ADDENDUM NO. 1
EN-322-09
INDIANA TRANSPORTATION MUSEUM
SITE REMEDIATION
FOREST PARK
825 PARK DRIVE
NOBLESVILLE, INDIANA

MICHAEL J. DEVIR, PE
PROFESSIONAL ENGINEER
STATE OF INDIANA NO. 10000147

January 31, 2022

To All Plan Holders of Record:

Item 1 - CIB – Remove/Replace Special Provisions

Remove and replace the Special Provisions with attached reissued Special Provisions.

- Correct numbering sequence

- Revise **SP 39 Pay Items** to renumbered **SP 44** and Replace Item 17.0, Standard Galvanized (zinc) Coated Steel Chain Link Fence with Vinyl Coated 18' Wide, Double Swing Gate.

- Add **SP 59 Construction Traffic**
  CONTRACTOR shall ensure that all construction traffic enters and exits Forest Park from the north park entrance at the signaled intersection of State Road 19/Cicero Road and Field Drive.

- Revise **SP 28 Soil Remediation** to add the following:
  CONTRACTOR shall be responsible for the loading, transportation and disposal of the coal ash/contaminated soil excavated and stockpiled by others located on the south side of the Site. The tonnage shall be applied to line item 12.0 of the Itemized Proposal.

- Replace **SP 37 Galvanized and Vinyl Coated Chain Link Fencing and Gates** with renumbered SP 42, changes highlighted below:

SP 42 ~~37 Galvanized and~~ Vinyl Coated Chain Link Fencing and Gates

CONTRACTOR shall provide and install ~~both galvanized and~~ PVC-coated galvanized (zinc) coated chain link fabric with PVC-coated galvanized steel framework and accessories for commercial or industrial applications. Refer to Plans included in Bidding Documents for location ~~of each type~~ of fence.

CONTRACTOR shall use manufacturing facilities in the United States with a minimum 5 years of experience specializing in manufacturing of chain link fence CONTRACTOR shall have 5 years' experience installing similar projects in accordance with ASTM F567. To ensure system integrity obtain the chain link system, framework, fabric, fittings, gates, and accessories from a single source.

Materials from qualified manufacturers having a minimum of five years' experience manufacturing chain link fencing will be acceptable by the Engineer as equal, if approved in writing, ten days prior to bidding, and if they meet the following specifications for design, size gauge of metal parts and fabrication.

Approved Manufacturers:

a. Merchants Metals
   71347 CR 23
   New Paris, IN 46553
   Ph. (800) 831-4060
   Fax (574) 831-3515

b. Or approved equal

CONTRACTOR shall obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source.

Chain Link Fence Fabric

1. Galvanized (zinc) coated steel chain link fabric per ASTM A392 Class 2 weight of zinc coating 2.0 oz/ft² (610 g/m²)
2. PVC coated, 6 mil (0.15mm) to 10 mil (0.25mm) thickness, thermally fused to 0.30 oz/ft² (min) zinc-coated steel core wire: Per ASTM F668 Class 2b. Core wire tensile strength 75,000 psi (517 MPa). Color: Green, per ASTM F934.

3. Size: Helically wound and woven to height of 8 feet (or as indicated on drawings) and less with 2” diamond mesh, with 9 gauge (0.148 in.), and a break load of 1290 lb/f. Refer to drawings for locations.
4. Selvage of fabric knuckled at top and bottom (K&K). Fabric shall not extend more than 1” above top rail.

Steel Fence Framing

1. Pipe. Steel pipe - Type I: ASTM F 1083, standard weight schedule 40; minimum yield strength of 30,000 psi (205 MPa); sizes as indicated. Hot-dipped galvanized with minimum average 1.8 oz/ft² (550 g/m²) of coated surface area.
2. Galvanized PVC-Coated finish: In accordance with ASTM F1043, apply supplemental color coating of 10 to 15 mils (0.254 - 0.38 mm) in green color to match fabric.
3.

Gate Post	4” OD	9.11 lbs/ft
End and Corner Post	3” OD	5.79 lbs/ft
Line (intermediate) Post	2.5” OD	3.67 lbs/ft
Rails and Braces	1-5/8” OD	2.27 lbs/ft

4. Refer to drawings and details for exact size and location

Accessories

1. Chain link fence accessories: ASTM F 626. Provide items required to complete fence system. Galvanize each ferrous metal item and finish to match framing.
2. Post caps: PVC-Coated, ASTM F626 galvanized pressed steel, malleable iron, or aluminum alloy weather tight closure cap for tubular posts. Provide one cap for each post.
3. Rail ends: PVC-Coated, galvanized pressed steel per ASTM F626, for connection of rails to post using a brace band.
4. Top rail sleeves: PVC-Coated, 7” (178 mm) galvanized steel sleeve per ASTM F626
5. Wire ties: PVC-Coated 9 gauge 0.148” (3.76 mm) galvanized steel wire for attachment of fabric to line posts and rails. Pre-formed hog ring ties to be 9 gauge (0.148”) (3.76 mm) galvanized steel or aluminum for attachment of fabric to tension wire. Tie wire and hog rings per ASTM F626.
6. Brace and tension (stretcher bar) bands: PVC-Coated ASTM F626 galvanized 12 gauge (0.105”) (2.67mm) pressed steel by 3/4” (19mm) formed to a minimum 300-degree profile curvature for post attachment. Secure bands using minimum 5/16” (7.94 mm) galvanized carriage bolt and nut.
7. Tension (stretcher) bars: PVC-Coated, galvanized steel one-piece length equal to 2 inches (50 mm) less than full height of fabric with a minimum cross-section of 3/16” x 3/4” (4.76 mm x 19 mm) per ASTM F626. Provide tension (stretcher) bars where chain link fabric is secured to the terminal post.
8. Truss rod assembly: PVC-Coated, galvanized steel minimum 5/16” (7.9mm) diameter truss rod with pressed steel tightener, in accordance with ASTM F626
9. Carriage bolts and nuts: Galvanized of commercial quality
10. Nuts and bolts are galvanized but not vinyl coated. Cans of PVC touch up paint are available to color coat nuts and bolts once installed.

Setting materials

Concrete: Minimum 28-day compressive strength of 4,000 psi.

Chain Link Fence Framing Installation

1. Install chain link fence in accordance with ASTM F 567 and manufacturer's instructions.
2. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.
3. Space line posts uniformly as shown on the drawing, or at max 10' on center.
4. Concrete set terminal and gate posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have minimum diameter 4 times greater than outside dimension of post or as noted on the drawings, and depths approximately 6" deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" – 48" below surface when in firm, undisturbed soil or deeper per Drawings. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts.
5. Check each post for vertical and top alignment and maintain in position during placement and finishing operations.
6. Bracing: Install horizontal pipe brace at mid-height for fences 6' and over, on each side of terminal posts. Firmly attach with fittings. Install diagonal truss rods at these points. Adjust truss rod, ensuring posts remain plumb.
7. Top rail: Install lengths, 21'. Connect joints with sleeves for rigid connections for expansion/contraction.
8. Center rails are to be installed when fence fabric is 12' or higher, or when shown on drawings.
9. Bottom Rails: Install bottom rails between posts and attach to post using rail end or line rail clamps. Bottom rails shall be installed tight to grade.

Chain Link Fabric Installation

1. Fabric: Install fabric on security side and attach so that fabric remains in tension after pulling force is released. Attach fabric with wire ties to line posts at 15" on center and to rails, braces, and tension wire at 24" on center.
2. Tension (stretcher) bars: Pull fabric taut; thread tension bar through fabric and attach to terminal posts with bands or clips spaced maximum of 15" on center.

CONTRACTOR shall provide and install the gate associated with the fencing as outlined below.

A. Gates shall be PVC coated or powder coated black.

B. Chain Link Swing Gates: Double leaf 16' and 18' wide opening by ~~8'~~ 6' high. Fabricate chain link swing gates in accordance with ASTM F900. Gate frame to be of welded construction. Weld areas to be protected with zinc-rich paint per ASTM A780. The gate frame shall be 2" O.D. pipe as noted on the Plans. Pipe to be Grade 1 ASTM F1083. Chain link fabric to match specification of fence system. Fabric to be stretched tightly and secured to vertical outer frame members using tension bar and tension bands spaced 12" (304.8 mm) on center and tied to the horizontal and interior members 12" (304.8 mm) on center using 9-gauge galvanized steel ties per section 2.04.

C. Security Pipe Gate: Double leaf 28' wide. Fabricate security swing gates in accordance with ASTM F900. Gate frame to be of welded construction. Weld areas to be protected with zinc-rich paint per ASTM A780. The gate frame shall be 2" O.D. pipe as noted on the Plans. Pipe to be Grade 1 ASTM F1083.

D. Hinges, hot dip galvanized pressed steel or malleable iron, structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180° (3.14 rad)

E. Latch: Galvanized forked type capable of retaining gate in closed position and have provision for padlock. Latch shall permit operation from either side of gate.

F. Double gates: Provide galvanized drop rod with center gate stop pipe or receiver to secure inactive leaf in the closed position (chain link gate only). Provide galvanized pressed steel locking latch, requiring one padlock for locking both gate leaves, accessible from either side.

G. Gate holdback: Provide galvanized gate hold back keeper for each gate leaf over 5' (1524 mm) wide. Gate keeper shall consist of mechanical device for securing free end of gate when in full open position. Coordinate location with the OWNER prior to placement.

H. Gate posts: Grade 1 pipe ASTM F1083:

~~1. 4" O.D. for Chain Link Fence Gate~~

~~2. 6" O.D. and concrete filled for Security Pipe Gate~~

1. 4" O.D. for Vinyl Coated Chain Link Fence Gate at the Green Barn
2. 6" O.D. and concrete filled for Security Pipe Gate at the Green Barn Service Entrance
3. 6" O.D. and concrete filled for Rail Security Gate at the north end of the On-Site Improvement area.

I. Provide shop drawing submittals for gates to Engineer and OWNER prior to fabrication.

Item 2 – Remove/Replace Plan Sheets

- Sheet 1, Titlesheet:
  Sheet No. 7 is misnumbered in the Sheet Index. Sheet Index shall be numbered as follows:

Sheet	Description
1	Titlesheet
2	Site Survey
3	On-Site Clearing & Demolition Plan
4	Off-Site Clearing & Demolition Plan
5	On-Site Excavation Plan
6	On-Site Grading & Drainage Plan
7	Off-Site Grading & Drainage Plan
8	Off-Site Bank Site Plan & Cross Section
9	Grading & Drainage Details
10	On-Site Improvement Plan & Details
11	Off-Site Improvement Plan & Details
12	SWPPP & Erosion Control Index
13	On-Site SWPPP & Erosion Control Plan
14	Off-Site SWPPP & Erosion Control Plan
15	SWPPP & Erosion Control Details
16	On-Site Stabilization Plan
17	Off-Site Stabilization Plan

- Sheet 5, On-Site Excavation Plan:
  Area of excavation has been modified to exclude area on the south side of the Site north of Hobbs Station as shown on reissued Sheet 4. The identified area is to be excavated by others.

- Sheet 6, On-Site Grading & Drainage Plan:
  The Storm Pipe from Structure B to C will increase from 12" to 15" as shown on reissued Sheet 6. Invert elevations will be maintained the same.

- Sheet 7, Off-Site Grading & Drainage Plan:
  Structures No. H, No. I and No. J shall be relocated as shown in reissued Sheet 7.

- Sheet 10, On-Site Improvement Plan & Details
  Detail for new 18' Wide, Double Swing Gate as shown on reissued Sheet 7

- Sheet 11, Off-Site Improvement Plan & Details:
  Increase thickness of concrete patch from 4” to 6”
  Revised detail for fence height from 8’ to 6’

Item 3– CIB – Remove/Replace – Itemized Proposal (Page 21)

Remove and replace the Itemized Proposal with attached reissued Itemized Proposal.

Updated Excel IP available on Project Website.
Remove galvanized fence (Item 17.0) and replace with 18’ wide, double swing gate
Increase PVC coated fence linear footage (Item 18.0)

Item 4 – Bid Forms

The Contract Information Book is password protected. The Bid forms can be printed from the secured document; however, pages cannot be extracted. The Bid forms have been provided separately and are included in this addendum.

CITY OF NOBLESVILLE

Please acknowledge receipt of this Addendum by emailing Tstottlemyer@noblesville.in.us and sguss@keramida.com.

Phone: 317-776-6330

INDEX TO SPECIAL PROVISIONS
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SP 1 Contract Documents

The City of Noblesville Standard Drawings and Specifications dated July 8, 2021 and the Indiana Department of Transportation, 2021 Standard Specifications shall be used in conjunction with these Plans, Contract Forms, General Provisions, Special Provisions, Standard Sheets and any addenda, which may be issued for this project.

In the event that conflicting standards and/or specifications exist, the following order shall govern.

1. Special Provisions
2. Information for Bidders
3. Special General Conditions
4. General Conditions
5. Contract Forms
6. Construction Plans
7. Noblesville Standards
8. 2021 INDOT Standard Specifications

It is the intent of these Contract Documents to describe a functionally complete project to be constructed in accordance therewith. Any work, materials or equipment that may reasonably be inferred will be supplied whether or not specifically called for.

SP 2 Contract Time

Notice to Proceed is not anticipated to be given prior to **February 22, 2022**.
Intermediate completion date for tree clearing shall be on or before **March 31, 2022**.
Intermediate completion date for the off-site storm sewer work to be conducted on the baseball field, including placement of sod on baseball field, shall be on or before **April 1, 2022**.
Intermediate completion date for the relocation of the concrete monument and the excavation of coal ash/contaminated soil associated with Site remediation within the area north of “Hobbs Station” to the “Green Barn” project area shall be on or before **April 15, 2022**. Liquidated damages will not be assessed for this intermediate completion, but is for phasing of adjacent project schedule, as noted elsewhere.
Final completion of project shall be on or before **October 15, 2022**.

Liquidated Damages

If the work embraced by this Contract is not fully or substantially completed on or before the time or date set for full or substantial completion, or any extension thereof, the actual damage for the delay will be impossible to determine, and in lieu thereof, the CONTRACTOR shall pay the OWNER as fixed, agreed and liquidated damages, the sum of Five Hundred Dollars ($500.00) per day for each calendar day of delay until the work is satisfactorily completed. Whatever sums may be due the OWNER as liquidated damages for delay may be deducted from payments due the CONTRACTOR or may be collected from the CONTRACTOR or the CONTRACTOR’S surety at the option of the OWNER. Time is of the essence.

SP 3 Pre-Bid Meeting

A mandatory Pre-Bid meeting and Project site walk for interested parties will be held on Tuesday, January 25, 2022, at 09:00 A.M., local time at The Forest Park Inn, 701 Cicero Road, Noblesville, IN 46060. A second opportunity to attend the mandatory Pre-Bid meeting and Project site walk will be held on Tuesday, February 1, 2022, at 09:00 A.M., local time at The Forest Park Inn, 701 Cicero Road, Noblesville, IN 46060. Attendance at one of the Pre-Bid meeting and Project site walk is a requirement for bid submittal. For special accommodations for individuals planning to attend the Pre-Bid meeting and Project site walk or public bid opening, please call or notify the City of Noblesville at (317) 776-6350 at least forty-eight (48) hours prior thereto.

SP 4 Pre-Construction Meeting

The CONTRACTOR will be required to attend a pre-construction meeting prior to the issuance of the Notice to Proceed. Any sub-contractors of the CONTRACTOR that the ENGINEER deems necessary shall attend the pre-construction meeting. An additional meeting may be required in field between the ENGINEER and CONTRACTOR, which may be on a separate day.

CONTRACTOR shall submit the following at, or prior to, the pre-construction meeting:

1. Construction schedule
2. Job mix formula(s)
3. Specify a project superintendent
4. Three (3) emergency 24-hour contacts
5. Schedule a project walk through with CONTRACTOR's Superintendent and ENGINEER, or designated representative

SP 5 Permits

The following permits are still pending:

Rule 5 Stormwater Construction Permit
Construction in the Floodway Permit from the Indiana Department of Natural Resources (DNR) Clean Water Act (CWA) Sections 401/404 IDEM/United States Army Corps of Engineers (USACE) permits.

Owner Is responsible for obtaining the Notice of Intent (NOI) required pursuant to 327 IAC 15-5 (Rule 5 Stormwater Construction Permit) and for the development of the Erosion and Sedimentation Control Plan/Stormwater Pollution Prevention Plan (SWPPP). CONTRACTOR shall be responsible for the implementation of the measures outlined in the SWPPP and compliance. Owner is responsible for the submission of the Notice of Termination (NOT).

OWNER is responsible for obtaining a construction in the floodway (CIF) permit from the Indiana Department of Natural Resources (DNR) and for the Clean Water Act (CWA) Sections 401/404 IDEM/United States Army Corps of Engineers (USACE) permits. These permits are required for the construction associated with the drainage outfall to Mallory Granger Ditch, more specifically any Work on the slope or at the toe of the slope. It is anticipated these permits will be issued by May 30, 2022.

The CONTRACTOR is responsible for securing all other permits that may be required for this project in accordance with the Standard Specifications.

SP 6 Contract Award Process

The following procedure shall be followed for award of Contract:

1. Any CONTRACTOR requesting Bid Preference at time of Bid Opening shall be required to submit justification to OWNER within 24 hours of Bid. Review of Preference by OWNER shall occur within 24 hours of said Preference request.
2. CONTRACTOR acknowledges receipt of Notice of Intent to Award from OWNER
3. CONTRACTOR submits the following within five (5) days of receipt of Notice of Intent to Award to ENGINEER for approval by the Noblesville Board of Public Works and Safety:
    a. Two (2) signed and executed original Contract documents
    b. Two (2) signed and executed original Performance Bond documents
    c. Two (2) signed and executed original Payment Bond documents
    d. One (1) copy of Certificate of Liability Insurance

SP 7 Contract Close Out

CONTRACTOR shall submit the following with request for final payment: request:

1. Disposal Records - waste profiles, bills of lading, weight tickets, summary of waste disposal by waste stream, manifests, reconciliation of manifest number associated with each load.
2. Imported Materials Records (backfill, topsoil, ballast) - trucks records per day by source, weight tickets, and summary of imported material by type and source
3. Test reports, including laboratory results of imported material sampling

Prior to release of final retainage amount to CONTRACTOR, the following process must occur:

1. Project walk-through to be scheduled and completed with representatives present from the OWNER, CONTRACTOR, any and all applicable sub-contractors. Punch list to be generated from this meeting.
2. Punch list to be completed to satisfaction of OWNER.
3. CONTRACTOR will submit the Required As-Built Record Drawings, electronic and hard copy, and have accepted by inspection staff and City's GIS coordinator.
4. CONTRACTOR to submit operations and maintenance (O&M) manuals for equipment installed on project. (i.e. – BMP, signal controller, electronics, etc.) (If Applicable)
5. CONTRACTOR shall submit video inspection for all sewer, storm and/or sanitary, installed for the project and have it approved by appropriate staff.
6. Letter from person of firm responsible for construction observation recommending improvements to be accepted by the City.
7. CONTRACTOR will submit request for release of retainage along with Waiver of Liens, Consent of Surety to Final Payment, Three Year Maintenance Bond, and Warranty Letter.
8. OWNER will present final close-out to Noblesville Board of Public Works and Safety. Upon approval by Noblesville Board of Public Works & Safety, retainage will be released to CONTRACTOR.

SP 8 Maintaining Traffic

A minimum of one lane of traffic shall be maintained at all times during work hours. One lane of traffic in each direction shall be maintained each evening after construction activities have been completed for the day, unless specifically a road closure has been allowed. Access to all streets, alleys and private drives shall be maintained throughout the construction.

All traffic control shall be in accordance with the Indiana Work Zone Safety Manual (IWZSM) and Section 801 of the INDOT Standards Specifications.

Equipment shall not be used as barricades or temporary traffic control devices. Flagman shall be equipped with ANSI Class 2, or higher, reflective safety vests, "Stop/Slow" paddles, and 2-way radios and shall be used in accordance with the most recent adopted version of the Indiana Manual of Uniform Traffic Control Devices (MUTCD) and/or Indiana Work Zone Safety Manual (IWZSM).

All workers within the roadway shall be wearing ANSI Class 2, or higher, reflective safety vests. During any and all night paving operations, all workers shall be wearing ANSI Class 3 reflective safety vests.

Drums shall be required on all shoulders with a drop offs greater than four inches (4") and shall be spaced per MUTCD and/or IWZSM according to street classification and design speed.

CONTRACTOR shall maintain regular trash pick-up service in a similar schedule to the occupant's normal schedule. Typically most trash pick-up is weekly. Coordinate trash pick-up and disposal with the occupant.

Road Construction Ahead signs shall be placed at project limits. End Construction signs shall be placed for opposing flow traffic at same location. Signs are to be left up for the duration of the project. Cost of signs shall be included in the price for Maintenance of Traffic if no specific pay items are included in the contract.

All other temporary traffic control devices, including temporary striping, labor, materials, etc., necessary for the maintenance of traffic as specified within the Contract Documents, shall be included in the cost of other items for maintaining traffic as described within the Contract Documents.

SP 9 Maintenance During Construction

The work shall be maintained during construction and until the contract is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day with adequate equipment and forces to the end that the roadway, curbs, sidewalk, structures, barricades, and construction signs are kept in satisfactory condition at all times.

Once construction operations have begun within the project limits, during which public vehicular traffic is required to be maintained, the CONTRACTOR shall repair areas as directed, which require special maintenance. If the repair work is determined to be required as a result of damage caused by the CONTRACTOR's operations, the cost of such work shall be borne by the CONTRACTOR. If the areas of the roadway which require repair are due to use by the traveling public or the elements of nature, and are not the fault of the CONTRACTOR, the CONTRACTOR will be paid to repair those areas of the work. Such repair work will be paid for under the appropriate pay items or in accordance with the Contract Documents for extra or unforeseen work.

SP 10 Coordination/Cooperation with Utilities

The CONTRACTOR shall cooperate with all utility companies whose facilities are located within the project areas. Coordination with the utility companies or their contractors shall be maintained to expedite

CONTRACTOR shall provide notification to all utilities with facilities in the vicinity of the project limits.

The facilities of Duke Energy may exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Christina Girod of the utility may be contacted at Christina.girod@duke-energy.com.

The facilities of Indiana American Water Company may exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Don Ugoletti of the utility may be contacted at 317-606-5968. Email: Donald.ugoletti@amwater.com or ,Josh Cox of the utility may be contacted at 317-773-2497. Email: joshua.cox@amwater.com

The facilities of Comcast may exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Scott Evans of the utility may be contacted at 317-752-6569. Email: sevans@telecomplacement.com

The facilities of Centerpoint Energy may exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Nathan Dowker of the utility may be contacted at 800-227-1376. Email: Nathan.dowker@centerpointenergy.com

The facilities of AT&T may exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Brad Bailey of the utility may be contacted at 317-610-5422. Email: bb3525@att.com

The facilities of Zayo Bandwidth may exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Waylon Higgins of the utility may be contacted at 317-758-5625 (317) 432-6197. Email: Waylon.higgins@zayo.com

The facilities of City of Noblesville Wastewater Utility may exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Kirk Staley of the utility may be contacted at 317-776-6353. Email: kstaley@noblesville.in.us

Any repair or replacement work by public utilities shall be completed prior to pavement milling and/or pavement patching or demolition of curb (where required).

Damage to any of the existing public utility facilities within the limits of the project, caused by the CONTRACTOR's operations, shall be repaired / replaced by the CONTRACTOR at no expense to the OWNER.

Work adjacent to and/or crossing utilities is anticipated and the cost of protecting and/or supporting utility infrastructure will not be paid for directly, but included in the cost of other items in the Contract.

No direct payment shall be made for this work, but the cost thereof shall be included in the cost of other items in the Contract.

SP 11 Barricades

The Contract shall employ all necessary day and night guardsmen, and erect and place necessary barricades and lights, and shall use proper precaution to prevent injury to any person or property, and shall omit no reasonable precautions which tend to the security of all persons and property. No open excavations shall be left unprotected. Additional protective devices shall be furnished, if directed by the ENGINEER, at no additional cost to the OWNER.

No direct payment shall be made for this work, but the cost thereof shall be included in the cost of other items in the Contract.

SP 12 Construction Noise

The CONTRACTOR shall be required to limit construction noise by maintaining his equipment in proper working order, thereby minimizing the effect of construction noise in the project area.

SP 13 Contractor's Supervision

The CONTRACTOR awarded the work will be required to maintain a superintendent with full authority to direct all construction operations and personnel on the site at all times while construction is in progress.

SP 14 Erosion, Sediment Control, and Street Cleaning

The CONTRACTOR shall provide effective dust/debris control in all phases. Loader-mounted pickup, vacuum truck, power sweepers, or other types of pull type models shall be used in all phases of street cleaning.

The CONTRACTOR shall schedule and conduct his operation to minimize erosion of soils. Construction of drainage facilities and performance of other Contract work, which will contribute to the control of erosion and sedimentation, shall be carried on in conjunction with earthwork operation or as soon thereafter as practicable. The area of bare soils exposed at any one time by construction operation shall be kept to a minimum. Silt fence for perimeter protection shall be installed, as shown on the plans, prior to any land disturbing activities. Prior to suspension of construction operation for appreciable lengths of time, the CONTRACTOR shall shape the earthwork in a manner that will permit storm runoff with a minimum of erosion. Unless otherwise provided for in the Contract, temporary erosion control measures will not be paid for directly, but will be considered as a subsidiary obligation of the CONTRACTOR covered under the various Contract items of work.

Prior to suspension of construction operations for appreciable lengths of time, the CONTRACTOR shall shape the earthwork in a manner that will permit storm runoff with a minimum amount of erosion. Unless otherwise provided for in the Contract, temporary erosion control measures will not be paid for directly, but will be considered as a subsidiary obligation of the CONTRACTOR covered under the various Contract items of work.

The maintenance of all erosion control practices should be done as needed on a weekly basis, after large storms and when directed by the ENGINEER or representative of SWCD/IDEM. If the CONTRACTOR elects to use a pump to control ground and/or surface water, pump discharge filter bags must be used. The bags need to be located so the outflow does not cause erosion and sedimentation of receiving

structures/streams and need to be located preferably on undisturbed, well vegetated areas away from open streams.

An erosion control report shall be completed weekly and within one business day after a half inch or more rain storm event by the CONTRACTOR and shall be kept on site and shall be made available for review upon request. The cost of the report will not be paid for directly but shall be included in the cost of other items.

Vehicle and Equipment Maintenance: Onsite vehicle and equipment maintenance should only be used where it is impractical to send vehicles and equipment offsite for maintenance and repair. If maintenance must occur on site, the area where repairs are to be made must be located away from drainage courses. Drip pans and/or absorbent pads should be used during vehicle and equipment maintenance work that involves fluids, unless the maintenance work is performed over an impermeable surface in a dedicated maintenance area. Inspect onsite vehicles and equipment daily at the startup for leaks, and repair immediately. Properly dispose of used oils, fluids, lubricants and spill cleanup materials. Do not place used oil in a dumpster or pour into a storm drain or watercourse. Vehicle

Fueling: Onsite vehicle and equipment fueling should only be used where it is impractical to send vehicles and equipment offsite for fueling. Drip pans and absorbent pads should be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area. Nozzles used in vehicle and equipment fueling should be equipped with an automatic shutoff to control drips. Fueling operations should not be left unattended. Federal, state, and local requirements should be observed for any stationary above ground storage tanks. Debris Collection: To prevent clogging of the storm drainage system, litter and debris removal from drainage grates, trash, rocks, and ditch lines should be a priority. Construction debris and waste should be removed from the site biweekly or more frequently as needed. Construction material visible to the public should be stored in an orderly manner. Stormwater runoff should be prevented from contacting stored solid waste.

Concrete Washout: Perform washout of concrete trucks offsite or in designated areas only. Sign stating “Concrete Washout” must be on-site indicating the location of the washout. Do not washout concrete trucks into storm drains, open ditches, streets, or streams. Do not allow excess concrete to be dumped on site, except in designated areas. For onsite washout: locate washout area at least fifty (50) feet from storm drains, open ditches, or bodies of water; do not allow runoff from this area by constructing a temporary berm or holding area large enough for liquid and solid waste; wash out wastes into the designated area where the concrete can set and be broken up and disposed of properly.

The CONTRACTOR shall also provide an offsite pollution prevention plan that addresses all of the following areas outside of right-of-ways:

1. Utility relocation areas.
2. Material hauling and transportation routes/roads.
3. Borrow pits.
4. Temporary staging and material stockpile areas.
5. Temporary disposal areas for waste materials.

The offsite pollution prevention plan shall include all applicable maps, drawings, and necessary erosion control measures that will be used. The offsite pollution prevention plan shall be submitted to the OWNER and ENGINEER within 48 hours of receiving notice of intent to award.

The OWNER and/or ENGINEER shall forward any written documentation regarding stormwater pollution prevention and the project site to the CONTRACTOR within 48 hours of receiving notice. The 48 hours does include any time on Saturday, Sunday, or Federal Holidays.

In instance of an agency with jurisdiction issuing fines or other punitive damages to the OWNER resulting from Rule 5 deficiencies, OWNER shall deduct punitive damage amount from payment to CONTRACTOR.

Any delays to the CONTRACTOR resulting from Rule 5 deficiencies will not be considered by the OWNER for a contract time extension.

SP 15 Construction Schedule

It is the responsibility of the CONTRACTOR, upon notification of acceptance of Bid, to prepare a construction schedule for establishing the controlling work activity. The schedule shall be in the form of a bar graph. The CONTRACTOR should provide the construction schedule at or before the time of the Preconstruction Conference.

The CONTRACTOR shall not work between the hours of 7:00 pm (local time) and 7:00 am (local time), unless noted otherwise.

Work on observed Federal holidays and adjacent weekends of Federal holidays are strictly prohibited. No work shall be completed outside of these timelines, without the prior written approval of the ENGINEER.

If, in the opinion of the ENGINEER, the CONTRACTOR falls behind the progress schedule, the CONTRACTOR shall take such steps as may be necessary to improve his progress which may require him to increase the number of shifts and/or overtime operations, days of work, and/or the amount of construction planned, and to submit for approval such supplementary schedule or schedules as necessary to demonstrate the manner in which the agreed rate of progress will be regained, all without additional cost to the OWNER.

SP 16 Existing Conditions

The Indiana Transportation Museum (ITM) property is located at 825 Park Drive, Noblesville, Indiana (Site). The Site is approximately 6.15 acres and is owned by the City of Noblesville (OWNER). It is located west of Forest Park Drive, north of Forest Park Inn, and south of Forest Park Aquatic Center in Noblesville, Hamilton County, Indiana. The Site is located within a Wellhead Protection Area in a mixed commercial/residential area approximately one mile northwest of downtown Noblesville.

The Site has been a part of the Indiana Department of Environmental Management (IDEM) State Cleanup Program (SCP) since 2017. Three Site investigations have been completed to date. The Constituents of Concern (COCs) identified in the soil include volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), hexavalent chromium, and Resource Conservation and Recovery Act (RCRA) eight metals. Contamination includes coal ash that has been deposited at the Site as fill material. The coal ash contains heavy metals including hexavalent chromium, lead, and arsenic. The estimated on-Site area of impact is approximately 3.28 acres.

Available reports, boring logs and sampling and analysis data are available on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC) located at https://vfc.idem.in.gov/FacilitySearch.aspx under the facility name of Indiana Transportation Museum. The proposer is responsible for understanding the Site conditions and developing the appropriate means and methods for executing the work associated with this Bid. These documents are made available for information and factual data only and shall not be interpreted as a warranty of subsurface conditions. The proposer should base means and methods for executing the work not only on the available information, but also on the Site walk and experience and knowledge associated with the similar environmental projects, including the excavation of contaminated soil in accordance with IDEM remediation requirements. The proposer is solely responsible for evaluating Site conditions that may affect the performance of the Work associated with the Bidding Documents.

Work will also be performed off-Site to the north for the implementation of the Site drainage plan. The on-Site and off-Site Work is defined as the Project and includes the limits shown on the Plans provided in the Bidding Documents.

SP 17 Bidder Qualifications

Bidder shall have the following qualifications to be considered qualified to submit a Bid.

Training and Certification

Workers performing the Work shall be Occupational Safety and Health Administration (OSHA) Hazardous Waste and Emergency Response (HAZWOPER) trained and certified and shall have current 40-hour

HAZWOPER training certification and the associated 8-hour HAZWOPER refresher training, if applicable.

CONTRACTOR personnel that will come in contact with, are exposed to, disturb, operate equipment in, or otherwise handle contaminated materials or demolition debris, shall have the appropriate hazards communication, environmental training and medical monitoring in accordance with OSHA.

Relevant Experience
Bidder shall have experience with projects of similar work scope and magnitude outlined in the Bidding Documents. Bidders shall have experience with environmental remediation and cleanup projects mandated under state and/or federal regulations. Remediation work experience shall include the excavation and handling of coal ash/contaminated soil.

The Project Lead and Alternate Project Lead designated for the Work by the CONTRACTOR shall have a minimum of 15 years of experience in the environmental remediation field and the tasks outlined in the Bidding Documents.

SP 18 Additional Bid Submittals

Bidders shall include the following with their Bid.

Project Approach - detailed summary on the means and methods for completing the work, including how the excavation will be completed around and within railroad tracks, trees, structures, and wooden fence to prevent damage.

Training and Certifications - provide documentation of the required HAZWOPER training and certification for the key project staff that will be performing the Work.

Experience - Bidders shall have experience performing similar work and magnitude for all aspects of the Work outlined in the Bidding Documents. Qualifications demonstrating experience with similar remediation projects and drainage plans shall be included in the Bid.

SP 19 Health and Safety

CONTRACTOR shall be responsible for the ensuring the work is conducted in a safe manner consistent with applicable federal, state, and local rules, regulations, and ordinances at all times and for exercising precaution for the health and safety of employees, subcontractors and vendors engaged in the execution and control of the Work. CONTRACTOR shall provide a Health and Safety Plan (HASP) in accordance with all federal, state, and local requirements as part of the Pre-Work submittals. CONTRACTOR shall ensure the HASP meets all regulatory requirements and that the procedures are being implemented accordingly throughout the Work. CONTRACTOR shall note that the Project is adjacent to active railroad operations and shall take extra precaution to avoid conflict and injuries to all Project personnel.

The HASP shall address Project specific activities, potential COCs identified that may be encountered, and the Personal Protective Equipment (PPE) required to prevent/reduce risk of exposure to any potential COCs based on the specific tasks to be performed. Precautions shall be taken when performing activities in which inhalation or incidental ingestion of soil dust is of concern. OSHA requires that PPE be selected based on hazard identification and assessment such that the minimum level of PPE provides adequate protection to individuals exposed to physical, chemical and/or biological hazards within the Work environment. CONTRACTOR shall be responsible for conducting the hazard identification and assessment based on the Work to be conducted.

SP 20 Underground Utilities

CONTRACTOR shall be responsible for the verification of the utilities located within the Work area. CONTRACTOR shall be responsible for locating all utilities, including public and private, and any utility notifications required pursuant to state and local rules, regulations, and ordinances prior to the commencement of the Work. CONTRACTOR shall notify Indiana 811 at least two days prior to the commencement of the Work. CONTRACTOR shall be responsible for the protection of all utilities and any

damages at no additional cost and shall repair all damaged utilities to the satisfaction of the utility owner and OWNER.

SP 21 Salvaging of Materials

Salvageable materials, unless indicated otherwise, will become the property of the CONTRACTOR and shall be removed from Site. The rail designated to be removed will **not** become the property of CONTRACTOR. CONTRACTOR shall comply with all federal, state, and local rules, regulations, and ordinances associated with the transportation and recycling of the materials.

SP 22 Waste Disposal

CONTRACTOR shall be responsible for the transportation and proper disposal of all waste generated from the execution of the Work, including, but is not limited to, clearing and grubbing debris, coal ash and contaminated soil, excess spoils, non-salvageable materials, and liquid and sediment contained in the maintenance pit. Waste shall be transported by licensed transporters and taken to permitted disposal facilities. Engineer will be responsible for the sampling and analysis of the waste streams required for waste profiling, including associated costs. Engineer will assist CONTRACTOR with the waste profile(s) approval process. CONTRACTOR shall be responsible for payment of all fees associated with transportation and disposal of all waste associated with the Work.

SP 23 Dust Control

CONTRACTOR shall implement dust control measures to minimize or eliminate the formation of dust generated from the Work activities and wind to reduce the potential for inhalation by Project workers and area inhabitants. The dust may contain COCs. CONTRACTOR shall be responsible for implementing best management practices (BMPs) for the dust control in accordance with Indiana Department of Transportation (INDOT), IDEM, and City of Noblesville. The BMPs shall be established based on the type of Work being performed at the Project.

SP 24 Special Handling

There is a historical concrete monument located on the southeast side of the Site that is approximately 10 feet high by 10 feet wide with a two-foot base. CONTRACTOR shall relocate the monument to the area designated by OWNER prior to the commencement of the Work being conducted within the vicinity of the concrete monument. The current location of the monument and the proposed relocation are shown on the Plans included in the Bidding Documents. Due to the nature, size and condition of the monument, a qualified third party shall be hired for the moving the monument. The third party company shall have the experience and expertise associated with the moving and handling of similar items. CONTRACTOR shall coordinate with OWNER and Engineer during the relocation process and shall obtain OWNER approval to use the proposed third party vendor prior to proceeding with the Work.

SP 25 Clearing

CONTRACTOR shall conduct on-Site and off-Site clearing of the areas identified on the Plans included in the Bidding Documents. The tree removal shall be completed no later than March 31, 2022 to comply with federal and state rules and regulations for Indiana bat seasonal restrictions for tree cutting. CONTRACTOR shall be responsible for the transportation and disposal of the waste generated. The waste generated from the clearing and grubbing activities shall be taken to a permitted solid waste disposal facility.

CONTRACTOR shall note there are trees identified to remain on the Project and shall protect these trees from damage at all times. The trees that are to remain are shown on the Plans included in the Bidding Documents. CONTRACTOR shall protect trees adjacent to the areas of the Work. OWNER resident park arborist will be available during the mandatory Project Site walks to address any concerns and to answer any questions regarding the protection of the trees. CONTRACTOR shall exercise care while working around the trees (and root zones) to remain on-Site and off-Site throughout the Work. CONTRACTOR

shall be responsible for determining the means and methods for ensuring the trees are not damaged during the clearing and grubbing activities and during other Work activities. CONTRACTOR shall be responsible for any damage(s) to the trees designated to be protected and remain on-Site.

SP 26 Relocation of Stone

CONTRACTOR shall be responsible for the relocation of stone (ballast) located off-Site to the north in an area that requires clearing and grubbing for the construction of the storm sewer. The stone shall be relocated to provide access to the Storm Water Quality Unit location as shown in the Plans included in the Bidding Documents. The stone shall be spread 14 feet wide and 6 inches deep on the access drive until all of the stone has been removed from the designated location. CONTRACTOR shall be responsible for bringing in additional #53 aggregate to complete the access drive if needed. Contactor shall use this drive for access to the off-Site area north of the Site. CONTRACTOR shall be responsible for ensuring access drive is in good condition at the completion of the Work, including adding additional material as needed. CONTRACTOR shall coordinate the stone relocation with OWNER and Engineer.

SP 27 Demolition

CONTRACTOR shall be responsible for the removal of the designated sections of railroad tracks, including the rails, ties and ballast, as shown in the Plans included in the Bidding Documents. The removal of the railroad tracks is necessary to access to the coal ash located within the area. CONTRACTOR shall be responsible for the disposal of the excavated railroad ties and ballast; however, the OWNER intends to reuse the rails. CONTRACTOR shall exercise care in the removal of the rails to prevent damage. CONTRACTOR shall stockpile the rails within the paved area south of the City's Maintenance Building located north of the Site.

CONTRACTOR shall be responsible for the removal of the utility poles shown in the Plans included in the Bidding Documents. The utility poles will be de-energized prior to demolition. Contactor shall verify there is no power to the poles prior to commencement of the Work. CONTRACTOR shall be responsible for the removal of the existing stormwater sewers and fencing identified in the Plans include in the Bidding Documents. The wooden fence along Park Drive shall remain in place until the Work has been completed and the new fencing and gates are installed after the completion of the Site restoration and stabilization.

CONTRACTOR shall be responsible for the dewatering of the maintenance pit located to the east of the Green Barn as shown in the Plans included in the Bidding Documents prior to demolition. The water shall be collected and for proper waste disposal. CONTRACTOR shall remove any sediment that may have accumulated in the maintenance pit prior to demolishing the concrete structure for proper disposal. The Engineer will be responsible for the sampling and analysis of the water and the sediment, including costs, required for waste profiles. Engineer will work with CONTRACTOR to obtain the waste profiles required for disposal at permitted facilities. CONTRACTOR should assume the water and sediment is nonhazardous and should be managed in accordance with applicable federal, state, and local rules, regulations, and ordinances. Any soil or sediment removed from the maintenance pit should be included in the tonnage for the coal ash and contaminated soil.

SP 28 Soil Remediation

CONTRACTOR shall be responsible for the excavation of the coal ash and contaminated soil as shown in the Plans included in the Bidding Documents. Coal ash may be encountered outside of the area of excavation shown. The majority of the coal ash appears to be limited to the surface (0-2 feet); however, the depth is not consistent across the Site. The thickness of the coal ash varies across the Site from a couple of inches to five feet or more and may be mixed with other fill material and contaminated soil at some locations.

The coal ash is distinct in appearance and can be visually identified during the excavation process. Field identification of the coal ash shall be used in conjunction with the delineation data from the Site investigations. Engineer will provide daily oversight during the Work. CONTRACTOR shall meet with Engineer at the beginning of each day prior to commencement of the Work to discuss the excavation plan for the day.

In order to determine the extent and depth of the coal ash, CONTRACTOR shall initially remove no more than the top foot of the surface material and continue excavating six-inch lifts until coal ash is no longer visible or as directed by Engineer. CONTRACTOR shall make every effort to minimize the commingling of clean soil (i.e. soil that has not come into contact with coal ash or other COCs) with the coal ash and contaminated soil Excavated clean soil shall be segregated from the coal ash/contaminated soil and stockpiled. Clean soil stockpiles shall be managed in accordance with the SWPPP. Engineer will collect samples of any clean soil segregated and stockpiled for laboratory analysis to determine if the segregated soil can be used as clean backfill on-Site.

The excavation will require removal of coal ash in the areas between the railroad tracks as shown in the Plans included in the Bidding Documents. There is also an area of sandblasting waste within the tracks that shall be removed by CONTRACTOR. CONTRACTOR shall be responsible for the means and methods to ensure the railroad tracks and ties are not damaged, and that the integrity of the railroad tracks is not compromised. The excavation of the coal ash/contaminated soil cannot extend below the depth of the railroad ties of the active railroad tracks (i.e. all tracks with the exception of what is designated for removal) as noted in the Plans included in the Bidding Documents.

In the event dewatering of excavation areas is needed to proceed with the Work, CONTRACTOR shall coordinate with OWNER and Engineer. CONTRACTOR shall remove water to an approved location by pumps, drains, and other approved methods. Disposal and/or discharge of dewatered water shall be approved by the Engineer and comply with Rule 5 requirements for water quality. The use of filter bags, sediment basin, or similar may be required to minimize silt entering the waterways

The quantity of coal ash and contaminated soil to be excavated cannot be quantified with certainty due to the unknowns with regard to the extent, depths, and uniformity across the Site. An estimated range of material to be excavated is 15,900 tons to 27,700 tons. This estimate is based upon assumed average depths of 2 feet to 3.5 feet across the area of excavation of approximately 3.28 acres. **OWNER and Engineer makes no guarantee regarding the volume or quantity of coal ash and contaminated soil to be excavated or the estimated range provided.**

CONTRACTOR shall be responsible for barricading excavation area(s) in accordance with all applicable federal, state, and local rules, regulations, and ordinances while not attended and at the end of the workday if the excavation area(s) are not backfilled. Areas of excavation cannot be backfilled until confirmation sample laboratory results have been received, which will take 7-10 days, and cleared by Engineer. Engineer will be responsible for the collection of confirmation soil samples and the sampling and analysis required for the waste profile of the excavated coal ash and contaminated soil. Engineer will work with CONTRACTOR to obtain the required waste profile for disposal of the excavated coal ash and contaminated soil.

CONTRACTOR shall be responsible for excavating the fill from of the maintenance pit (not a concrete structure) located northwest of the Green Barn that was previously filled in as shown on the Plans provided in the Bidding Documents. The pit is approximately six-feet in diameter and six-feet deep. Engineer will be responsible for the sampling and analysis of the fill material, including costs, required for the waste profile. Engineer will work with CONTRACTOR to complete and obtain the waste profile for disposal. CONTRACTOR shall be responsible for any costs associated with transportation and disposal of the excavated material.

CONTRACTOR shall stake the areas of excavation on a daily basis. OWNER will survey the areas of excavation to document the extent of remediation and the location of the confirmation samples.

In the event something unanticipated is encountered during excavation activities outside the scope of work, CONTRACTOR shall immediately stop all Work within the area and notify Engineer.

CONTRACTOR shall be responsible for the loading, transportation and disposal of the coal ash/contaminated soil excavated and stockpiled by others located on the south side of the Site. The tonnage shall be applied to line item 12.0 of the Itemized Proposal. (Per Addendum 1, Issued 1/31/2022)

SP 29 Confirmation Sampling

Engineer will be responsible for the collection and analysis of the confirmation samples collected from the coal ash/contaminated soil areas of excavation, including the associated costs. The standards for determining the extent of the excavation include the visual appearance of coal ash and confirmation sampling. Soil samples will be collected from the excavation bottom based on a grid system (75 feet x 75 feet). Samples will be collected from the exposed soil surface in the areas of excavation and sent to the required laboratories for analysis. The standard turnaround time for the receipt of the laboratory results is 7 to 10 days.

The area(s) of excavation shall remain open pending laboratory results and Engineer approval. In the event the laboratory results indicate contamination remains in the location(s) of the confirmation sample(s), CONTRACTOR shall perform additional excavation. CONTRACTOR shall excavate an additional six inches of material in the contaminated area(s) or as directed by Engineer. The process of excavating six-inch layers of material will continue until visual inspection indicates the coal ash has been removed as directed by Engineer. Engineer will conduct additional confirmation sampling following the additional excavation. CONTRACTOR shall backfilled area(s) of excavation with imported clean material after laboratory results confirm the contamination has been removed and approved by Engineer.

SP 30 Excavation For Storm Sewers

The width of the trench at and below the top of the pipe shall be in accordance with City of Noblesville Engineering Standards. Depth of excavation for storm sewer lines shall permit the installation of the pipe at the flow line elevations shown in the Plans provided in the Bidding Documents. Excavation for catch basins, manholes, etc. and similar structures shall be sufficient to leave at least 12 inches in the clear between the outer surfaces and the embankment or timber used to hold and protect the walls, unless drawings require a larger excavation. Any over-depth excavation below such appurtenances that has not been directed will be considered unauthorized and shall be refilled with select bedding material or concrete, at no additional cost to the OWNER.

Compaction shall conform to the applicable INDOT Standard Specification Sections 203 and 211 and the following compaction requirements:

a. Maximum density shall be determined by AASHTO T-99 as modified by Section 203.24 of the State Specifications using Method A for soil and Method C for granular material.
b. The minimum soil compaction requirements for backfill material and pavement subgrade will be as follows:

Subgrade under pavement, and slabs (existing and future)	95% – 100%
Existing ground receiving fills	95% – 100%
Backfill in pipe and conduit trenches under pavement and curbs (existing and future)	95% – 100%
All other areas receiving fill (non-lawn areas)	95% – 100%

2. Bedding
    a. For Storm Sewer pipe and services refer to the drawing details for bedding requirements and materials. Storm sewer pipe shall meet the requirements set forth in the City of Noblesville Engineering Standards
    b. The remainder of the trench shall be backfilled as specified in the drawings and materials referenced above.
    c. Backfill material shall be deposited in layers not exceeding the thickness specified on the drawings, and each layer shall be compacted to the minimum density specified.

SP 31 Imported Material Analysis

CONTRACTOR shall be responsible for the demonstrating that any materials imported to the Project are free of contamination. CONTRACTOR shall provide documentation materials are from a virgin source or complete sampling and analysis to demonstrate the materials are clean. CONTRACTOR shall provide the documentation from each source if multiple sources are used for each type of material. CONTRACTOR shall provide sample results to verify imported materials do not contain contaminants or provide certified clean documentation prior to delivery to the Project. CONTRACTOR shall be required to submit weight tickets from each source for payment and will not be paid if the required documentation was not provided prior to delivery to Project.

CONTRACTOR shall be responsible for the laboratory and sampling costs of the imported materials. Three random composite random samples shall be collected from each source for each type of material and analyzed for VOCs, PAHs, RCRA metals, and hexavalent chromium. The results of the analyses shall be compared to the IDEM Remediation Closure Guide (RCG) screening levels (SLs) for soil exposure and provided to Engineer for review and approval. The laboratory shall be capable of reporting at the lowest SLs for each parameter. Samples for Hexavalent Chromium analysis shall be sent to Enviro-Chem, 47 Loveton Cir Suite K, Sparks, MD 21152, telephone of (410) 472-1112.

The number and type of sample containers, volumes, and preservatives required for the soil analyses are summarized in the table below.

Analytical Method, Containers, Preservation, and Holding Times Requirements Matrix = Soil

Analytical Parameter and/or Field Measurements	Analytical Method Number	Containers	Preservation Requirements	Maximum Holding Times	Reporting Level
VOCs	EPA Method 8260	4 oz jar and 3 tared vials	Cools to 4°C	14 days	IDEM RCG screening levels
PAHs	EPA Method 8270 SIM	4 oz. jar	Cools to 4°C	14 days	IDEM RCG screening levels
Mercury	EPA Method 7470	4 oz. jar	Cools to 4°C	28 days	IDEM RCG screening levels
Hexavalent Chromium	EPA Method 7199	4 oz. jar	Cools to 4°C	28 days	IDEM RCG* screening levels
Other RCRA Metals	EPA Method 6010	4 oz. jar	Cools to 4°C	6 months	IDEM RCG screening levels
PCBs	EPA Method 8082	4 oz. jar	Cools to 4°C	14 days	IDEM RCG screening levels

*Must use Enviro-Chem 47 Loveton Cir Suite K, Sparks , MD 21152

Three representative composite samples shall be collected and placed in containers supplied by the laboratory selected to perform the analyses. All samples shall be placed in a cooler and chilled with ice to approximately 4^0 C immediately upon collection. The samples shall be held at this temperature in a secure location until delivered or shipped to the laboratory. The imported material must not exceed the RCG SLs and must be approved by Engineer prior to being transported to the Project. CONTRACTOR shall provide the source of imported materials and the laboratory results or certified clean documentation documenting the material is free of contaminants.

Backfill soil material is available at no cost to CONTRACTOR in an area located to the east of Riverside Hospital at 395 Westfield Road in Noblesville (Riverview Stockpile). An initial sample has been collected and analyzed and the laboratory results are provided in the Appendices. If CONTRACTOR intends to

use this material, additional sampling and analysis is required to demonstrate the material is clean as outlined above. Scales are not available at this location. Therefore, if CONTRACTOR decides to use this material, CONTRACTOR shall assume 13 cubic yards per tri-axle truck load and shall work with Engineer to track and document the number of cubic yards of material being placed. CONTRACTOR shall not be reimbursed if the Engineer is not able to confirm the number of truckloads of backfill delivered for the Work.

CONTRACTOR shall document the quantity of materials by material type imported from each source, including weight tickets provided by the source. Records from the source(s) and results of the sampling and/or documentation of certified clean from a virgin source shall be included in payment documentation. The quantities shall be compared to the base Bid quantities and added/deducted accordingly based on the unit rates included in the Bid.

SP 32 Backfill and Compaction

Backfill material for restoration shall consist of natural materials such as loam, clay, and sand free of rocks, boulders, stones, bricks, or other debris, and cannot contain cinders, ashes, or refuse. Backfill for excavation between railroad tracks and area restoration north of the Green Barn in the area where railroad tracks are removed shall consist of No. 4 limestone aggregate. Swale underdrain backfill shall consist of #8 stone washed and free of fines. Clean on-Site excavated soil may be used as backfill provided it consists of natural materials such as loam, clay, and sand free of rocks, boulders, stones, bricks, or other debris, and does not contain cinders, ashes, or refuse, is free of contamination based on Engineer's testing, and meets the requirements for intended use. CONTRACTOR shall backfill in accordance with the Plans included in the Bidding Documents.

CONTRACTOR shall verify sub surface soils are backfilled, compacted, and ready for construction work and shall not proceed until unsatisfactory conditions are corrected. CONTRACTOR shall correct conditions detrimental to timely and proper completion of the Work and shall not proceed until unsatisfactory conditions are corrected.

CONTRACTOR shall:

1. Identify required lines, levels, contours, and datum.
2. Protect plant life, lawns, and other features remaining as a portion of final landscaping.
3. Protect benchmarks, existing structures, fences, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.
4. Maintain and protect above and below grade utilities which are to remain. Compact sub grade to density requirements for subsequent backfill materials.
5. Cut out soft areas of sub grade not capable of meeting requirements for compaction. Backfill with granular fill and compact to density equal to or greater than requirements for subsequent fill material.
6. Scarify and proof roll sub grade surface to a depth of 12 inches to identify soft spots; fill and compact to density equal to or greater than requirements for subsequent fill material.

Depending on the location for restoration, CONTRACTOR shall restore areas of soil remediation excavation to the specified grade with clean backfill that will have four inches of topsoil added as part of the Project stabilization or 4-inches of No. 4 limestone aggregate between the railroad tracks in accordance with the Bidding Documents. The area of excavation in front of the Green Barn within area of the railroad tracks removal shall be restored No. 4 limestone aggregate as shown on the Plans included in the Bidding Documents.

The CONTRACTOR shall achieve following compact rates:

Subgrade under future rail repair north of the Green Barn	100% and H-25 Loading
Subgrade under pavement, and slabs (existing and future)	95% –100%
Subgrade under the Green Barn Service Drive and Stormwater BMP Access Drive	100% and H-25 Loading
Existing ground receiving fills	95% –100%
Backfill in pipe and conduit trenches under pavement and curbs (existing and future)	95% –100%
All other areas receiving fill (non-lawn areas)	95% –100%

SP 33 Transportation and Disposal

CONTRACTOR shall be responsible for the transportation and disposal of the waste generated from the Work. CONTRACTOR shall develop a Waste Management Plan detailing how the waste streams will be managed for submission to Engineer prior to the transporting any Project waste. CONTRACTOR shall submit this plan as part of the Pre-Work Submittals. In order to track the loads of coal ash and contaminated soil, CONTRACTOR shall obtain a Site-specific manifest from Engineer to accompany each load of coal ash and contaminated soil. Other waste cannot be mixed in with the coal ash and contaminated soil. The quantity of coal ash and contaminated soil shall be tracked and documented separately from other waste streams for regulatory reporting purposes.

The excavated coal ash and contaminated soil shall be direct loaded into licensed trucks for transportation to a permitted solid waste disposal facility. In the event the coal ash and contaminated soil cannot be live loaded and temporary stockpiles are needed, the stockpiles shall be managed and maintained in a manner that minimizes contact with storm water, dust generation, and worker contact in accordance with the SWPPP. If coal ash and contaminated soil is stockpiled it shall be kept within the area(s) of excavation or placed on a minimum of 10-mil or equivalent plastic ground cloth and covered with 6-mil minimum polyethylene sheeting or equivalent to protect against leaching or runoff of contaminants into groundwater, storm water and surface water. The sheeting shall be secured by appropriate means and seams sealed to prevent tearing or removal by weather at all times. The covering shall be maintained throughout the time the coal ash and contaminated soil is stockpiled.

Trucks shall be covered prior to the leaving the Project and during transport to the permitted disposal facility. All trucks drivers shall obey the speed limits established for Forest Park, roads and highways at all times. Best management practices shall be implemented to prevent tracking of material outside of the Project Limits. CONTRACTOR shall comply with INDOT and local standards regarding weight limits.

All waste shall be taken to a permitted solid waste disposal facility approved by Engineer prior to the commencement of the Work. Prior to transporting any Project waste, a waste profile shall be established with the disposal facility. Engineer will provide the analytical data required for the waste profile(s) and provide assistance to obtain the waste profile(s).

As part of the project completion close out documents, CONTRACTOR shall provide documentation of disposal, including the name(s) and location(s) of the permitted solid waste disposal facility, waste profiles, bills of lading, weight tickets, and a summary of loads including weights per load and associated manifest numbers used for the coal ash/contaminated soil. Waste disposal quantities shall be compared to the base Bid quantities and added/deducted accordingly based on the unit rates included in the Bid.

SP 34 Storm Sewers

CONTRACTOR shall be responsible for the construction of the storm sewer system outlined in the Plans included in the Bidding Documents. The implementation of the drainage plan requires work on-Site and off-Site.
CONTRACTOR shall provide the equipment, labor, and materials necessary to install the storm sewer system as shown on the drawings and as needed for a complete and proper installation. Work shall follow and comply with INDOT Standard Specification- (Latest Edition) and City of Noblesville Standards, Specifications and Details.

CONTRACTOR shall provide shop drawings/product data indicating structures, pipe, and pipe accessories.

Storm Sewer Pipe Materials

1. All materials shall conform to the City of Noblesville Standards and applicable requirements of INDOT Section 715, 718 and 720.
2. Storm sewer pipe, pre-cast pipe and manholes/catch basins/inlets shall conform to the following acceptable kinds as specified in the Plans:
    a. Reinforced Concrete Pipe, ASTM C-76, Class III, Wall B and joints to conform to ASTM C443.
    b. Smooth-lined, double-walled, corrugated polyvinyl chloride pipe in accordance with ASTM F-949. Joints to conform to ASTM-D3212 and F-477.
    c.

Storm Sewer Accessories

1. Fittings: Same material as pipe molded or formed to suite pipe size and end design, in required tee, beds, elbows, cleanouts, reducers, traps and other configurations required.
2. Filter Fabric: ADS Geosynthetics 0801T, water pervious type, non-woven, 100% polypropylene. Install below glacial stone at pipe outlets and where noted on the Plans included in the Bidding Documents.
3. Turf Reinforcement Mat: Rollmax VMAX C350 by Tensar.
4. Flexstorm Catch-it: Reusable inlet protection device.
5. Open-ended Pipe Trash Guards: Galvanized steel ends sections with trash guards.

Material by:
J&J Drainage Co.
110 N. Pershing Street
P.O. Box 829,
Hutchinson, KS 67504
Phone: 1 (800) 331-7465
Or approved equal

Drainage Structures

1. Catch Basin – reinforced pre-cast concrete pipe section with solid bottom. Size varies, refer to plans for sizes and locations.
2. In-Line Drain – PVC, solid drain basin with storm sewer adapters
3. Castings: East Jordan Iron Works, Neenah or approved equal.
    a. Catch Basin Castings: Dome Grate
    b. In-Line Drain: Pedestrian grate (outfield of baseball field only)

SP 35 Saw-Cutting of Pavement

In locations where the new pavement abuts the existing pavement edge, the existing pavement shall be saw cut with an approved concrete saw to assure a uniform, neat and flush edge with new pavement. The saw cut shall be thoroughly cleaned its entire length.

Saw cutting is required for curb removal and/or pavement removal by excavation. Saw cutting is not required when a milling machine is used to remove curbing and/or pavement unless the resulting milled edge is not uniform, neat and flush edge.

The saw cut work will not be paid for directly, but the cost thereof shall be included in the cost of other items in the Contract.

SP 36 Concrete Pavement

CONTRACTOR shall be responsible for restoring the asphalt cut off-Site for the installation of the storm sewer with concrete as shown in the Plans in the Bidding Documents. CONTRACTOR shall use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work.

Materials include the following:

1. Concrete Mix Design
   a. Air Content: 6% +/- 1%
   b. Slump: 6 +/- 1”
   c. W/C Ratio: 0.43
   d. Type F Mid-Range Water Reducer ASTM C494: As needed to reach slump and W/C Ratio
   e. Design Strength: 4500 psi
   f. Unit weight: 145.2 lbs./ft3
   g. Cement: Type 1 564 lbs.
   h. Fine Aggregate Sand: 1369 lb. (see attached “A”, Sieve Sizes for specification)
   i. Coarse Aggregate Limestone ASTM #57 (1”-No.4): 1268 lb.
   j. Coarse Aggregate IND #11 Limestone Washed: 476 lb.
   k. Water Municipal: 245 lbs.
   l. Yield: 3,921 lbs. Volume: 27 (ft3)
   m. Forta Ferro macro synthetic fiber: 3 lbs. per cubic yard

2. Curing Materials
   a. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309.
   b. Approved material: Euclid Super Diamond Clear 350, exempt solvent-based (Indiana only)

Excavation shall be made to the required depth and to a width that will permit the installation and bracing of the forms. The grade shall be shaped and compacted to a firm, even surface conforming to the section view shown on the Plans included in the Bidding Documents. Bracing and staking of forms and expansion joint material shall be such that the forms remain in both horizontal and vertical alignment until their removal. All excavated areas shall be re-compacted to 95% modified proctor before concrete placement. All soft and unsuitable material shall be removed and replaced with compacted aggregate No.53 as per 3.1, A. 3 of these specifications. If thickness of replaced No. 53 exceeds 6-inches in thickness, the No. 53 materials shall be compacted to 95% modified proctor in lifts that do not exceed the specification of the compacting equipment. Defer to the OWNER for direction. The tolerance of the in-place concrete shall conform to the standards contained in ACI 117. Consolidation of concrete placed in the forms shall be by vibration or other acceptable methods. Forms shall be left in place for 24 hours or until the concrete has set sufficiently so that forms may be removed without damaging the concrete. Upon removal of the forms, the exposed portions of the curb shall be rubbed immediately to a uniform surface. The No. 53 stone shall be in a damp surface condition. If the No. 53 stone has dried, it shall be moistened immediately prior to concrete placement, without standing water. Concrete shall have a light broom finish.

SP 37 Project Stabilization

CONTRACTOR shall be responsible for ensuring that the Project is graded in accordance with the Plans included in the Bidding Documents. CONTRACTOR shall ensure that the areas to be seeded shall have a minimum of 4-inches of topsoil prior to seeding. Topsoil shall be capable of supporting the healthy growth of vegetation with a minimum organic matter content value of 6% and shall not contain noxious weeds. The topsoil must consist of loose easily pulverized soil, free of debris, stumps, large roots, rocks over one inch in diameter, brush, weeds, or other material which would be detrimental to the proper development of vegetative growth.

Prior to placement of the topsoil, the area to be covered must be free of all rocks or clods over 1.5 inches in diameter, and all sticks or other foreign material. If the prepared area becomes crusted, eroded, or rutted as a result of rain, CONTRACTOR shall rework the soil until it is smooth prior to being seeded. The CONTRACTOR shall not place topsoil when subsoil or topsoil is frozen, excessively wet, or otherwise may cause damage to the Project.

CONTRACTOR is responsible for seeding and maintenance of the vegetation (seed and sod) until it is established. Temporary seeding may be required to meet the SWPPP. If so, CONTRACTOR is required to plant additional seeding as soon as possible during the growing season for the final stabilization of the Project. Areas requiring final stabilization outside of the erosion control area designated in the Plans included in the Bidding Documents must be covered with straw mat within 24 hours after seeding. The mulching material must be maintained in place until vegetation is established.

CONTRACTOR shall provide fresh, clean, new-crop seed complying with the tolerance for purity and germination established by the Official Seed Analysts of North America of the grass species, proportions and maximum percentages of purity, germination, and minimum percentages of weed seed specified. A substitute mixture for the type of grass seed below must be approved by Engineer. Seed to meet or exceed 95% purity / 85% germination and consist of an 80% Kentucky bluegrass, 20% perennial ryegrass bluegrass blend. Seed shall be delivered to the Project in the original, unopened containers which shall bear the vendor's guarantee of analysis. Do not use wet seed or seed, which is moldy or otherwise, damaged in transit or storage. Sow seed using a spreader or seeding machine. Do not seed when wind velocity exceeds 5 mph. Distribute seed evenly over entire area by sowing equal quantity in two directions at right angles to each other. Seed to be applied at 4.0 pound per 1,000 square feet Spread fertilizer and pulverized mulch in water, using equipment specifically designed for hydro seed application. Mix until uniformly blended into homogeneous slurry suitable for hydraulic application. Apply slurry uniformly to all areas seeded. Slurry mix to includes fiber mulch at 2,000 pounds per acre, level fertilizer to apply one pound nitrogen per 1,000 square feet and grass seed mixture at 5 pounds per 1,000 square feet.

Sodding only required on the baseball field and around each storm catch basin/inlet and shall be stabilized with sod no later than April 1, 2022. Sod shall consist of Fresh Kentucky Bluegrass sod blend. CONTRACTOR shall not plant dormant sod or if ground is frozen and sod shall not be laid unless soil is friable to a depth of six inches. Finished grade shall be raked smooth, free from depressions or undulations. Rolling shall be done in two directions perpendicular to each other. After rolling, repair and reroll any area where depressions or other irregularities appear in the finished grade. The soil surface shall be moistened immediately before laying sod with a fine spray which will not cause disturbance of the finished surface. Sod pieces shall be fitted tightly together so that no joint is visible and be firmly and evenly tamped by hand. After sodding is completed and has been approved, it shall be rolled in two directions perpendicular to each other. All areas noted to receive sod shall be fertilized at a rate of two pounds of nitrogen per 1,000 square feet prior to laying of sod. All sodded areas shall be watered immediately after final rolling with a fine spray to a depth of four inches.

SP 38 Erosion Control Blanket

CONTRACTOR shall install the Erosion Control Blanket (ECB) to retain sediment on disturbed and seeded area and small sloping disturbed as noted on the Plans provided in the Bidding Documents. Additional ECB may be required in areas where runoff velocity displaces seed and prevents the seed to remain in contact with the soil and germinate. ECB shall be installed, secured, and anchored per the manufacturer's recommendation. Limits of blanket are noted on the Plans in the Bidding Documents; however limits may expand depending on land disturbance and may be determined in the field prior to placement.

CONTRACTOR shall install ECB on slopes 3:1 or greater and seeded area, swales, and general slopes noted on the Plans included in the Bidding Documents. CONTRACTOR shall use EroNet S75 by North American Green (1-800-772-2040) or approved equal. CONTRACTOR shall grade in accordance with the Plans included in the Bidding Documents, add topsoil as necessary, seed area as specified immediately after grading activities, and fertilize. Install blankets per detail and manufacturer's specifications with minimum two 6-inch biodegradable stakes per square yard. Overlap blankets minimum

one foot and biodegradable stakes together when two or more blankets are required. Toe in erosion control blanket at the top and bottom of the slope.

CONTRACTOR shall inspect drainage channel following each storm event during and after vegetative establishment, repair and reseed as required; check drainage channel outlet for blockage and sediment build-up, repair as required; remove significant sediment and debris from drainage channel to maintain design cross section and grade; and reseed as required.

SP 39 Silt Fence
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR shall install silt fence to retain sediment from small sloping disturbed areas by reducing the velocity of sheet flow. CONTRACTOR shall comply with the following requirements:

1. Drainage Area: Maximum distance of drainage area above silt fence - 100 feet.
2. Support Posts: Are to be 2" x 2" hardwood posts set at least 8” below grade.
3. Spacing of Posts: 6 foot maximum.
4. Fence Height: 3 foot maximum.
5. Fence Fabric: Woven or non-woven geotextile fabric with specified filtering efficiency and tensile strength and containing UV inhibitors and stabilizer to ensure six-month minimum life at temperatures 0 to 120 degrees F.

Installation:

1. Along the entire intended fence line, maintain contour as much as possible, dig a 4” wide x 8" deep flat bottom or v-shaped trench.
2. On the downslope side of the trench, drive the post at least 8” into the ground.
3. Run a continuous length of geotextile fabric along upstream side of posts.
4. If a joint is necessary, nail the overlap to the nearest post with a wood lath.
5. Place the bottom one foot of fabric in the 8" deep trench, extending the remaining 4" of fabric toward the upslope side.
6. Backfill the trench with compacted earth.

Maintenance:

1. Inspect silt fence periodically and after each storm event.
2. If fence fabric tears, starts to decompose, or becomes ineffective, replace the affected portion.
3. Remove deposited sediment when it reaches half the height of the fence at its lowest point or is causing the fabric to bulge.
4. Take care to avoid undermining the fence during clean out.
5. After watershed has been stabilized, remove fence, and sediment deposits.

CONTRACTOR shall coordinate removal of temporary measures with installation of permanent measures. At completion of temporary measures, remove all temporary materials from Project and dispose of in accordance with the City of Noblesville and the Indiana Stormwater Quality Manual requirements.

SP 40 Inlet Protection
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR shall install inlet protection on all new drainage structures preventing sediment from entering existing and new inlets and ultimately the storm sewer system. In addition to the inlet protection device, the CONTRACTOR shall wrap the inlet grate with turfgrass sod and flag the structure for identification purposes. CONTRACTOR shall comply with the following requirements:

1. Inlet protection cage shall be welded and manufactured from low carbon steel wire. Cage shall be wrapped in geotextile.

2. All new and existing drainage inlets within the project area shall receive filters.

3. Sediment cage should be installed at the time the structure is set to keep job in compliance and to prevent the need to clean out the storm sewer system at a later date.

4. Remove accumulated sediment when once it exceeds one half of the height of the structure.

5. Acceptable manufacturers:

   Sed Catch Environmental Products
   392 Congress Park Dr.
   Dayton, OH 45459
   (937) 435-5075

CONTRACTOR shall coordinate removal of temporary measures with installation of permanent measures. Once soil stabilization has been reached, remove all temporary materials from site and dispose of in accordance with the City of Noblesville and the Indiana Stormwater Quality Manual requirements.

SP 41 Green Barn Service Drive
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR shall be responsible for the construction of a permanent aggregate service drive to the Green Barn as shown in the Plans provided in the Bidding Documents. The temporary construction access required for the SWPPP shall be removed prior to construction of the permanent service drive due to the potential for cross contamination with the coal ash/contaminated soil.

The permanent service drive is to be constructed of coarse aggregate, Class D or higher, Size No. 53 consistent with Section 904, INDOT 2020 specifications with a width of 25 feet, 45 foot width at the paved drive intersection, and a minimum thickness of 12 inches. Geotextile must be placed prior to placement of the aggregate. Aggregate must not be placed if frozen, placed on a frozen subgrade or when the air temperature is less than 35°F. The aggregate must be spread in uniform lifts with a spreading and leveling device with a compacted depth of each lift of a minimum of three inches and a maximum of six inches. Compaction shall meet H25 loading capacity.

SP 42 Vinyl Coated Chain Link Fencing and Gates
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR shall provide and install PVC-coated galvanized (zinc) coated chain link fabric with PVC-coated galvanized steel framework and accessories for commercial or industrial applications. Refer to Plans included in Bidding Documents for location of fence.

CONTRACTOR shall use manufacturing facilities in the United States with a minimum 5 years of experience specializing in manufacturing of chain link fence CONTRACTOR shall have 5 years' experience installing similar projects in accordance with ASTM F567. To ensure system integrity obtain the chain link system, framework, fabric, fittings, gates, and accessories from a single source.

Materials from qualified manufacturers having a minimum of five years' experience manufacturing chain link fencing will be acceptable by the Engineer as equal, if approved in writing, ten days prior to bidding, and if they meet the following specifications for design, size gauge of metal parts and fabrication.

Approved Manufacturers:

a. Merchants Metals
   71347 CR 23
   New Paris, IN 46553
   Ph. (800) 831-4060
   Fax (574) 831-3515

b. Or approved equal

CONTRACTOR shall obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source.

Chain Link Fence Fabric

1. Galvanized (zinc) coated steel chain link fabric per ASTM A392 Class 2 weight of zinc coating 2.0 oz/ft² (610 g/m²)
2. PVC coated, 6 mil (0.15mm) to 10 mil (0.25mm) thickness, thermally fused to 0.30 oz/ft² (min) zinc-coated steel core wire: Per ASTM F668 Class 2b. Core wire tensile strength 75,000 psi (517 MPa). Color: Green, per ASTM F934.
3. Size: Helically wound and woven to height of 8 feet (or as indicated on drawings) and less with 2" diamond mesh, with 9 gauge (0.148 in.), and a break load of 1290 lb/f. Refer to drawings for locations.
4. Selvage of fabric knuckled at top and bottom (K&K). Fabric shall not extend more than 1" above top rail.

Steel Fence Framing

1. Pipe. Steel pipe - Type I: ASTM F 1083, standard weight schedule 40; minimum yield strength of 30,000 psi (205 MPa); sizes as indicated. Hot-dipped galvanized with minimum average 1.8 oz/ft² (550 g/m²) of coated surface area.
2. Galvanized PVC-Coated finish: In accordance with ASTM F1043, apply supplemental color coating of 10 to 15 mils (0.254 - 0.38 mm) in green color to match fabric.
3.

Gate Post	4" OD	9.11 lbs/ft
End and Corner Post	3" OD	5.79 lbs/ft
Line (intermediate) Post	2.5" OD	3.67 lbs/ft
Rails and Braces	1-5/8" OD	2.27 lbs/ft

4. Refer to drawings and details for exact size and location

Accessories

1. Chain link fence accessories: ASTM F 626. Provide items required to complete fence system. Galvanize each ferrous metal item and finish to match framing.
2. Post caps: PVC-Coated, ASTM F626 galvanized pressed steel, malleable iron, or aluminum alloy weather tight closure cap for tubular posts. Provide one cap for each post.
3. Rail ends: PVC-Coated, galvanized pressed steel per ASTM F626, for connection of rails to post using a brace band.
4. Top rail sleeves: PVC-Coated, 7" (178 mm) galvanized steel sleeve per ASTM F626
5. Wire ties: PVC-Coated 9 gauge 0.148" (3.76 mm) galvanized steel wire for attachment of fabric to line posts and rails. Pre-formed hog ring ties to be 9 gauge (0.148") (3.76 mm) galvanized steel or aluminum for attachment of fabric to tension wire. Tie wire and hog rings per ASTM F626.
6. Brace and tension (stretcher bar) bands: PVC-Coated ASTM F626 galvanized 12 gauge (0.105") (2.67mm) pressed steel by 3/4" (19mm) formed to a minimum 300-degree profile curvature for post attachment. Secure bands using minimum 5/16" (7.94 mm) galvanized carriage bolt and nut.
7. Tension (stretcher) bars: PVC-Coated, galvanized steel one-piece length equal to 2 inches (50 mm) less than full height of fabric with a minimum cross-section of 3/16" x 3/4" (4.76 mm x 19 mm) per ASTM F626. Provide tension (stretcher) bars where chain link fabric is secured to the terminal post.
8. Truss rod assembly: PVC-Coated, galvanized steel minimum 5/16" (7.9mm) diameter truss rod with pressed steel tightener, in accordance with ASTM F626
9. Carriage bolts and nuts: Galvanized of commercial quality
10. Nuts and bolts are galvanized but not vinyl coated. Cans of PVC touch up paint are available to color coat nuts and bolts once installed.

Setting materials

Concrete: Minimum 28-day compressive strength of 4,000 psi.

Chain Link Fence Framing Installation

1. Install chain link fence in accordance with ASTM F 567 and manufacturer's instructions.
2. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.
3. Space line posts uniformly as shown on the drawing, or at max 10' on center.
4. Concrete set terminal and gate posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have minimum diameter 4 times greater than outside dimension of post or as noted on the drawings, and depths approximately 6" deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" – 48" below surface when in firm, undisturbed soil or deeper per Drawings. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts.
5. Check each post for vertical and top alignment and maintain in position during placement and finishing operations.
6. Bracing: Install horizontal pipe brace at mid-height for fences 6' and over, on each side of terminal posts. Firmly attach with fittings. Install diagonal truss rods at these points. Adjust truss rod, ensuring posts remain plumb.
7. Top rail: Install lengths, 21'. Connect joints with sleeves for rigid connections for expansion/contraction.
8. Center rails are to be installed when fence fabric is 12' or higher, or when shown on drawings.
9. Bottom Rails: Install bottom rails between posts and attach to post using rail end or line rail clamps. Bottom rails shall be installed tight to grade.

Chain Link Fabric Installation

1. Fabric: Install fabric on security side and attach so that fabric remains in tension after pulling force is released. Attach fabric with wire ties to line posts at 15" on center and to rails, braces, and tension wire at 24" on center.
2. Tension (stretcher) bars: Pull fabric taut; thread tension bar through fabric and attach to terminal posts with bands or clips spaced maximum of 15" on center.

CONTRACTOR shall provide and install the gate associated with the fencing as outlined below.

A. Gates shall be PVC coated or powder coated black. Per Addendum 1, Issued 1/28/2022

B. Chain Link Swing Gates: Double leaf 16' *and 18'* wide opening by *6'* high. Fabricate chain link swing gates in accordance with ASTM F900. Gate frame to be of welded construction. Weld areas to be protected with zinc-rich paint per ASTM A780. The gate frame shall be 2" O.D. pipe as noted on the Plans. Pipe to be Grade 1 ASTM F1083. Chain link fabric to match specification of fence system. Fabric to be stretched tightly and secured to vertical outer frame members using tension bar and tension bands spaced 12" (304.8 mm) on center and tied to the horizontal and interior members 12" (304.8 mm) on center using 9-gauge galvanized steel ties per section 2.04.

C. Security Pipe Gate: Double leaf 28' wide. Fabricate security swing gates in accordance with ASTM F900. Gate frame to be of welded construction. Weld areas to be protected with zinc-rich paint per ASTM A780. The gate frame shall be 2" O.D. pipe as noted on the Plans. Pipe to be Grade 1 ASTM F1083.

D. Hinges, hot dip galvanized pressed steel or malleable iron, structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180° (3.14 rad)

E. Latch: Galvanized forked type capable of retaining gate in closed position and have provision for padlock. Latch shall permit operation from either side of gate.

F. Double gates: Provide galvanized drop rod with center gate stop pipe or receiver to secure inactive leaf in the closed position (chain link gate only). Provide galvanized pressed steel locking latch, requiring one padlock for locking both gate leaves, accessible from either side.

G. Gate holdback: Provide galvanized gate hold back keeper for each gate leaf over 5' (1524 mm) wide. Gate keeper shall consist of mechanical device for securing free end of gate when in full open position. Coordinate location with the OWNER prior to placement.

H. Gate posts: Grade 1 pipe ASTM F1083:

1. *4" O.D. for Vinyl Coated Chain Link Fence Gate at the Green Barn*
2. *6" O.D. and concrete filled for Security Pipe Gate at the Green Barn Service Entrance*
3. *6" O.D. and concrete filled for Rail Security Gate at the north end of the On-Site Improvement area.*

(Per Addendum 1, Issued 1/31/2022)

I. Provide shop drawing submittals for gates to Engineer and OWNER prior to fabrication.

SP 43 Sequencing

(Renumbering Per Addendum 1, Issued 1/31/2022)

Due to the current construction being conducted south of the Site at Hobbs Station, the area south of the Green Barn shall be the first area to be excavated. CONTRACTOR shall relocate the historical monument prior beginning the excavation work. CONTRACTOR shall coordinate with the company conducting the construction and Hobbs Station accordingly.

OWNER is responsible for obtaining the Construction in the Floodway (CIF) permit from the Indiana Department of Natural Resources (DNR) and Clean Water Act Sections 401/404 from IDEM/USACE. It is anticipated that the permits will be available between May 30, 2022; however, there is no guarantee. Work may progress at the top of the slope prior to OWNER receiving permits. Permits are required for work on the slope and at the toe of the slope.

The areas disturbed on the baseball diamond for the implementation of the drainage plan must be sodded in time for the spring events; therefore, the CONTRACTOR must plan accordingly. The Work on the baseball diamond shall be completed by April 1, 2022 to allow time for the sod to be established prior to use beginning April 15, 2022.

The wooden fence along Forest Park Road shall not be removed until CONTRACTOR installs new fencing and gate along Forest Park Drive.

SP 44 Pay Items

(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR shall be paid in accordance with the following items:

1. Project Mobilization/Demobilization
   All costs associated with the mobilization and demobilization for the Project should be accounted for in this pay item.

2. Project SWPPP Implementation and Maintenance for Project
   All costs associated with all components associated with the SWPPP including any off Project SWPPP development, implementation of measure, monitoring, and maintenance should be accounted for in this pay item.

3. Third Party Relocation of Concrete Monument
   All costs associated with hiring a third party CONTRACTOR to relocate the concrete monument should be accounted for in this pay item.

4. Project Clearing, Demolition, and Transportation and Disposal of Associated Waste
   All costs associated with the Work shown in the Plans included in the Bidding Documents for the clearing and demolition should be accounted for in this pay item. Costs should include the transportation and

disposal of the waste generated from the clearing and demolition activities. The clearing and demolition waste stream must be tracked separately from the coal ash/contaminated soil.

5. Construction of Project Drainage System
   All costs associated with the construction of the drainage system detailed in the Plans included in the Bidding Documents should be accounted for in this pay item.

6. Storm Water Quality Unit Access Drive
   All costs associated with moving the stone (ballast) located off-Site for the construction of an access drive to the Storm Water Quality Unit and for any additional materials, labor, and equipment to complete the access drive should be accounted for in this pay item.

7. Green Barn Service Drive
   All costs associated with the construction of the service drive to the Green Barn should be accounted for in this pay item. The cost for the temporary construction access should be included in the costs for the SWPPP.

8. Project Miscellaneous Costs Not Included in Other Line Items
   All costs that are not included in the specific line items in the Proposal should be accounted for in this pay item.

9. Project Stabilization (topsoil, seed, sod, straw, fertilizer, erosion control blanket)
   All costs associated with the final stabilization of the Project in any areas that require topsoil, seeding, sod, straw, fertilizer, and erosion control blanket, including maintenance should be accounted for in this pay item.

10. 16’ Wide Double Leaf Chain Link Fence Gate, Vinyl Coated
    All costs associated with the purchase and installation of the referenced gate should be accounted for in this pay item.

11. 28’ Wide Double Leaf Security Pipe Gate, Vinyl or Powder Coated
    All costs associated with the purchase and installation of the referenced gate should be accounted for in this pay item.

12. Excavation, Transportation and Disposal of Coal Ash/Contaminated Soil (on-Site)
    All costs associated with the excavation, loading, transportation and disposal of the coal ash and contaminated soil required for the Site environmental remediation and cleanup should be accounted for in this pay item. The costs for the loading, transportation and disposal of the sediment from the maintenance pit located east of the Green Barn and the fill material from the maintenance pit north of the Green Barn should be accounted for in this pay item. Costs not to include sampling and analysis. Engineer will complete any sampling and analysis required for disposal and will assist CONTRACTOR with the waste profile.

13. Provide, Place, and Compact Backfill Material to Grade (on-Site)
    All costs associated with the backfill and grading of the areas of soil remediation excavation should be accounted for in this pay item.

14. Provide, Place, and Compact Backfill Material to Grade – Riverside Stockpile (on-Site)
    All costs associated with the backfill and grading of the areas of soil remediation excavation should be accounted for in this pay item.

15. Provide, Place, and Compact No. 4 Limestone Aggregate Backfill Material (on-Site)
    All costs associated with the backfill and grading of the areas of soil remediation excavation that require backfill with No. 4 Limestone aggregate should be accounted for in this pay item.

16. Provide, Place, and Compact No. 53 Aggregate Backfill Material (on-Site in north of Green Barn)
    All costs associated with the restoration of the area north of the Green Barn where the railroad tracks are to be removed for the placement of No. 53 aggregate in accordance with the Plans included in the Bidding

Documents should be accounted for in this pay item. The cost for additional No. 53 aggregate if needed for other aspects of the Project should be included in the respective pay item.

17. *18' Wide, Double Swing Gate, Vinyl Coated*
All costs associated with the purchase and installation of the referenced fencing should be accounted for in this pay item. Per Addendum 1, Issued 1/31/2022

18. PVC-Coated Chain Link Fence
All costs associated with the purchase and installation of the referenced fencing should be accounted for in this pay item.

19. Pump, Transport, and Dispose of Liquid Waste from Maintenance Pit (on-Site)
All costs associated with the removal, transportation, disposal of the liquid waste in the maintenance pit located on the east side of the Green Barn should be accounted for in this pay item. Costs not to include sampling and analysis. Engineer will complete any sampling and analysis required for disposal and will assist CONTRACTOR with the waste profile.

SP 45 Material Delivery Tickets
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR, at his/her expense, shall furnish ENGINEER material delivery tickets for bituminous mixture, concrete, soils, and aggregate which is specified for measurement by weight and/or volume. The tickets shall be prepared at the weighing site by the CONTRACTOR or his representative and shall contain the following information: Ticket Serial Number, Date, Source of Supply, Material Designation (size and type), Truck Number, Time Weighed, Gross Weight (DR entered here if scale is direct reading type), Tare, and Net Weight. The original or duplicate tickets shall be provided to the OWNER.

Material delivery tickets shall be grouped by material, then date when submitted to the ENGINEER.

Material delivery ticket collection will not be paid for directly but shall be included in the cost of other items in the Contract.

SP 46 Progress Estimate Billing
(Renumbering Per Addendum 1, Issued 1/31/2022)

Progress estimate billings shall be submitted only once a month and according to schedule submitted to CONTRACTOR on day of Pre-Construction meeting. ENGINEER will provide an electronic Progress Pay Estimate template, in MS Excel, to CONTRACTOR on day of Pre-Construction meeting. Progress Pay Estimate shall be submitted to ENGINEER in electronic format for review, upon acceptance, a signed paper copy shall be delivered to ENGINEER for actual submittance of claim.

A hardcopy of the Progress Pay Estimate form is included in the Appendix.

SP 47 As-Built Record Drawing, Testing, and Video Inspection
(Renumbering Per Addendum 1, Issued 1/31/2022)

KERAMIDA, Inc. will be providing the construction inspection and oversight for the public infrastructure project.

CONTRACTOR shall submit "As-Built" drawings for Storm Sewer, Water, Hydrants, Grading, Ditches, BMP, and Trees in accordance with City of Noblesville Standards, in both hard copy and electronic format (PDF and DWG). Infrastructure shall be surveyed and certified by a Professional Land Survey licensed in the State of Indiana. Each page shall be certified by a licensed surveyor, state date of survey, and state "As-Built Drawings." The designed elevation and slopes shall be struck through and the actual constructed values be shown on the drawings for both profile sheets and structure data sheets that are contained within the project construction plan set.

CONTRACTOR shall provide OWNER with a thorough and accurate record of construction. Specific requirements for documenting and submitting As-Built information for existing and new improvements,

structures, grades (topography) constructed or installed per the Bidding Documents and Contract Documents is provided in the Appendices.

Base electronic drawings will be available from Designer in AutoCad 2018 format after the construction contract has been awarded (drawings can be made available as a previous version upon request). This will not be paid for directly, but should be included in the cost of other items.

CONTRACTOR shall also provide video inspection and testing of all storm and sanitary sewers installed in accordance with the most recent version of the Noblesville Standards. This will not be paid for directly, but should be included in the cost of other items.

Items covered in this special provision will not be paid for directly, but should be included in the cost of other items.

SP 48 Pre-Designation of Project Supervision and Subcontractors
(Renumbering Per Addendum 1, Issued 1/31/2022)

The City of Noblesville reserves the right to reject any subcontractor based on work load in the project area and current or past performance. The City of Noblesville also reserves the right to reject the use of any subcontractor, foreman, or superintendent proposed for this project based on current or past performance. Any prime or subcontractor as part of this contractor performing in amount exceeding 10% of the contract value shall declare the project superintendent to be assigned to the project after the low bidder has been identified prior to award. The City reserves the right to approve or disprove of personnel designated for this project prior to award of the project. Any contractor removing or re-assigning predesignated and pre-approved personnel for this project agrees to pay a penalty of $10,000 for removing said designated personnel.

SP 49 Top of Casting Elevations
(Renumbering Per Addendum 1, Issued 1/31/2022)

Top of Casting Elevations, if provided, in contract documents are for general reference and not absolute values. The CONTRACTOR shall adjust each casting and/or structure to match the adjacent grade without creating a bowl or mound. Adjusting of structures shall comply with the Noblesville Standards. There is not direct payment for this work, but shall be included in the cost of other items unless a specific pay item is called out in the Itemized Proposal.

SP 50 Maintaining of Right-Of-Way and Easement
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR shall maintain the Right-Of-Way and/or easements in which the CONTRACTOR is working until the project has been accepted and the contract closed out. This work includes but is not limited to mowing of existing grassed area, mowing of new sod, mowing of newly established seeded area, weeding of landscaping in public R/W. This will not be paid for directly, but included in the cost of other items.

SP 51 Storm Water Quality Structures
(Renumbering Per Addendum 1, Issued 1/31/2022)

STORMWATER QUALITY TREATMENT UNIT
Description.
This work shall consist of the installation of four storm water quality unit manholes in accordance with 105.03 and 720.

Materials.
Material shall be in accordance with the following:
Castings……910.05
Concrete……..702
Precast Units……907.04
Reinforced Concrete Pipe……907.02

Reinforcing Steel……910.01
Stormwater Quality Treatment Units located on the current City of Indianapolis Stormwater Quality Unit Selection Guide will be accepted.
Units are sized based on the Noblesville Stormwater Technical Standards criteria.

The Stormwater Quality Treatment Unit, Structure ###, shall satisfy the requirements as follows:

1. *Total Suspended Solids (TSS) Removal Rate 80%*
2. *Treatment rate: ……..…….. 9.24 cfs*
3. *Unit shall be installed off-line.*
4. *Structure shall be reinforced pre-cast concrete and rated for H-20 rating.*
5. *A type 4 casting or larger shall be used to access the structure.*
6. *The separator manholes shall have easy and unobstructed access from the top of the structure to allow for inspection, cleanout and maintenance.*

Based upon the parameters the following manufactures with model, or approved equal, can be used for this project.

- *Hydro International Downstream Defender 8-ft*
- *Hydro International First Defense (High Capacity) 7-ft*
- *Aquashield Aqua-Swirl Xcelerator XC-7*
- *Aquashield Aqua-Swirl Concentrator AS-9*

General Requirements
The construction of the item listed in this specification shall be in accordance with the manufacturer's recommendations and the Indiana Department of Transportation Standard Specifications Section 720. In the event of a conflict between the INDOT Standard Specifications and the manufacturer's recommendations, the manufacturer's recommendations shall govern.

Shop Drawings
The CONTRACTOR shall submit, for approval, three copies of the manufacturer's design specifications, O&M Manuals and shop/detail drawings of the storm water separator manholes.
Method of Measurement: Storm water quality units will be measured per each unit, complete in place.
Basis of Payment: The accepted quantities of the manufactured separator manholes will be paid for at the contract unit price per each complete in place.

SP 52 Permanent Flexamat Slope Stabilization
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR shall provide and install Flexamat Plus – Tied Concrete Block Erosion Control Mats. The Work shall consist of furnishing and placing the Flexamat Plus system in accordance with this specification and conforming with the lines, grades, design, and dimensions shown on the Plans included in the Bidding Documents.

Flexamat Plus is manufactured from individual concrete blocks tied together with high strength knitted polypropylene bi-axial geogrid. Each block is tapered, beveled and interlocked and includes connections that prevent lateral displacement of the blocks within the mats when they are lifted for placement.

Tied Concrete Block Mats shall be Flexamat Plus, manufactured by Motz Enterprises, Inc. via:
D2 Land & Water Resource
2600 Bloyd Ave.
Indianapolis, IN 46218
(317) 917-2180

Blocks. Furnish blocks manufactured with concrete conforming to the cement requirements of ASTM C150 and to the aggregate requirements of ASTM C33. Blocks shall have a minimum weight of 3 lb. per block and placed no further than 2 in. apart. Material weight per square foot shall not exceed 10 lbs. Blocks shall have a 2.25" profile, a flat-top pyramid shape, and a coarse finish without protrusions. Concrete shall have a minimum compressive strength requirement of Table1.

Table 1
Concrete Compressive Strength Requirements

Age	Required Compressive Strength psi
4 - Day	5000 psi
7 – Day	6000 psi
28 - Day	7000 psi

Polypropylene Bi-Axial Geogrid. The interlocking geogrid shall be an open knitted fabric composed of high tenacity, multifilament polypropylene yarns knitted and coated in tension with an acrylic based coating which is designed to resist degradation in environments with exposure to water and low pH (4 pH) and high pH (>9 pH). When combined with the revetment mat, this will yield a high tenacity, low elongating, and continuous filament polypropylene geogrid that is embedded within the base of the concrete blocks. Ensure the geogrid meets the requirements of Table 2.

Table 2
Polypropylene Bi-Axial Geogrid

Property	Unit	Test	Requirement
Mass/Unit Area	oz/yd^2	ASTM D5261	6.5 oz/yd^2
Aperture Size	English units	Measured	1.4x 1.4 inch
Ultimate Wide Width Tensile Strength (MD x CMD)	lb/ft	ASTM D6637	2,055 lb/ft
Elongation at Ultimate Tensile Strength (MD x CMD)	%	ASTM D6637	6%
Wide Width Tensile Strength @ 2% (MD x CMD)	lb/ft	ASTM D6637	822 lb/ft
Wide Width Tensile Strength @ 5% (MD x CMD)	lb/ft	ASTM D6637	1,640 lb/ft
Tensile Modulus @ 2% (MD x CMD)	lb/ft	ASTM D6637	41,100 lb/ft
Tensile Modulus @ 5% (MD x CMD)	lb/ft	ASTM D6637	32,800 lb/ft

Underlayment Materials. Includes 5-Pick Leno Weave, Recyclex TRM-V and Curlex® II. The backing material shall be packaged within the roll of the Flexamat Plus Tied Concrete Blocks.

Five-Pick Leno Weave: This Five-Pick Weave provides added strength and support to the underlayments.

Index Property	Units	Value
GSM	g/m²	118 (-3˜ +3)
Density	Picks/10cm	62 x 24 (+/- 2)
Warp Strength	N/5cm	≥ 350
Warp Elongation	%	20 - 50
Weft Strength	N/5cm	≥ 280
Weft Elongation	%	20 – 50
Warp Shrinkage	%	≤ 7
Weft Shrinkage	%	≤ 9

Recyclex® TRM: Recyclex TRM – V is a permanent non-degradable Turf Reinforcement Mat (TRM), consists of 100% post-consumer recycled polyester (green or brown bottles) with 80% five-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area

of the TRM. The top and bottom of each TRM is covered with heavy duty polypropylene net. Fibers are tightly crimped and curled to allow fiber interlock, and to retain 95% memory of the original shape after loading by hydraulic events. Fibers have a specific gravity greater than 1.0; therefore, the blanket will not float during hydraulic events. Recyclex TRM – V meets Federal Government Executive Order initiatives for use of products made from, or incorporating, recycled materials. Recyclex TRM – V shall be manufactured in the U.S.A. and the fibers shall be made from 100% recycled post-consumer goods.

Index Property	Test Method	Value
Thickness	ASTM D 6525	0.294 in (7.47 mm)
Light Penetration	ASTM D 6567	57%
Resiliency	ASTM D 6524	86%
Mass per Unit Area	ASTM D 6566	0.50 lb/yd^2 (271 g/m^2)
MD-Tensile Strength Max.	ASTM D 6818	295.2 lb/ft (4.32 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	194.4 lb/ft (2.85 kN/m)
MD-Elongation	ASTM D 6818	32.2%
TD-Elongation	ASTM D 6818	40.8%
Swell	ECTC Procedure	8%
Water Absorption	ASTM D 1117/ECTC	33.8%
Specific Gravity	ASTM D 792	1.21
UV Stability	ASTM D 4355 (1,000 hr)	80% minimum
Porosity	Calculated	97.5%
Bench-Scale Rain Splash	ECTC Method 2	SLR = 5.86 @ 2 in/hr [1,2]
Bench-Scale Rain Splash	ECTC Method 2	SLR = 5.00 @ 4 in/hr [1,2]
Bench-Scale Rain Splash	ECTC Method 2	SLR = 6.33 @ 6 in/hr [1,2]
Bench-Scale Shear	ECTC Method 3	2.41 lb/ft^2 @ 0.5 in soil loss [2]
Germination Improvement	ECTC Method 4	432%

Curlex® II: Curlex II erosion control blanket (ECB) consists of a specific cut of naturally seed free Great Lakes Aspen curled wood excelsior with 80% six-inch fibers or greater fiber length. It is of consistent thickness with fibers evenly distributed throughout the entire area of the blanket. The top and bottom of each blanket is covered with degradable polypropylene netting.

Index Property	Test Method	Value
Thickness	ASTM D 6525	0.418 in (10.62 mm)
Light Penetration	ASTM D 6567	34.6%
Resiliency	ASTM D 6524	64%
Mass per Unit Area	ASTM D 6475	0.57 lb/yd^2 (309 g/m^2)
MD-Tensile Strength Max.	ASTM D 6818	127.0 lb/ft (1.9 kN/m)
TD-Tensile Strength Max.	ASTM D 6818	50.9 lb/ft (0.7 kN/m)
MD-Elongation	ASTM D 6818	28.64%
TD-Elongation	ASTM D 6818	29.84%
Swell	ECTC Procedure	89%
Water Absorption	ASTM D 1117/ECTC	199%
Bench-Scale Rain Splash	ECTC Method 2	SLR = 6.84 @ 2 in/hr [2,3]
Bench-Scale Rain Splash	ECTC Method 2	SLR = 7.19 @ 4 in/hr [2,3]
Bench-Scale Rain Splash	ECTC Method 2	SLR = 7.56 @ 6 in/hr [2,3]
Bench-Scale Shear	ECTC Method 3	2.6 lb/ft^2 @ 0.5 in soil loss [3]
Germination Improvement	ECTC Method 4	645%

the mat or otherwise protect it during long periods of storage to protect against degradation of the backing material as recommended by the manufacturer. Mats will be rolled for shipment. Upon delivery, rolls may be left exposed for up to 30 days. If exposure will exceed 30 days, cover or tarp the rolls to minimize UV exposure. All mats to be inspected upon delivery. Assure that all units are sound and free of defects that would interfere with the proper placing of the unit or impair the strength or permanence of the construction. Chipping or missing concrete resulting in a weight loss exceeding 15% of the average weight of a concrete unit is grounds for rejection by the Engineer. Replace, repair or patch the damaged areas per the manufacturer's recommendations.

Prior to installing Flexamat CONTRACTOR shall prepare the subgrade as detailed in the plans. All subgrade surfaces to be smooth and free of all rocks, stones, sticks, roots, and other protrusions or debris of any kind that would result in an individual block being raised more than 3/4 in. above the adjoining blocks. When seeding is shown on the plans, provide subgrade material that can sustain growth. Ensure the prepared subgrade provides a smooth, firm, and unyielding foundation for the mats. The subgrade shall be graded into a parabolic or trapezoidal shape to concentrate flow to middle of mat or mats. When vegetation is required, distribute seed on the prepared topsoil subgrade before installation of the concrete mats in accordance with the specifications.

Install mats to the line and grade shown on the plans and per the manufacturer's guidelines. The manufacturer or authorized representative will provide technical assistance during preparation and installation of the concrete block mats as needed. Provide a minimum 18-inches. deep concrete mat embedment toe trench at all edges exposed to concentrated flows, or per plans. Recess exterior edges subject to sheet flow a minimum of 12-inches or greater if shown in plans. When needed, provide fastening or anchoring as recommended by the manufacturer or Engineer for the Project conditions. For seams parallel to the flow line in ditch or channel applications, an extension of geogrid and specified underlayment shall be provided at a length recommended by the manufacturer or Engineer for the Project conditions. This extension shall be placed entirely beneath the adjacent upstream mats and anchored using U-anchors or zip ties at manufacturer's or Engineer's recommended spacing. If zip ties are used, they shall encompass three cords of geogrid of either adjacent mat. Parallel seams in the center of the ditch shall be avoided when possible. Seams perpendicular to the flow line shall utilize extensions of geogrid and underlayment executed as in parallel seams or shall be shingled at the manufacturer's or Engineer's recommendation. If shingled, seams shall be completed with the downstream mat recessed a minimum of 3 blocks under the upstream mat and fastened together along the seam at 2 ft. maximum spacing if required by manufacturer or Engineer.

SP 53 Construction Limits
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR shall work within the construction limits shown on the plans. If construction limits are not specifically called out in the plans, CONTRACTOR shall confine operations within the rights-of-way, sewer/drainage easements, or temporary rights-of-way shown on the plans. Work outside the construction limits is not permitted per this contract.

SP 54 De-Watering
(Renumbering Per Addendum 1, Issued 1/31/2022)

The cost for all de-watering necessary to construct all items in the project plans shall NOT be paid for directly but shall be included in the cost of other items.

Disposal and/or discharge of dewatered water shall be approved by the ENGINEER and comply with Rule 5 requirements for water quality. The use of filter bags, sediment basin, or similar may be required to minimize silt entering the waterways. These items will not be paid for directly and shall be included in the cost of other items.

SP 55 Management of Subcontractors
(Renumbering Per Addendum 1, Issued 1/31/2022)

The City of Noblesville reserves the right to reject a CONTRACTOR based on current and/or past performance of managing work and schedule of subcontractors.

SP 56 Project Materials
(Renumbering Per Addendum 1, Issued 1/31/2022)

All material's composition and type shall comply with the Noblesville (Construction) Standards. All storm sewer pipe equal to or greater than 12" shall be reinforced concrete pipe. All underdrain pipes shall be double-walled smooth bore.

SP 57 Pre-Work Submittals
(Renumbering Per Addendum 1, Issued 1/31/2022)

Contractor shall provide the following submittals prior to the commencement of the Work.

1. Documentation of HAZWOPER training and certification for all workers that will be performing the Work electronically to the Engineer prior to the commencement of the Work. Workers that do not need to be HAZWOPER trained and certified include the third party CONTRACTOR employees for the relocation of the monument (refer to SP 11), truck drivers if drivers stay in vehicle, and any third party CONTRACTOR used for the removal of the trees for clearing and grubbing.
2. Permits/Licenses/Approvals required to complete the Work
3. Health and Safety Plan (HASP) that compiles with applicable federal, state, and local laws, rules, regulations and ordinances
4. Detailed final schedule for completion of the Work
5. Project Approach detailing means and methods and process for tracking the imported materials brought to the Project for backfill and stabilization
6. Waste Management Plan detailing management of the waste streams, method for tracking quantity of coal ash and contaminated soil, names and locations of disposal facility and recycling facility if any materials are recycled
7. Performance Bond
8. Certificate of Insurance

SP 58 Workmanship and Materials
(Renumbering Per Addendum 1, Issued 1/31/2022)

CONTRACTOR guarantees and warranties the workmanship and materials, including all subcontractors and suppliers, for a period of three (3) full years, commencing from the date the Noblesville Board of Public Works and Safety accepts the improvements and closes the contract. CONTRACTOR guarantees and warranties that all labor and materials furnished are in accordance with the requirements of the project drawings and specifications, and should any defects in the work develop during the period due to improper materials, workmanship, or arrangements, these defects will promptly be corrected without expense to the OWNER

Performance Bond shall remain in full effect three (3) years from the date of project close-out and acceptance by the Noblesville Board of Public Works and Safety. In lieu of this, CONTRACTOR may elect to replace said Performance Bond with a Maintenance Bond of same duration in an amount equal to no less than 15% of the final contract amount.

SP 59 Construction Traffic (*Per Addendum 1, Issued 1/31/2022)*

CONTRACTOR shall ensure that all construction traffic enters and exits Forest Park from the north park entrance at the signaled intersection of State Road 19/Cicero Road and Field Drive.

[END OF SECTION]

Indiana Transportation Museum Site Remediation
Contract: EN-322-09

ITEMIZED PROPOSAL

		BASE BID			
Item No.	**Description**	**Quantity**	**Unit**	**Unit Price**	**Extended Price**
1.0	Project Mobilization/Demobilization	1	LSUM		
2.0	Project SWPPP Implementation and Maintenance	1	LSUM		
3.0	Third Party Relocation of Concrete Monument	1	LSUM		
4.0	Project Clearing, Demolition, and Transportation and Disposal of Associated Waste	1	LSUM		
5.0	Construction of Project Drainage System	1	LSUM		
6.0	Storm Water Quality Unit Access Drive	1	LSUM		
7.0	Green Barn Service Drive	1	LSUM		
8.0	Project Miscellaneous Costs Not Included in Other Line Items	1	LSUM		
9.0	Project Stabilization (topsoil, seed, sod, straw, fertilizer, erosion control blanket)	1	LSUM		
10.0	16' Wide Double Leaf Chain Link Fence Gate, Vinyl Coated	1	LSUM		
11.0	28' Wide Double Leaf Security Pipe Gate, Vinyl or Powder Coated	1	LSUM		
12.0	Excavation, Transportation and Disposal of Coal Ash/Contaminated Soil (on-Site)	19,800	TON		
13.0	Provide, Place, and Compact Backfill Material to Grade (on-Site)	13,200	TON		
14.0	Provide, Place, and Compact Backfill Material to Grade – Riverside Stockpile (on-Site)	8,800	CY		
15.0	Provide, Place, and Compact No. 4 Limestone Aggregate Backfill Material (on-Site)	1,100	TON		
16.0	Provide, Place, and Compact No. 53 Aggregate Backfill Material (on-Site in north of Green Barn)	120	TON		
Per Addendum 1, Issued 1/31/2022	17.0	*18' Wide Double Swing Gate, Vinyl Coated*	*1*	LSUM		
Per Addendum 1, Issued 1/31/2022	18.0	*PVC-Coated Chain Link Fence*	*718*	LF		
	19.0	Pump, Transport, and Dispose of Liquid Waste from Maintenance Pit (on-Site)	5,000	GAL		

Base Bid: Total Estimated Construction Costs = _____ **(Figures)**

_____ **(Words)**

These prices are the sum of the unit prices multiplied by the quantity for each item. Whereas any mathematical computation er ror exists causing Total Estimated Construction Costs to be stated incorrectly, the Undersigned acknowledges that the unit prices , as stated above, shall govern.

The above stated items covers all work, labor, equipment, and manpower to complete project. Prospective Bidder accepts and agrees to competed the project in accordance to Contract Information Book and Construction Plans.

Respectfully submitted,

_____
Contractor
(Individual) (Partnership) or (Corporation)

By: (SIGNED) _____
By: (TYPED) _____
Title: _____
Address: _____

_____
Date: _____

The above Bidder acknowledges receipt of Addenda Nos._____

Note: The legal status of the Bidder, whether as an individual, partnership, or corporation must be indicated as above, and all pertinent information as required by the Specifications must be furnished.

CITY OF NOBLESVILLE, INDIANA
INDIANA TRANSPORTATION MUSEUM SITE REMEDIATION

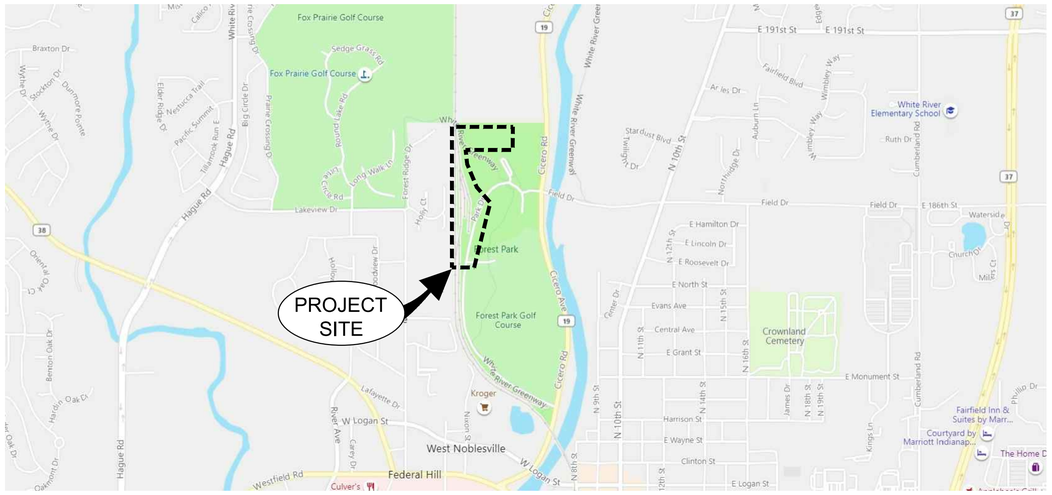
PROJECT NO. EN-322-09

FOREST PARK
825 PARK DRIVE
NOBLESVILLE, INDIANA

JANUARY 19, 2022

1

SHEET INDEX



LATEST EDITION OF THE CITY OF NOBLESVILLE, INDIANA SPECIFICATIONS AND STANDARDS DETAILS TO BE USED WITH THESE PLANS

KERAMIDA
GLOBAL EHS & SUSTAINABILITY SERVICES
401 North College Avenue
Indianapolis, IN 46202
317-685-6608 (Phone)
317-685-6610 (Fax)
www.keramida.com

IN ASSOCIATION WITH:
LEHMAN & LEHMAN
Transforming Horizons
LANDSCAPE ARCHITECTS • PLANNERS • PLACEMAKERS
510 LINCOLNWAY EAST, SUITE C
MISHAWAKA, IN 46544
TEL: 574.257.0255
www.lehmanandlehman.com

STATE OF INDIANA
MICHAEL J. DEVIR
PE 10000147
INDIANAPOLIS
INDIANA
PROFESSIONAL ENGINEER

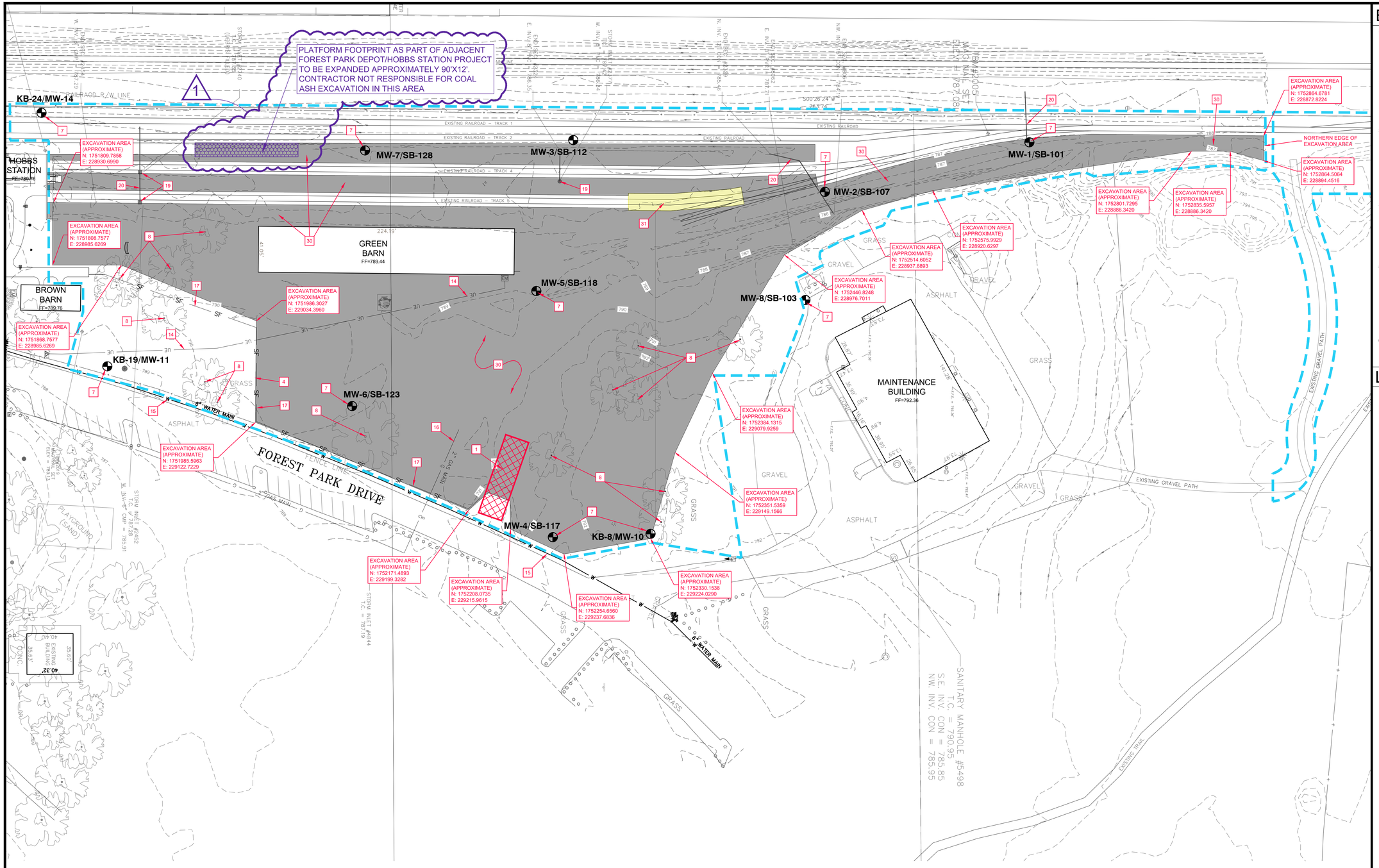
1.19.22

MICHAEL J. DEVIR, PE
PROFESSIONAL ENGINEER
STATE OF INDIANA NO. 10000147

MICHAEL J. BULTINCK
REGISTERED
No. 20400089
STATE OF INDIANA
LANDSCAPE ARCHITECT

1.19.22

MICHAEL J. BULTINCK, PLA
REGISTERED LANDSCAPE ARCHITECT
STATE OF INDIANA NO. 20400089



EXCAVATION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE EXCAVATION OF THE COAL ASH AND CONTAMINATED SOIL AS SHOWN IN THE PLANS. COAL ASH MAY BE ENCOUNTERED OUTSIDE OF THE AREA OF EXCAVATION SHOWN. THE MAJORITY OF THE COAL ASH APPEARS TO BE LIMITED TO THE SURFACE (0-2 FEET); HOWEVER, THE DEPTH IS NOT CONSISTENT ACROSS THE SITE. THE THICKNESS OF THE COAL ASH VARIES ACROSS THE SITE FROM A COUPLE OF INCHES TO FIVE FEET OR MORE AND IS MIXED WITH OTHER FILL MATERIAL AND CONTAMINATED SOIL AT SOME LOCATIONS.

2. THE COAL ASH IS DISTINCT IN APPEARANCE AND CAN BE VISUALLY IDENTIFIED DURING THE EXCAVATION PROCESS. FIELD IDENTIFICATION OF THE COAL ASH WILL BE USED IN CONJUNCTION WITH THE DELINEATION DATA FROM THE SITE INVESTIGATIONS. ENGINEER WILL PROVIDE DAILY OVERSIGHT DURING THE WORK. THE CONTRACTOR MUST MEET WITH THE ENGINEER AND THE CITY OF NOBLESVILLE AT THE BEGINNING OF EACH DAY PRIOR TO COMMENCEMENT OF WORK TO DISCUSS THE EXCAVATION PLAN FOR THE DAY.

3. IN ORDER TO DETERMINE THE EXTENT AND DEPTH OF THE COAL ASH, THE CONTRACTOR MUST INITIALLY REMOVE NO MORE THAN THE TOP FOOT OF THE SURFACE MATERIAL AND CONTINUE EXCAVATING SIX-INCH LIFTS UNTIL COAL ASH IS NO LONGER VISIBLE OR AS DIRECTED BY ENGINEER. THE CONTRACTOR MUST MAKE EVERY EFFORT TO MINIMIZE THE COMMINGLING OF CLEAN SOIL (I.E. SOIL THAT HAS NOT COME INTO CONTACT WITH COAL ASH) WITH THE COAL ASH. EXCAVATED CLEAN SOIL MUST BE SEGREGATED FROM THE COAL ASH/CONTAMINATED SOIL AND STOCKPILED. CLEAN SOIL STOCKPILES MUST BE MANAGED IN ACCORDANCE WITH THE SWPPP. ENGINEER WILL COLLECT SAMPLES OF THE CLEAN SOIL FOR LABORATORY ANALYSIS TO DETERMINE IF THE SEGREGATED SOIL CAN BE USED AS CLEAN BACKFILL.

4. THE EXCAVATION WILL REQUIRE THE REMOVAL OF COAL ASH IN THE AREAS BETWEEN THE RAILROAD TRACKS AS SHOWN IN THE PLANS. THERE IS ALSO AN AREA OF SANDBLASTING WASTE WITHIN THE TRACKS THAT MUST BE REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR MAKING SURE THE RAILROAD TRACKS AND TIES ARE NOT DAMAGED, AND THAT THE INTEGRITY OF THE RAILROAD TRACKS IS NOT COMPROMISED. THE EXCAVATION OF THE COAL ASH/CONTAMINATED SOIL CANNOT EXTEND BELOW THE BOTTOM OF THE RAILROAD TIES OF THE ACTIVE RAILROAD TRACKS (I.E. ALL TRACKS WITH THE EXCEPTION OF WHAT IS DESIGNATED FOR REMOVAL).

5. THE CONTRACTOR IS RESPONSIBLE FOR BARRICADING EXCAVATION AREA(S) ACCORDING TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL RULES, REGULATIONS, AND ORDINANCES WHILE NOT ATTENDED AND AT THE END OF THE WORKDAY IF THE EXCAVATION AREAS ARE NOT BACKFILLED. AREAS OF EXCAVATION CANNOT BE BACKFILLED UNTIL CONFIRMATION SAMPLE LABORATORY RESULTS HAVE BEEN RECEIVED, WHICH WILL TAKE 7-10 DAYS, AND CLEARED BY ENGINEER. ENGINEER WILL BE RESPONSIBLE FOR THE COLLECTION OF CONFIRMATION SOIL SAMPLES AND THE SAMPLING AND ANALYSIS REQUIRED FOR THE WASTE PROFILE. ENGINEER WILL WORK WITH THE CONTRACTOR TO OBTAIN THE REQUIRED WASTE PROFILE FOR DISPOSAL OF THE EXCAVATED COAL ASH AND CONTAMINATED SOIL.

6. IN THE EVENT SOMETHING UNANTICIPATED IS ENCOUNTERED DURING EXCAVATION ACTIVITIES OUTSIDE THE SCOPE OF WORK, THE CONTRACTOR MUST IMMEDIATELY STOP ALL WORK WITHIN THE AREA AND NOTIFY THE DESIGNATED ENGINEER AND CITY OF NOBLESVILLE REPRESENTATIVE(S).

LEGEND

- ANTICIPATED PROJECT LIMITS (LIMITS MAY FLUCTUATE)
- 1 CONSTRUCTION ENTRANCE PER INDIANA STORMWATER MANUAL
- 7 EXISTING MONITORING WELL TO REMAIN. COORDINATE RIM ADJUSTMENTS WITH ENGINEER. PROTECT IN PLACE — MW-8/SB-103
- 8 EXISTING TREE TO REMAIN. ADJUST GRADING AS NECESSARY TO PROTECT CRITICAL ROOT ZONE
- 14 EXISTING ELECTRIC LINE TO REMAIN. LOCATE AND PROTECT IN PLACE
- 15 EXISTING WATER LINE TO REMAIN. LOCATE AND PROTECT IN PLACE
- 16 EXISTING GAS LINE TO REMAIN. LOCATE AND PROTECT IN PLACE
- 17 SILT FENCE — SF —
- 19 EXISTING STORM INLET TO REMAIN. PROTECT IN PLACE
- 20 EXISTING STORM SEWER TO REMAIN. PROTECT IN PLACE
- 30 COAL ASH EXCAVATION/REMOVAL AREA (APPROXIMATE)
- 31 SANDBLASTING WASTE EXCAVATION/REMOVAL AREA (APPROXIMATE)

SITE PLAN

SCALE 1"=40'-0"

PROPOSED SITE IMPROVEMENTS BASED ON SITE SURVEY AND GIS DATA PREPARED AND PROVIDED BY OTHERS. LEHMAN & LEHMAN, INC. ASSUMES NO RESPONSIBILITY FOR THE CONTENT OR ACCURACY OF THE TOPOGRAPHY, VEGETATION AND INFRASTRUCTURE LOCATIONS. VERIFICATION OF EXISTING CONDITIONS IS HIGHLY RECOMMENDED.

STATE OF INDIANA — MICHAEL J. DEVIR — PE 10000147 — INDIANAPOLIS, INDIANA — PROFESSIONAL ENGINEER — 1.19.22

MICHAEL J. BUTTICK — REGISTERED — No. 20400089 — STATE OF INDIANA — LANDSCAPE ARCHITECT — 1.19.22

Revisions:

1.27.22	⚠1 Addendum #1

KERAMIDA GLOBAL EHS & SUSTAINABILITY SERVICES

In Association with: LEHMAN & LEHMAN Transforming Horizons

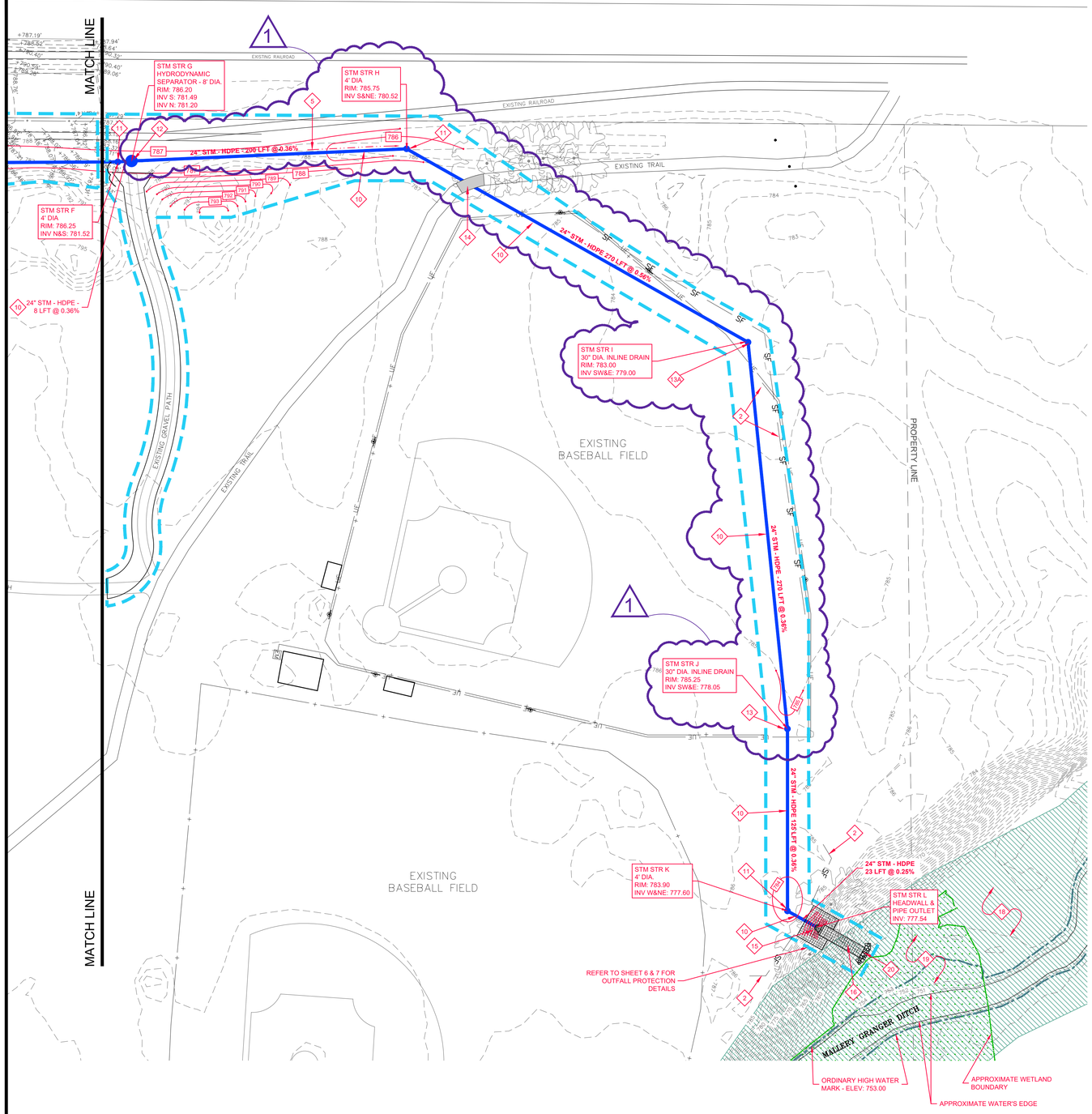
Project: Indiana Transportation Museum Site Remediation
Project No. EN-322-09
825 Park Drive
Noblesville, IN

	Drawn By: M.J.B.
Project Number: 17432	Approved By: S.G.G.
Date: January 19, 2022	File No.: 17432-Base-1SF

Sheet 5

On-Site Excavation Plan

C:\Lehman General\2021-023 ITM Drainage Master Plan



SITE PLAN

SCALE 1"=40'-0"

DRAINAGE STRUCTURE CHART

STRUCTURE NO.	STRUCTURE TYPE	RIM ELEVATION	INVERT ELEVATION	PIPE REQUIREMENTS	NORTHING EASTING
A	PIPE INLET	N/A	IE: 787.25	160 LFT 12" STM - RCP TO STR C @ 2.34%	N:1752194.6315 E: 229042.1278
B	2'x2' SQ. CATCH BASIN	786.75	IE NW: 783.75 IE S: 783.95	100 LFT 12" STM - RCP TO STR C @ 0.25% 6" STM - PERF. HDPE FROM UNDERDRAIN	N: 1752252.6762 E: 228945.7249
C	4' DIA. CATCH BASIN	788.25	IE SW&N: 783.50 IE S: 783.50	150 LFT 18" STM - HDPE TO STR D @ 0.36%	N: 1752252.6762 E: 228945.7249
D	4' DIA. CATCH BASIN	787.50	IE W: ±784.40 IE N&S: 782.96	200 LFT 24" STM - HDPE TO STR E @ 0.36% 12" STM - RCP FROM EXISTING DRAIN	N: 1752484.4678 E: 228932.6061
E	4' DIA. CATCH BASIN	786.75	IE N&S: 782.24	200 LFT 24" STM - HDPE TO STR F @ 0.36% 24" STM - HDPE FROM STR D	N:1752680.3914 E: 228886.1253
F	4' DIA. CATCH BASIN	786.25	IE N&S: 781.52	8 LFT 24" STM - HDPE TO STR G @ 0.36% 24" STM - HDPE FROM STR E	N: 1752880.2079 E: 228885.1573
G	8' DIA. HYDRODYNAMIC SEPARATOR BMP SOLID LID	786.20	IE S: 781.49 IE N: 781.20	190 LFT 24" STM - HDPE TO STR H @ 0.36% 24" STM - HDPE FROM STR F	N: 1752889.6886 E: 228884.5523
H	4' DIA. CATCH BASIN	785.75	IE S&NE: 780.52	270 LFT 24" STM - HDPE TO STR I @ 0.56% 24" STM - HDPE FROM STR G	N: 1753079.5035 E: 228876.1667
I	2'-6" DIA INLINE DRAIN	783.00	IE SW&E: 779.00	270 LFT 24" STM - HDPE TO STR J @ 0.36% 24" STM - HDPE FROM STR H	N: 1753315.0437 E: 229009.6260
J	2'-6" DIA INLINE DRAIN	785.25	IE SW&E: 778.05	125 LFT 24" STM - HDPE TO STR K @ 0.36% 24" STM - HDPE FROM STR I	N: 1753342.2152 E: 229276.3756
K	4' DIA. CATCH BASIN	783.90	IE W&NE: 777.60	23 LFT 24" STM - HDPE TO STR L @ 0.25% 24" STM - HDPE FROM STR J	N: 1753342.2152 E: 229402.0533
L	HEADWALL AND PIPE OUTLET	N/A	IE: 777.54	24" STM - HDPE FROM STR K	N: 1753362.3312 E: 229413.2176
M	2'x2' SQ. CATCH BASIN SOLID LID	787.75	IE N: 784.85	260 LFT 6" STM - PERF. HDPE TO STR B @ 0.35%	N:1751993.0660 E: 228939.2652

GRADING & DRAINAGE NOTES

1. PROJECT LIMIT LINE DENOTES APPROXIMATE AREA OF EARTHWORK, CLEARING AND GENERAL SITE WORK. ADJACENT USE OF THE PARK, INCLUDING, PARKING AND TRAFFIC CIRCULATION SHALL NOT BE OBSTRUCTED BY CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NOBLESVILLE AND STATE OF INDIANA PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF VEHICULAR AND PEDESTRIAN TRAFFIC MEASURES PRIOR TO COMMENCING WORK. ALL TRAFFIC MEASURES MUST BE APPROVED BY THE CITY OF NOBLESVILLE.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS AND DEPTH OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
5. REPAIR/REPLACE ANY EXISTING IMPROVEMENTS OR STRUCTURES DAMAGED BY CONSTRUCTION ACTIVITY AT NO ADDITIONAL COST TO THE OWNER.
6. DO NOT SCALE DRAWINGS - USE WRITTEN DIMENSIONS ONLY.
7. ALL PROJECT WORK TO BE IN ACCORDANCE WITH CITY, STATE AND FEDERAL STANDARDS AND REQUIREMENTS.
8. CONTRACTOR IS OBLIGATED TO FIELD VERIFY DIMENSIONS AND LAYOUT IN THE FIELD AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS.
9. ALL STORM SEWER WORK SHALL BE INSTALLED PER CITY OF NOBLESVILLE STANDARDS, INCLUDING BUT NOT LIMITED TO EXCAVATION, BEDDING, COMPACTION, BACKFILL, ETC.

LEGEND

- ANTICIPATED PROJECT LIMITS (LIMITS MAY FLUCTUATE)
- 1 CONSTRUCTION ENTRANCE PER INDIANA STORMWATER MANUAL
- 2 SILT FENCE — SF —
- 3 EXISTING MONITORING WELL TO REMAIN. ADJUST RIM AS NECESSARY - PROTECT IN PLACE **MW-8/SB-103**
- 4 EXISTING STORM SEWER TO REMAIN. CUT EASTERN MOST 6' OF PIPE, REMOVE DEBRIS WITHIN PIPE AND CONNECT TO NEW CATCH BASIN/INLET
- 5 NEW DRAINAGE SWALE/PATH OF FLOW. ENSURE POSITIVE FLOW
- 6 NEW FLARED END SECTION WITH RODENT GUARD AND GLACIAL STONE OUTLET PROTECTION. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 7 NEW SWALE WITH UNDERDRAIN. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 8 NEW 12" RCP STORM SEWER
- 9 NEW 18" DUAL-WALL HDPE STORM SEWER
- 10 NEW 24" DUAL-WALL HDPE STORM SEWER
- 11 NEW PRECAST STORM INLET/CATCH BASIN STRUCTURE WITH BEEHIVE GRATE. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 12 NEW 8' DIAMETER HYDRODYNAMIC SEPARATOR. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 13 NEW HDPE STORM INLINE DRAIN WITH FLAT PEDESTRIAN STYLE GRATE. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 13A NEW HDPE STORM INLINE DRAIN WITH DOME STYLE GRATE. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 14 SAW CUT AND REMOVE EXISTING ASPHALT PAVEMENT FOR INSTALLATION OF A NEW 12" STORM SEWER. REPLACE REMOVED TRAIL SECTION WITH 4" THICK CONCRETE PAVEMENT. REFER TO OFF-SITE IMPROVEMENT PLAN FOR ADDITIONAL INFORMATION
- 15 NEW CONCRETE HEADWALL. RESTORE GRADE ABOVE HEADWALL PRIOR TO PLACING FLEXAMAT. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 16 NEW FLEXAMAT BANK STABILIZATION BMP. EXTEND DOWN THE SLOPE AND WRAP AROUND TOP OF HEADWALL. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION
- 17 NEW GRAVEL SERVICE DRIVE. REFER TO SITE IMPROVEMENT PLAN FOR ADDITIONAL INFORMATION
- 18 FLOODWAY BOUNDARY PER CITY OF NOBLESVILLE GIS
- 19 WETLAND BOUNDARY PER CITY OF NOBLESVILLE GIS
- 20 GLACIAL STONE/BOULDER ENERGY DISSIPATER AT END OF FLEXAMAT BANK STABILIZATION BMP
- 21 NEW PRECAST STORM INLET/CATCH BASIN STRUCTURE WITH SOLID LID AT BEGINNING OF SWALE UNDERDRAIN. REFER TO GRADING & DRAINAGE DETAIL SHEET FOR ADDITIONAL INFORMATION

PROPOSED SITE IMPROVEMENTS BASED ON SITE SURVEY AND GIS DATA PREPARED AND PROVIDED BY OTHERS. LEHMAN & LEHMAN, INC. ASSUMES NO RESPONSIBILITY FOR THE CONTENT OR ACCURACY OF THE TOPOGRAPHY, VEGETATION AND INFRASTRUCTURE LOCATIONS. VERIFICATION OF EXISTING CONDITIONS IS HIGHLY RECOMMENDED.

STATE OF INDIANA — MICHAEL J. DEVER — PE 10000147 — INDIANAPOLIS, INDIANA — PROFESSIONAL ENGINEER — 1.19.22

STATE OF INDIANA — MICHAEL J. BULTINCK — REGISTERED — No. 20400089 — LANDSCAPE ARCHITECT — 1.19.22

Revisions:

1.27.22	⚠1 Addendum #1

KERAMIDA GLOBAL EHS & SUSTAINABILITY SERVICES

In Association with: LEHMAN & LEHMAN Transforming Horizons

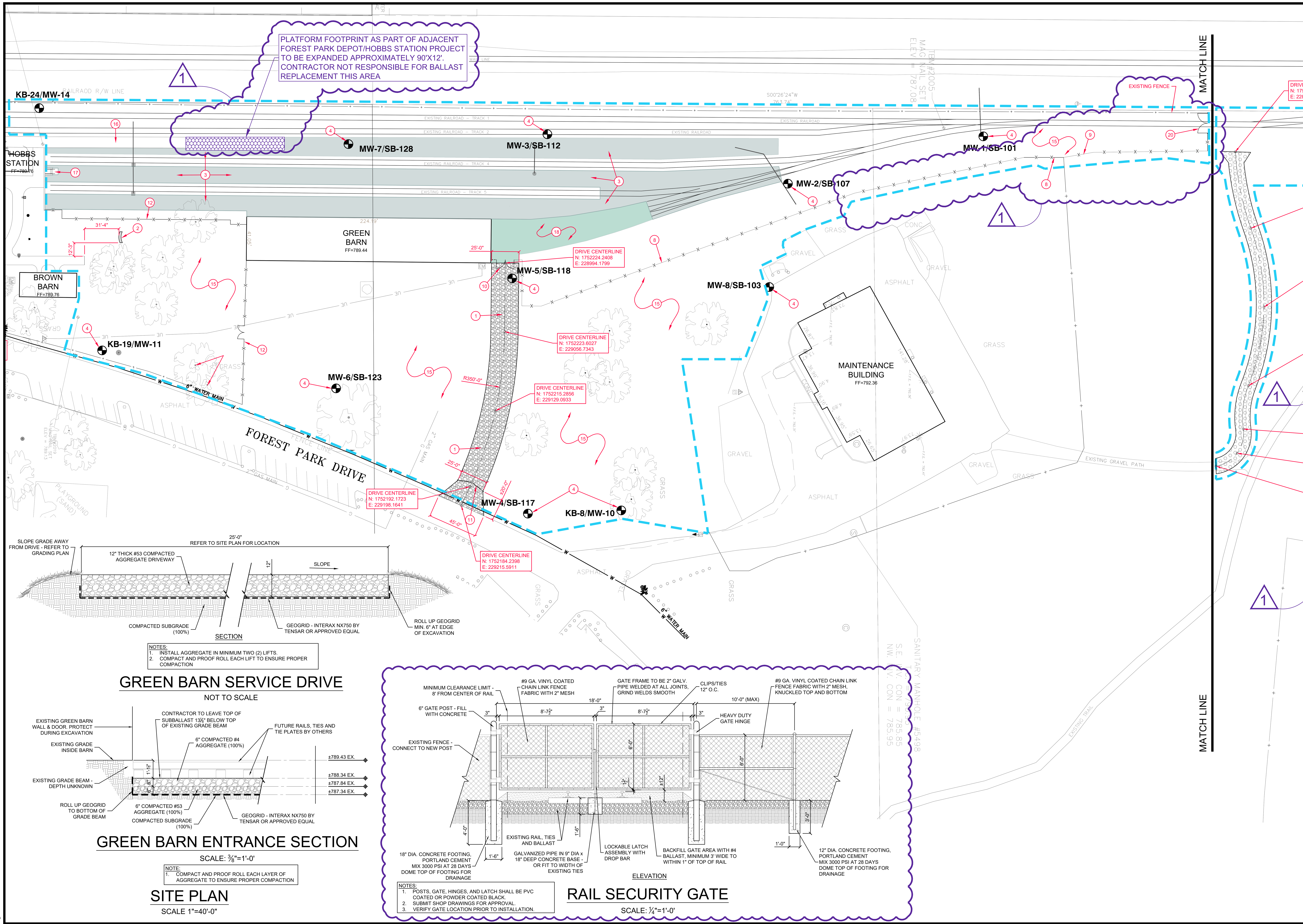
Project: Indiana Transportation Museum Site Remediation
Project No. EN-322-09
825 Park Drive
Noblesville, IN

	Drawn By: M.J.B.
Project Number: 17432	Approved By: S.G.G.
Date: January 19, 2022	File No.: 17432-Base-1SF

Sheet 7

Off-Site Grading & Drainage Plan

C:\Lehman Gsteen\2021\023 ITM Drainage Master Plan



NOTES:
1. INSTALL AGGREGATE IN MINIMUM TWO (2) LIFTS.
2. COMPACT AND PROOF ROLL EACH LIFT TO ENSURE PROPER COMPACTION

GREEN BARN SERVICE DRIVE

NOT TO SCALE

GREEN BARN ENTRANCE SECTION

SCALE: ⅜"=1'-0'

NOTE:
1. COMPACT AND PROOF ROLL EACH LAYER OF AGGREGATE TO ENSURE PROPER COMPACTION

SITE PLAN

SCALE 1"=40'-0"

NOTES:
1. POSTS, GATE, HINGES, AND LATCH SHALL BE PVC COATED OR POWDER COATED BLACK.
2. SUBMIT SHOP DRAWINGS FOR APPROVAL.
3. VERIFY GATE LOCATION PRIOR TO INSTALLATION.

RAIL SECURITY GATE

SCALE: ¼"=1'-0'

SITE PLAN NOTES

1. PROJECT LIMIT LINE DENOTES APPROXIMATE AREA OF EARTHWORK, CLEARING AND GENERAL SITE WORK. ADJACENT USE OF THE PARK, INCLUDING, PARKING AND TRAFFIC CIRCULATION SHALL NOT BE OBSTRUCTED BY CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NOBLESVILLE AND STATE OF INDIANA PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF VEHICULAR AND PEDESTRIAN TRAFFIC MEASURES PRIOR TO COMMENCING WORK. ALL TRAFFIC MEASURES MUST BE APPROVED BY THE CITY OF NOBLESVILLE.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS AND DEPTH OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
5. REPAIR/REPLACE ANY EXISTING IMPROVEMENTS OR STRUCTURES DAMAGED BY CONSTRUCTION ACTIVITY AT NO ADDITIONAL COST TO THE OWNER.
6. DO NOT SCALE DRAWINGS - USE WRITTEN DIMENSIONS ONLY.
7. ALL PROJECT WORK TO BE IN ACCORDANCE WITH CITY, STATE AND FEDERAL STANDARDS AND REQUIREMENTS.
8. CONTRACTOR IS OBLIGATED TO FIELD VERIFY DIMENSIONS AND LAYOUT IN THE FIELD AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS.

LEGEND

ANTICIPATED PROJECT LIMITS (LIMITS MAY FLUCTUATE)

1. NEW GREEN BARN SERVICE DRIVE - 12" THICK COMPACTED #53 AGGREGATE SERVICE WITH GEOGRID UNDERLINING. PROVIDE SMOOTH TRANSITION AT EXISTING PAVEMENT
2. RELOCATION OF EXISTING CONCRETE SIGN. COORDINATE LOCATION WITH ENGINEER AND THE CITY OF NOBLESVILLE. DIMENSIONS ARE APPROXIMATE
3. BALLAST (#4 LIMESTONE) REPLACEMENT AREA, MIN. 6" THICK (APPROXIMATE) ABOVE FINISHED SUBGRADE
4. EXISTING MONITORING WELL TO REMAIN. PROTECT IN PLACE — MW-8/SB-103
5. 4" THICK CONCRETE PAVEMENT TRAIL PATCH, ±150 SF
6. REPLACED BASEBALL FIELD FENCE. REPLACE WITH SALVAGED FENCE OR INSTALL NEW FENCE TO MATCH, ±8' HEIGHT
7. CONCRETE HEADWALL. REFER TO GRADING AND DRAINAGE PLAN AND DRAINAGE DETAILS FOR ADDITIONAL INFORMATION
8. NEW 6' VINYL COATED CHAIN LINK FENCE. FENCE LAYOUT MAY BE ADJUSTED TO ACCOMMODATE NEW AND EXISTING TOPOGRAPHY. TIE NEW FENCE INTO EXISTING FENCE
9. ~~NEW 6' STANDARD GALVANIZED CHAIN LINK FENCE. FENCE LAYOUT MAY BE ADJUSTED TO ACCOMMODATE NEW AND EXISTING TOPOGRAPHY. TIE NEW FENCE INTO EXISTING FENCE~~
10. NEW 16' WIDE, DOUBLE LEAF CHAIN LINK SWING GATE
11. NEW 28' WIDE, DOUBLE LEAF PIPE SECURITY GATE
12. NEW FENCING BY OTHERS AS PART OF THE FOREST PARK DEPOT PROJECT
13. FLOOD BOUNDARY PER CITY OF NOBLESVILLE GIS
14. WETLAND BOUNDARY PER CITY OF NOBLESVILLE GIS
15. LAWN RESTORATION AREA. REFER TO STABILIZATION PLAN FOR ADDITIONAL INFORMATION
16. EXISTING PLATFORM AS PART OF THE FOREST PARK DEPOT/HOBBS STATION PROJECT. PROTECT IN PLACE
17. EXISTING STAIRS AS AS PART OF THE FOREST PARK DEPOT/HOBBS STATION PROJECT. PROTECT IN PLACE
18. SUBBALLST (#53 LIMESTONE), 6" THICK AND BALLAST (#4 LIMESTONE), WITH GEOGRID (APPROXIMATE). REFER TO GREEN BARN ENTRANCE SECTION DETAIL, SHEET 10 FOR ADDITIONAL INFORMATION
19. NEW BMP SERVICE DRIVE - 6" THICK COMPACTED #53 AGGREGATE. SALVAGED BALLAST MAY BE USED AS A BASE LAYER, BUT MINIMUM 4" OF #53 TOP FINISH LAYER
20. NEW 18' WIDE VINYL COATED RAIL SECURITY GATE. REFER TO DETAIL SHEET 10. REMOVE EXISTING GATE AND FENCE - EAST SIDE ONLY

PROPOSED SITE IMPROVEMENTS BASED ON SITE SURVEY AND GIS DATA PREPARED AND PROVIDED BY OTHERS. LEHMAN & LEHMAN, INC. ASSUMES NO RESPONSIBILITY FOR THE CORRECT OR ACCURACY OF THE TOPOGRAPHY, VEGETATION AND INFRASTRUCTURE LOCATIONS. VERIFICATION OF EXISTING CONDITIONS IS HIGHLY RECOMMENDED.

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STATE OF INDIANA — MICHAEL J. DEVIR — PE 10000147 — PROFESSIONAL ENGINEER — 1.19.22

MICHAEL J. BULTINCK — REGISTERED LANDSCAPE ARCHITECT — No. 20400089 — STATE OF INDIANA — 1.19.22

Revisions:	
1.27.22	1 Addendum #1

KERAMIDA GLOBAL EHS & SUSTAINABILITY SERVICES
In Association with:
LEHMAN & LEHMAN Transforming Horizons

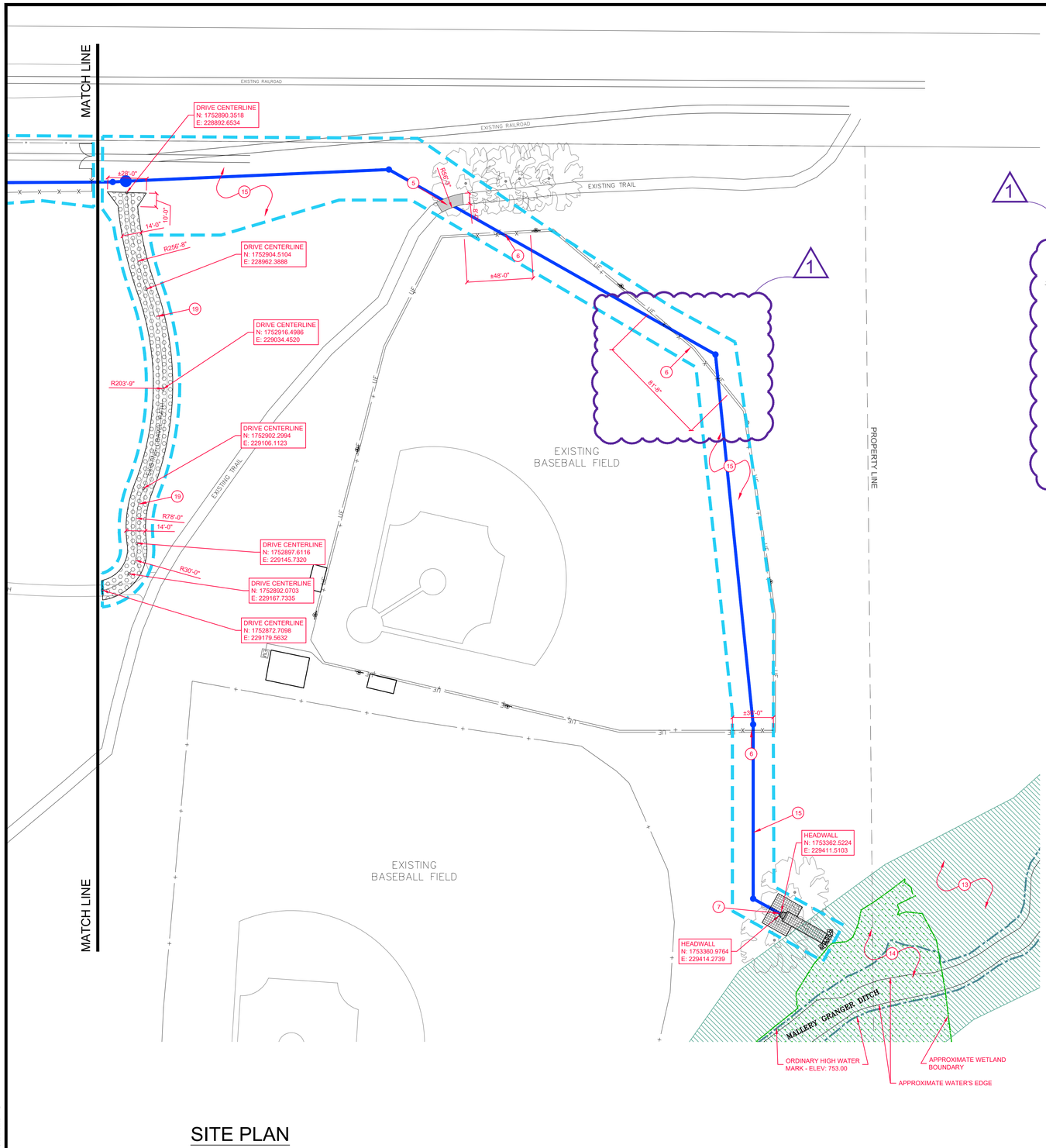
Project: Indiana Transportation Museum Site Remediation
Project No. EN-322-09
825 Park Drive
Noblesville, IN

Project Number: 17432	Drawn By: M.J.B.
Date: January 19, 2022	Approved By: S.G.G.
	File No.: 17432-Base-1SF

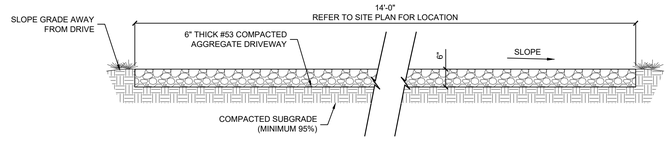
Sheet 10

On-Site Improvement Plan & Details

C:\Lehman General\2021-023 ITM Drainage Master Plan



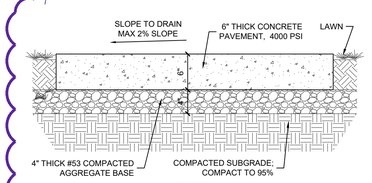
SITE PLAN
SCALE 1"=40'-0"



SECTION

NOTES:
1. CLEAN, SALVAGED BALLAST MAY BE USED AS A BASE COURSE OF THE DRIVE BUT SHALL NOT EXCEED 4" THICKNESS.
2. TOP 2"-3" SHALL BE #53 COMPACTED RECYCLED AGGREGATE.
3. PROOF ROLL AGGREGATE TO ENSURE PROPER COMPACTION.

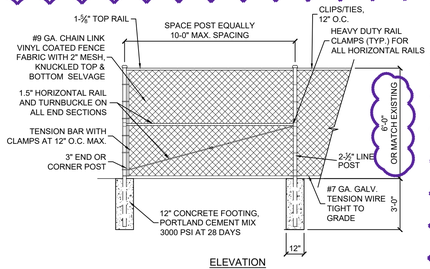
BMP SERVICE DRIVE
NOT TO SCALE



SECTION

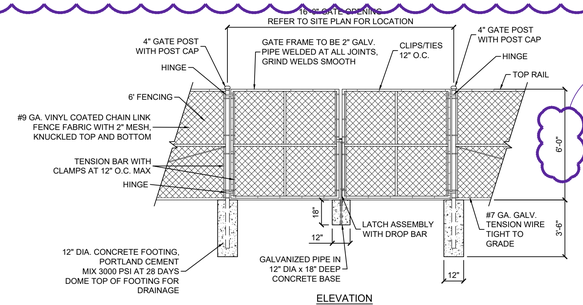
NOTES:
1. ALL CONCRETE PAVEMENT SHALL BE CLASS "A" CONCRETE
2. CONCRETE PAVEMENT SHALL BE 4,000 PSI AT 28 DAYS
3. JOINTS MAY BE SAWN OR TOOLED
4. CONTRACTION JOINTS ±6' O.C.
5. ALL CONCRETE EDGES SHALL BE TOOLED.

CONCRETE PAVEMENT
NOT TO SCALE



ELEVATION

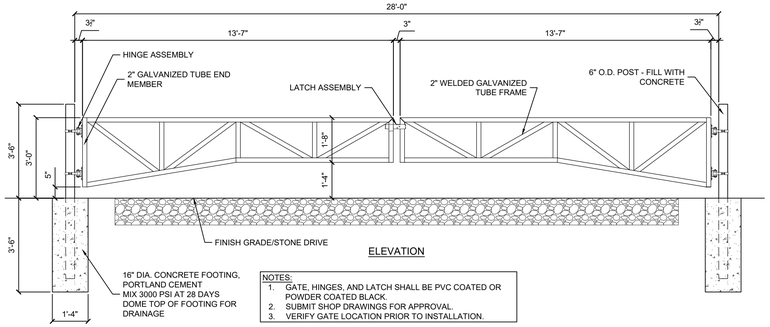
FENCING
NOT TO SCALE



ELEVATION

NOTE:
VERIFY GATE LOCATION PRIOR TO INSTALLATION

DOUBLE LEAF SWING GATE
NOT TO SCALE



ELEVATION

NOTES:
1. GATE, HINGES, AND LATCH SHALL BE PVC COATED OR POWDER COATED BLACK.
2. SUBMIT SHOP DRAWINGS FOR APPROVAL.
3. VERIFY GATE LOCATION PRIOR TO INSTALLATION.

DOUBLE LEAF PIPE SECURITY GATE
NOT TO SCALE

SITE PLAN NOTES

1. PROJECT LIMIT LINE DENOTES APPROXIMATE AREA OF EARTHWORK, CLEARING AND GENERAL SITE WORK. ADJACENT USE OF THE PARK, INCLUDING, PARKING AND TRAFFIC CIRCULATION SHALL NOT BE OBSTRUCTED BY CONSTRUCTION ACTIVITIES.
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8. CONTRACTOR IS OBLIGATED TO FIELD VERIFY DIMENSIONS AND LAYOUT IN THE FIELD AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS.

LEGEND

- ANTICIPATED PROJECT LIMITS (LIMITS MAY FLUCTUATE)
- (1) NEW GREEN BARN SERVICE DRIVE - 12" THICK COMPACTED #53 AGGREGATE SERVICE WITH GEOGRID UNDERLINING. PROVIDE SMOOTH TRANSITION AT EXISTING PAVEMENT
- (2) RELOCATION OF EXISTING CONCRETE SIGN. COORDINATE LOCATION WITH ENGINEER AND THE CITY OF NOBLESVILLE. DIMENSIONS ARE APPROXIMATE
- (3) BALLAST (#4 LIMESTONE) REPLACEMENT AREA, MIN. 6" THICK (APPROXIMATE) ABOVE FINISHED SUBGRADE
- (4) EXISTING MONITORING WELL TO REMAIN. PROTECT IN PLACE — MW-8/SB-103
- (5) 4" THICK CONCRETE PAVEMENT TRAIL PATCH, ±150 SF
- (6) REPLACED BASEBALL FIELD FENCE. REPLACE WITH SALVAGED FENCE OR INSTALL NEW FENCE TO MATCH, ±6' HEIGHT
- (7) CONCRETE HEADWALL. REFER TO GRADING AND DRAINAGE PLAN AND DRAINAGE DETAILS FOR ADDITIONAL INFORMATION
- (8) NEW 6' VINYL COATED CHAIN LINK FENCE. FENCE LAYOUT MAY BE ADJUSTED TO ACCOMMODATE NEW AND EXISTING TOPOGRAPHY. TIE NEW FENCE INTO EXISTING FENCE
- (9) ~~NEW 6' STANDARD GALVANIZED CHAIN LINK FENCE. FENCE LAYOUT MAY BE ADJUSTED TO ACCOMMODATE NEW AND EXISTING TOPOGRAPHY. TIE NEW FENCE INTO EXISTING FENCE.~~
- (10) NEW 16' WIDE, DOUBLE LEAF CHAIN LINK SWING GATE
- (11) NEW 28' WIDE, DOUBLE LEAF PIPE SECURITY GATE
- (12) NEW FENCING BY OTHERS AS PART OF THE FOREST PARK DEPOT PROJECT
- (13) FLOOD BOUNDARY PER CITY OF NOBLESVILLE GIS
- (14) WETLAND BOUNDARY PER CITY OF NOBLESVILLE GIS
- (15) LAWN RESTORATION AREA. REFER TO STABILIZATION PLAN FOR ADDITIONAL INFORMATION
- (16) EXISTING PLATFORM AS PART OF THE FOREST PARK DEPOT/HOBBS STATION PROJECT. PROTECT IN PLACE
- (17) EXISTING STAIRS AS AS PART OF THE FOREST PARK DEPOT/HOBBS STATION PROJECT. PROTECT IN PLACE
- (18) SUBBALLST (#53 LIMESTONE), 6" THICK AND BALLAST (#4 LIMESTONE), WITH GEOGRID (APPROXIMATE). REFER TO GREEN BARN ENTRANCE SECTION DETAIL, SHEET 10 FOR ADDITIONAL INFORMATION
- (19) NEW BMP SERVICE DRIVE - 6" THICK COMPACTED #53 AGGREGATE. SALVAGED BALLAST MAY BE USED AS A BASE LAYER, BUT MINIMUM 4" OF #53 TOP FINISH LAYER
- (20) NEW 18' WIDE VINYL COATED RAIL SECURITY GATE. REFER TO DETAIL SHEET 10. REMOVE EXISTING GATE AND FENCE - EAST SIDE ONLY

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STATE OF INDIANA — MICHAEL J. DEVER — PE 10000147 — INDIANAPOLIS, INDIANA — PROFESSIONAL ENGINEER — 1.19.22

MICHAEL J. BULTINCK — REGISTERED — No. 20400089 — STATE OF INDIANA — LANDSCAPE ARCHITECT — 1.19.22

Revisions:

1.27.22	⚠1 Addendum #1

KERAMIDA GLOBAL EHS & SUSTAINABILITY SERVICES
In Association with:
LEHMAN & LEHMAN Transforming Horizons

Project: Indiana Transportation Museum Site Remediation
Project No. EN-322-09
825 Park Drive
Noblesville, IN

	Drawn By: M.J.B.
Project Number: 17432	Approved By: S.G.G.
Date: January 19, 2022	File No.: 17432-Base-1SF

Sheet 11

Off-Site Improvement Plan & Details

L:\LL\Projects\2021\2021-023 ITM Drainage Master Plan\DWG

BID FORMS

BID PACKAGE

EN-322-09
INDIANA TRANSPORTATION MUSEUM
SITE REMEDIATION
FOREST PARK
825 PARK DRIVE
NOBLESVILLE, INDIANA

ITEMS

1	Proposal
2	Itemized Proposal
3	Bid Bond
4	Affidavit of Major Suppliers
5	Affidavit of Subcontractors
6	Non-Collusion Affidavit
7	E-Verify Affidavit
8	Form 96 – **to be provided by Bidder**
9	Financial Statement – **to be provided by Bidder**
10	Bidder Qualifications – **to be provided by Bidder** *Pursuant to SP 17 and 18*

PLACE A TAB BY EACH SECTION NOTED ABOVE FOR QUICK REVIEW AT BID OPENING

Bidder:_____

Address:_____

City, State, Zip:_____

Phone:_____

Contact:_____

PROPOSAL

EN-322-09
INDIANA TRANSPORTATION MUSEUM SITE REMEDIATION
FOREST PARK
825 PARK DRIVE
NOBLESVILLE, INDIANA

To the Board of Public Works and Safety, Noblesville, Indiana:

Pursuant to the published "Notice to Bidders", the undersigned has investigated the conditions affecting the cost of the proposed:

INDIANA TRANSPORTATION MUSEUM SITE REMEDIATION
And hereby tenders this bid to construct said project in accordance with the Contract Documents now on file with the City of Noblesville, Indiana, and to furnish all necessary machinery, equipment, tools, labor and other means of construction, and to furnish all material specified in the manner and at the time prescribed as required by the Contract Documents and pursuant to the Payment Bond and Performance Bond to be filed, each in the amount of 100 percent of the Contract price of:

TOTAL BASE BID AMOUNT

_____

_____ Dollars (Words)

_____ Dollars (Figures)

These prices are the sum of the quoted unit prices multiplied by the quantity for each item as shown on the attached Itemized Proposal. Whereas as a mathematical computation error exists on the Itemized Proposal; thus causing the above-stated Bid Amount to be stated incorrectly, the Bidder acknowledges that the unit prices, as stated on the Itemized Proposal, shall govern.

The undersigned further agrees to complete the furnishing and construction of this Contract and be substantially completed and ready for use on or before October 1, 2022.

Enclosed is a certified check to the Board of Public Works and Safety, City of Noblesville, or a Bid Bond binding the undersigned and surety to the Board of Public Works and Safety, City of Noblesville, Indiana, in the amount of:

_____

_____ Dollars (Words)

_____ Dollars (Figures)

which amount is not less than ten percent (10%) of the total bid amount (Base Bid and all Alternate Bids) as set out above, guaranteeing the undersigned will enter into contract for the performance of the work if this Proposal is accepted.

As required by the statutes of the State of Indiana for any bid of $100,000 of more, Questionnaire Form 96 (revised 2013), of the Indiana State Board of Accounts is properly executed and attached hereto. It is hereby agreed that this Proposal shall remain in full force and effect, and may not be withdrawn for a period of 60 days from the date of receiving proposals by the Board of Public Works and Safety, Noblesville, Indiana.

Respectfully submitted,

_____
Contractor

(Individual) (Partnership) or (Corporation)

By: _____

Address: _____

_____

Dated:

_____

The above Bidder acknowledges receipt of Addenda Nos. _____

Note: The legal status of the Bidder, whether as an individual, partnership or corporation must be indicated as above, and all pertinent information as required by the Specifications must be furnished.

Indiana Transportation Museum Site Remediation
Contract: EN-322-09

ITEMIZED PROPOSAL

Item No.	Description	BASE BID Quantity	Unit	Unit Price	Extended Price
1.0	Project Mobilization/Demobilization	1	LSUM		
2.0	Project SWPPP Implementation and Maintenance	1	LSUM		
3.0	Third Party Relocation of Concrete Monument	1	LSUM		
4.0	Project Clearing, Demolition, and Transportation and Disposal of Associated Waste	1	LSUM		
5.0	Construction of Project Drainage System	1	LSUM		
6.0	Storm Water Quality Unit Access Drive	1	LSUM		
7.0	Green Barn Service Drive	1	LSUM		
8.0	Project Miscellaneous Costs Not Included in Other Line Items	1	LSUM		
9.0	Project Stabilization (topsoil, seed, sod, straw, fertilizer, erosion control blanket)	1	LSUM		
10.0	16' Wide Double Leaf Chain Link Fence Gate, Vinyl Coated	1	LSUM		
11.0	28' Wide Double Leaf Security Pipe Gate, Vinyl or Powder Coated	1	LSUM		
12.0	Excavation, Transportation and Disposal of Coal Ash/Contaminated Soil (on-Site)	19,800	TON		
13.0	Provide, Place, and Compact Backfill Material to Grade (on-Site)	13,200	TON		
14.0	Provide, Place, and Compact Backfill Material to Grade – Riverside Stockpile (on-Site)	8,800	CY		
15.0	Provide, Place, and Compact No. 4 Limestone Aggregate Backfill Material (on-Site)	1,100	TON		
16.0	Provide, Place, and Compact No. 53 Aggregate Backfill Material (on-Site in north of Green Barn)	120	TON		
17.0	18' Wide Double Swing Gate, Vinyl Coated	1	LSUM		
18.0	PVC-Coated Chain Link Fence	718	LF		
19.0	Pump, Transport, and Dispose of Liquid Waste from Maintenance Pit (on-Site)	5,000	GAL		

Per Addendum 1, Issued 1/28/2022

Per Addendum 1, Issued 1/28/2022

Base Bid: Total Estimated Construction Costs = _____ **(Figures)**

_____ **(Words)**

These prices are the sum of the unit prices multiplied by the quantity for each item. Whereas any mathematical computation er ror exists causing Total Estimated Construction Costs to be stated incorrectly, the Undersigned acknowledges that the unit prices , as stated above, shall govern.

The above stated items covers all work, labor, equipment, and manpower to complete project. Prospective Bidder accepts and agrees to competed the project in accordance to Contract Information Book and Construction Plans.

Respectfully submitted,

_____
Contractor
(Individual) (Partnership) or (Corporation)

By: (SIGNED) _____
By: (TYPED) _____
Title: _____
Address: _____
_____
Date: _____

The above Bidder acknowledges receipt of Addenda Nos._____

Note: The legal status of the Bidder, whether as an individual, partnership, or corporation must be indicated as above, and all pertinent information as required by the Specifications must be furnished.

CITY OF NOBLESVILLE
BID BOND

BIDDER / CONTRACTOR (Name and address of principal place of business):

SURETY (Name and address of principal place of business):

OWNER City of Noblesville
16 S. 10th Street
Noblesville, Indiana 46060

BID

Bid Due Date: February 8, 2022, 9:00 AM, local time

Project Description: Environmental remediation of the former Indiana Transportation Museum Site due to contamination from historical operation.

("Project"): Indiana Transportation Museum Site Remediation, EN-322-09

BOND

Bond Number:

Date: (Not earlier than

Bid due date):

Penal Sum (10% of Bid): (words) ($)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

	"BIDDER/CONTRACTOR"		"SURETY"
Company:		Company:	
Signature:		By:	
Printed:		Printed:	
Title:		Counter-signed:	

The above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

1. The Bid Bond is given as required by Indiana Code 36-1-12-4.5. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay Owner upon default of Bidder the Penal Sum set forth on the face of this Bond. Payment of the Penal Sum is the extent of Bidder's and Surety's liability. Surety is held and firmly bound unto Owner in the full and just sum equal to the Penal Sum, to be paid upon demand of the Owner, plus interest at the maximum legal rate from date of demand and any attorney fees and court costs incurred by Owner to enforce this Bid Bond.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required (or any extension thereof agreed to in writing by Owner) the executed Agreement, Performance, and Payment Bonds, and Certificates of Insurance.

3. This obligation shall be null and void if:

3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required (or any extension thereof agreed to in writing by Owner) the executed Agreement, Performance and Payment Bonds, and Certificates of Insurance and other documentation to be delivered prior to commencement of Work, or

3.2 All Bids are rejected by Owner.

4. Payment under this Bond, including interest at the maximum legal rate from the date of demand and any attorneys' fees and costs incurred by Owner to enforce this instrument will be due and payable upon default of Bidder and within seven (7) calendar days after receipt by Bidder and Surety of written notice of default from Owner, identifying this Bond and the Project and including a statement of the amount due.

5. No suit or action shall be commenced under this Bond prior to seven (7) calendar days after the notice of default period required in Paragraph 4 above.

6. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in Hamilton County, Indiana.

7. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executes this Bond on behalf of Surety, and deliver such Bond and bind the Surety thereby.

8. This Bond is intended to conform to all applicable statutory requirements of Ind. Code §36-1-12-4.5. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

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

CONTRACTOR'S AFFIDAVIT OF MAJOR SUPPLIERS

The following Major Suppliers will provide material or equipment on Indiana Transportation Museum Site Remediation in fulfilling the Agreement with the City of Noblesville, Engineering Department. List only one Major Supplier per category. Listing of more than one Major Supplier per category may be cause for rejection of the Bid Proposal.

	NAME	TRADE	AMOUNT (nearest $1,000)	PRE-QUALIFIED (Yes or No)
1.		Erosion Control		
2.		Stormwater BMP		
3.		Concrete Pipe		
4.		Concrete Structures		
5.		Plastic Pipe		
6.		Stone Aggregate		
7.		Gravel Aggregate		
8.		Clean Fill Dirt/Clay		
9.		Clean Top Soil		
10.		Seed, Fertilizer, Straw, Blanket		
11.		Flexamat ® Concrete Armoring		
12.		Fencing		
13.				
14.				
15.				

_____ being duly sworn upon oath, deposes and says that he is _____ of the firm _____ and is familiar with the affidavit herewith and that the statements are complete and true.

Firm Name: _____

By:_____

Title: _____

Date:_____

[Must be signed by principal of organization or person executing Signature Affidavit (Form LPW 0.22)].

STATE OF _____)
) SS:
COUNTY OF _____)

_____ personally appeared before me, a Notary Public, in and for said County and State, this _____ day of _____, 20___, after being duly sworn upon his oath, says that the facts alleged in the foregoing affidavit are true.

My Commission Expires:
_____

_____
Notary Public – Signature

My County of Residence:
_____

_____
Notary Public – Printed Name

(S E A L)

CONTRACTOR'S AFFIDAVIT OF SUBCONTRACTORS EMPLOYED

The following sub-contractors will perform work on Indiana Transportation Museum Site Remediation in fulfilling the Agreement with the City of Noblesville, Engineering Department. List only one subcontractor per category. Listing of more than one subcontractor per category may be cause for rejection of the Bid Proposal.

	NAME	TRADE	AMOUNT (nearest $1,000)	PRE-QUALIFIED (Yes or No)
1.		Construction Phase Erosion Control		
2.		Excavation for Remediation		
3.		Trucking OUT - Disposal Coal Ash/Contaminated soil		
4.		Trucking IN - Import Fill Dirt		
5.		Trucking IN - Top Soil		
6.		Trucking IN - Aggregate		
7.		Crane/Rigger - Concrete Sign Move		
8.		Storm / Drainage System Construction		
9.		Placing Fill Soil - Rough & Final sub-Grades		
10.		Placing Top Soil Final Grading		
11.		Placing Stone Ballast		
12.		Fertilizer, Grass Seed, Straw Mulch or Blanket		
13.		Fence & Gate Install		

14.		Lab Testing for Fill Materials (if not commercially sourced)		
15.				

_____ being duly sworn upon oath, deposes and says that he is _____ of the firm _____ and is familiar with the affidavit herewith and that the statements are complete and true.

Firm Name: _____

By:_____

Title: _____

Date:_____

[Must be signed by principal of organization or person executing Signature Affidavit (Form LPW 0.22)].

STATE OF _____)
) SS:
COUNTY OF _____)

_____ personally appeared before me, a Notary Public, in and for said County and State, this _____ day of _____, 20___, after being duly sworn upon his oath, says that the facts alleged in the foregoing affidavit are true.

My Commission Expires:
_____

_____
Notary Public – Signature

My County of Residence:
_____

_____
Notary Public – Printed Name

(S E A L)

NON-COLLUSION AFFIDAVIT

EN-322-09
INDIANA TRANSPORTATION MUSEUM SITE REMEDIATION
FOREST PARK
825 PARK DRIVE
NOBLESVILLE, INDIANA

The Bidder, by its officers and agents or representatives present at the time of filing this bid, being duly sworn, on their oaths say that neither they nor any of them have in any way directly or indirectly entered into any arrangement or agreement with any other Bidder or with any public officer whereby such affiant or affiants, or either of them has paid or is to pay such other Bidder or public officer anything of value whatsoever, or such affiant or affiants, or either of them has not directly or indirectly entered into any arrangement with any other Bidder or Bidders which tends to or does lesson or destroy free competition in the letting of the contract sought for by the attached bids; that no inducement of any form or character other than that which appears upon the face of the bid will be suggested, offered, paid, or delivered to any person whomsoever to influence the acceptance of the said bid or awarding of the Contract, nor has this Bidder any agreement or understanding of any kind whatsoever with any person whomsoever, to pay, deliver to, or share with any person in any way or manner any of the proceeds of the Contract sought by this bid.

Witness our hands this _____ day of _____, 20___.

Name: _____

Address: _____

_____

By: _____, _____
Title

CITY OF NOBLESVILLE

E-VERIFY AFFIDAVIT

Pursuant to Ind. Code 22-5-1.7-11, the Contractor entering into the Agreement with the City of Noblesville is required to enroll in and verify the work eligibility status of all its newly hired employees through the E-Verify Program. The Contractor is not required to verify the work eligibility status of all its newly hired employees through the E-Verify Program if the E-Verify Program no longer exists.

The undersigned, on behalf of the Contractor, being first duly sworn, deposes and states that the Contractor does not knowingly employ and unauthorized alien. The undersigned further affirms that, prior to entering into its Agreement with the City of Noblesville, the undersigned Contractor will enroll in and agrees to verify the work eligibility status of all its newly hired employees through the E-Verify Program.

(Contractor): _____

By (Written Signature) _____

(Printed Name):_____

(Title):_____

Important – Notary Signature and Seal Required in the Space Below

STATE OF _____

SS:_____

COUNTY OF _____

Subscribed and sworn to before me this _____ day of _____, 20__

My commission expires: _____ (Signed):_____

Residing in _____ County, State _____