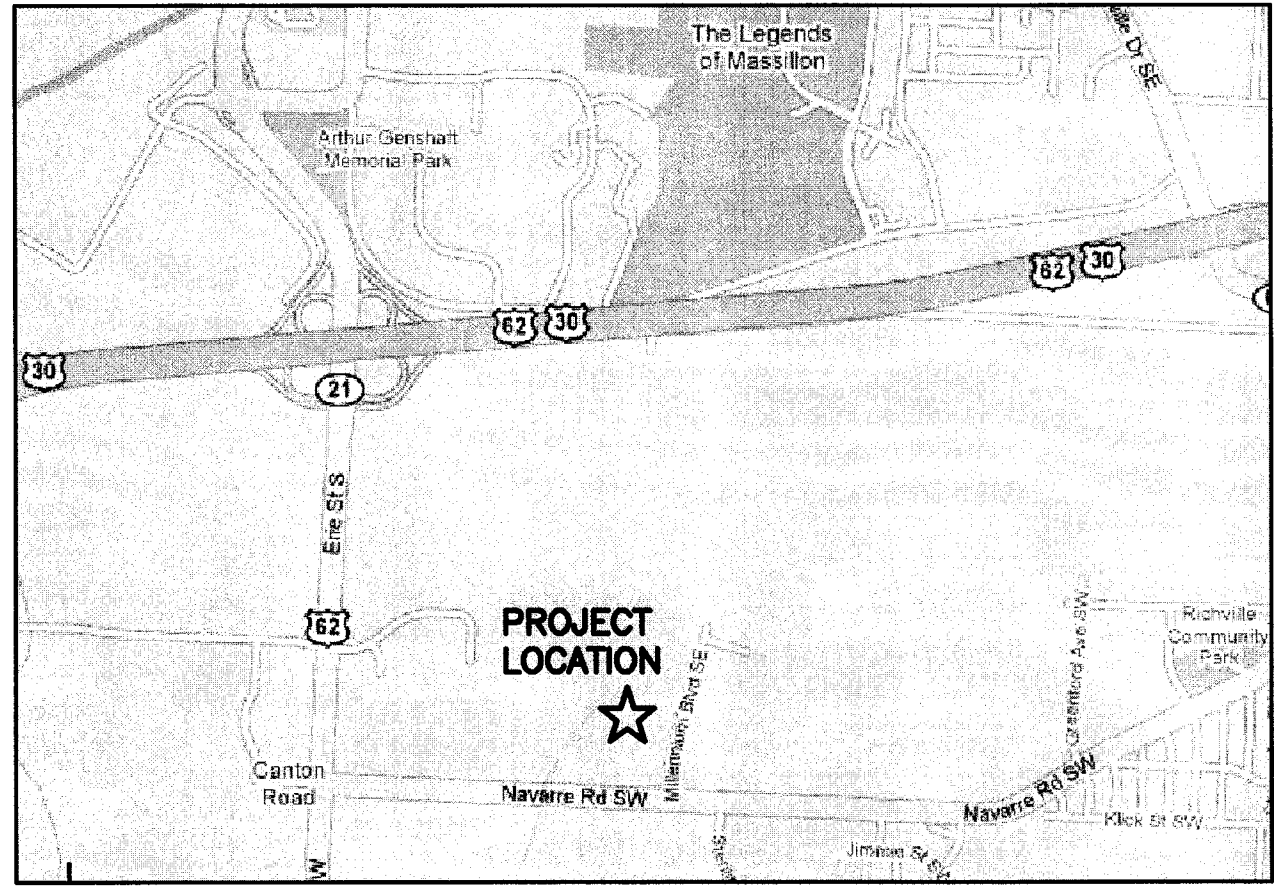


LEGEND	
—R/W—	RIGHT-OF-WAY
—W—	WATER LINE
—S—	SANITARY SEWER LINE
—ST—	STORM SEWER LINE
—G—	GAS LINE
—UE—	UNDERGROUND ELECTRIC
—OE—	OVERHEAD ELECTRIC
—UT—	UNDERGROUND TELEPHONE
—OT—	OVERHEAD TELEPHONE
—OET&C—	OVERHEAD ELECTRIC, TELEPHONE & CABLE
—X—X—	FENCE
⊗	GAS LINE MARKER
⊙	TELEPHONE LINE MARKER
⊕	POWER POLE
⊖	TELEPHONE POLE
⊗	TELEPHONE, LIGHT POLE
⊙	TELEPHONE, POWER POLE
⊕	GENERAL POLE
⊖	LIGHT POLE
⊗	LIGHT, POWER POLE
⊙	LIGHT, POWER, TELEPHONE POLE
⊕	LIGHT, POWER, TELEPHONE, CABLE T.V. POLE
⊖	ANCHOR
⊗	SIGN
⊙	CATCH BASIN (C.B.)
⊕	MAN HOLE (AS LABELED)
⊖	TRAFFIC CONTROL BOX
⊗	FIRE HYDRANT
⊙	VALVE (AS LABELED)
⊕	MAIL BOX
⊖	GUARD POST
⊗	SOIL BORING
⊙	MONITORING WELL
CO	CLEAN OUT
DS	DOWN SPOUT
EOP	EDGE OF PAVEMENT
FD	FLOOR DRAIN
FF	FINISH FLOOR ELEVATION
FP	FLAG POLE
RD	ROOF DRAIN
YD	YARD DRAIN
⊗	SPOT ELEV. TOP & BOTTOM OF CURB



BENCHMARK NO. 1:
"X" CHISELED ON NORTH RIM OF CATCH BASIN
LOCATED APPROXIMATELY 300 FT NORTH OF NAVARRE RD
& 80 FT WEST OF MILLENNIUM BLVD.
ELEV. = 999.76

**PARKING LOT EXPANSION
FOR E-TANK**
SITUATED IN THE CITY OF MASSILLON, STARK COUNTY, OHIO
BEING ALL OF OUTLOT 944
JANUARY 2008
REVISED JANUARY 2011



VICINITY MAP
NOT TO SCALE

ENGINEER/SURVEYOR	OWNER/DEVELOPER
HAMMONTREE & ASSOCIATES, LTD. 5233 STONEHAM ROAD NORTH CANTON, OHIO 44720 PHONE: (330) 499-8817 FAX: (330) 499-0149	E-TANK 4113 MILLENNIUM BLVD. SE MASSILLON, OH 44646 ATTN: ALAN JASLOW PHONE: (330) 837-5100

- GENERAL NOTES**
1. PRIOR TO THE COMMENCEMENT OF ANY PROJECT, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE CITY ENGINEER'S OFFICE. AT THIS TIME, THE PROJECT WILL BE DISCUSSED IN REGARD TO PROCEDURE, MATERIALS, INSPECTION, ETC...
 2. REFER TO SOILS REPORT FOR ALL SITE REQUIREMENTS ON COMPACTION, FILLING, FOUNDATION AND PAVEMENT SECTION REQUIREMENTS.
 3. THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED ON THE SITE NO MORE THAN TEN DAYS AND NO LESS THAN 48 HOURS IN ADVANCE OF EXCAVATION (ORC 3781.28).
 4. TRAFFIC SHALL BE MAINTAINED ON ALL ADJOINING STREETS AT ALL TIMES. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).
 5. ALL TRENCHES BENEATH THE PAVEMENT SHALL BE COMPACTED IN LIFTS AND WITH MATERIAL SPECIFIED BY THE CITY ENGINEERING DEPARTMENT OR ANY APPLICABLE O.D.O.T. SPECIFICATIONS.
 6. PAVEMENT MARKINGS SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS, JANUARY 1, 2005, ITEMS 641, 642 AND 740.
 7. THE CONTRACTOR SHALL MAINTAIN A WELL DRAINED SITE, FREE OF STANDING WATER DURING ALL PHASES OF CONSTRUCTION.
 8. IF ANY PAVEMENT IS DAMAGED OUTSIDE THE SAWCUT LIMITS, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPAIR OF THAT PAVEMENT.

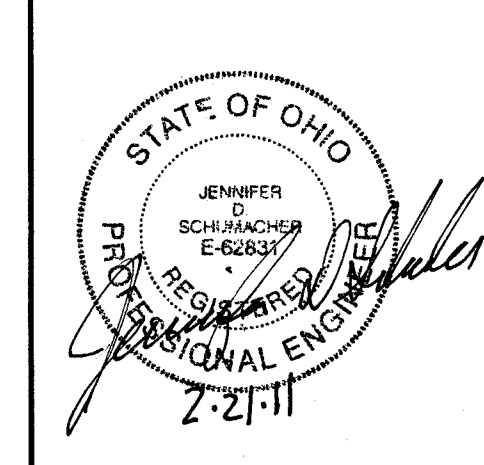
INDEX OF SHEETS	
1	COVER SHEET
2	EXISTING PLAN
3	SITE DIMENSION PLAN
4	UTILITY PLAN
5	STORM ROUTING PLAN
6	GRADING PLAN
7	SOIL EROSION CONTROL PLAN (NORTH)
8	SOIL EROSION CONTROL PLAN (SOUTH)
9	SOIL EROSION CONTROL NOTES & DETAILS
10	SOIL EROSION CONTROL NOTES & DETAILS

APPROVALS

APPROVED BY THE MASSILLON CITY ENGINEER
THIS 25th DAY OF FEBRUARY, 2011.
K.A. Dylewski
KEITH A. DYLEWSKI, PE

ONLY APPROVED SIGNED PLANS BY THE CITY ENGINEER ARE TO BE USED FOR CONSTRUCTION

OHIO EPA STORM WATER GENERAL PERMIT NUMBER:
3GC03886*AG



COVER SHEET

PARKING LOT EXPANSION

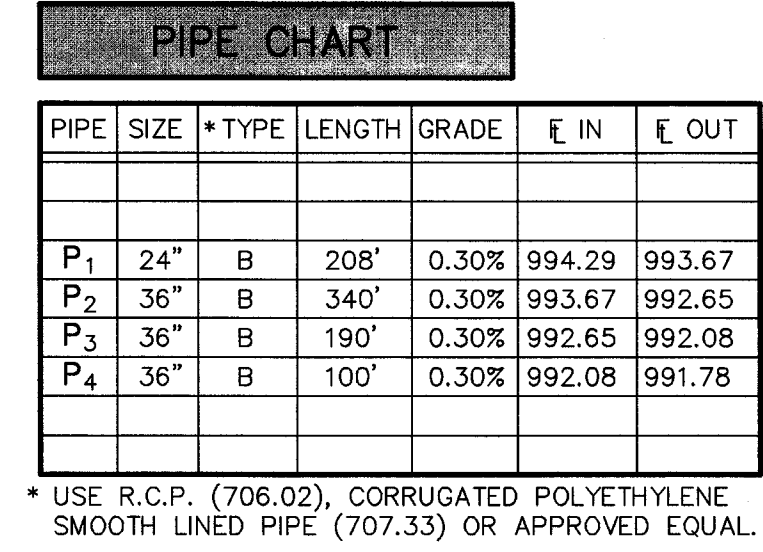
FOR: E-TANK

BEING ALL OF OUTLOT 944

CITY OF MASSILLON, STARK COUNTY, OHIO

1
10

HAMMONTREE & ASSOCIATES, LTD.
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TOLL FREE: 1-800-394-8817 FAX: (330) 499-0149
www.hammontree-engineers.com



[illegible]

* USE R.C.P. (706.02), CORRUGATED POLYETHYLENE SMOOTH LINED PIPE (707.33) OR APPROVED EQUAL.

0' 15' 30' 60'



10

5

PARKING LOT EXPANSION

FOR: E-TANK

BEING ALL OF OUTLOT 944

CITY OF MASSILLON, STARK COUNTY, OHIO

STORM ROUTING PLAN

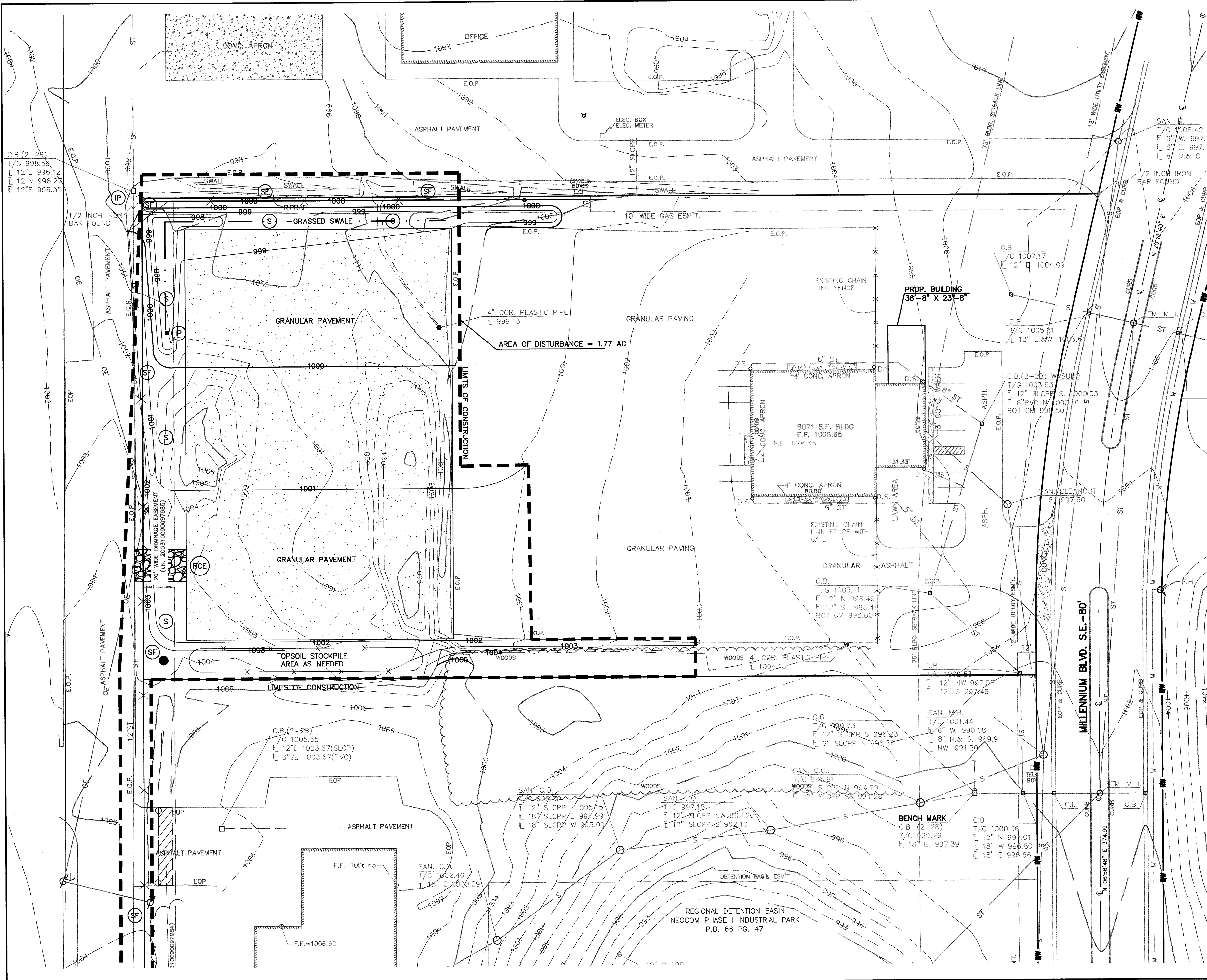
SCALES: _____

HORIZ: 1" = 30'

DESGN. BY: BAB CHKD. BY: JDS DRWN. BY: BAB RWD. BY: JDS F.B. <u>531</u> PAGE: <u>50</u>	REV. BY: _____ DATE: _____ REV. BY: _____ DATE: _____ REV. BY: _____ DATE: _____ REV. BY: _____ DATE: _____ REV. BY: _____ DATE: _____ REV. BY: _____ DATE: _____	DESC.: _____ DESC.: _____ DESC.: _____ DESC.: _____ DESC.: _____ DESC.: _____	REVISED STORM ROUTING REV. BY: JDS DATE: 10/12/10 REV. BY: JDS DATE: 6/24/08 REV. BY: _____ DATE: _____ REV. BY: _____ DATE: _____
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COPYRIGHT: 2006 DATE: 10-1-07
 LAYOUT: UTILITY
 RE: STARK COUNTY MASSILLON 125 EMMILL STE. 01-17-11 DWG

STORM ROUTING PLAN
PARKING LOT EXPANSION
FOR: E-TANK
BEING ALL OF OUTLOT 944
CITY OF MASSILLON, STARK COUNTY, OHIO



SEDIMENT & EROSION CONTROL NARRATIVE

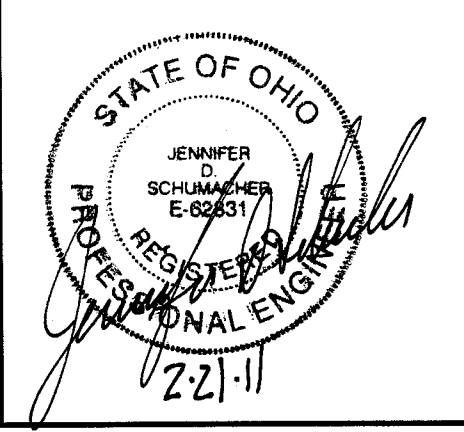
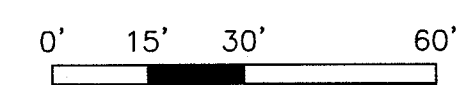
THE SITE SLOPES FROM SOUTH TO NORTH. BEFORE CONSTRUCTION, THE CONTRACTOR IS TO INSTALL SILT FENCE ALONG NORTH PROPERTY LINE AS SHOWN ON THE PLANS. ALSO TO INSTALL INLET PROTECTION AROUND EXISTING AND PROPOSED INLETS TO PREVENT SEDIMENTS FROM LEAVING THE SITE.

LEGEND

- SF= SILT FENCE
- RCE= CONSTRUCTION ENTRANCE
- IP= INLET PROTECTION
- S= PERMANENT SEEDING
- LIMITS OF CONSTRUCTION

I, THE UNDERSIGNED, CLARIFY THAT I UNDERSTAND AND WILL ADHERE TO THE REQUIREMENTS, TERMS, AND CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN REVIEWED AND APPROVED BY THE STARK SOIL AND WATER CONSERVATION DISTRICT FOR COMPLIANCE WITH THE STARK COUNTY WATER QUALITY REGULATIONS FOR THE ABOVE REFERENCED PROJECT.

OWNER _____
DATE: _____
CONTRACTOR _____
DATE: _____



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5333 STONEHAM ROAD, NORTH CANTON, OHIO 44720
PHONE CANTON (330) 499-8817 AKRON (330) 493-7274
TOLL FREE 1-800-391-8817 FAX (330) 499-0149
www.hammontree-engineers.com

REV. BY:	DATE:	DESC.:
DES. BY: BAB	CHKD. BY: JDS	
DRWN. BY: BAB	RWD. BY: JDS	
F.B. 531	PAGE: 50	
REV. BY: JDS	DATE: 10/12/10	DESC.: REVISED STORM ROUTING
REV. BY: JDS	DATE: 6/24/08	DESC.: REVISED STORM TO 24" ADDRESS CITY COMMENTS
R: STARK COUNTY MASSILLON, 128 E. MAIN ST. 01-17-11.DWG		

DESIGN: BY: BAB	CHKD. BY: JDS
DATE: 10-1-07	
COPYRIGHT: 2006	
LAYOUT: SWP3	

SOIL EROSION CONTROL PLAN (NORTH)
PARKING LOT EXPANSION
FOR: E-TANK
BEING ALL OF OUTLOT 944
CITY OF MASSILLON, STARK COUNTY, OHIO

7
10

1. ALL PROPERTIES ADJACENT TO THE SITE OF SOIL-DISTURBING ACTIVITY SHALL BE PROTECTED TO THE MAXIMUM EXTENT PRACTICABLE, FROM SOIL EROSION AND SEDIMENT RUNOFF AND DRAINAGE, INCLUDING, BUT NOT LIMITED TO PRIVATE PROPERTIES, NATURAL AND ARTIFICIAL WATERWAYS, WETLANDS, STORM SEWERS AND PUBLIC LANDS.
2. CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL PRACTICES USED TO SATISFY THIS REQUIREMENT SHALL CONFORM, AS A MINIMUM, TO STATE OF OHIO STANDARDS AS SET FORTH IN THE MOST-CURRENT EDITION OF THE RAINWATER AND LAND DEVELOPMENT MANUAL, DEFINED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF SOIL AND WATER CONSERVATION AND NATURAL RESOURCE CONSERVATION SERVICE AND SHALL CONFORM TO THE MOST CURRENT OHIO ENVIRONMENTAL PROTECTION AGENCY, OHIO REVISED CODE CHAPTER 6111 REQUIREMENTS.
3. EROSION AND SEDIMENT CONTROL PLAN APPROVALS ISSUED IN ACCORDANCE WITH THESE RULES DO NOT RELIEVE THE OWNER OF RESPONSIBILITY FOR OBTAINING ALL OTHER NECESSARY PERMITS AND OR APPROVALS FROM FEDERAL STATE, AND/OR COUNTY AGENCIES. IF REQUIREMENTS VARY, THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.

- A. AN APPROVED EROSION AND SEDIMENT CONTROL PLAN OR APPROVAL LETTER FROM THE LOCAL SWCD SHALL BE LOCATED ON SITE FOR REVIEW.
- B. LIMITS TO CLEARING AND GRADING SHALL BE SHOWN ON ESC PLANS. LIMITS TO CLEARING AND GRADING SHALL BE CLEARLY MARKED ON SITE WITH SIGNAGE, FLAGGING, AND/OR FENCING ETC.
- C. INSTALL EROSION AND SEDIMENT PERIMETER CONTROLS AS A FIRST ACTION OF CONSTRUCTION AS SPECIFIED BY CONSTRUCTION SEQUENCE. THIS SHALL INCLUDE AND IS NOT LIMITED TO PROTECTIVE BMP'S FOR STREAM CORRIDORS AND CROSSINGS, WETLANDS, SITE ENTRANCE, SEDIMENT TRAPS & BASINS, BARRIERS, AND DIVERSION DIKES.
- D. CONCENTRATED STORM WATER RUNOFF SHALL PASS THROUGH A SEDIMENT CONTROL DEVICE BEFORE EXITING THE SITE BOUNDARIES. CONCENTRATED RUNOFF FROM BARE SOIL AREAS SHALL BE DIVERTED INTO A SETTLING POND OR SEDIMENT CONTROL STRUCTURE, OR OTHER APPROVED SEDIMENT BARRIER BEFORE LEAVING THE SITE.
- E. EARTHEN STRUCTURES SUCH AS DAMS, BASINS, STREAM MODIFICATIONS AND WATER DIVERSIONS SHALL BE SEEDED AND MULCHED WITH IN SEVEN (7) DAYS OF THE COMPLETION OF INSTALLATION. DAMS SHALL CONFORM TO THE OHIO DAM LAWS (ORC 1521.06).
- F. STABILIZATION OF CRITICAL AREAS WITHIN 50 FEET OF ANY STREAM OR WETLAND SHALL BE TEMPORARILY STABILIZED WITHIN TWO (2) DAYS OF DISTURBANCE IF AREA WILL REMAIN INACTIVE FOR SEVEN (7) DAYS OR LONGER. CONSTRUCTION VEHICLES SHALL AVOID STREAMS AND THE 50 FOOT BUFFER AREAS. IF AN ACTIVE DRAINAGE WAY MUST BE CROSSED BY CONSTRUCTION VEHICLES REPEATEDLY DURING CONSTRUCTION, A TEMPORARY STREAM CROSSING SHALL BE CONSTRUCTED ACCORDING TO THE SPECIFICATIONS IN THE RAINWATER & LAND DEVELOPMENT MANUAL. CONSTRUCTION OF BRIDGES, CULVERTS OR SEDIMENT CONTROL STRUCTURES SHALL NOT PLACE SOIL, DEBRIS AND OTHER FINE PARTICULATE MATERIAL INTO OR CLOSE TO THE WATER RESOURCE IN SUCH A MANNER THAT IT MAY SLOUGH, SLIP OR ERODE.
- G. STORM SEWER INLETS SHALL BE PROTECTED SO THAT SEDIMENT-LADEN RUNOFF WILL NOT ENTER THE STORM SEWER SYSTEM WITHOUT FIRST BEING FILTERED AND/OR TREATED. SANITARY SEWER MANHOLES SHALL BE PROTECTED SO THAT NO STORM RUNOFF WILL ENTER THE SANITARY SEWER SYSTEM.
- H. RE-VEGETATE SOIL. TEMPORARY SOIL STABILIZATION SHALL OCCUR WITHIN SEVEN (7) DAYS AFTER ROUGH GRADING IF THE AREA WILL REMAIN IDLE LONGER THAN TWENTY-ONE (21) DAYS. PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. PERMANENT VEGETATION IS A GROUND COVER DENSE ENOUGH TO COVER 80% OF THE SOIL SURFACE AND MATURE ENOUGH TO SURVIVE WINTER WEATHER CONDITION.
- I. SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED TO PREVENT SOIL LOSS. STABILIZATION SHALL BE REQUIRED IF STOCKPILES ARE LOCATED WITHIN CRITICAL AREAS NEAR STREAMS OR WETLANDS, OR IF DETERMINED BY THE LOCAL SWCD THAT SEDIMENT FROM STOCKPILES WILL LEAVE THE SITE.
- J. UNSTABLE SOILS PRONE TO SLIPPING OR SLOUGHING SHALL NOT BE CLEARED, GRADED, EXCAVATED, FILLED OR HAVE LOADS IMPOSED UPON THEM UNLESS THE WORK IS PLANNED BY A QUALIFIED PROFESSIONAL ENGINEER AND INSTALLED IN ACCORDANCE WITH THE ESC PLAN. CUT AND FILL SLOPES SHOULD BE DESIGNED TO MINIMIZE EROSION PROBLEMS. ADEQUATE SLOPE DESIGN INCLUDES USE OF ROUGH SOIL SURFACE ALONG THE FACE OF THE SLOPE; WATER DIVERSION ALONG THE TOP OF THE SLOPE AWAY FROM THE FACE; TERRACES TO REDUCE SLOPE LENGTH; DELIVERY OF CONCENTRATED STORM WATER FLOWS TO THE BASE OF THE SLOPE VIA ADEQUATE CHANNEL OR PIPE; AND DRAINAGE FOR WATER SEEPS IN THE SLOPE THAT ENDANGER SLOPE STABILITY.
- K. SOIL SHALL BE REMOVED FROM PAVED SURFACES AND/OR PUBLIC ROADS AT THE END OF EACH DAY IN SUCH A MANNER THAT DOES NOT CREATE OFF-SITE SEDIMENTATION IN ORDER TO ENSURE SAFETY AND ABATE OFF-SITE SOIL LOSS. COLLECTED SEDIMENTS SHALL BE PLACED IN A STABLE LOCATION ON SITE OR TAKEN OFF-SITE TO A STABLE LOCATION.
- L. STABILIZE DISTURBED OR MODIFIED DRAINAGEWAYS. REDUCE EROSION EFFECTS OF STORM WATER BY USING AND/OR MAINTAINING GRASSED SWALES, INFILTRATION STRUCTURES, OR WATER DIVERSIONS.
- M. SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED ONCE EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL EVENT. A WRITTEN LOG OF THESE INSPECTIONS AND IMPLEMENTATION TO CONTROLS SHALL BE KEPT ON SITE. THE INSPECTIONS SHALL INCLUDE THE DATE OF INSPECTION, NAME OF INSPECTOR, WEATHER CONDITIONS, OBSERVATIONS, ACTIONS TAKEN TO CORRECT ANY PROBLEMS AND THE DATE CORRECTIVE ACTIONS WERE TAKEN.
- N. TRENCHES FOR UNDERGROUND UTILITY LINES AND PIPES SHALL BE TEMPORARILY STABILIZED WITHIN SEVEN (7) DAYS IF THEY ARE TO REMAIN INACTIVE FOR THIRTY (30) DAYS. TRENCH DEWATERING DEVICES SHALL DISCHARGE IN A MANNER THAT FILTERS SOIL-LADEN WATER BEFORE DISCHARGING IT TO A RECEIVING DRAINAGE DITCH OR POND. IF SEEDING, MULCHING, OR OTHER EROSION AND SEDIMENT CONTROL MEASURES WERE PREVIOUSLY INSTALLED, THESE PROTECTIVE MEASURES SHALL BE REINSTALLED.
- O. DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH SEEDING AND MULCHING OR OTHER APPROPRIATE MEANS WITHIN 7 DAYS.
- P. SOLID, SANITARY AND TOXIC WASTE MUST BE DISPOSED OF IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. IT IS PROHIBITED TO BURN, BURY OR POUR OUT ONTO THE GROUND OR INTO THE STORM SEWERS ANY SOLVENTS, PAINTS, STAINS, GASOLINE, DIESEL, FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTIFREEZE, CEMENT CURING COMPOUNDS AND OTHER SUCH TOXIC OR HAZARDOUS WASTES. WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN A DIKED, DESIGNATED AREA WHERE THE WASHINGS CAN COLLECT AND BE DISPOSED OF PROPERLY WHEN THEY HARDEN. STORAGE TANKS SHOULD BE LOCATED IN DIKED AREAS AWAY FROM ANY DRAINAGE CHANNELS. THE DIKED AREA SHOULD HOLD A VOLUME 110% OF THE LARGEST TANK.
- Q. OFF-SITE VEHICLE TRACKING SEDIMENT SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD(S) NOTED ON THE PLAN. OFFSITE SEDIMENT TRACKING SHALL BE CONTROLLED BY REGULARLY SCHEDULED SWEEPING OF OFFSITE ACCESS ROADS AND MAINTENANCE OF ROCK CONSTRUCTION ENTRANCE.
- R. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK (1996).
- S. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.
- T. WINTERIZATION - ANY DISTURBED AREA THAT IS NOT GOING TO BE WORKED FOR 21 DAYS OR MORE MUST BE SEEDED AND MULCHED BY NOVEMBER 1 OR MUST HAVE A DORMANT SEEDING OR MULCH COVER APPLIED BETWEEN NOVEMBER 1 AND MARCH 1.
- U. CONCRETE CEMENT IS TO BE TAKEN BACK TO PLANT FOR WASHOUT AND RECYCLING.

-
- PLAN VIEW**
- 20 FT.
- 50 FT. (OR 30 FT. FOR ACCESS TO INDIVIDUAL HOUSE LOT)
- RIGHT OF WAY DIVERSION AS NEEDED
- PROFILE**
- 18" OR SUFFICIENT TO DIVERT RUNOFF
- ROAD OR OTHER EXISTING PAVED SURFACE
- CULVERT AS NEEDED

- CONSTRUCTION ENTRANCE
- N.T.S.
- RCE

TEMPORARY SEEDING SPECIES SELECTION			
SEEDING DATES	SPECIES	LB./1,000 FT. ²	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.
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
AUGUST 16 TO NOVEMBER 1	RYE	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
NOVEMBER 1 TO SPRING SEEDING USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING.			
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.			

2. TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 21 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEED AS SOON AS POSSIBLE. AFTER GRADING OR SHALL BE SEED WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.

5. SEEDING METHOD - SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULPICKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR OF CULPICKER. IF HYDROSEEDING IS USED, THE

TEMPORARY SEEDING (TS)

PERMANENT SEEDING			
SEED MIX	SEEDING RATE		NOTES:
	LB./AC.	LB./1,000 FT ²	
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	
TALL FESCUE	20	1/2	DO NOT SEED LATER THAN AUGUST.
FLAT PEA	20	1/2	
TALL FESCUE	20	1/2	DO NOT SEED LATER THAN AUGUST.
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	
CREEPING RED FESCUE	60	1 1/2	FOR SHADED AREAS.
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.			

NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED

1. PERMANENT SEEDING SHALL NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YR. FROM THE TIME OF PLANTING. SEEDING AREAS SHALL BE INSPECTED FOR FAILURE AND VEGETATION REESTABLISHED AS NEEDED. DEPENDING ON SITE CONDITIONS, IT MAY BE NECESSARY TO IRRIGATE, FERTILIZE, OVERSEED OR REESTABLISH PLANTINGS IN ORDER TO PROVIDE PERMANENT VEGETATION FOR ADEQUATE EROSION CONTROL.
2. MAINTENANCE FERTILIZATION RATES SHALL BE ESTABLISHED BY SOIL TEST RECOMMENDATIONS OR BY USING THE RATES SHOWN IN THE FOLLOWING

MAINTENANCE FOR PERMANENT SEEDING FERTILIZATION AND MOWING TABLE.					
MIXTURE	FORMULA	LB./AC.	LB./1,000 FT ²	TIME	MOWING
CREeping RED FESCUE RYEGrASS KENTUCKY BLUEGRASS	10-10-10	500	12		NOT CLOSER THAN 3"
TALL FESCUE	10-10-10	500	12	FALL, YEARLY OR AS NEEDED.	NOT CLOSER THAN 4"
DWARF FESCUE	10-10-10	500	12		NOT CLOSER THAN 2"
CROWN VETCH FESCUE	0-20-20	400	10	SPRING, YEARLY FOLLOWING ESTABLISH- MENT AND EVERY 4-7 YR	DO NOT MOW
FLAT PEA FESCUE	0-20-20	400	10	THHEREAFTER	DO NOT MOW
NOTE: FOLLOWING SOIL TEST RECOMMENDATIONS IS PREFERRED TO FERTILIZER RATES SHOWN ABOVE.					

NOTE: FOLLOWING SOIL TEST RECOMMENDATIONS IS PREFERRED TO FERTILIZER RATES SHOWN ABOVE

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PHONE: CANTON:(330)/489-8817 AKRON:(330)/633-7272 FAX: CANTON:(330)/489-0149

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 DRWN. BY: BAB RWVD. BY: JDS
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 COPYRIGHT: 2006 DATE: 10-1-07
 LAYOUT: E.C.N.-1

SCALES:

N.T.S.

SOIL EROSION CONTROL NOTES & DETAILS
PARKING LOT EXPANSION
FOR: E-TANK
BEING ALL OF OUTLOT 944
CITY OF MASSILLON, STARK COUNTY, OHIO



SITE DESCRIPTION	
EXISTING	-OPEN SPACE
PROPOSED	-GRAVEL PARKING LOT

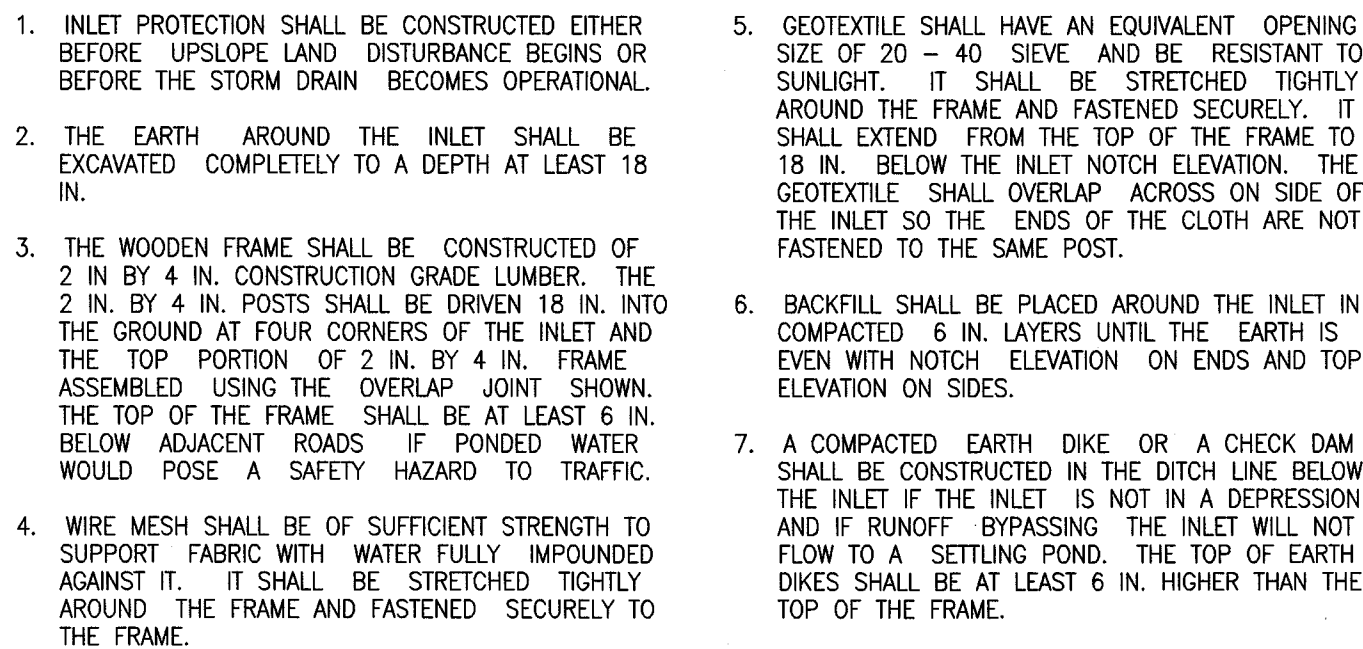
TOTAL AREA OF SITE	4.07 AC.
AREA OF SITE TO UNDERGO EXCAVATION	2.02 AC.

PRE-CONSTRUCTION RUNOFF COEFFICIENT C=0.30
POST-CONSTRUCTION RUNOFF COEFFICIENT C=0.70

SCHEDULE OF MAJOR CONSTRUCTION	
COMMENCEMENT	WINTER 2011
COMPLETION	SPRING 2011

RECEIVING STREAM AND SURFACE WATERS
ONSITE DRAINAGE FLOWS TO A REGIONAL DETENTION
BASIN LOCATED OFFSITE

EXISTING SOILS ON SITE	
CdB	CANFIELD SILT LOAM, 2 TO 6 PERCENT SLOPES
WuB2	WOOSTER SILT LOAM, 12 TO 18 PERCENT SLOPES
ReB	RAVENNA SILT LOAM, 2 TO 6 PERCENT SLOPES



N.T.S



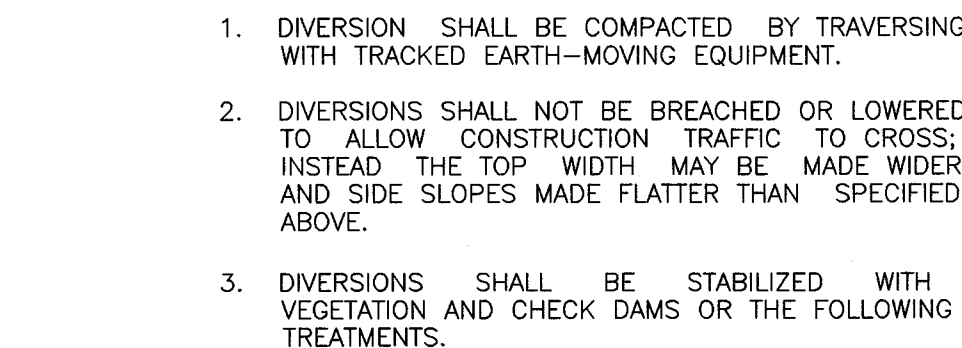
NOTES:

1. THE SILT FENCE SHALL BE CONSTRUCTED BEFORE UPOPLAND LAND DISTURBANCE BEGINS.
 2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW SPOTS. THE FENCE, AND SO THAT SMALL SPOLES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS, THE SILT FENCE AREA DISSEMINATING ITS FENCES.
 3. TO PREVENT WATER FLOWED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPOPLESS SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
 4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
 5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5' FT. (OR AS MUCH AS POSSIBLE) UPOPLESS FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE FENCE.
 6. SOIL STOCKPILES OR OTHER SOURCES OF SEDIMENT SHALL HAVE SILT FENCE PROTECTION.
 7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6" DEEP. THE TRENCH SHALL BE BACKFILLED WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY INSTALLED TRENCH.
 8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE, SIDE OF THE GEOTEXTILE AND SO THAT 8' OF CLOTH ARE EXPOSED TO THE GROUND SURFACE. MATERIAL SHALL LAY ON THE BOTTOM OF THE 8" DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPLETED.
 9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED. THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
 10. MAINTENANCE-- THE SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE TRENCH. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE END OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED:
 - 1) THE APPROPRIATE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
 - 2) ACCUMULATED SEDIMENT SHALL BE REMOVED.
 - 3) OTHER PRACTICES SHALL BE INSTALLED.
- CRITERIA FOR SILT FENCE MATERIALS
1. FENCE POSTS -- THE LENGTH SHALL BE A MINIMUM OF 32" X 2" HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
 2. SILT FENCE FABRIC (SEE CHART BELOW):

SILT FENCE

NOTES

"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 STANDARDS FOR STORMWATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION. SEDIMENT 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 CONSTRUCTION PLANS, AS SPECIFIED BY THE CITY OF MASSILLON."



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CONSTRUCTION SEQUENCE

1. INSTALL SILT FENCE AND CONSTRUCTION ENTRANCE AS SHOWN ON PLANS. (CONTRACTOR SHALL DESIGNATE THE AREA UTILIZED FOR CONSTRUCTION ENTRANCE.)
 2. CLEAR TREES, BRUSH AND STUMPS AS NECESSARY.
 3. ALL PERIMETER BARRIERS TO BE CONSTRUCTED WITHIN 7 DAYS OF FIRST GRUBBING.
 4. INSTALL TEMPORARY SEEDING TO ALL STRUCTURAL EROSION INSTALLATIONS PRIOR TO MASS GRADING OF SITE.
 5. STRIP/STOCKPILE TOPSOIL. STOCKPILES THAT ARE INACTIVE FOR 21 DAYS OR LONGER SHALL BE SEEDED/STABILIZED WITHIN 7 DAYS OF LAST ACTIVITY.
 6. MASS GRADING
 7. INSTALL UNDERGROUND UTILITIES.
 8. INSTALL INLET PROTECTION.
 9. BRING PAVEMENT AREAS TO SUB GRADE.
 10. INSTALL PAVEMENT. AFTER INSTALLATION OF PAVEMENT REPLACE INLET PROTECTION.
 11. FINISH GRADE, SEED AND MULCH ALL DISTRIBUTED AREAS AND MAINTAIN TEMPORARY EROSION CONTROLS AS REQUIRED.
 12. UPON COMPLETION AND SITE STABILIZATION, REMOVE ACCUMULATED SEDIMENT AND DEBRIS FROM STORM SYSTEM AND REMOVE SOIL AND EROSION CONTROLS, EXCEPT FOR SILT FENCING.
 13. INSTALLATION OF SILT FENCING SHALL NOT OCCUR PRIOR TO THE INITIAL CITY PRE-CONSTRUCTION MEETING.
 14. CONTINUOUSLY SWEEP DRIVES AND STREET AND MAINTAIN CONSTRUCTION ENTRANCE.
- * ALL AREAS AT FINAL GRADE OR WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR 21 DAYS OR LONGER SHALL BE STABILIZED WITHIN 7 DAYS OF LAST ACTIVITY.

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SILT FENCE



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 DRAWN BY: BAB RVWD. BY: JDS
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N.T.S.

SOIL EROSION CONTROL NOTES & DETAILS
PARKING LOT EXPANSION
FOR: E-TANK
BEING ALL OF OUTLOT 944
CITY OF MASSILLON, STARK COUNTY, OHIO

