#### PLANNING COMMISSION AGENDA



Planning Commission Meeting 5:30 PM Thursday, March 8, 2018

Village Administration Building 99 High Street South Lebanon, Ohio 45065

	Agenda Item
1.	Call to Order
2.	Pledge of Allegiance
3.	Roll Call
4.	Open Forum
5.	Review and Approval of Minutes
	A. Minutes of January 24, 2018
6.	Public Hearing - None
7.	Old Business
	A. None
8.	New Business
	A. Case 18-02P: Application for Final Development Plan – Wynstead Section 5, A & B
	B. Case 18-03P. Approval of Right-of-Way Dedication Plat – Stone Lake Subdivision
9.	Communications
10.	Adjournment

Members of the public may address the Planning Commission during the Open Forum segment of the agenda and shall be limited to five minutes each. After the speaker concludes remarks, the Planning Commission may comment or ask questions at that time. The Chairperson may at his or her discretion restrict duplicate testimony on a particular subject.



Village of South Lebanon 99 N. High St. South Lebanon, Ohio 45065 Ph:(513)494-2296 Fax:(513)494-1656

www.southlebanonohio.org

Planning Commission Meeting MEETING MINUTES Wednesday, January 24, 2018

**Members Present:** 

Dennis Rees Bill Madison Jim Smith **Members Absent:** 

Tom Hunsche

Staff:
Jerry Haddix
Administrator
Brianna Koutny
Clerk

- 1. Call to order at 5:00p.m.
- 2. Roll Call
- 3. Pledge of Allegiance
- 4. Open Forum: None
- 5. Review and Approval of Minutes from December 19, 2017. A motion to approve was made by Jim Smith and Seconded by Dennis Rees. A vote was taken. All YEAS.
- 6. Public Hearing: None
- 7. Old Business: None
- 8. New Business:
  - a) Case 18-01P: Application for Replat of Lots 24 & 25, Fredericks Stand Subdivision. Administrator, Jerry Haddix stated the original Lot 24 consisted of 0.2184 acres and Lot 25 was originally 0.1328 acres. He stated the Applicant is proposing to move the lot line 20 feet to the west, creating identical parcels at 24-A (0.1716) acres, and 25-A (0.1796) acres. Haddix Stated the Replat had been reviewed and approved by the Warren County Tax Map Department, Choice One Engineering and the Warren County Sanitary and Water Department. Haddix recommends a motion to approve the Replat of Lots 24 & 25 in Fredericks Stand Subdivision and authorize Chairman Zucco to sign the Mylar.
- 9. Communications: None
- 10. A motion to Adjourn was made by Jim Smith, and Seconded by Darrick Zucco. A vote was taken. All YEAS.

Darrick Zucco – Chairman	Brianna Koutny – Clerk

#### VILLAGE OF SOUTH LEBANON MEMORANDUM

**TO:** Planning Commission

**FROM:** Jerry Haddix, Village Administrator

**RE:** Case 18-02P, Final Development Plan & Construction Drawings for Wynstead Section

5 A & B

**DATE:** March 6, 2018

On the agenda for March 6<sup>th</sup> meeting is Case #18-02P, an application for approval of the Final Development Plan & Construction Drawings (FDP) Wynstead Section 5 Phases A & B (the "Property") submitted by Grand Communities, LTD (aka Fischer Homes) (the "Owner").

#### Background

On February 1, 2018, the Owner submitted the FDP for Section 5, Phases A & B of Wynstead Subdivision consisting of a total of 49 single family lots (Phase A–32 lots, Phase B-17 lots) comprising 9.816 acres. Phase A of the development will continue Emerald Drive at Section 3 of the development. Phase B will be the cul-de-sac of Noble Court. The FDP & construction drawings have been sent to various agencies and all of the comments have been forwarded to the Owner's Project Engineer, Bayer Becker. Bayer Becker has indicated that they are currently incorporating all of the comments and will be re-submitting the plans.

#### **Code Analysis**

Section 15.14.18 of the Village Zoning Code lists the requirements for the Final Development Plan. The Owner will be required to submit a Final plat and will need to be reviewed by the Planning Commission.

#### **Zoning Process**

The Planning Commission shall approve, approve with conditions, or disapprove the final development plan within sixty (60) days after it has been filed.

#### Recommendation

The submitted FDP is consistent with the Preliminary Development Plan. Staff recommends that the Planning Commission adopt a motion to approve the Final Development plan & Construction Drawings with the following conditions:

- 1. Enter into a Development Agreement with the Village and fulfill bonding requirements as required by the Village Solicitor in accordance with the Village Zoning Regulations;
- 2. Approval of the FDP by the Village Engineer, the Warren County Water & Sewer Department and the Warren County Soil & Water Conservation District, per their comments received by the Village;
- 3. Review and approval of the "Declaration of Covenants and Restrictions" by the Village Solicitor; and
- 4. Approval of the Construction Drawings by the Warren County Soil & Water District.

## VILLAGE OF SOUTH LEBANON PLANNING COMMISSION APPLICATION

1. Application Type: (check the appropriate box) (all plans must be folded when submitted)

Draft Plan-Discussion Only		Preliminary PUD
Site Plan	1	Final PUD
Landscape Plan		Rezoning
Construction Drawings. (Please complete Fee Schedule form on Page 2)		Lot Split
Preliminary Plat (Please compete Fee Schedule form on Page 2)		Conditional Use Special Use –Telecommunications Tower
Final Plat or Replat	+	Special Meeting
Right-of-Way Dedication Plat	-	Other:

(See Page 3 for complete Fee Schedule and Submittal Requirement Information)

2. Development Information:

Development/Business Name: Wynstead Section Five	
Type of Business/Project Description: Subdivision	
Location: Military Survey No. 1546	Size of Building:
Current Zoning: R-3 PUD	Rezone to:
Total Acreage: 9.816	Acres to be Rezoned:
Number of Employees:	Number of Fleet Vehicles:
Current Owner of the Property	Project Contact (Architect, Engineer, Planner)
Name: Grand Communities, LTD.	Name: Bayer Becker
Address: 2670 Chancellor Dr. Suite 300	Address: 6900 Tylersville Road, Suite A
City: Crestview Hills State: KY Zip: 41017	City: Masou, State: Oh Zip: 45040
Telephone: (859) 341-4709 Fax:	Telephone: (513) 336-6600 Fax:
Applicant(s): Grand Communities, LTD.	
	naic Rlud Str 100
City: Grestview Hitts & Classec State: KY	Zip: 41017 41018
Telephone: (859)341-4709 Fax:	
Please Print Applicant's Name Here:	
* Applicant's Signature:	at a second and a second a second and a second a second and a second a second and a
* Applicant is responsible for payment of all fees (See Fe	ee Schedule and Footnotes on Pages 3 and 4 respectively.)

TO BE COMPLETED BY THE VILLAGE OF SOUTH LEBANON					
Application Number:		Date of Zoning	Commission Meeting:		
Fee Paid:	Drawn:	Check #:	Date:	Initial:	
Legal Notices Advertis	sed:	Mailed to St	urrounding Property Own	ers:	

3. Rezoning and Preliminary PUD Plan Requests

Surrounding Property Owners: Please list the names and addresses of all Owners of Real Property within 300 feet of any part of the property as such names and addresses appear on the most recent tax duplicate on 2 sets of mailing labels. (See submittal requirements on page 3).

4.	<b>Signatures</b>	Required
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By signing this application, I attest under penalty of law that all the information knowledge.	on given above is correct to the best of my
Please Print Applicant's Name: Dave Strong Land Develo	pricat Construction Manager
Applicant's Signature:	Date: //s///8
Property Owner's Signature:	Date: //s//8

5. Fee Determination for Construction Drawings and Preliminary Plat Submittals

Please create a detailed breakdown of the estimated infrastructure breakdown cost for the Construction Drawings complete Item 1 and for Preliminary Plats complete Item 2.	ie p	roject and attach it to the	is application. For
Total Infrastructure Cost	: \$	225,954.80	(A)
1 - Construction Drawing Fee Breakdown			
1.25% of Total Infrastructure Cost* (Line A x 0.0125)	\$	2,824.44	(B)
1.50% of Total Infrastructure Cost** (Line A x 0.015)	+ \$	3,389.32	(C)
Application Fee	+ \$	150.00	(D)
Total Construction Drawing Fee (Line B + C + D) Final PUD 2 - Preliminary Plet Fee Breakdown:	\$	6,363.76	(E)
0.25% of Total Infrastructure Cost* (Line A x 0.0025)	\$	564.89	(F)
Application Fee	+ S	150.00	(G)
Total Preliminary Plat Fee (Line F + G)	\$	714.89	(H)
Total Paid with Application/Submittals (Line E+H)	\$	7078.64	
* Due upon submittal  ** Due prior to construction			

6. Fee Schedule and Submittal Requirements

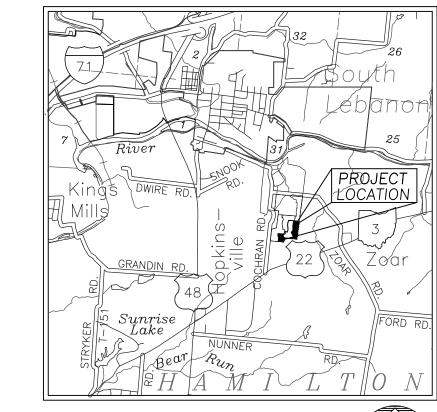
Article/Ord. Reference	Item	Fees <sup>(3)(4)</sup>	Submittal Requirements
Article 20	Preliminary Plats	\$150 + 0.25% of estimated	12 Copies <sup>(5)</sup> + 1 Copy (Ledger Paper)
Article 14	Final PUDs	infrastructure construction costs <sup>(1)</sup>	
Article 20	Construction Drawings	\$150 + 2.75% of estimated	4 Copies <sup>(5)</sup>
		infrastructure construction costs <sup>(1)</sup> (Include estimate with	2 Drainage Calculations
		application)	2 Detailed Spreadsheet of the
		(1.25% due at time of submittal and 1.5% due before construction begins) <sup>(2)</sup>	Estimated Infrastructure Costs
Article 20	Final / Dedication Plats	\$350	10 Copies <sup>(5)</sup> + 1 Copy (Ledger Paper)
Article 20	Lot Split / Minor Subdivision / Replats	\$75 per lot	3 Survey Plats <sup>(5)</sup> & Legal Descriptions
			1 New Deed + 1 Original Deed
Article 18	Site Plans	\$400 + \$5 per unit Multi-family	12 Copies <sup>(5)</sup> + 1 Copy (Ledger Paper)
		\$400 + \$20 per acre Commercial/ Office/Industrial/Institutional	
Article 17	Landscape Plans	\$150 + \$10 per acre	12 Copies <sup>(5)</sup> + 1 Copy (Ledger Paper)
Article 7	Zoning District Map Change	\$400 + \$10 per acre	20 Copies <sup>(5)</sup> + 1 Copy (Ledger Paper)
	Zoning Text Change		1 List of Surrounding Property
			Owners + 2 Sets of Mailing Labels
Article 5	Variances / Appeals	\$400	8 Copies + 1 Copy (Ledger Paper) 1 List of Surrounding Property Owners + 1 Set of Mailing Labels
Article 14	Preliminary PUD Plans	\$2,500 + \$20 per acre	12 Copies <sup>(5)</sup> + 1 Copy (Ledger Paper) 1 List of Surrounding Property Owners + 2 Sets of Mailing Labels
Article 14	Final PUD Plans	Site Plan Review Fees Apply	Site Plan Review Submittal Requirements Apply
Article 6	Conditional Use / Similar Use	\$250 + applicable site plan fee	15 Copies + 1 Copy Ledger Paper <sup>(5)</sup>
Article 3	Zoning Permit	\$250 + \$0.03 per square foot of building area (Village water tap and inspection fee required if utilizing Village Water [proof of payment of County tap fee if utilizing County Water]; Village sewer tap and inspection fee also required)	5 Copies
Article 3	Temporary Use Permit	\$50	5 Copies
Article 3	Certificate of Occupancy	\$50	3 Copies
Ord. No: 2001-13	Special User Permit Telecommunications Tower	\$5,000 deposit for a new tower \$2,000 deposit for an existing tower	10 copies of all documents as per Ordinance 2001-13 Section 6.F
Ord. No:	Flood Hazard Area Development	\$50	3 Copies of Permit Application w/
2008-14; Permit App.	Permit Permit		applicable submittal requirements (stated on Page 2 of 2 of Permit Application + Engineering "No

Special Meeting	\$500 + Application Fee, if any <sup>(6)</sup>	Depends Upon Type of Application
		or Meeting Requested
POOTMOTES TO FEE SOMERING		

#### FOOTNOTES TO FEE SCHEDULE

- (1) Infrastructure construction costs include all infrastructure costs associated with a development including, but not limited to, drainage facilities, sanitary sewers, waterlines, grading, excavation, and street improvements.
- (2) Any inspection conducted outside the normal eight-hour workday of Monday through Friday, excluding holidays, 8:00 a.m. until 4:30 p.m., shall be charged at one and a half (1.5) times the standard rate. The Village reserves the right to charge fees in addition to the fees specified in the table above if, due to the applicant's responsibility, excessive review and/or field inspections are necessary, and as determined by the Village Engineer. Such fees for review and field inspection by Village staff shall be charged at the standard rate of forty dollars (\$40) per hour, plus a three-fourths (.75) hour charge for travel time. Any review and inspection completed by consultants on behalf of the Village shall be charged to the applicant at the same rate charged by the consultants. Performance and maintenance bonds will not be released until payment of all fees is received.
- (3) Any review and inspection completed by consultants on behalf of the Village shall be charged to the applicant at the same rate charged by the consultants. The applicant shall pay the difference when consultant fees charged to the Village are in excess of the established Fee Schedule base amounts. Final approvals will be held until all fees charged by consultants are paid-in-full by the applicant.
- (4) The fee for review of a revised application shall be sixty (60) percent of the fee specified for the initial or first review of such application.
- (5) All plans must be folded to fit a legal sized file folder with the title showing in the lower right-hand corner.
- (6) Special meetings that require one or more of the Village's consultants to attend shall require payment of the special meeting fee before the meeting is scheduled. Examples of special meetings include staff meetings and non-scheduled Planning Commission meetings requested by an applicant and/or developer.

SECTION FIVE, PHASES A & B
MILITARY SURVEY No. 1546
VILLAGE OF SOUTH LEBANON
WARREN COUNTY, OHIO







### **GENERAL NOTES**

- WATER MAIN PLANS AND CONSTRUCTION SHALL COMPLY WITH THE RULES, SPECIFICATIONS AND INSPECTION OF THE OFFICE OF THE WARREN COUNTY SANITARY ENGINEER. ALL OTHER PLANS AND CONSTRUCTION SHALL COMPLY WITH THE RULES, SPECIFICATIONS AND INSPECTION OF THE VILLAGE OF SOUTH LEBANON.
- 2. ALL MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH "CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION." DATE: JANUARY 15, 2016.
- 3. UNLESS OTHERWISE NOTED ALL CONSTRUCTION DETAILS SHALL CONFORM WITH THE "STANDARD CONSTRUCTION DRAWINGS OF THE STATE OF OHIO DEPARTMENT OF
- 4. ALL SANITARY SEWER MANHOLES, CASTINGS, PIPE, ETC., SHALL CONFORM WITH CURRENT SPECIFICATIONS OF THE VILLAGE OF SOUTH LEBANON AND THE OHIO ENVIRONMENTAL
- 5. UNLESS OTHERWISE SPECIFIED ALL STORM SEWER MATERIAL SHALL BE HDPE (ADS) PIPE PER ODOT ITEM 707.33. ALL STORM SEWERS SHALL HAVE A MAXIMUM MANNING'S "N" VALUE OF 0.012.
- 6. BED AND BACKFILL STORM PIPE PER ODOT ITEM 611 TO 12" ABOVE TOP OF PIPE. BACKFILL RFMAINDER OF TRENCH WITH NATIVE MATERIALS PER ODOT ITEM 203.
- NO STRUCTURE OF ANY KIND WHICH CAN INTERFERE WITH ACCESS TO SANITARY SEWER, WATER MAIN, OR STORM SEWER SHALL BE PLACED IN OR UPON A PERMANENT EASEMENT, EXCEPT ITEMS SUCH AS RECREATIONAL SURFACES, PAVED AREAS FOR PARKING LOTS, DRIVEWAYS OR OTHER SURFACES USED FOR INGRESS AND EGRESS, PLANTS, TREES, SHRUBBERY, FENCES, LANDSCAPING OR SIMILAR ITEMS BEING NATURAL OR ARTIFICIAL.
- 8. SANITARY SEWERS ARE TO RECEIVE SANITARY WASTES ONLY. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE
- 9. ANY DISTURBANCE OF EXISTING NATURAL FEATURES SHALL BE SAFEGUARDED SO AS NOT TO CAUSE DETRIMENTAL EROSION. AS EARTHWORK IS PERFORMED, DANDY BAGS AND SILT FENCES SHALL BE UTILIZED TO MANAGE STORM RUNOFF AND TO FILTER SOME OF THE EXISTING SOILS. ALL NATURAL VEGETATION TO REMAIN EXCEPT IN AREAS AFFECTED BY IMPROVEMENTS.
- 10. STORM WATER AND EXTRANEOUS FLOWS ARE PROHIBITED FROM ENTERING THE EXISTING SYSTEM DURING CONSTRUCTION. NO OPEN CUT TRENCHES WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT. STORM DRAINS, DIVERSION DITCHES, ETC., SHALL BE USED AS REQUIRED TO
- 11. ALL WATER MAINS, FIRE HYDRANTS AND RELATED ITEMS SHALL CONFORM WITH CURRENT SPECIFICATIONS OF THE WARREN COUNTY SANITARY ENGINEER AND THE OHIO ENVIRONMENTAL
- 12. WARREN COUNTY WATER AND SEWER DEPARTMENT SHALL ESTABLISH PROCEDURES FOR REPAIRS TO WATER MAIN OR WATER SERVICES DAMAGED.

SANITARY SEWAGE FLOWS: THE EXISTING SANITARY SEWERS CONTAIN NORMAL DOMESTIC SANITARY SEWAGE FLOWS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF ANY POTENTIAL HAZARDS THAT MAY BE PRESENT WHEN WORKING AROUND THESE SEWERS. THE CONTRACTOR SHALL HOLD THE VILLAGE OF SOUTH LEBANON AND THE ENGINEER HARMLESS FROM ANY CLAIMS ARISING FROM INJURY, ILLNESS, OR DISEASE TO HIS EMPLOYEES AS A RESULT OF CONTACT WITH ANY SANITARY SEWAGE.

ALL SEWER LINE EXCAVATION AND GRADING WORK SHALL BE RESTRICTED TO PERIODS WITH DRY WORKING CONDITIONS. WORK IN STREAM CORRIDORS SHALL BE DONE DURING PERIODS OF LOW FLOWS. AREAS OF EXPOSED SOIL SHALL BE LIMITED TO THE IMMEDIATE WORK SITES. TEMPORARY EROSION CONTROL MEASURES, SUCH AS HAY BALES, FILTER FABRICS, DIKES, SLOPE DRAINS, SEDIMENT BASINS, MULCHING, AND SEEDING SHALL BE UTILIZED AS NECESSARY TO PREVENT OR CONTAIN EROSION AND SEDIMENTATION. ALL STOCKPILES OF TOPSOIL AND OTHER ERODIBLE MATERIALS NOT SCHEDULED FOR REPLACEMENT WITHIN ONE MONTH OF WHEN EXCAVATED SHALL BE COVERED OR TEMPORARILY SEEDED. SILT BARRIERS SHALL BE POSITIONED BETWEEN SUCH STOCKPILES AND ADJACENT STREAMS. FLOWS FROM DEWATERING TRENCHES SHALL BE FILTERED OR SETTLED TO REMOVE SILT PRIOR TO RELEASE. SEWER TRENCHES ARE TO BE BACKFILLED ON A

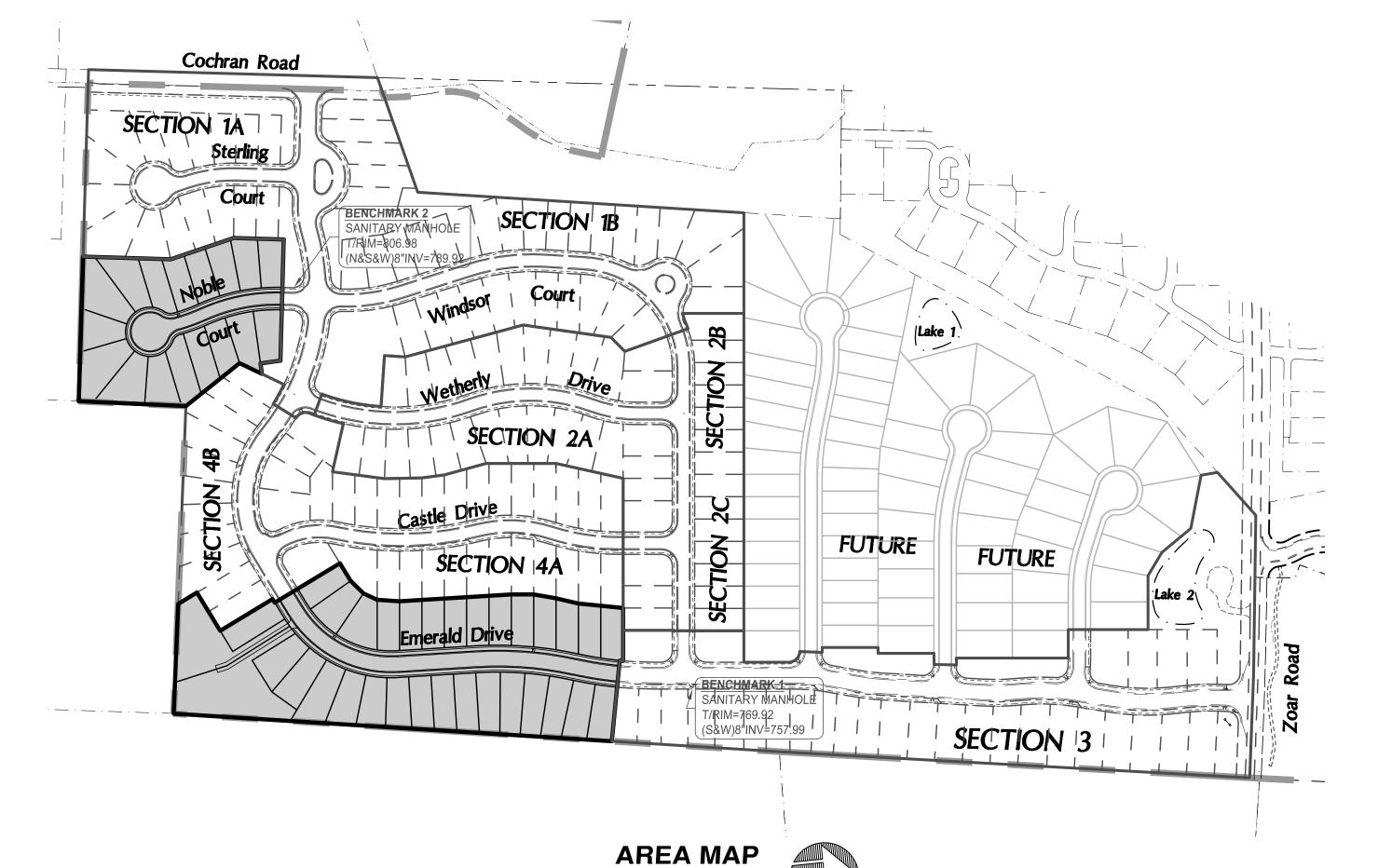
EXISTING SANITARY SEWERS: LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL SANITARY SEWERS AND SERVICE LATERALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN OPERATIONS OF THE EXISTING SEWERS THROUGHOUT THE CONNECTION TO THE EXISTING MANHOLE.

SANITARY SEWER-MANHOLE CONNECTIONS: THE SANITARY SEWER PIPE TO MANHOLE CONNECTIONS SHALL BE OF A FLEXIBLE WATERTIGHT JOINT OF APPROVED MANUFACTURE. THE JOINT MAY BE OF THE FOLLOWING DESIGN (A) RUBBER SLEEVE WITH STAINLESS STEEL BANDING, (B) RUBBER GASKET COMPRESSION, OR (C) RUBBER GASKET EXPANSION.

THE SANITARY SEWER SHOULD BE DESIGNED AND CONSTRUCTED PER RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, "TEN STATE STANDARDS" AND THE VILLAGE OF SOUTH LEBANON

SPECIFICATIONS FOR SANITARY SEWER MATERIALS AND INSTALLATION

	PIPE SIZE	PIPE MATERIAL	MATERIAL SPECIFICATION	JOINT SPECIFICATION	BEDDING CLASSIFICATION
SANITARY SEWER (DEPTH LESS THEN 15')	8"	PVC	ASTM D-3034, SDR-35	ASTM D-3212	D-2331 III
SANITARY SEWER (EQUAL TO OR GREATER THEN 15')	8"	PVC	ASTM D-3034, SDR-26	ASTM D-3212	D-2331 III
PRECAST CONCRETE M.H.			ASTM C-478	ASTM D-443	
SANITARY LATERAL	6"	PVC	ASTM D-3034	ASTM D-3212	D-2331 III



## **ENGINEER'S NOTES**

- 1. EARTHWORK QUANTITIES ARE THE RESULT OF COMPUTER ANALYSIS. NO ADJUSTMENTS TO EARTHWORK QUANTITIES WILL BE CONSIDERED AFTER THE START OF CONSTRUCTION UNLESS THE DEVELOPER AND/OR ENGINEER MODIFY THE GRADING PLAN. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO BEGINNING WORK. NO EXTRAS SHALL BE GRANTED AFTER CONSTRUCTION BEGINS.
- 2. CONSTRUCTION STAKING TO BE PROVIDED AS FOLLOWS:
- A) CENTERLINE 50 FOOT STATIONS TWO TIMES.
- B) CURB STAKING 25 FOOT STATIONS ONE TIME.
- C) SANITARY SEWERS OFFSET STAKES AT ALL MANHOLES WITH CHECK STAKES AT 50 - AND 100 FEET OUT OF MANHOLES - STANDARD CUT SHEETS TO BE PROVIDED ONE (1) TIME.
- D) STORM SEWERS OFFSET STAKES AT ALL STORM STRUCTURES ONE (1) TIME.
- WATER MAIN & FIRE HYDRANT OFFSET STAKES AT 50 FOOT STATIONS ONE (1)
- F) UTILITY CROSSOVERS OFFSET STAKING ONE (1) TIME.
- G) SEWER LATERALS LATHS SET AT TERMINUS FOR EACH LOT ONE (1) TIME. H) FINE GRADING OF LOTS AFTER PAVING - ONE (1) TIME.
- 3. IF ANY QUESTIONS EXIST, AS TO THE PURPOSE OR INTENT OF GRADES OR STAKES, THE CONTRACTOR SHALL NOT ASSUME, BUT SHALL CONTACT THE ENGINEER PRIOR TO
- 4. LOCATION OF ALL EXISTING UTILITIES TO BE DETERMINED IN THE FIELD PRIOR TO
- 5. THE CONTRACTOR SHALL MAINTAIN SILT BARRIERS, BMPs AND OTHER EROSION CONTROL MEASURES FROM THE START OF CONSTRUCTION UNTIL ACCEPTANCE OF THE RECORD PLAT AND/OR COMPLETION OF ITS WORK.

## **UTILITIES:**

5445 AUDRO DRIVE CINCINNATI, OHIO 45247 (513) 287-1487

SPRINT UNITED TELEPHONE **185 HARMON AVENUE** LEBANON, OHIO 45035 (513) 933-3561

TIME WARNER CABLE 11254 CORNELL PARK DRIVE CINCINNATI, OHIO 45242 (513) 489-5957

WARREN COUNTY WATER & SEWER 406 JUSTICE DRIVE LEBANON, OHIO 45036 (513) 925-1377

SANITARY AND STORM VILLAGE OF SOUTH LEBANON 99 HIGH STREET SOUTH LEBANON, OHIO 45065 (513) 494-2296

## **ZONING:**

R-3 PUD

## **DEVELOPER:**

GRAND COMMUNITIES, LTD. 3940 OLYMPIC BLVD., SUITE 100 ERLANGER, KY 41018 (859) 341-4709

### LAND PLANNER/ **ENGINEER/SURVEYOR**

BAYER BECKER, INC. 6900 TYLERSVILLE ROAD, SUITE A MASON, OHIO 45040 PH: (513)336-6600

## **BENCHMARK 1**

SANITARY MANHOLE NORTH SIDE OF EMERALD DRIVE AND WINDSOR COURT INTERSECTION (S&W)INV=757.99

### **BENCHMARK 2**

SANITARY MANHOLE SOUTHWEST SIDE OF EMERALD DRIVE AND NOBLE COURT INTERSECTION T/RIM=806.98 (N&S&W)INV=789.92

## **EMERALD DRIVE PARKING**

**SEQUENCE OF CONSTRUCTION** 

STEP 2: PERFORM CLEARING OPERATION, STRIP AND STOCKPILE TOPSOIL

STEP 4: INSTALL UTILITIES, CONSTRUCT TEMPORARY SILT TRAPS WHERE SHOWN.

STEP 1: INSTALL EROSION AND SEDIMENT CONTROL MEASURES.

1. PARKING ON EMERALD DRIVE WILL BE RESTRICTED TO ONE SIDE OF THE STREET AND SIGNS STATING THE FACT WILL BE INSTALLED.

THE FOLLOWING SEQUENCE OF CONSTRUCTION WILL BE SIMULTANEOUSLY FOLLOWED FOR ALL

STEP 3: ROUGH GRADE SITE, STABILIZE EROSION PRONE AREAS. ALL SLOPES 3 TO 1 AND GREATER

STEP 5: INSTALL BASE COURSE IN ROADWAYS FOLLOWING THE INSTALLATION OF IMPROVEMENTS.

STEP 6: FINE GRADE AND SEED; REMOVE EROSION CONTROL METHODS UPON COMPLETION OF ALL

AREAS ELIMINATING ONLY THOSE STEPS THAT DO NOT PERTAIN TO THAT PARTICULAR AREA:

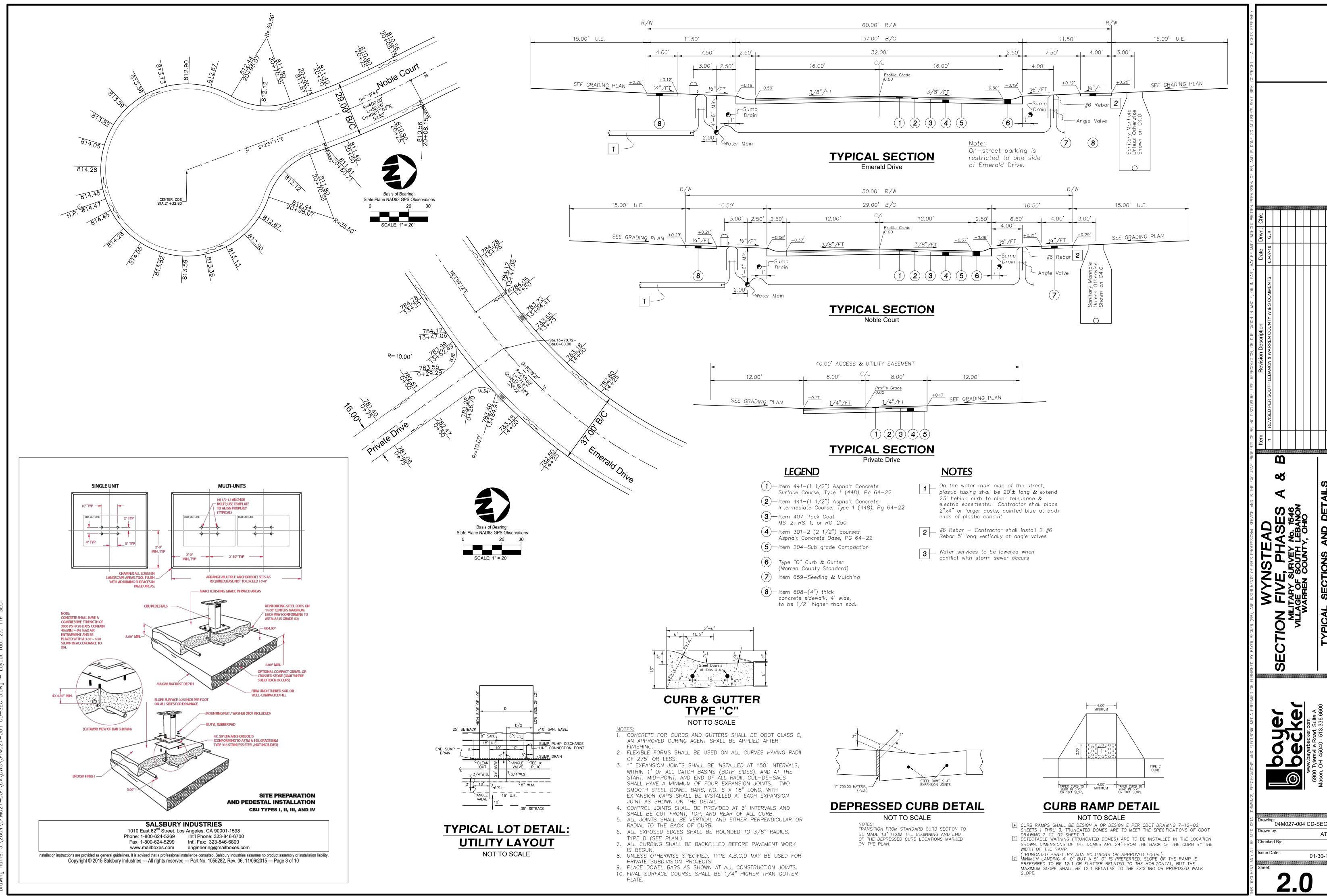
SHALL BE IMMEDIATELY STABILIZED WITH SEED AND MULCH OR AN EQUAL

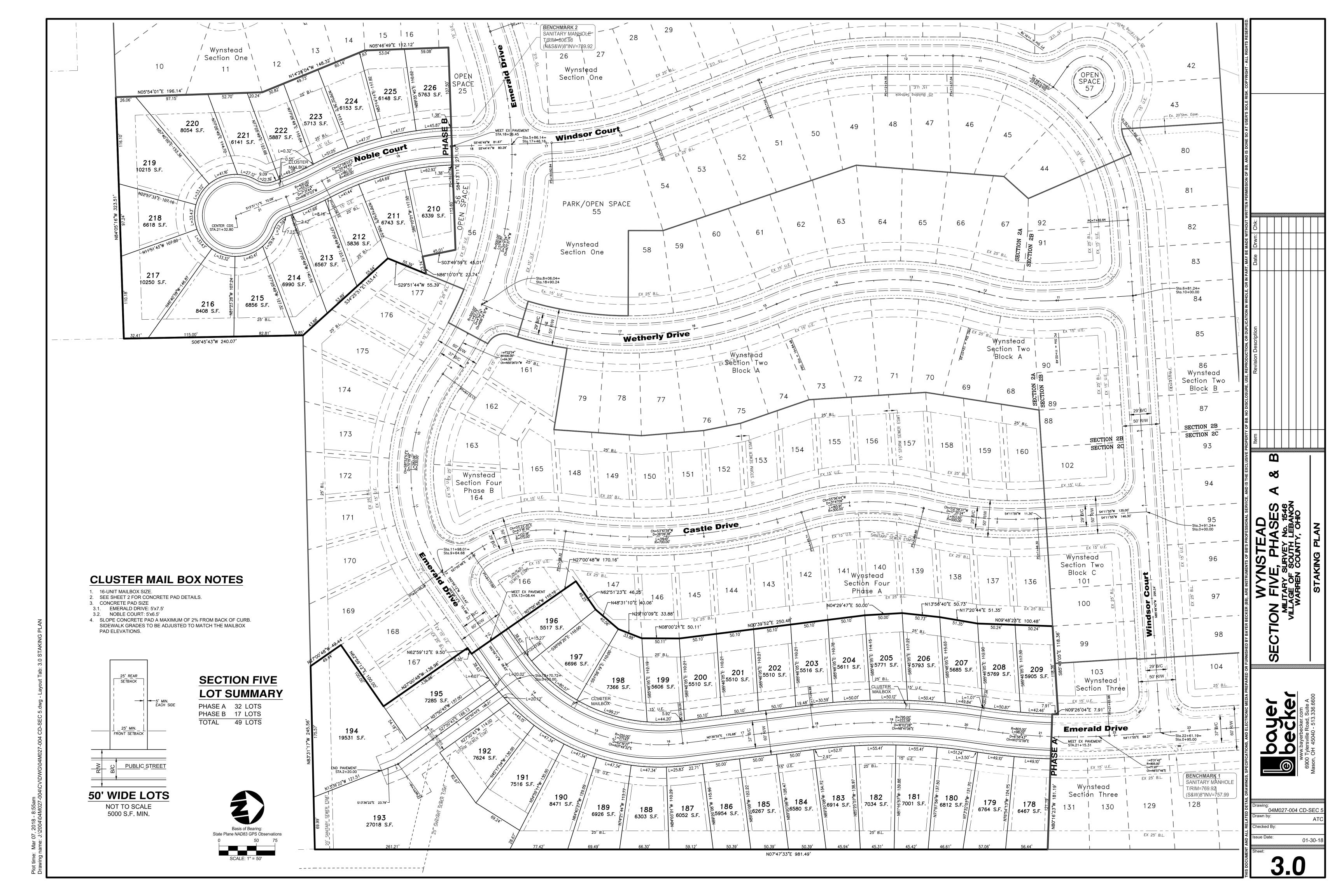


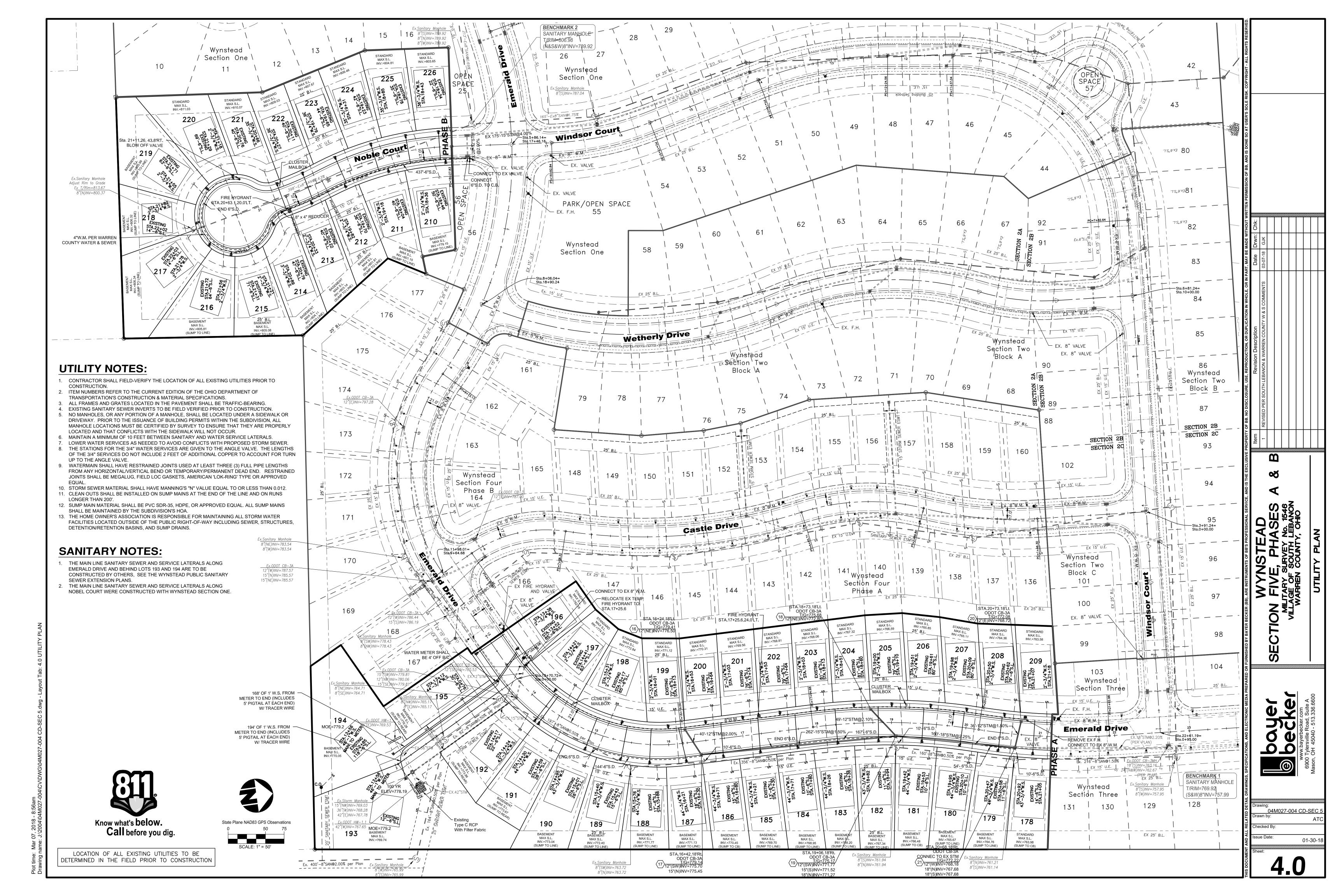
LOCATION OF ALL EXISTING UTILITIES TO BE DETERMINED IN THE FIELD PRIOR TO CONSTRUCTION

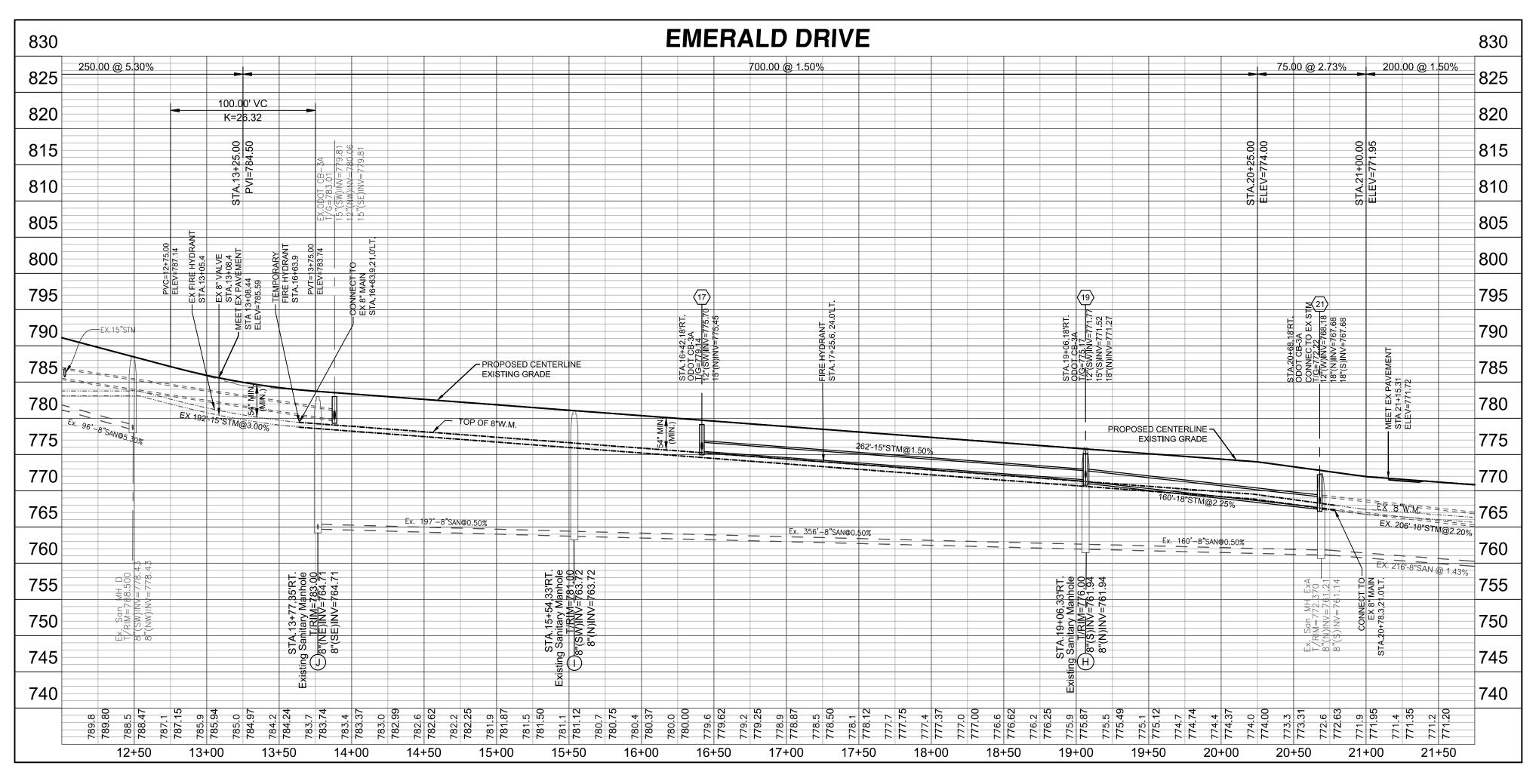
**INDEX OF SHEETS** 

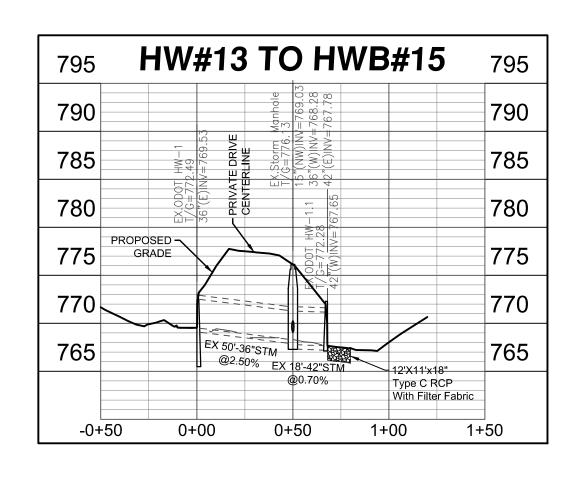
RAWING NO.	DRAWING TITLE	ISSUE DATE	REVISION NO.	REVISION DATE
1.0	TITLE SHEET	01-30-18	1	03-07-18
2.0	TYPICAL SECTIONS AND DETAILS	01-30-18	1	03-07-18
3.0	STAKING PLAN	01-30-18		
4.0	UTILITY PLAN	01-30-18	1	03-07-18
5.0	PROFILES	01-30-18	1	03-07-18
6.0	GRADING & EROSION CONTROL PLAN	01-30-18	1	03-07-18
6.1	GRADING & EROSION CONTROL PLAN	03-05-18		
7.0	SEDIMENTATION & EROSION CONTROL DETAILS	01-30-18		
8.0	WARREN COUNTY WATER DETAILS	01-30-18		
9.0	WARREN COUNTY SANITARY SEWER DETAILS	03-05-18		

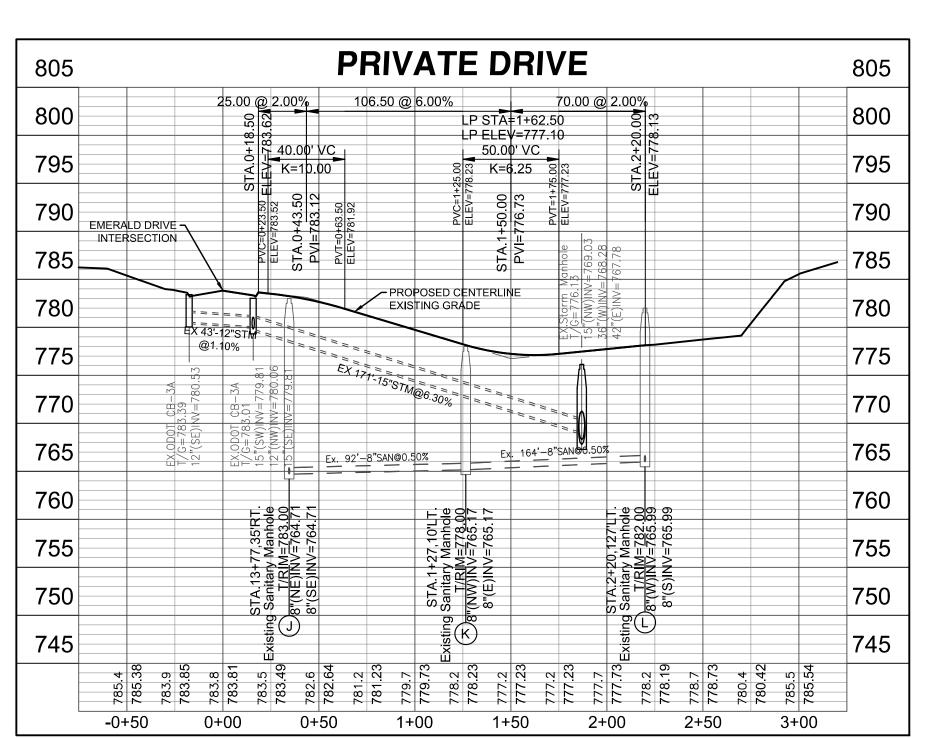


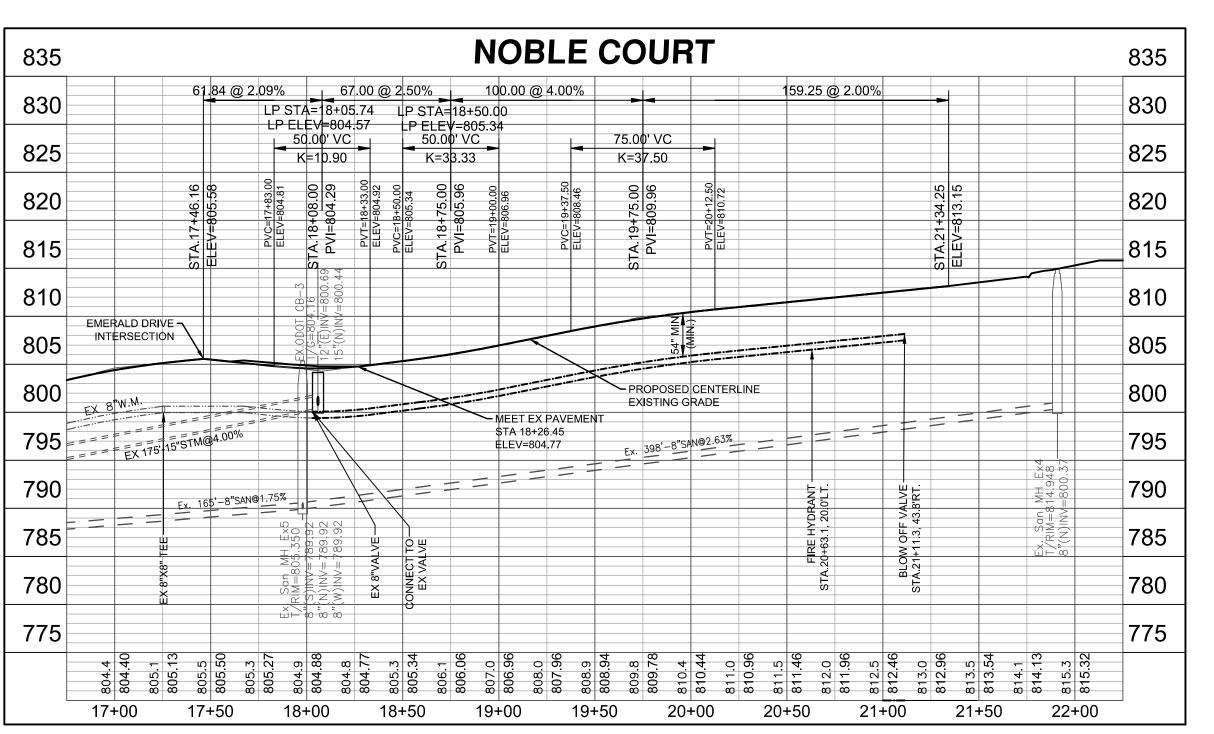






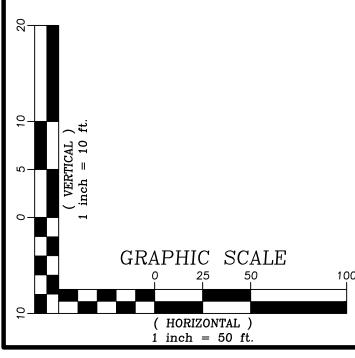


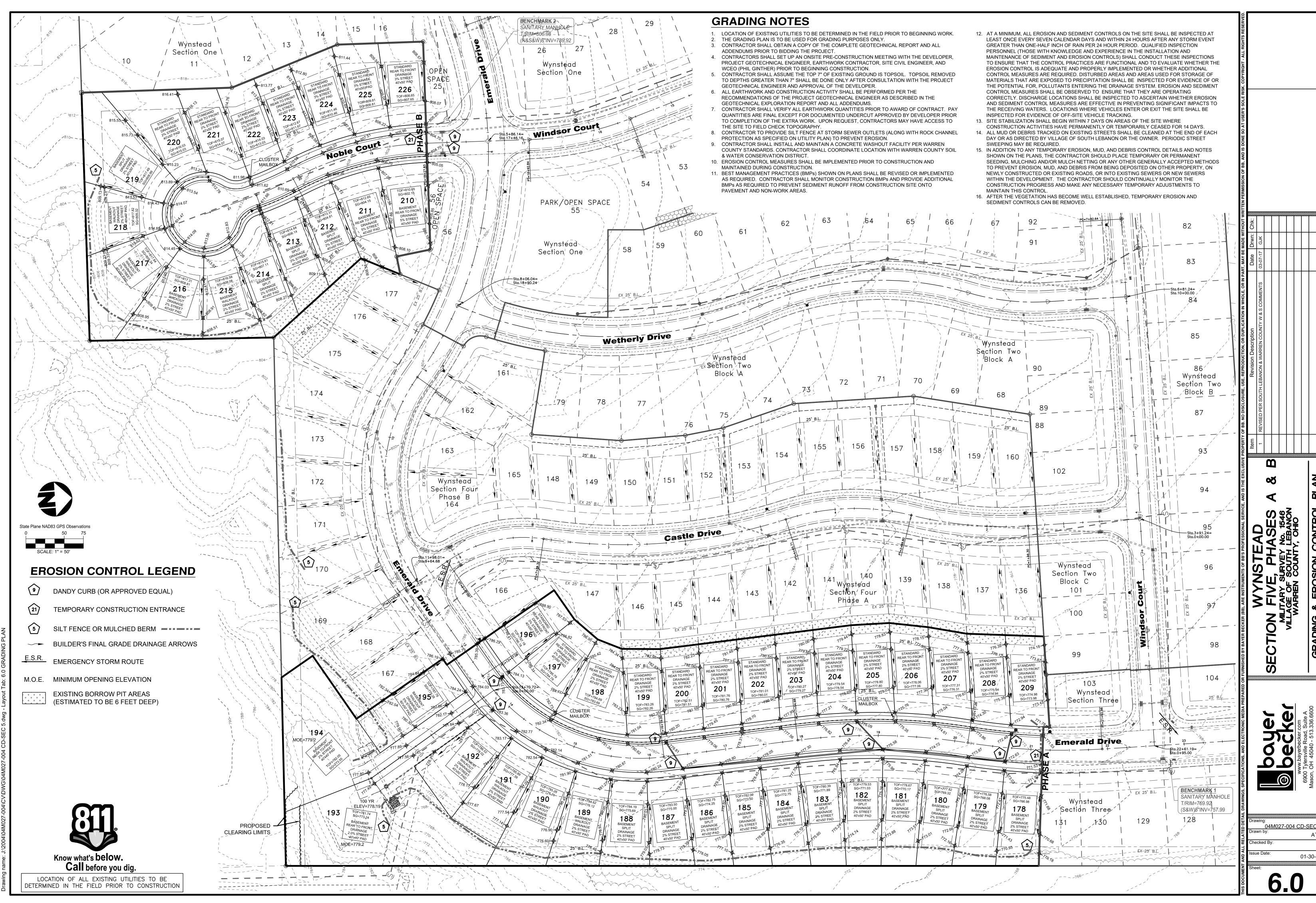


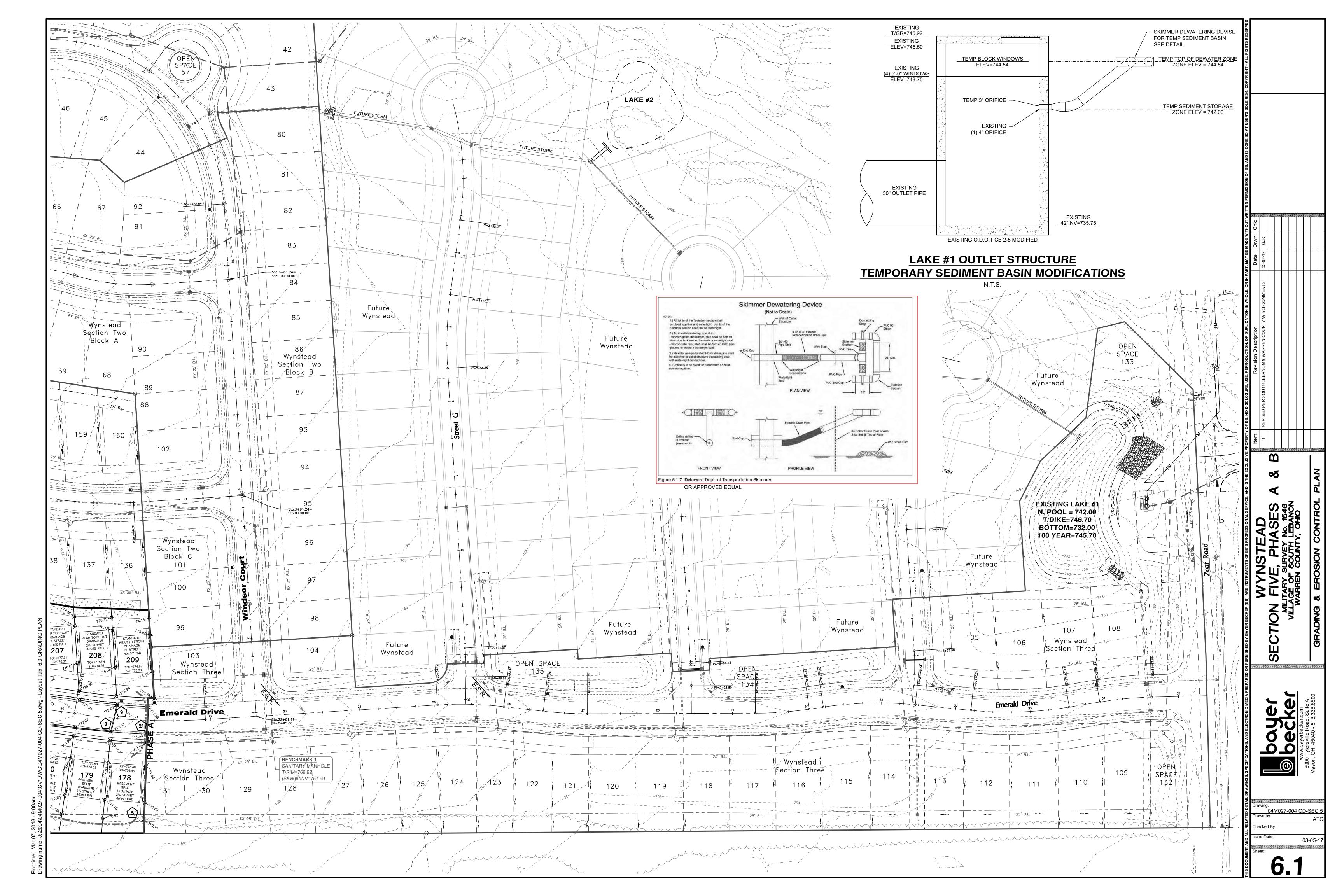


WYNSTEAD
CTION FIVE, PHASES
MILITARY SURVEY No. 1546
VILLAGE OF SOUTH LEBANON
WARREN COUNTY, OHIO

04M027-004 CD-SEC







CONDITIONS WHERE PRACTICE APPLIES

Permanent seeding should be applied to:

Areas or portions of construction-sites which can be brought to final grade. Applications of permanent seeding should not be delayed while construction on limited portions of the site

Areas on that will be regraded, but will be dormant for a year or more

#### PLANNING CONSIDERATIONS

Healthy dense turf will have a dramatic long lasting effect on stormwater quality as well as promoting infiltration and reducing the amount of runoff. To establish quality vegetation, careful preparation of the seedbed, soil, even

- <u>Soil Compaction</u>--Stormwater quality and the amount of runoff both vary significantly with soil compaction. Non-compacted soils improve stormwater by promoting:
- dense vegetation. high infiltration & lower runoff rates
- pollutant filtration, deposition & absorption, and beneficial biologic activity in the soil.

Construction activity can cause highly compacted soils but also offers the opportunity to improve soil condition. The best time for improving soil condition is during the establishment of permanent vegetation. It is highly recommended that subsoilers, plows or others implements be specified as part of final seedbed preparation. Use discretion in slip-prone areas.

Minimum Soil Conditions--Vegetation cannot be expected to stabilize soil that is unstable due to its texture, tructure, water movement or excessively steep slope. The following minimum soil conditions are needed for the establishment and maintenance of a long-lived vegetation cover. If these conditions cannot be met, see the Standards and Specifications for Resoiling.

Soils must include enough fine-grained material to hold at least a moderate amount of available moisture. The soil must be free from material that is toxic or otherwise harmful to plant growth.

	Permane	ent Seeding						
Seed Mix	Seeding	g Rate	Nata					
Seed Wilk	lb./ac. lb./1,000 ft. 2		Notes:					
	General Use							
Creeping Red Fescue Ryegrass Kentucky Bluegrass	20-40 10-20 10-20	1/2-1 1/4-1/2 1/4-1/2						
Tall Fescue	40	1						
Dwarf Fescue	40	1						
	Steep Banks or Cut Slopes							
Tall Fescue	40	1						
Crown Vetch Tall Fescue	10 20	1/4 1/2	Do not seed later than August					
Flat Pea Tall Fescue	20 20	1/2 1/2	Do not seed later than August					
Road Ditches and Swales								
Tall Fescue	40	1						
Dwarf Fescue Kentucky Bluegrass	=   90							
	La	awns						

1 1/2 1 1/2

For shaded areas

Maintenance for Permanent Seedings Fertilization and Mowing							
Mixture	Formula	lb./ac.	lb./1,000 sq. ft.	Time	Mowing		
Creeping Red Fescue Ryegrass Kentucky Bluegrass	10-10-10	500	12		Not closer than 3"		
Tall Fescue	10-10-10	500	12	Fall, yearly or as needed	Not closer than 4"		
Dwarf Fescue	10-10-10	500	12		Not closer than 2"		
Crown Vetch Fescue	0-20-20	400	10	Spring, yearly following establishment	Do not mow		
Flat Pea Fescue	0-20-20	400	and every 4-7 yrs. thereafter		Do not mow		
Note: Following soil test recommendations is preferred to fertilizer rates shown above.							

### SITE PREPARATION

Perennial Ryegrass

Kentucky Bluegrass

Creeping Red Fescue

Kentucky Bluegrass

Note: Other approved seed species may be substituted

A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be

done on slip-prone areas where soil preparation should be limited to what is necessary for establishing

The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation

Resoil shall be applied where needed to establish vegetation.

### SEEDBED PREPARATION

Lime--Agricultural group limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb./1,000 sq. ft. or 2 tons/ac.

Fertilizer--Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac. of 10-10-10- or 12-12-12 analysis

The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

### SEEDING DATES AND SOIL CONDITIONS

Seeding should be done March 1 to May 31 or August 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season. Tillage/seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

### MULCHING

Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Dormant seeding shall be mulched.

Straw--If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq. ft. sections and spread

- two 45-lb. bales of straw in each section. Hydroseeders--If wood cellulose fiber is used, it shall be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
- Other--Other acceptable mulches include mulch mattings applied according to manufacturer's recommendations
- or wood chips applied at 6 tons/ac. Straw Mulch Anchoring Methods
- Straw mulch shall be anchored immediately to minimize loss by wind or water
- Mechanical--A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped by, generally, be left longer than 6 in.

## PERMANENT SEEDING (1)

- Permanent seeding shall not be considered established for at least 1 full yr. from the time of planting. Seeded areas shall be inspected for failure and vegetation conditions, it may be necessary to irrigate, fertilize, overseed, or reestablish plantings in order to provider permanent vegetation for adequate erosion control.
- Maintenance fertilization rates shall be established by soil test recommendations or by using the rates shown in the following table.
- Seeding 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. 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 firmed following seeding operations with a cultipacker, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.
- Mulch Nettings--Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.
- Asphalt Emulsion--Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.
- Synthetic Binders--Synthetic binders such as Acrylic DLR (Agri-Tac), DAC-70, Petroset, Terra Tack or equal may be used at rates recommended by the
- Wood Cellulose Fiber--Wood cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood cellulose fiber shall be mixed with water and the mixture shall
- contain a maximum of 50 lb./100 gal, of wood cellulose fiber. 1. Permanent seeding shall include irrigation to establish vegetation during dry or hot
- 2. Excessive irrigation rates shall be avoided and irrigation monitored to prevent erosion and damage from runoff.

weather or on adverse site conditions as needed for adequate moisture for seed

## TEMPORARY SEEDING

Temporary seeding provides erosion control on areas in between construction operations. Grasses which are quick growing are seeded and usually mulched to provide prompt, temporary soil stabilization. It sequence of construction operations allows vegetation to be established.

#### CONDITIONS WHERE PRACTICE APPLIES

germination and plant growth.

Temporary seeding should be applied on exposed soil where additional work (grading,etc.) is not scheduled

Control efficiencies greater than 90% will be achieved with proper applications of temporary seeding.

Seeding Dates	Species	Lb./1,000 ft. 2	Per Acre		
March 1 to August 15	Oats	3	4 bushel		
	Tall Fescue	1	40 lb.		
	Annual Ryegrass	1	40 lb.		
	Perennial Ryegrass	1	40 lb.		
	Tall Fescue	1	40 lb.		
	Annual Ryegrass	1	40 lb.		
August 16 to November 1	Rye	3	2 bushel		
	Tall Fescue	1	40 lb.		
	Annual Ryegrass	1	40 lb.		
	Wheat	3	2 bushel		
	Tall Fescue	1	40 lb.		
	Annual Ryegrass	1	40 lb.		
	Perennial Ryegrass	1	40 lb.		
	Tall Fescue	1	40 lb.		
	Annual Ryegrass	1	40 lb.		
November 1 to Spring Seeding	Use mulch only, sodding practices or dormant seeding.				

- Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 45 days or more. These idle areas should be seeded as soon as possible after grading or shall be seeded within 7 days. Several applications of temporary seeing are necessary on typical construction projects.
- The seedbed should be pulverized and loose to ensure the success of establishing vegetation.
- Soil Amendments--Applications of temporary vegetation shall establish adequate stands of vegetation which may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.
- fertilizer will be mixed on-site and the seeding shall be done immediately and without interruption.

flat areas may not need mulch to achieve adequate stabilization.

Hydroseeders--If wood cellulose fiber is used, it shall be used at 2,000 lb/ac. or 46

Straw mulch shall be anchored immediately to minimize loss by wind or water.

### Anchoring Methods:

\*Mechanical--A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 in.

\*Mulch Nettings--Nettings shall be used according to the manufacturer's recommendations Netting may be necessary to hold mulch in place in areas of concentration runoff and on

\* Asphalt Emulsion--Asphalt shall be applied as recommended by the manufacturer or at

SEWER GRATE

> LIFT STRAPS USED FOR EASY MOVEMENT AND INSPECTION OF UNIT

> > SEWER

GRATE

PROJECT:

CITY/STATE

DANDY BAG®

\*\*\*\*\*\*

DATE:

Stone Size--Two-inch stone shall be used, or recycled concrete

Length--The construction entrance shall be as long as required to

Width--The entrance shall be at least 10 ft. wide, but not less than the full width at points where ingress or egress occurs.

Bedding--A geotextile shall be placed over the entire area prior to

placing stone. It shall have a Grab Tensile Strength of at least 200

needed to prevent surface water flowing across the entrance from

flowing the length of the construction entrance and out onto paved

conditions demand. Mud spilled, dropped, washed or tracked onto

sediment controls, shall be removed immediately. Removal shall

Maintenance--Top dressing of additional stone shall be applied as

public roads, or any surfaces where runoff is not checked by

9. Construction entrances shall not be relied upon to remove mud fro

vehicles and prevent off-site tracking. Vehicles that enter and

leave the construction-site shall be restricted from muddy areas

residence lot where a 30-ft. minimum length applies).

3. Thickness--The stone layer shall be at least 6 in. thick.

lb. and a Mullen Burst Strength of at least 190 lb.

Water Bar--A water bar shall be constructed as part of the

construction entrance if needed to prevent surface runoff from

being directed out onto paved surfaces

be accomplished by scraping or sweeping.

stabilize high traffic areas but not less than 50 ft. (except on single

effectively minimizes the area of a construction-site prone to erosion and should be used everywhere the

for more than 45 days. Permanent seeding should be applied if the areas will be idle for more than a year. PLANNING CONSIDERATIONS

This practice has the potential to drastically reduce the amount of sediment eroded from a construction-site Because practices used to trap sediment are usually much less effective, temporary seeding is to be used even on areas where runoff is treated by sediment trapping practices. Because temporary seeding is highly effective and practical on construction-sites, its liberal use is highly recommended

Seeding Dates	Species	Lb./1,000 ft. <sup>2</sup>	Per Acre
March 1 to August 15	Oats	3	4 bushel
March 1 to August 15	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1 1	40 lb.
	Annual Ryegrass	1	40 lb.
	Rye	3	2 bushel
August 16 to November 1	Tall Fescue	] 1	40 lb.
	Annual Ryegrass	1 1	40 lb.
	Wheat	3	2 bushel
	Tall Fescue		40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1 1	40 lb.
	Annual Ryegrass	1	40 lb.
lovember 1 to Spring Seeding	Use mulch only, sodding practices or dormant seeding.		

- Structural erosion- and sediment-control practices such as diversions and sediment traps shall be
- installed and stabilized with temporary seeding prior to grading the rest of the construction-site.
- However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible.
- Seeding Method--Seed shall be applied uniformly with a cyclone seeder, drill cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used, the seed and

### MULCHING TEMPORARY SEEDING

Applications of temporary seeding shall include mulch which shall be applied during or immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very

tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each section.

\*Straw--If straw is used, it shall be unrotted small-grain straw applied at the rate of 2

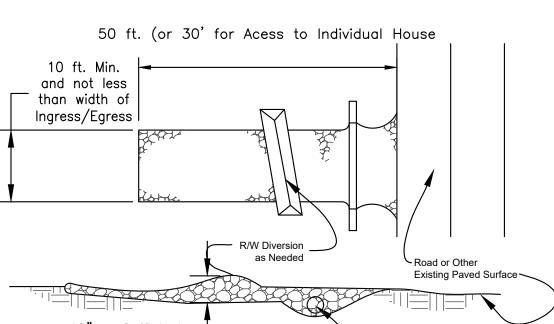
\*Other--Other acceptance mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.

\* Synthetic Binders--Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset Terra Tack or equal may be used at rates recommended by the manufacturer \*Wood-Cellulose Fiber--Wood-cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood-cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal.

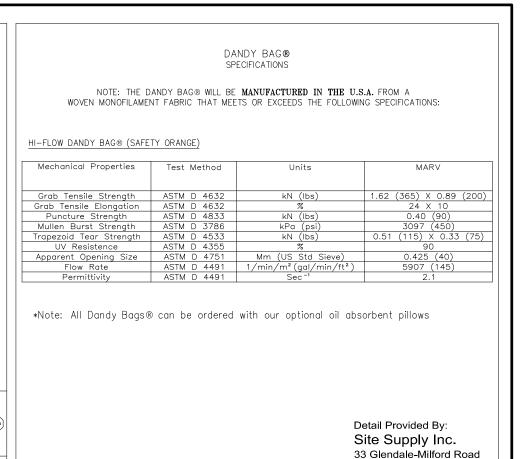
CONSTRUCTION ENTRANCE

DANDY BAG DETAIL

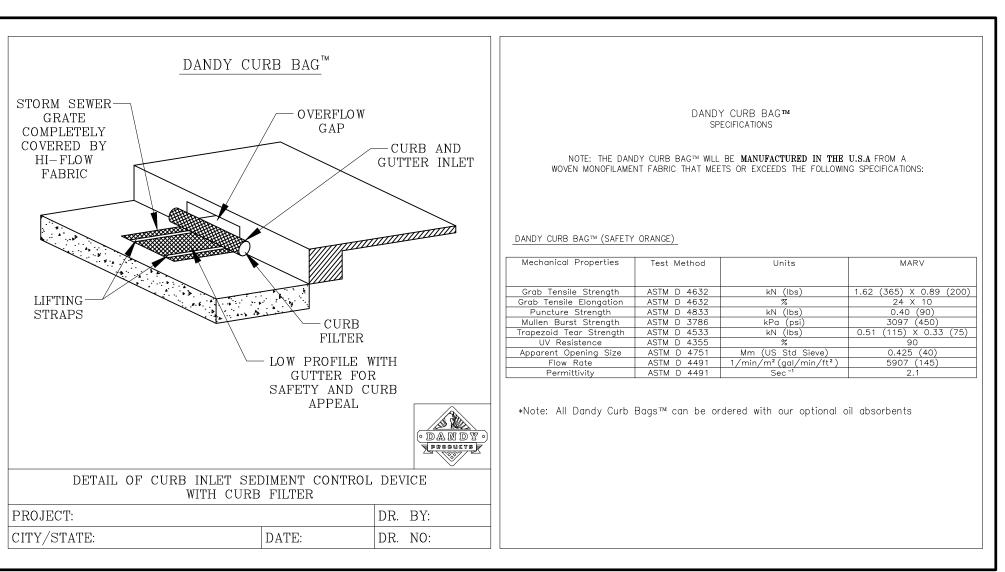
DANDY BAG



Culvert--A pipe or culvert shall be constructed under the entrance if 18" or Sufficient to Divert Runoff



DETAIL OF INLET SEDIMENT CONTROL DEVICE Loveland, OH 45140 Phone: (513) 248-1498 Fax: (513) 248-4584 DR. BY: cbrowning@sitefabric.com http://www.sitefabric.com DR. NO DANDY CURB BAG DETAIL



Erosion Prevention and Sediment Control Site Inspection Form If you answered "no" to any of the above questions, note any corrective action needed above, and note on the Inspection Log

### Inspection Log

when the action was completed.

The site shall be inspected before and after storm events with 0.5 inches or greater predicted or actual precipitation, and documented on the Construction Site Inspection Form. Incidents of noncompliance must be reported to the Engineer. A log of all inspections, as shown below, shall be kept current.

Date:	Inspector:	Corrective Actions Performed/Date:

SILT FENCE ELEVATION FLOW SECTION

1. Silt fence shall be constructed before upslope land disturbance begins. 2. Silt Fence Fabric shall be ODOT Type C Geotextile Fabric or as described by the chart

INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS

All silt fence shall be placed as close to the contour as possible so that water will not

carry small concentrated flows to the silt fence are dissipated along its length.

constructed upslope so that the ends are at a higher elevation.

Where possible, silt fence shall be placed on the flattest area available.

the 6-in.-deep trench. The trench shall be backfilled and compacted.

wrapped together before driving into the ground.

or 3) Other practices shall be installed

concentrate at low points in the fence and so that small swales or depressions which may

To prevent water ponded by the silt fence from flowing around the ends, each end shall be

Where possible, vegetation shall be preserved for 5 ft. (or as much as possible) upslope

The height of the silt fence shall be a minimum of 16 in. above the original ground surface.

The silt fence shall be placed in a trench cut a minimum of 6 in. deep. The trench shall be

The silt fence shall be placed with the stakes on the downslope side of the geotextile and so

that 8 in. of cloth are below the ground surface. Excess material shall lay on the bottom of

Seams between section of silt fence shall be overlapped with the end stakes of each section

geotextile. If runoff overtops the silt fence, flows under or around the ends, or in any other

way becomes a concentrated flow, one of the following shall be performed, as appropriate

Fence Posts--The length shall be a minimum of 32 in. long. Wood posts will be 2-by-2-in.

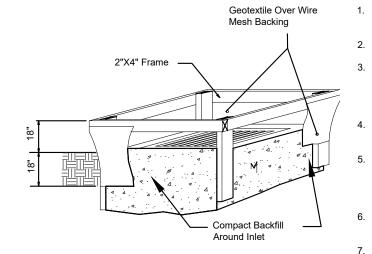
hardwood of sound quality. The maximum spacing between posts shall be 10 ft.

1) The layout of the silt fence shall be changed, 2) Accumulated sediment shall be removed,

Maintenance--Silt fence shall allow runoff to pass only as diffuse flow through the

cut with a trencher, cable laying machine, or other suitable device which will ensure an

from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the



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 the depth at least 18in.

The wooden frame shall be constructed of 2-by-4-in. construction grade lumber. The 2-by-4-in. posts shall be driven 1 ft. into the ground at four corners of the inlet and the top portion of 2-by-4-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

Backfill shall be placed around the inlet in compacted 6-in. layers until the earth is even with notch elevation on ends and top elevation on sides.

the inlet so the ends of the cloth are not fastened to the same post.

Amount of rainfall since last inspection: \_\_\_\_\_

Overall site conditions: \_\_\_

Sediment Basins/Traps:

Silt Fence/Mulch Berms:

Action Needed:

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 setting pond. The top of earth dikes shall be at least 6 in. higher than the top of the frame.

Erosion Prevention and Sediment Control Site Inspection Form

Are all Basins installed correctly according to the approved plan? YES NO N/A

(Check for runoff directed to basin, down slope areas stabilized, riser pipe wrapped with wire

Are all Silt Fence/Mulch Berm (SF/MB) installed correctly according to the approved plan?

YES NO N/A (Check for fabric trenched in, follow contour, turned upslope at ends, silt

Check for runoff ponding, in good shape, silt accumulated, etc..)

fence/filter fabric, emergency overflow, accumulated sediment more than 40% of volume, etc..)

accumulated, broken stakes, tight fabric, installed in all areas where sediment could leave the site)

Are all Inlet Protections installed correctly according to the approved plan? YES NO N/A

Erosion Prevention and Sediment Control Site Inspection

Introduction: By using some simple Best Management Practices (BMP's) developers and contractors can do their share to protect the County's water resources from the harmful effects of sediment. The topography of the site and the extent of the construction activities will determine which of these practices are applicable to any given site, but the BMP's listed here are applicable to most construction sites. For details on the installation and maintenance of Is the entrance installed correctly according to the approved plan? YES NO N/A these BMP's, please refer to the approved plans and or the Rainwater **and** Land Development, Ohio's Standards for Storm Water Management, Land (Check for mud in stones/street, runoff diverted from street, etc...) Development and Urban Stream Protection (ODNR, 1996), available from Action Needed:

Temporary Stabilization is the most effective BMP. All disturbed areas that will lie dormant for 21 days or more must be stabilized within 7 days o the date the area becomes inactive. The goal of temporary stabilization is to provide cover quickly. Areas within 50 feet of a stream must be stabilized within 2 days of reaching final grade. This is accomplished by seeding with ast-growing grasses, then covering with straw mulch. See the Rainwater and Land Development Manual for seasonally adjusted seeding specifications. To minimize your costs of temporary stabilization, leave natural cover in place for as long as possible by only disturbing areas worked within the next 21 days.

HCSWCD for \$20 plus postage.

Construction Entrances are installed to minimize off-site tracking of sediments. A roughstone access drive underlain with woven geotextile shall be installed at every point where vehicles enter or exit the site. Every individual lot should also have its own drive once construction on the lot begins. Maintenance is performed by top dressing with stone and/or street sweeping.

Sediment Basins/Traps are the sediment control of choice for areas,

which exceed the design capacity of silt fence (see page 119 of the Rainwater manual) or to control concentrated flows or runoff. There are two types: sediment basins and sediment traps. A trap is appropriate where the contributing drainage area is 10 acres or less. The outlet is an earthen embankment with a simple stone spillway underlain with woven geotextile. A sediment basin is appropriate for drainage areas larger than 10 acres. The outlet is an engineered riser pipe. Often a permanent storm water management pond, such as a retention or detention basin, can be retrofitted to act as a sediment basin during construction. All sediment ponds, regardless of whether they are a trap or a basin, or whether they will become a permanent storm water pond, must provide a minimum storage of 67 cubic yards per acre of total contributing drainage area. Sediment ponds must be installed prior to mass clearing and grading. Maintenance must be performed once the basin loses 40% of capacity, and 30% for storm water basins retrofitted as sediment

Silt Fence or Mulch Berms are typically used at the perimeter of a disturbed area. They are only for small drainage areas on relatively flat slopes Action Needed: or around small soil storage piles; not suitable where runoff is concentrated in a ditch, pipes or though streams. For large drainage areas where flow is concentrated, collect runoff in diversion berms or channels and pass it through

a sediment pond prior to discharging it from the site. Combination barriers

days of first grubbing the area it controls. Whenever practical they should be installed before clearing or grubbing the area it controls.

Are the Stream Crossings installed correctly according to the approved plan? YES NO N/A

Are all disturbed areas that will lie dormant for 21 days or more stabilized with seed/straw or mulch? (stockpiles, hillsides, etc..) YES NO N/A Are all areas stabilized still in good condition and not eroding? YES NO N/A

Have areas that achieved final grade within the last 7 days been stabilized? YES NO Do all storm water outflow areas have riprap or concrete to prevent scouring? YES NO N/A

(Check for stabilized edges, runoff diverted from stream, mud over stones, end of useful life, etc..)

Inlet Protection must be installed on all yard drains and curb drains when these inlets do not drain to a sediment trap or basin. Even if there is a sediment trap or basin, inlet protection is still recommended, as it will reduce the amount of sediment entering the basin and increase the overall sediment removal efficiency. Best used on roads with little or no traffic. If working properly, inlet protection will cause water to pond. If used on curb inlets, streets will flood temporarily during heavy storms, (overflow should be built-in.) Check with the authority that has jurisdiction over the roads before installing. They may prefer an alternate BMP. Care should be taken when placing inlet protection so that the runoff is not diverted to public roads or other areas where it could cause a hazard.

constructed of silt fence supported by welded wire fencing, mulch berms supported by rock check dams, or silt fence embedded within rock check dams may be effective within small

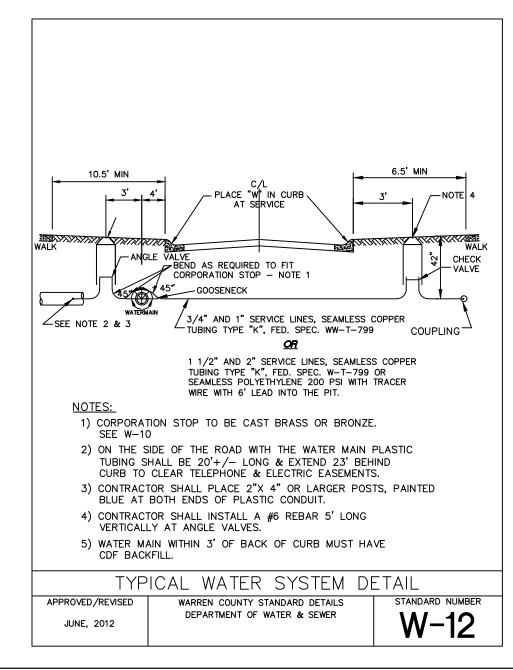
channels. As with all sediment controls, silt fence or mulch berms must be capable of ponding runoff so that sediment can settle out of suspension. These must be installed within 7

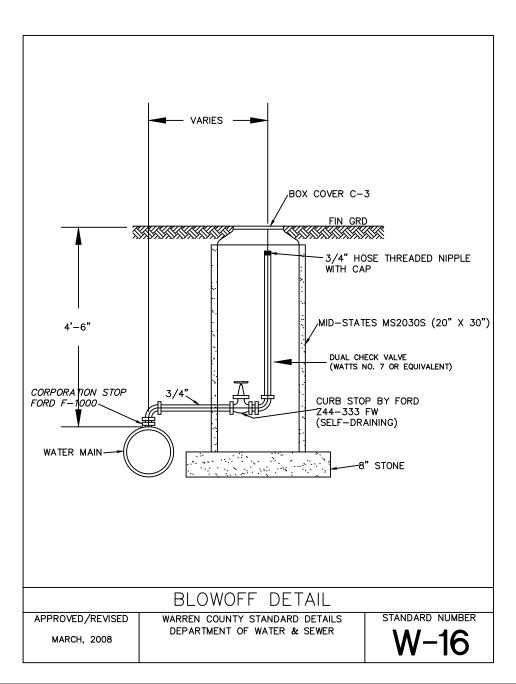
Permanent Stabilization must occur on areas at final grade within 7 days of reaching final grade. This is usually accomplished by using seed and mulch, but special measures are sometimes required. This is particularly true in drainage ditches or on steep slopes. These measures include the addition of topsoil, erosion control matting, rock riprap or retaining walls. See the Rainwater and Land Development Manual for seasonally adjusted seeding specifications. At all times of the year, the area should be temporarily stabilized until a permanent seeding can be applied.

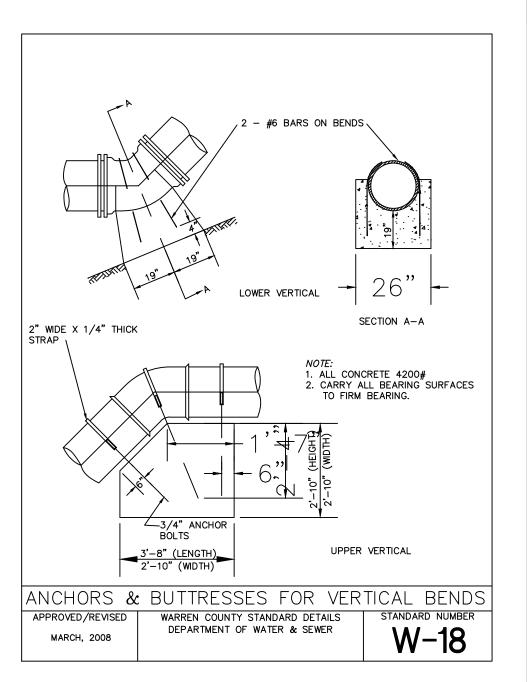
Inspections shall be performed at least once a week and within 24 hours after a storm event greater than 1/2 inch of rainfall within a 24-hour duration using the enclosed Inspection Form. Inspections can be tracked using the enclosed Inspection Log. These shall be maintained throughout the development process and kept on file for three years per OEPA requirements. Erosion prevention and sediment control (EP&SC) measures shall be observed to ensure correct operation. Discharge locations shall be inspected to determine effectiveness of EP&SC measures in preventing significant impacts to the receiving waters. Where practices require repair or maintenance, it must be accomplished within three days of the inspection or as soon as site conditions allow. Repairs to sediment ponds shall be completed within 10 days or as soon as site conditions allow. Most of these BMP's are easy to implement with a little bit of planning and go a long way toward keeping your site clean and organized if they are properly installed and maintained. Please be sure to inform all parties on site how these BMPs affect their operations on the site, particularly those that will be working near a stream.

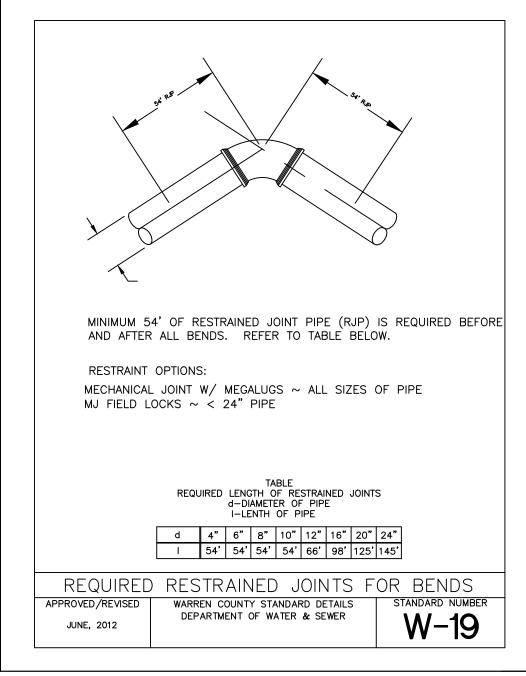
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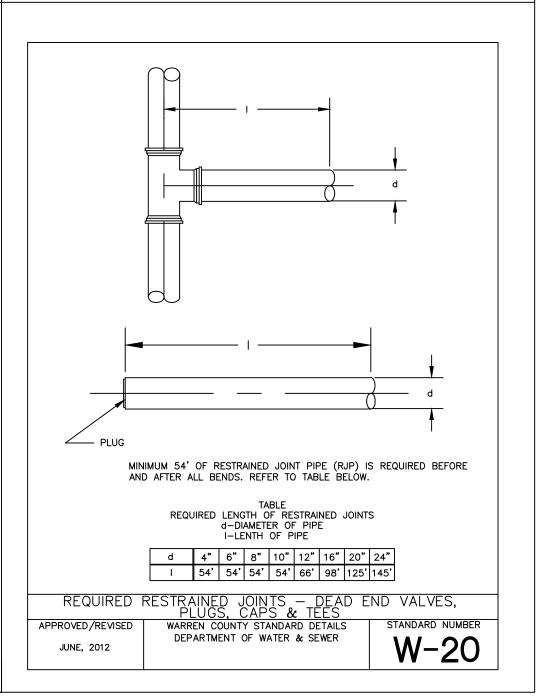


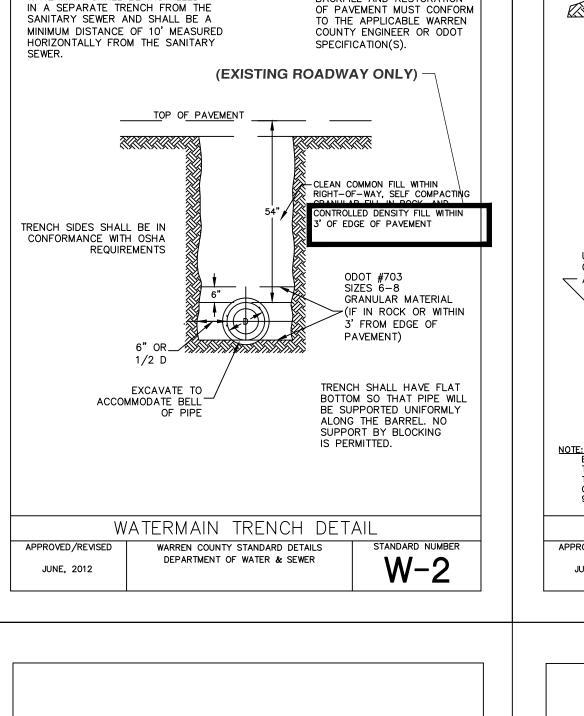


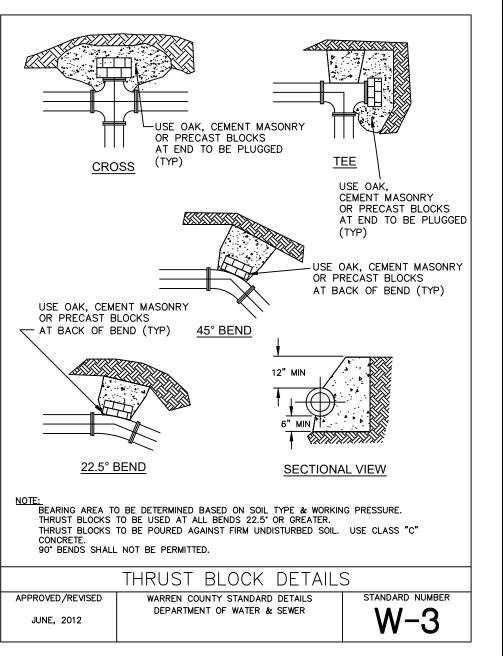


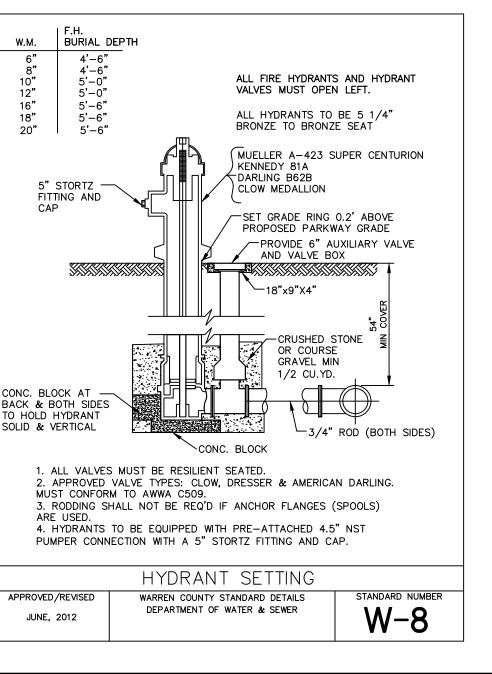












PROCEDURE FOR CONNECTION TO EXISTING WATER SYSTEM

REQUIREMENTS IF DETERMINED NECESSARY BY WARREN COUNTY.

ISOLATE LINE TO BE TAPPED.

1. MUST NOTIFY WARREN COUNTY WATER DEPARTMENT THREE (3) DAYS IN ADVANCE OF ANY SHUT DOWN. WARREN COUNTY WILL ISSUE THE SHUT DOWN

2. EXPOSE EXISTING MAIN AT PROPOSED CONNECTION POINT. NO WET TAP

3. COUNTY PERSONNEL TO OPERATE CLOSING OF APPROPRIATE VALVES TO

4. INSTALL PROPER TAPPING SLEEVE AND TAPPING VALVE. THE TAPPING SLEEVE AND VALVE SHALL BE TESTED AT 200 PSI FOR A PERIOD OF AT LEAST

5 MINUTES. THE PIPE SLUG MUST BE REMOVED AND INSPECTED BY COUNTY

5. IF THE TAPPING SLEEVE AND VALVE WILL BE UNDER FUTURE PAVEMENT, THE

BURIED VALVE MUST BE LEFT OPEN AND A NEW VALVE SET OUT OF PAVEMENT.

6. FIELD CUT EXISTING MAIN AS NECESSARY TO ACCOMMODATE TEE AND CLOSE COUPLED VALVES AT EACH END OF TEE. CARE IS TO BE TAKEN SO AS NOT

7. THOROUGHLY CLEAN AND DISINFECT PIPE AND APPURTENANCES TO BE

NECESSARY. PROPOSED MAIN VALVE IS TO BE CAPPED AND SHUT OFF. EXISTING MAIN IS THEN TO BE RETURNED TO SERVICE BY COUNTY PERSONNEL.

9. CONSTRUCTION OF PROPOSED MAIN IS TO BE COMPLETED WITHIN A JOINT OF CONNECTION TO TEE AND VALVES INSTALLED ABOVE.

10. ENTIRE LINE IS TO BE PRESSURE TESTED AND DISINFECTED TO COUNTY

11. ENTIRE LENGTH OF PIPE IS TO BE THOROUGHLY CLEANED AND DISINFECTED PRIOR TO INSTALLATION. PERMATEX CHLORINE TABLETS TO BE USED FOR

13. TAPPING SLEEVES/SADDLES TO BE TWO-PIECE CAST IRON. SIZE ON SIZE

12. NEW MAIN IS TO BE PUT INTO SERVICE BY COUNTY PERSONNEL.

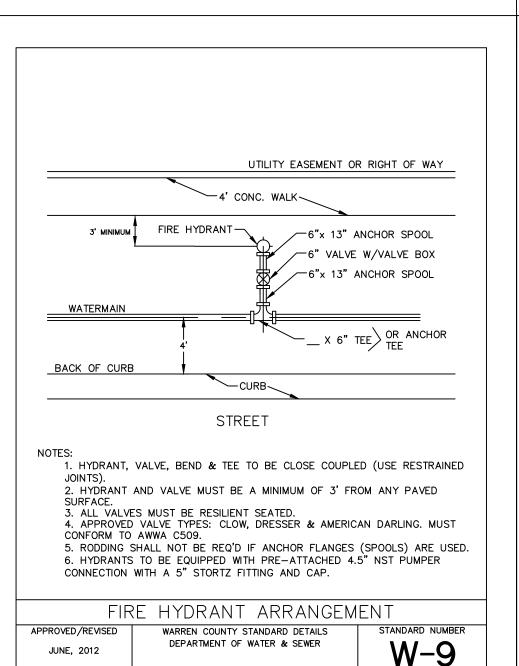
TAPPING SLEEVES ARE NOT PERMITTED.

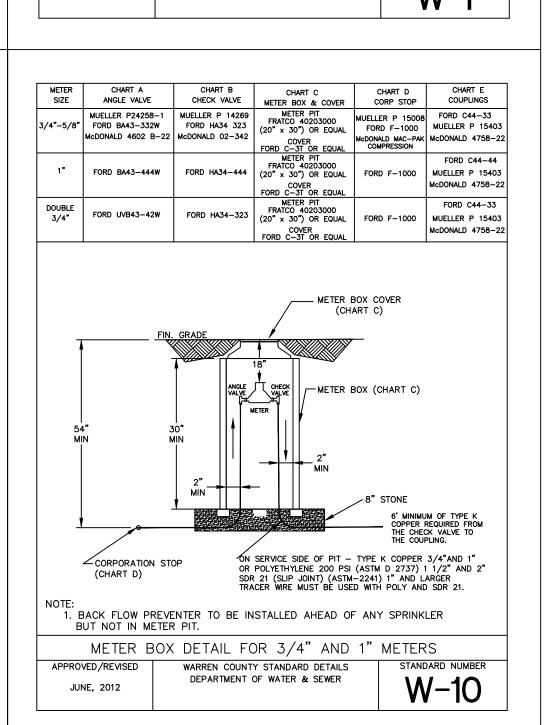
DISINFECTION. DOSAGE SHALL BE PER MANUFACTURER'S SPECIFICATIONS BASED

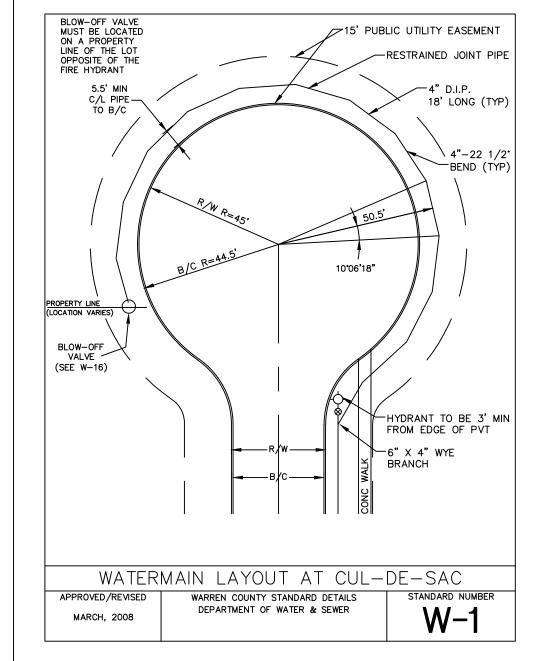
8. INSTALL TEE AND VALVES - DRESSER COUPLINGS CAN BE USED IF

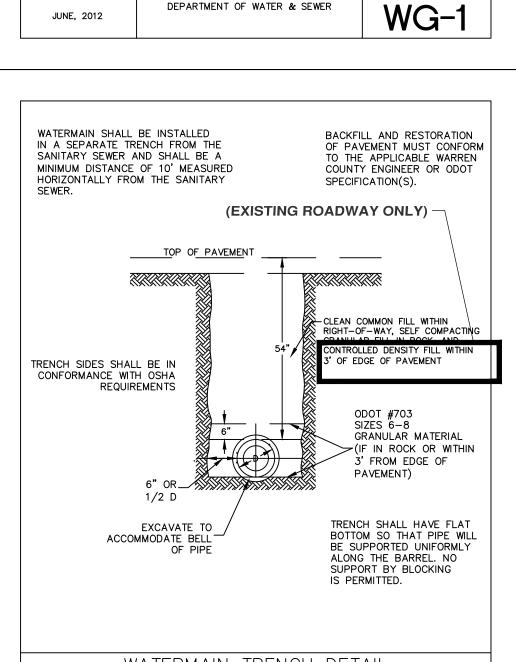
SHALL BE MADE WITHIN THREE (3) FEET OF A BELL OR PIPE CONNECTION.

NOTIFICATION AND/OR BOIL ADVISORY TO AFFECTED CUSTOMERS PER OHIO EPA









1. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 4'-6".

OR EQUAL. ALL VALVE EXTENSIONS TO HAVE SET SCREWS.

3. COMPACT FITTINGS ARE PERMITTED.

/CIRCLE AND NINE INCHES (9") THICK.

LOCATION OF SAID LATERALS.

THE AS-BUILT PLANS.

APPROVED/REVISED

1.A. ALL WATER SERVICE LATERALS SHALL HAVE A MINIMUM COVER OF 42".

2. ALL WATER MAINS SHALL BE DUCTILE IRON CONFORMING WITH AWWA SPEC.

C-151 CLASS 52 IN SIZES 4"-16" AND PSI CLASS 350 FOR 20" AND ABOVE.

4. ALL WATER VALVES MUST OPEN LEFT. ALL VALVE BOX LIDS MUST BE

CAST/STAMPED "WCWD" IN 1 1/2" LETTERS AND BE NEENAH NF-19130002

MAIN VALVE BOXES. THE SLABS MUST BE EIGHTEEN INCHES (18") SQUARE

5. A CONCRETE SLAB MUST BE PROVIDED AT FINAL GRADE AROUND ALL

6. WATER AND SEWER LINES SHALL HAVE A MINIMUM OF TEN FEET (10')

8. NO DRIVEWAY SHALL BE INSTALLED WITHIN FIVE FEET (5') OF A FIRE

9. A MINIMUM OF THREE FEET (3') IS REQUIRED BETWEEN CORPORATION

10. THE LOCATION OF WATER SERVICE LATERALS MUST BE STAMPED IN THE CURB AT THE TIME THE CURB IS PLACED TO PERMANENTLY INDICATE THE

11. THE LOCATION OF ALL WATER SERVICE LATERALS MUST BE PROVIDED ON

12. CONTRACTOR SHALL SUBMIT AS-BUILT PLANS OF SANITARY AND WATER

FILLED WITH GRANULAR MATERIAL, O.D.O.T. ITEM 310.02, BETWEEN MAINS AND

WARREN COUNTY STANDARD DETAILS

STANDARD NUMBER

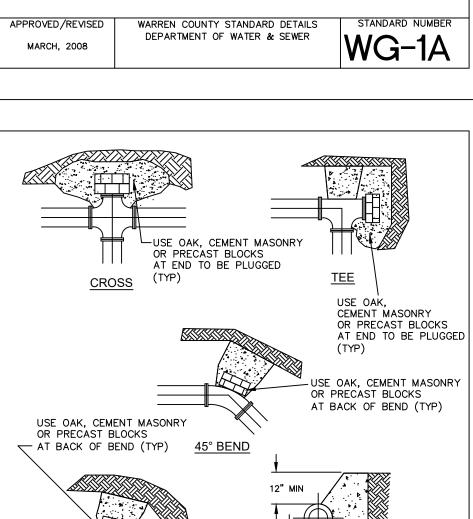
13. ALL WATER MAINS CROSSING UNDER STORM DRAINS SHALL BE BACK-

STOPS. NO TAP SHALL BE MADE WITHIN THREE (3') OF A BELL.

HORIZONTAL SEPARATION AND/ OR TWO FEET (2') VERTICAL SEPARATION.

7. NO GATE VALVE, METER PIT, BLOW OFF OR CORPORATION STOP SHALL BE

LOCATED UNDER OR WITHIN THREE FEET (3') OF DRIVEWAYS, ROADWAYS OR



14. EACH SERVICE LATERAL MUST BE A CONTINUOUS PIECE OF PIPE FROM THE

COPPER SHALL BE USED FOR 3/4" AND 1" SERVICES. POLYETHYLENE 200 PSI

15. SERVICE LINES 1" AND LARGER MUST BE EITHER TYPE K COPPER, POLY 200

PSI (ASTM D-2737) OR SDR 21 (SLIP JOINT) (ASTM-2241). TRACER WIRE MUST

BE TAPED EVENLY EVERY 3' ON POLY AND SDR 21 FROM THE METER PIT INTO

THE STRUCTURE BEING SERVED (A 3' LEAD IS REQUIRED INSIDE THE PIT).

16. 1 1/2" AND 2" SERVICE LINES FROM THE CORP STOP TO THE METER PIT

MUST BE TYPE K COPPER OR POLYETHYLENE 200 PSI. POLY MUST HAVE A TRACER WIRE. SEE W-10A.

17. FIRE HYDRANTS MUST BE PROVIDED AT THE ENTRANCE TO ALL SUBDIVISIONS AND AT ALL STREET INTERSECTIONS.

POCK BFHE-10 3/4", WITH BEL

SERVICE LATERALS BY THE PROPERTY OWNER IMMEDIATELY UPON ENTRY TO THE

i) FOR RESIDENTIAL DWELLING UNITS (3 FAMILY OR LESS), A DOUBLE CHECK

19. A BACKFLOW PREVENTION DEVICE MUST BE INSTALLED ON ALL WATER

VALVE COMPLYING WITH A.S.S.E. NO. 1024 MUST BE PROVIDED (WATTS

STRUCTURE TO BE SERVED, PRIOR TO ANY POINT OF CONNECTION OR USAGE.

ii) FOR ALL OTHER USERS, A REDUCED PRESSURE PRINCIPAL PRESSURE

MUST BE PROVIDED (WATTS REGULATOR COMPANY MODEL NO. 909 OR EQUAL).

21. ALL NEW WATER MAINS SHALL BE PRESSURE TESTED FOR 2 HOURS AT 1.5

25. ALL MATERIALS USED SHALL BE DOMESTIC, MADE IN THE UNITED STATES OF

REDUCING VALVE (TRIPLE CHECK VALVE) COMPLYING WITH A.S.S.E. NO. 1013

20. SWAB PIPE WITH 50 PPM CHLORINE SOLUTION BEFORE INSTALLATION.

TIMES THE OPERATING PRESSURE OR AT 150 PSI, WHICHEVER IS GREATER. ALLOWABLE LEAKAGE SHALL BE PER TABLE 6A OF AWWA C-600.

23. NO IRRIGATION CONNECTIONS SHALL BE ALLOWED IN THE METER PIT. 24. BACK FLOW PREVENTER TO BE INSTALLED AHEAD OF ANY SPRINKLER BUT

(NOT USED)

WITH DOUBLE BALL CHECK VALVE

(COPPER TUBE SIZE) MAY BE USED FOR 1 1/2" AND 2" SERVICES. TRACER

WIRE MUST BE USED WITH POLY AND SDR 21.

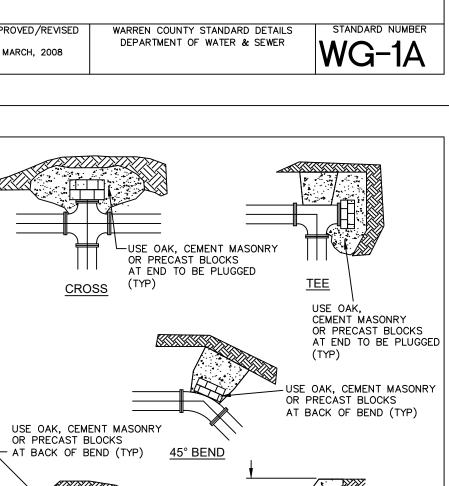
THE FOLLOWING DEVICES SHALL BE REQUIRED:

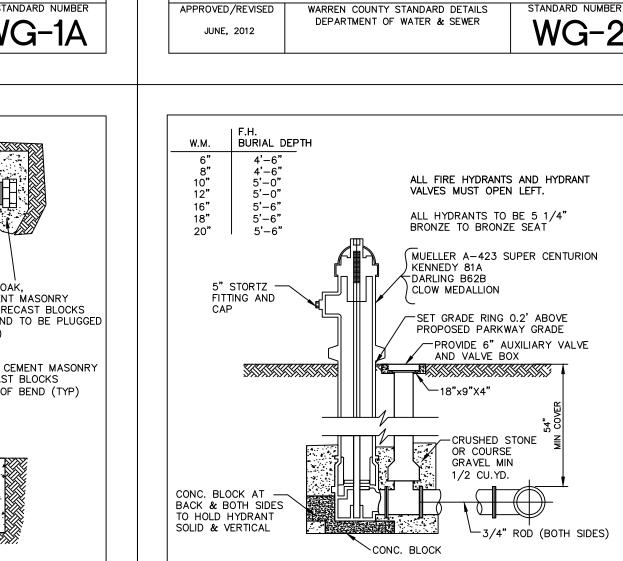
REGULATOR COMPANY MODEL NO. 7 OR EQUAL).

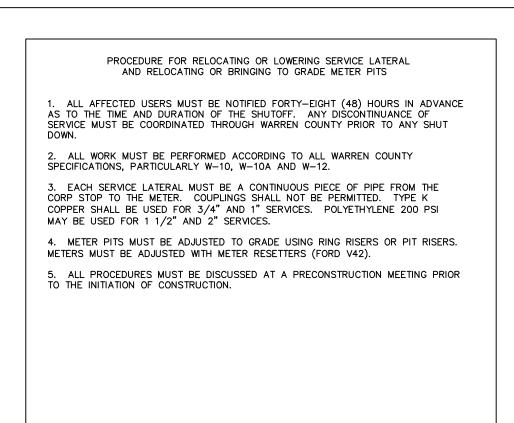
22. DEDUCT METERS SHALL NOT BE ALLOWED.

BREAKER PERMANENTLY ATTACK

CORP STOP TO THE METER. COUPLINGS SHALL NOT BE ALLOWED. TYPE K







WARREN COUNTY STANDARD DETAILS

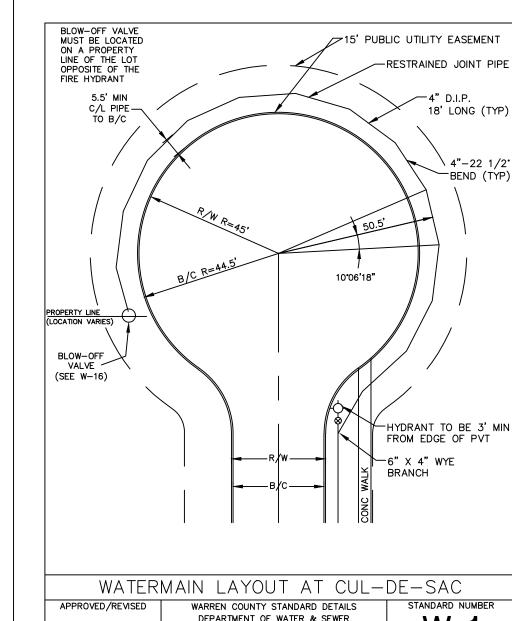
DEPARTMENT OF WATER & SEWER

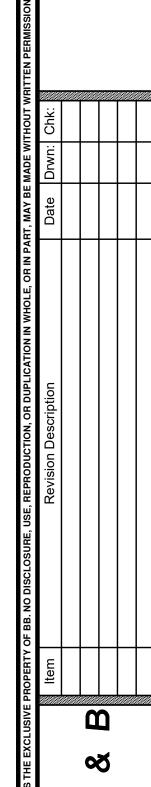
STANDARD NUMBER

WG-3

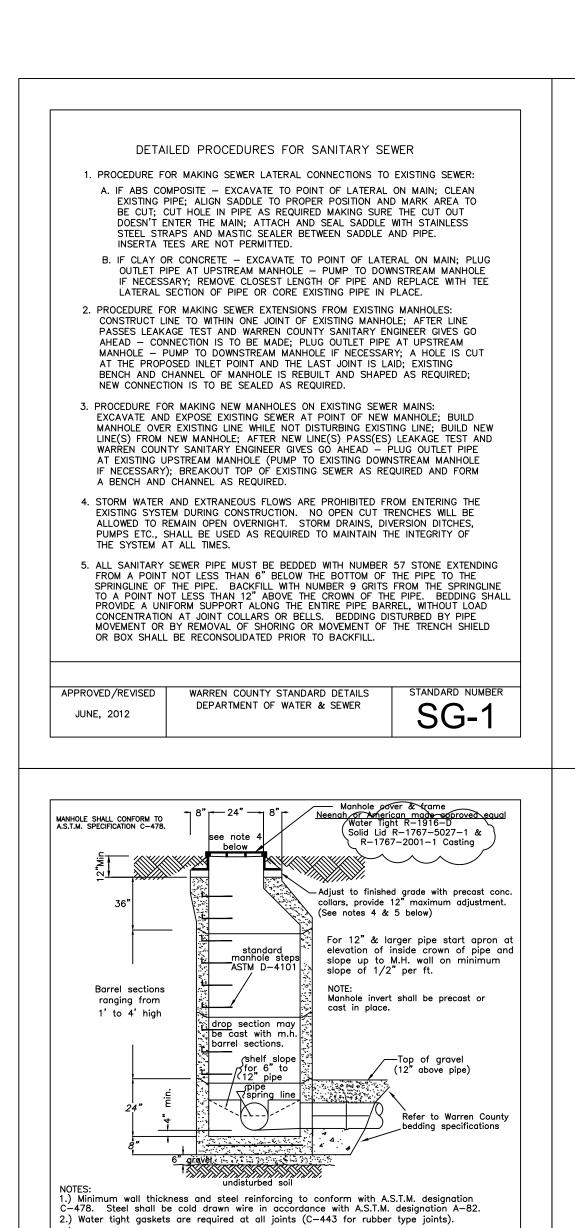
APPROVED/REVISED

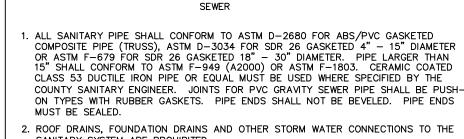
MARCH, 2008





04M027-004 CD DETAILS - SE





- SANITARY SYSTEM ARE PROHIBITED. 3. NO MANHOLE, OR ANY PORTION OF THE MANHOLE, SHALL BE LOCATED UNDER A SIDEWALK OR DRIVEWAY.
- 4. SANITARY SEWER LATERALS SHALL BE CONSTRUCTED OF THE FOLLOWING MATERIALS: A) ABS PIPE - ASTM D-2751 WITH SDR 23.5 (4" OR 6" GLUE JOINT) B) PVC PIPE - ASTM D-3034 WITH SDR 23.5 (4" OR 6" GLUE OR GASKET JOINT) ASTM D-2665 SCHEDULE 40 (4" ONLY) ASTM D-3034 WITH SDR 35 (6" ONLY) C) DUCTILE IRON - CLASS 53 (4" OR 6")
- 5. ON THE WATER MAIN SIDE OF THE ROAD, SEWER LATERALS MUST BE EXTENDED TWENTY—THREE FEET (23') BEHIND CURB, ON THE SIDE OF THE ROAD OPPOSITE THE WATER MAIN. SEWER LATERALS MUST BE EXTENDED TO THE HOUSE SIDE OF UTILITY EASEMENTS AND SHALL BE MARKED BY TWO INCHES (2") BY FOUR INCHES (2" X 4") OR LARGER POSTS. POSTS SHALL BE PAINTED RED. A SIX FOOT (6') LENGTH OF #6 REINFORCED BAR SHALL BE INSTALLED AGAINST THE POST. END OF SEWER LÄTERAL SHALL NOT EXCEED 12' IN DEPTH UNLESS APPROVED BY THE COUNTY SANITARY ENGINEER.
- 6. ONLY SANITARY WYES OR TEES WITH 45' BENDS SHALL BE USED FOR SANITARY LATERAL INSTALLATION. ALL WYES TO BE GLUE JOINTS ON TRUSS AND COMPOSITE PIPE. ALL SANITARY LATERALS MUST BE SIX INCHES (6") IN DIAMETER WITHIN THE RIGHT-OF-WAY AND MAY BE REDUCED TO FOUR INCHES (4") FROM THE RIGHT-OF-WAY TO THE STRUCTURE. NO CONNECTION SHALL BE MADE TO THE CROWN OF THE SEWER MAIN.
- 7. FOR ALL STRUCTURES OTHER THAN DETACHED SINGLE FAMILY RESIDENTIAL UNITS, SEWER LATERALS MUST BE NOT LESS THAN SIX INCHES (6") INTERNAL DIAMETER. FOR DETACHED SINGLE-FAMILY RESIDENTIAL UNITS, SEWER LATERALS MUST BE SIX INCHES (6") IN DIAMETER WITHIN THE RIGHT-OF-WAY AND MAY BE REDUCED TO FOUR INCHÉS (4") FROM THE RIGHT-OF-WAY TO THE STRUCTURE. 8. THE LOCATION OF SEWER LATERALS MUST BE STAMPED IN THE CURB AT THE

TIME THE LATERALS	 IS I	PLACED	TO	PERMANE	ENTLY	INDICATE	THE	LOCATION	OF	SAID	

WARREN COUNTY STANDARD DETAILS

DEPARTMENT OF WATER & SEWER

STANDARD NUMBER

SG-2A

APPROVED/REVISED

JUNE, 2012

SEWER (CONTINUED) 9. THE LOCATION OF ALL SEWER LATERALS MUST BE PROVIDED ON THE AS-BUILT

- O. MANHOLE LATERALS SHALL HAVE AN INVERT TWO INCHES (2") ABOVE MAIN-LINE . EXISTING MANHOLE CASTINGS ARE TO BE RAISED BY EITHER A MANHOLE ADJUSTING RING OR A BARREL SECTION ADDED. IF THE HEIGHT OF NECESSARY ADJUSTMENT IS OVER ONE FOOT (1') OR THERE IS ALREADY AN EXISTING ADJUSTMENT RING BEING USED, THE CONTRACTOR IS TO USE A NEW BARREL SECTION ONLY. EXTRA
- CARE IS TO BE TAKEN TO INSURE A PROPER AND TIGHT SEAL AT ALL NEW JOINTS. 2. THE CONTRACTOR MUST EITHER CONSTRUCT BULK HEAD(S) OR INSTALL MECHANICAL PLUGS(S) AT THE POINT(S) OF CONNECTION TO THE EXISTING SEWER PRIOR TO INITIATING ANY CONSTRUCTION. THE BULK HEAD(S) OR MECHANICAL PLUG(S) SHALL REMAIN IN PLACE UNTIL THE NEW MAINS HAVE BEEN FLUSHED, CLEANED, TESTED, TELEVISED AND APPROVED FOR USE BY WARREN COUNTY. THE BULK HEAD(S) OR MECHANICAL PLUG(S) CAN ONLY BE REMOVED IN THE PRESENCE OF A WARREN COUNTY SEWER INSPECTOR.
- 3. TRENCH SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR MUST INSURE THAT ALL APPLICABLE OSHA OPEN TRENCH SAFETY REQUIREMENTS ARE FOLLOWED. IT IS NOT WARREN COUNTY'S RESPONSIBILITY TO INSPECT EACH
- SITE FOR COMPLIANCE. 4. HDPE PIPE MAY BE USED FOR DIRECTIONAL BORING OF FORCE MAINS WITH APPROVAL FROM THE COUNTY SANITARY ENGINEER. ALL DIRECTIONAL DRILLING SHOULD BE ACCOMAPNIED BY DRILLING LOGS AT 25' STATION INCREMENTS, PVC PIPE SHALL BE PERMITTED FOR FORCE MAINS SIX INCHES (6") OR SMALLER IN DIAMETER. FORCE MAINS EIGHT INCHES (8") OR LARGER MUST BE CLASS 53 DUCTILE IRON WITH AN INTERIOR LINING OF ÉPOXY OR CERAMIC. PVC SHALL CONFORM TO AWWA C900 REQUIREMENTS AND HAVE AN EQUIVALENT OUTSIDE DIAMETER OF DR 14.

15. MINIMUM SLOPE SHALL BE AS FOLLOWS: MINIMUM SLOPE (%)

16. ALL MATERIALS USED SHALL BE DOMESTIC, MADE IN THE UNITED STATES OF AMERICA.

STANDARD NUMBER APPROVED/REVISED WARREN COUNTY STANDARD DETAILS DEPARTMENT OF WATER & SEWER SG-2B JUNE, 2012

PIPE CONNECTIONS INTO MANHOLES

SEWER PIPE TO MANHOLE CONNECTIONS ON ALL SANITARY SEWERS SHALL BE FLEXIBLE AND WATERTIGHT. SEWER PIPE SHALL BE SEALED IN THE MANHOLE SECTION PIPE OPENINGS WITH A RESILIENT CONNECTOR MEETING THE REQUIREMENTS OF ASTM C923. THE CONNECTION MAY BE ANY OF THE

- 1. RUBBER SLEEVE WITH STAINLESS STEEL BANDING A) KOR-N-SEAL AS MANUFACTURED BY POLLUTION CONTROL SYSTEMS,
- B) LOCK JOINT FLEXIBLE MANHOLE SLEEVE AS MANUFACTURED BY INTERSPACE CORPORATION C) OR EQUAL
- RUBBER GASKET COMPRESSION A) PRESS WEDGE II AS MANUFACTURED BY PRESS-SEAL GASKET
- B) DURA-SEAL MANUFACTURED BY DURA TECH, INC. C) OR EQUAL

SECTION(S).

APPROVED/REVISED

MARCH, 2008

RESILIENT CONNECTOR SHALL BE CAST INTEGRALLY INTO THE WALL OF THE MANHOLE SECTION AT TIME OF MANUFACTURE OR SHALL BE INSTALLED BY MECHANICAL MEANS IN OPENINGS CUT INTO MANHOLE WALL PER ASTM C923. ANY CONNECTION TO AN EXISTING MANHOLE MUST BE MADE BY CORING THE MANHOLE. ANY CORE TO A MANHOLE MUST BE CENTERED IN THE BARREL SECTION. NO CORE SHALL BE MADE ALONG THE SEAM OF THE BARREL

WARREN COUNTY STANDARD DETAILS

DEPARTMENT OF WATER & SEWER

STANDARD NUMBER APPROVED/REVISED SG-3

WARREN COUNTY STANDARD DETAILS DEPARTMENT OF WATER & SEWER

SEWER TESTING

THE CONTRACTOR MUST EITHER CONSTRUCT BULK HEAD(S) OR INSTALL MECHANICAL

INITIATING ANY CONSTRUCTION. THE BULK HEAD(S) OR MECHANICAL PLUG(S) SHALL

REMAIN IN PLACE UNTIL THE NEW MAINS HAVE BEEN FLUSHED, CLEANED, TESTED,

MECHANICAL PLUG(S) CAN ONLY BE REMOVED IN THE PRESENCE OF A WARREN

2. ALL NEW MANHOLES SHALL BE VACUUM TESTED. A VACUUM OF 10" OF MERCURY

SHALL BE DRAWN ON THE MANHOLE. FOR A 4' MANHOLE LESS THAN 20' DEEP,

3. ALL SANITARY SEWER MAINS MUST BE AIR TESTED. THE STANDARD TEST IS AN AIR

4. ALL NON-TRUSS PIPE SHALL BE TESTED FOR DEFLECTION AFTER BACKFILLING IS

PRESSURE TEST OF 4.0 PSI FOR A FIVE (5) MINUTE PERIOD WITH NO MEASUREABLE

COMPLETED (30 DAY MINIMUM REQUIRED). A DEFLECTION TEST WITH A NINE POINT

VERTICAL RING DEFLECTION GREATER THAN FIVE PERCENT (5%) WILL NOT BE ALLOWED.

THIS DEFLECTION IS DEFINED AS A FIVE PERCENT REDUCTION IN THE VERTICAL BASE

MANDREL WILL BE REQUIRED. NO MECHÁNICAL PULLING DEVICE SHALL BE USED

5. AT THE TIME THE SANITARY SEWER IS TESTED, THE SEWER MUST BE TELEVISED AND VIDEO DOCUMENTATION (DVD) PROVIDED TO WARREN COUNTY. THE VIDEO MUST

INCLUDE AUDIO IDENTIFICATION OF PIPE SPANS FROM MANHOLE TO MANHOLE, FLOW

IN THE SYSTEM. ALL PROBLEMS MUST BE IDENTIFIED BY THE CONTRACTOR. THE

NECESSARY REPAIRS MUST BE MADE AND THE SEWER MUST THEN BE RE-TESTED

6. A SECOND VIDEO INSPECTION IS REQUIRED ONE YEAR AFTER INSTALLATION AND/OR PRIOR TO THE RELEASE OF THE MAINTENANCE BOND. IF A DEFICIENCY IS IDENTIFIED DURING THIS TELEVISED INSPECTION, THE FAILED SEWER PIPE MUST BE TESTED AND

7. THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE

REPAIRED TO THE SATISFACTION OF THE COUNTY SANITARY ENGINEER.

THE TELEVISING, TESTING AND REPAIRS OF THE SANITARY SEWER.

DIRECTION. TILT AND PAN OF ALL LATERALS AND CALL OUT ANY SUSPECT PROBLEMS

MANHOLE SHALL HOLD 9" OF MERCURY FOR AT LEAST 1 MINUTE.

COUNTY SEWER INSPECTOR.

OR AVERAGE INSIDE DIAMETER.

LOSS OF PRESSURE.

AND RE-TELEVISED.

MARCH, 2008

MARCH, 2008

TELEVISED AND APPROVED FOR USE BY WARREN COUNTY. THE BULK HEAD(S) OR

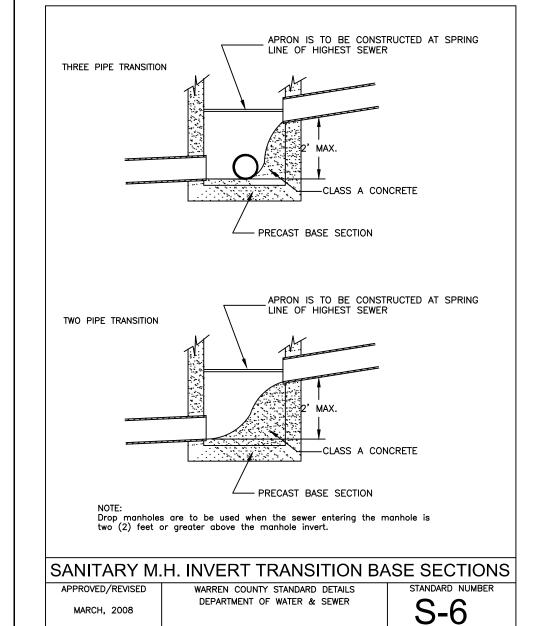
PLUGS(S) AT THE POINT(S) OF CONNECTION TO THE EXISTING SEWER PRIOR TO

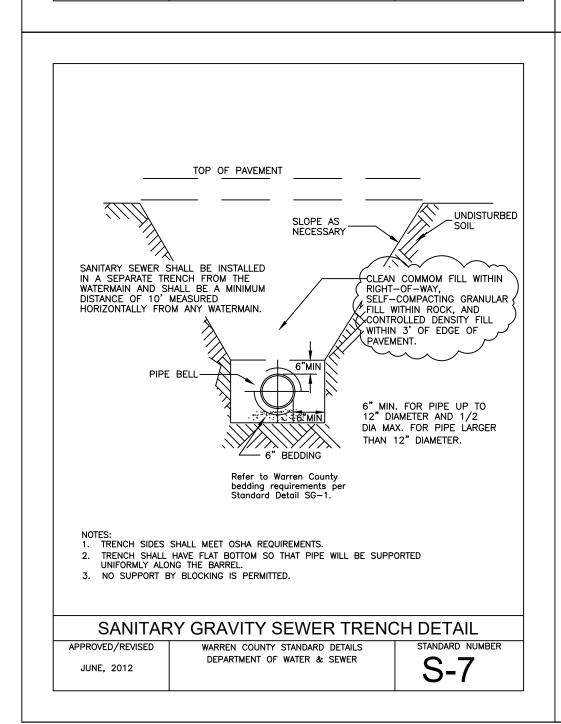
STANDARD NUMBER SG-4

A minimum drop of 0.10' must be aintained between inlet and outlet NOTE: MODIFY MANHOLE CHANNEL ENTRANCE CONDITIONS SHOWN TO SUIT ENTRANCE NEEDS OF INDIVIDUAL CASES, MAINTAINING CHANNELS MUST BE SUITABLE FOR INSTALLATION & REMOVAL OF EXPANSION PLUG USED FOR FLUSHING. ALL CONSTRUCTION DETAILS & DIMENSIONS ARE TO CONFORM TO THOSE SHOWN FOR STANDARD MANHOLES.

ALL CHANNELS MUST BE SMOOTH AND UNIFORM. TRANSITION MUST NOT CREATE OBSTRUCTION TO FLOW.  $\label{eq:construction} % \begin{subarray}{ll} \end{subarray} % \begin{subarray}{ll} \end{su$ 

MANHOLE CHANNELS WARREN COUNTY STANDARD DETAILS DEPARTMENT OF WATER & SEWER MARCH, 2008





3.) Except as otherwise noted on the sewer staking plan, where pipe sizes change at the manhole, the inside tops of pipes to be set at the same elevation.

4.) Top of casting shall be even with finished grade at paved locations (roadways and parking lots) and at developed lots. In undeveloped lots, top of casting to be a minimum of 12" above finished grade or as otherwise shown on plan.

5.) Within a new subdivision, temporary adjusting collar must be provided 1 foot above rough/finished grade. Risers (12" maximum) are permitted. Manholes shall be lowered to finished grade when subdivision improvements are completed and the lot is built on.

6.) No manhole, or any portion of a manhole, shall be located under a sidewalk or driveway. Manholes shall only be allowed in roadway pavement upon permission by the County Sanitary

PRECAST MANHOLE

WARREN COUNTY STANDARD DETAILS

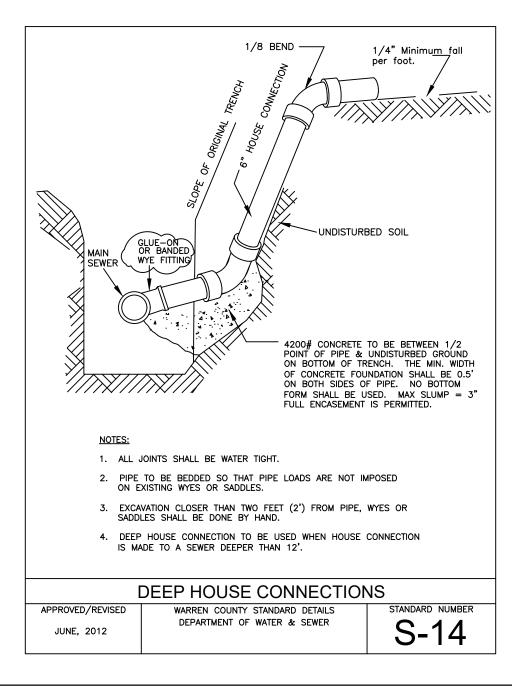
DEPARTMENT OF WATER & SEWER

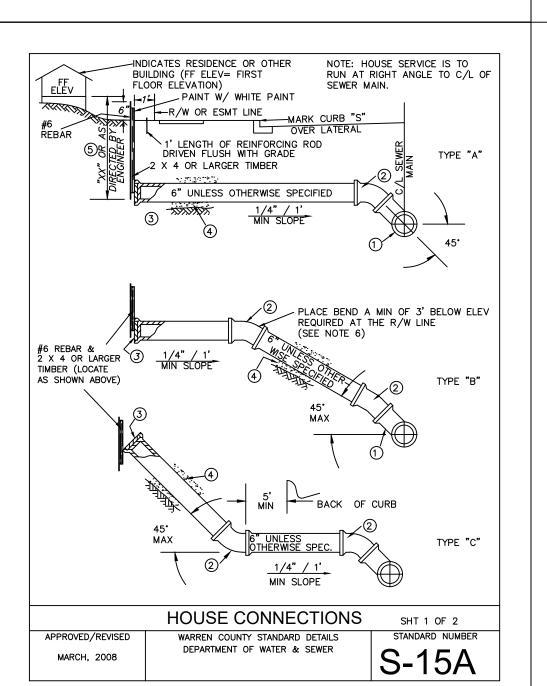
S-'

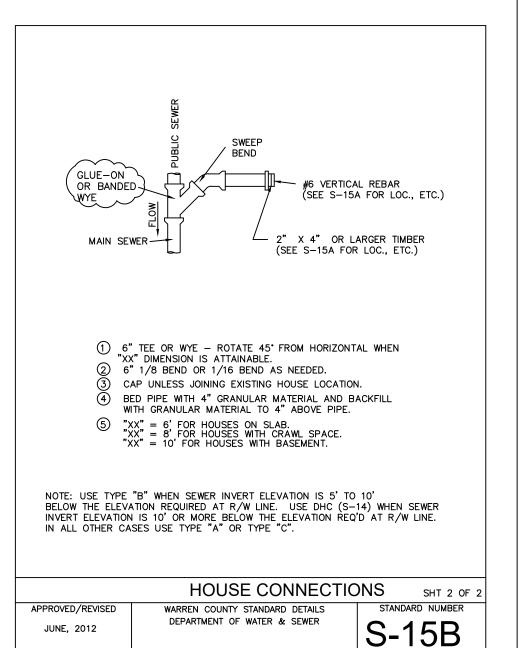
7.) A minimum drop of 0.10' must be maintained between inlet and outlet inverts.

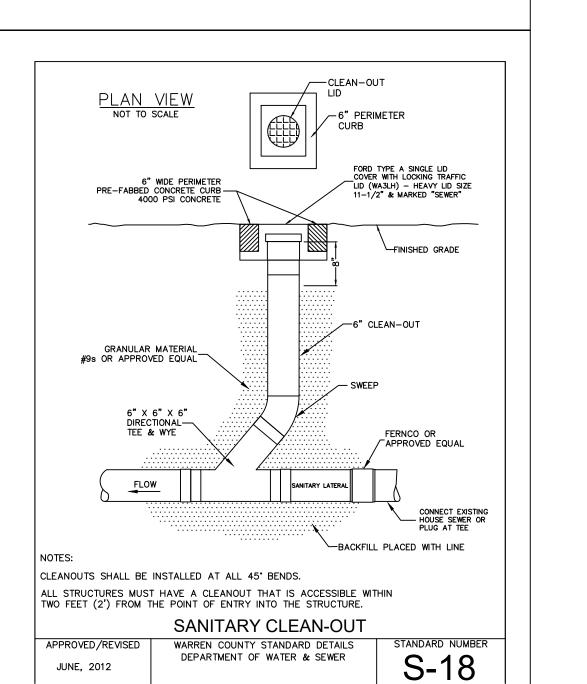
APPROVED/REVISED

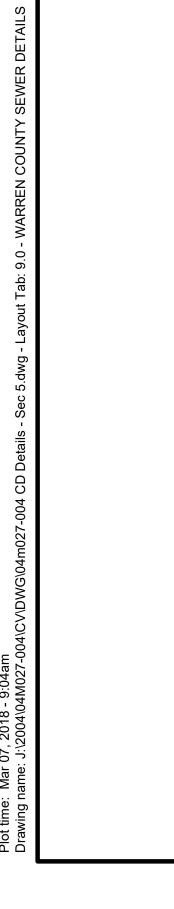
JUNE, 2012











04M027-004 CD DETAILS - SE





Date

February 14, 2018

Attention

Jerry Haddix Village Administrator Address

99 N. High Street South Lebanon, OH 45065

#### Subject

Wynstead Section 5 Phases A & B Review #1 Village of South Lebanon, OH

### Dear Mr. Haddix:

Attached are our comments after reviewing the Wynstead Subdivision Section 5, Phases A & B subdivision plans, the storm calcs for the roadway storm sewer, and the construction estimate that were submitted to Choice One on 2/5/18. Choice One recommends that the plans and supporting documentation be resubmitted after revisions are made. An electronic resubmission of the revised items would be acceptable to Choice One.

#### **Construction Plans**

- General
  - o Please add Warren County sanitary sewer details to plans.
- Page 1.0
  - o A field visit determined that the sanitary manhole at the corner of Noble and Emerald (benchmark #2) was buried under the grass. Please locate and confirm benchmark prior to use as project survey control.
- Page 2.0
  - o Sump drains shall be 6" minimum (change labels on plan view too)
  - o Asphalt surface and intermediate courses are mistakenly referencing ODOT Item 442 Superpave asphalt. Please revise to reference Item 441 asphalt.
  - o Note on curb detail that final surface course to be 1/4" higher than gutter plate.



- Page 5.0
  - o Emerald Drive sewer in phase 5A is shown as existing. Please send plans that were to be built "by others" to Choice One.
  - o Extend 4" water main in Noble Court cul-de-sac further so the blow off valve is in front of lot 220. This will eliminate the need for the water service to cross the entire cul-de-sac.
- Page 6.0
  - o On Note 14, change reference of Warren County to "Village of South Lebanon".

#### **Storm Sewer Comments**

- N/A

#### **Ohio EPA Submittal Comments**

- No sanitary PTI will be needed as all sewer is either installed already or will be installed by others.
- Warren County will review the water PTI.
- Please submit electronic copy of NOI permit to Village and Choice One for their records.

If you have any questions, please contact our office.

Sincerely,

Nicholas J. Selhorst, P.E.

nicholas f. Selhort

## WARREN COUNTY WATER & SEWER DEPARTMENT

### CHRIS G. BRAUSCH, P.E. COUNTY SANITARY ENGINEER

February 8, 2018

Gregory Koch Bayer Becker 6900 Tylersville Road, Suite A Mason, OH 45040

Re: Wynstead

Section 5, A & B South Lebanon

Dear Mr. Koch,

Please be advised that the detail plans for the subject project have been reviewed and the comments with respect to the proposed water system improvements are as follows:

- 1) The water main on Noble Court terminates at the valve, the temporary fire hydrant was never installed.
- 2) As the plans are shown all water main testing will be against existing valves. Confirm developer understands there is potential for failed pressure tests.
- 3) Noble Court watermain should continue around cul-de sac to lot line 220/221.

It is requested that the plans be modified in accordance with the enclosed drawings and the revised drawings be resubmitted to us so that our review can be finalized.

If you have any questions or comments, please contact this office.

Sincerely,

Chris Wojnicz, P.E., LEED AP Deputy Sanitary Engineer

Jones Wayne

cc: e-file, Gilbert, email J. Haddix, email

P. O. BOX 530 ■ 406 JUSTICE DR. ■ LEBANON, OH 45036 513-695-1377 ■ 513-925-1377 ■ 937-425-1377 ■ FAX 513-695-2995 E-MAIL waterdept@co.warren.oh.us



Robert Ware Warren County Regional Planning Commission 406 Justice Drive Lebanon, Ohio 45036 February 15, 2018

RE: Wynstead, Section 5

**PLAN REVIEW** 

Dear Bob.

I have reviewed the submittal for Wynstead, Section 5 as submitted to my office. The following is a list of outstanding items.

- Erosion and sediment control plan.
  - The plan is lacking in perimeter controls. There are areas of disturbed earth that would run
    off site without a control in place to first filter any sediment laden water. The south and east
    lines are particularly exposed.
  - Provide calculations for the sediment basin (Lake #1 & Lake #2) being used during construction of this section. Sediment basin construction must comply with the standards in the latest edition of the Rainwater and Land Development Manual.
- Please submit a Storm Water Pollution Prevention Plan (SWP3) in compliance with the Ohio EPA Checklist found at http://www.epa.ohio.gov/portals/35/storm/CGP\_SWP3\_Checklist.pdf

Please provide an electronic copy of the revised plans. I will begin inspection of this site once construction commences.

Sincerely,

Molly M Conley

Natural Resource Engineer

CC: Consultant

Molly M Conley

Developer

File

## VILLAGE OF SOUTH LEBANON MEMORANDUM

**TO:** Planning Commission

**FROM:** Jerry Haddix, Village Administrator

**RE:** Case 18-03P, Right-of-Way Dedication Plat – Stone Lake Subdivisison

**DATE:** March 6, 2018

On the November 2<sup>nd</sup>, 2017, the South Lebanon Village Council passed Ordinance No. 2017-10 accepting the streets in the Stone Lake Subdivision for public maintenance. As part of the process, a right-of-way dedication plat is required. Attached is the Stone Lake Subdivision R-O-W plat which requires Planning Commission approval.

Let me know if you have any questions.

#### VILLAGE OF SOUTH LEBANON, OHIO ORDINANCE NO. 2017-10

# AN ORDINANCE APPROVING AND ACCEPTING FOR PUBLIC MAINTENANCE STONE RIDGE BOULEVARD, PARKSIDE DRIVE, AND LAKEVIEW COURT IN THE STONE LAKE SUBDIVISION IN THE VILLAGE OF SOUTH LEBANON

**WHEREAS**, the Stone Lake Subdivision was recorded in the Warren County Recorder's Office on March 7, 2007; and

WHEREAS, as part of the Planned Unit Development (PUD) process, the following private streets were approved as part of the development, with the ingress and egress easement being recorded in Book 4592 Page 377 of the Official Records of Warren County:

Street Name	Street Width	Street Mileage
Stone Ridge Blvd	22.00′	1,181 lf.
Lakeview Court	22.00′	491 lf.
Parkside Drive	22.00′	796 l.f.

WHEREAS, at the request of the Stone Lake Homeowner's Association (Association), per Resolution No. 2016-44, the Village Council entered into a Consent Agreement with the Association which permits the Association to amend the Declaration of Easement for Ingress and Egress for the Stone Lake Subdivision to request the Village to dedicate the above listed for public maintenance,

WHEREAS, the Village Planning Commission met on September 5, 2017 and, per Section 15.14.22 of the Village Zoning Code, determined that the Association's request did not represent a major departure from the approved PUD.

**NOW, THEREFORE, BE IT ORDAINED** by the Council of the Village of South Lebanon, Ohio, at least a majority of all members elected thereto concurring:

<u>Section 1</u>. That the Council approves and accepts for public maintenance the herein referenced streets as described herein and illustrated on the attached Exhibit.

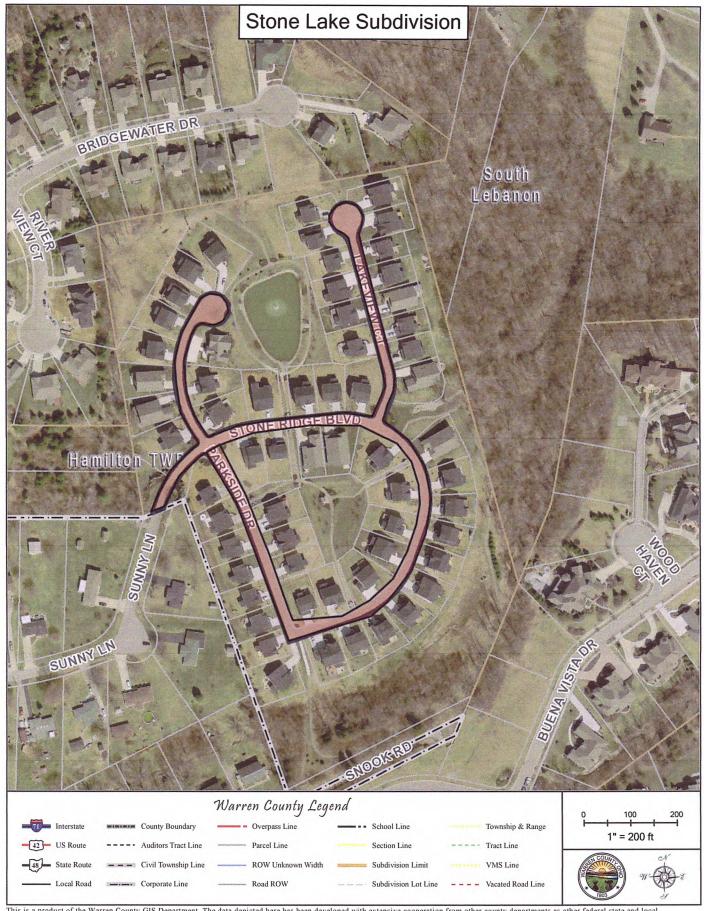
<u>Section 2</u>. That the Fiscal Officer certify a copy of this Ordinance to the Warren County Engineer.

<u>Section 3.</u> That the Council is acting in its administrative capacity in passing this Ordinance.

<u>Section 4</u>. That the recitals contained within the Whereas Clauses set forth above are incorporated by reference herein.

<u>Section 5.</u> That it is found and determined that all formal actions of the Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of Council in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

Adopted this day of	November, 2017.	
Attest	MIMMA S	and Row
Nicole Armstro	ng, Fiscal Officer/Clerk James	es D. Smith, Mayor
Rules Suspended:	(if applicable)	Effective Date - / /17
Vote Yeas Nays		
First Reading – 10/5/200 Second Reading – 10/6/200 Third Reading – 10/200		Effective Date – / /2017
Vote - Veas Nays		
Prepared by and appro	oved as to form:	
PAUL R. REVELSON VILLAGE SOLICITOR SOUTH LEBANON, C		
By:		



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