



Indiana Department of Environmental Management
Office of Water Quality
Wetlands Section

Publication Date:

April 16, 2024

Closing Date:

May 7, 2024

IDEM ID Number:

2024-233-3-JLB-A

Corps of Engineers ID Number:

LRL-2022-00973-sjk

PUBLIC NOTICE

To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

- 1. Applicant:** Lantz McElroy
Arbor Homes
9225 Harrison Park Court
Indianapolis, IN 46216
- 2. Agent:** Patrick Ewbank
Davey Resource Group
5641 W. 73rd St.
Indianapolis, IN 46278
- 3. Project location:** Bartholomew County
Latitude 39.232698, Longitude -85.947813
The project is located 0.70-mile south of West Lowell Road and County Road N 200 W in Columbus, Indiana.
- 4. Affected waterbody:** Palustrine Scrub-Shrub Wetland, DNR Mitigation Site
- 5. Project Description:** Arbor Homes plans to develop the Sutter Place subdivision, which includes 0.222 acre of impacts to a DNR mitigation site. To compensate for these impacts, the applicant proposes to purchase 0.67 wetland credits through the DNR Stream and Wetland Mitigation Program In-Lieu Fee. Additional information may be found online at <https://www.in.gov/idem/5474.htm>

Comment period: Any person or entity who wishes to submit comments or information relevant to this project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.

Public Hearing: Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.

Questions? Additional information may be obtained from Jake Brinkman, Project Manager, by phone at 317-306-8995 or by e-mail at jbrinkma@idem.in.gov. Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to:

Indiana Department of Environmental Management
100 North Senate Avenue
MC65-42 WQS IGCN 1255
Indianapolis, Indiana 46204-2251 FAX: 317/232-8406

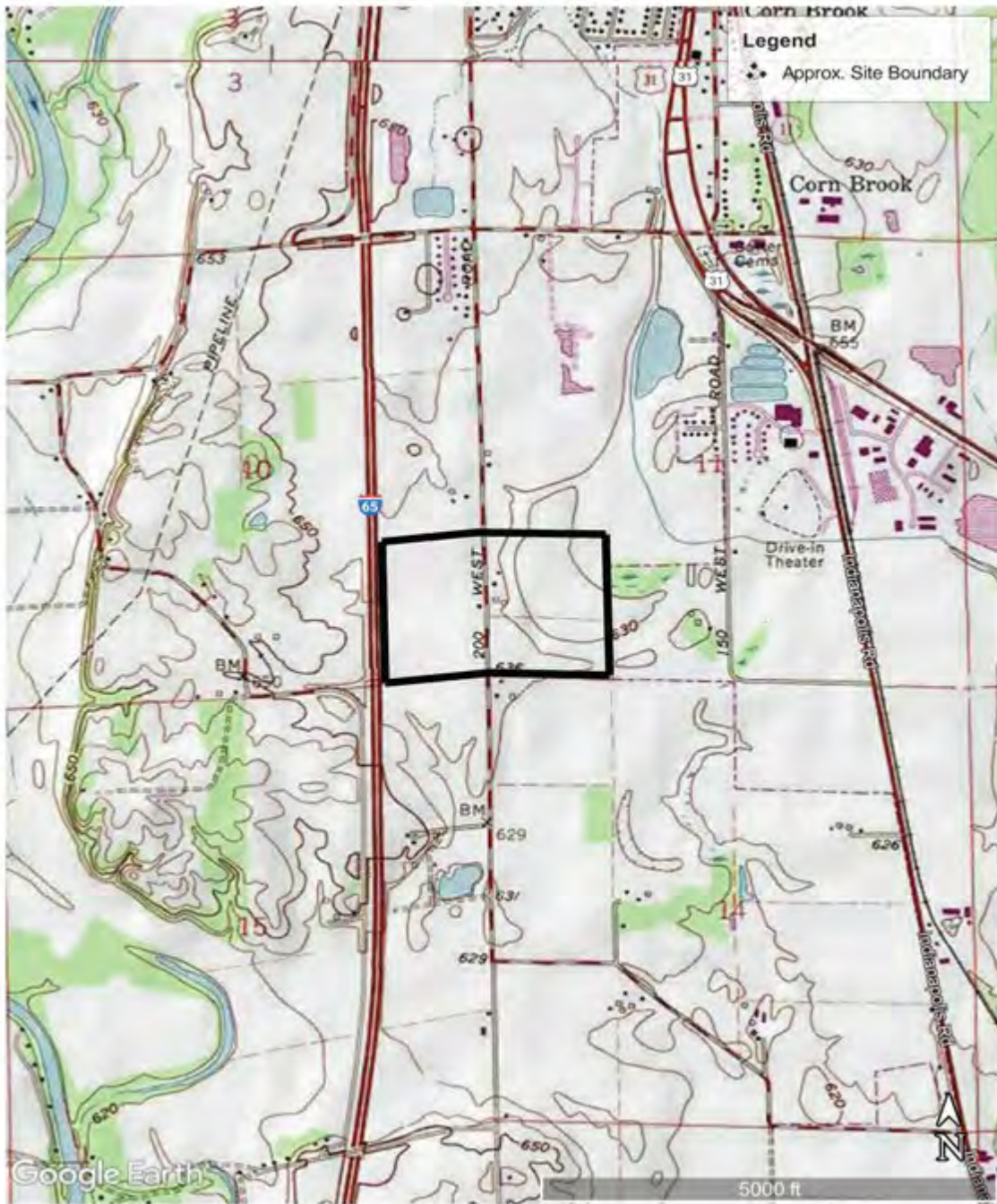


Figure 1. USGS 7.5-minute series of the Columbus, Indiana topographic quadrangle.

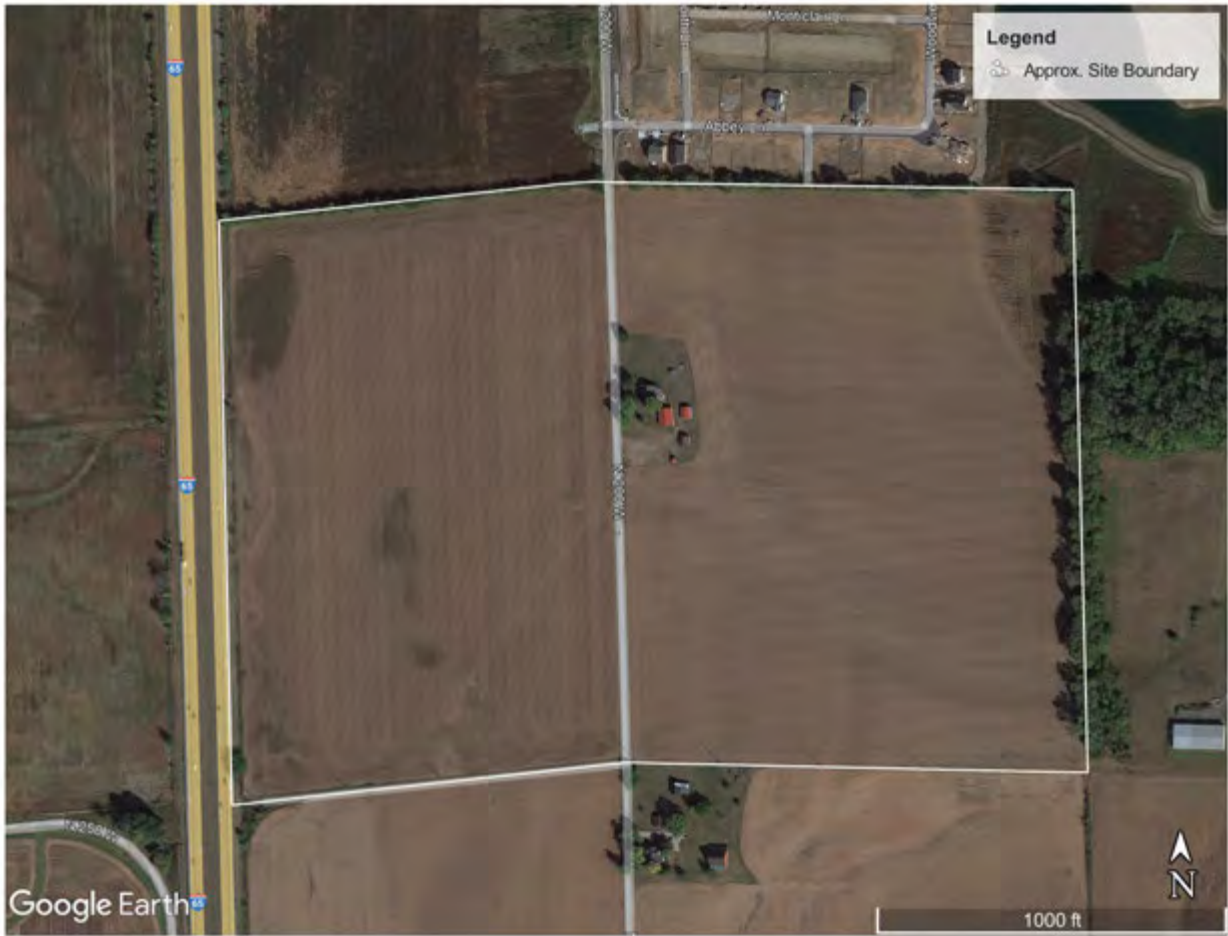
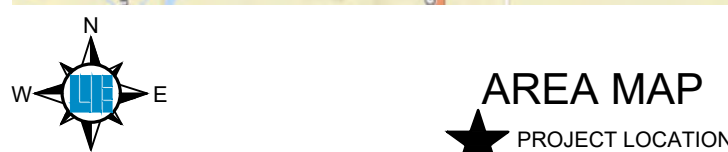
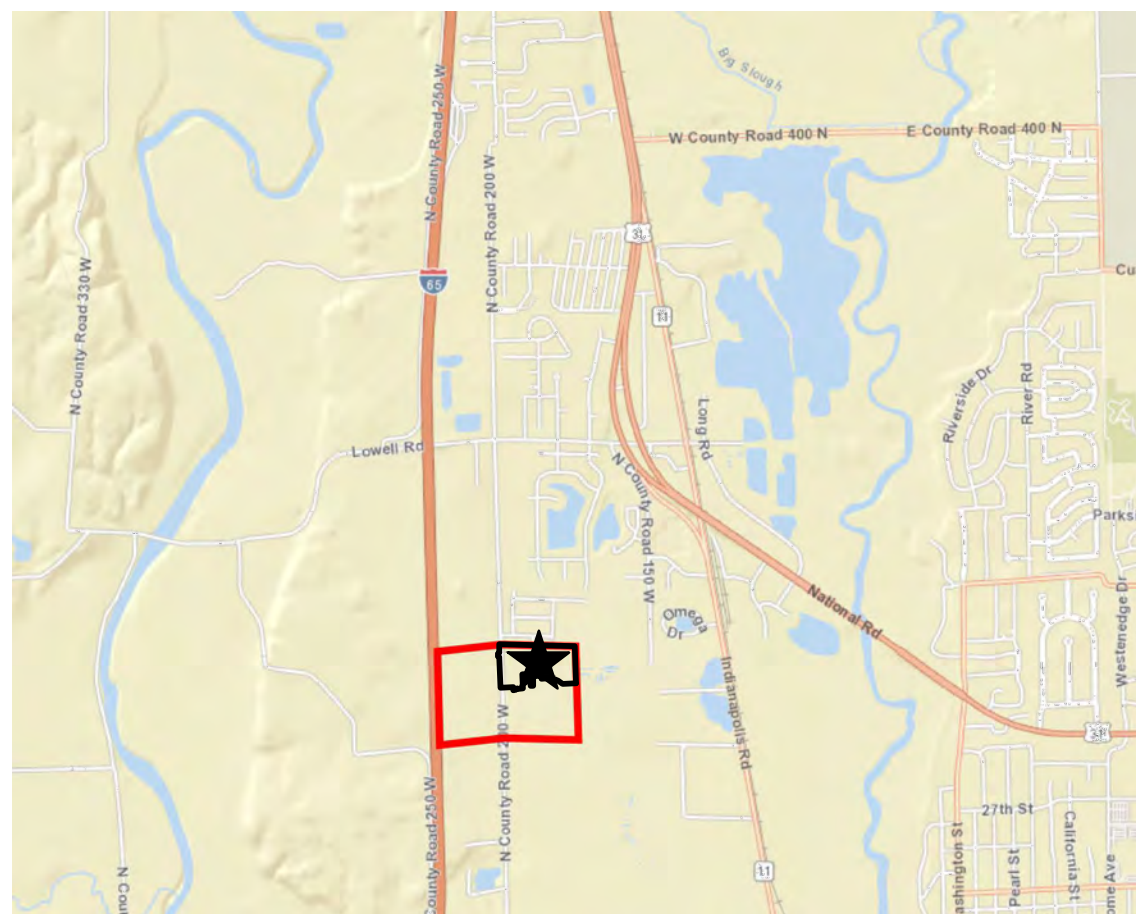


Figure 2. October 2019 aerial photograph.

CONSTRUCTION PLANS FOR SUTTER PLACE MAJOR SUBDIVISION SECTION 1 3535 N 200 W COLUMBUS, IN 47201



GENERAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, OR VERIFYING THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, AND STATE AGENCIES PRIOR TO STARTING CONSTRUCTION.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS OF ALL EXISTING UTILITIES IN THE VICINITY OF THE CONSTRUCTION AREA PRIOR TO STARTING CONSTRUCTION.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY AND COORDINATE CONSTRUCTION WITH ALL RESPECTIVE UTILITIES.
- ALL QUANTITIES ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS: FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
- EXCAVATIONS EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE A TRENCH SAFETY SYSTEM DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
- TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL STANDARDS.
- THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- ANY FIELD TILES ENCOUNTERED DURING EXCAVATION SHALL BE REPAIRED AND CONNECTED TO NEW STORM SEWERS AND POSITIVE DRAINAGE PRESERVED.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONFIRM THAT ALL LANDSCAPE REQUIREMENTS ARE MET AND CONFORM TO APPLICABLE LOCAL STANDARDS.
- THE SITE DOES LIE IN A SPECIAL FLOOD HAZARD AREA AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY - NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTTED BY SCALE ON FLOOD INSURANCE RATE MAP #18005C0127E, DATED DECEMBER 9, 2014.
- BEARINGS, DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS & PLAT FOR EXACT INFORMATION.
- A WETLANDS DELINEATION REPORT BY RON L. DIXON NATURAL RESOURCE CONSULTING, INC., MARCH 2022 INDICATED 2 WETLANDS NEAR THE NORTHEAST CORNER OF THE PROJECT.
- ALL WATER MAINS, HYDRANTS, AND WATER VALVES SHALL BE INSPECTED AND SHALL COMPLY WITH BACKFILL, BEDDING, AND THRUST BLOCK REQUIREMENTS PER EASTERN BARTHOLOMEW WATER CORPORATION DETAIL SHEETS.
- ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT OF WAY SHALL CONFORM TO THE REQUIREMENTS OF THE CITY. CONTRACTOR SHALL CONTACT THE CITY TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS. STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE CITY AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY RIGHT OF WAY.
- IF IT WILL BE NECESSARY TO RELOCATE EXISTING UTILITIES DUE TO A CONFLICT, THE EXPENSE OF SUCH RELOCATION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER.

ERRORS AND OMISSIONS STATEMENT

DESIGN PROFESSIONAL CERTIFYING PLANS FOR THE PROJECT ACKNOWLEDGES HIS PROFESSIONAL RESPONSIBILITY FOR ENSURING THAT ALL WORK IS CORRECT, ACCURATE AND COMPLIES WITH ALL APPROPRIATE LAWS, STANDARDS, REGULATIONS AND ORDINANCES. IF AN ERROR OR OMISSION IS FOUND, THE DESIGN PROFESSIONAL ACCEPTS FULL RESPONSIBILITY AND SHALL DETERMINE A SOLUTION THAT COMPLIES WITH ALL APPROPRIATE LAWS, STANDARDS, REGULATIONS AND ORDINANCES. IF SUCH AN ERROR OR OMISSION IS FOUND, THE DEVELOPER IS NOT RELIEVED OF COMPLYING WITH ALL APPROPRIATE LAWS, STANDARDS, REGULATIONS AND ORDINANCES.

DESIGN DATA

CURRENT ZONING	RT-C
TOTAL ACRES	20.21 AC
TOTAL LOTS	50 LOTS
DENSITY	2.47 LOTS/ACRE
COMMON AREA	8.95 AC
POND AREA (N.P.)	2.15 AC
FRONT YARD SETBACK	25' MIN. (10' FOR GENESIS LOTS)
SIDE YARD SETBACK	5' MIN. (0' AGGREGATE FOR GENESIS LOTS)
REAR YARD SETBACK	5' MIN.
SPEED LIMIT	25 MPH

*REZONED PER P.C. CASE #RZ-2021-008 WITH COMMITMENTS
RECORDED UNDER INSTR. #2022005562 ON 6/1/2022

OPERATING AUTHORITIES

COMCAST CABLE
ATTENTION: TOM ARMSTRONG
1470 JACKSON STREET
COLUMBUS, INDIANA 47201
(800)934-6489

CENTERPOINT ENERGY
ATTENTION: MATTHEW MURRAY
2345 E. MAIN ST.
DANVILLE, INDIANA 46122
317-718-3606

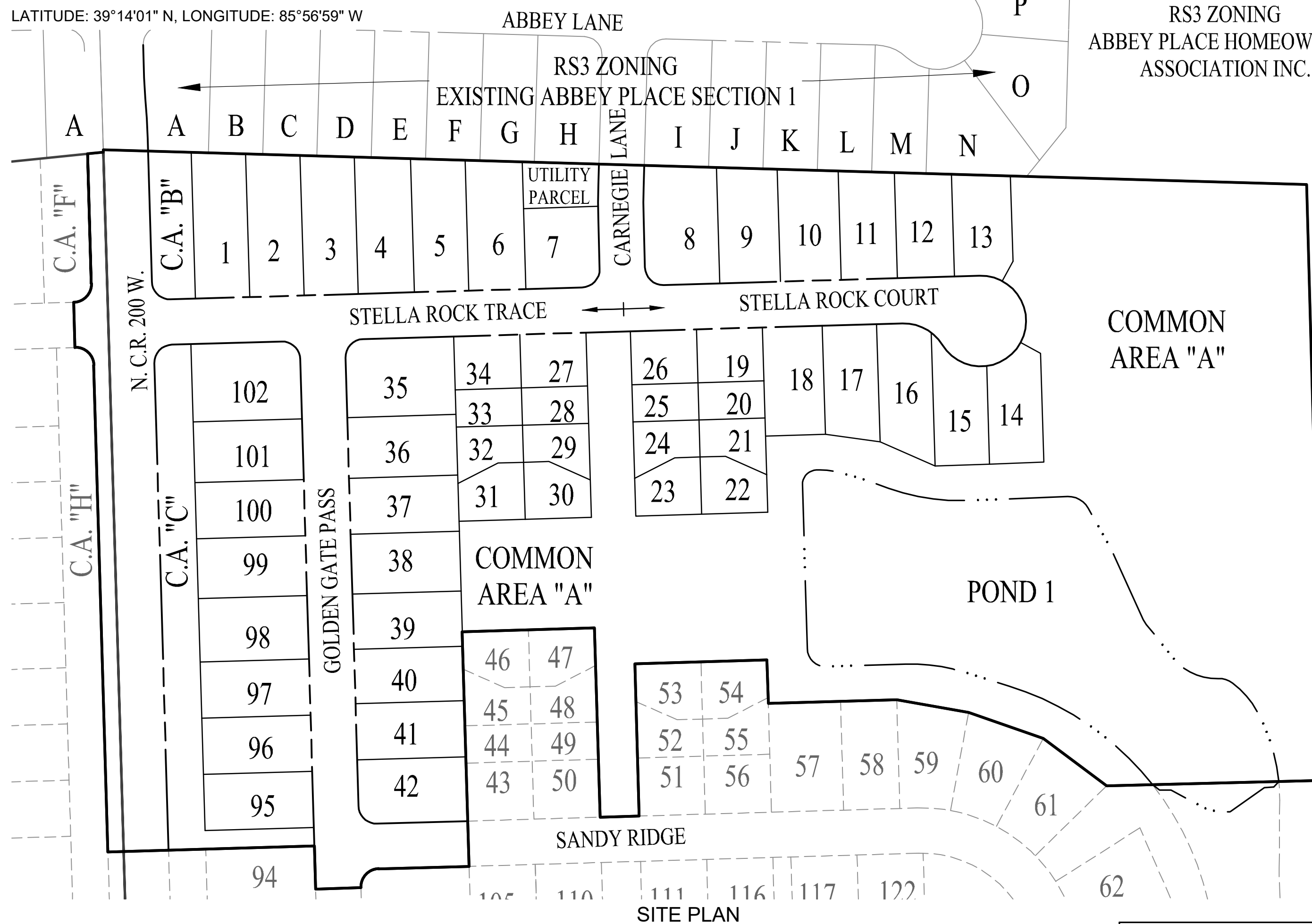
DUKE ENERGY
ATTENTION: TUCKER SETTLE
2727 CENTRAL AVENUE
COLUMBUS, INDIANA 47201
812-375-2004

CITY OF COLUMBUS ENGINEERING
ATTENTION: ANDREW BECKORT, PE
123 WASHINGTON STREET
COLUMBUS, INDIANA 47201
812-376-2540

COLUMBUS CITY UTILITIES
ATTENTION: ASHLEY GETZ, PE
1111 MCCLURE ROAD
COLUMBUS, INDIANA 47201
812-372-8861

BARTHOLOMEW COUNTY SURVEYOR
ATTENTION: TOM FRINKE
440 THIRD STREET, SUITE 400
COLUMBUS, IN 47201
812-379-1525

EASTERN BARTHOLOMEW WATER CORPORATION
ATTENTION: DONALD SMITH JR.
2413 W. 700 N.
TAYLORSVILLE, IN 47280
812-526-9777



SOIL SERIES	DESCRIPTION
FexA	FOX LOAM, 0 TO 2 PERCENT SLOPES
FexB2	FOX LOAM, 2 TO 6 PERCENT SLOPES, ERODED
FgqC3	FOX-CASCO SANDY LOAMS, 6 TO 12 PERCENT SLOPES, SEVERELY ERODED
NpcA	NINEVAH GRAVELLY SANDY LOAM, 0 TO 2 PERCENT SLOPES
NpcAQ	NINEVAH GRAVELLY SANDY LOAM, 0 TO 2 PERCENT SLOPES, RARELY FLOODED
NpeB2	NINEVAH SANDY LOAM, 2 TO 6 PERCENT SLOPES, ERODED
WqIAQ	WESTLAND CLAY LOAM, 0 TO 1 PERCENT SLOPES, RARELY FLOODED



SEE SHEET C204 FOR SOIL DEFINITIONS.

SOILS MAP

LOT	OWNER NAME
A	ABBEE PLACE HOMEOWNERS ASSOCIATION INC.
B	DOPHER, CAITLIN M
C	CLAYTON PROPERTIES GROUP INC
D	CLAYTON PROPERTIES GROUP INC
E	ALLA, SRINIVAS
F	BROWN, JAMES D & MARGARET O
G	CLARK, JOSHUA W
H	STIGDON, SAMANTHA & TOBY
I	GOEMMEL, DYLAN WAYNE
J	BUCHANAN, JOSEPH M
K	JANAPALA, NARESHKUMAR
L	BRANSTETTER, KARRY A & RYAN A
M	BRYANT, BILLY J JR & KELSAY L
N	COCKERHAM, CHAD M
O	SMITLEY, SUSAN K & JOSHUA A
P	MALIK, ANUBHAV & BHARDWAJ, GARIMA
Q	AULT, CHRISTOPHER D & JASON W
R	DORN, CHRISTOPHER GARY
S	FOX, CHRISTOPHER W II & WHITNEY J
T	ALVARADO, LANDA MIGUEL & ALVARADO NATALIE
U	SHIRSATH, CHETAN V & LAKADE ASHWINEE
V	DOUGLASS, SARA & BROOKS, THOMAS
W	PATTINGILLANGELA, J
X	PATIL, NILAKSHI VASUDEO & PANDY, AMIT KUMAR
Y	ETHERTON, CHASITY A
Z	MADRID-AMARILLAS, GERMAN A
AA	SHELLEY, JOSHUA D
BB	MAHIBO LIU ZHUYE (JYHRS)
CC	OLSON, CHARLES L II & JESSICA M
DD	COLUMBUS CITY UTILITIES
EE	DIAMET CORPORATION



SHEET INDEX	
SHEET NO.	DESCRIPTION
C001	TITLE SHEET
C100-C101	EXISTING CONDITIONS & DEMOLITION PLAN
C200-C201	STORMWATER POLLUTION PREVENTION PLAN-PHASE I
C202-C203	STORMWATER POLLUTION PREVENTION PLAN PHASE II
C204-C205	STORMWATER POLLUTION PREVENTION DETAILS & SPECIFICATIONS
C300-C301	GRADING PLAN
C400-C402	STREET PLAN AND PROFILES
C403	INTERSECTION & CUL-DE-SAC DETAILS
C404-C405	TRAFFIC CONTROL & MAILBOX PLAN
C406	MAINTENANCE OF TRAFFIC PLAN
C407	DETOUR PLAN
C500-C502	SANITARY SEWER PLAN & PROFILES
C503	SANITARY FORCE MAIN PLAN & PROFILE
C504-C505	SANITARY SEWER DETAILS & SPECIFICATIONS
C506-C507	LIFT STATION DETAILS & SPECIFICATIONS
C600-C603	STORM SEWER PLAN & PROFILES
C700	WATER MAIN PLAN
C701-C704	WATER MAIN DETAILS & SPECIFICATIONS
C800	GAS MAIN LOWERING PLAN & PROFILE
C900	GENERAL DETAILS & SPECIFICATIONS
L100-L101	LANDSCAPE PLAN
L102	LANDSCAPE DETAILS & SPECIFICATIONS
1-11	CITY OF COLUMBUS TYPICAL CONSTRUCTION GUIDELINES & DETAILS

PROJECT BENCHMARK

PER NGS DATA SHEET JZ2092
*DESCRIBED BY COAST AND GEODETIC SURVEY 1947 AT COLUMBUS.
AT COLUMBUS, AT THE SOUTHWEST CORNER OF THE COURT HOUSE GROUNDS, 45.5 FEET EAST OF THE CENTER LINE OF JACKSON STREET, 45.0 FEET NORTH OF THE CENTER LINE OF 2ND STREET, 2 FEET INSIDE A CONCRETE CURB AROUND THE COURT HOUSE LAWN ABOUT 1.5 FEET ABOVE THE INTERSECTION AND SET IN THE TOP OF A CONCRETE POST PROJECTING 2 INCHES.
ELEV: 627.82 NAVD 88

SITE TBMs

TBM 1
CUT SQUARE ON THE EAST SIDE OF THE HEADWALL APPROXIMATELY 10' NORTH OF THE CENTERLINE OF AN ASPHALT DRIVE AND APPROXIMATELY 730 FEET WEST OF THE INTERSECTION OF THE ASPHALT DRIVE AND COUNTY ROAD 200 WEST WEST OF THE SUBJECT PROPERTY
ELEV: 635.58 (NAVD 88)

TBM 2

MAG NAIL ON THE EDGE OF ASPHALT OF COUNTY ROAD 200 WEST APPROXIMATELY 20 FEET NORTH OF THE SUBJECT PARCEL.
ELEV: 634.88 (NAVD 88)

OWNER

ARBOR HOMES
9225 HARRISON PARK COURT
INDIANAPOLIS, INDIANA 46216
TELEPHONE: (317) 827-6643
CONTACT PERSON: LANTZ MCELROY, P.E.
EMAIL: LANTZM@YOURARBORHOME.COM

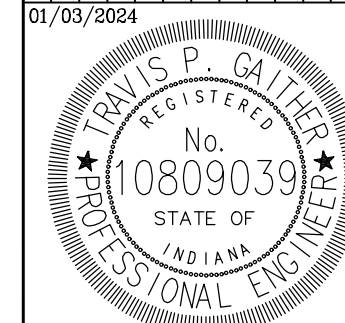
PLANS PREPARED BY

WEIHE ENGINEERS
10505 N. COLLEGE AVE.
INDIANAPOLIS, INDIANA 46280
TELEPHONE: (317) 846-6611
CONTACT PERSON: KEVIN C. SUMNER, P.S.
EMAIL: SUMNERK@WEIHE.NET

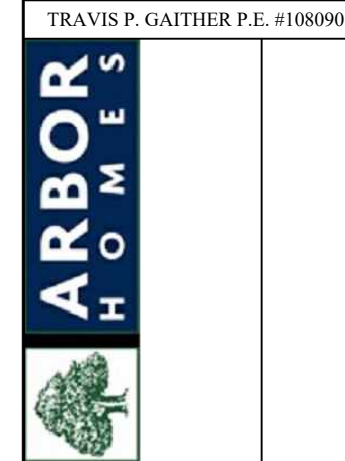
10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture
Build with confidence.

PROJECT NO.	DATE	BY	REVISIONS AND ISSUES
W210486-1	01/03/2024		



Travis P. Gauthier
Travis P. Gauthier P.E. #10809039

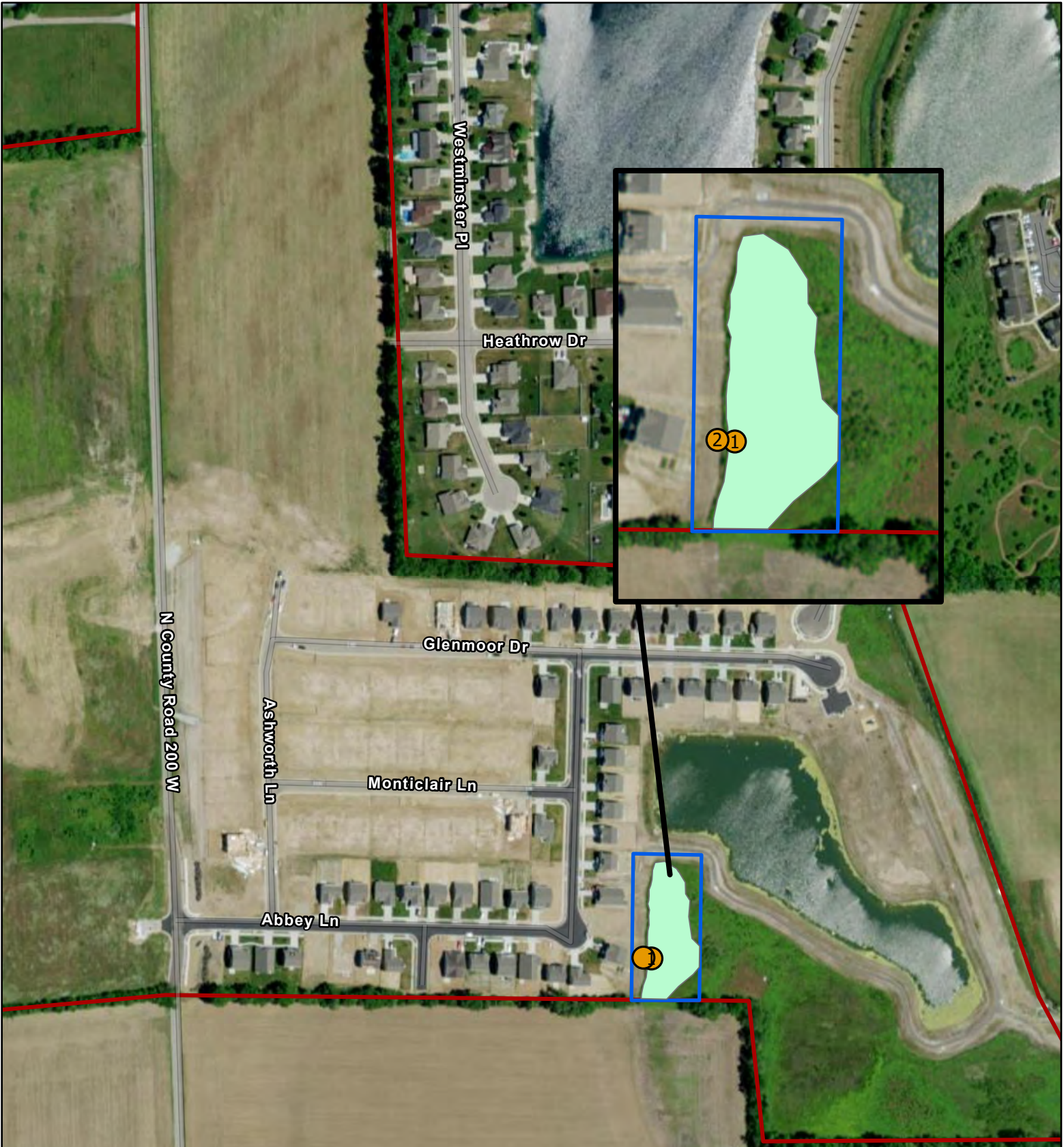


SUTTER PLACE - SECTION 1
ARBOR HOMES
3535 N 200 W, COLUMBUS, IN 47201
TITLE SHEET

SHEET NO.
C001
PROJECT NO.
W210486-1



Appendix A: Water Resources - Sutter Place Impacts through Abbey Place



DAVEY
Resource Group

Date: November 22, 2022

Site Location: NCR200 W,
German Township, Bartholomew County, IN

Sources: National Agricultural Imagery Program
Hybrid. Imagery Date 2020.

0 280 560 1,120
Feet

Legend

- Data Point
- Stream
- Wetland
- 2022 Study Area
- 2017 Study Area

GENERAL NOTES:

- THE CONTRACTOR SHALL CONFIRM ALL EARTHWORK QUANTITIES PRIOR TO THE START OF CONSTRUCTION. IF AN EXCESS OR SHORTAGE OF SOIL IS ENCOUNTERED, THE CONTRACTOR SHALL CONFIRM WITH THE OWNER AND ENGINEER THE REQUIREMENTS FOR STOCKPILING, REMOVAL OR IMPORTING OF EARTH.
- CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY SEWER FACILITIES, WATER MAIN, AND STORM SEWERS IS 18" OR LESS.
- GRANULAR BACKFILL TO BE USED FOR ALL UTILITY AND SEWER - STREET CROSSINGS.
- PIPE CROSSINGS SHALL BE BACKFILLED WITH TYPE "B" BORROW. TYPE "B" BORROW SHALL MEET 2" OR GREATER NOMINAL SIZE.
- THIS SUBDIVISION SHALL MEET A.D.A. REQUIREMENTS AND SUBDIVISION STANDARDS.
- ALL EXISTING DRAIN TILES SHALL BE TIED INTO THE PROPOSED STORM SYSTEM OF THIS SECTION (WHERE APPLICABLE).
- CONTRACTOR TO VERIFY DEPTHS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE ARE NO CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS.
- REFER TO THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS, LATEST EDITION, FOR BASIC MATERIALS AND CONSTRUCTION METHODS.
- FILL MATERIAL SHALL CONSIST OF SOIL OBTAINED FROM CUT AREAS, BORROW PITS OR OTHER APPROVED SOURCES. SOIL SHALL BE FREE FROM ORGANIC MATTER, DELETERIOUS SUBSTANCES AND LARGE ROCKS. THE FILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX INCHES FOLLOWING COMPACTION. PROPER MOISTURE CONTENT OF FILL MATERIAL WILL BE SUCH TO ACHIEVE SPECIFIED COMPACTION DENSITY. ALL FILL BENEATH PAVED AREAS, FLOOR SLABS SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY PER ASTM D-1557. FIELD COMPACTION TESTS SHALL BE RUN ON EACH LIFT IN FILL SECTIONS, AND THE REQUIRED COMPACTION ON EACH LIFT SHALL BE IN ACCORDANCE WITH INDOT SECTION 211.
- MAXIMUM LAWN SLOPE IS 3:1.
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE MAINS, CONDUITS, SERVICE LINES, ETC. IN THE AFFECTED CONSTRUCTION AREA. EXISTING UTILITY STRUCTURES ARE SHOWN HERE IN ACCORDANCE WITH AVAILABLE INFORMATION. THE LOCATION AND PROTECTION OF UTILITY STRUCTURES, THEIR SUPPORT AND MAINTENANCE DURING CONSTRUCTION (IN COOPERATION WITH APPLICABLE UTILITY COMPANY) IS THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
- ALL SPOT ELEVATIONS ARE TO FINISHED GRADE.
- ALL REINFORCING BARS SHALL MEET EXISTING.
- ALL CONSTRUCTION ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH O.S.H.A. STANDARDS FOR WORKER SAFETY.
- PROVIDE POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS. CONTRACTOR TO TEST FOR AND CORRECT ANY PONDING CONDITIONS.

PROJECT BENCHMARK

PER NGS DATA SHEET J22092
 *DESCRIBED BY COAST AND GEODETIC SURVEY 1947 AT COLUMBUS, AT COLUMBUS, AT THE SOUTHWEST CORNER OF THE COURT HOUSE GROUNDS, 45.5 FEET EAST OF THE CENTER LINE OF JACKSON STREET, 45.0 FEET NORTH OF THE CENTER LINE OF 2ND STREET, 2 FEET INSIDE A CONCRETE CURB AROUND THE COURT HOUSE LAWN ABOUT 1.5 FEET ABOVE THE INTERSECTION AND SET IN THE TOP OF A CONCRETE POST PROJECTING 2 INCHES.
 ELEV. 627.82 NAVD 88

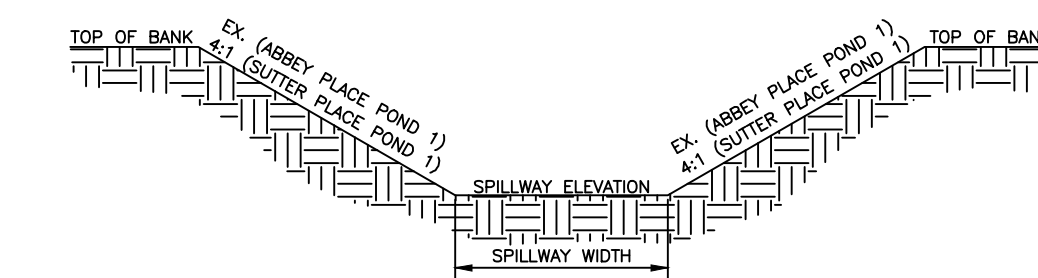
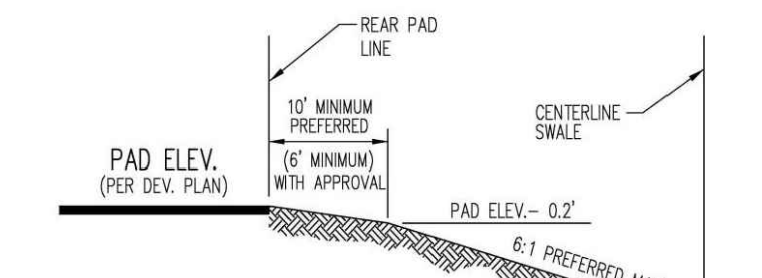
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 MAG NAIL ON THE EDGE OF ASPHALT OF COUNTY ROAD 200 WEST APPROXIMATELY 20 FEET NORTH OF THE SUBJECT PARCEL.
 ELEV. 634.88 (NAVD 88)

LEGEND

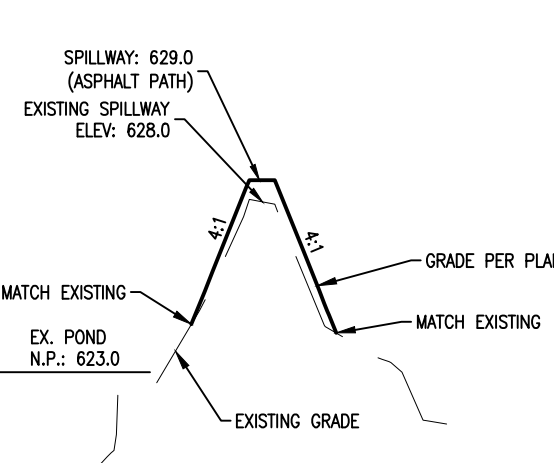
- RIGHT-OF-WAY LINE
- CURB WITH 6" UNDERDRAIN
- PROPOSED STORM SEWER LINE
- EXISTING STORM SEWER LINE
- TREE LINE
- SWALE
- SSD
- PROPOSED SANITARY SEWER LINE AND SANITARY MANHOLE
- EXISTING SANITARY SEWER LINE
- SANITARY SEWER LATERAL
- SANITARY SEWER STRUCTURE NUMBER
- PROPOSED WATER LINE
- DUAL WATER LATERAL AND METER
- SINGLE WATER LATERAL AND METER
- FLOW DIRECTION
- EXISTING CONTOURS
- PROPOSED ELEVATION
- PROPOSED STREET CENTERLINE FINISHED GRADE ELEVATION
- STORM INLET
- STORM SEWER STRUCTURE NUMBER
- TOP OF CASTING
- INVERT
- REINFORCED CONCRETE PIPE
- MANHOLE
- SIR
- DRAINAGE EASEMENT
- DRAINAGE AND UTILITY EASEMENT
- D.U.&S.E.
- SEWER EASEMENT
- LANDSCAPE EASEMENT
- PRIVATE ACCESS & UTILITY EASEMENT
- EASEMENT LINE
- CONCRETE END SECTION WITH RIP-RAP
- MATCH EXISTING
- TYPICAL
- PROPOSED
- EXISTING
- RADIUS
- VARIABLE
- RIGHT-OF-WAY
- BACK TO BACK OF CURB
- PAD ELEV
- EMERGENCY FLOOD ROUTE
- BUILDING SETBACK LINE
- HIGH POINT
- LOW POINT
- ADA RAMP
- FIRE HYDRANT
- WATER VALVE
- PROPOSED ELECTRIC LINE
- PROPOSED 8' OR 10' ASPHALT PATH, SEE SHEET C400
- PROPOSED 5' SIDEWALK BY DEVELOPER, SEE SHEET 3 OF 11 OF THE CITY OF COLUMBUS DETAILS
- TOP OF CURB
- GUTTER OF CURB
- POINT OF VERTICAL INTERSECTION
- POINT OF CURVATURE
- POINT OF TANGENCY
- POLYVINYL CHLORIDE PIPE
- EXISTING STORM BEEHIVE
- EXISTING STORM CURB INLET
- EXISTING STORM STRUCTURE NUMBER
- PROPOSED CONTOURS
- RIP RAP
- TEMP. DEAD END & PUBLIC NOTICE SIGN, SEE SHEET C404 & C900
- STREET LIGHT
- CENTERLINE
- PAVEMENT
- ELEVATION

TYPICAL REAR YARD GRADE CROSS SECTION



LOCATION	TOP OF BANK ELEV.	100% SLOPE ELEV.	SPILLWAY ELEV.	SPILLWAY WIDTH
ABEY PLACE POND 1	630.0	628.84	629.0	12'
SUTTER PLACE POND 1	630.5	629.16	629.2	20'

NOTE
 MLAG FOR ALL PADS TO BE 629.50

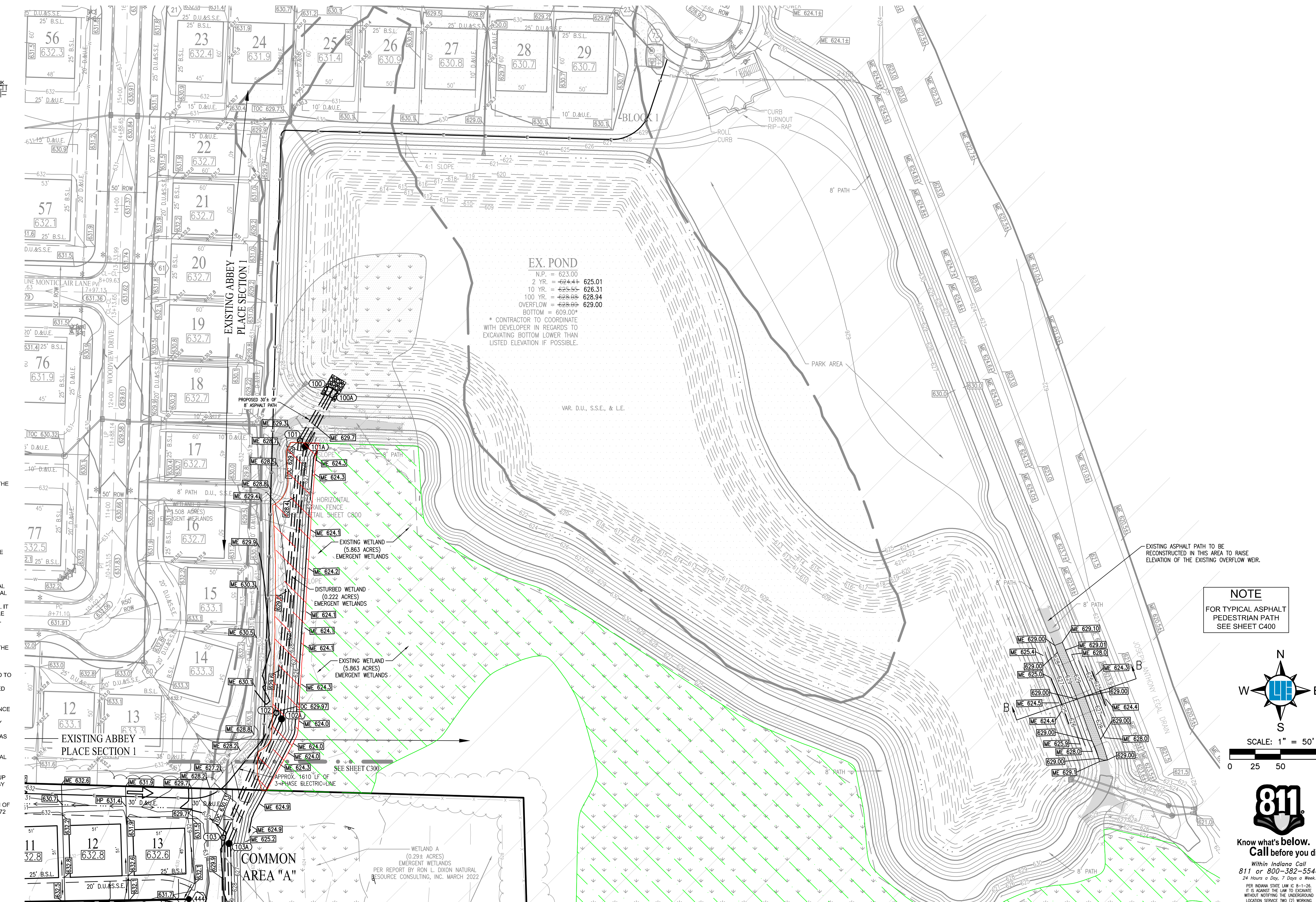


SECTION B-B
 NOT TO SCALE

POND LINER SPECIFICATIONS

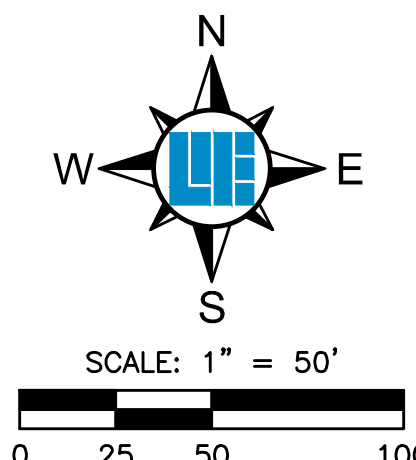
IT MAY BE NECESSARY TO CONSTRUCT A LINER TO SEAL THE MORE PERMEABLE SANDY CLAYS AND SAND SEAMS WHICH MAY BE PRESENT AT A SHALLOW DEPTH WITHIN THE SIDE SLOPE OR BOTTOM OF THE EXCAVATION. THE CONTRACTOR SHALL PERFORM SOILS ANALYSIS TESTS IN THE POND AREAS TO DETERMINE IF THE PONDS WILL REQUIRE A LINER. IN THE EVENT THAT CONSTRUCTION OF A LINER BECOMES NECESSARY, POND LINER SPECIFICATIONS HAVE BEEN INCLUDED BELOW.

- ACCEPTABLE LINERS ARE AS FOLLOWS:
- NATURAL CLAY LINER
 - LABORATORY TESTING SHALL BE PERFORMED ON THE DESIGNATED LINER MATERIAL TO DETERMINE THE OPTIMUM LINER COMPACTION CRITERIA. PERMEABILITY TESTING SHALL BE PERFORMED ON REMOLDED SAMPLES, COMPACTED TO THIS STANDARD. LABORATORY TESTING SHALL BE PERFORMED AT LEAST ONE (1) MONTH PRIOR TO INITIATING LINING ACTIVITIES.
 - THE CONTRACTOR SHALL IDENTIFY AND RETAIN THE ENGINEER-APPROVED LINER MATERIAL FOR USE ON SEALING THE SIDE SLOPES AND BOTTOM OF THE POND. THE OPTIMUM NATURAL LINER MATERIAL SHALL NOT BE USED FOR OTHER PORTIONS OF SITE WORK PRIOR TO VERIFICATION THAT ADEQUATE RESOURCES ARE AVAILABLE AND HAVE BEEN STOCKPILED. IT IS IMPORTANT THAT THE STOCKPILED SOILS BE STORED IN AS SMALL AN AREA AS POSSIBLE TO RETAIN NATURAL MOISTURE. THE CONTRACTOR SHOULD ANTICIPATE THAT ADDITIONAL SOIL WORK MAY BE REQUIRED TO BRING THE LINER MATERIAL TO REQUIRED UNIFORM MOISTURE LEVEL.
 - A REPRESENTATIVE OF THE TESTING ENGINEER SHALL BE PRESENT FOR INSPECTION OF THE BASE AND SIDE SLOPES OF THE POND PRIOR TO AND DURING COMPACTION OF THE LINER MATERIALS.
 - THE CLAY LINING MATERIAL APPROVED BY THE TESTING ENGINEER, SHALL BE COMPACTED TO A MINIMUM OF 12 INCHES THICK ON THE UPPER TWO THIRDS OF THE SIDE SLOPES AND 18 INCHES ON THE LOWER ONE THIRD. A COMPACTED MINIMUM OF 18 TO 24 INCHES APPROVED LINING MATERIAL SHALL BE PLACED ACROSS THE BASE OF THE POND.
 - THE CLAY LINER MATERIAL SHALL BE REGULARLY SAMPLED AND TESTED FOR CONFORMANCE TO THE MOISTURE AND ATTERBERG LIMITS ESTABLISHED FOR THE APPROVED LINER MATERIAL(S). FIELD DENSITY AND MOISTURE TESTING SHALL BE PERFORMED FREQUENTLY DURING CONSTRUCTION TO ESTABLISH A CORRELATION BETWEEN DENSITY AND FIELD PERMEABILITY. IT IS IMPERATIVE THAT MOISTURE LEVELS BE MAINTAINED OVER OPTIMUM AS DETERMINED IN LABORATORY TESTING. ONLY BY MAINTAINING THIS CONDITION WILL IT BE POSSIBLE TO APPROACH THE ZERO VOIDS CONDITION AND MAXIMIZE NATURAL LINER CAPABILITIES. OFF-SITE SOURCES FOR CLAY LINER MATERIAL MAY BE USED WITH APPROVAL BY THE OWNER'S REPRESENTATIVE AND ON-SITE TESTING ENGINEER.
 - COMPACTION OF THE NATURAL LINER SHALL BE PERFORMED BY EQUIPMENT OPERATING UP AND DOWN THE SLOPE. ENGINEERED NATURAL CLAY LINERS SHALL NOT BE COMPACTED BY EQUIPMENT OPERATING AROUND THE SLOPES OR NEAR THE SAME ELEVATION. IT IS IMPORTANT THAT HYDRATION OF THE CLAY LINERS TAKES PLACE AFTER INSTALLATION IS COMPLETE. THIS IS TYPICALLY ACCOMPLISHED BY NATURAL RAINFALL OR BY APPLICATION OF FRESH WATER AT THE RATE OF ONE QUARTER GALLON PER SQUARE FOOT FOR AT LEAST 72 HOURS. THIS RECOMMENDED RATE OF HYDRATION WILL HELP PREVENT SHRINKAGE AND CRACKING OF THE CLAY LINER AND MAINTAIN ITS INTEGRITY.
 - BENTONITE
 - MATERIALS AND INSTALLATION METHOD TO BE REVIEWED BY THE TESTING ENGINEER AND APPROVED BY THE ENGINEER.
 - SYNTHETIC LINER
 - MATERIALS AND INSTALLATION METHOD TO BE REVIEWED BY THE TESTING ENGINEER AND APPROVED BY THE ENGINEER.



EX. POND
 N.P. = 623.00
 2 YR. = 624.44
 10 YR. = 625.55
 100 YR. = 628.98
 OVERFLOW = 628.99
 BOTTOM = 609.00
 * CONTRACTOR TO COORDINATE WITH DEVELOPER IN REGARDS TO EXCAVATING BOTTOM LOWER THAN LISTED ELEVATION IF POSSIBLE.

NOTE
 FOR TYPICAL ASPHALT PEDESTRIAN PATH SEE SHEET C400



Within Indiana Call
 811 or 800-332-5544
 24 Hours a Day, 7 Days a Week
 PER INDIANA STATE LAW IC 8-1-26,
 IT IS ILLEGAL FOR ANY PERSON TO EXCAVATE
 WITHOUT NOTIFYING THE UNDERGROUND
 LOCATOR SERVICE TWO (2) WORKING
 DAYS BEFORE COMMENCING WORK.

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PROJECT NO.: W210486-1
 DWG NAME: W210486-1-Grading
 DESIGNER: Travis P. Gaither, P.E.
 DRAWN BY: J.L.
 CHECKED BY: KCS
 DATE: 01/03/2024

DATE: 01/03/2024

TRAVIS P. GAITHER
 No. 10809039
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

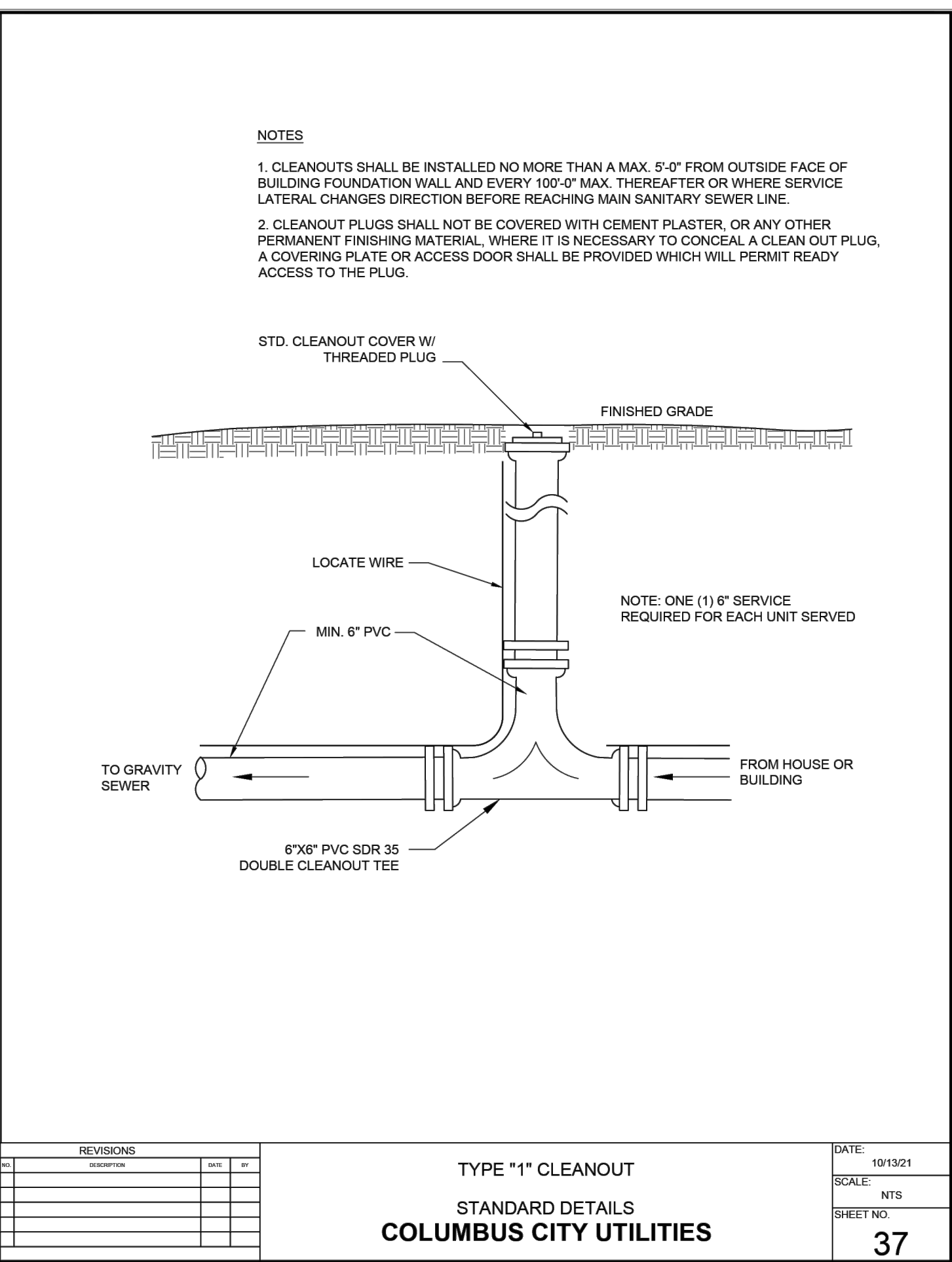
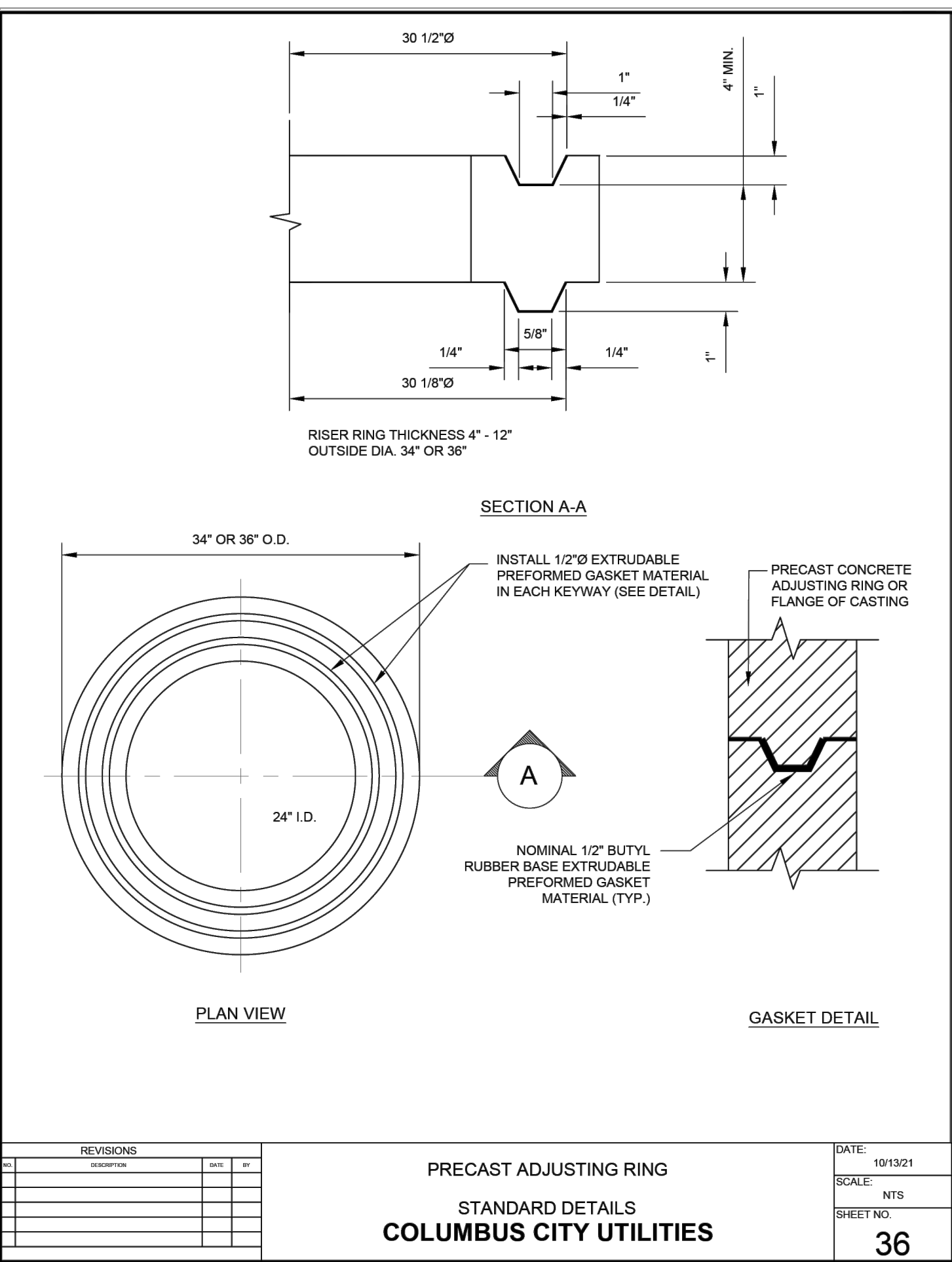
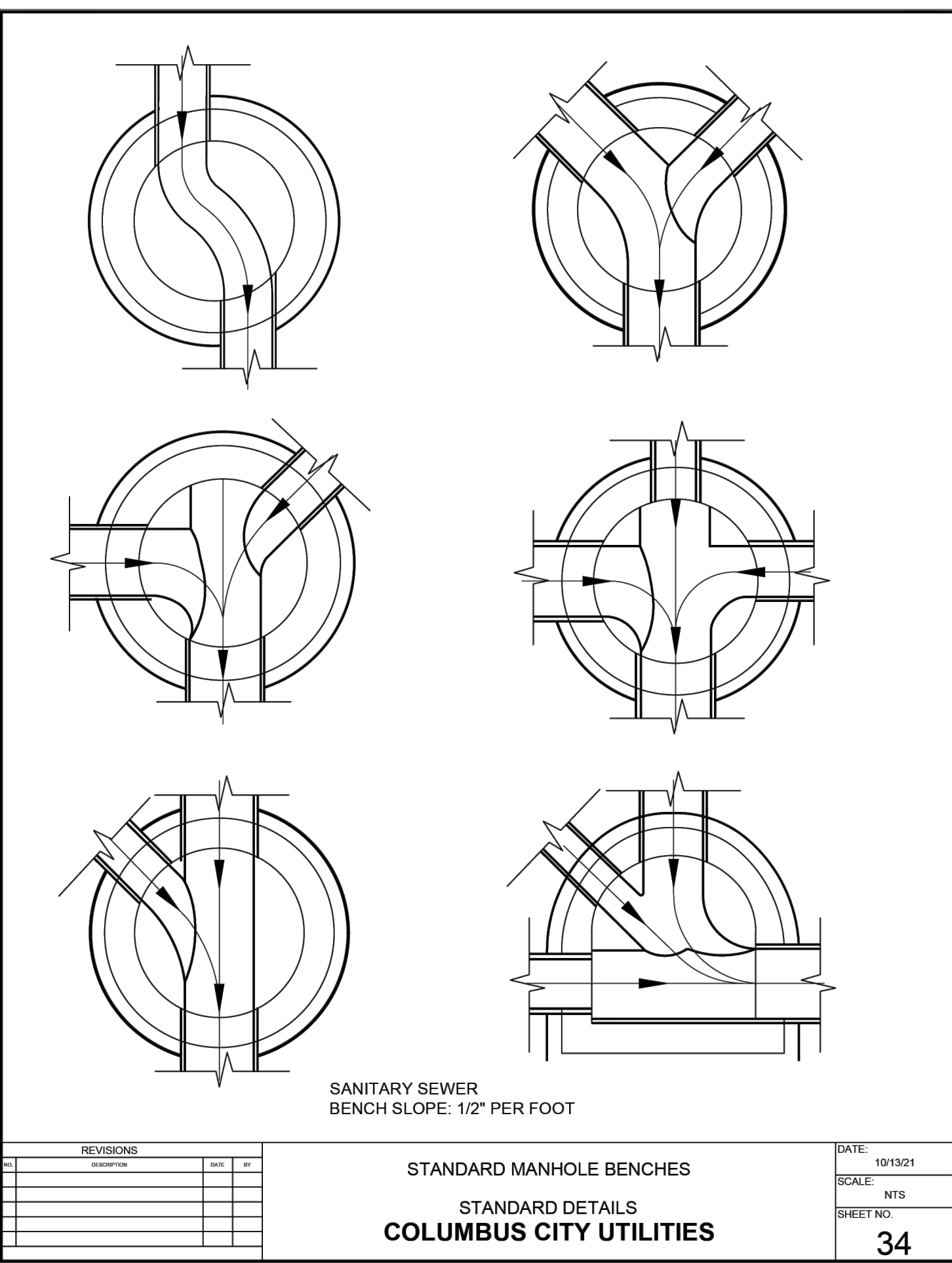
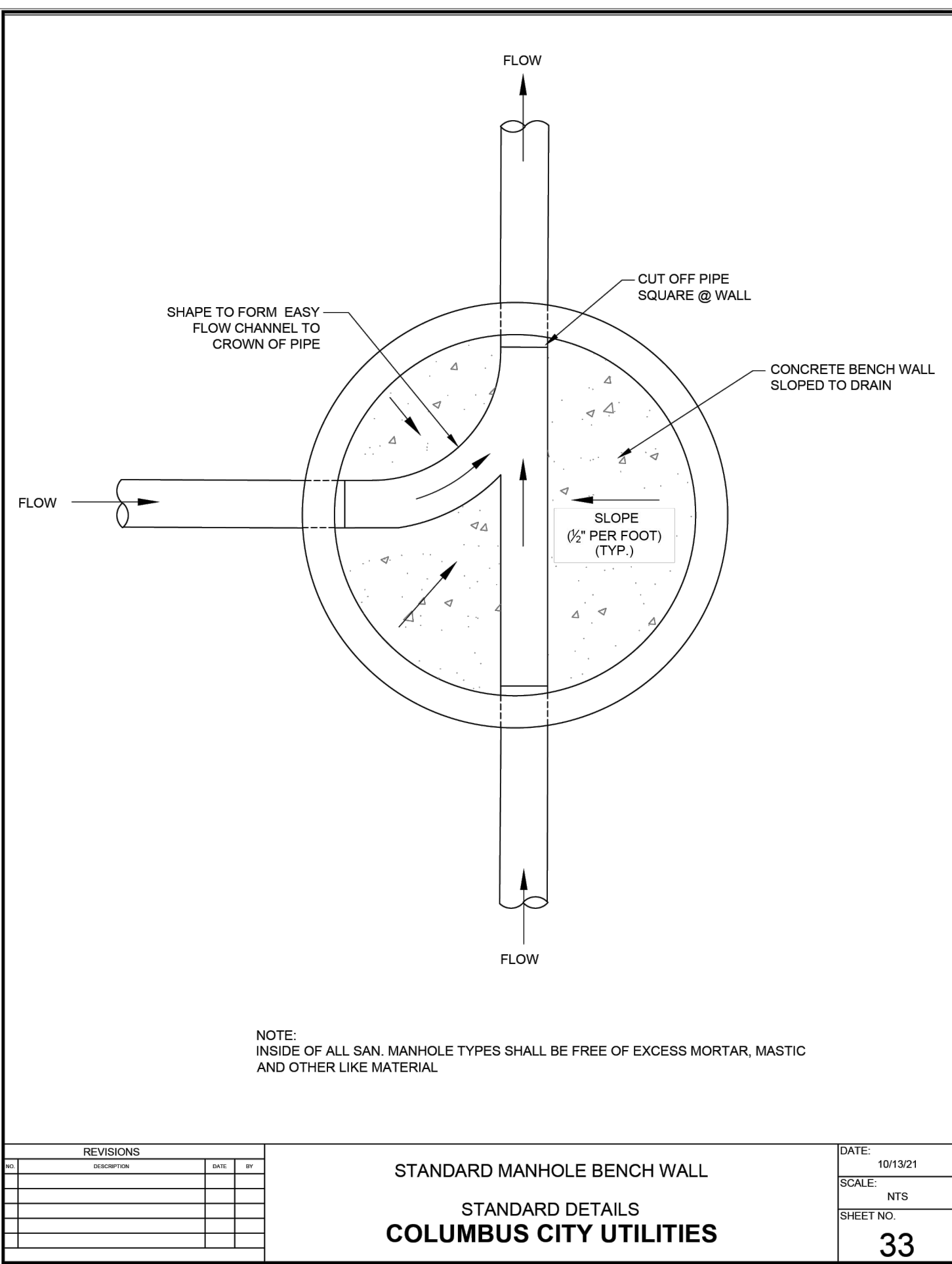
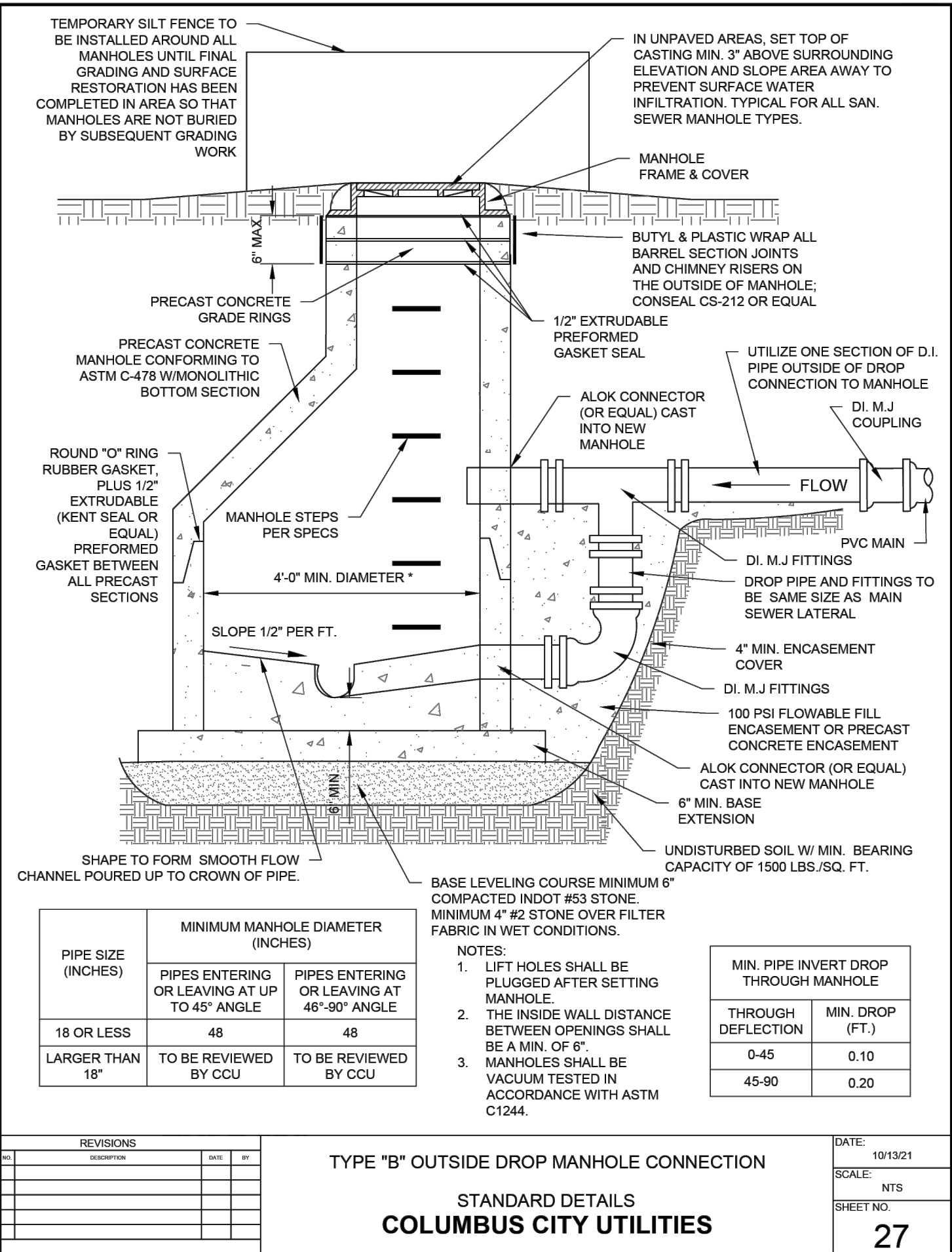
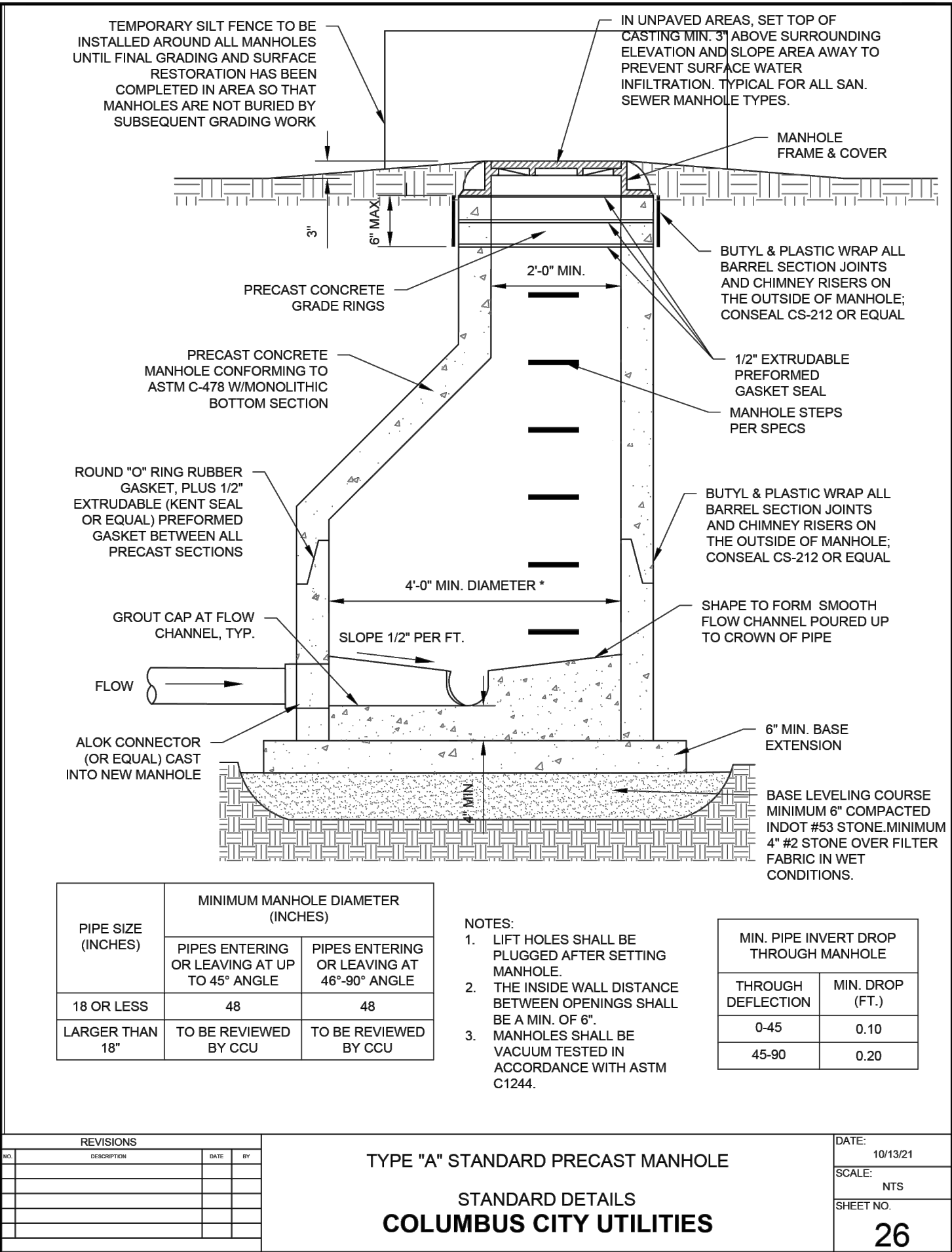
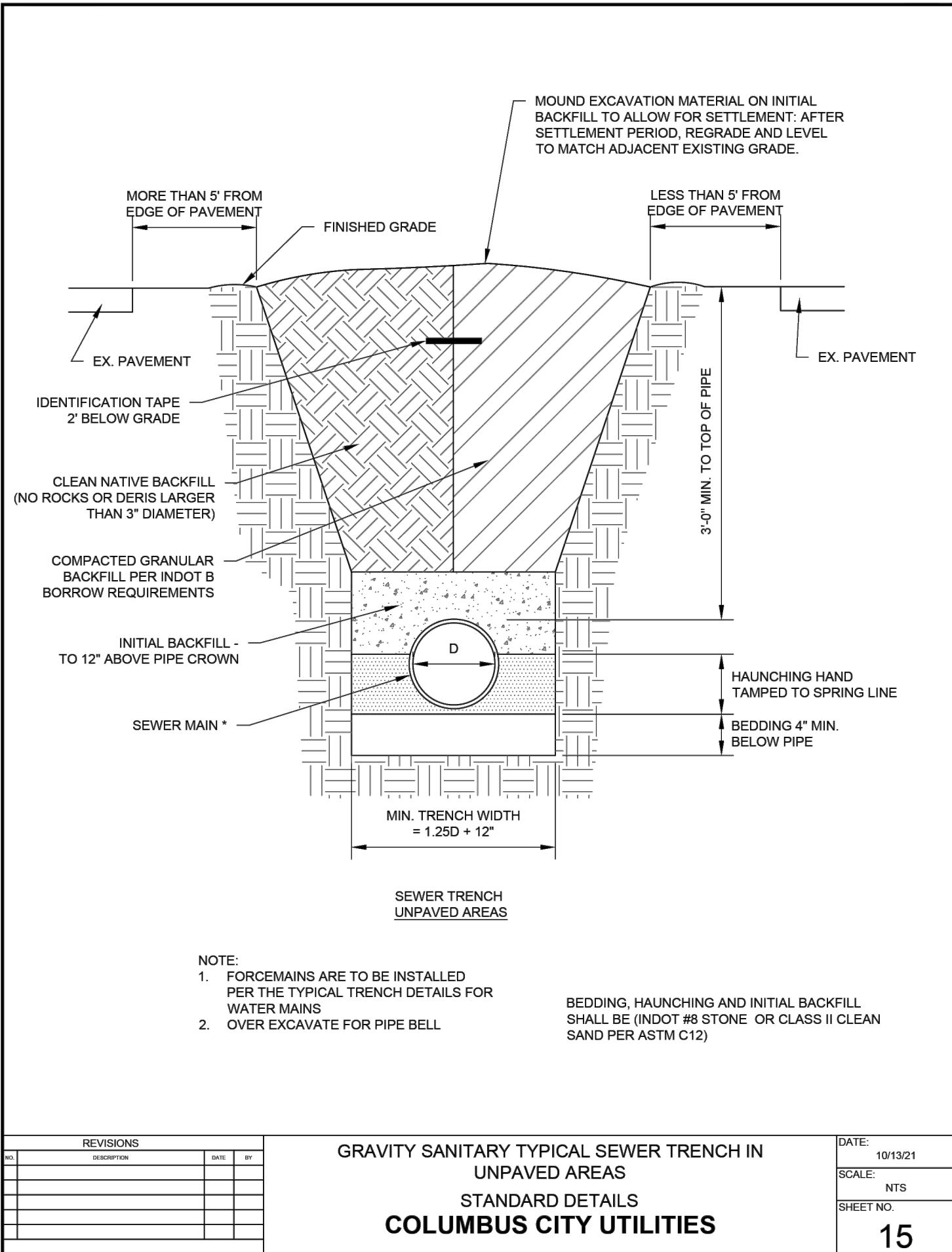
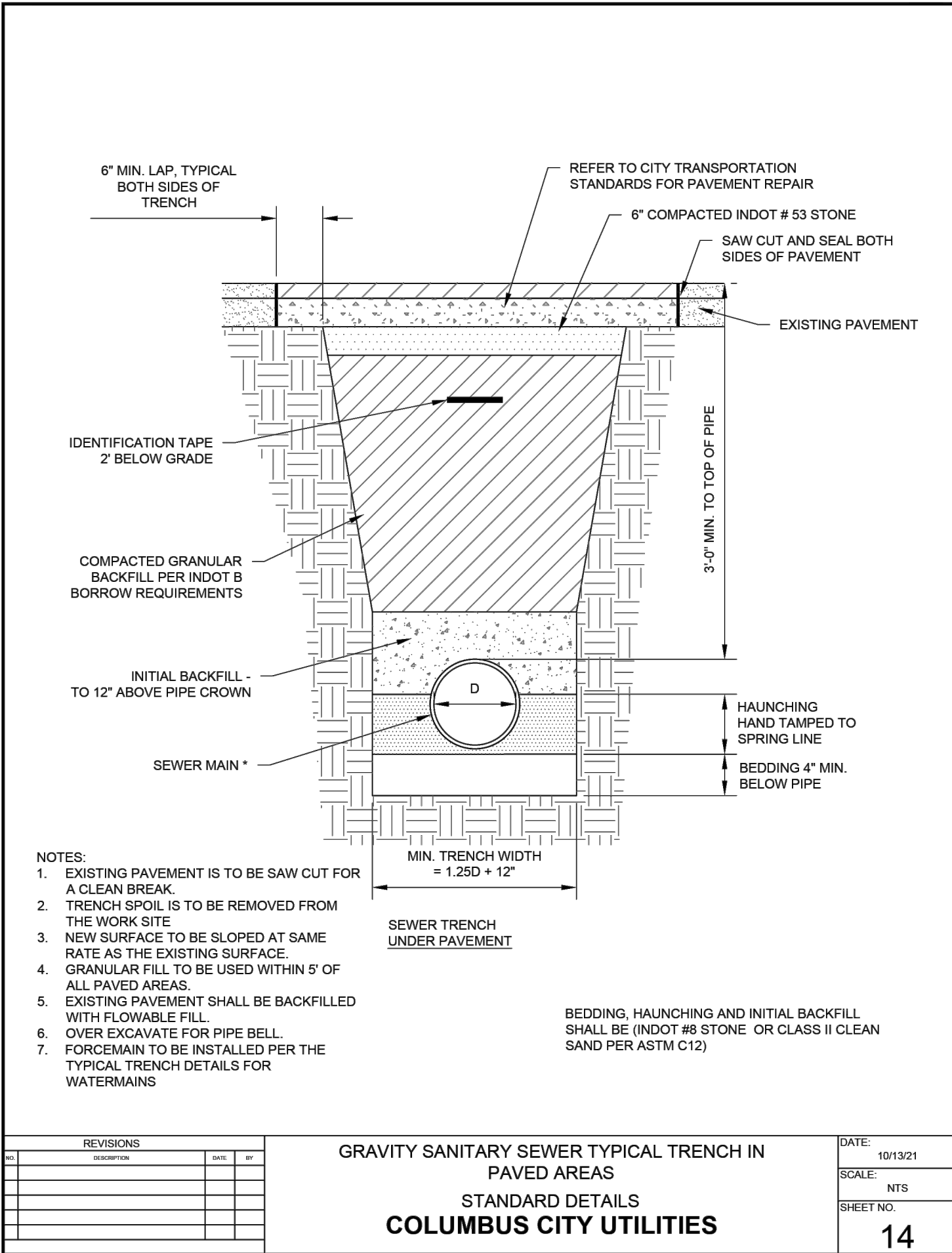
TRAVIS P. GAITHER P.E. #1686939

ARBOR HOMES

SUTTER PLACE - SECTION 1
 ARBOR HOMES
 3535 N 200 W, COLUMBUS, IN 47201

GRADING PLAN
 Part of the Subdivision 14 of Section 11 Township 10 North, Range 5 East, Columbus Township, Benton County, Indiana

SHEET NO. **C301**
 PROJECT NO. **W210486-1**



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PROJECT NO.: W210486-1
DWG NAME: C504 Sanitary Details
DESIGNED BY: JAO
DRAWN BY: BMY
CHECKED BY: KCS
DATE: 01/03/2024

DATE: 01/03/2024

REVISIONS AND ISSUES

REGISTERED PROFESSIONAL ENGINEER
No. 10809039
STATE OF INDIANA

TRAVIS P. GAITHER
TRAVIS P. GAITHER P.E. #10809039

ARBOR HOMES

SUTTER PLACE - SECTION 1
ARBOR HOMES
3535 N 200 W, COLUMBUS, IN 47201

SANITARY SEWER DETAILS & SPECIFICATIONS
Part of the Sutterwest 1st of Section 11 Township 9 North, Range 5 East, Columbus Township, Bartholomew County, Indiana

SHEET NO. **C504**
PROJECT NO. W210486-1

LOCATION: I:\2021\W210486\Section 1 - Engineering\dwg\C504 Sanitary Details.dwg
DATE PLOTTED: December 29, 2023 - 11:21am
PLOTTER: HP DesignJet 500



Photograph 3 - Wetland A, Data Point 1 facing south.



Photograph 4 - Wetland A, Data Point 1 facing west.



Photograph 5 - Upland Data Point 2 facing north. Wetland A to east.



Photograph 6 - Upland Data Point 2 facing east. Wetland A in foreground.