

- SITE IMPROVEMENT PLANS FOR -
BREMLEE ESTATES
SUBDIVISION
DUBLIN, FRANKLIN COUNTY OHIO
2022

PROJECT SUMMARY:

TOTAL ACRES: 4.663 AC
NUMBER OF LOTS: 4
RIGHT-OF-WAY: 0.233 AC
OPEN SPACE: 0.499 AC
ZONING: R-2 LIMITED SUBURBAN RESIDENTIAL

PROJECT EARTH DISTURBED AREA: 4.08 AC

DESIGN DESIGNATION DATA:

DESIGN SPEED: 25 MPH
LEGAL SPEED: 25 MPH
DESIGN FUNCTIONAL CLASSIFICATION: LOCAL
DESIGN EXCEPTION: NONE

FLOOD DESIGNATION:

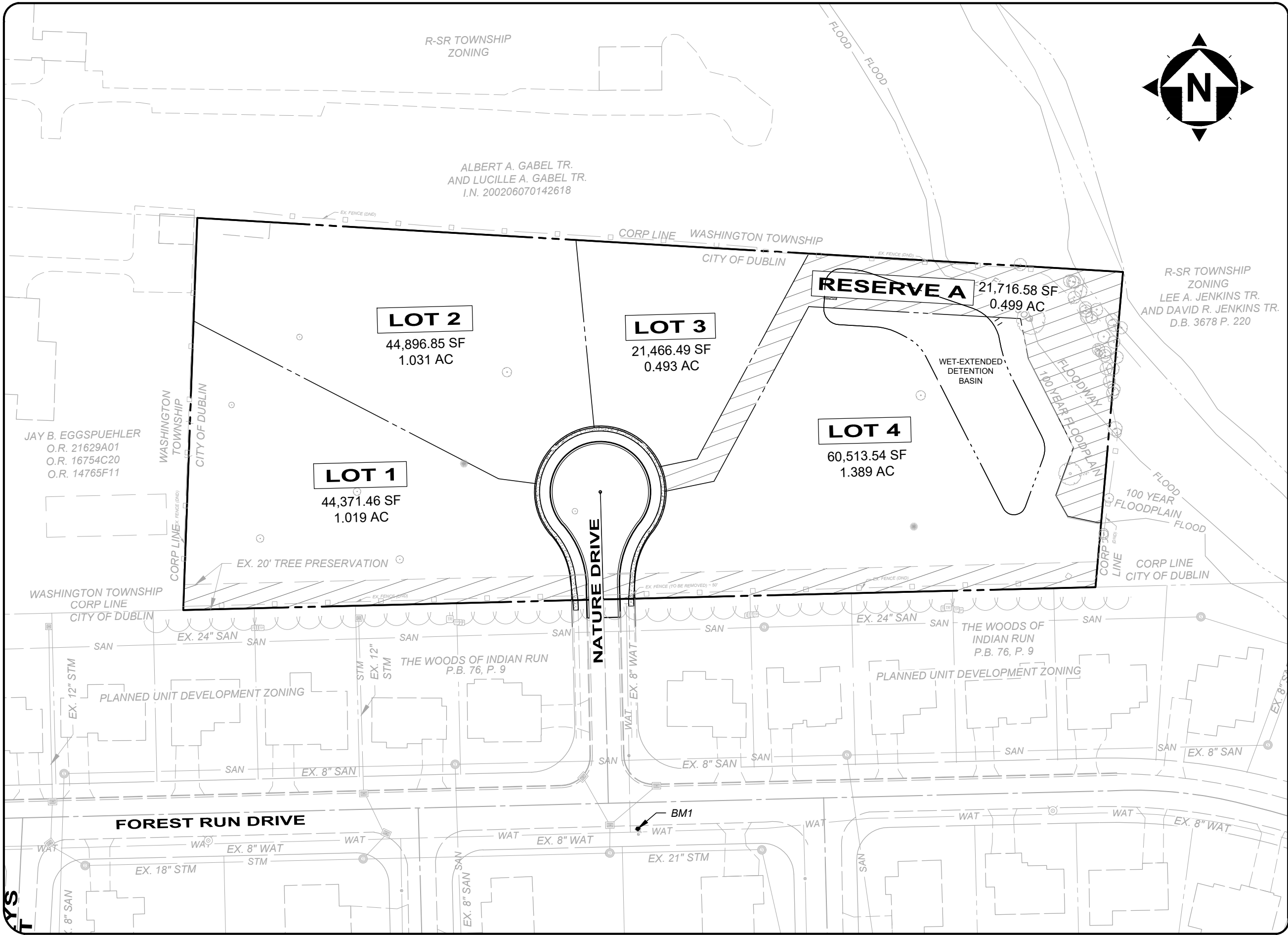
THE SUBJECT PROPERTY LIES IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN) AND ZONE AE AS DETERMINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. THIS AREA IS SHOWN ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 39049C0132K.

UNDERGROUND UTILITIES:

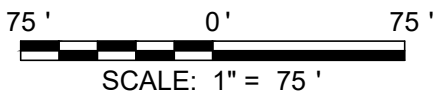
UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD MARKINGS (BY OTHERS) AND AVAILABLE RECORDS, AND AS SUCH, SHOULD BE FIELD VERIFIED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.

BENCH MARKS (NAVD 1988)		
NO.	DESCRIPTION	ELEV
BM1	ARROW BOLT ON FIRE HYDRANT AT SOUTHEAST CORNER OF INTERSECTION OF FOREST RUN DRIVE AND NATURE DRIVE. NORTHING: 770656.4650 EASTING: 1792391.8980	885.09
SOURCE OF TOPOGRAPHY: TOPOGRAPHIC SURVEY WAS PERFORMED BY CT CONSULTANTS, DECEMBER 2021, FOR CITY OF DUBLIN, FRANKLIN COUNTY, OHIO.		

CHANGE ORDER SCHEDULE					
CHANGE	BY	DESC.	SHT	APPR.	DATE

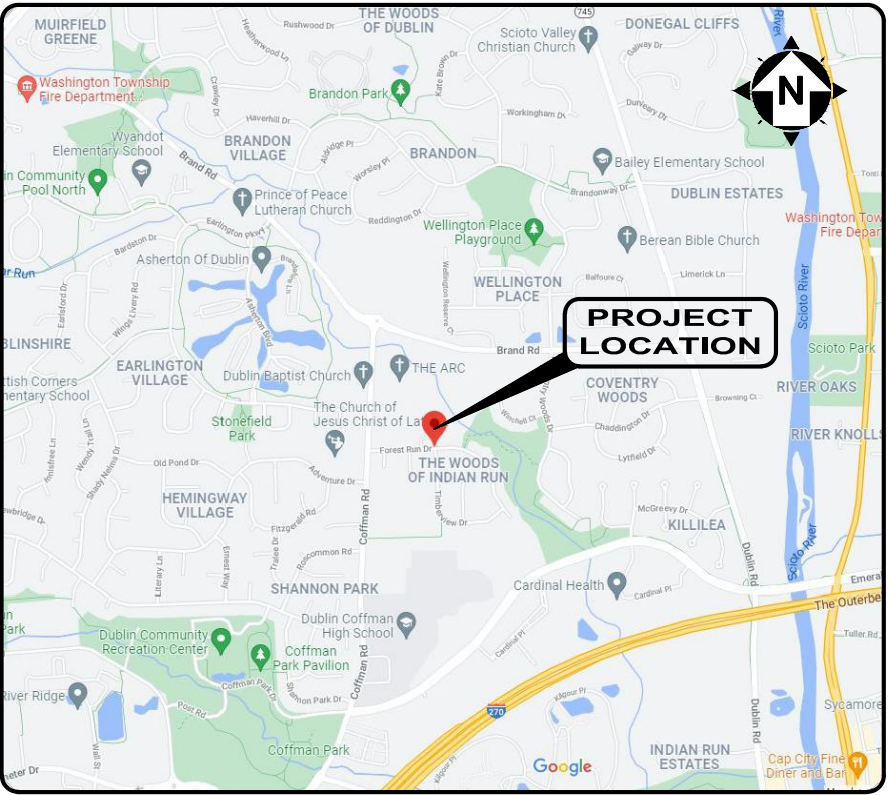


INDEX MAP



LIST OF DRAWINGS	
1	COVER SHEET
2	GENERAL NOTES
3	LEGEND & QUANTITIES
4	CONSTRUCTION DETAILS
5	EXISTING CONDITIONS PLAN
6	SITE & UTILITY PLAN
7	GRADING PLAN
8	GRADING DETAILS
9	STORM SEWER PROFILES
10	STORM BASIN DETAILS
11	SANITARY SEWER & WATERLINE PROFILES
12-13	SWP3 NOTES & DETAILS
14	SWP3 PLAN

STANDARD DRAWINGS					
THE CURRENT STANDARD CONSTRUCTION DRAWINGS FOR EACH MUNICIPALITY OR UTILITY LISTED BELOW SHALL BE CONSIDERED AS PART OF THIS SET THEREOF.					
DUBLIN		CITY OF COLUMBUS			
MD-02	SA-01	AA-S102	AA-S133A	L-6306	L-6637A
MD-05	SA-02	AA-S106	AA-S133B	L-6309A	L-6640
RD-01	SA-03	AA-S107	AA-S139	L-6309E	L-7102C
RD-02	ST-01	AA-S108	AA-S149	L-6310	L-9901
RD-03	ST-03	AA-S110	AA-S150	L-6311	
RD-05	ST-04	AA-S117	AA-S151	L-6312	
RD-07	ST-05	AA-S119	AA-S166	L-6316A	
RD-09	ST-06	AA-S125A	AA-S168	L-6320	
RD-10	WA-01	AA-S128	L-1001	L-6409B	



LOCATION MAP
NTS

OWNER/DEVELOPER:

T&R PROPERTIES
3895 STONERIDGE LANE
DUBLIN, OH 43017
PHONE: 614-923-4000

CONTACT: RON SABATINO
EMAIL: RSABATINO@TRPROP.COM

ENGINEER:

CT CONSULTANTS, INC.
NORTHWOODS 1
7965 NORTH HIGH ST., SUITE 340
COLUMBUS, OHIO 43235
PHONE: 614-885-1700
FAX: 614-885-1701

CONTACT: JOHN MAAR, PE
EMAIL: JMAAR@CTCONSULTANTS.COM

SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSES AND GENERAL LOCATION OF THE PROJECT AND DOES NOT CONSTITUTE ASSURANCE TO OPERATE AS INTENDED. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL CIVIL ENGINEER PREPARING THE PLANS.

APPROVED:

DIRECTOR OF ENGINEERING/CITY ENGINEER
CITY OF DUBLIN, OHIO
PAUL A. HAMMERSMITH, P.E.

DATE

NOTE: APPROVAL ON THE PART OF THE CITY OF COLUMBUS IS GIVEN PURSUANT TO THE PROVISIONS OF THE SEWER (AND/OR WATER) SERVICE AGREEMENT WITH THE CITY OF DUBLIN, OHIO DATED APRIL 13, 1993.

DIRECTOR, DEPARTMENT OF PUBLIC UTILITIES
CITY OF COLUMBUS, OHIO

DATE

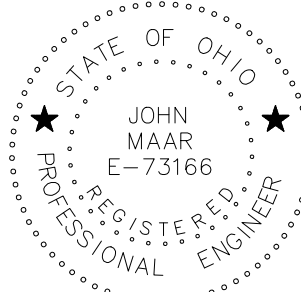
ADMINISTRATOR, DIVISION OF SEWERAGE AND DRAINAGE (AND/OR WATER)
CITY OF COLUMBUS, OHIO

DATE

DESIGN ENGINEER:

THIS IS TO CERTIFY THAT GOOD ENGINEERING PRACTICES HAVE BEEN UTILIZED IN THE DESIGN OF THIS PROJECT AND IN OUR OPINION AND TO THE BEST OF OUR KNOWLEDGE THAT ALL MINIMUM STANDARDS AS DELINEATED IN THE DELAWARE COUNTY ENGINEERING AND SURVEYING STANDARDS FOR "SUBDIVISION DEVELOPMENT" HAVE BEEN MET, INCLUDING THOSE STANDARDS GREATER THAN MINIMUM WHERE, IN OUR OPINION, THEY ARE NEEDED TO PROTECT THE SAFETY OF THE PUBLIC.

03/11/2022
DATE



BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -

COVER SHEET

PROJECT NO.	
210661	
DISCIPLINE	
CIVIL	
SHEET NAME	
CVR-SHT	
SHEET	OF
1	14

GENERAL NOTES:

1.

CITY OF COLUMBUS AND OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT EDITIONS, AND ANY SUPPLEMENTS THERETO (HEREAFTER REFERRED TO AS STANDARD SPECIFICATIONS), SHALL GOVERN ALL CONSTRUCTION ITEMS UNLESS OTHERWISE NOTED. IF A CONFLICT BETWEEN SPECIFICATIONS IS FOUND, THE MORE STRICT SPECIFICATION WILL APPLY AS DECIDED BY THE CITY ENGINEER. ITEM NUMBERS LISTED REFER TO CITY OF COLUMBUS ITEM NUMBERS UNLESS OTHERWISE NOTED.
2.

THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF CONSTRUCTION THAT ARE NOT SPECIFIED HEREIN. THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR SAFETY ON THE WORK SITE, OR FOR FAILURE BY THE CONTRACTOR TO PERFORM WORK ACCORDING TO CONTRACT DOCUMENTS.
3.

THE DEVELOPER OR CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS INCLUDING BUT NOT LIMITED TO OHIO EPA PERMITS TO INSTALL (PTI) AND NOTICES OF INTENT (NOI), BUILDING PERMITS, ETC.
4.

THE CONTRACTOR SHALL NOTIFY THE CITY OF DUBLIN DIVISION OF ENGINEERING IN WRITING AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.
5.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. THE CONTRACTOR SHALL EXERCISE PRECAUTION ALWAYS FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146.
6.

FOLLOWING COMPLETION OF CONSTRUCTION OF THE SITE IMPROVEMENTS AND BEFORE REQUESTING OCCUPANCY, A PROOF SURVEY SHALL BE PROVIDED TO THE DIVISION OF ENGINEERING THAT DOCUMENTS "AS BUILT" ELEVATIONS, DIMENSIONS, SLOPES AND ALIGNMENTS OF ALL ELEMENTS OF THIS PROJECT. THE PROOF SURVEY SHALL BE PREPARED, SIGNED AND SUBMITTED BY THE PROFESSIONAL ENGINEER WHO SEALED THE CONSTRUCTIONS DRAWINGS.
7.

THE CONTRACTOR SHALL RESTRICT CONSTRUCTION ACTIVITY TO PUBLIC RIGHT-OF-WAY AND AREAS DEFINED AS PERMANENT AND/OR TEMPORARY CONSTRUCTION EASEMENTS, UNLESS OTHERWISE AUTHORIZED BY THE CITY ENGINEER.
8.

THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, STAKES AND OTHER SURVEY REFERENCE MONUMENTS OR MARKERS. IN CASES OF WILLFUL OR CARELESS DESTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATIONS. RESETTING OF MARKERS SHALL BE PERFORMED BY AN OHIO PROFESSIONAL SURVEYOR AS APPROVED BY THE CITY ENGINEER.
9.

NON-RUBBER TIRED VEHICLES SHALL NOT BE MOVED ON OR ACROSS PUBLIC STREETS OR HIGHWAYS WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER.
10.

THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED BEFORE CONSTRUCTION. DRAINAGE DITCHES OR WATERCOURSES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THE GRADES AND CROSS SECTIONS THAT EXISTED BEFORE CONSTRUCTION.
11.

TRACKING OR SPILLING MUD, DIRT OR DEBRIS UPON STREETS, RESIDENTIAL OR COMMERCIAL DRIVES, SIDEWALKS OR BIKE PATHS IS PROHIBITED ACCORDING TO SECTION 97.38 OF THE DUBLIN CODE OF ORDINANCES. ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE CITY. IF THE CONTRACTOR FAILS TO REMOVE SAID MUD, DIRT, DEBRIS, OR SPILLAGE, THE CITY RESERVES THE RIGHT TO REMOVE THESE MATERIALS AND CLEAN AFFECTED AREAS, THE COST OF WHICH SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
12.

DISPOSAL OF EXCESS EXCAVATION WITHIN SPECIAL FLOOD HAZARD AREAS (100-YEAR FLOODPLAIN) IS NOT PERMITTED.
13.

ALL SIGNS, LANDSCAPING, STRUCTURES OR OTHER APPURTENANCES WITHIN RIGHT-OF-WAY DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER. THE COST OF THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
14.

ALL FIELD TILE BROKEN OR ENCOUNTERED DURING EXCAVATION SHALL BE REPLACED OR REPAIRED AND CONNECTED TO THE PUBLIC STORM SEWER SYSTEM AS DIRECTED BY THE CITY ENGINEER. THE COST OF THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
15.

ALL PRECAST CONCRETE PRODUCTS SHALL BE INSPECTED AT THE LOCATION OF MANUFACTURE. APPROVED PRECAST CONCRETE PRODUCTS WILL BE STAMPED OR HAVE SUCH IDENTIFICATION NOTING THAT INSPECTION HAS BEEN CONDUCTED BY THE CITY OF COLUMBUS. PRECAST CONCRETE PRODUCTS WITHOUT PROOF OF INSPECTION SHALL NOT BE APPROVED FOR INSTALLATION.
16.

BACKFILL WITHIN A 1:1 INFLUENCE LINE OF EXISTING STRUCTURES (HOUSES, GARAGES, ETC.) OR PUBLIC INFRASTRUCTURE (PAVEMENT, CURBS, SIDEWALKS, BIKE PATHS, ETC.) SHALL BE COMPACTED GRANULAR BACKFILL ACCORDING TO ITEM 912 OF THE STANDARD SPECIFICATIONS OR FLOWABLE CDF, TYPE II ACCORDING TO ITEM 613. ITEM 911 OF THE STANDARD SPECIFICATIONS SHALL BE USED ELSEWHERE.
17.

THE CONTRACTOR SHALL SUBMIT A COPY OF THE APPROVED CONSTRUCTION DRAWINGS AND A LIST OF PROPOSED PRECAST CONCRETE PRODUCT MANUFACTURERS TO THE CITY OF COLUMBUS CONSTRUCTION INSPECTION DIVISION BEFORE COMMENCING CONSTRUCTION.

SEND THE INFORMATION TO THE FOLLOWING ADDRESS:

CONSTRUCTION INSPECTION DIVISION
CITY OF COLUMBUS
1800 EAST 17TH AVENUE
COLUMBUS, OHIO 43219

SEND A COPY OF THE TRANSMITTAL LETTER TO THE FOLLOWING ADDRESS:

DIVISION OF ENGINEERING
CITY OF DUBLIN
6555 SHIER RINGS ROAD
DUBLIN, OHIO 43016

18.

ALL TRENCHES WITHIN PUBLIC RIGHT-OF-WAY SHALL BE BACKFILLED ACCORDING TO THE APPROVED CONSTRUCTION DRAWINGS OR SECURELY PLATED DURING NONWORKING HOURS. TRENCHES OUTSIDE THESE AREAS SHALL BE BACKFILLED OR SHALL BE PROTECTED BY APPROVED TEMPORARY FENCING OR BARRICADES DURING NONWORKING HOURS. CLEAN UP SHALL FOLLOW CLOSELY BEHIND THE TRENCHING OPERATION.
19.

ALL TREES WITHIN THE CONSTRUCTION AREA NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PRESERVED, WHETHER SHOWN OR NOT SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS. TREES TO BE PRESERVED SHALL BE PROTECTED WITH HIGH VISIBILITY FENCING PLACED A MINIMUM 15 FEET FROM THE TREE TRUNK. TREES 6 - INCHES OR GREATER AT DBH (DIAMETER BREAST HEIGHT) MUST BE PROTECTED WITH FENCING PLACED AT THE CRITICAL ROOT ZONE OR 15 FEET, WHICHEVER IS GREATER. TREES NOT INDICATED ON THE APPROVED CONSTRUCTION DRAWINGS FOR REMOVAL MAY NOT BE REMOVED WITHOUT PRIOR APPROVAL OF THE DIVISION OF ENGINEERING.
20.

CONDUIT MUST BE DIRECTIONALLY BORED ACROSS STREETS INSTEAD OF OPEN CUT, UNLESS SPECIFICALLY APPROVED BY THE CITY ENGINEER. USE OF PNEUMATIC AIR RAM DEVICES IS NOT PERMITTED. PERMITS TO CONSTRUCT IN THE RIGHT-OF-WAY OF EXISTING STREETS MUST BE OBTAINED FROM THE CITY OF DUBLIN DIVISION OF ENGINEERING BEFORE COMMENCING CONSTRUCTION. SHOULD OPEN CUTTING OF EXISTING PAVEMENT BE PERMITTED, CONTROLLED DENSITY BACKFILL (TYPE II) SHALL BE USED IN PLACE OF COMPACTED GRANULAR BACKFILL, ACCORDING TO ITEM 613 OF THE STANDARD SPECIFICATIONS.
21.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF TRENCHES WITHIN THE RIGHT-OF-WAY AND PUBLIC EASEMENTS FOR A PERIOD OF ONE YEAR FROM THE FINAL ACCEPTANCE OF THE WORK, AND SHALL MAKE ANY NECESSARY REPAIRS AT NO COST TO THE CITY.
22.

PAVEMENTS SHALL BE CUT IN NEAT, STRAIGHT LINES THE FULL DEPTH OF THE EXISTING PAVEMENT, OR AS REQUIRED BY THE CITY ENGINEER. PAVEMENT REPLACEMENT SHALL BE CONDUCTED ACCORDING TO CITY OF COLUMBUS STANDARD DRAWING 1441 DR. A AND APPLICABLE CITY OF DUBLIN STANDARD DRAWINGS. THE REPLACEMENT OF DRIVEWAYS, HANDICAPPED RAMPS, SIDEWALKS, BIKE PATHS, PARKING LOT PAVEMENT, ETC. SHALL BE PROVIDED ACCORDING TO THE APPROVED CONSTRUCTION DRAWINGS AND CITY OF DUBLIN STANDARD CONSTRUCTION DRAWINGS.
23.

TREE TRIMMING WITHIN THE CONSTRUCTION ZONE IS TO BE COMPLETED BY A CERTIFIED ARBORIST. AT THE COMPLETION OF THE PROJECT, THE ARBORIST IS TO RETURN AND TRIM ANY BROKEN BRANCHES AS NEEDED.
24.

ANY MODIFICATION TO THE WORK SHOWN ON DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER, CITY OF DUBLIN.
25.

ALL INLETS SHALL BE CHANNELIZED.
26.

PARK AREAS SHALL BE FINE_GRADED AND SEEDED WITH THE FOLLOWING MIXTURE:

IMPROVED KENTUCKY BLUEGRASS: 40% OF WEIGHT (2 VARIETIES IN EQUAL PARTS)
IMPROVED PERENNIAL RYE: 60% OF WEIGHT (2 VARIETIES IN EQUAL PARTS)
GERMINATION RATE: 85%
APPLICATION RATE: 7 LBS PER 1000 SQ FT OR AS DIRECTED BY THE DIVISION OF PARKS AND RECREATION, CITY OF DUBLIN, OHIO.
27.

TRAFFIC CONTROL AND OTHER REGULATORY SIGNS SHALL BE TYPE S WITH A SQUARE POST ANCHOR BASE INSTALLATION AND MEET ALL REQUIREMENTS OF ODOT TC-41.20 AND APPLICABLE CITY OF DUBLIN SPECIFICATIONS.
28.

STREET SIGNS SHALL MEET ALL CITY OF DUBLIN SPECIFICATIONS WITH LETTERING COLORED IN WHITE DISPLAYED OVER A BROWN BACKGROUND. SIGN TUBING SHALL BE BROWN IN COLOR AND CONFORM WITH THE TYPE S, SQUARE POST ANCHOR BASE INSTALLATION REQUIREMENTS OF ODOT TC-41.20.

UTILITIES

1.

THE FOLLOWING UTILITIES ARE KNOWN TO BE LOCATED WITHIN THE LIMITS OF THIS PROJECT:

(INSERT NAME OF UTILITY)
(INSERT NAME OF UTILITY)

2.

THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO OHIO UTILITIES PROTECTION SERVICE (TELEPHONE NUMBER 800_362_2764), PRODUCERS UNDERGROUND PROTECTION SERVICE (TELEPHONE NUMBER 614_587_0486), AND TO OWNERS OF UNDERGROUND UTILITIES THAT ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE. NOTICE SHALL BE GIVEN AT LEAST 2 WORKING DAYS BEFORE START OF CONSTRUCTION.
3.

THE IDENTITY AND LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE CITY OF DUBLIN AND THE CITY ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR DEPTHS OF UNDERGROUND FACILITIES SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS. IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF THE SAME AND FOR ANY RESULTING CONTINGENT DAMAGE.

4.

LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES, WHETHER SHOWN OR NOT SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5.

WHEN UNKNOWN OR INCORRECTLY LOCATED UNDERGROUND UTILITIES ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE CITY ENGINEER.
6.

PUBLIC STREET LIGHTING MAY BE IN THE VICINITY OF THIS PROJECT. CONTACT THE CITY OF DUBLIN, DIVISION OF ENGINEERING AT 410-4637, TWO DAYS PRIOR TO BEGINNING WORK.

TRAFFIC CONTROL

1.

TRAFFIC CONTROL SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR ACCORDING TO OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), CURRENT EDITION.

2.

ALL TRAFFIC LANES OF PUBLIC ROADWAYS SHALL BE FULLY OPEN TO TRAFFIC FROM 7:00 AM TO 9:00 AM AND FROM 4:00 PM TO 6:00 PM UNLESS AUTHORIZED DIFFERENTLY BY THE CITY ENGINEER. AT ALL OTHER HOURS THE CONTRACTOR SHALL MAINTAIN MINIMUM ONE_LANE TWO_WAY TRAFFIC, UNIFORMED, OFF-DUTY POLICE OFFICERS SHALL REPLACE FLAGMEN DESIGNATED BY THE OMUTCD, AND SHALL BE PRESENT WHENEVER ONE_LANE TWO_WAY TRAFFIC CONTROL IS IN EFFECT. POLICE CRUISERS MAY BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.
3.

IF THE CITY ENGINEER DETERMINES THAT THE CONTRACTOR IS NOT PROVIDING PROPER PROVISIONS FOR TRAFFIC CONTROL, THE CITY ENGINEER SHALL ASSIGN UNIFORMED, OFF_DUTY POLICE OFFICERS TO THE PROJECT AT NO COST TO THE CITY.
4.

STEADY_BURNING, TYPE "C" LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS, AND SIMILAR TRAFFIC CONTROL DEVICES IN USE AT NIGHT.
5.

ACCESS FROM PUBLIC ROADWAYS TO ALL ADJOINING PROPERTIES FOR EXISTING RESIDENTS OR BUSINESSES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT FOR MAIL, PASSENGER WATER AND SANITARY SEWER SERVICE, AND EMERGENCY VEHICLES. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN DETAILING THE PROPOSED MAINTENANCE OF TRAFFIC PROCEDURES. THE TRAFFIC CONTROL PLAN MUST INCORPORATE ANY TRAFFIC CONTROL DETAILS CONTAINED HEREIN. THE TRAFFIC CONTROL PLAN PROPOSED BY THE CONTRACTOR MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

EROSION AND SEDIMENT CONTROL

1.

THE CONTRACTOR OR DEVELOPER IS RESPONSIBLE FOR SUBMITTING A NOTICE OF INTENT (NOI) TO BE REVIEWED AND APPROVED BY THE OHIO EPA. THE NOI MUST BE SUBMITTED TO OEPA 45 DAYS PRIOR TO THE START OF CONSTRUCTION AND MAY ENTITLE COVERAGE UNDER THE OHIO EPA GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY. A PROJECT LOCATION MAP MUST BE SUBMITTED WITH THE NOI. A SEDIMENT AND EROSION CONTROL PLAN MUST BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL IF A SEDIMENT AND EROSION CONTROL PLAN HAS NOT ALREADY BEEN INCLUDED WITH THE APPROVED CONSTRUCTION DRAWINGS. THIS PLAN MUST BE MADE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE DESIGN OF EROSION CONTROL SYSTEMS SHALL FOLLOW THE REQUIREMENTS OF OHIO EPA, ITEM 207 OF OHIO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND THE CITY ENGINEER. AN INDIVIDUAL NPDES STORMWATER DISCHARGE PERMIT MAY BE REQUIRED. THE CONTRACTOR SHALL BE CONSIDERED THE PERMITEE.
2.

THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL AT ALL POINTS WHERE STORM WATER RUNOFF LEAVES THE PROJECT, INCLUDING WATERWAYS, OVERLAND SHEET FLOW, AND STORM SEWERS.
3.

ACCEPTED METHODS OF PROVIDING EROSION/SEDIMENT CONTROL INCLUDE BUT ARE NOT LIMITED TO: SEDIMENT BASINS, SILT FILTER FENCE, AGGREGATE CHECK DAMS, AND TEMPORARY GROUND COVER. HAY OR STRAW BALES ARE NOT PERMITTED.
4.

THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE OF THE WORK AREA AT ALL TIMES CONSISTENT WITH EROSION CONTROL PRACTICES.
5.

DISTURBED AREAS THAT WILL REMAIN UNWORKED FOR 30 DAYS OR MORE SHALL BE SEEDED OR PROTECTED WITHIN SEVEN CALENDAR DAYS OF THE DISTURBANCE. OTHER SEDIMENT CONTROLS THAT ARE INSTALLED SHALL BE MAINTAINED UNTIL VEGETATIVE GROWTH HAS BEEN ESTABLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY SEDIMENT DEVICES AT THE CONCLUSION OF CONSTRUCTION BUT NOT BEFORE GROWTH OF PERMANENT GROUND COVER.

BLASTING (IF PERMITTED)

1.

THE CONTRACTOR MUST OBTAIN A BLASTING PERMIT FROM WASHINGTON TOWNSHIP FIRE DEPARTMENT PRIOR TO BLASTING FOR ROCK EXCAVATION. THE CONTRACTOR SHALL SUBMIT BLASTING REPORTS UPON COMPLETION OF BLASTING TO THE CITY ENGINEER, THE OWNER, AND THE OWNER'S ENGINEER. TOP OF ROCK ELEVATIONS SHALL BE SHOWN ON "AS_BUILT" CONSTRUCTION DRAWINGS.

SANITARY SEWERS

1.

CONNECTIONS TO THE SANITARY SEWER WILL BE PERMITTED UPON RECEIVING AN OEPA PERMIT TO INSTALL (PTI), AND UPON RECEIVING A SATISFACTORY LETTER FROM THE DESIGN ENGINEER STATING THAT THE PROJECT HAS BEEN CONSTRUCTED AS PER THE PLANS, AND ALL OF THE CONDITIONS OF THE PTI HAVE BEEN MET. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL REQUIRED OHIO EPA APPROVALS AND PAYING REVIEW FEES.
2.

SANITARY SEWER COLLECTION SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES, REGULATIONS, STANDARDS AND SPECIFICATIONS OF THE CITY OF DUBLIN, OHIO EPA, OHIO DEPARTMENT OF HEALTH AND THE CURRENT EDITION OF THE GREAT LAKES-UPPER MISSISSIPPI RIVER BOARD (TEN STATES) - RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES.
3.

THE MINIMUM REQUIREMENTS FOR SANITARY SEWER PIPE WITH DIAMETERS 8 INCHES TO 10 INCHES SHALL BE PVC SEWER PIPE ASTM D3034, SDR 35. PIPE FOR 6 INCH DIAMETER HOUSE SERVICE LINES SHALL BE PVC PIPE ASTM D3034, SDR 35. PVC PIPE SHALL NOT BE USED AT DEPTHS GREATER THAN 28 FEET. PIPE MATERIALS AND RELATED STRUCTURES SHALL BE SHOP TESTED IN ACCORDANCE WITH CITY OF COLUMBUS CONSTRUCTION INSPECTION DIVISION QUALITY CONTROL REQUIREMENTS.
4.

THE MINIMUM REQUIREMENTS FOR SANITARY SEWER PIPES WITH DIAMETERS 12 INCHES TO 30 INCHES SHALL BE PVC SEWER PIPE, ASTM D3034, SDR 35 OR SANITITE HP PIPE, ASTM F2736. SANITARY SEWER PIPES WITH DIAMETERS 30 INCHES TO 60 INCHES SHALL BE PVC SEWER PIPE, ASTM D3034, SDR 35 OR SANITITE HP PIPE, ASTM F2764.
5.

ALL IN LINE WYE AND TEE CONNECTIONS IN CONCRETE SEWERS, 18-INCH DIAMETER AND LARGER, SHALL BE EITHER KOR_N_TEE OR KOR_N_SEAL CONNECTIONS CONFORMING TO THE MANHOLE MANUFACTURER'S RECOMMENDATIONS.
6.

GRANULAR BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL ACCORDING TO ITEM 912 OF THE STANDARD SPECIFICATIONS OR CONTROLLED DENSITY BACKFILL ACCORDING TO ITEM 613, TYPE II OF THE STANDARD SPECIFICATIONS AS DIRECTED BY THE CITY ENGINEER.
7.

ALL MANHOLE LIDS SHALL BE PROVIDED WITH CONTINUOUS SELF-SEALING GASKETS. THE APPROVED CONSTRUCTION DRAWINGS SHALL SHOW WHERE BOLT_DOWN LIDS ARE REQUIRED. SANITARY SEWER MANHOLES SHALL BE PRECAST CONCRETE OR AS APPROVED BY THE CITY ENGINEER AND CONFORM TO THE CITY OF DUBLIN SANITARY MANHOLE STANDARD DRAWING. MANHOLE LIDS SHALL INCLUDE CITY OF DUBLIN LOGO.
8.

ALL PVC SEWER PIPES SHALL BE DEFLECTION TESTED NO LESS THAN 60 DAYS AFTER COMPLETION OF BACKFILLING OPERATIONS. ALL OTHER REQUIREMENTS SHALL BE ACCORDING TO ITEM 901.21 OF THE STANDARD SPECIFICATIONS.
9.

TEMPORARY BULKHEADS SHALL BE PLACED IN PIPES AT LOCATIONS SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS AND SHALL REMAIN IN PLACE UNTIL THE PERMIT TO INSTALL (PTI) HAS BEEN ISSUED BY THE OEPA AND THE SEWERS HAVE BEEN APPROVED FOR USE BY THE CITY ENGINEER. THE COST FOR FURNISHING, INSTALLING, MAINTAINING, AND REMOVING BULKHEADS SHALL BE INCLUDED IN THE CONTRACT UNIT BID PRICE FOR THE VARIOUS SANITARY SEWER ITEMS.
10.

ALL SANITARY SEWERS INCLUDING SANITARY SEWER SERVICE LINES SHALL BE SUBJECTED TO AND PASS INFILTRATION OR EXFILTRATION TESTS ACCORDING TO ITEM 901 OF THE STANDARD SPECIFICATIONS AND MUST BE APPROVED FOR USE BY THE CITY ENGINEER BEFORE ANY SERVICE CONNECTIONS ARE TAPPED INTO SEWERS.
11.

FOR SANITARY SEWER INFILTRATION, LEAKAGE THROUGH JOINTS SHALL NOT EXCEED 100 GALLONS PER INCH OF TRIBUTARY SEWER DIAMETER PER 24 HOURS PER MILE OF LENGTH OR THE COMPUTED EQUIVALENT. ALL SANITARY SEWERS SHALL BE TESTED.
12.

AT THE DETERMINATION OF THE CITY ENGINEER, THE CONTRACTOR MAY BE REQUIRED TO PERFORM A TV INSPECTION OF THE SANITARY SEWER SYSTEM PRIOR TO FINAL ACCEPTANCE BY THE CITY. THIS WORK SHALL BE COMPLETED BY THE CONTRACTOR AT HIS EXPENSE.
13.

VISIBLE LEAKS OR OTHER DEFECTS OBSERVED OR DISCOVERED DURING TV INSPECTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER.
14.

ROOF DRAINS, FOUNDATION DRAINS, FIELD TILE OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE STRICTLY PROHIBITED ACCORDING TO SECTION 51.23 OF THE DUBLIN CODE OF ORDINANCES.
15.

ALL WATER LINES SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY AND 18 INCHES VERTICALLY, FROM SANITARY SEWERS AND STORM SEWERS, TO THE GREATEST EXTENT PRACTICABLE. WHERE SANITARY SEWERS CROSS WATER MAINS OR OTHER SEWERS OR OTHER UTILITIES, TRENCH BACKFILL SHALL BE PLACED BETWEEN THE PIPES CROSSING AND SHALL BE COMPACTED GRANULAR MATERIAL ACCORDING TO ITEM 912 OF THE STANDARD SPECIFICATIONS. IN THE EVENT THAT A WATER LINE MUST CROSS WITHIN 18 INCHES OF A SANITARY SEWER, THE SANITARY SEWER SHALL BE CONCRETE ENCASED OR CONSIST OF DUCTILE IRON PIPE MATERIAL.
16.

SERVICE RISERS SHALL BE INSTALLED WHERE THE DEPTH FROM WYES TO PROPOSED GROUND ELEVATION EXCEEDS 10 FEET. TOPS OF RISERS SHALL BE NO LESS THAN 9 FEET BELOW PROPOSED GROUND ELEVATION IF BASEMENT SERVICE IS INTENDED.
17.

WHERE SERVICE RISERS ARE NOT INSTALLED, A MINIMUM 5 FOOT LENGTH OF SANITARY SEWER SERVICE PIPE OF THE SAME SIZE AS THE WYE OPENING SHALL BE INSTALLED.
18.

THE CONTRACTOR SHALL FURNISH AND PLACE, AS DIRECTED, APPROVED WYE POLES MADE OF 2 INCHES X 2 INCHES LUMBER AT ALL WYE LOCATIONS, ENDS OF EXTENDED SERVICES, OR AT THE END OF EACH RISER WHERE RISERS ARE REQUIRED. WYE POLES SHALL BE VISIBLE BEFORE ACCEPTANCE BY THE CITY. THE COST OF THESE POLES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE VARIOUS SEWER ITEMS.
19.

EXISTING SANITARY SEWER FLOWS SHALL BE MAINTAINED AT ALL TIMES. COSTS FOR PUMPING AND BYPASSING SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE BID FOR THE RELATED ITEMS.
20.

THE CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, AND LABOR TO MAKE CONNECTIONS TO EXISTING MANHOLES. THE SEWER PIPE TO MANHOLE CONNECTIONS FOR ALL SANITARY SEWERS SHALL BE FLEXIBLE AND WATERTIGHT. ALL HOLES SHALL BE NEATLY CORED. THE SEWER PIPE BARREL AT THE SPRINGLINE SHALL NOT EXTEND MORE THAN 1 INCH BEYOND THE INSIDE FACE OF THE MANHOLE. TO MAINTAIN FLEXIBILITY IN THE CONNECTION, A 1_INCH SPACE SHALL BE LEFT BETWEEN THE END OF THE PIPE INSIDE THE MANHOLE AND THE CONCRETE CHANNEL; THE SPACE SHALL BE FILLED WITH A WATERPROOF FLEXIBLE JOINT FILLER. ANY METAL THAT IS USED SHALL BE TYPE 300 SERIES STAINLESS STEEL. THE CONNECTION MAY BE ANY OF THE FOLLOWING TYPES:

- A.

RUBBER SLEEVE WITH STAINLESS STEEL BANDING.
1) KOR-N-SEAL AS MANUFACTURED BY NATIONAL POLLUTION CONTROL SYSTEMS, INC.
2) LOCK JOINT FLEXIBLE MANHOLE SLEEVE AS MANUFACTURED BY INTERPACE CORPORATION.
3) OR EQUAL AS APPROVED BY THE CITY ENGINEER.
- B.

RUBBER GASKET COMPRESSION:
1) PRESS WEDGE II AS MANUFACTURED BY PRESS_SEAL GASKET CORPORATION.
2) DURA SEAL III AS MANUFACTURED BY DURA TECH, INC.
3) LINK_SEAL AS MANUFACTURED BY THUNDERLINE CORPORATION.
4) OR EQUAL AS APPROVED BY THE CITY ENGINEER.

THE COST FOR THIS WORK ALONG WITH A NEW CHANNELIZED BASE FOR THE MANHOLE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RELATED ITEMS OF WORK.

WATER LINE

1.

ALL WATER LINE MATERIALS SHALL BE PROVIDED AND INSTALLED ACCORDING TO CURRENT SPECIFICATIONS OF THE CITY OF COLUMBUS DIVISION OF WATER.
2.

ALL PUBLIC WATER PIPE WITH A DIAMETER 3 INCHES TO 8 INCHES SHALL BE DUCTILE IRON, CLASS 53. PUBLIC WATER PIPE 12 INCHES IN DIAMETER OR LARGER SHALL BE DUCTILE IRON, CLASS 54. PUBLIC WATER PIPE 20 INCHES IN DIAMETER OR LARGER MAY BE PRESTRESSED CONCRETE PIPE. PRIVATE WATER PIPE SHALL MEET THE APPROVAL OF THE CITY OF COLUMBUS DIVISION OF WATER PRIOR TO APPROVAL OF THE CONSTRUCTION DRAWINGS.
3.

ONLY FIRE HYDRANTS CONFORMING TO CITY OF COLUMBUS STANDARDS WILL BE APPROVED FOR USE.

4.

PUBLIC WATER LINES SHALL BE DISINFECTED BY THE CITY OF COLUMBUS DIVISION OF WATER. REQUESTS FOR WATER LINE CHLORINATION SHALL BE MADE THROUGH THE CITY OF DUBLIN DIVISION OF ENGINEERING. THE COST FOR CHLORINATION SHALL BE PAID FOR BY THE CONTRACTOR.
5.

ALL WATER LINES SHALL BE DISINFECTED ACCORDING TO ITEM 801.13 OF THE STANDARD SPECIFICATIONS. SPECIAL ATTENTION IS DIRECTED TO APPLICABLE SECTIONS OF AMERICAN WATER WORKS ASSOCIATION SPECIFICATION C.651, PARTICULARLY FOR FLUSHING (SECTION 5) AND FOR CHLORINATING VALVES AND FIRE HYDRANTS (SECTION 7). PRESSURE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 801.12 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. WHEN WATER LINES ARE READY FOR DISINFECTION, THE CITY OF DUBLIN SHALL SUBMIT TWO (2) SETS OF "AS-BUILT" PLANS, AND A LETTER STATING THAT THE WATER LINES HAVE BEEN PRESSURE TESTED AND NEED TO BE DISINFECTED, TO THE CITY OF COLUMBUS, DIVISION OF WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DISINFECTION OF ALL WATER LINES CONSTRUCTION PER THIS PLAN. PRESSURE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 801.12 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS.
6.

THE CONTRACTOR SHALL PAINT ALL FIRE HYDRANTS ACCORDING TO CITY OF DUBLIN STANDARDS. THE COST OF PAINTING FIRE HYDRANTS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR FIRE HYDRANTS.
7.

NO WATER TAPS OR SERVICE CONNECTIONS (E.G., TO CURB STOPS OR METER PITS) MAY BE ISSUED UNTIL ADJACENT PUBLIC WATER LINES SERVING THE CONSTRUCTION SITE HAVE BEEN DISINFECTED BY THE CITY OF COLUMBUS DIVISION OF WATER AND HAVE BEEN ACCEPTED BY THE CITY ENGINEER. A TAP PERMIT FOR EACH WATER SERVICE MUST BE OBTAINED FROM THE CITY OF DUBLIN AND THE CITY OF COLUMBUS DIVISION OF WATER BEFORE MAKING ANY TAPS INTO PUBLIC WATER LINES.
8.

THE CONTRACTOR SHALL NOTIFY THE CITY OF COLUMBUS DIVISION OF WATER AT 645_7788 AND THE CITY OF DUBLIN DIVISION OF ENGINEERING AT LEAST 24 HOURS BEFORE TAPPING INTO EXISTING WATER LINES.
9.

ALL WATER MAIN STATIONING SHALL BE BASED ON STREET CENTERLINE STATIONING.
10.

ALL BENDS, JOINT DEFLECTIONS AND FITTINGS SHALL BE BACKED WITH CONCRETE PER CITY OF COLUMBUS STANDARDS.
11.

THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO ALL AFFECTED PROPERTY OWNERS AT LEAST 1 WORKING DAY BUT NOT MORE THAN 3 WORKING DAYS PRIOR TO ANY TEMPORARY INTERRUPTION OF WATER SERVICE. INTERRUPTION OF WATER SERVICE SHALL BE MINIMIZED AND MUST BE APPROVED BY THE CITY ENGINEER.
12.

WATER METERS SHALL BE INSTALLED INSIDE PROPOSED STRUCTURES UNLESS A METER PIT INSTALLATION IS APPROVED BY THE CITY OF COLUMBUS DIVISION OF WATER. METER PITS MUST CONFORM TO STANDARD DRAWINGS L-7103, A&B FOR 5/8" THROUGH 1" METERS OR L-6317, A, B, C&D FOR 1-1/2" OR LARGER METERS.
13.

WATER LINES TO BE INSTALLED IN EMBANKMENT AREAS SHALL BE PLACED AFTER THE EMBANKMENT HAS BEEN PLACED AND COMPACTED ACCORDING TO THE STANDARD SPECIFICATIONS.
14.

CURB STOP BOXES SHALL BE LOCATED AT LEAST 1 FOOT INSIDE THE RIGHT_OF_WAY AND SET AT FINISHED GRADE.
15.

IF THE TOP OF THE OPERATING NUT OF ANY VALVE IS GREATER THAN 36 INCHES BELOW FINISHED GRADE, AN EXTENSION STEM SHALL BE FURNISHED TO BRING THE TOP OF THE OPERATING NUT TO WITHIN 24 INCHES OF FINISHED GRADE ELEVATION.
16.

ALL WATER LINES SHALL BE PLACED AT A MINIMUM DEPTH OF 4 FEET MEASURED FROM TOP OF FINISHED GRADE TO TOP OF WATER LINE. WATER LINES SHALL BE SET DEEPER AT ALL POINTS WHERE NECESSARY TO CLEAR EXISTING OR PROPOSED UTILITY LINES OR OTHER UNDERGROUND RESTRICTIONS BY A MINIMUM OF 18 INCHES.
17.

TWO ¼ INCH TAPS SHALL BE INSTALLED WITHIN 2 FEET OF THE END OF THE LINE ON ALL DEAD-END WATER LINES.

STORM SEWER

1.

ALL STORM WATER DETENTION AND RETENTION AREAS AND MAJOR FLOOD ROUTING SWALES SHALL BE CONSTRUCTED TO FINISH GRADE AND HYDRO_SEEDED AND HYDRO_MULCHED ACCORDING TO ITEMS 203 AND 859 OF THE STANDARD SPECIFICATIONS.
2.

WHERE PRIVATE STORM SEWERS CONNECT TO PUBLIC STORM SEWERS, THE LAST RUN OF PRIVATE STORM SEWER CONNECTING TO THE PUBLIC STORM SEWER SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM DESIGNATION C76, WALL B, CLASS IV FOR PIPE DIAMETERS 12 INCHES TO 15 INCHES, CLASS III FOR 18 INCHES TO 24 INCH PIPES, AND 27 INCHES AND LARGER PIPE SHALL BE CLASS II, UNLESS OTHERWISE SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS. INSPECTION IS REQUIRED BY THE CITY OF DUBLIN'S DIVISION OF ENGINEERING.
3.

GRANULAR BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL ACCORDING TO ITEM 912 OF THE STANDARD SPECIFICATIONS OR CONTROLLED DENSITY BACKFILL ACCORDING TO ITEM 613, TYPE II OF THE STANDARD SPECIFICATIONS AS DIRECTED BY THE CITY ENGINEER.
4.

ALL STORM SEWERS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM DESIGNATION C76, WALL B, CLASS IV FOR PIPE DIAMETERS 12 INCHES TO 15 INCHES, CLASS III FOR 18 INCHES TO 24 INCH PIPES, AND 27 INCHES AND LARGER PIPE SHALL BE CLASS II, UNLESS OTHERWISE SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS.
5.

HEADWALLS SHALL BE REQUIRED AT ALL STORM SEWER INLETS OR OUTLETS TO AND FROM STORMWATER MANAGEMENT FACILITIES. NATURAL STONE AND/OR BRICK APPROVED BY THE CITY ENGINEER SHALL BE PROVIDED ON ALL VISIBLE HEADWALLS SURFACES.
6.

STORM INLETS OR CATCH BASINS SHALL BE CHANNELIZED AND HAVE BICYCLE SAFE GRATES. MANHOLE LIDS SHALL INCLUDE CITY OF DUBLIN LOGO AND ALL CURB INLET AND CATCH BASIN GRATES SHALL INDUCE ENGRAVED LETTERING: "DUMP NO WASTE; DRAINS TO RIVER."
7.

STORM SEWER OUTLETS GREATER THAN 18 INCHES IN DIAMETER ACCESSIBLE FROM STORMWATER MANAGEMENT FACILITIES OR WATERCOURSES SHALL BE PROVIDED WITH SAFETY GRATES, AS APPROVED BY THE CITY ENGINEER.
8.

HP STORM AND HP SANITITE OR APPROVED EQUAL ARE APPROVED ALTERNATIVES TO REINFORCED CONCRETE PIPE IN PAVED AND NON PAVED AREAS AS APPROVED BY THE CITY ENGINEER. THIS INCLUDES APPLICATIONS INSIDE THE RIGHT-OF-WAY.
9.

HP STORM AND HP SANITITE OR APPROVED EQUAL PIPE JOINTS SHALL BE WATERTIGHT ACCORDING TO REQUIREMENTS OF ASTM D3212. PIPES SHALL BE JOINED WITH A GASKETED INTEGRAL BELL & SPIGOT JOINT MEETING THE REQUIREMENTS OF ASTM F2881 (HP STORM) AND ASTM F2764 (HP SANITITE). GASKETS SHALL BE INSTALLED BY PIPE MANUFACTURER AND COVERED WITH REMOVABLE, PROTECTIVE WRAP TO ENSURE THE GASKET IS FREE FROM DEBRIS. A JOINT LUBRICANT AVAILABLE FROM THE MANUFACTURER SHALL BE USED ON THE GASKET AND BELL DURING JOINT ASSEMBLY.
10.

ALL BEDDING MATERIAL SHALL BE IN ACCORDANCE WITH CITY OF COLUMBUS STANDARD CONSTRUCTION DRAWING AA-S149.
11.

BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH ITEM 911 OR ITEM 912 OF THE CITY OF COLUMBUS CONSTRUCTION MATERIAL SPECIFICATIONS (CMS).
12.

BACKFILL MATERIAL IN AREAS LOCATED OUTSIDE THE PUBLIC RIGHT-OF-WAY SHALL BE PLACED IN ACCORDANCE WITH ITEM 901 OF THE CITY OF COLUMBUS (CMS).
13.

ALL HP STORM AND HP SANITITE PIPE (FOR STORM SEWER) SHALL BE MANDREL TESTED IN ACCORDANCE WITH CITY OF COLUMBUS ITEM 901.21, WITH THE EXCEPTION THAT THE WAITING PERIOD PRIOR TO TESTING SHALL BE 30 DAYS.

MAIL DELIVERY

1.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT US MAIL DELIVERY WITHIN THE PROJECT LIMITS IS NOT DISRUPTED BY CONSTRUCTION OPERATIONS. THIS RESPONSIBILITY IS LIMITED TO RELOCATION OF MAILBOXES TO A TEMPORARY LOCATION THAT WILL ALLOW THE COMPLETION OF THE WORK AND SHALL ALSO INCLUDE THE RESTORATION OF MAILBOXES TO THEIR ORIGINAL LOCATION OR APPROVED NEW LOCATION. ANY RELOCATION OF MAILBOX SERVICES MUST BE FIRST COORDINATED WITH THE US POSTAL SERVICE AND THE HOMEOWNER.
2.

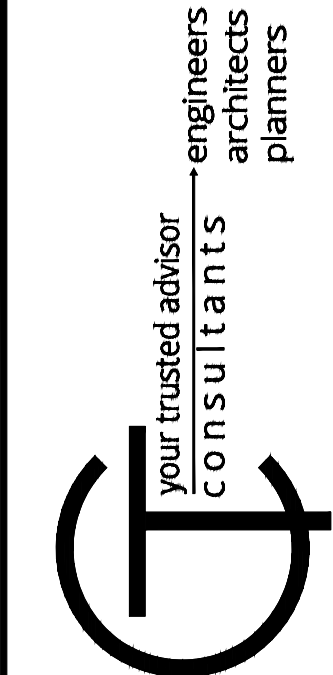
BEFORE RELOCATING ANY MAILBOXES, THE CONTRACTOR SHALL CONTACT THE U.S. POSTAL SERVICE AND RELOCATE MAILBOXES ACCORDING TO THE REQUIREMENTS OF THE POSTAL SERVICE.

USE OF FIRE HYDRANTS

1.

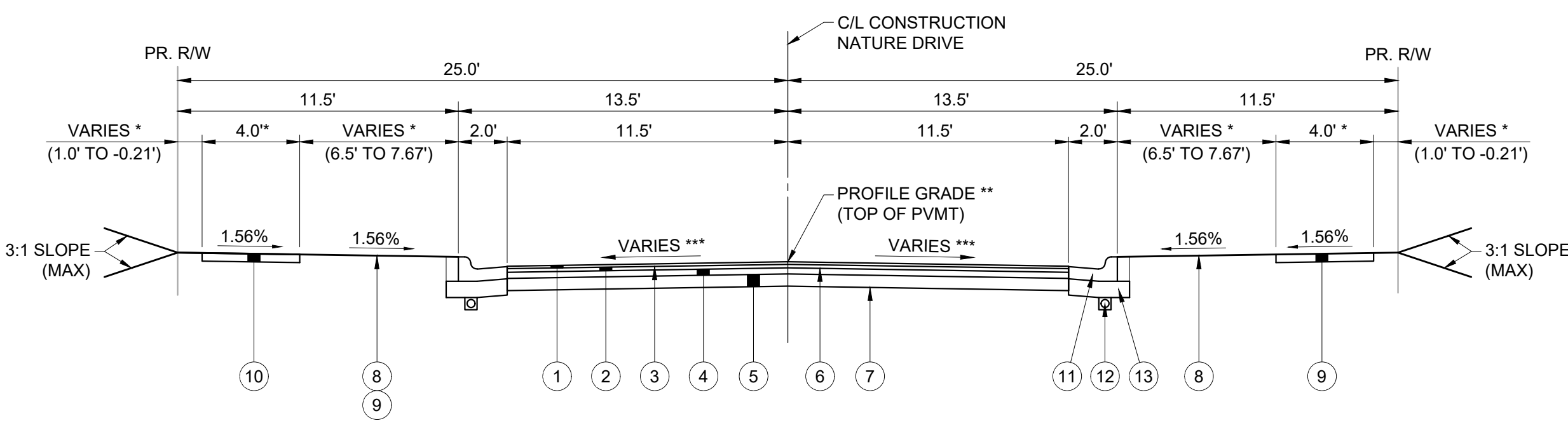
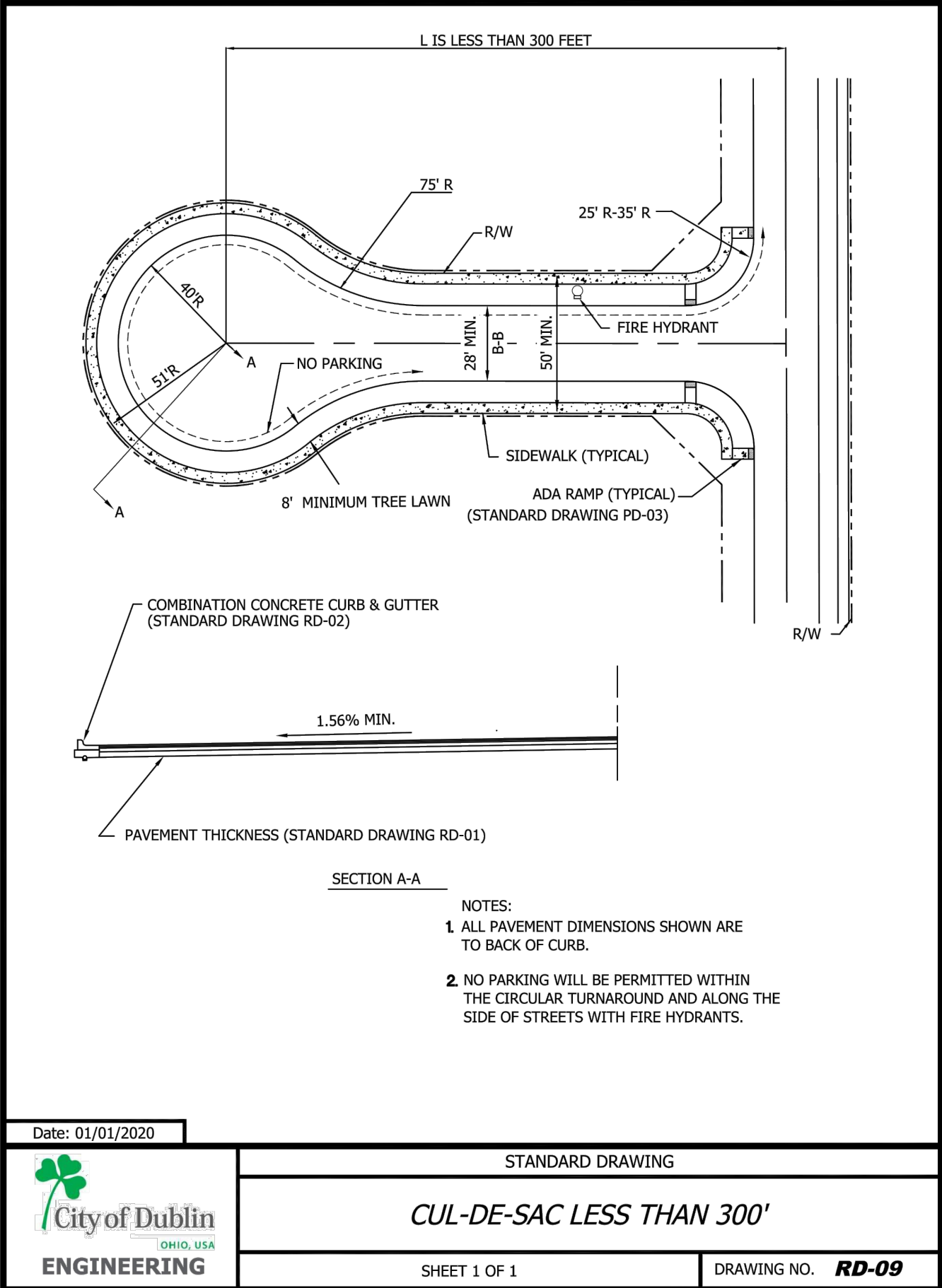
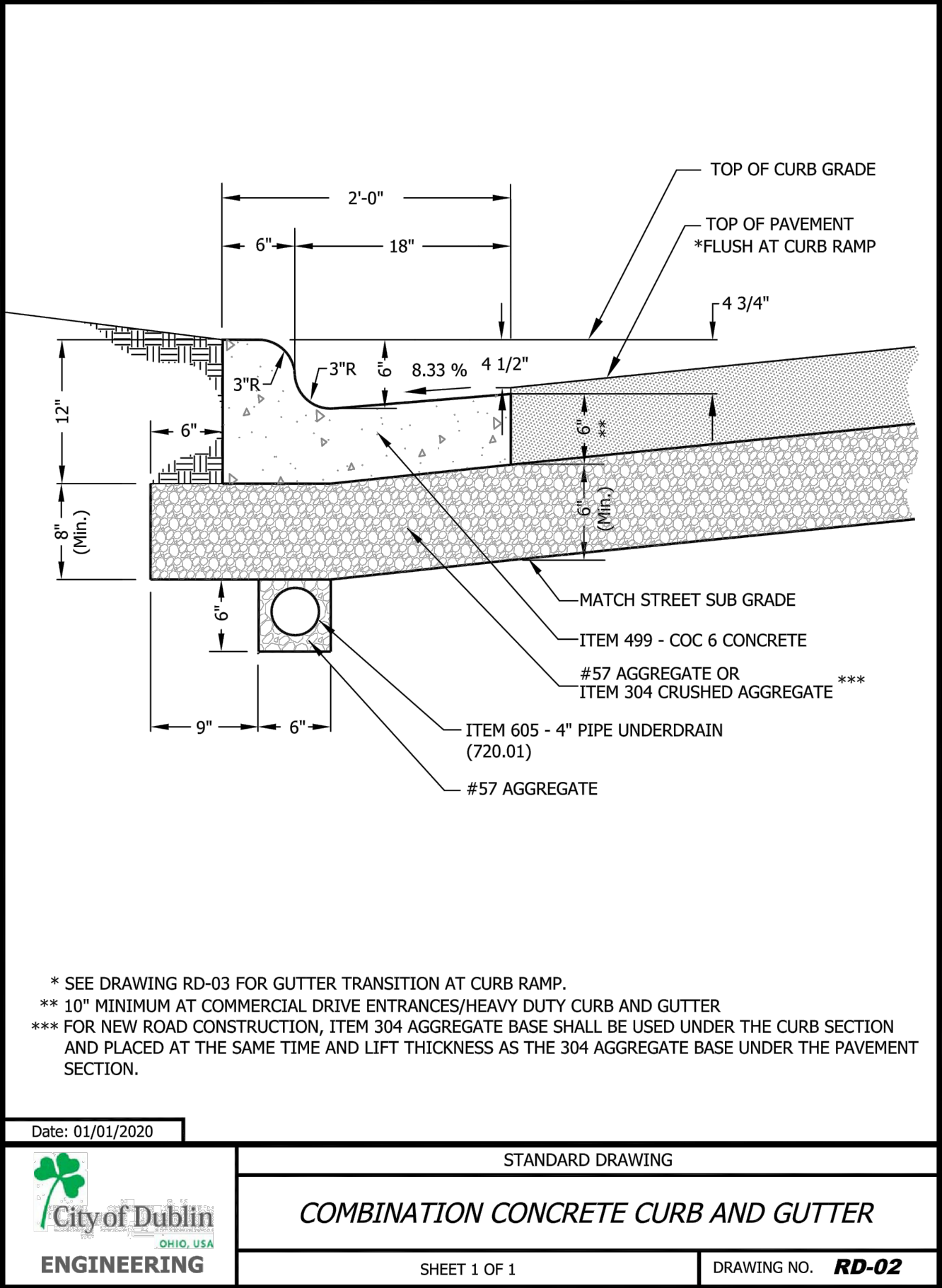
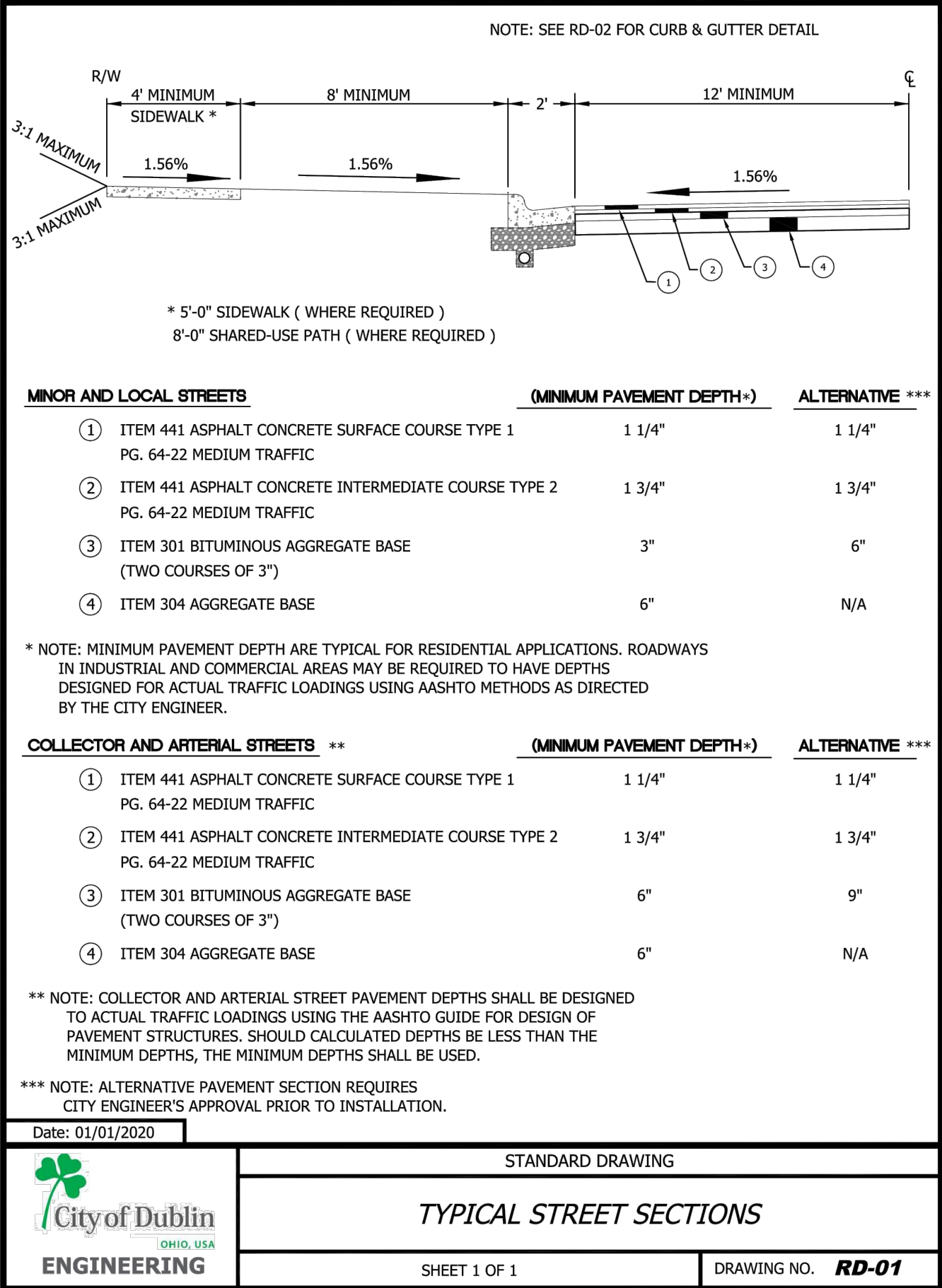
THE CONTRACTOR SHALL MAKE PROPER ARRANGEMENTS WITH THE DUBLIN SERVICE DEPARTMENT AND THE COLUMBUS DIVISION OF WATER FOR THE USE OF FIRE HYDRANTS WHEN USED FOR WORK PERFORMED UNDER THIS CONTRACT AND PROVIDE THE CITY OF DUBLIN A COPY OF THE HYDRANT USAGE PERMIT OBTAINED FROM THE CITY OF COLUMBUS. THE CONTRACTOR SHALL ALSO SEND A COPIES OF PERMITS OBTAINED FROM DUBLIN AND COLUMBUS TO THE WASHINGTON AND/OR PERRY TOWNSHIP FIRE DEPARTMENT. PERMITS SHALL BE KEPT AT THE CONSTRUCTION SITE AT ALL TIMES.
2.

BEFORE THE FINAL ESTIMATE IS PAID, THE CONTRACTOR SHALL SUBMIT A LETTER FROM THE CITY OF COLUMBUS DIVISION OF WATER TO THE CITY ENGINEER STATING THAT THE CONTRACTOR HAS RETURNED THE SIAMESE VALVE TO THE CITY OF COLUMBUS AND HAS PAID ALL COSTS ARISING FROM THE USE OF THE FIRE HYDRANTS.



DATE	REVISION	NO	REVIEW	ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
			4/29/22	AS SHOWN			BDC	BKU	JAM

BREMLEE ESTATES SUBDIVISION - DUBLIN, OHIO -		GENERAL NOTES	
PROJECT NO.		210661	
DISCIPLINE		CIVIL	
SHEET NAME		GEN-NOTE	
SHEET	OF		
2	14		



TYPICAL SECTION - 27' B/B - 50' RW
NATURE DRIVE
SCALE: 1" = 5'
(REVISED CITY OF DUBLIN STD. DWG. RD-01 - DATED 01/01/20)

SECTION APPLIES TO:
STA. 1+45.73 TO STA. 1+71.58 = 25.85 L.F.

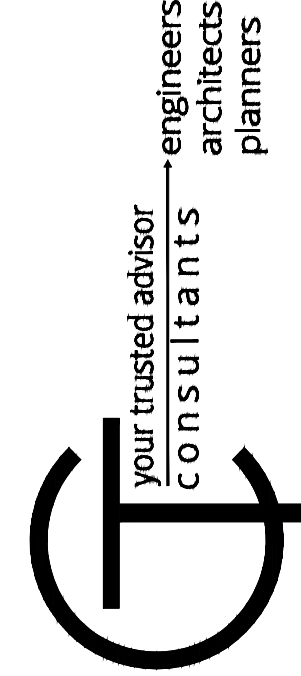
LEGEND:

- ① ITEM 441 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 64-22
- ② ITEM 441 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448), PG 64-22
- ③ ITEM 407 TACK COAT (0.10 GAL/SY)
- ④ ITEM 301 3" ASPHALT CONCRETE BASE
- ⑤ ITEM 304 6" AGGREGATE BASE
- ⑥ ITEM 407 TACK COAT (0.075 GAL/SY)
- ⑦ ITEM 204 SUBGRADE COMPACTION
- ⑧ ITEM 653 4" TOPSOIL FURNISHED AND PLACED
- ⑨ ITEM 659 SEEDING & MULCHING, CLASS 1
- ⑩ ITEM 608 4" CONCRETE WALK, PER RD-05
- ⑪ CITY OF DUBLIN CONCRETE COMBINATION CURB & GUTTER PER RD-02
- ⑫ ITEM 605 4" PIPE UNDERDRAIN (720.01)
- ⑬ NO. 57 AGGREGATE

* FOR TREE LAWN & SIDEWALK TRANSITIONS, SEE GRADING DETAIL, SHEET 8

** DUE TO THE NATURE OF THIS PROJECT, THE PROFILE GRADE SHOWN ON THIS TYPICAL AND THE STREET PROFILE DEPICT TOP OF PAVEMENT ELEVATIONS, NOT BACK OF CURB. PLEASE SEE GRADING DETAILS, SHEET 8 FOR APPROPRIATE HORIZONTAL AND VERTICAL INFORMATION.

*** PAVEMENT CROSS-SLOPE VARIES DUE TO EX. CONDITION TIE-INS & VARYING SLOPES ON CUL-DE-SAC FOR DRAINAGE PURPOSES. SEE GRADING DETAILS, SHEET 8 FOR APPROPRIATE HORIZONTAL AND VERTICAL INFORMATION.



ISSUED FOR:	REVIEW	NO	REVISION	DATE
4/29/22	AS SHOWN	BDC	BRU	JAM

BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -

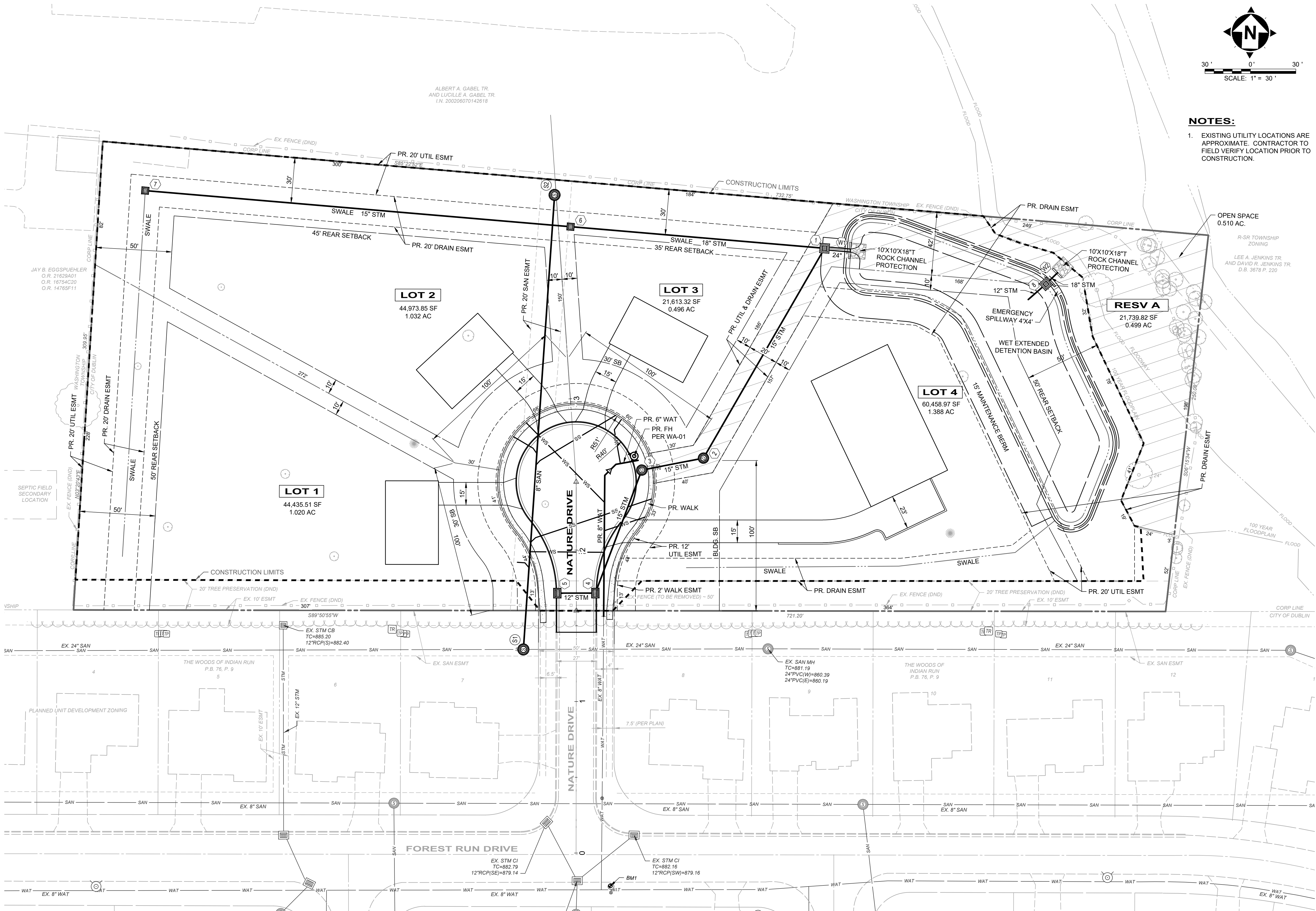
CONSTRUCTION DETAILS

PROJECT NO.	210661
DISCIPLINE	CIVIL
SHEET NAME	CSTN-DTLS
SHEET	OF
4	14



TREE SURVEY

Number	Latin name	Common name	DBH	Condition
1	<i>Juglans nigra</i>	Black walnut	23	Good
2	<i>Prunus serotina</i>	Black cherry	18	Good
3	<i>Juglans nigra</i>	Black walnut	30	Good
4	<i>Gleditsia triacanthos</i>	Honey locust	32	Good
5	<i>Gleditsia triacanthos</i>	Honey locust	28	Good
6	<i>Juglans nigra</i>	Black walnut	17	Fair
7	<i>Juglans nigra</i>	Black walnut	22	Good
8	<i>Juglans nigra</i>	Black walnut	22	Fair
9	<i>Juglans nigra</i>	Black walnut	28	Dead
10	<i>Juglans nigra</i>	Black walnut	10	Good
11	<i>Celtis occidentalis</i>	Hackberry	8	Good
12	<i>Celtis occidentalis</i>	Hackberry	9	Good
13	<i>Celtis occidentalis</i>	Hackberry	16	Good
14	<i>Ulmus rubra</i>	Slippery elm	8	Fair
15	<i>Celtis occidentalis</i>	Hackberry	8	Good
16	<i>Celtis occidentalis</i>	Hackberry	9	Good
17	<i>Acer saccharum</i>	Sugar maple	6	Good
18	<i>Celtis occidentalis</i>	Hackberry	7	Good
19	<i>Gleditsia triacanthos</i>	Honey locust	11	Fair
20	<i>Celtis occidentalis</i>	Hackberry	10	Good
21	<i>Celtis occidentalis</i>	Hackberry	8	Good
22	<i>Acer saccharum</i>	Sugar maple	10	Good
23	<i>Celtis occidentalis</i>	Hackberry	9	Good
24	<i>Gleditsia triacanthos</i>	Honey locust	7	Dead
25	<i>Gleditsia triacanthos</i>	Honey locust	7	Good
26	<i>Celtis occidentalis</i>	Hackberry	6	Good
27	<i>Gleditsia triacanthos</i>	Honey locust	14	Good
28	<i>Prunus serotina</i>	Black cherry	11	Good
29	<i>Celtis occidentalis</i>	Hackberry	8	Fair
30	<i>Acer saccharum</i>	Sugar maple	6	Good
31	<i>Celtis occidentalis</i>	Hackberry	11	Good
32	<i>Acer saccharum</i>	Sugar maple	10	Good
33	<i>Gleditsia triacanthos</i>	Honey locust	13	Good
34	<i>Acer saccharum</i>	Sugar maple	6	Fair
35	<i>Celtis occidentalis</i>	Hackberry	8	Good
36	<i>Gleditsia triacanthos</i>	Honey locust	17	Fair
37	<i>Gleditsia triacanthos</i>	Honey locust	32	Good
38	<i>Gleditsia triacanthos</i>	Honey locust	15	Good
39	<i>Celtis occidentalis</i>	Hackberry	14	Fair
40	<i>Fraxinus americana</i>	American ash	6	Fair



NOTES:

- EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

**BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -**

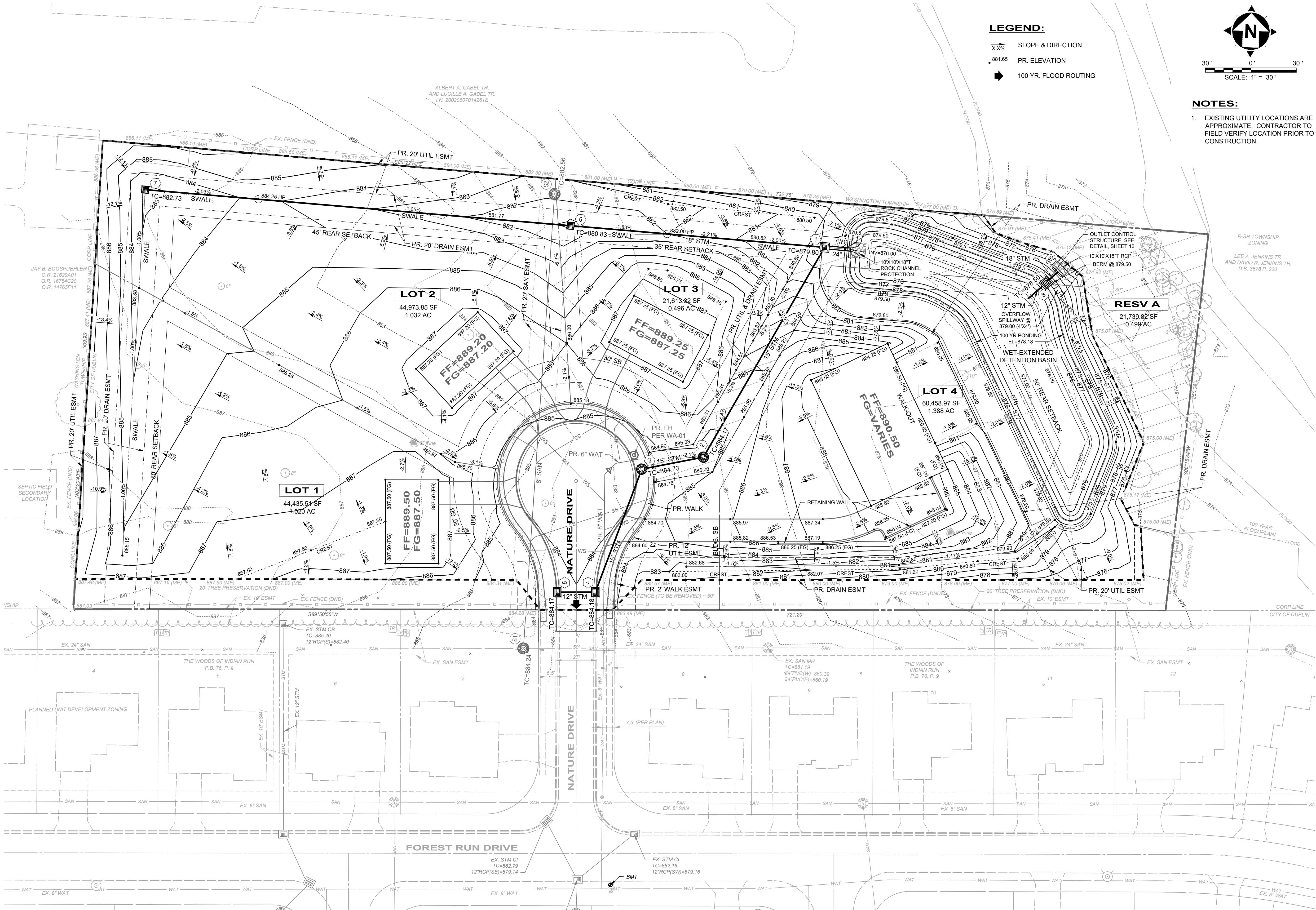
SITE & UTILITY PLAN

PROJECT NO.	
210661	
DISCIPLINE	
CIVIL	
SHEET NAME	
SITE-PLN	
SHEET	OF
6	14

ISSUED FOR:	REVIEW	NO	REVISION	DATE
AS SHOWN	BDC			
DESIGNED BY:	BRU			
DRAWN BY:	JAM			
CHECKED BY:				

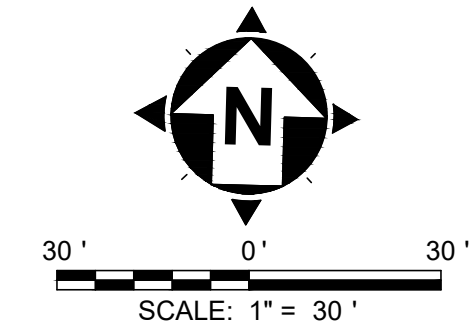
your trusted advisor
consultants

engineers
architects
planners



LEGEND:

- SLOPE & DIRECTION
- PR. ELEVATION
- 100 YR. FLOOD ROUTING



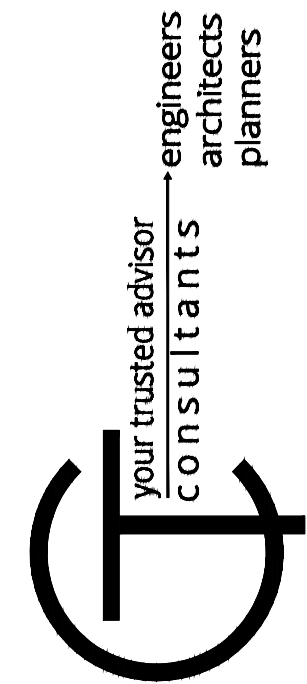
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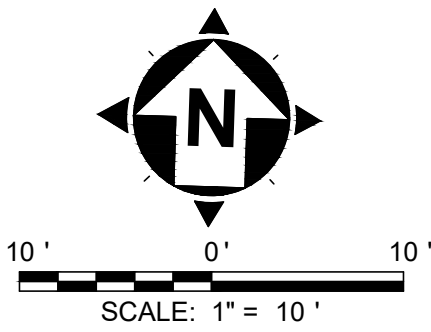
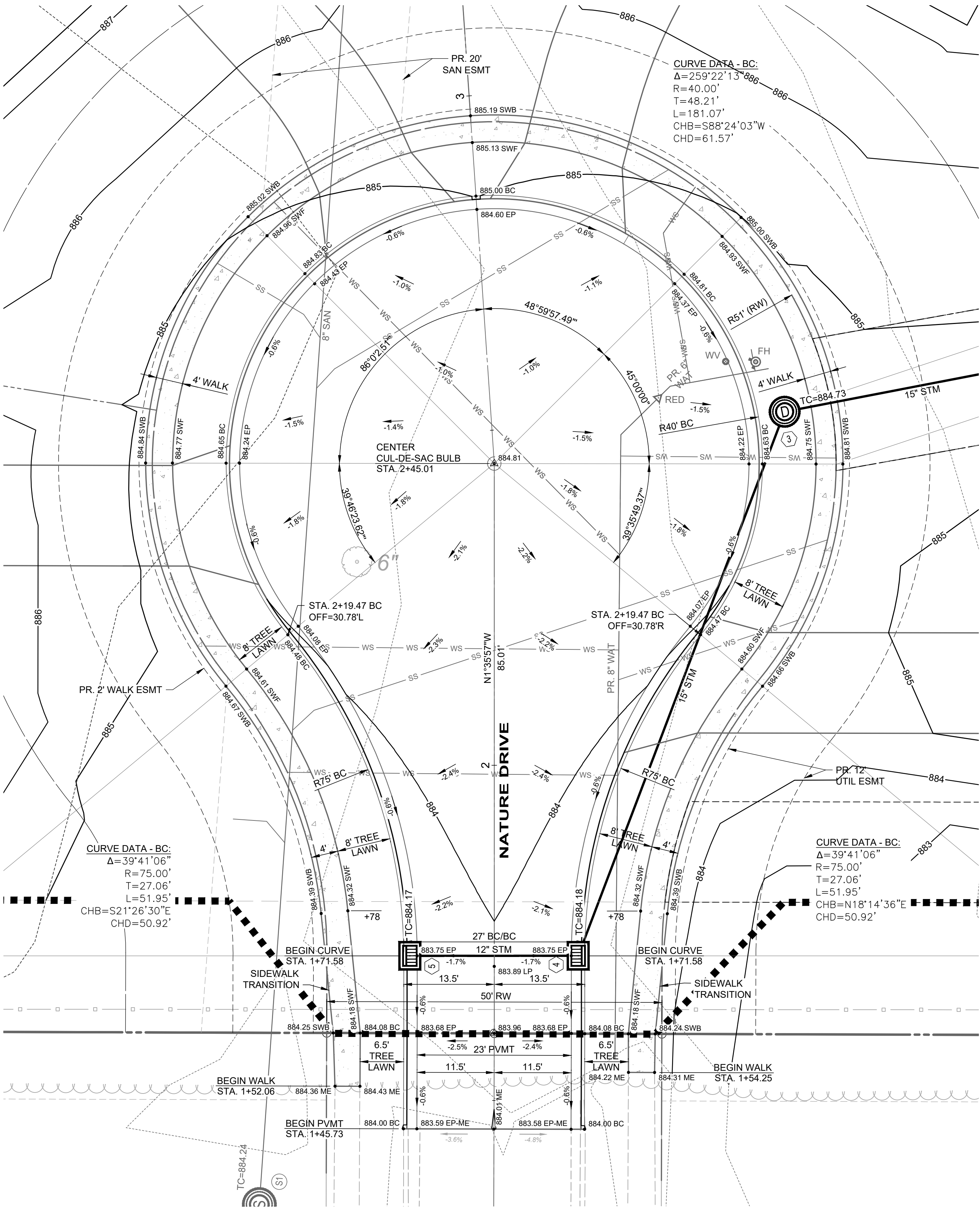
- EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -
GRADING PLAN

PROJECT NO.	
210661	
DISCIPLINE	
CIVIL	
SHEET NAME	
GRAD-PLN	
SHEET	OF
7	14

ISSUED FOR:	REVIEW	NO	REVISION	DATE
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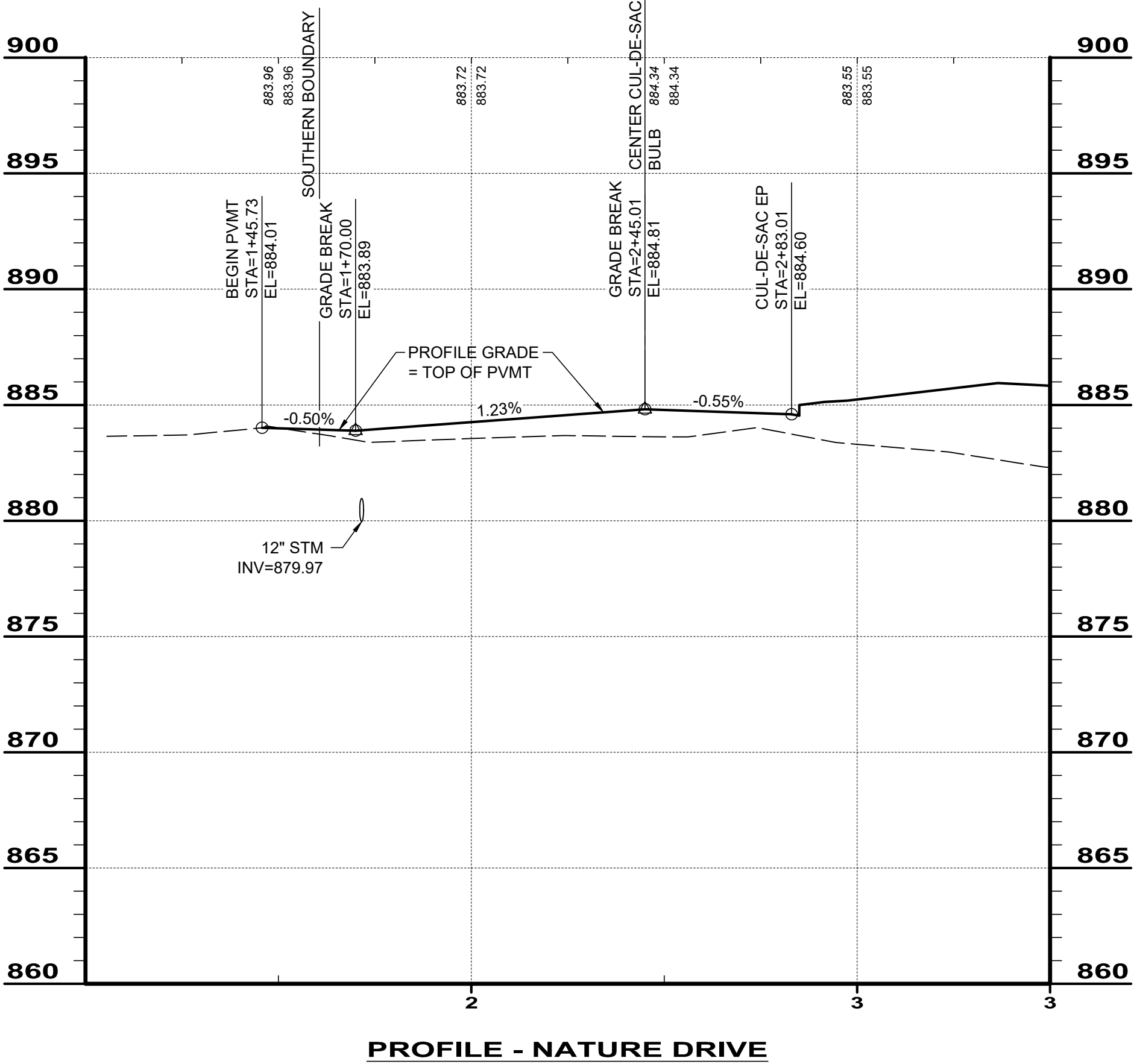


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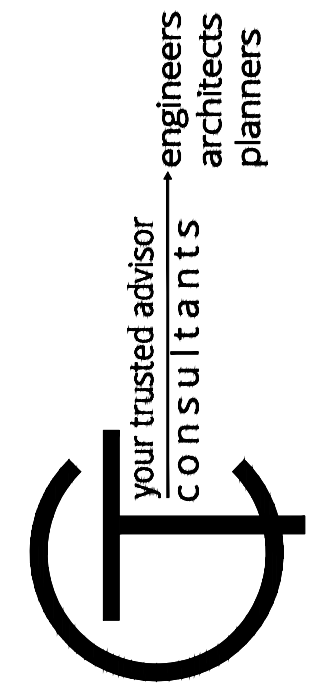
- X.X% SLOPE & DIRECTION
- 881.65 PR. ELEVATION
- BC BACK OF CURB
- EP EDGE OF PAVEMENT
- SWF SIDEWALK - FRONT EDGE
- SWB SIDEWALK - BACK EDGE
- TC TOP OF CASTING

NOTES:

- EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

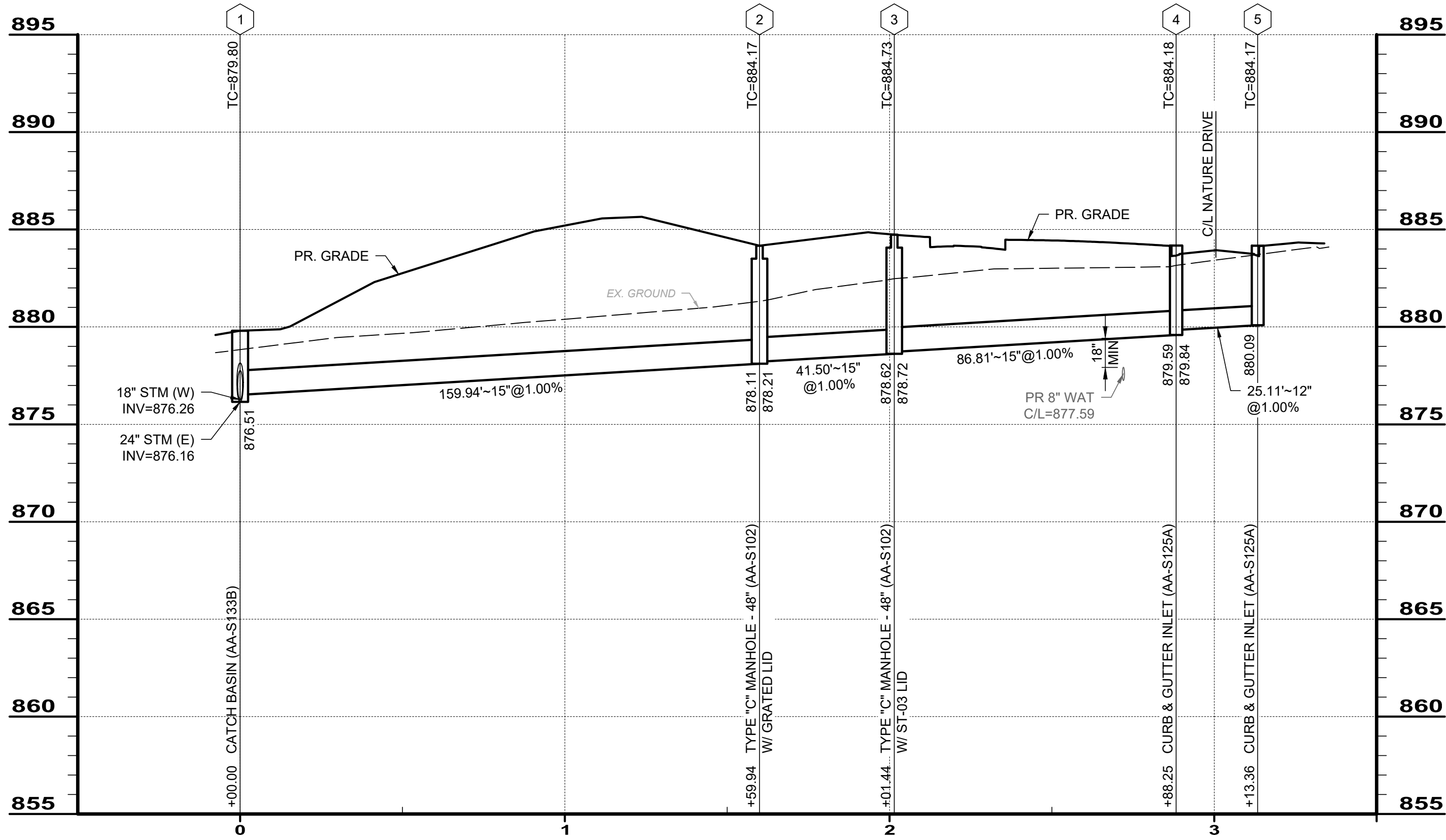


BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -
GRADING DETAILS

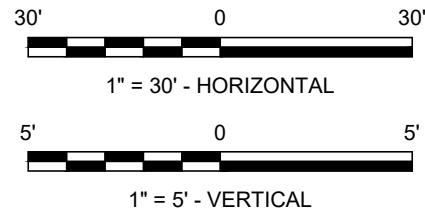


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ISSUE DATE:	4/29/22			
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DESIGNED BY:	BDC			
DRAWN BY:	BRU			
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PROJECT NO.	
210661	
DISCIPLINE	
CIVIL	
SHEET NAME	
GRD-DET	
SHEET	OF
7	14

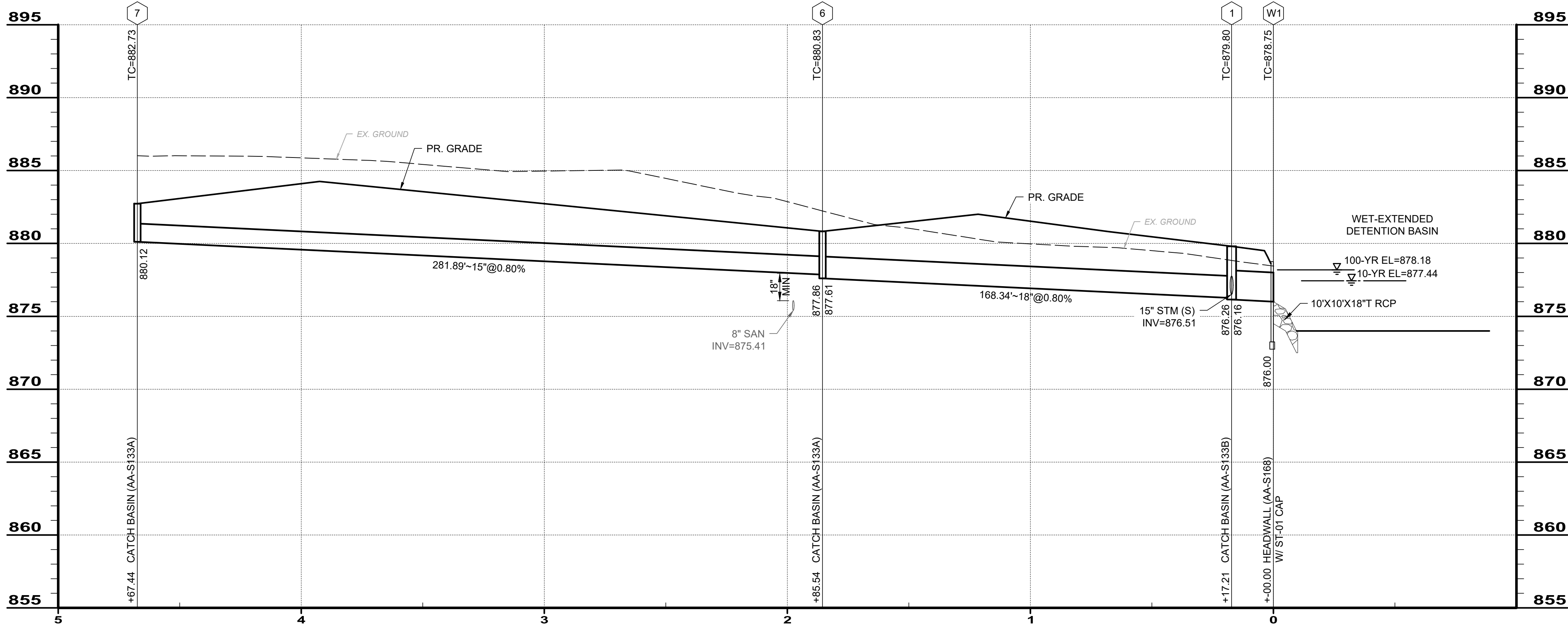


PROFILE - STM RUN 1



STORMWATER STRUCTURE TABLE				
STRUCTURE NAME:	NORTHING (PER PLAN)	EASTING (PER PLAN)	NORTHING (ASBUILT)	EASTING (ASBUILT)
W2	771069.01	1792676.47		
W1	771079.99	1792539.34		
1	771081.00	1792522.16		
2	770940.43	1792445.86		
3	770931.46	1792405.35		
4	770849.47	1792376.83		
5	770848.76	1792351.73		
6	771090.83	1792354.11		
7	771107.26	1792072.70		
8	771061.25	1792668.90		

STORM PIPE TABLE				
STR'S	SIZE	LENGTH	SLOPE	BRG
1 - 2	15"	159.94'	1.00%	N28°29'34"E
1 - 6	18"	168.34'	0.80%	S86°39'07"E
2 - 3	15"	41.50'	1.00%	N77°30'33"E
3 - 4	15"	86.81'	1.00%	N19°10'49"E
4 - 5	12"	25.11'	1.00%	N88°23'18"E
6 - 7	15"	281.89'	0.80%	S86°39'32"E
8 - INL	12"	15.50'	0.00%	N47°12'39"E
W1 - 1	24"	17.21'	0.91%	S86°37'35"E
W2 - 8	18"	10.84'	2.99%	N44°16'43"E



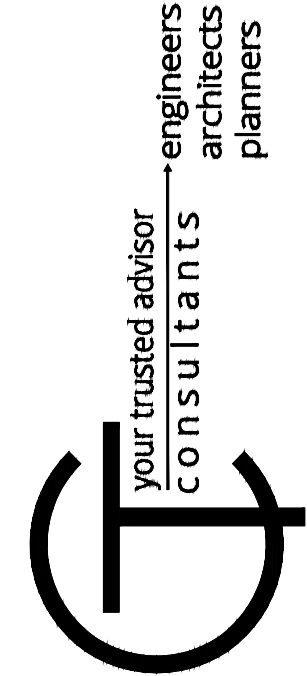
PROFILE - STM RUN 2

BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -

STORM SEWER PROFILES

PROJECT NO.	
210661	
DISCIPLINE	
CIVIL	
SHEET NAME	
STM-PROF	
SHEET	OF
9	14

ISSUED FOR:	REVIEW	NO	REVISION	DATE
ISSUE DATE:	4/29/22			
SCALE:	AS SHOWN			
DESIGNED BY:	BDC			
DRAWN BY:	BRU			
CHECKED BY:	JAM			



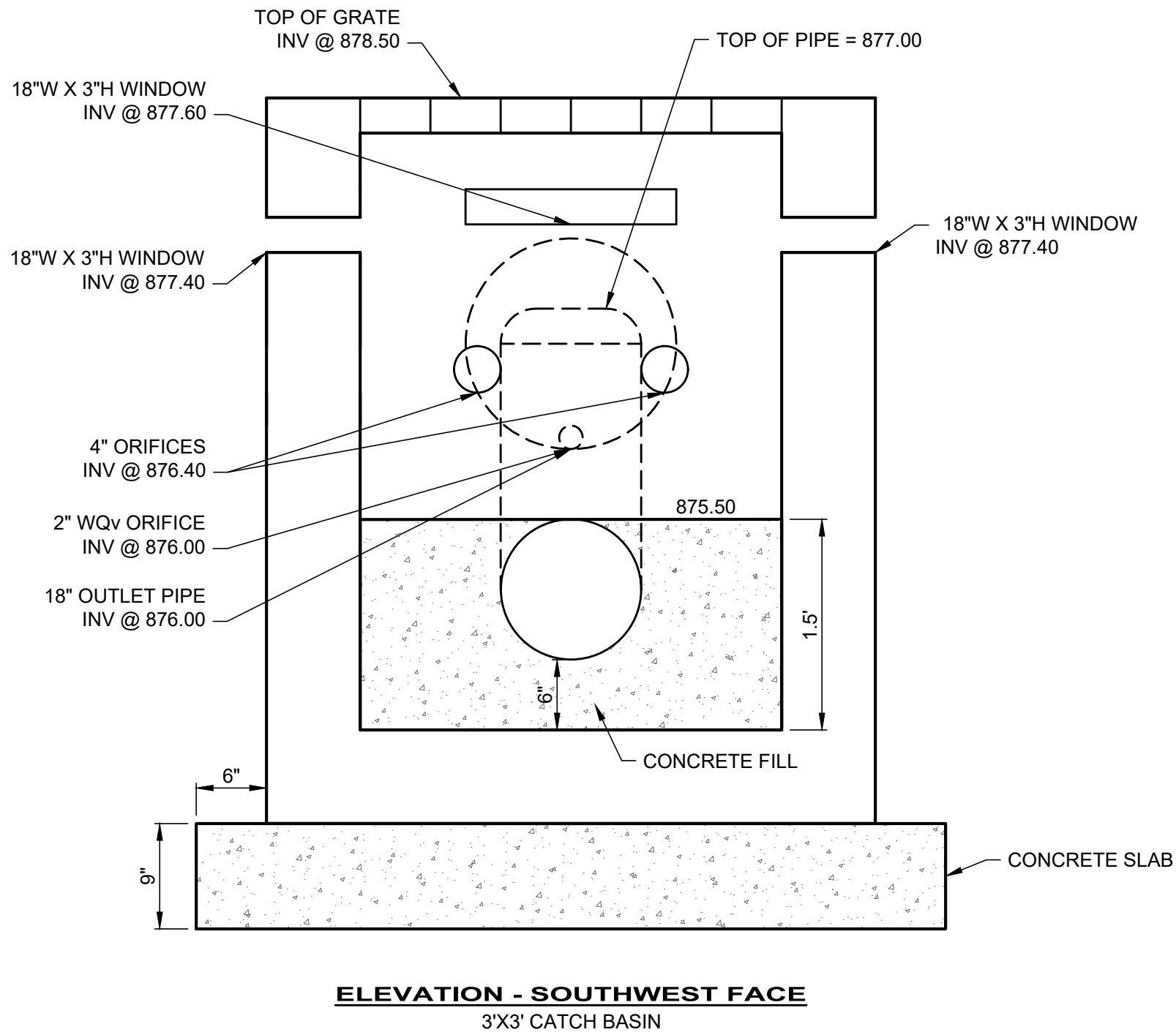
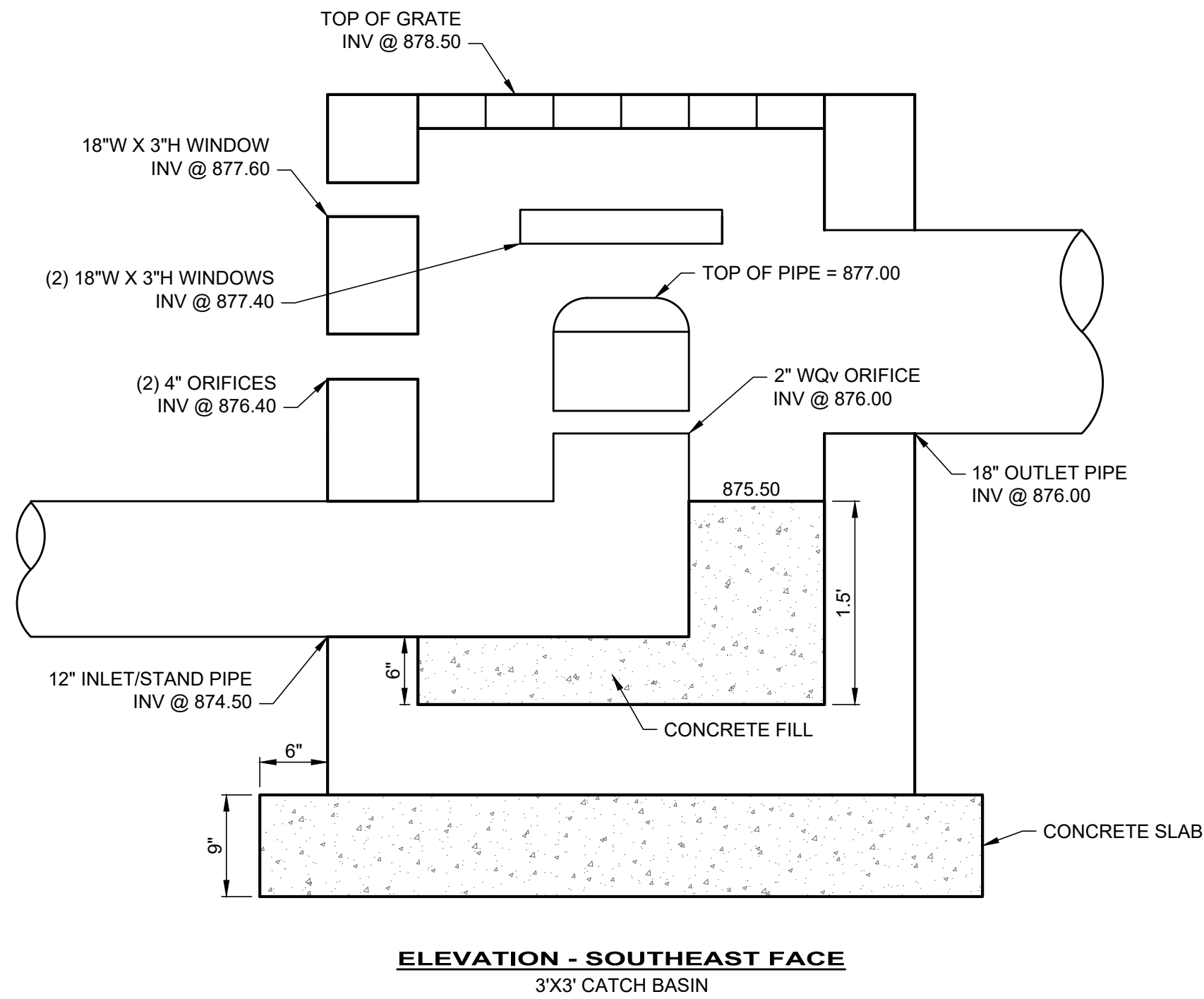


Table 12- Retention Basin Release Rates

Storm Event	(A) Onsite Drainage Lots 1-3 Rear to Basin (cfs)	(B) Offsite Drainage to Basin (cfs)	(C) Onsite Drainage Cul-de-sac, Lot 4, Reserve A to Basin (cfs)	(D) Peak Release Rate from Basin (cfs)	(E) Ponding Elevation for Given Storm (feet)
	Design	As-Built	Design	As-Built	Design
1-yr	0.80	0.32	2.43	0.24	876.60
2-yr	1.34	0.49	3.32	0.48	876.79
5-yr	2.20	0.75	4.62	0.74	877.14
10-yr	2.98	0.98	5.72	1.00	877.44
25-yr	4.15	1.32	7.28	2.74	877.71
50-yr	5.16	1.61	8.58	4.20	877.93
100-yr	6.25	1.92	9.95	5.35	878.18

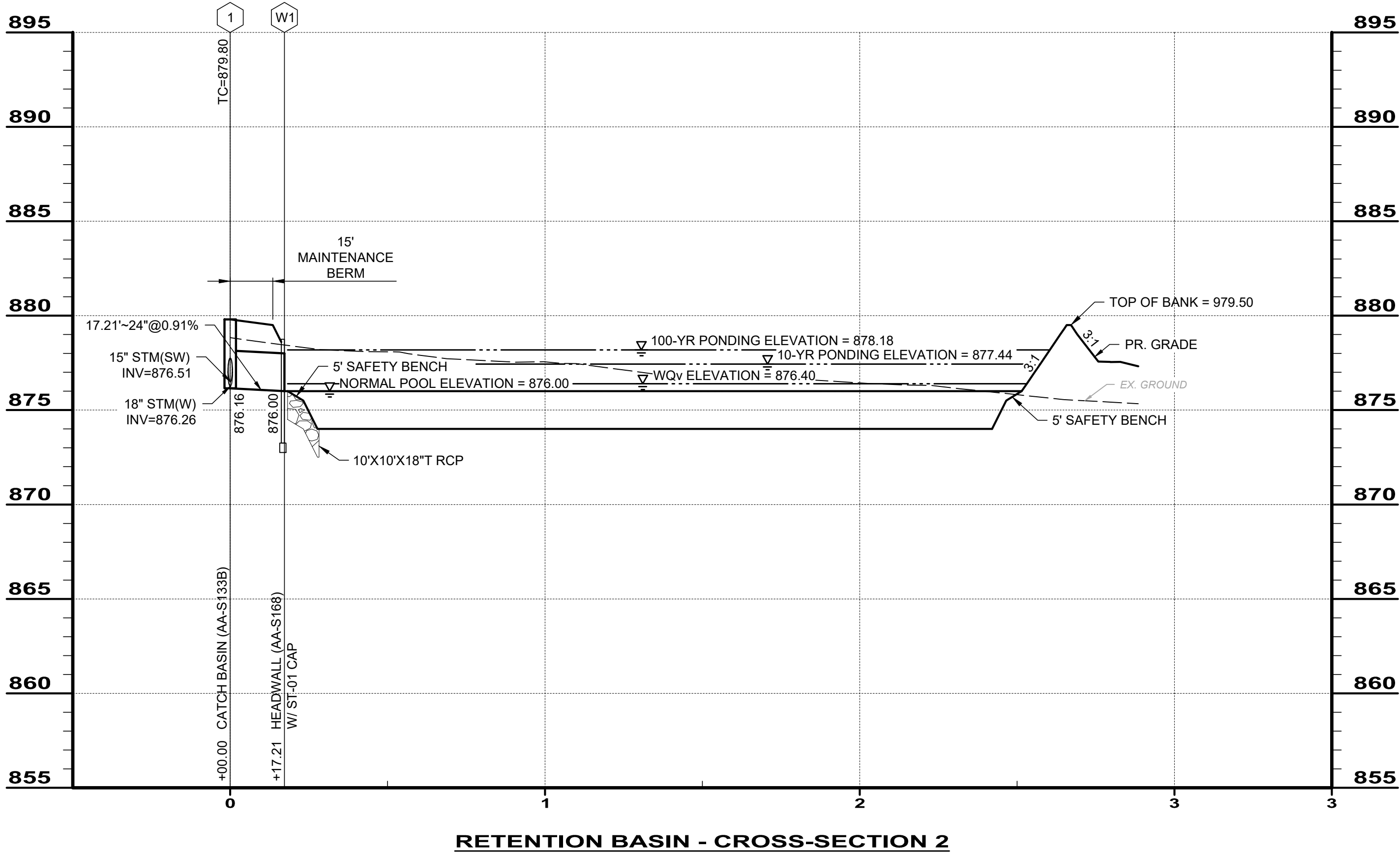
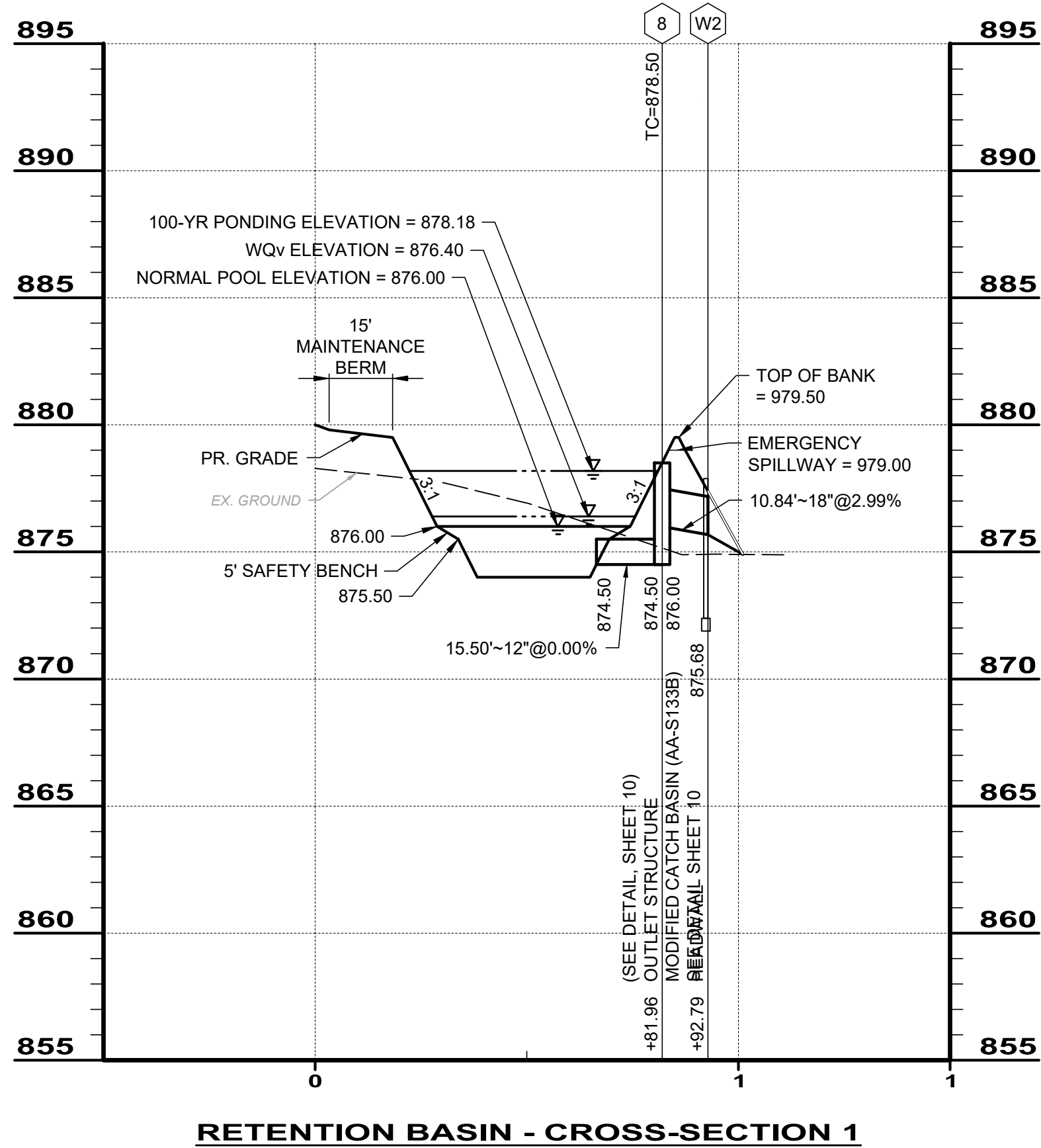
Table 13- Retention Basin Release Rates Based on Elevation

Contour Elevation	Surface Area (sf)		Basin Storage Volume (cf) ¹		Cumulative Storage Volume (cf)		Discharge Rate at Given Water Surface Elevation (cfs)	
	Design	As-Built	Design	As-Built	Design	As-Built	Design	As-Built
876	8,192		0		0		0.00	
877	9,829		9,011		9,011		0.65	
878	11,523		10,676		19,687		4.57	
879	13,274		12,399		32,085		17.99	

Note: The permanent pool of this basin is at elevation 976.00. All elevations below provide no basin storage volume.

RETENTION BASIN OUTLET STRUCTURE
(POST-CONSTRUCTION)

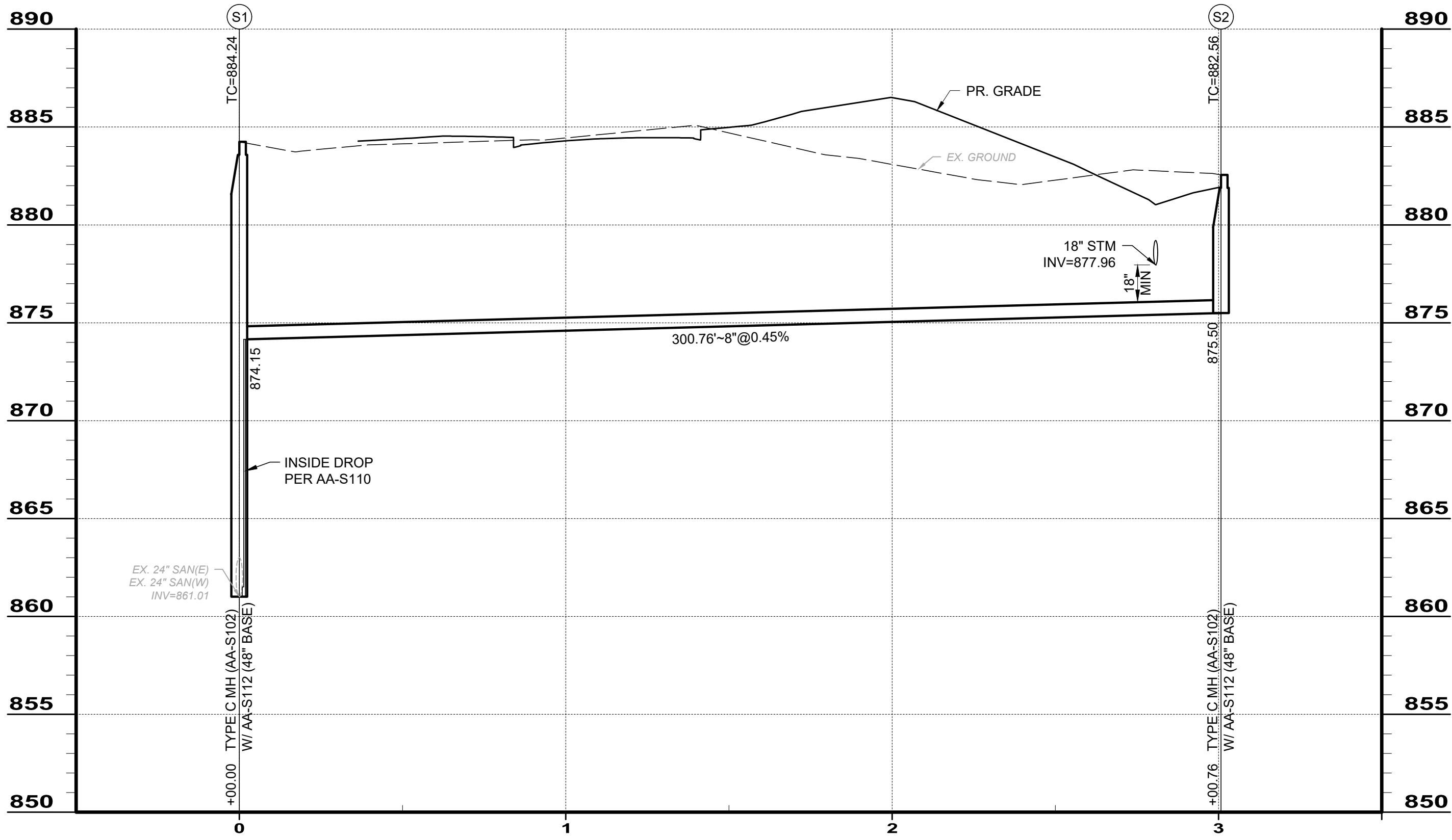
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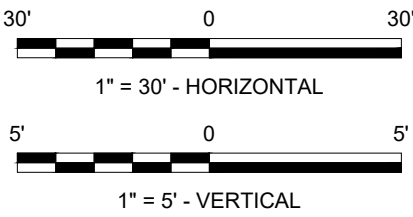
BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -

STORM BASIN DETAILS

PROJECT NO. 210661	
DISCIPLINE CIVIL	
SHEET NAME BASN-DET	
SHEET 10	OF 14



PROFILE - SAN RUN 1

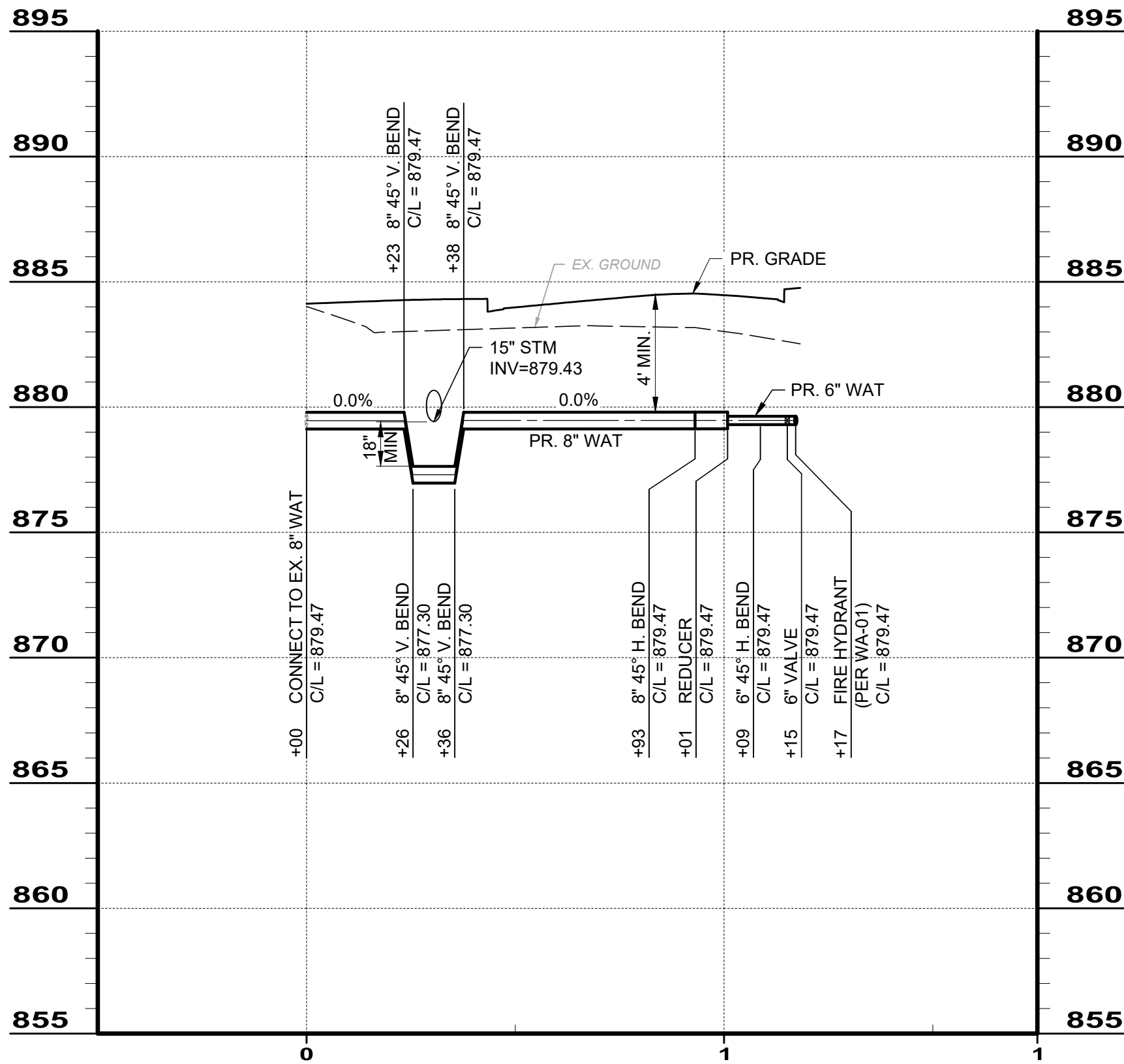


SANITARY STRUCTURE TABLE				
STRUCTURE NAME:	NORTHING (PER PLAN)	EASTING (PER PLAN)	NORTHING (ASBUILT)	EASTING (ASBUILT)
S1	770811.04	1792330.32		
S2	771111.53	1792342.97		

SANITARY PIPE TABLE				
STR'S	SIZE	LENGTH	SLOPE	BRG
S1 - S2	8"	300.76'	0.45%	S2°24'42"W

SANITARY SERVICE TABLE								
LOT NO.	STATION AT MAIN	FINISHED GRADE	INVERT OF SERVICE AT PAD	LENGTH OF SERVICE	SLOPE	INVERT OF SERVICE AT MAIN	RISER	INVERT AT MAIN
LOT 1	0+57	887.50	881.50	60'	2.08%	880.25	5.85'	874.40
LOT 2	0+73	887.20	881.20	61'	2.08%	879.93	5.45'	874.48
LOT 3	1+23	887.25	881.25	109'	2.08%	878.98	4.28'	874.70
LOT 4	1+32	888.50	882.19 *	214'	2.08%	877.74 *	3.00*	874.74

* GRINDER PUMP REQUIRED FOR LOT 4.



PROFILE - WAT RUN 1

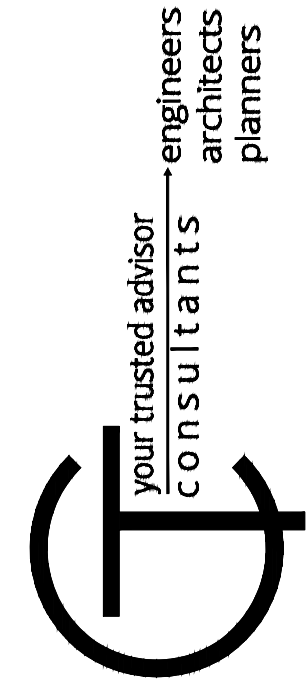
WATER COORDINATE TABLE					
SHEET	ITEM	STATION	FIELD NORTHING	FIELD EASTING	FIELD CL ELEVATION
6	CONNECT TO EX. 8" WAT	0+00			
6	8" 45° VERTICAL BEND	0+23			
6	8" 45° VERTICAL BEND	0+26			
6	8" 45° VERTICAL BEND	0+36			
6	8" 45° VERTICAL BEND	0+38			
6	8" 45° HORIZONTAL BEND	0+93			
6	6"X6" REDUCER	1+01			
6	6" 45° HORIZONTAL BEND	1+09			
6	6" VALVE	1+15			
6	FIRE HYDRANT	1+17			

BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -

SANITARY SEWER &
WATERLINE PROFILES

ISSUED FOR:	REVIEW	NO	REVISION	DATE
4/29/22	AS SHOWN		SAN & WAT PROFILE UPDATES	3/25/22
SCALE:	DESIGNED BY:			
BDC	BDC			
BKU	BKU			
JAM	JAM			

PROJECT NO.	
210661	
DISCIPLINE	
CIVIL	
SHEET NAME	
WAT-SAN	
SHEET	OF
11	14



SEDIMENTATION & EROSION CONTROL NOTES:

1. THE EROSION AND SEDIMENT CONTROL MEASURES INCLUDED IN THIS PLAN SHALL BE INSTALLED SEVEN (7) DAYS PRIOR TO INITIAL LAND DISTURBANCE ACTIVITIES. SEDIMENT SHALL BE PREVENTED FROM DISCHARGING FROM THE PROJECT SITE BY INSTALLING AND MAINTAINING SILT FENCE, STRAW BALES, CHECK DAMS, INLET PROTECTION, ETC. AS SHOWN ON THIS PLAN. IF SHOWN ON THESE PLANS, ENERGY DISSIPATION DEVICES OR EROSION CONTROL AT THE OUTFALL OF THE STORM SEWER SYSTEM SHALL BE INSTALLED AT THE TIME OF CONSTRUCTION OF THE OUTFALL. STRUCTURAL PRACTICES SHALL BE USED TO CONTROL EROSION FROM ALL AREAS REMAINING DISTURBED FOR MORE THAN FOURTEEN (14) DAYS.

2. THE CONTRACTOR SHALL CONTROL WASTE, GARBAGE, DEBRIS, WASTEWATER AND OTHER SUBSTANCES ON THE SITE IN SUCH A WAY THAT THEY SHALL NOT BE TRANSPORTED FROM THE SITE BY THE ACTION OF WINDS, STORMWATER RUNOFF OR OTHER FORCES. PROPER DISPOSAL OR MANAGEMENT OF ALL WASTE AND UNUSED BUILDING MATERIAL, APPROPRIATE TO THE NATURE OF THE WASTE OR MATERIAL, IS REQUIRED. COMPLIANCE IS REQUIRED WITH ALL STATE OR LOCAL REGULATIONS REGARDING WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEMS.

3. PUBLIC OR PRIVATE ROADWAYS SHALL BE CLEARED OF ACCUMULATED SEDIMENT DAILY OR ON AN AS NEEDED BASIS. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. CLEARED SEDIMENT SHALL BE RETURNED TO THE POINT OF LIKELY ORIGIN OR OTHER SUITABLE LOCATION.

4. ALL ONSITE STORM DRAIN INLETS SHALL BE PROTECTED AGAINST SEDIMENTATION WITH FILTER FABRIC OR EQUIVALENT BARRIERS AS SHOWN ON THESE PLANS.

5. THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED UNDER THE GUIDANCE OF QUALIFIED PERSONNEL EXPERIENCED IN EROSION CONTROL AND FOLLOWING THE PLANS AND SPECIFICATIONS INCLUDED IN THE PLAN.

6. DURING THE PERIODS OF CONSTRUCTION ACTIVITY, ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES, IF REQUIRED, WITH THE OWNER. MAINTENANCE SHALL BE IN ACCORDANCE WITH THE CITY OF DUBLIN, OHIO ENVIRONMENTAL PROTECTION AGENCY (EPA) GENERAL CONSTRUCTION PERMIT AND THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) RAINWATER AND LAND DEVELOPMENT CURRENT EDITION.

7. ALL EROSION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBUS, OHIO ENVIRONMENTAL PROTECTION AGENCY (EPA) GENERAL CONSTRUCTION PERMIT AND THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) RAINWATER AND LAND DEVELOPMENT CURRENT EDITION.

8. EXISTING VEGETATION SHALL BE PROTECTED AS MUCH AS POSSIBLE. ALL REASONABLE ATTEMPTS SHOULD BE MADE TO MINIMIZE THE TOTAL AREA OF DISTURBED LAND.

9. ALL POST-CONSTRUCTION STORMWATER MANAGEMENT BMPS SHALL BE ONLY USED FOR POST-CONSTRUCTION STORMWATER MANAGEMENT. THE PROJECT SITES SHALL HAVE ADEQUATE VEGETATION AND LANDSCAPING TO FILTER POLLUTANTS AS MUCH AS POSSIBLE BEFORE THE POST-CONSTRUCTION BMPS ARE ONLINE. LOCAL REGULATIONS REGARDING THE DISCHARGING OF OIL AND OTHER POLLUTANTS INTO THE STORM SEWERS OR DRAINAGE WATER SHALL APPLY.

10. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED IN ACCORDANCE WITH THE CONDITIONS OF THE APPLICABLE NPDES PERMIT.

11. ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION.

12. THIS PLAN MUST BE POSTED ON SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL TIMES.

13. THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF OPERATIONS TO THE OWNER. SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE PLACED IN ACCORDANCE WITH THIS SCHEDULE.

14. THE CONTRACTOR SHALL PLACE INLET PROTECTION FOR THE EROSION CONTROL IMMEDIATELY AFTER CONSTRUCTION OF THE CATCH BASINS/INLETS.

15. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER CONTROL OF EROSION AND SEDIMENTATION RUNOFF FROM THE SITE ALONG WITH PROPER MAINTENANCE AND INSPECTION IN ACCORDANCE WITH THE NPDES GENERAL PERMIT FROM THE STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.

16. PRIOR TO CONSTRUCTION OPERATIONS IN A PARTICULAR AREA, ALL EROSION CONTROL FEATURES SHALL BE IN PLACE. FIELD ADJUSTMENTS WITH RESPECT TO LOCATIONS AND DIMENSIONS MAY BE MADE BY THE CITY OF DUBLIN, OHIO EPA AND THE DESIGNER/ENGINEER.

17. IT MAY BECOME NECESSARY TO REMOVE PORTIONS OF THE BARRIER (SILT FENCE, STRAW WATTLES) DURING CONSTRUCTION TO FACILITATE THE GRADING OPERATIONS IN A CERTAIN AREA. HOWEVER, THE BARRIER SHALL BE IN PLACE IN THE EVENING OR DURING ANY INCLEMENT WEATHER.

18. SEEDING HAS BEEN ASSUMED TO BE 4'-0" OUTSIDE THE DITCH TIE IN LIMITS. ALL AREAS NOT DESIGNATED TO BE SEEDED SHALL REMAIN UNDER NATURAL GROUND COVER. THOSE AREAS DISTURBED OUTSIDE THE SEEDING LIMITS SHALL BE SEEDED AND MULCHED AT THE CONTRACTOR'S EXPENSE.

19. THE USE OF STRAW WATTLES HAS BEEN PROVEN TO BE A VERSATILE AND EFFECTIVE EROSION AND SEDIMENT CONTROL BMP, ESPECIALLY IN A RESIDENTIAL SETTING. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE IN A LINEAR INSTALLATION. COMPOST FILTER SOCK MAY BE SUBSTITUTED FOR SILT FENCE. COMPOST BLANKETS MAY BE USED FOR EROSION CONTROL ON STEEP SLOPES.

20. THE EROSION AND SEDIMENT PLAN SHALL INCORPORATE MEASURES WHICH CONTROL THE FLOW OF RUNOFF FROM DISTURBED AREAS SO AS TO PREVENT EROSION FROM OCCURRING. SUCH PRACTICES INCLUDE ROCK CHECK DAMS, PIPE SLOPE DRAINS, DIVERSIONS TO DIRECT FLOW AWAY FROM EXPOSED SOILS AND PROTECTIVE GRADING PRACTICES. THESE PRACTICES SHALL DIVERT RUNOFF AWAY FROM DISTURBED AREAS AND STEEP SLOPES WHERE PRACTICABLE.

21. VELOCITY DISSIPATION DEVICES SHALL BE PLACED AT DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL TO PROVIDE NON-EROSIVE FLOW VELOCITY FROM THE STRUCTURE TO A WATER COURSE. THESE DEVICES WILL PREVENT THE NATURAL PHYSICAL AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS BE MAINTAINED AND PROTECTED.

22. ALL SEDIMENT CONTROL PRACTICES MUST BE CAPABLE OF PONDING RUNOFF IN ORDER TO BE CONSIDERED FUNCTIONAL. EARTH DIVERSION DIKES OR CHANNELS ALONE ARE NOT CONSIDERED A SEDIMENT CONTROL PRACTICE UNLESS THESE ARE USED IN CONJUNCTION WITH A SEDIMENT SETTLING POND.

23. SEDIMENT CONTROL STRUCTURES SHALL BE FUNCTIONAL THROUGHOUT THE COURSE OF EARTH DISTURBANCE ACTIVITIES. SEDIMENT BASINS AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED PRIOR TO GRADING AND WITHIN SEVEN (7) DAYS FROM THE START OF CONSTRUCTION ACTIVITIES. THEY SHALL CONTINUE TO BE FUNCTIONAL UNTIL THE UP SLOPE PROJECT AREA IS REESTABLISHED. AS CONSTRUCTION PROGRESSES AND THE TOPOGRAPHY IS ALTERED, APPROPRIATE CONTROLS MUST BE CONSTRUCTED OR EXISTING CONTROLS ALTERED TO ADDRESS THE CHANGING DRAINAGE PATTERNS.

24. SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY PERIMETER FILTER FABRIC FENCE OF DIVERSIONS TO PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SEDIMENT TRANSPORTED VIA SHEET FLOW. WHERE INTENDED TO PROVIDE SEDIMENT CONTROL, PERIMETER FILTER FABRIC FENCE SHALL BE PLACED ON A LEVEL CONTOUR DOWNSLOPE OF THE DISTURBED AREA.

25. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL MINIMIZE SEDIMENT LADEN WATER FROM ENTERING ACTIVE STORM DRAINS SYSTEMS, UNLESS THE STORM DRAIN SYSTEM DRAINS TO A SEDIMENT SETTLING POND. ALL INLETS RECEIVING RUNOFF FROM DRAINAGE AREAS OF ONE OR MORE ACRES WILL REQUIRE A SEDIMENT SETTLING POND.

26. ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF THE CITY OF DUBLIN AND/OR THE OHIO EPA IN ORDER TO COMPLY WITH THE APPLICABLE LAWS AND REGULATIONS.

27. EXCEPT AS PREVENTED BY INCLEMENT WEATHER CONDITIONS, ALL DISTURBED AREAS TO REMAIN INACTIVE FOR MORE THAN THIRTY (30) DAYS SHALL BE STABILIZED BY SEEDING, SODDING, MULCHING OR ANY OTHER EQUIVALENT EROSION CONTROL MEASURE WITHIN SEVEN (7) DAYS. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS ESTABLISHED.

28. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE SEDIMENT CONTROL FEATURES USED ON THIS PROJECT, THE SITE SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS AFTER ANY STORM EVENT GREATER THAN ONE-HALF (0.50) INCH OF RAIN PER TWENTY-FOUR (24) HOUR PERIOD. THE INSPECTION FREQUENCY MAY BE REDUCED TO ONCE A MONTH IF THE ENTIRE SITE IS TEMPORARY STABILIZED OR RUNOFF IS UNLIKELY DUE TO WEATHER CONDITIONS (SNOW, ICE OR FROZEN GROUNDS). RECORDS OF THESE INSPECTIONS SHALL BE KEPT AND MADE AVAILABLE TO JURISDICTIONAL AGENCIES IF REQUESTED. ANY SEDIMENT OR DEBRIS WHICH HAS REDUCED THE EFFICIENCY OF A STRUCTURE SHALL BE REMOVED IMMEDIATELY. SHOULD A STRUCTURE OR FEATURE BECOME DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE STRUCTURE AT NO ADDITIONAL COST TO THE OWNER.

29. THIS EROSION AND SEDIMENT CONTROL PLAN IS TO BE USED AS A BASE PLAN FOR THE CONTRACTOR AND IF IT IS REQUIRED TO BE MODIFIED THE CONTRACTOR SHALL NOTIFY THE DESIGNER/ENGINEER WITH THE CHANGES BY SUBMITTING A REVISED EROSION AND SEDIMENT CONTROL PLAN IDENTIFYING ALL REVISION REQUIRED AS A RESULT OF THE WORK. REVISIONS SHALL INCLUDE ALL PROPOSED BMPS NOT PROPOSED ON THIS PLAN OR CONSTRUCTION DOCUMENTS. THE PLAN SHALL BE UPDATE AS CONTROLS ARE PLACED IN THE FIELD.

30. THE CONTRACTOR MAY INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS ON A ROLLING BASIS AS CONSTRUCTION PROCEEDS. NO EARTH DISTURBANCE MAY OCCUR IN AN AREA UNLESS THE BMP ASSOCIATED WITH THE TRIBUTARY AREA IS IN PLACE. THE CONTRACTOR SHALL APPRISE THE CITY OF DUBLIN AND DESIGNER/ENGINEER OF THE ANTICIPATED INSTALLATION RANGE, DATE OF INSTALLED CONTROLS AND LOG THE ACTUAL PLACEMENT RANGE AND DATE ON THE PLAN.

31. THE SEDIMENT AND EROSION CONTROL PLAN AS HEREIN DELINEATED IS SUBJECT TO ADJUSTMENT TO ENSURE EROSION CONTROL MEASURES ARE PROPERLY COORDINATED WITH SUCCESSIVE CONSTRUCTION STAGES. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO MINIMIZE THE TOTAL AMOUNT OF AREA DISTURBED AT ONE TIME.

32. WASHOUT AREAS SHALL BE LOCATED AS NEEDED IN THE PROJECT AREA BUT AWAY FROM EXISTING WATERCOURSES. THE CONTRACTOR MAY PLACE WASHOUT AREAS AS NEEDED IN THE PROJECT AREA, BUT ALL WASHOUT AREAS SHALL BE ENTIRELY CONTAINED WITHIN THE RIGHT-OF-WAY AND MUST INSURE THAT NO WASH WATER IS DISCHARGED FROM THE WASHOUT AREA.

33. PROCESS WASTE WATER AND MATERIALS FROM WASHOUT OPERATIONS OR MATERIAL MIXING OPERATIONS SHALL BE DISPOSED OF AS WASTEWATER AND SHALL NOT BE DISCHARGED DIRECTLY TO STREAM COURSES. PROJECT WASTE WATER SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS.

34. WATER MAY BE USED FOR DUST CONTROL. USED OIL MAY NOT BE USED FOR DUST CONTROL.

35. ALL INSPECTION RECORDS SHALL BE RETAINED FOR AT LEAST THREE (3) YEARS AFTER COMPLETION OF CONSTRUCTION ACTIVITIES.

36. DIRECT DISCHARGE OF SEDIMENT LADEN WATER TO THE CITY'S SEWER SYSTEM OR A RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF DUBLIN REGULATIONS. THE CONTRACTOR WILL BE HELD LIABLE FOR THE VIOLATION AND SUBSEQUENT FINES.

PAVEMENT CUTTING, SAWING AND EXCAVATION OPERATIONS NOTE:

ALL PUBLIC AGENCIES AND PRIVATE CONTRACTORS PERFORMING PAVEMENT-CUTTING OPERATIONS ON CITY OF COLUMBUS STREETS AND ROADWAYS SHALL PROTECT THE ENVIRONMENT FROM DISCHARGES CREATED BY THEIR PAVEMENT CUTTING OPERATIONS. NOTE THAT COLUMBUS CITY CODE 1145 PROHIBITS NON-STORMWATER DISCHARGE INTO THE CITY OF DUBLIN SEWER SYSTEM, CURB INLETS AND ANY PARTS OF ITS MS4 (MUNICIPAL SEPARATE STORM SYSTEM).

THE REQUIREMENT INCLUDES BUT IS NOT LIMITED TO WET OR DRY SAW-CUTTING, JACK HAMMERING, EXCAVATION EQUIPMENT USE, ETC. THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR WORK CREWS SHALL RECOVER AND DISPOSE OF DETRITUS, POLLUTED WATERS, OR OTHER DISCHARGES RESULTING FROM THEIR PAVEMENT CUTTING OPERATIONS AND PROTECT ALL STORM SEWER INLETS FROM RECEIVING ANY DISCHARGES FROM THE CONSTRUCTION OPERATIONS. THE AGENCY OR CONTRACTOR RESPONSIBLE FOR EACH PAVEMENT CUTTING ACTIVITY SHALL BE SOLELY LIABLE FOR NOTICE OF VIOLATIONS (NOV/S) AND FINES ISSUED BY THE CITY OF COLUMBUS AND/OR STATE OF OHIO AUTHORITIES.

EQUIPMENT, MATERIALS AND METHODS SHALL BE PROVIDED BY THE RESPONSIBLE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR TO WORK CREWS PERFORMING THE PAVEMENT CUTTING ACTIVITY AND MADE AVAILABLE TO WORK CREWS FOR USE IN CLEANING UP DISCHARGES RESULTING FROM SUCH CUTTING ACTIVITIES AND PREVENTING RUNOFF. ALL CREWS SHALL BE TRAINED TO EXERCISE AND EMPLOY EQUIPMENT, MATERIALS, AND ENVIRONMENTAL PROTECTIVE MEASURES TO PREVENT POLLUTED DISCHARGES FROM ENTERING THE CITY OF DUBLIN STORM SEWER SYSTEMS AND WATERS OF THE STATE OF OHIO.

THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT THE INLET PROTECTION IS ADEQUATE. THE MOST STRINGENT PROJECT PLANS, NOTES AND/OR DRAWINGS INCLUDE STORMWATER POLLUTION PREVENTION PLAN (SWP3) OR SPILL PREVENTION/REMEDIATION PLAN SHALL APPLY TO ALL PAVEMENT CUTTING, SAWING OR EXCAVATION OPERATIONS.

37. SHOULD THE INSPECTION INDICATE THAT ANY BMP'S REQUIRE MAINTENANCE OR REPAIR, THE CONTRACTOR SHALL REPAIR NON-SEDIMENT POND BMP'S WITHIN THREE (3) DAYS OF INSPECTION AND REPAIR OR CLEAN OUT SEDIMENT PONDS WITHIN FIVE (5) DAYS OF INSPECTION.

38. IF THE INSPECTION INDICATES THAT A BMP IS NOT MEETING ITS INTENDED FUNCTION, THE CONTRACTOR SHALL INSTALL A NEW BMP WITHIN THREE (3) DAYS OF INSPECTION.

39. SHOULD THE INSPECTION INDICATE ANY MISSING BMP'S REQUIRED TO BE INSTALLED UNDER THIS PLAN, THE CONTRACTOR SHALL INSTALL ANY MISSING BMP'S WITHIN FIVE (5) DAYS OF INSPECTION.

40. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE OHIO EPA GENERAL NPDES PERMIT FOR CONSTRUCTION ACTIVITY AND THE CONSTRUCTION ACTIVITY EROSION AND SEDIMENT CONTROL REQUIREMENTS OF THE CITY OF COLUMBUS STORMWATER DRAINAGE MANUAL. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COVERAGE UNDER ANY GENERAL NPDES PERMIT AND/OR OBTAINING ANY INDIVIDUAL NPDES PERMIT FOR CONSTRUCTION ACTIVITY UNDER THIS PLAN.

41. STREET CLEANING (ON AN AS-NEEDED BASIS) IS REQUIRED THROUGH DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER CLEANING, AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS.

42. TEMPORARY SEEDING: ALL AREAS THAT REQUIRE TEMPORARY STABILIZED WITH BE TEMPORARY SEEDED. THIS WORK WILL CONSIST OF FERTILIZING, WATERING AND SEEDING MIX THAT IS APPROPRIATE FOR THE MONTH THAT THE TEMPORARY SEEDING WILL BE APPLIED. THE TEMPORARY SEEDING WILL TAKE PLACE AT THE RATES INDICATED UNDER CITY OF COLUMBUS ITEM 207 - CONSTRUCTION SEEDING AND MULCHING.

43. PERMANENT SEEDING: ALL AREAS THAT REQUIRE PERMANENT STABILIZED WITH BE PERMANENTLY SEEDED. THIS WORK WILL CONSIST OF FERTILIZING, WATERING AND SEEDING MIX THAT IS APPROPRIATE FOR THE MONTH THAT THE PERMANENT SEEDING WILL BE APPLIED. THE PERMANENT SEEDING WILL TAKE PLACE AT THE RATES INDICATED UNDER CITY OF COLUMBUS ITEM 659 - SEEDING AND MULCHING.

SITE DATA:
THIS PROJECT ENTAILS THE CONSTRUCTION OF THE BREMLEE ESTATES SUBDIVISION AND RELATED UTILITIES. NEW STORM WATER MANAGEMENT FACILITIES WILL BE INSTALLED TO COMPLY WITH WATER QUANTITY AND QUALITY REQUIREMENTS.

TOTAL DISTURBED AREA: 4.00 AC

EXISTING DRAINAGE/RECEIVING WATER: NORTH FORK OF INDIAN RUN

EROSION CONTROL DEVICES: CONSTRUCTION SEEDING AND MULCHING AND PERIMETER FILTER FABRIC FENCE

SCHEDULE: THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF OPERATIONS TO THE CITY AND DESIGNER/ENGINEER. EROSION AND SEDIMENTATION BMPS SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THIS SCHEDULE:

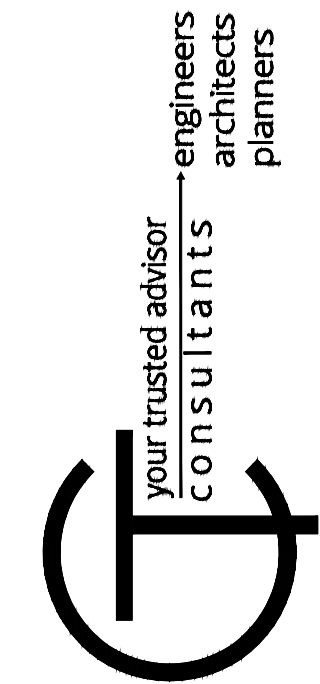
OWNER: T&R PROPERTIES
3895 STONERIDGE LANE
DUBLIN, OH 43017
PHONE: 614-923-4000
CONTACT: RON SABATINO
EMAIL: RSABATINO@TRPROP.COM

SITE CONTACT: SAME AS OWNER/DEVELOPER

PLAN DESIGNER: CT CONSULTANTS, INC.
7965 NORTH HIGH STREET, SUITE 340
COLUMBUS, OHIO 43235
CONTACT: JOHN MAAR
PHONE: 614-779-0030
FAX: 614-885-1701
EMAIL: JMAAR@CTCONSULTANTS.COM

OHIO EPA GENERAL PERMIT NO. OHC000005 CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN HAS BEEN ASSIGNED NPDES PERMIT NUMBER(S):

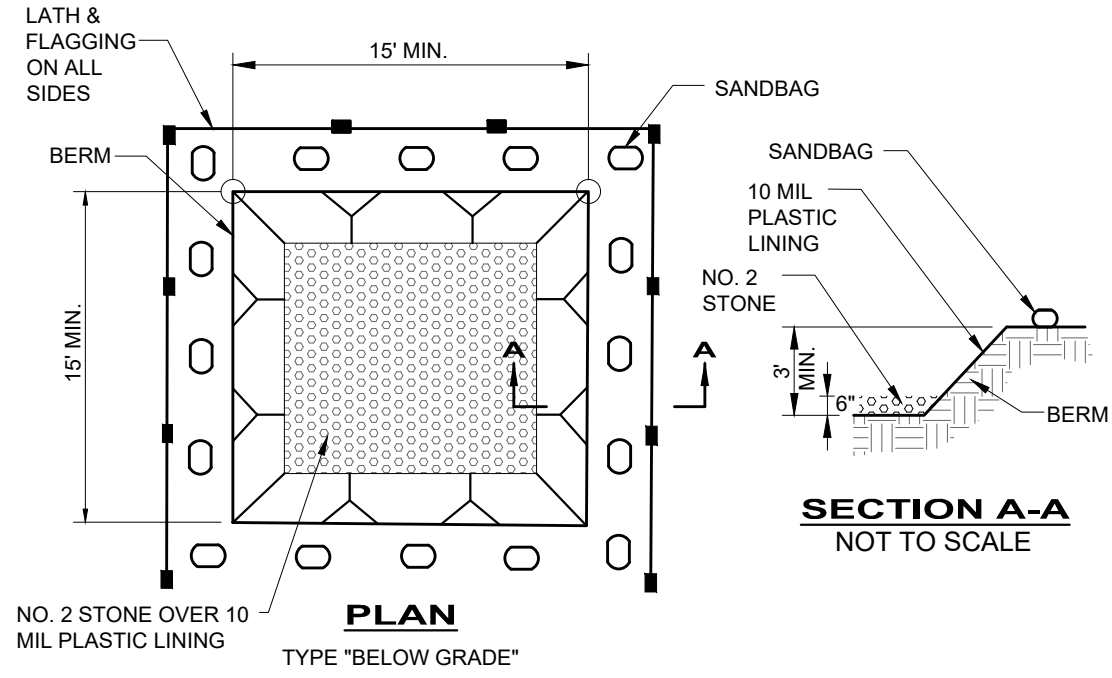
NOI IS REQUIRED SINCE PROJECT EDA IS GREATER THAN 1 AC.



REVISION		NO	DATE

BREMLEE ESTATES SUBDIVISION - DUBLIN, OHIO -	SWP3 NOTES & DETAILS

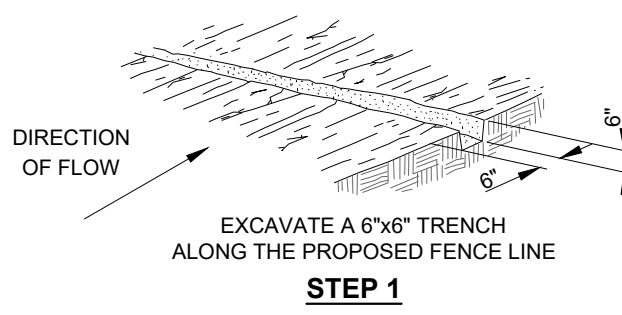
PROJECT NO.	
210661	
DISCIPLINE	
CIVIL	
SHEET NAME	
SWP3-NOTE	
SHEET	OF
12	14



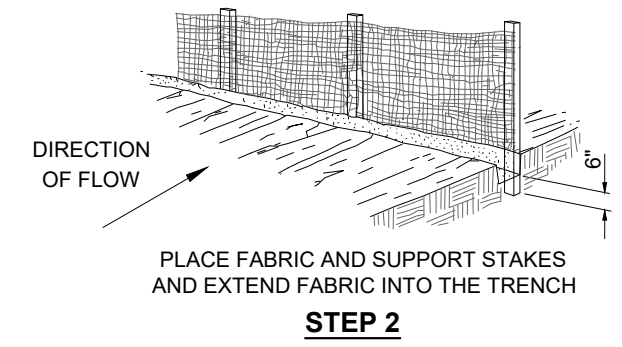
CONCRETE WASHOUT FACILITY
NOT TO SCALE

CONCRETE WASHOUT NOTES:

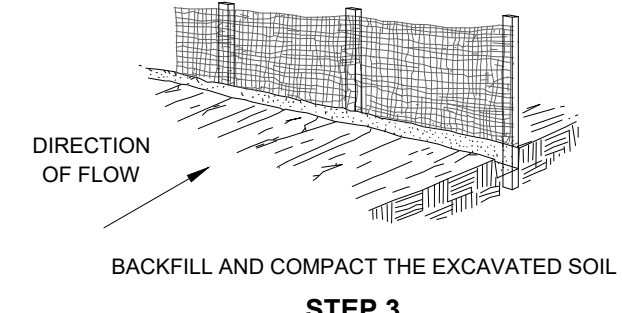
1. WASHOUT LOCATIONS SHALL BE GRADED IN SUCH A MANNER TO DRAIN AWAY FROM THE ADJACENT CREEK TO AVOID SPILL OVER.
2. WASHOUTS SHALL BE MAINTAINED DAILY. ACCUMULATED MATERIALS SHALL BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. THERE SHALL BE NO DISPOSAL IN OR NEAR ANY WATER BODY, FLOODPLAIN, WETLAND, DRAINAGE COURSE OR ENVIRONMENTALLY SENSITIVE AREAS, EVEN WITH PERMISSION OF THE PROPERTY OWNER.
3. THE USE OF PORTABLE CONCRETE WASHOUT UNITS IS APPROVED (AND ENCOURAGED) FOR ALL CONSTRUCTION AREAS IN THE CITY OF COLUMBUS.



STEP 1



STEP 2



STEP 3

PERIMETER FILTER FABRIC FENCE

MATERIALS:

FURNISH 30" WIDE FILTER FABRIC WITH SOUND WOOD SUPPORTS WITH MAXIMUM ON-CENTER SPACING OF 10'. USE FILTER FABRIC CONFORMING TO 712.09, TYPE C.

CONSTRUCTION:

TRENCH THE FILTER FABRIC FENCE AS DETAILED. THE CONTRACTOR MAY ELECT TO TRENCH THE FENCE DETAILED ON STEPS 1 THROUGH 3 IN ONE PLOWING OPERATION.

PAYMENT:

ITEM 207 - PERIMETER FILTER FABRIC FENCE.

MAINTENANCE:

IF RUNOFF OVERTOPS THE FENCE, FLOWS UNDER THE FABRIC, AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS CONCENTRATED FLOW TO DISCHARGE, ONE OF THE FOLLOWING MUST BE PERFORMED:

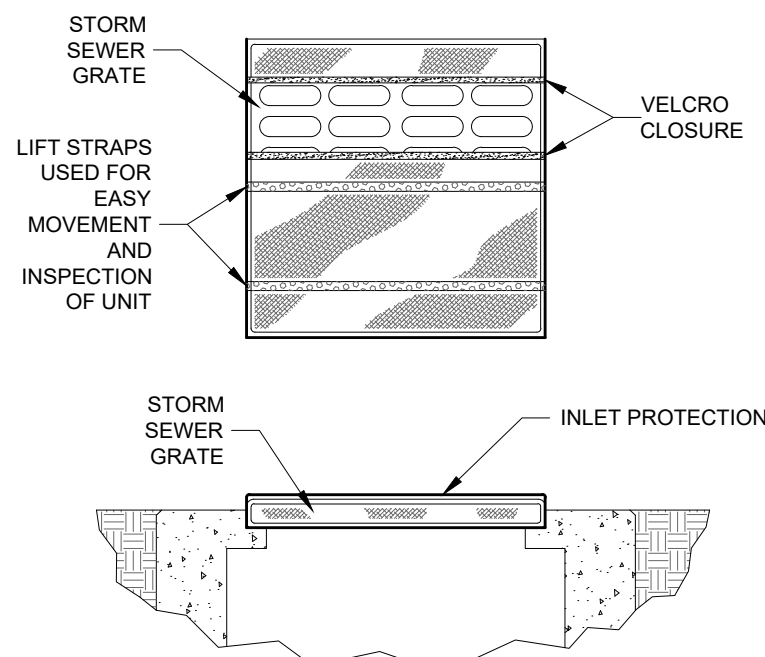
1. THE LAYOUT OF THE FENCE SHALL BE CHANGED
2. SEDIMENT SHALL BE REMOVED
3. ANOTHER BMP SHALL BE INSTALLED

SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED OR WHEN THE SEDIMENT REACHES ONE- HALF (1/2) OF THE HEIGHT OF THE FENCE.

FILTER FABRIC FENCE SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONG RAINFALL. THE LOCATION OF THE FENCE SHALL BE REVIEWED DAILY TO ENSURE EFFECTIVENESS.

REPAIRS SHALL BE MADE AS NEEDED TO ENSURE BMP IS PERFORMING AS INTENDED.

NOTE:
THE USE OF STRAW WATTLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP. ESPECIALLY IN RESIDENTIAL SETTINGS. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE. STRAW WATTLES OR COMPOST ROLLS HAVE TO BE A MINIMUM OF 12 INCHES IN DIAMETER NOW (OEPA).



INLET PROTECTION

MATERIALS:

FURNISH INLET PROTECTION CONFORMING TO THE SPECIFICATIONS LISTED ABOVE.

INSTALLATION:

- 1) REMOVE GRATE FROM CATCH BASIN
- 2) PLACE THE EMPTY DANDY BAG UNIT OVER THE GRATE AS THE GRATE STANDS ON END.
- 3) HOLDING THE LIFTING STRAPS INSERT THE GRATE INTO ITS FRAME

PAYMENT:

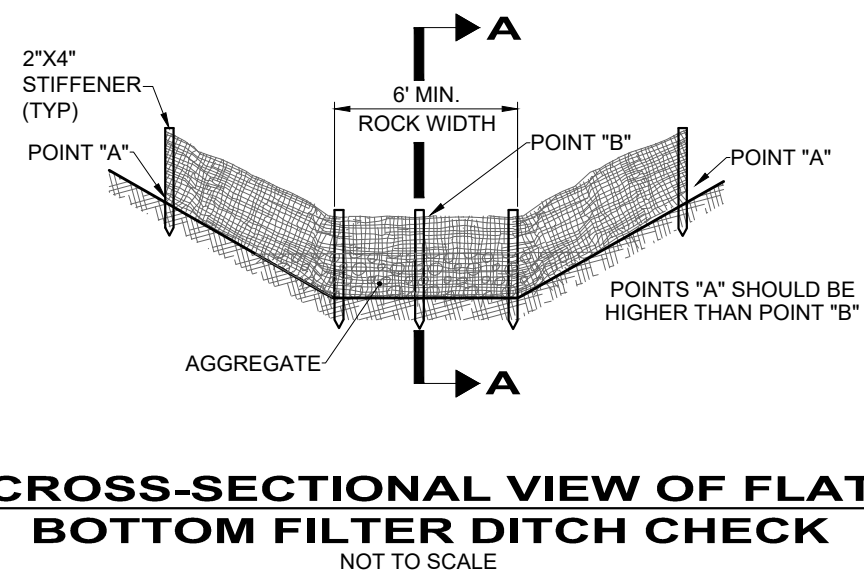
ITEM 207 - INLET PROTECTION - EA

MAINTENANCE:

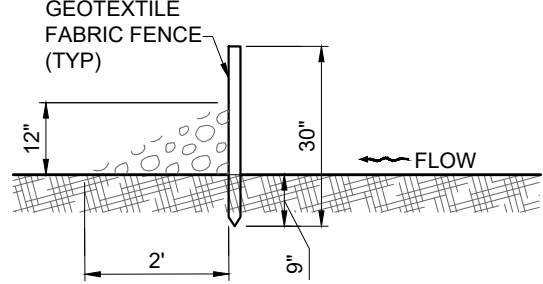
CONTRACTOR SHALL REMOVE ALL SEDIMENT AND DEBRIS FROM THE SURFACE AND VICINITY OF EACH UNIT AFTER EACH RAIN EVENT OR AS DIRECTED.

TO BE USED ON STRUCTURE NUMBERS:

1, 3, 6, 7



CROSS-SECTIONAL VIEW OF FLAT BOTTOM FILTER DITCH CHECK
NOT TO SCALE



PROFILE VIEW OF FLAT BOTTOM
SECTION A-A
NOT TO SCALE

NOTES:

GEOTEXTILE FABRIC DITCH CHECKS:

MATERIALS:

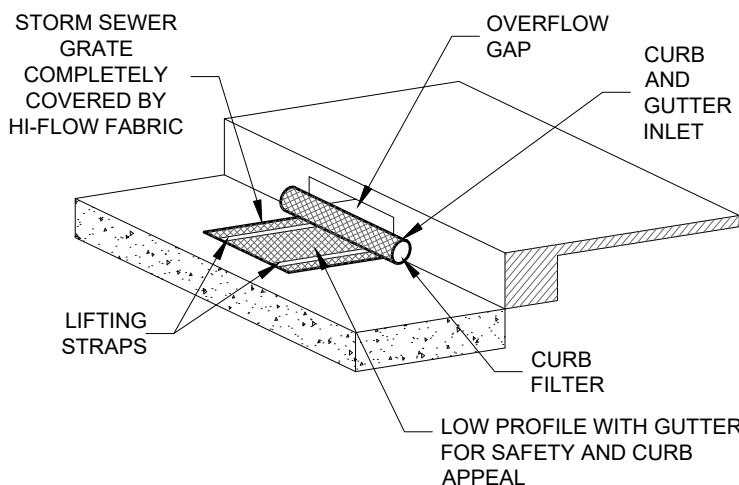
- FURNISH GEOTEXTILE FABRIC DITCH CHECKS CONSISTING OF THE FOLLOWING MATERIALS:
1. 30" WIDE GEOTEXTILE FABRIC WITH SOUND WOOD SUPPORTS WITH MAXIMUM ON-CENTER SPACING OF 10'. USE GEOTEXTILE FABRIC CONFORMING TO 712.09, TYPE C.
 2. A VERTICALLY DRIVEN 2"X4" STIFFENER STAKE IN THE CENTER OF THE DITCH.
 3. AGGREGATE CONFORMING TO ONE OF THE FOLLOWING GRADATIONS: NO. 1 THROUGH NO. 4 ON TABLE 703.01. WHEN USING STRAW BALES, FURNISH 30" LONG 2"X2" WOODEN STAKES. REINFORCING BARS OR FENCE POSTS TO STAKE STRAW BALES IN PLACE.

CONSTRUCTION:

TRENCH THE GEOTEXTILE FABRIC FENCE AS DETAILED FOR PERIMETER FILTER FABRIC FENCE. PLACE A VERTICAL 2"X4" STIFFENER STAKE IN THE CENTER OF THE DITCH WITH THE TOP LEVEL TO THE TOP OF THE FENCE AND AT LEAST 6" BELOW THE BOTTOM OF THE DITCH. EXCAVATE FOR AGGREGATE AND PLACE THE AGGREGATE ON THE DOWNSTREAM SIDE OF THE DITCH CHECK. IF THE ENGINEER DETERMINES THAT ROCK SHOULD NOT BE USED FOR THE GEOTEXTILE FABRIC DITCH CHECKS, REPLACE AGGREGATE WITH STRAW BALES CONFIGURED WITH MINIMAL GAPS BETWEEN BALES. TIGHTLY PLACE EACH BALE ADJACENT TO ONE ANOTHER. ENTRENCH 2' TO 3' INTO THE GROUND PRIOR TO STAKING. FIRMLY STAKE EACH BALE WITH AT LEAST TWO STAKES.

PAYMENT:

ITEM 207 - FILTER DITCH CHECK



INLET PROTECTION

MATERIALS:

FURNISH INLET PROTECTION CONFORMING TO THE SPECIFICATIONS LISTED ABOVE.

INSTALLATION:

1. REMOVE GRATE FROM INLET.
2. PLACE THE EMPTY DANDY CURB BAG UNIT OVER THE GRATE AS THE GRATE STANDS ON END.
3. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GATE.
4. HOLDING THE LIFTING STRAPS INSERT THE GRATE INTO ITS FRAME. STREET SIDE EDGE FIRST, THEN LOWER BACK EDGE WITH CYLINDRICAL TUBE INTO PLACE.

PAYMENT:

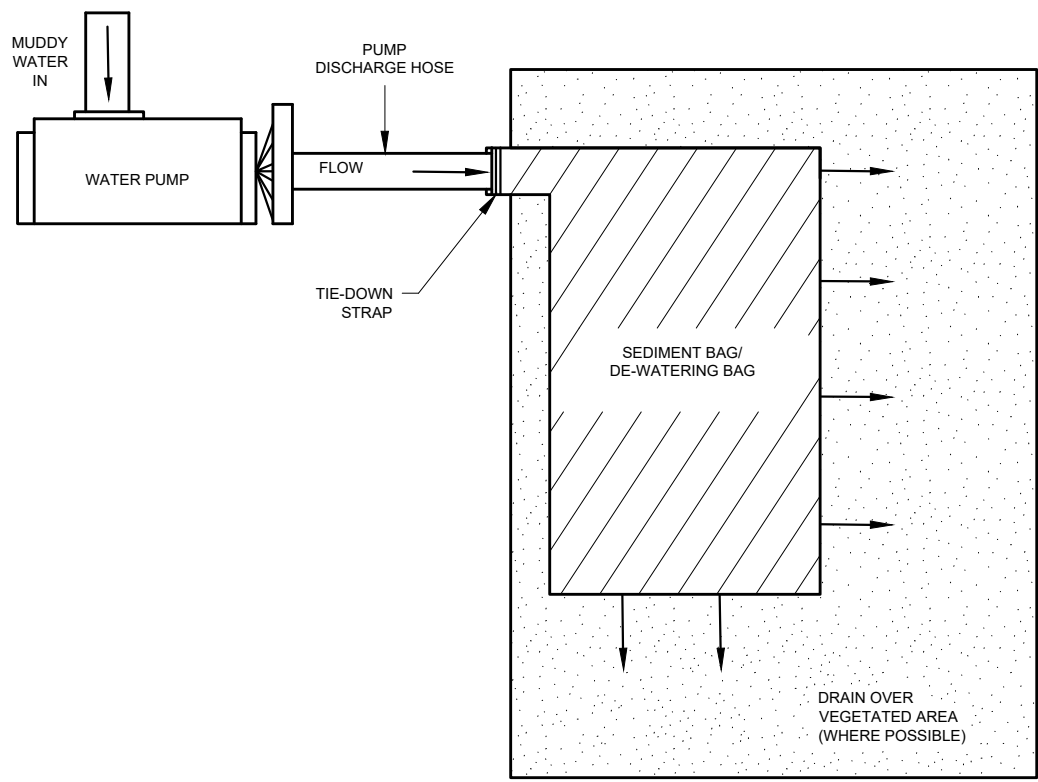
ITEM 207 - INLET PROTECTION - EA

MAINTENANCE:

CONTRACTOR SHALL REMOVE ALL SEDIMENT AND DEBRIS FROM THE SURFACE AND VICINITY OF EACH UNIT AFTER EACH RAIN EVENT OR AS DIRECTED.

TO BE USED ON STRUCTURE NUMBERS:

4, 5

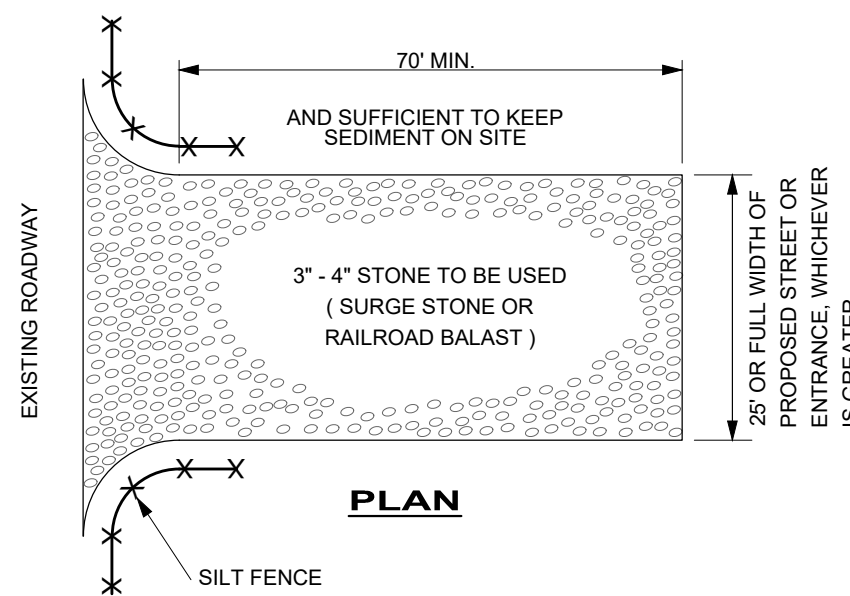


PUMPING MUDDY WATER DETAIL
NTS

THE PUMPING OR DIRECT DISCHARGE OF SEDIMENT-LADEN (MUDDY) WATER TO THE CITY'S SEWER SYSTEM OR RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF COLUMBUS REGULATIONS.

ALL INLETS RECEIVING FLOW FROM RUNOFF, PUMPING ACTIVITIES, OR OTHER DIRECT DISCHARGES SHALL BE FITTED WITH AN INLET PROTECTION DEVICE THAT IS PROPERLY SIZED AND SECURED TO REDUCE THE DISCHARGE OF SEDIMENT INTO THE STORM SEWER SYSTEM AND RECEIVING STREAM. INLET PROTECTION IS REQUIRED ON ALL INLETS RECEIVING DISCHARGE REGARDLESS OF WHETHER OR NOT THE INLET IS TRIBUTARY TO ANY DOWNSTREAM EROSION AND SEDIMENT CONTROLS.

DISCHARGE HOSES USED DURING PUMPING ACTIVITIES SHALL BE FITTED WITH SEDIMENT BAGS THAT ARE PROPERLY SIZED PER MANUFACTURER'S RECOMMENDATIONS REGARDLESS OF WHAT OTHER SEDIMENT CONTROLS ARE IN PLACE FURTHER DOWNSTREAM. SEDIMENT BAGS MUST BE PROPERLY SECURED TO THE DISCHARGE HOSE AND PLACED OVER VEGETATED AREAS, WHERE FEASIBLE, DURING DISCHARGE. SEE DETAIL ABOVE OF A TYPICAL SEDIMENT BAG INSTALLATION.



CONSTRUCTION ENTRANCE DETAIL
NTS

MAINTENANCE:

1. SILT FENCE SHOULD BE INSTALLED TO ENSURE CONSTRUCTION ENTRANCE IS USED.
2. IF MUD IS NOT REMOVED FROM THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLE MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD OR THE LENGTH OF THE CONSTRUCTION ENTRANCE EXTENDED.
3. ADD ADDITIONAL 2" STONE STONE AS NEEDED

PAYMENT:

ITEM 207 - STABILIZED CONSTRUCTION ENTRANCE

FAIRCLOTH SKIMMER GENERAL NOTES:

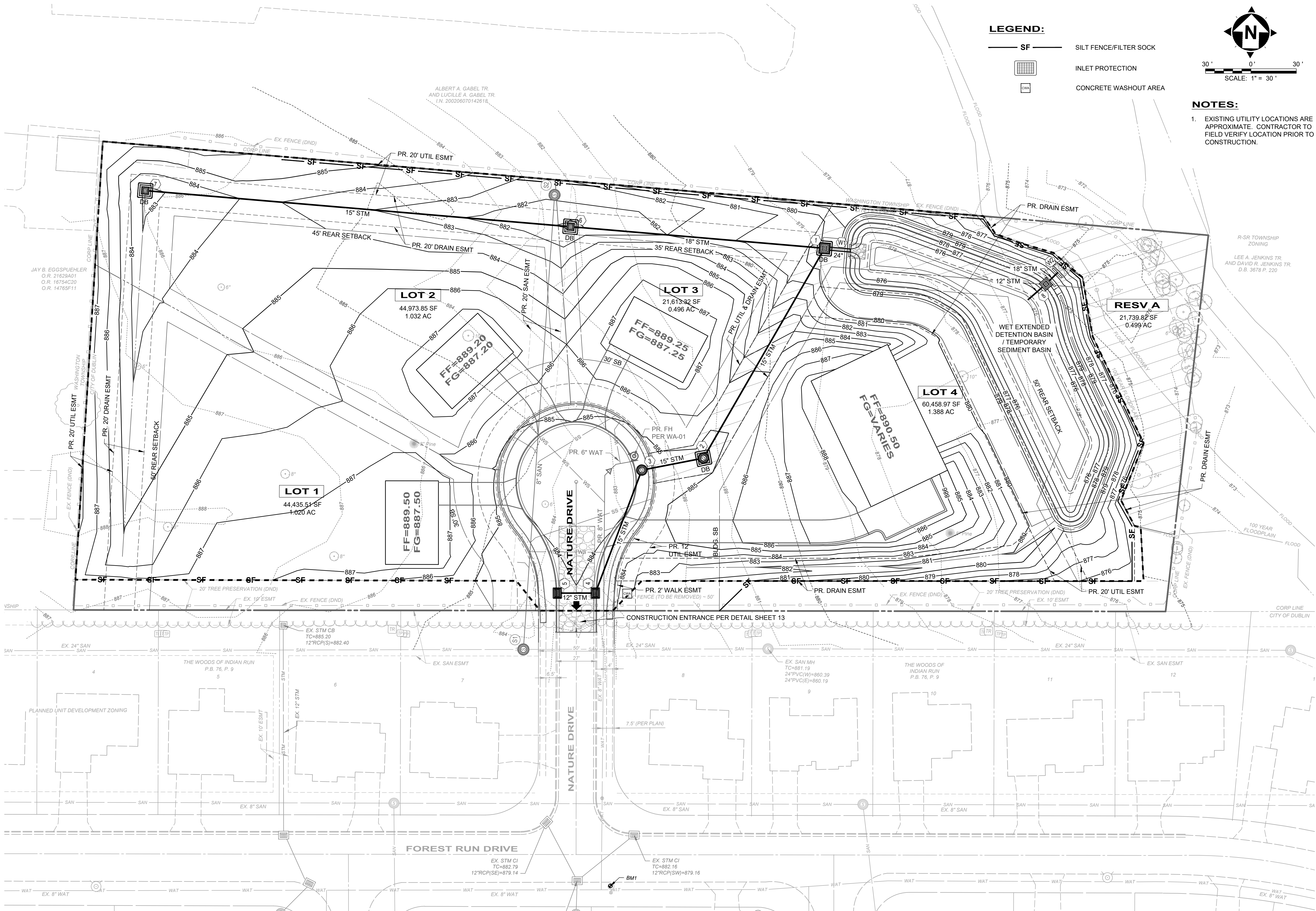
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE BASIN DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND TEMPORARY EROSION PROTECTION INSTALLED.
5. TEMPORARY EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.

FAIRCLOTH SKIMMER SPECIFICATION			
BASIN	SKIMMER DIAMETER SIZE (IN.)	SKIMMER ORIFICE DIAMETER (IN.)	SKIMMER WIRE STOP ELEV.
TEMP SED. BASIN 1	X"	X"	XXX.XX

TEMPORARY SEDIMENT BASIN CALCULATIONS						
BASIN	TRIBUTARY AREA (AC.)	EARTH DISTURBED AREA (AC.)	DEWATERING VOLUME REQUIRED (1800 CF/AC)	SEDIMENT VOLUME REQUIRED (1000 CY/AC.)	TOTAL VOLUME REQUIRED (CF)	TOTAL VOLUME PROVIDED (CF)
TEMP SED. BASIN 1	X.XX	X.XX	X	X	X	X

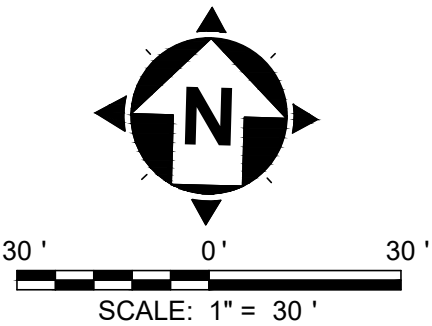
ISSUED FOR:	REVIEW	NO	REVISION	DATE
4/29/22				
SCALE:	AS SHOWN			
DESIGNED BY:	BDC			
DRAWN BY:	BKU			
CHECKED BY:	JAM			

PROJECT NO.	
210661	
DISCIPLINE	
CIVIL	
SHEET NAME	
SWP3-DET	
SHEET	OF
13	14



LEGEND:

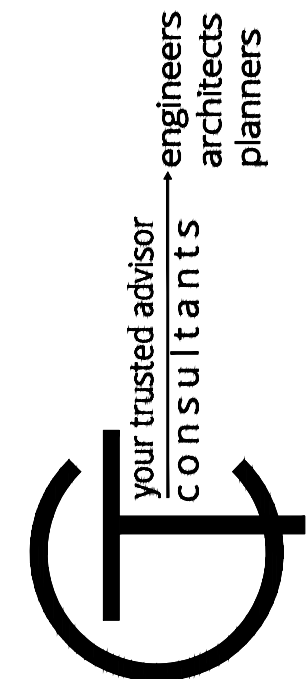
- SF SILT FENCE/FILTER SOCK
- INLET PROTECTION
- CONCRETE WASHOUT AREA



NOTES:

- EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

BREMLEE ESTATES
SUBDIVISION
- DUBLIN, OHIO -
SWP3 PLAN



ISSUED FOR:	REVIEW	NO	REVISION	DATE
4/29/22	AS SHOWN	BDC	BRU	JAM
SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	

PROJECT NO.	210661
DISCIPLINE	CIVIL
SHEET NAME	SWP3-PLN
SHEET	14
OF	14