THE METROPOLITAN SEWER DISTRICT
OF GREATER CINCINNATI
HAMILTON COUNTY

PROJECT NO. I0270026

CAMARGO CANYON
PUMP STATION ELIMINATION

NOTES:

MANHOLES: ALL PROPOSED MANHOLES AND DROP MANHOLES SHALL BE TYPE "S" ON SEWERS 42" AND SMALLER. THE MODIFIED TYPE "S" MANHOLE SHALL BE USED ON SEWERS 24" TO 42" WHEN NOT LOCATED IN PAVED AREAS. ALL MANHOLES LOCATED OUTSIDE OF ROAD RIGHT-OF-WAY AND OUTSIDE OF MAINTAINED RESIDENTIAL YARDS SHALL HAVE MANHOLE TOPS 18" ABOVE GROUND. THE STANDARD PRECAST MANHOLE BASE WITH FLEXIBLE MANHOLE JOINTS SHALL BE USED WITH P.V.C. PIPE. IF THE CONTRACTOR PROVIDES PRECAST MANHOLES, THE CONTRACTOR SHALL ASSUME ANY RISK OF MAKING FIELD MODIFICATIONS TO THE PRECAST MANHOLES, DUE TO FIELD CONDITIONS.

PIPE JOINTS: ALL PROPOSED CONDUIT SHALL HAVE RESILIENT AND FLEXIBLE JOINTS.

HOUSE CONNECTIONS: ALL HOUSE CONNECTIONS SHALL BE TYPE "I" CONDUIT WITH RESILIENT AND FLEXIBLE JOINTS, EITHER P.V.C. OR ABS CONDUIT, SDR35 WITH ASTM D-3212 FLEXIBLE ELASTOMERIC SEALS.

UNDERGROUND STRUCTURES: LOCATION OF UNDERGROUND STRUCTURES ARE NOT GUARANTEED. APPROXIMATE LOCATION OF GAS, WATER & ELECTRIC SERVICE LATERALS ARE SHOWN IN PLAN VIEW ONLY.

OVERHEAD UTILITY LINES: LOCATION OF ABOVEGROUND UTILITY LINES ARE NOT SHOWN ON THE DRAWINGS. CONTRACTOR SHALL VISIT PROJECT SITE PRIOR TO BIDDING TO VERIFY OVERHEAD UTILITIES.

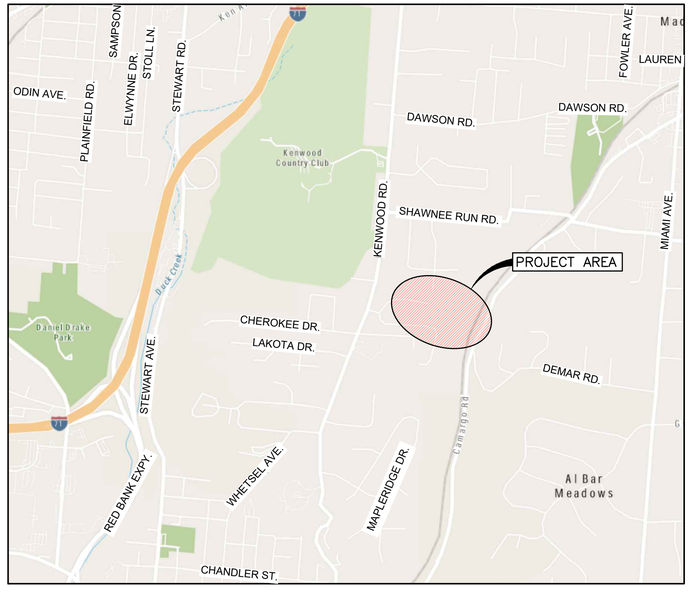
ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEMS ARE PROHIBITED.

THE CONTRACTOR SHALL FURNISH ALL MANHOLE FRAMES AND COVERS.

BORE PITS: THE CONTRACTOR IS REQUIRED TO PROVIDE A DETAILED PLAN SHOWING HOW BORE PITS ARE TO BE CONSTRUCTED AND RESTORED.

BENCH MARKS:

(SEE SHEET 3)



VICINITY MAP

NO SCALE

STANDARDS:

(SEE MSDGC STANDARD DRAWINGS)

DESCRIPTION	ACCESSION NO.
STANDARD DROP MANHOLES	49003
TYPICAL INVERTS	49004
STANDARD PRECAST DROP MANHOLES	49005
STANDARD CASTING FOR MANHOLES	49006
STANDARD CONCRETE COLLARS ON CONDUITS	49031
CONTROL DIMENSIONS FOR TYPICAL TRENCHES FOR CONDUITS	49032
TYPICAL BUILDING SEWERS AND STACKS	49033
STANDARD (TYPE "S") MANHOLE	49037
STANDARD CONCRETE CRADLE AND ENCASEMENT	49044
MODIFIED (TYP "S") MANHOLE	49049
WATERTIGHT MANHOLE	49051
STANDARD PRECAST CONCRETE MANHOLE BASE	49056
STANDARD INSIDE DROP FOR EXISTING MANHOLE	49061
STANDARD SYMBOLS	49072 TO 49076

CONTENTS:

SHEET NO.	DESCRIPTION
01	TITLE SHEET
02	LEGEND AND UTILITY CONTACTS
03	GENERAL PLAN
04	PLAN AND PROFILE
05	PLAN AND PROFILE
06	PLAN AND PROFILE
07	STANDARD DETAILS
08	STANDARD DETAILS
09	FORCE MAIN ABANDONMENT
10	PUMP STATION DEMOLITION
11	SITE DEMOLITION

AMERICAN STRUCTUREPOINT INC.
4700 Ashwood Drive | Suite 145 |Cincinatti, Ohio 45241
TEL 513.407.8317 | FAX 614.901.2236
www.structurepoint.com

DESIGNED BY: MOF
DRAWN BY: VE

UNDER GROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
OHIO UTILITIES PROTECTION SERVICE
Call 800-362-2764 (Toll Free)
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS
UNDER GROUND PROTECTION SERVICE
Call 800-925-0988 (Toll Free)

CONTRACT DRAWING
PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE D. FAGRELL
E-88372
REGISTERED PROFESSIONAL ENGINEER
ENGINEERS SEAL

SUBMITTED: Reese P Johnson 8/21/2026 9:14:59 AM
CHIEF ENGINEER
Reese Johnson
APPROVED: 8/28/2026 11:21:35 AM
DIRECTOR OF SEWERS
DATE: 8/28/2026

PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514UI.TS.DWG
DATE: Aug 17, 2026 - 02:12 PM
PLOTTED BY: VESTUFINAN

ACAD DRAWING NAME: 202000514.UI.TS.DWG

ACC. NO. 79125

SS# 6868

UTILITY CONTACT INFORMATION

GAS:	DUKE ENERGY GAS 139 E 4TH STREET CINCINNATI, OH 45202 (800) 362–2764
ELECTRIC:	DUKE ENERGY ELECTRIC 139 E 4TH STREET CINCINNATI, OH 45202 (800) 362–2764
TELEPHONE:	ALTAFIBER 221 EAST FOURTH STREET CINCINNATI, OH 45202 (513) 999–9913
CABLE:	CHARTER COMMUNICATIONS 11315 REED HARTMAN HWY BLUE ASH, OH 45241 (513) 369–2408
WATER:	GREATER CINCINNATI WATER WORKS 4747 SPRING GROVE AVE. CINCINNATI, OH 45232 (513) 591–7700
ROAD:	HAMILTON COUNTY ENGINEERS OFFICE 138 E COURT STREET, SUITE # 700 CINCINNATI, OH 45202 (513) 946–4250
LOCAL MUNICIPALITY:	CITY OF MADEIRA 7141 MIAMI AVE. MADEIRA, OH 45243 (513) 561–7228
STORM:	HAMILTON COUNTY PLANNING & DEVELOPMENT STORMWATER & INFRASTRUCTURE 138 E. COURT STREET, SUITE #800 CINCINNATI, OH 45202 (513) 946–4750
SEWER:	METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI 1600 GEST STREET CINCINNATI, OH 45204 CONTACT: MSD ENGINEERING CUSTOMER SERVICE (513) 557–3594 MSDCommunications@cincinnati–oh.gov
RAILROAD	CSX TRANSPORTATION EMERGENCY CONTACT 1 (800) 232–0144

EXISTING LEGEND

- BENCHMARK/CONTROL POINT
- COMBINATION INLET
- CURB INLET
- CURB INLET MANHOLE
- DOUBLE DITCH INLET
- DOUBLE GUTTER INLET
- CLEANOUT
- FLOW ARROW
- FIRE HYDRANT
- MANHOLE
- SIGN
- FLAG POLE
- G.B. GAS BOX
- G.V. GAS VALVE
- GUY WIRE
- LIGHT POLE
- COMMON PROPERTY LINE
- M.B. MAILBOX
- MARSH
- PROPERTY LINE
- POWER POLE
- R/W
- SINGLE DITCH INLET
- SINGLE GUTTER INLET
- T.B. # TEST BORE
- TELEPHONE MANHOLE
- TELEPHONE POLE
- W.B. WATER BOX
- WATER VALVE CHAMBER
- W.V. WATER VALVE
- Y.D. YARD DRAIN
- TREE

PROPOSED LEGEND

- MANHOLE
- CONTRACTOR LAYDOWN AREA
- PAVEMENT REPAIR LIMITS
- APPROXIMATE LOCATION OF CONTRACTOR ACCESS

CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS

BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELL
E-88372
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. N/A
VERT. N/A

CAMARGO CANYON PUMP STATION ELIMINATION

LEGEND AND UTILITY CONTACTS

ACAD DRAWING NAME: 202000514.UI.GP.DWG

FOR EASEMENT DRAWING SEE ACC. NO. N/A

ACC. NO. 79126

SHEET 2 OF 11

SS# 6868

PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514.UI.GP.DWG
DATE: Aug 17, 2026 - 02:12 PM
PLOTTED BY: VESTUPINAN

HORIZONTAL DATUM

THE HORIZONTAL CONTROL IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), OHIO SOUTH ZONE, 2011 ADJUSTMENT, REFERENCING THE OHIO DEPARTMENT OF TRANSPORTATION VRS NETWORK, AS DETERMINED BY A GLOBAL POSITIONING SURVEY PERFORMED BY DYNOTEC, INC. IN MARCH OF 2021.

VERTICAL DATUM

THE VERTICAL CONTROL IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) REFERENCING AN ELEVATION OF 599.97 ON A MONUMENT FLUSH WITH THE GROUND HAVING A BRASS CAP STAMPED "CITY OF CINCINNATI BENCHMARK #263 SET 1933", LOCATED 1.4 FEET SOUTH OF THE BACK OF THE SOUTH CURB OF MADISON ROAD, AND 141.0 FEET EAST OF THE CENTERLINE OF JAMESON STREET, 2.4 FEET WEST OF THE PRODUCED WEST SIDE OF A TWO STORY FRAME HOUSE RESIDENCE #6609. AS SHOWN ON THE PLANS FOR PROPOSED PROJECT NO. 10270026 CAMARGO CANYON PUMP STATION ELIMINATION, DATED JANUARY 24, 2014.

SITE CONTROL POINTS

CP #3 PIN SET W/ PLASTIC CAP
N: 433,584.51
E: 1,436,580.38
ELEV: 689.76

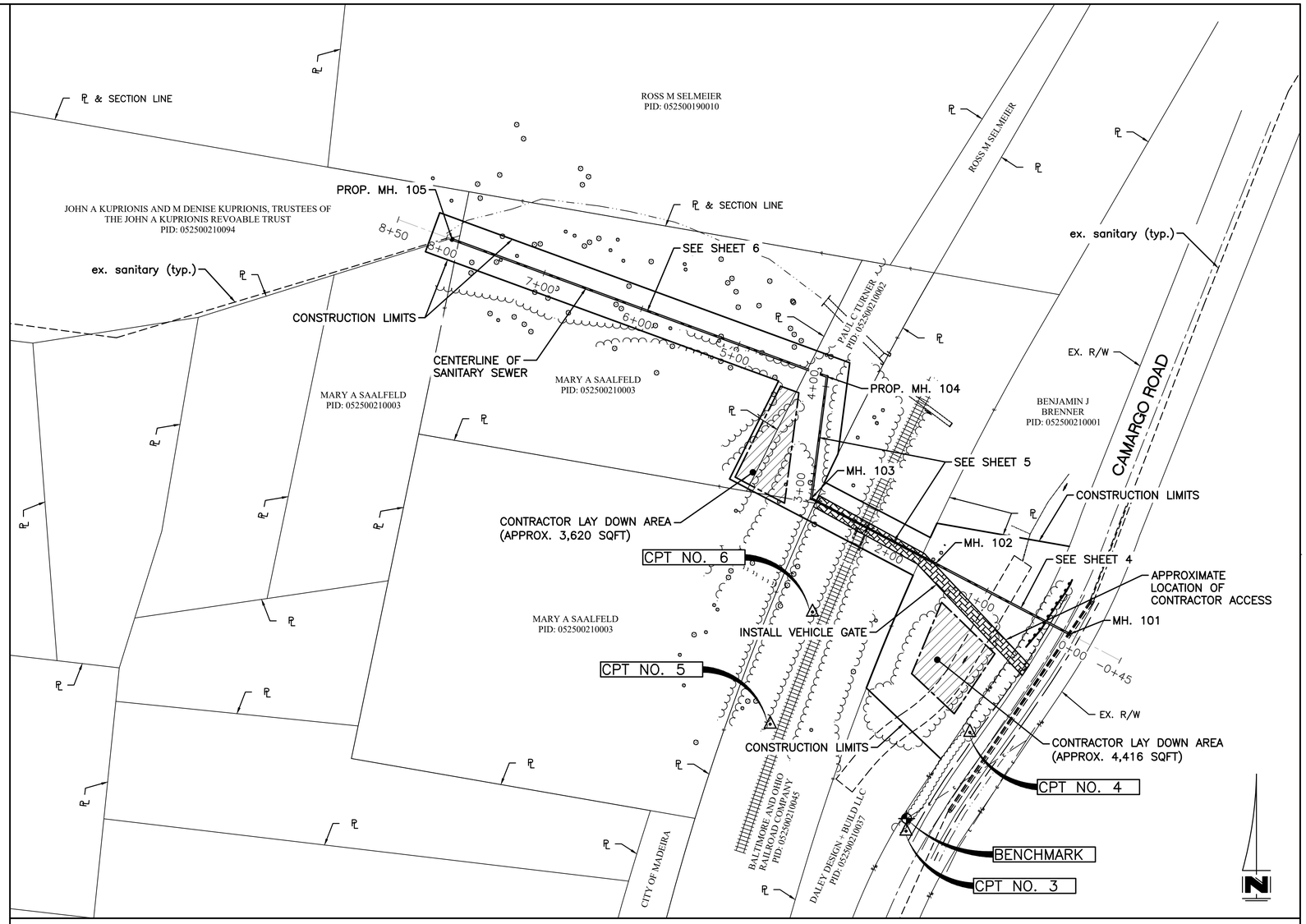
CP #4 PIN SET W/ PLASTIC CAP
N: 433,679.74
E: 1,436,641.87
ELEV: 695.72

CP #5 PIN SET W/ PLASTIC CAP
N: 433,687.65
E: 1,436,449.41
ELEV:694.30
A

CP #6 PIN SET W/ PLASTIC CAP
N: 433,795.68
E: 1,436,490.14
ELEV:695.62

SITE BENCHMARK

BENCHMARK IS A SPIKE WITH A UTILITY POLE WITH LIGHT LOCATED ALONG THE WEST SIDE OF CAMARGO ROAD, 11.5 FEET WEST OF THE WEST EDGE OF PAVEMENT OF CAMARGO ROAD, 42.3 FEET WEST OF A STORM MANHOLE LOCATED IN CAMARGO ROAD, AND 137.2 FEET SOUTHWEST OF A POWER POLE LOCATED ALONG THE EAST SIDE OF CAMARGO ROAD.
ELEV:692.19



MANHOLE COORDINATES			
MH NUMBER	NORTHING	EASTING	DIAMETER
101	433774.4753	1436738.1501	60”
102	433842.3839	1436608.7329	48”
103	433905.2108	1436489.0027	60”
104	434022.6718	1436504.2102	48”
105	434155.0460	1436142.6720	60”

CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS		
BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELL
E-88376
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. 1"=60'
VERT. N/A

0 60 120

CAMARGO CANYON PUMP STATION ELIMINATION

GENERAL PLAN

ACAD DRAWING NAME: 202000514.UI.GP.DWG

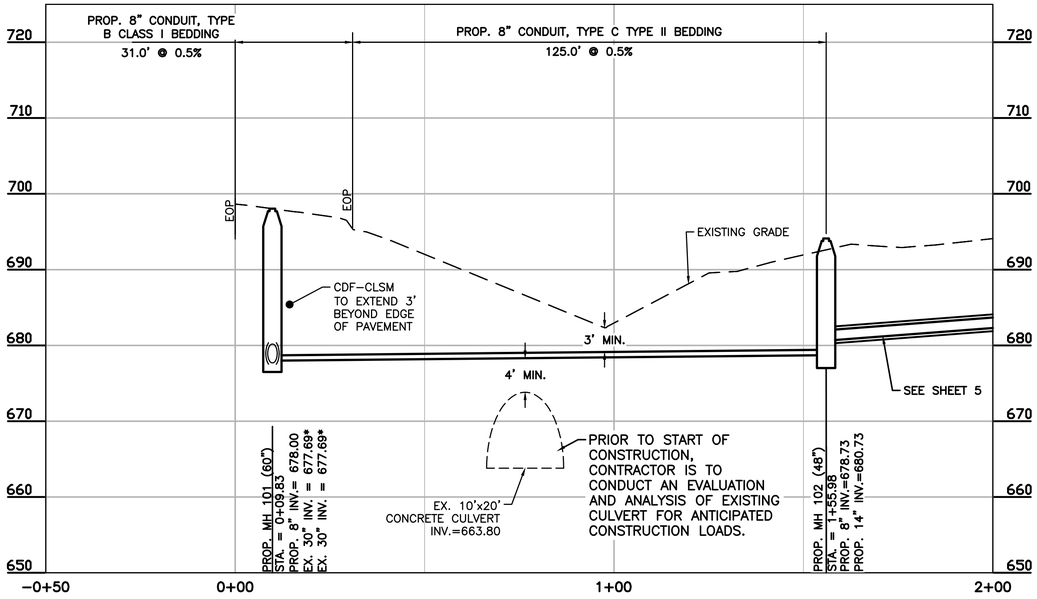
FOR EASEMENT DRAWING SEE ACC. NO. N/A

ACC. NO. 79127

SHEET 3 OF 11

SS# 6868

PATH: P:\2020\0514\3. DRAWINGS\UTILITY INFRASTRUCTURE\202000514.UI.GP.DWG
DATE: Aug 17, 2026 - 02:12 PM
PLOTTED BY: VESTUPIMAN



* INVERT ELEVATION OF 30" SEWER AT PROPOSED MH 101 HAS BEEN INTERPOLATED FROM CAGIS GIS DATA.

CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF MANHOLE PRIOR TO START OF WORK.

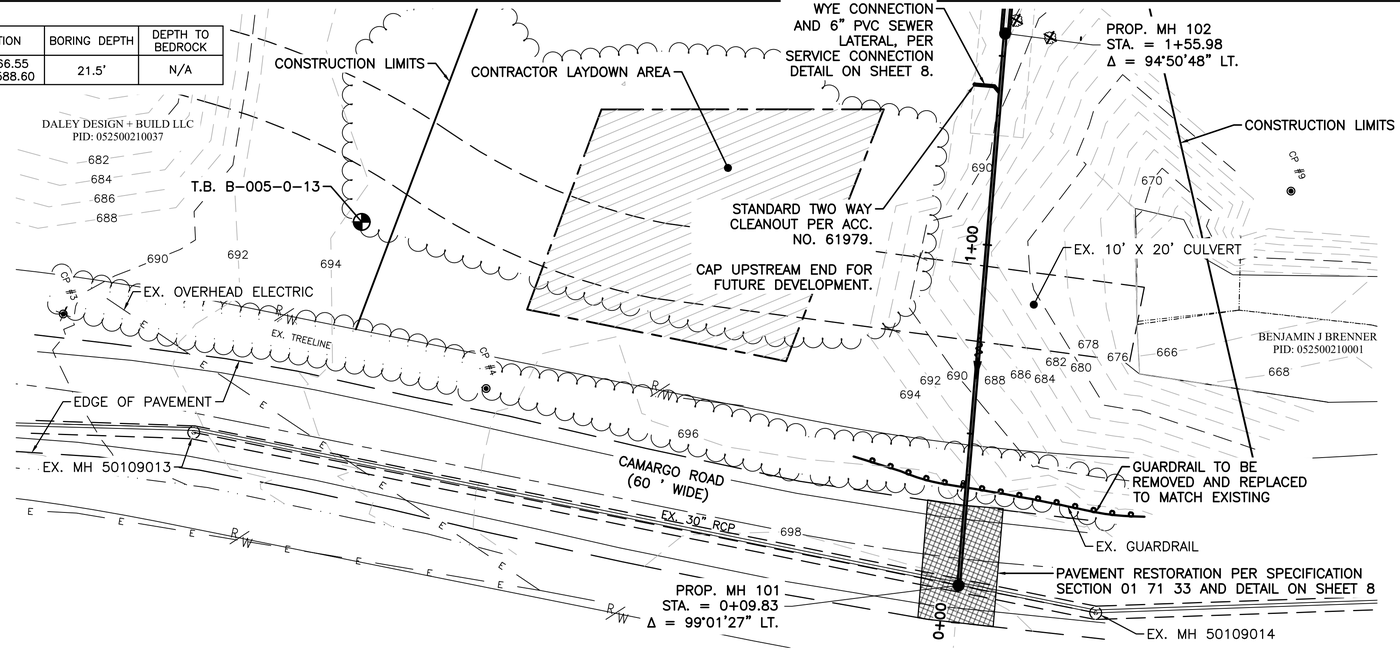
CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

GENERAL NOTES:

1. PER CSX DESIGN CONSTRUCTION STANDARDS, STEEL CASING PIPE SHALL BE INSTALLED ACROSS THE ENTIRE RIGHT OF WAY.
2. FINAL SIZE AND LOCATION OF JACK AND BORE AND HDD LAUNCH/RECEIVING PITS ARE TO BE DETERMINED BY THE CONTRACTOR.
3. EXISTING 10'x20' CULVERT PIPE SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL INSPECT THE EXISTING CULVERT TO ENSURE STRUCTURAL STABILITY. ANY CONCERNS REGARDING THE 10' X 20' CULVERT SHALL BE BROUGHT TO THE OWNERS ATTENTION PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE CAUSED DURING CONSTRUCTION ACTIVITIES IS BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR SHALL SUBMIT A SITE ACCESS PLAN PRIOR TO THE START OF WORK. THE PLAN SHALL SHOW ALL ACCESS ROADS, STAGING AND STORAGE AREAS. PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE RAILROAD PERMIT
5. CONTRACTOR SHALL KEEP WORK WITHIN THE CONSTRUCTION LIMITS. IF THIS IS NOT ACHIEVABLE, CONTRACTOR SHALL SUBMIT A PLAN SHOWING THE LOCATION OF THE PROPOSED WORK AND WILL BE REQUIRED TO ACQUIRE RIGHT OF ENTRY FROM PROPERTY OWNER(S).

BORING NUMBER	LOCATION	BORING DEPTH	DEPTH TO BEDROCK
B-005-0-13	N: 433666.55 E: 1436588.60	21.5'	N/A



TREE REMOVAL NOTE:

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA AND TRI-COLORED BAT. TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSE OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

EROSION CONTROL NOTES:

6. CONTRACTOR IS PERMITTED TO PERFORM CLEARING OF TREES AND BRUSH AND BENCHING OF HILLSIDE AS NECESSARY TO PERFORM THE WORK SUCH ACTIVITIES SHALL BE MINIMIZED TO THE EXTENT POSSIBLE.
7. NEW PATHS CONSTRUCTED TO AID CONSTRUCTION DO NOT REQUIRE RE-GRADING AS PART OF RESTORATION. THESE AREAS SHALL BE PROTECTED FROM EROSION USING ODOT 712.11, TYPE B EROSION CONTROL MATS AFTER THE COMPLETION OF WORK. ALL OTHER DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION POST CONSTRUCTION.

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS

BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELL
E-88373
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. 1"=20'
VERT. 1"=10'

0 20 40

CAMARGO CANYON PUMP STATION ELIMINATION

PLAN & PROFILE

ACAD DRAWING NAME: 202000514.UI.PP.DWG

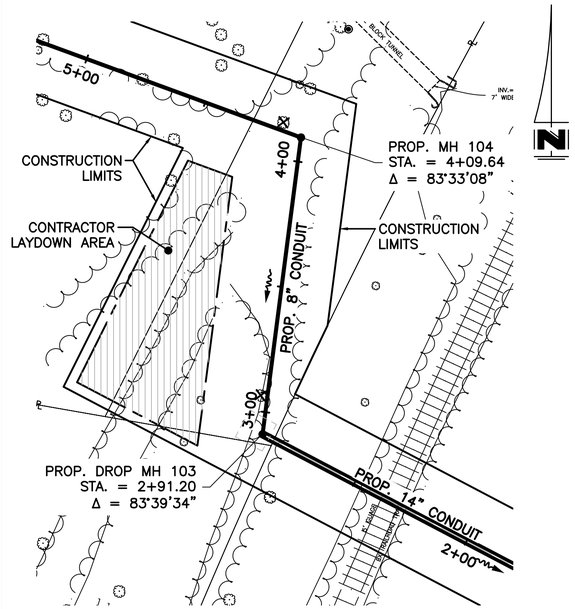
FOR EASEMENT DRAWING SEE ACC. NO. 79136

ACC. NO. 79128

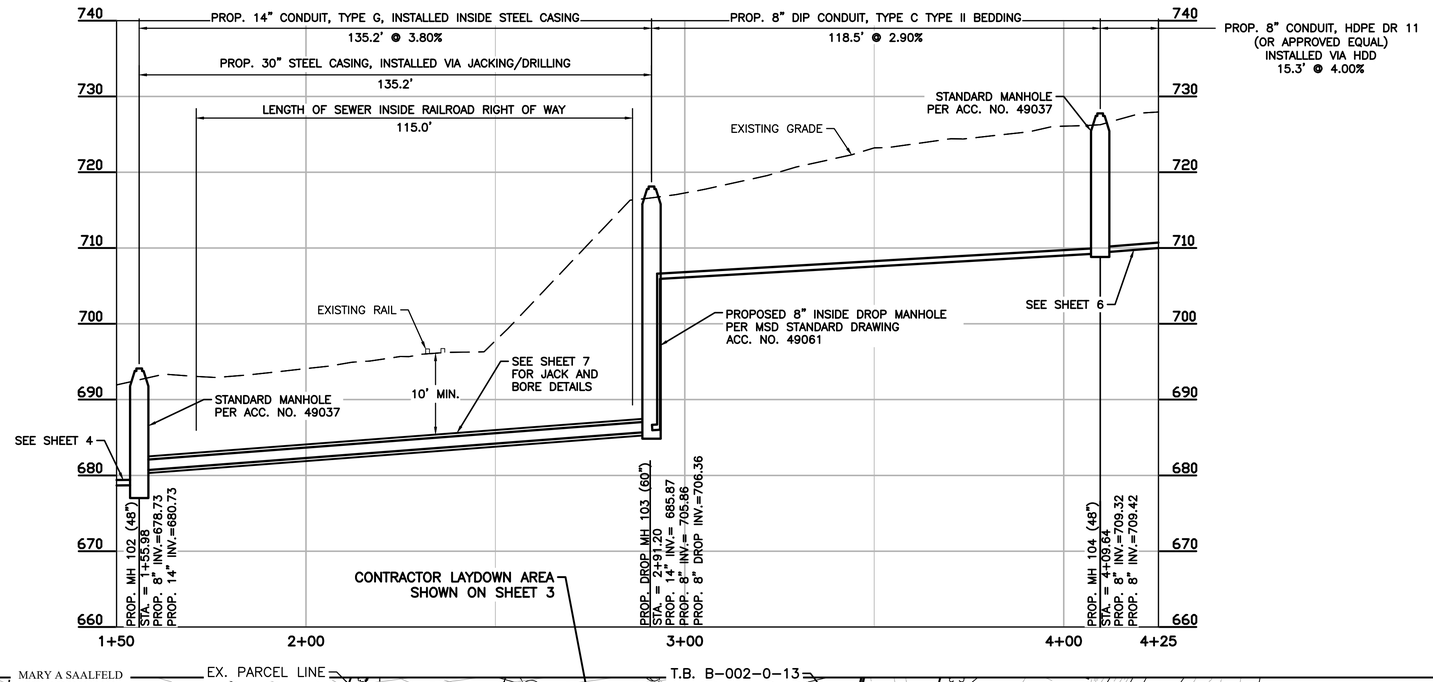
SHEET 4 OF 11

SS# 6868

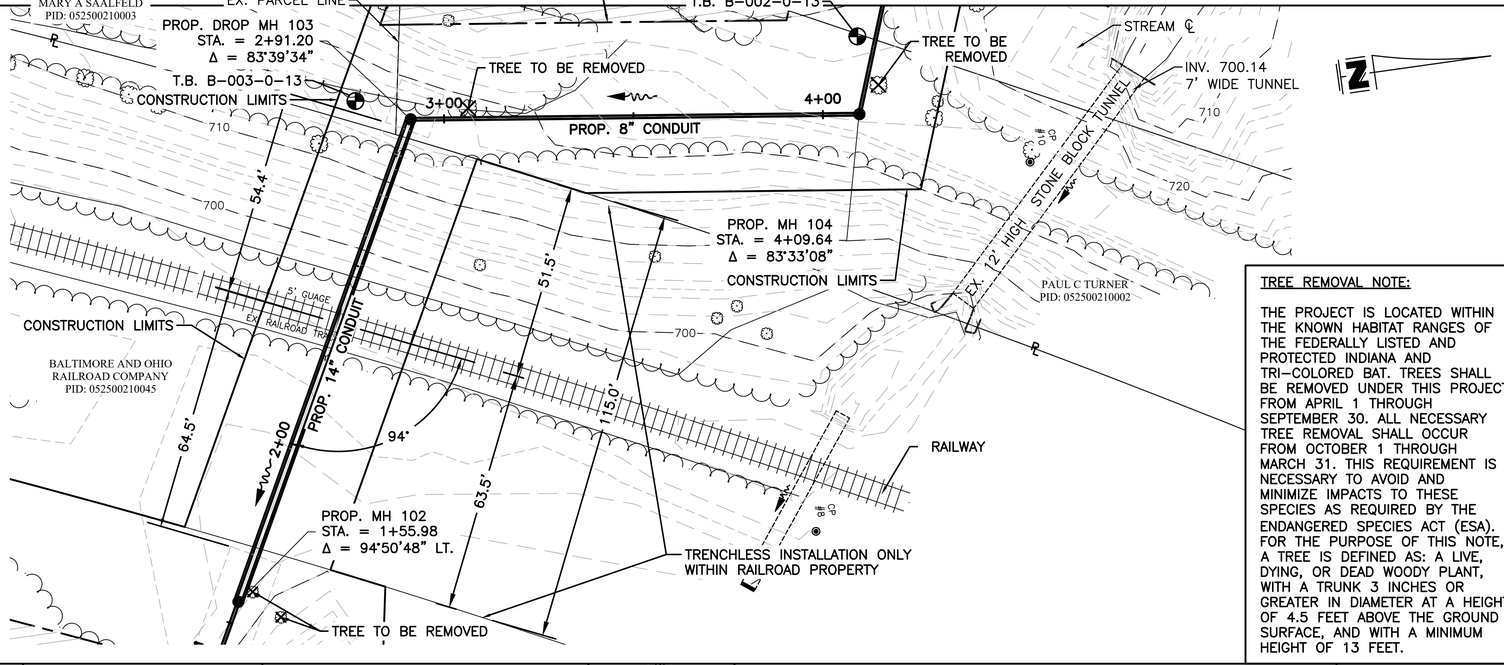
PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514UIPP.DWG
DATE: Aug 17, 2026 - 02:12 PM
PLOTTED BY: VESTUPINAN



LOCATION DETAIL FOR NEARBY CONTRACTOR LAYDOWN AREA
SCALE: 1"=30'



BORING NUMBER	LOCATION	BORING DEPTH	DEPTH TO BEDROCK
B-002-0-13	N: 434025.02 E: 1436483.83	13.5'	13.5'
B-003-0-13	N: 433891.44 E: 1436482.18	12.5'	12.5'



GENERAL NOTES:

1. PER CSX DESIGN CONSTRUCTION STANDARDS, STEEL CASING PIPE SHALL BE INSTALLED ACROSS THE ENTIRE RIGHT OF WAY.
2. FINAL SIZE AND LOCATION OF JACK AND BORE AND HDD LAUNCH/RECEIVING PITS ARE TO BE DETERMINED BY THE CONTRACTOR.
3. EXISTING 10'x20' CULVERT PIPE SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL INSPECT THE EXISTING CULVERT TO ENSURE STRUCTURAL STABILITY. ANY CONCERNS REGARDING THE 10' X 20' CULVERT SHALL BE BROUGHT TO THE OWNERS ATTENTION PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE CAUSED DURING CONSTRUCTION ACTIVITIES IS BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR SHALL SUBMIT A SITE ACCESS PLAN PRIOR TO THE START OF WORK. THE PLAN SHALL SHOW ALL ACCESS ROADS, STAGING AND STORAGE AREAS. PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE RAILROAD PERMIT
5. CONTRACTOR SHALL KEEP WORK WITHIN THE CONSTRUCTION LIMITS. IF THIS IS NOT ACHIEVABLE, CONTRACTOR SHALL SUBMIT A PLAN SHOWING THE LOCATION OF THE PROPOSED WORK AND WILL BE REQUIRED TO ACQUIRE RIGHT OF ENTRY FROM PROPERTY OWNER(S).

EROSION CONTROL NOTES:

6. CONTRACTOR IS PERMITTED TO PERFORM CLEARING OF TREES AND BRUSH AND BENCHING OF HILLSIDE AS NECESSARY TO PERFORM THE WORK SUCH ACTIVITIES SHALL BE MINIMIZED TO THE EXTENT POSSIBLE.
7. NEW PATHS CONSTRUCTED TO AID CONSTRUCTION DO NOT REQUIRE RE-GRADING AS PART OF RESTORATION. THESE AREAS SHALL BE PROTECTED FROM EROSION USING ODOT 712.11, TYPE B EROSION CONTROL MATS AFTER THE COMPLETION OF WORK. ALL OTHER DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION POST CONSTRUCTION.

RAILROAD NOTES:

8. ALL CONSTRUCTION ACTIVITIES, ADDITIONAL PERSONNEL, AND EQUIPMENT REQUIRED BY RAILROAD TO FACILITATE CONSTRUCTION, INCLUDING FLAGGERS, ARE THE RESPONSIBILITY OF THE CONTRACTOR. WORK TO BE PAID VIA ALLOWANCE.

TREE REMOVAL NOTE:

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA AND TRI-COLORED BAT. TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSE OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS		
BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELL
E-88378
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. 1"=20'
VERT. 1"=10'

0 20 40

CAMARGO CANYON PUMP STATION ELIMINATION

PLAN & PROFILE

ACAD DRAWING NAME: 202000514.UI.PP.DWG

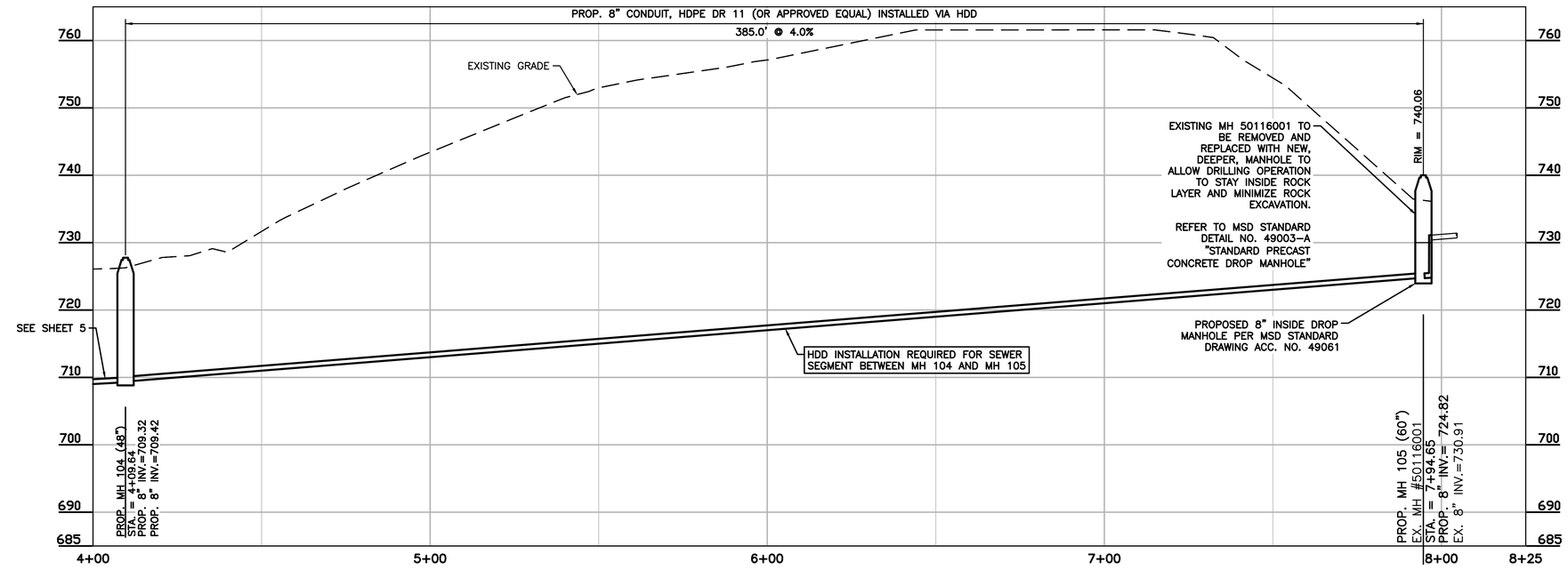
FOR EASEMENT DRAWING SEE ACC. NO. 79137

ACC. NO. 79129

SHEET 5 OF 11

SS# 6868

PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514UIPP.DWG
DATE: Aug 17, 2026 - 0213 PM
PLOTTED BY: VESTUPINAN



CONTRACT DRAWING

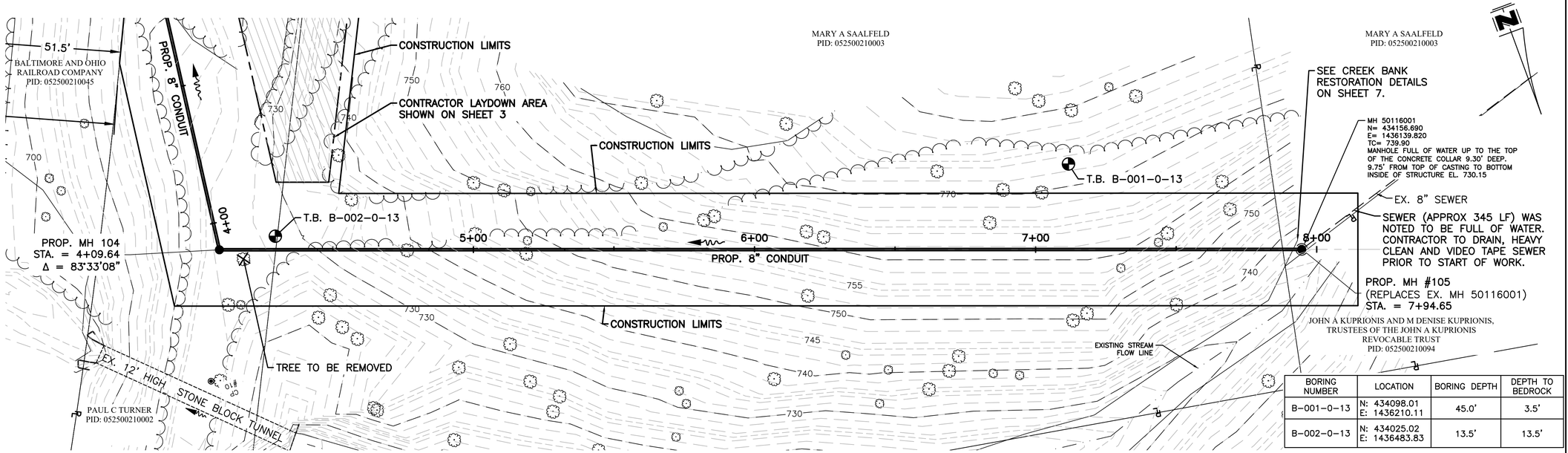
PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

TREE REMOVAL NOTE:

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA AND TRI-COLORED BAT. TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSE OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

GENERAL NOTES:

1. FINAL SIZE AND LOCATION OF JACK AND BORE AND HDD LAUNCH/RECEIVING PITS ARE TO BE DETERMINED BY THE CONTRACTOR.
2. CONTRACTOR SHALL SUBMIT A SITE ACCESS PLAN PRIOR TO THE START OF WORK. THE PLAN SHALL SHOW ALL ACCESS ROADS, STAGING AND STORAGE AREAS.
3. CONTRACTOR SHALL KEEP WORK WITHIN THE CONSTRUCTION LIMITS. IF THIS IS NOT ACHIEVABLE, CONTRACTOR SHALL SUBMIT A PLAN SHOWING THE LOCATION OF THE PROPOSED WORK AND WILL BE REQUIRED TO ACQUIRE RIGHT OF ENTRY FROM PROPERTY OWNER(S).
3. CONTRACTOR IS TO CCTV THE EXISTING 8" SEWER TO VERIFY IT IS IN GOOD WORKING CONDITION.
4. CONTRACTOR IS ADVISED THAT THE 8" SEWER IS LIKELY FULL OF WATER. CONTRACTOR SHALL COORDINATE THE DISCHARGE OF THIS WATER WITH THE OWNER.



BORING NUMBER	LOCATION	BORING DEPTH	DEPTH TO BEDROCK
B-001-0-13	N: 434098.01 E: 1436210.11	45.0'	3.5'
B-002-0-13	N: 434025.02 E: 1436483.83	13.5'	13.5'

EROSION CONTROL NOTES:

5. CONTRACTOR IS PERMITTED TO PERFORM CLEARING OF TREES AND BRUSH AND BENCHING OF HILLSIDE AS NECESSARY TO PERFORM THE WORK. SUCH ACTIVITIES SHALL BE MINIMIZED TO THE EXTENT POSSIBLE.
6. NEW PATHS CONSTRUCTED TO AID CONSTRUCTION DO NOT REQUIRE RE-GRADING AS PART OF RESTORATION. THESE AREAS SHALL BE PROTECTED FROM EROSION USING ODOT 712.11, TYPE B EROSION CONTROL MATS AFTER THE COMPLETION OF WORK. ALL OTHER DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION POST CONSTRUCTION.
7. THE CONTRACTOR IS REQUIRED TO PROVIDE A DETAILED PLAN SHOWING HOW PIT IS TO BE CONSTRUCTED AND RESTORED.

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS

BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELL
E-88374
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. 1"=20'
VERT. 1"=10'

0 20 40

CAMARGO CANYON PUMP STATION ELIMINATION

PLAN & PROFILE

ACAD DRAWING NAME: 202000514.UI.PP.DWG

FOR EASEMENT DRAWING SEE ACC. NO. 79138

ACC. NO. 79130

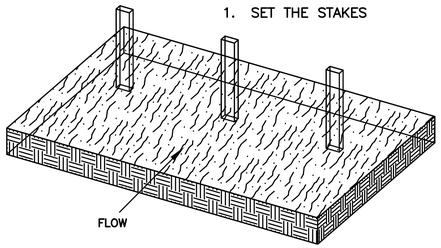
SHEET 6 OF 11

SS# 6868

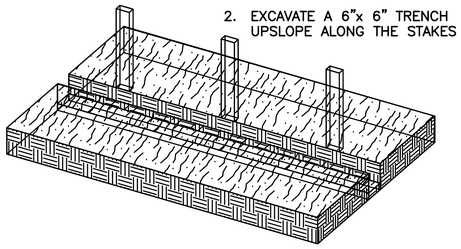
PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514.UI.PP.DWG
DATE: Aug 17, 2026 - 02:13 PM
PLOTTED BY: VESTUPNAN

SILT FENCE INSTALLATION DETAIL

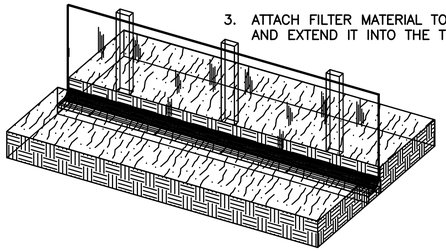
1. SET THE STAKES



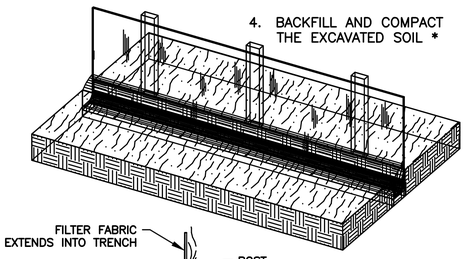
2. EXCAVATE A 6"x 6" TRENCH UPSLOPE ALONG THE STAKES

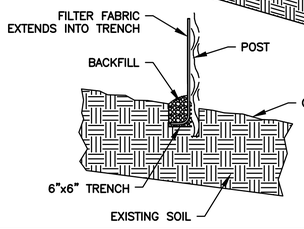


3. ATTACH FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH



4. BACKFILL AND COMPACT THE EXCAVATED SOIL *





* SOIL COMPACTION IS CRITICAL TO ELIMINATE CHANNELING UNDER THE SILT FENCE

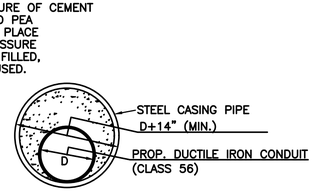
NOTES FOR CONSTRUCTION

1. EROSION CONTROL DEVICES SHALL BE INSTALLED, IN ADVANCE, ALONG THE LIMITS OF CONSTRUCTION BETWEEN THE SEWER LINE & STREAM AND AT STREAM CROSSINGS, AS PER DETAIL ON THIS SHEET.
2. FILL MATERIAL, EQUIPMENT, ETC., SHALL BE STORED IN STAGING AREAS AND NOT STORED WITHIN THE DRIPLINE OF ANY REMAINING TREES.
3. DISTURBED AREAS SHALL BE SEEDED AND/OR MULCHED, IN STAGES, AS THE PROJECT PROGRESSES TO HELP PREVENT SOIL EROSION. SEE DETAILS ON SHEET 8.
4. THE CONSTRUCTION HAUL ROAD SHALL FOLLOW THE PROPOSED SEWER ALIGNMENT, USE OF THE STREAM BED IS PROHIBITED.
5. AT EACH STREAM CROSSING SITE, ALL VEGETATION WITHIN THE CONSTRUCTION EASEMENT, INCLUDING BANKS, IS TO REMAIN INTACT, EXCEPT FOR THE ACTUAL EXCAVATION AREA, FOR ONE-HALF STREAM WIDTHS ON BOTH SIDES OF THE STREAM BED.
6. DURING CONSTRUCTION OF THE PROJECT, CULVERTS MUST BE INSTALLED AND TEMPORARY OVERPASSES CONSTRUCTED FOR THE HAUL ROAD AT ALL CREEK CROSSINGS.
8. IF SOIL STOCKPILES WILL BE LEFT FOR A PERIOD LONGER THAN FIFTEEN (15) DAYS, STABILIZE WITH TEMPORARY SEED MIX (SEE SHEET 8) AND SURROUNDED BY SILT FENCE (SEE DETAIL THIS SHEET).
9. INSTALL ALL APPLICABLE EROSION CONTROL MEASURES BEFORE ANY LAND DISTURBING ACTIVITIES.
10. UNVEGETATED AREAS THAT ARE SCHEDULED OR LIKELY TO BE LEFT INACTIVE FOR FIFTEEN (15) DAYS OR MORE MUST BE TEMPORARILY OR PERMANENTLY SEEDED (SEE SHEET 8). ALTERNATIVE STABILIZATION METHODS ARE ACCEPTABLE IF THEY ARE ADEQUATE TO PREVENT SEDIMENT DISCHARGE.

JACK AND BORE INSTALLATION OF DUCTILE IRON PIPE (D.I.P)

FILL WITH A LEAN (1 TO 8) MIXTURE OF CEMENT AND SAND OR CEMENT, SAND AND PEA GRAVEL RAMMED OR BLOWN INTO PLACE DRY. SOME POSITIVE MEANS TO ASSURE THAT THE SPACE IS COMPLETELY FILLED, FREE OF ANY VOIDS, SHALL BE USED.

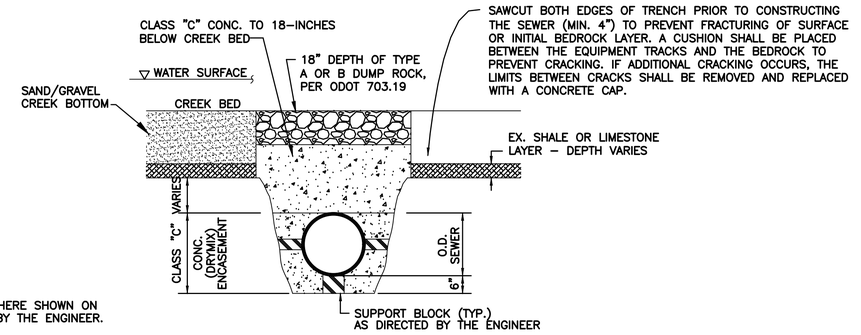
PROP. CONDUIT SIZE "D"	MINIMUM STEEL CASING WALL THICKNESS
14"	0.25"



NO SCALE

CREEK RESTORATION DETAIL FOR CREEKS WITH SAND/GRAVEL BOTTOM

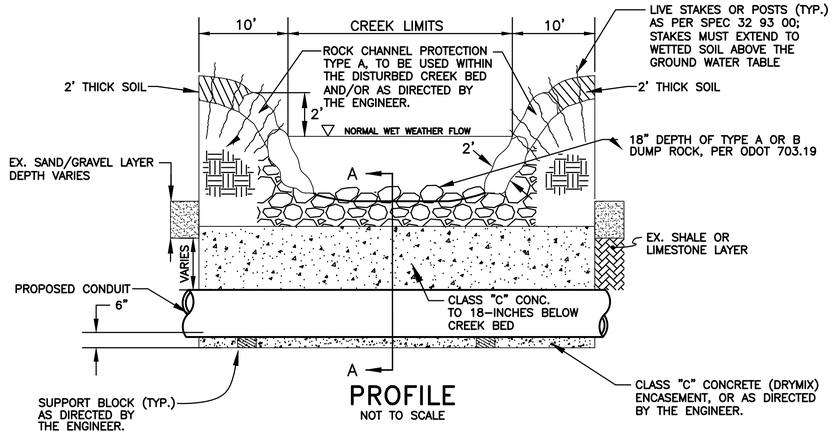
[DETAIL INCLUDED FOR RESTORATION NEEDED TO REPLACE MANHOLE #50116001, AS SHOWN ON SHEET 6.]



NOTE:

THIS DETAIL SHALL BE USED WHERE SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

(CROSS SECTION A-A)



PROFILE

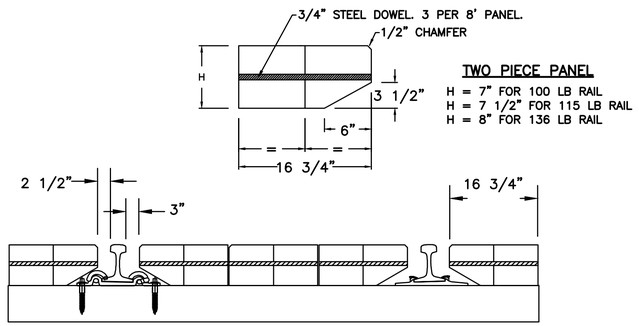
NOT TO SCALE

MATERIAL & FABRICATION

1. HARDWOOD PANELS TO BE TREATED MIXED HARDWOOD, FREE OF WANE.
2. BRANDING: EACH CROSSING PANEL SHALL BE IDENTIFIED ON THE END WITH MANUFACTURER ID, MO/YR MANUFACTURED, WEIGHT RAIL.

TIMBER PANEL INSTALLATION

1. BALLAST THROUGH CROSSING AREA SHALL BE CLEAN CRUSHED ROCK BALLAST, 12" BELOW BOTTOM OF TIES. TOP OF BALLAST TO BE 2" BELOW TOP OF TIES. TIES THROUGH CROSSING SHALL BE NO. 5 TREATED HARDWOOD 19 3/16" ON CENTERS, IN GOOD CONDITION.
2. IF REQUIRED BY GDLM, PERFORATED DRAINAGE PIPE RECOMMENDED FOR PROPER DRAINAGE.
3. ENDS OF CROSSING PANELS SHOULD BE CENTERED ON TIE.
4. THERMITE WELDS OR RAIL JOINTS SHOULD BE LOCATED OUTSIDE THE CROSSING. WHEREVER POSSIBLE, WELDED RAIL SHOULD BE RELAYED THROUGH CROSSING (MINIMUM RAIL WEIGHT, 112 LB.) BEFORE NEW TIES AND CROSSING PANELS ARE INSTALLED.
5. PANELS SHALL BE HANDLED CAREFULLY, SLATTED AND STACKED ON LEVEL GROUND TO PREVENT WORPAGE.
6. 5/8" X 12" TWIN LEAD TIMBER SPIKES FURNISHED SEPARATELY.
7. 3/8" DIA. HOLES SHOULD BE BORED IN FIELD, TO PATTERN SHOWN.
8. GAGE SIDE AND FIELD SIDE PANELS ARE INTERCHANGEABLE.
9. ALL CROSSING PANELS HAVE CLEARANCE FOR PANDROL PLATES AND CLIPS.

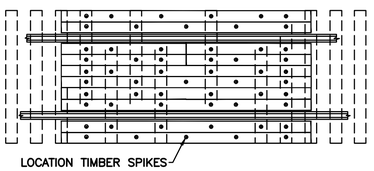


TWO PIECE PANEL
H = 7" FOR 100 LB RAIL
H = 7 1/2" FOR 115 LB RAIL
H = 8" FOR 136 LB RAIL

8'6" CROSS TIE

TIMBER CROSSING PANEL FOR LOW DENSITY RAIL TRAFFIC ON 8'-6" TIES

TYPICAL 16' CROSSING



8' & 16' PANELS SHOWN, TYPICAL

CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514.UI.DT.DWG
DATE: Aug 17, 2026 - 02:13 PM
PLOTTED BY: VESTUPINAN

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS

BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELI
E-88378
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. N/A
VERT. N/A

CAMARGO CANYON PUMP STATION ELIMINATION

STANDARD DETAILS

ACAD DRAWING NAME: 202000514.UI.DT.DWG

FOR EASEMENT DRAWING SEE ACC. NO. N/A

ACC. NO. 79131

SHEET 7 OF 11

SS# 6868

SEEDING AND MULCHING DETAILS

PERMANENT SEEDING RECOMMENDATIONS OPEN LOW–MAINTENANCE AREAS (REMAINING IDLE MORE THAN SIX MONTHS)		
SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
PERMANENT RYEGRASS (WHITE CLOVER)	70 LBS 2 LBS	5.6 – 7.0
PERENNIAL RYEGRASS (TALL FESCUE)	70 LBS 50 LBS	5.6 – 7.0
TALL FESCUE (WHITE CLOVER)	70 LBS 2 LBS	5.5 – 7.5

PERMANENT SEEDING RECOMMENDATIONS STEEP BANKS AND CUTS, LOW–MAINTENANCE AREAS (NOT MOWED)		
SEED MIXTURES	RATE PER ACRE PURE LIVE SEED	OPTIMUM SOIL pH
SMOOTH BROME GRASS (RED CLOVER)	35 LBS 20 LBS	5.5 – 7.0
TALL FESCUE (WHITE CLOVER)	50 LBS 2 LBS	5.5 – 7.5
TALL FESCUE (RED CLOVER)	50 LBS 20 LBS	5.5 – 7.5
ORCHARD GRASS (WHITE CLOVER) (RED CLOVER)	30 LBS 20 LBS 2 LBS	5.6 – 7.0

SEEDING NOTES

1. APPLY SEED UNIFORMLY WITH A DRILL OR CULTIPACKER SEEDER OR BY BROADCASTING. PLANT OR COVER SEED TO A DEPTH OF ONE–FOURTH TO ONE–HALF INCH. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED–TO–SOIL CONTACT BY FIRMING THE SEEDBED WITH A ROLLER OR CULTIPACKER AFTER COMPLETING SEEDING OPERATIONS. (IF SEEDING IS DONE WITH A HYDROSEEDER, FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.)
2. MULCH ALL SEEDED AREAS, AND USE APPROPRIATE METHODS TO ANCHOR THE MULCH IN PLACE.
3. FOR BEST RESULTS: (a) LEGUME SEED SHOULD BE INOCULATED; (b) SEEDING MIXTURES CONTAINING LEGUMES SHOULD PREFERABLY BE SPRING–SEEDED, ALTHOUGH THE GRASS MAY BE FALL–SEEDED AND THE LEGUME FROST–SEEDED.
4. AN OAT OR WHEAT COMPANION OR NURSE CROP MAY BE USED WITH ANY OF THE ABOVE PERMANENT SEEDING MIXTURES, AT THE FOLLOWING RATES:
   a. SPRING OATS–10 TO 24 LBS PURE LIVE SEED PER ACRE.
   b. WHEAT–NO MORE THAN 30 LBS PURE LIVE SEED PER ACRE.

MAINTENANCE

1. INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS UNTIL THE VEGETATION IS SUCCESSFULLY ESTABLISHED.
2. CHARACTERISTICS OF A SUCCESSFUL STAND INCLUDE VIGOROUS DARK GREEN OR BLUISH–GREEN SEEDLINGS WITH A UNIFORM VEGETATIVE COVER DENSITY OF 90 PERCENT OR MORE.
3. CHECK FOR EROSION OR MOVEMENT OF MULCH.
4. REPAIR DAMAGED, BARE, GULLIED, OR SPARSELY VEGETATED AREAS AND THEN FERTILIZE, RESEED, AND APPLY AND ANCHOR MULCH.
5. IF PLANT COVER IS SPARSE OR PATCHY, EVALUATE THE PLANT MATERIALS CHOSEN, SOIL FERTILITY, MOISTURE CONDITION, AND MULCH APPLICATION; REPAIR AFFECTED AREAS EITHER BY OVERSEEDING OR PREPARING A NEW SEEDBED AND RESEEDING. APPLY AND ANCHOR MULCH ON THE NEWLY SEEDED AREAS.
6. IF VEGETATION FAILS TO GROW, CONSIDER SOIL TESTING TO DETERMINE SOIL PH OR NUTRIENT DEFICIENCY PROBLEMS. (CONTACT YOUR SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE.)
7. IF ADDITIONAL FERTILIZATION IS NEEDED TO GET A SATISFACTORY STAND, DO SO ACCORDING TO SOIL TEST RECOMMENDATIONS.
8. ADD FERTILIZER THE FOLLOWING GROWING SEASON. FERTILIZE ACCORDING TO SOIL TEST RECOMMENDATIONS.
9. FERTILIZE TURF AREAS ANNUALLY. APPLY FERTILIZER IN A SPLIT APPLICATION. FOR COOL–SEASON GRASSES, APPLY ONE–HALF OF THE FERTILIZER IN LATE SPRING AND ONE–HALF IN EARLY FALL. FOR WARM–SEASON GRASSES, APPLY ONE–THIRD IN EARLY SPRING, ONE–THIRD IN LATE SPRING, AND THE REMAINING ONE–THIRD IN MIDDLE SUMMER.

MULCH SPECIFICATIONS		
MATERIAL	RATE PER ACRE	COMMENTS
STRAW OR HAY	2 TONS	SHOULD BE DRY, FREE OF UNDESIREABLE SEED. SPREAD BY HAND OR MACHINE. MUST BE CRIMPED OR ANCHORED (SEE TABLE 2)
WOOD FIBER OR CELLULOSE	1 TON	APPLY WITH A HYDRAULIC MULCH MACHINE AND USE TACKING AGENT.

MULCH ANCHORING METHODS	
ANCHORING METHOD	HOW TO APPLY
MULCH ANCHORING TOOL OR FARM DISK (DULL, SERRATED, AND BLADES SET STRAIGHT)	CRIM OR PUNCH THE STRAW OR HAW TWO TO FOUR INCHES INTO THE SOIL. OPERATE MACHINERY ON THE CONTOUR OF THE SLOPE.
CLEATING WITH DOZER TRACKS	OPERATE THE DOZER UP AND DOWN SLOPE TO PREVENT FORMATION OF RILLS BY DOZER CLEATS.
WOOD HYDROMULCH FIBERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
SYNTHETIC TACKIFIERS, BINDERS, OR SOIL STABILIZERS	APPLY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
NETTING (SYNTHETIC OR BIODEGRADABLE MATERIAL)	INSTALL NETTING IMMEDIATELY AFTER APPLYING MULCH. ANCHOR NETTING WITH STAPLES. EDGES OF NETTING STRIP SHOULD OVERLAP WITH EACH UP–SLOPE STRIP OVERLAPPING FOUR TO SIX INCHES OVER THE ADJACENT DOWN–SLOPE STRIP. BEST SUITED TO SLOPE APPLICATIONS. IN MOST INSTANCES, INSTALLATION DETAILS ARE SITE SPECIFIC, SO SITE MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED.

MULCHING NOTES

1. SPREAD THE MULCH MATERIAL UNIFORMLY BY HAND, HAYFORK, MULCH BLOWER, OR HYDRAULIC MULCH MACHINE. AFTER SPREADING, NO MORE THAN 25 PERCENT OF THE GROUND SHOULD BE VISIBLE.
2. ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION.

MAINTENANCE

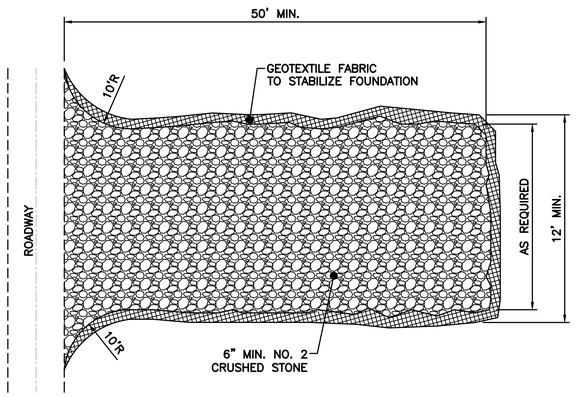
1. INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
2. CHECK FOR EROSION OR MOVEMENT OF MULCH; REPAIR DAMAGED AREAS, RESEED, APPLY NEW MULCH AND ANCHOR THE MULCH IN PLACE.
3. CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.
4. IF EROSION IS SEVERE OR RECURRING, USE EROSION CONTROL BLANKETS OR OTHER MORE SUBSTANTIAL STABILIZATION METHODS TO PROTECT THE AREA.

CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

(NOT TO SCALE)



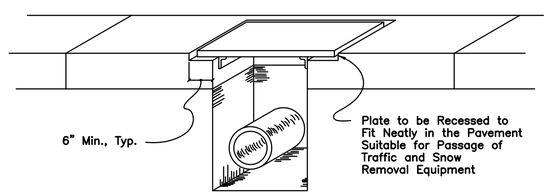
TEMPORARY CONSTRUCTION INGRESS/EGRESS PAD INSTALLATION

1. REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.
2. GRADE THE FOUNDATION AND CROWN FOR POSITIVE DRAINAGE.
3. INSTALL A CULVERT PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
4. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.
5. PLACE AGGREGATE (INDOT CA NO. 2) TO THE DIMENSIONS AND GRADE SHOWN IN THE CONSTRUCTION PLANS, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. TOP–DRESS THE DRIVE WITH WASHED AGGREGATE (INDOT CA NO. 53).
7. WHERE POSSIBLE, DIVERT ALL STORM WATER RUNOFF AND DRAINAGE FROM THE TEMPORARY CONSTRUCTION INGRESS/EGRESS PAD TO A SEDIMENT TRAP OR BASIN.

MAINTENANCE

1. INSPECT DAILY.
2. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL
3. TOP–DRESS WITH CLEAN AGGREGATE AS NEEDED.
4. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED INTO PUBLIC ROADS.
5. FLUSHING SHOULD ONLY BE USED IF THE WATER FROM THE CONSTRUCTION DRIVE CAN BE CONVEYED INTO A SEDIMENT TRAP OR BASIN.

TRENCH PLATE DETAIL FOR MAJOR ROADS



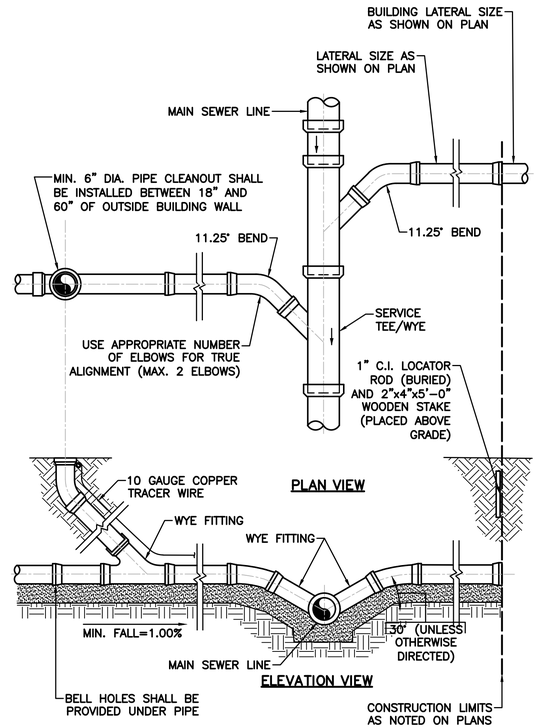
HIGHER SPEED/VOLUME APPLICATION

TYPICAL RESTORATION SECTION

RESTORATION CLASS		BACKFILL
ASPHALT OR BITUMINOUS ON CONC. BASE (GRIND AND RESURFACE PAVEMENT FULL WIDTH)	Item 448– 1.5" Min. Asphalt Concrete Surface Course, Type 1 Item 305 – 9" Conc. Base 78#/100 S.F. Road Mesh Variable The 1.5" Item 448 Asphalt Concrete Surface Course Shall Extend From Curb to Curb and Match into Existing Pavement with a Butt Joint, 25' Min. Length, Upon Completion of Pavement Planing of Ex. Surface Course. Saw Cut Both Edges– Full Depth 5/8"x1'–0" Tie Bar @ 5'–0" O.C. or 5\8" Expn. Anchor Bolt Ex. Macadam Ex. Conc. Base Flowable Controlled Density Fill Variable * Unless at Ex. Jt. With a Minimum of 3' Width	FLOWABLE CONTROLLED DENSITY FILL

SERVICE CONNECTION DETAIL
(SHALLOW SEWERS LESS THAN 15' DEEP)

(NOT TO SCALE)



PATH: P:\2020\0514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514UI.DT.DWG
DATE: Aug 17, 2026 - 02:13 PM
PLOTTED BY: VESTUPIMAN

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS		
BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO — MADELAINE O. FAGRELL — E-68372 — REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. N/A
VERT. N/A

CAMARGO CANYON PUMP STATION ELIMINATION

STANDARD DETAILS

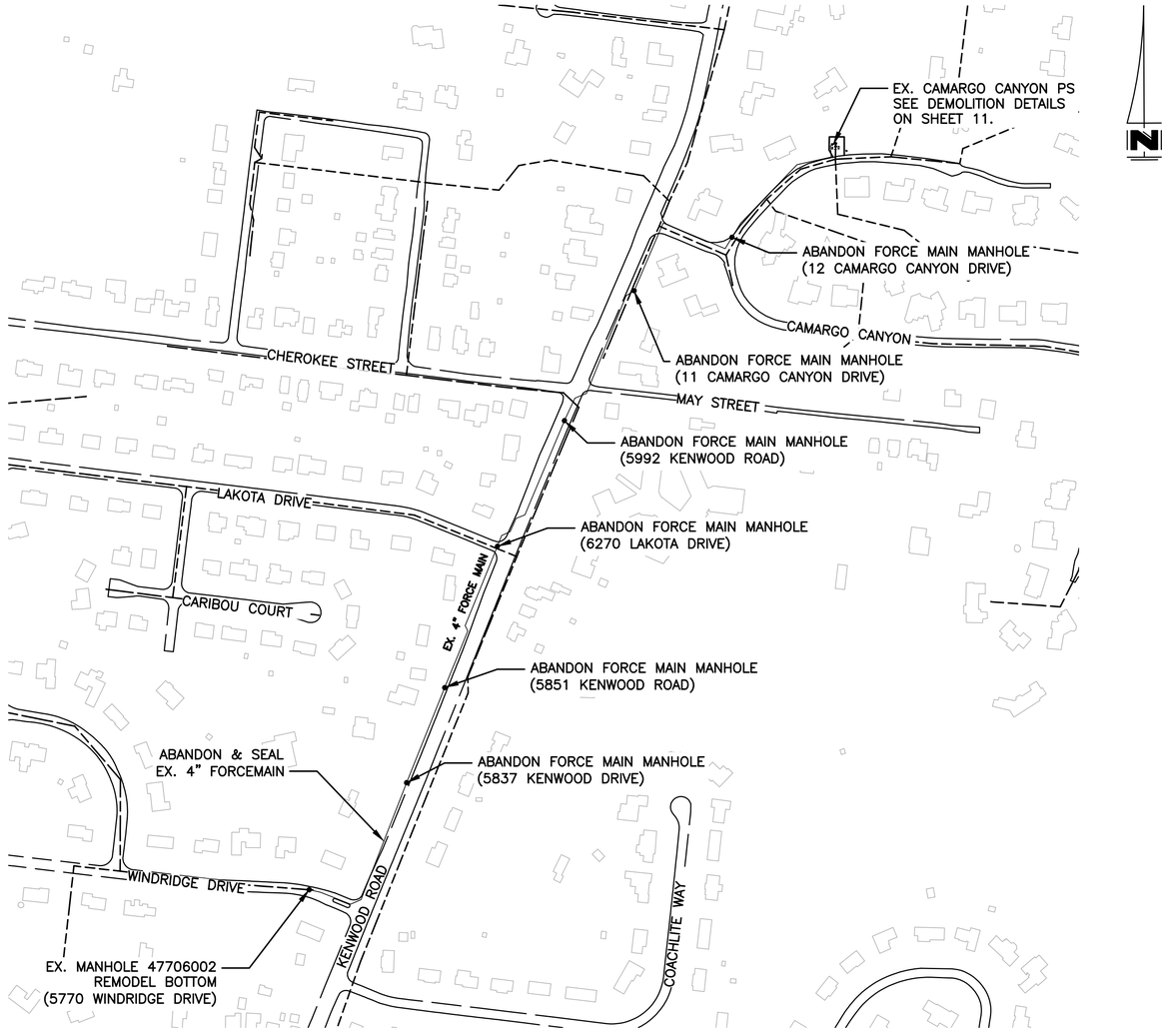
ACAD DRAWING NAME: 202000514UI.DT.DWG

FOR EASEMENT DRAWING SEE ACC. NO. N/A

ACC. NO. 79132

SHEET 8 OF 11

SS# 6868

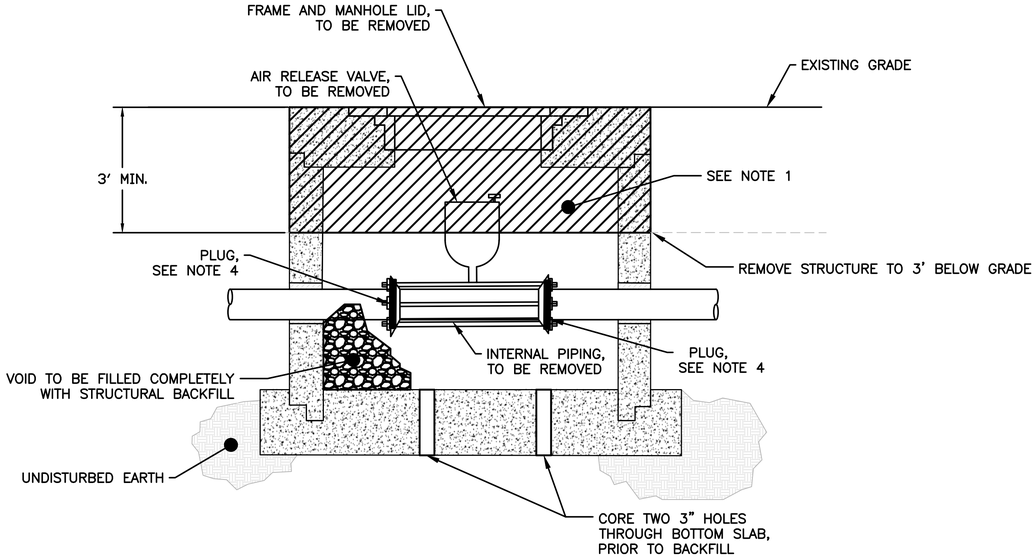


FORCE MAIN ABANDONMENT DETAIL

SCALE : 1' = 20'

NOTE:

1. REFER TO FORCE MAIN SPECIAL MANHOLE ABANDONMENT DETAIL, THIS SHEET.
2. FORCE MAIN DISCHARGE AT MANHOLE 47706002 SHALL BE PLUGGED WITH HYDRAULIC CEMENT.



FORCE MAIN SPECIAL MANHOLE ABANDONMENT

(AIR RELEASE VALVE MANHOLE ABANDONMENT)
NOT TO SCALE

NOTE:

1. NON PAVEMENT AREAS DISTURBED DURING DEMOLITION SHALL BE BACKFILLED WITH IMPORTED SOIL MATERIAL PER ITEM 203, COVERED WITH 6" MIN. TOPSOIL TO GRADE, AND SEEDED AND MULCHED TO MATCH EXISTING, PER 659.
2. AREAS WITHIN THE RIGHT OF WAY DISTURBED BY DEMOLITION SHALL BE BACKFILLED WITH COMPACTED GRANULAR BACKFILL OR CDF PER TYPICAL RESTORATION SECTION DETAILS ON SHEET 8.
3. ALL PIPING WITHIN STRUCTURES SHALL BE REMOVED PRIOR TO BACKFILLING.
4. BURIED PIPING SHALL BE PLUGGED AT BOTH ENDS.

CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS		
BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELI
E-88372
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. N/A
VERT. N/A

CAMARGO CANYON PUMP STATION ELIMINATION

FORCE MAIN ABANDONMENT

ACAD DRAWING NAME: 202000514.UI.DEMO.DWG

FOR EASEMENT DRAWING SEE ACC. NO. N/A

ACC. NO. 79133

SHEET 9 OF 11

SS# 6868

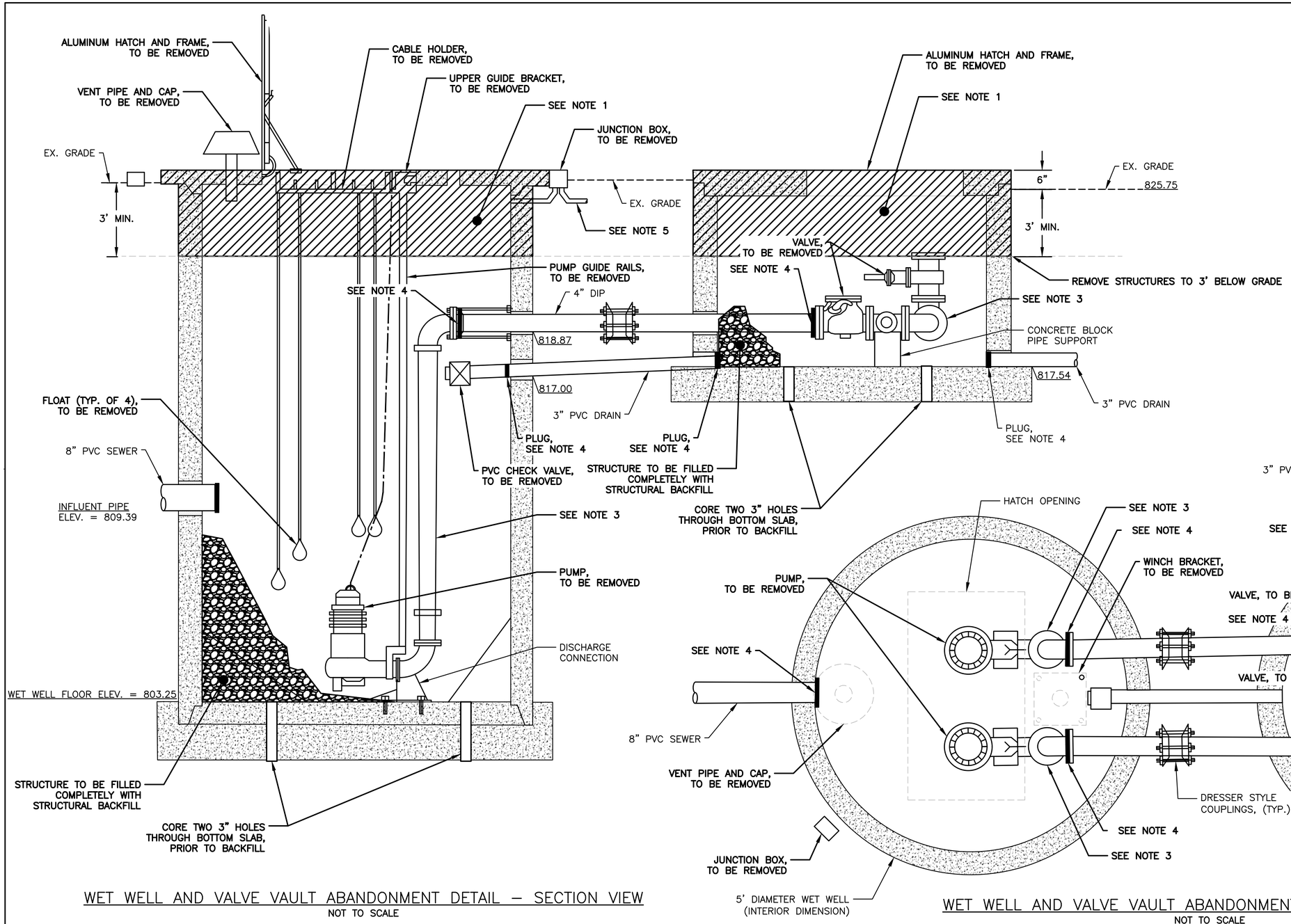
PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514UI.DEMO.DWG
DATE: Aug 17, 2026 - 02:13 PM
PLOTTED BY: VESTUPINAN

CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

NOTES:

1. NON PAVEMENT AREAS DISTURBED DURING DEMOLITION SHALL BE BACKFILLED WITH IMPORTED SOIL MATERIAL PER ITEM 203, COVERED WITH 6" MIN. TOPSOIL TO GRADE, AND SEEDED AND MULCHED TO MATCH EXISTING, PER 659.
2. AREAS WITHIN THE RIGHT OF WAY DISTURBED BY DEMOLITION SHALL BE BACKFILLED WITH COMPACTED GRANULAR BACKFILL OR CDF PER TYPICAL RESTORATION SECTION DETAILS ON SHEET 8.
3. ALL PIPING WITHIN STRUCTURES SHALL BE REMOVED PRIOR TO BACKFILLING.
4. BURIED PIPING SHALL BE PLUGGED AT BOTH ENDS.
5. ALL ELECTRICAL WIRES AND CORDS SHALL BE REMOVED. ALL CONDUIT ENTERING STRUCTURES SHALL BE PLUGGED (PER NOTE 4).
6. DETAIL ON THIS SHEET WAS DEVELOPED USING AS-BUILT DRAWINGS FOR THE PUMP STATION.



WET WELL AND VALVE VAULT ABANDONMENT DETAIL – SECTION VIEW
NOT TO SCALE

WET WELL AND VALVE VAULT ABANDONMENT DETAIL – PLAN VIEW
NOT TO SCALE

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS		
BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELIUS
E-88372
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. N/A
VERT. N/A

CAMARGO CANYON PUMP STATION ELIMINATION

PUMP STATION DEMOLITION

ACAD DRAWING NAME: 202000514.UI.DEMO.DWG

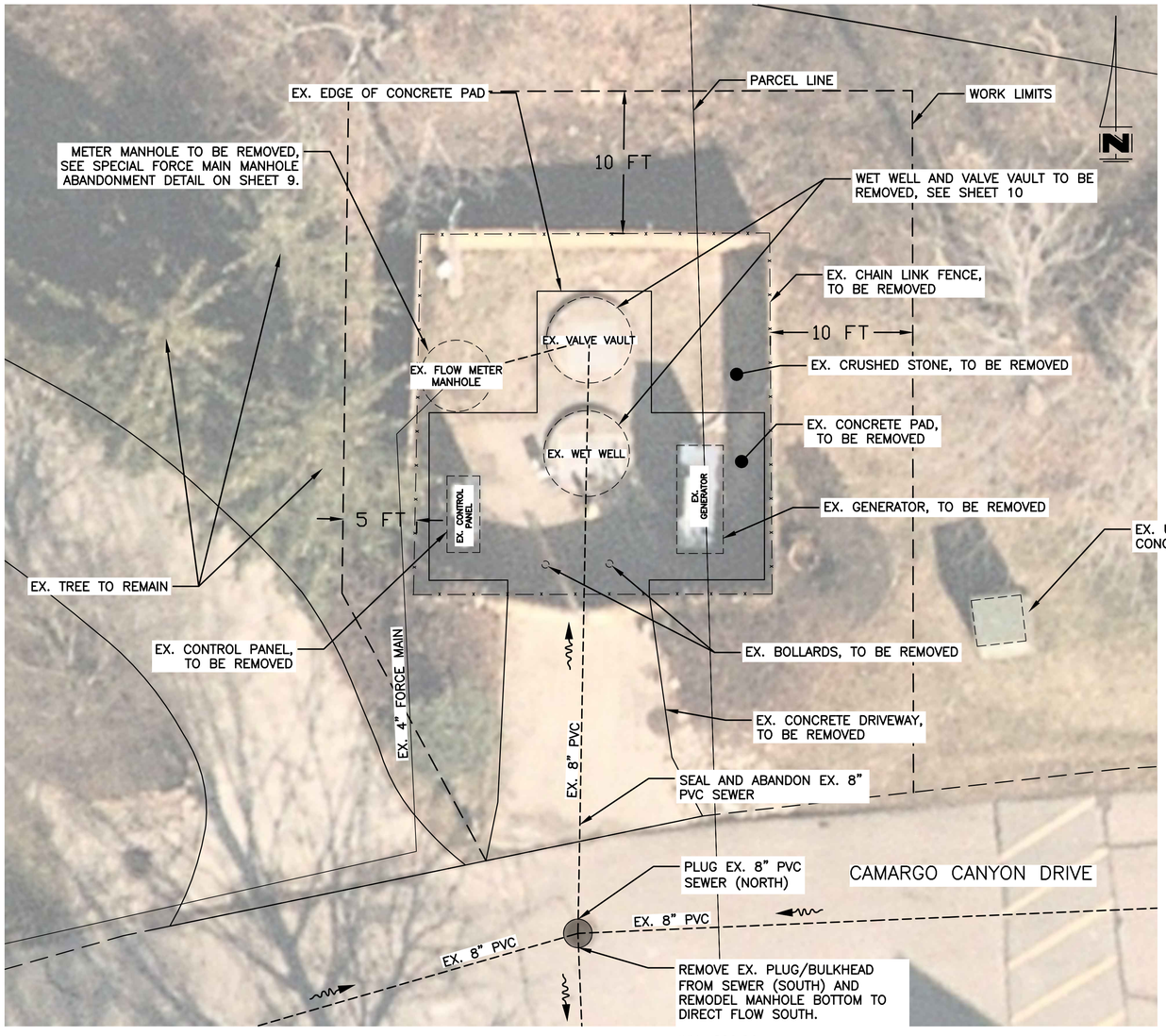
FOR EASEMENT DRAWING SEE ACC. NO. N/A

ACC. NO. 79134

SHEET 10 OF 11

SS# 6868

PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514.UI.DEMO.DWG
DATE: Aug 17, 2026 - 02:13 PM
PLOTTED BY: VESTUPINAN



CAMARGO CANYON PUMP STATION DEMOLITION

1" = 5'

(SEE DATA SOURCE NOTE, THIS SHEET)

NOTES:

1. CONTRACTOR SHALL COORDINATE THE DEMOLITION OF THE EXISTING STATION WITH OWNER REPRESENTATIVE FROM MSD WASTEWATER TREATMENT DIVISION.
2. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF WASTE FROM THE SITE.
3. ONCE DEMOLITION ACTIVITIES ARE COMPLETED THE SITE WILL BE SEEDED AND MULCHED, PER ITEM 659.
4. CONTRACTOR SHALL COORDINATE WITH MSD WASTEWATER TREATMENT DIVISION PRIOR TO THE START OF DEMOLITION WORK REGARDING THE SALVAGE OF DESIRED EQUIPMENT FROM THE LIFT STATION. EQUIPMENT TO BE SALVAGE INCLUDES, BUT IS NOT LIMITED TO, THE ITEMS ON THE FOLLOWING LIST.
   - 4.1. RTU PANEL (SCADA)
   - 4.2. POWER PANEL
   - 4.3. MISCELLANEOUS ELECTRICAL RELAYS AND OTHER COMPONENTS (PER OWNER)
   - 4.4. AIR RELEASE VALVE (FROM FORCE MAIN)

DATA SOURCE NOTE:

INFORMATION SHOWN ON THIS SHEET WAS DOWNLOADED FROM CAGIS ON DECEMBER,12TH 2021.

THE AERIAL SHOWN ON THIS SHEET WAS PROCURED FROM NEARMAP, AND WAS DATED FEBRUARY, 2ND, 2022.

CONTRACT DRAWING

PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

PATH: P:\2020\00514\D. DRAWINGS\UTILITY INFRASTRUCTURE\202000514.UI.DEMO.DWG
DATE: Aug 17, 2026 - 02:13 PM
PLOTTED BY: VESTUPINAN

DESIGNED BY: MDF
DRAWN BY: VE

REVISIONS		
BY:	DATE:	DESCRIPTION:

AMERICAN STRUCTUREPOINT INC.
9025 River Road | Suite 200 | Indianapolis, Indiana 46240
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

STATE OF OHIO
MADELAINE O. FAGRELL
E-88372
REGISTERED PROFESSIONAL ENGINEER

PROPOSED PROJECT NO. 10270026

COLUMBIA TOWNSHIP SEC. 11 & 17 FRACTIONAL RANGE 2-T-4

SCALE: HORIZ. N/A
VERT. N/A

CAMARGO CANYON PUMP STATION ELIMINATION

PUMP STATION SITE DEMOLITION

ACAD DRAWING NAME: 202000514.UI.DEMO.DWG

FOR EASEMENT DRAWING SEE ACC. NO. N/A

ACC. NO. 79135

SHEET 11 OF 11

SS# 6868