower has made all required root modifications noted during any nursery observations.
- Container and boxed root ball shaving: The outer surfaces of all plants in containers and boxes, including the top, sides and bottom of the root ball shall be shaved to remove all circling, descending, and matted roots. Shaving shall be performed using saws, knives, sharp shovels or other suitable equipment that is capable of making clean cuts on the roots. Shaving shall remove a minimum of one -inch of root mat or up to 2-inches as required to remove all root segments that are not growing reasonably radial to the trunk.
- Exposed stem tissue after modification: The required root ball modifications may result in stem tissue that has not formed trunk bark being exposed above the soil line. If such condition occurs, wrap the exposed portion of the stem in a protective wrapping with a white filter fabric. Secure the fabric with biodegradable masking tape. Do not use string, twine, green nursery ties or any other material that may girdle the trunk if not removed.

10.9. **EXCAVATION**

- 10.9.1. Excavation of the planting space: Using hand tools or tracked mini-excavator, excavate the planting hole into the planting soil to the depth of the root ball measured after any root ball modification to correct root problems, and wide enough for working room around the root ball or to the size indicated on the drawing or as noted below.
- 10.9.2. For trees and shrubs planted in soil areas that are not tilled or otherwise modified to a depth of at least 12-inches over a distance of more than 10 feet radius from each tree, or 5 feet radius from each shrub, the soil around the root ball shall be loosened as defined below or as indicated on the drawings.
- The area of loosening shall be a minimum of 3 times the diameter of the root ball at the surface sloping to

2 times the diameter of the root ball at the depth of the root ball.

- 10.9.2.2. Loosening is defined as digging into the soil and turning the soil to reduce the compaction. The soil does not have to be removed from the hole, just dua. lifted and turned. Lifting and turning may be accomplished with a tracked mini excavator, or hand
- If an auger is used to dig the initial planting hole, the 10.9.2.3. soil around the auger hole shall be loosened as defined above for trees and shrubs planted in soil areas that are not tilled or otherwise modified.
- 10.9.3. The measuring point for root ball depth shall be the average height of the outer edge of the root ball after any required root ball modification.
- 10.9.4. If motorized equipment is used to deliver plants to the planting area over exposed planting beds. or used to loosen the soil or dig the planting holes, all soil that has been driven over shall be tilled to a depth of 6-inches.
- 10.9.5. For trees to be planted in prepared planting soil that is deeper than the root ball depth, compact the soil under the root ball using a mechanical tamper to assure a firm bedding for the root ball. If there is more than 12-inches of planting soil under the root ball excavate and tamp the planting soil in lifts not to exceed 12-inches.
- Set top outer edge of the root ball at the average elevation of the proposed finish. Set the plant plumb and upright in the center of the planting hole. The tree graft, if applicable, shall be visible above the grade. Do not place soil on top of the root ball.
- The City may request that plant orientation be rotated when planted based on the form of the plant.
- Backfill the space around the root ball with the same planting soil or existing soil that was excavated for the planting space.
- Brace root ball by tamping planting soil around the lower portion of the root ball. Place additional planting soil around base and sides of ball in six-inch (6") lifts. Lightly tamp each lift using light foot pressure or hand tools to settle backfill. support the tree and eliminate voids. Do not over compact the backfill or use mechanical or pneumatic tamping equipment. Over compaction shall be defined as greater than 85% of maximum dry density, standard proctor or greater than 250 psi as measured by a cone penetrometer when the volumetric soil moisture is lower than field capacity.
- 10.13.1. When the planting hole has been backfilled to three auarters of its depth, water shall be poured around the root ball and allowed to soak into the soil to settle the soil. Do not flood the planting space. If the soil is above field capacity, allow the soil to drain to below field capacity before finishing the planting. Air pockets shall be eliminated and backfill continued until the planting soil is brought to grade level.
- 10.14. Thoroughly water the planting soil and root ball immediately after planting.
- Remove all nursery plant identification tags and ribbons as per City's instructions.
- Remove corrugated cardboard trunk protection after planting.
- Follow additional requirements for the permitted root ball

Planting Notes continue on Sheet 32...

CITY

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Albany Road, Co

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JUNE 2025

SPECIAL PLANTING REQUIREMENTS

11. <u>CONTAINER PLANTS</u>

(Includes boxed and above—ground fabric containers)

- 11.1. This specification assumes that most container plants have significant stem girdling and circling roots, and that the root collar is too low in the root ball.
- 11.2. Containered plants shall be carefully removed from the containers prior to installation. Plants shall not be pulled from the container by the trunk. Any plant materials observed to be removed from containers by the trunk may be rejected by the City.
- 11.3. Perform root ball shaving as defined above.
- 11.4. Remove all roots and substrate above the root collar and the main structural roots.
- 11.5. Remove all substrate at the bottom of the root ball that does not contain roots.
- 11.6. Using a hose, power washer or air excavation device, wash out the substrate from around the trunk and top of the remaining root ball and find and remove all stem girdling roots within the root ball above the top of the structural roots.
- 11.7. The excavated hole for B&B, #5 and #15 containers shall be a diameter that is at least 6—inches larger than the diameter of the container.

12. <u>ACCEPTANCE</u>

12.1. Upon written notice from the Contractor, the City shall review the planting work and make a determination if the planting work is substantially complete. Acceptance of the plant installation by the City shall be based on proper site preparation and installation, and satisfactory completion of required watering, if any. Acceptance of the work by the City shall not relieve the Contractor from any obligations of the contract. If planting occurs during the fall or winter months, the City may request seedlings be replanted if the spring walkover performed by the City identifies excessive planting failure as the result of frost heaving.

13. <u>DAMAGED AREAS</u>

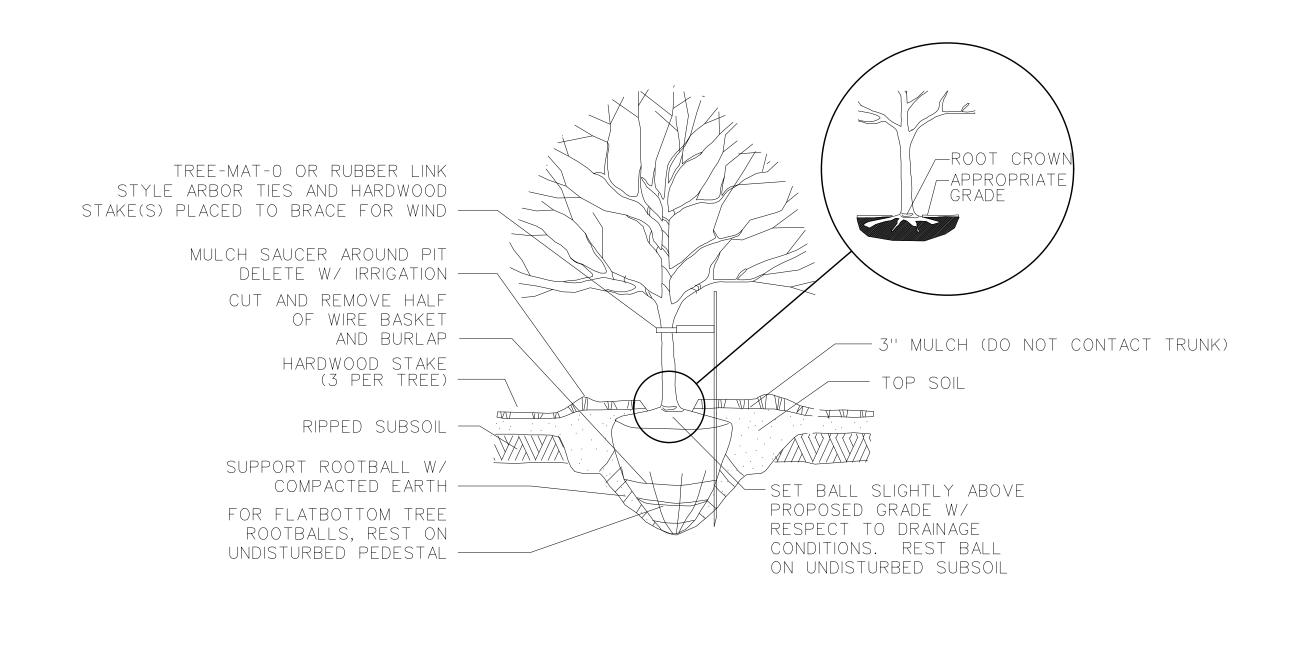
13.1. All areas where the installed plants have been disturbed or destroyed by the Contractor's negligent actions or inactions, as solely determined by the City, shall be replanted in accordance with these specifications by the Contractor at his own expense. Replanting shall occur at the next available planting window and shall not be delayed until the end of the warranty period.

WARRANTY PERIOD

- 14. The Contractor shall be held to the warranty percent survival rate of 80% for each of the seed types specified on Sheet 29 and 100% for each of the tree and shrub types specified on Sheet 30.
- The warranty period for the seeding and planting work shall extend for a minimum of one calendar year and include at least one full continuous growing season consisting of the full months of June through October, inclusive.
- 16. Following installation and throughout the warranty period, the Contractor shall actively maintain the installed planting work. This work includes removing debris accumulated in the planting area, resetting trees and shrubs to upright positions, reseeding bare soil areas, removing and replacing dead trees and shrubs, watering, and controlling invasive species and weeds during establishment period.
- 17. The Contractor shall perform maintenance visits to the project site at the following time intervals. Additional maintenance visits may be performed at the Contractor's discretion and expense.
- 17.1. 30 days following written acceptance of all planting work
- 17.2. 3 months following the previous maintenance visit.
- 8. The warranty inspection will be conducted at least 12 months from the date of installation between April 1 and November 15. Landscaper will meet with the City in the field and review the project areas to determine both adequate grass cover and vegetation survival in accordance with this plan. All dead material, regardless of cause, will be subject to the warranty replacement in accordance with a survivability rate of 80% for seeding and

100% for trees/shrubs. All missing material, regardless of cause (including but not limited to beavers, deer, flooding), shall be considered dead. Any material that is missing 50% or more of its original living branches present during installation (stunted branches, frost damage, leaf loss, etc.) shall be considered dead and will be subject to replacement.

The determination of seeded material survivability shall occur within a portion of each seeded area shown on this plan, agreed upon between the City and the Landscaper. The determination of adequate grass cover shall apply to the entire project area.



DETAIL
BALLED & BURLAP TREE PLANTING DETAIL

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PLANTI **JUNE 2025** SCALE NONE 2024-0677 SHEET 32/36

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

GENERAL

Traffic control shall be furnished, erected, maintained, and removed by the Contractor according to Ohio Manual of Uniform Traffic Control Devices (OMUTCD), current edition.

The roadway shall not be opened to traffic until permanent traffic controls are in place, or until temporary traffic controls, approved by the Engineer, are installed. The Contractor assumes all liability for the premature removal of temporary traffic controls.

The Contractor shall be responsible for the reinstallation and/or replacement of all permanent traffic control devices damaged or removed during the construction. Permanent traffic control that is no longer in conflict with temporary traffic control shall be replaced immediately. The Contractor shall assume all liability for missing, damaged and improperly placed traffic control devices.

The Contractor shall provide a 24 hour contact who will be responsible for maintenance of traffic for the duration of the project.

Construction operations shall not begin until all temporary traffic control devices are in place and approved by the Engineer and the City.

Maintenance of all traffic control devices including drums, signs, barricades, sign boards, detour signage, etc., shall be the Contractor's responsibility.

All trenches shall be backfilled or securely plated during all nighttime and non-working hours.

The drop off policies outlined in ODOT's Standard Construction Drawing MT-101.90 shall be applied to all phases of work outlined herein. irrespective of speed limit. A foreslope of 3:1 or flatter should be implemented during non-working and nighttime hours as needed to conform with MT-101.90.

If the City Engineer determines that the Contractor is not providing proper provisions for traffic control, the City Engineer shall assign uniformed, off-duty police officers to the project at no cost to the City.

CONSTRUCTION INITIATION

The Contractor will notify the City of Dublin 14 days prior to the start of construction activities. The Contractor will immediately inform the City of Dublin of any and all delays and/or changes regarding the construction project. The City Engineer will provide clarification for any questions about the notification requirement.

The Contractor shall submit a closure schedule to the City of Dublin for approval prior to initiating any closure.

ALTERNATE METHODS

The Contractor may submit alternative methods for the maintenance of traffic provided the intent of the above provisions is followed and no additional inconvenience to the traveling public results from the change. No alternative plan shall be placed in effect until approval has been received from the City of Dublin. There shall be no additional compensation for alternate methods.

LOCAL ACCESS

Ingress and egress shall be maintained to all residential and commercial properties. Driveway closure may be necessary to enable work on or in front of a drive. The Contractor will be responsible for notifying owners, residents, or business operators in writing at least 48 hours but not more than 72 hours prior to closure. The Engineer shall be given a list of the persons that were given notices with the date of notice included. Closure is permitted only during work hours and access must be returned at the end of each working day. Properties with multiple drives may have one drive closed at a time, while work is performed in the area of the closed

Access from public roadways to all adjoining properties for existing residents or businesses shall be maintained throughout the duration of the project for mail, public water and sanitary sewer service, and emergency vehicles. The Contractor shall provide a traffic control plan detailing the proposed maintenance of traffic procedures. The traffic control plan must incorporate any traffic control details contained herein. The traffic control plan proposed by the Contractor must be approved by the City Engineer prior to construction.

Individual drive closures shall be kept to the minimum time needed for construction activities. Every effort must be made to accommodate the owner's need for access.

PEDESTRIAN ACCESS

The Contractor shall be responsible for the protection and safe movement of pedestrians through, around, and away from the construction site.

The safety of pedestrian traffic shall be considered at all times in the provision of traffic control devices required by these plans and notes. It shall be the Contractor's responsibility to provide lights, signs, barricades, and other warnings to physically separate the pedestrian from hazards incidental to the construction operations such as open excavations, etc. At all times, the pedestrian MOT shall be subject to the approval of the Engineer.

If the Contractor desires to deviate from the proposed maintenance of pedestrian traffic plan, the Contractor shall submit in writing (a minimum of 14 days prior to construction) a plan to maintain pedestrian traffic for the duration of the project to the City and the Engineer for approval.

Any costs associated with maintaining pedestrian traffic shall be incidental to Item 614, Maintaining Traffic, As Per Plan.

COVERING SIGNS

The Contractor shall cover all existing signs that conflict with maintenance of traffic signs. Covering of signs shall be in accordance with 614.16. Costs for covering signs shall be included in Item 614 — Maintaining Traffic. As Per Plan

EXISTING TRAFFIC SIGN MAINTENANCE

Special care shall be taken to maintain existing street name signs and stop signs. If necessary, the Contractor shall relocate these signs out of the way of construction, but in conformance with OMUTCD.

SIGNS, BARRICADES, AND VERTICAL PANELS

All construction signs, barricades, vertical panels, and drums shall conform to OMUTCD and the latest revision of the ODOT construction and material specifications.

All construction signage shall be installed and covered before construction begins. After construction sign installation, the Contractor shall notify the Engineer three working days before work begins and request an inspection of all signage.

Faces of construction signs and reflective sheeting on barricades shall be type "H" VIP. All orange construction signs shall be fluorescent orange. All sheeting will be tested for reflectivity per ODOT 730.192. Vertical panels and drum bands shall be reflectorized with type "G" (High Intensity) sheeting complying with the requirements of 730.19. All signs and barricades, vertical panels, and drums will be like new and in good condition in conformance with "Quality Guidelines For Temporary Traffic Control Devices And Features" published by ATSSA.

Maintenance of all Contractor supplied signs, barricades, vertical panels, and drums is the Contractor's responsibility. If the Contractor fails to correct deficiencies within four hours of notification, the City will correct or hire someone to correct the deficiencies. The Contractor will then be back charged per ODOT specification 614.14. In the case that back charging the Contractor is not applicable, the City will rescind and withhold all permits issued to the Contractor to work within City right-of-way until the issue is settled.

These provisions shall not in any way relieve the Contractor of any of his legal responsibilities or liabilities for the safety of the public.

Steady_burning, Type "C" lights shall be required on all barricades, drums, and similar traffic control devices in use at night.

All advance signing shall be equipped with type "A" flashing lights and (2) orange flags (24"x24"). Lights are not required on signs in place during daylight hours.

Cones are not approved for use at night.

Drums shall be placed as follows: 40' c/c on tangents, 20' c/c on tapers, and 8' c/c in radii.

LANE CLOSURE/REDUCTION REQUIRED

Length and duration of lane closures and restrictions shall be at the approval of the Engineer. It is the intent to minimize the impact to the traveling public. Lane closures or restrictions over segments of the project in which no work is anticipated within a reasonable time frame, as determined by the Engineer, shall not be permitted. The level of utilization of maintenance of traffic devices shall be commensurate with the work in

MUD, DIRT AND DEBRIS

The tracking or spillage of mud, dirt or debris upon state highways is prohibited and any such occurrence shall be cleaned up immediately by the contractor.

PAYMENT

Payment for all maintenance of traffic items, including the furnishing, installation and maintenance of, but not limited to: flashing arrows panels. signs, sign supports, flags, flaggers, barricades, barrier, barrier reflectors, notice of closure signs, drums, cones, construction fencing, temporary pavement markings, traffic compacted surface, materials and labor for maintaining access to driveways, property owner notification/coordination and development of the operations schedule shall be at the lump sum price bid for Item 614 Maintaining Traffic, As Per Plan, which shall include all labor, material, equipment, and incidentals to complete the work as detailed in the plans. Unless separately itemized in the plans, no separate payment shall be made.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR, AS PER PLAN

Use of Law Enforcement Officers (LEOs) by Contractors other than the uses specified in this note will not be permitted at project cost unless prior approval has been obtained from the Engineer. LEOs should not be used where the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) intends for flaggers be used.

In addition to the requirements of CMS 614 and the OMUTCD, a uniformed LEO with an official patrol car (car with top-mounted emergency flashing lights and complete markings of the appropriate Law Enforcement Agency) should be provided for controlling traffic for the following tasks:

For lane closures: During initial set—up periods, tear down periods, substantial shifts of a closure point or when new lane closure arrangements are initiated. In general, LEOs should be positioned at the point of lane restriction or road closure and to manually control traffic movements through intersections in work zones.

During the entire advance preparation and closure sequence where blockage of traffic is required.

LEOs work at the direction of the Contractor. The Contractor is responsible for securing the services of the LEOs and communicating the intentions of the plans with respect to duties of the LEOs. The Engineer shall have final control over the LEOs' duties and placement and will resolve any issues that may arise between the two parties. The Contractor shall utilize any of the following Law Enforcement Agency(s): City of Dublin, Franklin County Sherrif's Office, or the Ohio State Highway Patrol.

Law Enforcement Officers with patrol car required by the traffic maintenance tasks above shall be paid for on a unit price (hourly) basis under Item 614, Law Enforcement Officer with Patrol Car, As Per Plan.

The hours paid shall include minimum show—up time required by the law enforcement agency involved. Any additional costs (administrative or otherwise) incurred by the Contractor to obtain the services of an LEO are included with the bid unit price for Item 614. Law Enforcement Officer with Patrol Car. As Per Plan.

SEQUENCE OF CONSTRUCTION

Brand Rd shall be closed and detoured for the installation of the proposed storm sewer crossing. Sheet 34 details the detour signage associated with the closure of Brand Rd. The closure shall be limited to 5 days maximum duration. Any pavement markings or signs impacted by construction shall be replaced prior to reopening the road to traffic. All costs related to restoration of signs shall be incidental to Item 614. Maintaining Traffic As

Sheet 35 details the removal of curbing to install temporary site access off Bristol Pkwy. Phase 1 shows the removal of the curb and Phase 2 shows the temporary set up during construction.

Pedestrian traffic shall be prohibited within the project work limits for the duration of the project. Sidewalks and paths shall be closed as detailed on sheet 36. Proposed sidewalk construction shall be completed prior to removing the sidewalk closures.

SPECIAL EVENTS

No work shall be performed and all existing lanes shall be open to traffic during the following designated special events.

St. Patrick's Day Parade Memorial Tournament Memorial Day Ceremony Independence Day Celebration **Dublin Irish Festival** Halloween Spooktacular Veterans Day Celebration Tree Lighting

DRAINAGE EMENTS FFIC NOTFS

A E ON INGT ASIN NTENA

JUNE 2025

NONE

SCALE

2024-0677

SHEET 33/36

