

City of Rochester



Oakland County, Michigan

Paint Creek Trail 31.7 Bridge Replacement Project

Paint Creek Trail - Northwest of Ludlow Road and Woodward Avenue



INDEX TO SHEETS

| TITLE SHEET |
|-------------------------------------|
| GENERAL NOTES |
| TOPOGRAPHIC SURVEY AND REMOVAL PLAN |
| CONSTRUCTION PLAN |
| BRIDGE PLAN AND PROFILE |
| FOUNDATION PLAN AND SECTIONS |
| ABUTMENT DETAILS |
| APPROACH SECTIONS AND DETAILS |
| SOIL BORING PLAN |
| ACCESS AND TRAFFIC CONTROL PLAN |
| SOIL EROSION AND SEDIMENTATION PLAN |

LOCAL AUTHORITY APPROVAL CITY OF ROCHESTER

ALEKSANDER MIZIKAR DIRECTOR OF PUBLIC WORKS AND ECONOMIC DEVELOPMENT DATE

"I HEREBY CERTIFY THESE PLANS HAVE BEEN PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH ACT 240, PUBLIC ACTS OF 1937 AS AMENDED- STATE OF MICHIGAN."

GENERAL PROVISIONS

This project shall be constructed in accordance with the Michigan Department of Transportation (MDOT) 2012 Standard Specifications for Highway Construction except as noted herein and in the proposal book.

Contract plans for the project have been developed and prepared by the Anderson, Eckstein and Westrick, Inc. Immediate project supervision and inspection will be performed by Anderson, Eckstein and Westrick, Inc.

During construction operations, the Contractor shall not perform work by private agreement with property owners adjacent to the project. Work may be allowed when requested by local municipalities, but only with the written consent of the Engineer.

The Contractor shall conduct his operations in such a manner to comply with all federal, state, and local codes for noise levels, vibrations, or any other restrictions while removing pavement or for any other construction operations within this contract to be included in the respective item of work.

If the work extends beyond the seasonal shutdown in the absence of any approved extension of time, no compensation will be due to the Contractor for any winter protection measures that may be required by the Engineer

The Contractor and/or his Subcontractor shall notify "Miss Dig", the Road Commission and the municipality's, fire, police, and public works departments 3 working days prior to the beginning of construction. In addition, 48 hours advanced notification is required for any road closures or changes in construction staging.

No use of private property by the Contractor or any Subcontractors shall occur before the project Engineer has written agreement between the property owner and the Contractor. This agreement must be provided by the Contractor and must be notarized by a public notary. If such use does occur before the project Engineer has possession of the notarized agreement, the project Engineer will issue a notice of non-compliance suspending all work immediately until such time as a copy of the written, notarized permission is submitted or the property in question has been vacated by the Contractor, or any Subcontractors, and restored to its original condition, with no extension of time or additional cost for idle equipment, downtime, etc. to the Paint Creek Trailways Commission.

<u>UTILITIES</u>

MISS DIG/UNDERGROUND UTILITY NOTIFICATION

For the protection of underground utilities and in conformance with Public Act 174 of 2013, the Contractor shall contact MISS DIG System, Inc. by phone at 811 or 800-482-7171 or via the web at either elocate.missdig.org for single address or rte.missdig.org, a minimum of 3 business days prior to excavating, excluding weekends and holidays.

OUT OF SERVICE UTILITIES

If plan information indicates an existing underground utility is or will be out of service within the limits of this contract, the Contractor is cautioned to treat such a line as if it were still in service and notify "Miss Dig" when working in the area of the out of service facility.

EXISTING WATER MAINS AND SEWERS

The Contractor shall be responsible for any damage to properly identified existing water mains and/or existing sewers during the construction of this project.

The existing utilities listed below and shown on these plans represent the best information available as obtained on our surveys. This information does not relieve the contractor of the responsibility to be satisfied as to its accuracy and the location of existing utilities.

All work required for locating existing utilities in accordance with Michigan Public Act 174 of 2013 shall not be paid for separately.

BENCHMARKS

Plan elevations shown on these plans are from the NAVD 88 datum

Iron pin, Sta 1777+22.76, 26.97 Lt. EL 800.63

Iron pin, Sta 1777+14.63, 5.72 Rt. EL 807.38

Aggregate bases shall use aggregate MDOT 21AA, unless otherwise specified.

No crushed concrete shall be used on this project.

BRIDGE

BRIDGE LEAD PAINT

If existing bridge beams are steel, the bridge paint may contain lead.

Existing vegetation shall not be damaged during construction operations, per the 2020 Standard Specifications for Construction.

Heavy equipment will not be allowed to work outside the slope stake lines in the wooded portion of the site. All equipment to be used must be approved by the engineer prior to beginning work.

Storage of equipment and materials will be restricted to areas designated by the

All raw fill or cut slopes will be covered with slope restoration according to the special provision and time limitations specified in section 816.03 of the 2020 Standard Specifications for Construction.

All excavated material will become the property of the contactor. Any excavated material not used on the project will be removed from the site and disposed of in accordance with section 205.03.P. of the 2020 Standard Specification for Construction and any applicable state and/or local ordinances.

No cereal rye seeding shall be used on this project.

Plant material, soil, fertilizer and mulch will be inspected/approved by the Engineer prior to installation. Plant inspection may occur at the nursery source or when plants arrive on site.

<u>SIGNS</u>

GENERAL

All signs shall be installed, removed and/or salvaged according to the current edition of "Michigan Manual on Uniform Traffic Control Devices" and the current edition of Michigan Department of Transportation (MDOT) "Standard Specifications for

All signs on the plans or in the log that do not have a recommendation are to be

EXISTING SIGN RELOCATION

Any permanent signs requiring relocation due to Contractor operations shall be salvaged and reset by the Contractor at locations designated by the Engineer. Signs and posts damaged during the removal and storage operations shall be replaced with new signs and posts. The cost of this work shall be borne by the Contractor.

When the Contractor is attaching signs to supports, tighten the nut, not the bolt head.

SIGN INSTALLATION

Nylon washers shall be placed between the steel washer and the sign face sheeting. The nylon washers are to be considered part of the attaching devices and hardware. Nylon washers shall have a 3/8 inch inner diameter, a 7/8 inch outer diameter and a 1/16 inch thickness.

REFERENCED PLANS

The following bridge plans were referred to in the design of this project 2019 - Bridge 33.7 Replacement

RIGHT OF WAY / REAL ESTATE

Right-of-way shown on the plans are from City of Rochester, Geographical Information System (GIS) unit and deemed accurate but not guaranteed.

TRAIL SAFETY

TEMPORARY (CONSTRUCTION) TRAFFIC CONTROL

Trail will be closed to through traffic in accordance with the construction signing diagram and the Road Commission for Oakland County Special Provision for "Maintaining Traffic" in the proposal.

The Contractor shall conduct his operations in such a manner that local traffic and emergency vehicles shall have access within the project at all times in a manner approved by the Engineer. This shall be included in the cost of the project.

Additional signs and barricades necessary to protect traffic, as directed by the Engineer, shall be paid for by their appropriate pay item. However, additional devices for contractor convenience, as determined by the Engineer, will not be paid

Maintaining traffic shall not be paid for separately, but shall be included in the cost of traffic control items during construction of the project.

<u>EARTHWORK</u>

Erosion Control items shall be in place, as directed by the engineer, prior to starting any earth disturbance.

Details for soil erosion control measures can be found on the Oakland County Water Resources Commissioner website at:

https://www.oakgoc.com/water/Documents/soil erosion details%20Sheet-updated 042013.pdf

And are here made part of these construction contract documents.

In addition to the silt fence identified on the plans, the following quantity of silt fence has been added to the project for use as directed by the Engineer. In areas where teh silt fence is deemed necessary, it shall be installed prior to any earth disturbing

Erosion Control, Silt Fence 200 Ft

All natural soil left in place, in cut sections, shall be compacted to not less than 95 percent of maximum unit weight to a minimum depth of 12 inches.

The limit of earth disturbance shall be the slope stake line unless otherwise directed by the Engineer.

All Slopes shall be Class A slopes.

Areas disturbed by the Contractor or Subcontractor shall be restored as specified in the Soil Erosion and Sedimentation Control plans or directed by the Engineer. No additional payment or compensation will be allowed for areas disturbed outside the Slope Stake Line or the limits of the construction identified in the plans.

The Contractor shall be responsible for any damage to the property beyond the slope stake line, including existing fencing, lawn, trees, shrubbery, and sidewalks. The following quantity has been included in the project for Slope Restoration:

Slope Restoration, Modified xx Syd Slope Protection, Type A xx Syd

The Soil Borings logs depict point locations and do not infer that the surface or subsurface conditions are the same in other areas.

Boring locations are shown on the plans. Soil logs are included in the plans.

EARTH QUANTITIES

SOIL BORINGS

Earthwork quantities are computed based upon limited survey information. These quantities are for bidding purposes only and will be adjusted by the Engineer based upon actual field measurements.

MISCELLANEOUS PAY ITEMS

The following items of work will not be paid for separately and are included in other items of work and shall be done as required by the Engineer.

Included in Clearing:

Removing trees less than 6 inch diameter - Removing shrubs and bushes

Included in concrete items: - Concrete Admixtures

The following items of work shall be done as they apply throughout the project or as directed by the Engineer. These items are not detailed or included elsewhere on the plans.

Mobilization, Max. 5% LSUM Embankment, CIP xx Cyd Excavation, Earth xx Cyd Dust Palliative, Applied xx Ton

Dust Palliative, Applied (Ton) has been included in the project to be used as directed by the Engineer to control dust within the project limits. Water required for dust control to be included in other items.

Verify conditions and measurements at the site and report any discrepancies to the owner before proceeding with the work. Existing dimensions and elevations shown within these contract documents are approximate and are to be field verified by the Contractor prior to construction.

Contractor shall prepare and submit for the Engineers' approval shop drawings, including product data information and testing results on all products and materials to be used. Substitutions from the materials and manufactures noted with these contract documents are permitted, provided that the "Or equal" products are approved by the Engineer prior to installation.

CONSTRUCTION STAGING NOTES

- Suggested construction sequence
- Install Temporary Traffic Control Install the temporary cofferdams and other soil erosion measures.
- Perform clearing and grubbing operations
- 4. Remove and dispose of the existing bridge offsite.
- Excavate and dispose offsite material to elevations shown on plans.
- Install the foundations, abutments, and wingwalls. Backfill substructure and install riprap to elevations shown.
- 8. Remove the temporary cofferdams.
- 9. Install bridge. 10. Topsoil/seed and mulch disturbed areas
- 11. once vegetation is established, remove erosion control measures and repair any areas damaged by erosion control removal.

Acceptable location for the contractor's staging area and erection. All labor, materials and equipment required for using this area, including site restoring to original condition shall not be paid for separately and shall be included in pay item "Slope Restoration, Modified".

HOUR OF OPERATION

See progress clause in project specifications for allowable hours of operation.

STRUCTURE NOTES

- 1. The work covered by these plans include clearing, grubbing, tree removal, channel excavation, earth excavation, maintaining traffic, backfills, seeding and slope protection to the Limits shown.
- 2. The Contractor shall locate all active underground utilities prior to starting work and shall conduct his operations in such a manner as to ensure that those utilities not requiring relocations will not be disturbed.
- 3. Remove peat and other unsuitable material below proposed approach fill location and backfill with compacted in place embankment.
- 4. Pedestrian traffic is to be detoured over other existing paths and sidewalks. See detour Plan.
- 5. Plan elevations refer to NAVD88 datum.
- 6. Water level is subject to change. The Contractor is responsible for making a determination of water levels that may exist during construction. 7. Measures shall be taken to prevent debris from falling from the structure. If
- debris falls into the water way, it shall be removed within 24 hours. Since disturbance of the waterway bottom may be harmful as the debris itself, the preventative measures must be effective. 8. The haul route shall be according to subsection 105.03 of the standard

MISCELLANEOUS NOTES

specifications.

All Construction shall conform to current MIOSHA Safety Standards. Backfill surrounding structures shall be MDOT Structure Backfill compacted to 95% Max. Density, at optimum moisture content unless otherwise noted. Backfill above the top of structure up to finished grade shall be clean granular material free of organics and submitted for approval before placement.

Excavated material shall be removed from the site.

Measures shall be taken to prevent debris from falling from the structure, if debris falls into the waterway, it shall be removed the same day that it occurred.

Provide key ways at all construction Joints (CJ)

The Contractor shall locate all active underground utilities prior to starting work and shall conduct his operations in such a manner as to ensure that those utilities not requiring relocation will not be disturbed. The following utility companies have facilities within the project area:

Consumers Energy Ernie Martyniuk 4600 Coolidge Highway Royal Oak, Michigan 48073 (248) 594-5089 ernest.martunuik@cmsenergy.com

Telecommunications AT&T Greg Hills 54 N. Mill Street Pontiac, Michigan 48342 248) 705-6529

Comcast Michael Marlow 41112 concept Drive Plymouth, MI 48170 (313) 304-9996

gh3275@att.com

michael.marlow@comcast.com <u>Electric</u>

Saso Trpceski 15600 Nineteen Mile Road Clinton Twp., Michigan 48038 (586) 412-3220 saso.trpceski@dteenergy.com

Water and Sewer City of Rochester Public Works Department Alek Mizikar, DPW Director 1141 North Wilcox Rochester, Michigan 48307 (248) 651-5165 amizkar@rochestermi.org

Oakland County Water Resource Commissioner Joel Kohn Bldg. 95 West – One Public Works Dr Waterford, Michigan 48328 (248) 858 - 0958

ANDERSON, ECKSTEIN AND WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS 51301 Schoenherr Road Phone 586 726 1234

Shelby Township

Michigan 48315 www.aewinc.com

ENGINEERING STRONG COMMUNITIES

Fax 586 726 8780

SUBMITTALS/REVISIONS PROJECT NAME

PAINT CREEK TRAIL **31.7 BRIDGE**

REPLACEMENT

SHEET TITLE

GENERAL NOTES

CITY OF ROCHESTER PRELIMINARY CONSTRUCTION RECORD

AAP MARCH 2023 NOT TO SCALE

DRAWN BY: CHECKED BY:



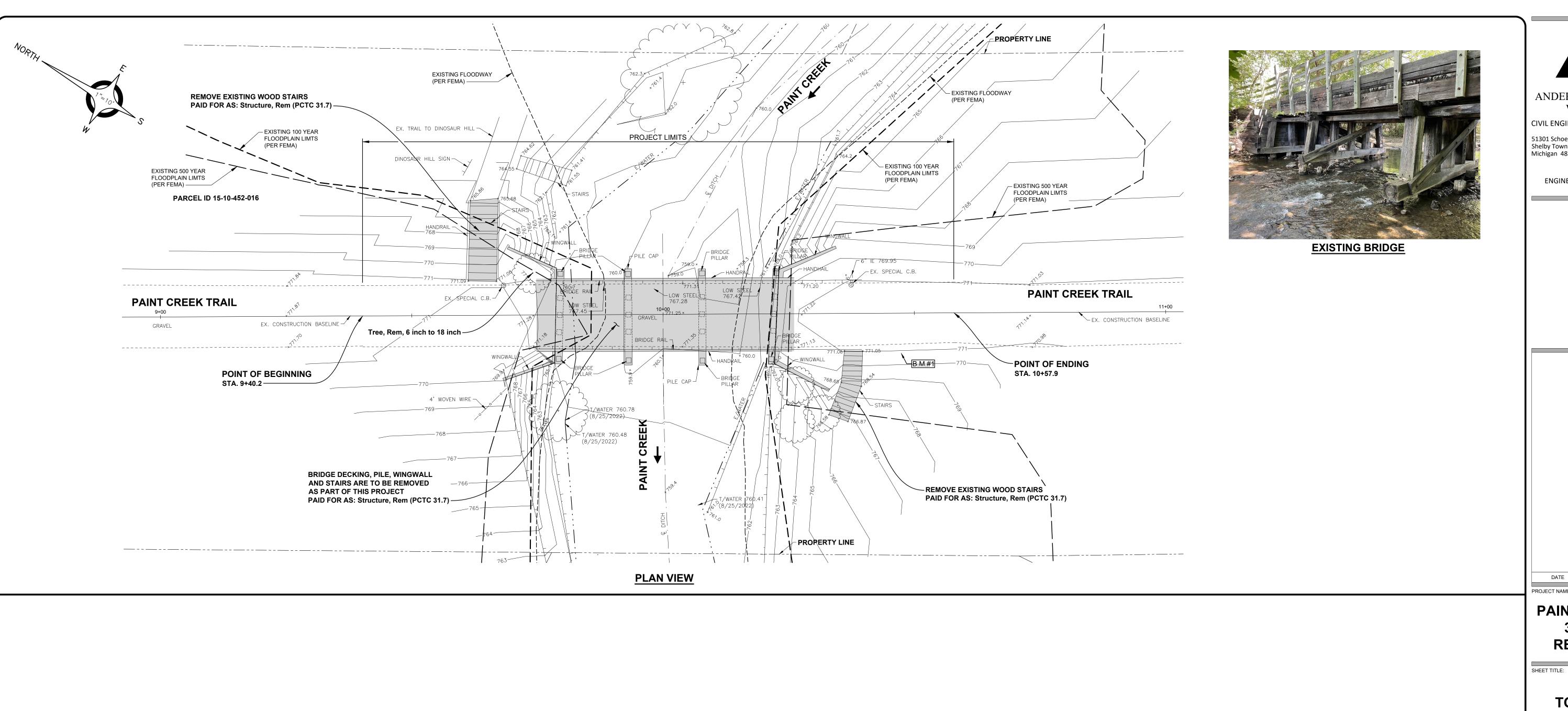
LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY. AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF

EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH THAT UTILITY).

DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

PROJECT NO. 0270-0177

M:\0270\0270-0177\DWG\CIVIL\01-04 COVER-CONST.DWG SHEET NO





ANDERSON, ECKSTEIN AND WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

Phone 586 726 1234 51301 Schoenherr Road Shelby Township Michigan 48315 Fax 586 726 8780

www.aewinc.com

ENGINEERING STRONG COMMUNITIES

PROJECT NAME: **PAINT CREEK TRAIL** 31.7 BRIDGE

SUBMITTALS/REVISIONS

TOPOGRAPHIC SURVEY AND REMOVAL PLAN

REPLACEMENT

CITY OF ROCHESTER

PRELIMINARY CONSTRUCTION RECORD



UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

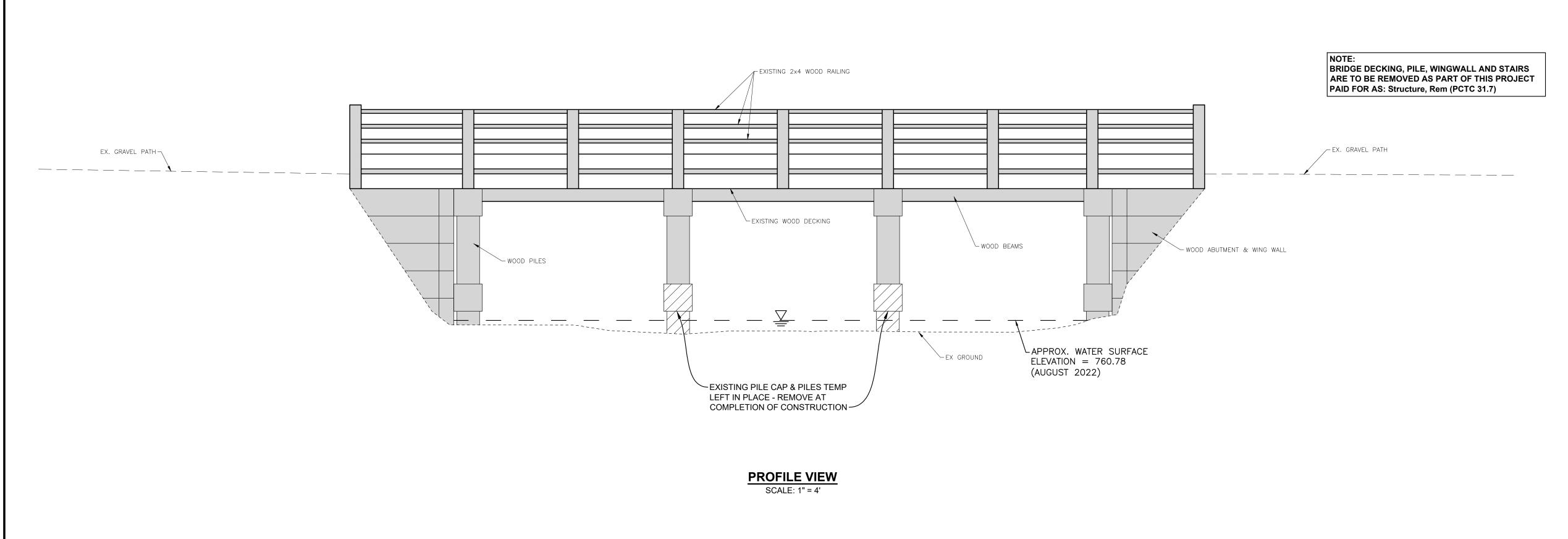
PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE

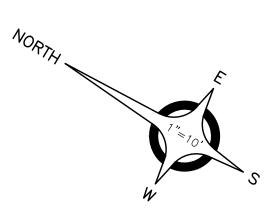
ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH THAT UTILITY). DURING CONSTRUCTION, THE CONTRACTOR SHALL USE

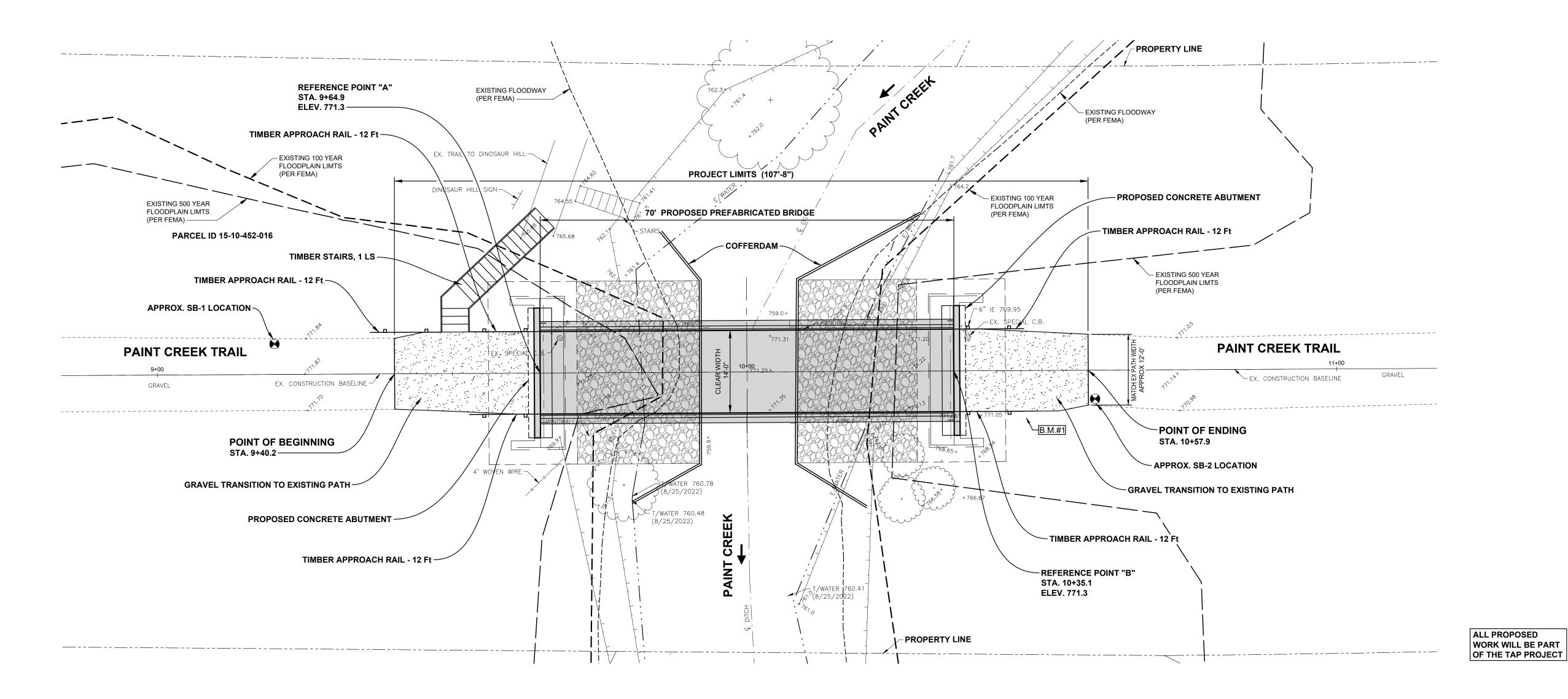
EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

PROJECT NO. 0270-0177

M:\0270\0270-0177\DWG\CIVIL\01-04_COVER-CONST.DWG SHEET NO.







NOTES:

THE DESIGN OF THIS STRUCTURE IS BASED ON CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATION PEDESTRIAN LOADING OF 90 PSF AND A MAINTENANCE VEHICLE H2O LOADING, NOT ACTING CONCURRENTLY. LIVE LOAD DEFLECTION DOES NOT EXCEED 1/360 OF SPAN LENGTH.

THE DRAINAGE AREA CONTRIBUTORY TO THIS CROSSING IS 63.0 SQUARE MILES.

THE EXISTING STRUCTURE PROVIDES A WATERWAY AREA OF 483.54 SQUARE FEET TO UNDERCLEARANCE ELEVATION 803.16.

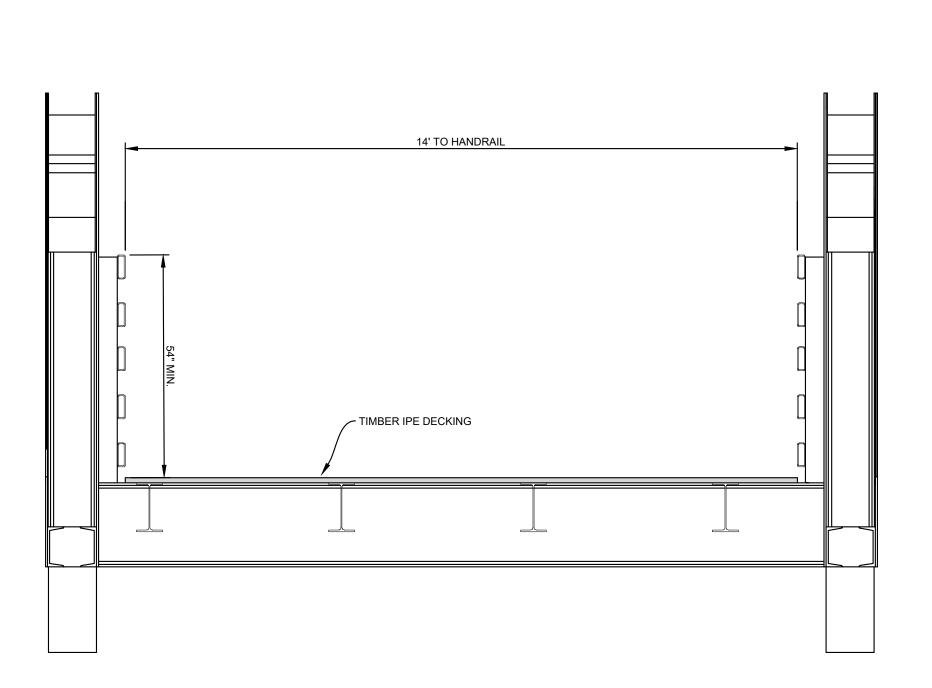
WITHOUT THE PREVENTIVE MEASURES SHOWN ON THESE PLANS, THERE IS A POSSIBILITY THAT STREAM BED SCOUR MAY OCCUR. THE ESTIMATED TOTAL SCOUR DEPTH IS CALCULATED TO BE 10.01 FEET AT ABUT. A AND 9.77 FEET AT ABUT. B. THESE DEPTHS ARE BASED ON A 100 YEAR RUNOFF EVENT.

COBBLE, GRAVEL, SAND MIX SHALL BE PLACED ON ALL SLOPES PRIOR TO PLACING RIPRAP.

FOR DETAILS OF SLOPE PROTECTION, SEE STANDARD PLAN B-102-SERIES.

THE RIPRAP QUANTITY IS BASED ON THE LATERAL DIMENSIONS OF THE AREA TO BE PROTECTED, REGARDLESS OF THE NUMBER OF LAYERS REQUIRED. THE ESTIMATED WEIGHT OF RIPRAP IS 378 TONS.

ALTERNATE METHODS OF STREAM DIVERSION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.



PROPOSED TYPICAL DECK SECTION

NOT TO SCALE

ANDERSON, ECKSTEIN AND WESTRICK, INC.

Fax 586 726 8780

CIVIL ENGINEERS SURVEYORS ARCHITECTS
51301 Schoenherr Road Phone 586 726 1234

51301 Schoenherr Road Shelby Township Michigan 48315

www.aewinc.com

ENGINEERING STRONG COMMUNITIES

DATE SUBMITTALS/REVISIONS
PROJECT NAME:

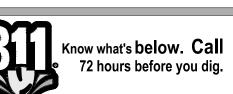
PAINT CREEK TRAIL 31.7 BRIDGE REPLACEMENT

SHEET TITLE:

CONSTRUCTION PLAN

CITY OF ROCHESTER

| PRELIMINAR | Y CONSTRU | CTION RECORD |
|------------|-------------|--------------|
| DRAWN BY: | CHECKED BY: | DATE: |
| MJS | AAP | MARCH 2023 |
| SCALE: | | |
| | 1" = 10' | |
| 0 | 5 10 | 20 |
| | | |



UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

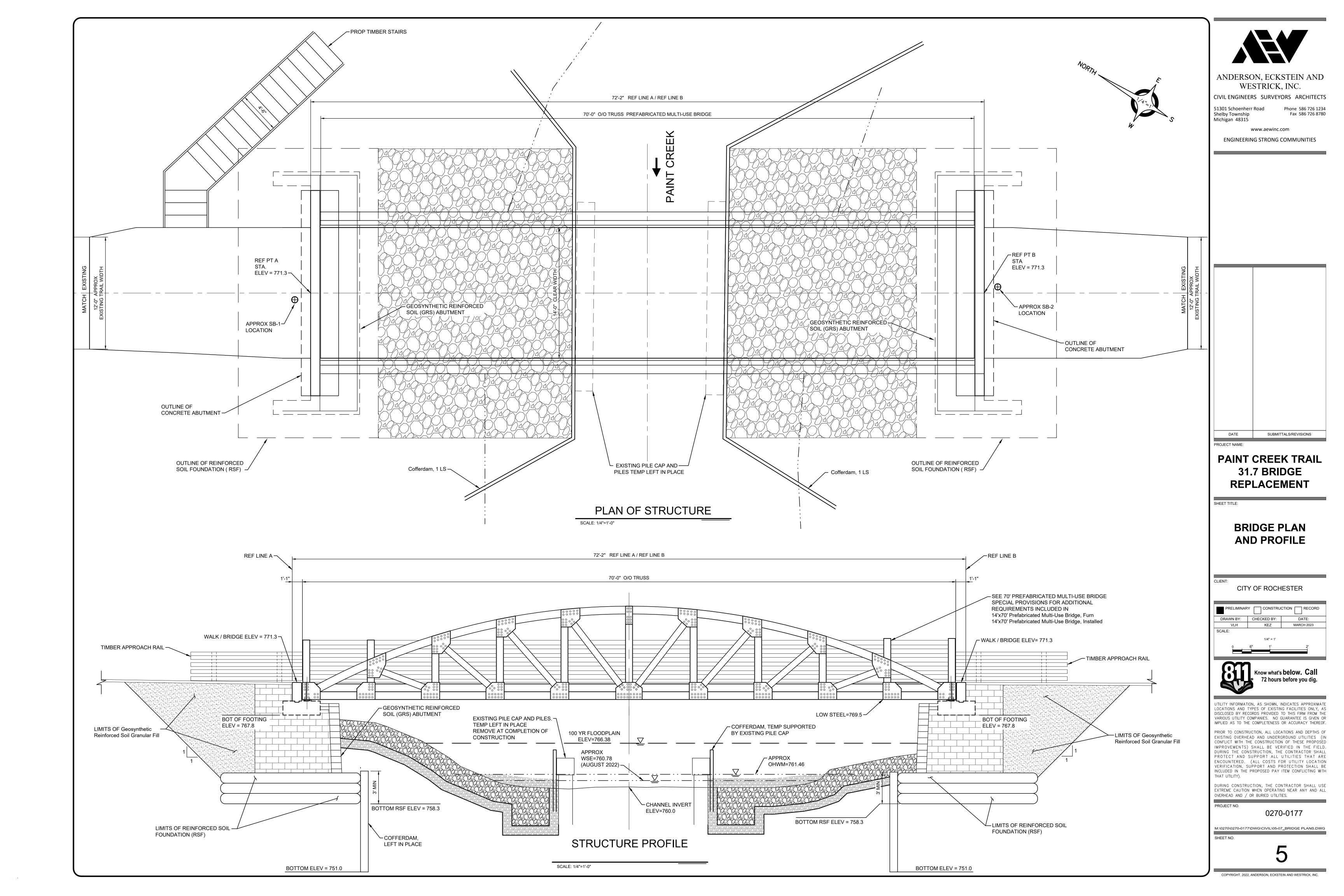
PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH

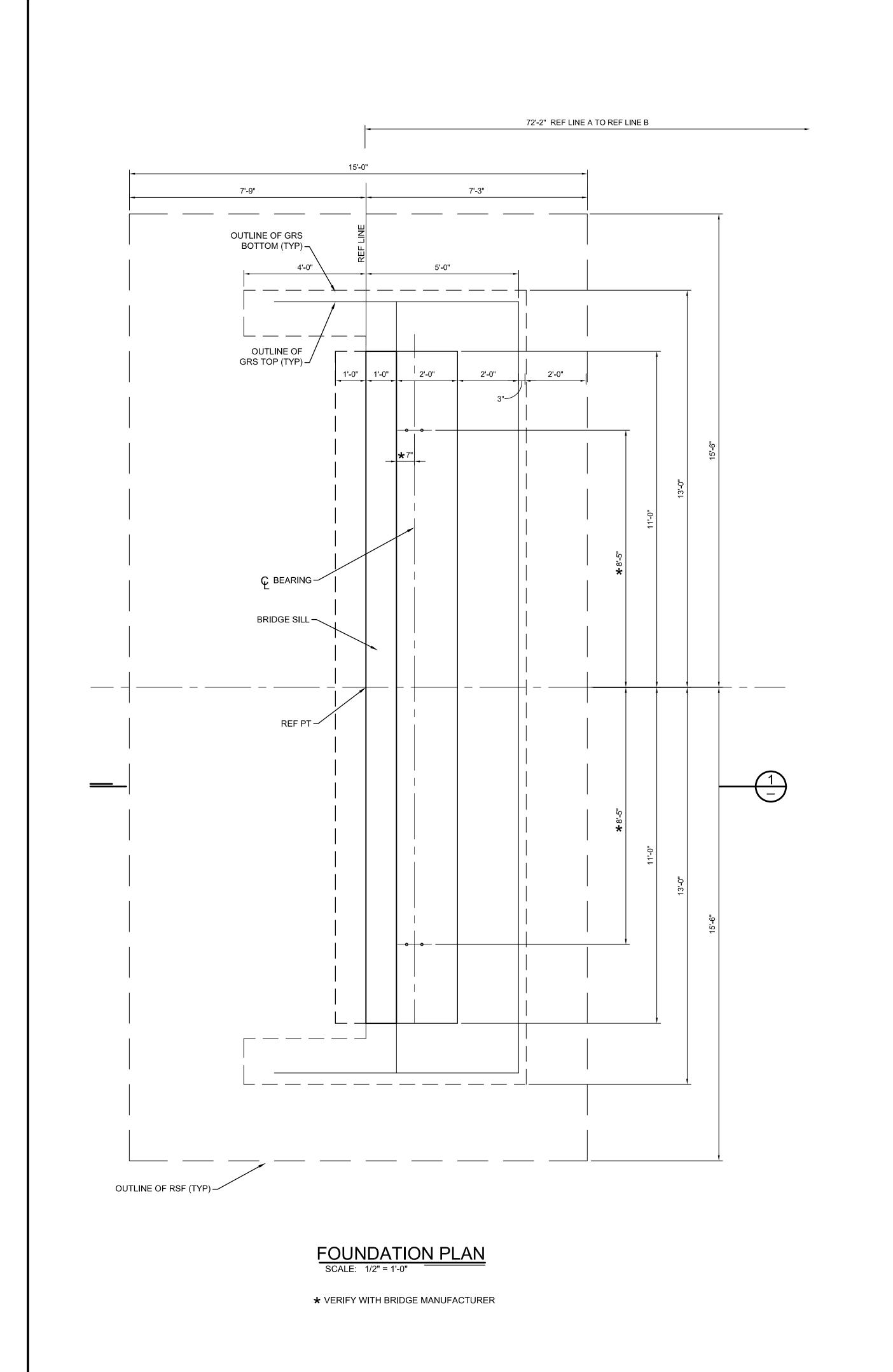
DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

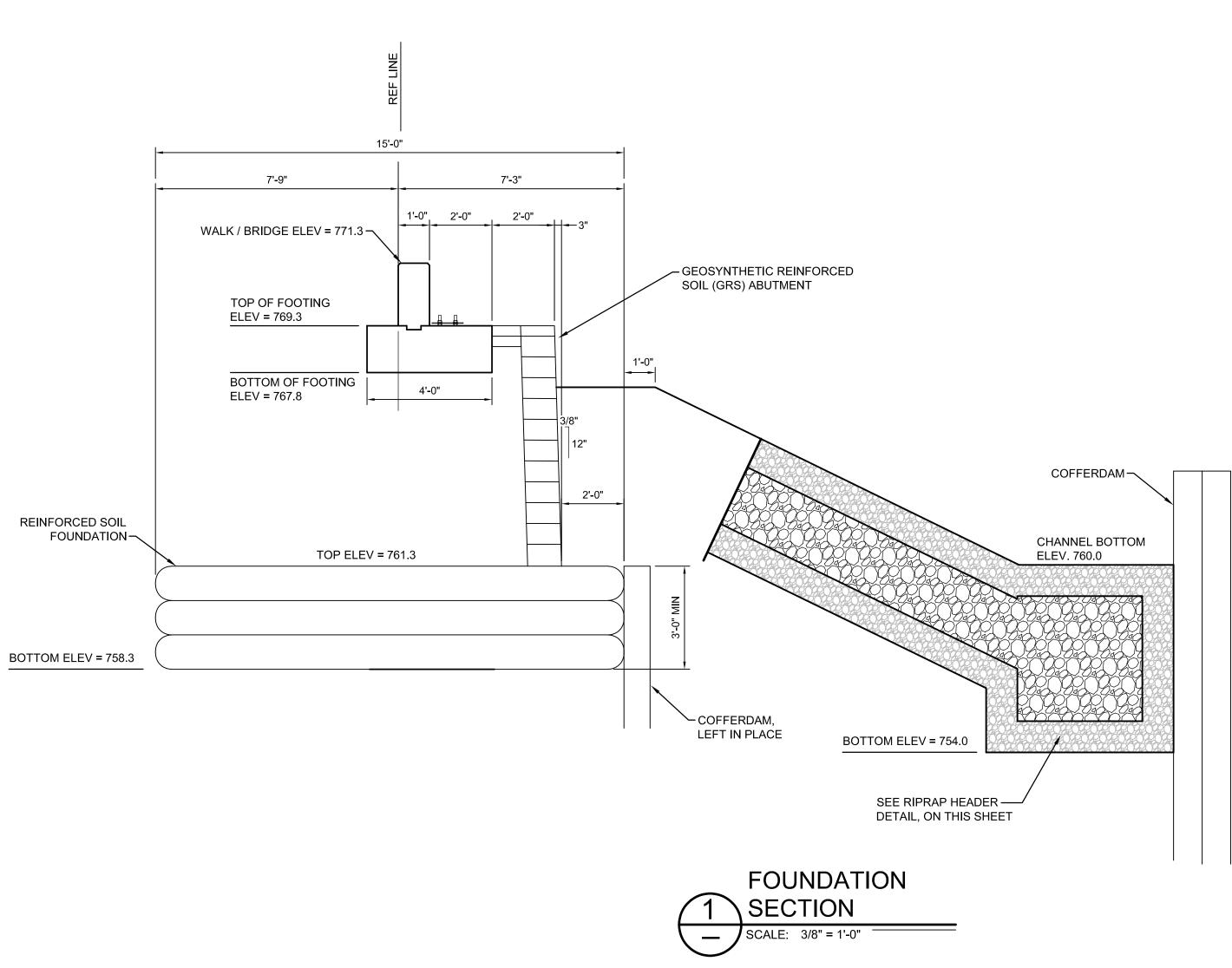
PROJECT NO. 0270-0177

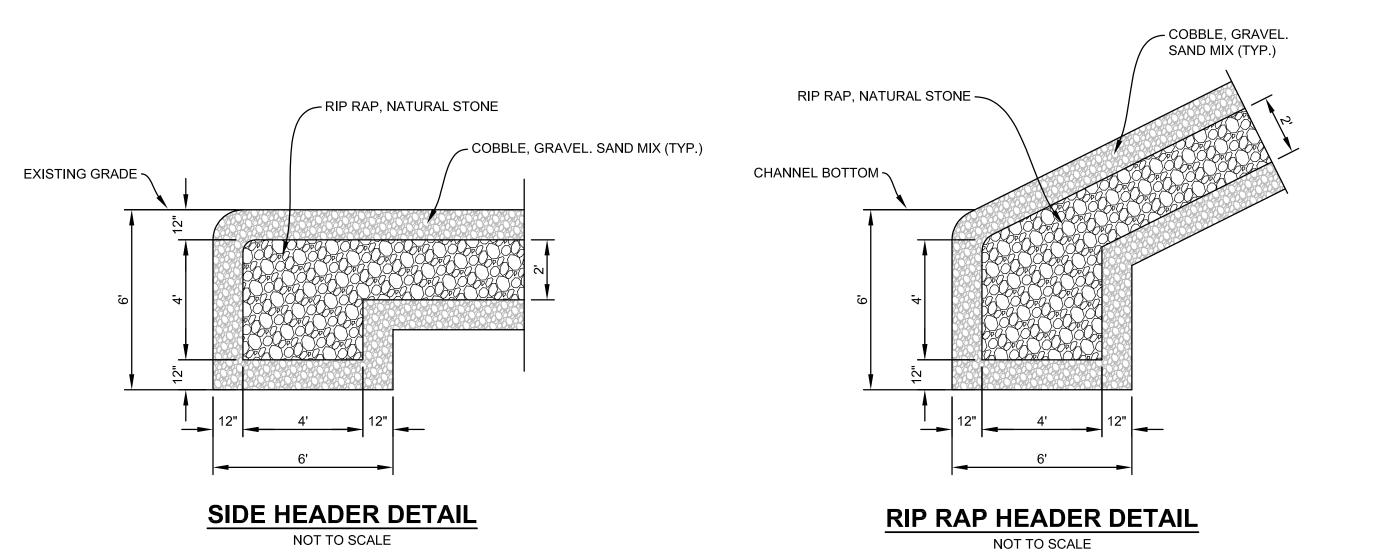
M:\0270\0270-0177\DWG\CIVIL\01-04_COVER-CONST.DWG

4











ANDERSON, ECKSTEIN AND WESTRICK, INC.

Fax 586 726 8780

CIVIL ENGINEERS SURVEYORS ARCHITECTS
51301 Schoenherr Road Phone 586 726 1234

Michigan 48315 www.aewinc.com

Shelby Township

ENGINEERING STRONG COMMUNITIES

11-15-2022 FOR REVIEW
DATE SUBMITTALS/REVISIONS

PAINT CREEK TRAIL 31.7 BRIDGE REPLACEMENT

SHEET TITL

PROJECT NAME:

FOUNDATION PLAN AND SECTION

CLIENT: CITY OF ROCHESTER

PRELIMINARY CONSTRUCTION RECORD

DRAWN BY: CHECKED BY: DATE:

VLH KEZ



UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH

THAT UTILITY).

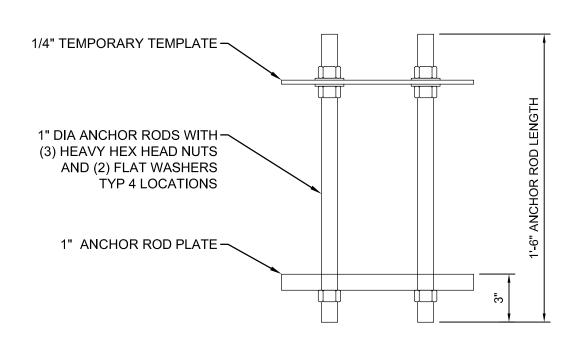
DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

PROJECT NO. 0270-0177

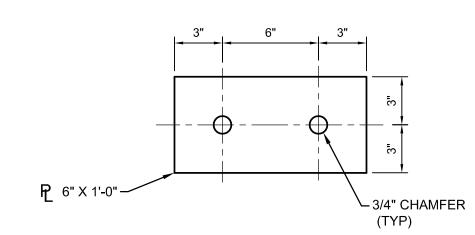
SHEET NO.

M:\0270\0270-0177\DWG\CIVIL\05-07_BRIDGE PLANS.DWG

6



ANCHOR ROD ASSEMBLY SCALE: 2" = 1'-0"

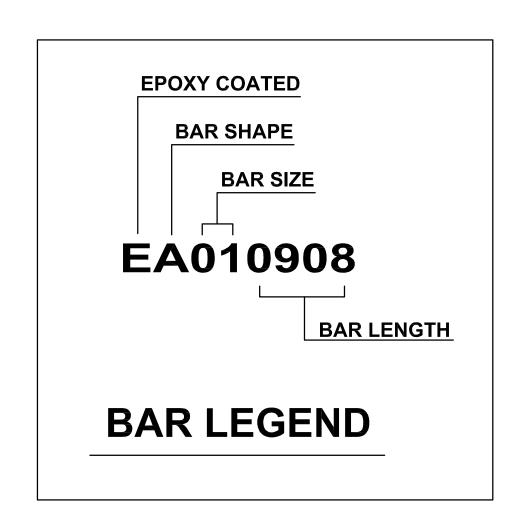


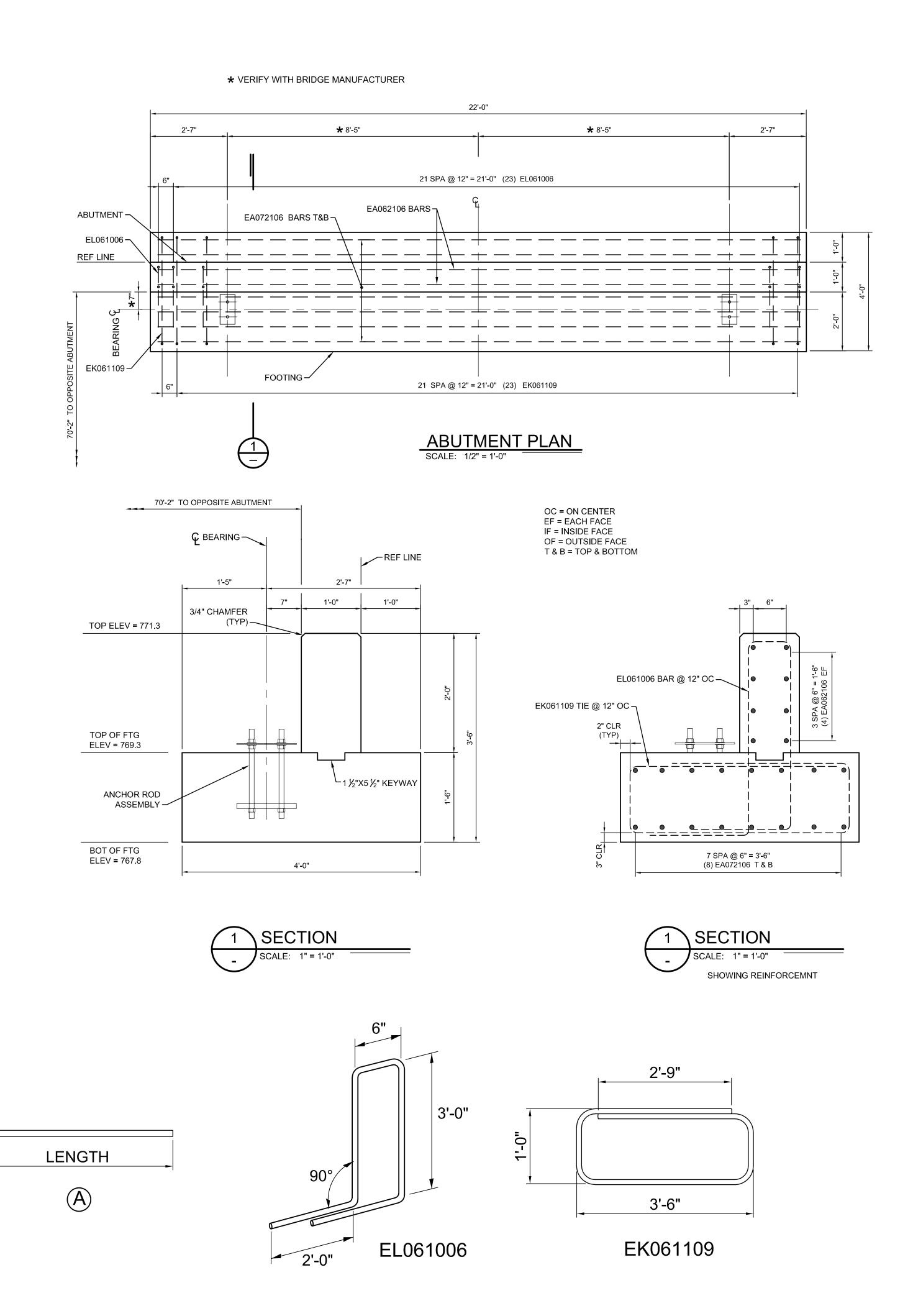
ANCHOR ROD PLATE AND TEMPLATE SCALE: 2" = 1'-0"

| REINFORCEMENT SCHEDULE | | | | | | |
|---|--------|----------|--------|--|--|--|
| BAR | LENGTH | QUANTITY | WEIGHT | | | |
| EA062106 | 21'-6" | 16 | 517 | | | |
| EA072106 | 21'-6" | 32 | 1407 | | | |
| EL061006 | 10'-6" | 46 | 726 | | | |
| EK061109 | 11'-9" | 46 | 812 | | | |
| Reinforcement, Steel, Epoxy Coated 3462 Lbs | | | | | | |

NOTES:

1. ALL STEEL REINFORCEMENT SHALL BE EPOXY COATED, UNLESS NOTED OTHERWISE.







ANDERSON, ECKSTEIN AND WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

51301 Schoenherr Road Phone 586 726 1234 Shelby Township Fax 586 726 8780 Michigan 48315

www.aewinc.com

ENGINEERING STRONG COMMUNITIES

11-15-2022 FOR REVIEW
DATE SUBMITTALS/REVISIONS

PROJECT NAME:

PAINT CREEK TRAIL

31.7 BRIDGE

SHEET TITLE:

ABUTMENT DETAILS

REPLACEMENT

CITY OF ROCHESTER

PRELIMINARY CONSTRUCTION RECORD

DRAWN BY: CHECKED BY: DATE:

VLH KEZ

SCALE: 1" = 3' VERT.

Know what's below. Call 72 hours before you dig.

UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

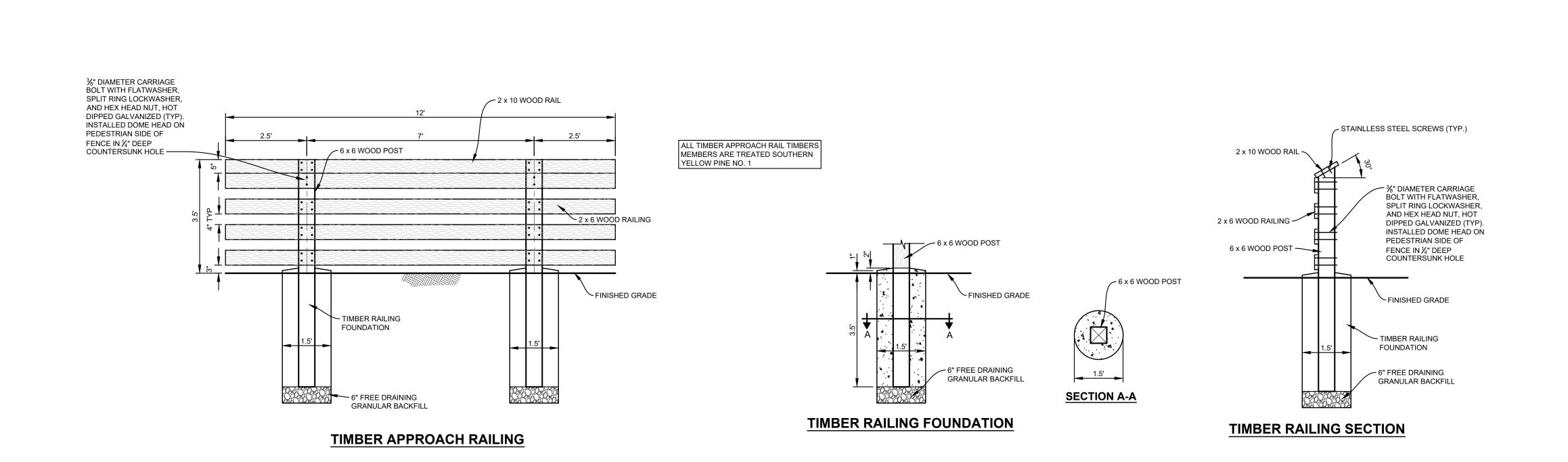
PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD.

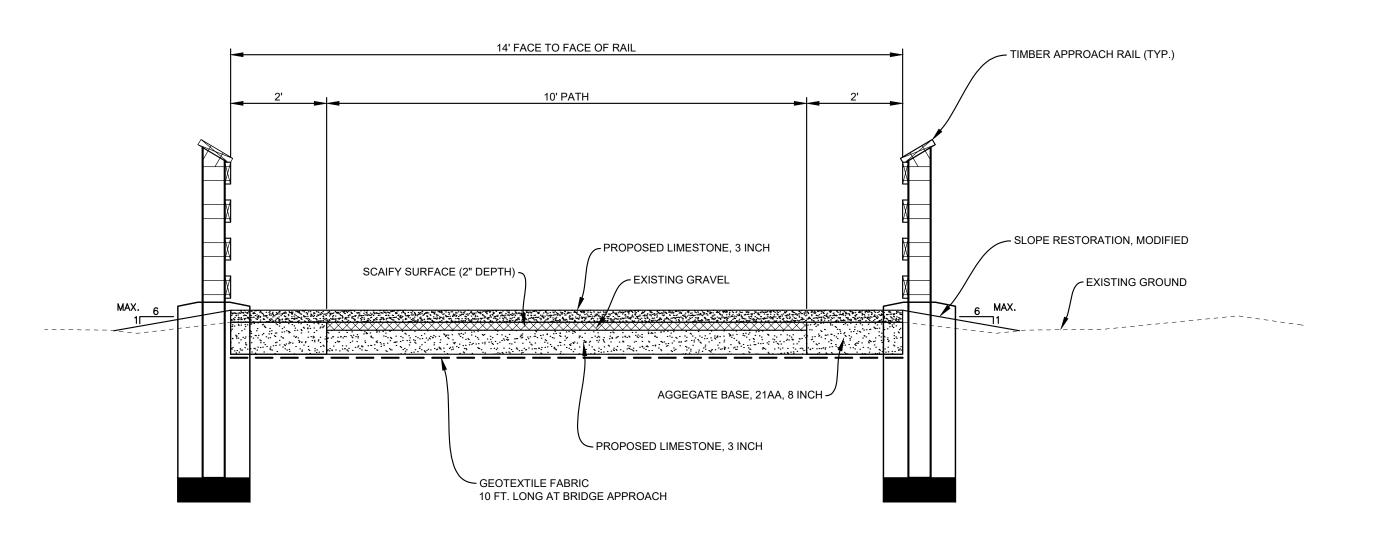
EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH THAT UTILITY).

DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

PROJECT NO. 0270-0177

M:\0270\0270-0177\DWG\CIVIL\05-07_BRIDGE PLANS.DWG





TYPICAL PATH APPROACH SECTION



ANDERSON, ECKSTEIN AND WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS Phone 586 726 1234 51301 Schoenherr Road Fax 586 726 8780

Michigan 48315 www.aewinc.com

Shelby Township

ENGINEERING STRONG COMMUNITIES

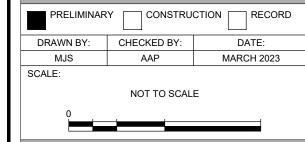
SUBMITTALS/REVISIONS PROJECT NAME:

PAINT CREEK TRAIL 31.7 BRIDGE **REPLACEMENT**

SHEET TITLE:

APPROACH SECTIONS AND DETAILS

CITY OF ROCHESTER





UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

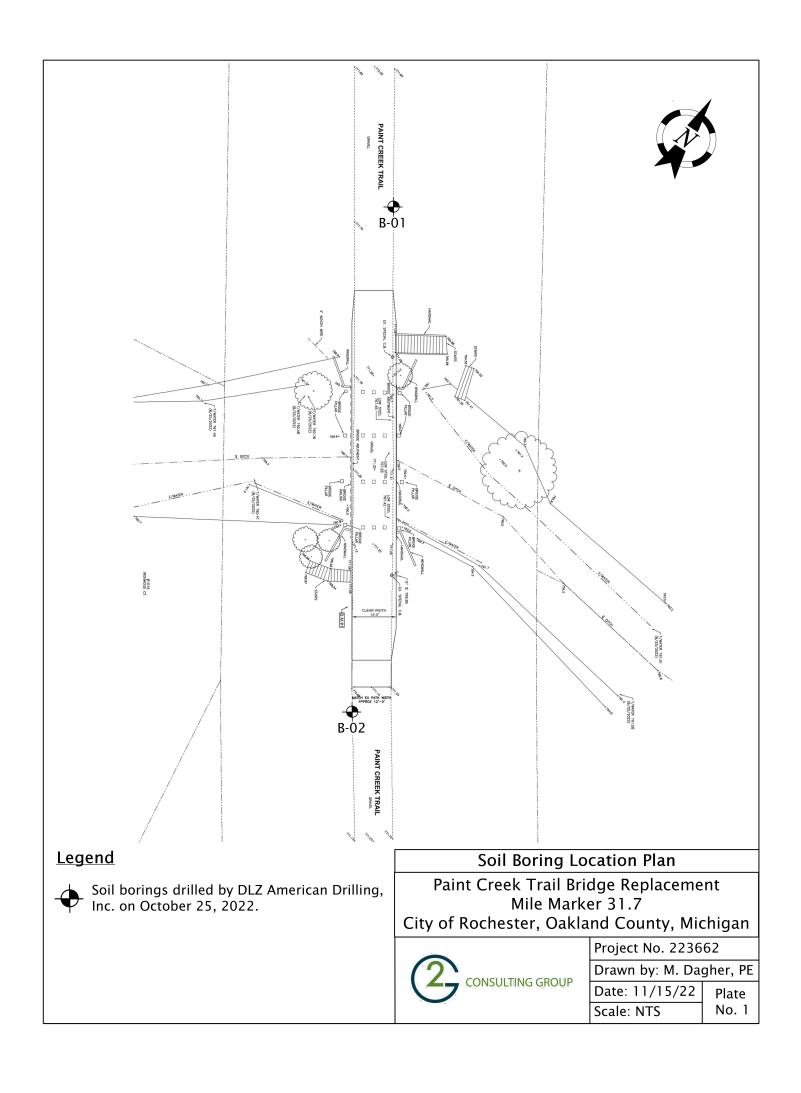
PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH

THAT UTILITY). DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

PROJECT NO. 0270-0177

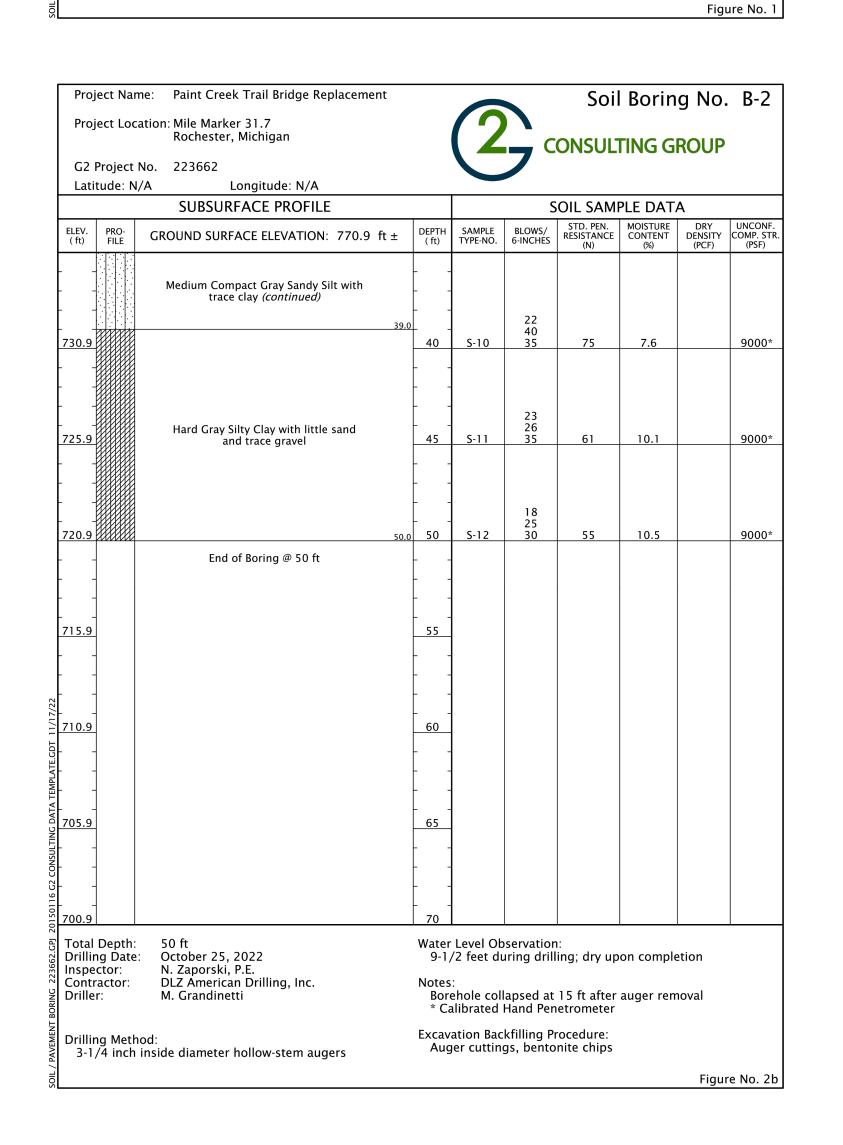
M:\0270\0270-0177\DWG\CIVIL\01-04_COVER-CONST.DWG

SHEET NO.



| Proj | ject Nan | ne: Paint Creek Trail Bridge Replacement | | | | Soi | Borin | g No. | B-2 |
|---|--|---|--------------|-------------------------|--------------------------|--------------------------------|----------------------------|-------------------------|-------------------------------|
| Proj | ject Loc | ation: Mile Marker 31.7 Rochester, Michigan | | () | | ONSUL' | TING GI | POLID | |
| G2 | Project | No. 223662 | | | 7 | ONSOL | I IIVG GI | NOUP | |
| | tude: N | | | | | | | | |
| | | SUBSURFACE PROFILE | | | S | OIL SAM | PLE DAT | 4 | |
| ELEV. (ft) | PRO- FILE | GROUND SURFACE ELEVATION: 770.9 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/ 6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STE (PSF) |
| | | Fill: Gray Sand and Gravel (12 inches) | 0 | | 6 | | | | |
| - | | | | S-1 | 10 13 | 23 | | | |
| 65.9 | Fill: Loose to Medium Compact Brown Sand with trace silt and gravel | 5 | S-2 | 6 3 4 | 7 | | | | |
| - | | 7. Loose Dark Brown Silty Sand with | 0 - | S-3 | 3 3 4 | 7 | | | |
| - | | roots 8. | 5 - | | 2 | | | | |
| '60.9 | | Loose Brown, Gray, and Reddish Brown Sand with trace silt, gravel, and roots | 10 | S-4 | 2 9 | 11 | | | |
| - | | Medium Compact Gray Sand with little gravel and trace silt | | | | | | | |
| - | | 13. | _ | 1 | 8 | | | | |
| 55.9 | | | 15 | S-5 | 12 15 | 27 | 8.4 | | 9000* |
| - | | Hard Gray Sandy Clay with little gravel | | | | | | | |
| - 50.9' | | and trace silt; occasional silt partings | 20 | S-6 | 7 15 21 | 36 | 8.0 | | 9000* |
| - | | | | | | | | | |
| - | | 23. | 0 - | | 2 | | | | |
| - '45.9 | | | 25 | S-7 | 3 10 14 | 24 | 15.9 | | 9000* |
| <u>43.9</u> - - | | Hard Gray Silty Clay with trace sand and gravel, occasional silt partings | | 3-7 | 14 | 24 | 13.9 | | 9000* |
| _ | | 29. | 0 . | | 3 | | | | |
| <u>40.9</u> - | - - | Medium Compact Gray Silt with trace clay and sand | 30 | S-8 | 8 14 | 22 | | | |
| - | $\left\{ \left \cdot \right \right \left \cdot \right \right\}$ | · | - | | | | | | |
| - - '35.9 | | 33. Medium Compact Gray Sandy Silt with trace clay | 35 | S-9 | 3 7 11 | 18 | | | |
| Γotal | | | Water | Level Ok | servation | 1: | on comple | etion | • |
| Inspector: N. Zaporski, P.E. | | 9-1/2 feet during drilling; dry upon completion Notes: Borehole collapsed at 15 ft after auger removal * Calibrated Hand Penetrometer | | | | | | | |
| Drilling Method: 3-1/4 inch inside diameter hollow-stem augers | | | Excav Aug | ation Bac ger cuttin | kfilling Pi gs, bento | ocedure: nite chips | | | |

| | Project I tude: N | | | | | | | | | |
|--------------------------|--|--|---|--------------------|--------------------|-------------------------|---------------------|----------------|---------|--|
| | SUBSURFACE PROFILE | | | SOIL SAMPLE DATA | | | | | | |
| LEV. | PRO- FILE | GROUND SURFACE ELEVATION: 771.8 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/ 6-INCHES | STD. PEN. RESISTANCE | MOISTURE CONTENT | DRY DENSITY | UNCONF. | |
| | | Fill: Gray Sand and Gravel (14 inches) | 2 | | 5 | (N) | (%) | (PCF) | (PSF) | |
| - | | Fill: Medium Compact Brown Sand | | S-1 | 9 | 18 | | | | |
| - 66.8 | | with trace silt and gravel | 5 | S-2 | 6 10 4 | 14 | | | | |
| - | | Fill: Medium Compact Brown, Gray, and Black Silty Sand (variable layers) with trace gravel and roots | | S-3 | 3 5 8 | 13 | | | | |
| - - 61.8 | | 9. (Rough Drilling) | 10 | S-4 | 5 8 10 | 18 | | | | |
| - - | | (Possible Cobbles/Boulders) Medium Compact Gray Clayey Sand with trace silt and gravel; occasional silt partings | | 3 1 | 10 | 10 | | | | |
| - - 56.8 | | 13. Hard Gray Sandy Clay with little gravel and trace silt | 15 | S-5 | 6 12 16 | 28 | 7.9 | | 9000* | |
| - - - 51.8 - | | 17. | 20 | S-6 | 6 12 18 | 30 | 9.4 | | 9000* | |
| - - 46.8 - - | | Hard Gray Silty Clay with little sand and trace gravel; occasional silt partings | 25 | S-7 | 9 12 15 | 27 | 16.2 | | 9000* | |
| - - 41.8 | | 7 29. Medium Compact Gray Sandy Silt with trace clay and gravel 30. | Τ ' | S-8 | 8 17 12 | 29 | | | | |
| - | - | End of Boring @ 30 ft | | | | | | | | |
| - 36.8 | | | 35 | | | | | | | |
| Drillii nspe | Depth: ng Date: ector: ractor: er: | 30 ft October 25, 2022 N. Zaporski, P.E. DLZ American Drilling, Inc. M. Grandinetti | Water Level Observation: 9-1/2 feet during drilling; dry upon completion Notes: Borehole collapsed at 14 ft after auger removal * Calibrated Hand Penetrometer | | | | | | | |





ANDERSON, ECKSTEIN AND WESTRICK, INC.

Phone 586 726 1234

Fax 586 726 8780

CIVIL ENGINEERS SURVEYORS ARCHITECTS

51301 Schoenherr Road Shelby Township Michigan 48315

www.aewinc.com
ENGINEERING STRONG COMMUNITIES

DATE SUBMITTALS/REVISIONS
PROJECT NAME:

PAINT CREEK TRAIL 31.7 BRIDGE REPLACEMENT

SHEET TITLE:

SOIL BORINGS

IENT:

CITY OF ROCHESTER

| PRELIMINARY CONSTRUCTION RECORD | | | | | | |
|---------------------------------|-------------|------------|--|--|--|--|
| DRAWN BY: | CHECKED BY: | DATE: | | | | |
| MJS | AAP | MARCH 2023 | | | | |
| SCALE: | | | | | | |
| NOT TO SCALE | | | | | | |



UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH

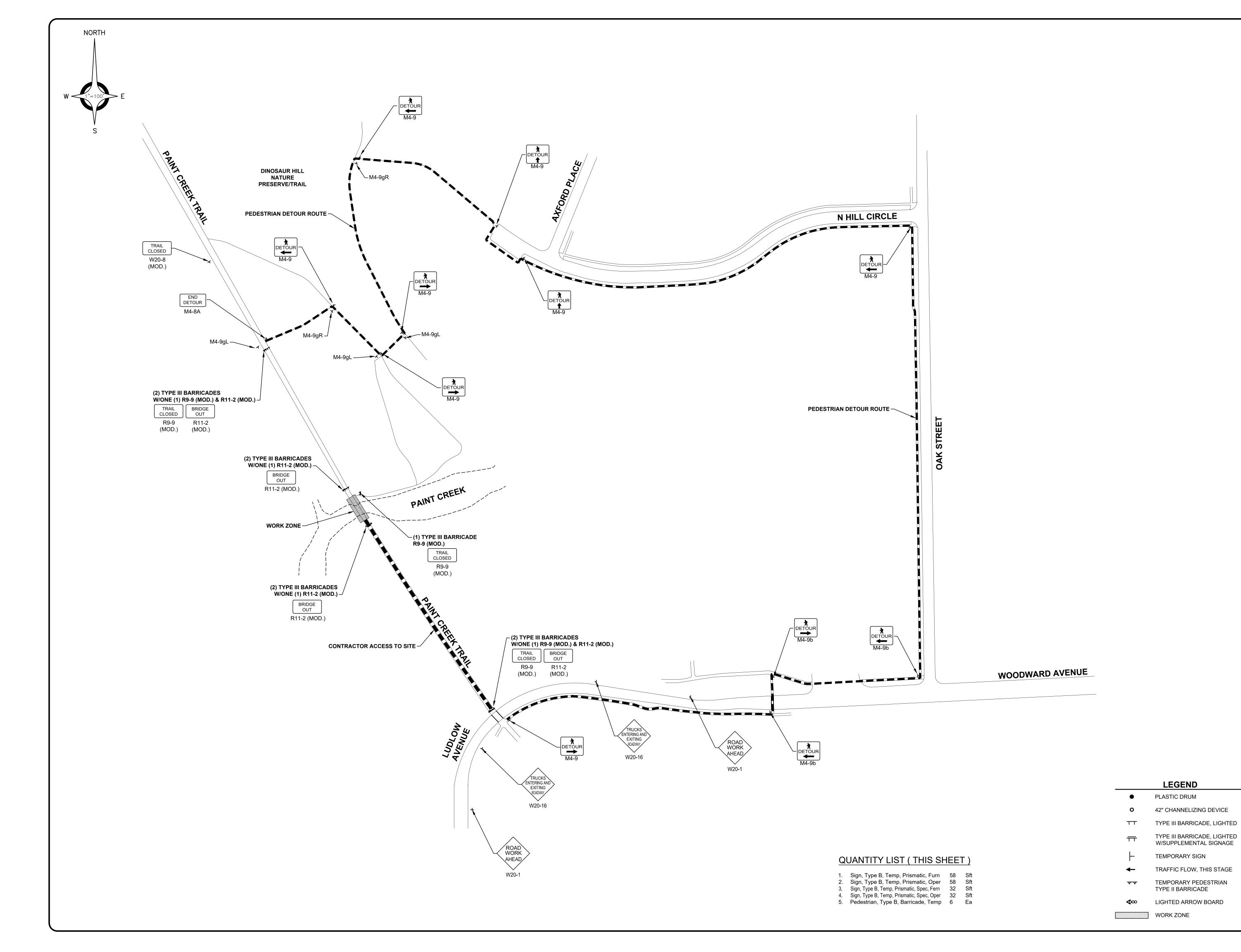
THAT UTILITY).

DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

PROJECT NO. 0270-0177

M:\0270\0270-0177\DWG\CIVIL\01-04_COVER-CONST.DWG
SHEET NO.

9





ANDERSON, ECKSTEIN AND WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

Phone 586 726 1234 51301 Schoenherr Road Shelby Township Michigan 48315

www.aewinc.com

ENGINEERING STRONG COMMUNITIES

Fax 586 726 8780

SUBMITTALS/REVISIONS PROJECT NAME:

PAINT CREEK TRAIL 31.7 BRIDGE REPLACEMENT

SHEET TITLE:

MAINTENANCE OF TRAFFIC PLAN

PEDESTRIAN DETOUR

CITY OF ROCHESTER



UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE

LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH

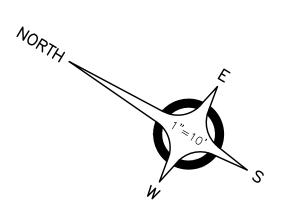
DURING CONSTRUCTION, THE CONTRACTOR SHALL USE

EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

PROJECT NO.

0270-0177

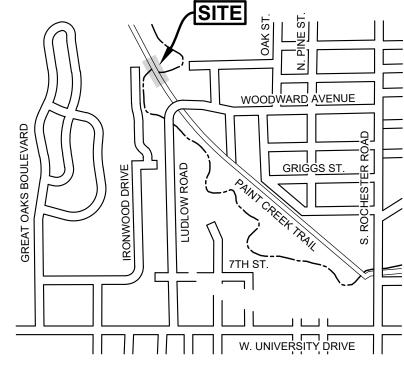
M:\0270\0270-0177\DWG\CIVIL\10_TRAFFIC.DWG SHEET NO.



THIS PROJECT SHALL BE CONSTRUCTED IN COMPLIANCE WITH PART 91 OF ACT 451 OF 1994, AS AMENDED. "THE SOIL EROSION AND SEDIMENT CONTROL ACT"

GROSS ACREAGE DISTURBED IS 0.06 ACRES.

SOIL TYPE FOR THIS SITE IS: 41B - AQUENTS, SANDY AND LOAMY, UNDULATING



INSTALL SILT FENCE (SEE DETAIL "SP-2" ON WRC DETAIL SHEET) PAID FOR AS "Erosion Control, Silt Fence" -LOCATION MAP PROPERTY LINE NOT TO SCALE EXISTING FLOODWAY – EXISTING FLÓODWAY EX. TRAIL TO DINOSAUR HILL -EXISTING 100 YEAR FLOODPLAIN LIMTS PROJECT LIMITS DINOSAUR HILL SIGN -70' PROPOSED PREFABRICATED BRIDGE - EXISTING 100 YEAR EXISTING 500 YEAR FLOODPLAIN LIMTS FLOODPLAIN LIMTS (PER FEMA) (PER FEMA) — PARCEL ID 15-10-452-016 - TURBIDITY CURTAIN - EXISTING 500 YEAR FLOODPLAIN LIMTS **PAINT CREEK TRAIL PAINT CREEK TRAIL** EX. CONSTRUCTION BASELINE EX. CONSTRUCTION BASELINE GRAVEL ____ POINT OF ENDING **POINT OF BEGINNING** STA. 10+57.9 STA. 9+40.2 -T/WATER 760.48 (8/25/2022) APPROX. LIMITS OF DISTURBANCE (TYP.) - TURBIDITY CURTAIN - PROPERTY LINE _------—--—--—--_ T/WATER 761.46

SOIL EROSION AND SEDIMENTATION CONTROL NOTES AND MAINTENANCE NOTES

THIS PROJECT SHALL BE CONSTRUCTED IN COMPLIANCE WITH PART 91 OF ACT 451 OF 1994, AS AMENDED. THE SOIL EROSION AND SEDIMENTATION CONTROL ACT AND THE WATER RESOURCES COMMISSIONER OFFICE ORDINANCE.

EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.

THE CONTRACTORS REPRESENTATIVE SHALL INSTALLATION AND MAINTAINING THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS BEFORE AND AT ALL TIMES DURING CONSTRUCTION ON THIS PROJECT. ALL SOIL EROSION DEVICES SHALL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT. ANY MODIFICATIONS OR ADDITIONS TO SOIL CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE COMPLIED WITH AS REQUIRED OR DIRECTED BY THE WATER RESOURCES COMMISSIONER OFFICE.

INSTALL SILT FENCE AS INDICATED ON THE PLANS AND AT ADDITIONAL AREAS AS NECESSARY.

- A. SILT FENCE SHALL BE INSTALLED PER DETAIL.
- B. BUILD UP OF SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE SILT FENCE
- C. IF SILT FENCE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF EXPECTED USABLE LIFE AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE REPLACED
- D. SILT FENCE SHALL BE INSPECTED WEEKLY UNDER NORMAL CONDITIONS. WITHIN 24 HOURS OF A RAINFALL EVENT AND DAILY DURING A PROLONGED RAIN EVENT. REQUIRED MAINTENANCE SHALL BE PROVIDED PROMPTLY.

IMMEDIATELY AFTER SEEDING, MULCH ALL SEEDED AREAS WITH UNWEATHERED SMALL GRAIN STRAW, SPREAD UNIFORMLY AT THE RATE OF 1 TO 2 TONS PER ACRE OR 100 POUNDS (2-3 BALES) PER 1000 SQUARE FEET. THIS MULCH SHOULD BE ANCHORED WITH DISC TYPE MULCH ANCHORING TOOL OR OTHER MEANS AS APPROVED BY THE WATER RESOURCES COMMISSIONERS OFFICE. MULCH MATTING MAY BE USED IN LIEU OF LOOSE MULCH.

- NO DEWATERING IS ANTICIPATED FOR THIS PROJECT. IF NEEDED IT SHALL BE DISCHARGED THROUGH A FILTER BAG OVER A WELL-VEGETATED AREA. THE PUMP MUST DISCHARGE AT A NON-EROSIVE VELOCITY. IF NECESSARY, AN APPROVED ENERGY DISSIPATER MAY BE USED.
- ALL DIRT TRACKED ONTO ANY ROADWAY SHALL BE REMOVED IMMEDIATELY.
- DURING DRY PERIODS, ALL DISTURBED AREAS SHALL BE WATERED FOR DUST CONTROL.

PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IMMEDIATELY. ALL TEMPORARY SOIL EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED. ALL PERMANENT SOIL EROSION CONTROL MEASURES WILL BE IMPLEMENTED AND ESTABLISHED BEFORE A CERTIFICATE OF COMPLIANCE IS ISSUED.

FINAL GRADE, ESTABLISH VEGETATION AND OR LANDSCAPE ALL DISTURBED AREAS NOT BUILT OR PAVED UPON.

REMOVE ALL TEMPORARY SOIL EROSION DEVICES AFTER PERMANENT STABILIZATION IS ESTABLISHED.

NEAREST WATER COURSES: PAINT CREEK

DISTANCE TO NEAREST WATERCOURSE IN FEET: ON-SITE

THE CONTRACTOR'S REPRESENTATIVE WILL BE RESPONSIBLE FOR MAINTAINING PERMANENT AND TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ON A WEEKLY BASIS AND AFTER EVERY STORM EVENT

APPROXIMATE START DATE: MAY 2023 AUGUST 2023 APPROXIMATE END DATE:

DESIGNATED CONTACT FOR ALL TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES, AND THE TENTATIVE CONSTRUCTION SCHEDULE FOR INSTALLATION OF SOIL EROSION CONTROL MEASURES, RESTORATION AND REMOVAL OF CONTROL MEASURE WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING BY THE CONTRACTOR.

TOTAL ACRES DISTURBED: 0.06 ACRES

SEQUENCE OF CONSTRUCTION

Install Temporary Traffic Control Install the temporary cofferdams and other soil erosion measures.

Perform clearing and grubbing operations Remove and dispose of the existing bridge offsite.

Excavate and dispose offsite material to elevations shown on plans. Install the foundations, abutments, and wingwalls.

Backfill substructure and install riprap to elevations shown. Remove the temporary cofferdams. Install bridge.

10. Topsoil/seed and mulch disturbed areas

11. once vegetation is established, remove erosion control measures and repair any areas damaged by erosion control removal.

Acceptable location for the contractor's staging area and erection. All labor, materials and equipment required for using this area, including site restoring to original condition shall not be paid for separately and shall be included in pay item "Slope Restoration, Modified".

QUANTITY LIST (THIS SHEET)

LEGEND

— — — Limits of Proposed Earth Change

Erosion Control, Silt Fence

1. Erosion Control, Silt Fence

DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL

THAT UTILITY).

PROJECT NO.

OVERHEAD AND / OR BURIED UTILITIES.

0270-0177

M:\0270\0270-0177\DWG\CIVIL\01-04 COVER-CONST.DWG SHEET NO.

COPYRIGHT, 2022, ANDERSON, ECKSTEIN AND WESTRICK, INC.

PLAN

CITY OF ROCHESTER

SUBMITTALS/REVISIONS

PAINT CREEK TRAIL

31.7 BRIDGE

REPLACEMENT

SOIL EROSION AND

SEDIMENTATION

PROJECT NAME:

SHEET TITLE

ANDERSON, ECKSTEIN AND WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

www.aewinc.com

ENGINEERING STRONG COMMUNITIES

Phone 586 726 1234 Fax 586 726 8780

51301 Schoenherr Road

Shelby Township Michigan 48315



UTILITY INFORMATION. AS SHOWN, INDICATES APPROXIMATE

LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY. AS

DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE

VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR

IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF

EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN

CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD.

DURING THE CONSTRUCTION, THE CONTRACTOR SHALL

PROTECT AND SUPPORT ALL UTILITIES THAT ARE

ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION

VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH