J. D. Stine, P.E. & Associates, Inc. Consulting Engineers 109 S. Main St. Bethel, OH 45103 (513) 734-4333



July 16, 2021

Anderson Township Planning & Zoning 7850 Five Mile rd. Anderson Township, OH 45230

Attn: Paul Drury, Director

RE: Anderson Park District Johnson Hills Park-2021 Parking Lot Expansion 7950 Bridle Road

Dear Mr. Drury:

We are submitting plans for the construction of a new 42 space parking lot along with 6 additional spaces adjacent to the existing parking lot for Conditional Use approval. Please note the following comments which demonstrate compliance with Section 5.4, Table 5.14 of the Township Zoning Resolution:

- The parking lot and added spaces are located as close to the existing parking for the park as feasible and are situated as far from the nearest adjoining residence as possible. In addition, the elevation of the parking area is well below that of the residence. Therefore, the impact on the neighborhood is minimized. The entire parking area is well off Bridle Road.
- 2. During construction, the Park District will endeavor to minimize dust and noise except during normal working hours and on weekdays. Subsequent to completion, the parking areas will be fully paved to eliminate dust. Disturbed areas will be reseeded, and trees and landscaping will be installed.
- 3. There are existing trees which shall remain along the parking and on the hillside to the south of the new lot. The existing wooded portion of the park is within about 30-35 feet of the parking lot. Additional landscaping will also be installed by the Park District as shown on the plans.
- 4. The only signage installed will be signs to designate handicapped parking spaces if required by code.
- 5. No exterior lighting is planned at this time, but there could be future security lighting which will be directed inwards towards the lots and away from adjacent residences.
- 6. To ensure security, the Park District contracts with the Hamilton County Sheriff's Department for a full time Deputy. The Park District also pays Special Deputies with the Hamilton County Sheriff's Department to patrol during busy times of the year. In addition to the Sheriff's patrols, the Park District also has paid staff that checks and maintains the Park daily.

- 7. The Park District has monthly public meetings where neighborhood residents can address the Park Board with any concerns. The Park District also maintains a normal business hours office at 6915 Beechmont Ave. for public participation.
- 8. The Park refuse is collected by Rumpke Waste Removal weekly.
- 9. The additional spaces planned are necessitated by the increased use of the park and to avoid parking in grassed areas. The entire park contains 140+ acres and the existing and new parking will occupy less than 1 acre or less than 0.7% of the total area.

Please review and advise.

Respectfully submitted. J. G. Stine/PE & Associates, Inc.

D. Stine, PE, PS President

Encl. Cc. w/ encl. Anderson Park District c/o Mike Smith

JOHNSON HILL PARK PARKING LOT EXPANSION **7950 BRIDLE ROAD** CINCINNATI, OHIO 45244 SITUATE IN **MILITARY SURVEY No. 1126**

ANDERSON PARK DISTRICT ANDERSON TOWNSHIP, HAMILTON COUNTY, OHIO

PROJECT TEAM

OWNER:

Anderson Park District 8249 Clough Pike Cincinnati, Ohio 45244 (513) 474-0003

ENGINEER/SURVEYOR:

Mcgill Smith Punshon 3700 Park 42 Drive Suite 190B Cincinnati, Ohio 45241 (513) 735-0004

OWNERS REPRESENTATIVE :

JD Stine, PE & Associates 109 S. Main Street Bethel, Ohio 45106 (513) 734-4333

GENERAL NOTES

ALL WORK SHALL COMPLY WITH LOCAL AND STATE CODES AND STANDARDS OF CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO START OF CONSTRUCTION.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO START OF THE WORK AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION. PLANS INDICATE APPROXIMATE ELEVATIONS AND ROUTING.

PAVEMENT DIMENSIONS ARE TO FACE OF CURB/EP, EXCEPT AS NOTED.

DETAILS AND SPECIFICATIONS SHOWN ON THESE PLANS ARE INTENDED TO COMPLIMENT THE PROJECT PLANS AND STANDARD DETAILS. IN CASE OF CONFLICT BETWEEN THESE PLANS AND OTHER SPECIFICATIONS, THE MORE RESTRICTIVE CASE APPLIES, UNLESS SPECIFICALLY OVERRIDDEN.

ALL WORK INSIDE THE RIGHT-OF-WAY IS SUBJECT TO OBTAINING A PERMIT FROM HAMILTON COUNTY, OHIO.

CONTRACTOR SHALL REPAIR, RESURFACE, RECONSTRUCT OR REFURBISH ANY AREAS DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, HIS SUBCONTRACTORS OR SUPPLIERS AT NO ADDITIONAL COST TO THE THE OWNER.

EASEMENTS SHOWN HEREON WERE DISCOVERED DURING THE COURSE OF RESEARCH OF PUBLIC RECORDS AND MAY NOT COMPRISE ALL OF THE EASEMENTS AND/OR ENCUMBRANCES AFFECTING THE SUBJECT PROPERTY.

THE UNDERGROUND UTILITIES SHOWN ARE BASED ON A COMBINATION OF SURFACE EVIDENCE AND AVAILABLE PLANS & RECORDS; THEY HAVE NOT BEEN PHYSICALLY LOCATED. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES ON THE PREMISES, EITHER IN SERVICE OR ABANDONED. NOR IS IT GUARANTEED THAT THEY ARE IN THE EXACT LOCATION INDICATED, ONLY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.

PARKING SPACES SHALL BE DEPARTED BY 4" WIDE WHITE PAINTED STRIPES.







DESIC DESIC McGill Smit	G N G N A P U 3700 F	n s h o n Park 42 Drive Suite 190B ati OH 45241
∎ Planning ■ Surveying	Phone 5 www.ms	513.759.0004 pdesign.com
Project Manager Drawn By DWG X-Ref(s)	1759910	DAS BCC 4-IMP-CON
ssue/Revision	No.	Date



INDEX OF SHEETS

SHEET NO:	DESCRIPTION:
C1	COVER SHEET
C2	LOCATION MAP
C4	LAYOUT & UTILITY PLAN
C4	DETAILS
C5	S.W.P.P.P./GRADING PLAN
C6	EROSION CONTROL NOTES AND DETAILS
	S.W.P.P.P. NOTES AND DETAILS
L1	LANDSCAPE PLAN

ARK SIO ARKIN Ō

26 Ö Ζ -No. Έγ ΜΙ 4 Ϋ́Υ RY SI SHIP, MILITA Z O RS ш

N

Sheet Title

COVER SHEET

Project Number Drawing Scale Sheet Number File Number

17599.10 AS NOTED C1 17599





SCALE IN FEET 0 100 200 400 600

OHIO Utilities Protection SERVICE Call Before You Dig 1-800-362-2764 CALL TWO WORKING DAYS BEFORE YOU DIG (NON MEMBERS MUST BE CALLED DIRECTLY)

LOCATION MAP

Project Number Drawing Scale Sheet Number File Number

Sheet Title

17599.10 AS NOTED **C2** 17599



STORM SEWER 101-100

1"=20' HOR. / 1"=5' VERT.



Suite 190B

DAS

BCC

H O

Ζ

Ο

C

Ζ

N

S

2

ш

1

PLAN

C3

17599

GENERAL LAYOUT & UTLILITY NOTES

ZONING: A-2 RESIDENCE DISTRICT

TOPO AND BOUNDARY PROVIDED BY MCGILL SMITH PUNSHON, INC.

ALL PLANS AND CONSTRUCTION WITHIN THE UNINCORPORATED AREAS OF HAMILTON COUNTY SHALL COMPLY WITH THE CURRENT "RULES AND REGULATIONS" OF THE PLANNING AND DEVELOPMENT DEPARTMENT OF HAMILTON COUNTY, GOVERNING THE DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE AND USE IN THE COUNTY OF HAMILTON STORM DRAINAGE SYSTEM. COPIES OF THESE "RULES AND REGULATIONS" ARE AVAILABLE AT THE DEPARTMENT OF PLANNING AND

DEVELOPMENT, ROOM 801 COUNTY ADMINISTRATION BUILDING, 138 EAST COURT STREET, CINCINNATI, OHIO 45202. 2. ALL STORM SEWER, SURFACE DRAINAGE AND DETENTION/RETENTION FACILITY CONSTRUCTION AND MATERIAL SHALL BE IN ACCORDANCE WITH THE STATE OF OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT EDITION.

3.ALL STORM SEWER, SURFACE DRAINAGE (EXCEPT FOR STORM SEWER WITHIN COUNTY ROAD RIGHT-OF- WAY) AND DETENTION/RETENTION FACILITY CONSTRUCTION TO BE UNDER THE INSPECTION AND SUPERVISION OF THE HAMILTON COUNTY PLANNING AND DEVELOPMENT DEPARTMENT. PHONE (513) 946-4550

AT LEAST 24 HOURS IN ADVANCE OF CONSTRUCTION. STORM SYSTEMS CONSTRUCTED WITHIN COUNTY ROAD RIGHT-OF-WAY IS TO BE INSPECTED BY THE HAMILTON COUNTY ENGINEER.

4.UNLESS OTHERWISE SPECIFIED, STORM SEWER PIPE SHALL BE TYPE "C" CONDUIT 706.02, CLASS IV. BEDDING AND BACKFILL IS TO COMPLY WITH ODOT 611.06 FOR ALL STORM SEWERS.

5. THERMOPLASTIC STORM SEWER PIPE MAY BE SUBSTITUTED FOR CONCRETE PIPE. THE TYPE OF PIPE AND ASTM OR AASHTO NUMBERS MUST APPEAR ON THE PLANS AND PROFILES. ALSO, THE PIPES SHALL BE STAMPED BY THE MANUFACTURER PRIOR TO SHIPMENT FOR FIELD VERIFICATION. THE PIPE SHALL COMPLY WITH THE SPECIFICATIONS OF THE HAMILTON COUNTY PLANNING AND DEVELOPMENT RULES AND REGULATIONS. (SECTION ST 713(b)). 6.UNLESS OTHERWISE SPECIFIED, STORM SEWER MANHOLES ARE TO BE ODOT STD NO. 1, STD. NO. 3 OR STD. NO.5, AND CATCH BASINS ARE TO BE ODOT STD. CATCH

BASINS. ALL CATCH BASIN OUTLET PIPES CONNECTING TO MANHOLES ARE TO BE SLOPED AT 2% UNLESS OTHERWISE SPECIFIED. MAXIMUM PERMITTED DEPTH OF ODOT STD

CATCH BASINS SHALL BE AS FOLLOWS: CB-3A, CB2-2-A, CB2-2C, AND CB2-2-B: 4'0" CB-3 AND CB-3M: 6'-0"

CB-3MH: 12'-0" SHOULD IT BECOME NECESSARY TO INCREASE DEPTHS BEYOND 12'-0", REINFORCED CONCRETE WALLS SHALL BE USED. DEVELOPER SHALL SUBMIT DESIGN DETAILS FOR APPROVAL.

7.ALL WINGWALL HEADWALLS DESIGNATED AS (STD. H.W.) OR (W.W.H.W.) SHALL BE HAMILTON COUNTY DEPARTMENT OF PLANNING AND DEVELOPMENT STD.

PLATE 5 WINGWALL HEADWALL. 8.RCP INDICATES ITEM 601 ROCK CHANNEL PROTECTION. DIMENSIONS ON PLAN INDICATE SIZE (TYPE B, C, ETC.), WIDTH AND LENGTH AND DEPTH.

9.COMPACTED FILLS ARE TO BE MADE TO A MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID SEWERS. ALL FILLS SHALL BE CONTROLLED, COMPACTED AND INSPECTED BY AN APPROVED TESTING LABORATORY OR AN INSPECTOR FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

10. ALL PROPOSED PRIVATE STORM SEWERS AND SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE PROPERTY OWNER FOR NONRESIDENTIAL DEVELOPMENTS.

11. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH STATE OF OHIO SPECIFICATION ITEM 659.

12. STEPS SHALL BE PROVIDED IN ALL CATCH BASINS WHERE THE DEPTH EXCEEDS 4'-0" AND SHALL MEET THE REQUIREMENTS OF THE STATE OF OHIO STD. CONSTRUCTION DRAWING MH-1. 13. NO DIRECT CONNECTIONS OF EFFLUENT PIPES FROM HOUSEHOLD SEWAGE DISPOSAL SYSTEMS ARE PERMITTED TO CLOSED PUBLIC STORM DRAINAGE

SYSTEMS. FURTHERMORE, THE DISCHARGE SHALL NOT ENTER THE PUBLIC STORM SEWER.

14. TEMPORARY EROSION, SEDIMENT AND DEBRIS CONTROL ACCORDING TO STORM DRAIN INLET PROTECTION UNDER CHAPTER 6 OF THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL (RLDM) MUST BE PROVIDED FOR AT ALL CATCH BASINS, INLETS AND THE INLET SIDE OF ALL NEW PIPE OPENINGS, OR APPROVED EOUAL.

15. TEMPORARY EROSION, SEDIMENT AND DEBRIS CONTROL USING A ROCK CHECK DAM ACCORDING TO CHAPTER 5 OF THE RLDM MUST BE PROVIDED FOR AT THE OUTLET DITCH, SWALE, WATERCOURSE OR PIPE. SEE APPROVED PLANS FOR ANY OTHER SPECIFIC LOCATIONS, ALSO, OR APPROVED EQUAL.

16. IN ADDITION TO ANY TEMPORARY EROSION, SEDIMENT, AND DEBRIS CONTROL DETAILS AND NOTES SHOWN ON THE PLANS, THE DEVELOPER SHALL CONSTRUCT TEMPORARY SEDIMENT BASINS, EARTH DIKES, TEMPORARY OR PERMANENT SEEDING, MULCHING AND/OR MULCH NETTING OR ANY OTHER GENERALLY ACCEPTED METHODS TO PREVENT EROSION, MUD AND DEBRIS FROM BEING DEPOSITED ON OTHER PROPERTY, ON NEWLY CONSTRUCTED OR EXISTING ROADS, OR INTO EXISTING SEWERS OR NEW SEWERS WITHIN THE DEVELOPMENT. THE DEVELOPER SHALL CONTINUALLY MONITOR THE CONSTRUCTION PROGRESS AND MAKE ANY NECESSARY TEMPORARY ADJUSTMENTS TO MAINTAIN THIS CONTROL.

PRIVATE DRAINAGE AND/OR STORM SEWER EASEMENT FOR STORM WATER DETENTION/RETENTION FACILITY

PRIVATE STORM DRAINAGE/SEWER LIMITS FOR STORM WATER DETENTION SHOWN ON THIS PLAN ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY AND THE COUNTY OF HAMILTON IS NOT OBLIGATED TO MAINTAIN OR REPAIR ANY CHANNELS OR INSTALLATIONS IN SAID LIMITS. THE SAID LIMIT AREA AND ALL IMPROVEMENTS IN IT SHALL BE MAINTAINED CONTINUOUSLY BY THE LEGAL OWNER(S) FOR NONRESIDENTIAL DEVELOPMENTS. THE SAID LIMIT AREA AND ALL IMPROVEMENTS IN IT SHALL BE MAINTAINED CONTINUOUSLY BY THE HOME OWNER'S ASSOCIATION (HOA) OR THE PROPORTIONAL DISTRIBUTION OF THE PROPERTY OWNERS WITHIN THE DEVELOPMENT IF THE HOA IS DISSOLVED OR NOT FORMED FOR RESIDENTIAL DEVELOPMENTS. NO STRUCTURES, PLANTING OR OTHER MATERIAL, SHALL BE PLACED OR PERMITTED TO REMAIN WHICH MAY OBSTRUCT, RETARD OR CHANGE THE DIRECTION OF THE FLOW OF WATER THROUGH THE DRAINAGE CHANNEL IN THE SAID LIMITS.

THE LOCATION OF THE PRIVATE STORM DRAINAGE/SEWER LIMITS MUST BE PREPARED BY THE DEVELOPER OR HIS ENGINEER ON AN EASEMENT AND/OR RECORD PLAT BY THE METES AND BOUNDS DESCRIPTION. THE PLAT IS TO BE SUBMITTED TO THE HAMILTON COUNTY DEPARTMENT OF PLANNING AND DEVELOPMENT FOR REVIEW AND APPROVAL PRIOR TO THE DEVELOPER OR HIS ENGINEER HAVING THE PLAT RECORDED. THE DEVELOPER OR HIS ENGINEER IS TO SUBMIT A PRINT OF THE RECORDED PLAT TO THE HAMILTON COUNTY DEPARTMENT OF PLANNING AND DEVELOPMENT FOR THEIR FILE AND RECORDS PRIOR TO APPROVAL OF THE FINAL DEVELOPMENT PLANS OR CERTIFICATE OF OCCUPANCY.









D E S I G McGill Smith	N Pu	nshon
 Architecture Engineering Landscape Architecture Planning Surveying 	3700 Cincinn Phone ! www.ms	Park 42 Drive Suite 190B ati OH 45241 513.759.0004 spdesign.com
Project Manager Drawn By DWG 1 X-Ref(s)	759910	DAS BCC 04-IMP-CON
Issue/Revision	No.	Date
Copyright 2021, McGILL S DOUM ALL SM DOUM CONTRACTOR	MITH PL MITH PL D F O GLAS LEN ITH I 622 LER I F F T T T T T T	NSHON, Inc.

MILITARY SURVEY No. 1126 ANDERSON TOWNSHIP, HAMILTON COUNTY, OHIO

JOHNSON HILL PARK PARKING LOT EXPANSION

Sheet Title

LAYOUT & UTILITY PLAN

17599.10

AS NOTED

C4

17599

Project Number Drawing Scale Sheet Number File Number





GRADING PLAN NOTES

- 1. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH A REPRESENTATIVE OF THE OWNER/DEVELOPER AND GENERAL CONTRACTOR.
- 2. CUT/FILLS & BULK EARTHWORK FOR THE SITE MUST BE PERFORMED UNDER THE OBSERVATION & GUIDANCE OF A STATE OF OHIO REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER. A COPY OF THE GEOTECHNICAL REPORT IS TO BE FORWARDED TO THE HCSW DISTRICT.
- 3. THE CONTRACTOR IS TO CONFIRM ALL EXISTING UTILITY LOCATIONS AND PROTECT THEM FROM DAMAGE. IF DISCREPANCIES EXIST, NOTIFY THE PROPER UTILITY COMPANY OR AGENCY. RELOCATION OF EXISTING UTILITIES WILL BE DONE IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY OR AGENCY RULES AND REGULATIONS.
- 4. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH, AND COMPLY WITH, THE SOILS REPORT PREPARED BY THE GEOTECHNICAL ENGINEER.
- 5. ESTABLISH VEGETATION ON ALL BARE AREAS AS PER O.E.P.A., N.P.D.E.D. REGULATIONS. 6. AREA DISTURBED IS LESS THAN 1.0 AC. NPDES PERMIT IS NOT REQUIRED.
- 7. EROSION AND SEDIMENT CONTROLS SHALL BE ESTABLISHED AROUND THE PERIMETER OF THE SITE BEFORE ANY EARTH DISTURBING ACTIVITIES HAVE BEGUN. SILT FENCE SHOULD BE USED AS A TEMPORARY MEASURE AGAINST SILT BEING WASHED ONTO THE ADJACENT PROPERTIES
- 8. THE HAMILTON COUNTY SOIL AND WATER CONSERVATION DISTRICT SHALL BE NOTIFIED 48 HOURS PRIOR TO COMMENCEMENT OF EARTH DISTURBING ACTIVITIES.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT PUBLIC ROADS & PRIVATE DRIVES CLEAN AND FREE OF MUD AND DEBRIS. 10. RELOCATE AND RE-ESTABLISH CONSTRUCTION ENTRANCE AS NECESSARY TO ACCOMODATE DEMOLITION WORK, BUILDING CONSTRUCTION AND UTIILTY CONSTRUCTION.
- 11. THE CONTRACTOR SHALL INITIATE EROSION & SEDIMENT CONTROL PRACTICES ON ALL DISTURBED AREAS WITHIN SEVEN (7) DAYS IF THE DISTURBED AREAS ARE TO REMAIN UNDISTURBED FOR MORE THAN FORTY- FIVE (45) DAYS.
- 12. TEMPORARY EROSION, MUD AND DEBRIS CONTROL USING SILT FENCE MUST BE PROVIDED AT ALL EXISTING AND PROPOSED OUTLET DITCHES SWALES, WATERCOURSES OR TEMPORARY PIPE OUTLETS WITHIN THE SITE LIMITS. EXCESS BUILD UP OF SEDIMENT AND DEBRIS DEPOSITED AT THESE TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED WHEN HALF FULL OF SEDIMENT AND DEBRIS.
- 13. UPON COMPLETION OF CONSTRUCTION, REMOVE AND PROPERLY DISPOSE OF ALL EROSION AND SEDIMENT CONTROL BMP'S AND STABILIZE ALL DISTURBED AREAS.
- 14. PARKING LOTS SHALL BE GRADED TO ASSURE POSITIVE FLOW TOWARDS THE STORM SEWER INLETS.
- 15. ALL PROPOSED SPOT ELEVATIONS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS. 16. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.

MAINTENANCE OF CONTROLS

- SHOULD THE FABRIC ON A FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
- 2. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. 3. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE PREPARED FOR SEEDING.

INSPECTIONS DURING CONSTRUCTION PERIOD



<u>SECTION A-A</u>

STONE CONSTRUCTION ENTRANCE N.T.S.

STABILIZATION. DISTURBED AREAS MUST BE STABILIZED AS SPECIFIED IN

Table 1: Permanent Stabilization

nent stabilization	Time frame to apply erosion controls
ormant for one	Within seven days of the most recent disturbance
et of a surface at final grade	Within two days of reaching final grade
grade	Within seven days of reaching final grade within that area

Table 2: Temporary Stabilization

nent stabilization	Time frame to apply erosion controls
hin 50 feet of a ate and not a final	Within two days of the most recent disturbance if the area will remain idle for more than 14 days
vities, any l be dormant for ess than one year, f a surface water	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).
l be idle over	Prior to the onset of winter weather

WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES SHALL BE EMPLOYED. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENFORCING OFFICIAL BEFORE IMPLEMENTING ALTERNATIVE STABILIZATION TECHNIQUES PER SECTION 310(N) OF THE HAMILTON COUNTY

PERMANENT STABILIZATION OF DITCHES: SPECIAL MEASURES SHALL BE UNDERTAKEN TO STABILIZE DITCHES AND PREVENT EROSIVE FLOWS. MEASURES MAY INCLUDE SEEDING, DORMANT SEEDING (AS DEFINED IN THE LATEST EDITION OF THE RAINWATER AND LAND DEVELOPMENT MANUAL), MULCHING, EROSION CONTROL MATTING, SODDING, RIPRAP, NATURAL DESIGN WITH BIOENGINEERING TECHNIQUES OR ROCK CHECK DAMS.

<u>RUNOFF CONTROL PRACTICES:</u> THE PROJECT SHALL INCORPORATE MEASURES WHICH CONTROL THE FLOW OF RUNOFF FROM DISTURBED AREAS SO AS TO PREVENT EROSION FROM OCCURRING. SUCH PRACTICES MAY INCLUDE ROCK CHECK DAMS, PIPE SLOPE DRAINS, DIVERSIONS TO DIRECT FLOW AWAY FROM EXPOSED SOILS AND PROTECTIVE GRADING PRACTICES. THESE PRACTICES SHALL DIVERT RUNOFF AWAY FROM DISTURBED



1-800-362-2764 CALL TWO WORKING DAYS BEFORE YOU DIG (NON MEMBERS MUST BE CALLED DIRECTLY)



Architecture 3700 Park 42 Drive Engineering Suite 190B ■ Landscape Architecture Cincinnati OH 45241

Planning Phone 513.759.0004 Surveying www.mspdesign.com

Project Manager DAS BCC Drawn By 17599104-IMP-CON DWG X-Ref(s)



C Copyright 2021, McGILL SMITH PUNSHON, Inc.



ARK SION 0 Ζ 4 XP F ш Ζ 0 U S ARKIN NHO Δ

.126 COUN⁻ JRVEY No. 1 HAMILTON MILITARY SU I TOWNSHIP, I DERSON

Ο

Sheet Title

S.W.P.P.P/GRADING PLAN

Project Number Drawing Scale Sheet Number File Number

17599.10 AS NOTED C5 17599

A V



WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENFORCING OFFICIAL BEFORE IMPLEMENTING

- 1. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH A REPRESENTATIVE OF THE OWNER/DEVELOPER AND GENERAL CONTRACTOR.
- 2. CUT/FILLS & BULK EARTHWORK FOR THE SITE MUST BE PERFORMED UNDER THE OBSERVATION & GUIDANCE OF A STATE OF OHIO REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER. A COPY OF THE GEOTECHNICAL REPORT IS TO BE FORWARDED TO THE HCSW DISTRICT.
- THE CONTRACTOR IS TO CONFIRM ALL EXISTING UTILITY LOCATIONS AND PROTECT THEM FROM DAMAGE. IF DISCREPANCIES EXIST, NOTIFY THE PROPER UTILITY COMPANY OR AGENCY. RELOCATION OF EXISTING UTILITIES WILL BE DONE IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY OR AGENCY RULES AND REGULATIONS.
- 4. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH, AND COMPLY WITH, THE SOILS REPORT PREPARED BY THE GEOTECHNICAL
- 5. ESTABLISH VEGETATION ON ALL BARE AREAS AS PER O.E.P.A., N.P.D.E.D. REGULATIONS.
- 7. EROSION AND SEDIMENT CONTROLS SHALL BE ESTABLISHED AROUND THE PERIMETER OF THE SITE BEFORE ANY EARTH DISTURBING ACTIVITIES HAVE BEGUN. SILT FENCE SHOULD BE USED AS A TEMPORARY MEASURE AGAINST SILT BEING WASHED ONTO THE ADJACENT
- 8. THE HAMILTON COUNTY SOIL AND WATER CONSERVATION DISTRICT SHALL BE NOTIFIED 48 HOURS PRIOR TO COMMENCEMENT OF EARTH
- 10. RELOCATE AND RE-ESTABLISH CONSTRUCTION ENTRANCE AS NECESSARY TO ACCOMODATE DEMOLITION WORK, BUILDING CONSTRUCTION
- 11. THE CONTRACTOR SHALL INITIATE EROSION & SEDIMENT CONTROL PRACTICES ON ALL DISTURBED AREAS WITHIN SEVEN (7) DAYS IF THE DISTURBED AREAS ARE TO REMAIN UNDISTURBED FOR MORE THAN FORTY- FIVE (45) DAYS.
- 12. TEMPORARY EROSION, MUD AND DEBRIS CONTROL USING SILT FENCE MUST BE PROVIDED AT ALL EXISTING AND PROPOSED OUTLET DITCHES SWALES, WATERCOURSES OR TEMPORARY PIPE OUTLETS WITHIN THE SITE LIMITS. EXCESS BUILD UP OF SEDIMENT AND DEBRIS DEPOSITED AT THESE TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED WHEN HALF FULL OF SEDIMENT AND DEBRIS.
- 13. UPON COMPLETION OF CONSTRUCTION, REMOVE AND PROPERLY DISPOSE OF ALL EROSION AND SEDIMENT CONTROL BMP'S AND STABILIZE
- 14. PARKING LOTS SHALL BE GRADED TO ASSURE POSITIVE FLOW TOWARDS THE STORM SEWER INLETS.
- 15. ALL PROPOSED SPOT ELEVATIONS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
- 16. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.

- 1. SHOULD THE FABRIC ON A FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
- 2. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. 3. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO

nanent stabilization	Time frame to apply erosion controls
e dormant for one	Within seven days of the most recent disturbance
feet of a surface nd at final grade	Within two days of reaching final grade
nal grade	Within seven days of reaching final grade within that area

nanent stabilization	Time frame to apply erosion controls
within 50 feet of a State and not a final	Within two days of the most recent disturbance if the area will remain idle for more than 14 days
activities, any will be dormant for ut less than one year, at of a surface water	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).
will be idle over	Prior to the onset of winter weather

				5		a provide the second se
D E	S		G	N	AX nsho	

3700 Park 42 Drive

Architecture Engineering Landscape Architecture Planning

Surveying

X-Ref(s)

Suite 190B Cincinnati OH 45241 Phone 513.759.0004 www.mspdesign.com

DAS **Project Manager** BCC Drawn By DWG 17599104-IMP-CON

ssue/Revision	No.	Date



RK 0 5 0 0 2 \bigcirc 0 0 SNHO RKIN 0 Constanting of

. 1126 N COUNT /EY No. > < R I \supset MILITARY SU TOWNSHIP, ERSON

 \square

ZZ

C

Sheet Title

S.W.P.P.P/GRADING ΡΙΔΝ

	PLAI
Project Number	17599.1
Drawing Scale	AS NOTEI
Sheet Number	C5
File Number	1759



Specifications

Permanent Seeding

SITE PREPARATION

1. A 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.

The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.

3. Resoil shall be applied where needed to establish vegetation

1. Lime-Agricultural ground limestone shall be applied to acid soil as

SEEDBED PREPARATION

recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lbs./1,000 sq. ft. or 2 tons/ac.

2. Fertilizer-Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac/ of 10-10-10 or 12-12-12 analysis.

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 in. 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 Aug. 1 to September 30

These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season Tillage/ 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 shall not be planted 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, and the required amounts of lime and fertilizer, then mulch and anchor After November 20, and before March 15, broadcast the selected seed mixture, mulch and anchor. 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 ing rates by 50

* 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 is used, the seedbed should be firmed following seeding operations with a cultipacke roller or light drag. On sloping land, seeding operations should be on the contour where feasible.

MULCHING

type of seeding.

1. Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates on ve mulch stabili be mu

with favorable soil conditio ery flat areas may not need h to achieve adequate lization. Dormant seeding ulched.	ons and d		
Permanent Seeding			
Cood Mix	Seeding Rate		Notoci
Seed MIX	lb./ac.	lb./1.000 ft. ²	Notes:

	.,			
General Use				
Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass	20-40 10-20 10-20	1/2-1 1/4-1/2 1/4-1/2		
Tall Fescue	40	1		
Dwarf Fescue	40	1		
	Steep	Banks or Cut Slope	es	
Tall Fescue	40	1		
Crown Vetch Tall Fescue	10 20	1/4 1/2	Do not seed later than August	
Flat Pea Tall Fescue	20 20	1/2 1/2	Do not seed later than August	
	Road	Ditches and Swale	25	
Tall Fescue	40	1		
Dwarf Fescue Kentucky Bluegrass	90 5	2 1/4		
Lawns				
Kentucky Bluegrass Perennial Ryegrass	60 60	1 1/2 1 1/2		
Kentucky Bluegrass Creeping Red Fescue	60 60	1 1/2 1 1/2	For shaded areas	
Note: Other approved seed species may b	oe substituted.			

2. Materials

* Straw-If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales The mulch shall be spread uniformly by hand or mechanically 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 used at 2,000 lb./ac/ or 46 lb./1,000 sq. ft.

* Other-Other acceptable mulches include mulch mattings applied according to manufacturer's ecommendations or wood chips applied at 6 tons/ac.

3. Straw Mulch Anchoring Methods 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 in.

* Mulch Nettings-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 manufacturer or at the rate of 160 gal. /ac.

* Synthetic Binders-Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack o equivalent may be used at rates recommended by manufacturer

* Wood Cellulose Fiber-Wood cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lbs./100 gal.

IRRIGATION 1. Permanent seeding shall include irrigation to establish vegetation during dry or hot weather or on adverse site conditions as needed for adequate moisture for seed germination and plant growth.

2. Excessive irrigation rates shall be avoided and irrigation monitored to prevent erosion and damage from

1. Permanent seeding shall not be considered established for at least 1 full year from the time of planting Seeded areas shall be inspected for failure and reestablished as needed Depending on site conditions, it may be necessary to irrigate, fertilize, overseed, or reestablish plantings in 2. Maintenance fertilization rates shall be established by soil test recommendations or by using the rates shown in the following table.

Time

order to provide permanent vegetation for adequate erosion control. Maintenance for Permanent Seedings Fertilization and Mowing Formula | lb./ac. | lb./1.000 ft. Mixture

Creeping Red Fescue Ryegrass Kentucky Bluegrass	10-10-10	500	12	
Tall Fescue	10-10-10	500	12	Fall, yearly or as needed.
Dwarf Fescue	10-10-10	500	12	
Crown Verch Fescue	0-20-20	400	10	Spring, yearly following establish-
Flat Pea Fescue	0-20-20	400	10	ment and every 4-7 yr. thereafter.
Note: Following soil test recommend	ations is preferred to fert	ilizer rates shown a	above.	

Specifications

Permanent Seedina

Specifications for

lemporary Seeding

Temporary Seeding Species Selection			
Seeding Dates	Species	lb./1.000 ft. ²	
March 1 to August 15	Oats	3	4
	Tall Fescus	1	4
	Annual Ryegrass	1	4
	Perennial Ryegrass	1	4
	Tall Fescus	1	4
	Annual Ryegrass	1	4
August 16 to November 1	Rye	3	2
	Tall Fescus	1	4
	Annual Ryegrass	1	4
	Wheat	3	2
	Tall Fescus	1	4
	Annual Ryegrass	1	4
	Perennial Ryegrass	1	4
	Tall Fescus	1	4
	Annual Ryegrass	1	4
November 1 to Spring Seeding	Use mulch only, sodding	practices or domant seeding	g

Note: Other approved seed species may be substitute

1. 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

2. Temporary seed shall be applied between construction operations or soil that will not be graded or reworked for 45 days or more. These idle areas should be seeded as soon as possible after grading or shall be seeded within 7 days Several applications of temporary seeding are necessary on typical construction projects.

3. The seedbed should be pulverized and loose to ensure the success of establishing vegetation. However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible.

4. Soil Amendments-Applications of temporary vegetation shall establish adequate stands of vegetation that may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.

5. Seeding Method-Seed shall be applied uniformly with a cyclone seeder, drill, cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking and 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

MULCHING TEMPORARY SEEDING

1. Applications of temporary seeding shall include mulch that shall be applied during or immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on verv flat areas may not need mulch to achieve adequate stabilization.

2. Materials: * Straw-If straw is used, it shall be

unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lbs./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically 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 used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.

* Other-Other acceptable mulches include mulch matting applie according to manufacturer's recommendations or wood chips applied at 6 tons/ac.

3. Straw mulch shall be anchored immediately to minimize loss by wind or water.

4. 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 generally, be left longer than 6 in.

* Mulch Nettings-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 manufacturer or at the rate of 160 gal./ac.

* Synthetic Binders-Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equivalent may be used at rates recommended by manufacturer

* Wood Cellulose Fiber-Wood cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lbs./100 gal.



immediately and without interruption.

Specifications for Mulching

1. Mulch and/or other appropriate vegetative practices shall be applied to disturbed areas within 7 days of grading if the area is to remain dormant (undisturbed) for more than 45 days or on areas and portions of the site which can be brought to final grade.

2. Mulch shall consist of one of the following:

* Straw-Straw shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lbs./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically 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.

* Hvdroseeders-Wood cellulose fiber should be used at 2,000 lb./ac. or 46 lbs./1,000 sq. ft.

* Other-Other acceptable mulches

include mulch matting applied according to manufacturer's ecommendations or wood chips applied at 10-20 tons/ac. 3. Mulch Anchoring-Mulch shall be

anchored immediately to minimize loss by wind or runoff. The following are accepted methods for anchoring mulch:

* Mechanical-Use a disk, crimper or similar type tool 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 in.

* Mulch Nettings-Use according to the manufacturer's recommendations, following all placement and anchoring suggestions. Use in areas of water concentration and steep slopes to hold mulch in place.

* Asphalt Emulsion-For straw mulch, apply at the rate of 160 gal. /ac. (0.1 gal. /sy) into the mulch as it is being applied or as recommended by the manufacturer.

* Synthetic Binders-For straw mulch, synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equivalen may be used at rates recommended by manufacturer.

* Wood Cellulose Fiber-Wood cellulose fiber may be used for anchoring straw. The fiber binde shall be applied at a net dry weight of 750 lb./acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lbs./100 gal.



Specifications for

Silt Fence

1. Silt fence shall be constructed before upslope land disturbance

Joining Sections of Silt Fence

2. All silt fences 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, which may carry small concentrated flows to the silt fence, are dissipated along its

3. To prevent water ponded by the silt fence from flowing around the ends, each end shall be constructed upslope so that the ends are at a higher elevation

4. Where possible, silt fence shall be placed on the flattest area available. 5. Where possible, vegetation shall be preserved for 5 ft. (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the

6. The height of the silt fence shall be a minimum of 16 in, above the original ground surface.

installation of the silt fence.

7. The silt fence shall be placed in a trench cut a minimum of 6 in. deep. The trench shall be cut with a trencher, cable laying machine, or other suitable device that will ensure an adequately uniform trench depth.

8. The silt fence shall be placed with the stakes on the downslope side of the geotextile and so that 8-in. of cloth are below the ground surface Excess material shall lie on the bottom of the 6-in. deep trench The trench shall be backfilled and compacted.

9. Seams between section of silt fence shall be overlapped with the end stakes of each section wrapped together before driving into the ground.

10. Maintenance-Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence. flows under or around ends, or in any other way becomes a concentrated flow, on of the following shall be performed, 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. Criteria for Silt Fence Materials 1. Fence Posts-The length shall be a

minimum of 32 in. long. Wood posts will be 2-by-2 in. of hardwood of sound quality. The maximum spacing between posts shall be 10 ft.

2. Silt Fence Fabric shall be ODOT Type C Geotextile Fabric or as described by the chart below:



Specifications Inlet Protection in Swales, Ditch Lines or Yard Inlets



land disturbance begins or before the storm drain becomes operational.

The earth around the inlet shall be excavated completely to a depth of at least 18 in.

3. The wooden frame shall be constructed of 2-by-4 in. construction grade lumber. The 2-by-4 in. posts shall be driven 1 ft. into the ground at four corners of the inlet and the top portion of 2-by-4 in. frame assembled using the overlap joint shown. The top o the frame shall be at least 6 in. below adjacent roads if ponded water would pose a safety hazard to traffic.

4. Wire mesh shall be of sufficient strength to support fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely to the

sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. It shall extend from the top of the frame to 18 in. below the inlet notch elevation. The geotextile shall overlap across one side of the inlet so the ends of the cloth are not fastened to the same post.

6. Backfill shall be placed around the inlet in compacted 6-in. layers until the earth is even with notch elevation on ends and top elevation on sides.

A compacted earth dike or a check dam shall be constructed in the ditch line below the inlet if the inlet is not in a depression and if runoff bypassing the inlet will not flow to a settling pond. The top of the earth dikes shall be at least 6 in. higher than the top of the frame.

The Contractor must provide BMPs for pollutant sources other than sediment. Nonsediment pollutant sources, which may be present on a construction site, include paving operations, concrete washout, structure painting, structure cleaning, demolition debris disposal, drilling and blasting operations, material storage, slag, solid waste, hazardous waste, contaminated soils, sanitary and septic wastes, vehicle fueling and maintenance activities, and landscaping operations. No solid or liquid waste, including building materials, shall be discharged in storm water runoff. The permittee must implement all necessary BMPs to prevent the discharge of non-sediment pollutants to the drainage system of the site or surface waters of the State. (Attached also is page 27 and 28 of the OEPA General Permit that addresses non sediment pollutants)

Other controls. The SWP3 must also provide BMPs for pollutant sources other than sediment. Non-sediment pollutant sources, which may be present on a construction site, include paving operations, concrete washout, structure painting, structure cleaning, demolition debris disposal, drilling and blasting operations, material storage, slag, solid waste, hazardous waste, contaminated soils, sanitary and septic wastes, vehicle fueling and maintenance activities, and landscaping operations. Contractor shall obtain approval from the enforcing official prior to implementation of the BMPs.

Non-Sediment Pollutant Controls. No solid or liquid waste, including building materials, shall be discharged in storm water runoff. The permittee must implement all necessary BMPs to prevent the discharge of non-sediment pollutants to the drainage system of the site or surface waters of the State. Under no circumstance shall concrete trucks wash out directly into a drainage channel, storm sewer or surface waters of the State. No exposure of storm water to waste materials is recommended.

Off-site traffic. Off-site vehicle tracking of sediments and dust generation shall be minimized.

Compliance with other requirements. The SWP3 shall be consistent with applicable State and/or local waste disposal, sanitary sewer or septic system regulations, including provisions prohibiting waste disposal by open burning and shall provide for the proper disposal of contaminated soils to the extent these are located within the permitted area.

Trench and ground water control. There shall be no turbid discharges to surface waters of the State resulting from dewatering activities. If trench or ground water contains sediment, it must pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging ground water to ensure that it does not become pollutantladen by traversing over disturbed soils or other pollutant sources.

Contaminated Sediment. Where construction activities are to occur on sites with contamination from previous activities, operators must be aware that concentrations of materials that meet other criteria (is not considered a Hazardous Waste, meeting VAP standards, etc.) may still result in storm water discharges in excess of Ohio Water Quality Standards. Such discharges are not authorized by this permit. Appropriate BMPs include, but are not limited to:

- The use of berms, trenches, and pits to collect contaminated runoff and prevent discharges;
- Pumping runoff into a sanitary sewer (with prior approval of the sanitary sewer operator) or into a container for transport to an appropriate treatment/disposal facility; and
- Covering areas of contamination with tarps or other methods that prevent storm water from coming into contact with the material. Operators should consult with Ohio EPA Division of Surface Water prior to seeking permit coverage.

Maintenance. All temporary and permanent control practices shall be maintained and repaired as needed 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. The SWP3 shall be designed to minimize maintenance requirements. The applicant shall provide a description of maintenance procedures needed to ensure the continued performance of control practices



GENERAL NOTES

- 1. PROJECT INVOLVES THE CONSTRUCTION OF A PARKING LOT WITH SUPPORTING INFRASTRUCTURE.
- 2. AREA TO BE DISTURBED IS APPROXIMATELY 0.80 ACRES.

3. PRE-CONSTRUCTION RUNOFF COEFFICIENT IS 0.30. POST-CONSTRUCTION RUNOFF COEFFICIENT IS 0.57.

- 4. THE PREDOMINATE SOIL TYPE IS URBAN LAND-AFLIC UNDARENTS AVUNBURB COMPLEX 0 TO 12° 5. PERCENT GRADES & URBAN LAND UDORTHENTS COMPLEX 0 TO 12° PERCANT SLOPES.
- 6. DRY RUN CREEK IS THE FIRST NAMED STREAM RECEIVING RUNOFF FROM THIS SITE.
- PROJECT DURATION: THRU 2021
- 8. UNLESS OTHERWISE NOTED, STANDARDS AND SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE OHIO DEPARTMENT OF NATURAL RESOURCES "RAINWATER AND LAND DEVELOPMENT" MANUAL, CURRENT EDITION, SHALL GOVERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS PLAN.
- 9. PRIOR TO COMMENCEMENT OF CONSTRUCTION OPERATIONS, ALL SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE IN PLACE.
- 10. SEDIMENT CONTROL STRUCTURES SHALL BE FUNCTIONAL THROUGHOUT THE COURSE OF EARTH DISTURBING ACTIVITY. AND SHALL CONTINUE TO FUNCTION UNTIL THE UP SLOPE DEVELOPMENT AREA IS REESTABLISHED. AS CONSTRUCTION PROGRESSES AND THE TOPOGRAPHY IS ALTERED, APPROPRIATE CONTROLS MUST BE CONSTRUCTED OR EXISTING CONTROLS ALTERED TO ADDRESS THE CHANGING DRAINAGE PATTERNS.
- 11. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF DEMOLITION AND ARE TO FINAL GRADE AND TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH STATE OF OHIO SPECIFICATION ITEM 659, AND IN ACCORDANCE WITH THE CONDITIONS OF THE NPDES STORM WATER GENERAL PERMIT.

CONSTRUCTION SEQUENCE

- 1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES.
- 2. GRADING AND STRIPPING OF THE REMAINING AREAS OF THE DEVELOPMENT SITE OR PROJECT
- 3. TEMPORARY VEGETATIVE STABILIZATION OF EROSION AND SEDIMENT CONTROL MEASURES.
- 4. GRADING OF PARKING LOT.
- 5. INSTALLATION OF ALL UTILITIES.
- 6. SITE CONSTRUCTION.

OF SLOPE

- 7. FINAL GRADING, STABILIZATION, AND LANDSCAPING.
- 8. REMOVAL OF EROSION AND SEDIMENT CONTROLS MEASURES

DUE TO THE DYNAMICS AND STAGING OF EARTH MOVEMENT. CONTRACTOR MAY NEED TO ALTER THE EROSION CONTROL MEASURES AS SHOWN HEREON. CONTRACTOR TO APPLY (B.M.P.) BEST MANAGEMENT PRACTICES IN ORDER TO CONTROL THE RUNOFF OF SILT AND SEDIMENT.

ADDITIONAL SILT FENCE MAY BE REQUIRED AS SITE CONDITIONS DETERMINE IF A TEMPORARY STOCKPILE IS CREATED, SILT FENCE SHALL BE PLACED AT THE TOE

EROSION AND SEDIMENT CONTROL MAINTENANCE NOTES

- A. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF OR THE POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWP3 SHALL BE OBSERVED TO ENSURE THAT THOSE ARE OPERATING CORRECTLY.DISCHARGE LOCATIONS SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE VEHICLE TRACKING.
- B. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED EROSION CONTROL BARRIERS, END RUNS, AND THE UNDERCUTTING OF BARRIERS BY RUNOFF.
- C. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION HAS REACHED PPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- D. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SEDIMENT CONTROL BARRIER IS NOT LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE APPROPRIATE GRADE ELEVATION, PREPARED AND SEEDED
- E. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF MUD AND DIRT BEING TRACKED ONTO THE STREETS BY INSTITUTING BEST MANAGEMENT PRACTICES
- F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST PER ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS ITEM 616

Important Inspection and Maintenance Procedure: When storage volume has been significantly reduced, clean out sediment and floatable debris.

Inspection activities shall be performed as follows. Any deficiencies that are found shall be repaired immediately.

BMP Element	Potential Deficiencies	Deficiency Remediation
Entire System	Trash/debris is present.	Remove the trash/debris.
SWO Treatment Unit	Sediment and/or oil are accumulating in the device.	Remove sediment and oil and properly dispose of it off-site.
Swq freatment onit	Structural damage has occurred in the device.	Repair or replace the device or its components as necessary.
Inlet Device	Pipe is Clogged.	Unclog the pipe. Properly dispose of sediment off-site.
	Pipe is cracked or otherwise damaged.	Replace the pipe.
	Sediment has accumulated to a depth greater than the original design depth for sediment storage.	Remove sediment and properly dispose of it off-site.
	Excessive vegetation has accumulated to a volume greater than the original design volume for sediment storage.	Remove vegetation and properly dispose of it off-site.
Basin	The basin has low areas collecting stagnant water.	Remove excessive sediment and blockages to flow, regrade the basin, as needed.
	Structural damage has occurred to concrete channels or other components.	Repair or replace the vault, piping, and/or other components as necessary.
	Oil is accumulating.	Pump the accumulated oil out of the vault or piping and dispose of it properly.
	Blocked, damaged, or plugged outlet and emergency overflow.	Clear vents from all blockages and make structural repairs as necessary.
	Clogging has occurred.	Clean out the outlet device. Properly dispose of sediment off- site.
Outlet Device and	Outlet device is damaged.	Repair or replace the outlet device.
Emergency Overflow	Erosion or other signs of damage have occurred at the outlet.	Stabilize soil within your property. Contact City of Loveland Public Works Department at 513-683-0150 for further instructions.



McGill Smith Punshon

Architecture 3700 Park 42 Drive Engineering Suite 190B Cincinnati OH 45241 Landscape Architecture Planning Phone 513.759.0004 Surveying www.mspdesign.com

Project Manager DAS BCC Drawn By DWG 17599104-IMP-CON X-Ref(s)

Issue/Revision	No.	Date

(C) Copyright 2021, McGILL SMITH PUNSHON, Inc. DOUGLAS ALLEN SMITH

X SION 1 Ζ 0 X ш Ζ 0 U RKIN 4 0

126 COUN⁻ No. E√ > < K T RY SI SHIP, MILITAI DERSON

Sheet Title

EROSION CONTROL NOTES & S.W.P.P.P. **NOTES & DETAILS**

Project Number
Drawing Scale
Sheet Number
-ile Number

1" = 20' C6 17599

17599.10

Z V



Autumn Blaze Maple Princeton Sentry Ginkgo Skyline Honey Locust	<u>3126</u> 2 1/2" - 3" CAL. B&B 2 1/2" - 3" CAL. B&B 2 1/2" - 3" CAL. B&B	5 2 3
<u>COMMON NAME</u>	<u>SIZE</u>	<u>Q</u>
Bailey`s Redtwig Dogwood	#5 CONT.	6
Royal Purple Smokebush	#7 CONT.	1
Gold Mound Spirea	#5 CONT.	7
Arrowwood Viburnum	#5 CONT.	13
<u>COMMON NAME</u>	<u>SIZE</u>	<u>Q</u>
Sea Green Juniper	#5 CONT.	7
Techny Arborvitae	4`-5` B&B	7
<u>COMMON NAME</u>	<u>SIZE</u>	<u>Q</u>
Alleghany Viburnum	4`-5` B&B	10

(NON MEMBERS MUST BE CALLED DIRECTLY)

SOUTH	3	7 (5) EXISTING	10	12	
EAST	4	existing	13	13	
INTERIOR LANDSCAPE					
PARKING LOT	6	5	12	14	
PERIMETER LANDSCAPE NORTH	1 TREE PE 1 SHRUB ,	R 30' 96 LF / 10' 96 LF	/ 30 = 3.2 / 10 = 9.6	2 TREES 5 SHRUBS	
PERIMETER LANDSCAPE SOUTH	1 TREE PE 1 SHRUB ,	R 30' 96 LF / 10' 96 LF	/ 30 = 3.2 / 10 = 9.6	2 TREES 5 SHRUBS	
PERIMETER LANDSCAPE EAST SIDE	1 TREE PE 1 SHRUB ,	R 30' 129 / / 10' 129 /	30 = 4.3 10 = 12.	3 TREES .9 SHRUBS	
INTERIOR LANDSCAPE	1 TREE PE 2 SHRUBS	R 2500 SF. S PER 2500 SF.	14513 / 250 14513 / 250	$\begin{array}{l} 0 & = 5.81 \\ 0 & = 5.8^{*2} \end{array}$	REES 2 = 11.0

CUBIC YARD) AND 2 1/3 LBS. OF BONE MEAL (PER CUBIC YARD).

Ο U No. **M**I **>** < R I IP S SH MILITA Z O S 2

 \frown

Suite 190B

DAS

CFB

17599106-PLA

LANDSCAPE PLAN

17599.10
1" = 20
L1
17599

Sł



WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENFORCING OFFICIAL BEFORE IMPLEMENTING

- 1. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH A REPRESENTATIVE OF THE OWNER/DEVELOPER AND GENERAL CONTRACTOR.
- 2. CUT/FILLS & BULK EARTHWORK FOR THE SITE MUST BE PERFORMED UNDER THE OBSERVATION & GUIDANCE OF A STATE OF OHIO REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER. A COPY OF THE GEOTECHNICAL REPORT IS TO BE FORWARDED TO THE HCSW DISTRICT.
- THE CONTRACTOR IS TO CONFIRM ALL EXISTING UTILITY LOCATIONS AND PROTECT THEM FROM DAMAGE. IF DISCREPANCIES EXIST, NOTIFY THE PROPER UTILITY COMPANY OR AGENCY. RELOCATION OF EXISTING UTILITIES WILL BE DONE IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY OR AGENCY RULES AND REGULATIONS.
- 4. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH, AND COMPLY WITH, THE SOILS REPORT PREPARED BY THE GEOTECHNICAL
- 5. ESTABLISH VEGETATION ON ALL BARE AREAS AS PER O.E.P.A., N.P.D.E.D. REGULATIONS.
- 7. EROSION AND SEDIMENT CONTROLS SHALL BE ESTABLISHED AROUND THE PERIMETER OF THE SITE BEFORE ANY EARTH DISTURBING ACTIVITIES HAVE BEGUN. SILT FENCE SHOULD BE USED AS A TEMPORARY MEASURE AGAINST SILT BEING WASHED ONTO THE ADJACENT
- 8. THE HAMILTON COUNTY SOIL AND WATER CONSERVATION DISTRICT SHALL BE NOTIFIED 48 HOURS PRIOR TO COMMENCEMENT OF EARTH
- 10. RELOCATE AND RE-ESTABLISH CONSTRUCTION ENTRANCE AS NECESSARY TO ACCOMODATE DEMOLITION WORK, BUILDING CONSTRUCTION
- 11. THE CONTRACTOR SHALL INITIATE EROSION & SEDIMENT CONTROL PRACTICES ON ALL DISTURBED AREAS WITHIN SEVEN (7) DAYS IF THE DISTURBED AREAS ARE TO REMAIN UNDISTURBED FOR MORE THAN FORTY- FIVE (45) DAYS.
- 12. TEMPORARY EROSION, MUD AND DEBRIS CONTROL USING SILT FENCE MUST BE PROVIDED AT ALL EXISTING AND PROPOSED OUTLET DITCHES SWALES, WATERCOURSES OR TEMPORARY PIPE OUTLETS WITHIN THE SITE LIMITS. EXCESS BUILD UP OF SEDIMENT AND DEBRIS DEPOSITED AT THESE TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED WHEN HALF FULL OF SEDIMENT AND DEBRIS.
- 13. UPON COMPLETION OF CONSTRUCTION, REMOVE AND PROPERLY DISPOSE OF ALL EROSION AND SEDIMENT CONTROL BMP'S AND STABILIZE
- 14. PARKING LOTS SHALL BE GRADED TO ASSURE POSITIVE FLOW TOWARDS THE STORM SEWER INLETS.
- 15. ALL PROPOSED SPOT ELEVATIONS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
- 16. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.

- 1. SHOULD THE FABRIC ON A FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
- 2. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. 3. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO

Time frame to apply erosion controls
Within seven days of the most recent disturbance
Within two days of reaching final grade
Within seven days of reaching final grade within that area

nanent stabilization	Time frame to apply erosion controls
within 50 feet of a State and not a final	Within two days of the most recent disturbance if the area will remain idle for more than 14 days
activities, any will be dormant for out less than one year, et of a surface water	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).
will be idle over	Prior to the onset of winter weather

		B			2
D	E	S I	G	N	H
Мc	Gil	l Sm	ith	Pun	shor

3700 Park 42 Drive

Architecture Engineering Landscape Architecture Planning Surveying

Cincinnati OH 45241 Phone 513.759.0004 www.mspdesign.com

Suite 190B

DAS **Project Manager** BCC Drawn By DWG 17599104-IMP-CON X-Ref(s)

ssue/Revision	No.	Date

		dan da an an an Anna a

		_



RK 0 5 0 0 2 \bigcirc 0 0 SNHO RKIN 0 Constanting of

. 1126 N COUNT /EY No. > < R I \supset MILITARY SU TOWNSHIP, ERSON

 \square

ZZ

C

Sheet Title

S.W.P.P.P/GRADING ΡΙΔΝ

	PLAI
Project Number	17599.1
Drawing Scale	AS NOTEI
Sheet Number	C5
File Number	1759

OHIO Utilities Protection SERVICE Call Before You Dig 1-800-362-2764 CALL TWO WORKING DAYS BEFORE YOU DIG (NON MEMBERS MUST BE CALLED DIRECTLY)