

A PRE-CONSTRUCTION CONFERENCE SCHEDULED BY THE ENGINEER SHALL BE HELD PRIOR TO ANY WORK STARTING. IN ADDITION, THE CONTRACTOR SHALL PROVIDE 48 HOUR NOTICE TO CONCORD TOWNSHIP, THE LAKE COUNTY ENGINEER AND STORMWATER MANAGEMENT DEPARTMENT, PAINESVILLE WATER, LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT AND THE LAKE COUNTY DEPARTMENT OF UTILITIES PRIOR TO BEGINNING WORK TO ARRANGE FOR INSPECTION.

THE STANDARD SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION, LATEST EDITION, INCLUDING ALL SUPPLEMENTAL SPECIFICATIONS AND STANDARD DRAWINGS, SHALL GOVERN THIS PROJECT.

ALL WORK CONTEMPLATED SHALL BE GOVERNED BY THE RULES, REGULATIONS AND SPECIFICATIONS OF CONCORD TOWNSHIP, THE LAKE COUNTY ENGINEER AND STORMWATER MANAGEMENT DEPARTMENT, PAINESVILLE WATER, LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT AND THE LAKE COUNTY DEPARTMENT OF UTILITIES AND AT ALL TIMES BE SUBJECT TO THEIR DIRECT SUPERVISION AND INSPECTION.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

THE DESIGNATED AREAS OF EXCAVATION AND FILL SHALL BE CLEARED AND STRIPPED BY THE CONTRACTOR PRIOR TO THE START OF ANY EARTHWORK OPERATIONS.

CLEARING AND GRUBBING SHALL BE PERFORMED WITHIN THE ENTIRE SITE AND EASEMENT AREAS. CLEARING AND GRUBBING SHALL ALSO INCLUDE STUMP REMOVAL.

ALL STUMPS, TREES AND OTHER CONSTRUCTION DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR AND THE COST THEREOF INCLUDED IN ITEMS CONTAINED IN THE BID.

THE CONTRACTOR SHALL STRIP ALL TOPSOIL AS DIRECTED BY THE OWNER AND STOCKPILE THE TOPSOIL IN THE AREAS DESIGNATED BY THE OWNER FOR RESPREADING.

THE CONTRACTOR SHALL PLACE AND COMPACT ALL SUITABLE FILL MATERIAL EXCAVATED DURING HIS CONSTRUCTION OPERATIONS WITHIN THE FILL AREAS DESIGNATED ON THE IMPROVEMENT PLANS. THE FINAL GRADE OF THE EXCAVATED AND FILLED AREAS SHALL CORRESPOND TO THE PROPOSED GRADES SHOWN ON THE IMPROVEMENT PLANS.

ALL EMBANKMENT CONSTRUCTION SHALL CONFORM TO O.D.O.T. ITEM 203 SPECIFICATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A SOILS ENGINEER FOR ALL SOILS ANALYSIS AND TESTING REQUIRED.

DUCTILE IRON PIPE SHALL CONFORM TO AWWA C150 AND C151, THICKNESS CL 52 MINIMUM (ASTM A746); FITTINGS SHALL CONFORM TO AWWA C153; JOINTS SHALL CONFORM TO AWWA C111 WITH RUBBER GASKETS.

VITRIFIED CLAY PIPE AND FITTINGS SHALL CONFORM TO ASTM C700 EXTRA STRENGTH WITH PREMIUM JOINTS MEETING THE REQUIREMENTS OF ASTM C425.

MATERIAL SPECIFICATIONS

MATERIAL SPECIFICATIONS CALLED FOR ON THE PLANS REPRESENT THE MINIMUM REQUIRED FOR EACH APPLICATION. THE OWNER MAY REQUEST OR THE CONTRACTOR MAY DESIRE TO SUBSTITUTE ALTERNATE MATERIALS. ANY SUCH SUBSTITUTIONS MUST BE EQUIVALENT IN QUALITY TO THE MATERIAL CALLED FOR AND MUST BE APPROVED IN WRITING BY THE APPROVING AGENCIES AND THE CONSULTING ENGINEER.

ALL SANITARY AND LATERALS RUNNING UNDERNEATH PAVEMENT SHALL BE BACK FILLED WITH GRANULAR MATERIAL AS PER TRENCH AND BEDDING DETAIL.

SLAG SHALL NOT BE USED FOR BEDDING, BACK FILL OR ANY OTHER PROPOSED WORK ON THIS PROJECT.

THE CONTRACTOR SHALL INCLUDE COST OF GRANULAR BACK FILL MATERIAL UNDER ALL EXISTING AND PROPOSED PAVEMENTS IN PRICE BID PER LINEAR FOOT OF PIPE, INCLUDING COMPACTION TESTS UNDER ALL EXISTING AND PROPOSED PAVEMENTS.

ALL SEWERS, SERVICE LATERALS, UTILITY CONDUITS AND DUCTS INSTALLED UNDERNEATH EXISTING OR FUTURE PAVEMENT SHALL BE BACK FILLED WITH NO. 10 LIMESTONE AND COMPACTED WITH A VIBRATORY PLATE COMPACTOR IN 6" LIFTS. THE MINIMUM COMPACTION REQUIREMENT SHALL CONFORM TO ODOT ITEM 203. COMPACTION TESTS MAY BE REQUIRED BY THE LAKE COUNTY ENGINEER. COMPACTION TESTS SHALL BE PERFORMED BY A CONSULTANT APPROVED BY TH LAKE COUNTY ENGINEER AT THE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ALL MATERIAL TESTING AND ALL PERMITS REQUIRED FOR THIS

<u>WATERLINE</u> - ALL WATERLINE MATERIAL AND INSTALLATION F SPECIFICATIONS. (SEE WATERLINE NOTES & DETAILS PLAN SHEET) ALL WATERLINE MATERIAL AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH PAINESVILLE WATER

10" AND UNDER SHALL BE PVC SDR 35, ADS N-12 OR APPROVED EQUAL 12" TO 15" TO BE RCP C-76 CL IV OR HDPE (*ALTERNATE)

18" AND OVER TO BE RCP C-76 CL III OR HDPE (*ALTERNATE)

*ALTERNATE HDPE PIPE SPECFICIATIONS: HANCOR HI-Q POLYETHYLENE PIPE OR ADS N-12 POLYETHYLENE PIPE, OR EQUAL PER ASTM D3350.

THE CONTRACTOR SHALL TEST ALL STORM SEWER PIPE PER ODOT SUPPLEMENTAL SPECIFICATIONS 942 AND 944 FOR DEFLECTION WITH A NINE (9) ARM MANDREL. MAXIMUM ALLOWABLE DEFLECTION SHALL BE 7.5% OF ITS BASE INSIDE DIAMETER WHEN MEASURED NOT LESS THAN 30 DAYS AFTER COMPLETION OF INSTALLATION.

SANITARY SEE LAKE COUNTY UTILITY DEPARTMENT NOTES

FILTER FABRICS ALL FABRIC FOR EROSION CONTROL TO BE WOVEN MATERIAL.

THE CONTRACTOR SHALL INCLUDE THE COST OF GRANULAR BACKFILL MATERIAL UNDER ALL EXISTING AND PROPOSED PAVEMENTS IN THE PRICE BID PER LINEAL FOOT OF PIPE.

SEE TRENCH AND BEDDING DETAILS FOR BEDDING AND BACKFILL SPECIFICATIONS FOR ALL STORM SEWER, SANITARY SEWER, WATER MAIN AND LATERAL CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION SIGNING, TRAFFIC MAINTENANCE AND TRAFFIC CONTROL AS DIRECTED BY CONCORD TOWNSHIP. ALL WORK, SIGN LAYOUTS, AND MATERIALS USED SHALL CONFORM TO THE SPECIFICATIONS SET FORTH IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

EROSION AND SEDIMENT CONTROL PROCEDURES

SEE EROSION CONTROL LOCATIONS ITEMS LOCATED ON THE GRADING AND SWPP PLANS, SWPP NOTES AND EROSION DETAILS

ADDITIONAL UTILITY NOTES:

1. ALL SANITARY SEWER CONNECTIONS SHALL BE A MINIMUM OF 6" DIAMETER AND SHALL HAVE PREMIUM JOINTS.

2. ALL SANITARY SEWER CONNECTIONS SHALL HAVE A MINIMUM GRADE OF 1%.

1. TEN FEET MINIMUM HORIZONTAL SEPARATION (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN WATER LINE AND SANITARY

2. AN 18" MINIMUM VERTICAL SEPARATION (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN THE WATER LINE AND SANITARY SEWERS AT ALL CROSSINGS.

3. TEN FEET MINIMUM HORIZONTAL SEPARATION (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN THE WATER LINE AND STORM

4. A 18 INCH MINIMUM VERTICAL SEPARATION (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN THE WATER LINE AND STORM

5. THE PROPOSED WATERLINE IMPROVEMENTS WILL PROVIDE A MINIMUM 35 PSI PRESSURE AT THE CURB STOP DURING NORMAL OPERATING CONDITIONS.

6. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.

7. THE SYSTEM SHALL BE DESIGNED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI AT GROUND LEVEL AT ALL POINTS IN THE DISTRIBUTION SYSTEM UNDER ALL CONDITIONS OF FLOW.

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATIONS OF SURFACE AND SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL.

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY FACILITIES ARE SHOWN ON THE PLANS FROM DATA AVAILABLE AT THE TIME OF THE FIELD SURVEY IN COMPLIANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF THE EXISTING UTILITY OWNERS AND UTILITY PROTECTION SERVICE LISTED BELOW IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE AND AS OUTLINED IN PROJECT SPECIFICATIONS.

THE UTILITY OWNERSHIP'S ARE AS FOLLOWS:

OHIO UTILITIES PROTECTION SERVICE 4740 BELMONT YOUNGSTOWN, OHIO 44505 PH: (800) 362-2764

THE ILLUMINATING COMPANY 7757 AUBURN ROAD, BLDG. 4 CONCORD, OHIO 44077 PH: (440) 350-7741 (RALPH DELLIGATTI)

13630 LORAIN AVE. CLEVELAND, OHIO 44111 PH: (216) 476-6181 (MAUREEN ROCHE)

7757 AUBURN ROAD, BLDG. 8 PAINESVILLE, OHIO 44077

PH: (440) 354-0030 (CHUCK SULLIVAN) ORWELL NATURAL GAS COMPANY 8500 STATION ST. SUITE 100 MENTOR, OH 44060

CITY OF PAINESVILLE WATER DEPARTMENT 459 STORRS STREET PAINESVILLE, OHIO 44077 PHONE: (440) 392-2975

PH: (440) 974-5120 (JERRY LIVENGOOD)

DATE: <u>10/20/22</u> DRAWN: <u>JNG</u>

SCALE: HOR. <u>1"=20'</u> VERT. <u>N/A</u>

FOLDER: <u>DWG/Proj. Engineering</u>

FILENAME: Site Plan

TAB: 04-General Notes

BNDY. CHK: <u>RAT-11/10/21</u>

BASE. CHK: XXX-xx/xx/20xx

DOMINION EAST OHIO 1201 EAST 55TH STREET CLEVELAND, OHIO 44103 PH: (216) 736-6788 (JOE HINTON)

LAKE COUNTY SWCD

LAKE COUNTY ENGINEER/STORMWATER 550 BLACKBROOK ROAD PAINESVILLE, OHIO 44077 PH: (440) 350-2770 (GEORGE HADDEN)

LAKE COUNTY DEPT. OF UTILITIES 105 MAIN STREET PAINESVILLE, OHIO 44077 PH: (440) 350-2652 (RANDY ROTHLISBERGER)

125 E. ERIE ST. PAINESVILLE, OH 44077 PH: (440) 350-2730 (DAN DONALDSON)

ANAGEMENT DEPARTMENT (LCSWMD) 125 E. ERIE ST. PAINESVILLE, OH 44077 PH: (440) 350-5900 (TIM MILLER)

LAKE COUNTY STORMWATER

CONCORD TOWNSHIP SERVICE DEPARTMENT 7229 RAVENNA ROAD CONCORD, OHIO 44077 PH: (440) 350-3226 (FRANK KRASKA)

OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 12 5500 TRANSPORTATION BLVD. GARFIELD HEIGHTS, OH 44125 PH: (216) 581-2100 (WILLIAM GERBER) FX: (216) 584-2274

LAKE COUNTY DEPARTMENT OF UTILITIES GENERAL SANITARY NOTES VR. 21

1. ALL SANITARY SEWER WORK COMPLETED MUST BE IN ACCORDANCE WITH THE CURRENT REGULATIONS AND RULES OF THE LAKE COUNTY DEPARTMENT OF UTILITIES (LCDU).

2. ONLY WATER/SEWER CONTRACTORS LICENSED BY THE LAKE COUNTY BOARD OF COMMISSIONERS MAY INSTALL

3. CONSTRUCTION PLAN APPROVAL BY THE LCDU SHALL EXPIRE IF SANITARY SEWER CONSTRUCTION HAS NOT BEEN INITIATED BY A DEVELOPER WITHIN (12) MONTHS OF THE EFFECTIVE APPROVAL DATE AS SHOWN ON THE BLUEPRINT COPY ORIGINALLY SUBMITTED FOR APPROVAL (THIS IS NOT TO BE CONSTRUED AS THE DATE SHOWN ON THE ORIGINAL MYLAR TITLE SHEET).

4. ALL SANITARY SEWER CONNECTIONS SHALL BE A MINIMUM OF 6" DIAMETER AND SHALL HAVE PREMIUM JOINTS. 5. ALL SANITARY SEWER MUST HAVE PREMIUM JOINTS, AND THE ENTIRE SYSTEM MUST PASS AN INFILTRATION TEST AND EXFILTRATION TEST AFTER CONSTRUCTION HAS BEEN COMPLETED. THE MAXIMUM ALLOWABLE RATE OF

INFILTRATION AND EXFILTRATION SHALL BE 100 GALLONS PER INCH DIAMETER OF THE SEWER PER MILE PER DAY. 6. THE CONTRACTOR SHALL SCHEDULE INSPECTION AT LEAST 48 HOURS IN ADVANCE WITH LCDU.

7. NO SANITARY SEWER SERVICE CONNECTIONS TO ANY BUILDING SHALL BE PERMITTED PRIOR TO FINAL ACCEPTANCE BY THE LCDU WHICH SHALL INCLUDE APPROVED RECTIFICATION OF ALL PUNCH LIST ITEMS AND THE SUBMITTAL OF MYLAR AS—BUILT DRAWINGS.

8. ROOF DRAINS, FOUNDATIONS DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

9.ALL SANITARY SEWER CONSTRUCTION AREAS MUST BE TO SUBGRADE PRIOR TO CONSTRUCTION AND CERTIFIED IN WRITING BY AN OHIO PROFESSIONAL SURVEYOR.

10. SHOP DRAWINGS ON ALL MATERIALS SHALL BE SUBMITTED TO THE LCDU FOR APPROVAL PRIOR TO INSTALLATION. 11. INSPECTION SERVICES SHALL BE PERFORMED BY THE LCDU. THE COST OF INSPECTION SHALL BE INCLUDED AS A PART OF THIS CONSTRUCTION PROJECT AT THE CURRENT BASE RATE AS ESTABLISHED BY THE LAKE COUNTY BOARD OF COMMISSIONERS. (SEE SECTION 7 FEE SCHEDULE OF LCDU RULES AND REGULATIONS) COST FOR INSPECTION SHALL BE THE SOLE RESPONSIBILITY OF THE LAKE COUNTY LICENSED WATER/SEWER CONTRACTOR.

12. HYDROSTATIC TESTING SHALL BE PREFORMED FOR ALL MANHOLES UNDER THE SUPERVISION OF LCDU INSPECTION. 13. FINAL TELEVISING OF A SANITARY SEWER SHALL BE PREFORMED BY A PACP CERTIFIED CREW IN ASSOCIATION OF SEWER SERVICE COMPANIES AND AS APPROVED BY THE LCDU. THE TELEVISION INSPECTION SHALL BE RECORDED TO

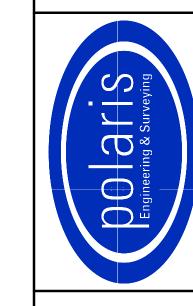
A DVD IN MPEG FORMAT AS DIRECTED BY LCDU. THE LCDU SHALL RECEIVE VIDEO RECORDING OF ALL TELEVISION

14. ALL PROPOSED SANITARY SEWERS SHALL BE LAID OUT BY A REGISTERED SURVEYOR WITH GRADE STAKES AT A MINIMUM OF EVERY 50' AND AT ALL FITTINGS AND A CUTE SHEET PROVIDED PRIOR TO CONSTRUCTION. 15. THE CONTRACTOR/DEVELOPER SHALL SUBMIT A THREE YEAR MAINTENANCE BOND TO THE COMMISSIONERS BY THE

DEVELOPER IN THE AMOUNT OF TEN PERCENT OF THE FINAL CONSTRUCTION COSTS AS VERIFIED BY THE DEVELOPERS ENGINEER, FOR PUBLIC EXTENSION PROJECTS.

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INEERING & SU N ROAD - SUITE D LLS, OHIO 44094 (440) 944-3722 (Fa



CONTRACT No.

21183

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GENERAL EROSION AND SEDIMENT CONTROL NOTES

EROSION CONTROL SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE GOVERNING AGENCY DURING THE LIFE OF THE CONTRACT TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH USE OF EROSION CONTROL PERMANENT BEST MANAGEMENT PRACTICES (BMP'S).

ADDITIONAL EROSION CONTROL BMP'S MAY BE MANDATED BY THE GOVERNING AGENCY AT ANY TIME DURING THIS PROJECT AS UNFORESEEN SITUATIONS MAY ARISE THAT WARRANT FURTHER EROSION AND

TEMPORARY EROSION AND SEDIMENT CONTROL ITEMS, THE LOCATION AND SIZE OF WHICH ARE DETAILED ON THE PLANS, SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORK OPERATIONS. CONDITIONS THAT REQUIRE ADDITIONAL OR MODIFIED TEMPORARY OR PERMANENT BMP'S SHALL BE APPROVED BY THE DESIGN ENGINEER AND REFLECTED ON THE REVISED STORM WATER POLLUTION PREVENTION PLAN (SWP3).

SEDIMENT BASINS, SEDIMENT TRAPS, AND PERIMETER SEDIMENT CONTROLS, SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL DISTURBED AREAS ARE REESTABLISHED WITH TEMPORARY VEGETATION. NO SEDIMENT CONTROLS SHALL BE PLACED IN A STREAM.

TRENCH DEWATERING OR GROUND WATER. WHICH CONTAINS SEDIMENT. SHALL PASS THROUGH A SEDIMENT SETTLING POND AND BE DEWATERED AT THE POND SURFACE USING A SKIMMER OR BE DEWATERED BY AN EQUALLY EFFECTIVE ALTERNATIVE. ALTERNATIVES MAY INCLUDE DEWATERING INTO SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. <u>SEDIMENT LADEN WATER SHALL NOT</u> BE DISCHARGED TO STREAMS OR THE STORM SEWER SYSTEM. VOLUME OF THE DEWATERING ZONE CAN BE A MINIMUM OF 1800 FT3/ACRE OF DRAINAGE AND HAVE A MINIMUM DRAIN TIME OF 48 HOURS.

THE SWP3, NOTES, DETAILED DRAWINGS AND ANY ADDENDUMS ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) RAINWATER AND LAND DEVELOPMENT MANUAL AND THE NDPES STORM WATER DISCHARGE PERMIT.

ALL CAST IRON CATCH BASINS, GRATES AND INLET COVERS SHALL HAVE THE MESSAGE "DUMP NO WASTE, DRAINS TO WATERWAYS".

<u>FUEL/LIQUID TANK STORAGE</u> ALL FUEL/LIQUID TANKS AND DRUMS SHALL BE STORED IN A MARKED STORAGE AREA. A DIKE SHALL BE CONSTRUCTED AROUND THIS STORAGE AREA WITH A MINIMUM CAPACITY EQUAL TO 110% OF THE VOLUME OF ALL CONTAINERS IN THE STORAGE AREA.

CONSTRUCTION & DEMOLITION DEBRIS ALL CONSTRUCTION & DEMOLITION DEBRIS (C&DD) WASTE SHALL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE (ORC) 3714. CONSTRUCTION DEBRIS MAY BE DISPOSED OF ON-SITE, BUT DEMOLITION DEBRIS MUST BE DISPOSED IN A OHIO EPA

APPROVED LANDFILL. ALSO, MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR

POLLUTION REGULATIONS (SEE OHIO ADMINISTRATIVE CODE (OAC) 3745-20). AREA SHALL BE DESIGNATED FOR MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME

ASPHALT, OR CONCRETE, THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREA. EQUIPMENT FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY. THESE AREAS SHALL

BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR ANOTHER STORM WATER DRAINAGE AREAS. CONCRETE WASH WATER
ALL DESIGNATED CONCRETE WASHOUT AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES.

DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREAS.

ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL

SPILL PREVENTION CONTROL & COUNTERMEASURES A SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE-GROUND STORAGE TANK OF 660 GALLONS OR MORE. TOTAL ABOVE-GROUND STORAGE OF 1,330 GALLONS, OR BELOW-GROUND STORAGE OF 42,000 GALLONS OF FUEL. NOTE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP THE SPCC PLAN IF HIS ON-SITE STORAGE TANKS WILL BE ABOVE THESE LIMITS.

<u>SPILL REPORTING REQUIREMENTS</u>
THE CONTRACTOR SHALL CONTACT THE OHIO EPA AT 800-282-9378, THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE IN THE EVENT OF A PETROLEUM SPILL (>25 GALLONS) OR THE PRESENCE OF SHEEN. ON PROJECTS NORTH OF ROUTE 2 THE COAST GUARD MUST BE NOTIFIED AT (216) 937-0111.

TRENCH AND GROUND WATER CONTROL THERE SHALL BE NO SEDIMENTLADEN OR TURBID DISCHARGES TO WATER RESOURCES OR WETLANDS RESULTING FROM DEWATERING ACTIVITIES, IF TRENCH OR GROUND WATER CONTAINS SEDIMENT, IT MUST PASS THROUGH A SEDIMENT-SETTLING POND OR OTHER EQUALLY EFFECTIVE SEDIMENT

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 POLLUTANT-LADEN BY TRAVERSING OVER DISTURBED SOILS OR OTHER POLLUTANT SOURCES.

OPEN BURNING OPEN BURNING IS NOT PERMITTED.

REV. No

<u>DUST CONTROLS/SUPRESSANTS</u>
USED OIL MAY NOT BE USED AS A DUST SUPPRESSANT. NO DUST SUPPRESSANT SHALL BE APPLIED NEAR CATCH BASINS, STORM SEWERS OR OTHER DRAINAGE WAYS.

CERTAIN ACTIVITIES ASSOCIATED WITH CONSTRUCTION WILL REQUIRE AIR PERMITS. ACTIVITIES INCLUDING BUT NOT LIMITED TO MOBILE CONCRETE BATCH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, LARGE GENERATORS, ETC, WILL REQUIRE SPECIFIC OHIO EPA AIR PERMITS FOR INSTALLATION AND OPERATION. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY AND ALL REQUIRED AIR PERMITS.

<u>PROCESS WASTE WATER/LEACHATE MANAGEMENT</u>

DISCHARGES INCLUDING BUT NOT LIMITED TO VEHICLE/AND OR EQUIPMENT WASHING, LEACHATE ASSOCIATED WITH ON-SITE WASTE DISPOSAL, CONCRETE WASHOUTS, ETC. ARE A PROCESS WASTEWATER AND ARE NOT AUTHORIZED FOR DISCHARGE UNDER OHCOOOOO5. ALL PROCESS WASTE

WATER MUST BE COLLECTED AND PROPERLY DISPOSED OF AT AN APPROVED DISPOSAL FACILITY.

TEMPORARY RUN-OFF CONTROLS

TORMWATER DIVERSION PRACTICES SHALL BE USED TO KEEP RUNOFF AWAY FROM DISTURBED AREAS AND STEEP SLOPES WHERE PRACTICAL. DIVERSIONS SHOULD BE USED IN LOCATIONS WHERE THE DRAINAGE AREA EXCEEDS THE CAPACITY OF THE SILT FENCE. IN SUCH CASES, THE RUNOFF SHOULD BE DIVERTED INTO A SEDIMENT BASIN OR SEDIMENT TRAP. DIVERSION SWALES, DIKES OR BERMS, MAY RECEIVE FROM AREAS UP TO

SOIL STABILIZATION CONTROLS

CLEARING & GRUBBING

Creeping Red Fescue

DATE

Note: other approved seed species may be substituted

LIMITS OF CLEARING AND GRADING SHALL BE CLEARLY MARKED ON THE SITE WITH SIGNAGE, FLAGGING AND/OR CONSTRUCTION FENCING.

THE CONTRACTOR SHALL LIMIT THE SURFACE AREA OF ERODABLE EARTH MATERIAL EXPOSED BY EXCAVATION, BORROW, AND FILL OPERATIONS AND PROVIDE IMMEDIATE PERMANENT OR TEMPORARY CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, WETLANDS OR OTHER AREAS OF WATER IMPOUNDMENT.

A STONED CONSTRUCTION ENTRANCE SHALL BE INSTALLED FOR ALL INGRESS & EGRESS TO THE SITE. THE MINIMUM DIMENSIONS OF THE DRIVE SHALL BE 20 FT. WIDE AND 50 FT. LONG. THE STONE SHALL BE 12 INCHES DEEP WITH AN UNDERLAIN GEOTEXTILE FABRIC. THE DRIVE SHALL BE INSTALLED PRIOR TO ANY CLEARING AND GRUBBING. SEDIMENTS SHALL BE REMOVED FROM ROADWAYS DAILY.

PERMANENT AND TEMPORARY STABILIZATION ARE DEFINED IN PART VII OF THE OEPA AUTHORIZATION FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM OHIO EPA PERMIT NO. OHOOOOOS DISTURBED AREAS MUST BE STABILIZED AS SPECIFIED IN HE FOLLOWING TABLES BELOW:

SEEDING AREAS SHALL BE INSPECTED AND WHERE THE SEED HAS NOT PRODUCED 70% COVER SHALL BE RESEEDED AS NECESSARY BY THE CONTRACTOR. AREAS SHALL BE STABILIZED WITH MULCH WHEN CONDITIONS

STRAW MULCHING SHALL BE APPLIED AT A RATE 2-3 STANDARD 45 LB. BALES PER 1000 SQ.FT. OF DISTURBED AREA OR 2 TONS PER ACRE. ALL HYDROSEEDING MUST BE STRAW MULCHED ACCORDING TO THE ABOVE SPECIFICATIONS UNLESS IT IS WATERED WEEKLY.

ALL DETENTION PONDS, RETENTION PONDS, WATER QUALITY STRUCTURES, SEDIMENT PONDS, SEDIMENT TRAPS, EARTHEN DIVERSIONS OR EMBANKMENTS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS OF COMPLETED CONSTRUCTION.

TEMPORAR	Y STABILIZATION
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL
ANY DISTURBED AREAS WITHIN 50 FT. OF SURFACE WATERS 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
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FT. OF SURFACE WATERS 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 ONSET OF WINTER WEATHER (NOV.1) STRAW MULCH 2 TO 3 BALES PER 1000 SQ.FT. AND OR 2 TONS PER ACRE.

PERMANENT STABILIZATION				
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL			
ANY AREA THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE			
ANY AREA WITHIN 50 FT. OF SURFACE WATERS OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAYS OF REACHING FINAL GRADE			
ANY OTHER AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA			

Seed Mix	lb./ac.	lb. / 1000sqft	Notes:
	General	Use	
Creeping Red Fescue	20-40	1/2-1	For close mowing & for waterways
Domestic Ryegrass	10-20	1/4-1/2	with <2.0 ft/sec velocity
Kentucky Bluegrass	20-40	1/4-1/2	
Tall Fescue	40-50	1-1 1/4	
Dwarf Fescue	90	2 1/4	
	Steep E	Banks or Cut Slopes	
Tall Fescue	40-50	1-1 1/4	
Crown Vetch	10-20	1/4-1/2	Do not seed later than August
Tall Fescue	20-30	1/2-3/4	
Flat Pea	20-25	1/2-3/4	Do not seed later than August
Tall Fescue	20-30	1/2-3/4	
	Road D	itches and Swales	_
Tall Fescue	40-50	1-1 1/4	
Dwarf Fescue	90	2 1/4	
Kentucky Bluegrass	5	0.1	
	Lawns		
Kentucky Bluegrass Perennial Ryegrass	100-120	2 2	
Kentucky Bluegrass	100-120	2	For Shaded areas.

PERMANENT STABILIZATION OF CONVEYANCE CHANNELS
OPERATORS SHALL UNDERTAKE SPECIAL MEASURES TO STABILIZE CHANNELS AND OUTFALLS AND PREVENT EROSIVE FLOWS. MEASURES MAY INCLUDE SEEDING, DORMANT SEEDING (AS DEFINED IN THE LATEST EDITION OF ODNR RAINWATER AND LAND DEVELOPMENT MANUAL), MULCHING, EROSION CONTROL MATTING, SODDING, RIPRAP NATURAL CHANNEL DESIGN WITH BIO ENGINEERING TECHNIQUES OR ROCK CHECK DAMS.

DATE: <u>10/20/22</u> DRAWN: <u>JNG</u>

SCALE: HOR. <u>1"=20'</u> VERT. <u>N/A</u>

FOLDER: <u>DWG/Proj. Engineering</u>

05-SWP3 Notes

FILENAME: Site Plan

BNDY. CHK: <u>RAT-11/10/21</u>

BASE. CHK: XXX-xx/xx/20xx

1-1/2

TEMPORARY SEDIMENT CONTROLS

SILT FENCE SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SILT FENCE OR DIVERSIONS TO PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SEDIMENT TRANSPORTED VIA SHEET FLOW. WHERE INTENDED TO PROVIDE SEDIMENT CONTROL, SILT FENCES SHALL BE PLACED ON A LEVEL CONTOUR. THE EPA PERMIT NO. OHCOOOOO5 DOES NOT PRECLUDE THE USE OF OTHER SEDIMENT BARRIERS DESIGNED TO CONTROL SHEET FLOW RUNOFF. SILT FENCE IS NOT PERMITTED TO BE USED FOR CONTROLLING CONCENTRATED SURFACEWATER FLOW (ONLY SHEET FLOW).

THE SIZE OF THE DRAINAGE AREA THAT CAN BE TREATED BY SILT FENCE VARIES WITH TOPOGRAPHY. THE FOLLOWING TABLE IS TO BE USED TO DETERMINE THE MAXIMUM UPSTREAM DISTANCE THAT IS ALLOWABLE TO BE TREATED BY THE SILT FENCE IN ORDER TO FUNCTION PROPERLY:

	SLOPE LENGTH (FT)
FLATTER THAN 50:1	250
50:1-10:1	125
10: 1-5: 1	100
5: 1-3: 1	75
3:1-2:1	50
>2:1	25

OTHER EROSION AND SEDIMENT CONTROL PRACTICES SHALL MINIMIZE SEDIMENT LADEN WATER ENTERING ACTIVE STORM DRAIN SYSTEMS. UNLESS THE STORM DRAIN SYSTEM DRAINS TO A SEDIMENT POND. INLET PROTECTION IS MANDATORY WHERE SEDIMENT SETTLING PONDS WILL NOT BE IMPLEMENTED.

GRADING NOTES

ALL EMBANKMENT AREAS UNDER FUTURE PAVEMENT, BUILDING PADS, ETC. SHALL BE COMPACTED PER ODOT ITEM 203.

EXCESS MATERIAL GENERATED FROM TRENCH EXCAVATION OPERATIONS SHALL BE INCORPORATED IN THE UNIT PRICE BID FOR EXCAVATION INCLUDING EMBANKMENT CONSTRUCTION.

THE CONTRACTOR SHALL MAKE EVERY EFFORT TO AVOID ALL WETLANDS AND PROTECTED STREAMS ON THE

EROSION CONTROL ITEMS AS SPECIFIED IN THE EROSION CONTROL NOTES SHALL BE IMPLEMENTED PRIOR TO ANY EARTHWORK COMMENCING ON THIS PROJECT.

THE CONTRACTOR SHALL VERIFY AREAS OF TOPSOIL STRIPPING, STOCKPILING AND RE-SPREADING WITH THE OWNER PRIOR TO CONSTRUCTION. CONFIRMATION WITH THE OWNER SHALL BE RECEIVED PRIOR TO ANY TOPSOIL, EXCESS EMBANKMENT MATERIALS

AND/OR CONSTRUCTION DEBRIS BEING HAULED OFF OF THE SITE. THE CONTRACTOR SHALL DISCUSS THE SEQUENCING OF EARTHWORK OPERATIONS WITH A REPRESENTATIVE OF

THE OWNER PRIOR TO WORK COMMENCING.

ANY EXCESS EMBANKMENT MATERIAL SHALL BE STOCKPILED OR HAULED OFF-SITE AS DIRECTED BY THE

ALL ORGANIC AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM ALL EXISTING CHANNELS AND THE EXISTING POND AREA PRIOR TO FILLING AND COMPACTING.

AFTER REMOVAL OF ORGANIC MATERIAL AND UNSUITABLE MATERIALS, EXISTING POND AREA SHOULD BE PROOF ROLLED TO ENSURE THAT SUBBASE IS STABLE PRIOR TO THE START OF EMBANKMENT OPERATIONS.

ENGINEERED FILL MATERIALS SHOULD CONSIST OF NON-EXPANSIVE MATERIALS. PYRITIC AND/OR POTENTIALLY EXPANSIVE MATERIALS, SUCH AS MINE TAILINGS AND SLAG SHOULD NOT BE USED AS ENGINEERED FILL MATERIAL. MATERIALS SELECTED FOR USE AS ENGINEERED FILL SHOULD CONTAIN LESS THAN 3 PERCENT BY WEIGHT OF ORGANIC MATTER, CONSTRUCTION DEBRIS, OR OTHER DELETERIOUS MATERIALS. FILL MATERIALS SHOULD GENERALLY HAVE A STANDARD PROCTOR MAXIMUM DRY DENSITY GREATER THAN 110 POUNDS PER CUBIC FOOT (PCF), AN ATTERBERG LIQUID LIMIT LESS THAN 40, A PLASTICITY INDEX OF LESS THAN 15, AND A MAXIMUM PARTICLE SIZE OF 2 INCHES OR LESS.

PLACE AND COMPACT ENGINEERED FILL IN SIX (6) INCH MAXIMUM LIFTS. EACH LIFT SHOULD BE COMPACTED TO AT LEAST NINETY-EIGHT (98%) PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY WITH THE MOISTURE CONTENT OF THE ENGINEERED FILL BEING WITHIN TWO (2%)± PERCENT OF THE OPTIMUM MOISTURE CONTENT (ASTM D698).

POSITIVE DRAINAGE TO PROPOSED STORM SEWER INLETS AND/OR NATURAL DRAINAGEWAYS SHALL BE MAINTAINED AT ALL TIMES.

THE CONTRACTOR IS REQUIRED TO MAINTAIN POSITIVE DRAINAGE AWAY FROM THE ROADWAY SECTION THROUGH ALL PHASES OF CONSTRUCTION UNTIL THE PAVEMENT IS INSTALLED. IT IS ANTICIPATED THAT POSITIVE DRAINAGE SHALL BE MAINTAINED BY USE OF ANY COMBINATION OF THE FOLLOWING:

1. DIVERT WATER FROM LOW AREAS BY CUTTING TEMPORARY SWALES OR DITCHED TO AN AREA WHERE POSITIVE DRAINAGE CAN BE OBTAINED.

SEWER CAN BE INSTALLED.

3. CONSTRUCT STORM SEWER AS NECESSARY TO REACH THE LOW AREAS AND INSTALL A DROP PIPE STRUCTURE ON A STORM CONNECTION, A STORM STRUCTURE, OR THE STORM SEWER.

2. LEAVE LOW AREAS UNEXCAVATED TO AID WITH POSITIVE DRAINAGE UNTIL SUCH TIME THAT THE STORM

4. ALL COSTS INVOLVED WITH MAINTAINING POSITIVE DRAINAGE SHALL BE INCLUDED IN THE UNIT PRICE FOR "EXCAVATION INCLUDING EMBANKMENT CONSTRUCTION". NON SEDIMENT SITE POLLUTION CONTROLS

NO SOLID OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORMWATER RUNOFF. ALL NECESSARY BMP'S MUST BE IMPLEMENTED TO PREVENT THE DISCHARGE OF NON-SEDIMENT POLLUTANTS TO THE DRAINAGE SYSTEM OF THE SITE OR SURFACE WATERS OF THE STATE. NO EXPOSURE OF STORMWATER TO WASTE MATERIALS IS RECOMMENDED.

HANDLING OF TOXIC AND HAZARDOUS WASTES

DO: PREVENTS SPILLS, USE PRODUCTS UP - FOLLOW LABEL DIRECTIONS FOR DISPOSAL - REMOVE LIDS FROM EMPTY BOTTLES AND CANS WHEN DISPOSING IN TRASH - RECYCLE WASTES WHENEVER POSSIBLE. DON'T: POUR INTO WATERWAYS, STORM DRAINS, ONTO GROUND - POUR INTO SINKS, FLOOR DRAIN OR SEPTIC TANKS - BURY CHEMICALS OR CONTAINERS - BURN CHEMICALS OR CONTAINERS - MIX CHEMICALS

TOXIC OR HAZARDOUS WASTES SHALL BE HANDLED WITH THE APPROPRIATE PROTECTIVE EQUIPMENT AND PROPERLY DISPOSED OF ACCORDING TO OCCUPATIONAL, SAFETY, HEALTH ADMINISTRATION (OSHA) AND ENVIRONMENTAL PROTECTION AGENCY (EPA) GUIDELINES. NO TOXIC/HAZARDOUS WASTE SHALL BE DISPOSED INTO STORM DRAINS, SEPTIC TANKS, OR BY BURYING, BURNING, OR MIXING WITH OTHER WASTE.

WASTE DISPOSAL CONTAINERS (E.G., DUMPSTERS, DRUMS) SHALL BE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES. ALL CONTAINERS MUST BE COVERED AND LEAK-PROOF. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL.

CLEAN HARD FILL BRICKS, HARDENING CONCRETE, AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WATERS OF THE STATE.

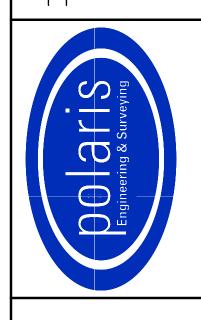
CLEAN CONSTRUCTION WASTES THAT WILL BE DISPOSED INTO THE PROPERTY, SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL.

CONSTRUCTION SEQUENCE NARRATIVE

- 1. PROVIDE SAFE AND SECURE PEDESTRIAN AND VEHICULAR TRAFFIC CIRCULATION THROUGHOUT THE ENTIRETY OF THE CONSTRUCTION SEQUENCE WITH WELL DEFINED CONSTRUCTION BOUNDARIES TO BE ACCESSED BY CONSTRUCTION PERSONNEL ONLY. ALL EROSION CONTROLS ARE TO BE THOROUGHLY INSPECTED BY THE CONTRACTOR UPON THE COMPLETION OF EACH WORK DAY AND MAINTAINED THROUGHOUT THE REQUIRED LIFE OF THE CONTROL AS SPECIFIED BY THE APPROVED SWP3 PLANS AND NARRATIVE. CONTRACTOR MUST REVIEW THE SWP3 AND NARRATIVE.
- CONTRACTOR SHALL COMPLETE AND SUBMIT THE OEPA CO-PERMITEE NOTICE OF INTENT (N.O.I.) APPLICATION. ALL OPERATORS AT THE CONSTRCUTION SITE ARE REQUIRED TO BECOME CO-PERMITTEES. INSTRUCTIONS AND FROMS CAN BE
- OBTAINED AT THE OEPA WEBSITE: www.epa.ohio.gov/Portals/35/storm/StormWater Co-Permittee NOI.docx 4. INSTALL STONE CONSTRUCTION ENTRANCE FOR ACCESS TO CONSTRUCTION AREAS OF SITE.
- 4. DELIVER CONSTRUCTION TRAILER TO SITE AND ESTABLISH TEMPORARY POWER AND TELEPHONE SERVICE.
- 5. ALL TEMPORARY UTILITY SERVICES SHALL BE THE RESPOSIBILITY OF THE CONTRACTOR.
- 6. INSTALL TEMPORARY INLET PROTECTION ON ALL EXISTING CATCH BASINS. INLET PROTECTION SHALL BE INSTALLED AS PER PLAN DESIGNATION.
- 7. INSTALL ALL FILTER FABRIC FENCE WHERE SHOWN ON PLANS. FILTER FABRIC FENCE SHALL BE INSTALLED AS PER PLAN
- 8. BEGIN CLEARING AND GRUBBING WITHIN THE DISTURBANCE LIMITS, AS REQUIRED.
- 9. REMOVE TOPSOIL FROM AREAS AS NECESSARY. REMOVE FROM SITE PER OHIO ENVIRONMENTAL PROTECTION AGENCY (OHIO EPA) STANDARDS OR TEMPORARILY STOCKPILE MATERIAL IN DESIGNATED AREAS.
- 10. AT A MINIMUM ALL CONTROLS ARE INSPECTED AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD. IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE IS IN NEED OF REPAIR OR MAINTENANCE, WITH THE EXCEPTION OF A SEDIMENT SETTLING POND, IT MUST BE REPAIRED OR MAINTAINED WITHIN 3 DAYS OF THE INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED WITHIN 10 DAYS OF THE INSPECTION.
- 11. TEMPORARILY STORE MATERIAL EXCAVATED FOR CONSTRUCTION AT DESIGNATED AREAS. MATERIAL TO BE MAINTAINED FOR DUST CONTROL BY USE OF A COVER OR OTHER METHODS APPROVED BY OHIO EPA.
- 12. IN THE EVENT OF RAIN, ALLOW STANDING WATER TO SETTLE PRIOR TO PUMPING. UTILIZE THE PUMPING SYSTEMS TO PUMP POLLUTED WATER PER REQUIREMENTS. ALLOW ONLY CLEAN WATER TO BE DISCHARGED TO THE EXISTING DRAINAGE SWALE. REMOVE SILT FROM BASIN AS NECESSARY PRIOR TO CONTINUING EARTHWORK. MATERIAL SHOULD BE MECHANICALLY SPREAD AND DRIED PRIOR TO INCORPORATION INTO THE EARTHWORK PROCEDURES. ADEQUACY OF THE DRIED MATERIAL IS TO BE DETERMINED BY THE ONSITE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE AND ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHALL BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL IF WASTE MATERIAL IS REMOVED FROM THE PROJECT SITE. THE CONTRACTOR MUST PROVIDE AN EROSION AND SEDIMENTATION CONTROL PLAN TO THE REGULATORY COUNTY CONSERVATION DISTRICT MAINTAINING JURISDICTION OF THE PROJECT SITE AS WELL AS THE COUNTY CONSERVATION DISTRICT MAINTAINING JURISDICTION OF THE DISPOSAL AREA.
- 13. BEGIN EARTHMOVING AND SITE GRADING OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE COUNTY CONSERVATION DISTRICT OF LOCATION AND EROSION SEDIMENTATION CONTROL MEASURES IMPLEMENTED AT BORROW OR SPOIL SITE OF IMPORT/EXPORT MATERIAL.
- 14. TEMPORARY STABILIZATION PROVIDES EROSION CONTROL ON AREAS IN BETWEEN CONSTRUCTION OPERATIONS. GRASSES WHICH ARE QUICK GROWING ARE SEEDED AND USUALLY STAW MULCHED TO PROVIDE PROMPT, TEMPORARY SOIL STABILIZATION. TEMPORARY STABILIZATION IS REQUIRED BY OHIO EPA'S GENERAL CONSTRUCTION PERMIT TO BE APPLIED ON DISTURBED SOIL AREAS WITHIN 7 DAYS IF THE AREA IS INTENDED TO BE DORMANT FOR GREATER THAN 14 DAYS, OR WITHIN 2 DAYS IF THE AREA IS WITHIN 50 FEET OF JURISDICTIONAL WATER (STREAM OR WETLAND).
- 15. BEGIN STORM SEWER AND OTHER UTILITY INSTALLATION. STABILIZE ALL UTILITY TRENCHES AT THE END OF EACH WORKDAY. INLET PROTECTION SHALL BE INSTALLED ON EACH STORM STRUCTURE UPON INDIVIDUAL COMPLETION.
- 16. REPAIR/STABILIZE ALL AREAS DESIGNATED FOR TEMPORARY SEEDING AND MULCHING. INCLUDING AREAS WHERE SLOPE IS 3:1 OR GRÉATER, WHICH REQUIRE A MULCH NETTING. ANY AREAS AT FINAL GRADE OR THAT WILL LIE DORMANT FOR ONE YEAR OR MORE REQUIRE PERMANENT SEEDING WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE (REFER TO OHIO'S "RAINWATER AND LAND DEVELOPMENT" MANUAL). IN ADDITION, ANY AREAS WITHIN 50 FEET OF A STREAM AND AT FINAL GRADE REQUIRE EROSION CONTROLS WITHIN 2 DAYS OF REACHING FINAL GRADE. NOTE THAT A 70% VEGETATIVE DENSITY IS REQUIRED ON ALL DISTURBED SOIL AREAS FOR STABILIZATION.
- 17. MAINTAIN TEMPORARY CONTROLS UNTIL REMOVAL IS WARRANTED DUE TO PROGRESSION OF WORK. SEDIMENT BASINS & TRAPS SHOULD BE CLEANED OUT WHEN SILT OCCUPIES 40 PERCENT OF THE POND DEPTH.
- 18. INSTALL CONCRETE CURBS(WHERE APPLICABLE) AND PAVEMENT SUBBASE. BEGIN BITUMINOUS OR CONCRETE PAVING, REMOVING STONE CONSTRUCTION ENTRANCE ONLY WHEN NECESSARY.
- 19. STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEED AND MULCHING OR CROWNVETCH SEEDING IMMEDIATELY UPON REACHING FINAL GRADE.
- 20. ALL REMAINING TEMPORARY SEDIMENT CONTROL PRACTICES (INLET PROTECT, SILT FENCE, ETC.) SHALL BE REMOVED UPON SITE STABILIZATION. NOTE 70% VEGETATIVE DENSITY IS REQUIRED ON ALL DISTURBED SOIL ARÉAS FOR STABILIZATION.
- 21. PERMANANT SEEDING AND LANDSCAPING SHOULD BE APPLIED WITHIN THE WATER QUALITY AND DETENTION BASIN UPON
- 22. COMPLETE SITEWORK, PAVEMENT MARKINGS, FINAL LANDSCAPING, SIGN INSTALLATION(S), AND CLEAN-UP.
- 23. RESEED AND REDRESS ANY AREAS THAT MAY REQUIRE ATTENTION IMMEDIATELY. NOTE THAT LAWN AREAS WILL NOT BE DEEMED STABLE UNTIL A UNIFORM 70% VEGETATIVE DENSITY IS ACHIEVED.
- 24. IF, FOR ANY REASON, THE PROJECT IS SUSPENDED, THE CONTRACTOR SHALL INSURE THAT ALL INSTALLED EROSION MEASURES ARE FUNCTIONING AND PROPERLY MAINTAINED DURING THIS PERIOD, AND THAT ALL BARED SOILS ARE SEEDED AND MULCHED WITH TEMPORARY SEED MIXTURE.
- 25. ONCE FINAL STABILIZATION HAS BEEN ACHIEVED THE CONTRACTOR SHALL COMPLETE AND SUBMIT THE OEPA NOTICE OF TERMINATION (N.O.T) APPLICATION. INSTRUCTIONS AND APPLICATIONS ARE ALSO LOCATED ON THE EPA WEBSITE (SEE STEP #1). CONTRACTOR SHOULD VERIFY WITH THE OWNER THAT THE TERMS OF THE CONTRACT HAVE BEEN FINALIZED PRIOR TO SUBMITTING THE N.O.T.
- 26. ALL QUESTIONS REGARDING EROSION CONTROL ARE TO BE DIRECTED TO POLARIS ENGINEERING AND SURVEYING AT (440) 944-4433 OR TO THE APPROPRIATE COUNTY CONSERVATION DISTRICT FOR REVIEW PRIOR TO THE COMMENCEMENT OF SUCH CHANGES AT THE CONSTRUCTION SITE.

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Specifications

Temporary Seeding

Table 7.8.1 Temporary Seeding Species Selection March 1 to August 15 128 (4 Bushel) Annual Ryegrass Perennial Ryegrass Annual Ryegrass Annual Ryegrass Creeping Red Fescue Kentucky Bluegrass 128 (3 bushel) Annual Ryegrass August 16th to November 112 (2 bushel) Annual Ryegrass 120 (2 bushel) Annual Ryegrass Perennial Rve Annual Ryegrass Annual Ryegrass

Kentucky Bluegrass November 1 to Feb. 29 Use mulch only or dormant seeding Note: Other approved species may be substituted.

Creeping Red Fescue

1. Structural erosion and sediment control practices such 4. Soil Amendments—Temporary vegetation seeding rates as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest require the use of soil amendments. Base rates for lime of the construction site.

should not be postponed if ideal seedbed preparation is

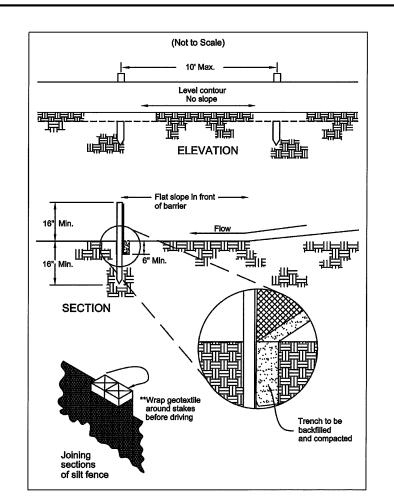
2. Temporary seed shall be applied between construction 5. Seeding Method—Seed shall be applied uniformly with a operations on soil that will not be graded or reworked cyclone spreader, drill, cultipacker seeder, or hydroseeder. for 21 days or greater. These idle areas shall be seeded When feasible, seed that has been broadcast shall be within 7 days after grading. covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding 3. The seedbed should be pulverized and loose to ensure the is used, the seed and fertilizer will be mixed on-site and success of establishing vegetation. Temporary seeding

and fertilizer shall be used.

CHAPTER 7 Soil Stabilization 35

the seeding shall be done immediately and without

Specifications Silt Fence



CHAPTER 6 Sediment Controls 33

CHAPTER 7 Soil Stabilization 19

Specifications Silt Fence

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 fences shall be brought upslope slightly so that water ponded by the silt fence will be prevented from

2. All silt fence shall be placed as close to the contour as

flowing around the ends. 4. Silt fence shall be placed on the flattest area available. 5. 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.

7. The silt fence shall be placed in an excavated or sliced be made with a trencher, cable laying machine, slicing 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. 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.

1. Silt fence shall be constructed before upslope land distur- 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 the ground, (see details). 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 performed as appropriate: 1) the layout of the silt fence shall be changed, 2) accumulated sediment shall be removed, or

Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence.

Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.

1. Fence post - The length shall be a minimum of 32 inches. Wood posts 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.

FABRIC PROPERTIES	VALUES	TEST MET
Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4
Maximum Elongation at 60 lbs	50%	ASTM D 4
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4
Minimum Tear Strength	40 lbs (180 N)	ASTM D 4
Apparent Opening Size	≤ 0.84 mm	ASTM D 4
Minimum Permittivity	1X10-2 sec1	ASTM D 4
UV Exposure Strength Retention	70%	ASTM G 4

Specifications **Geotextile Inlet Protection**

Specifications

Grassed Swale

5. Stabilization shall be done according to the appropriate

7. Gullies that may form in the channel or other erosion

established shall be repaired without delay.

damage that occurs before the grass lining becomes

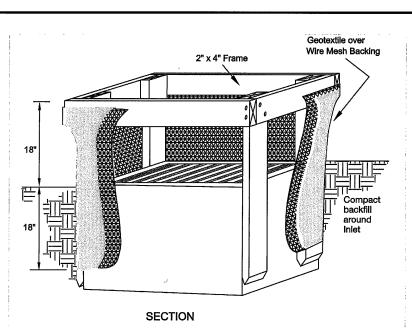
CHAPTER 4 Permanent Runoff Control

specifications for permanent seeding, vegetative practices,

6. Construction shall be sequenced so that newly constructed

channels are stabilized prior to becoming operational. To aid in the establishment of vegetation, surface water may

be prevented from entering the newly constructed channel



1. Inlet protection shall be constructed either before upslope 5. Geotextile material shall have an equivalent opening size

land disturbance begins or before the inlet becomes 2. The earth around the inlet shall be excavated completely

1. All trees, brush, stumps, and other unsultable material

2. The channel shall be excavated and shaped to the proper

3. Fill material used in the construction of the channel shall

be well compacted in uniform layers not exceeding

construction equipment to prevent unequal settlement

4. Excess earth shall be graded or disposed of so that it

will not restrict flow to the channel or interfere with its

9 inches using the wheel treads or tracks of the

shall be removed from the site.

grade and cross section.

to a depth at least 18 inches. 3. The wooden frame shall be constructed of 2-inch by 4-inch construction grade lumber. The 2-inch by 4-inch posts shall be driven one (1) ft, into the ground at four corners of the inlet and the top portion of 2-inch by 4-inch frame assembled using the overlap joint shown. The top of the frame shall be at least 6 inches below adjacent 7. A compacted earth dike or check dam shall be con-

4. Wire mesh shall be of sufficient strength to support

to the frame.

fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely

roads if ponded water will pose a safety hazard to traffic.

of 20-40 sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. 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 6inch layers until the earth is even with notch elevation on

ends and top elevation on sides. structed in the ditch line below the inlet if the inlet is not in a depression. The top of the dike shall be at least 6 inches higher than the top of the frame.

CHAPTER 6 Sediment Controls 39

Concrete Washout Areas

1. Concrete wash water shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance and washout pits shall be situated a minimum of fifty (50) feet from them. 2. Field tile or other subsurface drainage structures within 10 ft. of the sump shall be cut and plugged.

3. Ensure a stable path is provided for concrete trucks to reach the washout area. 4. A highly visible sign that reads "Concrete Washout Area" shall be erected adjacent to the washout pit. Surface runoff generated from upslope areas shall be diverted away from below-grade washout pits so as not to flow into them.

6. A single centralized washout area may be utilized for multiple sublots.

7. The washout pit must be inspected frequently to ensure the liner is intact. Inspect weekly at minimum. 8. Once 75% of the original volume of the washout pit is filled or if the liner is torn, the material must be removed and properly disposed of once it is completely hardened. Once the hardened concrete is removed, the liner must be replaced (if torn). A new pit must be constructed if the original structure is no **Jonger suitable.** Concrete to be disposed at an approved solid waste disposal site.

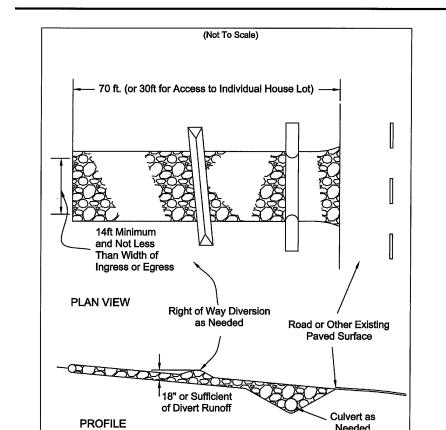
9. Once the washout pit is no longer needed, ensure all washout material has completely hardened, then remove and properly dispose of all materials. If straw bales were used, they can be spread as mulch. 10. Prefabricated containers specifically designed for concrete washout collection may be used subject to prior approval by the Community Engineer. Follow the manufacturer's suggestions for installation, maintenance and removal procedures.

Sizing of Concrete Washout Pits

Below-g	rade (3-ft de	pth)	Above-g	rade (2-ft de	pth)
# of concrete trucks expected to be washed out on site*	Width (ft)	Length (ft)	# of concrete trucks expected to be washed out on site*	Width (ft)	Léngth (ft)
2-3	3	3	2	3	3
4-5	4	4	3-4	4	4
	5	5	5-6	5	5
6-7	5	5	7-8	6	6
8-10	6	6	9-11	7	7
11-14	7	7	12-15	8	8

*For small projects using a maximum of only one truckload of concrete or utilizing on-site mixing, rinsing of equipment may take place on the lot without a pit, provided it can be done a minimum of fifty (50) feet away from any water conveyances.

Specifications **Construction Entrance**



recycled concrete equivalent.

prior to placing stone. It shall be composed of strong rot-proof polymeric fibers and meet the following

Construction Entrance

2. Length—The Construction entrance shall be as long as

3. Thickness -The stone layer shall be at least 6 inches thick

4. Width -The entrance shall be at least 14 feet wide, but

5. Geotextile -A geotextile shall be laid over the entire area

Geotextile Specification i	or Construction Entrance
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 < 0.6 mm.
Permittivity	1×10-3 cm/sec.

1. Stone Size—ODOT # 2 (1.5-2.5 inch) stone shall be used, or 6. Timing—The construction entrance shall be installed as 7. Culvert -A pipe or culvert shall be constructed under the required to stabilize high traffic areas but not less than entrance if needed to prevent surface water from flowing 70 ft. (exception: apply 30 ft. minimum to single

> out onto paved surfaces. 8. Water Bar -A water bar shall be constructed as part of the from flowing the length of the construction entrance and out

onto paved surfaces. not less than the full width at points where ingress or egress 9. Maintenance -Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface

across the entrance or to prevent runoff from being directed

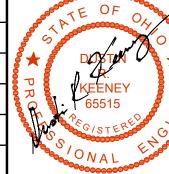
where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by

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 11. Removal—the entrance shall remain in place until the

disturbed area is stabilized or replaced with a permanent roadway or entrance.

· 20 CHAPTER 7 Soil Stabilization

REV. No.	DATE	BY



ABOVE-GRADE CONCRETE WASHOUT PIT

BELOW-GRADE CONCRETE WASHOUT PIT

2 2 2 2

DATE: <u>10/20/22</u> DRAWN: <u>JNG</u> SCALE: HOR. <u>1"=20'</u> VERT. <u>N/A</u> FOLDER: <u>DWG/Proj. Engineering</u> FILENAME: Site Plan 06-SWP3 Details BNDY. CHK: <u>RAT-11/10/21</u>

BASE. CHK: XXX-xx/xx/20xx

GENERAL REQUIREMENTS: THE FOLLOWING REQUIREMENTS APPLY TO ALL PAVEMENT DRIVE APRONS, SIDEWALKS AND CURB RAMPS. ALL PAVEMENT DRIVES, SIDEWALKS AND/OR CURB RAMPS SHALL CONFORM TO ODOT SPECIFICATIONS IF NOT SPECIFIED HEREIN. ALL PAVEMENT DRIVES, SIDEWALKS AND CURB RAMP REPLACEMENTS SHALL CONFORM TO THE GRADE OF THE EXISTING PAVEMENT DRIVE, SIDEWALK AND/OR CURB RAMP.

MATERIAL: ALL CONCRETE SHALL BE CLASS "C" PER ODOT 499 AND PROPERLY CONSOLIDATED. (NO SLAG)

SIGNAGE: THE CONTRACTOR MUST PROVIDE ADEQUATE SIGNS, MARKERS AND BARRICADES TO PROTECT PEDESTRIAN TRAFFIC, VEHICULAR TRAFFIC AND CONSTRUCTION PERSONNEL DURING THE PROGRESS OF THIS WORK. ADDITIONAL SIGNS INDICATING ENTRANCES FOR BUSINESSES IN A CONSTRUCTION ZONE ARE REQUIRED AS DIRECTED BY THE GOVERNING AGENCY'S ENGINEER.

ONE-HALF (1/2) INCH EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT TO EXCEED ONE HUNDRED (100) FEET. EXPANSION JOINTS SHALL BE SEALED WITH 1/2" THICK SELF LEVELING URETHANE CHALK, LIMESTONE GRAY IN COLOR.

CURB RAMPS: CURB RAMPS SHALL BE PLACED AS SHOWN ON THE PLANS. ALL SIDEWALKS SHALL CONNECT TO THE PAVEMENT OR CURB AT INTERSECTIONS WITH WHEELCHAIR RAMPS AND ONE-HALF (1/2) INCH EXPANSION JOINTS BETWEEN THE WALK AND CURB. EXPANSION JOINTS SHALL BE SEALED WITH 1/2" THICK SELF LEVELING URETHANE CHALK, LIMESTONE GRAY IN COLOR. ALL CURB RAMPS SHALL MEET THE CURRENT ADA REQUIREMENTS WITH TRUNCATED DOMES.

CONSTRUCTION SAW CUTTING: WHERE IT IS NECESSARY TO DISTURB EXISTING PAVEMENT DRIVES, CURB RAMPS OR SIDEWALKS THE CONCRETE SHALL BE SAW CUT IN NEAT STRAIGHT LINES. THE DEPTH OF SAW CUT SHALL BE FULL DEPTH. WHERE IT IS NECESSARY TO DISTURB EXISTING PAVEMENT DRIVES, CURBS AND/OR WALKS THE ASPHALT CONCRETE SHALL BE LINE CUT WITH STRAIGHT VERTICAL EDGES. ALL CUT BITUMINOUS SURFACES SHALL BE SEALED WITH A 4" WIDE RUBBERIZED JOINT SEALER USING A SQUEEGEE.

PAVEMENT MARKING LEGEND

PS - PARKING SPACE (SOLID WHITE-4" WIDE) TL - TRANSVERSE LINE (SOLID WHITE-4" WIDE 12" O/C @ 45° ANGLE, 4" WIDE OUTER

WS - INTERNATIONAL SYMBOL OF ACCESS (WHEELCHAIR SYMBOL) (36" HIGH, 41" WIDE, 4" STROKE, WHITE)

SB - STOP BAR (SOLID WHITE - 12" WIDE, HALF WIDTH OF DRIVEWAY)

PAVEMENT MARKING SHALL MEET THE REQUIREMENTS OF ODOT ITEM 640
"PAVEMENT MARKING". PAINT SHALL MEET REQUIREMENTS OF ODOT ITEM 642

"TRAFFIC PAINT".

ALL SIGNAGE AND STRIPING SHALL MEET THE REQUIREMENTS OF THE, "OHIO

MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" CURRENT EDITION.

ALL SIGN SHEETING SHALL BE TYPE G REFLECTIVE SHEETING.

ALL SIGNS SHALL BE MOUNTED AT A 7' HEIGHT TO BOTTOM OF SIGN.

PAVEMENT PLAN AND SITE LAYOUT NOTES

NEW PAVEMENT TO MEET EXISTING. EXISTING EDGE OF PAVEMENT TO BE SAWCUT FULL DEPTH. SEAL JOINT. MATCH EXISTING CURB.

RESTRIPE ALL PARKING SPACES ON PROPERTY WHERE PAVEMENT REMAINED. EXISTING PAVEMENT MARKINGS ADJACENT TO SITE TO REMAIN.

CURB TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF EXISTING CURB DURING CONSTRUCTION. PAVEMENT SHALL REMAIN IN ANY AREA NOT DESIGNED ON THIS PLAN. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF EXISTING PAVEMENT DURING CONSTRUCTION.

ALL DIMENSIONS TO THE BACK OF CURB UNLESS OTHERWISE STATED.

ALL PAVEMENT AND SITE WORK SHALL CONFORM TO O.D.O.T. AND CITY OR COUNTY SPECIFICATIONS.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO BEGINNING ANY CONSTRUCTION.

REFER TO THE ARCHITECTURAL PLANS FOR LANDSCAPING, DUMPSTER PAD DETAIL,

FOR PRECISE BUILDING DIMENSIONS SEE ARCHITECTURAL PLANS.

AND DOOR STOOP DETAIL.

THE CONTRACTOR SHALL PROVIDE JOINTS IN CONCRETE PAVEMENT INCLUDING CONSTRUCTION JOINTS, ISOLATION JOINTS, EXPANSION JOINTS AND CONTRACTION JOINTS AS REQUIRED. THE CONTRACTOR SHALL SUBMIT A PROPOSED JOINTING PLAN TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION.

SIGNAGE: SEE ARCHITECTURAL PLANS FOR SIGNING REQUIREMENTS.

SITE LIGHTING: SEE ARCHITECTURAL PLANS FOR LIGHTING REQUIREMENTS.

PAVEMENT CONSTRUCTION NOTES

THE FOLLOWING REQUIREMENTS APPLY TO ALL PAVEMENT IMPROVEMENTS.

COLD WEATHER: NO ASPHALTIC PAVEMENT COURSE AND/OR CONCRETE PAVEMENT OR CURBING SHALL BE LAID ON FROZEN PAVEMENT, BASE OR SUBBASE.

ALL ASPHALT PAVING MUST MEET ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THEIR BEST PRACTICES.

SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE FENCING, LIGHTING, AND/OR STORM INLET STRUCTURES, THEN THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.

THE CONTRACTOR SHALL MAINTAIN ALL EXISTING PARKING, SIDEWALKS, DRIVES, ETC. CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND VEHICULAR TRAFFIC TO AND FROM THE SITE.

ALL DEMOLITION AND COMPACTION WORK SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF SUBSURFACE EXPLORATION REPORT AS PRESENTED BY THE GEOTECHNICAL ENGINEER.

THE FOLLOWING EARTHWORK NOTES ARE TO BE USED AS GENERAL GUIDELINES IF A GEOTECHNICAL REPORT IS NOT AVAILABLE.

STRIP TOPSOIL AND REMOVE PAVEMENTS AT LEAST FIVE (5) FEET BEYOND THE BUILDING FOOTPRINT AND TWO (2) FEET BEYOND THE PROPOSED PAVEMENT AREAS.

UNDERCUT ALL OLD FILL AND PROOF ROLL THE EXPOSED SUBGRADE IN ACCORDANCE WITH THE SUBSURFACE EXPLORATION REPORT.

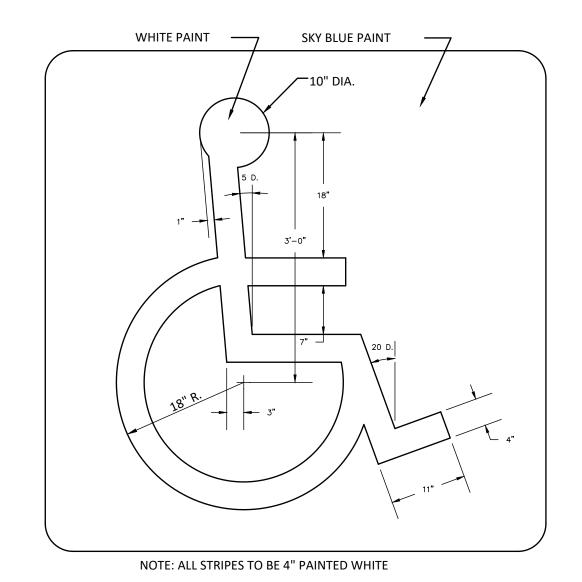
ENGINEERED FILL MATERIALS SHOULD CONSIST OF NON-EXPANSIVE MATERIALS.
PYRITIC AND/OR POTENTIALLY EXPANSIVE MATERIALS, SUCH AS MINE TAILINGS AND
SLAG SHOULD NOT BE USED AS ENGINEERED FILL MATERIAL. MATERIALS SELECTED
FOR USE AS ENGINEERED FILL SHOULD CONTAIN LESS THAN 3 PERCENT BY WEIGHT
OF ORGANIC MATTER, WASTER CONSTRUCTION DEBRIS, OR OTHER DELETERIOUS
MATERIALS. FILL MATERIALS SHOULD GENERALLY HAVE A STANDARD PROCTOR
MAXIMUM DRY DENSITY GREATER THAN 110 POUNDS PER CUBIC FOOT (PCF), AN
ATTEERBERG LIQUID LIMIT LESS THAN 40, A PLASTICITY INDEX OF LESS THAN 15, AND
A MAXIMUM PARTICLE SIZE OF 2 INCHES OR LESS.

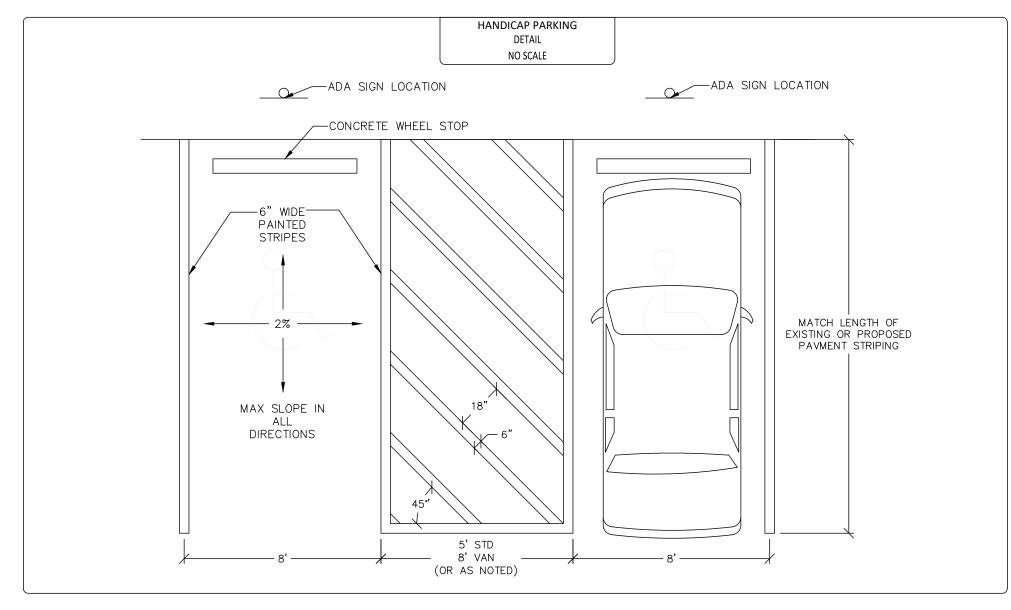
PLACE AND COMPACT ENGINEERED FILL TO THE FOOTING BEARING ELEVATION IN SIX (6) INCH MAXIMUM LIFTS. EACH LIFT SHOULD BE COMPACTED TO AT LEAST NINETY-EIGHT (98%) PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY WITH THE MOISTURE CONTENT OF THE ENGINEERED FILL BEING WITHIN TWO (2%)± PERCENT OF THE OPTIMUM MOISTURE CONTENT (ASTM D698). THIS WORK SHOULD BE COMPLETED AT ONE TIME AND IN A UNIFORM MANNER OVER THE ENTIRE BUILDING PAD TO THE HIGHEST FOUNDATION BEARING ELEVATION.

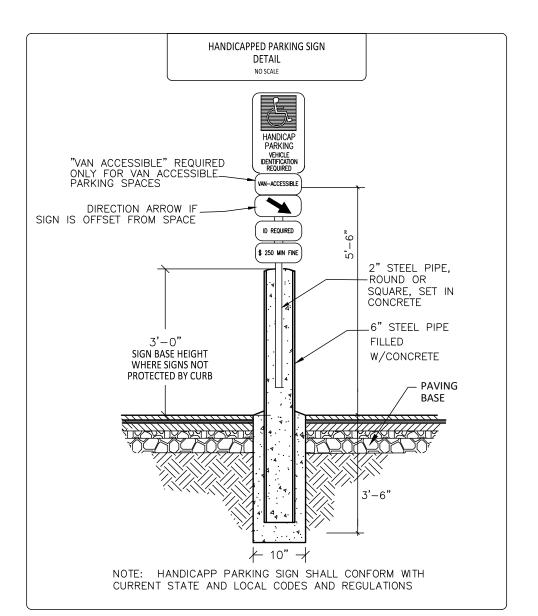
ENGINEERED FILL REQUIRED IN PAVEMENT AREAS SHOULD BE PLACED IN SIX (6) INCH MAXIMUM LIFTS WITH EACH LIFT COMPACTED TO AT LEAST NINETY-FIVE (95%) PERCENT STANDARD PROCTOR MAXIMUM DRY DENSITY WITH THE MOISTURE CONTENT OF THE ENGINEERED FILL BEING WITHIN TWO (2%)± PERCENT OF THE OPTIMUM MOISTURE CONTENT (ASTM D698).

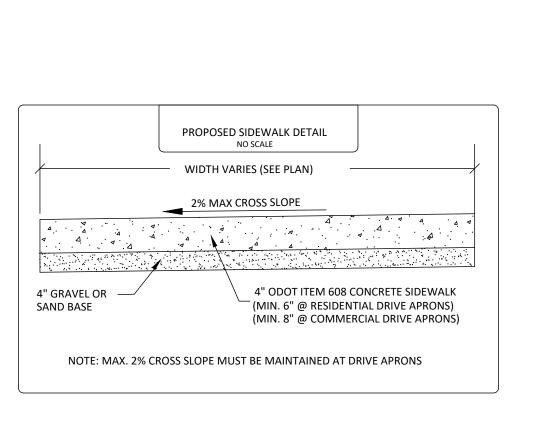
REPRESENTATIVE SAMPLES OF THE PROPOSED FILL MATERIALS SHOULD BE COLLECTED AT LEAST ONE WEEK PRIOR TO THE START OF THE FILLING OPERATIONS THE SAMPLES SHOULD BE TESTED TO DETERMINE THE MAXIMUM DRY DENSITY, OPTIMUM MOISTURE CONTENT, PARTICLE SIZE DISTRIBUTION AND PLASTICITY CHARACTERISTICS. THESE TESTS ARE NEEDED TO DETERMINE IF THE MATERIAL IS ACCEPTABLE AS STRUCTURAL FILL AND QUALITY CONTROL DURING THE COMPACTION PROCESS.

CONTROL POINTS SHOULD BE ESTABLISHED WITHIN THE ANTICIPATED FILL AREAS (
MORE THAN 4 FEET) TO MONITOR, DURING AND SUBSEQUENT TO THE COMPLETION
OF THE FILL OPERATIONS, ANY AND ALL SETTLEMENTS OF THE FINAL GRADE
RESULTING FROM CONSOLIDATION OF THE AREA'S SUBSURFACE MATERIALS UNDER
THE WEIGHT OF THE ENGINEERED FILL, AND FROM THE ENGINEERED FILL UNDER
THEIR OWN WEIGHT. SETTLEMENT-TIME DATA, THUS DEVELOPED, SHOULD BE
EMPLOYED TO ESTABLISH THE TIME OF PLACEMENT OF THE BUILDING STRUCTURE
AND PAVEMENT AREAS.



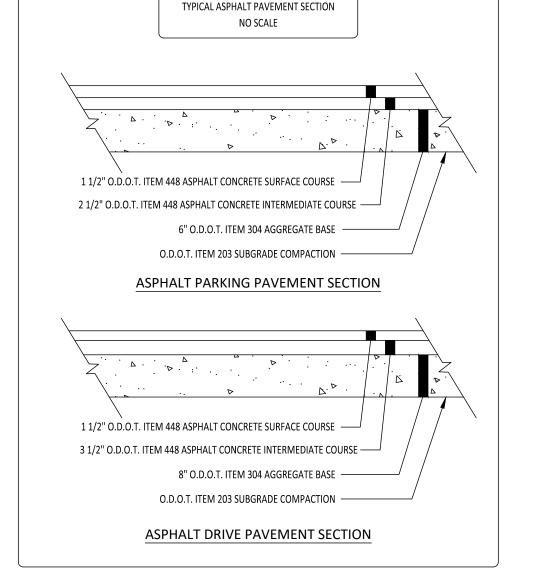






CURB RAMP WITH TRUNCATED DOMES

NO SCALE



1. CURB RAMPS MUST HAVE CONFORMING SIDE SLOPES AND NON-SLIP SURFACES. CURB RAMPS ARE TO SLOPE FROM THE PARKING LOT SIDEWALK TO THE MANUEVERING AREA AND ARE TO BE NO

2. SURFACE TEXTURE: TEXTURE SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE

BE PROVIDED ALONG THE EDGES OF RAMPS BUILT IN EXISTING CONCRETE WALKS.

-48:1 SLOPE MAX

3. JOINTS: SHALL BE PROVIDED IN THE CURB RAMP AS EXTENSIONS OF WALK JOINTS AND CONSISTENT

WITH ITEM 608.03 FOR NEW CONCRETE WALKS. A 1/2" ITEM 705.03 EXPANSION JOINT FILLER SHALL

3. A FLAT, 48 INCH LONG LANDING AREA IS TO BE CONSTRUCTED BETWEEN THE CURB RAMPS AND

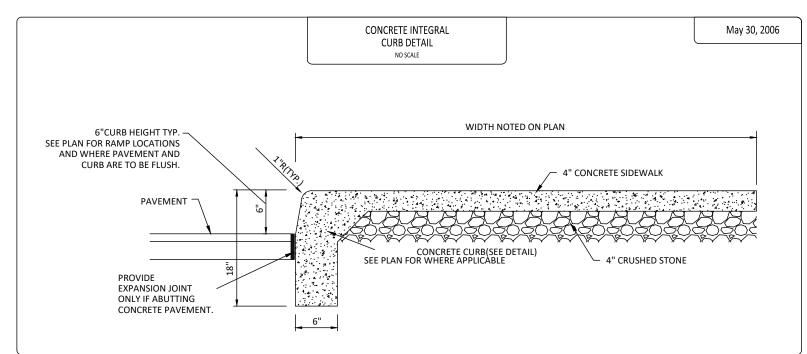
4. A MINIMUM 3 FOOT WIDE ACCESSIBLE ROUTE IS TO BE CONSTRUCTED FROM THE PARKING LOT

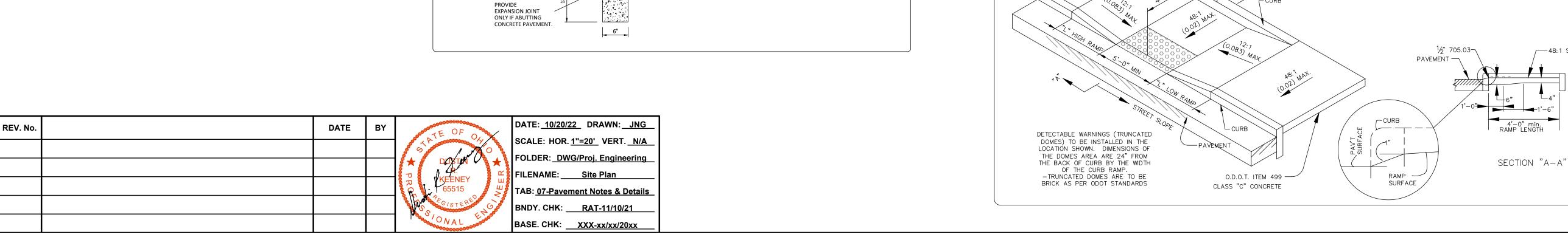
*MEASURED ALONG THE BACK OF A 6"

CURB RAMP NOTES:

ACCESS AISLE TO THE CURB RAMP

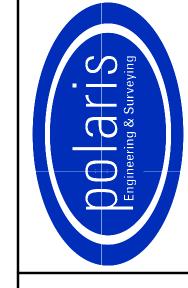
RAMP SLOPES AND SHALL BE ROUGHER THAN ADJACENT WALK.





CLEVELAND PIZZA C 31222 VINE STREET

POLARIS ENGINEERING & SURVE 34600 CHARDON ROAD - SUITE D WILLOUGHBY HILLS, OHIO 44094 (440) 944-4433 (440) 944-3722 (Fax)



AVEMENT NOTES
DETAILS

CONTRACT No.

21183

 SHEET
 OF

 07
 08



Maximum

trench width

(see note 1)

— TRENCH

BACKFILL

1/2 ID Shape bottom of trench

at top of pipe

CLASS "C" BEDDING

Select on site

or fine friable

(see note 4)

fine friable

(see note 3)

material

No. 46 or 57

(see note 2)

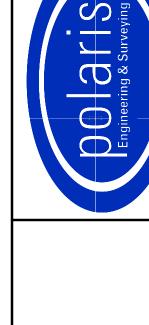
limestone

material

friable material



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21183 SHEET OF 80

trench width at top of pipe - TRENCH BACKFILL LOCATION and elevation when given on the plans is top center of the 12" MIN CASTING & GRATING In Pavement (Without Slab Top): Casting to Be East Jordan No. 5250 In Lawn (With Slab Top): Casting to Be East Jordan No. 5110 w/ Type M3 Grate (or equal). concrete cradle BRICK, concrete block or cast-in-place CLASS "A" BEDDING SECTION A-Awalls have a nominal thickness of 8 inches. Precast walls shall have a

CATCH BASIN DETAIL

1/4"

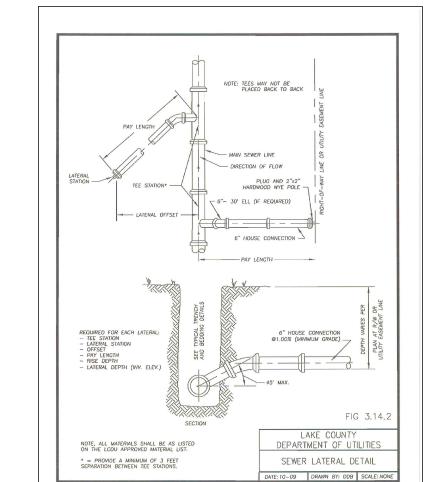
PLAN

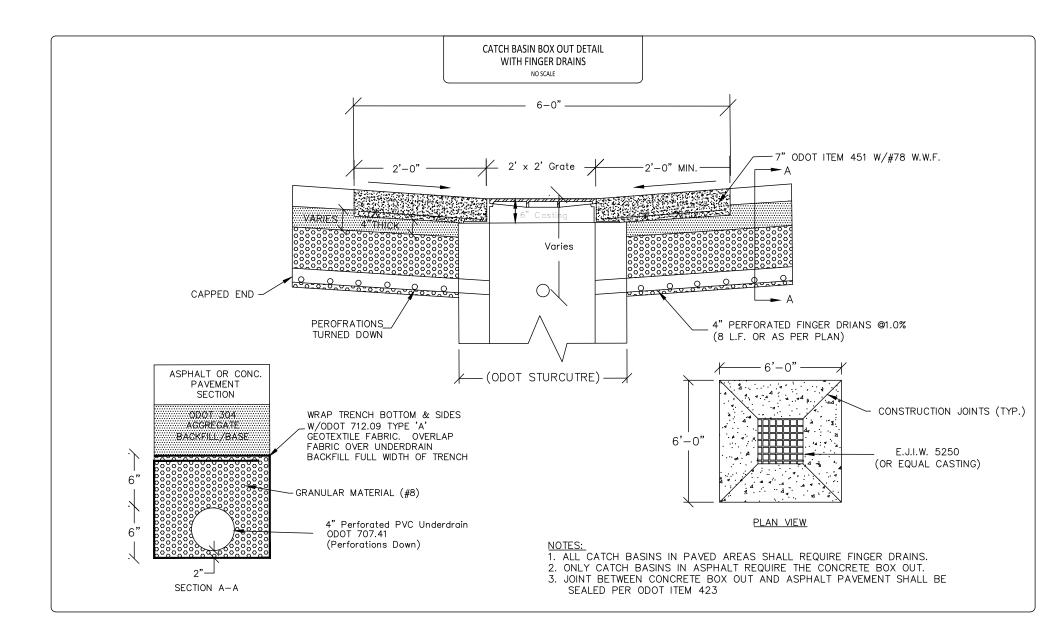
Alternate Rim (In Pavemer

minimum thickness of 6 inches and be reinforced sufficiently to permit shipping and handling without damage. 2-2-B GRATE elevation to be placed 4 to 6 inches below normal elevations

of median or ditch flow line returning to normal 10 feet each side of basin. CONCRETE, cast-in-place, to be Class "C". All precast concrete shall meet the requirements of 706.13 with 6%, plus or minus 2% air void content in the hardened concrete and be marked

with catch basin number. OPENINGS for pipes shall be 0.D. +2" when fabricated or field cut. THIS DETAIL IS INTENDED TO DETAIL THE ODOT STANDARD 2-2-B CATCH BASIN





PIPE BEDDING & BACKFILL DETAIL

NO SCALE

trench width

CLASS "B" BEDDING

4. In areas outside of povement, select on site friable material approved by the Engineer may be used above the bedding as specified in Item 2.

TRENCH AND BEDDING NOTES

1. Maximum trench width at top of pipe shall be O.D. plus 24" for all pipe sizes up to and including 24" I.D. and O.D. plus 30" for pipe sizes larger that 24" I.D.

2. Pipe bedding shall be No. 46 or No. 57 limestone to springline of pipe for concrete pipe. Pipe bedding shall be No. 46 or No. 57 limestone to 12" above the pipe for

3. Pipe backfill under pavement and structures shall be No. 46 or No. 57 limestone to 12" above top of pipe. Remaining backfill under pavement and structures shall

be No. 10 limestone compacted in lifts not to exceed 4" to top of trench. (ODOT item 304 gravel may be used as approved by the Engineer.) The backfill material shall

Select on site

friable material

or fine friable

(see note 4)

— fine friable

material

(see note 3)

— 4" or 1/4 I.D.

whichever is

shale

PVC and VCP pipe.

Slag shall not be used.

Waterline bedding shall be Class "C".

greater in earth

6" min. in rock or

extend a minimum of 3 feet beyond each edge of pavement or structure.

5. All bedding shall be Class "B" unless otherwise noted on the plans or authorized by the Engineer.

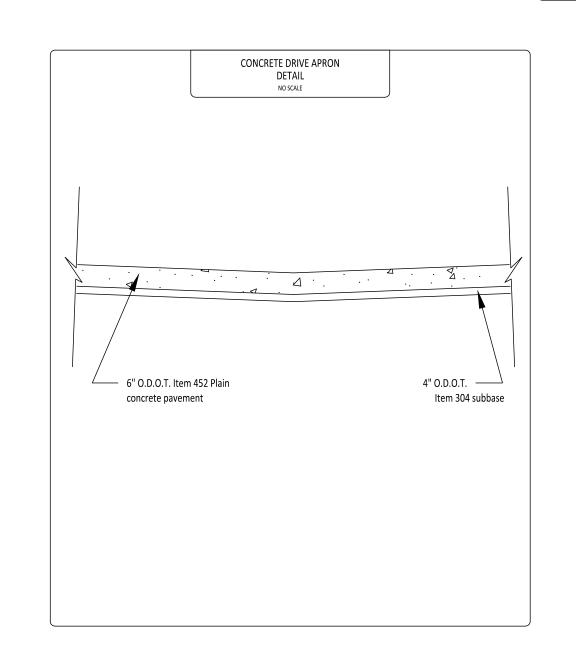
8. Clay dams shall be required when and where necessary per the sole discretion of the Engineer.

at top of pipe

- TRENCH

BACKFILL

12" MIN



NUIES:

1. MANHOLES SHALL BE PERFECTLY PLUMB.

2. MANHOLE RIMS CAN BE ADJUSTED TO GRADE BY THE USE OF NO MORE THAN 12-INCHES OF PRECAST ADJUSTING COLLARS.

2. THOROSEAL INSIDE OF MANHOLES FULL DEPTH (ANY COLOR BUT GRAY).

3. ALL JOINTS AND CONNECTIONS TO BE WATER PLUGGED.

4. ALL MATERIAL SHALL BE AS LISTED IN THE LODU APPROVED MATERIAL LIST.

STANDARD MANHOLE FRAME AND COVER. MAKE FLUSH WITH RIDGED OR FLEXIBLE PAVEMENT, TRAVELED ROAD SURFACE OR BERM, OR 3" AROVE FARTH

SPRING LINE OF PIPE -

PLAN VIEW

24"MIN. (FROM FIRST STEP)

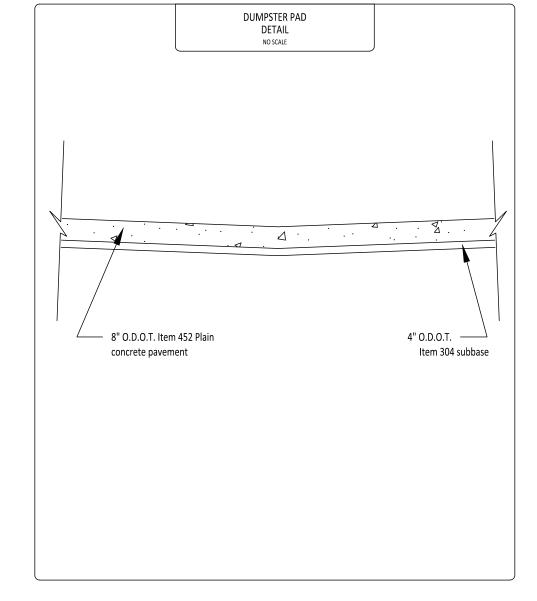
2500 PSI CONCRETE FILL —/
(FULL CHANNEL FACE TO FACE OF SECTION VIEW

2 ROWS OF BUTYL RUBBER SEALANT OR MASTIC JOINT SEALANT BETWEEN MANHOLE CASTING AND ADJUSTING RING COLLAR.

2 ROWS OF BUTYL RUBBER SEALANT OR MASTIC JOINT SEALANT INBETWEEN ADJUSTING RING COLLARS.

SAMPLING AND METERING MANHOLE

TE: 3-14 DRAWN BY: D.D.B. SCALE: NONE

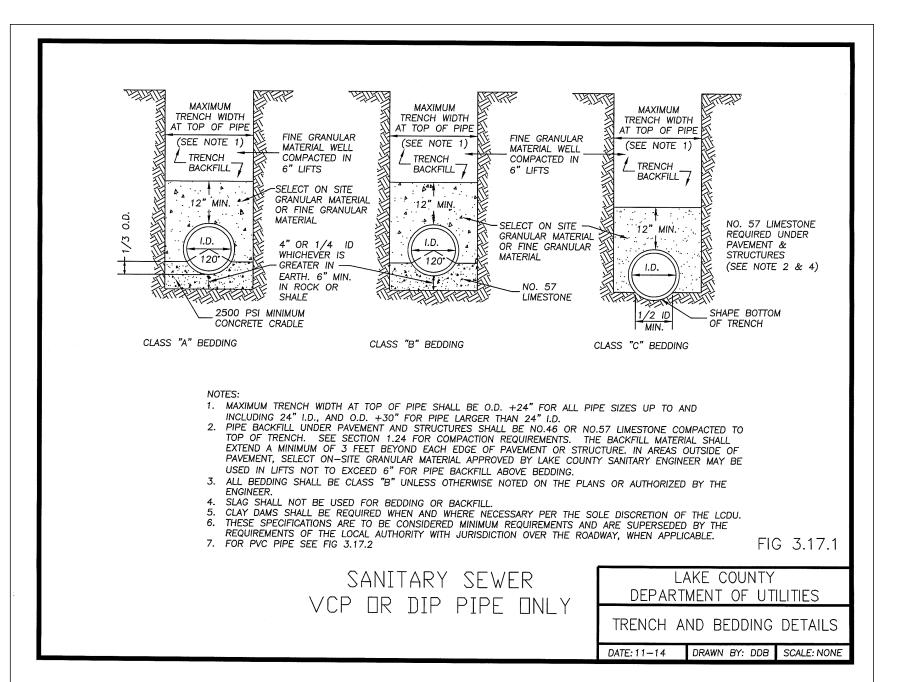


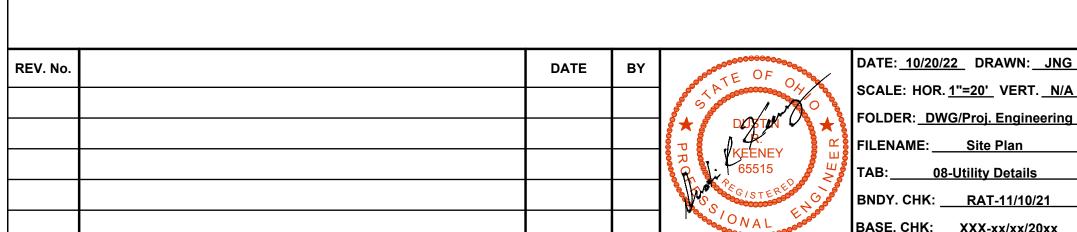
8" 2'-0" 8"

SECTION B-B

__

SECTION C-C





SCALE: HOR. 1"=20' VERT. N/A FOLDER: <u>DWG/Proj. Engineering</u> FILENAME: Site Plan 08-Utility Details

BNDY. CHK: <u>RAT-11/10/21</u> BASE. CHK: XXX-xx/xx/20xx