

Pennoni Associates, Inc.

1085 Raymond Boulevard, Suite 2102, Newark, New Jersey 07102

ADDENDUM No. 1

TO THE CONTRACT DOCUMENTS OF THE PROJECT:

Trailside Nature and Science Center Sensory Trail Drainage Improvements

**452 New Providence Road
Mountainside, New Jersey 07092**

For the

Union County Improvement Authority

DATE: November 14, 2025
Pennoni Associates Project Number: RSCAR25003

NOTICE TO BIDDERS:

The original specifications and drawings, for the project noted above have been amended as noted in this Addendum. Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Form of Proposal.

I. THIS ADDENDUM CONSISTS OF THE FOLLOWING:

Number of Pages: 57 (Including the cover page, description of Addendum, and divider pages)

Included:

- Bidder Questions (RFI) 3 pages
- Specifications 49 pages
- Drawings 1 page

I. RESPONSE TO REQUESTS FOR INFORMATION (RFIs):

1. General notes about RFIs:
 - a. Contractors must follow the protocols identified in the RFB for submission of RFIs. Including submitting requests on the appropriate forms and to all parties listed in the RFB.
 - b. Requests for substitution for specific materials must come directly from bidders and not individual vendors. Customarily this process does not occur until the bid is awarded.

II. SPECIFICATIONS:

1. Minor revision in "Table of Contents", added "Exhibit G-5, Request for Information (RFI)", attached
2. Minor revisions on "Bid Form", attached:
 - a. Added "Exhibit B, Mandatory Equal Opportunity Language N.J.S.A. 10:5-31 et seq. (P.L. 1975, C.127) N.J.A.C. 17:27, Page B-23" text to "Bidder Checklist" Table of Contents, see Page B-1
 - b. Added Item #27 – "Exhibit G-5, Request for Information (RFI), Page B-43 (If Applicable) text to "Bidder Checklist", see Page B-2
3. Added Exhibit G-5 to Page B-43 of the "Bid Forms", see attached

III. DRAWINGS:

Pennoni Associates, Inc.

1085 Raymond Boulevard, Suite 2102, Newark, New Jersey 07102

1. HDPE Detention Basin Detail Riser Detail added to Sheet CS6002, Page 9 of 12, (Red revision cloud), see attached

END OF ADDENDUM DESCRIPTION

Pennoni Associates, Inc.

1085 Raymond Boulevard, Suite 2102, Newark, New Jersey 07102

BIDDER QUESTIONS (REQUEST FOR INFORMATION)

Response to Bidder Questions (RFI)

1. *Dwg. CS1001 Grading and Drainage inset 2: Please provide details on the 2 rectangular structures joining the 2 parallel running 36" HDPE pipes at north and south sides.*

The two "rectangular structures" represent standard HDPE headers. The Plans have been revised to include a standard detail for proposed basin. See sheet CS6002, Page 9 of 12 (Red revision cloud). The detail is for reference only; Contractor shall provide shop drawings for review and approval.

2. *Dwg. CS6001 Detail – Poured-In-Place Rubber Surface: Note 3 calls for restoring existing trail stone. Please clarify if we are removing 6" of material from the existing trail and installing new 4" clean stone and 2" rubber surface or are we removing 2" of existing trail surface and restoring existing stone and installing 2" rubber surface on top of the existing stone.*

Contractor shall excavate existing trail material to a minimum of 6" depth to install geotextile fabric, 4" of 3/4" clean compacted stone, and 2" of poured-in-place rubber surface. Contractor can utilize the existing trail material as subbase where applicable.

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

Project: Trailside Nature and Science Center Sensory Trail Drainage Improvements

RFI Number 25-005-01		Contractor A-Tech Concrete Co.	
Description:			
NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION			
Referenced Doc; Drawing - #		Other;	
Spec - #			
Question :			
<p>1.Dwg. CS1001 Grading and Drainage inset 2: please provide details on the 2 Rectangular Structures joining the 2 parallel running 36" HDPE pipes at North and South sides.</p> <p>2.Dwg. CS6001 Detail- Poured-In-Place Rubber Surface: Note-3 calls for restoring existing Trail Stone . Please clarify if we are removing 6" Material from the existing Trail and Installing new 4" Clean stone and 2" Rubber Surface or are we removing 2" of existing Trail Surface and restoring existing Stone and Installing 2" Rubber surface on top of the existing Stone.</p>			
Issued By : Billy Gidda			Date 11/13/25
Response :			
<p>1. The two "rectangular structures" represent standard HDPE headers. The Plans have been revised to include a standard detail for proposed basin. See sheet CS6002, Page 9 of 12 (Red revision cloud). The detail is for reference only; Contractor shall provide shop drawings for review and approval.</p> <p>2. Contractor shall excavate existing trail material to a minimum of 6" depth to install geotextile fabric, 4" of 3/4" clean compacted stone, and 2" of poured-in-place rubber surface. Contractor can utilize the existing trail material as subbase where applicable.</p>			
By: Philip R. Meehan		Date	<input type="checkbox"/> <input type="checkbox"/>
Firm: Pennoni Associates, Inc.		11/13/25	
Dist: Name of A/E Contact			
<p>Stephen Hoyt SHoyt@Pennoni.com</p> <p>Timothy Hennessy bidding@rscarchitects.com</p> <p>Bibi Taylor btaylorUCIA@ucnj.org</p>			
		Date	

Pennoni Associates, Inc.

1085 Raymond Boulevard, Suite 2102, Newark, New Jersey 07102

SPECIFICATIONS

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside New Jersey

TABLE OF CONTENTS

	<u>Page</u>
Notice to Bidders.....	NB-1

ARTICLE I:
INSTRUCTIONS TO BIDDERS

Section 1.01 Invitation to Bid.....	IB-1
Section 1.02 Preparation of Bids	IB-1
Section 1.03 General Information.....	IB-2
Section 1.04 Delivery of Bids	IB-3
Section 1.05 Bid Forms.....	IB-3
Section 1.06 Bid Security.....	IB-3
Section 1.07 Certification of Surety.....	IB-4
Section 1.08 Non-Collusion Affidavit	IB-4
Section 1.09 Ownership Disclosure Statement	IB-5
Section 1.10 Performance/Payment Bond.....	IB-5
Section 1.11 Power of Attorney	IB-5
Section 1.12 Acceptance/Rejection of Bids	IB-5
Section 1.13 Withdrawal of Bids.....	IB-6
Section 1.14 Indemnification.....	IB-6
Section 1.15 Assignments	IB-6
Section 1.16 Classification and Qualification of Bidders	IB-6
Section 1.17 Uncompleted Contracts.....	IB-7

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside New Jersey

Section 1.18	Compliance with Laws.....	IB-7
Section 1.19	Examination of Site, Drawings and Specifications	IB-10
Section 1.20	Drawings and Specifications.....	IB-11
Section 1.21	Number and Title of Drawings.....	IB-11
Section 1.22	Pre-Bid Conference	IB-12
Section 1.23	Brand Name of Equivalent.....	IB-12
Section 1.24	Subcontracts	IB-12
Section 1.25	Form of Agreement.....	IB-12
Section 1.26	Multiple Bids Not Allowed.....	IB-13
Section 1.27	Public Works Contractor Registration Act	IB-13
Section 1.28	Business Registration Certificate	IB-16
Section 1.29	Pay to Play.....	IB-17
Section 1.30	Public Information	IB-17
Section 1.31	Liquidated Damages	IB-18
Section 1.32	Insurance Requirements.....	IB-18

BID FORMS

Bidders’s Checklist.....	B-1
Bid (Proposal) Form	B-3
Sample Bid Bond Form.....	B-7
Consent of Surety	B-8

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside New Jersey

Sample Performance/Payment Bond B-9

Ownership Disclosure Statement.....B-11

Affidavit of Compliance – Plumbing ContractorB-13

Hold Harmless Clause..... B-14

Non-Collusion Affidavit B-15

Acknowledgement of Receipt of Addenda B-16

Subcontractor Identification Statement..... B-17

~~Financial Statement..... B-18~~

Business Registration Information B-20

Uncompleted Contracts Affidavit..... B-21

Affirmative Action Compliance B-22

Certificate of Bidder Showing Ability to Perform Contract B-27

Equipment Statement B-28

Americans with Disabilities Act..... B-29

Statement of Bidder’s Qualifications..... B-31

Contractor Performance Record B-34

Affidavit Regarding Debarred, Suspended or Disqualified Bidders B-37

Certificate of Insurance Statement..... B-38

Time of Completion..... B-39

Agreement for Use of Bid Documents in Electronic Form..... B-40

Exhibit G-5, Request for Information (RFI).....B-43

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside New Jersey

AIA Standard Contract A132 (2019) – Construction Manager as Adviser

AIA Document A232 (2019) General Conditions of Contract CMA

SUPPLEMENTARY CONDITIONS OF THE CONTRACT

NEW JERSEY PREVAILING WAGE DETERMINATION DOCUMENTS

GENERAL SPECIFICATIONS

Labor and Materials	G-1
Guarantee Against Defective Work	G-1
Lines and Grades	G-2
Prompt Payment of Construction Contracts	G-2
Stopping Work on Account of Bad Weather	G-2
Access for Other Contractors	G-3
Rejected Materials and Work	G-3
Safety	G-3
Matters Not Mentioned in Contract Documents	G-3
Permits	G-4
Progress Payments	G-4
Inspection	G-5
Utilities	G-5
Material Compliance and Shop Drawings	G-6

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside New Jersey

Preconstruction..... G-6

New Jersey Sales and Use Tax RequirementsG-7

SPECIAL CONDITIONS

DefinitionsSC-1

Correlation, Intent and Interpretation of the Contract DocumentsSC-3

Intent of ContractSC-3

No Product or Manufacturer SpecifiedSC-3

Temporary Field OfficeSC-3

Project CoordinationSC-4

Project Site and Building Limitations and Job ConditionsSC-4

Traffic and Street MaintenanceSC-4

Construction SignsSC-5

Guarantees and WarrantiesSC-6

Precedence of Large Scale Details and DocumentsSC-6

Bidder to Examine All Bid DocumentsSC-6

Construction Start and DurationSC-7

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside, New Jersey

BIDDERS CHECKLIST

BIDDER'S NAME _____

Items 1 through 27 are the forms which must be completed and/or provided in **TRIPLICATE (original and two copies)** with the Bid.

BIDDER MUST INITIAL EACH ENTRY AND SIGN AND DATE THIS FORM.

		<u>Bidder's Initials</u>
1.	This Bidder's Checklist	_____
2.	Bid Form, Pages B-3 to B-6	_____
3.	** Bid Security in the form of Certified Check, Cashier's Check or Bid Bond; see Page B-7	_____
4.	** Consent of Surety, Page B-8 (See sample Performance/Payment Bond at Page B-9)	_____
5.	** Ownership Disclosure Statement, Page B-11	_____
6.	Plumbers Compliance Affidavit, Page B-13	_____
7.	Hold Harmless Clause, Page B-14	_____
8.	Non-Collusion Affidavit, Page B-15	_____
9.	** Acknowledgement of Receipt of Addenda to Bid Documents, Page B-16	_____
10.	** List of Subcontractors as required by N.J.S.A.40A:11-16, Page B-17	_____
11.	** Certified Financial Statement prepared within last 12 months (See Page B-18) (Omitted)	_____
12.	Public Contractors Registration Act Certificate for Contractor and Subcontractors listed in N.J.S.A.40A:11-16. See N.J.S.A. 34:11-56-48	_____
13.	Business Registration Certificate for Contractor and Subcontractors listed in N.J.S.A. 40A:11-16. See N.J.S.A. 52:32-44; see also Page B-20	_____
14.	N.J. Div. of Property Management & Construction (DPMC) Certificate/ Notice of Classification	_____
15.	Uncompleted Contracts Affidavit, Page B-21	_____
16.	Affirmative Action Compliance, Page B-22	_____
17.	Exhibit B, Mandatory Equal Employment Opportunity Language N.J.S.A 10:5-31 et seq. (P.L. 1975, C.127) N.J.A.C. 17:27, Page B-23	_____
18.	Certificate of Bidder Showing Ability to Perform Contract, Page B-27	_____

[Continued on next page]

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside, New Jersey

BIDDERS CHECKLIST (Continued)

BIDDER'S NAME _____

- | | | |
|-----|--|-------|
| 19. | Equipment Statement, Page B-28 | _____ |
| 20. | Americans with Disability Act Language, Page B-29 | _____ |
| 21. | Statement of Bidder's Qualifications, Page B-31 | _____ |
| 22. | Contractor Performance Record, Page B-34 | _____ |
| 23. | Affidavit Regarding List of Debarred, Suspended or Disqualified Bidders, Page B-37 | _____ |
| 24. | Certificate of Insurance Statement, Page B-38 | _____ |
| 25. | Time of Completion, Page B-39 | _____ |
| 26. | Agreement for Use of Bid Documents in Electronic Form, Page B-40 | _____ |
| 27. | Exhibit G-5, Request for Information (RFI), Page B-43 (If Applicable) | _____ |

** Failure to submit any of these items will result in MANDATORY rejection of the bid; failure to submit with the bid cannot be cured. Failure to submit any of the unstarred items may result in rejection of the bid.

The undersigned hereby acknowledges the above-listed requirements.

NAME OF BIDDER:

Person, Firm, or Corporation

Signature

Title

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory
Trail Drainage Improvements
452 New Providence Road , Mountainside, New Jersey

Bidder's Name _____
BID FORM

Having inspected the site of the Work, the undersigned will furnish all labor, material, equipment and services necessary for the complete construction of the **Trailside Nature and Science Center Sensory Trail Drainage Improvements**, as defined in the Bid Documents, for the contract amount indicated below, in strict accordance with the Bid Documents:

ITEM NO	DESCRIPTION	TOTAL	UNIT	UNIT PRICE	SUBTOTAL
1	MOBILIZATION	1	LS		
2	CLEARING SITE	1	LS		
3	EARTHWORK	1	LS		
4	EXCAVATION, ROCK AND BEDROCK, IF & WHERE DIRECTED	10	CY		
5	POURED-IN-PLACE RUBBER SURFACE, TO INCLUDE BASE CONSTRUCTION	1,045	SY		
6	BEAM CLAY 3/16" PATHWAY MIX W/ STABILIZER BINDER	2	TON		
7	BOARDWALK / FOOT BRIDGE	65	LF		
8	BRAILLE TRAIL LOOP ROPE GUIDE	1,350	LF		
9	HMA MILLING, 3" OR LESS	20	SY		
10	DENSE GRADED AGGREGATE BASE COURSE, 6" THICK	85	SY		
11	SUPERPAVE HOT MIX ASPHALT 9.5M64 SURFACE COURSE; 2" THICK	15	TON		
12	SUPERPAVE HOT MIX ASPHALT 19M64 BASE COURSE; 2" THICK	15	TON		
13	TACK COAT	30	GAL		
14	INLET TYPE B W/ BICYCLE SAFE GRATE AND TYPE 'N-ECO' CURB PIECE	3	UNIT		
15	INLET TYPE E W/ BICYCLE SAFE GRATE	1	UNIT		
16	12" HDPE PIPE	75	LF		
17	15" HDPE PIPE	50	LF		
18	12" HDPE FLARED END SECTION	1	UNIT		
19	15" HDPE FLARED END SECTION	3	UNIT		

ITEM NO	DESCRIPTION	TOTAL	UNIT	UNIT PRICE	SUBTOTAL
20	RIPRAP APRON, D50=6" STONE, 18" THICK W/ FILTER FABRIC	30	SY		
21	NORTH AMERICAN GREEN ROLLMAX VMAX SC250	50	SY		
22	NORTH AMERICAN GREEN SHOREMAX MATTING	50	SY		
23	24" ACCESS MANHOLE	1	UNIT		
24	36" HDPE PIPE	90	LF		
25	BELGIUM BLOCK VERTICAL CURB	15	LF		
26	CONCRETE DEPRESSED CURB	6	LF		
27	NATURAL SWALE (8' MIN.)	285	LF		
28	RE-MOUNTING EXISTING SIGNAGE W/ NEW POST	12	UNIT		
29	TOPSOILING, 4" THICK, IF & WHERE DIRECTED	30	SY		
				TOTAL	

BASE BID ITEM:

(Identified individually for accounting and invoicing purposes)

_____ Words

_____ Figures

BID CONTINGENCY: (To be used if and when directed by the Union County Improvement Authority)

Thirty Five Thousand Dollars

Words

\$35,000.00

Figures

TOTAL BASE BID PLUS CONTINGENCIES:

_____ Words

\$ _____

Figures

**Trailside Nature and Science Center Sensory Trail
Drainage Improvements
452 New Providence Road, Mountainside, New Jersey**

Bidder's Name _____

BID FORM (continued from B-3)

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

BID FORM (continued from B-3)

Further, the undersigned agrees, if awarded the contract, to execute an agreement for the above stated Work on the Standard Form of Agreement Between Owner and Contractor, AIA Document A132 - 2019/Construction Manager as Advisor Edition. The undersigned also agrees, if awarded the contract, that Bidder will pay the UCIA \$1,500 per day for each calendar day beyond the completion Date that is set forth in the schedule provided in the Bid Documents and further agrees to the liquidated damages to be applied to the (20) business day office shutdown (inclusive of State and Federal Holidays) .

The undersigned acknowledges that, during the progress of the Work or delivery of the materials to be furnished, two percent (2%) of the contract price shall be retained until said work is fully completed and accepted (including all punch list items, delivery of warranties and submission and acceptance of all contract close out documentation).

The undersigned, acting through its authorized officers and intending to be legally bound, agrees that this bid proposal shall constitute an offer by the undersigned to enter into a contract with the acts and things therein provided, which offer shall be irrevocable for sixty (60) calendar days from the date of opening hereof and that the Owner may accept this offer at any time during said period by notifying the undersigned of the acceptance of said offer.

No member, employee or officer of the Trailside Nature and Science Center or the Union County Improvement Authority is directly interested in this proposal, or in the supplies or work to which it relates, or to any portion of the profits thereof

The undersigned further agrees to comply with the requirements as to conditions of employment, wage rates, and hours of labor set forth in the contract documents.

NAME OF BIDDER

ADDRESS OF BIDDER

BY: _____
ORIGINAL SIGNATURE

**ORIGINAL SIGNATURE OF
CORPORATE SECRETARY**

PRINT NAME OF CORP. SECTY

PRINT NAME

[Corporate Seal]

TITLE

FAX: _____

E-Mail: _____

Phone: _____

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

BID FORM (continued from B-4)

NOTE:

1. If doing business under a **trade name, partnership or a sole proprietorship**, you must submit the bid under exact title of the trade name, partnership, or proprietorship, and the bid must be signed by either the **owner**, or a **partner** and **witnessed** by a **notary public**.
2. If a **Corporation**, the bid must be signed by the **President** or **Vice President** and **witnessed** by a **Corporate Secretary** (corporate title must be exact) and **affix corporate seal**. If a Corporate Secretary does not exist, President or Vice President's signature shall be witnessed by a Notary Public.
3. Other persons **authorized** by **corporate resolution** to execute agreements on its behalf may also sign the bid documents. **Copy of a resolution must accompany the bid.**
4. The person who signs this bid form **must also** sign the **Non-Collusion Affidavit**.
5. You **cannot** witness your own signature.

SAMPLE BID BOND FORM

THIS SAMPLE BID BOND CONTAINS LANGUAGE THAT IS ACCEPTABLE TO THE UCIA; ANY LANGUAGE THAT LIMITS THE BID BOND TO THE DIFFERENCE BETWEEN THE BID AMOUNT AND SUCH LARGER AMOUNT FOR WHICH THE UCIA COULD CONTRACT SHALL NOT BE ACCEPTABLE

THIS BOND, made this _____ day of _____, 2022.

WITNESSETH:

KNOW ALL MEN BY THESE PRESENT, that we, the undersigned,

_____, as Principal and
_____, as
Surety, are held firmly bound unto the Union County Improvement Authority, as Owner, in the sum of Ten Percent (10%) of Amount of Bid, but in no case in excess of \$20,000, for the payment of which we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above is such that whereas the Principal has submitted to the Union County Improvement Authority a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing for

NOW, THEREFORE,

- (a) If said Bid be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Agreement attached hereto (properly completed in accordance with said Bid), and shall in all other respects perform the agreement created by the acceptance of said Bid,

Then this obligation shall be null and void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

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

IN WITNESS WHEREOF, the **Principal and the Surety** have hereunto set their hands and seals, and in such of them as are corporations have caused their corporate seals to be hereto affixed and those present to be signed by their proper officers, the day and year first set forth above.

by Principal: _____ by Surety: _____

NOTE: POWER OF ATTORNEY OF OFFICERS OF SURETY COMPANY DEMONSTRATING AUTHORITY TO EXECUTE THE BID BOND MUST BE SUBMITTED WITH THE BID BOND.

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

**CONSENT OF SURETY
TO ACCOMPANY PROPOSAL (BID)**

_____ (hereinafter called Surety), organized and existing under the laws of the State of _____ duly authorized and qualified to transact business in the State of New Jersey, in consideration of the sum of One Dollar (\$1.00), lawful money of the United States of America, to it in hand paid, receipt whereof is hereby acknowledged, and in consideration, hereby certifies and agrees that if the contract for which the attached proposal is made be awarded to _____ (hereinafter called Contractor) for the performance of certain work and labor or the supplying of certain materials, or both, as more particularly set forth in said proposal and described for purposes of this instrument as a proposal to the Union County Improvement Authority (UCIA) for the Trailside Nature and Science Center Sensory Trail Drainage Improvements, and if Contractor shall enter into the contract, Surety will become bound as surety for its faithful performance, and labor and material payment, and will provide the Contractor with a performance, labor and material payment bond in the full amount of the contract price.

NAME OF SURETY

ADDRESS: _____

By: _____
ORIGINAL SIGNATURE - ATTORNEY-IN-FACT FOR SURETY CO.

NOTE: POWER OF ATTORNEY OF OFFICERS OF SURETY COMPANY DEMONSTRATING AUTHORITY TO EXECUTE THIS DOCUMENT MUST BE SUBMITTED.

SAMPLE PERFORMANCE/PAYMENT/WARRANTY BOND
Consolidated Bond Form

- A. **Performance Bond**
- B. **Payment of Labor & Material Bond**
- C. **1-Year Warranty**

KNOW ALL MEN BY THESE PRESENT THAT WE, the undersigned, _____

as Principal, and _____
as the Surety, are held and firmly bound unto the Union County Improvement Authority, hereinafter called "the Union County Improvement Authority," and as hereinafter set forth, in the full and just several sum of

(a) _____ Dollars (_____)

for faithful performance of the contract as designated in Paragraph "A" and

(b) _____ Dollars (_____)

for payment of labor and materials as designated in Paragraph "B"

(c) _____ Dollars (_____)

to guarantee remedy of defects as designated in Paragraph "C" lawful money of the United States of America, to be paid to the Union County Improvement Authority or its assigns, to which payment well and truly to be made and done, we bond ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this ____ day of _____ 20__.

WHEREAS, the above bounden Principal has entered into a contract with the Union County Improvement Authority, bearing even date herewith, for Contract No. _____

_____ upon certain terms and conditions in said contract more particularly mentioned, and:

WHEREAS, it is one of the conditions of the award of the Union County Improvement Authority pursuant to which said contract is about to be entered into, that these presents be executed.

NOW THEREFORE, the joint and several conditions of this obligation are such:

"A" – That if the above bounden Principal as Contractor shall well and faithfully do and perform the things agreed by him to be done and performed according to the terms of the said Contract therein referred to and made a part thereof and such alterations as may be made in said work as therein provided and which are hereby made a part of this Bond the same as though they were set forth herein, and shall indemnify and save harmless the said Union County Improvement Authority and all of its officers, agents and employees from any expenses incurred through the failure of said Contractor and any of its subcontractors to complete the work as specified and for any damages growing out of the manner of performance of said Contract by said Contractor or his subcontractors or his or their agents or servants, including patent, trademark and copyright infringements; then this part of this obligation shall be void; otherwise it shall be and remain in full force and effect.

"B" – That if the above bounden Principal shall and will promptly pay or cause to be paid, all sums of money which may be due any person, co-partnership, association or corporation including any subcontractors for all material furnished and labor supplied or performed in the prosecution of the work, whether or not the said material or labor enter into and become component parts of the work or improvement contemplated, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

"C" – That if the above bounden Principal shall remedy without cost to the said Union County Improvement Authority any defects which may develop during the period of one (1) year from date of completion and acceptance of the work performed under said Contract, provided such defects, in the judgment of the Union County Improvement Authority or its successors, are caused by defective or inferior materials or workmanship, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

It is further agreed that any alterations which may be made in the terms of the contract or in the work to be done or materials to be furnished or labor to be supplied or performed under it or the giving by the Union County Improvement Authority of any extension of time for the performance of the contract or any other forbearance on the part of either the Union County Improvement Authority or the Principal and the Surety or Sureties or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the Surety or Sureties or any such alterations, extension, or forbearance being hereby waived.

The Principal and Surety hereby jointly and severally agree with the obligee herein that every person, co-partnership, association or corporation who, whether as subcontractor or otherwise, has furnished material or supplied or performed labor in prosecution of the work as above provided and who has not been paid therefor, may sue in assumpsit of this bond in the name of the Union County Improvement Authority for his, their, or its use, prosecute the same to final judgment for such sum or sums as may be justly due him, them, or it and have execution thereon; provided, however, that the Union County Improvement Authority shall not be liable for the payment of any costs or expenses of any such suit and further provided that the subcontractors or otherwise shall not have the right to sue or bring action against the Union County Improvement Authority directly.

IN WITNESS WHEREOF, the said Principal and Surety have duly executed this bond under seal the day and year above written.

WITNESS:

(Principal)

BY: _____
(Signature of Principal)

(Type Name and Title of
Principal's Signatory)

(Type Name of Surety Co.)

BY: _____
(Signature of Attorney-in-Fact)

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

OWNERSHIP DISCLOSURE STATEMENT

N.J.S.A. 52:25-24.2 (P.L. 1977 c. 33)

CHECK ONE

I certify that the list below contains the names and home addresses of all stockholders holding 10% or more of the issued and outstanding stock of the undersigned or of all partners/principals owning 10% or more of the undersigned.

OR

I certify that no one stockholder owns 10% or more of the issued and outstanding stock of the undersigned or that no one partner/principal owns 10% or more of the undersigned.

If a corporation owns all or part of the stock of the corporation or partnership submitting the bid, then the statement shall include a list of the stockholders who own 10% or more of the stock of any class of that owning corporation. If no one owns 10% or more stock, attest to that.

Check the box that represents the type of business organization:

- Partnership
- Limited Partnership
- Subchapter S Corporation
- Corporation
- Limited Liability Corporation
- Sole Proprietorship
- Limited Liability Partnership

Complete if Bidder is one of the 3 types of corporations:

Date Incorporated: _____ **Where Incorporated:** _____

All Bidders:

Sign and notarize the form below, and, if necessary, complete the stockholder list below.

Stockholders/Partners/Principals:

Name: _____

Name: _____

Home Address: _____

Home Address: _____

[Continued on next page]

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

OWNERSHIP DISCLOSURE STATEMENT (Continued from B-10)

N.J.S.A. 52:25-24.2 (P.L. 1977 c. 33)

Name: _____

Name: _____

Home Address: _____

Home Address: _____

Name: _____

Name: _____

Home Address: _____

Home Address: _____

Name: _____

Name: _____

Home Address: _____

Home Address: _____

NAME OF BIDDER: _____

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

By: _____
(Affiant)

(Notary Public)

(Print name & title of affiant)

My Commission expires:

(Corporate Seal)

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

AFFIDAVIT OF COMPLIANCE
PLUMBING CONTRACTOR

Public Law 1987, Chapter 442 (N.J.S.A. 45:14C-2) defines Plumbing Contractor as a licensed master plumber that shall be the holder of not less than 10% of the issued and outstanding shares of stock in the corporation, or not less than 10% of the capital of the partnership, or not less than 10% of the ownership of any other firm or legal entity engaging in the business of plumbing contracting in the State and shall employ either journeyman, plumbers or apprentice plumber or both.

Due to the enactment of Public Law 1987, Chapter 442, Plumbing Subcontractor listed in the Bid pursuant to N.J.S.A. 40A:11-16 must certify the following:

I certify that I own not less than (____) 10% of the issued and outstanding shares of stock in the plumbing subcontractor company set forth below, or not less than (____) 10% of the capital of the partnership, or not less than (____) 10% of the ownership of any other firm or legal entity.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me is willfully false, I am subject to punishment.

NAME OF PLUMBING SUBCONTRACTOR

SWORN AND SUBSCRIBED TO
BEFORE ME THE _____ DAY
OF _____, 20____

Signature of Notary Public
Notary Public of _____
My Commission expires _____

SIGNATURE OF MASTER PLUMBER

PRINT NAME OF MASTER PLUMBER

TITLE

NAME OF BIDDER FOR WHOM THE WORK WILL BE DONE:

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

HOLD HARMLESS CLAUSE

- A. The Contractor shall indemnify and save harmless the Union County Improvement Authority, the County of Union, the Trailside Nature and Science Center Sensory Trail Drainage Improvements, their elected and appointed officers, professionals, consultants, agents and employees, including their individual members, and the Engineer and Construction Manager, and their employees and agents (collectively, the "Indemnified Parties"), from and against all losses, claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought against or recoverable from the Indemnified Parties, including attorney's fees, by reason of any act or omission of the Contractor, its agents, employees, assigns, subcontractors and any entity acting in the Contractor's behalf and on the Contractor's direction in the execution of any work for the project, and any activities directly or indirectly incidental thereto. This specifically includes any negligence or carelessness of the Contractor in failing to review all plans, specifications, and other documents published by the Indemnified Parties in connection with the preparation and award of the contract.

- B. The Contractor shall assume all risk and bear any loss or injury to the property or any person which is caused by Contractor's negligence, including its negligent failure to notify the Indemnified Parties of any dangerous condition requiring the Indemnified Parties' action, during the progress of the work provided for in the contract, including periods when the Contractor is not present on the site, until the work shall have been completed and accepted. The Contractor shall also assume all responsibility for any and all loss by reason of the Contractor's negligence or violation of any local, state, or federal law, regulation, practice, or order. The Contractor shall give the Union County Improvement Authority and all other appropriate authorities all required notices relating to the work provided for in the contract, including all notices of dangerous conditions.

- C. The Contractor, in executing the agreement for the work, represents to the Indemnified Parties that the contents of this hold harmless clause have been communicated to its subcontractors and employees and that this representation is made on behalf of both the Contractor and all persons and entities acting in the Contractor's behalf including subcontractors and employees.

ATTEST: _____

Name of Bidder

By: _____

Print Name: _____

Title: _____

Bidder's Name _____

NON-COLLUSION AFFIDAVIT
(N.J.S.A. 52:34-15)

STATE OF _____)
)
COUNTY OF _____)

SS:

I _____, of the municipality of _____, in the County of _____, and the State of _____, of full age, being duly sworn according to law, on my oath depose and say that: I am _____ of the firm of _____, the bidder making the proposal for the above named project, and that I executed the said proposal for the above named project, and that I executed the said proposal with full authority to do so; that said bidder has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named project; and that all statements contained in said proposal and in this Affidavit are true and correct, and made with full knowledge that the UNION COUNTY IMPROVEMENT AUTHORITY relies upon the truth of the statements contained in said proposal and in the statements contained in this Affidavit in awarding the contract for the said project.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bonafide established commercial or selling agencies maintained by the Bidder, _____ (N.J.S.A. 52:34-15).

NAME OF BIDDER

SIGNATURE

TITLE

NOTE: This Affidavit must be executed by the same person who signed the BID FORM (pages B-3 to B-5).

Subscribed and sworn before me
this ____ day of _____, 20____.

Notary Public of the State of _____
My commission expires: _____

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

ACKNOWLEDGMENT OF RECEIPT OF ADDENDA

Pursuant to N.J.S.A. 40A:11-23.2(e), the undersigned bidder, hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the UCIA's record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.

Local Unit Reference Number or Title of Addendum/Revision	How Received (mail, fax, pick-up, etc.)	Date Received

IF NO ADDENDA ISSUED, INSERT "NONE" HERE: _____

ACKNOWLEDGMENT BY BIDDER:

NAME OF BIDDER: _____

SIGNATURE: _____

PRINTED NAME AND TITLE: _____

DATE: _____

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

SUBCONTRACTOR IDENTIFICATION STATEMENT

LIST OF SUBCONTRACTORS

*This form is **ONLY** required for plumbing and gas fitting, steam and hot water heating and ventilating apparatus, steam power plants, electrical work, structural steel, ornamental iron work, and any other trades required to be identified by the specifications if bidder is not using any subcontractors, certify below.*

In compliance with N.J.S.A. 40A:11-16 and the bid specifications, the undersigned hereby lists the name or names of the following subcontractors:

Company Name: _____
Address: _____
Telephone: _____ Subcontract Amount: \$ _____
Description of Work Subcontracted: _____
License No. _____

Company Name: _____
Address: _____
Telephone: _____ Subcontract Amount: \$ _____
Description of Work Subcontracted: _____
License No. _____

Company Name: _____
Address: _____
Telephone: _____ Subcontract Amount: \$ _____
Description of Work Subcontracted: _____
License No. _____

NAME OF BIDDER

ADDRESS

By:

PRINT NAME AND TITLE

Date _____

IF MORE THAN THREE SUBCONTRACTORS, PLEASE COPY THIS SHEET AS NECESSARY AND SUBMIT ALL SHEETS WITH BID.

(THIS FORM HAS BEEN DELETED)

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

FINANCIAL STATEMENT

as of _____ 2022

NAME _____ RESIDENCE _____
OCCUPATION _____ BUSINESS _____
OR PROFESSION _____ ADDRESS _____

I make the following statement of all my assets and liabilities at the close of business on the date indicated above

(Name and Location of Financial Institution)

and give other material information for the purpose of obtaining advances on notes and bills bearing my signature, endorsement guaranty, and for obtaining credit upon present and future applications.

ASSETS		LIABILITIES and NET WORTH	
Cash on Hand	\$	Notes Payable to Banks-Unsecured Direct borrowings only	\$
Cash in Banks		Notes Payable to Banks-Secured Direct borrowings only	
Notes Receivable		Notes Payable to Others-Unsecured	
Accounts Receivable		Notes Payable to Others-Secured	
Loans Receivable		Accounts Payable	
Life Insurance-Cash Surrender Value (Do not deduct loans)		Loans against Life Insurance	
Securities-Readily Marketable U.S. Govt. & listed on Stock Exchanges		Real Estate Mortgages Payable	
Securities-Not Readily Marketable Unlisted stocks & bonds		Real Estate Taxes & Assessments Payable	
Mortgages Owned		Federal & State Income Taxes	
Real Estate Owned		Other Taxes	
Automobile(s) Registered in own name		Interest Payable on loans, mortgages, etc.	
Other Assets (Itemize)		Brokers Margin Accounts	
		Other Liabilities (Itemize)	
		Net Worth	
TOTAL ASSETS		TOTAL LIABILITIES & NET WORTH	

(THIS FORM HAS BEEN DELETED)

Certification – This is to certify that all the statements contained herein and in any supporting schedules are true and give a correct showing of any financial condition as of the date indicated. I further certify that I had no liabilities, direct or contingent, business or accommodation, except as set forth in this statement, and that the title to all assets therein set forth is in my name: Solely, except as may be otherwise noted. IN THE EVENT OF ANY MATERIAL ADVERSE CHANGE IN MY FINANCIAL CONDITION, I AGREE TO NOTIFY THE FINANCIAL INSTITUTION NAMED HEREIN IMMEDIATELY IN WRITING.

Signed this _____ day of _____, 20_____

(Signature)

NOTE: IF YOU ARE ENCLOSING AN ANNUAL REPORT OR AUDITOR'S REPORT IN CONNECTION WITH YOUR BID IN LIEU OF COMPLETING THE SAMPLE "FINANCIAL STATEMENT" INCLUDED IN THE BID PACKAGE, PLEASE SIGN THE CERTIFICATION STATEMENT LISTED BELOW AND ATTACH TO THE ANNUAL/AUDITOR'S REPORT.

CERTIFICATION: This is to certify that all the statements contained herein and in any supporting schedules are true and give a correct showing of my financial condition as of the date indicated. I further certify that I had no liabilities, direct or contingent, business or accommodation, except as set forth as in my name solely, except as may be otherwise noted.

Signed this _____ day of _____, 2022.

Signature

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

BUSINESS REGISTRATION

P.L. 2009, c.315, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each must be provided prior to the award of a contract. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

Proof of business registration shall be:

- A copy of a Business Registration Certificate issued by the Department of Treasury, Division of Revenue; or
- A copy of the web printed version provided by the NJ Division of Revenue

Register online at www.nj.gov/treasury/revenue/taxreg.htm. Click the "online" link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-1730.

Note: A NJ Certificate of Authority is not acceptable.



STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE	
Taxpayer Name:	TAX REG TEST ACCOUNT
Trade Name:	
Address:	847 ROEBLING AVE TRENTON, NJ 08611
Certificate Number:	1093907
Date of Issuance:	October 14, 2004
For Office Use Only:	20041014112813533

ATTACH BRC HERE

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

UNCOMPLETED CONTRACTS AFFIDAVIT

PURSUANT TO N.J.A.C. 17:19-2.13, BIDDER DECLARES THE FOLLOWING WITH RESPECT TO ITS UNCOMPLETED CONTRACTS, ON ALL WORK, FROM WHATEVER SOURCE (PUBLIC AND PRIVATE), BOTH IN NEW JERSEY AND FROM OTHER GOVERNMENTAL JURISDICTIONS

Entity	Project Title	Original Contract Amount	Uncompleted Amount As Of Bid Opening Date	Name and Telephone Number of Party to be Contacted From Entity For Verification

TOTAL AMOUNT OF UNCOMPLETED CONTRACTS \$ _____

Sworn and Subscribed to Before me
 this _____ day of _____, 20__

 Notary Public

BIDDER:

 (Signature)

 (Print Name)

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

AFFIRMATIVE ACTION COMPLIANCE

General Requirements of P.L. 1975, c. 127 – The undersigned bidder is hereby put on notice and acknowledges that:

Bidders are required to comply with Affirmative Action / Equal Employment Opportunity law as set forth in N.J.S.A. 10:5-31 *et seq.* and N.J.A.C. 17:27.

In particular, Exhibit B, Mandatory Equal Employment Opportunity Language (Construction Contracts), attached hereto, shall be incorporated into the contract awarded by the UCIA for the construction of the Project.

Additionally, the bidder to whom the contract is awarded shall submit to the UCIA, prior to the signing of the contract, Form AA-201, Initial Project Workforce Report Construction.

Bidders are referred to the State of New Jersey website www.state.nj.us/treasury/contract_compliance for further information and forms regarding AA/EEO laws and regulations.

If the successful contractor does not submit the Initial Project Workforce Report Construction (AA-201) prior to signing of the contract, the UCIA will declare the contractor non-responsive and may award the contract to the next lowest responsible bidder.

NAME OF BIDDER

By: _____

Print Name: _____

Title: _____

Date: _____

(REVISED 4/10)

EXHIBIT B

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127)

N.J.A.C. 17:27

CONSTRUCTION CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, up-grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided,

however, that the Dept. of LWD, Construction EEO Monitoring Program may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5- 31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

(B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

(1) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;

(2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;

(3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

(4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;

(5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;

(6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

(i) The contractor or subcontractor shall interview the referred minority or women worker.

(ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.

(iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.

(iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.

(7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Dept. of LWD, Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program upon request.

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA 201) electronically provided to the public agency by the Dept. of LWD, Construction EEO Monitoring Program, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Division and to the public agency compliance officer.

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

(D) The contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code (NJAC 17:27)**.

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

EQUIPMENT STATEMENT

The undersigned hereby certifies that Bidder is fully prepared with the necessary capital, material, and machinery to conduct the Work as herein specified and further certifies that the equipment required for the proper execution of this contract in the time specified is available as follows:

LIST EQUIPMENT OWNED BY THE BIDDER:

(Attach additional sheets if necessary)

LIST EQUIPMENT TO BE LEASED BY THE BIDDER FOR THIS JOB:

(Attach additional sheets if necessary)

Include certifications from owner or person in control of equipment, including subcontractor, definitively granting the bidder control of the equipment as may be necessary for the completion of work.

Witness

NAME OF BIDDER

Date

ADDRESS

BY: _____

PRINT NAME

TITLE

YOU MAY ATTACH ADDITIONAL SHEETS, BUT YOU MUST SIGN AND WITNESS THIS SHEET

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

AMERICANS WITH DISABILITIES ACT
EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES

The Contractor and the Union County Utilities Authority (hereafter "Owner") do hereby agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C.S12.101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the Owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the Owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the Owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the Owner's grievance procedure, the contractor agrees to abide by any decision of the Owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the Owner, or if the Owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

The Owner shall, as soon as practicable after a claim has been made against it, give written notice thereof to the contractor along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the Owner or any of its agents, servants, and employees, the Owner shall expeditiously forward or have forwarded to the contractor every demand, complaint, notice, summons, pleading, or process received by the Owner or its representatives.

It is expressly agreed and understood that any approval by the Owner of the services provided by the contractor pursuant to this contract will not relieve the contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the Owner pursuant to this paragraph.

It is further agreed and understood that the Owner assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees and subcontractors for any claim which

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

AMERICANS WITH DISABILITIES ACT (Continued)

may arise out of their performance of this Agreement. Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the Owner from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

Name of Bidder _____

By: _____
Signature

Print Name: _____

Title: _____

Date _____

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

1. _____
(Name of Bidder)

2. _____
(Permanent Main Office Address)

3. _____
(When Organized)

4. _____
(If a Corporation, Where Incorporated)

5. Number of years engaged in construction or contracting business under present firm or trade name?

6. Contracts on hand: (Show gross amount of each Contract and the appropriate dates of Completion)

7. General character of work performed by you. _____

8. Have you ever failed to complete any work awarded to you? _____

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

STATEMENT OF BIDDER'S QUALIFICATIONS (Continued)

9. Have you ever defaulted on a Contract? _____ If so, complete details, including where and why?

10. List your major equipment available for this Contract. (Attach separate sheet, if necessary)

11. Experience in the Construction work similar in importance to this Project.

12. Have you had any material adverse changes from the trades as listed in NJ Notice of Classification within last five (5) years? _____. If so, list prior classification.

13. Background and experience of the principal members of your organization, including the officers.

14. Bank Reference. (Name, Address, Phone, Representative) _____

15. Will you, upon request, furnish any other information that may be required by the UCIA?

16. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the UCIA in verification of the recitals comprising this Statement of Bidder's Qualifications.

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

STATEMENT OF BIDDER'S QUALIFICATIONS (Continued)

17. Bidder's telephone number, fax number and e-mail address.

Phone _____

Fax _____

E-mail _____

Mobile _____

NAME OF BIDDER

By: _____

Print Name: _____

Title: _____

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

Notary Public of New Jersey
My Commission Expires:
_____, 20__.

UNION COUNTY IMPROVEMENT AUTHORITY
Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

CONTRACTOR PERFORMANCE RECORD

How many years has your organization been in business as a Contractor under your present business name? _____.

How many years experience in construction work has your organization had (a) as a general contractor? _____; (b) as a subcontractor? _____.

What is the construction experience of the principal individuals of your organization?

Individual's Name	Present Position or Office	Yrs. of Construction Experience	Magnitude & Type of Work	In What Capacity

Has bidder ever failed to complete any work contracted to you?

If so, where and why? (Attach separate sheet if necessary)

Has any officer or partner of your organization ever failed to complete a construction contract handled in its own name?

If so, state name of individual, name of owner, location and type of project, and reason for the failure to complete.

PERFORMANCE RECORD (Continued) List of all contracts completed by you within past 10 years.

Bidder's Name _____

Name of Owner	Name & Location of Project: Type Of Work	Prime or Sub-Cont.	Engineer or Architect in Charge for Owner	Contract Price (Omit Cost)	Date Completed	Was Time* Extension Necessary	Were Any Penalties Imposed	Were Liens* Claims or Stop Notice Filed

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

CONTRACTOR PERFORMANCE RECORD (Continued)

Explanation of details in connection with non-completion of contracts, time extensions, penalties imposed, labor troubles experience, liens, claims and notices filed again contracts listed in preceding item "Performance Record:"

CERTIFICATION

The information above is true and complete to the best of my knowledge and belief.

(Name of Bidder)

By: _____
(Signature)

(Title)

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

A Notary Public of New Jersey
My Commission Expires: _____, 20__.

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

**AFFIDAVIT REGARDING LIST OF DEBARRED,
SUSPENDED OR DISQUALIFIED BIDDERS**

STATE OF NEW JERSEY _____)

) SS:

COUNTY OF _____)

I, _____, of the municipality of _____
in the State of _____, of full age, being duly sworn according
to law on my oath depose and say that:

I am _____ of the firm of _____,
the Bidder making the Proposal for the above named Project. I have executed the said Proposal with full
authority to do so. Said Bidder is not at the time of the making of this bid included on the New Jersey
State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a
result of action taken by any State or Federal Agency.

Name of Bidder

By: _____
(Signature of Authorized Representative)

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

Notary Public of New Jersey
My Commission Expires: _____, 20____.

UNION COUNTY IMPROVEMENT AUTHORITY

Trailside Nature and Science Center Sensory Trail Drainage Improvements

452 New Providence Road, Mountainside, New Jersey

Bidder's Name _____

CERTIFICATE OF INSURANCE STATEMENT

The Bidder fully understands the UCIA's insurance requirements as stated in the Bid Documents as well as the Owner/Contractor Agreement and agrees to provide all insurance required by these documents prior to the issuance of the Notice to Proceed.

NAME OF BIDDER _____

By: _____
(Signature)

Print Name : _____

Title: _____

UNION COUNTY IMPROVEMENT AUTHORITY

**Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside, New Jersey**

Bidder's Name _____

TIME OF COMPLETION

The undersigned agrees that, if awarded the Contract, the scope of work will begin within ten (10) Calendar Days after Notice to Proceed by the Owner and will be completed within 120 calendar days.

I, _____ of _____
NAME (Print or type) NAME OF COMPANY

agree to complete work in the time frame specified

SIGNATURE

Date: _____, 20____

TITLE

**Trailside Nature and Science Center Sensory Trail Drainage Improvements
452 New Providence Road, Mountainside, New Jersey**

Bidder's Name _____

AGREEMENT FOR USE OF BID DOCUMENTS IN ELECTRONIC FORM

This Agreement is made in reference to the following project: **Trailside Nature and Science Center Sensory Trail Drainage Improvements** ("Project") for **Union County Improvement Authority** ("Owner").

The Union County Utilities Authority (UCIA) will provide to _____ ("Recipient") certain drawings, specifications and other documents prepared by Pennoni Associates, Inc. ("Pennoni") in electronic or other machine-readable format. These documents shall be referred to herein as the "Electronic Documents." It is understood and agreed that Recipient may wish to make certain Electronic Documents available to other individuals and entities in connection with the Project. This Agreement is intended to govern the use of the Electronic Documents by the Recipient and other individuals and entities.

In consideration of Pennoni's agreement to release the Electronic Documents to Recipient, Recipient agrees as follows:

1. Any distribution by Recipient of all or any portion of the Electronic Documents shall be limited for use on this Project only. Such distribution is subject to Pennoni's approval and may be made only after written notice is given to Pennoni by Recipient, and any additional recipient agrees in writing to be bound by the terms of this Agreement.

2. This Agreement shall be incorporated in the General Conditions for the Contract for Construction and shall become binding on all parties who use the Electronic Documents. Any individual or entity, including the Owner, to whom Pennoni release all or any portion of the Electronic Documents, or who thereafter receives all or any portion of the Electronic Documents, shall be a Recipient for purposes of this Agreement.

3. All drawings, specifications or other documents of any kind prepared by RSC as the case may be, whether in hard copy or any electronic or machine readable format including the Electronic Documents (collectively the "Pennoni Documents"), are instruments of Pennoni's services prepared solely for use in connection with the Project. Pennoni shall reserve all rights, including copyrights, for their respective Documents. This Agreement is not intended in any way to alter the respective interests of the parties in the Pennoni Documents as may be set forth in any other agreement, notwithstanding Pennoni's agreement to release the Electronic Documents to Recipient.

4. The Electronic Documents are provided to the Recipient in connection with the Recipient's performance of its responsibilities and obligations relating to the Project, including bidding. Pennoni shall retain a set of paper copies of the Electronic Documents, which Recipient may review at the UCIA at a mutually agreeable time. If it is determined that any difference exists between the paper copies and the Electronic Documents, the paper copies shall be

presumed to be correct and take precedence over the Electronic Documents, unless Pennoni specifically advises Recipient to the contrary in writing.

5. The parties agree that the Electronic Documents are not, and shall not be construed to be, a product. It is expressly agreed by the Recipient that there are no warranties of any kind in the Electronic Documents or in the media in which they are contained, either express or implied.

6. Recipient agrees not to add to, delete from, or otherwise modify or alter in any way, or to allow others to add to, delete from, or otherwise modify or alter in any way, the Electronic Documents or any copies Recipient prints from the Electronic Documents. Recipient recognizes that additions, deletions, alterations or modifications to the Pennoni Documents introduced by anyone other than Pennoni, as the case may be, may result in adverse consequences that Pennoni can neither predict nor control. Therefore, even in the event that Pennoni may have specifically given the Recipient permission to use the Electronic Documents in connection with Recipient's obligation to prepare certain documents for the Project which requires Recipient to add to, delete from, modify or alter the Pennoni Documents, Recipient shall be subject to the provisions of Paragraphs 9 and 10 of this Agreement. Furthermore, if Recipient receives Pennoni's permission to add to, delete from, modify or alter the Pennoni Documents, Recipient shall, in addition to the other obligations set forth herein, remove Pennoni's title block, as the case may be, from the paper copy of the Electronic Documents used by Recipient.

7. The Electronic Documents are supplied in the following format: **PDF Format.**

Any conversion of the format is solely the responsibility of the Recipient. Recipient understands and agrees that the conversion of the paper copies of the Pennoni Documents into electronic or machine-readable format or the conversion of the Electronic Documents from the machine-readable formats to a different format may introduce errors and inaccuracies. Recipient therefore agrees to confirm the accuracy of the Electronic Documents before using them. Recipient shall accept all responsibility for any errors or inaccuracies and shall release Pennoni and the UCIA from any liability or claims for recovery of damages or expenses arising as the result thereof.

8. Recipient further agrees that the Pennoni Documents were prepared for use in connection with this Project only, and that the Electronic Documents are supplied to Recipient only for the limited purpose stated herein. Recipient agrees not to use, or allow others to use, the Electronic Documents, in whole or in part, for any purpose or project other than as stated herein.

9. Recipient agrees to waive any and all claims and liability against Pennoni and the UCIA, and their respective subconsultants and consultants, as the case may be, arising under this Agreement or as a result of Recipient's use of the Electronic Documents.

10. Recipient agrees to indemnify and save harmless Pennoni and their respective subconsultants, and each of their partners, officers, shareholders, directors and employees, and the Owner and its officers and employees and professionals, from any and all claims, judgments, suits, liabilities, damages, costs or expenses (including reasonable defense and attorneys fees) arising as the result of 1) Recipient's failure to comply with any of the requirements of this Agreement; or 2) a defect, error or omission in the Electronic Documents or the information contained therein, which defect, error or omission was not contained in the paper copies of the Contract Documents; or 3) from any addition, deletion, modification or alteration to, or the misinterpretation of the Electronic Documents.

RECIPIENT

Name: _____ **Date:** _____
Title: _____
Company: _____

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

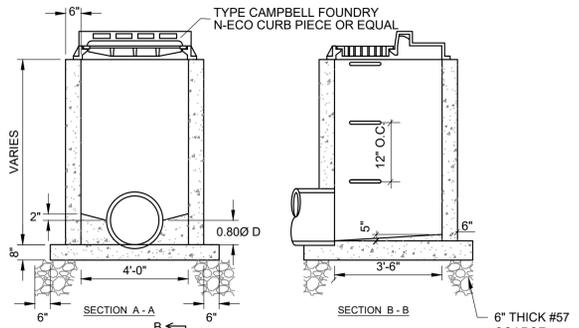
Project: Trailside Nature and Science Center Sensory Trail Drainage Improvements

RFI Number	Contractor	
Description:		
NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION		
Referenced Doc; Drawing - #	Spec - #	Other;
Question :		
Issued By :	Date	
Response :		
By:	Date	<input type="checkbox"/> <input type="checkbox"/>
Firm:		
Dist: Name of A/E Contact Stephen Hoyt SHoyt@Pennoni.com Timothy Hennessy bidding@rscarchitects.com Bibi Taylor btaylorUCIA@ucnj.org		
	Date	

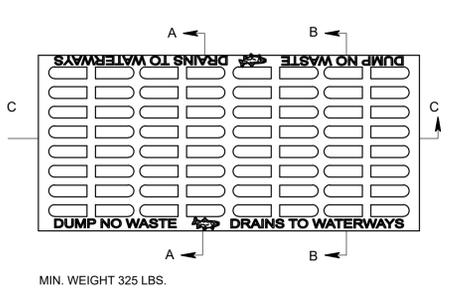
Pennoni Associates, Inc.

1085 Raymond Boulevard, Suite 2102, Newark, New Jersey 07102

DRAWINGS

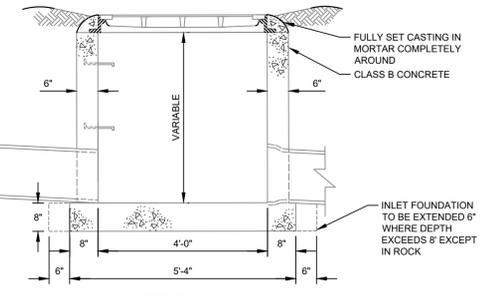


NJDOT TYPE "B" INLET DETAIL
N.T.S.



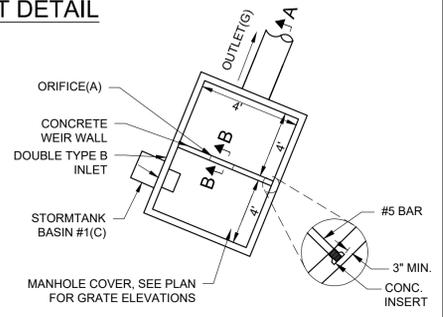
BICYCLE SAFE GRATE (CAST IRON)
N.T.S.

- INLET GENERAL NOTES:**
- INVERTS, FOUNDATIONS, AND FOOTINGS SHALL BE NJDOT CLASS B CONCRETE
 - FRAME AND GRATE TO BE NO. 2618 AS MANUFACTURED BY CAMPBELL FOUNDRY CO. OR EQUAL BICYCLE TYPE GRATE. WALLS BELOW THE DEPTH OF 8'-0" MEASURED FROM THE INLET GUTTER TO INVERT, SHALL BE 12" THICK. THE FOUNDATION DIMENSION SHALL BE INCREASED 12" IN WIDTH AND TO 12" IN DEPTH.
 - INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLET. BOTTOMS SHALL BE DISHED AND SLOPED TOWARD THE OUTLET
 - FRAME AND GRATES SHALL BE CAMPBELL FOUNDRY PATTERN NO. 3425 BICYCLE AND ADA COMPLIANT OR APPROVED EQUAL
 - MINIMUM REINFORCEMENT REQUIRED:
DEPTH BELOW TOP OF GRATE HORIZONTAL REINF. VERTICAL REINF.
0' - 10'-0" #13 @ 10" C.C. #13 @ 18" C.C.
10'-1" - 15'-0" #13 @ 8" C.C. #13 @ 18" C.C.
15'-1" - 20'-0" #13 @ 6" C.C. #13 @ 18" C.C.

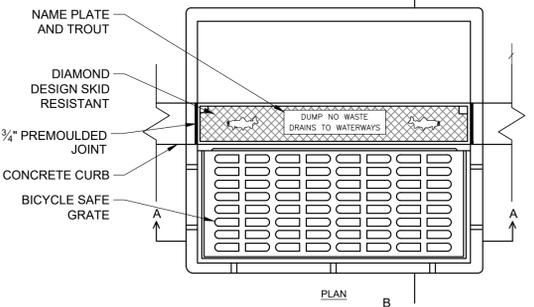


NJDOT TYPE "E" INLET DETAIL
SCALE: NTS

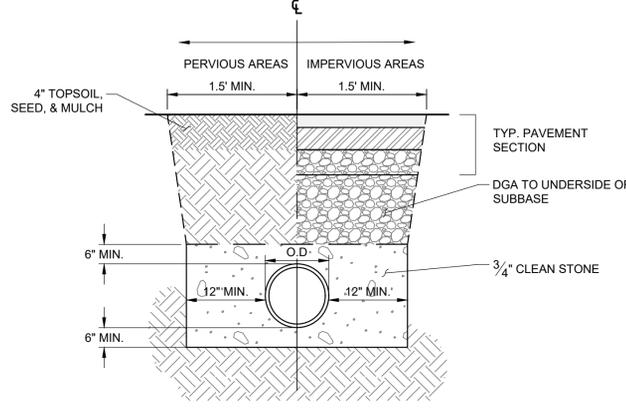
	SIZE	ELEVATION	
A	ORIFICE	0'-3"	435.98
B	WEIR	4'-0"	437.83
C	INLET INVERT	24" HDPE	435.98
G	OUTLET INVERT	12" HDPE	435.88



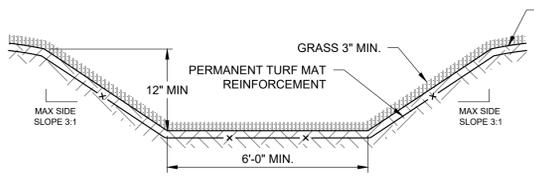
OUTLET CONTROL STRUCTURE - DOUBLE TYPE B INLET
SCALE: NTS



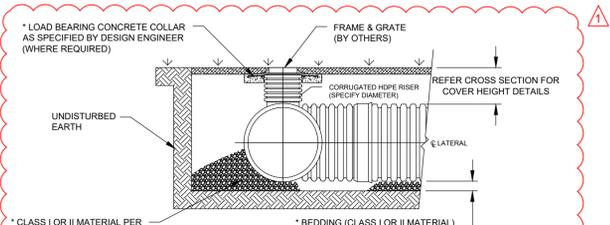
GRASS SWALE CROSS-SECTION
N.T.S.



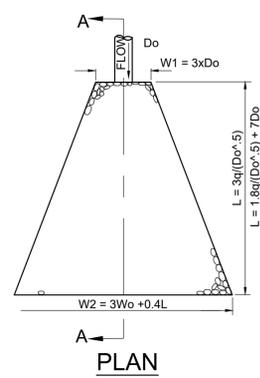
PIPE TRENCH AND BEDDING DETAIL
N.T.S.



CROSS SECTION
N.T.S.

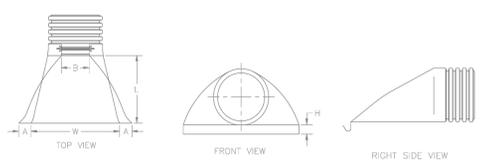


RISER DETAIL
N.T.S.



RIP-RAP APRON DETAIL
N.T.S.

Diameter (in/mm)	PIPE DIAMETER, in (mm)			
	12 (300)	15 (375)	18 (450)	24 (600)
A	6.5 (165)	7.5 (191)	8.5 (216)	10.0 (254)
B	10.0 (254)	11.0 (280)	12.0 (305)	13.0 (330)
H	6.5 (165)	6.5 (165)	6.5 (165)	6.5 (165)
L	25.0 (635)	25.0 (635)	32.0 (813)	36.0 (914)
T	29.0 (737)	29.0 (737)	35.0 (889)	45.0 (1143)



FLARED-END SECTION(FES) DETAIL
N.T.S.

- NOTES:**
- FOR REFERENCE ONLY. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL. BASIS OF DESIGN: ADS LANDMAX STORMWATER MANAGEMENT SYSTEM
 - ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
 - ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
 - MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
 - FILTER FABRIC: A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.
 - FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 - BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm), 6" (150mm) FOR 30"-60" (750mm-1500mm).
 - INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 - MINIMUM COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

HDPE DETENTION BASIN DETAIL
N.T.S.

NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "S"	NOMINAL SPACING "C"	TYPICAL SIDE WALL "X"	H (NON-TRAFFIC)	H (TRAFFIC)
12" (300mm)	14.5" (368mm)	11" (279mm)	25.5" (648mm)	8" (203mm)	12" (305mm)	12" (305mm)
15" (375mm)	17" (432mm)	13" (330mm)	31" (787mm)	10" (254mm)	12" (305mm)	12" (305mm)
18" (450mm)	21" (533mm)	17" (432mm)	38" (965mm)	12" (305mm)	12" (305mm)	12" (305mm)
24" (600mm)	28" (711mm)	22" (559mm)	49" (1245mm)	15" (381mm)	12" (305mm)	12" (305mm)
30" (750mm)	36" (914mm)	28" (711mm)	61" (1549mm)	18" (457mm)	12" (305mm)	12" (305mm)
36" (900mm)	42" (1067mm)	33" (838mm)	73" (1854mm)	22" (559mm)	12" (305mm)	12" (305mm)
42" (1065mm)	48" (1219mm)	39" (991mm)	85" (2159mm)	26" (660mm)	12" (305mm)	12" (305mm)
48" (1220mm)	54" (1372mm)	45" (1143mm)	97" (2464mm)	30" (762mm)	12" (305mm)	12" (305mm)
60" (1500mm)	69" (1752mm)	57" (1448mm)	121" (3073mm)	38" (965mm)	12" (305mm)	12" (305mm)

* CLASS I BACKFILL REQUIRED AROUND 60" DIAMETER FITTINGS.

Pennoni
NJ COA: GA26033300
PENNONI ASSOCIATES INC.
1085 Raymond Boulevard, Suite 2102
Newark, NJ 07102
T 973.265.9775 F 973.265.9774

STEPHEN C. HOYT, PE
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. 2468054015
DATE: 11/15/2025

TRAILSIDE NATURE AND SCIENCE CENTER
SENSORY TRAIL DRAINAGE IMPROVEMENTS

452 NEW PROVIDENCE ROAD
MOUNTAIN SIDE, NEW JERSEY

DRAINAGE DETAILS
RSC ARCHITECTS
3 UNIVERSITY PLAZA DRIVE, SUITE 600
HACKENSACK, NEW JERSEY

PROJECT: **RSCAR25003**

DATE: 2025-09-12

DRAWING SCALE: N.T.S.

DRAWN BY: PM

APPROVED BY: SH

REVISIONS

NO.	DATE	REVISIONS	BY
1	2025-11-13		PM

ADDENDUM #1

CS6002

SHEET 9 OF 12

NOT FOR CONSTRUCTION