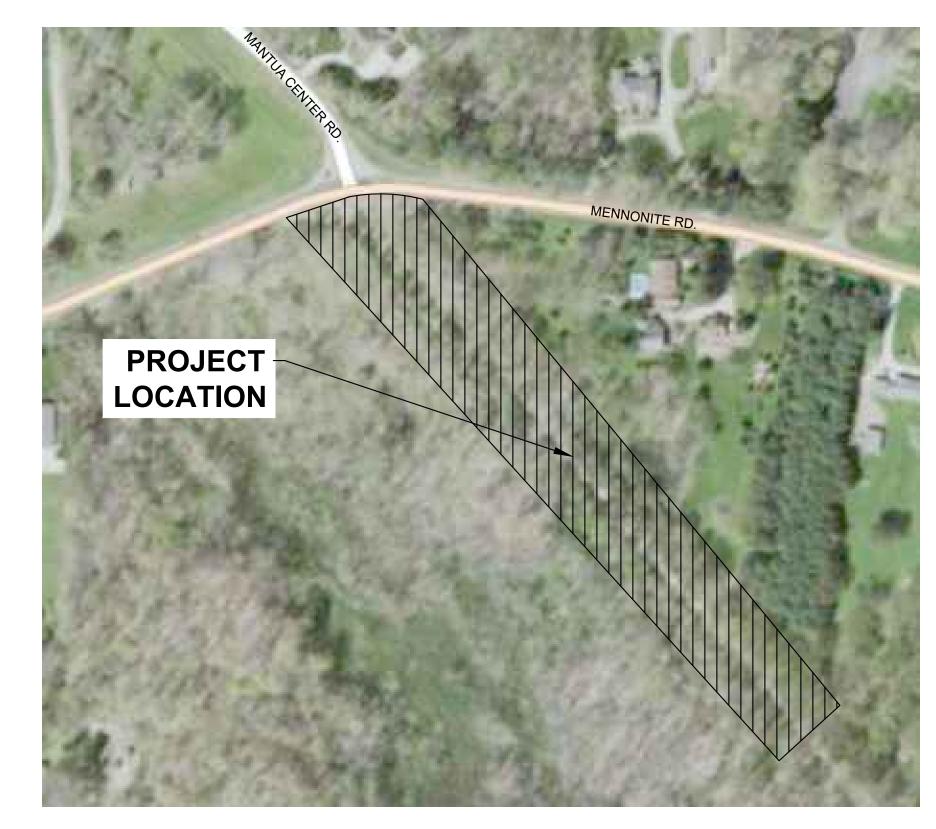


**EXECUTIVE DIRECTOR: CHRISTINE CRAYCROFT** 

PARK COMMISSIONERS:
SCOTT McKINNEY
ALLAN ORASHAN
THOMAS HRDY
CHARLES ENGELHART

# PORTAGE PARK DISTRICT HEADWATERS TRAIL MANTUA, OHIO



VICINITY MAP
- NO SCALE

# **INDEX OF SHEETS**

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Cleveland, OH 44115
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PROJECT NAME

PORTAGE PARK DISTRICT
HEADWATERS TRAIL

CLIENT NAME



ISSUE FOR BID 1/28/2021
100% OWNER REVIEW 1/22/2021
REV. NO. DESCRIPTION DATE

PROJECT NO: 2020-0003
DRAWN BY: SMA
APPROVED BY: CJB
DATE: 01/28/2021

SCALE: AS NOTED

SHEET TITLE

TITLE SHEET

\_\_\_\_

Click, Call or Tap Before You Dig

OUPS TICKET NUMBER #A001500323

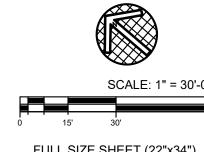
FULL SIZE SHEET (22"x34")

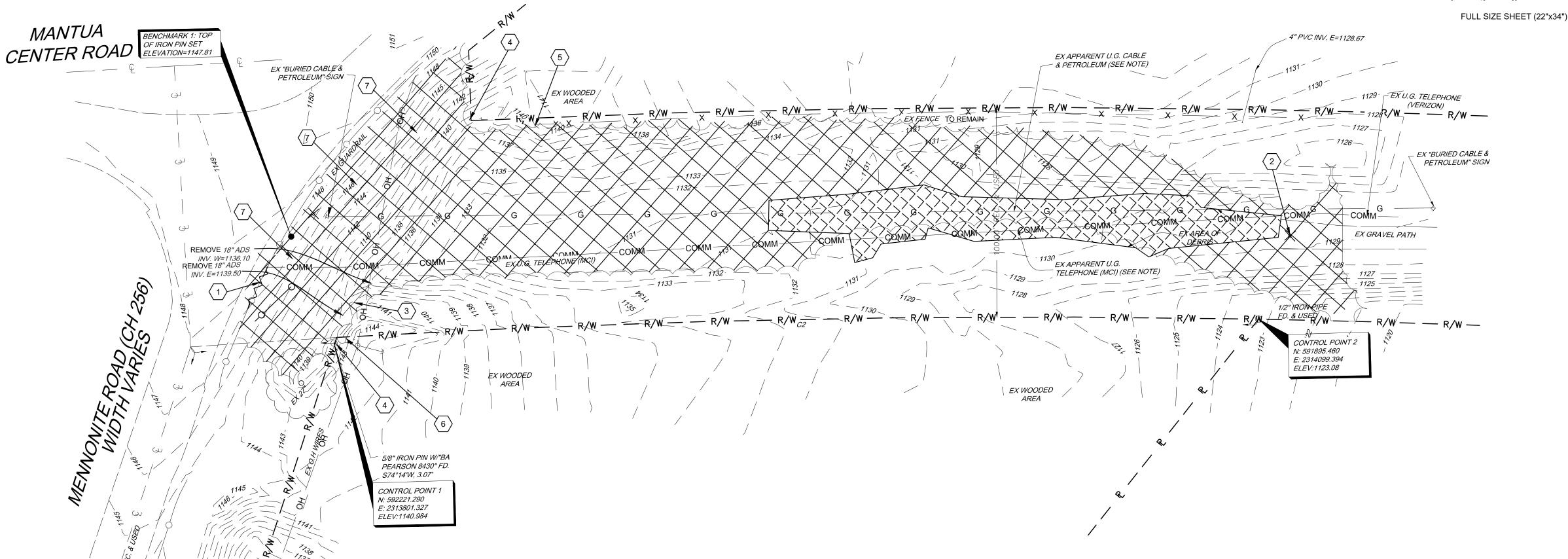
TOLL FREE 1-(800)-362-2764

C-00

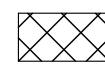
APPROVED \_\_\_\_\_\_ MICHAEL A. MAROZZI, PE.,P.S.

PORTAGE COUNTY ENGINEER





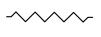
#### **PLAN LEGEND**



TREE REMOVAL, CLEARING AND GRUBBING LIMITS



REMOVE DEBRIS STOCKPILES



-\\\\\\\\\ GUARD RAIL REMOVAL FROM IN FRONT OF NEW WALK

#### **PLAN NOTES**

REMOVE 22 LF OF EXISTING GUARDRAIL

RELOCATE EXISTING SIGN

REMOVE EXISTING STORM PIPE

- LOCATED EXISTING PROPERTY PIN, LOG COORDINATES AND RESET IF IMPACTED BY CONSTRUCTION. WORK SHALL BE PERFORMED BY A STATE OF OHIO REGISTERED PROFESSIONAL
- REMOVE SECTION OF FENCE AS REQUIRED FOR GRADING ALONG PROPERTY LINE
- LOCATE PROPERTY LINE AT CORNER AND INSTALL ORANGE CONSTRUCTION FENCE ONPROPERTY LINE, DO NOT DISTURB PRIVATE PROPERTY TO THE SOUTH
- LEAVE ROOTS AND STUMPS ALONG HILLSIDE TO ROAD, GRIND STUMP AT GRADE

#### **EXISTING UTILITIES NOTE:**

UNDERGROUND CABLE AND PETROLEUM LINES ARE SHOWN BASED ON SIGN LOCATIONS FOUND IN THE FIELD. MCI UNDERGROUND LINES ARE SHOWN BASED ON PHYSICAL MARKINGS FOUND AT THE NORTH AND SOUTH ENDS OF THE PROJECT AREA.

CONTRACTOR SHALL CONTACT UTILITY ONWERS PRIOR TO CONSTRUCTION TO MARK OUT FACILITIES AND PROVIDE PLANS TO UTILITIES.

#### **UTILITY LIST**

(OWNERS LIST)

#### OUPS TICKET NUMBER #A001500323

VERIZON- 216-570-5343

DIVERSIFIED GAS & OIL 800-683-9920

EQUITY OIL & GAS FUNDS, INC. 234-231-1004

AT&T 330 379-08358

FIRST ENERGY 800-633-4766

DOMINION ENERGY OHIO 800-362-7557

ENERVEST 1-800-300-0076

#### **GENERAL NOTES**

- 1. UTILITIES: THE CONTRACTOR SHALL GIVE DUE NOTICE TO THE OWNERS OF ALL UTILITIES AND SHALL SEE THAT WITH THE SAME. AND IN NO CASE SHALL THE SERVICE OF ANY SUCH UTILITY BE DISRUPTED OR INTERFERED WITH, WITHOUT WRITTEN CONSENT OF THE OWNER THEREOF, AND IN CASE OF SEWER, PIPE, CONDUIT, POLE OR OTHER PUBLIC UTILITY PROPERTY IS DAMAGED OR MUST BE MOVED OR SUPPORTED, THE REPAIR, REMOVAL OR SUPPORTING SHALL BE DONE BY THE OWNER AND THE DESIGN BUILDER SHALL PAY ALL NECESSARY EXPENSE IN CONNECTION THEREWITH.
- 2. DAMAGES TO THE ADJACENT PROPERTY OR STRUCTURES MUST BE CAREFULLY GUARDED AGAINST, ESPECIALLY IN MAKING EXCAVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE FULL EXTENT, IF THE SAME ARE OCCASIONED THROUGH NEGLECT OR FAILURE ON HIS PART, OR THAT OF ANYONE IN HIS EMPLOY, TO TAKE ALL NECESSARY OR PROPER PRECAUTIONS TO PREVENT THE SAME, AND HE SHALL ASSUME ALL RISK OF DAMAGE TO ANY PORTION OF HIS WORK.
- 3. ALL EXISTING STRUCTURES INCLUDING PAVEMENT AS CALLED FOR TO BE REMOVED SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES. ANY BURNING ON-SITE IS

# **EXISTING CONDITIONS NOTES**

- 1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER KARPINSKI ENGINEERING, DEMPSEY SURVEYING COMPANY NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION BY CALLING 811.
- 2. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. BENCHMARKS SHOWN ON PLAN ESTABLISHED BY OR FOUND BY DEMPSEY SURVEYING. CONDITION OF BENCHMARK MUST BE VERIFIED PRIOR TO CONSTRUCTION.

#### **DEMOLITION NOTES**

- THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR SITE DEMOLITION. IT SHOULD BE NOTED THAT ALL MANMADE FEATURES, PAVEMENT, SIGNS, POLES, CURBING, CONCRETE WALKS, UTILITIES, ETC. SHALL BE REMOVED AS NECESSARY TO CONSTRUCT WORK, UNLESS OTHERWISE NOTED TO REMAIN. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCIES FROM DATA AS SHOWN ON DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN
- 2. ALL EXISTING STRUCTURES WITHIN THE CONSTRUCTION AREA NOTED TO REMOVE, SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES.
- 3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND ANY EARTH MOVING OPERATIONS. SILT FENCE SHALL BE INSTALLED AT THE LIMITS OF IMPACT AREAS ACCORDING TO THE DETAILS SHOWN ON SHEET C-04
- 4. CONTRACTOR RESPONSIBLE FOR REPAIRS AND RESTORATION OF AREAS DISTURBED BY TRAIL EXTENSION.



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**PROJECT NAME** 

PORTAGE PARK DISTRICT **HEADWATERS TRAIL** 



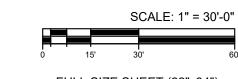
	ISSUE FOR BID	1/28/2
	100% OWNER REVIEW	1/22/2
REV. NO.	DESCRIPTION	DA

PROJECT NO: 2020-0003 DRAWN BY: SMA APPROVED BY: CJB DATE: 01/28/2021

SCALE: AS NOTED SHEET TITLE

> **EXISTING AND DEMOLITION PLAN**





FULL SIZE SHEET (22"x34")



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PROJECT NAME

PORTAGE PARK DISTRICT **HEADWATERS TRAIL** 

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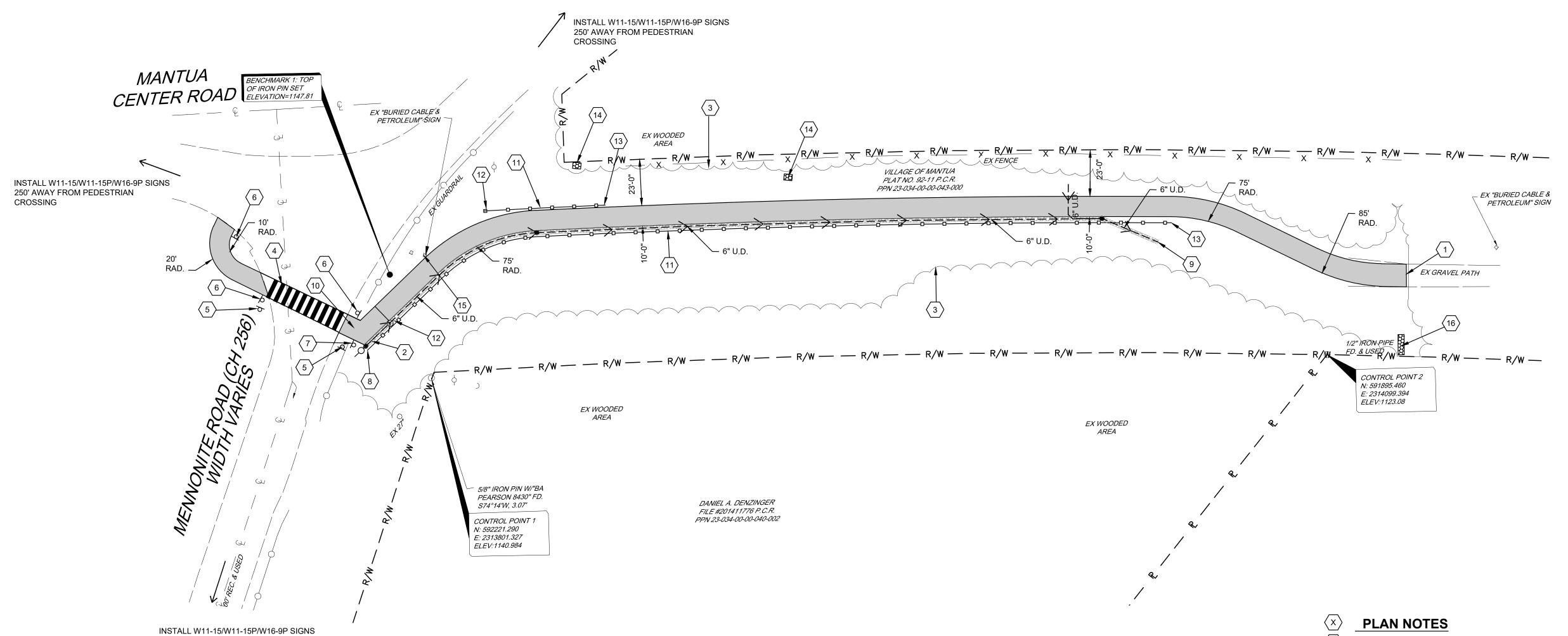
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APPROVED BY: CJB DATE: 01/28/2021 SCALE: AS NOTED

SHEET TITLE

SITE LAYOUT **PLAN** 

SHEET NUMBER



# **PLAN LEGEND**

PROPOSED ASPHALT MULTI-PURPOSE TRAIL

PROPOSED UNDERDRAIN AND AGGREGATE

**GENERAL NOTES** 

UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED

FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER DEMPSEY SURVEYING COMPANY NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION BY CALLING

EXISTING GRAVEL PATH END

PROPOSED 25 LF ODOT MSG GUARDRAIL

NEW WOODED AREA LIMITS

LADDER CROSSWALK

PROPOSED W11-15 AND W16-7p SIGNS

PROPOSED R1-1 SIGN AND STOP BAR (REDUCE POST HEIGHT FOR **BIKE PATH** 

PROPOSED R5-3 SIGN

BEGIN AGGREGATE UNDERDRAIN

9 END AGGREGATE UNDERDRAIN

INSTALL 6x6" PRESSURE TREATED WOOD POST WITH REFLECTOR

PROPOSED WOOD BIKEWAY RAILING (SEE DETAILS)

12 BEGIN BIKEWAY RAILING

(13) END BIKEWAY RAILING

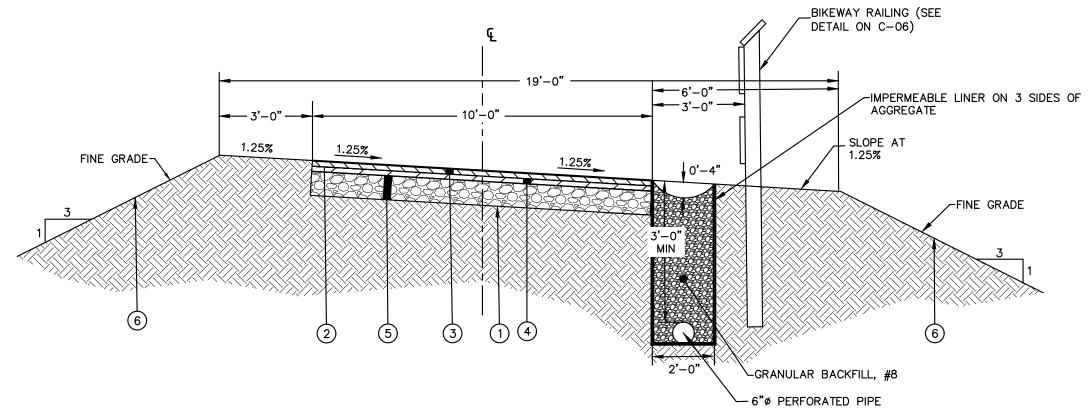
14 INSTALL ROCK CHANNEL PROTECTION TPYE C 3' WIDE X 4' LONG X 18" DEEP

15 RELOCATE SIGN

16 INSTALL ROCK CHANNEL PROTECTION TPYE C 3' WIDE X 10' LONG X 18" DEEP

250' AWAY FROM PEDESTRIAN

CROSSING



TYPICAL TRAIL SECTION WITH CONCRETE SWALE LOOKING DOWN HILL SCALE: NONE

#### <u>NOTES</u>

- 1. ALL THICKNESSES SHOWN ARE COMPACTED IN PLACE.
- 2. PRIOR TO PAVING, SUBBASE IS TO BE PROOF ROLLED.
- 3. TACK COAT TO BE APPLIED IN ACCORDANCE WITH ODOT ITEM 407 SPECIFICATIONS
- WHERE APPLICABLE, REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
- 5. SEE LOCATION OF TRAIL SECTIONS WITH CONCRETE SWALES ON PLANS
- 6. SLOPE ALL UNDERDRAINS AT 0.5% (MIN.) SLOPE TO NEAREST FEASIBLE CATCH BASIN, INLET BASIN, OR STORM MANHOLE.
- 7. UNDERDRAIN TRENCH TO BE SURROUNDED BY WELL COMPACTED

#### PROPOSED LEGEND

- 1 ITEM 204 COMPACTED SUBGRADE
- 2 ITEM 407 TACK COAT (AT 0.1 GAL/SY)
- 3 ITEM 441 1-1/2" SURFACE COURSE ASPHALT PAVEMENT, TYPE 1, PG 64-22 (448) (NO R.A.P.)
- ITEM 441 1-1/2" INTERMEDIATE COURSE ASPHALT PAVEMENT, TYPE 2, PG 64-22 (448) (NO R.A.P.)
- 5 ITEM 304 6" AGGREGATE BASE
- 6 ITEM 659 SEEDING AND MULCHING, CLASS 1

# **LEGEND**

609.00	PROPOSED TOP OF CURB ELEVATION PROPOSED BOTTOM OF CURB ELEVATION
609.00	PROPOSED SPOT ELEVATION
608.50	EXISTING TOP OF CURB ELEVATION EXISTING BOTTOM OF CURB ELEVATION
607.50	EXISTING ELEVATION
~~	FLOW ARROW

#### PROPOSED STORM STRUCTURES

ID	TYPE	RIM	INVERT
1	CLEANOUT	-	6" SE & NW 1140.50
2	CLEANOUT	-	6" S & NW 1128.92
3	CATCH BASIN	1125.00	12" SW 1122.68
4	CLEANOUT	-	6" E 1144.50

#### **GENERAL NOTES**

- 1. ELEVATIONS SHOWN ARE TIED TO TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)
- 2. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. BENCHMARKS SHOWN ON PLAN ESTABLISHED BY OR FOUND BY DEMPSEY SURVEYING COMPANY. CONDITION OF BENCHMARK MUST BE VERIFIED PRIOR TO CONSTRUCTION.
- 3. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- 4. IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG LEASE LINE OR PROPERTY LINES IN ALL AREAS WHERE SILT FENCE IS NOT REQUIRED.

### **EARTHWORK NOTES**

THE CONTARCTOR SHALL INSTALL THE EMBANKMENT PER ODOT GB2: SPECIAL BENCHING AND SIDEHILL EMBANKMENT FILLS DOCUMENT. DOCUMENT CAN BE OBTAINED FROM THE FOLLOWING WEBSITE: HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/ENGIENERING/GEOTECHNICAL. SHALL NEW FILL BE BENCHED INTO THE EXISTING HILLSIDE.



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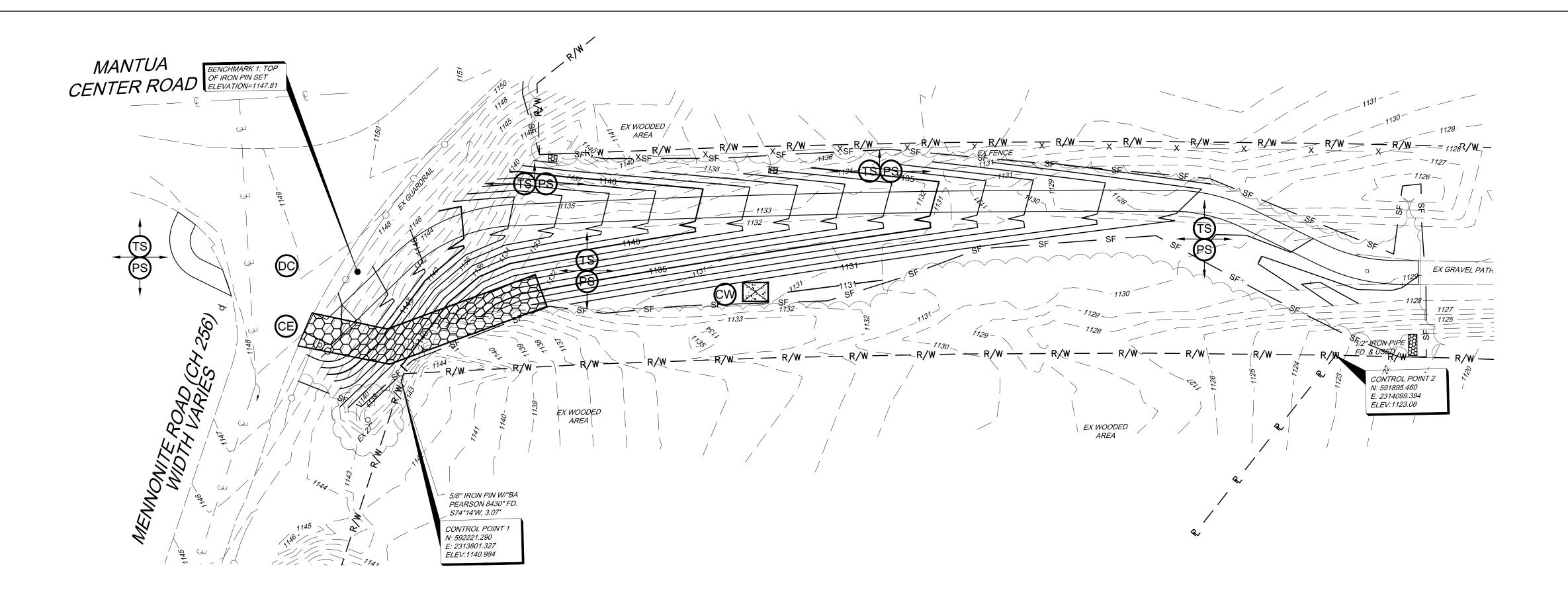
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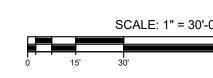
**GRADING PLAN** 

SHEET NUMBER

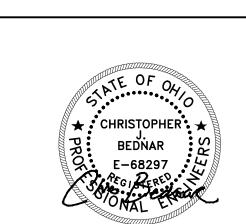
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FULL SIZE SHEET (22"x34")



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PROJECT NAME

# PORTAGE PARK DISTRICT HEADWATERS TRAIL

CLIENT NAM



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**SWPP PLAN** 

SHEET NUMBER

C-04

SWPP	P LEGEND	BMPs UTILIZED ON THIS PROJECT "X"
	STORM DRAIN INLET PROTECTION	
TS	TEMPORARY SEEDING	X
PS	PERMANENT SEEDING	X
<u>©</u>	DUST CONTROL	X
	CONCRETE WASHOUT	X
— x — CF	8'-0" CHAIN-LINK FENCE	
— FS — FS	FILTER SOCK	
— SF — SF	SILT FENCE	X
	COVERED AND LEAK PROOF CONSTRUCTION DEBRIS DUMPSTER	
<b>⊠ F</b> C	FUEL CONTAINMENT DYKE AND CHEMICAL STORAGE/MIXING AREA	
	CONSTRUCTION ENTRANCE MAY USE EX ASPHALT IN PLACE	X

## **EROSION AND SEDIMENT CONTROL NOTES:**

- 1. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT.
- WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
- 3. TEMPORARY VEGETATION SHALL BE USED TO PROTECT HIGH EROSION POTENTIAL OR OTHER CRITICAL AREAS EXPOSED DURING DEVELOPMENT. WHEREVER FEASIBLE, NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED.
- 4. THE CONTRACTOR IS TO REFER TO THIS PLAN AND THE E&S PLAN, NOTES. AND DETAILS.
- 5. THE SITE DISTURBED AREA IS APPROXIMATELY 0.61 AC.
- 6. TEMPORARY SEEDING IS SPECIFIED UNTIL CONSTRUCTION OF FINAL IMPROVEMENTS COMMENCES.
- 7. THE CONTRACTOR IS TO INSTALL AND MAINTAIN THE E&S CONTROLS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL THE SITE IS FULLY STABILIZED.
- 8. THE CONTRACTOR IS RESPONSIBLE TO REMOVE THE TEMPORARY E&S CONTROLS ONCE THE SITE IS FULLY STABILIZED.
- 9. CONTRACTOR IS TO MAINTAIN A LOG DOCUMENTING GRADING AND STABILIZATION ACTIVITIES AS WELL AS AMENDMENTS TO THE SWPPP. PER GENERAL PERMIT REQUIREMENTS. SWP3 INSPECTION REPORTS SHALL BE KEPT ON SITE WITH THE SWP3 AND READILY ACCESSIBLE DURING NORMAL WORKING HOURS.
- 10. CONTRACTOR IS TO UTILIZE EXISTING PAVEMENT FOR CONSTRUCTION ENTRANCE PER THEIR MEANS AND
- 11. APPLICANT SHALL MAINTAIN COMPLIANCE WITH OHIO EPA'S GENERAL STORMWATER NPDES PERMIT
- 12. APPLICANT SHALL MAINTAIN COMPLIANCE WITH THE VILLAGE OF MANTUA AND STATE OF OHIO'S AIR QUALITY REGULATIONS APPLICABLE IN THE MANTUA MUNICIPAL CODE AND THE OHIO ADMINISTRATIVE CODE INCLUDING, BUT NOT LIMITED TO THE ASBESTOS AND THE ANTI-NOISE LAWS.
- 13. ALL WASTE WILL COMPLY WITH APPLICABLE STATE OR LOCAL WASTE DISPOSAL REQUIREMENTS AND PROVISIONS FOR SANITARY WASTES AND CONSTRUCTION AND DEMOLITION DEBRIS. OPEN BURNING IS PROHIBITED.
- 14. ALL TRASH TO BE REMOVED ON DAILY BASIS. NO DUMPSTER REQUIRED ON PROJECT
- 15. CONTRACTOR SHALL PROVIDE FUEL TANKS ON TRUCKS/VEHICLES FOR REFUELING. NO SEPERATE ON-SITE FUEL CONTAINMENT/STORAGE ALLOWED

THE CONTRACTOR'S RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION PROCEDURES, MATERIALS, INSTALLATION SEQUENCE, AND COORDINATION WITH THE OWNER.

THE CONTRACTOR SHALL SECURE AND PAY FOR ANY AND ALL LICENSES, GOVERNMENT FEES, AND PERMITS THAT MAY BE REQUIRED TO PROPERLY EXECUTE AND COMPLETE THE WORK. COMPLY WITH ALL APPLICABLE CODES, RULES, ORDINANCES AND OTHER LEGAL REQUIREMENTS.

CONTRACTOR SHALL IMMEDIATELY LOCATE ALL REFERENCE POINTS, LAYOUT WORK, AND BE RESPONSIBLE FOR ALL MEASUREMENTS AND OTHER WORK TO BE EXECUTED UNDER THE CONTRACT. VERIFY ALL FIGURES SHOWN ON THE PLANS, VERIFY ALL DIMENSIONS OF ANY EXISTING AND NEW WORK, BE RESPONSIBLE FOR THEIR ACCURACY AND SUBMIT ANY DIFFERENCES FOUND TO THE OWNER BEFORE PROCEEDING WITH THE WORK, NO EXTRA COMPENSATION WILL BE PERMITTED BECAUSE OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND MEASUREMENTS INDICATED ON THE DRAWINGS.

#### STANDARDS & SPECIFICATIONS

CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND / OR MATERIAL INSIDE OR OUTSIDE CONTRACT LIMIT / PROPERTY LINE DUE TO CONSTRUCTION. ALL WORK MUST BE IN ACCORDANCE WITH LOCAL AND / OR STATE CODES AND REGULATIONS. CONTRACTOR IS TO COMPLY WITH ODOT ITEM 107.10. WORK IS TO BE SATISFACTORY TO THE PROPERTY OWNER.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS OF THE COUNTY, AND THE LATEST EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. IN THE CASE OF A CONFLICT BETWEEN COUNTY AND ODOT REQUIREMENTS, THE COUNTY REQUIREMENTS WILL TAKE PRECEDENCE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY DISCREPANCIES FROM THE PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY SO THAT APPROPRIATE ADJUSTMENTS IN ALIGNMENT AND / OR GRADE MAY BE MADE PRIOR TO THE START OF CONSTRUCTION.

FAILURE BY THE CONTRACTOR TO VERIFY AND / OR DETERMINE EXISTING INFORMATION AS INDICATED WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR ANY CHANGES NECESSARY TO COMPLETE THE WORK SPECIFIED WITHOUT ADDITIONAL COMPENSATION.

ANY MODIFICATIONS TO THE NOTES, OR CHANGES TO THE WORK AS SHOWN ON THESE PLANS MUST HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER.

IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF THE RESIDENTS (INCLUDING EMPLOYEES), WORKERS, GENERAL PUBLIC AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.

THE CONTRACTOR SHALL PROPERLY SUPPORT AND / OR MAINTAIN ALL EXCAVATIONS PER. APPLICABLE SAFETY REQUIREMENTS AND COMPLY WITH ALL OSHA REGULATIONS. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER OF THE PROJECT'S ASSIGNED "COMPETENT PERSON" IN OSHA EXCAVATION STANDARDS.

PUBLIC STREETS SHALL BE KEPT CLEAN AND FREE OF DEBRIS (MUD, STONE, ETC.) AT ALL TIMES.

THE CONTRACTOR SHALL ALERT ALL LOCAL EMERGENCY AGENCIES (FIRE, POLICE, AMBULANCE, ETC.) OF THE NATURE OF THE PROPOSED PROJECT PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. ACCESS FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.

SURVEY INFORMATION HAS BEEN PROVIDED BY DEMPSEY SURVEYING. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. BENCHMARKS SHOWN ON PLAN ESTABLISHED BY OR FOUND BY DEMPSEY SURVEYING. CONDITION OF BENCHMARK MUST BE VERIFIED PRIOR TO CONSTRUCTION.

VIEW THE SITE AND COORDINATE WITH THE OWNER REGARDING LOCATION OF EXISTING FACILITIES AND ANY POSSIBLE UTILITY SERVICE INTERRUPTION OR RELOCATION. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO, THE INVESTIGATION, VERIFICATION OF EXISTING UTILITY DIMENSIONS AND LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT.

THE CONTRACTOR SHALL NOTIFY THE OHIO UTILITY PROTECTION SERVICE (OUPS) AT 1-800-362-2764, THE COUNTY ENGINEER, AND ALL PRIVATE UTILITY OWNERS A MINIMUM OF 48 HOURS PRIOR TO ANY EARTH DISTURBING ACTIVITY.

ALL UTILITY INFORMATION SHOWN ON THESE PLANS IS BASED UPON THE SURVEY COMPLETED BY DEMPSEY SURVEYING, AND RECORD DRAWINGS, AND IS PROVIDED AS A REFERENCE ONLY. IT IS BELIEVED THAT THESE LOCATIONS ARE ESSENTIALLY CORRECT. HOWEVER, THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THESE EXISTING UTILITIES. CONTRACTOR MAY DIG TEST PITS AT THEIR OWN EXPENSE.

THE CONTRACTOR SHALL PRESERVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMENTS AND / OR ANY TYPE OF LAND MONUMENT. ALL MONUMENTS IN THE PROXIMITY OF THE WORK SHALL BE REFERENCED. THE CONTRACTOR SHALL REPLACE / RESET ANY DISTURBED OR DAMAGED MONUMENTS, AND SHALL FURNISH A CERTIFICATION BY A REGISTERED SURVEYOR THAT THE MONUMENTS HAVE BEEN RESTORED TO THEIR ORIGINAL STATE.

#### DEWATERING OPERATIONS

WHEN DEEMED NECESSARY. THE CONTRACTOR MAY PLAN AND INSTALL DEWATERING EQUIPMENT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND PLANS FOR THE INSTALLATION AND SUBSEQUENT REMOVAL OF DEWATERING EQUIPMENT AS MAY BE NECESSARY PER STATE AND LOCAL GOVERNING AGENCIES.

ALL WORK REQUIRED FOR THIS IMPROVEMENT PLAN SHALL BE SUBJECT TO INSPECTION BY THE COUNTY OR THEIR DESIGNATED REPRESENTATIVE. THE CONTRACTOR SHALL GIVE A 48 HOUR NOTICE BEFORE STARTING ANY WORK ON THIS PROJECT AND SHALL KEEP THE COUNTY AND THE OWNER INFORMED OF HIS / HER CONSTRUCTION SCHEDULE. NO WORK SHALL BE PERFORMED AND / OR BURIED UNLESS AN AUTHORIZED INSPECTOR IS

#### CONSTRUCTION NOISE

CONSTRUCTION NOISE ASSOCIATED WITH ANY IMPROVEMENT PROJECT, SHALL BE LIMITED TO LEVELS COMMENSURABLE WITH ADJOINING LAND AND THEIR ASSOCIATED USAGE AS DETERMINED BY THE COUNTY ENGINEER, IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 7:00 P.M. AND 8:00 A.M, UNLESS AUTHORIZED BY THE OWNER AND COUNTY ENGINEER.

CONSTRUCTION HOURS AND ACCEPTABLE NOISE LEVELS ARE TO BE APPROVED BY THE OWNER.

THE CONTRACTOR SHALL FURNISH AND APPLY WATER AND CALCIUM CHLORIDE FOR DUST CONTROL AS DIRECTED BY THE OWNER AND / OR COUNTY ENGINEER. SUFFICIENT QUANTITIES OF CALCIUM CHLORIDE SHALL BE STORED ON THE JOB SITE AT ALL TIMES TO BE USED FOR DUST

#### MAINTENANCE OF TRAFFIC

THE CONTRACTOR IS TO MAINTAIN ACCESS ALONG RAVENNA ROAD AT ALL TIMES. THE CONTRACTOR MUST SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE OWNER AND COUNTY (IF APPLICABLE) FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.

USE SIGNS, BARRICADES, FLAGMEN OR GUARDS AS REQUIRED DURING CONSTRUCTION ACTIVITIES TO ENSURE THE SAFETY FOR ALL VEHICULAR AND PEDESTRIAN TRAFFIC. NO UNMANNED EXCAVATION SHALL BE LEFT UNPROTECTED. ALL TEMPORARY TRAFFIC CONTROL / FLAGGING ARE TO BE IN ACCORDANCE WITH ODOT ITEM 614, AS WELL AS OHIO REVISED CODE SECTION 4571.09.

ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, AND FACE OF BUILDING, UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REGULATIONS AND RELATIONS TO OTHER WORK BEFORE FABRICATION AND / OR INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT OF WORK.

CONFINE OPERATIONS TO AREAS BEING CONSTRUCTED OR REPAIRED. DO NOT UNREASONABLY ENCUMBER THE SITE WITH MATERIALS OR EQUIPMENT. COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE OWNER.

TAKE ALL PRECAUTIONS TO PREVENT INTERFERENCE WITH NORMAL OPERATIONS OF THE OWNER. DO NOT BLOCK OR INTERFERE WITH REQUIRED LEGAL EXITING.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER THAT LOCAL TRAFFIC SHALL HAVE ACCESS THROUGHOUT THE PROJECT IN A MANNER APPROVED BY THE COUNTY ENGINEER.

NO TRENCH OR EXCAVATION SHALL BE LEFT OPEN OVERNIGHT. OPEN AREAS ARE TO BE BACKFILLED OR STEEL PLATED. IN CASE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH SHALL BE BACKFILLED OR STEEL PLATED AT THE DIRECTION OF THE ENGINEER OR THE AUTHORITY HAVING JURISDICTION.NO TRENCH MAY BE BACKFILLED WITHOUT INSTALLED UTILITIES BEING REVIEWED BY ASSOCIATED INSPECTOR(S).

THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE SITE CLEAN AT ALL TIMES, TAKE RESPONSIBILITY FOR FINAL CLEANING, AND REMOVAL MATERIAL THAT IS NOT TO BE USED FOR ON-SITE FILL. HAUL AWAY AND PROPERLY DISPOSE OF ALL EXCESS CUT MATERIAL AT NO ADDITIONAL

EXPENSE TO THE OWNER.

THE CONTRACTOR SHALL FURNISH A CERTIFICATE FROM A REGISTERED PROFESSIONAL SURVEYOR STATING THAT ALL HORIZONTAL AND VERTICAL CONTROL MONUMENTS AFFECTED BY THE PROJECT WERE REMOVED AND REPLACED TO THEIR ORIGINAL REFERENCE LOCATIONS AND ELEVATIONS.

ALL ROAD SURFACES, UTILITIES, BUILDINGS, STRUCTURES, SITE CONDITIONS, OR RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE BEFORE CONSTRUCTION CONDITION. ALL ITEMS ARE INCLUDED IN THE PAY ITEMS.

ALL EXISTING SITE PAVEMENT MATERIAL REMOVED AS PART OF THIS IMPROVEMENT SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR.

ALL DISTURBED SIGNS, GUARDRAIL, MAIL AND / OR PAPER BOXES, DRIVES AND DRIVE CULVERTS SHALL BE REPAIRED AND / OR REPLACED AS DIRECTED BY THE ENGINEER.

ALL DISTURBED AND / OR DAMAGED STORM SEWER PIPES, STORM SEWER APPURTENANCES, PAVEMENTS, BERMS AND DITCHES SHALL BE REPAIRED AND / OR REPLACED AS DIRECTED BY THE ENGINEER.

ANY DEFECTS IN CONSTRUCTION INCLUDING MATERIALS OR WORKMANSHIP SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHOD PRIOR TO ACCEPTANCE BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

THE CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT AND PERFORM SUB-GRADE PREPARATION WORK ACCORDING TO THE GEOTECHNICAL ENGINEER'S REQUIREMENTS AND FIELD DIRECTION. ACTUAL FIELD CONDITIONS MAY REQUIRE DECISIONS ON MATERIAL HANDLING AND USAGE. THE CONTRACTOR SHALL CONTINUALLY MONITOR AND MAINTAIN OVERALL SITE BALANCE AND COORDINATE ANY REVISIONS WITH THE OWNER AND ENGINEER. ANY EXCESS TOPSOIL OR ORGANIC MATERIAL MAY BE SPOILED ON-SITE IF APPROVED BY THE OWNER.

BEFORE ACCEPTANCE OF THE SUB-GRADE BY THE ENGINEER, PROOF-ROLLING SHALL BE REQUIRED ON ALL AREAS TO BE PAVED PER ODOT ITEM 204.06 CMS (LATEST EDITION). IN ADDITION, FOR ANY FILL IN EXCESS OF TWO (2) FEET, NUCLEAR COMPACTION TESTS SHALL BE PERFORMED BY AN APPROVED ODOT COMPANY AS PER ODOT ITEM 203. THESE TESTS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY PAVEMENT CONSTRUCTION.

FOR ODOT ITEMS- 304 - AGGREGATE BASE AND 441 - ASPHALT CONCRETE, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A JOB MIX FORMULA FOR REVIEW AND APPROVAL PRIOR TO THE PRE-CONSTRUCTION MEETING. ALL MATERIALS USED MUST BE OBTAINED FROM A SOURCE APPROVED BY ODOT.

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO PERFORM THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS.

#### **EXISTING CONDITIONS NOTES**

UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER KARPINSKI ENGINEERING OR DEMPSEY SURVEYING NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION BY CALLING 811.

CIVIL	LINE TYPE LEGE	END
DESCRIPTION	EXISTING	PROPOSED
CENTER LINE		<u> </u>
COMMUNICATION LINE (UG)		COMM——
CONTOUR (MAJOR)	×××	xxx
CONTOUR (MINOR)	×××	xxx
FENCE	×	x
FILTER SOCK	FS	FS
GAS LINE	G	G
POWER LINE (OVH)	— OH — —	—— ОН ———
POWER LINE (UG)	E	Е
PROPERTY LINE		—— P ———
RIGHT-OF-WAY LINE	— R/W — —	R/W
GUARDRAIL	OO	<del></del> oo
SILT FENCE	SF	SF
STORM LINE	st	— ST ►
SANITARY LINE	SAN	SAN
WOOD RAILING		<del></del>

CIVIL SYMB	OL LEGEN	D
DESCRIPTION	EXISTING	PROPOSED
SIGN	П	0
TREE OR SHRUB	0	
POWER POLE	ø	



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**PROJECT NAME** 

PORTAGE PARK DISTRICT **HEADWATERS TRAIL** 

**CLIENT NAME** 



	ISSUE FOR BID	1/28/202
	100% OWNER REVIEW	1/22/202
REV. NO.	DESCRIPTION	DATE

PROJECT NO: 2020-0003 DRAWN BY: SMA APPROVED BY: CJB DATE: 01/28/2020

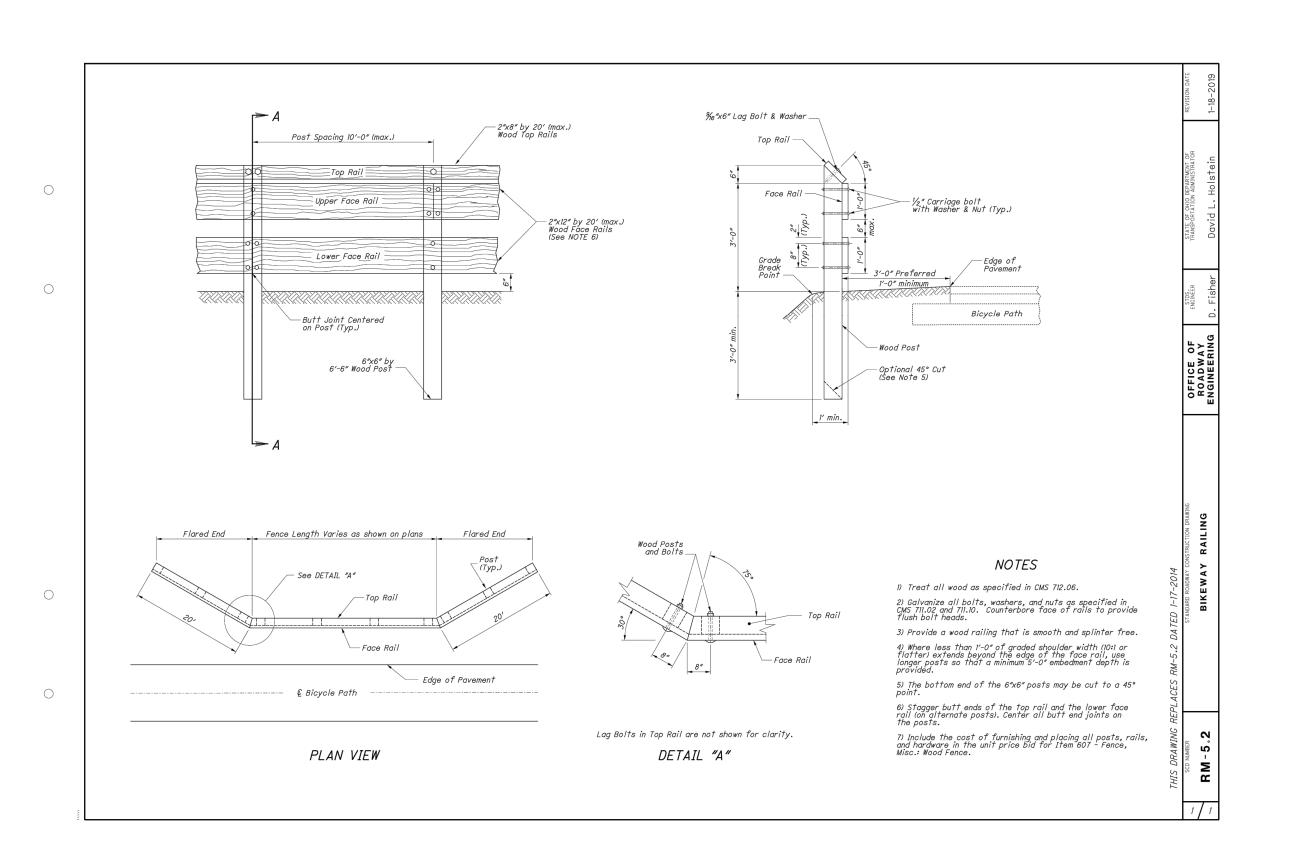
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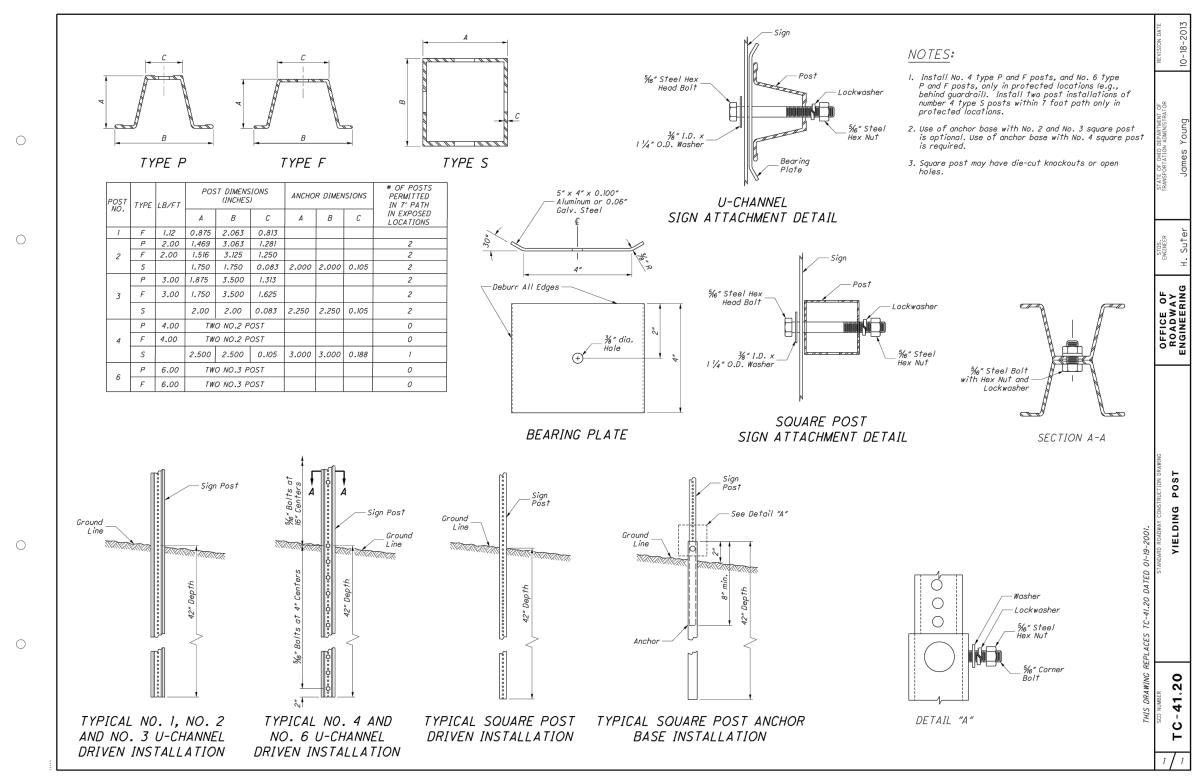
SHEET TITLE

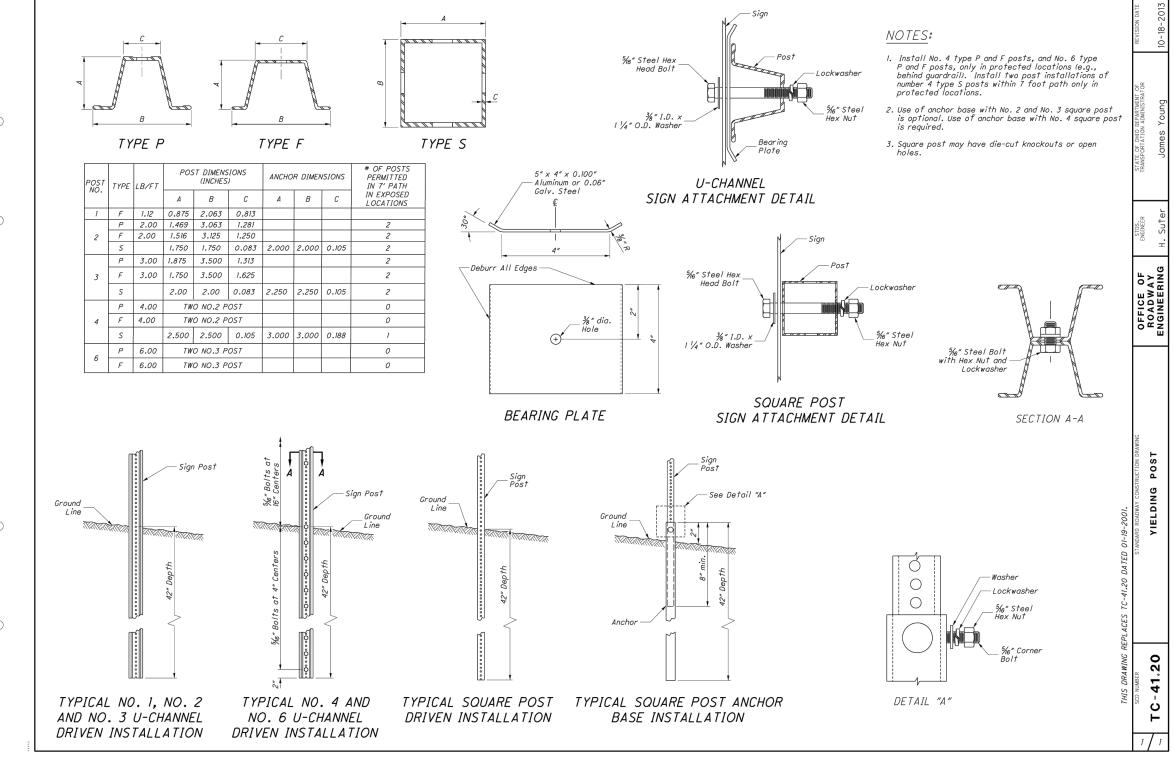
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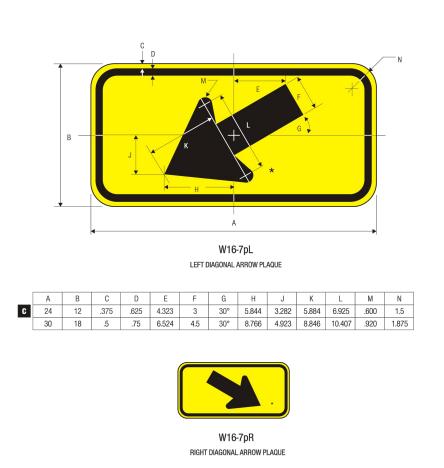
SHEET NUMBER

OF ALL TOOLS, EQUIPMENT AND SURPLUS MATERIALS FROM THE SITE AT COMPLETION OF THE WORK. DO NOT STOCKPILE ANY EXCESS CUT









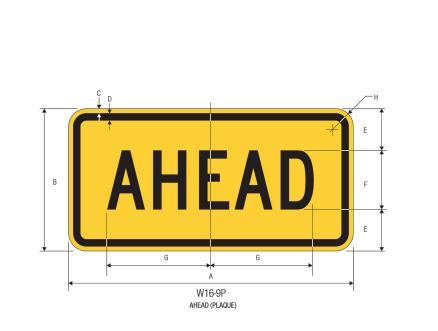




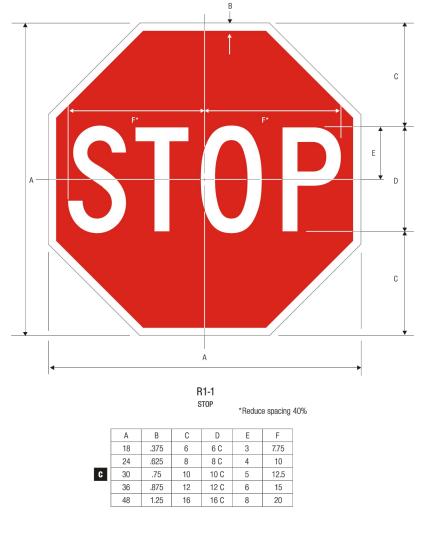


COLORS:	LEGEND — BLACK BACKGROUND — WHITE	(RETROREFLECTIVE)

1-78



Α	В	С	D	Е	F	G	Н
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30	18	.5	.75	5.5	7 C	12.201	1.875
36	24	.625	.875	8	8 C	13.944	2.25
48	36	.75	1.25	13	10 C	17.428	3









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PROJECT NAME

# PORTAGE PARK DISTRICT **HEADWATERS TRAIL**

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	ISSUE FOR BID	1/28/202
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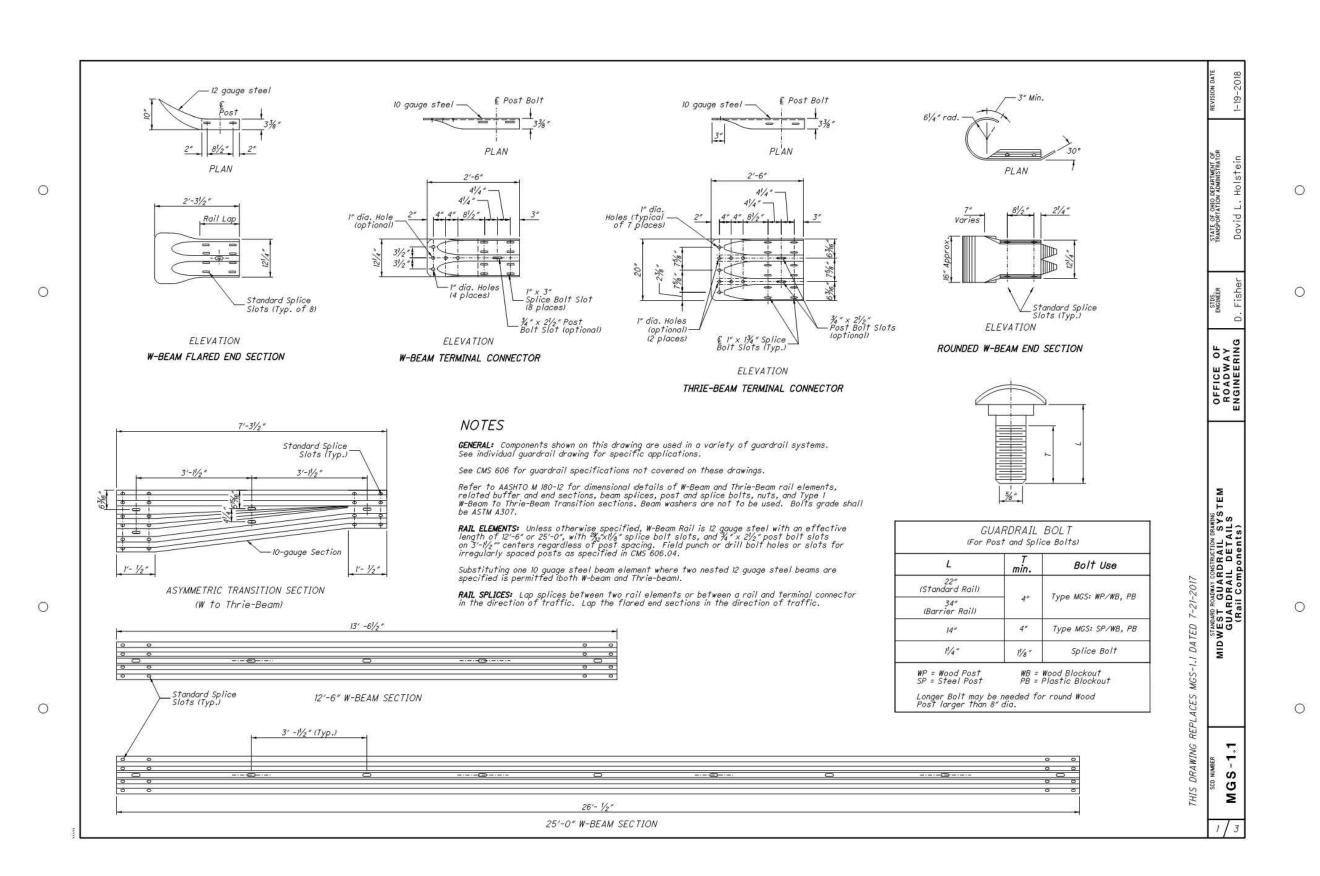
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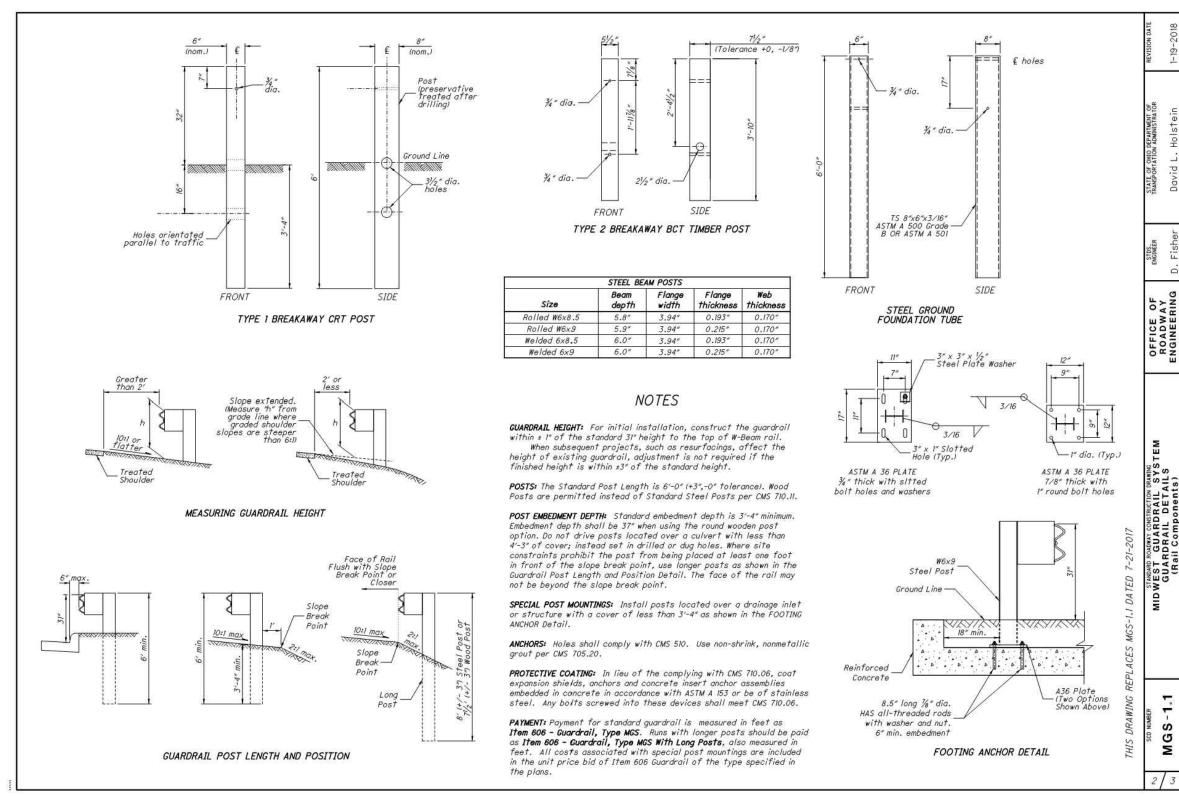
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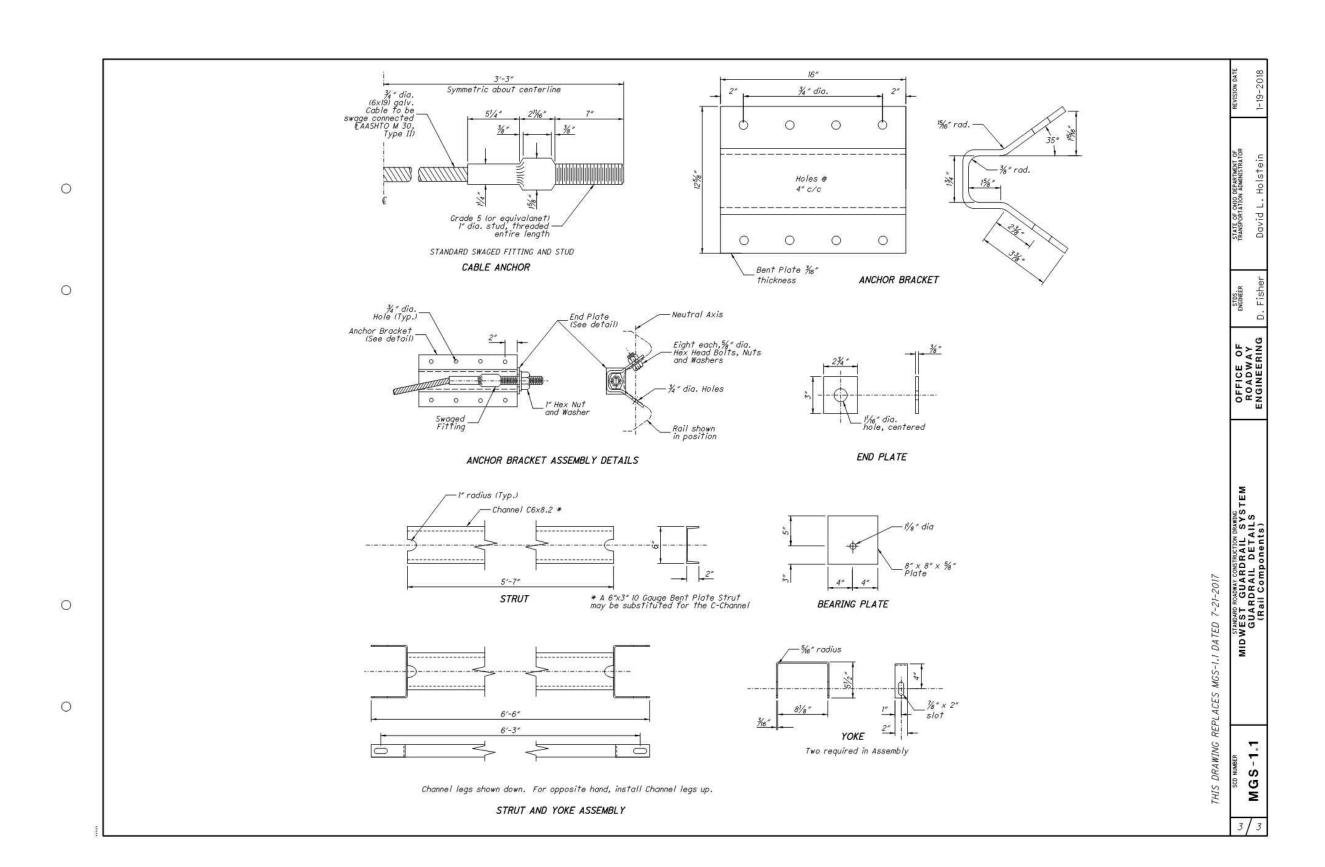
**DETAILS** 

SHEET NUMBER

**C-06** 









CHRISTOPHER \*

BEDNAR
E-68297
ONAL

01/28/2020

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PROJECT NAME

# PORTAGE PARK DISTRICT HEADWATERS TRAIL

CLIENT NAME



	ISSUE FOR BID	1/28/202
·	100% OWNER REVIEW	1/22/202
REV. NO.	DESCRIPTION	DATE

PROJECT NO: 2020-0003
DRAWN BY: SMA
APPROVED BY: CJB
DATE: 01/28/2020

SCALE: NO SCALE

SHEET TITLE

DETAILS

SHEET NUMBER

**C-07** 

#### **EROSION AND SEDIMENT CONTROL NOTES**

- 1. THE CONTRACTOR IS TO REFER TO THIS PLAN AND THE E&S PLAN, NOTES. AND DETAILS.
- 2. CONTRACTOR IS RESPONSIBLE TO MAINTAIN LAWN AND AND STORM WATER CONTROLS UNTIL SUBSTANTIAL COMPLETION OF THE PROJECT. PERIODIC INSPECTIONS ARE REQUIRED PER THE EPA GENERAL PERMIT OHC000005. GENERAL PERMIT TO BE OBTAINED BY CM. CONTRACTOR IS REQUIRED TO KEEP COPY OF PERMIT ON-SITE AND CONFORM WITH PERMIT REQUIREMENTS.
- 3. THE CONTRACTOR IS TO INSTALL AND MAINTAIN THE E&S CONTROLS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL THE SITE IS FULLY STABILIZED.
- 4. THE CONTRACTOR IS RESPONSIBLE TO REMOVE THE TEMPORARY E&S CONTROLS ONCE THE SITE IS FULLY STABILIZED.
- 5. CONTRACTOR IS TO MAINTAIN, ON-SITE AT ALL TIMES, LOGS DOCUMENTING GRADING AND STABILIZATION ACTIVITIES AS WELL AS AMENDMENTS TO THE SWP3. AS REQUIRED BY THE GENERAL PERMIT.
- 6. DUMPSTERS, WASTE DISPOSAL AREA'S AND OTHER AREAS DESIGNATED UNDER NON-SEDIMENT POLLUTANT CONTROLS WILL BE LOCATED ON-SITE DURING
- 7. INCIDENTAL WORK BEYOND APPROXIMATE CONSTRUCTION LIMIT LINE IS TO BE INCLUDED IN BASE BID.
- 8. CONTRACTOR IS TO PREVENT DUST AND DEBRIS FROM BEING TRACKED OR BLOWN ONTO MENNONITE ROAD OR SURROUNDING PROPERTIES BY USE OF REGULAR SWEEPING, TIRE WASHING, DUST CONTROL METHODS, ETC. EQUIPMENT (POWER BROOM, WATER TRUCK, ETC.) ARE TO REMAIN ON-SITE AS REQUIRED, TO ACCOMMODATE DUST AND DEBRIS. CONTRACTOR IS TO UTILIZE TIRE WASHING STATION DURING CONSTRUCTION ACTIVITIES, IF NEEDED, TO PREVENT DEBRIS FROM REACHING ADJACENT STREETS.
- 9. IF CONTRACTOR IS NOTIFIED BY POLICE, PORTAGE PARK DISTRICT OFFICIALS, OR PORTAGE SOIL AND WATER CONSERVATION DISTRICT PERSONNEL OF ANY SIGNIFICANT VIOLATION OF EPA GENERAL PERMIT AND/OR SWPPP PLANS AND INFORMATION, ALL CONSTRUCTION ON-SITE IS TO CEASE UNTIL PROBLEM(S) ARE RECTIFIED & DEEMED

#### CONSTRUCTION SEQUENCE

- PRE-CONSTRUCTION MEETING.
- 2. ESTABLISH CONSTRUCTION OFFICE ON SITE. ESTABLISH TEMPORARY UTILITIES AS NEEDED. ALL TEMPORARY UTILITY SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- STAKEOUT LIMITS OF DISTURBANCE.
- INSTALL INLET PROTECTION (DANDY BAGS OR APPROVED EQUAL) FOR ANY GRATED STORM STRUCTURES.
- 5. INSTALL SILT FENCE AROUND PERIMETER OF ENTIRE SITE EXCEPT AT MAN GATES AND VEHICLE CONSTRUCTION ENTRANCES / GATES.
- 6. CONSTRUCT SEDIMENT BASIN AND TEMPORARY OUTLET STRUCTURE BEFORE ANY OTHER EARTHWORK ACTIVITY. PROVIDE TEMPORARY SEEDING OF THE SEDIMENT BASIN AND ADJOINING BARE AREAS NOT BEING WORKED.
- 7. INSTALL DIVERSION BERMS EARLY IN CONSTRUCTION TO ENSURE SITE STORMWATER RUNOFF ENTERS THE SEDIMENT BASIN.
- REMOVE SOIL AS NEEDED AND CONSTRUCT TEMPORARY GRAVEL CONSTRUCTION ROAD AROUND ENTIRE BUILDING AS SHOWN. GRAVEL ROAD IS TO BE CONSTRUCTED OVER A WELL COMPACTED SUBGRADE (ODOT ITEM 204) AND CONSIST OF GEOTEXTILE FABRIC (ODOT ITEM 712.09, ITEM D), 9" THICK LAYER OF (AASHTO M 43) NO. 1's & NO. 2's, AND CHOKED OFF WITH 6" ODOT 57 CRUSHED STONE. PORTIONS OF THIS GRAVEL ROAD WILL SERVE AS A CONSTRUCTION ENTRANCES WHERE GATES ARE NOTED. POWER BROOM AND/OR CLEAN ADJACENT ROADWAYS ON A DAILY BASIS AND AS REQUIRED. REMOVE ALL DEBRIS FROM SITE. TEMPORARY CONSTRUCTION DRIVE IS TO BE REMOVED NEAR SUBSTANTIAL COMPLETION AND REPLACED WITH TOPSOIL & SEED OR WALKS & DRIVES AS SHOWN ON SITE PLAN.
- 7. CONSTRUCTION MANAGER TO ANNOTATE LOCATION OF TEMPORARY FACILITIES (WORK TRAILERS, SANITARY FACILITIES, CONTRACTOR PARKING, STORAGE AREAS, LAYDOWN AREAS, ETC.) ON THE APPROVED PLAN SET AND LOG THE CHANGES.
- 8. MAINTAIN TEMPORARY CONTROLS UNTIL REMOVAL IS WARRANTED DUE TO PROGRESSION OF WORK AND STABILIZATION OF SITE
- 9. BEGIN EARTHWORK OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE OWNER OF LOCATION AND EROSION SEDIMENTATION CONTROL MEASURES IMPLEMENTED AT BORROW OR SPOIL SITE OF IMPORT/EXPORT MATERIAL.
- 10. STORM SEWER AND UTILITY LINE CONSTRUCTION MAY BEGIN IMMEDIATELY FOLLOWING ESTABLISHMENT OF GRADE AND PERMISSION OF THE OWNER/CM
- 11. STABILIZE ALL UTILITY TRENCHES AT THE END OF EACH WORKDAY BY MEANS OF GRAVEL BACKFILL TO SURFACE, RE-PAVING OR MULCHING.
- 12. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, PERMANENT SEED AND MULCHING IMMEDIATELY UPON REACHING FINAL GRADE.
- 13. INSTALL PAVEMENT BASE, WALK, AND PAVEMENT
- 14. COMPLETE SITE WORK, FINAL LANDSCAPING AND CLEANUP.
- 15. RESEED AND REDRESS ANY AREAS THAT MAY REQUIRE ATTENTION IMMEDIATELY.
- 16. ALL EROSION MEASURES SHALL REMAIN IN PLACE UNTIL THE SITE IS STABILIZED. ALL AREAS OF VEGETATIVE SURFACE STABILIZATION, WHETHER TEMPORARY OR PERMANENT, SHALL BE CONSIDERED TO BE IN PLACE AND FUNCTIONAL WHEN THE REQUIRED UNIFORM RATE OF COVERAGE (80%) IS OBTAINED.
- 17. ONCE SEEDING IS ESTABLISHED CONVERT TEMPORARY SEDIMENT TO PERMANENT OUTLET STRUCTURE.
- 18. IF FOR ANY REASON THE PROJECT IS SUSPENDED, THE CONTRACTOR SHALL ENSURE THAT ALL INSTALLED EROSION MEASURES ARE FUNCTIONING AND PROPERLY MAINTAINED DURING THIS PERIOD, AND THAT ALL DISTURBED SOILS ARE SEEDED AND MULCHED WITH TEMPORARY SEED MIXTURE UNTIL FINAL SEEDING. LANDSCAPE CONTRACTOR IS RESPONSIBLE TO MAINTAIN LAWN UNTIL SUBSTANTIAL COMPLETION.
- 19. REPLACE APRON AND SIDEWALK AT THE CONSTRUCTION ENTRANCE.
- MAINTENANCE/INSPECTION PROCEDURES

#### EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED THROUGHOUT CONSTRUCTION TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UP SLOPE AREAS THEY CONTROL ARE PERMANENTLY STABILIZED.

#### **INSPECTIONS (MINIMUM REQUIREMENTS)**

1. ALL CONTROLS ARE TO BE INSPECTED ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN ONE-HALF INCH OF RAIN PER 24 HOUR PERIOD. THE INSPECTION PERIOD MAY BE REDUCED TO AT LEAST ONCE EVERY MONTH IF THE ENTIRE SITE IS TEMPORARILY STABILIZED OR RUNOFF IS UNLIKELY. ONCE A DEFINABLE AREA HAS BEEN FINALLY STABILIZED NO FURTHER INSPECTION REQUIREMENTS APPLY TO THAT PORTION OF THE SITE.

- 2. A CHECKLIST MUST BE COMPLETED AND SIGNED BY A QUALIFIED INSPECTION PERSONNEL AND INCLUDE THE FOLLOWING:
- NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION - WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION OR COMMENCEMENT OF CONSTRUCTION
- ACTIVITY (INCLUDE ANY STORM ACTIVITY DURATION, INTENSITY, DISCHARGES)
- LOCATION OF ANY SEDIMENT OR OTHER POLLUTANT DISCHARGES FROM THE SITE
- LOCATION OF BMPS THAT NEED TO BE INSTALLED AND/OR MAINTAINED - LOCATION OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE
- CHECK FOR ANY EVIDENCE OF POLLUTANTS FROM STORED MATERIALS ENTERING THE DRAINAGE SYSTEM
- CORRECTIVE ACTION (INSTALLATION, REPAIRS, MODIFICATIONS TO SWPPP PLAN AND IMPLEMENTATION DATES)
- A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR.
- THE SITE SUPERINTENDENT WILL SELECT INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
- COPIES OF THE REPORT ARE TO BE SENT TO THE OWNER, COUNTY ENGINEER & LOCAL SOIL & WATER CONSERVATION DISTRICT

#### REPAIR SCHEDULE OF SWPPP CONTROLS

A CONTROL PRACTICE, EXCEPT A SEDIMENT SETTLING POND, THAT IS IN NEED OF REPAIR OR MAINTENANCE MUST BE REPAIRED WITH 3 DAYS OF THE INSPECTION. IF APPLICABLE, SEDIMENT SETTLING PONDS MUST BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION. IF THE SPECIFIED CONTROL PRACTICE IS DEEMED INADEQUATE OR WAS NOT YET INSTALLED A NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF THE

# MAINTENANCE REQUIREMENTS DURING CONSTRUCTION (WHERE APPLICABLE)

- A. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE
- B. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. REPAIRS ARE TO BE MADE PROMPTLY.
- C. IF APPLICABLE, THE SEDIMENT BASIN WILL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 40 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.
- D. IF APPLICABLE, DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
- E. TEMPORARY AND PERMANENT SEEDING AND PLANTINGS WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

#### DEWATERING REQUIREMENTS DURING CONSTRUCTION

THERE SHALL BE NO SEDIMENT-LADEN DISCHARGES TO SURFACE WATERS RESULTING FROM DEWATERING ACTIVITIES. SHOULD DEWATERING BE REQUIRED, E.G., FROM TRENCHES, ETC,. DURING CONSTRUCTION, ALL WATER SHALL BE PUMPED TO THE TEMPORARY SEDIMENT BASINS, IF POSSIBLE BEFORE BEING RELEASED TO DOWNSTREAM CHANNELS, STORM SEWERS, ETC. IF A TEMPORARY SEDIMENT BASIN IS NOT SHOWN ON THE PLAN, OR NOT ACHIEVABLE FOR DEWATERING, THE WATER SHALL BE PUMPED INTO A SEDIMENT TRAP OR THROUGH SEDIMENT BAGS ONTO A RELATIVELY FLAT SURFACE AWAY FROM INLET BASINS, STREAMS, ETC.

#### POST-CONSTRUCTION INSPECTION PROCEDURE

- 1. (NA) THE SITE SHALL BE MAINTAINED PER THE POST-CONSTRUCTION MAINTENANCE PLAN FOLLOWING THE SUBMITTAL OF THE N.O.T. 2. THE PROPERTY OWNER OR THE OWNER'S AUTHORIZED REPRESENTATIVE(S) IS RESPONSIBLE FOR THE INSPECTION OF THE PERMANENT SWPPP
- CONTROLS, DISCHARGES FROM THE SITE AND ANY SEDIMENT ACCUMULATIONS. 3. MAINTENANCE COSTS, IF INSPECTED BY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE(S) WILL BE PAID BY THE OWNER.
- 4. REGULAR INSPECTIONS, ESPECIALLY FOLLOWING MAJOR STORM EVENTS, WILL REQUIRE AN INSPECTION REPORT THAT SHALL BE KEPT BY THE OWNER FOR A PERIOD OF THREE YEARS. A COPY OF THE REPORT IS TO BE SUBMITTED TO THE PORTAGE SOIL AND WATER CONSERVATION DISTRICT

#### POST CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

POST-CONSTRUCTION STORM WATER MANAGEMENT PRACTICES TREAT RUNOFF FROM A DEVELOPMENT SITE AFTER CONSTRUCTION IS COMPLETE.

CONSTRUCTION PERSONNEL, INCLUDING SUBCONTRACTORS WHO MAY USE OR HANDLE HAZARDOUS OR TOXIC MATERIALS, SHALL BE MADE AWARE OF THE FOLLOWING GENERAL GUIDELINES REGARDING DISPOSAL AND HANDLING OF HAZARDOUS AND CONSTRUCTION WASTES:

- 1. PREVENT SPILLS
- 2. USE PRODUCTS UP
- 3. FOLLOW LABEL DIRECTIONS FOR DISPOSAL
- 4. REMOVE LIDS FROM EMPTY BOTTLES AND CANS WHEN DISPOSING IN TRASH 5. RECYCLE WASTES WHENEVER POSSIBLE
- 6. DON'T POUR INTO WATERWAYS, STORM DRAINS OR ONTO THE GROUND
- 7. DON'T POUR DOWN THE SINK, FLOOR DRAIN OR SEPTIC TANKS
- 8. DON'T BURY CHEMICALS OR CONTAINERS
- 9. DON'T BURN CHEMICALS OR CONTAINERS 10. DON'T MIX CHEMICALS TOGETHER

SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST, KITTY LITTER OR OTHER ABSORBANT MATERIAL AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. SPILLS SHALL BE REPORTED TO OHIO EPA (1-800-282-9378), SPILLS OF 25 GALLONS OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MIN. OF THE DISCOVERY OF THE RELEASE. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATERS OF THE STATE, MUST BE REPORTED TO OHIO EPA'S HOTLINE.

#### HANDLING CONSTRUCTION CHEMICALS

MIXING, PUMPING, TRANSFERRING OR OTHER HANDLING OF CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREAAWAY FROM ANY WATERCOURSE, DITCH OR

#### **EQUIPMENT FUELING AND MAINTENANCE**

EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED AWAY FROM WATERCOURSES, DITCHES OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL OIL STORAGE TANKS. THESE AREAS MUST BE INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HRS. OF A 0.5 INCH OR GREATER RAIN EVENT TO ENSURE THERE ARE NO EXPOSED MATERIALS WHICH WOULD CONTAMINATE STORM WATER. SITE OPERATORS MUST BE AWARE THAT SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) REQUIREMENTS MAY APPLY. AN SPCC PLAN IS REQUIRED FOR SITES WITH ONE SINGLE ABOVEGROUND TANK OF 660 GALLONS OR MORE, ACCUMULATIVE ABOVEGROUND STORAGE OF 1330 GALLONS OR MORE, OR 42,000 GALLONS OF UNDERGROUND STORAGE. SOILS THAT HAVE BECOME CONTAMINATED MUST BE DISPOSED OF ACCORDANCE WITH THE "CONTAMINATED SOILS" NOTE.

#### **CONTAMINATED SOILS**

IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASED ONTO THE SOIL, THE SOIL SHOULD BE DUG UP AND DISPOSED OF AT LICENSED SANITARY LANDFILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). PLEASE BE AWARE THAT STORM WATER RUN OFF ASSOCIATED WITH CONTAMINATED SOILS ARE NOT AUTHORIZED UNDER OHIO EPA'S GENERAL STORM WATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES. IN THE EVENT THERE ARE LARGE EXTENSIVE AREAS OF CONTAMINATED SOILS ADDITIONAL MEASURES ABOVE AND BEYOND THE CONDITIONS OF OHIO EPA'S GENERAL CONSTRUCTION STORM WATER PERMIT WILL BE REQUIRED.

DEPENDING ON THE EXTENT OF CONTAMINATION, ADDITIONAL TREATMENT AND/OR COLLECTION AND DISPOSAL MAY BE REQUIRED. ALL STORM WATER DISCHARGES ASSOCIATED WITH THE CONTAMINATED SOILS MUST BE AUTHORIZED UNDER AN ALTERNATE NPDES (NATIONAL POLLUTANT DISCHARGE **ELIMINATION PERMIT.** 

#### CONCRETE WASH WATER/WASH OUTS

CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED.

#### CONSTRUCTION WASTE

CONTAINERS SHALL BE PROVIDED FOR THE PROPER COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS USED ON-SITE. CONTAINERS SHALL BE COVERED AND NOT LEAKING. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL. CONSTRUCTION DEMOLITION AND DEBRIS (CD&D) WASTE MUST BE DISPOSED OF AT AN OHIO EPA APPROVED CD&D LANDFILL.

NO CONSTRUCTION RELATED WASTE MATERIALS ARE TO BE BURIED ON-SITE. BY EXCEPTION, CLEAN FILL (BRICKS, HARDENED CONCRETE, SOIL) MAY BE UTILIZED IN A WAY WHICH DOES NOT ENCROACH UPON NATURAL WETLANDS, STREAMS OR FLOODPLAINS OR RESULT IN THE CONTAMINATION OF WATERS

CONSTRUCTION DEMOLITION AND DEBRIS (CD&D) WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ORC 3714 AT AN APPROVED OHIO EPA CD&D LANDFILL.

NO MATERIALS MAY BE BURNED WHICH CONTAIN RUBBER, GREASE, ASPHALT, OR PETROLEUM PRODUCTS SUCH AS TIRES, CARS, AUTOPARTS, PLASTICS OR PLASTIC COATED WIRE. (SEE OAC 3745-19)

OPEN BURNING IS NOT ALLOWED IN RESTRICTED AREAS. RESTRICTED AREAS ARE DEFINED AS:

- 1) WITHIN CORPORATION LIMITS 2) WITHIN 1000 FEET OUTSIDE A MUNICIPAL CORPORATION HAVING A POPULATION OF 1000 TO 10,000
- 3) A ONE MILE ZONE OUTSIDE OF A CORPORATION OF 10, 000 OR MORE.
- 4) WITHIN HALF MILE OF A SCHOOL OR PLAYGROUND.

OUTSIDE A RESTRICTED AREA, NO OPEN BURNING CAN TAKE PLACE WITHIN A 1000 FEET OF AN INHABITED BUILDING LOCATED OFF THE PROPERTY WHERE

# OPEN BURNING IS PERMISSIBLE IN A RESTRICTED AREA FOR THE FOLLOWING ACTIVITIES:

- 1. HEATING TAR, WELDING AND ACETYLENE TORCHES, SMUDGE POTS AND SIMILAR OCCUPATIONAL NEEDS
- 2. HEATING FOR WARMTH OR OUTDOOR BARBEQUES. OUTSIDE OF RESTRICTED AREAS

OPEN BURNING IS PERMISSIBLE FOR LANDSCAPE WASTES (PLANT MATERIAL), LAND-CLEARING WASTES (PLANT MATERIAL, WITH PRIOR WRITTEN PERMISSION FROM OHIO EPA), AND AGRICULTURAL WASTES (MATERIAL GENERATED BY CROP, HORTICULTURAL, OR LIVESTOCK PRODUCTION PRACTICES. THIS INCLUDES FENCE POSTS AND SCRAP LUMBER, BUT NOT BUILDINGS).

OUST CONTROL IS REQUIRED TO PREVENT NUISANCE CONDITIONS. DUST CONTROLS MUST BE USED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND NOT BE APPLIED IN A MANNER, WHICH WOULD RESULT IN A DISCHARGE TO WATERS OF THE STATE. ISOLATION DISTANCES FROM BRIDGES, CATCH BASINS, AND OTHER DRAINAGEWAYS MUST BE OBSERVED. APPLICATION (EXCLUDING WATER) MAY NOT OCCUR WHEN PRECIPITATION IS IMMINENT AS NOTED IN THE SHORT TERM FORECAST, USED OIL MAY NOT BE APPLIED FOR DUST CONTROL.

#### CONSTRUCTION STAKING NOTE

THE CONTRACTOR'S REGISTERED SURVEYOR SHALL CONTACT THE ENGINEER OF RECORD TO OBTAIN A COPY OF THE AUTOCAD FILE FOR CONSTRUCTION STAKING.



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PROJECT NAME

PORTAGE PARK DISTRICT HEADWATERS TRAIL

**CLIENT NAME** 



ISSUE FOR BID 1/28/202 100% OWNER REVIEW | 1/22/202 REV. NO. DESCRIPTION DATE

PROJECT NO: 2020-0003 DRAWN BY: SMA APPROVED BY: CJB DATE: 01/28/2020

SCALE: NO SCALE

SHEET TITLE

**SWPPP** NOTES

1.SUBSOILER, PLOW, OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. (MAXIMIZING INFILTRATION WILL HELP CONTROL BOTH RUNOFF RATE AND WATER QUALITY.) SUBSOILING SHOULD BE DONE WHEN THE SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING SHALL NOT BE DONE ON SLIP-PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION. 2.THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.

3.TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

#### SEEDBED PREPARATION

1.LIME--AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, LIME SHALL BE APPLIED AT THE RATE OF 100 POUNDS PER 1,000-SQ. FT. OR 2 TONS PER ACRE.

2.FERTILIZER--FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN PLACE OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 25 POUNDS PER 1,000-SQ. FT. OR 1000 POUNDS PER ACRE OF A 10-10-10 OR 12-12-12 ANALYSES.

3. THE LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING-TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3 INCHES. ON SLOPING LAND, THE SOIL SHALL BE WORKED ON THE CONTOUR.

#### SEEDING DATES AND SOIL CONDITIONS

SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THE ABOVE- SPECIFIED DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. FOR WINTER SEEDING, SEE THE FOLLOWING SECTION ON DORMANT SEEDING.

#### DORMANT SEEDINGS

1.SEEDINGS SHOULD NOT BE MADE FROM OCTOBER 1 THROUGH NOVEMBER 20. DURING THIS PERIOD, THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY WILL NOT BE ABLE TO SURVIVE THE WINTER.

2.THE FOLLOWING METHODS MAY BE USED FOR "DORMANT SEEDING":

• FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

• FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

• APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM. MOIST SEEDBED.

WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER

3. STRAW AND MULCH ANCHORING METHODS

• IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE.

#### MULCHING

1.MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. DORMANT SEEDING SHALL BE MULCHED. 100% OF THE GROUND SURFACE SHALL BE COVERED WITH AN APPROVED MATERIAL.

• STRAW-IF STRAW IS USED IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS PER ACRE OR 90 POUNDS (TWO TO THREE BALES) PER 1,000-SQ. FT. THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY APPLIED SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000-SQ.-FT. SECTIONS AND SPREAD TWO 45-LB. BALES OF STRAW IN EACH SECTION.

• HYDROSEEDERS--IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE APPLIED AT 2,000 LB./AC. OR 46 LB./1,000 SQ. FT.

• OTHER--OTHER ACCEPTABLE MULCHES INCLUDE ROLLED EROSION CONTROL MATTINGS OR BLANKETS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS PER ACRE.

STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.

• MECHANICAL--A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL.

STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 INCHES. • MULCH NETTING--NETTING SHALL BE USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.

• ASPHALT EMULSION--ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURE OR AT THE RATE OF 160 GALLONS PER ACRE.

• SYNTHETIC BINDERS--SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUIVALENT MAY BE USED AT RATES SPECIFIED BY THE MANUFACTURER.

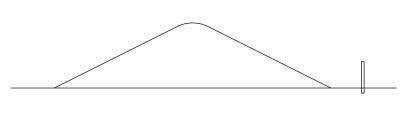
 WOOD CELLULOSE FIBER--WOOD CELLULOSE FIBER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER WITH THE MIXTURE CONTAINING A MAXIMUM OF 50 POUNDS CELLULOSE PER 100 GALLONS OF WATER.

PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY WEATHER OR ON ADVERSE SITE CONDITIONS. WHICH REQUIRE ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.

IRRIGATION RATES SHALL BE MONITORED TO PREVENT EROSION AND DAMAGE TO SEEDED AREAS FROM EXCESSIVE RUNOFF.

Seed Mix	Seeding Rate		****
Seed MIX	Lbs./acre	Lbs./1,000 Sq. Feet	Notes:
5,0		General Use	
Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass	20-40 10-20 20-40	1/2-1 1/4-1/2 1/2-1	For close mowing & for waterways with < 2.0 ft/sec velocity
Tall Fescue	40-50	1-1 1/4	
Turf-type (dwarf) Fescue	90	2 1/4	
	St	eep Banks or Cut Slopes	A
Tall Fescue	40-50	1-1 1/4	
Crown Velch Tall Fescue	10-20 20-30	1/4-1/2 1/2-3/4	Do not seed later than August
Flat Pea Tall Fescue	20-25 20-30	1/2-3/4 1/2-3/4	Do not seed later than August
**	R	oad Ditches and Swales	A.
Tall Fescue	40-50	1-11/4	
Turf-type (Dwarf) Fescue Kentucky Bluegrass	90 5	2 1/4 0.1	
		Lawns	
Kentucky Bluegrass Perennial Ryegrass	100-120	2 2	7
Kentucky Bluegrass Creeping Red Fescue	100-120	2 1-1/2	For shaded areas

Note: Other approved seed species may be substituted.



1. STOCKPILE HEIGHT MUST NOT EXCEED 20 FEET.

STOCK PILE SLOPES MUST BE 2:1 OR FLATTER. 2. SILT FENCE SHALL BE INSTALLED AT THE DOWNSLOPE

3. STOCKPILES SHALL BE TEMPORARILY STABILIZED

WITH SEED AND MULCH.

SIDE OF THE STOCKPILE.

4. TOPSOIL STOCKPILE LOCATIONS SHALL BE PROVIDED WHERE AND WHEN DIRECTED BY THE CMT.

TYPICAL STOCKPILE SECTION

# TEMPORARY SEEDING (TS)

TEMPORARY SEEDINGS ESTABLISH TEMPORARY COVER ON DISTURBED AREAS BY PLANTING APPROPRIATE RAPIDLY GROWING ANNUAL GRASSES OR SMALL GRAINS. TEMPORARY SEEDING PROVIDES EROSION CONTROL ON AREAS IN BETWEEN CONSTRUCTION OPERATIONS. GRASSES, WHICH ARE QUICK GROWING, ARE SEEDED. AND USUALLY MULCHED TO PROVIDE PROMPT, TEMPORARY SOIL STABILIZATION. IT EFFECTIVELY MINIMIZES THE AREA OF A CONSTRUCTION SITE PRONE TO EROSION AND SHOULD BE USED EVERYWHERE THE SEQUENCE OF CONSTRUCTION OPERATIONS ALLOWS VEGETATION TO BE ESTABLISHED.

SPECIFICATIONS FOR TEMPORARY SEEDING

SEEDING DATES	SPECIES	LB./1,000 SF	LB./ACRE
MARCH 1 TO AUGUST 15	OATS TALL FESCUE ANNUAL RYEGRASS	3 1	128 (4 BUSHEL) 40 40
	PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 40 40 40
	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.4 0.4	55 142 17 17
	OATS TALL FESCUE ANNUAL RYEGRASS	3 1 1	128 (3 BUSHEL) 40 40
AUGUST 16 TO NOVEMBER	RYE TALL FESCUE ANNUAL RYEGRASS	3 1 1	112 (2 BUSHEL) 40 40
	WHEAT TALL FESCUE ANNUAL RYEGRASS	3 1 1	120 (2 BUSHEL) 40 40
	PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 40 40
	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.4 0.4	40 40 40 0
NOVEMBER 1 TO FEB. 29	I TO FEB. 29 USE MULCH ONLY OR DORMANT SEEDING		

#### NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED.

#### NOTES:

- STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE. TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED
- OR REWORKED FOR 21 DAYS OR GREATER. THESE IDLE AREAS SHALL BE SEEDED WITHIN 7 DAYS AFTER GRADING. THE SEEDBED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION.
- TEMPORARY SEEDING SHOULD NOT BE POSTPONED IF IDEAL SEEDBED PREPARATION IS NOT POSSIBLE. SOIL AMENDMENTS - TEMPORARY VEGETATION SEEDING RATES SHALL ESTABLISH ADEQUATE STANDS OF
- VEGETATION, WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. BASE RATES FOR LIME AND FERTILIZER SHALL
- SEEDING METHOD SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

#### MULCHING TEMPORARY SEEDING

APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH, WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDINGS MADE DURING OPTIMUM SEEDING DATES ON FAVORABLE, VERY FLAT SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION.

STRAW - IF STRAW IS USED, IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT A RATE OF 2 TONS/ACRE

OR 90 LBS./1,000 SQ.-FT. (2-3 BALES) • HYDROSEEDERS - IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2,000 LBS./AC. OR 46 LB./1,000

• OTHER - OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TON/AC. STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER. ANCHORING METHODS: MECHANICAL - A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE

MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT LEFT TO A LENGTH OF APPROXIMATELY 6 INCHES. MULCH NETTING - NETTING SHALL BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. NETTING

MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES. SYNTHETIC BINDERS - SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TRACK OR EQUIVALENT MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.

 WOOD-CELLULOSE FIBER - WOOD -CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WT. OF 750 LB./AC. THE WOOD-CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50

# **Table 1: Permanent Stabilization**

Area requiring permanent stabilization	Time frame to apply erosion controls
Any areas that will lie dormant for one year or more	Within seven days of the most recent disturbance
Any areas within 50 feet of a surface water of the state and at final grade	Within two days of reaching final grade
Other areas at final grade	Within seven days of reaching final grade within that area

#### Table 2: Temporary Stabilization

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed areas within 50 feet of a surface water of the state and not at final grade	Within two days of the most recent disturbance if the area will remain idle for more than 14 days
Any disturbed areas that will be dormant for more than 14 days but less than one year, and not within 50 feet of a surface water of the state	Within seven days of the most recent disturbance within the area  For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s).
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. Permanent and temporary stabilization are defined in Part VII.

# DUST CONTROL (DC)

#### DESCRIPTION

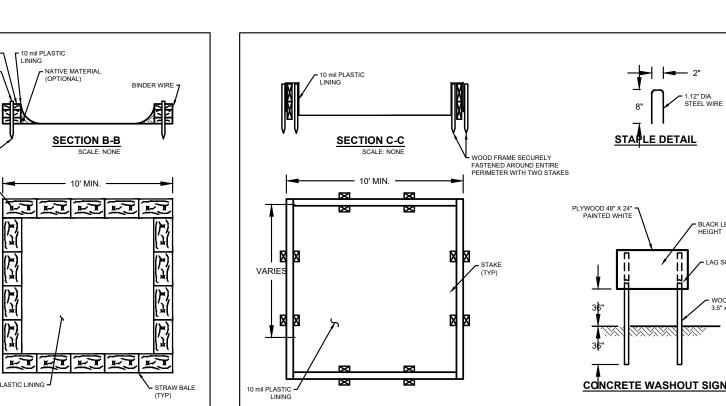
DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIR-BORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

#### SPECIFICATIONS FOR DUST CONTROL

- 1. VEGETATIVE COVER AND/MULCH APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 21 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
- 2. WATERING SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
- 3. SPRAY-ON ADHESIVES APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS' INSTRUCTIONS.
- 4. STONE GRADED ROADWAYS AND OTHER SUITABLE AREAS WILL BE STABILIZED USING CRUSHED STONE OR COARSE GRAVEL AS SOON AS PRACTICABLE AFTER REACHING AN INTERIM OR FINAL GRADE. CRUSHED STONE OR COARSE GRAVEL CAN BE USED AS A PERMANENT COVER TO PROVIDE CONTROL OF SOIL EMISSIONS.
- 5. BARRIERS EXISTING WINDBREAK VEGETATION SHALL BE MARKED AND PRESERVED. SNOW FENCING OR OTHER SUITABLE BARRIER MAY BE PLACED PERPENDICULAR TO PREVAILING AIR CURRENTS AT INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHT TO CONTROL AIR CURRENTS AND BLOWING SOIL.
- 6. CALCIUM CHLORIDE THIS CHEMICAL MAY BE APPLIED BY MECHANICAL SPREADER AS LOOSE, DRY GRANULES OR FLAKES AT A RATE THAT KEEPS THE SURFACE MOIST BUT NOT SO HIGH AS TO CAUSE WATER POLLUTION OR PLANT DAMAGE. APPLICATION RATES SHOULD BE STRICTLY IN ACCORDANCE WITH SUPPLIERS' SPECIFIED RATES.
- 7. OPERATION AND MAINTENANCE WHEN TEMPORARY DUST CONTROL MEASURES ARE USED; REPETITIVE TREATMENT SHOULD BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL. STREET CLEANING - PAVED AREAS THAT HAVE ACCUMULATED SEDIMENT FROM CONSTRUCTION SHOULD BE CLEANED DAILY, OR AS NEEDED, UTILIZING A STREET SWEEPER OR BUCKET -TYPE ENDLOADER OR SCRAPER.

#### ADHESIVES FOR DUST CONTROL

ADHESIVE	WATER DILUTION (ADHESIVE: WATER)	NOZZLE TYPE	APPLICATION RATE (GAL./AC.)
LATEX EMULSION	12.5:1	FINE	235
RESIN IN WATER ACRYLIC EMULSION (NO-TRAFFIC)	4:1	FINE	300
ACRYLIC EMULSION (NO-TRAFFIC)	7:1	COARSE	450
ACRYLIC EMULSION (TRAFFIC)	3.5:1	COARSE	350



# ABOVE GRADEW WITH WOOD PLANKS

# **CONCRETE WASHOUT DETAILS**

SECTION B-B

ABOVE GRADEW WITH STRAW BALES

1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.

BELOW GRADE

- 2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30'-0" OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
- 3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
- 4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.

#### **CWA INSTALLATION NOTES**

- 1. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. 2. BERM SURROUNDING SIDES AND BACK OF CWA SHALL HAVE A MINIMUM HEIGHT OF 1'-0".
- 3. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- 4. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

#### **CWA MAINTENANCE NOTES**

SCALE: NONE

- 1. INSPECT BMP'S EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMP'S SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP'S AS SOON AS POSSIBLE (AND ALWAYS WITH 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMP'S IN EFFECTIVE OPERATING CONDITIONS. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- 3. WHERE BMP'S HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- 4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'-0".
- 5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
- THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL

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PROJECT NAME

PORTAGE PARK DISTRICT **HEADWATERS TRAIL** 



	ISSUE FOR BID	1/28/202
	100% OWNER REVIEW	1/22/202
REV. NO.	DESCRIPTION	DATE

PROJECT NO: 2020-0003 DRAWN BY: SMA APPROVED BY: CJB

DATE: 01/28/2020 SCALE: NO SCALE

SHEET TITLE

**SWPPP** 

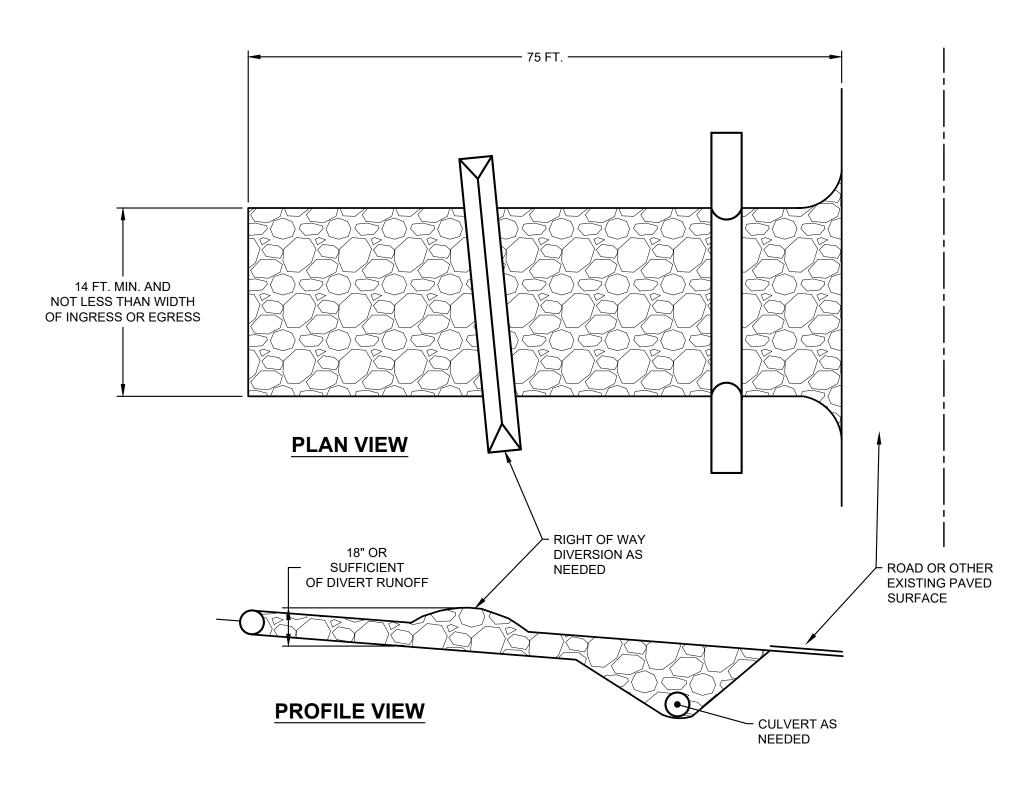
**DETAILS** 

# CONSTRUCTION ENTRANCE (CE)

#### DESCRIPTION

A CONSTRUCTION ENTRANCE IS A STABILIZED PAD OF STONE UNDERLAIN WITH A GEOTEXTILE AND IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC. LOCATED AT POINTS OF INGRESS/EGRESS, THE PRACTICE IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC.

SPECIFICATIONS FOR CONSTRUCTION ENTRANCE



- STONE SIZE # 2 (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS).
- THICKNESS THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
- WIDTH THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- GEOTEXTILE A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

# GEOTEXTILE SPECIFICATIONS FOR CONSTRUCTION ENTRANCES

MINIMUM TENSILE STRENGTH	200 LBS.
MINIMUM PUNCTURE STRENGTH	80 PSI
MINIMUM TEAR STRENGTH	50 LBS
MINIMUM BURST STRENGTH	320 PSI
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS < 0.6MM
PERMITTIVITY	1x10 <sup>-3</sup> CM/SEC

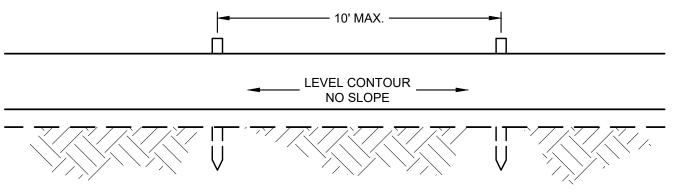
- TIMING THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
- CULVERT A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
- WATER BAR A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
- MAINTENANCE TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR
- TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
- 10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
- 11. REMOVAL THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

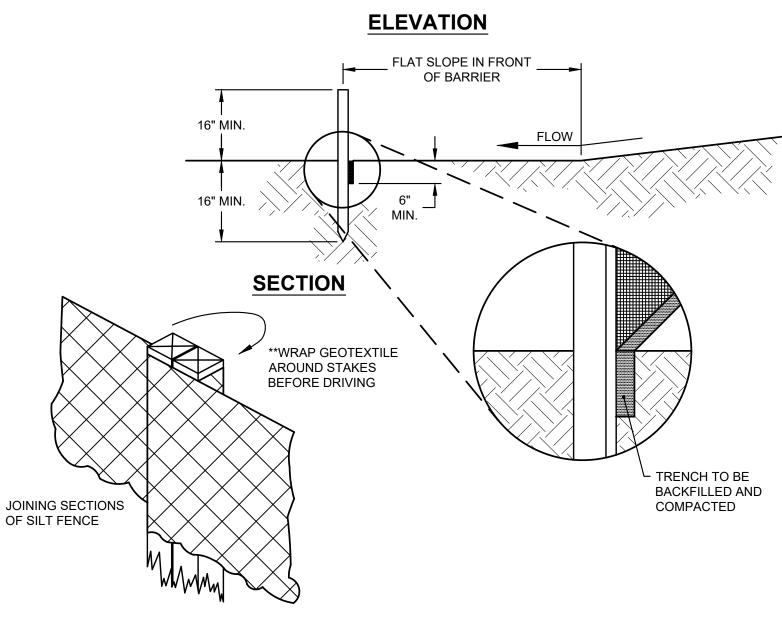


#### DESCRIPTION

SILT FENCE IS A SEDIMENT-TRAPPING PRACTICE UTILIZING A GEOTEXTILE FENCE, TOPOGRAPHY AND SOMETIMES VEGETATION TO CAUSE SEDIMENT DEPOSITION. SILT FENCE REDUCES RUNOFF'S ABILITY TO TRANSPORT SEDIMENT BY PONDING RUNOFF AND DISSIPATING SMALL RILLS OR CONCENTRATED FLOW INTO UNIFORM SHEET FLOW. SILT FENCE IS USED TO PREVENT SEDIMENT-LADEN SHEET RUNOFF FROM ENTERING INTO DOWNSTREAM CREEKS AND SEWER SYSTEMS.

SPECIFICATIONS FOR SILT FENCE





- SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS. 2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS
- LENGTH 3. ENDS OF THE SILT FENCE SHOULD BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
- SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE)
- UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE. 6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND
- SURFACE.
- THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATE UNIFORM TRENCH DEPTH.
- THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
- 9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO GROUND, (SEE DETAIL).
- 10. MAINTENANCE SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PREFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.
- SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF
- THE HEIGHT OF THE SILT FENCE.
- SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL
- THE LOCATION OF THE EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

#### CRITERIA FOR SILT FENCE MATERIALS:

- 1. FENCE POST THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POST WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS, AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
- 2. SILT FENCE FABRIC SEE CHART BELOW.

VALUES	TEST METHOD
120 LBS (535 N)	ASTM D 4632
50 %	ASTM D 4632
50 LBS (220 N)	ASTM D 4833
40 LBS (180 N)	ASTM D 4533
≤ 0.84 mm	ASTM D 4751
1 x 10 <sup>-2</sup> SEC. <sup>-1</sup>	ASTM D 4491
70%	ASTM D 4355
	120 LBS (535 N) 50 % 50 LBS (220 N) 40 LBS (180 N) ≤ 0.84 mm 1 x 10 <sup>-2</sup> SEC. <sup>-1</sup>



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01/28/2020

PROJECT NAME

PORTAGE PARK DISTRICT **HEADWATERS TRAIL** 

CLIENT NAME



	ISSUE FOR BID	1/28/2021
	100% OWNER REVIEW	1/22/2021
REV. NO.	DESCRIPTION	DATE
1		

PROJECT NO: 2020-0003 DRAWN BY: SMA APPROVED BY: CJB

DATE: 01/28/2020 SCALE: NO SCALE

SHEET TITLE

**SWPPP DETAILS** 

<b>#</b>	Karpinsk
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01/28/2020

PORTAGE PARK DISTRICT

**HEADWATERS TRAIL** 

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**SWPPP DETAILS** 

SHEET NUMBER

# SWPPP GRADING AND STABILIZATION ACTIVITIES LOG

#### PROJECT NAME

DATE GRADING ACTIVITY INITIATED	DESCRIPTION OF GRADING ACTIVITY	DATE GRADING ACTIVITY CEASED (INDICATE TEMPORARY OR PERMANENT)	DATE WHEN STABILIZATION MEASURES ARE INITIATED	DESCRIPTION OF STABILIZATION MEASURE AND LOCATION

## SWPPP INSPECTION REPORT LOG

#### PROJECT NAME

TYPE OF CORRECTIVE ACTION REQUIRED	RAIN EVENT	DATE OF INSPECTION	INSPECTOR NAME	INSPECTION #

## SWPPP AMENDMENT LOG

# PROJECT NAME

AMENDMENT NUMBER	DESCRIPTION OF AMENDMENT	DATE OF AMENDMENT	AMENDMENT PREPARED BY

# SWPPP CORRECTIVE ACTION LOG

# PROJECT NAME

INSPECTION DATE	INSPECTOR NAME	DESCRIPTION OF CORRECTIVE ACTION NEEDED (FORM INSPECTION REPORT)	CORRECTIVE ACTION TAKEN	DATE ACTION TAKEN