

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT INFORMATION

NPDES PERMIT (OH0000004) # _____

PERMITEE (DEVELOPER) _____

CO-PERMITEE (CONTRACTOR) _____

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 SEDIMENT CONTROL PRACTICES.

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 RE-ESTABLISHED 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 BASIN OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPOLOPE AREA. SEDIMENT LADEN WATER SHALL NOT BE DISCHARGED TO STREAMS OR THE STORM SEWER SYSTEM.

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 NPDES STORM WATER DISCHARGE PERMIT.

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

STORMWATER QUALITY MAINTENANCE NOTES

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 CONTRACTOR SHALL COMPLY WITH THE INSPECTION AND MAINTENANCE SCHEDULE INCLUDED WITH THE APPROVED PLANS FOR THE PROPOSED EROSION CONTROLS. A WRITTEN DOCUMENT CONTAINING THE SIGNATURES OF ALL CONTRACTORS AND SUB-CONTRACTORS INVOLVED IN THE IMPLEMENTATION OF THE BMP'S MUST BE MAINTAINED AS PROOF ACKNOWLEDGING THAT THEY REVIEWED AND UNDERSTAND THE CONDITIONS AND RESPONSIBILITIES OF THE SWP3.

PROPERTY OWNER SHALL BE RESPONSIBLE FOR OVERSEEING MAINTENANCE OF ALL EROSION CONTROL AND WATER QUALITY PRACTICES. OWNER SHALL MAINTAIN PROPER OPERATION. IF PROPERTY SHOULD TRANSFER OWNER NEW OWNER WILL ASSUME RESPONSIBILITY FOR ALL INSPECTIONS, ANY REQUIRED MAINTENANCE AND/OR REPAIRS.

SEE "OEPA CONSTRUCTION SITE INSPECTION CHECKLIST" FOR INSPECTIONS OCCURRING DURING THE CONSTRUCTION PROCESS. SEE "OPERATION AND MAINTENANCE INSPECTION REPORT FOR STORMWATER MANAGEMENT PONDS" FOR INSPECTIONS OCCURRING AFTER SITE STABILIZATION. INSPECTION REPORTS CAN BE OBTAINED BY CONTACTING THE DESIGN ENGINEER.

INSPECTIONS AND REQUIRED MAINTENANCE OCCURRING DURING THE CONSTRUCTION PROCESS ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS ATTRIBUTED TO REPAIRS DURING CONSTRUCTION ACTIVITIES.

INSPECTIONS AND REQUIRED MAINTENANCE OCCURRING AFTER THE SITE IS STABILIZED ARE THE RESPONSIBILITY OF THE OWNER OR A QUALIFIED AGENT OF THE OWNER. THE OWNER SHALL BE RESPONSIBLE FOR ANY COSTS ATTRIBUTED TO REPAIRS AFTER SITE STABILIZATION.

SEE "OPERATION AND MAINTENANCE INSPECTION REPORT FOR STORMWATER MANAGEMENT PONDS" FOR TIMING ON INSPECTION FREQUENCY. NOTE THAT ADDITIONAL INSPECTIONS MAY BE REQUIRED IN THE FIRST YEAR TO ENSURE PROPER OPERATION OF STORM WATER MANAGEMENT FACILITIES.

PERPETUAL MAINTENANCE INSPECTION REPORTS ARE TO BE SUBMITTED TO THE COMMUNITY BY MAY 1ST OF EACH AND EVERY YEAR AFTER THE BEST MANAGEMENT PRACTICE (BMP) HAS BEEN COMPLETED.

INSPECTION DURING CONSTRUCTION
ALL STORMWATER CONTROLS ON THE SITE ARE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN ONE-HALF INCH OF RAIN PER 24 HOUR PERIOD. A WRITTEN RECORD DOCUMENTATING THE RESULTS OF THESE INSPECTIONS MUST BE CREATED AND MAINTAINED WITH THE SWP3. 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 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.

I. WHEN PRACTICES REQUIRE REPAIR OR MAINTENANCE
IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE IS IN NEED OF REPAIR OR MAINTENANCE, WITH EXCEPTION OF A SEDIMENT SETTLING POND, IT MUST BE REPAIRED OR MAINTAINED WITHIN THREE DAYS OF INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION.

II. WHEN PRACTICES FAIL TO PROVIDE THEIR INTENDED FUNCTION
IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE FAILS TO PERFORM ITS INTENDED FUNCTION AND THAT ANOTHER, MORE APPROPRIATE CONTROL PRACTICE IS REQUIRED, THE SWP3, MUST BE AMENDED AND THE NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF INSPECTION.

III. WHEN PRACTICES DEPICTED ON THE SWP3 ARE NOT INSTALLED
IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE HAS NOT BEEN IMPLEMENTED IN ACCORDANCE WITH THE SWP3, THE SWP3 MUST BE AMENDED AND THE NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION. IF THE INSPECTION REVEALS THAT THE PLANNED CONTROL PRACTICE IS NOT NEEDED, THE RECORD MUST CONTAIN A STATEMENT OF EXPLANATION AS TO WHY THE CONTROL PRACTICE IS NOT NEEDED.

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: PREVENT 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 TOGETHER.

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 DISPOSSED INTO THE PROPERTY, SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL.

FUEL/LIQUID TANK STORAGE

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 DISPOSSED OF ON-SITE, BUT DEMOLITION DEBRIS MUST BE DISPOSSED IN A OHIO EPA APPROVED LANDFILL. ALSO, MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR POLLUTION REGULATIONS (SEE OHIO ADMINISTRATIVE CODE (OAC) 3745-20).

CONSTRUCTION CHEMICAL COMPOUNDS

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

EQUIPMENT FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY.

CONCRETE WASH WATER

ALL DESIGNATED CONCRETE WASHOUT AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREAS.

CONTAMINATED SOILS

ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES (TSDF'S).

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.

SPILL REPORTING REQUIREMENTS

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 SEDIMENT-LADEN 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 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 POLLUTANT-LADEN BY TRAVELING OVER DISTURBED SOILS OR OTHER POLLUTANT SOURCES.

OPEN BURNING

OPEN BURNING IS NOT PERMITTED.

DUST CONTROLS/SUPPRESSANTS

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.

AIR PERMITTING REQUIREMENTS

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.

PROCESS WASTE WATER/LEACHATE MANAGEMENT

DISCHARGES INCLUDING BUT NOT LIMITED TO VEHICLE/AND OR EQUIPMENT WASHING, LEACHATE ASSOCIATED WITH ON-SITE WASTE DISPOSAL, CONCRETE WASHOUTS, ETC. ARE A PROCESS WASTE/LEACHATE AND ARE NOT AUTHORIZED FOR DISCHARGE UNDER OH000003. ALL PROCESS WASTE WATER MUST BE COLLECTED AND PROPERLY DISPOSED OF AT AN APPROVED DISPOSAL FACILITY.

SOIL STABILIZATION CONTROLS

CLEARING & GRUBBING

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.

CONSTRUCTION ENTRANCE

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.

STABILIZATION

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. OH000003 EFFECTIVE DATE 4/21/08 - EXPIRATION DATE 4/20/13 DISTURBED AREAS MUST BE STABILIZED AS SPECIFIED IN THE FOLLOWING TABLES BELOW:

TEMPORARY SEEDING

SEEDING AREAS SHALL BE INSPECTED AND WHERE THE SEED HAS NOT PRODUCED 80% COVER SHALL BE RESEED AS NECESSARY BY THE CONTRACTOR. AREAS SHALL BE STABILIZED WITH MULCH WHEN CONDITIONS PROHIBIT SEEDING.

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 SEEDDED AND MULCHED WITHIN 7 DAYS OF COMPLETED CONSTRUCTION.

TEMPORARY STABILIZATION

AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL
ANY DISTURBED AREAS WITHIN 50 FT. OF A STREAM 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 21 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FT. OF A STREAM	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 A STREAM 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

PERMANENT SEEDING SPECIFICATIONS

Seed Mix	lb./ac.	lb. / 1000sqft	Notes:
General Use			
Creeping Red Fescue	20-40	1/2-1	
Domestic Ryegrass	10-20	1/4-1/2	
Kentucky Bluegrass	10-20	1/4-1/2	
Tall Fescue	40	1	
Dwarf Fescue	40	1	
Steep Banks or Cut Slopes			
Tall Fescue	40	1	
Crown Vetch	10	1/4	Do not seed later than August.
Tall Fescue	20	1/2	
Flat Peg	20	1/2	Do not seed later than August.
Tall Fescue	20	1/2	
Road Ditches and Swales			
Tall Fescue	40	1	
Dwarf Fescue	90	2 1/4	
Kentucky Bluegrass	5		
Lawns			
Kentucky Bluegrass	60	1 1/2	
Perennial Ryegrass	60	1 1/2	
Kentucky Bluegrass	60	1 1/2	For Shaded areas.
Creeping Red Fescue	60	1 1/2	

Note: other approved seed species may be substituted.

PERMANENT STABILIZATION OF CONVEYANCE CHANNELS

OPERATORS SHALL UNDERTAKE SPECIAL MEASURES TO STABILIZE CHANNELS AND OUTFALLS AND PREVENT EROSION 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.

TEMPORARY SEDIMENT CONTROLS

SILT FENCE

SHEET FLOW RUNOFF FROM DENUDDED 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. OH0000002 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	SLOPE LENGTH (FT)
0-2%	FLATTER THAN 50:1
2-10%	50:1-10:1
10%-20%	10:1-5:1
20%-33%	5:1-3:1
33%-50%	3:1-2:1
>50%	>2:1

INLET PROTECTION

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.

TEMPORARY RUN-OFF CONTROLS

DIVERSION SWALES

STORMWATER 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 16 ACRES.

TEMPORARY SEEDING SPECIFICATIONS

SEEDING DATES	SPECIES	LB.	1000SQFT	PER ACRE
MARCH 1 TO AUGUST 15	OATS	3		4 BUSHEL
	TALL FESCUE	1		40 LB.
	ANNUAL RYEGRASS	1		40 LB.
	PERENNIAL RYEGRASS	1		40 LB.
AUGUST 16 TO NOVEMBER 1	TALL FESCUE	1		40 LB.
	ANNUAL RYEGRASS	1		40 LB.
	WHEAT	1		40 LB.
	TALL FESCUE	1		40 LB.
NOVEMBER 1 TO SPRING SEEDING	ANNUAL RYEGRASS	1		40 LB.
	PERENNIAL RYEGRASS	1		40 LB.
	TALL FESCUE	1		40 LB.
	ANNUAL RYEGRASS	1		40 LB.

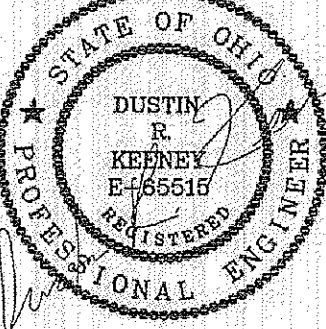
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.

CONSTRUCTION SEQUENCE NARRATIVE

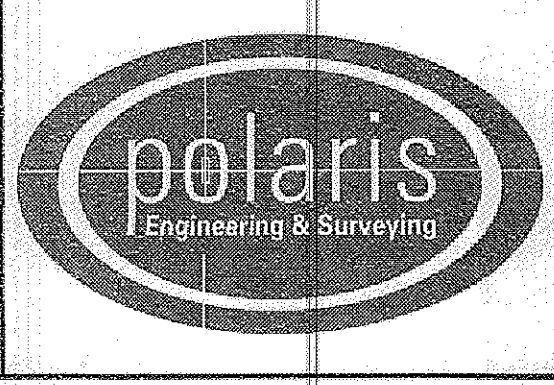
- PROVIDE SAFE AND SECURE PEDESTRIAN AND VEHICULAR TRAFFIC CIRCULATION THROUGHOUT THE ENTIRETY OF THE CONSTRUCTION SEQUENCE WITH WELL DEFINED CONSTRUCTION BOUNDARIES TO BE ACCESSED BY CONSTRUCTION PERSONNEL ONLY. ALL EROSION CONTROLS ARE TO BE THOROUGHLY INSPECTED BY THE CONTRACTOR UPON THE COMPLETION 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 CONSTRUCTION SITE ARE REQUIRED TO BECOME CO-PERMITEES. INSTRUCTIONS AND FORMS CAN BE OBTAINED AT THE OEPA WEBSITE: <http://www.epa.state.oh.us/dsw/storm/stormform.html>
- INSTALL STONE CONSTRUCTION ENTRANCE FOR ACCESS TO CONSTRUCTION AREAS OF SITE.
- DELIVER CONSTRUCTION TRAILER TO SITE AND ESTABLISH TEMPORARY POWER AND TELEPHONE SERVICE.
- ALL TEMPORARY UTILITY SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- STAKEOUT LIMITS OF DISTURBANCE
- INSTALL TEMPORARY INLET PROTECTION ON ALL EXISTING CATCH BASINS. INLET PROTECTION SHALL BE INSTALLED AS PER PLAN DESIGNATION.
- INSTALL ALL FILTER FABRIC FENCE WHERE SHOWN ON PLANS. FILTER FABRIC FENCE SHALL BE INSTALLED AS PER PLAN DESIGNATION.
- BEGIN CLEARING AND GRUBBING WITHIN THE DISTURBANCE LIMITS AS REQUIRED.
- REMOVE TOPSOIL FROM AREAS AS NECESSARY. REMOVE FROM SITE PER OHIO ENVIRONMENTAL PROTECTION AGENCY (OHIO EPA) STANDARDS OR TEMPORARILY STOCKPILE MATERIAL IN DESIGNATED AREAS.
- 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.
- 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.
- BEGIN EARTH-MOVING, EXCAVATION AND SITE GRADING OPERATIONS.
- 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).
- REPAIR/STABILIZE ALL AREAS DESIGNATED FOR TEMPORARY SEEDING AND MULCHING, INCLUDING AREAS WHERE SLOPE IS 3:1 OR GREATER, 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.
- MAINTAIN TEMPORARY CONTROLS UNTIL REMOVAL IS WARRANTED DUE TO PROGRESSION OF WORK.
- STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEED AND MULCHING OR CROWN VETCH SEEDING IMMEDIATELY UPON REACHING FINAL GRADE.
- CONSTRUCTION OF HOUSE TO BEGIN UPON EXCAVATION OF FOUNDATION AREA.
- AFTER HOUSE CONSTRUCTION INSTALLATION OF SEPTIC DRIVE AND FINAL GRADING ACTIVITIES SHALL OCCUR.
- ALL REMAINING TEMPORARY SEDIMENT CONTROL PRACTICES (INLET PROTECT, SILT FENCE, ETC.) SHALL BE REMOVED UPON SITE STABILIZATION. NOTE 80% VEGETATIVE DENSITY IS REQUIRED ON ALL DISTURBED SOIL AREAS FOR STABILIZATION. ORANGE CONSTRUCTION FENCE SHALL REMAIN ALONG THE RIPARIAN SETBACK LIMITS UNTIL THE CONSTRUCTION AND SITE LANDSCAPING ACTIVITIES ARE COMPLETE.
- RESEED AND REDRESS ANY AREAS THAT MAY REQUIRE ATTENTION IMMEDIATELY. NOTE THAT LAWN AREAS WILL NOT BE DEEMED STABLE UNTIL A UNIFORM 80% VEGETATIVE DENSITY IS ACHIEVED.
- 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.
- 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.
- 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.

REV. NO.	DATE	BY	CHK'D
1	REVISED PER LCSWD COMMENTS	9/25/13	JCK DRK

DATE: 9/13/13
SCALE: HOR. 1"=40'
VERT. 1"=5'
FOLDER: Site Plan
FILENAME: Site Plan
TAB: Details
DRAWN: DER



SUBLOT 8
CHAPIN LEDGES SUBDIVISION
7650 STRUMBLY GLEN LANE
CITY OF KIRTLAND-LAKE COUNTY-OHIO



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CONTRACT NO.	
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SHEET	OF
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SWP3 NOTES

PREPARED FOR:
ANDY LONCAR