

#### Addendum D2

#### re: DUNELAND SCHOOL CORPORATION Chesterton Middle School Demolition 513001.00

date: June 17, 2024

This Addendum forms a part of the Contract Documents for the above-referenced project and is issued in accordance with the Instructions to Bidders. Acknowledge receipt of this addendum by inserting its number in the space provided in the bid form.

ITEM	LOCATION	DESCRIPTION
A2.01	SCHEDULE	CLARIFICATION:  Demolition mobilization is scheduled to begin September 17, 2024 and is estimated to be completed by November 11, 2024. Asbestos abatement and MEPFP make safe terminations to be completed in advance of building demolition.
A2.02	TABLE OF CONTENTS (Document Reissued)	CHANGE:  Table of Content is being reissued in its entirety as part of this addendum D2 as an integral part of the Construction Documents.
A2.03	BIDDING REQUIREMENTS AND FORMS Instructions to Bidders (AIA Document A701) "Exhibit A" (Exhibit Reissued)	CHANGE:  "Exhibit A" is being reissued in its entirety as part of this addendum D2 as an integral part of the Construction Documents.
A2.04	BIDDING REQUIREMENTS AND FORMS Background Check Certificate of Compliance (Form Reissued)	CLARIFICATION:  On page 1, CHANGE "CERTIFICATE OF COMPLIANCE FWCS BACKGROUND CHECK REQUIREMENT" to "CERTIFICATE OF COMPLIANCE BACKGROUND CHECK REQUIREMENT".



# Addendum D2 DUNELAND SCHOOL CORPORATION Chesterton Middle School Demolition

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A2.05 BIDDING

REQUIREMENTS AND

**FORMS** 

Contractor's Statement of Equal Employment Opportunity Policy (Form Reissued)

#### **CLARIFICATION:**

On page 1, line 8, CHANGE City of Berne to Duneland School Corporation. See reissued form.

A2.06 BIDDING

**REQUIREMENTS AND** 

**FORMS** 

DSC – Responsible Bidding Practices and Submission Requirements (New Document **ADDITION:** 

ADD Duneland School Corporation (DSC) – Responsible Bidding Practices and Submission Requirements into the Project Manual. This shall be an integral part of the Construction Documents.

A2.07 SPECIFICATIONS

Issued)

Specification Section 011500 – Scope of

Work

**ADDITION:** 

Duneland School Corporation expects approximately 600 more items of school furniture to be brought into the middle school. Primarily student desks and chairs.

A2.08 DRAWING

C4 – C7 SWPPP Plans (New Drawings Issued) **ADDITION:** 

Include additional Soil Erosion Control drawings, Specifications & Details into Construction Documents.

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A2.09 DRAWING

A0.1

Reference Site Demolition Plan (Drawing Reissued)

SPECIFICATIONS Specification Section 012300 – Alternates

BIDDING REQUIREMENTS AND FORMS Supplementary Bid Form

(Form Reissued)

(Speciation Reissued)

#### **ADDITION:**

Install 10-foot-wide access road using #53's at depth of 12 inches. Place 5 feet away from Demolition Cut Line. See new Alternate 4 to remove stone, place topsoil and seed in March 2025.

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#### Submitted by:

The Moake Park Group, Inc.



Jeff E. Schroeder, AIA President

attachments: (Document Reissued) Table of Contents

(Exhibit Reissued) "Exhibit A" of Instructions to Bidders (AIA Document A701)

(Form Reissued) Background Check Certificate of Compliance

(Form Reissued) Contractor's Statement of Equal Employment Opportunity Policy (New Document Issued) DSC – Responsible Bidding Practices and Submission

Requirements

(Specification Reissued) Specification Section 012300 - Alternates

(Form Reissued) Supplemental Bid Form

(New Drawings Issued) C4-C7 (Drawing Reissued) A0.1

copies: All Plan Holders

513001/670

#### PROJECT MANUAL

#### **TABLE OF CONTENTS**

#### **CERTIFICATION PAGE**

#### **TABLE OF CONTENTS**

#### **BIDDING REQUIREMENTS AND FORMS**

Notice to Bidders

Instructions to Bidders (AIA Document A701)

Supplementary Instructions to Bidders

Form 96, Contractors Bid for Public Works

Supplementary Bid Form

DSC - Responsible Bidding Practice and Submission Requirements

Background Check Certificate of Compliance

Contractor's Statement of Equal Employment Opportunity Policy

Contractor's Qualification Statement (AIA Document A305)

Proposal Request (AIA Document G709)

Construction Change Directive (AIA Document G714)

Change Order (AIA Document G701)

Architect's Supplemental Instructions (AIA Document G710)

Certificate of Substantial Completion (AIA Document G704)

Application and Certificate for Payment (AIA Document G702)

Continuation Sheet (AIA Document G703)

#### **GENERAL CONDITIONS**

General Conditions of the Contract for Construction (AIA Document A201)
Supplementary Conditions
Performance Bond (AIA Document A312)
Payment Bond (AIA Document A312)

#### **SPECIFICATIONS**

#### **DIVISION 01 - GENERAL REQUIREMENTS**

011000	Summary
011500	Scope of Work
012300	Alternates
012900	Payment Procedures
013100	Project Management and Coordination
015000	Temporary Facilities and Controls
017419	Construction Waste Management and Disposal

#### **DIVISION 02 - EXISTING CONDITIONS**

024100 Demolition

#### **DIVISION 03 – CONCRETE (For Reference Only)**

033000 Cast-In-Place Concrete

513001.00

#### **DIVISION 05 - METALS (For Reference Only)**

054000 Cold-Formed Metal Framing

#### DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES (For Reference Only)

061000 Rough Carpentry

#### DIVISION 07 - THERMAL AND MOISTURE PROTECTION (For Reference Only)

071400	Fluid-Applied Waterproofing
072100	Thermal Insulation
072500	Weather Barriers
074213	Metal Wall Panels
076200	Sheet Metal Flashing and Trim
079200	Joint Sealants

#### **DIVISION 09 - FINISHES (For Reference Only)**

092116	Gypsum Board Assemblies
099100	Painting

#### **DIVISION 31 - EARTHWORK**

311000	Site Clearing
312310	Excavation and Embankment
312410	B Borrow Fill and Backfill (INDOT 211)

#### **DIVISION 32 - EXTERIOR IMPROVEMENTS**

329200 Lawns and Grasses

#### **END OF TABLE OF CONTENTS**

#### **EXHIBIT "A"**

CIVIL	
C1	ALTA/NSPS Land Title Survey
C2	ALTA/NSPS Land Title Survey
C3	ALTA/NSPS Land Title Survey
C4	Overall SWPPP Plan
C5	SWPPP Specifications
C6	SWPPP Details
C7	SWPPP Seeding Details

# ARCHITECTURAL And 1 Site Demolition Plan

A0.1	Site Demolition Plan
A1.0	Reference Tunnel / Crawlspace Plan
A1.1	Reference First Floor Demolition Plan
A1.20	Demolition Elevations and/or Sections
A1.21	Demolition Elevations and/or Sections

#### **PLUMBING**

P1.0	Plumbing Lower Level Demolition Plan
P1.1	Plumbing First & Second Floor Demolition Plans

#### **MECHANICAL**

M1.0	Mechanical Lower Level Demolition Plan
M1.1	Mechanical First & Second Floor Demolition Plans

#### **ELECTRICAL**

E1.0	Electrical Lower Level Demolition Plan
E1.1	Electrical First & Second Floor Demolition Plans
E2.0	Electrical Details
E2.1	Electrical Specifications

# CERTIFICATE OF COMPLIANCE BACKGROUND CHECK REQUIREMENT

The undersigned contractor declares to Duneland School Corporation that the following procedure has been completed and will remain in effect for the duration of the project with regards to background checks/criminal history of employees:

- 1. The Contractor and all Sub-Contractors providing services to Duneland School Corporation verifies that all employees have undergone a criminal background check.
- 2. Employees of Contractors or Sub-Contractors providing services to Duneland School Corporation that are found to have a criminal history shall not be permitted to work on the Owner's properties.
- 3. Contractor and Sub-Contractors shall continually screen new hires in compliance with Duneland School Corporation Background Check Requirement.
- 4. Contractor shall report arrest and or filing of criminal charges against each employee within two business days of the occurrence and the disposition of such arrest of filing of charges throughout the duration of the project.

5.	Non-compliance with these requirements shall be a breach of a material term of any contract and reason for termination.				
***	****************	***********************			
	S	ignature			
	N	ame Printed			
	Ē	ompany Name			

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#### CONTRACTOR'S STATEMENT OF EQUAL EMPLOYMENT OPPORTUNITY POLICY

The undersigned contractor declares to the Duneland School Corporation that the following is its policy with respect to equal employment opportunity:

- 1. That in the hiring of employees for the performance of work under any contract or any subcontract with the Dunland School Corporation, neither it nor any of its subcontractors, nor any of its subcontractors, nor any person acting on behalf of it or any of its subcontractors, shall, by reason of race, religion, color, sex, national origin or ancestry, discriminate against any citizen of the State of Indiana who is qualified and available to perform the work to which the employment related.
- That neither it nor any of its subcontractors, nor any person or behalf of it or any of its subcontractors, shall in any manner, discriminate against or intimidate any employee hired for the performance of work under this contract on account of race, religion, color, sex, national origin or ancestry.

Executed at	(City)	(State)	, this	day of	, 2024.
				CONTRACT	OR

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# A RESOLUTION OF THE DUNELAND SCHOOL CORPORATION AMENDING ITS POLICY ESTABLISHING RESPONSIBLE BIDDING PRACTICES AND SUBMISSION REQUIREMENTS FOR SUBMITTING BIDS TO PERFORM CONSTRUCTION WORK

**WHEREAS**, the Duneland School Corporation ("School") previously adopted a Policy Establishing Responsible Bidding Practices and Submission Requirements for Submitting Bids to Perform Construction Work; and

WHEREAS, the School desires to amend the Policy as set forth in this Resolution.

**THEREFORE**, the School's "Responsible Bidding Practices and Submission Requirements for Submitting Bids to Perform Construction Work," is hereby amended and shall hereafter read as follows:

#### I. Bid Submission Requirements

Contractors proposing to submit bids on any Duneland School Corporation ("School") project estimated to be at least three hundred thousand dollars (\$300,000.00) or more must, prior to the opening of bids, submit a statement made under oath and subject to perjury laws, on a form designated by the School and must include:

- (A) A copy of a print-out of the Indiana Secretary of State's on-line records for the bidder showing that the bidder is in existence, current, and in good standing in the bidder's state of existence. The Board shall require proof, not later than ten (10) days after the bid award, that the bidder is authorized to transact business in the State of Indiana. If the bidder is an individual, sole proprietor or partnership, this subsection shall not apply;
- (B) A list identifying all previous names used by the bidder;
- (C) A list of all determinations by a court or governmental agency for violations of federal, state, or local laws including, but not limited to violations of contracting or antitrust laws, tax or licensing laws, environmental laws, the Occupational Safety and Health Act (OSHA), or federal Davis-Bacon and related Acts;
- (D) A statement on staffing capabilities, including labor sources;
- (E) Evidence of participation by the workforce performing the work in apprenticeship and training programs, applicable to the work to be performed on the project, which are approved by and registered with the United States Department of Labor's Office of Apprenticeship, or its successor organization and evidence that any applicable apprenticeship program has graduated at least five (5) apprentices in

each of the past five (5) years for each of the construction crafts the bidder will perform on the project. Evidence of graduation rates are not required for apprentice-able crafts dedicated exclusively to the transportation of material and equipment to and from the public works project.

The required evidence includes but is not limited to a copy of all applicable apprenticeship standards and Apprenticeship Agreement(s) for any apprentice(s) who will perform work on the public works project and documentation from each applicable apprenticeship program certifying that it has graduated at least five (5) apprentices in each of the past five (5) years for each construction craft the bidder will perform on the project. Additional evidence of participation and graduation requirements may be requested by the School in its discretion;

- (F) A copy of a written plan for employee drug testing that: (i) covers all employees of the bidder who will perform work on the public work project; and (ii) meets, or exceeds, the requirements set forth in IC 4-13-18-5 or IC 4-13-18-6;
- (G) The name and description of the management experience of each of the bidder's project managers and superintendents that bidder intends to assign to work on the project;
- (H) Proof of any professional or trade license required by law for any trade or specialty area in which bidder is seeking a contract award; and disclosure of any suspension or revocation within the previous five years of any professional or trade license held by the company, or of any director, office or manager employed by the bidder;
- (I) Evidence that the contractor is utilizing a surety company which is on the United States Department of Treasury's Listing of Approved Sureties; and
- (J) A written statement of any federal, state or local tax liens or tax delinquencies owed by the bidder to any federal, state or local taxing body in the last five years.

The School reserves the right to demand supplemental information from the bidder, (additional) verification of any of the information provided by the bidder, and may also conduct random inquiries of the bidder's current and prior customers. All waivers of any requirements imposed by this Policy must be approved by the Board.

#### II. Post-Bid Submissions from Subcontractors

All bidders shall provide a written list that discloses the name, address, and type of work for each first-tier subcontractor from whom the bidder has accepted a bid and/or intends to directly contract with or hire on any part of the public work project, including individuals performing work as independent contractors, within five (5) business days after the date the bids are due.

In addition, each such subcontractor contracting directly with the bidder shall be required to adhere to the requirements of Section I of this Policy as though it were bidding directly to the School, except that such subcontractors shall submit the required information (including the name, address, and type of work for each of their subcontractors) to the successful bidder no later than five (5) business days after the subcontractor's first day of work on the public work project and the bidder shall then forward said information to the School. Payment shall be withheld from any subcontractor contracting directly with the bidder who fails to timely submit said information until such information is submitted and approved by the School.

Upon request, the School may require any subcontractors to provide the required information (including name, address, type of work on the project and the name of the subcontractor with whom the subcontractor has a direct contract). Payments shall be withheld from any subcontractor who fails to timely submit this information until this information is submitted and approved by the School. Additionally, the School may require the successful bidder and relevant subcontractor to remove the nonresponsive or non-responsible subcontractor from the project and replace it with a responsive and responsible subcontractor.

Failure of a subcontractor to submit the required information shall not disqualify the successful bidder from performing work on the project and shall not constitute a contractual default and/or breach by the successful bidder. However, the School may withhold all payments otherwise due for work performed by a subcontractor, until the subcontractor submits the required information, and the School approves such information. The School may also require that successful bidder to remove the subcontractor from the project and replace it with a responsive and responsible subcontractor.

The disclosure of a subcontractor ("Disclosed Subcontractor") by a bidder or a subcontractor shall not create any rights in the Disclosed Subcontractor. Thus, a bidder and/or subcontractor may substitute another subcontractor ("Substitute Subcontractor") for a Disclosed

Subcontractor by giving the School written notice of the name, address, and type of work of the Substitute Subcontractor. The Substitute Subcontractor is subject to all the obligations of a subcontractor under this Ordinance.

#### III. Validity of Pre-Qualification Classification

Upon designation by the School that a contractor's or subcontractor's submission in anticipation of a bid is complete and timely, and upon any further consideration deemed necessary by the School, the contractor or subcontractor may be pre-qualified for future School public works projects. A contractor's classification as "qualified" shall exempt the contractor or sub-contractor from the comprehensive submission requirements contained herein for a period of twelve (12) months. Thereafter, contractors or subcontractors who are pre-qualified must submit a complete application for continuation of "pre-qualified" standing, on a form provided by the School, (also referred to as the "short form") by December 31st for the upcoming calendar year. Failure by any pre-qualified contractor or subcontractor to timely submit its complete application for continuation of "pre-qualified" standing shall result in automatic removal of the designation, effective January 1 of the upcoming year. However, the "removed" contractor or subcontractor shall still be permitted to bid on School public works projects.

Any material changes to the contractor's status, at any time, must be reported in writing within ten (10) days of its occurrence to the School. The pre-qualification designation is solely within the discretion of the School and the School specifically reserves the right to change or revoke the designation for a stated written reason(s).

Denial of pre-qualification shall be in writing and shall be forwarded to the contractor within seven (7) working days of such decision. Any contractor denied or losing pre-qualification status may request reconsideration of the decision by submitting such request in writing to the School within five (5) business days of receipt of notice of denial.

#### IV. Incomplete Submissions by Bidders

It is the sole responsibility of the potential bidder to comply with all submission requirements applicable to the bidder in section I above by no later than the public bid opening, subject to the School's right to request supplementation of the submission requirements in order to determine compliance. Post-bid submissions must be submitted in accordance with

section II above. Submissions deemed inadequate, incomplete, or untimely by the School may result in the automatic disqualification of the bid in the sole discretion of the School. The School reserves the right to waive any or all of the requirements of this Policy.

#### V. Responsive and Responsible Bidder Determination

The School, after review of complete and timely submissions, shall, in its sole discretion, after taking into account all information in the submission requirements, or information supplied by the Bidder upon request from the School after the bid opening, determine whether a bidder is responsive and responsible. The School specifically reserves the right to utilize all information provided in the contractor or subcontractor's submission or any information obtained by the School through its own independent verification of the information provided by the contractor.

#### VI. <u>Certified Payroll</u>

For projects in which the cost is at least \$300,000, the successful bidder and all subcontractors working on a public work project shall submit a certified payroll report utilizing the federal form now known as a WH-347 which must be prepared on a weekly basis and submitted to the School within ten (10) calendar days after the end of each week in which the bidder or subcontractor performed its work on the public work project. These certified payroll reports shall identify the job title and craft of each employee on the project, e.g. journeyman electrician or apprentice electrician.

The School may withhold payment due for work performed by a bidder if the bidder fails to timely submit its certified payroll reports until such time as such certified payroll reports are submitted. The School may also withhold payment due for work performed by a subcontractor if the subcontractor fails to timely submit its certified payroll reports until such time as such certified payroll reports are submitted. The School shall not withhold payment to a bidder for work performed by the bidder or for work performed by subcontractors who have submitted their certified payroll reports, because one or more other subcontractors failed to timely submit their certified payroll reports.

#### VII. Public Records

All information submitted by a bidder or a subcontractor pursuant to this Policy, including certified payrolls, are public records subject to review pursuant to the Indiana Access to Public Records law (IC 5-14-3).

#### VIII. Penalties for False, Deceptive, or Fraudulent Statements/Information

Any bidder that willfully makes, or willfully causes to be made, a false, deceptive or fraudulent statement, or willfully submits false, deceptive or fraudulent information in connection with any submission made to the School shall be disqualified from bidding on all School projects for a period of three years.

#### IX. Conflicting Policies

Any Policy or provision of any Policy in conflict with the provisions of this Policy is hereby repealed.

#### X. Severability

Tim McGinty, Member

If any provision of this Policy is found to be invalid, the remaining provisions of this Policy shall not be affected by such a determination. The other provisions of this Policy shall remain in full force and effect without the invalid provision.

This Policy is hereby adopted by the Duneland School Corporation on the 18<sup>th</sup> day of October, 2021.

Brandon Kroft, President

Alayna Lightfoot Pol, Vice President

Tom Schnabel, Secretary

Rohald Stone, Member

#### **SECTION 012300 - ALTERNATES**

#### **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

A. This Section includes administrative and procedural requirements for alternates.

#### 1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

#### 1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

#### PART 2 - PRODUCTS (Not Used)

#### **PART 3 - EXECUTION**

#### 3.1 SCHEDULE OF ALTERNATES

#### A. <u>Alternate No. 1:</u> Partial Foundation Removal

1. Provide credit to remove foundation walls and footings to 3 feet below grade in lieu of full-depth removal.

#### B. Alternate No. 2: Concrete Crushing

1. Provide adder to crush all concrete slabs, foundations, and footings into gradation #53 and stockpile on site for the future project use.

#### C. Alternate No. 3: Demolition of Running Track Area

- 1. See limits of Alternate 3 on A0.1 Site Demolition Plan.
- 2. Provide adder to demolish and dispose of all items within area delineated by A0.1 Site Demolition Plan, including, but not limited to:
  - a. Running track and subbase
  - b. Concrete pavement
  - c. Fencing
  - d. Goalposts
  - e. Scoreboards
  - f. Bleachers
  - g. Press box, shed, barn, and other structures
  - h. Slabs, footings, and foundation
  - i. Light poles
  - j. Masonry Enclosures
  - k. Site Furnishings
- 3. Electrical make-safe shall be by others.
- 4. Include construction fencing. Remove fencing 60 days after demobilization.
- 5. Include erosion control elements and associated maintenance. Remove upon completion of your work.
- 6. Backfill excavations with structural fill.
- 7. Furnish and spread 4" of topsoil over backfilled items. Match existing grades.
- 8. Include seeding and blanketing at topsoiled areas.
- 9. Repair any landscaping damaged as a result of demolition activities.

#### D. <u>Alternate No. 4:</u> <u>Access Road Removal</u>

Provide add to remove access road along building cut line during month of March 2025.
 Remove stone, place topsoil and reseed disturbed area.

#### **END OF SECTION 012300**

#### **SUPPLEMENTARY BID FORM**

PROJECT NAME: Chesterton Middle School Demolition

BID DATE: Thursday, June 27, 2024

TIME: 2:00 p.m. (Central Standard Time)

LOCATION: Duneland School Corporation Administration Center

601 W. Morgan Ave. Chesterton, IN 46304

I have also received, carefully reviewed, and understand the Contract Documents prepared by:

The Moake Park Group, Inc. 7223 Engle Road, Suite 200 Fort Wayne, Indiana 46804

•				
I have also received Ao my Bid.	ddenda No(s)		_ and have included their p	provisions in
BIDDER NAME:				_
ADDRESS:				_
CITY/STATE/ZIP:				_
TELEPHONE:		FAX:		_
	BID AMOUNT			
TOTAL BASE BID	\$		_	

BID CHECKLIST STATE FORM 96

FINANCIAL STATEMENT

**BID BOND** 

NON-COLLUSION FORM SUPPLEMENTARY BID FORM

BACKGROUND CHECK CERTIFICATE OF COMPLIANCE CONTRACTOR'S QUALIFICATION STATEMENT A305

E.E.O FORM

SUBCONTRACTOR/MANUFACTURER LIST

The successful bidder/contractor represents that by submitting a bid for this work, he has been at the job site and fully examined the existing conditions, all the contract documents, and has to his satisfaction prepared a bid representing all the work necessary to complete this project.

Bidder/Contractor also affirms that he has completely examined all bid documents and represents that there are no inconsistencies and/or ambiguities contained herein, or if there were, he has requested in writing, prior to time of bid being due, has any and all inconsistencies and/or ambiguities answered in writing from the Architect. Once the Bidder/Contractor submits his bid for this work, no changes/additions to the contract shall be requested by the Contractor due to his failure to comply with these provisions.

Clearly mark sealed bid envelope with your Name and Project(s) being bid.

NOTE: All lines and totals must be completed.

# **DUNELAND SCHOOL CORPORATION Chesterton Middle School Demolition**513001.00

#### SUPPLEMENTARY BID FORM

Page 2

<u>Completion Time:</u> The undersigned here agrees, if awarded the contract, to pursue the work to substantial completion within \_\_\_\_\_ calendar days after contract execution and authorization to proceed barring strikes, civil strife, natural calamity, or other events beyond control.

#### **ALTERNATES: (Note: Add or Deduct Must Be Indicated.)**

#### Alternate No. 1: Partial Foundation Removal

1. Provide credit to remove foundation walls and footings to removal.	3 feet below (	grade in lieu of	full-depth
ADD/DEDUCT:			
	Dollars	\$	
Alternate No. 2: Concrete Crushing			
Provide adder to crush all concrete slabs, foundations, stockpile on site for the future project use.	and footings	into gradation	#53 and
ADD/DEDUCT:			
	Dollars	\$	

#### Alternate No. 3: Demolition of Running Track Area

- 1. See limits of Alternate 3 on A0.1 Site Demolition Plan.
- 2. Provide adder to demolish and dispose of all items within area delineated by A0.1 Site Demolition Plan, including, but not limited to:
  - a. Running track and subbase
  - b. Concrete pavement
  - c. Fencing
  - d. Goalposts
  - e. Scoreboards
  - f. Bleachers
  - g. Press box, shed, barn, and other structures
  - h. Slabs, footings, and foundation
  - i. Light poles
  - j. Masonry Enclosures
  - k. Site Furnishings
- 3. Electrical make-safe shall be by others.
- 4. Include construction fencing. Remove fencing 60 days after demobilization.
- 5. Include erosion control elements and associated maintenance. Remove upon completion of your work.
- 6. Backfill excavations with structural fill.
- 7. Furnish and spread 4" of topsoil over backfilled items. Match existing grades.
- 8. Include seeding and blanketing at topsoiled areas.
- 9. Repair any landscaping damaged as a result of demolition activities.

ADD/DEDUCT:		
	Dollars \$	

Alternate No. 4:	Access Road Removal
------------------	---------------------

	to remove access topsoil and reseed	road along building I disturbed area.	cut line during	month of M	arch 2025.	Remove
ADD/DEDUCT:						
			Γ	Dollars \$		

I have also attached the following required s	submissions:
Use this form if bidder is Sole Proprietor:	
IN TESTIMONY WHEREOF, the Bidder, (a Day of, 2024.	firm) has hereunto set its hand this
FIRM	NAME
	(Signature)
Use this form if Bidder is a Partnership:	
	corporation) has caused this proposal to be signed by its porate seal this day 4.
CORPORATION	NAME
President	(Signature)
Secretary	(Signature)

(SEAL)

THIS BID SHLL BE FURNISHED IN DUPLICATE, WITH BOTH COPIES ENCLOSED IN THE SEALED BID ENVELOPE.

#### **NON-COLLUSIVE BIDDING CERTIFICATION**

No bid will be accepted that does not have this form completely executed.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party hereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:

- (a) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or any competition;
- (b) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor;
- (c) No attempt has been made or will be made by the bidder to insure any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition;
- (d) The person signing this bid or proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the bidder as well as to the person signing in its behalf;
- (e) That attached hereto (if corporate bidder) is a certified copy of resolution authorizing the execution of this certificate by the signature of this bid or proposal in behalf of the corporate bidder.

		(Individual)
		(Corporation)
Date:	By:	

This Non-Collusive Bidding Certificate must be submitted with the Bid.

**END OF SUPPLEMENTARY BID FORM** 

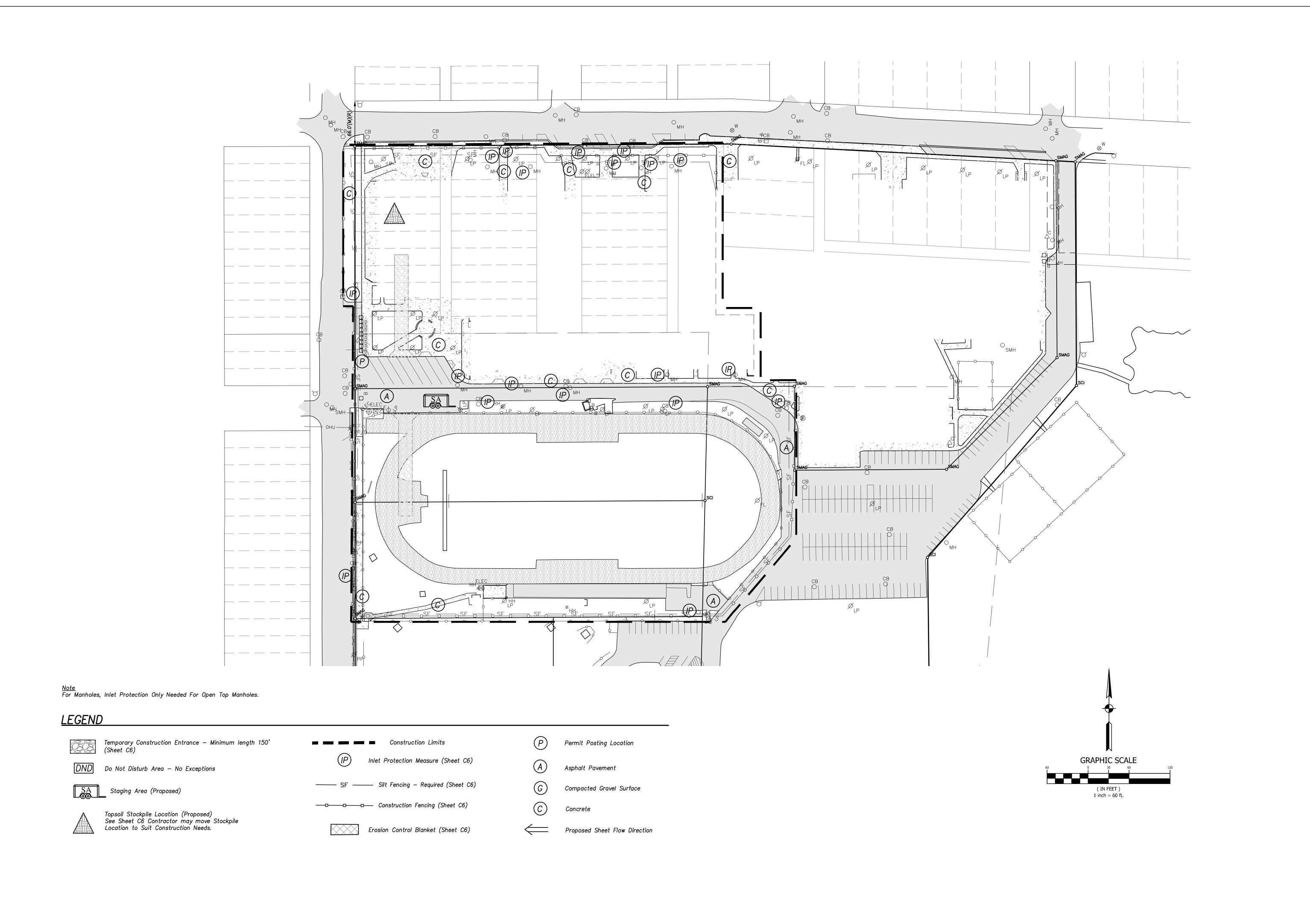
#### SUBCONTRACTOR AND MANUFACTURER LIST

#### **Subcontractor List**

TRADE			
Company:	Contact N	Name:	
Address:	Email:		
City/State/Zip	Phone:		Fax:
TRADE			
Company:	Contact N	Name:	
Address:	Email:		
City/State/Zip	Phone:		Fax:
TRADE			
Company:	Contact N	Name:	
Address:	Email:		
City/State/Zip	Phone:		Fax:
TRADE			
Company:	Contact N	Name:	
Address:	Email:		
City/State/Zip	Phone:		Fax:
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Company:	Contact N	Name:	
Address:	Email:		
City/State/Zip	Phone:		Fax:
TRADE			
Company:	Contact N	Name:	
Address:	Email:		
City/State/Zip	Phone:		Fax:

#### **Manufacturer List**

TRADE		
Company:	Cont	act Name:
Phone:	Ema	il:
TRADE		
Company:	Cont	act Name:
Phone:	Ema	il:
TRADE		
Company:	Cont	act Name:
Phone:	Ema	il:
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To N. Washington Street
17 N. Washington Street
Valparaiso, IN 46383
1219.850.4624
F 219.850.4625
abonmarche.com
Hobart

DUNELAND YMCA SITE DEMO

ALL SWPPP PLAN

DRAWN BY:

JAK

DESIGNED BY:

JAK

JAK
PM REVIEW:
MSK
QA/QC REVIEW:
QA/QC

DATE: **06/10/2024** 

SEAL:

SIGNATURE:

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GRAPHIC QUALITY MAY NOT
BE ACCURATE FOR ANY

BE ACCURATE FOR A OTHER SIZES

SCALE:

HORZ: 1" = 60"

HORZ: 1" = 60" VERT: **N/A** 

> 24-0303 HEET NO.

NO. REVISION DESCRIPTION:

A1 PLAN INDEX SHOWING LOCATIONS OF REQUIRED ITEMS

A2 VICINITY MAP DEPICTING THE PROJECT SITE LOCATION IN RELATIONSHIP TO LOCAL LANDMARKS, TOWNS, AND MAJOR ROADS See Cover Sheet for a vicinity or location map.

A3 NARRATIVE OF THE NATURE AND PURPOSE OF THE PROJECT The building which formerly housed the Chesterton Middleschool is being renovated into a YMCA. A Part of the existing building will be demolished, the remainder will be renovated.

A4 LATITUDE AND LONGITUDE TO THE NEAREST FIFTEEN (15) SECONDS

A5 LEGAL DESCRIPTION OF THE PROJECT SITE

See Sheet C1 for Parcels. Legal Description from the below listed Documents. D.R. 111, PG. 396 (PARCEL I(b))

41° 36' 30" N 87° 03' 42" W

D.R. 151, PG. 62 (PARCEL I(a)) D.R. 161, PG. 381 (PARCEL II)

D.R. 201, PG. 100 (PARCEL IV)

D.R. 235, PG. 260 (EXCEPTION TO PARCEL I(c)) D.R. 235, PG. 208 (PARCEL I(c))

D.R. 480, PG 533 (EXCEPTION TO PARCEL I(c))

A6 11 X 17 - INCH PLAT SHOWING BUILDING LOT NUMBERS/BOUNDARIES AND ROAD LAYOUT/NAMES

A7 BOUNDARIES OF THE ONE HUNDRED(100) YEAR FLOODPLAINS, FLOODWAY FRINGES, AND FLOODWAYS According to the National Flood Insurance Program, Map 18127C0131D, effective date 09/30/2015, the site is located in Zone X, area of minimal flooding. See this sheet for Flood Map.

A8 LAND USE OF ALL ADJACENT PROPERTIES

South -Porter Ave.; Residential East — 5th St.; Residential

A9 <u>IDENTIFICATION OF A U.S. EPA APPROVED OR ESTABLISHED TMDL</u>

According to the IDEM Indiana Impaired Waters Online e303d Tool, the site is located in the Little Calumet River Watershed E. coli TMD.

A10 NAME(S) OF THE RECEIVING WATER(S)

According to IDEM's Indiana HUC Finder, the tertiary receiving waters for the pre- and post-construction runoff are the Little Calumet-Galient Subbasin (HUC8-04040001); the secondary receiving waters is/are East Arm Little Calumet River watershed (HUC 10-0404000104); the primary receiving waters is/are Coffee Creek-East Arm Little Calumet River Sub-Watershed (HUC12-040400010403). (https://www.in.gov/idem/cleanwater/resources/indiana-huc-finder/).

A11 IDENTIFICATION OF DISCHARGES TO A WATER ON THE CURRENT 303d LIST OF IMPAIRED WATERS AND THE POLLUTANT(S) FOR

According to the IDEM Indiana Impaired Waters Online e303d Tool, the site is located in the Little Calumet River Watershed TMDL which has been approved by the U.S. EPA for TMDL requirements established for E. coli and nutrients and sediment that impact the biotic community. Other potential pollutant sources in the watershed include nonpoint sources from agriculture and pastures, land application of manure, and urban and rural run-off, as well as point sources from straight pipe discharges, home sewage treatment system disposal, municipal separate storm sewer system communities, and combined sewer overflow outlets. Some of the recommended solutions to address the impairments include stormwater controls, point source controls, manure management, and habitat improvements.

A12 SOIL MAP OF THE PREDOMINANT SOIL TYPES See this sheet for the Soil Map. The site is composed of Ue and Uw soil types.

A13 IDENTIFICATION AND LOCATION OF ALL KNOWN WETLANDS, LAKES, AND WATER COURSES ON OR ADJACENT TO THE PROJECT SITE (CONSTRUCTION PLAN. EXISTING SITE LAYOUT) According to the U.S. Fish and Wildlife Service National Wetland Inventory Mapper, there are no wetlands, lakes, or water courses located on the site. See this sheet for a map of this project site from the National Wetlands Inventory.

A14 <u>IDENTIFICATION OF ANY OTHER STATE OR FEDERAL WATER QUALITY PERMITS OR AUTHORIZATIONS THAT ARE REQUIRED FOR CONSTRUCTION ACTIVITES</u>

There are no other known applicable permit items at this time.

A15 IDENTIFICATION AND DELINEATION OF EXISTING COVER. INCLUDING NATURAL BUFFERS The site for this project consists of an existing School building. See Sheet C1 for an identification of existing cover.

A16 EXISTING TOPOGRAPHY AT A CONTOUR INTERVAL APPROPRIATE TO INDICATE DRAINAGE PATTERNS

A17 LOCATION(S) OF WHERE RUN-OFF ENTERS THE PROJECT SITE

In the existing condition, most stormwater run—off enters the project site from rooftops and other impervious areas.

A18 LOCATION(S) OF WHERE RUN-OFF DISCHARGES FROM THE PROJECT SITE PRIOR TO LAND DISTURBANCE

The Existing Site drains into the Chesterton Stormwater System.

A19 LOCATION OF ALL EXISTING STRUCTURES ON THE PROJECT SITE

See Sheet C1 for location of existing structures on the project site.

A20 EXISTING PERMANENT RETENTION OR DETENTION FACILITIES, INCLUDING MANMADE WETLANDS, DESIGNED FOR THE PURPOSE OF There are no existing permanent retention or detention facilities, including manmade wetlands, designed for the purpose of stormwater management located on this project site.

A21 LOCATIONS WHERE STORMWATER MAY BE DIRECTLY DISCHARGED INTO GROUND WATER. SUCH AS ABANDONED WELLS. SINKHOLES. OR KARST FEATURES There are no other known sensitive areas, karst features (sinkholes), drywells, abandoned wells, or other areas where stormwater may be directly discharged to groundwater.

A22 SIZE OF THE PROJECT AREA EXPRESSED IN ACRES
Total Project Area: +/- 20.3 ac.

A23 TOTAL EXPECTED LAND DISTURBANCE EXPRESSED IN ACRES Construction Site Area to be disturbed: +/- 9 .66 ac

A24 PROPOSED FINAL TOPOGRAPHY

A25 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS

A26 LOCATION, SIZE, AND DIMENSIONS OF ALL STORMWATER DRAINAGE SYSTEMS, SUCH AS CULVERTS, STORM SEWERS, AND CONVEYANCE CHANNELS

A27 LOCATIONS OF SPECIFIC POINTS WHERE STORMWATER AND NON-STORMWATER DISCHARGES WILL LEAVE THE PROJECT SITE

A28 LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING ROADS, UTILITIES, LOT DELINEATION AND IDENTIFICATION, PROPOSED STRUCTURES, AND COMMON AREAS See Sheet P1.1 for demolished space of the building. No Site Improvements to occur as of this Demolition Phase.

A29 LOCATION OF ALL ON-SITE STOCKPILES AND BORROW AREAS Silt fence is proposed around any and all soil stockpiles to include those that are not listed in the plan sheets in order to prevent sediment-laden runoff from leaving the site. Sedimentation treatment will include but not be limited to filter socks, silt fencing, erosion control blankets and reseeding. Soil excavation and fill operations will take place to meet proposed grades. Topsoil will be separated and stockpiled prior to re-spread. A detail and specification for soil stockpiles has been featured in this section. Proposed locations of soil

stockpiles (if applicable) can be found on Sheet C4 of the attached construction plansheets

A30 CONSTRUCTION SUPPORT ACTIVITIES THAT ARE EXPECTED TO BE PART OF THE PROJECT

Construction support activities include a temporary construction entrance, staging/material storage area. Suggested locations for these support activities can be found on Sheet C4 of the corresponding construction plansheets.

A31 LOCATION OF ANY IN-STREAM ACTIVITIES THAT ARE PLANNED FOR THE PROJECT INCLUDING, BUT NOT LIMITED TO STREAM CROSSINGS AND PUMP AROUNDS There are no areas where activities are anticipated that will require contractors to cross or work within waterbodies (creek: and streams) and or/wetlands to perform work on the project site.

SECTION B: STORMWATER POLLUTION PREVENTION PLAN -**EROSION AND SEDIMENT CONTROL/PROJECT SITE** 

## DESCRIPTION OF THE POTENTIAL POLLUTANT GENERATING SOURCES AND POLLUTANTS. INCLUDING ALL POTENTIAL NON-STORMWATER DISCHARGES

• Potential Sources of Sediment Pollution to Stormwater Runoff:

Clearing and grubbing operations
 Grading and site excavation operations

 Vehicle tracking - Topsoil stripping and stockpilina

Potential pollutants and sources, other than sediment, to stormwater runoff: – Combined Staging Areas – small fueling activities, minor equipment maintenance, sanitary facilities, and

- Material Storage Area - general building materials, solvents, adhesives, paving materials, paints, aggregates Construction Activity – building demolition, clearing and grubbing, track removal.

Historical/Previous-Use Pollutants: - There are no known historical or potential previous—use pollutants on this site.

B2 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS

ee Sheet C4 for the location of the temporary construction entrance. See Construction Entrance Detail on Sheet C6.

B3 SPECIFICATIONS FOR TEMPORARY AND PERMANENT STABILIZATION

B4 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS

**B5** <u>SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS</u>

Silt fence is being prescribed as the primary perimeter control to help maintain natural areas and prevent soil erosion and sedimentation from leaving the site. See Sheet C4 for prescribed locations for silt fence and double-layered silt fence (if applicable). These locations are not "all-inclusive" and adjustments may need to be made based on field conditions and SWPPP inspection recommendations. Silt fence should be installed and maintained per the details outlined in this section. See Detail on Sheet C6.

there is no way to predict delays.

There are no prescribed run-off control measures (diversion, rock check dams, slope drains, etc.) for this site.

B7 STORMWATER OUTLET PROTECTION LOCATIONS AND SPECIFICATIONS In the Proposed Condition, stormwater run-off from this site will discharge directly to the Chesterton Storm Sewer. Therefore, no outlet protection is being prescribed.

**B8** GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS

Erosion control blankets shall be installed along all major slopes as a slope stabilization BMP. Please see Sheet C4 for locations where Erosion Control Blankets are prescribed (if applicable). These are not all inclusive and additional Erosion Control Blanket may need to be installed in areas where unstable slopes are occurring. See Sheet C6 for detail.

B9 DEWATERING APPLICATIONS AND MANAGEMENT METHODS

All excess water for the dewatering will be pump through a filter bag or equivalent and into the near by

B10 MEASURES UTILIZED FOR WORK WITHIN WATERBODIES

There are no areas where activities are anticipated that will require contractors to cross or work within waterbodies (creeks and streams) and or/wetlands to perform work on the project site.

B11 MAINTENANCE GUIDELINES FOR EACH PROPOSED TEMPORARY STORMWATER QUALITY MEASURE See Detail(s) on Sheets C6.

B12 PLANNED CONSTRUCTION SEQUENCE DESCRIBING THE RELATIONSHIP BETWEEN IMPLEMENTATION OF STORMWATER QUALITY MEASURES IN RELATION TO LAND DISTURBANCE A list of land-disturbing activities as well as an approximate Construction Sequence can be found on this Sheet. Please note, the construction sequence is only a proposed schedule. Actual construction schedule must remain flexible as

B13 PROVISIONS FOR EROSION AND SEDIMENT CONTROL ON INDIVIDUAL BUILDING LOTS REGULATED UNDER THE PROPOSED

There are no provisions for single residential building lots since the project site is a single industrial lot.

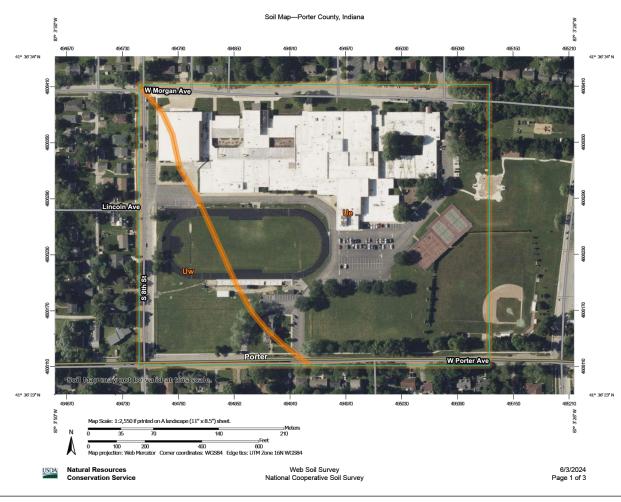
B14 MATERIAL HANDLING AND SPILL PREVENTION AND SPILL RESPONSE PLAN MEETING THE REQUIREMENTS IN 327 IAC 2-6.1

B15 MATERIAL HANDLING AND STORAGE PROCEDURES ASSOCIATED WITH CONSTRUCTION ACTIVITY All waste materials will be collected and disposed of into metal trash dumpsters in the materials storage area.

Dumpsters will have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all federal, state, and municipal regulations. Only trash and construction debris from the site will be deposited in the dumpster. No construction materials will be buried on—site. All personnel will be instructed, during tailgate training sessions, regarding the correct disposal of trash and construction debris. Notices that state these practices will be posted in the office trailer and the individual who manages day—to—day site operations will be responsible for seeing that these practices are followed. Trash dumpsters will be installed once the materials storage area has been established. The dumpsters will be inspected weekly and immediately after storm events. The dumpster should be emptied weekly but shall not exceed beyond the fill

All construction equipment and materials will be stored on site at a location deemed appropriate by the General Contractor and owner's representative. The General Contractor is to identify the location in the pre-construction meeting. A material storage area will be identified on site before any construction activities begin. The storage area will be inspected weekly and either within 24 hours prior to or following every ½"or greater rainfall event. The area is to be inspected for evidence of, or the potential for, pollutants entering the drainage system. Based on the results of the inspection, the description of potential pollutant sources identified in the plan and pollution prevention sources identified in the plan shall be revised as appropriate as soon as practicable after such inspection. Such modification shall provide for timely implementation of any changes to the plan within seven (7) calendar days following the inspection.

limit. If trash and construction debris are exceeding the dumpster's capacity, the dumpsters will be emptied more frequently.



USDA SOIL SURVEY MAP

# **ABONMARCHE**

#### 3.6 Spill Prevention and Control Plan (B14)

Construction materials that may be located onsite include vehicle lubricants, oils, vehicular fuels, concrete wash-out, acids, curing compounds, paints, mulch, pesticides, herbicides, fertilizer, and trash. Any toxic waste materials are to be properly disposed of in an approved manor in accordance with local, state, and federal laws.

These materials should be stored in a manner that prevents or minimizes the chance that a spill will reach soils, groundwater or surface water. It is NOT anticipated that a fuel or other chemical tank

Contractor shall have absorption spill clean-up materials and spill kits available in the storage areas at all times and utilize secondary containment by means of installing an impermeable berm around the construction site refueling and maintenance areas, and oil and chemical drums storage areas to prevent stormwater run-on, runoff, and to contain spills. Contractor shall select and designate an area onsite for these areas and utilize drip pans or absorbent pads during vehicle and equipment maintenance work. Contractor shall inspect these areas daily when in use, and weekly when not in use. Materials stored inside shall be placed in a manner to prevent a spill from migrating outside the confines of the building or into any drain leaving the building and discharging to soils, groundwater

If a spill does occur, then the spill must be contained immediately utilizing appropriate response techniques including diking and absorbents. Clean up of the spill should occur as soon as possible once the spill is stabilized and contained. Spills shall be cleaned up using acceptable methods such as, absorbents on impervious surfaces or removal of contaminated soils. In all cases, cleanup standards must adhere to local, state and federal requirements. Failure to clean up any spill is a violation of the Indiana State Spill Rule (327 IAC 2-6.1), which is enforced by the Indiana Department of Environmental Management (IDEM). Certain spills must be reported to the local response agency, Local Emergency Planning Committee and/or IDEM. Initial calls should be made to the 911 system if the spill exceeds reportable quantities or is a threat to public safety. The 911 system will typically notify Union Township Fire Department (219-759-3321), IDEM (1-888-233-7745) or the National Response Center (1-800-424-8802) can typically assist with information on clean up operations or clean up Contractors. The following information will likely need to be provided: time of spill, location of spill, material, source of spill, approximate volume and length of spillage, weather conditions at time of spill, personnel present at time of spill, and all action taken for post

Small spills and leaks of these materials onto non-paved areas shall be shoveled into containers or dumpsters and be properly disposed of in an approved manor in accordance with local and state laws. All spills that occur near an inlet to the stormwater conveyance system must have "curbing" implemented immediately, "Curbing" is the use of a barrier (absorbent material) which prevents the spill from making contact with the stormwater conveyance system or stormwater runoff. Contractor shall contact a Waste Recovery Agency immediately for removal of contaminates and coordination of monitoring the site during cleanup until all the hazardous material has been removed. Contractor shall cooperate with IDEM and the Union Township during and after the spill to ensure all required cleanup and filing reports are properly submitted.

The Developer/Owner shall be continually informed of any contamination concerns occurring on the site. The Construction Manager shall keep a list onsite of qualified Contractors for spill remediation. A spill prevention and control plan should be developed and utilized prior to any emergency. All site personnel, including maintenance employees, shall be made aware of this plan and proper spill prevention and remediation techniques. All materials used to absorb spills shall be properly disposed of in an approved manor in accordance with local and state laws. Do not flush spill materials with water unless directed to do so by a governing agency. It is important that all manufacturer's instructions be followed when using or applying all fertilizers, herbicides, and

# MATERIAL HANDLING & SPILL PREVENTION RESPONSE PLAN (B14)

### SECTION C: STORMWATER POLLUTION PREVENTION PLAN -**POST-CONSTRUCTION**

DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE Potential pollutants associated with the proposed land use include litter and trash, sedimentation from asphalt parking, automotive waste from streets and alley. This list is neither exhaustive nor all-inclusive.

DESCRIPTION OF PROPOSED POST—CONSTRUCTION STORMWATER MEASURES Areas of vegetation at the project will provide filtration and infiltration of stormwater runoff. The vegetated areas will also reduce thermal pollutants in the runoff. The stormwater quality measures at the project will be maintained by the owner.

C3 PLAN DETAILS FOR EACH STORMWATER MEASURE IMPLEMENTATION

# SEQUENCE DESCRIBING STORMWATER MEASURE IMPLENTATION

Following construction, erosion control measures shall be inspected and maintained until permanent vegetation has been established on all disturbed areas and all construction is complete. Individual erosion control measures may be removed after sufficient vegetation has been established to prevent flows of sediment or sediment laden stormwater flows into the stormwater conveyance system.

C5 MAINTENANCE GUIDELINES FOR PROPOSED POST—CONSTRUCTION STORMWATER MEASURES

The stormwater quality measures at the project will be maintained by the owner as described in the Operations and Maintenance Manual. However, the municipality may elect to address deficiencies and repairs and charge the responsible party. See Operations and Maintenance Manual..

A. A self-monitoring program that includes the following must be implemented at all permitted project

1. A trained individual shall perform a written evaluation of the project site a minimum of one time per week and by the end of the next business day following each measurable storm event. 2. The evaluation must address the maintenance of existing stormwater quality measures to ensure they are functioning properly and identify additional measures — necessary to remain in compliance with all applicable statutes and rules.

3. Written evaluation reports must include:

a. The name of the individual performing the evaluation; b. The date of the evaluation;

c. Problems identified at the project site; and

d. Details of corrective actions recommended and completed. 4. All evaluation reports for the project site must be made available to the MS4 operator or other designated entity within 48 hours of a request.

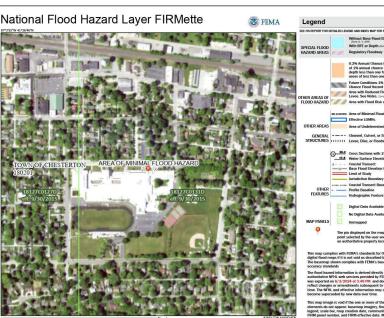
Evaluation reports must be maintained for a period of two years from date of NOT. 6. All evaluation reports will be scanned and submitted in electronic format (CD-ROM) to the town no later than 90 days from the date of NOT.

B. The failure to file self-monitoring reports required by this section may be prosecuted through the Ordinance Violations Bureau established by  $\S 1-13$  of this code of ordinances. Dry weather violations of this section shall be punishable by a fine of \$100 for a first offense. Second and subsequent dry weather violations shall be punishable by a fine of \$250. Each day that a violation is found to exist shall constitute a Chesterton, IN Code of Ordinances separate violation. We weather violations of this section shall be punishable by a fine of \$250. Each day that the violation is found to exist shall constitute a separate violation. Violations that are not remedied after a second or subsequent violation may result in stop-work order.

(Ord. 2006-04. passed 2-13-2006; Ord. 2008-06, passed 4-28-2008) ENTITY THAT WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE POST-CONSTRUCTION STORMWATER <u>MEASURES</u>

FEMA FLOOD MAP

Berglund Consturction 126 Venturi Drive Chesterton, IN 46304 (219) 926-4246 Contact: Josh Schoon jschoon@berglundco.com

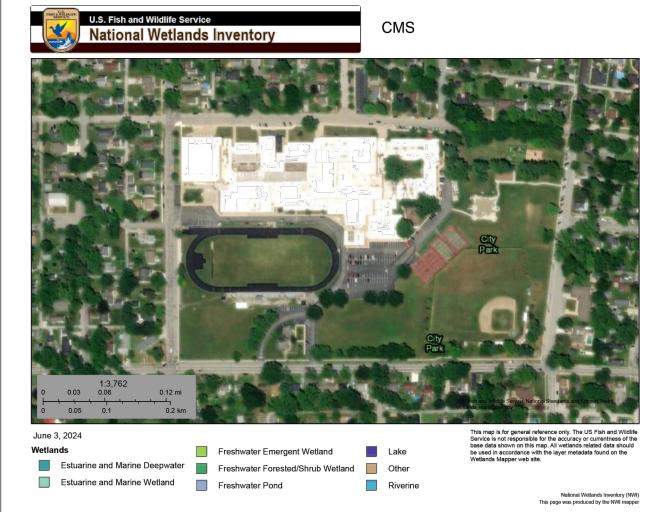


PROJECT GENERAL CONSTRUCTION SCHEDULE

- 1. Contractor to schedule a Pre-Construction Meeting with the Town of Chesterton MS4 Coordinator (219-728-1336) District prior to commencing any land disturbing activities.
- 2. Required posting materials are to be posted at or near the entrance to the development. The Notice of Intent, location of the Stormwater Pollution Prevention Plan or SWPPP, and Site Contact Information are required to be posted. The materials must be current and legible at all times.
- 3. Temporary construction entrance must be installed immediately. Minimum length of the temporary construction entrance is 150 feet. A detail is provided on Sheet C4.
- 4. Areas for staging (material stockpiles, equipment, etc.), material storage areas, and topsoil stockpile areas are to be field established at the project (i.e.: install safety fencing around areas). Each area shall be properly protected and maintained at all times during construction. Proposed locations are shown on Sheet C4. Refer to the Legend in the lower right hand corner of the Sheet for the symbols representing each of the measures.
- 5. Contact Indiana Underground Plant Protection Systems, Inc. (INDIANA 811) for underground utility locations. (1-800-382-5544) prior to commencing earthmoving activities.
- 6. Stripping and stockpiling of topsoil onsite at a location determined by contractor and/or the project owner will occur. Install perimeter measures adjacent to the stockpile. Refer to Sheet C6 for a Stockpile Detail. A proposed location is shown on Sheet C4.
- 7. Commence earthwork operations. Refer to Sheet C4 for the location of the required fencing. Install silt fencing on as needed basis during construction at the project. This step will involve the installation of the stormwater structures, storm pipes, gas, electric, sanitary sewer, and water. Areas disturbed during the extension/installation of gas, electric, and water are to be stabilized as soon as the installations are completed (seeding in vegetated areas, pavement or gravel in other areas). Areas which are at final grade or that will remain idle for a period of 15 days or more are to be stabilized. Refer to Sheet C7 for Surface Stabilization Measures. Measures such Hydroseeding (surface stabilization permanent) and Erosion Control Blankets (repairs, permanent) will be used at the project. An Installation Detail for Erosion Control Blanket is provided in the bottom center of Sheet C6. A general hydroseeding detail is provided on Sheet C7.
- 8. Stormwater inspections are to occur at the minimum of weekly and within one business day of each 0.50 inch or greater event. Rainfall amounts can be obtained at: https://www.cocorahs.org/ViewData/ListDailyPrecipReports.aspx. Maintenance of all installed erosion control measures are to occur during each of the inspections and include but are not limited to to the following items:
- Repair silt fencing if damaged. If silt is 1/2 the height of the fabric, remove silt and replace/repair fence as
- · Verify that areas are being stabilized as they reach final grade or if they have remained idle for a period of
- Trash collections are occurring regularly. This includes scrap construction materials, cardboard, plastic sheeting, empty containers (buckets, cans, etc.), styrofoam, fast food containers/packaging, plastic bags and bottles, cans, and related trash/debris.

Refer to Sheets C6 - C7 for Details for the above measures. General maintenance guidelines are supplied with

- 9. When all final grading has been completed, apply permanent surface stabilization measures on all remaining disturbed areas. Remove temporary erosion control measures and any sediment adjacent to them, and stabilize those areas as needed with permanent seeding or erosion control blankets. Refer to Sheets C7 (Seeding) and C6 (Erosion Control Blanket). Erosion control blanket is required for restabilization of failure areas of the basin banks.
- 10. A trash/debris collection is to be made of the overall project. All excess construction materials, erosion control products (silt fencing, inlet protection measures, etc.), general trash, buckets, cardboard, plastic sheeting, pallets and related are to be collected and removed from the project. Collected trash and debris are not to be burned, buried, or dumped on vacant areas of the development.
- 11. When all construction has been completed, all earthmoving activities have been completed, and all areas meet the minimum requirements for permanent surface stabilization, a Notice of Termination is to be submitted to IDEM. Minimum stabilization requirements are currently 70% uniformly dense coverage. The Notice of Termination form can be obtained at:http://www.in.gov/idem/5157.htm#owq\_stormwater



NATIONAL WETLANDS INVENTORY MAP

HORZ: **N/A** 

NO. REVISION DESCRIPTION:

**DESIGNED BY** PM REVIEW: MSK

 $\bigcirc$ 

QA/QC 06/10/2024

QA/QC REVIEW:

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VELA SITE

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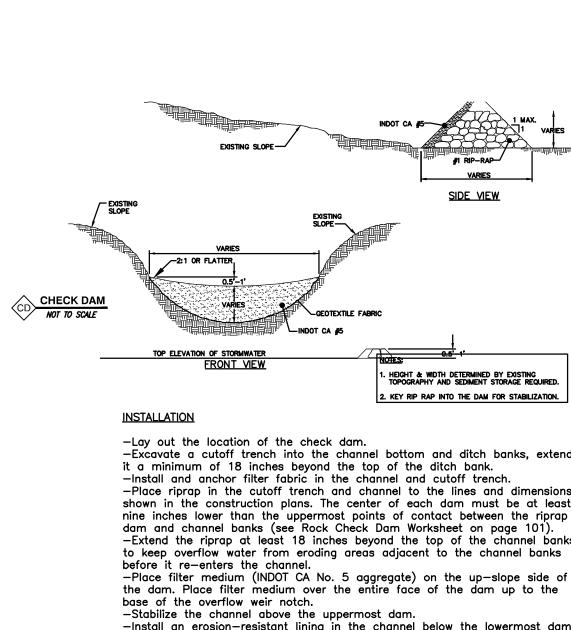
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-Excavate a cutoff trench into the channel bottom and ditch banks, extending -Place riprap in the cutoff trench and channel to the lines and dimensions shown in the construction plans. The center of each dam must be at least nine inches lower than the uppermost points of contact between the riprap -Extend the riprap at least 18 inches beyond the top of the channel banks to keep overflow water from eroding areas adjacent to the channel banks

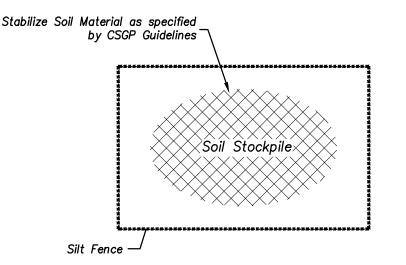
the dam. Place filter medium over the entire face of the dam up to the -Install an erosion-resistant lining in the channel below the lowermost dam. The lining should extend a minimum distance of six feet below the dam.

-Additional sediment storage can be provided by excavating a small sediment trap on the upstream side of the check dam.

-Inspect within 24 hours of each rain event and at least once every seven calendar days. -If significant erosion occurs between dams, install an erosion-resistant liner in that portion of the channel. -Remove accumulated sediment when it reaches one-half the height of the dam to maintain channel capacity, allow drainage through the dam, and prevent large flow from displacing sediment. -Add riprap and aggregate as needed to maintain design height and cross -When dams are no longer needed, remove the riprap and aggregate and stabilize the channel, using an erosion—resistant lining if necessary. (Riprap

and aggregate from the dam may be removed or utilized to stabilize the

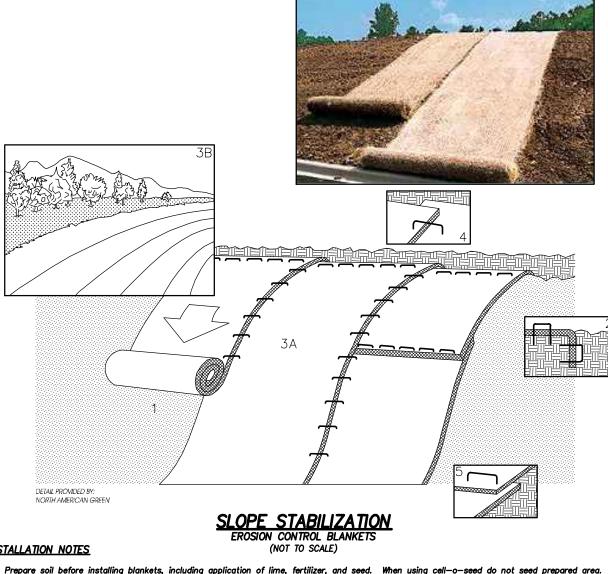
No stockpiles, clearing debris / piles, or related materials are to remain on the site at the completion of construction. All materials must be removed "trucked" from the site as needed.



SOIL STOCKPILE DETAIL

(NOT TO SCALE)

Stockpile(s) shall be covered with vegetation or a tarp after 7 days of inactivity and achieved within 14 days. Inspect daily and check for damage to perimeter barrier; repair immediately.



INSTALLATION NOTES

- Prepare soil before installing blankets, including application of lime, fertilizer, and seed. When using cell—o—seed do not seed prepared area.
   Cell—o—seed must be installed with paper side down.
- 2. Begin at the top of the slope by anchoring the blanket in 6" deep x 6" wide trench. Backfill and compact the trench after stapling. Follow the manufacturer's recommendations for size and type of staples and staple pattern for securing the blankets.
- 3. A) Roll the blankets down the bank as shown. B) Blankets may be installed horizontally down the slope of the drainage swale.
- 4. The edges of parallel blankets must be stapled with approximately 2" overlap.
- 5. When blankets must be spliced down the slope, place blanket end over end (shingle style) with approximately 4" overlap. Staple through overlapped area, approximately 12" apart.
- 1. Inspect within 24 hours of a half—inch or greater rain event and at least once every week.
- 2. Check for erosion or displacement of the blanket.
- 3. If any area shows erosion, pull back that portion of the blanket covering the eroded area, add soil and tamp, reseed area, replace and

— Steel or Wood post Steel or wood

4"x 8" trench with

<u>MAINTENANCE</u>

—compacted backfill

over fabric

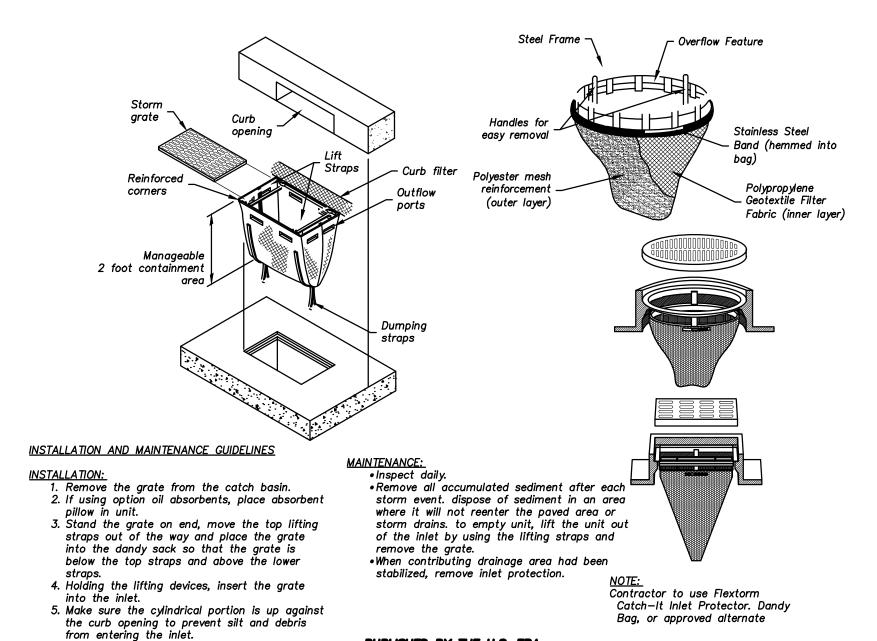
<u>Trench Detail</u>

SILT FENCE DETAIL

18" min. height

36" max. height

Ponding Height



**Drop Bag Inlet Protection** 

PUBLISHED BY THE U.S. EPA

**INSTALLATION NOTES** 

Steel or Wood post -

6' max, spacina without wire support fence

(10' max. spacing with wire support fence)

1. Lay out the location of the fence so that it is parallel to the contour of the slope and at least 10 feet beyond the toe of the slope to provide a sediment storage area. Turn the ends of the fence up slope such that the point of contact between the ground and the bottom of the fence end terminates at a higher elevation than the top of the fence at its lowest point.

2. Excavate an 8-inch deep by 4-inch wide trench along the entire length of the fence. (installation by plowing is acceptable)

Install silt fence with the filter fabric located on the up—slope side of the excavated trench and the support posts on the down—slope side of the trench.

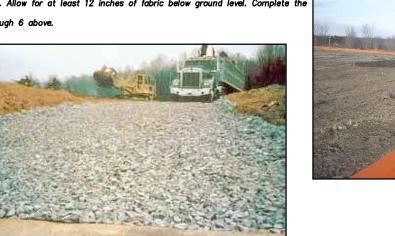
Extra strenath filter

non-woven fabric needed without wire mesh support

Drive the support posts at least 18 inches into the ground, tightly stretching the fabric between the
posts as each is driven into the soil. A minimum of 12 inches of the filter fabric should extend into
the trench.

Lay the lower 4 inches of fabric on the bottom of the trench and extend it toward the up-slope side of the trench. 6. Backfill the trench with soil material and compact it in place.

<u>NOTE</u>:
If the silt fence is being constructed onsite, attach the filter fabric to the support posts and attach wooden lathe to secure the fabric to the posts. Allow for at least 12 inches of fabric below ground level. Complete the



# Geotextile fabric to stabilize foundation (especially important where wetness is anticipated), and to prevent undermining of aggregate and the underlying soil H = X inches (NOTE: 8-inch min.)

# INSTALLATION NOTES

Remove all vegetation and other objectionable material from the foundation area.

Grade foundation and crown for positive drainage. If the slope of the construction entrance is toward a public road and exceeds two percent, construct an 8-inch high diversion ridge with a ratio of 3-to-1 side slopes across the foundation area about 15 feet from the entrance to divert runoff

Install a culvert pipe under the pad if needed to maintain proper public road drainage.
 If wet conditions are anticipated, place geotextile fabric on the graded foundation to improve

Stability.

5. Place specified aggregate to the dimensions shown leaving the surface smooth and sloped for Where possible, divert all stormwater runoff and drainage from the pad to a sediment trap or basin.

MAINTENANCE Inspect daily.

. Inspect daily. 2. Reshape pad as needed for drainage and runoff control. 3. Top dress with clean aggregate as needed. 4. Immediately remove mud and sediment tracked or washed onto public roads. 5. Flushing should only be used if the water can be conveyed into a sediment trap or basin

Diversion Ridge with 3:1 sides

Metal pins or staples to secure polyethylene lining — to straw bales

Straw bale (alternative acceptable

**Typical Section** 

Earthen Berm

CONCRETE WASHOUT STRUCTURE

1. Dependent upon the type of system, either excavate the pit or install the containment system. For prefabricated containers, locate, and install according to the

Install the polyethylene lining. For excavated systems, the lining should extend over the entire excavation. The lining for bermed systems should be installed over the pooling area with enough material to extend the lining over the berm or containment system. The lining should be secured with pins, staples, or other fasteners.

4. Excess concrete should be removed when the washout system reaches 50 percent of the design capacity. Use of the system should be discontinued until appropriate measures can be initiated to clean the structure. Prefabricated systems should also utilize this this criterion, unless the manufacturer has alternate specifications.

6. Dispose of all the concrete in a legal manner. Reuse the material on site, recycle, or haul the material to an approved construction/demoition landfill site. Recycling of material is encouraged. The waste material can be used for multiple applications including but not limited to roadbeds and building. The availability for recycling should be checked locally.

Concrete washout systems are designed to promote evaporation. However, if the liquids do not evaporate and the system is near capacity it may be necessary to
vacuum or remove the liquids and dispose of them in an acceptable method. Disposal may be allowed at the local sanitary sewer authority provided their national
pollutant discharge elimination system permits allow for acceptance of this material. Another option would be to utilize a secondary containment system or basin for
further dewatering.

11. Inspect construction activities on a regular basis to ensure suppliers, contractors, and others are utilizing designated washout areas. If concrete waste is being

12. When concrete washout systems are no longer required, the concrete washout system shall be closed. Dispose of all hardened concrete and other materials used to construct the system.

2. A base shall be constructed and prepared that is free of rocks and other debris that may cause tears/punctures in the polyethylene lining.

6. Install signage that identifies concrete washout areas and post signs directing contractors and suppliers to designated locations.

1. Inspect daily and after each storm event — Inspect the integrity of the overall structure and containment system where applicable.

2. Inspect the system for leaks, spills, and tracking of soil by equipment, and the polyethylene lining for failure, including tears and punctures

system to secure the polyethylene lining

Entry side of \_\_

Sandbags or other appropriate anchoring \_ system to secure the

Lining over berm -

INSTALLATION NOTES

**MAINTENANCE** 

Sandbags or other appropriate anchoring system to secure the polyethylene lining

Polyethylene lining (10 mm) -

Lining over berm

Section A-A

Section B-B

4. Place flags, safety fencing, or equivalent to provide a barrier to construction equipment and other traffic.

7. Where necessary, provide stable ingress and egress or alternative approach pad for concrete washout systems.

5. Upon removal of the solids, inspect the structure. Repair the structure as needed or construct a new system.

7. The plastic liner should be replaced after every cleaning; the removal of material will usually damage the lining.

10. Prefabricated units are often pumped and the company supplying the unit provides this service.

8. The concrete washout system should be repaired or enlarged as necessary to maintain capacity for concrete waste.

13. Holes, depressions and other land disturbances associated with the system should be backfilled, graded, and stabilized.

3. Once concrete wastes harden, remove and dispose of the material.

Earthen Berm -

<u>Below Grade</u>

<u>Above Grade</u>

Section C-C

WASHOUT

Concrete Washout

<u>Sign Detail</u>

Lining to extend over

Compacted soil material

— Black letters of 6" height

TEMPORARY CONSTRUCTION ENTRANCE (LARGE SITE-TWO ACRES OR LARGER)

NO. REVISION DESCRIPTION:

<u>Joining Fences</u>

1. Inspect within 24 hours of a half-inch or greater rain event

If fence fabric tears, starts to decompose, or in any way becomes ineffective, replace the affected portion immediately.

3. Remove deposited sediment when it is causing the filter fabric to boulder or when it reaches one—half the height of the fence at its lowest oiunt. When contribution drainage area has been stabilized, remove the fence and sediment deposits, grade the site to blend with surround area, and stabilize.

All repairs should meet specifications as outlined in Silt Fence

Hydroseeding can be accomplished using a multiple—step or one—step

The multiple-step process ensures maximum direct contact of the seeds to

A wide variety of special use products can be incorporated into the

Cellulose Fiber Mulch, Fertilizer, Tackifier, and Hydroseed mix.

Paper Mulch is frequently applied at 1,200-1,500 pounds per acre

mulch tends to crust, and can inhibit germination.

probability of yielding an excellent grass stand.

always necessary to produce a stand of grass.

(approximately 25lbs. -35 lbs. per 1.000 square feet). With a polyacrylamide

additive, such rates can be effective. Many contractors avoid using more

than 2.000-2.500 lbs per acre of paper mulch, because too much paper

<u>Wood Mulch</u> is most effective at rates beginning at 2,000 lbs per acre

A guar based tackifier is also highly recommended to improve the

(about 45 lbs. per 1,000 square feet). In very hot conditions, 3,000 lbs

(about 70 lbs. per 1,000 square feet) per acre will provide more moisture

retention, and will therefore improve the probability of success significantly.

Bonded Fiber Matrix rates start at about 3,000 lbs per acre. At 4,000 lbs.

per acre (about 90 lbs. per 1,000 square feet), most wood based Bonded

coverage of grass, even when pounded with destructive rains or in very hot

recommend application rate is 1½ lbs per 1,000 Sq. ft. or about 60 lbs per

Fiber Matrix products provide an excellent probability of achieving total

Regardless of the quality of the mulch protection, rainfall or irrigation is

hydroseed slurry when conditions dictate. Soil amendments, such as lime and

gypsum, or organics such as sludge and humus can be applied right along

To select appropriate hydroseeding mixtures, an evaluation of site conditions

with the seed and other ingredients. Dyes, surfactants, growth stimulators,

funaicides. inoculates. and a host of other liquid, powdered and granular

When the one—step process is used to apply the mixture of seed, fiber, etc.. the seed rate shall be increased to compensate for all seeds not having direct contact with the soil.

Follow-up applications shall be made as needed to cover weak spots. The time allowed between placement of seed in the hydraulic mulcher and the emptying of the hydraulic mulcher tank should not exceed 30 minutes. Application of the slurry should proceed until a uniform cover is achieved. The applicator should not be directed at one location for too long a period of time or the applied water will cause erosion.

Construction Guidelines

hours to dry before rainfall occurs to be effective <u>Monitorina</u> Hydromulched slopes should be inspected periodically for damage due to

wind, water, or human disturbance.

Maintenance specifications or straw mulch.

NO. REVISION DESCRIPTION:

# GENERAL SEEDING and SURFACE STABILIZATION PROCEDURES IN ACCORDANCE WITH CHAPTER 7 OF THE INDIANA STORM WATER QUALITY MANUAL, OCTOBER 2007

## TEMPORARY SEEDING

Table 1. Temporary Seeding Specifications

Seed Species 1	Rate per Acre	Planting Depth	Optimum Dates 2
Wheat or Rye	150 lbs.	1 to 1-1/2 inches	Sept. 15 - Oct. 30
Spring Oats	100 lbs.	1 inch	March 1 — April 15
Annual Ryegrass	40 lbs.	1–1/4 inch	March 1 — May 1 Aug. 1 — Sept. 1
German Millet	40 lbs.	1 to 2 inches	May 1 — June 1
Sudangrass	35 lbs.	1 to 2 inches	May 1 — July 30
Buckwheat	60 lbs.	1 to 2 inches	April 15 – June 1
Corn (broadcast)	300 lbs.	1 to 2 inches	May 11 - Aug. 10
Sorghum	35 lbs.	1 to 2 inches	May 1 — July 15

- 1. Perennial species may be used as a temporary cover, especially if the area to be seeded will remain idle for more than one
- year (See Permanent Seeding). 2. Seeding done outside the optimum seeding dates increases the chances of seeding failure. Dates may be extended or shortened based on the location of the project site within the state

Mulch alone is an acceptable temporary cover and may be used in lieu of temporary seeding, provided that it is appropriately anchored. A high potential for fertilizer, seed, and mulch to wash exists on steep banks, cuts, and in channels and areas of

- Test soil to determine pH and nutrient levels.

  Apply soil amendments as recommended by the soil test. If testing is not done, apply 400 to 600 pounds per acre of 12—12—12 analysis fertilizer, or
- equivalent.
  3. Work the soil amendments into the upper two to four inches of the soil with a disk or rake operated across the slope.
- Apply seed uniformly with a drill or cultipacker seeder or by broadcasting. Plant or cover seed to the depth shown in Table 1.
- 1. If drilling or broadcasting the seed, ensure good seed-to-soil contact by firming the seedbed with a roller or cultipacker after completing seeding operations. Daily seeding when the soil is moist is usually most effective. 2. If seeding is done with a hydroseeder, fertilizer and mulch can be applied with the seed in a slurry mixture.
- 3. Apply mulch (See Mulching and Compost Mulching Requirements Below) and anchor it in place.
- Inspect within 24 hours of each rain event and at least once every seven calendar days.
- Check for erosion or movement of mulch and repair immediately. Monitor for erosion damage and adequate cover (80 percent density): reseed, fertilize, and apply mulch where necessary. 4. If nitrogen deficiency is apparent, top-dress fall seeded wheat or rye seeding with 50 pounds per acre of nitrogen in February

# DORMANT SEEDING & FROST SEEDING (SURFACE STABILIZATION MEASURES)

CONTRACTOR TO DETERMINE THE APPROPRIATE SEEDING METHOD BASED ON THE TIME OF YEAR.

# . To provide early germination and soil stabilization in the spring.

. To reduce sediment—laden stormwater runoff from being transported to downstream areas. . To improve visual aesthetics of construction area.

4. To repair or enhance previous seeding.

# 1. Soil amendments based upon analysis of soil by a soil testing service. (fertilizer, etc.)

3. Mulch (straw, hay, wood fiber, etc.) for protection of seedbed, moisture retention and encouragement of plant growth. mulch must be anchored to prevent dispersal by wind or water, may be covered with manufactured erosion control blankets

#### Seed Specifications: Note that seeding done outside of the optimum seeding dates increases the chances of seeding failure, dates may be shortened. Note that seeding done outside of the optimum seeding dates increases the chances of seeding failure, dates may be shortened. or extended depending on the location of the site within the State of Indiana. Mulch alone is an acceptable temporary cover and may be used in lieu of temporary seeding, providing that it is appropriately anchored, perennial species may be used as a

temporary cover, especially if the area to be seeded will remain idle for more than one year (see permanent seeding).

Temporary Dormant or Frost Seeding Wheat or Rye: 150 pounds per acre Spring Oats: 150 pounds per acre

<u>Open low-maintenance areas</u> (remaining idle more than 6 months): Perennial ryegrass & white clover: ryegrass 75 pounds per acre + 3 pounds of clover per acre, optimum soil ph 5.6 to 7.0 Perennial ryegrass & tall fescue: ryegrass 45 pounds per acre + 45 pounds of fescue per acre, optimum soil ph 5.6 to 7.0 Tall fescue & white clover: fescue 75 pounds per acre + 3 pounds of white clover per acre, optimum soil ph 5.5 to 7.5 Kentucky bluegrass, smooth bromegrass, switchgrass, timothy, perennial ryegrass, & white clover: bluegrass 30 pounds per acre + 15 pounds of bromegrass per acre + 5 pounds of switchgrass per acre + 6 pounds of timothy per acre + 15 pounds of

# Steep banks and cuts (low-maintenance areas, not mowed):

Smooth bromegrass & red clover: brome 50 pounds per acre + 30 pounds of red clover per acre, optimum soil ph 5.5 to 7.0 Tall fescue & white clover: fescue 75 pounds per acre + 30 pounds of white clover per acre, optimum soil ph 5.5 to 7.5 Tall fescue & red clover: fescue 75 pounds per acre + 30 pounds of red clover per acre, optimum soil ph 5.5 to 7.5 Orchard grass, red clover & white clover; orchard grass 45 pounds per acre + 30 pounds of red clover per acre + 3 pounds of white clover per acre, optimum soil ph 5.6 to 7.0

# Lawns and high-maintenance areas:

ryegrass per acre + 3 pounds of white clover per acre, optimum soil ph 5.5 to 7.5

<u>Bluegrass</u>: bluegrass 210 pounds per acre, optimum ph 5.5 to 7.0

<u>Perennial ryegrass & bluegrass</u>: 90 pounds of ryegrass per acre & 135 pounds of bluegrass per acre, optimum ph 5.6 to 7.0 all fescue (turf type) & bluegrass: fescue 250 pounds per acre + 45 pounds of bluegrass per acre, optimum soil ph 5.6 to

<u>Channels and areas of concentrated flow:</u>
<u>Perennial ryegrass & white clover</u>; ryegrass 225 pounds per acre + 3 pounds of white clover per acre, optimum soil ph 5.5 to Kentucky bluegrass, smooth bromegrass, switchgrass, timothy, perennial ryegrass, & white clover: bluegrass 30 pounds per acre + 15 pounds of bromegrass per acre + 5 pounds of switchgrass per acre + 6 pounds of timothy per acre + 15 pounds of ryegrass per acre + 3 pounds of white clover per acre, optimum soil ph 5.5 to 7.5

Iall fescue & white clover: fescue 225 pounds per acre + 3 pounds of clover per acre, optimum soil ph 5.5 to 7.5

# Tall fescue, perennial rye grass. & Kentucky bluegrass: fescue 225 pounds per acre + 30 pounds of ryegrass per acre + 30 pounds of bluegrass per acre, optimum soil ph 5.5 to 7.5

- Note: for best results: (a) Legume seed should be inoculated
  (b) Seeding mixtures containing legumes should be spring—seeded although, the grass may be fall—seeded and the legume
- (c) If legumes are fall-seeded, do so in early fall
- (d) If using mixtures other than those listed above, increase seeding rates by 50 percent over the conventional seeding

Site Preparation:
1. Grade the site to achieve positive drainage.
2. Add topsoil to achieve needed depth for establishment of vegetation.

<u>Dormant Seeding:</u>
1. Test soil to determine ph and nutrient levels. 2. Broadcast soil amendments as recommended by soil test and work into the upper 2 to 4 inches of soil. If testing is not done, apply 200 to 300 pounds per acre of 12-12-12 analysis fertilizer. or equivalent. Apply anchored mulch immediately after completion of grading and addition of soil amendments.
 Select appropriate seed species (see seed specifications above). Broadcast the seed on top of the mulch and/or into existing

# ground cover at rates shown. Areas are to be seeded when soil temperatures are below 50 degrees but the soil is not frozen.

Frost Seeding:
1. Test soil to determine pH and nutrient levels. 2. Broadcast soil amendments as recommended by a soil test and work into the upper 2 to 4 inches of soil before it freezes. If testing was not done, apply 200 to 300 pounds per acre of 12-12-12 analysis fertilizer, or equivalent. 3. Select appropriate seed species or mixture (see seed specifications above). Broadcast the seed on the seedbed when the soil

# is frozen. do not work the seed into the soil.

1. Inspect at least once every seven calendar days. 2. Check for erosion or movement of mulch. 3. Check for inadequate cover (less than 80 percent density over the soil surface); reseed and mulch in mid to late April if necessary. For best results, reseed within the recommended dates shown under temporary and permanent seeding).

4. Apply 200 to 300 pounds per acre of 12-12-12 analysis fertilizer, or equivalent, between April 15 and May 10 or during 5. Fertilize turf areas annually. Apply fertilizer in a split application. For cool—season grasses, apply 1/2 in late Sprina and 1/2 in early Fall. For warm—season grasses, Apply 1/3 in early Spring, 1/3 in late Spring, and the remaining 1/3 in middle Summer.

# Required density of vegetative cover = 80 percent or greater over the soil surface.

# PERMANENT SEEDING

Site Preparation I. Grade the site to achieve positive drainage. 2.Add topsoil or compost mulch to achieve needed depth for establishment of vegetation. (Compost material may be added to improve soil moisture holding capacity, soil friability, and nutrient availability.)

1. Test soil to determine pH and nutrient levels.

2. Apply soil amendments as recommended by the soil test and work into the upper two to four inches of soil. If testing is not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent.
3.Till the soil to obtain a uniform seedbed. Use a disk or rake, operated across the slope, to work the soil amendments into the upper two to four inches of

Optimum seeding dates are March 1 to May 10 and August 10 to September 30. Permanent seeding done between May 10 and August 10 may need to be irrigated. Seeding outside or beyond optimum seeding dates is still possible with the understanding that reseeding or overseeding may be required if adequate surface cover is not achieved. Reseeding or overseeding can be easily accomplished if the soil surface remains well protected with mulch.

1. Select a seeding mixture and rate from Table 1 Permanent Seeding Recommendations. Select seed mixture based on site conditions, soil pH, intended land broadcasting the seed, ensure good seed-to-soil contact by firming the seedbed with a roller or cultipacker after completing seeding operations. (If seeding is done with a hydroseeder fertilizer and mulch can be applied with the seed in a slurry mixture.) 3.Mulch all seeded areas and use appropriate methods to anchor the mulch in place. Consider using erosion control blankets on sloping areas and conveyance

Inspect within 24 hours of each rain event and at least once every seven calendar days until the vegetation is successfully established Characteristics of a successful stand include vigorous dark green or bluishgreen seedlings with a uniform vegetative cover density of 90 percent or more.

• Repair damaged, bare, gullied, or sparsely vegetated areas and then fertilize, reseed, and apply and anchor mulch. • If plant cover is sparse or patchy, evaluate the plant materials chosen, soil fertility, moisture condition, and mulch application; repair affected areas either by overseeding or preparing a new seedbed and reseeding. Apply and anchor mulch on the newly seeded areas. • If vegetation fails to grow, consider soil testing to determine soil pH or nutrient deficiency problems. (Contact your soil and water conservation district or

•If additional fertilization is needed to get a satisfactory stand, do so according to soil test recommendation Add fertilizer the following growing season. Fertilize according to soil test recommendations. Fertilize turf areas annually. Apply fertilizer in a split application. For cool—season grasses, apply one—half of the fertilizer in late spring and one—half in early fall. For warm—season grasses, apply one—third in early spring, one—third in late spring, and the remaining one—third in middle summer.

cooperative extension office for assistance.)

This table provides several seed mixture options. Additional seed mixtures are available commercially. When selecting a mixture, consider intended land use and site conditions, including soil properties (e.g., soil pH and drainage), slope aspect, and the tolerance of each species to shade and drouaht.

Open Low-Maintenance	Areas (Remaining idle more than six months)	

Seed Mixtures	Rate per Acre Pure Live Seed	Optimum Soil pH
1. Perennial ryegrass	70 lbs.	5.6 to 7.0
– white clover 1	2 lbs.	
2. Perennial ryegrass	70 lbs.	5.6 to 7.0
— tall fescue 2	50 lbs.	
3. Tall fescue 2	70 lbs.	5.5 to 7.5
- white clover 1	2 lbs.	

Geed Mixtures	Rate per Acre Pure Live Seed	Optimum 9oil pH
1. Smooth brome grass — red clover 1	35 lbs. 20 lbs.	5.5 to 7.0
2. Tall fescue 2 — white clover 1	50 lbs. 2 lbs.	5.5 to 7.5
3. Tall fescue 2 — red clover 1	50 lbs. 20 lbs.	5.5 to 7.5
4. Orchard grass — red clover 1 — white clover 1	30 lbs. 20 lbs. 2 lbs.	5.6 to 7.0
5. Crownvetch 1 — tall fescue 2	12 lbs. 30 lbs.	5.6 to 7.0

#### 3. Tall fescue (turf type)2 170 lbs. -bluegrass 30 lbs.

Channels and Areas of Concentrated Flow

Lawns and High-Maintenance Areas

Bluegrass

(turf type)

2. Perennial ryegrass

Seed Mixtures	Rate per Acre Pure Live Seed	Optimum Soil pH
1. Perennial ryegrass	150 lbs.	5.5 to 7.0
- white 1	2 lbs.	
2. Kentucky bluegrass	20 lbs.	
<ul> <li>smooth bromegrass</li> </ul>	10 lbs.	5.5 to 7.5
<ul><li>switchgrass</li></ul>	3 lbs.	
<ul><li>timothy</li></ul>	4 lbs.	
– perennial ryegrass	10 lbs.	
– white clover	2 lbs.	
3. Tall fescue 1	150 lbs.	5.5 to 7.5
– white clover	2 lbs.	
4. Tall fescue 2	150 lbs.	
– perennial ryegrass	20 lbs.	5.5 to 7.5
<ul> <li>Kentucky bluegrass1</li> </ul>	20 lbs.	

Rate per Acre

Pure Live Seed

140 lbs.

Optimum Soil pH

5.5 to 7.0

5.6 to 7.0

5.6 to 7.5

# 1. For best results: (a) legume seed should be inoculated; (b) seeding mixtures containing legumes should preferably be spring-seeded, although the grass may be fall-seeded and

the legume frost-seeded (see Dormant Seeding and Frost Seeding on page 41); and (c) if legumes are fall-seeded, do so in early fall. 2. Tall fescue provides little cover for, and may be toxic to some species of wildlife. The Indiana Department of Natural Resources recognizes the need for additional research on alternatives such as buffalograss, orchardgrass, smooth bromegrass, and switchgrass. This research, in conjunction with demonstration areas, should focus on erosion control characteristics, wildlife toxicity, turf durability, and drought resistance.

# Notes 1. An oat or wheat companion or nurse crop may be used with any of the above permanent seeding mixtures, at the following rates:

(a) spring outs - one-fourth to three-fourths bushel per acre (b) wheat - no more than one-half bushel per acre 2. A high potential for fertilizer, seed, and mulch to wash exists on steep banks, cuts, and in channels and areas of concentrated flow.

Installed Description

Sod should not be installed during hot weather, on dry soil, frozen soil, compacted clay, loose sand or gravelly substrate soils, aggregate, or pesticide treated soil. The ideal time to lay sod is May 1 to June 1 or September 1 to September 30, although it can be installed as early as March 15 if available or

1. Apply topsoil if existing soil conditions are unsuitable for establishing vegetation.
2. Grade the site to achieve positive drainage and create a smooth, firm soil surface.
3. Where applicable, use a chisel plow, disk, harrow, or rake to break up compacted soils and create a favorable rooting depth of six to eight inches.

est soil to determine pH and nutrient levels. 2. If soil pH is too acidic for the grass sod to be installed, apply lime according to soil test results or at the rate recommended by the sod supplier.

5. Rake or harrow the area to achieve a smooth final grade and then roll or cultipack the soil surface to create a firm surface on which to lay the sod.

#### . Apply fertilizer as recommended by the soil test. If testing was not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent. 4. Work the soil amendments into the upper two to four inches of soil with a disk or rake operated across the slope.

 Install sod within thirty—six hours of its cutting.
 Store the sod in a shaded location during installation. 3. Immediately before laying the sod, rake the soil surface to break any crust. (If the weather is hot, lightly irrigate the soil surface prior to laying the sod.) 4. Lay sod strips in a brick-like pattern.

#### 5. Butt all joints tightly against each other (do not stretch or overlap them), using a knife or mason's trowel to trim and fit sod into irregularly shaped areas. 6. Roll the sod lightly after installation to ensure firm contact between the sod and soil. 7. Irrigate newly sodded areas until the underlying soil is wet to a depth of four inches, and then keep moist until the grass takes root.

1. Install sod strips with the longest dimension perpendicular to the slope.

# 2. Where slopes exceed a ratio of 3:1, staple or stake each strip at the corners and in the middle.

(Sodding provides quicker protection than seeding and may reduce the risk of early washout.)

# 1. Excavate the channel, allowing for the full thickness of the sod.

Lay sod strips with the longest dimension perpendicular to channel flow.
 Staple or stake each strip of sod at the corners and in the middle.

fall. For warm—season grasses, apply one—third in early spring, one—third in late spring and one—third in mid—summer.

# 4. Staple jute or biodegradable polypropylene netting over the sodded area to minimize the potential for washout during establishment.

Inspect within 24 hours of each rain event and at least once every seven calendar days until sod is well rooted.

#### Keep sod moist until fully rooted. · After sod is well-rooted (two to three weeks), maintain a plant height of two to three inches

#### • Time mowing to avoid ruts in turf • Fertilize turf areas annually. Apply fertilizer in a split application. For coolseason grasses, apply one-half of the fertilizer in late spring and one-half in early

## Table 1. Mulch Specification

**MULCHING** 

Majorial 1	Rate per Acre	Comments  Should be dry, free of undesirable seeds. Spread by hand or machine. Must be crimped or anchored (See Table 2).	
Straw or Hay	2 tons		
Wood fiber or cellulose1	1 ton	Apply with a hydraulic mulch machine and use with tacking agent.	

1 Mulching is not recommended in concentrated flows. Consider erosion control blankets or other stabilization

# The mulch should have a uniform density of at least 75 percent over the soil surface.

Anchoring Method	How to Apply	
Mulch anchoring tool or farm disk (dull, serrated, and blades set straight)	Crimp or punch the straw or hay two to four inches into the soil. Operate machinery on the contour of the slope.	
Cleating with dozer tracks	Operate dozer up and down slope to prevent formation of rills by dozer cleats	
Wood hydromulch fibers	Apply according to manufacturer's recommendations.	
Synthetic tackifiers, binders, or soil stabilizers	Apply according to manufacturer's recommendations.	

should overlap with each up-slope strip overlapping strip. Best suited to slope applications. In most instances, installation details are site specific, so manufacturer's recommendations should be followed.

Install netting immediately after applying mulch.

Anchor netting with staples. Edges of netting strips

1 All forms of mulch must be anchored to prevent displacement by wind and/or water

# . Apply mulch at the recommended rate shown in Table 1.

2. Spread the mulch material uniformly by hand, hayfork, mulch blower, or hydraulic mulch machine. After spreading, no more than 25 percent of the ground should be visible. 3. Anchor straw or hay mulch immediately after application. The mulch can be anchored using one

a. Crimp with a mulch anchoring tool, a weighted farm disk with dull serrated blades set straight, or track cleats of a bulldozer, b. Apply hydraulic mulch with short cellulose fibers,

# d. Cover with netting secured by staples

(synthetic or biodegradable

of the methods listed below:

Inspect within 24 hours of each rain event and at least once a week. • Check for erosion or movement of mulch; repair damaged areas, reseed, apply new mulch and anchor the mulch in place

• If erosion is severe or recurring, use erosion control blankets or other more substantial stabilization methods to protect the area.

# • Continue inspections until vegetation is firmly established.

# 1. Remove existing vegetation, large soil clods, rocks, stumps, large roots, and debris in areas where compost mulch is to

25% to 50% | 4:1 to 2:1 | 1 to 2 inches

> 2:1 2 to 3 inches

< 4:1

Compost Specifications

at 40 CFR Part 503), or any combination thereof.

• Free of any contaminants and materials toxic to plant growth

Council, Seal of Testing Assurance, approved testing laboratory.)

• Moisten compost/mulch blanket for a minimum of 60 days.

• Moisture content not to exceed 45 percent by dry weight.

Refuse free (less than one percent by weight).

• Carbon-nitrogen ratio not to exceed 100.

Table 1. Compost Particle Size

100%

<u>Anchoring Method</u>

Cover Thickness

• Erosion control netting (optional).

Table 2. Compost Blanket Thickness

temperature data indicating effective weed seed, pathogen, and insect larvae kill.

•Compost shall be well decomposed, stable, and weed free.

Percent Passing Sleve Size

Thickness of

Compost Blanket

1 to 2 inches

•Inert materials not to exceed one percent by dry weight pH of 5.5 to 8.0.

3. Aerate areas to be covered with compost/mulch blanket. (Proper aeration will require a minimum of two passes oriented 4. Broadcast a minimum of one pound of nitrogen (N), one-half pound of phosphorous (P205), and one-half pound of

6. Water compost mulch blanket for a period of 60 days following application. (On steeper slopes, it may be necessary to

products are also widely available.

shall be performed with respect to:

Blanket with Erceion

Cantral Nettina

2 inches

Not Applicable

3 inches

Feedstocks may include but are not limited to well-composted vegetable matter, leaves, yard trimmings, food scraps,

composted manures, paper fiber, wood bark, Class A biosolids (as defined in Title 40 of the Code of Federal Regulations

• Compost shall be produced using an aerobic composting process meeting 40 CFR Part 503 regulations, including time and

•Variable particle size with maximum dimensions of three inches in length, one—half inch in width and one—half inch in

runoff. (All additives combined with compost materials should be tested for physical results at a certified erosion and

sediment control laboratory and biologically tested for elevated beneficial microorganisms at a United States Compost

Five percent to ten percent sandy loam (as classified by the U.S. Department of Agriculture soil classification system).

1-Inch Sieve 3/4-Inch Sieve >1/4-Inch Sieve

potash (K20) per 1,000 square feet or 300 to 400 pounds per acre of 12-12-12 analysis fertilizer, or equivalent, per 5. Apply compost mulch blanket with a pneumatic blower or per manufacturer's directions.

a. Apply within three days of completing aeration operations. b. Overlap top of slope shoulder by five to ten feet. c. Seed may be applied at time of installation. (Seed must be evenly blended into the compost if applied with a pneumatic blower or applied with a calibrated seeder attachment prior to installation of the compost blanket.)

<u>Materials</u>

<u>Design Specifications</u>

soil conditions

site topography

veaetation types

water availability

season and climate

maintenance requirements

plans for permanent vegetation

sensitive adjacent areas

#### a. Mist blanket for first seven days and then every three days throughout the remainder of the 60-day period. b. Maintain a constant moisture content of 40 percent to 60 percent. • Inspect within 24 hours of a rain event and at least once a week.

install erosion control netting over the compost blanket.)

• Monitor vegetation and apply appropriate soil amendments (if needed) per a soil test

# to land in one step.

#### Hydroseedina General Information <u>Definition</u> Hydroseeding is a mechanical method of applying seed, fertilizer, and mulch

Description and Purpose Hydroseeding typically consists of applying a mixture of wood fiber, seed, fertilizer, and stabilizing emulsion with hydro—mulch equipment, which temporarily protects exposed soils from erosion by water and wind. The practice may also be called hydro mulching, hydraulic planting, hydraulic mulch seeding, and hydraseeding.

Pollutant(s) controlled: Suspended Sediments Pollution Removal Efficiencies: Hydroseeding initially reduces sediment generation by 70 to 80% as compared to sediment production off bare slopes.

#### Companion and Alternative BMPs Mulching Seeding/Vegetation Rolled Erosion Control Products

<u>Location</u>

Advantages and Disadvantages <u>Advantages:</u> Tackifiers can be used with the application to help keep the seed in place Provides mulching medium around the seed to hold moisture <u>Disadvantages:</u>

Otherwise, hydroseeding must be used in conjunction with a soil binder or Hydroseeding may be inappropriate in dry periods without supplemental irrigation Wood fiber hydraulic mulches are generally short-lived (only last a part of a

Hydroseeding may be used alone only when there is sufficient time in the

season to ensure adequate vegetation establishment and erosion control.

#### growing season) and need 24 hours to dry before rainfall occurs to be May not be able to access remote areas with hydroseeder

protection until permanent vegetation is established or disturbed soil areas that must be re- disturbed following an extended period of inactivity **General Characteristics** Hydraulic planting mulch is the ingredient that makes the technique possible. Water-laden mulch shot from high-pressure hose or spray gun travels farther than seed and water alone. Once the mulch is on the soil surface, it

Hvdroseeding is applied on disturbed soil areas requiring temporary

environment for seed germination. Mulch materials may be made from wood chips, newsprint, or corrugated cardboard. Some products may include synthetic poly-based fibers or natural agricultural fibers, paper mill sludge, sawdust, slick papers, or some combination of these. Each mulch product group has unique performance characteristics and

creates a "mat" or blanket that holds the seed in place, retains soil

moisture, resists wind and water erosion, and creates a favorable

Mulch Fiber length is the key to holding power, while germination is most influenced by moisture holding ability and application rates. Virtually any fertilizer formulation can be incorporated into the hydroseeding slurry. It is important to use soil testing to determine the appropriate fertilizer for the site.

A difficult to access site is best fertilized with a long acting or

associated costs. Some materials simply perform the mulch function better

site can be fertilized (again) after germination. Tackifier is powdered or granular glue, which when added to the slurry, serves to alue the mulch blanket in place, helping it to withstand wind and rain erosion. Steep slopes are best protected with a tackifier, though any site susceptible to erosion (including that caused by the project's own irrigation) should be a candidate.

time-release product at the same time it is seeded. An easily accessible

acre. This product has been the mainstay as a glue additive for hvdro-mulching for many years. Seed and fertilizer recommendations are dependent upon the location of the area to be treated.

Guar tackifier can be used at 25-150 lbs per acre. The standard

Prior to application, roughen embankment and fill areas by rolling with a crimping or punching type roller or by track walking. Track walking shall only be used where other methods are impractical. Hydraulic matrices require 24

Repair all damaged areas immediately using hydromulching at the original

Supplemental watering may be required.

DESIGNED BY:

GRAPHIC QUALITY MAY NOT BE ACCURATE FOR ANY OTHER SIZES

HORZ: **N/A** 

VERT: N/A

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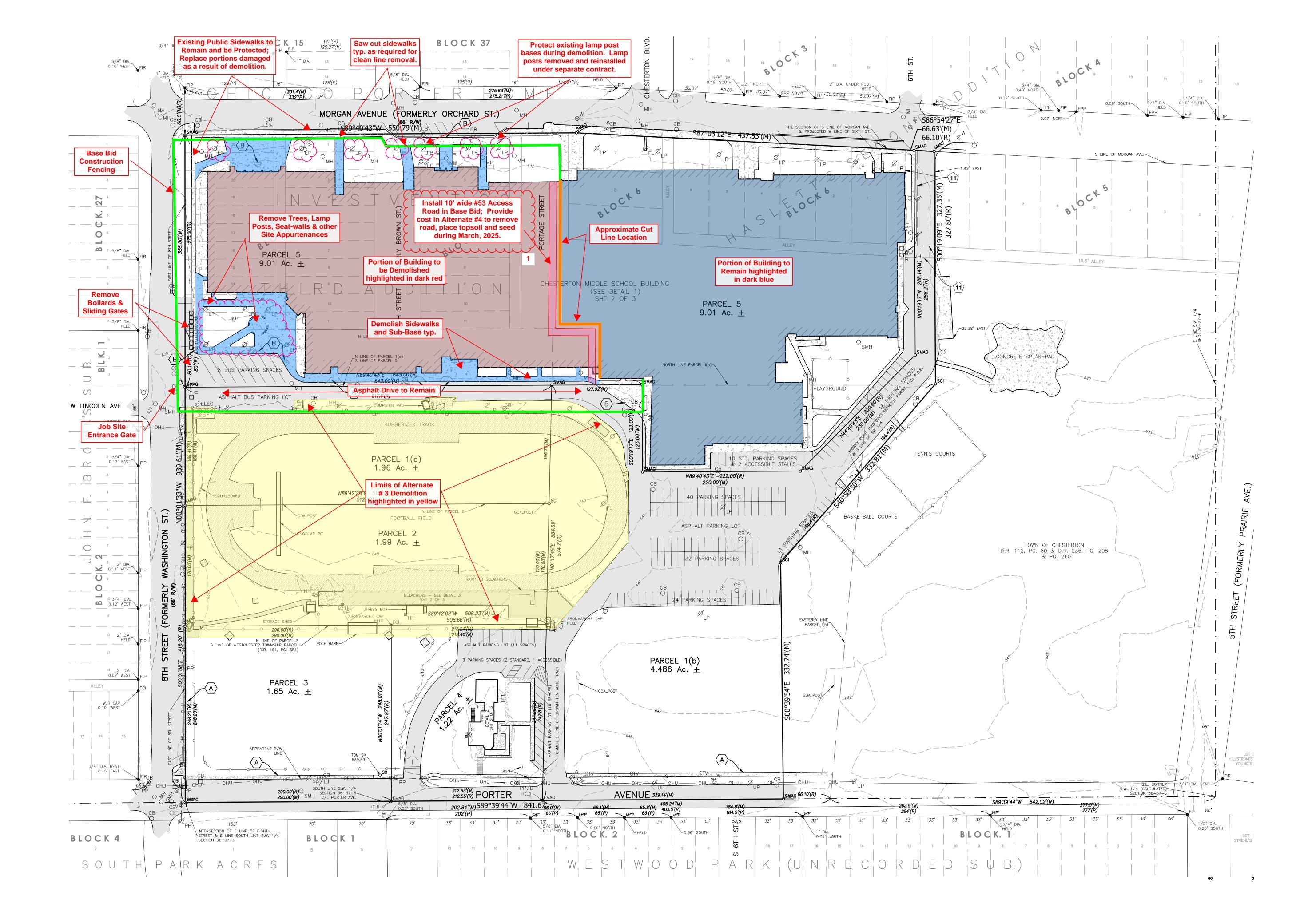
BE 24" X 36" WHEN PLOTTED

SCALE(S) INDICATED AND

24-0303













Duneland School Corporation
Chesterton Middle School Demolition

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Mark date description

1 6/17/24 Access Road

Reference Site Demolition Plan

date: June 3, 2024

project: 513001

coordinator: JES

drawn: CDH

checked: