

# iVCP MUHLHAUSER 2 LLC

## MASS GRADING

### 4325 MUHLHAUSER ROAD FAIRFIELD, OH 45014

**GENERAL:** THE CURRENT STATE OF OHIO, DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (ODOTCMS) TOGETHER WITH THE REQUIREMENTS OF THE CITY OF FAIRFIELD, INCLUDING ALL SUPPLEMENTS THERETO, IN FORCE ON THE DATE OF CONTRACT, SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THESE PLANS. WHEN THERE IS OR APPEARS TO BE A CONFLICT BETWEEN THE ABOVE REFERENCED SPECIFICATIONS AND THESE PLANS, THE MOST STRINGENT REQUIREMENT SHALL GOVERN.

**PROJECT LIMITS:** THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHTS-OF-WAY, CONSTRUCTION EASEMENTS, AND PERMANENT EASEMENTS, AND SHALL NOT TRESPASS UPON PRIVATE PROPERTY WITHOUT WRITTEN CONSENT OF THE PROPERTY OWNER.

**MISCELLANEOUS WORK:** ALL ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF SAME SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS RELATED ITEMS.

**DRAINAGE TILE:** ALL FARM DRAINS, ROADWAY DRAINS, AND OTHER DRAINAGE TILE WHICH ARE ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS DURING CONSTRUCTION SHALL BE PROVIDED WITH AN UNOBSTRUCTED OUTLET. EXISTING COLLECTOR TILES WHICH ARE LOCATED BELOW THE PROPOSED FINISHED ELEVATION AND WHICH CROSS THE TRENCH SHALL BE REPLACED WITHIN THE TRENCH LIMITS BY ITEM 603 CONDUIT. THE LOCATION, TYPE, SIZE, AND GRADE OF REQUIRED REPLACEMENT SHALL BE DETERMINED BY THE PROJECT ENGINEER OR HIS SITE REPRESENTATIVE DURING CONSTRUCTION. NECESSARY BENDS OR FITTINGS, COMPACTED GRANULAR BACKFILL, AND ASSOCIATED ITEMS SHALL BE INCLUDED IN THE BID PRICE.

**BORROW MATERIAL AND SURPLUS EXCAVATION:** THE SITE SHALL BE CONSTRUCTED TO THE FINAL GRADES SHOWN ON THE PLANS. WHERE NECESSARY, THE CONTRACTOR SHALL OBTAIN SUITABLE BORROW MATERIAL ON-SITE OR OFF-SITE AS NEEDED TO COMPLETE THE SITE CONSTRUCTION AS PROVIDED HEREIN. THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION ON SITE, AND, IF NECESSARY, SHALL HAUL SURPLUS EXCAVATED MATERIAL AWAY FROM THE SITE AND DISPOSE OF PROPERLY.

**EXISTING UTILITIES:** THE INFORMATION SHOWN CONCERNING EXISTING UTILITIES IS APPROXIMATE. THE LOCATION, SIZES, AND OTHER INFORMATION SHOWN IS ONLY AS ACCURATE AS THAT PROVIDED BY THE OWNERS OF THE UTILITY. THIS INFORMATION IS NOT REPRESENTED, WARRANTED OR GUARANTEED TO BE COMPLETE OR ACCURATE. THE ENGINEER DOES NOT INDEPENDENTLY VERIFY NOR FIELD LOCATE UTILITIES. THE CONTRACTOR IS RESPONSIBLE TO PHYSICALLY LOCATE AND VERIFY, IN THE FIELD, THE HORIZONTAL AND VERTICAL LOCATIONS, WHETHER SHOWN ON THE PLAN OR NOT, PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL SUPPORT, PROTECT, AND RESTORE ALL EXISTING UTILITIES AND THEIR ASSOCIATED ITEMS. THE CONTRACTOR SHALL NOTIFY THE REGISTERED UTILITY PROTECTION SERVICE AND ALL UTILITY OWNERS HAVING FACILITIES IN THE CONSTRUCTION AREA WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND UTILITY PROTECTION SERVICE. THE CONTRACTOR SHALL ADHERE TO SECTION 153.64, OHIO REVISED CODE. THE CONTRACTOR SHALL GIVE NOTIFICATION AS REQUIRED BY OHIO REVISED CODE, AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, AND SHALL COORDINATE HIS WORK WITH THE UTILITY OWNERS UNTIL HIS WORK IS COMPLETED. THE CONTRACTOR SHALL KEEP THE UTILITY OWNERS APPRISED OF HIS SCHEDULE AND REQUIREMENTS AND SHALL PROVIDE THE PROJECT OWNER WITH EVIDENCE OF HAVING NOTIFIED THE UTILITIES AND PROVIDING THEM WITH HIS WORK SCHEDULE PRIOR TO BEGINNING ANY WORK.

THE CONTRACTOR MAY REVIEW THE INFORMATION PROVIDED TO THE ENGINEER BY THE UTILITY COMPANIES AT THE ENGINEER'S OFFICE PRIOR TO SUBMITTING A BID. CONTRACTORS REQUIRING MORE INFORMATION REGARDING EXISTING UTILITIES SHOULD CONDUCT THEIR OWN FIELD INVESTIGATIONS, OR OTHERWISE LOCATE THE UTILITIES, PRIOR TO SUBMITTING A BID FOR THE CONSTRUCTION. NOTICE SHALL BE GIVEN TO THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764), FOR THE MEMBER UTILITIES.

**PERMITS:** THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS UNLESS OTHERWISE INDICATED IN THESE DOCUMENTS. THE CONTRACTOR SHALL NOT ENTER ON PRIVATE PROPERTY WITHOUT WRITTEN CONSENT OF THE PROPERTY OWNER.

**INSTALLATION IN EMBANKMENT:** WHERE UTILITIES ARE TO BE INSTALLED IN EMBANKMENT AREAS, THE EMBANKMENT SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS A MINIMUM OF TWO FEET ABOVE THE PIPE BUT SUFFICIENTLY ABOVE THE PIPE TO PROTECT THE PIPE FROM DAMAGE DUE TO FURTHER CONSTRUCTION ACTIVITIES PRIOR TO THE INSTALLATION OF THE UTILITY.

**TEMPORARY PAVEMENT:** TEMPORARY PAVEMENT REPLACEMENT SHALL BE PROVIDED ON PERMANENT PAVEMENT DAMAGED OR REMOVED BY THE CONTRACTOR IN THE PERFORMANCE OF THE WORK. AS SOON AS THE TRENCH HAS BEEN BACKFILLED, TEMPORARY PAVEMENT SHALL BE INSTALLED. THE ENGINEER MAY REQUIRE THAT ALL MATERIALS AND EQUIPMENT INCIDENTAL TO PROVIDING THE TEMPORARY PAVEMENT BE ON THE JOB SITE PRIOR TO REMOVING THE EXISTING PAVEMENT. THE TEMPORARY PAVEMENT SHALL CONSIST OF 2 INCHES OF BITUMINOUS COLD MIX MATERIAL PLACED UPON 6 INCHES OF COMPACTED ITEM 304 (ODOTCMS), AGGREGATE BASE. TEMPORARY PAVEMENT SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT PAVEMENT IS INSTALLED.

**PERMANENT PAVEMENT:** WHERE DAMAGED OR REMOVED, THE PAVEMENT SHALL BE REPLACED BY FIRST REMOVING THE TEMPORARY PAVEMENT DOWN TO THE CLEAN GRANULAR MATERIAL AND REMOVING THE EXISTING PAVEMENT FOR AT LEAST 12 INCHES BEYOND THE TRENCH LIMITS ON EACH SIDE. THE PAVEMENT TO BE REMOVED SHALL BE NEATLY SAWED, NOT MORE THAN 72 HOURS PRIOR TO THE PLACING OF PERMANENT PAVEMENT MATERIALS. THE PERMANENT PAVEMENT REPLACEMENT MATERIALS AND WORKMANSHIP SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS. ITEM 407 (ODOTCMS) TACK COAT SHALL BE APPLIED TO THE EXPOSED EXISTING PAVEMENT EDGES, WHEN EITHER THE EXISTING OR NEW PAVEMENT IS BITUMINOUS MATERIAL, AND ITEM 407 (ODOTCMS) TACK COAT OR 408 (ODOTCMS). PRIME COAT SHALL BE APPLIED TO THE BASE MATERIAL, DEPENDING UPON THE BASE MATERIAL, WHEN THE PERMANENT PAVEMENT IS BITUMINOUS MATERIAL, PRIOR TO THE PLACING OF THE PERMANENT PAVEMENT.

**TRAFFIC CONTROL:** THE CONTRACTOR SHALL USE ADEQUATE LIGHTS, SIGNS, FLAGGERS, AND BARRICADES AS REQUIRED IN ITEM 614 (ODOTCMS) TO SAFEGUARD THE TRAVELING PUBLIC AT ALL TIMES. ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS. WHERE IT IS ANTICIPATED THAT WORK WILL CLOSE A ROAD OR STREET, THE CONTRACTOR SHALL INFORM THE RESIDENTS TO BE AFFECTED, THE LOCAL LAW ENFORCEMENT AGENCY, THE LOCAL FIRE DEPARTMENT, AND THE ENGINEER AS TO THE EXTENT, NATURE, AND THE TIME OF THE ANTICIPATED WORK. THE CONTRACTOR SHALL SUBMIT A PLAN AND SCHEDULE FOR DETOURING TRAFFIC TEN (10) DAYS PRIOR TO THE CLOSING OF ANY ROAD OR STREET TO THE ENGINEER AND ROAD OWNER. DURING A CLOSING OF A ROAD OR STREET, THE CONTRACTOR SHALL PROVIDE ACCESS TO THE PROPERTY FOR EMERGENCY VEHICLES AND THE PROPERTY OWNERS. NO ROAD OR STREET SHALL BE CLOSED UNTIL THE SCHEDULE IS APPROVED BY THE AGENCY HAVING CONTROL OF THE ROAD. WORK REQUIRING A LANE CLOSURE MUST BE PERFORMED DURING THE HOURS OF 8:00 PM AND 6:00 AM. ODOT PERMIT OFFICE TO BE NOTIFIED THREE (3) WORKING DAYS PRIOR TO START OF WORK. WORK IN STATE ROUTES (IF NECESSARY) SHALL BEGIN ON A SUNDAY OR MONDAY NIGHT TO ENSURE THAT PAVEMENT REPLACEMENT IS COMPLETED BY FRIDAY.

**SAFETY OF CONSTRUCTION:** THE CONTRACTOR SHALL COMPLY WITH THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (OSHA) AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, FINDINGS AND ORDERS RELATING TO SAFETY AND HEALTH CONDITIONS ON THE WORK SITE. CONSTRUCTION METHODS FOR COMPLETING THE WORK DESCRIBED IN THESE CONTRACT DOCUMENTS SHALL BE CONSISTENT WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AMENDED CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUB-PART P, EFFECTIVE MARCH 5, 1990.

**CLEANOUT TOPS:** WHERE CLEANOUTS ARE LOCATED WITHIN PUBLIC OR PRIVATE PAVEMENT, SIDEWALK, CONCRETE PAD, OR PAVED SHOULDER, THE TOPS SHALL BE BUILT TO EXISTING PAVEMENT ELEVATIONS.

**FINAL GRADING AND CLEAN-UP:** THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM HIS OPERATION AND RESTORE ALL SURFACES, STRUCTURES, DITCHES, AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER. ALL SIGNS, MAILBOXES, FENCES, GUARDRAILS, ROADSIDE DITCHES, OR OTHER PHYSICAL FEATURES DISTURBED OR DAMAGED DURING WORK UNDER THIS CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR. THE COST OF ALL SUCH WORK SHALL BE INCLUDED WITH THE VARIOUS RELATED ITEMS.

**SEEDING AND MULCHING:** ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND ELEVATION OR TO THE PROPOSED ELEVATION SHOWN ON THE DRAWINGS, AND PROPER DRAINAGE SHALL BE PROVIDED. AFTER FINAL GRADING, THE SEED BED SHALL BE RAKED AND ALL STONES, CLOUDS, LUMPS, AND OTHER FOREIGN MATERIAL GREATER THAN 1" IN DIAMETER SHALL BE REMOVED PRIOR TO SEEDING AND MULCHING. ALL AREAS SHALL BE SEEDED AS PER THE URBAN SEED MIX OF SECTION 659.09 (ODOTCMS). THE CONTRACTOR SHALL WATER, RE-SEED, AND MULCH AS NECESSARY UNTIL AN ACCEPTABLE STAND OF GRASS IS ACHIEVED.

**CONFLICTS IN GRADE:** IN ALL CONFLICTS IN GRADE BETWEEN THE CONCENTRATE LINES AND OTHER EXISTING UTILITIES, THE CONCENTRATE LINE SHALL BE LOWERED DURING CONSTRUCTION. A MINIMUM OF 18" VERTICAL AND 10' HORIZONTAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE CONCENTRATE LINE AND ANY SANITARY SEWER; 12" MINIMUM VERTICAL CLEARANCE FOR OTHER UTILITIES. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AHEAD OF HIS CONSTRUCTION OPERATIONS TO ALLOW FOR ADJUSTMENTS IN GRADE TO THE CONCENTRATE LINE THAT MAY BE REQUIRED AS A RESULT OF A POTENTIAL CONFLICT IN GRADE WITH AN EXISTING UTILITY. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR LOWERING THE CONCENTRATE LINE TO AVOID CONFLICTS WITH EXISTING UTILITIES.

**PROHIBITED CONSTRUCTION ACTIVITIES:**

USING ANY SUBSTANCE OTHER THAN WATER TO CONTROL DUST.

OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE PERMIT OR DISPOSING OF THE TREES AND STUMPS.

PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS, OR STORM SEWERS.

DISCHARGING POLLUTANTS - SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE - AND OTHER HARMFUL WASTE INTO OR ALONGSIDE RIVERS, STREAMS, IMPOUNDMENTS OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO.

STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIAL ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED BY THE CITY ENGINEER FOR SAID PURPOSES.

DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOOD PLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER.

INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, WETLAND SURFACE WATERS, OR OUTSIDE THE EASEMENT AREA.

PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF A STREAM.

DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.

DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS, ANY WETLANDS, AND SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS.

**EROSION & SEDIMENT CONTROL:**

CONTRACTOR SHALL PREPARE AND SUBMIT FOR APPROVAL A SWPPP PRIOR TO CONSTRUCTION. COST FOR SWPPP SHALL BE INCLUDED IN THE ITEM SPECIAL, STORM WATER POLLUTION PREVENTION PLAN AND IMPLEMENTATION.

THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL AT ALL POINTS WHERE STORM WATER RUNOFF LEAVES THE PROJECT INCLUDING WATERWAYS, OVERLAND SHEET FLOW, AND STORM SEWERS. EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED AS PER THE REQUIREMENTS OF THE OHIO EPA, CITY OF FAIRFIELD, AND THE STANDARDS AND SPECIFICATIONS OF THE "RAINWATER AND LAND DEVELOPMENT" MANUAL BY THE ODNR.

EROSION AND SEDIMENT CONTROL ARE TO BE MAINTAINED UNTIL SUCH TIME THAT THEY ARE NO LONGER REQUIRED BY THE ENGINEER. ALL LAND DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE ENGINEER AND/OR THE OHIO EPA. FAILURE TO COMPLY WITH THESE REGULATIONS IS SUBJECT TO LEGAL ENFORCEMENT ACTION.

**CURRENT OWNER:**

**iVCP MUHLHAUSER 2 LLC**  
810 BULL LEA RUN #300  
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CONTACT: JOSHUA LEWIS  
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**CONTRACTOR:**

**DENHAM BLYTHE**  
100 TRADE STREET  
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**CIVIL ENGINEER:**

**INFRASTRUCTURE & DEVELOPMENT ENGINEERING, INC.**  
9338 CINCINNATI COLUMBUS RD  
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CONTACT: TIMOTHY FOSTER, P.E.  
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(513) 671-8144

**CITY ENGINEER:**

**CITY OF FAIRFIELD**  
8870 N. GILMORE ROAD  
FAIRFIELD, OH 45014  
CONTACT: NICHOLAS DILL, P.E.  
NDILL@FAIRFIELD-CITY.ORG  
(513) 967-4221



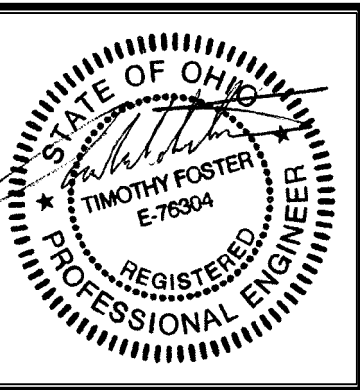
**SHEET INDEX:**

- C101 COVER SHEET
- C102 GRADING AND EROSION CONTROL PLAN
- C103 DETAILS
- C104 EROSION AND SEDIMENT CONTROL DETAILS

\* CALL BEFORE YOU DIG "O.U.P.S." \*

NOTE: THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION AND SHALL CONTACT THE UTILITIES PROTECTION SERVICE A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO DIGGING AT THE NUMBER BELOW. THE ENGINEER SHALL BE NOTIFIED OF ANY CONFLICTS ON THIS MATTER AND NO EXCAVATION SHALL COMMENCE UNTIL ALL APPLICABLE UTILITIES HAVE BEEN CLEARED.

1-800-362-2764



**INFRASTRUCTURE DEVELOPMENT ENGINEERING**

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Tele: (513) 671-8144

Designed By: T. FOSTER	Drawn By: J. MOLONY	Checked By: T. FOSTER	Approved By: T. FOSTER
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REVISIONS:	06-07-21: UPDATED GRADING - ROCK ELEV.
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**iVCP MUHLHAUSER 2 LLC**  
**MASS GRADING**  
4325 MUHLHAUSER RD  
FAIRFIELD, OH 45014

COVER SHEET

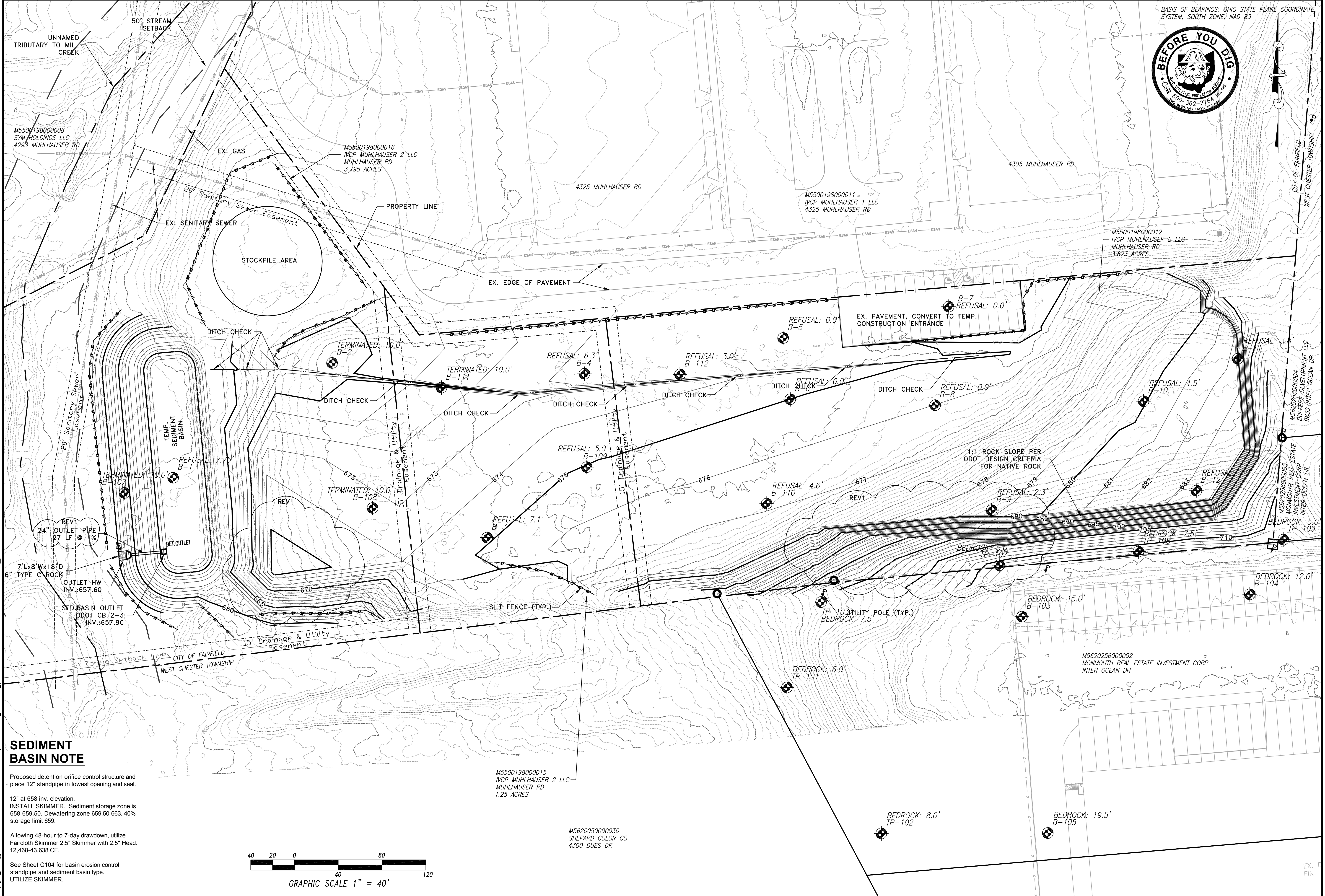
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Sheet 1 of 4

**C101**

Project No.  
20045A-62



BASIS OF BEARINGS: OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD 83



**INFRASTRUCTURE DEVELOPMENT ENGINEERING**

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Drawn By: J. MOLONY  
Checked By: T. FOSTER  
Approved By: T. FOSTER

REVISIONS:

06-07-21	UPDATED GRADING - ROCK ELEV.
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**IVCP MUHLHAUSER 2 LLC  
MASS GRADING  
4325 MUHLHAUSER RD  
FAIRFIELD, OH 45014**

**GRADING & EROSION CONTROL PLAN**

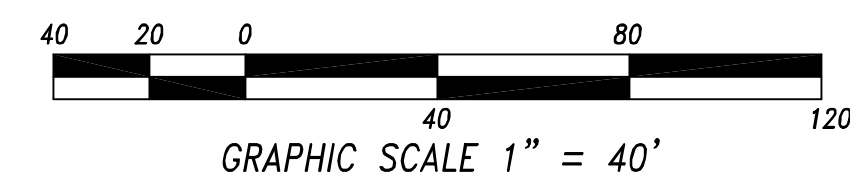
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Date: 05/14/2021

Sheet 2 of 4  
**C102**  
Project No. 20045A-62

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**SEDIMENT BASIN NOTE**

Proposed detention orifice control structure and place 12" standpipe in lowest opening and seal.  
12" at 658 inv. elevation.  
INSTALL SKIMMER. Sediment storage zone is 658-659.50. Dewatering zone 659.50-663. 40% storage limit 659.  
Allowing 48-hour to 7-day drawdown, utilize Faircloth Skimmer 2.5" Skimmer with 2.5" Head. 12,468-43,638 CF.  
See Sheet C104 for basin erosion control standpipe and sediment basin type.  
UTILIZE SKIMMER.

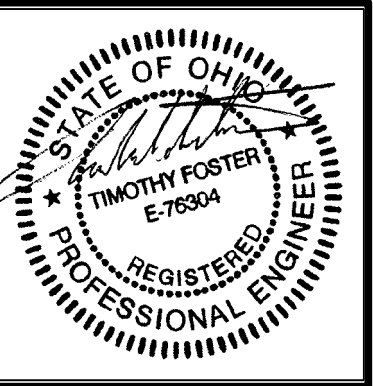


M5500198000015  
IVCP MUHLHAUSER 2 LLC  
MUHLHAUSER RD  
1.25 ACRES

M5620050000030  
SHEPARD COLOR CO  
4300 DUES DR

M5620256000002  
MONMOUTH REAL ESTATE INVESTMENT CORP  
INTER OCEAN DR

EX. FIN.



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REVISIONS:

06-07-21: UPDATED GRADING - ROCK ELEV.
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**IVCF MUHLHAUSER 2 LLC  
MASS GRADING  
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FAIRFIELD, OH 45014**

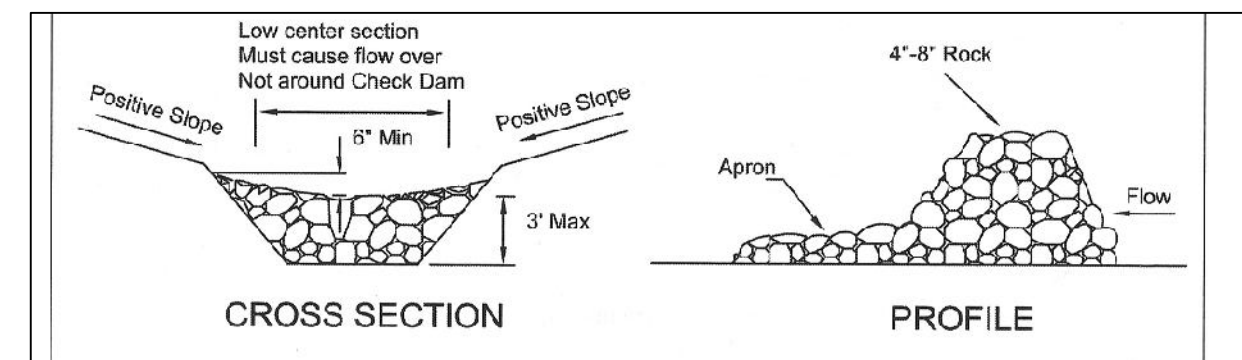
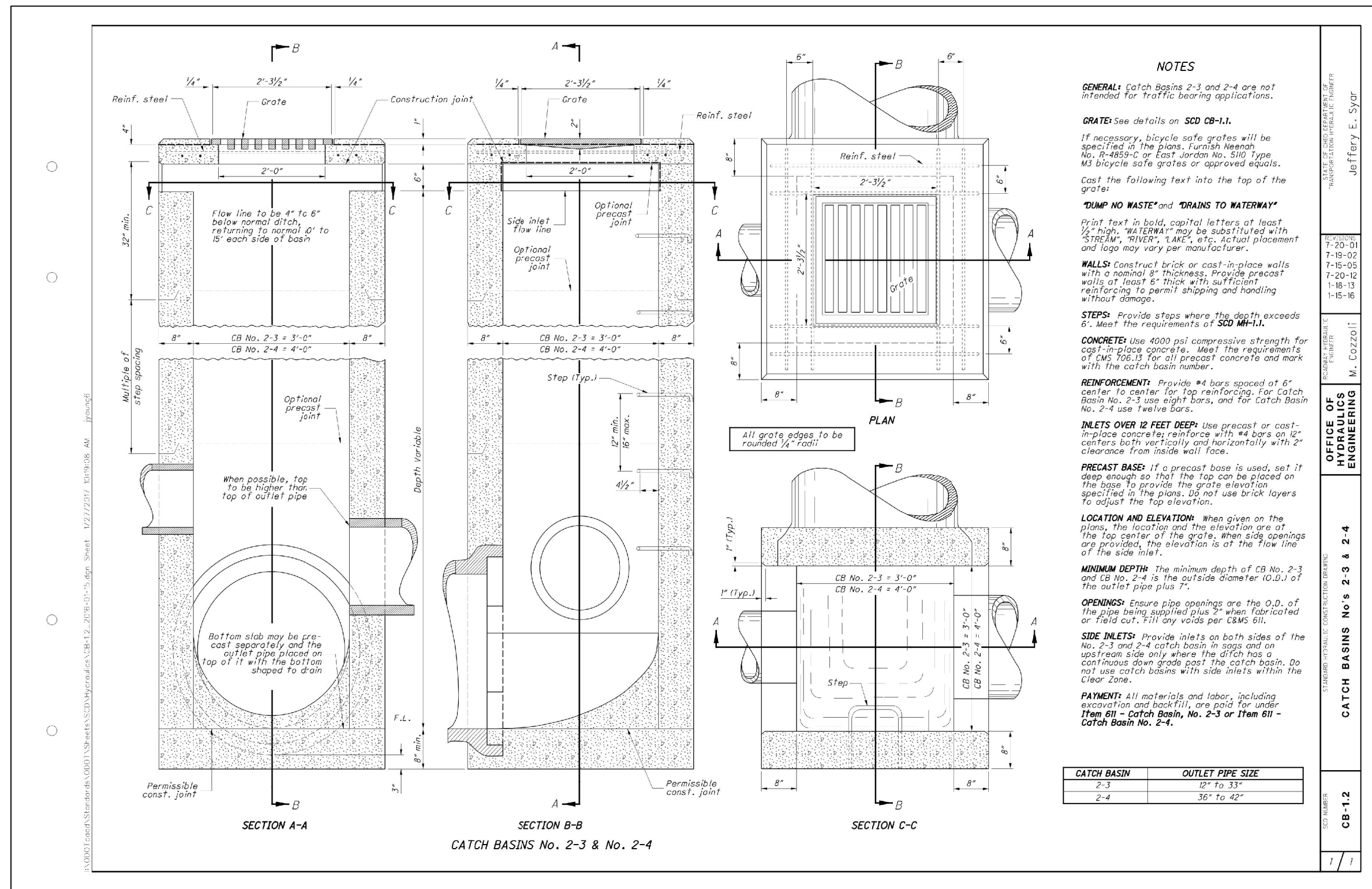
**DETAILS**

Scale: 1" = 60'

Date: 05/14/2021

Sheet # of 4  
**C103**

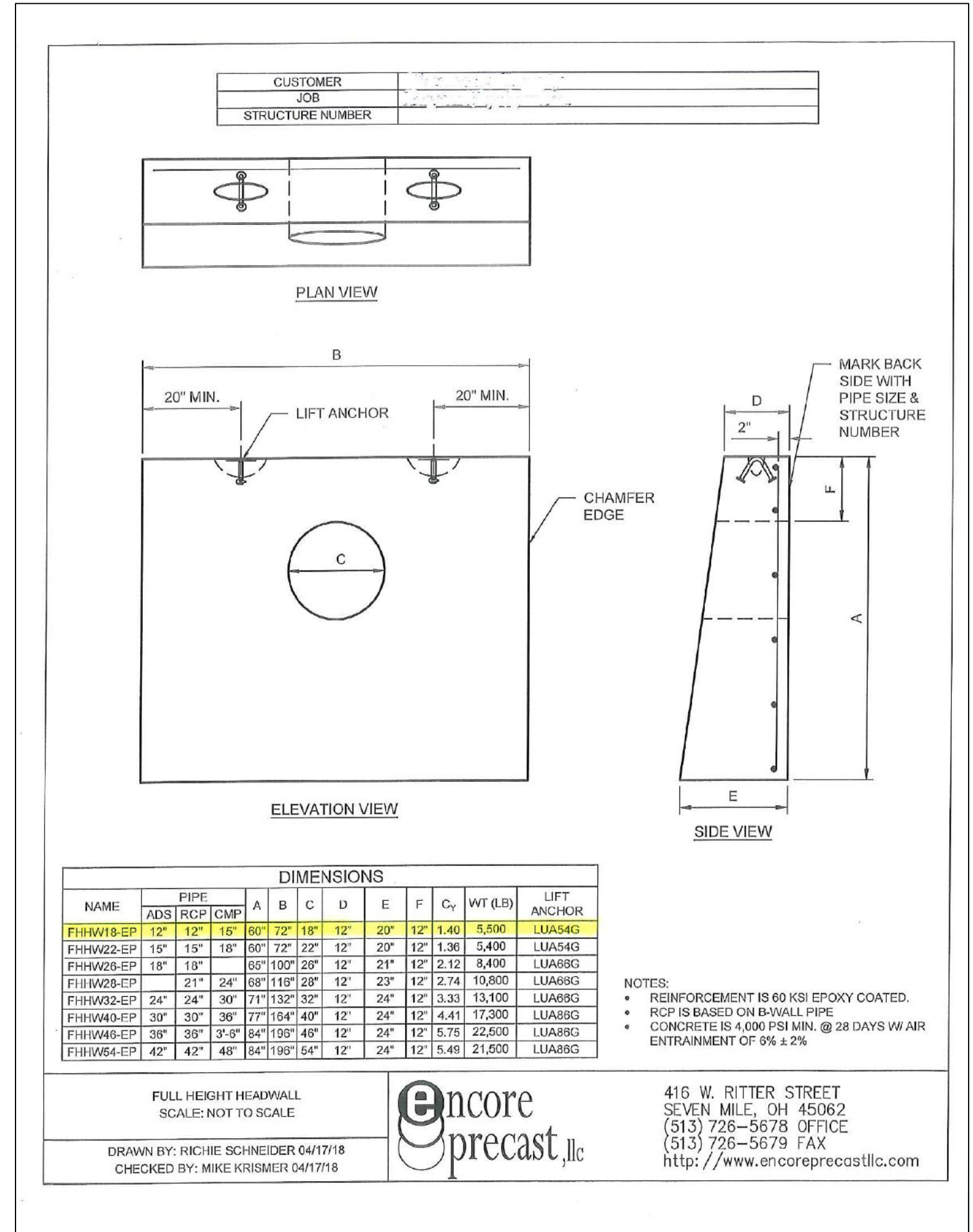
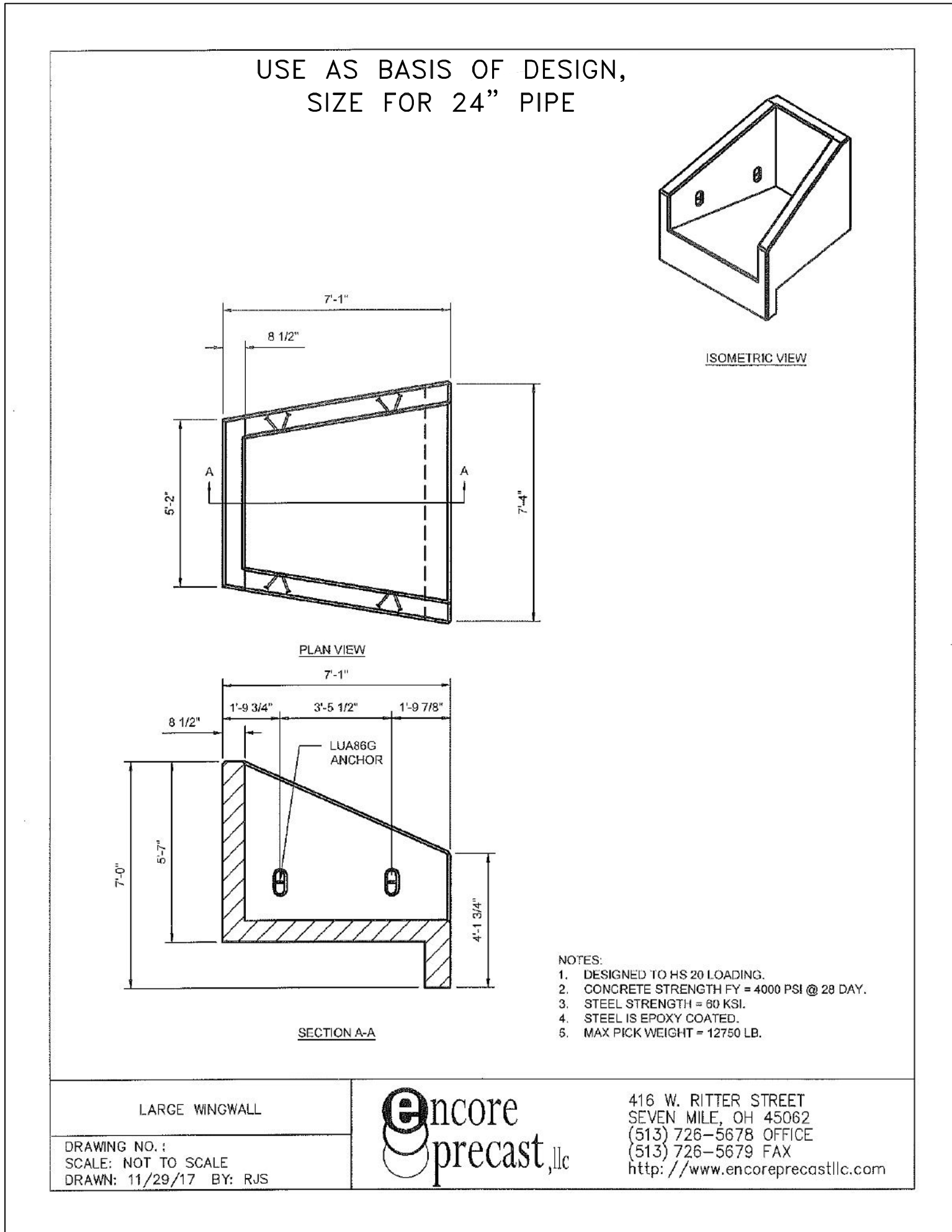
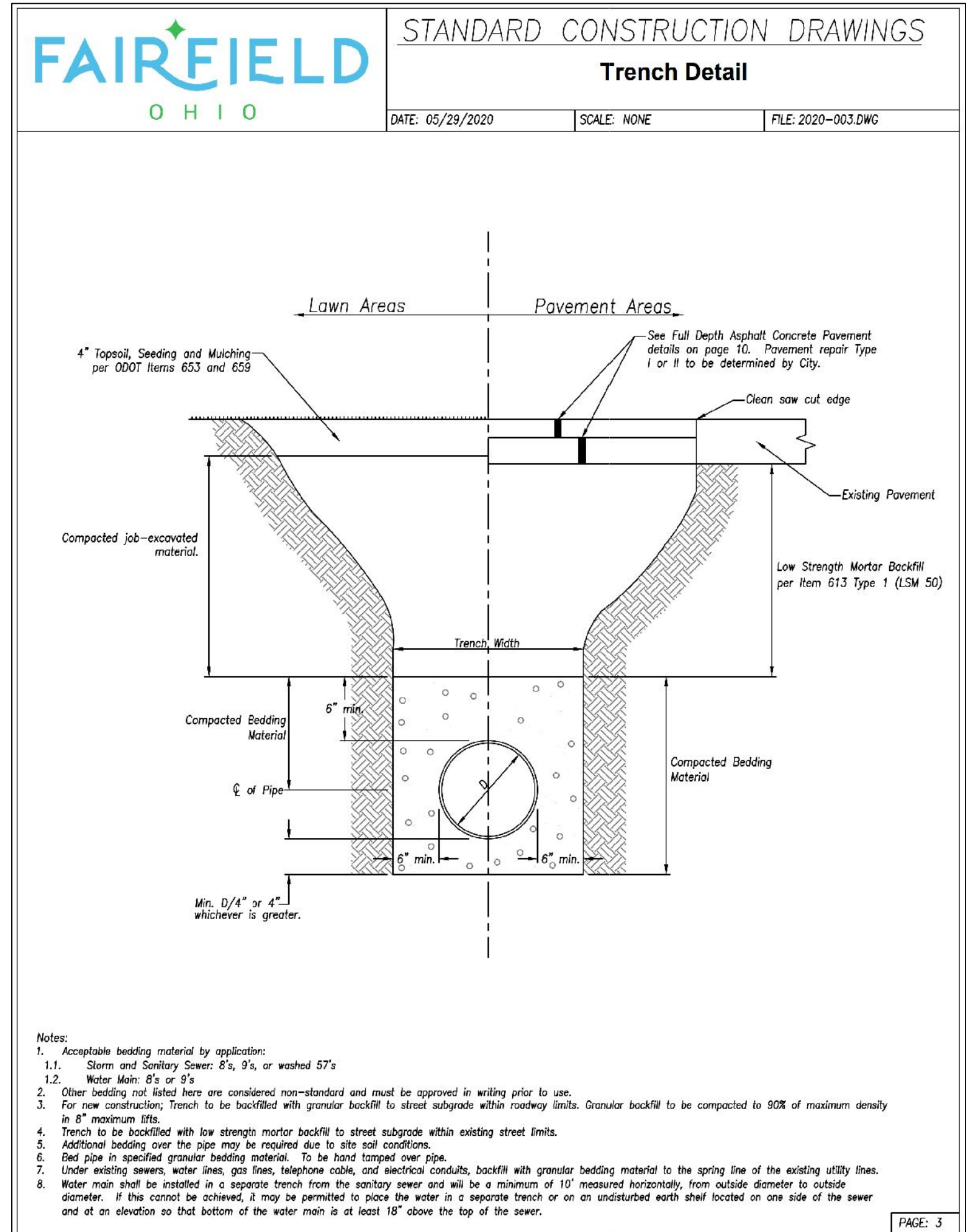
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**EROSION CONTROL NOTES**

- See Sheet C102 for Proposed Grading and Erosion Control Plan
- See Sheet C104 for Erosion & Sediment Control (ESC) Notes & Details
- Maintenance of Erosion and Sediment Controls must reflect the timelines on Part III.G.2.i (inspections) on page 26 of 27 of the OEPA Construction General Permit for when practices require repair and maintenance, when practices fail to provide their intended function and when practices depicted on the SWPPP are not installed. This note supersedes any discrepancies created by notes on C104 related to maintenance and inspections.
- Temporary erosion, sediment and debris control must be provided for at all catch basins, inlets and the inlet side of all new pipe openings, or equal.
- Temporary erosion, sediment and debris control must be provided for at the outlet ditch, swale, watercourse or pipe. See approved plans for any other specific locations.
- In addition to any temporary erosion, sediment, and debris control details and notes shown on the plans, the developer shall construct temporary sediment basins, earth dikes, temporary or permanent seeding, mulching and/or mulch netting or any other generally accepted methods to prevent erosion, mud and debris from being deposited on other property, on newly constructed or existing roads, or into existing sewers or new sewers within the development. The developer shall continually monitor the construction progress and make any necessary temporary adjustments to maintain this control. Consideration should also be given to the "Dikes & Slope Protection" and "Sediment Basins and Dams" shown on Std. Drawing, MC-11 for use in temporary erosion, mud and debris control.
- Non-Sediment Pollution BMPs: No hazardous substances, solid or liquid waste, including building materials and concrete wash water, shall be discharged from the site. All necessary and appropriate BMPs shall be implemented to prevent the discharge of pollutants.

- The check dam shall be constructed of 4-8 inch diameter stone, placed so that it completely covers the width of the channel. ODOT Type D stone is acceptable, but should be underlain with a gravel filter consisting of ODOT No. 3 or 4 or suitable filter fabric.
- Maximum height of check dam shall not exceed 3.0 feet.
- The midpoint of the rock check dam shall be a minimum of 6 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 entrenched approximately 6 inches.
- Spacing of check dams shall be in a manner such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.



CONSTRUCTION SEQUENCE

- 1. PRE-CONSTRUCTION MEETING TO REVIEW THE PLAN AND CONSTRUCTION SEQUENCING BEFORE EARTHWORK IS PERMITTED.
2. INSTALL TEMPORARY CONSTRUCTION ENTRANCE(S) FOR CONSTRUCTION TRAFFIC...
3. DUST ON SITE SHALL BE MINIMIZED BY SPRAYING WATER ON DRY AREAS OF THE SITE...
4. INSTALL PERIMETER EROSION CONTROL MEASURES...
5. PERFORM CLEARING, GRUBBING, AND TOPSOIL STOCKPILING AS REQUIRED...
6. IMMEDIATELY AFTER LAND CLEARING, APPLY SURFACE STABILIZATION ON GRADED AND OTHER DISTURBED AREAS...
7. DURING EMBANKMENT OPERATIONS, TEMPORARY DIVERSION DITCHES/BERMS AND TEMPORARY SLOPE DRAINS SHOULD BE INSTALLED...
8. BEGIN SITE GRADING OPERATIONS AND CONSTRUCTION...
9. INSTALL ALL STORM SEWER PIPES AND UNDERGROUND UTILITY LINES AS SHOWN ON THE PLANS...
10. WHEN APPLICABLE, INSTALL BASE MATERIAL AS REQUIRED FOR PAVEMENT...
11. REMOVE INLET PROTECTION AROUND INLETS AND MANHOLES...
12. INSTALL FINAL PAVEMENT AS SHOWN ON THE PLANS...
13. CARRY OUT FINAL GRADING, SEEDING, AND PLANTING...
14. INSPECT STORM SEWERS PRIOR TO TURNOVER...
15. REGULAR MAINTENANCE INSPECTION AND REPAIR OF EROSION AND SEDIMENT CONTROL DEVICES...
16. PRE-WINTER STABILIZATION MEETING IF PROJECT IS TO BE THROUGH THE WINTER.

EROSION CONTROL NOTES

- 1. ALL PROPERTIES ADJACENT TO THE AREAS OF SOIL-DISTURBING ACTIVITY, INCLUDING BUT NOT LIMITED TO PRIVATE PROPERTIES, NATURAL AND ARTIFICIAL WATERWAYS, WETLANDS, STORM SEWERS AND PUBLIC LANDS, SHALL BE PROTECTED...
2. CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL PRACTICES USED TO SATISFY THIS REQUIREMENT SHALL CONFORM...
3. EROSION AND SEDIMENT CONTROL PLAN APPROVALS ISSUED IN ACCORDANCE WITH THESE RULES DO NOT RELIEVE THE OWNER OF RESPONSIBILITY...
4. EROSION AND SEDIMENT CONTROL PRACTICES AT THE SITE AND AS IDENTIFIED IN THIS PLAN SHALL COMPLY WITH THE FOLLOWING:
A. RESERVED
B. LIMITS TO CLEARING AND GRADING...
C. INSTALL EROSION AND SEDIMENT PERIMETER CONTROLS AS A FIRST ACTION OF CONSTRUCTION...
D. CONCENTRATED STORM WATER RUNOFF SHALL PASS THROUGH A SEDIMENT CONTROL DEVICE...
E. ANY AREAS THAT REQUIRE PERMANENT STABILIZATION AND THAT WILL LIE DORMANT FOR ONE (1) YEAR OR MORE...
F. ANY AREAS THAT REQUIRE PERMANENT STABILIZATION AND THAT WILL BE WITHIN 50 FEET OF A SURFACE WATER...
G. STORM SEWER INLETS SHALL BE PROTECTED...
H. ANY OTHER AREAS THAT REQUIRE PERMANENT STABILIZATION AT FINAL GRADE...
I. SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED TO PREVENT SOIL LOSS...
J. UNSTABLE SOILS PRONE TO SLIPPING OR SLOUGHING SHALL NOT BE CLEARED...
K. SOIL SHALL BE REMOVED FROM PAVED SURFACES AND/OR PUBLIC ROADS...
L. DISTURBED OR MODIFIED DRAINAGE WAYS SHALL BE STABILIZED...
M. SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED ONCE EVERY SEVEN (7) DAYS...
N. ANY AREAS THAT REQUIRE TEMPORARY STABILIZATION AND THAT WILL BE WITHIN 50 FEET OF A SURFACE WATER...
O. FOR ALL CONSTRUCTION ACTIVITIES, ANY AREAS THAT REQUIRE TEMPORARY STABILIZATION FOR A DISTURBED AREA...
P. ANY AREAS REQUIRE TEMPORARY STABILIZATION THAT WILL BE IDLE OVER WINTER...
Q. RESERVED
R. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF...
S. OFF-SITE VEHICLE TRACKING SEDIMENT SHALL BE MINIMIZED...
T. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS...
U. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY...
V. WINTERIZATION - RESERVED
W. CONCRETE CEMENT IS TO BE TAKEN BACK TO PLANT FOR WASHOUT AND RECYCLING.

THE PLAN FOR THIS PROJECT IS COMPOSED OF THE NPDES CONSTRUCTION STORM WATER GENERAL PERMIT, INCLUDING ALL REQUIREMENTS THEREIN, THE PROJECT CONSTRUCTION DRAWINGS, AND ALL SUPPLEMENTAL INFORMATION INCLUDED/ADDED BY THE CONTRACTOR(S)...

EROSION AND SEDIMENT CONTROL PRACTICES NOT ALREADY SPECIFIED ON THESE PLAN MAY BE NECESSARY DUE TO UNFORESEEN ENVIRONMENTAL CONDITIONS AND/OR CHANGES IN DRAINAGE PATTERNS CAUSED BY EARTH-DISTURBING ACTIVITY.

SITE DESCRIPTION

- A. 6.40 ACRES, EARTHWORK FOR A NEW DEVELOPMENT.
B. TOTAL AREA OF SITE - 6.40 ACRES
C. PRE-CONSTRUCTION WEIGHTED C COEFFICIENT - 0.30
D. POST-CONSTRUCTION WEIGHTED C COEFFICIENT - 0.30
E. IMPERVIOUS AREA CREATED BY CONSTRUCTION ACTIVITY - 0.00 ACRES
F. PERCENT SITE IMPERVIOUS - 0%
G. EXISTING SOILS ARE AS IDENTIFIED IN PRELIMINARY GEOTECHNICAL REPORT PROVIDED SEPARATELY.
H. RECEIVING STREAM - UNNAMED TRIBUTARY TO MILL CREEK, STORM WATER IN OPEN CHANNEL.

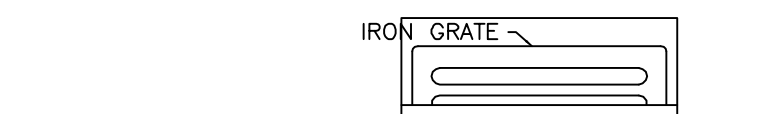
CONTRACTOR/CONSTRUCTION MANAGER RESPONSIBILITY

- A. THE GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
B. THE PLAN, INCLUDING COPIES OF THE NOI, THE LETTER GRANTING PERMIT COVERAGE AND THE NPDES CONSTRUCTION STORM WATER GENERAL PERMIT SHALL BE MAINTAINED ON-SITE FOR THE DURATION OF THE PROJECT...

CERTIFICATION

I HEREBY CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED... I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION...

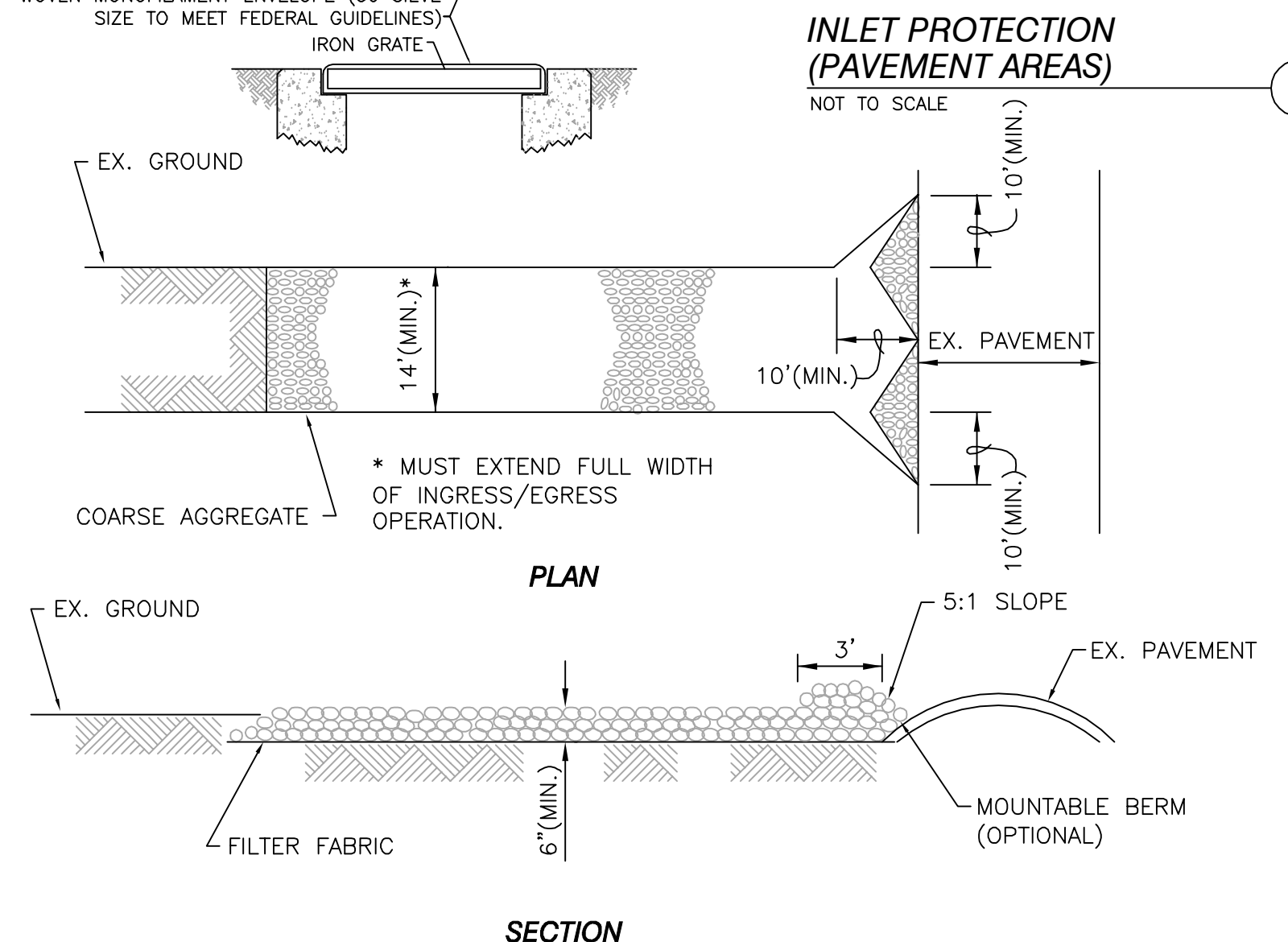
PERMITTEE DATE



TO INSPECT CATCH BASIN: REMOVE UNIT WITH GRATE INSIDE, INSPECT BASIN AND REPLACE UNIT.

MAINTENANCE: REMOVE DRIED SEDIMENT FROM SURFACE OF UNIT AS NEEDED WITH STIFF BRUSH OR SQUARE SHOVEL. REMOVE FINE MATERIAL FROM INSIDE ENVELOPE AS NEEDED.

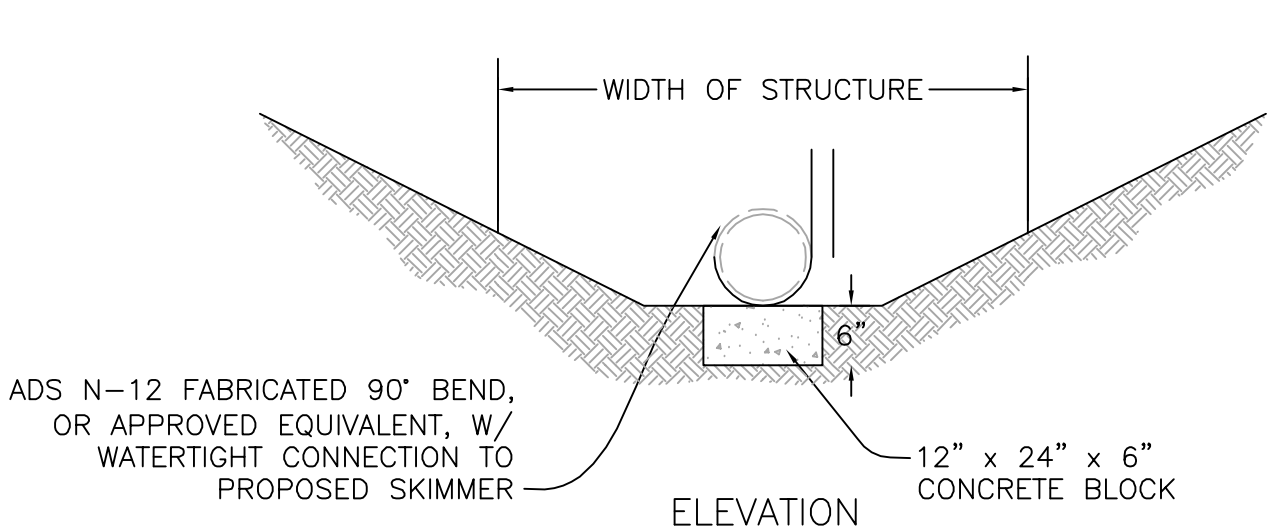
PROVIDE THIS DETAIL OR OTHER APPROVED PROTECTION AT STRUCTURES/INLETS



CONSTRUCTION SPECIFICATIONS

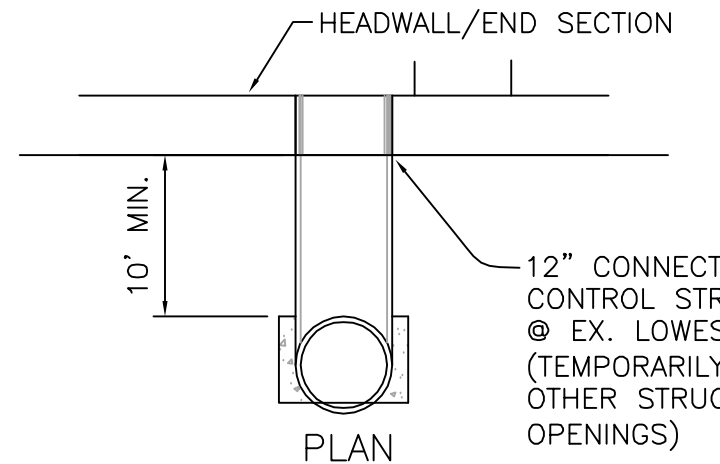
- 1. STONE SIZE - USE 2" STONE OR RECLAIMED/RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 70' LONG.
3. THICKNESS - NOT LESS THAN 6".
4. WIDTH - 14' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS.
9. PERIODIC INSPECTION & NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
10. GROUND USED FOR THE TEMPORARY CONSTRUCTION DRIVE NEEDS TO BE RETURNED TO THE ORIGINAL CONDITION OR BETTER.

TEMPORARY CONSTRUCTION ENTRANCE NOT TO SCALE



REFER TO SEDIMENT BASIN NOTE ON SHEET C102 FOR ELEVATIONS AND DRAWDOWN SIZING.

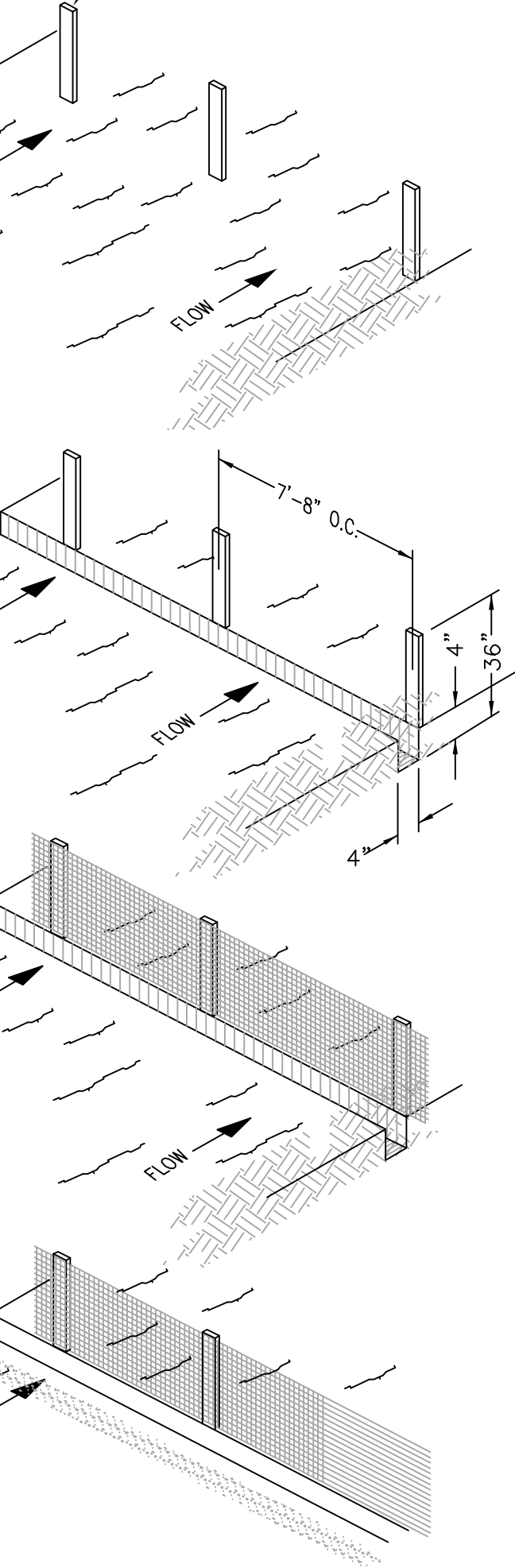
FAIRCLOTH SKIMMER 2.5" SKIMMER AND 2.5" HEAD 2-7 DAY DRAWDOWN 12,468-43,638 CF



TEMPORARY SEDIMENT CONTROL BARRIER SHALL BE INSTALLED WHERE INDICATED & SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE & PERMANENT EROSION CONTROL MEASURES ARE ESTABLISHED. SEDIMENT SHALL BE REMOVED FROM TEMPORARY SEDIMENT BASIN BEFORE 40% CAPACITY IS REACHED (ELEVATION 499)...

TEMPORARY SEDIMENT CONTROL BARRIER NOT TO SCALE

2" x 2" STAKE, 42" LONG (SHARPENED)



SILT FENCE: THIS SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRIC. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.

- 1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36". HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
2. FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS...
3. POSTS SHALL BE SPACED A MAXIMUM OF 10' APART AT THE BARRIER LOCATION & DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12"...
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" WIDE & 4" DEEP ALONG THE LINE OF POSTS & UP-SLOPE FROM THE BARRIER.
5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UP-SLOPE SIDE...
6. STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE TRENCH...
7. WHEN EXTRA STRENGTH FILTER FABRIC & CLOSER POST SPACING ARE USED...
8. THE TRENCH SHALL BE BACKFILLED & SOIL COMPACTED OVER THE FILTER FABRIC.
9. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE...
MAINTENANCE: SILT FENCES & FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL & AT LEAST DAILY DURING PROLONGED RAINFALL...

SEDIMENT FENCE NOT TO SCALE



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Table with design, draw, check, and approval by names: T. FOSTER, J. MOLONY, T. FOSTER, T. FOSTER.

Table for REVISIONS with one entry: 06-07-21: UPDATED GRADING - ROCK ELEV.

iVCP MUHLHAUSER 2 LLC MASS GRADING 4325 MUHLHAUSER RD FAIRFIELD, OH 45014

EROSION AND SEDIMENT CONTROL DETAILS

Scale: NTS Date: 05/14/2021

Sheet 4 of 4 C104 Project No. 20045A-62

20045A-62 IVCP\_MASS GRADING.DWG Copyright © 2021 Infrastructure & Development Engineering, Inc.