

- (1) ITEM 448 1" ASPHALT CONCRETE SURFACE 1) ITEM 448 - 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 COURSE, TYPE 1
- (2) ITEM 448 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2
- (3) ITEM 408 BITUMINOUS PRIME COAT (0.4 GAL./S.Y.)
- (4) ITEM 304 6" AGGREGATE BASE
- (5) ITEM 203 COMPACTED SUBGRADE

TYP. PAVEMENT SECTION

HEAVY DUTY PAVEMENT SECTION

(3) ITEM 408 - BITUMINOUS PRIME COAT

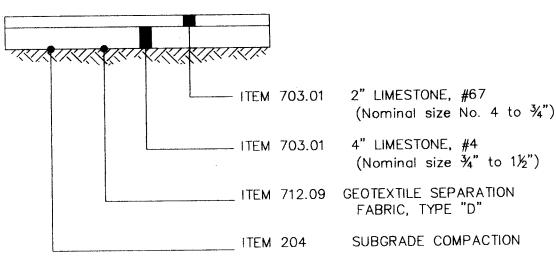
(4) ITEM 304 - 6" AGGREGATE BASE

(5) ITEM 203 - COMPACTED SUBGRADE

(2) ITEM 448 - 4" ASPHALT CONCRETE INTERMEDIATE

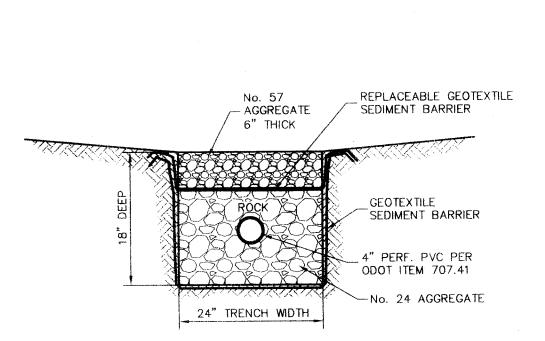
COURSE, TYPE 2

(0.4 GAL./S.Y.)

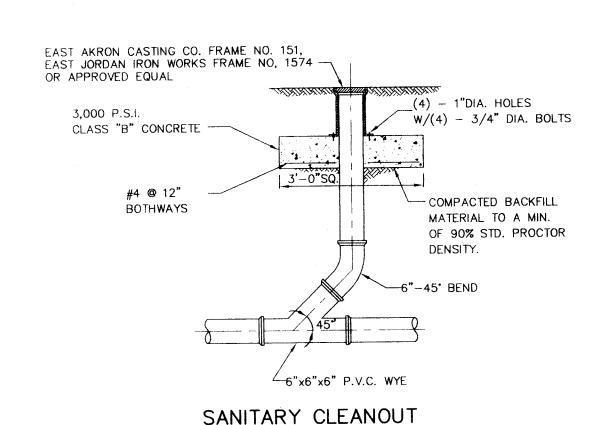


# GRAVEL PAVEMENT TYP. SECTION

## PAVEMENT SECTIONS



GRAVEL TRENCH W/ UNDERDRAIN



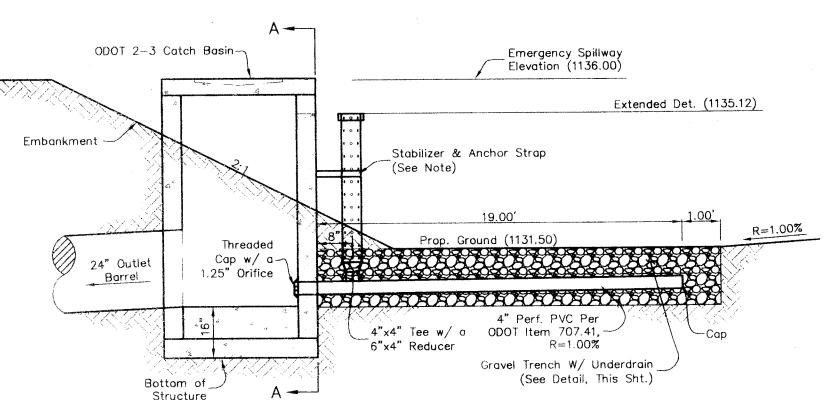
INDUSTRIAL:

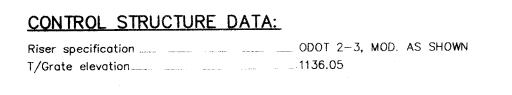
PARKING REQUIREMENTS:

FIVE PARKING SPACES PLUS ONE FOR EVERY ONE AND ONE HALF EMPLOYEES IN THE LARGEST WORKING SHIFT. SPACE ON SITE SHALL ALSO BE PROVIDED FOR ALL CONSTRUCTION WORKERS DURING PERIODS OF PLANT CONSTRUCTION.

47 EMPLOYEES/1.5 = 32 + 5 = 37SPACES REQUIRED

TOTAL PARKING SPACES ON SITE = 50





Orifice diameter 4" Perf. PVC Per ODOT Item 707.41 Outlet pipe specification \_\_\_1130.30 } See Note 1 1" Orifice invert elevation ... 4" pipe invert elev. @ C.B.

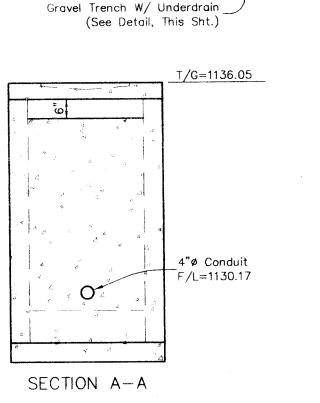
Securely fasten the riser pipe to the basin in the vertical position using a stabilizer and anchor strap that consists of a universal clamp or a strap and a block. All metal components shall be galvanized or stainless steel. All other materials shall be rot resistant.

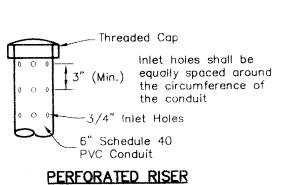
WATER QUALITY CONTROL DATA

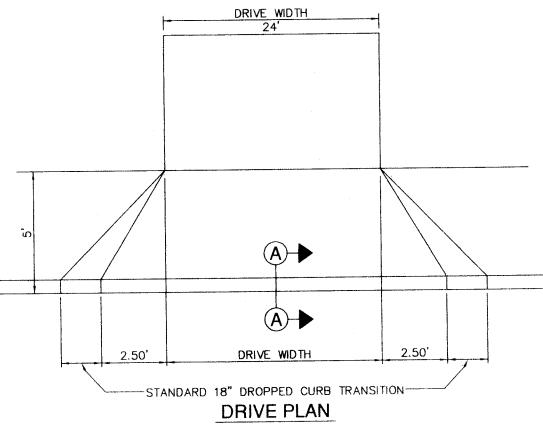
STABILIZER AND ANCHOR STRAP:

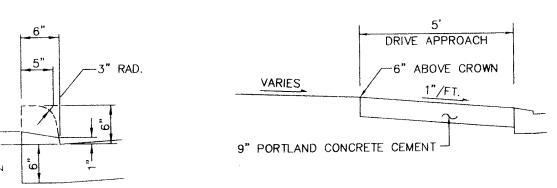
1.) FOR THE WATER QUALITY, IT IS INTENDED FOR THE 1" ORIFICE TO BE CENTERED ON THE 4" PLUG. 2.) THIS STRUCTURE SHALL BE EQUIPPED WITH STEPS AND MEET THE REQUIREMENTS OF ODOT'S SCD

3.) SEE THE STORM WATER POLLUTION PREVENTION PLAN, SHEET 4, FOR TEMPORARY MODIFICATIONS TO CONVERT THE SWM BASIN INTO A SEDIMENT BASIN. 4.) FILL THE BOTTOM OF THE CATCH BASIN WITH CONCRETE FOR BOUYANCY PURPOSES.









DRIVE PROFILE A-A NOTE ANY DEVIATION FROM THIS MUST BE APPROVED BY THE CITY ENGINEER.

CONCRETE SHALL BE 4000 PSI CLASS C

DRIVE DETAIL

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES AND ORDINANCES OF THE CITY OF MASSILLON; IN LIEU OF ANY MUNICIPAL REGULATIONS PERTINENT TO A SUBJECT ITEM TO BE CONSTRUCTED, THE CONTRACTOR SHALL BE BOUND BY THE STATE OF OHIO -DEPARTMENT OF TRANSPORTATION - CONSTRUCTION & MATERIAL SPECIFICATIONS DATED JANUARY 1, 2005 (HEREINAFTER REFERRED TO AS ODOT SPECIFICATIONS) PLUS ANY REFERENCED ODOT STANDARD CONSTRUCTION DRAWING.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR THIS PROJECT EXISTING FIELD CONDITIONS SHALL BE FIELD CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO BIDDING. SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLANS AND EXISTING FIELD CONDITIONS; THE CONTRACTOR SHALL SEEK WRITTEN CLARIFICATION FROM THE ENGINEER PRIOR TO THE BID SUBMISSION. SHOULD THE CONTRACTOR ENCOUNTER CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT-ISSUING AGENCIES, THE CONTRACTOR SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER PRIOR TO BID SUBMISSION.

4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO USE CONSTRUCTION MEANS AND METHODS THAT WILL PROTECT PROPERTY AND PREVENT BODILY INJURY AND/OR DEATH. THE CONTRACTOR SHALL COMPLY WITH THE SAFETY REQUIREMENTS OF CITY, STATE, AND FEDERAL

5. CONSTRUCTION SHALL BE PERFORMED, AND EQUIPMENT STORED, IN A MANNER WHICH PERMITS EXISTING FACILITIES TO PERFORM WITHOUT THE CONTRACTOR SHALL PERFORM WORK SO AS TO NOT DISTURB, DAMAGE OR DESTROY ANY MAILBOX, PAPER BOX, TELEPHONE OR POWER POLES, SIGNS, FENCES, RETAINING WALLS, LANDSCAPING ITEMS, ETC. ANY ITEM DAMAGED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY ITEM DISTURBED OR IN CONFLICT WITH THE WORK TO BE PERFORMED SHALL BE REMOVED AND RESET AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE NOTED ON THE PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING, WHICH SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 201. THIS WORK SHALL CONSIST OF CLEARING, GRUBBING, SCALPING, REMOVAL OF TREES AND STUMPS, AND

REMOVING AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS DESIGNATED ON THE PLANS. ALL ELEVATIONS ON THESE PLANS ARE BASED ON A LOCAL BENCH MARK WHICH WAS USED IN THE INDUSTRIAL PARK INFRASTRUCTURE

REMOVE ALL TREES AND STUMPS WITHIN THE WORK IMPROVEMENT AREA UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. CONSTRUCT AND MAINTAIN EROSION AND SEDIMENT CONTROLS IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN.

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 ORC. LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

MASSILLON CABLE FIRST ENERTY GREAT LAKES ENERGY PARTNERS 2600 ERIE STREET S. 814 CABLE COURT NW P.O. BOX 550 MASSILLON, OHIO 44648 MASSILLON, OHIO 44646 HARTVILLE, OHIO 44632 CONTACT = JEFF CAMPBELL CONTACT = LUKE SAGE CONTACT = ED HAASPHONE = 330-833-4134PHONE = 330-830-7046PHONE = 330-857-1221DOMINION EAST OHIO - GAS NE OHIO OPERATING CO SBC - MASSILLON 7015 FREEDOM AVENUE NW 50 W. BOWERY 6TH FLOOR 5640 LANCASTER-NEWARD RD NE NORTH CANTON, OHIO 44720 AKRON, OHIO 44308 PLEASANTVILLE, OHIO 43148 CONTACT = HARVEY YERGIN CONTACT = AL HOFFMAN CONTACT = HOBY GRIEST PHONE = 330-266-2049PHONE = 330-384-2234PHONE = 740-862-3300CITY OF MASSILLON ENGINEERS AQUA OHO INC. 151 LINCOLNWAY EAST 870 THIRD STREET NW MASSILLON, OHIO 44646 MASSILLON, OHIO 44647 CONTACT = DON SNYDER CONTACT = JASON HAINESPHONE = 330-832-7600

12. WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT. IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT (OR APPURTENANCE) TO BE CONNECTED DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS. 13. THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

THIS PLAN UTILIZES MANUFACTURED WATER QUALITY STRUCTURES FOR WATER QUALITY TREATMENT. AREAS HAVE BEEN SHOWN IN THE PLANS FOR PLACEMENT OF AN OFF-LINE SYSTEM. THIS STRUCTURE SHALL BE IN CONFORMANCE WITH ITEM 895, MANUFACTURED WATER QUALITY STRUCTURE. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL.

SUBGRADE COMPACTION SHALL BE IN ACCORDANCE WITH ODOT ITEM 204 - SUBGRADE COMPACTION. 15. PLACE PROPOSED PAVEMENT IN THE LOCATIONS REPRESENTED ON THE PLANS AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE REFERENCED ODOT ITEMS AND THE TYPICAL SECTIONS SHOWN ON THE PLANS.

16. STORM SEWERS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 603. BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT STANDARD CONSTRUCTION DRAWING (SCD) DM-1.4 - CONDUIT INSTALLATION. 17. UNLESS OTHERWISE NOTED, ALL STORM SEWER INSTALLATIONS ARE TO BE INSTALLED USING TYPE B CONDUITS WITH CLASS B BEDDING IN

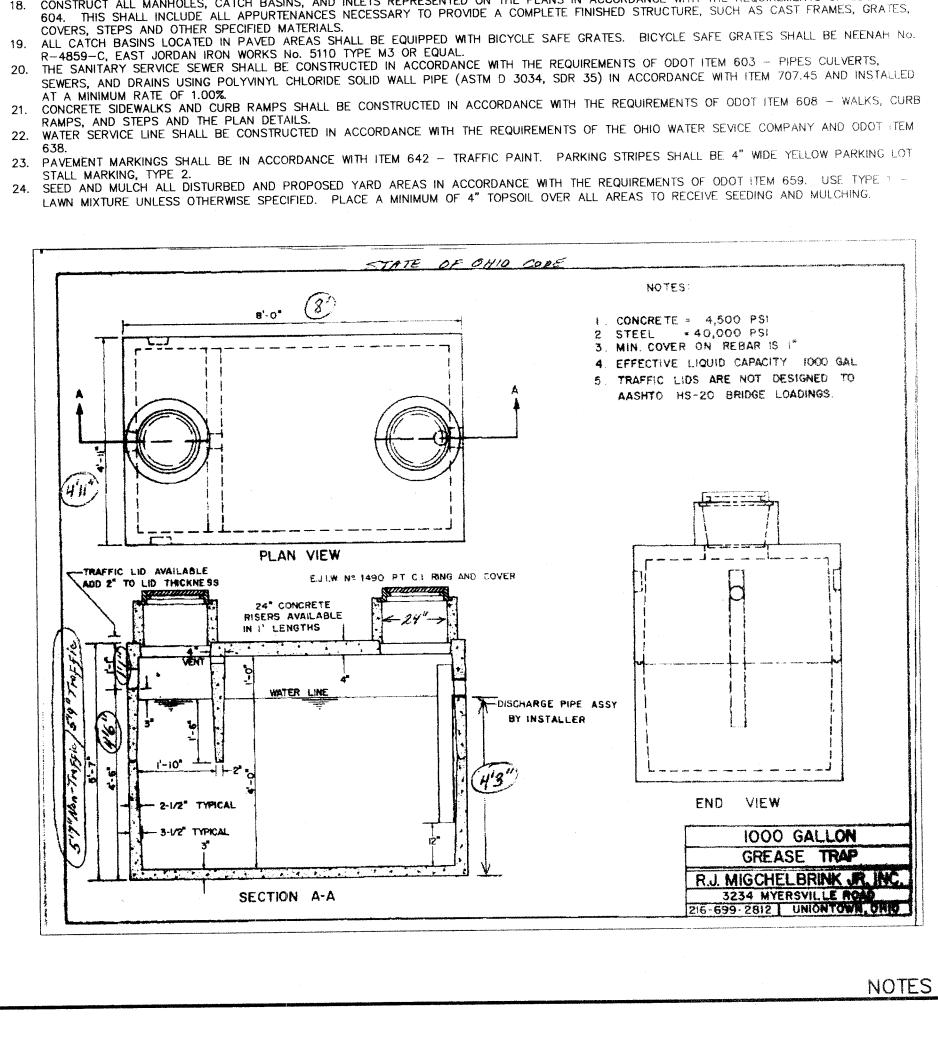
a. REINFORCED CONCRETE PIPE (RCP) IN ACCORDANCE WITH ODOT ITEM 706.02 HIGH-DENSITY CORRUGATED POLYETHYLENE (HDPE) SMOOTH LINED PIPE IN ACCORDANCE WITH ODOT ITEM 707.33

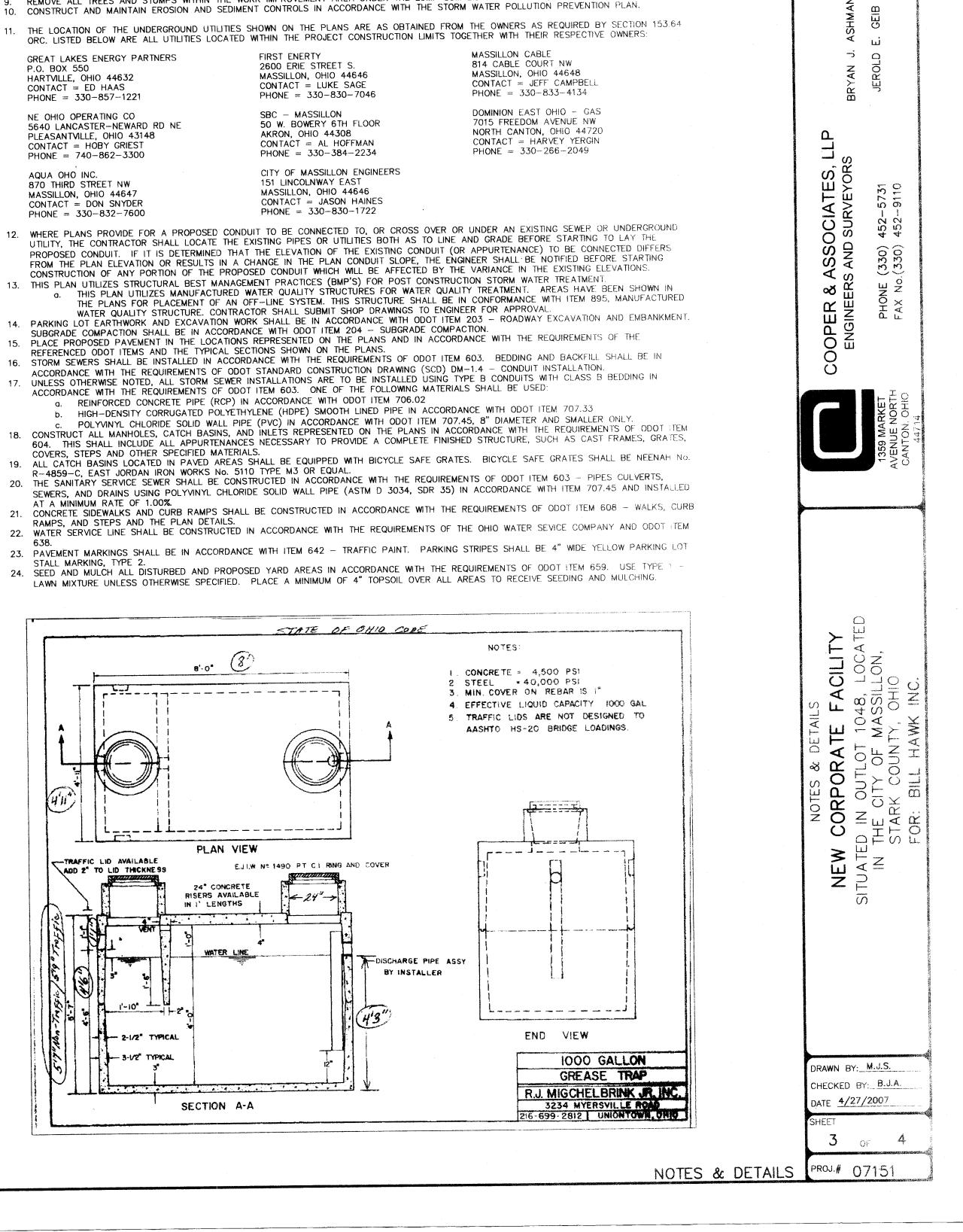
POLYVINYL CHLORIDE SOLID WALL PIPE (PVC) IN ACCORDANCE WITH ODOT ITEM 707.45, 8" DIAMETER AND SMALLER ONLY. 18. CONSTRUCT ALL MANHOLES, CATCH BASINS, AND INLETS REPRESENTED ON THE PLANS IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 604. THIS SHALL INCLUDE ALL APPURTENANCES NECESSARY TO PROVIDE A COMPLETE FINISHED STRUCTURE, SUCH AS CAST FRAMES, GRATES,

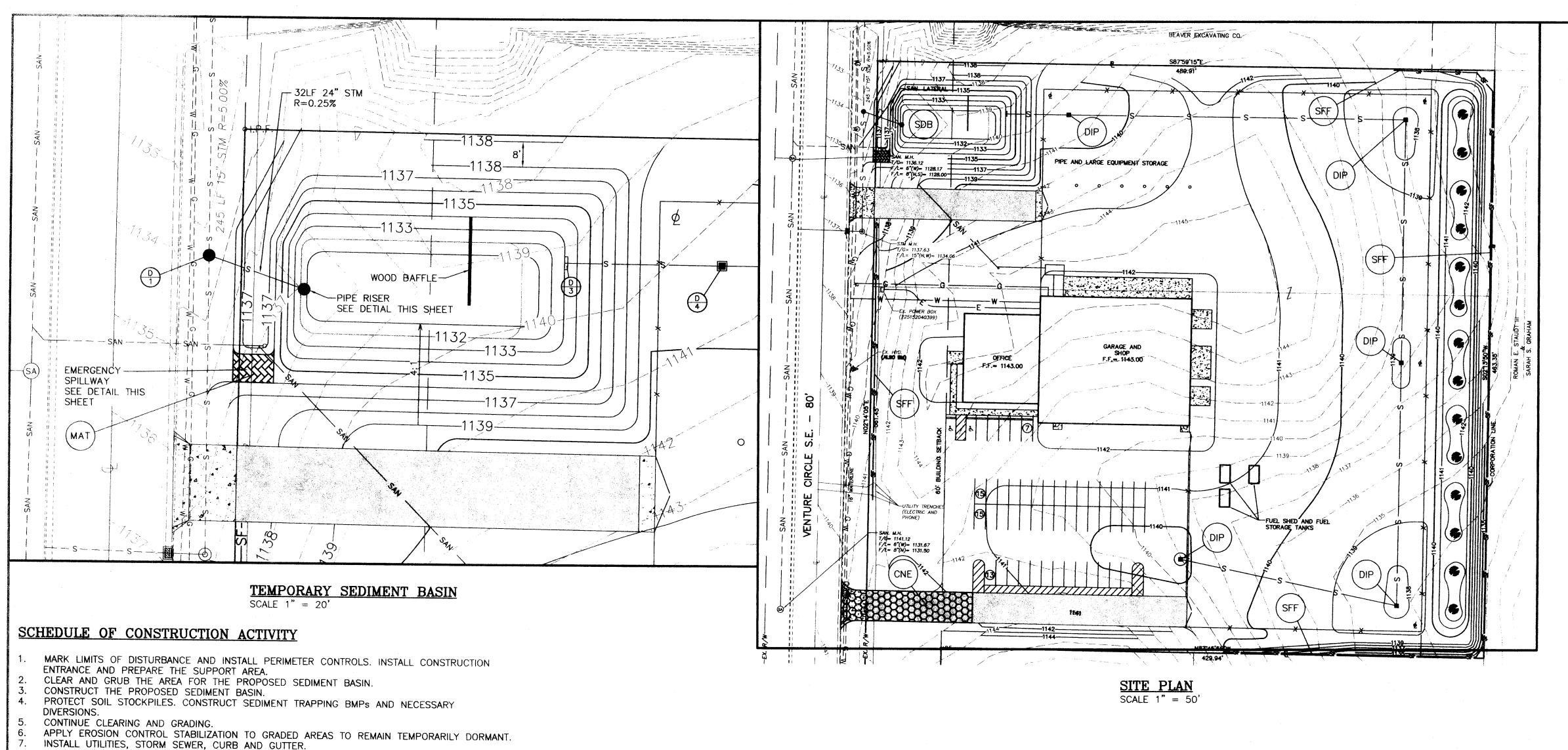
COVERS, STEPS AND OTHER SPECIFIED MATERIALS. 19. ALL CATCH BASINS LOCATED IN PAVED AREAS SHALL BE EQUIPPED WITH BICYCLE SAFE GRATES. BICYCLE SAFE GRATES SHALL BE NEENAH No.

RAMPS, AND STEPS AND THE PLAN DETAILS.

23. PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH ITEM 642 - TRAFFIC PAINT. PARKING STRIPES SHALL BE 4" WIDE YELLOW PARKING LOT







CONTACT INFORMATION

BILL HAWK INC. 2421 N. WOOSTER AVE DOVER, OHIO 44622 CONTACT: JENINE M. OTTOBRE - VP PHONE: (330) 364-7771 FAX: (330) 343-3240

### CO-PERMITEE INFORMATION

NORMAN ECKINGER INC. 2500 KRISKO CIR. S.W. CANTON, OHIO 44706 CONTACK: NORMAN ECKINGER PHONE: (330) 452-6500 FAX: (330) 452-6530

PROJECT DESCRIPTION

ACTIVITIES DISTUBING THIS SITE WILL CONSIST OF CONSTRUCTION OF BUILDING, PARKING LOT, AND STORM SEWERS. THE SITE IS AT 5.34AC. AT WHICH 4.39AC. WILL BE DISTURBED. ALL SEDIMENT LADEN WATER WILL BE DIRECTED TO A SEDIMENT BASIN LOCATED IN THE NORTHWEST CORNER OF THE SITE.

#### SOILS INFORMATION

Stark County Soil Survey Map # 58

#### LEGEND

PER THIS SHEET SILT FENCE AS PER PGS. 120-121 OF RWLD INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS AS PER PG. 125 OF RWLD

SEDIMENT BASIN AS

CONSTRUCTION ENTRANCE AS

PER PG. 158 OF RWLD MATTING AS PER PG. 163-164 OF RWLD

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DRAWN BY: M.J.S. CHECKED BY: B.J.A. DATE 4/27/2007

of 4

# STORMWATER POLLUTION PREVENTION PLAN NOTES

COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTINGS

ACQUIRE APPROVAL FROM STARK COUNTY SOIL AND WATER CONSERVATION DISTRICT TO

REMOVE SWP3 RISER AND INSTALL WQ CONTROL STRUCTURE (STRUCTURE 'D2') 13. CONVERT TO THE SEDIMENT BASIN TO THE PERMANENT WATER QUALITY BASIN.

APPLY AGGREGATE BASE TO ROADWAY.

COMPLETE FINAL PAVING.

REMOVE THE SEDIMENT BASIN.

THE CONTRACTOR SHALL PREVENT AND/OR REDUCE AND CONTROL SOIL EROSION RESULTING FROM THE PROPOSED IMPROVEMENTS. THE USE OF SILT FENCING, JUTE MATTING, TEMPORARY SEEDING, SILT CHECKS, INLET PROTECTION AROUND ALL CATCH BASINS, STABILIZED CONSTRUCTION ENTRANCE(S), ETC. WILL BE REQUIRED. SEDIMENT CONTROL STRUCTURES/DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL RAINWATER AND LAND DEVELOPMENT - OHIO'S STANDARS FOR STORMWATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION. SEDIMANT CONTROL DEVICES MUST BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUED INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS SET FORTH ON THE APPROVED STORMWATER POLLUTION PREVENTION PLAN IF APPLICABLE, OR AS DETAILED ON THE

CONSTUCTION PLANS, AS SPECIFIED BY THE CITY OF MASSILLON. THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL MEASURES SHALL ALSO CONFORM TO THE REQUIREMENTS OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) AND THE STARK SOIL AND WATER CONSERVATION DISTRICT. IF CONFLICTS EXIST REGARDING THE EROSION AND SEDIMENT CONTROL PRACTICES, THE MORE RESTRICTIVE SHALL APPLY.

TEMPORARILY STABILIZE DISTURBED AREAS THAT WILL REMAIN IDLE FOR 21 DAYS OR LONGER WITHIN 7 DAYS OF LAST DISTURBANCE OR WITHIN 2 DAYS FOR AREAS WITHIN 50 FEET OF A STREAM. PERMANENTLY STABILIZE DISTURBED AREAS WITHIN 7 DAYS OF REACHING FINAL GRADE. WHEN SEASONAL CONDITIONS PROHIBIT THE APPLICATION OF TEMPORARY OR PERMANENT SEEDING, THE AREA SHALL BE MULCHED IN ACCORDANCE WITH RWLD SPECIFICATIONS.

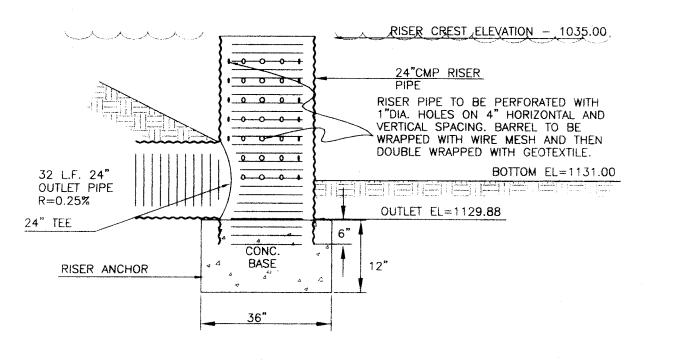
PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH RWLD SPECIFICATIONS, PAGES 167-170. TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH RWLD SPECIFICATIONS, PAGES 174-175. MULCHING SHALL BE IN ACCORDANCE WITH THE RWLD SPECIFICATIONS, PAGE 160. INSTALL ALL EROSION AND SEDIMENT CONTROL ITEMS BEFORE ANY CLEARING AND GRUBBING OR EARTHWORK IS BEGUN.

PROTECT UNDISTURBED AREAS THROUGHOUT CONSTRUCTION. DO NOT STORE EQUIPMENT, VEHICLES OR MATERIALS IN THESE PROTECTED AREAS. DO NOT DISTURB THESE AREAS. OFF-SITE VEHICLE TRACKING OF SEDIMENTS SHALL BE MINIMIZED. ALL OFF-SITE TRACKING OF

SEDIMENTS SHALL BE CLEANED UP AT THE END OF EACH WORK DAY. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL

IMPLEMENT NON-SEDIMENT POLLUTION CONTROLS IN ACCORDANCE WITH THE SPECIFICATIONS PROVIDED ON PAGE 181 OF RWLD.

- 12. PROVIDE EROSION AND SEDIMENT CONTROL MEASURES FOR "SMALL LOT BUILDING SITES" IN
- ACCORDANCE WITH THE SPECIFICATIONS PROVIDED ON PAGE 183 OF RWLD. 13. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH STARK SWCD (330-830-7700) PRIOR TO BEGINNING WORK.
- 14. EROSION AND SEDIMENT CONTROL MUST BE INSPECTED ONCE EVERY 7 DAYS AND FOLLOWING STORM EVENTS WITH 0.5 INCH OR GREATER RAINFALL DURING A 24 HOUR PERIOD. A WRITTEN LOG OF THESE INSPECTIONS MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. THE LOG SHOULD INDICATE THE DATES OF INSPECTIONS, INSPECTION, INSPECTION WEATHER CONDITIONS, OBSERVATIONS, ACTIONS TAKEN TO CORRECT PROBLEMS, AND THE DATE THE ACTION WAS TAKEN.
- 15. ANY NEEDED REPAIRS OF EROSION AND SEDIMENT CONTROL MEASURES, STRUCTURES, DEVICES OR RELATED ITEMS SHALL BE MADE WITHIN 3 DAYS.
- 16. SUBJECT PROPERTY IS LOCATED IN ZONE C (AREA OF MINIMAL FLOODING) PER FEMA MAP 390780 0100B.



RISER PIPE DETAIL - 100% DEWATERING DRAWDOWN

SEDIMENT BASIN - EMERGENCY SPILLWAY

OUTLET SECTION

TOP WIDTH

EL=1137.00

OUTLET PROFILE

EMBANKMENT /
PREFERABLY EXISTING

EMBANKMENT ELEV=1137.

TURE REINFORCEMENT

TURF REINFORCEMENT MAT

INSTALLED PER MANUFACTURE'S

STORM WATER POLLUTION PREVENTION PLAN PROJ.#07151A