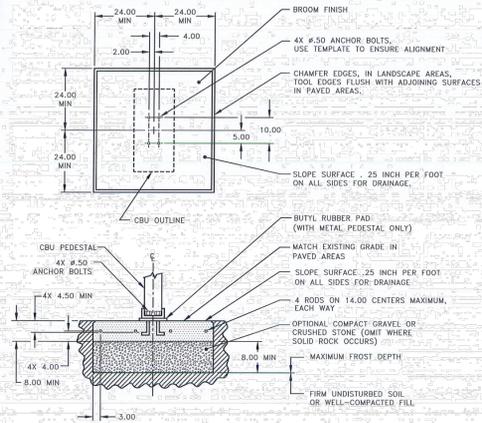


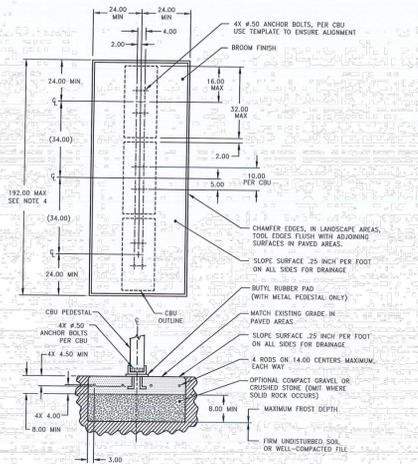


**USPS APPROVED SPECIFICATIONS – CONCRETE PAD (SINGLE UNIT)**  
(All measurements are in inches)



- NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 4% MIN - 6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3.50 - 4.50 SLUMP IN ACCORDANCE WITH ACI 301.
  2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.
  3. ANCHOR BOLTS SHALL CONFORM TO ASTM A193, GRADE 88M, TYPE 316 STAINLESS STEEL.

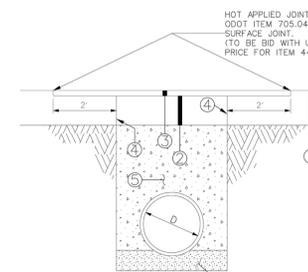
**USPS APPROVED SPECIFICATIONS – CONCRETE PAD (MULTIPLE UNIT)**



- NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 4% MIN - 6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3.50 - 4.50 SLUMP IN ACCORDANCE WITH ACI 301.
  2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.
  3. ANCHOR BOLTS SHALL CONFORM TO ASTM A193, GRADE 88M, TYPE 316 STAINLESS STEEL.
  4. A 3 CBU CONFIGURATION IS DEPICTED. A 2 OR 4 CBU CONFIGURATION MAY BE USED AS LONG AS THEY ARE ARRANGED IN GROUPS SUCH THAT THE OVERALL DIMENSION OF THE CONCRETE BASE DOES NOT EXCEED 192 INCHES.

**CLUSTER MAILBOX CONCRETE PAD DETAIL**

**BUTLER COUNTY ENGINEER'S OFFICE  
STANDARD DETAIL FOR  
ROADWAY PAVEMENT RESTORATION**



1. EXISTING PAVEMENT
2. 8" ITEM 301 BITUMINOUS AGGREGATE BASE IN TWO 4" LIFTS
3. 2" ITEM 448 ASPHALT CONCRETE SURFACE COURSE MIN. 2" EACH SIDE OF CUT
4. ITEM 407 TACK COAT APPLIED AT 0.10 GAL/SY
5. LOW STRENGTH MORTAR BACKFILL MATERIAL CLASS LSM 50
6. MIN. 6" GRANULAR PIPE BEDDING (OPTION - USE GRANULAR BEDDING EXTENDED 12" ABOVE PIPE FOR FULL WIDTH OF TRENCH)

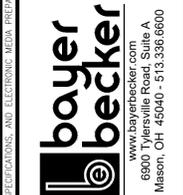
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Revision Description

Item

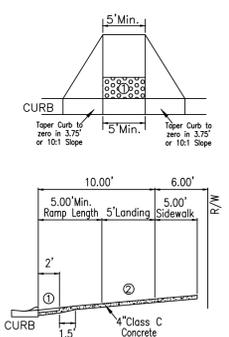
**FIELDSTONE FARMS  
SECTIONS TWO & THREE  
SINGLE FAMILY**  
SECTION 15, TOWN 3, RANGE 3  
LIBERTY TOWNSHIP, BUTLER COUNTY, OHIO



Drawing: 16-0294 S CD2  
Drawn by: TAC  
Checked by: EMR  
Issue Date: 9-20-19  
Sheet:

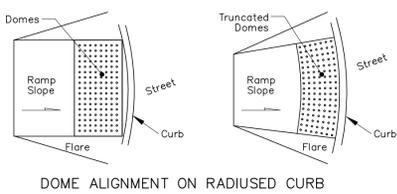
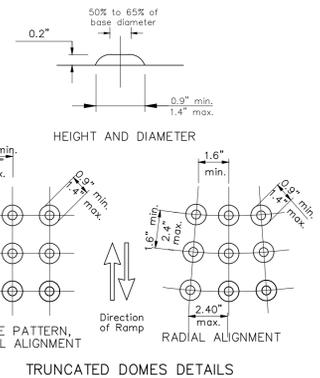
**2/11**

Plot time: Oct 01, 2019 3:42pm  
Drawing name: J:\2016\16-0294\CAD\DWG\Single-Family\16-0294 S CD2.dwg - Layout Tab: 2DT



1. Detectable Warning (Truncated Domes) are to be installed in the location shown. Dimensions of the domes are 24" from the back of the curb by the width of the ramp.
2. Minimum Landing is to be 4' but 5' is preferred. The slope of the ramp is preferred to be 12:1 or flatter related to the horizontal, but the slope shall be relative to the existing or proposed walk slope.
3. Curb ramps shall be design A or design B per ODOT Drawing 7-12-02, sheets 1 thru 3. Truncated domes are to meet the specifications of ODOT drawing 7-12-02 sheet 3.

**CURB RAMP DETAIL**



DOME ALIGNMENT ON RADIUSED CURB

**CURB RAMP NOTES**

**DRAINAGE:** Contractor is to ensure the base of each constructed curb ramp allows for proper drainage, without exceeding allowable cross slope or ramp slopes. Vertical change in level exceeding 1/4" between the 1) pavement and gutter, and 2) gutter and ramp, are not allowed. See Intersection Details.

**SURFACE TEXTURE:** Texture concrete surfaces by coarse brooming transverse to the ramp slopes to be rougher than the adjacent walk.  
The edge of the curb shall be flush with the edge of the adjacent pavement and gutter and surface slopes that meet grade breaks shall also be flush.

**DETECTABLE WARNINGS NOTES**

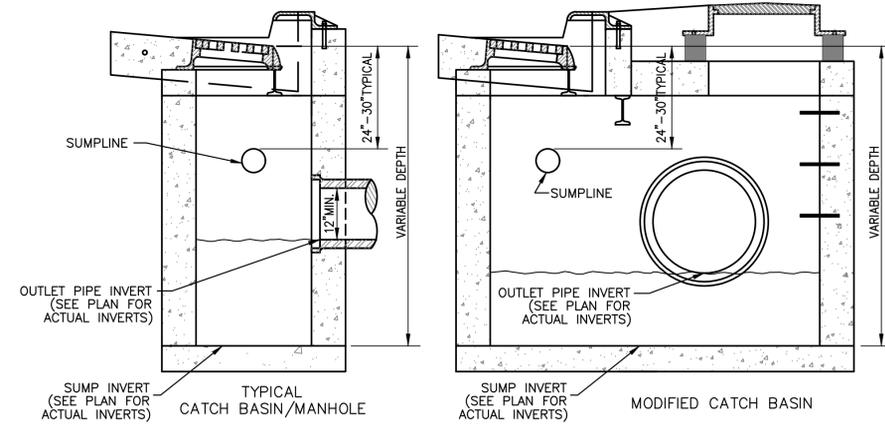
**GENERAL:** Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

**PLACEMENT:** Detectable warnings are to be installed at any location where pedestrians might cross paths with vehicular traffic lanes, such as the base of curb ramps or at blended curbs. A 24" strip of domes is to be installed for the full width of the ramp or walk. See plan locations of curb ramps.

The depth of concrete underneath detectable warning products shall be a minimum of 4".

**ALIGNMENT:** Truncated domes should be aligned with the primary direction of the ramp as shown on the DETECTABLE WARNING ALIGNMENT Detail. Normally the detectable warnings should be flush with the back of the curb, but in skewed conditions at least one corner of the 24" strip should be adjacent to the back of curb. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.

**PRODUCTS & COLORS:** Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Contractor to submit Armor-Tile Detectable/Tactile Warning Surface Cast in Place Tile or approved equal cut sheets for color selection approval to Owner. Install as per manufacturer's printed instructions.



**STORM WATER QUALITY STRUCTURE DETAILS**  
(Not to Scale)

NOTE: STORM STRUCTURES THAT PROVIDE WATER QUALITY ARE TO BE INSPECTED AND MAINTAINED FOUR (4) TIMES PER YEAR

STRUCTURE TYPE	INNER STRUCTURE FLOOR AREA*
48" MANHOLE	12.57 S.F.
CB-3A	4.87 S.F.
CB-3A(MOD)	14.44 S.F.
CB-3	10.69 S.F.
CB-3(MOD)	31.68 S.F.
CB-2-2	4.00 S.F.
CB-2-3	9.00 S.F.
CB-2-4	16.00 S.F.
CB-2-5	25.00 S.F.
CB-2-6	36.00 S.F.

\* AS PER ODOT & BUTLER COUNTY STANDARD DETAILS

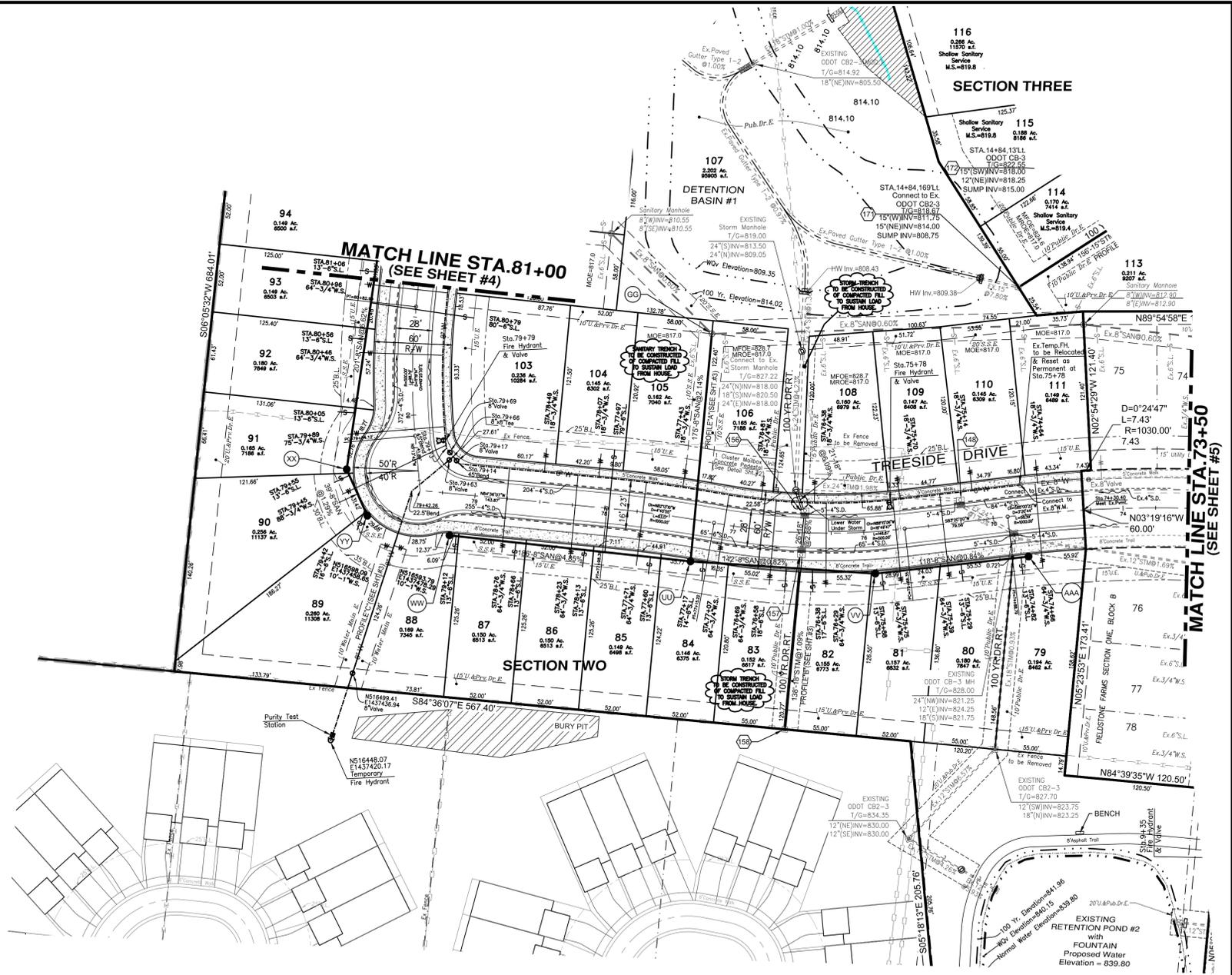
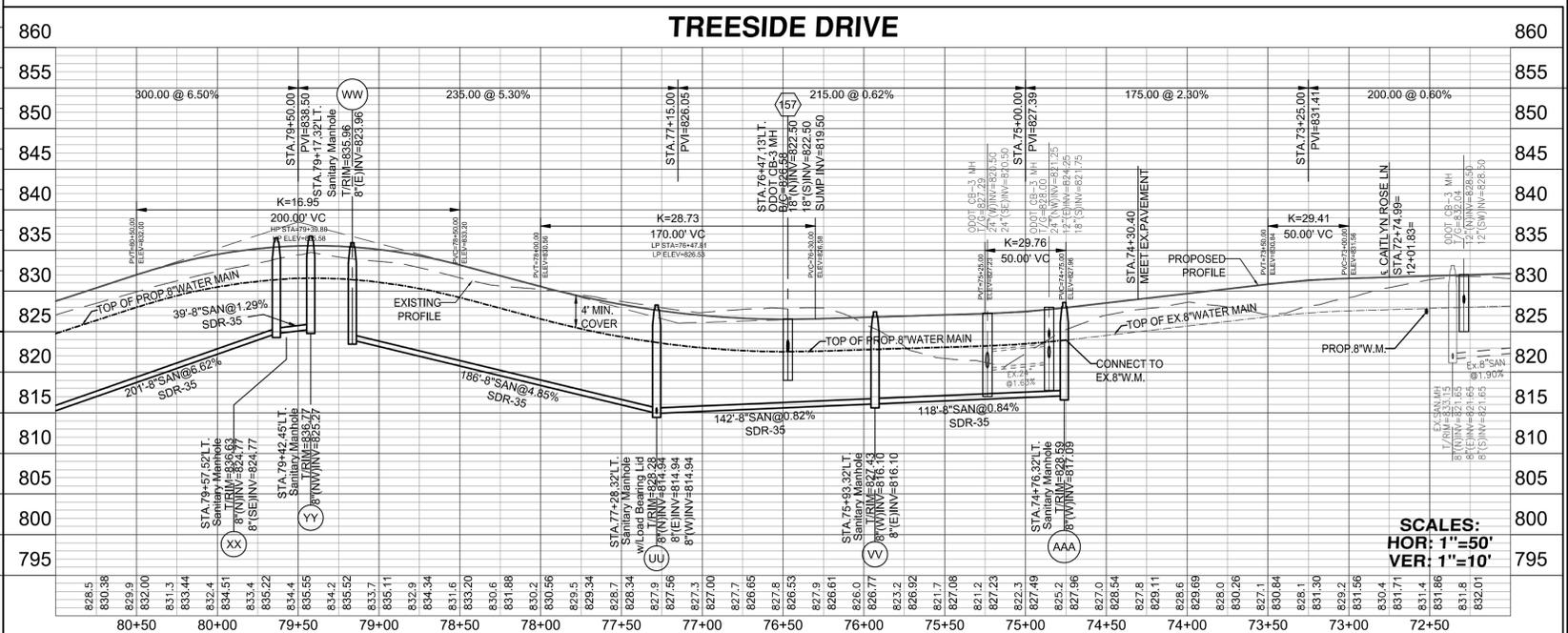
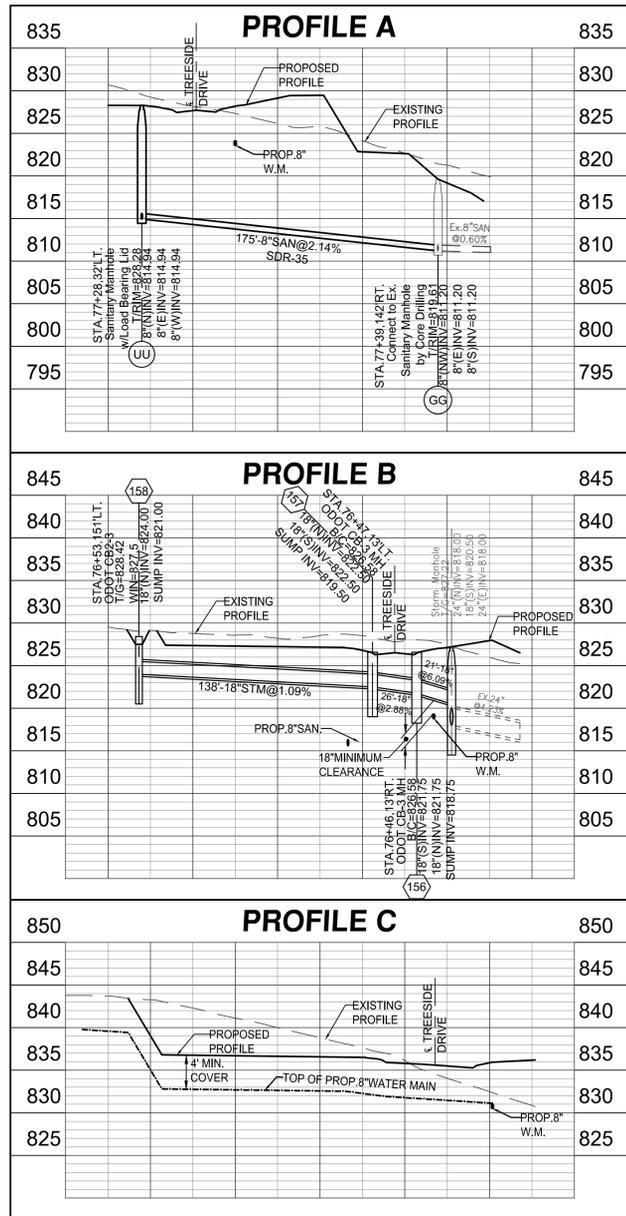
- NOTES:
- 48 hours notice to be given to affected residents before construction begins.
  - All Catch Basin B/C Elevations located within the curb are set to the Back of Curb Elevations.
  - Lower 3/4" Water Services as needed to avoid conflicts with Storm with Min. 4" Cover.
  - Location of existing utilities to be determined in the field prior to work beginning.
  - All lots Sump to Sump Drain unless otherwise noted in plan.
  - Sump Lines to be installed as per Standard Service Detail. Wyes or Tees are to be placed ten feet past lot line, on the low side of specified lots, and marked with Wye poles.
  - Contractors to accept all quantities as correct prior to beginning construction.



NOTE:  
At Crossings, the water main shall have a minimum vertical distance of eighteen (18") inches from storm and sanitary sewers. Also, one full length of water main shall be located so the joints are as far from the storm and sanitary sewers as possible. Fittings, not joint deflection, must be used when water main is lowered at crossings.

WATER MAIN RESTRAINT JOINT LOCATION CHART

Water Main Dia.	Horizontal 45° Bends	Vertical 45° Bends Up (Lower Water Under...)	Vertical 45° Bends Down (Lower Water Under...)	Dead Ends (Permanent & Temporary)	Tees (for Tee Branch)
6"	18" both sides	18" both sides	36" both sides	72" Back	54"
8"	18" both sides	36" both sides	36" both sides	90" Back	54" 72"
10"	36" both sides	36" both sides	54" both sides	117" Back	54" 72" 90"
12"	36" both sides	54" both sides	72" both sides	180" Back	36" 72" 90"
14"	54" both sides	54" both sides	90" both sides	198" Back	36" 72" 90"
16"	54" both sides	54" both sides	90" both sides	216" Back	36" 54" 90"



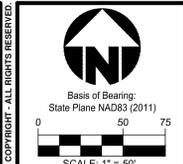
**FIELDSTONE FARMS SECTIONS TWO & THREE SINGLE FAMILY**  
SECTION 15, TOWN 3, RANGE 3  
LIBERTY TOWNSHIP, BUTLER COUNTY, OHIO

**PLAN & PROFILE**

**bayer becker**  
www.bayerbecker.com  
6900 Tversville Road, Suite A  
Mason, OH 45040 - 513.336.6600

Drawing: 16-0294 S CD2  
Checked by: TAC  
Issue Date: 3-22-18

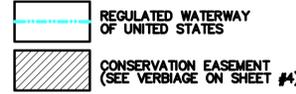
**3/11**



NOTES:

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WATER MAIN RESTRAINT JOINT LOCATION CHART

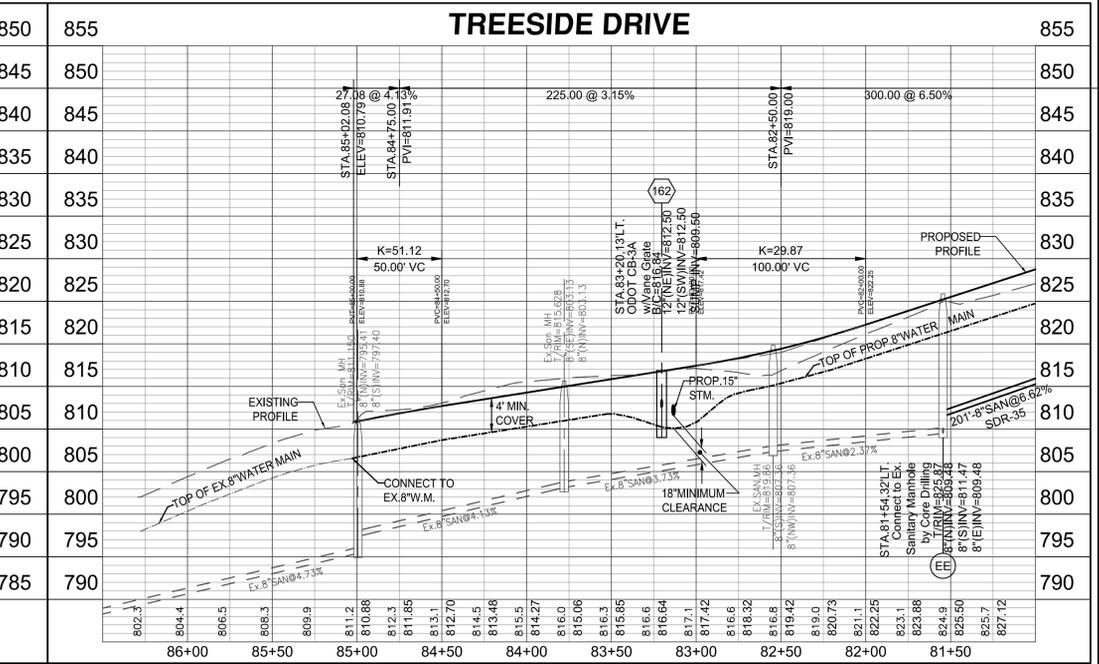
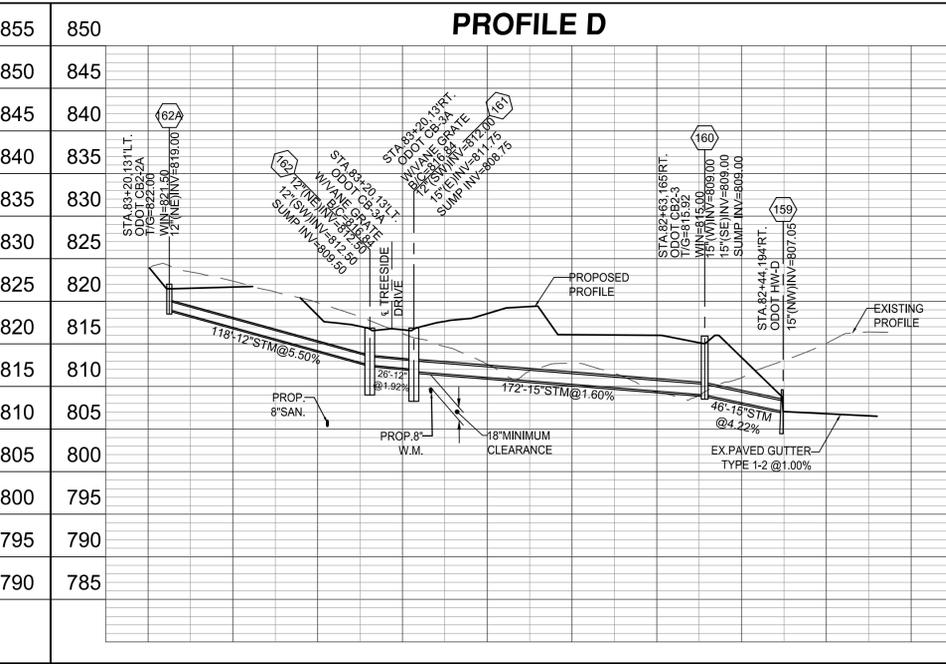
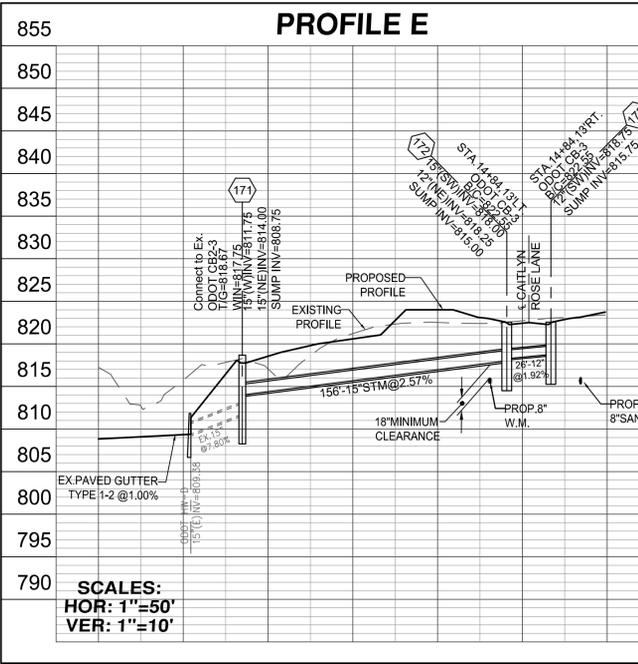
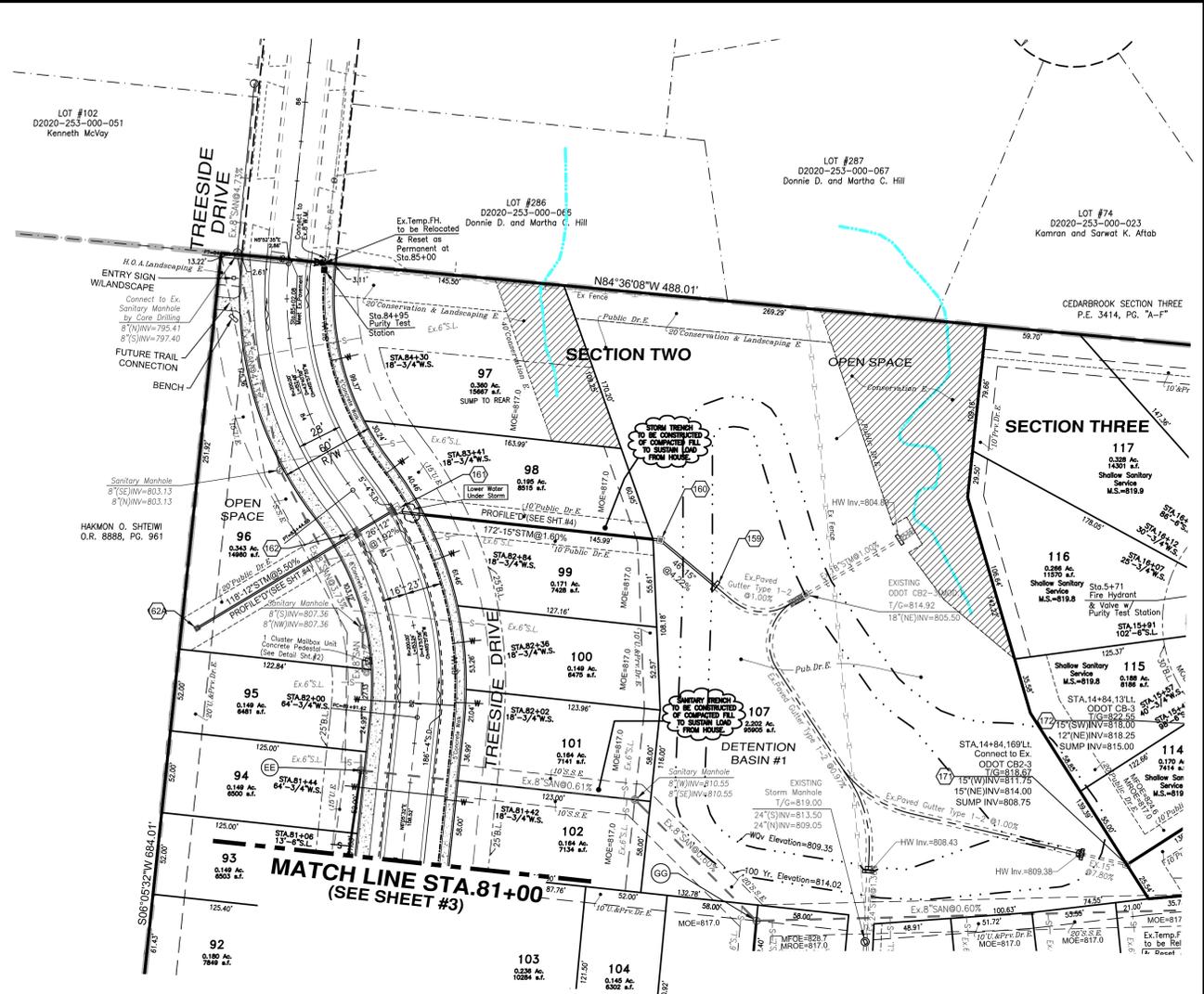
Water Main Dia.	Horizontal 45° Bends	Vertical 45° Bends Up (Lower Water Under...)	Vertical 45° Bends Down (Lower Water Under...)	Dead Ends (Permanent & Temporary)	Tees (for Tee Branch)
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16"	54' both sides	54' both sides	90' both sides	216' Back	36' 54' 90'

CONSERVATION EASEMENTS:

The area in the conservation easement contains a stream that has been identified as a jurisdictional waterway of the United States and is protected under the federal clean water act. The conservation easement shown hereon restricts disturbance and use of the area. Natural water courses and adjacent riparian buffers may not be dredged, straightened, filled, channelized, impeded, diverted or otherwise altered in the conservation area, other than as part of activities that are authorized by the nationwide permit program regulated by the army corps of engineers. There shall be no clearing, disturbance of existing vegetation or placement of manmade modifications such as buildings, structures and fences within conservation area except as approved by the army corps of engineers.

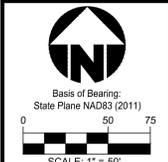
CONSERVATION AND LANDSCAPING EASEMENTS:

The conservation and landscaping easement shown hereon restricts disturbance and use of this area. "Conservation" shall mean there is to be no clearing, grading, construction, filling or disturbance of existing vegetation for the purpose of retaining wooded areas, predominately and as nearly as practical, in their natural, scenic and undeveloped condition except as approved by the Liberty Township Zoning Department. "Landscape" shall mean the general care and upkeep of the easement area shall be the responsibility of the individual property owner which permits the removal of dead trees and vegetation. Construction activity by the developer may take place within the easement area, but no existing trees are to be removed. Any area disturbed within the easement during the construction process will be re-established and re-vegetated by the contractor on site.



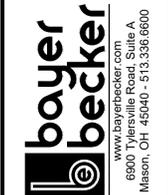
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SCALES:  
HOR: 1"=50'  
VER: 1"=10'



Item	Revision Description	Date	Drawn	Chk
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2				
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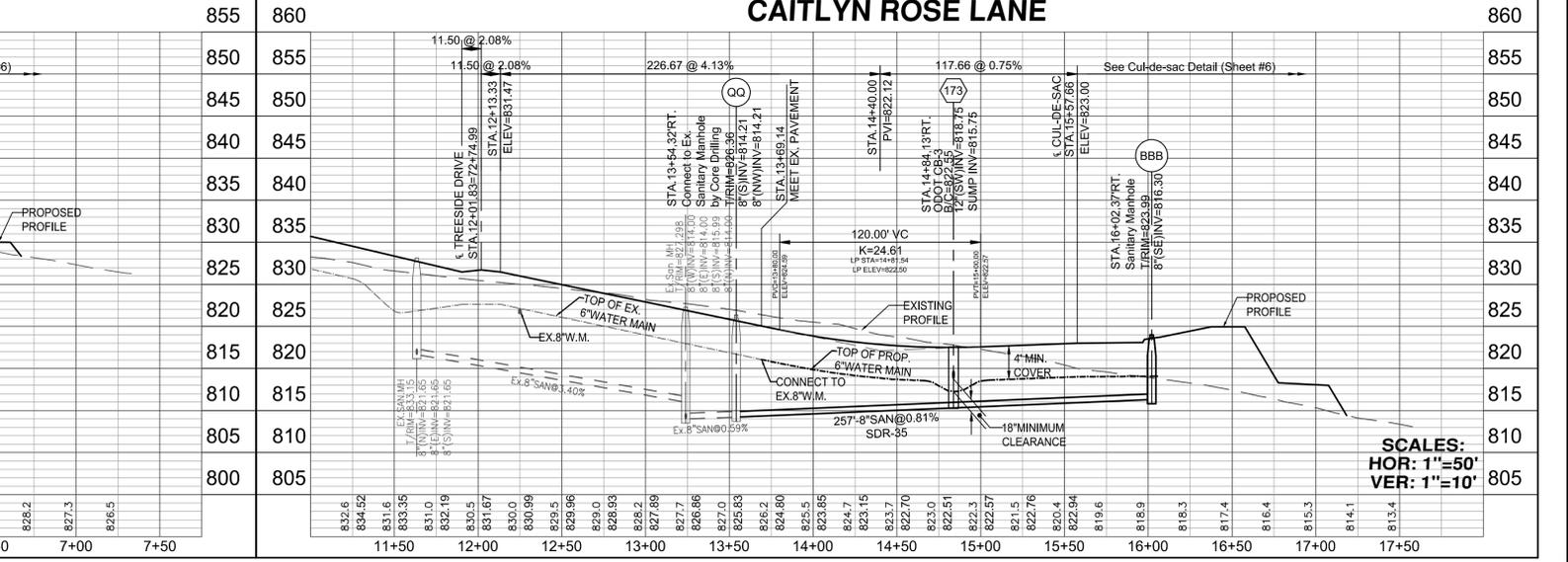
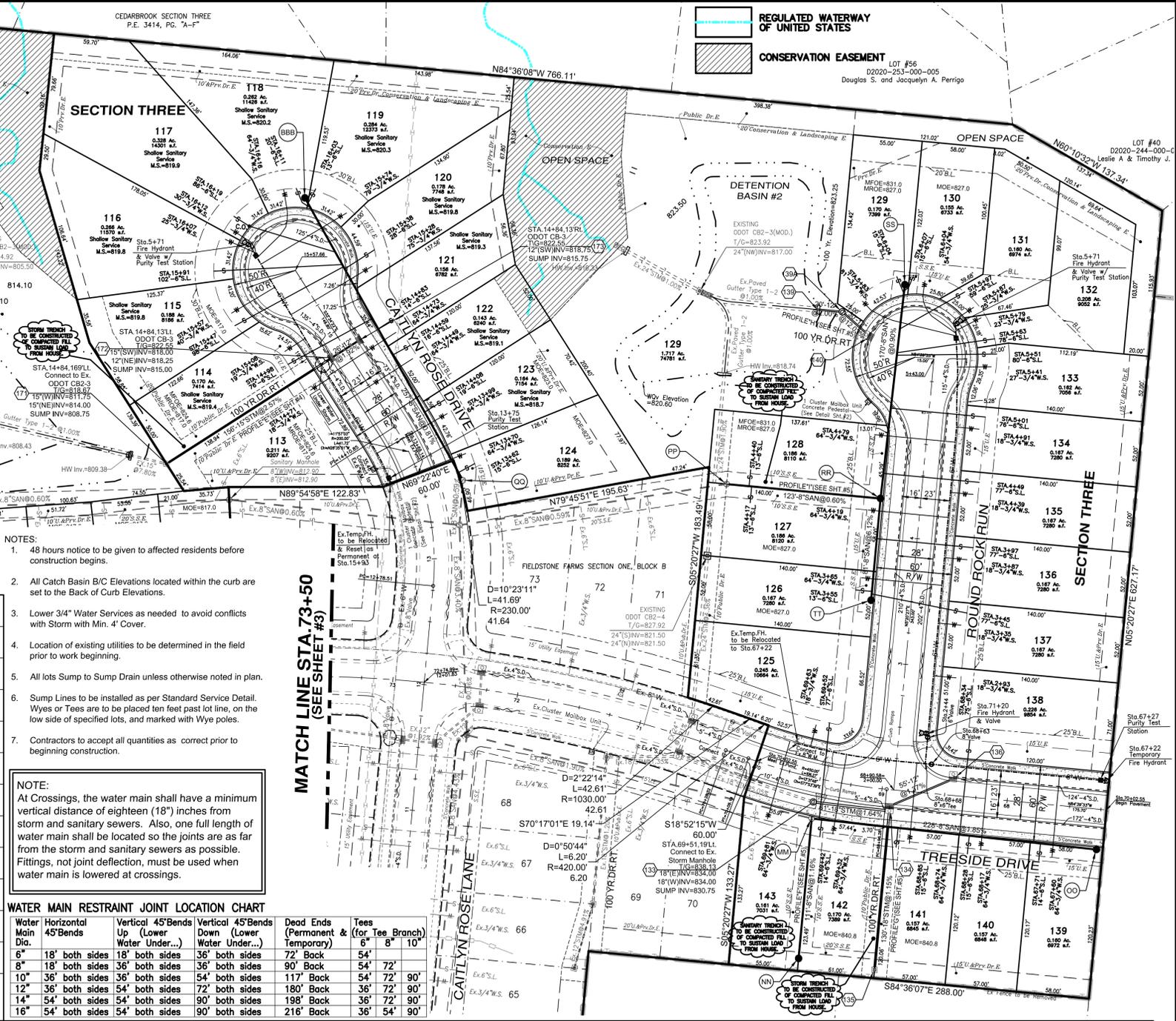
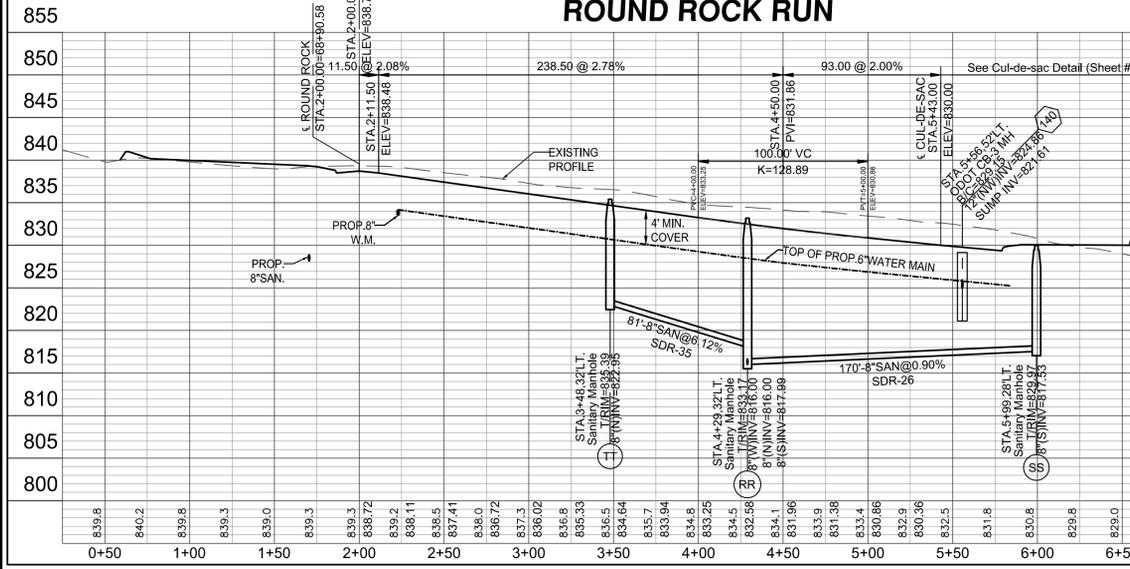
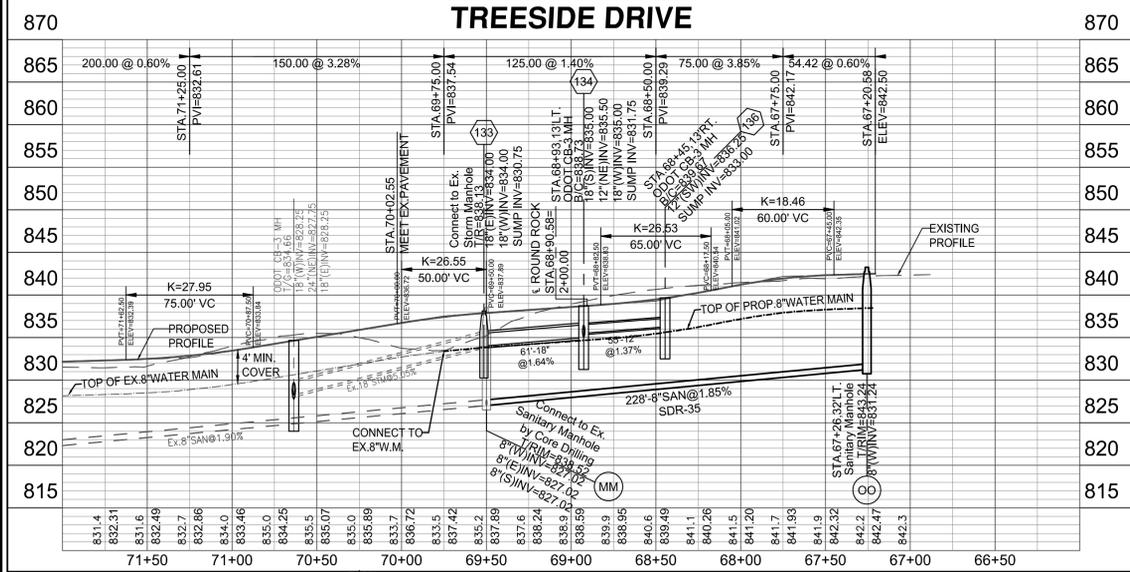
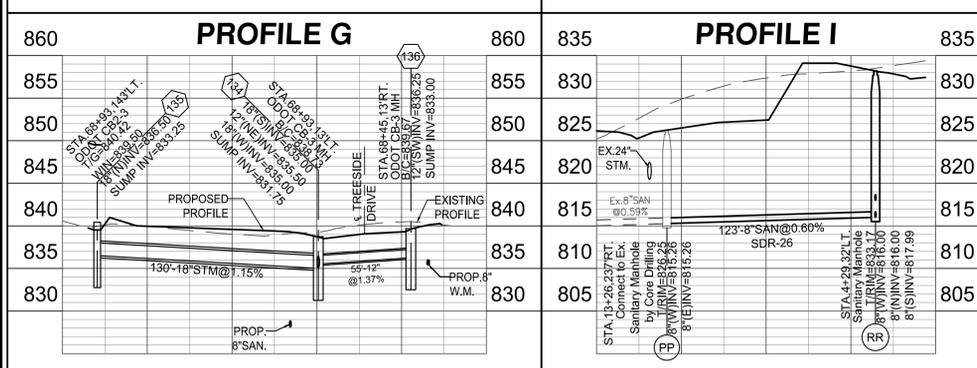
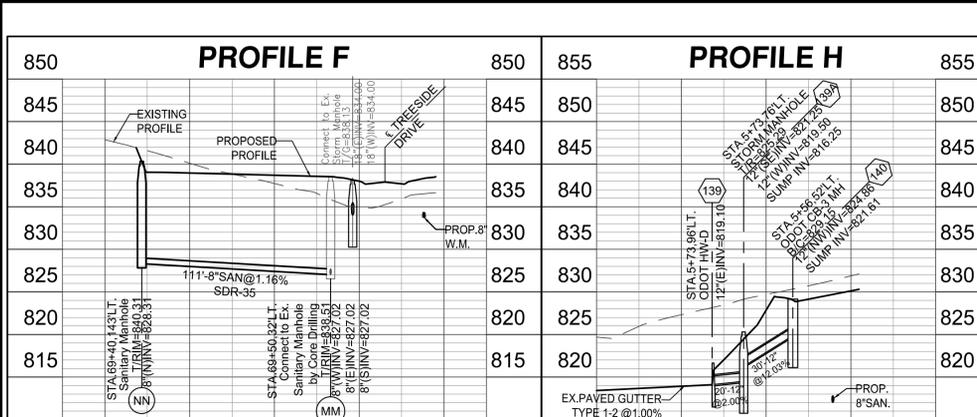
FIELDSTONE FARMS  
SECTIONS TWO & THREE  
SINGLE FAMILY  
SECTION 15, TOWN 3, RANGE 3  
LIBERTY TOWNSHIP, BUTLER COUNTY, OHIO  
PLAN & PROFILE



Drawing: 16-0294 S\_CD2  
Drawn by: TAC  
Checked By:  
Issue Date: 3-22-18  
Sheet:

4/11

Plot time: Oct 01, 2019 - 3:52pm  
 Drawing name: J:\2016\16-0294\CDWG\Single-Family\16-0294 S CD2.dwg - Layout Tab: SPP



- NOTES:**
- 48 hours notice to be given to affected residents before construction begins.
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**FIELDSTONE FARMS SECTIONS TWO & THREE SINGLE FAMILY**  
 SECTION 15, TOWN 3, RANGE 3  
 LIBERTY TOWNSHIP, BUTLER COUNTY, OHIO

**PLAN & PROFILE**

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Drawing: 16-0294 S CD2  
 Drawn by: TAC  
 Checked by:  
 Issue Date: 3-22-18  
 Sheet:

**5/11**

- NOTES:**
- Regular inspection and maintenance will be provided for all erosion and sediment control practices. Permanent records of maintenance and inspections must be kept throughout the construction period. Inspections must be made a minimum of once every seven (7) days and immediately after storm events greater than 0.5 inches of rain in a 24 hour period. Provided will be name of inspector, major observations, date of inspection and corrective measures taken.
  - All erosion and sediment control practices must conform to the specifications of Rainwater and Land Development, Ohio's standards for storm water management, land development and urban stream protection.
  - Perimeter Sedimentation control and basins/traps shall be implemented as the first step of grading and within seven (7) days of initial grubbing or grading and shall continue to function until upland areas are stabilized.
  - Disturbed areas which will remain unworked for a period of fourteen (14) days or more, shall be stabilized with seeding and mulching or other approved means within seven (7) days. All disturbed areas within fifty (50) feet of an intermittent or solid blue line stream shall be stabilized within two (2) days. All areas of a site which are at final grade shall be stabilized with seeding and mulching or other approved means within seven (7) days.
  - Quantities for Erosion Control may vary between detailed plans and field conditions during construction. Plan quantities are a minimum; more erosion control may be necessary due to environmental conditions.
  - Sedimentation control and ditch swales are subject to change upon completion of entire set of construction drawings.
  - No solid or liquid waste shall be discharged into storm water runoff.
  - Home builders are responsible for erosion control on each individual lot.

**NOTE:**  
Contractors to accept all quantities as correct prior to beginning construction.

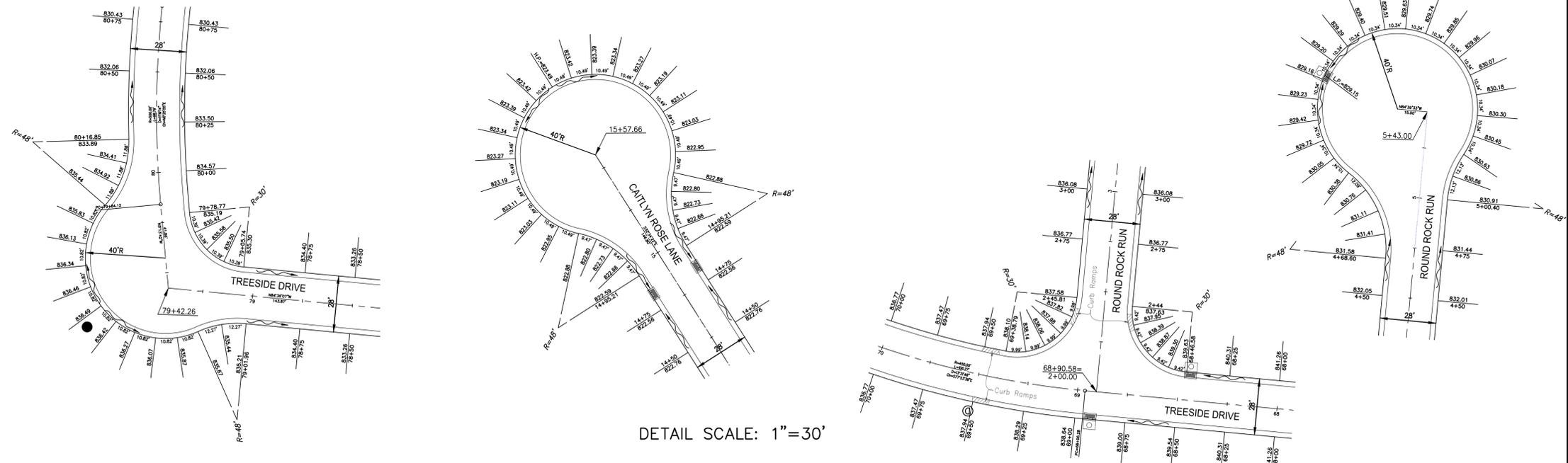
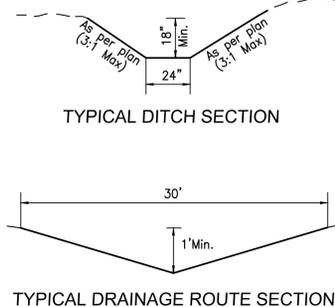
**NOTE:**  
Quantities for Erosion Control may vary between detailed plans and field conditions during construction. Plan quantities are a minimum; more erosion control may be necessary due to environmental conditions.

**NOTE:**  
Sedimentation control and ditch swales are subject to change upon completion of entire set of construction drawings.

- CLEARING LIMITS
- SILT FENCE OR MULCH BERM
- REGULATED WATERWAY OF UNITED STATES
- RIPARIAN AREA: NO DISTURBANCE PERMITTED
- CONSERVATION EASEMENT (SEE VERBIAGE ON SHEET #4)

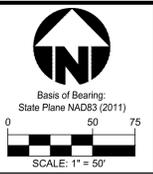
- EROSION CONTROL NOTES**
- SEEDING AND MULCHING
  - SODDING
  - PRESERVE EXISTING VEGETATION
  - STRAW BALE
  - SILT FENCE OR MULCH BERM
  - SOIL PILES
  - TEMPORARY STREAM CROSSING
  - GRAVEL CURB INLET SEDIMENT FILTER
  - GEOTEXTILE INLET SEDIMENT FILTER
  - GABIONS
  - STRAW BALE DROP INLET SEDIMENT FILTER
  - SOD DROP INLET SEDIMENT FILTER
  - GRAVEL & WIRE MESH DROP INLET SEDIMENT FILTER
  - BLOCK & GRAVEL CURB INLET SEDIMENT FILTER
  - TEMPORARY SEDIMENT TRAPS & DAMS
  - DIKES & SLOPE PROTECTION
  - ROLLED GRAVEL CURB INLET SEDIMENT FILTER
  - CHECK DAM
  - TEMPORARY DETENTION SEDIMENT FILTER/BASIN
  - DANDY BAG/BEAVER DAM® OR EQUAL
  - CONSTRUCTION ENTRANCE
  - CONCRETE WASHOUT AREA
- SEE SOIL EROSION & SEDIMENTATION CONTROL DETAIL SHEET (Page #11)

Note: All ditches constructed by the Developer shall be sodded or hydra-seeded.



DETAIL SCALE: 1"=30'

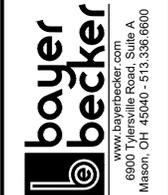
**NOTE:**  
All Existing Structures, pavement, fencing and utilities are to be removed from site.



Date: \_\_\_\_\_  
Dwn: \_\_\_\_\_  
Chk: \_\_\_\_\_

Revision Description

**FIELDSTONE FARMS**  
**SECTIONS TWO & THREE**  
**SINGLE FAMILY**  
SECTION 15, TOWN 3, RANGE 3  
LIBERTY TOWNSHIP, BUTLER COUNTY, OHIO  
**GRADING PLAN**



Drawing: 16-0294 S CD2  
Drawn by: TAC  
Checked by:  
Issue Date: 9-20-19

Sheet:  
**6/11**

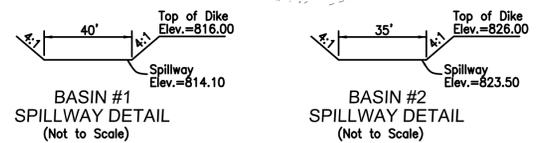
Plot time: Oct 01, 2019 - 4:07pm  
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NO DISTURBANCE SHALL TAKE PLACE IN THE VICINITY OF REGULATED WATERWAY.

NO DISTURBANCE SHALL TAKE PLACE IN THE VICINITY OF REGULATED WATERWAY.

CONTRACTOR TO TAKE CAUTION TO NOT DISTURB EXISTING TREES WHEN CUTTING IN PROPOSED SWALE.



- NOTES:**
- Regular inspection and maintenance will be provided for all erosion and sediment control practices. Permanent records of maintenance and inspections must be kept throughout the construction period. Inspections must be made a minimum of once every seven (7) days and immediately after storm events greater than 0.5 inches of rain in a 24 hour period. Provided will be name of inspector, major observations, date of inspection and corrective measures taken.
  - All erosion and sediment control practices must conform to the specifications of Rainwater and Land Development, Ohio's standards for storm water management, land development and urban stream protection.
  - Perimeter Sedimentation control and basins/traps shall be implemented as the first step of grading and within seven (7) days of initial grubbing or grading and shall continue to function until upland areas are stabilized.
  - Disturbed areas which will remain unworked for a period of fourteen (14) days or more, shall be stabilized with seeding and mulching or other approved means within seven (7) days. All disturbed areas within fifty (50) feet of an intermittent or solid blue line stream shall be stabilized within two (2) days. All areas of a site which are at final grade shall be stabilized with seeding and mulching or other approved means within seven (7) days.
  - Quantities for Erosion Control may vary between detailed plans and field conditions during construction. Plan quantities are a minimum; more erosion control may be necessary due to environmental conditions.
  - Sedimentation control and ditch swales are subject to change upon completion of entire set of construction drawings.
  - No solid or liquid waste shall be discharged into storm water runoff.
  - Home builders are responsible for erosion control on each individual lot.

**NOTE:**  
 All Existing Structures, pavement, fencing and utilities are to be removed from site.

**NOTE:**  
 Contractors to accept all quantities as correct prior to beginning construction.

**NOTE:**  
 Quantities for Erosion Control may vary between detailed plans and field conditions during construction. Plan quantities are a minimum; more erosion control may be necessary due to environmental conditions.

**NOTE:**  
 Sedimentation control and ditch swales are subject to change upon completion of entire set of construction drawings.

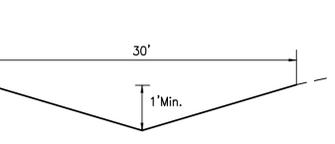
PROJECT DATA		
Total Area	20.90 Ac.	
Disturbed Tributary Area	16.30 Ac.	
Drainage Area	29.7 Ac.	
Required Detention Storage	42,869 c.f.	
Pre-Developed Runoff Coefficient	0.36	
Post-Developed Runoff Coefficient	0.50	
Estimated Proposed Impervious Area	6.40 Ac. (25.9%)	
Immediate Receiving Waters	Unnamed Tributary to Gregory Creek	
Subsequent Receiving Waters	Gregory Creek	

SOIL TYPES		
Symbol	Name	Type
RwB	Russell-Miamian silt loams, bedrock substratum 2 to 6 percent slopes	B
WyB2	Wynn silt loam 6 to 12 percent slopes, moderately eroded	B

- CLEARING LIMITS
- SILT FENCE OR MULCH BERM
- REGULATED WATERWAY OF UNITED STATES
- RIPARIAN AREA: NO DISTURBANCE PERMITTED
- CONSERVATION EASEMENT (SEE VERBIAGE ON SHEET #4)

Note: All ditches constructed by the Developer shall be sodded or hydro-seeded.



- EROSION CONTROL NOTES**
- SEEDING AND MULCHING
  - SODDING
  - PRESERVE EXISTING VEGETATION
  - STRAW BALE
  - SILT FENCE OR MULCH BERM
  - SOIL PILES
  - TEMPORARY STREAM CROSSING
  - GRAVEL CURB INLET SEDIMENT FILTER
  - GEOTEXTILE INLET SEDIMENT FILTER
  - GABIONS
  - STRAW BALE DROP INLET SEDIMENT FILTER
  - SOD DROP INLET SEDIMENT FILTER
  - GRAVEL & WIRE MESH DROP INLET SEDIMENT FILTER
  - BLOCK & GRAVEL CURB INLET SEDIMENT FILTER
  - TEMPORARY SEDIMENT TRAPS & DAMS
  - DIKES & SLOPE PROTECTION
  - ROLLED GRAVEL CURB INLET SEDIMENT FILTER
  - CHECK DAM
  - TEMPORARY DETENTION SEDIMENT FILTER/BASIN
  - DANDY BAG/BEAVER DAM OR EQUAL
  - CONSTRUCTION ENTRANCE
  - CONCRETE WASHOUT AREA
- SEE SOIL EROSION & SEDIMENTATION CONTROL DETAIL SHEET (Page #11)

**FIELDSTONE FARMS SECTIONS TWO & THREE SINGLE FAMILY SECTION 15, TOWN 3, RANGE 3 LIBERTY TOWNSHIP, BUTLER COUNTY, OHIO GRADING PLAN**

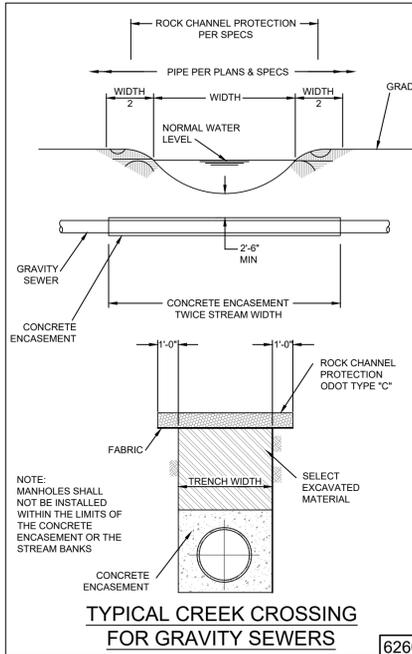
Date	Drawn	Chk.	Revision Description
10-19	TAC		1 REVISED AS PER BCCO
			2
			3
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Item: 1 2 3 4 5 6 7 8 9

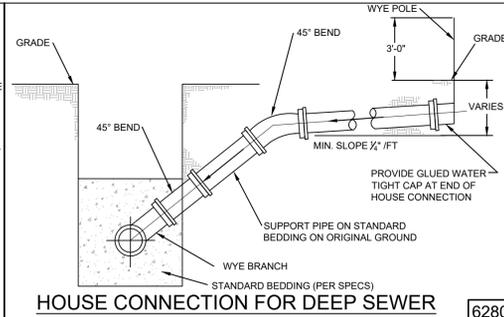
Drawing: 16-0294 S.CD2  
 Drawn by: TAC  
 Checked by:  
 Issue Date: 9-20-19  
 Sheet:

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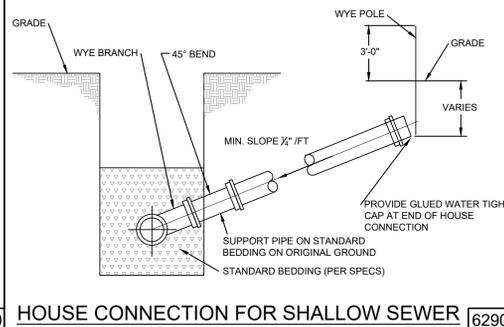
**7/11**



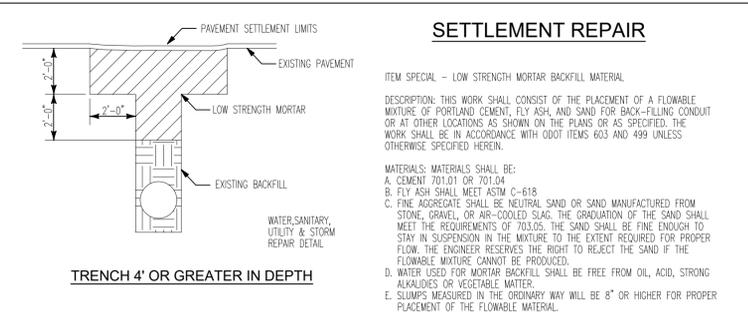
**TYPICAL CREEK CROSSING FOR GRAVITY SEWERS** [6260]



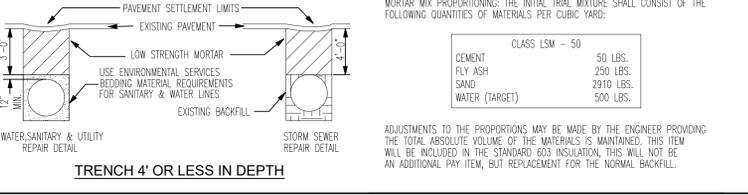
**HOUSE CONNECTION FOR DEEP SEWER** [6280]



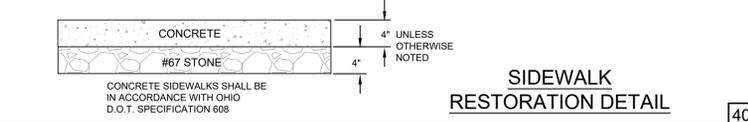
**HOUSE CONNECTION FOR SHALLOW SEWER** [6290]



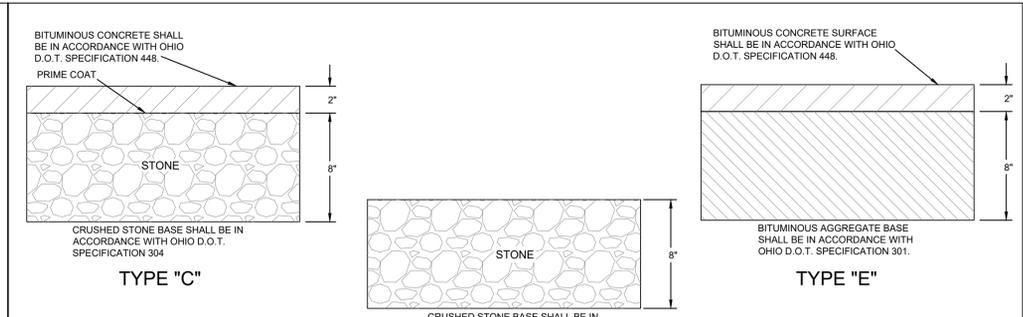
**TRENCH 4' OR GREATER IN DEPTH**



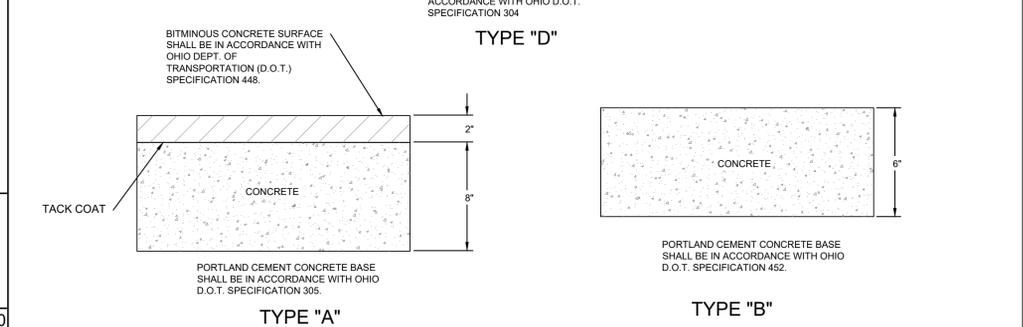
**TRENCH 4' OR LESS IN DEPTH**



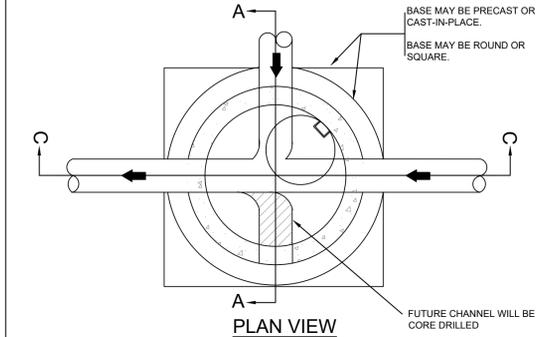
**SIDEWALK RESTORATION DETAIL** [4010]



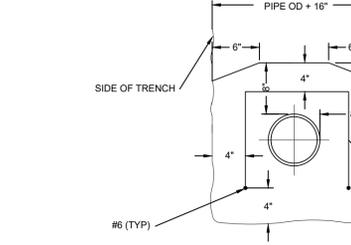
**TYPE "C"**



**PAVEMENT REPLACEMENT DETAILS** [4120]



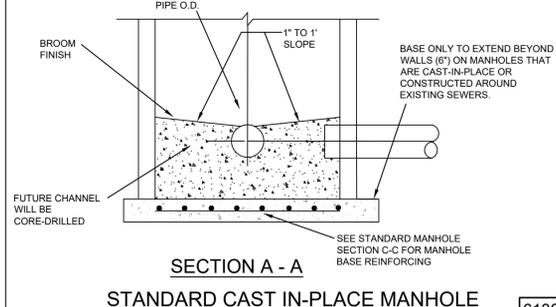
**PLAN VIEW**



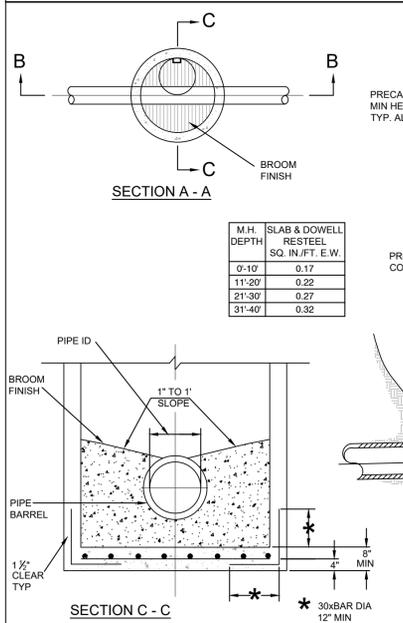
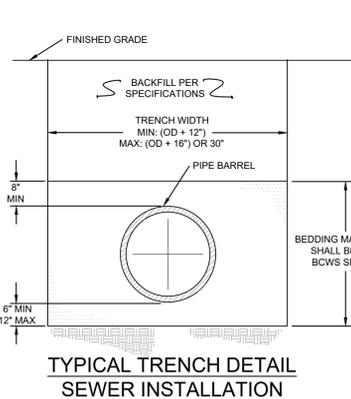
**TYPICAL TRENCH DETAIL SEWER INSTALLATION** [6270]

**CONCRETE ENCASEMENT DETAIL** [6240]

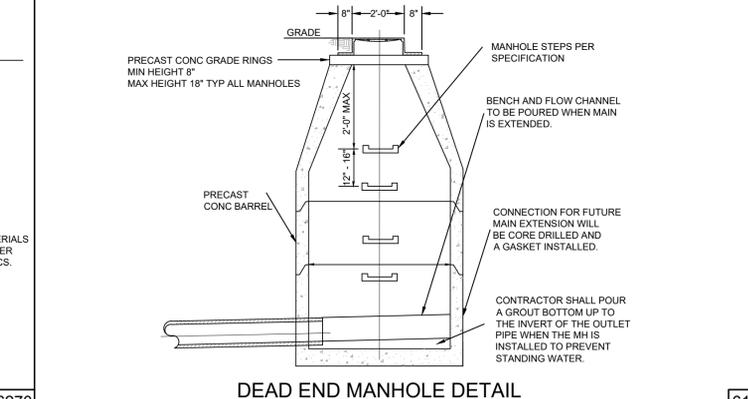
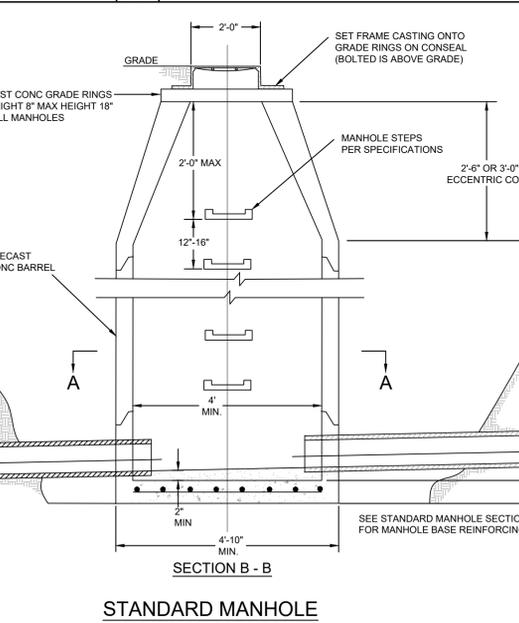
PIPE SIZE	CY CONC PER LIN FT	LENGTH OF NO 3 BARS	SPACING (FT) BETWEEN NO 3 BARS
6"	0.121	3'-9"	1.64
8"	0.139	4'-3"	1.25
10"	0.157	4'-9"	1.12
12"	0.177	5'-3"	1.02
16"	0.200	6'-3"	0.85
18"	0.247	6'-10"	0.78
20"	0.270	7'-5"	0.72
24"	0.315	8'-6"	0.63
30"	0.540	10'-0"	0.57



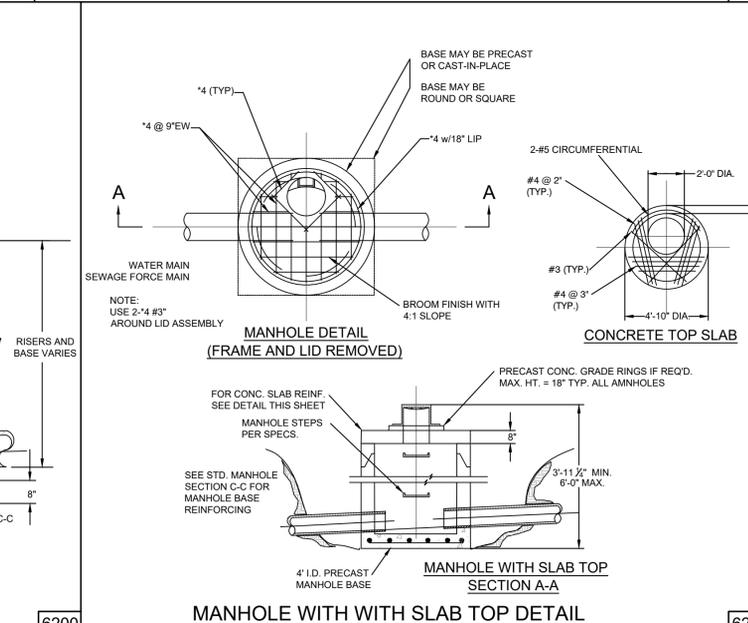
**SECTION A - A STANDARD CAST-IN-PLACE MANHOLE** [6130]



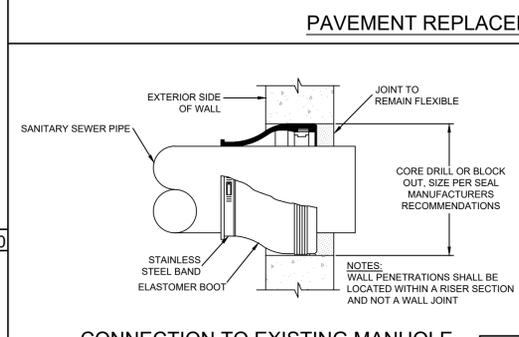
**SECTION C - C STANDARD MANHOLE** [6200]



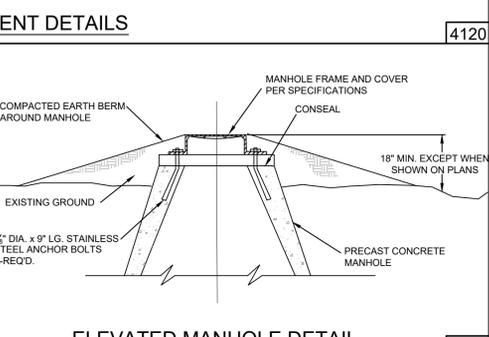
**DEAD END MANHOLE DETAIL** [6190]



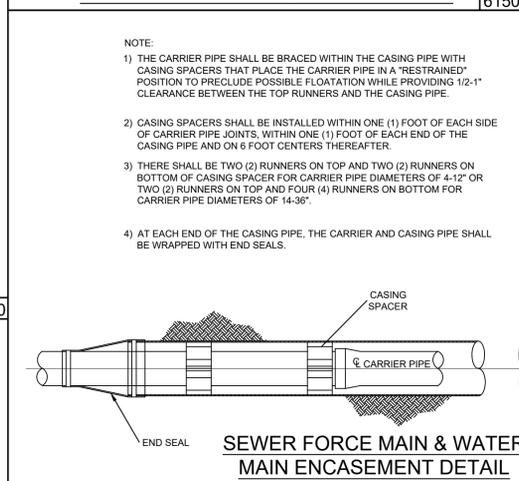
**MANHOLE WITH WITH SLAB TOP DETAIL** [6210]



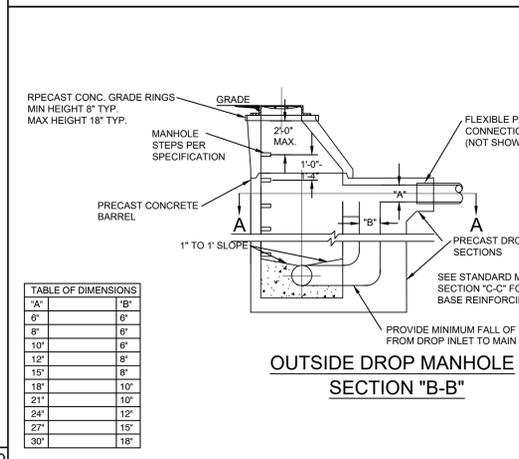
**CONNECTION TO EXISTING MANHOLE** [6150]



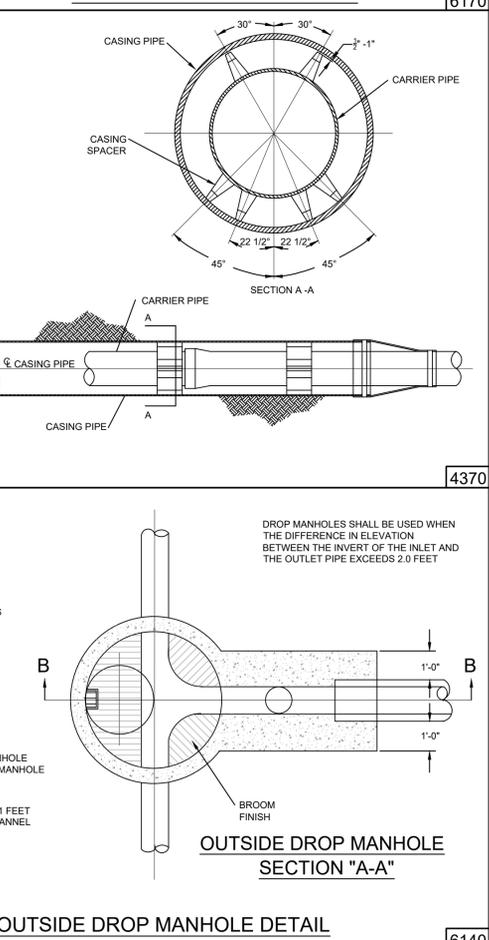
**ELEVATED MANHOLE DETAIL** [6170]



**SEWER FORCE MAIN & WATER MAIN ENCASEMENT DETAIL** [4370]



**OUTSIDE DROP MANHOLE SECTION "B-B"**



**OUTSIDE DROP MANHOLE SECTION "A-A"**

**TABLE OF DIMENSIONS**

24"	18"
6"	6"
8"	6"
10"	6"
12"	8"
15"	8"
18"	10"
24"	10"
24"	12"
27"	15"
30"	18"

Plot time: Sep 20, 2019 4:05pm  
 Drawing name: K:\OLD-K\Mason\FF BLOCKS\DETAILS\BUTLER\BC SAN.dwg - Layout Tab: SAN

Revision Description

Item	Date	Drawn	Chk

DATE: 12-28-17

Sheet: 8/11

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 Mason, Ohio 45040 - 513.336.6600

Butler County, Ohio  
 Miscellaneous & Sanitary Details

Drawing: BC SAN  
 Checked By:  
 Issue Date: 12-28-17





**GENERAL NOTES**

**EROSION AND SEDIMENT CONTROLS**

**Vegetative Practices**  
Such practices may include: temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing and protection of trees. The contractor shall initiate appropriate vegetative practices on all disturbed areas within seven (7) days if they are to remain dormant (undisturbed) for more than fourteen (14) days. Permanent or temporary soil stabilization shall be applied to disturbed areas within seven (7) days after final grade is reached on any portion of the site.

**Structural Practices**  
Structural practices shall be used to control erosion and trap sediment from all sites remaining disturbed for more than fourteen (14) days.

**Timing**  
Sediment control structures shall be functional throughout earth disturbing activity. Sediment ponds and perimeter sediment barriers shall be implemented as the first step of grading and within seven days from the start of grubbing. They shall continue to function until the upslope development area is reestablished.

**Sediment Barriers**  
Sheet flow runoff from denuded areas shall be intercepted by sediment barriers. Sediment barriers, such as sediment fences or diversions direction runoff to settling facilities, shall protect adjacent properties and water resources from sediment transported by sheet flow.

Erosion and sediment control practices used to satisfy the conditions of this plan shall meet the standards and specifications in the current edition of Water Management and Sediment Control in Urbanized Areas (Soil Conservation Service.)

**Waste Disposal**  
No solid or liquid waste, including building materials, shall be discharged in storm water runoff. Off-site waste disposal of sediments shall be minimized. The plan shall ensure and demonstrate compliance and applicable State of local waste disposal, sanitary sewer or septic system regulations.

**Maintenance**  
All temporary and permanent control practices shall be maintained and repaired as needed to assure continued performance of their intended function.

**Dormant Seeding**  
1. Seedlings shall not be planted from October 1 through November 20. During this period the seeds are likely to germinate but probably will not be able to survive the winter.  
2. The following methods may be used for "Dormant Seeding":  
From October 1 through November 20, prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After November 20 and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50% for this type of seeding.  
From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this type of seeding.  
Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro-seeder (slurry may include seed and fertilizer) on a firm, moist seedbed.

Where feasible, except when a cultipacker type seeder is used, the seedbed should be formed following seeding operations with a cultipacker, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.

**REVEGETATION**  
Seed, sod or mulch bare soil as soon as possible

**SEEDING AND MULCHING**  
Spread 4 to 6 inches of topsoil. Fertilize according to soil test (or apply 10 lb./1000 sq. ft. of 20-10-10 or 10-10-10 fertilizer.) Seed with an appropriate mix for the site (see table.) Rake lightly to cover seed with 1/4" of soil. Roll lightly. Mulch with straw (70-90 lb. or one bale per 1000 sq. ft.) Anchor mulch by punching 2 inches into the soil with a dull, weighted disk or by using netting or other measures on steep slopes, or windy areas. Water gently every day or two to keep soil moist. Less watering is needed once grass is 2 inches tall.

**SODDING**  
Spread 4 to 6 inches of topsoil. Fertilize according to soil test (or apply 10 lb./1000 sq. ft. of 20-10-10 or 10-10-10 fertilizer.) Lightly water the soil. Lay sod, tamp or roll lightly. On slopes, lay sod starting at the bottom and work toward the top. Peg each piece down in several places. Initial watering should wet soil 6 inches deep (or until water stands 1 inch deep in a straight-sided container.) Then water lightly every day or two for 2 weeks. If construction is completed after October 31, seeding or sodding may be delayed. Applying mulch or temporary seed (such as rye or winter wheat) is recommended if weather permits. Straw bale or silt fences must be maintained until final seeding or sodding is completed in spring March 15 - May 31.

**1. Set the stakes.**  
**2. Excavate a 4" x 4" trench** upslope along the line of stakes.  
**3. Staple filter material to stakes** and extend it into the trench.  
**4. Backfill and compact** the excavated soil.

**CONSTRUCTION OF A FILTER BARRIER**  
Source: Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant

