

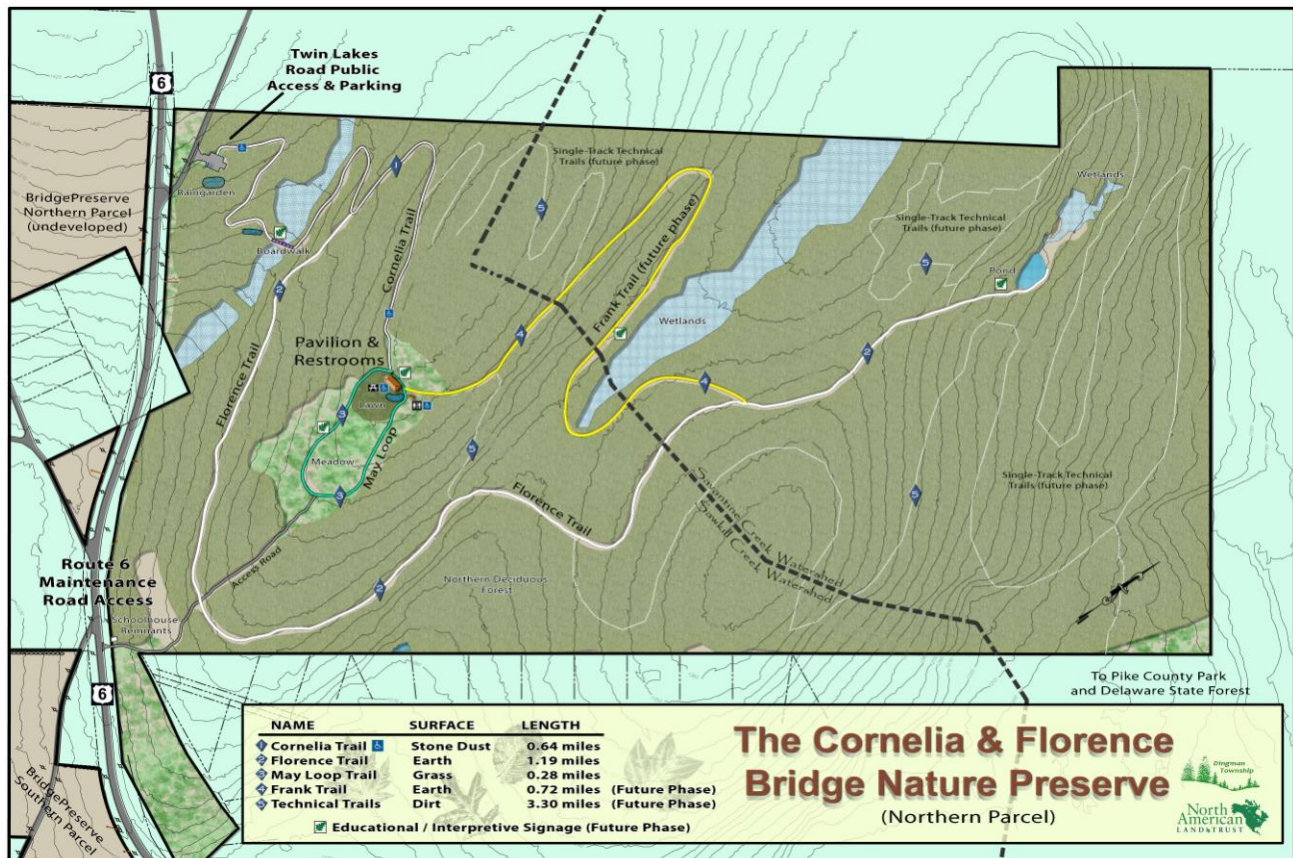
DINGMAN TOWNSHIP

118 FISHER LANE, MILFORD, PA 18337

(PHYSICAL LOCATION)

CORNELIA & FLORENCE BRIDGE PRESERVE
 INTERSECTION OF ROUTE 6 & TWIN LAKES ROAD
 DINGMAN TOWNSHIP/MILFORD TOWNSHIP, PA 18337

“FRANK TRAIL PROJECT”



INVITATION FOR BIDS

JUNE 12, 2017

DINGMAN TOWNSHIP
118 FISHER LANE, MILFORD
PIKE COUNTY, PA

“FRANK TRAIL PROJECT”

TABLE OF CONTENTS

Invitation for Bids	page 2
Description of Work	page 3
Instructions to Bidder	page 3-6
Proposal Submission	page 7

ATTACHMENT I. Bid Submission Forms

- Contractor Information Form
- Statement of Bidder Qualifications
- Bid Proposal
- Itemized Bid Form
- Summary Bid Form
- Bid Bond
- Certification of Non-Segregated Facilities
- Non-Collusion Affidavit
- Non-Discrimination and Equal Opportunity Policy
- Sexual Harassment Policy

ATTACHMENT II. Draft Contractual Agreement
- Performance Bond

ATTACHMENT III. Construction Drawings (*Sheets CV & C-1*)

ATTACHMENT IV. Technical Specifications

INVITATION FOR BIDS

Notice is hereby given that the Dingman Township Board of Supervisors will accept separate sealed proposals for **Walking Trail Construction Services** at their office, 118 Fisher Lane, Milford, Pennsylvania, 18337, until **2:00 PM, Monday, June 26, 2017**, at which time they will be publicly opened and read. Contract award is anticipated to occur during their regular meeting on July 5, 2017 at 7:30 PM.

Work on this trail project, located within the Cornelia & Florence Bridge Preserve, shall include, but is not limited to furnishing all labor, materials and equipment necessary for completing the following scope of work: trail corridor clearing; minimal rough grading to create nearly level base; installation of mulch (hammer-mill) trail tread or approved equal; installation of stormwater management facilities, E&S control measures and temporary seeding, as needed; and other associated work.

Contract documents will be available for download beginning **9:00 AM on Monday, June 12, 2017** on the Township website (www.dingmantownship.org). The contract Documents include Construction Drawings, Project Manual, General Conditions, Instructions, Technical Specifications, and Bid Submission Forms. The contractor is responsible for printing their own full-size plan set and manual. The full project sets will be available for review at the Township Office and McLane Associates (601 Stafford Avenue, Scranton, PA 18505). A **mandatory pre-bid conference** for all prime-contractors will be held at the project site at **12:00PM on Monday, June 19, 2017**.

All bids shall be submitted on the forms furnished (Attachment I), in sealed envelopes, clearly marked "The Bridge Preserve Frank Trail Project" and addressed to Karen Kleist, Secretary/Treasurer. They must be delivered or mailed to Township so as to arrive by the time of the bid opening. No bids will be considered which fail in any respect to comply with the bid conditions and requirements.

Dingman Township reserves the right to reject any or all bids or any part of any bid and to waive any or all irregularities, mistakes, omissions or informalities relative thereto. All bids shall be considered binding and shall not be withdrawn for a period of thirty (30) calendar days from the bid opening date without the consent of Dingman Township.

Submitted by:
Dingman Township Board of Supervisors

DESCRIPTION OF WORK

The project deliverables for this trail construction project are: 1.) site clearing of existing plant materials within the specified limit of disturbance (the 8' wide trail corridor); 2.) minimal earth moving to level trail base; 3.) installation of hammer-mill wood chip trail tread or approved equivalent; and 4.) installation of stormwater management facilities, required E&S BMP's and temporary/permanent seeding of all disturbed areas, as needed.

Work shall include, but is not limited to furnishing all labor, materials and equipment necessary for completing the above mentioned scope of work. Proposed site work is described in and shown on the attached Construction Site Drawings (Attachment III. Sheets CV & C-1).

INSTRUCTIONS TO BIDDERS

1. PREFACE

Dingman Township, hereinafter "Dingman" invites you to submit a proposal with the intent of entering into a Contract with Dingman for furnishing all labor, materials, equipment, for this woodland Trail Project at the Cornelia & Florence Bridge Preserve at the intersection of Route 6 and Twin Lakes Road (Access road is along Route 6).

2. GENERAL NOTES

- A. Each bidder should visit the site and become familiar with the site conditions under which the work is to be conducted. A **mandatory pre-bid meeting will be held at Noon on Monday, June 19, 2017.**
- B. The bidder must provide a **10% Bid Bond** (required for Bid Submission) and **100% Performance Bond** (required after Bid Award).
- C. The successful bidder, upon execution of a contract with the client and after receiving a formal Notice to Proceed, will **complete all site work with 2 months from the award date.**
- D. All construction debris, material and equipment shall be removed from the project area and disposed of in a legal manner upon completion of work. There shall be no burning of any type within the project area. Removed vegetation from the trail corridor can be chipped and left/spread on site.
- E. The proposed trail tread surface is best described as hammer-mill mulch (a.k.a. root mulch, hardwood mulch, *et. al.*). The material shall be a natural product and not shredded pallets.

- F. It shall be the responsibility of the contractor to verify all utility locations within the project area prior to commencing work (**PA One Call**). The contractor shall be responsible for damage to life and property as a result of negligence in verifying utility locations.
- G. Before executing any subcontractor for this project, **the successful Bidder shall submit the name and qualifications of any proposed subcontractor for approval** by Dingman Township and the Landscape Architect. If subcontractors are expected prior to bid submission, then the names and addresses of these subcontractors should be noted in the bid submission (This is preferable to assure the submitted bid represents a cohesive team from the outset).
- H. The contractor shall perform all work in accordance with all applicable laws, codes, and regulations required by all authorities having jurisdiction over such work. Contractor shall obtain all inspections, licenses, and permits required by federal, state, and local governments in furnishing, transporting, and installing the work.
- I. The Cornelia & Florence Bridge Preserve will remain open during construction. Where applicable, the contractor shall provide safety fencing and signage to inform Preserve users that the trail site is under construction and not open to non-construction personnel.

3. CONSTRUCTION/CONTRACT DOCUMENTS & BIDDING PROCESS

- A. All construction documents including Drawings, Specifications, and Bid Forms, will be available for download on the Township website. Full-size, hardcopies of the drawings can be ordered and picked up, at the contractor's expense, from Dingman Township or from Steamtown Blueprint & Copy Center, 308 Penn Avenue, Scranton, PA 18503, PH: (570) 961-1315. Addenda issued during the bidding period will be furnished to all bidders via email.
- B. If, during the bidding period, a bidder observes errors, discrepancies, ambiguities or omissions in, or requires clarification as to the meaning of the drawings and specifications, he shall request interpretations or corrections by the project landscape architect, who will issue a written clarification or supplementary information by addendum to all bidders.
- C. No oral interpretation will be made to any Bidder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to Dingman Township. Any inquiry received two (2) or more days prior to the date fixed for opening of Bids will be given consideration. Every interpretation made to a Bidder will be in the form of an Addendum to the Contract Documents, and when issued, will be on file in the office of Dingman Township and the office of McLane Associates at least one (1) day before Bids are opened.

- D. All Addenda will be emailed to each person holding Contract Documents, but it shall be the Bidder's responsibility to make inquiry as to the Addenda issued. All such Addenda shall become part of the Contract and all Bidders shall be bound by such Addenda, whether or not received by the Bid.
- E. Before submitting a proposal, each bidder shall be held responsible for examining these Instructions to Bidders, the Specifications, Drawings and Bid Forms, and to have visited the site of the proposed work and fully informed themselves as to all conditions affecting the work of the contract.
- F. After Execution of Agreement, no consideration will be given to any claim of misunderstanding of the documents or alleged unfamiliarity of site conditions affecting the work.
- G. Should there be any doubt as to the exact meaning of the documents; the contractor shall bring it to the attention of the Project Landscape Architect in order to clarify by addendum.
- H. The following "Contractor Documents," as they may apply to this contract, accompany these instructions to Bidders: Attachment III. Construction Drawings (Sheets CV & C-1).

4. BID SUBMISSION, OPENING & AWARD OF BIDS

- A. The Project Manual is not to be detached, filled out, or executed. Separate copies of bid forms and contractual documents have been furnished for the submission of bids.
- B. All Bids must be submitted on forms supplied by Dingman Township. All Bids must be regular in every respect and no interlineations, excisions or special conditions shall be made or included in the Bid Form by the Bidder.
- C. The Dingman Township Board of Supervisors will accept separate sealed proposals for **Walking Trail Construction Services** at their office, 118 Fisher Lane, Milford, Pennsylvania, 18337, until **2:00 PM, Monday, June 26, 2017**, at which time they will be publicly opened and read.
- D. Award of Contract to the lowest responsible bidder is anticipated to occur during the regularly-scheduled Supervisors meeting on July 5, 2017 at 7:30 PM.
- E. Bids will not be accepted after specified time or will the time for accepting bids be extended due to weather conditions, traffic or travel distance of bidder or for any other circumstances.

5. RESERVATION OF RIGHTS

- A. Dingman Township reserves the right to reject any or all proposals, or parts thereof, to accept other than lowest proposal, and to waive any informality in any proposal.

- B. Dingman Township further reserves the right to delay the award of the contract up to thirty (30) calendar days after receipt of proposals with no change in the Base Bid or other conditions or prices stated in the proposals.
- C. The undersigned further agrees that this Base Bid Proposal is based on the understanding that within ten (10) calendar days after the receipt of a Letter of Award (Letter to Proceed), they will be fully prepared to start work operations.
- D. Dingman reserves the right to let other contractors and to employ other contractors in connection with the work of this project. All contractors on this project shall afford other contractors reasonable opportunity for handling and storing of materials and equipment, and for execution of their work with the work of the other contractors.

6. INSURANCE

- A. The CONTRACTOR must carry Worker Compensation Insurance naming Dingman Township as an additional insured, and shall provide Dingman Township with a Workers Compensation Insurance Certificate evidencing that the policy is in force. The policy must remain in force until project completion; should the policy expire, a copy of the new insurance certificate will be forwarded to Dingman Township as soon as it is received.
- B. The CONTRACTOR must carry Public Liability Insurance, including insurance against claims for personal injury and property damage in the sum of not less than One Million Dollars (\$1,000,000.00), naming Dingman Township an additional insured, and shall provide Dingman with a Public Liability Insurance Certificate evidencing that the policy is in force. The policy must remain in force until project completion; should the policy expire, a copy of the new insurance certificate will be forwarded to Dingman Township as soon as it is received.
- C. The CONTRACTOR must carry Builders Risk/All Risk Insurance, in an amount not less than 100% of the contract price, naming Dingman Township as an additional insured, and shall provide Dingman Township with a Builders Risk/All Risk Insurance Certificate evidencing that the policy is in force. The policy must remain in force until project completion; should the policy expire, a copy of the new insurance certificate will be forwarded to Dingman Township as soon as it is received.
- D. The Contractor is primary insurer.

7. DINGMAN TOWNSHIP/ CONTRACTOR AGREEMENT

The Contractor shall enter into a standard contract agreement with Dingman Township prior to project commencement. A draft contract is attached (Attachment II).

PROPOSAL SUBMISSION

A complete bid package includes all forms in ATTACHMENT I. Proposals shall be addressed and submitted to:

The Township of Dingman
c/o Karen Kleist, Secretary/Treasurer
118 Fisher Lane
Milford, Pennsylvania, 18337

Proposal Due Date: **2:00 PM EST, Monday, June 26, 2017**

ATTACHMENT I. BID SUBMISSION FORMS

- Contractor Information Form
- Statement of Bidder Qualifications
- Bid Proposal Form
- Itemized Bid Form
- Summary Bid Forms
- Bid Bond
- Certificate of Non-Segregated Facilities
- Non-Collusion Affidavit
- Non-Discrimination & Equal Opportunity Policy
- Sexual Harassment Policy

CONTRACTOR INFORMATION FORM

NAME OF FIRM _____

ADDRESS _____

CITY, STATE, ZIP CODE _____

AUTHORIZED SIGNATURE _____

TYPED NAME AND TITLE _____

PHONE NO. _____ FAX _____

EMAIL _____

EMERGENCY (24-HOUR) PHONE NO. _____

U.S. TREASURY EMPLOYER'S IDENTIFICATION NO. _____

SUBCONTRACTORS (NAME/TASK)? [LIST, IF APPLICABLE (MUST BE APPROVED BY TWP.)]:

NOTE: Firms must use their FULL LEGAL name. Generally, a corporation's name must end with a suffix indicating the corporate statue of that business (i.e., Inc., Co., Corp., etc.). Trade names may be indicated by individuals or corporations with the individual or corporation name followed by "t/a" (trading as) or "d/b/a" (doing business as), respectively. Failure to use your FULL LEGAL name may be cause for rejection of the bid.

STATEMENT OF BIDDER QUALIFICATIONS

All questions must be answered in a clear and comprehensive manner. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he/she desires that is project specific.

1. General character of work performed by your company. List any specialty work.

2. List your major equipment available for this contract.

3. State your experience in construction work similar to this project. Specifically, do you have experience working on trails and in recreational facilities? If yes, please list a few projects.

4. Background and experience of the principal members of your organization, including the project manager.

5. List two references, with contact information, from comparable projects.

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

Name of Company _____

By: _____

Date: _____

Title: _____

BID PROPOSAL

The undersigned, having familiarized themselves with the existing conditions at the Cornelia & Florence Bridge Preserve that may impact the cost of the work and with the Contract Documents (including the Construction Drawings, the Project Manual, Addenda (if any), the Invitation to Bidders, the Instructions to Bidders, the Attachments and the Technical Specifications), hereby proposes to furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment, and services, including water, utility and transportation services, and other facilities and services necessary to perform and complete all work depicted in the Plans and Specifications for the **Cornelia & Florence Bridge Preserve - Frank Trail Project** and all incidental work in strict accordance with the Contract Documents within 2 months from the issuance of the Notice to Proceed, for the

BASE BID PRICE OF (\$_____)
_____ **Dollars**

1. In submitting this bid, the Bidder understands that Dingman Township reserves the right to reject any or all bids or to waive any informality in the bidding. If written notice of the acceptance of this Bid is mailed or delivered to the undersigned within sixty (60) days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver the Contract Agreement in the form prescribed by Dingman Township, within 10 days. The Bidder understands that they must furnish Workers Compensation Insurance, the required Public Liability Insurance, the required Builders Risk/All Risk Insurance (if applicable), the required Performance Bond within ten (10) days after the Agreement is presented to him/her for signature.

2. Attached hereto are the following forms:
 - a. Contractor Information Form
 - b. Statement of Bidder Qualifications
 - c. Itemized Bid Form
 - d. Summary Bid Form
 - e. Bid Bond (10%) - Security in the sum of _____ dollars (\$_____), in the form of a _____.
 - f. Certificate of Non Segregated Facilities
 - g. Non-Collusion Affidavit
 - h. Non-Discrimination and Equal Opportunity Policy
 - i. Sexual Harassment Policy

3. The undersigned represents that he is in receipt of the following number of Addenda (if no Addenda have been issued, insert the word "none" in the following space):
Addenda # _____
Addenda # _____
Addenda # _____
Addenda # _____

I. WHEN THE PROSPECTIVE CONTRACTOR IS AN INDIVIDUAL:

If the Prospective Contractor is an individual trading under his owner and his exact post office address must be given. If one other than the owner signs this proposal, then a notarized certificate of authority signed by the owner must accompany this proposal.

_____(SEAL)
Witness _____ Prospective Contractor

Address: _____
Trading as: _____

II. WHEN THE PROSPECTIVE CONTRACTOR IS A PARTNERSHIP:

If the Prospective Contractor is a firm or partnership trading under an individual of fictitious name, this proposal must be signed by one or more partners and the exact names and post office addresses of the members of the firm or partnership must be included. If one other than a partner signs this proposal, then a notarized certificate of authority signed by all the partners must accompany this proposal.

_____(SEAL)
Witness _____ Partner

_____(SEAL)
Witness _____ Partner

Address: _____
Trading as: _____

III. *WHEN THE PROSPECTIVE CONTRACTOR IS A CORPORATION:

If the Prospective Contractor is a corporation, the proposal must be signed by the president or vice-president, or by an individual whose notarized certificate of authority to execute must accompany this proposal together with the names, titles, and business addresses of the president, secretary, and treasurer, which must appear on the said certificate.

_____(SEAL)
Secretary _____ President

Address: _____
Trading as: _____

(CORPORATE SEAL)

*The _____ is a corporation organized and existing under the laws of the State of _____ and has been granted a certificate of authority to do business in Pennsylvania, required by the Business Corporation Law, approved May 5, 1933, P. L. 364, as amended.

ITEMIZED BID FORM
CORNELIA & FLORENCE BRIDGE PRESERVE
"FRANK TRAIL PROJECT"

BASE BID:

CORRIDOR PREPARATION \$ _____
Clear vegetation; 8' wide, 8' height

WOODLAND TRAIL / MULCH TREAD:* \$ _____
(see detail 2/C-1) Installation of hammer-mill wood chips (Assume 300 CY) over existing ground;

CONSTRUCTION SAFETY FENCING: \$ _____
(see detail 5/C-1) Installed near wetlands, as specified, and to secure work area

DIRECTIONAL SIGNAGE: (see detail 3/C-1) \$ _____
Purchase & Installation of sign on 4"x4" P.T. SYP Post

DESTINATION SIGNAGE: (see detail 3/C-1) \$ _____
Purchase & Installation of sign on 4"x4" P.T. SYP Post

LILLIAN OVERLOOK: (see detail 1/C-1) \$ _____
Rock, spur trail, wood chips, cutting of existing fallen log, installation of second log bench (see detail 4/C-1)

BASE BID TOTAL: \$ _____

* Hammer-mill Wood Chips - Unit Price for Installation = \$ _____ per CY

COMPANY NAME: _____

AUTHORIZED SIGNATURE: _____

SUMMARY BID FORM

I. BASE BID (Total from Itemized Bid Form); *Insert Amount in Words & Numbers*)

\$ _____

COMPANY NAME

AUTHORIZED SIGNATURE

TELEPHONE NUMBER

E-MAIL ADDRESS

THE BIDDER AFFIRMS AND DECLARES:

1. That the Bidder is of lawful age and that no other person, firm, corporation, or joint venture has any interest in this Bid or in the Contract proposed to be entered into.
2. That this Bid is made without any understanding, agreement or connection with any other person, firm, corporation, or joint venture making a Bid for the same purposes, and is in all respects fair and without collusion or fraud.
3. That the Bidder has carefully examined the site of the work, and that from his own investigations, he has satisfied himself as to the nature and location of the work, the character, quality, and quantity of materials and the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all difficulties to be encountered, and all other items which may, in all ways, affect the work or its performance.
4. The undersigned, as Bidder, also declares that he has carefully examined and fully understands all the component parts of the Contract Documents and agrees that he will execute the Contract and completely perform the work in strict accordance with the terms of the Contract and the Contract Documents therein referred to.

EXCEPTIONS:

All exceptions taken to the specifications contained in this document must be clearly indicated in the space provided in the space below. Unless noted as an exception, the bidder will be held responsible for providing each component or standard called for in the construction documents.

Dingman Township retains the exclusive right to approve or reject any exception taken to the specifications contained in this bid. It is hereby agreed that if this bid is rejected due to an exception taken to a specification by the bidder, the rejection of the bid will be final and no further action may be taken.

Do you claim any exception to any specifications in this Bid? _____

BID BOND (10%)

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned _____
as PRINCIPAL, and _____ as SURETY are held and firmly
bound unto Dingman Township, hereinafter called "Dingman", in the penal sum of
_____ Dollars (\$_____) lawful money of the United States, for the
payment of which sum well and truly to be made, we bind ourselves, our heirs, executors,
administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted
the accompany bid, dated _____, 2017,
for _____.

NOW, THEREFORE, if the Principal shall not withdraw said Bid within thirty (30) days after the
said opening, and shall within the period specified therefore, or if no period be specified, then
within ten (10) days after the prescribed forms are presented to him for signature, enter into a
written Contract with Dingman in accordance with the Bid accepted, and give bond with good and
sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment
of such Contract; or in the event of the withdrawal of said Bid within the period specified, or in the
failure to enter in to such Contract and give such bond within the time specified, if the Principal
shall pay Dingman may procure the required work or supplies or both, if the latter be in excess of
the former, then the above obligation shall be void and of no effect, otherwise to remain in full
force and virtue.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their
several seals this _____ day of _____, 2017, the name and corporate seal of each
corporate party being hereto affixed and these presents signed by its undersigned representative,
pursuant to authority of its governing body.

INDIVIDUAL OR PARTNERSHIP PRINCIPALS

_____ (SEAL)

_____ (SEAL)

In the presence of: _____ (SEAL)

_____ (SEAL)

CORPORATE PRINCIPAL

ATTEST: _____

_____ (SEAL)

SURETY

ATTEST: _____

_____ (SEAL)

Countersigned:

By: _____

Attorney-in-Fact,
State of _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation named as
Principal in the within bond; that _____

_____, who signed the said bond on behalf of the Principal was

then _____ of said Corporation; that I know his signature, and his

signature thereto is genuine; and that said bond was duly signed, sealed and attested to for

and in behalf of said corporation by authority of his governing body.

Title: _____

(CORPORATE SEAL)

CERTIFICATE OF NON-SEGREGATED FACILITIES

We, _____ (Company)

Certify that we do not and will not maintain or provide for our employees any segregated facilities at any of our establishments, and that we do not and will not permit our employees to perform their services at any location, under our control, where segregated facilities are maintained. We understand and agree that breach of this certification is a violation of Equal Opportunity clause required by Executive Order 11246, amended.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom or otherwise.

We further agree that (except where we have obtained identical certifications from proposed Subcontractors for specific time periods) we will obtain identical certifications from proposed Subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause; that we will retain such certification in our files; and that we will forward the following notice to such proposed Subcontractors (except where the proposed Subcontractors have submitted identical certifications for specific time periods).

NOTICE TO PROSPECTIVE SUBBUILDERS OF REQUIREMENT FOR CERTIFICATION OF NON-SEGREGATED FACILITIES. A certification of Non-segregated facilities as required by the 9 May 1967 order on Elimination of Segregated Facilities, by the Secretary of Labor (32 Fed. Reg. 7439, 19 May 1967), must be submitted from the provisions either for each subcontract or for all subcontracts during a period (i.e. quarterly, semi-annually, or annually).

NOTE: Whoever knowingly and willfully makes any false, fictitious or fraudulent representation may be liable to criminal prosecution under 18 U.S.C. 1001.

(Name of Company)

By: _____

Date: _____

Title: _____

NON-COLLUSION AFFIDAVIT

STATE OF _____:

COUNTY OF _____:

I state that I, _____ of _____
(Name) (Name of Firm)

am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal, and the preparation of the proposal.

I state that:

1. I am fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

2. Such Bid is genuine and is not a collusive or sham Bid;

3. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached Bid or of any other bidder, or to secure through any other bidder, or to fix any overhead, profit or cost element of the bid price or the bid price of any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against The Township of Dingman or any person interested in the proposed contract; and

4. The price or prices quoted in the attached Bid are fair and proper and are not tainted by a collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(signed) _____

(title) _____

Subscribed and sworn to before me
this _____ day of _____, 2017

(signature)

NONDISCRIMINATION & EQUAL OPPORTUNITY POLICY

Nondiscrimination and equal opportunity are the policy of the Commonwealth and Dingman Township in all its decisions program, and activities. The purpose is to achieve the aims of the United States and Pennsylvania Constitutions. Executive Order 1972-1, the Pennsylvania Human Relations Act, Act of October 27, 1955, (P.L. 744), as amended, (43 P.S. § 951, *et. seq.*), and (43 P.S. § 153), by assuring that all persons are accorded equal employment opportunity without regard to race, color, religious creed, handicap, ancestry, national origin, age, or sex.

During the term of this contract, the Contractor agrees as follows:

- (a) Contractor shall not discriminate against any employee, applicant for employment, independent contractor or any other person because of race, color, religious creed, ancestry, national origin, age, sex or handicap. Contractor shall take affirmative action to insure that applicants are employed, and that employees or agents are treated during employment, without regard to their race, color, religious creed, ancestry, national origin, age, sex or handicap. Such affirmative action shall include, but is not limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other *forms* of compensation; and selection *for* training. Contractor shall post in conspicuous places, available to employees, agents, applicants for employment, and other persons, a notice to be provided by the contracting agency setting forth the provision of this nondiscrimination certification.
- (b) Contractor shall, in advertisements or requests for employment placed by it or on its behalf, state all qualified applicants will receive consideration for employment without regard to race, color, religious creed, handicap, ancestry, national origin, age, or sex.
- (c) Contractor shall send each labor union or workers' representative with whom it has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or worker's representative of its commitment to this nondiscrimination certification. Similar notice shall be sent to every other source of recruitment regularly utilized by bidder.
- (d) It shall be no defense to a finding of noncompliance with this nondiscrimination certification that contractor has delegated some of its employment practices to any union, training program, or other source of recruitment which prevents it from meeting its obligations. However, if the evidence indicates that the contractor was not on notice of the third-party discrimination or made a good faith effort to correct it; such factor shall be considered in mitigation in determining appropriate sanctions.
- (e) Where the practices of a union or of any training program or other source of recruitment will result in the exclusion of minority group persons, so that contractor will be unable to meet its obligations under this nondiscrimination certification, contractor shall then employ and fill vacancies through other nondiscriminatory employment procedures.

(f) Contractor shall comply with all state and federal laws prohibiting discrimination in hiring or employment opportunities. In the event of contractor's noncompliance with the nondiscrimination certification or with any such laws, this contract may be terminated or suspended, in whole or part, and contractor may be declared temporarily ineligible for Township contracts, and other sanctions may be imposed and remedies invoked.

(g) Contractor shall actively recruit minority and women subcontractors or subcontractors with substantial minority representation among their employees.

(h) Contractor shall include the provisions of this nondiscrimination certification in every subcontract, so that such provisions will be binding upon each subcontractor.

(i) Contractor's obligations under this clause are limited to the contractor's facilities within Pennsylvania, or where the contract is for purchase of goods manufactured outside of Pennsylvania, the facilities at which such goods are actually produced.

DATE: _____

(NAME OF CONTRACTOR)

BY _____

TITLE _____

SEXUAL HARASSMENT POLICY

Sexual harassment includes unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexually harassing nature, when: (1) submission to the harassment is made either explicitly or implicitly a term or condition of employment; (2) submission to or rejection of the harassment is used as the basis for employment decisions affecting the individual; or (3) the harassment has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

It is the policy of Dingman Township that all Township-owned and operated workplaces, including recreational facilities, are free from sexual harassment. Because of Dingman Township's strong disapproval of offensive or inappropriate sexual behavior at workplaces, any contractor hired by Dingman Township must also assure that all of their employees avoid any action or conduct which could be viewed as sexual harassment.

The Contractor and each subcontractor shall establish and maintain a written sexual harassment policy and shall inform their employees of the policy. The policy must contain a notice that sexual harassment will not be tolerated and employees who practice it will be disciplined. The Contractor shall include the provisions of this Sexual Harassment policy in every subcontract so that those provisions applicable to subcontractors will be binding upon each subcontractor. The Contractor must be willing and able to supply a copy of their written sexual harassment policy upon request to Dingman Township.

During the term of this contract, the Contractor agrees as follows sexual harassment policy:

DATE: _____

(NAME OF CONTRACTOR)

BY _____

TITLE _____

ATTACHMENT II.
DRAFT CONTRACTUAL AGREEMENT

(FINAL AGREEMENT MAY BE REVISED AFTER LEGAL REVIEW AND
ACCEPTANCE BY BOTH PARTIES)

CONTRACTUAL AGREEMENT - DRAFT

THIS AGREEMENT, made this ____ day of _____, 2017, by and between Dingman Township and the _____, his, her or their heirs, executors or administrators and assigns, party of the Second Part, hereinafter called the "CONTRACTOR".

WITNESSETH, that the CONTRACTOR and Dingman Township, for the considerations stated herein, mutually agree as follows:

ARTICLE 1. STATEMENT OF WORK:

A.) The Contractor shall furnish and pay for all supervision, technical personnel, labor, materials, machinery, tools, equipment and services, including water, heat, utility and transportation services, and other facilities and services necessary to perform and complete all work required for the Construction of the improvements described in the Plans and Specifications for **the Cornelia & Florence Bridge Preserve - Frank Trail Project**, hereinafter called the "Project", and other work incidental thereto, all in strict accordance with the Contract Documents as prepared by **Thomas J. McLane and Associates, Inc.**, the Landscape Architect. The CONTRACTOR shall not employ on the Project any unfit person or anyone not skilled in the task assigned to him. The CONTRACTOR shall perform all work in accordance with all applicable local, state and federal laws and regulations and shall obtain all necessary permits for the purchase, transportation, storage and installation of all materials. The CONTRACTOR shall be responsible for initiating, maintaining and supervising all construction operations and safety precautions and programs in connection with the PROJECT and shall take all reasonable precautions for the safety of all employees or subcontractors on the PROJECT, and all material, equipment, and other property at the project site or adjacent thereto.

ARTICLE 2. THE CONTRACT PRICE:

A.) Dingman Township will pay the CONTRACTOR for the performance of the Contract in current funds for the total quantities of work performed at the unit prices stipulated in the Bid for the several respective items of work completed, subject to additions and deductions as provided for in the Contract Documents. The Total Contract Price shall be
(\$ _____)
_____ Dollars

ARTICLE 3. INSURANCE:

- A.) The CONTRACTOR must carry Worker Compensation Insurance naming Dingman Township as an additional insured, and shall provide Dingman Township with a Workers Compensation Insurance Certificate evidencing that the policy is in force. The policy must remain in force until project completion; should the policy expire, a copy of the new insurance certificate will be forwarded to Dingman Township as soon as it is received.
- B.) The CONTRACTOR must carry Public Liability Insurance, including insurance against claims for personal injury and property damage in the sum of not less than One Million Dollars (\$1,000,000.00), naming Dingman Township as an additional insured, and shall provide Dingman Township with a Public Liability Insurance Certificate evidencing that the policy is in force. The policy must remain

in force until project completion; should the policy expire, a copy of the new insurance certificate will be forwarded to Dingman Township as soon as it is received.

- C.) The CONTRACTOR must carry Builders Risk/All Risk Insurance, in an amount not less than 100% of the contract price, naming Dingman Township as an additional insured, and shall provide Dingman Township with a Builders Risk/All Risk Insurance Certificate evidencing that the policy is in force. The policy must remain in force until project completion; should the policy expire, a copy of the new insurance certificate will be forwarded to Dingman Township as soon as it is received.

ARTICLE 4. BONDS:

- A.) The CONTRACTOR must provide a 10% Bid Bond.
- B.) The CONTRACTOR must provide a 100% Performance Bond (see attached).

ARTICLE 5. E&S CONTROLS:

- A.) The CONTRACTOR agrees to share operational control of construction activities at the site. The contractor will also share responsibility for day-to-day operational control (supervision) of those activities at the project site that are necessary to ensure compliance with the Erosion and Sediment Control Plan for the site.

ARTICLE 6. LIENS:

- A.) The CONTRACTOR specifically waives any right to file or claim any mechanic's or material liens, and agrees to execute, simultaneously herewith, and cause to be filed in the records of the Clerk of Judicial Records of Pike County, a Stipulation Against Liens, which shall be binding upon the CONTRACTOR, CONTRACTOR'S supplier and any sub-contractors engaged by the CONTRACTOR.

ARTICLE 7: DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION:

- A.) Work to commence after Dingman Township issues a formal written notice to proceed and will be completed no later than 2 months from formal Notice to Proceed. After that period, liquidated damages of up to \$500.00 per day MAY be assessed by Dingman Township. Should the contractor find it necessary to request an extension of time due to legitimate conditions beyond his control (ie, inclement weather, etc.), Dingman Township may consider such request; however, no additional compensation will be considered or allowed.

ARTICLE 8: CONTRACT:

- A.) This agreement and the following documents form the Contract between the parties hereto and are as fully a part of the Contract as if hereto attached or herein repeated: **this Agreement, Addenda (if any), the Project Manual, the Invitation to Bidders, the Instruction to Bidders, the signed copy of the Bid, the Technical Specifications, the Drawings (as listed in the Schedule of Drawings), the Resolution awarding the Bid, the Notice to proceed, and all of the documents enumerated or referred to in this Agreement.**

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in Four (4) original copies on the day and year first above written.

ATTEST:

CONTRACTOR

By: _____ Date: _____

Title: _____

ATTEST:

DINGMAN TOWNSHIP

By: _____ Date: _____

Title: _____

ATTACHMENTS:

WORKER COMPENSATION INSURANCE CERTIFICATE
PUBLIC LIABILITY INSURANCE CERTIFICATE
BUILDERS RISK/ALL RISK INSURANCE CERTIFICATE
PERFORMANCE BOND

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____

_____ as principal, and

_____ as

sureties are held and firmly bound unto _____, its certain attorney,

successors, or assigns (hereinafter called the Obligee), in the full and just sum of

_____ Dollars (\$_____) lawful money of

the United States, for the payment of which, well and truly to be made, we bind ourselves, our heirs,

administrators, executors, successor and assigns, jointly and severally firmly by these presents.

WHEREAS, said Principal has entered into a certain contract with the Obligee dated

_____, 2017, (hereinafter called the Contract) for _____

_____ which Contract and the

Specifications for said work shall be deemed a part hereof as fully as if set out herein:

NOW, therefore, THE CONDITION OF THIS OBLIGATIONS IS SUCH, that if the principal shall faithfully perform the contract on his part as of the time and in the manner therein provided and satisfy all claims and demands incurred in or for the same, or growing out of the same, or for injury or damages to persons or property in the performance thereof, and shall fully indemnify and save harmless the said Obligee from any performance thereof, and shall fully indemnify and save harmless the said Obligee from any and all cost and damage which the said Obligee may suffer by reason of the principal's failure to do so, and shall fully reimburse and repay the said Obligee any and all outlay and expense shall be null and void, otherwise it shall remain in full force and virtue.

The said surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to terms of the Contract or to the work to be performed thereunder or the Specifications accompanying the same in any wise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.

SIGNED, SEALED AND DELIVERED THIS _____ 2017.

(Individual Principals sign here)

_____(SEAL)

In the presence of: _____(SEAL)

_____(SEAL)

_____(SEAL)

(Corporate Principal sign here)

By _____

Attest: (Surety sign here)

The rate of premium charged is \$ _____ per thousand.

The total amount of premium charged is \$ _____.

(The above must be filled in by the Corporate Surety.)

It is hereby further stipulated and agreed that if the Principal is a non-Pennsylvania corporation neither Principal nor the Surety shall be discharged from liability on this bond, nor the bond surrendered, until such Principal files with the obligee a certificate from the Pennsylvania Department of Revenue evidencing the payment in full of all taxes, penalties and interest, and a certificate from the Bureau of Employment and Unemployment Compensation of the Pennsylvania Department of Labor and Industry, evidencing the payment of all unemployment compensation contributions, penalties and interest due the Commonwealth of Pennsylvania from the said penalties and interest due the Commonwealth of Pennsylvania from the said Principal, or any non-Pennsylvania corporation subcontractor thereunder, or for which liability has accrued, but the time for payment has not arrived as required by the Act of June 10, 1947, P.L. 493, 8 P.S. Sec. 23, amended.

ATTACHMENT III. CONSTRUCTION DRAWINGS

- CV Cover Sheet
- C-1 Frank Trail Layout

CONSTRUCTION PLANS FOR

THE CORNELIA & FLORENCE BRIDGE PRESERVE "FRANK TRAIL"

DINGMAN TOWNSHIP
118 FISHER LANE, MILFORD, PA 18337
PIKE COUNTY, PENNSYLVANIA

TOWNSHIP SUPERVISORS

THOMAS E. MINGER
CHAIRMAN

DENNIS BRINK
VICE CHAIRMAN

KERRY W. WELSH
SUPERVISOR

KAREN KLEIST
SECRETARY/TREASURER

DINGMAN TOWNSHIP RECREATION BOARD

GEORGE KLEIST
CHAIRMAN

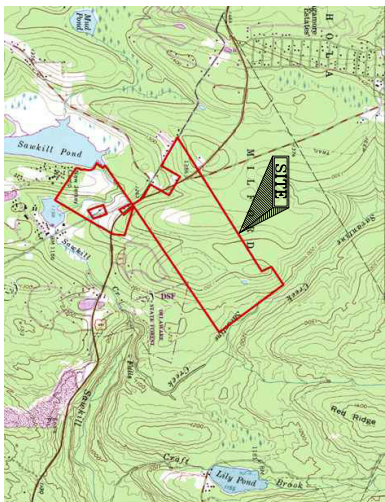
ANTHONY CONTINO
VICE CHAIRMAN

JULIE FORBES
SECRETARY

CATHY WICKE

MICHAEL LAPADULA

MATT SICKLER



LOCATION MAP: EDMERE QUAD
0 1000 2000 4000 6000 8000 10,000 FEET
1 INCH = 800 FEET

PARTNERS

NORTH AMERICAN LAND TRUST



MILFORD TOWNSHIP
PO BOX 366
MILFORD, PA 18227



PENNSYLVANIA ONE CALL SYSTEM INC.
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS
NOTICE FOR CONSTRUCTION PHASE AND 9 WORKING
DAYS IN DESIGN STAGE. STOP CALL 1-800-242-1776
PA15system Inc.

LIST OF DRAWINGS

NUMBER	DESCRIPTION
CV	COVER SHEET
C-1	FRANK TRAIL LAYOUT

JUNE 12, 2017

CLIENT:

Dingman Township
118 Fisher Lane
Milford, PA 18337

~ Pike County, Pennsylvania ~

CONSULTANT:

**McCLANE
ASSOCIATES**

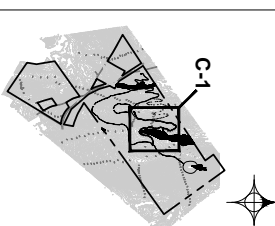
NATIONAL REGISTERED PROFESSIONAL ENGINEERS
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECTS
REGISTERED PROFESSIONAL SURVEYORS

SEALS:



THOMAS E. MINGER, P.E.
DENNIS BRINK, P.E.

KEY PLAN:



PROJECT TITLE:

CORNELIA & FLORENCE
BRIDGE PRESERVE
FRANK TRAIL

Pike County, Pennsylvania

DRAWING TITLE:

COVER SHEET

REVISION DATE:

06/09/17 - AMEND TO BE CONSTRUCTION DOCUMENTS

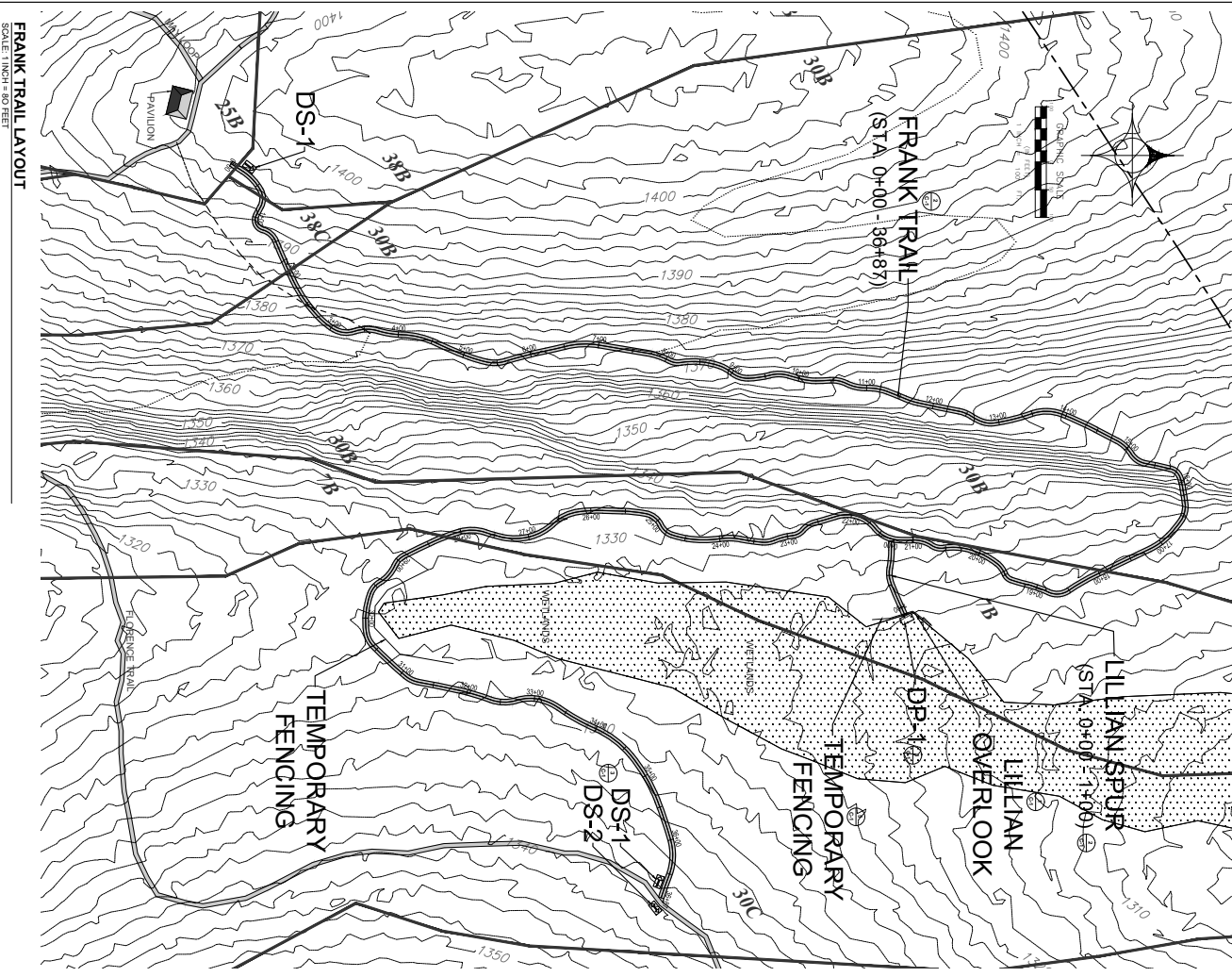
DRAWN BY: PWB

CHECKED BY: TJM

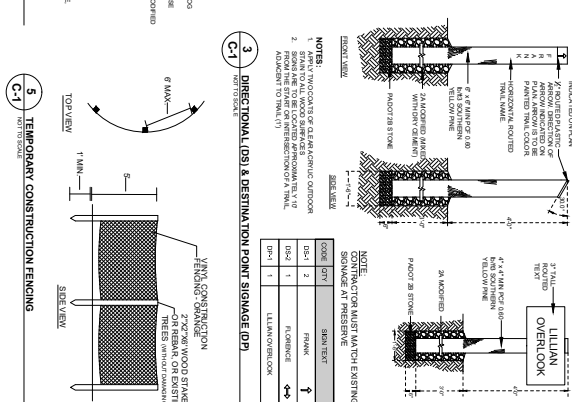
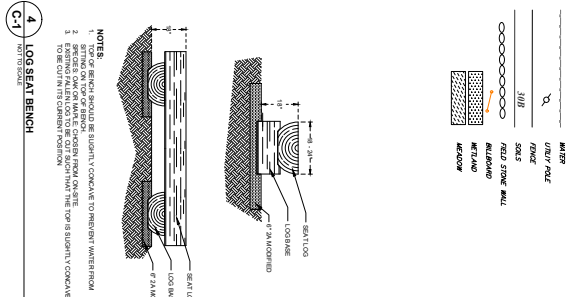
DATE: 06-12-17

PROJECT NO: 1725

DRAWING NO: CV



FRANK TRAIL LAYOUT
SCALE: 1 INCH = 80 FEET



CONSTRUCTION SHEET NUMBER: (28)	SHEET NAME: FRANK TRAIL
DATE: 06-12-17	
DRAWN BY: PNB	
CHECKED BY: TMJ	
PROJECT NO: 1725	

CONSTRUCTION SHEET NUMBER: (28)
SHEET NAME: FRANK TRAIL

NOTES:

- 1. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL OR BETTER CONDITION.
- 2. ALL EXCAVATIONS TO BE PROTECTED WITH STEEL SHIELDING TO PREVENT COLLAPSE.
- 3. ALL EXCAVATIONS TO BE PROTECTED WITH STEEL SHIELDING TO PREVENT COLLAPSE.

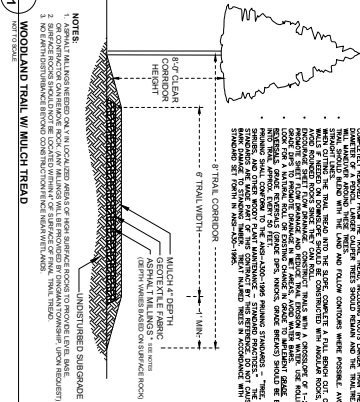
SOIL INFORMATION

SITE SOILS

- 8B. WARTBURG STONY FINE LOAM
- 8M. SLOAN EXTREME STONY
- 8S. SLOAN STONY
- 8U. WARTBURG SANDY FINE SANDY LOAM

SOIL LIMITATIONS

THE SOILS ON THE PROPERTY ARE CLASSIFIED AS EXTREME TO VERY SEVERE. THESE SOILS ARE NOT SUITABLE FOR CONSTRUCTION OF FOOTINGS OR FOUNDATIONS.



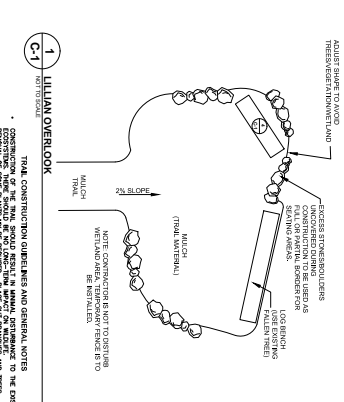
CONSTRUCTION SHEET NUMBER: (28)	SHEET NAME: FRANK TRAIL
DATE: 06-12-17	
DRAWN BY: PNB	
CHECKED BY: TMJ	
PROJECT NO: 1725	

TEMPORARY FENCING

2x2x8 LOG SEAT BENCH
2x2x4 TOP RAIL
2x2x8 WOODEN STAKE

TEMPORARY CONSTRUCTION FENCING

2x2x8 WOOD STAKE
2x2x4 TOP RAIL



CONSTRUCTION SHEET NUMBER: (28)	SHEET NAME: FRANK TRAIL
DATE: 06-12-17	
DRAWN BY: PNB	
CHECKED BY: TMJ	
PROJECT NO: 1725	

**ATTACHMENT IV.
TECHNICAL SPECIFICATIONS &
PRODUCT CUT SHEETS**

TECHNICAL SPECIFICATIONS SUMMARY

The contractor shall complete the project scope of work items, in accordance with the construction plans, as well as, the project manual, including the attached technical specifications.

Provided technical specifications include the following:

Soil Erosion & Sedimentation Control – Section 02000

Earthwork – Section 02300

Site Clearing – Section 02230

SECTION 02000 SOIL EROSION AND SEDIMENTATION CONTROL

1.1 REQUIREMENTS

The contractor shall be required to **utilize all erosion and sedimentation control practices on the plans** to prevent the discharge of pollutants from the project area during construction. The contractor shall be required to implement the following control measures and those described in the contract documents.

- A. Reduce to the greatest extent practicable the area of disturbance and duration of exposure of readily erodible soils.
- B. Protect the exposed soils by use of temporary vegetation, or seeding and mulch, or by accelerating the establishment of permanent vegetation. Complete and protect segments of work as rapidly as possible.
- C. Retard the rate of runoff from the construction site and control the dispersal of runoff.
- D. Utilize compost filter sock and other sediment holding devices at inlets, cross drains, etc.
- E. Trap all sediment resulting from construction in temporary or permanent silt holding basins. This includes pump discharges resulting from dewatering operations.
- F. Sprinkle or apply dust suppressor on haul roads and within the project area in order to keep air borne dust within tolerable limits as determined by the landscape architect.
- G. Should construction operations be suspended for any appreciable length of time, temporary measure for control of erosion must be utilized.

1.2 MATERIALS

- A. Geotextiles shall be in accordance with Penn DOT Publication 408, Section 735 and as specified in the construction drawings and this manual.
- B. Temporary seeding shall be employed using Annual Ryegrass (*lolium multi-florum*).

1.3 CONSTRUCTION

- A. Prior to earth moving activities the Contractor shall install compost filter sock as required adjacent to drainage culverts, inlets, end walls, etc.
- B. Compost Filter Sock and sediment traps shall be maintained by removing trapped sediment upstream and by removing sediment from the fabric when it becomes clogged.
- C. All seeding and mulching in ditches and swales and by all other denuded areas shall be maintained by filling in washouts and reseeding and mulching until vegetation has been established.
- D. On areas where permanent seeding may be delayed for 20 or more days, temporary seeding shall be employed.

END OF SECTION 02000

SECTION 02300: EARTHWORK

1.1 GENERAL

- A. Definitions in this Section include the following:
1. Backfill: Soil materials used to fill in excavation.
 2. Base Course: Layer placed between the subbase course and asphalt paving.
 3. Bedding course: Layer placed over the excavated subgrade in a trench before laying pipe.
 4. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
 5. Drainage Course: Layer supporting slab-on-grade used to minimize capillary flow of pore water.
 6. Excavation: Removal of material encountered above subgrade elevations.
 - a. Additional Excavation: Excavation below subgrade elevations as directed by Architect. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
 - b. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.
 7. Fill: Soil materials used to raise existing grades.
 8. Structure: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
 9. Subbase Course: Layer placed between the subgrade and base course for asphalt paving, or layer placed between the subgrade and a concrete pavement or walk.
 10. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.
 11. Utilities include on-site underground pipes, conducts, ducts, and cables, as well as underground services within buildings.
- B. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Architect and then only after arranging to provide temporary utility services according to requirements indicated.

1.2 PRODUCTS

- A. Soil Materials: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: ASTM D 2487 soil satisfaction groups GW, GP, GM, SW, SP, and SM, or combinations of these group symbols; free of rock or gravel larger than 3 inches (75 mm) in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT, or a combination of these group symbols.
- D. Backfill and Fill: Satisfactory soil materials.

EARTHWORK

- E. Subbase Materials: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand: ASTM D 2940; with at least 90 percent passing a 1-1/2 inch (38 mm) sieve and not more than 12 percent passing a No. 200 (0.075 mm) sieve.
- F. Bedding: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1 inch (38 mm) sieve and 0 to 5 percent passing a No. 8 (2.36 mm) sieve.
- G. Drainage Fill: Washed, narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2 inch (38 mm) sieve and 0 to 5 percent passing a No. 8 (2.36 mm) sieve.
- H. Detectable Warning Tape: Polyethylene film warning tape encasing a metallic core, minimum 6 inches (150 mm) wide and 4 mils (0.1 mm) thick, continuously inscribed with a description of the utility.

1.3 EXECUTION

- A. Preparation: Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Provide erosion- and sedimentation-control measures.
- C. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- D. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
- E. Excavation to subgrade elevations regardless of the character of surface and subsurface conditions encountered, including rock, soil materials, and obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- F. Excavation for structures, pavements, and walks to indicate elevations and dimensions. Extend excavations for placing and removing concrete formwork, for installing services and other construction and for inspections.
- G. Excavated utility trenches to indicate gradients, lines, depths, and invert elevations of uniform widths to provide a working clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches (300 mm) higher than top of pipe or conduit.
 - 1. Excavate trenches deeper than bottom of pipe elevation, 6 inches (150 mm) deeper in rock, 4 inches (100 mm) deeper elsewhere, to allow for bedding course. Hand excavate for bell of pipe.
- H. Proof roll subgrades, before filling or placing aggregate courses, with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof roll wet or saturated subgrades.
- I. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities.

- J. Fill unauthorized excavated under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill may be used when approved by Architect.
1. Fill unauthorized excavations under other construction or utility pipe as directed by Architect.
- K. Stockpile borrow materials and satisfactory soil materials, without intermixing, in shaped, graded, drained, and covered stockpiles. Stockpile soil materials away from edge of excavations and outside drip line of remaining trees.
- L. Utility Trench Backfill: Place, compact, and shape bedding course to provide continuous support for pipes and conduits over rock and other unyielding bearing surfaces and to fill unauthorized excavations.
1. Place and compact backfill of satisfactory soil materials of subbase material, free of particles larger than 1 inch (25 mm), to a height of 12 inches (300 mm) over the utility pipe or conduit. Place and compact final backfill of satisfactory soil material to final subgrade.
 2. Install warning tape directly above utilities, 12 inches (300 mm) below finished grade, except 6 inches (150 mm) below subgrade under pavements and slabs.
- M. Fill: Place and compact fill material in layers to required elevations.
- N. Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content.
1. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.
- O. Compaction: Place backfill and fill materials in layers not more than 8 inches (200 mm) in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches (100 mm) in loose depth for material compacted by hand-operated tampers.
- P. Compact soil to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:
1. Under structures, building slabs, steps, and pavements, scarify and recompact top 122 inches (300 mm) of existing subgrade and each layer of backfill or fill material at 95 percent.
 2. Under walkways, scarify and recompact top 6 inches (150 mm) below subgrade and compact each layer of backfill or fill material at 92 percent.
 3. Under lawn or unpaved areas, scarify and recompact top 6 inches (150 mm) below subgrade and compact each layer of backfill material at 85 percent.
- Q. Grading: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevation indicated. Grade lawns, walks, and unpaved subgrades to tolerances of plus or minus 1 inch (25 mm) and pavements and areas within building lines to plus or minus ½ inch (13 mm).
- R. Subbase and Base Courses: Under pavements and walks, place subbase course on prepared subgrade. Place base course material over subbase. Compact to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

EARTHWORK

- S. Under slabs-on-grade, place drainage course on prepared subgrade. Compact to required cross sections and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.
- T. Testing Agency: Owner will engage a qualified independent geotechnical engineering testing agency to perform field quality-control testing.
 - 1. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.
 - 2. When testing agency reports that subgrades, fill, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.
- U. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settles, or where they lose compaction.
- V. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
- W. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

END OF SECTION 02300

SECTION 02230 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
1. Protecting existing trees and vegetation to remain.
 2. Removing trees and other vegetation.
 3. Clearing and grubbing.
 4. Topsoil stripping.
 5. Removing above-grade site improvements.
 6. Disconnecting, capping or sealing, and abandoning site utilities in place.
 7. Disconnecting, capping or sealing, and removing site utilities.

1.2 DEFINITIONS

- A. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches (50 mm) in diameter; and free of weeds, roots, and other deleterious materials.

1.3 MATERIALS OWNERSHIP

- A. Except for materials indicated to be stockpiled or to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from the site.

1.4 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- B. Improvements on Adjoining Property: Permission for performing indicated removal and alteration work on property adjoining Owner's property will be obtained by Owner before award of Contract.
- C. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.

- D. Notify utility locator service for area where Project is located before site clearing.

PART 2 - EXECUTION

2.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Provide erosion-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Locate and clearly flag trees and vegetation to remain or to be relocated.
- D. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

2.2 TREE PROTECTION

- A. Erect and maintain a temporary fence around drip line of individual trees or around perimeter drip line of groups of trees to remain. Remove fence when construction is complete.
 - 1. Do not store construction materials, debris, or excavated material within drip line of remaining trees.
 - 2. Do not permit vehicles, equipment, or foot traffic within drip line of remaining trees.
- B. Do not excavate within drip line of trees, unless otherwise indicated.
- C. Where excavation for new construction is required within drip line of trees, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks, comb soil to expose roots, and cleanly cut roots as close to excavation as possible.
 - 1. Cover exposed roots with burlap and water regularly.
 - 2. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.
 - 3. Cover exposed roots with wet burlap to prevent roots from drying out. Backfill with soil as soon as possible.
- D. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations, in a manner approved by Architect.
 - 1. Employ a qualified arborist, licensed in jurisdiction where Project is located, to submit details of proposed repairs and to repair damage to trees and shrubs.
 - 2. Replace trees that cannot be repaired and restored to full-growth status, as determined by the qualified arborist.

2.3 UTILITIES

- A. Owner will arrange for disconnecting and sealing indicated utilities that serve existing structures before site clearing when requested by Contractor.
 - 1. Verify that utilities have been disconnected and capped before proceeding with site clearing.
- B. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.
 - 1. Owner will arrange to shut off indicated utilities when requested by Contractor.
 - 2. Arrange to shut off indicated utilities with utility companies.
- C. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Architect not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Architect's written permission.
- D. Excavate for and remove underground utilities indicated to be removed.

2.4 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, grass, and other vegetation to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 - 2. Cut minor roots and branches of trees indicated to remain in a clean and careful manner where such roots and branches obstruct installation of new construction.
 - 3. Completely remove stumps, roots, obstructions, and debris extending to a depth of 18 inches (450 mm) below exposed subgrade.
 - 4. Use only hand methods for grubbing within drip line of remaining trees.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding **8-inch (200-mm)** loose depth, and compact each layer to a density equal to adjacent original ground.

2.5 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.

1. Strip surface soil of unsuitable topsoil, including trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil materials away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.
1. Limit height of topsoil stockpiles to 72 inches (1800 mm).
 2. Do not stockpile topsoil within drip line of remaining trees.
 3. Dispose of excess topsoil as specified for waste material disposal.
 4. Stockpile surplus topsoil and allow for re-spreading deeper topsoil.

2.6 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.

2.7 DISPOSAL

- A. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 02230