

ESTIMATE OF QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
604	2	EA.	TYPE "C" MANHOLE
604	1	EA.	TYPE "C" MANHOLE W/ OUTSIDE DROP
901	178	L.F.	8" SANITARY SEWER PIPE WITH TYPE I BEDDING & COMPACTED BACKFILL
901	129	L.F.	8" SANITARY SEWER PIPE WITH TYPE I BEDDING & COMPACTED GRANULAR BACKFILL
914	9	L.F.	6" PIPE RISERS
915	5	EA.	8"x 6" WYE FITTINGS
918	10	L.F.	6" SANITARY SEWER SERVICE WITH TYPE I BEDDING

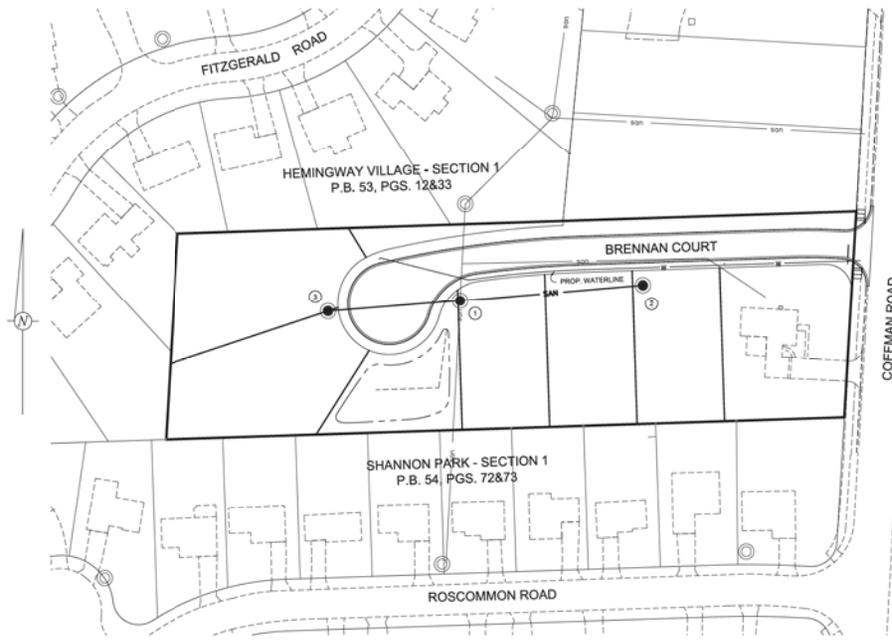
NOTE RE: ESTIMATE OF QUANTITIES
 THESE QUANTITIES ARE APPROXIMATE ONLY AND ARE NOT TO BE USED FOR PREPARATION OF COST ESTIMATES, BIDS, OR ANY OTHER ESTIMATING PURPOSE WITHOUT VERIFICATION BY THE USER, ANY DISCREPANCIES IN THE QUANTITIES SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER FOR EVALUATION.

CITY OF DUBLIN, OHIO PUBLIC SANITARY SEWER IMPROVEMENTS FOR COFFMAN RESERVE 2013



LOCATION MAP
NO SCALE

DEVELOPER/OWNER
 THE PARAGON BUILDING GROUP, LTD.
 10104 BREWSTER LANE, SUITE 100
 POWELL, OHIO 43065
 CONTACT: CHARLES RUMA
 EMAIL: CHARLES@VIRGINIA-HOMES.COM
 PHONE: 614-764-1953 X-103



INDEX MAP
SCALE: 1" = 60'

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STANDARD DRAWINGS

THE STANDARD DRAWINGS LISTED ON THESE PLANS SHALL BE CONSIDERED A PART THEREOF.

CITY OF DUBLIN	CITY OF COLUMBUS
SA-01	AA-S102
SA-02	AA-S106
SA-03	AA-S107
	AA-S110
	AA-S111
	AA-S117
	AA-S119
	AA-S149
	AA-S150
	AA-S160

BENCHMARKS

REFERENCE BENCHMARK
 DESIGNATION: N39RESET

ALUMINUM DISK IN THE TOP OF THE SOUTH END OF THE EAST ABUTMENT OF BRAND ROAD BRIDGE WAS 44-2.09 OVER NORTH FORK INDIAN RUN, 0.20 MILES NORTHWEST OF COFFMAN ROAD, 19.5 FEET SOUTH OF THE CENTERLINE OF BRAND ROAD.

ELEV.: 866.766'
 (NAVD 88 REFERENCE DATUM)

BENCHMARK #1
 NORTH BOLT ON THE FIRE HYDRANT ON THE WEST SIDE OF COFFMAN ROAD, 235'± SOUTH OF ADVENTURE DRIVE.

ELEV.: 892.69'

BENCHMARK #2
 RAIL ROAD SPIKE IN THE WEST SIDE OF A UTILITY POLE ON THE EAST SIDE OF COFFMAN ROAD, 335'± NORTH OF ROSCOMMON ROAD.

ELEV.: 893.11'

SIGNATURES

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 ENGINEER PREPARING THE PLANS.

APPROVED:

CITY ENGINEER _____ DATE _____
 CITY OF DUBLIN, OHIO

DIRECTOR OF LAND USE & LONG RANGE PLANNING _____ DATE _____
 CITY OF DUBLIN, OHIO

NOTE: APPROVAL ON THE PART OF THE CITY OF COLUMBUS IS GIVEN PURSUANT TO THE PROVISIONS OF THE SEWER AGREEMENT WITH THE CITY OF DUBLIN, OHIO DATED APRIL 13, 1993, AND ALL SUBSEQUENT AMENDMENTS THEREOF.

ADMINISTRATOR, DIVISION OF SEWERAGE & DRAINAGE _____ DATE _____
 CITY OF COLUMBUS, OHIO

DIRECTOR OF PUBLIC UTILITIES _____ DATE _____
 CITY OF COLUMBUS, OHIO

NOTE: THE SANITARY SEWER MEETS OR EXCEEDS ALL CITY OF COLUMBUS DESIGN STANDARDS (INCLUDING PER CAPITA FLOW, PEAKING FACTOR) & MATERIALS SPECIFICATIONS.



800-362-2764 or 8-1-1
 www.oups.org



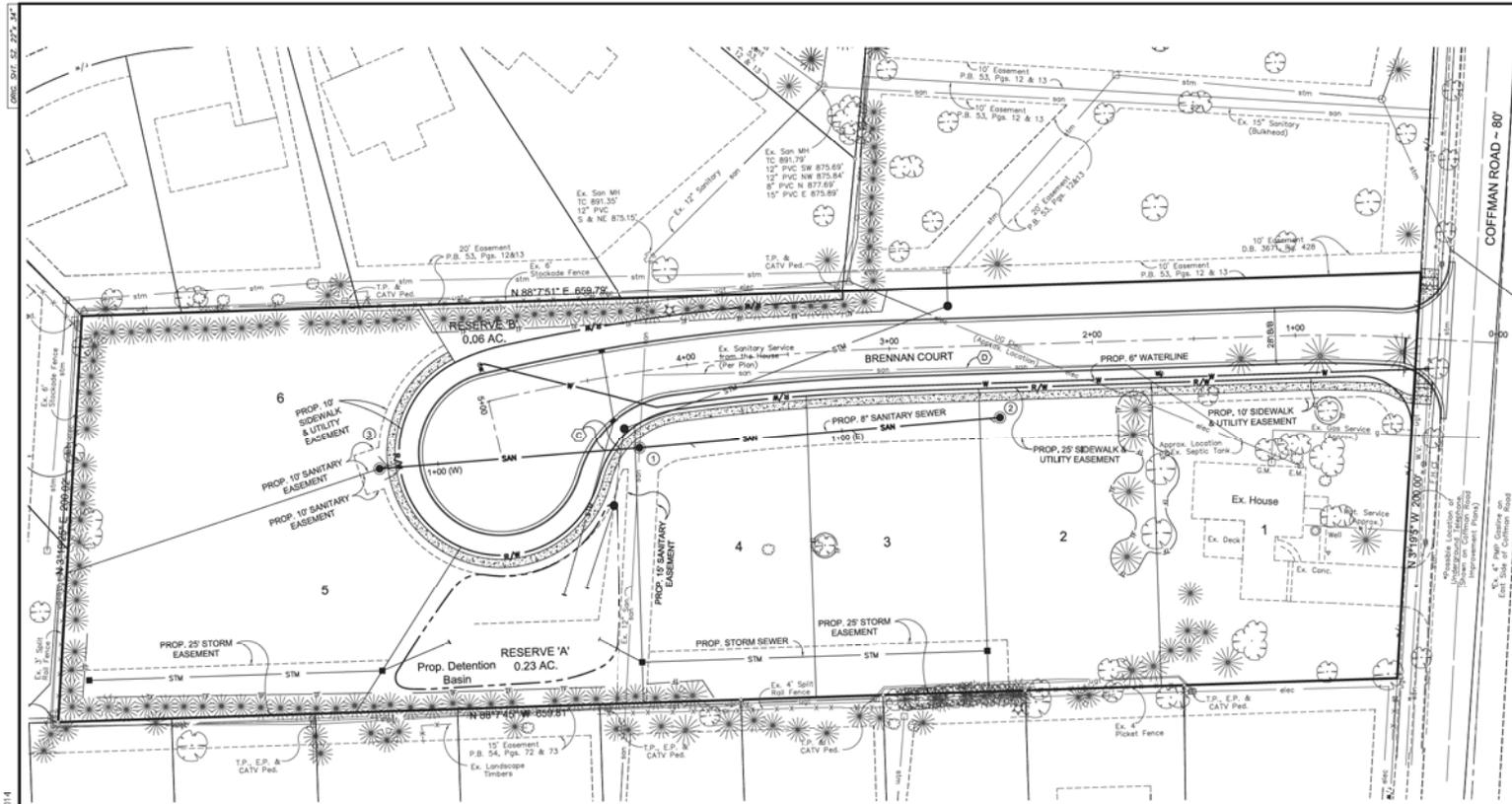
JAMES M. BARRY - OHIO ENGINEER NO. E-52696



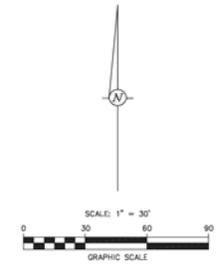
DATE

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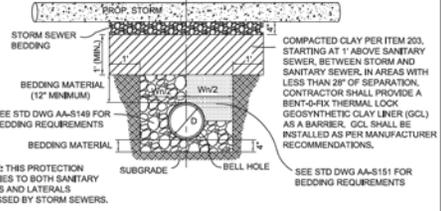
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STATE PLANE COORDINATES FOR MANHOLES AND REFERENCE POINTS					
THE BASIS OF BEARING FOR THIS SURVEY WAS XXX					
PROPOSED SANITARY MANHOLE COORDINATES			AS-BUILT SANITARY MANHOLE COORDINATES		
MH NO.	NORTHING	EASTING	MH NO.	NORTHING	EASTING
1	769682.6936	1791221.5161	1		
2	769696.0337	1791399.0440	2		
3	769672.4541	1791093.2254	3		



FLEXIBLE SEWER PIPE				RIGID SEWER PIPE			
* INCHES				* INCHES			
D	W _h	D	W _h	D	W _h	D	W _h
6	30	24	48	8	24	30	57
8	30	27	52	10	30	36	64
10	30	30	56	12	32	42	71
12	32	36	64	15	36	48	78
15	36	42	72	18	40	54	87
18	40	48	80	21	44	60	96
21	44			24	48	66	108
				27	52		



ANTI INFILTRATION AND INFLOW BARRIER DETAIL
NO SCALE

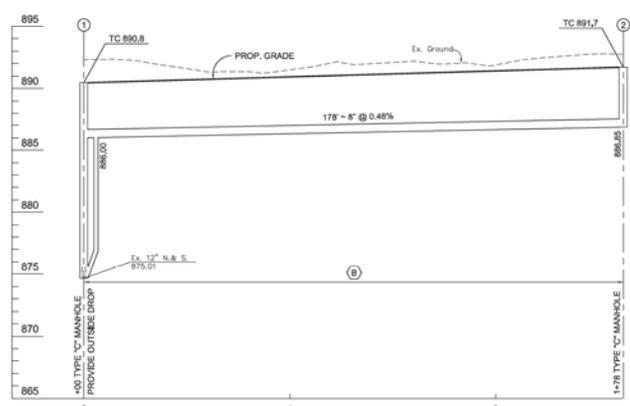
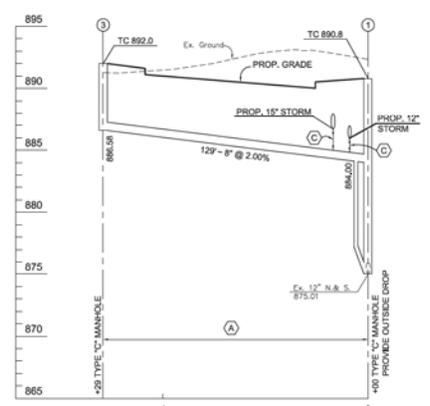
CODED NOTES

- (A) COMPACTED GRANULAR BACKFILL PER CITY OF COLUMBUS ITEM 912.
- (B) COMPACTED BACKFILL PER CITY OF COLUMBUS ITEM 911.
- (C) ANTI INFILTRATION/ INFLOW BARRIER PER DETAIL ON THIS SHEET.
- (D) EXISTING SANITARY SEWER SERVICE TO REMAIN IN USE.

LEGEND

- TREE PROTECTION FENCE

SERVICE SCHEDULE				
LOT NO.	WYE STATION	ELEVATION AT END OF SERVICE	LENGTH OF RISER	LENGTH OF SERVICE
5	1+18	889.5	1	10
6	1+23	889.5	2	
4	0+25	889.0	2	
3	1+05	889.0	2	
2	1+73	888.6	2	



SANITARY SEWER PROFILES
SCALE: 1" = 30' HORIZ. / 1" = 5' VERT.



Bird-Bull
C.F. BIRD & R.J. BULL, INC.
Engineers and Surveyors
2912 W. Dublin-Greenwich Road
Columbus, Ohio 43235
Ph: (614) 761-1561
Fax: (614) 761-1528
WWW.BIRDBULL.COM

COFFMAN RESERVE
COFFMAN ROAD
DUBLIN, OHIO 43217

**SANITARY SEWER
PLAN AND PROFILE**

SCALE: 1" = 30' HORIZ. / 1" = 5' VERT.
DWN:WSM CKD:JMB DATE: 4/21/14

JOB NO. 12422 2

GENERAL NOTES

- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF DUBLIN DIVISION OF ENGINEERING IN WRITING AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.
- 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.
- 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 CONSTRUCTION DRAWINGS.
- 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.
- THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCH MARKS, 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. RESETTling OF MARKERS SHALL BE PERFORMED BY AN OHIO PROFESSIONAL SURVEYOR AS APPROVED BY THE CITY ENGINEER.
- NON-RUBBER Tired VEHICLES SHALL NOT BE MOVED ON OR ACROSS PUBLIC STREETS OR HIGHWAYS WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED BEFORE CONSTRUCTION. DRAINAGE DITCHES OR WATER COURSES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THE GRADES AND CROSS-SECTIONS THAT EXISTED BEFORE CONSTRUCTION.
- TRACKING OR SPILLING MUD, DIRT OR DEBRIS UPON STREETS, RESIDENTIAL OR COMMERCIAL DRIVES, SIDEWALKS OR BIKE PATHS IS PROHIBITED ACCORDING TO SECTION 97.28 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.
- DISPOSAL OF EXCESS EXCAVATION WITHIN SPECIAL FLOOD HAZARD AREAS (100-YEAR FLOODPLAIN) IS NOT PERMITTED.
- 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.
- 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.
- 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.
- 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 CURB, TYPE B ACCORDING TO ITEM 636, ITEM 911 OF THE STANDARD SPECIFICATIONS MAY BE USED ELSEWHERE.
- 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
 180 EAST 17TH AVENUE
 COLUMBUS, OHIO 43219

SEND A COPY OF THE TRANSMITTAL LETTER TO THE FOLLOWING ADDRESS:
 DIVISION OF ENGINEERING
 CITY OF DUBLIN
 5803 SHERBURNES ROAD
 DUBLIN, OHIO 43016

- 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. CLEANUP SHALL FOLLOW CLOSELY BEHIND THE TRENCHING OPERATION.
- 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 8+ 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.
- CONDUIT MUST BE DIRECTLY 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 CONDUIT 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 B) SHALL BE USED IN PLACE OF COMPACTED GRANULAR BACKFILL, ACCORDING TO ITEM 636 OF THE STANDARD SPECIFICATIONS.
- 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.

- 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 THE CITY OF COLUMBUS STANDARD SPECIFICATIONS (141.14) 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.
- 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.
- ANY MODIFICATION TO THE WORK SHOWN ON DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER, CITY OF DUBLIN.
- ALL INLETS SHALL BE CHANNELIZED.
- PARK AREAS SHALL BE FINE_GRADED AND SEEDDED 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: 1.1BS PER 1000 SQ FT OR AS DIRECTED BY THE DIVISION OF PARKS AND RECREATION, CITY OF DUBLIN, OHIO.
- TRAFFIC CONTROL AND OTHER REGULATORY SIGNS SHALL BE TYPE B WITH A SQUARE POST ANCHOR BASE INSTALLATION AND MEET ALL REQUIREMENTS OF ODOT TC-120 AND APPLICABLE CITY OF DUBLIN SPECIFICATIONS.
- 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 B, SQUARE POST ANCHOR BASE INSTALLATION REQUIREMENTS OF ODOT TC-120.

UTILITIES

- THE FOLLOWING UTILITIES ARE KNOWN TO BE LOCATED WITHIN THE LIMITS OF THIS PROJECT:
- | UTILITY | OWNER | TELEPHONE |
|------------------------|--|----------------|
| FIRE HYDRANTS & SEWERS | CITY OF DUBLIN 5600 SHERBURNES ROAD DUBLIN, OHIO 43016 | (614) 410-4600 |
| WATER FACILITIES | CITY OF COLUMBUS (DIVISION OF WATER) 910 DUBLIN RD, COLUMBUS, OHIO 43215 | (614) 645-7788 |
| GAS | COLUMBIA GAS OF OHIO GOODALE BLVD COLUMBUS, OHIO 43212 | (614) 460-2079 |
| CABLE TV | WARNER CABLE 1266 DUBLIN ROAD COLUMBUS, OHIO 43215 | (614) 481-5000 |
| TELEPHONE | AMR/TECH 150 E. GAY ST., ROOM 4C COLUMBUS, OHIO 43215 | (614) 223-8262 |
| ELECTRICITY | AMERICAN ELECTRIC POWER COLUMBUS DIVISION 215 N. FRONT ST., COLUMBUS, OHIO 43215 | (614) 494-7253 |
- THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO OHIO UTILITIES PROTECTION SERVICE (TELEPHONE NUMBER 800-362-2764), PRODUCER'S UNDERGROUND PROTECTION SERVICE (TELEPHONE NUMBER 614-658-0486), 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.
 - 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 CONTINUED DAMAGE.
 - 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.
 - WHEN UNKNOWN OR INCORRECTLY LOCATED UNDERGROUND UTILITIES ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE CITY ENGINEER.
 - PUBLIC STREET LIGHTING MAY BE IN THE VICINITY OF THIS PROJECT. CONTACT THE CITY OF DUBLIN DIVISION OF ENGINEERING AT 410-4537, TWO DAYS PRIOR TO BEGINNING WORK.

TRAFFIC CONTROL

- TRAFFIC CONTROL SHALL BE FURNISHED, ERRECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR ACCORDING TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION.
- ALL TRAFFIC LANES OF PUBLIC ROADWAYS SHALL BE FULLY OPEN TO TRAFFIC FROM 7:00 AM TO 6:00 AM AND FROM 6:00 PM TO 6:00 PM UNLESS AUTHORIZED OTHERWISE BY THE CITY ENGINEER. AT ALL OTHER HOURS THE CONTRACTOR SHALL MAINTAIN MINIMUM ONE-LANE TWO-WAY TRAFFIC, UNIFORMED, OFF-DUTY POLICE OFFICERS SHALL BE PLACED AT THE PROJECT AT NO COST TO THE CITY. PRESENT WHEREVER ONE-LANE, TWO-WAY TRAFFIC CONTROL IS IN EFFECT, POLICE OFFICERS MAY BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.
- IF THE CITY ENGINEER DETERMINES PROPER PROVISIONS FOR TRAFFIC CONTROL ARE NOT BEING PROVIDED BY THE CONTRACTOR, THE CITY ENGINEER SHALL ASSIGN UNIFORMED, OFF-DUTY POLICE OFFICERS TO THE PROJECT AT NO COST TO THE CITY.
- STEADY-BURNING, TYPE "C" LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS, AND SIMILAR TRAFFIC CONTROL DEVICES IN USE AT NIGHT.
- ACCESS FROM PUBLIC ROADWAYS TO ALL ADJOINING PROPERTIES FOR EXISTING RESIDENTS OR BUSINESSES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT FOR MAIL, PUBLIC 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 DEVICES CONTAINED HEREIN. THE TRAFFIC CONTROL PLAN PROPOSED BY THE CONTRACTOR MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

WATER LINE

- ALL WATER LINE MATERIALS SHALL BE PROVIDED AND INSTALLED ACCORDING TO CURRENT SPECIFICATIONS OF THE CITY OF COLUMBUS DIVISION OF WATER.
- 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 BE APPROVED BY THE CITY OF COLUMBUS DIVISION OF WATER PRIOR TO APPROVAL OF THE CONSTRUCTION DRAWINGS.
- ONLY FIRE HYDRANTS CONFORMING TO CITY OF COLUMBUS STANDARDS WILL BE APPROVED FOR USE.
- 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.
- 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 C401, PARTICULARLY FOR FLUSHING (SECTION 8) 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.
- 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.
- NO WATER TAPS OR SERVICE CONNECTIONS (E.G., TO CURB STOPS OR METER PITS) MAY BE ISSUED UNLESS THE PUBLIC WATER SERVICE SERVING THE CONSTRUCTION SITE HAVE BEEN ACCEPTED 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.
- 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.
- ALL WATER MAIN STATIONING SHALL BE BASED ON STREET CENTERLINE STATIONING.
- ALL BENDS, JOINT DEFLECTIONS AND FITTINGS SHALL BE BACKED WITH CONCRETE PER CITY OF COLUMBUS STANDARDS.
- 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. TEMPORARY INTERRUPTION OF WATER SERVICE SHALL BE MINIMIZED AND MUST BE APPROVED BY THE CITY ENGINEER.
- 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-1103, AS FOR 3/4" THROUGH 1" METERS OR L-617, A, B, C AND FOR 1-1/2" OR LARGER METERS.
- WATER LINES TO BE INSTALLED IN EMBANKMENT AREAS SHALL BE PLACED AFTER THE EMBANKMENT HAS BEEN PLACED AND COMPACTED ACCORDING TO THE STANDARD SPECIFICATIONS.
- CURB STOP BOXES SHALL BE LOCATED AT LEAST 1 FOOT INSIDE THE RIGHT-OF-WAY AND SET AT FINISHED GRADE.
- IF THE TOP OF THE OPERATING NIB OF ANY VALVE IS GREATER THAN 36 INCHES BELOW FINISHED GRADE, AN EXTENSION STEM SHALL BE FURNISHED TO BRING THE TOP OF THE OPERATING NIB WITHIN 24 INCHES OF FINISHED GRADE ELEVATION.
- 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.
- TWO 3/4 INCH NIPS SHALL BE INSTALLED WITHIN 2 FEET OF THE END OF THE LINE ON ALL DEAD-END WATER LINES.

EROSION AND SEDIMENT CONTROL

- 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 DEPA 30 DAYS PRIOR TO THE START OF CONSTRUCTION AND MAY ENTITILE 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 PERMITTEE.
- THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL AT ALL POINTS WHERE STORM WATER RUNOFF LEAVES THE PROJECT, INCLUDING WATERWAYS, OVERLAND SHEET FLOW, AND STORM SEWERS.
- ACCEPTED METHODS OF PROVIDING EROSION/SEDIMENT CONTROL INCLUDE BUT ARE NOT LIMITED TO: SEDIMENT BINS, SILT FILTER FENCE, AGGREGATE CHECK DAMS, AND TEMPORARY GROUND COVER. HAY OR STRAW BALES ARE NOT PERMITTED.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE OF THE WORK AREA AT ALL TIMES CONSISTENT WITH EROSION CONTROL PRACTICES.
- DISTURBED AREAS THAT WILL REMAIN UNWORKED FOR 30 DAYS OR MORE SHALL BE SEEDED OR PROTECTED WITH SEVEN CALENDAR DAYS OF THE DISTURBANCE. OTHER SEEDING 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

- 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 OWNERS ENGINEER. TOP OF ROCK ELEVATIONS SHALL BE SHOWN ON "AS-BUILT" CONSTRUCTION DRAWINGS.

STORM SEWERS

DELETED FOR THIS PROJECT

STORM SEWER

- ALL STORM WATER DETENTION AND RETENTION AREAS AND MAJOR FLOOD ROUTING SWALES SHALL BE 1. CONSTRUCTED TO FINISH GRADE AND HYDRO-SEEDED AND HYDROMULCHED ACCORDING TO ITEMS 203 AND 650 OF THE STANDARD SPECIFICATIONS.
- 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 II 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 DIVISION OF ENGINEERING.
- GRANULAR BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL ACCORDING TO ITEM 912 OF THE STANDARD SPECIFICATIONS OR CONTROLLED DENSITY BACKFILL ACCORDING TO ITEM 636, TYPE B OF THE STANDARD SPECIFICATIONS AS DIRECTED BY THE CITY ENGINEER.
- ALL STORM SEWERS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM DESIGNATION C76, WALL B, CLASS IV FOR PIPE DIAMETERS 12 INCHES TO 18 INCHES TO 24 INCH PIPES, AND 27 INCHES AND LARGER PIPE SHALL BE CLASS II, UNLESS OTHERWISE SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS.
- HEADWALLS AND ENDSWALLS 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 AND/OR ENDSWALL SURFACES.
- STORM INLETS OR CATCH BASINS SHALL BE CHANNELIZED AND HAVE BICYCLE RAFT GRATES. MANHOLE LIDS SHALL INCLUDE CITY OF DUBLIN LOGO AND ALL CURB INLET AND CATCH BASIN GRATES SHALL INCLUDE ENGRAVED LETTERINGS: "DUMP NO WASTE: DRAINS TO RIVER."
- STORM SEWER OUTLETS GREATER THAN 18 INCHES IN DIAMETER ACCESSIBLE FROM STORMWATER MANAGEMENT FACILITIES OR WATERCOURSES SHALL BE PROVIDED WITH SAFETY GRATES, AS PROVIDED BY THE CITY ENGINEER.

MAIL DELIVERY

- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT US MAIL DELIVERY WITHIN THE PROJECT LIMITS IS NOT DISRUPTED BY CONSTRUCTION OPERATIONS. THE 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.
- 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

- 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 PERMITTED 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.
- 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 SAME SE VALUE TO THE CITY OF COLUMBUS AND HAS PAID ALL COSTS ARISING FROM THE USE OF THE FIRE HYDRANTS.



COFFMAN RESERVE
 COFFMAN ROAD
 DUBLIN, OHIO 43217

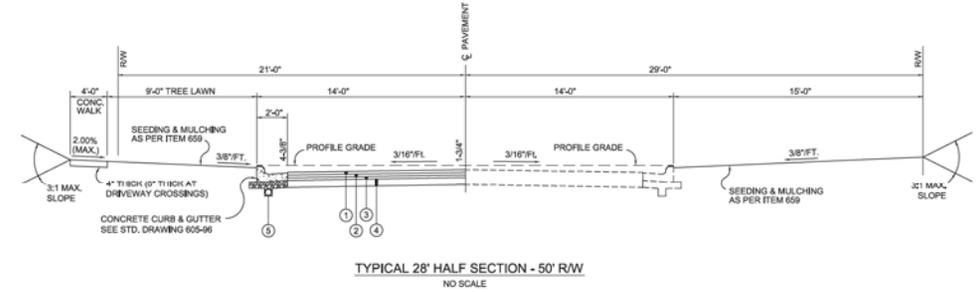
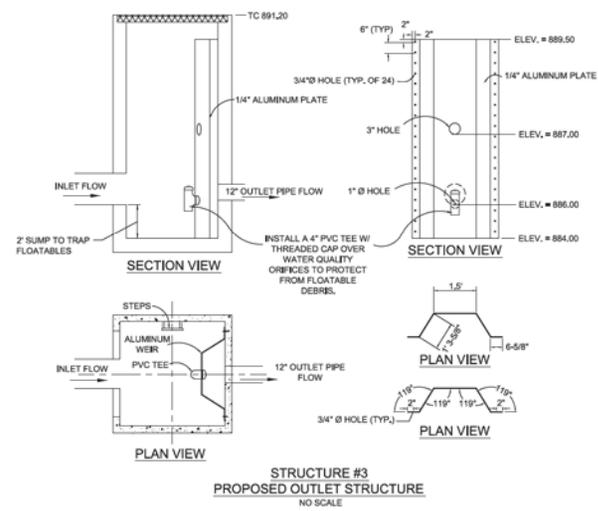
GENERAL NOTES

SCALE: NONE	JOB NO: 12-022	2
DWN:WSM CKD:JMB	DATE: 4/21/14	6

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ESTIMATE OF QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
203		CY	EXCAVATION
203		CY	EMBANKMENT
204	1784	SY	SUBGRADE COMPACTION
207	4	EA	INLET PROTECTION, GRASS
207	2	EA	CURB INLET PROTECTION
207	165	LF	SILT FENCE
207	140	SY	CONSTRUCTION ENTRANCE
301	149	CY	ASPHALT CONCRETE BASE
304	297	CY	AGGREGATE BASE
448	74	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
448	74	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22
601	17	CY	ROCK CHANNEL PROTECTION, TYPE C
602	4	EA	PRECAST PIPE ENDWALL
604	3	EA	MANHOLE, TYPE C
604	4	EA	STANDARD CATCH BASIN
604	2	EA	CURB & GUTTER INLET
605	1112	LF	4" PIPE UNDERDRAIN
608	2	EA	CURB RAMP
608	2	EA	DETECTABLE WARNING, TYPE A
609	1112	LF	COMBINATION CURB AND GUTTER
630	10	LF	GRAND MOUNTED SUPPORT POST
630	9	SF	SKIN ERECTED, FLAT SHEET
644	16	LF	STOP LINE
657	987	LF	TREE FENCE PROTECTION
801	479	LF	6" DUCTILE IRON WATER PIPE & FITTINGS, CL. 52
802	2	EA	6" VALVES & APPURTENANCES
803	1	EA	16" X 6" TAPPING SLEEVE & VALVE & APPURTENANCES
805	3	EA	3/4" WATER SERVICE TAP SHORT, COMPLETE
805	2	EA	3/4" WATER SERVICE TAP LONG, COMPLETE
809	2	EA	FIRE HYDRANT
901	685	LF	12" STORM PIPE WITH TYPE 1 BEDDING
901	87	LF	15" STORM PIPE WITH TYPE 1 BEDDING

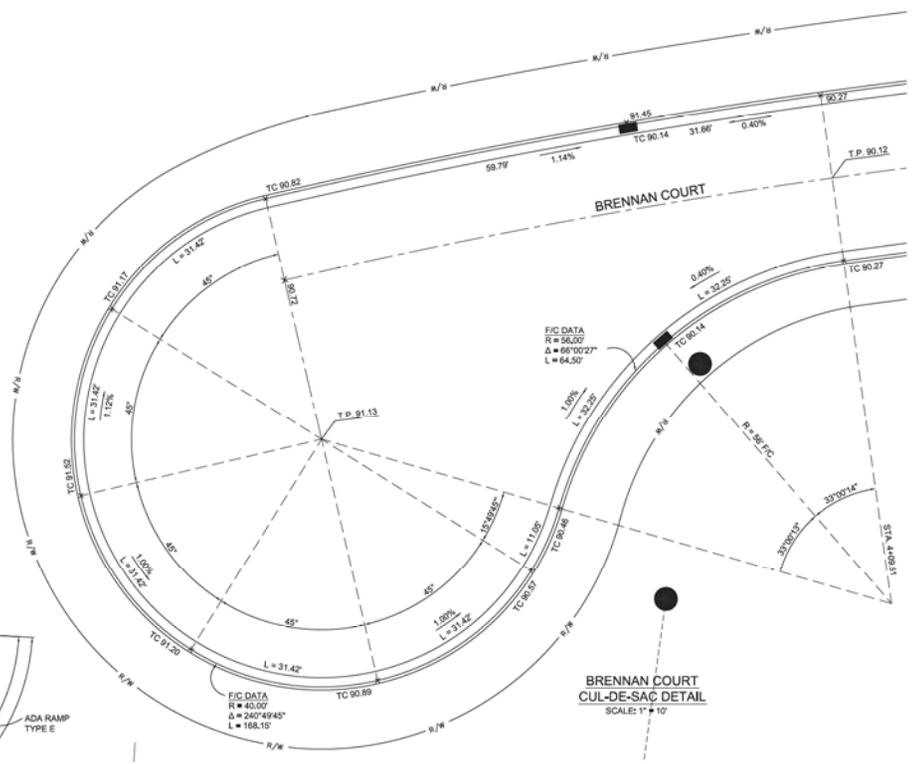
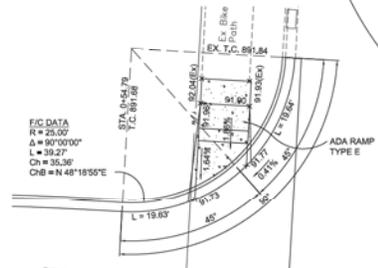
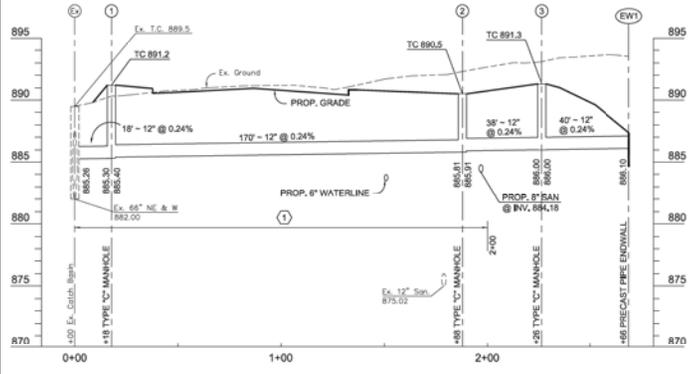
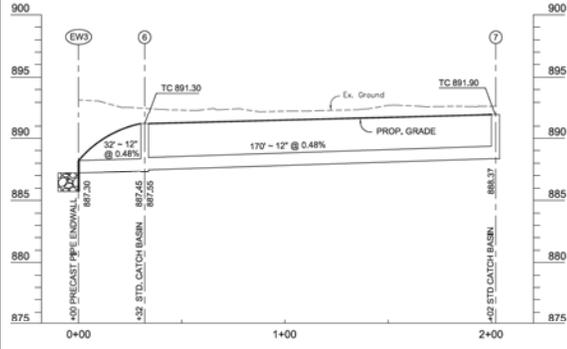
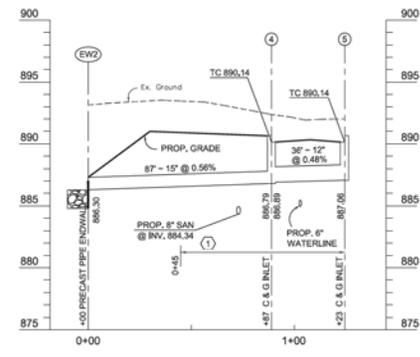
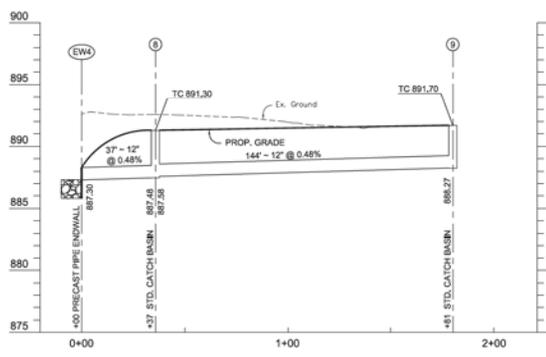
NOTE RE: ESTIMATE OF QUANTITIES
 THESE QUANTITIES ARE APPROXIMATE ONLY AND ARE NOT TO BE USED FOR PREPARATION OF COST ESTIMATES, BIDS, OR ANY OTHER ESTIMATING PURPOSE WITHOUT VERIFICATION BY THE USER. ANY DISCREPANCIES IN THE QUANTITIES SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER FOR EVALUATION.



- ① ITEM 448 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- ② ITEM 448 - 1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22
- ③ ITEM 301 - 3" BITUMINOUS AGGREGATE BASE
- ④ ITEM 304 - 6" AGGREGATE BASE
- ⑤ 4" PIPE UNDERDRAIN

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 Bird+Bull <small>Engineers and Surveyors</small> 2192 N. Dublin-Granville Road Columbus, Ohio 43235 Ph: (614) 761-1661 Fax: (614) 761-1328 WWW.BIRDBULL.COM	COFFMAN RESERVE COFFMAN ROAD DUBLIN, OHIO 43217	
	ESTIMATE OF QUANTITIES AND TYPICAL SECTION	
SCALE: NONE DWN:WSM CKD:JMB DATE: 4/21/14	JOB NO. 12-022	3 6

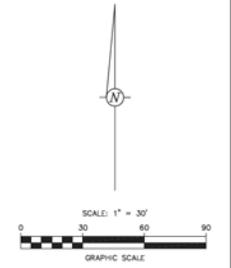
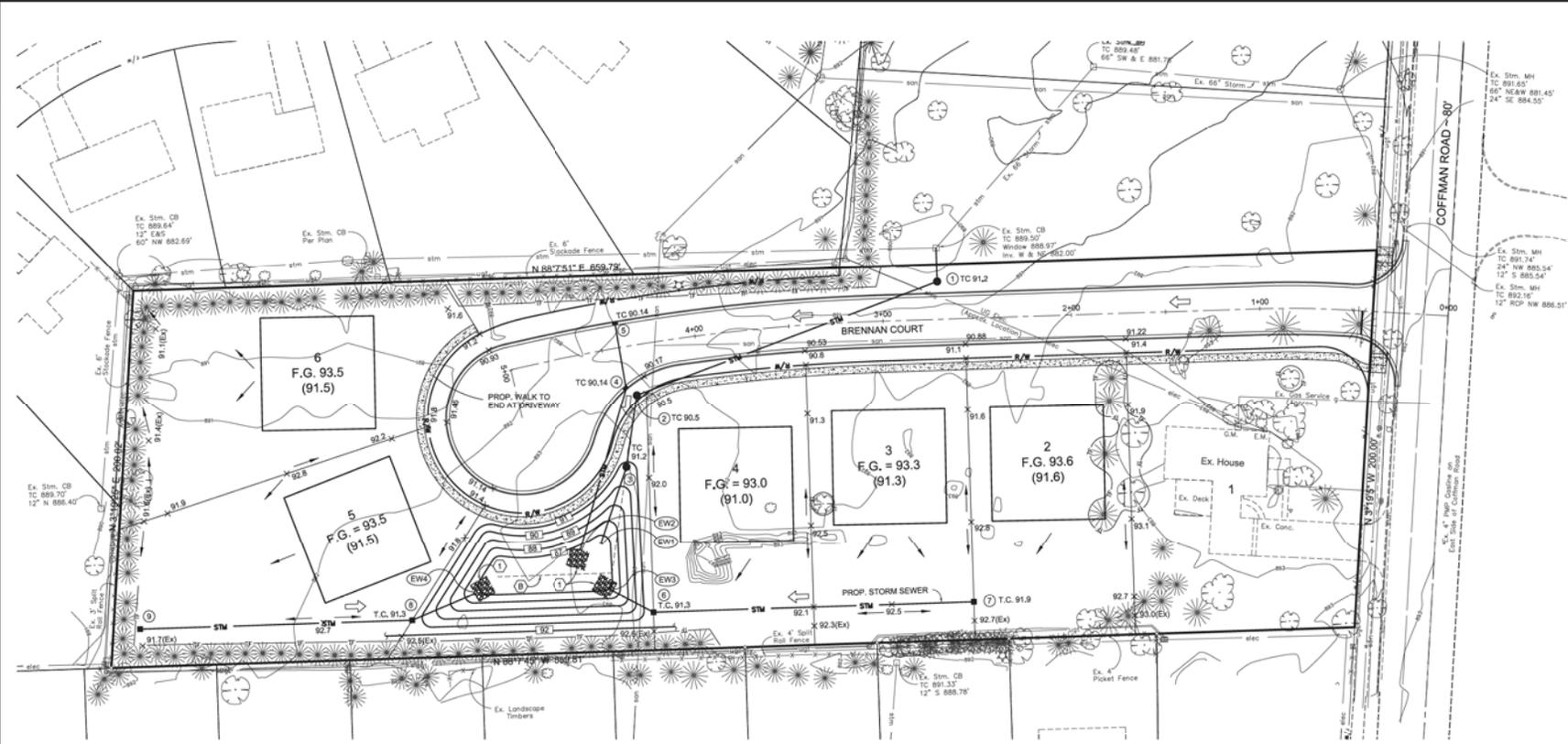


CODED NOTE
 ① COMPACTED GRANULAR BACKFILL, ITEM 912.

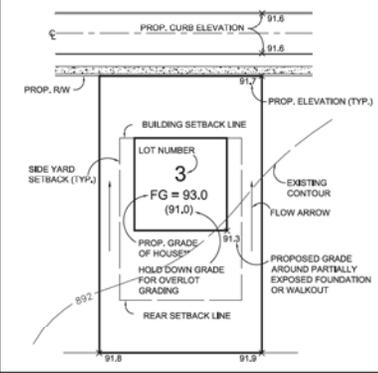
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 C.F. BIRD & R.J. BULL, INC.
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COFFMAN RESERVE COFFMAN ROAD DUBLIN, OHIO 43217	
STORM PROFILES, CUL-DE-SAC AND INTERSECTION DETAILS	
SCALE: 1" = 10'	JOB NO. 5
DWN:WSM CKD:JMB	DATE: 4/21/14 12-022

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- LEGEND**
- EXISTING STORM MANHOLE
 - PROPOSED STORM MANHOLE
 - EXISTING CATCH BASIN
 - PROPOSED CATCH BASIN
 - ⊙ EXISTING SANITARY MANHOLE
 - ⊙ PROPOSED SANITARY MANHOLE
 - △ EXISTING FIRE HYDRANT
 - ▲ PROPOSED FIRE HYDRANT
 - EXISTING VALVE
 - PROPOSED VALVE
 - (with diagonal lines) PARTS OF PROPOSED CONCRETE



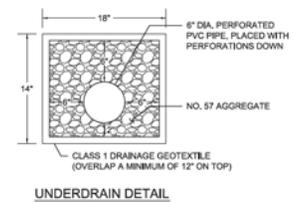
NOTE:
 **THIS ELEVATION HAS BEEN ESTABLISHED AS THE MINIMUM GRADE AROUND THE FINISHED STRUCTURE TO ENSURE PROPER DRAINAGE.

FOR INITIAL OVERLOT GRADING PURPOSES, THE SURVEYOR SHALL STAKE PAD GRADES 2.0' LOWER THAN THAT SHOWN. HOME BUILDER SHALL USE BASEMENT EXCAVATION TO BRING GROUND AROUND HOUSE FOUNDATION TO ELEVATION SHOWN. HOME BUILDER SHALL BE RESPONSIBLE FOR CONFORMING TO THE GRADES AND ELEVATIONS SHOWN TO PROVIDE POSITIVE DRAINAGE. HOME BUILDER SHALL BE RESPONSIBLE FOR HAULING AWAY ALL EXCESS EXCAVATION AS DIRECTED BY THE DEVELOPER.

HOME BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING ELEVATIONS ALONG FLOOD ROUTING PATH WHERE DESIGNATED TO ENSURE PROPER FLOW OF HIGHER FREQUENCY STORM FLOWS.

NOTE:
 GRADES SHOWN ALONG CURB LINE ARE PROFILE GRADE ELEVATIONS (TOP OF CURB). SUBTRACT 0.5' FOR GUTTER ELEVATIONS.

STORMWATER MANAGEMENT INFORMATION	1 YEAR	2 YEAR	5 YEAR	10 YEAR	25 YEAR	50 YEAR	100 YEAR
	PREDEVELOPED Q	0.59	0.82	1.27	2.43	4.11	6.91
POSTDEVELOPED Q	2.3	3.25	4.71	5.96	7.76	9.28	10.89
ALLOWABLE RELEASE	0.59	0.59	0.59	2.43	4.11	6.91	9.66
ACTUAL RELEASE	0.27	0.33	0.4	0.79	2.8	4.79	6.79
POND DEPTH/ELEV	888.12	888.65	889.37	889.84	890.07	890.24	890.4



- CODED NOTES**
- (A) TYPE 1C' ROCK CHANNEL PROTECTION WITH FILTER FABRIC 10' x 10' x 1.5'
 - (B) PROP. 6" PERFORATED UNDERDRAIN @ 0.40% SLOPE AS PER DETAIL ON THIS SHEET.
- LEGEND**
- ← INDICATES MAJOR FLOOD ROUTING
 - |— TREE PROTECTION FENCE

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COFFMAN RESERVE
 COFFMAN ROAD
 DUBLIN, OHIO 43217

GRADING PLAN

SCALE: 1" = 30'
 DWN:WSM CKD:JMB [DATE: 4/21/14] JOB NO. 12-022 6

GENERAL EROSION NOTES

- A. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF OHIO'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- D. BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- E. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- G. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEARING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED, PROPERLY TREATED AND/OR DISPOSED. IF CONCRETE CHUTES ARE TO BE WASHED, A PLACE MUST BE PROVIDED FOR THE WASH RUNOFF IN A PLACE AWAY FROM THE STORM SEWER, NO RUNOFF FROM THE WASHING OF CONCRETE CHUTES SHALL BE ALLOWED TO DRAIN TO STORM SEWER SYSTEM. THIS AREA TO BE DELINEATED ON RECORD DRAWING ON FILE IN JOB TRAILER.
- I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEANUP FUEL OR CHEMICAL SPILLS AND LEAKS.
- J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- L. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- M. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS, SHALL BE RESEEDING. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
- N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEED. THESE AREAS SHALL BE SEED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
- O. TREES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- Q. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- R. ON-SITE & OFF-SITE SOIL, STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- S. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- T. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, INLET FILTER, CHECK DAMS, ETC.) TO PREVENT EROSION.
- U. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

MAINTENANCE
ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETRIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.

NOTE: CONTRACTOR TO PREPARE A MATERIAL HANDLING AND SPILL PREVENTION PLAN PRIOR TO CONSTRUCTION.

ADDITIONAL NOTES

THE SITE CONTRACTOR SHALL ESTABLISH AN INTERIM SEDIMENTATION AND EROSION CONTROL PLAN TO CONTROL SEDIMENT DURING MASS GRADING OPERATIONS. TEMPORARY CONTROL MEASURES SHALL BE ESTABLISHED BY THE CONTRACTOR AND RECORDS KEPT ON-SITE OF TEMPORARY CONTROL MEASURES IMPLEMENTED AND SITE INSPECTIONS.

THE CONTRACTOR SHALL TAKE EXTREME CAUTION TO PREVENT SEDIMENT AND DEBRIS FROM ENTERING PUBLIC STREETS.

THE SITEWORK CONTRACTOR SHALL BE A CO-PERMITTEE TO THE OHIO EPA STORM WATER CONSTRUCTION GENERAL PERMIT AND SHALL SUBMIT THE CO-PERMITTEE NOTICE OF INTENT INCLUDED IN THE SPECIFICATIONS. THE SITEWORK CONTRACTOR SHALL CORRECT ALL TERMS AND CONDITIONS OF THE PERMIT NEEDED FOR COMPLIANCE.

THE SITE CONTRACTOR SHALL MAINTAIN A LOG ON-SITE, DOCUMENTING GRADING AND STABILIZATION ACTIVITIES AS WELL AS AMENDMENTS TO THE SWPP, WHICH OCCUR AFTER CONSTRUCTION HAS COMMENCED.

SEEDBED PREPARATION

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS.
2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW).
5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDBED AREAS AND MAKE NECESSARY REPAIRS OF RESEEDINGS WITHIN THE PLANTING SEASON. IF POSSIBLE IF STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

APPLY:

AGRICULTURAL LIMESTONE - 2 TON/ACRE	TEMPORARY SEEDING MIXTURE (IF REQUIRED)
FERTILIZER - 1000 LBS/ACRE - 10-10-10	70 LBS/ACRE
SUPERPHOSPHATE - 500 LBS/ACRE - 20%	50% TALL FESCUE
MULCH - 2 TON/ACRE - GRAINSTRAW	30% SERICEA LESPEDEZA
ANCHOR - ASPHALT EMULSION - 300 GALS/ACRE	20% RYE GRASS

SEEDBED SPECIFICATIONS:

DATES	SLOPES, SIDE DITCHES, SLOPES (MAXIMUM 3:1)	TYPE	PLANTING RATE
AUG 15-NOV 1		TALL FESCUE	120 LBS/ACRE
NOV 01-MAR 01		TALL FESCUE	120 LBS/ACRE
		AND ABRUZZI RYE	25 LBS/ACRE
MAR 01-APR 15		TALL FESCUE	120 LBS/ACRE
APR 15-JUL 30		HULLED COMMON BERMAUDA GRASS	12 LBS/ACRE
		TALL FESCUE AND BROWNTOP MILLET	60 LBS/ACRE
JUL 15-AUG 15		OR SORGHUM-GUDAH HYBRID	35 LBS/ACRE
			30 LBS/ACRE

POST CONSTRUCTION BMP STORM WATER CONTROL FACILITY MAINTENANCE PLAN

1. INSPECT ALL PERMANENT STRUCTURES FOR PROPER FUNCTIONALITY EVERY SIX MONTHS, AND AFTER ANY STORM EVENT WITH A RAINFALL DEPTH EQUAL TO OR GREATER THAN 4 INCHES. CLEAN SEDIMENT FROM BOTTOM OF STRUCTURES AND GRATES AS NECESSARY.
2. INSPECT BASIN OUTLET STRUCTURE, OPENING IN THE ORICE PLATE AND TRASH RACK FOR PROPER FUNCTIONALITY EVERY MONTH, AND IMMEDIATELY AFTER ANY STORM EVENT WITH A RAINFALL DEPTH EQUAL TO OR GREATER THAN 2.5 INCHES. CLEAN SEDIMENT FROM TRASH RACK, GRATE, AND BOTTOM OF STRUCTURE AS NECESSARY. OPENING IS TO BE FLOWING DURING ALL RAINFALL EVENTS.
3. INSPECT VEGETATION ON A MONTHLY BASIS, INSURING THAT IT IS HEALTHY AND GROWING WITH AT LEAST 50% SURFACE COVERAGE. IF WEED GROWTH EXCEEDS 10" IN HEIGHT SEEDED COMMUNITIES, TRIM OR MOW TO 4". DO NOT CUT NATIVE PLANT COMMUNITIES.
4. INSPECT FOR EXCESSIVE EROSION ON SLOPES AND STORM OUTFALLS INTO POND ON AN ANNUAL BASIS, AS WELL AS ANY STORM EVENT WITH A RAINFALL DEPTH EQUAL TO OR GREATER THAN 4 INCHES. REPAIR USING APPROPRIATE SLOPE STABILIZATION AS NECESSARY.
5. DEBRIS AND POLLUTANTS ARE TO BE DISPOSED OF THROUGH APPROPRIATE LOCAL, STATE, AND FEDERAL REGULATIONS.
6. FACILITIES ARE TO BE MONITORED FOR MOSQUITO LARVAE PRESENCE ON A MONTHLY BASIS (SEASONAL).
7. WHEN SEDIMENT LEVEL IN THE BASIN ACCUMULATES TO 6" ABOVE DESIGN ELEVATIONS PER PLAN, SEDIMENT IS TO BE REMOVED AND DESIGN DEPTH IS TO BE RESTORED.

TO DETERMINE WHEN SEDIMENT LEVEL ACCUMULATES TO 6" ABOVE DESIGN ELEVATION, TWO 4" X 4" WOODEN MONITOR POSTS SHALL BE INSTALLED IN THE POND, POSTS ARE TO BE LOCATED AT LEAST 6' APART FROM EACH OTHER TO ACCOUNT FOR IRREGULAR SEDIMENTATION. THE POSTS WILL BE MARKED WITH BOTH THE DESIGN ELEVATION, AS WELL AS THE ELEVATION CORRESPONDING TO 6" ABOVE THE DESIGN ELEVATION. SEE DETAIL FOR MONITOR POST.

ITEM	INSPECTION FREQUENCY
VEGETATION ADEQUATE	MONTHLY
UNDESIRABLE VEGETATIVE GROWTH	MONTHLY
UNDESIRABLE WOODY VEGETATION	MONTHLY
LOWFLOW CHANNELS CLEAR OF OBSTRUCTIONS	MONTHLY
STANDING WATER OR WET SPOTS	MONTHLY, AFTER MAJOR STORMS
SEDIMENT AND/OR TRASH ACCUMULATION	MONTHLY
SLOPE EROSION	ANNUAL, AFTER MAJOR STORMS
STORM DRAIN PIPES	ANNUAL, AFTER MAJOR STORMS
ENDWALLS/HEADWALLS	ANNUAL, AFTER MAJOR STORMS
GRASS HEIGHT	MONTHLY
DEFENTION BASIN OUTLET STRUCTURE	ANNUAL
DEFENTION BASIN	ANNUAL

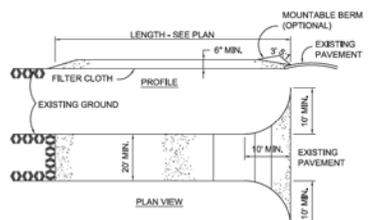
POST CONSTRUCTION CLEANING AND MAINTENANCE SCHEDULE FOR BMP WATER QUANTITY/QUALITY BASIN

THE HOMEOWNERS ASSOCIATION, ITS ADMINISTRATORS, EXECUTORS, SUCCESSORS, HEIRS OR ASSIGNS SHALL MAINTAIN THE STORMWATER CONTROL FACILITY OR FACILITIES IN GOOD WORKING CONDITION ACCEPTABLE TO THE CITY AND IN ACCORDANCE WITH THE SCHEDULE OF LONG TERM MAINTENANCE ACTIVITIES PROVIDED IN THE APPROVED STORMWATER CONTROL FACILITY MAINTENANCE PLAN FOR THE STORMWATER CONTROL FACILITY OR FACILITIES. MAINTAINED INFRASTRUCTURE SHALL INCLUDE ALL PIPES AND CHANNELS BUILT TO CONVEY STORMWATER TO THE FACILITY, AS WELL AS ALL STRUCTURES, IMPROVEMENTS, AND VEGETATION PROVIDED TO CONTROL THE QUANTITY AND QUALITY OF THE STORMWATER FROM THE FACILITY. "MAINTAINED" IS HEREBY DEFINED AS GOOD WORKING CONDITION SO THAT THESE FACILITIES ARE PERFORMING THEIR DESIGN FUNCTIONS.

SEQUENCE OF MAJOR SWPPP ACTIVITIES

1. INSTALL TEMPORARY CONSTRUCTION ENTRANCE PER THE SITE DRAWINGS BEFORE ANY CONSTRUCTION BEGINS OR SUPPLIES ARE DELIVERED.
2. INSTALL ALL EROSION AND SEDIMENT CONTROLS INCLUDING SEDIMENT BASINS, SILT FENCE, AND INLET PROTECTION.
3. POST ALL APPLICABLE SIGNS, INCLUDING THE NOTICE OF INTENT (NOI), AND HAVE THE SWPPP WITH EROSION AND SEDIMENT CONTROL PLANS AT THE SITE FOR CONTINUAL USE AND MODIFICATION. (SEE ATTACHED "CONSTRUCTION SITE NOTICE" FOR POSTING AT THE CONSTRUCTION ENTRANCE).
4. PHASING OF WORK TO ALLOW EXISTING VEGETATIVE AREAS OR BUFFERS TO REMAIN AS LONG AS POSSIBLE IS ENCOURAGED.
5. EROSION CONTROLS MUST BE INSPECTED PER THE ATTACHED INSPECTION CHECKLIST (ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF 0.5 INCHES OR GREATER RAINFALL).
6. INSTALL ANY SEDIMENT TRAPS AND/OR BASINS PER THE SITE DRAWINGS, AS SOON AS POSSIBLE, DURING THE CLEARING AND EXCAVATION OF THE SITE. PROVIDE TEMPORARY GRADING TO DIRECT WATER TO TRAPS/BASINS.
7. REMOVE ACCUMULATED SEDIMENT FROM EROSION CONTROLS AS NECESSARY.
8. CONTINUE INSTALLING/MODIFYING EROSION CONTROLS AS THE CONSTRUCTION OF SITE UTILITIES FOUNDATIONS, AND STRUCTURES CHANGE THE TOPOGRAPHY OF THE SITE.
9. ESTABLISH TEMPORARY STABILIZATION/SEEDING ON ALL AREAS THAT ARE TO REMAIN UNDISTURBED PER THE ATTACHED WEEKLY INSPECTION CHECKLIST.
10. THE GENERAL CONTRACTOR WILL KEEP WRITTEN DOCUMENTATION OF MAJOR EARTH MOVING ACTIVITIES USING THE ATTACHED SITE LOG INDICATING START AND STOP DATES FOR DEFINED AREAS OF THE SITE. NOTE THESE AREAS ON THE SITE DRAWINGS WHEN POSSIBLE.
11. PROVIDE FINAL STABILIZATION AS SOON AS AREAS ARE MADE AVAILABLE. FINAL STABILIZATION, (70) PERCENT COVERAGE OF TURF GRASS, IS SPECIFIED IN THE TEXT OF THE APPLICABLE PERMIT.
12. SCHEDULE POST CONSTRUCTION SOD INSPECTION ONCE SITE ACHIEVES 70% OVERALL GRASS DENSITY.
13. REMOVE TEMPORARY OR SEDIMENT CONTROL PRACTICES ONCE FINAL STABILIZATION/VEGETATION HAS BEEN ESTABLISHED (70% OVERALL GRASS DENSITY).
14. KEEP ALL SWPPP DOCUMENTS, INCLUDING INSPECTION CHECKLISTS, ON FILE FOR THREE YEARS FROM TERMINATION.

THIS PLAN MUST BE POSTED ON-SITE IN THE PROJECT TRAILER. A COPY OF THE SWPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (N.O.I. NO. 4GC04165*AG) SHALL BE KEPT ONSITE AT ALL TIMES.



- CONSTRUCTION SEQUENCE**
1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 2. LENGTH - AS REQUIRED.
 3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
 4. WIDTH - TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
 6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE.
 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS, WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN ON SITE CONTAINMENT AREA.
 9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED AFTER EACH RAIN.
 10. THIS CONSTRUCTION SHALL INCLUDE ALL MATERIALS AND COSTS RELATIVE TO CONSTRUCTING, MAINTAINING, REMOVAL AND RESTORATION OF STABILIZED ENTRANCE WITHIN THE VARIOUS SEVERITY ITEMS.

STABILIZED CONSTRUCTION ENTRANCE
NO SCALE

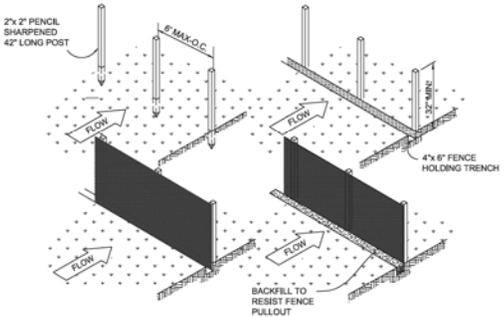


COFFMAN RESERVE
COFFMAN ROAD
DUBLIN, OHIO 43217

STORM WATER POLLUTION PREVENTION NOTES

SCALE: NONE
DWN:WSM CKD:JMB [DATE: 4/21/14] JOB NO. 12-022 2 4

DATE: 07/27/2014

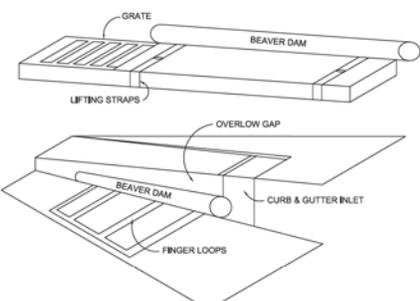


SEDIMENT FENCE FABRIC SHALL BE ODOT, TYPE 'C' GEOTEXTILE FABRIC OR THE EQUIVALENT TO FOLLOWING PROPERTIES:

MATERIAL PROPERTIES	
MAXIMUM TENSILE STRENGTH	120 LBS.
MAXIMUM ELONGATION AT 50% STRETCH	50%
MINIMUM TEAR STRENGTH	40 LBS.
MINIMUM BURST STRENGTH	200 LBS.
APPROXIMATE OPENING SIZE	0.04 MM
MINIMUM PERMITTIVITY	1X10 ⁹ SEC
ULTRAVIOLET EXPOSURE STRENGTH RETENTION	70%

- SILT FENCE:**
THIS SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED. MATERIAL PROPERTIES ARE LISTED IN THE PROVIDED TABLE.
- THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).
 - THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL, CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM OF A 6 INCH OVERLAP, AND SECURELY SEALED.
 - POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WOOD POSTS WILL BE MINIMUM OF 32 INCHES LONG WITH EXTRA STRENGTH FABRIC IS USED WITH WIRE SUPPORT FENCE.
 - A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
 - THE STANDARD STRENGTH FILTER SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
 - THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC.
 - SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
 - TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THE ENDS ARE HIGHER ELEVATION.

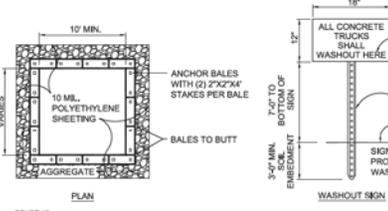
SEDIMENT FENCE
NO SCALE



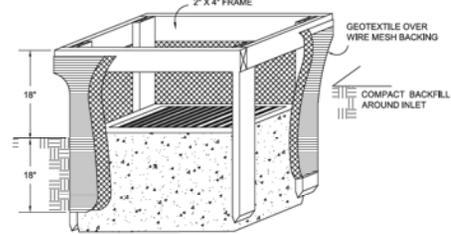
MAINTENANCE: WITH A STIFF BRISTLE BROOM SWEEP SILT & OTHER DEBRIS OFF SURFACE AFTER EACH EVENT.

INSTALLATION: STAND GRATE ON END. SLIDE THE BEAVER DAM BAG ON W/DM ON TOP OF THE GRATE. PULL ALL EXCESS DOWN. LAY UNIT ON ITS SIDE. CAREFULLY TUCK FLAP IN. PRESS VELCRO STRIPS TOGETHER. INSTALL THE UNIT MAKING SURE FRONT EDGE OF GRATE IS INSERTED IN FRAME FIRST THEN LOWER BACK INTO PLACE. PRESS VELCRO DOTS TOGETHER WHICH ARE LOCATED UNDER LIFTING STRAPS. THIS INSURES STRAPS REMAIN FLUSH WITH GUTTER.

CURB INLET PROTECTION
NO SCALE

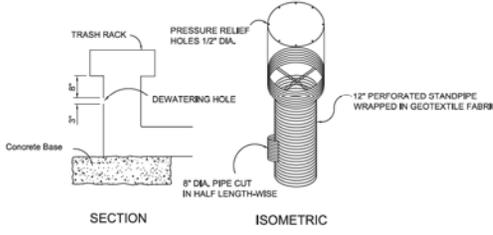


CONCRETE WASHOUT AREA
NO SCALE



- INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
- THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 IN.
- THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2x4-IN. CONSTRUCTION-GRADE LUMBER. THE 2x4-IN. POSTS SHALL BE DRIVEN 1 FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2x4-IN. FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 IN. BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
- WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
- GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 IN. BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
- BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6-IN. LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP.
- A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF THE EARTH DIKES SHALL BE AT LEAST 6 IN. HIGHER THAN THE TOP OF THE FRAME.

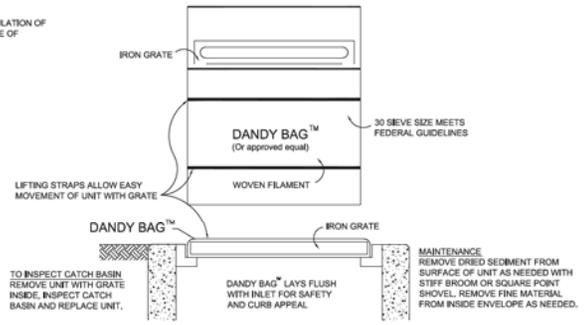
INLET PROTECTION - GRASS
NO SCALE



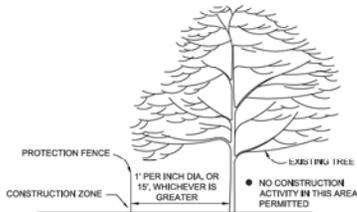
SEDIMENT BASIN RISER
NO SCALE

- NOTES:**
- CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
 - CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
 - WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
 - WASHOUT AREAS SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
 - ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
 - AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

THIS PLAN MUST BE POSTED ON-SITE IN THE PROJECT TRAILER. A COPY OF THE SWPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (N.O.I. NO. 4GC04165*AG) SHALL BE KEPT ONSITE AT ALL TIMES.



INLET PROTECTION - PAVEMENT
NO SCALE



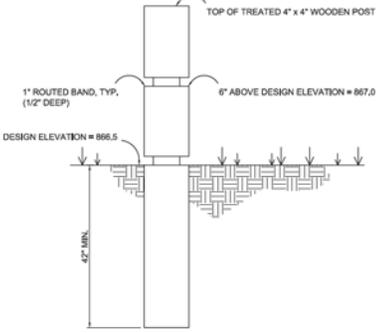
TREE PRESERVATION FENCING
NO SCALE

GENERAL NOTES
ALL TREES IN THE CONSTRUCTION AREA NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PRESERVED. TREES TO BE PRESERVED SHALL BE PROTECTED WITH HIGH VISIBILITY TREE PROTECTION FENCING AS SHOWN. OWNER SHALL BE RESPONSIBLE FOR THE CONSTRUCTION, ERECTION, AND MAINTENANCE OF PROTECTION FENCING.

THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION. ANY CHANGE IN THE PROTECTIVE FENCING MUST BE APPROVED BY THE PLANNING DIRECTOR.

IT SHALL BE UNLAWFUL TO FAIL TO ABIDE BY THE TERMS OF THE TREE PRESERVATION PLAN OR TREE REMOVAL PERMIT.

TREES REMAINING ARE TO BE FERTILIZED AND PRUNED (IF NEEDED) TWO YEARS AFTER CONSTRUCTION.



MONITOR POST FOR SEDIMENT ACCUMULATION
NO SCALE

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Engineers and Surveyors
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Columbus, Ohio 43235
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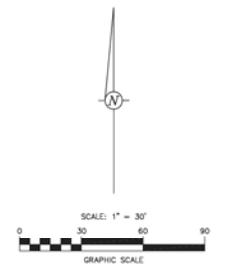
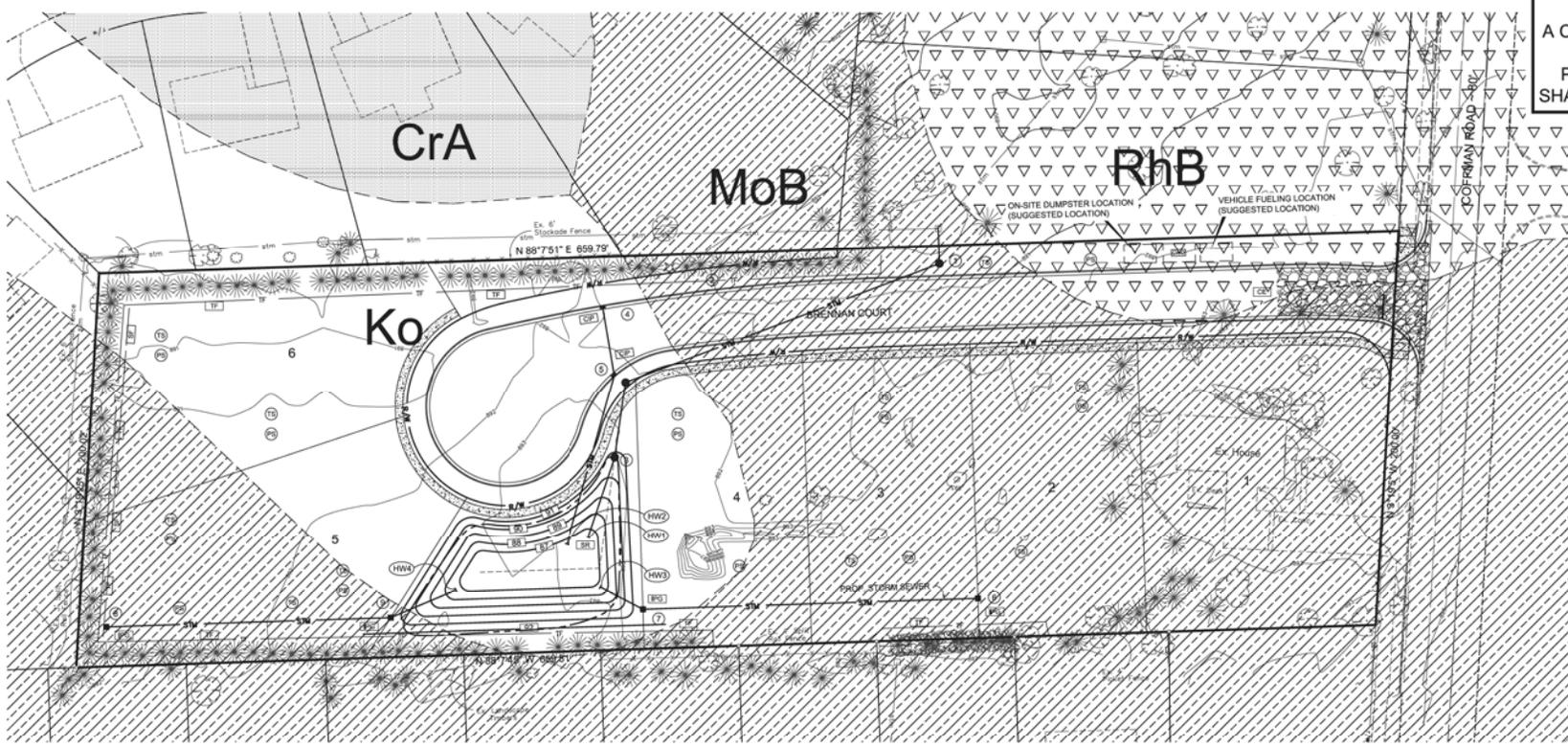
COFFMAN RESERVE COFFMAN ROAD DUBLIN, OHIO 43217	
STORM WATER POLLUTION PREVENTION DETAILS	
SCALE: NONE	JOB NO. 3
DWN:WSM CKD:JMB	DATE: 4/21/14 12:22

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DATE: 04/12/2014 12:27:34

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THIS PLAN MUST BE POSTED ON-SITE
IN THE PROJECT TRAILER.
A COPY OF THE SWPP PLAN AND THE
APPROVED EPA STORMWATER
PERMIT (N.O.I. NO. 4GC04165*AG)
SHALL BE KEPT ONSITE AT ALL TIMES.



LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- TEMPORARY SEEDING AND MULCHING
- PERMANENT SEEDING AND MULCHING
- INLET PROTECTION - GRASS
- CURB INLET PROTECTION
- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT AREA
- SEDIMENT FENCING
- TREE FENCE
- INDICATES DIRECTION OF MAJOR FLOOD ROUTING
- TEMPORARY SEDIMENT RISER
- CONSTRUCTION ENTRANCE



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COFFMAN RESERVE COFFMAN ROAD DUBLIN, OHIO 43217	
STORM WATER POLLUTION PREVENTION PLAN	
SCALE: 1" = 30'	JOB NO. 4
DWN:WSM CKD:JMB DATE: 4/21/14	12-022