### IGER ARPS <u>W</u> DING

### CITY OF MASSILLON Stark County, Ohio

### PROJECT DESCRIPTION

CONSTRUCTION OF A NEW INDUSTRIAL FACILITY INCLUDING 530 LF OF  $\infty$ SANITARY SEWER

#### CONVENTIONAL SIGNS

CORPORATION LINE TOWNSHIP LINE COUNTY LINE RIGHT OF WAY EXISTING: ·Ex R/W· , PROPOSED:

EXIST. UTILITIES PROPOSED POLES **EXISTING POLES** CATCH BASINS VALVE: POWER: POWER: 1-POST: EXISTING: , TELEPHONE , TELEPHONE , HYDRANT: , 2-POST: , PROPOSED: 3-POST: , METERS , LIGHT , LIGHT , REHABILITATED: , STREET: , GUY: , SPAN , SPAN

#

MANHOLES •

EXISTING:

(S)

, PROPOSED:

, REHABILITATED:

FENCE LINE

EXISTING:

PROPOSED:

PROPOSED:

### PERMIT TO INSTALL

SANITARY SEWER PERMIT TO INSTALL (P.T.I.) HAS BEEN RECEIVED FROM THE OHIO ENVIRONMENTAL PROTECTION AGENCY PROTECTION AGENCY THIS DAY

PTI No.

9



### INDEX OF SHEETS:

NOTES · • **EXISTING CONDITIONS PLAN** SITE PLAN TITLE SHEET

Feb, 2019

BMH

CKED BY:

HORIZONTAL SCALE IN FEET

SWP3 PLAN NOTES/DETAILS

REVISIONS:

DATE

DESCRIPTION

GRADING/SWP3 PLAN

APPROVED BY:

**EROSION AND** CITY ENGINEER - JASON POPIEL, P.E. SEDIMENT CONTROL PLAN APPROVAL

ED BY STARK SOIL AND WATER DISTRICT BY LETTER

#### **APPROVALS**

DATE

**LOCATION MAP** 

PORTION TO BE IMPROVED



4450 Belden Village St. NW, Suite 800 Canton, Ohio 44718 (234) 410-3913 CIVPRO ENGINEERING PLAN PREPARED BY:

OHIO UtilitiesProtection 1-800-362-2764 SERVICE (Non-members must be called directly) OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988

Call Before You Dig 1-800-362-2764

UNDERGROUND CONTACT BOTH SERVICES

UTILITIES

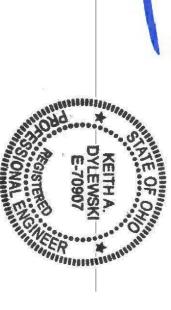
DAYS

BOTH SERVICES TWO WORKING BEFORE YOU DIG

411 Oberlin Avenue SW Massillon, OH 44647 ATTN: Garret Kloots Massillon Energy Technology Park OWNER:

(330) 495-5246





DATE

4450 BELDEN VILLAGE STREET NW, SUITE 800 CANTON, OH 44718 PHONE: (234) 410-3913 EMAIL: KAD@CIVPROENGINEERING.COM WWW.CIVPROENGINEERING.COM

TIGER TARPS BUILDING Title Sheet City of Massillon Stark County, Ohio

GENERAL NOTES
THE CONSTRUCTION OF SUPPLEMENTED WHERE AFFICE. (O.D.O. T.) MATERIAL SI AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL PROVIDE AND MATERIAL SHEETS FOR REVIEW, A LIST OF ALL SUBCONTRACTOR S, FOR THE PROJECT, EMERGENCY NUMBERS, AND OTHER ITEMS REQUESTED PRIOR TO BEGINNING ANY WORK ON THE PROJECT. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REQUEST AND MEETING. ANY MODIFICATION TO THE WORK SHOWN ON THESE PLANS MUST HAVE PRIOR WRITTEN APPROVAL BY THE ENGINEER. ANY CHANGE ORDERS TO THE ORIGINAL CONTRACT DOCUMENTS MUST BE SUBMITTED IN WRITING BY THE CONTRACTOR, TO THE ENGINEER, FOR REVIEW AND APPROVAL/DISAPPROVAL BY THE OWNER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY UPON SUSPECTING A PENDING CHANGE ORDER. THE OWNER WILL REVIEW EACH REQUEST IN A TIMELY FASHION. ANY WORK COMPLETED BY THE CONTRACTOR WITHOUT PRIOR WRITTEN AUTHORIZATION WILL NOT BE PAID BY THE OWNER (COST WILL BE BORNE BY THE CONTRACTOR. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PROJECT, SITE CONDITIONS, WEATHER LIMITATIONS, SCHEDULE LIMITATIONS, PLANS, SPECIFICATIONS, STANDARD DRAWINGS AND ANY OTHER DOCUMENTS ASSOCIATED WITH THE PROJECT PRIOR BIDDING ON THIS PROJECT F THIS PROJECT SHALL BE GOVERNED BY THE CITY OF APPLICABLE BY THE STATE OF OHIO DEPARTMENT OF SPECIFICATIONS, 2016. ATTEND E ALL SHOP DRAWINGS , A WRITTEN SCHEDULE D BY THE ENGINEER, A PRE-CONSTRUCTION MASSILLON AND TRANSPORTATION

ALL ROAD SURFACES, EASEMENTS OR RIGHT OF WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE BEFORE CONSTRUCTION CONDITION OR BETTER. THE CONTRACTOR SHALL CONFINE WORK ACTIVITIES TO THE PROJECT ARE A, UNLESS PRIVATE AGREEMENTS HAVE BEEN MADE BETWEEN THE CONTRACTOR AND PROPERTY OWNERS TO EXTEND ONTO PRIVATE PROPERTY ALL DAMAGE TO AREAS BEYOND THE WORK LIMITS SHALL BE REPAIRED TO A CONDITION EQUAL TO OR BETTER THAN THE CONDITION BEFORE CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THIS PROJECT.

PRICES BID PER FOOT FOR ALL PIPE IS COMPLETE IN PLACE REGARDLESS OF CONDITIONS.

SOIL OR ROCK

FERTILIZING, SEEDING AND MULCHING FOR RESTORATION OF DISTURBED AREAS SHALL CONFORM TO CITY OF MASSILLON CONSTRUCTION STANDARDS AND SPECIFICATIONS. WHERE POSSIBLE. PRIOR TO SOIL STOCKPILING, CONTRACTOR CONDITIONS/ELEVATION PRIOR TO BID. EXCAVATE TEST PITS FOR MONITORING BY GEOTECHNICAL ENGINEER. NO WORK OR OTHER ACTIVITIES ARE TO TAKE PLACE OUTSIDE OF THE PROPERTY LINES OF PROJECT AS DEFINED IN THE CONTRACT PLANS. CONTRACTOR SHALL LIMIT THE AREA OF DISTURBANCE TO THE PROPOSED LIMITS OF GRADING. TO REVIEW THE EXISTING SITE AS NECESSARY. OWNER TO PAY

CONTRACTOR SHALL RESTORE ALL AREAS AND UTILITIES DISTURBED BY HIS WORK SHALL BE REPAIRED TO THE CONDITION EXISTING PRIOR TO CONSTRUCTION AND AS PER CONTRACT DRAWINGS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES, BUILDINGS, ROADWAYS, STRUCTURES AND SITE CONDITIONS RESULTING FROM HIS WORK. THE EXISTING CONTOURS WERE FROM FIELD TOPOGRAPHIC SURVEY PRIOR TO SITE CLEARING, DEMOLITION AND TOPSOIL STOCKPILING. THE CONTOURS ARE IN ONE (1) FOOT INCREMENTS.

ALL DISTURBED SIGNS. GUARD RAIL, MAIL AND/OR PAPER BOXES, DRIVES AND DRIVE CULVERTS SHALL BE REPAIRED AND/OR REPLACED AS DIRECTED BY THE CITY OF MASSILLON. ONTRACTOR SHALL STRICTLY ADHERE. TO EROSION CONTROL PLAN. SEE STORM WATER OLLUTION CONTROL SHEETS AND DETAILED EROSION CONTROL NOTES. TEMPORARY WATER OLLUTION. SOIL EROSION AND SILTATION CONTROL MAY BE REQUIRED IN ACCORDANCE WITH TEM 207 OF THE 0.0.0.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS. BERMS

ALL DISTURBED AND/OR DAMAGED SEWER PIPES, SEWER APPURTENANCES, PAVEMENTS, AND DITCHES SHALL BE REPAIRED AND /OR REPLACED AS DIRECTED BY THE CITY OF MASSILLON.

ALL COSTS FOR THE WORK DESCRIBED ABOVE SHALL BID FOR THE VARIOUS CONTRACT ITEMS. BE WITH THE

THE CITY OF MASSILLON 151 LINCOLN WAY E MASSILLON, OH 446461

SAFETY
THE CONTRACTOR AND SUBCONTACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTION AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTOR(S) TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK. THE ENGINEER RESERVES THE RIGHT TO SHUT-DOWN THE PROJECT WITH NO RESDELAY CLAIMS OR PROJECT SCHEDULE, SHOULD THE CONTRACTOR FAIL TO PROVIDE A SAFE ENVIRONMENT FOR WORKERS AND /OR RESPONSIBILITY

THE PUBLIC.

EACH LOCATION WHERE WORK 107.16 IN THE CONSTRUCTION

THE CONTRACTOR SHALL NOTIFY PROTECTION SERVICE (OUPS), THE PROTECTION SERVICE (OGPUPS), DISTRICT 4 HEADQUARTERS AND TWO (2) WORKING DAYS PRIOR TO Y THE PROJECT ENGINEER, THE OHIO UTILITIES THE OHIO OIL AND GAS PRODUCERS UNDERGROUND), THE OHIO DEPARTMENT OF TRANSPORTATION DALL NON REGISTERED UTILITY OWNERS AT LEAST TO COMMENCING CONSTRUCTION IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT 1 -330-786-3145 0988 DIRECTLY)

EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED UPON THE BEST AVAILABLE INFORMATION PROVIDED TO THE ENGINEER. THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION OF PROPOSED PIPES OR FACILITIES TO VERIFY THE REQUIRED VERTICAL AND HORIZONTAL CLEARANCE IS AVAILABLE, PRIOR TO CONSTRUCTION OF THE PROPOSED FACILITY. IN THE CASE OF CONFLICT BETWEEN UTILITIES, THE ENGINEER SHALL DETERMINE THE PROPOSED COURSE OF ACTION TO ELIMINATE THE CONFLICT. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT. PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES, WHETHER SHOWN ON THESE PLANS OR NOT.

HE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES. ALL EXISTING UTILITIES, SERVICE LINES, ETC.. DAMAGED DURING CONSTRUCTION OF THE PROJECT SHALL BE REPAIRED TO THE SATISFACTION OF THE UTILITY OWNER

AT ALL UTILITY CROSSINGS, THE MATERIAL BETWEEN THE PIPES. SHALL CONSIST OF BOXES,

ALL EXISTING MANHOLES, CATCH ADJUSTED TO MATCH THE FINISH BOXES, VALVES I

STORM SEWER SYSTEM ALL STORM STRUCTURES SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611 CONSTRUCTED PER THE STANDARD DRAWING REFERENCED IN THE PLANS, OR SPECIFIC DETAILS INCLUDED IN THIS PLAN. ACCEPTABLE MATERIALS SHALL ECONCRETE ONLY. STORM GRATES SHALL BE "B

ALL STORM ,PIPES SHALL MEØ1 THE REQUIREMENTS OF ODOT ITEM 611 , OR AS MODIFIED BY SPECIFIC DETAILS INCLUDED IN THIS PLAN. ACCEPTABLE STORM SEWER MATERIALS SHALL BE (706.02), HDPE (707.33), OR PVC (707.42,707.43).  $_{\circ}^{\square}$ ALL DRIVE PIPES

ALL STORM SEWER S UNDER PAVENODOT TYPE D. ALL CULVERTS SHA

ALL UNDERDRAINS SHALL MEET THE SPECIFIC DETAILS INCLUDED IN THI SHALL BE HOPE (707.31) OR PVC ( REQUIREMENTS OF ODOT ITEM S PLAN. ACCEPTABLE MATERIAL  $\sim$ 

ALL ROOF DR AIN COLLECTOR S SHALL MEET THE REQUIREMENTS OF ODOT ITEM 605, OR AS MODIFIED BY SPECIFIC DE TAILS INCLUDED IN THIS PLAN. ACCEPTABLE MATERIALS SHALL BE HOPE (707. 33) OR PVC (707.45).BA CK FILL FOR ALL PIPES WITHIN THE INFLUENCE LINE OF THE PAVEMENT (STREET, DRIVEWAYS, SIDEWALKS, ETC.) SHALL BE FULL DEPTH COMPACTED GRANULAR EMBANKMENT MEETING THE REQUIREMENTS OF ODOT ITEM 611. THE INFLUENCE LINE OF THE PAVEMENT IS DEFINED AS A LINE EXTENDING DOWNWARD AT A 45 DEGREE ANGLE FROM A POINT 2 FEET BEYOND THE PAVEMENT. COMPACTION AND TESTING REQUIREMENTS SHALL MEET THE ODOT SPECIFICATION.

ALL EXISTING PIPES, ROOF DR AI OR FIELD TILES ENCOUNTERED DUF CONNECTED TO THE STORM SEWER BY THE ENGINEER. NS, DR AIN TILES, SUMP PUMP CONNECTIONS, SPRIVING CONSTRUCTION SHALL BE
SYSTEM OR ROOF DR AIN COLLECTOR SYSTEM, AS DIRECTED

ALL COSTS FOR THE WORK DESCRIBED ABOVE SHALL PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

CONTACT

DETER MINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER ROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE D BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN FOR THE PERTINENT 603 ITEM.

CITY OF MASSILLON CONSTRUCTION STANDARDS AND SPECIFICATIONS;

28 26 ASTM D3034 SHALL  $\Box$ 

FOR DEPTHS OF 17 FT. TO

THE SANITARY PIPE FOR DEPTHS ENGINEER

RCP FOR 12" AND 15" SHALL BE A CLASS IV TYPE. CLASS III FOR 18" BE CLASS III WITH LOAD BEARING QUALIFICATION APPROVED BY THE IV PIPE SHALL BE USED IN CASES OF DEEP SEWERS OR HEAVY LOADS

FOR DR OP MANHOLE INSTALLATIONS, SEE SHEET S-13 AND S-14 FOR DETAILS

22. EACH SUBLOT IS TO BE PROVIDED WITH ITS OWN STORM CONNECTION THAT SUBLOT ONLY. STORM CONNECTIONS SHALL NOT BE PERMITTED TO ADJACENT PROPER TIES.

23. STORM SEWER PVC PIPE CONNECTIONS INTO RCP STORM SHALL BF WITTEE OR SOLID CONCRETE BRICK AND MORTAR

24. RCP STORM SEWER CONNECTIONS INTO RCP STORM SHALL BE WITH AN SOLID CONCRETE BRICK AND MORTAR

CROSSINGS AND CONDUIT TO BE CONTINUED.

PROPOSED CONDUIT TO BE CONTINUED.

EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTINUED.

EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTINUED SEWER OR UNDERGROUND UTILITIES BOTH AS TO LINE AND GRADE BEHOME.

OR PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING 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 STAR TING CONSTRUCTION OF ANY PORTION OF THE. PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATION.

THE PLAN, THE ENGINEER SHALL BE AFFECTED BY THE VARIANCE IN THE PLAN, THE ENGINEER SHALL BE AFFECTED.

WHICH

CONSTRUCTION NOTES FOR SANITARY & STORM SEWER INSTALLATION FLS-1 & STANDARD REFERENCES LISTED BELOW REFER TO CITY OF MASSILLON STANDARD DRAWINGS 1. A) SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SCHEDULE 35 ASTM WITH RING-TITE FACTORY INSTALLED RUBBER SEALING RING 2.ASTM C-443) TO DEPTH OF 17 FT.

SDR

34. PVC STORM SEWER REPAIR S SHALL BE MADE USING FERNCO FITTINGS.

33. PVC SANITARY SEWER REPAIRS SHALL BE MADE USING SOLID SLEEVE FERNCO FITTINGS SHALL NOT BE PERMITTED FOR SANITARY REPAIR S

GREATER THAN 28 SHALL AND LARGER PIPE SHALL CITY ENGINEER. CLASS

.STORM SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SCHF[)ULE 35 ASTM 0-RING-TITE FACTORY INSTALLED RUBBER SEALING RING (AS TM C-443) OR RCP, 'NEOPRENE RUBBER 'O' RING GASKETS.

.THE CITY MAY CONSIDER THE ON SITE USE OF CORRUGATED SMOOTH INTERIOR HEAD STORM SEWERS AS SPECIFIED ON SHEET S-18 & S-19.

.MANHOLE TO MANHOLE DISTANCE SHALL NOT EXCEED 400 FEET.

37. UPON REVIEW OF THE CITY ENGINEER , IF AN ATTRACTIVE NUISANCE OR ANY OTHER SAFETY HAZED IS DEEMED TO EXIST, THE USE OF A STEEL SAFETY RACK OR "CHILD PROOF BARS" WILL BE REQUIRED. REFER TO SHEET S-20 FOR DETAILS.

REFERENCE

36. WHEN A WATER SERVICE AND /OR GA S SERVICE IS DISTURBED OR DISCONNECTED DURING TRENCH OR SHEETING EXCAVATION, SUCH SERVICES SHALL BE PLANKED USING 2"x8" HARDWOOD MINIMUM, 18" INTO VIRGIN SOIL , EACH END.

SHOULD EXCAVATION ENCOUNTER EXISTING DRAIN LINES, REPAIR SHA MINIMUM (6 ") SIX INCH TEE OR K OR -N-SEAL BOOT INTO THE STORM SYSTEM. (6") SIX INCH PVC SO R 35 PIPE TO THE RIGHT-OF-JCER AND/OR VARIOUS BENDS TO MAKE THE CONNECTION. FENCES\_ICATION.

6.WELL POINTS SHALL BE IN STALLED A T THE DOWN STREAM MANHOLE OF ALL SANITARY MAIN SYSTEMS FOR THE PURPOSE OF MEASURING GROUND WATER, SO AS TO CALCULATE REQUIRED AIR PRESSURE. SEE SHEET S - 2 SANITARY LINE AIR TESTING.

7.SANITARY MANHOLE S SHALL MEET ASTM C -478 FOR MATERIAL AND ASTM C-443 FOR JOINTS 8. FLEXIBLE GASKETS ON ALL SEWER LINE CONNECTIONS AND ALL PRECAST MANHOLE COLLARS SHALL BE ASTM C-923.

9. ALL SANITARY MAINOLE CASTINGS ARE TO BE E. J.I.W. 1040 SERIES HEAVY DUTY CASTING. SANITARY MANHOLE LIDS SHALL BE TYPE "A" GASKET SEAL, "MATERTITE" TYPE WITH 'O' RING GASKETING (ASTM C - 443) EXCEPTING THAT HEAVY DUTY BOLT DOWN CASTING AND COVER (E.J.I. W. 1040- WT) SHALL BE SUED WHENEVER A SANITARY OR STORM MANHOLE IS IN AN OFF-SITE EASEMENT, NEAR A WATERWAY OR WITHIN A ROADWAY ARE AS.

11. ALL ADJUSTMENTS TO CASTING SHALL BE MADE WITH PRECAST CONCRETE GRADE RINGS.

12. ALL PAVEMENT BASINS (i. e. CATCH & INLET) SHALL BE BROUGHT TO GRADE WITH PRECAST OR HAYDITE BRICK & MORTAR. PRECAST IS PREFERRED. CITY WILL CONSIDER EQUAL TO PRECAST ONLY IN WRITING. RED CLAY BRICK WILL NOT BE ALLOWED.

13. FLOW LINES SHALL BE FORMED SO AS TO MATCH ALL PIPE PENETRATION INVERTS.

14. SANITARY SEWER MAINS A T MANHOLES PROPOSED WITHIN 2 FEET OF EXISTING INVERT ELEVATION SHALL BE REQUIRED TO MATCH THE EXISTING INVERT.

15. SANITARY SEWERS IN EX CESS OF 4 FEET SHALL REQUIRE A PRECAST EXTERIOR MANHOLE. (REFERENCE SHEET S-13)

SANITARY AND STORM MANHOLE CONNECTIONS SHALL BE

APPLICATIONS DURING MANHOLE SHALL BE REQUIRED FOR ALL COMMERCIAL AND INDUSTRIAL APPLICATIONS DURING DEVELOPMENT. THE MONITORING MANHOLE SHALL BE PLACED AS CLOSE TO THE ESTABLISHED RIGHT OF WA Y AS POSSIBLE.

19. SANITARY, STORM AND WATER LINE EASEMENTS SHALL BE PROVIDED WITH CITY ACCESS FOR THE PURPOSE OF MAINTENANCE OF UTILITIES. CITY ACCESS IS TO BE A HARDENED SURFACE SUCH AS AGGREGATE, ASPHALT, CONCRETE BLOCKS WITH GRASS GROWTH OR INFORM ACCEPTABLE TO THE CITY UTILITY DEPARTMENT TO BE DETERMINED AT THE TIME OF PLAN REVIEW. SAID EASEMENTS SHALL BE DESIGNATED AS BLOCK S.

20. WHERE A STORM SYSTEM IS PROPOSED ALONG AN EXISTING ROADWAY, AREA DRAINS SHALL BE PROVIDED FOR EACH PROPERTY. LOCATION, SIZE AND MANNER OF CONNECTION TO THE STORM SYSTEM SHALL BE DETERMINED AT THE PLAN REVIEW STAGE.

21. IN NO CASE SHALL SANITARY OR STORMS LATERALS BE DIRECTLY CONNECTED INTO A MANHOLE.

21. MANH

26. CLAY DAM IS TO BE PROVIDED 6 FT. FROM THE LATERAL STORM. HAVE A DEPTH OF (9) NINE FEET AT ITS RIGHT OF-WAY TERMINUS) SERVICE THE LOWEST POINT OF THE BUILDING OR A DEPTH IN FOR SANITARY SYSTEM.

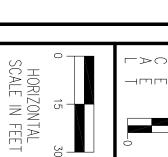
28. MINIMUM OF 6" CLEARANCE SHALL BE MAINTAINED BETWEEN CROSSING PIPE. CROSSING AS HEREIN DEFINED SHALL ANGLE A T THE CROSSING. BE EITHER PERPENDICUL AR CASING

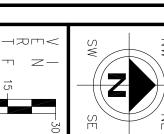
29. PVC SAN. OR PVC STM. MAINS MAY BE INSTALLED IN A DISTANCE OF 10 FEET EACH SIDE OF THE CROSSING. WHERE THE SAN. LAT , STM. LAT OR SAN., STM. MAIN IS WITHIN . CLASS 52 SHALL BE USED @ 10'EACH SIDE OF THE SSING, 150 PSI SHALL BE PROVIDED. STEEL CASING, WATER MAIN,

32. TRANSITIONAL ADAPTERS ARE TO BE USED FROM P VC TO D.I.P. PREFERRED SINGLE ADAPTER IS SPECIFIED FITTINGS 581056 SWR . 6" GXGDR18CDD XS WR OR EQUAL.FERNCO FITTINGS WILL NOT BE PERMITTED IN PLACED OF ADAPTERS. WHERE THE SANITARY OR STORM LATERAL THE WATERMAIN, D.I.P. CLASS 52 SHALL THAN  $\Box$ FT.IN DEPTH WITHIN 1

SOLID SLEEVE COUPLINGS COUPLINGS WAY LINE, USING MAY BE USED IN BE MADE OR ONLY. **REVISIONS:** DESCRIPTION BMH X A D

DATE

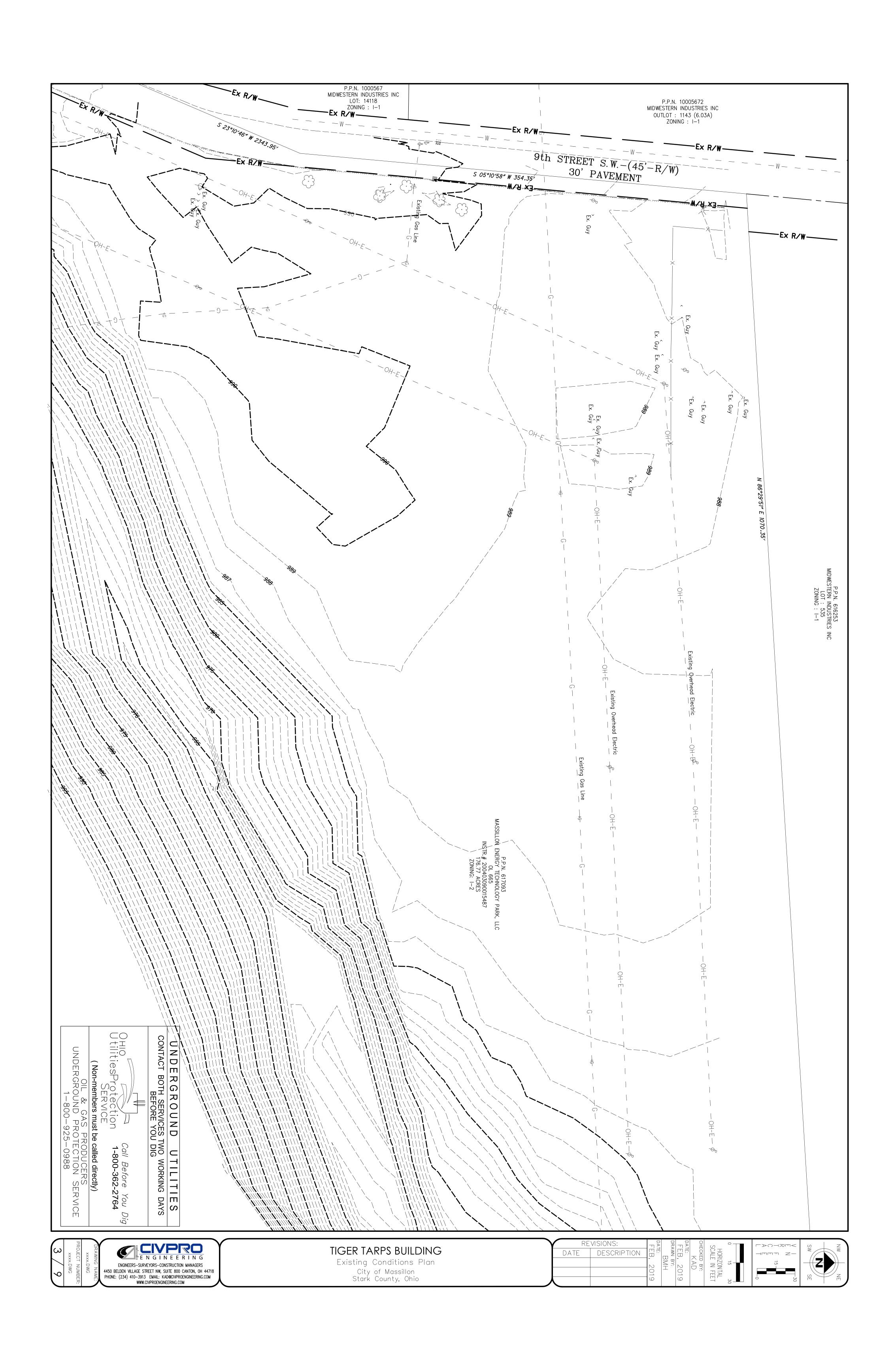


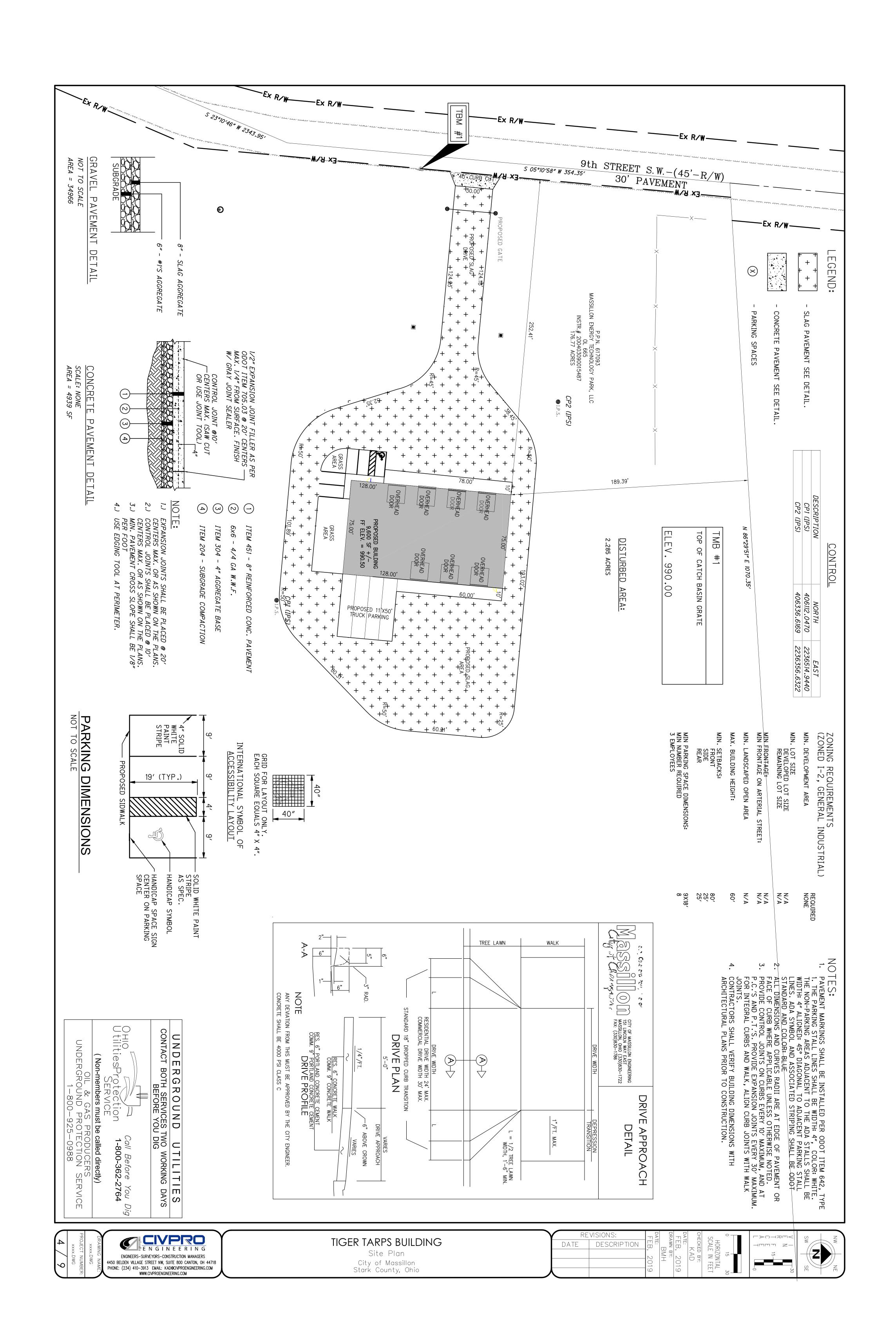


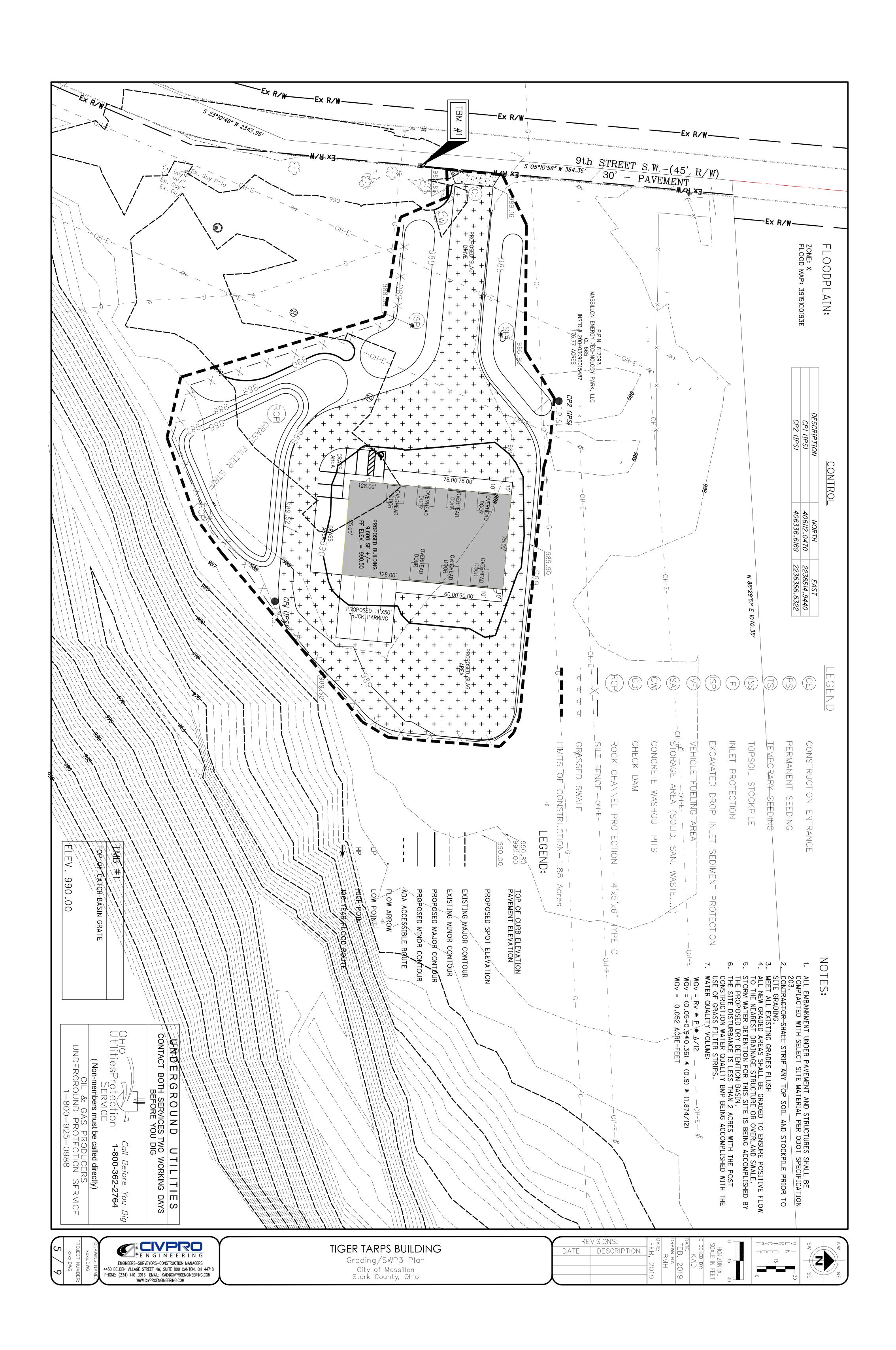
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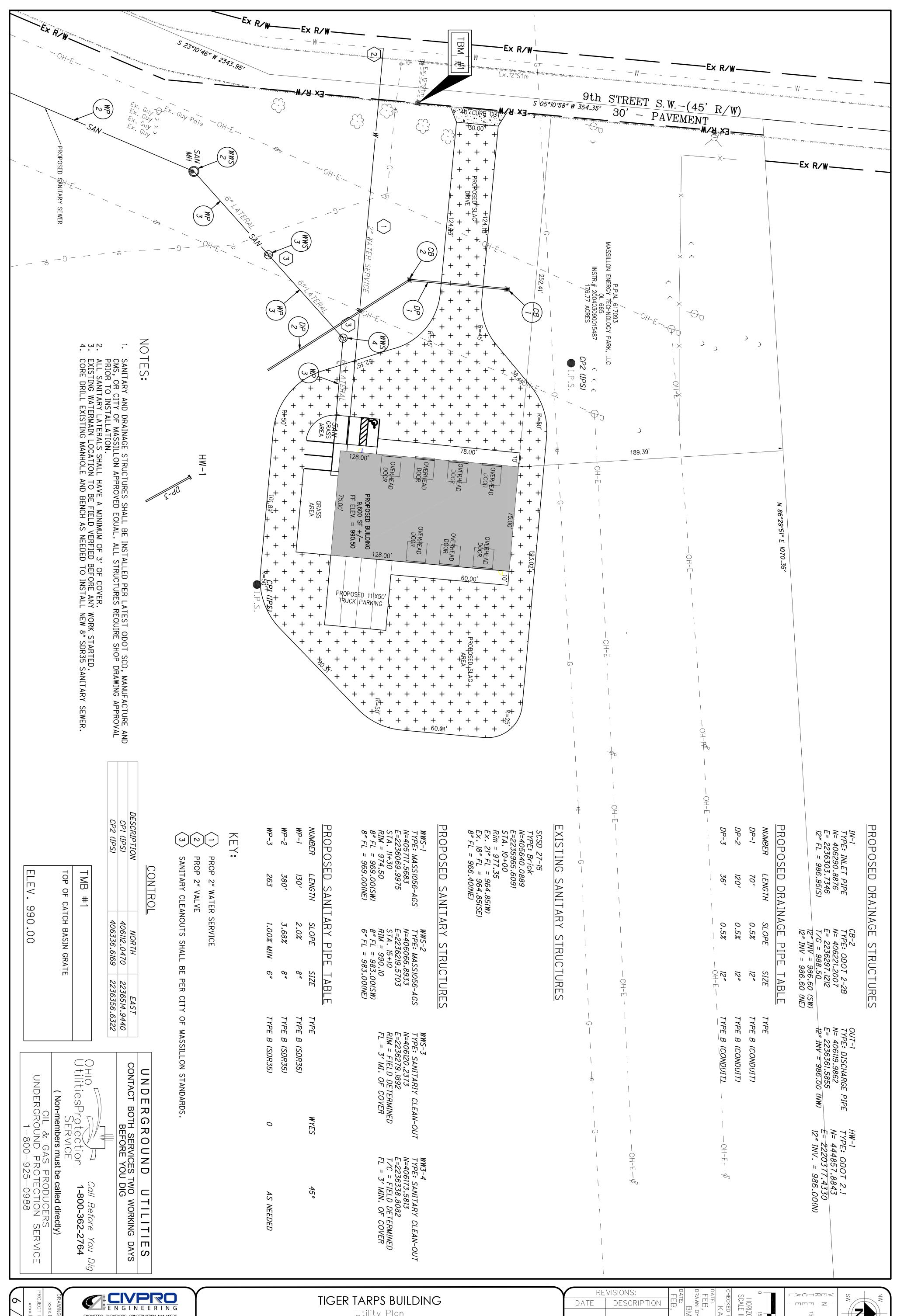
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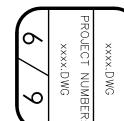
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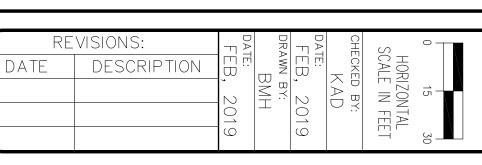


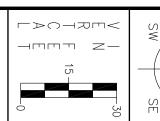




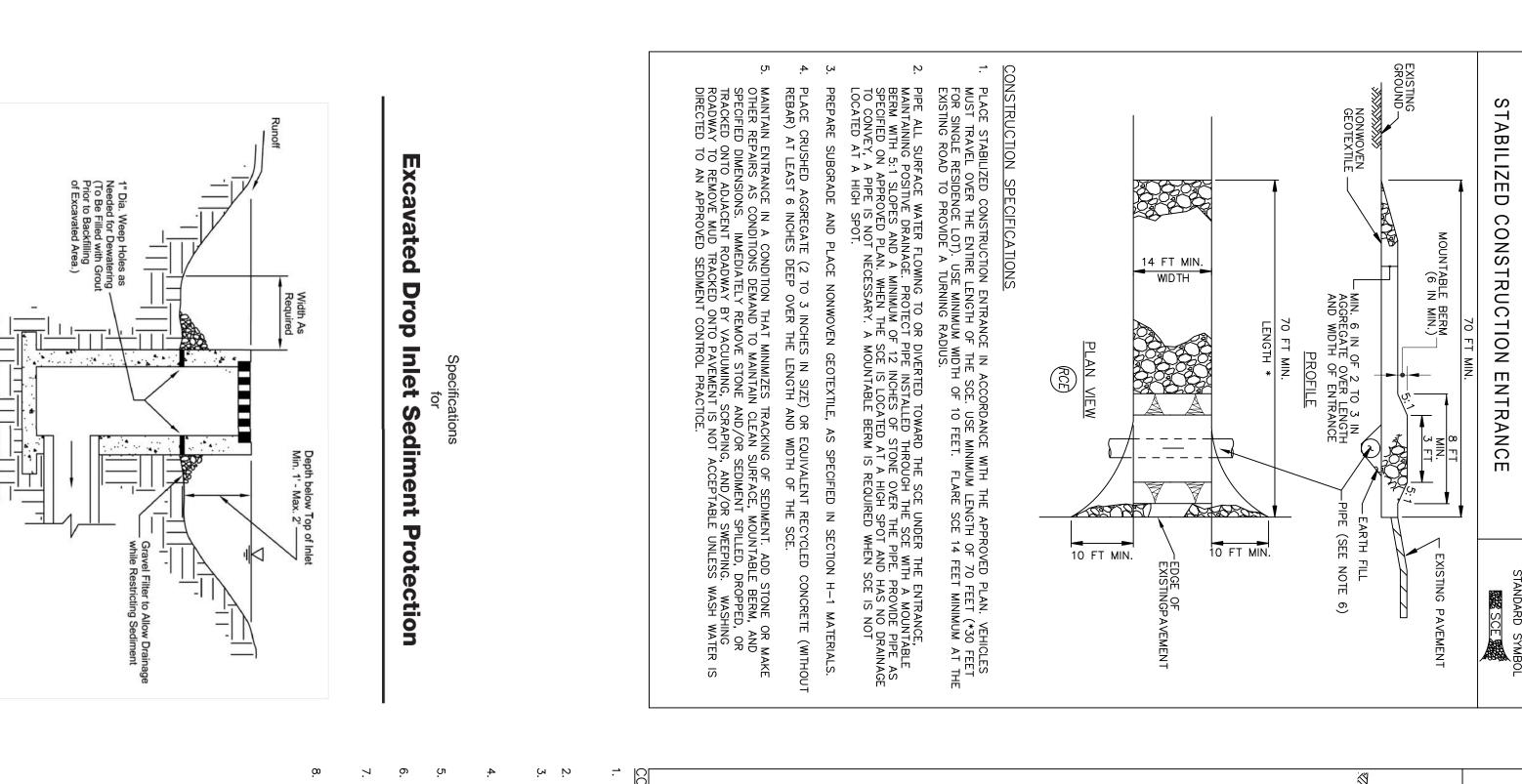


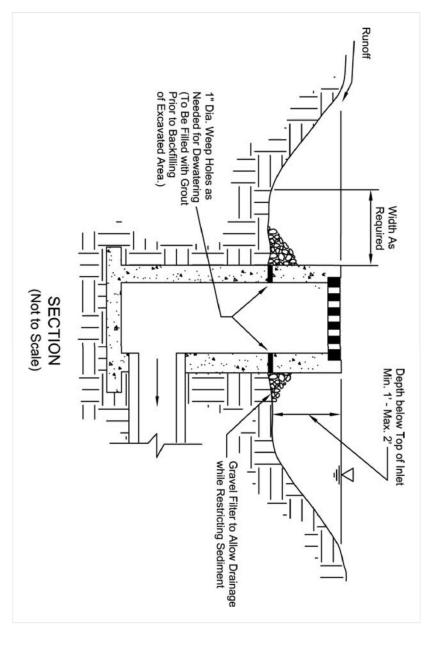












REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS REINSTALL FENCE.

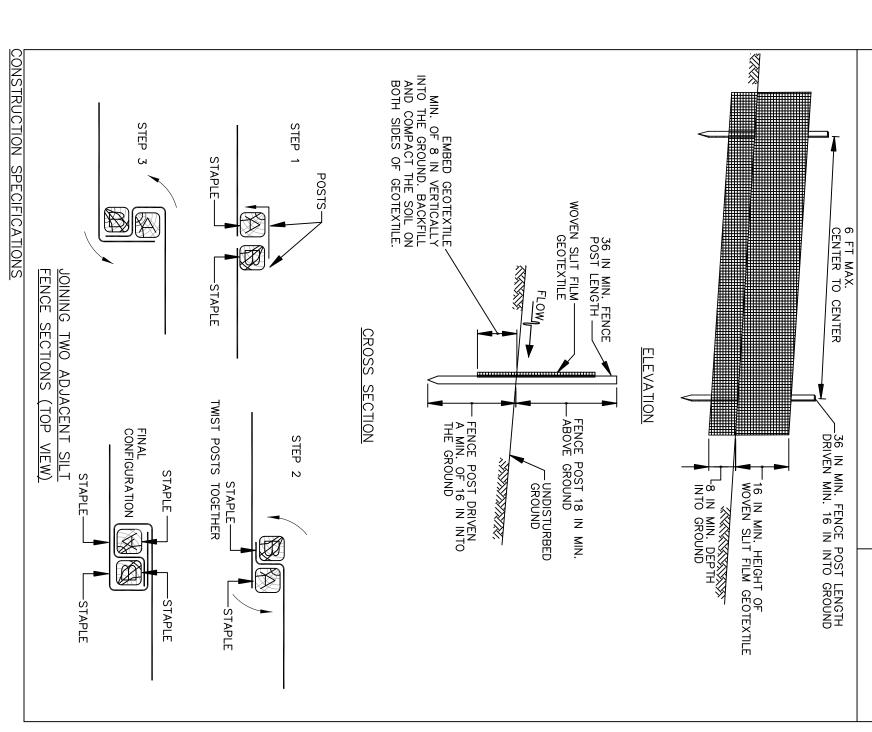
EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.

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Where the area receives concentrated flows, such as in a highway median, provide the trap with a shape having a 2:1 ratio of length to width, with the length oriented in the direction of the flow.

The slopes of the trap may vary to fit the drainage area and terrain.

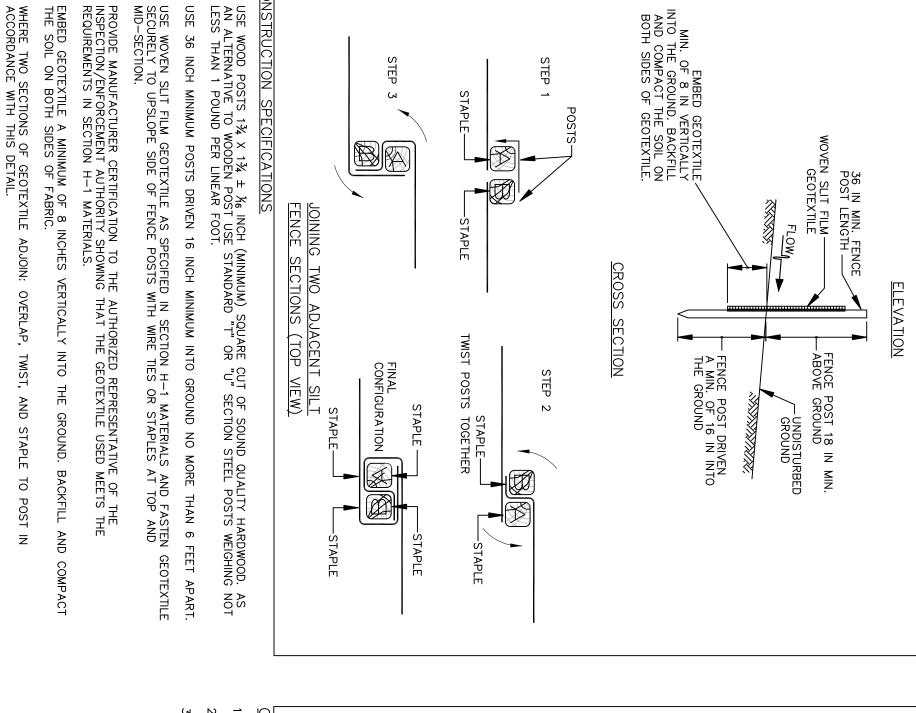
During final grading, the inlet should be protected with geotextile-stone inlet protection. Once final grading is achieved, sod or a suitable temporary erosion control material shall be implemented to protect the area until permanent vegetation is established.



SILT F

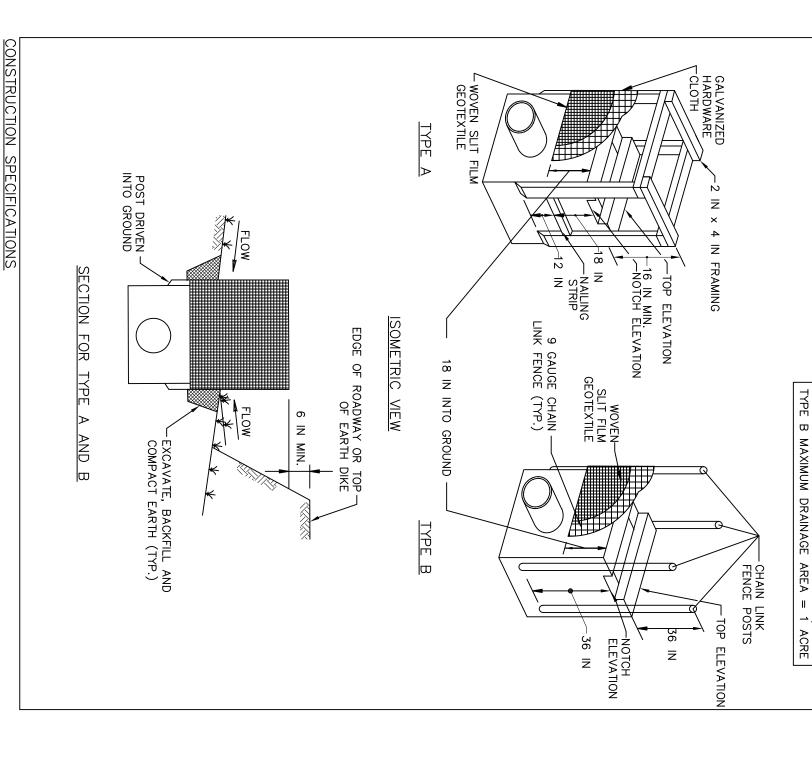
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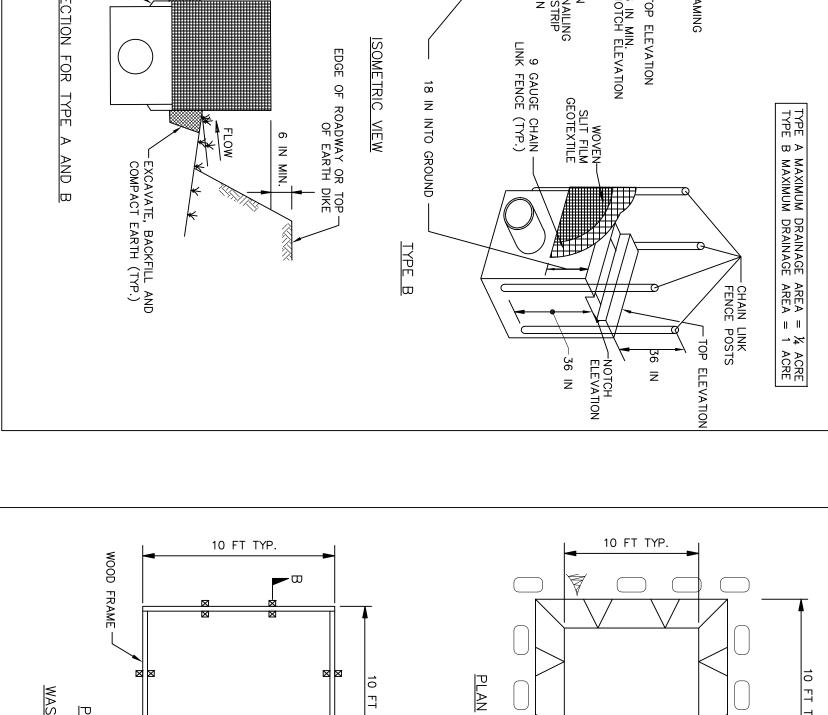
STANDARD INLET PROTECTION

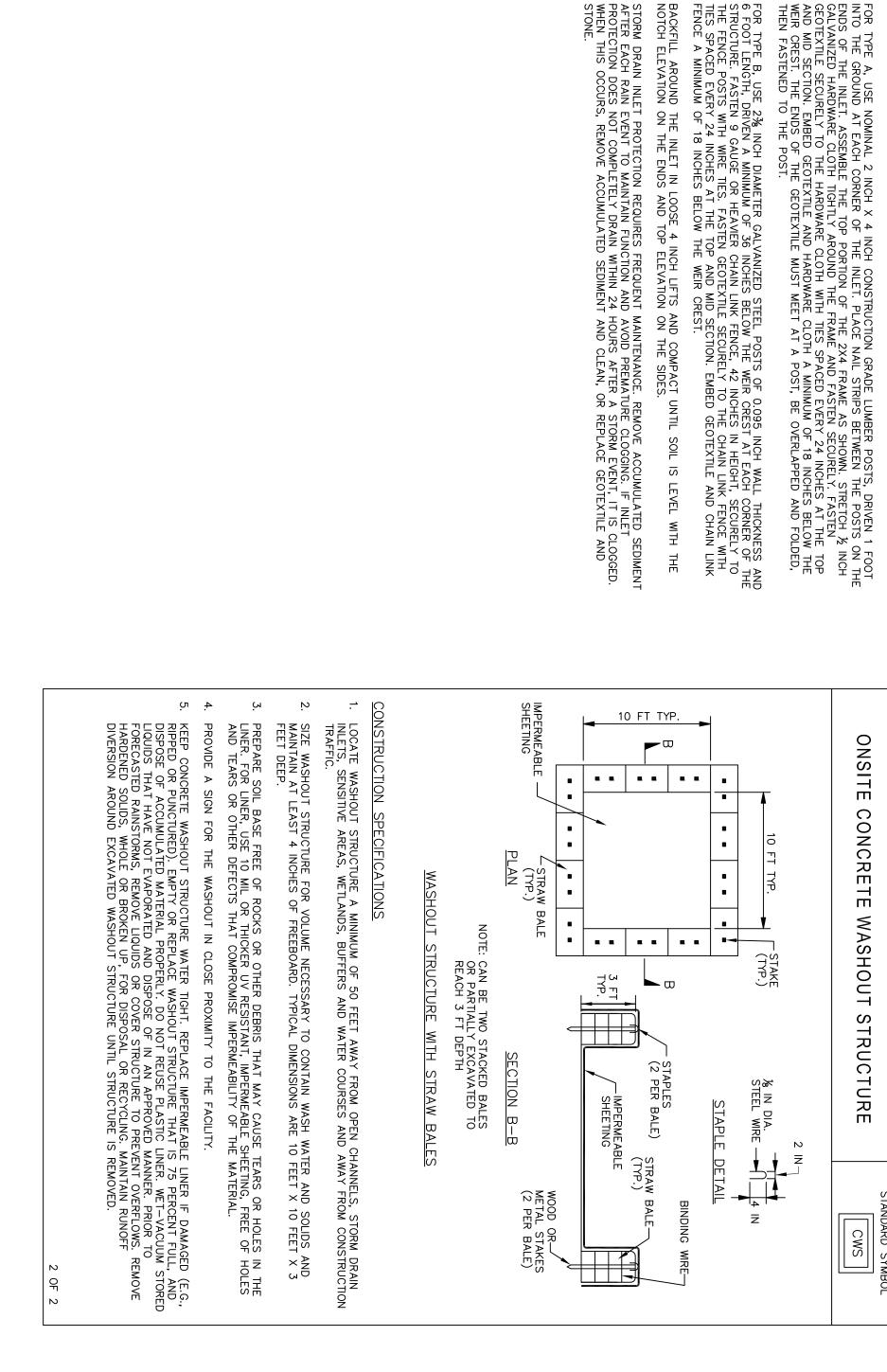


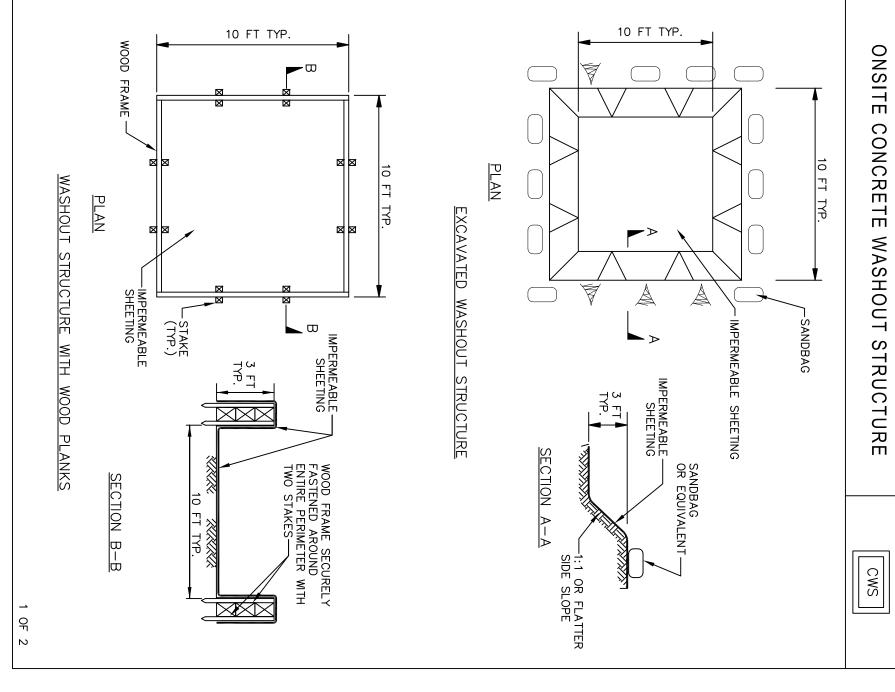
USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.

A DEPTH OF 18 INCHES BELOW



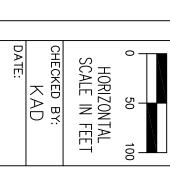


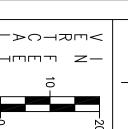


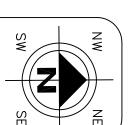


SWP3 I	Notes/[	Deta
	of Mass County,	
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	DATE	DESCRIPTION	ij	RAWN	
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### GENERAL **EROSION AND SEDIMENT CONTROL NOTES**

EROSION CONTROL SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE CITY OF MASSILLON EROSION AND SEDIMENTATION THROUGH THE USE OF EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP'S). DURING 유 CONSTRUCTION OT

TEMPORARY EROSION AND SEDIMENT CONTROL ITEMS, THE LOCATION AND SIZE OF WHICH ARE DETAILED ON THE PLANS, SHALL BE INSTALLED BY ANY CLEARING OR EARTHVVORK OPERATIONS. CONDITIONS THAT DEVELOP DURING CONSTRUCTION THAT WERE NOT FORSEEN DURING DESI TEMPORARY OR PERMANENT BMP'S SHALL BE APPROVED BY THE DESIGN ENGINEER AND REFLECTED ON THE REVISED SWP3. CONTRACTOR PRIOR TO STAGE, THAT REQUIRE A O THE COMMENCEMENT OF ADDITIONAL OR MODIFIED

SEDIMENT PONDS, SEDIMENT TRAPS, AND PERIMETER SEDIMENT CONTROLS, SHALL BE IMPLEMENTED PRIOR TO GRADING AND WITHIN 7 DAYS FROM THE START OF FUNCTION UNTIL THE UP SLOPE DEVELOPMENT AREAS ARE RE-ESTABLISHED WITH VEGETATION. SEDIMENT CONTROLS SHALL NOT BE PLACED IN A STREAM. GRUBBING. THEY SHALL CONTINUE

TRENCH DEWATERING OR GROUND WATER, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG, OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATER SHALL NOT BE DISCHARGED TO STREAMS, WATER RESOURCES, OR THE STORM

THE SWP3, NOTES AND DETAILED DRAWINGS ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION AND SEDIMENT CONTROL PRACTICES S OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) RAINWATER AND LAND DEVELOPMENT MANUAL.

ADDITIONAL EROSION AND SEDIMENT CONTROL BMP'S MAY BE REQUIRED BY THE CITY OF MASSILLON AS UNFORSEEN SITUATIONS MAY ARISE CONTROL PRACTICES.

## **CLEARING AND GRUBBING**

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

THE CONTRACTOR SHALL LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY EXCAVATION, BORROW AND FILL OPERATIONS CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS, WATER RESOURCES, WETLANDS, OR OTHER AREAS OF WATER IMPOU AND PROVIDE JNDMENT. IMMEDIATE PERMANENT QR **TEMPORARY** 

## **CONSTRUCTION ENTRANCE**

A STONED CONSTRUCTION ENTRANCE SHALL BE INSTALLED FOR ALL INGRESS AND EGRESS TO THE SITE. THE MINIMUM DIMENSIONS OF THE DRI SHALL BE 6 INCHES DEEP WITH AN UNDERLAIN GEOTEXTILE FABRIC. THE DRIVE SHALL BE INSTALLED PRIOR TO ANY CLEARING AND GRUBBING. SEI OR MORE FREQUENTLY IF REQUIRED BY LORAIN COUNTY. VE SHALL BE 14 FEET WIDE BY 70 FEET LONG. THE STONE DIMENTS SHALL BE REMOVED FROM THE ROADWAY DAILY

### STABILIZATION

PERMANENT AND TEMPORARY STABILIZATION SHALL OCCUR AS REQUIRED IN THE FOLLOWING TABLES:

TABLE 1 · PERMANENT STABILIZATION

PERMANENT STABILIZATION	TABILIZATION
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 SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN 2 DAYS OF REACHING FINAL GRADE
ANY OTHER AREAS AT FINAL GRADE	WITHIN 7 DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

### **TEMPORARY SEEDING**

SEEDED AREAS SHALL BE INSPECTED AND WHERE THE SEED HAS NOT PRODUCED 80% COVER SHALL BE CONDITIONS PROHIBIT SEEDING. RESEEDED BY THE CONTRACTOR. SHALL STABILIZED MIIM STRAW MULCH WHEN

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

ALL DETENTION PONDS. RETENTION PONDS, WATER QUAIITY WITHIN 7 DAYS OF COMPLETED CONSTRUCTION. STRUCTURES, SEDIMENT PONDS. OR П

TABLE 2: TEMPORARY STABILIZATION

ITY, EROSION MATTING MAY BE USED.	NOTE WHERE VEGETATIVE STABILIZATION TECHNIQUES ARE UNOBTAINABLE DUE TO INSTABILITY, EROSION MATTING MAY BE USED.
PRIOR TO THE ONSET OF WINTER WEATHER (NOV 1) STRAW MULCH 2-3 BALES PER 1000 SQ FT OR 2 TONS PER ACRE.	DISTURBED AREAS THAT WILL REMAIN IDLE OVER WINTER
NT WILL WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.	FOR ALL CONSTRUCT/ON ACTIVITIES, ANY DISTURBED AREA, INCLUDING SOIL STOCKPILES THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN 1 YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE.
WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS	ANY DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE
TIME FRAME TO APPLY EROSION CONTROL	AREA REQUIRING PERMANENT STABILIZATION
TEMPORARY STABILIZATION	TEMPO

# PERMANENT STABILIZATION OF CONVEYANCE CHANNELS

THE CONTRACTOR SHALL UNDERTAKE SPECIAL MEASURES TO STABILIZE CHANNELS AND OUTFALLS AND PREVENT EROSIVE FLOWS. MEASURES MAY EROSION CONTROL MATTING, SODDING, RIPRAP. NATURAL CHANNEL DESIGN WITH BIO-ENGINEERING TECHNIQUES. OR ROCK CHECK DAMS, ALL AS RAINWATER AND LAND DEVELOPMENT MANUAL PUBLISHED BY ODNR. INCLUDE SEEDING, DORMANT SEEDING, MULCHING, DEFINED IN THE MOST RECENT EDITION OF THE

# **SOIL TRANSPORT ONTO PUBLIC ROADS**

WHERE SOIL IS TRANSPORTED ONTO PUBLIC ROAD SURFACES, THE ROADS SHALL BE CLEANED THOROUGHLY BY EITHER SWEEPING OR SCRAPING AT THE END OF EACH WORK DAY OR MORE FREQUENTLY IF NEEDED IN ORDER TO ENSURE PUBLIC SAFETY. STREET WASHING IS NOT PERMITTED. IF APPLICABLE, THE CATCH BASINS NEAREST TO THE CONSTRUCTION ENTRANCE SHALL BE CLEANED WEEKLY.

ADDITIONAL REQUIREMENTS TO CONTROL SOIL TRANSPORT ONTO PUBLIC ROADS MAY INCLUDE

- SILT FENCE OR CONSTRUCTION FENCE INSTALLED AROUND THE PERIMETER OF THE DEVELOPMENT AREA TO ENSURE ALL VEHICLE TRAFFIC A DHERES TO DESIGNATED CONSTRUCTION ENTRANCES.
- DESIGNATED WHEEL WASHING AREAS. WASH WATER FROM THESE AREAS MUST BE DIRECTED TO A DESIGNATED SEDIMENT TRAP, SEDIMENT POND, OR TO A DEWATERING SUMP

ERODIBLE MATERIAL RAMPS IN STREETS TO ENABLE EQUIPMENT TO CROSS CURBS SHALL BE PROPERLY REMOVED IMMEDIATELY AFTER USE.

#### **FENCE AND DIVERSIONS**

SHEET FLOW RUNOFF FROM D
TRANSPORTED VIA SHEET FLOW DENUDED DOES NOT PRECLUDE THE USE OF OTHER SEDIMENT BARRIERS DESIGNED TO CONTROL, SILT FENCE SHALL BE PERSONNEL. TO PROTECT ADJACENT PROPERTIES, WATER RESOURCES, AND WETLANDS FROM PLACED ON A LEVEL CONTOUR AND SHALL BE CAPABLE OF TEMPORARILY PONDING RICONTROL SHEET FLOW RUNOFF. OM SEDIMENT

STORM WATER DIVERSION PRACTICES SHALL BE USED TO KEEP RUNOFF AWAY FROM DISTURBED WATER RUNOFF FROM AREAS UP *TO* 10 ACRES. STEEP SLOPES. SUCH DEVICES. WHICH INCLUDE SWALES, DIKES OR BERMS, MAY RECEIVE STORM

### **INLET PROTECTION**

INLET PROTECTION IS MANDATORY. INLET PROTECTION SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENT VERSION OF THE RAINWATER AND LAND DEVELOPMENT MANUAL BY OF INLETS RECEIVING RUNOFF FROM DRAINAGE AREAS OF ONE OR MORE ACRES WILL REQUIRE A SEDIMENT SETTLING POND. STRAW OR HAY BALES ARE NOT ACCEPTABLE FORMS OF INLET PROTECTION ODNR.

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# **NON-SEDIMENT POLLUTANTS CONTROLS**

NO SOLID OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER NON-SEDIMENT POLLUTANTS TO THE DRAINAGE SYSTEM OF THE SITE, WATER RESOURCES, OR WETLANDS. CHANNEL, STREET, STORM SEWER. OR OTHER PUBLIC FACILITY OR NATURAL RESOURCE. EXPOSURE OF WASTE R RUNOFF. ALL NECESSARY BMP'S MUST BE IMPLEMENTED TO PREVENT THE DISCHARGE OF UNDER NO CIRCUMSTANCE SHALL CONCRETE TRUCKS WASH OUT DIRECTLY INTO A DRAINAGE MATERIALS TO STORM WATER IS NOT PERMITTED.

# NCH AND GROUNDWATER CONTROL

IHERE 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 BE 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 LADEN BY

DATE:

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DATE: FEB,

2019

CHECKED BY:

HORIZONTAL SCALE IN FEET

#### **INSPECTION**

ALL CONTROLS ON THE SITE SHALL BE 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. THE CONTRACTOR SHALL ASSIGN QUALIFIED INSPECTION PERSONNEL TO CONDUCT THESE INSPECTIONS TO ENSURE THAT THE CONTROL PRACTICES ARE FUNCTIONAL AND TO EVALUATE WHETHER THE SWP3 IS ADEQUATE, OR WHETHER ADDITIONAL CONTROL MEASURES ARE REQUIRED. QUALIFIED INSPECTION PERSONNEL ARE INDIVIDIUALS WITH KNOWLEDGE AND EXPERIENCE IN THE INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROLS.

**REVISIONS:** 

DATE

DESCRIPTION

INSPECTIONS SHALL MEET THE FOLLOWING REQUIREMENTS:

- DRAINAGE SYSTEM. AREAS AND AREAS USED FOR STORAGE OF MATERIALS ARE **EXPOSED** T0 **PRECIPITATION** ΒE INSPECTED FOR EVIDENCE OF 9R ΉE POTENTIAL FOR, **POLLUTANTS**
- EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWP3 SHALL BE OBSEFFORM ACCEPTABLE TO THE CITY OF MASSILLON. THE INSPECTION FORM SHALL INCLUDE: OBSERVED m **OPERATING** CORRECTLY CONTRACTOR **SHALL** AN INSPECTION

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- NAMES, TITLES AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION.
- WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION, INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT AND APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT IN INCHES, AND WHETHER ANY DISCHARGES OCCURRED.
- LOCATIONS OF:

d.

C.

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- DISCHARGES FROM SEDIMENT OR OTHER POLLUTANTS FROM THE SITE.

  BMP'S THAT NEED TO BE MAINTAINED.

  BMP'S THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION.

  WHERE ADDITIONAL BMP'S ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION.

  CORRECTIVE ACTION REQUIRED INCLUDING ANY NECESSARY CHANGES TO THE SWP3 AND IMPLEMENTATION DATES.
- DISCHARGE LOCATIONS SHALL BE INSPECTED 0 T DETERMINE WHETHER EROSION AND SEDIMENT
- WATER RESOURCE OR WETLANDS CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS HE RECEIVING

Tiger Tarps Building

SWP3 Notes/Details

City of Massillon Stark County, Ohio

LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE VEHICLE TRACKING

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THE PERMIT APPLICANT SHALL MAINTAIN FOR 3 YEARS FOLLOWING FINAL STABILIZATION THE RESULTS OF THESE INSPECTIONS, THE NAMES AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTIONS, THE DATES OF THE INSPECTIONS, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWP3, A CERTIFICATION AS TO WHETHER THE FACILITY IS IN COMPLIANCE WITH THE SWP3, AND INFORMATION ON ANY INCIDENTS OF NON-COMPLIANCE DETERMINED BY THESE INSPECTIONS. EMAIL WEEKLY REPORTS TO BORCHERDS@CVELIMITED.COM

### **MAINTENANC**

ALL CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION UNTIL FINAL STABILIZATION. ALL SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UP SLOPE AREAS THEY CONTROL REACH FINAL STABILIZATION THE CONTRACTOR SHALL COMPLY WITH THE MAINTENANCE SCHEDULE CONTAINED IN 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 SHALL BE MAINTAINED AT THE JOB SITE AS PROOF ACKNOWLEDGING THAT THEY HAVE REVIEWED AND UNDERSTAND THE CONDITIONS AND RESPONSIBILITIES OF THE SWP3.

WHEN INSPECTIONS REVEAL THE NEED FOR REPAIR, REPLACEMENT, OR INSTALLATION OF EROSION AND SEDIN MENT CONTROL BMP'S, THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

- WHEN PRACTICES REQUIRE REPAIR OR MAINTENANCE CONTROL PRACTICES IN NEED OF REPAIR OR MAINTAINED WITHIN 3 DAYS OF THE INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED OR I MAINTAINED WITHIN 10 DAYS OF THE INSPECTION. WITH THE EXCEPTION OF A SEDIMENT SETTLING POND, BΕ REPAIRED
- WHEN PRACTICES FAIL TO PROVIDE THEIR INTENDED FUNCTION: CONTROL PRACTICES THAT FAIL TO FANOTHER MORE APPROPRIATE CONTROL WITHIN 10 DAYS. THE SWP3 SHALL BE AMENDED TO SHOW THE NEW CONTROL PRACTICE RFORM THEIR INTENDED FUNCTION AS DETAILED IN THE SWP3 SHALL BE REPLACED WITH
- WHEN PRACTICES ON THE SWP3 ARE NOT INSTALLED: CONTROL PRACTICES REQUIRED BY THE SWP3 BUT NOT IMPLEMENTED AT THE TIME OF THE INSPECTION OF THE INSPECTION. IF THE PLANNED CONTROL IS NOT NEEDED, AN EXPLANATION AS TO WHY THE CONTROL IS NOT NEEDED SHALL BE ADDED TO THE SWP3. SHALL ΒE **INSTALLED WITHIN 10** DAYS

### **WASTE DISPOSAL**

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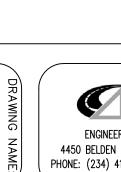
A COVERED DUMPSTER SHALL BE MADE AVAILABLE FOR THE PROPER DISPOSAL OF GARBAGE, PLASTER, DRYW ALL WASTE MATERIAL INCLUDING TOXIC OR HAZARDOUS WASTE SHALL BE DISPOSED OF AT FACILITIES APPROVEN. VALL, GROUT, GYPSUM, AND OTHER WASTE MATERIALS.
VED FOR THE PERTINENT MATERIAL. ALL CONTAINERS MUST BE LEAK PROOF











OJECT NUMBER

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### **CLEAN HARD FILL**

BRICKS, HARDENING CONCRETE. AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WA WILL BE DISPOSED OF INTO THE PROPERTY SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL. TER RESOURCES OR WETLANDS CLEAN CONSTRUCTION WASTES THAT

# CONSTRUCTION AND DEMOLITION DEBRIS (C&DD)

ALL C&DD SHALL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE (ORC) 3714. MATE REGULATIONS (SEE OHIO ADMINISTRATIVE CODE (OAC) 3745-20).

# CONSTRUCTION CHEMICAL COMPOUNDS

AREAS SHALL BE DESIGNATED FOR THE MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME, WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORM WATER DRAINAGE AREAS.

# **EQUIPMENT FUELING AND MAINTENANCE**

ALL FUEL/LIQUID TANKS AND DRUMS SHALL BE STORED IN A MARKED STORAGE AREA. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL OIL STORAGE TANKS. VEHICLE FUELING AND MAINTENANCE SHALL OCCUR IN DESIGNATED AREAS. THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES. FIELD DRAINS, OR OTHER STORM WATER DRAINAGE

# SPILL PREVENTION CONTROL AND COUNTERMEASURES

A SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE GROUND STORAGE STORAGE OF 1330 GALLONS, OR BELOW GROUND STORAGE OF 42,000 GALLONS OF FUEL. 660 GALLONS OR MORE, TOTAL ABOVE GROUND TANK

## **CONCRETE WASH WATERS**

CONCRETE CHUTE OR OTHER CONCRETE WASH WATERS SHALL BE DISCHARGED INTO DESIGNATED AREAS ONLY. DESIGNATED AREAS WATERCOURSES, DRAINAGE DITCHES. FIELD DRAINS. OR OTHER STORM WATER DRAINAGE AREAS.

ALL CONTAMINATED SOILS MUST BE TREATED AND/OR DISPOSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, (TSDFs). RUNOFF FROM CONTAMINATED SOILS SHALL NOT BE DISCHARGED FROM THE SITE. PROPER PERMITS SHALL BE OBTAINED FOR DEVELOPMENT PROJECTS ON REDEVELOPMENT SITES. CONTAMINATED SOILS STORAGE OR DISPOSAL FACILITIES SOLID WASTE LANDFILL SITES OR

# SPILL REPORTING REQUIREMENTS

IN THE EVENT OF A SMALL RELEASE (LESS THAN 25 GALLONS) OF PETROLEUM WASTE. THE LOCAL FIRE DEPARTMENT SHALL BE CONTACTED. PETROLEUM WASTE, CONTACT OHIO EPA AT 1-800-282-9378, AND THE LOCAL FIRE DEPARTMENT.

IN THE EVENT OF A LARGER RELEASE (25 OR MORE GALLONS) OF

**OPEN BURNING** OPEN BURNING IS NOT PERMITTED.

# **DUST CONTROLS AND SUPPRESSANTS**

USED OIL SHALL NOT BE USED AS A DUST SUPPRESSANT. DUST CONTROLS MAY INCLUDE THE USE OF WATER TRUCKS TO WET DISTURBED AREAS, DISTURBED AREAS, AND REGULATION OF THE SPEED OF VEHICLES ON THE SITE. TARPING STOCKPILES, 유

### STREAM CROSSINGS

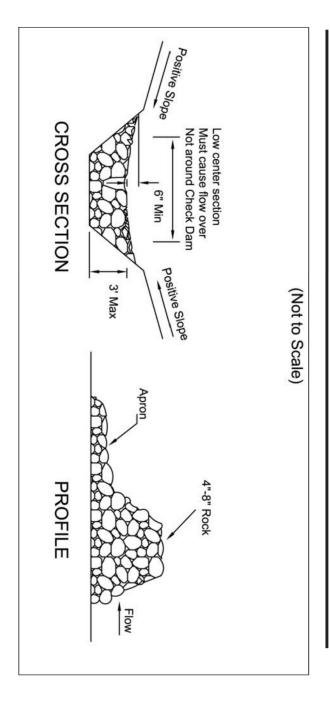
STREAM CROSSINGS SHALL BE CONSTRUCTED ENTIRELY OF STONE, ROCK, OR CLEAN RECYCLED CONCRETE. SOIL OR EARTHEN MATERIAL STREAM SHALL BE CONSTRUCTED TO PREVENT LOCALIZED SEDIMENTATION. THE CHANNEL BED AND BANKS SHALL BE RESTORED, AND SHALL BE STABILIZED WITH SEED AND STRAW MULCH WITHIN 2 DAYS OF THE DISTURBANCE. . MAY NOT BE USED. A 20 FOOT STONE APRON ON EITHER SIDE OF THE ALL DISTURBED AREAS OF THE BANK WITHIN 50 FEET OF THE STREAM

### SEEDING AND MULCHING

SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY SEEDING AND MULCHING UPON COMPLETION OF EXCAVATION OR FILL AND FINISHED GRADING IN ITEM 659 OR AS DIRECTED BY THE ENGINEER. THE FOLLOWING MIXTURES SHALL BE USED FOR SEEDING: WITH THE REQUIREMENTS

SEED MIX		ANNUAL RYEGRASS	PERENNIAL RYEGRASS	SEED MIX	STEEP BANKS, CUT SLOPE	KENTUCKY BLUEGRASS	KENTUCKY 31 FESCUE	PERENNIAL RYEGRASS	SEED MIX		PERENNIAL RYEGRASS	ANNUAL RYEGRASS	CREEPING RED FESCUE	KENTUCKY BLUEGRASS	SEED MIX	
SEEDING RATE	TEMPORARY EROSION C	0.3 LBS./1000 SQ FT	1.8 LBS./1000 SQ FT	SEEDING RATE	ES, DETENTION AREAS, WHE	1.5 LBS./1000 SQ FT	2.0 LBS./1000 SQ FT	1.5 LBS./1000 SQ FT	SEEDING RATE	ROADSIDE DITCHES AND	2 LBS./1000 SQ FT	2 LBS./1000 SQ FT	3 LBS./1000 SQ FT	3 LBS./1000 SQ FT	SEEDING RATE	GENERAL USE (
FERTILIZER	TEMPORARY EROSION CONTROL (ODOT 659.09, CLASS 7)			FERTILIZER	STEEP BANKS, CUT SLOPES, DETENTION AREAS, WHERE SLOPES ARE STEEPER THAN 3 1 (ODOT 659.09, CLASS 3C)			10-20-10@20 LBS./1000 SQ FT	FERTILIZER	ROADSIDE DITCHES AND SWALES (ODOT 659.09, CLASS 2)				10-20-10@20 LBS./1000 SQ FT	FERTILIZER	GENERAL USE (ODOT 659 09, CLASS 1)
MULCH				MULCH	(ODOT 659.09, CLASS 3C)			STRAW - 2 TONS/ACRE	MULCH					STRAW - 2 TONS/ACRE	MULCH	

#### Roc **Check Dam**



- he check dam shall be constructed of 4-8 inch dia cone, placed so that it completely covers the width nannel. ODOT Type D stone is acceptable, but sho nderlain with a gravel filter consisting of ODOT No suitable filter fabric.
- 3.0 feet
- The midpoint of the rock check dam shall be a minimum of inches lower than the sides in order to direct across the center and away from the channel sides.
- The base of the check dam shall be ent mately 6 inches.

4450 BELDEN VILLAGE ST. NW, SUITE 800 CANTON, OH 44718 PHONE: (234) 410-3913 EMAIL: KAD@CIVPROENGINEERING.COM WWW.CIVPROENGINEERING.COM

9

Tiger Tarps Building SWP3 Notes/Details City of Massillon Stark County, Ohio

DATE

REVISIONS: PATE: FEB, DESCRIPTION 2019

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DATE: FEB, 2019 DRAWN BY: BMH

